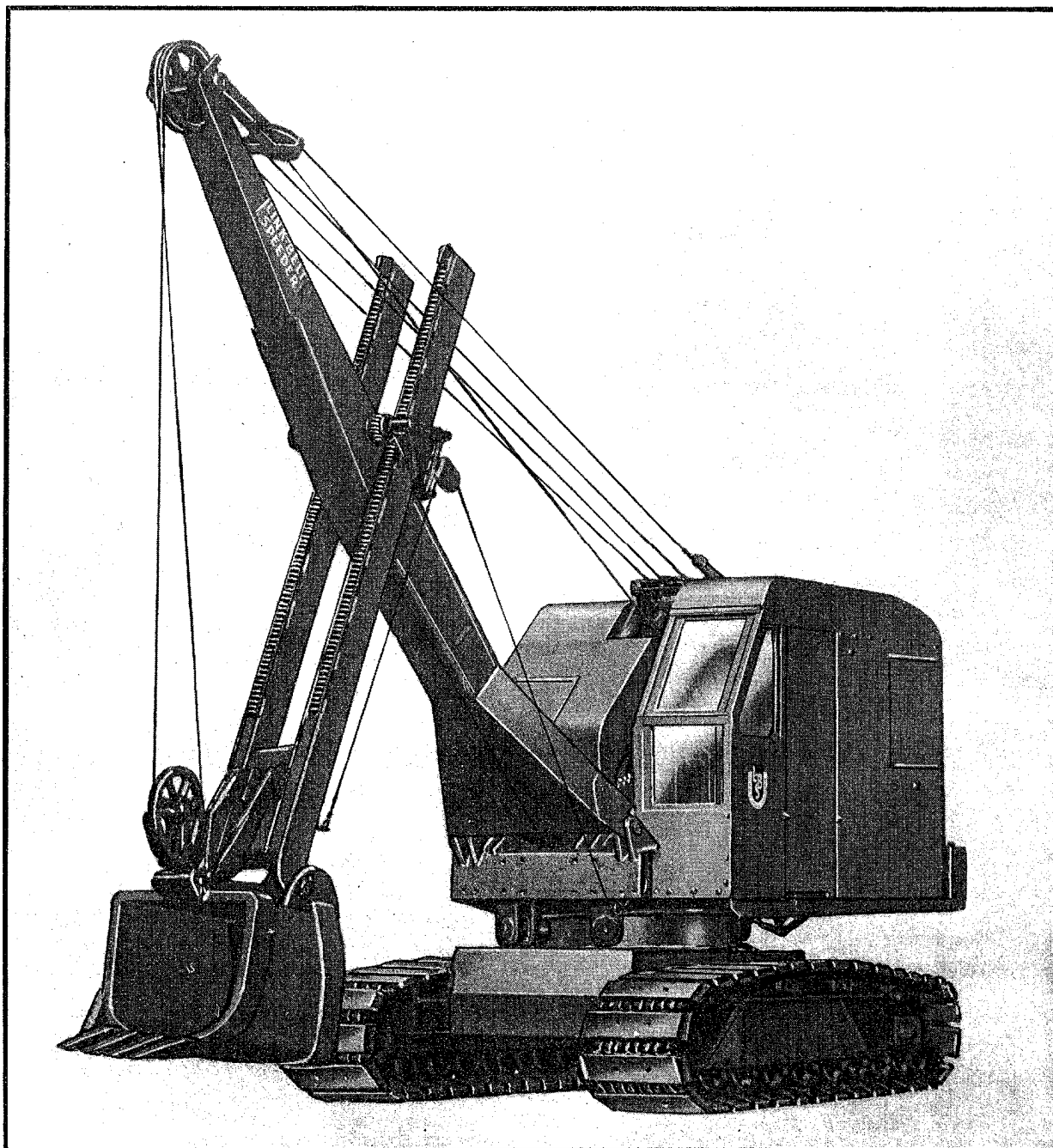




MODEL LS-71



THIS CATALOG EFFECTIVE MACHINE NO. 3F01



INSTRUCTIONS FOR ORDERING PARTS

This list does not carry every part on the machine; merely the ones on which we anticipate the possibility of the need for service.

The Parts Catalogue progresses from the lower frame up thru the machine to the power unit. Immediately following the power unit is found on the parts on the various tools or attachments. An index is to be found at the end of the book.

Whenever in doubt as to whether you can order from this parts catalogue, send us a sketch of the part needed, or send in the old part.

Never order from pictures, merely use them to help identify and locate the part you want.

Parts lists covering the accessories, such as engine, magneto, carburetor, starter, etc., will be furnished upon request.

All prices quoted at any time are subject to change without notice.

All prices quoted by the factory are f.o.b. Cedar Rapids, Iowa.

All shipments are C.O.D. or SDBL unless other arrangements have been made with our company.

State MODEL of machine, with Engine and Serial numbers.

State to whom shipment is to be made.

State method of shipment desired, whether parcel post, express, freight or truck, otherwise our own judgment will be used.

Claims for shortage or error should be made upon receipt of the parts.

No responsibility will be assumed for delay, damage or loss to merchandise while in transit. Broken, damaged or lost material should be refused or a full description made of damage or loss by the carrier agent on the freight or express bill.

If, for any reason, you desire to return parts to the factory, to one of our warehouses or to any distributor from whom these parts were obtained, you must first secure permission to return the parts. Shipping instructions will be given you along with this permission. A 10% handling charge must be assessed against the returned shipment unless an error is made by the factory, by the warehouse or by the distributor while filling your order.

Stocks of parts are maintained at points strategically located throughout the United States and in some foreign countries. For prompt service from the closest stock, always order through the nearest SPEEDER distributor.

TELEGRAPHIC CODE

For convenience and economy when ordering by telegram, code words are provided for all parts. This code is made up of a combination of letters. You may use the following code for any parts number.

1 - B	7 - M
2 - C	8 - R
3 - D	9 - X
4 - J	0 - T
5 - K	1/4 - W
6 - L	1/2 - Y

Example - ordinarily part number T327 would be transmitted as four separate words, whereas by using the code the number is transmitted as one word - TDCM.

Parts numbers carrying a prefix or suffix will retain either or both. For example, T665 will be transmitted TLLK. Likewise R585CB will be transmitted RKRKCB.

USE THIS CODE WHEN TELEGRAPHING

JAB	Ship Air Mail to
JACK	Ship to me (us) by Parcel Post
JADE	Charge our account and ship by Parcel Post to
JAG	Ship by Parcel Post COD to
JAIL	Ship to me (us) by Express
JAM	Charge our account and ship by Express to
JANGLE	Ship by Express COD to
JAR	Ship to me (us) by Freight
JAUNT	Charge our account and ship by Freight to
JAW	Ship by Freight SDBL to
JEAN	Ship in addition to previous order
JERK	Ship what is ready, balance as soon as possible
JEST	When do you expect to ship order(s)
JET	Ship Air Express to
JIG	Ship Air Freight to

Use telegraphic code only in telegrams, CONFIRM all telephone or telegraph orders IMMEDIATELY.



QUICK REFERENCE SYSTEM

TO LOCATE DESIRED INFORMATION, MATCH BLACK INDEX TAB
WITH BLACK TABS ON APPROPRIATE PAGES OF THIS CATALOG

Lower Frame and Crawlers

Revolving Frame

Vertical Shaft Assemblies

Front Drum Shaft Assembly

Hoist Drum Shaft Assembly

Reverse Shaft Assembly

Horizontal Drive Shaft, Pinion and Chain

Engine and Clutch

Operating Controls

Shovel Attachment

Trench Hoe Attachment

Crane, Clamshell, Dragline and Pile Driver Attachments

Tagline Winder and Dipper Trip

Cable Requirements

General Instructions

Maintenance Information

Lubrication Chart

Alphabetical Index

Numerical Index



SECTION I—LOWER FRAME AND CRAWLER

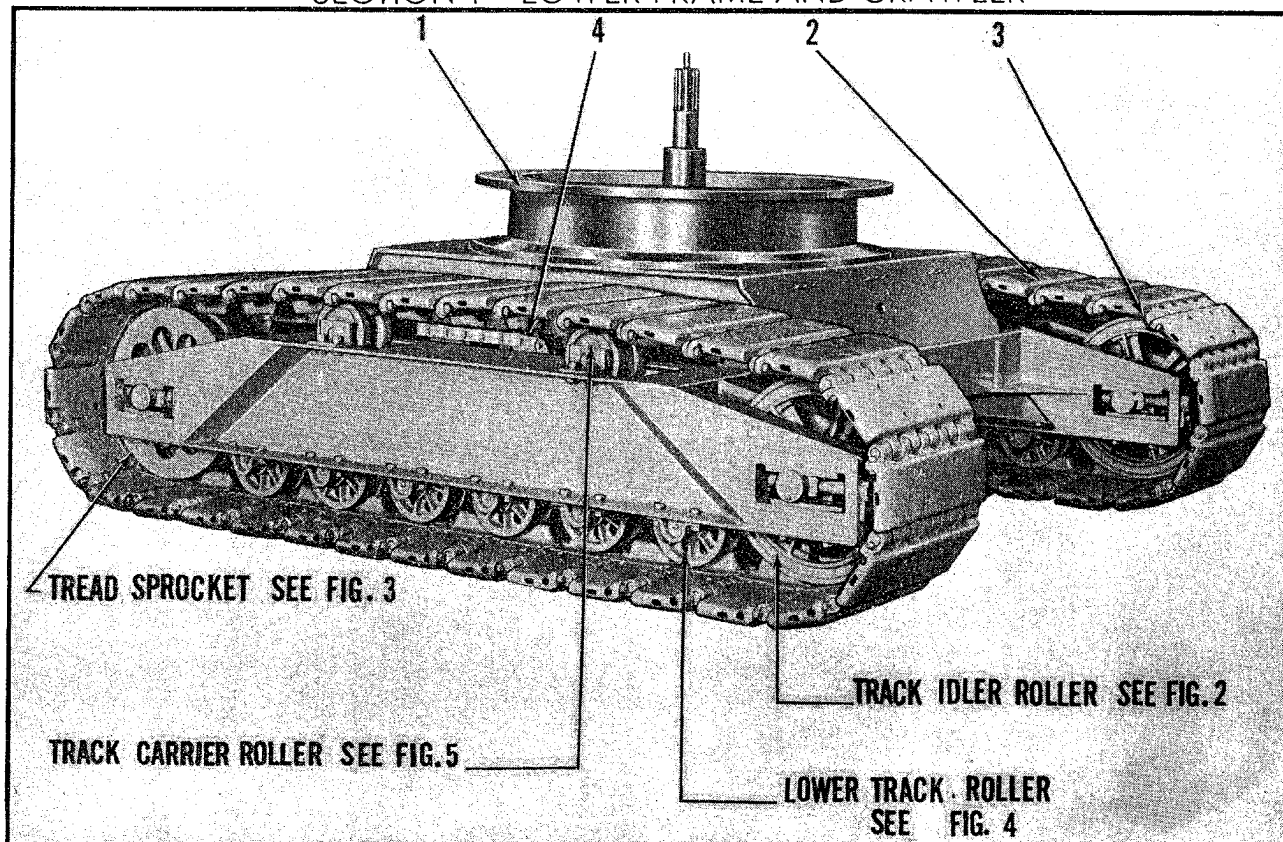


FIG. 1. LOWER FRAME AND CRAWLERS

In the column listed "Position" the numbers are for identification only. The first number designates the figure, the second denotes the object.

<u>Position</u>	<u>Part No.</u>	<u>No. Req.</u>	<u>Description</u>
LOWER FRAME GROUP			
1-1	AB272	1	Gear, Turntable
		8	Machine Bolt, 3-4" x 2-3/4", with Nut and Lockwasher
		6	Machine Bolt, 3/4" x 3-1/4", with Nut, Bevel Washer and Lockwasher
TRACK IDLER ROLLER GROUP			
2-1	AE123	2	Roller, Track Idler, with Two AA83 Bronze Bushing, 3-1/2" x 4" x 2-1/4"
	1627	2	Grease Fitting, 1/4"
2-2	AB440	2	Shaft, Track Idler Roller, 3-1/2" x 15-1/4"
2-3	AE127	4	Washer, Track Idler Roller Shaft Thrust, 6" x 7-1/8" x 6"

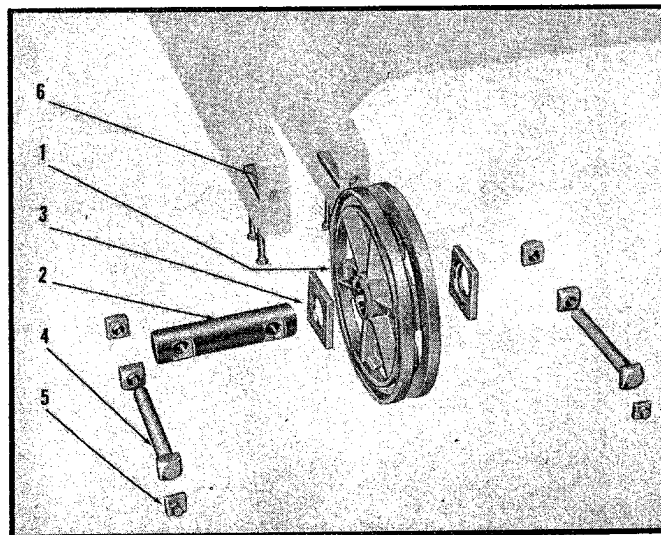


FIG. 2. TRACK IDLER ROLLER



SECTION I—LOWER FRAME AND CRAWLER—Continued

Position	Part No.	No. Req.	Description
TRACK IDLER ROLLER GROUP, Continued			
2-4	AA84	4	Bolt, Track Idler Roller Adjusting, 1-1/2" x 12", with AB442 Square Nut 1-1/2"
2-5	AE113	4	Keeper, Adjusting Bolt, 2" x 1/2" x 2", with Cap Screw, 5/8" x 1-1/2", and Lockwasher
2-6	AA86	4	Bar, Steel Take Up, 3" x 5/8" x 9", with Cap Screw, 3/4" x 1-1/4", and Lockwasher

NOTE: The Following Three Items used as required for Track Idler Roller Shaft Adjustment.

AE135	1	Shim, 3" x 16 Ga. x 7-1/2"
AE136	1	Shim, 3" x 20 Ga. x 7-1/2"
AE137	1	Shim, 3" x 28 Ga. x 7-1/2"

TREAD SPROCKET GROUP

3-1	AE101	2	Sprocket Assembly, Chain and Tread, Weld Complete, Consisting of the Following Items:
	AE102	2	Sprocket, Tread, with AE104 Bronze Bushing, 4" x 3-1/2" x 6"
	AE103	2	Sprocket, Chain, with AE104 Bronze Bushing, 4" x 3-1/2" x 6"
		4	Pipe Nipple, 1/4" x 2"
		4	Pipe Nipple, 1/4" x 1-1/2"
		8	Pipe Coupling, 1/4"
	1629	8	Grease Fitting, 1/4" x 67-1/2 Degree
3-2	AB330	2	Shaft, Chain and Tread Sprocket, 3-1/2" x 26-1/8"
3-3	AE110	4	Washer, Tread Sprocket Shaft Thrust, 6" x 3/4" x 6"
3-4	AA77	4	Bolt, Tread Sprocket Adjusting, 1-1/2" x 12", with AA78 Square Nut, 1-1/2"
3-5	AA79	8	Nut, Adjusting Bolt Lock, 1-1/2"
3-6	AE113	4	Keeper, Adjusting Bolt, 2" x 1/2" x 2", with Cap Screws, 5/8" x 1-1/2", and Lockwashers
3-7	AA76	4	Bar, Steel Take-Up, 3" x 5/8" x 7-1/2"

NOTE: Following item to be used as required for Sprocket Shaft Adjustment.

AA207	2	Shim, 3-3/8" x 16 Ga. x 7-1/2"
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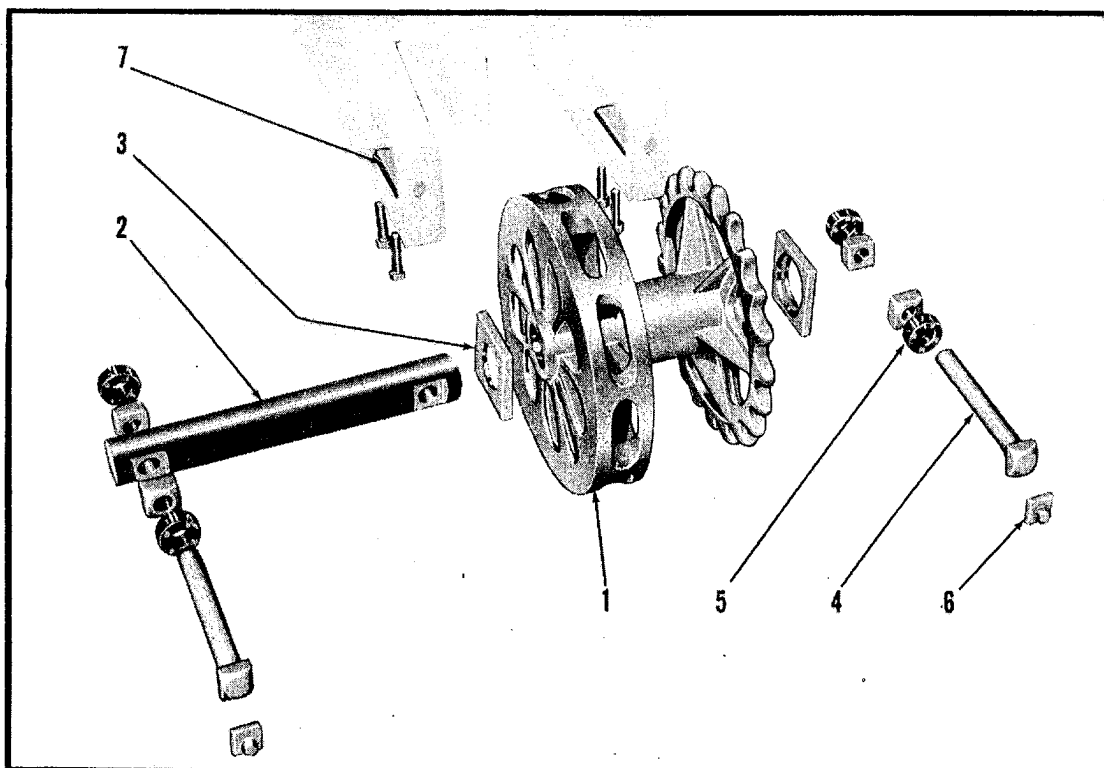


FIG. 3. TREAD SPROCKET



SECTION I—LOWER FRAME AND CRAWLER—Continued

<u>Position</u>	<u>Part No.</u>	<u>No. Req.</u>	<u>Description</u>
LOWER TRACK ROLLER GROUP			
4-1	AA211	12	Roller, Lower Track, with Two KC28 Bronze Bushings, 2-1/2" x 3" x 2"
4-2	AB422	12	Shaft, Track Roller, 1/2" x 10"
	1627	12	Grease Fitting, 1/4"
4-3	AE141	24	Washer, 4" x 5/16"
4-4	AB421	24	Keeper, Track Roller Shaft, 2-1/2" x 1/2" x 9-1/2"
		48	Bolt, Square Askew Shaft, 5/8" x 2", with Nut and Lock-washer

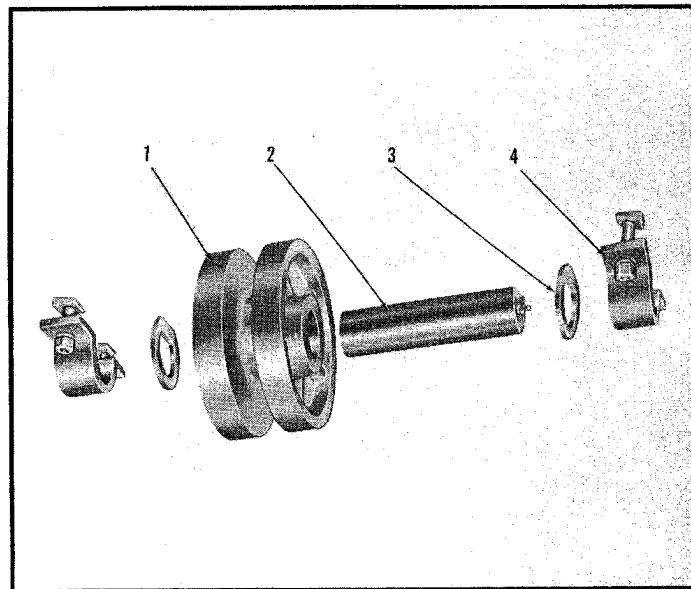


FIG. 4. LOWER TRACK ROLLER

TRACK CARRIER ROLLER GROUP			
5-1	AC1947	4	Roller, Track Carrier
	1610	8	Grease Fitting, 1/8"
5-2	AB417	4	Bracket, Track Carrier Roller Shaft, Weld Complete
5-3	AB418	4	Bracket, Track Carrier Roller
		16	Bolt, Sq. Askew Head, 5/8" x 2", with Nut and Lockwasher

TRACK SHOES - 20" - PRIOR MACHINE NO. 3F70

1-2	AC262	64	Shoes, Track, with Connecting Pin, Bolt, Nuts and Lockwasher
1-3	AC263	64	Pin, Connecting, 1-1/8" x 17-1/4"
		128	Bolt, 1/2" x 1-1/2", with Nut and Lockwasher

TRACK SHOES - 24" - PRIOR MACHINE NO. 3F70

1-2	AE244	64	Shoes, Track, with Connecting Pin, Bolts, Nuts and Lockwashers
1-3	AE245	64	Pin, Connecting, 1-1/8" x 21-5/8"
		128	Bolt, 1/2" x 1-1/2", with Nut and Lockwasher

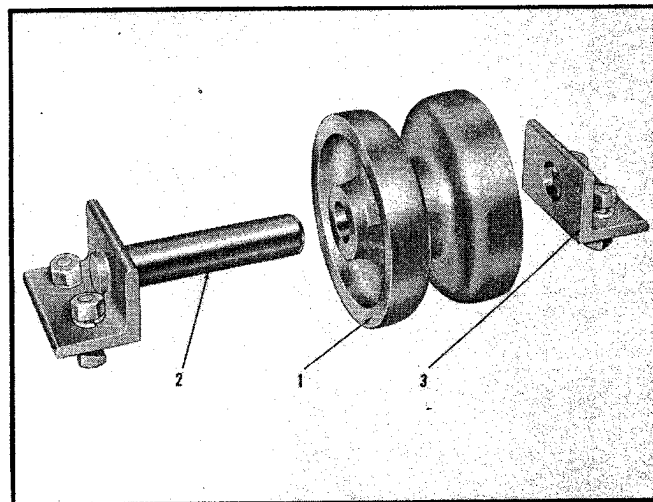


FIG. 5. TRACK CARRIER ROLLER

TRACK SHOES - 30" - PRIOR MACHINE NO. 3F70

1-2	AA171	64	Shoes, Track, with Connecting Pin, Bolts, Nuts and Lockwashers
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SECTION I—LOWER FRAME AND CRAWLER—Continued

<u>Position</u>	<u>Part No.</u>	<u>No. Req.</u>	<u>Description</u>
TRACK SHOES - 30", Continued			
1-3	AE245	64 128	Pin, Connecting, 1-1/8" x 21-5/8" Bolt, 1/2" x 1-1/2", with Nut and Lockwasher
TRACK SHOES - 16"			
	AB445	64	Shoe, 16" Track complete with Connecting Pin, Bolts, Nuts and Lockwashers
	AB446	64 128	Pin, Connecting, 1-1/8" x 12-3/4" Bolt, 1/2" x 1-1/2", with Nut and Lockwasher
TRACK SHOES - 20" - (AFTER MACHINE NO. 3F69)			
	AB576	64	Shoe, 20" Track, complete with Connecting Pins, Bolts, Nuts and Lockwashers
	AA549	64 128	Pin, Connecting, 1-1/8" x 17" Bolt, 1/2" x 1-1/2", with Nut and Lockwasher
TRACK SHOES - 24" - (AFTER MACHINE NO. 3F69)			
	AA548	64	Shoe, 24" Track, Complete with Connecting Pin, Bolts, Nuts and Lockwashers
	AA549	64 128	Pin, Connecting, 1-1/8" x 17" Bolt, 1/2" x 1-1/2", with Nut and Lockwasher
TRACK SHOES - 30" - (AFTER MACHINE NO. 3F69)			
	AA610	64	Shoe, 30" Track, complete with Connecting Pin, Bolts, Nuts and Lockwashers
	AA549	64 128	Pin, Connecting, 1-1/8" x 17" Bolt, 1/2" x 1-1/2", with Nut and Lockwasher
TRACK DRIVE CHAIN GROUP			
1-4	AB433	2	Chain, Traction Drive Roller, No. XXS40, 48 Links
<i>NOTE: Replacement links for No. XYS40 Roller Chain are kept in stock.</i>			
HORIZONTAL TRACTION SHAFT GROUP			
6-1	AE53	2	Sprocket, Drive, 7-Teeth
6-2	AE58	2	Set Screw, Sq. Head, 5/8" x 2" with Nut
6-3	ACU46	2	Shaft, Outer Traction, 3" x 22-15/16"
		4	Bearing Assembly, Traction Shaft, Babbitted
		16	Bolts, 3/4" x 5-1/2", with Nut, Bevel Washer, and Lockwasher
		15	Bolts, 3/4" x 2-1/2", with Nut, Bevel Washer, and Lockwasher
6-4	AE71	2	Spring, Traction Shaft, 3-11/16" x 9"
6-5	AC60	2	Collar, Bronze Shift
6-6	AC63	2	Clutch, Stationary Jaw with AC64 Bronze Bushing, 5-1/2" x 5-1/32" x 2"
6-7	AC59	2	Clutch, Sliding Jaw
6-8	AE80	2	Spacer, Outer Traction Shaft
6-9	AC69	1	Clutch, Traction, with AC70 Bronze Bushing, 3" x 2-1/2" x 3"
6-10	AC72	1	Shaft, Center Traction, 3" x 15-5/8"
6-11	AC73	1	Gear, Traction Bevel, 18 Teeth (Splined)
6-12	AC74	1	Washer, Bronze Thrust, 6" x 4" x 1/4"
6-13	AB329	1	Clutch, Traction Lock, with AC70 Bronze Bushing, 3" x 2-1/2" x 3"
	AC1519	2	Hose Assembly, Flexible Grease
	AB465	2	Tube, Grease, 5/16" O.D. x 39"
	AB466	2	Tube, Grease, 5/16" O.D. x 37"
		6	Street Elbow, 1/8"
		12	Pipe Coupling, 1/8"
		8	Pipe Nipple, 1/8" x 3/4"
	1610	6	Grease Fitting, 1/8"
	HB117	2	Clip, Grease Line, 1" x 20 Ga. x 3/4", with Nut and Lockwasher
	HB182	4	Connection, 5/16" x 1/8"