## Equation assignment sequence for variable y

| no | var | equ | quations   | token |
|----|-----|-----|--|-------|
| 15 | 139 | -   | $m_A$ :: port variable   |       |
| 14 | 6   | _   | t:: port variable  |       |
| 13 | 129 | _   | $I_{N,D}$ :: port variable   |       |
| 12 | 1   | _   | # :: port variable   |       |
| 11 | 143 | 149 | $B_{A,D} := \operatorname{Instantiate}(B_{A,D}, \#)$                           |       |
| 10 | 142 | 148 | $A_{N,D} := \operatorname{Instantiate}(A_{N,D}, \#)$                           |       |
| 9  | 135 | 146 | $y^o_A := \text{Instantiate}(y^o_A, \#)$                                       |       |
| 8  | 8   | 5   | $t_e := \text{Instantiate}(t, \#)$   |       |
| 7  | 7   | 4   | $t_o := \text{Instantiate}(t, \#)$   |       |
| 6  | 144 | 106 | $\dot{x}_D := A_{N,D} \overset{N}{\star} x_N + B_{A,D} \overset{A}{\star} e_A$ |       |
| 5  | 140 | 104 | $e_A := m_A - y^o{}_A$   |       |
| 4  | 137 | 112 | $x_N := \int_{t_o}^{t_e} I_{N,D} \stackrel{D}{\star} \dot{x}_D dt$             |       |
| 3  | 136 | 147 | $D_A := \operatorname{Instantiate}(D_A, \#)$                                   |       |
| 2  | 133 | 144 | $C_{N,A} := \operatorname{Instantiate}(C_{N,A}, \#)$                           |       |
| 1  | 155 | 153 | $y_A := D_A \cdot e_A$   |       |
| 0  | 155 | 150 | $y_A := C_{N,A} \stackrel{N}{\star} x_N + D_A \cdot e_A$                       |       |