

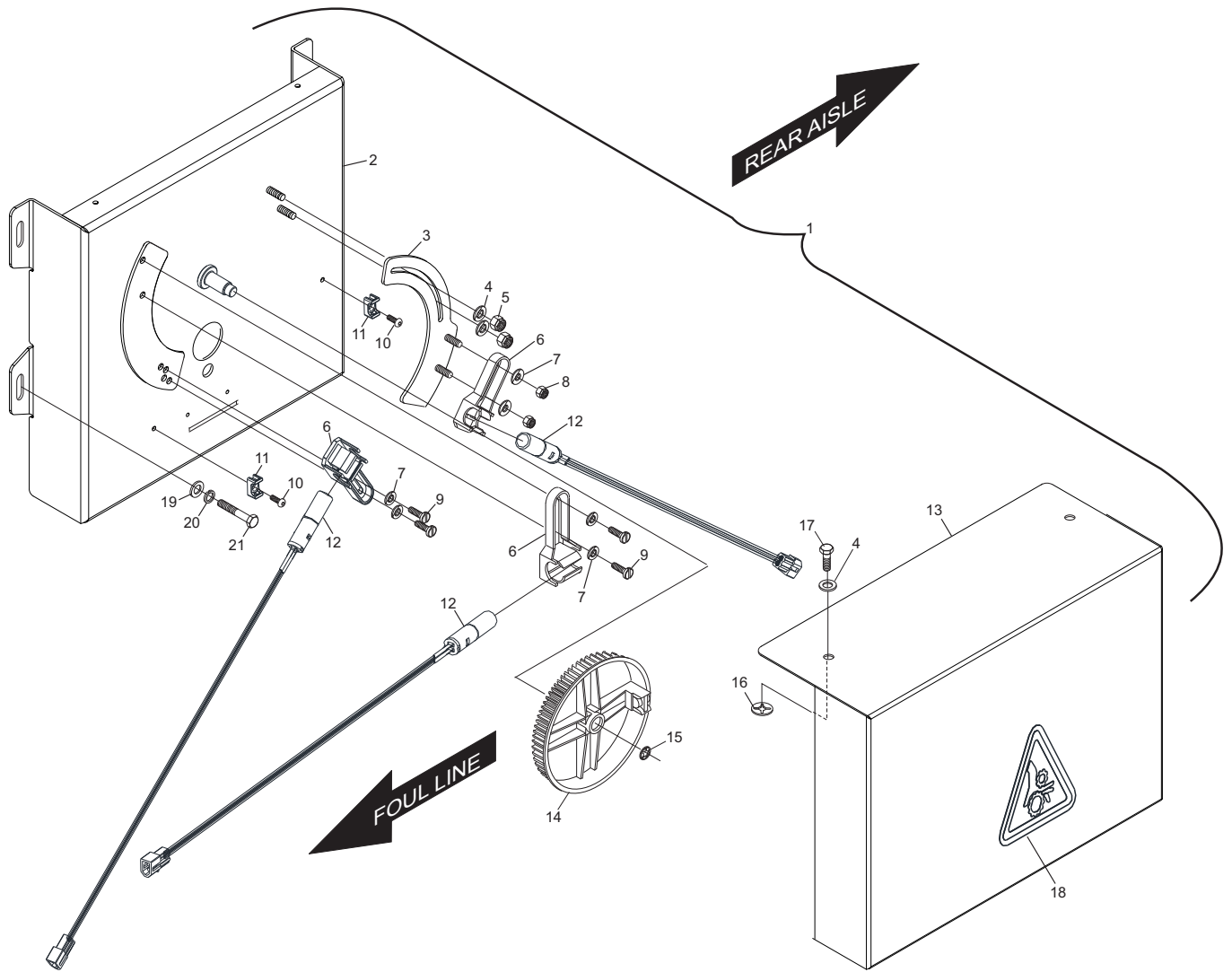
Section E

Electronics

Index No.	Part No.	Package / Order Reference	Description
1.	55-078115-009		Cluster Housing Assembly
2.	*55-078115-000		Cluster Housing
3.	55-078255-000		Switch Support 2 (Home Switch)
4.	11-052020-001		Flat Washer (5.3 mm x 12 mm x 1 mm)
5.	11-051742-001		Hex Locknut (M5)
6.	99-050181-004		Switch Holder
7.	11-052021-001		Flat Washer (4.3 mm x 12 mm x 1 mm)
8.	11-051741-001		Hex Locknut
9.	11-052354-001		Slotted Pan Head Machine Screw (M4 x 12 mm)
10.	11-054601-001		Pop Rivet
11.	99-226387-000		Cable Tie Holder
12.	55-143047-000		Assembly - Cluster Reed Switch
13.	55-078116-000		Cluster Cover
14.	55-078216-009		Cluster Gear Assembly
15.	11-053478-001		Quick Lock (Speed Nut)
16.	11-690553-000		Retainer - Push-On
17.	11-051069-001		Screw Hex Cap (M5 x 12 mm)
18.	99-268200-003		"Moving Parts" Safety Label
19.	11-052008-001		Flat Washer (10.5 mm x 20 mm x 2 mm)
20.	11-051769-001		Lock Washer (M10)
21.	11-051035-001		Screw Hex. Cap. (M6 x 16 mm)

* Not sold separately - order index number 1.

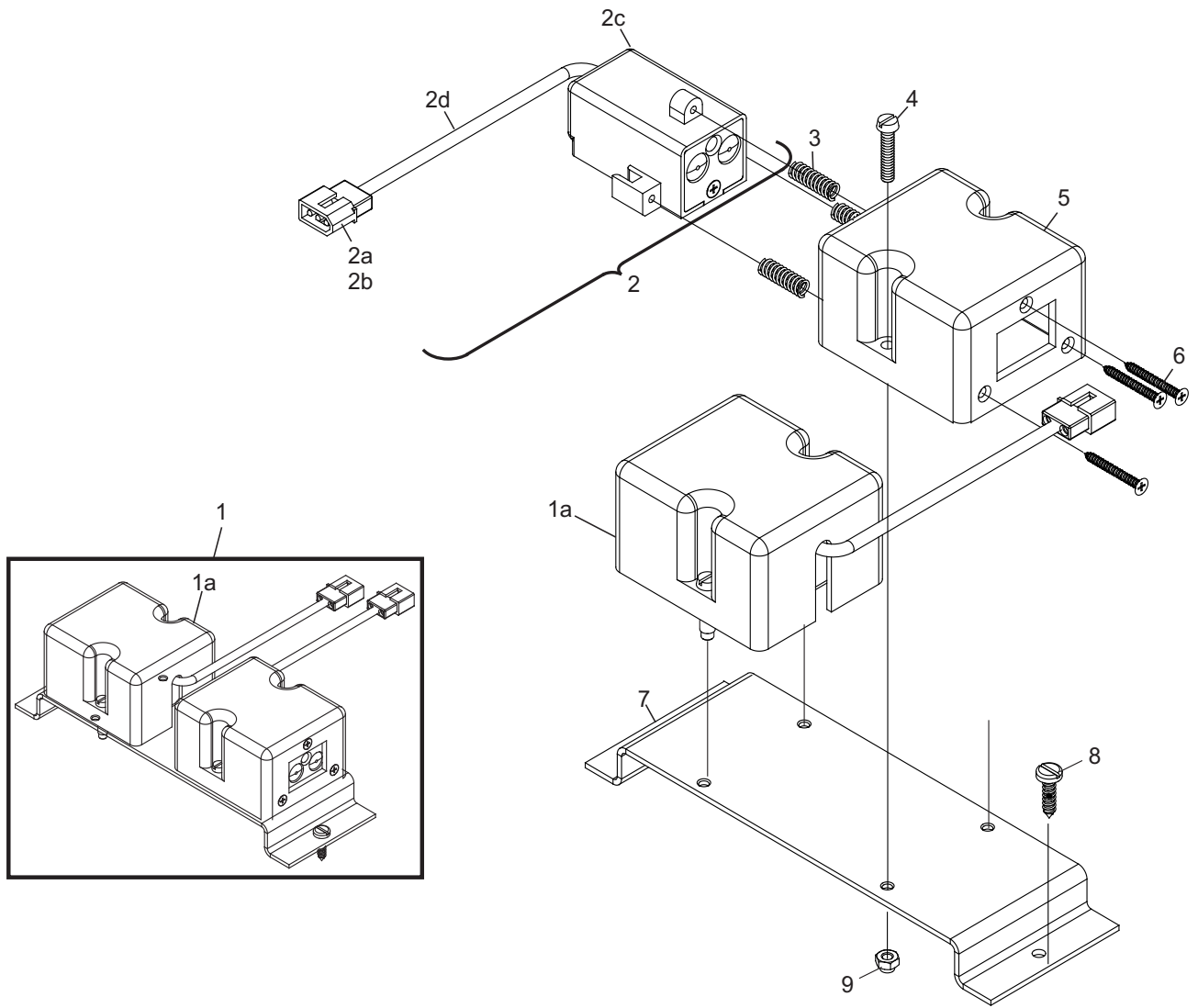
Switch Cluster



Switch Cluster

Index No.	Part No.	Package / Order Reference	Description
1.	99-087141-000		Ball Detect Assembly Complete
	1a. 99-087140-000		Ball Detect Only - Single Unit
2.	99-087139-000		Ball Detect Complete
	2a. 11-680101-000		Connector Plug (Molex)
	2b. 11-680302-000		Pin (Molex)
	2c. 99-080193-004		Ball Detector Box
	2d. 99-080269-004		Cable - Ball Detector
3.	99-080180-004		Compression Spring
4.	11-052211-001		Slotted Head Machine Screw
5.	99-080186-003		Ball Detect Housing
6.	11-086307-001		Flat Head Tapping Screw
7.	99-080213-003		Support Bracket
8.	11-053203-001		Tapping Screw
9.	11-051741-001		Metric Hex Locknut

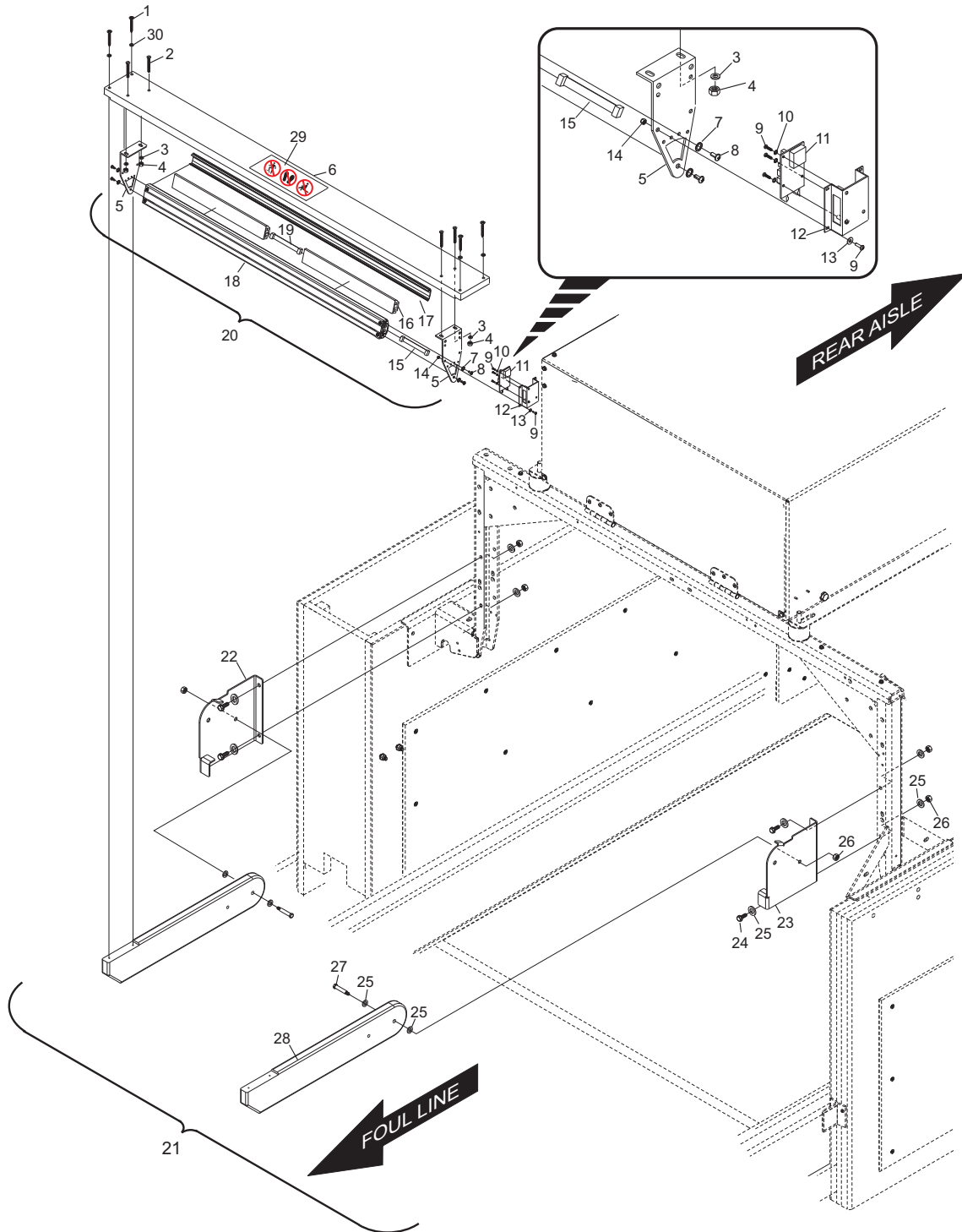
Ball Detect



Ball Detect

Index No.	Part No.	Package / Order Reference	Description
1.	11-081208-000		Screw - Flat Head Robertson (#10 X 2 Inch)
2.	11-051027-001		Screw Hex. Cap. (M5 x 40 mm)
3.	11-052020-001		Flat Washer (M5 x 12 mm)
4.	11-051742-001		Hex Locknut (M5)
5.	47-226757-000		LED Pinlight Bracket
6.	55-278163-002		Mounting Plate - Pin Light
7.	11-055013-015		Lock Washer - External Tooth (M5)
8.	11-053788-015		Screw (M5 x .8 mm x 12 mm)
9.	11-053800-015		Screw (M3 x .5 mm x 12 mm)
10.	11-055011-015		Lock Washer - External Tooth (M3)
11.	47-225589-000		Pin Light Controller PCB
12.	47-226856-000		Bracket for Pin Light Controller PCB
13.	11-052055-015		Washer (3.2 mm x 7 mm x .5 mm)
14.	11-051746-015		Locknut (M3)
15.	47-225111-000		Cable - Ribbon
16.	47-226586-000		LED Pinlight Board
17.	84-200242-302		Lens - LED Pinlight
18.	47-226549-000		LED Pinlight Enclosure
19.	47-226409-000		Cable - Ribbon
20.	47-226551-009		Assembly - LED Pinlight Complete With Brackets (Includes Index Numbers 5 - 19)
21.	55-868164-000		Pkg - Universal Pin Light Mount & Hardware - StringPin (Includes Index Numbers 1 - 4, 6, 22 - 32)
22.	55-278160-002		Pivot Bracket - Left
23.	55-278161-002		Pivot Bracket - Right
24.	11-051010-001		Screw Hex. Cap. (M8 x 20 mm)
25.	11-052017-001		Flat Washer (M8 x 15 mm)
26.	11-051744-001		Hex Locknut (M8)
27.	11-056101-001		Screw - Hex (M8 x 10 mm x 30 mm)
28.	55-278162-002		Pivot Arm - LED Pindeck Light
29.	11-681174-000		Label - Danger "No Step", "No Stand", "No Sit"
30.	11-190014-001		Flat Washer 3/8" (10.3 mm x 20 mm)
31.	47-226204-000		Assembly - Safety Pin (Not Shown)
32.	11-054728-001		Screw, P.H.C.R. Wood (M5 x 25 mm) For Safety Pin

StringPin Pinlight

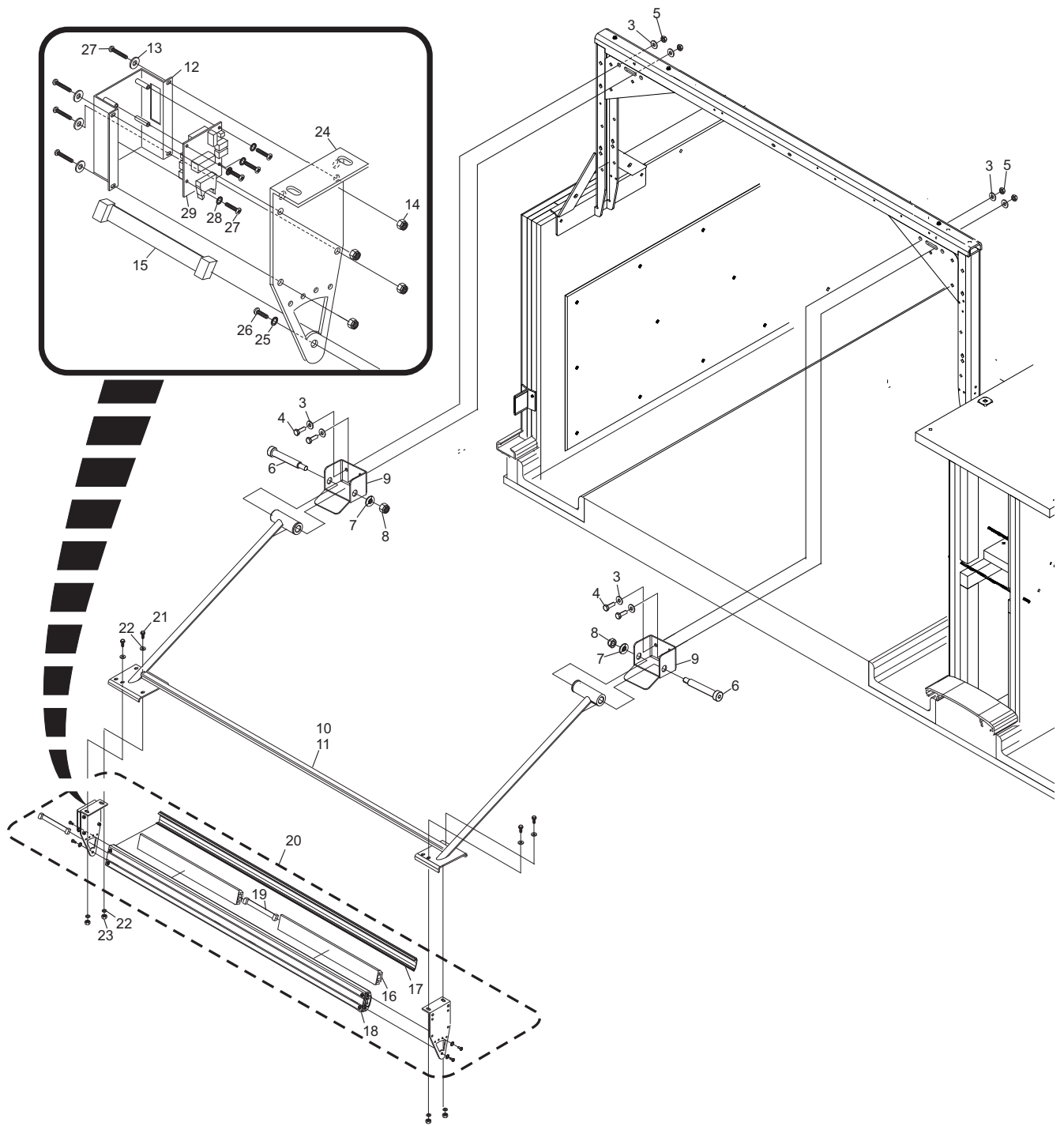


StringPin Pinlight

Index No.	Part No.	Package / Order Reference	Description
1.	55-278621-009		Pkg., L.H. Pivoting Pin Light (Left Lane) - shown
2.	*55-278615-009		Pkg., R.H. Pivoting Pin Light (Right Lane) - not shown
3.	11-052006-000		Flat Washer (8.4 mm x 20 mm x 2 mm)
4.	11-051015-001		Hex Cap Screw (M8 x 25 mm)
5.	11-051744-001		Metric Hex Locknut (M8)
6.	11-056104-000		Hex Socket Head Shoulder Bolt (M8 - 10 mm x 90 mm)
7.	11-052024-001		Flat Washer (13 mm x 30 mm x 16 mm)
8.	11-051747-001		Metric Hex Locknut (M12)
9.	55-278617-000		Frame Holder
10.	55-278622-000		L.H. Welded Frame - only (Left Lane) - shown
11.	*55-278616-000		R.H. Welded Frame - only (Right Lane) - not show
12.	47-226856-000		Bracket for Pin Light Controller PCB
13.	11-052055-001		Washer (3.2 mm x 7 mm x .5 mm)
14.	11-051746-015		Locknut (M3)
15.	47-225111-000		Cable - Ribbon
16.	47-226586-000		LED Pinlight Board
17.	84-200242-302		Lens - LED Pinlight
18.	47-226549-000		LED Pinlight Enclosure
19.	47-226409-000		Cable - Ribbon
20.	47-226551-009	47-860017-000	Assembly - LED Pinlight Complete With Brackets (Includes Index Numbers 12 - 19)
21.	11-051027-001		Screw Hex. Cap. (M5 x 40 mm)
22.	11-052020-001		Flat Washer (M5 x 12 mm)
23.	11-051742-001		Hex Locknut (M5)
24.	47-226757-000		LED Pinlight Bracket
25.	11-055013-001		Lock Washer - External Tooth (M5)
26.	11-053788-001		Screw (M5 x .8 mm x 12 mm)
27.	11-053800-001		Screw (M3 x .5 mm x 12 mm)
28.	11-055011-015		Lock Washer - External Tooth (M3)
29.	47-225589-000		Pin Light Controller PCB

* = Not Illustrated

StringPin Pivoting Pinlight

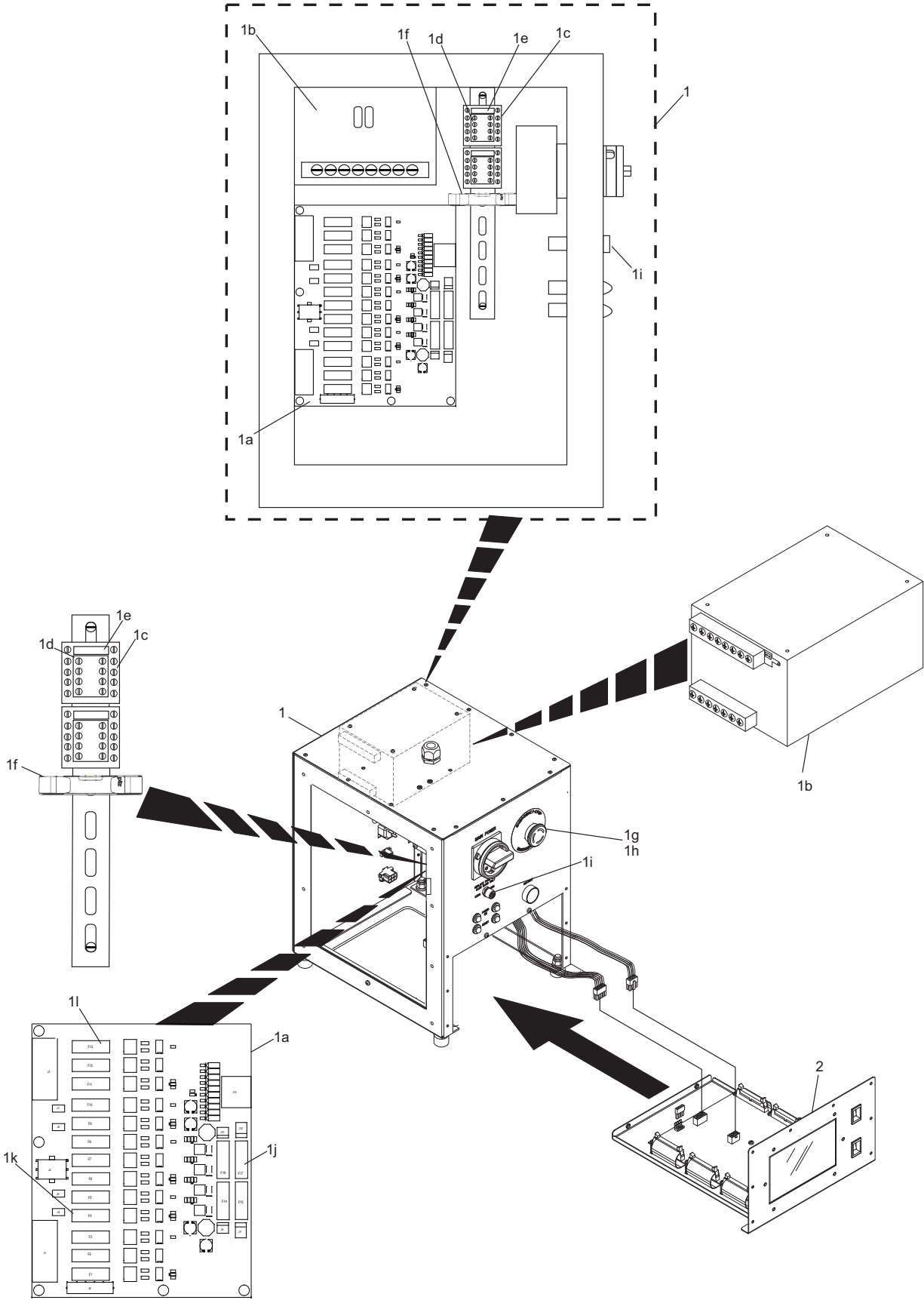


StringPin Pivoting Pinlight

Index No.	Part No.	Package / Order Reference	Description
1.	55-143072-000	55-860056-000	Pkg. 360 Controller Assembly - StringPin UL
	55-143026-000	55-860057-000	Pkg. 360 Controller - StringPin CE
1a.	55-143008-230	55-860059-230	High Voltage PCB (230V)
	55-143008-380	55-860059-380	High Voltage PCB (380V)
1b.	11-696982-000	55-860060-000	Power Supply (24V)
1c.	*11-671007-xxx		Power Contactor -12A
1d.	*11-671008-xxx		Contact Block - NC/NO
1e.	*11-671009-xxx		Surge Suppressor 24V
1f.	11-696694-000		Controller - Pilz (CE Only)
1g.	11-616037-000		Holder, Contact Block - Emergency Stop
1h.	11-616036-000		Button - Emergency Stop
1i.	11-685056-000		Fuse 250V .5A Fast Blo
1j.	11-685061-000	57-861636-000	Fuse 250V 1.0A Slow Blow - Pkg of 4 (Not Shown)
1k.	11-685062-000	14-860242-000	Fuse 250V 2.0A Slow Blow - Pkg of 5 (Not Shown)
1l.	11-685067-000	57-861874-000	Fuse 250V 3.0A Slow Blow - Pkg of 4 (230V Only)
2.	55-143054-400	55-860058-400	Slide Out Assembly - StringPin Ver 1.0 (Replaced by 55-860058-401)
	55-143054-401	55-860058-401	Slide Out Assembly - StringPin Ver 1.1.27 (Replaced by 55-860064-400)
	55-143090-400	55-860064-400	Slide Out Assembly - StringPin Ver 1.1.27
2a.	11-685060-000	47-862854-000	Fuse 250V 3.15 A Fast Blo - Pkg of 5 (Not Shown)

* xxx - 000 or 100 (Do Not Mix)

360 Controller



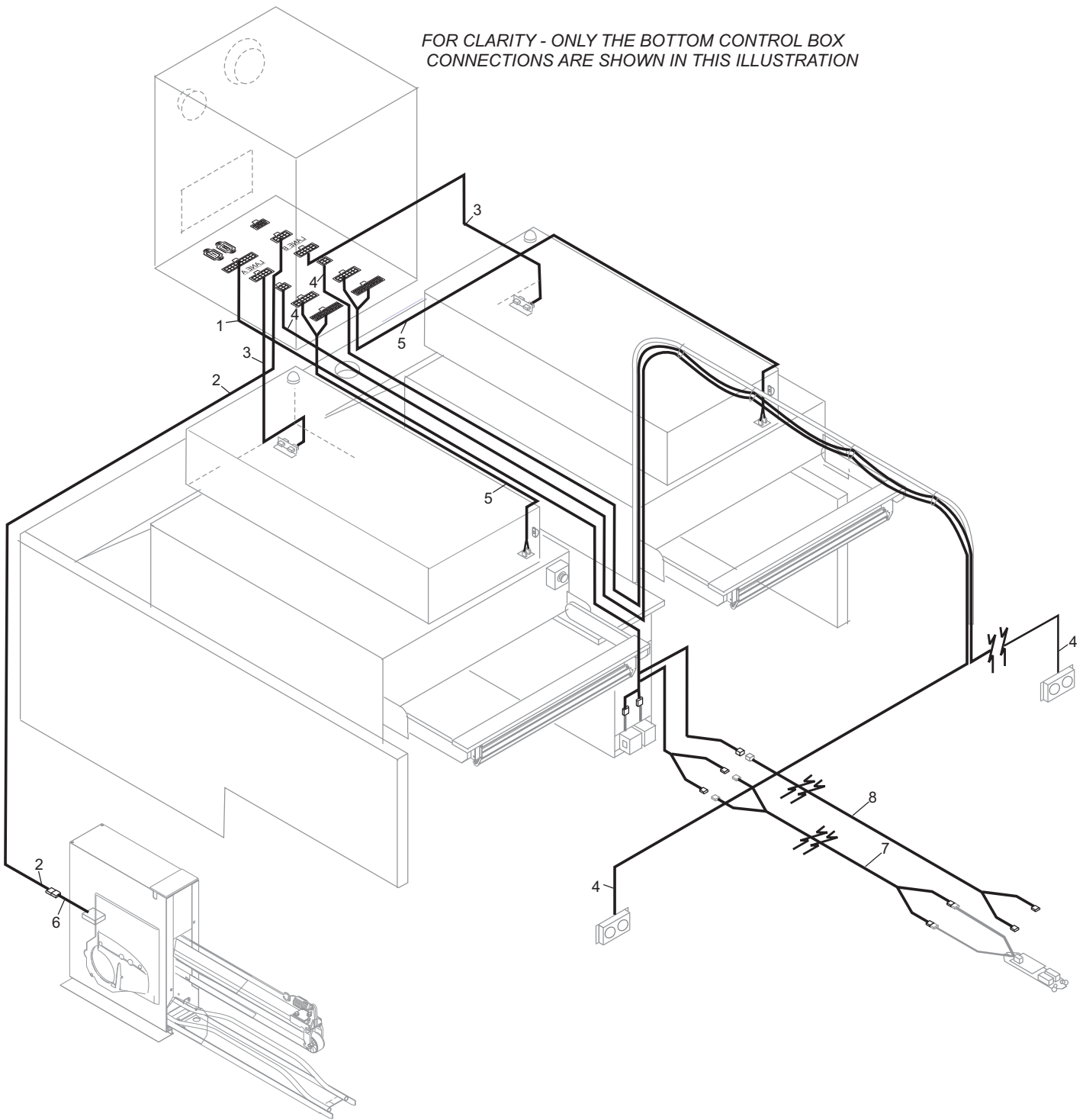
360 Controller

Index No.	Part No.	Package / Order Reference	Description
1.	55-143016-xxx		Foul Unit/ Ball Detect/ Ball Lift Cable Assembly
2.	55-143014-xxx		StringPin Ball Accelerator Overload Cable Assembly
3.	55-143068-xxx		StringPin Switch Cluster Ext Cable Assembly
4.	55-143015-xxx		1st/2nd Ball LED Lights Masking Unit Cable Assembly
5.	55-143012-xxx		Cable Assembly, String Pinsetter Control to PMI
6.	47-245429-004		Overload Switch Cable
7.	68-100659-000	47-862717-000	Foul To Optical Trigger Cable Assembly
8.	53-520588-000	53-860691-000	Lane Cable To Ball Lift

*xxx - 000 for rear mount controller
100 for front mount controller
200 for separated lane pair*

StringPin 360 Controller Bottom Connection Cabling

FOR CLARITY - ONLY THE BOTTOM CONTROL BOX CONNECTIONS ARE SHOWN IN THIS ILLUSTRATION



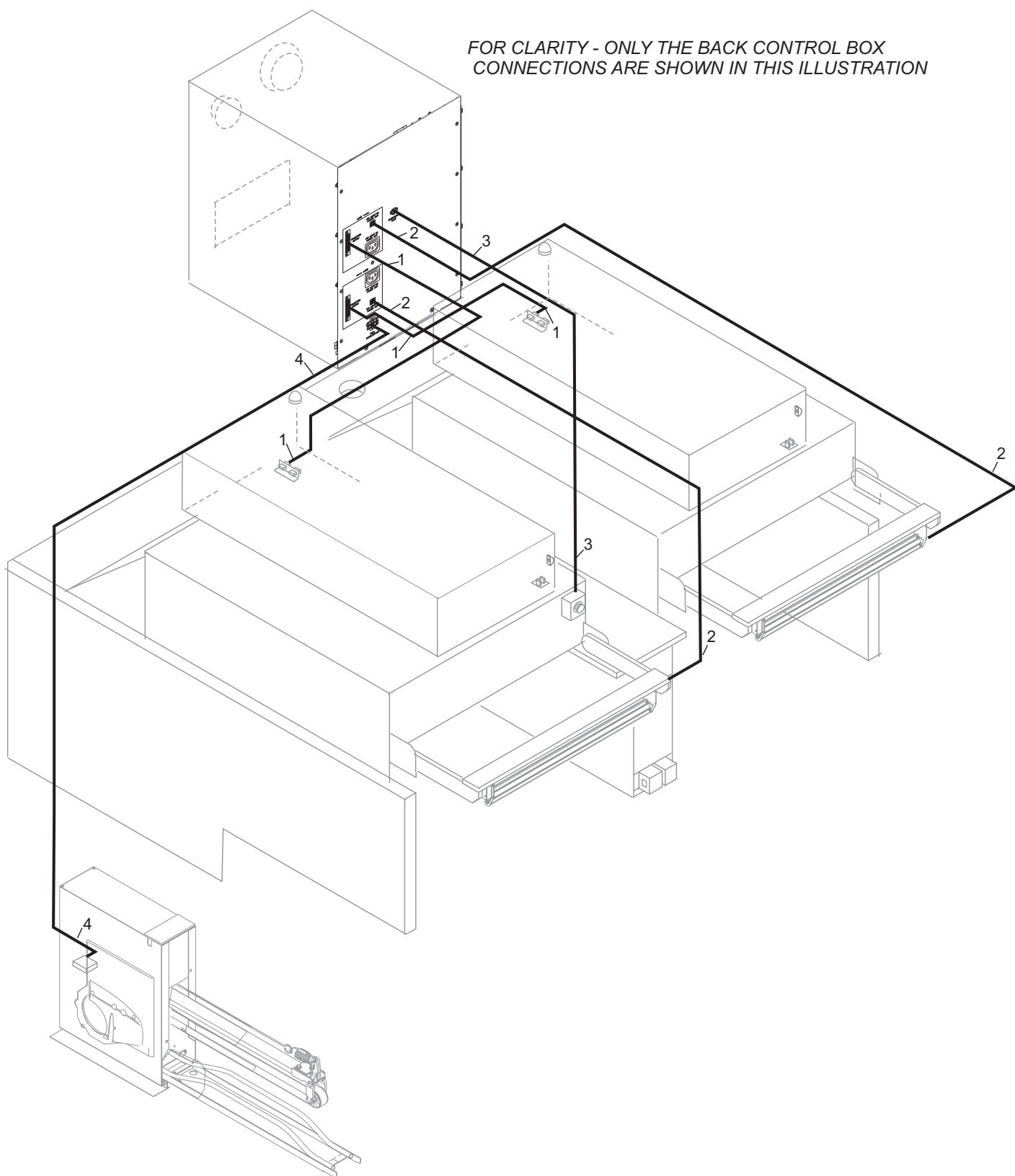
StringPin 360 Controller Bottom Connection Cabling

Index No.	Part No.	Package / Order Reference	Description
1.	55-143067-xxx		StringPin Motor Power Cable Assembly
2.	55-143069-xxx		String Pinsetter DC Pin Light Cable Assembly
3.	55-143013-xxx		Emergency Stop Box Assembly w/Cable
4.	47-246311-004		Ball Accelerator Motor Cable Assembly

*xxx - 000 for rear mount controller
100 for front mount controller
200 for separated lane pair*

StringPin 360 Controller Back Connection Cabling

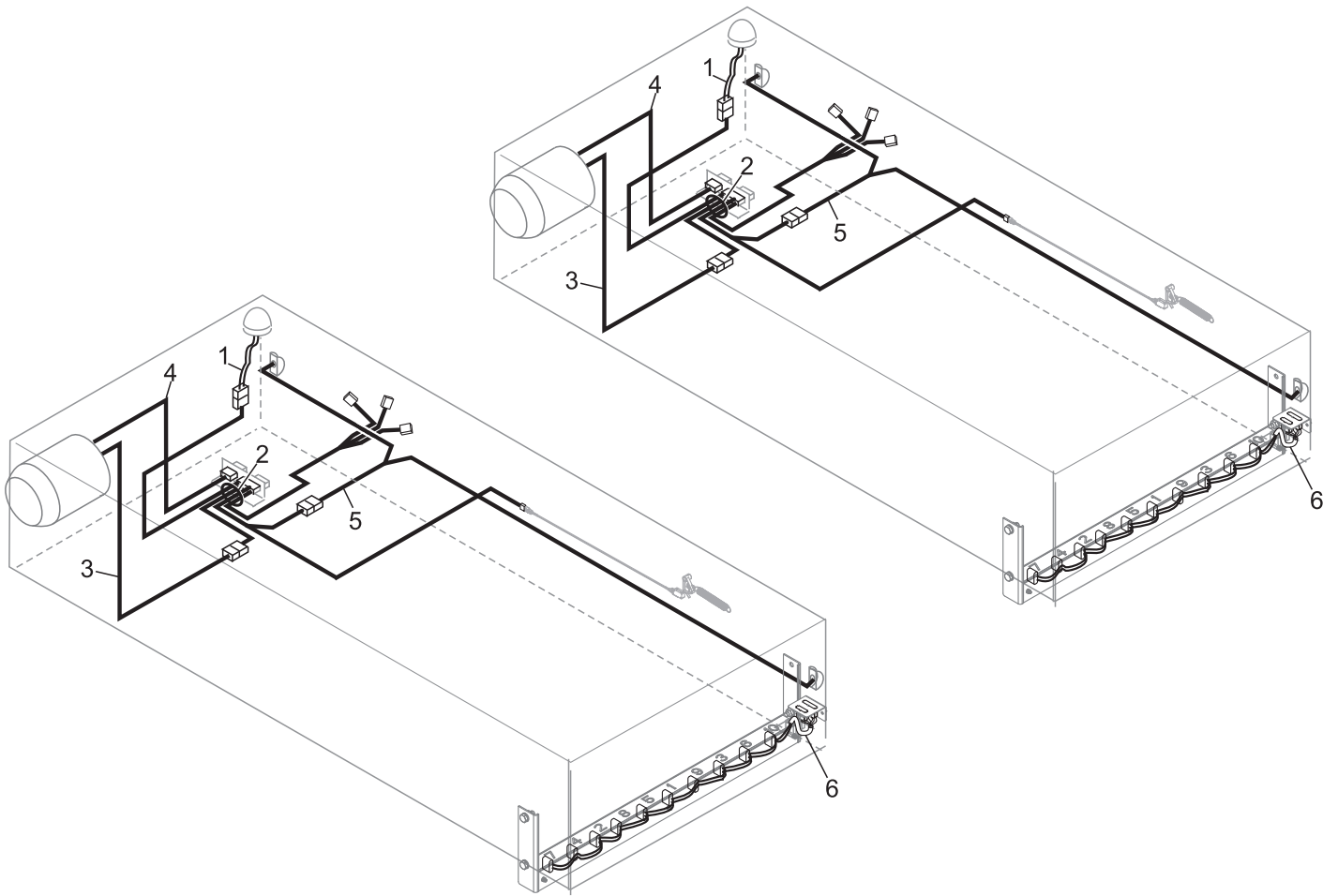
FOR CLARITY - ONLY THE BACK CONTROL BOX CONNECTIONS ARE SHOWN IN THIS ILLUSTRATION



StringPin 360 Controller Back Connection Cabling

Index No.	Part No.	Package / Order Reference	Description
1.	55-143019-000		StringPin Trouble Light Cable Assembly
2.	55-143010-000		StringPin Switch Cluster Cable
3.	55-143018-000		StringPin Motor Overload Cable
4.	55-143011-000		String Pinsetter Motor Cable Assembly
5.	55-143017-000		Mechanic's Stop Switch Cable Assembly
6.	55-143009-000		Pin Station Cable Assembly

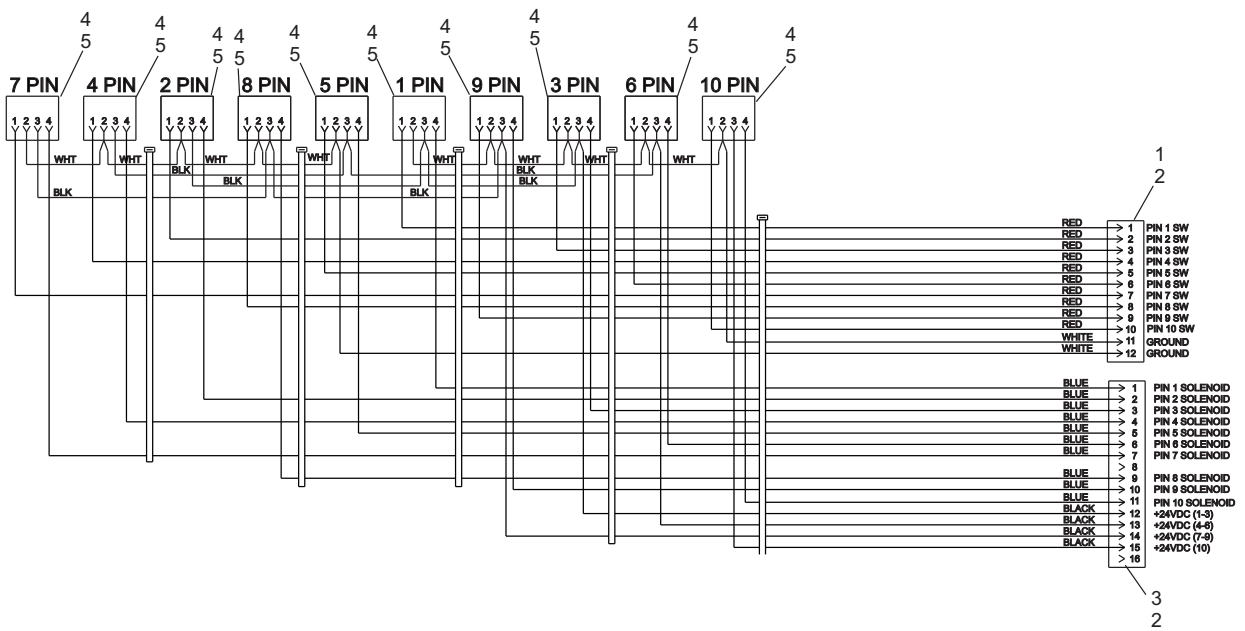
String Pinsettter Internal Cabling



String Pinsetter Internal Cabling

Index No.	Part No.	Package / Order Reference	Description
1.	11-692212-000		Connector Housing (12 Position Mini-Fit Jr.)
2.	11-692090-000		Terminal (Mini-Fit Jr. - Male)
3.	11-692005-000		Connector Housing (16 Position Mini-Fit Jr.)
4.	11-680301-000		Terminal (.062 Female)
5.	11-680205-000		Connector Housing (4 Position .062)

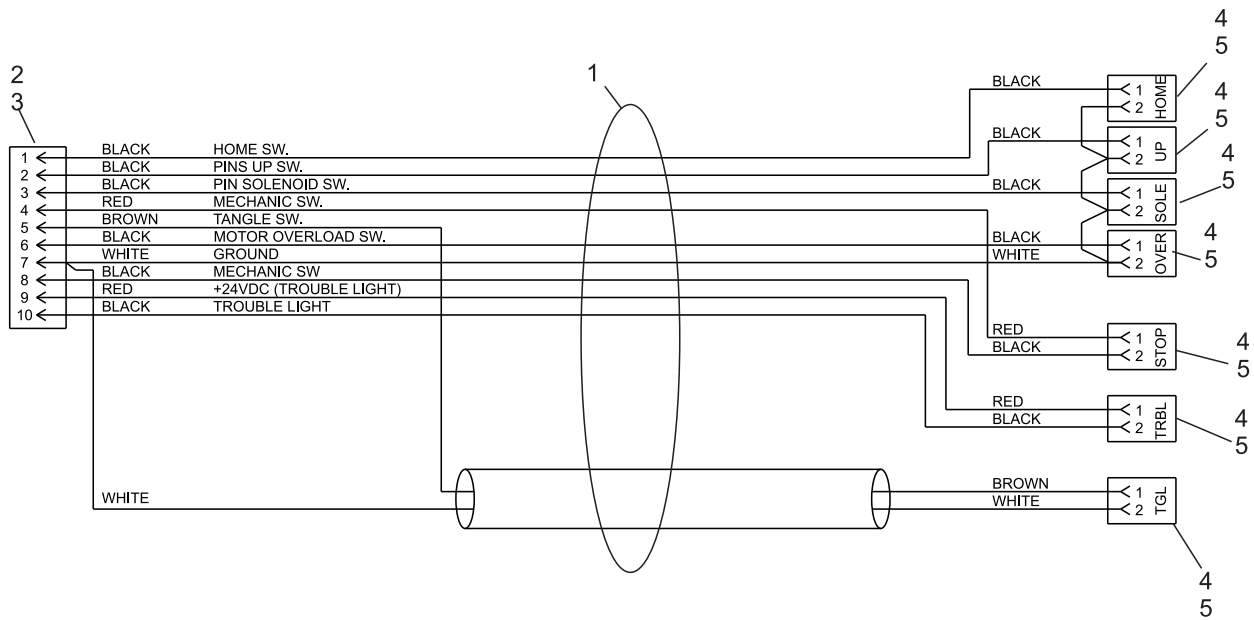
**Pin Station Cable Assembly
55-143009-000**



**Pin Station Cable Assembly
55-143009-000**

Index No.	Part No.	Package / Order Reference	Description
1.	55-143010-000		StringPin Switch Cluster Cable Assembly
2.	11-692210-000		Connector Housing (10 Position Mini-Fit Jr.)
3.	11-692090-000		Terminal (Mini-Fit Jr. - Male)
4.	11-680216-000		Connector Housing (2 Position .062)
5.	11-680301-000		Terminal (.062 Female)

**StringPin Switch Cluster Cable Assembly
55-143010-000**



StringPin Switch Cluster Cable Assembly
55-143010-000

Index No.	Part No.	Package / Order Reference	Description
1.	55-143011-000		String Pinsetter Motor Cable Assembly
2.	11-612010-000		Terminal - #8 Stud
3.	11-696738-000		4 Position Mate-N-Lok
4.	11-696737-000		Terminal - Socket, Mate-N-Lok

**StringPin Pinsetter Motor Cable Assembly
55-143011-000**

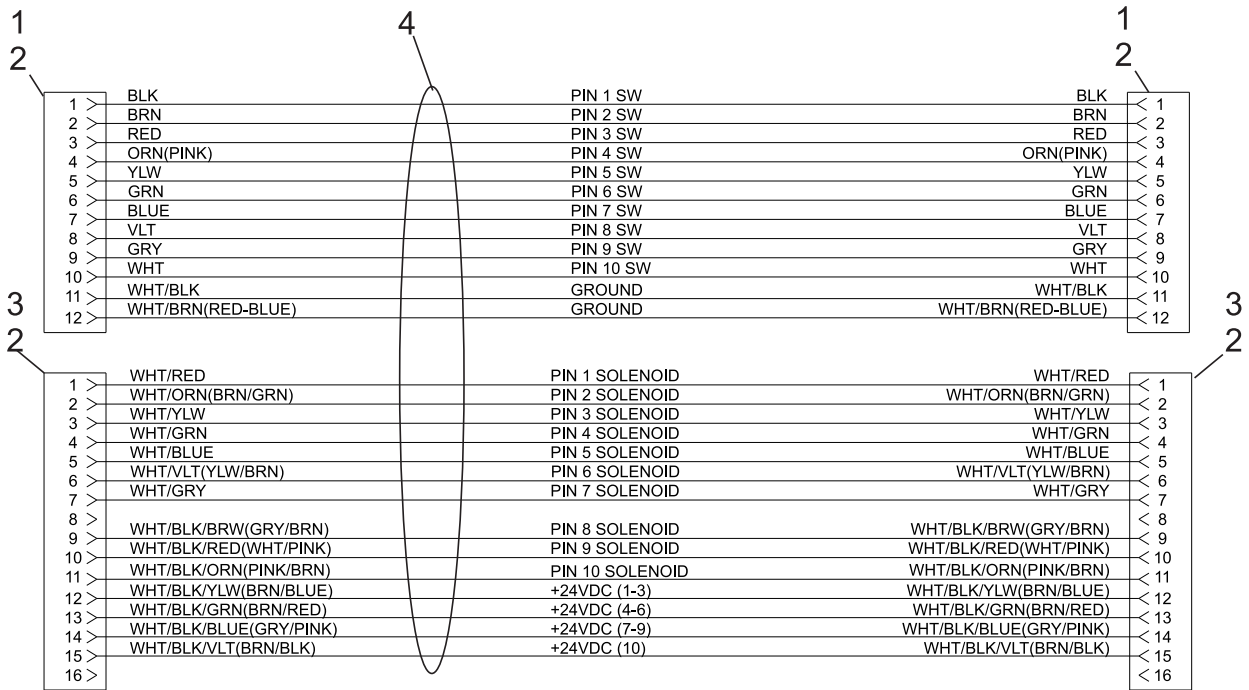


StringPin Pinsetter Motor Cable Assembly
55-143011-000

Index No.	Part No.	Package / Order Reference	Description
1.	11-692312-000		Connector Housing (12 Position Mini-Fit Jr.)
2.	11-692091-000		Terminal (Mini-Fit Jr. - Female)
3.	11-692856-000		Connector Housing (16 Position Mini-Fit Jr.)
4.	55-143012-xxx		Cable Assembly, String Pinsetter Control to PMI

*xxx - 000 for rear mount controller
100 for front mount controller
200 for separated lane pair*

**StringPin 360 Controller to PMI
55-143012-XXX**

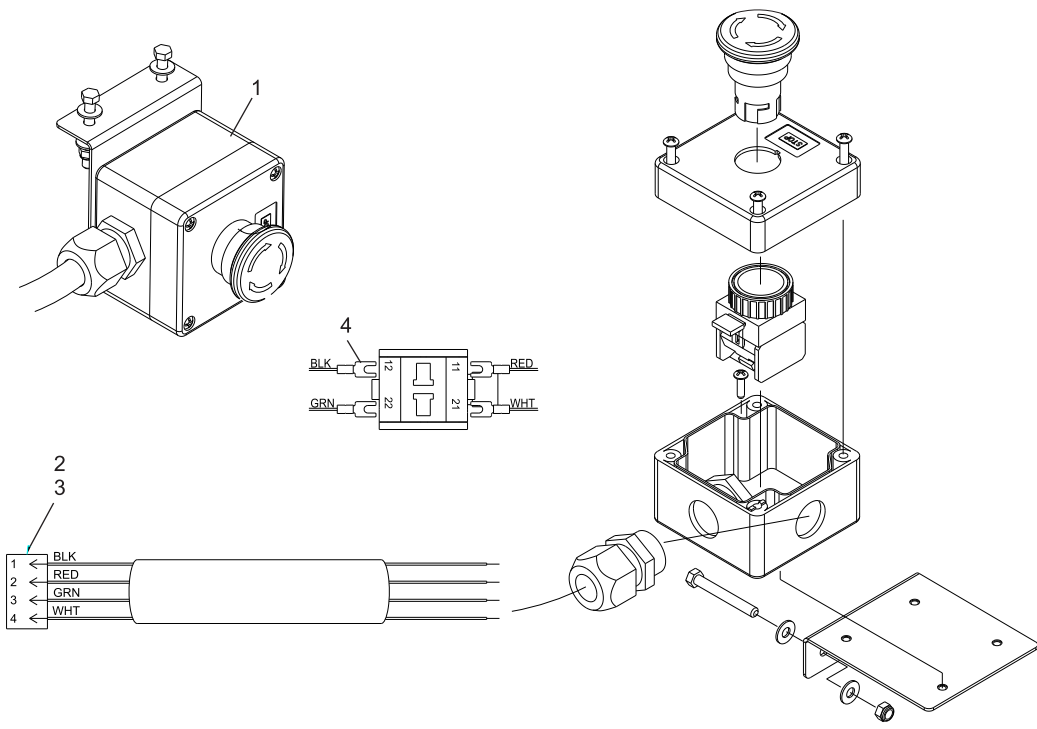


**StringPin 360 Controller to PMI
55-143012-XXX**

Index No.	Part No.	Package / Order Reference	Description
1.	55-143013-xxx		Emergency Stop Box Assembly
2.	11-692091-000		Terminal (Mini-Fit Jr. - Female)
3.	11-692304-000		Connector Housing (4 Position Mini-Fit Jr.)
4.	11-612000-000		Terminal - Fork #6

*xxx - 000 for rear mount controller
100 for front mount controller
200 for separated lane pair*

**StringPin Emergency Stop Box - Rear Mount Cable
55-143013-xxx**

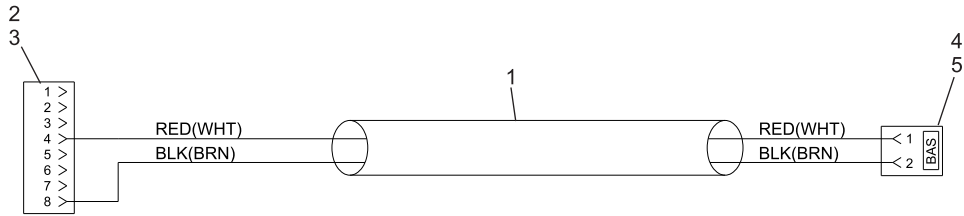


StringPin Emergency Stop Box - Rear Mount Cable
55-143013-xxx

Index No.	Part No.	Package / Order Reference	Description
1.	55-143014-xxx		StringPin Ball Accelerator Overload Cable Assembly
2.	11-692091-000		Terminal - (Mini-Fit Jr. - Female)
3.	11-692308-000		Connector Housing (8 Position Mini-Fit Jr.)
4.	11-690216-000		Connector Housing (2 Position .062)
5.	11-680301-000		Terminal (.062 Female)

*xxx - 000 for rear mount controller
100 for front mount controller
200 for separated lane pair*

**Ball Accelerator Overload Cable - Rear Mount Cable
55-143014-XXX**

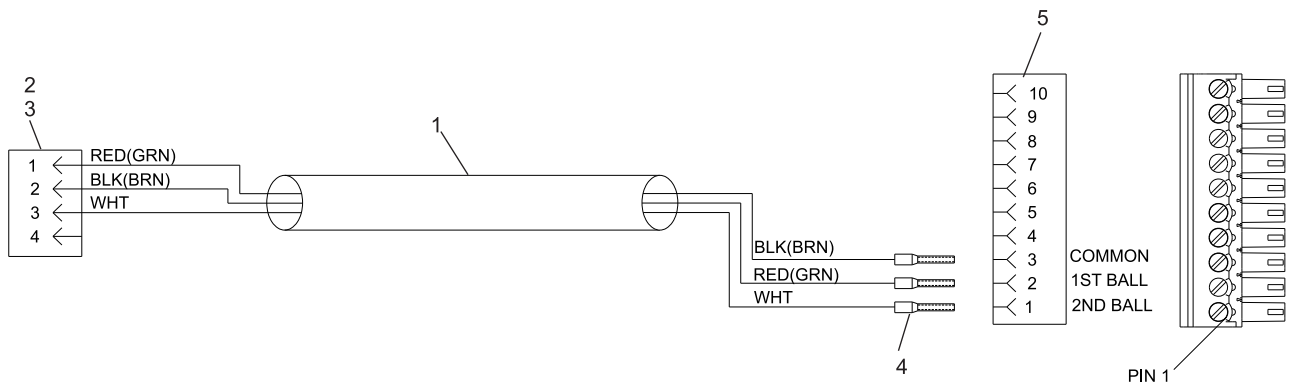


Ball Accelerator Overload Cable - Rear Mount Cable
55-143014-XXX

Index No.	Part No.	Package / Order Reference	Description
1.	55-143015-xxx		1st/2nd Ball LED Lights Masking Unit Cable Assembly
2.	11-692091-000		Terminal (Mini-Fit Jr. - Female)
3.	11-692304-000		Connector Housing (4 Position Mini-Fit Jr.)
4.	11-680831-000		Ferrule
5.	11-697996-000		Connector Housing (10 Position)

*xxx - 000 for rear mount controller
100 for front mount controller
200 for separated lane pair*

**1st and 2nd Ball LED lights Cable Assembly
55-143015-XXX**

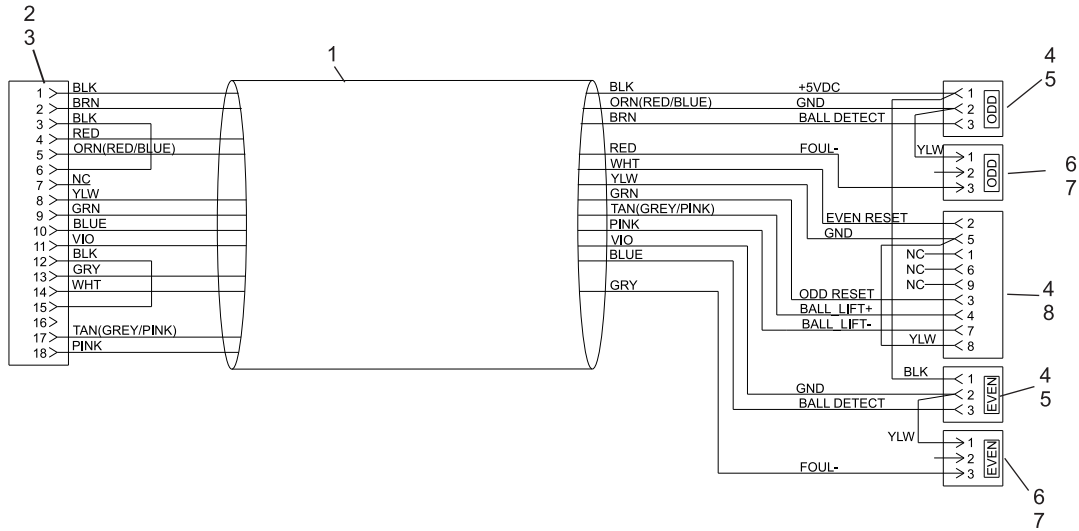


**1st and 2nd Ball LED lights Cable Assembly
55-143015-XXX**

Index No.	Part No.	Package / Order Reference	Description
1.	55-143016-xxx		Foul Unit/ Ball Detect/ Ball Lift Cable Assembly
2.	11-692091-000		Terminal (Mini-Fit Jr. - Female)
3.	11-692318-000		Connector Housing (18 Position Mini-Fit Jr.)
4.	11-680301-000		Terminal (.062 Female)
5.	11-680201-000		Connector Housing (3 Position .062 Receptacle)
6.	11-680302-000		Terminal - (.062 Male)
7.	11-680101-000		Connector Housing (3 Position .062 Plug)
8.	11-680204-000		Connector Housing (9 Position .062 Receptacle)

*xxx - 000 for rear mount controller
100 for front mount controller
200 for separated lane pair*

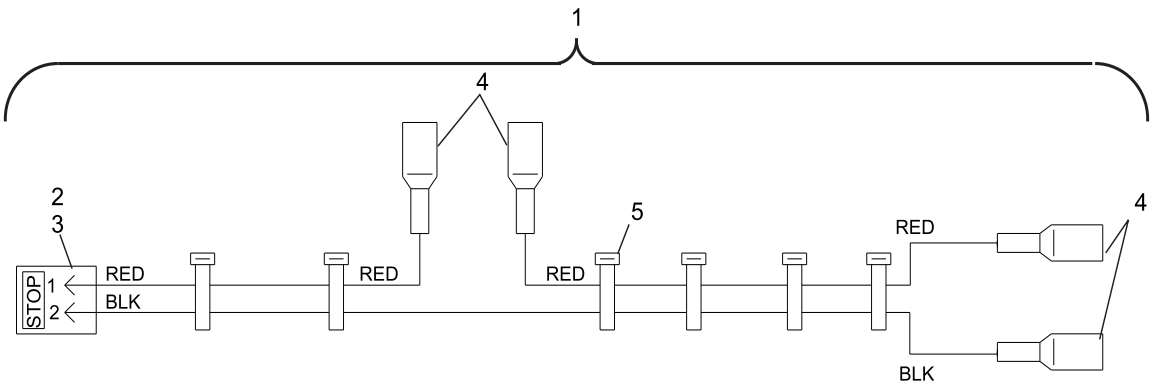
**Foul/Ball lift/ Ball Detect ,Cable Assembly
55-143016-XXX**



**Foul/Ball lift/ Ball Detect ,Cable Assembly
55-143016-XXX**

Index No.	Part No.	Package / Order Reference	Description
1.	55-143017-000		String Pinsetter Mechanic's Stop Switch Cable Assembly
2.	11-680116-000		Connector Housing (2 Position .062 Plug)
3.	11-680302-000		Terminal - (.062 Male)
4.	11-612152-000		Terminal - Faston
5.	11-603115-000		Wire Tie - 4"

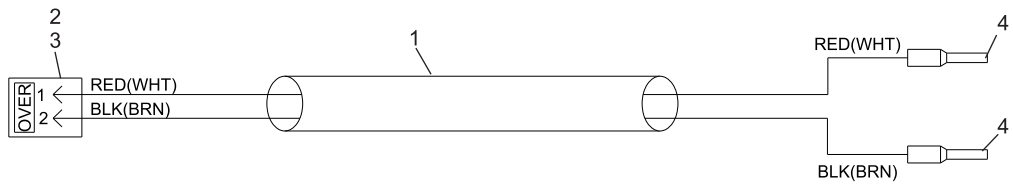
**String Pinsetter Mechanic's Stop Switch Cable Assembly
55-143017-000**



**String Pinsetter Mechanic's Stop Switch Cable Assembly
55-143017-000**

Index No.	Part No.	Package / Order Reference	Description
1.	55-143018-000		StringPin Motor Overload Cable Assembly
2.	11-680116-000		Connector Housing (.062 Plug)
3.	11-680302-000		Terminal (.062 - Male
4.	11-680831-000		erminal Ferulle

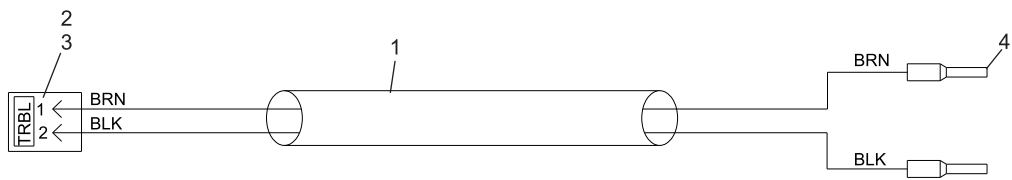
**String Pinsetter Motor Overload Cable Assembly
55-143018-000**



String Pinsetter Motor Overload Cable Assembly
55-143018-000

Index No.	Part No.	Package / Order Reference	Description
1.	55-143019-000		StringPin Trouble Light Cable Assembly
2.	11-680116-000		Connector Housing (.062 Plug)
3.	11-680302-000		Terminal (.062 - Male
4.	11-680831-000		Terminal Ferulle

**String Pinsetter Trouble light Cable Assembly
55-143019-000**

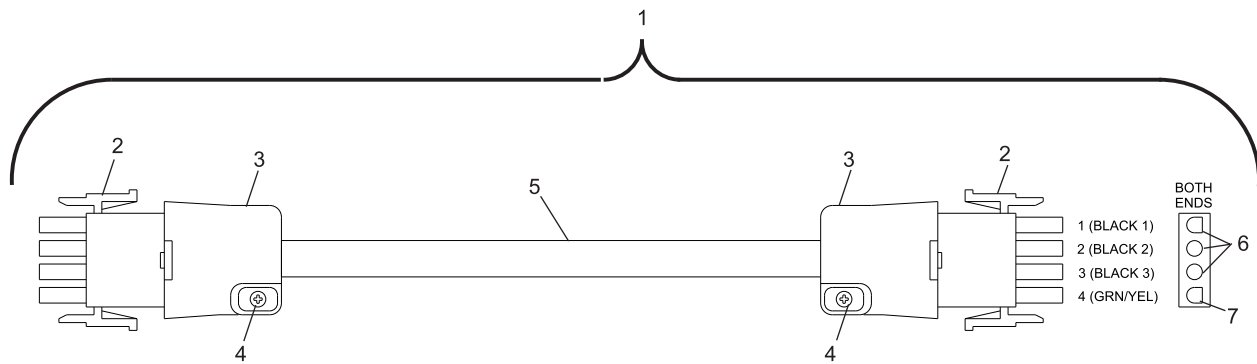


String Pinsetter Trouble Light Cable Assembly
55-143019-000

Index No.	Part No.	Package / Order Reference	Description
1.	55-143067-xxx		StringPin Motor Power Cable Assembly
2.	11-696703-000		Connector Housing (4 Position Mate-N-Lok Plug)
3.	11-696721-000		Strain Relief, Cover (4 Position)
4.	11-082521-001		Screw (#6 x 3/8")
5.	27-619208-000		4 Conductor Cable (4500 mm)
6.	11-696736-000		Terminal - Pin, Mate-N-Lok
7.	11-696735-000		Terminal - Pin, Mate-N-Lok, Ground

*xxx - 000 for rear mount controller
100 for front mount controller
200 for separated lane pair*

**StringPin Motor Power, Cable Assembly - Rear Mount Cable
55-143067-XXX**

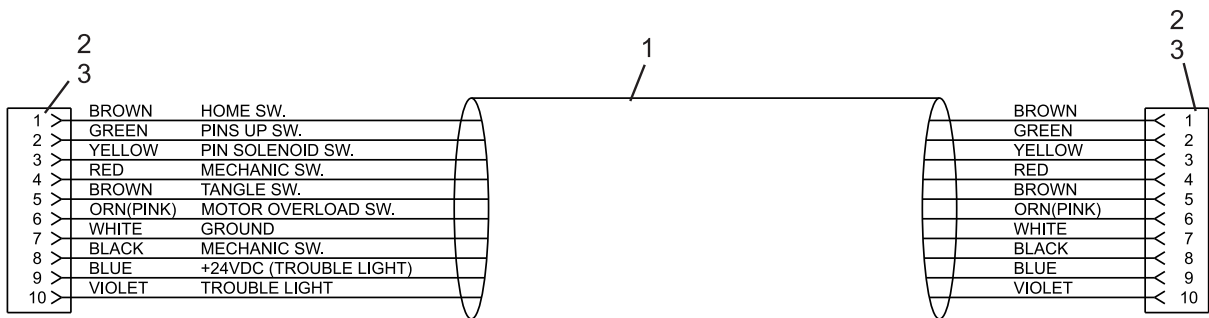


**StringPin Motor Power, Cable Assembly - Rear Mount Cable
55-143067-XXX**

Index No.	Part No.	Package / Order Reference	Description
1.	55-143068-xxx		String Pinsetter Switch Cluster EXT Cable Assembly
2.	11-692309-000		Connector Housing (10 Position Mini-Fit Jr. Receptacle)
3.	11-692091-000		Terminal (Mini-Fit Jr. - Female)

*xxx - 000 for rear mount controller
100 for front mount controller
200 for separated lane pair*

**String Pinsetter Switch Cluster EXT Cable Assembly
55-143068-XXX**

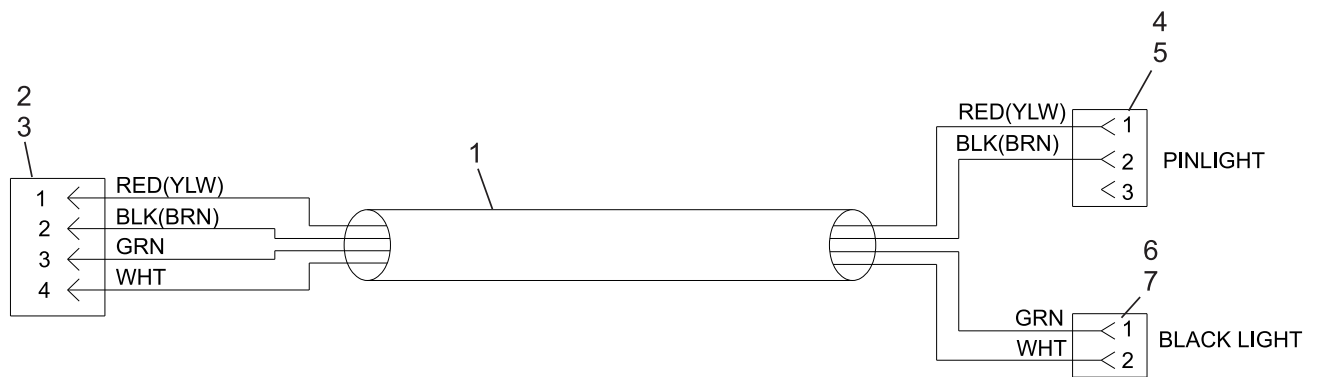


**String Pinsetter Switch Cluster EXT Cable Assembly
55-143068-XXX**

Index No.	Part No.	Package / Order Reference	Description
1.	55-143069-xxx		String Pinsetter DC Pinlight Cable Assembly
2.	11-680019-000		Connector Housing (2 Position Plug .062)
3.	11-680302-000	57-860032-000	Terminal (.062 Male), Pkg Qty - 10
4.	11-697237-000		Connector Housing (3 Position .100kk)
5.	11-680326-000		Terminal (.100kk)
6.	11-697204-000		Connector Housing (2 Position.156kk)
7.	11-680322-000		Terminal (.156kk)

xxx - 000 for rear mount controller
100 for front mount controller
200 for separated lane pair

**String Pinsetter DC Pinlight Cable Assembly
55-143069-XXX**



**String Pinsetter DC Pinlight Cable Assembly
55-143069-XXX**