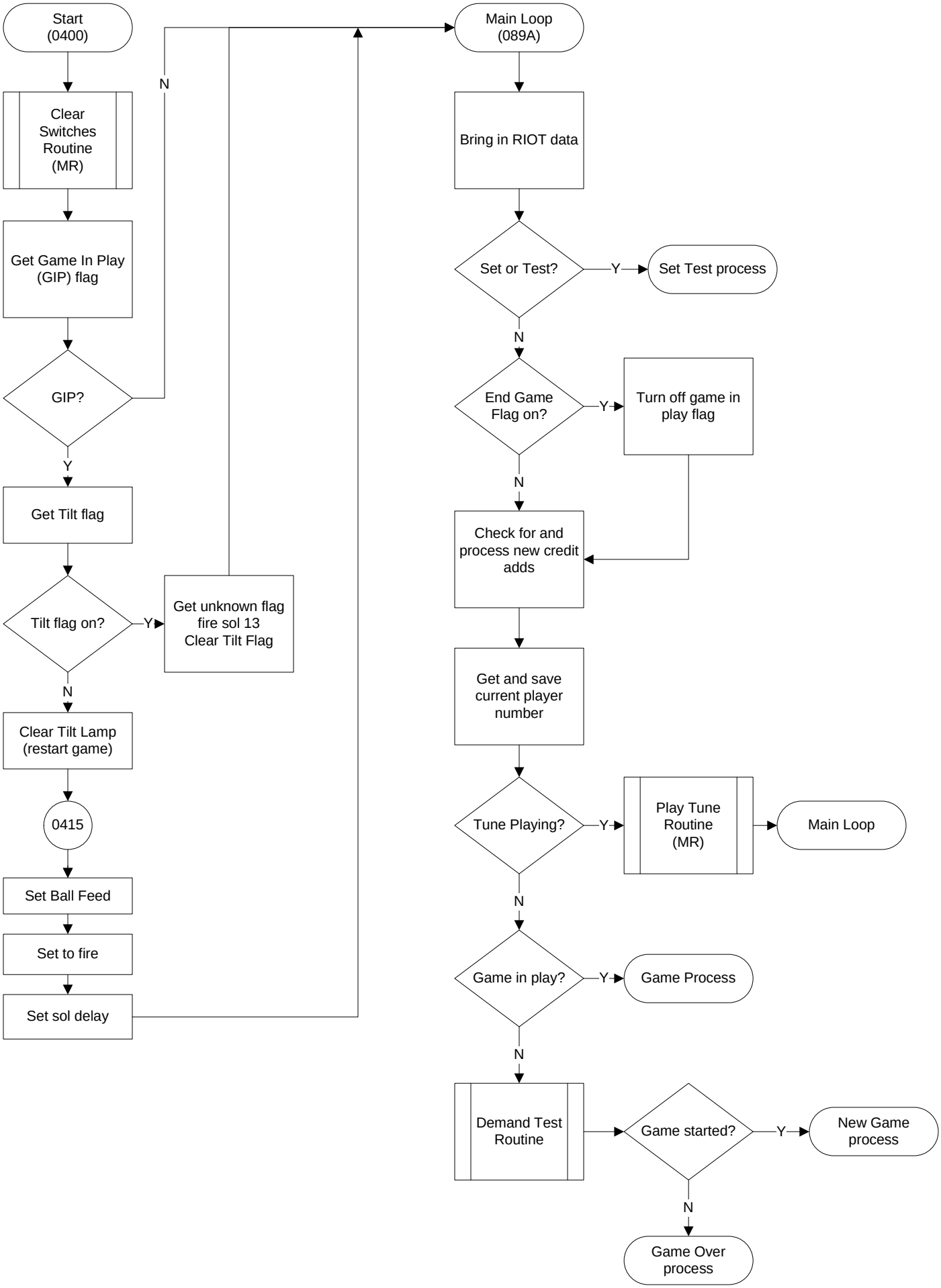
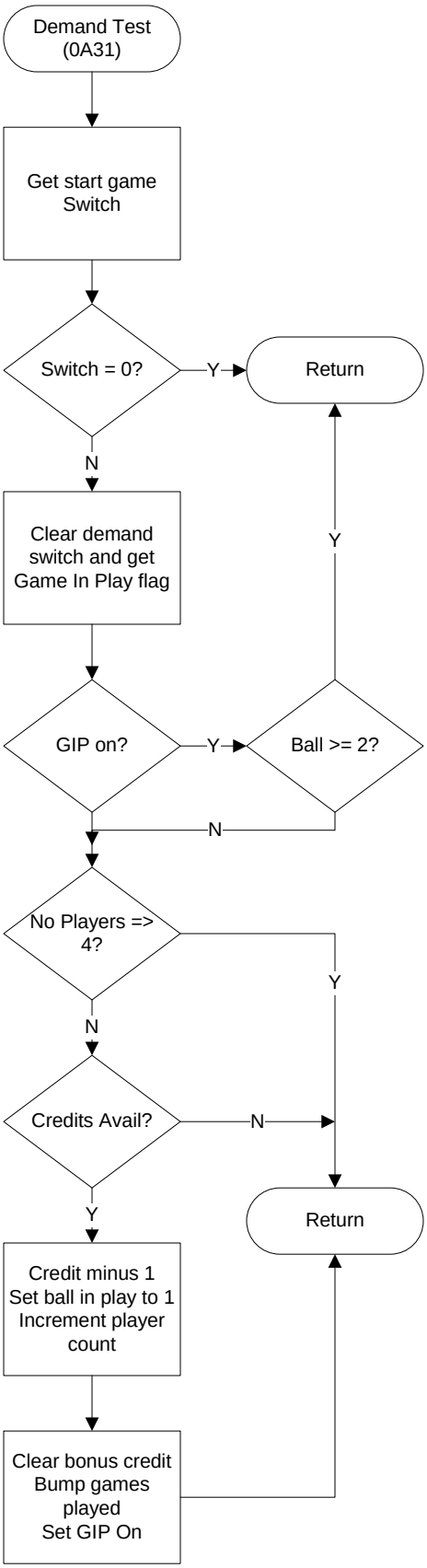
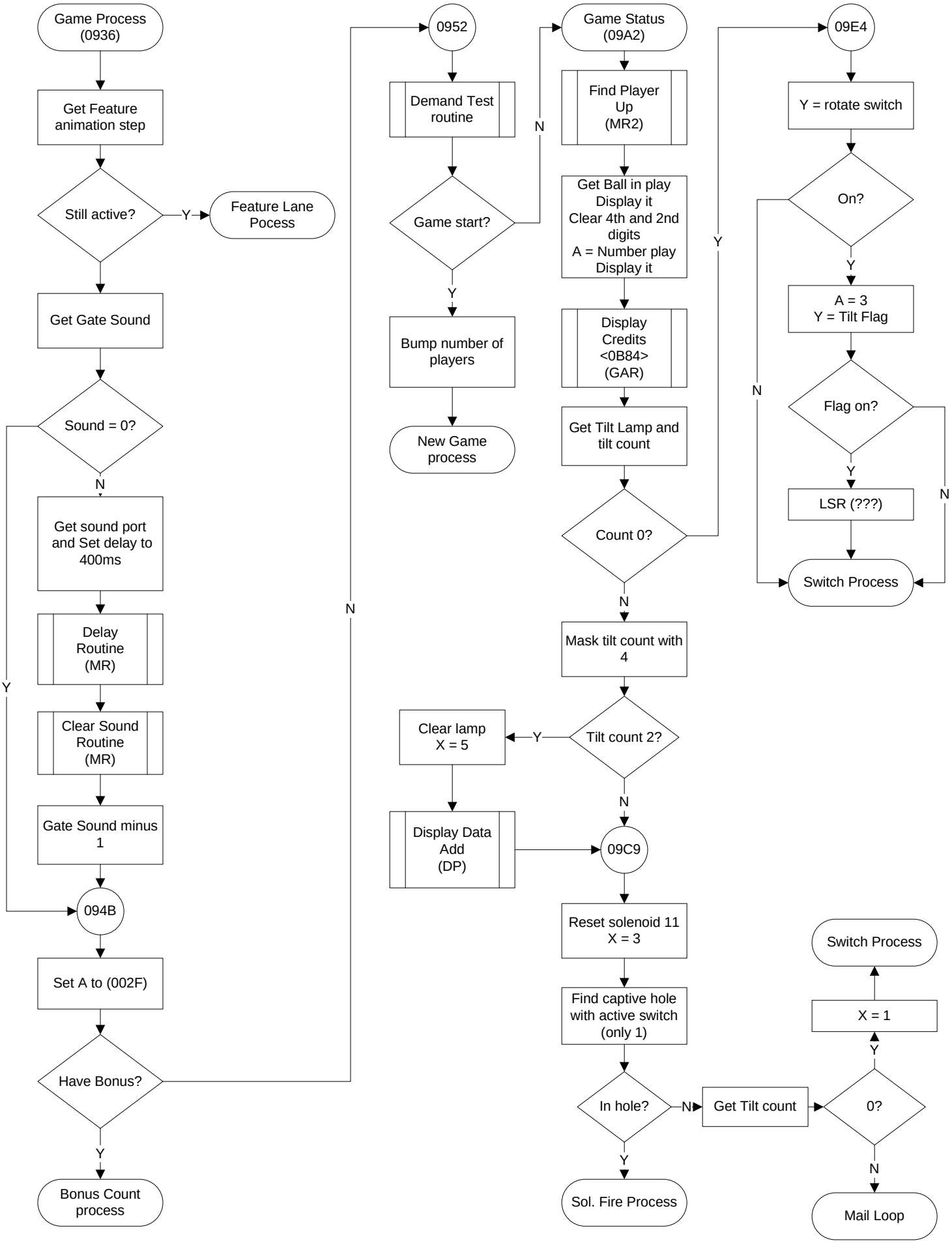
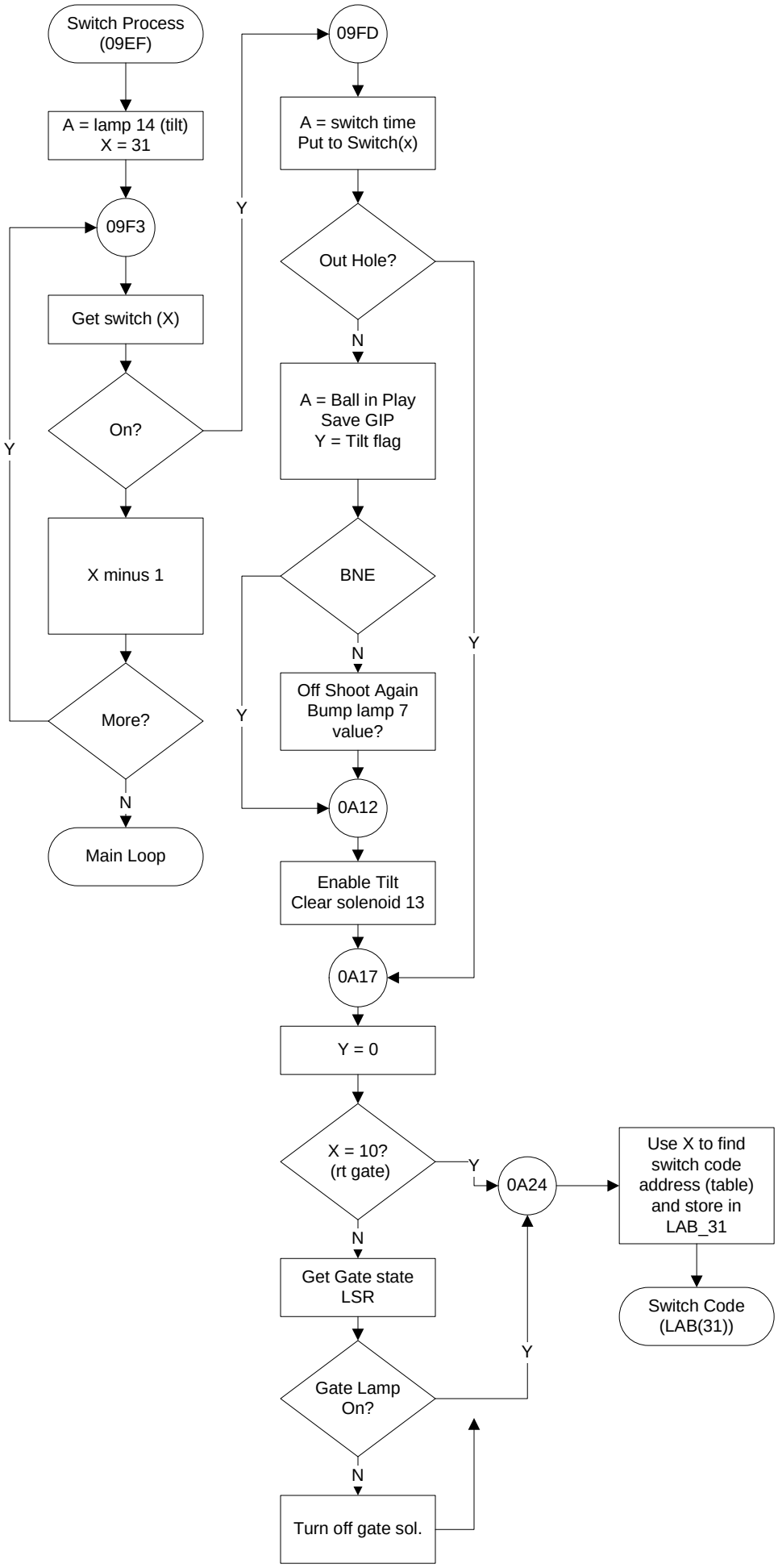

Start
(0400)
Clear
Switches
Routine
(MR)
Get Game In Play
(GIP) flag
GIP?
N
Y
Get Tilt flag
Tilt flag on?
Y
Get unknown flag
fire sol 13
Clear Tilt Flag
N
Clear Tilt Lamp
(restart game)
0415
Set Ball Feed
Set to fire
Set sol delay
Main Loop
(089A)
Bring in RIOT data
Set or Test?
Y
Set Test process
N
End Game
Flag on?
Y
Turn off game in
play flag
N
Check for and
process new credit
adds
Get and save
current player
number
Tune Playing?
Y
Play Tune
Routine
(MR)
Main Loop
N
Game in play?
Y
Game Process
N
Demand Test
Routine
Game started?
Y
New Game
process
N
Game Over
process

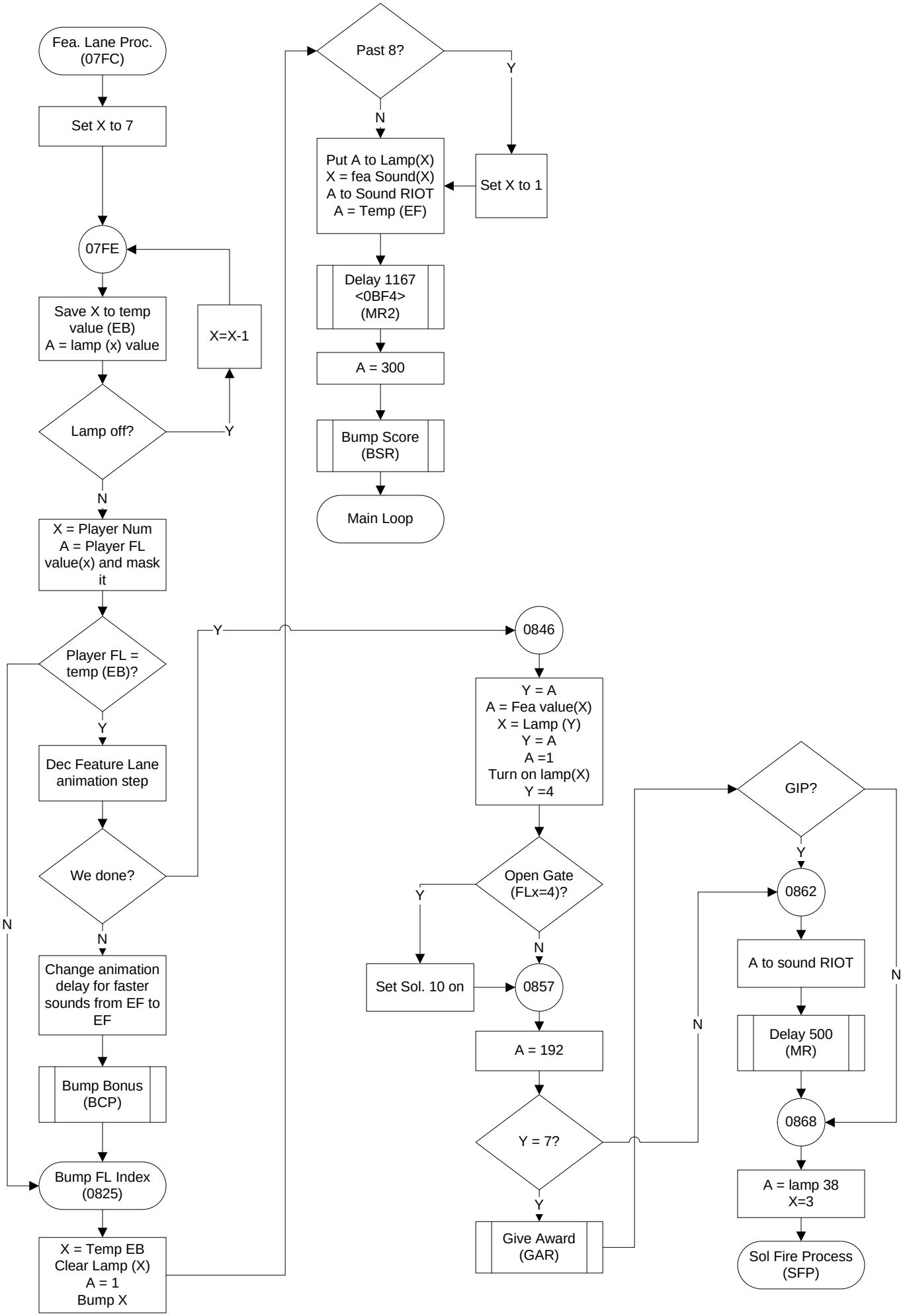

Demand Test
(0A31)
Get start game
Switch
Switch = 0?
Y
Return
N
Clear demand
switch and get
Game In Play flag
Y
GIP on?
Y
Ball >= 2?
N
No Players =>
4?
Y
N
Credits Avail?
N
Y
Return
Credit minus 1
Set ball in play to 1
Increment player
count
Clear bonus credit
Bump games
played
Set GIP On

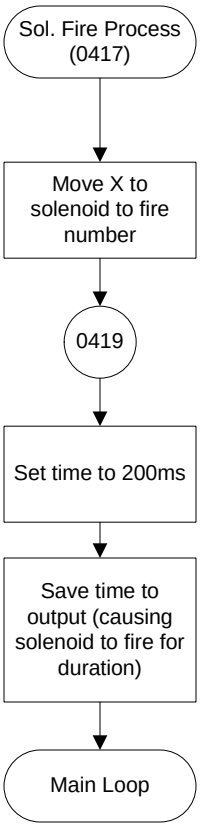

Game Process (0936)
Get Feature animation step
Still active?
Y
Feature Lane Pocess
Get Gate Sound
Sound = 0?
N
Y
Get sound port and Set delay to 400ms
Delay Routine (MR)
Clear Sound Routine (MR)
Gate Sound minus 1
094B
Set A to (002F)
Have Bonus?
Y
Bonus Count process
N
0952
Demand Test routine
Game start?
N
Y
Bump number of players
New Game process
Game Status (09A2)
Find Player Up (MR2)
Get Ball in play Display it Clear 4th and 2nd digits A = Number play Display it
Display Credits <0B84> (GAR)
Get Tilt Lamp and tilt count
Count 0?
Y
N
Mask tilt count with 4
Tilt count 2?
Y
Clear lamp X = 5
Display Data Add (DP)
N
09C9
Reset solenoid 11 X = 3
Find captive hole with active switch (only 1)
In hole?
N
Y
Sol. Fire Process
Get Tilt count
0?
Y
N
Mail Loop
X = 1
Switch Process
09E4
Y = rotate switch
On?
N
Y
A = 3 Y = Tilt Flag
Flag on?
N
Y
LSR (???)
Switch Process

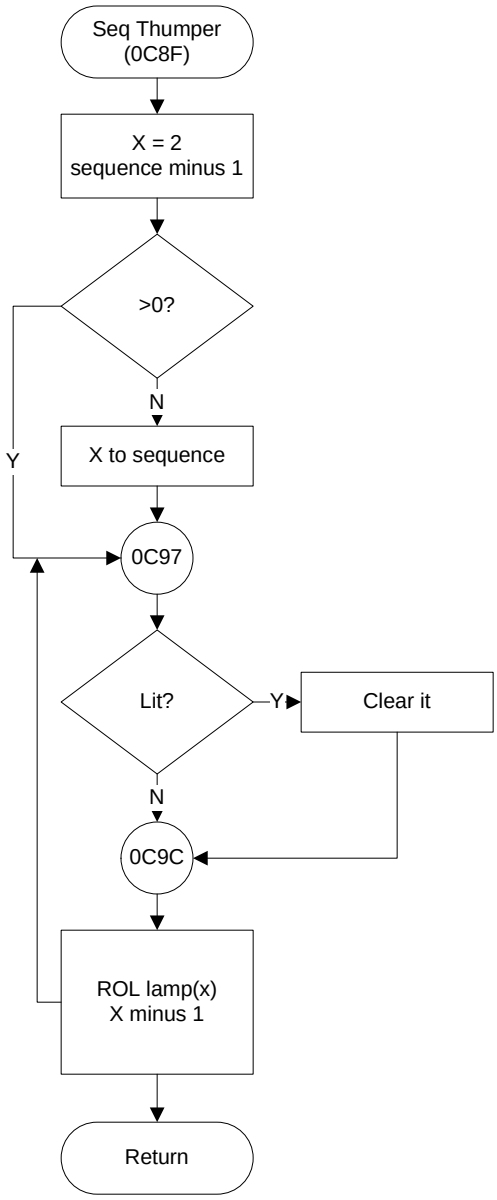


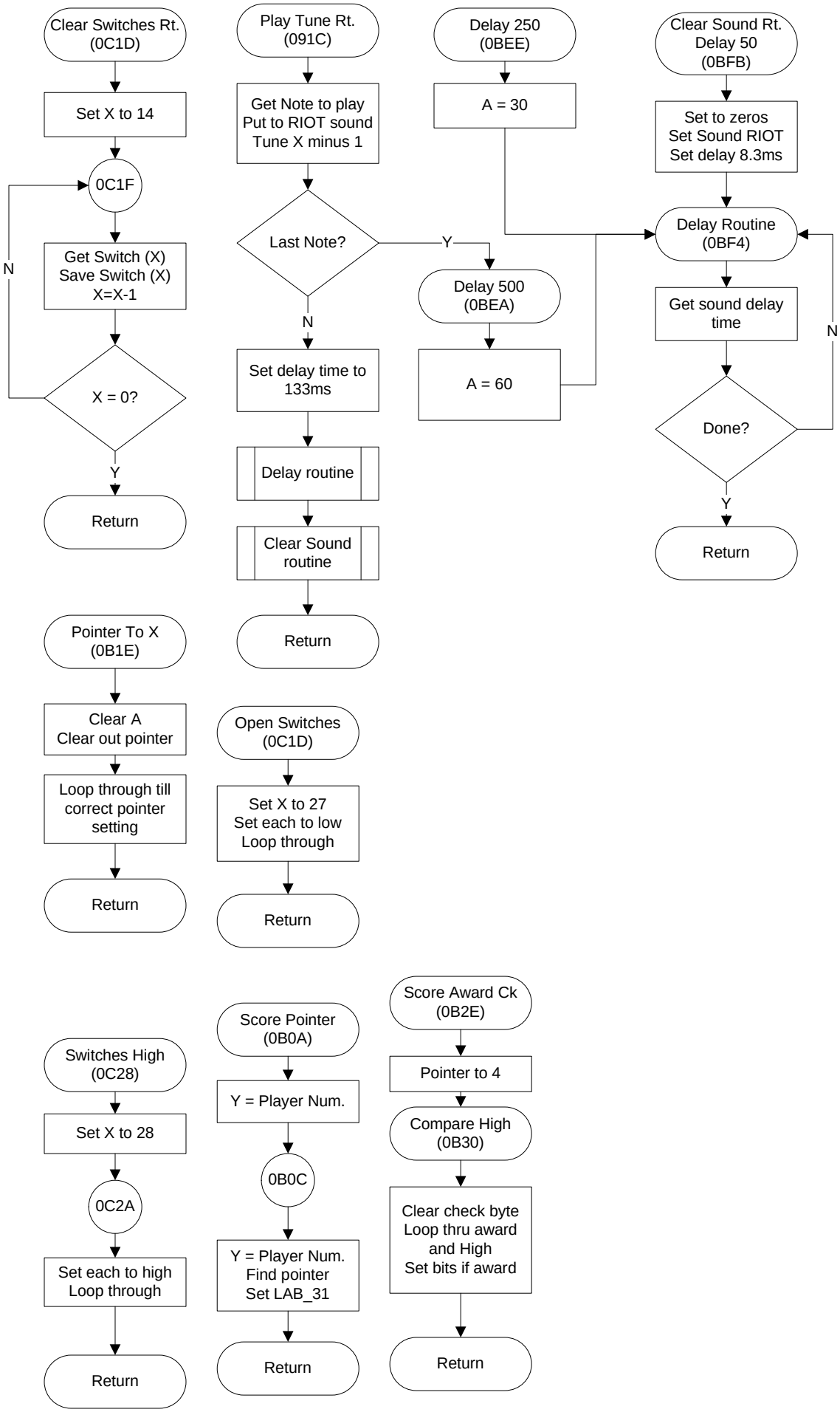
Code Table

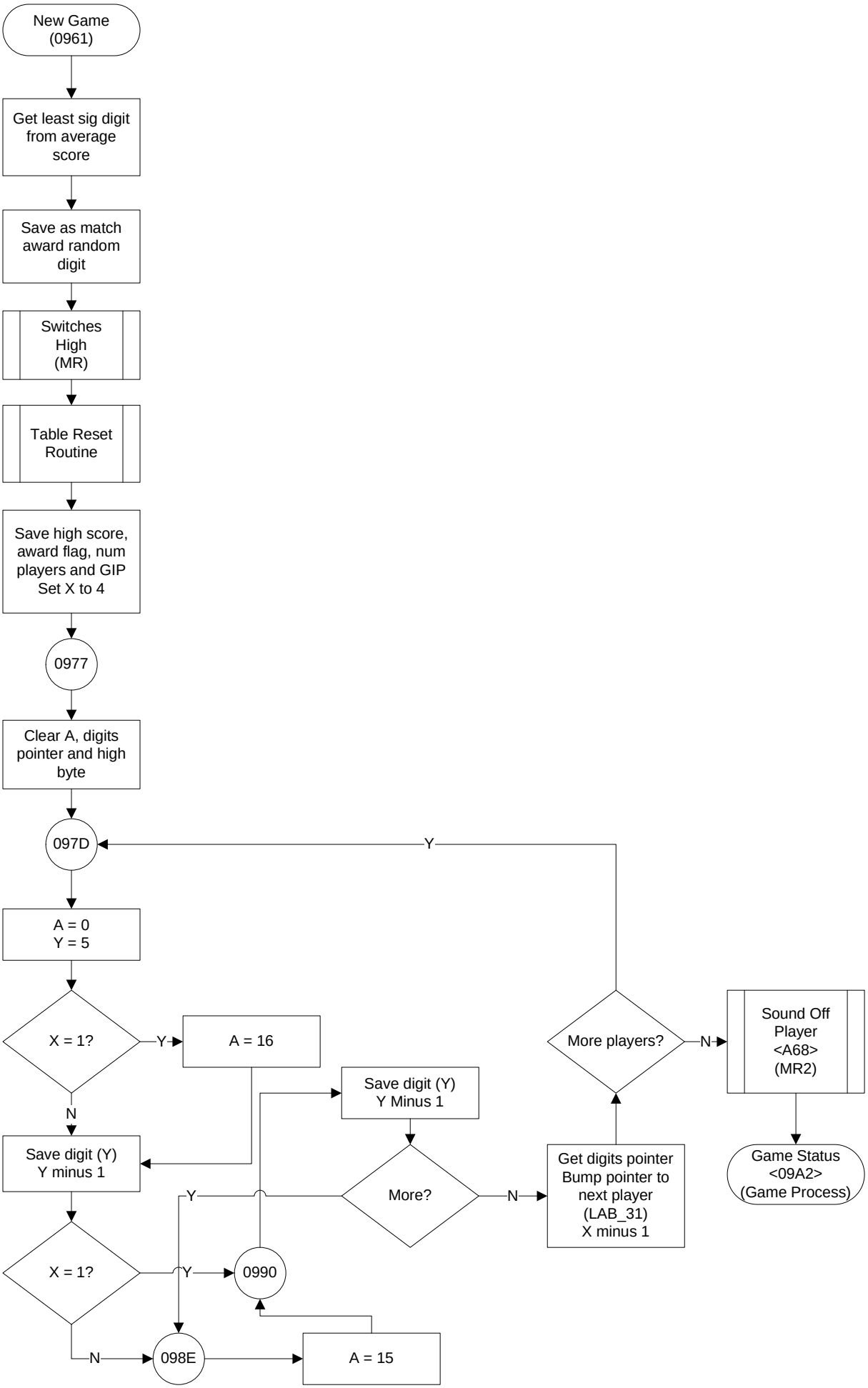
1	0FE6
2	0420
3	0439
4	0456
5	048A
6	048A
7	048A
8	05F1
9	05F1
10	05D2
11	04AD
12	04AD
13	04F5
14	04F2
15	04F5
16	0534
17	0546
18	0568
19	0572
20	0588
21	05A8
22	0600 (-26)
27	0FF2


Fea. Lane Proc. (07FC)
Set X to 7
07FE
Save X to temp value (EB)
A = lamp (x) value
X=X-1
Lamp off?
Y
N
X = Player Num
A = Player FL value(x) and mask it
Player FL = temp (EB)?
Y
N
Dec Feature Lane animation step
We done?
Y
N
Change animation delay for faster sounds from EF to EF
Bump Bonus (BCP)
Bump FL Index (0825)
X = Temp EB
Clear Lamp (X)
A = 1
Bump X
Past 8?
Y
N
Set X to 1
Put A to Lamp(X)
X = fea Sound(X)
A to Sound RIOT
A = Temp (EF)
Delay 1167 <0BF4> (MR2)
A = 300
Bump Score (BSR)
Main Loop
0846
Y = A
A = Fea value(X)
X = Lamp (Y)
Y = A
A =1
Turn on lamp(X)
Y =4
Open Gate (FLx=4)?
Y
N
Set Sol. 10 on
0857
A = 192
Y = 7?
Y
N
Give Award (GAR)
GIP?
Y
N
0862
A to sound RIOT
Delay 500 (MR)
0868
A = lamp 38
X=3
Sol Fire Process (SFP)


Sol. Fire Process
(0417)
Move X to solenoid to fire number
0419
Set time to 200ms
Save time to output (causing solenoid to fire for duration)
Main Loop


Seq Thumper
(0C8F)
X = 2
sequence minus 1
>0?
N
Y
X to sequence
0C97
Lit?
Y
Clear it
N
0C9C
ROL lamp(x)
X minus 1
Return


Clear Switches Rt.
(0C1D)
Set X to 14
0C1F
Get Switch (X)
Save Switch (X)
X=X-1
X = 0?
N
Y
Return
Play Tune Rt.
(091C)
Get Note to play
Put to RIOT sound
Tune X minus 1
Last Note?
Y
N
Set delay time to
133ms
Delay routine
Clear Sound
routine
Return
Delay 250
(0BEE)
A = 30
Delay 500
(0BEA)
A = 60
Clear Sound Rt.
Delay 50
(0BFB)
Set to zeros
Set Sound RIOT
Set delay 8.3ms
Delay Routine
(0BF4)
Get sound delay
time
Done?
N
Y
Return
Pointer To X
(0B1E)
Clear A
Clear out pointer
Loop through till
correct pointer
setting
Return
Open Switches
(0C1D)
Set X to 27
Set each to low
Loop through
Return
Switches High
(0C28)
Set X to 28
0C2A
Set each to high
Loop through
Return
Score Pointer
(0B0A)
Y = Player Num.
0B0C
Y = Player Num.
Find pointer
Set LAB_31
Return
Score Award Ck
(0B2E)
Pointer to 4
Compare High
(0B30)
Clear check byte
Loop thru award
and High
Set bits if award
Return


New Game
(0961)
Get least sig digit from average score
Save as match award random digit
Switches High
(MR)
Table Reset Routine
Save high score, award flag, num players and GIP
Set X to 4
0977
Clear A, digits pointer and high byte
097D
A = 0
Y = 5
X = 1?
Y
A = 16
N
Save digit (Y)
Y minus 1
X = 1?
Y
0990
N
098E
A = 15
Save digit (Y)
Y Minus 1
More?
Y
N
Get digits pointer
Bump pointer to next player
(LAB_31)
X minus 1
More players?
Y
N
Sound Off Player
<A68>
(MR2)
Game Status
<09A2>
(Game Process)

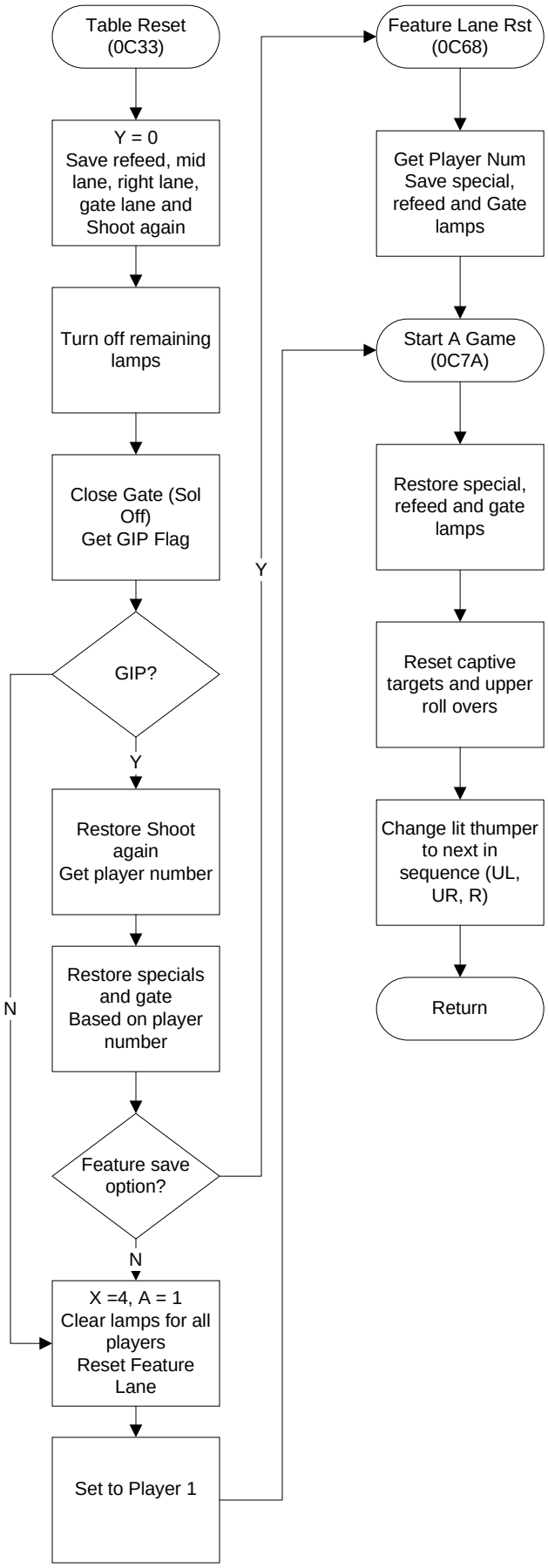
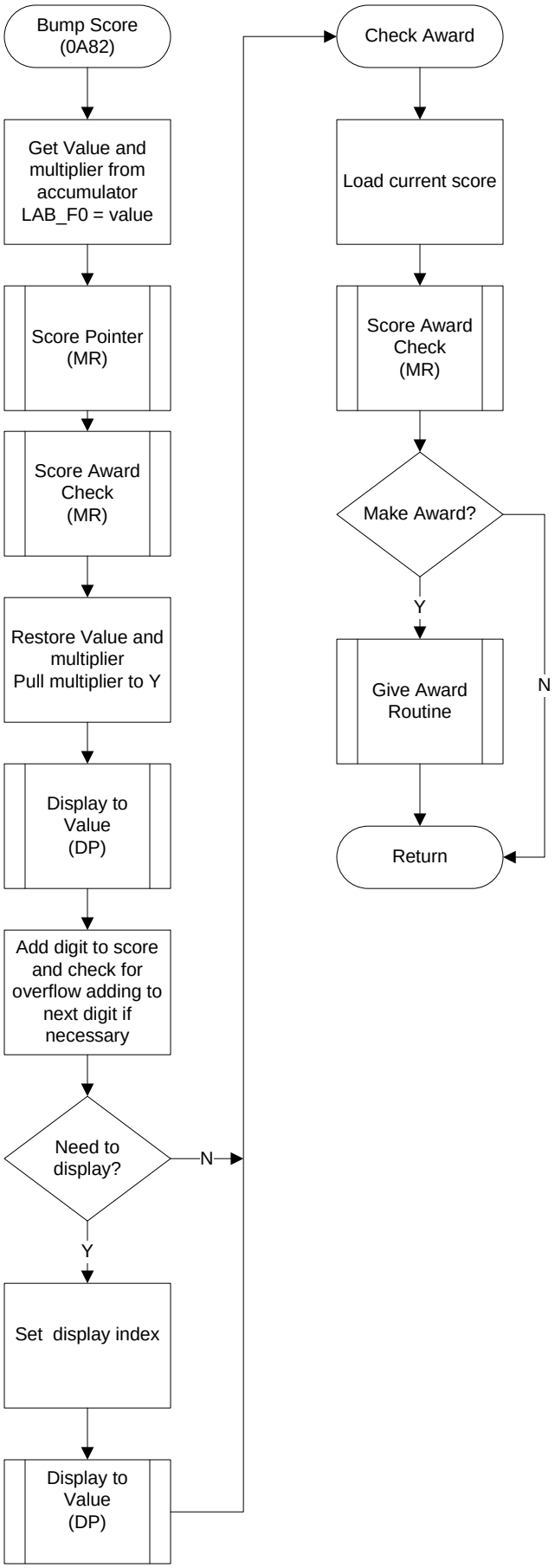
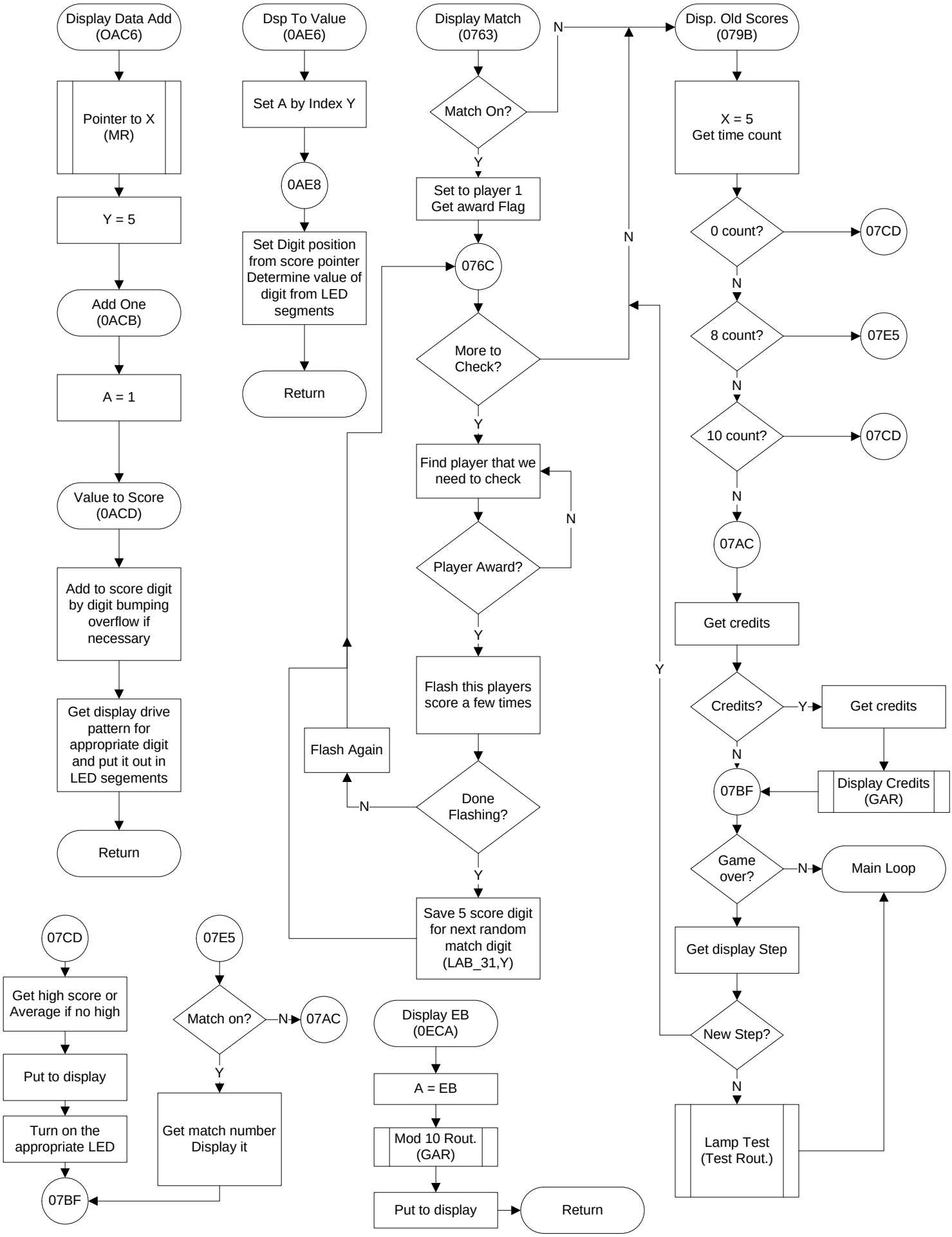
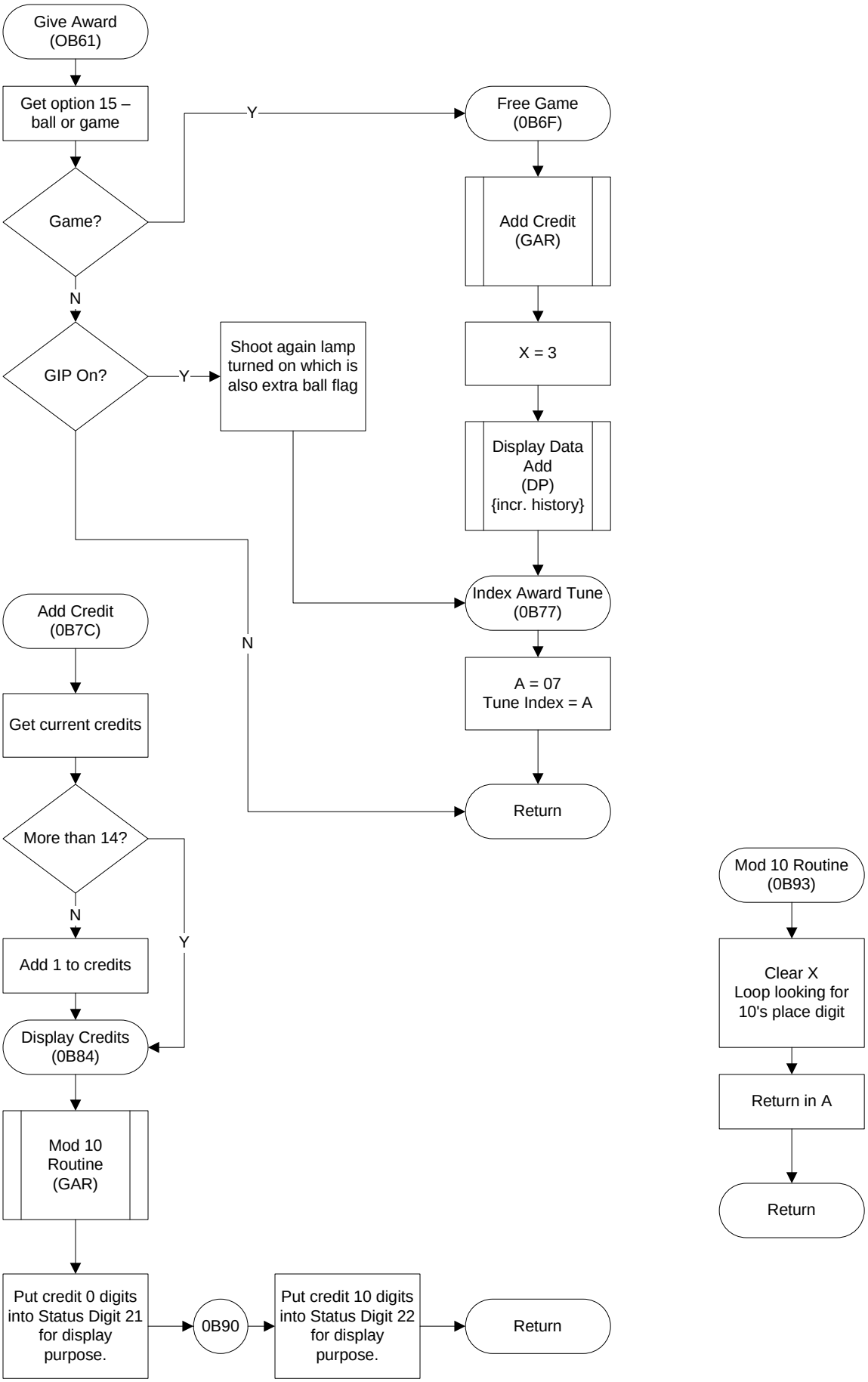
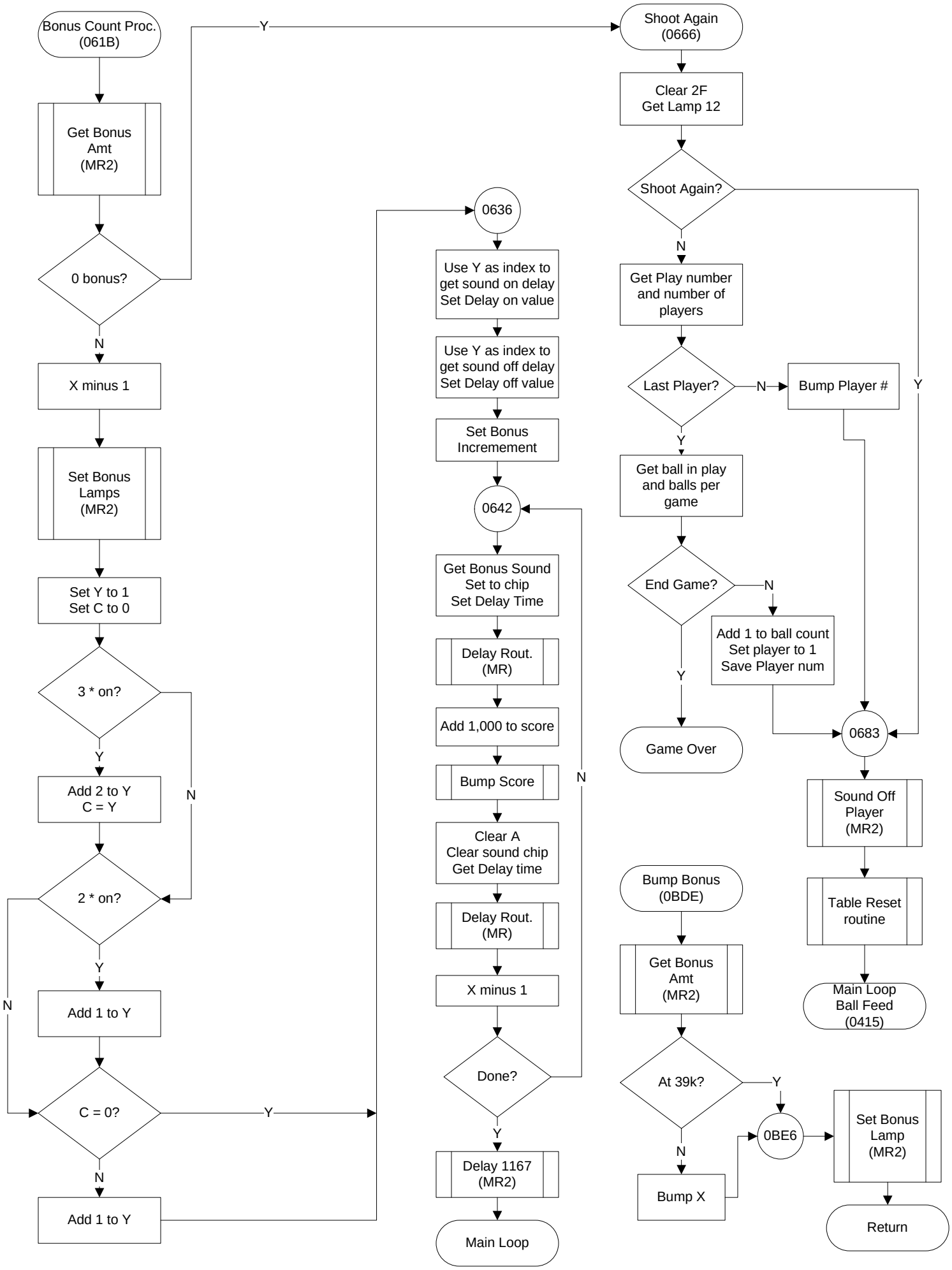


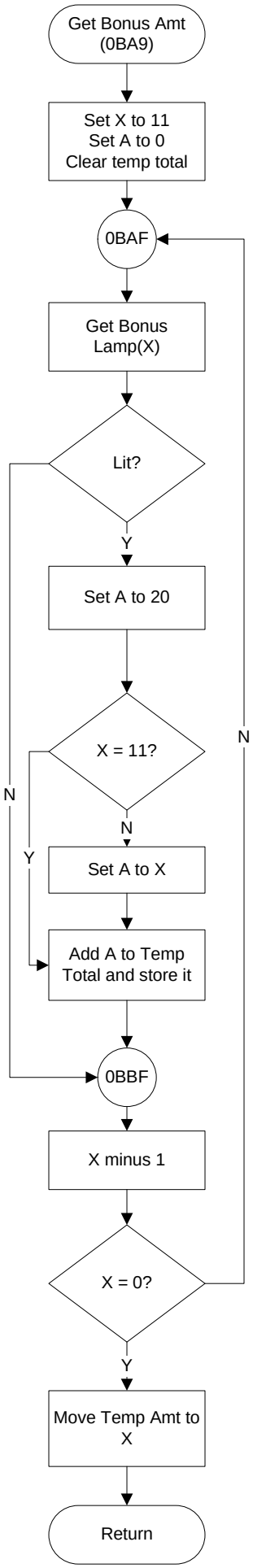
Table Reset (0C33)
Y = 0
Save refeed, mid lane, right lane, gate lane and Shoot again
Turn off remaining lamps
Close Gate (Sol Off)
Get GIP Flag
GIP?
Y
N
Restore Shoot again
Get player number
Restore specials and gate
Based on player number
Feature save option?
Y
N
X =4, A = 1
Clear lamps for all players
Reset Feature Lane
Set to Player 1
Feature Lane Rst (0C68)
Get Player Num
Save special, refeed and Gate lamps
Start A Game (0C7A)
Restore special, refeed and gate lamps
Reset captive targets and upper roll overs
Change lit thumper to next in sequence (UL, UR, R)
Return

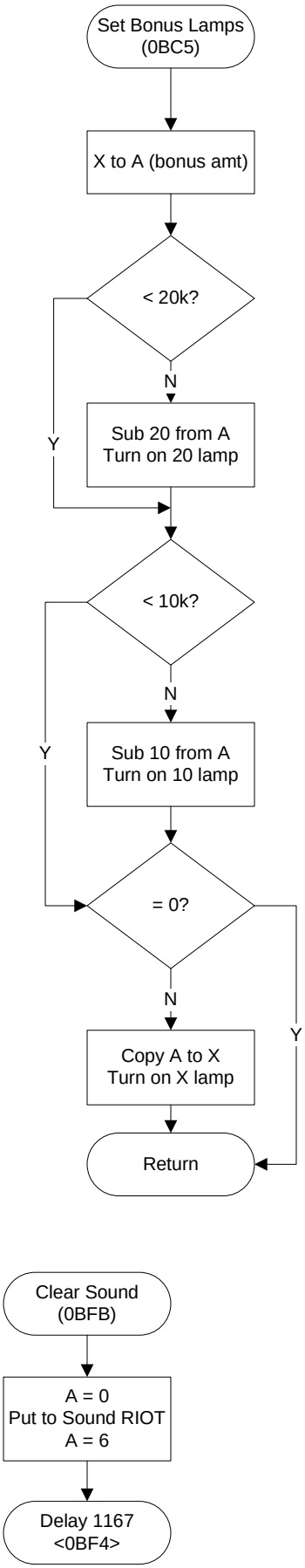

Bump Score
(0A82)
Get Value and multiplier from accumulator
LAB_F0 = value
Score Pointer
(MR)
Score Award Check
(MR)
Restore Value and multiplier
Pull multiplier to Y
Display to Value
(DP)
Add digit to score and check for overflow adding to next digit if necessary
Need to display?
N
Y
Set display index
Display to Value
(DP)
Check Award
Load current score
Score Award Check
(MR)
Make Award?
Y
N
Give Award Routine
Return

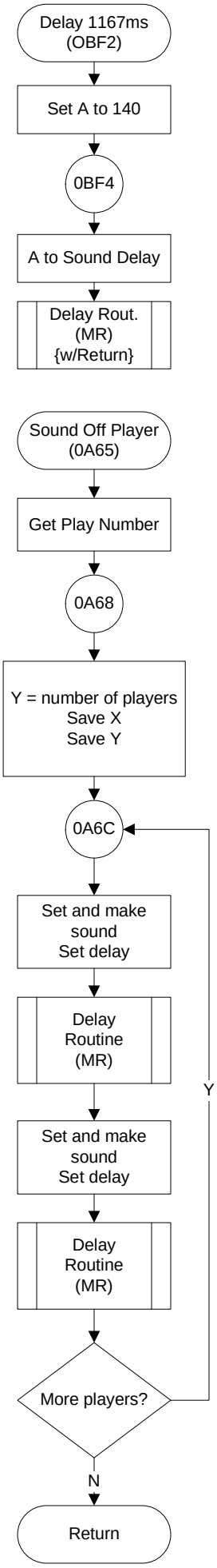

Display Data Add (OAC6)
Pointer to X (MR)
Y = 5
Add One (0ACB)
A = 1
Value to Score (0ACD)
Add to score digit by digit bumping overflow if necessary
Get display drive pattern for appropriate digit and put it out in LED segements
Return
Dsp To Value (0AE6)
Set A by Index Y
0AE8
Set Digit position from score pointer Determine value of digit from LED segments
Return
Display Match (0763)
Match On?
N
Y
Set to player 1 Get award Flag
076C
More to Check?
N
Y
Find player that we need to check
Player Award?
N
Y
Flash this players score a few times
Done Flashing?
N
Flash Again
Y
Save 5 score digit for next random match digit (LAB_31,Y)
Disp. Old Scores (079B)
X = 5 Get time count
0 count?
07CD
N
8 count?
07E5
N
10 count?
07CD
N
07AC
Get credits
Credits?
Y
Get credits
N
07BF
Display Credits (GAR)
Game over?
N
Main Loop
Get display Step
New Step?
Y
N
Lamp Test (Test Rout.)
07CD
Get high score or Average if no high
Put to display
Turn on the appropriate LED
07BF
07E5
Match on?
N
07AC
Y
Get match number Display it
Display EB (0ECA)
A = EB
Mod 10 Rout. (GAR)
Put to display
Return

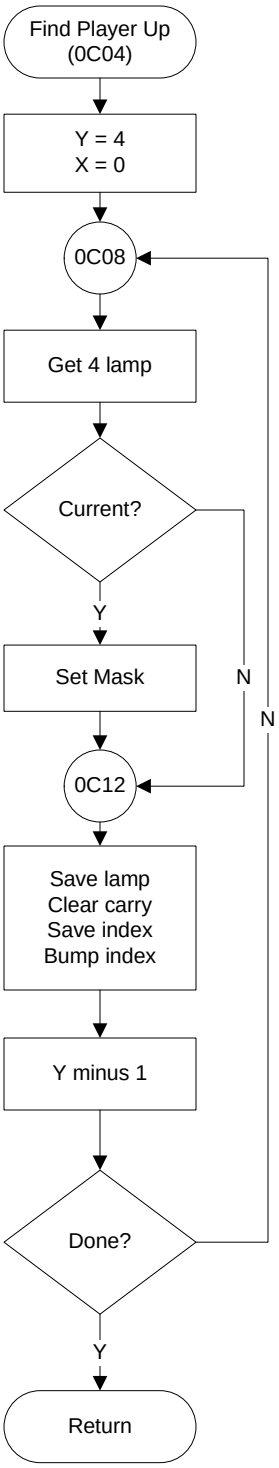

Give Award
(OB61)
Get option 15 –
ball or game
Game?
Y
Free Game
(0B6F)
Add Credit
(GAR)
X = 3
Display Data
Add
(DP)
{incr. history}
Index Award Tune
(0B77)
A = 07
Tune Index = A
Return
N
GIP On?
Y
Shoot again lamp
turned on which is
also extra ball flag
N
Add Credit
(0B7C)
Get current credits
More than 14?
N
Y
Add 1 to credits
Display Credits
(0B84)
Mod 10
Routine
(GAR)
Put credit 0 digits
into Status Digit 21
for display
purpose.
0B90
Put credit 10 digits
into Status Digit 22
for display
purpose.
Return
Mod 10 Routine
(0B93)
Clear X
Loop looking for
10's place digit
Return in A
Return

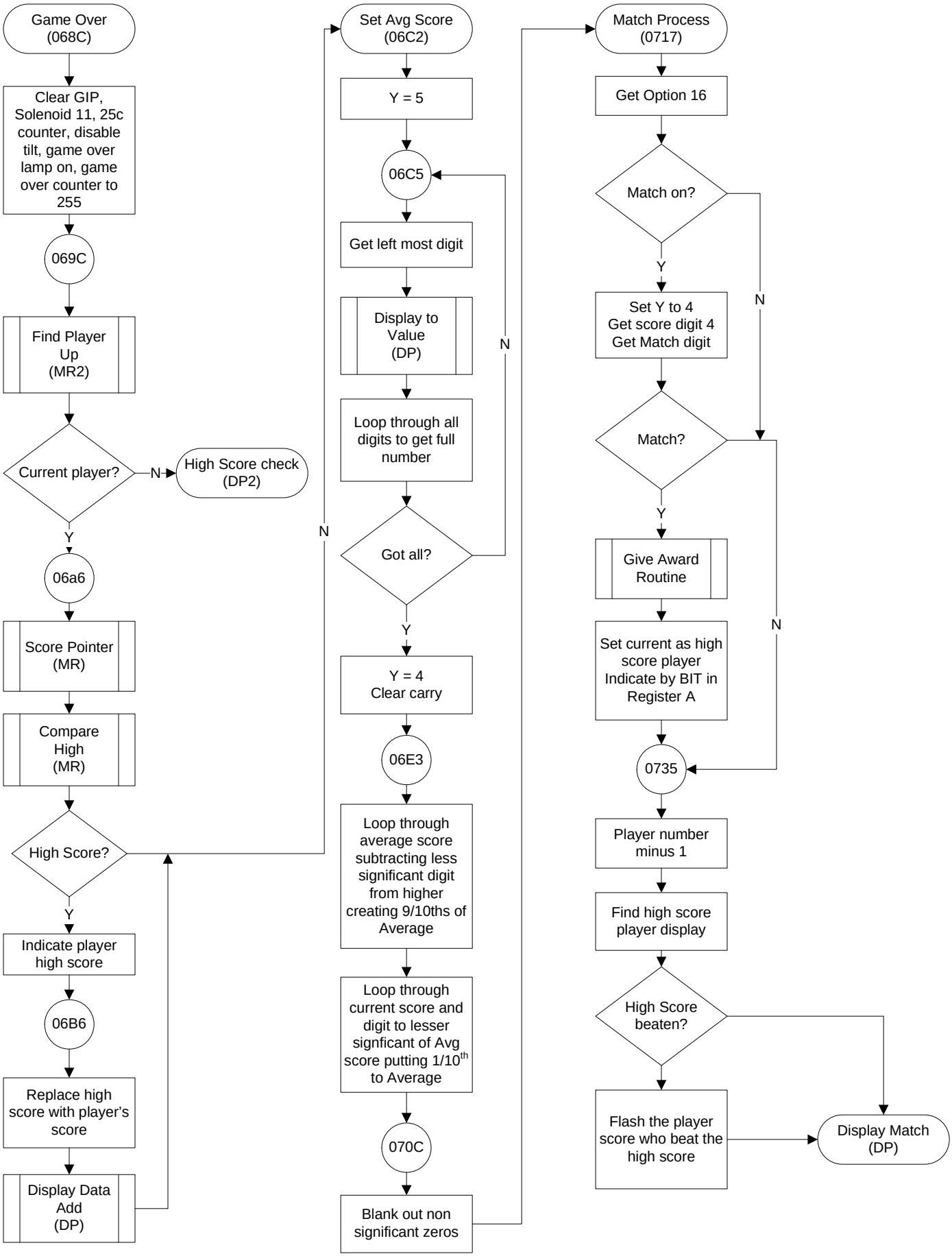

Bonus Count Proc.
(061B)
Get Bonus
Amt
(MR2)
0 bonus?
Y
N
X minus 1
Set Bonus
Lamps
(MR2)
Set Y to 1
Set C to 0
3 * on?
Y
N
Add 2 to Y
C = Y
2 * on?
Y
N
Add 1 to Y
C = 0?
Y
N
Add 1 to Y
0636
Use Y as index to
get sound on delay
Set Delay on value
Use Y as index to
get sound off delay
Set Delay off value
Set Bonus
Incremement
0642
Get Bonus Sound
Set to chip
Set Delay Time
Delay Rout.
(MR)
Add 1,000 to score
Bump Score
Clear A
Clear sound chip
Get Delay time
Delay Rout.
(MR)
X minus 1
Done?
N
Y
Delay 1167
(MR2)
Main Loop
Shoot Again
(0666)
Clear 2F
Get Lamp 12
Shoot Again?
Y
N
Get Play number
and number of
players
Last Player?
N
Bump Player #
Y
Get ball in play
and balls per
game
End Game?
N
Add 1 to ball count
Set player to 1
Save Player num
Y
Game Over
0683
Sound Off
Player
(MR2)
Table Reset
routine
Main Loop
Ball Feed
(0415)
Bump Bonus
(0BDE)
Get Bonus
Amt
(MR2)
At 39k?
Y
N
Bump X
0BE6
Set Bonus
Lamp
(MR2)
Return

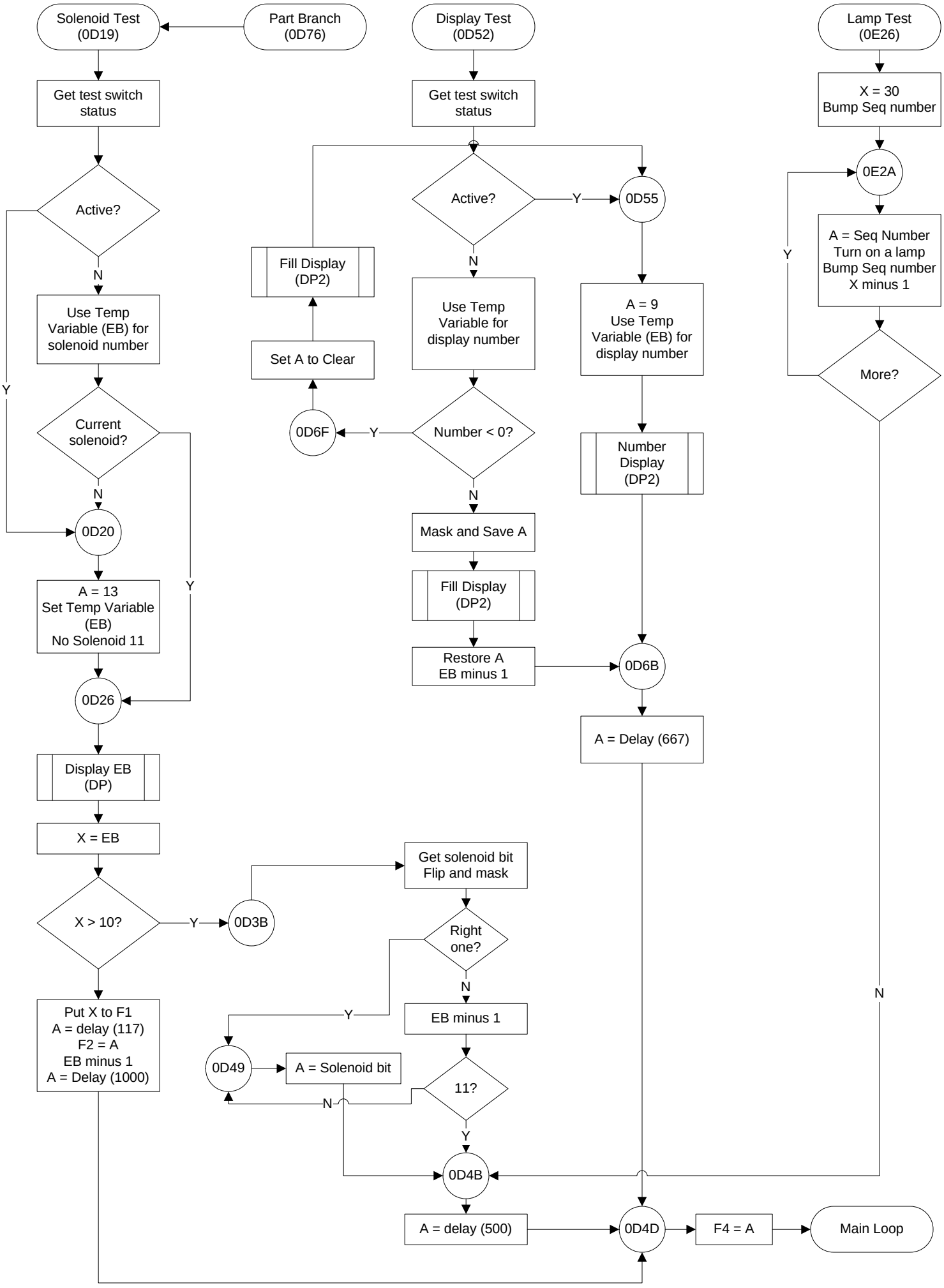

Get Bonus Amt
(0BA9)
Set X to 11
Set A to 0
Clear temp total
0BAF
Get Bonus
Lamp(X)
Lit?
Y
N
Set A to 20
X = 11?
N
Y
Set A to X
Add A to Temp
Total and store it
0BBF
X minus 1
X = 0?
N
Y
Move Temp Amt to
X
Return

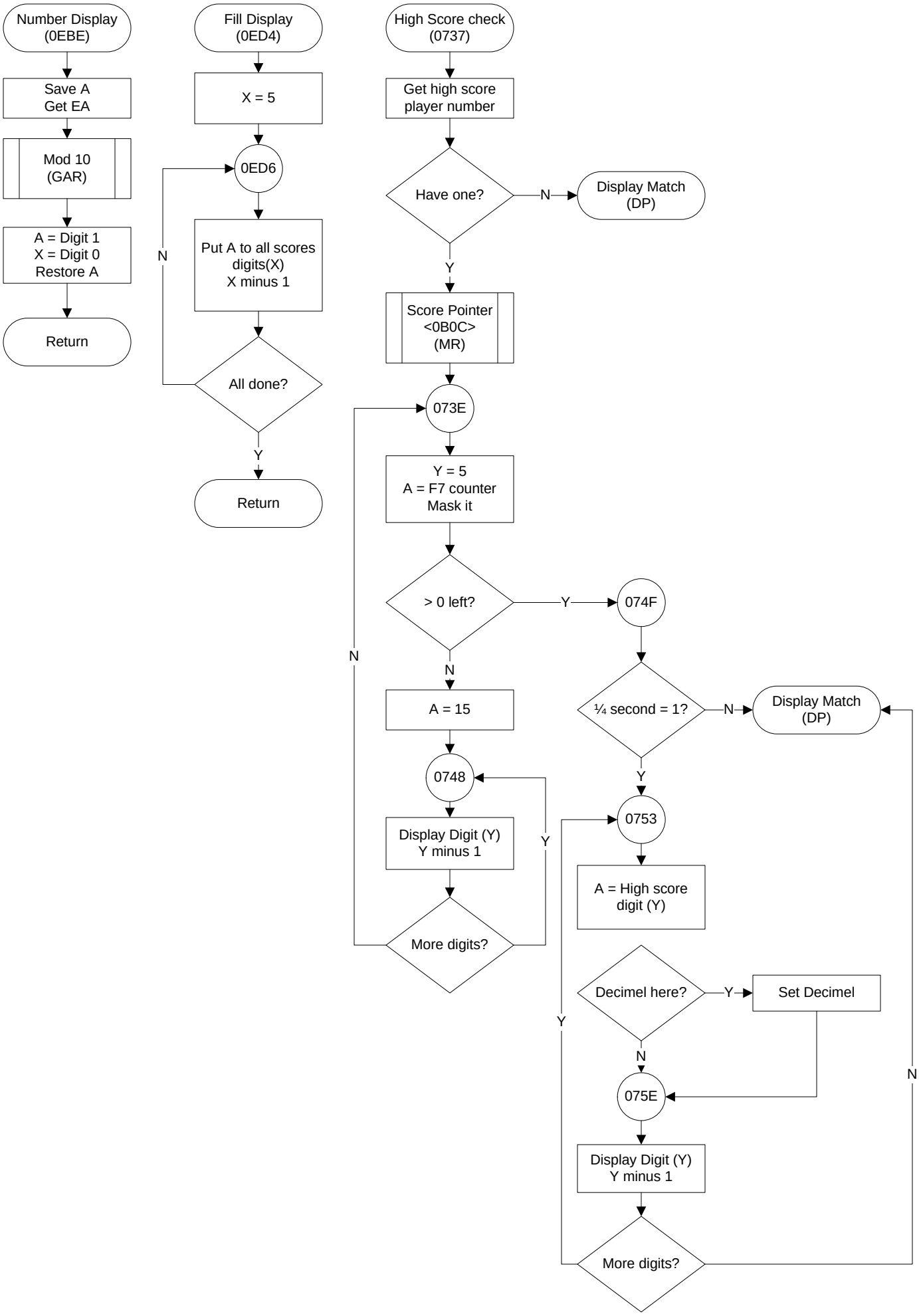

Set Bonus Lamps
(0BC5)
X to A (bonus amt)
< 20k?
N
Y
Sub 20 from A
Turn on 20 lamp
< 10k?
N
Y
Sub 10 from A
Turn on 10 lamp
= 0?
N
Y
Copy A to X
Turn on X lamp
Return
Clear Sound
(0BFB)
A = 0
Put to Sound RIOT
A = 6
Delay 1167
<0BF4>

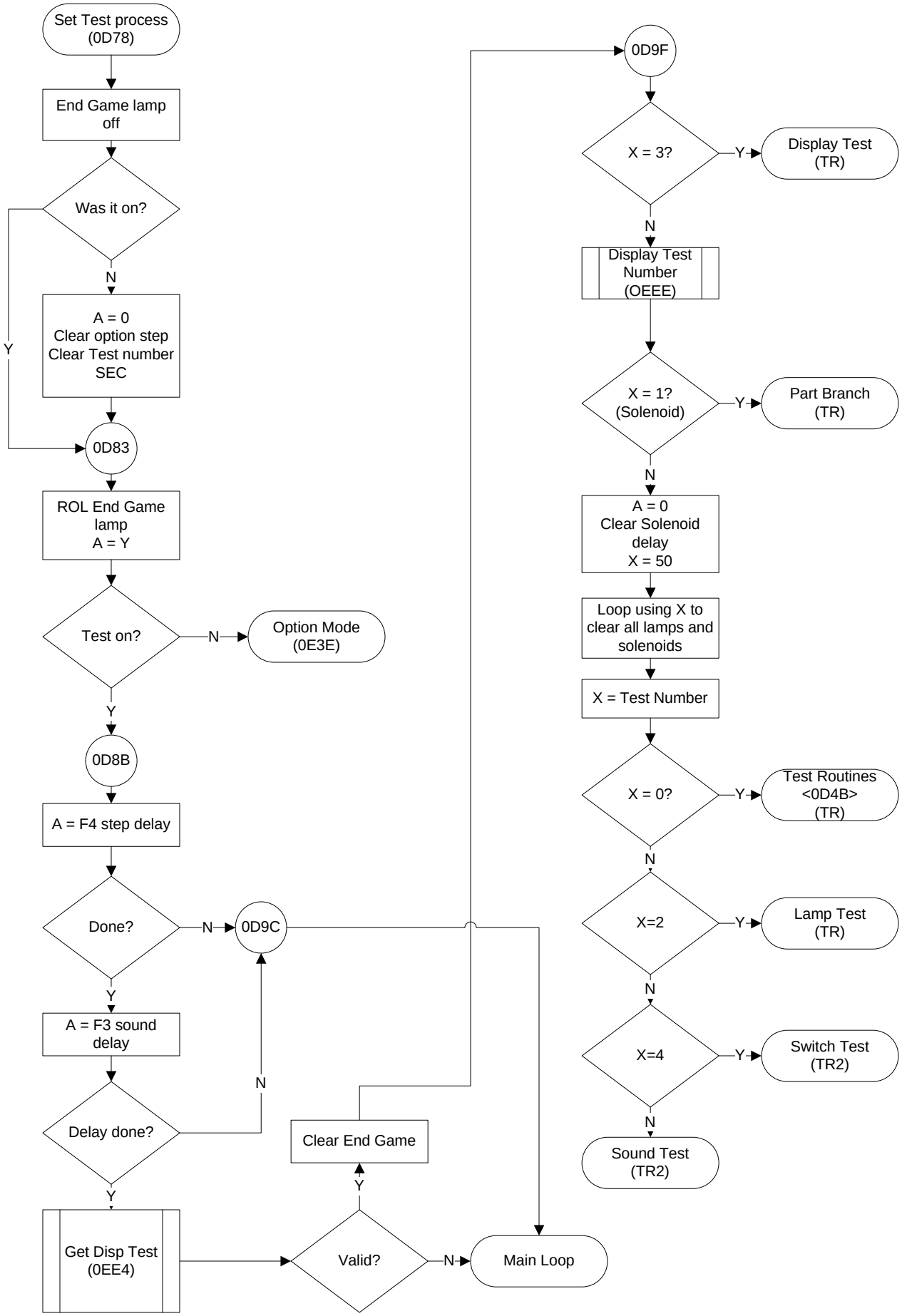

Delay 1167ms
(OBF2)
Set A to 140
0BF4
A to Sound Delay
Delay Rout.
(MR)
{w/Return}
Sound Off Player
(0A65)
Get Play Number
0A68
Y = number of players
Save X
Save Y
0A6C
Set and make
sound
Set delay
Delay
Routine
(MR)
Set and make
sound
Set delay
Delay
Routine
(MR)
More players?
Y
N
Return

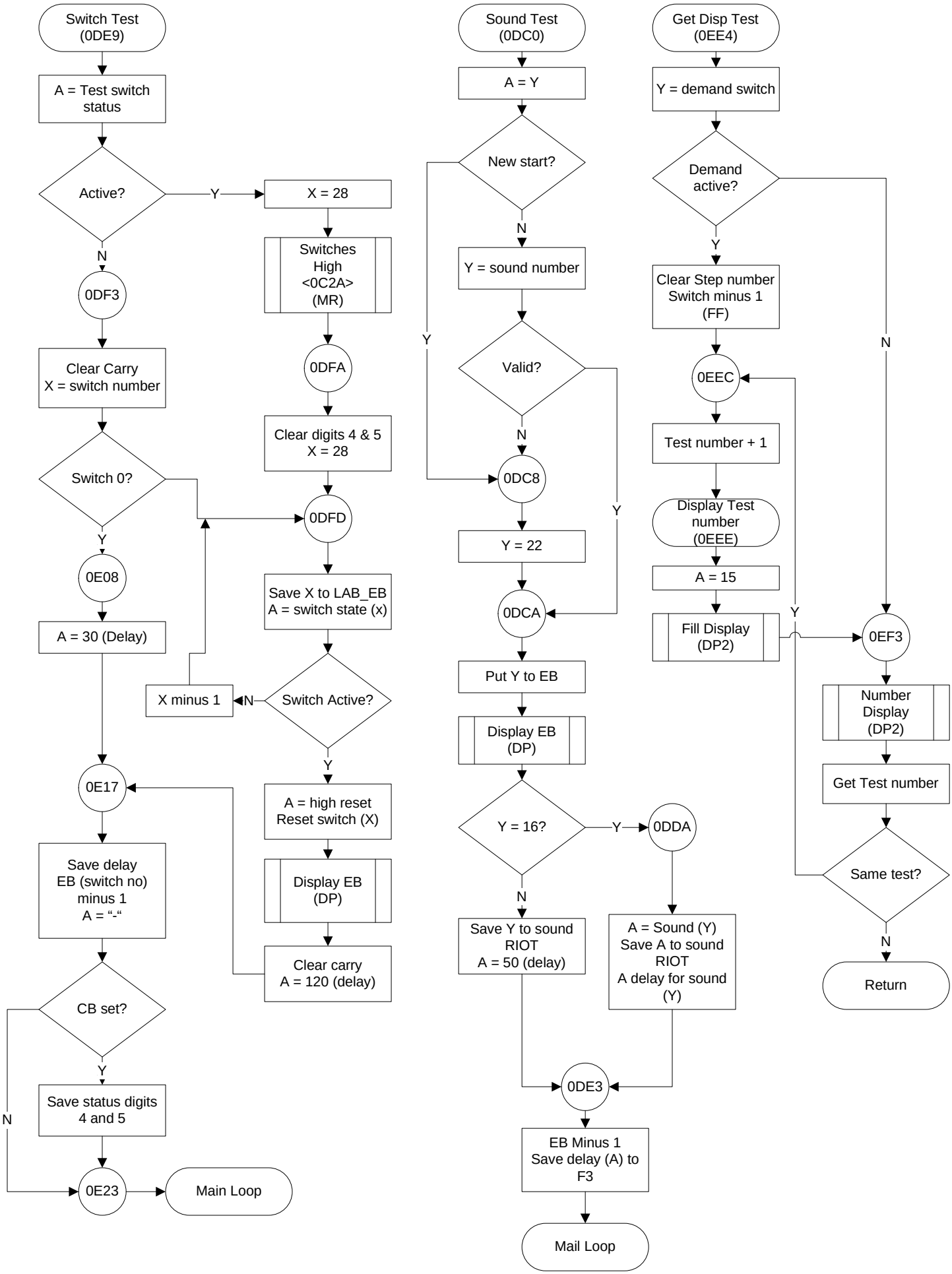

Find Player Up
(0C04)
Y = 4
X = 0
0C08
Get 4 lamp
Current?
Y
N
Set Mask
0C12
Save lamp
Clear carry
Save index
Bump index
Y minus 1
Done?
N
Y
Return

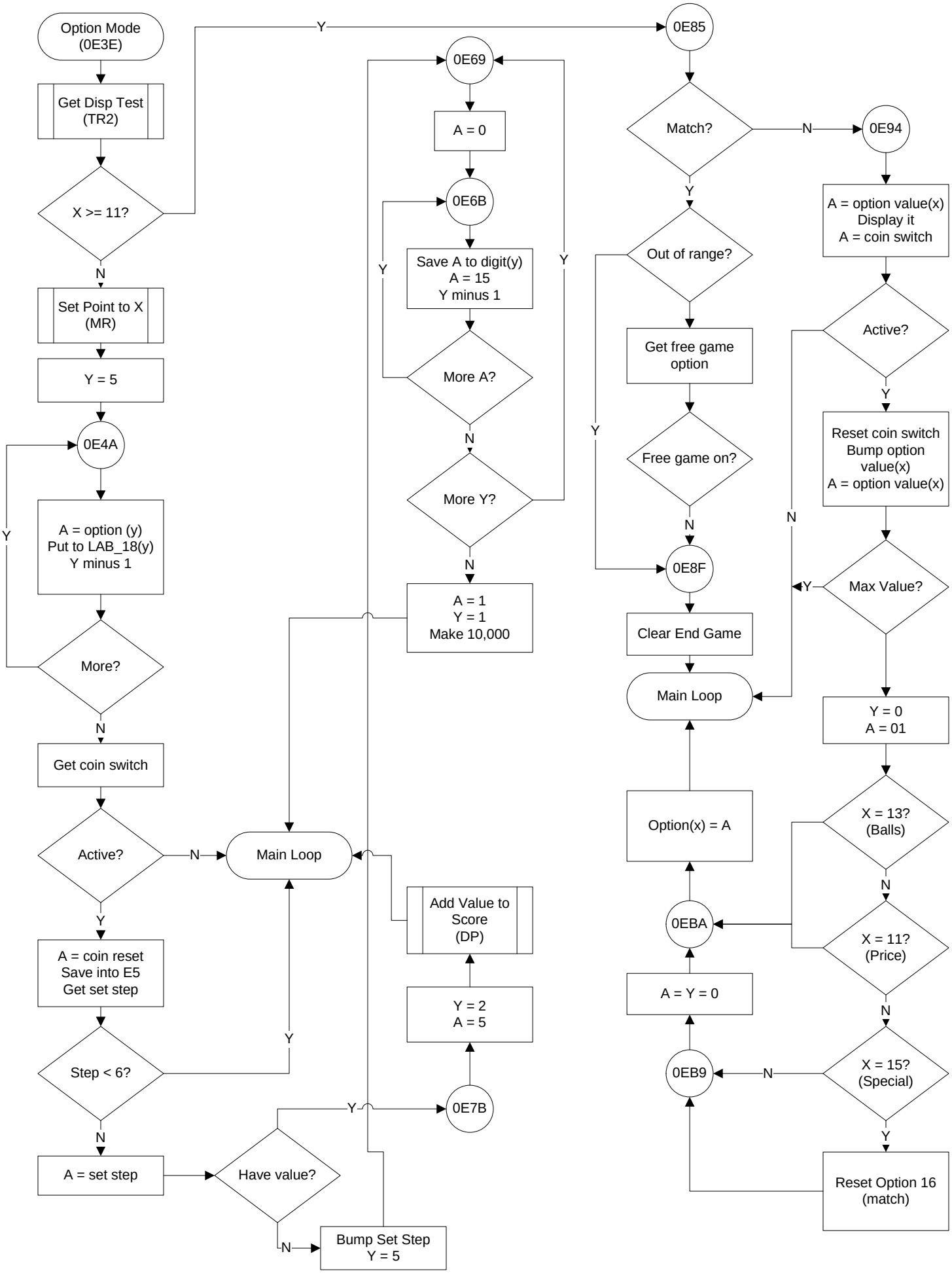

Game Over (068C)
Clear GIP, Solenoid 11, 25c counter, disable tilt, game over lamp on, game over counter to 255
069C
Find Player Up (MR2)
Current player?
N
High Score check (DP2)
Y
06a6
Score Pointer (MR)
Compare High (MR)
High Score?
Y
Indicate player high score
06B6
Replace high score with player's score
Display Data Add (DP)
N
Set Avg Score (06C2)
Y = 5
06C5
Get left most digit
Display to Value (DP)
Loop through all digits to get full number
Got all?
N
Y
Y = 4
Clear carry
06E3
Loop through average score subtracting less significant digit from higher creating 9/10ths of Average
Loop through current score and digit to lesser signficant of Avg score putting 1/10th to Average
070C
Blank out non significant zeros
Match Process (0717)
Get Option 16
Match on?
Y
N
Set Y to 4
Get score digit 4
Get Match digit
Match?
Y
N
Give Award Routine
Set current as high score player
Indicate by BIT in Register A
0735
Player number minus 1
Find high score player display
High Score beaten?
Flash the player score who beat the high score
Display Match (DP)

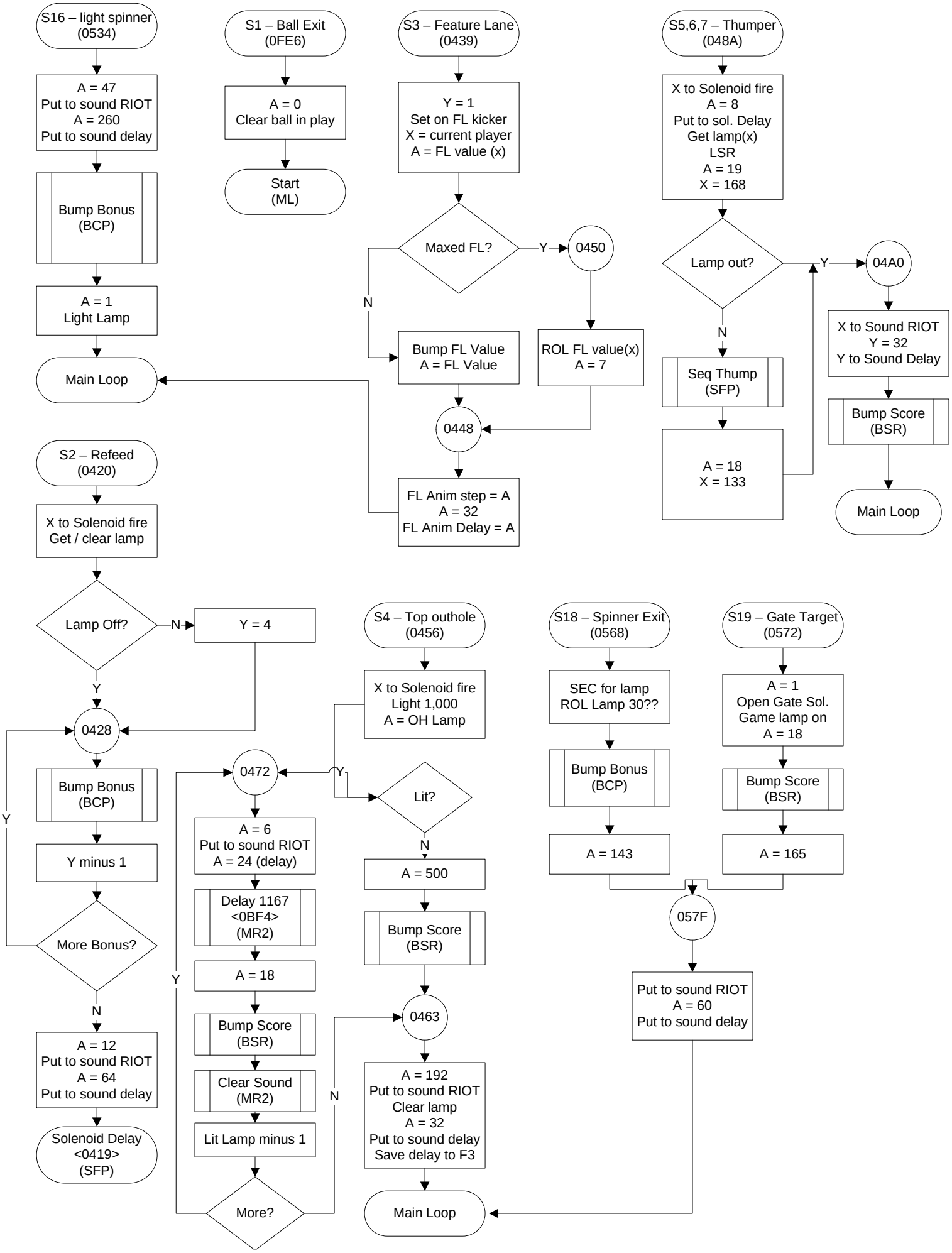

Solenoid Test (0D19)
Part Branch (0D76)
Display Test (0D52)
Lamp Test (0E26)
Get test switch status
Get test switch status
X = 30
Bump Seq number
Active?
Active?
Y
0D55
0E2A
N
Fill Display (DP2)
N
A = Seq Number
Turn on a lamp
Bump Seq number
X minus 1
Y
Use Temp Variable (EB) for solenoid number
Use Temp Variable for display number
A = 9
Use Temp Variable (EB) for display number
Set A to Clear
More?
Y
Current solenoid?
0D6F
Y
Number < 0?
Number Display (DP2)
N
N
0D20
Mask and Save A
A = 13
Set Temp Variable (EB)
No Solenoid 11
Y
Fill Display (DP2)
Restore A
EB minus 1
0D6B
0D26
A = Delay (667)
Display EB (DP)
X = EB
Get solenoid bit
Flip and mask
X > 10?
Y
0D3B
Right one?
N
Y
EB minus 1
N
Put X to F1
A = delay (117)
F2 = A
EB minus 1
A = Delay (1000)
0D49
A = Solenoid bit
11?
N
Y
0D4B
A = delay (500)
0D4D
F4 = A
Main Loop

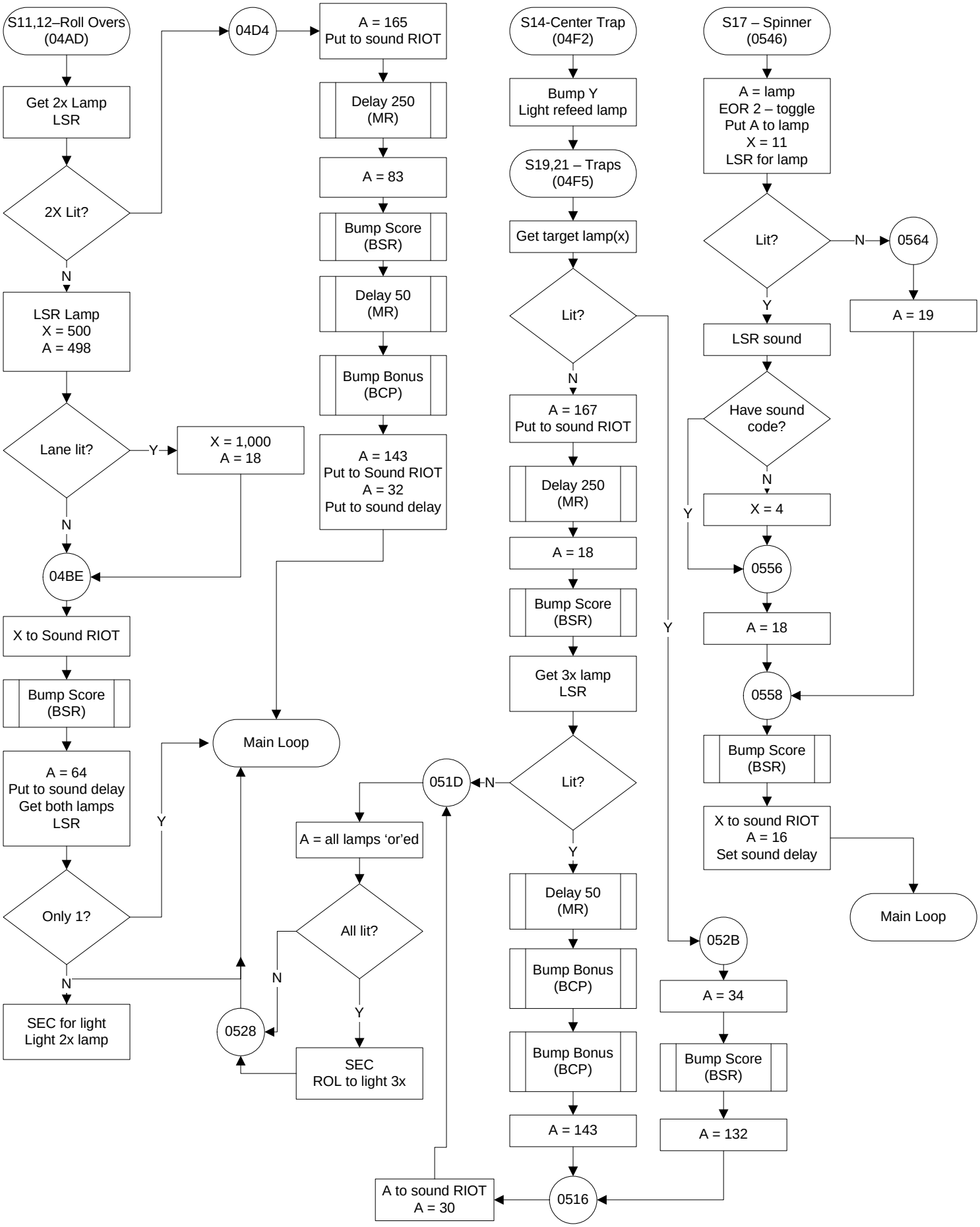

Number Display
(0EBE)
Save A
Get EA
Mod 10
(GAR)
A = Digit 1
X = Digit 0
Restore A
Return
Fill Display
(0ED4)
X = 5
0ED6
Put A to all scores
digits(X)
X minus 1
All done?
N
Y
Return
High Score check
(0737)
Get high score
player number
Have one?
N
Display Match
(DP)
Y
Score Pointer
<0B0C>
(MR)
073E
Y = 5
A = F7 counter
Mask it
> 0 left?
Y
074F
N
N
A = 15
¼ second = 1?
N
Display Match
(DP)
Y
0748
Display Digit (Y)
Y minus 1
Y
More digits?
N
0753
A = High score
digit (Y)
Decimel here?
Y
Set Decimel
N
075E
Display Digit (Y)
Y minus 1
Y
More digits?
N

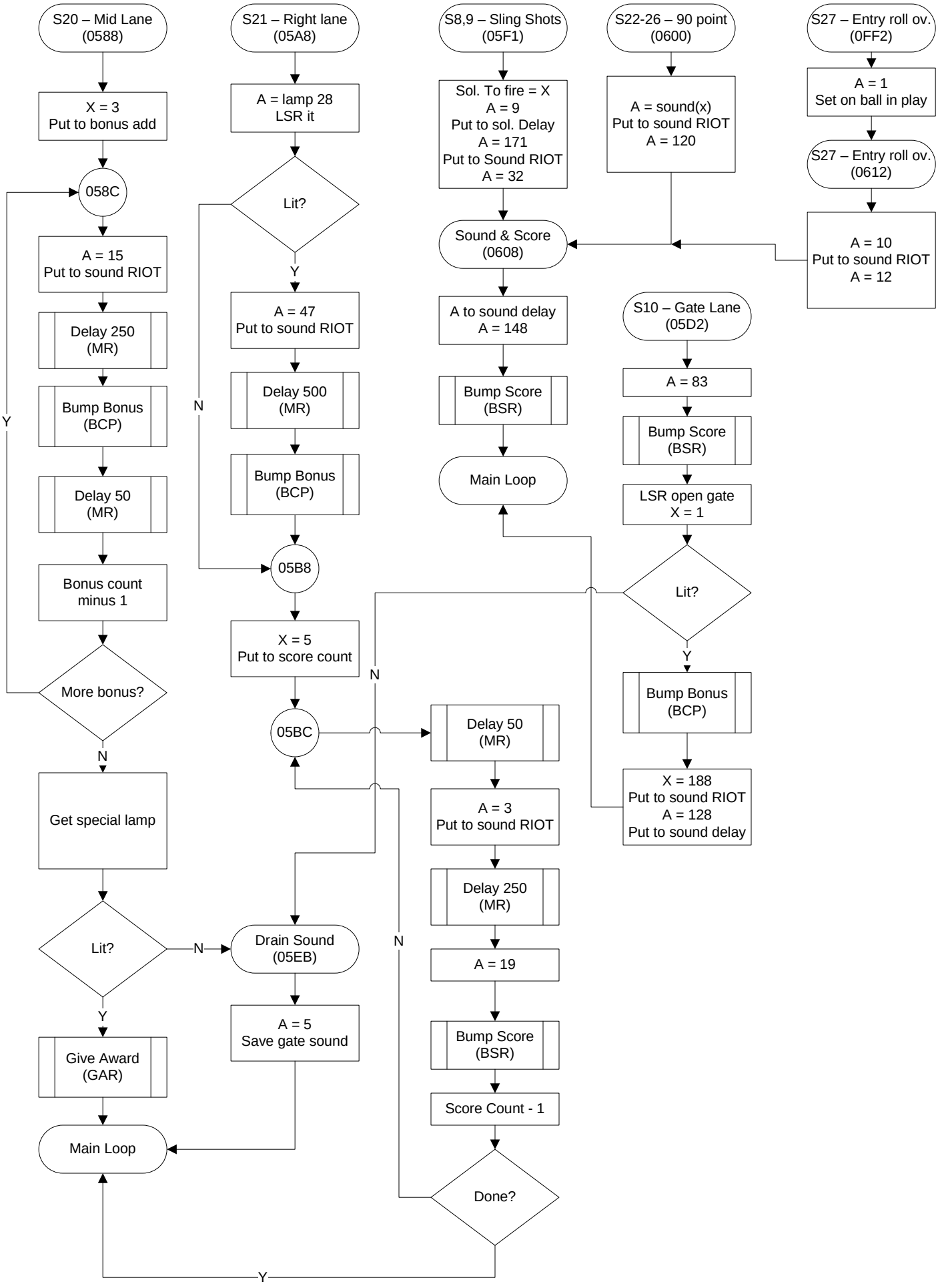

Set Test process (0D78)
End Game lamp off
Was it on?
N
Y
A = 0
Clear option step
Clear Test number
SEC
0D83
ROL End Game lamp
A = Y
Test on?
N
Option Mode (0E3E)
Y
0D8B
A = F4 step delay
Done?
N
0D9C
Y
A = F3 sound delay
Delay done?
N
Y
Get Disp Test (0EE4)
Valid?
Y
Clear End Game
N
Main Loop
0D9F
X = 3?
Y
Display Test (TR)
N
Display Test Number (OEEE)
X = 1? (Solenoid)
Y
Part Branch (TR)
N
A = 0
Clear Solenoid delay
X = 50
Loop using X to clear all lamps and solenoids
X = Test Number
X = 0?
Y
Test Routines <0D4B> (TR)
N
X=2
Y
Lamp Test (TR)
N
X=4
Y
Switch Test (TR2)
N
Sound Test (TR2)

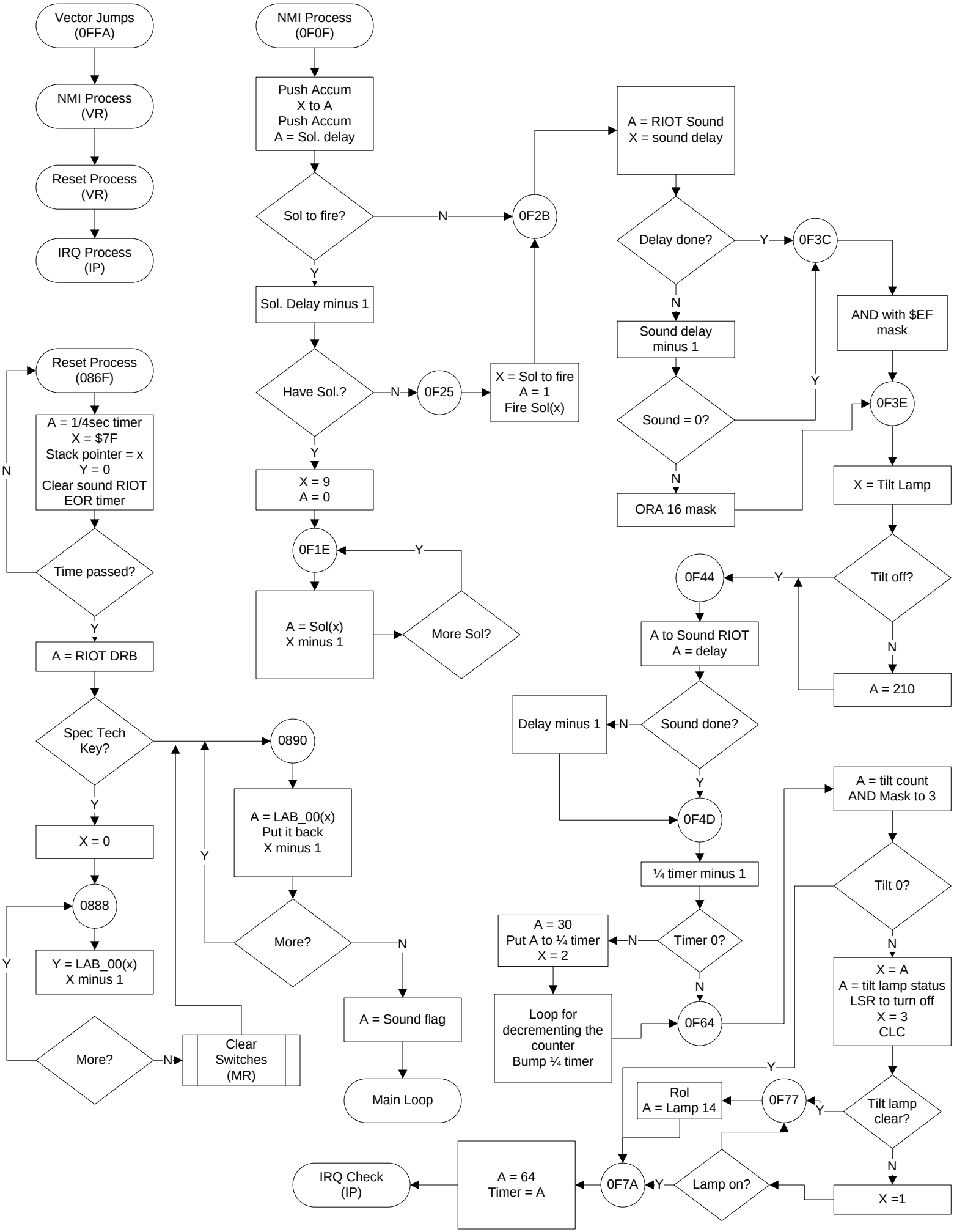

Switch Test (0DE9)
A = Test switch status
Active?
Y
X = 28
Switches High <0C2A> (MR)
0DFA
Clear digits 4 & 5 X = 28
0DFD
Save X to LAB_EB A = switch state (x)
Switch Active?
N
X minus 1
Y
A = high reset Reset switch (X)
Display EB (DP)
Clear carry A = 120 (delay)
N
0DF3
Clear Carry X = switch number
Switch 0?
Y
0E08
A = 30 (Delay)
0E17
Save delay EB (switch no) minus 1 A = "-"
CB set?
Y
Save status digits 4 and 5
N
0E23
Main Loop
Sound Test (0DC0)
A = Y
New start?
N
Y
Y = sound number
Valid?
N
Y
0DC8
Y = 22
0DCA
Put Y to EB
Display EB (DP)
Y = 16?
Y
0DDA
A = Sound (Y) Save A to sound RIOT A delay for sound (Y)
N
Save Y to sound RIOT A = 50 (delay)
0DE3
EB Minus 1 Save delay (A) to F3
Mail Loop
Get Disp Test (0EE4)
Y = demand switch
Demand active?
Y
N
Clear Step number Switch minus 1 (FF)
0EEC
Test number + 1
Display Test number (0EEE)
A = 15
Fill Display (DP2)
Y
0EF3
Number Display (DP2)
Get Test number
Same test?
N
Return

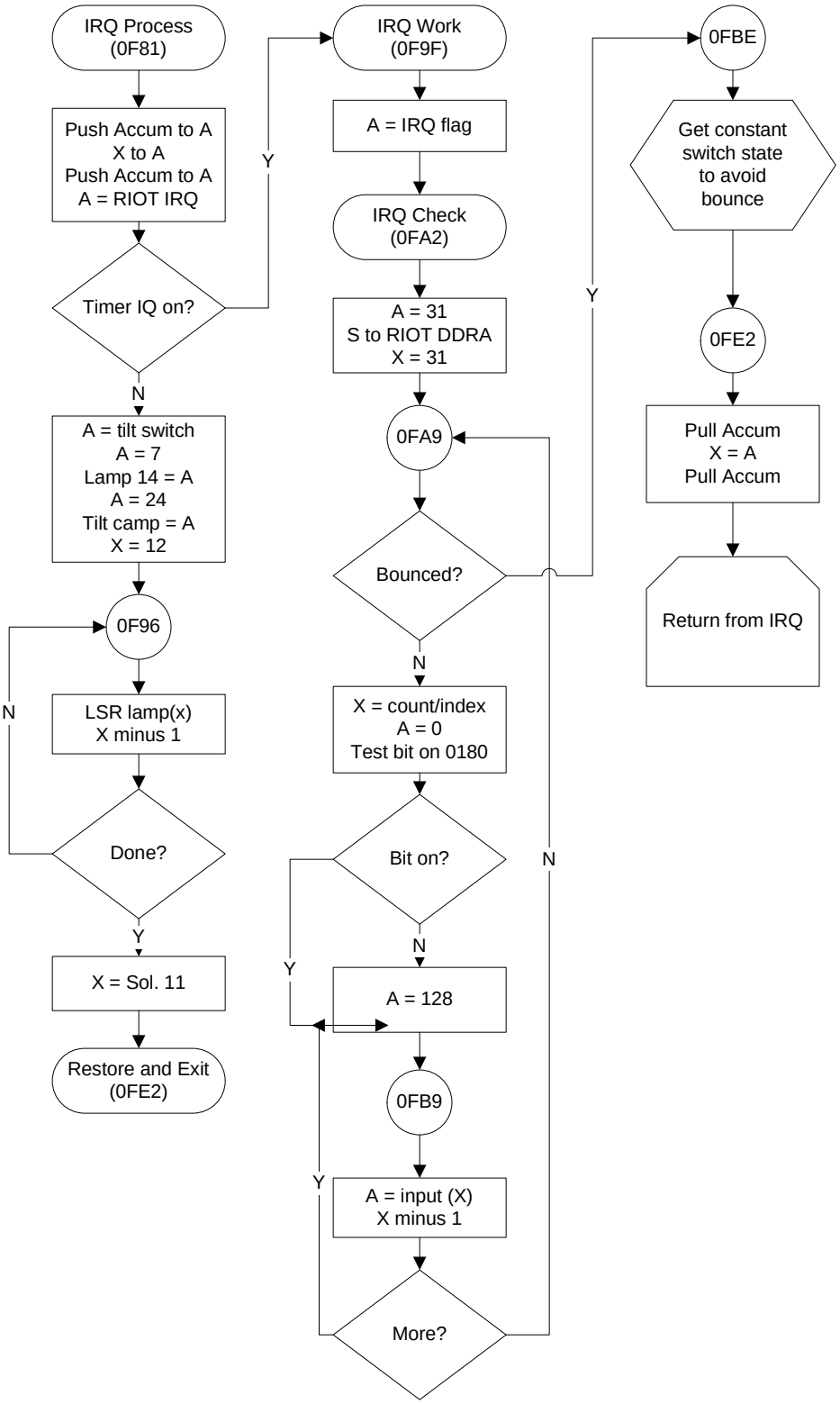

Option Mode (0E3E)
Get Disp Test (TR2)
X >= 11?
Y
N
Set Point to X (MR)
Y = 5
0E4A
A = option (y)
Put to LAB_18(y)
Y minus 1
More?
Y
N
Get coin switch
Active?
N
Main Loop
Y
A = coin reset
Save into E5
Get set step
Step < 6?
Y
N
A = set step
Have value?
Y
N
Bump Set Step
Y = 5
0E7B
Y = 2
A = 5
Add Value to Score (DP)
0E69
A = 0
0E6B
Save A to digit(y)
A = 15
Y minus 1
More A?
Y
N
More Y?
Y
N
A = 1
Y = 1
Make 10,000
0E85
Match?
N
Y
0E94
Out of range?
Y
Get free game option
Free game on?
N
0E8F
Clear End Game
Main Loop
A = option value(x)
Display it
A = coin switch
Active?
Y
N
Reset coin switch
Bump option value(x)
A = option value(x)
Max Value?
Y
N
Y = 0
A = 01
X = 13? (Balls)
N
X = 11? (Price)
N
X = 15? (Special)
N
Y
Reset Option 16 (match)
0EB9
A = Y = 0
0EBA
Option(x) = A


S16 – light spinner (0534)
A = 47
Put to sound RIOT
A = 260
Put to sound delay
Bump Bonus (BCP)
A = 1
Light Lamp
Main Loop
S1 – Ball Exit (0FE6)
A = 0
Clear ball in play
Start (ML)
S3 – Feature Lane (0439)
Y = 1
Set on FL kicker
X = current player
A = FL value (x)
Maxed FL?
Y
0450
N
Bump FL Value
A = FL Value
ROL FL value(x)
A = 7
0448
FL Anim step = A
A = 32
FL Anim Delay = A
S5,6,7 – Thumper (048A)
X to Solenoid fire
A = 8
Put to sol. Delay
Get lamp(x)
LSR
A = 19
X = 168
Lamp out?
Y
04A0
N
Seq Thump (SFP)
A = 18
X = 133
X to Sound RIOT
Y = 32
Y to Sound Delay
Bump Score (BSR)
Main Loop
S2 – Refeed (0420)
X to Solenoid fire
Get / clear lamp
Lamp Off?
N
Y = 4
Y
0428
Bump Bonus (BCP)
Y minus 1
More Bonus?
Y
N
A = 12
Put to sound RIOT
A = 64
Put to sound delay
Solenoid Delay <0419> (SFP)
0472
A = 6
Put to sound RIOT
A = 24 (delay)
Delay 1167 <0BF4> (MR2)
A = 18
Bump Score (BSR)
Clear Sound (MR2)
Lit Lamp minus 1
More?
Y
N
S4 – Top outhole (0456)
X to Solenoid fire
Light 1,000
A = OH Lamp
Lit?
Y
N
A = 500
Bump Score (BSR)
0463
A = 192
Put to sound RIOT
Clear lamp
A = 32
Put to sound delay
Save delay to F3
Main Loop
S18 – Spinner Exit (0568)
SEC for lamp
ROL Lamp 30??
Bump Bonus (BCP)
A = 143
S19 – Gate Target (0572)
A = 1
Open Gate Sol.
Game lamp on
A = 18
Bump Score (BSR)
A = 165
057F
Put to sound RIOT
A = 60
Put to sound delay


S11,12–Roll Overs (04AD)
Get 2x Lamp LSR
2X Lit?
N
LSR Lamp X = 500 A = 498
Lane lit?
Y
X = 1,000 A = 18
N
04BE
X to Sound RIOT
Bump Score (BSR)
A = 64 Put to sound delay Get both lamps LSR
Only 1?
Y
N
SEC for light Light 2x lamp
04D4
A = 165 Put to sound RIOT
Delay 250 (MR)
A = 83
Bump Score (BSR)
Delay 50 (MR)
Bump Bonus (BCP)
A = 143 Put to Sound RIOT A = 32 Put to sound delay
Main Loop
A = all lamps 'or'ed
All lit?
N
Y
0528
SEC ROL to light 3x
051D
S14-Center Trap (04F2)
Bump Y Light refeed lamp
S19,21 – Traps (04F5)
Get target lamp(x)
Lit?
N
A = 167 Put to sound RIOT
Delay 250 (MR)
A = 18
Bump Score (BSR)
Get 3x lamp LSR
Lit?
N
Y
Y
Delay 50 (MR)
Bump Bonus (BCP)
Bump Bonus (BCP)
A = 143
0516
A to sound RIOT A = 30
S17 – Spinner (0546)
A = lamp EOR 2 – toggle Put A to lamp X = 11 LSR for lamp
Lit?
N
0564
A = 19
Y
LSR sound
Have sound code?
N
Y
X = 4
0556
A = 18
0558
Bump Score (BSR)
X to sound RIOT A = 16 Set sound delay
Main Loop
052B
A = 34
Bump Score (BSR)
A = 132


S20 – Mid Lane (0588)
X = 3 Put to bonus add
058C
A = 15 Put to sound RIOT
Delay 250 (MR)
Bump Bonus (BCP)
Delay 50 (MR)
Bonus count minus 1
More bonus?
Y
N
Get special lamp
Lit?
N
Y
Give Award (GAR)
Main Loop
S21 – Right lane (05A8)
A = lamp 28 LSR it
Lit?
Y
N
A = 47 Put to sound RIOT
Delay 500 (MR)
Bump Bonus (BCP)
05B8
X = 5 Put to score count
05BC
Drain Sound (05EB)
A = 5 Save gate sound
S8,9 – Sling Shots (05F1)
Sol. To fire = X A = 9 Put to sol. Delay A = 171 Put to Sound RIOT A = 32
Sound & Score (0608)
A to sound delay A = 148
Bump Score (BSR)
Main Loop
Delay 50 (MR)
A = 3 Put to sound RIOT
Delay 250 (MR)
A = 19
Bump Score (BSR)
Score Count - 1
Done?
N
N
Y
S22-26 – 90 point (0600)
A = sound(x) Put to sound RIOT A = 120
S27 – Entry roll ov. (0FF2)
A = 1 Set on ball in play
S27 – Entry roll ov. (0612)
A = 10 Put to sound RIOT A = 12
S10 – Gate Lane (05D2)
A = 83
Bump Score (BSR)
LSR open gate X = 1
Lit?
Y
Bump Bonus (BCP)
X = 188 Put to sound RIOT A = 128 Put to sound delay


Vector Jumps (0FFA)
NMI Process (VR)
Reset Process (VR)
IRQ Process (IP)
Reset Process (086F)
A = 1/4sec timer
X = $7F
Stack pointer = x
Y = 0
Clear sound RIOT
EOR timer
Time passed?
N
Y
A = RIOT DRB
Spec Tech Key?
Y
X = 0
0888
Y = LAB_00(x)
X minus 1
More?
Y
N
Clear Switches (MR)
0890
A = LAB_00(x)
Put it back
X minus 1
More?
Y
N
A = Sound flag
Main Loop
NMI Process (0F0F)
Push Accum
X to A
Push Accum
A = Sol. delay
Sol to fire?
N
Y
Sol. Delay minus 1
Have Sol.?
N
Y
0F25
X = Sol to fire
A = 1
Fire Sol(x)
0F2B
X = 9
A = 0
0F1E
A = Sol(x)
X minus 1
More Sol?
Y
A = RIOT Sound
X = sound delay
Delay done?
Y
N
0F3C
Sound delay minus 1
Sound = 0?
Y
N
ORA 16 mask
AND with $EF mask
0F3E
X = Tilt Lamp
Tilt off?
Y
N
0F44
A = 210
A to Sound RIOT
A = delay
Sound done?
N
Y
Delay minus 1
0F4D
¼ timer minus 1
Timer 0?
N
N
A = 30
Put A to ¼ timer
X = 2
Loop for decrementing the counter
Bump ¼ timer
0F64
A = tilt count
AND Mask to 3
Tilt 0?
N
X = A
A = tilt lamp status
LSR to turn off
X = 3
CLC
Tilt lamp clear?
Y
N
X =1
Lamp on?
Y
0F7A
0F77
Y
Rol
A = Lamp 14
A = 64
Timer = A
IRQ Check (IP)


IRQ Process
(0F81)
Push Accum to A
X to A
Push Accum to A
A = RIOT IRQ
Timer IQ on?
Y
N
A = tilt switch
A = 7
Lamp 14 = A
A = 24
Tilt camp = A
X = 12
0F96
LSR lamp(x)
X minus 1
Done?
N
Y
X = Sol. 11
Restore and Exit
(0FE2)
IRQ Work
(0F9F)
A = IRQ flag
IRQ Check
(0FA2)
A = 31
S to RIOT DDRA
X = 31
0FA9
Bounced?
Y
N
X = count/index
A = 0
Test bit on 0180
Bit on?
Y
N
A = 128
0FB9
A = input (X)
X minus 1
More?
Y
N
0FBE
Get constant
switch state
to avoid
bounce
0FE2
Pull Accum
X = A
Pull Accum
Return from IRQ