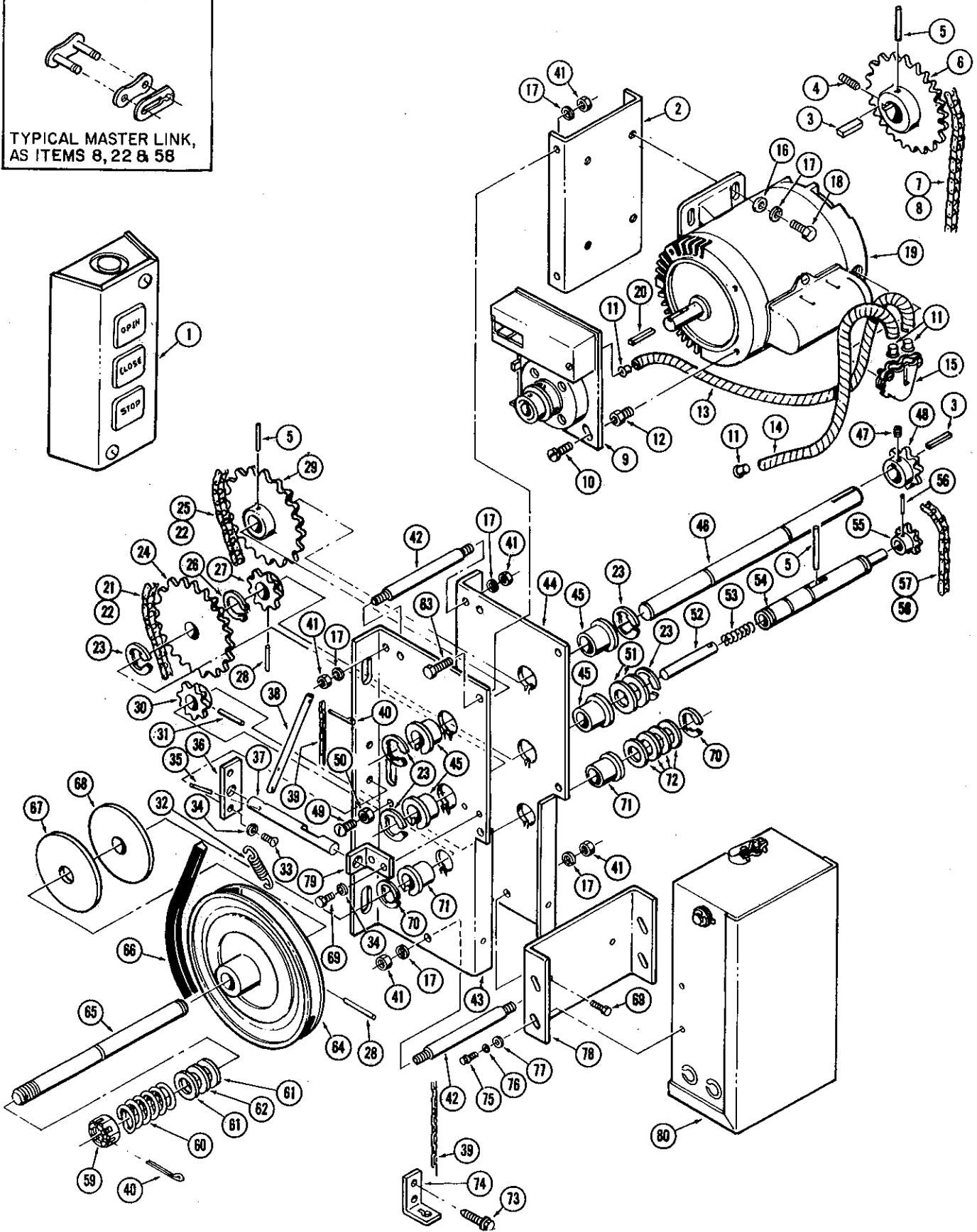
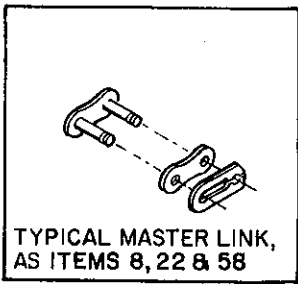


# JACKSHAFT OPERATOR



## J OPERATOR

No.	Part No.	Description	Req'd
1	02-300	STATION, 3 Button .....	1
2	10-203	BASE, Motor .....	1
3	80-533-1	KEY, 1/4" x 1/4" x 1 1/2" .....	2
4	80-130-12	SCREW, Set 5/16" - 18 x 1 1/4" .....	1
5	80-675-1	PIN, Spiral 5/16" x 2 .....	3
6	15-502241	SPROCKET, 50B24, 1" Bore, 1/4" Keyway.....	1
7	19-50116	CHAIN, Drive #50 .....	1
8	19-50M	LINK, Master #50 .....	1
* 9	71-56115-2	BRAKE, 115 Volt .....	1
	71-56230-2	BRAKE, 230 Volt (For Further Breakdown see page 26.)	
10	80-30-7	SCREW, 10-32 x 1/2" .....	4
11	27-6S	SLEEVE, Insulating.....	4
12	31-4000	ADAPTOR .....	4
13	27-500	CABLE, Armoured 18" long.....	1
14	27-500	CABLE, Armoured 15" long.....	1
15	27-5C	CONNECTOR, Double .....	1
16	80-450-1	WASHER, Flat 5/16".....	4
17	80-180	LOCKWASHER, Split 5/16" .....	12
18	80-75-1	BOLT, Hex 5/16" - 18 x 1/2" .....	4
*19	20-1033	MOTOR, 1/3 HP, 115/230 Volts, Single Phase .....	1
	20-1050	MOTOR, 1/2 HP, 115/230 Volts, Single Phase .....	
	20-1075	MOTOR, 3/4 HP, 115-230 Volts, Single Phase .....	
	20-3033	MOTOR, 1/3 HP, 230/460 Volts, Three Phase .....	
	20-3050	MOTOR, 1/2 HP, 230/460 Volts, Three Phase .....	
	20-3075	MOTOR, 3/4 HP, 230/460 Volts, Three Phase .....	
20	80-534-1	KEY, 3/16" x 3/16" x 1 1/8" .....	1
21	19-41038	CHAIN, Primary #41 .....	1
22	19-41M	LINK, Master #41 .....	2
23	80-357	RING, Retaining 1" .....	5
24	71-412325	ASSEMBLY, Disconnect Sprocket .....	1
25	19-41040	CHAIN, Secondary #41 .....	1
26	80-670-1	RING, Snap 1" .....	1
27	15-412123	SPROCKET, 41B12, 1" Bore .....	1
28	80-342-13	PIN, Roll 1/4" x 1 1/2" .....	2
29	15-412323	SPROCKET, 41B32, 1" Bore .....	1
30	15-412102	SPROCKET, 41B10, 3/4" Bore .....	1
31	80-342-10	PIN, Roll 1/4" x 1 1/8" .....	1
32	18-886	SPRING, Disconnect Lever .....	1
33	80-5-7	SCREW, Roundhead 1/4" - 20 x 1/2" .....	2
34	80-179	LOCKWASHER, Split 1/4" .....	4
35	80-340-3	PIN, Roll 1/8" x 5/8" .....	1
36	10-504	PLATE, Disconnect .....	1
37	11-504	SHAFT, Cam .....	1
38	10-7001	ROD, Disconnect .....	1
39	19-412-1	CHAIN, Sash 12' long .....	1
40	80-337-5	PIN, Cotter 1/8" x 1 1/2" .....	2
41	80-221	NUT, Hex 5/16" - 18 .....	8
42	11-117	SPACER .....	2
43	10-200	FRAME, Left Side .....	1
44	10-201	FRAME, Right Side .....	1
45	12-16208	BEARING, 1" .....	4

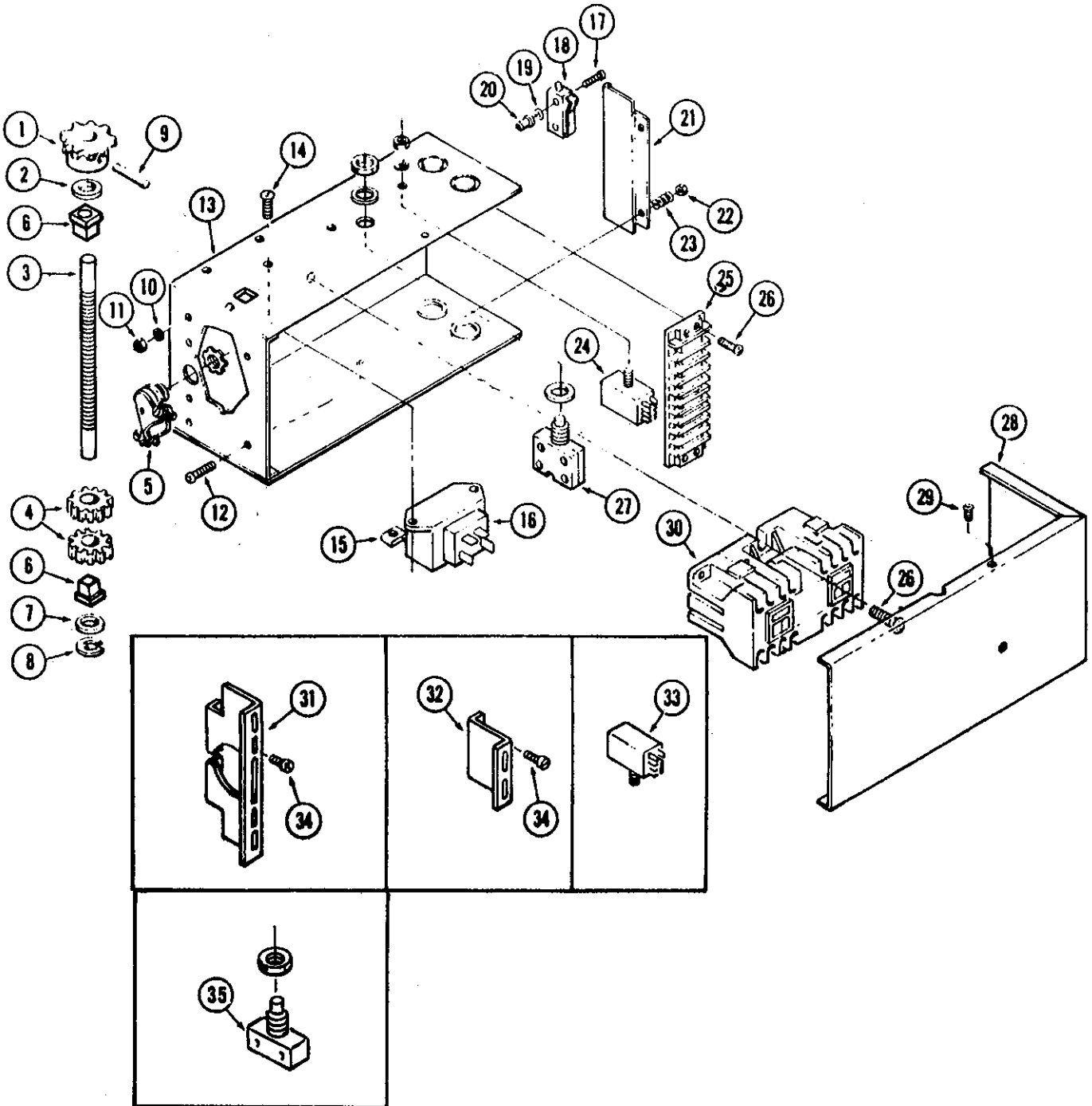
## J OPERATOR (CONTINUED)

No.	Part No.	Description	Req'd
46	11-400	SHAFT, Output .....	1
47	80-1130	SCREW, Set 5/16" - 18 x 1/4" .....	1
48	15-502121	SPROCKET, 50B12, 1/4" Keyway .....	1
49	80-41-12	SCREW, Truss Head 1/4" - 20 x 1" .....	1
50	80-220	NUT, Hex 1/4" - 20 .....	1
51	80-206-1	SPACER, 1" x .010" .....	AR
	80-206-2	SPACER, 1" x .050" .....	AR
52	11-503	SHAFT, Insert .....	1
53	18-899	SPRING, Compression .....	1
54	11-500	SHAFT, Secondary .....	1
55	15-482094	SPROCKET, 48B9, 3/8" Bore .....	1
56	80-340-9	PIN, Roll 1/8" X 1 .....	1
57	19-48030	CHAIN, Limit #48 .....	1
58	19-48M	LINK, Master #48 .....	1
59	80-289	NUT, Slotted 3/4" - 16 .....	1
60	18-885	SPRING, Clutch .....	1
61	12-1220-1	RACE, 3/4" .....	2
62	12-1220	BEARING, 3/4" .....	1
63	80-75-3	BOLT, Hex 5/16" - 18 x 3/4" .....	4
64	71-280	ASSEMBLY, Clutch Sheave .....	1
65	11-501	SHAFT, Clutch .....	1
66	37-5350	BELT, 19/32" x 35" .....	1
67	39-100	DISC, Clutch .....	1
68	15-193-2	HUB, Clutch .....	1
69	80-74-1	BOLT, Hex 1/4" - 20 x 1/2" .....	4
70	80-355	RING, Retaining 3/4" .....	2
71	12-12166	BEARING, 3/4" .....	2
72	80-204-1	SPACER, 3/4" x .010" .....	AR
	80-204-2	SPACER, 3/4" x .050" .....	AR
73	80-147-5	SCREW, Lag 5/16" x 1 1/2" .....	2
74	10-207	BRACKET, Disconnect Chain .....	1
75	80-10375	SCREW, Tapping 10 - 32 x 3/8" .....	4
76	80-178	LOCKWASHER, Split #10 .....	4
77	80-449	WASHER, Flat 1/4" .....	4
78	10-5090	BRACKET, Control Box .....	1
79	10-505	BRACKET, Disconnect pivot cam .....	1
80		BOX, Control (to order give voltage, phase, HP, & wiring) ..	1

AR - AS REQUIRED

\* USE PART NUMBER & DESCRIPTION COMMON TO YOUR OPERATOR.

# CONTROL BOX



## CONTROL BOX

No.	Part No.	Description	Req'd
1	15-482094	SPROCKET, 48B9 3/8" Bore .....	1
*2	80-201-2	SPACER, 3/8" x 3/4" x 3/64" .....	1
3	11-5050	SHAFT, Limit .....	1
4	31-173	NUT, Limit 1/2" .....	2
5	27-4C	CONNECTOR, Bx 90° .....	1
6	41-10000	BEARING, 3/8" .....	2
7	80-201-2	SPACER, 3/8" x 3/4" x 3/64" .....	AR
	80-201-1	SPACER, 3/8" x 3/4" x 3/32" .....	AR
8	80-351	RETAINER, 3/8" .....	1
9	80-340-9	PIN, Roll 1/8" x 1" .....	1
10	80-176	LOCKWASHER, #6 .....	4
11	80-216	NUT, Hex #6-32 .....	4
12	80-1-12	SCREW, #6-32 x 1" .....	2
13	10-5076	BOX, Control .....	1
14	80-2-6	SCREW, #8-32 x 1/2" .....	2
15	80-218	KEP NUT, 8-32 .....	2
*16	21-5115	TRANSFORMER, 115/241 Volt .....	1
	21-5230	TRANSFORMER, 208 - 230/24 Volt .....	
	21-5460	TRANSFORMER, 460/24 Volt .....	
	21-5575	TRANSFORMER, 550 - 575/24 Volt .....	
17	80-1-15	SCREW, #6-32 x 1 1/2" .....	4
*18	23-2015	SWITCH, Limit DPDT (No. req'd varies with wiring) .....	2
	23-2017	SWITCH, Limit SPDT .....	
19	80-164	WASHER, Flat #6 .....	4
20	31-113	SPACER .....	4
21	10-5022	PLATE, Limit Depression .....	1
22	80-294	NUT, Lock #6-32 .....	2
23	18-5043	SPRING .....	2
*24	24-74	RELAY, I.R. 230 Volt Op: .....	1
	24-79	RELAY, I.R. 115 Volt Op: .....	
25	27-69910	TERMINAL, Board 10 Lug .....	1
26	80-8625	SCREW, Tap #8-32 x 5/8" .....	4
*27	25-2006	OVERLOAD, 6 AMP. (Single Phase) .....	1
	25-2008	OVERLOAD, 8 AMP. (Single Phase) .....	
	25-2010	OVERLOAD, 10 AMP. (Single Phase) .....	
	25-2012	OVERLOAD, 12 AMP. (Single Phase) .....	
	25-2015	OVERLOAD, 15 AMP. (Single Phase) .....	
	25-2017	OVERLOAD, 17 AMP. (Single Phase) .....	
	25-8002-5	OVERLOAD, Adjustable 1-6-2.5 AMP. (Three Phase) .....	
	25-8004	OVERLOAD, Adjustable 2.5 - 4.0 AMP. (Three Phase) .....	
	25-8006	OVERLOAD, Adjustable 4.0 - 6.0 AMP. (Three Phase) .....	
28	10-5021	COVER, Box .....	1
29	80-8250	SCREW, Tap #8-32 x 1/4" .....	2
30	03-8024	CONTROLLER, Reversing 24 Volt Control Circuit .....	1
31	10-132	BRACKET, Double .....	AR
32	10-5074	BRACKET, Single .....	AR
33	24-77	RELAY, R.1 24 Volt .....	AR
34	80-8250	SCREW, 8/32" x 1/4" Self Tapping .....	1
35	23-1152	SWITCH, Interlock (Used on H Operator Only) .....	1

\*USE PART NUMBER AND DESCRIPTION COMMON TO YOUR OPERATOR.