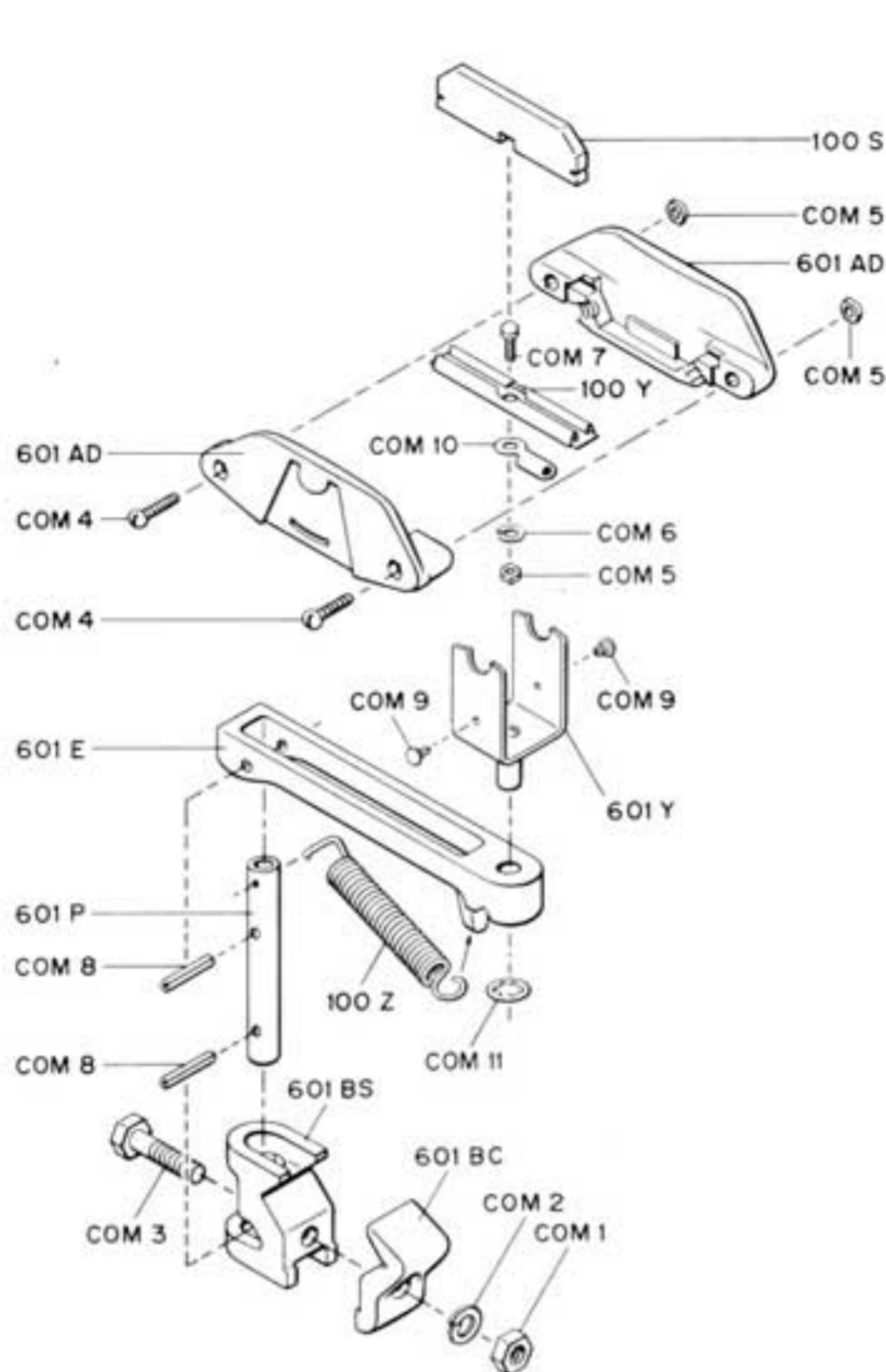


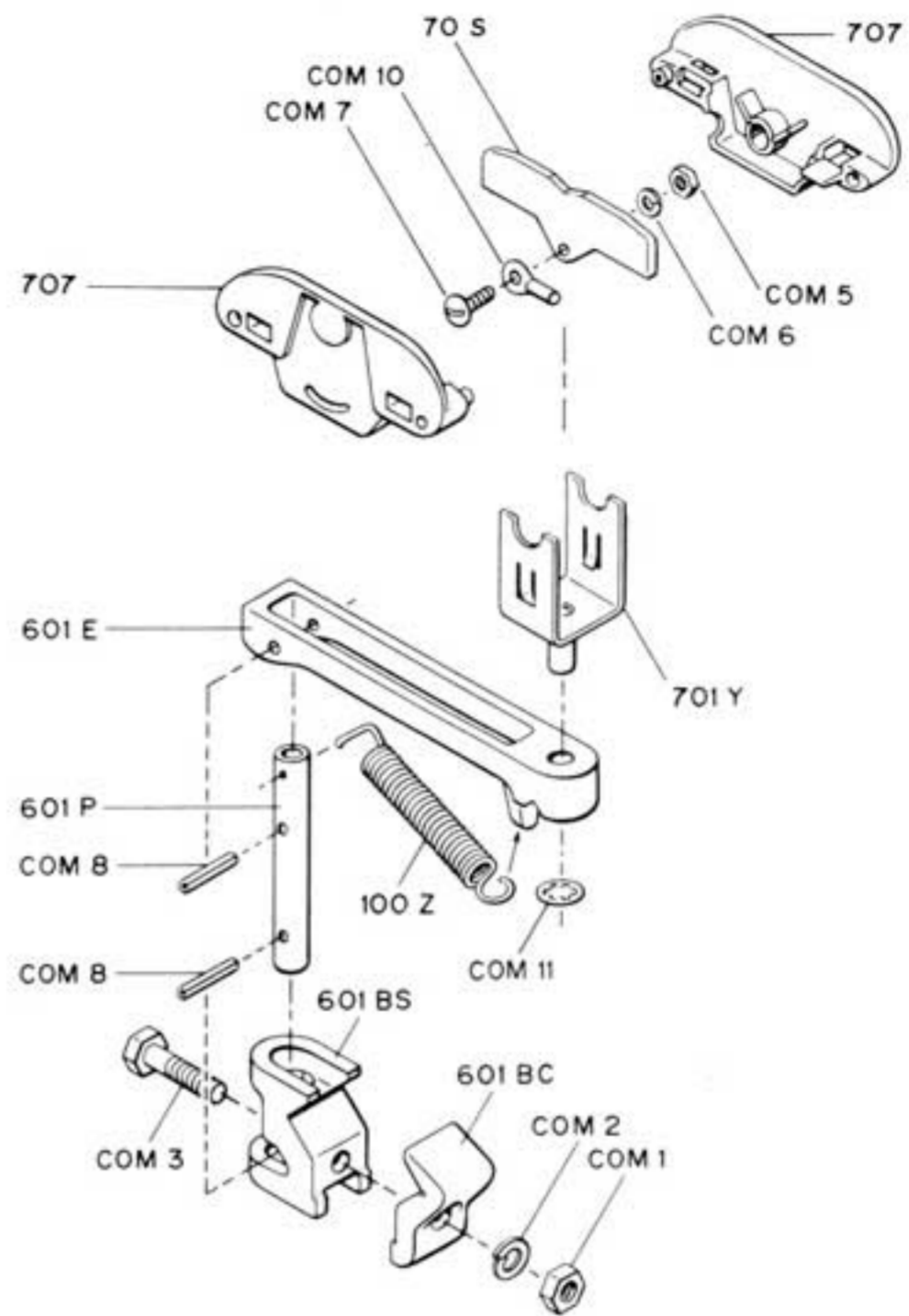
## Enclosed Conductor System Current Collectors



**\*NUMBER 100E**

### COLLECTOR ASSEMBLY PARTS LIST

Part No.	No. Req'd.	Part Name
*100E	3	Collector Assembly
601 BC	1	Clamp only
601 BS	1	Swivel only
601 P	1	Post
601 E	1	Standard Arm
601 Y	1	Yoke
601 AD	2	Case Half
100 S	1	Shoe
100 Y	1	Shoe Clip
100 Z	1	Spring
COM 1	1	3/8 — 16 Hex Nut
COM 2	1	3/8 Lockwasher
COM 3	1	3/8 — 16 x 1 1/2 Bolt
COM 4	2	1/4 — 20 x 1 Machine Screw
COM 5	3	1/4 — 20 Hex Nut
COM 6	1	1/4 Lockwasher
COM 7	1	1/4 — 20 x 1/2 Bolt
COM 8	2	1/4 x 1 1/4 Roll Pin
COM 9	2	Dot Fastener
COM 10	1	No. 6 Non-Insulated Terminal
COM 11	1	1/2 Retaining Ring



**NUMBER 70E**

### COLLECTOR ASSEMBLY PARTS LIST

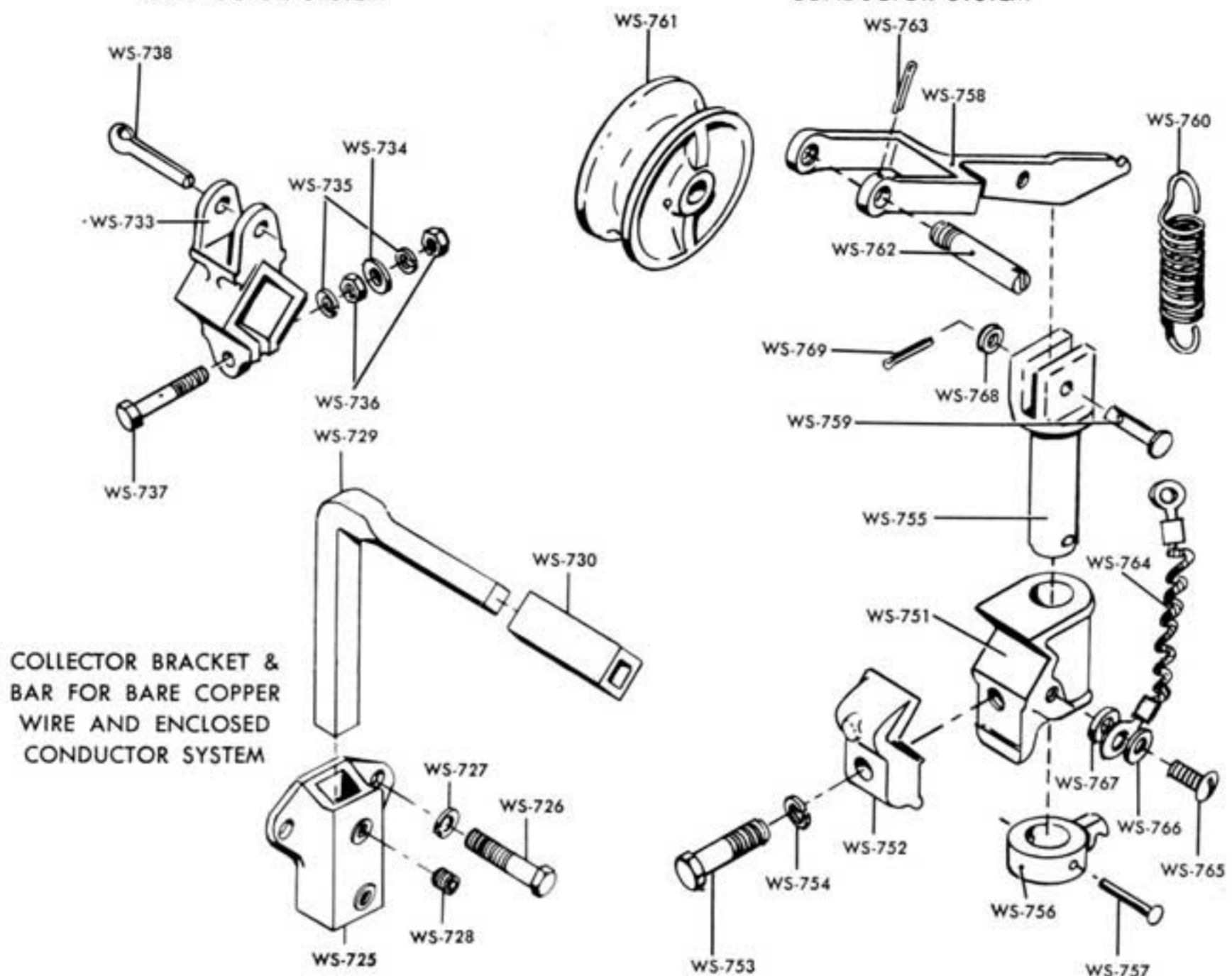
Part No.	No. Req'd.	Part Name
70 E	3	Collector Assembly
601 BC	1	Clamp only
601 BS	1	Swivel only
601 P	1	Post
601 E	1	Standard Arm
701 Y	1	Yoke
707	2	Case Half
70 S	1	Shoe
100 Z	1	Spring
COM 1	1	3/8 — 16 Hex Nut
COM 2	1	3/8 Lockwasher
COM 3	1	3/8 — 16 x 1 1/2 Bolt
COM 5	1	1/4 — 20 Hex Nut
COM 6	1	1/4 Lockwasher
COM 7	1	1/4 — 20 x 1/2 Bolt
COM 8	2	1/4 x 1 1/4 Roll Pin
COM 10	1	No. 6 Non-Insulated Terminal
COM 11	1	1/2 Retaining Ring

**\*ASSEMBLIES DISCONTINUED. INDIVIDUAL COMPONENTS AVAILABLE FOR REPAIRS ONLY.**

# Current Collectors

\*SHOE COLLECTOR FOR BARE COPPER WIRE CONDUCTOR SYSTEM

\*WHEEL COLLECTOR FOR BARE COPPER WIRE CONDUCTOR SYSTEM

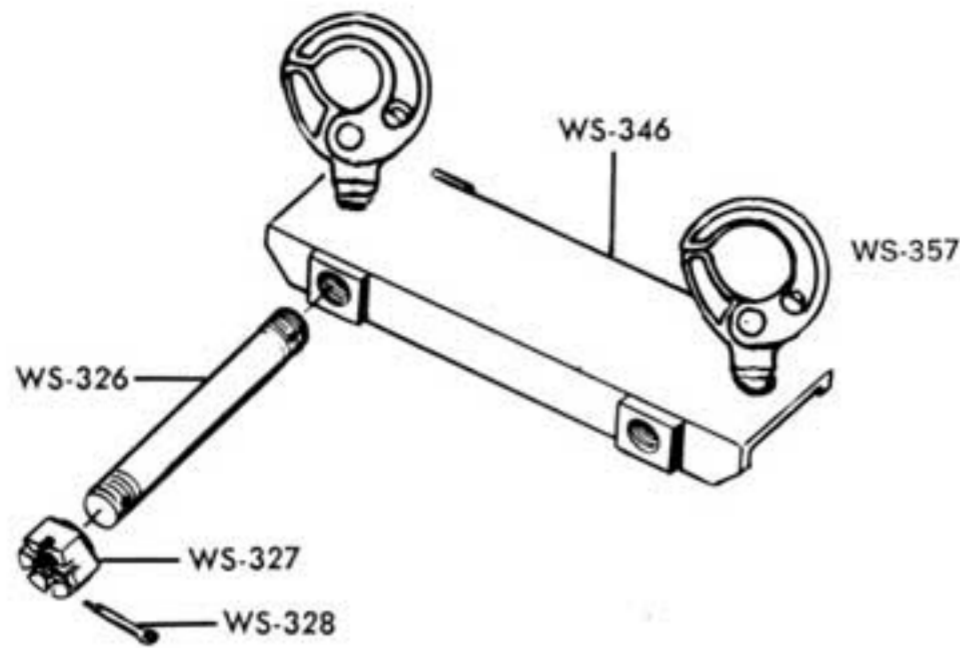


\*ASSEMBLIES DISCONTINUED. INDIVIDUAL COMPONENTS AVAILABLE FOR REPAIRS ONLY. REFER TO PAGE 41 FOR MOUNTING INSTRUCTIONS.  
 \*\*INDIVIDUAL PART NOT AVAILABLE. CONTACT FACTORY FOR REPLACEMENT.

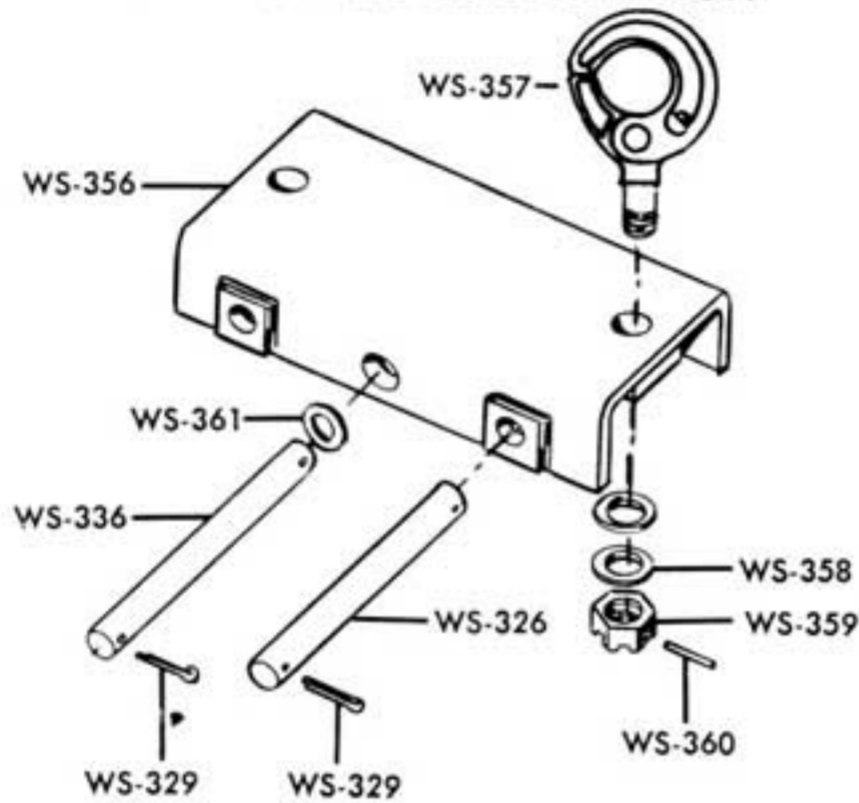
## Parts List

Key No.	No. Req'd.	Part Name	Key No.	No. Req'd.	Part Name
*WS-723	1	Shoe Collector Assembly (Items WS-725 Thru WS-730 & Three WS-732; Specify Size of I-Beam & Capacity of Hoist)	WS-736	2	Collector Shoe Clamp Screw Nut
*WS-724	1	Wheel Collector Assembly (Items WS-725 Thru WS-730 & Three WS-750; Specify Size of I-Beam & Capacity of Hoist)	WS-737	1	Collector Shoe Clamp Screw
WS-725	1	Collector Bar Bracket	WS-738	1	Collector Shoe Cotter Pin
WS-726	2	Collector Bar Bracket Attaching Screw	*WS-750	3	Wheel Collector (Items WS-751 Thru WS-769)
WS-727	2	Collector Bar Bracket Attaching Screw Lockwasher	WS-751	1	Clamp Bearing and Rivet
WS-728	2	Collector Bar Bracket Set Screw	WS-752	1	Clamp
WS-729	1	Collector Bar (Specify Whether for Shoe or Wheel Collector, Size of I-Beam & Capacity of Hoist)	WS-753	1	Clamp Screw
WS-730	1	Collector Bar Insulator	WS-754	1	Clamp Screw Lockwasher
*WS-732	3	Shoe Collector (Items WS-733 Thru WS-738)	WS-755	1	Clevis Pin & Rivet
WS-733	1	Collector Shoe	WS-756	1	Collar & Rivet
WS-734	1	Collector Shoe Clamp Screw Washer	WS-757	1	Rivet
WS-735	2	Collector Shoe Clamp Screw Lockwasher	**WS-758	1	Harp
			WS-759	1	Harp Pin, Washer & Cotterpin
			WS-760	1	Spring
			WS-761	1	Wheel
			WS-762	1	Wheel Pin
			WS-763	1	Wheel Pin Cotter Pin
			WS-764	1	Copper Shunt
			WS-765	3	Shunt and Terminal Screw
			WS-766	3	Shunt and Terminal Screw Lockwasher
			WS-767	3	Shunt and Terminal Screw Washer
			WS-768	1	Harp Pin Washer
			WS-769	1	Harp Pin Cotter Pin

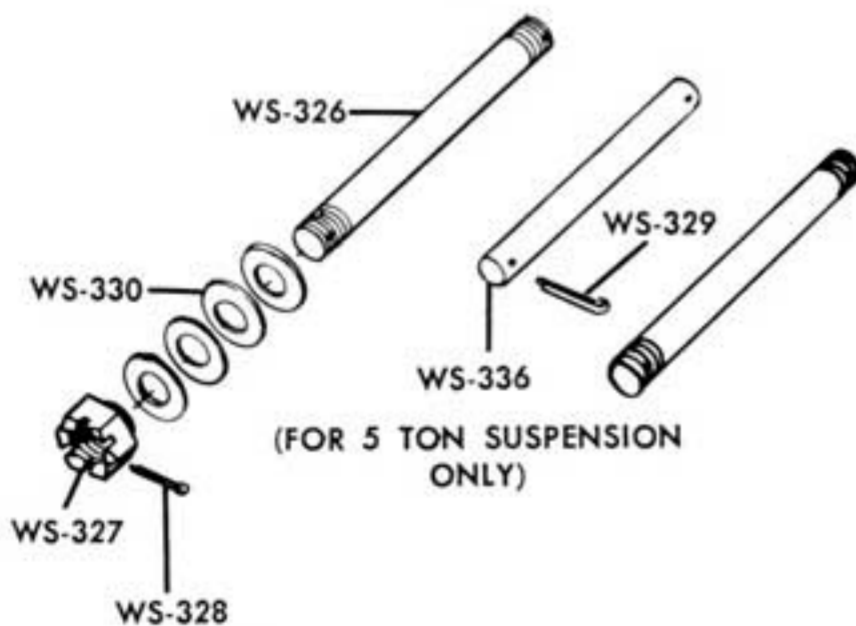
## Hook and Lug Suspension



**1/2-3 TON HOOK SUSPENSION**



**5 TON HOOK SUSPENSION**



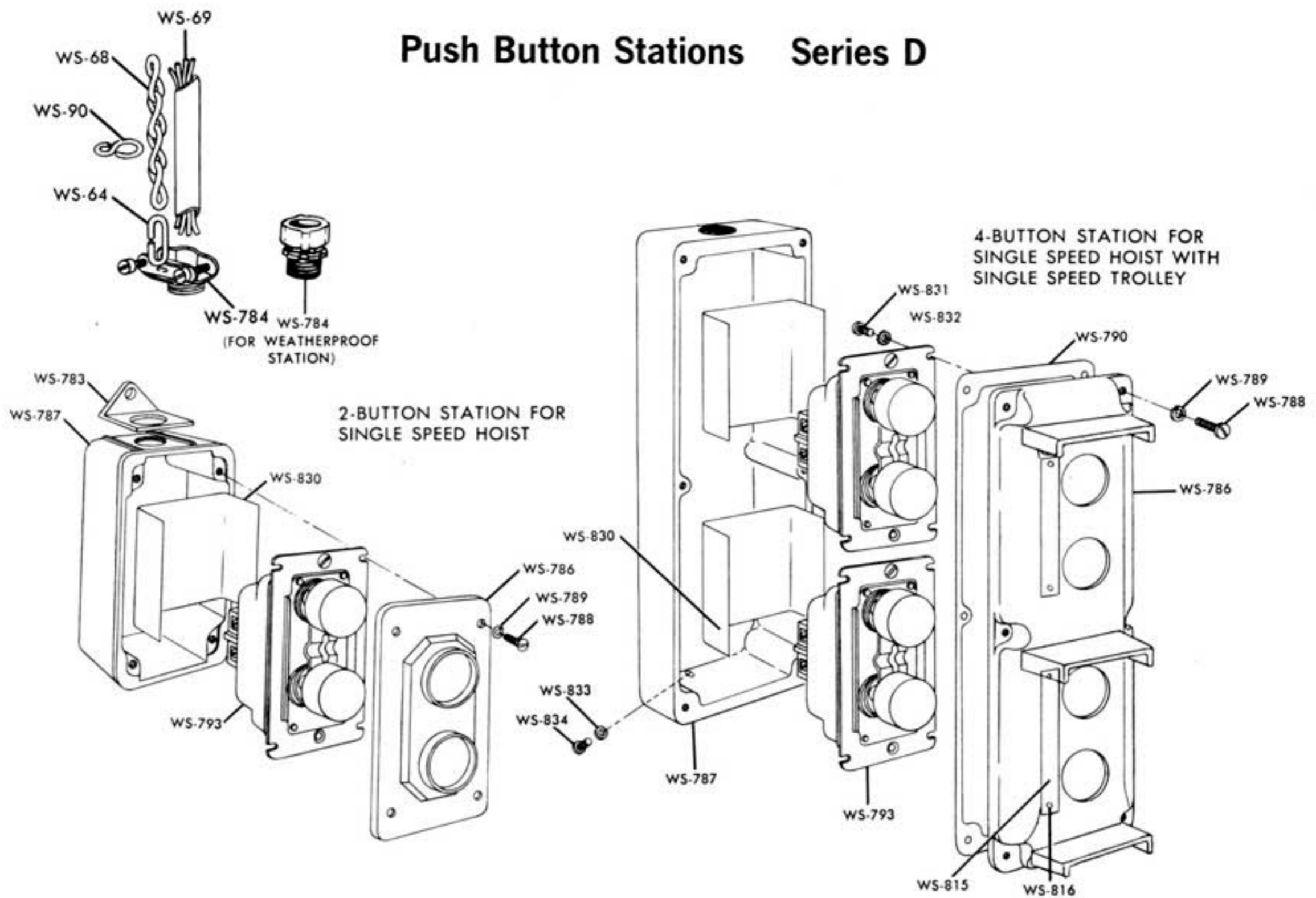
**1/2-5 TON LUG SUSPENSION**

### Parts List

Key No.	No. Req'd.	Part Name
WS-269	2	Latch Kit (1/2-3 Ton #7 Latch Kit, 5 Ton #8 Latch Kit), Specify Hook Size (Not Shown)
WS-325	1	Lug Suspension — 1/2-3 Ton Units (Items WS-326 Thru WS-328 & WS-330)
WS-326	2	Hoist Suspension Bolt (Specify Length of Bolt)
WS-326	2	Hoist Suspension Pin (5 Ton Hook Suspension)
WS-327	4	Hoist Suspension Bolt Nut
WS-328	4	Hoist Suspension Bolt Nut Cotter Pin
WS-329	4	Hoist Suspension Pin Cotter Pin
WS-329	2	Idler Sheave Housing Support Pin Cotter Pin
WS-330	76	Spacer Washer — 1/2-3 Ton Units
WS-330	36	Spacer Washer — 5 Ton Units
WS-335	1	Lug Suspension — 5 Ton Units (Items WS-326 Thru WS-330 & WS-336)
WS-336	1	Idler Sheave Housing Support Pin (Specify Length of Pin). For other type Pin see Page 28.
WS-345	1	Hook Suspension — 1/2-3 Ton Units (Items WS-326 Thru WS-328 & WS-346)
WS-346	1	Upper Hooks and Channel Assembly
WS-355	1	Hook Suspension — 5 Ton Units (Items WS-326, WS-329, WS-336 & WS-356 Thru WS-361)
WS-356	1	Hook Suspension Channel
WS-357	2	Upper Hook—Latchlok
WS-358	4	Upper Hook Washer
WS-359	2	Upper Hook Nut
WS-360	2	Upper Hook Nut Pin
WS-361	2	Idler Sheave Housing Support Pin Washer

**REFER TO PAGE 26 FOR ORDERING INSTRUCTIONS**

## Push Button Stations Series D

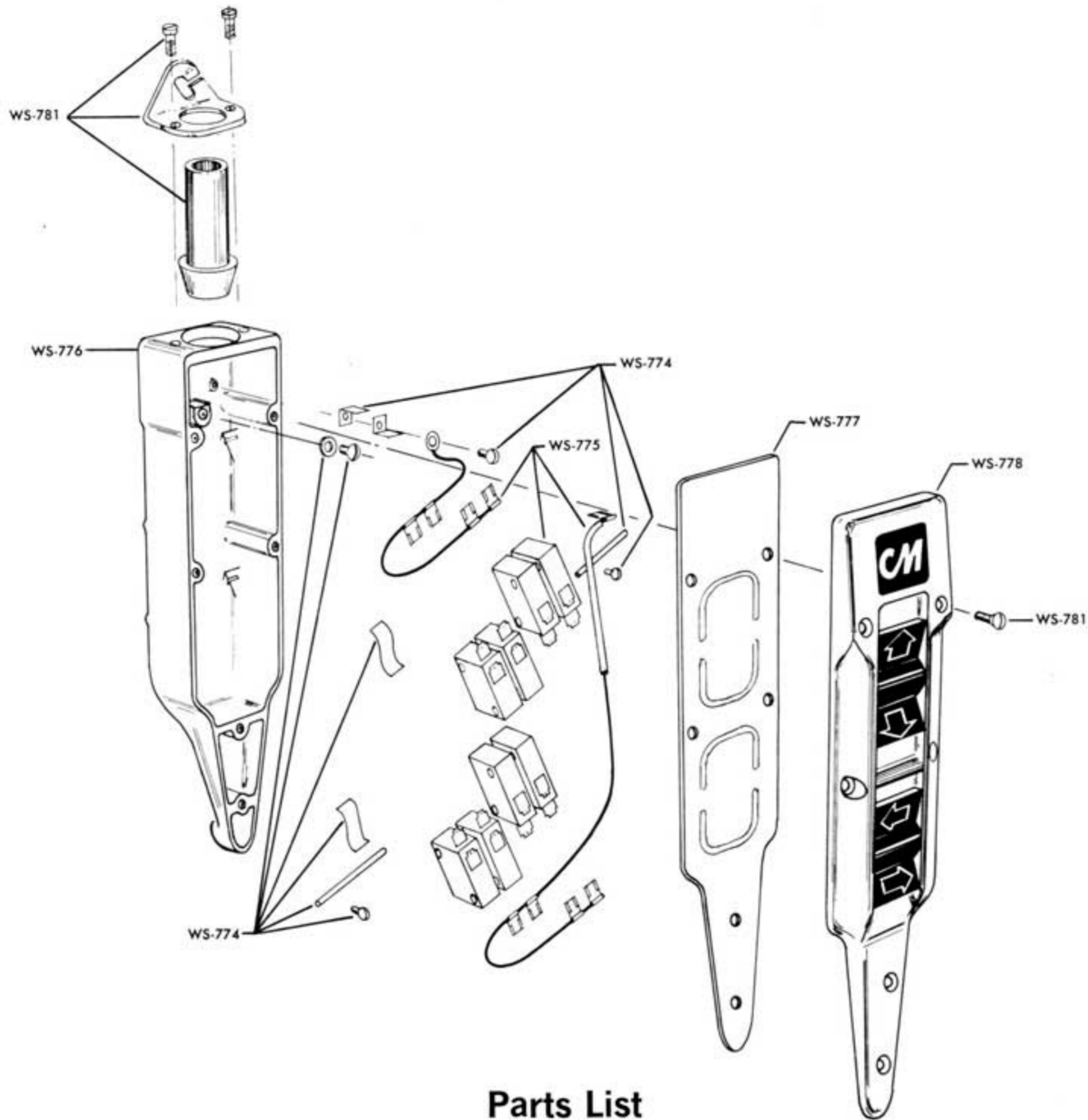


### Parts List

Key No.	No. Req'd.	Part Name	Key No.	No. Req'd.	Part Name
WS-64	2	Push Button Chain Attaching Link	WS-787	1	Box
WS-68		Push Button Chain (Specify Length Req'd.)	WS-788	4 or 6	Cover Attaching Screw
WS-69		Push Button Cable (Specify Length Req'd.)	WS-789	4 or 6	Cover Attaching Screw Lockwasher
WS-90		Push Button Cable Clip (Specify No. Req'd.)	WS-790	1	Cover Gasket (For Weatherproof Station)
WS-783	1	Push Button Chain Clip	WS-793	1 or 2	Switch Unit (Specify Button Markings Req'd.; State Whether for "Hoist" or "Trolley")
WS-784	1	Push Button Box Connector	WS-815	2	Name Plate (Specify Markings Req'd.)
WS-785	1	2-Push Button Station (Specify Button Markings Req'd.) (Items WS-786 Thru WS-789, WS-793 & WS-830)	WS-816	4	Name Plate Drive Screw
WS-785	1	4-Push Button Station (Items WS-786 Thru WS-789, WS-793, WS-815, WS-816, WS-830 Thru WS-834)	WS-830	1 or 2	Liner
WS-786	1	Cover (For 2-Button Station)	WS-831	8	Switch Attaching Screw
WS-786	1	Cover With Name Plates (For 4-Button Station)	WS-832	8	Switch Attaching Screw Lockwasher
			WS-833	1	External Ground Screw Washer
			WS-834	1	External Ground Screw

REFER TO PAGE 26 FOR ORDERING INSTRUCTIONS

## Control Station – Hoist Trolley Combination



### Parts List

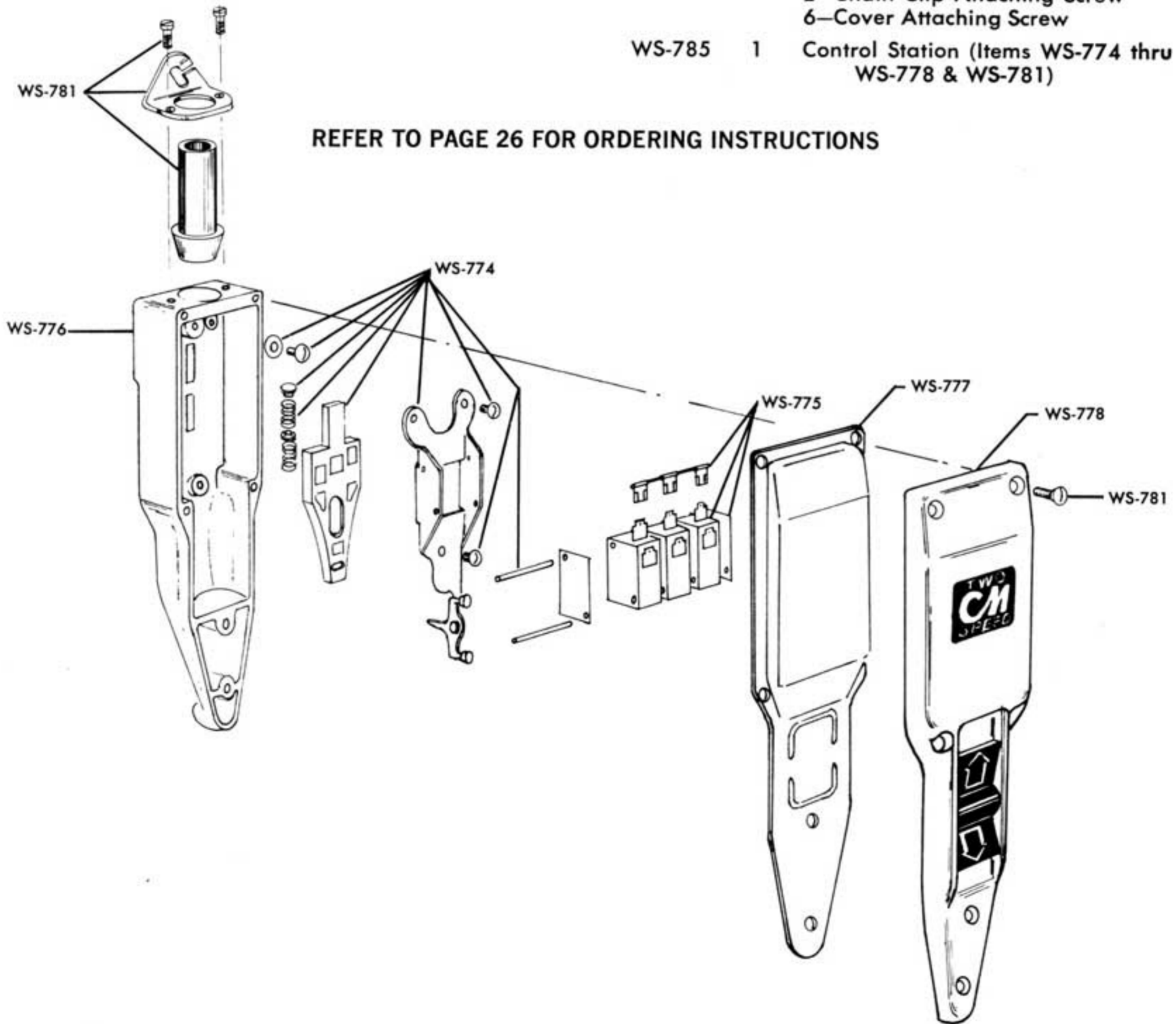
Key No.	No. Req'd.	Part Name	Key No.	No. Req'd.	Part Name
WS-774	1	Control Station Parts Kit consists of: 2—Terminal Attaching Screw 1—Strain Cable Attaching Screw 1—Strain Cable Attaching Screw Washer 4—Pin Retainer Screw 8—Switch Leaf Spring 2—Switch Mounting Pin 4—Terminal	WS-776	1	Case
			WS-777	1	Gasket
			WS-778	1	Cover Assembly (Decal & Rocker Included)
			WS-781	1	Control Station Kit consists of: 1—Grommet 1—Control Station Chain Clip 2—Chain Clip Attaching Screw 6—Cover Screw
WS-775	1	Control Station Switch Kit consists of: 8—Switch 1—Jumper 2—Jumper	WS-785	1	Control Station (Items WS-774 thru WS-778 & WS-781)

**REFER TO PAGE 26 FOR ORDERING INSTRUCTIONS**

## Control Station – Two Speed Hoist Parts List

Key No.	No. Req'd.	Part Name
WS-774	1	Control Station Parts Kit consists of: 1—Spring 1—Strain Cable Attaching Screw 1—Strain Cable Attaching Screw Washer 2—Switch Attaching Pin 1—Sliding Cam 2—Spring End Support 3—Switch Mounting Plate & Rocker Assembly Attaching Screw 1—Switch Mounting Plate & Rocker Assembly 1—Cam Return Spring

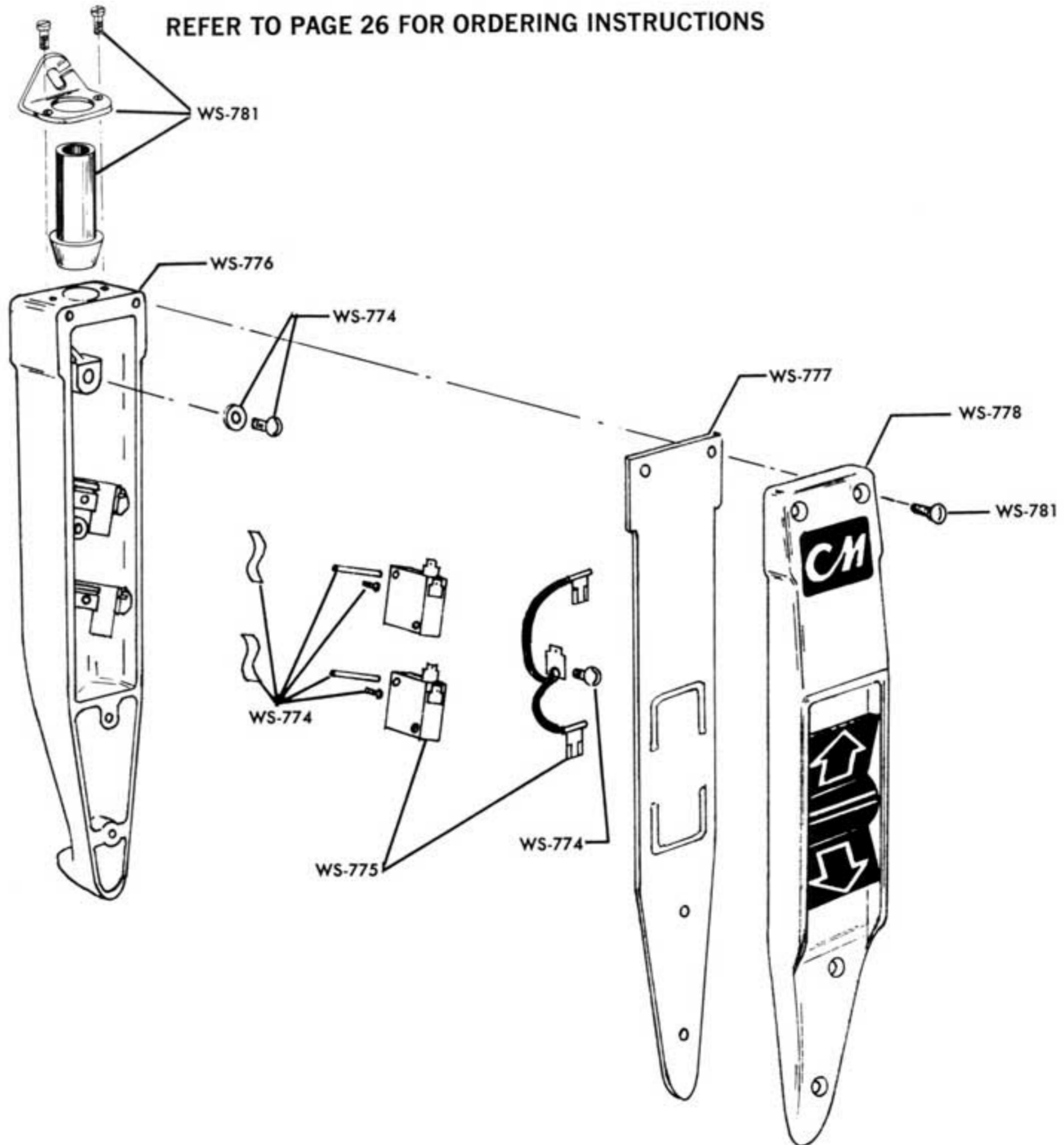
Key No.	No. Req'd.	Part Name
WS-775	1	Control Station Switch Kit consists of: 3—Switch 2—Insulator 1—Jumper
WS-776	1	Case
WS-777	1	Gasket
WS-778	1	Cover Assembly (Decal & Rocker Included)
WS-781	1	Control Station Kit consists of: 1—Grommet 1—Control Station Chain Clip 2—Chain Clip Attaching Screw 6—Cover Attaching Screw
WS-785	1	Control Station (Items WS-774 thru WS-778 & WS-781)



# Control Station – Single Speed Hoist

## Parts List

Key No.	No. Req'd.	Part Name	Key No.	No. Req'd.	Part Name
WS-774	1	Control Station Parts Kit consists of: 1—Strain Cable Attaching Screw 1—Strain Cable Attaching Screw Washer 2—Switch Mounting Pin 3—Pin & Jumper Retainer Screw 2—Switch Leaf Spring	WS-776	1	Case
WS-775	1	Control Station Switch Kit consists of: 2—Switch 1—Jumper	WS-777	1	Gasket
			WS-778	1	Cover Assembly (Decal & Rocker Included)
			WS-781	1	Control Station Kit consists of: 1—Grommet 1—Control Station Chain Clip 2—Chain Clip Attaching Screw 4—Cover Attaching Screw
			WS-785	1	Control Station (Items WS-774 thru WS-778, & WS-781)

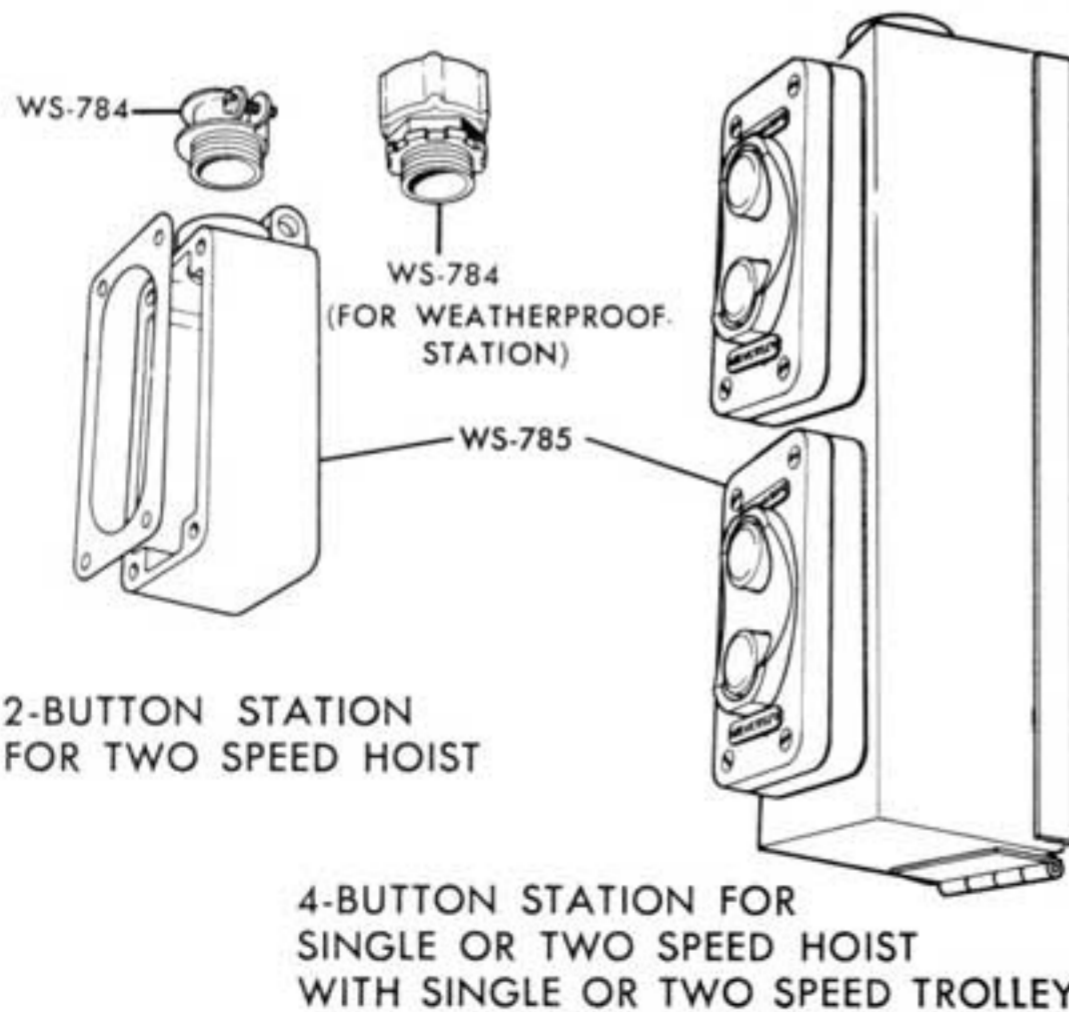


## Parts List

Key No.	No. Required		Part Name	Key No.	No. Required		Part Name
	Reversing Contactor	Selecting Contactor			Reversing Contactor	Selecting Contactor	
WS-610	1		Reversing Contactor	WS-627	4	2	Coil Retainer
WS-611		1	Speed Selecting Contactor	WS-628	4	2	Yoke Trunnion, Screw and Lockwasher
WS-612	1	1	Back Plate, Side Plates and Screws	WS-629	0	2	Jumper
WS-613	2	1	Coil	WS-630	8	4	Stationary Contact Block Attaching Screw
WS-614	2	1	Yoke Spring, Right Hand	WS-631	2	1	Armature
WS-615	2	1	Yoke Spring, Left Hand	WS-632	4	2	Wire Retainer
WS-616	0 or 1	1	Terminal Block Kit (Block, Terminals & Screws)	WS-633	3	3	Contacting Attaching Screw
WS-617	2	0	Rocker Arm With Bracket	WS-634	3	3	Contacting Attaching Screw Washer
WS-618	2	0	Mechanical Interlock Bar	WS-635	3	3	Grommet, large
WS-619	0 or 2	2	N. C. Contact Kit	WS-636	2	1	Field With Brackets & Shading Coils
WS-620	6	2	N. O. Contact Kit	WS-637	8	4	Field Attaching Screw, Washer and Nut
WS-621	0 or 4	0	Dummy Contact Kit	WS-638	8	4	Grommet, small
WS-622	2	1	Stationary Contact Block	WS-639	0	1	Reinforcing Bar
WS-623	2	1	Upper and Lower Movable Contact Blocks and Screw (WS-642)	WS-640	16	10	Quick Connect Terminal
WS-624	4	2	Movable Contact Block Assembly Screw	WS-641	16	8	Quick Connect Terminal Screw
WS-625	4	2	Movable Contact Block Assembly Screw Lockwasher	WS-642	2	1	Movable Contact Block Screw
WS-626	3 or 4	0	Connector	WS-643	2	1	Yoke
				WS-644	4	2	Shading Coil

REFER TO PAGE 26 FOR ORDERING INSTRUCTIONS

### Push Button Stations Series R

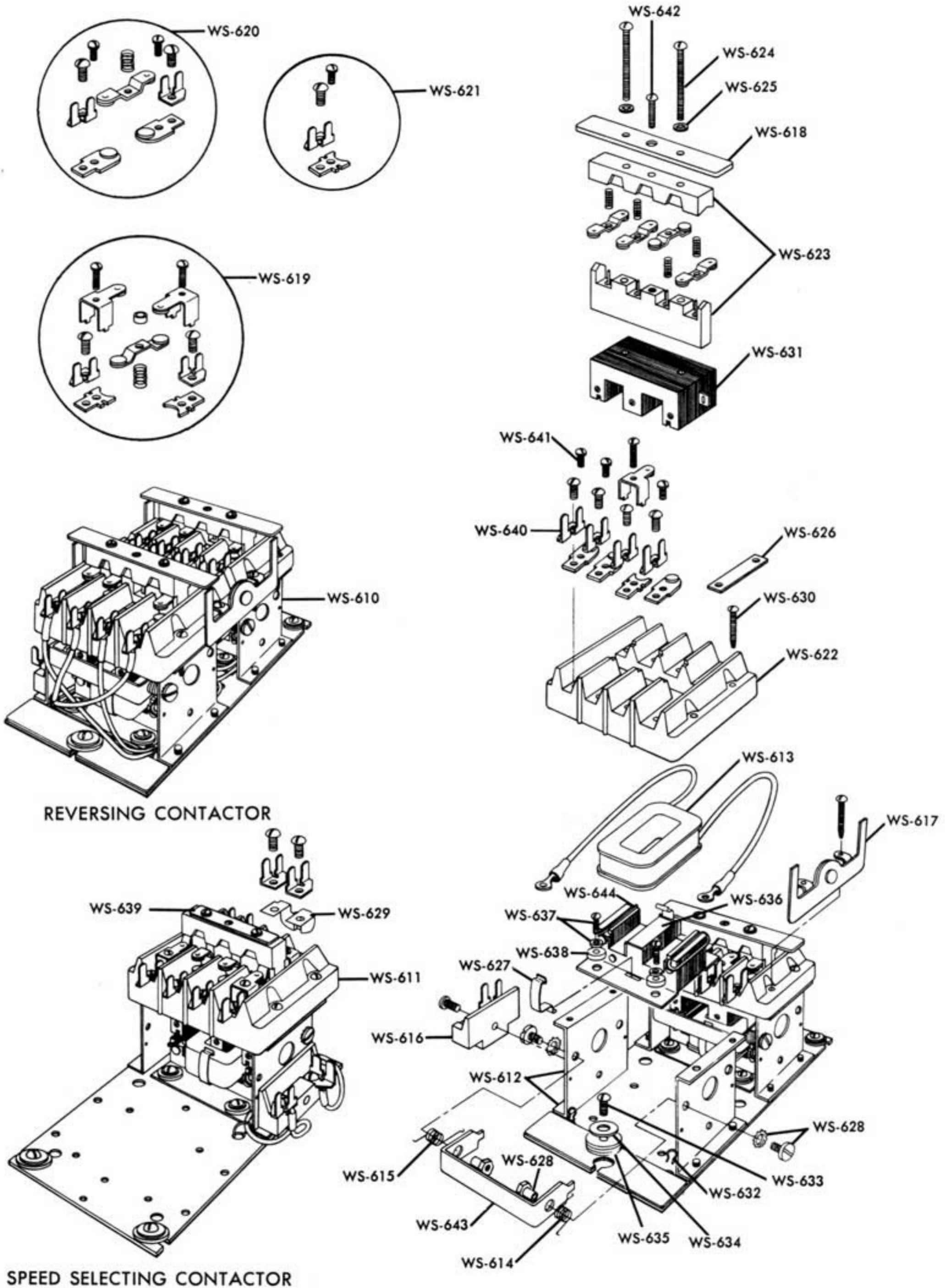


### Parts List

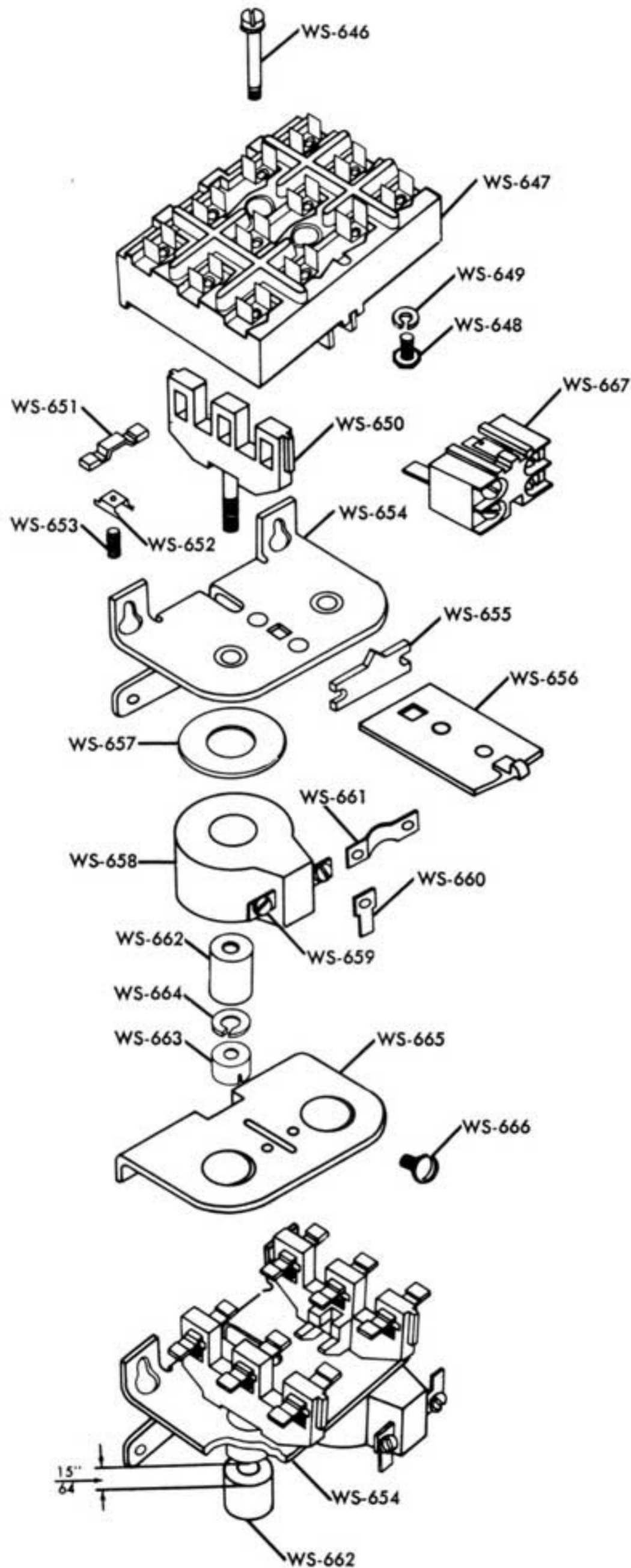
Key No.	No. Req'd.	Part Name
WS-784	1	Push Button Box Connector
WS-785	1	2-Push Button Station Discontinued — Control Station Page 35 will be furnished
WS-785	1	4-Push Button Station Discontinued — Control Station Page 36 will be furnished

ALSO, INDIVIDUAL COMPONENTS FOR THESE STATIONS ARE **NOT** AVAILABLE.

# Contactor Type BW



# Contactor Type D



## Parts List

Key No.	No. Req'd.	Part Name
WS-645	1	Contactor (Items WS-646 Thru WS-666)
WS-646	2	Contact Block Screw With Lockwasher
WS-647	1	Contact Block With Stationary Contact Screws & Lockwashers
WS-648	12	Stationary Contact Screw
WS-649	12	Stationary Contact Screw Lockwasher
WS-650	2	Contact Carrier
WS-651	6	Movable Contact
WS-652	6	Contact Spring Retainer
WS-653	6	Contact Spring
WS-654	1	Base With Bushings
WS-655	1	Mechanical Interlock
WS-656	1	Interlock Latch
WS-657	2	Coil Washer
WS-658	2	Magnet Coil
WS-659	4	Coil Terminal Screw With Lockwasher
WS-660	4	Slip-on Connector
WS-661	1	Coil Jumper
WS-662	2	Armature With Lockwasher & Nut
WS-663	2	Armature Slotted Nut
WS-664	2	Armature Nut Lockwasher
WS-665	1	Bottom Plate
WS-666	2	Bottom Plate Screw With Lockwasher
WS-667	1	Electrical Interlock Assembly (N.C. Contacts)
WS-668	1	Contact Kit (Items WS-648, WS-649, WS-651 & WS-653)

ADJUSTMENT — If armature solenoid is removed, it should be adjusted when reassembled by screwing armature within 15/64 of magnet core and locking with slotted nut to 20 in.-lbs. torque.

REFER TO PAGE 26 FOR ORDERING INSTRUCTIONS