

JANUARY 1997
16-10316

JUNK YARD

Operators Handbook

WILLIAMS ELECTRONICS GAMES, INC.
3401 N. CALIFORNIA
CHICAGO, IL 60618

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MENU SYSTEM OPERATION

The Main Menu allows you to choose from several options, which in turn lead to other menus to choose from. To access the Main Menu open the coin door, press the Begin Test button, then the Enter button. Press the Up and Down buttons to scroll through the Main Menu. To access a menu, (Bookkeeping, Printouts, etc.), from the Main Menu, press the Enter button. To return to the Main Menu (from Bookkeeping, Printouts, etc.) press the Escape button. Press the Start button for HELP.

MAIN MENU

| | | |
|----------------------------|-------------------------------|-------------------------------------------------|
| B. BOOKKEEPING MENU | | |
| | B.1 Main Audits | <u>Press Escape</u> |
| | B.2 Earning Audits | To move out of a menu selection. |
| | B.3 Standard Audits | |
| | B.4 Feature Audits | <u>Press Enter</u> |
| | B.5 Histograms | To get into a menu selection. |
| | B.6 Time-Stamps | |
| P. PRINTOUTS MENU | | |
| | P.1 Earnings Data | <u>Press Up</u> |
| | P.2 Main Audits | Increases sequence; Example A.1, A.2, A.3, A.4. |
| | P.3 Standard Audits | |
| | P.4 Feature Audits | <u>Press Down</u> |
| | P.5 Score Histograms | Decreases sequence; Example A.4, A.3, A.2, A.1. |
| | P.6 Time Histograms | |
| | P.7 Time-Stamps | Use Up or Down to cycle through the |
| | P.8 All Data | selections in a menu. |
| T. TEST MENU | | |
| | T.1 Switch Edges Test | |
| | T.2 Switch Levels Test | |
| | T.3 Single Switches Test | |
| | T.4 Solenoid Test | |
| | T.5 Flasher Test | |
| | T.6 General Illumination Test | |
| | T.7 Sound and Music Test | |
| | T.8 Single Lamp Test | |
| | T.9 All Lamps Test | |
| | T.10 Lamp and Flasher Test | |
| | T.11 Display Test | |
| | T.12 Flipper Coil Test | |
| | T.13 Ordered Lamps Test | |
| | T.14 Lamp Row-Col. | |
| | T.15 DIP Switch Test | |
| | T.16 Empty Balls Test | |
| U. UTILITIES MENU | | |
| | U.1 Clear Audits | |
| | U.2 Clear Coins | |
| | U.3 Reset H.S.T.D. | |
| | U.4 Set Time and Date | |
| | U.5 Custom Message | |
| | U.6 Set Game I.D. | |
| | U.7 Factory Adjustments | |
| | U.8 Factory Resets | |
| | U.9 Presets | |
| | U.10 Clear Credits | |
| | U.11 Auto Burn-in | |
| A. ADJUSTMENT MENU | | |
| | A.1 Standard Adjustments | |
| | A.2 Feature Adjustments | |
| | A.3 Pricing Adjustments | |
| | A.4 H.S.T.D. Adjustments | |
| | A.5 Printer Adjustments | |

LAMP MATRIX

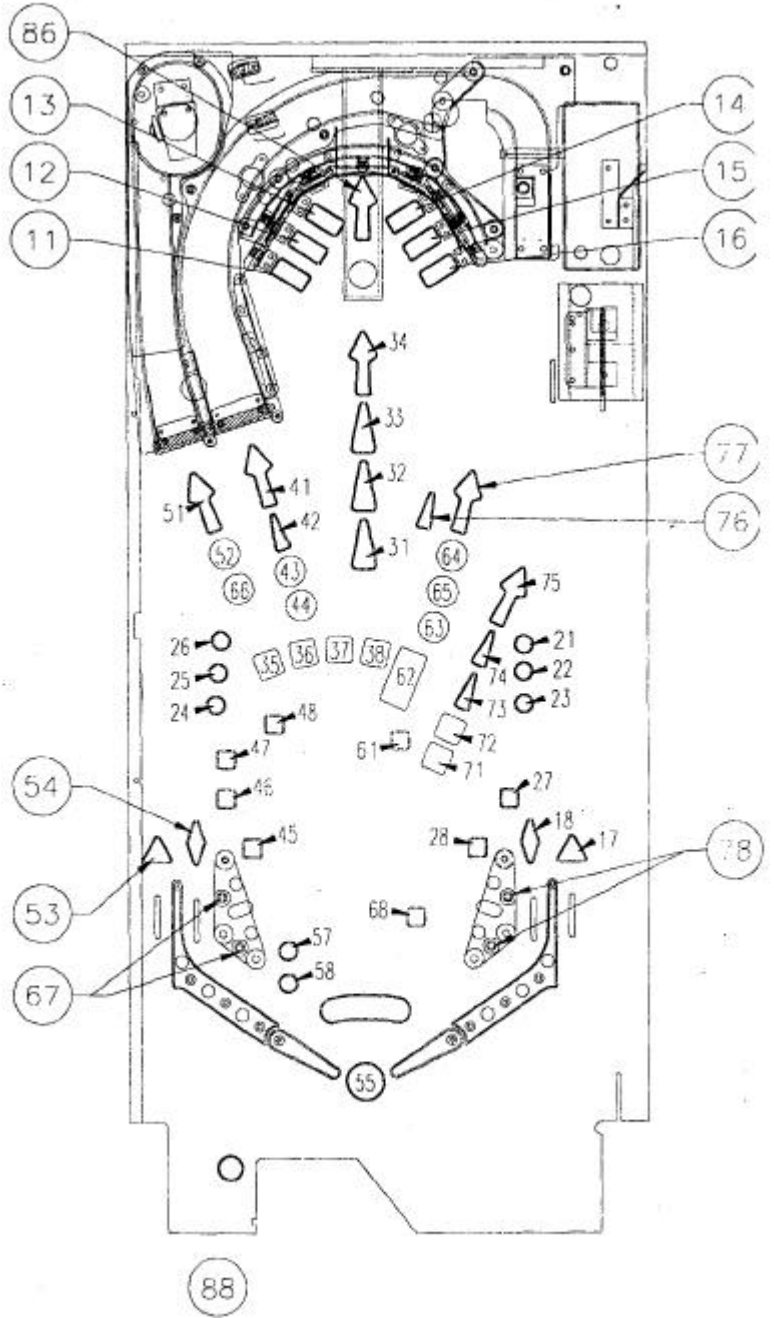
Yellow (B+)  Red

| Column \ Row | 1 Yellow-Brown J121-1 Q96 | 2 Yellow-Red J121-2 Q100 | 3 Yellow-Orange J121-3 Q95 | 4 Yellow-Black J121-4 Q99 | 5 Yellow-Green J121-5 Q94 | 6 Yellow-Blue J121-6 Q98 | 7 Yellow-Violet J121-7 Q93 | 8 Yellow-Gray J121-9 Q97 |
|--------------------------------|---------------------------------|--------------------------------|----------------------------------|---------------------------------|---------------------------------|--------------------------------|----------------------------------|--------------------------------|
| 1 Red-Brown J125-1 Q104 | TOP LEFT BANK BOTTOM 11 | RIGHT 3 BANK TOP 21 | JACKPOT 31 | GEN. BUS 41 | GEN. TOILET 51 | PROPELLER 61 | TIME MACHINE 71 | FIREWORKS 81 |
| 2 Red-Black J125-2 Q108 | TOP LEFT BANK MIDDLE 12 | RIGHT 3 BANK MIDDLE 22 | SUPER JACKPOT 32 | TOAST 42 | WINDOW SHOPPING 52 | OUTER SPACE 62 | START ADVENTURE 72 | TOXIC WASTE 82 |
| 3 Red-Orange J125-4 Q103 | TOP LEFT BANK TOP 13 | RIGHT 3 BANK BOTTOM 23 | MULTIBALL 33 | MAGIC BUS 43 | LEFT RECYCLE 53 | DO(G) 63 | EXTRA BALL 73 | LIGHT EXTRA BALL 83 |
| 4 Red-Yellow J125-5 Q107 | TOP RIGHT BANK TOP 14 | LEFT BANK BOTTOM 24 | WRECKING BALL 34 | COLLECT JUNK 44 | LEFT CRANE H. U. 54 | (D)OG 64 | TOAST 74 | FREE GAME 84 |
| 5 Red-Green J125-6 Q102 | TOP RIGHT BANK MIDDLE 15 | LEFT BANK MIDDLE 25 | RADAR ADVENTURE 35 | COO COO CLOCK 45 | SHOOT AGAIN 55 | D(O)G 65 | GEN. SEWER 75 | LIGHT JACKPOT 85 |
| 6 Red-Blue J125-7 Q106 | TOP RIGHT BANK BOTTOM 16 | LEFT BANK TOP 26 | JALOPY RACE 36 | TELEVISION 46 | NOT USED 56 | CHOOSE JUNK 66 | TOASTER GUN 76 | GEN. CRANE 86 |
| 7 Red-Violet J125-8 Q101 | RIGHT RECYCLE 17 | FAN 27 | TOILET ADVENTURE 37 | WEATHER VANE 47 | TOASTER 57 | ANGEL SLING 67 | GEN. ALLEY 77 | NOT USED 87 |
| 8 Red-Gray J125-9 Q105 | RIGHT CRANE H. U. 18 | BATH TUB 28 | A.T.C. ADVENTURE 38 | FISH BOWL 48 | HAIR DRYER 58 | BICYCLES 68 | DEVIL SLING 78 | START BUTTON 88 |

J1XX = Power Driver Board

Lamp Locations

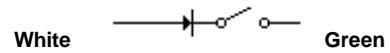
| Item No. | Bulb No. | Lamp Assy No. | Description |
|----------|----------|---------------|---------------------------|
| 11 | 24-8768 | A-21322 | Top Left Bank Bottom |
| 12 | 24-8768 | A-21322 | Top Left Bank Middle |
| 13 | 24-8768 | A-21322 | Top Left Bank Top |
| 14 | 24-8768 | A-21322 | Top Right Bank Top |
| 15 | 24-8768 | A-21322 | Top Right Bank Middle |
| 16 | 24-8768 | A-21322 | Top Right Bank Bottom |
| 17 | 24-6549 | A-17835 | Right Recycle |
| 18 | 24-6549 | A-17835 | Right Crane H.U. |
| 21 | 24-8768 | A-21322 | Right 3-Bank Top |
| 22 | 24-8768 | A-21322 | Right 3-Bank Middle |
| 23 | 24-8768 | A-21322 | Right 3-Bank Bottom |
| 24 | 24-8768 | A-21322 | Left Bank Bottom |
| 25 | 24-8768 | A-21322 | Left Bank Middle |
| 26 | 24-8768 | A-21322 | Left Bank Top |
| 27 | 24-6549 | A-17835 | Fan |
| 28 | 24-6549 | A-17835 | Bath Tub |
| 31 | 24-8768 | A-21323 | Jackpot |
| 32 | 24-8768 | A-21323 | Super Jackpot |
| 33 | 24-8788 | A-21323 | Multiball |
| 34 | 24-8768 | A-21323 | Wrecking Ball |
| 35 | 24-8768 | A-21321 | Radar Adventure |
| 36 | 24-8768 | A-21321 | Jalopy Race |
| 37 | 24-8768 | A-21321 | Toilet Adventure |
| 38 | 24-8768 | A-21321 | A.T.C.Adventure |
| 41 | 24-8768 | A-21320 | Gen. Bus |
| 42 | 24-8768 | A-21320 | Toast |
| 43 | 24-8768 | A-21320 | Magic Bus |
| 44 | 24-6549 | A-17807 | Collect Junk |
| 45 | 24-8768 | A-21324 | Coo Coo Clock |
| 46 | 24-8768 | A-21324 | Television |
| 47 | 24-8768 | A-21324 | Weather Vane |
| 48 | 24-8768 | A-21324 | Fish Bowl |
| 51 | 24-8768 | A-21320 | Gen. Toilet |
| 52 | 24-8768 | A-21320 | Window Shopping |
| 53 | 24-6549 | A-17835 | Left Recycle |
| 54 | 24-6549 | A-17835 | Left Crane H.U. |
| 55 | 24-6549 | A-17807 | Shoot Again |
| 56 | | | Not Used |
| 57 | 24-6549 | A-17835 | Toaster |
| 58 | 24-6549 | A-17835 | Hair Dryer |
| 61 | 24-8768 | A-21319 | Propeller |
| 62 | 24-8768 | A-21319 | Outer Space |
| 63 | 24-8768 | A-21319 | DO(G) |
| 64 | 24-8768 | A-21319 | (D)OG |
| 65 | 24-8768 | A-21319 | D(O)G |
| 66 | 24-8768 | A-21320 | Choose Junk |
| 67 | 24-6549 | 04-10514 | Angel Slingshot (2 Bulbs) |
| 68 | 24-6549 | A-17835 | Bicycles |
| 71 | 24-8768 | A-21319 | Time Machine |
| 72 | 24-8768 | A-21319 | Start Adventure |
| 73 | 24-8768 | A-21319 | Extra Ball |
| 74 | 24-8768 | A-21319 | Toast |
| 75 | 24-8768 | A-21319 | Gen. Sewer |
| 76 | 24-6549 | A-17807 | Toaster Gun |
| 77 | 24-6549 | A-17807 | Gen. Alley |
| 78 | 24-6549 | 04-10514 | Devil Slingshot (2 Bulbs) |
| 81 | 24-8768 | ----- | *Fireworks |
| 82 | 24-8768 | ----- | *Toxic Waste |
| 83 | 24-8768 | ----- | *Light Extra Ball |
| 84 | 24-8768 | ----- | *Free Game |
| 85 | 24-8768 | ----- | *Light Jackpot |
| 86 | 24-6549 | A-17835 | *Gen. Crane |
| 87 | | | Not Used |
| 88 | ----- | 20-9663-1 6 | Start Button |



*These lamps are located on the insert panel.

24-6549 = #44 Bulb 24-8768 = #555

SWITCH MATRIX

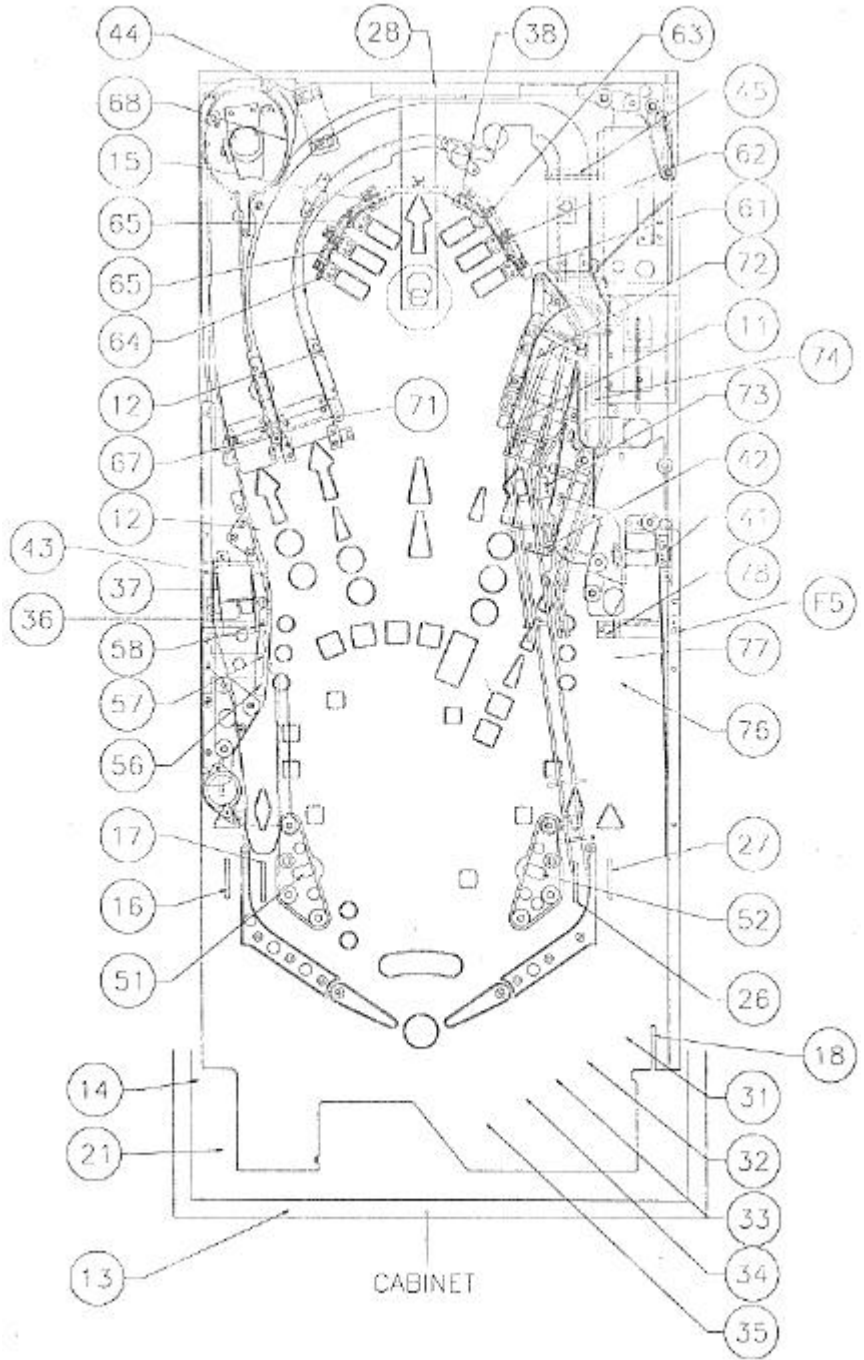


| Dedicated Grounded Switches | Column | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | Flipper Grounded Switches |
|----------------------------------------------------------------------------------------------|------------------------------------------|---------------------------------|-------------------------------|----------------------------------|----------------------------------|------------------------------------|-------------------------------------|----------------------------------|--------------------------------|--------------------------------------------------------------------|
| | Row | Green-Brown J206-1 U20-18 | Green-Red J206-2 U20-17 | Green-Orange J206-3 U20-16 | Green-Yellow J206-4 U20-15 | Green-Black J206-5 U20-14 | Green-Blue J206-6 U20-13 | Green-Violet J206-7 U20-12 | Green-Gray J206-9 U20-11 | |
| Orange-Brown J205-1 Left Coin Chute U17-5 D1 | 1 White-Brown J208-1 U18-11 | TOASTER GUN 11 | SLAM TILT 21 | TROUGH EJECT 31 | PAST SPINNER 41 | LEFT SLING 51 | UPPER RIGHT 3 BANK BOTTOM 61 | RAMP ENTRY 71 | NOT USED 81 | Black-Green J208-13 Lower Right Flipper E.O.S. F1 |
| Orange-Red J205-2 Center Coin Chute U17-7 D2 | 2 White-Red J208-2 U18-9 | REBOUND SWITCH 12 | COIN DOOR CLOSED 22 | TROUGH BALL 1 32 | IN THE SEWER 42 | RIGHT SLING 52 | UPPER RIGHT 3 BANK MIDDLE 62 | SCOOP DOWN 72 | NOT USED 82 | Blue-Violet J212-12 Lower Right Flipper Opto F2 |
| Orange-Black J205-3 Right Coin Chute U17-11 D3 | 3 White-Orange J2083 U18-5 | START BUTTON 13 | NOT USED 23 | TROUGH BALL 2 33 | LOCK JAM 43 | CAR TARGET 4 53 | UPPER RIGHT 3 BANK TOP 63 | SCOOP MADE 73 | NOT USED 83 | Black-Blue J208-12 Lower left Flipper E.O.S. F3 |
| Orange-Yellow J205-4 4th Coin Chute U17-9 D4 | 4 White-Yellow J208-4 U18-7 | PLUMB BOB TILT 14 | ALWAYS CLOSED 24 | TROUGH BALL 3 34 | PAST CRANE 44 | CAR TARGET 5 (RIGHT) 54 | UPPER LEFT 3 BANK BOTTOM 64 | DOG ENTRY 74 | NOT USED 84 | Blue-Gray J212-11 Lower Left Flipper Opto F4 |
| Orange-Green J205-6 U16-9 Normal Test Function Function Srv Crdts Escape D5 | 5 White-Green J208-5 U19-11 | TOP LEFT CRANE 15 | NOT USED 25 | TROUGH BALL 4 35 | RAMP EXIT 45 | NOT USED 55 | UPPER LEFT 3 BANK MIDDLE 65 | NOT USED 75 | NOT USED 85 | Black-Violet J208-11 SPINNER F5 |
| Orange-Blue J205-7 U16-11 Normal Test Function Function Volume Dn Down D6 | 6 White-Blue J208-7 U19-9 | LEFT OUTLANE 16 | RIGHT RETURN LANE 26 | LOCK UP 2 36 | CAR TARGET 1 (LEFT) 46 | LOWER LEFT 3 BANK BOTTOM 56 | UPPER LEFT 3 BANK TOP 66 | RIGHT 3 BANK BOTTOM 76 | NOT USED 86 | Black-Yellow J212-10 Upper Right Flipper Opto F6 |
| Orange-Violet J205-8 U16-7 Normal Test Function Function Volume Up Up D7 | 7 White-Violet J208-8 019-5 | LEFT RETURN LANE 17 | RIGHT OUTLANE 27 | LOCK UP 1 37 | CAR TARGET 2 47 | LOWER LEFT 3 BANK MIDDLE 57 | BOWL ENTRY 67 | RIGHT 3 BANK MIDDLE 77 | NOT USED 87 | Black-Gray J208-10 Upper Left Flipper E.O.S. F7 |
| Orange-Gray J205-9 U16-5 Normal Test Function Function Begin Test Enter D8 | 8 White-Gray J208-9 019-7 | SHOOTER LANE 18 | CRANE DOWN 28 | TOP RIGHT CRANE 38 | CAR TARGET 3 48 | LOWER LEFT 3 BANK TOP 58 | BOWL EXIT 68 | RIGHT 3 BANK TOP 78 | NOT USED 88 | Black-Blue J212-9 Upper Left Flipper Opto F8 |

J2XX = CPU BOARD = OPTO, TYPICALLY CLOSE

SWITCH LOCATIONS

| Item No. | Switch No. | Description |
|----------|-------------------------|-----------------------------|
| F7 | SW-1A-194 | Lower Right Flipper E.O.S. |
| F2 | A-17316 | Lower Right Flipper Cabinet |
| F3 | SW-1A-194 | Lower Left Flipper E.O.S. |
| F4 | A-17316 | Lower Left Flipper Cabinet |
| F5 | 5647-12693-24 | Spinner |
| F6 | Not Used | Upper Right Flipper Cabinet |
| F7 | Not Used | Upper Left Flipper E.O.S. |
| F8 | Not Used | Upper Left Flipper Cabinet |
| 11 | A-18530-6 | Toaster Gun |
| 12 | A-17794 (2) | Rebound Switch |
| 13 | 20-9663-16 | Start Button |
| 14 | 04-10346 | Plumb Bob |
| 15 | A-18530-4 | Top Left Crane |
| 16 | 5647-12693-19 | Left Outlane |
| 17 | 5647-12693-19 | Left Return lane |
| 18 | 5647-12693-65 | Shooter Lane |
| 21 | A-17238 | Slam Tilt |
| 22 | 5643-09268-00 | Coin Door Closed* |
| 23 | Not Used | Not Used |
| 24 | 5643-15190-00 | Always Closed* |
| 25 | Not Used | Not Used |
| 26 | 5647-12693-19 | Right Return Lane |
| 27 | 5647-12693-19 | Right Outlane |
| 28 | 5647-12693-31 | Crane Down |
| 31 | A-18617-1 (LED) | Trough Eject |
| | A-18618-1 (PHOTO TRANS) | |
| 32 | A-18617-1 (LED) | Trough Ball 1 |
| | A-18618-1 (PHOTO TRANS) | |
| 33 | A-18617-1 (LED) | Trough Ball 2 |
| | A-18618-1 (PHOTO TRANS) | |
| 34 | A-18617-1 (LED) | Trough Ball 3 |
| | A-18618-1 (PHOTO TRANS) | |
| 35 | A-18617-1 (LED) | Trough Ball 4 |
| | A-18618-1 (PHOTO TRANS) | |
| 36 | A-16908 (LED) | Lock Up 2 |
| | A-16909 (PHOTO TRANS) | |
| 37 | A-16908 (LED) | Lock Up 1 |
| | A-16909 (PHOTO TRANS) | |
| 38 | A-18530-4 | Top Right Crane |
| 41 | A-16908 (LED) | Past Spinner |
| | A-16909 (PHOTO TRANS) | |
| 42 | A-16908 (LED) | In The Sewer |
| | A-16909 (PHOTO TRANS) | |
| 43 | A-16908 (LED) | Lock Jam |
| | A-16909 (PHOTO TRANS) | |
| 44 | A-16908 (LED) | Past Crane |
| | A-16909 (PHOTO TRANS) | |
| 45 | A-12556 | Ramp Exit |
| 46 | SW-1A-210-1 | Car Target 1 (Left) *** |
| 47 | SW-1A-210-2 | Car Target 2 *** |
| 48 | SW-1A-210-3 | Car Target 3 *** |
| 51 | A-17800 (KICK) | Left Slingshot (Angel) |
| | A-17794 (SCORE) | |
| 52 | A-17800 (KICK) | Right Slingshot (Devil) |
| | A-17794 (SCORE) | |
| 53 | SW-1A-210-4 | Car Target 4 *** |
| 54 | SW-1A-210-5 | Car Target 5 (Right) *** |
| 55 | Not Used | Not Used |
| 56 | A-21349-1 | Lower Left 3-Bank Bottom |
| 57 | A-21349-1 | Lower Left 3-Bank Middle |
| 58 | A-21349-1 | Lower Left 3-Bank Top |
| 61 | A-21351-1 | Upper Right 3-Bank Bottom |
| 62 | A-21351-2 | Upper Right 3-Bank Middle |
| 63 | A-21351-3 | Upper Right 3-Bank Top |
| 64 | A-21351-4 | Upper Left 3-Bank Bottom |
| 65 | A-21351-5 | Upper Left 3-Bank Middle |
| 66 | A-21351-6 | Upper L.R 3-Bank Top |
| 67 | 5647-12693-36 | Bowl Entry |
| 68 | 5647-12693-21 | Bowl Exit |
| 71 | 5647-12693-21 | Ramp Entry |
| 72 | 5647-12693-36 | Scoop Down |
| 73 | 5647-12693-21 | Scoop Made |
| 74 | 5647-12693-19 | Dog Entry |
| 75 | Not Used | Not Used |
| 76 | A-21349-1 | Right 3-Bank Bottom |
| 77 | A-21349-1 | Right 3-Bank Middle |
| 78 | A-21349-1 | Right 3-Bank Top |
| 81 to 88 | Not Used | Not Used |



*NOT SHOWN. **SCORE SWITCHES HAVE DIODES ATTACHED.
 ***ABOVE CRANE

SOLENOID/FLASHER TABLE

| Sol No. | Function | Solenoid Type | Voltage Connections | | | Drive Xistor | Drive Connection | | | Drive Wire Color | Solenoid Part Number | |
|-----------------------------|------------------------|--------------------|---------------------|---------|-------------------|--------------|------------------|--------------------|-------------|------------------|----------------------|-----------|
| | | | Playfield | Backbox | Cabinet | | Playfield | Backbox | Cabinet | | Flashlamp Type | Playfield |
| 01 | AUTO PLUNGER | High Power | J133-2 | | | Q72 | J116-1 | | | VIO-BRN | AE-23-800 | |
| 02 | REFRIGERATOR POPPER | High Power | J133-2 | | | Q68 | J116-2 | | | VIO-RED | AF-23-800 | |
| 03 | POWER CRANE | High Power | J133-2 | | | Q71 | J116-4 | | | VIO-ORG | A-20099 | |
| 04 | NOT USED | High Power | | | | Q67 | | | | VIO-YEL | | |
| 05 | SCOOP DOWN | High Power | J133-2 | | | Q70 | J116-6 | | | VIO-GRN | SM1-28-900 | |
| 06 | BUS DIVERTER | High Power | J133-2 | | | Q66 | J116-7 | | | VIO-BLU | AE-26-1200 | |
| 07 | KNOCKER | High Power | | J133-2 | | Q69 | | J116-8 | | VIO-BLK | | AE-23-800 |
| 08 | NOT USED | High Power | | | | Q65 | J116-9 | | | VIO-GRY | | |
| 09 | TROUGH | Low Power | J133-3 | | | Q44 | J113-1 | | | BRN BLK | AE-26-1500 | |
| 10 | LEFT SLINGSHOT | Low Power | J133-3 | | | Q48 | J113-3 | | | BRN-RED | AE-26-1200 | |
| 11 | RIGHT SLINGSHOT | Low Power | J133-3 | | | Q43 | J113-4 | | | BRN-ORG | AE-26-1200 | |
| 12 | NOT USED | Low Power | | | | Q47 | | | | BRN-YEL | | |
| 13 | NOT USED | Low Power | | | | Q42 | | | | BRN-GRN | | |
| 14 | NOT USED | Low Power | | | | Q46 | | | | BRN-BLU | | |
| 15 | HOLD CRANE | Low Power | J133-2 | | | Q41 | J113-8 | | | BRN-VIO | A-20099 | |
| 16 | MOVE DOG | Low Power | J133-3 | | | Q45 | J113-9 | | | BRN-GRY | AE-26-1200 | |
| 17 | DOG FACE FLASHER | Flasher | J133-6 | | | Q28 | J111-1 | | | BLK-BRN | #906 (1) | |
| 18 | WINDOW SHOP FLSHR | Flasher | J133-6 | | | Q32 | | J112-2 | | BLK-RED | | #906 (1) |
| 19 | AUTOFIRE FLASHERS | Flasher | J133-6 | | | Q27 | J111-3 | | | BLK-ORG | #89 (2) | |
| 20 | LEFT SIDE FLASHERS | Flasher | J133-6 | | | Q31 | J111-4 | J112-5 | | BLK-YEL | #906 (1) | #906 (1) |
| 21 | SCOOP UP** | Low Power | J133-3 | | | Q26 | J111-5 | | | BLU-GRN | AE-26-1200 | |
| 22 | UNDER CRANE FLSHR | Flasher | J133-6 | | | Q30 | J111-6 | | | BLU-BLK | #906 (1) | |
| 23 | BACK LEFT FLASHERS | Flasher | J133-6 | | | Q25 | J111-7 | J112-8 | | BLU-VIO | #906 (1) | #906 (1) |
| 24 | BACK RIGHT FLASHERS | Flasher | J133-6 | | | Q29 | J111-8 | J112-9 | | BLU-GRY | #906 (1) | #906 (1) |
| 25 | SHOOTER FLASHER | Gen. Purpose | J133-6 | | | Q16 | J109-1 | | | BLU-BRN | #906 (1) | |
| 26 | SCOOP FLASHERS | Gen. Purpose | J133-6 | | | Q15 | J109-2 | J108-3 | | BLU-RED | #906 (1) | #906 (1) |
| 27 | DOG HOUSE FLASHER | Gen. Purpose | J133-6 | | | Q14 | J109-3 | | | BLU-ORG | #89 (1) | |
| 28 | CARS FLASHERS | Gen. Purpose | J133-6 | | | Q13 | J109-4 | | | BLU-YEL | #89 (2) | |
| General Illumination | | | | | | | | | | | | |
| 01 | PLAYFIELD STRING 1 | G.I. | J105-1 | | | Q5 | J105-7 | | | WHT-BRN | #44 | |
| 02 | PLAYFIELD STRING 2 | G.I. | J105-2 | | | Q4 | J105-8 | | | WHT-ORG | #44 | |
| 03 | LOGG STRING 3 | G.I. | | J106-3 | | Q3 | | J106-9 | | WHT-YEL | | #555 |
| 04 | *ILLUMINATION STRING 4 | G.I. | | J106-5 | | Q2 | | J106-10 | | WHT-GRN | | #555 |
| 05 | *ILLUMINATION STRING 5 | G.I. | | J106-6 | J104-3 | Q1 | | J106-11 | J104-1 | WHT-VIO | | #555 |
| Flipper Circuits | | | | | | | | | | | | |
| Sol No. | Function | Voltage Connection | Drive Transistors | | Drive Connection. | Drive Colors | | Wire Coil Part No. | Coil Colors | | | |
| | | | Playfield | Power | | Playfield | Power | | | | | |
| 29 | | Lwr. Rt. Power | 119-1 (RED-GRN) | Q90 | | J120-13 | YEL-GRN | FL-11629 | BLUE | | | |
| 30 | LOWER RIGHT FLIPPER | Lwr. Rt. Hold | 119-1 (RED-GRN) | Q92 | | J120-11 | ORG-GRN | | | | | |
| 31 | | Lwr. Lt. Power | 119-4 (RED-BLU) | Q87 | | J120-9 | YEL-BLU | FL-11629 | BLUE | | | |
| 32 | LOWER LEFT FLIPPER | Lwr. Lt. Hold | 119-4 (RED-BLU) | Q89 | | J120-7 | ORG-BLU | | | | | |
| 33 | NOT USED | Upr. Rt. Power | 119-6 (RED-VIO) | Q84 | | J120-6 | YEL-VIO | NOT USED | | | | |
| 34 | UPPER RIGHT FLIPPER | Upr. Rt. Hold | 119-6 (RED-VIO) | Q86 | | J120-4 | ORG-VIO | | | | | |
| 35 | NOT USED | Upr. Lt. Power | 119-8 (RED-GRY) | Q81 | | J120-3 | YEL-GRY | NOT USED | | | | |
| 36 | UPPER LEFT FLIPPER | Upr. Lt. Hold | 119-8 (RED-GRY) | Q83 | | J120-1 | ORG-GRY | | | | | |

J1XX = POWER DRIVER BOARD

24-6549= #44 BULB; 24-8704 = #89 BULB; 24-8768 = #555 BULB; 24-8802 = #906 BULB

* THESE G.I. STRINGS DO NOT BRIGHTEN AND DIM, THEY ARE ALWAYS ON.

** TIEBACK DIODE FROM J111-12 & J111-13.

Solenoid/Flashlamp Locations

| Item No. | Coil/Flasher Number | Assembly Number | Description |
|----------|---------------------|-----------------|---------------------|
| 01 | AE-23-800 | A-21022 | Auto Plunger |
| 02 | AE-23-800 | A-21216 | Refrigerator Poppar |
| 03 | A-20099 | A-21523 | Power Crane |
| 04 | | | Not Used |
| 05 | SM1-28-900 | A-21220 | Scoop Down |
| 06 | AE-27-1200 | A-21409-1 | Bus Diverter |
| 07 | AE-23-800 | B-10686-1 | **Knocker |
| 08 | | | Not Used |
| 09 | AE-26-1500 | A-19963-1 | Trough |
| 10 | AE-26-1200 | B-9362-R-3 | Left Slingshot |
| 11 | AE-26-1200 | B-9362-R-3 | Right Slingshot |
| 12 | | | Not Used |
| 13 | | | Not Used |
| 14 | | | Not Used |
| 15 | A-20099 | A-21523 | **Hold Crane |
| 16 | AE-26-1200 | A-21383 | Move Dog |
| 17 | #906 (1) | A-21395 | Dog Face Flasher |
| 18 | #906 (1) | ----- | Window Shop Flasher |
| 19 | #89 (2) | A-17984 | AutoFire Flashers |
| 20 | #906 (1) | ----- | Left Side Flashers |
| | #906 (1) | ----- | Insert Panel |
| 21 | AE-26-1200 | A-21220 | Scoop Up |
| 22 | #906 (1) | A-21525 | Under Crane Flasher |
| 23 | #906 (1) | A-20158 | Back Left Flashers |
| | #906 (1) | ----- | Insert Panel |
| 24 | #906 (1) | A-20158 | Back Right Flashers |
| | #906 (1) | ----- | Insert Panel |
| 25 | #906 (1) | A-17802 | Shooter Flasher |
| 26 | #906 (1) | A-21355 | Scoop Flashers |
| | #906 (1) | ----- | Insert Panel |
| 27 | #89 (1) | A-17983 | Dog House Flasher |
| 28 | #89 (2) | 04-10509 | Cars Flasher |

Flippers

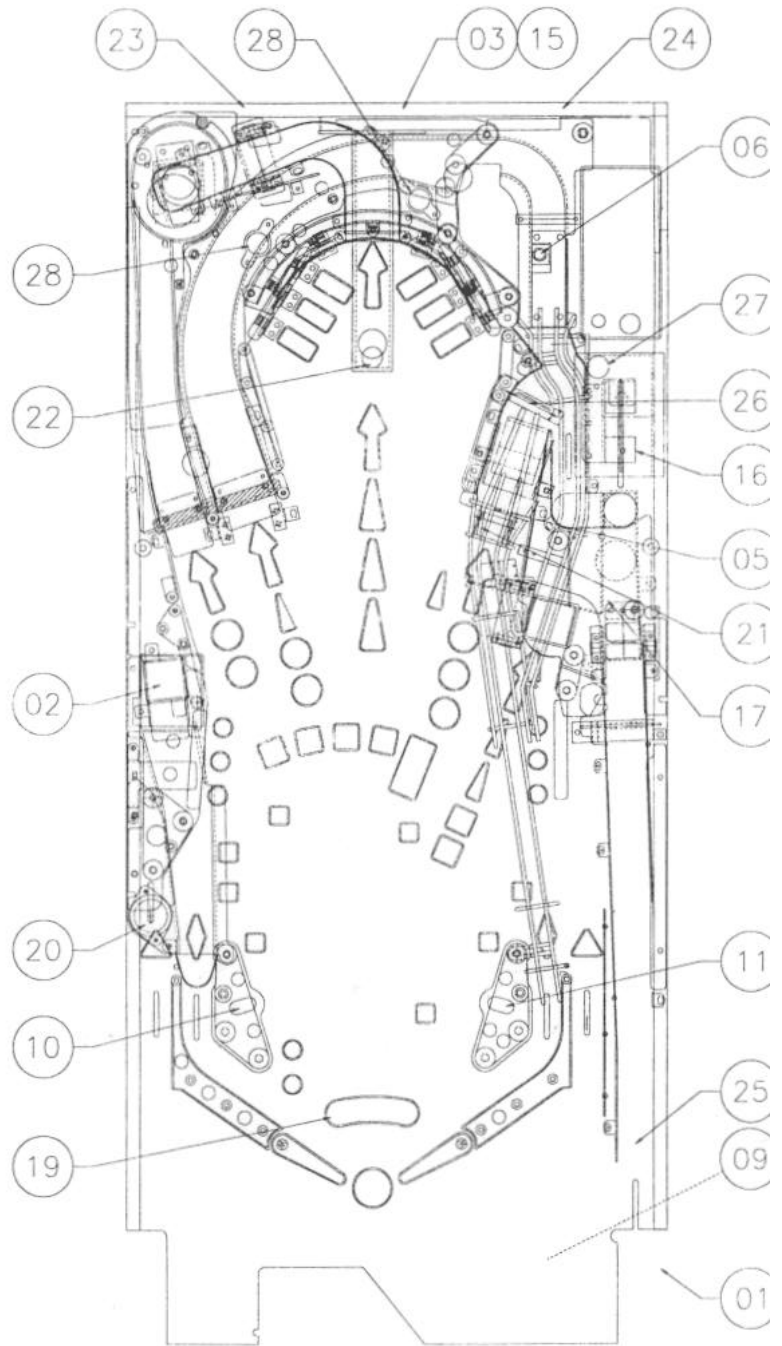
| Item No. | Coil/Flasher Number | Assembly Number | Description |
|----------|---------------------|-----------------|---------------------|
| 29-30 | FL-11629 | A-15849-R-2 | Lower Right Flipper |
| 31-32 | FL-11629 | A-15849-L-2 | Lower Left Flipper |
| 33-34 | | | |
| 35-36 | | | |

General Illumination

| Item No. | Bulb Number | Description |
|----------|-------------|------------------------|
| 01 | #44 | *Playfield String 1 |
| 02 | #44 | *Playfield String 2 |
| 03 | #555 | *Logo String 3 |
| 04 | #555 | *Illumination String 4 |
| 05 | #555 | *Illumination String 5 |

24-6549 = #44 BULB
 24-8704 = #89 BULB
 24-8768 = #555 BULB
 24-8802 = #906 BULB

*NOT SHOWN
 **IN BACKBOX

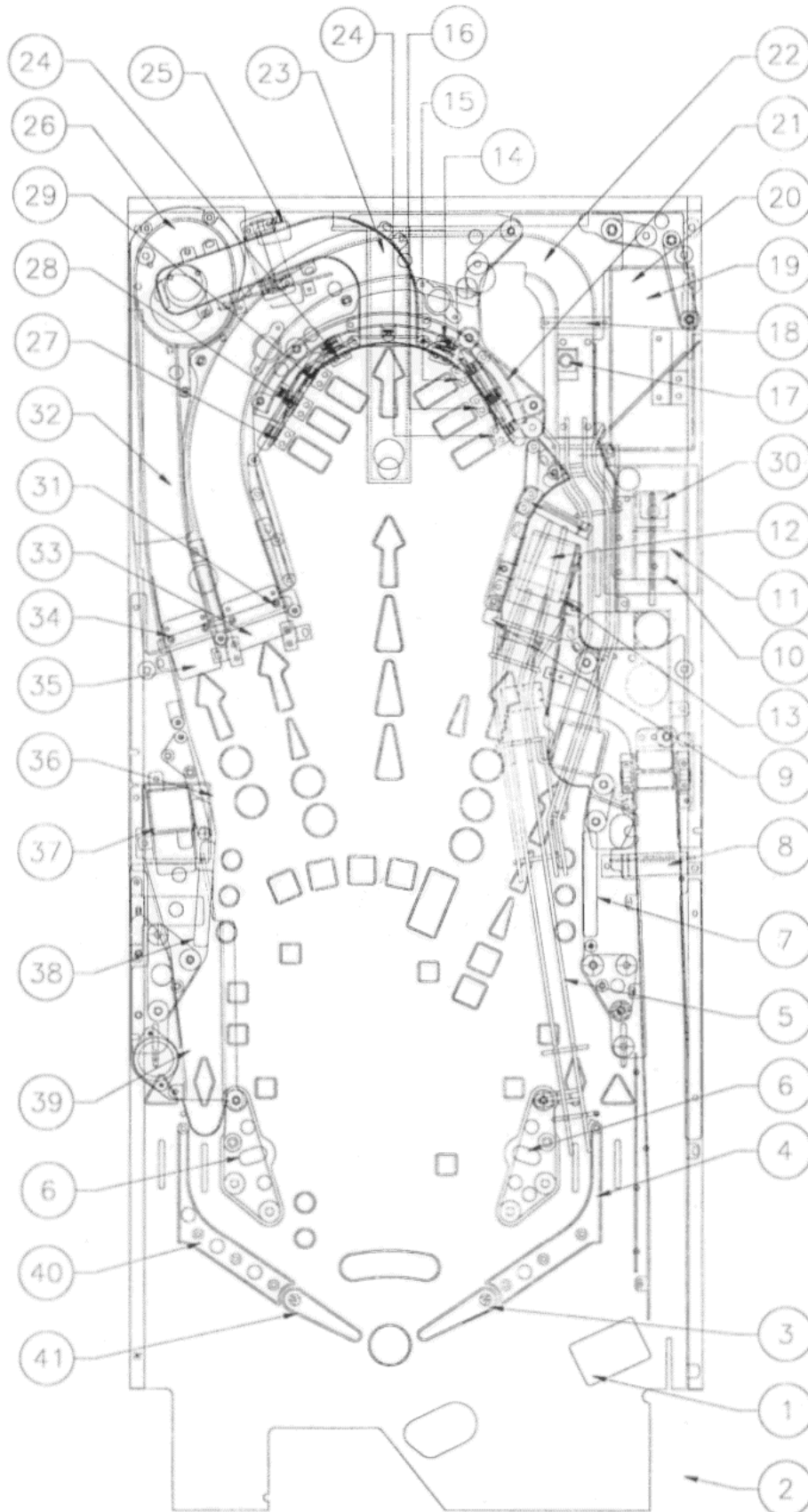


UPPER PLAYFIELD PARTS LIST

| Item No. | Part No. | Description | Not Shown: | |
|----------|-------------|-------------------------------|---------------|-----------------------------|
| 1 | A-19963-1 | Ball Trough Assembly | 03-8633 | Level Mount |
| 2 | A-21022 | Shooter Lane Kicker Assembly | 03-9610-1 | *Full Playfield Myltar |
| 3 | A-15849-R-2 | Flipper Assembly | 03-9610-2 | Drop Area Mylars (2) |
| | 20-10110-5 | Shaft & Paddle Assembly | 039610-3A | Wrecking Ball Area Mylar |
| 4 | 039216-13 | Clear Flipper Ball Guide | 039610-5 | Right Rear Area Mylar |
| 5 | A-21224 | Wire Ramp Assembly | 20-6500 | Steel Balls (4) |
| 6 | A-17811 | Kicker Assembly | 20-9691 | Level |
| | B-9362-R-3 | Coil & Bracket Assembly | 31-1357-50052 | Backglass Translite |
| 7 | A-21349-1 | Blue Standup Target | 31-2601 | Screened Bottom Arch |
| 8 | A-21338 | Spinner | 36-50052 | Screened Hardcoat Playfield |
| 9 | A-18530-6 | Yellow Standup Target | | |
| 10 | 31-2598 | Dog | | |
| 11 | A-21398 | Dog House & Decal Assembly | | |
| | 31-2599 | Dog House | | |
| 12 | A-21220 | Fork Lift Assembly | | |
| | A-21232 | Fork Mech. Gate Assembly | | |
| 13 | A-21355 | Fork Hood Assembly | | |
| 14 | A-21351-1 | Decal & Standup Target | | |
| | A-18060-4 | Target | | |
| | 31-26033 | Decal | | |
| 15 | A-21351-2 | Decal & Standup Target | | |
| | A-18060-4 | Target | | |
| | 31-2603-4 | Decal | | |
| 16 | A-21351-3 | Decal & Standup Target | | |
| | A-18060-4 | Target | | |
| | 31-26035 | Decal | | |
| 17 | A-21409-1 | Up/Down Post | | |
| 18 | A-21370 | Switch Gate Assembly | | |
| 19 | 31-2597.1 | Bus | | |
| 20 | A-21516 | Bus Bracket Assembly | | |
| 21 | A-21247 | Wrecking Ball Target Assembly | | |
| 22 | A-21222 | Main Ramp | | |
| 23 | A-21215 | Wrecking Ball Mech. Assembly | | |
| 24 | A-18530-4 | Red Standup Target | | |
| 25 | A-21249 | Popper Ball Guide | | |
| 26 | 31-2595 | Toilet | | |
| 27 | A-21351-4 | Decal & Standup Target | | |
| | A-180604 | Target | | |
| | 31-26036 | Decal | | |
| 28 | A-21351-5 | Decal & Standup Target | | |
| | A-18060-4 | Target | | |
| | 31-26037 | Decal | | |
| 29 | A-21351-6 | Decal & Standup Target | | |
| | A-18060-4 | Target | | |
| | 31-26038 | Decal | | |
| 30 | A-21383 | Dog Mech. | | |
| 31 | A-17515 | Switch Gate & Bracket | | |
| 32 | A-21223 | Toilet Ramp | | |
| 33 | 01-14407 | Main Ramp Flap | | |
| 34 | A-21207 | Ramp Gate Assembly | | |
| 35 | 01-14410 | Toilet Ramp Flap | | |
| 36 | 31-2596 | Refrigerator | | |
| 37 | A-21216 | 3-Ball Popper Assembly | | |
| 38 | A-213491 | Blue Standup Target | | |
| 39 | A-21212 | Left Plastic Ramp | | |
| 40 | 039216-13 | Clear Flipper Guide | | |
| 41 | A-15849L-2 | Flipper Assembly | | |
| | 20-10110.5 | Shaft & Paddle Assembly | | |

*The JUNK YARD hardcoat playfield does not require a full mylar. However, mylars can be purchased through your local Williams Distributor.

Upper Playfield Parts

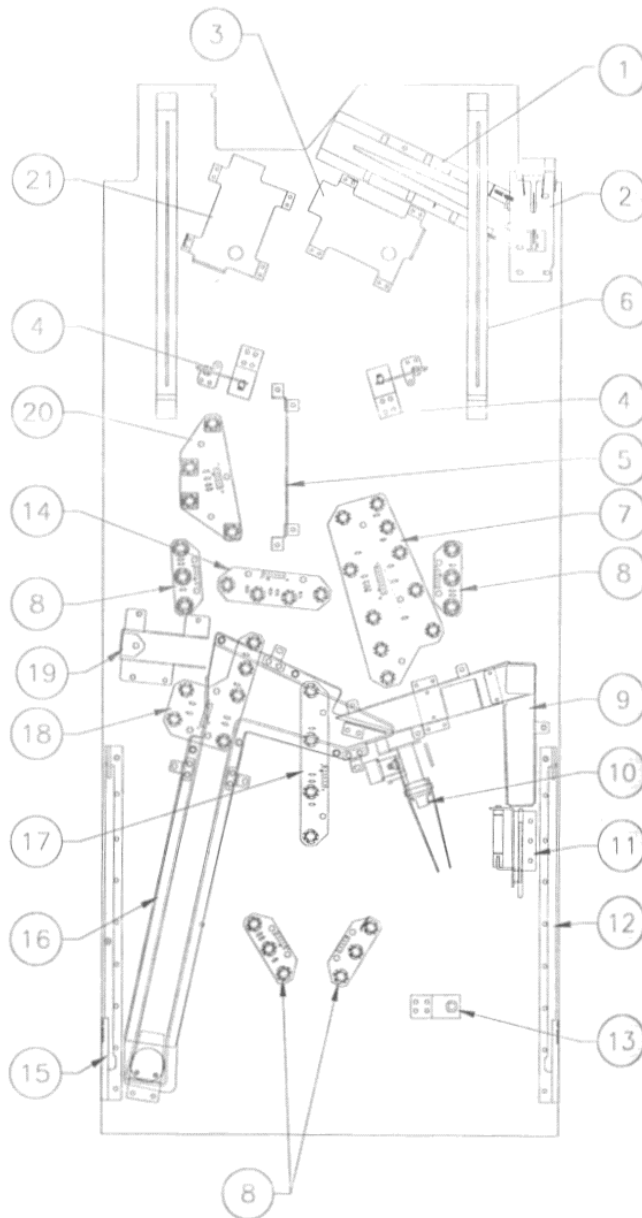


LOWER PLAYFIELD PARTS & LOCATIONS

| Item | Part Number | Description |
|------|-------------|------------------------------|
| 1 | A-19963-1 | Ball Trough Assy. w/Cable |
| 2 | A-21022 | Shooter Lane Auto Kicker |
| 3 | A-15849-R-2 | Flipper Assembly - Right |
| 4 | B-9362-R-3 | Coil & Bracket Assembly (2) |
| | *A-17811 | Kicker (Slingshot) Assy. (2) |
| 5 | A-17223 | 16-Opto PCB w/Bracket |
| 6 | 01-11781 | Support Bracket Assy. (2) |
| 7 | A-21319 | 10-Lamp PCB Assembly |
| 8 | A-21322 | 4-Lamp PCB Assembly (4) |
| 9 | A-21227 | Metal Trough Assembly |
| 10 | A-21220 | Fork Lift Assembly |
| 11 | A-21383 | Dog Mech. Assembly |
| 12 | A-17749.1-2 | Playfield Slide Assy.-Right |
| 13 | A-21409-1 | Up/Down Post Assembly |
| 14 | A-21321 | 4-Lamp Assembly |
| 15 | A-17749.1-1 | Playfield Slide Assy.-Left |
| 16 | A-21226 | Trough Assembly |
| 17 | A-21323 | 4-Lamp PCB Assembly |
| 18 | A-21320 | 6-Lamp PCB Assembly |
| 19 | A-21216 | 3-Ball Popper Assembly |
| 20 | A-21324 | 4-Lamp PCB Assembly |
| 21 | A-15849-L-2 | Flipper Assembly - Left |

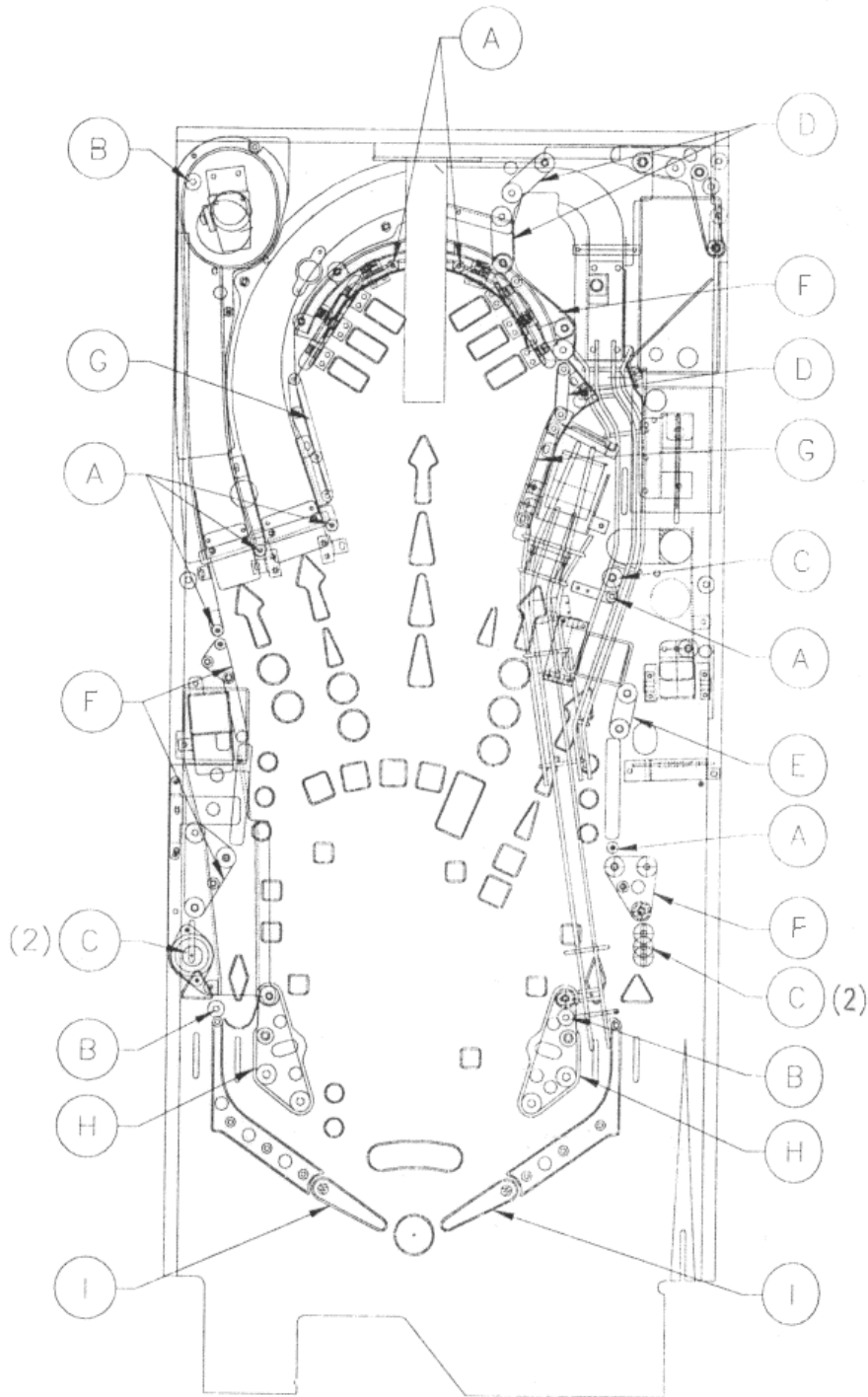
* Located on top of playfield.

Underside of Playfield, Viewed in Raised Position



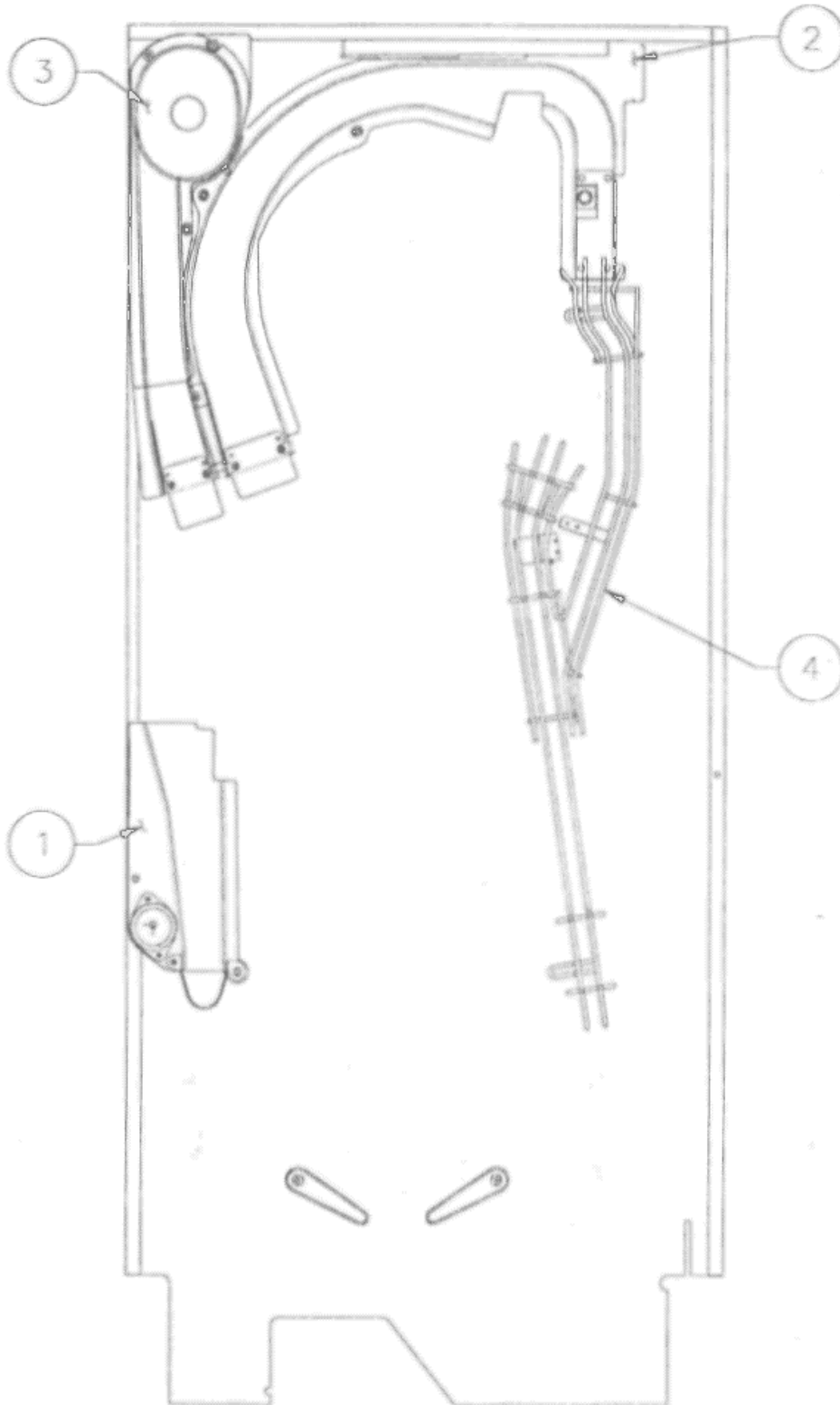
RUBBER PARTS

| Item No. | Part No. | Description | Quantity |
|----------|------------|--------------------------|----------|
| A | 23-6556 | Black Bumper Sleeve | 7 |
| B | 23-6694-1 | Black Rubber Grommet | 3 |
| C | 23-6694-3 | Black Rubber Ring 5/16" | 5 |
| D | 23-6694-5 | Black Rubber Ring 1" | 3 |
| E | 23-6694-6 | Black Rubber Ring 3/4" | 1 |
| F | 23-6694-8 | Black Rubber Ring 1/2" | 4 |
| G | 23-6694-9 | Black Rubber Ring 2" | 2 |
| H | 23-6694-10 | Black Rubber Ring 2 1/2" | 2 |

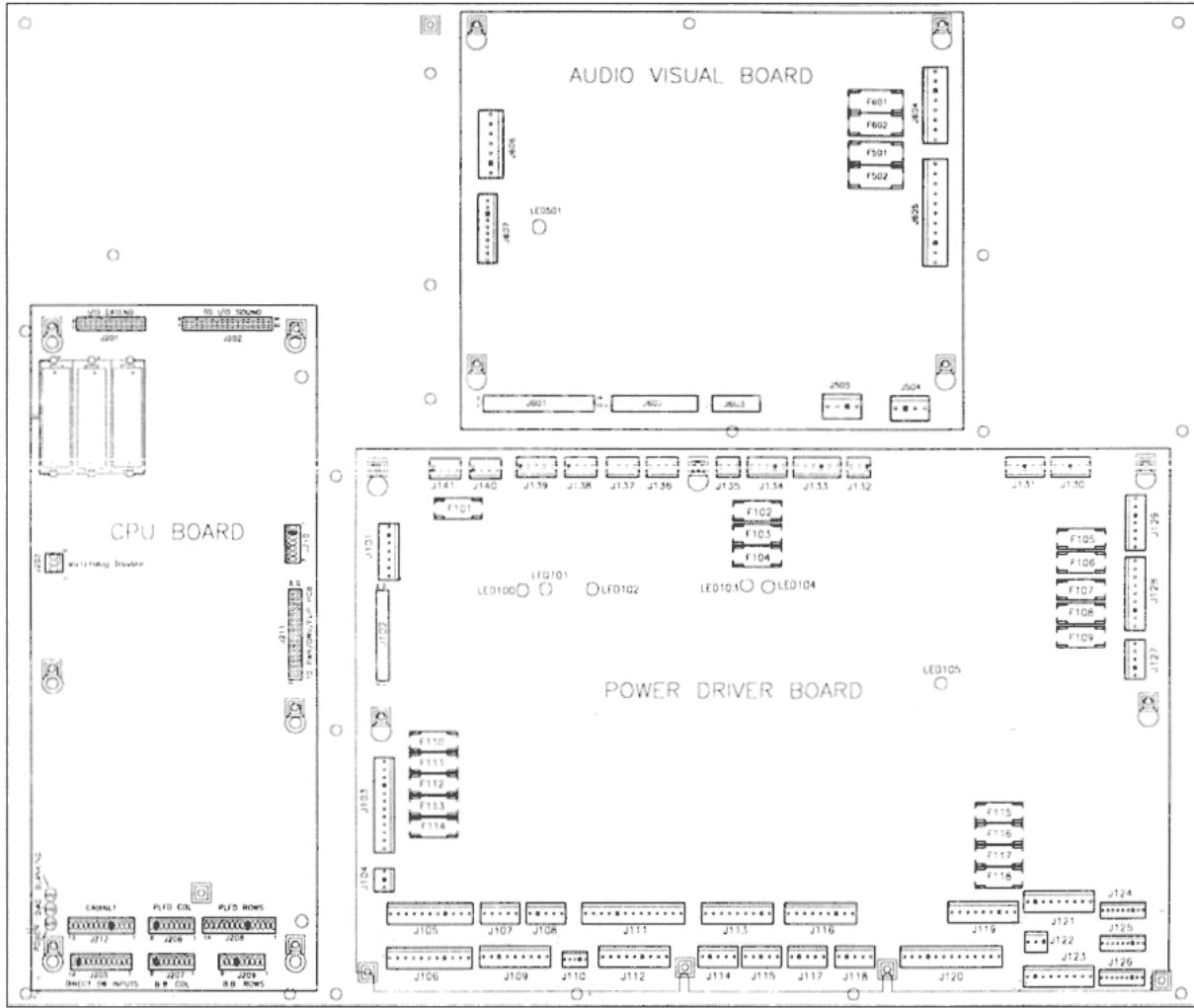


RAMPS

| Item | Part Number | Description |
|------|-------------|--------------------|
| 1 | A-21212 | Left Plastic Ramp |
| 2 | A-21222 | Main Ramp Assy. |
| 3 | A-21223 | Toilet Ramp Assy. |
| 4 | A-21224 | Wire Ramp Assembly |



FUSE LIST



AUDIO VIDEO BOARD

| Loc. | Description | Part Number | Value |
|------|---------------|---------------|--------------|
| F501 | -25V | 5731-14532-00 | T2.5A, 250V |
| F502 | +25V | 5731-14532-00 | T2.5A, 250V |
| F601 | +62V | 5731-14533-00 | T0.25A, 250V |
| F602 | -113V & -125V | 5731-14533-00 | T0.25A, 250V |

CPU BOARD

There are no fuses on the CPU board.

POWER DRIVER BOARD

| Loc. | Description | Part Number | Value | Loc. | Description | Part Number | Value |
|------|----------------------|---------------|--------------|------|-----------------|---------------|-------------|
| F101 | Regulated 12V | 5731-14531-00 | T0.63A, 250V | F110 | G.1.#5 WHT-VIO | 5731-14530-00 | T4.0A, 250V |
| F102 | Solenoid. #25 to #28 | 5731-14530-00 | T4.0A, 250V | F111 | G.I. #4 WHT-GRN | 5731-14530-00 | T4.0A, 250V |
| F103 | Solenoid #148 | 5731-14530-00 | T4.0A, 250V | F112 | G.1. #3 WHT-YEL | 5731-14530-00 | T4.0A, 250V |
| F104 | Solenoid #9 to #16 | 5731-14530-00 | T4.0A, 250V | F113 | G.1. #2 WHT-ORG | 5731-14530-00 | T4.0A, 250V |
| F105 | +5V Logic | 5731-14530-00 | T4.0A, 250V | F114 | G.I. #1 WHT-BRN | 5731-14530-00 | T4.0A, 250V |
| F106 | +18V Lamp Matrix | 5731-14046-00 | T5.0A, 250V | F115 | +50V Flippers | 5731-14530-00 | T4.0A, 250V |
| F107 | Flasher Secondary | 5731-14530-00 | T4.0A, 250V | F116 | +50V Flippers | 5731-14530-00 | T4.0A, 250V |
| F108 | Solenoid Secondary | 5731-14529-00 | T6.3A, 250V | F117 | +SOV Flippers | 5731-14530-00 | T4.0A, 250V |
| F109 | Unregulated 12V | 5731-14530-00 | T4.0A, 250V | F118 | +50V Flippers | 5731-14530-00 | T4.0A, 250V |

| LINE FILTER | Part Number | Value |
|-------------|---------------|-------------|
| Loc. | 5731-14530-00 | T4.0A, 250V |
| Foreign | 5731-14046-00 | T5.0A, 250V |
| Domestic | | |

WARNINGS & NOTICES

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