FRAME 6

HOIST REFERENCE SHEET

REFERENCE

APRIL 1982

ITEM NUMBER	BASIC PARTS	SERIES			
			A	B	C
5640-5650	Wheel Type Collector	Basic Section			
6662-6676	Trolley Motor Brake	Basic Section			
8001-8035	Trolley Drive Motor (Rectangular Gear Box)	Basic Section			
8131-8137	Trolley Drive Parts (Rectangular Gear Box)	Basic Section			
8285-8303	Gear Case Parts		2-1 2-2	2-1 2-2	2-1 2-2
8304-8324	Gear Case Parts		2-2	2-2	2-2
8325-8339	Four Part Bottom Block		5-3	5-3	5-3
8340-8353	Two Part Bottom Block		5-1	5-1	5-1
8355-8373	Frame & Components		1-1 1-2	1-1 1-2	1-1 1-2
8374-8375	Motor & Coupling		1-2	1-2	1-2
8376-8388	Miscellaneous Parts		1-2	1-2	1-2
8390-8410	M-7 "C" Brake Assy. (45.0#)		3-2	3-2	3-2
8390-8410	M-7 "C" Brake Assy. (90.0#)		3-1	3-1	3-1
8461-8596	8 Part Bottom Block		5-7	5-7	5-7
8521-8538	Hoist & Trolley Controls		4-1 4-2	4-1 4-2	4-3 4-4
8384-	Hoisting Cable	Basic Section			
8551-8563	"M" Type Trolley		6-1	6-1	6-1
8576-8596	6 Part Bottom Block		5-5	5-5	5-5
8667-8673	Push Button & Components	Basic Section			

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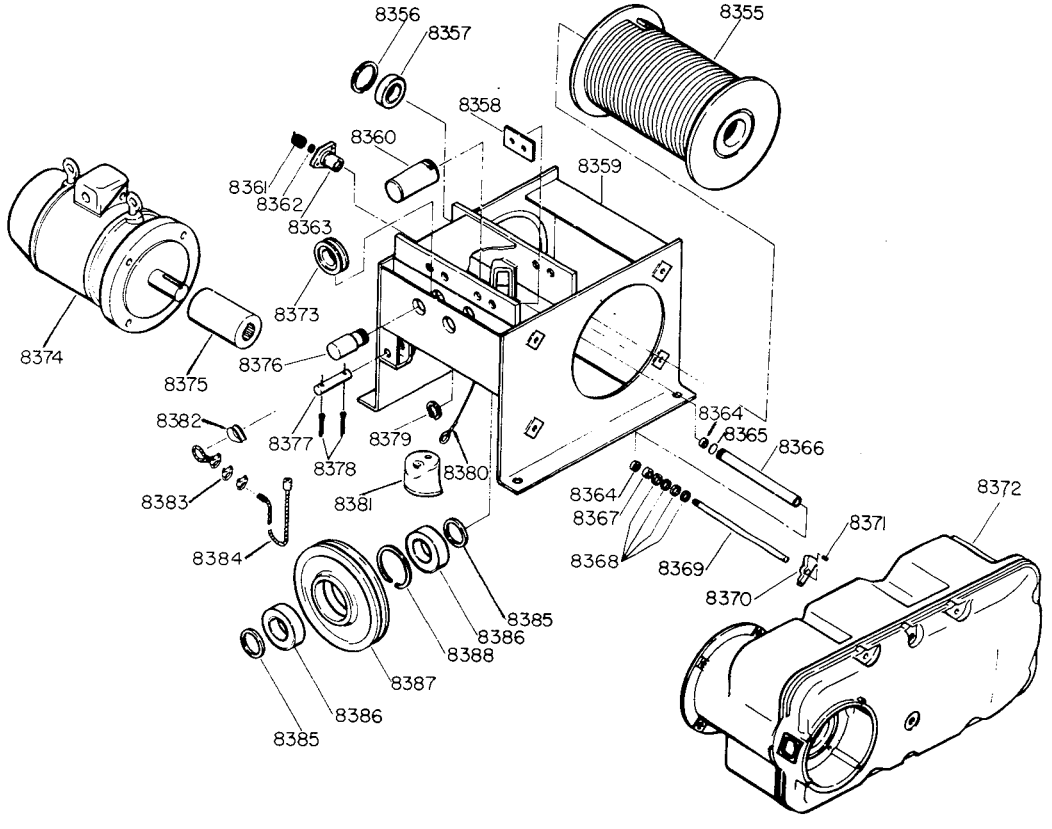
FRAME 6

1-1

FRAME AND COMPONENTS

AUGUST 1980



ITEM	DESCRIPTION	PART NUMBER	QUANTITY
8355	Rope Drum	Consult Factory	1
8356	Snap Ring	22-02244-014	1
8357	Ball Bearing	6-30-050-211-1	1
8358	Keeper Plate	22-01801-001	1
8359	Hoist Frame	Consult Factory	1
8360	Sheave Pin	22-10791-006	1
8361	Spring	22-09449-001	1
8362	Snap Ring	22-06497-007	1
8363	Mounting Bracket	22-08533-002	1
8364	Ball Bearing	6-30-102-007-0	2
8365	O'Ring	22-08171-002	1
8366	Limit Tube	Consult Factory	1
8367	Felt Washer	6-23-060-204-0	1
8368	Shim Washer	6-23-030-169-0	8
8369	Limit Switch Shaft	Consult Factory	1

Rev. Jan. '82

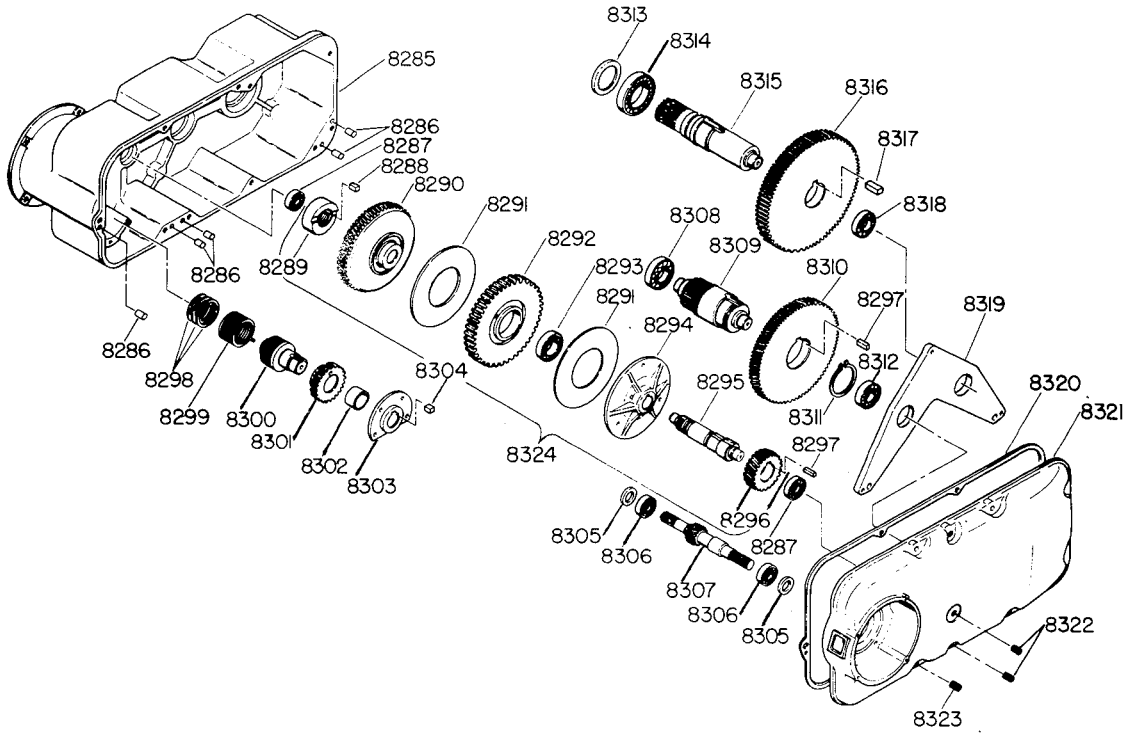
FRAME AND COMPONENTS

ITEM	DESCRIPTION	PART NUMBER	QUANTITY
8370	Lever	23-06635-003	1
8371	Key	6-11-002-008-0	1
8372	Gear Case	25-03034-001	1
8373	Spool	22-11453-001	1
	230/460 Volts 7.5 HP @ 1800 RPM	23-07790-016	1
	200 Volts 10 HP @ 1800 RPM	23-07790-001	1
	230/460 Volts 10 HP @ 1800 RPM	23-07790-002	1
	575 Volts 10 HP @ 1800 RPM	23-07790-003	1
	230 Volts 10/3.3 HP @ 600/1800 RPM	23-07790-005	1
	460 Volts 10/3.3 HP @ 600/1800 RPM	23-07790-006	1
	230 Volts 15 HP @ 1800 RPM	23-07790-009	1
8374	575 Volts 15 HP @ 1800 RPM	23-07790-010	1
*	230 Volts 1.5/.5 HP @ 1800/600 RPM	23-07790-012	1
	460 Volts 1.5/.5 HP @ 1800/600 RPM	23-07790-013	1
	575 Volts 1.5/.5 HP @ 1800/600 RPM	23-07790-014	1
	575 Volts 7.5 HP @ 1800 RPM	23-07790-017	1
	230 Volts 7.5/2.5 HP @ 1800/600 RPM	23-07790-019	1
	460 Volts 7.5/2.5 HP @ 1800/600 RPM	23-07790-020	1
	575 Volts 7.5/2.5 HP @ 1800/600 RPM	23-07790-021	1
8375	Motor Coupling	23-07795-001	1
8376	Pin	23-07798-001	1
8377	Dead End Pin	22-00034-038	1
8378	Cotter Pin	6-16-005-063-0	2
8379	Retaining Ring	22-06497-034	1
8380	Limit Cable Assy.	22-09092-003	1
8381	Limit Weight	23-02305-701	1
8382	Rope Thimble	22-11457-001	1
8383	Rope Clip	22-07510-001	2
8384	Wire Rope Assembly	See Basic Section	1
8385	Bearing Spacer	22-10790-006	2
8386	Ball Bearings	6-30-050-211-1	2
8387	Rope Sheave	24-05949-001	1
8388	Snap Ring	22-02244-014	1

FRAME 6

2-1 GEARCASE

AUGUST 1980



ITEM	DESCRIPTION	PART NUMBER	QUANTITY
8285	Gearcase	25-03034-001	1
8286	Dowel Pins	6-16-018-065-0	3
8287	Ball Bearings	6-30-041-207-0	2
8288	Cam Nut Key	22-00483-001	1
8289	Cam Nut	23-00146-001	1
8290	Spider Gear	25-02993-009	1
8291	Friction Disc	22-03228-001	2
8292	Ratchet Gear	24-05959-001	1
8293	Ball Bearing	6-30-041-210-0	1
8294	Thrust Disc	24-02203-001	1
8295	Load Brake Shaft	23-06028-003	1
	Int. Pinion 30 FPM 4 Part 48T	24-05955-001	1
	Int. Pinion 22 FPM 4 Part 40T	24-05955-002	1
8296	Int. Pinion 20 FPM 4 Part 37T	24-05955-003	1
	Int. Pinion 15 FPM 4 Part 30T	24-05955-004	1
	Int. Pinion 11 FPM 4 Part 24T	24-05955-005	1
8297	Key	6-11-028-026-0	1
8298	Washer	22-09986-001	3

Rev. Jan. '82

GEAR CASE

ITEM	DESCRIPTION	PART NUMBER	QUANTITY
8299	Spring	22-09561-003	1
8300	Clutch Shaft	23-06740-004	1
8301	Pinion	23-06741-005	1
8302	Bushing	22-02829-003	1
8303	Clutch Cover	23-07322-001	1
8304	Key	22-00482-015	1
8305	Oil Seal	22-02792-001	2
8306	Ball Bearing	6-30-041-306-0	2
8307	Motor Extension Shaft	24-05954-001	1
8308	Ball Bearing	6-30-041-211-0	2
8309	Drum Pinion 24T	24-05957-001	1
	Int. Gear 30 FPM 4 Part 79T	24-05956-001	1
	Int. Gear 22 FPM 4 Part 87T	24-05956-002	1
8310	Int. Gear 20 FPM 4 Part 90T	24-05956-003	1
	Int. Gear 15 FPM 4 Part 97T	24-05956-004	1
	Int. Gear 11 FPM 4 Part 103T	24-05956-005	1
8311	Snap Ring	22-06497-036	1
8312	Ball Bearing	6-30-042-209-0	1
8313	Oil Seal	22-11454-004	1
8314	Ball Bearing	6-30-020-118-0	1
8315	Drum Drive Shaft	24-05953-001	1
8316	Drum Gear 95T	24-05958-001	1
8317	Key	22-02600-008	1
8318	Ball Bearing	6-30-042-209-0	1
8319	Spider	24-05960-001	1
8320	Gasket	24-05962-001	1
8321	Gearcase Cover	25-03035-001	1
8322	Pipe Plug	6-16-014-008-1	2
8323	Vent Plug	22-00536-003	1
8324	Load Brake Assy. 30 FPM	23-07948-001	1
	22 FPM	23-07948-002	1
	20 FPM	23-07948-003	1
	15 FPM	23-07948-004	1
	11 FPM	23-07948-005	1

FRAME 6

LOAD BRAKE

2-3

JULY 1982

All load brakes are self-adjusting and require a minimum of maintenance. Wear on friction disc should be checked during any gear case maintenance. Replace discs when thickness reaches 1/16". To adjust for disc wear, or reset after disc replacement, remove the key from the cam nut. Rotate cam nut/load brake gear until brake is closed snugly. Back off cam nut/load brake gear just enough to replace key in the first available key slot. Retighten load brake gear and check the clearance between the cam nut and spider gear shoulders. The clearance should be between 1/8" and 3/8". If the gap is less than 1/8" it will be necessary to use the second available key slot. In no case should initial gap adjustment exceed 7/16".

Brake should be readjusted whenever gap exceeds 5/8". See Figure 6-1.

The load brake should be checked for proper holding action after any load brake maintenance is performed.

To check to see whether load brake is holding properly, attach approximately a 25% capacity load to hook and raise off floor 6". Release motor brake by backing off center adjusting screw approximately 2 turns. Load should remain suspended. If load drifts to floor, check for malfunctioning spring clutch assembly or worn friction discs. Repair/replace as necessary.

Note: Severe impact or shock loads on hook due to improper handling of loads may result in a locked load brake. Load can be raised, but motor torque is not sufficient to unlock brake to permit lowering, and motor stalls. If load brake does not release after several inchings of the down button, the load must be removed from the hook before manual efforts are made to unlock the brake. It is recommended that the unlocking and subsequent inspection of load brake be performed by a serviceman experienced in these areas.

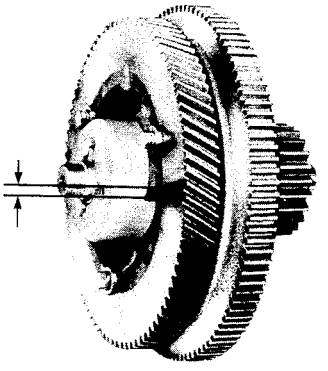
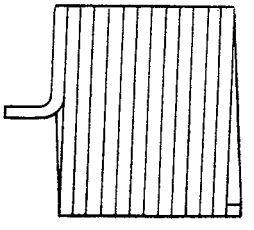
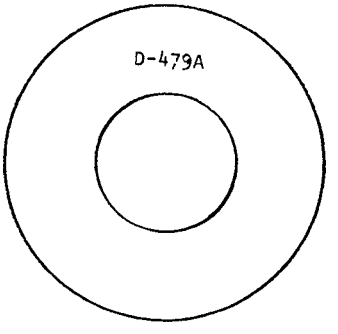


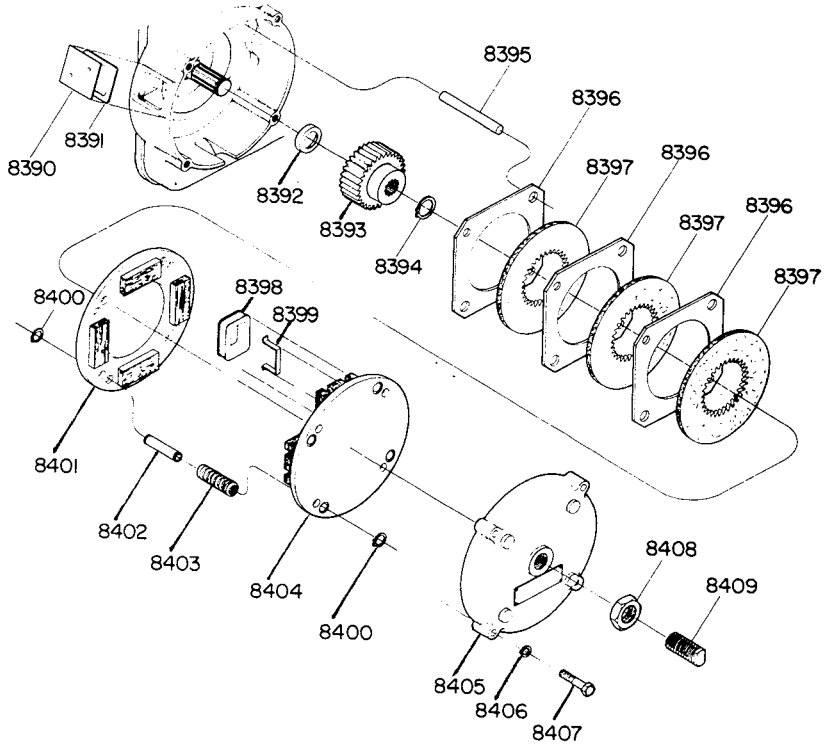
Figure 6-1



When replacing clutch spring always use 12 3/4 coil spring no. 22-09561-003. On units built prior to June 1982 it is recommended this replacement be made a part of any service routine involving the load brake.



When replacing friction discs always use discs marked D-479A as shown.

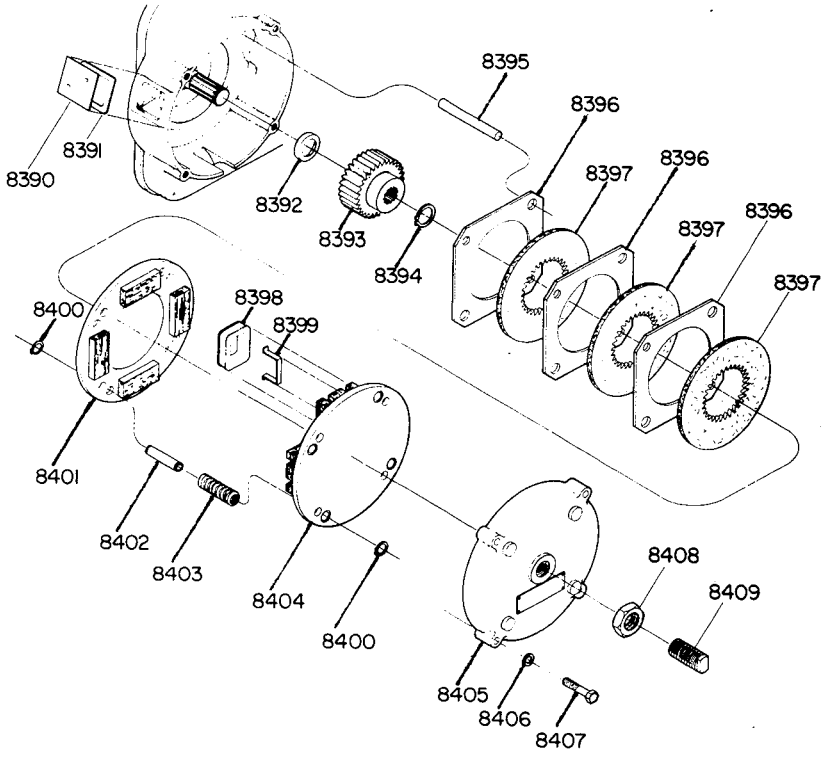


ITEM	DESCRIPTION	PART NUMBER	QUANTITY
8390	Inspection Plate Assy.	23-07793-001	1
8391	Gasket	22-10416-002	1
8392	Oil Seal	22-02792-001	1
8393	Brake Hub	23-06258-013	1
8394	Retaining Ring	22-06497-006	4
8395	Brake Studs	22-11455-002	4
8396	Thrust Disc	23-03648-012	3
8397	Friction Disc	22-03607-013	3
8398	Coil (115 Volts) *	22-08269-002	4
8399	Wedge	22-08471-001	4
8400	Snap Rings	22-06497-032	4
8401	Armature Plate Assy.	23-06098-005	1
8402	Sleeve	22-09072-002	4
8403	Spring	22-03615-008	4
8404	Pole Plate Assy.	23-07791-001	1
8405	Brake Cover	25-03037-001	1
8406	Lock Washers	6-23-001-043-0	4
8407	Hex Head Cap Screws	22-09413-520	4
8408	Hex Jam Nut	6-14-008-032-0	1
8409	Adjustable Screw	22-03612-003	1
8410	Complete Brake Assy.	27-25043-003	1

* See Brake Section For Other Voltages

FRAME 6 SERIES B

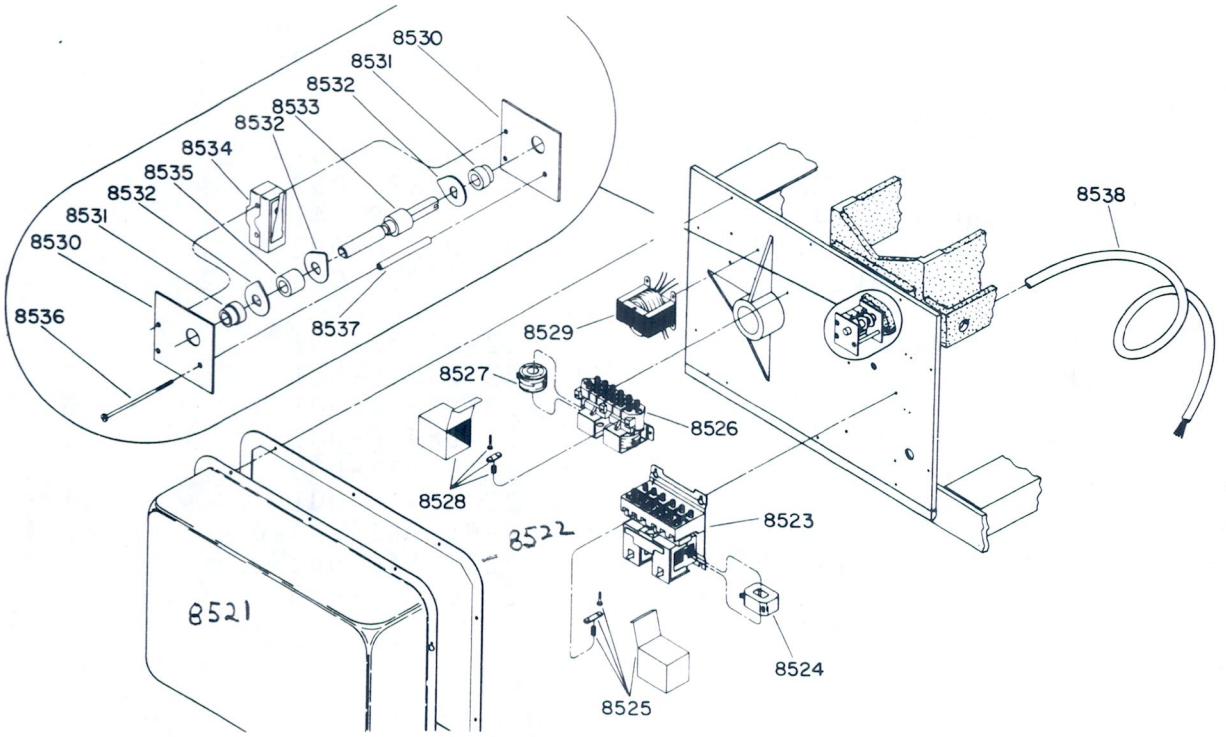
M7C BRAKE



ITEM	DESCRIPTION	PART NUMBER	QUANTITY
8390	Inspection Plate Assy.	23-07793-001	1
8391	Gasket	22-10416-002	1
8392	Oil Seal	22-02792-001	1
8393	Brake Hub	23-06258-013	1
8394	Retaining Ring	22-06497-006	4
8395	Brake Studs	22-11455-002	4
8396	Int. Thrust Disc	23-03648-012	3
8397	Friction Disc	22-03607-013	3
8398	Brake Coils (115V) *	22-08269-002	2
8399	Coil Support	22-08471-001	2
8400	Snap Ring	22-06497-032	4
8401	Armature Plate Assy.	23-06098-006	1
8402	Sleeves	22-09072-002	4
8403	Springs	22-03615-007	4
8404	Pole Plate Assy.	23-07791-002	1
8405	Brake Cover	25-03037-001	1
8406	Lock Washers	6-23-001-043-0	4
8407	Hex Head Cap Screws	22-09413-520	4
8408	Hex Jam Nut	6-14-008-032-0	1
8409	Adjustment Screw	22-03612-003	1
8410	Complete Brake Assy.	27-25043-004	1

* See Brake Section For Other Voltages

CONTROL PANEL
HOIST AND TROLLEY CONTROLS



ITEM	DESCRIPTION	PART NUMBER	QUANTITY
8521	Control Cover	22-08426-001	1
8522	Cover Gasket	22-08544-001	1
8523	Hoist Controller Complete (7½HP)	22-07861-001	1
	Hoist Controller 10HP	23-07605-001	1
	Hoist Controller 15HP	23-07604-001	1
	Magnet Coil-Hoist Controller		
	24 Volt 7½HP	22-07866-001	2
8524	115 Volt 7½HP	22-07866-002	2
	24 Volt 10&15HP	23-07604-003	2
	115 Volt 10&15HP	23-07604-004	2
8525	Contact Kit (Hoist) 7½HP	22-07619-005	1
	Contact Kit (Hoist) 10&15HP	23-07604-014	6
8526	Trolley Controller Complete	23-07623-001	1
8527	Magnet Coil Trolley Controller		
	24 Volt	22-10755-003	2
	115 Volt	22-10755-004	2
8528	Contact Kit Trolley	23-07623-010	6

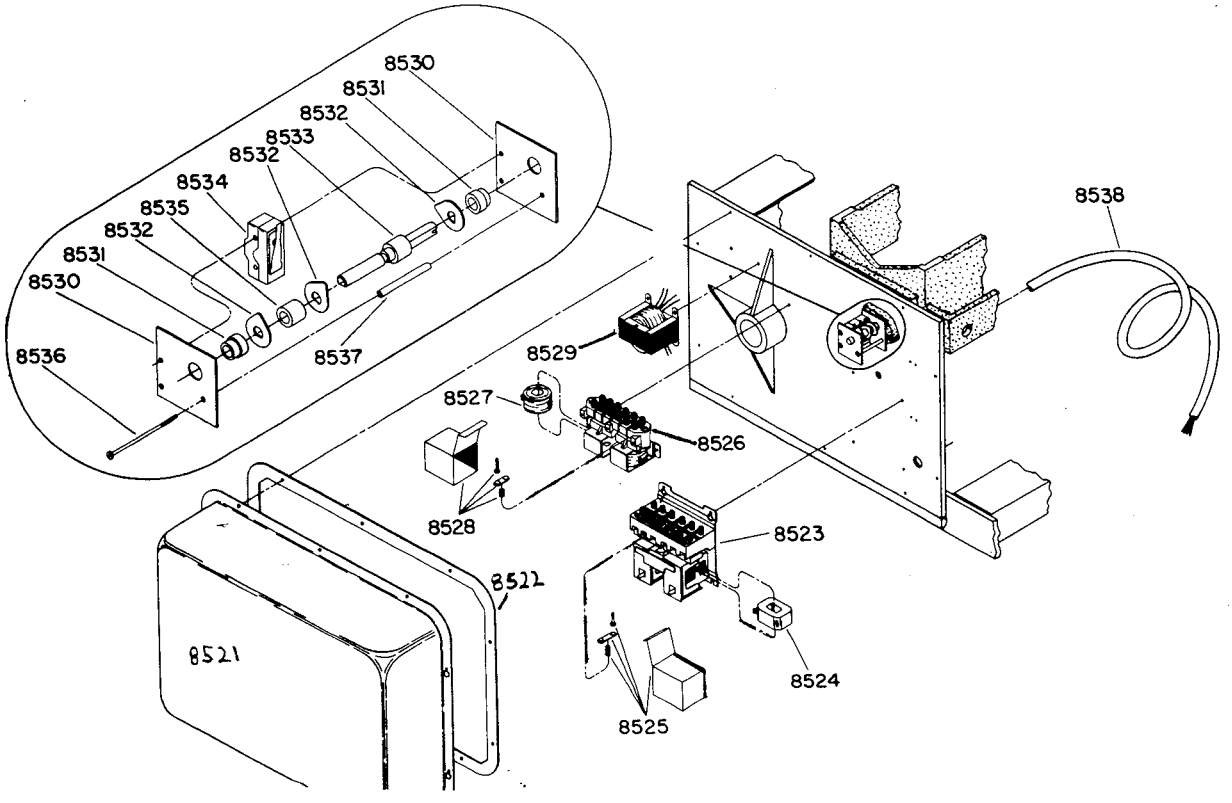
FRAME 6

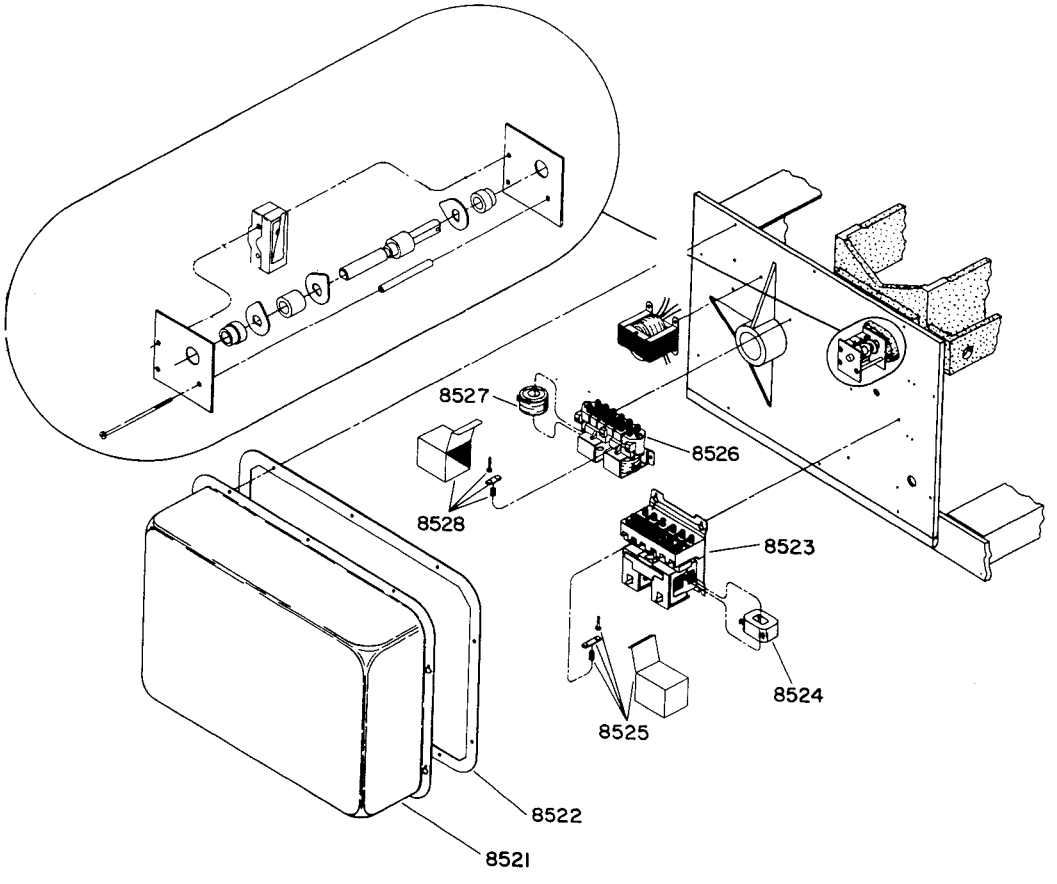
4-2

AUGUST 1980

CONTROL PANEL
HOIST AND TROLLEY CONTROLS

ITEM	DESCRIPTION	PART NUMBER	QUANTITY
	Transformer		
	230/460V PRI 115VSEC 75VA	23-07228-051	1
	575VPRI 115VSEC 75VA	23-07228-052	1
8529	230/460 PRI 24VSEC 75VA	23-07228-047	1
	230/460PRI 115VSEC 150VA	23-07228-092	1
	575VPRI 115VSEC 150VA	23-07228-093	1
8530	Side Plate	22-08535-001	2
8531	Bushing	22-08536-001	2
8532	Operating Cam	22-08534-001	3
8533	Limit Shaft	22-08539-002	1
8534	Micro Switch	23-05987-003	3
8535	Cam Spacer	22-08546-001	1
8536	Screw	6-02-061-044-0	3
8537	Side Plate Spacer	22-08540-002	1
8538	Main Line Cable #12-3	22-04382-003	1
	Length To Suit		





ITEM	DESCRIPTION	PART NUMBER	QUANTITY
8521	Control Cover	22-08426-001	1
8522	Cover Gasket	22-08544-001	1
8523	Hoist Controller Complete (7½HP)	23-08410-001	1
	Hoist Controller 10HP	23-08412-001	1
	Hoist Controller 15HP	23-08413-001	1
	Magnet Coil-Hoist Controller (ALL)		
	24 volt	22-10755-003	2
8524	115 volt	22-10755-004	2
8525	Contact Kit (Hoist) 7½HP	23-08410-003	6
	Contact Kit (Hoist) 10HP	23-08412-002	6
	Contact Kit (Hoist) 15HP	23-08413-002	6
8526	Trolley Controller Complete	23-07623-001	1
8527	Magnet Coil Trolley Controller		
	24 volt	22-10755-003	2
	115 volt	22-10755-004	2
8528	Contact Kit Trolley	23-07623-010	6

FRAME 6

CONTROL PANEL

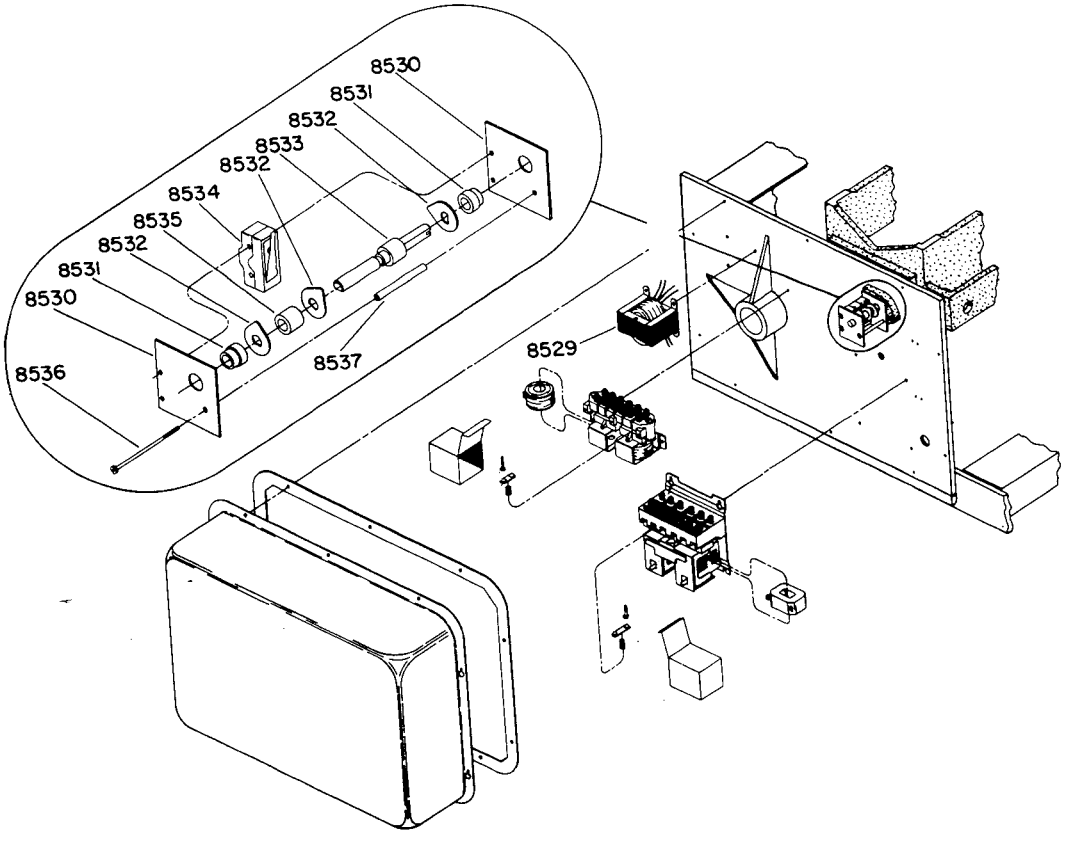
4-4

HOIST AND TROLLEY CONTROLS

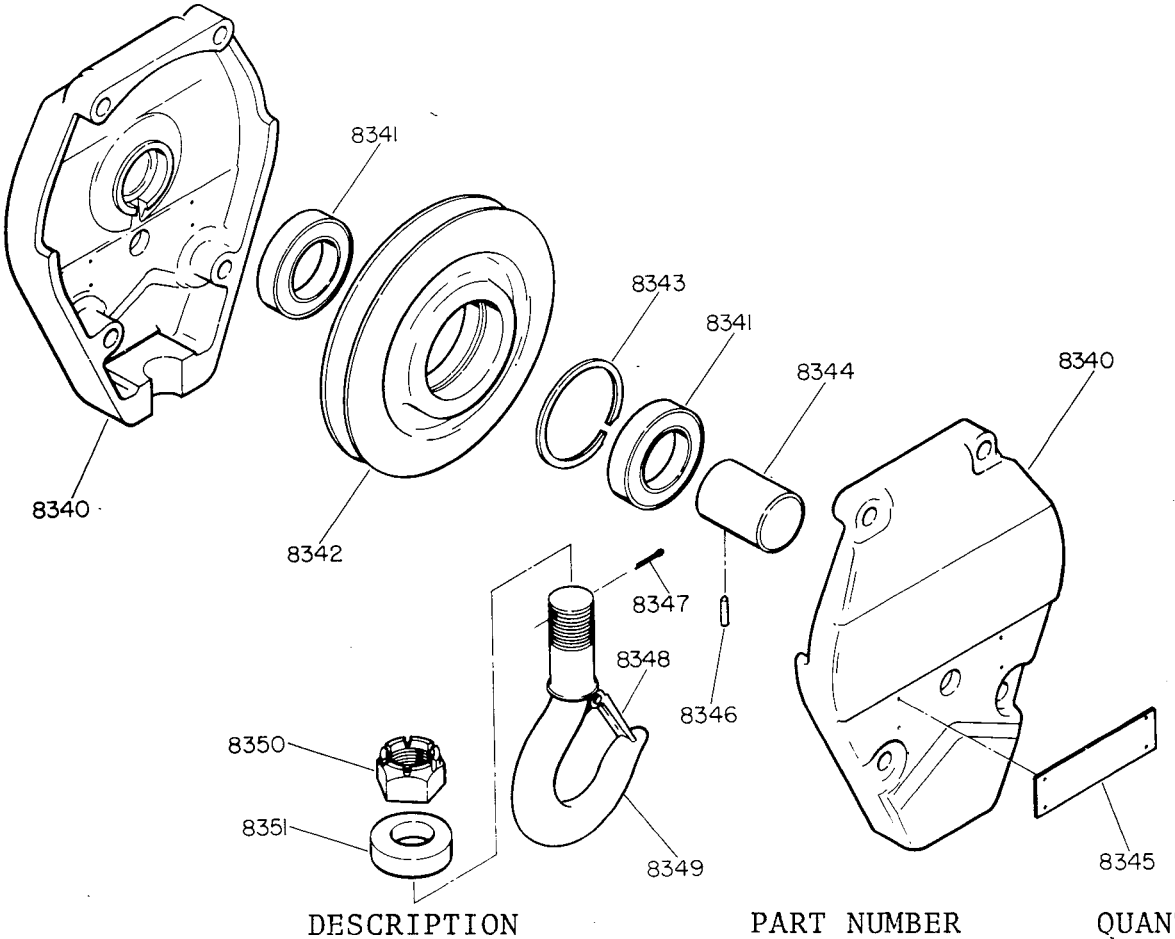
SERIES C

APRIL 1982

ITEM	DESCRIPTION	PART NUMBER	QUANTITY
8529	Transformer		
	230/460V PRI 115VSEC 75VA	23-07228-051	1
	575VPRI 115VSEC 75VA	23-07228-052	1
	230/460 PRI 24VSEC 75VA	23-07228-047	1
8530	Side Plate	22-08535-001	2
8531	Bushing	22-08536-001	2
8532	Operating Cam	22-08534-001	3
8533	Limit Shaft	22-08539-002	1
8534	Micro Switch	23-05987-003	3
8535	Cam Spacer	22-08546-001	1
8536	Screw	6-02-061-044-0	3
8537	Side Plate Spacer	22-08540-002	1
8538	Main Line Cable #12-3 Length To Suit	22-04382-003	1

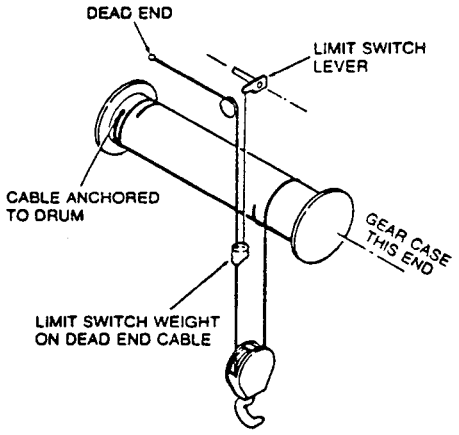


2 PART BOTTOM BLOCK



ITEM	DESCRIPTION	PART NUMBER	QUANTITY
8340	Block Frame	25-03047-001	2
8341	Ball Bearings	6-30-050-211-1	2
8342	Rope Sheave	24-05949-001	1
8343	Snap Ring	22-02244-014	1
8344	Sheave Pin	22-10791-007	1
8345	Capacity Plate	22-11456-004	2
8346	Roll Pin	22-07653-011	1
8347	Cotter Pin	6-16-005-063-0	1
8348	Latch Kit	22-09929-004	1
8349	Load Hook	24-05974-001	1
8350	Castle Nut	23-07796-013	1
8351	Thrust Bearing	6-30-160-022-0	1
8352	Complete Bottom Block Assy.	25-03046-001	1
8353	Load Hook Assy. (Includes Latch-Nut-Bearing-Cotter Pin)	22-11576-002	1

2 Part Single Reeving Diagram F6 Hoist



When the need for cable replacement has been established, proceed as follows:

CAUTION

Always wear heavy gloves when handling cables to avoid hand injuries from possible broken wires.

1. Run hoist in the down direction until only one half to one wrap of cable remains on the drum. Stop with drum in position where the keyhole slot anchoring the cable socket is most accessible.

2. Remove the rope clips and thimble from the dead end attachment and pull free cable end through dead end spool, limit weight, and block sheave. Free the socketed end of the cable from the hoist drum by removing plug from the keyhole slot. Discard old cable.

3. Inspect rope sheave, bearings, pin, etc. for wear or damage. Repair or replace as needed. *Note:* Placing a new cable in service in a sheave tracked or worn to a reduced groove radius will severely shorten cable life and can cause premature cable failure.

4. Unreel the replacement cable and inspect for any shipping damage, kinks, etc. Refer to Operation Maintenance Section — Wire Rope. If replacement cables are held in storage for extended periods of time, check for fried out lubricant or possible corrosion.

5. Place one half to one wrap of the socketed cable end around the drum, live cable leading off drum side nearest the motor. Place socket through the keyhole slot and replace plug, anchoring socket inside the drum.

6. Tighten plug securely, checking to make certain that surface of plug does not extend above bottom of rope groove in the drum.

7. Depending on the distance of the hoist to the floor, or surface where the block lies, it may be desirable to run the hoist (up direction) and wind part of the free cable onto the drum. Cable should be guided to ensure that it spools properly onto drum, and remaining free length of cable should be adequate to complete the reeving system with block lying on the floor.

8. If cable is to be threaded into the system without disassembly of the block, it will be helpful to tape a section of stiff wire to the free end of the cable. This "lead wire" can be formed to the sheave contour and rolled through the sheave, serving as a pilot to lead the cable into proper position.

9. Thus fitted, the free end, or live cable, from the drum is passed first into the block sheave, then through the hole in limit switch weight, over the dead end spool, and anchored to the dead end pin. Refer to reeving diagram. Make certain that rope clips are properly applied and tightened as outlined in the Operation Maintenance Section.

CAUTION

Make certain that limit switch weight is properly threaded onto dead end cable and operating freely. Safe operation of the hoist requires a properly operating limit switch mechanism.

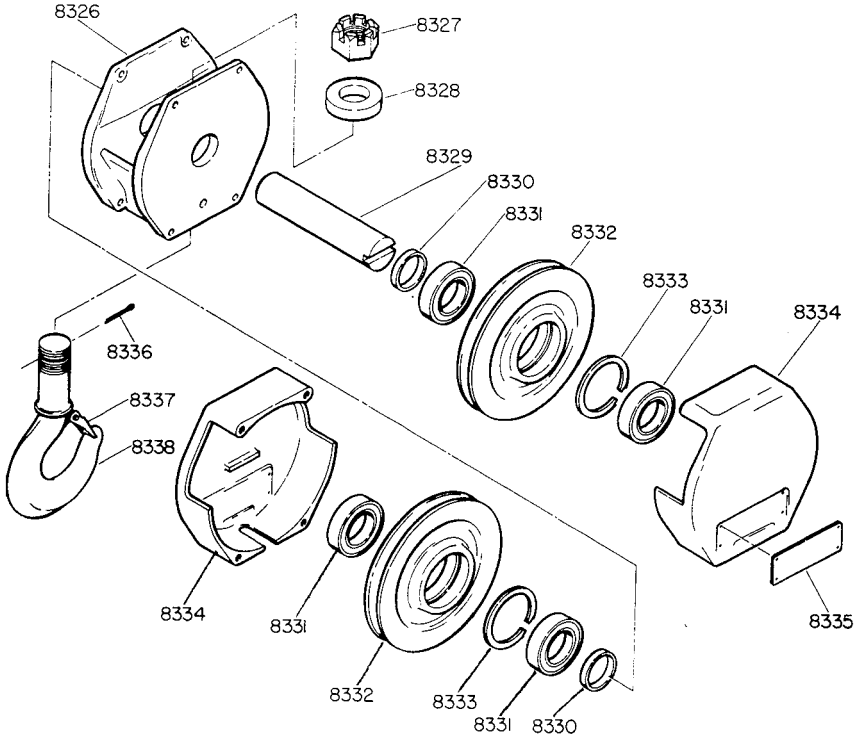
10. Operate hoist up control to raise block from the floor. Check to be certain that sheave turns freely and that block hangs properly as shown in the reeving diagram.

11. Operate the block through the full range of lift for 2-3 cycles with empty hook. Check cables with block near the full up position to ensure they hang properly. Make 1-2 *short* lifts from the floor with a near capacity load. Follow this by retightening rope clips.

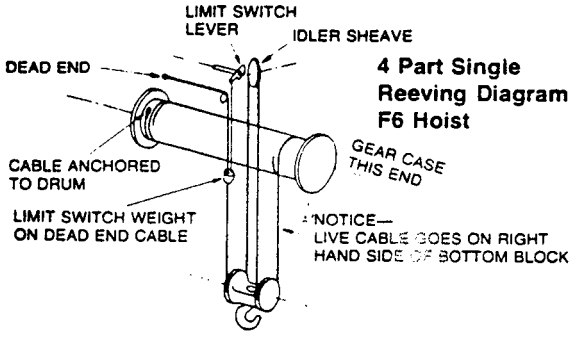
IMPORTANT

If equipped with optional geared limits, check and adjust limits as necessary to maintain original stop locations.

4 PART BOTTOM BLOCK



ITEM	DESCRIPTION	PART NUMBER	QUANTITY
8325	Complete Block Assy.	25-03031-006	1
8326	Trunion	25-03038-001	1
8327	Slotted Nut	23-07796-016	1
8328	Thrust Bearing	6-30-160-078-0	1
8329	Sheave Pin	23-07797-001	1
8330	Bearing Spacers	22-10790-005	2
8331	Ball Bearings	6-30-050-211-1	4
8332	Rope Sheaves	24-05949-001	2
8333	Snap Rings	22-02214-014	2
8334	Block Side Covers	25-03039-001	2
8335	Capacity Plates (10 Ton)	22-11456-001	2
8336	Cotter Pins	6-16-005-083-0	1
8337	Latch Kit	22-09929-005	1
8338	Load Hook	24-05961-001	1
8339	Load Hook Assy. (Includes Latch-Nut-Bearing-Cotter Pins)	22-11576-001	1



When the need for cable replacement has been established, proceed as follows:

CAUTION

Always wear heavy gloves when handling cables to avoid hand injuries from possible broken wires.

1. Run block to the floor and lay on its side with axis of sheaves parallel to axis of hoist drum. Continue to run hoist in the down direction until only one half to one wrap of cable remains on the drum. Stop with drum in position where the keyhole slot anchoring the cable socket is most accessible.

2. Remove the rope clips and thimble from the dead end attachment and pull free cable end through dead end spool, limit weight, sheaves, etc. Free the socketed end of the cable from the hoist drum by removing plug from the keyhole slot. Discard old cable.

3. Inspect rope sheaves, bearings, pins, etc. for wear or damage. Repair or replace as needed. *Note:* Placing a new cable in service in a sheave tracked or worn to a reduced groove radius will severely shorten cable life and can cause premature cable failure.

4. Unreel the replacement cable and inspect for any shipping damage, kinks, etc. Refer to Operation Maintenance Section — Wire Rope. If replacement cables are held in storage for extended periods of time, check for dried out lubricant or possible corrosion.

5. Place one half to one wrap of the socketed cable end around the drum, live cable leading off drum side nearest the motor. Place socket through the keyhole slot and replace plug, anchoring socket inside the drum.

6. Tighten plug securely, checking to make certain that surface of plug does not extend above bottom of rope groove in the drum.

7. Depending on the distance of the hoist to the floor, or surface where the block lies, it may be desirable to run the hoist (up direction) and wind part of the free cable onto the drum. Cable should be guided to ensure that it spools properly onto drum, and remaining free length of cable should be adequate to complete the reeving system with block lying on the floor.

8. If cable is to be threaded into the system without disassembly of the block or idler sheaves, it will be helpful to tape a section of stiff wire to the free end of the cable. This "lead wire" can be formed to the sheave contour and rolled through the sheaves, serving as a pilot to lead the cable into proper position.

9. Thus fitted, the free end, or live cable, from the drum is passed first into the block sheave at gearcase end, drum side, second, into the idler sheave, motor side, and third, into the block sheave at control end, drum side. Refer to reeving diagram.

10. Pass cable through the hole in limit switch weight, over the dead end spool, and anchor to the dead end pin. Make certain that rope clips are properly applied and tightened as outlined in the Operation Maintenance Section.

CAUTION

Make certain that limit switch weight is properly threaded onto dead end cable and operating freely. Safe operation of the hoist requires a properly operating limit switch mechanism.

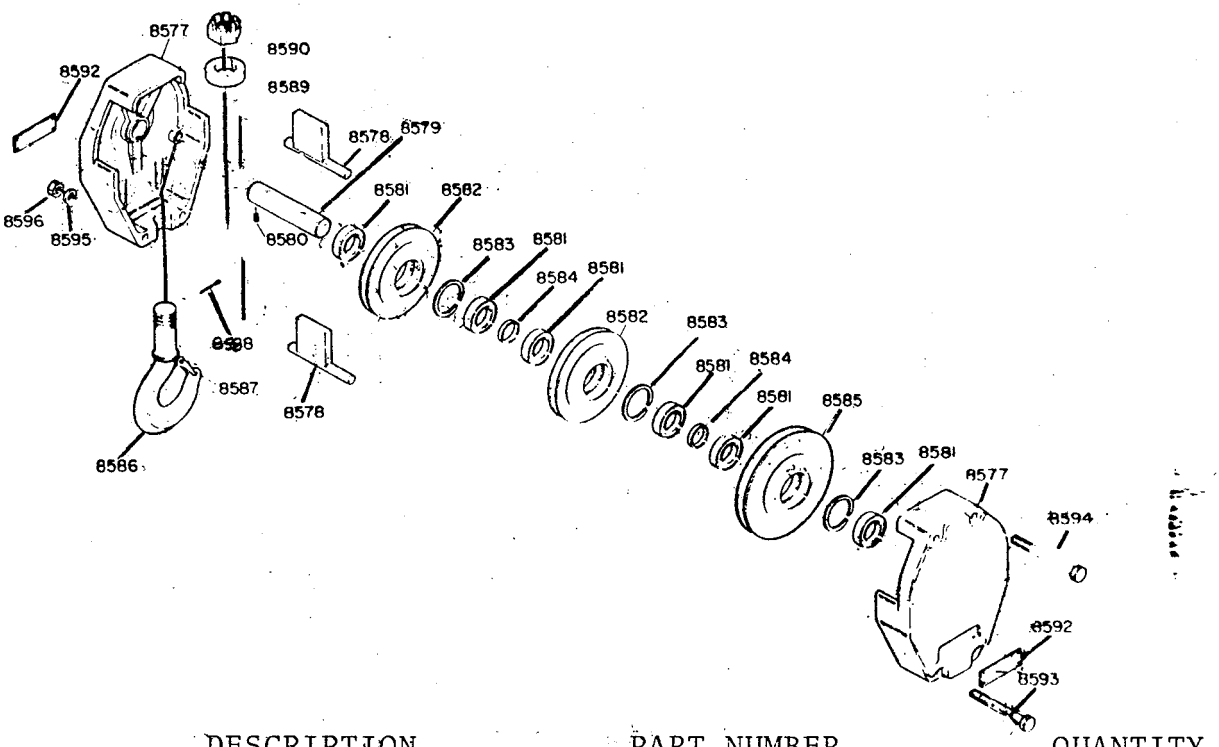
11. Operate hoist up control to raise block from the floor. Check to be certain that all sheaves turn freely and that block hangs properly as shown in the reeving diagram.

12. Operate the block through the full range of lift for 2-3 cycles with empty hook. Check cables with block near the full up position to ensure they hang properly. Make 1-2 *short* lifts from the floor with a near capacity load. Follow this by retightening rope clips.

IMPORTANT

If equipped with optional geared limits, check and adjust limits as necessary to maintain original stop locations.

6 PART BOTTOM BLOCK



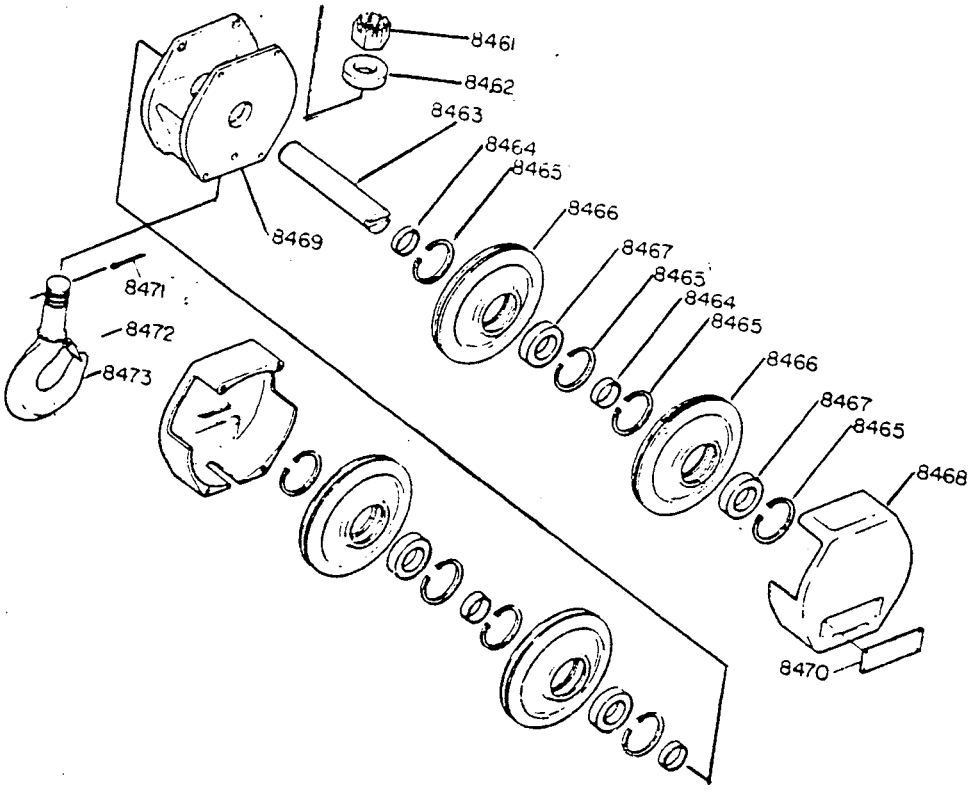
ITEM	DESCRIPTION	PART NUMBER	QUANTITY
8576	Complete Block Assy.	25-03065-001	1
8577	Block Frames	25-03068-001	2
8578	Rope Guard	22-11528-001	2
8579	Sheave Pin	22-10791-009	1
8580	Roll Pin	22-07653-011	1
8581	Ball Bearings	6-30-050-211-1	6
8582	Rope Sheave	24-05949-001	2
8583	Snap Rings	22-02244-014	3
8584	Bearing Spacer	22-10790-006	2
8585	Rope Sheave	24-06012-001	1
8586	Load Hook	24-03481-029	1
8587	Latch	22-09929-006	1
8588	Cotter Pin	6-16-005-084-0	1
8589	Thrust Bearing	6-30-160-032-0	1
8590	Slotted Nut	23-07796-017	1
8591	Load Hook Assy. (Includes Latch-Nut-Bearing-Cotter Pins)	22-11576-003	1
8592	Capacity Plates	22-11456-008(15ton)	2
8593	Bolt	22-09413-760	2
8594	Bolt	22-09413-780	2
8595	Washer	6-23-001-047-0	4
8596	Nut	6-14-007-008-0	4

FRAME 6

5-6

AUGUST 1980

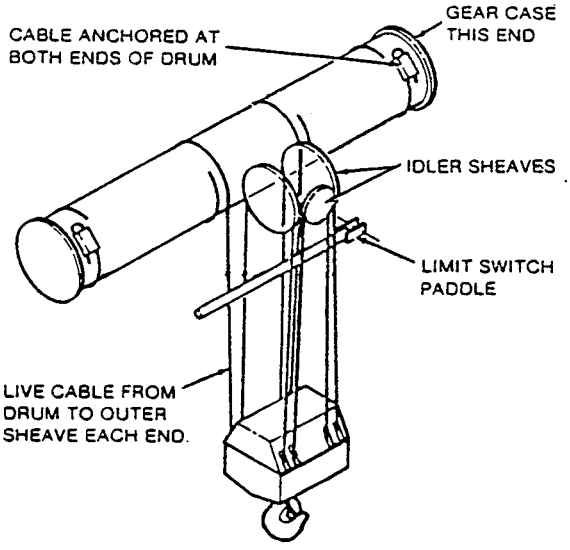
8 PART BOTTOM BLOCK



ITEM	DESCRIPTION	PART NUMBER	QUANTITY
8461	Slotted Nut	23-07796-016	1
8462	Thrust Bearing	6-30-160-028-0	1
8463	Sheave Pin	23-07797-002	1
8464	Bearing Spacer	22-02265-007	2
8464	Bearing Spacer	22-02265-008	2
8465	Snap Rings	22-06498-017	8
8466	Rope Sheaves	24-06000-001	4
8467	Ball Bearings	6-30-050-210-1	4
8468	Block Side Covers	25-03039-002	2
8469	Trunion	25-03038-002	1
8470	Capacity Plates	22-11456-007 (10ton)*	2
8471	Cotter Pin	6-16-005-084-0	1
8472	Latch Kit	22-09929-005	1
8473	Load Hook & Latch	24-05961-001	1
8474	Load Hook Assy. (Includes Latch-Nut-Bearing-Cotter Pins)	22-11576-001	1
8475	Complete Block	25-03031-002	1

*Consult Factory For Other Tonnages

4 Part Double Reeving Diagram F6 Hoist



When the need for cable replacement has been established, proceed as follows:

CAUTION

Always wear heavy gloves when handling cables to avoid hand injuries from possible broken wires.

1. Run block to the floor and lay on its side with axis of sheaves parallel to axis of hoist drum. Continue to run hoist in the down direction until only one half to one wrap of cable remains on the drum. Stop with drum in position where the rope clips anchoring the cable to the drum are most accessible.

2. Remove the rope clips which anchor the cable ends to the drum. Pull the free cable ends from the drum and through the sheaves, removing the cable from the hoist. Discard old cable.

3. Inspect rope sheaves, bearings, pins, etc. for wear or damage. Repair or replace as needed. *Note:* Placing a new cable in service in a sheave tracked or worn to a reduced groove radius will severely shorten cable life and can cause premature cable failure.

4. Unreel the replacement cable and inspect for any shipping damage, kinks, etc. Refer to Operation Maintenance Section — Wire Rope. If replacement cables are held in storage for extended periods of time, check for dried out lubricant or possible corrosion.

5. Pass one end of the new cable around the stationary idler sheave (small sheave nearest the motor), pulling through half of the cable length so the free ends hang parallel and equal distance from the hoist.

6. Pass the free cable ends through the block sheaves, one each side, entering first the inner sheaves, from the motor side. Check to insure cables are not crossed. Pass the free cable ends through the hoist idler sheaves, one each side, entering the sheaves from the drum side. Check to insure cables are not crossed. Pass the free cable ends through the outer block sheaves, one each side, entering from the motor side. Check to insure cables are not crossed. Pull the cable ends up to the drum and anchor them securely under the rope clips, one at either end of the drum. See reeving diagram. Check to insure that cables hang straight and are free of the limit paddle mechanism.

CAUTION

Make certain that limit switch paddle is operating freely. Safe operation of the hoist requires a properly operating limit switch mechanism.

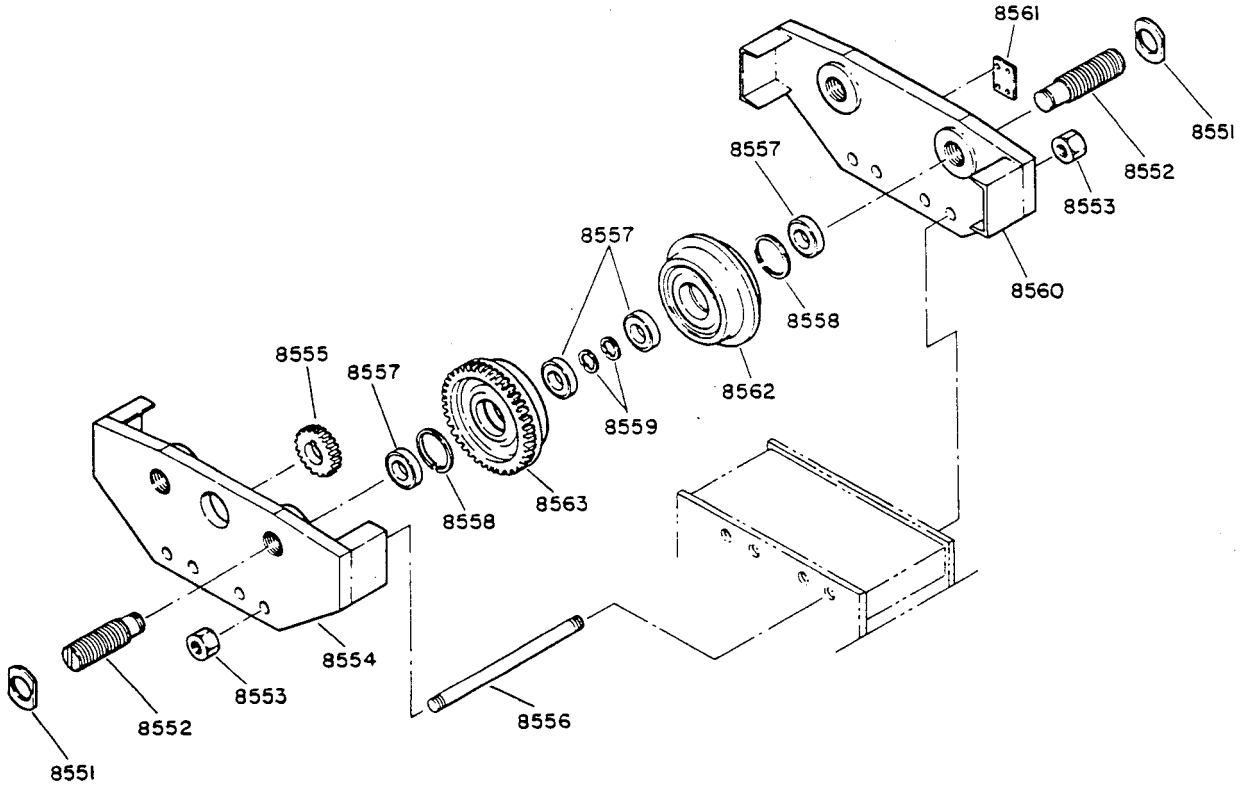
7. Operate the hoist up control and guide cables to insure they spool properly onto the drum until the block weight is supported. Check to be certain that sheaves turn freely and that block hangs properly as shown in the reeving diagram.

8. Operate the block through the full range of lift for 2-3 cycles with empty hook. Check cables with block near the full up position to ensure they hang properly. Make 1-2 *short* lifts from the floor with a near capacity load. Follow this by retightening rope clips.

IMPORTANT

If equipped with optional geared limits, check and adjust limits as necessary to maintain original stop locations.

"M" TROLLEY 10 TON



ITEM	DESCRIPTION	PART NUMBER	QUANTITY
8551	Lock Collar	22-00490-001	8
8552	Wheel Stud	23-05077-008	4
8553	Hex Nut	6-14-007-010-0	8
8554	Drive Side Plate	24-05784-001	1
8555	Drive Pinion	22-10985-003	1
8556*	Mounting Stud	22-03338-007	4
8557	Ball Bearing	6-30-042-209-0	8
8558	Retaining Ring	22-06498-022	4
8559	Retaining Ring	22-06497-034	4
8560	Idler Side Frame	24-05784-002	1
8561	No Longer Required	----------	-
8562	Idler Wheel	23-07177-017	2
8563	Geared Wheel Assy.	23-07480-004	2

*Length May Vary Depending On Operating Beam Flange Width.

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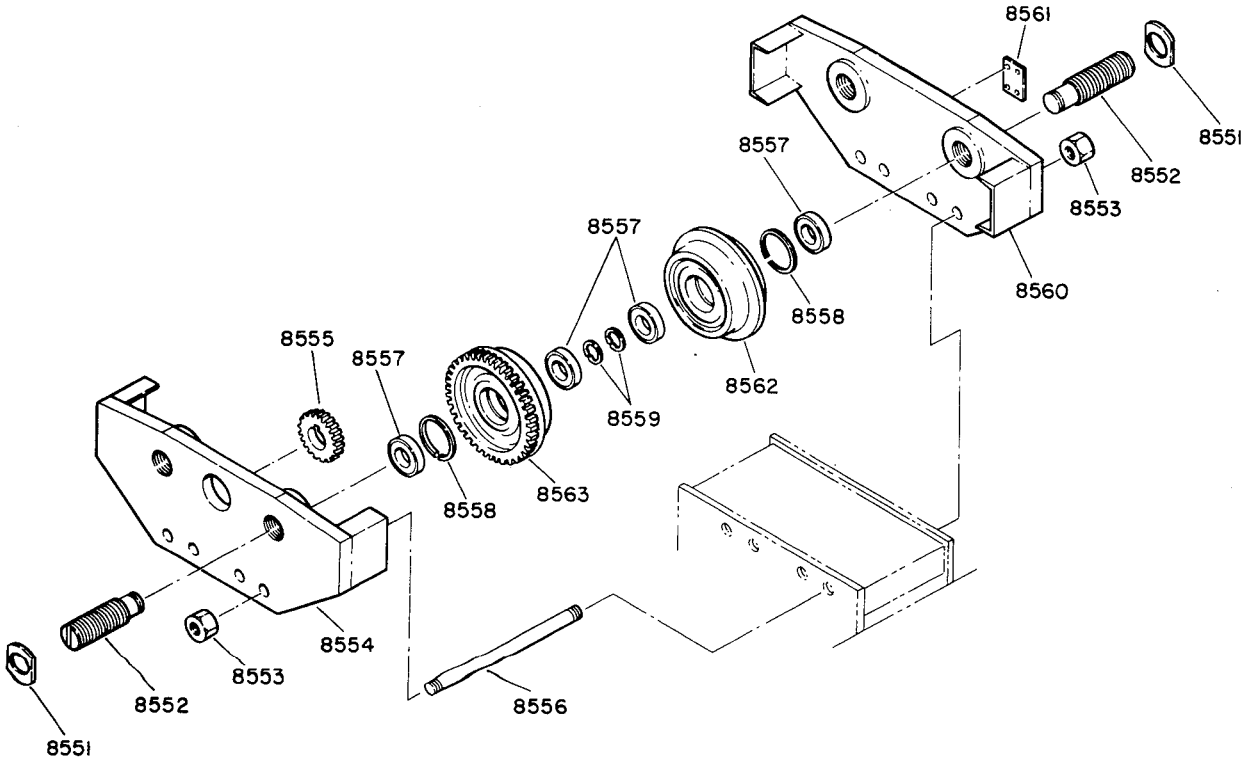
TYPE "G" TROLLEY
10 TON



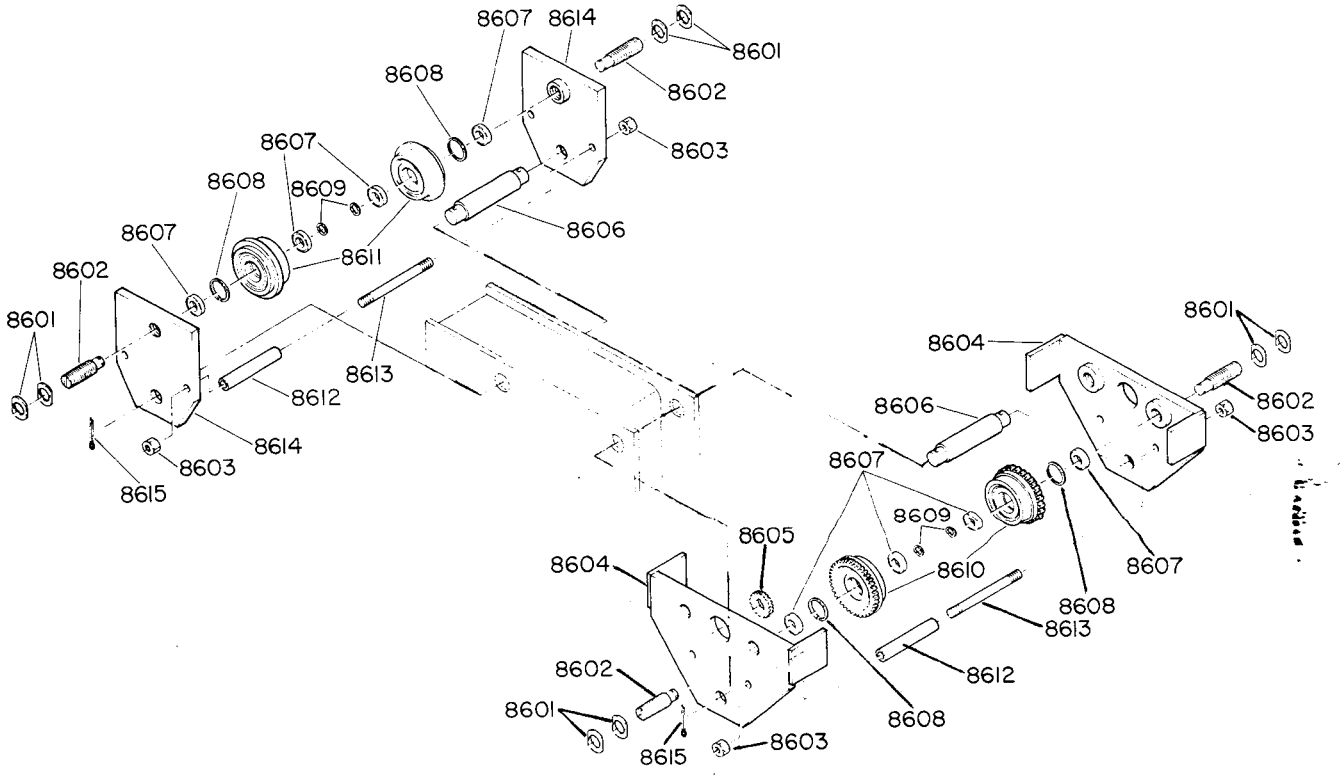
ITEM	DESCRIPTION	PART NUMBER	QTY
8551	Lock Collar	22-00490-001	8
8552	Wheel Stud	23-05077-008	4
8553	Hex Nut	6-14-007-010-0	8
8554	Drive Side Plate	24-05784-001	1
8555	Drive Pinion	22-10985-024	1
	Pinion Key	6-11-024-034-0	1
	Pinion Set Screw	6-06-077-008-3	2
8556	Mounting Stud	22-03338-007	4
8557	Ball Bearing	6-30-042-209-0	8
8558	Retaining Ring	22-06498-022	4
8559	Retaining Ring	22-06497-034	4
8560	Idler Side Frame	24-05784-002	1
8561	No Longer Required	----------	-
8562	Idler Wheel	23-08414-002	2
8563	Drive Wheel	23-08414-001	2
Not Shown	Shaft Bracket	23-07484-007	1
Not Shown	Shaft	23-07485-008	1
Not Shown	Chain Guard	24-00217-004	1
Not Shown	Hand Wheel	24-00216-026	1
Not Shown	Chain	22-00005-001	1

FRAME 6

6-4

FEB 83

TYPE "M" TROLLEY
15 TON



ITEM	DESCRIPTION	PART NUMBER	QTY
8601	Lock Collars	22-00490-001	12
8602	Wheel Studs	23-05077-009	6
8603	Hex Nuts	6-14-007-012-0	8
8604	Drive Side Plate	24-06013-001	2
8605	Drive Pinion	22-10985-024	2
	Pinion Key	6-11-024-034-0	2
	Pinion Set Screw	6-06-077-008-3	4
8606	Suspension Pins	23-07901-001	2
8607	Ball Bearing	6-30-042-209-0	12
8608	Retaining Rings	22-06498-022	6
8609	Retaining Rings	22-06497-034	6
8610	Geared Wheel	23-08414-001	4
8611	Idler Wheel	23-08414-002	2
8612	Pipe Spacer	22-11530-001	4
8613	Trolley Stud	22-11529-001	4
8614	Idler Side Plate	24-06014-001	2
8615	Cotter Pin	6-16-005-096-0	4

Trolley Wheel Setting

Trolleys designed to run on I-beams or WF sections (see Figure 6-2) must have wheel clearance such that there is approximately ⅛" clearance between wheel flange and rail with hoist/trolley centered on beam.

Trolley designed to run on patented type rails (see Figure 6-3) should have 1/16" clearance between wheel flange and rail with hoist/trolley centered on rail.

Note: If binding occurs while negotiating curves in track, trolley may be adjusted to provide 1/16" maximum additional clearance between wheel and WF or I-beam flanges.

Trolley Adjustment Procedure

To adjust wheel setting, back off lock collars. Turn threaded wheel studs to adjust distance between wheel flanges. Retighten lock collar.

IMPORTANT

Each wheel must be positioned an equal distance from trolley side plate to maintain proper hoist balance.

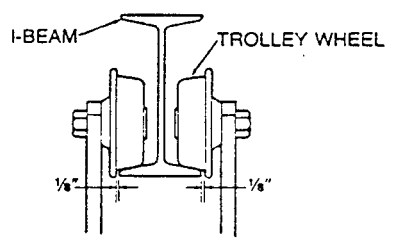


Figure 6-2

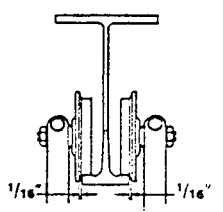


Figure 6-3