



IRON MAN

Optional Kits available through your Distributor:

Flipper Rebuild Kit (Left) 500-6307-10

Flipper Base Plate Kit (Left) 515-6617-01

Kit includes: Flipper Base Plate (Left) pre-threaded with securing hardware; see the Flipper Drawing for view.

Flipper Rebuild Kit (Right) 500-6307-00

Flipper Base Plate Kit (Right) 515-6617-00

Kit includes: Flipper Base Plate (Left) pre-threaded with securing hardware; see the Flipper Drawing for view.

Pinball Location Maintenance Standard Kit (for Ironman Pinball) 502-6002-B3

Standard Kit includes : 8 oz. Novus Wax #2 Fine (Red) (675-0003-01), Cloth, Rubber Rings (used above playfield), Bulbs (Bulb quantities vary and is limited to 25 per type), Fuses (1/per type) and 4 Pinballs. **Note:** Quanties, sizes and contents subject to change without notice.

Pinball Location Maintenance Deluxe Kit (for Ironman Pinball) 502-6003-B3

Deluxe Kit includes : Pinball Location Maintenance Standard Kit as described above plus a quantity of Flipper Rebuild Kits. **Note:** Quantity varies which equals the same quantity of flippers used in this game.

▲ THIS GAME KIT INCLUDES (2) FLIPPER REBUILD KITS ▲

Plastics*Kit (for Ironman Pinball) 803-5000-B3

Plastics Kit includes: Plastic Sets (830-6105-XX)

Decals*Kit (for Ironman Pinball) 802-5000-B3

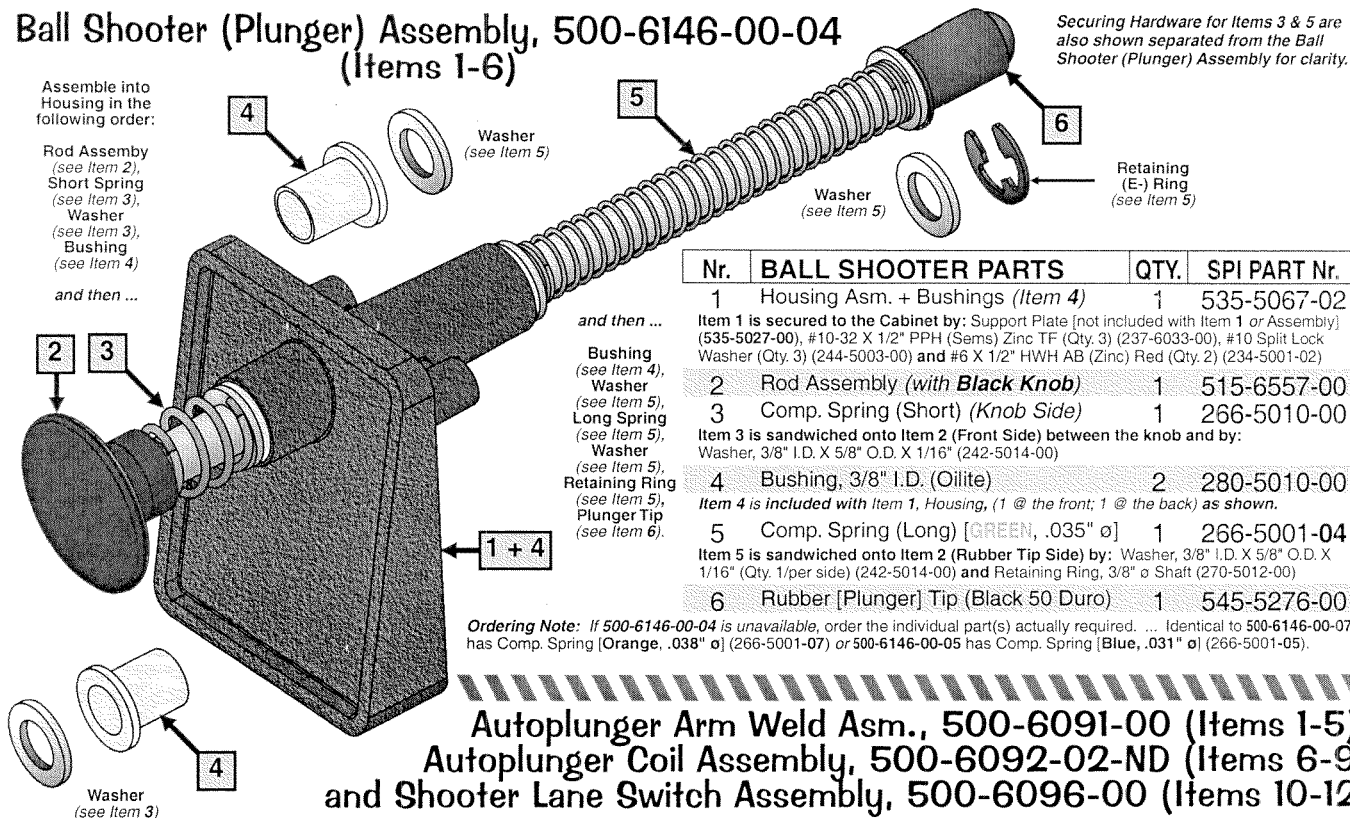
Decals Kit includes: Decal Set (820-6561-XX)

Mylar*Kit (for Ironman Pinball) 802-5001-B3

Mylar Kit includes: Full Mylar (820-5815-00)

***Attention:** No individual Plastic or Decal can be ordered separately, unless noted otherwise. Plastics & Decals are subject to change without notice during and / or after production. Key Fobs subject to availability and may or may not be included in the plastic set. All designs, shapes & pieces used subject to change without notice. Kit contents subject to change. Service Bulletin(s) will announce any critical changes, if warranted. The last 2-digits shown on plastics or decals are for reference only.

Ball Shooter (Plunger) Assembly, 500-6146-00-04 (Items 1-6)



Nr.	BALL SHOOTER PARTS	QTY.	SPI PART Nr.
1	Housing Asm. + Bushings (Item 4)	1	535-5067-02
Item 1 is secured to the Cabinet by: Support Plate [not included with Item 1 or Assembly] (535-5027-00), #10-32 X 1/2" PPH (Sems) Zinc TF (Qty. 3) (237-6033-00), #10 Split Lock Washer (Qty. 3) (244-5003-00) and #6 X 1/2" HWH AB (Zinc) Red (Qty. 2) (234-5001-02)			
2	Rod Assembly (with Black Knob)	1	515-6557-00
3	Comp. Spring (Short) (Knob Side)	1	266-5010-00
Item 3 is sandwiched onto Item 2 (Front Side) between the knob and by: Washer, 3/8" I.D. X 5/8" O.D. X 1/16" (242-5014-00)			
4	Bushing, 3/8" I.D. (Oilite)	2	280-5010-00
Item 4 is included with Item 1, Housing, (1 @ the front; 1 @ the back) as shown.			
5	Comp. Spring (Long) [GREEN, .035" ø]	1	266-5001-04
Item 5 is sandwiched onto Item 2 (Rubber Tip Side) by: Washer, 3/8" I.D. X 5/8" O.D. X 1/16" (Qty. 1/per side) (242-5014-00) and Retaining Ring, 3/8" ø Shaft (270-5012-00)			
6	Rubber [Plunger] Tip (Black 50 Duro)	1	545-5276-00

Ordering Note: If 500-6146-00-04 is unavailable, order the individual part(s) actually required. ... Identical to 500-6146-00-07 has Comp. Spring [Orange, .038" ø] (266-5001-07) or 500-6146-00-05 has Comp. Spring [Blue, .031" ø] (266-5001-05).

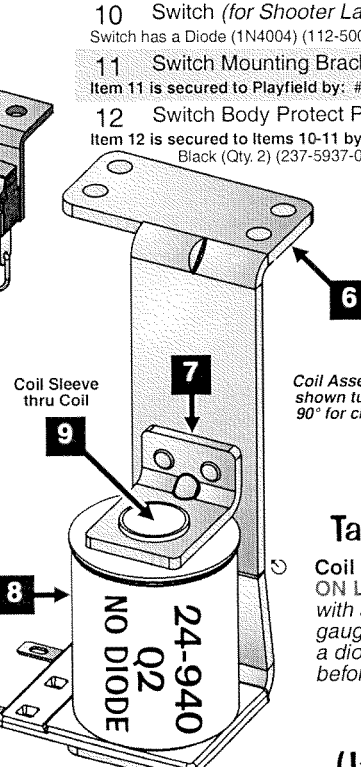
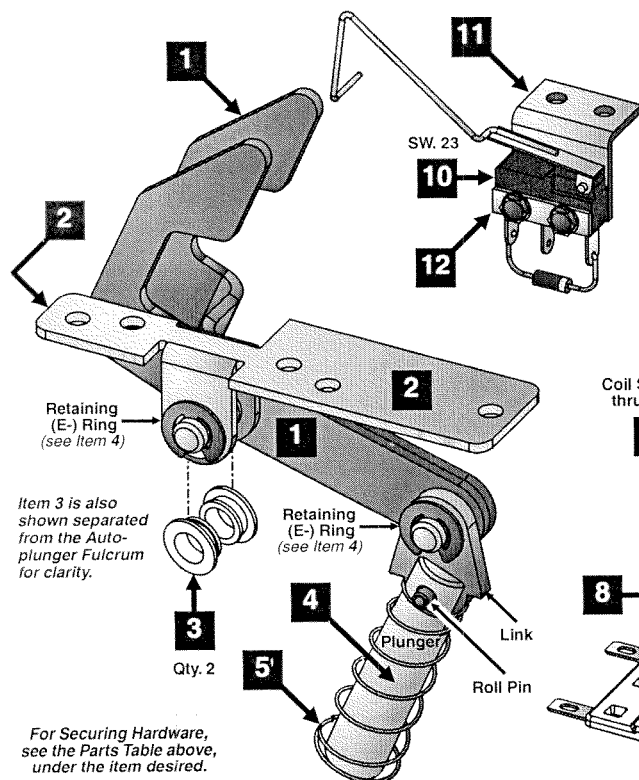
Autoplunger Arm Weld Asm., 500-6091-00 (Items 1-5), Autoplunger Coil Assembly, 500-6092-02-ND (Items 6-9) and Shooter Lane Switch Assembly, 500-6096-00 (Items 10-12)

Nr.	AUTOPL. ARM WELD PARTS	QTY.	SPI PART Nr.
1	Arm Weld Assembly	1	515-6526-00
Item 1 is secured to Item 2 by: Retaining Ring, 1/4" ø Shaft (Qty. 1) (270-5002-00)			
2	Autoplunger Fulcrum	1	535-7697-00
3	Nyliner, 1/4" (Thomson #411-FF)	2	545-5423-00
4	Plunger & Link Assembly	0	511-5183-00
Item 4 is secured to Item 1 by: Retaining Ring, 1/4" ø Shaft (Qty. 1) (270-5002-00) For Individual Items use : Plunger 1.81" Lg. (530-5025-05), Plunger Link (545-5293-00) and Roll Pin 1/8" ø x 5/8" Lg. (251-5008-00)			
5	Compression (Return) Spring	1	266-5020-00
(ASM. REF. 500-6091-00, Items 1-5)			

Nr.	AUTOPLNGR. COIL PARTS	QTY.	SPI PART Nr.
6	Autoplunger Coil Bracket Assembly	1	515-6527-00
Items 1 & 6 are secured below the P/F by: #8 X 1/2" SHWH AB (Zc.) (Qty. 9) (234-5101-00)			
7	Coil Retainer Bracket	1	535-5203-03
Item 7 is secured to Item 6 by: #8-32 X 1/4" PPH MS (Sems) Zinc (Qty. 2) (232-5300-00)			
8	Coil, 24-940 [NO DIODE]	1	090-5036-ND
COIL DOES NOT REQUIRE A DIODE. SEE COIL NOTE BELOW FOR DETAILS.			
9	Coil Sleeve	1	545-5031-00
(ASM. REF. 500-6092-02-ND, Items 6-9)			

Nr.	SWITCH PARTS	QTY.	SPI PART Nr.
10	Switch (for Shooter Lane)	1	180-5157-00
Switch has a Diode (1N4004) (112-5003-00). Can be replaced with (1N4001) (112-5001-00).			
11	Switch Mounting Bracket	1	535-6173-00
Item 11 is secured to Playfield by: #6 X 1/2" SLT HWH AB (Zinc) (Qty. 2) (234-5001-02)			
12	Switch Body Protect Plate	14	535-6539-00
Item 12 is secured to Items 10-11 by: #2-56 X 1/2" Unslotted Ser. HWH #4 Head TR3 Black (Qty. 2) (237-5937-02) and #2-56 Hex Nut (Qty. 2) (240-5301-0)			
(ASM. REF. 500-6096-00, Items 10-12)			

Assemblies & Ramps



For Securing Hardware,
see the Parts Table above,
under the item desired.

Take Note:

Coil Note: NO DIODE ON LUGS. If replacing with a coil of the same gauge and turn & it has a diode on it, remove it before using.

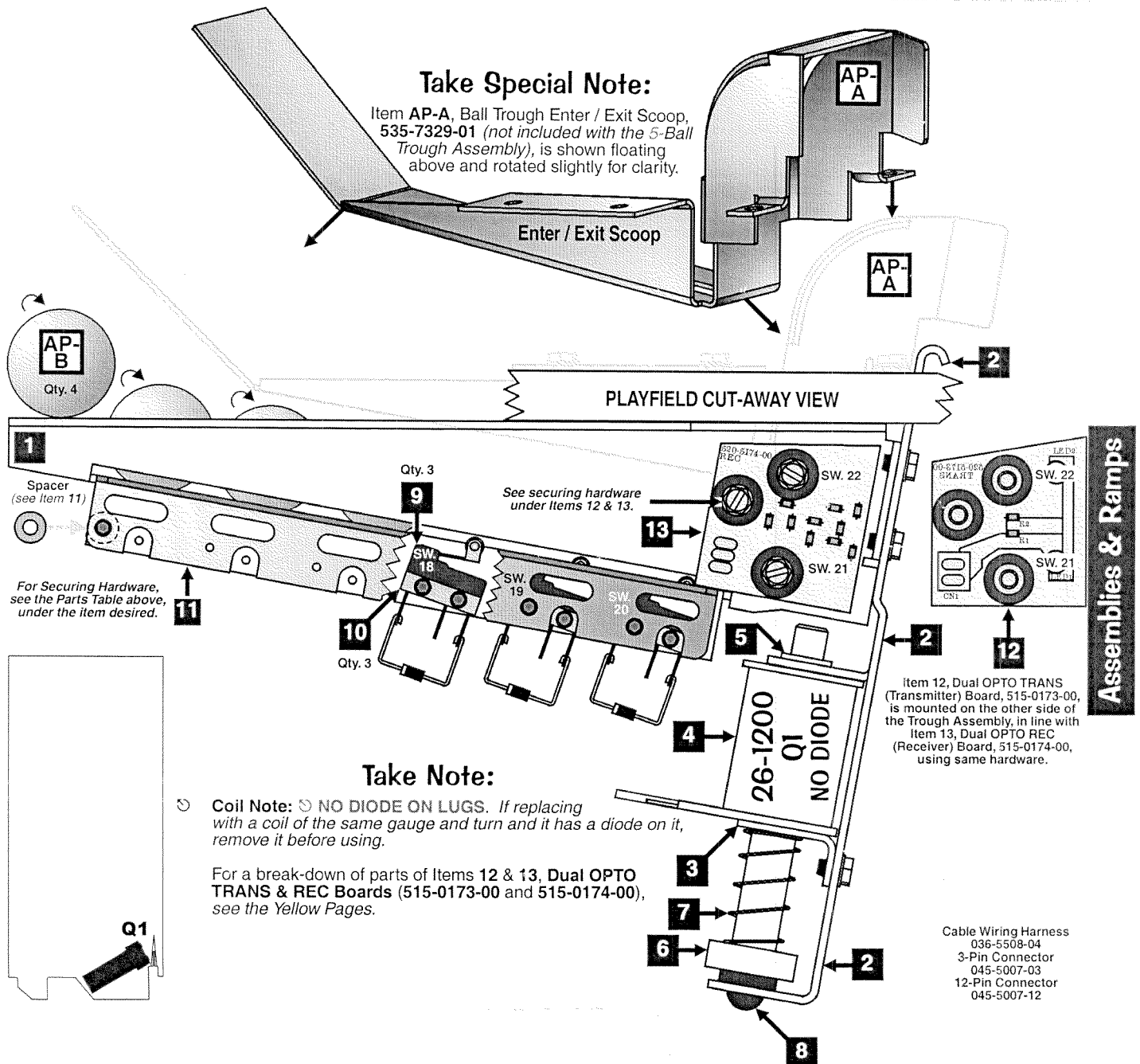
(Items 1-13)

Table Below.

4-Ball Trough Assembly, 500-6318-24-ND (Items 1-13) and Associated Parts: See Parts Table Below.

Ordering Note: Identical to 500-6318-14 with exceptions, see note below Item 13 (Parts Table).

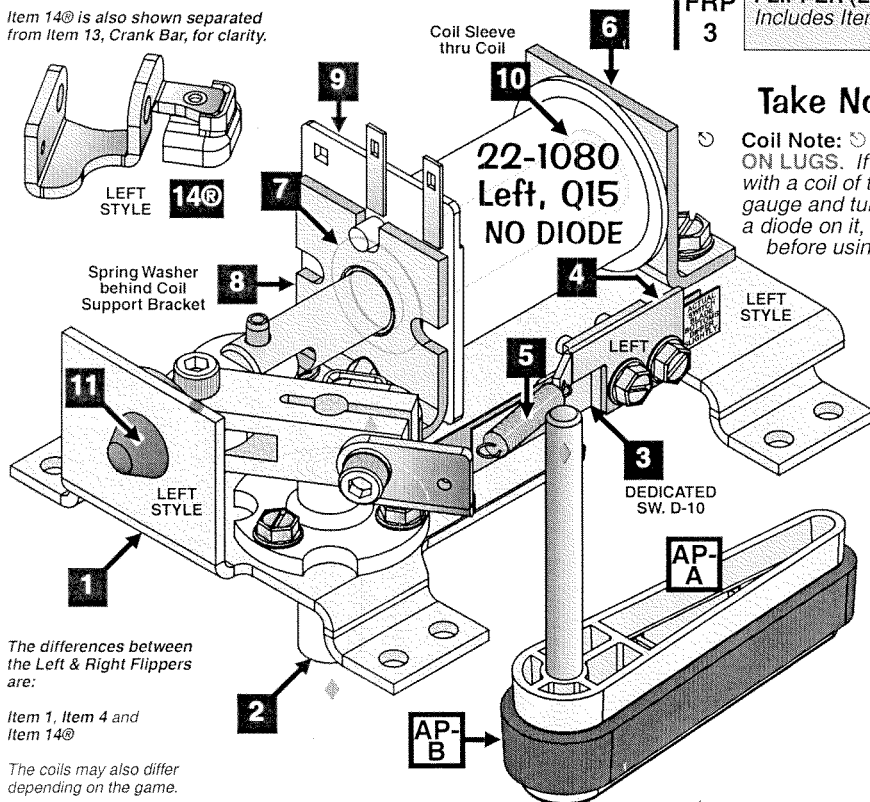
Nr.	4-BALL TROUGH PARTS	QTY.	SPI PART Nr.	Nr.	4-BALL TROUGH PARTS	QTY.	SPI PART Nr.
1	Ball Trough Outhole Mounting Bracket	1	515-6580-01	11	Trough Ball Guide Plate	1	535-7801-00
Item 1 is secured below the playfield by: #8 X 1/2" SHWH AB (Zc.) (Qty. 4) (234-5101-00)				Item 11 is secured to Item 1 by: 1/4" X 5/16" X .144" I.D. Spacer Tap. (Qty. 1) (254-5014-03) and #2-56 X 1/2" HWH (Ser) UNS #4HD TR3 BO (Qty. 4) (237-5937-02)			
2	Coil Mounting Bracket	1	535-7330-01	12	Dual OPTO TRANS Board Assembly	1	515-0173-00
Item 2 is secured to Item 1 by: #8-32 X 3/8" HWH Swage (Sr.) Zinc (Qty. 4) (237-5975-00)				Items 12 & 13 are secured by: #6-32 X 5/8" HWH Swg (Ser) Zc (Qty. 3/per) (237-5976-04)			
3	Coil Retaining Bracket	1	535-5203-03	13	Dual OPTO REC Board Assembly	1	515-0174-00
Item 3 is secured to Item 2 by: #8-32 X 1/4" SHWH (Serr) Zinc (Qty. 2) (237-5975-04)				For individual items use: Dual OPTO Transmitter Board (Qty. 1) (520-5173-00), Dual OPTO Receiver Board (Qty. 1) (520-5174-00), OPTO PCB Tube Spacer (Brass) (Qty. 3/per) (530-5308-02) and OPTO PCB Rubber Grommet (Qty. 3/per) (545-5518-00)			
4	Coil, 26-1200 [NO DIODE]	1	090-5044-ND	Ordering Note: If 500-6318-24-ND is unavailable, order the individual part(s) actually required. This assembly is identical to 500-6318-14-ND, -15 or -25 except for the quantity of Items 9 & 10 (Qty. 4/per on 5-Ball Trough) and Item 11, required when a Magnet Mech. is used in the game. -ND means no diode on Item 4, Coil, 26-1200.			
COIL DOES NOT REQUIRE A DIODE. SEE COIL NOTE BELOW FOR DETAILS.				ASSOCIATED PARTS ARE NOT INCLUDED WITH THE ABOVE ASSEMBLY.			
5	Coil Sleeve (Short) (Formost #10-7077)	1	545-5076-01	Nr.	ASSOCIATED PART(S)	QTY.	SPI PART Nr.
6	Steel & Nylon Plunger Asm. (3.57")	1	515-7309-01	AP-A	Ball Trough Enter / Exit Scoop	1	535-7329-01
7	Compression (Return) Spring	1	266-5020-00	Item AP-A secured to the playfield by: #8 X 1/2" SHWH AB (Zinc) (Qty. 4) (234-5101-00).			
8	Rubber Bumper (Grommet)	1	545-5105-00	AP-B	Steel Balls (1-1/16" ø)	4	260-5000-00
9	Micro Switch (Roller Actuator, Life-Force)	3	180-5119-02				
Item 9 requires: Heat Shrink Tubing 1/8" ø PUI-24 (Qty. 1*/per) (605-5006-00)							
Switch has a Diode (1N4004) (112-5003-00). Can be replaced with (1N4001) (112-5001-00).							
10	Switch Body Protect Plate	3	535-6539-00				



Flipper (Left) Assembly, 500-6543-15-ND (Items 1-15) and Associated Parts: Yellow Flipper Bat & Shaft Asm., 515-5133-06-06 (Items AP-A / AP-B)

Nr.	FLIPPER (LEFT) PARTS	QTY.	SPI PART Nr.
1	Flipper Base Plate (LEFT)	1	See FRP1
Item 1 is secured below by: #8 X 1/2" SHWH AB (Zinc) (Qty. 8) (234-5101-00) Ordering Note : Individual Part (535-7275-01) is not prethreaded, see Item FRP1.			
2	Flipper Bat Bushing (White Plastic) .25" ø I.D.	1	545-5070-00
Item 2 is secured to Item 1 by: #6-32 X 3/8" HWH Swage (Ser.) Zc. (Qty. 3) (237-5976-02)			
3	Power (EOS / End-of-Stroke) Switch	1	180-5149-00
Item 3 is secured to Item 1 by: #6-32 X 5/8" HWH Swage (Ser.) Zc. (Qty. 2) (237-5976-04)			
4	Sw. Plate/Spring Return Brkt. (LEFT)	1	535-7354-01
5	Flipper Return Spring	1	265-5035-00
6	Coil Stop Bracket Sub-Assembly	1	515-6308-01
Item 6 is secured to Item 1 by: #10-32 X 3/8" SHWH Swage (Serr) Zinc (Qty. 2) (237-5985-00) and #10 Split Lock Washer (Qty. 2) (244-5003-00)			
7	Spring Washer (17/32" ID X 3/4" X 1")	1	269-5002-00
8	Coil Support Bracket	1	535-7356-00
Item 8 is secured to Item 1 by: #8-32 X 3/8" HWH Swage (Ser.) Zc. (Qty. 2) (237-5975-00)			
9	Coil, 22-1080 [NO DIODE] BLUE	1	090-5032-ND
COIL DOES NOT REQUIRE A DIODE. SEE COIL NOTE BELOW FOR DETAILS.			
10	Coil Sleeve	1	545-5388-00
11	Deflector Pad (Bumper)	1	545-5428-00
12	Flipper Plunger & Link Sub-Assy.	1	515-6304-03
For Individual Items use : Flipper Plunger (530-5349-01) and Plunger "Flipper" Link (545-5611-01) and is secured to the Plunger by: Bushing, 16" ø ID X .281" ø OD X .187" (Qty. 1) (530-5532-00) and Spiral Pin ø 5/32" X 3/4" Lg. (Qty. 1) (251-5015-02)			
13	Crank Bar (Pawl)	1	530-5070-02
Item 13 requires: Bushing, .192" ø ID X .312" ø OD X .195" (Qty. 1) (530-5139-00)			
14®	Switch Actuator (LEFT) Sub-Assy.	1	515-7257-01
For Individual Items use : Actuator & Spring Bracket (LEFT) (535-9038-01) and ® Switch Actuator (White Plastic) (545-5612-00) and is secured to the Bracket by: Rivet, 1/8" ø X 1/4" Lg. (Qty. 1) (249-5003-00)			
15	Set Screw: #10-32 X 3/4" Socket Hd.	2	237-6144-00
Item 15 requires: #10-32 Nylon Stop Nut (Qty. 1) Flipper Link Side Only (240-5203-00) and #10 Split Lock Washer (Qty. 1) Switch Actuator Side Only (244-5003-00) Tool required for Item 15: 5/32" or 4mm Allen Wrench			

Item 14® is also shown separated from Item 13, Crank Bar, for clarity.



The differences between the Left & Right Flippers are:

Item 1, Item 4 and Item 14®

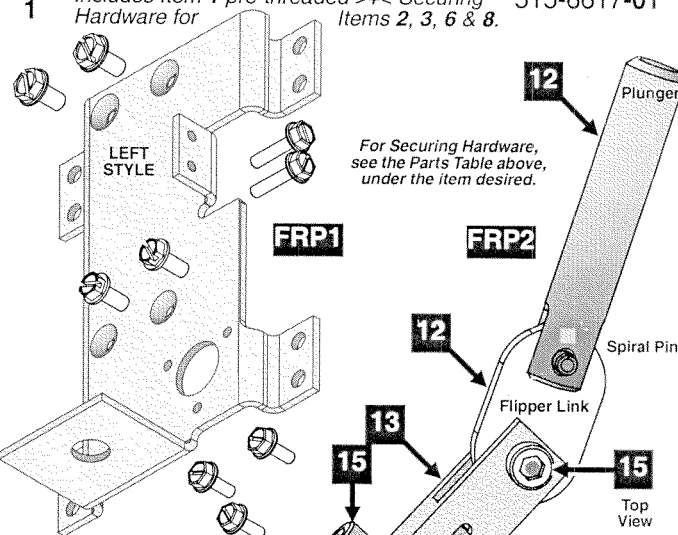
The coils may also differ depending on the game.

ASSOCIATED PARTS ARE NOT INCLUDED WITH THE ABOVE ASSEMBLY.

Nr.	ASSOCIATED PART(S)	QTY.	SPI PART Nr.
AP-A	YELLOW Flipper Bat & Shaft Asm. (Non-Knurled End) without Rubber Ring	1	515-5133-06-06
AP-B	Large Flipper Red Rubber Ring	1	545-5277-22

Flipper Rebuild Parts for Easier Installation, Save \$:

FRP 1 FLIPPER BASE PLATE KIT (LEFT) :
Includes Item 1 pre-threaded >+< Securing Hardware for Items 2, 3, 6 & 8. 515-6617-01

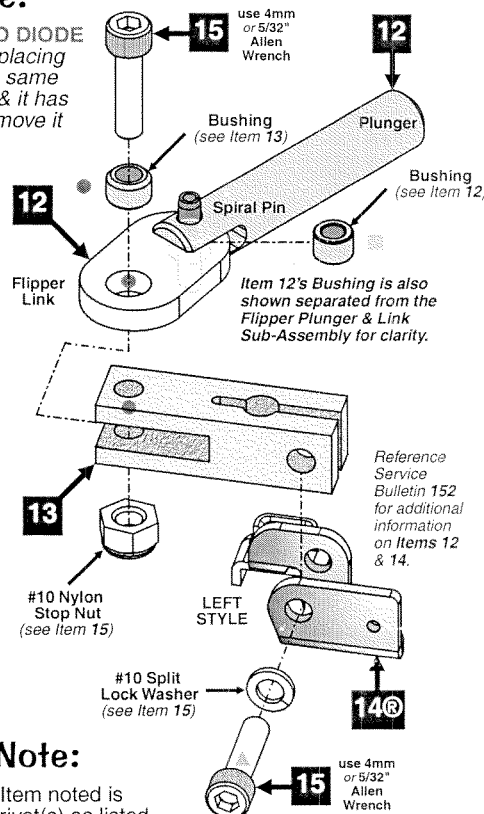


FRP 2 PLUNGER, LINK & CRANK (LEFT STYLE) ASSEMBLY : Includes Items 12, 13, 14 & 15 (comes assembled). 515-7203-01

FRP 3 FLIPPER (LEFT) REBUILD KIT :
Includes Items 6, 10 AND above FRP2 500-6307-10

Take Note:

Coil Note: NO DIODE ON LUGS. If replacing with a coil of the same gauge and turn & it has a diode on it, remove it before using.



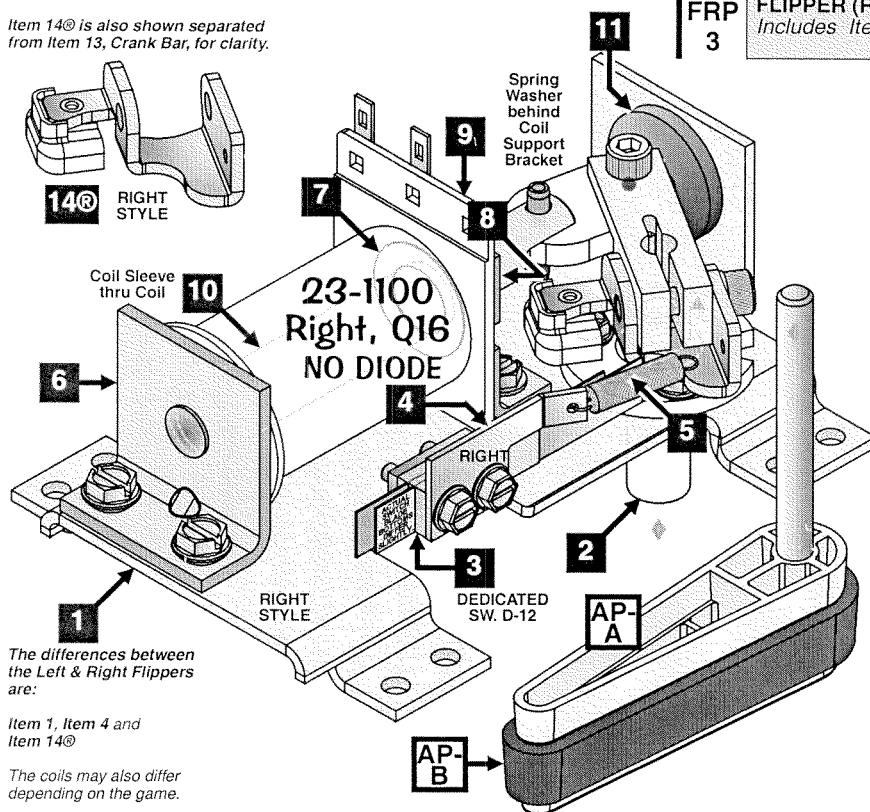
Take Note:

® "R" indicates Item noted is secured with rivet(s) as listed.

Flipper (Right) Assembly, 500-6543-05-ND (Items 1-15) and Associated Parts: Yellow Flipper Bat & Shaft Asm., 515-5133-06-06 (Items AP-A / AP-B)

Nr.	FLIPPER (RIGHT) PARTS	QTY.	SPI PART Nr.
1	Flipper Base Plate (RIGHT)	1	See FRP1
Item 1 is secured below by: #8 X 1/2" SHWH AB (Zinc) (Qty. 8) (234-5101-00) Ordering Note: Individual Part (535-7275-00) is not prethreaded, see Item FRP1.			
2	Flipper Bat Bushing (White Plastic), .25" ϕ I.D.	1	545-5070-00
Item 2 is secured to Item 1 by: #6-32 X 3/8" HWH Swage (Ser.) Zc. (Qty. 3) (237-5976-02)			
3	Power (EOS / End-of-Stroke) Switch	1	180-5149-00
Item 3 is secured to Item 1 by: #6-32 X 5/8" HWH Swage (Ser.) Zc. (Qty. 2) (237-5976-04)			
4	Sw. Plate/Spring Return Brkt. (RIGHT)	1	535-7354-00
5	Flipper Return Spring	1	265-5035-00
6	Coil Stop Bracket Sub-Assembly	1	515-6308-01
Item 6 is secured to Item 1 by: #10-32 X 3/8" SHWH Swage (Serr) Zinc (Qty. 2) (237-5985-00) and #10 Split Lock Washer (Qty. 2) (244-5003-00)			
7	Spring Washer (17/32" ID X 3/4" X 1")	1	269-5002-00
8	Coil Support Bracket	1	535-7356-00
Item 8 is secured to Item 1 by: #8-32 X 3/8" HWH Swage (Ser.) Zc. (Qty. 2) (237-5976-02)			
9	Coil, 23-1100 [NO DIODE] BLUE	1	090-5030-ND
COIL DOES NOT REQUIRE A DIODE. SEE $\odot$ COIL NOTE PREV. PAGE FOR DETAILS.			
10	Coil Sleeve	1	545-5388-00
11	Deflector Pad (Bumper)	1	545-5428-00
12	Flipper Plunger & Link Sub-Assy.	1	515-6304-03
For Individual Items use: Flipper Plunger (530-5349-01) and Plunger "Flipper" Link (545-5611-01) and is secured to the Plunger by: Bushing, .16" ϕ ID X .281" ϕ OD X .187" (Qty. 1) (530-5532-00) and Spiral Pin ϕ 5/32" X 3/4" Lg. (Qty. 1) (251-5015-02)			
13	Crank Bar (Pawl)	1	530-5070-02
Item 13 requires: Bushing, .192" ϕ ID X .312" ϕ OD X .195" (Qty. 1) (530-5139-00)			
14 $\odot$	Switch Actuator (RIGHT) Sub-Assy.	1	515-7257-00
For Individual Items use: Actuator & Spring Bracket (LEFT) (535-9038-01) and $\odot$ Switch Actuator (White Plastic) (545-5612-00) and is secured to the Bracket by: Rivet, 1/8" ϕ X 1/4" Lg. (Qty. 1) (249-5003-00)			
15	Set Screw: #10-32 X 3/4" Socket Hd.	2	237-6144-00
Item 15 requires: #10-32 Nylon Stop Nut (Qty. 1) Flipper Link Side Only (240-5203-00) and #10 Split Lock Washer (Qty. 1) Switch Actuator Side Only (244-5003-00) Tool required for Item 15: 5/32" or 4mm Allen Wrench			

Item 14 $\odot$ is also shown separated from Item 13, Crank Bar, for clarity.



The differences between the Left & Right Flippers are:

Item 1, Item 4 and Item 14 $\odot$

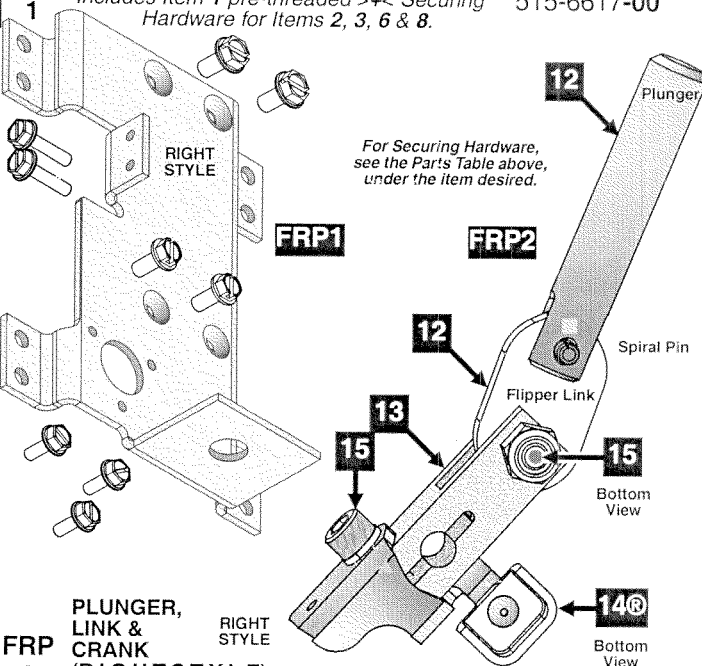
The coils may also differ depending on the game.

ASSOCIATED PARTS ARE NOT INCLUDED WITH THE ABOVE ASSEMBLY.

Nr.	ASSOCIATED PART(S)	QTY.	SPI PART Nr.
AP-A	YELLOW Flipper Bat & Shaft Asm. (Non-Knurled End) without Rubber Ring	1	515-5133-06-06
AP-B	Large Flipper Red Rubber Ring	1	545-5277-22

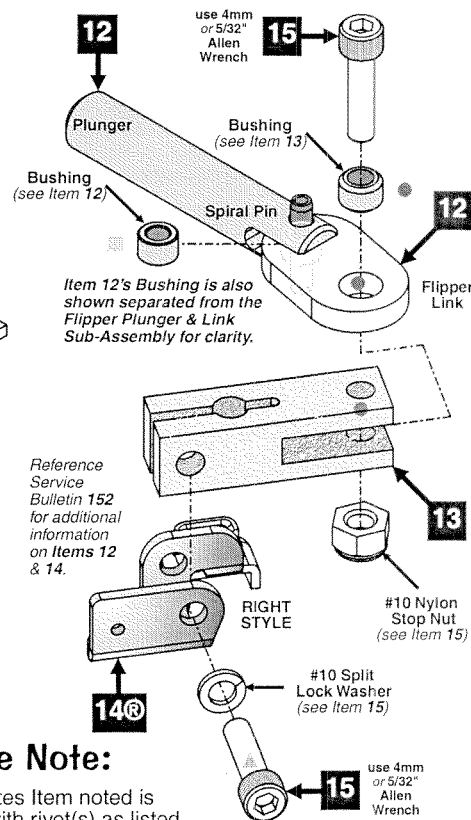
Flipper Rebuild Parts for Easier Installation, Save \$:

FRP 1 FLIPPER BASE PLATE KIT (RIGHT):
Includes Item 1 pre-threaded >+< Securing Hardware for Items 2, 3, 6 & 8. 515-6617-00



FRP 2 PLUNGER, LINK & CRANK (RIGHT STYLE) ASSEMBLY: Includes Items 12, 13, 14 & 15 (comes assembled). 515-7203-00

FRP 3 FLIPPER (RIGHT) REBUILD KIT:
Includes Items 6, 10 AND above FRP2 500-6307-00



Reference Service Bulletin 152 for additional information on Items 12 & 14.

Take Note:

$\odot$ "R" indicates Item noted is secured with rivet(s) as listed.

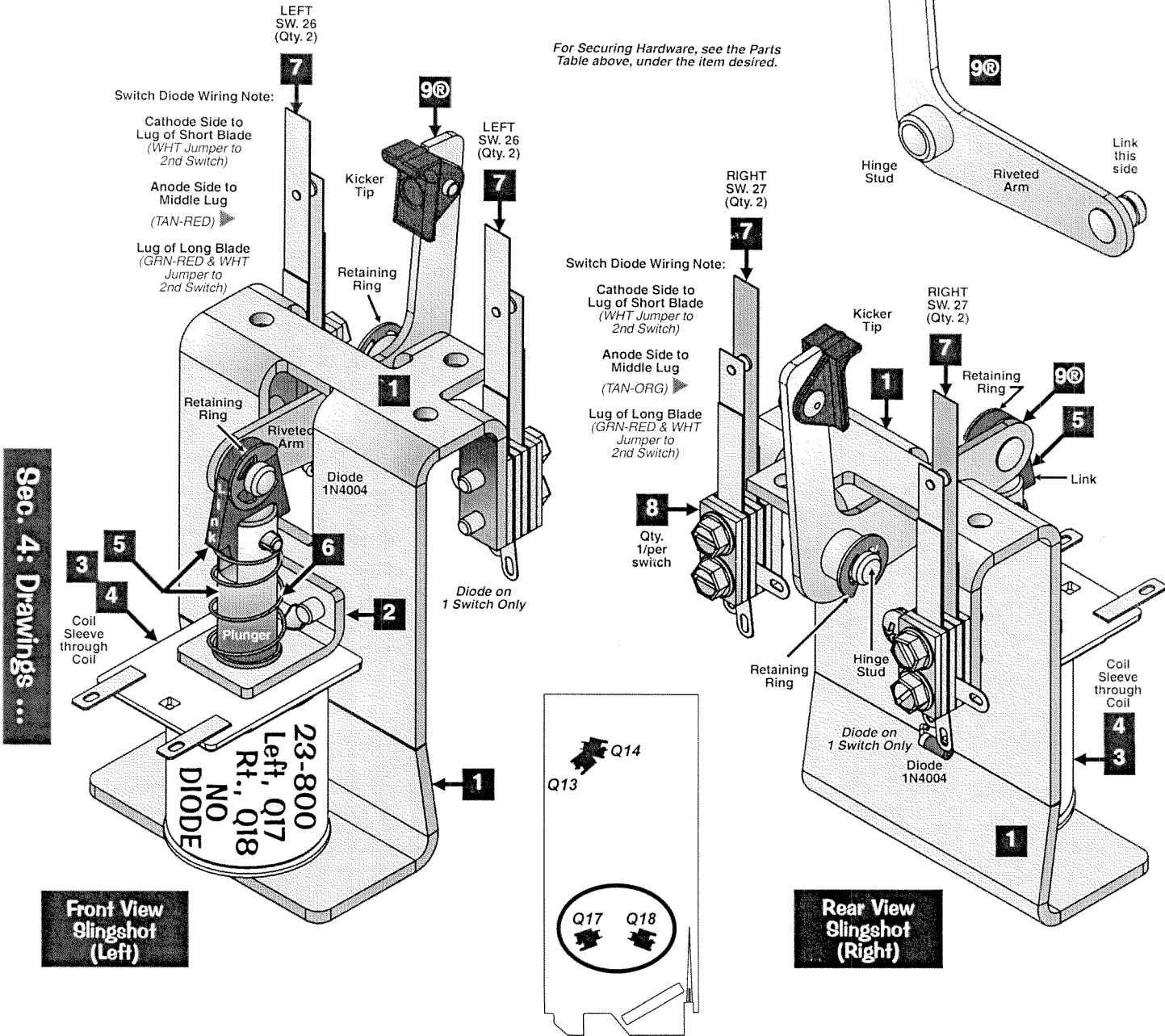
Assemblies & Ramps

Slingshot (Lower Left & Right) Assemblies, 500-5849-00-ND (Qty. 2) (Items 1-9)

Nr.	SLINGSHOT PARTS	QTY.	SPI PART Nr.	Nr.	SLINGSHOT PARTS	QTY.	SPI PART Nr.
1	Slingshot Bracket Assembly	1/per	515-5339-01	6	Compression (Return) Spring	1/per	266-5020-00
Item 1 is secured below the playfield by: #8 X 1/2" SHWH AB (Zc.) (Qty. 3) (234-5101-00)				7	Slingshot Stack (Blade) Switch	2/per	180-5054-00
2	Coil Retaining Bracket	1/per	535-5203-03	Only 1 of the 2 Switches has a Diode (1N4004) (112-5003-00). See Note Below on Drawing. Can be replaced with (1N4001) (112-5001-00).			
3	Coil, 23-800 [NO DIODE]	1/per	090-5001-ND	8	Switch Body Protect Plate	2/per	535-5045-00
COIL DOES NOT REQUIRE A DIODE. SEE COIL NOTE BELOW FOR DETAILS.				Items 7 & 8 are secured to Item 1 by: #6-32 X 5/8" HWH Swage (Qty. 4) (237-5976-04)			
4	Coil Sleeve	1/per	545-5031-00	9Ⓡ	Riveted Arm & Tip Assembly	1/per	515-5340-01
5	Plunger & Link Assembly	1/per	515-5338-00	For Individual Parts use (requires drilling out rivet & rereviting): Arm (515-5341-01), Kicker Tip (545-5216-01) and Rivet, 1/8" ø x 1/4" Lg. (249-5003-00)			
The Riv. Arm is secured to Item 1 by: Retaining Ring, 1/4" ø Shaft (Qty. 1) (270-5002-00)				Ordering Note: If 515-5340-01 is unavailable, order the individual part(s) actually required.			
Ordering Note: If 515-5338-00 is unavailable, order the individual part(s) actually required.				Ordering Note: If 500-5849-00-ND is unavailable, order the individual part(s) actually required. This assembly is identical to 500-5849-00R-ND with the exception of Item 3, which has the coil rotated as shown in the drawing on the next page. This assembly is identical to 500-5849-ND-A4 with the exception of Item 1, which is modified to fit the space constraints in this game only.			

Take Note:

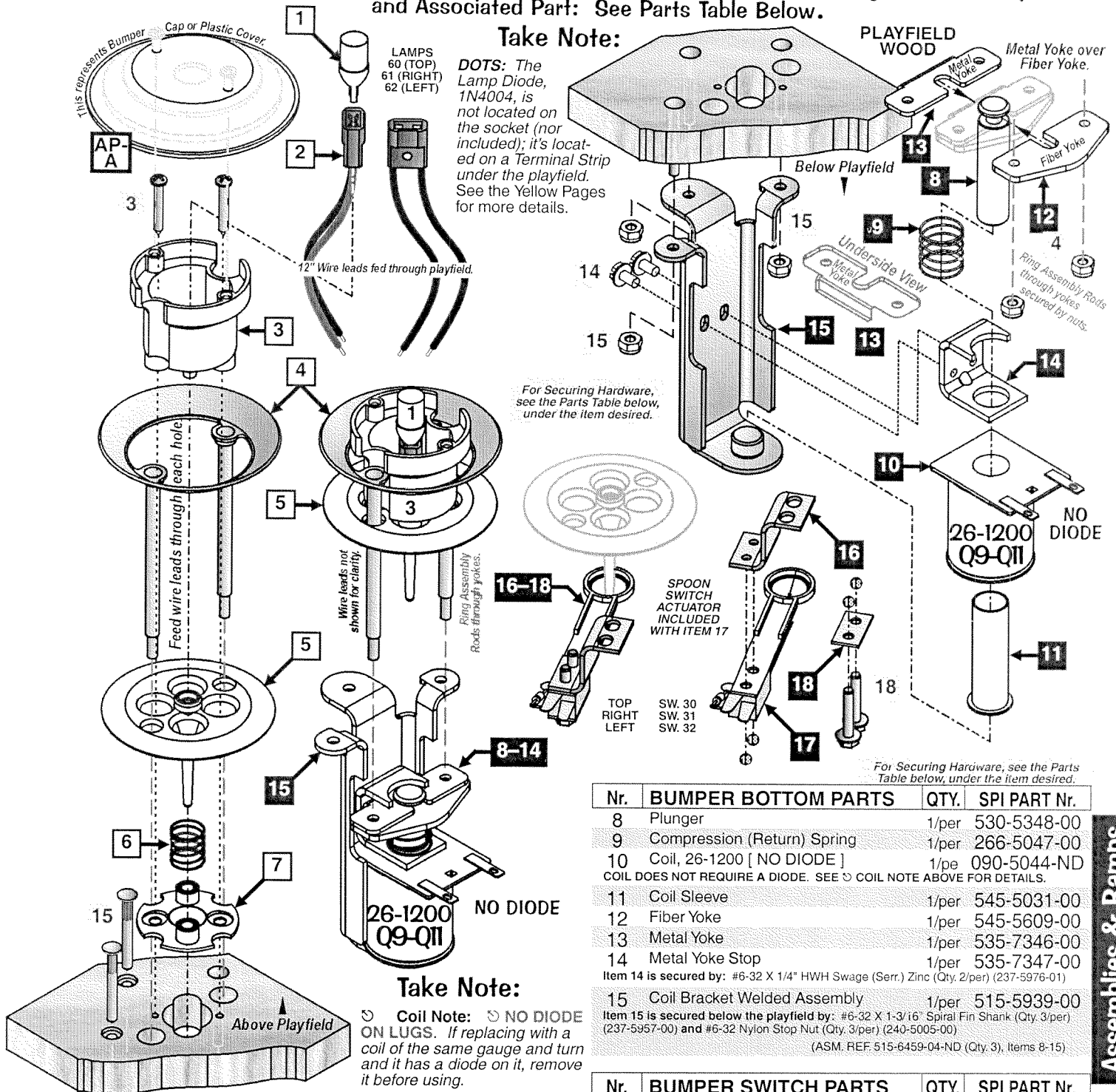
- Ⓢ **Coil Note:** Ⓢ NO DIODE ON LUGS. If replacing with a coil of the same gauge and turn and it has a diode on it, remove it before using.
- Ⓡ "R" indicates Item noted is secured with rivet(s) as listed.



Left, Right & Bottom Bumper & Switch Individual Parts Only (Items 1-18) and Associated Part: See Parts Table Below.

Take Note:

DOTS: The Lamp Diode, 1N4004, is not located on the socket (nor included); it's located on a Terminal Strip under the playfield. See the Yellow Pages for more details.



Take Note:

Coil Note: NO DIODE ON LUGS. If replacing with a coil of the same gauge and turn and it has a diode on it, remove it before using.

Nr.	BUMPER TOP PARTS	QTY.	SPI PART Nr.
1	LED Module (WHT) (6.3v) Wedge Base	1/per	112-5024-08
2	Wedge Base Socket	1/per	077-5206-00
3	Bumper Body	1/per	545-5197-00
Item 3 is secured above the P/F by: #5 X 7/8" PRH AB (Zinc) (Qty. 2/per) (237-5826-00)			
4	Ring Assembly	1/per	515-5085-00
Item 4 is secured by: #6-32 Nylon Stop Nut (Qty. 2/per) (240-5005-00)			
5	Bumper Skirt (Switch Actuator)	1/per	545-5607-00
6	Bumper Skirt Compression Spring	1/per	266-5048-00
7	Bumper Base	1/per	545-5195-00
(ASM. REF. 515-6459-01L (Qty. 3), Items 1-7)			

The Top & Bottom Assemblies are secured together by hardware noted in Item 4.

Nr.	BUMPER BOTTOM PARTS	QTY.	SPI PART Nr.
8	Plunger	1/per	530-5348-00
9	Compression (Return) Spring	1/per	266-5047-00
10	Coil, 26-1200 [NO DIODE]	1/pe	090-5044-ND
COIL DOES NOT REQUIRE A DIODE. SEE COIL NOTE ABOVE FOR DETAILS.			
11	Coil Sleeve	1/per	545-5031-00
12	Fiber Yoke	1/per	545-5609-00
13	Metal Yoke	1/per	535-7346-00
14	Metal Yoke Stop	1/per	535-7347-00
Item 14 is secured by: #6-32 X 1/4" HWH Swage (Serr.) Zinc (Qty. 2/per) (237-5976-01)			
15	Coil Bracket Welded Assembly	1/per	515-5939-00
Item 15 is secured below the playfield by: #6-32 X 1-3/16" Spiral Fin Shank (Qty. 3/per) (237-5957-00) and #6-32 Nylon Stop Nut (Qty. 3/per) (240-5005-00)			
(ASM. REF. 515-6459-04-ND (Qty. 3), Items 8-15)			

Nr.	BUMPER SWITCH PARTS	QTY.	SPI PART Nr.
16	Switch Bracket	1/per	535-7342-00
Item 16 is secured by: #8 X 1/2" HWH AB (Zinc) (Qty. 2/per) (234-5101-00)			
17	Bumper Stack (Blade) Switch Assy.	1/per	180-5015-04
Included with Item 17: Spoon Switch Actuator (545-5610-02). Switch has a Diode (1N4004) (112-5003-00). Can be replaced with (1N4001) (112-5001-00).			
18	Switch Body Protect Plate	1/per	535-7344-00
Items 17 & 18 are secured by: #6-32 X 3/4" HWH Swage (Serr) Zc. (Qty. 2) (237-5976-05)			
Can substitute Item 17 with 180-5015-05 (ASM. REF. 515-6459-09/R (Qty. 3), Items 16-18)			

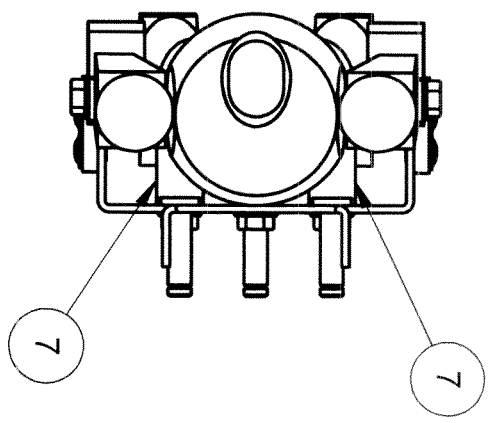
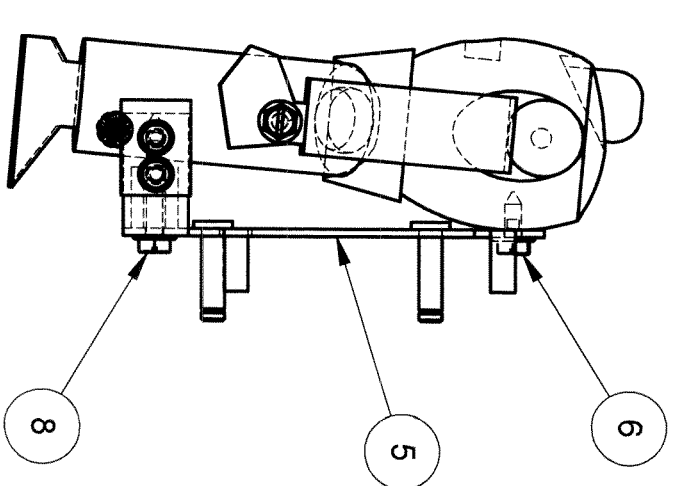
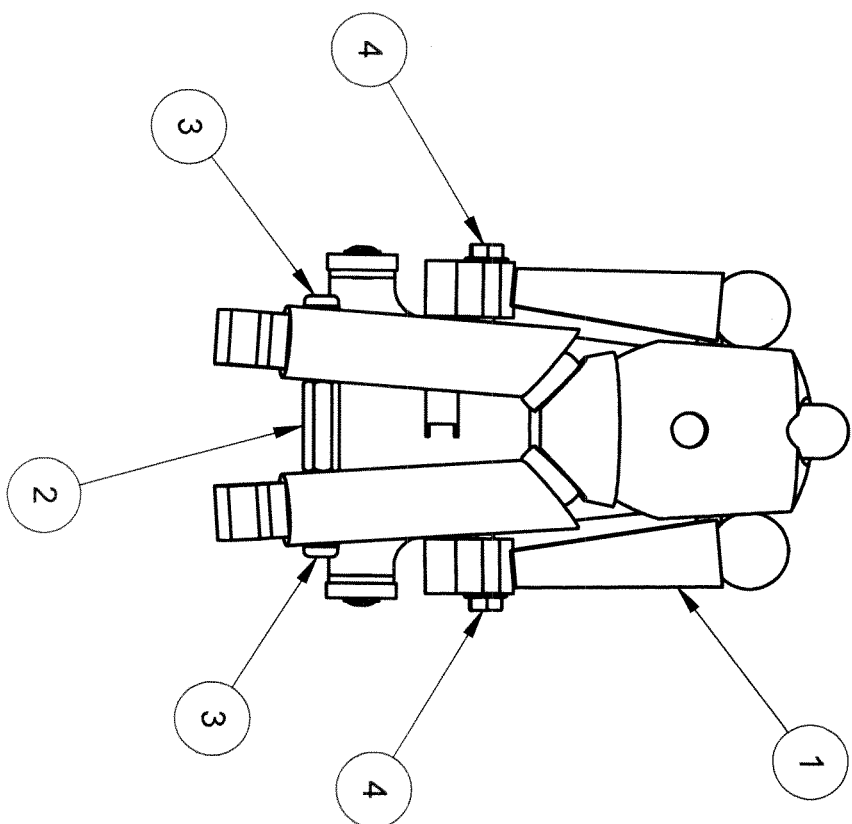
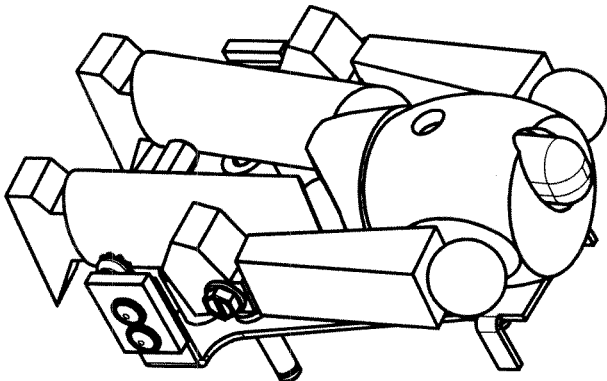
ASSOCIATED PARTS ARE NOT INCLUDED WITH THE ABOVE ASSEMBLIES.

Nr.	ASSOCIATED PART(S)	QTY.	SPI PART Nr.
AP-A	Kit: Plastics (includes -10, -11 & -12)	1	803-5000-A2
Note: Individual Plastics (830-6071-XX) are not available individually, ordering of kit is required.			
Item AP-A is secured Item 3 by: #5 X 7/8" PRH AB (Zinc) (Qty. 2/per) (237-5826-00)			

Assemblies & Ramps

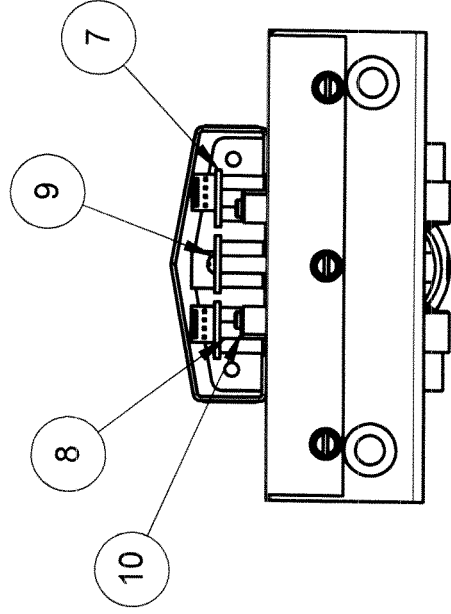
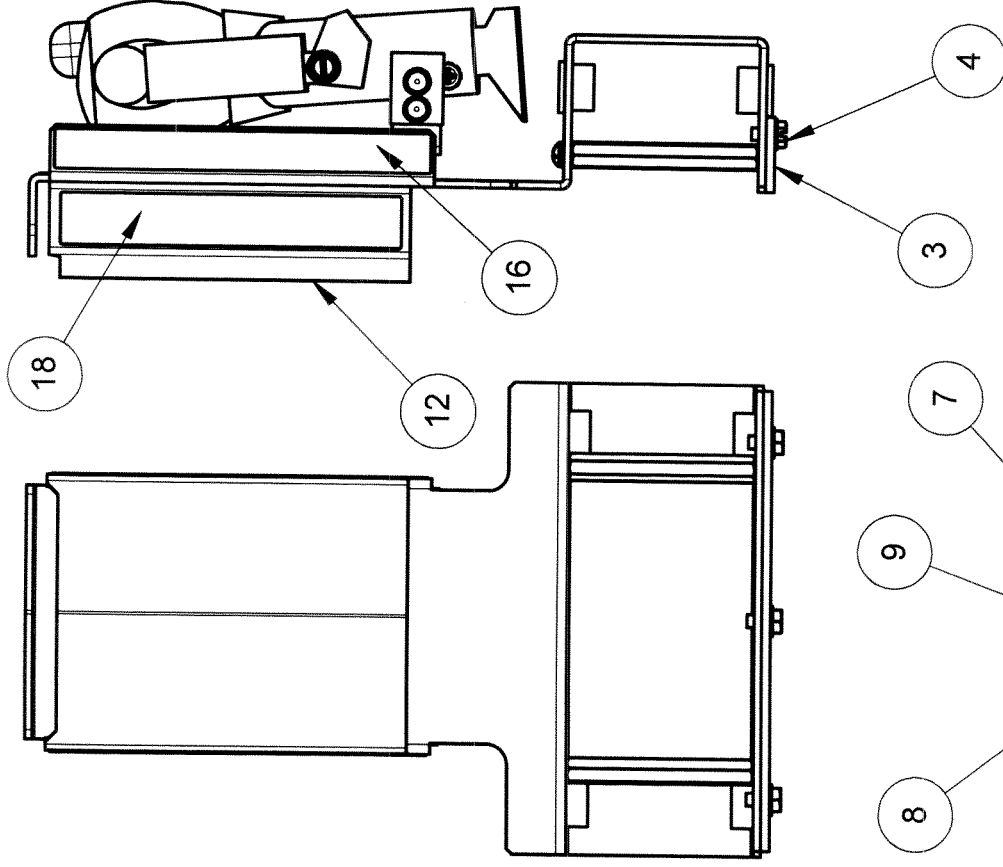
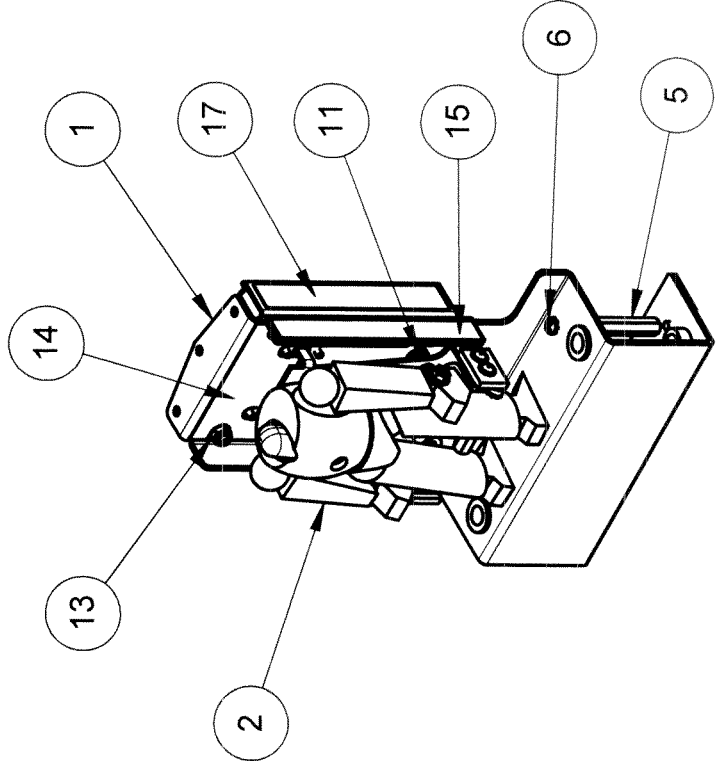
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	880-5115-01	IRON MONGER TOY, MODIFIED	1
2	254-5008-04	HEX SPACER - 3/4 "	1
3	232-5203-00	SCREW, 6-32 x 5/8 PPH SEMS ZINC	2
4	234-5002-00	SCREW, #6 X 5/8" HWH	2
5	510-5111-00	RIVETED ASSY, MONGER MOUNT	1
6	234-5000-00	SCREW, #6 X 3/8" HWH	1
7	254-5000-01	NYLON SPACER - BLACK - 3/8 OD X .175 ID X 1/2"	2
8	234-5005-00	SCREW, #6 X 1" HWH AB	2

ASSY, IRON MONGER, FASTENED
511-6758-00



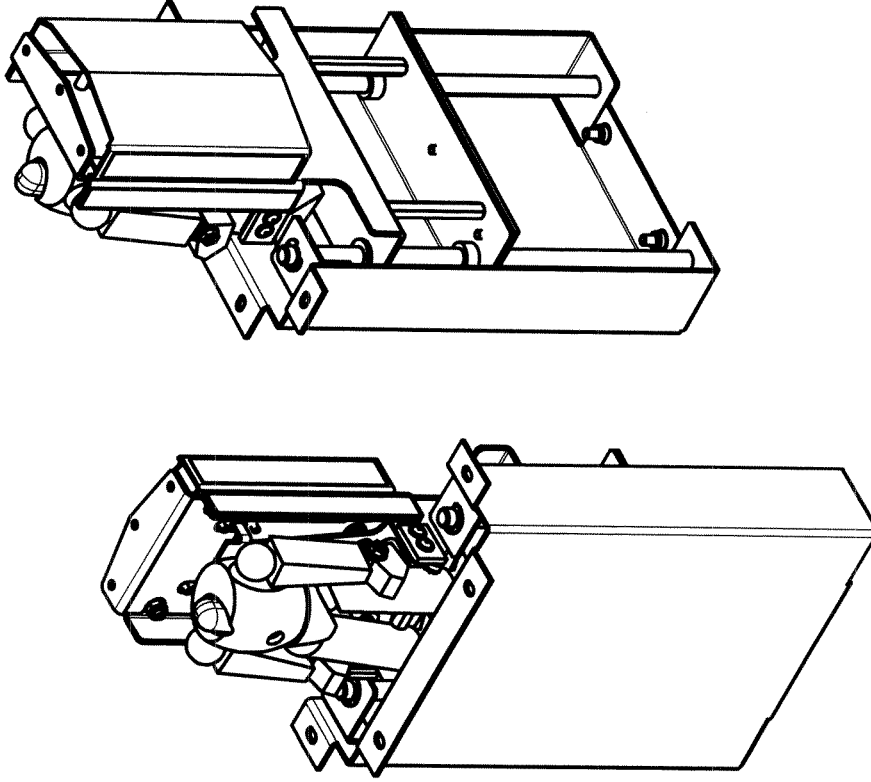
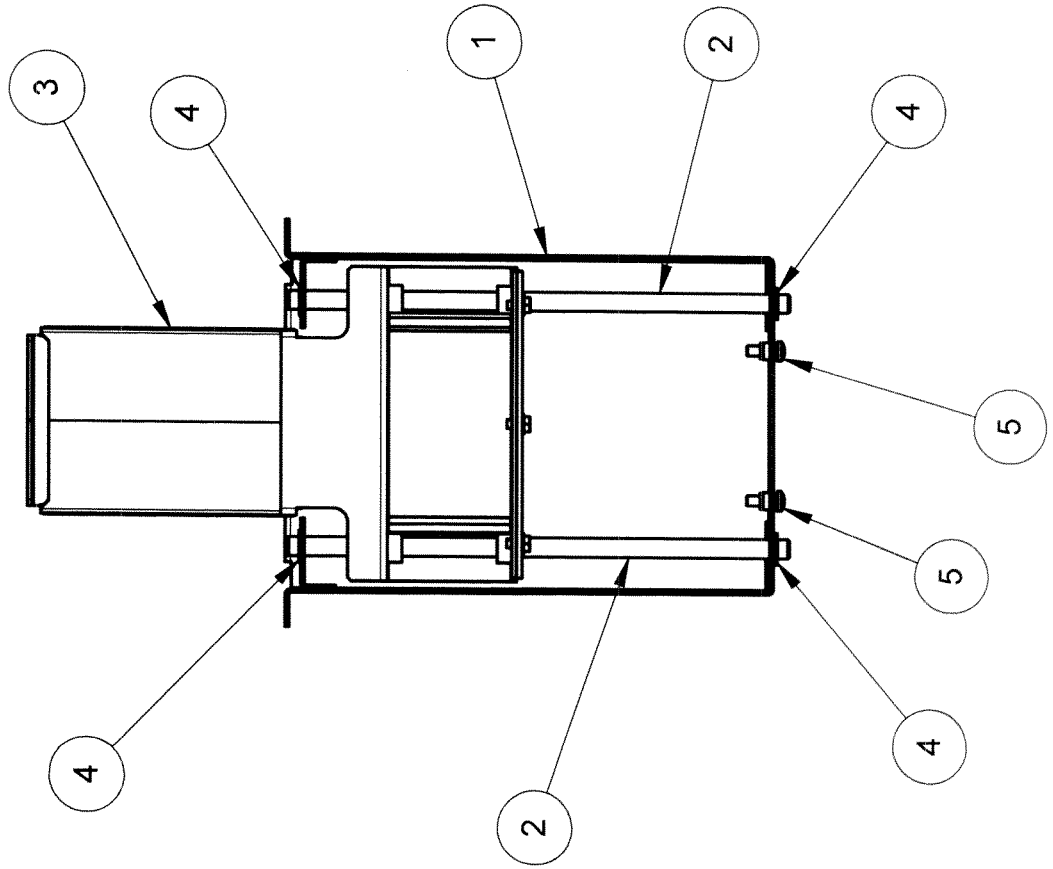
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	535-0369-00	LIFT BRACKET, IRON MONGER	1
2	511-6758-00	ASSY, IRON MONGER, FASTENED	1
3	545-6811-00	GLIDE STRIP, MONGER LIFT	1
4	237-5976-01	SCREW, 6-32 X 1/4 HWH SWAGE	3
5	254-5008-07	HEX SPACER - 2"	2
6	232-5201-00	SCREW, 6-32 X 3/8" PPH MS SEMS	2
7	520-5292-00	OPTO INTERRUPTOR BOARD - IDLER DISC	3
8	254-5061-08	SPACER, #4 ID, 3/16" OD X 1/2"	6
9	237-5863-00	SCREW, 4-40 X 3/4 PRH	6
10	270-5001-00	RETAINING E-RING, 3/16" SHAFT OD	3
11	266-5095-00	COMPRESSION SPRING, IRON MONGER	3
12	535-0381-00	BRACKET, REAR SHIELD, MONGER	1
13	240-5005-00	6-32 NYLOK STOP NUT	4
14	820-6561-35	DECAL #35, IRON MONGER	1
15	820-6561-37	DECAL #37, IRON MONGER	1
16	820-6561-38	DECAL #38, IRON MONGER	1
17	820-6561-39	DECAL #39, IRON MONGER	1
18	820-6561-40	DECAL #40, IRON MONGER	1
98*	040-5001-00	CABLE TIE, 4"	1
99*	036-5547-10-B3	FLEXIBLE OPTO CABLE	1

* ITEM NOT SHOWN



ASSEMBLY, IRON MONGER LIFT
511-6757-00

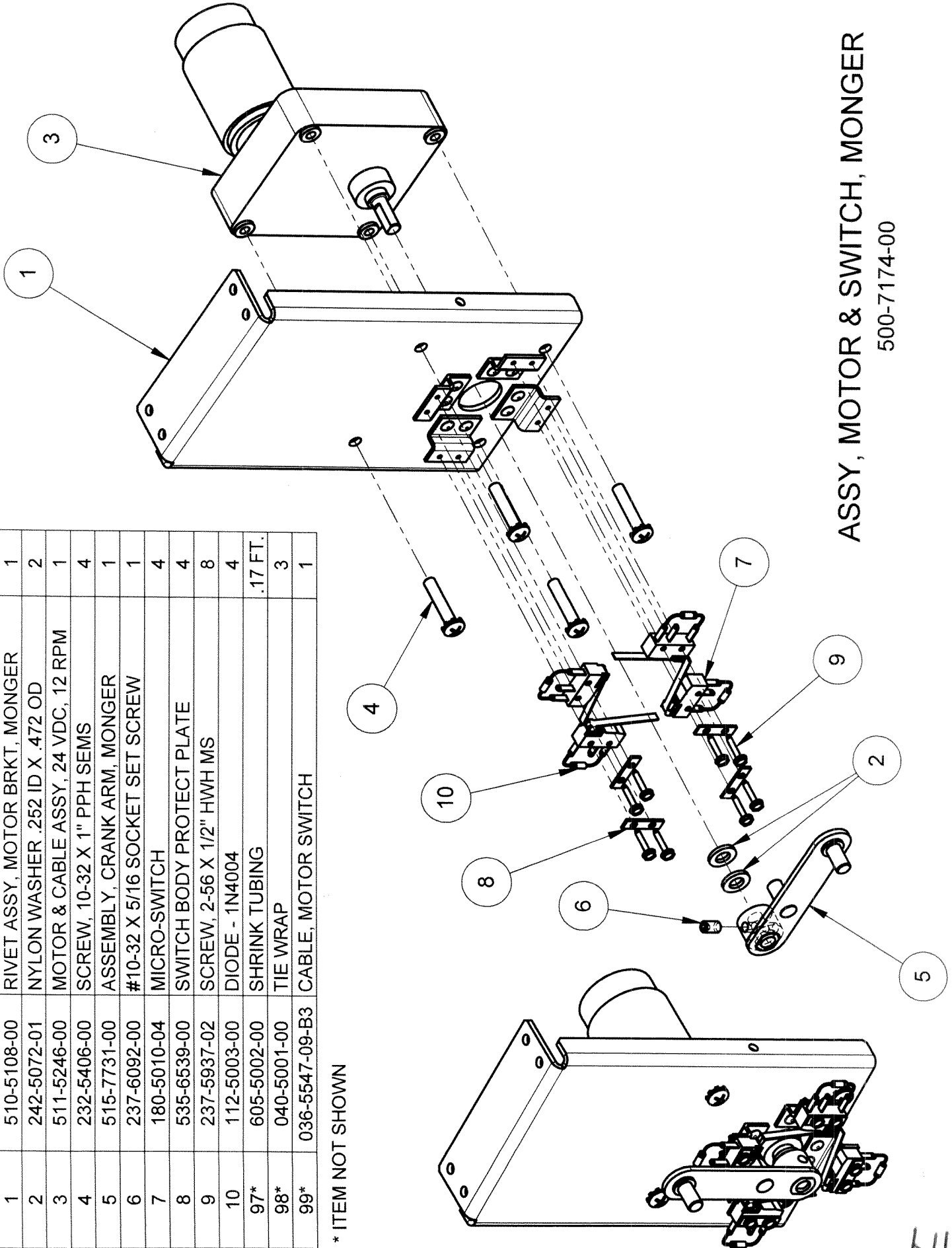
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	515-7730-00	WELDMENT, GUIDE SUPPORT, MONGER	1
2	530-6561-00	GUIDE ROD, IRON MONGER	2
3	511-6757-00	ASSEMBLY, IRON MONGER LIFT	1
4	270-5003-00	RETAINING RING 5/16"	4
5	237-5602-00	SCREW, 8-32 X 1/2 PPH MS, ZINC	2



ASSEMBLY, IRON MONGER LIFT
500-7173-00

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	510-5108-00	RIVET ASSY, MOTOR BRKT, MONGER	1
2	242-5072-01	NYLON WASHER .252 ID X .472 OD	2
3	511-5246-00	MOTOR & CABLE ASSY, 24 VDC, 12 RPM	1
4	232-5406-00	SCREW, 10-32 X 1" PPH SEMS	4
5	515-7731-00	ASSEMBLY, CRANK ARM, MONGER	1
6	237-6092-00	#10-32 X 5/16 SOCKET SET SCREW	1
7	180-5010-04	MICRO-SWITCH	4
8	535-6539-00	SWITCH BODY PROTECT PLATE	4
9	237-5937-02	SCREW, 2-56 X 1/2" HWH MS	8
10	112-5003-00	DIODE - 1N4004	4
97*	605-5002-00	SHRINK TUBING	.17 FT.
98*	040-5001-00	TIE WRAP	3
99*	036-5547-09-B3	CABLE, MOTOR SWITCH	1

* ITEM NOT SHOWN

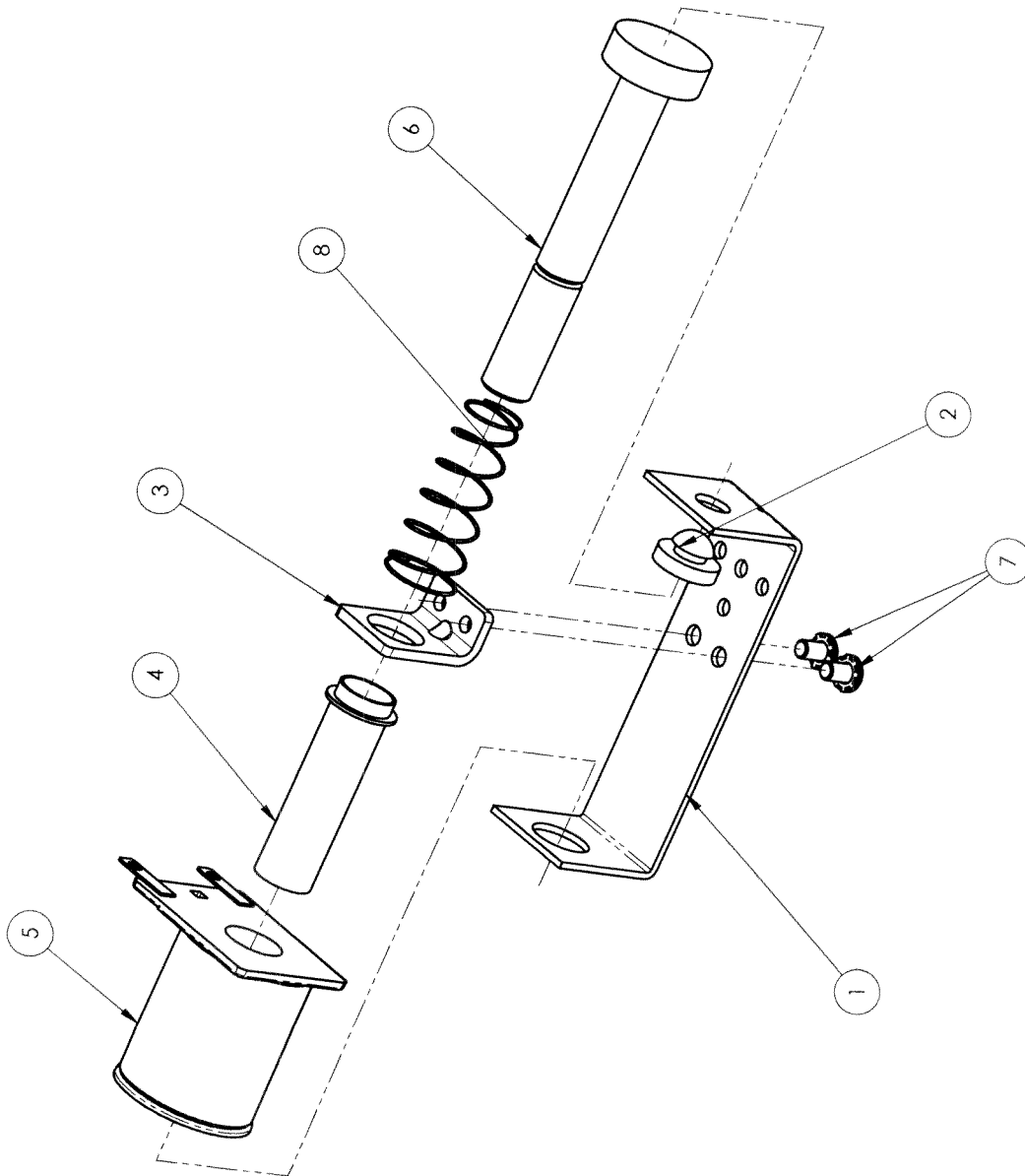


ASSY, MOTOR & SWITCH, MONGER

500-7174-00

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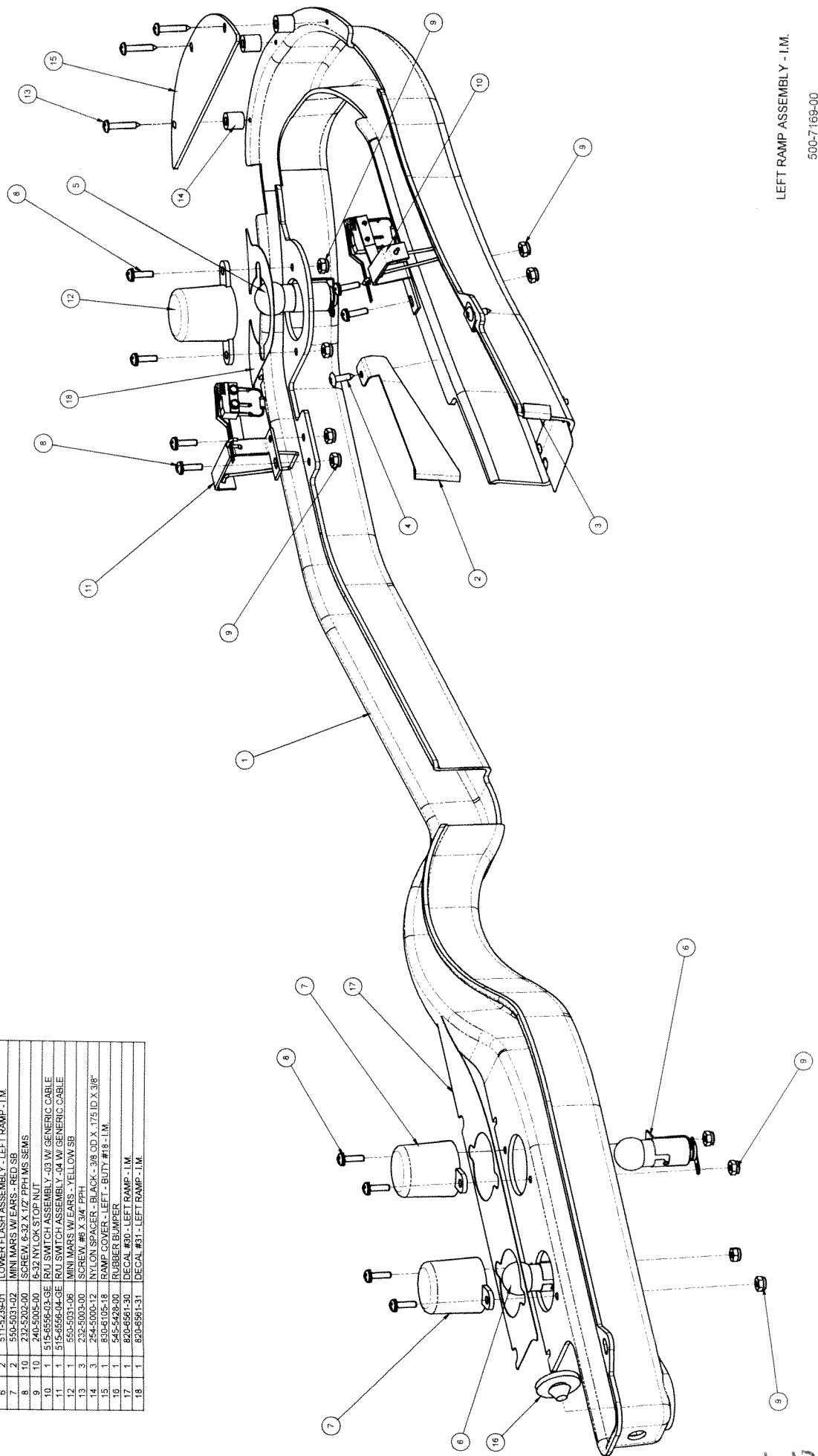


ITEM #	QTY	PART #	DESCRIPTION
1	1	535-6730-00	FRAME - KICK BIG BRACKET
2	1	545-5105-00	RUBBER BUMPER
3	1	535-5203-03	COIL RETAINING BRACKET
4	1	545-5076-01	COIL SLEEVE
5	1	090-5001-ND	COIL - 23-800, NO DIODE
6	1	515-7318-00	PLUNGER ASSEMBLY
7	2	232-5300-00	SCREW, 8-32 X 1/4" PPH SEMS
8	1	266-5020-00	COMPRESSION SPRING-CONICAL
NOT SHN	1	036-5542-00	CABLE - GENERIC - COIL

KICKER ASSEMBLY

500-6697-01-ND

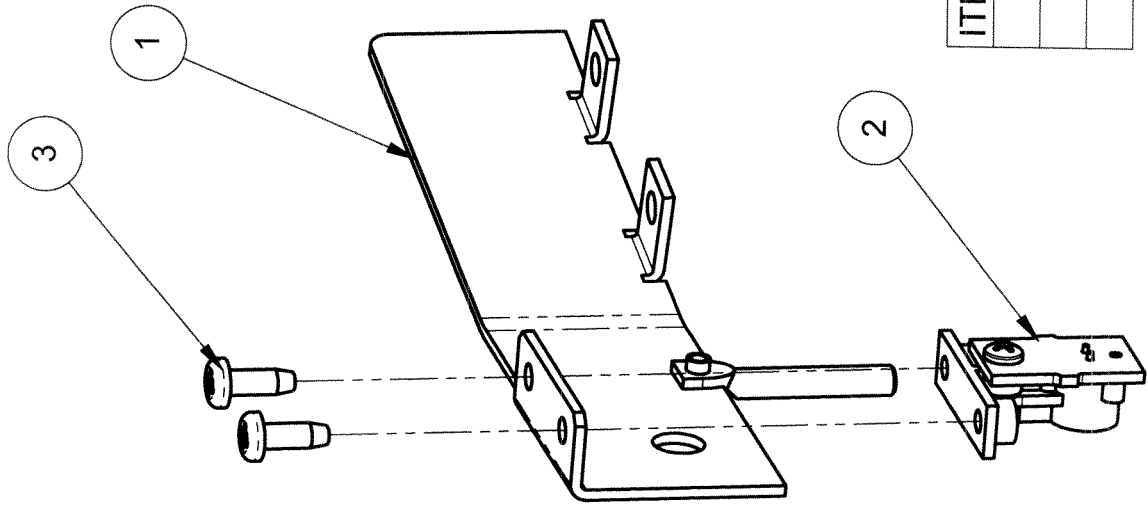
ITEM #	QTY	PART #	DESCRIPTION
1	1	510-5105-00	RAMP/FLAP ASSEMBLY - LEFT - I.M.
2	1	515-5555-00	RAMP PROTECTOR - LEFT - LEFT RAMP - I.M.
3	1	515-5555-00	RAMP PROTECTOR - RIGHT - LEFT RAMP - I.M.
4	2	232-5500-00	SCREW #8 X 3/4" PPH
5	4	511-5235-02	UPPER FLASH ASSEMBLY - LEFT RAMP - I.M.
6	2	511-5235-01	LOWER FLASH ASSEMBLY - LEFT RAMP - I.M.
7	2	550-5031-02	MINI MARS W EARS - RED SB
8	10	232-5202-00	SCREW 6-32 X 1/2" PPH MS SEMS
9	10	240-5005-00	6-32 NYLON STOP NUT
10	1	515-5556-03-GE	RAJ SWITCH ASSEMBLY -03 W/ GENERIC CABLE
11	1	515-5556-04-GE	RAJ SWITCH ASSEMBLY -04 W/ GENERIC CABLE
12	1	550-5031-06	MINI MARS W EARS - YELLOW SB
13	3	232-5003-00	SCREW #8 X 3/4" PPH
14	3	254-5000-12	NYLON SPACER - BLACK - 3/8" OD X .175 ID X 3/8"
15	1	830-6105-18	RAMP COVER - LEFT - BUTY #18 - I.M.
16	1	545-5428-00	RUBBER BUMPER
17	1	820-6561-30	DECAL #30 - LEFT RAMP - I.M.
18	1	820-6561-31	DECAL #31 - LEFT RAMP - I.M.



LEFT RAMP ASSEMBLY - I.M.

500-7169-00

613

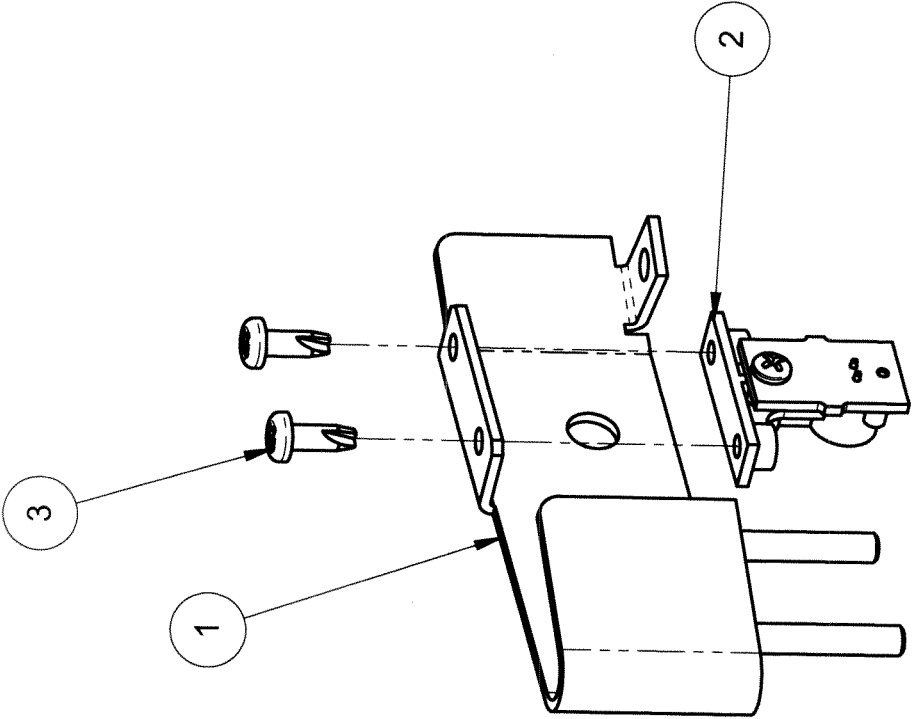


ITEM #	QTY	PART #	DESCRIPTION
1	1	535-0351-02	BALL GUIDE #2 - KICKER - I.M.
2	1	500-6775-01	OPTO TRANSCEIVER ASSY, 15" LEADS
3	2	237-5880-00	SCREW, #6 X 3/8 PPH T-25

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BALL GUIDE ASSEMBLY #2 - I.M.

511-5237-02

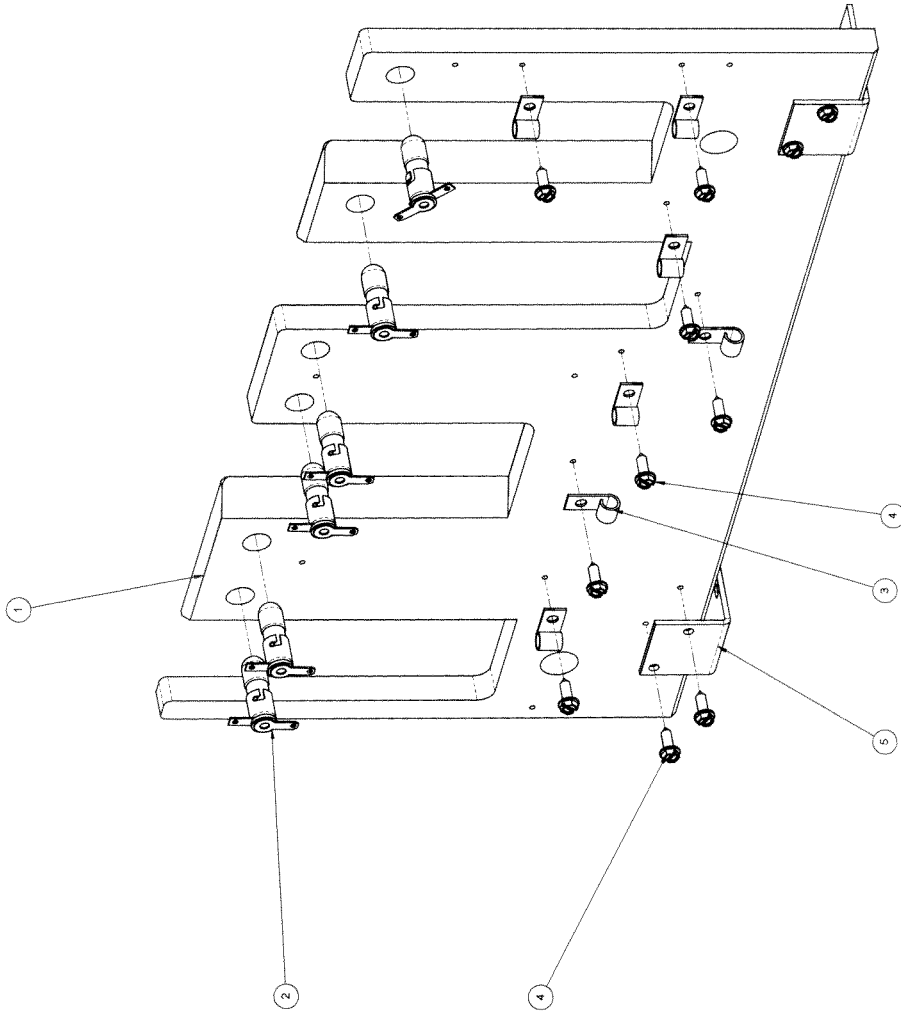


ITEM #	QTY	PART #	DESCRIPTION
1	1	535-0351-03	BALL GUIDE #3 - KICKER - I.M.
2	1	500-6775-01	OPTO TRANSCIVER ASSY, 15" LEADS
3	2	237-5880-00	SCREW, #6 X 3/8 PPH T-25

BALL GUIDE ASSEMBLY #3 - KICKER - I.M.

511-5237-03

ITEM #	QTY	PART #	DESCRIPTION
1	1	525-5689-00	BACK PANEL - I.M.
2	6	519-5000-00-HF	SOCKET & BULB ASSY. CLEAR
3	7	040-5000-03	1/4" CABLE CLAMP
4	11	234-5101-00	SCREW #8 X 1/2" SLT HWH AB ZINC
5	2	535-8964-00	BRACKET - BACK PANEL SUPPORT
NOT SHN	8 FT	600-5003-00	BRAIDED WIRE - 20 GA.
NOT SHN	14	631-5000-00	STAPLE - 3/16
NOT SHN	1	038-5947-04-83	CABLE - BACK PANEL - I.M.



BACK PANEL ASSEMBLY - I.M.

500-7168-00

b17



IRON MAN

Optional Kits available through your Distributor:

Pinball Location Maintenance Standard Kit (for Ironman Pinball) 502-6002-B3

Standard Kit includes : 8 oz. Novus Wax #2 Fine (Red) (675-0003-01), Cloth, Rubber Rings (used above playfield), Bulbs (Bulb quantities vary and is limited to 25 per type), Fuses (1/per type) and 4 Pinballs. **Note:** Quanties, sizes and contents subject to change without notice.

Pinball Location Maintenance Deluxe Kit (for ironman Pinball) 502-6003-B3

Deluxe Kit includes : Pinball Location Maintenance Standard Kit as described above plus a quantity of Flipper Rebuild Kits. **Note:** Quantity varies which equals the same quantity of flippers used in this game.

▲ THIS GAME KIT INCLUDES (2) FLIPPER REBUILD KITS ▲

Plastics*Kit (for Ironman Pinball) 803-5000-B3

Plastics Kit includes: Plastic Sets (830-6105XX)

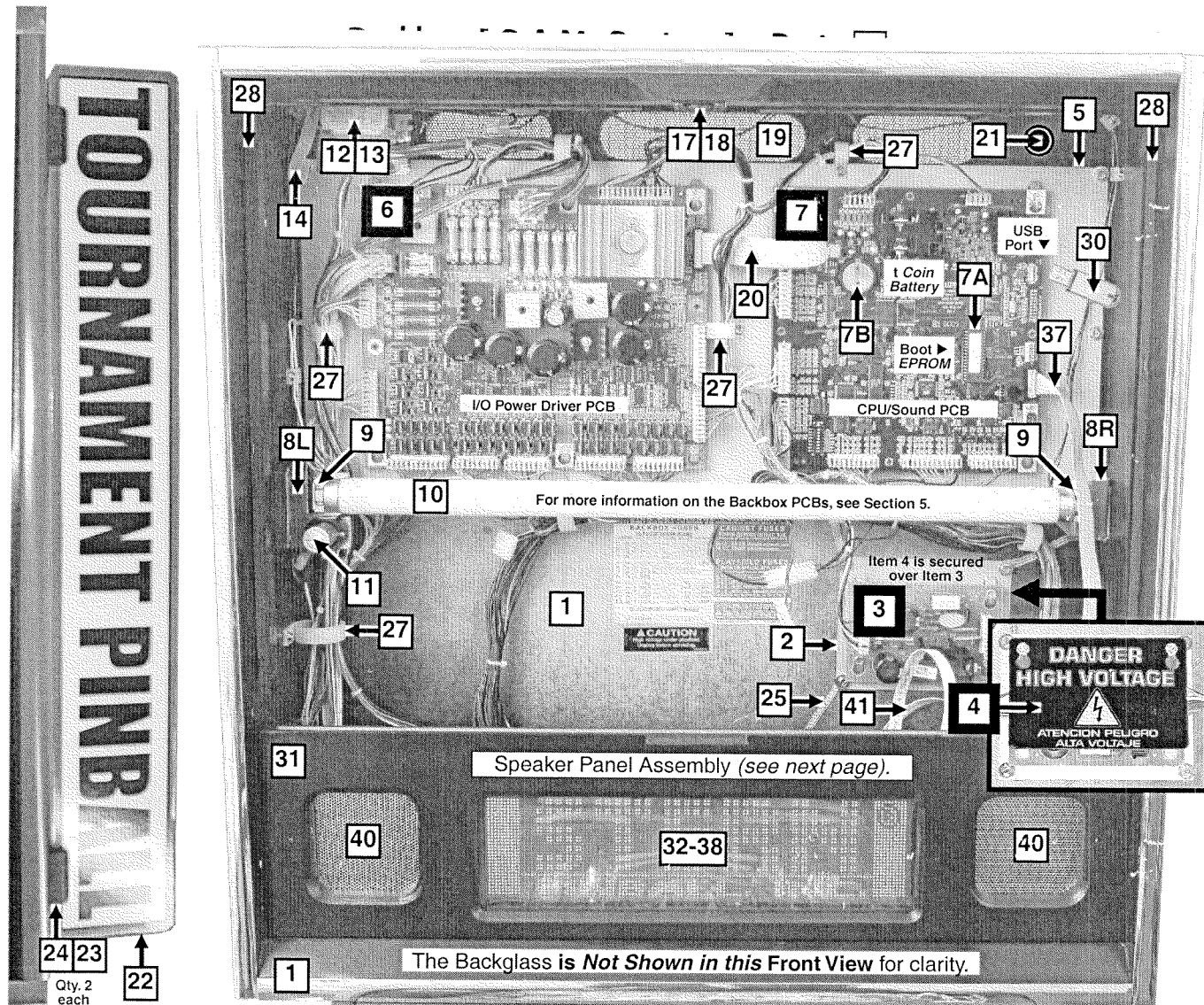
Decals*Kit (for Ironman Pinball) 802-5000-B3

Decals Kit includes: Decal Set (820-6561-XX)

Mylar*Kit (for Ironman Pinball) 802-5001-B3

Mylar Kit includes: Ball Drop (820-5815-00)

***Attention:** No individual Plastic or Decal can be ordered separately, unless noted otherwise. Plastics & Decals are subject to change without notice during and / or after production. Key Fobs subject to availability and may or may not be included in the plastic set. All designs, shapes & pieces used subject to change without notice. Kit contents subject to change. Service Bulletin(s) will announce any critical changes, if warranted. The last 2-digits shown on plastics or decals are for reference only.

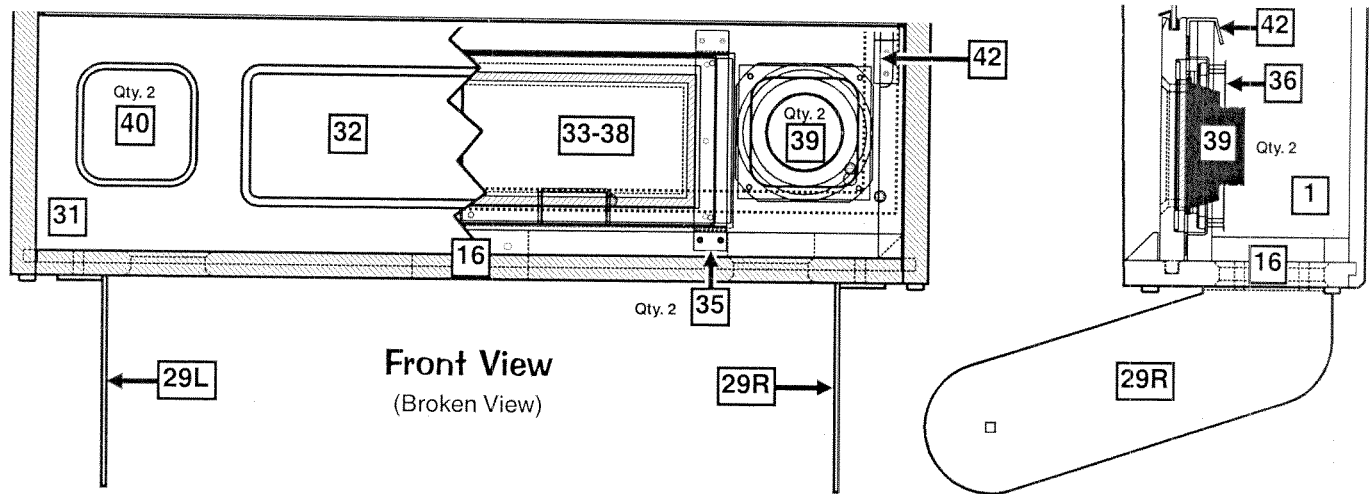


Nr.	BACKBOX PARTS	QTY.	SPI PART Nr.
1	Backbox Ironman™ (No Parts)	1	525-5631-17-B3
Item 1 Note: Chrome T-Molding is installed and cannot be ordered separately. Fuse Description (820-6384-00) and High Voltage Caution (UL) (820-6082-01 & -02) Decals.			
2	PCB Metal Mounting Plate [Display]	1	535-9769-00
3	Display Power Supply PCB	1	520-5138-00
Item 3 is secured to @ bottom by: #8-32 X 3/8" SHWH Swg. (Zinc) (Qty. 2) (237-5975-00)			
4	Plastic Cover [DANGER HIGH VOLTAGE]	1	830-6053-00
Items 3 & 4 are secured to @ top by: 1-1/4" X 3/8" Plastic Spacer Gray (Qty. 2) (234-5000-05) and #8-32 X 1-3/4" SHWH Ser. (Zinc) (Qty. 2) (237-5975-28)			
5	PCB Metal Mounting Plate [I/O+CPU]	1	535-9664-00
Items 2 & 5 are secured to Item 1 by: #8 X 1/2" SHWH AB (Zinc) (Qty. 1/hole) (234-5101-00) and #10 Washer 7/32" I.D. X .5" O.D. X 1/16" Thick (Qty. 1/hole) (242-5003-00) Note: Where a Wire Clamp (Item 27) is mounted, a #10 Washer is not required.			
6	I/O Power Driver PCB [S.A.M. Sys.]	1	520-5249-00
7	CPU/Sound PCB [S.A.M. System]	1	520-5246-00
7A: 8MB EPROM #M27C801-100F1 (960-5016-00) Ordering Note: Programmed EPROM (965-B00T-SAM) 7B: Coin Cell Battery (CR2430 3V) (000-0644-01) For USB Memory Stick Information, see Item 30 on the next page.			
Items 6 & 7 are secured to Item 5 by: #8-32 X 3/8" SHWH Swage (Zinc) (Qty. 10) (237-5975-00) and 1/4" Sil. Rtn. Spacer White (Qty. 5 [I/O] / Qty. 4 [CPU]) (254-5007-05)			
8L	Fluorescent Light Bracket (Left Style)	1	535-7739-00
8R	Fluorescent Light Brckt. (Right Style)	1	535-7739-01
Items 8L & 8R are secured to Item 1 by: #10-24 X 1-1/4" Carriage Bolt Square Neck (Qty. 2/per) (231-5012-00), #10-24 Keps Nut (Qty. 2/per) (240-5207-00) and 3/4" X 3" Reinforced Strapping Tape (Qty. 1, sold in 12' length only) (626-5040-00)			
9	Fluorescent Lamp Holder (Socket)	2	077-5214-01
Item 9 is secured to Items 8L and 8R by: #6-32 X 5/8" PPH MS (Sems) Zinc (Qty. 1/per) (232-5203-00) Lock-In Fluor. Bulb with Yellow Socket Clip (Qty. 1/per) (545-6271-00)			
10	Fluorescent Tube 24" (F18T8CW)	1	165-5061-00

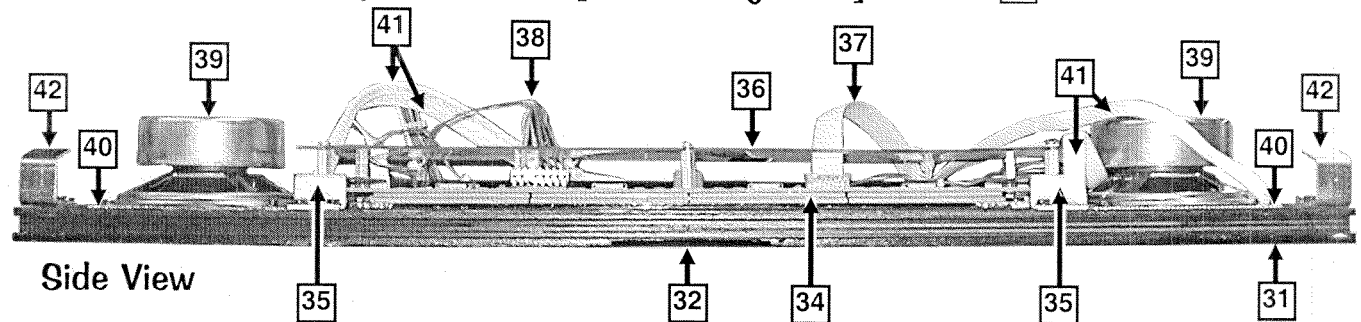
Nr.	BACKBOX PARTS	QTY.	SPI PART Nr.
11	Starter - Fluorescent (FS2 Light)	1	165-5011-01
	Starter Base (with leads) [on Item 8L]	1	077-5213-00
Item 11 is secured to Item 8L by: #4-40 X 1/2" PPH MS (Sems) Zc. (Qty. 2) (237-5813-00)			
12	Ballast Mounting Plate	1	535-8657-00
13	Ballast CU452-W 1/2" Core 120v 60 Hz 13W	1	010-5015-00
Items 12 & 13 are secured to Item 1 by: #8 X 1/2" SHWH AB (Zinc) (Qty. 2) (234-5101-00) >>> CAUTION - VERY HOT" Decal (820-6266-00) EU / UK Only : Ballast, 5/8" Core 50/60 Hz (010-5015-01)			
14	Ground Strap (5")	1	600-5006-05
15*	Roto Lock Male (on Cabinet)	1	355-5006-01
16	Roto Lock Female (R2-0002-02)	1	355-5006-02
Item 16 is secured by: #10-24 X 1-3/4" CBSN (231-5022-00), #10-24 Keps Nut (Qty. 2) (240-5207-00), #10-24 X 2" CBSN (231-5045-00) and #10 Washer 7/32" I.D. X .5" O.D. X 1/16" (Qty. 5) (242-5003-00); See opposite next page.			
17	Lock Mounting Plate	1	535-0072-00
18	Lock 5/8" Barrel, 3/4"ø, 1.5" Flat Cam	1	355-5055-00
Items 17 & 18 are secured by: #8 X 1/2" TP Torx T20 Black (Qty. 2) (237-6173-05)			
19	Back Vent Grill 2-1/2" X 18"	1	545-5072-02
20	Ribbon Cable, 20-Pin (3.5")	1	036-5000-350
Item 20 connects the I/O Pwr. Drvr. PCB to the CPU/Sound PCB; For 14-Pin see next page.			
21	Button Hole Plug (Blk) (Happ #52-6214-00)	1	500-6566-00
Item 21 plugs the Access Hole required if using optional BETArite Sign or Data cables.			
22	Header Sign TOURNAMENT PINBALL	1	545-6133-00
23	Bracket, Tournament Sign (Black)	2	535-0081-02
Item 22 is mounted to item 23 with #8-32 x 3/8 PPA screw (Qty 2/per) (232-5303-01) & #8-32 Nylock Nut (Qty 2/per) (240-5102-00). Item 23 is secured to Item 1 by: #8 X 5/8" PPH (Qty. 2/per) (232-5101-01)			

PARTS TABLE & VIEWS CONTINUED ON THE NEXT PAGE. ►

Backbox [S.A.M. System] - Parts



Speaker Panel [S.A.M. System] - Parts



Nr.	BACKBOX PARTS	QTY.	SPI PART Nr.
25	Braided Wire (1-1/2 Feet)	1	600-5001-00
Item 25 is secured by: Staple 5/16" (Qty. 23) (631-5000-00)			
26*	Zip Cable Tie (Screw Down Style)	4	040-5005-00
Item 26 is secured @ inside bot. by: #8 X 1/2" SHWH AB (Zinc) (Qty. 1/per) (234-5101-00)			
27	Clamps [Multiple Sizes]	28	040-5000-XX
Item 27 secured by: #8 X 1/2" SHWH AB (Zinc) (Qty. 1/per) (234-5101-00) For the following sizes, replace -XX with: 1/4" Double = -23 (Qty. 5); 1/2" Single = -06 (Qty. 3); 3/4" Single = -08 (Qty. 4); 1" Single = -09 (Qty. 1); 1-1/4" Double = -30 (Qty. 1)			
28	Foam 3/16" Thick X 1/4" Wide X 12"	6	626-5026-00
Above Item 28 is self-adhesive. 17.5" strip on each side. Sold in 12" Lengths only.			
29L	Pivot Hinge (Left Style)	1	535-7999-00
29R	Pivot Hinge (Right Style)	1	535-7999-01
Items 29L-29R are secured to Backbox by: 1/4"-20 X 1-1/4" C.B. Sq. Neck (Qty. 4) (231-5003-00) and 1/4"-20 Flange Nut (Qty. 4) (240-5300-00)			
Items 29L-29R are secured to Cabinet by: Spacer Hex Nut 1/2" O.D. - 1/4-20 X 1/2" TD (Black) (Qty. 1/per) (254-5042-00), Nylon Spacer (Black) (Qty. 1/per) (242-5084-00), 1/4-20 X 1/2" Carriage Bolt Square Neck (Black) (Qty. 1/per) (231-5072-00) and Washer 1" O.D. X 1/2" I.D. X 1/16" (Black) (Qty. 1/per side, only if required) (242-5087-00)			
30*	Memory Stick USB 1.1+ [Generic] 64MB		970-0064-00
	Memory Stick USB 1.1+ [Generic] 128MB		970-0128-00
Item 30 was not included with your game. Read the inside cover or go on-line for more info. To order with the latest game code copied onto it, add -A3 to the Part Nr. (970-0128-00-A3). File(s) can be downloaded from our website (Files are 25MB or larger, DSL or Fast Modem recommended). Not all manufacturers of Memory Sticks are compatible with our system. Test it out, if it doesn't work properly, return your purchase and order the memory stick through your local pinball distributor (Stern Pinball Memory Sticks guaranteed compatible).			
(ASM. REF. 505-6002-A3-A3, Items 1-42 Only, [29-30 not included in assembly])			

Take Note:

* An asterisk (*) indicates item(s) are not noted in the pictorials.

Nr.	BACKGLASS PARTS	QTY.	SPI PART Nr.
i*	Glass (Tempered) 25.906" X 19.187" X .125"	1	660-5038-02
ii*	Ironman™ Film Art (#B3)	1	830-52B3-00
iii*	Top Plastic Channel - 26"	1	545-5018-15

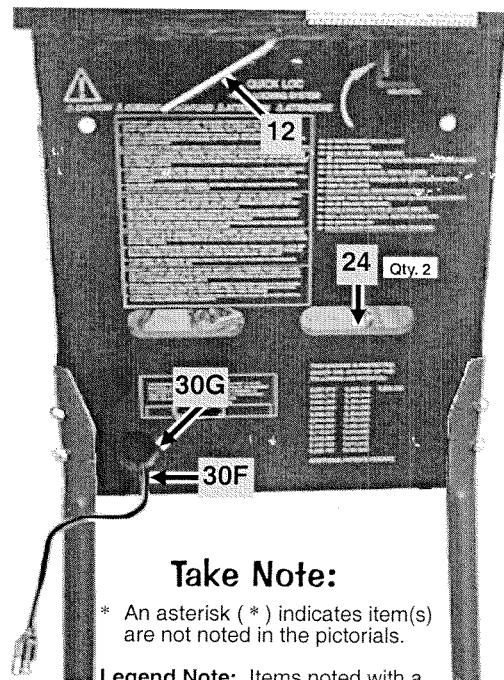
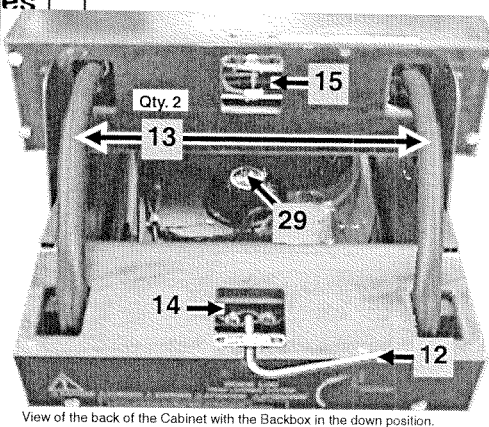
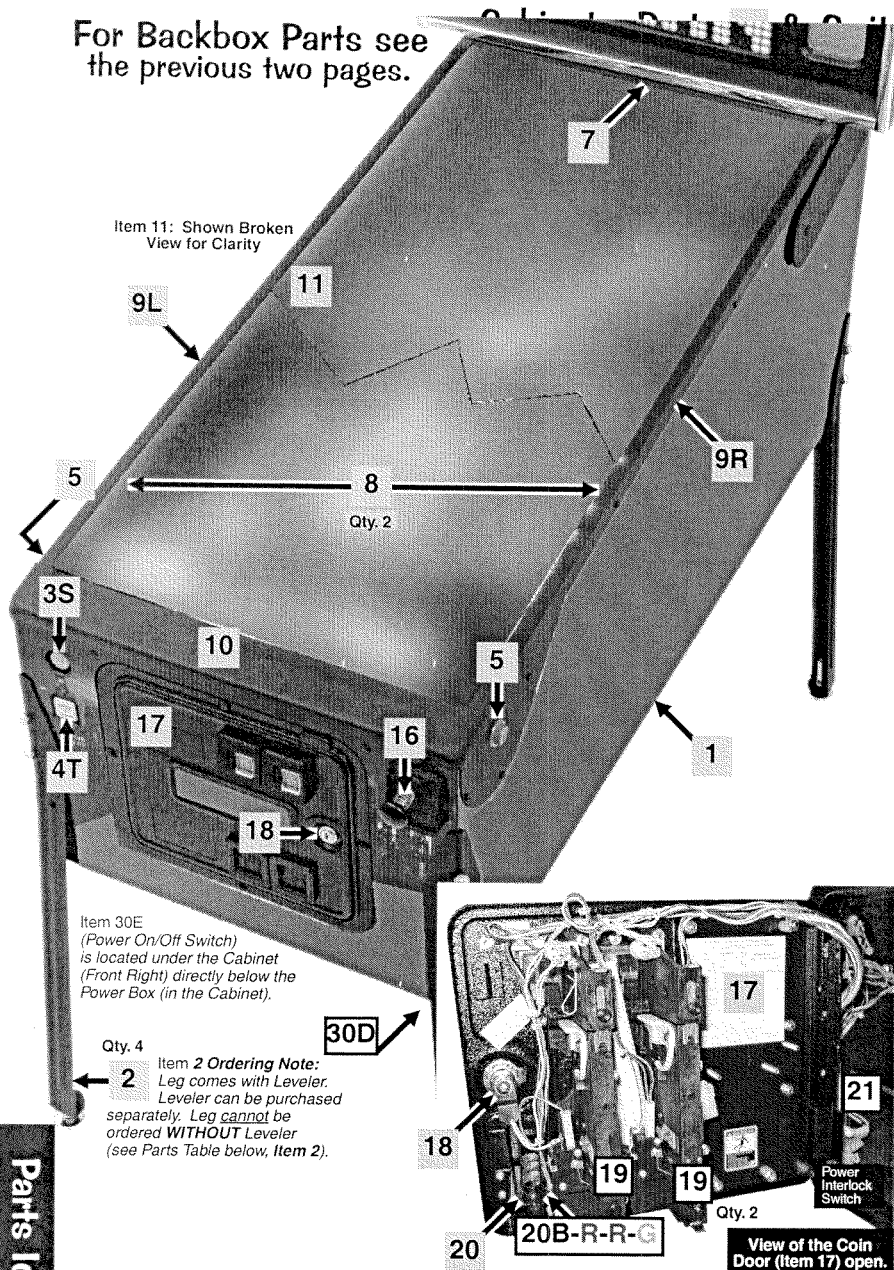
Nr.	SPEAKER PANEL PARTS	QTY.	SPI PART Nr.
31	Speaker Panel (Black Wood)	1	525-5515-00
32	Plastic Shield (Display Front Cover)	1	545-5884-00
Item 33 is secured to inside Item 31 by: #6 X 3/8" SHWH AB (Zinc) (Qty. 8) (234-5000-00)			
33*	Foam 3/16" Thick X 1/4" Wide X 12"	6	626-5026-00
Above Item 33 is self-adhesive. Located between Items 32-34. Sold in 12" Lengths only.			
	128 X 32 Dot Matrix Display PCB	1	520-5052-00
34	// EURO ONLY RoHS // 128 X 32 DM CES PCB		520-5052-05
	// EURO ONLY RoHS // Dot Matrix Bezel		545-6281-00
Item 34 is secured to Item 35 by (at corners): 3/16" X 3/8" Spacer Gray (Qty. 4) (254-5000-18) and #6-32 X 1/2" SHWH Swage (Serr) Zinc (Qty. 4) (237-5976-03)			
35	Dot Matrix Display Mounting Bracket	2	535-8368-01
Item 35 is secured to Item 31 by: #8 X 1/2" SHWH AB (Zinc) (Qty. 4/per) (234-5101-00)			
36	Plastic Shield (Display Back Cover)	1	830-6040-00
Item 36 is secured to Item 34 by: 1/2" X 1/4" Hex Spacer #6-32 Tap (Qty. 4) (254-5008-03), 3/4" X 1/4" Hex Spacer #6-32 Tap (Qty. 2) (254-5008-04), #6-32 X 1/4" PPH MS (Sems) Zinc (Qty. 2) (232-5200-00) and #6-32 X 3/8" PPH (Qty. 6) (232-5201-00)			
37	Ribbon Cable, 14-Pin (33")	1	036-5260-33
	// EURO ONLY RoHS // LED Ribbon Cable Filter PCB		520-5259-00
Item 37 (14-Pin) connects the 128 X 32 Dot Matrix Display PCB to the CPU/Sound PCB.			
38	Display Cable (Wiring Harness)	1	036-5454-01
	// EURO ONLY RoHS // LED Display Adapter Harness		036-5520-00
39	Speaker (Shld.) 4" 8Ω #MG ELE 4060SH	2	031-5004-02
40	Speaker Grill (Black w/Artwork)	2	535-8081-B3
Items 39-40 are secured by: #8 X 1/2" SHWH AB (Black) (Qty. 4/per) (234-5101-01)			
41	Ground Strap (25") [2 per : Items 35 & 39]	4	600-5006-25
42	Speaker Panel Hook Bracket	2	535-7009-02
Item 42 is secured by: #8 X 1/2" SHWH AB (Zinc) (Qty. 2/per) (234-5101-00)			
(ASM. REF. 515-6888-05, Items 31-42 Only [includes wiring])			

Parts Identification

Nr.	BACKGLASS PARTS	QTY.	SPI PART Nr.
iv*	Bottom Plastic Lift Channel - 26"	1	545-6313-01
v*	Plastic Edging (Left/Right) - 18-1/8"	2	545-5018-14
Items i-v are secured to Item i by: 3M Tape (Double-Sided), 12" (Qty. 1) (626-5080-00)			
Note: Only 6" required, sold in 12" lengths only.			

(ASM. REF. 515-5450-00-A9, Items i-v)

For Backbox Parts see the previous two pages.



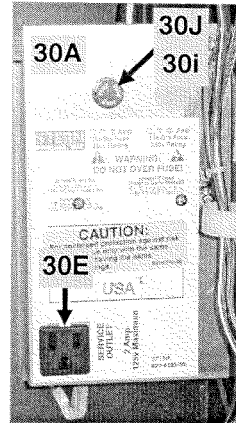
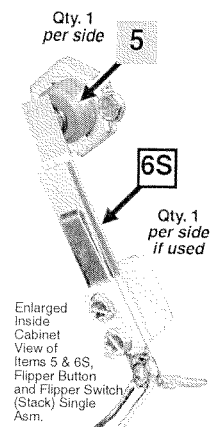
Parts Identification

Nr.	CAB. PARTS & SWITCHES	QTY.	SPI PART Nr.
1	Screened Cabinet Ironman™ (No Parts)		525-5395-15P-B3
2	Black Leg with Leveler Asm.	4	500-5921-50
Item 2 is secured by: Leg Bolt Back Plate (535-5703-00) and Leg Bolt 3/8" X 16 X 2-1/2" Hex 5/8" Hd. (2/per) (231-5001-01) Leg Leveler ONLY (3/8"-16 X 3") (500-5017-00).			
3S	Start Button (Green Round) with Sw. + Lamp	1	500-6388-44-TL
4T	Tournament Button (Yel. Sq.), w/Sw. + Lamp	1	500-6587-06-TL
Item 3S & 4T includes the Switch & Lamp (No Wiring; desolder old wiring where required). Switch or Bulb replacement: TWIST & LOCK (-TL) >> not snap-in << Assembly Parts Included: Microswitch (180-5174-00); #555 Wedge Base Clear Bulb (165-5002-00); If 4T is not desired, use optional Button Plug Black (500-6566-00). Requires 3-Lug Terminal Strip (055-5204-03) and Diodes, 1N4004 (Qty. 2) (112-5003-00) inside cabinet under button(s) for Lamp Operation (Diode for Switch, located on Switch.)			
5	Flipper Button (Red) Assembly (No Switch)	2	500-5026-32
Item 5 is secured by: Pal Nut for Flipper Button (Metal) (Qty. 2/per) (240-5003-01) Pal Nut inside cabinet secured by: #8 X 1/2" SHWH AB (Zinc) (Qty. 1/per) (234-5101-00) and Washer (Zinc), .187" ID X .875" OD X .048" Thick (Qty. 1/per) (242-5059-00)			
6S	Flipper Switch Single Assembly	2	500-6889-01
Assembly Parts Included: Flipper Switch Stack Single (Paliney Contact) (180-5160-01) and Capacitor - Ceramic .05 Mfd 25 volt (130-5001-00)			
Item 6S/6D are secured to Cab. by: #6 X 1-1/4 SHWH AB (Zinc) (Qty. 2/per) (237-5959-00)			
6D	Flipper Switch Double Assembly	0	500-6890-01
Assembly Parts Included: Flipper Switch Stack Double (Paliney Contact) (180-5164-01) and Capacitor - Ceramic .05 Mfd 25 volt (130-5001-00)			
Item 6S/6D are secured to Cab. by: #6 X 1-1/4 SHWH AB (Zinc) (Qty. 2/per) (237-5959-00)			

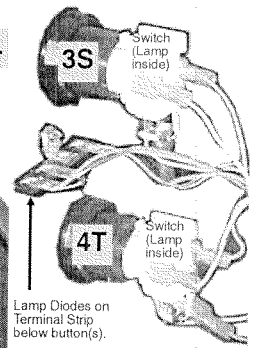
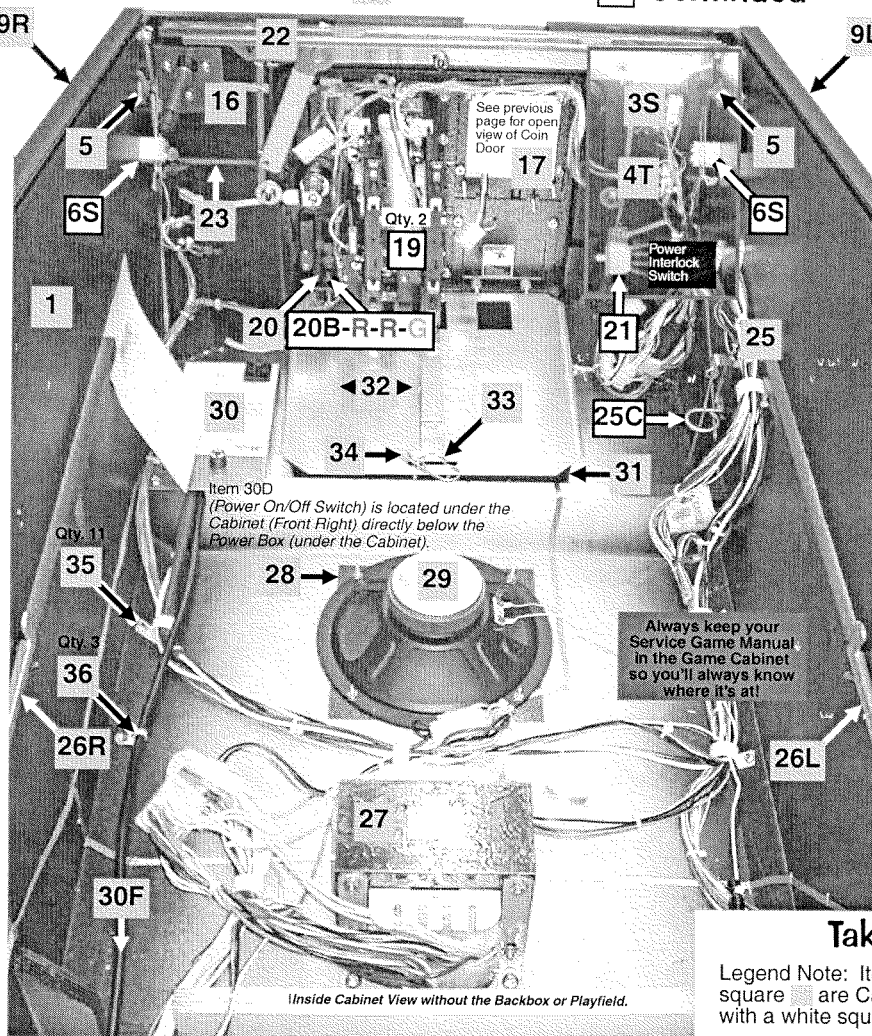
Nr.	CAB. PARTS & SWITCHES	QTY.	SPI PART Nr.
7	Rear Glass Channel 20-3/8" Length	1	545-5038-00
8	Plastic Channel 42-5/8" Lg. (Left/Rt.)	2	545-5017-00
9L	Side Armor (Left) W/O Button Guard	1	535-7297-02
9R	Side Armor (Right) W/O Button Guard	1	535-7297-02
Items 9L & 9R are secured @ front & side by: Pem Stud 1/4 X 1" Flange Head Black (Qty. 1/per) (237-6116-01), 1/4-20 Flange Nut (Qty. 1/per) (240-5300-00) and #8 X 1/2" T20 Tamper Proof Black (Qty. 5/per) (237-6173-05); @ rear (backbox) by: #10-24 X 1" Sq. Neck Carrg. Bolt Black (Qty. 1/per) (231-5021-00) and #10-24 Hex Nut (Qty. 1/per) (240-5202-00)			
10	Front Molding (Black) < NO BUTTON HOLE >	1	515-7495-00
Item 10 includes: Self-Adhesive Foam Rubber 3/8" X 3/16" X 20-3/8" (3") (626-5001-00) Items 10 works with Item 22 (next page) ONLY.			
11	Playfield Glass (Tempered) 21" X 43" X 3/16"	1	660-5001-00
12	Hex Key Allen Wrench 5/16"	1	777-0001-00
13	Corrugated Tubing Black 1" ID X 2.6" Lg.	1	605-5008-03
Above Item 13 covers the Cable Wiring Harnesses going into the Backbox from the Cabinet.			
14	Roto Lock Male (R2-0055-02)	1	355-5006-01
Item 14 is secured by: #10-24 X 1-3/4" Carriage Bolt Square Neck (Qty. 2) (231-5022-00), #10-24 Nylon Stop Nut (Qty. 2) (240-5206-00) and #10 Washer, 7/32" ID X 1/2" OD X 1/16" Thick (Qty. 2) (242-5003-00)			
15	Roto Lock Female (on Backbox)	1	355-5006-02
16	Ball Shooter (Plunger) Assembly	1	500-6146-00-04

PARTS TABLE & VIEWS CONTINUED ON THE NEXT PAGE. ➔

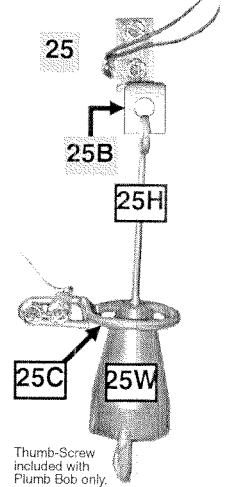
Cabinet - Parts & Switches ☐ Continued



Enlarged Inside Cabinet View of Items 30, Power Box (30A), Service Outlet (30E), Fuse (30I) and Fuse Holder (30J).



Enlarged Inside Cabinet View of Items 3S, 4T and 25 (25B, 25C, 25H & 25W), Plumb Bob Tilt Switch.



Take Note:

Legend Note: Items noted with a cyan square are Cabinet Parts. Items noted with a white square ☐ are Switches.

Nr.	CAB. PARTS & SWITCHES	QTY.	SPI PART Nr.
PARTS TABLE & VIEWS CONTINUED FROM THE PREVIOUS PAGE.			
17	Coin Door 2-Cht \$V Up-Slk. 4-Button Bracket	1	501-5018-172
Item 17 is secured by: 1/4"-20 X 1-1/4" Carriage Bolt Square Neck (Qty. 4) (231-5003-00) 1/4"-20 Flange Nut (Qty. 4) (240-5300-00) and Fend Washer 1/4" I.D. X 1" O.D. (Qty. 3) (242-5009-00) Note: For Coin Door other than USA call Technical Support for SPI Part Nr.			
18	Lock 5/8" Barrel, 3/4, Fit. Cam	1	355-5055-00
19	Coin Door Switch (USA) (Happ)	2	180-5024-01
ALT. SW.: 19C: Coin Door Switch (USA) (Coin Control) (180-5024-00) ALT. SW.: 19J: Coin Door Switch (Japan) (180-5091-00)			
20	4-Button Bracket (for Service Menu Buttons)	1	535-6860-04
SWITCH: 20B: Push-Button Service Switch (Black) (180-5192-00) SWITCH: 20R: Push-Button Service Switch (Red) (Qty. 2) (180-5192-02) SWITCH: 20G: Push-Button Service Switch () (180-5192-04)			
Ordering Note: Securing hardware for switches included. Decal in kit sold separately.			
21	Power Interlock-Memory Protect Switch Asm.	1	500-5808-05
Assembly Parts Included: Mounting Bracket (535-9794-00), Power Interlock (Playfield) Switch (180-5136-00) and secured by: #8 X 1/2" SHWH AB (Zinc) (Qty. 2) (234-5101-00)			
22	Front Molding Lockdown Asm.	1	500-6881-00
Item 22 is secured by: #10-24 X 1-1/4" Carr. Bolt (Qty. 2) (231-5012-00) and #10-24 Keps Nut (Qty. 2) (240-5207-00)			
23	Lockdown Spring (connected to handle)	1	265-5008-00
Item 23 is secured by: #8 X 1/2" SHWH AB (Zinc) (Qty. 1) (234-5101-00) and #10 Washer, 7/32" ID X 1/2" OD X 1/16" Thick (Qty. 1) (242-5003-00)			
24	Grills 2-1/2" X 18" (on Back & Bottom)	3	545-5072-02
Plumb Bob Tilt Switch Individual Parts Only Ind. Parts Only			
25	SWITCH: 25B: Bracket for Hanger Wire (535-5221-00) 25C: Contact Wire Form (535-7563-01) 25H: Hanger Wire (535-5319-02) 25W: Plumb Bob Weight (535-5029-00) (includes Thumb-Screw)		
Item 25B is secured to Cabinet by: #6 X 5/8" SHWH AB (Zinc) (Qty. 4) (234-5002-00)			
26L	Slide & Pivot Support Bracket (Left)	1	535-5989-00
26R	Slide & Pivot Support Bracket (Right)	1	535-5990-00
Items 26L & 26R are secured by: #10-24 X 1-1/4" Carriage Bolt Square Neck Black (3/per) (231-5012-00) and #10-24 KEPS Nut (3/per) (240-5207-00)			

Nr.	CAB. PARTS & SWITCHES	QTY.	SPI PART Nr.
27	Transformer 5.7VAC (with Ballast Winding)	1	010-5012-01
Item 27 is secured by: 1/4"-20 X 5/8" PPH MS (Zinc) (Qty. 4) (237-5854-00) and 1/4" Split Lock Washer (Qty. 4) (244-5000-00)			
28	Woofer (Speaker) Grill 7" X 7"	1	545-5072-03
29	Woofer 8" ø Round 8010 4Ω	1	031-5007-01
Items 28 & 29 are secured by: #6-32 X 1-1/4" Fin Shank Screw (Qty. 4) (237-5883-00) and #6-32 Keps Nut (Qty. 4) (240-5008-00)			
Power Input Box Asm. + Univ. Cable		1	515-5360-08
30A: Power Box (No Parts) Mounting Frame (535-5932-00) 30B*: Line Filter (150-5000-00) 30C*: Varistor* TNR159211KM (Domestic) (150-5001-00) or Varistor TRM15G431KM (Euro) (150-5002-00) SWITCH: 30D: On/Off Rocker Switch + Bracket Assembly (515-7085-00) 30D incl.: Switch, APEM R2101C5NBB (180-5001-03) + Bracket (535-8318-00) 30E: Service Outlet (3-Prong / US) (180-5008-01) / International N/A 30F: Line Cord 10' ROJ 3" + Ring Terminal Asm. (515-6566-00) 30G: Recessed (Black) Cup (rear of Cabinet) (545-5122-00) 30H*: Snap Bushing 9/16" (White) (280-5001-01) 30I: Fuse 8 Amp 250V Slo-Blo (Domestic) (200-5000-05) or Fuse 5 Amp 250V Slo-Blo (International) (Qty. 2) (200-5003-00) 30J: Fuse Holder (205-5001-00)			
Universal Cable & Jumper Caps (all voltage variations): See the Yellow Pages, Page y 10.			
31	Cash Box Plastic Bottom	1	545-5090-00
32	Cash Box Cover (Validator)	1	535-5013-03
33	Cash Box Lock Bracket (U-Wire)	1	535-7562-00
Item 33 is secured by: #8 X 5/8" HWH AB (Green) (Qty. 2) (234-5102-04)			
34	Large Hair-Pin Clip	1	535-7772-00
35	Clamps [Multiple Sizes]	28	040-5000-XX
Item 35 is secured to Item 1 by: #8 X 1/2" SHWH AB (Zinc) (Qty. 1/per) (234-5101-00) For following sizes, replace XX with: 3/4" Single = -08 (Qty. 9); 1-1/2" Single = -10 (Qty. 3)			
36	Zip Cable Tie (Screw Down Style)	4	040-5005-00
Item 36 is secured by: #8 X 1/2" SHWH AB (Zinc) (Qty. 1/per) (234-5101-00)			
37†	Meter +12VDC with Bracket Optional	opt.	G-0053-013-102
† Meters (Diode included) are optional and were not included in this Pinball Machine. Order without the bracket use G-0053-013-102A. More information or Qs? Call Technical Support.			

Parts Identification

Main Playfield Top - Miscellaneous Parts ☐ and Brackets ☐

Nr.	THE PLAYFIELD	QTY.	SPI PART Nr.
Main	P/F Screened w/ Inserts & NO Parts	1	830-5100-B3
P/F	P/F Complete w/ Inserts & ALL Parts	1	505-6004-B3-B3

Nr.	MISC. PARTS (ABOVE)	QTY.	SPI PART Nr.
1	Arch (PLASTIC)	1	545-5995-02
Item 1 is secured to Item 9 below by: #10-32 X 5/16" PFH U/C MS (Zinc) (Qty. 2) (237-6013-00) Usage Note: When replacing the Arch, order new replacement Nelson Protect Strips 7-5/8" (not included) (Qty. 2) (545-5212-04; use -02 for 8-9/16" size) For Decals, see Playfield Top - Plastics Kit, Decals & Mylar Kits.			
2	Inst. Card [Eng./Spanish] IRONMAN™	1	755-51B3-12-Y
Note: Visit www.sternpinball.com for a PDF copy of the Game Instruction Card which will also have any translated Instruction Cards made for this game. Find Game Link or Archives. Spanish 755-51A2-12-Y; German 755-51A2-03-Y; Italian 755-51A2-04-Y; French 755-51A2-05-Y Ordering Note: If this is a non-US Game, Coin Card(s) Part			



4Y	Mini Mars w/ears (Yellow)	2	550-5031-06
4R	Mini Mars w/ears (Red)	3	550-5031-02
40	Plastic Dome Hat (Orange)	2	550-5032-07
4y	Plastic Dome Hat (yellow)	1	550-5032-06
4r	Plastic Dome Hat (Red)	1	550-5032-02

5	Light Reflector (Silver Plst.) REF540N	2	545-5409-01
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6

7	Bubble Level Assembly	1	500-6815-00
Assembly Parts Included: Level .8mm Empire #0224 (545-6001-01) or Level Mount (545-6068-00). Flange secured by: #6-32 X 1/4" PPH MS (no Sems) Zinc (237-5500-00) and #6-32 Keps Nut (240-5008-00) Item 7 is secured to the Wood Rail by: #6 X 1-3/4" PPH AB (Zinc) (Qty. 2) (232-5009-00)			

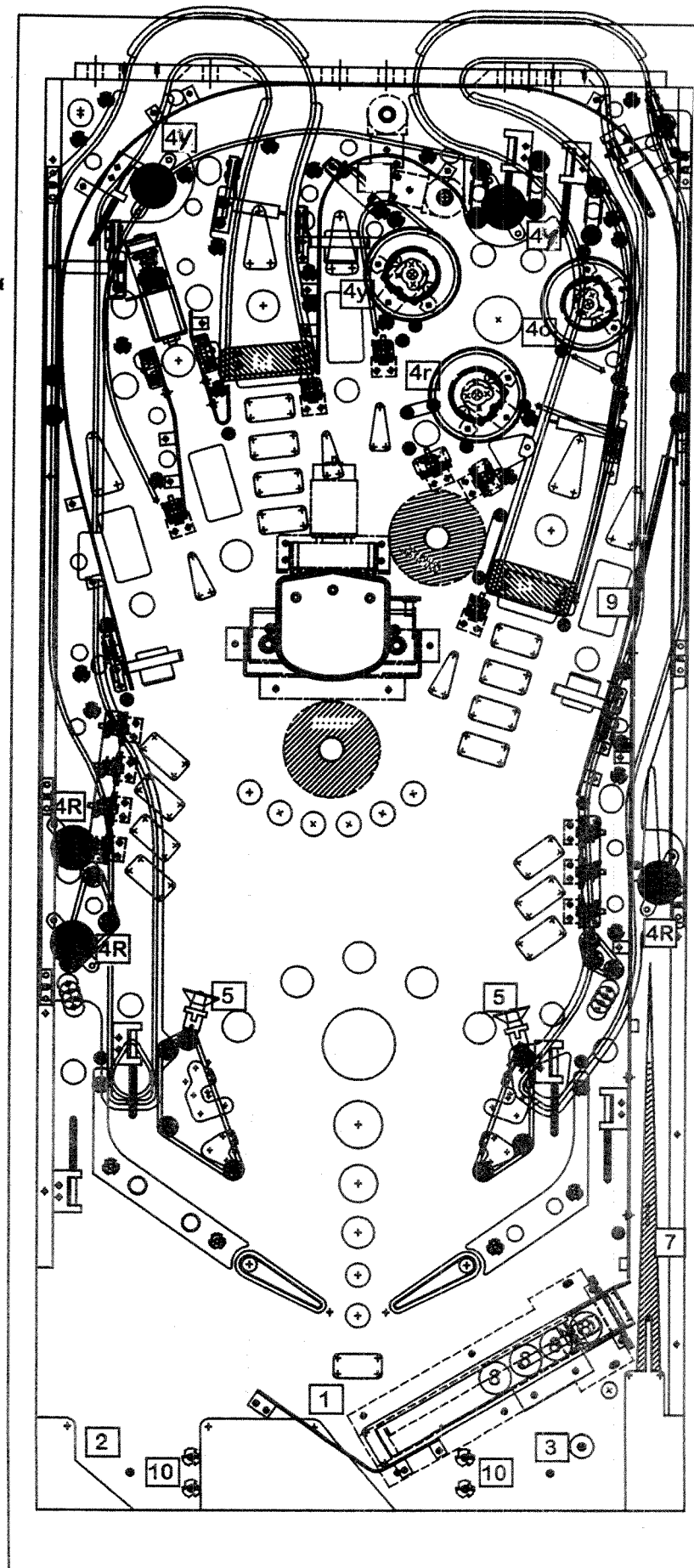
8	Pinball (Steel) 1-1/16" ø	4	260-5000-00
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Nr.	MISC. BRACKETS (ABOVE)	QTY.	SPI PART Nr.
9	Shooter Ramp (Shooter Lane)	1	535-8145-00

10	Bracket, Playfield Hanger	2	535-8385-00
Item 10 is secured to the Playfield (P/F) by: #8-32 X 7/8" Unslotted HWH MS Zinc (Qty. 2/per) (237-5890-00) and #8-32 T-Nut (Qty. 2/per) (240-5101-00)			

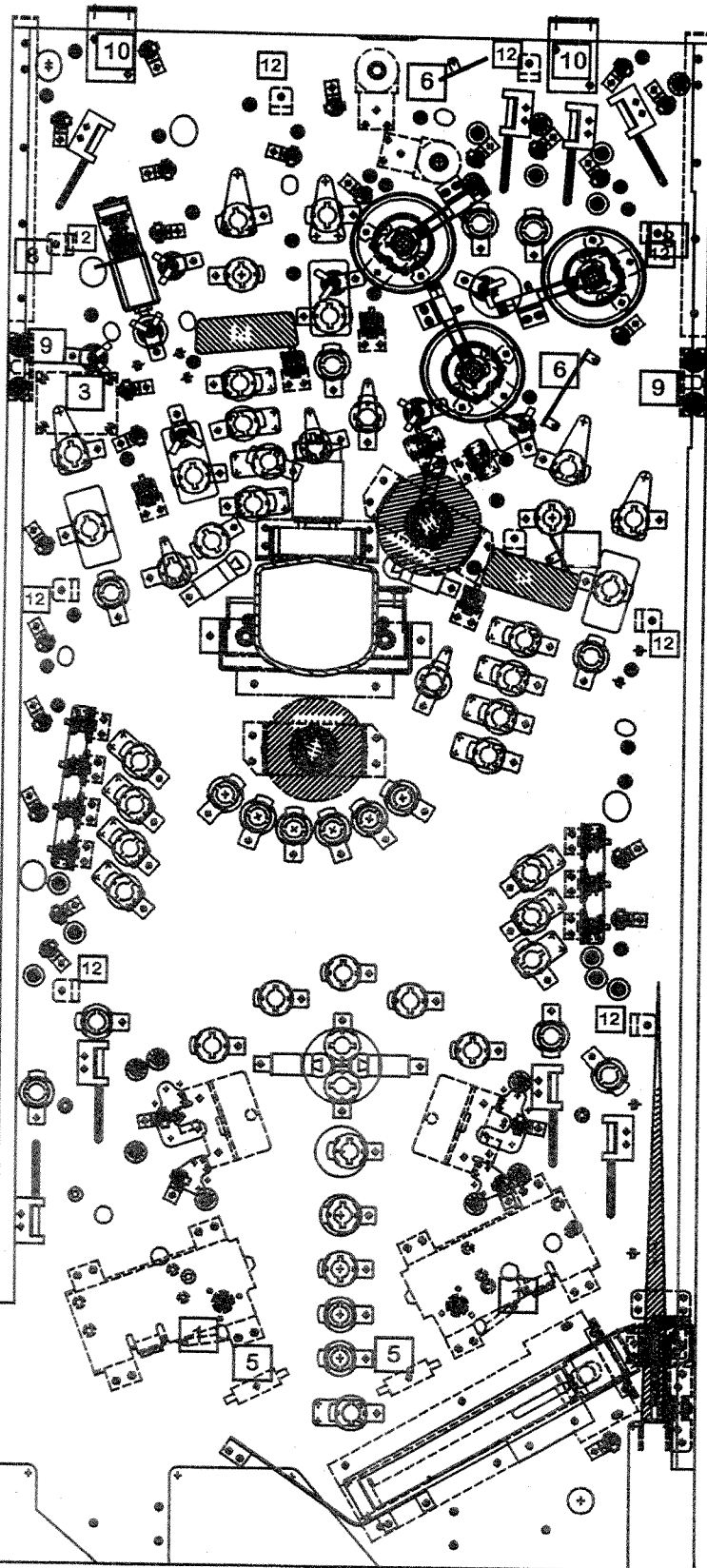
11

12



Parts Identification

Main Playfield Bottom - Miscellaneous Parts and Brackets



Nr.	THE PLAYFIELD	QTY.	SPI PART Nr.
Main	P/F Screened w/ Inserts & NO Parts	1	830-5100-B3
P/F	P/F Complete w/ Inserts & ALL Parts	1	505-6004-B3-B3

Nr.	MISC. PARTS (BELOW)	QTY.	SPI PART Nr.
1	Insulation Fiche Paper (under Lower Flippers)	2	545-5721-00
2	Relay + Conn. Asm.	0	190-5007-00

3	PCB, OPTO Transceiver Amplifier	1	520-5239-01
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Item 3 is secured by: #6 X 3/4" SHWH AB (Zinc) (Qty. 4) (234-5003-00)

Application Note: Required for OPTO Transceiver Pairs (500-6775-01) listed on the next page (... Switches). See the Yellow Pages, PCBs, Pages y 42 - y 43.

4	Resistor Assy	0	511-5223-00
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See the Yellow Pages,

5	3A 250v Slo-Blo Fuse	2	200-5000-08
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Fuse Clip Holder (Socket)

2	205-5000-01
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Item 5 is secured by: #6 X 1/2" PPH AB (Qty. 1/per) (237-5805-00)

Note: Item 5, Fuse Clip Holder (Socket) 205-5000-01 is part of a set of 12 (205-5000-12).

You can order them as individuals (...-01) or a set of 12 (...-12).

6	Diode Terminal Strip 2-Lug (810) Isolated	055-5203-00
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6	Diode Terminal Strip 3-Lug (813) Isolated	1	055-5204-03
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6	Diode Terminal Strip 5-Lug (824) Isolated	1	055-5204-05
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Items 6B-6C are secured by: #6 X 3/8" HWH AB Zinc (Qty. 1-2/per) (234-5000-00)

Item 6B (Qty. 1) located in Cabinet. Note: 1N4004 Diodes (112-5003-00) are used in all Diode applications. 1N4001 Diodes can be used for Switches and/or Lamps.

Nr.	MISC. BRACKETS (BELOW)	QTY.	SPI PART Nr.
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7	Bracket, Playfield Support Slide	535-6862-05
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Item 7 is secured by: #10 X 1/2" HWH A (Zinc) (Qty. 2/per) (237-5817-00),

#8-32 X 5/8" SHWH Swage (Zinc) Wax (Qty. 1/per) (237-5975-03) and

#8-32 T-Nut (Qty. 1/per) (240-5101-00)

8	Bracket, Edge Slide (Extended)	2	535-5988-01
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Item 8 is secured by: #4 X 1/2" PFH (Zinc) (Qty. 5/per) (237-5840-00) and

#8-32 T-Nut (Qty. 2/per) (240-5101-00)

9	Bracket, Pivot Pin Welded Assembly	2	500-5329-03
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Item 9 is secured by: #8-32 X 5/8" SHWH Swage (Zinc) Wax (Qty. 2/per) (237-5975-03)

10	Bracket, Back Panel Mounting	2	535-8964-00
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Item 10 is secured by: #8 X 1/2" SHWH AB (Zinc) (Qty. 2/per) (234-5101-00) and

#8-32 T-Nut (Qty. 2/per) (240-5101-00) For a 3D View: See the Blue Pages, Page b 23

11	Bracket, Hole Protect (center up-post)	0	535-0289-00
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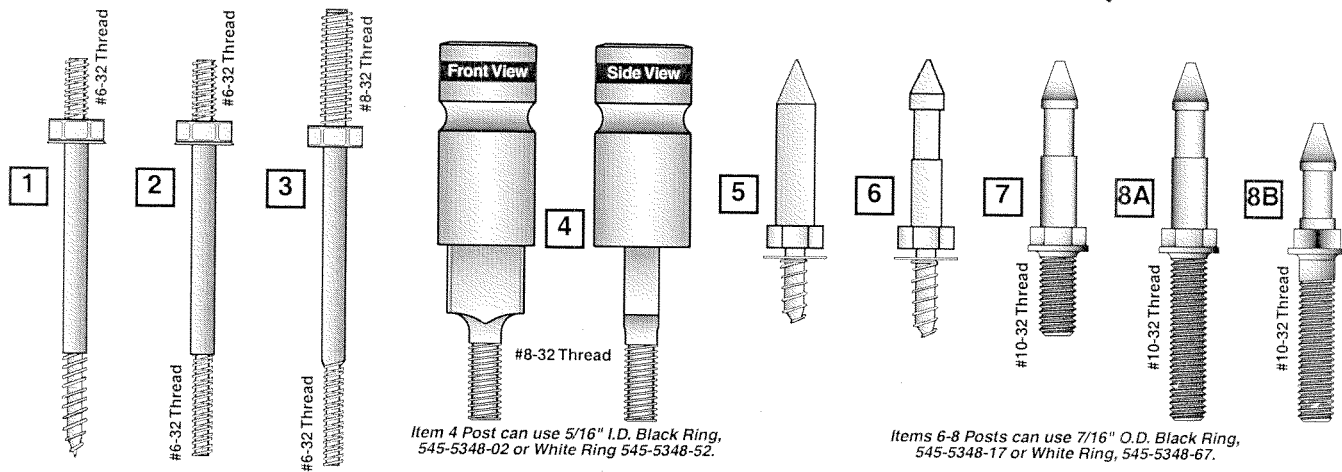
Item 11 secured under the playfield by: #8 X 1/2" SHWH AB (Zinc) (Qty. 2) (234-5101-00)

12	Tie Post (White Nylon) 3-1/2"	11	545-5253-01
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Item 12 is secured by: #6 X 5/8" SHWH AB Green (Qty. 1/per) (234-5002-00) and wiring with Cable Tie, 5-1/2" (Qty. 1/per) (040-5001-02)

Parts Identification

Playfield - Metal Posts & Fin Shank Screws (Actual Size) †



A & B

Items A & B Note: Typically used to secure Hex Spacers onto the Playfield Wood or Back Panel.

C

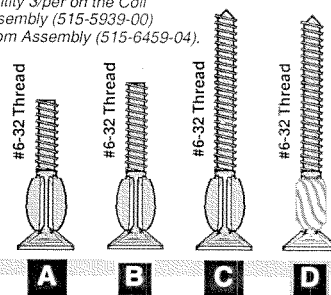
Item C Note: Quantity 4 on bottom Cabinet Speaker Grill (Qty. 4) (also requires #6-32 Nylon Stop Nut, 240-5005-00).

D

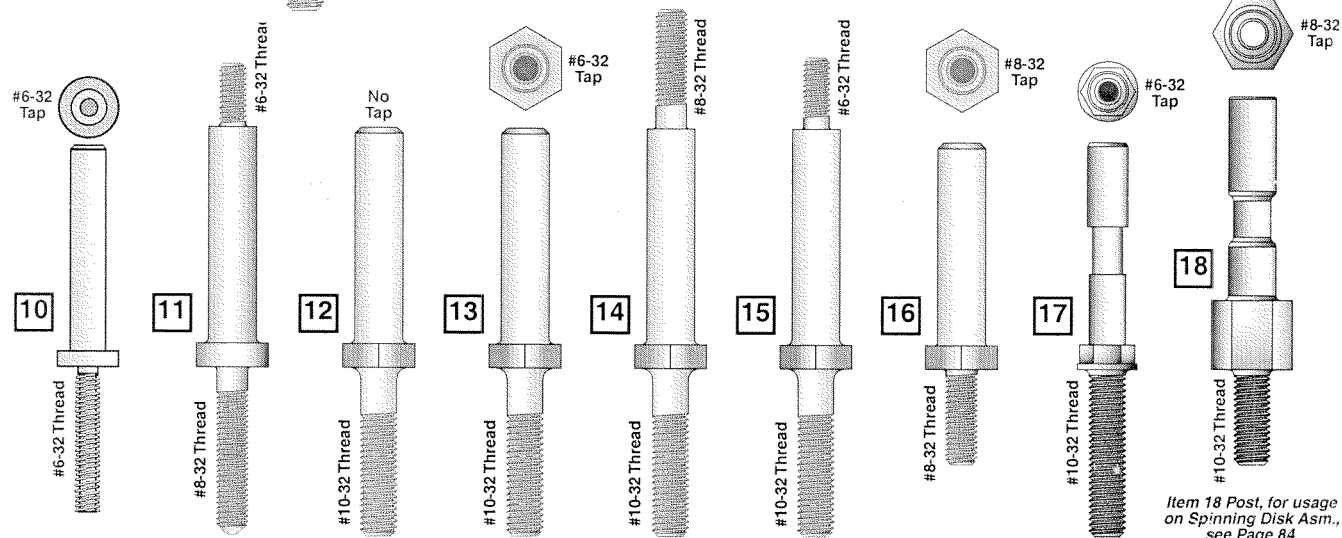
Item D Note: Quantity 3/per on the Coil Bracket Welded Assembly (515-5939-00) in the Bumper Bottom Assembly (515-6459-04).

A-D

Items A-D Note: The "Fins" keep the screw from turning inside the wood hole.



Parts Identification

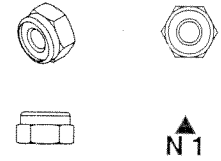


Nr.	METAL POSTS	SPI PART Nr.	Nr.	METAL POSTS	SPI PART Nr.
1	Post [Fasten] #6-32 Thread // Wood Screw	530-5010-02	12	Post [Hex Base] NO TAP // 10-32 Thread	530-5332-00
2	Post [Fasten] #6-32 Thread // #6-32 Thread	530-5012-02	13	Post [Hex Bs.] #6-32 TAP // #10-32 Thread	530-5332-01
3	Post [Fasten] #8-32 Thread // #6-32 Thread	530-5008-00	14	Post [Hex Bs.] #8-32 Thread // #10-32 Thr.	530-5332-02
4	Post Brass [Adjustable, Sliding] #8-32 Thread	530-5621-00	15	Post [Hex Bs.] #6-32 Thread // #10-32 Thr.	530-5332-03
5	Mini-Post Wood Screw (no cut-away)	530-5004-01	16	Post [Hex Bs.] #8-32 TAP // #8-32 Thread	530-5332-04
6	Mini-Post Wood Screw	530-5004-00	17	Post [Hex Bs.+Groove] #6-32 TAP // #10-32 Thr.	530-5679-00
7	Mini-Post Machine Scr. // #10-32 .4" Thread	530-5005-01	18	Post [Hex Bs.+Groove] #8-32 TAP // #10-32 Thr.	530-5753-00
8A	Mini-Post MS // #10-32 .875" Thread	530-5005-00			
8B	Mini-Post Short MS // #10-32 .875" Thread	530-5749-00			
9	Post [Fasten] #6-32 Thread // Wood Screw	530-5263-01			
10	Post #6-32 Tap // #6-32 Thread	530-5127-00			
11	Post [Fasten] #6-32 Thread // #8-32 Thread	530-5007-00			
Nr.	FIN SHANK SCREWS	SPI PART Nr.	Nr.	FIN SHANK SCREWS	SPI PART Nr.
A	#6-32 X 3/4" Fin Shank Screw	237-5921-02	B	#6-32 X 7/8" Fin Shank Screw	237-5921-04
C	#6-32 X 1 1/4" Fin Shank Screw	237-5883-00	D	#6-32 X 1 3/16" Spiral Fin Shank Screw	237-5957-00

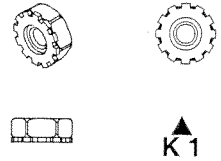
NOT ALL PARTS LISTED ABOVE ARE USED ON THIS GAME (QUANTITIES PER GAME WILL DIFFER).
COMPARE ACTUAL PART ON GAME TO ABOVE DRAWINGS TO IDENTIFY THE PART NUMBER REQUIRED.

Playfield - Nylon Stop, KEPS, Hex, T-, Flange, Pal* & Wing Nuts* (Actual Size) †

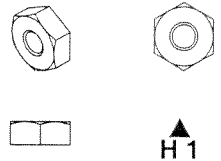
Nr.	NYLON STOP NUTS*	SPI PART Nr.
N1	#6-32 Nylon Stop Nut	240-5005-00
N2	#6-32 N.S. Nut (with 1/4" Hex Body)	240-5010-00
N3	#8-32 Nylon Stop Nut	240-5102-00
N4	#10-32 Nylon Stop Nut	240-5203-00
N5	#10-24 Nylon Stop Nut	240-5206-00
<i>Item N5 used with #10-24 X 1-3/4" Carriage Bolt Square Neck Black (231-5022-00) located in the Cabinet for the Roto Lock (Male) (355-5006-01).</i>		
N6	#4-40 Nylon Stop Nut	240-5303-00
N7	#4-40 (18/8 Stainless) Nylon Stop Nut	240-5303-01
N8	5/16"-18 Nylon Stop Nut	240-5316-00



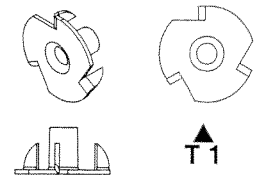
Nr.	KEPS NUTS*	SPI PART Nr.
K1	#6-32 Keps Nut (with Star Washer)	240-5008-00
K2	#6-32 Keps Nut (with 1/4" Hex Body)	240-5011-00
K3	#8-32 Keps Nut	240-5104-00
K4	#10-32 Keps Nut	240-5208-00
K5	#10-24 Keps Nut	240-5207-00
K6	#4-40 Keps Nut	240-5318-00



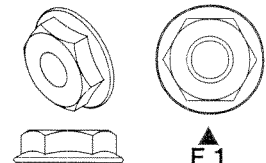
Nr.	HEX NUTS*	SPI PART Nr.
H1	#6-32 Hex Nut (No Star Washer)	240-5004-00
H2	#8-32 Hex Nut	240-5103-00
H3	#10-32 Hex Nut	240-5201-00
H4	#10-24 Hex Nut	240-5202-00
<i>Item H4 used with #10-24 X 1" Carriage Bolt Square Neck Black (231-5021-00) located in the Cabinet for the Side Armor Rear (towards Backbox).</i>		
H5	#10-32 X 3/8" Hex Nut	240-5209-00
H6	3/4-16 Hex Nut	240-5315-00
H7	#2-56 Hex Nut	240-5301-00
H8	7/8"-14 Hex Nut	240-5317-00



Nr.	T-NUTS*	SPI PART Nr.
T1	#6-32 T-Nut	240-5002-00
T2	#6-32 T-Nut (with Side Cut Off)	240-5002-01
T3	#8-32 T-Nut	240-5101-00
T4	#10-32 (Black Oxide) T-Nut	240-5007-00
T5	#10-32 T-Nut (with Side Cut Off)	240-5205-00
T6	#10-32 X 5/16" 3-Prong T-Nut	240-5204-00
T7	#10-24 T-Nut	240-5200-00



Nr.	FLANGE NUT*	SPI PART Nr.
F1	1/4" X 20 Flange Nut	240-5300-00
<i>Item F1 used with 1/4-20 X 1-1/4 Sq. Neck Carriage Bolt Black (231-5003-00) located in the Cabinet for the Slide Armor (Front) and Pivot Hinges.</i>		



Nr.	PAL NUTS*	SPI PART Nr.
P1	Plastic Pal Nut (on Flipper Buttons)	240-5003-00
P2	Metal Pal Nut (on Flipper Buttons)	240-5003-01

* Not Shown

Nr.	WING NUTS*	SPI PART Nr.
W1	#6-32 Wing Nut	240-5001-00
W2	#8-32 Wing Nut	240-5100-00
W3	#10-24 Wing Nut	240-5211-00
W4	1/4"-20 Wing Nut	240-5302-00
W5	1/4"-20 Toggle Wing	240-5324-00

* Not Shown

Parts Identification

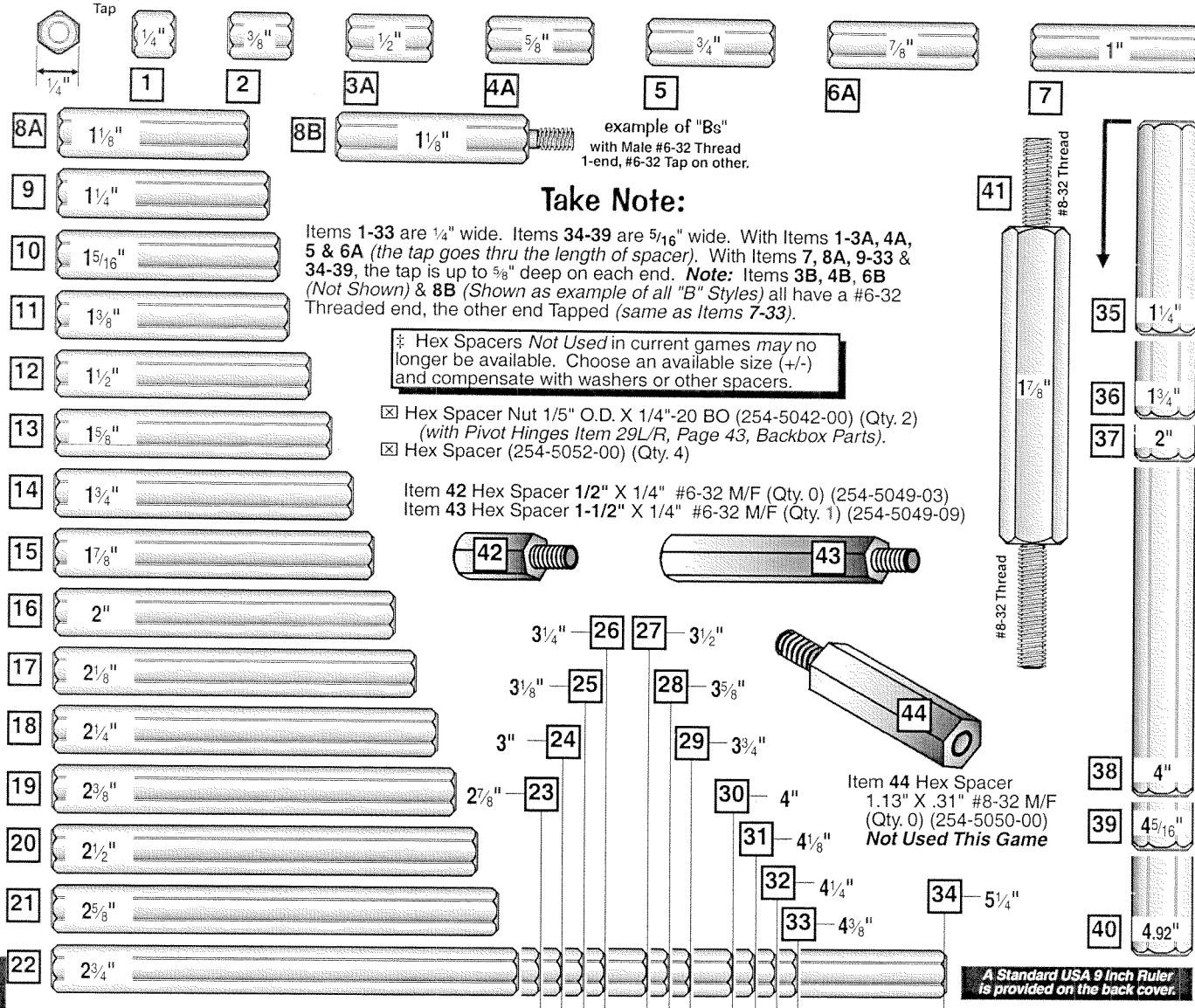
NOT ALL PARTS LISTED ABOVE ARE USED ON THIS GAME (QUANTITIES PER GAME WILL DIFFER).
COMPARE ACTUAL PART ON GAME TO ABOVE DRAWINGS TO IDENTIFY THE PART NUMBER REQUIRED.

Hex Spacers:

#6-32

Tap

Playfield Top - Hex Spacers (Actual Size) †

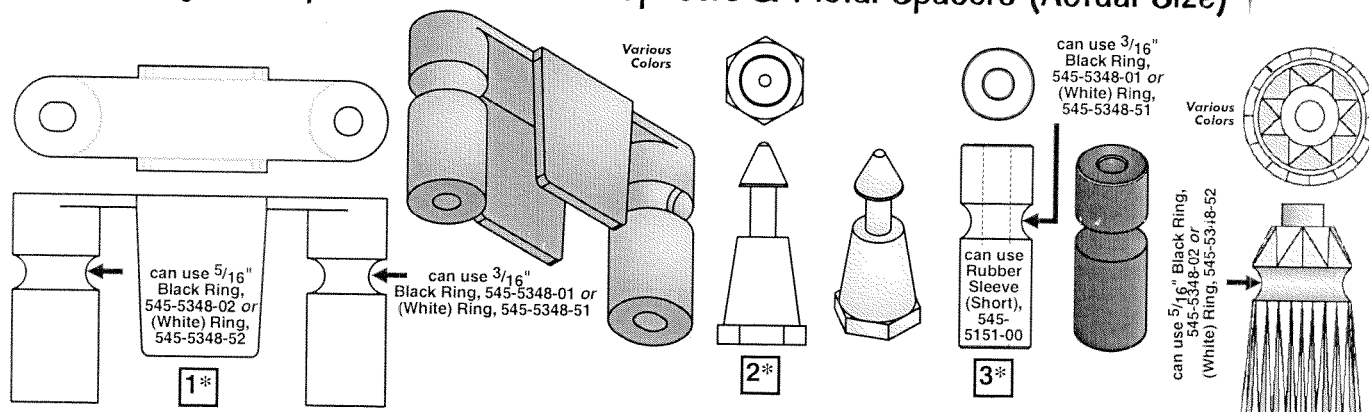


Parts Identification

Nr.	HEX SPACERS	SPI PART Nr.	Nr.	HEX SPACERS	SPI PART Nr.
1	1/4" X 1/4" : #6-32 Tap (both ends)	254-5008-00	19	2 3/8" X 1/4" : #6-32 Tap (both ends)	254-5008-28
2	3/8" X 1/4" : #6-32 Tap (both ends)	254-5008-12	20	2 1/2" X 1/4" : #6-32 Tap (both ends)	254-5008-16
3A	1/2" X 1/4" : #6-32 Tap (both ends)	254-5008-03	21	2 5/8" X 1/4" : #6-32 Tap (both ends)	254-5008-08
3B*	Identical to 3A with #6-32 Thread end	254-5024-03	22	2 3/4" X 1/4" : #6-32 Tap (both ends)	254-5008-15
4A	5/8" X 1/4" : #6-32 Tap (both ends)	254-5008-02	23	2 7/8" X 1/4" : #6-32 Tap (both ends)	254-5008-31
4B*	Identical to 4A with #6-32 Thread end	254-5024-02	24	3" X 1/4" : #6-32 Tap (both ends)	254-5008-14
5	3/4" X 1/4" : #6-32 Tap (both ends)	254-5008-04	25	3 1/8" X 1/4" : #6-32 Tap (both ends)	254-5008-19
6A	7/8" X 1/4" : #6-32 Tap (both ends)	254-5008-05	26	3 1/4" X 1/4" : #6-32 Tap (both ends)	254-5008-26
6B*	Identical to 6A with #6-32 Thread end	254-5024-05	27	3 1/2" X 1/4" : #6-32 Tap (both ends)	254-5008-27
7	1" X 1/4" : #6-32 Tap (both ends)	254-5008-06	28	3 5/8" X 1/4" : #6-32 Tap (both ends)	254-5008-25
8A	1 1/8" X 1/4" : #6-32 Tap (both ends)	254-5008-17	29	3 3/4" X 1/4" : #6-32 Tap (both ends)	254-5008-36
8B	Identical to 8A with #6-32 Thread end	254-5024-17	30	4" X 1/4" : #6-32 Tap (both ends)	254-5008-21
9	1 1/4" X 1/4" : #6-32 Tap (both ends)	254-5008-11	31	4 1/8" X 1/4" : #6-32 Tap (both ends)	254-5008-23
10	1 5/16" X 1/4" : #6-32 Tap (both ends)	254-5008-34	32	4 1/4" X 1/4" : #6-32 Tap (both ends)	254-5008-30
11 ‡	1 3/8" X 1/4" : #6-32 Tap (both ends)	254-5008-33	33	4 3/8" X 1/4" : #6-32 Tap (both ends)	254-5008-29
12	1 1/2" X 1/4" : #6-32 Tap (both ends)	254-5008-09	34	5 1/4" X 1/4" : #6-32 Tap (both ends)	254-5008-35
13 ‡	1 5/8" X 1/4" : #6-32 Tap (both ends)	254-5008-13	35	1 1/4" X 5/16" : #6-32 Tap (both ends)	254-5018-09
14	1 3/4" X 1/4" : #6-32 Tap (both ends)	254-5008-10	36	1 3/4" X 5/16" : #6-32 Tap (both ends)	254-5018-06
15 ‡	1 7/8" X 1/4" : #6-32 Tap (both ends)	254-5008-20	37	2" X 5/16" : #6-32 Tap (both ends)	254-5018-07
16	2" X 1/4" : #6-32 Tap (both ends)	254-5008-07	38	4" X 5/16" : #6-32 Tap (both ends)	254-5018-03
17	2 1/8" X 1/4" : #6-32 Tap (both ends)	254-5008-32	39	4 5/16" X 5/16" : #6-32 Tap (both ends)	254-5018-00
18	2 1/4" X 1/4" : #6-32 Tap (both ends)	254-5008-18	40	4.92" X 5/16" : #6-32 Tap (both ends)	254-5018-04

NOT ALL PARTS LISTED ABOVE ARE USED ON THIS GAME (QUANTITIES PER GAME WILL DIFFER).
COMPARE ACTUAL PART ON GAME TO ABOVE DRAWINGS TO IDENTIFY THE PART NUMBER REQUIRED.

Playfield Top - Plastic Posts & Spacers & Metal Spacers (Actual Size) †



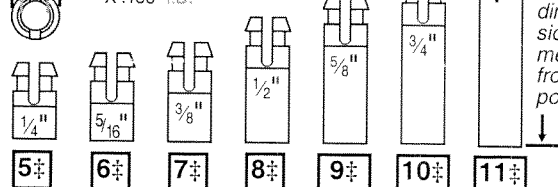
PLASTIC PART COLOR CHART

Nr.	Color	Nr.	Color	Nr.	Color
-00	Black	-06	Yellow	-12	Fluor. Blue
-01	Clear	-07	Orange	-13	Teal Green
-02	Red	-08	(White)	-14	(Gray)
-03	Amber	-09	Purple	-15	Luminescent
-04	Green	-10	Fluor. Org.	-16	Gold
-05	Blue	-11	Fluor. Green		

* Items 1 & 5 come in various colors. The "XX" (the last 2-Digits in the Part Number), should be replaced with the desired 2-Digit number from the above Color Chart (may not be available in every color; other colors used in prior games may no longer be available.) Call for availability.

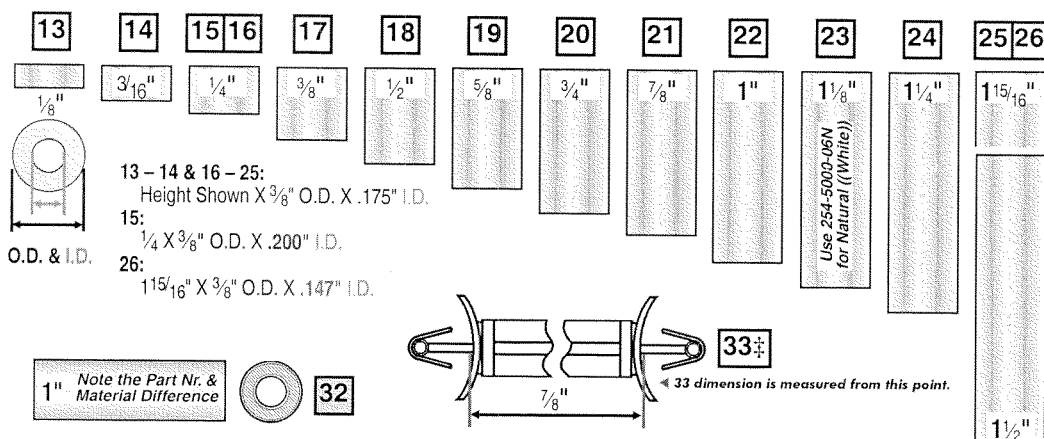
O.D. & I.D.

5 - 11:
Height Shown X $\frac{9}{32}$ " O.D.
X .153" I.D.



† Items 5 through 11 dimensions are measured from bottom to just under the cut-away. Item 33 dimension is measured from top-to-top of curve. See pictorials with Items 11 & 33.

12: $\frac{1}{2}$ "
X $\frac{1}{4}$ " O.D.
X .147" I.D.



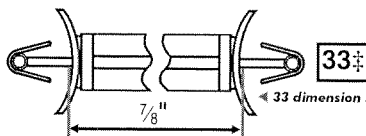
O.D. & I.D.

13 - 14 & 16 - 25:
Height Shown X $\frac{3}{8}$ " O.D. X .175" I.D.

15:
 $\frac{1}{4}$ X $\frac{3}{8}$ " O.D. X .200" I.D.

26:
 $\frac{11}{16}$ X $\frac{3}{8}$ " O.D. X .147" I.D.

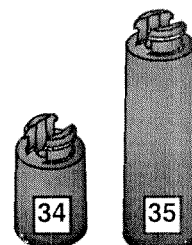
1" Note the Part Nr. & Material Difference



† 33 dimension is measured from this point.

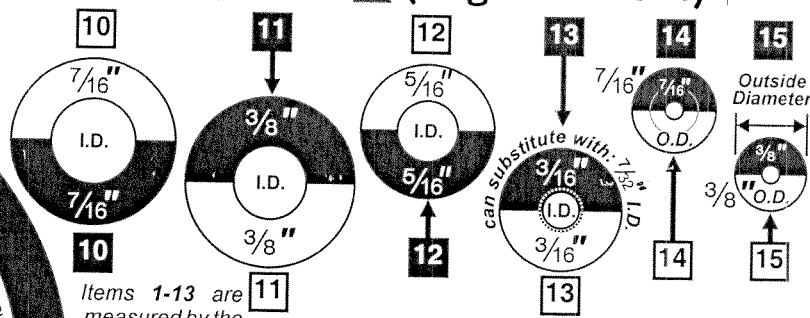
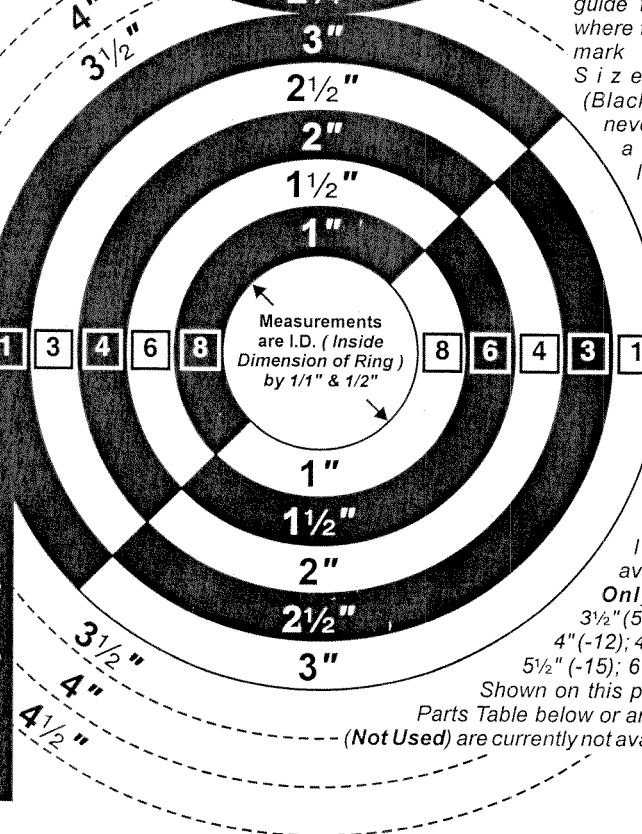
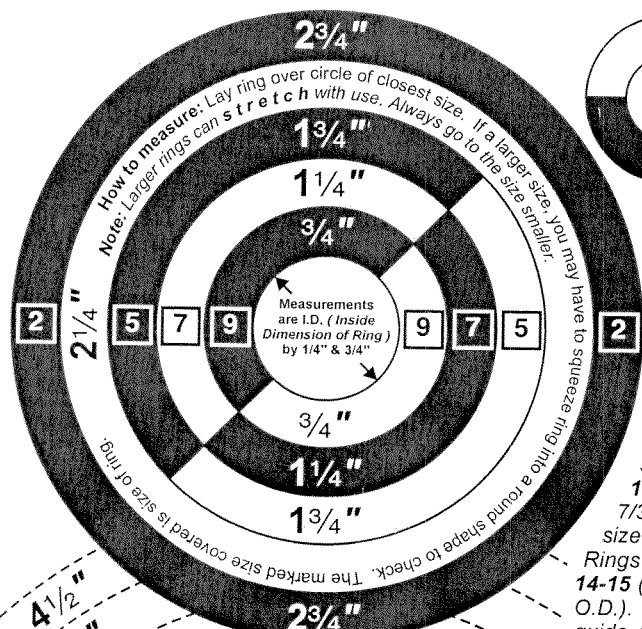
Nr.	PLASTIC POSTS & SPACERS	SPI PART Nr.	Nr.	PLASTIC POSTS & SPACERS	SPI PART Nr.
1**	Top Lane Plastic Mini-Lite Hood (XX-Color)	550-5061-XX	21	$\frac{7}{8}$ " X $\frac{3}{8}$ " O.D. X .175" I.D. Pls. Spacer (Gray)	254-5000-11
2**	Mini-Jewel Plastic Post (XX-Color)	550-5052-XX	22	1" X $\frac{3}{8}$ " O.D. X .175" I.D. Pls. Spacer (Gray)	254-5000-04
3**	$\frac{11}{16}$ " 1-Groove Plastic Post (XX-Color)	550-5059-XX	23	$\frac{11}{16}$ " X $\frac{3}{8}$ " O.D. X .175" I.D. Pls. Spcr. (Gray)	254-5000-06
Item 3 Only: Use Part Number (550-5059-00) for color Black.			Item 23 Only: Add the letter "N" for color Natural (if available) or "B" for color Black.		
4**	1-Groove Jewel Plastic Post (XX-Color)	550-5034-XX	24	$\frac{11}{16}$ " X $\frac{3}{8}$ " O.D. X .175" I.D. Pls. Spcr. (Gray)	254-5000-05
Items 3 & 4 typically sec'd by: Post Fastening Scr. #6-32 Top / #6-32 Bot. (530-5012-02). Use Color Chart above for last 2-digits. Not all colors are available.			25	$\frac{11}{16}$ " X $\frac{3}{8}$ " O.D. X .175" I.D. Pls. Spcr. (Gray)	254-5000-08
Items 1-4 Note: Use Color Chart above for last 2-digits. Not all colors are available.			26	$\frac{11}{16}$ " X $\frac{3}{8}$ " O.D. X .147" I.D. Plastic Spacer (Gray)	254-5000-15
			Items 13-26 Only: Spacers may also be Black in color (random from vendor).		
5 ‡	$\frac{1}{4}$ " Self Retain. Plastic Spacer (White)	254-5007-02	Not Shown and listed for reference only: 254-5000-10: $2\frac{1}{2}$ " X $\frac{3}{8}$ " O.D. X .175" I.D. -13: $\frac{5}{16}$ " X $\frac{1}{4}$ " X .147"; -16: $\frac{5}{16}$ " X $\frac{5}{16}$ " X .190"; -17: $\frac{13}{16}$ " X $\frac{3}{8}$ " O.D. X .175" I.D.		
6 ‡	$\frac{9}{16}$ " Self Retain. Plastic Spacer (White)	254-5007-05	27	$\frac{1}{4}$ " X $\frac{5}{16}$ " O.D. X .144" I.D. Metal Spacer	254-5014-03
7 ‡	$\frac{3}{8}$ " Self Retain. Plastic Spacer (White)	254-5007-01	28	$\frac{1}{2}$ " X $\frac{5}{16}$ " O.D. X .144" I.D. Metal Spacer	254-5014-00
8 ‡	$\frac{1}{2}$ " Self Retain. Plastic Spacer (White)	254-5007-04	29	$\frac{9}{16}$ " X $\frac{5}{16}$ " O.D. X .144" I.D. Metal Spacer	254-5014-04
9 ‡	$\frac{5}{8}$ " Self Retain. Plastic Spacer (White)	254-5007-00	30	$\frac{3}{4}$ " X $\frac{5}{16}$ " O.D. X .144" I.D. Metal Spacer	254-5014-01
10 ‡	$\frac{3}{4}$ " Self Retain. Plastic Spacer (White)	254-5007-03	31	$\frac{11}{8}$ " X $\frac{5}{16}$ " O.D. X .144" I.D. Metal Spacer	254-5014-02
11 ‡	1" Self Retain. Plastic Spacer (White)	254-5007-06	32	1" X $\frac{5}{16}$ " O.D. X .144" I.D. Metal Spacer	254-5001-00
12	$\frac{1}{2}$ " X $\frac{1}{4}$ " O.D. X .147" I.D. Pls. Spacer (White)	254-5000-03	33 ‡	$\frac{7}{8}$ " Plastic Spacer Support (Dual-Locking)	254-5039-14
13	$\frac{1}{8}$ " X $\frac{3}{8}$ " O.D. X .175" I.D. Pls. Spacer (Gray)	254-5000-19	34	Plastic Spacer, .5"	254-5054-00
14	$\frac{3}{16}$ " X $\frac{3}{8}$ " O.D. X .175" I.D. Pls. Spcr. (Gray)	254-5000-18	35	Plastic Mounting	254-5054-01
15	$\frac{1}{4}$ " X $\frac{3}{8}$ " O.D. X .200" I.D. Pls. Spcr. (Gray)	254-5000-02			
16	$\frac{1}{4}$ " X $\frac{3}{8}$ " O.D. X .175" I.D. Pls. Spacer (Gray)	254-5000-09			
17	$\frac{3}{8}$ " X $\frac{3}{8}$ " O.D. X .175" I.D. Pls. Spacer (Gray)	254-5000-12			
18	$\frac{1}{2}$ " X $\frac{3}{8}$ " O.D. X .175" I.D. Pls. Spacer (Gray)	254-5000-01			
19	$\frac{5}{8}$ " X $\frac{3}{8}$ " O.D. X .175" I.D. Pls. Spacer (Gray)	254-5000-14			
20	$\frac{3}{4}$ " X $\frac{3}{8}$ " O.D. X .175" I.D. Pls. Spacer (Gray)	254-5000-07			

NOT ALL PARTS LISTED ABOVE ARE USED ON THIS GAME (QUANTITIES PER GAME WILL DIFFER). COMPARE ACTUAL PART ON GAME TO ABOVE DRAWINGS TO IDENTIFY THE P/N REQUIRED.



Parts Identification

Playfield - Rubber Parts Black ■, White □ & Blue ■ (Rings Actual Size) †



Items 1-13 are measured by the Inside Diameter (I.D.). Items 1-9 and 11 are approximately 1/4" thick. Items 10, 12-15 are approximately 3/16" thick. Item 13 can also be a 7/32" I.D. Ring. The size is imprinted on all Rings except for Items 14-15 (7/16" O.D. & 3/8" O.D.). Use this page as a guide to measure rings where the size imprint or mark does not exist. Size 2 1/4" I.D. (Black or White) was never used. Choose a Ring Size +/- 1/4" I.D. if required.

Nr.	RUBBER RINGS	QTY.	SPI PART Nr.
1	3" I.D. Rubber Ring BLACK		545-5348-10
	3" I.D. Rubber Ring WHITE		545-5348-60
2	2 3/4" I.D. Rubber Ring BLK		545-5348-20
	N/U		
3	2 1/2" I.D. Rubber Ring BLK		545-5348-09
	2 1/2" I.D. Rubber Ring WHT		545-5348-59
4	2" I.D. Rubber Ring BLACK	2	545-5348-08
	2" I.D. Rubber Ring WHITE		545-5348-58
5	1 3/4" I.D. Rubber Ring BLK		545-5348-21
	1 3/4" I.D. Rubber Ring WHT	N/U	545-5348-71
6	1 1/2" I.D. Rubber Ring BLK		545-5348-07
	1 1/2" I.D. Rubber Ring WHT		545-5348-57
7	1 1/4" I.D. Rubber Ring BLK	1	545-5348-06
	1 1/4" I.D. Rubber Ring WHT		545-5348-56
8	1" I.D. Rubber Ring BLACK		545-5348-05
	1" I.D. Rubber Ring WHITE		545-5348-55
9	3/4" I.D. Rubber Ring BLACK		545-5348-04
	3/4" I.D. Rubber Ring WHITE		545-5348-54
10	7/16" I.D. Rubber Ring BLK		545-5348-18
	7/16" I.D. Rubber Ring WHT		545-5348-68
11	3/8" I.D. Rubber Ring BLACK		545-5348-03
	3/8" I.D. Rubber Ring WHITE	N/U	545-5348-63
12	5/16" I.D. Rubber Ring BLK	3	545-5348-02
	5/16" I.D. Rubber Ring WHT		545-5348-52
13	3/16" I.D. Rubber Ring BLK	5	545-5348-01
	3/16" I.D. Rubber Ring WHT		545-5348-51
14	7/16" O.D. Rubber Ring BLK	45	545-5348-17
	7/16" O.D. Rubber Ring WHT		545-5348-67
	Note: Item 14, 7/16" O.D. Back Rings (Qty. 44 of 49) are used to cushion the Bayonet Sockets under the playfield (between bracket & playfield).		
15	3/8" O.D. Rubber Ring BLK		545-5348-19
	3/8" O.D. Rubber Ring WHT		545-5348-69
16	Small Flipper BLACK Ring (Soft Duro)		545-5207-00
	Small Flipper RED Ring (Soft Duro)		545-5207-22
	Large Flipper BLACK Ring (50 Duro)		545-5277-00
	Large Flipper YELLOW Ring (50 Duro) (use -06 40 Duro)		545-5277-04
17	Large Flipper WHITE Ring (50 Duro)		545-5277-08
	Large Flipper RED Ring (Soft Duro)	2	545-5277-22

Take Note:

For Blue Rubber Pads, see the next page and/or the Blue Pages for the assembly the pads are found on for the part number.

Nr.	RUBBER BUMPER PADS	QTY.	SPI PART Nr.
A*	Bumper BLK Pad (Lg. w/ grommet)	2	545-5428-00
	Item A are located on Flipper Assemblies. See next page for location.		
B*	Bumper BLK Pad (Sm. w/ grommet)	2	545-5105-00
	Item B are located on multiple assemblies. See next page for location.		

Nr.	RBR. BUMPER POST SLVS.	QTY.	SPI PART Nr.
D*	Bumper BLACK Post Sleeve (Tall)	2	545-5308-00
	Item D in RED use 545-5308-22; Item D in WHITE use 545-5308-08.		
E*	Bumper Post Sleeve (Short)		545-5151-00

