

Section M

**GS CONSOLIDATED ELECTRONICS
and
GS NEXGEN ELECTRONICS**

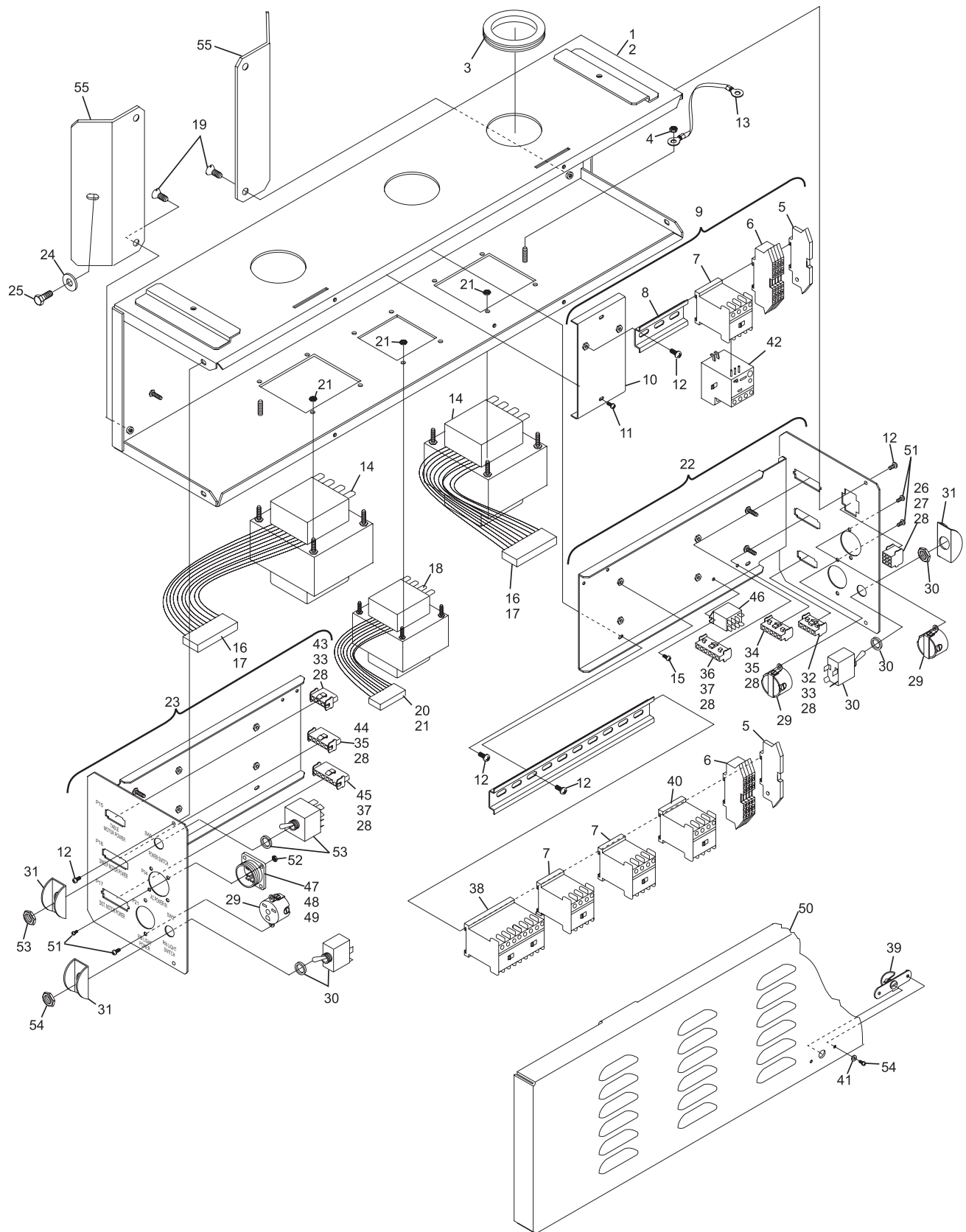
Index

No.	Part No.	Description
1.	47-862841-000	N.A. GS Consolidated Electronics High Voltage Box Assembly (includes Mount and Mounting Hardware)
2.	N.A.	Enclosure
3.	11-651024-000	N.A. Grommet (2.5 Dia.)
4.	11-170005-001	N.A. Hex Nut (#10-24)
5.	11-615760-000	N.A. End Cap
6.	11-615759-000	N.A. Terminal Block
7.	11-671513-000	N.A. Contactor - (24V)
8.	47-142599-000	N.A. Mounting Rail (short)
9.	47-862838-000	N.A. Ball Accelerator Contactor Mounting Plate Assembly
10.	47-142601-000	N.A. Relay Mounting Plate
11.	11-012060-001	N.A. Pan Head C.R. Screw with Lockwasher (#8-32 x 1/2")
12.	11-012057-001	N.A. Pan Head C.R. Screw with Lockwasher (#8-32 x 5-16")
13.	68-100481-000	N.A. Ground Cable Assembly
14.	47-142564-000	N.A. Transformer Assembly
15.	11-012271-001	N.A. Pan Head C.R. Screw (#6-32 x 5/16")
16.	11-697214-000	N.A. Connector
17.	11-680322-000	N.A. Terminal
18.	57-860042-000	R.O. Terminal (Pkg. of 20)
19.	47-142605-000	N.A. Transformer Assembly
20.	11-014144-001	N.A. Flat Head Slotted Screw (1/4-20 x 1/2")
21.	11-697208-000	N.A. Connector
22.	11-125003-001	N.A. Hex Nut (#8-32)
23.	47-862839-000	N.A. R.H. Relay Mounting Plate Assembly
24.	47-862840-000	N.A. L.H. Relay Mounting Plate Assembly
25.	11-191012-001	N.A. Flat Washer (5/16)
26.	11-001176-001	N.A. Hex Head Cap Screw (1/4-20 x 3/8")
27.	*47-142585-000	N.A. Ball Accelerator Motor Power Cable Assembly
28.	11-696715-000	N.A. Connector
29.	11-696737-000	N.A. Terminal
30.	11-686128-000	N.A. Utility Outlet
31.	11-615515-000	N.A. Toggle Switch
32.	47-142594-000	N.A. Switch Guard
33.	*47-142586-000	N.A. Table Motor Power Cable Assembly
34.	11-696714-000	N.A. Connector
35.	*47-142587-000	N.A. Sweep Motor Power Cable Assembly
36.	11-696716-000	N.A. Connector
37.	*47-142588-000	N.A. Elevator Motor Power Cable Assembly
38.	*47-862735-000	N.A. Elevator Motor Power Cable Assembly (for use with Adapter 68-100453-000 N.A.)
39.	11-696717-000	N.A. Connector Cap
40.	11-671011-000	N.A. Contactor (24V)
41.	57-214276-007	N.A. Spring Latch Assembly
42.	11-671514-000	N.A. Contactor (12V)
43.	11-199000-001	N.A. Lockwasher
44.	11-671001-000	N.A. Relay (1.6 - 2.5 Amp)
45.	*47-142591-000	N.A. Table Motor Power Cable Assembly
46.	*47-142592-000	N.A. Sweep Motor Power Cable Assembly
47.	*47-142606-000	N.A. Elevator Motor Power Cable Assembly
48.	11-696622-000	N.A. Relay (24V)
49.	*47-172916-000	N.A. AC Input Cable Assembly
50.	11-703531-000	N.A. Connector
51.	11-612578-000	N.A. Terminal
52.	47-142556-000	N.A. Cover
53.	11-012274-001	N.A. Pan Head C.R. Machine Screw (#6-32 x 1/2")
54.	11-176005-001	N.A. Keps Nut
55.	11-615510-000	N.A. Toggle Switch
56.	11-012251-001	N.A. Pan Head C.R. Screw with Lockwasher (#4-40 x 3-16")
57.	47-142600-000	N.A. Mounting Bracket

N.A. = No Longer Available

* Not Illustrated

GS Consolidated Electronics High Voltage Box Assembly



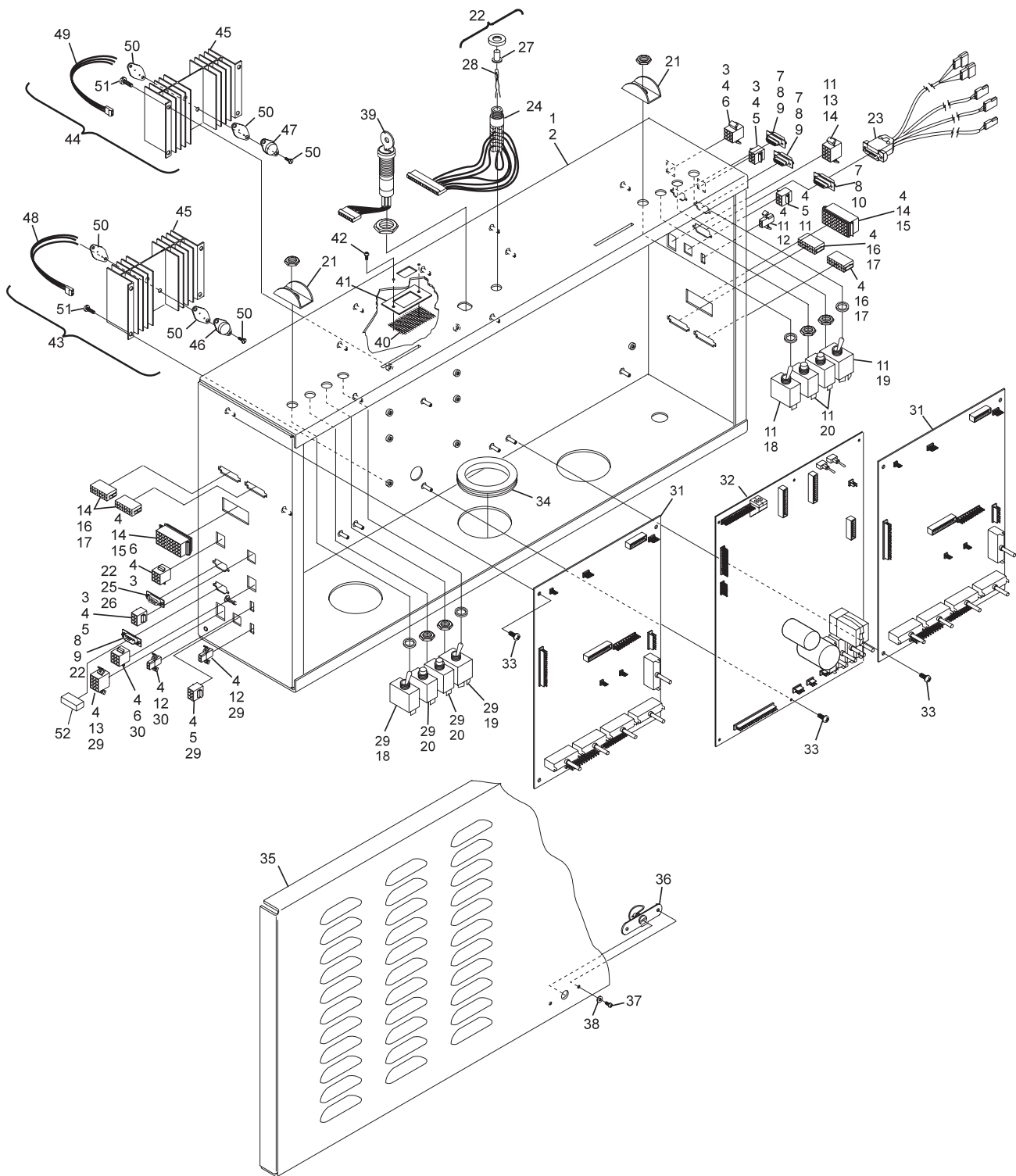
GS Consolidated Electronics High Voltage Box Assembly

Index No.	Part No.		Description
1.	47-862821-400	N.A.	GS Consolidated Electronics Low Voltage Control Box (includes Isolation Mount and Mounting Hardware)
	47-862926-400	N.A.	GS-X Consolidated Electronics Low Voltage Control Box (includes Isolation Mount and Mounting Hardware)
2.	N.A.		Enclosure
3.	*47-142571-000		Masking Unit and Micro Processor Interface Cable Assembly
4.	11-680301-000	N.A.	Terminal
	57-860031-000	R.O.	Terminal - Female (Pkg. of 20)
5.	11-680207-000		Connector
6.	N.A.		Connector
7.	*47-142568-000		Low Voltage Interface Cable Assembly
8.	11-680983-000		Terminal
9.	11-680995-000	N.A.	Connector
10.	11-680954-000		Connector
11.	*47-142602-000	N.A.	R.H. Lane Various Functions Cable Assembly
12.	11-680220-000	N.A.	Connector
13.	11-680208-000	N.A.	Connector
14.	N.A.		Solenoid and Switches Cable Assembly
15.	11-680221-000		Connector
16.	11-692325-000		Connector
17.	11-692090-000	N.A.	Terminal
	57-860043-000	R.O.	Terminal (Pkg. of 10)
18.	11-615511-000		Toggle Switch
19.	11-615515-000		Toggle Switch
20.	11-615013-000		Push Button
21.	47-142594-000		Switch Guard
22.	*N.A.		Comline Switch Cable Assembly
	47-142563-000	R.O.	Comline Switch GS Low Voltage Box Cable Assembly
23.	47-142619-000		Optical Trigger Foul Control Cable Assembly
24.	11-615021-000		Switch w/LED (Does not include cable)
25.	N.A.		Connector
26.	11-680981-000		Terminal
27.	11-615022-000		Lens (Red)
28.	11-680802-000		LED
29.	*47-142572-000	N.A.	R.H. and L.H. Lane Various Functions Cable Assembly
30.	*47-142567-000		High Voltage Output Cable Assembly
31.	47-862823-000		I/O PCB
32.	47-862822-400	N.A.	CPU PCB (pre-GS-X)
	47-862925-400	N.A.	CPU PCB (GS-X)
33.	11-012274-001		Pan Head C.R. Machine Screw (#6-32 x 1/2")
34.	11-651024-000	N.A.	Grommet (2-1/2" Dia.)
35.	47-142595-000		Cover
36.	57-214276-007		Fastener
37.	11-012251-001		Pan Head C.R. Machine Screw (#4-40 x 3/16")
38.	11-199000-001		Lockwasher (#4)
39.	47-862503-000		Keypress Assembly
40.	N.A.		Screen
41.	68-100663-000	N.A.	Screen Retainer
42.	11-012003-001		Pan Head C.R. Machine Screw w/Lockwasher (#4-40 x 5/16")
43.	N.A.		Voltage Regulator (VR2)
44.	N.A.		Voltage Regulator (VR1)
45.	11-698421-000	N.A.	Heat Sink
46.	11-696878-000	N.A.	Adjustable Voltage Regulator (+12V)
47.	11-696876-000	N.A.	Voltage Regulator (+12V)
48.	47-142566-001	N.A.	Cable Assembly - 9" (Blue)
49.	47-142565-001	N.A.	Cable Assembly - 13" (Orange)
50.	11-698441-000	N.A.	Mounting Kit
51.	11-052057-001		Pan Head C.R. Screw with Lockwasher
52.	57-861589-000	N.A.	Comline Terminator

N.A. = No Longer Available

* Not Illustrated

GS Consolidated Electronics Low Voltage Box Assembly

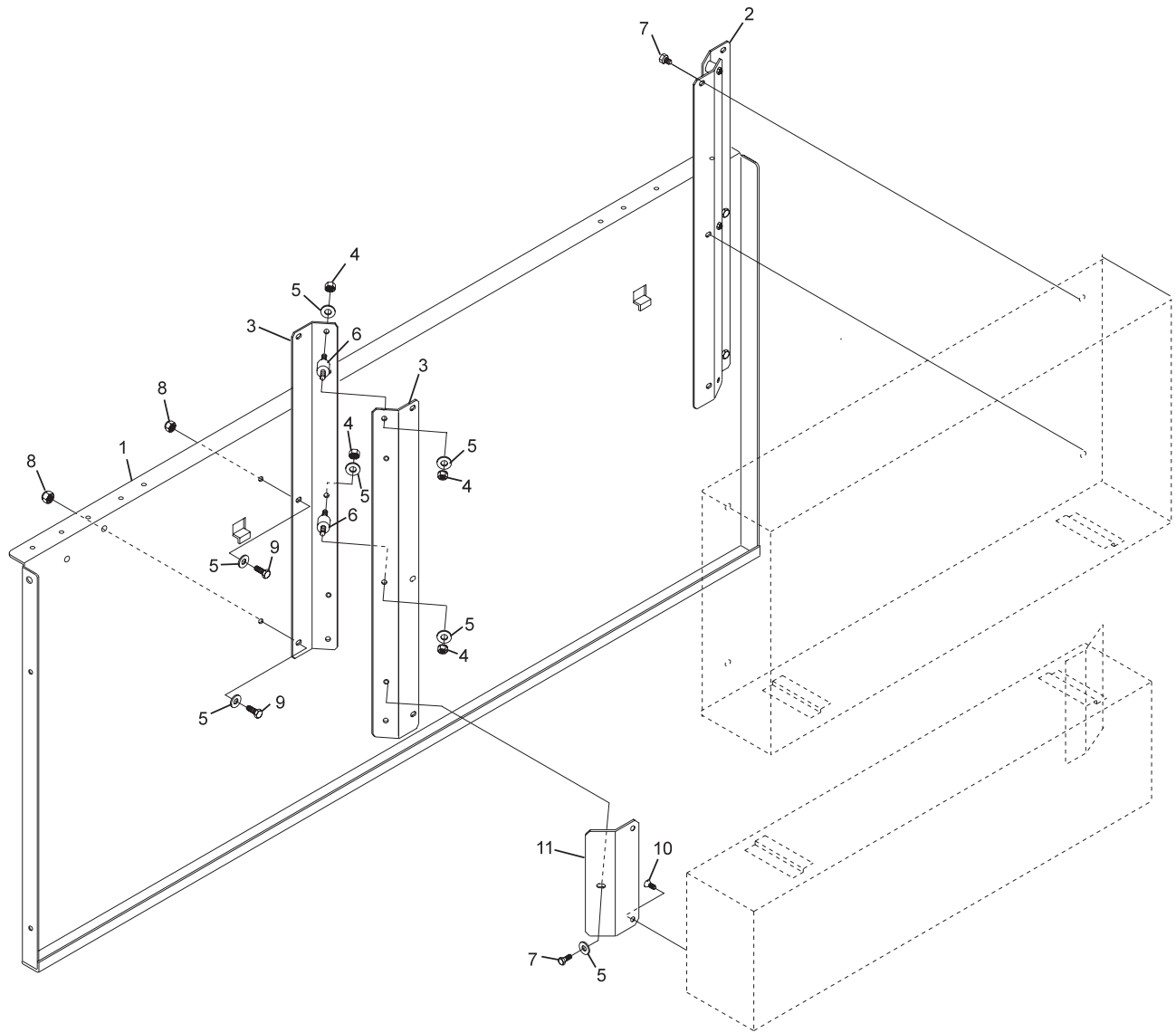


GS Consolidated Electronics Low Voltage Box Assembly

Index

No.	Part No.		Description
1.	47-080201-001	N.A.	Front Frame Support
2.	47-142613-000I	N.A.	Isolation Mount Assembly (shipped as R.H. reconfigure for L.H. Isolation Mount Assembly use)
3.	N.A.		Mounting Bracket
4.	11-176001-001		Keys Nut (5/16-18)
5.	11-191012-001		Flat Washer (5/16)
6.	11-603025-000	N.A.	Vibration Mount
7.	11-001176-001	N.A.	Hex Machine Screw (1/4-20 x 3/8")
8.	11-050901-001	N.A.	Locknut (M8)
9.	11-051010-001		Hex Head Cap Screw (M8 x 20)
10.	11-014144-001		Flat Head Screw (1/4-20 x 1/2")
11.	47-142600-000	N.A.	Mounting Bracket

N.A. = No Longer Available



GS Consolidated Electronics Box Mounting

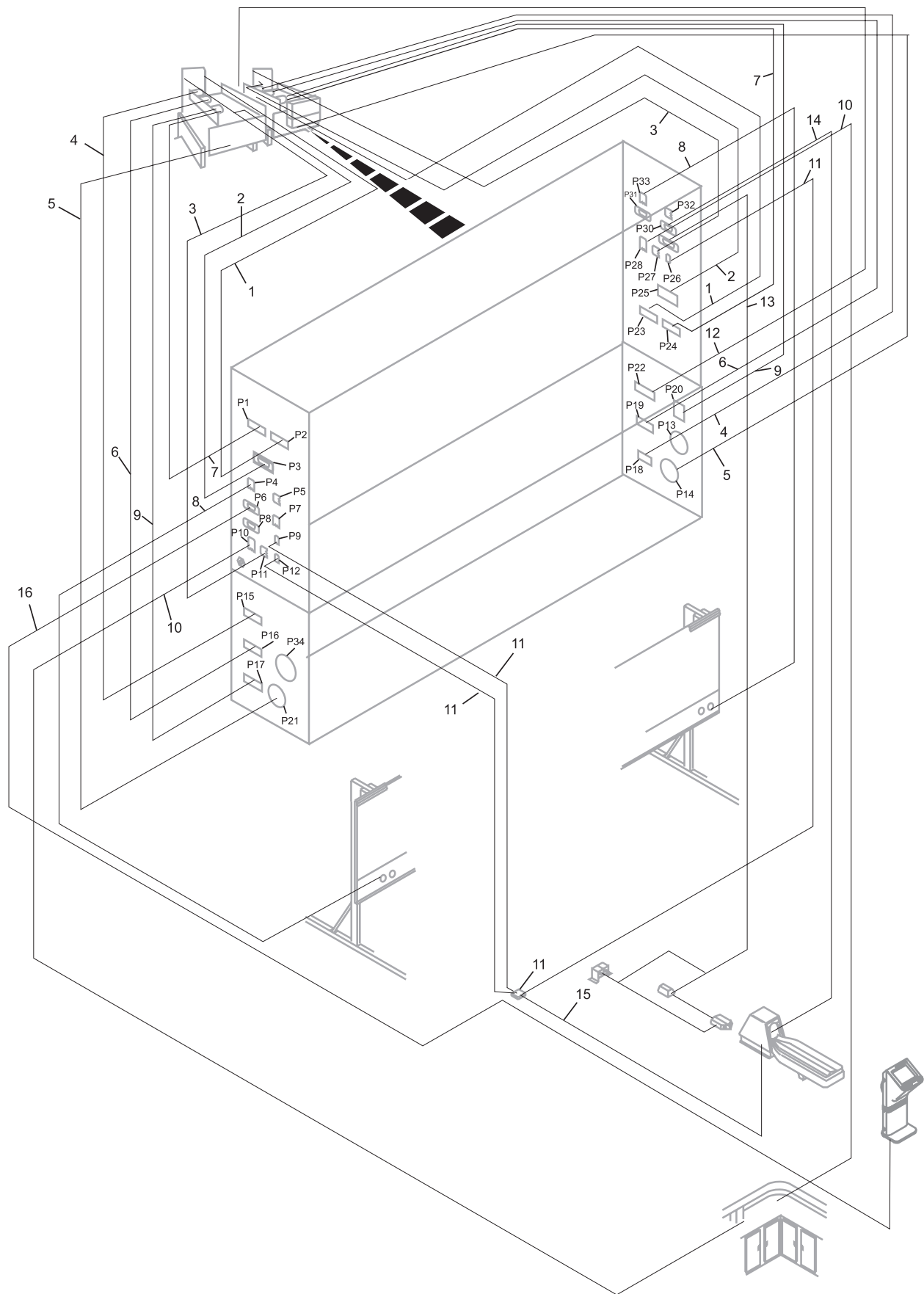
Index

No.	Part No.	Description
1.	47-142620-000	R.H. Side Function Solenoid and Switches Cable Assembly
2.	47-244922-004	Table Switch and Harness Cable Assembly
3.	47-243071-004	N.A. Rear Box Control with Cable Assembly
4.	47-142615-000	Table Motor Cable Assembly
5.	*	L.H. Pin Light Power Cable Assembly
6.	47-142617-000	Sweep Motor Cable Assembly
7.	47-142621-000	L.H. Function Solenoid and Switches Cable Assembly
8.	53-200871-000	Masking Unit Control Cable Assembly
9.	47-142616-000	Elevator Motor Cable Assembly
10.	68-100159-000	N.A. Manager's Lane Control Cable Assembly
11.	47-862825-000	Ball Lift Adapter Cable
12.	47-142614-000	Ball Accelerator Cable Assembly
13.	47-142619-000	Foul and Optical Trigger Cable
14.	68-100050-000	N.A. Player Control Station Cable Assembly
15.	53-860691-000	Lane (to Ball Lift) Cable Assembly
16.	57-861526-000	Framework Primary to Consolidated Box LAN Cable

N.A. = No Longer Available

NOTE: See page 5F for Setting Table Cable Assembly for GS-X and Above (Machine Series 424 and Above)

GS Consolidated Electronics Box Cabling



GS Consolidated Electronics Box Cabling

Index

No.	Part No.	Description
1.	*57-214920-000	N.A. Reflector and Bracket Assembly
2.	57-214921-000	N.A. Ball Detector Assembly
	99-080220-004	N.A. Ball Detector Assembly
	99-086293-000	R.O. Pkg. Ball Detect Complete w/Hardware
3.	*57-214901-000	N.A. Bracket
4.	*17-600771-000	N.A. Housing Assembly
5.	11-190004-001	Flat Washer (#8)
6.	11-195008-001	Lockwasher (#8)
7.	11-012308-001	Pan Hd. Machine Screw (#8-32 x 3/8")
8.	*17-600770-000	N.A. Housing Only
9.	17-600773-000	N.A. Plate
10.	53-600101-000	Reflector
11.	11-013007-001	N.A. Sltd. Pan Hd. Machine Screw (#4-40 x 9/16")
12.	11-195004-001	N.A. Lockwasher (#4)
13.	11-125000-001	Hex Nut (#4)
14.	11-082092-001	N.A. Self Tapping Screw (#10 x 1/2")
15.	11-195010-001	Lockwasher (#10)
16.	11-190006-001	Flat Washer (#10)
17.	N.A.	Wood Screw (#10 x 3/4")
18.	57-214900-000	Bracket
19.	11-013060-001	Pan Hd. Machine Screw (#8-32 x 1/2")
20.	11-086307-001	Sltd. Flat Hd. Machine Screw (#4 x 1")
21.	57-214904-000	N.A. Cable Assembly
	99-080194-004	N.A. Photo Cell & Cable Assembly
	99-086292-000	R.O. Pkg. Ball Detect Sigle Unit w/Hardware
22.	99-080186-003	Housing
23.	99-080180-004	Spring
24.	11-680101-000	Connector
25.	11-680302-000	N.A. Terminal
	57-860032-000	R.O. Terminal - Male (Pkg. of 10)
26.	47-223102-004	N.A. Reflector
	47-225846-004	R.O. Reflector
27.	11-054780-000	N.A. Slotted Pan Hd. Self Tapping Screw (4.2mm x 16mm)
28.	99-200212-004	N.A. Reflector Bracket
29.	99-200222-004	Reflector and Bracket Assembly
30.	47-225846-004	Reflector Tape
31.	*57-860507-000	Reflector and Hardware Pkg. (includes Index Nos 1, 3, 4, and 8)

N.A. = No Longer Available

R.O. = Replacement Option

* Part available in Reflector and Hardware Package see index No. 31 for ordering.

** Not Illustrated

Reflector and Ball Detector Assemblies - GS Electronics Boxes

Index			
No.	Part No.		Description
1.	47-862863-000		I/O PCB Assembly
2.	47-862851-400	N.A.	CPU PCB Assembly
	47-142736-401	R.O.	CPU PCB Nexgen Controller Assembly
3.	47-862852-000	N.A.	High Voltage PCB Assembly
	47-862859-000	R.O.	High Voltage PCB Nexgen Controller
4.	47-142859-000	N.A.	Transformer/Harness Assembly-Single (single Transformer Nexgen Box)
	47-142659-000	R.O.	Harness Transformer Assembly
	47-142692-000		Transformer/Harness Assembly-Double (dual Transformer Nexgen Box)
5.	47-862857-000		Keyboard Membrane
6.	11-615511-000		ON/OFF Toggle Switch w/Nut
7.	47-142594-000		Switch Guard
8.	47-862862-400	N.A.	Nexgen Controller Assembly
	47-862866-400	N.A.	Nexgen Controller Assembly
	47-862866-402	N.A.	Nexgen Controller Assembly
	47-862866-403	R.O.	Nexgen Controller Assembly
9.	47-142662-000	N.A.	Run/Stop Cable Assembly
10.	47-142660-000		Power Switch/Cable Assembly (single transformer nexgen box)
	47-142705-000	N.A.	Power Switch/Cable Assembly (dual transformer nexgen box)
11.	47-142663-000		AC Power In Cable Assembly
12.	47-142653-000	N.A.	Ball Accelerator Motor Power Cable Assembly
13.	47-142656-000		L.H. Distributor Motor Power Cable Assembly
14.	47-142656-010	N.A.	R.H. Distributor Motor Power Cable Assembly
15.	47-142657-000		L.H. Setting Table Power Cable Assembly
16.	47-142657-010		R.H. Setting Table Power Cable Assembly
17.	47-142700-000		CPU to High Voltage Logic Cable Assembly (14")
18.	47-142664-000		L.H. Pin Light Power Cable Assembly
19.	47-142664-010		R.H. Pin Light Power Cable Assembly
20.	47-142661-000		L.H. Sweep Motor Power Cable Assembly
21.	47-142661-010		R.H. Sweep Motor Power Cable Assembly
22.	47-142654-000	N.A.	CPU to I/O PCB Cable Assembly
23.	47-862854-000		Fuse 3.15A, 250V (Pkg. of 5)
24.	47-862855-000		Fuse 8A, 250V - Fast Blow (Pkg. of 5)
25.	47-862856-000		Fuse .5A, 250V - Slow Blow (Pkg. of 5)
26.	**47-142666-000	N.A.	LCD Display - only (order cable separately)
27.	47-225658-004	N.A.	External Transformer/Harness Assembly
28.	11-688581-000	N.A.	Power Filter
	47-142655-000	R.O.	Power Filter w/Harness Assembly
29.	**47-142665-000	N.A.	LCD Display Cable
30.	47-142693-000		Transformer to CPU Cable
31.	*47-862927-400		Nexgen to AS/90 Interface
32.	*47-862100-000		Wire Harness for LCD Nexgen Pkg. (includes index Nos. 26 & 29)
33.	47-862007-000		Pkg. Nexgen Vibration Mount Kit (includes 4 mounts and hardware)

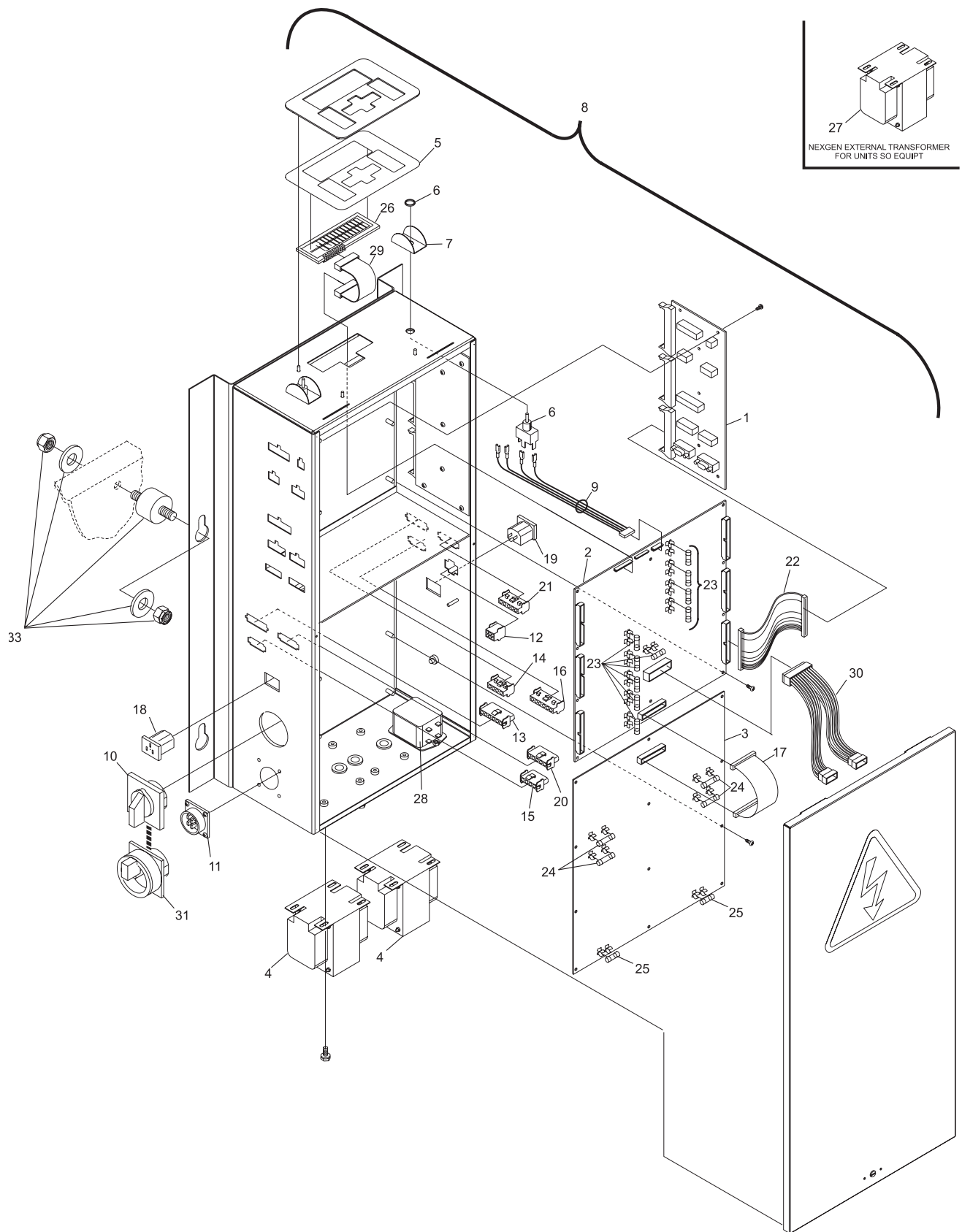
N.A. = No Longer Available

R.O. = Replacement Option

* Not Illustrated

** Part available in Wire Harness for LCD - Nexgen Pkg. see index No. 32 for ordering.

Nexgen Controller Assembly (Includes Internal Cabling)



Nexgen Controller Assembly (Includes Internal Cabling)

Index

No.	Part No.	Description
1.	47-142674-000	N.A. R.H.Function Solenoid and Switches Cable Assembly
	47-142730-000	R.O. R.H. Functions Cable Assembly
2.	47-862848-000	N.A. Ball Detect and Foul Cable Assembly
3.	47-245422-003	Rear Box Control Cable Assembly
4.	47-142673-000	N.A. L.H. Functions Solenoids and Switches Cable Assembly
	47-142790-000	R.O. L.H. Functions Cable Assembly
5.	47-245420-004	Setting Table Cable Assembly
6.	47-142616-000	Distributor Motor Cable Assembly
7.	47-142617-000	Sweep Motor Cable Assembly
8.	47-142615-000	Setting Table Motor Cable Assembly
9.	47-225416-004	Pin Light Cable Assembly
10.	47-862735-000	Power Adapter Cord (600V)
11.	47-245423-004	Ball Accelerator Motor Cable Assembly
12.	47-862825-000	Ball Lift Cable
13.	53-860691-000	Lane to Ball Lift Cable
14.	57-900112-000	Forked Extractor
15.	11-692091-000	N.A. Terminal
16.	57-900103-000	Crimper

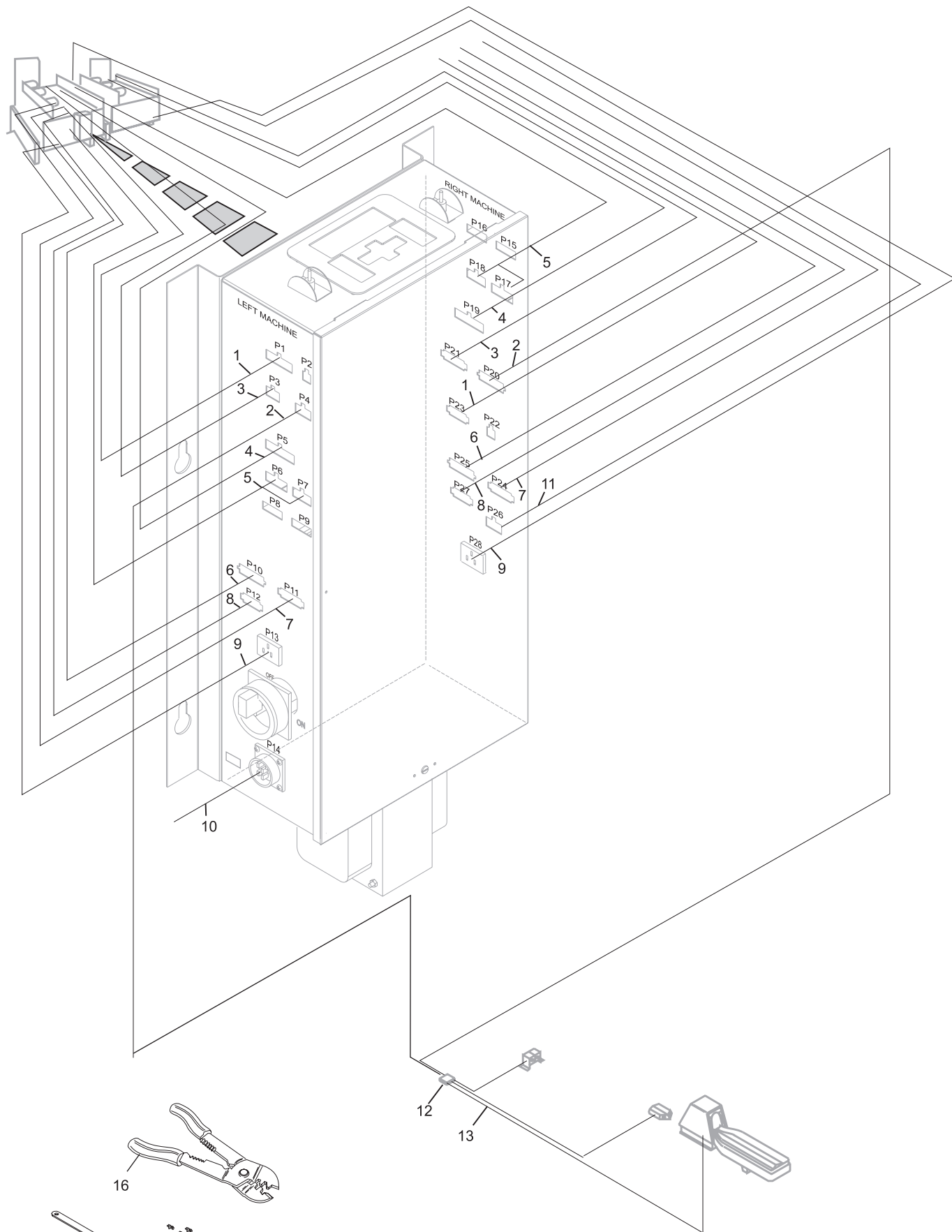
N.A. = No Longer Available

R.O. = Replacement Option

* 47-862848-000 Ball Detect and Masking Unit Cable

L.H. Machine				R.H. Machine			
Con- nection	Cable Description		Part No.	Con- nection	Cable Description		Part No.
P1	R.H Function	N.A.	47-142674-000	P23	R.H. Function	N.A.	47-142674-000
	R.H. Function	R.O.	47-142730-000		R.H. Function	R.O.	47-142730-000
P2	Masking Unit		*	P22	Masking Unit		*
P3	Rear Box Control		47-245422-003	P23	Rear Box Control		47-245422-003
P4	Ball Detect & Foul	N.A.	47-142672-000	P20	Ball Detect & Foul		47-142672-000
P5	L.H. Function	N.A.	47-142673-000	P19	L.H. Function	N.A.	47-142673-000
	L.H. Function	R.O.	47-142790-000		L.H. Function	R.O.	47-142790-000
P6/P7	Setting Table		47-245420-004	P18/ P17	Setting Table		47-245420-004
P8	FX Com Line In			P15	FX Com Line In		
P9	FX Com Line Out		57-861526-000	P16	FX Com Line Out		57-861526-000
P10	Distributor Motor		47-142616-000	P25	Distributor Motor		47-142616-000
P11	Sweep Motor		47-142617-000	P24	Sweep Motor		47-142617-000
P12	Setting Table Motor		47-142615-000	P27	Setting Table Motor		47-142615-000
P13	Pin Light		47-225416-004	P28	Pin Light		47-225416-004
P14	Power In		68-100453-000	P26	Power In		68-100453-000

Nexgen Controller Assembly External Cabling



Nexgen Controller Assembly External Cabling

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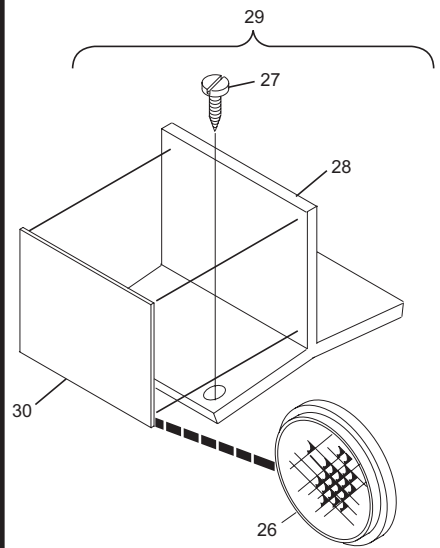
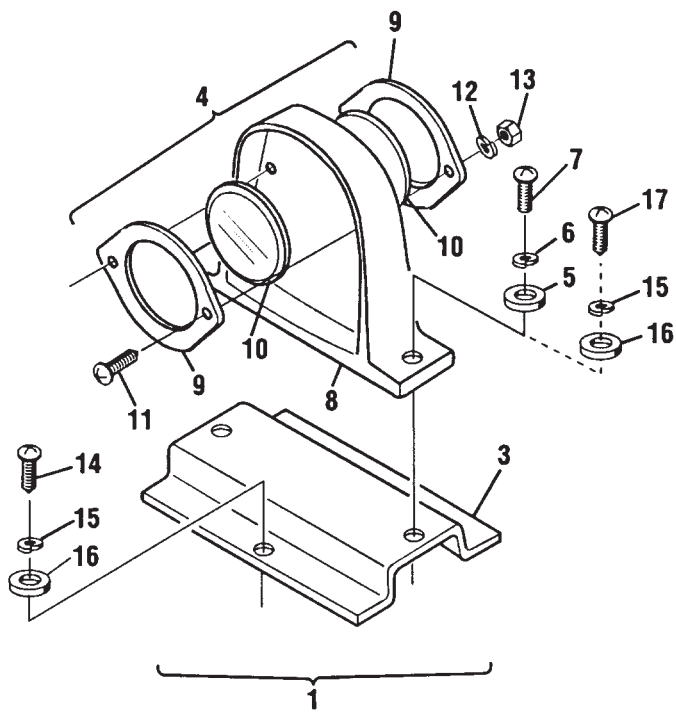
No.	Part No.		Description
1.	*57-214920-000	N.A.	Reflector and Bracket Assembly
2.	57-214921-000	N.A.	Ball Detector Assembly
	99-080220-004	N.A.	Ball Detector Assembly
	99-086293-000	R.O.	Pkg. Ball Detect Complete w/Bracket & Hardware
3.	*57-214901-000	N.A.	Bracket
4.	*17-600771-000	N.A.	Reflector Housing Assembly
5.	11-190004-001		Flat Washer (#8)
6.	11-195008-001		Lockwasher (#8)
7.	11-012308-001		Pan Hd. Machine Screw (#8-32 x 3/8")
8.	*17-600770-000	N.A.	Housing Only
9.	17-600773-000	N.A.	Plate
10.	53-600101-000		Reflector
11.	11-013007-001	N.A.	Sltd. Pan Hd. Machine Screw (#4-40 x 9/16")
12.	11-195004-001	N.A.	Lockwasher (#4)
13.	11-125000-001		Hex Nut (#4-40)
14.	11-082092-001	N.A.	Self Tapping Screw (#10 x 1/2")
15.	11-195010-001		Lockwasher (#10)
16.	11-190006-001		Flat Washer (#10)
17.	N.A.		Wood Screw (#10 x 3/4")
18.	57-214900-000		Bracket
19.	11-013060-001		Pan Hd. Machine Screw (#8-32 x 1/2")
20.	11-086307-001		Sltd. Flat Hd. Machine Screw (#4 x 1")
21.	57-214904-000	N.A.	Cable Assembly
	99-080194-004	N.A.	Photo Cell & Cable Assembly
	99-086292-000	R.O.	Pkg. Ball Detect Single Unit w/Hardware
22.	99-080186-003		Housing
23.	99-080180-004		Spring
24.	11-680101-000		Connector
25.	11-680302-000	N.A.	Terminal
	57-860032-000	R.O.	Terminal - Male (Pkg. of 10)
26.	47-223102-004	N.A.	Reflector
	47-225846-004	R.O.	Reflector
27.	11-054780-000	N.A.	Slotted Pan Hd. Self Tapping Screw (4.2mm x 16mm)
28.	99-200212-004	N.A.	Reflector Bracket
29.	99-200222-004		Reflector and Bracket Assembly
30.	47-225846-004		Reflector Tape
31.	**57-860507-000		Reflector and Hardware Pkg. (includes Index Nos. 1, 3, 4 & 8)

N.A. = No Longer Available

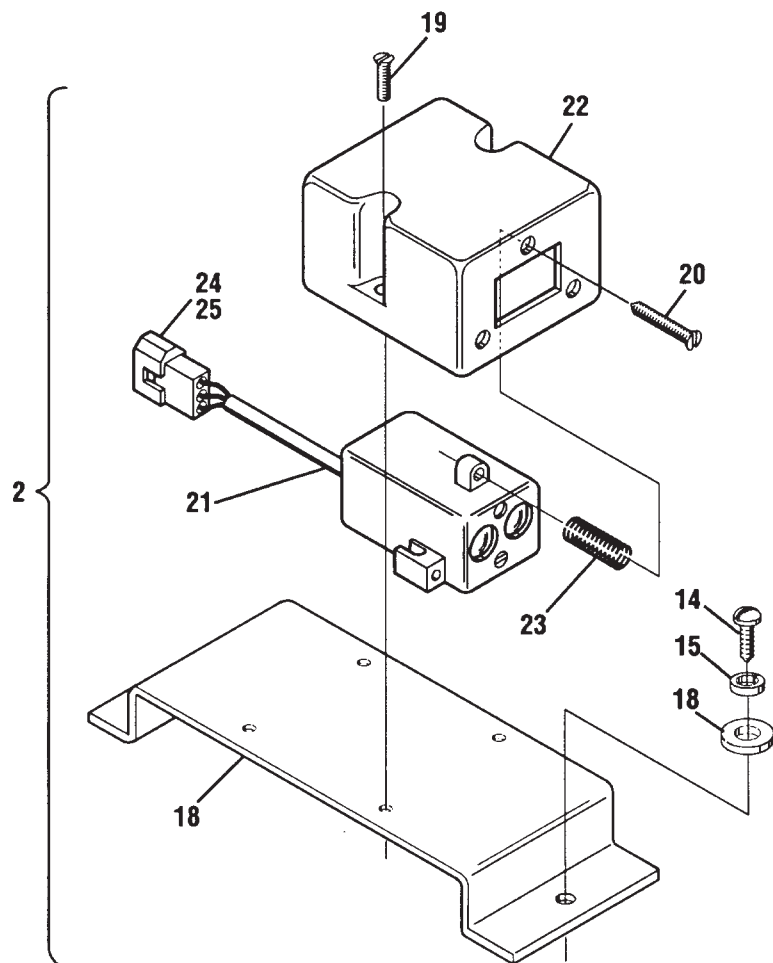
* Parts available in Reflector and Hardware Pkg. See index No. 31 for ordering.

** Not Illustrated

Reflector and Ball Detector Assemblies - Nexgen Controller Assembly



FOR UNITS SO EQUIPPED



Reflector and Ball Detector Assemblies - Nexgen Controller Assembly