

| row | t-s,s;v | base                      | differential                    |
|-----|---------|---------------------------|---------------------------------|
| 1   | 0,0;0   | 1                         | Permanent cycle                 |
| 2   | 0,1;0   | $h_0$                     | Permanent cycle                 |
| 3   | 1,1;0   | $h_1$                     | Permanent cycle                 |
| 4   | 2,2;0   | $h_1^2$                   | Permanent cycle                 |
| 5   | 3,1;0   | $h_2$                     | Permanent cycle                 |
| 6   | 3,2;0   | $h_0 h_2$                 | Permanent cycle                 |
| 7   | 6,2;0   | $h_2^2$                   | Permanent cycle                 |
| 8   | 7,1;0   | $h_3$                     | Permanent cycle                 |
| 9   | 7,2;0   | $h_0 h_3$                 | Permanent cycle                 |
| 10  | 7,3;0   | $h_0^2 h_3$               | Permanent cycle                 |
| 11  | 7,4;0   | $h_0^3 h_3$               | Permanent cycle                 |
| 12  | 8,2;0   | $h_1 h_3$                 | Permanent cycle                 |
| 13  | 8,3;2   | $[h_1 h_0(1)]$            | Permanent cycle                 |
| 14  | 8,4;4   | $[b_{02}^2]$              | $d_4 = h_0^4 h_3$               |
| 15  | 8,5;4   | $h_0 [b_{02}^2]$          | $d_4 = h_0^5 h_3$               |
| 16  | 9,3;0   | $h_1^2 h_3$               | Permanent cycle                 |
| 17  | 9,4;2   | $h_1 [h_1 h_0(1)]$        | Permanent cycle                 |
| 18  | 9,5;4   | $h_1 [b_{02}^2]$          | Permanent cycle                 |
| 19  | 10,6;4  | $h_1^2 [b_{02}^2]$        | Permanent cycle                 |
| 20  | 11,5;4  | $h_2 [b_{02}^2]$          | Permanent cycle                 |
| 21  | 11,6;4  | $h_0 h_2 [b_{02}^2]$      | Permanent cycle                 |
| 22  | 14,2;0  | $h_3^2$                   | Permanent cycle                 |
| 23  | 14,3;0  | $h_0 h_3^2$               | Permanent cycle                 |
| 24  | 14,4;0  | $h_0^2 h_3^2$             | $d_4^{-1} = [h_2 b_{03}]$       |
| 25  | 14,4;4  | $[h_0(1)^2]$              | Permanent cycle                 |
| 26  | 14,5;0  | $h_0^3 h_3^2$             | $d_4^{-1} = h_0 [h_2 b_{03}]$   |
| 27  | 14,5;4  | $h_0 [h_0(1)^2]$          | Permanent cycle                 |
| 28  | 14,6;0  | $h_0^4 h_3^2$             | $d_4^{-1} = h_0^2 [h_2 b_{03}]$ |
| 29  | 14,6;4  | $h_0^2 [h_0(1)^2]$        | Permanent cycle                 |
| 30  | 14,7;0  | $h_0^5 h_3^2$             | $d_4^{-1} = h_0^3 [h_2 b_{03}]$ |
| 31  | 14,8;0  | $h_0^6 h_3^2$             | $d_4^{-1} = h_0^4 [h_2 b_{03}]$ |
| 32  | 15,1;0  | $h_4$                     | Permanent cycle                 |
| 33  | 15,2;0  | $h_0 h_4$                 | Permanent cycle                 |
| 34  | 15,3;0  | $h_0^2 h_4$               | Permanent cycle                 |
| 35  | 15,3;4  | $[h_2 b_{03}]$            | $d_4 = h_0^2 h_3^2$             |
| 36  | 15,4;0  | $h_0^3 h_4$               | Permanent cycle                 |
| 37  | 15,4;4  | $h_0 [h_2 b_{03}]$        | $d_4 = h_0^3 h_3^2$             |
| 38  | 15,5;0  | $h_0^4 h_4$               | Permanent cycle                 |
| 39  | 15,5;4  | $h_1 [h_0(1)^2]$          | Permanent cycle                 |
| 40  | 15,5;4  | $h_0^2 [h_2 b_{03}]$      | $d_4 = h_0^4 h_3^2$             |
| 41  | 15,6;0  | $h_0^5 h_4$               | Permanent cycle                 |
| 42  | 15,6;4  | $h_0^3 [h_2 b_{03}]$      | $d_4 = h_0^5 h_3^2$             |
| 43  | 15,7;0  | $h_0^6 h_4$               | Permanent cycle                 |
| 44  | 15,7;4  | $h_0^4 [h_2 b_{03}]$      | $d_4 = h_0^6 h_3^2$             |
| 45  | 15,8;0  | $h_0^7 h_4$               | Permanent cycle                 |
| 46  | 15,8;4  | $h_0^5 [h_2 b_{03}]$      | $d_4 = h_0^7 h_3^2$             |
| 47  | 16,2;0  | $h_1 h_4$                 | Permanent cycle                 |
| 48  | 16,6;4  | $h_1^2 [h_0(1)^2]$        | Permanent cycle                 |
| 49  | 16,7;6  | $[h_1 h_0(1)] [b_{02}^2]$ | Permanent cycle                 |
| 50  | 16,8;8  | $[b_{02}^2]^2$            | $d_8 = h_0^8 h_4$               |
| 51  | 16,9;8  | $h_0 [b_{02}^2]^2$        | $d_8 = h_0^9 h_4$               |
| 52  | 17,3;0  | $h_1^2 h_4$               | Permanent cycle                 |
| 53  | 17,4;4  | $[h_0(1) b_{13}]$         | Permanent cycle                 |

|     |          |                                       |   |
|-----|----------|---------------------------------------|---|
| 54  | 17,5;4   | $h_0[h_0(1)b_{13}]$                   | Permanent cycle                             |
| 55  | 17,6;4   | $h_0^2[h_0(1)b_{13}]$                 | Permanent cycle                             |
| 56  | 17,7;4   | $h_0^3[h_0(1)b_{13}]$                 | Permanent cycle                             |
| 57  | 17,8;6   | $h_1[h_1h_0(1)][b_{02}^2]$            | Permanent cycle                             |
| 58  | 17,9;8   | $h_1[b_{02}^2]^2$                     | Permanent cycle                             |
| 59  | 18,2;0   | $h_2h_4$                              | Permanent cycle                             |
| 60  | 18,3;0   | $h_0h_2h_4$                           | Permanent cycle                             |
| 61  | 18,4;0   | $h_0^2h_2h_4$                         | Permanent cycle                             |
| 62  | 18,4;4   | $h_2[h_2b_{03}]$                      | Permanent cycle                             |
| 63  | 18,5;4   | $h_0h_2[h_2b_{03}]$                   | Permanent cycle                             |
| 64  | 18,10;8  | $h_1^2[b_{02}^2]^2$                   | Permanent cycle                             |
| 65  | 19,3;2   | $[h_2h_1(1)]$                         | Permanent cycle                             |
| 66  | 19,9;8   | $h_2[b_{02}^2]^2$                     | Permanent cycle                             |
| 67  | 19,10;8  | $h_0h_2[b_{02}^2]^2$                  | Permanent cycle                             |
| 68  | 20,4;4   | $[b_{13}^2]$                          | Permanent cycle                             |
| 69  | 20,5;4   | $h_0[b_{13}^2]$                       | Permanent cycle                             |
| 70  | 20,6;4   | $h_0^2[b_{13}^2]$                     | Permanent cycle                             |
| 71  | 21,3;0   | $h_2^2h_4$                            | Permanent cycle                             |
| 72  | 21,5;4   | $h_1[b_{13}^2]$                       | Permanent cycle                             |
| 73  | 22,4;2   | $h_2[h_2h_1(1)]$                      | Permanent cycle                             |
| 74  | 22,8;8   | $[b_{02}^2][h_0(1)^2]$                | Permanent cycle                             |
| 75  | 22,9;8   | $h_0[b_{02}^2][h_0(1)^2]$             | Permanent cycle                             |
| 76  | 22,10;8  | $h_0^2[b_{02}^2][h_0(1)^2]$           | Permanent cycle                             |
| 77  | 23,4;2   | $[h_1h_0(1)]h_4$                      | Permanent cycle                             |
| 78  | 23,5;4   | $[b_{02}^2]h_4 + h_2[b_{13}^2]$       | $d_4^{-1} = [b_{03}^2]$                     |
| 79  | 23,5;4   | $h_2[b_{13}^2]$                       | Permanent cycle                             |
| 80  | 23,6;4   | $h_0[b_{02}^2]h_4 + h_0h_2[b_{13}^2]$ | $d_4^{-1} = h_0[b_{03}^2]$                  |
| 81  | 23,6;4   | $h_0h_2[b_{13}^2]$                    | Permanent cycle                             |
| 82  | 23,7;4   | $h_0^2[b_{02}^2]h_4$                  | $d_4^{-1} = h_0^2[b_{03}^2]$                |
| 83  | 23,7;8   | $[b_{02}^2][h_2b_{03}]$               | Permanent cycle                             |
| 84  | 23,8;4   | $h_0^3[b_{02}^2]h_4$                  | $d_4^{-1} = h_0^3[b_{03}^2]$                |
| 85  | 23,8;8   | $h_0[b_{02}^2][h_2b_{03}]$            | Permanent cycle                             |
| 86  | 23,9;4   | $h_0^4[b_{02}^2]h_4$                  | $d_4^{-1} = h_0^4[b_{03}^2]$                |
| 87  | 23,9;8   | $h_1[b_{02}^2][h_0(1)^2]$             | Permanent cycle                             |
| 88  | 23,9;8   | $h_0^2[b_{02}^2][h_2b_{03}]$          | Permanent cycle                             |
| 89  | 23,10;4  | $h_0^5[b_{02}^2]h_4$                  | $d_4^{-1} = h_0^5[b_{03}^2]$                |
| 90  | 23,10;8  | $h_0^3[b_{02}^2][h_2b_{03}]$          | Permanent cycle                             |
| 91  | 23,11;4  | $h_0^6[b_{02}^2]h_4$                  | $d_4^{-1} = h_0^6[b_{03}^2]$                |
| 92  | 23,11;8  | $h_0^4[b_{02}^2][h_2b_{03}]$          | Permanent cycle                             |
| 93  | 23,12;4  | $h_0^7[b_{02}^2]h_4$                  | $d_4^{-1} = h_0^7[b_{03}^2]$                |
| 94  | 23,12;8  | $h_0^5[b_{02}^2][h_2b_{03}]$          | Permanent cycle                             |
| 95  | 24,4;8   | $[b_{03}^2]$                          | $d_4 = [b_{02}^2]h_4 + h_2[b_{13}^2]$       |
| 96  | 24,5;2   | $h_1[h_1h_0(1)]h_4$                   | Permanent cycle                             |
| 97  | 24,5;8   | $h_0[b_{03}^2]$                       | $d_4 = h_0[b_{02}^2]h_4 + h_0h_2[b_{13}^2]$ |
| 98  | 24,6;4   | $h_1[b_{02}^2]h_4$                    | $d_4^{-1} = h_1[b_{03}^2]$                  |
| 99  | 24,6;8   | $h_0^2[b_{03}^2]$                     | $d_4 = h_0^2[b_{02}^2]h_4$                  |
| 100 | 24,7;8   | $h_0^3[b_{03}^2]$                     | $d_4 = h_0^3[b_{02}^2]h_4$                  |
| 101 | 24,8;8   | $h_0^4[b_{03}^2]$                     | $d_4 = h_0^4[b_{02}^2]h_4$                  |
| 102 | 24,9;8   | $h_0^5[b_{03}^2]$                     | $d_4 = h_0^5[b_{02}^2]h_4$                  |
| 103 | 24,10;8  | $h_1^2[b_{02}^2][h_0(1)^2]$           | Permanent cycle                             |
| 104 | 24,10;8  | $h_0^6[b_{03}^2]$                     | $d_4 = h_0^6[b_{02}^2]h_4$                  |
| 105 | 24,11;8  | $h_0^7[b_{03}^2]$                     | $d_4 = h_0^7[b_{02}^2]h_4$                  |
| 106 | 24,11;10 | $[h_1h_0(1)][b_{02}^2]^2$             | Permanent cycle                             |

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| 107 | 24,12;8  | $h_0^8[b_{03}^2]$                              | $d_4 = h_0^8[b_{02}^2]h_4$                 |
| 108 | 24,12;12 | $[b_{02}^2]^3$                                 | $d_4 = h_0^6[b_{02}^2][h_2b_{03}]$         |
| 109 | 24,13;8  | $h_0^9[b_{03}^2]$                              | $d_4 = h_0^9[b_{02}^2]h_4$                 |
| 110 | 24,13;12 | $h_0[b_{02}^2]^3$                              | $d_4 = h_0^7[b_{02}^2][h_2b_{03}]$         |
| 111 | 25,5;8   | $h_1[b_{03}^2]$                                | $d_4 = h_1[b_{02}^2]h_4$                   |
| 112 | 25,7;4   | $h_1^2[b_{02}^2]h_4$                           | $d_4^{-1} = h_1^2[b_{03}^2]$               |
| 113 | 25,8;8   | $[b_{02}^2][h_0(1)b_{13}]$                     | Permanent cycle                            |
| 114 | 25,9;8   | $h_0[b_{02}^2][h_0(1)b_{13}]$                  | Permanent cycle                            |
| 115 | 25,10;8  | $h_0^2[b_{02}^2][h_0(1)b_{13}]$                | Permanent cycle                            |
| 116 | 25,11;8  | $h_0^3[b_{02}^2][h_0(1)b_{13}]$                | Permanent cycle                            |
| 117 | 25,12;10 | $h_1[h_1h_0(1)][b_{02}^2]^2$                   | Permanent cycle                            |
| 118 | 25,13;12 | $h_1[b_{02}^2]^3$                              | Permanent cycle                            |
| 119 | 26,6;4   | $h_2[b_{02}^2]h_4 + h_2^2[b_{13}^2]$           | $d_4^{-1} = h_2[b_{03}^2]$                 |
| 120 | 26,6;4   | $h_2^2[b_{13}^2]$                              | Permanent cycle                            |
| 121 | 26,6;8   | $h_1^2[b_{03}^2]$                              | $d_4 = h_1^2[b_{02}^2]h_4$                 |
| 122 | 26,7;4   | $h_0h_2[b_{02}^2]h_4$                          | $d_4^{-1} = h_0h_2[b_{03}^2]$              |
| 123 | 26,7;8   | $[h_0h_0(1)^2b_{03}]$                          | Permanent cycle                            |
| 124 | 26,8;4   | $h_0^2h_2[b_{02}^2]h_4$                        | $d_4^{-1} = h_0^2h_2[b_{03}^2]$            |
| 125 | 26,8;8   | $h_0[h_0h_0(1)^2b_{03}]$                       | Permanent cycle                            |
| 126 | 26,9;8   | $h_0^2[h_0h_0(1)^2b_{03}]$                     | Permanent cycle                            |
| 127 | 26,14;12 | $h_1^2[b_{02}^2]^3$                            | Permanent cycle                            |
| 128 | 27,5;8   | $h_2[b_{03}^2]$                                | $d_4 = h_2[b_{02}^2]h_4 + h_2^2[b_{13}^2]$ |
| 129 | 27,6;8   | $h_0h_2[b_{03}^2]$                             | $d_4 = h_0h_2[b_{02}^2]h_4$                |
| 130 | 27,7;8   | $h_0^2h_2[b_{03}^2]$                           | $d_4 = h_0^2h_2[b_{02}^2]h_4$              |
| 131 | 27,13;12 | $h_2[b_{02}^2]^3$                              | Permanent cycle                            |
| 132 | 27,14;12 | $h_0h_2[b_{02}^2]^3$                           | Permanent cycle                            |
| 133 | 28,8;8   | $[b_{02}^2][b_{13}^2]$                         | Permanent cycle                            |
| 134 | 28,9;8   | $h_0[b_{02}^2][b_{13}^2]$                      | Permanent cycle                            |
| 135 | 28,10;8  | $h_0^2[b_{02}^2][b_{13}^2]$                    | Permanent cycle                            |
| 136 | 29,7;8   | $[h_2b_{03}][h_0(1)^2]$                        | Permanent cycle                            |
| 137 | 29,8;8   | $h_0[h_2b_{03}][h_0(1)^2]$                     | Permanent cycle                            |
| 138 | 29,9;8   | $h_0^2[h_2b_{03}][h_0(1)^2]$                   | Permanent cycle                            |
| 139 | 30,2;0   | $h_4^2$  | Permanent cycle                            |
| 140 | 30,3;0   | $h_0h_4^2$                                     | Permanent cycle                            |
| 141 | 30,4;0   | $h_0^2h_4^2$                                   | Permanent cycle                            |
| 142 | 30,5;0   | $h_0^3h_4^2$                                   | Permanent cycle                            |
| 143 | 30,6;0   | $h_0^4h_4^2$                                   | $d_8^{-1} = h_3[b_{03}^2]$                 |
| 144 | 30,6;8   | $h_2^2[b_{03}^2]$                              | Permanent cycle                            |
| 145 | 30,7;0   | $h_0^5h_4^2$                                   | $d_8^{-1} = h_0h_3[b_{03}^2]$              |
| 146 | 30,7;6   | $[h_4h_0(1)b_{02}^2 + h_0^3b_{02}b_{14}]$      | Permanent cycle                            |
| 147 | 30,8;0   | $h_0^6h_4^2$                                   | $d_8^{-1} = h_0^2h_3[b_{03}^2]$            |
| 148 | 30,8;6   | $h_0[h_4h_0(1)b_{02}^2 + h_0^3b_{02}b_{14}]$   | Permanent cycle                            |
| 149 | 30,9;0   | $h_0^7h_4^2$                                   | $d_8^{-1} = h_0^3h_3[b_{03}^2]$            |
| 150 | 30,9;6   | $h_0^2[h_4h_0(1)b_{02}^2 + h_0^3b_{02}b_{14}]$ | Permanent cycle                            |
| 151 | 30,10;0  | $h_0^8h_4^2$                                   | $d_8^{-1} = h_0^4h_3[b_{03}^2]$            |
| 152 | 30,10;6  | $h_0^3[h_4h_0(1)b_{02}^2 + h_0^3b_{02}b_{14}]$ | Permanent cycle                            |
| 153 | 30,11;0  | $h_0^9h_4^2$                                   | $d_8^{-1} = h_0^5h_3[b_{03}^2]$            |
| 154 | 30,11;6  | $h_0^4[h_4h_0(1)b_{02}^2 + h_0^3b_{02}b_{14}]$ | Permanent cycle                            |
| 155 | 30,12;0  | $h_0^{10}h_4^2$                                | $d_8^{-1} = h_0^6h_3[b_{03}^2]$            |
| 156 | 30,12;6  | $h_0^5[h_4h_0(1)b_{02}^2 + h_0^3b_{02}b_{14}]$ | $d_6^{-1} = [b_{02}^2]^2[h_2b_{03}]$       |
| 157 | 30,12;12 | $[b_{02}^2]^2[h_0(1)^2]$                       | Permanent cycle                            |
| 158 | 30,13;0  | $h_0^{11}h_4^2$                                | $d_8^{-1} = h_0^7h_3[b_{03}^2]$            |
| 159 | 30,13;6  | $h_0^6[h_4h_0(1)b_{02}^2 + h_0^3b_{02}b_{14}]$ | $d_6^{-1} = h_0[b_{02}^2]^2[h_2b_{03}]$    |

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| 160 | 30,13;12 | $h_0[b_{02}^2]^2[h_0(1)^2]$  | Permanent cycle                                      |
| 161 | 30,14;0  | $h_0^{12}h_4^2$  | $d_8^{-1} = h_0^8h_3[b_{03}^2]$                      |
| 162 | 30,14;6  | $h_0^7[h_4h_0(1)b_{02}^2 + h_0^3b_{02}b_{14}]$                                 | $d_6^{-1} = h_0^2[b_{02}^2]^2[h_2b_{03}]$            |
| 163 | 30,14;12 | $h_0^2[b_{02}^2]^2[h_0(1)^2]$  | Permanent cycle                                      |
| 164 | 30,15;0  | $h_0^{13}h_4^2$  | $d_8^{-1} = h_0^9h_3[b_{03}^2]$                      |
| 165 | 30,15;6  | $h_0^8[h_4h_0(1)b_{02}^2 + h_0^3b_{02}b_{14}]$                                 | $d_6^{-1} = h_0^3[b_{02}^2]^2[h_2b_{03}]$            |
| 166 | 30,16;0  | $h_0^{14}h_4^2$  | $d_8^{-1} = h_0^{10}h_3[b_{03}^2]$                   |
| 167 | 30,16;6  | $h_0^9[h_4h_0(1)b_{02}^2 + h_0^3b_{02}b_{14}]$                                 | $d_6^{-1} = h_0^4[b_{02}^2]^2[h_2b_{03}]$            |
| 168 | 31,1;0   | $h_5$  | Permanent cycle                                      |
| 169 | 31,2;0   | $h_0h_5$   | Permanent cycle                                      |
| 170 | 31,3;0   | $h_1h_4^2$   | Permanent cycle                                      |
| 171 | 31,3;0   | $h_0^2h_5$   | Permanent cycle                                      |
| 172 | 31,4;0   | $h_0^3h_5$   | Permanent cycle                                      |
| 173 | 31,5;0   | $h_0^4h_5$   | Permanent cycle                                      |
| 174 | 31,5;6   | $[h_2h_1(1)b_{03}]$  | Permanent cycle                                      |
| 175 | 31,5;8   | $h_3[b_{03}^2]$  | $d_8 = h_0^4h_4^2$                                   |
| 176 | 31,6;0   | $h_0^5h_5$   | Permanent cycle                                      |
| 177 | 31,6;8   | $h_0h_3[b_{03}^2]$   | $d_8 = h_0^5h_4^2$                                   |
| 178 | 31,7;0   | $h_0^6h_5$   | Permanent cycle                                      |
| 179 | 31,7;8   | $h_0^2h_3[b_{03}^2]$   | $d_8 = h_0^6h_4^2$                                   |
| 180 | 31,8;0   | $h_0^7h_5$   | Permanent cycle                                      |
| 181 | 31,8;6   | $h_1[h_4h_0(1)b_{02}^2 + h_0^3b_{02}b_{14}]$                                   | $d_4^{-1} = [h_1h_0(1)][b_{03}^2]$                   |
| 182 | 31,8;8   | $[h_0(1)^2][h_0(1)b_{13}]$   | Permanent cycle                                      |
| 183 | 31,8;8   | $h_0^3h_3[b_{03}^2]$   | $d_8 = h_0^7h_4^2$                                   |
| 184 | 31,9;0   | $h_0^8h_5$   | Permanent cycle                                      |
| 185 | 31,9;8   | $[b_{02}^2]^2h_4 + h_0[h_0(1)^2][h_0(1)b_{13}] +$<br>$h_0^4h_3[b_{03}^2]$      | $d_4^{-1} = [b_{02}^2][b_{03}^2]$                    |
| 186 | 31,9;8   | $h_0[h_0(1)^2][h_0(1)b_{13}]$  | Permanent cycle                                      |
| 187 | 31,9;8   | $h_0^4h_3[b_{03}^2]$   | $d_8 = h_0^8h_4^2$                                   |
| 188 | 31,10;0  | $h_0^9h_5$   | Permanent cycle                                      |
| 189 | 31,10;8  | $h_0[b_{02}^2]^2h_4 + h_0^2[h_0(1)^2][h_0(1)b_{13}] +$<br>$h_0^5h_3[b_{03}^2]$ | $d_4^{-1} = h_0[b_{02}^2][b_{03}^2]$                 |
| 190 | 31,10;8  | $h_0^2[h_0(1)^2][h_0(1)b_{13}]$  | Permanent cycle                                      |
| 191 | 31,10;8  | $h_0^5h_3[b_{03}^2]$   | $d_8 = h_0^9h_4^2$                                   |
| 192 | 31,11;0  | $h_0^{10}h_5$  | Permanent cycle                                      |
| 193 | 31,11;8  | $h_0^2[b_{02}^2]^2h_4 + h_0^6h_3[b_{03}^2]$                                    | $d_4^{-1} = h_0^2[b_{02}^2][b_{03}^2]$               |
| 194 | 31,11;8  | $h_0^6h_3[b_{03}^2]$   | $d_8 = h_0^{10}h_4^2$                                |
| 195 | 31,11;12 | $[b_{02}^2]^2[h_2b_{03}]$  | $d_6 = h_0^5[h_4h_0(1)b_{02}^2 + h_0^3b_{02}b_{14}]$ |
| 196 | 31,12;0  | $h_0^{11}h_5$  | Permanent cycle                                      |
| 197 | 31,12;8  | $h_0^3[b_{02}^2]^2h_4 + h_0^7h_3[b_{03}^2]$                                    | $d_4^{-1} = h_0^3[b_{02}^2][b_{03}^2]$               |
| 198 | 31,12;8  | $h_0^7h_3[b_{03}^2]$   | $d_8 = h_0^{11}h_4^2$                                |
| 199 | 31,12;12 | $h_0[b_{02}^2]^2[h_2b_{03}]$   | $d_6 = h_0^6[h_4h_0(1)b_{02}^2 + h_0^3b_{02}b_{14}]$ |
| 200 | 31,13;0  | $h_0^{12}h_5$  | Permanent cycle                                      |
| 201 | 31,13;8  | $h_0^4[b_{02}^2]^2h_4 + h_0^8h_3[b_{03}^2]$                                    | $d_4^{-1} = h_0^4[b_{02}^2][b_{03}^2]$               |
| 202 | 31,13;8  | $h_0^8h_3[b_{03}^2]$   | $d_8 = h_0^{12}h_4^2$                                |
| 203 | 31,13;12 | $h_1[b_{02}^2]^2[h_0(1)^2]$  | Permanent cycle                                      |
| 204 | 31,13;12 | $h_0^2[b_{02}^2]^2[h_2b_{03}]$   | $d_6 = h_0^7[h_4h_0(1)b_{02}^2 + h_0^3b_{02}b_{14}]$ |
| 205 | 31,14;0  | $h_0^{13}h_5$  | Permanent cycle                                      |
| 206 | 31,14;8  | $h_0^5[b_{02}^2]^2h_4 + h_0^9h_3[b_{03}^2]$                                    | $d_4^{-1} = h_0^5[b_{02}^2][b_{03}^2]$               |
| 207 | 31,14;8  | $h_0^9h_3[b_{03}^2]$   | $d_8 = h_0^{13}h_4^2$                                |
| 208 | 31,14;12 | $h_0^3[b_{02}^2]^2[h_2b_{03}]$   | $d_6 = h_0^8[h_4h_0(1)b_{02}^2 + h_0^3b_{02}b_{14}]$ |
| 209 | 31,15;0  | $h_0^{14}h_5$  | Permanent cycle                                      |
| 210 | 31,15;8  | $h_0^6[b_{02}^2]^2h_4 + h_0^{10}h_3[b_{03}^2]$                                 | $d_4^{-1} = h_0^6[b_{02}^2][b_{03}^2]$               |
| 211 | 31,15;8  | $h_0^{10}h_3[b_{03}^2]$  | $d_8 = h_0^{14}h_4^2$                                |

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| 212 | 31,15;12 | $h_0^4[b_{02}^2]^2[h_2b_{03}]$                 | $d_6 = h_0^9[h_4h_0(1)b_{02}^2 + h_0^3b_{02}b_{14}]$                            |
| 213 | 31,16;0  | $h_0^{15}h_5$                                  | Permanent cycle   |
| 214 | 31,16;8  | $h_0^7[b_{02}^2]^2h_4 + h_0^{11}h_3[b_{03}^2]$ | $d_4^{-1} = h_0^7[b_{02}^2][b_{03}^2]$  |
| 215 | 31,16;8  | $h_0^{11}h_3[b_{03}^2]$                        | $d_8 = h_0^{15}h_4^2$   |
| 216 | 31,16;12 | $h_0^5[b_{02}^2]^2[h_2b_{03}]$                 | $d_6 = h_0^{10}[h_4h_0(1)b_{02}^2 + h_0^3b_{02}b_{14}]$                         |
| 217 | 32,2;0   | $h_1h_5$                                       | Permanent cycle   |
| 218 | 32,4;0   | $h_1^2h_4^2$                                   | $d_4^{-1} = [h_3b_{14}]$  |
| 219 | 32,4;4   | $[h_1(1)^2]$                                   | Permanent cycle   |
| 220 | 32,6;8   | $h_1h_3[b_{03}^2]$                             | Permanent cycle   |
| 221 | 32,7;8   | $[h_2b_{03}][h_0(1)b_{13}]$                    | Permanent cycle   |
| 222 | 32,7;10  | $[h_1h_0(1)][b_{03}^2]$                        | $d_4 = h_1[h_4h_0(1)b_{02}^2 + h_0^3b_{02}b_{14}]$                              |
| 223 | 32,8;8   | $h_0[h_2b_{03}][h_0(1)b_{13}]$                 | Permanent cycle   |
| 224 | 32,8;12  | $[b_{02}^2][b_{03}^2]$                         | $d_4 = [b_{02}^2]^2h_4 + h_0[h_0(1)^2][h_0(1)b_{13}] + h_0^4h_3[b_{03}^2]$      |
| 225 | 32,9;6   | $h_1^2[h_4h_0(1)b_{02}^2 + h_0^3b_{02}b_{14}]$ | $d_4^{-1} = h_1[h_1h_0(1)][b_{03}^2]$   |
| 226 | 32,9;8   | $h_0^2[h_2b_{03}][h_0(1)b_{13}]$               | Permanent cycle   |
| 227 | 32,9;12  | $h_0[b_{02}^2][b_{03}^2]$                      | $d_4 = h_0[b_{02}^2]^2h_4 + h_0^2[h_0(1)^2][h_0(1)b_{13}] + h_0^5h_3[b_{03}^2]$ |
| 228 | 32,10;8  | $h_1[b_{02}^2]^2h_4$                           | $d_4^{-1} = h_1[b_{02}^2][b_{03}^2]$  |
| 229 | 32,10;12 | $h_0^2[b_{02}^2][b_{03}^2]$                    | $d_4 = h_0^2[b_{02}^2]^2h_4 + h_0^6h_3[b_{03}^2]$                               |
| 230 | 32,11;12 | $h_0^3[b_{02}^2][b_{03}^2]$                    | $d_4 = h_0^3[b_{02}^2]^2h_4 + h_0^7h_3[b_{03}^2]$                               |
| 231 | 32,12;12 | $h_0^4[b_{02}^2][b_{03}^2]$                    | $d_4 = h_0^4[b_{02}^2]^2h_4 + h_0^8h_3[b_{03}^2]$                               |
| 232 | 32,13;12 | $h_0^5[b_{02}^2][b_{03}^2]$                    | $d_4 = h_0^5[b_{02}^2]^2h_4 + h_0^9h_3[b_{03}^2]$                               |
| 233 | 32,14;12 | $h_1^2[b_{02}^2]^2[h_0(1)^2]$                  | Permanent cycle   |
| 234 | 32,14;12 | $h_0^6[b_{02}^2][b_{03}^2]$                    | $d_4 = h_0^6[b_{02}^2]^2h_4 + h_0^{10}h_3[b_{03}^2]$                            |
| 235 | 32,15;12 | $h_0^7[b_{02}^2][b_{03}^2]$                    | $d_4 = h_0^7[b_{02}^2]^2h_4 + h_0^{11}h_3[b_{03}^2]$                            |
| 236 | 32,15;14 | $[h_1h_0(1)][b_{02}^2]^3$                      | Permanent cycle   |
| 237 | 32,16;12 | $h_0^8[b_{02}^2][b_{03}^2]$                    | $d_4 = h_0^8[b_{02}^2]^2h_4 + h_0^{12}h_3[b_{03}^2]$                            |
| 238 | 32,16;16 | $[b_{02}^2]^4$                                 | $d_{16} = h_0^{16}h_5$  |
| 239 | 32,17;12 | $h_0^9[b_{02}^2][b_{03}^2]$                    | $d_4 = h_0^9[b_{02}^2]^2h_4 + h_0^{13}h_3[b_{03}^2]$                            |
| 240 | 32,17;16 | $h_0[b_{02}^2]^4$                              | $d_{16} = h_0^{17}h_5$  |
| 241 | 33,3;0   | $h_1^2h_5$                                     | Permanent cycle   |
| 242 | 33,3;4   | $[h_3b_{14}]$                                  | $d_4 = h_1^2h_4^2$  |
| 243 | 33,4;4   | $h_0[h_3b_{14}]$                               | Permanent cycle   |
| 244 | 33,5;4   | $h_0^2[h_3b_{14}]$                             | Permanent cycle   |
| 245 | 33,7;8   | $h_1^2h_3[b_{03}^2]$                           | Permanent cycle   |
| 246 | 33,8;10  | $h_1[h_1h_0(1)][b_{03}^2]$                     | $d_4 = h_1^2[h_4h_0(1)b_{02}^2 + h_0^3b_{02}b_{14}]$                            |
| 247 | 33,9;12  | $h_1[b_{02}^2][b_{03}^2]$                      | $d_4 = h_1[b_{02}^2]^2h_4$  |
| 248 | 33,11;8  | $h_1^2[b_{02}^2]^2h_4$                         | $d_4^{-1} = h_1^2[b_{02}^2][b_{03}^2]$  |
| 249 | 33,12;12 | $[b_{02}^2]^2[h_0(1)b_{13}]$                   | Permanent cycle   |
| 250 | 33,13;12 | $h_0[b_{02}^2]^2[h_0(1)b_{13}]$                | Permanent cycle   |
| 251 | 33,14;12 | $h_0^2[b_{02}^2]^2[h_0(1)b_{13}]$              | Permanent cycle   |
| 252 | 33,15;12 | $h_0^3[b_{02}^2]^2[h_0(1)b_{13}]$              | Permanent cycle   |
| 253 | 33,16;14 | $h_1[h_1h_0(1)][b_{02}^2]^3$                   | Permanent cycle   |
| 254 | 33,17;16 | $h_1[b_{02}^2]^4$                              | Permanent cycle   |
| 255 | 34,2;0   | $h_2h_5$                                       | Permanent cycle   |
| 256 | 34,3;0   | $h_0h_2h_5$                                    | Permanent cycle   |
| 257 | 34,4;0   | $h_0^2h_2h_5$                                  | Permanent cycle   |
| 258 | 34,5;2   | $[h_0h_4^2b_{02} + h_0^3h_2(1)]$               | $d_4^{-1} = [h_0h_3b_{04}]$   |
| 259 | 34,6;2   | $h_0[h_0h_4^2b_{02} + h_0^3h_2(1)]$            | $d_4^{-1} = h_0[h_0h_3b_{04}]$  |
| 260 | 34,6;6   | $h_2[h_2h_1(1)b_{03}]$                         | Permanent cycle   |
| 261 | 34,7;2   | $h_0^2[h_0h_4^2b_{02} + h_0^3h_2(1)]$          | $d_4^{-1} = h_0^2[h_0h_3b_{04}]$  |
| 262 | 34,8;2   | $h_0^3[h_0h_4^2b_{02} + h_0^3h_2(1)]$          | $d_4^{-1} = h_0^3[h_0h_3b_{04}]$  |

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| 263 | 34,8;8   | $[h_0(1)^2][b_{13}^2]$                           | Permanent cycle  |
| 264 | 34,9;2   | $h_0^4[h_0h_4^2b_{02} + h_0^3h_2(1)]$            | $d_4^{-1} = h_0^4[h_0h_3b_{04}]$                       |
| 265 | 34,9;8   | $h_0[h_0(1)^2][b_{13}^2]$                        | Permanent cycle  |
| 266 | 34,10;2  | $h_0^5[h_0h_4^2b_{02} + h_0^3h_2(1)]$            | $d_4^{-1} = h_0^5[h_0h_3b_{04}]$                       |
| 267 | 34,10;8  | $h_2[b_{02}^2]^2h_4 + h_0^2[h_0(1)^2][b_{13}^2]$ | $d_4^{-1} = h_2[b_{02}^2][b_{03}^2]$                   |
| 268 | 34,10;8  | $h_0^2[h_0(1)^2][b_{13}^2]$                      | Permanent cycle  |
| 269 | 34,10;12 | $h_1^2[b_{02}^2][b_{03}^2]$                      | $d_4 = h_1^2[b_{02}^2]^2h_4$                           |
| 270 | 34,11;2  | $h_0^6[h_0h_4^2b_{02} + h_0^3h_2(1)]$            | $d_4^{-1} = h_0^6[h_0h_3b_{04}]$                       |
| 271 | 34,11;8  | $h_0h_2[b_{02}^2]^2h_4$                          | $d_4^{-1} = h_0h_2[b_{02}^2][b_{03}^2]$                |
| 272 | 34,11;12 | $[b_{02}^2][h_0h_0(1)^2b_{03}]$                  | Permanent cycle  |
| 273 | 34,12;2  | $h_0^7[h_0h_4^2b_{02} + h_0^3h_2(1)]$            | $d_4^{-1} = h_0^7[h_0h_3b_{04}]$                       |
| 274 | 34,12;8  | $h_0^2h_2[b_{02}^2]^2h_4$                        | $d_4^{-1} = h_0^2h_2[b_{02}^2][b_{03}^2]$              |
| 275 | 34,12;12 | $h_0[b_{02}^2][h_0h_0(1)^2b_{03}]$               | Permanent cycle  |
| 276 | 34,13;2  | $h_0^8[h_0h_4^2b_{02} + h_0^3h_2(1)]$            | $d_4^{-1} = h_0^8[h_0h_3b_{04}]$                       |
| 277 | 34,13;12 | $h_0^2[b_{02}^2][h_0h_0(1)^2b_{03}]$             | Permanent cycle  |
| 278 | 34,14;2  | $h_0^9[h_0h_4^2b_{02} + h_0^3h_2(1)]$            | $d_4^{-1} = h_0^9[h_0h_3b_{04}]$                       |
| 279 | 34,15;2  | $h_0^{10}[h_0h_4^2b_{02} + h_0^3h_2(1)]$         | $d_4^{-1} = h_0^{10}[h_0h_3b_{04}]$                    |
| 280 | 34,16;2  | $h_0^{11}[h_0h_4^2b_{02} + h_0^3h_2(1)]$         | $d_4^{-1} = h_0^{11}[h_0h_3b_{04}]$                    |
| 281 | 34,17;2  | $h_0^{12}[h_0h_4^2b_{02} + h_0^3h_2(1)]$         | $d_4^{-1} = h_0^{12}[h_0h_3b_{04}]$                    |
| 282 | 34,18;2  | $h_0^{13}[h_0h_4^2b_{02} + h_0^3h_2(1)]$         | $d_4^{-1} = h_0^{13}[h_0h_3b_{04}]$                    |
| 283 | 34,18;16 | $h_1^2[b_{02}^2]^4$                              | Permanent cycle  |
| 284 | 35,4;6   | $[h_0h_3b_{04}]$                                 | $d_4 = [h_0h_4^2b_{02} + h_0^3h_2(1)]$                 |
| 285 | 35,5;4   | $h_2[h_1(1)^2]$                                  | Permanent cycle  |
| 286 | 35,5;6   | $h_0[h_0h_3b_{04}]$                              | $d_4 = h_0[h_0h_4^2b_{02} + h_0^3h_2(1)]$              |
| 287 | 35,6;6   | $h_0^2[h_0h_3b_{04}]$                            | $d_4 = h_0^2[h_0h_4^2b_{02} + h_0^3h_2(1)]$            |
| 288 | 35,7;6   | $h_0^3[h_0h_3b_{04}]$                            | $d_4 = h_0^3[h_0h_4^2b_{02} + h_0^3h_2(1)]$            |
| 289 | 35,7;8   | $[h_2b_{03}][b_{13}^2]$                          | Permanent cycle  |
| 290 | 35,8;6   | $h_0^4[h_0h_3b_{04}]$                            | $d_4 = h_0^4[h_0h_4^2b_{02} + h_0^3h_2(1)]$            |
| 291 | 35,8;8   | $h_0[h_2b_{03}][b_{13}^2]$                       | Permanent cycle  |
| 292 | 35,9;6   | $h_0^5[h_0h_3b_{04}]$                            | $d_4 = h_0^5[h_0h_4^2b_{02} + h_0^3h_2(1)]$            |
| 293 | 35,9;8   | $h_0^2[h_2b_{03}][b_{13}^2]$                     | Permanent cycle  |
| 294 | 35,9;12  | $h_2[b_{02}^2][b_{03}^2]$                        | $d_4 = h_2[b_{02}^2]^2h_4 + h_0^2[h_0(1)^2][b_{13}^2]$ |
| 295 | 35,10;6  | $h_0^6[h_0h_3b_{04}]$                            | $d_4 = h_0^6[h_0h_4^2b_{02} + h_0^3h_2(1)]$            |
| 296 | 35,10;12 | $h_0h_2[b_{02}^2][b_{03}^2]$                     | $d_4 = h_0h_2[b_{02}^2]^2h_4$                          |
| 297 | 35,11;6  | $h_0^7[h_0h_3b_{04}]$                            | $d_4 = h_0^7[h_0h_4^2b_{02} + h_0^3h_2(1)]$            |
| 298 | 35,11;12 | $h_0^2h_2[b_{02}^2][b_{03}^2]$                   | $d_4 = h_0^2h_2[b_{02}^2]^2h_4$                        |
| 299 | 35,12;6  | $h_0^8[h_0h_3b_{04}]$                            | $d_4 = h_0^8[h_0h_4^2b_{02} + h_0^3h_2(1)]$            |
| 300 | 35,13;6  | $h_0^9[h_0h_3b_{04}]$                            | $d_4 = h_0^9[h_0h_4^2b_{02} + h_0^3h_2(1)]$            |
| 301 | 35,14;6  | $h_0^{10}[h_0h_3b_{04}]$                         | $d_4 = h_0^{10}[h_0h_4^2b_{02} + h_0^3h_2(1)]$         |
| 302 | 35,15;6  | $h_0^{11}[h_0h_3b_{04}]$                         | $d_4 = h_0^{11}[h_0h_4^2b_{02} + h_0^3h_2(1)]$         |
| 303 | 35,16;6  | $h_0^{12}[h_0h_3b_{04}]$                         | $d_4 = h_0^{12}[h_0h_4^2b_{02} + h_0^3h_2(1)]$         |
| 304 | 35,17;6  | $h_0^{13}[h_0h_3b_{04}]$                         | $d_4 = h_0^{13}[h_0h_4^2b_{02} + h_0^3h_2(1)]$         |
| 305 | 35,17;16 | $h_2[b_{02}^2]^4$                                | Permanent cycle  |
| 306 | 35,18;6  | $h_0^{14}[h_0h_3b_{04}]$                         | $d_4 = h_0^{14}[h_0h_4^2b_{02} + h_0^3h_2(1)]$         |
| 307 | 35,18;16 | $h_0h_2[b_{02}^2]^4$                             | Permanent cycle  |
| 308 | 36,6;6   | $[h_1(1)b_{13}^2 + h_1^2b_{24}b_{03}]$           | Permanent cycle  |
| 309 | 36,12;12 | $[b_{02}^2]^2[b_{13}^2]$                         | Permanent cycle  |
| 310 | 36,13;12 | $h_0[b_{02}^2]^2[b_{13}^2]$                      | Permanent cycle  |
| 311 | 36,14;12 | $h_0^2[b_{02}^2]^2[b_{13}^2]$                    | Permanent cycle  |
| 312 | 37,3;0   | $h_2^2h_5$                                       | Permanent cycle  |
| 313 | 37,5;6   | $[h_2b_{24}b_{03} + h_2^3b_{04}]$                | Permanent cycle  |
| 314 | 37,6;6   | $h_0[h_2b_{24}b_{03} + h_2^3b_{04}]$             | Permanent cycle  |
| 315 | 37,7;6   | $h_1[h_1(1)b_{13}^2 + h_1^2b_{24}b_{03}]$        | Permanent cycle  |

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| 316 | 37,7;6   | $h_0^2[h_2b_{24}b_{03} + h_2^3b_{04}]$                 | Permanent cycle   |
| 317 | 37,8;6   | $h_0^3[h_2b_{24}b_{03} + h_2^3b_{04}]$                 | Permanent cycle   |
| 318 | 37,8;8   | $[h_0(1)b_{13}][b_{13}^2]$                             | Permanent cycle   |
| 319 | 37,9;6   | $h_0^4[h_2b_{24}b_{03} + h_2^3b_{04}]$                 | Permanent cycle   |
| 320 | 37,9;8   | $h_0[h_0(1)b_{13}][b_{13}^2]$                          | $d_4^{-1} = [h_0(1)^2][b_{03}^2]$                                   |
| 321 | 37,10;6  | $h_0^5[h_2b_{24}b_{03} + h_2^3b_{04}]$                 | Permanent cycle   |
| 322 | 37,10;8  | $h_0^2[h_0(1)b_{13}][b_{13}^2]$                        | $d_4^{-1} = h_0[h_0(1)^2][b_{03}^2]$                                |
| 323 | 37,11;6  | $h_0^6[h_2b_{24}b_{03} + h_2^3b_{04}]$                 | $d_6^{-1} = h_0^2[h_0(1)^2][b_{03}^2]$                              |
| 324 | 37,11;12 | $[b_{02}^2][h_2b_{03}][h_0(1)^2]$                      | Permanent cycle   |
| 325 | 37,12;6  | $h_0^7[h_2b_{24}b_{03} + h_2^3b_{04}]$                 | $d_4^{-1} = [b_{02}^2][h_4h_0(1)b_{02}^2 + h_0^3b_{02}b_{14}]$      |
| 326 | 37,12;12 | $h_0[b_{02}^2][h_2b_{03}][h_0(1)^2]$                   | Permanent cycle   |
| 327 | 37,13;6  | $h_0^8[h_2b_{24}b_{03} + h_2^3b_{04}]$                 | $d_4^{-1} = h_0[b_{02}^2][h_4h_0(1)b_{02}^2 + h_0^3b_{02}b_{14}]$   |
| 328 | 37,13;12 | $h_0^2[b_{02}^2][h_2b_{03}][h_0(1)^2]$                 | Permanent cycle   |
| 329 | 37,14;6  | $h_0^9[h_2b_{24}b_{03} + h_2^3b_{04}]$                 | $d_4^{-1} = h_0^2[b_{02}^2][h_4h_0(1)b_{02}^2 + h_0^3b_{02}b_{14}]$ |
| 330 | 37,15;6  | $h_0^{10}[h_2b_{24}b_{03} + h_2^3b_{04}]$              | $d_4^{-1} = h_0^3[b_{02}^2][h_4h_0(1)b_{02}^2 + h_0^3b_{02}b_{14}]$ |
| 331 | 37,16;6  | $h_0^{11}[h_2b_{24}b_{03} + h_2^3b_{04}]$              | $d_4^{-1} = h_0^4[b_{02}^2][h_4h_0(1)b_{02}^2 + h_0^3b_{02}b_{14}]$ |
| 332 | 37,17;6  | $h_0^{12}[h_2b_{24}b_{03} + h_2^3b_{04}]$              | $d_4^{-1} = h_0^5[b_{02}^2][h_4h_0(1)b_{02}^2 + h_0^3b_{02}b_{14}]$ |
| 333 | 37,18;6  | $h_0^{13}[h_2b_{24}b_{03} + h_2^3b_{04}]$              | $d_4^{-1} = h_0^6[b_{02}^2][h_4h_0(1)b_{02}^2 + h_0^3b_{02}b_{14}]$ |
| 334 | 37,19;6  | $h_0^{14}[h_2b_{24}b_{03} + h_2^3b_{04}]$              | $d_4^{-1} = h_0^7[b_{02}^2][h_4h_0(1)b_{02}^2 + h_0^3b_{02}b_{14}]$ |
| 335 | 38,2;0   | $h_3h_5$   | Permanent cycle   |
| 336 | 38,3;0   | $h_0h_3h_5$  | Permanent cycle   |
| 337 | 38,4;0   | $h_0^2h_3h_5$  | Permanent cycle   |
| 338 | 38,4;4   | $[h_1(1)b_{24}]$                                       | Permanent cycle   |
| 339 | 38,5;0   | $h_0^3h_3h_5$  | Permanent cycle   |
| 340 | 38,6;0   | $h_0^4h_3h_5$  | $d_4^{-1} = [b_{02}^2]h_5$  |
| 341 | 38,6;4   | $[b_{02}^2]h_4^2 + h_2^2[h_1(1)^2]$                    | $d_4^{-1} = h_4[b_{03}^2]$  |
| 342 | 38,6;4   | $h_2^2[h_1(1)^2]$                                      | Permanent cycle   |
| 343 | 38,6;8   | $h_3^2[b_{03}^2]$                                      | Permanent cycle   |
| 344 | 38,7;0   | $h_0^5h_3h_5$  | $d_4^{-1} = h_0[b_{02}^2]h_5$                                       |
| 345 | 38,7;4   | $h_0[b_{02}^2]h_4^2$                                   | $d_4^{-1} = h_0h_4[b_{03}^2]$                                       |
| 346 | 38,7;8   | $h_0h_3^2[b_{03}^2]$                                   | Permanent cycle   |
| 347 | 38,8;0   | $h_0^6h_3h_5$  | $d_4^{-1} = h_0^2[b_{02}^2]h_5$                                     |
| 348 | 38,8;4   | $h_0^2[b_{02}^2]h_4^2$                                 | $d_4^{-1} = h_0^2h_4[b_{03}^2]$                                     |
| 349 | 38,8;8   | $h_2[h_2b_{03}][b_{13}^2] + h_0^2h_3^2[b_{03}^2]$      | $d_4^{-1} = [h_2b_{03}][b_{03}^2]$                                  |
| 350 | 38,8;8   | $h_0^2h_3^2[b_{03}^2]$                                 | Permanent cycle   |
| 351 | 38,8;12  | $[h_0(1)^2][b_{03}^2]$                                 | $d_4 = h_0[h_0(1)b_{13}][b_{13}^2]$                                 |
| 352 | 38,9;0   | $h_0^7h_3h_5$  | $d_4^{-1} = h_0^3[b_{02}^2]h_5$                                     |
| 353 | 38,9;4   | $h_0^3[b_{02}^2]h_4^2$                                 | $d_4^{-1} = h_0^3h_4[b_{03}^2]$                                     |
| 354 | 38,9;8   | $h_0h_2[h_2b_{03}][b_{13}^2] + h_0^3h_3^2[b_{03}^2]$   | $d_4^{-1} = h_0[h_2b_{03}][b_{03}^2]$                               |
| 355 | 38,9;8   | $h_0^3h_3^2[b_{03}^2]$                                 | Permanent cycle   |
| 356 | 38,9;12  | $h_0[h_0(1)^2][b_{03}^2]$                              | $d_4 = h_0^2[h_0(1)b_{13}][b_{13}^2]$                               |
| 357 | 38,10;0  | $h_0^8h_3h_5$  | $d_4^{-1} = h_0^4[b_{02}^2]h_5$                                     |
| 358 | 38,10;4  | $h_0^4[b_{02}^2]h_4^2$                                 | $d_4^{-1} = h_0^4h_4[b_{03}^2]$                                     |
| 359 | 38,10;8  | $h_0^4h_3^2[b_{03}^2]$                                 | $d_4^{-1} = h_0^2[h_2b_{03}][b_{03}^2]$                             |
| 360 | 38,10;12 | $h_0^2[h_0(1)^2][b_{03}^2]$                            | $d_6 = h_0^6[h_2b_{24}b_{03} + h_2^3b_{04}]$                        |
| 361 | 38,11;0  | $h_0^9h_3h_5$  | $d_4^{-1} = h_0^5[b_{02}^2]h_5$                                     |
| 362 | 38,11;4  | $h_0^5[b_{02}^2]h_4^2$                                 | $d_4^{-1} = h_0^5h_4[b_{03}^2]$                                     |
| 363 | 38,11;8  | $h_0^5h_3^2[b_{03}^2]$                                 | $d_4^{-1} = h_0^3[h_2b_{03}][b_{03}^2]$                             |
| 364 | 38,11;10 | $[b_{02}^2][h_4h_0(1)b_{02}^2 + h_0^3b_{02}b_{14}]$    | $d_4 = h_0^4[h_2b_{24}b_{03} + h_2^3b_{04}]$                        |
| 365 | 38,12;0  | $h_0^{10}h_3h_5$                                       | $d_4^{-1} = h_0^6[b_{02}^2]h_5$                                     |
| 366 | 38,12;4  | $h_0^6[b_{02}^2]h_4^2$                                 | $d_4^{-1} = h_0^6h_4[b_{03}^2]$                                     |
| 367 | 38,12;8  | $h_0^6h_3^2[b_{03}^2]$                                 | $d_4^{-1} = h_0^4[h_2b_{03}][b_{03}^2]$                             |
| 368 | 38,12;10 | $h_0[b_{02}^2][h_4h_0(1)b_{02}^2 + h_0^3b_{02}b_{14}]$ | $d_4 = h_0^8[h_2b_{24}b_{03} + h_2^3b_{04}]$                        |

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| 369 | 38,13;0  | $h_0^{11}h_3h_5$   | $d_4^{-1} = h_0^7[b_{02}^2]h_5$                            |
| 370 | 38,13;4  | $h_0^7[b_{02}^2]h_4^2$                                   | $d_4^{-1} = h_0^7h_4[b_{03}^2]$                            |
| 371 | 38,13;8  | $h_0^7h_3^2[b_{03}^2]$                                   | $d_4^{-1} = h_0^5[h_2b_{03}][b_{03}^2]$                    |
| 372 | 38,13;10 | $h_0^2[b_{02}^2][h_4h_0(1)b_{02}^2 + h_0^3b_{02}b_{14}]$ | $d_4 = h_0^9[h_2b_{24}b_{03} + h_2^3b_{04}]$               |
| 373 | 38,14;0  | $h_0^{12}h_3h_5$   | $d_4^{-1} = h_0^8[b_{02}^2]h_5$                            |
| 374 | 38,14;4  | $h_0^8[b_{02}^2]h_4^2$                                   | $d_4^{-1} = h_0^8h_4[b_{03}^2]$                            |
| 375 | 38,14;8  | $h_0^8h_3^2[b_{03}^2]$                                   | $d_4^{-1} = h_0^6[h_2b_{03}][b_{03}^2]$                    |
| 376 | 38,14;10 | $h_0^3[b_{02}^2][h_4h_0(1)b_{02}^2 + h_0^3b_{02}b_{14}]$ | $d_4 = h_0^{10}[h_2b_{24}b_{03} + h_2^3b_{04}]$            |
| 377 | 38,15;0  | $h_0^{13}h_3h_5$   | $d_4^{-1} = h_0^9[b_{02}^2]h_5$                            |
| 378 | 38,15;4  | $h_0^9[b_{02}^2]h_4^2$                                   | $d_4^{-1} = h_0^9h_4[b_{03}^2]$                            |
| 379 | 38,15;8  | $h_0^9h_3^2[b_{03}^2]$                                   | $d_4^{-1} = h_0^7[h_2b_{03}][b_{03}^2]$                    |
| 380 | 38,15;10 | $h_0^4[b_{02}^2][h_4h_0(1)b_{02}^2 + h_0^3b_{02}b_{14}]$ | $d_4 = h_0^{11}[h_2b_{24}b_{03} + h_2^3b_{04}]$            |
| 381 | 38,16;0  | $h_0^{14}h_3h_5$   | $d_4^{-1} = h_0^{10}[b_{02}^2]h_5$                         |
| 382 | 38,16;4  | $h_0^{10}[b_{02}^2]h_4^2$                                | $d_4^{-1} = h_0^{10}h_4[b_{03}^2]$                         |
| 383 | 38,16;8  | $h_0^{10}h_3^2[b_{03}^2]$                                | $d_4^{-1} = h_0^8[h_2b_{03}][b_{03}^2]$                    |
| 384 | 38,16;10 | $h_0^5[b_{02}^2][h_4h_0(1)b_{02}^2 + h_0^3b_{02}b_{14}]$ | $d_4 = h_0^{12}[h_2b_{24}b_{03} + h_2^3b_{04}]$            |
| 385 | 38,16;16 | $[b_{02}^2]^3[h_0(1)^2]$                                 | Permanent cycle  |
| 386 | 38,17;0  | $h_0^{15}h_3h_5$   | $d_4^{-1} = h_0^{11}[b_{02}^2]h_5$                         |
| 387 | 38,17;4  | $h_0^{11}[b_{02}^2]h_4^2$                                | $d_4^{-1} = h_0^{11}h_4[b_{03}^2]$                         |
| 388 | 38,17;8  | $h_0^{11}h_3^2[b_{03}^2]$                                | $d_4^{-1} = h_0^9[h_2b_{03}][b_{03}^2]$                    |
| 389 | 38,17;10 | $h_0^6[b_{02}^2][h_4h_0(1)b_{02}^2 + h_0^3b_{02}b_{14}]$ | $d_4 = h_0^{13}[h_2b_{24}b_{03} + h_2^3b_{04}]$            |
| 390 | 38,17;16 | $h_0[b_{02}^2]^3[h_0(1)^2]$                              | Permanent cycle  |
| 391 | 38,18;0  | $h_0^{16}h_3h_5$   | $d_4^{-1} = h_0^{12}[b_{02}^2]h_5$                         |
| 392 | 38,18;4  | $h_0^{12}[b_{02}^2]h_4^2$                                | $d_4^{-1} = h_0^{12}h_4[b_{03}^2]$                         |
| 393 | 38,18;8  | $h_0^{12}h_3^2[b_{03}^2]$                                | $d_4^{-1} = h_0^{10}[h_2b_{03}][b_{03}^2]$                 |
| 394 | 38,18;10 | $h_0^7[b_{02}^2][h_4h_0(1)b_{02}^2 + h_0^3b_{02}b_{14}]$ | $d_4 = h_0^{14}[h_2b_{24}b_{03} + h_2^3b_{04}]$            |
| 395 | 38,18;16 | $h_0^2[b_{02}^2]^3[h_0(1)^2]$                            | Permanent cycle  |
| 396 | 38,19;0  | $h_0^{17}h_3h_5$   | $d_4^{-1} = h_0^{13}[b_{02}^2]h_5$                         |
| 397 | 38,19;4  | $h_0^{13}[b_{02}^2]h_4^2$                                | $d_4^{-1} = h_0^{13}h_4[b_{03}^2]$                         |
| 398 | 38,19;8  | $h_0^{13}h_3^2[b_{03}^2]$                                | $d_4^{-1} = h_0^{11}[h_2b_{03}][b_{03}^2]$                 |
| 399 | 38,19;10 | $h_0^8[b_{02}^2][h_4h_0(1)b_{02}^2 + h_0^3b_{02}b_{14}]$ | $d_4 = h_0^{15}[h_2b_{24}b_{03} + h_2^3b_{04}]$            |
| 400 | 38,20;0  | $h_0^{18}h_3h_5$   | $d_4^{-1} = h_0^{14}[b_{02}^2]h_5$                         |
| 401 | 38,20;4  | $h_0^{14}[b_{02}^2]h_4^2$                                | $d_4^{-1} = h_0^{14}h_4[b_{03}^2]$                         |
| 402 | 38,20;8  | $h_0^{14}h_3^2[b_{03}^2]$                                | $d_4^{-1} = h_0^{12}[h_2b_{03}][b_{03}^2]$                 |
| 403 | 38,20;10 | $h_0^9[b_{02}^2][h_4h_0(1)b_{02}^2 + h_0^3b_{02}b_{14}]$ | $d_4 = h_0^{16}[h_2b_{24}b_{03} + h_2^3b_{04}]$            |
| 404 | 39,3;0   | $h_1h_3h_5$  | Permanent cycle  |
| 405 | 39,4;2   | $[h_1h_0(1)]h_5$   | Permanent cycle  |
| 406 | 39,5;4   | $h_1[h_1(1)b_{24}]$                                      | Permanent cycle  |
| 407 | 39,5;4   | $[b_{02}^2]h_5$  | $d_4 = h_0^4h_3h_5$  |
| 408 | 39,5;8   | $h_4[b_{03}^2]$  | $d_4 = [b_{02}^2]h_4^2 + h_2^2[h_1(1)^2]$                  |
| 409 | 39,6;4   | $h_0[b_{02}^2]h_5$                                       | $d_4 = h_0^5h_3h_5$  |
| 410 | 39,6;8   | $h_0h_4[b_{03}^2]$                                       | $d_4 = h_0[b_{02}^2]h_4^2$                                 |
| 411 | 39,7;4   | $h_1[b_{02}^2]h_4^2$                                     | $d_4^{-1} = h_1h_4[b_{03}^2]$                              |
| 412 | 39,7;4   | $h_0^2[b_{02}^2]h_5$                                     | $d_4 = h_0^6h_3h_5$  |
| 413 | 39,7;6   | $h_2[h_1(1)b_{13}^2 + h_1^2b_{24}b_{03}]$                | Permanent cycle  |
| 414 | 39,7;8   | $h_0^2h_4[b_{03}^2]$                                     | $d_4 = h_0^2[b_{02}^2]h_4^2$                               |
| 415 | 39,7;12  | $[h_2b_{03}][b_{03}^2]$                                  | $d_4 = h_2[h_2b_{03}][b_{13}^2] + h_0^2h_3^2[b_{03}^2]$    |
| 416 | 39,8;4   | $h_0^3[b_{02}^2]h_5$                                     | $d_4 = h_0^7h_3h_5$  |
| 417 | 39,8;8   | $h_0^3h_4[b_{03}^2]$                                     | $d_4 = h_0^3[b_{02}^2]h_4^2$                               |
| 418 | 39,8;12  | $h_0[h_2b_{03}][b_{03}^2]$                               | $d_4 = h_0h_2[h_2b_{03}][b_{13}^2] + h_0^3h_3^2[b_{03}^2]$ |
| 419 | 39,9;4   | $h_0^4[b_{02}^2]h_5$                                     | $d_4 = h_0^8h_3h_5$  |
| 420 | 39,9;8   | $h_0^4h_4[b_{03}^2]$                                     | $d_4 = h_0^4[b_{02}^2]h_4^2$                               |
| 421 | 39,9;12  | $h_1[h_0(1)^2][b_{03}^2]$                                | Permanent cycle  |



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| 422 | 39,9;12  | $h_0^2[h_2b_{03}][b_{03}^2]$                                   | $d_4 = h_0^4h_3^2[b_{03}^2]$                 |
| 423 | 39,10;4  | $h_0^5[b_{02}^2]h_5$   | $d_4 = h_0^9h_3h_5$                          |
| 424 | 39,10;8  | $h_0^5h_4[b_{03}^2]$   | $d_4 = h_0^5[b_{02}^2]h_4^2$                 |
| 425 | 39,10;12 | $h_0^3[h_2b_{03}][b_{03}^2]$                                   | $d_4 = h_0^5h_3^2[b_{03}^2]$                 |
| 426 | 39,11;4  | $h_0^6[b_{02}^2]h_5$   | $d_4 = h_0^{10}h_3h_5$                       |
| 427 | 39,11;8  | $h_0^6h_4[b_{03}^2]$   | $d_4 = h_0^6[b_{02}^2]h_4^2$                 |
| 428 | 39,11;12 | $h_0^4[h_2b_{03}][b_{03}^2]$                                   | $d_4 = h_0^6h_3^2[b_{03}^2]$                 |
| 429 | 39,12;4  | $h_0^7[b_{02}^2]h_5$   | $d_4 = h_0^{11}h_3h_5$                       |
| 430 | 39,12;8  | $h_0^7h_4[b_{03}^2]$   | $d_4 = h_0^7[b_{02}^2]h_4^2$                 |
| 431 | 39,12;10 | $h_1[b_{02}^2][h_4h_0(1)b_{02}^2 + h_0^3b_{02}b_{14}]$         | $d_4^{-1} = [h_1h_0(1)][b_{02}^2][b_{03}^2]$ |
| 432 | 39,12;12 | $[b_{02}^2][h_0(1)^2][h_0(1)b_{13}]$                           | Permanent cycle                              |
| 433 | 39,12;12 | $h_0^5[h_2b_{03}][b_{03}^2]$                                   | $d_4 = h_0^7h_3^2[b_{03}^2]$                 |
| 434 | 39,13;4  | $h_0^8[b_{02}^2]h_5$   | $d_4 = h_0^{12}h_3h_5$                       |
| 435 | 39,13;8  | $h_0^8h_4[b_{03}^2]$   | $d_4 = h_0^8[b_{02}^2]h_4^2$                 |
| 436 | 39,13;12 | $[b_{02}^2]^3h_4 + h_0[b_{02}^2][h_0(1)^2][h_0(1)b_{13}]$      | $d_4^{-1} = [b_{02}^2]^2[b_{03}^2]$          |
| 437 | 39,13;12 | $h_0[b_{02}^2][h_0(1)^2][h_0(1)b_{13}]$                        | Permanent cycle                              |
| 438 | 39,13;12 | $h_0^6[h_2b_{03}][b_{03}^2]$                                   | $d_4 = h_0^8h_3^2[b_{03}^2]$                 |
| 439 | 39,14;4  | $h_0^9[b_{02}^2]h_5$   | $d_4 = h_0^{13}h_3h_5$                       |
| 440 | 39,14;8  | $h_0^9h_4[b_{03}^2]$   | $d_4 = h_0^9[b_{02}^2]h_4^2$                 |
| 441 | 39,14;12 | $h_0[b_{02}^2]^3h_4 + h_0^2[b_{02}^2][h_0(1)^2][h_0(1)b_{13}]$ | $d_4^{-1} = h_0[b_{02}^2]^2[b_{03}^2]$       |
| 442 | 39,14;12 | $h_0^2[b_{02}^2][h_0(1)^2][h_0(1)b_{13}]$                      | Permanent cycle                              |
| 443 | 39,14;12 | $h_0^7[h_2b_{03}][b_{03}^2]$                                   | $d_4 = h_0^9h_3^2[b_{03}^2]$                 |
| 444 | 39,15;4  | $h_0^{10}[b_{02}^2]h_5$  | $d_4 = h_0^{14}h_3h_5$                       |
| 445 | 39,15;8  | $h_0^{10}h_4[b_{03}^2]$  | $d_4 = h_0^{10}[b_{02}^2]h_4^2$              |
| 446 | 39,15;12 | $h_0^2[b_{02}^2]^3h_4$   | $d_4^{-1} = h_0^2[b_{02}^2]^2[b_{03}^2]$     |
| 447 | 39,15;12 | $h_0^8[h_2b_{03}][b_{03}^2]$                                   | $d_4 = h_0^{10}h_3^2[b_{03}^2]$              |
| 448 | 39,15;16 | $[b_{02}^2]^3[h_2b_{03}]$                                      | Permanent cycle                              |
| 449 | 39,16;4  | $h_0^{11}[b_{02}^2]h_5$  | $d_4 = h_0^{15}h_3h_5$                       |
| 450 | 39,16;8  | $h_0^{11}h_4[b_{03}^2]$  | $d_4 = h_0^{11}[b_{02}^2]h_4^2$              |
| 451 | 39,16;12 | $h_0^3[b_{02}^2]^3h_4$   | $d_4^{-1} = h_0^3[b_{02}^2]^2[b_{03}^2]$     |
| 452 | 39,16;12 | $h_0^9[h_2b_{03}][b_{03}^2]$                                   | $d_4 = h_0^{11}h_3^2[b_{03}^2]$              |
| 453 | 39,16;16 | $h_0[b_{02}^2]^3[h_2b_{03}]$                                   | Permanent cycle                              |
| 454 | 39,17;4  | $h_0^{12}[b_{02}^2]h_5$  | $d_4 = h_0^{16}h_3h_5$                       |
| 455 | 39,17;8  | $h_0^{12}h_4[b_{03}^2]$  | $d_4 = h_0^{12}[b_{02}^2]h_4^2$              |
| 456 | 39,17;12 | $h_0^4[b_{02}^2]^3h_4$   | $d_4^{-1} = h_0^4[b_{02}^2]^2[b_{03}^2]$     |
| 457 | 39,17;12 | $h_0^{10}[h_2b_{03}][b_{03}^2]$                                | $d_4 = h_0^{12}h_3^2[b_{03}^2]$              |
| 458 | 39,17;16 | $h_1[b_{02}^2]^3[h_0(1)^2]$                                    | Permanent cycle                              |
| 459 | 39,17;16 | $h_0^2[b_{02}^2]^3[h_2b_{03}]$                                 | Permanent cycle                              |
| 460 | 39,18;4  | $h_0^{13}[b_{02}^2]h_5$  | $d_4 = h_0^{17}h_3h_5$                       |
| 461 | 39,18;8  | $h_0^{13}h_4[b_{03}^2]$  | $d_4 = h_0^{13}[b_{02}^2]h_4^2$              |
| 462 | 39,18;12 | $h_0^5[b_{02}^2]^3h_4$   | $d_4^{-1} = h_0^5[b_{02}^2]^2[b_{03}^2]$     |
| 463 | 39,18;12 | $h_0^{11}[h_2b_{03}][b_{03}^2]$                                | $d_4 = h_0^{13}h_3^2[b_{03}^2]$              |
| 464 | 39,18;16 | $h_0^3[b_{02}^2]^3[h_2b_{03}]$                                 | Permanent cycle                              |
| 465 | 39,19;4  | $h_0^{14}[b_{02}^2]h_5$  | $d_4 = h_0^{18}h_3h_5$                       |
| 466 | 39,19;8  | $h_0^{14}h_4[b_{03}^2]$  | $d_4 = h_0^{14}[b_{02}^2]h_4^2$              |
| 467 | 39,19;12 | $h_0^6[b_{02}^2]^3h_4$   | $d_4^{-1} = h_0^6[b_{02}^2]^2[b_{03}^2]$     |
| 468 | 39,19;12 | $h_0^{12}[h_2b_{03}][b_{03}^2]$                                | $d_4 = h_0^{14}h_3^2[b_{03}^2]$              |
| 469 | 39,19;16 | $h_0^4[b_{02}^2]^3[h_2b_{03}]$                                 | Permanent cycle                              |
| 470 | 39,20;4  | $h_0^{15}[b_{02}^2]h_5$  | $d_4 = h_0^{19}h_3h_5$                       |
| 471 | 39,20;8  | $h_0^{15}h_4[b_{03}^2]$  | $d_4 = h_0^{15}[b_{02}^2]h_4^2$              |
| 472 | 39,20;12 | $h_0^7[b_{02}^2]^3h_4$   | $d_4^{-1} = h_0^7[b_{02}^2]^2[b_{03}^2]$     |
| 473 | 39,20;12 | $h_0^{13}[h_2b_{03}][b_{03}^2]$                                | $d_4 = h_0^{15}h_3^2[b_{03}^2]$              |
| 474 | 39,20;16 | $h_0^5[b_{02}^2]^3[h_2b_{03}]$                                 | Permanent cycle                              |
| 475 | 40,4;0   | $h_1^2h_3h_5$  | Permanent cycle                              |

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| 476 | 40,4;4   | $h_3[h_3b_{14}]$   | Permanent cycle  |
| 477 | 40,5;2   | $h_1[h_1h_0(1)]h_5$                                      | Permanent cycle  |
| 478 | 40,5;4   | $h_0h_3[h_3b_{14}]$                                      | Permanent cycle  |
| 479 | 40,6;4   | $h_1[b_{02}^2]h_5$                                       | Permanent cycle  |
| 480 | 40,6;4   | $h_0^2h_3[h_3b_{14}]$                                    | Permanent cycle  |
| 481 | 40,6;8   | $h_1h_4[b_{03}^2]$                                       | $d_4 = h_1[b_{02}^2]h_4^2$   |
| 482 | 40,8;4   | $h_1^2[b_{02}^2]h_4^2$                                   | $d_4^{-1} = h_1^2h_4[b_{03}^2]$                                      |
| 483 | 40,8;8   | $[b_{13}^2]^2$   | Permanent cycle  |
| 484 | 40,9;8   | $h_0[b_{13}^2]^2$  | $d_4^{-1} = [h_0(1)b_{13}][b_{03}^2]$                                |
| 485 | 40,10;8  | $h_0^2[b_{13}^2]^2$                                      | $d_4^{-1} = h_0[h_0(1)b_{13}][b_{03}^2]$                             |
| 486 | 40,10;12 | $h_1^2[h_0(1)^2][b_{03}^2]$                              | Permanent cycle  |
| 487 | 40,11;12 | $[b_{02}^2][h_2b_{03}][h_0(1)b_{13}]$                    | Permanent cycle  |
| 488 | 40,11;14 | $[h_1h_0(1)][b_{02}^2][b_{03}^2]$                        | $d_4 = h_1[b_{02}^2][h_4h_0(1)b_{02}^2 + h_0^3b_{02}b_{14}]$         |
| 489 | 40,12;12 | $h_0[b_{02}^2][h_2b_{03}][h_0(1)b_{13}]$                 | Permanent cycle  |
| 490 | 40,12;16 | $[b_{02}^2]^2[b_{03}^2]$                                 | $d_4 = [b_{02}^2]^3h_4 + h_0[b_{02}^2][h_0(1)^2][h_0(1)b_{13}]$      |
| 491 | 40,13;10 | $h_1^2[b_{02}^2][h_4h_0(1)b_{02}^2 + h_0^3b_{02}b_{14}]$ | $d_4^{-1} = h_1[h_1h_0(1)][b_{02}^2][b_{03}^2]$                      |
| 492 | 40,13;12 | $h_0^2[b_{02}^2][h_2b_{03}][h_0(1)b_{13}]$               | Permanent cycle  |
| 493 | 40,13;16 | $h_0[b_{02}^2]^2[b_{03}^2]$                              | $d_4 = h_0[b_{02}^2]^3h_4 + h_0^2[b_{02}^2][h_0(1)^2][h_0(1)b_{13}]$ |
| 494 | 40,14;12 | $h_1[b_{02}^2]^3h_4$                                     | $d_4^{-1} = h_1[b_{02}^2]^2[b_{03}^2]$                               |
| 495 | 40,14;16 | $h_0^2[b_{02}^2]^2[b_{03}^2]$                            | $d_4 = h_0^2[b_{02}^2]^3h_4$   |
| 496 | 40,15;16 | $h_0^3[b_{02}^2]^2[b_{03}^2]$                            | $d_4 = h_0^3[b_{02}^2]^3h_4$   |
| 497 | 40,16;16 | $h_0^4[b_{02}^2]^2[b_{03}^2]$                            | $d_4 = h_0^4[b_{02}^2]^3h_4$   |
| 498 | 40,17;16 | $h_0^5[b_{02}^2]^2[b_{03}^2]$                            | $d_4 = h_0^5[b_{02}^2]^3h_4$   |
| 499 | 40,18;16 | $h_1^2[b_{02}^2]^3[h_0(1)^2]$                            | Permanent cycle  |
| 500 | 40,18;16 | $h_0^6[b_{02}^2]^2[b_{03}^2]$                            | $d_4 = h_0^6[b_{02}^2]^3h_4$   |
| 501 | 40,19;16 | $h_0^7[b_{02}^2]^2[b_{03}^2]$                            | $d_4 = h_0^7[b_{02}^2]^3h_4$   |
| 502 | 40,19;18 | $[h_1h_0(1)][b_{02}^2]^4$                                | Permanent cycle  |
| 503 | 40,20;16 | $h_0^8[b_{02}^2]^2[b_{03}^2]$                            | $d_4 = h_0^8[b_{02}^2]^3h_4$   |
| 504 | 40,20;20 | $[b_{02}^2]^5$   | $d_4 = h_0^6[b_{02}^2]^3[h_2b_{03}]$                                 |
| 505 | 40,21;16 | $h_0^9[b_{02}^2]^2[b_{03}^2]$                            | $d_4 = h_0^9[b_{02}^2]^3h_4$   |
| 506 | 40,21;20 | $h_0[b_{02}^2]^5$  | $d_4 = h_0^7[b_{02}^2]^3[h_2b_{03}]$                                 |
| 507 | 41,3;2   | $[h_3h_2(1)]$  | Permanent cycle  |
| 508 | 41,4;2   | $h_0[h_3h_2(1)]$   | Permanent cycle  |
| 509 | 41,5;2   | $h_0^2[h_3h_2(1)]$                                       | Permanent cycle  |
| 510 | 41,6;2   | $h_0^3[h_3h_2(1)]$                                       | $d_4^{-1} = h_3[h_0h_3b_{04}]$                                       |
| 511 | 41,7;2   | $h_0^4[h_3h_2(1)]$                                       | $d_4^{-1} = h_0h_3[h_0h_3b_{04}]$                                    |
| 512 | 41,7;4   | $h_1^2[b_{02}^2]h_5$                                     | Permanent cycle  |
| 513 | 41,7;8   | $h_1^2h_4[b_{03}^2]$                                     | $d_4 = h_1^2[b_{02}^2]h_4^2$   |
| 514 | 41,8;2   | $h_0^5[h_3h_2(1)]$                                       | $d_4^{-1} = h_0^2h_3[h_0h_3b_{04}]$                                  |
| 515 | 41,8;12  | $[h_0(1)b_{13}][b_{03}^2]$                               | $d_4 = h_0[b_{13}^2]^2$  |
| 516 | 41,9;2   | $h_0^6[h_3h_2(1)]$                                       | $d_4^{-1} = h_0^3h_3[h_0h_3b_{04}]$                                  |
| 517 | 41,9;8   | $h_1[b_{13}^2]^2$  | $d_4^{-1} = h_2[h_2b_{03}][b_{03}^2]$                                |
| 518 | 41,9;12  | $h_0[h_0(1)b_{13}][b_{03}^2]$                            | $d_4 = h_0^2[b_{13}^2]^2$  |
| 519 | 41,10;2  | $h_0^7[h_3h_2(1)]$                                       | $d_4^{-1} = h_0^4h_3[h_0h_3b_{04}]$                                  |
| 520 | 41,10;12 | $h_0^2[h_0(1)b_{13}][b_{03}^2]$                          | Permanent cycle  |
| 521 | 41,11;2  | $h_0^8[h_3h_2(1)]$                                       | $d_4^{-1} = h_0^5h_3[h_0h_3b_{04}]$                                  |
| 522 | 41,11;12 | $h_0^3[h_0(1)b_{13}][b_{03}^2]$                          | Permanent cycle  |
| 523 | 41,12;2  | $h_0^9[h_3h_2(1)]$                                       | $d_4^{-1} = h_0^6h_3[h_0h_3b_{04}]$                                  |
| 524 | 41,12;14 | $h_1[h_1h_0(1)][b_{02}^2][b_{03}^2]$                     | $d_4 = h_1^2[b_{02}^2][h_4h_0(1)b_{02}^2 + h_0^3b_{02}b_{14}]$       |
| 525 | 41,13;2  | $h_0^{10}[h_3h_2(1)]$                                    | $d_4^{-1} = h_0^7h_3[h_0h_3b_{04}]$                                  |
| 526 | 41,13;16 | $h_1[b_{02}^2]^2[b_{03}^2]$                              | $d_4 = h_1[b_{02}^2]^3h_4$   |
| 527 | 41,14;2  | $h_0^{11}[h_3h_2(1)]$                                    | $d_4^{-1} = h_0^8h_3[h_0h_3b_{04}]$                                  |

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| 528 | 41,15;2  | $h_0^{12}[h_3h_2(1)]$   | $d_4^{-1} = h_0^9h_3[h_0h_3b_{04}]$        |
| 529 | 41,15;12 | $h_1^2[b_{02}^2]^3h_4$  | $d_4^{-1} = h_1^2[b_{02}^2]^2[b_{03}^2]$   |
| 530 | 41,16;2  | $h_0^{13}[h_3h_2(1)]$   | $d_4^{-1} = h_0^{10}h_3[h_0h_3b_{04}]$     |
| 531 | 41,16;16 | $[b_{02}^2]^3[h_0(1)b_{13}]$  | Permanent cycle                            |
| 532 | 41,17;2  | $h_0^{14}[h_3h_2(1)]$   | $d_4^{-1} = h_0^{11}h_3[h_0h_3b_{04}]$     |
| 533 | 41,17;16 | $h_0[b_{02}^2]^3[h_0(1)b_{13}]$   | Permanent cycle                            |
| 534 | 41,18;2  | $h_0^{15}[h_3h_2(1)]$   | $d_4^{-1} = h_0^{12}h_3[h_0h_3b_{04}]$     |
| 535 | 41,18;16 | $h_0^2[b_{02}^2]^3[h_0(1)b_{13}]$   | Permanent cycle                            |
| 536 | 41,19;2  | $h_0^{16}[h_3h_2(1)]$   | $d_4^{-1} = h_0^{13}h_3[h_0h_3b_{04}]$     |
| 537 | 41,19;16 | $h_0^3[b_{02}^2]^3[h_0(1)b_{13}]$   | Permanent cycle                            |
| 538 | 41,20;2  | $h_0^{17}[h_3h_2(1)]$   | $d_4^{-1} = h_0^{14}h_3[h_0h_3b_{04}]$     |
| 539 | 41,20;18 | $h_1[h_1h_0(1)][b_{02}^2]^4$  | Permanent cycle                            |
| 540 | 41,21;2  | $h_0^{18}[h_3h_2(1)]$   | $d_4^{-1} = h_0^{15}h_3[h_0h_3b_{04}]$     |
| 541 | 41,21;20 | $h_1[b_{02}^2]^5$   | Permanent cycle                            |
| 542 | 42,5;6   | $h_3[h_0h_3b_{04}]$   | $d_4 = h_0^3[h_3h_2(1)]$                   |
| 543 | 42,6;4   | $h_2[b_{02}^2]h_5$  | Permanent cycle                            |
| 544 | 42,6;6   | $h_0h_3[h_0h_3b_{04}]$  | $d_4 = h_0^4[h_3h_2(1)]$                   |
| 545 | 42,7;4   | $h_0h_2[b_{02}^2]h_5$   | Permanent cycle                            |
| 546 | 42,7;6   | $h_0^2h_3[h_0h_3b_{04}]$  | $d_4 = h_0^5[h_3h_2(1)]$                   |
| 547 | 42,8;4   | $h_0^2h_2[b_{02}^2]h_5$   | Permanent cycle                            |
| 548 | 42,8;6   | $h_2^2[h_1(1)b_{13}^2 + h_1^2b_{24}b_{03}]$                                 | $d_4^{-1} = [h_2h_1(1)][b_{03}^2]$         |
| 549 | 42,8;6   | $h_0^3h_3[h_0h_3b_{04}]$  | $d_4 = h_0^6[h_3h_2(1)]$                   |
| 550 | 42,8;12  | $h_2[h_2b_{03}][b_{03}^2]$  | $d_4 = h_1[b_{13}^2]^2$                    |
| 551 | 42,9;6   | $[b_{02}^2][h_0h_4^2b_{02} + h_0^3h_2(1)] + h_0^4h_3[h_0h_3b_{04}]$         | $d_4^{-1} = [b_{02}^2][h_0h_3b_{04}]$      |
| 552 | 42,9;6   | $h_0^4h_3[h_0h_3b_{04}]$  | $d_4 = h_0^7[h_3h_2(1)]$                   |
| 553 | 42,9;12  | $h_0h_2[h_2b_{03}][b_{03}^2]$   | Permanent cycle                            |
| 554 | 42,10;6  | $h_0[b_{02}^2][h_0h_4^2b_{02} + h_0^3h_2(1)] + h_0^5h_3[h_0h_3b_{04}]$      | $d_4^{-1} = h_0[b_{02}^2][h_0h_3b_{04}]$   |
| 555 | 42,10;6  | $h_0^5h_3[h_0h_3b_{04}]$  | $d_4 = h_0^8[h_3h_2(1)]$                   |
| 556 | 42,11;6  | $h_0^2[b_{02}^2][h_0h_4^2b_{02} + h_0^3h_2(1)] + h_0^6h_3[h_0h_3b_{04}]$    | $d_4^{-1} = h_0^2[b_{02}^2][h_0h_3b_{04}]$ |
| 557 | 42,11;6  | $h_0^6h_3[h_0h_3b_{04}]$  | $d_4 = h_0^9[h_3h_2(1)]$                   |
| 558 | 42,12;6  | $h_0^3[b_{02}^2][h_0h_4^2b_{02} + h_0^3h_2(1)] + h_0^7h_3[h_0h_3b_{04}]$    | $d_4^{-1} = h_0^3[b_{02}^2][h_0h_3b_{04}]$ |
| 559 | 42,12;6  | $h_0^7h_3[h_0h_3b_{04}]$  | $d_4 = h_0^{10}[h_3h_2(1)]$                |
| 560 | 42,12;12 | $[b_{02}^2][h_0(1)^2][b_{13}^2]$  | Permanent cycle                            |
| 561 | 42,13;6  | $h_0^4[b_{02}^2][h_0h_4^2b_{02} + h_0^3h_2(1)] + h_0^8h_3[h_0h_3b_{04}]$    | $d_4^{-1} = h_0^4[b_{02}^2][h_0h_3b_{04}]$ |
| 562 | 42,13;6  | $h_0^8h_3[h_0h_3b_{04}]$  | $d_4 = h_0^{11}[h_3h_2(1)]$                |
| 563 | 42,13;12 | $h_0[b_{02}^2][h_0(1)^2][b_{13}^2]$   | Permanent cycle                            |
| 564 | 42,14;6  | $h_0^5[b_{02}^2][h_0h_4^2b_{02} + h_0^3h_2(1)] + h_0^9h_3[h_0h_3b_{04}]$    | $d_4^{-1} = h_0^5[b_{02}^2][h_0h_3b_{04}]$ |
| 565 | 42,14;6  | $h_0^9h_3[h_0h_3b_{04}]$  | $d_4 = h_0^{12}[h_3h_2(1)]$                |
| 566 | 42,14;12 | $h_2[b_{02}^2]^3h_4 + h_0^2[b_{02}^2][h_0(1)^2][b_{13}^2]$                  | $d_4^{-1} = h_2[b_{02}^2]^2[b_{03}^2]$     |
| 567 | 42,14;12 | $h_0^2[b_{02}^2][h_0(1)^2][b_{13}^2]$                                       | Permanent cycle                            |
| 568 | 42,14;16 | $h_1^2[b_{02}^2]^2[b_{03}^2]$   | $d_4 = h_1^2[b_{02}^2]^3h_4$               |
| 569 | 42,15;6  | $h_0^6[b_{02}^2][h_0h_4^2b_{02} + h_0^3h_2(1)] + h_0^{10}h_3[h_0h_3b_{04}]$ | $d_4^{-1} = h_0^6[b_{02}^2][h_0h_3b_{04}]$ |
| 570 | 42,15;6  | $h_0^{10}h_3[h_0h_3b_{04}]$   | $d_4 = h_0^{13}[h_3h_2(1)]$                |
| 571 | 42,15;12 | $h_0h_2[b_{02}^2]^3h_4$   | $d_4^{-1} = h_0h_2[b_{02}^2]^2[b_{03}^2]$  |
| 572 | 42,15;16 | $[b_{02}^2]^2[h_0h_0(1)^2b_{03}]$   | Permanent cycle                            |
| 573 | 42,16;6  | $h_0^7[b_{02}^2][h_0h_4^2b_{02} + h_0^3h_2(1)] + h_0^{11}h_3[h_0h_3b_{04}]$ | $d_4^{-1} = h_0^7[b_{02}^2][h_0h_3b_{04}]$ |
| 574 | 42,16;6  | $h_0^{11}h_3[h_0h_3b_{04}]$   | $d_4 = h_0^{14}[h_3h_2(1)]$                |

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| 575 | 42,16;12 | $h_0^2 h_2 [b_{02}^2]^3 h_4$  | $d_4^{-1} = h_0^2 h_2 [b_{02}^2]^2 [b_{03}^2]$  |
| 576 | 42,16;16 | $h_0 [b_{02}^2]^2 [h_0 h_0 (1)^2 b_{03}]$   | Permanent cycle   |
| 577 | 42,17;6  | $h_0^8 [b_{02}^2] [h_0 h_4^2 b_{02} + h_0^3 h_2 (1)] +$<br>$h_0^{12} h_3 [h_0 h_3 b_{04}]$    | $d_4^{-1} = h_0^8 [b_{02}^2] [h_0 h_3 b_{04}]$  |
| 578 | 42,17;6  | $h_0^{12} h_3 [h_0 h_3 b_{04}]$   | $d_4 = h_0^{15} [h_3 h_2 (1)]$  |
| 579 | 42,17;16 | $h_0^2 [b_{02}^2]^2 [h_0 h_0 (1)^2 b_{03}]$   | Permanent cycle   |
| 580 | 42,18;6  | $h_0^9 [b_{02}^2] [h_0 h_4^2 b_{02} + h_0^3 h_2 (1)] +$<br>$h_0^{13} h_3 [h_0 h_3 b_{04}]$    | $d_4^{-1} = h_0^9 [b_{02}^2] [h_0 h_3 b_{04}]$  |
| 581 | 42,18;6  | $h_0^{13} h_3 [h_0 h_3 b_{04}]$   | $d_4 = h_0^{16} [h_3 h_2 (1)]$  |
| 582 | 42,19;6  | $h_0^{10} [b_{02}^2] [h_0 h_4^2 b_{02} + h_0^3 h_2 (1)] +$<br>$h_0^{14} h_3 [h_0 h_3 b_{04}]$ | $d_4^{-1} = h_0^{10} [b_{02}^2] [h_0 h_3 b_{04}]$   |
| 583 | 42,19;6  | $h_0^{14} h_3 [h_0 h_3 b_{04}]$   | $d_4 = h_0^{17} [h_3 h_2 (1)]$  |
| 584 | 42,20;6  | $h_0^{11} [b_{02}^2] [h_0 h_4^2 b_{02} + h_0^3 h_2 (1)] +$<br>$h_0^{15} h_3 [h_0 h_3 b_{04}]$ | $d_4^{-1} = h_0^{11} [b_{02}^2] [h_0 h_3 b_{04}]$   |
| 585 | 42,20;6  | $h_0^{15} h_3 [h_0 h_3 b_{04}]$   | $d_4 = h_0^{18} [h_3 h_2 (1)]$  |
| 586 | 42,21;6  | $h_0^{12} [b_{02}^2] [h_0 h_4^2 b_{02} + h_0^3 h_2 (1)] +$<br>$h_0^{16} h_3 [h_0 h_3 b_{04}]$ | $d_4^{-1} = h_0^{12} [b_{02}^2] [h_0 h_3 b_{04}]$   |
| 587 | 42,21;6  | $h_0^{16} h_3 [h_0 h_3 b_{04}]$   | $d_4 = h_0^{19} [h_3 h_2 (1)]$  |
| 588 | 42,22;6  | $h_0^{13} [b_{02}^2] [h_0 h_4^2 b_{02} + h_0^3 h_2 (1)] +$<br>$h_0^{17} h_3 [h_0 h_3 b_{04}]$ | $d_4^{-1} = h_0^{13} [b_{02}^2] [h_0 h_3 b_{04}]$   |
| 589 | 42,22;6  | $h_0^{17} h_3 [h_0 h_3 b_{04}]$   | $d_4 = h_0^{20} [h_3 h_2 (1)]$  |
| 590 | 42,22;20 | $h_1^2 [b_{02}^2]^5$  | Permanent cycle   |
| 591 | 43,7;10  | $[h_2 h_1 (1)] [b_{03}^2]$  | $d_4 = h_2^2 [h_1 (1) b_{13}^2 + h_1^2 b_{24} b_{03}]$  |
| 592 | 43,8;10  | $[b_{02}^2] [h_0 h_3 b_{04}]$   | $d_4 =$<br>$[b_{02}^2] [h_0 h_4^2 b_{02} + h_0^3 h_2 (1)] + h_0^4 h_3 [h_0 h_3 b_{04}]$             |
| 593 | 43,9;8   | $h_2 [b_{13}^2]^2$  | $d_4^{-1} = [b_{13}^2] [b_{03}^2]$  |
| 594 | 43,9;10  | $h_0 [b_{02}^2] [h_0 h_3 b_{04}]$   | $d_4 = h_0 [b_{02}^2] [h_0 h_4^2 b_{02} + h_0^3 h_2 (1)] +$<br>$h_0^5 h_3 [h_0 h_3 b_{04}]$         |
| 595 | 43,10;8  | $h_0 h_2 [b_{13}^2]^2$  | $d_4^{-1} = h_0 [b_{13}^2] [b_{03}^2]$  |
| 596 | 43,10;10 | $h_0^2 [b_{02}^2] [h_0 h_3 b_{04}]$   | $d_4 = h_0^2 [b_{02}^2] [h_0 h_4^2 b_{02} + h_0^3 h_2 (1)] +$<br>$h_0^6 h_3 [h_0 h_3 b_{04}]$       |
| 597 | 43,11;10 | $h_0^3 [b_{02}^2] [h_0 h_3 b_{04}]$   | $d_4 = h_0^3 [b_{02}^2] [h_0 h_4^2 b_{02} + h_0^3 h_2 (1)] +$<br>$h_0^7 h_3 [h_0 h_3 b_{04}]$       |
| 598 | 43,11;12 | $[b_{02}^2] [h_2 b_{03}] [b_{13}^2]$  | Permanent cycle   |
| 599 | 43,12;10 | $h_0^4 [b_{02}^2] [h_0 h_3 b_{04}]$   | $d_4 = h_0^4 [b_{02}^2] [h_0 h_4^2 b_{02} + h_0^3 h_2 (1)] +$<br>$h_0^8 h_3 [h_0 h_3 b_{04}]$       |
| 600 | 43,12;12 | $h_0 [b_{02}^2] [h_2 b_{03}] [b_{13}^2]$  | Permanent cycle   |
| 601 | 43,13;10 | $h_0^5 [b_{02}^2] [h_0 h_3 b_{04}]$   | $d_4 = h_0^5 [b_{02}^2] [h_0 h_4^2 b_{02} + h_0^3 h_2 (1)] +$<br>$h_0^9 h_3 [h_0 h_3 b_{04}]$       |
| 602 | 43,13;12 | $h_0^2 [b_{02}^2] [h_2 b_{03}] [b_{13}^2]$  | Permanent cycle   |
| 603 | 43,13;16 | $h_2 [b_{02}^2]^2 [b_{03}^2]$   | $d_4 = h_2 [b_{02}^2]^3 h_4 + h_0^2 [b_{02}^2] [h_0 (1)^2] [b_{13}^2]$                              |
| 604 | 43,14;10 | $h_0^6 [b_{02}^2] [h_0 h_3 b_{04}]$   | $d_4 = h_0^6 [b_{02}^2] [h_0 h_4^2 b_{02} + h_0^3 h_2 (1)] +$<br>$h_0^{10} h_3 [h_0 h_3 b_{04}]$    |
| 605 | 43,14;16 | $h_0 h_2 [b_{02}^2]^2 [b_{03}^2]$   | $d_4 = h_0 h_2 [b_{02}^2]^3 h_4$  |
| 606 | 43,15;10 | $h_0^7 [b_{02}^2] [h_0 h_3 b_{04}]$   | $d_4 = h_0^7 [b_{02}^2] [h_0 h_4^2 b_{02} + h_0^3 h_2 (1)] +$<br>$h_0^{11} h_3 [h_0 h_3 b_{04}]$    |
| 607 | 43,15;16 | $h_0^2 h_2 [b_{02}^2]^2 [b_{03}^2]$   | $d_4 = h_0^2 h_2 [b_{02}^2]^3 h_4$  |
| 608 | 43,16;10 | $h_0^8 [b_{02}^2] [h_0 h_3 b_{04}]$   | $d_4 = h_0^8 [b_{02}^2] [h_0 h_4^2 b_{02} + h_0^3 h_2 (1)] +$<br>$h_0^{12} h_3 [h_0 h_3 b_{04}]$    |
| 609 | 43,17;10 | $h_0^9 [b_{02}^2] [h_0 h_3 b_{04}]$   | $d_4 = h_0^9 [b_{02}^2] [h_0 h_4^2 b_{02} + h_0^3 h_2 (1)] +$<br>$h_0^{13} h_3 [h_0 h_3 b_{04}]$    |
| 610 | 43,18;10 | $h_0^{10} [b_{02}^2] [h_0 h_3 b_{04}]$  | $d_4 = h_0^{10} [b_{02}^2] [h_0 h_4^2 b_{02} + h_0^3 h_2 (1)] +$<br>$h_0^{14} h_3 [h_0 h_3 b_{04}]$ |

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| 611 | 43,19;10 | $h_0^{11}[b_{02}^2][h_0h_3b_{04}]$               | $d_4 = h_0^{11}[b_{02}^2][h_0h_4^2b_{02} + h_0^3h_2(1)] + h_0^{15}h_3[h_0h_3b_{04}]$ |
| 612 | 43,20;10 | $h_0^{12}[b_{02}^2][h_0h_3b_{04}]$               | $d_4 = h_0^{12}[b_{02}^2][h_0h_4^2b_{02} + h_0^3h_2(1)] + h_0^{16}h_3[h_0h_3b_{04}]$ |
| 613 | 43,21;10 | $h_0^{13}[b_{02}^2][h_0h_3b_{04}]$               | $d_4 = h_0^{13}[b_{02}^2][h_0h_4^2b_{02} + h_0^3h_2(1)] + h_0^{17}h_3[h_0h_3b_{04}]$ |
| 614 | 43,21;20 | $h_2[b_{02}^2]^5$                                | Permanent cycle  |
| 615 | 43,22;10 | $h_0^{14}[b_{02}^2][h_0h_3b_{04}]$               | $d_4 = h_0^{14}[b_{02}^2][h_0h_4^2b_{02} + h_0^3h_2(1)] + h_0^{18}h_3[h_0h_3b_{04}]$ |
| 616 | 43,22;20 | $h_0h_2[b_{02}^2]^5$                             | Permanent cycle  |
| 617 | 44,4;4   | $[b_{24}^2]$                                     | Permanent cycle  |
| 618 | 44,5;4   | $h_0[b_{24}^2]$                                  | Permanent cycle  |
| 619 | 44,6;4   | $h_0^2[b_{24}^2]$                                | Permanent cycle  |
| 620 | 44,7;4   | $h_0^3[b_{24}^2]$                                | $d_6^{-1} = [h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$                               |
| 621 | 44,8;4   | $h_0^4[b_{24}^2]$                                | $d_6^{-1} = h_0[h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$                            |
| 622 | 44,8;12  | $[b_{13}^2][b_{03}^2]$                           | $d_4 = h_2[b_{13}^2]^2$  |
| 623 | 44,9;4   | $h_0^5[b_{24}^2]$                                | $d_6^{-1} = h_0^2[h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$                          |
| 624 | 44,9;12  | $h_0[b_{13}^2][b_{03}^2]$                        | $d_4 = h_0h_2[b_{13}^2]^2$   |
| 625 | 44,10;4  | $h_0^6[b_{24}^2]$                                | $d_6^{-1} = h_0^3[h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$                          |
| 626 | 44,10;12 | $h_0^2[b_{13}^2][b_{03}^2]$                      | Permanent cycle  |
| 627 | 44,11;4  | $h_0^7[b_{24}^2]$                                | $d_6^{-1} = h_0^4[h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$                          |
| 628 | 44,12;4  | $h_0^8[b_{24}^2]$                                | $d_6^{-1} = h_0^5[h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$                          |
| 629 | 44,13;4  | $h_0^9[b_{24}^2]$                                | $d_6^{-1} = h_0^6[h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$                          |
| 630 | 44,14;4  | $h_0^{10}[b_{24}^2]$                             | $d_6^{-1} = h_0^7[h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$                          |
| 631 | 44,15;4  | $h_0^{11}[b_{24}^2]$                             | $d_6^{-1} = h_0^8[h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$                          |
| 632 | 44,16;4  | $h_0^{12}[b_{24}^2]$                             | $d_6^{-1} = h_0^9[h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$                          |
| 633 | 44,16;16 | $[b_{02}^2]^3[b_{13}^2]$                         | Permanent cycle  |
| 634 | 44,17;4  | $h_0^{13}[b_{24}^2]$                             | $d_6^{-1} = h_0^{10}[h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$                       |
| 635 | 44,17;16 | $h_0[b_{02}^2]^3[b_{13}^2]$                      | Permanent cycle  |
| 636 | 44,18;4  | $h_0^{14}[b_{24}^2]$                             | $d_6^{-1} = h_0^{11}[h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$                       |
| 637 | 44,18;16 | $h_0^2[b_{02}^2]^3[b_{13}^2]$                    | Permanent cycle  |
| 638 | 44,19;4  | $h_0^{15}[b_{24}^2]$                             | $d_6^{-1} = h_0^{12}[h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$                       |
| 639 | 44,20;4  | $h_0^{16}[b_{24}^2]$                             | $d_6^{-1} = h_0^{13}[h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$                       |
| 640 | 44,21;4  | $h_0^{17}[b_{24}^2]$                             | $d_6^{-1} = h_0^{14}[h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$                       |
| 641 | 44,22;4  | $h_0^{18}[b_{24}^2]$                             | $d_6^{-1} = h_0^{15}[h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$                       |
| 642 | 44,23;4  | $h_0^{19}[b_{24}^2]$                             | $d_6^{-1} = h_0^{16}[h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$                       |
| 643 | 45,3;0   | $h_3^2h_5$                                       | Permanent cycle  |
| 644 | 45,4;0   | $h_0h_3^2h_5$                                    | Permanent cycle  |
| 645 | 45,5;0   | $h_0^2h_3^2h_5$                                  | $d_4^{-1} = [h_2b_{03}]h_5$  |
| 646 | 45,5;4   | $[h_0(1)^2]h_5$                                  | Permanent cycle  |
| 647 | 45,5;4   | $h_1[b_{24}^2]$                                  | Permanent cycle  |
| 648 | 45,6;0   | $h_0^3h_3^2h_5$                                  | $d_4^{-1} = h_0[h_2b_{03}]h_5$   |
| 649 | 45,6;4   | $h_0[h_0(1)^2]h_5$                               | Permanent cycle  |
| 650 | 45,6;10  | $[h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$      | $d_6 = h_0^3[b_{24}^2]$  |
| 651 | 45,7;0   | $h_0^4h_3^2h_5$                                  | $d_4^{-1} = h_0^2[h_2b_{03}]h_5$   |
| 652 | 45,7;4   | $h_0^2[h_0(1)^2]h_5$                             | Permanent cycle  |
| 653 | 45,7;10  | $h_0[h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$   | $d_6 = h_0^4[b_{24}^2]$  |
| 654 | 45,8;0   | $h_0^5h_3^2h_5$                                  | $d_4^{-1} = h_0^3[h_2b_{03}]h_5$   |
| 655 | 45,8;10  | $h_0^2[h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$ | $d_6 = h_0^5[b_{24}^2]$  |
| 656 | 45,9;0   | $h_0^6h_3^2h_5$                                  | $d_4^{-1} = h_0^4[h_2b_{03}]h_5$   |
| 657 | 45,9;10  | $h_0^3[h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$ | $d_6 = h_0^6[b_{24}^2]$  |
| 658 | 45,9;12  | $h_1[b_{13}^2][b_{03}^2]$                        | Permanent cycle  |
| 659 | 45,10;0  | $h_0^7h_3^2h_5$                                  | $d_4^{-1} = h_0^5[h_2b_{03}]h_5$   |

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| 660 | 45,10;10 | $h_0^4[h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$    | $d_6 = h_0^7[b_{24}^2]$                        |
| 661 | 45,11;0  | $h_0^8h_3^2h_5$                                     | $d_4^{-1} = h_0^6[h_2b_{03}]h_5$               |
| 662 | 45,11;10 | $h_0^5[h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$    | $d_6 = h_0^8[b_{24}^2]$                        |
| 663 | 45,12;0  | $h_0^9h_3^2h_5$                                     | $d_4^{-1} = h_0^7[h_2b_{03}]h_5$               |
| 664 | 45,12;10 | $h_0^6[h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$    | $d_6 = h_0^9[b_{24}^2]$                        |
| 665 | 45,12;12 | $[b_{02}^2][h_0(1)b_{13}][b_{13}^2]$                | Permanent cycle                                |
| 666 | 45,13;0  | $h_0^{10}h_3^2h_5$                                  | $d_4^{-1} = h_0^8[h_2b_{03}]h_5$               |
| 667 | 45,13;10 | $h_0^7[h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$    | $d_6 = h_0^{10}[b_{24}^2]$                     |
| 668 | 45,13;12 | $h_0[b_{02}^2][h_0(1)b_{13}][b_{13}^2]$             | $d_4^{-1} = [b_{02}^2][h_0(1)^2][b_{03}^2]$    |
| 669 | 45,14;0  | $h_0^{11}h_3^2h_5$                                  | $d_4^{-1} = h_0^9[h_2b_{03}]h_5$               |
| 670 | 45,14;10 | $h_0^8[h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$    | $d_6 = h_0^{11}[b_{24}^2]$                     |
| 671 | 45,14;12 | $h_0^2[b_{02}^2][h_0(1)b_{13}][b_{13}^2]$           | $d_4^{-1} = h_0[b_{02}^2][h_0(1)^2][b_{03}^2]$ |
| 672 | 45,15;0  | $h_0^{12}h_3^2h_5$                                  | $d_4^{-1} = h_0^{10}[h_2b_{03}]h_5$            |
| 673 | 45,15;10 | $h_0^9[h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$    | $d_6 = h_0^{12}[b_{24}^2]$                     |
| 674 | 45,15;16 | $[b_{02}^2]^2[h_2b_{03}][h_0(1)^2]$                 | Permanent cycle                                |
| 675 | 45,16;0  | $h_0^{13}h_3^2h_5$                                  | $d_4^{-1} = h_0^{11}[h_2b_{03}]h_5$            |
| 676 | 45,16;10 | $h_0^{10}[h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$ | $d_6 = h_0^{13}[b_{24}^2]$                     |
| 677 | 45,16;16 | $h_0[b_{02}^2]^2[h_2b_{03}][h_0(1)^2]$              | Permanent cycle                                |
| 678 | 45,17;0  | $h_0^{14}h_3^2h_5$                                  | $d_4^{-1} = h_0^{12}[h_2b_{03}]h_5$            |
| 679 | 45,17;10 | $h_0^{11}[h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$ | $d_6 = h_0^{14}[b_{24}^2]$                     |
| 680 | 45,17;16 | $h_0^2[b_{02}^2]^2[h_2b_{03}][h_0(1)^2]$            | Permanent cycle                                |
| 681 | 45,18;0  | $h_0^{15}h_3^2h_5$                                  | $d_4^{-1} = h_0^{13}[h_2b_{03}]h_5$            |
| 682 | 45,18;10 | $h_0^{12}[h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$ | $d_6 = h_0^{15}[b_{24}^2]$                     |
| 683 | 45,19;0  | $h_0^{16}h_3^2h_5$                                  | $d_4^{-1} = h_0^{14}[h_2b_{03}]h_5$            |
| 684 | 45,19;10 | $h_0^{13}[h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$ | $d_6 = h_0^{16}[b_{24}^2]$                     |
| 685 | 45,20;0  | $h_0^{17}h_3^2h_5$                                  | $d_4^{-1} = h_0^{15}[h_2b_{03}]h_5$            |
| 686 | 45,20;10 | $h_0^{14}[h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$ | $d_6 = h_0^{17}[b_{24}^2]$                     |
| 687 | 45,21;0  | $h_0^{18}h_3^2h_5$                                  | $d_4^{-1} = h_0^{16}[h_2b_{03}]h_5$            |
| 688 | 45,21;10 | $h_0^{15}[h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$ | $d_6 = h_0^{18}[b_{24}^2]$                     |
| 689 | 45,22;0  | $h_0^{19}h_3^2h_5$                                  | $d_4^{-1} = h_0^{17}[h_2b_{03}]h_5$            |
| 690 | 45,22;10 | $h_0^{16}[h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$ | $d_6 = h_0^{19}[b_{24}^2]$                     |
| 691 | 45,23;0  | $h_0^{20}h_3^2h_5$                                  | $d_4^{-1} = h_0^{18}[h_2b_{03}]h_5$            |
| 692 | 45,23;10 | $h_0^{17}[h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$ | $d_6 = h_0^{20}[b_{24}^2]$                     |
| 693 | 46,4;4   | $[h_2b_{03}]h_5$                                    | $d_4 = h_0^2h_3^2h_5$                          |
| 694 | 46,5;4   | $h_0[h_2b_{03}]h_5$                                 | $d_4 = h_0^3h_3^2h_5$                          |
| 695 | 46,6;4   | $h_1^2[b_{24}^2]$                                   | $d_4^{-1} = [h_2h_1(1)b_{04}]$                 |
| 696 | 46,6;4   | $h_1[h_0(1)^2]h_5$                                  | Permanent cycle                                |
| 697 | 46,6;4   | $h_0^2[h_2b_{03}]h_5$                               | $d_4 = h_0^4h_3^2h_5$                          |
| 698 | 46,7;4   | $h_0^3[h_2b_{03}]h_5$                               | $d_4 = h_0^5h_3^2h_5$                          |
| 699 | 46,7;10  | $h_1[h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$      | Permanent cycle                                |
| 700 | 46,8;4   | $h_0^4[h_2b_{03}]h_5$                               | $d_4 = h_0^6h_3^2h_5$                          |
| 701 | 46,8;10  | $h_2[h_2h_1(1)][b_{03}^2]$                          | Permanent cycle                                |
| 702 | 46,9;4   | $h_0^5[h_2b_{03}]h_5$                               | $d_4 = h_0^7h_3^2h_5$                          |
| 703 | 46,10;4  | $h_0^6[h_2b_{03}]h_5$                               | $d_4 = h_0^8h_3^2h_5$                          |
| 704 | 46,10;8  | $h_2^2[b_{13}^2]^2$                                 | $d_4^{-1} = h_2[b_{13}^2][b_{03}^2]$           |
| 705 | 46,10;8  | $[b_{02}^2]^2h_4^2$                                 | $d_4^{-1} = [b_{02}^2]h_4[b_{03}^2]$           |
| 706 | 46,11;4  | $h_0^7[h_2b_{03}]h_5$                               | $d_4 = h_0^9h_3^2h_5$                          |
| 707 | 46,11;8  | $h_0[b_{02}^2]^2h_4^2$                              | $d_4^{-1} = h_0[b_{02}^2]h_4[b_{03}^2]$        |
| 708 | 46,11;12 | $[h_2b_{03}][h_0(1)^2][h_0(1)b_{13}]$               | Permanent cycle                                |
| 709 | 46,12;4  | $h_0^8[h_2b_{03}]h_5$                               | $d_4 = h_0^{10}h_3^2h_5$                       |
| 710 | 46,12;8  | $h_0^2[b_{02}^2]^2h_4^2$                            | $d_4^{-1} = h_0^2[b_{02}^2]h_4[b_{03}^2]$      |
| 711 | 46,12;12 | $h_0[h_2b_{03}][h_0(1)^2][h_0(1)b_{13}]$            | $d_4^{-1} = [b_{02}^2][h_2b_{03}][b_{03}^2]$   |
| 712 | 46,12;16 | $[b_{02}^2][h_0(1)^2][b_{03}^2]$                    | $d_4 = h_0[b_{02}^2][h_0(1)b_{13}][b_{13}^2]$  |

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| 713 | 46,13;4  | $h_0^9[h_2b_{03}]h_5$                                      | $d_4 = h_0^{11}h_3^2h_5$                        |
| 714 | 46,13;8  | $h_0^3[b_{02}^2]^2h_4^2$                                   | $d_4^{-1} = h_0^3[b_{02}^2]h_4[b_{03}^2]$       |
| 715 | 46,13;12 | $h_0^2[h_2b_{03}][h_0(1)^2][h_0(1)b_{13}]$                 | $d_4^{-1} = h_0[b_{02}^2][h_2b_{03}][b_{03}^2]$ |
| 716 | 46,13;16 | $h_0[b_{02}^2][h_0(1)^2][b_{03}^2]$                        | $d_4 = h_0^2[b_{02}^2][h_0(1)b_{13}][b_{13}^2]$ |
| 717 | 46,14;4  | $h_0^{10}[h_2b_{03}]h_5$                                   | $d_4 = h_0^{12}h_3^2h_5$                        |
| 718 | 46,14;8  | $h_0^4[b_{02}^2]^2h_4^2$                                   | $d_4^{-1} = h_0^4[b_{02}^2]h_4[b_{03}^2]$       |
| 719 | 46,14;16 | $h_0^2[b_{02}^2][h_0(1)^2][b_{03}^2]$                      | Permanent cycle                                 |
| 720 | 46,15;4  | $h_0^{11}[h_2b_{03}]h_5$                                   | $d_4 = h_0^{13}h_3^2h_5$                        |
| 721 | 46,15;8  | $h_0^5[b_{02}^2]^2h_4^2$                                   | $d_4^{-1} = h_0^5[b_{02}^2]h_4[b_{03}^2]$       |
| 722 | 46,15;14 | $[b_{02}^2]^2[h_4h_0(1)b_{02}^2 + h_0^3b_{02}b_{14}]$      | Permanent cycle                                 |
| 723 | 46,16;4  | $h_0^{12}[h_2b_{03}]h_5$                                   | $d_4 = h_0^{14}h_3^2h_5$                        |
| 724 | 46,16;8  | $h_0^6[b_{02}^2]^2h_4^2$                                   | $d_4^{-1} = h_0^6[b_{02}^2]h_4[b_{03}^2]$       |
| 725 | 46,16;14 | $h_0[b_{02}^2]^2[h_4h_0(1)b_{02}^2 + h_0^3b_{02}b_{14}]$   | Permanent cycle                                 |
| 726 | 46,17;4  | $h_0^{13}[h_2b_{03}]h_5$                                   | $d_4 = h_0^{15}h_3^2h_5$                        |
| 727 | 46,17;8  | $h_0^7[b_{02}^2]^2h_4^2$                                   | $d_4^{-1} = h_0^7[b_{02}^2]h_4[b_{03}^2]$       |
| 728 | 46,17;14 | $h_0^2[b_{02}^2]^2[h_4h_0(1)b_{02}^2 + h_0^3b_{02}b_{14}]$ | Permanent cycle                                 |
| 729 | 46,18;4  | $h_0^{14}[h_2b_{03}]h_5$                                   | $d_4 = h_0^{16}h_3^2h_5$                        |
| 730 | 46,18;8  | $h_0^8[b_{02}^2]^2h_4^2$                                   | $d_4^{-1} = h_0^8[b_{02}^2]h_4[b_{03}^2]$       |
| 731 | 46,18;14 | $h_0^3[b_{02}^2]^2[h_4h_0(1)b_{02}^2 + h_0^3b_{02}b_{14}]$ | Permanent cycle                                 |
| 732 | 46,19;4  | $h_0^{15}[h_2b_{03}]h_5$                                   | $d_4 = h_0^{17}h_3^2h_5$                        |
| 733 | 46,19;8  | $h_0^9[b_{02}^2]^2h_4^2$                                   | $d_4^{-1} = h_0^9[b_{02}^2]h_4[b_{03}^2]$       |
| 734 | 46,19;14 | $h_0^4[b_{02}^2]^2[h_4h_0(1)b_{02}^2 + h_0^3b_{02}b_{14}]$ | Permanent cycle                                 |
| 735 | 46,20;4  | $h_0^{16}[h_2b_{03}]h_5$                                   | $d_4 = h_0^{18}h_3^2h_5$                        |
| 736 | 46,20;8  | $h_0^{10}[b_{02}^2]^2h_4^2$                                | $d_4^{-1} = h_0^{10}[b_{02}^2]h_4[b_{03}^2]$    |
| 737 | 46,20;14 | $h_0^5[b_{02}^2]^2[h_4h_0(1)b_{02}^2 + h_0^3b_{02}b_{14}]$ | $d_6^{-1} = [b_{02}^2]^4[h_2b_{03}]$            |
| 738 | 46,20;20 | $[b_{02}^2]^4[h_0(1)^2]$                                   | Permanent cycle                                 |
| 739 | 46,21;4  | $h_0^{17}[h_2b_{03}]h_5$                                   | $d_4 = h_0^{19}h_3^2h_5$                        |
| 740 | 46,21;8  | $h_0^{11}[b_{02}^2]^2h_4^2$                                | $d_4^{-1} = h_0^{11}[b_{02}^2]h_4[b_{03}^2]$    |
| 741 | 46,21;14 | $h_0^6[b_{02}^2]^2[h_4h_0(1)b_{02}^2 + h_0^3b_{02}b_{14}]$ | $d_6^{-1} = h_0[b_{02}^2]^4[h_2b_{03}]$         |
| 742 | 46,21;20 | $h_0[b_{02}^2]^4[h_0(1)^2]$                                | Permanent cycle                                 |
| 743 | 46,22;4  | $h_0^{18}[h_2b_{03}]h_5$                                   | $d_4 = h_0^{20}h_3^2h_5$                        |
| 744 | 46,22;8  | $h_0^{12}[b_{02}^2]^2h_4^2$                                | $d_4^{-1} = h_0^{12}[b_{02}^2]h_4[b_{03}^2]$    |
| 745 | 46,22;14 | $h_0^7[b_{02}^2]^2[h_4h_0(1)b_{02}^2 + h_0^3b_{02}b_{14}]$ | $d_6^{-1} = h_0^2[b_{02}^2]^4[h_2b_{03}]$       |
| 746 | 46,22;20 | $h_0^2[b_{02}^2]^4[h_0(1)^2]$                              | Permanent cycle                                 |
| 747 | 46,23;4  | $h_0^{19}[h_2b_{03}]h_5$                                   | $d_4 = h_0^{21}h_3^2h_5$                        |
| 748 | 46,23;8  | $h_0^{13}[b_{02}^2]^2h_4^2$                                | $d_4^{-1} = h_0^{13}[b_{02}^2]h_4[b_{03}^2]$    |
| 749 | 46,23;14 | $h_0^8[b_{02}^2]^2[h_4h_0(1)b_{02}^2 + h_0^3b_{02}b_{14}]$ | $d_6^{-1} = h_0^3[b_{02}^2]^4[h_2b_{03}]$       |
| 750 | 46,24;4  | $h_0^{20}[h_2b_{03}]h_5$                                   | $d_4 = h_0^{22}h_3^2h_5$                        |
| 751 | 46,24;8  | $h_0^{14}[b_{02}^2]^2h_4^2$                                | $d_4^{-1} = h_0^{14}[b_{02}^2]h_4[b_{03}^2]$    |
| 752 | 46,24;14 | $h_0^9[b_{02}^2]^2[h_4h_0(1)b_{02}^2 + h_0^3b_{02}b_{14}]$ | $d_6^{-1} = h_0^4[b_{02}^2]^4[h_2b_{03}]$       |
| 753 | 47,5;4   | $h_2[b_{24}^2]$  | Permanent cycle                                 |
| 754 | 47,5;8   | $[h_2h_1(1)b_{04}]$  | $d_4 = h_1^2[b_{24}^2]$                         |
| 755 | 47,6;4   | $h_0h_2[b_{24}^2]$   | Permanent cycle                                 |
| 756 | 47,7;4   | $h_1^2[h_0(1)^2]h_5$                                       | Permanent cycle                                 |
| 757 | 47,8;6   | $[h_1h_0(1)][b_{02}^2]h_5$                                 | Permanent cycle                                 |
| 758 | 47,8;10  | $h_1^2[h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$           | Permanent cycle                                 |
| 759 | 47,9;8   | $[b_{02}^2]^2h_5$  | $d_8^{-1} = [b_{03}^2]^2$                       |
| 760 | 47,9;12  | $h_2[b_{13}^2][b_{03}^2]$                                  | $d_4 = h_2^2[b_{13}^2]^2$                       |
| 761 | 47,9;12  | $[b_{02}^2]h_4[b_{03}^2]$                                  | $d_4 = [b_{02}^2]^2h_4^2$                       |
| 762 | 47,10;8  | $h_0[b_{02}^2]^2h_5$                                       | $d_8^{-1} = h_0[b_{03}^2]^2$                    |
| 763 | 47,10;12 | $h_0h_2[b_{13}^2][b_{03}^2]$                               | Permanent cycle                                 |
| 764 | 47,10;12 | $h_0[b_{02}^2]h_4[b_{03}^2]$                               | $d_4 = h_0[b_{02}^2]^2h_4^2$                    |
| 765 | 47,11;8  | $h_1[b_{02}^2]^2h_4^2$                                     | $d_4^{-1} = h_1[b_{02}^2]h_4[b_{03}^2]$         |

|     |          |   |   |
|-----|----------|---|---|
| 766 | 47,11;8  | $h_0^2[b_{02}^2]^2 h_5$   | $d_8^{-1} = h_0^2[b_{03}^2]^2$                                      |
| 767 | 47,11;12 | $h_0^2[b_{02}^2] h_4[b_{03}^2]$   | $d_4 = h_0^2[b_{02}^2]^2 h_4^2$                                     |
| 768 | 47,11;16 | $[b_{02}^2][h_2 b_{03}][b_{03}^2]$  | $d_4 = h_0[h_2 b_{03}][h_0(1)^2][h_0(1)b_{13}]$                     |
| 769 | 47,12;8  | $h_0^3[b_{02}^2]^2 h_5$   | $d_8^{-1} = h_0^3[b_{03}^2]^2$                                      |
| 770 | 47,12;12 | $h_0^3[b_{02}^2] h_4[b_{03}^2]$   | $d_4 = h_0^3[b_{02}^2]^2 h_4^2$                                     |
| 771 | 47,12;16 | $h_0[b_{02}^2][h_2 b_{03}][b_{03}^2]$   | $d_4 = h_0^2[h_2 b_{03}][h_0(1)^2][h_0(1)b_{13}]$                   |
| 772 | 47,13;8  | $h_0^4[b_{02}^2]^2 h_5$   | $d_8^{-1} = h_0^4[b_{03}^2]^2$                                      |
| 773 | 47,13;12 | $h_0^4[b_{02}^2] h_4[b_{03}^2]$   | $d_4 = h_0^4[b_{02}^2]^2 h_4^2$                                     |
| 774 | 47,13;16 | $h_1[b_{02}^2][h_0(1)^2][b_{03}^2] + h_0^2[b_{02}^2][h_2 b_{03}][b_{03}^2]$                               | Permanent cycle   |
| 775 | 47,13;16 | $h_0^2[b_{02}^2][h_2 b_{03}][b_{03}^2]$   | Permanent cycle   |
| 776 | 47,14;8  | $h_0^5[b_{02}^2]^2 h_5$   | $d_8^{-1} = h_0^5[b_{03}^2]^2$                                      |
| 777 | 47,14;12 | $h_0^5[b_{02}^2] h_4[b_{03}^2]$   | $d_4 = h_0^5[b_{02}^2]^2 h_4^2$                                     |
| 778 | 47,14;16 | $h_0^3[b_{02}^2][h_2 b_{03}][b_{03}^2]$   | Permanent cycle   |
| 779 | 47,15;8  | $h_0^6[b_{02}^2]^2 h_5$   | $d_8^{-1} = h_0^6[b_{03}^2]^2$                                      |
| 780 | 47,15;12 | $h_0^6[b_{02}^2] h_4[b_{03}^2]$   | $d_4 = h_0^6[b_{02}^2]^2 h_4^2$                                     |
| 781 | 47,15;16 | $h_0^4[b_{02}^2][h_2 b_{03}][b_{03}^2]$   | Permanent cycle   |
| 782 | 47,16;8  | $h_0^7[b_{02}^2]^2 h_5$   | $d_8^{-1} = h_0^7[b_{03}^2]^2$                                      |
| 783 | 47,16;12 | $h_0^7[b_{02}^2] h_4[b_{03}^2]$   | $d_4 = h_0^7[b_{02}^2]^2 h_4^2$                                     |
| 784 | 47,16;14 | $h_1[b_{02}^2]^2[h_4 h_0(1)b_{02}^2 + h_0^3 b_{02} b_{14}]$   | $d_4^{-1} = [h_1 h_0(1)][b_{02}^2][b_{03}^2]$                       |
| 785 | 47,16;16 | $[b_{02}^2]^2[h_0(1)^2][h_0(1)b_{13}]$  | Permanent cycle   |
| 786 | 47,16;16 | $h_0^5[b_{02}^2][h_2 b_{03}][b_{03}^2]$   | Permanent cycle   |
| 787 | 47,17;8  | $h_0^8[b_{02}^2]^2 h_5$   | $d_8^{-1} = h_0^8[b_{03}^2]^2$                                      |
| 788 | 47,17;12 | $h_0^8[b_{02}^2] h_4[b_{03}^2]$   | $d_4 = h_0^8[b_{02}^2]^2 h_4^2$                                     |
| 789 | 47,17;16 | $[b_{02}^2]^4 h_4 + h_0[b_{02}^2]^2[h_0(1)^2][h_0(1)b_{13}] + h_0^6[b_{02}^2][h_2 b_{03}][b_{03}^2]$      | $d_4^{-1} = [b_{02}^2]^3[b_{03}^2]$                                 |
| 790 | 47,17;16 | $h_0[b_{02}^2]^2[h_0(1)^2][h_0(1)b_{13}]$   | Permanent cycle   |
| 791 | 47,17;16 | $h_0^6[b_{02}^2][h_2 b_{03}][b_{03}^2]$   | Permanent cycle   |
| 792 | 47,18;8  | $h_0^9[b_{02}^2]^2 h_5$   | $d_8^{-1} = h_0^9[b_{03}^2]^2$                                      |
| 793 | 47,18;12 | $h_0^9[b_{02}^2] h_4[b_{03}^2]$   | $d_4 = h_0^9[b_{02}^2]^2 h_4^2$                                     |
| 794 | 47,18;16 | $h_0[b_{02}^2]^4 h_4 + h_0^2[b_{02}^2]^2[h_0(1)^2][h_0(1)b_{13}] + h_0^7[b_{02}^2][h_2 b_{03}][b_{03}^2]$ | $d_4^{-1} = h_0[b_{02}^2]^3[b_{03}^2]$                              |
| 795 | 47,18;16 | $h_0^2[b_{02}^2]^2[h_0(1)^2][h_0(1)b_{13}]$   | Permanent cycle   |
| 796 | 47,18;16 | $h_0^7[b_{02}^2][h_2 b_{03}][b_{03}^2]$   | Permanent cycle   |
| 797 | 47,19;8  | $h_0^{10}[b_{02}^2]^2 h_5$  | $d_8^{-1} = h_0^{10}[b_{03}^2]^2$                                   |
| 798 | 47,19;12 | $h_0^{10}[b_{02}^2] h_4[b_{03}^2]$  | $d_4 = h_0^{10}[b_{02}^2]^2 h_4^2$                                  |
| 799 | 47,19;16 | $h_0^2[b_{02}^2]^4 h_4 + h_0^8[b_{02}^2][h_2 b_{03}][b_{03}^2]$   | $d_4^{-1} = h_0^2[b_{02}^2]^3[b_{03}^2]$                            |
| 800 | 47,19;16 | $h_0^8[b_{02}^2][h_2 b_{03}][b_{03}^2]$   | Permanent cycle   |
| 801 | 47,19;20 | $[b_{02}^2]^4[h_2 b_{03}]$  | $d_6 = h_0^5[b_{02}^2]^2[h_4 h_0(1)b_{02}^2 + h_0^3 b_{02} b_{14}]$ |
| 802 | 47,20;8  | $h_0^{11}[b_{02}^2]^2 h_5$  | $d_8^{-1} = h_0^{11}[b_{03}^2]^2$                                   |
| 803 | 47,20;12 | $h_0^{11}[b_{02}^2] h_4[b_{03}^2]$  | $d_4 = h_0^{11}[b_{02}^2]^2 h_4^2$                                  |
| 804 | 47,20;16 | $h_0^3[b_{02}^2]^4 h_4 + h_0^9[b_{02}^2][h_2 b_{03}][b_{03}^2]$   | $d_4^{-1} = h_0^3[b_{02}^2]^3[b_{03}^2]$                            |
| 805 | 47,20;16 | $h_0^9[b_{02}^2][h_2 b_{03}][b_{03}^2]$   | Permanent cycle   |
| 806 | 47,20;20 | $h_0[b_{02}^2]^4[h_2 b_{03}]$   | $d_6 = h_0^6[b_{02}^2]^2[h_4 h_0(1)b_{02}^2 + h_0^3 b_{02} b_{14}]$ |
| 807 | 47,21;8  | $h_0^{12}[b_{02}^2]^2 h_5$  | $d_8^{-1} = h_0^{12}[b_{03}^2]^2$                                   |
| 808 | 47,21;12 | $h_0^{12}[b_{02}^2] h_4[b_{03}^2]$  | $d_4 = h_0^{12}[b_{02}^2]^2 h_4^2$                                  |
| 809 | 47,21;16 | $h_0^4[b_{02}^2]^4 h_4 + h_0^{10}[b_{02}^2][h_2 b_{03}][b_{03}^2]$  | $d_4^{-1} = h_0^4[b_{02}^2]^3[b_{03}^2]$                            |
| 810 | 47,21;16 | $h_0^{10}[b_{02}^2][h_2 b_{03}][b_{03}^2]$  | Permanent cycle   |
| 811 | 47,21;20 | $h_1[b_{02}^2]^4[h_0(1)^2]$   | Permanent cycle   |
| 812 | 47,21;20 | $h_0^2[b_{02}^2]^4[h_2 b_{03}]$   | $d_6 = h_0^7[b_{02}^2]^2[h_4 h_0(1)b_{02}^2 + h_0^3 b_{02} b_{14}]$ |
| 813 | 47,22;8  | $h_0^{13}[b_{02}^2]^2 h_5$  | $d_8^{-1} = h_0^{13}[b_{03}^2]^2$                                   |
| 814 | 47,22;12 | $h_0^{13}[b_{02}^2] h_4[b_{03}^2]$  | $d_4 = h_0^{13}[b_{02}^2]^2 h_4^2$                                  |
| 815 | 47,22;16 | $h_0^5[b_{02}^2]^4 h_4 + h_0^{11}[b_{02}^2][h_2 b_{03}][b_{03}^2]$  | $d_4^{-1} = h_0^5[b_{02}^2]^3[b_{03}^2]$                            |
| 816 | 47,22;16 | $h_0^{11}[b_{02}^2][h_2 b_{03}][b_{03}^2]$  | Permanent cycle   |
| 817 | 47,22;20 | $h_0^3[b_{02}^2]^4[h_2 b_{03}]$   | $d_6 = h_0^8[b_{02}^2]^2[h_4 h_0(1)b_{02}^2 + h_0^3 b_{02} b_{14}]$ |



|     |          |  |  |
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| 818 | 47,23;8  | $h_0^{14}[b_{02}^2]^2 h_5$   | $d_8^{-1} = h_0^{14}[b_{03}^2]^2$  |
| 819 | 47,23;12 | $h_0^{14}[b_{02}^2] h_4 [b_{03}^2]$                                | $d_4 = h_0^{14}[b_{02}^2]^2 h_4^2$   |
| 820 | 47,23;16 | $h_0^6[b_{02}^2]^4 h_4 + h_0^{12}[b_{02}^2][h_2 b_{03}][b_{03}^2]$ | $d_4^{-1} = h_0^6[b_{02}^2]^3 [b_{03}^2]$  |
| 821 | 47,23;16 | $h_0^{12}[b_{02}^2][h_2 b_{03}][b_{03}^2]$                         | Permanent cycle  |
| 822 | 47,23;20 | $h_0^4[b_{02}^2]^4 [h_2 b_{03}]$                                   | $d_6 = h_0^9[b_{02}^2]^2 [h_4 h_0(1) b_{02}^2 + h_0^3 b_{02} b_{14}]$  |
| 823 | 47,24;8  | $h_0^{15}[b_{02}^2]^2 h_5$   | $d_8^{-1} = h_0^{15}[b_{03}^2]^2$  |
| 824 | 47,24;12 | $h_0^{15}[b_{02}^2] h_4 [b_{03}^2]$                                | $d_4 = h_0^{15}[b_{02}^2]^2 h_4^2$   |
| 825 | 47,24;16 | $h_0^7[b_{02}^2]^4 h_4 + h_0^{13}[b_{02}^2][h_2 b_{03}][b_{03}^2]$ | $d_4^{-1} = h_0^7[b_{02}^2]^3 [b_{03}^2]$  |
| 826 | 47,24;16 | $h_0^{13}[b_{02}^2][h_2 b_{03}][b_{03}^2]$                         | Permanent cycle  |
| 827 | 47,24;20 | $h_0^5[b_{02}^2]^4 [h_2 b_{03}]$                                   | $d_6 = h_0^{10}[b_{02}^2]^2 [h_4 h_0(1) b_{02}^2 + h_0^3 b_{02} b_{14}]$                                     |
| 828 | 48,4;2   | $h_3[h_3 h_2(1)]$  | Permanent cycle  |
| 829 | 48,5;2   | $h_0 h_3[h_3 h_2(1)]$  | $d_4^{-1} = [h_2 h_0(1, 2)]$   |
| 830 | 48,5;4   | $[h_0(1) b_{13}] h_5$  | Permanent cycle  |
| 831 | 48,6;2   | $h_0^2 h_3[h_3 h_2(1)]$  | $d_4^{-1} = h_0[h_2 h_0(1, 2)]$  |
| 832 | 48,6;4   | $h_0[h_0(1) b_{13}] h_5$   | Permanent cycle  |
| 833 | 48,7;2   | $h_0^3 h_3[h_3 h_2(1)]$  | $d_4^{-1} = h_0^2[h_2 h_0(1, 2)]$  |
| 834 | 48,7;4   | $h_0^2[h_0(1) b_{13}] h_5$   | Permanent cycle  |
| 835 | 48,7;10  | $h_2[h_0(1) b_{03} b_{14} + h_0(1) b_{13} b_{04}]$                 | Permanent cycle  |
| 836 | 48,8;2   | $h_0^4 h_3[h_3 h_2(1)]$  | $d_4^{-1} = h_0^3[h_2 h_0(1, 2)]$  |
| 837 | 48,8;4   | $h_0^3[h_0(1) b_{13}] h_5$   | $d_6^{-1} = [h_1 b_{13} b_{03} b_{14} + h_1 b_{13}^2 b_{04}]$  |
| 838 | 48,8;10  | $h_0 h_2[h_0(1) b_{03} b_{14} + h_0(1) b_{13} b_{04}]$             | Permanent cycle  |
| 839 | 48,8;16  | $[b_{03}^2]^2$   | $d_8 = [b_{02}^2]^2 h_5$   |
| 840 | 48,9;2   | $h_0^5 h_3[h_3 h_2(1)]$  | $d_4^{-1} = h_0^4[h_2 h_0(1, 2)]$  |
| 841 | 48,9;6   | $h_1[h_1 h_0(1)][b_{02}^2] h_5$                                    | Permanent cycle  |
| 842 | 48,9;10  | $h_0^2 h_2[h_0(1) b_{03} b_{14} + h_0(1) b_{13} b_{04}]$           | Permanent cycle  |
| 843 | 48,9;16  | $h_0[b_{03}^2]^2$  | $d_8 = h_0[b_{02}^2]^2 h_5$  |
| 844 | 48,10;2  | $h_0^6 h_3[h_3 h_2(1)]$  | $d_4^{-1} = h_0^5[h_2 h_0(1, 2)]$  |
| 845 | 48,10;8  | $h_1[b_{02}^2]^2 h_5$  | $d_8^{-1} = h_1[b_{03}^2]^2$   |
| 846 | 48,10;12 | $h_1[b_{02}^2] h_4 [b_{03}^2]$                                     | $d_4 = h_1[b_{02}^2]^2 h_4^2$  |
| 847 | 48,10;16 | $h_0^2[b_{03}^2]^2$  | $d_8 = h_0^2[b_{02}^2]^2 h_5$  |
| 848 | 48,11;2  | $h_0^7 h_3[h_3 h_2(1)]$  | $d_4^{-1} = h_0^6[h_2 h_0(1, 2)]$  |
| 849 | 48,11;16 | $h_0^3[b_{03}^2]^2$  | $d_8 = h_0^3[b_{02}^2]^2 h_5$  |
| 850 | 48,12;2  | $h_0^8 h_3[h_3 h_2(1)]$  | $d_4^{-1} = h_0^7[h_2 h_0(1, 2)]$  |
| 851 | 48,12;8  | $h_1^2[b_{02}^2]^2 h_4^2$  | $d_4^{-1} = h_1^2[b_{02}^2] h_4 [b_{03}^2]$  |
| 852 | 48,12;12 | $[b_{02}^2][b_{13}^2]^2$   | Permanent cycle  |
| 853 | 48,12;16 | $h_0^4[b_{03}^2]^2$  | $d_8 = h_0^4[b_{02}^2]^2 h_5$  |
| 854 | 48,13;2  | $h_0^9 h_3[h_3 h_2(1)]$  | $d_4^{-1} = h_0^8[h_2 h_0(1, 2)]$  |
| 855 | 48,13;12 | $h_0[b_{02}^2][b_{13}^2]^2$  | $d_4^{-1} = [b_{02}^2][h_0(1) b_{13}][b_{03}^2]$   |
| 856 | 48,13;16 | $h_0^5[b_{03}^2]^2$  | $d_8 = h_0^5[b_{02}^2]^2 h_5$  |
| 857 | 48,14;2  | $h_0^{10} h_3[h_3 h_2(1)]$   | $d_4^{-1} = h_0^9[h_2 h_0(1, 2)]$  |
| 858 | 48,14;12 | $h_0^2[b_{02}^2][b_{13}^2]^2$                                      | $d_4^{-1} = h_0[b_{02}^2][h_0(1) b_{13}][b_{03}^2]$  |
| 859 | 48,14;16 | $h_1^2[b_{02}^2][h_0(1)^2][b_{03}^2]$                              | Permanent cycle  |
| 860 | 48,14;16 | $h_0^6[b_{03}^2]^2$  | $d_8 = h_0^6[b_{02}^2]^2 h_5$  |
| 861 | 48,15;2  | $h_0^{11} h_3[h_3 h_2(1)]$   | $d_4^{-1} = h_0^{10}[h_2 h_0(1, 2)]$   |
| 862 | 48,15;16 | $[b_{02}^2]^2 [h_2 b_{03}][h_0(1) b_{13}]$                         | Permanent cycle  |
| 863 | 48,15;16 | $h_0^7[b_{03}^2]^2$  | $d_8 = h_0^7[b_{02}^2]^2 h_5$  |
| 864 | 48,15;18 | $[h_1 h_0(1)][b_{02}^2]^2 [b_{03}^2]$                              | $d_4 = h_1[b_{02}^2]^2 [h_4 h_0(1) b_{02}^2 + h_0^3 b_{02} b_{14}]$  |
| 865 | 48,16;2  | $h_0^{12} h_3[h_3 h_2(1)]$   | $d_4^{-1} = h_0^{11}[h_2 h_0(1, 2)]$   |
| 866 | 48,16;16 | $h_0[b_{02}^2]^2 [h_2 b_{03}][h_0(1) b_{13}]$                      | Permanent cycle  |
| 867 | 48,16;16 | $h_0^8[b_{03}^2]^2$  | $d_8 = h_0^8[b_{02}^2]^2 h_5$  |
| 868 | 48,16;20 | $[b_{02}^2]^3 [b_{03}^2]$  | $d_4 = [b_{02}^2]^4 h_4 + h_0[b_{02}^2]^2 [h_0(1)^2][h_0(1) b_{13}] + h_0^6[b_{02}^2][h_2 b_{03}][b_{03}^2]$ |

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| 869 | 48,17;2  | $h_0^{13}h_3[h_3h_2(1)]$                                   | $d_4^{-1} = h_0^{12}[h_2h_0(1, 2)]$   |
| 870 | 48,17;14 | $h_1^2[b_{02}^2]^2[h_4h_0(1)b_{02}^2 + h_0^3b_{02}b_{14}]$ | $d_4^{-1} = h_1[h_1h_0(1)][b_{02}^2][b_{03}^2]$   |
| 871 | 48,17;16 | $h_0^2[b_{02}^2]^2[h_2b_{03}][h_0(1)b_{13}]$               | Permanent cycle   |
| 872 | 48,17;16 | $h_0^9[b_{03}^2]^2$  | $d_8 = h_0^9[b_{02}^2]^2h_5$  |
| 873 | 48,17;20 | $h_0[b_{02}^2]^3[b_{03}^2]$                                | $d_4 =$<br>$h_0[b_{02}^2]^4h_4 + h_0^2[b_{02}^2]^2[h_0(1)^2][h_0(1)b_{13}] +$<br>$h_0^7[b_{02}^2][h_2b_{03}][b_{03}^2]$ |
| 874 | 48,18;2  | $h_0^{14}h_3[h_3h_2(1)]$                                   | $d_4^{-1} = h_0^{13}[h_2h_0(1, 2)]$   |
| 875 | 48,18;16 | $h_1[b_{02}^2]^4h_4$                                       | $d_4^{-1} = h_1[b_{02}^2]^3[b_{03}^2]$  |
| 876 | 48,18;16 | $h_0^{10}[b_{03}^2]^2$                                     | $d_8 = h_0^{10}[b_{02}^2]^2h_5$   |
| 877 | 48,18;20 | $h_0^2[b_{02}^2]^3[b_{03}^2]$                              | $d_4 = h_0^2[b_{02}^2]^4h_4 + h_0^8[b_{02}^2][h_2b_{03}][b_{03}^2]$   |
| 878 | 48,19;2  | $h_0^{15}h_3[h_3h_2(1)]$                                   | $d_4^{-1} = h_0^{14}[h_2h_0(1, 2)]$   |
| 879 | 48,19;16 | $h_0^{11}[b_{03}^2]^2$                                     | $d_8 = h_0^{11}[b_{02}^2]^2h_5$   |
| 880 | 48,19;20 | $h_0^3[b_{02}^2]^3[b_{03}^2]$                              | $d_4 = h_0^3[b_{02}^2]^4h_4 + h_0^9[b_{02}^2][h_2b_{03}][b_{03}^2]$   |
| 881 | 48,20;2  | $h_0^{16}h_3[h_3h_2(1)]$                                   | $d_4^{-1} = h_0^{15}[h_2h_0(1, 2)]$   |
| 882 | 48,20;16 | $h_0^{12}[b_{03}^2]^2$                                     | $d_8 = h_0^{12}[b_{02}^2]^2h_5$   |
| 883 | 48,20;20 | $h_0^4[b_{02}^2]^3[b_{03}^2]$                              | $d_4 = h_0^4[b_{02}^2]^4h_4 + h_0^{10}[b_{02}^2][h_2b_{03}][b_{03}^2]$  |
| 884 | 48,21;2  | $h_0^{17}h_3[h_3h_2(1)]$                                   | $d_4^{-1} = h_0^{16}[h_2h_0(1, 2)]$   |
| 885 | 48,21;16 | $h_0^{13}[b_{03}^2]^2$                                     | $d_8 = h_0^{13}[b_{02}^2]^2h_5$   |
| 886 | 48,21;20 | $h_0^5[b_{02}^2]^3[b_{03}^2]$                              | $d_4 = h_0^5[b_{02}^2]^4h_4 + h_0^{11}[b_{02}^2][h_2b_{03}][b_{03}^2]$  |
| 887 | 48,22;2  | $h_0^{18}h_3[h_3h_2(1)]$                                   | $d_4^{-1} = h_0^{17}[h_2h_0(1, 2)]$   |
| 888 | 48,22;16 | $h_0^{14}[b_{03}^2]^2$                                     | $d_8 = h_0^{14}[b_{02}^2]^2h_5$   |
| 889 | 48,22;20 | $h_1^2[b_{02}^2]^4[h_0(1)^2]$                              | Permanent cycle   |
| 890 | 48,22;20 | $h_0^6[b_{02}^2]^3[b_{03}^2]$                              | $d_4 = h_0^6[b_{02}^2]^4h_4 + h_0^{12}[b_{02}^2][h_2b_{03}][b_{03}^2]$  |
| 891 | 48,23;2  | $h_0^{19}h_3[h_3h_2(1)]$                                   | $d_4^{-1} = h_0^{18}[h_2h_0(1, 2)]$   |
| 892 | 48,23;16 | $h_0^{15}[b_{03}^2]^2$                                     | $d_8 = h_0^{15}[b_{02}^2]^2h_5$   |
| 893 | 48,23;20 | $h_0^7[b_{02}^2]^3[b_{03}^2]$                              | $d_4 = h_0^7[b_{02}^2]^4h_4 + h_0^{13}[b_{02}^2][h_2b_{03}][b_{03}^2]$  |
| 894 | 48,23;22 | $[h_1h_0(1)][b_{02}^2]^5$                                  | Permanent cycle   |
| 895 | 48,24;2  | $h_0^{20}h_3[h_3h_2(1)]$                                   | $d_4^{-1} = h_0^{19}[h_2h_0(1, 2)]$   |
| 896 | 48,24;16 | $h_0^{16}[b_{03}^2]^2$                                     | $d_8 = h_0^{16}[b_{02}^2]^2h_5$   |
| 897 | 48,24;20 | $h_0^8[b_{02}^2]^3[b_{03}^2]$                              | $d_4 = h_0^8[b_{02}^2]^4h_4 + h_0^{14}[b_{02}^2][h_2b_{03}][b_{03}^2]$  |
| 898 | 48,24;24 | $[b_{02}^2]^6$   | $d_8 = h_0^8[b_{02}^2]^4h_4$  |
| 899 | 48,25;2  | $h_0^{21}h_3[h_3h_2(1)]$                                   | $d_4^{-1} = h_0^{20}[h_2h_0(1, 2)]$   |
| 900 | 48,25;16 | $h_0^{17}[b_{03}^2]^2$                                     | $d_8 = h_0^{17}[b_{02}^2]^2h_5$   |
| 901 | 48,25;20 | $h_0^9[b_{02}^2]^3[b_{03}^2]$                              | $d_4 = h_0^9[b_{02}^2]^4h_4 + h_0^{15}[b_{02}^2][h_2b_{03}][b_{03}^2]$  |
| 902 | 48,25;24 | $h_0[b_{02}^2]^6$  | $d_8 = h_0^9[b_{02}^2]^4h_4$  |
| 903 | 49,4;6   | $[h_2h_0(1, 2)]$   | $d_4 = h_0h_3[h_3h_2(1)]$   |
| 904 | 49,5;4   | $h_2[h_2b_{03}]h_5$  | Permanent cycle   |
| 905 | 49,5;6   | $h_0[h_2h_0(1, 2)]$  | $d_4 = h_0^2h_3[h_3h_2(1)]$   |
| 906 | 49,6;4   | $h_0h_2[h_2b_{03}]h_5$                                     | Permanent cycle   |
| 907 | 49,6;6   | $h_0^2[h_2h_0(1, 2)]$                                      | $d_4 = h_0^3h_3[h_3h_2(1)]$   |
| 908 | 49,7;6   | $h_0^3[h_2h_0(1, 2)]$                                      | $d_4 = h_0^4h_3[h_3h_2(1)]$   |
| 909 | 49,7;10  | $[h_1b_{13}b_{03}b_{14} + h_1b_{13}^2b_{04}]$              | $d_6 = h_0^3[h_0(1)b_{13}]h_5$  |
| 910 | 49,8;6   | $h_0^4[h_2h_0(1, 2)]$                                      | $d_4 = h_0^5h_3[h_3h_2(1)]$   |
| 911 | 49,9;6   | $h_0^5[h_2h_0(1, 2)]$                                      | $d_4 = h_0^6h_3[h_3h_2(1)]$   |
| 912 | 49,9;16  | $h_1[b_{03}^2]^2$  | $d_8 = h_1[b_{02}^2]^2h_5$  |
| 913 | 49,10;6  | $h_0^6[h_2h_0(1, 2)]$                                      | $d_4 = h_0^7h_3[h_3h_2(1)]$   |
| 914 | 49,11;6  | $h_0^7[h_2h_0(1, 2)]$                                      | $d_4 = h_0^8h_3[h_3h_2(1)]$   |
| 915 | 49,11;8  | $h_1^2[b_{02}^2]^2h_5$                                     | $d_8^{-1} = h_1^2[b_{03}^2]^2$  |
| 916 | 49,11;12 | $[h_2b_{03}][h_0(1)^2][b_{13}^2]$                          | Permanent cycle   |
| 917 | 49,11;12 | $h_1^2[b_{02}^2]h_4[b_{03}^2]$                             | $d_4 = h_1^2[b_{02}^2]^2h_4^2$  |
| 918 | 49,12;6  | $h_0^8[h_2h_0(1, 2)]$                                      | $d_4 = h_0^9h_3[h_3h_2(1)]$   |
| 919 | 49,12;12 | $h_0[h_2b_{03}][h_0(1)^2][b_{13}^2]$                       | $d_4^{-1} = [b_{03}^2][h_0h_0(1)^2b_{03}]$  |

|     |          |  |  |
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| 920 | 49,12;16 | $[b_{02}^2][h_0(1)b_{13}][b_{03}^2]$                         | $d_4 = h_0[b_{02}^2][b_{13}^2]^2$                                |
| 921 | 49,13;6  | $h_0^9[h_2h_0(1,2)]$   | $d_4 = h_0^{10}h_3[h_3h_2(1)]$                                   |
| 922 | 49,13;12 | $h_0^2[h_2b_{03}][h_0(1)^2][b_{13}^2]$                       | $d_4^{-1} = h_0[b_{03}^2][h_0h_0(1)^2b_{03}]$                    |
| 923 | 49,13;16 | $h_0[b_{02}^2][h_0(1)b_{13}][b_{03}^2]$                      | $d_4 = h_0^2[b_{02}^2][b_{13}^2]^2$                              |
| 924 | 49,14;6  | $h_0^{10}[h_2h_0(1,2)]$                                      | $d_4 = h_0^{11}h_3[h_3h_2(1)]$                                   |
| 925 | 49,14;16 | $h_0^2[b_{02}^2][h_0(1)b_{13}][b_{03}^2]$                    | Permanent cycle  |
| 926 | 49,15;6  | $h_0^{11}[h_2h_0(1,2)]$                                      | $d_4 = h_0^{12}h_3[h_3h_2(1)]$                                   |
| 927 | 49,15;16 | $h_0^3[b_{02}^2][h_0(1)b_{13}][b_{03}^2]$                    | Permanent cycle  |
| 928 | 49,16;6  | $h_0^{12}[h_2h_0(1,2)]$                                      | $d_4 = h_0^{13}h_3[h_3h_2(1)]$                                   |
| 929 | 49,16;18 | $h_1[h_1h_0(1)][b_{02}^2]^2[b_{03}^2]$                       | $d_4 = h_1^2[b_{02}^2]^2[h_4h_0(1)b_{02}^2 + h_0^3b_{02}b_{14}]$ |
| 930 | 49,17;6  | $h_0^{13}[h_2h_0(1,2)]$                                      | $d_4 = h_0^{14}h_3[h_3h_2(1)]$                                   |
| 931 | 49,17;20 | $h_1[b_{02}^2]^3[b_{03}^2]$                                  | $d_4 = h_1[b_{02}^2]^4h_4$                                       |
| 932 | 49,18;6  | $h_0^{14}[h_2h_0(1,2)]$                                      | $d_4 = h_0^{15}h_3[h_3h_2(1)]$                                   |
| 933 | 49,19;6  | $h_0^{15}[h_2h_0(1,2)]$                                      | $d_4 = h_0^{16}h_3[h_3h_2(1)]$                                   |
| 934 | 49,19;16 | $h_1^2[b_{02}^2]^4h_4$                                       | $d_4^{-1} = h_1^2[b_{02}^2]^3[b_{03}^2]$                         |
| 935 | 49,20;6  | $h_0^{16}[h_2h_0(1,2)]$                                      | $d_4 = h_0^{17}h_3[h_3h_2(1)]$                                   |
| 936 | 49,20;20 | $[b_{02}^2]^4[h_0(1)b_{13}]$                                 | Permanent cycle  |
| 937 | 49,21;6  | $h_0^{17}[h_2h_0(1,2)]$                                      | $d_4 = h_0^{18}h_3[h_3h_2(1)]$                                   |
| 938 | 49,21;20 | $h_0[b_{02}^2]^4[h_0(1)b_{13}]$                              | Permanent cycle  |
| 939 | 49,22;6  | $h_0^{18}[h_2h_0(1,2)]$                                      | $d_4 = h_0^{19}h_3[h_3h_2(1)]$                                   |
| 940 | 49,22;20 | $h_0^2[b_{02}^2]^4[h_0(1)b_{13}]$                            | Permanent cycle  |
| 941 | 49,23;6  | $h_0^{19}[h_2h_0(1,2)]$                                      | $d_4 = h_0^{20}h_3[h_3h_2(1)]$                                   |
| 942 | 49,23;20 | $h_0^3[b_{02}^2]^4[h_0(1)b_{13}]$                            | Permanent cycle  |
| 943 | 49,24;6  | $h_0^{20}[h_2h_0(1,2)]$                                      | $d_4 = h_0^{21}h_3[h_3h_2(1)]$                                   |
| 944 | 49,24;22 | $h_1[h_1h_0(1)][b_{02}^2]^5$                                 | Permanent cycle  |
| 945 | 49,25;6  | $h_0^{21}[h_2h_0(1,2)]$                                      | $d_4 = h_0^{22}h_3[h_3h_2(1)]$                                   |
| 946 | 49,25;24 | $h_1[b_{02}^2]^6$  | Permanent cycle  |
| 947 | 50,4;2   | $[h_2h_1(1)]h_5$   | Permanent cycle  |
| 948 | 50,6;8   | $h_2[h_2h_1(1)b_{04}]$                                       | Permanent cycle  |
| 949 | 50,10;8  | $h_2[b_{02}^2]^2h_5$   | $d_8^{-1} = h_2[b_{03}^2]^2$                                     |
| 950 | 50,10;12 | $h_2^2[b_{13}^2][b_{03}^2]$                                  | Permanent cycle  |
| 951 | 50,10;16 | $h_1^2[b_{03}^2]^2$  | $d_8 = h_1^2[b_{02}^2]^2h_5$                                     |
| 952 | 50,11;8  | $h_0h_2[b_{02}^2]^2h_5$                                      | $d_8^{-1} = h_0h_2[b_{03}^2]^2$                                  |
| 953 | 50,11;16 | $[b_{03}^2][h_0h_0(1)^2b_{03}]$                              | $d_4 = h_0[h_2b_{03}][h_0(1)^2][b_{13}^2]$                       |
| 954 | 50,12;8  | $h_0^2h_2[b_{02}^2]^2h_5$                                    | $d_8^{-1} = h_0^2h_2[b_{03}^2]^2$                                |
| 955 | 50,12;16 | $h_0[b_{03}^2][h_0h_0(1)^2b_{03}]$                           | $d_4 = h_0^2[h_2b_{03}][h_0(1)^2][b_{13}^2]$                     |
| 956 | 50,13;10 | $[b_{02}^2]^2[h_0h_4^2b_{02} + h_0^3h_2(1)]$                 | $d_4^{-1} = [b_{02}^2]^2[h_0h_3b_{04}]$                          |
| 957 | 50,13;16 | $h_0^2[b_{03}^2][h_0h_0(1)^2b_{03}]$                         | Permanent cycle  |
| 958 | 50,14;10 | $h_0[b_{02}^2]^2[h_0h_4^2b_{02} + h_0^3h_2(1)]$              | $d_4^{-1} = h_0[b_{02}^2]^2[h_0h_3b_{04}]$                       |
| 959 | 50,15;10 | $h_0^2[b_{02}^2]^2[h_0h_4^2b_{02} + h_0^3h_2(1)]$            | $d_4^{-1} = h_0^2[b_{02}^2]^2[h_0h_3b_{04}]$                     |
| 960 | 50,16;10 | $h_0^3[b_{02}^2]^2[h_0h_4^2b_{02} + h_0^3h_2(1)]$            | $d_4^{-1} = h_0^3[b_{02}^2]^2[h_0h_3b_{04}]$                     |
| 961 | 50,16;16 | $[b_{02}^2]^2[h_0(1)^2][b_{13}^2]$                           | Permanent cycle  |
| 962 | 50,17;10 | $h_0^4[b_{02}^2]^2[h_0h_4^2b_{02} + h_0^3h_2(1)]$            | $d_4^{-1} = h_0^4[b_{02}^2]^2[h_0h_3b_{04}]$                     |
| 963 | 50,17;16 | $h_0[b_{02}^2]^2[h_0(1)^2][b_{13}^2]$                        | Permanent cycle  |
| 964 | 50,18;10 | $h_0^5[b_{02}^2]^2[h_0h_4^2b_{02} + h_0^3h_2(1)]$            | $d_4^{-1} = h_0^5[b_{02}^2]^2[h_0h_3b_{04}]$                     |
| 965 | 50,18;16 | $h_2[b_{02}^2]^4h_4 + h_0^2[b_{02}^2]^2[h_0(1)^2][b_{13}^2]$ | $d_4^{-1} = h_2[b_{02}^2]^3[b_{03}^2]$                           |
| 966 | 50,18;16 | $h_0^2[b_{02}^2]^2[h_0(1)^2][b_{13}^2]$                      | Permanent cycle  |
| 967 | 50,18;20 | $h_1^2[b_{02}^2]^3[b_{03}^2]$                                | $d_4 = h_1^2[b_{02}^2]^4h_4$                                     |
| 968 | 50,19;10 | $h_0^6[b_{02}^2]^2[h_0h_4^2b_{02} + h_0^3h_2(1)]$            | $d_4^{-1} = h_0^6[b_{02}^2]^2[h_0h_3b_{04}]$                     |
| 969 | 50,19;16 | $h_0h_2[b_{02}^2]^4h_4$                                      | $d_4^{-1} = h_0h_2[b_{02}^2]^3[b_{03}^2]$                        |
| 970 | 50,19;20 | $[b_{02}^2]^3[h_0h_0(1)^2b_{03}]$                            | Permanent cycle  |
| 971 | 50,20;10 | $h_0^7[b_{02}^2]^2[h_0h_4^2b_{02} + h_0^3h_2(1)]$            | $d_4^{-1} = h_0^7[b_{02}^2]^2[h_0h_3b_{04}]$                     |
| 972 | 50,20;16 | $h_0^2h_2[b_{02}^2]^4h_4$                                    | $d_4^{-1} = h_0^2h_2[b_{02}^2]^3[b_{03}^2]$                      |

|      |          |  |  |
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| 973  | 50,20;20 | $h_0[b_{02}^2]^3[h_0h_0(1)^2b_{03}]$                 | Permanent cycle  |
| 974  | 50,21;10 | $h_0^8[b_{02}^2]^2[h_0h_4^2b_{02} + h_0^3h_2(1)]$    | $d_4^{-1} = h_0^8[b_{02}^2]^2[h_0h_3b_{04}]$                       |
| 975  | 50,21;20 | $h_0^9[b_{02}^2]^3[h_0h_0(1)^2b_{03}]$               | Permanent cycle  |
| 976  | 50,22;10 | $h_0^9[b_{02}^2]^2[h_0h_4^2b_{02} + h_0^3h_2(1)]$    | $d_4^{-1} = h_0^9[b_{02}^2]^2[h_0h_3b_{04}]$                       |
| 977  | 50,23;10 | $h_0^{10}[b_{02}^2]^2[h_0h_4^2b_{02} + h_0^3h_2(1)]$ | $d_4^{-1} = h_0^{10}[b_{02}^2]^2[h_0h_3b_{04}]$                    |
| 978  | 50,24;10 | $h_0^{11}[b_{02}^2]^2[h_0h_4^2b_{02} + h_0^3h_2(1)]$ | $d_4^{-1} = h_0^{11}[b_{02}^2]^2[h_0h_3b_{04}]$                    |
| 979  | 50,25;10 | $h_0^{12}[b_{02}^2]^2[h_0h_4^2b_{02} + h_0^3h_2(1)]$ | $d_4^{-1} = h_0^{12}[b_{02}^2]^2[h_0h_3b_{04}]$                    |
| 980  | 50,26;10 | $h_0^{13}[b_{02}^2]^2[h_0h_4^2b_{02} + h_0^3h_2(1)]$ | $d_4^{-1} = h_0^{13}[b_{02}^2]^2[h_0h_3b_{04}]$                    |
| 981  | 50,26;24 | $h_1^2[b_{02}^2]^6$                                  | Permanent cycle  |
| 982  | 51,5;4   | $[b_{13}^2]h_5 + h_3[b_{24}^2]$                      | $d_4^{-1} = [b_{14}^2]$  |
| 983  | 51,5;4   | $h_3[b_{24}^2]$                                      | Permanent cycle  |
| 984  | 51,6;4   | $h_0[b_{13}^2]h_5 + h_0h_3[b_{24}^2]$                | $d_4^{-1} = h_0[b_{14}^2]$   |
| 985  | 51,6;4   | $h_0h_3[b_{24}^2]$                                   | Permanent cycle  |
| 986  | 51,7;4   | $h_0^2[b_{13}^2]h_5 + h_0^2h_3[b_{24}^2]$            | $d_4^{-1} = h_0^2[b_{14}^2]$                                       |
| 987  | 51,7;4   | $h_0^2h_3[b_{24}^2]$                                 | Permanent cycle  |
| 988  | 51,8;4   | $h_0^3h_3[b_{24}^2]$                                 | $d_4^{-1} = h_0^3[b_{14}^2]$                                       |
| 989  | 51,8;10  | $h_2^2[h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$     | Permanent cycle  |
| 990  | 51,9;4   | $h_0^4h_3[b_{24}^2]$                                 | $d_4^{-1} = h_0^4[b_{14}^2]$                                       |
| 991  | 51,9;10  | $[h_2b_{03}][h_1(1)b_{13}^2 + h_1^2b_{24}b_{03}]$    | Permanent cycle  |
| 992  | 51,9;16  | $h_2[b_{03}^2]^2$                                    | $d_8 = h_2[b_{02}^2]^2h_5$   |
| 993  | 51,10;4  | $h_0^5h_3[b_{24}^2]$                                 | $d_4^{-1} = h_0^5[b_{14}^2]$                                       |
| 994  | 51,10;16 | $h_0h_2[b_{03}^2]^2$                                 | $d_8 = h_0h_2[b_{02}^2]^2h_5$                                      |
| 995  | 51,11;4  | $h_0^6h_3[b_{24}^2]$                                 | $d_4^{-1} = h_0^6[b_{14}^2]$                                       |
| 996  | 51,11;16 | $h_0^2h_2[b_{03}^2]^2$                               | $d_8 = h_0^2h_2[b_{02}^2]^2h_5$                                    |
| 997  | 51,12;4  | $h_0^7h_3[b_{24}^2]$                                 | $d_4^{-1} = h_0^7[b_{14}^2]$                                       |
| 998  | 51,12;12 | $[h_0(1)^2][h_0(1)b_{13}][b_{13}^2]$                 | Permanent cycle  |
| 999  | 51,12;14 | $[b_{02}^2]^2[h_0h_3b_{04}]$                         | $d_4 = [b_{02}^2]^2[h_0h_4^2b_{02} + h_0^3h_2(1)]$                 |
| 1000 | 51,13;4  | $h_0^8h_3[b_{24}^2]$                                 | $d_4^{-1} = h_0^8[b_{14}^2]$                                       |
| 1001 | 51,13;12 | $h_0[h_0(1)^2][h_0(1)b_{13}][b_{13}^2]$              | $d_4^{-1} = [b_{02}^2][b_{13}^2][b_{03}^2]$                        |
| 1002 | 51,13;14 | $h_0[b_{02}^2]^2[h_0h_3b_{04}]$                      | $d_4 = h_0[b_{02}^2]^2[h_0h_4^2b_{02} + h_0^3h_2(1)]$              |
| 1003 | 51,14;4  | $h_0^9h_3[b_{24}^2]$                                 | $d_4^{-1} = h_0^9[b_{14}^2]$                                       |
| 1004 | 51,14;12 | $h_0^2[h_0(1)^2][h_0(1)b_{13}][b_{13}^2]$            | $d_4^{-1} = h_0[b_{02}^2][b_{13}^2][b_{03}^2]$                     |
| 1005 | 51,14;14 | $h_0^2[b_{02}^2]^2[h_0h_3b_{04}]$                    | $d_4 = h_0^2[b_{02}^2]^2[h_0h_4^2b_{02} + h_0^3h_2(1)]$            |
| 1006 | 51,15;4  | $h_0^{10}h_3[b_{24}^2]$                              | $d_4^{-1} = h_0^{10}[b_{14}^2]$                                    |
| 1007 | 51,15;14 | $h_0^3[b_{02}^2]^2[h_0h_3b_{04}]$                    | $d_4 = h_0^3[b_{02}^2]^2[h_0h_4^2b_{02} + h_0^3h_2(1)]$            |
| 1008 | 51,15;16 | $[b_{02}^2]^2[h_2b_{03}][b_{13}^2]$                  | Permanent cycle  |
| 1009 | 51,16;4  | $h_0^{11}h_3[b_{24}^2]$                              | $d_4^{-1} = h_0^{11}[b_{14}^2]$                                    |
| 1010 | 51,16;14 | $h_0^4[b_{02}^2]^2[h_0h_3b_{04}]$                    | $d_4 = h_0^4[b_{02}^2]^2[h_0h_4^2b_{02} + h_0^3h_2(1)]$            |
| 1011 | 51,16;16 | $h_0[b_{02}^2]^2[h_2b_{03}][b_{13}^2]$               | Permanent cycle  |
| 1012 | 51,17;4  | $h_0^{12}h_3[b_{24}^2]$                              | $d_4^{-1} = h_0^{12}[b_{14}^2]$                                    |
| 1013 | 51,17;14 | $h_0^5[b_{02}^2]^2[h_0h_3b_{04}]$                    | $d_4 = h_0^5[b_{02}^2]^2[h_0h_4^2b_{02} + h_0^3h_2(1)]$            |
| 1014 | 51,17;16 | $h_0^2[b_{02}^2]^2[h_2b_{03}][b_{13}^2]$             | Permanent cycle  |
| 1015 | 51,17;20 | $h_2[b_{02}^2]^3[b_{03}^2]$                          | $d_4 = h_2[b_{02}^2]^4h_4 + h_0^2[b_{02}^2]^2[h_0(1)^2][b_{13}^2]$ |
| 1016 | 51,18;4  | $h_0^{13}h_3[b_{24}^2]$                              | $d_4^{-1} = h_0^{13}[b_{14}^2]$                                    |
| 1017 | 51,18;14 | $h_0^6[b_{02}^2]^2[h_0h_3b_{04}]$                    | $d_4 = h_0^6[b_{02}^2]^2[h_0h_4^2b_{02} + h_0^3h_2(1)]$            |
| 1018 | 51,18;20 | $h_0h_2[b_{02}^2]^3[b_{03}^2]$                       | $d_4 = h_0h_2[b_{02}^2]^4h_4$                                      |
| 1019 | 51,19;4  | $h_0^{14}h_3[b_{24}^2]$                              | $d_4^{-1} = h_0^{14}[b_{14}^2]$                                    |
| 1020 | 51,19;14 | $h_0^7[b_{02}^2]^2[h_0h_3b_{04}]$                    | $d_4 = h_0^7[b_{02}^2]^2[h_0h_4^2b_{02} + h_0^3h_2(1)]$            |
| 1021 | 51,19;20 | $h_0^2h_2[b_{02}^2]^3[b_{03}^2]$                     | $d_4 = h_0^2h_2[b_{02}^2]^4h_4$                                    |
| 1022 | 51,20;4  | $h_0^{15}h_3[b_{24}^2]$                              | $d_4^{-1} = h_0^{15}[b_{14}^2]$                                    |
| 1023 | 51,20;14 | $h_0^8[b_{02}^2]^2[h_0h_3b_{04}]$                    | $d_4 = h_0^8[b_{02}^2]^2[h_0h_4^2b_{02} + h_0^3h_2(1)]$            |
| 1024 | 51,21;4  | $h_0^{16}h_3[b_{24}^2]$                              | $d_4^{-1} = h_0^{16}[b_{14}^2]$                                    |
| 1025 | 51,21;14 | $h_0^9[b_{02}^2]^2[h_0h_3b_{04}]$                    | $d_4 = h_0^9[b_{02}^2]^2[h_0h_4^2b_{02} + h_0^3h_2(1)]$            |

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| 1026 | 51,22;4  | $h_0^{17}h_3[b_{24}^2]$                    | $d_4^{-1} = h_0^{17}[b_{14}^2]$                            |
| 1027 | 51,22;14 | $h_0^{10}[b_{02}^2]^2[h_0h_3b_{04}]$       | $d_4 = h_0^{10}[b_{02}^2]^2[h_0h_4^2b_{02} + h_0^3h_2(1)]$ |
| 1028 | 51,23;4  | $h_0^{18}h_3[b_{24}^2]$                    | $d_4^{-1} = h_0^{18}[b_{14}^2]$                            |
| 1029 | 51,23;14 | $h_0^{11}[b_{02}^2]^2[h_0h_3b_{04}]$       | $d_4 = h_0^{11}[b_{02}^2]^2[h_0h_4^2b_{02} + h_0^3h_2(1)]$ |
| 1030 | 51,24;4  | $h_0^{19}h_3[b_{24}^2]$                    | $d_4^{-1} = h_0^{19}[b_{14}^2]$                            |
| 1031 | 51,24;14 | $h_0^{12}[b_{02}^2]^2[h_0h_3b_{04}]$       | $d_4 = h_0^{12}[b_{02}^2]^2[h_0h_4^2b_{02} + h_0^3h_2(1)]$ |
| 1032 | 51,25;4  | $h_0^{20}h_3[b_{24}^2]$                    | $d_4^{-1} = h_0^{20}[b_{14}^2]$                            |
| 1033 | 51,25;14 | $h_0^{13}[b_{02}^2]^2[h_0h_3b_{04}]$       | $d_4 = h_0^{13}[b_{02}^2]^2[h_0h_4^2b_{02} + h_0^3h_2(1)]$ |
| 1034 | 51,25;24 | $h_2[b_{02}^2]^6$                          | Permanent cycle  |
| 1035 | 51,26;4  | $h_0^{21}h_3[b_{24}^2]$                    | $d_4^{-1} = h_0^{21}[b_{14}^2]$                            |
| 1036 | 51,26;14 | $h_0^{14}[b_{02}^2]^2[h_0h_3b_{04}]$       | $d_4 = h_0^{14}[b_{02}^2]^2[h_0h_4^2b_{02} + h_0^3h_2(1)]$ |
| 1037 | 51,26;24 | $h_0h_2[b_{02}^2]^6$                       | Permanent cycle  |
| 1038 | 52,4;8   | $[b_{14}^2]$                               | $d_4 = [b_{13}^2]h_5 + h_3[b_{24}^2]$                      |
| 1039 | 52,5;6   | $h_2[h_2h_0(1,2)]$                         | Permanent cycle  |
| 1040 | 52,5;8   | $h_0[b_{14}^2]$                            | $d_4 = h_0[b_{13}^2]h_5 + h_0h_3[b_{24}^2]$                |
| 1041 | 52,6;4   | $h_1[b_{13}^2]h_5 + h_1h_3[b_{24}^2]$      | $d_4^{-1} = h_1[b_{14}^2]$                                 |
| 1042 | 52,6;4   | $h_1h_3[b_{24}^2]$                         | Permanent cycle  |
| 1043 | 52,6;8   | $h_0^2[b_{14}^2]$                          | $d_4 = h_0^2[b_{13}^2]h_5 + h_0^2h_3[b_{24}^2]$            |
| 1044 | 52,7;8   | $h_0^3[b_{14}^2]$                          | $d_4 = h_0^3h_3[b_{24}^2]$                                 |
| 1045 | 52,8;8   | $[b_{13}^2][h_1(1)^2]$                     | Permanent cycle  |
| 1046 | 52,8;8   | $h_0^4[b_{14}^2]$                          | $d_4 = h_0^4h_3[b_{24}^2]$                                 |
| 1047 | 52,9;8   | $h_0^5[b_{14}^2]$                          | $d_4 = h_0^5h_3[b_{24}^2]$                                 |
| 1048 | 52,10;8  | $h_0^6[b_{14}^2]$                          | $d_4 = h_0^6h_3[b_{24}^2]$                                 |
| 1049 | 52,11;8  | $h_0^7[b_{14}^2]$                          | $d_4 = h_0^7h_3[b_{24}^2]$                                 |
| 1050 | 52,11;12 | $[h_2b_{03}][h_0(1)b_{13}][b_{13}^2]$      | Permanent cycle  |
| 1051 | 52,12;8  | $h_0^8[b_{14}^2]$                          | $d_4 = h_0^8h_3[b_{24}^2]$                                 |
| 1052 | 52,12;12 | $h_0[h_2b_{03}][h_0(1)b_{13}][b_{13}^2]$   | $d_4^{-1} = [h_2b_{03}][h_0(1)^2][b_{03}^2]$               |
| 1053 | 52,12;16 | $[b_{02}^2][b_{13}^2][b_{03}^2]$           | $d_4 = h_0[h_0(1)^2][h_0(1)b_{13}][b_{13}^2]$              |
| 1054 | 52,13;8  | $h_0^9[b_{14}^2]$                          | $d_4 = h_0^9h_3[b_{24}^2]$                                 |
| 1055 | 52,13;12 | $h_0^2[h_2b_{03}][h_0(1)b_{13}][b_{13}^2]$ | $d_4^{-1} = h_0[h_2b_{03}][h_0(1)^2][b_{03}^2]$            |
| 1056 | 52,13;16 | $h_0[b_{02}^2][b_{13}^2][b_{03}^2]$        | $d_4 = h_0^2[h_0(1)^2][h_0(1)b_{13}][b_{13}^2]$            |
| 1057 | 52,14;8  | $h_0^{10}[b_{14}^2]$                       | $d_4 = h_0^{10}h_3[b_{24}^2]$                              |
| 1058 | 52,14;16 | $h_0^2[b_{02}^2][b_{13}^2][b_{03}^2]$      | Permanent cycle  |
| 1059 | 52,15;8  | $h_0^{11}[b_{14}^2]$                       | $d_4 = h_0^{11}h_3[b_{24}^2]$                              |
| 1060 | 52,16;8  | $h_0^{12}[b_{14}^2]$                       | $d_4 = h_0^{12}h_3[b_{24}^2]$                              |
| 1061 | 52,17;8  | $h_0^{13}[b_{14}^2]$                       | $d_4 = h_0^{13}h_3[b_{24}^2]$                              |
| 1062 | 52,18;8  | $h_0^{14}[b_{14}^2]$                       | $d_4 = h_0^{14}h_3[b_{24}^2]$                              |
| 1063 | 52,19;8  | $h_0^{15}[b_{14}^2]$                       | $d_4 = h_0^{15}h_3[b_{24}^2]$                              |
| 1064 | 52,20;8  | $h_0^{16}[b_{14}^2]$                       | $d_4 = h_0^{16}h_3[b_{24}^2]$                              |
| 1065 | 52,20;20 | $[b_{02}^2]^4[b_{13}^2]$                   | Permanent cycle  |
| 1066 | 52,21;8  | $h_0^{17}[b_{14}^2]$                       | $d_4 = h_0^{17}h_3[b_{24}^2]$                              |
| 1067 | 52,21;20 | $h_0[b_{02}^2]^4[b_{13}^2]$                | Permanent cycle  |
| 1068 | 52,22;8  | $h_0^{18}[b_{14}^2]$                       | $d_4 = h_0^{18}h_3[b_{24}^2]$                              |
| 1069 | 52,22;20 | $h_0^2[b_{02}^2]^4[b_{13}^2]$              | Permanent cycle  |
| 1070 | 52,23;8  | $h_0^{19}[b_{14}^2]$                       | $d_4 = h_0^{19}h_3[b_{24}^2]$                              |
| 1071 | 52,24;8  | $h_0^{20}[b_{14}^2]$                       | $d_4 = h_0^{20}h_3[b_{24}^2]$                              |
| 1072 | 52,25;8  | $h_0^{21}[b_{14}^2]$                       | $d_4 = h_0^{21}h_3[b_{24}^2]$                              |
| 1073 | 52,26;8  | $h_0^{22}[b_{14}^2]$                       | $d_4 = h_0^{22}h_3[b_{24}^2]$                              |
| 1074 | 52,27;8  | $h_0^{23}[b_{14}^2]$                       | $d_4 = h_0^{23}h_3[b_{24}^2]$                              |
| 1075 | 53,5;2   | $h_2[h_2h_1(1)]h_5$                        | Permanent cycle  |
| 1076 | 53,5;8   | $h_1[b_{14}^2]$                            | $d_4 = h_1[b_{13}^2]h_5 + h_1h_3[b_{24}^2]$                |
| 1077 | 53,7;8   | $h_2^2[h_2h_1(1)b_{04}]$                   | Permanent cycle  |
| 1078 | 53,9;8   | $[b_{02}^2][h_0(1)^2]h_5$                  | Permanent cycle  |

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| 1079 | 53,10;8  | $h_0[b_{02}^2][h_0(1)^2]h_5$                                  | $d_6^{-1} = [h_0b_{02}b_{03}^2b_{14} + h_0h_0(1)^2b_{03}b_{04}]$      |
| 1080 | 53,10;14 | $[b_{02}^2][h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$         | Permanent cycle   |
| 1081 | 53,11;8  | $h_0^2[b_{02}^2][h_0(1)^2]h_5$                                | $d_6^{-1} = h_0[h_0b_{02}b_{03}^2b_{14} + h_0h_0(1)^2b_{03}b_{04}]$   |
| 1082 | 53,11;14 | $h_0[b_{02}^2][h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$      | Permanent cycle   |
| 1083 | 53,11;16 | $[h_2b_{03}][h_0(1)^2][b_{03}^2]$                             | $d_4 = h_0[h_2b_{03}][h_0(1)b_{13}][b_{13}^2]$                        |
| 1084 | 53,12;14 | $h_0^2[b_{02}^2][h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$    | Permanent cycle   |
| 1085 | 53,12;16 | $h_0[h_2b_{03}][h_0(1)^2][b_{03}^2]$                          | $d_4 = h_0^2[h_2b_{03}][h_0(1)b_{13}][b_{13}^2]$                      |
| 1086 | 53,13;14 | $h_0^3[b_{02}^2][h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$    | Permanent cycle   |
| 1087 | 53,13;16 | $h_0^2[h_2b_{03}][h_0(1)^2][b_{03}^2]$                        | Permanent cycle   |
| 1088 | 53,14;14 | $h_0^4[b_{02}^2][h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$    | Permanent cycle   |
| 1089 | 53,15;14 | $h_0^5[b_{02}^2][h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$    | Permanent cycle   |
| 1090 | 53,16;14 | $h_0^6[b_{02}^2][h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$    | Permanent cycle   |
| 1091 | 53,16;16 | $[b_{02}^2]^2[h_0(1)b_{13}][b_{13}^2]$                        | Permanent cycle   |
| 1092 | 53,17;14 | $h_0^7[b_{02}^2][h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$    | Permanent cycle   |
| 1093 | 53,17;16 | $h_0[b_{02}^2]^2[h_0(1)b_{13}][b_{13}^2]$                     | $d_4^{-1} = [b_{02}^2]^2[h_0(1)^2][b_{03}^2]$                         |
| 1094 | 53,18;14 | $h_0^8[b_{02}^2][h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$    | Permanent cycle   |
| 1095 | 53,18;16 | $h_0^2[b_{02}^2]^2[h_0(1)b_{13}][b_{13}^2]$                   | $d_4^{-1} = h_0[b_{02}^2]^2[h_0(1)^2][b_{03}^2]$                      |
| 1096 | 53,19;14 | $h_0^9[b_{02}^2][h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$    | $d_6^{-1} = h_0^2[b_{02}^2]^2[h_0(1)^2][b_{03}^2]$                    |
| 1097 | 53,19;20 | $[b_{02}^2]^3[h_2b_{03}][h_0(1)^2]$                           | Permanent cycle   |
| 1098 | 53,20;14 | $h_0^{10}[b_{02}^2][h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$ | $d_4^{-1} = [b_{02}^2]^3[h_4h_0(1)b_{02}^2 + h_0^3b_{02}b_{14}]$      |
| 1099 | 53,20;20 | $h_0[b_{02}^2]^3[h_2b_{03}][h_0(1)^2]$                        | Permanent cycle   |
| 1100 | 53,21;14 | $h_0^{11}[b_{02}^2][h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$ | $d_4^{-1} = h_0[b_{02}^2]^3[h_4h_0(1)b_{02}^2 + h_0^3b_{02}b_{14}]$   |
| 1101 | 53,21;20 | $h_0^2[b_{02}^2]^3[h_2b_{03}][h_0(1)^2]$                      | Permanent cycle   |
| 1102 | 53,22;14 | $h_0^{12}[b_{02}^2][h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$ | $d_4^{-1} = h_0^2[b_{02}^2]^3[h_4h_0(1)b_{02}^2 + h_0^3b_{02}b_{14}]$ |
| 1103 | 53,23;14 | $h_0^{13}[b_{02}^2][h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$ | $d_4^{-1} = h_0^3[b_{02}^2]^3[h_4h_0(1)b_{02}^2 + h_0^3b_{02}b_{14}]$ |
| 1104 | 53,24;14 | $h_0^{14}[b_{02}^2][h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$ | $d_4^{-1} = h_0^4[b_{02}^2]^3[h_4h_0(1)b_{02}^2 + h_0^3b_{02}b_{14}]$ |
| 1105 | 53,25;14 | $h_0^{15}[b_{02}^2][h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$ | $d_4^{-1} = h_0^5[b_{02}^2]^3[h_4h_0(1)b_{02}^2 + h_0^3b_{02}b_{14}]$ |
| 1106 | 53,26;14 | $h_0^{16}[b_{02}^2][h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$ | $d_4^{-1} = h_0^6[b_{02}^2]^3[h_4h_0(1)b_{02}^2 + h_0^3b_{02}b_{14}]$ |
| 1107 | 53,27;14 | $h_0^{17}[b_{02}^2][h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$ | $d_4^{-1} = h_0^7[b_{02}^2]^3[h_4h_0(1)b_{02}^2 + h_0^3b_{02}b_{14}]$ |
| 1108 | 54,6;4   | $h_2[b_{13}^2]h_5$  | $d_4^{-1} = h_2[b_{14}^2]$  |
| 1109 | 54,6;8   | $h_1^2[b_{14}^2]$   | Permanent cycle   |
| 1110 | 54,7;4   | $h_0h_2[b_{13}^2]h_5$   | $d_4^{-1} = h_0h_2[b_{14}^2]$   |
| 1111 | 54,8;8   | $[b_{02}^2][h_2b_{03}]h_5$                                    | Permanent cycle   |
| 1112 | 54,9;8   | $h_0[b_{02}^2][h_2b_{03}]h_5$                                 | Permanent cycle   |
| 1113 | 54,9;14  | $[h_0b_{02}b_{03}^2b_{14} + h_0h_0(1)^2b_{03}b_{04}]$         | $d_6 = h_0[b_{02}^2][h_0(1)^2]h_5$                                    |
| 1114 | 54,10;8  | $h_1[b_{02}^2][h_0(1)^2]h_5 + h_0^2[b_{02}^2][h_2b_{03}]h_5$  | $d_8^{-1} = h_3[b_{03}^2]^2$  |
| 1115 | 54,10;8  | $h_0^2[b_{02}^2][h_2b_{03}]h_5$                               | Permanent cycle   |
| 1116 | 54,10;10 | $h_2[h_2b_{03}][h_1(1)b_{13}^2 + h_1^2b_{24}b_{03}]$          | $d_4^{-1} = [b_{03}^2][h_2h_1(1)b_{03}]$                              |
| 1117 | 54,10;14 | $h_0[h_0b_{02}b_{03}^2b_{14} + h_0h_0(1)^2b_{03}b_{04}]$      | $d_6 = h_0^2[b_{02}^2][h_0(1)^2]h_5$                                  |
| 1118 | 54,10;16 | $h_2^2[b_{03}^2]^2$   | Permanent cycle   |
| 1119 | 54,11;8  | $h_0^3[b_{02}^2][h_2b_{03}]h_5$                               | $d_8^{-1} = h_0h_3[b_{03}^2]^2$                                       |
| 1120 | 54,11;14 | $h_1[b_{02}^2][h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$      | Permanent cycle   |
| 1121 | 54,11;14 | $h_2^2[h_0b_{02}b_{03}^2b_{14} + h_0h_0(1)^2b_{03}b_{04}]$    | Permanent cycle   |
| 1122 | 54,12;8  | $h_0^4[b_{02}^2][h_2b_{03}]h_5$                               | $d_8^{-1} = h_0^2h_3[b_{03}^2]^2$                                     |
| 1123 | 54,12;12 | $[h_0(1)^2][b_{13}^2]^2$                                      | Permanent cycle   |
| 1124 | 54,12;14 | $h_0^3[h_0b_{02}b_{03}^2b_{14} + h_0h_0(1)^2b_{03}b_{04}]$    | Permanent cycle   |
| 1125 | 54,13;8  | $h_0^5[b_{02}^2][h_2b_{03}]h_5$                               | $d_8^{-1} = h_0^3h_3[b_{03}^2]^2$                                     |
| 1126 | 54,13;12 | $h_0[h_0(1)^2][b_{13}^2]^2$                                   | $d_4^{-1} = [h_0(1)^2][h_0(1)b_{13}][b_{03}^2]$                       |
| 1127 | 54,13;14 | $h_0^4[h_0b_{02}b_{03}^2b_{14} + h_0h_0(1)^2b_{03}b_{04}]$    | Permanent cycle   |
| 1128 | 54,14;8  | $h_0^6[b_{02}^2][h_2b_{03}]h_5$                               | $d_4^{-1} = [b_{02}^2]^3h_5$  |
| 1129 | 54,14;12 | $h_0^2[h_0(1)^2][b_{13}^2]^2$                                 | $d_4^{-1} = h_0[h_0(1)^2][h_0(1)b_{13}][b_{03}^2]$                    |
| 1130 | 54,14;12 | $[b_{02}^2]^3h_4^2$   | $d_4^{-1} = [b_{02}^2]^2h_4[b_{03}^2]$                                |
| 1131 | 54,14;14 | $h_0^5[h_0b_{02}b_{03}^2b_{14} + h_0h_0(1)^2b_{03}b_{04}]$    | Permanent cycle   |

|      |          |   |   |
|------|----------|---|---|
| 1132 | 54,15;8  | $h_0^7[b_{02}^2][h_2b_{03}]h_5$                               | $d_4^{-1} = h_0[b_{02}^2]^3h_5$                                     |
| 1133 | 54,15;12 | $h_0[b_{02}^2]^3h_4^2$  | $d_4^{-1} = h_0[b_{02}^2]^2h_4[b_{03}^2]$                           |
| 1134 | 54,15;14 | $h_0^6[h_0b_{02}b_{03}^2b_{14} + h_0h_0(1)^2b_{03}b_{04}]$    | Permanent cycle   |
| 1135 | 54,15;16 | $[b_{02}^2][h_2b_{03}][h_0(1)^2][h_0(1)b_{13}]$               | Permanent cycle   |
| 1136 | 54,16;8  | $h_0^8[b_{02}^2][h_2b_{03}]h_5$                               | $d_4^{-1} = h_0^2[b_{02}^2]^3h_5$                                   |
| 1137 | 54,16;12 | $h_0^2[b_{02}^2]^3h_4^2$                                      | $d_4^{-1} = h_0^2[b_{02}^2]^2h_4[b_{03}^2]$                         |
| 1138 | 54,16;14 | $h_0^7[h_0b_{02}b_{03}^2b_{14} + h_0h_0(1)^2b_{03}b_{04}]$    | Permanent cycle   |
| 1139 | 54,16;16 | $h_0[b_{02}^2][h_2b_{03}][h_0(1)^2][h_0(1)b_{13}]$            | $d_4^{-1} = [b_{02}^2]^2[h_2b_{03}][b_{03}^2]$                      |
| 1140 | 54,16;20 | $[b_{02}^2]^2[h_0(1)^2][b_{03}^2]$                            | $d_4 = h_0[b_{02}^2]^2[h_0(1)b_{13}][b_{13}^2]$                     |
| 1141 | 54,17;8  | $h_0^9[b_{02}^2][h_2b_{03}]h_5$                               | $d_4^{-1} = h_0^3[b_{02}^2]^3h_5$                                   |
| 1142 | 54,17;12 | $h_0^3[b_{02}^2]^3h_4^2$                                      | $d_4^{-1} = h_0^3[b_{02}^2]^2h_4[b_{03}^2]$                         |
| 1143 | 54,17;14 | $h_0^8[h_0b_{02}b_{03}^2b_{14} + h_0h_0(1)^2b_{03}b_{04}]$    | Permanent cycle   |
| 1144 | 54,17;16 | $h_0^2[b_{02}^2][h_2b_{03}][h_0(1)^2][h_0(1)b_{13}]$          | $d_4^{-1} = h_0[b_{02}^2]^2[h_2b_{03}][b_{03}^2]$                   |
| 1145 | 54,17;20 | $h_0[b_{02}^2]^2[h_0(1)^2][b_{03}^2]$                         | $d_4 = h_0^2[b_{02}^2]^2[h_0(1)b_{13}][b_{13}^2]$                   |
| 1146 | 54,18;8  | $h_0^{10}[b_{02}^2][h_2b_{03}]h_5$                            | $d_4^{-1} = h_0^4[b_{02}^2]^3h_5$                                   |
| 1147 | 54,18;12 | $h_0^4[b_{02}^2]^3h_4^2$                                      | $d_4^{-1} = h_0^4[b_{02}^2]^2h_4[b_{03}^2]$                         |
| 1148 | 54,18;14 | $h_0^9[h_0b_{02}b_{03}^2b_{14} + h_0h_0(1)^2b_{03}b_{04}]$    | $d_6^{-1} = h_0^2[b_{02}^2]^2[h_2b_{03}][b_{03}^2]$                 |
| 1149 | 54,18;20 | $h_0^2[b_{02}^2]^2[h_0(1)^2][b_{03}^2]$                       | $d_6 = h_0^9[b_{02}^2][h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$    |
| 1150 | 54,19;8  | $h_0^{11}[b_{02}^2][h_2b_{03}]h_5$                            | $d_4^{-1} = h_0^5[b_{02}^2]^3h_5$                                   |
| 1151 | 54,19;12 | $h_0^5[b_{02}^2]^3h_4^2$                                      | $d_4^{-1} = h_0^5[b_{02}^2]^2h_4[b_{03}^2]$                         |
| 1152 | 54,19;14 | $h_0^{10}[h_0b_{02}b_{03}^2b_{14} + h_0h_0(1)^2b_{03}b_{04}]$ | $d_6^{-1} = h_0^3[b_{02}^2]^2[h_2b_{03}][b_{03}^2]$                 |
| 1153 | 54,19;18 | $[b_{02}^2]^3[h_4h_0(1)b_{02}^2 + h_0^3b_{02}b_{14}]$         | $d_4 = h_0^{10}[b_{02}^2][h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$ |
| 1154 | 54,20;8  | $h_0^{12}[b_{02}^2][h_2b_{03}]h_5$                            | $d_4^{-1} = h_0^6[b_{02}^2]^3h_5$                                   |
| 1155 | 54,20;12 | $h_0^6[b_{02}^2]^3h_4^2$                                      | $d_4^{-1} = h_0^6[b_{02}^2]^2h_4[b_{03}^2]$                         |
| 1156 | 54,20;14 | $h_0^{11}[h_0b_{02}b_{03}^2b_{14} + h_0h_0(1)^2b_{03}b_{04}]$ | $d_6^{-1} = h_0^4[b_{02}^2]^2[h_2b_{03}][b_{03}^2]$                 |
| 1157 | 54,20;18 | $h_0[b_{02}^2]^3[h_4h_0(1)b_{02}^2 + h_0^3b_{02}b_{14}]$      | $d_4 = h_0^{11}[b_{02}^2][h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$ |
| 1158 | 54,21;8  | $h_0^{13}[b_{02}^2][h_2b_{03}]h_5$                            | $d_4^{-1} = h_0^7[b_{02}^2]^3h_5$                                   |
| 1159 | 54,21;12 | $h_0^7[b_{02}^2]^3h_4^2$                                      | $d_4^{-1} = h_0^7[b_{02}^2]^2h_4[b_{03}^2]$                         |
| 1160 | 54,21;14 | $h_0^{12}[h_0b_{02}b_{03}^2b_{14} + h_0h_0(1)^2b_{03}b_{04}]$ | $d_6^{-1} = h_0^5[b_{02}^2]^2[h_2b_{03}][b_{03}^2]$                 |
| 1161 | 54,21;18 | $h_0^2[b_{02}^2]^3[h_4h_0(1)b_{02}^2 + h_0^3b_{02}b_{14}]$    | $d_4 = h_0^{12}[b_{02}^2][h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$ |
| 1162 | 54,22;8  | $h_0^{14}[b_{02}^2][h_2b_{03}]h_5$                            | $d_4^{-1} = h_0^8[b_{02}^2]^3h_5$                                   |
| 1163 | 54,22;12 | $h_0^8[b_{02}^2]^3h_4^2$                                      | $d_4^{-1} = h_0^8[b_{02}^2]^2h_4[b_{03}^2]$                         |
| 1164 | 54,22;14 | $h_0^{13}[h_0b_{02}b_{03}^2b_{14} + h_0h_0(1)^2b_{03}b_{04}]$ | $d_6^{-1} = h_0^6[b_{02}^2]^2[h_2b_{03}][b_{03}^2]$                 |
| 1165 | 54,22;18 | $h_0^3[b_{02}^2]^3[h_4h_0(1)b_{02}^2 + h_0^3b_{02}b_{14}]$    | $d_4 = h_0^{13}[b_{02}^2][h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$ |
| 1166 | 54,23;8  | $h_0^{15}[b_{02}^2][h_2b_{03}]h_5$                            | $d_4^{-1} = h_0^9[b_{02}^2]^3h_5$                                   |
| 1167 | 54,23;12 | $h_0^9[b_{02}^2]^3h_4^2$                                      | $d_4^{-1} = h_0^9[b_{02}^2]^2h_4[b_{03}^2]$                         |
| 1168 | 54,23;14 | $h_0^{14}[h_0b_{02}b_{03}^2b_{14} + h_0h_0(1)^2b_{03}b_{04}]$ | $d_6^{-1} = h_0^7[b_{02}^2]^2[h_2b_{03}][b_{03}^2]$                 |
| 1169 | 54,23;18 | $h_0^4[b_{02}^2]^3[h_4h_0(1)b_{02}^2 + h_0^3b_{02}b_{14}]$    | $d_4 = h_0^{14}[b_{02}^2][h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$ |
| 1170 | 54,24;8  | $h_0^{16}[b_{02}^2][h_2b_{03}]h_5$                            | $d_4^{-1} = h_0^{10}[b_{02}^2]^3h_5$                                |
| 1171 | 54,24;12 | $h_0^{10}[b_{02}^2]^3h_4^2$                                   | $d_4^{-1} = h_0^{10}[b_{02}^2]^2h_4[b_{03}^2]$                      |
| 1172 | 54,24;14 | $h_0^{15}[h_0b_{02}b_{03}^2b_{14} + h_0h_0(1)^2b_{03}b_{04}]$ | $d_6^{-1} = h_0^8[b_{02}^2]^2[h_2b_{03}][b_{03}^2]$                 |
| 1173 | 54,24;18 | $h_0^5[b_{02}^2]^3[h_4h_0(1)b_{02}^2 + h_0^3b_{02}b_{14}]$    | $d_4 = h_0^{15}[b_{02}^2][h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$ |
| 1174 | 54,24;24 | $[b_{02}^2]^5[h_0(1)^2]$                                      | Permanent cycle   |
| 1175 | 54,25;8  | $h_0^{17}[b_{02}^2][h_2b_{03}]h_5$                            | $d_4^{-1} = h_0^{11}[b_{02}^2]^3h_5$                                |
| 1176 | 54,25;12 | $h_0^{11}[b_{02}^2]^3h_4^2$                                   | $d_4^{-1} = h_0^{11}[b_{02}^2]^2h_4[b_{03}^2]$                      |
| 1177 | 54,25;14 | $h_0^{16}[h_0b_{02}b_{03}^2b_{14} + h_0h_0(1)^2b_{03}b_{04}]$ | $d_6^{-1} = h_0^9[b_{02}^2]^2[h_2b_{03}][b_{03}^2]$                 |
| 1178 | 54,25;18 | $h_0^6[b_{02}^2]^3[h_4h_0(1)b_{02}^2 + h_0^3b_{02}b_{14}]$    | $d_4 = h_0^{16}[b_{02}^2][h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$ |
| 1179 | 54,25;24 | $h_0[b_{02}^2]^5[h_0(1)^2]$                                   | Permanent cycle   |
| 1180 | 54,26;8  | $h_0^{18}[b_{02}^2][h_2b_{03}]h_5$                            | $d_4^{-1} = h_0^{12}[b_{02}^2]^3h_5$                                |
| 1181 | 54,26;12 | $h_0^{12}[b_{02}^2]^3h_4^2$                                   | $d_4^{-1} = h_0^{12}[b_{02}^2]^2h_4[b_{03}^2]$                      |
| 1182 | 54,26;14 | $h_0^{17}[h_0b_{02}b_{03}^2b_{14} + h_0h_0(1)^2b_{03}b_{04}]$ | $d_6^{-1} = h_0^{10}[b_{02}^2]^2[h_2b_{03}][b_{03}^2]$              |
| 1183 | 54,26;18 | $h_0^7[b_{02}^2]^3[h_4h_0(1)b_{02}^2 + h_0^3b_{02}b_{14}]$    | $d_4 = h_0^{17}[b_{02}^2][h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$ |
| 1184 | 54,26;24 | $h_0^2[b_{02}^2]^5[h_0(1)^2]$                                 | Permanent cycle   |

|      |          |   |   |
|------|----------|---|---|
| 1185 | 54,27;8  | $h_0^{19}[b_{02}^2][h_2b_{03}]h_5$                            | $d_4^{-1} = h_0^{13}[b_{02}^2]^3h_5$                                |
| 1186 | 54,27;12 | $h_0^{13}[b_{02}^2]^3h_4^2$                                   | $d_4^{-1} = h_0^{13}[b_{02}^2]^2h_4[b_{03}^2]$                      |
| 1187 | 54,27;14 | $h_0^{18}[h_0b_{02}b_{03}^2b_{14} + h_0h_0(1)^2b_{03}b_{04}]$ | $d_6^{-1} = h_0^{11}[b_{02}^2]^2[h_2b_{03}][b_{03}^2]$              |
| 1188 | 54,27;18 | $h_0^8[b_{02}^2]^3[h_4h_0(1)b_{02}^2 + h_0^3b_{02}b_{14}]$    | $d_4 = h_0^{18}[b_{02}^2][h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$ |
| 1189 | 54,28;8  | $h_0^{20}[b_{02}^2][h_2b_{03}]h_5$                            | $d_4^{-1} = h_0^{14}[b_{02}^2]^3h_5$                                |
| 1190 | 54,28;12 | $h_0^{14}[b_{02}^2]^3h_4^2$                                   | $d_4^{-1} = h_0^{14}[b_{02}^2]^2h_4[b_{03}^2]$                      |
| 1191 | 54,28;14 | $h_0^{19}[h_0b_{02}b_{03}^2b_{14} + h_0h_0(1)^2b_{03}b_{04}]$ | $d_6^{-1} = h_0^{12}[b_{02}^2]^2[h_2b_{03}][b_{03}^2]$              |
| 1192 | 54,28;18 | $h_0^9[b_{02}^2]^3[h_4h_0(1)b_{02}^2 + h_0^3b_{02}b_{14}]$    | $d_4 = h_0^{19}[b_{02}^2][h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$ |
| 1193 | 55,5;8   | $[b_{03}^2]h_5 + h_2[b_{14}^2]$                               | $d_4^{-1} = [b_{04}^2]$   |
| 1194 | 55,5;8   | $h_2[b_{14}^2]$   | $d_4 = h_2[b_{13}^2]h_5$  |
| 1195 | 55,6;8   | $h_0[b_{03}^2]h_5 + h_0h_2[b_{14}^2]$                         | $d_4^{-1} = h_0[b_{04}^2]$  |
| 1196 | 55,6;8   | $h_0h_2[b_{14}^2]$  | $d_4 = h_0h_2[b_{13}^2]h_5$   |
| 1197 | 55,7;8   | $h_0^2[b_{03}^2]h_5 + h_0^2h_2[b_{14}^2]$                     | $d_4^{-1} = h_0^2[b_{04}^2]$  |
| 1198 | 55,7;8   | $h_0^2h_2[b_{14}^2]$  | Permanent cycle   |
| 1199 | 55,8;8   | $h_0^3[b_{03}^2]h_5$  | $d_4^{-1} = h_0^3[b_{04}^2]$  |
| 1200 | 55,9;8   | $h_0^4[b_{03}^2]h_5$  | $d_4^{-1} = h_0^4[b_{04}^2]$  |
| 1201 | 55,9;8   | $h_2[b_{13}^2][h_1(1)^2]$                                     | $d_4^{-1} = [b_{03}^2][h_1(1)^2]$                                   |
| 1202 | 55,9;14  | $[b_{03}^2][h_2h_1(1)b_{03}]$                                 | $d_4 = h_2[h_2b_{03}][h_1(1)b_{13}^2 + h_1^2b_{24}b_{03}]$          |
| 1203 | 55,9;16  | $h_3[b_{03}^2]^2$   | $d_8 = h_1[b_{02}^2][h_0(1)^2]h_5 + h_0^2[b_{02}^2][h_2b_{03}]h_5$  |
| 1204 | 55,10;8  | $h_0^5[b_{03}^2]h_5$  | $d_4^{-1} = h_0^5[b_{04}^2]$  |
| 1205 | 55,10;16 | $h_0h_3[b_{03}^2]^2$  | $d_8 = h_0^3[b_{02}^2][h_2b_{03}]h_5$                               |
| 1206 | 55,11;8  | $h_0^6[b_{03}^2]h_5$  | $d_4^{-1} = h_0^6[b_{04}^2]$  |
| 1207 | 55,11;8  | $h_1^2[b_{02}^2][h_0(1)^2]h_5$                                | $d_6^{-1} = x_{38}$   |
| 1208 | 55,11;12 | $[h_2b_{03}][b_{13}^2]^2$                                     | Permanent cycle   |
| 1209 | 55,11;16 | $h_0^2h_3[b_{03}^2]^2$  | $d_8 = h_0^4[b_{02}^2][h_2b_{03}]h_5$                               |
| 1210 | 55,12;8  | $h_0^7[b_{03}^2]h_5$  | $d_4^{-1} = h_0^7[b_{04}^2]$  |
| 1211 | 55,12;10 | $[h_1h_0(1)][b_{02}^2]^2h_5$                                  | $d_8^{-1} = [h_1h_0(1)][b_{03}^2]^2$                                |
| 1212 | 55,12;12 | $h_0[h_2b_{03}][b_{13}^2]^2$                                  | $d_4^{-1} = [h_2b_{03}][h_0(1)b_{13}][b_{03}^2]$                    |
| 1213 | 55,12;14 | $h_1^2[b_{02}^2][h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$    | Permanent cycle   |
| 1214 | 55,12;16 | $h_0^3h_3[b_{03}^2]^2$  | $d_8 = h_0^5[b_{02}^2][h_2b_{03}]h_5$                               |
| 1215 | 55,12;16 | $[h_0(1)^2][h_0(1)b_{13}][b_{03}^2]$                          | $d_4 = h_0[h_0(1)^2][b_{13}^2]^2$                                   |
| 1216 | 55,13;8  | $h_0^8[b_{03}^2]h_5$  | $d_4^{-1} = h_0^8[b_{04}^2]$  |
| 1217 | 55,13;12 | $h_0^2[h_2b_{03}][b_{13}^2]^2$                                | $d_4^{-1} = h_0[h_2b_{03}][h_0(1)b_{13}][b_{03}^2]$                 |
| 1218 | 55,13;12 | $[b_{02}^2]^3h_5$   | $d_4 = h_0^6[b_{02}^2][h_2b_{03}]h_5$                               |
| 1219 | 55,13;16 | $h_0^4h_3[b_{03}^2]^2$  | $d_4^{-1} = [b_{02}^2][b_{03}^2]^2$                                 |
| 1220 | 55,13;16 | $h_0[h_0(1)^2][h_0(1)b_{13}][b_{03}^2]$                       | $d_4 = h_0^2[h_0(1)^2][b_{13}^2]^2$                                 |
| 1221 | 55,13;16 | $[b_{02}^2]^2h_4[b_{03}^2]$                                   | $d_4 = [b_{02}^2]^3h_4^2$   |
| 1222 | 55,14;8  | $h_0^9[b_{03}^2]h_5$  | $d_4^{-1} = h_0^9[b_{04}^2]$  |
| 1223 | 55,14;12 | $h_0[b_{02}^2]^3h_5$  | $d_4 = h_0^7[b_{02}^2][h_2b_{03}]h_5$                               |
| 1224 | 55,14;16 | $h_0^5h_3[b_{03}^2]^2$  | $d_4^{-1} = h_0[b_{02}^2][b_{03}^2]^2$                              |
| 1225 | 55,14;16 | $h_0^2[h_0(1)^2][h_0(1)b_{13}][b_{03}^2]$                     | Permanent cycle   |
| 1226 | 55,14;16 | $h_0[b_{02}^2]^2h_4[b_{03}^2]$                                | $d_4 = h_0[b_{02}^2]^3h_4^2$  |
| 1227 | 55,15;8  | $h_0^{10}[b_{03}^2]h_5$                                       | $d_4^{-1} = h_0^{10}[b_{04}^2]$                                     |
| 1228 | 55,15;12 | $h_1[b_{02}^2]^3h_4^2$  | $d_4^{-1} = h_1[b_{02}^2]^2h_4[b_{03}^2]$                           |
| 1229 | 55,15;12 | $h_0^8[b_{02}^2]^3h_5$  | $d_4 = h_0^8[b_{02}^2][h_2b_{03}]h_5$                               |
| 1230 | 55,15;16 | $h_0^6h_3[b_{03}^2]^2$  | $d_4^{-1} = h_0^2[b_{02}^2][b_{03}^2]^2$                            |
| 1231 | 55,15;16 | $h_0^2[b_{02}^2]^2h_4[b_{03}^2]$                              | $d_4 = h_0^2[b_{02}^2]^3h_4^2$                                      |
| 1232 | 55,15;20 | $[b_{02}^2]^2[h_2b_{03}][b_{03}^2]$                           | $d_4 = h_0[b_{02}^2][h_2b_{03}][h_0(1)^2][h_0(1)b_{13}]$            |
| 1233 | 55,16;8  | $h_0^{11}[b_{03}^2]h_5$                                       | $d_4^{-1} = h_0^{11}[b_{04}^2]$                                     |
| 1234 | 55,16;12 | $h_0^3[b_{02}^2]^3h_5$  | $d_4 = h_0^9[b_{02}^2][h_2b_{03}]h_5$                               |
| 1235 | 55,16;16 | $h_0^7h_3[b_{03}^2]^2$  | $d_4^{-1} = h_0^3[b_{02}^2][b_{03}^2]^2$                            |
| 1236 | 55,16;16 | $h_0^3[b_{02}^2]^2h_4[b_{03}^2]$                              | $d_4 = h_0^3[b_{02}^2]^3h_4^2$                                      |
| 1237 | 55,16;20 | $h_0[b_{02}^2]^2[h_2b_{03}][b_{03}^2]$                        | $d_4 = h_0^2[b_{02}^2][h_2b_{03}][h_0(1)^2][h_0(1)b_{13}]$          |



|      |          |  |   |
|------|----------|--|---|
| 1238 | 55,17;8  | $h_0^{12}[b_{03}^2]h_5$  | $d_4^{-1} = h_0^{12}[b_{04}^2]$                                     |
| 1239 | 55,17;12 | $h_0^4[b_{02}^2]^3h_5$   | $d_4 = h_0^{10}[b_{02}^2][h_2b_{03}]h_5$                            |
| 1240 | 55,17;16 | $h_0^8h_3[b_{03}^2]^2$   | $d_4^{-1} = h_0^4[b_{02}^2][b_{03}^2]^2$                            |
| 1241 | 55,17;16 | $h_0^4[b_{02}^2]^2h_4[b_{03}^2]$                                 | $d_4 = h_0^4[b_{02}^2]^3h_4^2$                                      |
| 1242 | 55,17;20 | $h_1[b_{02}^2]^2[h_0(1)^2][b_{03}^2]$                            | Permanent cycle   |
| 1243 | 55,17;20 | $h_0^2[b_{02}^2]^2[h_2b_{03}][b_{03}^2]$                         | $d_6 = h_0^9[h_0b_{02}b_{03}^2b_{14} + h_0h_0(1)^2b_{03}b_{04}]$    |
| 1244 | 55,18;8  | $h_0^{13}[b_{03}^2]h_5$  | $d_4^{-1} = h_0^{13}[b_{04}^2]$                                     |
| 1245 | 55,18;12 | $h_0^5[b_{02}^2]^3h_5$   | $d_4 = h_0^{11}[b_{02}^2][h_2b_{03}]h_5$                            |
| 1246 | 55,18;16 | $h_0^9h_3[b_{03}^2]^2$   | $d_4^{-1} = h_0^5[b_{02}^2][b_{03}^2]^2$                            |
| 1247 | 55,18;16 | $h_0^5[b_{02}^2]^2h_4[b_{03}^2]$                                 | $d_4 = h_0^5[b_{02}^2]^3h_4^2$                                      |
| 1248 | 55,18;20 | $h_0^3[b_{02}^2]^2[h_2b_{03}][b_{03}^2]$                         | $d_6 = h_0^{10}[h_0b_{02}b_{03}^2b_{14} + h_0h_0(1)^2b_{03}b_{04}]$ |
| 1249 | 55,19;8  | $h_0^{14}[b_{03}^2]h_5$  | $d_4^{-1} = h_0^{14}[b_{04}^2]$                                     |
| 1250 | 55,19;12 | $h_0^6[b_{02}^2]^3h_5$   | $d_4 = h_0^{12}[b_{02}^2][h_2b_{03}]h_5$                            |
| 1251 | 55,19;16 | $h_0^{10}h_3[b_{03}^2]^2$  | $d_4^{-1} = h_0^6[b_{02}^2][b_{03}^2]^2$                            |
| 1252 | 55,19;16 | $h_0^6[b_{02}^2]^2h_4[b_{03}^2]$                                 | $d_4 = h_0^6[b_{02}^2]^3h_4^2$                                      |
| 1253 | 55,19;20 | $h_0^4[b_{02}^2]^2[h_2b_{03}][b_{03}^2]$                         | $d_6 = h_0^{11}[h_0b_{02}b_{03}^2b_{14} + h_0h_0(1)^2b_{03}b_{04}]$ |
| 1254 | 55,20;8  | $h_0^{15}[b_{03}^2]h_5$  | $d_4^{-1} = h_0^{15}[b_{04}^2]$                                     |
| 1255 | 55,20;12 | $h_0^7[b_{02}^2]^3h_5$   | $d_4 = h_0^{13}[b_{02}^2][h_2b_{03}]h_5$                            |
| 1256 | 55,20;16 | $h_0^{11}h_3[b_{03}^2]^2$  | $d_4^{-1} = h_0^7[b_{02}^2][b_{03}^2]^2$                            |
| 1257 | 55,20;16 | $h_0^7[b_{02}^2]^2h_4[b_{03}^2]$                                 | $d_4 = h_0^7[b_{02}^2]^3h_4^2$                                      |
| 1258 | 55,20;18 | $h_1[b_{02}^2]^3[h_4h_0(1)b_{02}^2 + h_0^3b_{02}b_{14}]$         | $d_4^{-1} = [h_1h_0(1)][b_{02}^2]^3[b_{03}^2]$                      |
| 1259 | 55,20;20 | $[b_{02}^2]^3[h_0(1)^2][h_0(1)b_{13}]$                           | Permanent cycle   |
| 1260 | 55,20;20 | $h_0^5[b_{02}^2]^2[h_2b_{03}][b_{03}^2]$                         | $d_6 = h_0^{12}[h_0b_{02}b_{03}^2b_{14} + h_0h_0(1)^2b_{03}b_{04}]$ |
| 1261 | 55,21;8  | $h_0^{16}[b_{03}^2]h_5$  | $d_4^{-1} = h_0^{16}[b_{04}^2]$                                     |
| 1262 | 55,21;12 | $h_0^8[b_{02}^2]^3h_5$   | $d_4 = h_0^{14}[b_{02}^2][h_2b_{03}]h_5$                            |
| 1263 | 55,21;16 | $h_0^{12}h_3[b_{03}^2]^2$  | $d_4^{-1} = h_0^8[b_{02}^2][b_{03}^2]^2$                            |
| 1264 | 55,21;16 | $h_0^8[b_{02}^2]^2h_4[b_{03}^2]$                                 | $d_4 = h_0^8[b_{02}^2]^3h_4^2$                                      |
| 1265 | 55,21;20 | $[b_{02}^2]^5h_4 + h_0[b_{02}^2]^3[h_0(1)^2][h_0(1)b_{13}]$      | $d_4^{-1} = [b_{02}^2]^4[b_{03}^2]$                                 |
| 1266 | 55,21;20 | $h_0[b_{02}^2]^3[h_0(1)^2][h_0(1)b_{13}]$                        | Permanent cycle   |
| 1267 | 55,21;20 | $h_0^6[b_{02}^2]^2[h_2b_{03}][b_{03}^2]$                         | $d_6 = h_0^{13}[h_0b_{02}b_{03}^2b_{14} + h_0h_0(1)^2b_{03}b_{04}]$ |
| 1268 | 55,22;8  | $h_0^{17}[b_{03}^2]h_5$  | $d_4^{-1} = h_0^{17}[b_{04}^2]$                                     |
| 1269 | 55,22;12 | $h_0^9[b_{02}^2]^3h_5$   | $d_4 = h_0^{15}[b_{02}^2][h_2b_{03}]h_5$                            |
| 1270 | 55,22;16 | $h_0^{13}h_3[b_{03}^2]^2$  | $d_4^{-1} = h_0^9[b_{02}^2][b_{03}^2]^2$                            |
| 1271 | 55,22;16 | $h_0^9[b_{02}^2]^2h_4[b_{03}^2]$                                 | $d_4 = h_0^9[b_{02}^2]^3h_4^2$                                      |
| 1272 | 55,22;20 | $h_0[b_{02}^2]^5h_4 + h_0^2[b_{02}^2]^3[h_0(1)^2][h_0(1)b_{13}]$ | $d_4^{-1} = h_0[b_{02}^2]^4[b_{03}^2]$                              |
| 1273 | 55,22;20 | $h_0^2[b_{02}^2]^3[h_0(1)^2][h_0(1)b_{13}]$                      | Permanent cycle   |
| 1274 | 55,22;20 | $h_0^7[b_{02}^2]^2[h_2b_{03}][b_{03}^2]$                         | $d_6 = h_0^{14}[h_0b_{02}b_{03}^2b_{14} + h_0h_0(1)^2b_{03}b_{04}]$ |
| 1275 | 55,23;8  | $h_0^{18}[b_{03}^2]h_5$  | $d_4^{-1} = h_0^{18}[b_{04}^2]$                                     |
| 1276 | 55,23;12 | $h_0^{10}[b_{02}^2]^3h_5$  | $d_4 = h_0^{16}[b_{02}^2][h_2b_{03}]h_5$                            |
| 1277 | 55,23;16 | $h_0^{14}h_3[b_{03}^2]^2$  | $d_4^{-1} = h_0^{10}[b_{02}^2][b_{03}^2]^2$                         |
| 1278 | 55,23;16 | $h_0^{10}[b_{02}^2]^2h_4[b_{03}^2]$                              | $d_4 = h_0^{10}[b_{02}^2]^3h_4^2$                                   |
| 1279 | 55,23;20 | $h_0^2[b_{02}^2]^5h_4$   | $d_4^{-1} = h_0^2[b_{02}^2]^4[b_{03}^2]$                            |
| 1280 | 55,23;20 | $h_0^8[b_{02}^2]^2[h_2b_{03}][b_{03}^2]$                         | $d_6 = h_0^{15}[h_0b_{02}b_{03}^2b_{14} + h_0h_0(1)^2b_{03}b_{04}]$ |
| 1281 | 55,23;24 | $[b_{02}^2]^5[h_2b_{03}]$  | Permanent cycle   |
| 1282 | 55,24;8  | $h_0^{19}[b_{03}^2]h_5$  | $d_4^{-1} = h_0^{19}[b_{04}^2]$                                     |
| 1283 | 55,24;12 | $h_0^{11}[b_{02}^2]^3h_5$  | $d_4 = h_0^{17}[b_{02}^2][h_2b_{03}]h_5$                            |
| 1284 | 55,24;16 | $h_0^{15}h_3[b_{03}^2]^2$  | $d_4^{-1} = h_0^{11}[b_{02}^2][b_{03}^2]^2$                         |
| 1285 | 55,24;16 | $h_0^{11}[b_{02}^2]^2h_4[b_{03}^2]$                              | $d_4 = h_0^{11}[b_{02}^2]^3h_4^2$                                   |
| 1286 | 55,24;20 | $h_0^3[b_{02}^2]^5h_4$   | $d_4^{-1} = h_0^3[b_{02}^2]^4[b_{03}^2]$                            |
| 1287 | 55,24;20 | $h_0^9[b_{02}^2]^2[h_2b_{03}][b_{03}^2]$                         | $d_6 = h_0^{16}[h_0b_{02}b_{03}^2b_{14} + h_0h_0(1)^2b_{03}b_{04}]$ |
| 1288 | 55,24;24 | $h_0[b_{02}^2]^5[h_2b_{03}]$                                     | Permanent cycle   |
| 1289 | 55,25;8  | $h_0^{20}[b_{03}^2]h_5$  | $d_4^{-1} = h_0^{20}[b_{04}^2]$                                     |
| 1290 | 55,25;12 | $h_0^{12}[b_{02}^2]^3h_5$  | $d_4 = h_0^{18}[b_{02}^2][h_2b_{03}]h_5$                            |
| 1291 | 55,25;16 | $h_0^{16}h_3[b_{03}^2]^2$  | $d_4^{-1} = h_0^{12}[b_{02}^2][b_{03}^2]^2$                         |

|      |          |   |   |
|------|----------|---|---|
| 1292 | 55,25;16 | $h_0^{12}[b_{02}^2]^2 h_4[b_{03}^2]$                | $d_4 = h_0^{12}[b_{02}^2]^3 h_4^2$  |
| 1293 | 55,25;20 | $h_0^4[b_{02}^2]^5 h_4$                             | $d_4^{-1} = h_0^4[b_{02}^2]^4 [b_{03}^2]$   |
| 1294 | 55,25;20 | $h_0^{10}[b_{02}^2]^2 [h_2 b_{03}][b_{03}^2]$       | $d_6 = h_0^{17}[h_0 b_{02} b_{03}^2 b_{14} + h_0 h_0(1)^2 b_{03} b_{04}]$         |
| 1295 | 55,25;24 | $h_1[b_{02}^2]^5 [h_0(1)^2]$                        | Permanent cycle   |
| 1296 | 55,25;24 | $h_0^2[b_{02}^2]^5 [h_2 b_{03}]$                    | Permanent cycle   |
| 1297 | 55,26;8  | $h_0^{21}[b_{03}^2] h_5$                            | $d_4^{-1} = h_0^{21}[b_{04}^2]$   |
| 1298 | 55,26;12 | $h_0^{13}[b_{02}^2]^3 h_5$                          | $d_4 = h_0^{19}[b_{02}^2][h_2 b_{03}] h_5$  |
| 1299 | 55,26;16 | $h_0^{17} h_3 [b_{03}^2]^2$                         | $d_4^{-1} = h_0^{13}[b_{02}^2][b_{03}^2]^2$                                       |
| 1300 | 55,26;16 | $h_0^{13}[b_{02}^2]^2 h_4 [b_{03}^2]$               | $d_4 = h_0^{13}[b_{02}^2]^3 h_4^2$  |
| 1301 | 55,26;20 | $h_0^5[b_{02}^2]^5 h_4$                             | $d_4^{-1} = h_0^5[b_{02}^2]^4 [b_{03}^2]$   |
| 1302 | 55,26;20 | $h_0^{11}[b_{02}^2]^2 [h_2 b_{03}][b_{03}^2]$       | $d_6 = h_0^{18}[h_0 b_{02} b_{03}^2 b_{14} + h_0 h_0(1)^2 b_{03} b_{04}]$         |
| 1303 | 55,26;24 | $h_0^3[b_{02}^2]^5 [h_2 b_{03}]$                    | Permanent cycle   |
| 1304 | 55,27;8  | $h_0^{22}[b_{03}^2] h_5$                            | $d_4^{-1} = h_0^{22}[b_{04}^2]$   |
| 1305 | 55,27;12 | $h_0^{14}[b_{02}^2]^3 h_5$                          | $d_4 = h_0^{20}[b_{02}^2][h_2 b_{03}] h_5$  |
| 1306 | 55,27;16 | $h_0^{18} h_3 [b_{03}^2]^2$                         | $d_4^{-1} = h_0^{14}[b_{02}^2][b_{03}^2]^2$                                       |
| 1307 | 55,27;16 | $h_0^{14}[b_{02}^2]^2 h_4 [b_{03}^2]$               | $d_4 = h_0^{14}[b_{02}^2]^3 h_4^2$  |
| 1308 | 55,27;20 | $h_0^6[b_{02}^2]^5 h_4$                             | $d_4^{-1} = h_0^6[b_{02}^2]^4 [b_{03}^2]$   |
| 1309 | 55,27;20 | $h_0^{12}[b_{02}^2]^2 [h_2 b_{03}][b_{03}^2]$       | $d_6 = h_0^{19}[h_0 b_{02} b_{03}^2 b_{14} + h_0 h_0(1)^2 b_{03} b_{04}]$         |
| 1310 | 55,27;24 | $h_0^4[b_{02}^2]^5 [h_2 b_{03}]$                    | Permanent cycle   |
| 1311 | 55,28;8  | $h_0^{23}[b_{03}^2] h_5$                            | $d_4^{-1} = h_0^{23}[b_{04}^2]$   |
| 1312 | 55,28;12 | $h_0^{15}[b_{02}^2]^3 h_5$                          | $d_4 = h_0^{21}[b_{02}^2][h_2 b_{03}] h_5$  |
| 1313 | 55,28;16 | $h_0^{19} h_3 [b_{03}^2]^2$                         | $d_4^{-1} = h_0^{15}[b_{02}^2][b_{03}^2]^2$                                       |
| 1314 | 55,28;16 | $h_0^{15}[b_{02}^2]^2 h_4 [b_{03}^2]$               | $d_4 = h_0^{15}[b_{02}^2]^3 h_4^2$  |
| 1315 | 55,28;20 | $h_0^7[b_{02}^2]^5 h_4$                             | $d_4^{-1} = h_0^7[b_{02}^2]^4 [b_{03}^2]$   |
| 1316 | 55,28;20 | $h_0^{13}[b_{02}^2]^2 [h_2 b_{03}][b_{03}^2]$       | $d_6 = h_0^{20}[h_0 b_{02} b_{03}^2 b_{14} + h_0 h_0(1)^2 b_{03} b_{04}]$         |
| 1317 | 55,28;24 | $h_0^5[b_{02}^2]^5 [h_2 b_{03}]$                    | Permanent cycle   |
| 1318 | 56,4;12  | $[b_{04}^2]$  | $d_4 = [b_{03}^2] h_5 + h_2 [b_{14}^2]$   |
| 1319 | 56,5;12  | $h_0 [b_{04}^2]$                                    | $d_4 = h_0 [b_{03}^2] h_5 + h_0 h_2 [b_{14}^2]$                                   |
| 1320 | 56,6;8   | $h_1 [b_{03}^2] h_5$                                | $d_4^{-1} = h_1 [b_{04}^2]$   |
| 1321 | 56,6;12  | $h_0^2 [b_{04}^2]$                                  | $d_4 = h_0^2 [b_{03}^2] h_5 + h_0^2 h_2 [b_{14}^2]$                               |
| 1322 | 56,7;12  | $h_0^3 [b_{04}^2]$                                  | $d_4 = h_0^3 [b_{03}^2] h_5$  |
| 1323 | 56,8;12  | $h_0^4 [b_{04}^2]$                                  | $d_4 = h_0^4 [b_{03}^2] h_5$  |
| 1324 | 56,8;12  | $[b_{03}^2][h_1(1)^2]$                              | $d_4 = h_2 [b_{13}^2][h_1(1)^2]$  |
| 1325 | 56,9;8   | $[b_{02}^2][h_0(1) b_{13}] h_5$                     | Permanent cycle   |
| 1326 | 56,9;12  | $h_0^5 [b_{04}^2]$                                  | $d_4 = h_0^5 [b_{03}^2] h_5$  |
| 1327 | 56,10;8  | $h_0 [b_{02}^2][h_0(1) b_{13}] h_5$                 | $d_6^{-1} = [h_0 h_0(1) b_{03}^2 b_{14} + h_0 h_0(1) b_{13} b_{03} b_{04}]$       |
| 1328 | 56,10;10 | $[b_{13}^2][h_1(1) b_{13}^2 + h_1^2 b_{24} b_{03}]$ | Permanent cycle   |
| 1329 | 56,10;12 | $h_0^6 [b_{04}^2]$                                  | $d_4 = h_0^6 [b_{03}^2] h_5$  |
| 1330 | 56,10;14 | $x_{38}$  | $d_6 = h_1^2 [b_{02}^2][h_0(1)^2] h_5$  |
| 1331 | 56,10;16 | $h_1 h_3 [b_{03}^2]^2$                              | Permanent cycle   |
| 1332 | 56,11;8  | $h_0^2 [b_{02}^2][h_0(1) b_{13}] h_5$               | $d_6^{-1} = h_0 [h_0 h_0(1) b_{03}^2 b_{14} + h_0 h_0(1) b_{13} b_{03} b_{04}]$   |
| 1333 | 56,11;12 | $h_0^7 [b_{04}^2]$                                  | $d_4 = h_0^7 [b_{03}^2] h_5$  |
| 1334 | 56,11;14 | $h_0 x_{38}$  | Permanent cycle   |
| 1335 | 56,11;16 | $[h_2 b_{03}][h_0(1) b_{13}][b_{03}^2]$             | $d_4 = h_0 [h_2 b_{03}][b_{13}^2]^2$  |
| 1336 | 56,11;18 | $[h_1 h_0(1)][b_{03}^2]^2$                          | $d_8 = [h_1 h_0(1)][b_{02}^2]^2 h_5$  |
| 1337 | 56,12;8  | $h_0^3 [b_{02}^2][h_0(1) b_{13}] h_5$               | $d_6^{-1} = h_0^2 [h_0 h_0(1) b_{03}^2 b_{14} + h_0 h_0(1) b_{13} b_{03} b_{04}]$ |
| 1338 | 56,12;12 | $h_0^8 [b_{04}^2]$                                  | $d_4 = h_0^8 [b_{03}^2] h_5$  |
| 1339 | 56,12;14 | $h_0^2 x_{38}$                                      | Permanent cycle   |
| 1340 | 56,12;16 | $h_0 [h_2 b_{03}][h_0(1) b_{13}][b_{03}^2]$         | $d_4 = h_0^2 [h_2 b_{03}][b_{13}^2]^2$  |
| 1341 | 56,12;20 | $[b_{02}^2][b_{03}^2]^2$                            | $d_4 = h_0^4 h_3 [b_{03}^2]^2$  |
| 1342 | 56,13;10 | $h_1 [h_1 h_0(1)][b_{02}^2]^2 h_5$                  | $d_8^{-1} = h_1 [h_1 h_0(1)][b_{03}^2]^2$   |

|      |          |  |  |
|------|----------|--|--|
| 1343 | 56,13;12 | $h_0^9[b_{04}^2]$  | $d_4 = h_0^9[b_{03}^2]h_5$   |
| 1344 | 56,13;14 | $h_0^3x_{38}$  | Permanent cycle  |
| 1345 | 56,13;16 | $h_0^2[h_2b_{03}][h_0(1)b_{13}][b_{03}^2]$                 | Permanent cycle  |
| 1346 | 56,13;20 | $h_0[b_{02}^2][b_{03}^2]^2$                                | $d_4 = h_0^5h_3[b_{03}^2]^2$   |
| 1347 | 56,14;12 | $h_1[b_{02}^2]^3h_5$                                       | $d_8^{-1} = h_1[b_{02}^2][b_{03}^2]^2$                                 |
| 1348 | 56,14;12 | $h_0^{10}[b_{04}^2]$                                       | $d_4 = h_0^{10}[b_{03}^2]h_5$  |
| 1349 | 56,14;16 | $h_1[b_{02}^2]^2h_4[b_{03}^2]$                             | $d_4 = h_1[b_{02}^2]^3h_4^2$   |
| 1350 | 56,14;20 | $h_0^2[b_{02}^2][b_{03}^2]^2$                              | $d_4 = h_0^6h_3[b_{03}^2]^2$   |
| 1351 | 56,15;12 | $h_0^{11}[b_{04}^2]$                                       | $d_4 = h_0^{11}[b_{03}^2]h_5$  |
| 1352 | 56,15;20 | $h_0^3[b_{02}^2][b_{03}^2]^2$                              | $d_4 = h_0^7h_3[b_{03}^2]^2$   |
| 1353 | 56,16;12 | $h_1^2[b_{02}^2]^3h_4^2$                                   | $d_4^{-1} = h_1^2[b_{02}^2]^2h_4[b_{03}^2]$                            |
| 1354 | 56,16;12 | $h_0^{12}[b_{04}^2]$                                       | $d_4 = h_0^{12}[b_{03}^2]h_5$  |
| 1355 | 56,16;16 | $[b_{02}^2]^2[b_{13}^2]^2$                                 | Permanent cycle  |
| 1356 | 56,16;20 | $h_0^4[b_{02}^2][b_{03}^2]^2$                              | $d_4 = h_0^8h_3[b_{03}^2]^2$   |
| 1357 | 56,17;12 | $h_0^{13}[b_{04}^2]$                                       | $d_4 = h_0^{13}[b_{03}^2]h_5$  |
| 1358 | 56,17;16 | $h_0[b_{02}^2]^2[b_{13}^2]^2$                              | $d_4^{-1} = [b_{02}^2]^2[h_0(1)b_{13}][b_{03}^2]$                      |
| 1359 | 56,17;20 | $h_0^5[b_{02}^2][b_{03}^2]^2$                              | $d_4 = h_0^9h_3[b_{03}^2]^2$   |
| 1360 | 56,18;12 | $h_0^{14}[b_{04}^2]$                                       | $d_4 = h_0^{14}[b_{03}^2]h_5$  |
| 1361 | 56,18;16 | $h_0^2[b_{02}^2]^2[b_{13}^2]^2$                            | $d_4^{-1} = h_0[b_{02}^2]^2[h_0(1)b_{13}][b_{03}^2]$                   |
| 1362 | 56,18;20 | $h_1^2[b_{02}^2]^2[h_0(1)^2][b_{03}^2]$                    | Permanent cycle  |
| 1363 | 56,18;20 | $h_0^6[b_{02}^2][b_{03}^2]^2$                              | $d_4 = h_0^{10}h_3[b_{03}^2]^2$  |
| 1364 | 56,19;12 | $h_0^{15}[b_{04}^2]$                                       | $d_4 = h_0^{15}[b_{03}^2]h_5$  |
| 1365 | 56,19;20 | $[b_{02}^2]^3[h_2b_{03}][h_0(1)b_{13}]$                    | Permanent cycle  |
| 1366 | 56,19;20 | $h_0^7[b_{02}^2][b_{03}^2]^2$                              | $d_4 = h_0^{11}h_3[b_{03}^2]^2$  |
| 1367 | 56,19;22 | $[h_1h_0(1)][b_{02}^2]^3[b_{03}^2]$                        | $d_4 = h_1[b_{02}^2]^3[h_4h_0(1)b_{02}^2 + h_0^3b_{02}b_{14}]$         |
| 1368 | 56,20;12 | $h_0^{16}[b_{04}^2]$                                       | $d_4 = h_0^{16}[b_{03}^2]h_5$  |
| 1369 | 56,20;20 | $h_0[b_{02}^2]^3[h_2b_{03}][h_0(1)b_{13}]$                 | Permanent cycle  |
| 1370 | 56,20;20 | $h_0^8[b_{02}^2][b_{03}^2]^2$                              | $d_4 = h_0^{12}h_3[b_{03}^2]^2$  |
| 1371 | 56,20;24 | $[b_{02}^2]^4[b_{03}^2]$                                   | $d_4 = [b_{02}^2]^5h_4 + h_0[b_{02}^2]^3[h_0(1)^2][h_0(1)b_{13}]$      |
| 1372 | 56,21;12 | $h_0^{17}[b_{04}^2]$                                       | $d_4 = h_0^{17}[b_{03}^2]h_5$  |
| 1373 | 56,21;18 | $h_1^2[b_{02}^2]^3[h_4h_0(1)b_{02}^2 + h_0^3b_{02}b_{14}]$ | $d_4^{-1} = h_1[h_1h_0(1)][b_{02}^2]^3[b_{03}^2]$                      |
| 1374 | 56,21;20 | $h_0^2[b_{02}^2]^3[h_2b_{03}][h_0(1)b_{13}]$               | Permanent cycle  |
| 1375 | 56,21;20 | $h_0^9[b_{02}^2][b_{03}^2]^2$                              | $d_4 = h_0^{13}h_3[b_{03}^2]^2$  |
| 1376 | 56,21;24 | $h_0[b_{02}^2]^4[b_{03}^2]$                                | $d_4 = h_0[b_{02}^2]^5h_4 + h_0^2[b_{02}^2]^3[h_0(1)^2][h_0(1)b_{13}]$ |
| 1377 | 56,22;12 | $h_0^{18}[b_{04}^2]$                                       | $d_4 = h_0^{18}[b_{03}^2]h_5$  |
| 1378 | 56,22;20 | $h_1[b_{02}^2]^5h_4$                                       | $d_4^{-1} = h_1[b_{02}^2]^4[b_{03}^2]$                                 |
| 1379 | 56,22;20 | $h_0^{10}[b_{02}^2][b_{03}^2]^2$                           | $d_4 = h_0^{14}h_3[b_{03}^2]^2$  |
| 1380 | 56,22;24 | $h_0^2[b_{02}^2]^4[b_{03}^2]$                              | $d_4 = h_0^2[b_{02}^2]^5h_4$   |
| 1381 | 56,23;12 | $h_0^{19}[b_{04}^2]$                                       | $d_4 = h_0^{19}[b_{03}^2]h_5$  |
| 1382 | 56,23;20 | $h_0^{11}[b_{02}^2][b_{03}^2]^2$                           | $d_4 = h_0^{15}h_3[b_{03}^2]^2$  |
| 1383 | 56,23;24 | $h_0^3[b_{02}^2]^4[b_{03}^2]$                              | $d_4 = h_0^3[b_{02}^2]^5h_4$   |
| 1384 | 56,24;12 | $h_0^{20}[b_{04}^2]$                                       | $d_4 = h_0^{20}[b_{03}^2]h_5$  |
| 1385 | 56,24;20 | $h_0^{12}[b_{02}^2][b_{03}^2]^2$                           | $d_4 = h_0^{16}h_3[b_{03}^2]^2$  |
| 1386 | 56,24;24 | $h_0^4[b_{02}^2]^4[b_{03}^2]$                              | $d_4 = h_0^4[b_{02}^2]^5h_4$   |
| 1387 | 56,25;12 | $h_0^{21}[b_{04}^2]$                                       | $d_4 = h_0^{21}[b_{03}^2]h_5$  |
| 1388 | 56,25;20 | $h_0^{13}[b_{02}^2][b_{03}^2]^2$                           | $d_4 = h_0^{17}h_3[b_{03}^2]^2$  |
| 1389 | 56,25;24 | $h_0^5[b_{02}^2]^4[b_{03}^2]$                              | $d_4 = h_0^5[b_{02}^2]^5h_4$   |
| 1390 | 56,26;12 | $h_0^{22}[b_{04}^2]$                                       | $d_4 = h_0^{22}[b_{03}^2]h_5$  |
| 1391 | 56,26;20 | $h_0^{14}[b_{02}^2][b_{03}^2]^2$                           | $d_4 = h_0^{18}h_3[b_{03}^2]^2$  |
| 1392 | 56,26;24 | $h_1^2[b_{02}^2]^5[h_0(1)^2]$                              | Permanent cycle  |
| 1393 | 56,26;24 | $h_0^6[b_{02}^2]^4[b_{03}^2]$                              | $d_4 = h_0^6[b_{02}^2]^5h_4$   |
| 1394 | 56,27;12 | $h_0^{23}[b_{04}^2]$                                       | $d_4 = h_0^{23}[b_{03}^2]h_5$  |

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| 1395 | 56,27;20 | $h_0^{15}[b_{02}^2][b_{03}^2]^2$                               | $d_4 = h_0^{19}h_3[b_{03}^2]^2$                                  |
| 1396 | 56,27;24 | $h_0^7[b_{02}^2]^4[b_{03}^2]$                                  | $d_4 = h_0^7[b_{02}^2]^5h_4$                                     |
| 1397 | 56,27;26 | $[h_1h_0(1)][b_{02}^2]^6$                                      | Permanent cycle  |
| 1398 | 56,28;12 | $h_0^{24}[b_{04}^2]$   | $d_4 = h_0^{24}[b_{03}^2]h_5$                                    |
| 1399 | 56,28;20 | $h_0^{16}[b_{02}^2][b_{03}^2]^2$                               | $d_4 = h_0^{20}h_3[b_{03}^2]^2$                                  |
| 1400 | 56,28;24 | $h_0^8[b_{02}^2]^4[b_{03}^2]$                                  | $d_4 = h_0^8[b_{02}^2]^5h_4$                                     |
| 1401 | 56,28;28 | $[b_{02}^2]^7$   | $d_4 = h_0^6[b_{02}^2]^5[h_2b_{03}]$                             |
| 1402 | 56,29;12 | $h_0^{25}[b_{04}^2]$   | $d_4 = h_0^{25}[b_{03}^2]h_5$                                    |
| 1403 | 56,29;20 | $h_0^{17}[b_{02}^2][b_{03}^2]^2$                               | $d_4 = h_0^{21}h_3[b_{03}^2]^2$                                  |
| 1404 | 56,29;24 | $h_0^9[b_{02}^2]^4[b_{03}^2]$                                  | $d_4 = h_0^9[b_{02}^2]^5h_4$                                     |
| 1405 | 56,29;28 | $h_0[b_{02}^2]^7$  | $d_4 = h_0^5[b_{02}^2]^5[h_2b_{03}]$                             |
| 1406 | 57,5;12  | $h_1[b_{04}^2]$  | $d_4 = h_1[b_{03}^2]h_5$   |
| 1407 | 57,7;4   | $h_2^2[b_{13}^2]h_5$   | $d_4^{-1} = h_2^2[b_{14}^2]$                                     |
| 1408 | 57,7;8   | $h_1^2[b_{03}^2]h_5$   | $d_4^{-1} = h_1^2[b_{04}^2]$                                     |
| 1409 | 57,7;12  | $[b_{03}^2][h_3b_{14}]$  | Permanent cycle  |
| 1410 | 57,8;8   | $h_5[h_0h_0(1)^2b_{03}]$                                       | Permanent cycle  |
| 1411 | 57,8;12  | $h_0[b_{03}^2][h_3b_{14}]$                                     | Permanent cycle  |
| 1412 | 57,9;8   | $h_0h_5[h_0h_0(1)^2b_{03}]$                                    | Permanent cycle  |
| 1413 | 57,9;12  | $h_0^2[b_{03}^2][h_3b_{14}]$                                   | Permanent cycle  |
| 1414 | 57,9;14  | $[h_0h_0(1)b_{03}^2b_{14} + h_0h_0(1)b_{13}b_{03}b_{04}]$      | $d_6 = h_0[b_{02}^2][h_0(1)b_{13}]h_5$                           |
| 1415 | 57,10;8  | $h_0^2h_5[h_0h_0(1)^2b_{03}]$                                  | Permanent cycle  |
| 1416 | 57,10;14 | $h_0[h_0h_0(1)b_{03}^2b_{14} + h_0h_0(1)b_{13}b_{03}b_{04}]$   | $d_6 = h_0^2[b_{02}^2][h_0(1)b_{13}]h_5$                         |
| 1417 | 57,11;10 | $h_1[b_{13}^2][h_1(1)b_{13}^2 + h_1^2b_{24}b_{03}]$            | $d_4^{-1} = h_2[b_{03}^2][h_2h_1(1)b_{03}]$                      |
| 1418 | 57,11;14 | $h_0^2[h_0h_0(1)b_{03}^2b_{14} + h_0h_0(1)b_{13}b_{03}b_{04}]$ | $d_6 = h_0^3[b_{02}^2][h_0(1)b_{13}]h_5$                         |
| 1419 | 57,11;16 | $h_1^2h_3[b_{03}^2]^2$   | Permanent cycle  |
| 1420 | 57,12;12 | $[h_0(1)b_{13}][b_{13}^2]^2$                                   | Permanent cycle  |
| 1421 | 57,12;18 | $h_1[h_1h_0(1)][b_{03}^2]^2$                                   | $d_8 = h_1[h_1h_0(1)][b_{02}^2]^2h_5$                            |
| 1422 | 57,13;12 | $h_0[h_0(1)b_{13}][b_{13}^2]^2$                                | $d_4^{-1} = [h_0(1)^2][b_{13}^2][b_{03}^2]$                      |
| 1423 | 57,13;20 | $h_1[b_{02}^2][b_{03}^2]^2$                                    | $d_8 = h_1[b_{02}^2]^3h_5$                                       |
| 1424 | 57,14;12 | $h_0^2[h_0(1)b_{13}][b_{13}^2]^2$                              | $d_4^{-1} = h_0[h_0(1)^2][b_{13}^2][b_{03}^2]$                   |
| 1425 | 57,15;12 | $h_1^2[b_{02}^2]^3h_5$   | $d_8^{-1} = h_1^2[b_{02}^2][b_{03}^2]^2$                         |
| 1426 | 57,15;16 | $[b_{02}^2][h_2b_{03}][h_0(1)^2][b_{13}^2]$                    | Permanent cycle  |
| 1427 | 57,15;16 | $h_1^2[b_{02}^2]^2h_4[b_{03}^2]$                               | $d_4 = h_1^2[b_{02}^2]^3h_4^2$                                   |
| 1428 | 57,16;16 | $h_0[b_{02}^2][h_2b_{03}][h_0(1)^2][b_{13}^2]$                 | $d_4^{-1} = [b_{02}^2][b_{03}^2][h_0h_0(1)^2b_{03}]$             |
| 1429 | 57,16;20 | $[b_{02}^2]^2[h_0(1)b_{13}][b_{03}^2]$                         | $d_4 = h_0[b_{02}^2]^2[b_{13}^2]^2$                              |
| 1430 | 57,17;16 | $h_0^2[b_{02}^2][h_2b_{03}][h_0(1)^2][b_{13}^2]$               | $d_4^{-1} = h_0[b_{02}^2][b_{03}^2][h_0h_0(1)^2b_{03}]$          |
| 1431 | 57,17;20 | $h_0[b_{02}^2]^2[h_0(1)b_{13}][b_{03}^2]$                      | $d_4 = h_0^2[b_{02}^2]^2[b_{13}^2]^2$                            |
| 1432 | 57,18;20 | $h_0^2[b_{02}^2]^2[h_0(1)b_{13}][b_{03}^2]$                    | Permanent cycle  |
| 1433 | 57,19;20 | $h_0^3[b_{02}^2]^2[h_0(1)b_{13}][b_{03}^2]$                    | Permanent cycle  |
| 1434 | 57,20;22 | $h_1[h_1h_0(1)][b_{02}^2]^3[b_{03}^2]$                         | $d_4 = h_1^2[b_{02}^2]^3[h_4h_0(1)b_{02}^2 + h_0^3b_{02}b_{14}]$ |
| 1435 | 57,21;24 | $h_1[b_{02}^2]^4[b_{03}^2]$                                    | $d_4 = h_1[b_{02}^2]^5h_4$                                       |
| 1436 | 57,23;20 | $h_1^2[b_{02}^2]^5h_4$   | $d_4^{-1} = h_1^2[b_{02}^2]^4[b_{03}^2]$                         |
| 1437 | 57,24;24 | $[b_{02}^2]^5[h_0(1)b_{13}]$                                   | Permanent cycle  |
| 1438 | 57,25;24 | $h_0[b_{02}^2]^5[h_0(1)b_{13}]$                                | Permanent cycle  |
| 1439 | 57,26;24 | $h_0^2[b_{02}^2]^5[h_0(1)b_{13}]$                              | Permanent cycle  |
| 1440 | 57,27;24 | $h_0^3[b_{02}^2]^5[h_0(1)b_{13}]$                              | Permanent cycle  |
| 1441 | 57,28;26 | $h_1[h_1h_0(1)][b_{02}^2]^6$                                   | Permanent cycle  |
| 1442 | 57,29;28 | $h_1[b_{02}^2]^7$  | Permanent cycle  |
| 1443 | 58,6;4   | $h_3^2[b_{24}^2]$  | $d_4^{-1} = h_3[b_{14}^2]$                                       |
| 1444 | 58,6;8   | $h_2[b_{03}^2]h_5 + h_2^2[b_{14}^2]$                           | $d_4^{-1} = h_2[b_{04}^2]$                                       |
| 1445 | 58,6;8   | $h_2^2[b_{14}^2]$  | $d_4 = h_2^2[b_{13}^2]h_5$                                       |
| 1446 | 58,6;10  | $[h_0h_0(1,2)b_{03}]$  | Permanent cycle  |
| 1447 | 58,6;12  | $h_1^2[b_{04}^2]$  | $d_4 = h_1^2[b_{03}^2]h_5$                                       |

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| 1448 | 58,7;4   | $h_0 h_3^2 [b_{24}^2]$                                  | $d_4^{-1} = h_0 h_3 [b_{14}^2]$                                 |
| 1449 | 58,7;8   | $h_0 h_2 [b_{03}^2] h_5$                                | $d_4^{-1} = h_0 h_2 [b_{04}^2]$                                 |
| 1450 | 58,7;10  | $h_0 [h_0 h_0 (1, 2) b_{03}]$                           | Permanent cycle   |
| 1451 | 58,8;4   | $h_0^2 h_3^2 [b_{24}^2]$                                | $d_4^{-1} = h_0^2 h_3 [b_{14}^2]$                               |
| 1452 | 58,8;8   | $h_0^2 h_2 [b_{03}^2] h_5$                              | $d_4^{-1} = h_0^2 h_2 [b_{04}^2]$                               |
| 1453 | 58,8;8   | $[b_{13}^2] [h_1 (1) b_{24}]$                           | $d_4^{-1} = [h_2 h_1 (1) b_{03} b_{04}]$                        |
| 1454 | 58,8;10  | $h_0^2 [h_0 h_0 (1, 2) b_{03}]$                         | Permanent cycle   |
| 1455 | 58,9;4   | $h_0^3 h_3^2 [b_{24}^2]$                                | $d_4^{-1} = h_0^3 h_3 [b_{14}^2]$                               |
| 1456 | 58,9;10  | $h_0^3 [h_0 h_0 (1, 2) b_{03}]$                         | $d_4^{-1} = [b_{03}^2] [h_0 h_3 b_{04}]$                        |
| 1457 | 58,10;4  | $h_0^4 h_3^2 [b_{24}^2]$                                | $d_4^{-1} = h_0^4 h_3 [b_{14}^2]$                               |
| 1458 | 58,10;8  | $h_2^2 [b_{13}^2] [h_1 (1)^2]$                          | $d_4^{-1} = h_2 [b_{03}^2] [h_1 (1)^2]$                         |
| 1459 | 58,10;10 | $h_0^4 [h_0 h_0 (1, 2) b_{03}]$                         | $d_4^{-1} = h_0 [b_{03}^2] [h_0 h_3 b_{04}]$                    |
| 1460 | 58,10;14 | $h_2 [b_{03}^2] [h_2 h_1 (1) b_{03}]$                   | $d_4 = h_1 [b_{13}^2] [h_1 (1) b_{13}^2 + h_1^2 b_{24} b_{03}]$ |
| 1461 | 58,11;4  | $h_0^5 h_3^2 [b_{24}^2]$                                | $d_4^{-1} = h_0^5 h_3 [b_{14}^2]$                               |
| 1462 | 58,11;10 | $h_0^5 [h_0 h_0 (1, 2) b_{03}]$                         | $d_4^{-1} = h_0^2 [b_{03}^2] [h_0 h_3 b_{04}]$                  |
| 1463 | 58,12;4  | $h_0^6 h_3^2 [b_{24}^2]$                                | $d_4^{-1} = h_0^6 h_3 [b_{14}^2]$                               |
| 1464 | 58,12;10 | $h_0^6 [h_0 h_0 (1, 2) b_{03}]$                         | $d_4^{-1} = h_0^3 [b_{03}^2] [h_0 h_3 b_{04}]$                  |
| 1465 | 58,12;12 | $h_2 [h_2 b_{03}] [b_{13}^2]^2$                         | $d_4^{-1} = [h_2 b_{03}] [b_{13}^2] [b_{03}^2]$                 |
| 1466 | 58,12;16 | $[h_0 (1)^2] [b_{13}^2] [b_{03}^2]$                     | $d_4 = h_0 [h_0 (1) b_{13}] [b_{13}^2]^2$                       |
| 1467 | 58,13;4  | $h_0^7 h_3^2 [b_{24}^2]$                                | $d_4^{-1} = h_0^7 h_3 [b_{14}^2]$                               |
| 1468 | 58,13;10 | $h_0^7 [h_0 h_0 (1, 2) b_{03}]$                         | $d_4^{-1} = h_0^4 [b_{03}^2] [h_0 h_3 b_{04}]$                  |
| 1469 | 58,13;12 | $h_0 h_2 [h_2 b_{03}] [b_{13}^2]^2$                     | $d_4^{-1} = h_0 [h_2 b_{03}] [b_{13}^2] [b_{03}^2]$             |
| 1470 | 58,13;16 | $h_0 [h_0 (1)^2] [b_{13}^2] [b_{03}^2]$                 | $d_4 = h_0^2 [h_0 (1) b_{13}] [b_{13}^2]^2$                     |
| 1471 | 58,14;4  | $h_0^8 h_3^2 [b_{24}^2]$                                | $d_4^{-1} = h_0^8 h_3 [b_{14}^2]$                               |
| 1472 | 58,14;10 | $h_0^8 [h_0 h_0 (1, 2) b_{03}]$                         | $d_4^{-1} = h_0^5 [b_{03}^2] [h_0 h_3 b_{04}]$                  |
| 1473 | 58,14;12 | $h_2 [b_{02}^2]^3 h_5$                                  | $d_8^{-1} = h_2 [b_{02}^2] [b_{03}^2]^2$                        |
| 1474 | 58,14;16 | $h_0^2 [h_0 (1)^2] [b_{13}^2] [b_{03}^2]$               | Permanent cycle   |
| 1475 | 58,14;20 | $h_1^2 [b_{02}^2] [b_{03}^2]^2$                         | $d_8 = h_1^2 [b_{02}^2]^3 h_5$                                  |
| 1476 | 58,15;4  | $h_0^9 h_3^2 [b_{24}^2]$                                | $d_4^{-1} = h_0^9 h_3 [b_{14}^2]$                               |
| 1477 | 58,15;10 | $h_0^9 [h_0 h_0 (1, 2) b_{03}]$                         | $d_4^{-1} = h_0^6 [b_{03}^2] [h_0 h_3 b_{04}]$                  |
| 1478 | 58,15;12 | $h_0 h_2 [b_{02}^2]^3 h_5$                              | $d_8^{-1} = h_0 h_2 [b_{02}^2] [b_{03}^2]^2$                    |
| 1479 | 58,15;20 | $[b_{02}^2] [b_{03}^2] [h_0 h_0 (1)^2 b_{03}]$          | $d_4 = h_0 [b_{02}^2] [h_2 b_{03}] [h_0 (1)^2] [b_{13}^2]$      |
| 1480 | 58,16;4  | $h_0^{10} h_3^2 [b_{24}^2]$                             | $d_4^{-1} = h_0^{10} h_3 [b_{14}^2]$                            |
| 1481 | 58,16;10 | $h_0^{10} [h_0 h_0 (1, 2) b_{03}]$                      | $d_4^{-1} = h_0^7 [b_{03}^2] [h_0 h_3 b_{04}]$                  |
| 1482 | 58,16;12 | $h_0^2 h_2 [b_{02}^2]^3 h_5$                            | $d_8^{-1} = h_0^2 h_2 [b_{02}^2] [b_{03}^2]^2$                  |
| 1483 | 58,16;20 | $h_0 [b_{02}^2] [b_{03}^2] [h_0 h_0 (1)^2 b_{03}]$      | $d_4 = h_0^2 [b_{02}^2] [h_2 b_{03}] [h_0 (1)^2] [b_{13}^2]$    |
| 1484 | 58,17;4  | $h_0^{11} h_3^2 [b_{24}^2]$                             | $d_4^{-1} = h_0^{11} h_3 [b_{14}^2]$                            |
| 1485 | 58,17;10 | $h_0^{11} [h_0 h_0 (1, 2) b_{03}]$                      | $d_4^{-1} = h_0^8 [b_{03}^2] [h_0 h_3 b_{04}]$                  |
| 1486 | 58,17;14 | $[b_{02}^2]^3 [h_0 h_4^2 b_{02} + h_0^3 h_2 (1)]$       | $d_4^{-1} = [b_{02}^2]^3 [h_0 h_3 b_{04}]$                      |
| 1487 | 58,17;20 | $h_0^2 [b_{02}^2] [b_{03}^2] [h_0 h_0 (1)^2 b_{03}]$    | Permanent cycle   |
| 1488 | 58,18;4  | $h_0^{12} h_3^2 [b_{24}^2]$                             | $d_4^{-1} = h_0^{12} h_3 [b_{14}^2]$                            |
| 1489 | 58,18;10 | $h_0^{12} [h_0 h_0 (1, 2) b_{03}]$                      | $d_4^{-1} = h_0^9 [b_{03}^2] [h_0 h_3 b_{04}]$                  |
| 1490 | 58,18;14 | $h_0 [b_{02}^2]^3 [h_0 h_4^2 b_{02} + h_0^3 h_2 (1)]$   | $d_4^{-1} = h_0 [b_{02}^2]^3 [h_0 h_3 b_{04}]$                  |
| 1491 | 58,19;4  | $h_0^{13} h_3^2 [b_{24}^2]$                             | $d_4^{-1} = h_0^{13} h_3 [b_{14}^2]$                            |
| 1492 | 58,19;10 | $h_0^{13} [h_0 h_0 (1, 2) b_{03}]$                      | $d_4^{-1} = h_0^{10} [b_{03}^2] [h_0 h_3 b_{04}]$               |
| 1493 | 58,19;14 | $h_0^2 [b_{02}^2]^3 [h_0 h_4^2 b_{02} + h_0^3 h_2 (1)]$ | $d_4^{-1} = h_0^2 [b_{02}^2]^3 [h_0 h_3 b_{04}]$                |
| 1494 | 58,20;4  | $h_0^{14} h_3^2 [b_{24}^2]$                             | $d_4^{-1} = h_0^{14} h_3 [b_{14}^2]$                            |
| 1495 | 58,20;10 | $h_0^{14} [h_0 h_0 (1, 2) b_{03}]$                      | $d_4^{-1} = h_0^{11} [b_{03}^2] [h_0 h_3 b_{04}]$               |
| 1496 | 58,20;14 | $h_0^3 [b_{02}^2]^3 [h_0 h_4^2 b_{02} + h_0^3 h_2 (1)]$ | $d_4^{-1} = h_0^3 [b_{02}^2]^3 [h_0 h_3 b_{04}]$                |
| 1497 | 58,20;20 | $[b_{02}^2]^3 [h_0 (1)^2] [b_{13}^2]$                   | Permanent cycle   |
| 1498 | 58,21;4  | $h_0^{15} h_3^2 [b_{24}^2]$                             | $d_4^{-1} = h_0^{15} h_3 [b_{14}^2]$                            |
| 1499 | 58,21;10 | $h_0^{15} [h_0 h_0 (1, 2) b_{03}]$                      | $d_4^{-1} = h_0^{12} [b_{03}^2] [h_0 h_3 b_{04}]$               |

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| 1500 | 58,21;14 | $h_0^4[b_{02}^2]^3[h_0h_4^2b_{02} + h_0^3h_2(1)]$            | $d_4^{-1} = h_0^4[b_{02}^2]^3[h_0h_3b_{04}]$    |
| 1501 | 58,21;20 | $h_0[b_{02}^2]^3[h_0(1)^2][b_{13}^2]$                        | Permanent cycle                                 |
| 1502 | 58,22;4  | $h_0^{16}h_3^2[b_{24}^2]$                                    | $d_4^{-1} = h_0^{16}h_3[b_{14}^2]$              |
| 1503 | 58,22;10 | $h_0^{16}[h_0h_0(1,2)b_{03}]$                                | $d_4^{-1} = h_0^{13}[b_{03}^2][h_0h_3b_{04}]$   |
| 1504 | 58,22;14 | $h_0^5[b_{02}^2]^3[h_0h_4^2b_{02} + h_0^3h_2(1)]$            | $d_4^{-1} = h_0^5[b_{02}^2]^3[h_0h_3b_{04}]$    |
| 1505 | 58,22;20 | $h_2[b_{02}^2]^5h_4 + h_0^2[b_{02}^2]^3[h_0(1)^2][b_{13}^2]$ | $d_4^{-1} = h_2[b_{02}^2]^4[b_{03}^2]$          |
| 1506 | 58,22;20 | $h_0^2[b_{02}^2]^3[h_0(1)^2][b_{13}^2]$                      | Permanent cycle                                 |
| 1507 | 58,22;24 | $h_1^2[b_{02}^2]^4[b_{03}^2]$                                | $d_4 = h_1^2[b_{02}^2]^5h_4$                    |
| 1508 | 58,23;4  | $h_0^{17}h_3^2[b_{24}^2]$                                    | $d_4^{-1} = h_0^{17}h_3[b_{14}^2]$              |
| 1509 | 58,23;10 | $h_0^{17}[h_0h_0(1,2)b_{03}]$                                | $d_4^{-1} = h_0^{14}[b_{03}^2][h_0h_3b_{04}]$   |
| 1510 | 58,23;14 | $h_0^6[b_{02}^2]^3[h_0h_4^2b_{02} + h_0^3h_2(1)]$            | $d_4^{-1} = h_0^6[b_{02}^2]^3[h_0h_3b_{04}]$    |
| 1511 | 58,23;20 | $h_0h_2[b_{02}^2]^5h_4$                                      | $d_4^{-1} = h_0h_2[b_{02}^2]^4[b_{03}^2]$       |
| 1512 | 58,23;24 | $[b_{02}^2]^4[h_0h_0(1)^2b_{03}]$                            | Permanent cycle                                 |
| 1513 | 58,24;4  | $h_0^{18}h_3^2[b_{24}^2]$                                    | $d_4^{-1} = h_0^{18}h_3[b_{14}^2]$              |
| 1514 | 58,24;10 | $h_0^{18}[h_0h_0(1,2)b_{03}]$                                | $d_4^{-1} = h_0^{15}[b_{03}^2][h_0h_3b_{04}]$   |
| 1515 | 58,24;14 | $h_0^7[b_{02}^2]^3[h_0h_4^2b_{02} + h_0^3h_2(1)]$            | $d_4^{-1} = h_0^7[b_{02}^2]^3[h_0h_3b_{04}]$    |
| 1516 | 58,24;20 | $h_0^2h_2[b_{02}^2]^5h_4$                                    | $d_4^{-1} = h_0^2h_2[b_{02}^2]^4[b_{03}^2]$     |
| 1517 | 58,24;24 | $h_0[b_{02}^2]^4[h_0h_0(1)^2b_{03}]$                         | Permanent cycle                                 |
| 1518 | 58,25;4  | $h_0^{19}h_3^2[b_{24}^2]$                                    | $d_4^{-1} = h_0^{19}h_3[b_{14}^2]$              |
| 1519 | 58,25;10 | $h_0^{19}[h_0h_0(1,2)b_{03}]$                                | $d_4^{-1} = h_0^{16}[b_{03}^2][h_0h_3b_{04}]$   |
| 1520 | 58,25;14 | $h_0^8[b_{02}^2]^3[h_0h_4^2b_{02} + h_0^3h_2(1)]$            | $d_4^{-1} = h_0^8[b_{02}^2]^3[h_0h_3b_{04}]$    |
| 1521 | 58,25;24 | $h_0^2[b_{02}^2]^4[h_0h_0(1)^2b_{03}]$                       | Permanent cycle                                 |
| 1522 | 58,26;4  | $h_0^{20}h_3^2[b_{24}^2]$                                    | $d_4^{-1} = h_0^{20}h_3[b_{14}^2]$              |
| 1523 | 58,26;10 | $h_0^{20}[h_0h_0(1,2)b_{03}]$                                | $d_4^{-1} = h_0^{17}[b_{03}^2][h_0h_3b_{04}]$   |
| 1524 | 58,26;14 | $h_0^9[b_{02}^2]^3[h_0h_4^2b_{02} + h_0^3h_2(1)]$            | $d_4^{-1} = h_0^9[b_{02}^2]^3[h_0h_3b_{04}]$    |
| 1525 | 58,27;4  | $h_0^{21}h_3^2[b_{24}^2]$                                    | $d_4^{-1} = h_0^{21}h_3[b_{14}^2]$              |
| 1526 | 58,27;10 | $h_0^{21}[h_0h_0(1,2)b_{03}]$                                | $d_4^{-1} = h_0^{18}[b_{03}^2][h_0h_3b_{04}]$   |
| 1527 | 58,27;14 | $h_0^{10}[b_{02}^2]^3[h_0h_4^2b_{02} + h_0^3h_2(1)]$         | $d_4^{-1} = h_0^{10}[b_{02}^2]^3[h_0h_3b_{04}]$ |
| 1528 | 58,28;4  | $h_0^{22}h_3^2[b_{24}^2]$                                    | $d_4^{-1} = h_0^{22}h_3[b_{14}^2]$              |
| 1529 | 58,28;10 | $h_0^{22}[h_0h_0(1,2)b_{03}]$                                | $d_4^{-1} = h_0^{19}[b_{03}^2][h_0h_3b_{04}]$   |
| 1530 | 58,28;14 | $h_0^{11}[b_{02}^2]^3[h_0h_4^2b_{02} + h_0^3h_2(1)]$         | $d_4^{-1} = h_0^{11}[b_{02}^2]^3[h_0h_3b_{04}]$ |
| 1531 | 58,29;4  | $h_0^{23}h_3^2[b_{24}^2]$                                    | $d_4^{-1} = h_0^{23}h_3[b_{14}^2]$              |
| 1532 | 58,29;10 | $h_0^{23}[h_0h_0(1,2)b_{03}]$                                | $d_4^{-1} = h_0^{20}[b_{03}^2][h_0h_3b_{04}]$   |
| 1533 | 58,29;14 | $h_0^{12}[b_{02}^2]^3[h_0h_4^2b_{02} + h_0^3h_2(1)]$         | $d_4^{-1} = h_0^{12}[b_{02}^2]^3[h_0h_3b_{04}]$ |
| 1534 | 58,30;4  | $h_0^{24}h_3^2[b_{24}^2]$                                    | $d_4^{-1} = h_0^{24}h_3[b_{14}^2]$              |
| 1535 | 58,30;10 | $h_0^{24}[h_0h_0(1,2)b_{03}]$                                | $d_4^{-1} = h_0^{21}[b_{03}^2][h_0h_3b_{04}]$   |
| 1536 | 58,30;14 | $h_0^{13}[b_{02}^2]^3[h_0h_4^2b_{02} + h_0^3h_2(1)]$         | $d_4^{-1} = h_0^{13}[b_{02}^2]^3[h_0h_3b_{04}]$ |
| 1537 | 58,30;28 | $h_1^2[b_{02}^2]^7$  | Permanent cycle                                 |
| 1538 | 59,5;8   | $h_3[b_{14}^2]$  | $d_4 = h_3^2[b_{24}^2]$                         |
| 1539 | 59,5;12  | $h_2[b_{04}^2]$  | $d_4 = h_2[b_{03}^2]h_5 + h_2^2[b_{14}^2]$      |
| 1540 | 59,6;8   | $h_0h_3[b_{14}^2]$   | $d_4 = h_0h_3^2[b_{24}^2]$                      |
| 1541 | 59,6;12  | $h_0h_2[b_{04}^2]$   | $d_4 = h_0h_2[b_{03}^2]h_5$                     |
| 1542 | 59,7;8   | $h_0^2h_3[b_{14}^2]$   | $d_4 = h_0^2h_3^2[b_{24}^2]$                    |
| 1543 | 59,7;12  | $h_0^2h_2[b_{04}^2]$   | $d_4 = h_0^2h_2[b_{03}^2]h_5$                   |
| 1544 | 59,7;12  | $[h_2h_1(1)b_{03}b_{04}]$                                    | $d_4 = [b_{13}^2][h_1(1)b_{24}]$                |
| 1545 | 59,8;8   | $h_0^3h_3[b_{14}^2]$   | $d_4 = h_0^3h_3^2[b_{24}^2]$                    |
| 1546 | 59,8;14  | $[b_{03}^2][h_0h_3b_{04}]$                                   | $d_4 = h_0^3[h_0h_0(1,2)b_{03}]$                |
| 1547 | 59,9;8   | $[b_{02}^2][b_{13}^2]h_5$                                    | $d_4^{-1} = [b_{02}^2][b_{14}^2]$               |
| 1548 | 59,9;8   | $h_0^4h_3[b_{14}^2]$   | $d_4 = h_0^4h_3^2[b_{24}^2]$                    |
| 1549 | 59,9;12  | $h_2[b_{03}^2][h_1(1)^2]$                                    | $d_4 = h_2^2[b_{13}^2][h_1(1)^2]$               |
| 1550 | 59,9;14  | $h_0[b_{03}^2][h_0h_3b_{04}]$                                | $d_4 = h_0^4[h_0h_0(1,2)b_{03}]$                |
| 1551 | 59,10;8  | $h_0[b_{02}^2][b_{13}^2]h_5$                                 | $d_4^{-1} = h_0[b_{02}^2][b_{14}^2]$            |
| 1552 | 59,10;8  | $h_0^5h_3[b_{14}^2]$   | $d_4 = h_0^5h_3^2[b_{24}^2]$                    |

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| 1553 | 59,10;14 | $[h_0(1)^2][h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$      | Permanent cycle  |
| 1554 | 59,10;14 | $h_0^2[b_{03}^2][h_0h_3b_{04}]$                            | $d_4 = h_0^5[h_0h_0(1,2)b_{03}]$                                   |
| 1555 | 59,11;8  | $h_0^2[b_{02}^2][b_{13}^2]h_5$                             | $d_4^{-1} = h_0^2[b_{02}^2][b_{14}^2]$                             |
| 1556 | 59,11;8  | $h_0^6h_3[b_{14}^2]$                                       | $d_4 = h_0^6h_3^2[b_{24}^2]$                                       |
| 1557 | 59,11;10 | $h_2[b_{13}^2][h_1(1)b_{13}^2 + h_1^2b_{24}b_{03}]$        | $d_4^{-1} = [b_{03}^2][h_1(1)b_{13}^2 + h_1^2b_{24}b_{03}]$        |
| 1558 | 59,11;14 | $h_0[h_0(1)^2][h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$   | Permanent cycle  |
| 1559 | 59,11;14 | $h_0^3[b_{03}^2][h_0h_3b_{04}]$                            | $d_4 = h_0^6[h_0h_0(1,2)b_{03}]$                                   |
| 1560 | 59,11;16 | $[h_2b_{03}][b_{13}^2][b_{03}^2]$                          | $d_4 = h_2[h_2b_{03}][b_{13}^2]^2$                                 |
| 1561 | 59,12;8  | $h_0^7h_3[b_{14}^2]$                                       | $d_4 = h_0^7h_3^2[b_{24}^2]$                                       |
| 1562 | 59,12;14 | $h_0^2[h_0(1)^2][h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$ | Permanent cycle  |
| 1563 | 59,12;14 | $h_0^4[b_{03}^2][h_0h_3b_{04}]$                            | $d_4 = h_0^7[h_0h_0(1,2)b_{03}]$                                   |
| 1564 | 59,12;16 | $h_0[h_2b_{03}][b_{13}^2][b_{03}^2]$                       | $d_4 = h_0h_2[h_2b_{03}][b_{13}^2]^2$                              |
| 1565 | 59,13;8  | $h_0^8h_3[b_{14}^2]$                                       | $d_4 = h_0^8h_3^2[b_{24}^2]$                                       |
| 1566 | 59,13;14 | $h_0^5[b_{03}^2][h_0h_3b_{04}]$                            | $d_4 = h_0^8[h_0h_0(1,2)b_{03}]$                                   |
| 1567 | 59,13;16 | $h_0^2[h_2b_{03}][b_{13}^2][b_{03}^2]$                     | Permanent cycle  |
| 1568 | 59,13;20 | $h_2[b_{02}^2][b_{03}^2]^2$                                | $d_8 = h_2[b_{02}^2]^3h_5$   |
| 1569 | 59,14;8  | $h_0^9h_3[b_{14}^2]$                                       | $d_4 = h_0^9h_3^2[b_{24}^2]$                                       |
| 1570 | 59,14;14 | $h_0^6[b_{03}^2][h_0h_3b_{04}]$                            | $d_4 = h_0^9[h_0h_0(1,2)b_{03}]$                                   |
| 1571 | 59,14;20 | $h_0h_2[b_{02}^2][b_{03}^2]^2$                             | $d_8 = h_0h_2[b_{02}^2]^3h_5$                                      |
| 1572 | 59,15;8  | $h_0^{10}h_3[b_{14}^2]$                                    | $d_4 = h_0^{10}h_3^2[b_{24}^2]$                                    |
| 1573 | 59,15;14 | $h_0^7[b_{03}^2][h_0h_3b_{04}]$                            | $d_4 = h_0^{10}[h_0h_0(1,2)b_{03}]$                                |
| 1574 | 59,15;20 | $h_0^2h_2[b_{02}^2][b_{03}^2]^2$                           | $d_8 = h_0^2h_2[b_{02}^2]^3h_5$                                    |
| 1575 | 59,16;8  | $h_0^{11}h_3[b_{14}^2]$                                    | $d_4 = h_0^{11}h_3^2[b_{24}^2]$                                    |
| 1576 | 59,16;14 | $h_0^8[b_{03}^2][h_0h_3b_{04}]$                            | $d_4 = h_0^{11}[h_0h_0(1,2)b_{03}]$                                |
| 1577 | 59,16;16 | $[b_{02}^2][h_0(1)^2][h_0(1)b_{13}][b_{13}^2]$             | Permanent cycle  |
| 1578 | 59,16;18 | $[b_{02}^2]^3[h_0h_3b_{04}]$                               | $d_4 = [b_{02}^2]^3[h_0h_4^2b_{02} + h_0^3h_2(1)]$                 |
| 1579 | 59,17;8  | $h_0^{12}h_3[b_{14}^2]$                                    | $d_4 = h_0^{12}h_3^2[b_{24}^2]$                                    |
| 1580 | 59,17;14 | $h_0^9[b_{03}^2][h_0h_3b_{04}]$                            | $d_4 = h_0^{12}[h_0h_0(1,2)b_{03}]$                                |
| 1581 | 59,17;16 | $h_0[b_{02}^2][h_0(1)^2][h_0(1)b_{13}][b_{13}^2]$          | $d_4^{-1} = [b_{02}^2]^2[b_{13}^2][b_{03}^2]$                      |
| 1582 | 59,17;18 | $h_0[b_{02}^2]^3[h_0h_3b_{04}]$                            | $d_4 = h_0[b_{02}^2]^3[h_0h_4^2b_{02} + h_0^3h_2(1)]$              |
| 1583 | 59,18;8  | $h_0^{13}h_3[b_{14}^2]$                                    | $d_4 = h_0^{13}h_3^2[b_{24}^2]$                                    |
| 1584 | 59,18;14 | $h_0^{10}[b_{03}^2][h_0h_3b_{04}]$                         | $d_4 = h_0^{13}[h_0h_0(1,2)b_{03}]$                                |
| 1585 | 59,18;16 | $h_0^2[b_{02}^2][h_0(1)^2][h_0(1)b_{13}][b_{13}^2]$        | $d_4^{-1} = h_0[b_{02}^2]^2[b_{13}^2][b_{03}^2]$                   |
| 1586 | 59,18;18 | $h_0^2[b_{02}^2]^3[h_0h_3b_{04}]$                          | $d_4 = h_0^2[b_{02}^2]^3[h_0h_4^2b_{02} + h_0^3h_2(1)]$            |
| 1587 | 59,19;8  | $h_0^{14}h_3[b_{14}^2]$                                    | $d_4 = h_0^{14}h_3^2[b_{24}^2]$                                    |
| 1588 | 59,19;14 | $h_0^{11}[b_{03}^2][h_0h_3b_{04}]$                         | $d_4 = h_0^{14}[h_0h_0(1,2)b_{03}]$                                |
| 1589 | 59,19;18 | $h_0^3[b_{02}^2]^3[h_0h_3b_{04}]$                          | $d_4 = h_0^3[b_{02}^2]^3[h_0h_4^2b_{02} + h_0^3h_2(1)]$            |
| 1590 | 59,19;20 | $[b_{02}^2]^3[h_2b_{03}][b_{13}^2]$                        | Permanent cycle  |
| 1591 | 59,20;8  | $h_0^{15}h_3[b_{14}^2]$                                    | $d_4 = h_0^{15}h_3^2[b_{24}^2]$                                    |
| 1592 | 59,20;14 | $h_0^{12}[b_{03}^2][h_0h_3b_{04}]$                         | $d_4 = h_0^{15}[h_0h_0(1,2)b_{03}]$                                |
| 1593 | 59,20;18 | $h_0^4[b_{02}^2]^3[h_0h_3b_{04}]$                          | $d_4 = h_0^4[b_{02}^2]^3[h_0h_4^2b_{02} + h_0^3h_2(1)]$            |
| 1594 | 59,20;20 | $h_0[b_{02}^2]^3[h_2b_{03}][b_{13}^2]$                     | Permanent cycle  |
| 1595 | 59,21;8  | $h_0^{16}h_3[b_{14}^2]$                                    | $d_4 = h_0^{16}h_3^2[b_{24}^2]$                                    |
| 1596 | 59,21;14 | $h_0^{13}[b_{03}^2][h_0h_3b_{04}]$                         | $d_4 = h_0^{16}[h_0h_0(1,2)b_{03}]$                                |
| 1597 | 59,21;18 | $h_0^5[b_{02}^2]^3[h_0h_3b_{04}]$                          | $d_4 = h_0^5[b_{02}^2]^3[h_0h_4^2b_{02} + h_0^3h_2(1)]$            |
| 1598 | 59,21;20 | $h_2^2[b_{02}^2]^3[h_2b_{03}][b_{13}^2]$                   | Permanent cycle  |
| 1599 | 59,21;24 | $h_2[b_{02}^2]^4[b_{03}^2]$                                | $d_4 = h_2[b_{02}^2]^5h_4 + h_0^2[b_{02}^2]^3[h_0(1)^2][b_{13}^2]$ |
| 1600 | 59,22;8  | $h_0^{17}h_3[b_{14}^2]$                                    | $d_4 = h_0^{17}h_3^2[b_{24}^2]$                                    |
| 1601 | 59,22;14 | $h_0^{14}[b_{03}^2][h_0h_3b_{04}]$                         | $d_4 = h_0^{17}[h_0h_0(1,2)b_{03}]$                                |
| 1602 | 59,22;18 | $h_0^6[b_{02}^2]^3[h_0h_3b_{04}]$                          | $d_4 = h_0^6[b_{02}^2]^3[h_0h_4^2b_{02} + h_0^3h_2(1)]$            |
| 1603 | 59,22;24 | $h_0h_2[b_{02}^2]^4[b_{03}^2]$                             | $d_4 = h_0h_2[b_{02}^2]^5h_4$                                      |
| 1604 | 59,23;8  | $h_0^{18}h_3[b_{14}^2]$                                    | $d_4 = h_0^{18}h_3^2[b_{24}^2]$                                    |
| 1605 | 59,23;14 | $h_0^{15}[b_{03}^2][h_0h_3b_{04}]$                         | $d_4 = h_0^{18}[h_0h_0(1,2)b_{03}]$                                |
| 1606 | 59,23;18 | $h_0^7[b_{02}^2]^3[h_0h_3b_{04}]$                          | $d_4 = h_0^7[b_{02}^2]^3[h_0h_4^2b_{02} + h_0^3h_2(1)]$            |

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| 1607 | 59,23;24 | $h_0^2 h_2 [b_{02}^2]^4 [b_{03}^2]$                                | $d_4 = h_0^2 h_2 [b_{02}^2]^5 h_4$   |
| 1608 | 59,24;8  | $h_0^{19} h_3 [b_{14}^2]$  | $d_4 = h_0^{19} h_3^2 [b_{24}^2]$  |
| 1609 | 59,24;14 | $h_0^{16} [b_{03}^2] [h_0 h_3 b_{04}]$                             | $d_4 = h_0^{19} [h_0 h_0(1, 2) b_{03}]$  |
| 1610 | 59,24;18 | $h_0^8 [b_{02}^2]^3 [h_0 h_3 b_{04}]$                              | $d_4 = h_0^8 [b_{02}^2]^3 [h_0 h_4^2 b_{02} + h_0^3 h_2(1)]$                       |
| 1611 | 59,25;8  | $h_0^{20} h_3 [b_{14}^2]$  | $d_4 = h_0^{20} h_3^2 [b_{24}^2]$  |
| 1612 | 59,25;14 | $h_0^{17} [b_{03}^2] [h_0 h_3 b_{04}]$                             | $d_4 = h_0^{20} [h_0 h_0(1, 2) b_{03}]$  |
| 1613 | 59,25;18 | $h_0^9 [b_{02}^2]^3 [h_0 h_3 b_{04}]$                              | $d_4 = h_0^9 [b_{02}^2]^3 [h_0 h_4^2 b_{02} + h_0^3 h_2(1)]$                       |
| 1614 | 59,26;8  | $h_0^{21} h_3 [b_{14}^2]$  | $d_4 = h_0^{21} h_3^2 [b_{24}^2]$  |
| 1615 | 59,26;14 | $h_0^{18} [b_{03}^2] [h_0 h_3 b_{04}]$                             | $d_4 = h_0^{21} [h_0 h_0(1, 2) b_{03}]$  |
| 1616 | 59,26;18 | $h_0^{10} [b_{02}^2]^3 [h_0 h_3 b_{04}]$                           | $d_4 = h_0^{10} [b_{02}^2]^3 [h_0 h_4^2 b_{02} + h_0^3 h_2(1)]$                    |
| 1617 | 59,27;8  | $h_0^{22} h_3 [b_{14}^2]$  | $d_4 = h_0^{22} h_3^2 [b_{24}^2]$  |
| 1618 | 59,27;14 | $h_0^{19} [b_{03}^2] [h_0 h_3 b_{04}]$                             | $d_4 = h_0^{22} [h_0 h_0(1, 2) b_{03}]$  |
| 1619 | 59,27;18 | $h_0^{11} [b_{02}^2]^3 [h_0 h_3 b_{04}]$                           | $d_4 = h_0^{11} [b_{02}^2]^3 [h_0 h_4^2 b_{02} + h_0^3 h_2(1)]$                    |
| 1620 | 59,28;8  | $h_0^{23} h_3 [b_{14}^2]$  | $d_4 = h_0^{23} h_3^2 [b_{24}^2]$  |
| 1621 | 59,28;14 | $h_0^{20} [b_{03}^2] [h_0 h_3 b_{04}]$                             | $d_4 = h_0^{23} [h_0 h_0(1, 2) b_{03}]$  |
| 1622 | 59,28;18 | $h_0^{12} [b_{02}^2]^3 [h_0 h_3 b_{04}]$                           | $d_4 = h_0^{12} [b_{02}^2]^3 [h_0 h_4^2 b_{02} + h_0^3 h_2(1)]$                    |
| 1623 | 59,29;8  | $h_0^{24} h_3 [b_{14}^2]$  | $d_4 = h_0^{24} h_3^2 [b_{24}^2]$  |
| 1624 | 59,29;14 | $h_0^{21} [b_{03}^2] [h_0 h_3 b_{04}]$                             | $d_4 = h_0^{24} [h_0 h_0(1, 2) b_{03}]$  |
| 1625 | 59,29;18 | $h_0^{13} [b_{02}^2]^3 [h_0 h_3 b_{04}]$                           | $d_4 = h_0^{13} [b_{02}^2]^3 [h_0 h_4^2 b_{02} + h_0^3 h_2(1)]$                    |
| 1626 | 59,29;28 | $h_2 [b_{02}^2]^7$   | Permanent cycle  |
| 1627 | 59,30;8  | $h_0^{25} h_3 [b_{14}^2]$  | $d_4 = h_0^{25} h_3^2 [b_{24}^2]$  |
| 1628 | 59,30;14 | $h_0^{22} [b_{03}^2] [h_0 h_3 b_{04}]$                             | $d_4 = h_0^{25} [h_0 h_0(1, 2) b_{03}]$  |
| 1629 | 59,30;18 | $h_0^{14} [b_{02}^2]^3 [h_0 h_3 b_{04}]$                           | $d_4 = h_0^{14} [b_{02}^2]^3 [h_0 h_4^2 b_{02} + h_0^3 h_2(1)]$                    |
| 1630 | 59,30;28 | $h_0 h_2 [b_{02}^2]^7$   | Permanent cycle  |
| 1631 | 60,7;10  | $[h_1 h_0(1)] [b_{14}^2]$  | Permanent cycle  |
| 1632 | 60,8;8   | $[h_2 b_{03}] [h_0(1)^2] h_5$                                      | Permanent cycle  |
| 1633 | 60,8;12  | $[b_{02}^2] [b_{14}^2]$  | $d_4 = [b_{02}^2] [b_{13}^2] h_5$  |
| 1634 | 60,9;8   | $h_0 [h_2 b_{03}] [h_0(1)^2] h_5$                                  | Permanent cycle  |
| 1635 | 60,9;12  | $h_0 [b_{02}^2] [b_{14}^2]$  | $d_4 = h_0 [b_{02}^2] [b_{13}^2] h_5$  |
| 1636 | 60,9;14  | $[h_2 b_{03}] [h_0(1) b_{03} b_{14} + h_0(1) b_{13} b_{04}]$       | Permanent cycle  |
| 1637 | 60,10;8  | $h_0^2 [h_2 b_{03}] [h_0(1)^2] h_5$                                | $d_4^{-1} = h_1 [b_{02}^2] [b_{14}^2]$   |
| 1638 | 60,10;12 | $h_0^2 [b_{02}^2] [b_{14}^2]$                                      | $d_4 = h_0^2 [b_{02}^2] [b_{13}^2] h_5$  |
| 1639 | 60,10;14 | $h_0 [h_2 b_{03}] [h_0(1) b_{03} b_{14} + h_0(1) b_{13} b_{04}]$   | Permanent cycle  |
| 1640 | 60,10;14 | $[b_{03}^2] [h_1(1) b_{13}^2 + h_1^2 b_{24} b_{03}]$               | $d_4 = h_2 [b_{13}^2] [h_1(1) b_{13}^2 + h_1^2 b_{24} b_{03}]$                     |
| 1641 | 60,11;12 | $h_0^3 [b_{02}^2] [b_{14}^2]$                                      | Permanent cycle  |
| 1642 | 60,11;14 | $h_0^2 [h_2 b_{03}] [h_0(1) b_{03} b_{14} + h_0(1) b_{13} b_{04}]$ | Permanent cycle  |
| 1643 | 60,12;12 | $[b_{13}^2]^3$   | Permanent cycle  |
| 1644 | 60,12;12 | $h_0^4 [b_{02}^2] [b_{14}^2]$                                      | Permanent cycle  |
| 1645 | 60,13;12 | $h_0 [b_{13}^2]^3$   | $d_4^{-1} = [h_0(1) b_{13}] [b_{13}^2] [b_{03}^2]$                                 |
| 1646 | 60,13;12 | $h_0^5 [b_{02}^2] [b_{14}^2]$                                      | Permanent cycle  |
| 1647 | 60,14;12 | $h_0^2 [b_{13}^2]^3$   | $d_4^{-1} = h_0 [h_0(1) b_{13}] [b_{13}^2] [b_{03}^2]$                             |
| 1648 | 60,14;12 | $h_0^6 [b_{02}^2] [b_{14}^2]$                                      | Permanent cycle  |
| 1649 | 60,15;12 | $h_0^7 [b_{02}^2] [b_{14}^2]$                                      | $d_6^{-1} = [b_{02}^2]^2 [h_0(1) b_{03} b_{14} + h_0(1) b_{13} b_{04}]$            |
| 1650 | 60,15;16 | $[b_{02}^2] [h_2 b_{03}] [h_0(1) b_{13}] [b_{13}^2]$               | Permanent cycle  |
| 1651 | 60,16;12 | $h_0^8 [b_{02}^2] [b_{14}^2]$                                      | $d_6^{-1} =$<br>$h_0 [b_{02}^2]^2 [h_0(1) b_{03} b_{14} + h_0(1) b_{13} b_{04}]$   |
| 1652 | 60,16;16 | $h_0 [b_{02}^2] [h_2 b_{03}] [h_0(1) b_{13}] [b_{13}^2]$           | $d_4^{-1} = [b_{02}^2] [h_2 b_{03}] [h_0(1)^2] [b_{03}^2]$                         |
| 1653 | 60,16;20 | $[b_{02}^2]^2 [b_{13}^2] [b_{03}^2]$                               | $d_4 = h_0 [b_{02}^2] [h_0(1)^2] [h_0(1) b_{13}] [b_{13}^2]$                       |
| 1654 | 60,17;12 | $h_0^9 [b_{02}^2] [b_{14}^2]$                                      | $d_6^{-1} =$<br>$h_0^2 [b_{02}^2]^2 [h_0(1) b_{03} b_{14} + h_0(1) b_{13} b_{04}]$ |
| 1655 | 60,17;16 | $h_0^2 [b_{02}^2] [h_2 b_{03}] [h_0(1) b_{13}] [b_{13}^2]$         | $d_4^{-1} = h_0 [b_{02}^2] [h_2 b_{03}] [h_0(1)^2] [b_{03}^2]$                     |
| 1656 | 60,17;20 | $h_0 [b_{02}^2]^2 [b_{13}^2] [b_{03}^2]$                           | $d_4 = h_0^2 [b_{02}^2] [h_0(1)^2] [h_0(1) b_{13}] [b_{13}^2]$                     |
| 1657 | 60,18;12 | $h_0^{10} [b_{02}^2] [b_{14}^2]$                                   | $d_6^{-1} =$<br>$h_0^3 [b_{02}^2]^2 [h_0(1) b_{03} b_{14} + h_0(1) b_{13} b_{04}]$ |



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| 1658 | 60,18;20 | $h_0^2[b_{02}^2]^2[b_{13}^2][b_{03}^2]$                 | Permanent cycle  |
| 1659 | 60,19;12 | $h_0^{11}[b_{02}^2][b_{14}^2]$                          | $d_6^{-1} = h_0^4[b_{02}^2]^2[h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$    |
| 1660 | 60,20;12 | $h_0^{12}[b_{02}^2][b_{14}^2]$                          | $d_6^{-1} = h_0^5[b_{02}^2]^2[h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$    |
| 1661 | 60,21;12 | $h_0^{13}[b_{02}^2][b_{14}^2]$                          | $d_6^{-1} = h_0^6[b_{02}^2]^2[h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$    |
| 1662 | 60,22;12 | $h_0^{14}[b_{02}^2][b_{14}^2]$                          | $d_6^{-1} = h_0^7[b_{02}^2]^2[h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$    |
| 1663 | 60,23;12 | $h_0^{15}[b_{02}^2][b_{14}^2]$                          | $d_6^{-1} = h_0^8[b_{02}^2]^2[h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$    |
| 1664 | 60,24;12 | $h_0^{16}[b_{02}^2][b_{14}^2]$                          | $d_6^{-1} = h_0^9[b_{02}^2]^2[h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$    |
| 1665 | 60,24;24 | $[b_{02}^2]^5[b_{13}^2]$                                | Permanent cycle  |
| 1666 | 60,25;12 | $h_0^{17}[b_{02}^2][b_{14}^2]$                          | $d_6^{-1} = h_0^{10}[b_{02}^2]^2[h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$ |
| 1667 | 60,25;24 | $h_0[b_{02}^2]^5[b_{13}^2]$                             | Permanent cycle  |
| 1668 | 60,26;12 | $h_0^{18}[b_{02}^2][b_{14}^2]$                          | $d_6^{-1} = h_0^{11}[b_{02}^2]^2[h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$ |
| 1669 | 60,26;24 | $h_0^2[b_{02}^2]^5[b_{13}^2]$                           | Permanent cycle  |
| 1670 | 60,27;12 | $h_0^{19}[b_{02}^2][b_{14}^2]$                          | $d_6^{-1} = h_0^{12}[b_{02}^2]^2[h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$ |
| 1671 | 60,28;12 | $h_0^{20}[b_{02}^2][b_{14}^2]$                          | $d_6^{-1} = h_0^{13}[b_{02}^2]^2[h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$ |
| 1672 | 60,29;12 | $h_0^{21}[b_{02}^2][b_{14}^2]$                          | $d_6^{-1} = h_0^{14}[b_{02}^2]^2[h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$ |
| 1673 | 60,30;12 | $h_0^{22}[b_{02}^2][b_{14}^2]$                          | $d_6^{-1} = h_0^{15}[b_{02}^2]^2[h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$ |
| 1674 | 60,31;12 | $h_0^{23}[b_{02}^2][b_{14}^2]$                          | $d_6^{-1} = h_0^{16}[b_{02}^2]^2[h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$ |
| 1675 | 61,4;6   | $[h_4h_0(1,2)]$   | Permanent cycle  |
| 1676 | 61,6;10  | $[h_0h_3b_{14}b_{04}]$                                  | Permanent cycle  |
| 1677 | 61,6;10  | $[h_2h_0(1,2)b_{03}]$                                   | Permanent cycle  |
| 1678 | 61,7;8   | $h_2^2[b_{03}^2]h_5$                                    | $d_4^{-1} = h_2^2[b_{04}^2]$   |
| 1679 | 61,7;10  | $h_0[h_0h_3b_{14}b_{04}]$                               | Permanent cycle  |
| 1680 | 61,7;10  | $h_0[h_2h_0(1,2)b_{03}]$                                | Permanent cycle  |
| 1681 | 61,8;10  | $h_0^2[h_2h_0(1,2)b_{03}]$                              | Permanent cycle  |
| 1682 | 61,9;12  | $h_1[b_{02}^2][b_{14}^2]$                               | $d_4 = h_0^2[h_2b_{03}][h_0(1)^2]h_5$                                      |
| 1683 | 61,9;14  | $[b_{03}^2][h_2b_{24}b_{03} + h_2^3b_{04}]$             | Permanent cycle  |
| 1684 | 61,10;14 | $h_0[b_{03}^2][h_2b_{24}b_{03} + h_2^3b_{04}]$          | Permanent cycle  |
| 1685 | 61,11;14 | $h_0^2[b_{03}^2][h_2b_{24}b_{03} + h_2^3b_{04}]$        | Permanent cycle  |
| 1686 | 61,11;14 | $h_1[b_{03}^2][h_1(1)b_{13}^2 + h_1^2b_{24}b_{03}]$     | Permanent cycle  |
| 1687 | 61,12;14 | $h_0^3[b_{03}^2][h_2b_{24}b_{03} + h_2^3b_{04}]$        | Permanent cycle  |
| 1688 | 61,12;16 | $[h_0(1)b_{13}][b_{13}^2][b_{03}^2]$                    | $d_4 = h_0[b_{13}^2]^3$  |
| 1689 | 61,13;12 | $h_1[b_{13}^2]^3$                                       | $d_4^{-1} = h_2[h_2b_{03}][b_{13}^2][b_{03}^2]$                            |
| 1690 | 61,13;12 | $[b_{02}^2]^2[h_0(1)^2]h_5$                             | $d_8^{-1} = [h_0(1)^2][b_{03}^2]^2$  |
| 1691 | 61,13;14 | $h_0^4[b_{03}^2][h_2b_{24}b_{03} + h_2^3b_{04}]$        | Permanent cycle  |
| 1692 | 61,13;16 | $h_0[h_0(1)b_{13}][b_{13}^2][b_{03}^2]$                 | $d_4 = h_0^2[b_{13}^2]^3$  |
| 1693 | 61,14;12 | $h_0[b_{02}^2]^2[h_0(1)^2]h_5$                          | $d_8^{-1} = h_0[h_0(1)^2][b_{03}^2]^2$                                     |
| 1694 | 61,14;14 | $h_0^5[b_{03}^2][h_2b_{24}b_{03} + h_2^3b_{04}]$        | $d_4^{-1} = [b_{02}^2][h_0b_{02}b_{03}^2b_{14} + h_0h_0(1)^2b_{03}b_{04}]$ |
| 1695 | 61,14;16 | $h_0^2[h_0(1)b_{13}][b_{13}^2][b_{03}^2]$               | Permanent cycle  |
| 1696 | 61,14;18 | $[b_{02}^2]^2[h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$ | $d_6 = h_0^7[b_{02}^2][b_{14}^2]$  |
| 1697 | 61,15;12 | $h_0^2[b_{02}^2]^2[h_0(1)^2]h_5$                        | $d_8^{-1} = h_0^2[h_0(1)^2][b_{03}^2]^2$                                   |

|      |          |   |  |
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| 1698 | 61,15;14 | $h_0^6[b_{03}^2][h_2b_{24}b_{03} + h_2^3b_{04}]$                | $d_4^{-1} = h_0[b_{02}^2][h_0b_{02}b_{03}^2b_{14} + h_0h_0(1)^2b_{03}b_{04}]$      |
| 1699 | 61,15;18 | $h_0[b_{02}^2]^2[h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$      | $d_6 = h_0^8[b_{02}^2][b_{14}^2]$  |
| 1700 | 61,15;20 | $[b_{02}^2][h_2b_{03}][h_0(1)^2][b_{03}^2]$                     | $d_4 = h_0[b_{02}^2][h_2b_{03}][h_0(1)b_{13}][b_{13}^2]$                           |
| 1701 | 61,16;14 | $h_0^7[b_{03}^2][h_2b_{24}b_{03} + h_2^3b_{04}]$                | $d_4^{-1} = h_0^2[b_{02}^2][h_0b_{02}b_{03}^2b_{14} + h_0h_0(1)^2b_{03}b_{04}]$    |
| 1702 | 61,16;18 | $h_0^2[b_{02}^2]^2[h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$    | $d_6 = h_0^9[b_{02}^2][b_{14}^2]$  |
| 1703 | 61,16;20 | $h_0[b_{02}^2][h_2b_{03}][h_0(1)^2][b_{03}^2]$                  | $d_4 = h_0^2[b_{02}^2][h_2b_{03}][h_0(1)b_{13}][b_{13}^2]$                         |
| 1704 | 61,17;14 | $h_0^8[b_{03}^2][h_2b_{24}b_{03} + h_2^3b_{04}]$                | $d_4^{-1} = h_0^3[b_{02}^2][h_0b_{02}b_{03}^2b_{14} + h_0h_0(1)^2b_{03}b_{04}]$    |
| 1705 | 61,17;18 | $h_0^3[b_{02}^2]^2[h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$    | $d_6 = h_0^{10}[b_{02}^2][b_{14}^2]$   |
| 1706 | 61,17;20 | $h_0^2[b_{02}^2][h_2b_{03}][h_0(1)^2][b_{03}^2]$                | Permanent cycle  |
| 1707 | 61,18;14 | $h_0^9[b_{03}^2][h_2b_{24}b_{03} + h_2^3b_{04}]$                | $d_4^{-1} = h_0^4[b_{02}^2][h_0b_{02}b_{03}^2b_{14} + h_0h_0(1)^2b_{03}b_{04}]$    |
| 1708 | 61,18;18 | $h_0^4[b_{02}^2]^2[h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$    | $d_6 = h_0^{11}[b_{02}^2][b_{14}^2]$   |
| 1709 | 61,19;14 | $h_0^{10}[b_{03}^2][h_2b_{24}b_{03} + h_2^3b_{04}]$             | $d_4^{-1} = h_0^5[b_{02}^2][h_0b_{02}b_{03}^2b_{14} + h_0h_0(1)^2b_{03}b_{04}]$    |
| 1710 | 61,19;18 | $h_0^5[b_{02}^2]^2[h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$    | $d_6 = h_0^{12}[b_{02}^2][b_{14}^2]$   |
| 1711 | 61,20;14 | $h_0^{11}[b_{03}^2][h_2b_{24}b_{03} + h_2^3b_{04}]$             | $d_4^{-1} = h_0^6[b_{02}^2][h_0b_{02}b_{03}^2b_{14} + h_0h_0(1)^2b_{03}b_{04}]$    |
| 1712 | 61,20;18 | $h_0^6[b_{02}^2]^2[h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$    | $d_6 = h_0^{13}[b_{02}^2][b_{14}^2]$   |
| 1713 | 61,20;20 | $[b_{02}^2]^3[h_0(1)b_{13}][b_{13}^2]$                          | Permanent cycle  |
| 1714 | 61,21;14 | $h_0^{12}[b_{03}^2][h_2b_{24}b_{03} + h_2^3b_{04}]$             | $d_4^{-1} = h_0^7[b_{02}^2][h_0b_{02}b_{03}^2b_{14} + h_0h_0(1)^2b_{03}b_{04}]$    |
| 1715 | 61,21;18 | $h_0^7[b_{02}^2]^2[h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$    | $d_6 = h_0^{14}[b_{02}^2][b_{14}^2]$   |
| 1716 | 61,21;20 | $h_0[b_{02}^2]^3[h_0(1)b_{13}][b_{13}^2]$                       | $d_4^{-1} = [b_{02}^2]^3[h_0(1)^2][b_{03}^2]$                                      |
| 1717 | 61,22;14 | $h_0^{13}[b_{03}^2][h_2b_{24}b_{03} + h_2^3b_{04}]$             | $d_4^{-1} = h_0^8[b_{02}^2][h_0b_{02}b_{03}^2b_{14} + h_0h_0(1)^2b_{03}b_{04}]$    |
| 1718 | 61,22;18 | $h_0^8[b_{02}^2]^2[h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$    | $d_6 = h_0^{15}[b_{02}^2][b_{14}^2]$   |
| 1719 | 61,22;20 | $h_0^2[b_{02}^2]^3[h_0(1)b_{13}][b_{13}^2]$                     | $d_4^{-1} = h_0[b_{02}^2]^3[h_0(1)^2][b_{03}^2]$                                   |
| 1720 | 61,23;14 | $h_0^{14}[b_{03}^2][h_2b_{24}b_{03} + h_2^3b_{04}]$             | $d_4^{-1} = h_0^9[b_{02}^2][h_0b_{02}b_{03}^2b_{14} + h_0h_0(1)^2b_{03}b_{04}]$    |
| 1721 | 61,23;18 | $h_0^9[b_{02}^2]^2[h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$    | $d_6 = h_0^{16}[b_{02}^2][b_{14}^2]$   |
| 1722 | 61,23;24 | $[b_{02}^2]^4[h_2b_{03}][h_0(1)^2]$                             | Permanent cycle  |
| 1723 | 61,24;14 | $h_0^{15}[b_{03}^2][h_2b_{24}b_{03} + h_2^3b_{04}]$             | $d_4^{-1} = h_0^{10}[b_{02}^2][h_0b_{02}b_{03}^2b_{14} + h_0h_0(1)^2b_{03}b_{04}]$ |
| 1724 | 61,24;18 | $h_0^{10}[b_{02}^2]^2[h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$ | $d_6 = h_0^{17}[b_{02}^2][b_{14}^2]$   |
| 1725 | 61,24;24 | $h_0[b_{02}^2]^4[h_2b_{03}][h_0(1)^2]$                          | Permanent cycle  |
| 1726 | 61,25;14 | $h_0^{16}[b_{03}^2][h_2b_{24}b_{03} + h_2^3b_{04}]$             | $d_4^{-1} = h_0^{11}[b_{02}^2][h_0b_{02}b_{03}^2b_{14} + h_0h_0(1)^2b_{03}b_{04}]$ |
| 1727 | 61,25;18 | $h_0^{11}[b_{02}^2]^2[h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$ | $d_6 = h_0^{18}[b_{02}^2][b_{14}^2]$   |
| 1728 | 61,25;24 | $h_0^2[b_{02}^2]^4[h_2b_{03}][h_0(1)^2]$                        | Permanent cycle  |
| 1729 | 61,26;14 | $h_0^{17}[b_{03}^2][h_2b_{24}b_{03} + h_2^3b_{04}]$             | $d_4^{-1} = h_0^{12}[b_{02}^2][h_0b_{02}b_{03}^2b_{14} + h_0h_0(1)^2b_{03}b_{04}]$ |
| 1730 | 61,26;18 | $h_0^{12}[b_{02}^2]^2[h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$ | $d_6 = h_0^{19}[b_{02}^2][b_{14}^2]$   |
| 1731 | 61,27;14 | $h_0^{18}[b_{03}^2][h_2b_{24}b_{03} + h_2^3b_{04}]$             | $d_4^{-1} = h_0^{13}[b_{02}^2][h_0b_{02}b_{03}^2b_{14} + h_0h_0(1)^2b_{03}b_{04}]$ |
| 1732 | 61,27;18 | $h_0^{13}[b_{02}^2]^2[h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$ | $d_6 = h_0^{20}[b_{02}^2][b_{14}^2]$   |
| 1733 | 61,28;14 | $h_0^{19}[b_{03}^2][h_2b_{24}b_{03} + h_2^3b_{04}]$             | $d_4^{-1} = h_0^{14}[b_{02}^2][h_0b_{02}b_{03}^2b_{14} + h_0h_0(1)^2b_{03}b_{04}]$ |
| 1734 | 61,28;18 | $h_0^{14}[b_{02}^2]^2[h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$ | $d_6 = h_0^{21}[b_{02}^2][b_{14}^2]$   |
| 1735 | 61,29;14 | $h_0^{20}[b_{03}^2][h_2b_{24}b_{03} + h_2^3b_{04}]$             | $d_4^{-1} = h_0^{15}[b_{02}^2][h_0b_{02}b_{03}^2b_{14} + h_0h_0(1)^2b_{03}b_{04}]$ |
| 1736 | 61,29;18 | $h_0^{15}[b_{02}^2]^2[h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$ | $d_6 = h_0^{22}[b_{02}^2][b_{14}^2]$   |

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| 1737 | 61,30;14 | $h_0^{21}[b_{03}^2][h_2b_{24}b_{03} + h_2^3b_{04}]$             | $d_4^{-1} = h_0^{16}[b_{02}^2][h_0b_{02}b_{03}^2b_{14} + h_0h_0(1)^2b_{03}b_{04}]$ |
| 1738 | 61,30;18 | $h_0^{16}[b_{02}^2]^2[h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$ | $d_6 = h_0^{23}[b_{02}^2][b_{14}^2]$   |
| 1739 | 61,31;14 | $h_0^{22}[b_{03}^2][h_2b_{24}b_{03} + h_2^3b_{04}]$             | $d_4^{-1} = h_0^{17}[b_{02}^2][h_0b_{02}b_{03}^2b_{14} + h_0h_0(1)^2b_{03}b_{04}]$ |
| 1740 | 61,31;18 | $h_0^{17}[b_{02}^2]^2[h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$ | $d_6 = h_0^{24}[b_{02}^2][b_{14}^2]$   |
| 1741 | 62,2;0   | $h_5^2$   | Permanent cycle  |
| 1742 | 62,3;0   | $h_0h_5^2$  | Permanent cycle  |
| 1743 | 62,4;0   | $h_0^2h_5^2$  | Permanent cycle  |
| 1744 | 62,5;0   | $h_0^3h_5^2$  | Permanent cycle  |
| 1745 | 62,5;6   | $h_1[h_4h_0(1, 2)]$   | Permanent cycle  |
| 1746 | 62,5;8   | $[h_1(1)h_0(1, 2)]$   | Permanent cycle  |
| 1747 | 62,6;0   | $h_0^4h_5^2$  | Permanent cycle  |
| 1748 | 62,6;6   | $h_5[h_2h_1(1)b_{03}]$  | Permanent cycle  |
| 1749 | 62,6;8   | $h_3[b_{03}^2]h_5$  | $d_4^{-1} = h_3[b_{04}^2]$   |
| 1750 | 62,6;12  | $h_2^2[b_{04}^2]$   | $d_4 = h_2^2[b_{03}^2]h_5$   |
| 1751 | 62,7;0   | $h_0^5h_5^2$  | Permanent cycle  |
| 1752 | 62,7;8   | $h_0h_3[b_{03}^2]h_5$   | $d_4^{-1} = h_0h_3[b_{04}^2]$  |
| 1753 | 62,8;0   | $h_0^6h_5^2$  | Permanent cycle  |
| 1754 | 62,8;8   | $h_0^2h_3[b_{03}^2]h_5$   | $d_4^{-1} = h_0^2h_3[b_{04}^2]$  |
| 1755 | 62,8;12  | $[b_{03}^2][h_1(1)b_{24}]$                                      | Permanent cycle  |
| 1756 | 62,8;12  | $h_2[h_2h_1(1)b_{03}b_{04}]$                                    | Permanent cycle  |
| 1757 | 62,9;0   | $h_0^7h_5^2$  | Permanent cycle  |
| 1758 | 62,9;8   | $h_0^3h_3[b_{03}^2]h_5$   | $d_4^{-1} = h_0^3h_3[b_{04}^2]$  |
| 1759 | 62,9;8   | $[h_0(1)^2][h_0(1)b_{13}]h_5$                                   | $d_4^{-1} = x_{45}$  |
| 1760 | 62,10;0  | $h_0^8h_5^2$  | $d_{16}^{-1} = h_4[b_{03}^2]^2$  |
| 1761 | 62,10;8  | $h_0^4h_3[b_{03}^2]h_5$   | $d_4^{-1} = h_0^4h_3[b_{04}^2]$  |
| 1762 | 62,10;8  | $h_0[h_0(1)^2][h_0(1)b_{13}]h_5$                                | $d_4^{-1} = h_0x_{45}$   |
| 1763 | 62,10;12 | $h_1^2[b_{02}^2][b_{14}^2]$                                     | Permanent cycle  |
| 1764 | 62,10;14 | $[h_0(1)b_{13}][h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$       | Permanent cycle  |
| 1765 | 62,10;16 | $h_3^2[b_{03}^2]^2$   | Permanent cycle  |
| 1766 | 62,11;0  | $h_0^9h_5^2$  | $d_{16}^{-1} = h_0h_4[b_{03}^2]^2$   |
| 1767 | 62,11;8  | $h_0^5h_3[b_{03}^2]h_5$   | $d_4^{-1} = h_0^5h_3[b_{04}^2]$  |
| 1768 | 62,11;8  | $h_0^2[h_0(1)^2][h_0(1)b_{13}]h_5$                              | $d_4^{-1} = h_0^2x_{45}$   |
| 1769 | 62,11;14 | $h_0[h_0(1)b_{13}][h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$    | Permanent cycle  |
| 1770 | 62,11;16 | $h_0h_3^2[b_{03}^2]^2$  | Permanent cycle  |
| 1771 | 62,12;0  | $h_0^{10}h_5^2$   | $d_{16}^{-1} = h_0^2h_4[b_{03}^2]^2$   |
| 1772 | 62,12;8  | $h_0^6h_3[b_{03}^2]h_5$   | $d_4^{-1} = h_0^6h_3[b_{04}^2]$  |
| 1773 | 62,12;10 | $h_2^2[b_{13}^2][h_1(1)b_{13}^2 + h_1^2b_{24}b_{03}]$           | $d_4^{-1} = h_2[b_{03}^2][h_1(1)b_{13}^2 + h_1^2b_{24}b_{03}]$                     |
| 1774 | 62,12;12 | $[b_{02}^2]^2[h_2b_{03}]h_5$                                    | Permanent cycle  |
| 1775 | 62,12;14 | $h_0^2[h_0(1)b_{13}][h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$  | Permanent cycle  |
| 1776 | 62,12;16 | $h_0^2h_3^2[b_{03}^2]^2$  | $d_4^{-1} = [h_2b_{03}][b_{03}^2]^2$   |
| 1777 | 62,12;16 | $h_2[h_2b_{03}][b_{13}^2][b_{03}^2]$                            | $d_4 = h_1[b_{13}^2]^3$  |
| 1778 | 62,12;20 | $[h_0(1)^2][b_{03}^2]^2$  | $d_8 = [b_{02}^2]^2[h_0(1)^2]h_5$  |
| 1779 | 62,13;0  | $h_0^{11}h_5^2$   | $d_{16}^{-1} = h_0^3h_4[b_{03}^2]^2$   |
| 1780 | 62,13;8  | $h_0^7h_3[b_{03}^2]h_5$   | $d_4^{-1} = h_0^7h_3[b_{04}^2]$  |
| 1781 | 62,13;12 | $h_0[b_{02}^2]^2[h_2b_{03}]h_5$                                 | Permanent cycle  |
| 1782 | 62,13;16 | $h_0^3h_3^2[b_{03}^2]^2$  | $d_4^{-1} = h_0[h_2b_{03}][b_{03}^2]^2$  |
| 1783 | 62,13;16 | $h_0h_2[h_2b_{03}][b_{13}^2][b_{03}^2]$                         | Permanent cycle  |
| 1784 | 62,13;18 | $[b_{02}^2][h_0b_{02}b_{03}^2b_{14} + h_0h_0(1)^2b_{03}b_{04}]$ | $d_4 = h_0^5[b_{03}^2][h_2b_{24}b_{03} + h_2^3b_{04}]$                             |
| 1785 | 62,13;20 | $h_0[h_0(1)^2][b_{03}^2]^2$                                     | $d_8 = h_0[b_{02}^2]^2[h_0(1)^2]h_5$   |
| 1786 | 62,14;0  | $h_0^{12}h_5^2$   | $d_{16}^{-1} = h_0^4h_4[b_{03}^2]^2$   |
| 1787 | 62,14;8  | $h_0^8h_3[b_{03}^2]h_5$   | $d_4^{-1} = h_0^8h_3[b_{04}^2]$  |

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| 1788 | 62,14;12 | $h_1[b_{02}^2]^2[h_0(1)^2]h_5$                                       | $d_8^{-1} = h_1[h_0(1)^2][b_{03}^2]^2$                       |
| 1789 | 62,14;12 | $h_0^2[b_{02}^2]^2[h_2b_{03}]h_5$                                    | Permanent cycle  |
| 1790 | 62,14;16 | $h_0^4h_3^2[b_{03}^2]^2$   | $d_4^{-1} = h_0^2[h_2b_{03}][b_{03}^2]^2$                    |
| 1791 | 62,14;18 | $h_0[b_{02}^2][h_0b_{02}b_{03}^2b_{14} + h_0h_0(1)^2b_{03}b_{04}]$   | $d_4 = h_0^6[b_{03}^2][h_2b_{24}b_{03} + h_2^3b_{04}]$       |
| 1792 | 62,14;20 | $h_0^2[h_0(1)^2][b_{03}^2]^2$  | $d_8 = h_0^2[b_{02}^2]^2[h_0(1)^2]h_5$                       |
| 1793 | 62,15;0  | $h_0^{13}h_5^2$  | $d_{16}^{-1} = h_0^5h_4[b_{03}^2]^2$                         |
| 1794 | 62,15;8  | $h_0^9h_3[b_{03}^2]h_5$  | $d_4^{-1} = h_0^9h_3[b_{04}^2]$                              |
| 1795 | 62,15;12 | $h_0^3[b_{02}^2]^2[h_2b_{03}]h_5$                                    | Permanent cycle  |
| 1796 | 62,15;16 | $h_0^5h_3^2[b_{03}^2]^2$   | $d_4^{-1} = h_0^3[h_2b_{03}][b_{03}^2]^2$                    |
| 1797 | 62,15;18 | $h_1[b_{02}^2]^2[h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$           | Permanent cycle  |
| 1798 | 62,15;18 | $h_0^2[b_{02}^2][h_0b_{02}b_{03}^2b_{14} + h_0h_0(1)^2b_{03}b_{04}]$ | $d_4 = h_0^7[b_{03}^2][h_2b_{24}b_{03} + h_2^3b_{04}]$       |
| 1799 | 62,16;0  | $h_0^{14}h_5^2$  | $d_{16}^{-1} = h_0^6h_4[b_{03}^2]^2$                         |
| 1800 | 62,16;8  | $h_0^{10}h_3[b_{03}^2]h_5$   | $d_4^{-1} = h_0^{10}h_3[b_{04}^2]$                           |
| 1801 | 62,16;12 | $h_0^4[b_{02}^2]^2[h_2b_{03}]h_5$                                    | Permanent cycle  |
| 1802 | 62,16;16 | $h_0^6h_3^2[b_{03}^2]^2$   | $d_4^{-1} = h_0^4[h_2b_{03}][b_{03}^2]^2$                    |
| 1803 | 62,16;16 | $[b_{02}^2][h_0(1)^2][b_{13}^2]^2$                                   | Permanent cycle  |
| 1804 | 62,16;18 | $h_0^3[b_{02}^2][h_0b_{02}b_{03}^2b_{14} + h_0h_0(1)^2b_{03}b_{04}]$ | $d_4 = h_0^8[b_{03}^2][h_2b_{24}b_{03} + h_2^3b_{04}]$       |
| 1805 | 62,17;0  | $h_0^{15}h_5^2$  | $d_{16}^{-1} = h_0^7h_4[b_{03}^2]^2$                         |
| 1806 | 62,17;8  | $h_0^{11}h_3[b_{03}^2]h_5$   | $d_4^{-1} = h_0^{11}h_3[b_{04}^2]$                           |
| 1807 | 62,17;12 | $h_0^5[b_{02}^2]^2[h_2b_{03}]h_5$                                    | Permanent cycle  |
| 1808 | 62,17;16 | $h_0^7h_3^2[b_{03}^2]^2$   | $d_4^{-1} = h_0^5[h_2b_{03}][b_{03}^2]^2$                    |
| 1809 | 62,17;16 | $h_0[b_{02}^2][h_0(1)^2][b_{13}^2]^2$                                | $d_4^{-1} = [b_{02}^2][h_0(1)^2][h_0(1)b_{13}][b_{03}^2]$    |
| 1810 | 62,17;18 | $h_0^4[b_{02}^2][h_0b_{02}b_{03}^2b_{14} + h_0h_0(1)^2b_{03}b_{04}]$ | $d_4 = h_0^9[b_{03}^2][h_2b_{24}b_{03} + h_2^3b_{04}]$       |
| 1811 | 62,18;0  | $h_0^{16}h_5^2$  | $d_{16}^{-1} = h_0^8h_4[b_{03}^2]^2$                         |
| 1812 | 62,18;8  | $h_0^{12}h_3[b_{03}^2]h_5$   | $d_4^{-1} = h_0^{12}h_3[b_{04}^2]$                           |
| 1813 | 62,18;12 | $h_0^6[b_{02}^2]^2[h_2b_{03}]h_5$                                    | Permanent cycle  |
| 1814 | 62,18;16 | $h_0^8h_3^2[b_{03}^2]^2$   | $d_4^{-1} = h_0^6[h_2b_{03}][b_{03}^2]^2$                    |
| 1815 | 62,18;16 | $h_0^2[b_{02}^2][h_0(1)^2][b_{13}^2]^2$                              | $d_4^{-1} = h_0[b_{02}^2][h_0(1)^2][h_0(1)b_{13}][b_{03}^2]$ |
| 1816 | 62,18;16 | $[b_{02}^2]^4h_4^2$  | $d_4^{-1} = [b_{02}^2]^3h_4[b_{03}^2]$                       |
| 1817 | 62,18;18 | $h_0^5[b_{02}^2][h_0b_{02}b_{03}^2b_{14} + h_0h_0(1)^2b_{03}b_{04}]$ | $d_4 = h_0^{10}[b_{03}^2][h_2b_{24}b_{03} + h_2^3b_{04}]$    |
| 1818 | 62,19;0  | $h_0^{17}h_5^2$  | $d_{16}^{-1} = h_0^9h_4[b_{03}^2]^2$                         |
| 1819 | 62,19;8  | $h_0^{13}h_3[b_{03}^2]h_5$   | $d_4^{-1} = h_0^{13}h_3[b_{04}^2]$                           |
| 1820 | 62,19;12 | $h_0^7[b_{02}^2]^2[h_2b_{03}]h_5$                                    | Permanent cycle  |
| 1821 | 62,19;16 | $h_0^9h_3^2[b_{03}^2]^2$   | $d_4^{-1} = h_0^7[h_2b_{03}][b_{03}^2]^2$                    |
| 1822 | 62,19;16 | $h_0[b_{02}^2]^4h_4^2$   | $d_4^{-1} = h_0[b_{02}^2]^3h_4[b_{03}^2]$                    |
| 1823 | 62,19;18 | $h_0^6[b_{02}^2][h_0b_{02}b_{03}^2b_{14} + h_0h_0(1)^2b_{03}b_{04}]$ | $d_4 = h_0^{11}[b_{03}^2][h_2b_{24}b_{03} + h_2^3b_{04}]$    |
| 1824 | 62,19;20 | $[b_{02}^2]^2[h_2b_{03}][h_0(1)^2][h_0(1)b_{13}]$                    | Permanent cycle  |
| 1825 | 62,20;0  | $h_0^{18}h_5^2$  | $d_{16}^{-1} = h_0^{10}h_4[b_{03}^2]^2$                      |
| 1826 | 62,20;8  | $h_0^{14}h_3[b_{03}^2]h_5$   | $d_4^{-1} = h_0^{14}h_3[b_{04}^2]$                           |
| 1827 | 62,20;12 | $h_0^8[b_{02}^2]^2[h_2b_{03}]h_5$                                    | Permanent cycle  |
| 1828 | 62,20;16 | $h_0^{10}h_3^2[b_{03}^2]^2$  | $d_4^{-1} = h_0^8[h_2b_{03}][b_{03}^2]^2$                    |
| 1829 | 62,20;16 | $h_0^2[b_{02}^2]^4h_4^2$   | $d_4^{-1} = h_0^2[b_{02}^2]^3h_4[b_{03}^2]$                  |
| 1830 | 62,20;18 | $h_0^7[b_{02}^2][h_0b_{02}b_{03}^2b_{14} + h_0h_0(1)^2b_{03}b_{04}]$ | $d_4 = h_0^{12}[b_{03}^2][h_2b_{24}b_{03} + h_2^3b_{04}]$    |
| 1831 | 62,20;20 | $h_0[b_{02}^2]^2[h_2b_{03}][h_0(1)^2][h_0(1)b_{13}]$                 | $d_4^{-1} = [b_{02}^2]^3[h_2b_{03}][b_{03}^2]$               |
| 1832 | 62,20;24 | $[b_{02}^2]^3[h_0(1)^2][b_{03}^2]$                                   | $d_4 = h_0[b_{02}^2]^3[h_0(1)b_{13}][b_{13}^2]$              |
| 1833 | 62,21;0  | $h_0^{19}h_5^2$  | $d_{16}^{-1} = h_0^{11}h_4[b_{03}^2]^2$                      |
| 1834 | 62,21;8  | $h_0^{15}h_3[b_{03}^2]h_5$   | $d_4^{-1} = h_0^{15}h_3[b_{04}^2]$                           |
| 1835 | 62,21;12 | $h_0^9[b_{02}^2]^2[h_2b_{03}]h_5$                                    | Permanent cycle  |
| 1836 | 62,21;16 | $h_0^{11}h_3^2[b_{03}^2]^2$  | $d_4^{-1} = h_0^9[h_2b_{03}][b_{03}^2]^2$                    |
| 1837 | 62,21;16 | $h_0^3[b_{02}^2]^4h_4^2$   | $d_4^{-1} = h_0^3[b_{02}^2]^3h_4[b_{03}^2]$                  |
| 1838 | 62,21;18 | $h_0^8[b_{02}^2][h_0b_{02}b_{03}^2b_{14} + h_0h_0(1)^2b_{03}b_{04}]$ | $d_4 = h_0^{13}[b_{03}^2][h_2b_{24}b_{03} + h_2^3b_{04}]$    |
| 1839 | 62,21;20 | $h_0^2[b_{02}^2]^2[h_2b_{03}][h_0(1)^2][h_0(1)b_{13}]$               | $d_4^{-1} = h_0[b_{02}^2]^3[h_2b_{03}][b_{03}^2]$            |
| 1840 | 62,21;24 | $h_0[b_{02}^2]^3[h_0(1)^2][b_{03}^2]$                                | $d_4 = h_0^2[b_{02}^2]^3[h_0(1)b_{13}][b_{13}^2]$            |

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| 1841 | 62,22;0  | $h_0^{20}h_5^2$   | $d_{16}^{-1} = h_0^{12}h_4[b_{03}^2]^2$                   |
| 1842 | 62,22;8  | $h_0^{16}h_3[b_{03}^2]h_5$  | $d_4^{-1} = h_0^{16}h_3[b_{04}^2]$                        |
| 1843 | 62,22;12 | $h_0^{10}[b_{02}^2]^2[h_2b_{03}]h_5$                                    | $d_{12}^{-1} = h_0^2[b_{02}^2]^3[h_2b_{03}][b_{03}^2]$    |
| 1844 | 62,22;16 | $h_0^{12}h_3^2[b_{03}^2]^2$   | $d_4^{-1} = h_0^{10}[h_2b_{03}][b_{03}^2]^2$              |
| 1845 | 62,22;16 | $h_0^4[b_{02}^2]^4h_4^2$  | $d_4^{-1} = h_0^4[b_{02}^2]^3h_4[b_{03}^2]$               |
| 1846 | 62,22;18 | $h_0^9[b_{02}^2][h_0b_{02}b_{03}^2b_{14} + h_0h_0(1)^2b_{03}b_{04}]$    | $d_4 = h_0^{14}[b_{03}^2][h_2b_{24}b_{03} + h_2^3b_{04}]$ |
| 1847 | 62,22;24 | $h_0^2[b_{02}^2]^3[h_0(1)^2][b_{03}^2]$                                 | Permanent cycle   |
| 1848 | 62,23;0  | $h_0^{21}h_5^2$   | $d_{16}^{-1} = h_0^{13}h_4[b_{03}^2]^2$                   |
| 1849 | 62,23;8  | $h_0^{17}h_3[b_{03}^2]h_5$  | $d_4^{-1} = h_0^{17}h_3[b_{04}^2]$                        |
| 1850 | 62,23;12 | $h_0^{11}[b_{02}^2]^2[h_2b_{03}]h_5$                                    | $d_{12}^{-1} = h_0^3[b_{02}^2]^3[h_2b_{03}][b_{03}^2]$    |
| 1851 | 62,23;16 | $h_0^{13}h_3^2[b_{03}^2]^2$   | $d_4^{-1} = h_0^{11}[h_2b_{03}][b_{03}^2]^2$              |
| 1852 | 62,23;16 | $h_0^5[b_{02}^2]^4h_4^2$  | $d_4^{-1} = h_0^5[b_{02}^2]^3h_4[b_{03}^2]$               |
| 1853 | 62,23;18 | $h_0^{10}[b_{02}^2][h_0b_{02}b_{03}^2b_{14} + h_0h_0(1)^2b_{03}b_{04}]$ | $d_4 = h_0^{15}[b_{03}^2][h_2b_{24}b_{03} + h_2^3b_{04}]$ |
| 1854 | 62,23;22 | $[b_{02}^2]^4[h_4h_0(1)b_{02}^2 + h_0^3b_{02}b_{14}]$                   | Permanent cycle   |
| 1855 | 62,24;0  | $h_0^{22}h_5^2$   | $d_{16}^{-1} = h_0^{14}h_4[b_{03}^2]^2$                   |
| 1856 | 62,24;8  | $h_0^{18}h_3[b_{03}^2]h_5$  | $d_4^{-1} = h_0^{18}h_3[b_{04}^2]$                        |
| 1857 | 62,24;12 | $h_0^{12}[b_{02}^2]^2[h_2b_{03}]h_5$                                    | $d_{12}^{-1} = h_0^4[b_{02}^2]^3[h_2b_{03}][b_{03}^2]$    |
| 1858 | 62,24;16 | $h_0^{14}h_3^2[b_{03}^2]^2$   | $d_4^{-1} = h_0^{12}[h_2b_{03}][b_{03}^2]^2$              |
| 1859 | 62,24;16 | $h_0^6[b_{02}^2]^4h_4^2$  | $d_4^{-1} = h_0^6[b_{02}^2]^3h_4[b_{03}^2]$               |
| 1860 | 62,24;18 | $h_0^{11}[b_{02}^2][h_0b_{02}b_{03}^2b_{14} + h_0h_0(1)^2b_{03}b_{04}]$ | $d_4 = h_0^{16}[b_{03}^2][h_2b_{24}b_{03} + h_2^3b_{04}]$ |
| 1861 | 62,24;22 | $h_0[b_{02}^2]^4[h_4h_0(1)b_{02}^2 + h_0^3b_{02}b_{14}]$                | Permanent cycle   |
| 1862 | 62,25;0  | $h_0^{23}h_5^2$   | $d_{16}^{-1} = h_0^{15}h_4[b_{03}^2]^2$                   |
| 1863 | 62,25;8  | $h_0^{19}h_3[b_{03}^2]h_5$  | $d_4^{-1} = h_0^{19}h_3[b_{04}^2]$                        |
| 1864 | 62,25;12 | $h_0^{13}[b_{02}^2]^2[h_2b_{03}]h_5$                                    | $d_{12}^{-1} = h_0^5[b_{02}^2]^3[h_2b_{03}][b_{03}^2]$    |
| 1865 | 62,25;16 | $h_0^{15}h_3^2[b_{03}^2]^2$   | $d_4^{-1} = h_0^{13}[h_2b_{03}][b_{03}^2]^2$              |
| 1866 | 62,25;16 | $h_0^7[b_{02}^2]^4h_4^2$  | $d_4^{-1} = h_0^7[b_{02}^2]^3h_4[b_{03}^2]$               |
| 1867 | 62,25;18 | $h_0^{12}[b_{02}^2][h_0b_{02}b_{03}^2b_{14} + h_0h_0(1)^2b_{03}b_{04}]$ | $d_4 = h_0^{17}[b_{03}^2][h_2b_{24}b_{03} + h_2^3b_{04}]$ |
| 1868 | 62,25;22 | $h_0^2[b_{02}^2]^4[h_4h_0(1)b_{02}^2 + h_0^3b_{02}b_{14}]$              | Permanent cycle   |
| 1869 | 62,26;0  | $h_0^{24}h_5^2$   | $d_{16}^{-1} = h_0^{16}h_4[b_{03}^2]^2$                   |
| 1870 | 62,26;8  | $h_0^{20}h_3[b_{03}^2]h_5$  | $d_4^{-1} = h_0^{20}h_3[b_{04}^2]$                        |
| 1871 | 62,26;12 | $h_0^{14}[b_{02}^2]^2[h_2b_{03}]h_5$                                    | $d_{12}^{-1} = h_0^6[b_{02}^2]^3[h_2b_{03}][b_{03}^2]$    |
| 1872 | 62,26;16 | $h_0^{16}h_3^2[b_{03}^2]^2$   | $d_4^{-1} = h_0^{14}[h_2b_{03}][b_{03}^2]^2$              |
| 1873 | 62,26;16 | $h_0^8[b_{02}^2]^4h_4^2$  | $d_4^{-1} = h_0^8[b_{02}^2]^3h_4[b_{03}^2]$               |
| 1874 | 62,26;18 | $h_0^{13}[b_{02}^2][h_0b_{02}b_{03}^2b_{14} + h_0h_0(1)^2b_{03}b_{04}]$ | $d_4 = h_0^{18}[b_{03}^2][h_2b_{24}b_{03} + h_2^3b_{04}]$ |
| 1875 | 62,26;22 | $h_0^3[b_{02}^2]^4[h_4h_0(1)b_{02}^2 + h_0^3b_{02}b_{14}]$              | Permanent cycle   |
| 1876 | 62,27;0  | $h_0^{25}h_5^2$   | $d_{16}^{-1} = h_0^{17}h_4[b_{03}^2]^2$                   |
| 1877 | 62,27;8  | $h_0^{21}h_3[b_{03}^2]h_5$  | $d_4^{-1} = h_0^{21}h_3[b_{04}^2]$                        |
| 1878 | 62,27;12 | $h_0^{15}[b_{02}^2]^2[h_2b_{03}]h_5$                                    | $d_{12}^{-1} = h_0^7[b_{02}^2]^3[h_2b_{03}][b_{03}^2]$    |
| 1879 | 62,27;16 | $h_0^{17}h_3^2[b_{03}^2]^2$   | $d_4^{-1} = h_0^{15}[h_2b_{03}][b_{03}^2]^2$              |
| 1880 | 62,27;16 | $h_0^9[b_{02}^2]^4h_4^2$  | $d_4^{-1} = h_0^9[b_{02}^2]^3h_4[b_{03}^2]$               |
| 1881 | 62,27;18 | $h_0^{14}[b_{02}^2][h_0b_{02}b_{03}^2b_{14} + h_0h_0(1)^2b_{03}b_{04}]$ | $d_4 = h_0^{19}[b_{03}^2][h_2b_{24}b_{03} + h_2^3b_{04}]$ |
| 1882 | 62,27;22 | $h_0^4[b_{02}^2]^4[h_4h_0(1)b_{02}^2 + h_0^3b_{02}b_{14}]$              | Permanent cycle   |
| 1883 | 62,28;0  | $h_0^{26}h_5^2$   | $d_{16}^{-1} = h_0^{18}h_4[b_{03}^2]^2$                   |
| 1884 | 62,28;8  | $h_0^{22}h_3[b_{03}^2]h_5$  | $d_4^{-1} = h_0^{22}h_3[b_{04}^2]$                        |
| 1885 | 62,28;12 | $h_0^{16}[b_{02}^2]^2[h_2b_{03}]h_5$                                    | $d_{12}^{-1} = h_0^8[b_{02}^2]^3[h_2b_{03}][b_{03}^2]$    |
| 1886 | 62,28;16 | $h_0^{18}h_3^2[b_{03}^2]^2$   | $d_4^{-1} = h_0^{16}[h_2b_{03}][b_{03}^2]^2$              |
| 1887 | 62,28;16 | $h_0^{10}[b_{02}^2]^4h_4^2$   | $d_4^{-1} = h_0^{10}[b_{02}^2]^3h_4[b_{03}^2]$            |
| 1888 | 62,28;18 | $h_0^{15}[b_{02}^2][h_0b_{02}b_{03}^2b_{14} + h_0h_0(1)^2b_{03}b_{04}]$ | $d_4 = h_0^{20}[b_{03}^2][h_2b_{24}b_{03} + h_2^3b_{04}]$ |
| 1889 | 62,28;22 | $h_0^5[b_{02}^2]^4[h_4h_0(1)b_{02}^2 + h_0^3b_{02}b_{14}]$              | $d_6^{-1} = [b_{02}^2]^6[h_2b_{03}]$                      |
| 1890 | 62,28;28 | $[b_{02}^2]^6[h_0(1)^2]$  | Permanent cycle   |
| 1891 | 62,29;0  | $h_0^{27}h_5^2$   | $d_{16}^{-1} = h_0^{19}h_4[b_{03}^2]^2$                   |
| 1892 | 62,29;8  | $h_0^{23}h_3[b_{03}^2]h_5$  | $d_4^{-1} = h_0^{23}h_3[b_{04}^2]$                        |
| 1893 | 62,29;12 | $h_0^{17}[b_{02}^2]^2[h_2b_{03}]h_5$                                    | $d_{12}^{-1} = h_0^9[b_{02}^2]^3[h_2b_{03}][b_{03}^2]$    |

|      |          |   |   |
|------|----------|---|---|
| 1894 | 62,29;16 | $h_0^{19}h_3^2[b_{03}^2]^2$   | $d_4^{-1} = h_0^{17}[h_2b_{03}][b_{03}^2]^2$              |
| 1895 | 62,29;16 | $h_0^{11}[b_{02}^2]^4h_4^2$   | $d_4^{-1} = h_0^{11}[b_{02}^2]^3h_4[b_{03}^2]$            |
| 1896 | 62,29;18 | $h_0^{16}[b_{02}^2][h_0b_{02}b_{03}^2b_{14} + h_0h_0(1)^2b_{03}b_{04}]$ | $d_4 = h_0^{21}[b_{03}^2][h_2b_{24}b_{03} + h_2^3b_{04}]$ |
| 1897 | 62,29;22 | $h_0^6[b_{02}^2]^4[h_4h_0(1)b_{02}^2 + h_0^3b_{02}b_{14}]$              | $d_6^{-1} = h_0[b_{02}^2]^6[h_2b_{03}]$                   |
| 1898 | 62,29;28 | $h_0[b_{02}^2]^6[h_0(1)^2]$   | Permanent cycle   |
| 1899 | 62,30;0  | $h_0^{28}h_5^2$   | $d_{16}^{-1} = h_0^{20}h_4[b_{03}^2]^2$                   |
| 1900 | 62,30;8  | $h_0^{24}h_3[b_{03}^2]h_5$  | $d_4^{-1} = h_0^{24}h_3[b_{04}^2]$                        |
| 1901 | 62,30;12 | $h_0^{18}[b_{02}^2]^2[h_2b_{03}]h_5$                                    | $d_{12}^{-1} = h_0^{10}[b_{02}^2]^3[h_2b_{03}][b_{03}^2]$ |
| 1902 | 62,30;16 | $h_0^{20}h_3^2[b_{03}^2]^2$   | $d_4^{-1} = h_0^{18}[h_2b_{03}][b_{03}^2]^2$              |
| 1903 | 62,30;16 | $h_0^{12}[b_{02}^2]^4h_4^2$   | $d_4^{-1} = h_0^{12}[b_{02}^2]^3h_4[b_{03}^2]$            |
| 1904 | 62,30;18 | $h_0^{17}[b_{02}^2][h_0b_{02}b_{03}^2b_{14} + h_0h_0(1)^2b_{03}b_{04}]$ | $d_4 = h_0^{22}[b_{03}^2][h_2b_{24}b_{03} + h_2^3b_{04}]$ |
| 1905 | 62,30;22 | $h_0^7[b_{02}^2]^4[h_4h_0(1)b_{02}^2 + h_0^3b_{02}b_{14}]$              | $d_6^{-1} = h_0[b_{02}^2]^6[h_2b_{03}]$                   |
| 1906 | 62,30;28 | $h_0^2[b_{02}^2]^6[h_0(1)^2]$   | Permanent cycle   |
| 1907 | 62,31;0  | $h_0^{29}h_5^2$   | $d_{16}^{-1} = h_0^{21}h_4[b_{03}^2]^2$                   |
| 1908 | 62,31;8  | $h_0^{25}h_3[b_{03}^2]h_5$  | $d_4^{-1} = h_0^{25}h_3[b_{04}^2]$                        |
| 1909 | 62,31;12 | $h_0^{19}[b_{02}^2]^2[h_2b_{03}]h_5$                                    | $d_{12}^{-1} = h_0^{11}[b_{02}^2]^3[h_2b_{03}][b_{03}^2]$ |
| 1910 | 62,31;16 | $h_0^{21}h_3^2[b_{03}^2]^2$   | $d_4^{-1} = h_0^{19}[h_2b_{03}][b_{03}^2]^2$              |
| 1911 | 62,31;16 | $h_0^{13}[b_{02}^2]^4h_4^2$   | $d_4^{-1} = h_0^{13}[b_{02}^2]^3h_4[b_{03}^2]$            |
| 1912 | 62,31;18 | $h_0^{18}[b_{02}^2][h_0b_{02}b_{03}^2b_{14} + h_0h_0(1)^2b_{03}b_{04}]$ | $d_4 = h_0^{23}[b_{03}^2][h_2b_{24}b_{03} + h_2^3b_{04}]$ |
| 1913 | 62,31;22 | $h_0^8[b_{02}^2]^4[h_4h_0(1)b_{02}^2 + h_0^3b_{02}b_{14}]$              | $d_6^{-1} = h_0[b_{02}^2]^6[h_2b_{03}]$                   |
| 1914 | 62,32;0  | $h_0^{30}h_5^2$   | $d_{16}^{-1} = h_0^{22}h_4[b_{03}^2]^2$                   |
| 1915 | 62,32;8  | $h_0^{26}h_3[b_{03}^2]h_5$  | $d_4^{-1} = h_0^{26}h_3[b_{04}^2]$                        |
| 1916 | 62,32;12 | $h_0^{20}[b_{02}^2]^2[h_2b_{03}]h_5$                                    | $d_{12}^{-1} = h_0^{12}[b_{02}^2]^3[h_2b_{03}][b_{03}^2]$ |
| 1917 | 62,32;16 | $h_0^{22}h_3^2[b_{03}^2]^2$   | $d_4^{-1} = h_0^{20}[h_2b_{03}][b_{03}^2]^2$              |
| 1918 | 62,32;16 | $h_0^{14}[b_{02}^2]^4h_4^2$   | $d_4^{-1} = h_0^{14}[b_{02}^2]^3h_4[b_{03}^2]$            |
| 1919 | 62,32;18 | $h_0^{19}[b_{02}^2][h_0b_{02}b_{03}^2b_{14} + h_0h_0(1)^2b_{03}b_{04}]$ | $d_4 = h_0^{24}[b_{03}^2][h_2b_{24}b_{03} + h_2^3b_{04}]$ |
| 1920 | 62,32;22 | $h_0^9[b_{02}^2]^4[h_4h_0(1)b_{02}^2 + h_0^3b_{02}b_{14}]$              | $d_6^{-1} = h_0^4[b_{02}^2]^6[h_2b_{03}]$                 |
| 1921 | 63,1;0   | $h_6$   | Permanent cycle   |
| 1922 | 63,2;0   | $h_0h_6$  | Permanent cycle   |
| 1923 | 63,3;0   | $h_1h_5^2$  | Permanent cycle   |
| 1924 | 63,3;0   | $h_0^2h_6$  | Permanent cycle   |
| 1925 | 63,4;0   | $h_0^3h_6$  | Permanent cycle   |
| 1926 | 63,5;0   | $h_0^4h_6$  | Permanent cycle   |
| 1927 | 63,5;12  | $h_3[b_{04}^2]$   | $d_4 = h_3[b_{03}^2]h_5$                                  |
| 1928 | 63,6;0   | $h_0^5h_6$  | Permanent cycle   |
| 1929 | 63,6;8   | $h_1[h_1(1)h_0(1,2)]$   | Permanent cycle   |
| 1930 | 63,6;12  | $h_0h_3[b_{04}^2]$  | $d_4 = h_0h_3[b_{03}^2]h_5$                               |
| 1931 | 63,7;0   | $h_0^6h_6$  | Permanent cycle   |
| 1932 | 63,7;8   | $h_1h_3[b_{03}^2]h_5$   | $d_4^{-1} = h_1h_3[b_{04}^2]$                             |
| 1933 | 63,7;10  | $[h_2h_1(1)^2b_{04}]$   | Permanent cycle   |
| 1934 | 63,7;10  | $[h_1b_{13}b_{14}^2 + h_1^2h_3b_{14}b_{04}]$                            | Permanent cycle   |
| 1935 | 63,7;12  | $h_0^2h_3[b_{04}^2]$  | $d_4 = h_0^2h_3[b_{03}^2]h_5$                             |
| 1936 | 63,8;0   | $h_0^7h_6$  | Permanent cycle   |
| 1937 | 63,8;8   | $[h_2b_{03}][h_0(1)b_{13}]h_5$  | Permanent cycle   |
| 1938 | 63,8;10  | $[h_1h_0(1)][b_{03}^2]h_5$  | $d_4^{-1} = [h_1h_0(1)][b_{04}^2]$                        |
| 1939 | 63,8;12  | $h_0^3h_3[b_{04}^2]$  | $d_4 = h_0^3h_3[b_{03}^2]h_5$                             |
| 1940 | 63,8;12  | $x_{45}$  | $d_4 = [h_0(1)^2][h_0(1)b_{13}]h_5$                       |
| 1941 | 63,9;0   | $h_0^8h_6$  | Permanent cycle   |
| 1942 | 63,9;8   | $h_0[h_2b_{03}][h_0(1)b_{13}]h_5$                                       | Permanent cycle   |
| 1943 | 63,9;12  | $[b_{02}^2][b_{03}^2]h_5 + h_0x_{45} + h_0^4h_3[b_{04}^2]$              | $d_4^{-1} = [b_{02}^2][b_{04}^2]$                         |
| 1944 | 63,9;12  | $h_1[b_{03}^2][h_1(1)b_{24}]$   | Permanent cycle   |
| 1945 | 63,9;12  | $h_0^4h_3[b_{04}^2]$  | $d_4 = h_0^4h_3[b_{03}^2]h_5$                             |
| 1946 | 63,9;12  | $h_0x_{45}$   | $d_4 = h_0[h_0(1)^2][h_0(1)b_{13}]h_5$                    |

|      |          |   |  |
|------|----------|---|--|
| 1947 | 63,9;16  | $h_4[b_{03}^2]^2$   | $d_{16} = h_0^8 h_5^2$   |
| 1948 | 63,10;0  | $h_0^9 h_6$   | Permanent cycle  |
| 1949 | 63,10;8  | $h_0^2[h_2 b_{03}][h_0(1)b_{13}]h_5$                                | $d_4^{-1} = h_1 x_{45}$  |
| 1950 | 63,10;12 | $h_0[b_{02}^2][b_{03}^2]h_5 + h_0^2 x_{45} + h_0^5 h_3[b_{04}^2]$   | $d_4^{-1} = h_0[b_{02}^2][b_{04}^2]$                           |
| 1951 | 63,10;12 | $h_0^5 h_3[b_{04}^2]$   | $d_4 = h_0^5 h_3[b_{03}^2]h_5$                                 |
| 1952 | 63,10;12 | $h_0^2 x_{45}$  | $d_4 = h_0^2[h_0(1)^2][h_0(1)b_{13}]h_5$                       |
| 1953 | 63,10;14 | $h_2[h_2 b_{03}][h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$          | Permanent cycle  |
| 1954 | 63,10;16 | $h_0 h_4[b_{03}^2]^2$   | $d_{16} = h_0^9 h_5^2$   |
| 1955 | 63,11;0  | $h_0^{10} h_6$  | Permanent cycle  |
| 1956 | 63,11;12 | $h_0^2[b_{02}^2][b_{03}^2]h_5 + h_0^3 x_{45} + h_0^6 h_3[b_{04}^2]$ | $d_4^{-1} = h_0^2[b_{02}^2][b_{04}^2]$                         |
| 1957 | 63,11;12 | $h_0^3 x_{45}$  | Permanent cycle  |
| 1958 | 63,11;12 | $h_0^6 h_3[b_{04}^2]$   | $d_4 = h_0^6 h_3[b_{03}^2]h_5$                                 |
| 1959 | 63,11;14 | $h_0 h_2[h_2 b_{03}][h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$      | Permanent cycle  |
| 1960 | 63,11;14 | $h_2[b_{03}^2][h_1(1)b_{13}^2 + h_1^2 b_{24}b_{03}]$                | $d_4 = h_2^2[b_{13}^2][h_1(1)b_{13}^2 + h_1^2 b_{24}b_{03}]$   |
| 1961 | 63,11;16 | $h_0^2 h_4[b_{03}^2]^2$   | $d_{16} = h_0^{10} h_5^2$                                      |
| 1962 | 63,11;20 | $[h_2 b_{03}][b_{03}^2]^2$  | $d_4 = h_0^2 h_3^2[b_{03}^2]^2$                                |
| 1963 | 63,12;0  | $h_0^{11} h_6$  | Permanent cycle  |
| 1964 | 63,12;12 | $h_0^3[b_{02}^2][b_{03}^2]h_5 + h_0^7 h_3[b_{04}^2]$                | $d_4^{-1} = h_0^3[b_{02}^2][b_{04}^2]$                         |
| 1965 | 63,12;12 | $h_0^7 h_3[b_{04}^2]$   | $d_4 = h_0^7 h_3[b_{03}^2]h_5$                                 |
| 1966 | 63,12;16 | $h_0^3 h_4[b_{03}^2]^2$   | $d_{16} = h_0^{11} h_5^2$                                      |
| 1967 | 63,12;20 | $h_0[h_2 b_{03}][b_{03}^2]^2$                                       | $d_4 = h_0^3 h_3^2[b_{03}^2]^2$                                |
| 1968 | 63,13;0  | $h_0^{12} h_6$  | Permanent cycle  |
| 1969 | 63,13;12 | $h_0^4[b_{02}^2][b_{03}^2]h_5 + h_0^8 h_3[b_{04}^2]$                | $d_4^{-1} = h_0^4[b_{02}^2][b_{04}^2]$                         |
| 1970 | 63,13;12 | $h_2[b_{13}^2]^3$   | $d_4^{-1} = [b_{13}^2]^2[b_{03}^2]$                            |
| 1971 | 63,13;12 | $h_0^8 h_3[b_{04}^2]$   | $d_4 = h_0^8 h_3[b_{03}^2]h_5$                                 |
| 1972 | 63,13;16 | $h_0^4 h_4[b_{03}^2]^2$   | $d_{16} = h_0^{12} h_5^2$                                      |
| 1973 | 63,13;20 | $h_1[h_0(1)^2][b_{03}^2]^2$   | $d_8 = h_1[b_{02}^2]^2[h_0(1)^2]h_5$                           |
| 1974 | 63,13;20 | $h_0^2[h_2 b_{03}][b_{03}^2]^2$                                     | $d_4 = h_0^4 h_3^2[b_{03}^2]^2$                                |
| 1975 | 63,14;0  | $h_0^{13} h_6$  | Permanent cycle  |
| 1976 | 63,14;12 | $h_0^5[b_{02}^2][b_{03}^2]h_5 + h_0^9 h_3[b_{04}^2]$                | $d_4^{-1} = h_0^5[b_{02}^2][b_{04}^2]$                         |
| 1977 | 63,14;12 | $h_0 h_2[b_{13}^2]^3$   | $d_4^{-1} = h_0[b_{13}^2]^2[b_{03}^2]$                         |
| 1978 | 63,14;12 | $h_0^9 h_3[b_{04}^2]$   | $d_4 = h_0^9 h_3[b_{03}^2]h_5$                                 |
| 1979 | 63,14;16 | $h_0^5 h_4[b_{03}^2]^2$   | $d_{16} = h_0^{13} h_5^2$                                      |
| 1980 | 63,14;20 | $h_0^3[h_2 b_{03}][b_{03}^2]^2$                                     | $d_4 = h_0^5 h_3^2[b_{03}^2]^2$                                |
| 1981 | 63,15;0  | $h_0^{14} h_6$  | Permanent cycle  |
| 1982 | 63,15;12 | $h_0^6[b_{02}^2][b_{03}^2]h_5 + h_0^{10} h_3[b_{04}^2]$             | $d_4^{-1} = h_0^6[b_{02}^2][b_{04}^2]$                         |
| 1983 | 63,15;12 | $h_1^2[b_{02}^2]^2[h_0(1)^2]h_5$                                    | $d_6^{-1} = [b_{02}^2]x_{38}$                                  |
| 1984 | 63,15;12 | $h_0^{10} h_3[b_{04}^2]$  | $d_4 = h_0^{10} h_3[b_{03}^2]h_5$                              |
| 1985 | 63,15;16 | $[b_{02}^2][h_2 b_{03}][b_{13}^2]^2$                                | Permanent cycle  |
| 1986 | 63,15;16 | $h_0^6 h_4[b_{03}^2]^2$   | $d_{16} = h_0^{14} h_5^2$                                      |
| 1987 | 63,15;20 | $h_0^4[h_2 b_{03}][b_{03}^2]^2$                                     | $d_4 = h_0^6 h_3^2[b_{03}^2]^2$                                |
| 1988 | 63,16;0  | $h_0^{15} h_6$  | Permanent cycle  |
| 1989 | 63,16;12 | $h_0^7[b_{02}^2][b_{03}^2]h_5 + h_0^{11} h_3[b_{04}^2]$             | $d_4^{-1} = h_0^7[b_{02}^2][b_{04}^2]$                         |
| 1990 | 63,16;12 | $h_0^{11} h_3[b_{04}^2]$  | $d_4 = h_0^{11} h_3[b_{03}^2]h_5$                              |
| 1991 | 63,16;14 | $[h_1 h_0(1)][b_{02}^2]^3 h_5$                                      | $d_8^{-1} = [h_1 h_0(1)][b_{02}^2][b_{03}^2]^2$                |
| 1992 | 63,16;16 | $h_0[b_{02}^2][h_2 b_{03}][b_{13}^2]^2$                             | $d_4^{-1} = [b_{02}^2][h_2 b_{03}][h_0(1)b_{13}][b_{03}^2]$    |
| 1993 | 63,16;16 | $h_0^7 h_4[b_{03}^2]^2$   | $d_{16} = h_0^{15} h_5^2$                                      |
| 1994 | 63,16;18 | $h_1^2[b_{02}^2]^2[h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$        | Permanent cycle  |
| 1995 | 63,16;20 | $h_0^5[h_2 b_{03}][b_{03}^2]^2$                                     | $d_4 = h_0^7 h_3^2[b_{03}^2]^2$                                |
| 1996 | 63,16;20 | $[b_{02}^2][h_0(1)^2][h_0(1)b_{13}][b_{03}^2]$                      | $d_4 = h_0[b_{02}^2][h_0(1)^2][b_{13}^2]^2$                    |
| 1997 | 63,17;0  | $h_0^{16} h_6$  | Permanent cycle  |
| 1998 | 63,17;12 | $h_0^8[b_{02}^2][b_{03}^2]h_5 + h_0^{12} h_3[b_{04}^2]$             | $d_4^{-1} = h_0^8[b_{02}^2][b_{04}^2]$                         |
| 1999 | 63,17;12 | $h_0^{12} h_3[b_{04}^2]$  | $d_4 = h_0^{12} h_3[b_{03}^2]h_5$                              |
| 2000 | 63,17;16 | $h_0^2[b_{02}^2][h_2 b_{03}][b_{13}^2]^2$                           | $d_4^{-1} = h_0[b_{02}^2][h_2 b_{03}][h_0(1)b_{13}][b_{03}^2]$ |

|      |          |  |  |
|------|----------|--|--|
| 2001 | 63,17;16 | $[b_{02}^2]^4 h_5 + h_0^8 h_4 [b_{03}^2]^2$                    | $d_8^{-1} = [b_{02}^2]^2 [b_{03}^2]^2$                             |
| 2002 | 63,17;16 | $h_0^8 h_4 [b_{03}^2]^2$                                       | $d_{16} = h_0^{16} h_5^2$  |
| 2003 | 63,17;20 | $h_0^6 [h_2 b_{03}] [b_{03}^2]^2$                              | $d_4 = h_0^8 h_3^2 [b_{03}^2]^2$                                   |
| 2004 | 63,17;20 | $h_0 [b_{02}^2] [h_0(1)^2] [h_0(1) b_{13}] [b_{03}^2]$         | $d_4 = h_0^2 [b_{02}^2] [h_0(1)^2] [b_{13}^2]^2$                   |
| 2005 | 63,17;20 | $[b_{02}^2]^3 h_4 [b_{03}^2]$                                  | $d_4 = [b_{02}^2]^4 h_4^2$   |
| 2006 | 63,18;0  | $h_0^{17} h_6$   | Permanent cycle  |
| 2007 | 63,18;12 | $h_0^9 [b_{02}^2] [b_{03}^2] h_5 + h_0^{13} h_3 [b_{04}^2]$    | $d_4^{-1} = h_0^9 [b_{02}^2] [b_{04}^2]$                           |
| 2008 | 63,18;12 | $h_0^{13} h_3 [b_{04}^2]$                                      | $d_4 = h_0^{13} h_3 [b_{03}^2] h_5$                                |
| 2009 | 63,18;16 | $h_0 [b_{02}^2]^4 h_5 + h_0^9 h_4 [b_{03}^2]^2$                | $d_8^{-1} = h_0 [b_{02}^2]^2 [b_{03}^2]^2$                         |
| 2010 | 63,18;16 | $h_0^9 h_4 [b_{03}^2]^2$                                       | $d_{16} = h_0^{17} h_5^2$  |
| 2011 | 63,18;20 | $h_0^2 [b_{02}^2] [h_0(1)^2] [h_0(1) b_{13}] [b_{03}^2]$       | Permanent cycle  |
| 2012 | 63,18;20 | $h_0^7 [h_2 b_{03}] [b_{03}^2]^2$                              | $d_4 = h_0^9 h_3^2 [b_{03}^2]^2$                                   |
| 2013 | 63,18;20 | $h_0 [b_{02}^2]^3 h_4 [b_{03}^2]$                              | $d_4 = h_0 [b_{02}^2]^4 h_4^2$                                     |
| 2014 | 63,19;0  | $h_0^{18} h_6$   | Permanent cycle  |
| 2015 | 63,19;12 | $h_0^{10} [b_{02}^2] [b_{03}^2] h_5 + h_0^{14} h_3 [b_{04}^2]$ | $d_4^{-1} = h_0^{10} [b_{02}^2] [b_{04}^2]$                        |
| 2016 | 63,19;12 | $h_0^{14} h_3 [b_{04}^2]$                                      | $d_4 = h_0^{14} h_3 [b_{03}^2] h_5$                                |
| 2017 | 63,19;16 | $h_1 [b_{02}^2]^4 h_4^2$                                       | $d_4^{-1} = h_1 [b_{02}^2]^3 h_4 [b_{03}^2]$                       |
| 2018 | 63,19;16 | $h_0^2 [b_{02}^2]^4 h_5 + h_0^{10} h_4 [b_{03}^2]^2$           | $d_8^{-1} = h_0^2 [b_{02}^2]^2 [b_{03}^2]^2$                       |
| 2019 | 63,19;16 | $h_0^{10} h_4 [b_{03}^2]^2$                                    | $d_{16} = h_0^{18} h_5^2$  |
| 2020 | 63,19;20 | $h_0^8 [h_2 b_{03}] [b_{03}^2]^2$                              | $d_4 = h_0^{10} h_3^2 [b_{03}^2]^2$                                |
| 2021 | 63,19;20 | $h_0^2 [b_{02}^2]^3 h_4 [b_{03}^2]$                            | $d_4 = h_0^2 [b_{02}^2]^4 h_4^2$                                   |
| 2022 | 63,19;24 | $[b_{02}^2]^3 [h_2 b_{03}] [b_{03}^2]$                         | $d_4 = h_0 [b_{02}^2]^2 [h_2 b_{03}] [h_0(1)^2] [h_0(1) b_{13}]$   |
| 2023 | 63,20;0  | $h_0^{19} h_6$   | Permanent cycle  |
| 2024 | 63,20;12 | $h_0^{11} [b_{02}^2] [b_{03}^2] h_5 + h_0^{15} h_3 [b_{04}^2]$ | $d_4^{-1} = h_0^{11} [b_{02}^2] [b_{04}^2]$                        |
| 2025 | 63,20;12 | $h_0^{15} h_3 [b_{04}^2]$                                      | $d_4 = h_0^{15} h_3 [b_{03}^2] h_5$                                |
| 2026 | 63,20;16 | $h_0^3 [b_{02}^2]^4 h_5 + h_0^{11} h_4 [b_{03}^2]^2$           | $d_8^{-1} = h_0^3 [b_{02}^2]^2 [b_{03}^2]^2$                       |
| 2027 | 63,20;16 | $h_0^{11} h_4 [b_{03}^2]^2$                                    | $d_{16} = h_0^{19} h_5^2$  |
| 2028 | 63,20;20 | $h_0^9 [h_2 b_{03}] [b_{03}^2]^2$                              | $d_4 = h_0^{11} h_3^2 [b_{03}^2]^2$                                |
| 2029 | 63,20;20 | $h_0^3 [b_{02}^2]^3 h_4 [b_{03}^2]$                            | $d_4 = h_0^3 [b_{02}^2]^4 h_4^2$                                   |
| 2030 | 63,20;24 | $h_0 [b_{02}^2]^3 [h_2 b_{03}] [b_{03}^2]$                     | $d_4 = h_0^2 [b_{02}^2]^2 [h_2 b_{03}] [h_0(1)^2] [h_0(1) b_{13}]$ |
| 2031 | 63,21;0  | $h_0^{20} h_6$   | Permanent cycle  |
| 2032 | 63,21;12 | $h_0^{12} [b_{02}^2] [b_{03}^2] h_5 + h_0^{16} h_3 [b_{04}^2]$ | $d_4^{-1} = h_0^{12} [b_{02}^2] [b_{04}^2]$                        |
| 2033 | 63,21;12 | $h_0^{16} h_3 [b_{04}^2]$                                      | $d_4 = h_0^{16} h_3 [b_{03}^2] h_5$                                |
| 2034 | 63,21;16 | $h_0^4 [b_{02}^2]^4 h_5 + h_0^{12} h_4 [b_{03}^2]^2$           | $d_8^{-1} = h_0^4 [b_{02}^2]^2 [b_{03}^2]^2$                       |
| 2035 | 63,21;16 | $h_0^{12} h_4 [b_{03}^2]^2$                                    | $d_{16} = h_0^{20} h_5^2$  |
| 2036 | 63,21;20 | $h_0^{10} [h_2 b_{03}] [b_{03}^2]^2$                           | $d_4 = h_0^{12} h_3^2 [b_{03}^2]^2$                                |
| 2037 | 63,21;20 | $h_0^4 [b_{02}^2]^3 h_4 [b_{03}^2]$                            | $d_4 = h_0^4 [b_{02}^2]^4 h_4^2$                                   |
| 2038 | 63,21;24 | $h_1 [b_{02}^2]^3 [h_0(1)^2] [b_{03}^2]$                       | Permanent cycle  |
| 2039 | 63,21;24 | $h_0^2 [b_{02}^2]^3 [h_2 b_{03}] [b_{03}^2]$                   | $d_{12} = h_0^{10} [b_{02}^2]^2 [h_2 b_{03}] h_5$                  |
| 2040 | 63,22;0  | $h_0^{21} h_6$   | Permanent cycle  |
| 2041 | 63,22;12 | $h_0^{13} [b_{02}^2] [b_{03}^2] h_5 + h_0^{17} h_3 [b_{04}^2]$ | $d_4^{-1} = h_0^{13} [b_{02}^2] [b_{04}^2]$                        |
| 2042 | 63,22;12 | $h_0^{17} h_3 [b_{04}^2]$                                      | $d_4 = h_0^{17} h_3 [b_{03}^2] h_5$                                |
| 2043 | 63,22;16 | $h_0^5 [b_{02}^2]^4 h_5 + h_0^{13} h_4 [b_{03}^2]^2$           | $d_8^{-1} = h_0^5 [b_{02}^2]^2 [b_{03}^2]^2$                       |
| 2044 | 63,22;16 | $h_0^{13} h_4 [b_{03}^2]^2$                                    | $d_{16} = h_0^{21} h_5^2$  |
| 2045 | 63,22;20 | $h_0^{11} [h_2 b_{03}] [b_{03}^2]^2$                           | $d_4 = h_0^{13} h_3^2 [b_{03}^2]^2$                                |
| 2046 | 63,22;20 | $h_0^5 [b_{02}^2]^3 h_4 [b_{03}^2]$                            | $d_4 = h_0^5 [b_{02}^2]^4 h_4^2$                                   |
| 2047 | 63,22;24 | $h_0^3 [b_{02}^2]^3 [h_2 b_{03}] [b_{03}^2]$                   | $d_{12} = h_0^{11} [b_{02}^2]^2 [h_2 b_{03}] h_5$                  |
| 2048 | 63,23;0  | $h_0^{22} h_6$   | Permanent cycle  |
| 2049 | 63,23;12 | $h_0^{14} [b_{02}^2] [b_{03}^2] h_5 + h_0^{18} h_3 [b_{04}^2]$ | $d_4^{-1} = h_0^{14} [b_{02}^2] [b_{04}^2]$                        |
| 2050 | 63,23;12 | $h_0^{18} h_3 [b_{04}^2]$                                      | $d_4 = h_0^{18} h_3 [b_{03}^2] h_5$                                |
| 2051 | 63,23;16 | $h_0^6 [b_{02}^2]^4 h_5 + h_0^{14} h_4 [b_{03}^2]^2$           | $d_8^{-1} = h_0^6 [b_{02}^2]^2 [b_{03}^2]^2$                       |
| 2052 | 63,23;16 | $h_0^{14} h_4 [b_{03}^2]^2$                                    | $d_{16} = h_0^{22} h_5^2$  |
| 2053 | 63,23;20 | $h_0^{12} [h_2 b_{03}] [b_{03}^2]^2$                           | $d_4 = h_0^{14} h_3^2 [b_{03}^2]^2$                                |
| 2054 | 63,23;20 | $h_0^6 [b_{02}^2]^3 h_4 [b_{03}^2]$                            | $d_4 = h_0^6 [b_{02}^2]^4 h_4^2$                                   |
| 2055 | 63,23;24 | $h_0^4 [b_{02}^2]^3 [h_2 b_{03}] [b_{03}^2]$                   | $d_{12} = h_0^{12} [b_{02}^2]^2 [h_2 b_{03}] h_5$                  |



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| 2056 | 63,24;0  | $h_0^{23}h_6$  | Permanent cycle  |
| 2057 | 63,24;12 | $h_0^{15}[b_{02}^2][b_{03}^2]h_5 + h_0^{19}h_3[b_{04}^2]$          | $d_4^{-1} = h_0^{15}[b_{02}^2][b_{04}^2]$                        |
| 2058 | 63,24;12 | $h_0^{19}h_3[b_{04}^2]$  | $d_4 = h_0^{19}h_3[b_{03}^2]h_5$                                 |
| 2059 | 63,24;16 | $h_0^7[b_{02}^2]^4h_5 + h_0^{15}h_4[b_{03}^2]^2$                   | $d_8^{-1} = h_0^7[b_{02}^2]^2[b_{03}^2]^2$                       |
| 2060 | 63,24;16 | $h_0^{15}h_4[b_{03}^2]^2$  | $d_{16} = h_0^{23}h_5^2$   |
| 2061 | 63,24;20 | $h_0^{13}[h_2b_{03}][b_{03}^2]^2$                                  | $d_4 = h_0^{15}h_3^2[b_{03}^2]^2$                                |
| 2062 | 63,24;20 | $h_0^7[b_{02}^2]^3h_4[b_{03}^2]$                                   | $d_4 = h_0^7[b_{02}^2]^4h_4^2$                                   |
| 2063 | 63,24;22 | $h_1[b_{02}^2]^4[h_4h_0(1)b_{02}^2 + h_0^3b_{02}b_{14}]$           | $d_4^{-1} = [h_1h_0(1)][b_{02}^2]^4[b_{03}^2]$                   |
| 2064 | 63,24;24 | $[b_{02}^2]^4[h_0(1)^2][h_0(1)b_{13}]$                             | Permanent cycle  |
| 2065 | 63,24;24 | $h_0^5[b_{02}^2]^3[h_2b_{03}][b_{03}^2]$                           | $d_{12} = h_0^{13}[b_{02}^2]^2[h_2b_{03}]h_5$                    |
| 2066 | 63,25;0  | $h_0^{24}h_6$  | Permanent cycle  |
| 2067 | 63,25;12 | $h_0^{16}[b_{02}^2][b_{03}^2]h_5 + h_0^{20}h_3[b_{04}^2]$          | $d_4^{-1} = h_0^{16}[b_{02}^2][b_{04}^2]$                        |
| 2068 | 63,25;12 | $h_0^{20}h_3[b_{04}^2]$  | $d_4 = h_0^{20}h_3[b_{03}^2]h_5$                                 |
| 2069 | 63,25;16 | $h_0^8[b_{02}^2]^4h_5 + h_0^{16}h_4[b_{03}^2]^2$                   | $d_8^{-1} = h_0^8[b_{02}^2]^2[b_{03}^2]^2$                       |
| 2070 | 63,25;16 | $h_0^{16}h_4[b_{03}^2]^2$  | $d_{16} = h_0^{24}h_5^2$   |
| 2071 | 63,25;20 | $h_0^{14}[h_2b_{03}][b_{03}^2]^2$                                  | $d_4 = h_0^{16}h_3^2[b_{03}^2]^2$                                |
| 2072 | 63,25;20 | $h_0^8[b_{02}^2]^3h_4[b_{03}^2]$                                   | $d_4 = h_0^8[b_{02}^2]^4h_4^2$                                   |
| 2073 | 63,25;24 | $[b_{02}^2]^6h_4 + h_0[b_{02}^2]^4[h_0(1)^2][h_0(1)b_{13}] +$      | $d_4^{-1} = [b_{02}^2]^5[b_{03}^2]$                              |
|      |          | $h_0^6[b_{02}^2]^3[h_2b_{03}][b_{03}^2]$                           |  |
| 2074 | 63,25;24 | $h_0[b_{02}^2]^4[h_0(1)^2][h_0(1)b_{13}]$                          | Permanent cycle  |
| 2075 | 63,25;24 | $h_0^6[b_{02}^2]^3[h_2b_{03}][b_{03}^2]$                           | $d_{12} = h_0^{14}[b_{02}^2]^2[h_2b_{03}]h_5$                    |
| 2076 | 63,26;0  | $h_0^{25}h_6$  | Permanent cycle  |
| 2077 | 63,26;12 | $h_0^{17}[b_{02}^2][b_{03}^2]h_5 + h_0^{21}h_3[b_{04}^2]$          | $d_4^{-1} = h_0^{17}[b_{02}^2][b_{04}^2]$                        |
| 2078 | 63,26;12 | $h_0^{21}h_3[b_{04}^2]$  | $d_4 = h_0^{21}h_3[b_{03}^2]h_5$                                 |
| 2079 | 63,26;16 | $h_0^9[b_{02}^2]^4h_5 + h_0^{17}h_4[b_{03}^2]^2$                   | $d_8^{-1} = h_0^9[b_{02}^2]^2[b_{03}^2]^2$                       |
| 2080 | 63,26;16 | $h_0^{17}h_4[b_{03}^2]^2$  | $d_{16} = h_0^{25}h_5^2$   |
| 2081 | 63,26;20 | $h_0^{15}[h_2b_{03}][b_{03}^2]^2$                                  | $d_4 = h_0^{17}h_3^2[b_{03}^2]^2$                                |
| 2082 | 63,26;20 | $h_0^9[b_{02}^2]^3h_4[b_{03}^2]$                                   | $d_4 = h_0^9[b_{02}^2]^4h_4^2$                                   |
| 2083 | 63,26;24 | $h_0[b_{02}^2]^6h_4 + h_0^2[b_{02}^2]^4[h_0(1)^2][h_0(1)b_{13}] +$ | $d_4^{-1} = h_0[b_{02}^2]^5[b_{03}^2]$                           |
|      |          | $h_0^7[b_{02}^2]^3[h_2b_{03}][b_{03}^2]$                           |  |
| 2084 | 63,26;24 | $h_0^2[b_{02}^2]^4[h_0(1)^2][h_0(1)b_{13}]$                        | Permanent cycle  |
| 2085 | 63,26;24 | $h_0^7[b_{02}^2]^3[h_2b_{03}][b_{03}^2]$                           | $d_{12} = h_0^{15}[b_{02}^2]^2[h_2b_{03}]h_5$                    |
| 2086 | 63,27;0  | $h_0^{26}h_6$  | Permanent cycle  |
| 2087 | 63,27;12 | $h_0^{18}[b_{02}^2][b_{03}^2]h_5 + h_0^{22}h_3[b_{04}^2]$          | $d_4^{-1} = h_0^{18}[b_{02}^2][b_{04}^2]$                        |
| 2088 | 63,27;12 | $h_0^{22}h_3[b_{04}^2]$  | $d_4 = h_0^{22}h_3[b_{03}^2]h_5$                                 |
| 2089 | 63,27;16 | $h_0^{10}[b_{02}^2]^4h_5 + h_0^{18}h_4[b_{03}^2]^2$                | $d_8^{-1} = h_0^{10}[b_{02}^2]^2[b_{03}^2]^2$                    |
| 2090 | 63,27;16 | $h_0^{18}h_4[b_{03}^2]^2$  | $d_{16} = h_0^{26}h_5^2$   |
| 2091 | 63,27;20 | $h_0^{16}[h_2b_{03}][b_{03}^2]^2$                                  | $d_4 = h_0^{18}h_3^2[b_{03}^2]^2$                                |
| 2092 | 63,27;20 | $h_0^{10}[b_{02}^2]^3h_4[b_{03}^2]$                                | $d_4 = h_0^{10}[b_{02}^2]^4h_4^2$                                |
| 2093 | 63,27;24 | $h_0^2[b_{02}^2]^6h_4 + h_0^8[b_{02}^2]^3[h_2b_{03}][b_{03}^2]$    | $d_4^{-1} = h_0^2[b_{02}^2]^5[b_{03}^2]$                         |
| 2094 | 63,27;24 | $h_0^8[b_{02}^2]^3[h_2b_{03}][b_{03}^2]$                           | $d_{12} = h_0^{16}[b_{02}^2]^2[h_2b_{03}]h_5$                    |
| 2095 | 63,27;28 | $[b_{02}^2]^6[h_2b_{03}]$  | $d_6 = h_0^5[b_{02}^2]^4[h_4h_0(1)b_{02}^2 + h_0^3b_{02}b_{14}]$ |
| 2096 | 63,28;0  | $h_0^{27}h_6$  | Permanent cycle  |
| 2097 | 63,28;12 | $h_0^{19}[b_{02}^2][b_{03}^2]h_5 + h_0^{23}h_3[b_{04}^2]$          | $d_4^{-1} = h_0^{19}[b_{02}^2][b_{04}^2]$                        |
| 2098 | 63,28;12 | $h_0^{23}h_3[b_{04}^2]$  | $d_4 = h_0^{23}h_3[b_{03}^2]h_5$                                 |
| 2099 | 63,28;16 | $h_0^{11}[b_{02}^2]^4h_5 + h_0^{19}h_4[b_{03}^2]^2$                | $d_8^{-1} = h_0^{11}[b_{02}^2]^2[b_{03}^2]^2$                    |
| 2100 | 63,28;16 | $h_0^{19}h_4[b_{03}^2]^2$  | $d_{16} = h_0^{27}h_5^2$   |
| 2101 | 63,28;20 | $h_0^{17}[h_2b_{03}][b_{03}^2]^2$                                  | $d_4 = h_0^{19}h_3^2[b_{03}^2]^2$                                |
| 2102 | 63,28;20 | $h_0^{11}[b_{02}^2]^3h_4[b_{03}^2]$                                | $d_4 = h_0^{11}[b_{02}^2]^4h_4^2$                                |
| 2103 | 63,28;24 | $h_0^3[b_{02}^2]^6h_4 + h_0^9[b_{02}^2]^3[h_2b_{03}][b_{03}^2]$    | $d_4^{-1} = h_0^3[b_{02}^2]^5[b_{03}^2]$                         |
| 2104 | 63,28;24 | $h_0^9[b_{02}^2]^3[h_2b_{03}][b_{03}^2]$                           | $d_{12} = h_0^{17}[b_{02}^2]^2[h_2b_{03}]h_5$                    |
| 2105 | 63,28;28 | $h_0[b_{02}^2]^6[h_2b_{03}]$                                       | $d_6 = h_0^6[b_{02}^2]^4[h_4h_0(1)b_{02}^2 + h_0^3b_{02}b_{14}]$ |
| 2106 | 63,29;0  | $h_0^{28}h_6$  | Permanent cycle  |
| 2107 | 63,29;12 | $h_0^{20}[b_{02}^2][b_{03}^2]h_5 + h_0^{24}h_3[b_{04}^2]$          | $d_4^{-1} = h_0^{20}[b_{02}^2][b_{04}^2]$                        |

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|------|----------|--|---|
| 2108 | 63,29;12 | $h_0^{24}h_3[b_{04}^2]$  | $d_4 = h_0^{24}h_3[b_{03}^2]h_5$                                    |
| 2109 | 63,29;16 | $h_0^{12}[b_{02}^2]^4h_5 + h_0^{20}h_4[b_{03}^2]^2$                | $d_8^{-1} = h_0^{12}[b_{02}^2]^2[b_{03}^2]^2$                       |
| 2110 | 63,29;16 | $h_0^{20}h_4[b_{03}^2]^2$  | $d_{16} = h_0^{28}h_5^2$  |
| 2111 | 63,29;20 | $h_0^{18}[h_2b_{03}][b_{03}^2]^2$                                  | $d_4 = h_0^{20}h_3^2[b_{03}^2]^2$                                   |
| 2112 | 63,29;20 | $h_0^{12}[b_{02}^2]^3h_4[b_{03}^2]$                                | $d_4 = h_0^{12}[b_{02}^2]^4h_4^2$                                   |
| 2113 | 63,29;24 | $h_0^4[b_{02}^2]^6h_4 + h_0^{10}[b_{02}^2]^3[h_2b_{03}][b_{03}^2]$ | $d_4^{-1} = h_0^4[b_{02}^2]^5[b_{03}^2]$                            |
| 2114 | 63,29;24 | $h_0^{10}[b_{02}^2]^3[h_2b_{03}][b_{03}^2]$                        | $d_{12} = h_0^{18}[b_{02}^2]^2[h_2b_{03}]h_5$                       |
| 2115 | 63,29;28 | $h_1[b_{02}^2]^6[h_0(1)^2]$  | Permanent cycle   |
| 2116 | 63,29;28 | $h_0^2[b_{02}^2]^6[h_2b_{03}]$                                     | $d_6 = h_0^7[b_{02}^2]^4[h_4h_0(1)b_{02}^2 + h_0^3b_{02}b_{14}]$    |
| 2117 | 63,30;0  | $h_0^{29}h_6$  | Permanent cycle   |
| 2118 | 63,30;12 | $h_0^{21}[b_{02}^2][b_{03}^2]h_5 + h_0^{25}h_3[b_{04}^2]$          | $d_4^{-1} = h_0^{21}[b_{02}^2][b_{04}^2]$                           |
| 2119 | 63,30;12 | $h_0^{25}h_3[b_{04}^2]$  | $d_4 = h_0^{25}h_3[b_{03}^2]h_5$                                    |
| 2120 | 63,30;16 | $h_0^{13}[b_{02}^2]^4h_5 + h_0^{21}h_4[b_{03}^2]^2$                | $d_8^{-1} = h_0^{13}[b_{02}^2]^2[b_{03}^2]^2$                       |
| 2121 | 63,30;16 | $h_0^{21}h_4[b_{03}^2]^2$  | $d_{16} = h_0^{29}h_5^2$  |
| 2122 | 63,30;20 | $h_0^{19}[h_2b_{03}][b_{03}^2]^2$                                  | $d_4 = h_0^{21}h_3^2[b_{03}^2]^2$                                   |
| 2123 | 63,30;20 | $h_0^{13}[b_{02}^2]^3h_4[b_{03}^2]$                                | $d_4 = h_0^{13}[b_{02}^2]^4h_4^2$                                   |
| 2124 | 63,30;24 | $h_0^5[b_{02}^2]^6h_4 + h_0^{11}[b_{02}^2]^3[h_2b_{03}][b_{03}^2]$ | $d_4^{-1} = h_0^5[b_{02}^2]^5[b_{03}^2]$                            |
| 2125 | 63,30;24 | $h_0^{11}[b_{02}^2]^3[h_2b_{03}][b_{03}^2]$                        | $d_{12} = h_0^{19}[b_{02}^2]^2[h_2b_{03}]h_5$                       |
| 2126 | 63,30;28 | $h_0^3[b_{02}^2]^6[h_2b_{03}]$                                     | $d_6 = h_0^8[b_{02}^2]^4[h_4h_0(1)b_{02}^2 + h_0^3b_{02}b_{14}]$    |
| 2127 | 63,31;0  | $h_0^{30}h_6$  | Permanent cycle   |
| 2128 | 63,31;12 | $h_0^{22}[b_{02}^2][b_{03}^2]h_5 + h_0^{26}h_3[b_{04}^2]$          | $d_4^{-1} = h_0^{22}[b_{02}^2][b_{04}^2]$                           |
| 2129 | 63,31;12 | $h_0^{26}h_3[b_{04}^2]$  | $d_4 = h_0^{26}h_3[b_{03}^2]h_5$                                    |
| 2130 | 63,31;16 | $h_0^{14}[b_{02}^2]^4h_5 + h_0^{22}h_4[b_{03}^2]^2$                | $d_8^{-1} = h_0^{14}[b_{02}^2]^2[b_{03}^2]^2$                       |
| 2131 | 63,31;16 | $h_0^{22}h_4[b_{03}^2]^2$  | $d_{16} = h_0^{30}h_5^2$  |
| 2132 | 63,31;20 | $h_0^{20}[h_2b_{03}][b_{03}^2]^2$                                  | $d_4 = h_0^{22}h_3^2[b_{03}^2]^2$                                   |
| 2133 | 63,31;20 | $h_0^{14}[b_{02}^2]^3h_4[b_{03}^2]$                                | $d_4 = h_0^{14}[b_{02}^2]^4h_4^2$                                   |
| 2134 | 63,31;24 | $h_0^6[b_{02}^2]^6h_4 + h_0^{12}[b_{02}^2]^3[h_2b_{03}][b_{03}^2]$ | $d_4^{-1} = h_0^6[b_{02}^2]^5[b_{03}^2]$                            |
| 2135 | 63,31;24 | $h_0^{12}[b_{02}^2]^3[h_2b_{03}][b_{03}^2]$                        | $d_{12} = h_0^{20}[b_{02}^2]^2[h_2b_{03}]h_5$                       |
| 2136 | 63,31;28 | $h_0^4[b_{02}^2]^6[h_2b_{03}]$                                     | $d_6 = h_0^9[b_{02}^2]^4[h_4h_0(1)b_{02}^2 + h_0^3b_{02}b_{14}]$    |
| 2137 | 63,32;0  | $h_0^{31}h_6$  | Permanent cycle   |
| 2138 | 63,32;12 | $h_0^{23}[b_{02}^2][b_{03}^2]h_5 + h_0^{27}h_3[b_{04}^2]$          | $d_4^{-1} = h_0^{23}[b_{02}^2][b_{04}^2]$                           |
| 2139 | 63,32;12 | $h_0^{27}h_3[b_{04}^2]$  | $d_4 = h_0^{27}h_3[b_{03}^2]h_5$                                    |
| 2140 | 63,32;16 | $h_0^{15}[b_{02}^2]^4h_5 + h_0^{23}h_4[b_{03}^2]^2$                | $d_8^{-1} = h_0^{15}[b_{02}^2]^2[b_{03}^2]^2$                       |
| 2141 | 63,32;16 | $h_0^{23}h_4[b_{03}^2]^2$  | $d_{16} = h_0^{31}h_5^2$  |
| 2142 | 63,32;20 | $h_0^{21}[h_2b_{03}][b_{03}^2]^2$                                  | $d_4 = h_0^{23}h_3^2[b_{03}^2]^2$                                   |
| 2143 | 63,32;20 | $h_0^{15}[b_{02}^2]^3h_4[b_{03}^2]$                                | $d_4 = h_0^{15}[b_{02}^2]^4h_4^2$                                   |
| 2144 | 63,32;24 | $h_0^7[b_{02}^2]^6h_4 + h_0^{13}[b_{02}^2]^3[h_2b_{03}][b_{03}^2]$ | $d_4^{-1} = h_0^7[b_{02}^2]^5[b_{03}^2]$                            |
| 2145 | 63,32;24 | $h_0^{13}[b_{02}^2]^3[h_2b_{03}][b_{03}^2]$                        | $d_{12} = h_0^{21}[b_{02}^2]^2[h_2b_{03}]h_5$                       |
| 2146 | 63,32;28 | $h_0^5[b_{02}^2]^6[h_2b_{03}]$                                     | $d_6 = h_0^{10}[b_{02}^2]^4[h_4h_0(1)b_{02}^2 + h_0^3b_{02}b_{14}]$ |
| 2147 | 64,2;0   | $h_1h_6$   | Permanent cycle   |
| 2148 | 64,4;0   | $h_1^2h_5^2$   | Permanent cycle   |
| 2149 | 64,5;6   | $h_2[h_4h_0(1, 2)]$  | Permanent cycle   |
| 2150 | 64,6;8   | $[h_0h_0(1, 3)b_{14}]$   | Permanent cycle   |
| 2151 | 64,6;12  | $h_1h_3[b_{04}^2]$   | $d_4 = h_1h_3[b_{03}^2]h_5$   |
| 2152 | 64,7;8   | $h_0[h_0h_0(1, 3)b_{14}]$  | Permanent cycle   |
| 2153 | 64,7;10  | $h_2[h_2h_0(1, 2)b_{03}]$  | Permanent cycle   |
| 2154 | 64,7;14  | $[h_1h_0(1)][b_{04}^2]$  | $d_4 = [h_1h_0(1)][b_{03}^2]h_5$                                    |
| 2155 | 64,8;8   | $h_1^2h_3[b_{03}^2]h_5$  | $d_4^{-1} = h_1^2h_3[b_{04}^2]$                                     |
| 2156 | 64,8;8   | $[b_{13}^2][b_{24}^2]$   | Permanent cycle   |
| 2157 | 64,8;8   | $h_0^2[h_0h_0(1, 3)b_{14}]$  | Permanent cycle   |
| 2158 | 64,8;12  | $h_3[b_{03}^2][h_3b_{14}]$   | Permanent cycle   |
| 2159 | 64,8;16  | $[b_{02}^2][b_{04}^2]$   | $d_4 = [b_{02}^2][b_{03}^2]h_5 + h_0x_{45} + h_0^4h_3[b_{04}^2]$    |
| 2160 | 64,9;8   | $h_0^3[h_0h_0(1, 3)b_{14}]$  | $d_4^{-1} = [h_0h_3b_{02}b_{14}b_{04}]$                             |
| 2161 | 64,9;10  | $h_1[h_1h_0(1)][b_{03}^2]h_5$                                      | $d_4^{-1} = h_1[h_1h_0(1)][b_{04}^2]$                               |
| 2162 | 64,9;12  | $h_0h_3[b_{03}^2][h_3b_{14}]$                                      | Permanent cycle   |

|      |          |   |  |
|------|----------|---|--|
| 2163 | 64,9;12  | $h_1 x_{45}$  | $d_4 = h_0^2[h_2 b_{03}][h_0(1)b_{13}]h_5$   |
| 2164 | 64,9;16  | $h_0[b_{02}^2][b_{04}^2]$                             | $d_4 = h_0[b_{02}^2][b_{03}^2]h_5 + h_0^5 x_{45} + h_0^5 h_3[b_{04}^2]$                  |
| 2165 | 64,10;8  | $h_0^4[h_0 h_0(1,3)b_{14}]$                           | $d_4^{-1} = h_0[h_0 h_3 b_{02} b_{14} b_{04}]$   |
| 2166 | 64,10;12 | $h_1[b_{02}^2][b_{03}^2]h_5$                          | $d_4^{-1} = h_1[b_{02}^2][b_{04}^2]$   |
| 2167 | 64,10;12 | $h_0^2 h_3[b_{03}^2][h_3 b_{14}]$                     | Permanent cycle  |
| 2168 | 64,10;16 | $h_1 h_4[b_{03}^2]^2$                                 | Permanent cycle  |
| 2169 | 64,10;16 | $h_0^2[b_{02}^2][b_{04}^2]$                           | $d_4 = h_0^2[b_{02}^2][b_{03}^2]h_5 + h_0^3 x_{45} + h_0^6 h_3[b_{04}^2]$                |
| 2170 | 64,11;8  | $h_0^5[h_0 h_0(1,3)b_{14}]$                           | $d_4^{-1} = h_0^2[h_0 h_3 b_{02} b_{14} b_{04}]$   |
| 2171 | 64,11;16 | $h_0^3[b_{02}^2][b_{04}^2]$                           | $d_4 = h_0^3[b_{02}^2][b_{03}^2]h_5 + h_0^7 h_3[b_{04}^2]$                               |
| 2172 | 64,12;8  | $h_0^6[h_0 h_0(1,3)b_{14}]$                           | $d_4^{-1} = h_0^3[h_0 h_3 b_{02} b_{14} b_{04}]$   |
| 2173 | 64,12;16 | $h_0^4[b_{02}^2][b_{04}^2]$                           | $d_4 = h_0^4[b_{02}^2][b_{03}^2]h_5 + h_0^8 h_3[b_{04}^2]$                               |
| 2174 | 64,12;16 | $[b_{13}^2]^2[b_{03}^2]$                              | $d_4 = h_2[b_{13}^2]^3$  |
| 2175 | 64,13;8  | $h_0^7[h_0 h_0(1,3)b_{14}]$                           | $d_4^{-1} = h_0^4[h_0 h_3 b_{02} b_{14} b_{04}]$   |
| 2176 | 64,13;12 | $[b_{02}^2]^2[h_0(1)b_{13}]h_5$                       | $d_8^{-1} = [h_0(1)b_{13}][b_{03}^2]^2$  |
| 2177 | 64,13;16 | $h_0^5[b_{02}^2][b_{04}^2]$                           | $d_4 = h_0^5[b_{02}^2][b_{03}^2]h_5 + h_0^9 h_3[b_{04}^2]$                               |
| 2178 | 64,13;16 | $h_0[b_{13}^2]^2[b_{03}^2]$                           | $d_4 = h_0 h_2[b_{13}^2]^3$  |
| 2179 | 64,14;8  | $h_0^8[h_0 h_0(1,3)b_{14}]$                           | $d_4^{-1} = h_0^5[h_0 h_3 b_{02} b_{14} b_{04}]$   |
| 2180 | 64,14;12 | $h_0[b_{02}^2]^2[h_0(1)b_{13}]h_5$                    | $d_6^{-1} = [b_{02}^2][h_0 h_0(1)b_{03}^2 b_{14} + h_0 h_0(1)b_{13} b_{03} b_{04}]$      |
| 2181 | 64,14;16 | $h_0^2[b_{13}^2]^2[b_{03}^2]$                         | Permanent cycle  |
| 2182 | 64,14;16 | $h_0^6[b_{02}^2][b_{04}^2]$                           | $d_4 = h_0^6[b_{02}^2][b_{03}^2]h_5 + h_0^{10} h_3[b_{04}^2]$                            |
| 2183 | 64,14;18 | $[b_{02}^2]x_{38}$                                    | $d_6 = h_1^2[b_{02}^2]^2[h_0(1)^2]h_5$   |
| 2184 | 64,14;20 | $h_1^2[h_0(1)^2][b_{03}^2]^2$                         | Permanent cycle  |
| 2185 | 64,15;8  | $h_0^9[h_0 h_0(1,3)b_{14}]$                           | $d_4^{-1} = h_0^6[h_0 h_3 b_{02} b_{14} b_{04}]$   |
| 2186 | 64,15;12 | $h_0^2[b_{02}^2]^2[h_0(1)b_{13}]h_5$                  | $d_6^{-1} = h_0[b_{02}^2][h_0 h_0(1)b_{03}^2 b_{14} + h_0 h_0(1)b_{13} b_{03} b_{04}]$   |
| 2187 | 64,15;16 | $h_0^7[b_{02}^2][b_{04}^2]$                           | $d_4 = h_0^7[b_{02}^2][b_{03}^2]h_5 + h_0^{11} h_3[b_{04}^2]$                            |
| 2188 | 64,15;18 | $h_0[b_{02}^2]x_{38}$                                 | Permanent cycle  |
| 2189 | 64,15;20 | $[b_{02}^2][h_2 b_{03}][h_0(1)b_{13}][b_{03}^2]$      | $d_4 = h_0[b_{02}^2][h_2 b_{03}][b_{13}^2]^2$  |
| 2190 | 64,15;22 | $[h_1 h_0(1)][b_{02}^2][b_{03}^2]^2$                  | $d_8 = [h_1 h_0(1)][b_{02}^2]^3 h_5$   |
| 2191 | 64,16;8  | $h_0^{10}[h_0 h_0(1,3)b_{14}]$                        | $d_4^{-1} = h_0^7[h_0 h_3 b_{02} b_{14} b_{04}]$   |
| 2192 | 64,16;12 | $h_0^3[b_{02}^2]^2[h_0(1)b_{13}]h_5$                  | $d_6^{-1} = h_0^2[b_{02}^2][h_0 h_0(1)b_{03}^2 b_{14} + h_0 h_0(1)b_{13} b_{03} b_{04}]$ |
| 2193 | 64,16;16 | $h_0^8[b_{02}^2][b_{04}^2]$                           | $d_4 = h_0^8[b_{02}^2][b_{03}^2]h_5 + h_0^{12} h_3[b_{04}^2]$                            |
| 2194 | 64,16;18 | $h_0^2[b_{02}^2]x_{38}$                               | Permanent cycle  |
| 2195 | 64,16;20 | $h_0[b_{02}^2][h_2 b_{03}][h_0(1)b_{13}][b_{03}^2]$   | $d_4 = h_0^2[b_{02}^2][h_2 b_{03}][b_{13}^2]^2$  |
| 2196 | 64,16;24 | $[b_{02}^2]^2[b_{03}^2]^2$                            | $d_8 = [b_{02}^2]^4 h_5 + h_0^8 h_4[b_{03}^2]^2$   |
| 2197 | 64,17;8  | $h_0^{11}[h_0 h_0(1,3)b_{14}]$                        | $d_4^{-1} = h_0^8[h_0 h_3 b_{02} b_{14} b_{04}]$   |
| 2198 | 64,17;14 | $h_1[h_1 h_0(1)][b_{02}^2]^3 h_5$                     | $d_8^{-1} = h_1[h_1 h_0(1)][b_{02}^2][b_{03}^2]^2$                                       |
| 2199 | 64,17;16 | $h_0^9[b_{02}^2][b_{04}^2]$                           | $d_4 = h_0^9[b_{02}^2][b_{03}^2]h_5 + h_0^{13} h_3[b_{04}^2]$                            |
| 2200 | 64,17;18 | $h_0^3[b_{02}^2]x_{38}$                               | Permanent cycle  |
| 2201 | 64,17;20 | $h_0^2[b_{02}^2][h_2 b_{03}][h_0(1)b_{13}][b_{03}^2]$ | Permanent cycle  |
| 2202 | 64,17;24 | $h_0[b_{02}^2]^2[b_{03}^2]^2$                         | $d_8 = h_0[b_{02}^2]^4 h_5 + h_0^9 h_4[b_{03}^2]^2$                                      |
| 2203 | 64,18;8  | $h_0^{12}[h_0 h_0(1,3)b_{14}]$                        | $d_4^{-1} = h_0^9[h_0 h_3 b_{02} b_{14} b_{04}]$   |
| 2204 | 64,18;16 | $h_1[b_{02}^2]^4 h_5$                                 | $d_8^{-1} = h_1[b_{02}^2]^2[b_{03}^2]^2$   |
| 2205 | 64,18;16 | $h_0^{10}[b_{02}^2][b_{04}^2]$                        | $d_4 = h_0^{10}[b_{02}^2][b_{03}^2]h_5 + h_0^{14} h_3[b_{04}^2]$                         |
| 2206 | 64,18;20 | $h_1[b_{02}^2]^3 h_4[b_{03}^2]$                       | $d_4 = h_1[b_{02}^2]^4 h_4^2$  |
| 2207 | 64,18;24 | $h_0^2[b_{02}^2]^2[b_{03}^2]^2$                       | $d_8 = h_0^2[b_{02}^2]^4 h_5 + h_0^{10} h_4[b_{03}^2]^2$                                 |
| 2208 | 64,19;8  | $h_0^{13}[h_0 h_0(1,3)b_{14}]$                        | $d_4^{-1} = h_0^{10}[h_0 h_3 b_{02} b_{14} b_{04}]$                                      |
| 2209 | 64,19;16 | $h_0^{11}[b_{02}^2][b_{04}^2]$                        | $d_4 = h_0^{11}[b_{02}^2][b_{03}^2]h_5 + h_0^{15} h_3[b_{04}^2]$                         |
| 2210 | 64,19;24 | $h_0^3[b_{02}^2]^2[b_{03}^2]^2$                       | $d_8 = h_0^3[b_{02}^2]^4 h_5 + h_0^{11} h_4[b_{03}^2]^2$                                 |
| 2211 | 64,20;8  | $h_0^{14}[h_0 h_0(1,3)b_{14}]$                        | $d_4^{-1} = h_0^{11}[h_0 h_3 b_{02} b_{14} b_{04}]$                                      |
| 2212 | 64,20;16 | $h_1^2[b_{02}^2]^4 h_4^2$                             | $d_4^{-1} = h_1^2[b_{02}^2]^3 h_4[b_{03}^2]$   |
| 2213 | 64,20;16 | $h_0^{12}[b_{02}^2][b_{04}^2]$                        | $d_4 = h_0^{12}[b_{02}^2][b_{03}^2]h_5 + h_0^{16} h_3[b_{04}^2]$                         |

|      |          |  |   |
|------|----------|--|---|
| 2214 | 64,20;20 | $[b_{02}^2]^3[b_{13}^2]^2$                                 | Permanent cycle   |
| 2215 | 64,20;24 | $h_0^4[b_{02}^2]^2[b_{03}^2]^2$                            | $d_8 = h_0^4[b_{02}^2]^4h_5 + h_0^{12}h_4[b_{03}^2]^2$  |
| 2216 | 64,21;8  | $h_0^{15}[h_0h_0(1,3)b_{14}]$                              | $d_4^{-1} = h_0^{12}[h_0h_3b_{02}b_{14}b_{04}]$   |
| 2217 | 64,21;16 | $h_0^{13}[b_{02}^2]^3[b_{04}^2]$                           | $d_4 = h_0^{13}[b_{02}^2][b_{03}^2]h_5 + h_0^{17}h_3[b_{04}^2]$   |
| 2218 | 64,21;20 | $h_0[b_{02}^2]^3[b_{13}^2]^2$                              | $d_4^{-1} = [b_{02}^2]^3[h_0(1)b_{13}][b_{03}^2]$   |
| 2219 | 64,21;24 | $h_0^5[b_{02}^2]^2[b_{03}^2]^2$                            | $d_8 = h_0^5[b_{02}^2]^4h_5 + h_0^{13}h_4[b_{03}^2]^2$  |
| 2220 | 64,22;8  | $h_0^{16}[h_0h_0(1,3)b_{14}]$                              | $d_4^{-1} = h_0^{13}[h_0h_3b_{02}b_{14}b_{04}]$   |
| 2221 | 64,22;16 | $h_0^{14}[b_{02}^2][b_{04}^2]$                             | $d_4 = h_0^{14}[b_{02}^2][b_{03}^2]h_5 + h_0^{18}h_3[b_{04}^2]$   |
| 2222 | 64,22;20 | $h_0^2[b_{02}^2]^3[b_{13}^2]^2$                            | $d_4^{-1} = h_0[b_{02}^2]^3[h_0(1)b_{13}][b_{03}^2]$  |
| 2223 | 64,22;24 | $h_1^2[b_{02}^2]^3[h_0(1)^2][b_{03}^2]$                    | Permanent cycle   |
| 2224 | 64,22;24 | $h_0^6[b_{02}^2]^2[b_{03}^2]^2$                            | $d_8 = h_0^6[b_{02}^2]^4h_5 + h_0^{14}h_4[b_{03}^2]^2$  |
| 2225 | 64,23;8  | $h_0^{17}[h_0h_0(1,3)b_{14}]$                              | $d_4^{-1} = h_0^{14}[h_0h_3b_{02}b_{14}b_{04}]$   |
| 2226 | 64,23;16 | $h_0^{15}[b_{02}^2][b_{04}^2]$                             | $d_4 = h_0^{15}[b_{02}^2][b_{03}^2]h_5 + h_0^{19}h_3[b_{04}^2]$   |
| 2227 | 64,23;24 | $[b_{02}^2]^4[h_2b_{03}][h_0(1)b_{13}]$                    | Permanent cycle   |
| 2228 | 64,23;24 | $h_0^7[b_{02}^2]^2[b_{03}^2]^2$                            | $d_8 = h_0^7[b_{02}^2]^4h_5 + h_0^{15}h_4[b_{03}^2]^2$  |
| 2229 | 64,23;26 | $[h_1h_0(1)][b_{02}^2]^4[b_{03}^2]$                        | $d_4 = h_1[b_{02}^2]^4[h_4h_0(1)b_{02}^2 + h_0^3b_{02}b_{14}]$  |
| 2230 | 64,24;8  | $h_0^{18}[h_0h_0(1,3)b_{14}]$                              | $d_4^{-1} = h_0^{15}[h_0h_3b_{02}b_{14}b_{04}]$   |
| 2231 | 64,24;16 | $h_0^{16}[b_{02}^2][b_{04}^2]$                             | $d_4 = h_0^{16}[b_{02}^2][b_{03}^2]h_5 + h_0^{20}h_3[b_{04}^2]$   |
| 2232 | 64,24;24 | $h_0[b_{02}^2]^4[h_2b_{03}][h_0(1)b_{13}]$                 | Permanent cycle   |
| 2233 | 64,24;24 | $h_0^8[b_{02}^2]^2[b_{03}^2]^2$                            | $d_8 = h_0^8[b_{02}^2]^4h_5 + h_0^{16}h_4[b_{03}^2]^2$  |
| 2234 | 64,24;28 | $[b_{02}^2]^5[b_{03}^2]$                                   | $d_4 = [b_{02}^2]^6h_4 + h_0[b_{02}^2]^4[h_0(1)^2][h_0(1)b_{13}] + h_0^6[b_{02}^2]^3[h_2b_{03}][b_{03}^2]$      |
| 2235 | 64,25;8  | $h_0^{19}[h_0h_0(1,3)b_{14}]$                              | $d_4^{-1} = h_0^{16}[h_0h_3b_{02}b_{14}b_{04}]$   |
| 2236 | 64,25;16 | $h_0^{17}[b_{02}^2][b_{04}^2]$                             | $d_4 = h_0^{17}[b_{02}^2][b_{03}^2]h_5 + h_0^{21}h_3[b_{04}^2]$   |
| 2237 | 64,25;22 | $h_1^2[b_{02}^2]^4[h_4h_0(1)b_{02}^2 + h_0^3b_{02}b_{14}]$ | $d_4^{-1} = h_1[h_1h_0(1)][b_{02}^2]^4[b_{03}^2]$   |
| 2238 | 64,25;24 | $h_0^2[b_{02}^2]^4[h_2b_{03}][h_0(1)b_{13}]$               | Permanent cycle   |
| 2239 | 64,25;24 | $h_0^9[b_{02}^2]^2[b_{03}^2]^2$                            | $d_8 = h_0^9[b_{02}^2]^4h_5 + h_0^{17}h_4[b_{03}^2]^2$  |
| 2240 | 64,25;28 | $h_0[b_{02}^2]^5[b_{03}^2]$                                | $d_4 = h_0[b_{02}^2]^6h_4 + h_0^2[b_{02}^2]^4[h_0(1)^2][h_0(1)b_{13}] + h_0^7[b_{02}^2]^3[h_2b_{03}][b_{03}^2]$ |
| 2241 | 64,26;8  | $h_0^{20}[h_0h_0(1,3)b_{14}]$                              | $d_4^{-1} = h_0^{17}[h_0h_3b_{02}b_{14}b_{04}]$   |
| 2242 | 64,26;16 | $h_0^{18}[b_{02}^2][b_{04}^2]$                             | $d_4 = h_0^{18}[b_{02}^2][b_{03}^2]h_5 + h_0^{22}h_3[b_{04}^2]$   |
| 2243 | 64,26;24 | $h_1[b_{02}^2]^6h_4$                                       | $d_4^{-1} = h_1[b_{02}^2]^5[b_{03}^2]$  |
| 2244 | 64,26;24 | $h_0^{10}[b_{02}^2]^2[b_{03}^2]^2$                         | $d_8 = h_0^{10}[b_{02}^2]^4h_5 + h_0^{18}h_4[b_{03}^2]^2$   |
| 2245 | 64,26;28 | $h_0^2[b_{02}^2]^5[b_{03}^2]$                              | $d_4 = h_0^2[b_{02}^2]^6h_4 + h_0^8[b_{02}^2]^3[h_2b_{03}][b_{03}^2]$   |
| 2246 | 64,27;8  | $h_0^{21}[h_0h_0(1,3)b_{14}]$                              | $d_4^{-1} = h_0^{18}[h_0h_3b_{02}b_{14}b_{04}]$   |
| 2247 | 64,27;16 | $h_0^{19}[b_{02}^2][b_{04}^2]$                             | $d_4 = h_0^{19}[b_{02}^2][b_{03}^2]h_5 + h_0^{23}h_3[b_{04}^2]$   |
| 2248 | 64,27;24 | $h_0^{11}[b_{02}^2]^2[b_{03}^2]^2$                         | $d_8 = h_0^{11}[b_{02}^2]^4h_5 + h_0^{19}h_4[b_{03}^2]^2$   |
| 2249 | 64,27;28 | $h_0^3[b_{02}^2]^5[b_{03}^2]$                              | $d_4 = h_0^3[b_{02}^2]^6h_4 + h_0^9[b_{02}^2]^3[h_2b_{03}][b_{03}^2]$   |
| 2250 | 64,28;8  | $h_0^{22}[h_0h_0(1,3)b_{14}]$                              | $d_4^{-1} = h_0^{19}[h_0h_3b_{02}b_{14}b_{04}]$   |
| 2251 | 64,28;16 | $h_0^{20}[b_{02}^2][b_{04}^2]$                             | $d_4 = h_0^{20}[b_{02}^2][b_{03}^2]h_5 + h_0^{24}h_3[b_{04}^2]$   |
| 2252 | 64,28;24 | $h_0^{12}[b_{02}^2]^2[b_{03}^2]^2$                         | $d_8 = h_0^{12}[b_{02}^2]^4h_5 + h_0^{20}h_4[b_{03}^2]^2$   |
| 2253 | 64,28;28 | $h_0^4[b_{02}^2]^5[b_{03}^2]$                              | $d_4 = h_0^4[b_{02}^2]^6h_4 + h_0^{10}[b_{02}^2]^3[h_2b_{03}][b_{03}^2]$  |
| 2254 | 64,29;8  | $h_0^{23}[h_0h_0(1,3)b_{14}]$                              | $d_4^{-1} = h_0^{20}[h_0h_3b_{02}b_{14}b_{04}]$   |
| 2255 | 64,29;16 | $h_0^{21}[b_{02}^2][b_{04}^2]$                             | $d_4 = h_0^{21}[b_{02}^2][b_{03}^2]h_5 + h_0^{25}h_3[b_{04}^2]$   |
| 2256 | 64,29;24 | $h_0^{13}[b_{02}^2]^2[b_{03}^2]^2$                         | $d_8 = h_0^{13}[b_{02}^2]^4h_5 + h_0^{21}h_4[b_{03}^2]^2$   |
| 2257 | 64,29;28 | $h_0^5[b_{02}^2]^5[b_{03}^2]$                              | $d_4 = h_0^5[b_{02}^2]^6h_4 + h_0^{11}[b_{02}^2]^3[h_2b_{03}][b_{03}^2]$  |
| 2258 | 64,30;8  | $h_0^{24}[h_0h_0(1,3)b_{14}]$                              | $d_4^{-1} = h_0^{21}[h_0h_3b_{02}b_{14}b_{04}]$   |
| 2259 | 64,30;16 | $h_0^{22}[b_{02}^2][b_{04}^2]$                             | $d_4 = h_0^{22}[b_{02}^2][b_{03}^2]h_5 + h_0^{26}h_3[b_{04}^2]$   |
| 2260 | 64,30;24 | $h_0^{14}[b_{02}^2]^2[b_{03}^2]^2$                         | $d_8 = h_0^{14}[b_{02}^2]^4h_5 + h_0^{22}h_4[b_{03}^2]^2$   |
| 2261 | 64,30;28 | $h_1^2[b_{02}^2]^6[h_0(1)^2]$                              | Permanent cycle   |
| 2262 | 64,30;28 | $h_0^6[b_{02}^2]^5[b_{03}^2]$                              | $d_4 = h_0^6[b_{02}^2]^6h_4 + h_0^{12}[b_{02}^2]^3[h_2b_{03}][b_{03}^2]$  |

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| 2263 | 64,31;8  | $h_0^{25}[h_0h_0(1,3)b_{14}]$                                       | $d_4^{-1} = h_0^{22}[h_0h_3b_{02}b_{14}b_{04}]$                          |
| 2264 | 64,31;16 | $h_0^{23}[b_{02}^2][b_{04}^2]$                                      | $d_4 = h_0^{23}[b_{02}^2][b_{03}^2]h_5 + h_0^{27}h_3[b_{04}^2]$          |
| 2265 | 64,31;24 | $h_0^{15}[b_{02}^2]^2[b_{03}^2]^2$                                  | $d_8 = h_0^{15}[b_{02}^2]^4h_5 + h_0^{23}h_4[b_{03}^2]^2$                |
| 2266 | 64,31;28 | $h_0^7[b_{02}^2]^5[b_{03}^2]$                                       | $d_4 = h_0^7[b_{02}^2]^6h_4 + h_0^{13}[b_{02}^2]^3[h_2b_{03}][b_{03}^2]$ |
| 2267 | 64,31;30 | $[h_1h_0(1)][b_{02}^2]^7$   | Permanent cycle  |
| 2268 | 64,32;8  | $h_0^{26}[h_0h_0(1,3)b_{14}]$                                       | $d_4^{-1} = h_0^{23}[h_0h_3b_{02}b_{14}b_{04}]$                          |
| 2269 | 64,32;16 | $h_0^{24}[b_{02}^2][b_{04}^2]$                                      | $d_4 = h_0^{24}[b_{02}^2][b_{03}^2]h_5 + h_0^{28}h_3[b_{04}^2]$          |
| 2270 | 64,32;24 | $h_0^{16}[b_{02}^2]^2[b_{03}^2]^2$                                  | $d_8 = h_0^{16}[b_{02}^2]^4h_5 + h_0^{24}h_4[b_{03}^2]^2$                |
| 2271 | 64,32;28 | $h_0^8[b_{02}^2]^5[b_{03}^2]$                                       | $d_4 = h_0^8[b_{02}^2]^6h_4 + h_0^{14}[b_{02}^2]^3[h_2b_{03}][b_{03}^2]$ |
| 2272 | 64,32;32 | $[b_{02}^2]^8$  | $d_{32} = h_0^{32}h_6$   |
| 2273 | 64,33;8  | $h_0^{27}[h_0h_0(1,3)b_{14}]$                                       | $d_4^{-1} = h_0^{24}[h_0h_3b_{02}b_{14}b_{04}]$                          |
| 2274 | 64,33;16 | $h_0^{25}[b_{02}^2][b_{04}^2]$                                      | $d_4 = h_0^{25}[b_{02}^2][b_{03}^2]h_5 + h_0^{29}h_3[b_{04}^2]$          |
| 2275 | 64,33;24 | $h_0^{17}[b_{02}^2]^2[b_{03}^2]^2$                                  | $d_8 = h_0^{17}[b_{02}^2]^4h_5 + h_0^{25}h_4[b_{03}^2]^2$                |
| 2276 | 64,33;28 | $h_0^9[b_{02}^2]^5[b_{03}^2]$                                       | $d_4 = h_0^9[b_{02}^2]^6h_4 + h_0^{15}[b_{02}^2]^3[h_2b_{03}][b_{03}^2]$ |
| 2277 | 64,33;32 | $h_0[b_{02}^2]^8$   | $d_{32} = h_0^{33}h_6$   |
| 2278 | 65,3;0   | $h_2h_5^2$  | Permanent cycle  |
| 2279 | 65,3;0   | $h_1^2h_6$  | Permanent cycle  |
| 2280 | 65,4;0   | $h_0h_2h_5^2$   | Permanent cycle  |
| 2281 | 65,5;0   | $h_0^2h_2h_5^2$   | Permanent cycle  |
| 2282 | 65,6;8   | $h_2[h_1(1)h_0(1,2)]$   | Permanent cycle  |
| 2283 | 65,7;6   | $h_2h_5[h_2h_1(1)b_{03}]$   | Permanent cycle  |
| 2284 | 65,7;10  | $h_3[h_0h_0(1,2)b_{03}]$  | Permanent cycle  |
| 2285 | 65,7;12  | $h_1^2h_3[b_{04}^2]$  | $d_4 = h_1^2h_3[b_{03}^2]h_5$  |
| 2286 | 65,8;10  | $h_0h_3[h_0h_0(1,2)b_{03}]$   | Permanent cycle  |
| 2287 | 65,8;12  | $[h_0h_3b_{02}b_{14}b_{04}]$  | $d_4 = h_0^3[h_0h_0(1,3)b_{14}]$   |
| 2288 | 65,8;14  | $h_1[h_1h_0(1)][b_{04}^2]$  | $d_4 = h_1[h_1h_0(1)][b_{03}^2]h_5$                                      |
| 2289 | 65,9;8   | $[h_0(1)^2][b_{13}^2]h_5$   | $d_4^{-1} = [h_0(1)^2][b_{14}^2]$  |
| 2290 | 65,9;10  | $h_0^2h_3[h_0h_0(1,2)b_{03}]$                                       | Permanent cycle  |
| 2291 | 65,9;12  | $h_2^2[h_2h_1(1)b_{03}b_{04}]$                                      | Permanent cycle  |
| 2292 | 65,9;12  | $h_0[h_0h_3b_{02}b_{14}b_{04}]$                                     | $d_4 = h_0^4[h_0h_0(1,3)b_{14}]$   |
| 2293 | 65,9;16  | $h_1[b_{02}^2][b_{04}^2]$   | $d_4 = h_1[b_{02}^2][b_{03}^2]h_5$                                       |
| 2294 | 65,10;8  | $h_0[h_0(1)^2][b_{13}^2]h_5$  | $d_4^{-1} = h_0[h_0(1)^2][b_{14}^2]$                                     |
| 2295 | 65,10;10 | $h_0^3h_3[h_0h_0(1,2)b_{03}]$                                       | $d_4^{-1} = h_3[b_{03}^2][h_0h_3b_{04}]$                                 |
| 2296 | 65,10;12 | $h_0^2[h_0h_3b_{02}b_{14}b_{04}]$                                   | $d_4 = h_0^5[h_0h_0(1,3)b_{14}]$   |
| 2297 | 65,10;14 | $[b_{13}^2][h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$               | Permanent cycle  |
| 2298 | 65,11;8  | $h_0^2[h_0(1)^2][b_{13}^2]h_5$                                      | $d_4^{-1} = h_0^2[h_0(1)^2][b_{14}^2]$                                   |
| 2299 | 65,11;10 | $h_0^4h_3[h_0h_0(1,2)b_{03}]$                                       | $d_4^{-1} = h_0h_3[b_{03}^2][h_0h_3b_{04}]$                              |
| 2300 | 65,11;12 | $h_1^2[b_{02}^2][b_{03}^2]h_5$                                      | $d_4^{-1} = h_1^2[b_{02}^2][b_{04}^2]$                                   |
| 2301 | 65,11;12 | $h_0^3[h_0h_3b_{02}b_{14}b_{04}]$                                   | $d_4 = h_0^6[h_0h_0(1,3)b_{14}]$   |
| 2302 | 65,11;14 | $h_0[b_{13}^2][h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$            | Permanent cycle  |
| 2303 | 65,11;16 | $h_1^2h_4[b_{03}^2]^2$  | Permanent cycle  |
| 2304 | 65,12;10 | $h_0^5h_3[h_0h_0(1,2)b_{03}]$                                       | $d_4^{-1} = h_0^2h_3[b_{03}^2][h_0h_3b_{04}]$                            |
| 2305 | 65,12;12 | $[b_{02}^2]h_5[h_0h_0(1)^2b_{03}]$                                  | Permanent cycle  |
| 2306 | 65,12;12 | $h_0^4[h_0h_3b_{02}b_{14}b_{04}]$                                   | $d_4 = h_0^7[h_0h_0(1,3)b_{14}]$   |
| 2307 | 65,12;14 | $h_0^2[b_{13}^2][h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$          | Permanent cycle  |
| 2308 | 65,12;20 | $[h_0(1)b_{13}][b_{03}^2]^2$  | $d_8 = [b_{02}^2]^2[h_0(1)b_{13}]h_5$                                    |
| 2309 | 65,13;10 | $h_0^6h_3[h_0h_0(1,2)b_{03}]$                                       | $d_4^{-1} = h_0^3h_3[b_{03}^2][h_0h_3b_{04}]$                            |
| 2310 | 65,13;12 | $h_0[b_{02}^2]h_5[h_0h_0(1)^2b_{03}]$                               | $d_8^{-1} = h_2[h_2b_{03}][b_{03}^2]^2$                                  |
| 2311 | 65,13;12 | $h_0^5[h_0h_3b_{02}b_{14}b_{04}]$                                   | $d_4 = h_0^8[h_0h_0(1,3)b_{14}]$   |
| 2312 | 65,13;16 | $h_1[b_{13}^2]^2[b_{03}^2]$   | Permanent cycle  |
| 2313 | 65,13;18 | $[b_{02}^2][h_0h_0(1)b_{03}^2b_{14} + h_0h_0(1)b_{13}b_{03}b_{04}]$ | $d_6 = h_0[b_{02}^2]^2[h_0(1)b_{13}]h_5$                                 |
| 2314 | 65,13;20 | $h_0[h_0(1)b_{13}][b_{03}^2]^2$                                     | Permanent cycle  |
| 2315 | 65,14;10 | $h_0^7h_3[h_0h_0(1,2)b_{03}]$                                       | $d_4^{-1} = h_0^4h_3[b_{03}^2][h_0h_3b_{04}]$                            |
| 2316 | 65,14;12 | $h_0^2[b_{02}^2]h_5[h_0h_0(1)^2b_{03}]$                             | $d_8^{-1} = h_0h_2[h_2b_{03}][b_{03}^2]^2$                               |

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| 2317 | 65,14;12 | $h_0^6[h_0h_3b_{02}b_{14}b_{04}]$  | $d_4 = h_0^9[h_0h_0(1,3)b_{14}]$                                 |
| 2318 | 65,14;18 | $h_0[b_{02}^2][h_0h_0(1)b_{03}^2b_{14} + h_0h_0(1)b_{13}b_{03}b_{04}]$   | $d_6 = h_0^2[b_{02}^2]^2[h_0(1)b_{13}]h_5$                       |
| 2319 | 65,14;20 | $h_0^2[h_0(1)b_{13}][b_{03}^2]^2$  | Permanent cycle  |
| 2320 | 65,15;10 | $h_0^8h_3[h_0h_0(1,2)b_{03}]$  | $d_4^{-1} = h_0^5h_3[b_{03}^2][h_0h_3b_{04}]$                    |
| 2321 | 65,15;12 | $h_0^7[h_0h_3b_{02}b_{14}b_{04}]$  | $d_4 = h_0^{10}[h_0h_0(1,3)b_{14}]$                              |
| 2322 | 65,15;18 | $h_0^2[b_{02}^2][h_0h_0(1)b_{03}^2b_{14} + h_0h_0(1)b_{13}b_{03}b_{04}]$ | $d_6 = h_0^3[b_{02}^2]^2[h_0(1)b_{13}]h_5$                       |
| 2323 | 65,15;20 | $h_0^3[h_0(1)b_{13}][b_{03}^2]^2$  | Permanent cycle  |
| 2324 | 65,16;10 | $h_0^9h_3[h_0h_0(1,2)b_{03}]$  | $d_4^{-1} = h_0^6h_3[b_{03}^2][h_0h_3b_{04}]$                    |
| 2325 | 65,16;12 | $h_0^8[h_0h_3b_{02}b_{14}b_{04}]$  | $d_4 = h_0^{11}[h_0h_0(1,3)b_{14}]$                              |
| 2326 | 65,16;16 | $[b_{02}^2][h_0(1)b_{13}][b_{13}^2]^2$                                   | Permanent cycle  |
| 2327 | 65,16;22 | $h_1[h_1h_0(1)][b_{02}^2][b_{03}^2]^2$                                   | $d_8 = h_1[h_1h_0(1)][b_{02}^2]^3h_5$                            |
| 2328 | 65,17;10 | $h_0^{10}h_3[h_0h_0(1,2)b_{03}]$   | $d_4^{-1} = h_0^7h_3[b_{03}^2][h_0h_3b_{04}]$                    |
| 2329 | 65,17;12 | $h_0^9[h_0h_3b_{02}b_{14}b_{04}]$  | $d_4 = h_0^{12}[h_0h_0(1,3)b_{14}]$                              |
| 2330 | 65,17;16 | $h_0[b_{02}^2][h_0(1)b_{13}][b_{13}^2]^2$                                | $d_4^{-1} = [b_{02}^2][h_0(1)^2][b_{13}^2][b_{03}^2]$            |
| 2331 | 65,17;24 | $h_1[b_{02}^2]^2[b_{03}^2]^2$  | $d_8 = h_1[b_{02}^2]^4h_5$                                       |
| 2332 | 65,18;10 | $h_0^{11}h_3[h_0h_0(1,2)b_{03}]$   | $d_4^{-1} = h_0^8h_3[b_{03}^2][h_0h_3b_{04}]$                    |
| 2333 | 65,18;12 | $h_0^{10}[h_0h_3b_{02}b_{14}b_{04}]$                                     | $d_4 = h_0^{13}[h_0h_0(1,3)b_{14}]$                              |
| 2334 | 65,18;16 | $h_0^2[b_{02}^2][h_0(1)b_{13}][b_{13}^2]^2$                              | $d_4^{-1} = h_0[b_{02}^2][h_0(1)^2][b_{13}^2][b_{03}^2]$         |
| 2335 | 65,19;10 | $h_0^{12}h_3[h_0h_0(1,2)b_{03}]$   | $d_4^{-1} = h_0^9h_3[b_{03}^2][h_0h_3b_{04}]$                    |
| 2336 | 65,19;12 | $h_0^{11}[h_0h_3b_{02}b_{14}b_{04}]$                                     | $d_4 = h_0^{14}[h_0h_0(1,3)b_{14}]$                              |
| 2337 | 65,19;16 | $h_1^2[b_{02}^2]^4h_5$   | $d_8^{-1} = h_1^2[b_{02}^2]^2[b_{03}^2]^2$                       |
| 2338 | 65,19;20 | $[b_{02}^2]^2[h_2b_{03}][h_0(1)^2][b_{13}^2]$                            | Permanent cycle  |
| 2339 | 65,19;20 | $h_1^2[b_{02}^2]^3h_4[b_{03}^2]$   | $d_4 = h_1^2[b_{02}^2]^4h_4^2$                                   |
| 2340 | 65,20;10 | $h_0^{13}h_3[h_0h_0(1,2)b_{03}]$   | $d_4^{-1} = h_0^{10}h_3[b_{03}^2][h_0h_3b_{04}]$                 |
| 2341 | 65,20;12 | $h_0^{12}[h_0h_3b_{02}b_{14}b_{04}]$                                     | $d_4 = h_0^{15}[h_0h_0(1,3)b_{14}]$                              |
| 2342 | 65,20;20 | $h_0[b_{02}^2]^2[h_2b_{03}][h_0(1)^2][b_{13}^2]$                         | $d_4^{-1} = [b_{02}^2]^2[b_{03}^2][h_0h_0(1)^2b_{03}]$           |
| 2343 | 65,20;24 | $[b_{02}^2]^3[h_0(1)b_{13}][b_{03}^2]$                                   | $d_4 = h_0[b_{02}^2]^3[b_{13}^2]^2$                              |
| 2344 | 65,21;10 | $h_0^{14}h_3[h_0h_0(1,2)b_{03}]$   | $d_4^{-1} = h_0^{11}h_3[b_{03}^2][h_0h_3b_{04}]$                 |
| 2345 | 65,21;12 | $h_0^{13}[h_0h_3b_{02}b_{14}b_{04}]$                                     | $d_4 = h_0^{16}[h_0h_0(1,3)b_{14}]$                              |
| 2346 | 65,21;20 | $h_0^2[b_{02}^2]^2[h_2b_{03}][h_0(1)^2][b_{13}^2]$                       | $d_4^{-1} = h_0[b_{02}^2]^2[b_{03}^2][h_0h_0(1)^2b_{03}]$        |
| 2347 | 65,21;24 | $h_0[b_{02}^2]^3[h_0(1)b_{13}][b_{03}^2]$                                | $d_4 = h_0^2[b_{02}^2]^3[b_{13}^2]^2$                            |
| 2348 | 65,22;10 | $h_0^{15}h_3[h_0h_0(1,2)b_{03}]$   | $d_4^{-1} = h_0^{12}h_3[b_{03}^2][h_0h_3b_{04}]$                 |
| 2349 | 65,22;12 | $h_0^{14}[h_0h_3b_{02}b_{14}b_{04}]$                                     | $d_4 = h_0^{17}[h_0h_0(1,3)b_{14}]$                              |
| 2350 | 65,22;24 | $h_0^2[b_{02}^2]^3[h_0(1)b_{13}][b_{03}^2]$                              | Permanent cycle  |
| 2351 | 65,23;10 | $h_0^{16}h_3[h_0h_0(1,2)b_{03}]$   | $d_4^{-1} = h_0^{13}h_3[b_{03}^2][h_0h_3b_{04}]$                 |
| 2352 | 65,23;12 | $h_0^{15}[h_0h_3b_{02}b_{14}b_{04}]$                                     | $d_4 = h_0^{18}[h_0h_0(1,3)b_{14}]$                              |
| 2353 | 65,23;24 | $h_0^3[b_{02}^2]^3[h_0(1)b_{13}][b_{03}^2]$                              | Permanent cycle  |
| 2354 | 65,24;10 | $h_0^{17}h_3[h_0h_0(1,2)b_{03}]$   | $d_4^{-1} = h_0^{14}h_3[b_{03}^2][h_0h_3b_{04}]$                 |
| 2355 | 65,24;12 | $h_0^{16}[h_0h_3b_{02}b_{14}b_{04}]$                                     | $d_4 = h_0^{19}[h_0h_0(1,3)b_{14}]$                              |
| 2356 | 65,24;26 | $h_1[h_1h_0(1)][b_{02}^2]^4[b_{03}^2]$                                   | $d_4 = h_1^2[b_{02}^2]^4[h_4h_0(1)b_{02}^2 + h_0^3b_{02}b_{14}]$ |
| 2357 | 65,25;10 | $h_0^{18}h_3[h_0h_0(1,2)b_{03}]$   | $d_4^{-1} = h_0^{15}h_3[b_{03}^2][h_0h_3b_{04}]$                 |
| 2358 | 65,25;12 | $h_0^{17}[h_0h_3b_{02}b_{14}b_{04}]$                                     | $d_4 = h_0^{20}[h_0h_0(1,3)b_{14}]$                              |
| 2359 | 65,25;28 | $h_1[b_{02}^2]^5[b_{03}^2]$  | $d_4 = h_1[b_{02}^2]^6h_4$                                       |
| 2360 | 65,26;10 | $h_0^{19}h_3[h_0h_0(1,2)b_{03}]$   | $d_4^{-1} = h_0^{16}h_3[b_{03}^2][h_0h_3b_{04}]$                 |
| 2361 | 65,26;12 | $h_0^{18}[h_0h_3b_{02}b_{14}b_{04}]$                                     | $d_4 = h_0^{21}[h_0h_0(1,3)b_{14}]$                              |
| 2362 | 65,27;10 | $h_0^{20}h_3[h_0h_0(1,2)b_{03}]$   | $d_4^{-1} = h_0^{17}h_3[b_{03}^2][h_0h_3b_{04}]$                 |
| 2363 | 65,27;12 | $h_0^{19}[h_0h_3b_{02}b_{14}b_{04}]$                                     | $d_4 = h_0^{22}[h_0h_0(1,3)b_{14}]$                              |
| 2364 | 65,27;24 | $h_1^2[b_{02}^2]^6h_4$   | $d_4^{-1} = h_1^2[b_{02}^2]^5[b_{03}^2]$                         |
| 2365 | 65,28;10 | $h_0^{21}h_3[h_0h_0(1,2)b_{03}]$   | $d_4^{-1} = h_0^{18}h_3[b_{03}^2][h_0h_3b_{04}]$                 |
| 2366 | 65,28;12 | $h_0^{20}[h_0h_3b_{02}b_{14}b_{04}]$                                     | $d_4 = h_0^{23}[h_0h_0(1,3)b_{14}]$                              |
| 2367 | 65,28;28 | $[b_{02}^2]^6[h_0(1)b_{13}]$   | Permanent cycle  |
| 2368 | 65,29;10 | $h_0^{22}h_3[h_0h_0(1,2)b_{03}]$   | $d_4^{-1} = h_0^{19}h_3[b_{03}^2][h_0h_3b_{04}]$                 |

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| 2369 | 65,29;12 | $h_0^{21}[h_0h_3b_{02}b_{14}b_{04}]$   | $d_4 = h_0^{24}[h_0h_0(1,3)b_{14}]$                  |
| 2370 | 65,29;28 | $h_0[b_{02}^2]^6[h_0(1)b_{13}]$  | Permanent cycle                                      |
| 2371 | 65,30;10 | $h_0^{23}h_3[h_0h_0(1,2)b_{03}]$   | $d_4^{-1} = h_0^{20}h_3[b_{03}^2][h_0h_3b_{04}]$     |
| 2372 | 65,30;12 | $h_0^{22}[h_0h_3b_{02}b_{14}b_{04}]$   | $d_4 = h_0^{25}[h_0h_0(1,3)b_{14}]$                  |
| 2373 | 65,30;28 | $h_0^3[b_{02}^2]^6[h_0(1)b_{13}]$  | Permanent cycle                                      |
| 2374 | 65,31;10 | $h_0^{24}h_3[h_0h_0(1,2)b_{03}]$   | $d_4^{-1} = h_0^{21}h_3[b_{03}^2][h_0h_3b_{04}]$     |
| 2375 | 65,31;12 | $h_0^{23}[h_0h_3b_{02}b_{14}b_{04}]$   | $d_4 = h_0^{26}[h_0h_0(1,3)b_{14}]$                  |
| 2376 | 65,31;28 | $h_0^3[b_{02}^2]^6[h_0(1)b_{13}]$  | Permanent cycle                                      |
| 2377 | 65,32;10 | $h_0^{25}h_3[h_0h_0(1,2)b_{03}]$   | $d_4^{-1} = h_0^{22}h_3[b_{03}^2][h_0h_3b_{04}]$     |
| 2378 | 65,32;12 | $h_0^{24}[h_0h_3b_{02}b_{14}b_{04}]$   | $d_4 = h_0^{27}[h_0h_0(1,3)b_{14}]$                  |
| 2379 | 65,32;30 | $h_1[h_1h_0(1)][b_{02}^2]^7$   | Permanent cycle                                      |
| 2380 | 65,33;10 | $h_0^{26}h_3[h_0h_0(1,2)b_{03}]$   | $d_4^{-1} = h_0^{23}h_3[b_{03}^2][h_0h_3b_{04}]$     |
| 2381 | 65,33;12 | $h_0^{25}[h_0h_3b_{02}b_{14}b_{04}]$   | $d_4 = h_0^{28}[h_0h_0(1,3)b_{14}]$                  |
| 2382 | 65,33;32 | $h_1[b_{02}^2]^8$  | Permanent cycle                                      |
| 2383 | 66,2;0   | $h_2h_6$   | Permanent cycle                                      |
| 2384 | 66,3;0   | $h_0h_2h_6$  | Permanent cycle                                      |
| 2385 | 66,4;0   | $h_0^2h_2h_6$  | Permanent cycle                                      |
| 2386 | 66,6;8   | $h_3^2[b_{14}^2]$  | Permanent cycle                                      |
| 2387 | 66,7;8   | $h_0h_3^2[b_{14}^2]$   | Permanent cycle                                      |
| 2388 | 66,7;10  | $[h_0(1,2)b_{13}^2 + h_1h_3h_0(1,2)b_{03}]$                                  | Permanent cycle                                      |
| 2389 | 66,8;8   | $[h_2b_{03}][b_{13}^2]h_5$   | $d_4^{-1} = [h_2b_{03}][b_{14}^2]$                   |
| 2390 | 66,8;10  | $h_0[h_0(1,2)b_{13}^2 + h_1h_3h_0(1,2)b_{03}]$                               | Permanent cycle                                      |
| 2391 | 66,8;12  | $[h_0(1)^2][b_{14}^2]$   | $d_4 = [h_0(1)^2][b_{13}^2]h_5$                      |
| 2392 | 66,9;8   | $h_0[h_2b_{03}][b_{13}^2]h_5$  | $d_4^{-1} = h_0[h_2b_{03}][b_{14}^2]$                |
| 2393 | 66,9;12  | $h_0[h_0(1)^2][b_{14}^2]$  | $d_4 = h_0[h_0(1)^2][b_{13}^2]h_5$                   |
| 2394 | 66,9;14  | $h_3[b_{03}^2][h_0h_3b_{04}]$  | $d_4 = h_0^3h_3[h_0h_0(1,2)b_{03}]$                  |
| 2395 | 66,10;8  | $h_0^2[h_2b_{03}][b_{13}^2]h_5$  | $d_4^{-1} = h_0^2[h_2b_{03}][b_{14}^2]$              |
| 2396 | 66,10;12 | $h_2[b_{02}^2][b_{03}^2]h_5 + h_0^2[h_0(1)^2][b_{14}^2]$                     | $d_4^{-1} = h_2[b_{02}^2][b_{04}^2]$                 |
| 2397 | 66,10;12 | $h_0^2[h_0(1)^2][b_{14}^2]$  | $d_4 = h_0^2[h_0(1)^2][b_{13}^2]h_5$                 |
| 2398 | 66,10;14 | $[b_{02}^2][h_0h_0(1,2)b_{03}] + h_0h_3[b_{03}^2][h_0h_3b_{04}]$             | Permanent cycle                                      |
| 2399 | 66,10;14 | $x_{53}$   | Permanent cycle                                      |
| 2400 | 66,10;14 | $h_0h_3[b_{03}^2][h_0h_3b_{04}]$   | $d_4 = h_0^4h_3[h_0h_0(1,2)b_{03}]$                  |
| 2401 | 66,10;16 | $h_1^2[b_{02}^2][b_{04}^2]$  | $d_4 = h_1^2[b_{02}^2][b_{03}^2]h_5$                 |
| 2402 | 66,11;12 | $h_0h_2[b_{02}^2][b_{03}^2]h_5$  | $d_4^{-1} = h_0h_2[b_{02}^2][b_{04}^2]$              |
| 2403 | 66,11;14 | $h_0x_{53}$  | Permanent cycle                                      |
| 2404 | 66,11;14 | $h_0[b_{02}^2][h_0h_0(1,2)b_{03}] +$<br>$h_0^2h_3[b_{03}^2][h_0h_3b_{04}]$   | Permanent cycle                                      |
| 2405 | 66,11;14 | $h_0^2h_3[b_{03}^2][h_0h_3b_{04}]$   | $d_4 = h_0^5h_3[h_0h_0(1,2)b_{03}]$                  |
| 2406 | 66,12;12 | $h_0^2h_2[b_{02}^2][b_{03}^2]h_5$  | $d_4^{-1} = h_0^2h_2[b_{02}^2][b_{04}^2]$            |
| 2407 | 66,12;14 | $h_2^2[b_{03}^2][h_1(1)b_{13}^2 + h_1^2b_{24}b_{03}]$                        | Permanent cycle                                      |
| 2408 | 66,12;14 | $h_0^2[b_{02}^2][h_0h_0(1,2)b_{03}] +$<br>$h_0^3h_3[b_{03}^2][h_0h_3b_{04}]$ | Permanent cycle                                      |
| 2409 | 66,12;14 | $h_0^3h_3[b_{03}^2][h_0h_3b_{04}]$   | $d_4 = h_0^6h_3[h_0h_0(1,2)b_{03}]$                  |
| 2410 | 66,12;20 | $h_2[h_2b_{03}][b_{03}^2]^2$   | $d_8 = h_0[b_{02}^2]h_5[h_0h_0(1)^2b_{03}]$          |
| 2411 | 66,13;14 | $h_0^3[b_{02}^2][h_0h_0(1,2)b_{03}] +$<br>$h_0^4h_3[b_{03}^2][h_0h_3b_{04}]$ | $d_4^{-1} = [b_{02}^2][b_{03}^2][h_0h_3b_{04}]$      |
| 2412 | 66,13;14 | $h_0^4h_3[b_{03}^2][h_0h_3b_{04}]$   | $d_4 = h_0^7h_3[h_0h_0(1,2)b_{03}]$                  |
| 2413 | 66,13;20 | $h_0h_2[h_2b_{03}][b_{03}^2]^2$  | $d_8 = h_0^2[b_{02}^2]h_5[h_0h_0(1)^2b_{03}]$        |
| 2414 | 66,14;12 | $h_2^2[b_{13}^2]^3$  | $d_4^{-1} = h_2[b_{13}^2]^2[b_{03}^2]$               |
| 2415 | 66,14;14 | $h_0^4[b_{02}^2][h_0h_0(1,2)b_{03}] +$<br>$h_0^5h_3[b_{03}^2][h_0h_3b_{04}]$ | $d_4^{-1} = h_0[b_{02}^2][b_{03}^2][h_0h_3b_{04}]$   |
| 2416 | 66,14;14 | $h_0^5h_3[b_{03}^2][h_0h_3b_{04}]$   | $d_4 = h_0^8h_3[h_0h_0(1,2)b_{03}]$                  |
| 2417 | 66,15;14 | $h_0^5[b_{02}^2][h_0h_0(1,2)b_{03}] +$<br>$h_0^6h_3[b_{03}^2][h_0h_3b_{04}]$ | $d_4^{-1} = h_0^2[b_{02}^2][b_{03}^2][h_0h_3b_{04}]$ |

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| 2418 | 66,15;14 | $h_0^6 h_3 [b_{03}^2] [h_0 h_3 b_{04}]$  | $d_4 = h_0^9 h_3 [h_0 h_0(1, 2) b_{03}]$                       |
| 2419 | 66,15;16 | $[h_2 b_{03}] [h_0(1)^2] [h_0(1) b_{13}] [b_{13}^2]$   | Permanent cycle  |
| 2420 | 66,16;14 | $h_0^6 [b_{02}^2] [h_0 h_0(1, 2) b_{03}] +$<br>$h_0^7 h_3 [b_{03}^2] [h_0 h_3 b_{04}]$       | $d_4^{-1} = h_0^3 [b_{02}^2] [b_{03}^2] [h_0 h_3 b_{04}]$      |
| 2421 | 66,16;14 | $h_0^7 h_3 [b_{03}^2] [h_0 h_3 b_{04}]$  | $d_4 = h_0^{10} h_3 [h_0 h_0(1, 2) b_{03}]$                    |
| 2422 | 66,16;16 | $h_0 [h_2 b_{03}] [h_0(1)^2] [h_0(1) b_{13}] [b_{13}^2]$                                     | $d_4^{-1} = [b_{02}^2] [h_2 b_{03}] [b_{13}^2] [b_{03}^2]$     |
| 2423 | 66,16;20 | $[b_{02}^2] [h_0(1)^2] [b_{13}^2] [b_{03}^2]$  | $d_4 = h_0 [b_{02}^2] [h_0(1) b_{13}] [b_{13}^2]^2$            |
| 2424 | 66,17;14 | $h_0^7 [b_{02}^2] [h_0 h_0(1, 2) b_{03}] +$<br>$h_0^8 h_3 [b_{03}^2] [h_0 h_3 b_{04}]$       | $d_4^{-1} = h_0^4 [b_{02}^2] [b_{03}^2] [h_0 h_3 b_{04}]$      |
| 2425 | 66,17;14 | $h_0^8 h_3 [b_{03}^2] [h_0 h_3 b_{04}]$  | $d_4 = h_0^{11} h_3 [h_0 h_0(1, 2) b_{03}]$                    |
| 2426 | 66,17;16 | $h_0^2 [h_2 b_{03}] [h_0(1)^2] [h_0(1) b_{13}] [b_{13}^2]$                                   | $d_4^{-1} = h_0 [b_{02}^2] [h_2 b_{03}] [b_{13}^2] [b_{03}^2]$ |
| 2427 | 66,17;20 | $h_0 [b_{02}^2] [h_0(1)^2] [b_{13}^2] [b_{03}^2]$  | $d_4 = h_0^2 [b_{02}^2] [h_0(1) b_{13}] [b_{13}^2]^2$          |
| 2428 | 66,18;14 | $h_0^8 [b_{02}^2] [h_0 h_0(1, 2) b_{03}] +$<br>$h_0^9 h_3 [b_{03}^2] [h_0 h_3 b_{04}]$       | $d_4^{-1} = h_0^5 [b_{02}^2] [b_{03}^2] [h_0 h_3 b_{04}]$      |
| 2429 | 66,18;14 | $h_0^9 h_3 [b_{03}^2] [h_0 h_3 b_{04}]$  | $d_4 = h_0^{12} h_3 [h_0 h_0(1, 2) b_{03}]$                    |
| 2430 | 66,18;16 | $h_2 [b_{02}^2]^4 h_5$   | $d_8^{-1} = h_2 [b_{02}^2]^2 [b_{03}^2]^2$                     |
| 2431 | 66,18;20 | $h_0^2 [b_{02}^2] [h_0(1)^2] [b_{13}^2] [b_{03}^2]$  | Permanent cycle  |
| 2432 | 66,18;24 | $h_1^2 [b_{02}^2]^2 [b_{03}^2]^2$  | $d_8 = h_1^2 [b_{02}^2]^4 h_5$                                 |
| 2433 | 66,19;14 | $h_0^9 [b_{02}^2] [h_0 h_0(1, 2) b_{03}] +$<br>$h_0^{10} h_3 [b_{03}^2] [h_0 h_3 b_{04}]$    | $d_4^{-1} = h_0^6 [b_{02}^2] [b_{03}^2] [h_0 h_3 b_{04}]$      |
| 2434 | 66,19;14 | $h_0^{10} h_3 [b_{03}^2] [h_0 h_3 b_{04}]$   | $d_4 = h_0^{13} h_3 [h_0 h_0(1, 2) b_{03}]$                    |
| 2435 | 66,19;16 | $h_0 h_2 [b_{02}^2]^4 h_5$   | $d_8^{-1} = h_0 h_2 [b_{02}^2]^2 [b_{03}^2]^2$                 |
| 2436 | 66,19;24 | $[b_{02}^2]^2 [b_{03}^2] [h_0 h_0(1)^2 b_{03}]$  | $d_4 = h_0 [b_{02}^2]^2 [h_2 b_{03}] [h_0(1)^2] [b_{13}^2]$    |
| 2437 | 66,20;14 | $h_0^{10} [b_{02}^2] [h_0 h_0(1, 2) b_{03}] +$<br>$h_0^{11} h_3 [b_{03}^2] [h_0 h_3 b_{04}]$ | $d_4^{-1} = h_0^7 [b_{02}^2] [b_{03}^2] [h_0 h_3 b_{04}]$      |
| 2438 | 66,20;14 | $h_0^{11} h_3 [b_{03}^2] [h_0 h_3 b_{04}]$   | $d_4 = h_0^{14} h_3 [h_0 h_0(1, 2) b_{03}]$                    |
| 2439 | 66,20;16 | $h_0^2 h_2 [b_{02}^2]^4 h_5$   | $d_8^{-1} = h_0^2 h_2 [b_{02}^2]^2 [b_{03}^2]^2$               |
| 2440 | 66,20;24 | $h_0 [b_{02}^2]^2 [b_{03}^2] [h_0 h_0(1)^2 b_{03}]$  | $d_4 = h_0^2 [b_{02}^2]^2 [h_2 b_{03}] [h_0(1)^2] [b_{13}^2]$  |
| 2441 | 66,21;14 | $h_0^{11} [b_{02}^2] [h_0 h_0(1, 2) b_{03}] +$<br>$h_0^{12} h_3 [b_{03}^2] [h_0 h_3 b_{04}]$ | $d_4^{-1} = h_0^8 [b_{02}^2] [b_{03}^2] [h_0 h_3 b_{04}]$      |
| 2442 | 66,21;14 | $h_0^{12} h_3 [b_{03}^2] [h_0 h_3 b_{04}]$   | $d_4 = h_0^{15} h_3 [h_0 h_0(1, 2) b_{03}]$                    |
| 2443 | 66,21;18 | $[b_{02}^2]^4 [h_0 h_4^2 b_{02} + h_0^3 h_2(1)]$   | $d_4^{-1} = [b_{02}^2]^4 [h_0 h_3 b_{04}]$                     |
| 2444 | 66,21;24 | $h_0^2 [b_{02}^2]^2 [b_{03}^2] [h_0 h_0(1)^2 b_{03}]$  | Permanent cycle  |
| 2445 | 66,22;14 | $h_0^{12} [b_{02}^2] [h_0 h_0(1, 2) b_{03}] +$<br>$h_0^{13} h_3 [b_{03}^2] [h_0 h_3 b_{04}]$ | $d_4^{-1} = h_0^9 [b_{02}^2] [b_{03}^2] [h_0 h_3 b_{04}]$      |
| 2446 | 66,22;14 | $h_0^{13} h_3 [b_{03}^2] [h_0 h_3 b_{04}]$   | $d_4 = h_0^{16} h_3 [h_0 h_0(1, 2) b_{03}]$                    |
| 2447 | 66,22;18 | $h_0 [b_{02}^2]^4 [h_0 h_4^2 b_{02} + h_0^3 h_2(1)]$   | $d_4^{-1} = h_0 [b_{02}^2]^4 [h_0 h_3 b_{04}]$                 |
| 2448 | 66,23;14 | $h_0^{13} [b_{02}^2] [h_0 h_0(1, 2) b_{03}] +$<br>$h_0^{14} h_3 [b_{03}^2] [h_0 h_3 b_{04}]$ | $d_4^{-1} = h_0^{10} [b_{02}^2] [b_{03}^2] [h_0 h_3 b_{04}]$   |
| 2449 | 66,23;14 | $h_0^{14} h_3 [b_{03}^2] [h_0 h_3 b_{04}]$   | $d_4 = h_0^{17} h_3 [h_0 h_0(1, 2) b_{03}]$                    |
| 2450 | 66,23;18 | $h_0^2 [b_{02}^2]^4 [h_0 h_4^2 b_{02} + h_0^3 h_2(1)]$                                       | $d_4^{-1} = h_0^2 [b_{02}^2]^4 [h_0 h_3 b_{04}]$               |
| 2451 | 66,24;14 | $h_0^{14} [b_{02}^2] [h_0 h_0(1, 2) b_{03}] +$<br>$h_0^{15} h_3 [b_{03}^2] [h_0 h_3 b_{04}]$ | $d_4^{-1} = h_0^{11} [b_{02}^2] [b_{03}^2] [h_0 h_3 b_{04}]$   |
| 2452 | 66,24;14 | $h_0^{15} h_3 [b_{03}^2] [h_0 h_3 b_{04}]$   | $d_4 = h_0^{18} h_3 [h_0 h_0(1, 2) b_{03}]$                    |
| 2453 | 66,24;18 | $h_0^3 [b_{02}^2]^4 [h_0 h_4^2 b_{02} + h_0^3 h_2(1)]$                                       | $d_4^{-1} = h_0^3 [b_{02}^2]^4 [h_0 h_3 b_{04}]$               |
| 2454 | 66,24;24 | $[b_{02}^2]^4 [h_0(1)^2] [b_{13}^2]$   | Permanent cycle  |
| 2455 | 66,25;14 | $h_0^{15} [b_{02}^2] [h_0 h_0(1, 2) b_{03}] +$<br>$h_0^{16} h_3 [b_{03}^2] [h_0 h_3 b_{04}]$ | $d_4^{-1} = h_0^{12} [b_{02}^2] [b_{03}^2] [h_0 h_3 b_{04}]$   |
| 2456 | 66,25;14 | $h_0^{16} h_3 [b_{03}^2] [h_0 h_3 b_{04}]$   | $d_4 = h_0^{19} h_3 [h_0 h_0(1, 2) b_{03}]$                    |
| 2457 | 66,25;18 | $h_0^4 [b_{02}^2]^4 [h_0 h_4^2 b_{02} + h_0^3 h_2(1)]$                                       | $d_4^{-1} = h_0^4 [b_{02}^2]^4 [h_0 h_3 b_{04}]$               |
| 2458 | 66,25;24 | $h_0 [b_{02}^2]^4 [h_0(1)^2] [b_{13}^2]$   | Permanent cycle  |
| 2459 | 66,26;14 | $h_0^{16} [b_{02}^2] [h_0 h_0(1, 2) b_{03}] +$<br>$h_0^{17} h_3 [b_{03}^2] [h_0 h_3 b_{04}]$ | $d_4^{-1} = h_0^{13} [b_{02}^2] [b_{03}^2] [h_0 h_3 b_{04}]$   |
| 2460 | 66,26;14 | $h_0^{17} h_3 [b_{03}^2] [h_0 h_3 b_{04}]$   | $d_4 = h_0^{20} h_3 [h_0 h_0(1, 2) b_{03}]$                    |



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| 2461 | 66,26;18 | $h_0^5[b_{02}^2]^4[h_0h_4^2b_{02} + h_0^3h_2(1)]$                                  | $d_4^{-1} = h_0^5[b_{02}^2]^4[h_0h_3b_{04}]$            |
| 2462 | 66,26;24 | $h_2[b_{02}^2]^6h_4 + h_0^2[b_{02}^2]^4[h_0(1)^2][b_{13}^2]$                       | $d_4^{-1} = h_2[b_{02}^2]^5[b_{03}^2]$                  |
| 2463 | 66,26;24 | $h_0^2[b_{02}^2]^4[h_0(1)^2][b_{13}^2]$  | Permanent cycle   |
| 2464 | 66,26;28 | $h_1^2[b_{02}^2]^5[b_{03}^2]$  | $d_4 = h_1^2[b_{02}^2]^6h_4$                            |
| 2465 | 66,27;14 | $h_0^{17}[b_{02}^2][h_0h_0(1,2)b_{03}] +$<br>$h_0^{18}h_3[b_{03}^2][h_0h_3b_{04}]$ | $d_4^{-1} = h_0^{14}[b_{02}^2][b_{03}^2][h_0h_3b_{04}]$ |
| 2466 | 66,27;14 | $h_0^{18}h_3[b_{03}^2][h_0h_3b_{04}]$  | $d_4 = h_0^{21}h_3[h_0h_0(1,2)b_{03}]$                  |
| 2467 | 66,27;18 | $h_0^6[b_{02}^2]^4[h_0h_4^2b_{02} + h_0^3h_2(1)]$                                  | $d_4^{-1} = h_0^6[b_{02}^2]^4[h_0h_3b_{04}]$            |
| 2468 | 66,27;24 | $h_0h_2[b_{02}^2]^6h_4$  | $d_4^{-1} = h_0h_2[b_{02}^2]^5[b_{03}^2]$               |
| 2469 | 66,27;28 | $[b_{02}^2]^5[h_0h_0(1)^2b_{03}]$  | Permanent cycle   |
| 2470 | 66,28;14 | $h_0^{18}[b_{02}^2][h_0h_0(1,2)b_{03}] +$<br>$h_0^{19}h_3[b_{03}^2][h_0h_3b_{04}]$ | $d_4^{-1} = h_0^{15}[b_{02}^2][b_{03}^2][h_0h_3b_{04}]$ |
| 2471 | 66,28;14 | $h_0^{19}h_3[b_{03}^2][h_0h_3b_{04}]$  | $d_4 = h_0^{22}h_3[h_0h_0(1,2)b_{03}]$                  |
| 2472 | 66,28;18 | $h_0^7[b_{02}^2]^4[h_0h_4^2b_{02} + h_0^3h_2(1)]$                                  | $d_4^{-1} = h_0^7[b_{02}^2]^4[h_0h_3b_{04}]$            |
| 2473 | 66,28;24 | $h_0^2h_2[b_{02}^2]^6h_4$  | $d_4^{-1} = h_0^2h_2[b_{02}^2]^5[b_{03}^2]$             |
| 2474 | 66,28;28 | $h_0[b_{02}^2]^5[h_0h_0(1)^2b_{03}]$   | Permanent cycle   |
| 2475 | 66,29;14 | $h_0^{19}[b_{02}^2][h_0h_0(1,2)b_{03}] +$<br>$h_0^{20}h_3[b_{03}^2][h_0h_3b_{04}]$ | $d_4^{-1} = h_0^{16}[b_{02}^2][b_{03}^2][h_0h_3b_{04}]$ |
| 2476 | 66,29;14 | $h_0^{20}h_3[b_{03}^2][h_0h_3b_{04}]$  | $d_4 = h_0^{23}h_3[h_0h_0(1,2)b_{03}]$                  |
| 2477 | 66,29;18 | $h_0^8[b_{02}^2]^4[h_0h_4^2b_{02} + h_0^3h_2(1)]$                                  | $d_4^{-1} = h_0^8[b_{02}^2]^4[h_0h_3b_{04}]$            |
| 2478 | 66,29;28 | $h_0^2[b_{02}^2]^5[h_0h_0(1)^2b_{03}]$   | Permanent cycle   |
| 2479 | 66,30;14 | $h_0^{20}[b_{02}^2][h_0h_0(1,2)b_{03}] +$<br>$h_0^{21}h_3[b_{03}^2][h_0h_3b_{04}]$ | $d_4^{-1} = h_0^{17}[b_{02}^2][b_{03}^2][h_0h_3b_{04}]$ |
| 2480 | 66,30;14 | $h_0^{21}h_3[b_{03}^2][h_0h_3b_{04}]$  | $d_4 = h_0^{24}h_3[h_0h_0(1,2)b_{03}]$                  |
| 2481 | 66,30;18 | $h_0^9[b_{02}^2]^4[h_0h_4^2b_{02} + h_0^3h_2(1)]$                                  | $d_4^{-1} = h_0^9[b_{02}^2]^4[h_0h_3b_{04}]$            |
| 2482 | 66,31;14 | $h_0^{21}[b_{02}^2][h_0h_0(1,2)b_{03}] +$<br>$h_0^{22}h_3[b_{03}^2][h_0h_3b_{04}]$ | $d_4^{-1} = h_0^{18}[b_{02}^2][b_{03}^2][h_0h_3b_{04}]$ |
| 2483 | 66,31;14 | $h_0^{22}h_3[b_{03}^2][h_0h_3b_{04}]$  | $d_4 = h_0^{25}h_3[h_0h_0(1,2)b_{03}]$                  |
| 2484 | 66,31;18 | $h_0^{10}[b_{02}^2]^4[h_0h_4^2b_{02} + h_0^3h_2(1)]$                               | $d_4^{-1} = h_0^{10}[b_{02}^2]^4[h_0h_3b_{04}]$         |
| 2485 | 66,32;14 | $h_0^{22}[b_{02}^2][h_0h_0(1,2)b_{03}] +$<br>$h_0^{23}h_3[b_{03}^2][h_0h_3b_{04}]$ | $d_4^{-1} = h_0^{19}[b_{02}^2][b_{03}^2][h_0h_3b_{04}]$ |
| 2486 | 66,32;14 | $h_0^{23}h_3[b_{03}^2][h_0h_3b_{04}]$  | $d_4 = h_0^{26}h_3[h_0h_0(1,2)b_{03}]$                  |
| 2487 | 66,32;18 | $h_0^{11}[b_{02}^2]^4[h_0h_4^2b_{02} + h_0^3h_2(1)]$                               | $d_4^{-1} = h_0^{11}[b_{02}^2]^4[h_0h_3b_{04}]$         |
| 2488 | 66,33;14 | $h_0^{23}[b_{02}^2][h_0h_0(1,2)b_{03}] +$<br>$h_0^{24}h_3[b_{03}^2][h_0h_3b_{04}]$ | $d_4^{-1} = h_0^{20}[b_{02}^2][b_{03}^2][h_0h_3b_{04}]$ |
| 2489 | 66,33;14 | $h_0^{24}h_3[b_{03}^2][h_0h_3b_{04}]$  | $d_4 = h_0^{27}h_3[h_0h_0(1,2)b_{03}]$                  |
| 2490 | 66,33;18 | $h_0^{12}[b_{02}^2]^4[h_0h_4^2b_{02} + h_0^3h_2(1)]$                               | $d_4^{-1} = h_0^{12}[b_{02}^2]^4[h_0h_3b_{04}]$         |
| 2491 | 66,34;14 | $h_0^{24}[b_{02}^2][h_0h_0(1,2)b_{03}] +$<br>$h_0^{25}h_3[b_{03}^2][h_0h_3b_{04}]$ | $d_4^{-1} = h_0^{21}[b_{02}^2][b_{03}^2][h_0h_3b_{04}]$ |
| 2492 | 66,34;14 | $h_0^{25}h_3[b_{03}^2][h_0h_3b_{04}]$  | $d_4 = h_0^{28}h_3[h_0h_0(1,2)b_{03}]$                  |
| 2493 | 66,34;18 | $h_0^{13}[b_{02}^2]^4[h_0h_4^2b_{02} + h_0^3h_2(1)]$                               | $d_4^{-1} = h_0^{13}[b_{02}^2]^4[h_0h_3b_{04}]$         |
| 2494 | 66,34;32 | $h_1^2[b_{02}^2]^8$  | Permanent cycle   |
| 2495 | 67,5;6   | $[h_3h_2(1)b_{14}]$  | Permanent cycle   |
| 2496 | 67,5;8   | $h_4[b_{14}^2]$  | Permanent cycle   |
| 2497 | 67,6;6   | $h_0[h_3h_2(1)b_{14}]$   | Permanent cycle   |
| 2498 | 67,6;8   | $h_0h_4[b_{14}^2]$   | Permanent cycle   |
| 2499 | 67,7;6   | $h_5[h_1(1)b_{13}^2 + h_1^2b_{24}b_{03}]$  | $d_4^{-1} = [h_1(1)b_{14}^2 + h_3^2b_{14}b_{04}]$       |
| 2500 | 67,7;8   | $h_0^2h_4[b_{14}^2]$   | Permanent cycle   |
| 2501 | 67,7;12  | $[h_2b_{03}][b_{14}^2]$  | $d_4 = [h_2b_{03}][b_{13}^2]h_5$                        |
| 2502 | 67,8;10  | $h_1[h_0(1,2)b_{13}^2 + h_1h_3h_0(1,2)b_{03}]$                                     | Permanent cycle   |
| 2503 | 67,8;12  | $h_0[h_2b_{03}][b_{14}^2]$   | $d_4 = h_0[h_2b_{03}][b_{13}^2]h_5$                     |
| 2504 | 67,9;12  | $h_1[h_0(1)^2][b_{14}^2] + h_0^2[h_2b_{03}][b_{14}^2]$                             | Permanent cycle   |
| 2505 | 67,9;12  | $[b_{13}^2][h_2h_1(1)b_{04}]$  | Permanent cycle   |
| 2506 | 67,9;12  | $h_0^2[h_2b_{03}][b_{14}^2]$   | $d_4 = h_0^2[h_2b_{03}][b_{13}^2]h_5$                   |

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| 2507 | 67,9;16  | $h_2[b_{02}^2][b_{04}^2]$  | $d_4 = h_2[b_{02}^2][b_{03}^2]h_5 + h_0^2[h_0(1)^2][b_{14}^2]$                      |
| 2508 | 67,10;12 | $h_0^3[h_2b_{03}][b_{14}^2]$   | Permanent cycle   |
| 2509 | 67,10;16 | $h_0h_2[b_{02}^2][b_{04}^2]$   | $d_4 = h_0h_2[b_{02}^2][b_{03}^2]h_5$   |
| 2510 | 67,11;12 | $h_0^4[h_2b_{03}][b_{14}^2]$   | Permanent cycle   |
| 2511 | 67,11;16 | $h_0^2h_2[b_{02}^2][b_{04}^2]$                                       | $d_4 = h_0^2h_2[b_{02}^2][b_{03}^2]h_5$   |
| 2512 | 67,11;18 | $[h_2h_1(1)][b_{03}^2]^2$  | Permanent cycle   |
| 2513 | 67,12;12 | $h_0^5[h_2b_{03}][b_{14}^2]$   | Permanent cycle   |
| 2514 | 67,12;18 | $[b_{02}^2][b_{03}^2][h_0h_3b_{04}]$                                 | $d_4 = h_0^3[b_{02}^2][h_0h_0(1,2)b_{03}] + h_0^4h_3[b_{03}^2][h_0h_3b_{04}]$       |
| 2515 | 67,13;12 | $[b_{02}^2]^2[b_{13}^2]h_5 + h_0^6[h_2b_{03}][b_{14}^2]$             | $d_4^{-1} = [b_{02}^2]^2[b_{14}^2]$   |
| 2516 | 67,13;12 | $h_0^6[h_2b_{03}][b_{14}^2]$   | $d_8^{-1} = [b_{13}^2][b_{03}^2]^2$   |
| 2517 | 67,13;16 | $h_2[b_{13}^2]^2[b_{03}^2]$  | $d_4 = h_2^2[b_{13}^2]^3$   |
| 2518 | 67,13;18 | $h_0[b_{02}^2][b_{03}^2][h_0h_3b_{04}]$                              | $d_4 = h_0^4[b_{02}^2][h_0h_0(1,2)b_{03}] + h_0^5h_3[b_{03}^2][h_0h_3b_{04}]$       |
| 2519 | 67,14;12 | $h_0[b_{02}^2]^2[b_{13}^2]h_5 + h_0^7[h_2b_{03}][b_{14}^2]$          | $d_4^{-1} = h_0[b_{02}^2]^2[b_{14}^2]$  |
| 2520 | 67,14;12 | $h_0^7[h_2b_{03}][b_{14}^2]$   | $d_6^{-1} = [b_{02}^2][h_2b_{03}][h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$         |
| 2521 | 67,14;16 | $h_0h_2[b_{13}^2]^2[b_{03}^2]$                                       | Permanent cycle   |
| 2522 | 67,14;18 | $[b_{02}^2][h_0(1)^2][h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$      | Permanent cycle   |
| 2523 | 67,14;18 | $h_0^2[b_{02}^2][b_{03}^2][h_0h_3b_{04}]$                            | $d_4 = h_0^5[b_{02}^2][h_0h_0(1,2)b_{03}] + h_0^6h_3[b_{03}^2][h_0h_3b_{04}]$       |
| 2524 | 67,15;12 | $h_0^2[b_{02}^2]^2[b_{13}^2]h_5 + h_0^8[h_2b_{03}][b_{14}^2]$        | $d_4^{-1} = h_0^2[b_{02}^2]^2[b_{14}^2]$  |
| 2525 | 67,15;12 | $h_0^8[h_2b_{03}][b_{14}^2]$   | $d_6^{-1} = h_0[b_{02}^2][h_2b_{03}][h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$      |
| 2526 | 67,15;18 | $h_0[b_{02}^2][h_0(1)^2][h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$   | Permanent cycle   |
| 2527 | 67,15;18 | $h_0^3[b_{02}^2][b_{03}^2][h_0h_3b_{04}]$                            | $d_4 = h_0^6[b_{02}^2][h_0h_0(1,2)b_{03}] + h_0^7h_3[b_{03}^2][h_0h_3b_{04}]$       |
| 2528 | 67,15;20 | $[b_{02}^2][h_2b_{03}][b_{13}^2][b_{03}^2]$                          | $d_4 = h_0[h_2b_{03}][h_0(1)^2][h_0(1)b_{13}][b_{13}^2]$                            |
| 2529 | 67,16;12 | $h_0^9[h_2b_{03}][b_{14}^2]$   | $d_4^{-1} = h_0^3[b_{02}^2]^2[b_{14}^2]$  |
| 2530 | 67,16;18 | $h_0^2[b_{02}^2][h_0(1)^2][h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$ | Permanent cycle   |
| 2531 | 67,16;18 | $h_0^4[b_{02}^2][b_{03}^2][h_0h_3b_{04}]$                            | $d_4 = h_0^7[b_{02}^2][h_0h_0(1,2)b_{03}] + h_0^8h_3[b_{03}^2][h_0h_3b_{04}]$       |
| 2532 | 67,16;20 | $h_0[b_{02}^2][h_2b_{03}][b_{13}^2][b_{03}^2]$                       | $d_4 = h_0^2[h_2b_{03}][h_0(1)^2][h_0(1)b_{13}][b_{13}^2]$                          |
| 2533 | 67,17;12 | $h_0^{10}[h_2b_{03}][b_{14}^2]$                                      | $d_4^{-1} = h_0^4[b_{02}^2]^2[b_{14}^2]$  |
| 2534 | 67,17;18 | $h_0^5[b_{02}^2][b_{03}^2][h_0h_3b_{04}]$                            | $d_4 = h_0^8[b_{02}^2][h_0h_0(1,2)b_{03}] + h_0^9h_3[b_{03}^2][h_0h_3b_{04}]$       |
| 2535 | 67,17;20 | $h_0^2[b_{02}^2][h_2b_{03}][b_{13}^2][b_{03}^2]$                     | Permanent cycle   |
| 2536 | 67,17;24 | $h_2[b_{02}^2]^2[b_{03}^2]^2$  | $d_8 = h_2[b_{02}^2]^4h_5$  |
| 2537 | 67,18;12 | $h_0^{11}[h_2b_{03}][b_{14}^2]$                                      | $d_4^{-1} = h_0^5[b_{02}^2]^2[b_{14}^2]$  |
| 2538 | 67,18;18 | $h_0^6[b_{02}^2][b_{03}^2][h_0h_3b_{04}]$                            | $d_4 = h_0^9[b_{02}^2][h_0h_0(1,2)b_{03}] + h_0^{10}h_3[b_{03}^2][h_0h_3b_{04}]$    |
| 2539 | 67,18;24 | $h_0h_2[b_{02}^2]^2[b_{03}^2]^2$                                     | $d_8 = h_0h_2[b_{02}^2]^4h_5$   |
| 2540 | 67,19;12 | $h_0^{12}[h_2b_{03}][b_{14}^2]$                                      | $d_4^{-1} = h_0^6[b_{02}^2]^2[b_{14}^2]$  |
| 2541 | 67,19;18 | $h_0^7[b_{02}^2][b_{03}^2][h_0h_3b_{04}]$                            | $d_4 = h_0^{10}[b_{02}^2][h_0h_0(1,2)b_{03}] + h_0^{11}h_3[b_{03}^2][h_0h_3b_{04}]$ |
| 2542 | 67,19;24 | $h_0^2h_2[b_{02}^2]^2[b_{03}^2]^2$                                   | $d_8 = h_0^2h_2[b_{02}^2]^4h_5$   |
| 2543 | 67,20;12 | $h_0^{13}[h_2b_{03}][b_{14}^2]$                                      | $d_4^{-1} = h_0^7[b_{02}^2]^2[b_{14}^2]$  |
| 2544 | 67,20;18 | $h_0^8[b_{02}^2][b_{03}^2][h_0h_3b_{04}]$                            | $d_4 = h_0^{11}[b_{02}^2][h_0h_0(1,2)b_{03}] + h_0^{12}h_3[b_{03}^2][h_0h_3b_{04}]$ |
| 2545 | 67,20;20 | $[b_{02}^2]^2[h_0(1)^2][h_0(1)b_{13}][b_{13}^2]$                     | Permanent cycle   |
| 2546 | 67,20;22 | $[b_{02}^2]^4[h_0h_3b_{04}]$   | $d_4 = [b_{02}^2]^4[h_0h_4^2b_{02} + h_0^3h_2(1)]$                                  |
| 2547 | 67,21;12 | $h_0^{14}[h_2b_{03}][b_{14}^2]$                                      | $d_4^{-1} = h_0^8[b_{02}^2]^2[b_{14}^2]$  |

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| 2548 | 67,21;18 | $h_0^9[b_{02}^2][b_{03}^2][h_0h_3b_{04}]$             | $d_4 = h_0^{12}[b_{02}^2][h_0h_0(1,2)b_{03}] + h_0^{13}h_3[b_{03}^2][h_0h_3b_{04}]$ |
| 2549 | 67,21;20 | $h_0[b_{02}^2]^2[h_0(1)^2][h_0(1)b_{13}][b_{13}^2]$   | $d_4^{-1} = [b_{02}^2]^3[b_{13}^2][b_{03}^2]$                                       |
| 2550 | 67,21;22 | $h_0[b_{02}^2]^4[h_0h_3b_{04}]$                       | $d_4 = h_0[b_{02}^2]^4[h_0h_4^2b_{02} + h_0^3h_2(1)]$                               |
| 2551 | 67,22;12 | $h_0^{15}[h_2b_{03}][b_{14}^2]$                       | $d_4^{-1} = h_0^9[b_{02}^2]^2[b_{14}^2]$  |
| 2552 | 67,22;18 | $h_0^{10}[b_{02}^2][b_{03}^2][h_0h_3b_{04}]$          | $d_4 = h_0^{13}[b_{02}^2][h_0h_0(1,2)b_{03}] + h_0^{14}h_3[b_{03}^2][h_0h_3b_{04}]$ |
| 2553 | 67,22;20 | $h_0^2[b_{02}^2]^2[h_0(1)^2][h_0(1)b_{13}][b_{13}^2]$ | $d_4^{-1} = h_0[b_{02}^2]^3[b_{13}^2][b_{03}^2]$                                    |
| 2554 | 67,22;22 | $h_0^2[b_{02}^2]^4[h_0h_3b_{04}]$                     | $d_4 = h_0^2[b_{02}^2]^4[h_0h_4^2b_{02} + h_0^3h_2(1)]$                             |
| 2555 | 67,23;12 | $h_0^{16}[h_2b_{03}][b_{14}^2]$                       | $d_4^{-1} = h_0^{10}[b_{02}^2]^2[b_{14}^2]$   |
| 2556 | 67,23;18 | $h_0^{11}[b_{02}^2][b_{03}^2][h_0h_3b_{04}]$          | $d_4 = h_0^{14}[b_{02}^2][h_0h_0(1,2)b_{03}] + h_0^{15}h_3[b_{03}^2][h_0h_3b_{04}]$ |
| 2557 | 67,23;22 | $h_0^3[b_{02}^2]^4[h_0h_3b_{04}]$                     | $d_4 = h_0^3[b_{02}^2]^4[h_0h_4^2b_{02} + h_0^3h_2(1)]$                             |
| 2558 | 67,23;24 | $[b_{02}^2]^4[h_2b_{03}][b_{13}^2]$                   | Permanent cycle   |
| 2559 | 67,24;12 | $h_0^{17}[h_2b_{03}][b_{14}^2]$                       | $d_4^{-1} = h_0^{11}[b_{02}^2]^2[b_{14}^2]$   |
| 2560 | 67,24;18 | $h_0^{12}[b_{02}^2][b_{03}^2][h_0h_3b_{04}]$          | $d_4 = h_0^{15}[b_{02}^2][h_0h_0(1,2)b_{03}] + h_0^{16}h_3[b_{03}^2][h_0h_3b_{04}]$ |
| 2561 | 67,24;22 | $h_0^4[b_{02}^2]^4[h_0h_3b_{04}]$                     | $d_4 = h_0^4[b_{02}^2]^4[h_0h_4^2b_{02} + h_0^3h_2(1)]$                             |
| 2562 | 67,24;24 | $h_0[b_{02}^2]^4[h_2b_{03}][b_{13}^2]$                | Permanent cycle   |
| 2563 | 67,25;12 | $h_0^{18}[h_2b_{03}][b_{14}^2]$                       | $d_4^{-1} = h_0^{12}[b_{02}^2]^2[b_{14}^2]$   |
| 2564 | 67,25;18 | $h_0^{13}[b_{02}^2][b_{03}^2][h_0h_3b_{04}]$          | $d_4 = h_0^{16}[b_{02}^2][h_0h_0(1,2)b_{03}] + h_0^{17}h_3[b_{03}^2][h_0h_3b_{04}]$ |
| 2565 | 67,25;22 | $h_0^5[b_{02}^2]^4[h_0h_3b_{04}]$                     | $d_4 = h_0^5[b_{02}^2]^4[h_0h_4^2b_{02} + h_0^3h_2(1)]$                             |
| 2566 | 67,25;24 | $h_0^2[b_{02}^2]^4[h_2b_{03}][b_{13}^2]$              | Permanent cycle   |
| 2567 | 67,25;28 | $h_2[b_{02}^2]^5[b_{03}^2]$                           | $d_4 = h_2[b_{02}^2]^6h_4 + h_0^2[b_{02}^2]^4[h_0(1)^2][b_{13}^2]$                  |
| 2568 | 67,26;12 | $h_0^{19}[h_2b_{03}][b_{14}^2]$                       | $d_4^{-1} = h_0^{13}[b_{02}^2]^2[b_{14}^2]$   |
| 2569 | 67,26;18 | $h_0^{14}[b_{02}^2][b_{03}^2][h_0h_3b_{04}]$          | $d_4 = h_0^{17}[b_{02}^2][h_0h_0(1,2)b_{03}] + h_0^{18}h_3[b_{03}^2][h_0h_3b_{04}]$ |
| 2570 | 67,26;22 | $h_0^6[b_{02}^2]^4[h_0h_3b_{04}]$                     | $d_4 = h_0^6[b_{02}^2]^4[h_0h_4^2b_{02} + h_0^3h_2(1)]$                             |
| 2571 | 67,26;28 | $h_0h_2[b_{02}^2]^5[b_{03}^2]$                        | $d_4 = h_0h_2[b_{02}^2]^6h_4$   |
| 2572 | 67,27;12 | $h_0^{20}[h_2b_{03}][b_{14}^2]$                       | $d_4^{-1} = h_0^{14}[b_{02}^2]^2[b_{14}^2]$   |
| 2573 | 67,27;18 | $h_0^{15}[b_{02}^2][b_{03}^2][h_0h_3b_{04}]$          | $d_4 = h_0^{18}[b_{02}^2][h_0h_0(1,2)b_{03}] + h_0^{19}h_3[b_{03}^2][h_0h_3b_{04}]$ |
| 2574 | 67,27;22 | $h_0^7[b_{02}^2]^4[h_0h_3b_{04}]$                     | $d_4 = h_0^7[b_{02}^2]^4[h_0h_4^2b_{02} + h_0^3h_2(1)]$                             |
| 2575 | 67,27;28 | $h_0^2h_2[b_{02}^2]^5[b_{03}^2]$                      | $d_4 = h_0^2h_2[b_{02}^2]^6h_4$   |
| 2576 | 67,28;12 | $h_0^{21}[h_2b_{03}][b_{14}^2]$                       | $d_4^{-1} = h_0^{15}[b_{02}^2]^2[b_{14}^2]$   |
| 2577 | 67,28;18 | $h_0^{16}[b_{02}^2][b_{03}^2][h_0h_3b_{04}]$          | $d_4 = h_0^{19}[b_{02}^2][h_0h_0(1,2)b_{03}] + h_0^{20}h_3[b_{03}^2][h_0h_3b_{04}]$ |
| 2578 | 67,28;22 | $h_0^8[b_{02}^2]^4[h_0h_3b_{04}]$                     | $d_4 = h_0^8[b_{02}^2]^4[h_0h_4^2b_{02} + h_0^3h_2(1)]$                             |
| 2579 | 67,29;12 | $h_0^{22}[h_2b_{03}][b_{14}^2]$                       | $d_4^{-1} = h_0^{16}[b_{02}^2]^2[b_{14}^2]$   |
| 2580 | 67,29;18 | $h_0^{17}[b_{02}^2][b_{03}^2][h_0h_3b_{04}]$          | $d_4 = h_0^{20}[b_{02}^2][h_0h_0(1,2)b_{03}] + h_0^{21}h_3[b_{03}^2][h_0h_3b_{04}]$ |
| 2581 | 67,29;22 | $h_0^9[b_{02}^2]^4[h_0h_3b_{04}]$                     | $d_4 = h_0^9[b_{02}^2]^4[h_0h_4^2b_{02} + h_0^3h_2(1)]$                             |
| 2582 | 67,30;12 | $h_0^{23}[h_2b_{03}][b_{14}^2]$                       | $d_4^{-1} = h_0^{17}[b_{02}^2]^2[b_{14}^2]$   |
| 2583 | 67,30;18 | $h_0^{18}[b_{02}^2][b_{03}^2][h_0h_3b_{04}]$          | $d_4 = h_0^{21}[b_{02}^2][h_0h_0(1,2)b_{03}] + h_0^{22}h_3[b_{03}^2][h_0h_3b_{04}]$ |
| 2584 | 67,30;22 | $h_0^{10}[b_{02}^2]^4[h_0h_3b_{04}]$                  | $d_4 = h_0^{10}[b_{02}^2]^4[h_0h_4^2b_{02} + h_0^3h_2(1)]$                          |
| 2585 | 67,31;12 | $h_0^{24}[h_2b_{03}][b_{14}^2]$                       | $d_4^{-1} = h_0^{18}[b_{02}^2]^2[b_{14}^2]$   |
| 2586 | 67,31;18 | $h_0^{19}[b_{02}^2][b_{03}^2][h_0h_3b_{04}]$          | $d_4 = h_0^{22}[b_{02}^2][h_0h_0(1,2)b_{03}] + h_0^{23}h_3[b_{03}^2][h_0h_3b_{04}]$ |
| 2587 | 67,31;22 | $h_0^{11}[b_{02}^2]^4[h_0h_3b_{04}]$                  | $d_4 = h_0^{11}[b_{02}^2]^4[h_0h_4^2b_{02} + h_0^3h_2(1)]$                          |
| 2588 | 67,32;12 | $h_0^{25}[h_2b_{03}][b_{14}^2]$                       | $d_4^{-1} = h_0^{19}[b_{02}^2]^2[b_{14}^2]$   |
| 2589 | 67,32;18 | $h_0^{20}[b_{02}^2][b_{03}^2][h_0h_3b_{04}]$          | $d_4 = h_0^{23}[b_{02}^2][h_0h_0(1,2)b_{03}] + h_0^{24}h_3[b_{03}^2][h_0h_3b_{04}]$ |

|      |          |  |   |
|------|----------|--|---|
| 2590 | 67,32;22 | $h_0^{12}[b_{02}^2]^4[h_0h_3b_{04}]$   | $d_4 = h_0^{12}[b_{02}^2]^4[h_0h_4^2b_{02} + h_0^3h_2(1)]$                          |
| 2591 | 67,33;12 | $h_0^{26}[h_2b_{03}][b_{14}^2]$  | $d_4^{-1} = h_0^{20}[b_{02}^2]^2[b_{14}^2]$   |
| 2592 | 67,33;18 | $h_0^{21}[b_{02}^2][b_{03}^2][h_0h_3b_{04}]$   | $d_4 = h_0^{24}[b_{02}^2][h_0h_0(1,2)b_{03}] + h_0^{25}h_3[b_{03}^2][h_0h_3b_{04}]$ |
| 2593 | 67,33;22 | $h_0^{13}[b_{02}^2]^4[h_0h_3b_{04}]$   | $d_4 = h_0^{13}[b_{02}^2]^4[h_0h_4^2b_{02} + h_0^3h_2(1)]$                          |
| 2594 | 67,33;32 | $h_2[b_{02}^2]^8$  | Permanent cycle   |
| 2595 | 67,34;12 | $h_0^{27}[h_2b_{03}][b_{14}^2]$  | $d_4^{-1} = h_0^{21}[b_{02}^2]^2[b_{14}^2]$   |
| 2596 | 67,34;18 | $h_0^{22}[b_{02}^2][b_{03}^2][h_0h_3b_{04}]$   | $d_4 = h_0^{25}[b_{02}^2][h_0h_0(1,2)b_{03}] + h_0^{26}h_3[b_{03}^2][h_0h_3b_{04}]$ |
| 2597 | 67,34;22 | $h_0^{14}[b_{02}^2]^4[h_0h_3b_{04}]$   | $d_4 = h_0^{14}[b_{02}^2]^4[h_0h_4^2b_{02} + h_0^3h_2(1)]$                          |
| 2598 | 67,34;32 | $h_0h_2[b_{02}^2]^8$   | Permanent cycle   |
| 2599 | 68,4;0   | $h_2^2h_5^2$   | $d_4^{-1} = [h_4b_{25}]$  |
| 2600 | 68,4;4   | $[h_2(1)^2]$   | Permanent cycle   |
| 2601 | 68,5;4   | $h_0[h_2(1)^2]$  | Permanent cycle   |
| 2602 | 68,6;4   | $h_0^2[h_2(1)^2]$  | $d_4^{-1} = [h_3h_2(1)b_{04}]$  |
| 2603 | 68,6;8   | $h_1h_4[b_{14}^2]$   | Permanent cycle   |
| 2604 | 68,6;10  | $[h_1(1)b_{14}^2 + h_3^2b_{14}b_{04}]$   | $d_4 = h_5[h_1(1)b_{14}^2 + h_1^2b_{24}b_{03}]$                                     |
| 2605 | 68,7;4   | $h_0^3[h_2(1)^2]$  | $d_4^{-1} = h_0[h_3h_2(1)b_{04}]$   |
| 2606 | 68,7;8   | $h_2^2[h_1(1)h_0(1,2)]$  | Permanent cycle   |
| 2607 | 68,7;10  | $h_0[h_1(1)b_{14}^2 + h_3^2b_{14}b_{04}]$  | Permanent cycle   |
| 2608 | 68,8;4   | $h_0^4[h_2(1)^2]$  | $d_4^{-1} = h_0^2[h_3h_2(1)b_{04}]$   |
| 2609 | 68,8;6   | $h_1h_5[h_1(1)b_{14}^2 + h_1^2b_{24}b_{03}]$   | $d_4^{-1} = h_1[h_1(1)b_{14}^2 + h_3^2b_{14}b_{04}]$                                |
| 2610 | 68,8;10  | $h_0^2[h_1(1)b_{14}^2 + h_3^2b_{14}b_{04}]$  | Permanent cycle   |
| 2611 | 68,8;12  | $[b_{03}^2][b_{24}^2]$   | Permanent cycle   |
| 2612 | 68,9;4   | $h_0^5[h_2(1)^2]$  | $d_4^{-1} = h_0^3[h_3h_2(1)b_{04}]$   |
| 2613 | 68,9;8   | $[h_0(1)b_{13}][b_{13}^2]h_5$  | $d_4^{-1} = [h_0(1)b_{13}][b_{14}^2]$   |
| 2614 | 68,9;12  | $h_0[b_{03}^2][b_{24}^2]$  | Permanent cycle   |
| 2615 | 68,10;4  | $h_0^6[h_2(1)^2]$  | $d_4^{-1} = h_0^4[h_3h_2(1)b_{04}]$   |
| 2616 | 68,10;8  | $h_0[h_0(1)b_{13}][b_{13}^2]h_5$   | $d_4^{-1} = h_0[h_0(1)b_{13}][b_{14}^2]$  |
| 2617 | 68,10;10 | $[h_1(1)^2][h_1(1)b_{14}^2 + h_1^2b_{24}b_{03}]$   | Permanent cycle   |
| 2618 | 68,10;12 | $h_0^2[b_{03}^2][b_{24}^2]$  | Permanent cycle   |
| 2619 | 68,11;4  | $h_0^7[h_2(1)^2]$  | $d_4^{-1} = h_0^5[h_3h_2(1)b_{04}]$   |
| 2620 | 68,11;8  | $h_0^2[h_0(1)b_{13}][b_{13}^2]h_5$   | $d_4^{-1} = h_0^2[h_0(1)b_{13}][b_{14}^2]$  |
| 2621 | 68,11;12 | $h_0^3[b_{03}^2][b_{24}^2]$  | Permanent cycle   |
| 2622 | 68,11;14 | $[h_1h_0(1)][b_{02}^2][b_{14}^2] + h_2[b_{13}^2][h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$ | $d_4^{-1} = [b_{03}^2][h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$                    |
| 2623 | 68,11;14 | $h_2[b_{13}^2][h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$                                   | Permanent cycle   |
| 2624 | 68,12;4  | $h_0^8[h_2(1)^2]$  | $d_4^{-1} = h_0^6[h_3h_2(1)b_{04}]$   |
| 2625 | 68,12;12 | $[b_{02}^2][h_2b_{03}][h_0(1)^2]h_5$   | Permanent cycle   |
| 2626 | 68,12;12 | $h_0^4[b_{03}^2][b_{24}^2]$  | Permanent cycle   |
| 2627 | 68,12;14 | $h_0h_2[b_{13}^2][h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$                                | $d_4^{-1} = h_0[b_{03}^2][h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$                 |
| 2628 | 68,12;16 | $[b_{02}^2]^2[b_{14}^2]$   | $d_4 = [b_{02}^2]^2[b_{13}^2]h_5 + h_0^6[h_2b_{03}][b_{14}^2]$                      |
| 2629 | 68,12;20 | $[b_{13}^2][b_{03}^2]^2$   | $d_8 = [b_{02}^2]^2[b_{13}^2]h_5$   |
| 2630 | 68,13;4  | $h_0^9[h_2(1)^2]$  | $d_4^{-1} = h_0^7[h_3h_2(1)b_{04}]$   |
| 2631 | 68,13;12 | $h_0[b_{02}^2][h_2b_{03}][h_0(1)^2]h_5 + h_0^5[b_{03}^2][b_{24}^2]$                        | $d_6^{-1} = h_0^2[b_{03}^2][h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$               |
| 2632 | 68,13;12 | $h_0^5[b_{03}^2][b_{24}^2]$  | Permanent cycle   |
| 2633 | 68,13;16 | $h_0[b_{02}^2]^2[b_{14}^2]$  | $d_4 = h_0[b_{02}^2]^2[b_{13}^2]h_5 + h_0^7[h_2b_{03}][b_{14}^2]$                   |
| 2634 | 68,13;18 | $[b_{02}^2][h_2b_{03}][h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$                           | $d_6 = h_0[b_{02}^2]^2[b_{13}^2]h_5$  |
| 2635 | 68,13;20 | $h_0[b_{13}^2][b_{03}^2]^2$  | Permanent cycle   |
| 2636 | 68,14;4  | $h_0^{10}[h_2(1)^2]$   | $d_4^{-1} = h_0^8[h_3h_2(1)b_{04}]$   |
| 2637 | 68,14;12 | $h_0^2[b_{02}^2][h_2b_{03}][h_0(1)^2]h_5$  | $d_4^{-1} = h_1[b_{02}^2]^2[b_{14}^2]$  |
| 2638 | 68,14;12 | $h_0^6[b_{03}^2][b_{24}^2]$  | $d_6^{-1} = h_0^3[b_{03}^2][h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$               |
| 2639 | 68,14;16 | $h_0^2[b_{02}^2]^2[b_{14}^2]$  | $d_4 = h_0^2[b_{02}^2]^2[b_{13}^2]h_5 + h_0^8[h_2b_{03}][b_{14}^2]$                 |

|      |          |   |   |
|------|----------|---|---|
| 2640 | 68,14;18 | $h_0[b_{02}^2][h_2b_{03}][h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$   | $d_6 = h_0^2[b_{02}^2]^2[b_{13}^2]h_5$  |
| 2641 | 68,14;20 | $h_0^2[b_{13}^2][b_{03}^2]^2$   | Permanent cycle   |
| 2642 | 68,15;4  | $h_0^{11}[h_2(1)^2]$  | $d_4^{-1} = h_0^9[h_3h_2(1)b_{04}]$   |
| 2643 | 68,15;12 | $h_0^7[b_{03}^2][b_{24}^2]$   | $d_6^{-1} = h_0^4[b_{03}^2][h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$         |
| 2644 | 68,15;16 | $h_0^3[b_{02}^2]^2[b_{14}^2]$   | $d_4 = h_0^9[h_2b_{03}][b_{14}^2]$  |
| 2645 | 68,15;18 | $h_0^2[b_{02}^2][h_2b_{03}][h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$ | Permanent cycle   |
| 2646 | 68,16;4  | $h_0^{12}[h_2(1)^2]$  | $d_4^{-1} = h_0^{10}[h_3h_2(1)b_{04}]$  |
| 2647 | 68,16;12 | $h_0^8[b_{03}^2][b_{24}^2]$   | $d_6^{-1} = h_0^5[b_{03}^2][h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$         |
| 2648 | 68,16;16 | $[b_{02}^2][b_{13}^2]^3$  | Permanent cycle   |
| 2649 | 68,16;16 | $h_0^4[b_{02}^2]^2[b_{14}^2]$   | $d_4 = h_0^{10}[h_2b_{03}][b_{14}^2]$   |
| 2650 | 68,17;4  | $h_0^{13}[h_2(1)^2]$  | $d_4^{-1} = h_0^{11}[h_3h_2(1)b_{04}]$  |
| 2651 | 68,17;12 | $h_0^9[b_{03}^2][b_{24}^2]$   | $d_6^{-1} = h_0^6[b_{03}^2][h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$         |
| 2652 | 68,17;16 | $h_0[b_{02}^2][b_{13}^2]^3$   | $d_4^{-1} = [b_{02}^2][h_0(1)b_{13}][b_{13}^2][b_{03}^2]$                     |
| 2653 | 68,17;16 | $h_0^5[b_{02}^2]^2[b_{14}^2]$   | $d_4 = h_0^{11}[h_2b_{03}][b_{14}^2]$   |
| 2654 | 68,18;4  | $h_0^{14}[h_2(1)^2]$  | $d_4^{-1} = h_0^{12}[h_3h_2(1)b_{04}]$  |
| 2655 | 68,18;12 | $h_0^{10}[b_{03}^2][b_{24}^2]$  | $d_6^{-1} = h_0^7[b_{03}^2][h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$         |
| 2656 | 68,18;16 | $h_0^2[b_{02}^2][b_{13}^2]^3$   | $d_4^{-1} = h_0[b_{02}^2][h_0(1)b_{13}][b_{13}^2][b_{03}^2]$                  |
| 2657 | 68,18;16 | $h_0^6[b_{02}^2]^2[b_{14}^2]$   | $d_4 = h_0^{12}[h_2b_{03}][b_{14}^2]$   |
| 2658 | 68,19;4  | $h_0^{15}[h_2(1)^2]$  | $d_4^{-1} = h_0^{13}[h_3h_2(1)b_{04}]$  |
| 2659 | 68,19;12 | $h_0^{11}[b_{03}^2][b_{24}^2]$  | $d_6^{-1} = h_0^8[b_{03}^2][h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$         |
| 2660 | 68,19;16 | $h_0^7[b_{02}^2]^2[b_{14}^2]$   | $d_4 = h_0^{13}[h_2b_{03}][b_{14}^2]$   |
| 2661 | 68,19;20 | $[b_{02}^2]^2[h_2b_{03}][h_0(1)b_{13}][b_{13}^2]$                     | Permanent cycle   |
| 2662 | 68,20;4  | $h_0^{16}[h_2(1)^2]$  | $d_4^{-1} = h_0^{14}[h_3h_2(1)b_{04}]$  |
| 2663 | 68,20;12 | $h_0^{12}[b_{03}^2][b_{24}^2]$  | $d_6^{-1} = h_0^9[b_{03}^2][h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$         |
| 2664 | 68,20;16 | $h_0^8[b_{02}^2]^2[b_{14}^2]$   | $d_4 = h_0^{14}[h_2b_{03}][b_{14}^2]$   |
| 2665 | 68,20;20 | $h_0[b_{02}^2]^2[h_2b_{03}][h_0(1)b_{13}][b_{13}^2]$                  | $d_4^{-1} = [b_{02}^2]^2[h_2b_{03}][h_0(1)^2][b_{03}^2]$                      |
| 2666 | 68,20;24 | $[b_{02}^2]^3[b_{13}^2][b_{03}^2]$                                    | $d_4 = h_0[b_{02}^2]^2[h_0(1)^2][h_0(1)b_{13}][b_{13}^2]$                     |
| 2667 | 68,21;4  | $h_0^{17}[h_2(1)^2]$  | $d_4^{-1} = h_0^{15}[h_3h_2(1)b_{04}]$  |
| 2668 | 68,21;12 | $h_0^{13}[b_{03}^2][b_{24}^2]$  | $d_6^{-1} =$<br>$h_0^{10}[b_{03}^2][h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$ |
| 2669 | 68,21;16 | $h_0^9[b_{02}^2]^2[b_{14}^2]$   | $d_4 = h_0^{15}[h_2b_{03}][b_{14}^2]$   |
| 2670 | 68,21;20 | $h_0^2[b_{02}^2]^2[h_2b_{03}][h_0(1)b_{13}][b_{13}^2]$                | $d_4^{-1} = h_0[b_{02}^2]^2[h_2b_{03}][h_0(1)^2][b_{03}^2]$                   |
| 2671 | 68,21;24 | $h_0[b_{02}^2]^3[b_{13}^2][b_{03}^2]$                                 | $d_4 = h_0^2[b_{02}^2]^2[h_0(1)^2][h_0(1)b_{13}][b_{13}^2]$                   |
| 2672 | 68,22;4  | $h_0^{18}[h_2(1)^2]$  | $d_4^{-1} = h_0^{16}[h_3h_2(1)b_{04}]$  |
| 2673 | 68,22;12 | $h_0^{14}[b_{03}^2][b_{24}^2]$  | $d_6^{-1} =$<br>$h_0^{11}[b_{03}^2][h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$ |
| 2674 | 68,22;16 | $h_0^{10}[b_{02}^2]^2[b_{14}^2]$                                      | $d_4 = h_0^{16}[h_2b_{03}][b_{14}^2]$   |
| 2675 | 68,22;24 | $h_0^2[b_{02}^2]^3[b_{13}^2][b_{03}^2]$                               | Permanent cycle   |
| 2676 | 68,23;4  | $h_0^{19}[h_2(1)^2]$  | $d_4^{-1} = h_0^{17}[h_3h_2(1)b_{04}]$  |
| 2677 | 68,23;12 | $h_0^{15}[b_{03}^2][b_{24}^2]$  | $d_6^{-1} =$<br>$h_0^{12}[b_{03}^2][h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$ |
| 2678 | 68,23;16 | $h_0^{11}[b_{02}^2]^2[b_{14}^2]$                                      | $d_4 = h_0^{17}[h_2b_{03}][b_{14}^2]$   |
| 2679 | 68,24;4  | $h_0^{20}[h_2(1)^2]$  | $d_4^{-1} = h_0^{18}[h_3h_2(1)b_{04}]$  |
| 2680 | 68,24;12 | $h_0^{16}[b_{03}^2][b_{24}^2]$  | $d_6^{-1} =$<br>$h_0^{13}[b_{03}^2][h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$ |
| 2681 | 68,24;16 | $h_0^{12}[b_{02}^2]^2[b_{14}^2]$                                      | $d_4 = h_0^{18}[h_2b_{03}][b_{14}^2]$   |
| 2682 | 68,25;4  | $h_0^{21}[h_2(1)^2]$  | $d_4^{-1} = h_0^{19}[h_3h_2(1)b_{04}]$  |
| 2683 | 68,25;12 | $h_0^{17}[b_{03}^2][b_{24}^2]$  | $d_6^{-1} =$<br>$h_0^{14}[b_{03}^2][h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$ |
| 2684 | 68,25;16 | $h_0^{13}[b_{02}^2]^2[b_{14}^2]$                                      | $d_4 = h_0^{19}[h_2b_{03}][b_{14}^2]$   |
| 2685 | 68,26;4  | $h_0^{22}[h_2(1)^2]$  | $d_4^{-1} = h_0^{20}[h_3h_2(1)b_{04}]$  |
| 2686 | 68,26;12 | $h_0^{18}[b_{03}^2][b_{24}^2]$  | $d_6^{-1} =$<br>$h_0^{15}[b_{03}^2][h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$ |

|      |          |   |   |
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| 2687 | 68,26;16 | $h_0^{14}[b_{02}^2]^2[b_{14}^2]$          | $d_4 = h_0^{20}[h_2b_{03}][b_{14}^2]$   |
| 2688 | 68,27;4  | $h_0^{23}[h_2(1)^2]$                      | $d_4^{-1} = h_0^{21}[h_3h_2(1)b_{04}]$  |
| 2689 | 68,27;12 | $h_0^{19}[b_{03}^2][b_{24}^2]$            | $d_6^{-1} =$<br>$h_0^{16}[b_{03}^2][h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$ |
| 2690 | 68,27;16 | $h_0^{15}[b_{02}^2]^2[b_{14}^2]$          | $d_4 = h_0^{21}[h_2b_{03}][b_{14}^2]$   |
| 2691 | 68,28;4  | $h_0^{24}[h_2(1)^2]$                      | $d_4^{-1} = h_0^{22}[h_3h_2(1)b_{04}]$  |
| 2692 | 68,28;12 | $h_0^{20}[b_{03}^2][b_{24}^2]$            | $d_6^{-1} =$<br>$h_0^{17}[b_{03}^2][h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$ |
| 2693 | 68,28;16 | $h_0^{16}[b_{02}^2]^2[b_{14}^2]$          | $d_4 = h_0^{22}[h_2b_{03}][b_{14}^2]$   |
| 2694 | 68,28;28 | $[b_{02}^2]^6[b_{13}^2]$                  | Permanent cycle   |
| 2695 | 68,29;4  | $h_0^{25}[h_2(1)^2]$                      | $d_4^{-1} = h_0^{23}[h_3h_2(1)b_{04}]$  |
| 2696 | 68,29;12 | $h_0^{21}[b_{03}^2][b_{24}^2]$            | $d_6^{-1} =$<br>$h_0^{18}[b_{03}^2][h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$ |
| 2697 | 68,29;16 | $h_0^{17}[b_{02}^2]^2[b_{14}^2]$          | $d_4 = h_0^{23}[h_2b_{03}][b_{14}^2]$   |
| 2698 | 68,29;28 | $h_0[b_{02}^2]^6[b_{13}^2]$               | Permanent cycle   |
| 2699 | 68,30;4  | $h_0^{26}[h_2(1)^2]$                      | $d_4^{-1} = h_0^{24}[h_3h_2(1)b_{04}]$  |
| 2700 | 68,30;12 | $h_0^{22}[b_{03}^2][b_{24}^2]$            | $d_6^{-1} =$<br>$h_0^{19}[b_{03}^2][h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$ |
| 2701 | 68,30;16 | $h_0^{18}[b_{02}^2]^2[b_{14}^2]$          | $d_4 = h_0^{24}[h_2b_{03}][b_{14}^2]$   |
| 2702 | 68,30;28 | $h_0^2[b_{02}^2]^6[b_{13}^2]$             | Permanent cycle   |
| 2703 | 68,31;4  | $h_0^{27}[h_2(1)^2]$                      | $d_4^{-1} = h_0^{25}[h_3h_2(1)b_{04}]$  |
| 2704 | 68,31;12 | $h_0^{23}[b_{03}^2][b_{24}^2]$            | $d_6^{-1} =$<br>$h_0^{20}[b_{03}^2][h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$ |
| 2705 | 68,31;16 | $h_0^{19}[b_{02}^2]^2[b_{14}^2]$          | $d_4 = h_0^{25}[h_2b_{03}][b_{14}^2]$   |
| 2706 | 68,32;4  | $h_0^{28}[h_2(1)^2]$                      | $d_4^{-1} = h_0^{26}[h_3h_2(1)b_{04}]$  |
| 2707 | 68,32;12 | $h_0^{24}[b_{03}^2][b_{24}^2]$            | $d_6^{-1} =$<br>$h_0^{21}[b_{03}^2][h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$ |
| 2708 | 68,32;16 | $h_0^{20}[b_{02}^2]^2[b_{14}^2]$          | $d_4 = h_0^{26}[h_2b_{03}][b_{14}^2]$   |
| 2709 | 68,33;4  | $h_0^{29}[h_2(1)^2]$                      | $d_4^{-1} = h_0^{27}[h_3h_2(1)b_{04}]$  |
| 2710 | 68,33;12 | $h_0^{25}[b_{03}^2][b_{24}^2]$            | $d_6^{-1} =$<br>$h_0^{22}[b_{03}^2][h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$ |
| 2711 | 68,33;16 | $h_0^{21}[b_{02}^2]^2[b_{14}^2]$          | $d_4 = h_0^{27}[h_2b_{03}][b_{14}^2]$   |
| 2712 | 68,34;4  | $h_0^{30}[h_2(1)^2]$                      | $d_4^{-1} = h_0^{28}[h_3h_2(1)b_{04}]$  |
| 2713 | 68,34;12 | $h_0^{26}[b_{03}^2][b_{24}^2]$            | $d_6^{-1} =$<br>$h_0^{23}[b_{03}^2][h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$ |
| 2714 | 68,34;16 | $h_0^{22}[b_{02}^2]^2[b_{14}^2]$          | $d_4 = h_0^{28}[h_2b_{03}][b_{14}^2]$   |
| 2715 | 68,35;4  | $h_0^{31}[h_2(1)^2]$                      | $d_4^{-1} = h_0^{29}[h_3h_2(1)b_{04}]$  |
| 2716 | 68,35;12 | $h_0^{27}[b_{03}^2][b_{24}^2]$            | $d_6^{-1} =$<br>$h_0^{24}[b_{03}^2][h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$ |
| 2717 | 68,35;16 | $h_0^{23}[b_{02}^2]^2[b_{14}^2]$          | $d_4 = h_0^{29}[h_2b_{03}][b_{14}^2]$   |
| 2718 | 69,3;0   | $h_2^2h_6$                                | Permanent cycle   |
| 2719 | 69,3;4   | $[h_4b_{25}]$                             | $d_4 = h_2^2h_5^2$  |
| 2720 | 69,4;4   | $h_0[h_4b_{25}]$                          | Permanent cycle   |
| 2721 | 69,5;4   | $h_0^2[h_4b_{25}]$                        | Permanent cycle   |
| 2722 | 69,5;8   | $[h_3h_2(1)b_{04}]$                       | $d_4 = h_0^2[h_2(1)^2]$   |
| 2723 | 69,6;4   | $h_0^3[h_4b_{25}]$                        | Permanent cycle   |
| 2724 | 69,6;8   | $h_3[h_1(1)h_0(1,2)]$                     | Permanent cycle   |
| 2725 | 69,6;8   | $h_0[h_3h_2(1)b_{04}]$                    | $d_4 = h_0^3[h_2(1)^2]$   |
| 2726 | 69,7;4   | $h_0^4[h_4b_{25}]$                        | Permanent cycle   |
| 2727 | 69,7;8   | $h_1^2h_4[b_{14}^2]$                      | $d_4^{-1} = h_3^2[b_{04}^2]$  |
| 2728 | 69,7;8   | $h_0^2[h_3h_2(1)b_{04}]$                  | $d_4 = h_0^4[h_2(1)^2]$   |
| 2729 | 69,7;10  | $h_1[h_1(1)b_{14}^2 + h_3^2b_{14}b_{04}]$ | $d_4 = h_1h_5[h_1(1)b_{13}^2 + h_1^2b_{24}b_{03}]$                            |
| 2730 | 69,8;4   | $h_0^5[h_4b_{25}]$                        | $d_8^{-1} = h_0h_3^2[b_{04}^2]$   |

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| 2731 | 69,8;8   | $h_0^3[h_3h_2(1)b_{04}]$                                     | $d_4 = h_0^5[h_2(1)^2]$   |
| 2732 | 69,8;10  | $h_2[h_0(1,2)b_{13}^2 + h_1h_3h_0(1,2)b_{03}]$               | Permanent cycle   |
| 2733 | 69,8;10  | $[b_{02}^2][h_4h_0(1,2)]$                                    | Permanent cycle   |
| 2734 | 69,8;12  | $[h_0(1)b_{13}][b_{14}^2]$                                   | $d_4 = [h_0(1)b_{13}][b_{13}^2]h_5$   |
| 2735 | 69,9;4   | $h_0^6[h_4b_{25}]$   | $d_8^{-1} = [h_2b_{03}][b_{03}^2]h_5 + h_2[h_2b_{03}][b_{14}^2]$                                      |
| 2736 | 69,9;8   | $h_2[h_2b_{03}][b_{13}^2]h_5$                                | $d_4^{-1} = h_2[h_2b_{03}][b_{14}^2]$   |
| 2737 | 69,9;8   | $h_0^4[h_3h_2(1)b_{04}]$                                     | $d_4 = h_0^6[h_2(1)^2]$   |
| 2738 | 69,9;10  | $h_0h_2[h_0(1,2)b_{13}^2 + h_1h_3h_0(1,2)b_{03}]$            | Permanent cycle   |
| 2739 | 69,9;12  | $[h_0(1)^2][b_{03}^2]h_5 + h_0[h_0(1)b_{13}][b_{14}^2]$      | $d_4^{-1} = [h_0(1)^2][b_{04}^2]$   |
| 2740 | 69,9;12  | $h_1[b_{03}^2][b_{24}^2]$                                    | Permanent cycle   |
| 2741 | 69,9;12  | $h_0[h_0(1)b_{13}][b_{14}^2]$                                | $d_4 = h_0[h_0(1)b_{13}][b_{13}^2]h_5$  |
| 2742 | 69,10;4  | $h_0^7[h_4b_{25}]$   | $d_8^{-1} =$<br>$h_0[h_2b_{03}][b_{03}^2]h_5 + h_0h_2[h_2b_{03}][b_{14}^2]$                           |
| 2743 | 69,10;8  | $h_0h_2[h_2b_{03}][b_{13}^2]h_5$                             | $d_4^{-1} = h_0h_2[h_2b_{03}][b_{14}^2]$  |
| 2744 | 69,10;8  | $h_0^5[h_3h_2(1)b_{04}]$                                     | $d_4 = h_0^7[h_2(1)^2]$   |
| 2745 | 69,10;12 | $h_0[h_0(1)^2][b_{03}^2]h_5 + h_0^2[h_0(1)b_{13}][b_{14}^2]$ | $d_4^{-1} = h_0[h_0(1)^2][b_{04}^2]$  |
| 2746 | 69,10;12 | $h_0^2[h_0(1)b_{13}][b_{14}^2]$                              | $d_4 = h_0^2[h_0(1)b_{13}][b_{13}^2]h_5$  |
| 2747 | 69,10;14 | $[b_{02}^2][h_2h_0(1,2)b_{03}]$                              | Permanent cycle   |
| 2748 | 69,10;18 | $[b_{03}^2][h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$        | $d_4 = [h_1h_0(1)][b_{02}^2][b_{14}^2] +$<br>$h_2[b_{13}^2][h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$ |
| 2749 | 69,11;4  | $h_0^8[h_4b_{25}]$   | $d_8^{-1} = h_0^4h_3^2[b_{04}^2]$   |
| 2750 | 69,11;8  | $h_0^6[h_3h_2(1)b_{04}]$                                     | $d_4 = h_0^8[h_2(1)^2]$   |
| 2751 | 69,11;12 | $h_0^2[h_0(1)^2][b_{03}^2]h_5$                               | $d_4^{-1} = h_0^2[h_0(1)^2][b_{04}^2]$  |
| 2752 | 69,11;14 | $h_2x_{53}$  | Permanent cycle   |
| 2753 | 69,11;14 | $h_0[b_{02}^2][h_2h_0(1,2)b_{03}]$                           | Permanent cycle   |
| 2754 | 69,11;18 | $h_0[b_{03}^2][h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$     | $d_4 =$<br>$h_0h_2[b_{13}^2][h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$                                |
| 2755 | 69,12;4  | $h_0^9[h_4b_{25}]$   | $d_8^{-1} = h_0^5h_3^2[b_{04}^2]$   |
| 2756 | 69,12;8  | $h_0^7[h_3h_2(1)b_{04}]$                                     | $d_4 = h_0^9[h_2(1)^2]$   |
| 2757 | 69,12;14 | $h_0^2[b_{02}^2][h_2h_0(1,2)b_{03}]$                         | $d_4^{-1} = h_1[b_{03}^2][h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$                                   |
| 2758 | 69,12;18 | $h_0^2[b_{03}^2][h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$   | $d_6 =$<br>$h_0[b_{02}^2][h_2b_{03}][h_0(1)^2]h_5 + h_0^5[b_{03}^2][b_{24}^2]$                        |
| 2759 | 69,13;4  | $h_0^{10}[h_4b_{25}]$  | $d_8^{-1} = h_0^6h_3^2[b_{04}^2]$   |
| 2760 | 69,13;8  | $h_0^8[h_3h_2(1)b_{04}]$                                     | $d_4 = h_0^{10}[h_2(1)^2]$  |
| 2761 | 69,13;16 | $h_1[b_{02}^2]^2[b_{14}^2]$                                  | $d_4 = h_0^2[b_{02}^2][h_2b_{03}][h_0(1)^2]h_5$   |
| 2762 | 69,13;18 | $h_0^3[b_{03}^2][h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$   | $d_6 =$<br>$h_0^2[b_{02}^2][h_2b_{03}][h_0(1)^2]h_5 + h_0^6[b_{03}^2][b_{24}^2]$                      |
| 2763 | 69,13;20 | $h_1[b_{13}^2][b_{03}^2]^2$                                  | Permanent cycle   |
| 2764 | 69,14;4  | $h_0^{11}[h_4b_{25}]$  | $d_8^{-1} = h_0^7h_3^2[b_{04}^2]$   |
| 2765 | 69,14;8  | $h_0^9[h_3h_2(1)b_{04}]$                                     | $d_4 = h_0^{11}[h_2(1)^2]$  |
| 2766 | 69,14;18 | $h_0^4[b_{03}^2][h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$   | $d_6 = h_0^7[b_{03}^2][b_{24}^2]$   |
| 2767 | 69,15;4  | $h_0^{12}[h_4b_{25}]$  | $d_8^{-1} = h_0^8h_3^2[b_{04}^2]$   |
| 2768 | 69,15;8  | $h_0^{10}[h_3h_2(1)b_{04}]$                                  | $d_4 = h_0^{12}[h_2(1)^2]$  |
| 2769 | 69,15;16 | $[h_2b_{03}][h_0(1)^2][b_{13}^2]^2$                          | Permanent cycle   |
| 2770 | 69,15;18 | $h_0^5[b_{03}^2][h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$   | $d_6 = h_0^8[b_{03}^2][b_{24}^2]$   |
| 2771 | 69,16;4  | $h_0^{13}[h_4b_{25}]$  | $d_8^{-1} = h_0^9h_3^2[b_{04}^2]$   |
| 2772 | 69,16;8  | $h_0^{11}[h_3h_2(1)b_{04}]$                                  | $d_4 = h_0^{13}[h_2(1)^2]$  |
| 2773 | 69,16;16 | $h_0[h_2b_{03}][h_0(1)^2][b_{13}^2]^2$                       | $d_4^{-1} = [h_2b_{03}][h_0(1)^2][h_0(1)b_{13}][b_{03}^2]$  |
| 2774 | 69,16;18 | $h_0^6[b_{03}^2][h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$   | $d_6 = h_0^9[b_{03}^2][b_{24}^2]$   |
| 2775 | 69,16;20 | $[b_{02}^2][h_0(1)b_{13}][b_{13}^2][b_{03}^2]$               | $d_4 = h_0[b_{02}^2][b_{13}^2]^3$   |
| 2776 | 69,17;4  | $h_0^{14}[h_4b_{25}]$  | $d_8^{-1} = h_0^{10}h_3^2[b_{04}^2]$  |
| 2777 | 69,17;8  | $h_0^{12}[h_3h_2(1)b_{04}]$                                  | $d_4 = h_0^{14}[h_2(1)^2]$  |
| 2778 | 69,17;16 | $h_0^2[h_2b_{03}][h_0(1)^2][b_{13}^2]^2$                     | $d_4^{-1} = h_0[h_2b_{03}][h_0(1)^2][h_0(1)b_{13}][b_{03}^2]$   |

|      |          |   |   |
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| 2779 | 69,17;16 | $[b_{02}^2]^3[h_0(1)^2]h_5$                                   | $d_8^{-1} = [b_{02}^2][h_0(1)^2][b_{03}^2]^2$                                   |
| 2780 | 69,17;18 | $h_0^7[b_{03}^2][h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$    | $d_6 = h_0^{10}[b_{03}^2][b_{24}^2]$  |
| 2781 | 69,17;20 | $h_0[b_{02}^2][h_0(1)b_{13}][b_{13}^2][b_{03}^2]$             | $d_4 = h_0^2[b_{02}^2][b_{13}^2]^3$   |
| 2782 | 69,18;4  | $h_0^{15}[h_4b_{25}]$   | $d_8^{-1} = h_0^{11}h_3^2[b_{04}^2]$  |
| 2783 | 69,18;8  | $h_0^{13}[h_3h_2(1)b_{04}]$                                   | $d_4 = h_0^{15}[h_2(1)^2]$  |
| 2784 | 69,18;16 | $h_0[b_{02}^2]^3[h_0(1)^2]h_5$                                | $d_6^{-1} = [b_{02}^2]^2[h_0b_{02}b_{03}^2b_{14} + h_0h_0(1)^2b_{03}b_{04}]$    |
| 2785 | 69,18;18 | $h_0^8[b_{03}^2][h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$    | $d_6 = h_0^{11}[b_{03}^2][b_{24}^2]$  |
| 2786 | 69,18;20 | $h_0^2[b_{02}^2][h_0(1)b_{13}][b_{13}^2][b_{03}^2]$           | Permanent cycle   |
| 2787 | 69,18;22 | $[b_{02}^2]^3[h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$       | Permanent cycle   |
| 2788 | 69,19;4  | $h_0^{16}[h_4b_{25}]$   | $d_8^{-1} = h_0^{12}h_3^2[b_{04}^2]$  |
| 2789 | 69,19;8  | $h_0^{14}[h_3h_2(1)b_{04}]$                                   | $d_4 = h_0^{16}[h_2(1)^2]$  |
| 2790 | 69,19;16 | $h_0^2[b_{02}^2]^3[h_0(1)^2]h_5$                              | $d_6^{-1} = h_0[b_{02}^2]^2[h_0b_{02}b_{03}^2b_{14} + h_0h_0(1)^2b_{03}b_{04}]$ |
| 2791 | 69,19;18 | $h_0^9[b_{03}^2][h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$    | $d_6 = h_0^{12}[b_{03}^2][b_{24}^2]$  |
| 2792 | 69,19;22 | $h_0[b_{02}^2]^3[h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$    | Permanent cycle   |
| 2793 | 69,19;24 | $[b_{02}^2]^2[h_2b_{03}][h_0(1)^2][b_{03}^2]$                 | $d_4 = h_0[b_{02}^2]^2[h_2b_{03}][h_0(1)b_{13}][b_{13}^2]$                      |
| 2794 | 69,20;4  | $h_0^{17}[h_4b_{25}]$   | $d_8^{-1} = h_0^{13}h_3^2[b_{04}^2]$  |
| 2795 | 69,20;8  | $h_0^{15}[h_3h_2(1)b_{04}]$                                   | $d_4 = h_0^{17}[h_2(1)^2]$  |
| 2796 | 69,20;18 | $h_0^{10}[b_{03}^2][h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$ | $d_6 = h_0^{13}[b_{03}^2][b_{24}^2]$  |
| 2797 | 69,20;22 | $h_0^2[b_{02}^2]^3[h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$  | Permanent cycle   |
| 2798 | 69,20;24 | $h_0[b_{02}^2]^2[h_2b_{03}][h_0(1)^2][b_{03}^2]$              | $d_4 = h_0^2[b_{02}^2]^2[h_2b_{03}][h_0(1)b_{13}][b_{13}^2]$                    |
| 2799 | 69,21;4  | $h_0^{18}[h_4b_{25}]$   | $d_8^{-1} = h_0^{14}h_3^2[b_{04}^2]$  |
| 2800 | 69,21;8  | $h_0^{16}[h_3h_2(1)b_{04}]$                                   | $d_4 = h_0^{18}[h_2(1)^2]$  |
| 2801 | 69,21;18 | $h_0^{11}[b_{03}^2][h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$ | $d_6 = h_0^{14}[b_{03}^2][b_{24}^2]$  |
| 2802 | 69,21;22 | $h_0^3[b_{02}^2]^3[h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$  | Permanent cycle   |
| 2803 | 69,21;24 | $h_0^2[b_{02}^2]^2[h_2b_{03}][h_0(1)^2][b_{03}^2]$            | Permanent cycle   |
| 2804 | 69,22;4  | $h_0^{19}[h_4b_{25}]$   | $d_8^{-1} = h_0^{15}h_3^2[b_{04}^2]$  |
| 2805 | 69,22;8  | $h_0^{17}[h_3h_2(1)b_{04}]$                                   | $d_4 = h_0^{19}[h_2(1)^2]$  |
| 2806 | 69,22;18 | $h_0^{12}[b_{03}^2][h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$ | $d_6 = h_0^{15}[b_{03}^2][b_{24}^2]$  |
| 2807 | 69,22;22 | $h_0^4[b_{02}^2]^3[h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$  | Permanent cycle   |
| 2808 | 69,23;4  | $h_0^{20}[h_4b_{25}]$   | $d_8^{-1} = h_0^{16}h_3^2[b_{04}^2]$  |
| 2809 | 69,23;8  | $h_0^{18}[h_3h_2(1)b_{04}]$                                   | $d_4 = h_0^{20}[h_2(1)^2]$  |
| 2810 | 69,23;18 | $h_0^{13}[b_{03}^2][h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$ | $d_6 = h_0^{16}[b_{03}^2][b_{24}^2]$  |
| 2811 | 69,23;22 | $h_0^5[b_{02}^2]^3[h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$  | Permanent cycle   |
| 2812 | 69,24;4  | $h_0^{21}[h_4b_{25}]$   | $d_8^{-1} = h_0^{17}h_3^2[b_{04}^2]$  |
| 2813 | 69,24;8  | $h_0^{19}[h_3h_2(1)b_{04}]$                                   | $d_4 = h_0^{21}[h_2(1)^2]$  |
| 2814 | 69,24;18 | $h_0^{14}[b_{03}^2][h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$ | $d_6 = h_0^{17}[b_{03}^2][b_{24}^2]$  |
| 2815 | 69,24;22 | $h_0^6[b_{02}^2]^3[h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$  | Permanent cycle   |
| 2816 | 69,24;24 | $[b_{02}^2]^4[h_0(1)b_{13}][b_{13}^2]$                        | Permanent cycle   |
| 2817 | 69,25;4  | $h_0^{22}[h_4b_{25}]$   | $d_8^{-1} = h_0^{18}h_3^2[b_{04}^2]$  |
| 2818 | 69,25;8  | $h_0^{20}[h_3h_2(1)b_{04}]$                                   | $d_4 = h_0^{22}[h_2(1)^2]$  |
| 2819 | 69,25;18 | $h_0^{15}[b_{03}^2][h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$ | $d_6 = h_0^{18}[b_{03}^2][b_{24}^2]$  |
| 2820 | 69,25;22 | $h_0^7[b_{02}^2]^3[h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$  | Permanent cycle   |
| 2821 | 69,25;24 | $h_0[b_{02}^2]^4[h_0(1)b_{13}][b_{13}^2]$                     | $d_4^{-1} = [b_{02}^2]^4[h_0(1)^2][b_{03}^2]$                                   |
| 2822 | 69,26;4  | $h_0^{23}[h_4b_{25}]$   | $d_8^{-1} = h_0^{19}h_3^2[b_{04}^2]$  |
| 2823 | 69,26;8  | $h_0^{21}[h_3h_2(1)b_{04}]$                                   | $d_4 = h_0^{23}[h_2(1)^2]$  |
| 2824 | 69,26;18 | $h_0^{16}[b_{03}^2][h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$ | $d_6 = h_0^{19}[b_{03}^2][b_{24}^2]$  |
| 2825 | 69,26;22 | $h_0^8[b_{02}^2]^3[h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$  | Permanent cycle   |
| 2826 | 69,26;24 | $h_0^2[b_{02}^2]^4[h_0(1)b_{13}][b_{13}^2]$                   | $d_4^{-1} = h_0[b_{02}^2]^4[h_0(1)^2][b_{03}^2]$                                |
| 2827 | 69,27;4  | $h_0^{24}[h_4b_{25}]$   | $d_8^{-1} = h_0^{20}h_3^2[b_{04}^2]$  |
| 2828 | 69,27;8  | $h_0^{22}[h_3h_2(1)b_{04}]$                                   | $d_4 = h_0^{24}[h_2(1)^2]$  |
| 2829 | 69,27;18 | $h_0^{17}[b_{03}^2][h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$ | $d_6 = h_0^{20}[b_{03}^2][b_{24}^2]$  |
| 2830 | 69,27;22 | $h_0^9[b_{02}^2]^3[h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$  | $d_6^{-1} = h_0^2[b_{02}^2]^4[h_0(1)^2][b_{03}^2]$                              |



|      |          |   |   |
|------|----------|---|---|
| 2831 | 69,27;28 | $[b_{02}^2]^5[h_2b_{03}][h_0(1)^2]$                             | Permanent cycle   |
| 2832 | 69,28;4  | $h_0^{25}[h_4b_{25}]$   | $d_8^{-1} = h_0^{21}h_3^2[b_{04}^2]$                                  |
| 2833 | 69,28;8  | $h_0^{23}[h_3h_2(1)b_{04}]$                                     | $d_4 = h_0^{25}[h_2(1)^2]$  |
| 2834 | 69,28;18 | $h_0^{18}[b_{03}^2][h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$   | $d_6 = h_0^{21}[b_{03}^2][b_{24}^2]$                                  |
| 2835 | 69,28;22 | $h_0^{10}[b_{02}^2]^3[h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$ | $d_4^{-1} = [b_{02}^2]^5[h_4h_0(1)b_{02}^2 + h_0^3b_{02}b_{14}]$      |
| 2836 | 69,28;28 | $h_0[b_{02}^2]^5[h_2b_{03}][h_0(1)^2]$                          | Permanent cycle   |
| 2837 | 69,29;4  | $h_0^{26}[h_4b_{25}]$   | $d_8^{-1} = h_0^{22}h_3^2[b_{04}^2]$                                  |
| 2838 | 69,29;8  | $h_0^{24}[h_3h_2(1)b_{04}]$                                     | $d_4 = h_0^{26}[h_2(1)^2]$  |
| 2839 | 69,29;18 | $h_0^{19}[b_{03}^2][h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$   | $d_6 = h_0^{22}[b_{03}^2][b_{24}^2]$                                  |
| 2840 | 69,29;22 | $h_0^{11}[b_{02}^2]^3[h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$ | $d_4^{-1} = h_0[b_{02}^2]^5[h_4h_0(1)b_{02}^2 + h_0^3b_{02}b_{14}]$   |
| 2841 | 69,29;28 | $h_0^2[b_{02}^2]^5[h_2b_{03}][h_0(1)^2]$                        | Permanent cycle   |
| 2842 | 69,30;4  | $h_0^{27}[h_4b_{25}]$   | $d_8^{-1} = h_0^{23}h_3^2[b_{04}^2]$                                  |
| 2843 | 69,30;8  | $h_0^{25}[h_3h_2(1)b_{04}]$                                     | $d_4 = h_0^{27}[h_2(1)^2]$  |
| 2844 | 69,30;18 | $h_0^{20}[b_{03}^2][h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$   | $d_6 = h_0^{23}[b_{03}^2][b_{24}^2]$                                  |
| 2845 | 69,30;22 | $h_0^{12}[b_{02}^2]^3[h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$ | $d_4^{-1} = h_0^2[b_{02}^2]^5[h_4h_0(1)b_{02}^2 + h_0^3b_{02}b_{14}]$ |
| 2846 | 69,31;4  | $h_0^{28}[h_4b_{25}]$   | $d_8^{-1} = h_0^{24}h_3^2[b_{04}^2]$                                  |
| 2847 | 69,31;8  | $h_0^{26}[h_3h_2(1)b_{04}]$                                     | $d_4 = h_0^{28}[h_2(1)^2]$  |
| 2848 | 69,31;18 | $h_0^{21}[b_{03}^2][h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$   | $d_6 = h_0^{24}[b_{03}^2][b_{24}^2]$                                  |
| 2849 | 69,31;22 | $h_0^{13}[b_{02}^2]^3[h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$ | $d_4^{-1} = h_0^3[b_{02}^2]^5[h_4h_0(1)b_{02}^2 + h_0^3b_{02}b_{14}]$ |
| 2850 | 69,32;4  | $h_0^{29}[h_4b_{25}]$   | $d_8^{-1} = h_0^{25}h_3^2[b_{04}^2]$                                  |
| 2851 | 69,32;8  | $h_0^{27}[h_3h_2(1)b_{04}]$                                     | $d_4 = h_0^{29}[h_2(1)^2]$  |
| 2852 | 69,32;18 | $h_0^{22}[b_{03}^2][h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$   | $d_6 = h_0^{25}[b_{03}^2][b_{24}^2]$                                  |
| 2853 | 69,32;22 | $h_0^{14}[b_{02}^2]^3[h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$ | $d_4^{-1} = h_0^4[b_{02}^2]^5[h_4h_0(1)b_{02}^2 + h_0^3b_{02}b_{14}]$ |
| 2854 | 69,33;4  | $h_0^{30}[h_4b_{25}]$   | $d_8^{-1} = h_0^{26}h_3^2[b_{04}^2]$                                  |
| 2855 | 69,33;8  | $h_0^{28}[h_3h_2(1)b_{04}]$                                     | $d_4 = h_0^{30}[h_2(1)^2]$  |
| 2856 | 69,33;18 | $h_0^{23}[b_{03}^2][h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$   | $d_6 = h_0^{26}[b_{03}^2][b_{24}^2]$                                  |
| 2857 | 69,33;22 | $h_0^{15}[b_{02}^2]^3[h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$ | $d_4^{-1} = h_0^5[b_{02}^2]^5[h_4h_0(1)b_{02}^2 + h_0^3b_{02}b_{14}]$ |
| 2858 | 69,34;4  | $h_0^{31}[h_4b_{25}]$   | $d_8^{-1} = h_0^{27}h_3^2[b_{04}^2]$                                  |
| 2859 | 69,34;8  | $h_0^{29}[h_3h_2(1)b_{04}]$                                     | $d_4 = h_0^{31}[h_2(1)^2]$  |
| 2860 | 69,34;18 | $h_0^{24}[b_{03}^2][h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$   | $d_6 = h_0^{27}[b_{03}^2][b_{24}^2]$                                  |
| 2861 | 69,34;22 | $h_0^{16}[b_{02}^2]^3[h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$ | $d_4^{-1} = h_0^6[b_{02}^2]^5[h_4h_0(1)b_{02}^2 + h_0^3b_{02}b_{14}]$ |
| 2862 | 69,35;4  | $h_0^{32}[h_4b_{25}]$   | $d_8^{-1} = h_0^{28}h_3^2[b_{04}^2]$                                  |
| 2863 | 69,35;8  | $h_0^{30}[h_3h_2(1)b_{04}]$                                     | $d_4 = h_0^{32}[h_2(1)^2]$  |
| 2864 | 69,35;18 | $h_0^{25}[b_{03}^2][h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$   | $d_6 = h_0^{28}[b_{03}^2][b_{24}^2]$                                  |
| 2865 | 69,35;22 | $h_0^{17}[b_{02}^2]^3[h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$ | $d_4^{-1} = h_0^7[b_{02}^2]^5[h_4h_0(1)b_{02}^2 + h_0^3b_{02}b_{14}]$ |
| 2866 | 70,2;0   | $h_3h_6$  | Permanent cycle   |
| 2867 | 70,3;0   | $h_0h_3h_6$   | Permanent cycle   |
| 2868 | 70,4;0   | $h_0^2h_3h_6$   | Permanent cycle   |
| 2869 | 70,4;4   | $h_1[h_4b_{25}]$  | Permanent cycle   |
| 2870 | 70,5;0   | $h_0^3h_3h_6$   | Permanent cycle   |
| 2871 | 70,5;2   | $[h_1h_0(1)]h_5^2$  | Permanent cycle   |
| 2872 | 70,6;0   | $h_4^4h_3h_6$   | $d_4^{-1} = [b_{02}^2]h_6$  |
| 2873 | 70,6;4   | $[b_{02}^2]h_5^2$   | Permanent cycle   |
| 2874 | 70,6;8   | $h_2h_4[b_{14}^2]$  | $d_4^{-1} = h_4[b_{04}^2]$  |
| 2875 | 70,6;12  | $h_3^2[b_{04}^2]$   | $d_4 = h_1^2h_4[b_{14}^2]$  |
| 2876 | 70,7;0   | $h_0^5h_3h_6$   | $d_4^{-1} = h_0[b_{02}^2]h_6$   |
| 2877 | 70,7;4   | $h_0[b_{02}^2]h_5^2$  | Permanent cycle   |
| 2878 | 70,7;8   | $h_0h_2h_4[b_{14}^2]$   | $d_4^{-1} = h_0h_4[b_{04}^2]$   |
| 2879 | 70,7;12  | $h_1h_3[h_1(1)h_0(1,2)]$  | Permanent cycle   |
| 2880 | 70,7;12  | $h_0h_3^2[b_{04}^2]$  | $d_8 = h_0^5[h_4b_{25}]$  |
| 2881 | 70,8;0   | $h_0^6h_3h_6$   | $d_4^{-1} = h_0^2[b_{02}^2]h_6$                                       |
| 2882 | 70,8;4   | $h_0^2[b_{02}^2]h_5^2$  | $d_8^{-1} = h_0^2h_4[b_{04}^2]$                                       |
| 2883 | 70,8;6   | $h_2h_5[h_1(1)b_{13}^2 + h_1^2b_{24}b_{03}]$                    | $d_4^{-1} = h_2[h_1(1)b_{14}^2 + h_3^2b_{14}b_{04}]$                  |

|      |          |   |   |
|------|----------|---|---|
| 2884 | 70,8;8   | $[h_1(1)^2][h_1(1)b_{24}]$  | Permanent cycle   |
| 2885 | 70,8;12  | $[h_2b_{03}][b_{03}^2]h_5 + h_2[h_2b_{03}][b_{14}^2] + h_0^2h_3^2[b_{04}^2]$            | $d_4^{-1} = [h_2b_{03}][b_{04}^2]$                                      |
| 2886 | 70,8;12  | $h_0^2h_3^2[b_{04}^2]$  | $d_8 = h_0^6[h_4b_{25}]$  |
| 2887 | 70,8;12  | $h_2[h_2b_{03}][b_{14}^2]$  | $d_4 = h_2[h_2b_{03}][b_{13}^2]h_5$                                     |
| 2888 | 70,8;16  | $[h_0(1)^2][b_{04}^2]$  | $d_4 = [h_0(1)^2][b_{03}^2]h_5 + h_0[h_0(1)b_{13}][b_{14}^2]$           |
| 2889 | 70,9;0   | $h_0^7h_3h_6$   | $d_4^{-1} = h_0^3[b_{02}^2]h_6$   |
| 2890 | 70,9;4   | $h_0^3[b_{02}^2]h_5^2$  | $d_8^{-1} = h_0^3h_4[b_{04}^2]$   |
| 2891 | 70,9;10  | $h_1[b_{02}^2][h_4h_0(1,2)]$  | Permanent cycle   |
| 2892 | 70,9;12  | $h_0[h_2b_{03}][b_{03}^2]h_5 + h_0h_2[h_2b_{03}][b_{14}^2] +$<br>$h_0^3h_3^2[b_{04}^2]$ | $d_4^{-1} = h_0[h_2b_{03}][b_{04}^2]$                                   |
| 2893 | 70,9;12  | $h_0^3h_3^2[b_{04}^2]$  | $d_8 = h_0^7[h_4b_{25}]$  |
| 2894 | 70,9;12  | $h_0h_2[h_2b_{03}][b_{14}^2]$   | $d_4 = h_0h_2[h_2b_{03}][b_{13}^2]h_5$                                  |
| 2895 | 70,9;16  | $h_0[h_0(1)^2][b_{04}^2]$   | $d_4 =$<br>$h_0[h_0(1)^2][b_{03}^2]h_5 + h_0^2[h_0(1)b_{13}][b_{14}^2]$ |
| 2896 | 70,10;0  | $h_0^8h_3h_6$   | $d_4^{-1} = h_0^4[b_{02}^2]h_6$   |
| 2897 | 70,10;4  | $h_0^4[b_{02}^2]h_5^2$  | $d_8^{-1} = h_0^4h_4[b_{04}^2]$   |
| 2898 | 70,10;12 | $h_0^2[h_2b_{03}][b_{03}^2]h_5 + h_0^4h_3^2[b_{04}^2]$                                  | $d_4^{-1} = h_0^2[h_2b_{03}][b_{04}^2]$                                 |
| 2899 | 70,10;12 | $h_1[h_0(1)^2][b_{03}^2]h_5$  | $d_4^{-1} = h_1[h_0(1)^2][b_{04}^2]$                                    |
| 2900 | 70,10;12 | $h_2[b_{13}^2][h_2h_1(1)b_{04}] + h_1^2[b_{03}^2][b_{24}^2]$                            | $d_4^{-1} = [b_{03}^2][h_2h_1(1)b_{04}]$                                |
| 2901 | 70,10;12 | $h_1^2[b_{03}^2][b_{24}^2]$   | Permanent cycle   |
| 2902 | 70,10;12 | $h_0^4h_3^2[b_{04}^2]$  | $d_8 = h_0^8[h_4b_{25}]$  |
| 2903 | 70,10;16 | $h_0^2[h_0(1)^2][b_{04}^2]$   | $d_4 = h_0^2[h_0(1)^2][b_{03}^2]h_5$                                    |
| 2904 | 70,11;0  | $h_0^9h_3h_6$   | $d_4^{-1} = h_0^5[b_{02}^2]h_6$   |
| 2905 | 70,11;4  | $h_0^5[b_{02}^2]h_5^2$  | $d_8^{-1} = h_0^5h_4[b_{04}^2]$   |
| 2906 | 70,11;12 | $h_0^3[h_2b_{03}][b_{03}^2]h_5 + h_0^5h_3^2[b_{04}^2]$                                  | $d_4^{-1} = h_0^3[h_2b_{03}][b_{04}^2]$                                 |
| 2907 | 70,11;12 | $h_0^5h_3^2[b_{04}^2]$  | $d_8 = h_0^9[h_4b_{25}]$  |
| 2908 | 70,11;18 | $h_1[b_{03}^2][h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$                                | $d_4 = h_0^2[b_{02}^2][h_2h_0(1,2)b_{03}]$                              |
| 2909 | 70,12;0  | $h_0^{10}h_3h_6$  | $d_4^{-1} = h_0^6[b_{02}^2]h_6$   |
| 2910 | 70,12;4  | $h_0^6[b_{02}^2]h_5^2$  | $d_8^{-1} = h_0^6h_4[b_{04}^2]$   |
| 2911 | 70,12;12 | $h_0^4[h_2b_{03}][b_{03}^2]h_5 + h_0^6h_3^2[b_{04}^2]$                                  | $d_4^{-1} = h_0^4[h_2b_{03}][b_{04}^2]$                                 |
| 2912 | 70,12;12 | $h_0^6h_3^2[b_{04}^2]$  | $d_8 = h_0^{10}[h_4b_{25}]$   |
| 2913 | 70,12;18 | $h_2[h_2h_1(1)][b_{03}^2]^2$  | Permanent cycle   |
| 2914 | 70,13;0  | $h_0^{11}h_3h_6$  | $d_4^{-1} = h_0^7[b_{02}^2]h_6$   |
| 2915 | 70,13;4  | $h_0^7[b_{02}^2]h_5^2$  | $d_8^{-1} = h_0^7h_4[b_{04}^2]$   |
| 2916 | 70,13;12 | $h_0^5[h_2b_{03}][b_{03}^2]h_5 + h_0^7h_3^2[b_{04}^2]$                                  | $d_4^{-1} = h_0^5[h_2b_{03}][b_{04}^2]$                                 |
| 2917 | 70,13;12 | $[b_{02}^2][h_0(1)^2][h_0(1)b_{13}]h_5$   | $d_4^{-1} = [b_{02}^2]x_{45}$   |
| 2918 | 70,13;12 | $h_0^7h_3^2[b_{04}^2]$  | $d_8 = h_0^{11}[h_4b_{25}]$   |
| 2919 | 70,14;0  | $h_0^{12}h_3h_6$  | $d_4^{-1} = h_0^8[b_{02}^2]h_6$   |
| 2920 | 70,14;4  | $h_0^8[b_{02}^2]h_5^2$  | $d_8^{-1} = h_0^8h_4[b_{04}^2]$   |
| 2921 | 70,14;12 | $h_0^6[h_2b_{03}][b_{03}^2]h_5 + h_0^8h_3^2[b_{04}^2]$                                  | $d_4^{-1} = h_0^6[h_2b_{03}][b_{04}^2]$                                 |
| 2922 | 70,14;12 | $h_0[b_{02}^2][h_0(1)^2][h_0(1)b_{13}]h_5$  | $d_4^{-1} = h_0[b_{02}^2]x_{45}$  |
| 2923 | 70,14;12 | $h_0^8h_3^2[b_{04}^2]$  | $d_8 = h_0^{12}[h_4b_{25}]$   |
| 2924 | 70,14;16 | $h_2^2[b_{13}^2]^2[b_{03}^2]$   | Permanent cycle   |
| 2925 | 70,14;16 | $h_1^2[b_{02}^2]^2[b_{14}^2]$   | Permanent cycle   |
| 2926 | 70,14;18 | $[b_{02}^2][h_0(1)b_{13}][h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$                     | Permanent cycle   |
| 2927 | 70,15;0  | $h_0^{13}h_3h_6$  | $d_4^{-1} = h_0^9[b_{02}^2]h_6$   |
| 2928 | 70,15;4  | $h_0^9[b_{02}^2]h_5^2$  | $d_8^{-1} = h_0^9h_4[b_{04}^2]$   |
| 2929 | 70,15;12 | $h_0^7[h_2b_{03}][b_{03}^2]h_5 + h_0^9h_3^2[b_{04}^2]$                                  | $d_4^{-1} = h_0^7[h_2b_{03}][b_{04}^2]$                                 |
| 2930 | 70,15;12 | $h_0^2[b_{02}^2][h_0(1)^2][h_0(1)b_{13}]h_5$  | $d_4^{-1} = h_0^2[b_{02}^2]x_{45}$                                      |
| 2931 | 70,15;12 | $h_0^9h_3^2[b_{04}^2]$  | $d_8 = h_0^{13}[h_4b_{25}]$   |
| 2932 | 70,15;18 | $h_0[b_{02}^2][h_0(1)b_{13}][h_0(1)b_{03}b_{14} +$<br>$h_0(1)b_{13}b_{04}]$             | Permanent cycle   |
| 2933 | 70,15;20 | $[h_2b_{03}][h_0(1)^2][h_0(1)b_{13}][b_{03}^2]$   | $d_4 = h_0[h_2b_{03}][h_0(1)^2][b_{13}^2]^2$                            |

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| 2934 | 70,16;0  | $h_0^{14}h_3h_6$   | $d_4^{-1} = h_0^{10}[b_{02}^2]h_6$                             |
| 2935 | 70,16;4  | $h_0^{10}[b_{02}^2]h_5^2$  | $d_8^{-1} = h_0^{10}h_4[b_{04}^2]$                             |
| 2936 | 70,16;12 | $h_0^8[h_2b_{03}][b_{03}^2]h_5 + h_0^{10}h_3^2[b_{04}^2]$                | $d_4^{-1} = h_0^8[h_2b_{03}][b_{04}^2]$                        |
| 2937 | 70,16;12 | $h_0^{10}h_3^2[b_{04}^2]$  | $d_8 = h_0^{14}[h_4b_{25}]$                                    |
| 2938 | 70,16;16 | $[b_{02}^2]^3[h_2b_{03}]h_5$   | $d_8^{-1} = [b_{02}^2][h_2b_{03}][b_{03}^2]^2$                 |
| 2939 | 70,16;18 | $h_0^2[b_{02}^2][h_0(1)b_{13}][h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$ | Permanent cycle  |
| 2940 | 70,16;20 | $h_0[h_2b_{03}][h_0(1)^2][h_0(1)b_{13}][b_{03}^2]$                       | $d_4 = h_0^2[h_2b_{03}][h_0(1)^2][b_{13}^2]^2$                 |
| 2941 | 70,16;24 | $[b_{02}^2][h_0(1)^2][b_{03}^2]^2$                                       | $d_8 = [b_{02}^2]^3[h_0(1)^2]h_5$                              |
| 2942 | 70,17;0  | $h_0^{15}h_3h_6$   | $d_4^{-1} = h_0^{11}[b_{02}^2]h_6$                             |
| 2943 | 70,17;4  | $h_0^{11}[b_{02}^2]h_5^2$  | $d_8^{-1} = h_0^{11}h_4[b_{04}^2]$                             |
| 2944 | 70,17;12 | $h_0^9[h_2b_{03}][b_{03}^2]h_5 + h_0^{11}h_3^2[b_{04}^2]$                | $d_4^{-1} = h_0^9[h_2b_{03}][b_{04}^2]$                        |
| 2945 | 70,17;12 | $h_0^{11}h_3^2[b_{04}^2]$  | $d_8 = h_0^{15}[h_4b_{25}]$                                    |
| 2946 | 70,17;16 | $h_0[b_{02}^2]^3[h_2b_{03}]h_5$  | $d_8^{-1} = h_0[b_{02}^2][h_2b_{03}][b_{03}^2]^2$              |
| 2947 | 70,17;20 | $h_0^2[h_2b_{03}][h_0(1)^2][h_0(1)b_{13}][b_{03}^2]$                     | Permanent cycle  |
| 2948 | 70,17;22 | $[b_{02}^2]^2[h_0b_{02}b_{03}^2b_{14} + h_0h_0(1)^2b_{03}b_{04}]$        | $d_6 = h_0[b_{02}^2]^3[h_0(1)^2]h_5$                           |
| 2949 | 70,17;24 | $h_0[b_{02}^2][h_0(1)^2][b_{03}^2]^2$                                    | Permanent cycle  |
| 2950 | 70,18;0  | $h_0^{16}h_3h_6$   | $d_4^{-1} = h_0^{12}[b_{02}^2]h_6$                             |
| 2951 | 70,18;4  | $h_0^{12}[b_{02}^2]h_5^2$  | $d_8^{-1} = h_0^{12}h_4[b_{04}^2]$                             |
| 2952 | 70,18;12 | $h_0^{10}[h_2b_{03}][b_{03}^2]h_5 + h_0^{12}h_3^2[b_{04}^2]$             | $d_4^{-1} = h_0^{10}[h_2b_{03}][b_{04}^2]$                     |
| 2953 | 70,18;12 | $h_0^{12}h_3^2[b_{04}^2]$  | $d_8 = h_0^{16}[h_4b_{25}]$                                    |
| 2954 | 70,18;16 | $h_0^2[b_{02}^2]^3[h_2b_{03}]h_5$  | $d_8^{-1} = h_0^2[b_{02}^2][h_2b_{03}][b_{03}^2]^2$            |
| 2955 | 70,18;16 | $h_1[b_{02}^2]^3[h_0(1)^2]h_5$   | $d_8^{-1} = h_1[b_{02}^2][h_0(1)^2][b_{03}^2]^2$               |
| 2956 | 70,18;22 | $h_0[b_{02}^2]^2[h_0b_{02}b_{03}^2b_{14} + h_0h_0(1)^2b_{03}b_{04}]$     | $d_6 = h_0^2[b_{02}^2]^3[h_0(1)^2]h_5$                         |
| 2957 | 70,18;24 | $h_0^2[b_{02}^2][h_0(1)^2][b_{03}^2]^2$                                  | Permanent cycle  |
| 2958 | 70,19;0  | $h_0^{17}h_3h_6$   | $d_4^{-1} = h_0^{13}[b_{02}^2]h_6$                             |
| 2959 | 70,19;4  | $h_0^{13}[b_{02}^2]h_5^2$  | $d_8^{-1} = h_0^{13}h_4[b_{04}^2]$                             |
| 2960 | 70,19;12 | $h_0^{11}[h_2b_{03}][b_{03}^2]h_5 + h_0^{13}h_3^2[b_{04}^2]$             | $d_4^{-1} = h_0^{11}[h_2b_{03}][b_{04}^2]$                     |
| 2961 | 70,19;12 | $h_0^{13}h_3^2[b_{04}^2]$  | $d_8 = h_0^{17}[h_4b_{25}]$                                    |
| 2962 | 70,19;16 | $h_0^3[b_{02}^2]^3[h_2b_{03}]h_5$  | $d_8^{-1} = h_0^3[b_{02}^2][h_2b_{03}][b_{03}^2]^2$            |
| 2963 | 70,19;22 | $h_1[b_{02}^2]^3[h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$               | Permanent cycle  |
| 2964 | 70,19;22 | $h_0^2[b_{02}^2]^2[h_0b_{02}b_{03}^2b_{14} + h_0h_0(1)^2b_{03}b_{04}]$   | Permanent cycle  |
| 2965 | 70,20;0  | $h_0^{18}h_3h_6$   | $d_4^{-1} = h_0^{14}[b_{02}^2]h_6$                             |
| 2966 | 70,20;4  | $h_0^{14}[b_{02}^2]h_5^2$  | $d_8^{-1} = h_0^{14}h_4[b_{04}^2]$                             |
| 2967 | 70,20;12 | $h_0^{12}[h_2b_{03}][b_{03}^2]h_5 + h_0^{14}h_3^2[b_{04}^2]$             | $d_4^{-1} = h_0^{12}[h_2b_{03}][b_{04}^2]$                     |
| 2968 | 70,20;12 | $h_0^{14}h_3^2[b_{04}^2]$  | $d_8 = h_0^{18}[h_4b_{25}]$                                    |
| 2969 | 70,20;16 | $h_0^4[b_{02}^2]^3[h_2b_{03}]h_5$  | $d_8^{-1} = h_0^4[b_{02}^2][h_2b_{03}][b_{03}^2]^2$            |
| 2970 | 70,20;20 | $[b_{02}^2]^2[h_0(1)^2][b_{13}^2]^2$                                     | Permanent cycle  |
| 2971 | 70,20;22 | $h_0^3[b_{02}^2]^2[h_0b_{02}b_{03}^2b_{14} + h_0h_0(1)^2b_{03}b_{04}]$   | Permanent cycle  |
| 2972 | 70,21;0  | $h_0^{19}h_3h_6$   | $d_4^{-1} = h_0^{15}[b_{02}^2]h_6$                             |
| 2973 | 70,21;4  | $h_0^{15}[b_{02}^2]h_5^2$  | $d_8^{-1} = h_0^{15}h_4[b_{04}^2]$                             |
| 2974 | 70,21;12 | $h_0^{13}[h_2b_{03}][b_{03}^2]h_5 + h_0^{15}h_3^2[b_{04}^2]$             | $d_4^{-1} = h_0^{13}[h_2b_{03}][b_{04}^2]$                     |
| 2975 | 70,21;12 | $h_0^{15}h_3^2[b_{04}^2]$  | $d_8 = h_0^{19}[h_4b_{25}]$                                    |
| 2976 | 70,21;16 | $h_0^5[b_{02}^2]^3[h_2b_{03}]h_5$  | $d_8^{-1} = h_0^5[b_{02}^2][h_2b_{03}][b_{03}^2]^2$            |
| 2977 | 70,21;20 | $h_0[b_{02}^2]^2[h_0(1)^2][b_{13}^2]^2$                                  | $d_4^{-1} = [b_{02}^2]^2[h_0(1)^2][h_0(1)b_{13}][b_{03}^2]$    |
| 2978 | 70,21;22 | $h_0^4[b_{02}^2]^2[h_0b_{02}b_{03}^2b_{14} + h_0h_0(1)^2b_{03}b_{04}]$   | Permanent cycle  |
| 2979 | 70,22;0  | $h_0^{20}h_3h_6$   | $d_4^{-1} = h_0^{16}[b_{02}^2]h_6$                             |
| 2980 | 70,22;4  | $h_0^{16}[b_{02}^2]h_5^2$  | $d_8^{-1} = h_0^{16}h_4[b_{04}^2]$                             |
| 2981 | 70,22;12 | $h_0^{14}[h_2b_{03}][b_{03}^2]h_5 + h_0^{16}h_3^2[b_{04}^2]$             | $d_4^{-1} = h_0^{14}[h_2b_{03}][b_{04}^2]$                     |
| 2982 | 70,22;12 | $h_0^{16}h_3^2[b_{04}^2]$  | $d_8 = h_0^{20}[h_4b_{25}]$                                    |
| 2983 | 70,22;16 | $h_0^6[b_{02}^2]^3[h_2b_{03}]h_5$  | $d_4^{-1} = [b_{02}^2]^5h_5$                                   |
| 2984 | 70,22;20 | $h_0^2[b_{02}^2]^2[h_0(1)^2][b_{13}^2]^2$                                | $d_4^{-1} = h_0[b_{02}^2]^2[h_0(1)^2][h_0(1)b_{13}][b_{03}^2]$ |
| 2985 | 70,22;20 | $[b_{02}^2]^5h_4^2$  | $d_4^{-1} = [b_{02}^2]^4h_4[b_{03}^2]$                         |

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| 2986 | 70,22;22 | $h_0^5[b_{02}^2]^2[h_0b_{02}b_{03}^2b_{14} + h_0h_0(1)^2b_{03}b_{04}]$    | Permanent cycle   |
| 2987 | 70,23;0  | $h_0^{21}h_3h_6$  | $d_4^{-1} = h_0^{17}[b_{02}^2]h_6$                                    |
| 2988 | 70,23;4  | $h_0^{17}[b_{02}^2]h_5^2$   | $d_8^{-1} = h_0^{17}h_4[b_{04}^2]$                                    |
| 2989 | 70,23;12 | $h_0^{15}[h_2b_{03}][b_{03}^2]h_5 + h_0^{17}h_3^2[b_{04}^2]$              | $d_4^{-1} = h_0^{15}[h_2b_{03}][b_{04}^2]$                            |
| 2990 | 70,23;12 | $h_0^{17}h_3^2[b_{04}^2]$   | $d_8 = h_0^{21}[h_4b_{25}]$   |
| 2991 | 70,23;16 | $h_0^7[b_{02}^2]^3[h_2b_{03}]h_5$   | $d_4^{-1} = h_0[b_{02}^2]^5h_5$                                       |
| 2992 | 70,23;20 | $h_0[b_{02}^2]^5h_4^2$  | $d_4^{-1} = h_0[b_{02}^2]^4h_4[b_{03}^2]$                             |
| 2993 | 70,23;22 | $h_0^6[b_{02}^2]^2[h_0b_{02}b_{03}^2b_{14} + h_0h_0(1)^2b_{03}b_{04}]$    | Permanent cycle   |
| 2994 | 70,23;24 | $[b_{02}^2]^3[h_2b_{03}][h_0(1)^2][h_0(1)b_{13}]$                         | Permanent cycle   |
| 2995 | 70,24;0  | $h_0^{22}h_3h_6$  | $d_4^{-1} = h_0^{18}[b_{02}^2]h_6$                                    |
| 2996 | 70,24;4  | $h_0^{18}[b_{02}^2]h_5^2$   | $d_8^{-1} = h_0^{18}h_4[b_{04}^2]$                                    |
| 2997 | 70,24;12 | $h_0^{16}[h_2b_{03}][b_{03}^2]h_5 + h_0^{18}h_3^2[b_{04}^2]$              | $d_4^{-1} = h_0^{16}[h_2b_{03}][b_{04}^2]$                            |
| 2998 | 70,24;12 | $h_0^{18}h_3^2[b_{04}^2]$   | $d_8 = h_0^{22}[h_4b_{25}]$   |
| 2999 | 70,24;16 | $h_0^8[b_{02}^2]^3[h_2b_{03}]h_5$   | $d_4^{-1} = h_0^2[b_{02}^2]^5h_5$                                     |
| 3000 | 70,24;20 | $h_0^2[b_{02}^2]^5h_4^2$  | $d_4^{-1} = h_0^2[b_{02}^2]^4h_4[b_{03}^2]$                           |
| 3001 | 70,24;22 | $h_0^7[b_{02}^2]^2[h_0b_{02}b_{03}^2b_{14} + h_0h_0(1)^2b_{03}b_{04}]$    | Permanent cycle   |
| 3002 | 70,24;24 | $h_0[b_{02}^2]^3[h_2b_{03}][h_0(1)^2][h_0(1)b_{13}]$                      | $d_4^{-1} = [b_{02}^2]^4[h_2b_{03}][b_{03}^2]$                        |
| 3003 | 70,24;28 | $[b_{02}^2]^4[h_0(1)^2][b_{03}^2]$  | $d_4 = h_0[b_{02}^2]^4[h_0(1)b_{13}][b_{13}^2]$                       |
| 3004 | 70,25;0  | $h_0^{23}h_3h_6$  | $d_4^{-1} = h_0^{19}[b_{02}^2]h_6$                                    |
| 3005 | 70,25;4  | $h_0^{19}[b_{02}^2]h_5^2$   | $d_8^{-1} = h_0^{19}h_4[b_{04}^2]$                                    |
| 3006 | 70,25;12 | $h_0^{17}[h_2b_{03}][b_{03}^2]h_5 + h_0^{19}h_3^2[b_{04}^2]$              | $d_4^{-1} = h_0^{17}[h_2b_{03}][b_{04}^2]$                            |
| 3007 | 70,25;12 | $h_0^{19}h_3^2[b_{04}^2]$   | $d_8 = h_0^{23}[h_4b_{25}]$   |
| 3008 | 70,25;16 | $h_0^9[b_{02}^2]^3[h_2b_{03}]h_5$   | $d_4^{-1} = h_0^3[b_{02}^2]^5h_5$                                     |
| 3009 | 70,25;20 | $h_0^3[b_{02}^2]^5h_4^2$  | $d_4^{-1} = h_0^3[b_{02}^2]^4h_4[b_{03}^2]$                           |
| 3010 | 70,25;22 | $h_0^8[b_{02}^2]^2[h_0b_{02}b_{03}^2b_{14} + h_0h_0(1)^2b_{03}b_{04}]$    | Permanent cycle   |
| 3011 | 70,25;24 | $h_0^2[b_{02}^2]^3[h_2b_{03}][h_0(1)^2][h_0(1)b_{13}]$                    | $d_4^{-1} = h_0[b_{02}^2]^4[h_2b_{03}][b_{03}^2]$                     |
| 3012 | 70,25;28 | $h_0[b_{02}^2]^4[h_0(1)^2][b_{03}^2]$                                     | $d_4 = h_0^2[b_{02}^2]^4[h_0(1)b_{13}][b_{13}^2]$                     |
| 3013 | 70,26;0  | $h_0^{24}h_3h_6$  | $d_4^{-1} = h_0^{20}[b_{02}^2]h_6$                                    |
| 3014 | 70,26;4  | $h_0^{20}[b_{02}^2]h_5^2$   | $d_8^{-1} = h_0^{20}h_4[b_{04}^2]$                                    |
| 3015 | 70,26;12 | $h_0^{18}[h_2b_{03}][b_{03}^2]h_5 + h_0^{20}h_3^2[b_{04}^2]$              | $d_4^{-1} = h_0^{18}[h_2b_{03}][b_{04}^2]$                            |
| 3016 | 70,26;12 | $h_0^{20}h_3^2[b_{04}^2]$   | $d_8 = h_0^{24}[h_4b_{25}]$   |
| 3017 | 70,26;16 | $h_0^{10}[b_{02}^2]^3[h_2b_{03}]h_5$                                      | $d_4^{-1} = h_0^4[b_{02}^2]^5h_5$                                     |
| 3018 | 70,26;20 | $h_0^4[b_{02}^2]^5h_4^2$  | $d_4^{-1} = h_0^4[b_{02}^2]^4h_4[b_{03}^2]$                           |
| 3019 | 70,26;22 | $h_0^9[b_{02}^2]^2[h_0b_{02}b_{03}^2b_{14} + h_0h_0(1)^2b_{03}b_{04}]$    | $d_6^{-1} = h_0^2[b_{02}^2]^4[h_2b_{03}][b_{03}^2]$                   |
| 3020 | 70,26;28 | $h_0^2[b_{02}^2]^4[h_0(1)^2][b_{03}^2]$                                   | $d_6 = h_0^9[b_{02}^2]^3[h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$    |
| 3021 | 70,27;0  | $h_0^{25}h_3h_6$  | $d_4^{-1} = h_0^{21}[b_{02}^2]h_6$                                    |
| 3022 | 70,27;4  | $h_0^{21}[b_{02}^2]h_5^2$   | $d_8^{-1} = h_0^{21}h_4[b_{04}^2]$                                    |
| 3023 | 70,27;12 | $h_0^{19}[h_2b_{03}][b_{03}^2]h_5 + h_0^{21}h_3^2[b_{04}^2]$              | $d_4^{-1} = h_0^{19}[h_2b_{03}][b_{04}^2]$                            |
| 3024 | 70,27;12 | $h_0^{21}h_3^2[b_{04}^2]$   | $d_8 = h_0^{25}[h_4b_{25}]$   |
| 3025 | 70,27;16 | $h_0^{11}[b_{02}^2]^3[h_2b_{03}]h_5$                                      | $d_4^{-1} = h_0^5[b_{02}^2]^5h_5$                                     |
| 3026 | 70,27;20 | $h_0^5[b_{02}^2]^5h_4^2$  | $d_4^{-1} = h_0^5[b_{02}^2]^4h_4[b_{03}^2]$                           |
| 3027 | 70,27;22 | $h_0^{10}[b_{02}^2]^2[h_0b_{02}b_{03}^2b_{14} + h_0h_0(1)^2b_{03}b_{04}]$ | $d_6^{-1} = h_0^3[b_{02}^2]^4[h_2b_{03}][b_{03}^2]$                   |
| 3028 | 70,27;26 | $[b_{02}^2]^5[h_4h_0(1)b_{02}^2 + h_0^3b_{02}b_{14}]$                     | $d_4 = h_0^{10}[b_{02}^2]^3[h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$ |
| 3029 | 70,28;0  | $h_0^{26}h_3h_6$  | $d_4^{-1} = h_0^{22}[b_{02}^2]h_6$                                    |
| 3030 | 70,28;4  | $h_0^{22}[b_{02}^2]h_5^2$   | $d_8^{-1} = h_0^{22}h_4[b_{04}^2]$                                    |
| 3031 | 70,28;12 | $h_0^{20}[h_2b_{03}][b_{03}^2]h_5 + h_0^{22}h_3^2[b_{04}^2]$              | $d_4^{-1} = h_0^{20}[h_2b_{03}][b_{04}^2]$                            |
| 3032 | 70,28;12 | $h_0^{22}h_3^2[b_{04}^2]$   | $d_8 = h_0^{26}[h_4b_{25}]$   |
| 3033 | 70,28;16 | $h_0^{12}[b_{02}^2]^3[h_2b_{03}]h_5$                                      | $d_4^{-1} = h_0^6[b_{02}^2]^5h_5$                                     |
| 3034 | 70,28;20 | $h_0^6[b_{02}^2]^5h_4^2$  | $d_4^{-1} = h_0^6[b_{02}^2]^4h_4[b_{03}^2]$                           |
| 3035 | 70,28;22 | $h_0^{11}[b_{02}^2]^2[h_0b_{02}b_{03}^2b_{14} + h_0h_0(1)^2b_{03}b_{04}]$ | $d_6^{-1} = h_0^4[b_{02}^2]^4[h_2b_{03}][b_{03}^2]$                   |
| 3036 | 70,28;26 | $h_0[b_{02}^2]^5[h_4h_0(1)b_{02}^2 + h_0^3b_{02}b_{14}]$                  | $d_4 = h_0^{11}[b_{02}^2]^3[h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$ |
| 3037 | 70,29;0  | $h_0^{27}h_3h_6$  | $d_4^{-1} = h_0^{23}[b_{02}^2]h_6$                                    |
| 3038 | 70,29;4  | $h_0^{23}[b_{02}^2]h_5^2$   | $d_8^{-1} = h_0^{23}h_4[b_{04}^2]$                                    |

|      |          |   |   |
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| 3039 | 70,29;12 | $h_0^{21}[h_2b_{03}][b_{03}^2]h_5 + h_0^{23}h_3^2[b_{04}^2]$              | $d_4^{-1} = h_0^{21}[h_2b_{03}][b_{04}^2]$                            |
| 3040 | 70,29;12 | $h_0^{23}h_3^2[b_{04}^2]$   | $d_8 = h_0^{27}[h_4b_{25}]$   |
| 3041 | 70,29;16 | $h_0^{13}[b_{02}^2]^3[h_2b_{03}]h_5$                                      | $d_4^{-1} = h_0^7[b_{02}^2]^5h_5$                                     |
| 3042 | 70,29;20 | $h_0^7[b_{02}^2]^5h_4^2$  | $d_4^{-1} = h_0^7[b_{02}^2]^4h_4[b_{03}^2]$                           |
| 3043 | 70,29;22 | $h_0^{12}[b_{02}^2]^2[h_0b_{02}b_{03}^2b_{14} + h_0h_0(1)^2b_{03}b_{04}]$ | $d_6^{-1} = h_0^5[b_{02}^2]^4[h_2b_{03}][b_{03}^2]$                   |
| 3044 | 70,29;26 | $h_0^2[b_{02}^2]^5[h_4h_0(1)b_{02}^2 + h_0^3b_{02}b_{14}]$                | $d_4 = h_0^{12}[b_{02}^2]^3[h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$ |
| 3045 | 70,30;0  | $h_0^{28}h_3h_6$  | $d_4^{-1} = h_0^{24}[b_{02}^2]h_6$                                    |
| 3046 | 70,30;4  | $h_0^{24}[b_{02}^2]h_5^2$   | $d_8^{-1} = h_0^{24}h_4[b_{04}^2]$                                    |
| 3047 | 70,30;12 | $h_0^{22}[h_2b_{03}][b_{03}^2]h_5 + h_0^{24}h_3^2[b_{04}^2]$              | $d_4^{-1} = h_0^{22}[h_2b_{03}][b_{04}^2]$                            |
| 3048 | 70,30;12 | $h_0^{24}h_3^2[b_{04}^2]$   | $d_8 = h_0^{28}[h_4b_{25}]$   |
| 3049 | 70,30;16 | $h_0^{14}[b_{02}^2]^3[h_2b_{03}]h_5$                                      | $d_4^{-1} = h_0^8[b_{02}^2]^5h_5$                                     |
| 3050 | 70,30;20 | $h_0^8[b_{02}^2]^5h_4^2$  | $d_4^{-1} = h_0^8[b_{02}^2]^4h_4[b_{03}^2]$                           |
| 3051 | 70,30;22 | $h_0^{13}[b_{02}^2]^2[h_0b_{02}b_{03}^2b_{14} + h_0h_0(1)^2b_{03}b_{04}]$ | $d_6^{-1} = h_0^6[b_{02}^2]^4[h_2b_{03}][b_{03}^2]$                   |
| 3052 | 70,30;26 | $h_0^3[b_{02}^2]^5[h_4h_0(1)b_{02}^2 + h_0^3b_{02}b_{14}]$                | $d_4 = h_0^{13}[b_{02}^2]^3[h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$ |
| 3053 | 70,31;0  | $h_0^{29}h_3h_6$  | $d_4^{-1} = h_0^{25}[b_{02}^2]h_6$                                    |
| 3054 | 70,31;4  | $h_0^{25}[b_{02}^2]h_5^2$   | $d_8^{-1} = h_0^{25}h_4[b_{04}^2]$                                    |
| 3055 | 70,31;12 | $h_0^{23}[h_2b_{03}][b_{03}^2]h_5 + h_0^{25}h_3^2[b_{04}^2]$              | $d_4^{-1} = h_0^{23}[h_2b_{03}][b_{04}^2]$                            |
| 3056 | 70,31;12 | $h_0^{25}h_3^2[b_{04}^2]$   | $d_8 = h_0^{29}[h_4b_{25}]$   |
| 3057 | 70,31;16 | $h_0^{15}[b_{02}^2]^3[h_2b_{03}]h_5$                                      | $d_4^{-1} = h_0^9[b_{02}^2]^5h_5$                                     |
| 3058 | 70,31;20 | $h_0^9[b_{02}^2]^5h_4^2$  | $d_4^{-1} = h_0^9[b_{02}^2]^4h_4[b_{03}^2]$                           |
| 3059 | 70,31;22 | $h_0^{14}[b_{02}^2]^2[h_0b_{02}b_{03}^2b_{14} + h_0h_0(1)^2b_{03}b_{04}]$ | $d_6^{-1} = h_0^7[b_{02}^2]^4[h_2b_{03}][b_{03}^2]$                   |
| 3060 | 70,31;26 | $h_0^4[b_{02}^2]^5[h_4h_0(1)b_{02}^2 + h_0^3b_{02}b_{14}]$                | $d_4 = h_0^{14}[b_{02}^2]^3[h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$ |
| 3061 | 70,32;0  | $h_0^{30}h_3h_6$  | $d_4^{-1} = h_0^{26}[b_{02}^2]h_6$                                    |
| 3062 | 70,32;4  | $h_0^{26}[b_{02}^2]h_5^2$   | $d_8^{-1} = h_0^{26}h_4[b_{04}^2]$                                    |
| 3063 | 70,32;12 | $h_0^{24}[h_2b_{03}][b_{03}^2]h_5 + h_0^{26}h_3^2[b_{04}^2]$              | $d_4^{-1} = h_0^{24}[h_2b_{03}][b_{04}^2]$                            |
| 3064 | 70,32;12 | $h_0^{26}h_3^2[b_{04}^2]$   | $d_8 = h_0^{30}[h_4b_{25}]$   |
| 3065 | 70,32;16 | $h_0^{16}[b_{02}^2]^3[h_2b_{03}]h_5$                                      | $d_4^{-1} = h_0^{10}[b_{02}^2]^5h_5$                                  |
| 3066 | 70,32;20 | $h_0^{10}[b_{02}^2]^5h_4^2$   | $d_4^{-1} = h_0^{10}[b_{02}^2]^4h_4[b_{03}^2]$                        |
| 3067 | 70,32;22 | $h_0^{15}[b_{02}^2]^2[h_0b_{02}b_{03}^2b_{14} + h_0h_0(1)^2b_{03}b_{04}]$ | $d_6^{-1} = h_0^8[b_{02}^2]^4[h_2b_{03}][b_{03}^2]$                   |
| 3068 | 70,32;26 | $h_0^5[b_{02}^2]^5[h_4h_0(1)b_{02}^2 + h_0^3b_{02}b_{14}]$                | $d_4 = h_0^{15}[b_{02}^2]^3[h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$ |
| 3069 | 70,32;32 | $[b_{02}^2]^7[h_0(1)^2]$  | Permanent cycle   |
| 3070 | 70,33;0  | $h_0^{31}h_3h_6$  | $d_4^{-1} = h_0^{27}[b_{02}^2]h_6$                                    |
| 3071 | 70,33;4  | $h_0^{27}[b_{02}^2]h_5^2$   | $d_8^{-1} = h_0^{27}h_4[b_{04}^2]$                                    |
| 3072 | 70,33;12 | $h_0^{25}[h_2b_{03}][b_{03}^2]h_5 + h_0^{27}h_3^2[b_{04}^2]$              | $d_4^{-1} = h_0^{25}[h_2b_{03}][b_{04}^2]$                            |
| 3073 | 70,33;12 | $h_0^{27}h_3^2[b_{04}^2]$   | $d_8 = h_0^{31}[h_4b_{25}]$   |
| 3074 | 70,33;16 | $h_0^{17}[b_{02}^2]^3[h_2b_{03}]h_5$                                      | $d_4^{-1} = h_0^{11}[b_{02}^2]^5h_5$                                  |
| 3075 | 70,33;20 | $h_0^{11}[b_{02}^2]^5h_4^2$   | $d_4^{-1} = h_0^{11}[b_{02}^2]^4h_4[b_{03}^2]$                        |
| 3076 | 70,33;22 | $h_0^{16}[b_{02}^2]^2[h_0b_{02}b_{03}^2b_{14} + h_0h_0(1)^2b_{03}b_{04}]$ | $d_6^{-1} = h_0^9[b_{02}^2]^4[h_2b_{03}][b_{03}^2]$                   |
| 3077 | 70,33;26 | $h_0^6[b_{02}^2]^5[h_4h_0(1)b_{02}^2 + h_0^3b_{02}b_{14}]$                | $d_4 = h_0^{16}[b_{02}^2]^3[h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$ |
| 3078 | 70,33;32 | $h_0[b_{02}^2]^7[h_0(1)^2]$   | Permanent cycle   |
| 3079 | 70,34;0  | $h_0^{32}h_3h_6$  | $d_4^{-1} = h_0^{28}[b_{02}^2]h_6$                                    |
| 3080 | 70,34;4  | $h_0^{28}[b_{02}^2]h_5^2$   | $d_8^{-1} = h_0^{28}h_4[b_{04}^2]$                                    |
| 3081 | 70,34;12 | $h_0^{26}[h_2b_{03}][b_{03}^2]h_5 + h_0^{28}h_3^2[b_{04}^2]$              | $d_4^{-1} = h_0^{26}[h_2b_{03}][b_{04}^2]$                            |
| 3082 | 70,34;12 | $h_0^{28}h_3^2[b_{04}^2]$   | $d_8 = h_0^{32}[h_4b_{25}]$   |
| 3083 | 70,34;16 | $h_0^{18}[b_{02}^2]^3[h_2b_{03}]h_5$                                      | $d_4^{-1} = h_0^{12}[b_{02}^2]^5h_5$                                  |
| 3084 | 70,34;20 | $h_0^{12}[b_{02}^2]^5h_4^2$   | $d_4^{-1} = h_0^{12}[b_{02}^2]^4h_4[b_{03}^2]$                        |
| 3085 | 70,34;22 | $h_0^{17}[b_{02}^2]^2[h_0b_{02}b_{03}^2b_{14} + h_0h_0(1)^2b_{03}b_{04}]$ | $d_6^{-1} = h_0^{10}[b_{02}^2]^4[h_2b_{03}][b_{03}^2]$                |
| 3086 | 70,34;26 | $h_0^7[b_{02}^2]^5[h_4h_0(1)b_{02}^2 + h_0^3b_{02}b_{14}]$                | $d_4 = h_0^{17}[b_{02}^2]^3[h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$ |
| 3087 | 70,34;32 | $h_0^2[b_{02}^2]^7[h_0(1)^2]$   | Permanent cycle   |
| 3088 | 70,35;0  | $h_0^{33}h_3h_6$  | $d_4^{-1} = h_0^{29}[b_{02}^2]h_6$                                    |
| 3089 | 70,35;4  | $h_0^{29}[b_{02}^2]h_5^2$   | $d_8^{-1} = h_0^{29}h_4[b_{04}^2]$                                    |
| 3090 | 70,35;12 | $h_0^{27}[h_2b_{03}][b_{03}^2]h_5 + h_0^{29}h_3^2[b_{04}^2]$              | $d_4^{-1} = h_0^{27}[h_2b_{03}][b_{04}^2]$                            |
| 3091 | 70,35;12 | $h_0^{29}h_3^2[b_{04}^2]$   | $d_8 = h_0^{33}[h_4b_{25}]$   |

|      |          |   |  |
|------|----------|---|--|
| 3092 | 70,35;16 | $h_0^{19}[b_{02}^2]^3[h_2b_{03}]h_5$                                      | $d_4^{-1} = h_0^{13}[b_{02}^2]^5h_5$   |
| 3093 | 70,35;20 | $h_0^{13}[b_{02}^2]^5h_4^2$   | $d_4^{-1} = h_0^{13}[b_{02}^2]^4h_4[b_{03}^2]$   |
| 3094 | 70,35;22 | $h_0^{18}[b_{02}^2]^2[h_0b_{02}b_{03}^2b_{14} + h_0h_0(1)^2b_{03}b_{04}]$ | $d_6^{-1} = h_0^{11}[b_{02}^2]^4[h_2b_{03}][b_{03}^2]$                                   |
| 3095 | 70,35;26 | $h_0^8[b_{02}^2]^5[h_4h_0(1)b_{02}^2 + h_0^3b_{02}b_{14}]$                | $d_4 = h_0^{18}[b_{02}^2]^3[h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$                    |
| 3096 | 70,36;0  | $h_0^{34}h_3h_6$  | $d_4^{-1} = h_0^{30}[b_{02}^2]h_6$   |
| 3097 | 70,36;4  | $h_0^{30}[b_{02}^2]h_5^2$   | $d_8^{-1} = h_0^{30}h_4[b_{04}^2]$   |
| 3098 | 70,36;12 | $h_0^{28}[h_2b_{03}][b_{03}^2]h_5 + h_0^{30}h_3^2[b_{04}^2]$              | $d_4^{-1} = h_0^{28}[h_2b_{03}][b_{04}^2]$   |
| 3099 | 70,36;12 | $h_0^{30}h_3^2[b_{04}^2]$   | $d_8 = h_0^{34}[h_4b_{25}]$  |
| 3100 | 70,36;16 | $h_0^{20}[b_{02}^2]^3[h_2b_{03}]h_5$                                      | $d_4^{-1} = h_0^{14}[b_{02}^2]^5h_5$   |
| 3101 | 70,36;20 | $h_0^{14}[b_{02}^2]^5h_4^2$   | $d_4^{-1} = h_0^{14}[b_{02}^2]^4h_4[b_{03}^2]$   |
| 3102 | 70,36;22 | $h_0^{19}[b_{02}^2]^2[h_0b_{02}b_{03}^2b_{14} + h_0h_0(1)^2b_{03}b_{04}]$ | $d_6^{-1} = h_0^{12}[b_{02}^2]^4[h_2b_{03}][b_{03}^2]$                                   |
| 3103 | 70,36;26 | $h_0^9[b_{02}^2]^5[h_4h_0(1)b_{02}^2 + h_0^3b_{02}b_{14}]$                | $d_4 = h_0^{19}[b_{02}^2]^3[h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$                    |
| 3104 | 71,3;0   | $h_1h_3h_6$   | Permanent cycle  |
| 3105 | 71,4;2   | $[h_1h_0(1)]h_6$  | Permanent cycle  |
| 3106 | 71,5;4   | $h_1^2[h_4b_{25}]$  | Permanent cycle  |
| 3107 | 71,5;4   | $[b_{02}^2]h_6$   | $d_4 = h_0^4h_3h_6$  |
| 3108 | 71,5;12  | $h_4[b_{04}^2]$   | $d_4 = h_2h_4[b_{14}^2]$   |
| 3109 | 71,6;2   | $h_1[h_1h_0(1)]h_5^2$   | Permanent cycle  |
| 3110 | 71,6;4   | $h_0[b_{02}^2]h_6$  | $d_4 = h_0^5h_3h_6$  |
| 3111 | 71,6;8   | $[h_3h_0(1,3)b_{14}]$   | Permanent cycle  |
| 3112 | 71,6;12  | $h_0h_4[b_{04}^2]$  | $d_4 = h_0h_2h_4[b_{14}^2]$  |
| 3113 | 71,7;4   | $h_1[b_{02}^2]h_5^2$  | $d_8^{-1} = h_1h_4[b_{04}^2]$  |
| 3114 | 71,7;4   | $h_0^2[b_{02}^2]h_6$  | $d_4 = h_0^6h_3h_6$  |
| 3115 | 71,7;8   | $h_0[h_3h_0(1,3)b_{14}]$  | Permanent cycle  |
| 3116 | 71,7;10  | $h_2[h_1(1)b_{14}^2 + h_3^2b_{14}b_{04}]$                                 | $d_4 = h_2h_5[h_1(1)b_{13}^2 + h_1^2b_{24}b_{03}]$                                       |
| 3117 | 71,7;12  | $h_0^2h_4[b_{04}^2]$  | $d_8 = h_0^2[b_{02}^2]h_5^2$   |
| 3118 | 71,7;16  | $[h_2b_{03}][b_{04}^2]$   | $d_4 = [h_2b_{03}][b_{03}^2]h_5 + h_2[h_2b_{03}][b_{14}^2] + h_0^2h_3^2[b_{04}^2]$       |
| 3119 | 71,8;4   | $h_0^3[b_{02}^2]h_6$  | $d_4 = h_0^7h_3h_6$  |
| 3120 | 71,8;12  | $h_0^3h_4[b_{04}^2]$  | $d_8 = h_0^3[b_{02}^2]h_5^2$   |
| 3121 | 71,8;16  | $h_0[h_2b_{03}][b_{04}^2]$  | $d_4 = h_0[h_2b_{03}][b_{03}^2]h_5 + h_0h_2[h_2b_{03}][b_{14}^2] + h_0^3h_3^2[b_{04}^2]$ |
| 3122 | 71,9;4   | $h_0^4[b_{02}^2]h_6$  | $d_4 = h_0^8h_3h_6$  |
| 3123 | 71,9;8   | $[b_{13}^2]^2h_5$   | $d_4^{-1} = [b_{13}^2][b_{14}^2]$  |
| 3124 | 71,9;12  | $h_2[b_{03}^2][b_{24}^2]$   | Permanent cycle  |
| 3125 | 71,9;12  | $h_0^4h_4[b_{04}^2]$  | $d_8 = h_0^4[b_{02}^2]h_5^2$   |
| 3126 | 71,9;16  | $h_0^2[h_2b_{03}][b_{04}^2]$  | $d_4 = h_0^2[h_2b_{03}][b_{03}^2]h_5 + h_0^4h_3^2[b_{04}^2]$                             |
| 3127 | 71,9;16  | $h_1[h_0(1)^2][b_{04}^2]$   | $d_4 = h_1[h_0(1)^2][b_{03}^2]h_5$   |
| 3128 | 71,9;16  | $[b_{03}^2][h_2h_1(1)b_{04}]$   | $d_4 = h_2[b_{13}^2][h_2h_1(1)b_{04}] + h_1^2[b_{03}^2][b_{24}^2]$                       |
| 3129 | 71,10;4  | $h_0^5[b_{02}^2]h_6$  | $d_4 = h_0^9h_3h_6$  |
| 3130 | 71,10;8  | $h_0[b_{13}^2]^2h_5$  | $d_4^{-1} = h_0[b_{13}^2][b_{14}^2]$   |
| 3131 | 71,10;12 | $h_0h_2[b_{03}^2][b_{24}^2]$  | Permanent cycle  |
| 3132 | 71,10;12 | $h_0^5h_4[b_{04}^2]$  | $d_8 = h_0^5[b_{02}^2]h_5^2$   |
| 3133 | 71,10;16 | $h_0^3[h_2b_{03}][b_{04}^2]$  | $d_4 = h_0^3[h_2b_{03}][b_{03}^2]h_5 + h_0^5h_3^2[b_{04}^2]$                             |
| 3134 | 71,11;4  | $h_0^6[b_{02}^2]h_6$  | $d_4 = h_0^{10}h_3h_6$   |
| 3135 | 71,11;8  | $h_0^2[b_{13}^2]^2h_5$  | $d_4^{-1} = h_0^2[b_{13}^2][b_{14}^2]$   |
| 3136 | 71,11;12 | $h_1^2[h_0(1)^2][b_{03}^2]h_5$  | $d_4^{-1} = h_1^2[h_0(1)^2][b_{04}^2]$   |
| 3137 | 71,11;12 | $h_0^6h_4[b_{04}^2]$  | $d_8 = h_0^6[b_{02}^2]h_5^2$   |
| 3138 | 71,11;14 | $[h_1h_0(1)]x_{45}$   | Permanent cycle  |
| 3139 | 71,11;16 | $h_0^4[h_2b_{03}][b_{04}^2]$  | $d_4 = h_0^4[h_2b_{03}][b_{03}^2]h_5 + h_0^6h_3^2[b_{04}^2]$                             |
| 3140 | 71,12;4  | $h_0^7[b_{02}^2]h_6$  | $d_4 = h_0^{11}h_3h_6$   |
| 3141 | 71,12;12 | $[b_{02}^2][h_2b_{03}][h_0(1)b_{13}]h_5$                                  | Permanent cycle  |
| 3142 | 71,12;12 | $h_0^7h_4[b_{04}^2]$  | $d_8 = h_0^7[b_{02}^2]h_5^2$   |
| 3143 | 71,12;14 | $[h_1h_0(1)][b_{02}^2][b_{03}^2]h_5$                                      | $d_4^{-1} = [h_1h_0(1)][b_{02}^2][b_{04}^2]$   |

|      |          |   |   |
|------|----------|---|---|
| 3144 | 71,12;14 | $h_2^2[b_{13}^2][h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$    | $d_4^{-1} = h_2[b_{03}^2][h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$         |
| 3145 | 71,12;16 | $h_0^5[h_2b_{03}][b_{04}^2]$                                  | $d_4 = h_0^5[h_2b_{03}][b_{03}^2]h_5 + h_0^4h_3^2[b_{04}^2]$                |
| 3146 | 71,12;16 | $[b_{02}^2]x_{45}$  | $d_4 = [b_{02}^2][h_0(1)^2][h_0(1)b_{13}]h_5$                               |
| 3147 | 71,12;18 | $h_1^2[b_{03}^2][h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$    | Permanent cycle   |
| 3148 | 71,13;4  | $h_0^8[b_{02}^2]h_6$  | $d_4 = h_0^{12}h_3h_6$  |
| 3149 | 71,13;12 | $h_0[b_{02}^2][h_2b_{03}][h_0(1)b_{13}]h_5$                   | $d_6^{-1} =$<br>$h_0h_2[b_{03}^2][h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$ |
| 3150 | 71,13;12 | $h_0^8h_4[b_{04}^2]$  | $d_8 = h_0^8[b_{02}^2]h_5^2$  |
| 3151 | 71,13;14 | $[h_2b_{03}][b_{13}^2][h_1(1)b_{13}^2 + h_1^2b_{24}b_{03}]$   | Permanent cycle   |
| 3152 | 71,13;16 | $[b_{02}^2]^2[b_{03}^2]h_5 + h_0[b_{02}^2]x_{45}$             | $d_4^{-1} = [b_{02}^2]^2[b_{04}^2]$   |
| 3153 | 71,13;16 | $h_0^6[h_2b_{03}][b_{04}^2]$                                  | $d_4 = h_0^6[h_2b_{03}][b_{03}^2]h_5 + h_0^8h_3^2[b_{04}^2]$                |
| 3154 | 71,13;16 | $h_0[b_{02}^2]x_{45}$   | $d_4 = h_0[b_{02}^2][h_0(1)^2][h_0(1)b_{13}]h_5$                            |
| 3155 | 71,13;18 | $[h_2b_{03}]x_{38}$   | Permanent cycle   |
| 3156 | 71,13;20 | $[b_{02}^2]h_4[b_{03}^2]^2 + h_2[b_{13}^2][b_{03}^2]^2$       | $d_4^{-1} = [b_{03}^2]^3$   |
| 3157 | 71,13;20 | $h_2[b_{13}^2][b_{03}^2]^2$                                   | Permanent cycle   |
| 3158 | 71,14;4  | $h_0^9[b_{02}^2]h_6$  | $d_4 = h_0^{13}h_3h_6$  |
| 3159 | 71,14;12 | $h_0^2[b_{02}^2][h_2b_{03}][h_0(1)b_{13}]h_5$                 | $d_4^{-1} = h_1[b_{02}^2]x_{45}$  |
| 3160 | 71,14;12 | $h_0^9h_4[b_{04}^2]$  | $d_8 = h_0^9[b_{02}^2]h_5^2$  |
| 3161 | 71,14;16 | $h_0[b_{02}^2]^2[b_{03}^2]h_5 + h_0^2[b_{02}^2]x_{45}$        | $d_4^{-1} = h_0[b_{02}^2]^2[b_{04}^2]$                                      |
| 3162 | 71,14;16 | $h_0^7[h_2b_{03}][b_{04}^2]$                                  | $d_4 = h_0^7[h_2b_{03}][b_{03}^2]h_5 + h_0^8h_3^2[b_{04}^2]$                |
| 3163 | 71,14;16 | $h_0^2[b_{02}^2]x_{45}$                                       | $d_4 = h_0^2[b_{02}^2][h_0(1)^2][h_0(1)b_{13}]h_5$                          |
| 3164 | 71,14;18 | $h_0[h_2b_{03}]x_{38}$  | Permanent cycle   |
| 3165 | 71,14;20 | $h_0[b_{02}^2]h_4[b_{03}^2]^2 + h_0h_2[b_{13}^2][b_{03}^2]^2$ | $d_4^{-1} = h_0[b_{03}^2]^3$  |
| 3166 | 71,14;20 | $h_0h_2[b_{13}^2][b_{03}^2]^2$                                | Permanent cycle   |
| 3167 | 71,15;4  | $h_0^{10}[b_{02}^2]h_6$                                       | $d_4 = h_0^{14}h_3h_6$  |
| 3168 | 71,15;12 | $h_0^{10}h_4[b_{04}^2]$                                       | $d_8 = h_0^{10}[b_{02}^2]h_5^2$   |
| 3169 | 71,15;16 | $h_0^2[b_{02}^2]^2[b_{03}^2]h_5 + h_0^3[b_{02}^2]x_{45}$      | $d_4^{-1} = h_0^2[b_{02}^2]^2[b_{04}^2]$                                    |
| 3170 | 71,15;16 | $h_0^3[b_{02}^2]x_{45}$                                       | Permanent cycle   |
| 3171 | 71,15;16 | $h_0^8[h_2b_{03}][b_{04}^2]$                                  | $d_4 = h_0^8[h_2b_{03}][b_{03}^2]h_5 + h_0^{10}h_3^2[b_{04}^2]$             |
| 3172 | 71,15;18 | $h_0^2[h_2b_{03}]x_{38}$                                      | Permanent cycle   |
| 3173 | 71,15;20 | $h_0^2[b_{02}^2]h_4[b_{03}^2]^2$                              | $d_4^{-1} = h_0^2[b_{03}^2]^3$  |
| 3174 | 71,15;24 | $[b_{02}^2][h_2b_{03}][b_{03}^2]^2$                           | $d_8 = [b_{02}^2]^3[h_2b_{03}]h_5$  |
| 3175 | 71,16;4  | $h_0^{11}[b_{02}^2]h_6$                                       | $d_4 = h_0^{15}h_3h_6$  |
| 3176 | 71,16;12 | $h_0^{11}h_4[b_{04}^2]$                                       | $d_8 = h_0^{11}[b_{02}^2]h_5^2$   |
| 3177 | 71,16;16 | $h_0^3[b_{02}^2]^2[b_{03}^2]h_5$                              | $d_4^{-1} = h_0^3[b_{02}^2]^2[b_{04}^2]$                                    |
| 3178 | 71,16;16 | $[h_0(1)^2][h_0(1)b_{13}][b_{13}^2]^2$                        | Permanent cycle   |
| 3179 | 71,16;16 | $h_0^9[h_2b_{03}][b_{04}^2]$                                  | $d_4 = h_0^9[h_2b_{03}][b_{03}^2]h_5 + h_0^{11}h_3^2[b_{04}^2]$             |
| 3180 | 71,16;20 | $h_0^3[b_{02}^2]h_4[b_{03}^2]^2$                              | $d_4^{-1} = h_0^3[b_{03}^2]^3$  |
| 3181 | 71,16;24 | $h_0[b_{02}^2][h_2b_{03}][b_{03}^2]^2$                        | $d_8 = h_0[b_{02}^2]^3[h_2b_{03}]h_5$                                       |
| 3182 | 71,17;4  | $h_0^{12}[b_{02}^2]h_6$                                       | $d_4 = h_0^{16}h_3h_6$  |
| 3183 | 71,17;12 | $h_0^{12}h_4[b_{04}^2]$                                       | $d_8 = h_0^{12}[b_{02}^2]h_5^2$   |
| 3184 | 71,17;16 | $h_0^4[b_{02}^2]^2[b_{03}^2]h_5$                              | $d_4^{-1} = h_0^4[b_{02}^2]^2[b_{04}^2]$                                    |
| 3185 | 71,17;16 | $h_0[h_0(1)^2][h_0(1)b_{13}][b_{13}^2]^2$                     | $d_4^{-1} = [b_{02}^2][b_{13}^2]^2[b_{03}^2]$                               |
| 3186 | 71,17;16 | $h_0^{10}[h_2b_{03}][b_{04}^2]$                               | $d_4 = h_0^{10}[h_2b_{03}][b_{03}^2]h_5 + h_0^{12}h_3^2[b_{04}^2]$          |
| 3187 | 71,17;20 | $h_0^4[b_{02}^2]h_4[b_{03}^2]^2$                              | $d_4^{-1} = h_0^4[b_{03}^2]^3$  |
| 3188 | 71,17;24 | $h_0^2[b_{02}^2][h_2b_{03}][b_{03}^2]^2$                      | $d_8 = h_0^2[b_{02}^2]^3[h_2b_{03}]h_5$                                     |
| 3189 | 71,17;24 | $h_1[b_{02}^2][h_0(1)^2][b_{03}^2]^2$                         | $d_8 = h_1[b_{02}^2]^3[h_0(1)^2]h_5$  |
| 3190 | 71,18;4  | $h_0^{13}[b_{02}^2]h_6$                                       | $d_4 = h_0^{17}h_3h_6$  |
| 3191 | 71,18;12 | $h_0^{13}h_4[b_{04}^2]$                                       | $d_8 = h_0^{13}[b_{02}^2]h_5^2$   |
| 3192 | 71,18;16 | $h_0^5[b_{02}^2]^2[b_{03}^2]h_5$                              | $d_4^{-1} = h_0^5[b_{02}^2]^2[b_{04}^2]$                                    |
| 3193 | 71,18;16 | $h_0^2[h_0(1)^2][h_0(1)b_{13}][b_{13}^2]^2$                   | $d_4^{-1} = h_0[b_{02}^2][b_{13}^2]^2[b_{03}^2]$                            |
| 3194 | 71,18;16 | $h_0^{11}[h_2b_{03}][b_{04}^2]$                               | $d_4 = h_0^{11}[h_2b_{03}][b_{03}^2]h_5 + h_0^{13}h_3^2[b_{04}^2]$          |
| 3195 | 71,18;20 | $h_0^5[b_{02}^2]h_4[b_{03}^2]^2$                              | $d_4^{-1} = h_0^5[b_{03}^2]^3$  |
| 3196 | 71,18;24 | $h_0^3[b_{02}^2][h_2b_{03}][b_{03}^2]^2$                      | $d_8 = h_0^3[b_{02}^2]^3[h_2b_{03}]h_5$                                     |

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| 3197 | 71,19;4  | $h_0^{14}[b_{02}^2]h_6$                                      | $d_4 = h_0^{18}h_3h_6$   |
| 3198 | 71,19;12 | $h_0^{14}h_4[b_{04}^2]$                                      | $d_8 = h_0^{14}[b_{02}^2]h_5^2$                                    |
| 3199 | 71,19;16 | $h_0^6[b_{02}^2]^2[b_{03}^2]h_5$                             | $d_4^{-1} = h_0^6[b_{02}^2]^2[b_{04}^2]$                           |
| 3200 | 71,19;16 | $h_1^2[b_{02}^2]^3[h_0(1)^2]h_5$                             | $d_6^{-1} = [b_{02}^2]^2x_{38}$                                    |
| 3201 | 71,19;16 | $h_0^{12}[h_2b_{03}][b_{04}^2]$                              | $d_4 = h_0^{12}[h_2b_{03}][b_{03}^2]h_5 + h_0^{14}h_3^2[b_{04}^2]$ |
| 3202 | 71,19;20 | $h_0^6[b_{02}^2]h_4[b_{03}^2]^2$                             | $d_4^{-1} = h_0^6[b_{03}^2]^3$                                     |
| 3203 | 71,19;20 | $[b_{02}^2]^2[h_2b_{03}][b_{13}^2]^2$                        | Permanent cycle  |
| 3204 | 71,19;24 | $h_0^4[b_{02}^2][h_2b_{03}][b_{03}^2]^2$                     | $d_8 = h_0^4[b_{02}^2]^3[h_2b_{03}]h_5$                            |
| 3205 | 71,20;4  | $h_0^{15}[b_{02}^2]h_6$                                      | $d_4 = h_0^{19}h_3h_6$   |
| 3206 | 71,20;12 | $h_0^{15}h_4[b_{04}^2]$                                      | $d_8 = h_0^{15}[b_{02}^2]h_5^2$                                    |
| 3207 | 71,20;16 | $h_0^7[b_{02}^2]^2[b_{03}^2]h_5$                             | $d_4^{-1} = h_0^7[b_{02}^2]^2[b_{04}^2]$                           |
| 3208 | 71,20;16 | $h_0^{13}[h_2b_{03}][b_{04}^2]$                              | $d_4 = h_0^{13}[h_2b_{03}][b_{03}^2]h_5 + h_0^{15}h_3^2[b_{04}^2]$ |
| 3209 | 71,20;18 | $[h_1h_0(1)][b_{02}^2]^4h_5$                                 | $d_8^{-1} = [h_1h_0(1)][b_{02}^2]^2[b_{03}^2]^2$                   |
| 3210 | 71,20;20 | $h_0^7[b_{02}^2]h_4[b_{03}^2]^2$                             | $d_4^{-1} = h_0^7[b_{03}^2]^3$                                     |
| 3211 | 71,20;20 | $h_0[b_{02}^2]^2[h_2b_{03}][b_{13}^2]^2$                     | $d_4^{-1} = [b_{02}^2]^2[h_2b_{03}][h_0(1)b_{13}][b_{03}^2]$       |
| 3212 | 71,20;22 | $h_1^2[b_{02}^2]^3[h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$ | Permanent cycle  |
| 3213 | 71,20;24 | $h_0^5[b_{02}^2][h_2b_{03}][b_{03}^2]^2$                     | $d_8 = h_0^5[b_{02}^2]^3[h_2b_{03}]h_5$                            |
| 3214 | 71,20;24 | $[b_{02}^2]^2[h_0(1)^2][h_0(1)b_{13}][b_{03}^2]$             | $d_4 = h_0[b_{02}^2]^2[h_0(1)^2][b_{13}^2]^2$                      |
| 3215 | 71,21;4  | $h_0^{16}[b_{02}^2]h_6$                                      | $d_4 = h_0^{20}h_3h_6$   |
| 3216 | 71,21;12 | $h_0^{16}h_4[b_{04}^2]$                                      | $d_8 = h_0^{16}[b_{02}^2]h_5^2$                                    |
| 3217 | 71,21;16 | $h_0^8[b_{02}^2]^2[b_{03}^2]h_5$                             | $d_4^{-1} = h_0^8[b_{02}^2]^2[b_{04}^2]$                           |
| 3218 | 71,21;16 | $h_0^{14}[h_2b_{03}][b_{04}^2]$                              | $d_4 = h_0^{14}[h_2b_{03}][b_{03}^2]h_5 + h_0^{16}h_3^2[b_{04}^2]$ |
| 3219 | 71,21;20 | $h_0^8[b_{02}^2]h_4[b_{03}^2]^2$                             | $d_4^{-1} = h_0^8[b_{03}^2]^3$                                     |
| 3220 | 71,21;20 | $h_0^2[b_{02}^2]^2[h_2b_{03}][b_{13}^2]^2$                   | $d_4^{-1} = h_0[b_{02}^2]^2[h_2b_{03}][h_0(1)b_{13}][b_{03}^2]$    |
| 3221 | 71,21;20 | $[b_{02}^2]^5h_5$  | $d_4 = h_0^6[b_{02}^2]^3[h_2b_{03}]h_5$                            |
| 3222 | 71,21;24 | $h_0^6[b_{02}^2][h_2b_{03}][b_{03}^2]^2$                     | $d_4^{-1} = [b_{02}^2]^3[b_{03}^2]^2$                              |
| 3223 | 71,21;24 | $h_0[b_{02}^2]^2[h_0(1)^2][h_0(1)b_{13}][b_{03}^2]$          | $d_4 = h_0^2[b_{02}^2]^2[h_0(1)^2][b_{13}^2]^2$                    |
| 3224 | 71,21;24 | $[b_{02}^2]^4h_4[b_{03}^2]$                                  | $d_4 = [b_{02}^2]^5h_4^2$  |
| 3225 | 71,22;4  | $h_0^{17}[b_{02}^2]h_6$                                      | $d_4 = h_0^{21}h_3h_6$   |
| 3226 | 71,22;12 | $h_0^{17}h_4[b_{04}^2]$                                      | $d_8 = h_0^{17}[b_{02}^2]h_5^2$                                    |
| 3227 | 71,22;16 | $h_0^9[b_{02}^2]^2[b_{03}^2]h_5$                             | $d_4^{-1} = h_0^9[b_{02}^2]^2[b_{04}^2]$                           |
| 3228 | 71,22;16 | $h_0^{15}[h_2b_{03}][b_{04}^2]$                              | $d_4 = h_0^{15}[h_2b_{03}][b_{03}^2]h_5 + h_0^{17}h_3^2[b_{04}^2]$ |
| 3229 | 71,22;20 | $h_0^9[b_{02}^2]h_4[b_{03}^2]^2$                             | $d_4^{-1} = h_0^9[b_{03}^2]^3$                                     |
| 3230 | 71,22;20 | $h_0[b_{02}^2]^5h_5$   | $d_4 = h_0^7[b_{02}^2]^3[h_2b_{03}]h_5$                            |
| 3231 | 71,22;24 | $h_0^7[b_{02}^2][h_2b_{03}][b_{03}^2]^2$                     | $d_4^{-1} = h_0[b_{02}^2]^3[b_{03}^2]^2$                           |
| 3232 | 71,22;24 | $h_0^2[b_{02}^2]^2[h_0(1)^2][h_0(1)b_{13}][b_{03}^2]$        | Permanent cycle  |
| 3233 | 71,22;24 | $h_0[b_{02}^2]^4h_4[b_{03}^2]$                               | $d_4 = h_0[b_{02}^2]^5h_4^2$                                       |
| 3234 | 71,23;4  | $h_0^{18}[b_{02}^2]h_6$                                      | $d_4 = h_0^{22}h_3h_6$   |
| 3235 | 71,23;12 | $h_0^{18}h_4[b_{04}^2]$                                      | $d_8 = h_0^{18}[b_{02}^2]h_5^2$                                    |
| 3236 | 71,23;16 | $h_0^{10}[b_{02}^2]^2[b_{03}^2]h_5$                          | $d_4^{-1} = h_0^{10}[b_{02}^2]^2[b_{04}^2]$                        |
| 3237 | 71,23;16 | $h_0^{16}[h_2b_{03}][b_{04}^2]$                              | $d_4 = h_0^{16}[h_2b_{03}][b_{03}^2]h_5 + h_0^{18}h_3^2[b_{04}^2]$ |
| 3238 | 71,23;20 | $h_0^{10}[b_{02}^2]h_4[b_{03}^2]^2$                          | $d_4^{-1} = h_0^{10}[b_{03}^2]^3$                                  |
| 3239 | 71,23;20 | $h_1[b_{02}^2]^5h_4^2$                                       | $d_4^{-1} = h_1[b_{02}^2]^4h_4[b_{03}^2]$                          |
| 3240 | 71,23;20 | $h_0^2[b_{02}^2]^5h_5$                                       | $d_4 = h_0^8[b_{02}^2]^3[h_2b_{03}]h_5$                            |
| 3241 | 71,23;24 | $h_0^8[b_{02}^2][h_2b_{03}][b_{03}^2]^2$                     | $d_4^{-1} = h_0^2[b_{02}^2]^3[b_{03}^2]^2$                         |
| 3242 | 71,23;24 | $h_0^2[b_{02}^2]^4h_4[b_{03}^2]$                             | $d_4 = h_0^2[b_{02}^2]^5h_4^2$                                     |
| 3243 | 71,23;28 | $[b_{02}^2]^4[h_2b_{03}][b_{03}^2]$                          | $d_4 = h_0[b_{02}^2]^3[h_2b_{03}][h_0(1)^2][h_0(1)b_{13}]$         |
| 3244 | 71,24;4  | $h_0^{19}[b_{02}^2]h_6$                                      | $d_4 = h_0^{23}h_3h_6$   |
| 3245 | 71,24;12 | $h_0^{19}h_4[b_{04}^2]$                                      | $d_8 = h_0^{19}[b_{02}^2]h_5^2$                                    |
| 3246 | 71,24;16 | $h_0^{11}[b_{02}^2]^2[b_{03}^2]h_5$                          | $d_4^{-1} = h_0^{11}[b_{02}^2]^2[b_{04}^2]$                        |
| 3247 | 71,24;16 | $h_0^{17}[h_2b_{03}][b_{04}^2]$                              | $d_4 = h_0^{17}[h_2b_{03}][b_{03}^2]h_5 + h_0^{19}h_3^2[b_{04}^2]$ |
| 3248 | 71,24;20 | $h_0^{11}[b_{02}^2]h_4[b_{03}^2]^2$                          | $d_4^{-1} = h_0^{11}[b_{03}^2]^3$                                  |
| 3249 | 71,24;20 | $h_0^3[b_{02}^2]^5h_5$                                       | $d_4 = h_0^9[b_{02}^2]^3[h_2b_{03}]h_5$                            |
| 3250 | 71,24;24 | $h_0^9[b_{02}^2][h_2b_{03}][b_{03}^2]^2$                     | $d_4^{-1} = h_0^3[b_{02}^2]^3[b_{03}^2]^2$                         |



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| 3251 | 71,24;24 | $h_0^3[b_{02}^2]^4 h_4[b_{03}^2]$                            | $d_4 = h_0^3[b_{02}^2]^5 h_4^2$  |
| 3252 | 71,24;28 | $h_0[b_{02}^2]^4[h_2 b_{03}][b_{03}^2]$                      | $d_4 = h_0^2[b_{02}^2]^3[h_2 b_{03}][h_0(1)^2][h_0(1)b_{13}]$                              |
| 3253 | 71,25;4  | $h_0^{20}[b_{02}^2]h_6$                                      | $d_4 = h_0^{24}h_3h_6$   |
| 3254 | 71,25;12 | $h_0^{20}h_4[b_{04}^2]$                                      | $d_8 = h_0^{20}[b_{02}^2]h_5^2$  |
| 3255 | 71,25;16 | $h_0^{12}[b_{02}^2]^2[b_{03}^2]h_5$                          | $d_4^{-1} = h_0^{12}[b_{02}^2]^2[b_{04}^2]$  |
| 3256 | 71,25;16 | $h_0^{18}[h_2 b_{03}][b_{04}^2]$                             | $d_4 = h_0^{18}[h_2 b_{03}][b_{03}^2]h_5 + h_0^{20}h_3^2[b_{04}^2]$                        |
| 3257 | 71,25;20 | $h_0^{12}[b_{02}^2]h_4[b_{03}^2]^2$                          | $d_4^{-1} = h_0^{12}[b_{03}^2]^3$  |
| 3258 | 71,25;20 | $h_0^4[b_{02}^2]^5 h_5$                                      | $d_4 = h_0^{10}[b_{02}^2]^3[h_2 b_{03}]h_5$  |
| 3259 | 71,25;24 | $h_0^{10}[b_{02}^2][h_2 b_{03}][b_{03}^2]^2$                 | $d_4^{-1} = h_0^4[b_{02}^2]^3[b_{03}^2]^2$   |
| 3260 | 71,25;24 | $h_0^4[b_{02}^2]^4 h_4[b_{03}^2]$                            | $d_4 = h_0^4[b_{02}^2]^5 h_4^2$  |
| 3261 | 71,25;28 | $h_1[b_{02}^2]^4[h_0(1)^2][b_{03}^2]$                        | Permanent cycle  |
| 3262 | 71,25;28 | $h_0^2[b_{02}^2]^4[h_2 b_{03}][b_{03}^2]$                    | $d_6 =$<br>$h_0^9[b_{02}^2]^2[h_0 b_{02} b_{03}^2 b_{14} + h_0 h_0(1)^2 b_{03} b_{04}]$    |
| 3263 | 71,26;4  | $h_0^{21}[b_{02}^2]h_6$                                      | $d_4 = h_0^{25}h_3h_6$   |
| 3264 | 71,26;12 | $h_0^{21}h_4[b_{04}^2]$                                      | $d_8 = h_0^{21}[b_{02}^2]h_5^2$  |
| 3265 | 71,26;16 | $h_0^{13}[b_{02}^2]^2[b_{03}^2]h_5$                          | $d_4^{-1} = h_0^{13}[b_{02}^2]^2[b_{04}^2]$  |
| 3266 | 71,26;16 | $h_0^{19}[h_2 b_{03}][b_{04}^2]$                             | $d_4 = h_0^{19}[h_2 b_{03}][b_{03}^2]h_5 + h_0^{21}h_3^2[b_{04}^2]$                        |
| 3267 | 71,26;20 | $h_0^{13}[b_{02}^2]h_4[b_{03}^2]^2$                          | $d_4^{-1} = h_0^{13}[b_{03}^2]^3$  |
| 3268 | 71,26;20 | $h_0^5[b_{02}^2]^5 h_5$                                      | $d_4 = h_0^{11}[b_{02}^2]^3[h_2 b_{03}]h_5$  |
| 3269 | 71,26;24 | $h_0^{11}[b_{02}^2][h_2 b_{03}][b_{03}^2]^2$                 | $d_4^{-1} = h_0^5[b_{02}^2]^3[b_{03}^2]^2$   |
| 3270 | 71,26;24 | $h_0^5[b_{02}^2]^4 h_4[b_{03}^2]$                            | $d_4 = h_0^5[b_{02}^2]^5 h_4^2$  |
| 3271 | 71,26;28 | $h_0^3[b_{02}^2]^4[h_2 b_{03}][b_{03}^2]$                    | $d_6 =$<br>$h_0^{10}[b_{02}^2]^2[h_0 b_{02} b_{03}^2 b_{14} + h_0 h_0(1)^2 b_{03} b_{04}]$ |
| 3272 | 71,27;4  | $h_0^{22}[b_{02}^2]h_6$                                      | $d_4 = h_0^{26}h_3h_6$   |
| 3273 | 71,27;12 | $h_0^{22}h_4[b_{04}^2]$                                      | $d_8 = h_0^{22}[b_{02}^2]h_5^2$  |
| 3274 | 71,27;16 | $h_0^{14}[b_{02}^2]^2[b_{03}^2]h_5$                          | $d_4^{-1} = h_0^{14}[b_{02}^2]^2[b_{04}^2]$  |
| 3275 | 71,27;16 | $h_0^{20}[h_2 b_{03}][b_{04}^2]$                             | $d_4 = h_0^{20}[h_2 b_{03}][b_{03}^2]h_5 + h_0^{22}h_3^2[b_{04}^2]$                        |
| 3276 | 71,27;20 | $h_0^{14}[b_{02}^2]h_4[b_{03}^2]^2$                          | $d_4^{-1} = h_0^{14}[b_{03}^2]^3$  |
| 3277 | 71,27;20 | $h_0^6[b_{02}^2]^5 h_5$                                      | $d_4 = h_0^{12}[b_{02}^2]^3[h_2 b_{03}]h_5$  |
| 3278 | 71,27;24 | $h_0^{12}[b_{02}^2][h_2 b_{03}][b_{03}^2]^2$                 | $d_4^{-1} = h_0^6[b_{02}^2]^3[b_{03}^2]^2$   |
| 3279 | 71,27;24 | $h_0^6[b_{02}^2]^4 h_4[b_{03}^2]$                            | $d_4 = h_0^6[b_{02}^2]^5 h_4^2$  |
| 3280 | 71,27;28 | $h_0^4[b_{02}^2]^4[h_2 b_{03}][b_{03}^2]$                    | $d_6 =$<br>$h_0^{11}[b_{02}^2]^2[h_0 b_{02} b_{03}^2 b_{14} + h_0 h_0(1)^2 b_{03} b_{04}]$ |
| 3281 | 71,28;4  | $h_0^{23}[b_{02}^2]h_6$                                      | $d_4 = h_0^{27}h_3h_6$   |
| 3282 | 71,28;12 | $h_0^{23}h_4[b_{04}^2]$                                      | $d_8 = h_0^{23}[b_{02}^2]h_5^2$  |
| 3283 | 71,28;16 | $h_0^{15}[b_{02}^2]^2[b_{03}^2]h_5$                          | $d_4^{-1} = h_0^{15}[b_{02}^2]^2[b_{04}^2]$  |
| 3284 | 71,28;16 | $h_0^{21}[h_2 b_{03}][b_{04}^2]$                             | $d_4 = h_0^{21}[h_2 b_{03}][b_{03}^2]h_5 + h_0^{23}h_3^2[b_{04}^2]$                        |
| 3285 | 71,28;20 | $h_0^{15}[b_{02}^2]h_4[b_{03}^2]^2$                          | $d_4^{-1} = h_0^{15}[b_{03}^2]^3$  |
| 3286 | 71,28;20 | $h_0^7[b_{02}^2]^5 h_5$                                      | $d_4 = h_0^{13}[b_{02}^2]^3[h_2 b_{03}]h_5$  |
| 3287 | 71,28;24 | $h_0^{13}[b_{02}^2][h_2 b_{03}][b_{03}^2]^2$                 | $d_4^{-1} = h_0^7[b_{02}^2]^3[b_{03}^2]^2$   |
| 3288 | 71,28;24 | $h_0^7[b_{02}^2]^4 h_4[b_{03}^2]$                            | $d_4 = h_0^7[b_{02}^2]^5 h_4^2$  |
| 3289 | 71,28;26 | $h_1[b_{02}^2]^5[h_4 h_0(1)b_{02}^2 + h_0^3 b_{02} b_{14}]$  | $d_4^{-1} = [h_1 h_0(1)][b_{02}^2]^5[b_{03}^2]$  |
| 3290 | 71,28;28 | $[b_{02}^2]^5[h_0(1)^2][h_0(1)b_{13}]$                       | Permanent cycle  |
| 3291 | 71,28;28 | $h_0^5[b_{02}^2]^4[h_2 b_{03}][b_{03}^2]$                    | $d_6 =$<br>$h_0^{12}[b_{02}^2]^2[h_0 b_{02} b_{03}^2 b_{14} + h_0 h_0(1)^2 b_{03} b_{04}]$ |
| 3292 | 71,29;4  | $h_0^{24}[b_{02}^2]h_6$                                      | $d_4 = h_0^{28}h_3h_6$   |
| 3293 | 71,29;12 | $h_0^{24}h_4[b_{04}^2]$                                      | $d_8 = h_0^{24}[b_{02}^2]h_5^2$  |
| 3294 | 71,29;16 | $h_0^{16}[b_{02}^2]^2[b_{03}^2]h_5$                          | $d_4^{-1} = h_0^{16}[b_{02}^2]^2[b_{04}^2]$  |
| 3295 | 71,29;16 | $h_0^{22}[h_2 b_{03}][b_{04}^2]$                             | $d_4 = h_0^{22}[h_2 b_{03}][b_{03}^2]h_5 + h_0^{24}h_3^2[b_{04}^2]$                        |
| 3296 | 71,29;20 | $h_0^{16}[b_{02}^2]h_4[b_{03}^2]^2$                          | $d_4^{-1} = h_0^{16}[b_{03}^2]^3$  |
| 3297 | 71,29;20 | $h_0^8[b_{02}^2]^5 h_5$                                      | $d_4 = h_0^{14}[b_{02}^2]^3[h_2 b_{03}]h_5$  |
| 3298 | 71,29;24 | $h_0^{14}[b_{02}^2][h_2 b_{03}][b_{03}^2]^2$                 | $d_4^{-1} = h_0^8[b_{02}^2]^3[b_{03}^2]^2$   |
| 3299 | 71,29;24 | $h_0^8[b_{02}^2]^4 h_4[b_{03}^2]$                            | $d_4 = h_0^8[b_{02}^2]^5 h_4^2$  |
| 3300 | 71,29;28 | $[b_{02}^2]^7 h_4 + h_0[b_{02}^2]^5[h_0(1)^2][h_0(1)b_{13}]$ | $d_4^{-1} = [b_{02}^2]^6[b_{03}^2]$  |
| 3301 | 71,29;28 | $h_0[b_{02}^2]^5[h_0(1)^2][h_0(1)b_{13}]$                    | Permanent cycle  |

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| 3302 | 71,29;28 | $h_0^6[b_{02}^2]^4[h_2b_{03}][b_{03}^2]$                         | $d_6 =$<br>$h_0^{13}[b_{02}^2]^2[h_0b_{02}b_{03}^2b_{14} + h_0h_0(1)^2b_{03}b_{04}]$ |
| 3303 | 71,30;4  | $h_0^{25}[b_{02}^2]h_6$  | $d_4 = h_0^{29}h_3h_6$   |
| 3304 | 71,30;12 | $h_0^{25}h_4[b_{04}^2]$  | $d_8 = h_0^{25}[b_{02}^2]h_5^2$  |
| 3305 | 71,30;16 | $h_0^{17}[b_{02}^2]^2[b_{03}^2]h_5$                              | $d_4^{-1} = h_0^{17}[b_{02}^2]^2[b_{04}^2]$  |
| 3306 | 71,30;16 | $h_0^{23}[h_2b_{03}][b_{04}^2]$                                  | $d_4 = h_0^{23}[h_2b_{03}][b_{03}^2]h_5 + h_0^{25}h_3^2[b_{04}^2]$                   |
| 3307 | 71,30;20 | $h_0^{17}[b_{02}^2]h_4[b_{03}^2]^2$                              | $d_4^{-1} = h_0^{17}[b_{03}^2]^3$  |
| 3308 | 71,30;20 | $h_0^9[b_{02}^2]^5h_5$   | $d_4 = h_0^{15}[b_{02}^2]^3[h_2b_{03}]h_5$   |
| 3309 | 71,30;24 | $h_0^{15}[b_{02}^2][h_2b_{03}][b_{03}^2]^2$                      | $d_4^{-1} = h_0^9[b_{02}^2]^3[b_{03}^2]^2$   |
| 3310 | 71,30;24 | $h_0^9[b_{02}^2]^4h_4[b_{03}^2]$                                 | $d_4 = h_0^9[b_{02}^2]^5h_4^2$   |
| 3311 | 71,30;28 | $h_0[b_{02}^2]^7h_4 + h_0^2[b_{02}^2]^5[h_0(1)^2][h_0(1)b_{13}]$ | $d_4^{-1} = h_0[b_{02}^2]^6[b_{03}^2]$   |
| 3312 | 71,30;28 | $h_0^2[b_{02}^2]^5[h_0(1)^2][h_0(1)b_{13}]$                      | Permanent cycle  |
| 3313 | 71,30;28 | $h_0^7[b_{02}^2]^4[h_2b_{03}][b_{03}^2]$                         | $d_6 =$<br>$h_0^{14}[b_{02}^2]^2[h_0b_{02}b_{03}^2b_{14} + h_0h_0(1)^2b_{03}b_{04}]$ |
| 3314 | 71,31;4  | $h_0^{26}[b_{02}^2]h_6$  | $d_4 = h_0^{30}h_3h_6$   |
| 3315 | 71,31;12 | $h_0^{26}h_4[b_{04}^2]$  | $d_8 = h_0^{26}[b_{02}^2]h_5^2$  |
| 3316 | 71,31;16 | $h_0^{18}[b_{02}^2]^2[b_{03}^2]h_5$                              | $d_4^{-1} = h_0^{18}[b_{02}^2]^2[b_{04}^2]$  |
| 3317 | 71,31;16 | $h_0^{24}[h_2b_{03}][b_{04}^2]$                                  | $d_4 = h_0^{24}[h_2b_{03}][b_{03}^2]h_5 + h_0^{26}h_3^2[b_{04}^2]$                   |
| 3318 | 71,31;20 | $h_0^{18}[b_{02}^2]h_4[b_{03}^2]^2$                              | $d_4^{-1} = h_0^{18}[b_{03}^2]^3$  |
| 3319 | 71,31;20 | $h_0^{10}[b_{02}^2]^5h_5$  | $d_4 = h_0^{16}[b_{02}^2]^3[h_2b_{03}]h_5$   |
| 3320 | 71,31;24 | $h_0^{16}[b_{02}^2][h_2b_{03}][b_{03}^2]^2$                      | $d_4^{-1} = h_0^{10}[b_{02}^2]^3[b_{03}^2]^2$  |
| 3321 | 71,31;24 | $h_0^{10}[b_{02}^2]^4h_4[b_{03}^2]$                              | $d_4 = h_0^{10}[b_{02}^2]^5h_4^2$  |
| 3322 | 71,31;28 | $h_0^2[b_{02}^2]^7h_4$   | $d_4^{-1} = h_0^2[b_{02}^2]^6[b_{03}^2]$   |
| 3323 | 71,31;28 | $h_0^8[b_{02}^2]^4[h_2b_{03}][b_{03}^2]$                         | $d_6 =$<br>$h_0^{15}[b_{02}^2]^2[h_0b_{02}b_{03}^2b_{14} + h_0h_0(1)^2b_{03}b_{04}]$ |
| 3324 | 71,31;32 | $[b_{02}^2]^7[h_2b_{03}]$  | Permanent cycle  |
| 3325 | 71,32;4  | $h_0^{27}[b_{02}^2]h_6$  | $d_4 = h_0^{31}h_3h_6$   |
| 3326 | 71,32;12 | $h_0^{27}h_4[b_{04}^2]$  | $d_8 = h_0^{27}[b_{02}^2]h_5^2$  |
| 3327 | 71,32;16 | $h_0^{19}[b_{02}^2]^2[b_{03}^2]h_5$                              | $d_4^{-1} = h_0^{19}[b_{02}^2]^2[b_{04}^2]$  |
| 3328 | 71,32;16 | $h_0^{25}[h_2b_{03}][b_{04}^2]$                                  | $d_4 = h_0^{25}[h_2b_{03}][b_{03}^2]h_5 + h_0^{27}h_3^2[b_{04}^2]$                   |
| 3329 | 71,32;20 | $h_0^{19}[b_{02}^2]h_4[b_{03}^2]^2$                              | $d_4^{-1} = h_0^{19}[b_{03}^2]^3$  |
| 3330 | 71,32;20 | $h_0^{11}[b_{02}^2]^5h_5$  | $d_4 = h_0^{17}[b_{02}^2]^3[h_2b_{03}]h_5$   |
| 3331 | 71,32;24 | $h_0^{17}[b_{02}^2][h_2b_{03}][b_{03}^2]^2$                      | $d_4^{-1} = h_0^{11}[b_{02}^2]^3[b_{03}^2]^2$  |
| 3332 | 71,32;24 | $h_0^{11}[b_{02}^2]^4h_4[b_{03}^2]$                              | $d_4 = h_0^{11}[b_{02}^2]^5h_4^2$  |
| 3333 | 71,32;28 | $h_0^3[b_{02}^2]^7h_4$   | $d_4^{-1} = h_0^3[b_{02}^2]^6[b_{03}^2]$   |
| 3334 | 71,32;28 | $h_0^9[b_{02}^2]^4[h_2b_{03}][b_{03}^2]$                         | $d_6 =$<br>$h_0^{16}[b_{02}^2]^2[h_0b_{02}b_{03}^2b_{14} + h_0h_0(1)^2b_{03}b_{04}]$ |
| 3335 | 71,32;32 | $h_0[b_{02}^2]^7[h_2b_{03}]$                                     | Permanent cycle  |
| 3336 | 71,33;4  | $h_0^{28}[b_{02}^2]h_6$  | $d_4 = h_0^{32}h_3h_6$   |
| 3337 | 71,33;12 | $h_0^{28}h_4[b_{04}^2]$  | $d_8 = h_0^{28}[b_{02}^2]h_5^2$  |
| 3338 | 71,33;16 | $h_0^{20}[b_{02}^2]^2[b_{03}^2]h_5$                              | $d_4^{-1} = h_0^{20}[b_{02}^2]^2[b_{04}^2]$  |
| 3339 | 71,33;16 | $h_0^{26}[h_2b_{03}][b_{04}^2]$                                  | $d_4 = h_0^{26}[h_2b_{03}][b_{03}^2]h_5 + h_0^{28}h_3^2[b_{04}^2]$                   |
| 3340 | 71,33;20 | $h_0^{20}[b_{02}^2]h_4[b_{03}^2]^2$                              | $d_4^{-1} = h_0^{20}[b_{03}^2]^3$  |
| 3341 | 71,33;20 | $h_0^{12}[b_{02}^2]^5h_5$  | $d_4 = h_0^{18}[b_{02}^2]^3[h_2b_{03}]h_5$   |
| 3342 | 71,33;24 | $h_0^{18}[b_{02}^2][h_2b_{03}][b_{03}^2]^2$                      | $d_4^{-1} = h_0^{12}[b_{02}^2]^3[b_{03}^2]^2$  |
| 3343 | 71,33;24 | $h_0^{12}[b_{02}^2]^4h_4[b_{03}^2]$                              | $d_4 = h_0^{12}[b_{02}^2]^5h_4^2$  |
| 3344 | 71,33;28 | $h_0^4[b_{02}^2]^7h_4$   | $d_4^{-1} = h_0^4[b_{02}^2]^6[b_{03}^2]$   |
| 3345 | 71,33;28 | $h_0^{10}[b_{02}^2]^4[h_2b_{03}][b_{03}^2]$                      | $d_6 =$<br>$h_0^{17}[b_{02}^2]^2[h_0b_{02}b_{03}^2b_{14} + h_0h_0(1)^2b_{03}b_{04}]$ |
| 3346 | 71,33;32 | $h_1[b_{02}^2]^7[h_0(1)^2]$                                      | Permanent cycle  |
| 3347 | 71,33;32 | $h_0^2[b_{02}^2]^7[h_2b_{03}]$                                   | Permanent cycle  |
| 3348 | 71,34;4  | $h_0^{29}[b_{02}^2]h_6$  | $d_4 = h_0^{33}h_3h_6$   |
| 3349 | 71,34;12 | $h_0^{29}h_4[b_{04}^2]$  | $d_8 = h_0^{29}[b_{02}^2]h_5^2$  |
| 3350 | 71,34;16 | $h_0^{21}[b_{02}^2]^2[b_{03}^2]h_5$                              | $d_4^{-1} = h_0^{21}[b_{02}^2]^2[b_{04}^2]$  |
| 3351 | 71,34;16 | $h_0^{27}[h_2b_{03}][b_{04}^2]$                                  | $d_4 = h_0^{27}[h_2b_{03}][b_{03}^2]h_5 + h_0^{29}h_3^2[b_{04}^2]$                   |

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| 3352 | 71,34;20 | $h_0^{21}[b_{02}^2]h_4[b_{03}^2]^2$   | $d_4^{-1} = h_0^{21}[b_{03}^2]^3$  |
| 3353 | 71,34;20 | $h_0^{13}[b_{02}^2]^5h_5$   | $d_4 = h_0^{19}[b_{02}^2]^3[h_2b_{03}]h_5$   |
| 3354 | 71,34;24 | $h_0^{19}[b_{02}^2][h_2b_{03}][b_{03}^2]^2$   | $d_4^{-1} = h_0^{13}[b_{02}^2]^3[b_{03}^2]^2$  |
| 3355 | 71,34;24 | $h_0^{13}[b_{02}^2]^4h_4[b_{03}^2]$   | $d_4 = h_0^{13}[b_{02}^2]^5h_4^2$  |
| 3356 | 71,34;28 | $h_0^5[b_{02}^2]^7h_4$  | $d_4^{-1} = h_0^5[b_{02}^2]^6[b_{03}^2]$   |
| 3357 | 71,34;28 | $h_0^{11}[b_{02}^2]^4[h_2b_{03}][b_{03}^2]$   | $d_6 =$<br>$h_0^{18}[b_{02}^2]^2[h_0b_{02}b_{03}^2b_{14} + h_0h_0(1)^2b_{03}b_{04}]$ |
| 3358 | 71,34;32 | $h_0^3[b_{02}^2]^7[h_2b_{03}]$  | Permanent cycle  |
| 3359 | 71,35;4  | $h_0^{30}[b_{02}^2]h_6$   | $d_4 = h_0^{34}h_3h_6$   |
| 3360 | 71,35;12 | $h_0^{30}h_4[b_{04}^2]$   | $d_8 = h_0^{30}[b_{02}^2]h_5^2$  |
| 3361 | 71,35;16 | $h_0^{22}[b_{02}^2]^2[b_{03}^2]h_5$   | $d_4^{-1} = h_0^{22}[b_{02}^2]^2[b_{04}^2]$  |
| 3362 | 71,35;16 | $h_0^{28}[h_2b_{03}][b_{04}^2]$   | $d_4 = h_0^{28}[h_2b_{03}][b_{03}^2]h_5 + h_0^{30}h_3^2[b_{04}^2]$                   |
| 3363 | 71,35;20 | $h_0^{22}[b_{02}^2]h_4[b_{03}^2]^2$   | $d_4^{-1} = h_0^{22}[b_{03}^2]^3$  |
| 3364 | 71,35;20 | $h_0^{14}[b_{02}^2]^5h_5$   | $d_4 = h_0^{20}[b_{02}^2]^3[h_2b_{03}]h_5$   |
| 3365 | 71,35;24 | $h_0^{20}[b_{02}^2][h_2b_{03}][b_{03}^2]^2$   | $d_4^{-1} = h_0^{14}[b_{02}^2]^3[b_{03}^2]^2$  |
| 3366 | 71,35;24 | $h_0^{14}[b_{02}^2]^4h_4[b_{03}^2]$   | $d_4 = h_0^{14}[b_{02}^2]^5h_4^2$  |
| 3367 | 71,35;28 | $h_0^6[b_{02}^2]^7h_4$  | $d_4^{-1} = h_0^6[b_{02}^2]^6[b_{03}^2]$   |
| 3368 | 71,35;28 | $h_0^{12}[b_{02}^2]^4[h_2b_{03}][b_{03}^2]$   | $d_6 =$<br>$h_0^{19}[b_{02}^2]^2[h_0b_{02}b_{03}^2b_{14} + h_0h_0(1)^2b_{03}b_{04}]$ |
| 3369 | 71,35;32 | $h_0^4[b_{02}^2]^7[h_2b_{03}]$  | Permanent cycle  |
| 3370 | 71,36;4  | $h_0^{31}[b_{02}^2]h_6$   | $d_4 = h_0^{35}h_3h_6$   |
| 3371 | 71,36;12 | $h_0^{31}h_4[b_{04}^2]$   | $d_8 = h_0^{31}[b_{02}^2]h_5^2$  |
| 3372 | 71,36;16 | $h_0^{23}[b_{02}^2]^2[b_{03}^2]h_5$   | $d_4^{-1} = h_0^{23}[b_{02}^2]^2[b_{04}^2]$  |
| 3373 | 71,36;16 | $h_0^{29}[h_2b_{03}][b_{04}^2]$   | $d_4 = h_0^{29}[h_2b_{03}][b_{03}^2]h_5 + h_0^{31}h_3^2[b_{04}^2]$                   |
| 3374 | 71,36;20 | $h_0^{23}[b_{02}^2]h_4[b_{03}^2]^2$   | $d_4^{-1} = h_0^{23}[b_{03}^2]^3$  |
| 3375 | 71,36;20 | $h_0^{15}[b_{02}^2]^5h_5$   | $d_4 = h_0^{21}[b_{02}^2]^3[h_2b_{03}]h_5$   |
| 3376 | 71,36;24 | $h_0^{21}[b_{02}^2][h_2b_{03}][b_{03}^2]^2$   | $d_4^{-1} = h_0^{15}[b_{02}^2]^3[b_{03}^2]^2$  |
| 3377 | 71,36;24 | $h_0^{15}[b_{02}^2]^4h_4[b_{03}^2]$   | $d_4 = h_0^{15}[b_{02}^2]^5h_4^2$  |
| 3378 | 71,36;28 | $h_0^7[b_{02}^2]^7h_4$  | $d_4^{-1} = h_0^7[b_{02}^2]^6[b_{03}^2]$   |
| 3379 | 71,36;28 | $h_0^{13}[b_{02}^2]^4[h_2b_{03}][b_{03}^2]$   | $d_6 =$<br>$h_0^{20}[b_{02}^2]^2[h_0b_{02}b_{03}^2b_{14} + h_0h_0(1)^2b_{03}b_{04}]$ |
| 3380 | 71,36;32 | $h_0^5[b_{02}^2]^7[h_2b_{03}]$  | Permanent cycle  |
| 3381 | 72,4;0   | $h_1^2h_3h_6$   | Permanent cycle  |
| 3382 | 72,5;2   | $h_1[h_1h_0(1)]h_6$   | Permanent cycle  |
| 3383 | 72,6;4   | $h_1[b_{02}^2]h_6$  | Permanent cycle  |
| 3384 | 72,6;12  | $h_1h_4[b_{04}^2]$  | $d_8 = h_1[b_{02}^2]h_5^2$   |
| 3385 | 72,8;4   | $h_1^2[b_{02}^2]h_5^2$  | $d_8^{-1} = h_1^2h_4[b_{04}^2]$  |
| 3386 | 72,8;10  | $h_3^2[h_0h_0(1,2)b_{03}]$  | Permanent cycle  |
| 3387 | 72,8;10  | $x_{57}$  | Permanent cycle  |
| 3388 | 72,8;12  | $[b_{13}^2][b_{14}^2]$  | $d_4 = [b_{13}^2]^2h_5$  |
| 3389 | 72,9;10  | $h_2^2[h_0(1,2)b_{13}^2 + h_1h_3h_0(1,2)b_{03}] +$<br>$h_0h_3^2[h_0h_0(1,2)b_{03}]$ | $d_4^{-1} = [b_{03}^2][h_2h_0(1,2)]$   |
| 3390 | 72,9;10  | $h_0h_3^2[h_0h_0(1,2)b_{03}]$   | Permanent cycle  |
| 3391 | 72,9;12  | $[h_0(1)b_{13}][b_{03}^2]h_5 + h_0[b_{13}^2][b_{14}^2]$                             | $d_4^{-1} = [h_0(1)b_{13}][b_{04}^2]$  |
| 3392 | 72,9;12  | $h_0[b_{13}^2][b_{14}^2]$   | $d_4 = h_0[b_{13}^2]^2h_5$   |
| 3393 | 72,10;8  | $h_1[b_{13}^2]^2h_5$  | $d_4^{-1} = h_1[b_{13}^2][b_{14}^2]$   |
| 3394 | 72,10;10 | $h_0^2h_3^2[h_0h_0(1,2)b_{03}]$   | $d_4^{-1} = h_0[b_{03}^2][h_2h_0(1,2)]$  |
| 3395 | 72,10;12 | $h_0[h_0(1)b_{13}][b_{03}^2]h_5 + h_0^2[b_{13}^2][b_{14}^2]$                        | $d_4^{-1} = h_0[h_0(1)b_{13}][b_{04}^2]$   |
| 3396 | 72,10;12 | $[b_{02}^2][h_0h_0(1,3)b_{14}]$   | Permanent cycle  |
| 3397 | 72,10;12 | $h_0^2[b_{13}^2][b_{14}^2]$   | $d_4 = h_0^2[b_{13}^2]^2h_5$   |
| 3398 | 72,10;16 | $h_1^2[h_0(1)^2][b_{04}^2]$   | $d_4 = h_1^2[h_0(1)^2][b_{03}^2]h_5$   |
| 3399 | 72,11;10 | $h_0^3h_3^2[h_0h_0(1,2)b_{03}]$   | $d_4^{-1} = h_0^2[b_{03}^2][h_2h_0(1,2)]$  |
| 3400 | 72,11;12 | $h_0^2[h_0(1)b_{13}][b_{03}^2]h_5$  | $d_4^{-1} = h_0^2[h_0(1)b_{13}][b_{04}^2]$   |
| 3401 | 72,11;12 | $h_0[b_{02}^2][h_0h_0(1,3)b_{14}]$  | Permanent cycle  |

|      |          |   |  |
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| 3402 | 72,11;18 | $[h_1 h_0(1)][b_{02}^2][b_{04}^2]$                              | $d_4 = [h_1 h_0(1)][b_{02}^2][b_{03}^2]h_5$  |
| 3403 | 72,11;18 | $h_2[b_{03}^2][h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$        | $d_4 = h_2^2[b_{13}^2][h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$                         |
| 3404 | 72,12;10 | $h_0^4 h_3^2[h_0 h_0(1, 2)b_{03}]$                              | $d_4^{-1} = h_0^3[b_{03}^2][h_2 h_0(1, 2)]$  |
| 3405 | 72,12;12 | $h_0^3[h_0(1)b_{13}][b_{03}^2]h_5$                              | $d_4^{-1} = h_0^3[h_0(1)b_{13}][b_{04}^2]$   |
| 3406 | 72,12;12 | $[b_{13}^2]^2[h_1(1)^2] + h_0^2[b_{02}^2][h_0 h_0(1, 3)b_{14}]$ | $d_6^{-1} = [b_{03}^2][h_1 b_{13} b_{03} b_{14} + h_1 b_{13}^2 b_{04}]$                  |
| 3407 | 72,12;12 | $h_0^2[b_{02}^2][h_0 h_0(1, 3)b_{14}]$                          | Permanent cycle  |
| 3408 | 72,12;18 | $h_0 h_2[b_{03}^2][h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$    | $d_6 = h_0[b_{02}^2][h_2 b_{03}][h_0(1)b_{13}]h_5$                                       |
| 3409 | 72,12;20 | $[b_{02}^2]^2[b_{04}^2]$  | $d_4 = [b_{02}^2]^2[b_{03}^2]h_5 + h_0[b_{02}^2]x_{45}$                                  |
| 3410 | 72,12;24 | $[b_{03}^2]^3$  | $d_4 = [b_{02}^2]h_4[b_{03}^2]^2 + h_2[b_{13}^2][b_{03}^2]^2$                            |
| 3411 | 72,13;10 | $h_0^5 h_3^2[h_0 h_0(1, 2)b_{03}]$                              | $d_4^{-1} = h_0^4[b_{03}^2][h_2 h_0(1, 2)]$  |
| 3412 | 72,13;12 | $h_0^3[b_{02}^2][h_0 h_0(1, 3)b_{14}]$                          | $d_4^{-1} = [b_{02}^2][h_0 h_3 b_{02} b_{14} b_{04}]$                                    |
| 3413 | 72,13;14 | $h_1[h_1 h_0(1)][b_{02}^2][b_{03}^2]h_5$                        | $d_4^{-1} = h_1[h_1 h_0(1)][b_{02}^2][b_{04}^2]$   |
| 3414 | 72,13;16 | $h_1[b_{02}^2]x_{45}$   | $d_4 = h_0^2[b_{02}^2][h_2 b_{03}][h_0(1)b_{13}]h_5$                                     |
| 3415 | 72,13;18 | $h_0^2 h_2[b_{03}^2][h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$  | Permanent cycle  |
| 3416 | 72,13;20 | $h_0[b_{02}^2]^2[b_{04}^2]$                                     | $d_4 = h_0[b_{02}^2]^2[b_{03}^2]h_5 + h_2^2[b_{02}^2]x_{45}$                             |
| 3417 | 72,13;24 | $h_0[b_{03}^2]^3$   | $d_4 = h_0[b_{02}^2]h_4[b_{03}^2]^2 + h_0 h_2[b_{13}^2][b_{03}^2]^2$                     |
| 3418 | 72,14;10 | $h_0^6 h_3^2[h_0 h_0(1, 2)b_{03}]$                              | $d_4^{-1} = h_0^5[b_{03}^2][h_2 h_0(1, 2)]$  |
| 3419 | 72,14;12 | $h_0^4[b_{02}^2][h_0 h_0(1, 3)b_{14}]$                          | $d_4^{-1} = h_0[b_{02}^2][h_0 h_3 b_{02} b_{14} b_{04}]$                                 |
| 3420 | 72,14;16 | $h_1[b_{02}^2]^2[b_{03}^2]h_5$                                  | $d_4^{-1} = h_1[b_{02}^2]^2[b_{04}^2]$   |
| 3421 | 72,14;20 | $h_1[b_{02}^2]h_4[b_{03}^2]^2$                                  | $d_4^{-1} = h_1[b_{03}^2]^3$   |
| 3422 | 72,14;20 | $h_0^2[b_{02}^2]^2[b_{04}^2]$                                   | $d_4 = h_0^2[b_{02}^2]^2[b_{03}^2]h_5 + h_0^3[b_{02}^2]x_{45}$                           |
| 3423 | 72,14;24 | $h_0^2[b_{03}^2]^3$   | $d_4 = h_0^2[b_{02}^2]h_4[b_{03}^2]^2$   |
| 3424 | 72,15;10 | $h_0^7 h_3^2[h_0 h_0(1, 2)b_{03}]$                              | $d_4^{-1} = h_0^6[b_{03}^2][h_2 h_0(1, 2)]$  |
| 3425 | 72,15;12 | $h_0^5[b_{02}^2][h_0 h_0(1, 3)b_{14}]$                          | $d_4^{-1} = h_0^2[b_{02}^2][h_0 h_3 b_{02} b_{14} b_{04}]$                               |
| 3426 | 72,15;16 | $[h_2 b_{03}][h_0(1)b_{13}][b_{13}^2]^2$                        | Permanent cycle  |
| 3427 | 72,15;20 | $h_0^3[b_{02}^2]^2[b_{04}^2]$                                   | $d_4 = h_0^3[b_{02}^2]^2[b_{03}^2]h_5$   |
| 3428 | 72,15;24 | $h_0^3[b_{03}^2]^3$   | $d_4 = h_0^3[b_{02}^2]h_4[b_{03}^2]^2$   |
| 3429 | 72,16;10 | $h_0^8 h_3^2[h_0 h_0(1, 2)b_{03}]$                              | $d_4^{-1} = h_0^7[b_{03}^2][h_2 h_0(1, 2)]$  |
| 3430 | 72,16;12 | $h_0^6[b_{02}^2][h_0 h_0(1, 3)b_{14}]$                          | $d_4^{-1} = h_0^3[b_{02}^2][h_0 h_3 b_{02} b_{14} b_{04}]$                               |
| 3431 | 72,16;16 | $h_0[h_2 b_{03}][h_0(1)b_{13}][b_{13}^2]^2$                     | $d_4^{-1} = [h_2 b_{03}][h_0(1)^2][b_{13}^2][b_{03}^2]$                                  |
| 3432 | 72,16;20 | $h_0^4[b_{02}^2]^2[b_{04}^2]$                                   | $d_4 = h_0^4[b_{02}^2]^2[b_{03}^2]h_5$   |
| 3433 | 72,16;20 | $[b_{02}^2][b_{13}^2]^2[b_{03}^2]$                              | $d_4 = h_0[h_0(1)^2][h_0(1)b_{13}][b_{13}^2]^2$  |
| 3434 | 72,16;24 | $h_0^4[b_{03}^2]^3$   | $d_4 = h_0^4[b_{02}^2]h_4[b_{03}^2]^2$   |
| 3435 | 72,17;10 | $h_0^9 h_3^2[h_0 h_0(1, 2)b_{03}]$                              | $d_4^{-1} = h_0^8[b_{03}^2][h_2 h_0(1, 2)]$  |
| 3436 | 72,17;12 | $h_0^7[b_{02}^2][h_0 h_0(1, 3)b_{14}]$                          | $d_4^{-1} = h_0^4[b_{02}^2][h_0 h_3 b_{02} b_{14} b_{04}]$                               |
| 3437 | 72,17;16 | $h_0^2[h_2 b_{03}][h_0(1)b_{13}][b_{13}^2]^2$                   | $d_4^{-1} = h_0[h_2 b_{03}][h_0(1)^2][b_{13}^2][b_{03}^2]$                               |
| 3438 | 72,17;16 | $[b_{02}^2]^3[h_0(1)b_{13}]h_5$                                 | $d_8^{-1} = [b_{02}^2][h_0(1)b_{13}][b_{03}^2]^2$  |
| 3439 | 72,17;20 | $h_0^5[b_{02}^2]^2[b_{04}^2]$                                   | $d_4 = h_0^5[b_{02}^2]^2[b_{03}^2]h_5$   |
| 3440 | 72,17;20 | $h_0[b_{02}^2][b_{13}^2][b_{03}^2]$                             | $d_4 = h_0^2[h_0(1)^2][h_0(1)b_{13}][b_{13}^2]^2$  |
| 3441 | 72,17;24 | $h_0^5[b_{03}^2]^3$   | $d_4 = h_0^5[b_{02}^2]h_4[b_{03}^2]^2$   |
| 3442 | 72,18;10 | $h_0^{10} h_3^2[h_0 h_0(1, 2)b_{03}]$                           | $d_4^{-1} = h_0^9[b_{03}^2][h_2 h_0(1, 2)]$  |
| 3443 | 72,18;12 | $h_0^8[b_{02}^2][h_0 h_0(1, 3)b_{14}]$                          | $d_4^{-1} = h_0^5[b_{02}^2][h_0 h_3 b_{02} b_{14} b_{04}]$                               |
| 3444 | 72,18;16 | $h_0[b_{02}^2]^3[h_0(1)b_{13}]h_5$                              | $d_6^{-1} = [b_{02}^2]^2[h_0 h_0(1)b_{03}^2 b_{14} + h_0 h_0(1)b_{13} b_{03} b_{04}]$    |
| 3445 | 72,18;20 | $h_0^2[b_{02}^2][b_{13}^2][b_{03}^2]$                           | Permanent cycle  |
| 3446 | 72,18;20 | $h_0^6[b_{02}^2]^2[b_{04}^2]$                                   | $d_4 = h_0^6[b_{02}^2]^2[b_{03}^2]h_5$   |
| 3447 | 72,18;22 | $[b_{02}^2]^2 x_{38}$   | $d_6 = h_1^2[b_{02}^2]^3[h_0(1)^2]h_5$   |
| 3448 | 72,18;24 | $h_1^2[b_{02}^2][h_0(1)^2][b_{03}^2]^2$                         | Permanent cycle  |
| 3449 | 72,18;24 | $h_0^6[b_{03}^2]^3$   | $d_4 = h_0^6[b_{02}^2]h_4[b_{03}^2]^2$   |
| 3450 | 72,19;10 | $h_0^{11} h_3^2[h_0 h_0(1, 2)b_{03}]$                           | $d_4^{-1} = h_0^{10}[b_{03}^2][h_2 h_0(1, 2)]$   |
| 3451 | 72,19;12 | $h_0^9[b_{02}^2][h_0 h_0(1, 3)b_{14}]$                          | $d_4^{-1} = h_0^6[b_{02}^2][h_0 h_3 b_{02} b_{14} b_{04}]$                               |
| 3452 | 72,19;16 | $h_0^2[b_{02}^2]^3[h_0(1)b_{13}]h_5$                            | $d_6^{-1} = h_0[b_{02}^2]^2[h_0 h_0(1)b_{03}^2 b_{14} + h_0 h_0(1)b_{13} b_{03} b_{04}]$ |

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| 3453 | 72,19;20 | $h_0^7[b_{02}^2]^2[b_{04}^2]$                          | $d_4 = h_0^7[b_{02}^2]^2[b_{03}^2]h_5$  |
| 3454 | 72,19;22 | $h_0[b_{02}^2]^2x_{38}$                                | Permanent cycle   |
| 3455 | 72,19;24 | $h_0^7[b_{03}^2]^3$                                    | $d_4 = h_0^7[b_{02}^2]h_4[b_{03}^2]^2$  |
| 3456 | 72,19;24 | $[b_{02}^2]^2[h_2b_{03}][h_0(1)b_{13}][b_{03}^2]$      | $d_4 = h_0[b_{02}^2]^2[h_2b_{03}][b_{13}^2]^2$  |
| 3457 | 72,19;26 | $[h_1h_0(1)][b_{02}^2]^2[b_{03}^2]^2$                  | $d_8 = [h_1h_0(1)][b_{02}^2]^4h_5$  |
| 3458 | 72,20;10 | $h_0^{12}h_3^2[h_0h_0(1,2)b_{03}]$                     | $d_4^{-1} = h_0^{11}[b_{03}^2][h_2h_0(1,2)]$  |
| 3459 | 72,20;12 | $h_0^{10}[b_{02}^2][h_0h_0(1,3)b_{14}]$                | $d_4^{-1} = h_0^7[b_{02}^2][h_0h_3b_{02}b_{14}b_{04}]$                                |
| 3460 | 72,20;16 | $h_0^3[b_{02}^2]^3[h_0(1)b_{13}]h_5$                   | $d_6^{-1} = h_0^2[b_{02}^2]^2[h_0h_0(1)b_{03}^2b_{14} + h_0h_0(1)b_{13}b_{03}b_{04}]$ |
| 3461 | 72,20;20 | $h_0^8[b_{02}^2]^2[b_{04}^2]$                          | $d_4 = h_0^8[b_{02}^2]^2[b_{03}^2]h_5$  |
| 3462 | 72,20;22 | $h_0^2[b_{02}^2]^2x_{38}$                              | Permanent cycle   |
| 3463 | 72,20;24 | $h_0^8[b_{03}^2]^3$                                    | $d_4 = h_0^8[b_{02}^2]h_4[b_{03}^2]^2$  |
| 3464 | 72,20;24 | $h_0[b_{02}^2]^2[h_2b_{03}][h_0(1)b_{13}][b_{03}^2]$   | $d_4 = h_0^2[b_{02}^2]^2[h_2b_{03}][b_{13}^2]^2$                                      |
| 3465 | 72,20;28 | $[b_{02}^2]^3[b_{03}^2]^2$                             | $d_4 = h_0^6[b_{02}^2][h_2b_{03}][b_{03}^2]^2$  |
| 3466 | 72,21;10 | $h_0^{13}h_3^2[h_0h_0(1,2)b_{03}]$                     | $d_4^{-1} = h_0^{12}[b_{03}^2][h_2h_0(1,2)]$  |
| 3467 | 72,21;12 | $h_0^{11}[b_{02}^2][h_0h_0(1,3)b_{14}]$                | $d_4^{-1} = h_0^8[b_{02}^2][h_0h_3b_{02}b_{14}b_{04}]$                                |
| 3468 | 72,21;18 | $h_1[h_1h_0(1)][b_{02}^2]^4h_5$                        | $d_8^{-1} = h_1[h_1h_0(1)][b_{02}^2]^2[b_{03}^2]^2$                                   |
| 3469 | 72,21;20 | $h_0^9[b_{02}^2]^2[b_{04}^2]$                          | $d_4 = h_0^9[b_{02}^2]^2[b_{03}^2]h_5$  |
| 3470 | 72,21;22 | $h_0^3[b_{02}^2]^2x_{38}$                              | Permanent cycle   |
| 3471 | 72,21;24 | $h_0^2[b_{02}^2]^2[h_2b_{03}][h_0(1)b_{13}][b_{03}^2]$ | Permanent cycle   |
| 3472 | 72,21;24 | $h_0^9[b_{03}^2]^3$                                    | $d_4 = h_0^9[b_{02}^2]h_4[b_{03}^2]^2$  |
| 3473 | 72,21;28 | $h_0[b_{02}^2]^3[b_{03}^2]^2$                          | $d_4 = h_0^7[b_{02}^2][h_2b_{03}][b_{03}^2]^2$  |
| 3474 | 72,22;10 | $h_0^{14}h_3^2[h_0h_0(1,2)b_{03}]$                     | $d_4^{-1} = h_0^{13}[b_{03}^2][h_2h_0(1,2)]$  |
| 3475 | 72,22;12 | $h_0^{12}[b_{02}^2][h_0h_0(1,3)b_{14}]$                | $d_4^{-1} = h_0^9[b_{02}^2][h_0h_3b_{02}b_{14}b_{04}]$                                |
| 3476 | 72,22;20 | $h_1[b_{02}^2]^5h_5$                                   | $d_8^{-1} = h_1[b_{02}^2]^3[b_{03}^2]^2$  |
| 3477 | 72,22;20 | $h_0^{10}[b_{02}^2]^2[b_{04}^2]$                       | $d_4 = h_0^{10}[b_{02}^2]^2[b_{03}^2]h_5$   |
| 3478 | 72,22;24 | $h_0^{10}[b_{03}^2]^3$                                 | $d_4 = h_0^{10}[b_{02}^2]h_4[b_{03}^2]^2$   |
| 3479 | 72,22;24 | $h_1[b_{02}^2]^4h_4[b_{03}^2]$                         | $d_4 = h_1[b_{02}^2]^5h_4^2$  |
| 3480 | 72,22;28 | $h_0^2[b_{02}^2]^3[b_{03}^2]^2$                        | $d_4 = h_0^8[b_{02}^2][h_2b_{03}][b_{03}^2]^2$  |
| 3481 | 72,23;10 | $h_0^{15}h_3^2[h_0h_0(1,2)b_{03}]$                     | $d_4^{-1} = h_0^{14}[b_{03}^2][h_2h_0(1,2)]$  |
| 3482 | 72,23;12 | $h_0^{13}[b_{02}^2][h_0h_0(1,3)b_{14}]$                | $d_4^{-1} = h_0^{10}[b_{02}^2][h_0h_3b_{02}b_{14}b_{04}]$                             |
| 3483 | 72,23;20 | $h_0^{11}[b_{02}^2]^2[b_{04}^2]$                       | $d_4 = h_0^{11}[b_{02}^2]^2[b_{03}^2]h_5$   |
| 3484 | 72,23;24 | $h_0^{11}[b_{03}^2]^3$                                 | $d_4 = h_0^{11}[b_{02}^2]h_4[b_{03}^2]^2$   |
| 3485 | 72,23;28 | $h_0^3[b_{02}^2]^3[b_{03}^2]^2$                        | $d_4 = h_0^9[b_{02}^2][h_2b_{03}][b_{03}^2]^2$  |
| 3486 | 72,24;10 | $h_0^{16}h_3^2[h_0h_0(1,2)b_{03}]$                     | $d_4^{-1} = h_0^{15}[b_{03}^2][h_2h_0(1,2)]$  |
| 3487 | 72,24;12 | $h_0^{14}[b_{02}^2][h_0h_0(1,3)b_{14}]$                | $d_4^{-1} = h_0^{11}[b_{02}^2][h_0h_3b_{02}b_{14}b_{04}]$                             |
| 3488 | 72,24;20 | $h_1^2[b_{02}^2]^5h_4^2$                               | $d_4^{-1} = h_1^2[b_{02}^2]^4h_4[b_{03}^2]$   |
| 3489 | 72,24;20 | $h_0^{12}[b_{02}^2]^2[b_{04}^2]$                       | $d_4 = h_0^{12}[b_{02}^2]^2[b_{03}^2]h_5$   |
| 3490 | 72,24;24 | $[b_{02}^2]^4[b_{13}^2]^2$                             | Permanent cycle   |
| 3491 | 72,24;24 | $h_0^{12}[b_{03}^2]^3$                                 | $d_4 = h_0^{12}[b_{02}^2]h_4[b_{03}^2]^2$   |
| 3492 | 72,24;28 | $h_0^4[b_{02}^2]^3[b_{03}^2]^2$                        | $d_4 = h_0^{10}[b_{02}^2][h_2b_{03}][b_{03}^2]^2$                                     |
| 3493 | 72,25;10 | $h_0^{17}h_3^2[h_0h_0(1,2)b_{03}]$                     | $d_4^{-1} = h_0^{16}[b_{03}^2][h_2h_0(1,2)]$  |
| 3494 | 72,25;12 | $h_0^{15}[b_{02}^2][h_0h_0(1,3)b_{14}]$                | $d_4^{-1} = h_0^{12}[b_{02}^2][h_0h_3b_{02}b_{14}b_{04}]$                             |
| 3495 | 72,25;20 | $h_0^{13}[b_{02}^2]^2[b_{04}^2]$                       | $d_4 = h_0^{13}[b_{02}^2]^2[b_{03}^2]h_5$   |
| 3496 | 72,25;24 | $h_0[b_{02}^2]^4[b_{13}^2]^2$                          | $d_4^{-1} = [b_{02}^2]^4[h_0(1)b_{13}][b_{03}^2]$                                     |
| 3497 | 72,25;24 | $h_0^{13}[b_{03}^2]^3$                                 | $d_4 = h_0^{13}[b_{02}^2]h_4[b_{03}^2]^2$   |
| 3498 | 72,25;28 | $h_0^5[b_{02}^2]^3[b_{03}^2]^2$                        | $d_4 = h_0^{11}[b_{02}^2][h_2b_{03}][b_{03}^2]^2$                                     |
| 3499 | 72,26;10 | $h_0^{18}h_3^2[h_0h_0(1,2)b_{03}]$                     | $d_4^{-1} = h_0^{17}[b_{03}^2][h_2h_0(1,2)]$  |
| 3500 | 72,26;12 | $h_0^{16}[b_{02}^2][h_0h_0(1,3)b_{14}]$                | $d_4^{-1} = h_0^{13}[b_{02}^2][h_0h_3b_{02}b_{14}b_{04}]$                             |
| 3501 | 72,26;20 | $h_0^{14}[b_{02}^2]^2[b_{04}^2]$                       | $d_4 = h_0^{14}[b_{02}^2]^2[b_{03}^2]h_5$   |
| 3502 | 72,26;24 | $h_0^2[b_{02}^2]^4[b_{13}^2]^2$                        | $d_4^{-1} = h_0[b_{02}^2]^4[h_0(1)b_{13}][b_{03}^2]$                                  |
| 3503 | 72,26;24 | $h_0^{14}[b_{03}^2]^3$                                 | $d_4 = h_0^{14}[b_{02}^2]h_4[b_{03}^2]^2$   |
| 3504 | 72,26;28 | $h_1^2[b_{02}^2]^4[h_0(1)^2][b_{03}^2]$                | Permanent cycle   |

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| 3505 | 72,26;28 | $h_0^6[b_{02}^2]^3[b_{03}^2]^2$                            | $d_4 = h_0^{12}[b_{02}^2][h_2b_{03}][b_{03}^2]^2$                      |
| 3506 | 72,27;10 | $h_0^{19}h_3^2[h_0h_0(1,2)b_{03}]$                         | $d_4^{-1} = h_0^{18}[b_{03}^2][h_2h_0(1,2)]$                           |
| 3507 | 72,27;12 | $h_0^{17}[b_{02}^2][h_0h_0(1,3)b_{14}]$                    | $d_4^{-1} = h_0^{14}[b_{02}^2][h_0h_3b_{02}b_{14}b_{04}]$              |
| 3508 | 72,27;20 | $h_0^{15}[b_{02}^2]^2[b_{04}^2]$                           | $d_4 = h_0^{15}[b_{02}^2]^2[b_{03}^2]h_5$                              |
| 3509 | 72,27;24 | $h_0^{15}[b_{03}^2]^3$                                     | $d_4 = h_0^{15}[b_{02}^2]h_4[b_{03}^2]^2$                              |
| 3510 | 72,27;28 | $[b_{02}^2]^5[h_2b_{03}][h_0(1)b_{13}]$                    | Permanent cycle  |
| 3511 | 72,27;28 | $h_0^7[b_{02}^2]^3[b_{03}^2]^2$                            | $d_4 = h_0^{13}[b_{02}^2][h_2b_{03}][b_{03}^2]^2$                      |
| 3512 | 72,27;30 | $[h_1h_0(1)][b_{02}^2]^5[b_{03}^2]$                        | $d_4 = h_1[b_{02}^2]^5[h_4h_0(1)b_{02}^2 + h_0^3b_{02}b_{14}]$         |
| 3513 | 72,28;10 | $h_0^{20}h_3^2[h_0h_0(1,2)b_{03}]$                         | $d_4^{-1} = h_0^{19}[b_{03}^2][h_2h_0(1,2)]$                           |
| 3514 | 72,28;12 | $h_0^{18}[b_{02}^2][h_0h_0(1,3)b_{14}]$                    | $d_4^{-1} = h_0^{15}[b_{02}^2][h_0h_3b_{02}b_{14}b_{04}]$              |
| 3515 | 72,28;20 | $h_0^{16}[b_{02}^2]^2[b_{04}^2]$                           | $d_4 = h_0^{16}[b_{02}^2]^2[b_{03}^2]h_5$                              |
| 3516 | 72,28;24 | $h_0^{16}[b_{03}^2]^3$                                     | $d_4 = h_0^{16}[b_{02}^2]h_4[b_{03}^2]^2$                              |
| 3517 | 72,28;28 | $h_0[b_{02}^2]^5[h_2b_{03}][h_0(1)b_{13}]$                 | Permanent cycle  |
| 3518 | 72,28;28 | $h_0^8[b_{02}^2]^3[b_{03}^2]^2$                            | $d_4 = h_0^{14}[b_{02}^2][h_2b_{03}][b_{03}^2]^2$                      |
| 3519 | 72,28;32 | $[b_{02}^2]^6[b_{03}^2]$                                   | $d_4 = [b_{02}^2]^7h_4 + h_0[b_{02}^2]^5[h_0(1)^2][h_0(1)b_{13}]$      |
| 3520 | 72,29;10 | $h_0^{21}h_3^2[h_0h_0(1,2)b_{03}]$                         | $d_4^{-1} = h_0^{20}[b_{03}^2][h_2h_0(1,2)]$                           |
| 3521 | 72,29;12 | $h_0^{19}[b_{02}^2][h_0h_0(1,3)b_{14}]$                    | $d_4^{-1} = h_0^{16}[b_{02}^2][h_0h_3b_{02}b_{14}b_{04}]$              |
| 3522 | 72,29;20 | $h_0^{17}[b_{02}^2]^2[b_{04}^2]$                           | $d_4 = h_0^{17}[b_{02}^2]^2[b_{03}^2]h_5$                              |
| 3523 | 72,29;24 | $h_0^{17}[b_{03}^2]^3$                                     | $d_4 = h_0^{17}[b_{02}^2]h_4[b_{03}^2]^2$                              |
| 3524 | 72,29;26 | $h_1^2[b_{02}^2]^5[h_4h_0(1)b_{02}^2 + h_0^3b_{02}b_{14}]$ | $d_4^{-1} = h_1[h_1h_0(1)][b_{02}^2]^5[b_{03}^2]$                      |
| 3525 | 72,29;28 | $h_0^2[b_{02}^2]^5[h_2b_{03}][h_0(1)b_{13}]$               | Permanent cycle  |
| 3526 | 72,29;28 | $h_0^9[b_{02}^2]^3[b_{03}^2]^2$                            | $d_4 = h_0^{15}[b_{02}^2][h_2b_{03}][b_{03}^2]^2$                      |
| 3527 | 72,29;32 | $h_0[b_{02}^2]^6[b_{03}^2]$                                | $d_4 = h_0[b_{02}^2]^7h_4 + h_0^2[b_{02}^2]^5[h_0(1)^2][h_0(1)b_{13}]$ |
| 3528 | 72,30;10 | $h_0^{22}h_3^2[h_0h_0(1,2)b_{03}]$                         | $d_4^{-1} = h_0^{21}[b_{03}^2][h_2h_0(1,2)]$                           |
| 3529 | 72,30;12 | $h_0^{20}[b_{02}^2][h_0h_0(1,3)b_{14}]$                    | $d_4^{-1} = h_0^{17}[b_{02}^2][h_0h_3b_{02}b_{14}b_{04}]$              |
| 3530 | 72,30;20 | $h_0^{18}[b_{02}^2]^2[b_{04}^2]$                           | $d_4 = h_0^{18}[b_{02}^2]^2[b_{03}^2]h_5$                              |
| 3531 | 72,30;24 | $h_0^{18}[b_{03}^2]^3$                                     | $d_4 = h_0^{18}[b_{02}^2]h_4[b_{03}^2]^2$                              |
| 3532 | 72,30;28 | $h_1[b_{02}^2]^7h_4$                                       | $d_4^{-1} = h_1[b_{02}^2]^6[b_{03}^2]$                                 |
| 3533 | 72,30;28 | $h_0^{10}[b_{02}^2]^3[b_{03}^2]^2$                         | $d_4 = h_0^{16}[b_{02}^2][h_2b_{03}][b_{03}^2]^2$                      |
| 3534 | 72,30;32 | $h_0^2[b_{02}^2]^6[b_{03}^2]$                              | $d_4 = h_0^2[b_{02}^2]^7h_4$   |
| 3535 | 72,31;10 | $h_0^{23}h_3^2[h_0h_0(1,2)b_{03}]$                         | $d_4^{-1} = h_0^{22}[b_{03}^2][h_2h_0(1,2)]$                           |
| 3536 | 72,31;12 | $h_0^{21}[b_{02}^2][h_0h_0(1,3)b_{14}]$                    | $d_4^{-1} = h_0^{18}[b_{02}^2][h_0h_3b_{02}b_{14}b_{04}]$              |
| 3537 | 72,31;20 | $h_0^{19}[b_{02}^2]^2[b_{04}^2]$                           | $d_4 = h_0^{19}[b_{02}^2]^2[b_{03}^2]h_5$                              |
| 3538 | 72,31;24 | $h_0^{19}[b_{03}^2]^3$                                     | $d_4 = h_0^{19}[b_{02}^2]h_4[b_{03}^2]^2$                              |
| 3539 | 72,31;28 | $h_0^{11}[b_{02}^2]^3[b_{03}^2]^2$                         | $d_4 = h_0^{17}[b_{02}^2][h_2b_{03}][b_{03}^2]^2$                      |
| 3540 | 72,31;32 | $h_0^3[b_{02}^2]^6[b_{03}^2]$                              | $d_4 = h_0^3[b_{02}^2]^7h_4$   |
| 3541 | 72,32;10 | $h_0^{24}h_3^2[h_0h_0(1,2)b_{03}]$                         | $d_4^{-1} = h_0^{23}[b_{03}^2][h_2h_0(1,2)]$                           |
| 3542 | 72,32;12 | $h_0^{22}[b_{02}^2][h_0h_0(1,3)b_{14}]$                    | $d_4^{-1} = h_0^{19}[b_{02}^2][h_0h_3b_{02}b_{14}b_{04}]$              |
| 3543 | 72,32;20 | $h_0^{20}[b_{02}^2]^2[b_{04}^2]$                           | $d_4 = h_0^{20}[b_{02}^2]^2[b_{03}^2]h_5$                              |
| 3544 | 72,32;24 | $h_0^{20}[b_{03}^2]^3$                                     | $d_4 = h_0^{20}[b_{02}^2]h_4[b_{03}^2]^2$                              |
| 3545 | 72,32;28 | $h_0^{12}[b_{02}^2]^3[b_{03}^2]^2$                         | $d_4 = h_0^{18}[b_{02}^2][h_2b_{03}][b_{03}^2]^2$                      |
| 3546 | 72,32;32 | $h_0^4[b_{02}^2]^6[b_{03}^2]$                              | $d_4 = h_0^4[b_{02}^2]^7h_4$   |
| 3547 | 72,33;10 | $h_0^{25}h_3^2[h_0h_0(1,2)b_{03}]$                         | $d_4^{-1} = h_0^{24}[b_{03}^2][h_2h_0(1,2)]$                           |
| 3548 | 72,33;12 | $h_0^{23}[b_{02}^2][h_0h_0(1,3)b_{14}]$                    | $d_4^{-1} = h_0^{20}[b_{02}^2][h_0h_3b_{02}b_{14}b_{04}]$              |
| 3549 | 72,33;20 | $h_0^{21}[b_{02}^2]^2[b_{04}^2]$                           | $d_4 = h_0^{21}[b_{02}^2]^2[b_{03}^2]h_5$                              |
| 3550 | 72,33;24 | $h_0^{21}[b_{03}^2]^3$                                     | $d_4 = h_0^{21}[b_{02}^2]h_4[b_{03}^2]^2$                              |
| 3551 | 72,33;28 | $h_0^{13}[b_{02}^2]^3[b_{03}^2]^2$                         | $d_4 = h_0^{19}[b_{02}^2][h_2b_{03}][b_{03}^2]^2$                      |
| 3552 | 72,33;32 | $h_0^5[b_{02}^2]^6[b_{03}^2]$                              | $d_4 = h_0^5[b_{02}^2]^7h_4$   |
| 3553 | 72,34;10 | $h_0^{26}h_3^2[h_0h_0(1,2)b_{03}]$                         | $d_4^{-1} = h_0^{25}[b_{03}^2][h_2h_0(1,2)]$                           |
| 3554 | 72,34;12 | $h_0^{24}[b_{02}^2][h_0h_0(1,3)b_{14}]$                    | $d_4^{-1} = h_0^{21}[b_{02}^2][h_0h_3b_{02}b_{14}b_{04}]$              |
| 3555 | 72,34;20 | $h_0^{22}[b_{02}^2]^2[b_{04}^2]$                           | $d_4 = h_0^{22}[b_{02}^2]^2[b_{03}^2]h_5$                              |
| 3556 | 72,34;24 | $h_0^{22}[b_{03}^2]^3$                                     | $d_4 = h_0^{22}[b_{02}^2]h_4[b_{03}^2]^2$                              |

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| 3557 | 72,34;28 | $h_0^{14}[b_{02}^2]^3[b_{03}^2]^2$                      | $d_4 = h_0^{20}[b_{02}^2][h_2b_{03}][b_{03}^2]^2$                                    |
| 3558 | 72,34;32 | $h_1^2[b_{02}^2]^7[h_0(1)^2]$                           | Permanent cycle  |
| 3559 | 72,34;32 | $h_0^6[b_{02}^2]^6[b_{03}^2]$                           | $d_4 = h_0^6[b_{02}^2]^7h_4$   |
| 3560 | 72,35;10 | $h_0^{27}h_3^2[h_0h_0(1,2)b_{03}]$                      | $d_4^{-1} = h_0^{26}[b_{03}^2][h_2h_0(1,2)]$   |
| 3561 | 72,35;12 | $h_0^{25}[b_{02}^2][h_0h_0(1,3)b_{14}]$                 | $d_4^{-1} = h_0^{22}[b_{02}^2][h_0h_3b_{02}b_{14}b_{04}]$                            |
| 3562 | 72,35;20 | $h_0^{23}[b_{02}^2]^2[b_{04}^2]$                        | $d_4 = h_0^{23}[b_{02}^2]^2[b_{03}^2]h_5$  |
| 3563 | 72,35;24 | $h_0^{23}[b_{03}^2]^3$                                  | $d_4 = h_0^{23}[b_{02}^2]h_4[b_{03}^2]^2$  |
| 3564 | 72,35;28 | $h_0^{15}[b_{02}^2]^3[b_{03}^2]^2$                      | $d_4 = h_0^{21}[b_{02}^2][h_2b_{03}][b_{03}^2]^2$                                    |
| 3565 | 72,35;32 | $h_0^7[b_{02}^2]^6[b_{03}^2]$                           | $d_4 = h_0^7[b_{02}^2]^7h_4$   |
| 3566 | 72,35;34 | $[h_1h_0(1)][b_{02}^2]^8$                               | Permanent cycle  |
| 3567 | 72,36;10 | $h_0^{28}h_3^2[h_0h_0(1,2)b_{03}]$                      | $d_4^{-1} = h_0^{27}[b_{03}^2][h_2h_0(1,2)]$   |
| 3568 | 72,36;12 | $h_0^{26}[b_{02}^2][h_0h_0(1,3)b_{14}]$                 | $d_4^{-1} = h_0^{23}[b_{02}^2][h_0h_3b_{02}b_{14}b_{04}]$                            |
| 3569 | 72,36;20 | $h_0^{24}[b_{02}^2]^2[b_{04}^2]$                        | $d_4 = h_0^{24}[b_{02}^2]^2[b_{03}^2]h_5$  |
| 3570 | 72,36;24 | $h_0^{24}[b_{03}^2]^3$                                  | $d_4 = h_0^{24}[b_{02}^2]h_4[b_{03}^2]^2$  |
| 3571 | 72,36;28 | $h_0^{16}[b_{02}^2]^3[b_{03}^2]^2$                      | $d_4 = h_0^{22}[b_{02}^2][h_2b_{03}][b_{03}^2]^2$                                    |
| 3572 | 72,36;32 | $h_0^8[b_{02}^2]^6[b_{03}^2]$                           | $d_4 = h_0^8[b_{02}^2]^7h_4$   |
| 3573 | 72,36;36 | $[b_{02}^2]^9$  | $d_4 = h_0^6[b_{02}^2]^7[h_2b_{03}]$   |
| 3574 | 72,37;10 | $h_0^{29}h_3^2[h_0h_0(1,2)b_{03}]$                      | $d_4^{-1} = h_0^{28}[b_{03}^2][h_2h_0(1,2)]$   |
| 3575 | 72,37;12 | $h_0^{27}[b_{02}^2][h_0h_0(1,3)b_{14}]$                 | $d_4^{-1} = h_0^{24}[b_{02}^2][h_0h_3b_{02}b_{14}b_{04}]$                            |
| 3576 | 72,37;20 | $h_0^{25}[b_{02}^2]^2[b_{04}^2]$                        | $d_4 = h_0^{25}[b_{02}^2]^2[b_{03}^2]h_5$  |
| 3577 | 72,37;24 | $h_0^{25}[b_{03}^2]^3$                                  | $d_4 = h_0^{25}[b_{02}^2]h_4[b_{03}^2]^2$  |
| 3578 | 72,37;28 | $h_0^{17}[b_{02}^2]^3[b_{03}^2]^2$                      | $d_4 = h_0^{23}[b_{02}^2][h_2b_{03}][b_{03}^2]^2$                                    |
| 3579 | 72,37;32 | $h_0^9[b_{02}^2]^6[b_{03}^2]$                           | $d_4 = h_0^9[b_{02}^2]^7h_4$   |
| 3580 | 72,37;36 | $h_0[b_{02}^2]^9$                                       | $d_4 = h_0^7[b_{02}^2]^7[h_2b_{03}]$   |
| 3581 | 73,7;4   | $h_2[b_{02}^2]h_5^2$                                    | Permanent cycle  |
| 3582 | 73,7;4   | $h_1^2[b_{02}^2]h_6$                                    | Permanent cycle  |
| 3583 | 73,7;8   | $h_2^2h_4[b_{14}^2]$                                    | $d_4^{-1} = h_2h_4[b_{04}^2]$  |
| 3584 | 73,7;10  | $h_4[h_0h_0(1,2)b_{03}]$                                | Permanent cycle  |
| 3585 | 73,7;12  | $h_1^2h_4[b_{04}^2]$                                    | $d_8 = h_1^2[b_{02}^2]h_5^2$   |
| 3586 | 73,8;4   | $h_0h_2[b_{02}^2]h_5^2$                                 | Permanent cycle  |
| 3587 | 73,8;10  | $h_0h_4[h_0h_0(1,2)b_{03}]$                             | Permanent cycle  |
| 3588 | 73,8;14  | $[b_{03}^2][h_2h_0(1,2)]$                               | $d_4 = h_2^2[h_0(1,2)b_{13}^2 + h_1h_3h_0(1,2)b_{03}] + h_0h_3^2[h_0h_0(1,2)b_{03}]$ |
| 3589 | 73,8;16  | $[h_0(1)b_{13}][b_{04}^2]$                              | $d_4 = [h_0(1)b_{13}][b_{03}^2]h_5 + h_0[b_{13}^2][b_{14}^2]$                        |
| 3590 | 73,9;4   | $h_0^2h_2[b_{02}^2]h_5^2$                               | $d_8^{-1} = h_0^2h_2h_4[b_{04}^2]$   |
| 3591 | 73,9;6   | $h_2^2h_5[h_1(1)b_{13}^2 + h_1^2b_{24}b_{03}]$          | $d_4^{-1} = h_2^2[h_1(1)b_{14}^2 + h_3^2b_{14}b_{04}]$                               |
| 3592 | 73,9;10  | $h_0^2h_4[h_0h_0(1,2)b_{03}]$                           | Permanent cycle  |
| 3593 | 73,9;12  | $h_2[h_2b_{03}][b_{03}^2]h_5 + h_1[b_{13}^2][b_{14}^2]$ | $d_4^{-1} = h_2[h_2b_{03}][b_{04}^2]$  |
| 3594 | 73,9;12  | $h_1[b_{13}^2][b_{14}^2]$                               | $d_4 = h_1[b_{13}^2]^2h_5$   |
| 3595 | 73,9;14  | $h_0[b_{03}^2][h_2h_0(1,2)]$                            | $d_4 = h_0^2h_3^2[h_0h_0(1,2)b_{03}]$  |
| 3596 | 73,9;16  | $h_0[h_0(1)b_{13}][b_{04}^2]$                           | $d_4 = h_0[h_0(1)b_{13}][b_{03}^2]h_5 + h_0^2[b_{13}^2][b_{14}^2]$                   |
| 3597 | 73,10;12 | $h_0h_2[h_2b_{03}][b_{03}^2]h_5$                        | $d_4^{-1} = h_0h_2[h_2b_{03}][b_{04}^2]$   |
| 3598 | 73,10;14 | $h_0^2[b_{03}^2][h_2h_0(1,2)]$                          | $d_4 = h_0^3h_3^2[h_0h_0(1,2)b_{03}]$  |
| 3599 | 73,10;16 | $h_0^2[h_0(1)b_{13}][b_{04}^2]$                         | $d_4 = h_0^2[h_0(1)b_{13}][b_{03}^2]h_5$   |
| 3600 | 73,11;12 | $h_2^2[b_{13}^2][h_2h_1(1)b_{04}]$                      | $d_4^{-1} = h_2[b_{03}^2][h_2h_1(1)b_{04}]$  |
| 3601 | 73,11;14 | $h_0^3[b_{03}^2][h_2h_0(1,2)]$                          | $d_4 = h_0^4h_3^2[h_0h_0(1,2)b_{03}]$  |
| 3602 | 73,11;16 | $h_0^3[h_0(1)b_{13}][b_{04}^2]$                         | $d_4 = h_0^3[h_0(1)b_{13}][b_{03}^2]h_5$   |
| 3603 | 73,11;18 | $[b_{03}^2][h_1b_{13}b_{03}b_{14} + h_1b_{13}^2b_{04}]$ | $d_6 = [b_{13}^2]^2[h_1(1)^2] + h_0^2[b_{02}^2][h_0h_0(1,3)b_{14}]$                  |
| 3604 | 73,12;14 | $h_0^4[b_{03}^2][h_2h_0(1,2)]$                          | $d_4 = h_0^5h_3^2[h_0h_0(1,2)b_{03}]$  |
| 3605 | 73,12;16 | $[b_{02}^2][h_0h_3b_{02}b_{14}b_{04}]$                  | $d_4 = h_0^3[b_{02}^2][h_0h_0(1,3)b_{14}]$   |
| 3606 | 73,12;18 | $h_1[h_1h_0(1)][b_{02}^2][b_{04}^2]$                    | $d_4 = h_1[h_1h_0(1)][b_{02}^2][b_{03}^2]h_5$  |
| 3607 | 73,13;12 | $[b_{02}^2][h_0(1)^2][b_{13}^2]h_5$                     | $d_4^{-1} = [b_{02}^2][h_0(1)^2][b_{14}^2]$  |

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| 3608 | 73,13;14 | $h_0^5[b_{03}^2][h_2h_0(1,2)]$   | $d_4 = h_0^6h_3^2[h_0h_0(1,2)b_{03}]$                      |
| 3609 | 73,13;16 | $h_0[b_{02}^2][h_0h_3b_{02}b_{14}b_{04}]$                                  | $d_4 = h_0^4[b_{02}^2][h_0h_0(1,3)b_{14}]$                 |
| 3610 | 73,13;20 | $h_1[b_{02}^2]^2[b_{04}^2]$  | $d_4 = h_1[b_{02}^2]^2[b_{03}^2]h_5$                       |
| 3611 | 73,13;24 | $h_1[b_{03}^2]^3$  | $d_4 = h_1[b_{02}^2]h_4[b_{03}^2]^2$                       |
| 3612 | 73,14;12 | $h_0[b_{02}^2][h_0(1)^2][b_{13}^2]h_5$                                     | $d_4^{-1} = h_0[b_{02}^2][h_0(1)^2][b_{14}^2]$             |
| 3613 | 73,14;14 | $h_0^6[b_{03}^2][h_2h_0(1,2)]$   | $d_4 = h_0^7h_3^2[h_0h_0(1,2)b_{03}]$                      |
| 3614 | 73,14;16 | $h_0^2[b_{02}^2][h_0h_3b_{02}b_{14}b_{04}]$                                | $d_4 = h_0^5[b_{02}^2][h_0h_0(1,3)b_{14}]$                 |
| 3615 | 73,14;18 | $[b_{02}^2][b_{13}^2][h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$            | Permanent cycle  |
| 3616 | 73,15;12 | $h_0^2[b_{02}^2][h_0(1)^2][b_{13}^2]h_5$                                   | $d_4^{-1} = h_0^2[b_{02}^2][h_0(1)^2][b_{14}^2]$           |
| 3617 | 73,15;14 | $h_0^7[b_{03}^2][h_2h_0(1,2)]$   | $d_4 = h_0^8h_3^2[h_0h_0(1,2)b_{03}]$                      |
| 3618 | 73,15;16 | $h_1^2[b_{02}^2]^2[b_{03}^2]h_5$   | $d_4^{-1} = h_1^2[b_{02}^2]^2[b_{04}^2]$                   |
| 3619 | 73,15;16 | $h_0^3[b_{02}^2][h_0h_3b_{02}b_{14}b_{04}]$                                | $d_4 = h_0^6[b_{02}^2][h_0h_0(1,3)b_{14}]$                 |
| 3620 | 73,15;18 | $h_0[b_{02}^2][b_{13}^2][h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$         | Permanent cycle  |
| 3621 | 73,15;20 | $h_1^2[b_{02}^2]h_4[b_{03}^2]^2$   | $d_4^{-1} = h_1^2[b_{03}^2]^3$                             |
| 3622 | 73,15;20 | $[h_2b_{03}][h_0(1)^2][b_{13}^2][b_{03}^2]$                                | $d_4 = h_0[h_2b_{03}][h_0(1)b_{13}][b_{13}^2]^2$           |
| 3623 | 73,16;14 | $h_0^8[b_{03}^2][h_2h_0(1,2)]$   | $d_4 = h_0^9h_3^2[h_0h_0(1,2)b_{03}]$                      |
| 3624 | 73,16;16 | $[b_{02}^2]^2h_5[h_0h_0(1)^2b_{03}]$                                       | $d_8^{-1} = [b_{03}^2]^2[h_0h_0(1)^2b_{03}]$               |
| 3625 | 73,16;16 | $h_0^4[b_{02}^2][h_0h_3b_{02}b_{14}b_{04}]$                                | $d_4 = h_0^7[b_{02}^2][h_0h_0(1,3)b_{14}]$                 |
| 3626 | 73,16;18 | $h_0^2[b_{02}^2][b_{13}^2][h_0(1)b_{03}b_{14} + h_0(1)b_{13}b_{04}]$       | Permanent cycle  |
| 3627 | 73,16;20 | $h_0[h_2b_{03}][h_0(1)^2][b_{13}^2][b_{03}^2]$                             | $d_4 = h_0^2[h_2b_{03}][h_0(1)b_{13}][b_{13}^2]^2$         |
| 3628 | 73,16;24 | $[b_{02}^2][h_0(1)b_{13}][b_{03}^2]^2$                                     | $d_8 = [b_{02}^2]^3[h_0(1)b_{13}]h_5$                      |
| 3629 | 73,17;14 | $h_0^9[b_{03}^2][h_2h_0(1,2)]$   | $d_4 = h_0^{10}h_3^2[h_0h_0(1,2)b_{03}]$                   |
| 3630 | 73,17;16 | $h_0[b_{02}^2]^2h_5[h_0h_0(1)^2b_{03}]$                                    | $d_8^{-1} = h_0[b_{03}^2]^2[h_0h_0(1)^2b_{03}]$            |
| 3631 | 73,17;16 | $h_0^5[b_{02}^2][h_0h_3b_{02}b_{14}b_{04}]$                                | $d_4 = h_0^8[b_{02}^2][h_0h_0(1,3)b_{14}]$                 |
| 3632 | 73,17;20 | $h_0^2[h_2b_{03}][h_0(1)^2][b_{13}^2][b_{03}^2]$                           | Permanent cycle  |
| 3633 | 73,17;22 | $[b_{02}^2]^2[h_0h_0(1)b_{03}^2b_{14} + h_0h_0(1)b_{13}b_{03}b_{04}]$      | $d_6 = h_0[b_{02}^2]^3[h_0(1)b_{13}]h_5$                   |
| 3634 | 73,17;24 | $h_0[b_{02}^2][h_0(1)b_{13}][b_{03}^2]^2$                                  | Permanent cycle  |
| 3635 | 73,18;14 | $h_0^{10}[b_{03}^2][h_2h_0(1,2)]$  | $d_4 = h_0^{11}h_3^2[h_0h_0(1,2)b_{03}]$                   |
| 3636 | 73,18;16 | $h_0^2[b_{02}^2]^2h_5[h_0h_0(1)^2b_{03}]$                                  | $d_8^{-1} = h_0^2[b_{03}^2]^2[h_0h_0(1)^2b_{03}]$          |
| 3637 | 73,18;16 | $h_0^6[b_{02}^2][h_0h_3b_{02}b_{14}b_{04}]$                                | $d_4 = h_0^9[b_{02}^2][h_0h_0(1,3)b_{14}]$                 |
| 3638 | 73,18;22 | $h_0[b_{02}^2]^2[h_0h_0(1)b_{03}^2b_{14} + h_0h_0(1)b_{13}b_{03}b_{04}]$   | $d_6 = h_0^2[b_{02}^2]^3[h_0(1)b_{13}]h_5$                 |
| 3639 | 73,18;24 | $h_0^2[b_{02}^2][h_0(1)b_{13}][b_{03}^2]^2$                                | Permanent cycle  |
| 3640 | 73,19;14 | $h_0^{11}[b_{03}^2][h_2h_0(1,2)]$  | $d_4 = h_0^{12}h_3^2[h_0h_0(1,2)b_{03}]$                   |
| 3641 | 73,19;16 | $h_0^7[b_{02}^2][h_0h_3b_{02}b_{14}b_{04}]$                                | $d_4 = h_0^{10}[b_{02}^2][h_0h_0(1,3)b_{14}]$              |
| 3642 | 73,19;22 | $h_0^2[b_{02}^2]^2[h_0h_0(1)b_{03}^2b_{14} + h_0h_0(1)b_{13}b_{03}b_{04}]$ | $d_6 = h_0^3[b_{02}^2]^3[h_0(1)b_{13}]h_5$                 |
| 3643 | 73,19;24 | $h_0^3[b_{02}^2][h_0(1)b_{13}][b_{03}^2]^2$                                | Permanent cycle  |
| 3644 | 73,20;14 | $h_0^{12}[b_{03}^2][h_2h_0(1,2)]$  | $d_4 = h_0^{13}h_3^2[h_0h_0(1,2)b_{03}]$                   |
| 3645 | 73,20;16 | $h_0^8[b_{02}^2][h_0h_3b_{02}b_{14}b_{04}]$                                | $d_4 = h_0^{11}[b_{02}^2][h_0h_0(1,3)b_{14}]$              |
| 3646 | 73,20;20 | $[b_{02}^2]^2[h_0(1)b_{13}][b_{13}^2]^2$                                   | Permanent cycle  |
| 3647 | 73,20;26 | $h_1[h_1h_0(1)][b_{02}^2]^2[b_{03}^2]^2$                                   | $d_8 = h_1[h_1h_0(1)][b_{02}^2]^4h_5$                      |
| 3648 | 73,21;14 | $h_0^{13}[b_{03}^2][h_2h_0(1,2)]$  | $d_4 = h_0^{14}h_3^2[h_0h_0(1,2)b_{03}]$                   |
| 3649 | 73,21;16 | $h_0^9[b_{02}^2][h_0h_3b_{02}b_{14}b_{04}]$                                | $d_4 = h_0^{12}[b_{02}^2][h_0h_0(1,3)b_{14}]$              |
| 3650 | 73,21;20 | $h_0[b_{02}^2]^2[h_0(1)b_{13}][b_{13}^2]^2$                                | $d_4^{-1} = [b_{02}^2]^2[h_0(1)^2][b_{13}^2][b_{03}^2]$    |
| 3651 | 73,21;28 | $h_1[b_{02}^2]^3[b_{03}^2]^2$  | $d_8 = h_1[b_{02}^2]^5h_5$                                 |
| 3652 | 73,22;14 | $h_0^{14}[b_{03}^2][h_2h_0(1,2)]$  | $d_4 = h_0^{15}h_3^2[h_0h_0(1,2)b_{03}]$                   |
| 3653 | 73,22;16 | $h_0^{10}[b_{02}^2][h_0h_3b_{02}b_{14}b_{04}]$                             | $d_4 = h_0^{13}[b_{02}^2][h_0h_0(1,3)b_{14}]$              |
| 3654 | 73,22;20 | $h_0^2[b_{02}^2]^2[h_0(1)b_{13}][b_{13}^2]^2$                              | $d_4^{-1} = h_0[b_{02}^2]^2[h_0(1)^2][b_{13}^2][b_{03}^2]$ |
| 3655 | 73,23;14 | $h_0^{15}[b_{03}^2][h_2h_0(1,2)]$  | $d_4 = h_0^{16}h_3^2[h_0h_0(1,2)b_{03}]$                   |
| 3656 | 73,23;16 | $h_0^{11}[b_{02}^2][h_0h_3b_{02}b_{14}b_{04}]$                             | $d_4 = h_0^{14}[b_{02}^2][h_0h_0(1,3)b_{14}]$              |
| 3657 | 73,23;20 | $h_1^2[b_{02}^2]^5h_5$   | $d_8^{-1} = h_1^2[b_{02}^2]^3[b_{03}^2]^2$                 |
| 3658 | 73,23;24 | $[b_{02}^2]^3[h_2b_{03}][h_0(1)^2][b_{13}^2]$                              | Permanent cycle  |
| 3659 | 73,23;24 | $h_1^2[b_{02}^2]^4h_4[b_{03}^2]$   | $d_4 = h_1^2[b_{02}^2]^5h_4^2$                             |



|      |          |  |  |
|------|----------|--|--|
| 3660 | 73,24;14 | $h_0^{16}[b_{03}^2][h_2h_0(1,2)]$                  | $d_4 = h_0^{17}h_3^2[h_0h_0(1,2)b_{03}]$                         |
| 3661 | 73,24;16 | $h_0^{12}[b_{02}^2][h_0h_3b_{02}b_{14}b_{04}]$     | $d_4 = h_0^{15}[b_{02}^2][h_0h_0(1,3)b_{14}]$                    |
| 3662 | 73,24;24 | $h_0[b_{02}^2]^3[h_2b_{03}][h_0(1)^2][b_{13}^2]$   | $d_4^{-1} = [b_{02}^2]^3[b_{03}^2][h_0h_0(1)^2b_{03}]$           |
| 3663 | 73,24;28 | $[b_{02}^2]^4[h_0(1)b_{13}][b_{03}^2]$             | $d_4 = h_0[b_{02}^2]^4[b_{13}^2]^2$                              |
| 3664 | 73,25;14 | $h_0^{17}[b_{03}^2][h_2h_0(1,2)]$                  | $d_4 = h_0^{18}h_3^2[h_0h_0(1,2)b_{03}]$                         |
| 3665 | 73,25;16 | $h_0^{13}[b_{02}^2][h_0h_3b_{02}b_{14}b_{04}]$     | $d_4 = h_0^{16}[b_{02}^2][h_0h_0(1,3)b_{14}]$                    |
| 3666 | 73,25;24 | $h_0^2[b_{02}^2]^3[h_2b_{03}][h_0(1)^2][b_{13}^2]$ | $d_4^{-1} = h_0[b_{02}^2]^3[b_{03}^2][h_0h_0(1)^2b_{03}]$        |
| 3667 | 73,25;28 | $h_0[b_{02}^2]^4[h_0(1)b_{13}][b_{03}^2]$          | $d_4 = h_0^2[b_{02}^2]^4[b_{13}^2]^2$                            |
| 3668 | 73,26;14 | $h_0^{18}[b_{03}^2][h_2h_0(1,2)]$                  | $d_4 = h_0^{19}h_3^2[h_0h_0(1,2)b_{03}]$                         |
| 3669 | 73,26;16 | $h_0^{14}[b_{02}^2][h_0h_3b_{02}b_{14}b_{04}]$     | $d_4 = h_0^{17}[b_{02}^2][h_0h_0(1,3)b_{14}]$                    |
| 3670 | 73,26;28 | $h_0^2[b_{02}^2]^4[h_0(1)b_{13}][b_{03}^2]$        | Permanent cycle  |
| 3671 | 73,27;14 | $h_0^{19}[b_{03}^2][h_2h_0(1,2)]$                  | $d_4 = h_0^{20}h_3^2[h_0h_0(1,2)b_{03}]$                         |
| 3672 | 73,27;16 | $h_0^{15}[b_{02}^2][h_0h_3b_{02}b_{14}b_{04}]$     | $d_4 = h_0^{18}[b_{02}^2][h_0h_0(1,3)b_{14}]$                    |
| 3673 | 73,27;28 | $h_0^3[b_{02}^2]^4[h_0(1)b_{13}][b_{03}^2]$        | Permanent cycle  |
| 3674 | 73,28;14 | $h_0^{20}[b_{03}^2][h_2h_0(1,2)]$                  | $d_4 = h_0^{21}h_3^2[h_0h_0(1,2)b_{03}]$                         |
| 3675 | 73,28;16 | $h_0^{16}[b_{02}^2][h_0h_3b_{02}b_{14}b_{04}]$     | $d_4 = h_0^{19}[b_{02}^2][h_0h_0(1,3)b_{14}]$                    |
| 3676 | 73,28;30 | $h_1[h_1h_0(1)][b_{02}^2]^5[b_{03}^2]$             | $d_4 = h_1^2[b_{02}^2]^5[h_4h_0(1)b_{02}^2 + h_0^3b_{02}b_{14}]$ |
| 3677 | 73,29;14 | $h_0^{21}[b_{03}^2][h_2h_0(1,2)]$                  | $d_4 = h_0^{22}h_3^2[h_0h_0(1,2)b_{03}]$                         |
| 3678 | 73,29;16 | $h_0^{17}[b_{02}^2][h_0h_3b_{02}b_{14}b_{04}]$     | $d_4 = h_0^{20}[b_{02}^2][h_0h_0(1,3)b_{14}]$                    |
| 3679 | 73,29;32 | $h_1[b_{02}^2]^6[b_{03}^2]$                        | $d_4 = h_1[b_{02}^2]^7h_4$                                       |
| 3680 | 73,30;14 | $h_0^{22}[b_{03}^2][h_2h_0(1,2)]$                  | $d_4 = h_0^{23}h_3^2[h_0h_0(1,2)b_{03}]$                         |
| 3681 | 73,30;16 | $h_0^{18}[b_{02}^2][h_0h_3b_{02}b_{14}b_{04}]$     | $d_4 = h_0^{21}[b_{02}^2][h_0h_0(1,3)b_{14}]$                    |
| 3682 | 73,31;14 | $h_0^{23}[b_{03}^2][h_2h_0(1,2)]$                  | $d_4 = h_0^{24}h_3^2[h_0h_0(1,2)b_{03}]$                         |
| 3683 | 73,31;16 | $h_0^{19}[b_{02}^2][h_0h_3b_{02}b_{14}b_{04}]$     | $d_4 = h_0^{22}[b_{02}^2][h_0h_0(1,3)b_{14}]$                    |
| 3684 | 73,31;28 | $h_1^2[b_{02}^2]^7h_4$                             | $d_4^{-1} = h_1^2[b_{02}^2]^6[b_{03}^2]$                         |
| 3685 | 73,32;14 | $h_0^{24}[b_{03}^2][h_2h_0(1,2)]$                  | $d_4 = h_0^{25}h_3^2[h_0h_0(1,2)b_{03}]$                         |
| 3686 | 73,32;16 | $h_0^{20}[b_{02}^2][h_0h_3b_{02}b_{14}b_{04}]$     | $d_4 = h_0^{23}[b_{02}^2][h_0h_0(1,3)b_{14}]$                    |
| 3687 | 73,32;32 | $[b_{02}^2]^7[h_0(1)b_{13}]$                       | Permanent cycle  |
| 3688 | 73,33;14 | $h_0^{25}[b_{03}^2][h_2h_0(1,2)]$                  | $d_4 = h_0^{26}h_3^2[h_0h_0(1,2)b_{03}]$                         |
| 3689 | 73,33;16 | $h_0^{21}[b_{02}^2][h_0h_3b_{02}b_{14}b_{04}]$     | $d_4 = h_0^{24}[b_{02}^2][h_0h_0(1,3)b_{14}]$                    |
| 3690 | 73,33;32 | $h_0[b_{02}^2]^7[h_0(1)b_{13}]$                    | Permanent cycle  |
| 3691 | 73,34;14 | $h_0^{26}[b_{03}^2][h_2h_0(1,2)]$                  | $d_4 = h_0^{27}h_3^2[h_0h_0(1,2)b_{03}]$                         |
| 3692 | 73,34;16 | $h_0^{22}[b_{02}^2][h_0h_3b_{02}b_{14}b_{04}]$     | $d_4 = h_0^{25}[b_{02}^2][h_0h_0(1,3)b_{14}]$                    |
| 3693 | 73,34;32 | $h_0^2[b_{02}^2]^7[h_0(1)b_{13}]$                  | Permanent cycle  |
| 3694 | 73,35;14 | $h_0^{27}[b_{03}^2][h_2h_0(1,2)]$                  | $d_4 = h_0^{28}h_3^2[h_0h_0(1,2)b_{03}]$                         |
| 3695 | 73,35;16 | $h_0^{23}[b_{02}^2][h_0h_3b_{02}b_{14}b_{04}]$     | $d_4 = h_0^{26}[b_{02}^2][h_0h_0(1,3)b_{14}]$                    |
| 3696 | 73,35;32 | $h_0^3[b_{02}^2]^7[h_0(1)b_{13}]$                  | Permanent cycle  |
| 3697 | 73,36;14 | $h_0^{28}[b_{03}^2][h_2h_0(1,2)]$                  | $d_4 = h_0^{29}h_3^2[h_0h_0(1,2)b_{03}]$                         |
| 3698 | 73,36;16 | $h_0^{24}[b_{02}^2][h_0h_3b_{02}b_{14}b_{04}]$     | $d_4 = h_0^{27}[b_{02}^2][h_0h_0(1,3)b_{14}]$                    |
| 3699 | 73,36;34 | $h_1[h_1h_0(1)][b_{02}^2]^8$                       | Permanent cycle  |