



IMPORTANT SAFETY INSTRUCTIONS

Please read this manual carefully and follow its instructions. Improper use or failure to follow these instructions could result in serious injury, death or property damage. Operators should be instructed in the safe and proper use and maintenance of this product. Keep this manual for future reference.

The following safety precautions call attention to potentially dangerous conditions.



DANGER: Immediate hazards which **WILL** result in severe personal injury or death.



WARNING: Hazards or unsafe practices which **COULD** result in severe personal injury or death.



CAUTION: Hazards or unsafe practices which **MAY** result in *minor* personal injury or product or property damage.

NOTE: Instruct operators in the safe, proper use and maintenance. Keep this manual for future reference.

INSTALLATION



WARNING: Failure to read, understand or follow these instructions could lead to hazards or unsafe practices **COULD** result in severe personal injury or death.



CAUTION: Operators need to be instructed on the safe, proper use and maintenance of this product. Keep this manual for future references. Hazards or unsafe practices **MAY** result in *minor* personal injury or product or property damage.

MOUNTING

Reel may be mounted with base up or down. The motor is not designed to operate in a vertical position. The reel is driven through open gears, and the motor is equipped with a brake which locks reel when current is off. A fully adjustable four-roller cable guide is provide which can be adjusted to any desire position on the guide rail. The fixed base of the reel allows mounting in several different positions including base up, base down, or wall mounted.

- Main shaft must be horizontal.
- Centerline of the spool assembly must be in line with the cable run.
- When mounted overhead in base up position, add a secondary chain, bracket, or other safety device to prevent the reel from falling in case the mounting bolts are removed or become loosened from vibration.

SECONDARY SUPPORT CHAIN



WARNING: Failure to read, understand or follow these instructions could lead to hazards or unsafe practices **COULD** result in severe personal injury or death.

A secondary support chain is necessary for all reels mounted over head to protect personnel in case of failure in mounting components or the structure which they are attached. Attach one end of support chain to the reel. Attach other end of support chain to a support other than that, which supports reel.

WORKING CABLE INSTALLATION / REPLACEMENT

The procedures below apply to both new installations and for replacement of working cable.

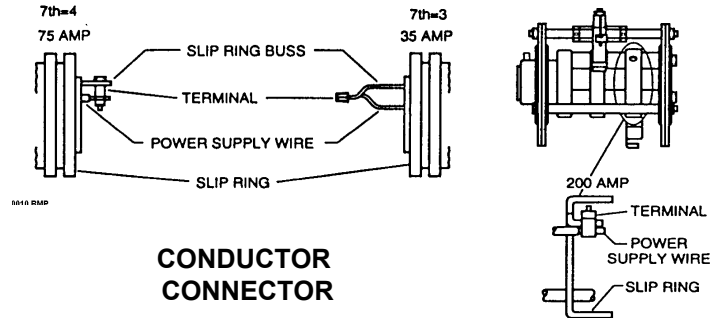


WARNING: Lock out all electrical power and remove all spring tension from the reel before opening any enclosures. Make sure all circuits carry appropriate fuse protection. Hazards or unsafe practices **COULD** result in severe personal injury or death.

Remove cover from entrance ring assembly. Then remove cable clamp from spool assembly and cable connector. To determine length to strip outer-jacket of working cable, insert working cable through gooseneck fitting, feed cable through connector until cable end reaches most distant brush terminal. Mark outer-jacket at location inside connector. Remove cable, and strip outer-jacket six inches above mark to ensure adequate conductor length to connect to brush terminals. Pass stripped end of working cable from inside spool assembly out through slot in flange adjacent to cable clamp. Insert cable through cable connector until outer-jacket becomes visible in fitting. Pass individual conductors through entrance ring assembly wall into collector assembly. Make sure individual conductors reach their proper brush terminals, then tighten watertight cable connector. Secure individual conductors to proper brush terminals. Install cable clamp making sure cable is not kinked or pinched. Tighten cable securely.

CONNECTING FIXED CABLE

Remove cover from junction box to gain access to slip ring lead wires in main shaft. See figure for connectors to be used at different amperages. Connect each supply conductor to corresponding lead wire from main shaft. Check continuity on each conductor, and replace junction box cover.



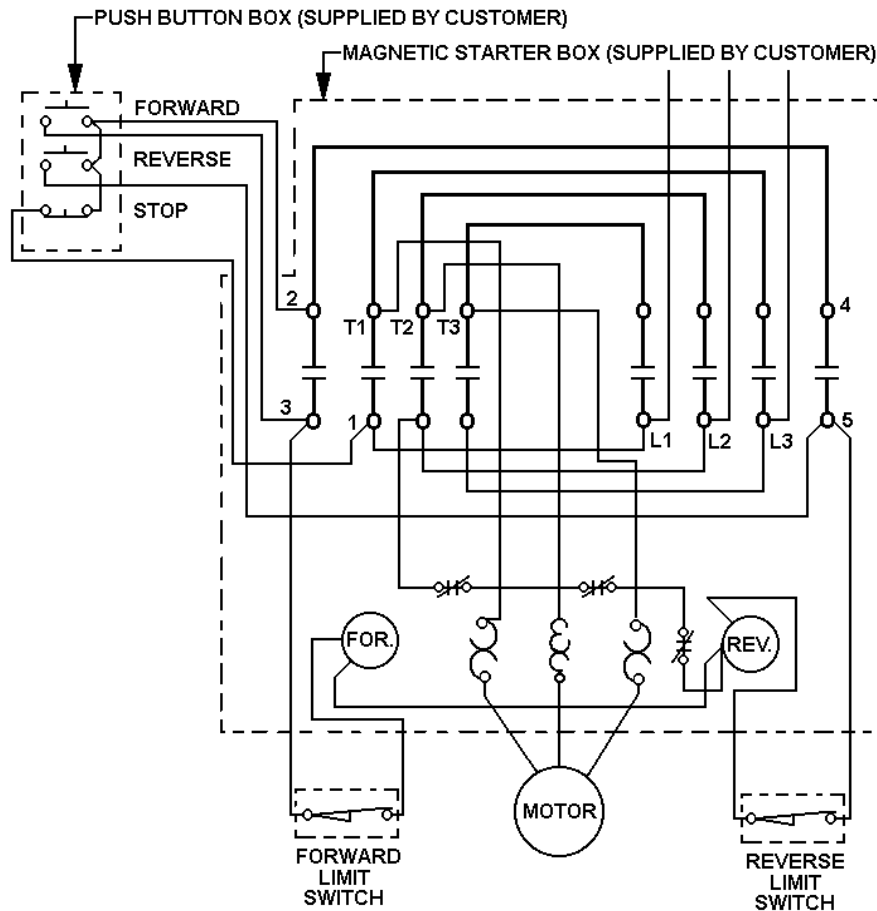
LOADING WORKING CABLE

Since spool is not freewheeling, cable can only be loaded by running the electric motor.

ELECTRICAL MOTOR & LIMIT SWITCH HOOK UP

A rotary limit switch, which operates from the main gear, may be adjusted when wired into the motor circuit to stop reel at both the up and down positions. This switch is equipped with two sets of normally open and normally closed contacts. To make Cam adjustments in switch, remove cover plate. Motor controls are not included & must be supplied by customer. The illustration below is a typical starter-wiring diagram showing integration of motor & limit switch. Check motor nameplate for rated Voltage and required Amps. Most motors are 3 phase, 1/3hp, or 1/2hp motors, operating at 230-460Volts. The limit switch is to prevent damage to cable and is set accordingly to cable length. Set to trip just before full payout and complete cable wind-up. See instructions on inside lid of limit switch.

3 PHASE REVERSING MAGNETIC STARTER WIRING DIAGRAM



NOTE: FORWARD & REVERSE CONTACTS MECHANICALLY INTERLOCKED.

SERVICE

COLLECTOR RING ASSEMBLY

WARNING: Disconnect and lock out all power to reel before servicing collector ring assembly. Hazards or unsafe practices COULD result in severe personal injury or death.

To service the collector ring assembly, unscrew and remove the collector ring cover. Disconnect working cable lead wires from terminals of brush holder assemblies. Remove brush holder assemblies from brush studs by releasing the clip on the side of the brush holder. Do not scratch the surface of the collector ring assembly when removing the brush holder. Remove the connectors, disconnect lead wires from the collector ring assembly, and remove assembly by loosening setscrews and sliding collector ring off the main shaft. To reassemble, reverse the above procedure, making sure each brush is properly centered on its corresponding ring with full contact. The collector ring assembly should be snug against the entrance ring assembly.

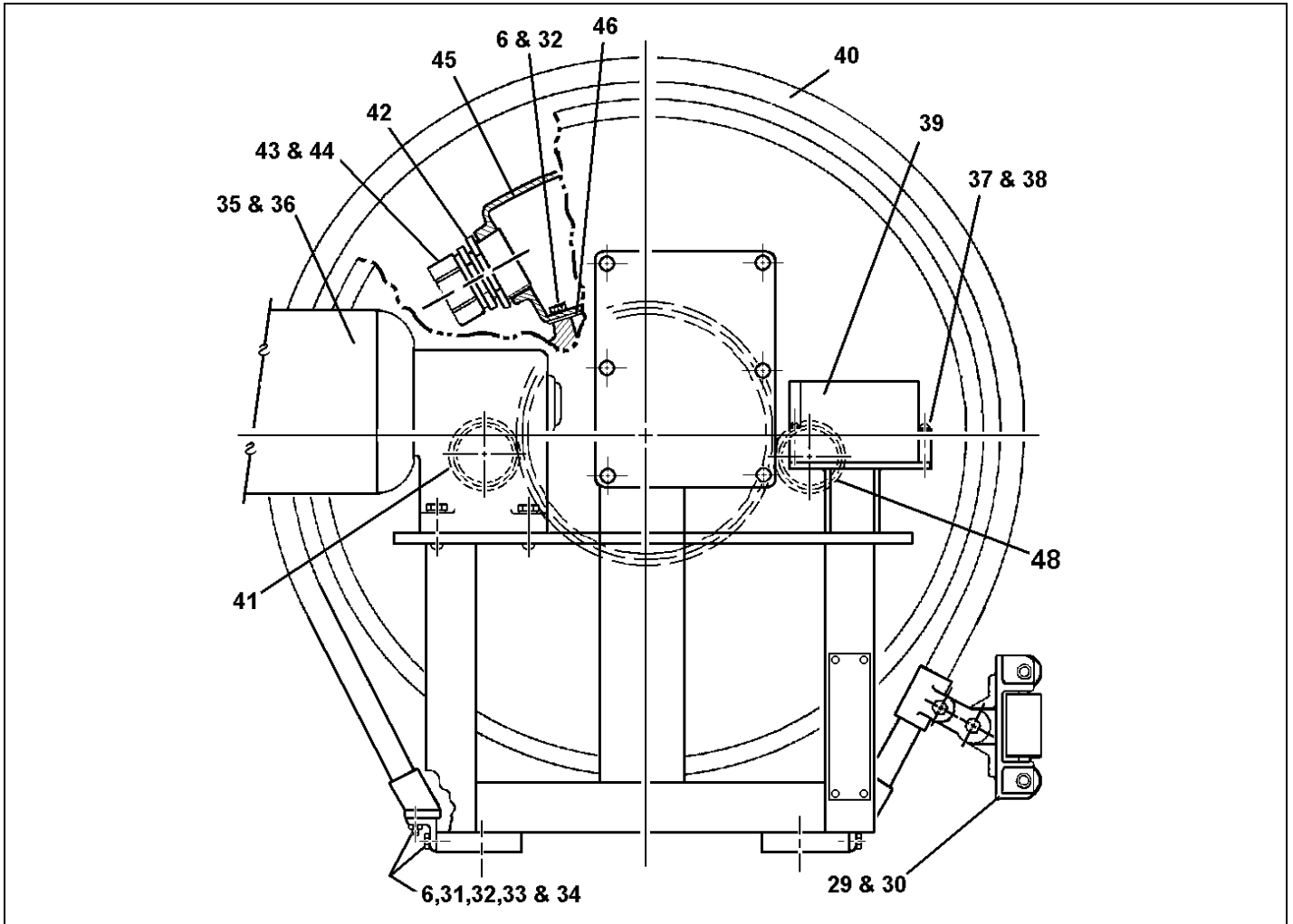
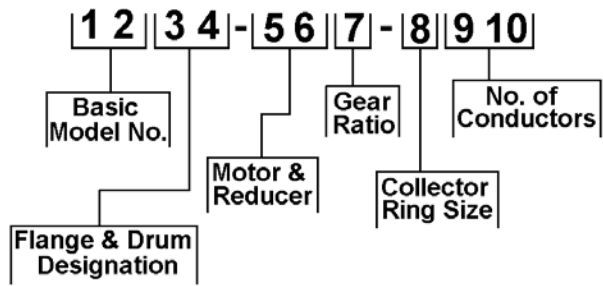
LUBRICATION

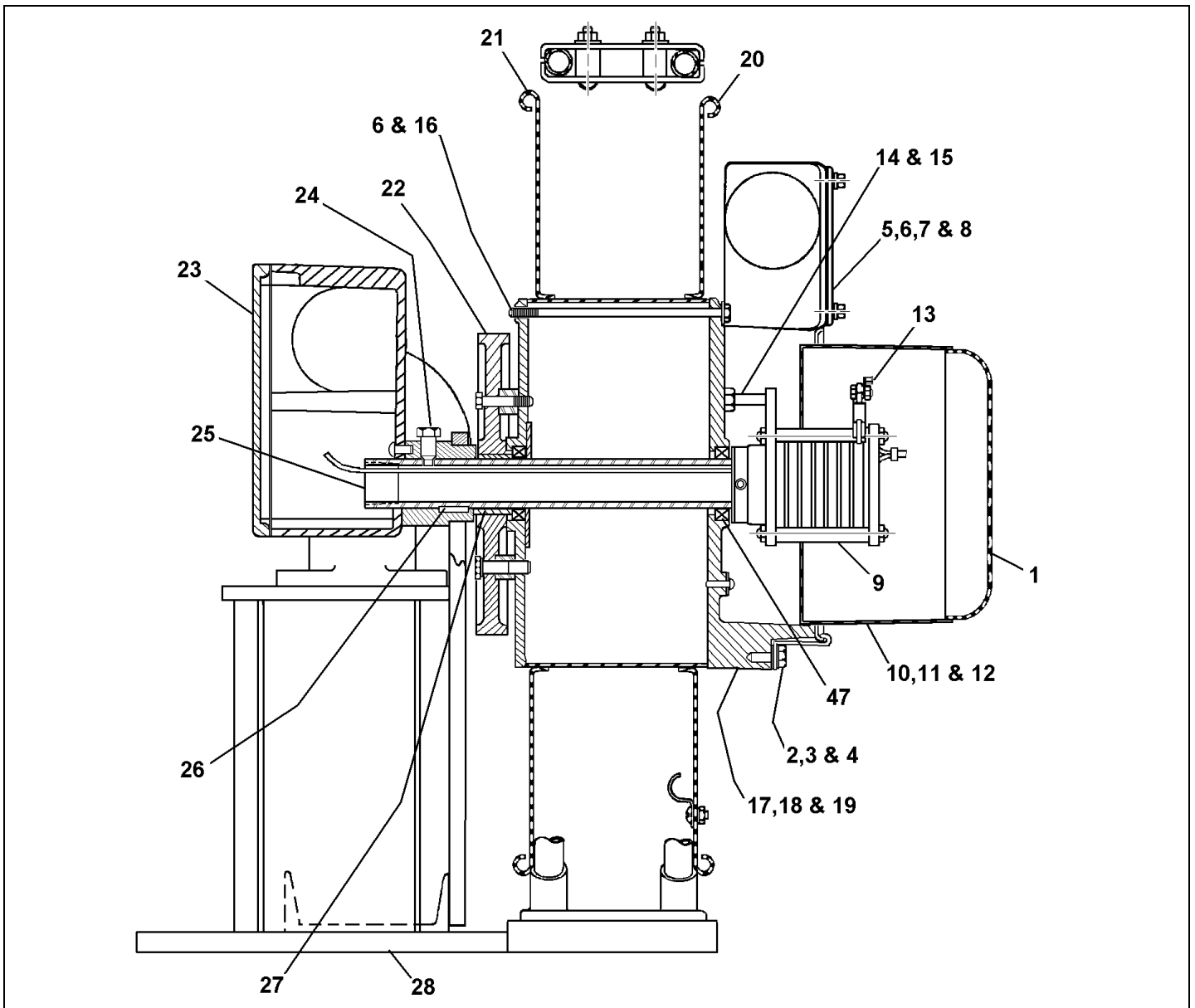
Bearings have been sufficiently lubricated at the factory to last for the normal life of the reel. If grease has been removed during maintenance, it should be replaced with good quality high-low, temperature grease (Texaco AFB 2 or equal). Bearings should be packed. The right angle gearbox has gears running in oil. Use an oil like Mobil 630 or Shell Omala 220.

WORKING CABLE INSTALLATION / REPLACEMENT

The procedures above for replacement of working cable.

REPLACEMENT PARTS





Reference Number *	Part Number	Qty.	Description
1	H82630032	1	Cover (302, 303, 304)
	H82630033	1	Cover (306, 308, 402, 403, 404, 902, 903)
	H82630034	1	Cover (310, 312)
	H82630035	1	Cover (904, 906, 320)
	H82630037	1	Cover (324)
	H82630039	1	Cover (330)
	H82630040	1	Cover (336)
2	M53800005	3	Clamp; Cover
3	00101P0030	3	Washer; Lock
4	00030P0715	3	Screw; Hex HD.
5	00030P0110	6	Screw; Hex HD Cap
6	00101P0030	24	Washer; Lock
7	5491100001	1	Cover; Junction Box
8	5491300000	1	Gasket; Junction box
9	SRxxx	1	Assembly; Collector Ring xxx = Digits 8.9.10
10	01149P0025	AR	Wire; Lead-In (non-ground) (Digits 8,9,10 = 302-320)
	01149P0020	AR	Wire; Lead-In (non-ground) (324)

	01149P0015	AR	Wire; Lead-In (non-ground) (330 -336)
	01149P0031	AR	Wire; Lead-In (non-ground) (402-404)
	01149P0030	AR	Wire; Lead-In (non-ground) =902-906)
11	00903P0001	AR	Connector; Wire (Digits 8,9,10 = 302-336)
	6150400002	2	Connector; Wire (402-404)
	N/A	N/A	Connector; Wire (902-906)
12	00904P0001	AR	Insulator ((Digits 8,9,10 = 302-336)
	N/A	N/A	Insulator (402-404, 902-906)
13	00042P0020	AR	Terminal (Digits 8,9,10 = 402-404)
14	00151P0035	1	Nut; Hex
15	4391100000	1	Stud; Drive
16	4014300034	6	Bolt; Cable Drum (Digits 1,2,3,4 = 4101)
	4014300035	6	Bolt; Cable Drum (4102)
	4014300038	6	Bolt; Cable Drum (4103)
17	M64560013	1	Entrance Ring
18	M14210027	1	Gasket
19	3743600000	1	Name Plate
20	4793400000	1	Spool Assembly (Digits 1,2,3,4 = 4101)
	4399000001	1	Spool Assy (4102)
	4399200022	1	Spool Assy (4103)
22	4792700001	1	Assembly; Gear & End Plate Digits 6 & 7= 21, 11, 31)
	4792700002	1	Assembly; Gear & End Plate (12, 22, 32)
	4792800000	1	Assembly; Gear & End Plate (13, 33, 23)
23	4373400023	AR	Junction Box (.375"- .929" Cable O.D.)
	4373400030	AR	Junction Box (.930"-1.065" Cable O.D.)
	4373400031	AR	Junction Box (1.066"-1.374" Cable O.D.)
	4373400032	AR	Junction Box (1.375"-1.625" Cable O.D.)
24	4068000000	1	Screw; Hex HD.
25	4014900013	1	Shaft; Main (Digits 1,2, 8,9,10 = 41, 303-306 & 402-404) (42, 302-306 & 402-403)
	4014900015	1	Shaft; Main (41, 308-316) (42, 308-310 & 404) (43, 306 & 402-403)
	4014900017	1	Shaft; Main (42, 312-316) (43, 308-310 & 404)
	4014900019	1	Shaft; Main (41, 320) (43, 312)
	4014900021	1	Shaft; Main (41, 324) (42, 320) (43, 316)
	4014900023	1	Shaft; Main (41, 330-336) (42, 324)
	4014900025	1	Shaft; Main (42, 330-336) (43, 320-324)
	4014900028	1	Shaft; Main (43, 330-336)
	4014900034	1	Shaft; Main (43, 902-906)
	4014900036	1	Shaft; Main (41, 902-906)
	4014900037	1	Shaft; Main (42, 902-906)
26	4077300002	1	Key
27	4790700001	1	Spacer (Digits 6 & 7 =11, 12, 21, 22, 31, 32)
	4790700002	1	Spacer (13, 23, 33)
28	4794300001	1	Assembly; Stand (4101)
	4794300002	1	Assembly; Stand (4102)
	4794300003	1	Assembly; Stand (4103)
29	3FMYE	1	Assembly; Roller Guide
30	4012700001	1	Spacer
31	4026600000	2	Bracket; Mounting
32	00030P0111	8	Screw; Hex HD Cap
33	00030P0112	4	Screw; Hex HD Cap
34	00151P0020	4	Nut; Hex
35	4791000003	1	Reducer (Digits 6 & 7 = 11, 12,13)
	01077P0001	1	Reducer (Digits 6 & 7 = 21, 22, 23, 31, 32, 33)
36	4791000004	1	Motor (Digits 6 & 7 =11, 12, 13)
	01052P0001	1	Motor (31, 32, 33)
	01052P0002	1	Motor (21, 22, 23)
37	00101P0015	3	Washer; Lock
38	00002P0027	4	Screw; RD. Head, Mach.
39	01030P0001	1	Limit Switch (5 th Digit=0)

40	C87350216	1	Limit Switch (5 th Digit=1)
	1R	1	Assembly; Guide Rail (Digits 1-4 =4101)
	2R	1	Assembly; Guide Rail (4102)
	3R	1	Assembly; Guide Rail (4103)
41	4792300030	1	Motor; Spur Gear (Digits 6 & 7 = 11, 12)
	4792400020	1	Motor; Spur Gear (13)
	6287700030	1	Motor; Spur Gear (23, 33)
	6287800020	1	Motor; Spur Gear (21, 22, 31, 32)
42	00669P0045	1	Reducer (.930"-1.065" Cable O.D.)
	00669P0049	1	Reducer (1.066"-1.374" Cable O.D.)
	N/A	N/A	Reducer (.375" - .929" & 1.375"-1.625" Cable O.D.)
43	01151P0019	1	Connector; Cable (.375"-.499" Cable O.D.)
	01151P0020	1	Connector; Cable (.500"-.624" Cable O.D.)
	01151P0021	1	Connector; Cable (.625"-.750" Cable O.D.)
	01151P0014	1	Connector; Cable (.751"-.880" Cable O.D.)
	01151P0015	1	Connector; Cable (.881"-.929" Cable O.D.)
	01151P0016	1	Connector; Cable (.930"-1.065" Cable O.D.)
	01151P0024	1	Connector; Cable (1.066"-1.187" Cable O.D.)
	01151P0025	1	Connector; Cable (1.188"-1.374" Cable O.D.)
	01151P0023	1	Connector; Cable (1.375"-1.625" Cable O.D.)
45	5490200002	1	Junction Box (.375"-.929" Cable O.D.) (Standard Retraction)
	5490200003	1	Junction Box (.930"-1.625" Cable O.D.) (Standard Retraction)
	5490200004	1	Junction Box (.375"-.929" Cable O.D.) (Reverse Retraction)
	5490200005	1	Junction Box (.930"-1.625" Cable O.D.) (Reverse Retraction)
46	5491200000	1	Gasket; Junction Box
47	01190P0012	1	Switch; Spur Gear, Limit (Digits 6 & 7 =11, 12, 21, 22, 31, 32)
	01190P0013	1	Switch; Spur Gear, Limit (13, 23, 33)

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