* **2-Pair State Transition Testing**

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| **Test Case#** | **Transitions Covered** | **Test Case** |
| Test#1 |  |  |
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* **Ghost Transition Testing**
* **Multiple Condition Testing:**
* **Activate()**

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| Test # | S==-1 | a>0 | b>0 | Test Case |
| Test#1 | T | T | T | Activate 4 5 TurnOff |
| Test#2 | T | T | F | Activate 4 -5 TurnOff |
| Test#3 | T | F | T | Activate -4 5 TurnOff |
| Test#4 | T | F | F | Activate -4 -5 TurnOff |
| Test#5 | F | T | T | Activate 4 5 Activate 4 5 TurnOff |
| Test#6 | F | T | F | Activate 4 -5 Activate 4 -5 TurnOff |
| Test#7 | F | F | T | Activate -4 5 Activate -4 5 TurnOff |
| Test#8 | F | F | F | Activate -4 -5 Activate -4 -5 TurnOff |

* **Start ()**

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| Test# | S == 0 | Test Case |
| Test#9 | T | Activate 10 15 Start PayCredit Reject TurnOff |
| Test#10 | F | Activate 10 15 Start PayCredit Start Reject TurnOff |

* **PayCredit()**

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| Test# | S == 1 | Test Case |
| Test#11 | T | Activate 10 15 Start PayCredit Reject TurnOff |
| Test$12 | F | Activate 10 15 Start PayCredit Reject PayCredit TurnOff |

* **Reject()**

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| Test# | S == 2 | Test Case |
| Test#13 | T | Activate 10 15 Start PayCredit Reject TurnOff |
| Test$14 | F | Activate 10 15 Reject TurnOff |

* **Cancel**

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| Test# | S == 3 | Test Case |
| Test#15 | T | Activate 10 15 Start PayCredit Approved Cancel TurnOff |
| Test$16 | F | Activate 10 15 Cancel TurnOff |

* **Approved**

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| Test# | S == 2 | Test Case |
| Test#17 | T | Activate 10 15 Start PayCredit Approved Cancel TurnOff |
| Test$18 | F | Activate 10 15 Approved TurnOff |

* **PayCash(int c)**

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| Test# | S == 1 | C > 0 | Test Case |
| Test#19 | T | T | Activate 10 15 Start PayCash 10 Cancel TurnOff |
| Test#20 | T | F | Activate 10 15 Start PayCash -10 Cancel TurnOff |
| Test#21 | F | T | Activate 10 15 PayCash 10 TurnOff |
| Test$22 | F | F | Activate 10 15 PayCash -10 TurnOff |

* **Regular**

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| Test# | S == 3 | Test Case |
| Test#23 | T | Activate 10 15 Start PayCash 10 Regular StartPump StopPump NoReceipt TurnOff |
| Test$24 | F | Activate 10 15 Regular TurnOff |

* **Super**

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| Test# | S == 3 | Test Case |
| Test#25 | T | Activate 10 15 Start PayCredit Super StartPump StopPump NoReceipt TurnOff |
| Test$26 | F | Activate 10 15 Super TurnOff |

* **StartPump**

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| Test# | S == 4 | Test Case |
| Test#27 | T | Activate 10 15 Start PayCash 10 Super StartPump StopPump NoReceipt TurnOff |
| Test$28 | F | Activate 10 15 StartPump TurnOff |

* **PumpGallon (s == 5)**

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| Test# | S == 5 | Test Case |
| Test#29 | T | Activate 10 15 Start PayCash 10 Super StartPump PumpGallon NoReceipt TurnOff |
| Test#30 | F | Activate 10 15 PumpGallon TurnOff |

* **PumpGallon ((w == 1) || ((cash >= price \* (G + 1)) && (w == 0)))**

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| --- | --- | --- | --- | --- |
| Test# | w == 1 | ((cash >= price \* (G + 1) | w == 0 | Test Case |
| Test# | T | T | T | Not Executable |
| Test# | T | T | F | Not Executable |
| Test# | T | F | T | Not Executable |
| Test#31 | T | F | F | Activate 10 15 Start PayCard Approved Regular StartPump PumpGalon StopPump NoReciept TurnOff |
| Test#32 | F | T | T | Activate 10 15 Start PayCash 15 Regular StartPump PumpGalon NoReciept TurnOff |
| Test# | F | T | F | Not Executable |
| Test#33 | F | F | T | Activate 10 15 Start PayCash 5 Regular StartPump PumpGalon NoReciept TurnOff |
| Test# | F | F | F | Not Executable |

* **PumpGallon ((w == 1) || ((cash >= price \* (G + 1)) && (w == 0)))**

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| --- | --- | --- | --- |
| Test# | w == 0 | cash < price \* (G + 1) | Test Case |
| Test#34 | T | T | Activate 10 15 Start PayCash 15 Regular StartPump PumpGalon NoReciept TurnOff |
| Test# | T | F | Not Executable |
| Test# | F | T | Not Executable |
| Test# | F | F | Not Executable |

* **StopPump**

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| Test# | S == 5 | Test Case |
| Test#35 | T | Activate 10 15 Start PayCard Approved Regular StartPump PumpGalon StopPump NoReciept TurnOff |
| Test#36 | F | Activate 10 15 StopPump TurnOff |

* **NoReceipt**

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| Test# | S == 6 | Test Case |
| Test#37 | T | Activate 10 15 Start PayCard Approved Regular StartPump PumpGalon StopPump NoReciept TurnOff |
| Test#38 | F | Activate 10 15 NoReciept TurnOff |

* **Receipt**

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| Test# | S == 6 | Test Case |
| Test#39 | T | Activate 10 15 Start PayCard Approved Regular StartPump PumpGalon StopPump Reciept TurnOff |
| Test#40 | F | Activate 10 15 Reciept TurnOff |

* **TurnOff**

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| Test# | S == 0 | Test Case |
| Test#41 | T | Activate 10 15 TurnOff |
| Test#42 | F | Activate 10 15 Start TurnOff PayCredit Reject TurnOff |