Software Testing

Project Report

1) Transition Pair Testing

State S0

Incoming: T1, T19, T5, T3, T14, T13

Outgoing: T2, T6, T20

|  |  |
| --- | --- |
| Transition Pair | Covering Test Case |
| (T1, T2) | Test #3 |
| (T1, T6) | Test #1 |
| (T1, T20) | Test #4 |

|  |  |
| --- | --- |
| (T3, T2) | Test #3 |
| (T3, T6) | Test #5 |
| (T3, T20) | Test #6 |

|  |  |
| --- | --- |
| (T5, T2) | Test #6 |
| (T5, T6) | Test #3 |
| (T5, T20) | Test #1 |

|  |  |
| --- | --- |
| (T13, T2) | Test #1 |
| (T13, T6) | Test #7 |
| (T13, T20) | Test #3 |

|  |  |
| --- | --- |
| (T14, T2) | Test #2 |
| (T14, T6) | Test #2 |
| (T14, T20) | Test #5 |

|  |  |
| --- | --- |
| (T19, T2) | Test #6 |
| (T19, T6) | Test #5 |
| (T19, T20) | Test #2 |

State S1

Incoming: T17, T18

Outgoing: T16, T17

|  |  |
| --- | --- |
| Transition Pair | Covering Test Case |
| (T17, T16) | Test #2 |
| (T17, T17) | Test #2 |
| (T18, T16) | Test #7 |
| (T18, T17) | Test #2 |

State S2

Incoming: T2

Outgoing: T3, T4

|  |  |
| --- | --- |
| Transition Pair | Covering Test Case |
| (T2, T3) | Test #3 |
| (T2, T4) | Test #1 |

State S3

Incoming: T4, T6

Outgoing: T5, T7, T8

|  |  |
| --- | --- |
| Transition Pair | Covering Test Case |
| (T4, T5) | Test #1 |
| (T4, T7) | Test #2 |
| (T4, T8) | Test #6 |

|  |  |
| --- | --- |
| (T6, T5) | Test #5 |
| (T6, T7) | Test #1 |
| (T6, T8) | Test #2 |

State S4

Incoming: T7, T8

Outgoing: T9, T18, T19

|  |  |
| --- | --- |
| Transition Pair | Covering Test Case |
| (T7, T9) | Test #1 |
| (T7, T18) | Test #2 |
| (T7, T19) | Test #6 |

|  |  |
| --- | --- |
| (T8, T9) | Test #3 |
| (T8, T18) | Test #7 |
| (T8, T19) | Test #2 |

State S5

Incoming: T9, T10

Outgoing: T10, T11, 12

|  |  |
| --- | --- |
| Transition Pair | Covering Test Case |
| (T9, T10) | Test #1 |
| (T9, T11) | Test #3 |
| (T9, T12) | Test #2 |

|  |  |
| --- | --- |
| (T10, T10) | Test #1 |
| (T10, T11) | Test #7 |
| (T10, T12) | Test #1 |

State S6

Incoming: T11, T12, T16

Outgoing: T13, T14

|  |  |
| --- | --- |
| Transition Pair | Covering Test Case |
| (T11, T13) | Test #3 |
| (T11, T14) | Test #7 |

|  |  |
| --- | --- |
| (T12, T13) | Test #1 |
| (T12, T14) | Test #2 |

|  |  |
| --- | --- |
| (T16, T13) | Test #7 |
| (T16, T14) | Test #2 |

Test Cases:

Test #1

Activate(6.5, 8.5), Cash(36.0), Regular(), Start(), Pump(), Pump(), Pump(), Pump(), Pump(), Receipt(), Credit(), Approved(), Cancel(), TurnOff()

*Transition: T1 -> T6 -> T7 -> T9 -> T10 -> T10 -> T10 -> T10 -> T10 -> T12 -> T13 -> T2 -> T4 -> T5 -> T20 ->*

Test #2

Activate(3, 4), Cash(1), Regular(), Start(), Pump(), NoReceipt(), Credit(), Approved(), Regular(), Start(), Pump(), Pump(), Stop(), NoReceipt(), Cash(10.0), Diesel(), Cancel(), TurnOff()

*Transition: T1 -> T6 -> T7 -> T9 -> T12 -> T14 -> T2 -> T4 -> T7 -> T18 -> T17 -> T17 -> T16 -> T14 -> T6 -> T8 -> T19 -> T20*

Test #3

Activate(6, 4), Credit(), Reject(), Credit(), Approved(), Cancel(), Cash(10), Diesel(), Start(),

Stop(), Receipt(), TurnOff()

*Transition: T1 -> T2 -> T3 -> T2 -> T4 -> T5 -> T6 -> T8 -> T9 -> T11 -> T13 -> T20*

Test #4

Activate(4, 5), TurnOff()

*Transition: T1 -> T20*

Test #5

Activate(3.0, 4.0), Credit(), Reject(), Cash(5.0), Cancel(), Cash(10), Diesel(), Cancel(), Cash(4), Regular(), Start(), Pump(), Stop(), NoReceipt(), TurnOff()

*Transition: T1 -> T2 -> T3 -> T6 -> T5 -> T6 -> T8 -> T19 -> T6 -> T7 -> T9 -> T10 -> T12 -> T14 -> T20*

Test #6

Activate(3.5, 4.0), Credit(), Approved(), Cancel(), Credit(), Approved(), Diesel(), Cancel(), Cash(1), Regular(), Cancel(),

Credit(), Reject(), TurnOff()

*Transition:* *T1 -> T2 -> T4 -> T5 -> T2 -> T4 -> T8 -> T19 -> T6 -> T7 -> T19 -> T2 -> T3 -> T20 ->*

Test #7

Activate(3.0, 4.0), Credit(), Approved(), Diesel(), Start(), Stop(), Receipt(), Cash(40), Diesel(), Start(),Pump(), Stop(), NoReceipt()

*Transition:* *T1 -> T2 -> T4 -> T8 -> T18 -> T16 -> T13 -> (Print: 0 and 0) T6 -> T8 -> T9 -> T10 -> T11 -> T14*

2) Default/Ghost Transitions Testing

State “Start”

|  |  |
| --- | --- |
| Default Transition | Covering Test Case |
| Activate(a, d)[ a <= 0 || d <= 0 ] | Test #8 |
| Credit() | Test #8 |
| Reject() | Test #8 |
| Cancel() | Test #8 |
| Approved() | Test #8 |
| Cash(c) | Test #8 |
| Regular() | Test #8 |
| Diesel() | Test #8 |
| Start() | Test #8 |
| Pump() | Test #8 |
| Stop() | Test #8 |
| NoReceipt() | Test #8 |
| Receipt() | Test #8 |
| TurnOff() | Test #8 |

Test #8

**Activate(-3.0, 4.0), Credit(), Reject(), Cancel(), Approved(), Cash(2), Regular(), Diesel(), Start(), Pump(), Stop(), NoReceipt(), Receipt(), TurnOff()**

State “S0”

|  |  |
| --- | --- |
| Default Transition | Covering Test Case |
| Activate(a, d) | Test #9 |
| Reject() | Test #9 |
| Cancel() | Test #9 |
| Approved() | Test #9 |
| Cash(c)[ c <= 0 ] | Test #9 |
| Regular() | Test #9 |
| Diesel() | Test #9 |
| Start() | Test #9 |
| Pump() | Test #9 |
| Stop() | Test #9 |
| NoReceipt() | Test #9 |
| Receipt() | Test #9 |

Test #9

Activate(3.0, 4.0), **Activate(-3.0, 4.0), Reject(), Cancel(), Approved(), Cash(-2), Regular(), Diesel(), Start(), Pump(), Stop(), NoReceipt(), Receipt()**

**State “S1”**

|  |  |
| --- | --- |
| Default Transition | Covering Test Case |
| Activate(a, d) | Test #10 |
| Credit() | Test #10 |
| Reject() | Test #10 |
| Cancel() | Test #10 |
| Approved() | Test #10 |
| Cash(c) | Test #10 |
| Regular() | Test #10 |
| Diesel() | Test #10 |
| Start() | Test #10 |
| NoReceipt() | Test #10 |
| Receipt() | Test #10 |
| TurnOff() | Test #10 |

Test #10

Activate(3.0, 4.0), Credit(), Approved(), Regular(), Start(), **Activate(-3.0, 4.0), Reject(), Cancel(), Approved(), Cash(-2), Regular(), Diesel(), Start(), NoReceipt(), Receipt()**

**State “S2”**

|  |  |
| --- | --- |
| Default Transition | Covering Test Case |
| Activate(a, d) | Test #11 |
| Credit() | Test #11 |
| Cancel() | Test #11 |
| Cash(c) | Test #11 |
| Regular() | Test #11 |
| Diesel() | Test #11 |
| Start() | Test #11 |
| Pump() | Test #11 |
| Stop() | Test #11 |
| NoReceipt() | Test #11 |
| Receipt() | Test #11 |
| TurnOff() | Test #11 |

Test #11 - changed to Activate(3.0, 4.0)

Activate(3.0, 4.0), Credit(), **Activate(3.0, 4.0), Credit(), Cancel(), Cash(2), Regular(), Diesel(), Start(), Pump(), Stop(), NoReceipt(), Receipt(), TurnOff()**

**State “S3”**

|  |  |
| --- | --- |
| Default Transition | Covering Test Case |
| Activate(a, d) | Test #12 |
| Credit() | Test #12 |
| Reject() | Test #12 |
| Approved() | Test #12 |
| Cash(c) | Test #12 |
| Start() | Test #12 |
| Pump() | Test #12 |
| Stop() | Test #12 |
| NoReceipt() | Test #12 |
| Receipt() | Test #12 |
| TurnOff() | Test #12 |

Test #12

Activate(3.0, 4.0), Credit(), Approved(), **Activate(3.0, 4.0), Credit(), Reject(), Approved(), Cash(2), Start(), Pump(), Stop(), NoReceipt(), Receipt(), TurnOff()**

**State “4”**

|  |  |
| --- | --- |
| Default Transition | Covering Test Case |
| Activate(a, d) | Test #13 |
| Credit() | Test #13 |
| Reject() | Test #13 |
| Approved() | Test #13 |
| Cash(c) | Test #13 |
| Regular() | Test #13 |
| Diesel() | Test #13 |
| Start()[ !(k == 0 || k == 1) ] | Test #13 b |
| Pump() | Test #13 |
| Stop() | Test #13 |
| NoReceipt() | Test #13 |
| Receipt() | Test #13 |
| TurnOff() | Test #13 |

Test #13

Activate(3.0, 4.0), Credit(), Approved(), Regular(), **Activate(3.0, 4.0), Credit(), Reject(), Approved(), Cash(2), Regular(), Diesel(), Pump(), Stop(), NoReceipt(), Receipt(), TurnOff()**

Test #13 b

Activate(3.0, 4.0), Credit(), Approved(), Regular(), **Start() with internal k=2,**

State “S5”

|  |  |
| --- | --- |
| Default Transition | Covering Test Case |
| Activate(a, d) | Test #14 |
| Credit() | Test #14 |
| Reject() | Test #14 |
| Cancel() | Test #14 |
| Approved() | Test #14 |
| Cash(c) | Test #14 |
| Regular() | Test #14 |
| Diesel() | Test #14 |
| Start() | Test #14 |
| NoReceipt() | Test #14 |
| Receipt() | Test #14 |
| TurnOff() | Test #14 |

Test #14

Activate(3.0, 4.0), Cash(5),Regular(), Start()

**Activate(3.0, 4.0), Credit(), Reject(), Cancel(), Approved(), Cash(2), Regular(), Diesel(), Start(), NoReceipt(), Receipt(), TurnOff()**

State “S6”

|  |  |
| --- | --- |
| Default Transition | Covering Test Case |
| Activate(a, d) | Test #15 |
| Credit() | Test #15 |
| Reject() | Test #15 |
| Cancel() | Test #15 |
| Approved() | Test #15 |
| Cash(c) | Test #15 |
| Regular() | Test #15 |
| Diesel() | Test #15 |
| Start() | Test #15 |
| Pump() | Test #15 |
| Stop() | Test #15 |
| TurnOff() | Test #15 |

Test #15

Activate(3.0, 4.0), Cash(5),Regular(), Start(), Stop()

**Activate(3.0, 4.0), Credit(), Reject(), Cancel(), Approved(), Cash(2), Regular(), Diesel(), Start(), Pump(), Stop(), TurnOff()**

State “End”

|  |  |
| --- | --- |
| Default Transition | Covering Test Case |
| Activate(a, d) | Test #16 |
| Credit() | Test #16 |
| Reject() | Test #16 |
| Cancel() | Test #16 |
| Approved() | Test #16 |
| Cash(c) | Test #16 |
| Regular() | Test #16 |
| Diesel() | Test #16 |
| Start() | Test #16 |
| Pump() | Test #16 |
| Stop() | Test #16 |
| NoReceipt() | Test #16 |
| Receipt() | Test #16 |

Test #16

Activate(3.0, 4.0), Cash(5),Regular(), Start(), Stop(), NoReceipt(), TurnOff(),

**Activate(3.0, 4.0), Credit(), Reject(), Cancel(), Approved(), Cash(2), Regular(), Diesel(), Start(), Pump(), Stop(), NoReceipt(), Receipt(), TurnOff()**

3) Multiple-conditional Testing

Activate(float a, float d)

if ((k == -1) && (a > 0) && (d > 0))

|  |  |  |  |
| --- | --- | --- | --- |
| **k == -1** | **a > 0** | **d > 0** | **Test Coverage** |
| T | T | T | Test #17 |
| T | T | F | Test #19 |
| T | F | T | Test #18 |
| T | F | F | Test #20 |
| F | T | T | Test #21 |
| F | T | F | Test #23 |
| F | F | T | Test #22 |
| F | F | F | Test #24 |

Test #17

**Activate(3.0, 4.0),** Activate(3.0, 4.0), Cash(20), Cancel(), TurnOff()

Test #18

**Activate(-3.0, 4.0),** Activate(3.0, 4.0), Cash(20), Cancel(), TurnOff()

Test #19

**Activate(3.0, -4.0),** Activate(3.0, 4.0), Cash(20), Cancel(), TurnOff()

Test #20

**Activate(-3.0, -4.0),** Activate(3.0, 4.0), Cash(20), Cancel(), TurnOff()

Test #21

Activate(3.0, 4.0), **Activate(3.0, 4.0),** Cash(20), Cancel(), TurnOff()

Test #22

Activate(3.0, 4.0), **Activate(-3.0, 4.0),** Cash(20), Cancel(), TurnOff()

Test #23

Activate(3.0, 4.0), **Activate(3.0, -4.0),** Cash(20), Cancel(), TurnOff()

Test #24

Activate(3.0, 4.0), **Activate(-3.0, -4.0),** Cash(20), Cancel(), TurnOff()

public final int Credit() {  
 if (k == 0) {

|  |  |
| --- | --- |
| **k == 0** | **Test Coverage** |
| T | Test #25 |
| F | Test #25 |

Test #25: Activate(3.0, 4.0), Activate(3.0, 4.0), Credit(), Credit(), Reject()

public final int Reject() {  
 if (k == 2) {

|  |  |
| --- | --- |
| **k == 2** | **Test Coverage** |
| T | Test #26 |
| F | Test #26 |

Test #26: Activate(3.0, 4.0), Activate(3.0, 4.0), Credit(), Credit(), Reject(), Reject()

public final int Cancel() {  
 if ((k == 3) || (k == 4)) {

|  |  |  |
| --- | --- | --- |
| **k == 3** | **k == 4** | **Test Coverage** |
| T | T | Not Executable |
| T | F | Test #27 |
| F | T | Test #29 |
| F | F | Test #28 |

if (w == 0) {

|  |  |
| --- | --- |
| **w == 0** | **Test Coverage** |
| T | Test #27 |
| F | Test #30 |

Test #27: Activate(3.0, 4.0), Activate(3.0, 4.0), Credit(), Credit(), Approved(), Cancel();

Test #28: Activate(3.0, 4.0), Activate(3.0, 4.0), Credit(), Credit(), Approved(), Cancel(), Cancel()

Test #29: Activate(5.0, 6.0), Credit(), Approved(), Regular(), Start(), Pump(), Pump(), Stop(), Receipt(), Cash(20), Regular(), Cancel(), Credit()

Test #30: Activate(5.0, 6.0), Credit(), Approved(), Cancel()

*Condition (T T) is not executable because “k” can’t be 2 values at the same time hence, these two conditions can’t be True at the same time*

public final int Approved() {  
 if (k == 2) {

|  |  |
| --- | --- |
| **k == 2** | **Test Coverage** |
| T | Test #27 |
| F | Test #31 |

Test #31: Activate(3.5, 4.5), Approved(), Cash(-20), Regular(), Receipt() , TurnOff()

public final int Cash(float c) {  
 if (k == 0) {

|  |  |
| --- | --- |
| **k == 0** | **Test Coverage** |
| T | Test #31 |
| F | Test #32 |

Test #32: Activate(3.3 4.4), Credit(), Approved(), Regular(), Start(), Cash(-20), Stop(), NoReceipt(), TurnOff()

public final int Regular() {  
 if (k == 3) {

|  |  |
| --- | --- |
| **k == 3** | **Test Coverage** |
| T | Test #32 |
| F | Test #33 |

Test #33: Activate(2.6, 3.1), Credit(), Regular(), Diesel(), Start(), Approved(), Regular(), Cancel(), TurnOff()

if (w==1)

|  |  |
| --- | --- |
| **w == 1** | **Test Coverage** |
| T | Test #33 |
| F | Test #31 |

public final int Diesel() {  
 if (k == 3) {

|  |  |
| --- | --- |
| **k == 3** | **Test Coverage** |
| T | Test #34 |
| F | Test #33 |

Test #34: Activate(5.0, 6.0), Credit(), Approved(), Regular(), Start(), Pump(), Pump(), Stop(), Receipt(), Cash(20), Diesel()

public final int Start() {  
 if (k == 4) {

|  |  |
| --- | --- |
| **k == 4** | **Test Coverage** |
| T | Test #34 |
| F | Test #33 |

public final int Pump() {  
 if (k == 5) {

|  |  |
| --- | --- |
| **k == 5** | **Test Coverage** |
| T | Test #35 |
| F | Test #36 |

Test #35: Activate(5.0, 6.0), Credit(), Approved(), Regular(), Start(), Pump(), Stop();

Test #36: Activate(3, 3.5), Pump(), Stop(), NoReceipt(), TurnOff()

if ((w == 1) || ((cash > price \* (L + 1)) && (w == 0))) {

|  |  |  |  |
| --- | --- | --- | --- |
| **w == 1** | **cash > price \* (L + 1)** | **w == 0** | **Test coverage** |
| T | T | T | Not Executable, w can’t be 1 and 0 at same time |
| T | T | F | Test #37 |
| T | F | T | Not Executable, w can’t be 0 and 1 same time |
| T | F | F | Test #35 |
| F | T | T | Test #38 |
| F | T | F | Not Executable, both (w==0) and (w==1) can’t be both  False. |
| F | F | T | Test #39 |
| F | F | F | Not Executable, both (w==0) and (w==1) can’t be both  False. |

Test #37: Activate(3, 4), Cash(20), Cancel(), Credit(), Approved(), Regular(), Start(), Pump(), Stop()

Test #38: Activate(3.0f, 4.0f), Credit(), Reject(), gp.Cash(5); gp.Cancel(); gp.Cash(10);  
gp.Diesel(); gp.Cancel(); gp.Cash(4); gp.Regular();  
gp.Start(); gp.Pump(); gp.Stop(); gp.NoReceipt(); gp.TurnOff();

Test #39: Activate(3.3, 4.4), Cash(1.1f), Regular(), Start(), Pump(), NoReceipt(), Credit();

else if ((w == 0) && (cash < price \* (L + 1))) {

|  |  |  |
| --- | --- | --- |
| **w == 0** | **cash < price \* (L + 1)** | **Test Coverage** |
| T | T | Test #39 |
| T | F | Test #38 |
| F | T | Not Executable. If (w==0) evaluates to False, then (w==0) must be True.  With (w==0) being True, the previous if statement if ((w == 1) ||  ((cash > price \* (L + 1)) && (w == 0))) must be evaluated to True, which makes this else if statement unreachable. (re-Confirm) |
| F | F | Not Executable. If (w==0) evaluates to False, then (w==0) must be True.  With (w==0) being True, the previous if statement if ((w == 1) ||  ((cash > price \* (L + 1)) && (w == 0))) must be evaluated to True, which makes this else if statement unreachable. (re-Confirm) |

if ((w == 0) && (total < cash)) {

|  |  |  |
| --- | --- | --- |
| **w == 0** | **total < cash** | **Test Coverage** |
| T | T | Test #39 |
| T | F | Test #41 |
| F | T | if ((w == 0) && (total < cash)) is nested inside the previous else if statement. Therefore, when the execution reaches this if statement, (w==0) must be True. |
| F | F | if ((w == 0) && (total < cash)) is nested inside the previous else if statement. Therefore, when the execution reaches this if statement, (w==0) must be True. |

public final int Stop() {  
 if (k == 5) {

|  |  |
| --- | --- |
| **k == 5** | **Test Coverage** |
| T | Test #38 |
| F | Test #40 |

Test #40: Activate(3.0f, 4.0f), Cash(2.0f), Diesel(), Start(); Pump(); Pump(); Pump(); Pump(), Stop();

Test #41: Activate(3.0f, 4.0f); Credit(); Reject(); Cash(5); Cancel(); Cash(10);  
Diesel(); Cancel(); Cash(-3); Regular();  
Start(); Pump(); Stop(); NoReceipt(); TurnOff();

if ((w == 0) && (total < cash)) {

|  |  |  |
| --- | --- | --- |
| **w == 0** | **total < cash** | **Test Coverage** |
| T | T | Test #1 |
| T | F | Not executable, cut total doesn’t get updated [confirm] |
| F | T | Test #37 |
| F | F | Test #35 |

public final int NoReceipt() {  
 if (k == 6) {

|  |  |
| --- | --- |
| **k == 6** | **Test Coverage** |
| T | Test #38 |
| F | Test #36 |

public final int Receipt() {  
 if (k == 6) {

|  |  |
| --- | --- |
| **k == 6** | **Test Coverage** |
| T | Test #34 |
| F | Test #31 |

public final int TurnOff() {  
 if (k == 0) {

|  |  |
| --- | --- |
| **k == 0** | **Test Coverage** |
| T | Test #41 |
| F | Test #42 |

Test #42: Activate(3.0f, 4.0f); Credit(); Approved(); Diesel(); Start(); Pump(); Pump(); Receipt(); TurnOff();

4) Test Suite

Test#1: Activate 6.5 8.5 Cash 36.0 Regular Start Pump Pump Pump Pump Pump Receipt Credit Approved Cancel TurnOff

Test#2: Activate 3 4 Cash 1 Regular Start Pump NoReceipt Credit Approved Regular Start Pump Pump Stop NoReceipt Cash 10.0 Diesel Cancel TurnOff

Test#3: Activate 6 4 Credit Reject Credit Approved Cancel Cash 10 Diesel Start Stop Receipt TurnOff

Test#4: Activate 4 5 TurnOff

Test#5: Activate 3.0 4.0 Credit Reject Cash 5.0 Cancel Cash 10 Diesel Cancel Cash 4 Regular Start Pump Stop NoReceipt TurnOff

Test#6: Activate 3.5 4.0 Credit Approved Cancel Credit Approved Diesel Cancel Cash 1 Regular Cancel Credit Reject TurnOff

Test#7: Activate 3.0 4.0 Credit Approved Diesel Start Stop Receipt Cash 40 Diesel Start Pump Stop NoReceipt

Test#8: Activate -3.0 4.0 Credit Reject Cancel Approved Cash 2 Regular Diesel Start Pump Stop NoReceipt Receipt TurnOff

Test#9: Activate 3.0 4.0 Activate -3.0 4.0 Reject Cancel Approved Cash -2 Regular Diesel Start Pump Stop NoReceipt Receipt

Test#10: Activate 3.0 4.0 Credit Approved Regular Start Activate -3.0 4.0 Reject Cancel Approved Cash -2 Regular Diesel Start NoReceipt Receipt

Test#11: Activate 3.0 4.0 Credit Activate 3.0 4.0 Credit Cancel Cash 2 Regular Diesel Start Pump Stop NoReceipt Receipt TurnOff

Test#12: Activate 3.0 4.0 Credit Approved Activate 3.0 4.0 Credit Reject Approved Cash 2 Start Pump Stop NoReceipt Receipt TurnOff

Test#13: Activate 3.0 4.0 Credit Approved Regular Activate 3.0 4.0 Credit Reject Approved Cash 2 Regular Diesel Pump Stop NoReceipt Receipt TurnOff

Test#14: Activate 3.0 4.0 Cash 5 Regular Start Activate 3.0 4.0 Credit Reject Cancel Approved Cash 2 Regular Diesel Start NoReceipt Receipt TurnOff

Test#15: Activate 3.0 4.0 Cash 5 Regular Start Stop Activate 3.0 4.0 Credit Reject Cancel Approved Cash 2 Regular Diesel Start Pump Stop TurnOff

Test#16: Activate 3.0 4.0 Cash 5 Regular Start Stop NoReceipt TurnOff Activate 3.0 4.0 Credit Reject Cancel Approved Cash 2 Regular Diesel Start Pump Stop NoReceipt Receipt TurnOff

Test#17: Activate 3.0 4.0 Activate 3.0 4.0 Cash 20 Cancel TurnOff

Test#18: Activate -3.0 4.0 Activate 3.0 4.0 Cash 20 Cancel TurnOff

Test#19: Activate 3.0 -4.0 Activate 3.0 4.0 Cash 20 Cancel TurnOff

Test#20: Activate -3.0 -4.0 Activate 3.0 4.0 Cash 20 Cancel TurnOff

Test#21: Activate 3.0 4.0 Activate 3.0 4.0 Cash 20 Cancel TurnOff

Test#22: Activate 3.0 4.0 Activate -3.0 4.0 Cash 20 Cancel TurnOff

Test#23: Activate 3.0 4.0 Activate 3.0 -4.0 Cash 20 Cancel TurnOff

Test#24: Activate 3.0 4.0 Activate -3.0 -4.0 Cash 20 Cancel TurnOff

Test#25: Activate 3.0 4.0 Activate 3.0 4.0 Credit Credit Reject

Test#26: Activate 3.0 4.0 Activate 3.0 4.0 Credit Credit Reject Reject

Test#27: Activate 3.0 4.0 Activate 3.0 4.0 Credit Credit Approved Cancel

Test#28: Activate 3.0 4.0 Activate 3.0 4.0 Credit Credit Approved Cancel Cancel

Test#29: Activate 5.0 6.0 Credit Approved Regular Start Pump Pump Stop Receipt Cash 20 Regular Cancel Credit

Test#30: Activate 5.0 6.0 Credit Approved Cancel

Test#31: Activate 3.5 4.5 Approved Cash -20 Regular Receipt TurnOff

Test#32: Activate 3.3 4.4 Credit Approved Regular Start Cash -20 Stop NoReceipt TurnOff

Test#33: Activate 2.6 3.1 Credit Regular Diesel Start Approved Regular Cancel TurnOff

Test#34: Activate 5.0 6.0 Credit Approved Regular Start Pump Pump Stop Receipt Cash 20 Diesel

Test#35: Activate 5.0 6.0 Credit Approved Regular Start Pump Stop

Test#36: Activate 3 3.5 Pump Stop NoReceipt TurnOff

Test#37: Activate 3 4 Cash 20 Cancel Credit Approved Regular Start Pump Stop

Test#38: Activate 3.0 4.0 Credit Reject Cash 5 Cancel Cash 10 Diesel Cancel Cash 4 Regular Start Pump Stop NoReceipt TurnOff

Test#39: Activate 3.3 4.4 Cash 1.1 Regular Start Pump NoReceipt Credit

Test#40: Activate 3.0 4.0 Cash 2.0 Diesel Start Pump Pump Pump Pump Stop

Test#41: Activate 3.0 4.0 Credit Reject Cash 5 Cancel Cash 10 Diesel Cancel Cash -3 Regular Start Pump Stop NoReceipt TurnOff

Test#42: Activate 3.0 4.0 Credit Approved Diesel Start Pump Pump Receipt TurnOff

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5) Test Results