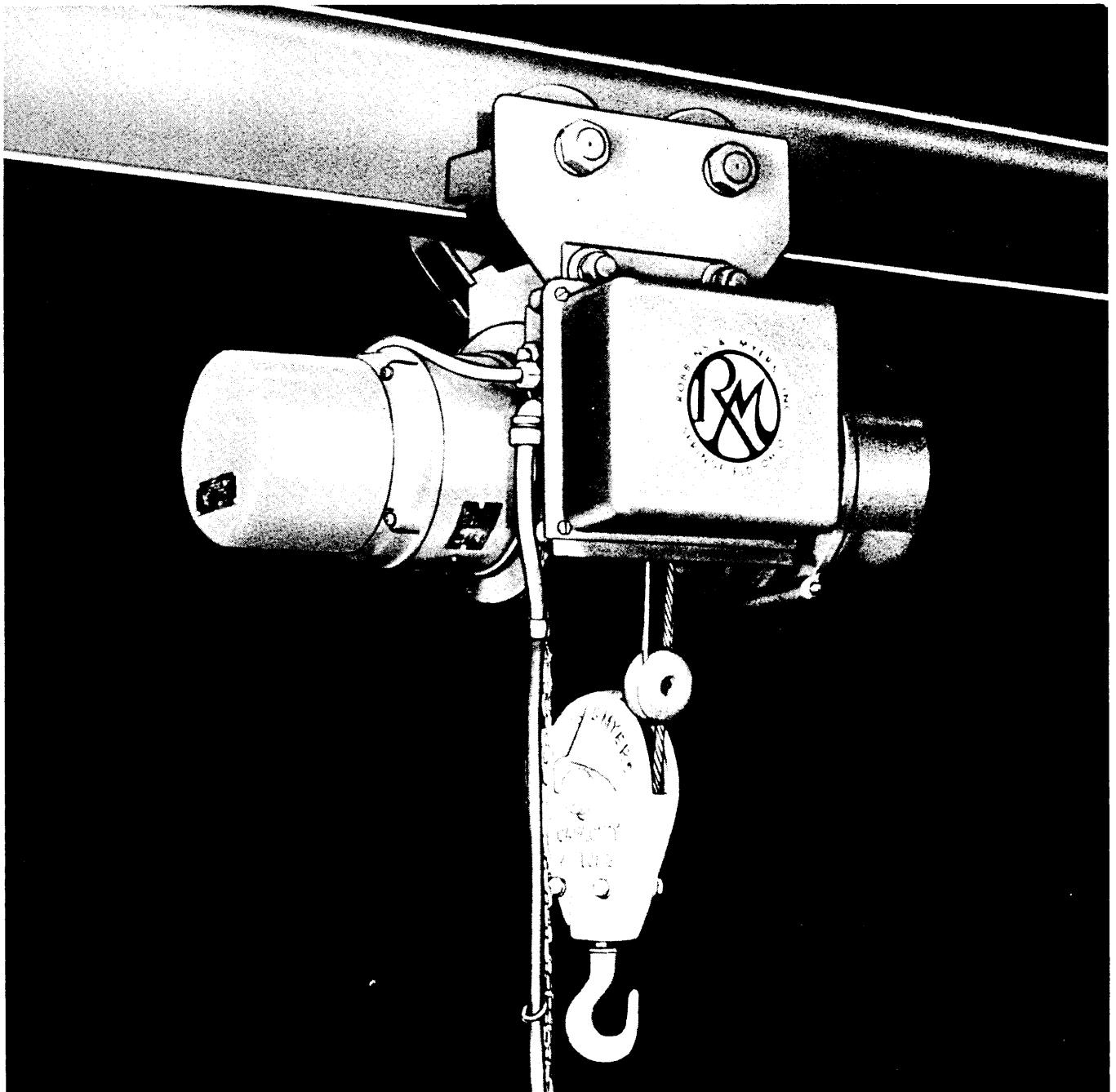


Series J  
Electric Hoists

Service Manual and  
Parts Catalog



# FOREWORD

To the purchasers of Robbins & Myers type J electric hoists:

This manual has been prepared primarily to acquaint you with the general aspects of installation, operation, and maintenance of the hoist you have purchased. It is our earnest desire to express our appreciation for the privilege of serving you.

We feel that the advantage of advance engineering, based on our experience in designing hoists for all types

of industrial service — plus superior workmanship and the highest quality materials available will provide for you the utmost of service and satisfaction through the years of use.

We have carefully outlined the procedures necessary to secure a safe, serviceable hoisting installation. Proper installation is important to the ultimate performance of the hoist. Study the instructions carefully and observe all precautions to prolong the life of the hoist and its accessories. Keep this manual where it will be readily accessible in case of an emergency.

## CAUTION

Robbins & Myers' hoists are not designed for lifting, lowering or transporting people and must not be so used. Local, state, federal and other regulatory codes cover elevator and dumb-waiter installations and equipment. There are no safety devices which may be added to a Robbins & Myers hoist to properly modify it to lift, lower

or transport people. Robbins & Myers cannot and will not assume any liability resulting from the dangerous and illegal use of their hoists to lift, lower or transport people. Any such use will void all warranties.

## GUARANTEE

When installing a new hoist be sure to:

1. Check all nameplates. See page 4.
2. Get correct limit switch action by properly connecting the power lines. See page 6 and 7.
3. Lubricate the hoist. (New hoists are shipped without oil.) See page 5.
4. Observe all instructions on tags attached to the hoist.

Robbins & Myers, Inc. stands behind every product which

bears its name. The equipment you have purchased has been designed and built to rigid specifications of quality and performance. Materials and workmanship are guaranteed for a period of one year from date of shipment. Any part proved defective within that interval will be replaced without charge f.o.b. factory. We ask only that the purchaser give written notice of such defect. We cannot, of course, assume responsibility for unauthorized repairs or alterations.

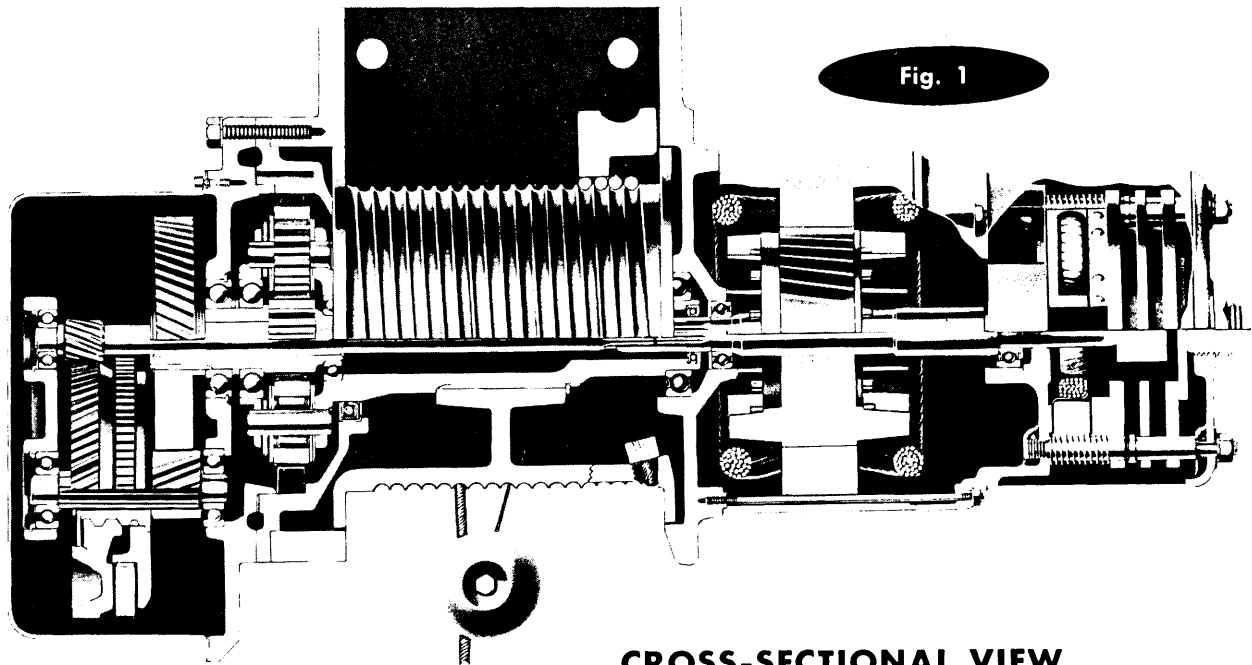
 **Robbins & Myers**

**Hoist and Crane Division  
Springfield, Ohio 45501**

NOTE: This manual covers three models of Robbins & Myers Type J Hoists. There are slight differences in details among these three models. Therefore, the illustrations shown in this manual may not be accurate to the last detail for the particular hoist you have purchased. We therefore ask that you use this information accordingly.

# TABLE OF CONTENTS

Foreword . . . . .	2	Load Brake Adjustment . . . . .	7
Guarantee . . . . .	2	Motor Brake . . . . .	7
Cross-Sectional View . . . . .	3	Motor Brake Adjustment . . . . .	8
Nameplates . . . . .	4	Wire Rope Conservation . . . . .	8
Installation . . . . .	4	To Install a New Wire Rope . . . . .	8
Trolley Mounting . . . . .	5	Trouble Chart . . . . .	9,10
Rigid Mounting . . . . .	5	Repair Instructions . . . . .	11
Hook Suspension . . . . .	5	Replacement of Oil Seals . . . . .	11
Lubrication . . . . .	5	Lubrication Schedule . . . . .	11
Motors . . . . .	5	General Repair Parts Information . . . . .	12
Limit Switches and Controls . . . . .	5,6	Return of Parts . . . . .	12
Connecting Main Leads . . . . .	6,7	Claims . . . . .	12
Automatic Load Brake . . . . .	7	Parts Catalog . . . . .	13



## CROSS-SECTIONAL VIEW

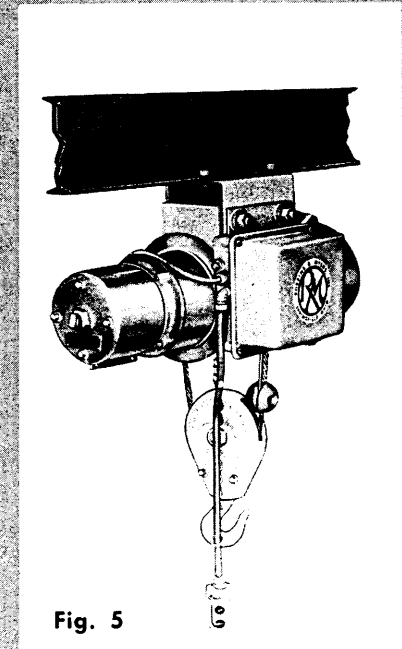
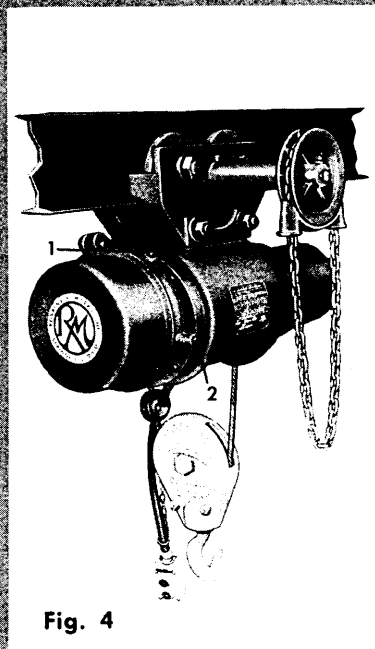
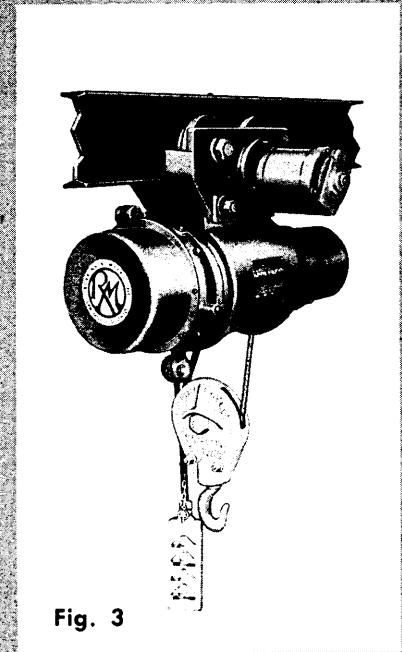
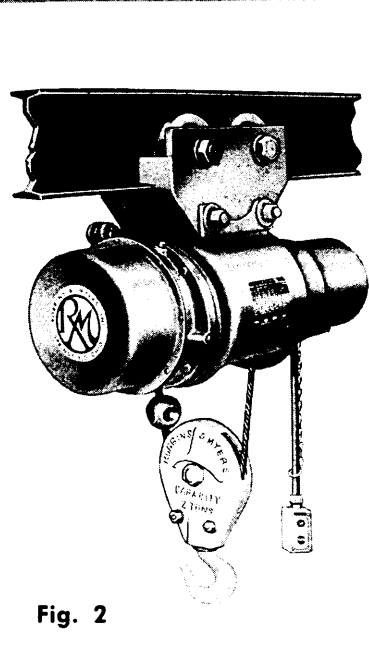
This cross-sectional view, see Figure 1, of the Robbins & Myers Type J-3 Hoist reveals engineering of the highest order and precision manufacture. This type of engineering and manufacturing is typical of the entire line of Robbins & Myers products.

## NAMEPLATES

Prior to installing and using the hoist, it is important to refer to all the nameplates for detail specifications regarding voltage, current, phase, load capacity, etc. Particular attention should be paid to the method of connecting the main line leads. See Limit Switches and Controls, pages 5 and 6. Some models may be connected for different line voltages. See wiring diagrams, in hoist control box.

## INSTALLATION

Built for various types of mountings, the Robbins & Myers Type J Hoist can be installed with a minimum of effort and expense for lifting operations. Three types of trolley mountings, as well as rigid mounting, are possible as illustrated in figures 2 to 5. Each of these may employ the collector assembly, or flexible cable, see figure 6, to bring in the power to the hoist motor. Instructions for installing trolley and rigid mounted models are outlined below. Installation will depend upon the individual application.



## TROLLEY MOUNTING

See Figure 7

A set of twelve steel spacers is included with each hoist to permit mounting of the hoist on any American Standard bevel flange I-beam of the following sizes: J-1 and J-2 hoists, 5 to 12 inch; J-3 hoist, 7 to 15 inch. They may also be mounted on flat flange beams of equivalent flange width. To prevent binding, a clearance of 1/8 inch between the trolley wheel flange and the I-beam flange must be maintained. Slightly more clearance is required if the runway has any short radius curves. By placing an equal number of spacers between each trolley side plate and the lug mounting, the proper centering will be accomplished. For standard 5-inch I-beam (J-1 and J-2 hoists) or 7-inch I-beam (J-3 hoist) installations, the side plates are mounted flush against the mounting lug and six spacers are positioned outside of the side plates. For larger size beams, install sufficient spacers between each side plate and the mounting lug to obtain the required clearance of the wheels over the beam flanges. Always mount the J-3 hoist parallel to the beam, never across the beam. The J-1 and J-2 hoists can be mounted across the beam, but parallel mounting is preferable.

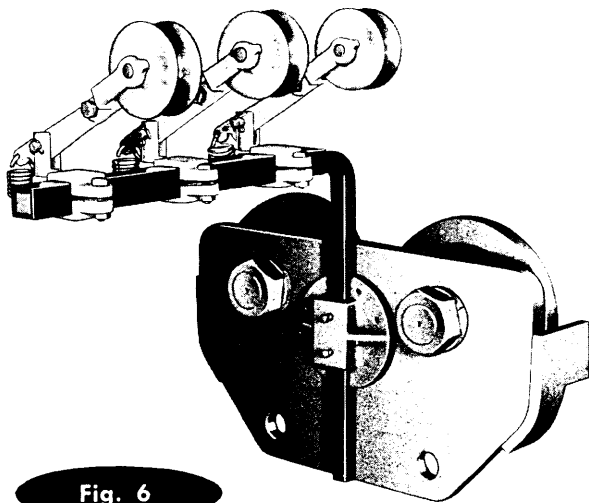


Fig. 6

## RIGID MOUNTING

Rigid mounting (Type A) hoists, see figure 5, are especially adaptable for stationary applications or monorail trolley installations.

## HOOK SUSPENSION

For hook suspension, J-1 and J-2 hoists are furnished with a drilled bracket which bolts directly to the lug mounting support. Swivel type hooks enable the operator to select the proper lifting position.

The J-3 hoist is not suitable for hook suspension.

## LUBRICATION

CAUTION

HOISTS ARE SHIPPED WITHOUT OIL

After hanging, but before operating the hoist, carefully add oil to the gear housing (see figure 8) as follows: Remove the two plugs (1 and 2 in Fig. 4) on the housing flange. Through the top hole (1) fill with a medium motor oil (SAE 20 or 30 is recommended for normal service and SAE 10 for outside winter service) until the oil supply is visible in the lower hole (2) marked "Oil Level". The normal oil requirement of the J-1 hoist is 1-1/2 quarts; the J-2 and J-3 hoists each require 2 quarts. Replace the plugs and wipe all excess oil from the housing. By maintaining the proper oil level in the case, lubrication problems are eliminated. All open bearings in the gear case are splash lubricated. One shaft bearing and the motor, trolley wheel and sheave bearings are the permanently double-sealed, prelubricated type which are packed with adequate grease for years of rugged hoisting duty. Oil may be added to the trolley drive motor as follows: Remove the oil fill and oil level plugs from the trolley drive motor gear housing. Through the top hole fill with a medium motor oil. (SAE 20 or 30 is recommended for normal service and SAE 10 for outside winter service.)

## MOTORS

Designed to provide the utmost in dependable hoisting service, the motor which powers your hoist was developed by Robbins & Myers motor engineers to attain the maximum performance of the hoisting mechanism. Each motor is enclosed against normal hazards of dust and moisture and equipped with single-row width, permanently-sealed bearings, see figure 9, which are packed with sufficient grease for years of rugged hoisting service. The standard trolley motor is designed to permit the leads to be connected for three different power ratings for driving the trolley wheels without any change in speed. All hoists are shipped with its trolley motor leads connected for average conditions. If more or less power is required, check the lead connections with the instruction plate on the motor for the method of changing the power of the motor.

Note

Changing these connections will not change the voltage required nor the speed of the trolley wheels.

## LIMIT SWITCHES AND CONTROLS (Figure 18)

The limit switch mechanisms function as emergency stops for upward and downward travel of the hook block. The hoist should be located high enough so that it will not be necessary to go into the upper limit during a normal work duty.

**CAUTION: OPERATORS MUST NOT INTENTIONALLY HOIST BLOCK TO THE POINT OF CONTACTING LIMIT SWITCH**

The upper limit switch consists of a pilot circuit switch held in contact by a weight suspended on a cable. The hoisting rope is threaded loosely through this weight so that movement of the bottom block has no effect on the reliability of operation. If the bottom block is hoisted too far, it raises the weight and allows the limit switch to open, thus opening the motor circuit and applying the magnetic brake. The switch will reverse the motor if the bottom block coasts too far.

After the hoist has been connected to the main line leads, check the operation of the limit switch by starting the hook block in the hoisting direction. Lift the limit switch weight slowly by hand. This should open the hoisting circuit and bring the hook block to a complete stop. If the hoist does not stop, follow instructions under **CONNECTING MAIN LINE LEADS**. Further lifting of the weight should cause the limit switch to close the lowering circuit, thereby reversing the motor and lowering the hook block. Release the weight and permit it to drop into its normal position. This should open the lowering circuit and bring the hook block to a complete stop (pushbuttons not depressed).

If the limit weight cable becomes broken and allows the weight to fall to the bottom block, the limit switch will automatically break the hoisting circuit, thereby preventing any further upward travel of the block until the limit weight cable is repaired. However, the lowering circuit is established and the bottom block is lowered until the hoist power is turned off or the lower limit switch functions. The lower limit switch circuit is closed when two or more wraps of hoist rope are wound on the rope drum. A lower limit lever rides over the turns of the hoist rope. As the last two wraps of rope are unwound, the lower limit lever will fall to a lower position and open the lower limit switch thereby stopping further downward travel of the bottom block.

This lower limit is accurately set at the factory but may require adjusting during use, or if a new cable is put on the hoist, or if the control panel is dismantled for any reason. To reset, unwind all the cable from the drum allowing the weighted arm to rest on the drum. It may be that in order to do this you will have to push down on the limit lever shown in Figure 18. Then back off the lock nut and extend the adjusting screw upward until you hear the limit switch click. This click is not very loud and you will have to listen closely. After the switch clicks, tighten the lock nut again. A quarter turn of the screw up or down from this position may be required for the best setting. A trial run will show whether this is necessary.

The limit switches are mounted within the control box and are protected against atmospheric conditions. Normally, they should last through the life of the hoist.

Since probably no other part of the hoist is subject to more abuse than limit switches used for limiting travel of hook blocks, a thorough understanding of them will be very helpful in preventing trouble and in making repairs. Operators should be cautioned about using the limit switch unnecessarily.

## CONNECTING MAIN LEADS

Make certain that your current supply is the same as stamped on the motor nameplate. Test the line voltage of each phase with a voltmeter at the motor terminals when the motor is operating at full load. Connect the hoist main line leads to the power supply in the manner shown in the accompanying illustration figure 10. Check the movement of the hook by "inching" the "UP" push button of the pendant. Should the hook lower instead of rise, release the push button and recheck the power connections. The interchanging of any two of the three main line leads will reverse the direction of hook travel on 3 phase hoists. For other power supplies, see wiring diagrams for instructions.

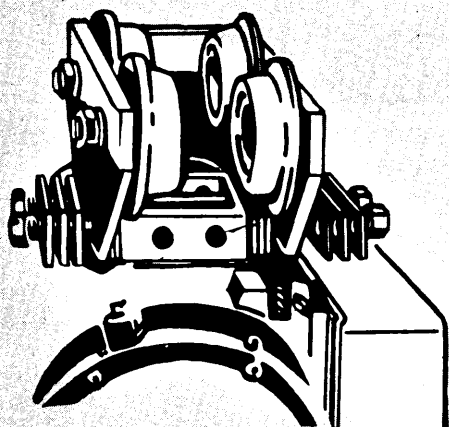


Fig. 7

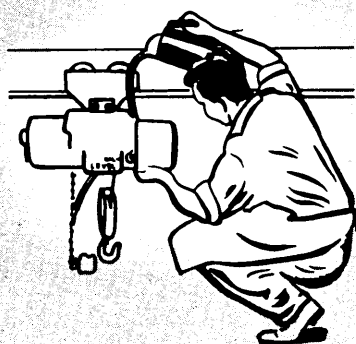


Fig. 8

PERMANENTLY SEALED,  
BOTH SIDES, TO KEEP  
LUBRICANT IN—DIRT OUT.

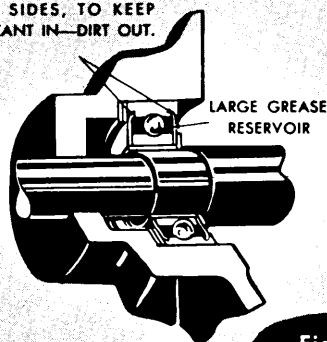


Fig. 9

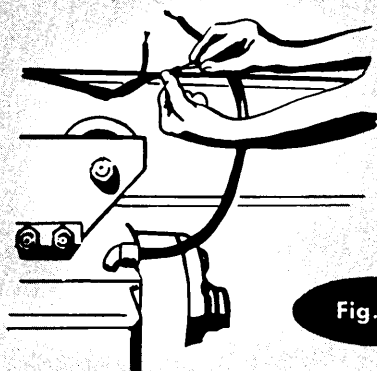


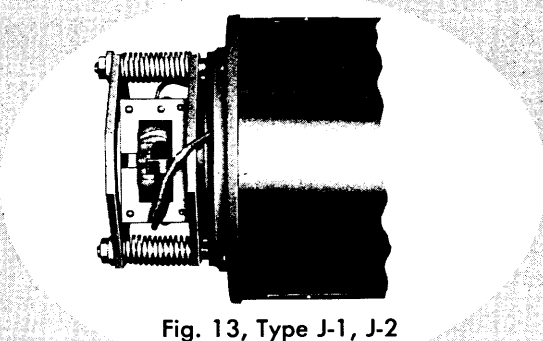
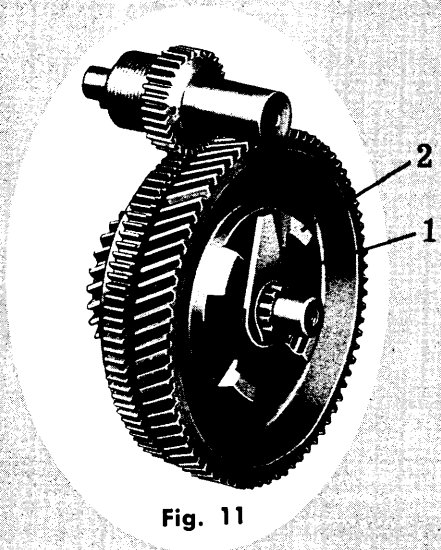
Fig. 10

## CAUTION

Do not under any circumstances change the wiring in the panel or the push button pendant. **DO NOT DISREGARD THESE INSTRUCTIONS.** Continued operation of the hoist when the hook travel is reversed will result in extensive damage. The manufacturer cannot assume responsibility for repairs if the proper precautions have not been taken.

## AUTOMATIC LOAD BRAKE

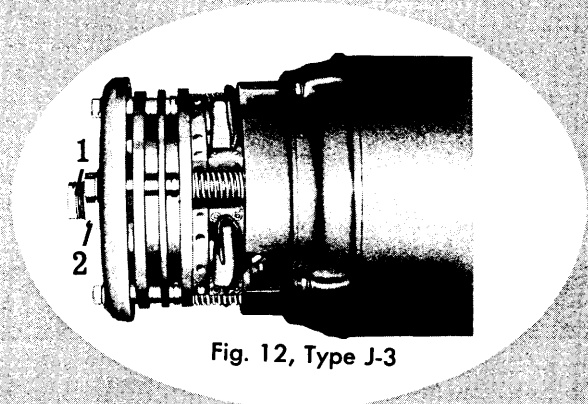
Fundamentally, the well-designed electric hoist must perform two definite operations. In addition to the lifting and lowering of loads, it must be capable of suspending them in mid-air for indefinite periods of time without danger of slipping or dropping. An over-size Weston type load brake (see figure 11) incorporated in the gearing of the Robbins & Myers Type J Hoist, automatically controls speed when the load is lowered and prevents dropping in the event of power failure.



Large area friction discs between the drive gear and the brake gear provide a positive check against slipping or dropping while the load is lifted or held stationary. Released only when the load is lowered, the brake is controlled by a non-reversing clutch. This clutch revolves only when hoisting and is stationary when lowering. The Weston load brake operates in an oil bath to cushion the braking action and to aid in dissipating heat. When replacing friction discs be sure to cover both sides of the new discs with oil before putting them in place. This is necessary since lubrication is an important factor in the satisfactory operation of the load brake.

## LOAD BRAKE ADJUSTMENT

To assure proper adjustment, the drive lever (1, figure 11) should be positioned between  $3/16$  and  $1/8$  inch from one of the four stops (2, figure 11). It may be necessary to try the lever at all four stops to attain the proper measurement. Refer to the exploded view, figure 22, when disassembling the load brake.



## MOTOR BRAKE

The Robbins & Myers magnetic motor brake (see figures 12 and 13) is enclosed against fumes, dirt and moisture. The motor brake is of the magnetic disc type and is used to prevent drift of the hook block. This brake dissipates energy in friction heat and is operated every time the motor is energized. The motor brake embodies ample brake area and liberal wear allowance for satisfactory performance. Multiple large-area asbestos friction discs mount on a splined hub and ride over polished steel discs. Equalized spring pressure that cannot be adjusted to overload the magnet, provide smooth, long wearing brake action.

## MOTOR BRAKE ADJUSTMENT

### J-1 AND J-2 HOISTS

There is no external adjustment provided in this brake because the liberal wearing surfaces of this brake make the need for adjustment very infrequent. As the brake linings wear, the air gap (see Fig. 13) will increase. When this gap becomes more than 1/16 inch, back-off the jam nut (1), tighten down the adjusting sleeve (2) until the gap is reduced to a minimum (about 1/64") coincident with free rotation of the friction disc, and then relock with the jam nut.

### J-3 HOISTS

As the friction discs on the J-3 brake wear, the brake will lose its torque. When this happens the center screw (1 in Fig. 12) should be drawn up snug and then backed off a half turn. No other adjustment needed.

## WIRE ROPE CONSERVATION

While the wear life of the wire rope depends mainly upon the frequency of use and severity of service, proper maintenance and reasonable hoisting precautions will aid considerably in prolonging its length of service. Periodic lubrication of the cable with 600-W oil will reduce deterioration caused by rust and acids and preserve the necessary flexibility for smoother, safer lifting. Examine the cable for broken wires. If more than three or four are found, the cable must be replaced. Cable of the exact size and quality with which your hoist was originally equipped is available on direct order from the factory. A cable so ordered will be complete with rope socket attached ready for immediate installation on your hoist. It is a good policy to have a spare cable on hand to prevent delays in production when replacement is necessary.

## TO INSTALL A NEW WIRE ROPE

It is suggested that the coil be rolled along the floor to permit unreeling without kinking or twisting of the cable. See figure 14. Remove the cable plug from the drum. Insert the new cable socket into the drum, threading the cable through the notched opening (see figure 15). Replace the plug and tighten securely. It is not necessary to remove the drum when installing a new cable. Be sure that the cable is directed over the drum so that the rotation of the drum will wind the cable properly in the grooves. To connect the stationary end, pass the cable between the main frame casting and the rear plate of the control panel. Use care to prevent putting twists or kinks in the cable. Figure 16 shows the hoist with the control panel removed and indicates the position of the cable against the main frame casting. Thread the cable over the thimble and tighten the two cable clamps securely.

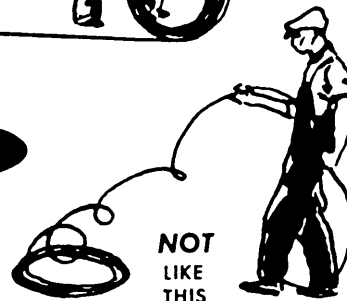
### CAUTION

The saddle of the cable clamp should ride on the loaded side of the cable.

UNREEL BY  
ROLLING COIL  
ALONG FLOOR



Fig. 14



NOT  
LIKE  
THIS

Fig. 15

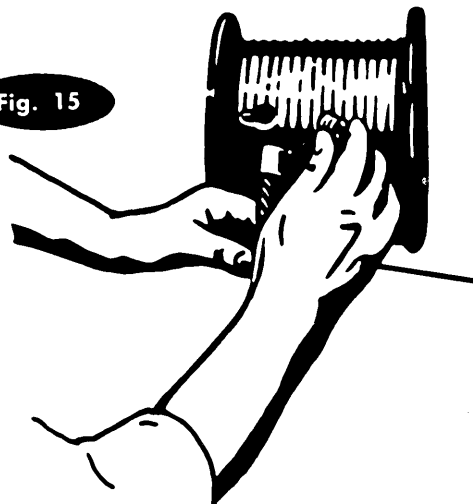


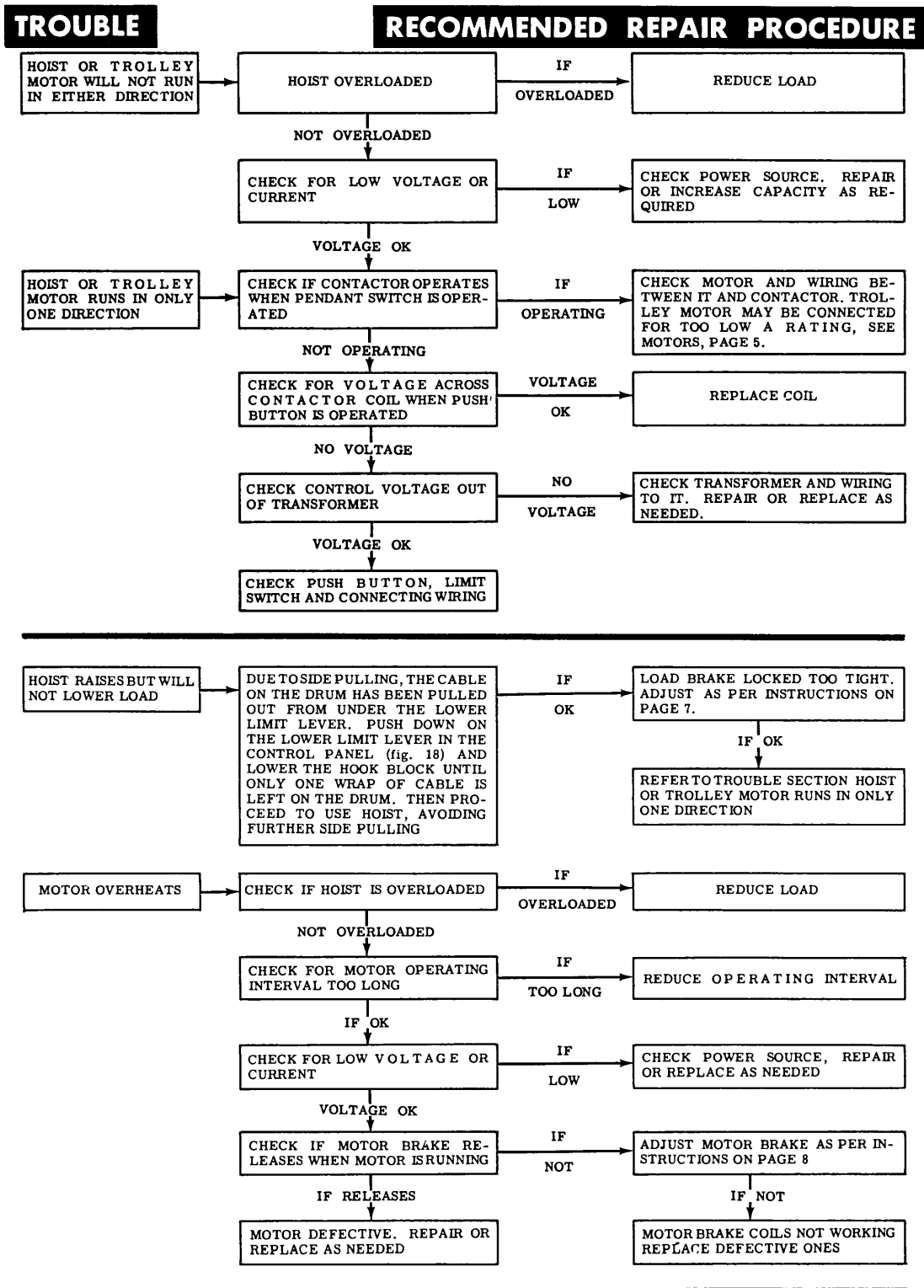
Fig. 16





# TROUBLE CHART

THE FOLLOWING CHART IS A LISTING OF POSSIBLE  
HOIST TROUBLES AND THE RECOMMENDED PROCEDURE  
FOR EFFICIENT REPAIR.



# TROUBLE CHART

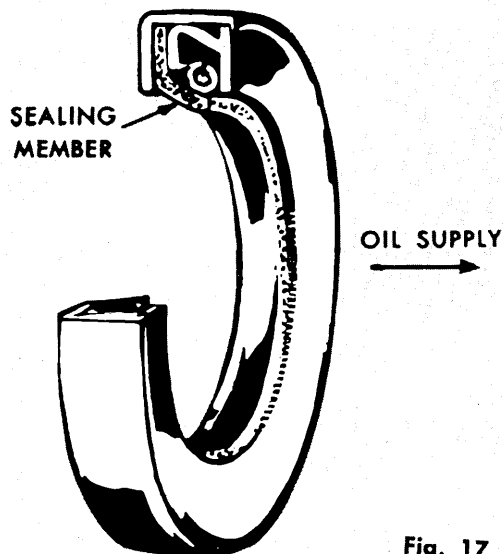
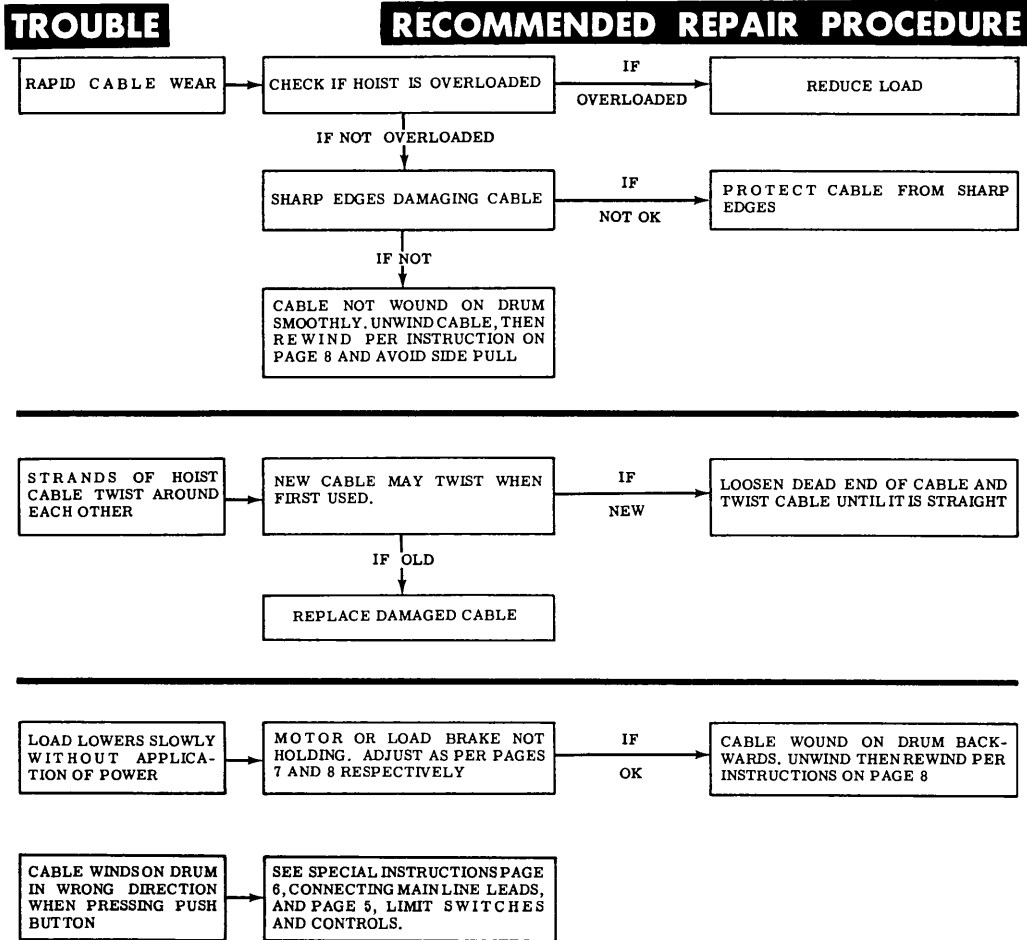


Fig. 17

# REPAIR INSTRUCTIONS

Disassemble each of the main assemblies as shown in the exploded views, figures 19 to 30. Retaining rings may be removed with standard Waldes-Kohinoor retaining ring pliers, or screw drivers depending on the type of ring used.

## Note

Disassembly should be limited to the removal of only defective parts. Unless required for replacement, the removal of dowel pins, nameplates, etc., is not recommended.

Clean all metal parts. To prevent damage, clean all highly finished and close tolerance parts individually. Dry parts thoroughly immediately after cleaning. Make an inspection of the following parts for the defects listed. Reject if worn or damaged.

## Note

All gaskets, oil seals and lock washers are to be discarded if removed.

Inspect the parts for the following:

- a. Threaded parts and openings for damaged or broken threads.
- b. Gears and splined shafts for wear on sides of teeth and evidence of hammering or pounding.
- c. Ball bearings for smoothness of operation and freedom of nicks, burrs and dirt.
- d. Shaft, bushing and bearing surfaces for nicks, scratches, burrs, or other damage affecting proper performance.
- e. Keys and key slots for bent or burred corners and edges.
- f. Castings for cracks, distortion, or other structural damage.
- g. Electrical wiring for cracked, cut or frayed insulation.
- h. Contactors for burred or pitted contacts.

Replace all gaskets, oil seals and lock washers removed during disassembly as well as all parts damaged beyond simple and obvious minor repair.

## Note

When replacing oil seals, make certain that the leather edge of the seals face toward oil reservoir. (Figure 17.)

Reassembly should be performed in the reverse order of disassembly. Use care in reassembly so as not to scratch, nick or burr highly finished parts. Never force parts together. If properly aligned, they will go together with very light tapping or pushing by hand.

Replace oil in hoist gear frame or trolley motor gear housing after final assembly. Refer to page 5.

## REPLACEMENT OF OIL SEALS

Before new seals are positioned, make certain that there are no burrs or rough spots on the shaft. Push the shafts through carefully, with the sealing member toward the oil supply as shown in figure 17. Assemble the oil seals into the housings by an arbor press, not by hammer or mallet.

## LUBRICATION SCHEDULE

PART	LUBRICANT	PERIOD
Hoist gear frame assembly	SAE 20 or 30	Semi-annually unless hoist shows evidence of leaking oil.
Trolley motor gear housing	SAE 20 or 30	Semi-annually unless there is evidence of oil leak.
Hoist cable	600 W grease	Monthly.

Bearings not in the gear case are permanently lubricated ball bearings; it is not necessary to lubricate during life of unit.

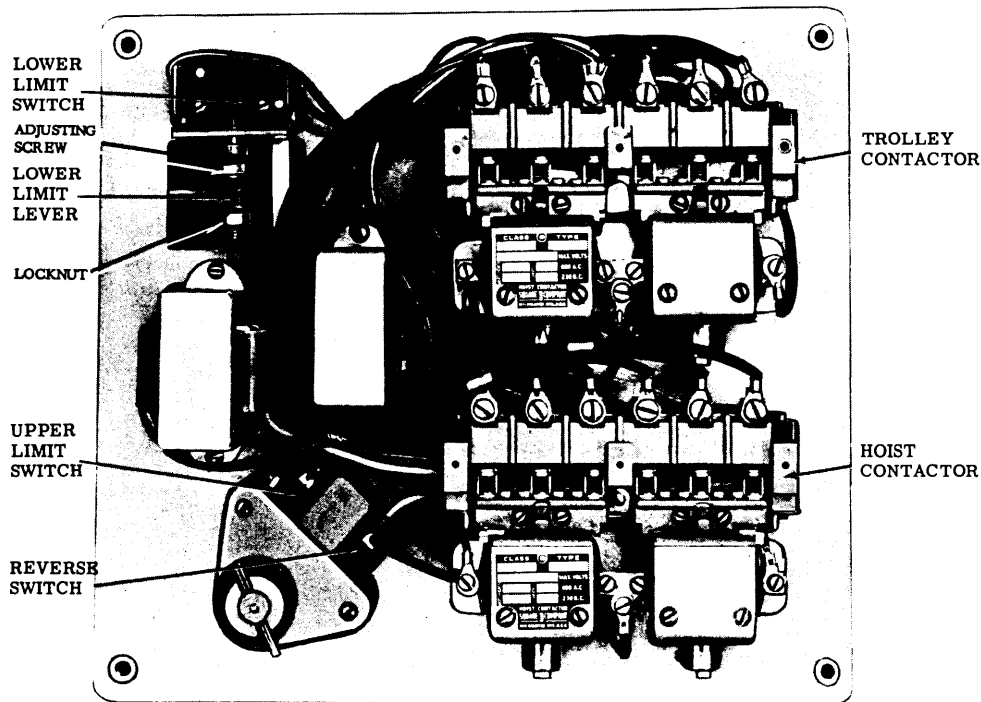


Fig. 18

## GENERAL REPAIR PARTS INFORMATION HOW TO ORDER REPAIR PARTS CORRECTLY

The parts catalog section of this manual covers all replacement parts required for the Robbins & Myers, Inc. Type J Hoist. To insure prompt service, each repair parts order must contain the following information:

1. Hoist Serial Number (See below)
2. Capacity
3. Reference Number of Bulletin #864-A
4. Quantity
5. Description
6. Voltage, Phase, and Cycle
7. Correct Shipping Destination

On the brass nameplate will be found the Serial Number of your hoist . . . . . i.e., Serial No. J-\_\_\_\_\_. Without this Serial Number we cannot be sure of sending you correct parts, so ALWAYS MENTION SERIAL NUMBER FOR PROMPT SERVICE. For a motor part, give Serial Number of Motor as given on motor nameplate, as well as Hoist Serial Number.

When orders for parts are sent directly to Robbins & Myers, Inc., they should be addressed as follows:

Hoist & Crane Division  
Robbins & Myers, Inc.  
1345 Lagonda Avenue  
Springfield 99, Ohio

Orders telephoned or telegraphed to us must be immediately confirmed by letter since we cannot assume responsibility for the correctness of the telephone or telegraphic message.

### NOTE

Remember that factories generally may be closed Saturday. Orders received for stock parts late Friday cannot be shipped until the Monday following. In an emergency contact factory, Hoist & Crane Division, Phone 323-6461, area code 513 and every effort will be made to serve you.

Minimum Repair Parts Order Charge . . . . . \$1.00

### RETURN OF PARTS

Robbins & Myers, Inc. will not accept return of any parts unless accompanied by a claim tag. These claim tags to be issued at the time authorization of such return is made. Tags must be attached to the outside of the package.

### CLAIMS

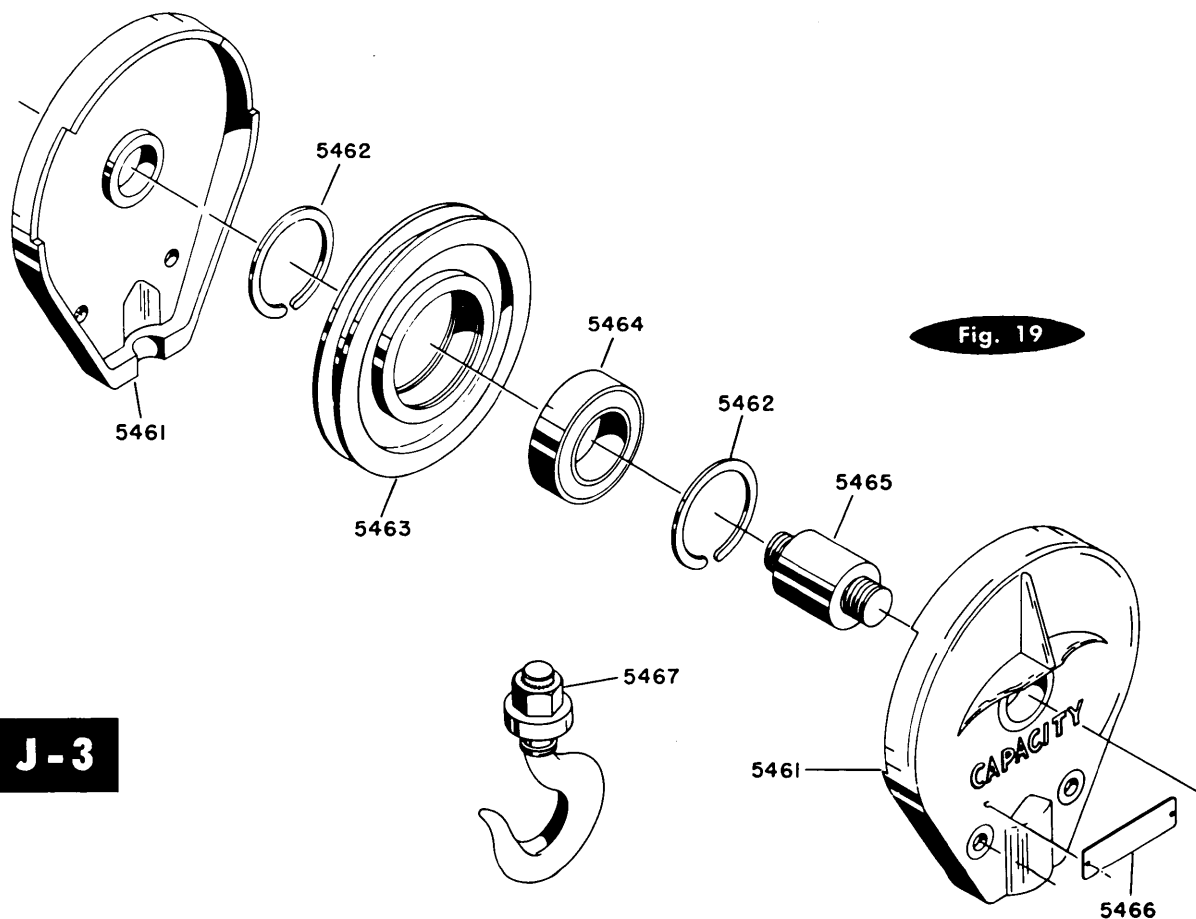
All shipments are carefully inspected and are delivered to the carrier in good order. Upon receipt of shipment, caution should be exercised that there is no loss or damage. If damage has occurred, refuse to accept the shipment until the carrier makes the proper notation to that effect. In the event of concealed loss or damage, notify the carrier immediately. By following these suggestions you will encounter less difficulty collecting your claim.

# PARTS CATALOG

This section illustrates and lists all procurable parts for the Robbins & Myers Type J Hoist. Each part is listed by a reference number and description. Use the reference number and complete part description when ordering replacement parts.

When a complete assembly is desired, use the reference number and description of that assembly. Do not list its component parts. Assemblies not having a reference number cannot be purchased as a complete item. It is necessary in this case to order each component part separately.

Refer to page 12 of this manual for complete instructions pertaining to the ordering of replacement parts.



**J-1, J-2, J-3**

REFERENCE NUMBER	PART DESCRIPTION
*5460	Bottom Block Assembly
5461	Sheave Frame
5462	Snap Ring
5463	Sheave
5464	Ball Bearing
5465	Stud
5466	Capacity Plate
5467	Hook Assembly

\* Use this reference number when ordering the complete assembly.

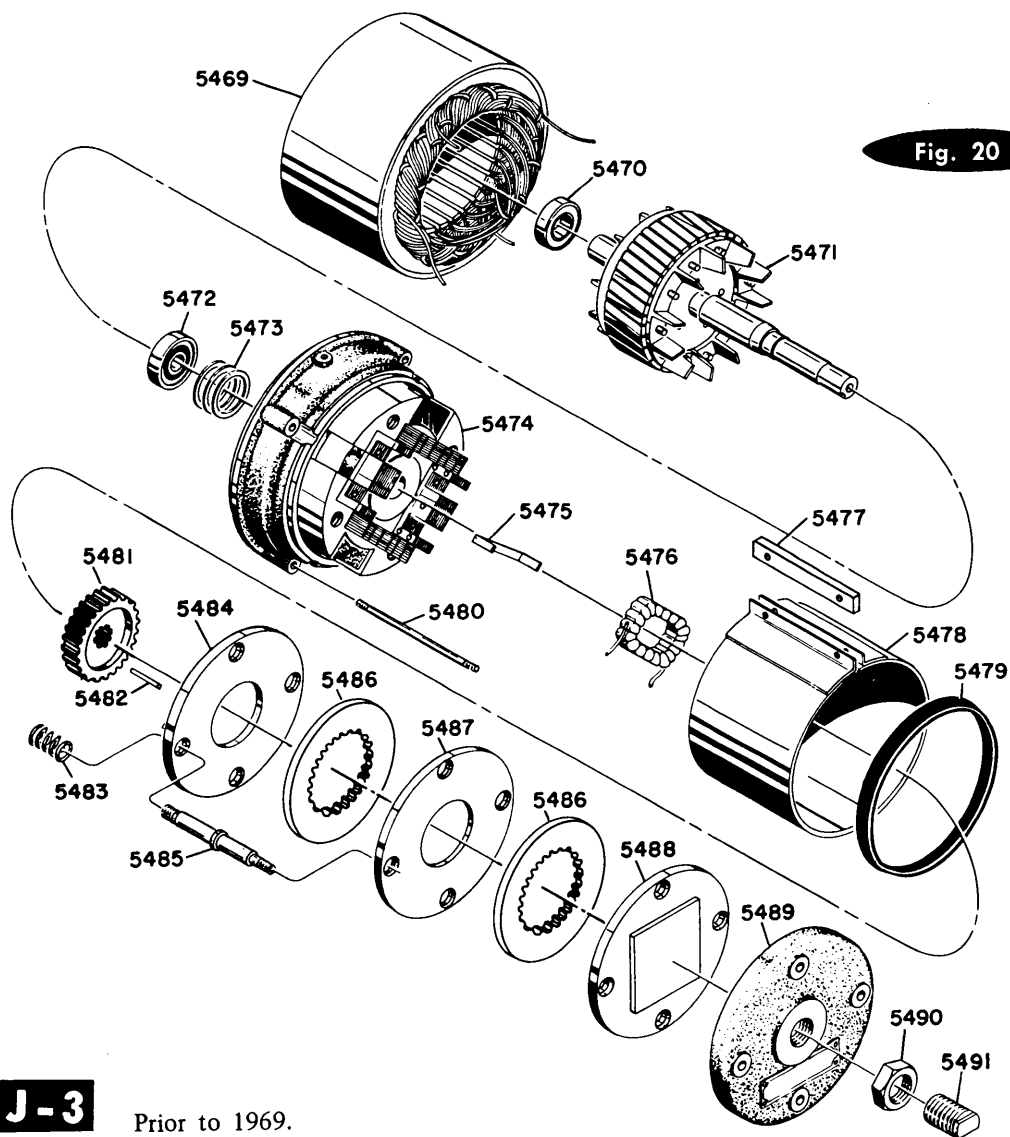


Fig. 20

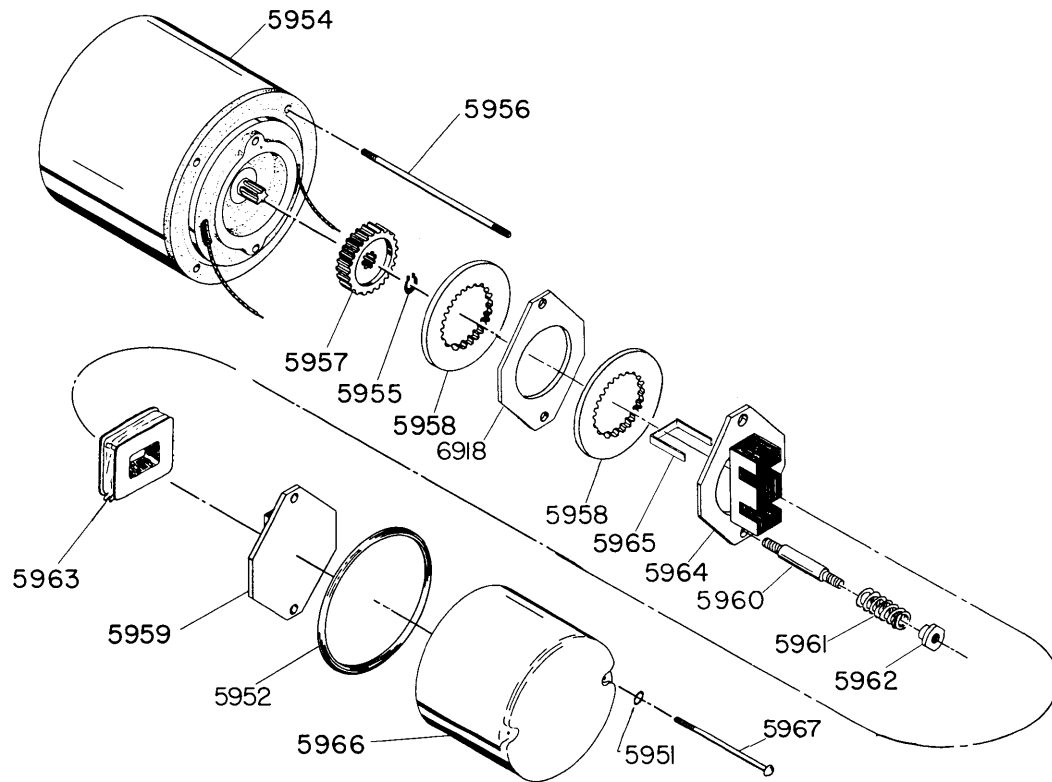
**J-3**

Prior to 1969.

REFERENCE NUMBER	PART DESCRIPTION	REFERENCE NUMBER	PART DESCRIPTION
*5468	Motor Assembly	5480	Stud
5469	Field Assembly	5481	Disc Hub
5470	Ball Bearing	5482	Hub Key
5471	Rotor	5483	Brake Spring
5472	Ball Bearing	5484	Armature Plate Assembly
5473	Shim	5485	Brake Stud
5474	Pole Piece and Motor Head Assembly	5486	Friction Disc
5475	Coil Support	5487	Intermediate Thrust Disc
5476	Coil	5488	Thrust Disc for Adjustment Screw
5477	Gasket	5489	Thrust Disc Cover
5478	Brake Cover	5490	Jam Nut
5479	Gasket	5491	Adjustment Screw

\* Use this reference number when ordering the complete assembly.

Fig. 21



All J-1/J-2 hoists, and J-3 hoists built during 1969 or thereafter, are equipped with brakes as shown above. J-1/J-2 are single disc brakes, J-3 2 disc.

## J-1, J-2

REFERENCE NUMBER	PART DESCRIPTION	REFERENCE NUMBER	PART DESCRIPTION
5951	Sealing Washer	5960	Brake Stud
5952	"O" Ring Seal	5961	Spring
5953 *	Motor and Brake Assembly	5962	Adjusting Sleeve
5954	Motor	5963	Magnetic Pole
5955	Snap Ring	5964	Magnetic Pole Plate Assembly
5956	Motor Stud	5965	Coil Support
5957	Brake Hub	5966	Brake Cover
5958**	Friction Disc	5967	Brake Cover Stud
5959	Armature Plate Assembly	6918	Intermediate Disc (J-3 only)

\* USE THIS REFERENCE NUMBER WHEN ORDERING THE COMPLETE ASSEMBLY  
 \*\* TWO REQUIRED (J-3 ONLY)

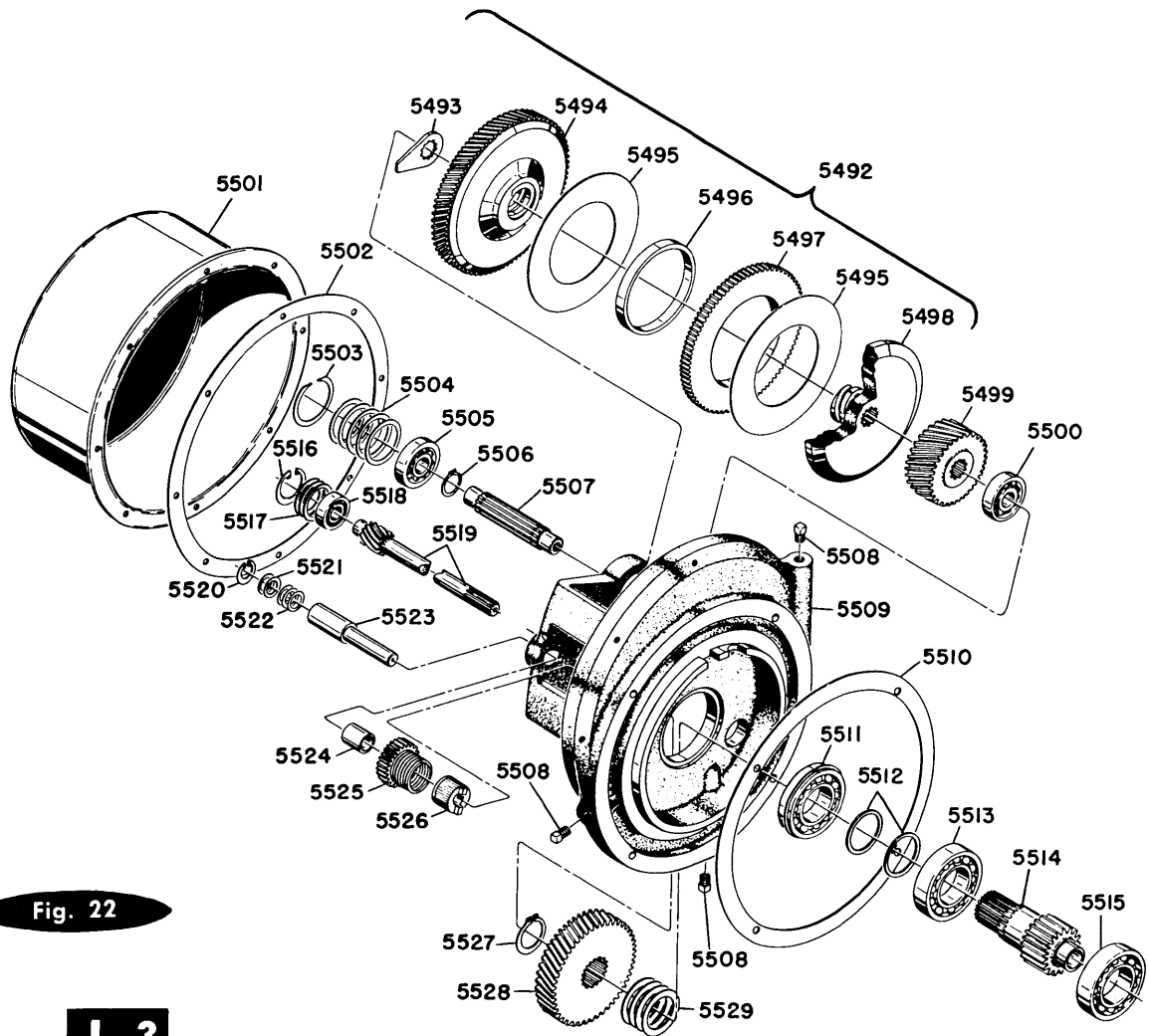


Fig. 22

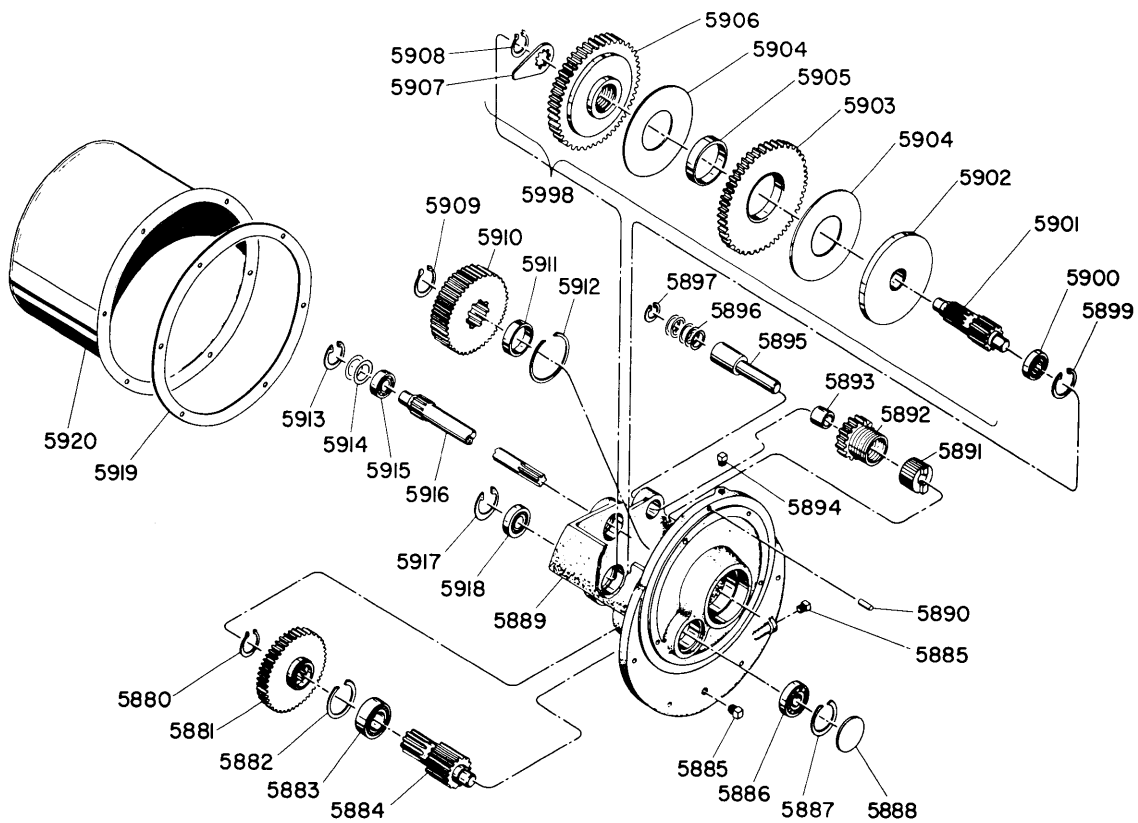
J-3

REFERENCE NUMBER	PART DESCRIPTION	REFERENCE NUMBER	PART DESCRIPTION
*5492	Load Brake Assembly	5511	Ball Bearing
5493	Reverse Lever	5512	Spacer
5494	Motor Gear	5513	Ball Bearing
5495	Brake Liner	5514	Sun Pinion
5496	Ratchet Bushing	5515	Ball Bearing
5497	Ratchet Gear	5516	Snap Ring
5498	Thrust Disc	5517	Spacer
5499	Intermediate Pinion	5518	Ball Bearing
5500	Ball Bearing	5519	Drive Shaft
5501	Gear Cover	5520	Snap Ring
5502	Gear Cover Gasket	5521	Spacer
5503	Snap Ring	5522	Shim
5504	Spacer	5523	Clutch Shaft
5505	Ball Bearing	5524	Bushing
5506	Snap Ring	5525	Spring Clutch Assembly
5507	Intermediate Pinion	5526	Shaft Adapter
5508	Pipe Plug	5527	Snap Ring
5509	Gear Frame	5528	Intermediate Gear
5510	Internal Gear Gasket	5529	Spacer

\* Use this reference number when ordering the complete assembly.



Fig. 23



J-1, J-2

REFERENCE NUMBER	PART DESCRIPTION	REFERENCE NUMBER	PART DESCRIPTION
5880	Snap Ring	5901	Int. Pinion
5881	Intermediate Gear	5902	Thrust Disc
5882	Snap Ring	5903	Ratchet Gear
5883	Ball Bearing	5904	Brake Liner
5884	Drum Pinion 15 FPM 30 FPM	5905	Bushing
5885	Pipe Plug	5906	Motor Gear
5886	Ball Bearing	5907	Reverse Lever
5887	Snap Ring	5908	Snap Ring
5888	Welch Plug	5909	Snap Ring
5889	Gear Case	5910	Drum Gear 15 FPM 30 FPM
5890	Pin	5911	Gear Spacer
5891	Adapter	5912	Snap Ring
5892	Spring Clutch Assembly	5913	Snap Ring
5893	Bushing	5914	Shim
5894	Pipe Plug	5915	Ball Bearing
5895	Clutch Shaft	5916	Drive Shaft
5896	Shim	5917	Snap Ring
5897	Snap Ring	5918	Ball Bearing
5898	Load Brake Assembly	5919	Gear Cover Gasket
5899	Snap Ring	5920	Gear Cover
5900	Ball Bearing		

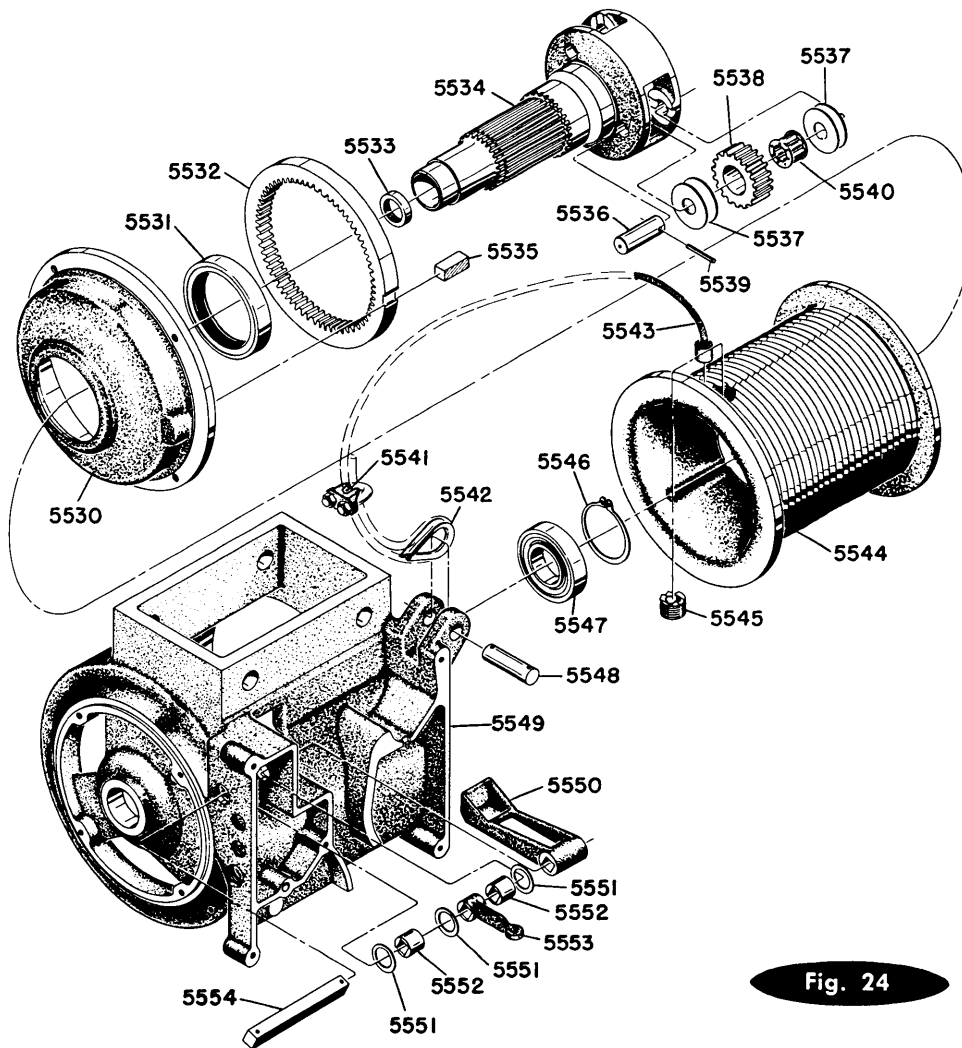
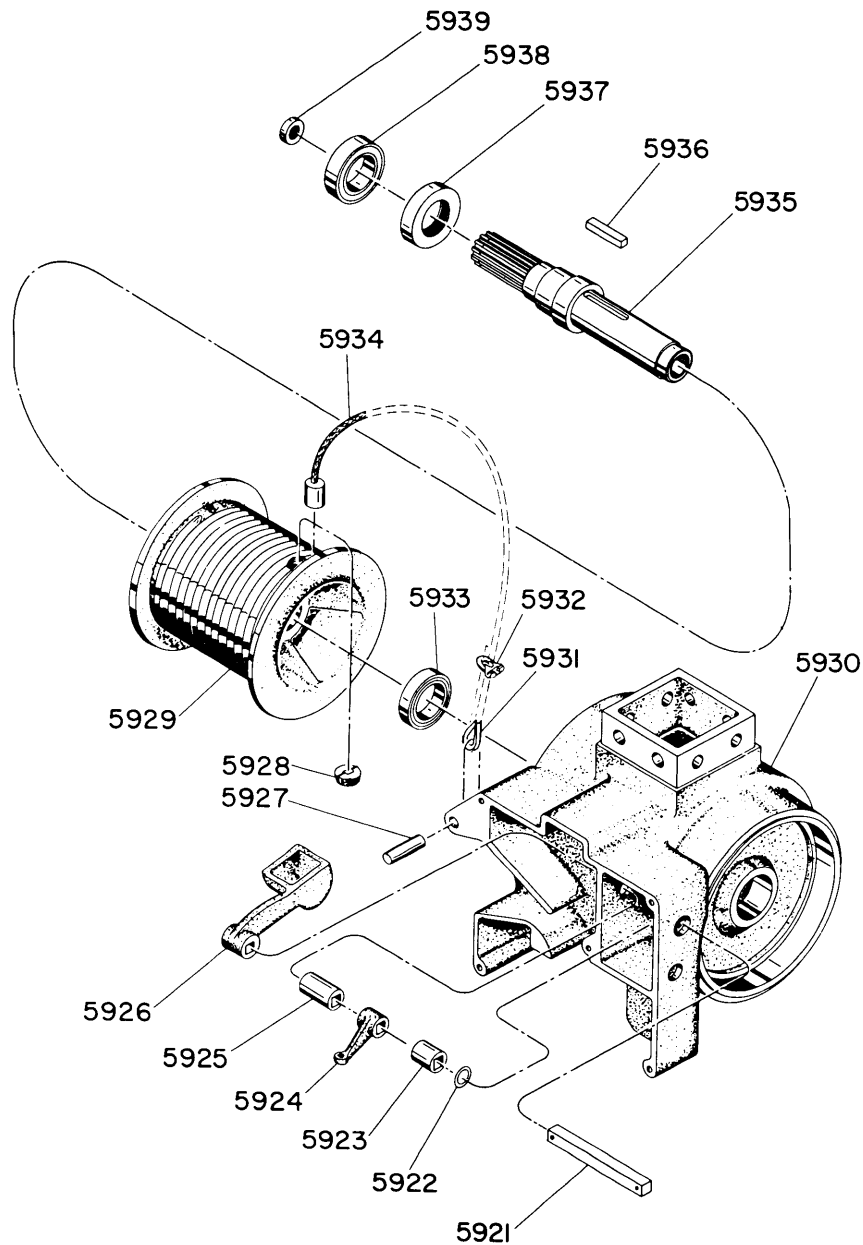


Fig. 24

**J-3**

REFERENCE NUMBER	PART DESCRIPTION	REFERENCE NUMBER	PART DESCRIPTION
5530	Internal Gear Cover	5543	Rope Assembly
5531	Oil Seal	5544	Rope Drum
5532	Internal Gear	5545	Pipe Plug
5533	Oil Seal	5546	Snap Ring
5534	Drum Shaft	5547	Ball Bearing
5535	Key	5548	Load Pin
5536	Pinion Shaft	5549	Hoist Body
5537	Spacer	5550	Lower Limit Lever
5538	Planet Pinion	5551	Spacer
5539	Groove Pin	5552	Limit Paddle Shaft Bushing
5540	Roller Bearing	5553	Lower Limit Lever
5541	Rope Clip	5554	Lower Limit Shaft
5542	Rope Thimble		

Fig. 25



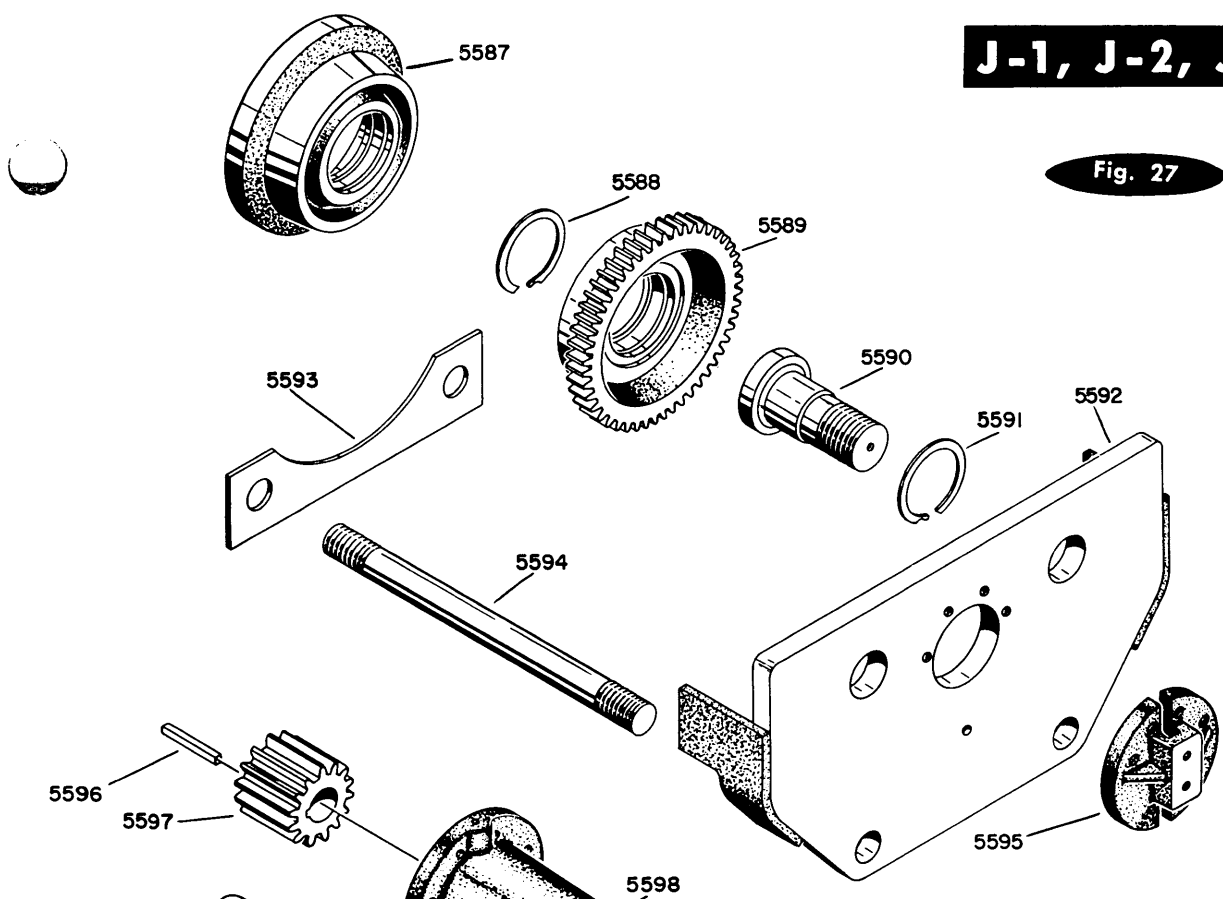
**J-1, J-2**

REFERENCE NUMBER	PART DESCRIPTION	REFERENCE NUMBER	PART DESCRIPTION
5921	Lower Limit Shaft	5931	Rope Thimble
5922	Shim	5932	Rope Clip
5923	Bushing	5933	Ball Bearing
5924	Lower Limit Arm	5934	Hoisting Cable
5925	Bushing	5935	Drum Shaft
5926	Lower Limit Drum Lever	5936	Key
5927	Pin	5937	Oil Seal
5928	Pipe Plug	5938	Ball Bearing
5929	Rope Drum	5939	Oil Seal
5930	Hoist Frame		

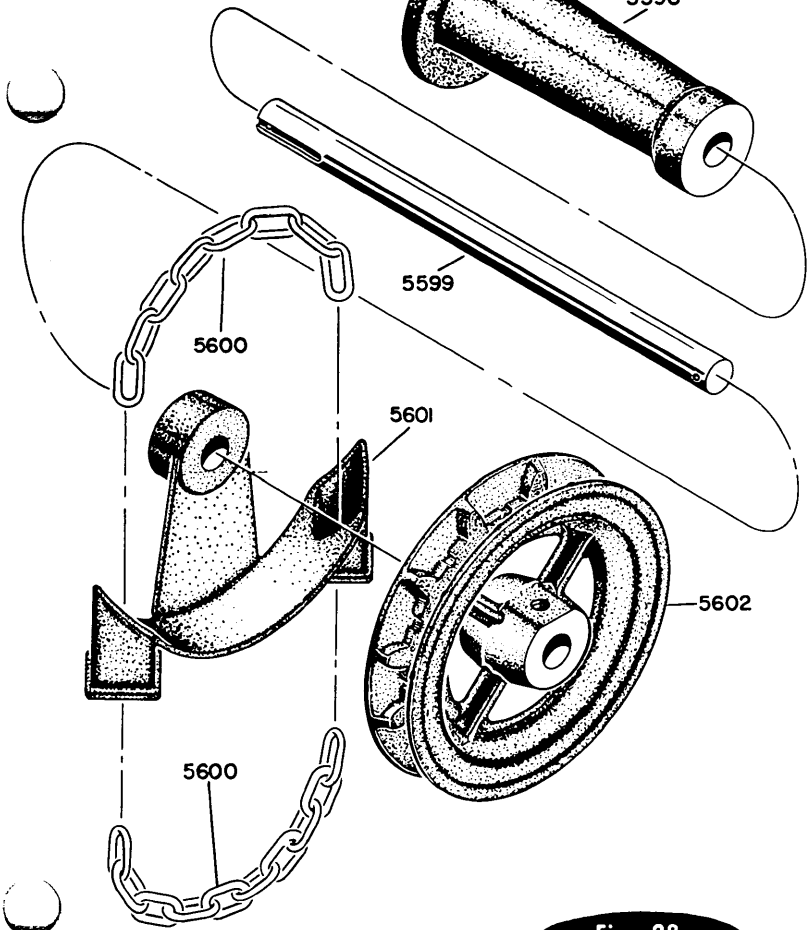


**J-1, J-2, J-3**

**Fig. 27**



REFERENCE NUMBER	PART DESCRIPTION
5587	Trolley Wheel
5588	Snap Ring
5589	Geared Trolley Wheel
5590	Trolley Wheel Stud
5591	Snap Ring
5592	Trolley Side Plate Assembly
5593	Trolley Spacer Washer
5594	Trolley Stud
5595	Collector Mounting Plate



**Fig. 28**

REFERENCE NUMBER	PART DESCRIPTION
5596	Key
5597	Trolley Drive Pinion
5598	Hand Wheel Shaft Tube
5599	Hand Wheel Shaft
5600	Hand Chain
5601	Hand Chain Guard
5602	Hand Chain Sheave

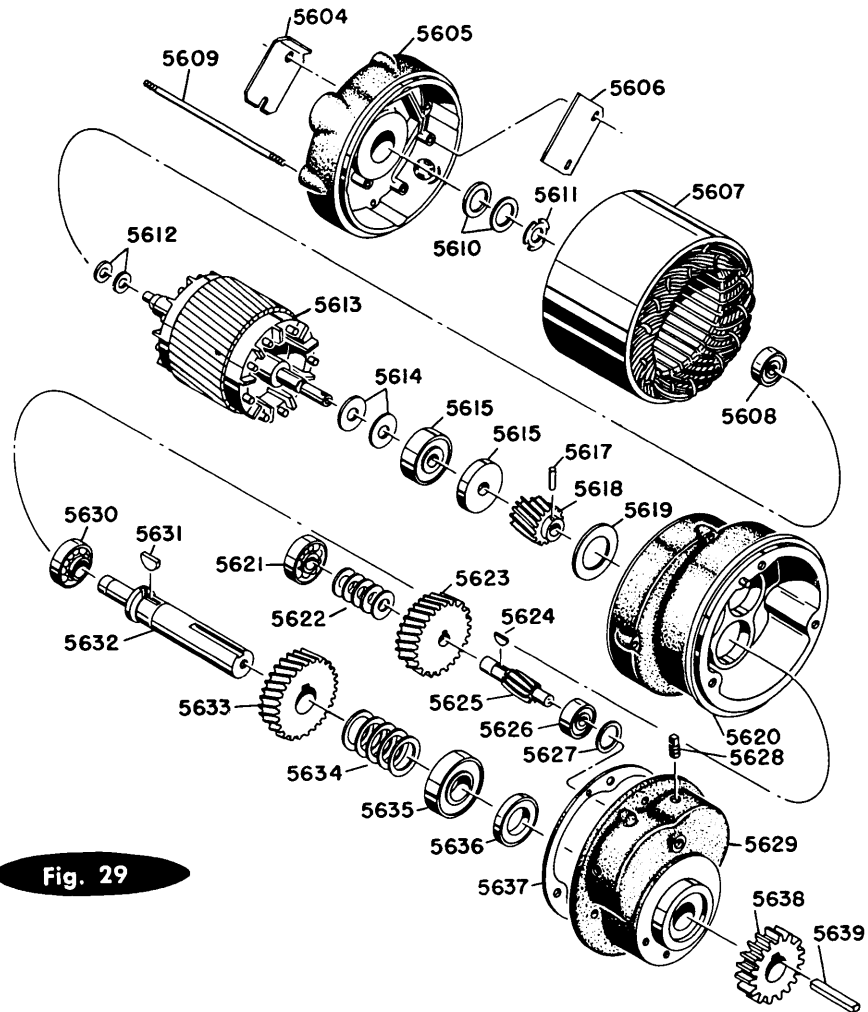


Fig. 29

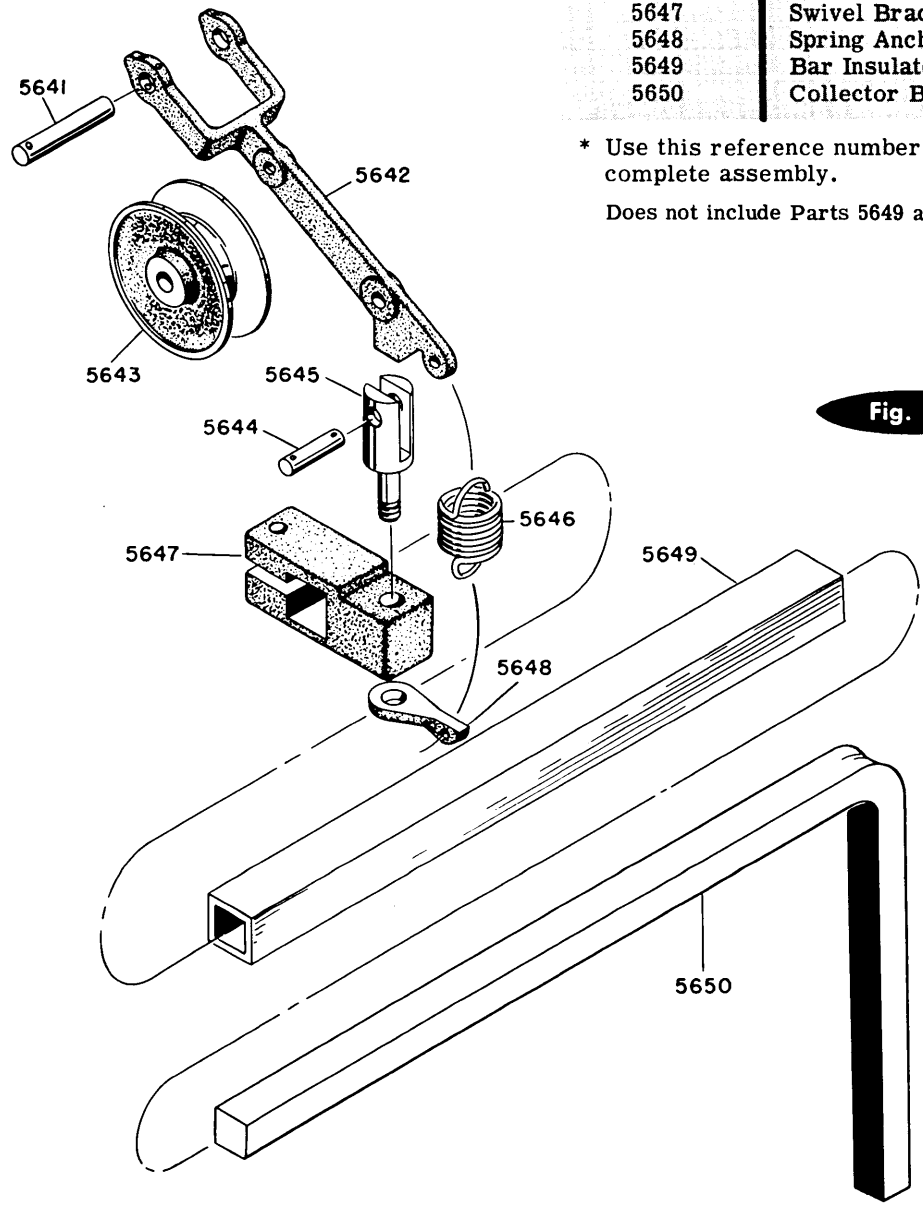
### J-1, J-2, J-3

REFERENCE NUMBER	PART DESCRIPTION	REFERENCE NUMBER	PART DESCRIPTION
*5603	Trolley Drive Motor Assembly	5621	Ball Bearing
5604	Plate	5622	Spacer
5605	End Bell	5623	Intermediate Gear
5606	Plate	5624	Key
5607	Stator	5625	Intermediate Pinion
5608	Ball Bearing	5626	Ball Bearing
5609	Stud	5627	Spacer
5610	Spacer	5628	Pipe Plug
5611	Spring Spacer	5629	Outer Gear Housing
5612	Spacer	5630	Ball Bearing
5613	Rotor	5631	Key
5614	Spacer	5632	Drive Shaft
5615	Ball Bearing	5633	Gear
5616	Spacer	5634	Spacer
5617	Groove Pin	5635	Ball Bearing
5618	Pinion Gear	5636	Oil Seal
5619	Spacer	5637	Gasket
5620	Inner Gear Housing	5638	Drive Gear
		5639	Key

\* Use this reference number when ordering the complete assembly.

**J-1, J-2, J-3**

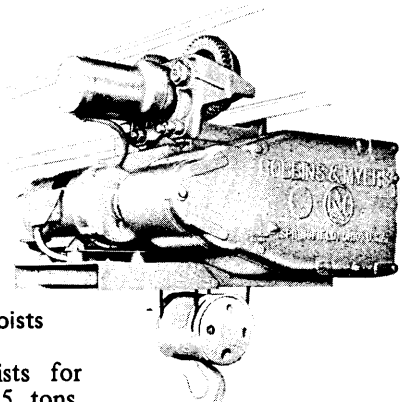
REFERENCE NUMBER	PART DESCRIPTION
*5640	Collector Assembly
5641	Pin
5642	Harp
5643	Collector Wheel
5644	Harp Pin
5645	Harp Yoke
5646	Tension Spring
5647	Swivel Bracket
5648	Spring Anchor Lug
5649	Bar Insulator
5650	Collector Bar



**Fig. 30**

\* Use this reference number when ordering the complete assembly.  
Does not include Parts 5649 and 5650.

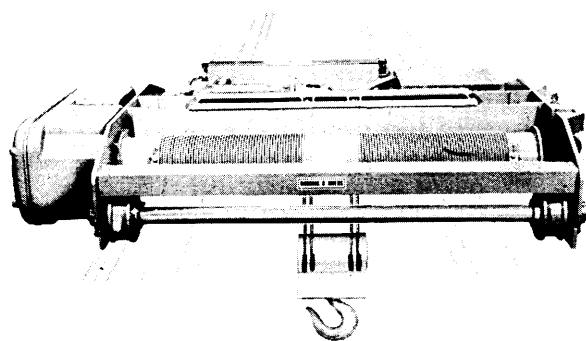
# OTHER MEMBERS OF THE FAMOUS ROBBINS & MYERS MATERIALS HANDLING FAMILY . . .



TYPE F & C

Electric Wire Rope Hoists

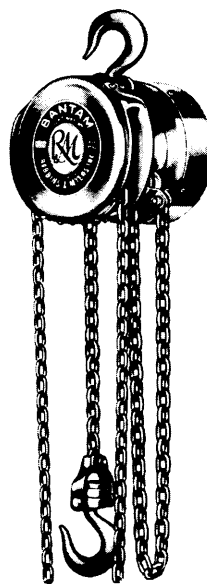
Modern electric hoists for handling loads to 15 tons. Push button control gives fast-action lifting. Lug, hook, push type or motorized trolleys. Bulletin 920-F. Bulletin 925.



Type C-75

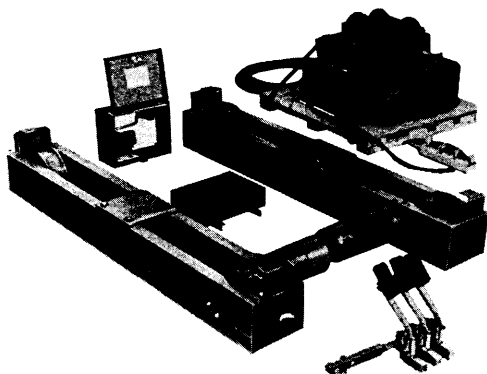
Crane Trolley Hoists

Heavy duty, Class D rated units for double girder cranes or monorail systems. Features both low profile and low headroom, direct drive trolley with rotating axles and extra duty rated motors and brakes. Capacities through 15 tons. Bulletin 900-8.



Spur Geared  
Hand Chain Hoists

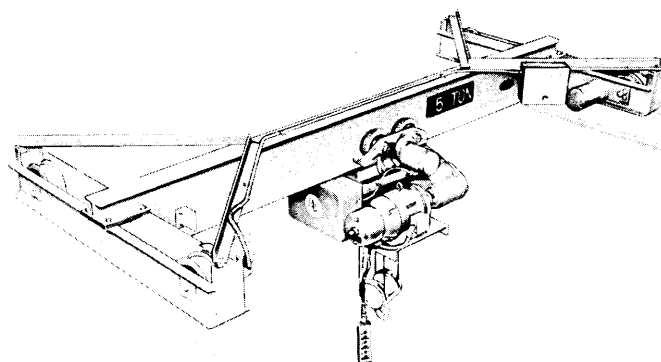
Portable, low cost materials handling. Coil link chain permits hoisting from any angle. Capacities to 25 tons.



Crane Components

A full line of hoists, end trucks and accessories which enable you to build your own crane at a considerable saving in cost. Everything included except the structural members. Motor-driven or hand-g geared. Top or under-running. Capacities to 25 tons. Bulletin 900-5.

Overhead  
Traveling Cranes



A complete line of standard units for general service. Single and double girder models in top running and underhung designs. Motor-driven or hand-g geared. Floor or cab control. Capacities to 30 tons; spans to 100 feet. Bulletin 900.