

Wood-Mizer[®] Sawmill

Parts Manual

1987 LT30HD
1987 LT40HD

rev. C3 - C6
rev. A - C6



Safety is our #1 concern! Read and understand all safety information and instructions before operating, setting up or maintaining this machine.

January 1999

Form #643

Table of Contents

Section-Page

SECTION 1	GENERAL INFORMATION	1-1
1.1	How To Use The Parts List	1-1
1.2	Sample Assembly	1-1
SECTION 2	BLADE DRIVE & GUIDES	2-1
2.1	Blade Guide Assembly, Drive Side.....	2-1
2.2	Blade Guide Assembly, Idle Side.....	2-3
2.3	Blade Drive Assembly.....	2-5
	<i>LT30HD</i> <i>Rev. C3 - C6</i>	
	<i>LT40HD</i> <i>Rev. C3 - C6</i>	
2.4	Blade Drive Assembly.....	2-7
	<i>LT40HD</i> <i>Rev. A - C2</i>	
2.5	Idle Blade Wheel Assembly	2-9
	<i>LT30HD</i> <i>Retrofit</i>	
	<i>LT40HD</i> <i>Retrofit</i>	
2.6	Idle Blade Wheel Assembly	2-11
	<i>LT30HD</i> <i>Rev. C3 - C6</i>	
	<i>LT40HD</i> <i>Rev. B7 - C6</i>	
2.7	Idle Blade Wheel Assembly	2-13
	<i>LT40HD</i> <i>Rev. AN - B6</i>	
2.8	Idle Blade Wheel Assembly	2-15
	<i>LT40HD</i> <i>Rev. A - AM</i>	
2.9	Hydraulic Blade Tensioner Assembly.....	2-17
	<i>LT30HD</i> <i>Rev. C3 - C6</i>	
	<i>LT40HD</i> <i>Rev. B7 - C6</i>	
2.10	Blade Tensioner Assembly.....	2-19
	<i>LT40HD</i> <i>Rev. AN - B6</i>	
2.11	Blade Tensioner Assembly.....	2-21
	<i>LT40HD</i> <i>Rev. A - AM</i>	
2.12	Blade Guide Arm Assembly.....	2-23
	<i>LT30HD</i> <i>Rev. C3 - C6</i>	
	<i>LT40HD</i> <i>Rev. B4 - C6</i>	
2.13	Blade Guide Arm Assembly.....	2-25
	<i>LT40HD</i> <i>Rev. A - B3</i>	
2.14	Clutch/Brake Lever Assembly	2-27
2.15	Water Lube Assembly	2-29
	<i>LT30HD</i> <i>Retrofit</i>	
	<i>LT40HD</i> <i>Retrofit</i>	
2.16	Water Lube Assembly w/Auto-Shutoff.....	2-31
	<i>LT30HD</i> <i>Rev. C3 - C6</i>	
	<i>LT40HD</i> <i>Rev. AP - C6</i>	
2.17	Water Lube Assembly	2-33
	<i>LT40HD</i> <i>Rev. A - AN</i>	
2.18	Middle Throat Cam	2-35
	<i>LT30HD</i> <i>Rev. C6</i>	
	<i>LT40HD</i> <i>Rev. C6</i>	
2.19	Middle Throat Bearing	2-36
	<i>LT30HD</i> <i>Rev. C3 - C5</i>	
	<i>LT40HD</i> <i>Rev. A - C5</i>	

Table of Contents	Section-Page
SECTION 3 SAW HEAD COVERS	3-1
3.1 Saw Head Covers	3-1
SECTION 4 BATTERY BOX AND INSTRUMENT PANEL	4-1
4.1 Battery Box Assembly, LT30HD/LT40HD	4-1
<i>LT30HD</i> <i>Rev. C3 - C6</i>	
<i>LT40HD</i> <i>Rev. AK - C6</i>	
4.2 Battery Box Assembly, LT30HD/LT40HD	4-3
<i>LT40HD</i> <i>Rev. A - AJ</i>	
4.3 Instrument Panel.....	4-5
<i>LT30HD</i> <i>Rev. C3 - C6</i>	
<i>LT40HD</i> <i>Rev. B4 - C6</i>	
4.4 Instrument Panel.....	4-7
<i>LT40HD</i> <i>Rev. A - B3</i>	
SECTION 5 UP/DOWN SYSTEM & SCALES	5-1
5.1 Saw Head V-Brace Mount.....	5-1
5.2 Blade Height Scale	5-3
5.3 Up/Down Drive Assembly	5-5
5.4 Up/Down Chain Assembly.....	5-7
SECTION 6 POWER FEED & TRACK ROLLERS	6-1
6.1 Upper Track Rollers And Wipers.....	6-1
6.2 Lower Track Rollers.....	6-3
6.3 Power Feed Drive Assembly	6-4
<i>LT30HD</i> <i>Rev. C3 - C6</i>	
<i>LT40HD</i> <i>Rev. B - C6</i>	
6.4 Power Feed Drive Assembly	6-7
<i>LT40HD</i> <i>Rev. A</i>	
6.5 Power Feed Chain.....	6-11
<i>LT30HD</i> <i>Retrofit</i>	
<i>LT40HD</i> <i>Retrofit</i>	
6.6 Power Feed Chain.....	6-13
<i>LT40HD</i> <i>Rev. A</i>	
6.7 Power Feed Chain.....	6-15
<i>LT30HD</i> <i>Rev. C3 - C6</i>	
<i>LT40HD</i> <i>Rev. B - C6</i>	
SECTION 7 BED FRAME ASSEMBLY	7-1
7.1 Bed Rail Assembly, Front And Rear	7-2
7.2 Bed Rail Assembly, Middle	7-4
7.3 Pivot Bed Rail Assembly.....	7-6
7.4 Log Side Support Assembly (Manual)	7-7
7.5 Leg, Stationary	7-8
7.6 Manual Toe Board.....	7-10
<i>LT40HD</i> <i>Rev. A - AL</i>	

Table of Contents

Section-Page

SECTION 8 HYDRAULIC SYSTEM

8-1

8.1	Hydraulic Hoses	8-1
8.2	Hydraulic Control Box	8-3
	<i>LT30HD</i> <i>Rev. C5 - C6</i>	
	<i>LT40HD</i> <i>Rev. C5 - C6</i>	
8.3	Hydraulic Pump/Valve	8-5
	<i>LT30HD</i> <i>Rev. C5 - C6</i>	
	<i>LT40HD</i> <i>Rev. C5 - C6</i>	
8.4	Hydraulic Control Box	8-7
	<i>LT30HD</i> <i>Rev. C3 - C4</i>	
	<i>LT40HD</i> <i>Rev. B8 (12/89+) - C4</i>	
8.5	Hydraulic Pump/Valve	8-9
	<i>LT30HD</i> <i>Rev. C3 - C4</i>	
	<i>LT40HD</i> <i>Rev. B8 (12/89+) - C4</i>	
8.6	Hydraulic Control Box	8-11
	<i>LT40HD</i> <i>Rev. AM - B8 (12/89-)</i>	
8.7	Hydraulic Pump/Valve	8-13
	<i>LT40HD</i> <i>Rev. AM - B8 (12/89-)</i>	
8.8	Hydraulic Control Box	8-15
	<i>LT40HD</i> <i>Rev. A - AL</i>	
8.9	Hydraulic Pump/Valve	8-17
	<i>LT40HD</i> <i>Rev. A - AL</i>	
8.10	Hydraulic Power Supply Strip.....	8-19
	<i>Retrofit</i>	
8.11	Hydraulic Power Supply Strip.....	8-21
	<i>LT30HD</i> <i>Rev. C3 - C6</i>	
	<i>LT40HD</i> <i>Rev. B6 - C6</i>	
8.12	Hydraulic Power Supply Buttons	8-23
	<i>LT40HD</i> <i>Rev. A - B5</i>	
8.13	Hydraulic Log Loader	8-25
8.14	Hydraulic Log Turner.....	8-27
8.15	Hydraulic Log Side Supports	8-29
8.16	Hydraulic Log Clamp Activator.....	8-31
	<i>LT30HD</i> <i>Retrofit</i>	
	<i>LT40HD</i> <i>Retrofit</i>	
8.17	Hydraulic Log Clamp	8-32
	<i>LT30HD</i> <i>Retrofit</i>	
	<i>LT40HD</i> <i>Retrofit</i>	
8.18	Hydraulic Log Clamp	8-36
	<i>LT30HD</i> <i>Rev. C3 - C6</i>	
	<i>LT40HD</i> <i>Rev. AH - C6</i>	
8.19	Hydraulic Log Clamp	8-40
	<i>LT40HD</i> <i>Rev. A - AG</i>	
8.20	Hydraulic Toe Board (Roller-Style).....	8-43
	<i>LT30HD</i> <i>Retrofit</i>	
	<i>LT40HD</i> <i>Retrofit</i>	
8.21	Hydraulic Toe Board	8-45
	<i>LT30HD</i> <i>Rev. C3 - C6</i>	
	<i>LT40HD</i> <i>Rev. AM - C6</i>	

SECTION 1 GENERAL INFORMATION

1.1 How To Use The Parts List

- Use the table of contents or index to locate the assembly that contains the part you need.
- Go to the appropriate section and locate the part in the illustration.
- Use the number pointing to the part to locate the correct part number and description in the table.
- Parts shown indented under another part are included with that part.
- Parts marked with a diamond (◆) are only available in the assembly listed above the part.

See the sample table below. Sample Part #A01111 includes part F02222-2 and subassembly A03333. Subassembly A03333 includes part S04444-4 and subassembly K05555. The diamond (◆) indicates that S04444-4 is not available except in subassembly A03333. Subassembly K05555 includes parts M06666 and F07777-77. The diamond (◆) indicates M06666 is not available except in subassembly K05555.

1.2 Sample Assembly				
REF	DESCRIPTION (◆ Indicates Parts Available In Assemblies Only)	PART #	QTY.	
	SAMPLE ASSEMBLY, COMPLETE (INCLUDES ALL INDENTED PARTS BELOW)	A01111	1	
1	Sample Part	F02222-22	1	
	Sample Subassembly (Includes All Indented Parts Below)	A03333	1	
2	Sample Part (◆ Indicates Part Is Only Available With A03333)	S04444-4	1	◆
	Sample Subassembly (Includes All Indented Parts Below)	K05555	1	
3	Sample Part (◆ Indicates Part Is Only Available With K05555)	M06666	2	◆
4	Sample Part	F07777-77	1	

To Order Parts:

- From the continental U.S., call **1-800-525-8100** to order parts. Have your customer number, vehicle identification number, and part numbers ready when you call.
- From other international locations, contact the Wood-Mizer distributor in your area for parts.



SECTION 2 BLADE DRIVE & GUIDES

2.1 Blade Guide Assembly, Drive Side				
REF	DESCRIPTION (◆ Indicates Parts Available In Assemblies Only)	PART #	QTY.	
	BLADE GUIDE ASSEMBLY, COMPLETE DRIVE SIDE (W/LUBE)	A12085 ¹	1	
	BLADE GUIDE ASSEMBLY, COMPLETE DRIVE SIDE (W/O LUBE)	A08191 ¹	1	
1	Nut, 1/2-20 Hex Nylon Lock	F05010-15	1	
	Roller Assembly, Blade Guide (standard)	A04925	1	
	Bearing Kit, Blade Guide Rebuild	K07079	1	
2	Washer, 5/8" White Felt	P04252	1	
3	Ring, 1 1/8" Interior Retaining	F04254-1	1	
4	Bearing, R8-2RS Blade Guide	015975	2	◆
5	Washer, 5/8" Gray Felt	P06455	1	
	Screw, 1/4-28 x 1/4" Socket Head Cup Point Set Black Oxide	F05005-105	1	
	Instruction Sheet, Blade Guide Rebuild	057407-1507	1	
6	Roller, Flanged Blade Guide	S04250	1	◆
	Instruction Sheet, Blade Guide Roller Replacement	A04925-364	1	
7	Spacer, Blade Guide	S04253 ²	2	
8	Bolt, Blade Guide Roller	036373	1	
9	Bracket, Blade Guide Drive Side (w/Lube)	W12086 ¹	1	
10	Bracket, Blade Guide Drive Side (w/o Lube)	W08482 ¹	1	
11	Screw, 3/8-24 X 1 1/4" Stainless Steel Socket Head Flat Point	F05007-96 ³	2	
12	Nut, 3/8-24 Jam	F05010-22	2	
13	Shaft, Blade Guide Adjustment	S08196	1	
14	SCREW, 3/8-24 X 3/4" STAINLESS STEEL SOCKET HEAD FLAT POINT	F05007-95 ⁴	4	
15	NUT, 3/8-24 JAM	F05010-22	4	
16	TUBE, BLADE GUIDE MOUNT (Part of Saw Frame Weldment)	W08159 ⁵	1	
	ROLLER ASSEMBLY, BLADE GUIDE RELUBE (OPTIONAL)	016568	1	
	Bearing Kit, Relube Blade Guide Rebuild	057407	1	
17	Washer, 5/8" White Felt	P04252	1	
18	Ring, 1 1/8" Interior Retaining	F04254-1	1	
19	Bearing, R8-2RS Blade Guide	015975 ⁶	2	◆
20	Washer, 5/8" Gray Felt	P06455	1	
21	Spacer, Blade Guide Bearing	035411	1	
	Instruction Sheet, Blade Guide Rebuild	057407-1507	1	
22	Roller, Flanged Blade Guide Relube	035426	1	◆
	Instruction Sheet, Blade Guide Roller Replacement	A04925-364	1	
23	BOLT, BLADE GUIDE ROLLER (RELUBE ONLY)	S08192	1	
24	FITTING, 1/4-28 GREASE (RELUBE ONLY)	P05060	1	

- ¹ Use A08191 to replace assembly without waterlube tube on bracket (W08482). Use A12085 to replace assembly with water tube on-drive side blade guide bracket (W12086). Complete blade guide assemblies include roller with non-greaseable bearings A04925. See optional parts for Relube guide assemblies.
- ² Replaces S04297-W Bolt Spacer originally supplied.
- ³ Stainless screw replaces F05007-51 used on Rev. A to C6. Two set screws replace F05007-23 3/8-24 x 2" Hex Head Full Thread Bolt and 1/4-28 x 1/2" Brass Set Screw originally supplied.
- ⁴ Stainless screw replaces F05007-20 used on Rev. A to C6.
- ⁵ Bolt-On blade guide kit available (016566). Requires cutting old block off, welding new receiver to saw head that will accept bolt-on mount. Kit includes all hardware and instructions.
- ⁶ Bearing must be modified for use with relube roller assemblies. Remove one seal from each bearing, place open sides facing each other and place spacer 035411 between bearings.

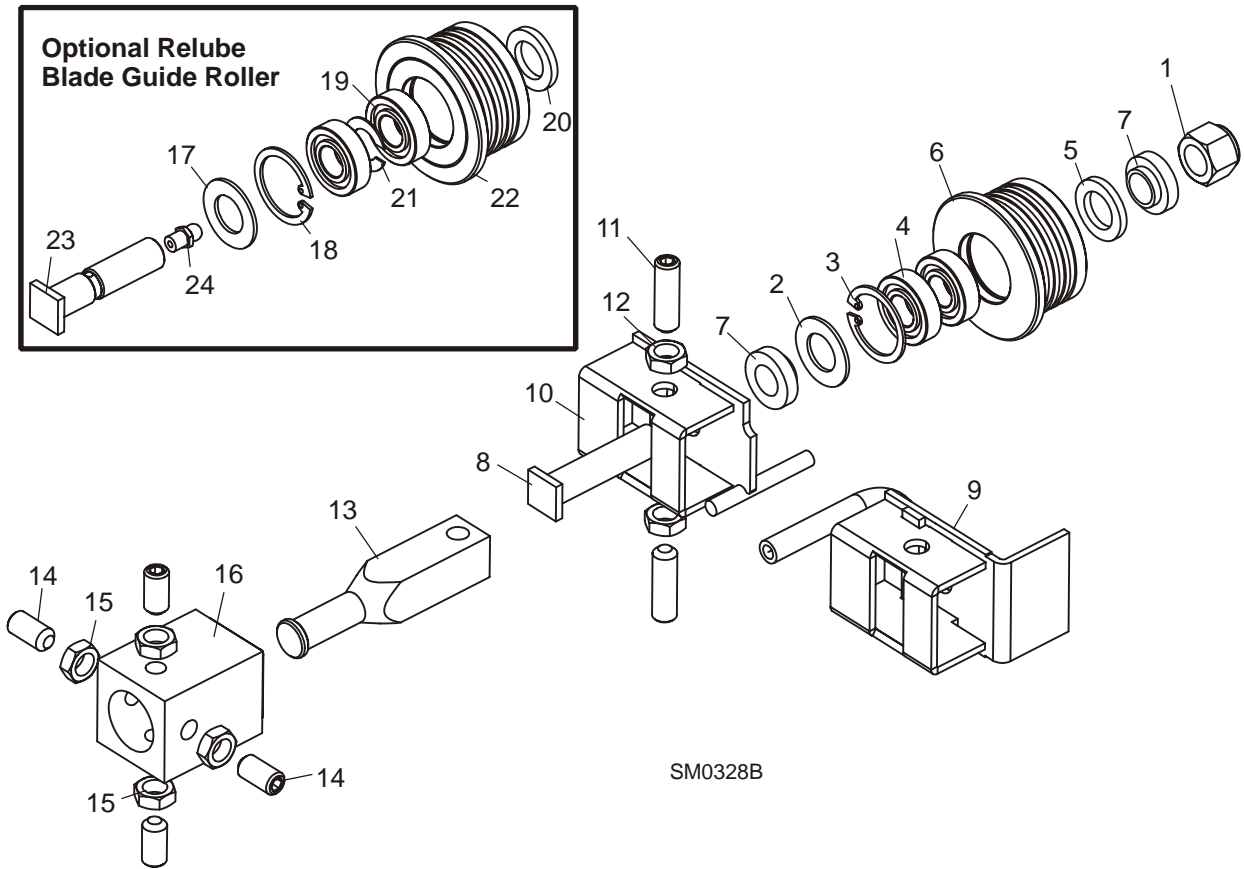


FIG. 2-1

2.2 Blade Guide Assembly, Idle Side				
REF	DESCRIPTION (◆ Indicates Parts Available In Assemblies Only)	PART #	QTY.	
	BLADE GUIDE ASSEMBLY, COMPLETE IDLE SIDE (W/LUBE)	A08197 ¹	1	
	BLADE GUIDE ASSEMBLY, COMPLETE IDLE SIDE (W/O LUBE)	A08191 ¹	1	
1	Nut, 1/2-20 Hex Nylon Lock	F05010-15	1	
	Roller Assembly, Blade Guide (standard)	A04925	1	
	Bearing Kit, Blade Guide Rebuild	K07079	1	
2	Washer, 5/8" White Felt	P04252	1	
3	Ring, 1 1/8" Interior Retaining	F04254-1	1	
4	Bearing, R8-2RS Blade Guide	015975	2	◆
5	Washer, 5/8" Gray Felt	P06455	1	
	Screw, 1/4-28 x 1/4" Socket Head Cup Point Set Black Oxide	F05005-105	1	
	Instruction Sheet, Blade Guide Rebuild	057407-1507	1	
6	Roller, Flanged Blade Guide	S04250	1	◆
	Instruction Sheet, Blade Guide Roller Replacement	A04925-364	1	
7	Spacer, Blade Guide	S04253 ²	2	
8	Bolt, Blade Guide Roller	036373	1	
9	Bracket, Blade Guide Idle Side (w/Lube)	W08495 ¹	1	
10	Bracket, Blade Guide Drive Side (w/o Lube)	W08482 ¹	1	
11	Screw, 3/8-24 X 1 1/4" Stainless Steel Socket Head Flat Point	F05007-96 ³	2	
12	Nut, 3/8-24 Jam	F05010-22	2	
13	Shaft, Blade Guide Adjustment	S08196	1	
14	SCREW, 3/8-24 X 3/4" STAINLESS STEEL SOCKET HEAD FLAT POINT	F05007-95 ⁴	3	
15	BOLT, 3/8-24 X 1" STAINLESS STEEL HEX HEAD	F05007-99 ⁵	1	
16	NUT, 3/8-24 JAM	F05010-22	4	
17	TUBE, BLADE GUIDE MOUNT (See Section 2.12 Blade Guide Arm Assembly).	W08159	1	
	ROLLER ASSEMBLY, BLADE GUIDE RELUBE (OPTIONAL)	016568	1	
	Bearing Kit, Relube Blade Guide Rebuild	057407	1	
18	Washer, 5/8" White Felt	P04252	1	
19	Ring, 1 1/8" Interior Retaining	F04254-1	1	
20	Bearing, R8-2RS Blade Guide	015975 ⁶	2	◆
21	Washer, 5/8" Gray Felt	P06455	1	
22	Spacer, Blade Guide Bearing	035411	1	
	Instruction Sheet, Blade Guide Rebuild	057407-1507	1	
23	Roller, Flanged Blade Guide Relube	035426	1	◆
	Instruction Sheet, Blade Guide Roller Replacement	A04925-364	1	
24	BOLT, BLADE GUIDE ROLLER (RELUBE ONLY)	S08192	1	
25	FITTING, 1/4-28 GREASE (RELUBE ONLY)	P05060	1	

¹ Use A08191 to replace assembly without water tube on idle side blade guide bracket (W08482). Use A08197 to replace assembly with water tube on idle side blade guide bracket (W08495). Complete blade guide assemblies include roller with non-greaseable bearings A04925. See optional parts for Relube guide assemblies.

² Replaces S04297-W Bolt Spacer originally supplied.

- ³ Stainless screw replaces F05007-51 used on Rev. A to C6. Two set screws replace F05007-23 3/8-24 x 2" Hex Head Full Thread Bolt and 1/4-28 x 1/2" Brass Set Screw originally supplied.
- ⁴ Stainless screw replaces F05007-20 used on Rev. A to C6.
- ⁵ Stainless bolt replaces F05007-95 (12/94).
- ⁶ Bearing must be modified for use with relube roller assemblies. Remove one seal from each bearing, place open sides facing each other and place spacer 035411 between bearings.

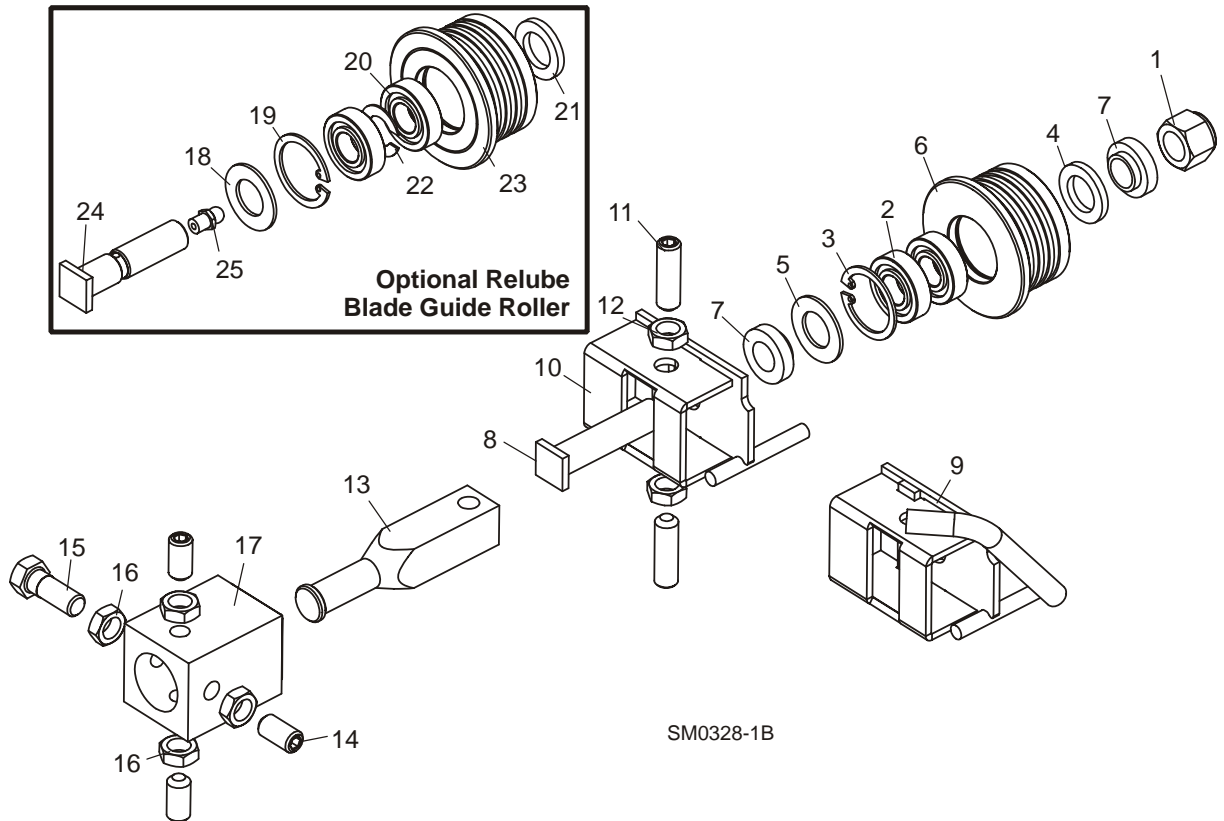


FIG. 2-2

2 Blade Drive & Guides

Blade Drive Assembly

2.3 Blade Drive Assembly				
LT30HD		Rev. C3 - C6		
LT40HD		Rev. C3 - C6		
REF	DESCRIPTION (◆ Indicates Parts Available In Assemblies Only)	PART #	QTY.	
	BEARING ASSEMBLY, BLADE WHEEL DRIVE	K10200 ¹	1	
	Bearing Assembly, Drive Painted	A10199	1	◆
1	Housing, Blade Wheel Drive Bearing	W10201	1	◆
2	Shaft, Blade Wheel Drive	S10204	1	◆
3	Bearing, Blade Wheel Drive #MU1308TV	P10205	1	◆
4	Bearing, Blade Wheel Drive #6308 C3 Open	016055 ²	1	◆
5	Ring, 90mm Interior Retaining #117	F04254-17	2	
6	Seal, Drive Bearing #cr15890	P10206-K	2	
7	Fitting, 1/4" NPT x 3/8" Hose Barb Elbow	016330 ³	1	
8	Fitting, 1/4" NPT x 3/8" Hose Barb Vented Elbow	016331	1	
9	Hose, Oil Level Viewer	016337	1	
10	Clamp, 7/32-5/8" Hose	P649	2	
11	Decal, Oil Level Gauge	017470	1	
12	Bolt, 1/2-13 Long U	S10207-1	1	
13	Bolt, 1/2-13 Short U	S10207-2	1	
14	Spacer, 1/2" I.D. Flanged	S04253	2	
15	Washer, 1/2" SAE Flat	F05011-2	8	
16	Washer, 1/2" Split Lock	F05011-9	4	
17	Nut, 1/2-13 Hex	F05010-35	4	
18	Nut, 1/2-13 Hex Jam	F05010-31	6	
19	Pin, 3/16" X 5/8" Roll	F05012-22	2	
20	Bushing, 1 7/16" Type 'H' Thick Flange	P12962 ⁴	3	
	Instruction Sheet, Bearing Replacement	K10200-275	1	
	WHEEL KIT, DRIVE SIDE BLADE	K12897 ⁵	1	
21	Bushing, 1 7/16" SD	016098 ⁵	1	
22	Key, .375" x .375"	S12892 ⁶	1	
	Key, .375" x .360"	S12893 ⁴	1	
23	Wheel, Drive Side Blade	016284	1	◆
	Drive Side Blade Wheel Replacement Kit Instruction Sheet	K12897-488	1	
24	BELT, BLADE WHEEL B57	P04185	1	
25	BELT, 2BX74 DRIVE (24HP P224 ONAN GAS ENGINE)	P10277-2 ⁷	1	
	BELT, 2BX70 DRIVE (15HP BALDOR ELECTRIC MOTOR)	P04857-2 ⁸	1	
26	PULLEY, 2BK130H DRIVE	P04854	1	
	WHEEL ASSEMBLY, BRAKE	A09953	1	
27	Wheel, Brake	014000 ⁹	1	◆
28	Bushing, 1 7/16" Type 'P1' Split Taper	014460 ¹⁰	1	
29	STRAP, BRAKE	M07484	1	

- ¹ Shipped without oil after 4/95. Customer should source ATF fluid to add to bearing after installation.
- ² Replaces P10205 Blade Wheel Drive Bearing #MU1308TV 6/98.
- ³ Oil level viewer added 6/99. New fitting replaces P05498 1/4" NPT Pipe Plug and P12868 1/4" NPT Vented Pipe Plug supplied prior to 6/99 (and P11757 1/4" NPT Square Head Pipe Plug supplied prior to 12/98).
- ⁴ Replaces P05152 1 7/16" type 'H' standard bushing originally supplied.
- ⁵ Replaces S09948 drive blade wheel originally supplied. Use P12962 'H' Bushing for original pulley. Use 016098 'SD' Bushing if wheel upgraded with K12897 wheel kit.
- ⁶ Only one key required; key size will depend on keyway size in shaft.
- ⁷ One Double-Belt replaces two P10277 single belts.
- ⁸ One Double-Belt replaces two P04857 single belts.
- ⁹ Replaces 014339 and W09953 Brake Wheels (4/96). NOTE: Change from W09953 to 014339 was a part number change only.
- ¹⁰ Use P12962 'H' Bushing for original brake pulley. Use 014460 'P1" Bushing if wheel upgraded with 014000 brake wheel.

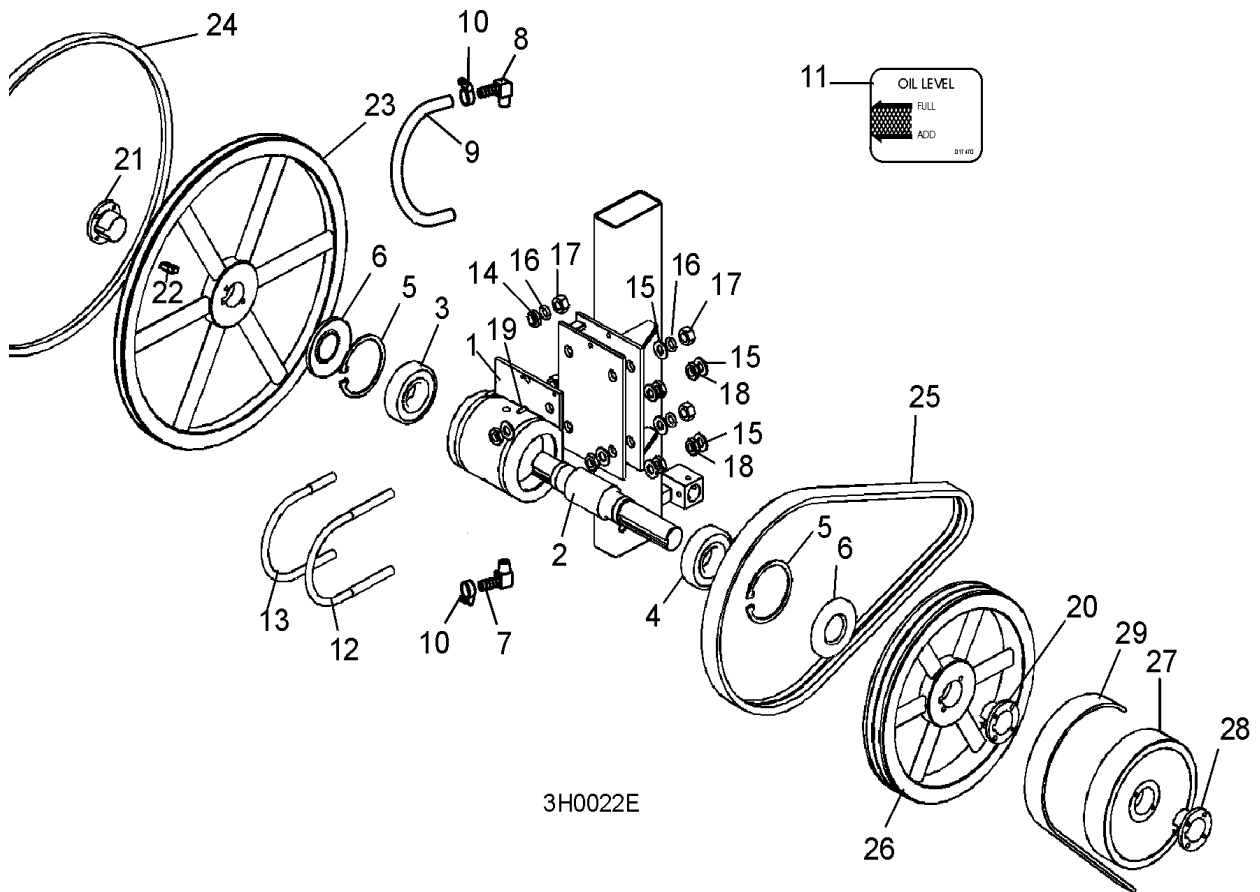


FIG. 2-3

2 Blade Drive & Guides

Blade Drive Assembly

2.4 Blade Drive Assembly				
<i>LT40HD Rev. A - C2</i>				
REF	DESCRIPTION (◆ Indicates Parts Available In Assemblies Only)	PART #	QTY.	
	BEARING ASSEMBLY, BLADE WHEEL DRIVE PILLOW BLOCK	K10183 ¹	1	◆
1	Bearing/Shaft Assembly, Pillow Block Drive	A10182	1	◆
	Bearing, P3U223N Pillow Block	P10181	2	◆
	Shaft, Pillow Block Drive	S04411-W	1	◆
	Screw, 3/8-24 x 1/2" Socket Head Flat Point Set	F05007-25	2	
2	Bushing, 1 7/16" Type 'H' Thick Flange	P12962 ²	3	
3	Bolt, 1/2-13 x 2 1/4" Hex Head Full Thread	F05008-2	2	
4	Bolt, 1/2-13 x 3 1/2" Hex Head Full Thread	F05008-11	2	
5	Nut, 1/2-13 Nylon Lock	F05010-8	4	
6	Nut, 1/2-13 Hex Jam	F05010-31	4	
7	Washer, 1/2" SAE Flat	F05011-2	8	
8	Pin, 3/16" x 1 1/4" Roll	F05012-16	2	
9	Spacer, 1/2" x 5/8" x 3/4" Flanged	S04253	2	
	WHEEL KIT, DRIVE SIDE BLADE	K12897 ³	1	
10	Bushing, 1 7/16" Type 'SD'	016098 ³	1	
11	Key, .375" x .360"	S12893 ⁴	1	
	Key, .375" x .375"	S12892 ⁴	1	
12	Wheel, Drive Side Blade	016284	1	◆
	Drive Side Blade Wheel Replacement Instruction Sheet	K12897-488	1	
13	BELT, BLADE WHEEL B57	P04185	1	
14	BELT, 2BX72 DRIVE (24HP ONAN T260 GAS ENGINE & 7.5/10 HP BALDOR ELECTRIC MOTORS REV. AG - B6)	P09555-2 ⁵	1	
	BELT, B69 DRIVE (7.5/10HP BALDOR ELECTRIC MOTOR REV. A - AF)	P04190 ⁶	2	
	BELT, 2BX70 DRIVE (20HP ONAN GAS ENGINE, 15HP BALDOR ELECTRIC MOTOR & 7.5/10 HP BALDOR REV. B7 - C1)	P04857-2 ⁷	1	
15	PULLEY, 2BK130H DRIVE	P04854	1	
	WHEEL ASSEMBLY, BRAKE	A09953 ⁸	1	
16	Wheel, Brake	014000 ⁹	1	◆
17	Bushing, 1 7/16" Type 'P1' Split Taper	014460 ¹⁰	1	
18	STRAP, BRAKE	M07484	1	

¹ Replace drive shaft/bearing assembly with cylinder style assembly. [See Section 2.3.](#)

² Replaces P05152 1 7/16" type 'H' standard bushing originally supplied.

³ Replaces P04883 and S09948 drive blade wheels originally supplied. Use P12962 'H' Bushing for original pulley. Use 016098 'SD' Bushing if wheel upgraded with K12897 wheel kit.

⁴ Only one key required; key size will depend on keyway size in shaft.

⁵ One Double-Belt replaces two P09555 single belts. If electric motor is retrofitted with alternator, replace belts with one P04857-2.

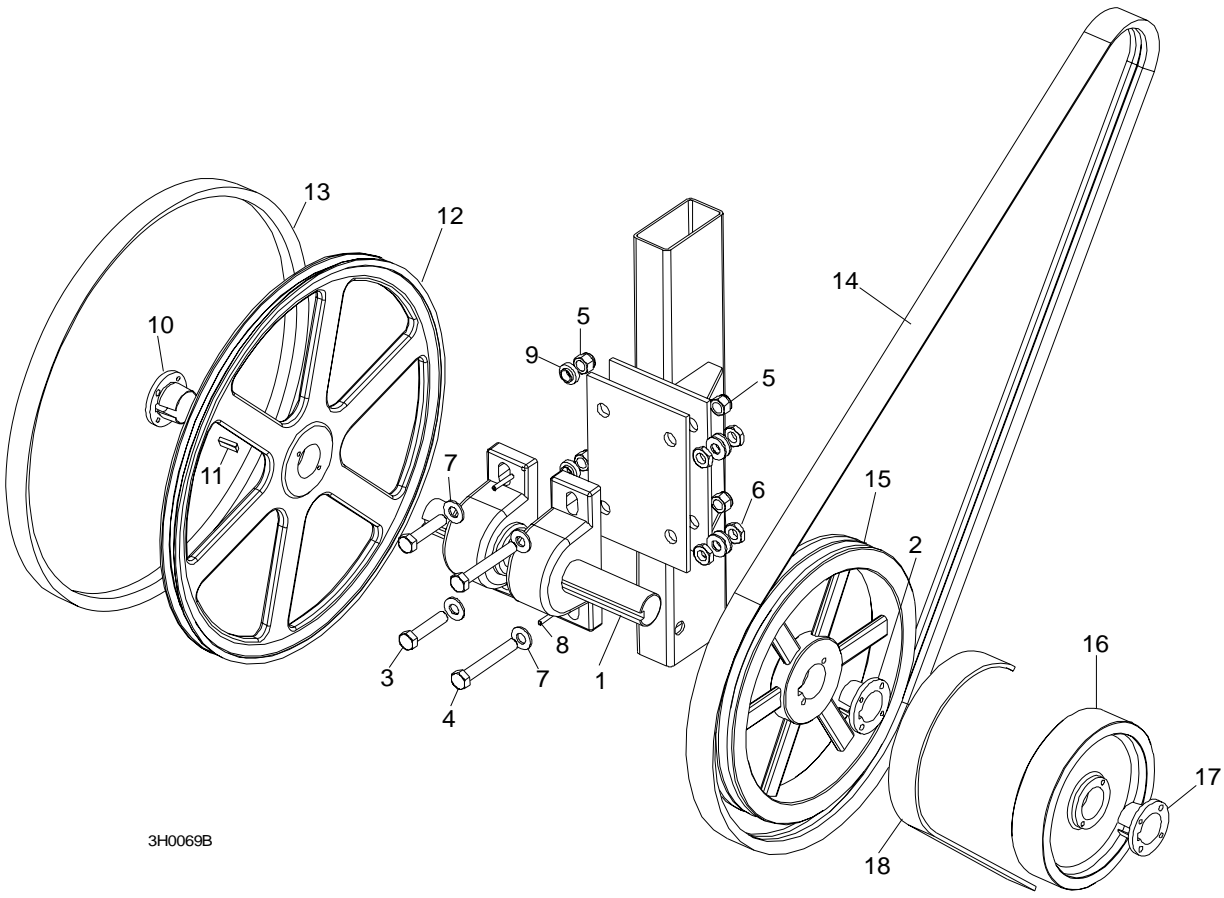
⁶ If electric motor is retrofitted with alternator, replace two P04857 belts with one P04857-2.

⁷ One Double-Belt replaces two P04857 single belts.

⁸ Replaces brake wheel M04963 originally supplied.

⁹ Replaces 014339 and W09953 Brake Wheels (4/96). NOTE: Change from W09953 to 014339 was a part number change only.

¹⁰ Use P12962 'H' Bushing for original brake pulley. Use 014460 'P1' Bushing if wheel upgraded with 014000 brake wheel.



3H0069B

FIG. 2-4

2 Blade Drive & Guides

Idle Blade Wheel Assembly

2.5 Idle Blade Wheel Assembly				
	<i>LT30HD</i>	<i>Retrofit</i>		
	<i>LT40HD</i>	<i>Retrofit</i>		
REF	DESCRIPTION (◆ Indicates Parts Available In Assemblies Only)	PART #	QTY.	
	WHEEL ASSEMBLY, IDLE SIDE BLADE	A08218 ¹	1	
1	Wheel, Idle Side Blade	P08125	1	◆
2	Bearing, Idle Side Blade Wheel #6305-AA, C3, ABEC-1, SRI-2 Grease	P08066 ²	2	
3	Ring, 2 7/16" Internal Retaining	F04254-21	1	
4	WASHER, IDLE BLADE WHEEL RETAINER	S08220	1	
5	BOLT, 5/16-18 X 3/4" HEX HEAD	F05006-5	1	
6	BELT, BLADE WHEEL B57	P04185	1	
7	SHAFT, IDLE BLADE WHEEL	S12565	1	
8	HOUSING, IDLE BLADE WHEEL SHAFT	W10157	1	
9	SCREW, 3/8-16 X 1 1/4" SOCKET HEAD OVAL POINT	F05007-18	2	
10	NUT, 3/8-16 HEX JAM	F05010-29	2	
	HANDLE ASSEMBLY, IDLE SIDE PULLEY TILT	A09357	1	
11	Handle, Tilt Adjustment Screw	S08174	1	◆
12	Driver, Tilt Adjustment Screw	S09405	1	◆
13	Rod, Threaded Tilt Adjustment Screw	S09358	1	◆
14	Pin, 3/16" x 7/8" Roll	F05012-19	2	
15	SLEEVE, PLASTIC HANDLE	P08072	1	
16	SPACER, 1/2" I.D. FLANGED	S04253	2	
17	NUT, 1/2-20 HEX JAM	F05010-16	2	
18	WASHER, 1/2" SPLIT LOCK	F05011-9	1	
19	WHEEL KIT, IDLE SIDE BLADE UPGRADE	016189 ¹		
	Wheel Assembly, Idle Side Blade	016120	1	
20	Wheel, Idle Side Blade	016013	1	◆
21	Bearing, Idle Side Blade Wheel #5309-2RS, C3, SRI-2 Grease	016014	1	
22	Ring, 100mm Internal Retaining Beveled	F04254-28	1	
23	Washer, 2 3/16 x 1/4"	016095	1	
24	Bolt, 5/16-18 X 3/4" Flat Head Socket	F05006-95	1	
25	Shaft, Idle Side Blade Wheel Retrofit	016180	1	

¹ Upgrade kit 016189 including blade wheel with larger diameter bearing and retrofit shaft 016180 available. [See Item #19](#) for upgrade parts.

² C3 Clearance bearing replaces C0 clearance supplied until 3/96.

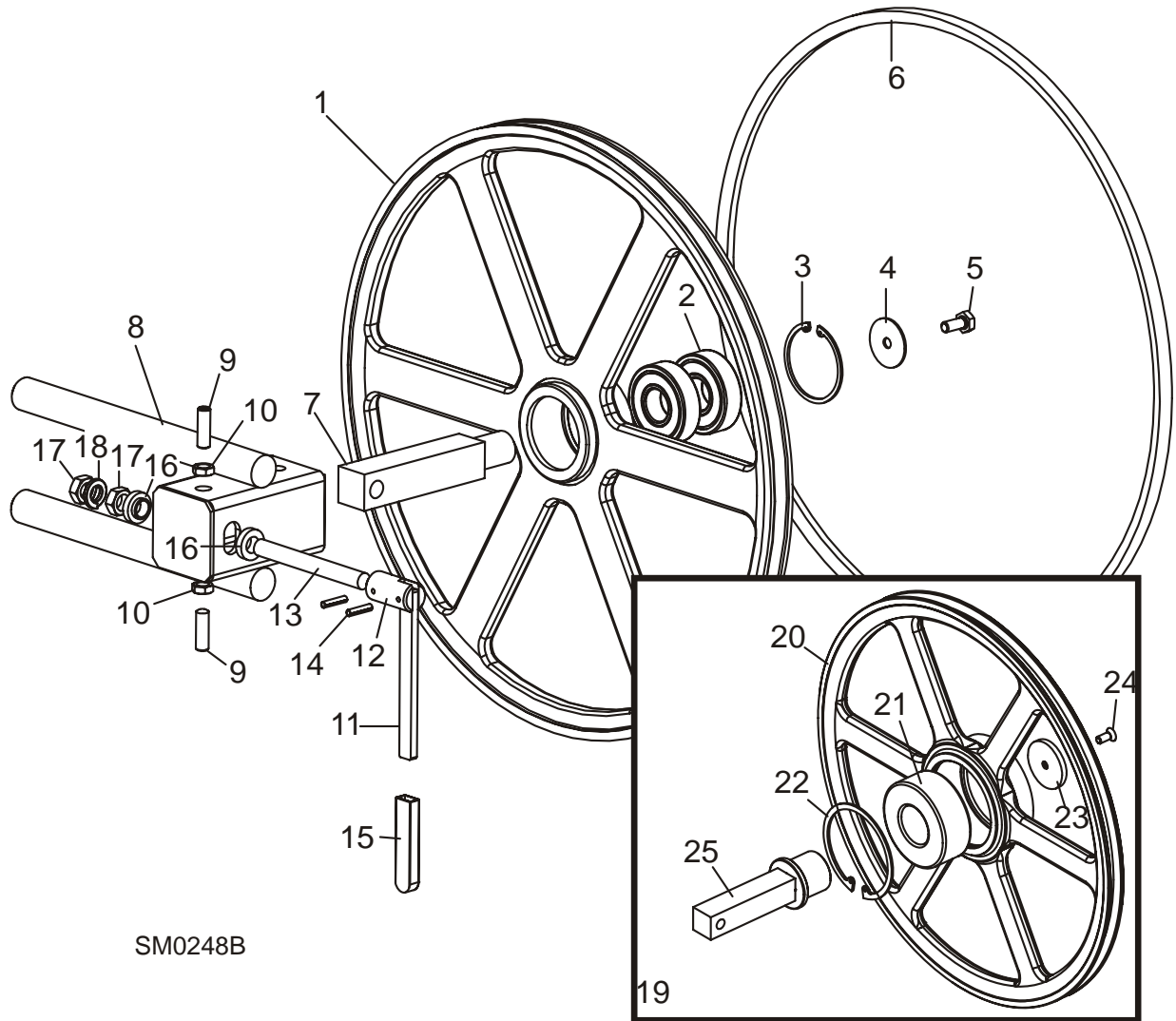


FIG. 2-5

2 Blade Drive & Guides

Idle Blade Wheel Assembly

2.6 Idle Blade Wheel Assembly				
LT30HD		Rev. C3 - C6		
LT40HD		Rev. B7 - C6		
REF	DESCRIPTION (◆ Indicates Parts Available In Assemblies Only)	PART #	QTY.	
	WHEEL ASSEMBLY, IDLE SIDE BLADE	A08218 ¹	1	
1	Wheel, Idle Side Blade	P08125	1	◆
2	Bearing, Idle Side Blade Wheel #6305-AA, C3, ABEC-1, SRI-2 Grease	P08066 ²	2	
3	Retainer Plate, Bearing	S10159 ³	1	
4	Screw, 1/4-20 X 1 1/4" Flat Head	F05005-66	3	
5	Bolt, 1/4-20 X 3/8" Hex Head Grade 2	F05005-67	3	
6	Washer, 1/4" SAE Flat	F05011-11	3	
7	WASHER, IDLE BLADE WHEEL RETAINER	S08220	1	
8	BOLT, 5/16-18 X 3/4" HEX HEAD	F05006-5	1	
9	BELT, BLADE WHEEL B57	P04185	1	
10	SHAFT, IDLE BLADE WHEEL	S09893	1	
11	HOUSING, IDLE BLADE WHEEL SHAFT	W10157	1	
12	SCREW, 3/8-16 X 1 1/4" SOCKET HEAD OVAL POINT	F05007-18	2	
13	NUT, 3/8-16 HEX JAM	F05010-29	2	
	HANDLE ASSEMBLY, IDLE SIDE PULLEY TILT	A09357	1	
14	Handle, Tilt Adjustment Screw	S08174	1	◆
15	Driver, Tilt Adjustment Screw	S09405	1	◆
16	Rod, Threaded Tilt Adjustment Screw	S09358	1	◆
17	Pin, 3/16" X 7/8" Roll	F05012-19	2	
18	SLEEVE, PLASTIC HANDLE	P08072	1	
19	SPACER, 1/2" I.D. FLANGED	S04253 ⁴	2	
20	NUT, 1/2-20 HEX JAM	F05010-16	2	
21	WASHER, 1/2" SPLIT LOCK	F05011-9	1	

¹ Replacement assembly A08218 includes upgraded wheel with hub and retaining ring. Blade wheel kit 016189 with larger diameter bearing and retrofit hardware also available. [See Section 2.5.](#)

² C3 Clearance bearing replaces C0 clearance supplied until 3/96.

³ Replaces S08490 originally supplied on Rev. B7. Also requires three F05005-66 flat head screws.

⁴ Replaces S04297-W spacer originally supplied.

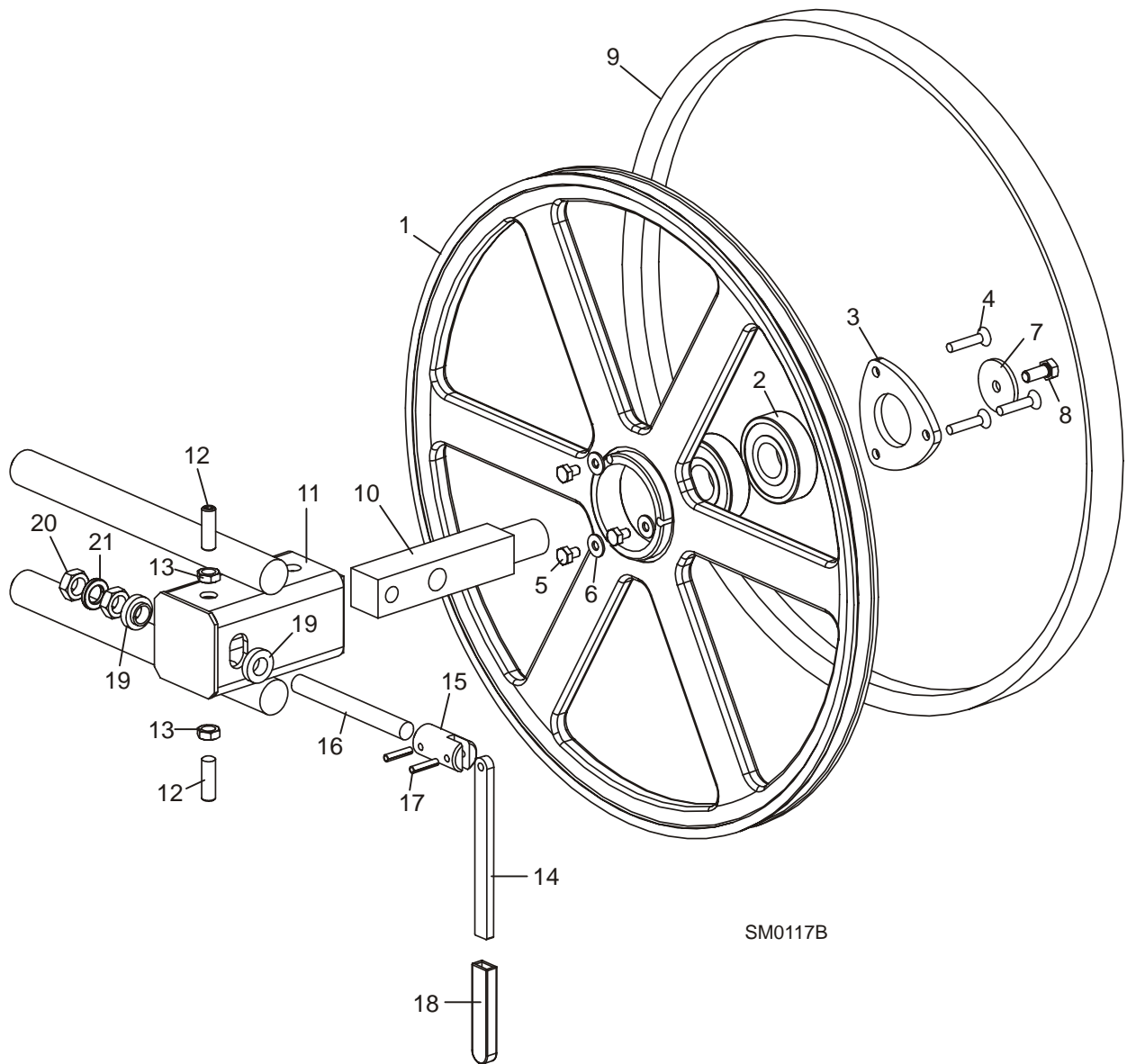


FIG. 2-6

2 Blade Drive & Guides

Idle Blade Wheel Assembly

2.7 Idle Blade Wheel Assembly				
<i>LT40HD Rev. AN - B6</i>				
REF	DESCRIPTION (◆ Indicates Parts Available In Assemblies Only)	PART #	QTY.	
	WHEEL ASSEMBLY, IDLE SIDE BLADE	A08218 ¹	1	
1	Wheel, Idle Side Blade	P08125	1	◆
2	Bearing, Idle Side Blade Wheel #6305-AA, C3, ABEC-1, SRI-2 Grease	P08066 ²	2	
3	Retainer Plate, Bearing	S08490 ³	1	◆
	Bolt Kit, Idle Wheel Retaining	A09933	1	
4	Nut, 1/4-20 Hex Lock	F05010-21	3	
5	Bolt, 1/4-20 X 1 3/4" Hex Head Grade 5	F05005-68 ⁴	3	
6	Washer, 1/4" SAE Flat	F05011-11	3	
7	Nut, 1/4-20 Square	S09937	3	
	Instruction Sheet, Retainer Bolt Kit	A09933-273	1	
8	WASHER, IDLE BLADE WHEEL RETAINER	S08220	1	
9	BOLT, 5/16-18 X 3/4" HEX HEAD	F05006-5	1	
10	BELT, BLADE WHEEL B57	P04185	1	
11	SHAFT, IDLE BLADE WHEEL	S09893	1	
12	HOUSING, IDLE BLADE WHEEL SHAFT	W09885 ⁵	1	◆
13	SCREW, 3/8-16 X 1 1/4" SOCKET HEAD OVAL POINT	F05007-18	2	
14	NUT, 3/8-16 HEX JAM	F05010-29	2	
	HANDLE ASSEMBLY, IDLE SIDE PULLEY TILT	A09357	1	
15	Handle, Tilt Adjustment Screw	S08174	1	◆
16	Driver, Tilt Adjustment Screw	S09405	1	◆
17	Rod, Threaded Tilt Adjustment Screw	S09358	1	◆
18	Pin, 3/16" X 7/8" Roll	F05012-19	2	
19	SLEEVE, PLASTIC HANDLE	P08072	1	
20	SPACER, 1/2" I.D. FLANGED	S04253 ⁶	2	
21	NUT, 1/2-20 HEX JAM	F05010-16	2	
22	WASHER, 1/2" SPLIT LOCK	F05011-9	1	

¹ Replacement assembly A08218 includes upgraded wheel with hub and retaining ring. Blade wheel kit 016189 with larger diameter bearing and retrofit hardware also available (requires hydraulic blade tensioner). [See Section 2.5.](#)

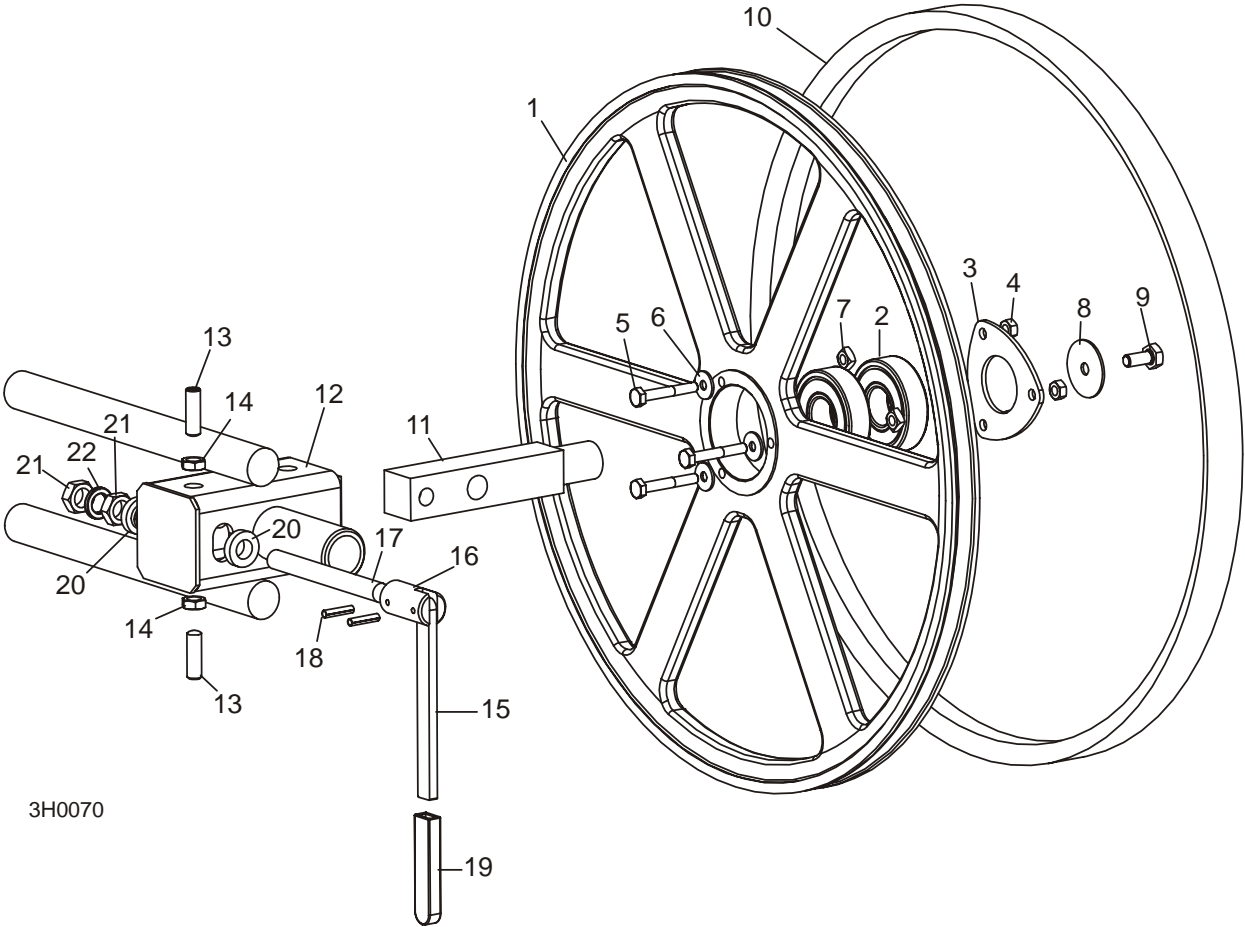
² C3 Clearance bearing replaces C0 clearance supplied until 3/96.

³ Replace with thicker retainer S10159 and flat head screws. [See Section 2.6.](#)

⁴ Replaces F05005-4 originally supplied.

⁵ Housing replaced by W10157 with hydraulic tensioner ([See Section 2.6.](#)). [See Section 2.9](#) for hydraulic tensioner.

⁶ Replaces S04297-W spacer originally supplied.



3H0070

FIG. 2-7

2 Blade Drive & Guides

Idle Blade Wheel Assembly

2.8 Idle Blade Wheel Assembly				
<i>LT40HD Rev. A - AM</i>				
REF	DESCRIPTION (◆ Indicates Parts Available In Assemblies Only)	PART #	QTY.	
	WHEEL ASSEMBLY, IDLE SIDE BLADE	A08218 ¹	1	
1	Wheel, Idle Side Blade	P08125	1	◆
2	Bearing, Idle Side Blade Wheel #6305-AA, C3, ABEC-1, SRI-2 Grease	P08066 ²	2	
3	Retainer Plate, Bearing	S08490 ³	1	◆
	Bolt Kit, Idle Wheel Retaining	A09933	1	
4	Nut, 1/4-20 Hex Lock	F05010-21	3	
5	Bolt, 1/4-20 X 1 3/4" Hex Head Grade 5	F05005-68 ⁴	3	
6	Washer, 1/4" SAE Flat	F05011-11	3	
7	Nut, 1/4-20 Square	S09937	3	
	Instruction Sheet, Retainer Bolt Kit	A09933-273	1	
8	WASHER, IDLE BLADE WHEEL RETAINER	S08220	1	
9	BOLT, 5/16-18 X 3/4" HEX HEAD	F05006-5	1	
10	BELT, BLADE WHEEL B57	P04185	1	
11	SHAFT, IDLE BLADE WHEEL	S04434-W ⁵	1	
12	HOUSING, IDLE BLADE WHEEL SHAFT	W04421 ⁵	1	◆
13	SCREW, 3/8-16 X 1 1/4" SOCKET HEAD OVAL POINT	F05007-18	2	
14	NUT, 3/8-16 HEX JAM	F05010-29	2	
	HANDLE ASSEMBLY, IDLE SIDE PULLEY TILT	A09357	1	
15	Handle, Tilt Adjustment Screw	S08174	1	◆
16	Driver, Tilt Adjustment Screw	S09405	1	◆
17	Rod, Threaded Tilt Adjustment Screw	S09358	1	◆
18	Pin, 3/16" X 7/8" Roll	F05012-19	2	
19	SLEEVE, PLASTIC HANDLE	P08072	1	
20	SPACER, 1/2" I.D. BRONZE FLANGED	P08060	1	
21	WASHER, 1/2" SAE FLAT	F05011-2	2	
22	NUT, 1/2-20 HEX JAM	F05010-16	2	
23	WASHER, 1/2" SPLIT LOCK	F05011-9	1	

¹ Replacement assembly A08218 includes upgraded wheel with hub and retaining ring. Blade wheel kit 016189 with larger diameter bearing and retrofit hardware also available (requires hydraulic blade tensioner). [See Section 2.5.](#)

² C3 Clearance bearing replaces C0 clearance supplied until 3/96.

³ Replace with thicker retainer S10159 and flat head screws. [See Section 2.6.](#)

⁴ Replaces F05005-4 originally supplied.

⁵ [See Section 2.7](#) if tensioner retrofitted to 2" spring system. [See Section 2.6](#) if tensioner retrofitted to hydraulic system.

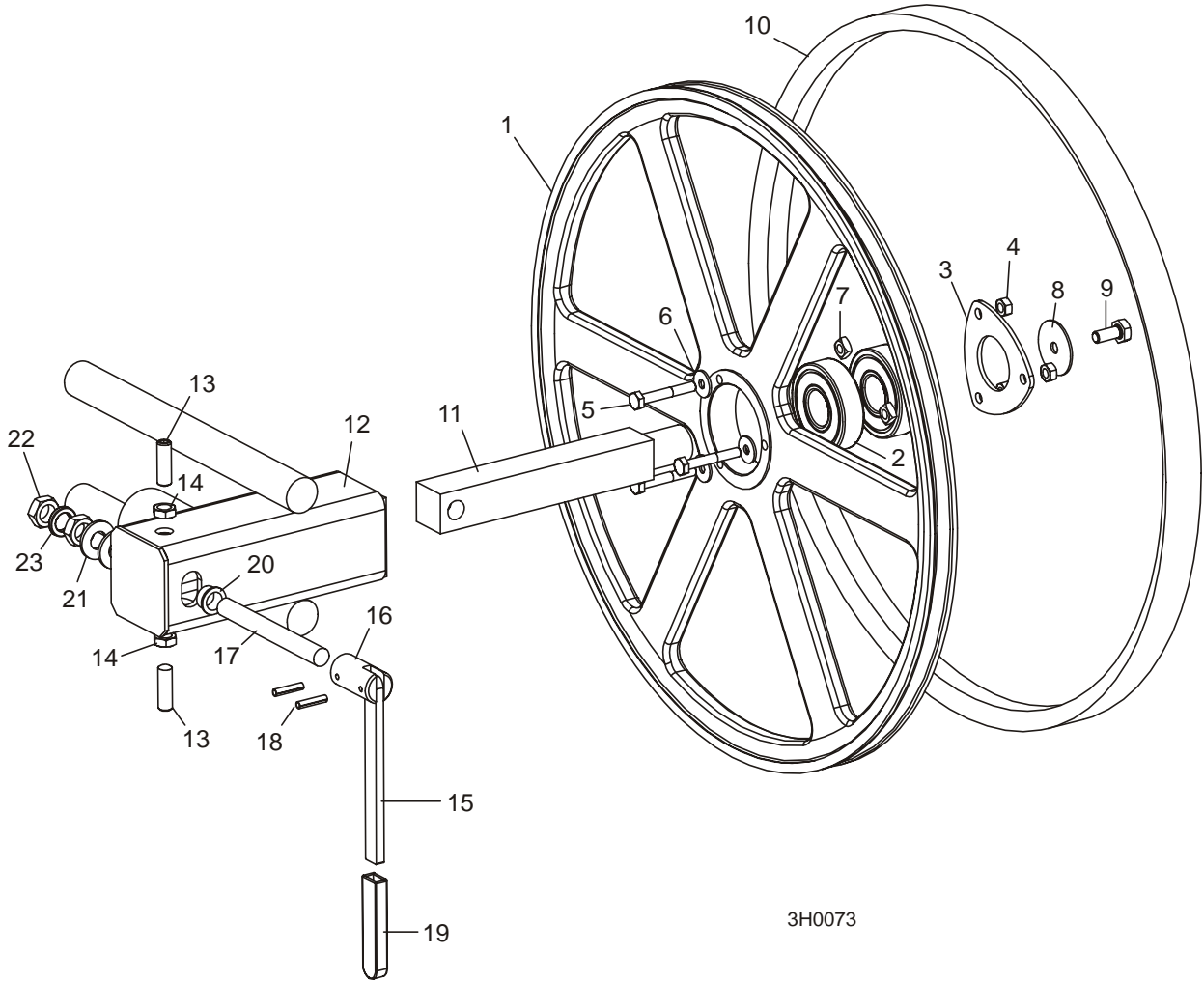


FIG. 2-8

2

Blade Drive & Guides

Hydraulic Blade Tensioner Assembly

2.9 Hydraulic Blade Tensioner Assembly				
LT30HD Rev. C3 - C6 LT40HD Rev. B7 - C6				
REF	DESCRIPTION (◆ Indicates Parts Available In Assemblies Only)	PART #	QTY.	
	HYDRAULIC BLADE TENSIONER ASSEMBLY	A10136	1	
	Handle Assembly, Hydraulic Blade Tensioner Screw	A12294	1	
1	Screw, Hydraulic Blade Tensioner	S10056 ¹	1	◆
2	Handle, Hydraulic Tensioner Screw	S08174	1	
3	Sleeve, Plastic Handle	P08072	1	
4	Pin, 3/16" x 7/8" Roll	F05012-19	1	
5	Ball, 1/2" Steel	P02720	1	
6	Block, Threaded Tensioner End	S10062 ¹	1	◆
7	Fitting, 1/4-28 Grease	P05060	1	
	Instruction Sheet, Tensioner Screw	A12294-518	1	
8	Bolt, 5/16-18 X 7 1/2" Hex Head Grade 5	F05006-43	4	
9	Piston, Hydraulic Tensioner Front 2 3/4" Long	S10060	1	
10	Block, Piston Guide	S10061 ¹	1	
	Seal Kit, Hydraulic Tensioner	003224	1	
5	Ball, 1/2" Steel	P02720	1	
11	Seal, 1" Diameter	P10051	2	
12	Wiper, 1" Diameter	P10053	1	
13	Ring, 5/8" X 3/32" Square "O"	P10377	1	
14	Block, Hydraulic Tensioner Gauge Mounting	S10140 ¹	1	
15	Gauge, 5000 P.S.I.	P10052	1	
16	Plug, Hydraulic Tensioner Fill	P10065 ²	2	
17	Block, Rear Tensioner Piston	S10142 ¹	1	
18	Piston, Hydraulic Tensioner Rear 3 5/8" Long	S10059 ¹	1	
19	Block, Rear Piston End	S10089 ¹	1	
20	Bolt, #10-24 X 1" Socket Button Head	F05004-43	4	
21	Bolt, 5/16-18 X 2 3/4" Hex Head Grade 5	F05006-28	4	
22	Decal, Hydraulic Tension Caution	P10147	1	
	Instruction Sheet, Hydraulic Tensioner Installation	A10136-272	1	

¹ Replaces part number with "-W" suffix. Part number change only.

² Plug added to S10142 Rear Tensioner Piston Block 6/99.

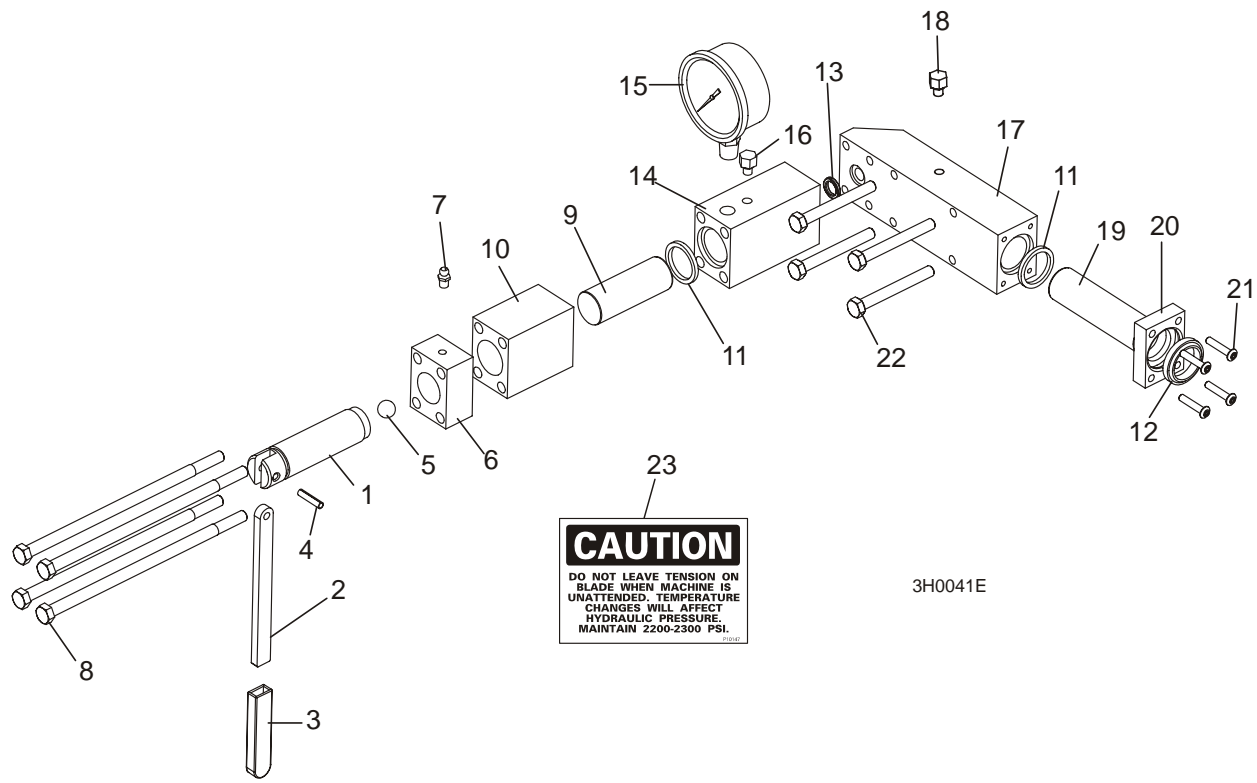


FIG. 2-9

2 Blade Drive & Guides

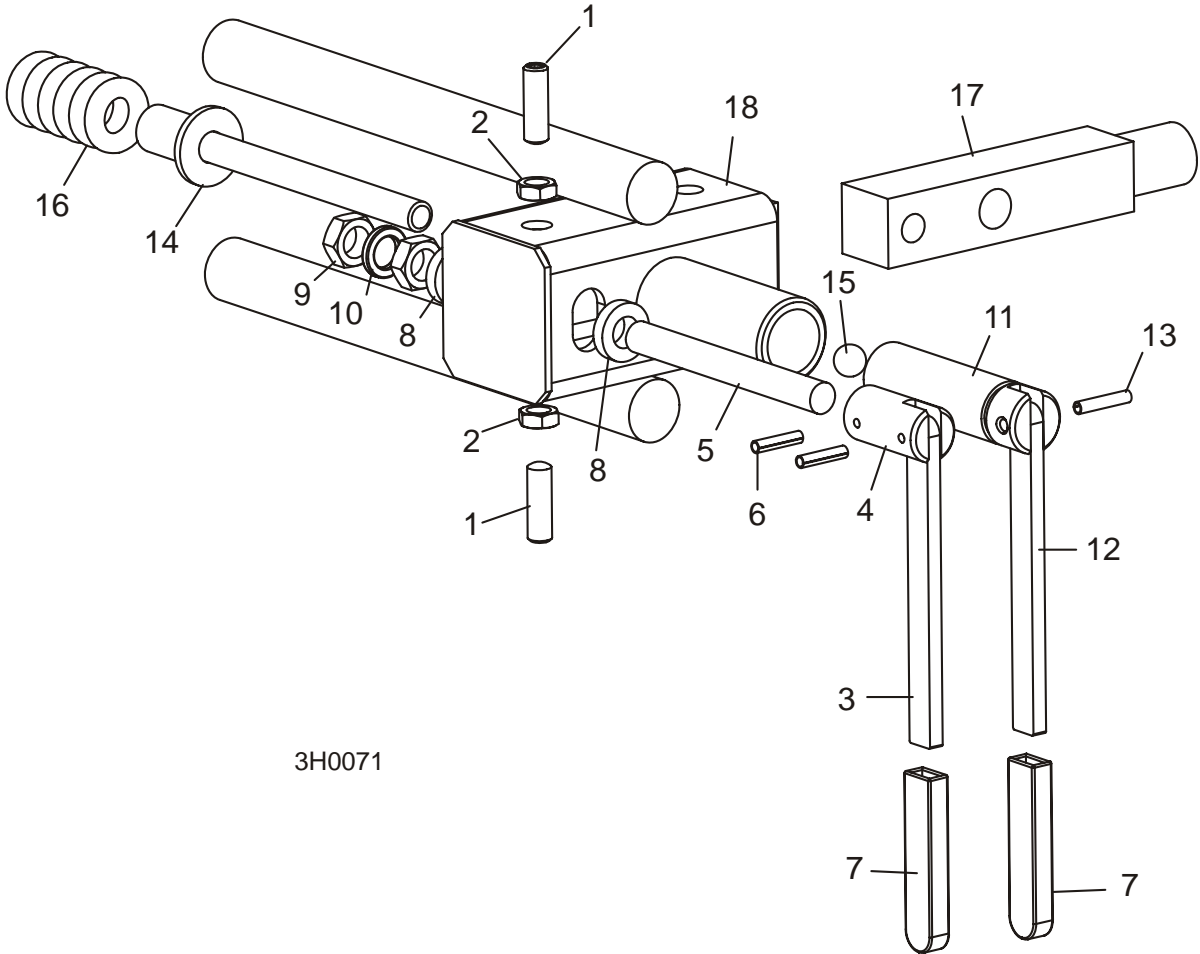
Blade Tensioner Assembly

2.10 Blade Tensioner Assembly				
<i>LT40HD Rev. AN - B6</i>				
REF	DESCRIPTION (◆ Indicates Parts Available In Assemblies Only)	PART #	QTY.	
1	SCREW, 3/8-16 X 1 1/4" SOCKET HEAD OVAL POINT	F05007-18	2	
2	NUT, 3/8-16 HEX JAM	F05010-29	2	
	HANDLE ASSEMBLY, IDLE SIDE PULLEY TILT	A09357	1	
3	Handle, Tilt Adjustment Screw	S08174	1	◆
4	Driver, Tilt Adjustment Screw	S09405	1	◆
5	Rod, Threaded Tilt Adjustment Screw	S09358	1	◆
6	Pin, 3/16" X 7/8" Roll	F05012-19	2	
7	SLEEVE, PLASTIC HANDLE	P08072	2	
8	SPACER, 1/2" I.D. FLANGED	S04253 ¹	2	
9	NUT, 1/2-20 HEX JAM	F05010-16	2	
10	WASHER, 1/2" SPLIT LOCK	f05011-9	1	
	TENSIONER UPGRADE ASSEMBLY, 2" SPRING	K09903 ²	1	◆
	Rod Assembly, Threaded Tensioner	A09883	1	
11	Rod, Tensioner Threaded	S09892	1	
12	Handle, Tensioner Screw	S08174	1	
13	Pin, 3/16" x 1" Roll	F05012-11	1	
14	Rod Assembly, Tensioner Plunger	A09891	1	
	End, Tensioner Plunger	S09890	1	◆
	Rod, Tesnioner Plunger	S09888	1	◆
15	Ball, 1/2" Dia. Steel	P02720	1	
16	Spring, 2" Tension Die	P09884	1	
17	Shaft, Idle Blade Wheel	S09893	1	
18	Housing, Idle Blade Wheel Shaft	W09885 ³	1	◆

¹ Replaces S04297-W spacer originally supplied.

² Tensioner kit obsolete. Upgrade to hydraulic system A10136 ([See Section 2.9](#)).

³ Housing replaced by W10157 with hydraulic tensioner ([See Section 2.6](#)).



3H0071

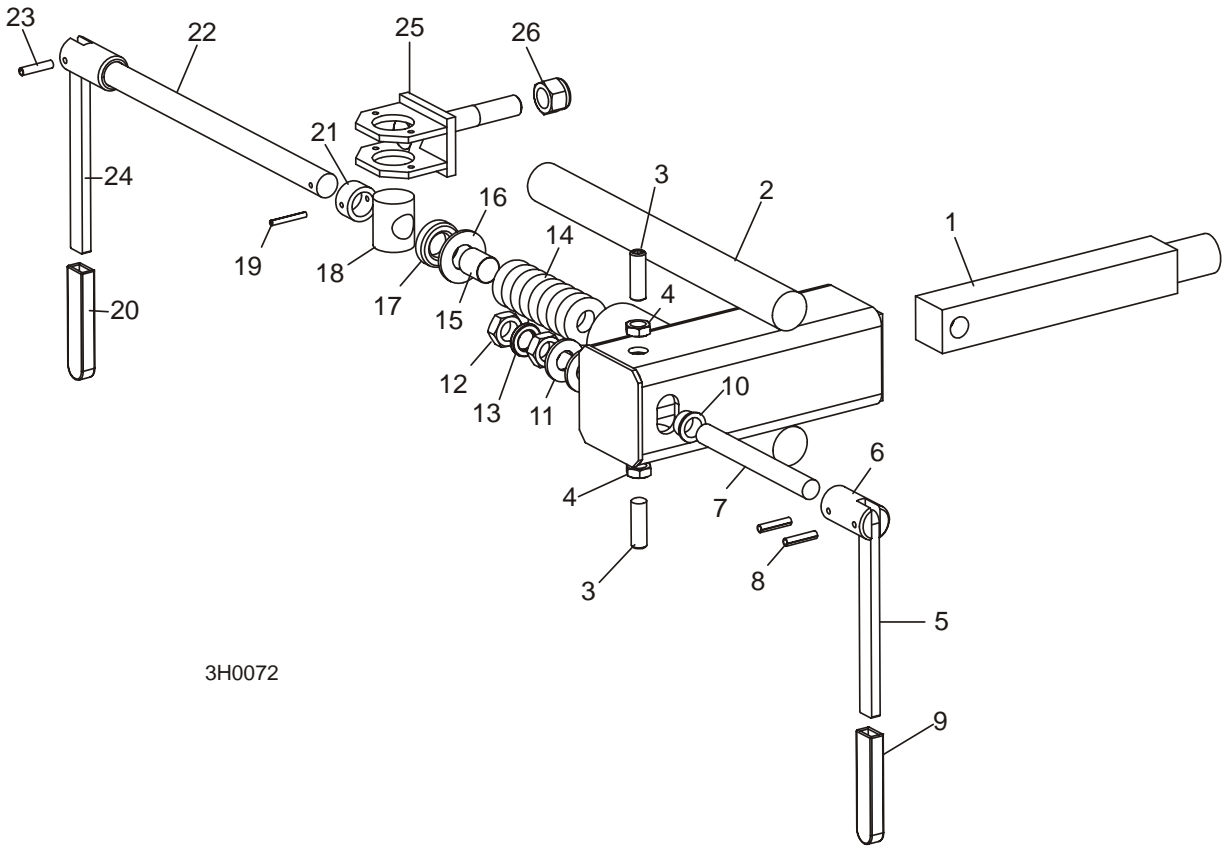
FIG. 2-10

2 Blade Drive & Guides

Blade Tensioner Assembly

2.11 Blade Tensioner Assembly				
<i>LT40HD Rev. A - AM</i>				
REF	DESCRIPTION (◆ Indicates Parts Available In Assemblies Only)	PART #	QTY.	
1	SHAFT, IDLE BLADE WHEEL	S04434-W ¹	1	
2	HOUSING, IDLE BLADE WHEEL SHAFT	W04421 ¹	1	◆
3	SCREW, 3/8-16 X 1 1/4" SOCKET HEAD OVAL POINT	F05007-18	2	
4	NUT, 3/8-16 HEX JAM	F05010-29	2	
	HANDLE ASSEMBLY, IDLE SIDE PULLEY TILT	A09357	1	
5	Handle, Tilt Adjustment Screw	S08174	1	◆
6	Driver, Tilt Adjustment Screw	S09405	1	◆
7	Rod, Threaded Tilt Adjustment Screw	S09358	1	◆
8	Pin, 3/16" X 7/8" Roll	F05012-19	2	
9	SLEEVE, PLASTIC HANDLE	P08072	1	
10	SPACER, 1/2" I.D. BRONZE FLANGED	P08060	1	
11	WASHER, 1/2" SAE FLAT	F05011-2	2	
12	NUT, 1/2-20 HEX JAM	F05010-16	2	
13	WASHER, 1/2" SPLIT LOCK	F05011-9	1	
14	SPRING, 3" TENSION DIE	P04235 ¹	1	
	TENSIONER ASSEMBLY, 3" SPRING	A09407	1	◆
15	Bushing, 5/8" I.D. x 3/4"	S04431	1	
16	Washer, 5/8" SAE Flat	F05011-5	1	
17	Bearing, 5/8" Thrust	P04214	1	
18	Bearing, Tension Trunnion	S04427	1	
19	Pin, 1/8" x 1" Roll	F05012-2	1	
20	Sleeve, Plastic Handle	P08072	1	
	Rod Assembly, Threaded Tensioner	A04430	1	◆
21	Nut, 5/8" Round Acme	F05072-1	1	
22	Rod Weldment, Tensioner	W04429	1	◆
23	Pin, 1/8" x 7/8" Roll	F05012-19	1	
24	Handle, Tensioner	S08174	1	
25	BRACKET, TENSIONER TRUNNION YOKE	W04416	1	
26	NUT, 1/2-13 NYLON LOCK	F05010-8	1	

¹ See Section 2.7 if tensioner retrofitted to 2" spring system. See Section 2.6 if tensioner retrofitted to hydraulic system.



3H0072

FIG. 2-11

2 Blade Drive & Guides

Blade Guide Arm Assembly

2.12 Blade Guide Arm Assembly				
LT30HD		Rev. C3 - C6		
LT40HD		Rev. B4 - C6		
REF	DESCRIPTION (◆ Indicates Parts Available In Assemblies Only)	PART #	QTY.	
1	BLADE GUIDE ARM WELDMENT (U.S. 28 5/8" [72.7 CM])	W10005	1	
2	Tube, Blade Guide Mount (U.S. - Welded to Blade Guide Arm)	W08159	1	
3	BOLT, BLADE GUIDE ARM ROLLER CAM	W09067	4	
4	WASHER, 5/8" SAE FLAT	F05011-5	4	
5	WASHER, 5/8" EXTERNAL STAR	F05011-26	4	
6	NUT, 5/8-18 HEX JAM	F05010-11	12	
7	WASHER, 5/8" INTERNAL STAR	F05011-25	8	
	ROLLER ASSEMBLY, BLADE GUIDE ARM WITH BEARING	A09059	2	
8	Roller, Blade Guide Arm V-Groove	S07989	1	◆
9	Bearing, 6203-2NSL 5/8" I.D.	P06030-1	1	
	ROLLER ASSEMBLY, BLADE GUIDE ARM WITH BEARING AND SPROCKET	A09932	2	
10	Roller, Blade Guide Arm Drive	S09930	1	◆
11	Bearing, 6203-2NSL 5/8" I.D.	P06030-1	1	
12	Sprocket, #25 26-Tooth	S09931	1	◆
13	CHAIN, #25 X 20 1/4"	P09984	1	
14	LINK, #25 MASTER	P09983	1	
15	BOLT, 5/16-18 X 2 3/4" HEX HEAD GRADE 5	F05006-28	4	
16	WASHER, 5/16" SAE FLAT	F05011-17	4	
17	TUBE, 3/8" X 1/2" NEOPRENE	R01897	2.5ft	
18	CLAMP, 1/2" COATED EMT	P07584	2	
19	WRAP, 1/4" X 6" TIE	F05089-1	2	
	DRIVE ASSEMBLY, BLADE GUIDE ARM	A09974	1	
	Motor Assembly, Blade Guide Arm Replacement	A10353 ¹	1	
20	Motor, Blade Guide Arm 50:1 Gear	P09698	1	◆
	Gear Kit, Von Weise Motor Replacement	A10239 ²	1	
	Gear #2, A11651-0001 50:1 Motor	P10185	1	
	Gear, H06099-0001 50:1 Motor Output	P10186	1	
	Shaft, J06185-0001 50:1 Motor Gear	P10187	1	
	Ring, R01877-0007 50:1 Motor Retaining	P10188	1	
	Shaft, J06171-0305 50:1 Motor Output	P10189 ³	1	
	Bearing, L06162-0001 50:1 Motor Front	P10190	1	
	Gear #4, A11652-0001 50:1 Motor	P10192	1	
	Bearing, L06163-0001 50:1 Motor Rear	P10193	1	
	Pin, 1" x 9/16" Dowel	S10528	1	
	Brush Kit, Gear Motor Replacement	P12800 ⁴	1	
21	Connector, 14 Gauge Butt	F04875-1	2	
22	Pin, 1/8" X 3/4" Roll	F05012-6	1	
	Instruction Sheet, Blade Guide Arm Motor	A10353-296	1	

23	Sprocket, Gear Motor #25 14-Tooth	P09970 ⁵	1	
24	Bracket, Blade Guide Arm Motor Mount	S09934	1	
25	Bolt, #10-32 X 1" Phillips Head	F05004-20 ⁶	4	
26	Roller, Blade Guide Arm Chain Idler	S09999 ⁷	1	
27	Bolt, 5/16-18 X 3 1/2" Hex Head Full Thread	F05006-3	1	
28	Spacer, 5/16" I.D. X 1 1/2"	S09996	1	
29	Washer, 5/16" SAE Flat	F05011-17	2	
30	Washer, 5/16" Split Lock	F05011-13	1	
31	Nut, 5/16-18 Hex Lock	F05010-6	1	
32	COVER, BLADE GUIDE ARM MOTOR	S11617 ⁸	1	
	GUARD, BLADE GUIDE ARM (G.S. ONLY)	S12029 ⁸	1	

- ¹ Replacement kit includes upgraded Klauber gear motor. Four F05004-60 mounting screws and four F05011-20 split-lock washers included. New motor cover S11617 (U.S.) or S12029 (G.S.) required.
- ² Gear kit for original Von Wiese motor only. Use P12569 gear kit if upgraded to Klauber motor.
- ³ Shaft for original Von Wiese Motor Only. Use 009695 shaft kit if upgraded to Klauber motor.
- ⁴ Brush kit used for Von Wiese and Klauber gear motors.
- ⁵ Sprocket modified 6/11 with threaded holes to accept included set screws (two F05004-274 #10-24 Full Dog Point Socket Screws replace 1/8" x 3/4" roll pin F05012-6). 14-Tooth sprocket replaces 13-tooth sprocket originally supplied before 5/93.
- ⁶ Mounting screws for original motor only. Use F05004-60 #10-32 x 1/2" Hex Bolt if upgraded to Klauber motor.
- ⁷ Replaces S09999-W. Part Number change only.
- ⁸ Guards added 5/91.

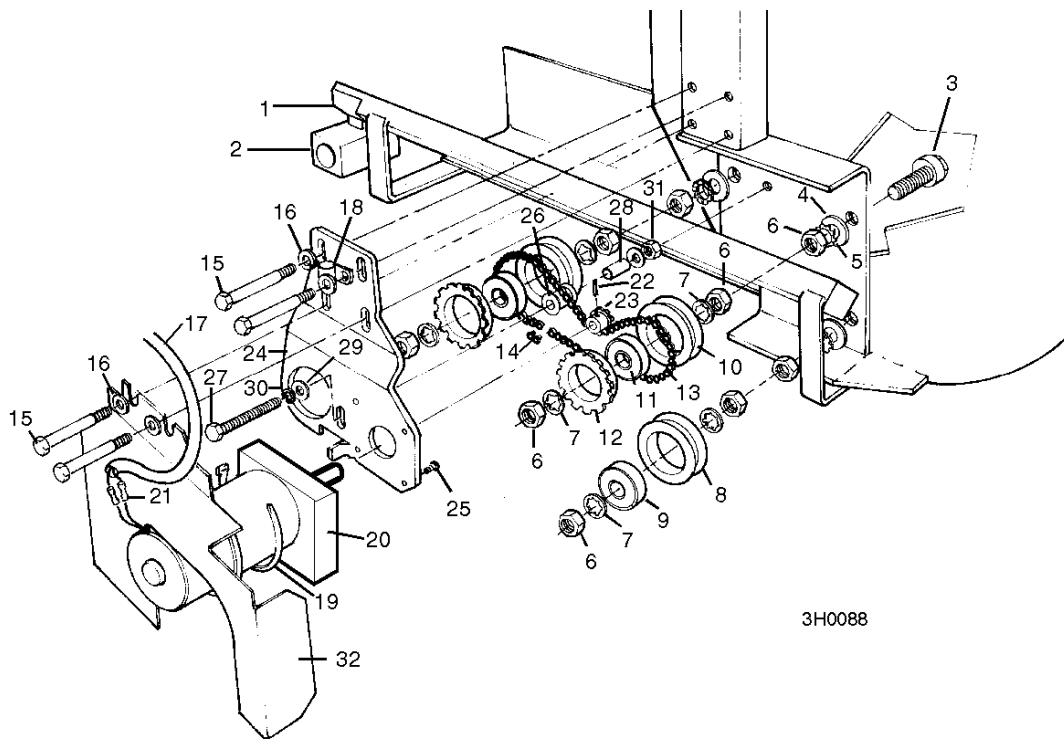


FIG. 2-12

2 Blade Drive & Guides

Blade Guide Arm Assembly

2.13 Blade Guide Arm Assembly				
<i>LT40HD Rev. A - B3</i>				
REF	DESCRIPTION (◆ Indicates Parts Available In Assemblies Only)	PART #	QTY.	
	CABLE DRIVE KIT	K09069	1	◆
1	Cable w/Mounts, Replacement Blade Guide Arm	K09794 ¹	1	
2	Bolt, 1/2-13 x 1 3/4" Shoulder	F05008-24	1	
3	Spring, 7/8" O.D. x 1 1/2"	P07997	1	
4	Washer, 5/8" Nylon	F05011-19	1	
5	Knob Assembly, Blade Guide Arm Cable	A09070	1	
	Knob, Blade Guide Arm Cable	S07988-W	1	◆
	Bushing, 5/8" x 1 " Flanged Bronze	P08058	1	
6	Washer, Rubber	P08362	1	
7	Washer, Nylon	M08378	1	
8	Nut, 1/2-13 Hex Lock	F05010-3	1	
9	Bolt, 5/16-18 x 1" Shoulder	F05006-25	2	
10	Pulley, 2 1/2" Nylon 'V'	P07996	5	
11	Nut, 5/16-18 Hex Locknut	F05010-6	2	
12	Washer, 5/16" Pulley	S09050	2	
13	Spacer, 3/8" x 5/8"	S07995-W	1	
14	Bolt, 5/16-18 x 2" Shoulder	F05006-26	1	
15	BLADE GUIDE ARM WELDMNT	W09353	1	
	Tube, Blade Guide Mount	W08159	1	
16	BOLT, BLADE GUIDE ARM ROLLER CAM	W09067	4	
17	WASHER, 5/8" SAE FLAT	F05011-5	4	
18	WASHER, 5/8" EXTERNAL STAR	F05011-26	4	
19	NUT, 5/8-18 HEX JAM	F05010-11	12	
20	WASHER, 5/8" INTERNAL STAR	F05011-25	8	
	ROLLER ASSEMBLY, BLADE GUIDE ARM WITH BEARING	A09059	4	
21	Roller, Blade Guide Arm V-Groove	S07989	1	◆
22	Bearing, 6203-2NSL 5/8" I.D.	P06030-1	1	

¹ Replaces A04382 originally supplied.

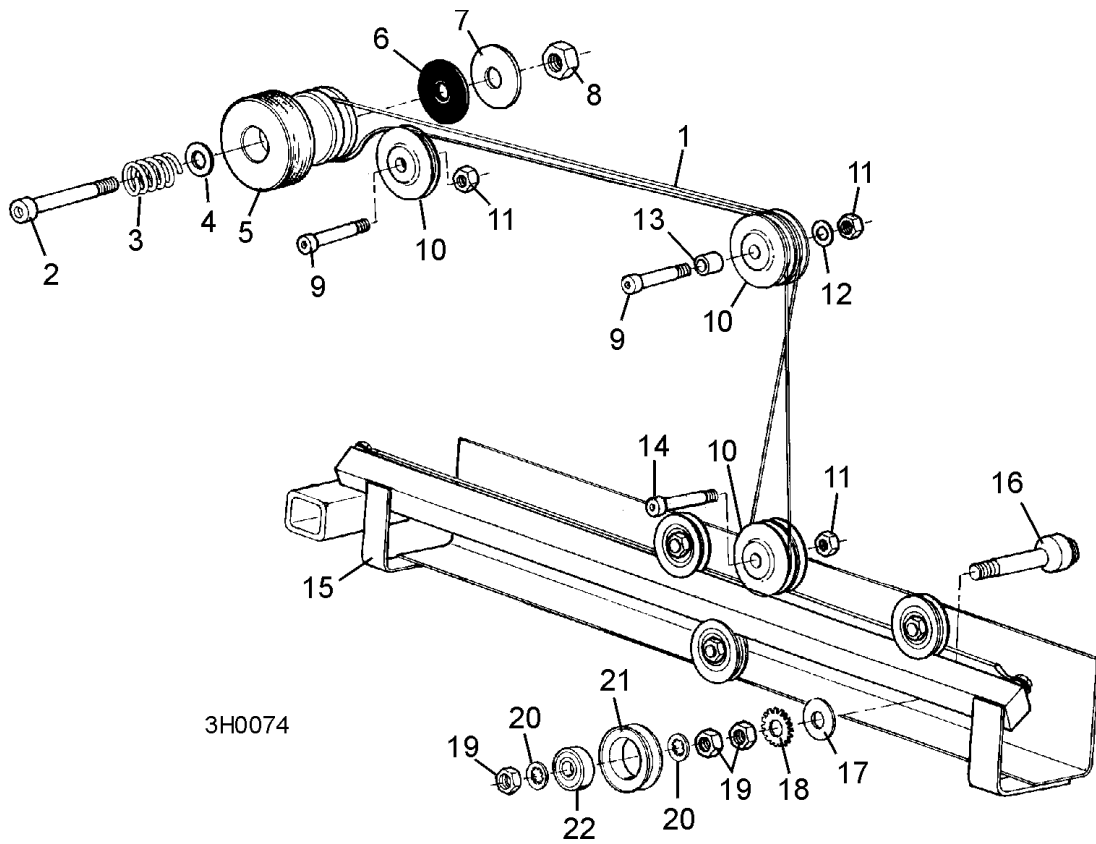


FIG. 2-13

2

Blade Drive & Guides*Clutch/Brake Lever Assembly***2.14 Clutch/Brake Lever Assembly**

REF	DESCRIPTION (◆ Indicates Parts Available In Assemblies Only)	PART #	QTY.	
	LEVER ASSEMBLY, CLUTCH/BRAKE	A07415	1	
1	Lever, Clutch/brake	W05034	1	◆
2	Knob, Plastic Round	P04211	1	
3	BOLT, 1/2-13 X 2 1/4 HEX HEAD GRADE 5	F05008-10	2	
4	NUT, 1/2-13 HEX NYLON LOCK	F05010-8	2	
5	BLOCK, CLUTCH HANDLE MOUNT	S04934 ¹	1	
6	BLOCK, CLUTCH HANDLE MOUNT ROUNDED	S04415-W	1	
7	BLOCK, CLUTCH HANDLE ADJUSTABLE	S04414-W	1	
8	FITTING, 3/16" GREASE	P04107	3	
9	COLLAR, 5/8" I.D.	P05035	1	
	COLLAR W/WATER SHUTOFF, 5/8" I.D.	A09921 ²	1	
10	BRACKET, THREADED MOTOR MOUNT HANGER	W05025	1	
11	WASHER, 1/2" SPLIT LOCK	F05011-6	2	
12	NUT, 3/4-10 HEX	F05010-7	2	
13	BOLT, 1/2-13 X 1 1/2 HEX HEAD	F05008-4	1	
14	NUT, 1/2-13 HEX LOCK	F05010-3	1	
15	BOLT, 1/2-13 X 1 1/2" HEX HEAD	F05008-4	1	
16	PLATE, UPPER BRAKE STRAP CLAMP	S04195	1	
17	NUT, 1/2-13 HEX NYLON LOCK	F05010-8	1	
18	STRAP, COTTON BRAKE	M07484 ³	1	
19	NUT, 3/8-16 HEX NYLON LOCK	F05010-10	2	
20	PLATE, LOWER BRAKE STRAP CLAMP	S04123	1	
21	BOLT, 3/8-16 X 1 1/4" CARRIAGE HEAD	F05007-11	2	

¹ Block may also be replaced with S04415-W rounded block.

² Replaces P05035 on mills equipped with Auto-Shutoff Waterlube.

³ Replaces leather brake strap originally supplied.

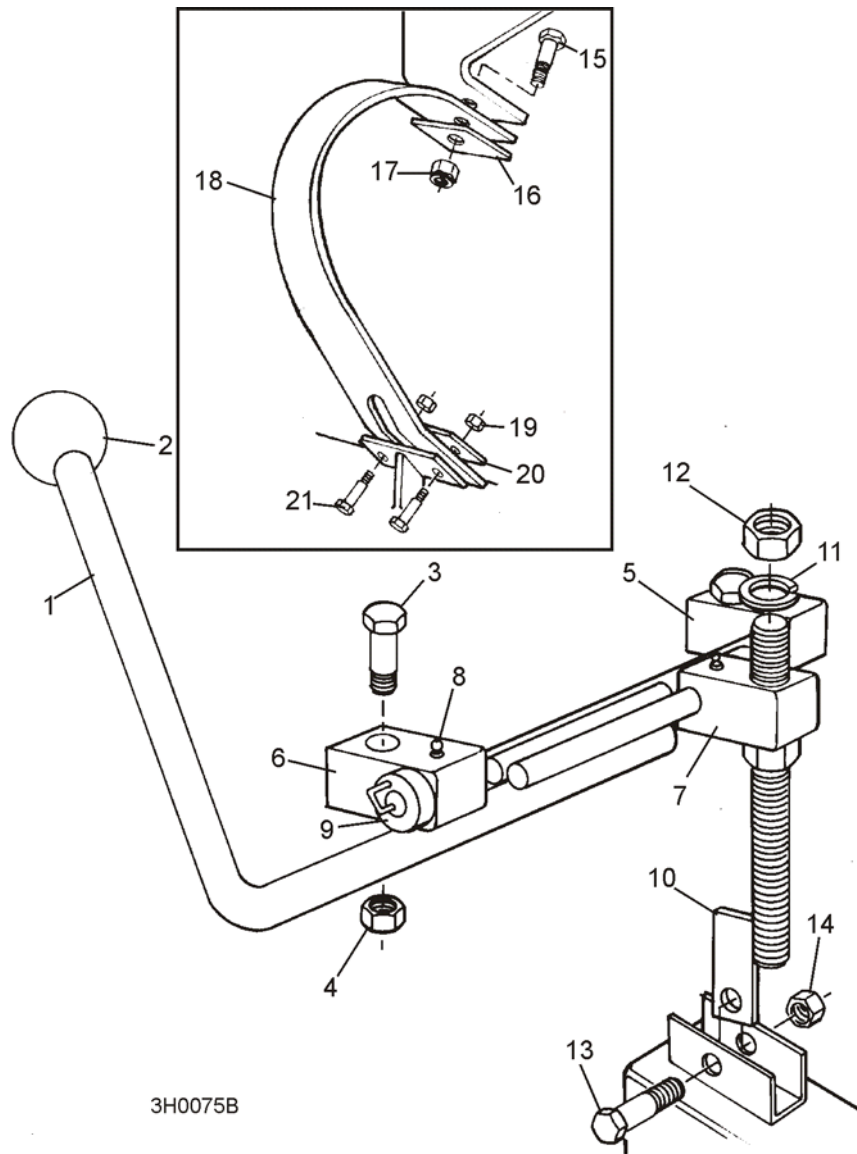


FIG. 2-14

2

Blade Drive & Guides

Water Lube Assembly

2.15 Water Lube Assembly				
	<i>LT30HD</i>	<i>Retrofit</i>		
	<i>LT40HD</i>	<i>Retrofit</i>		
REF	DESCRIPTION (◆ Indicates Parts Available In Assemblies Only)	PART #	QTY.	
1	BOTTLE ASSY, WATER LUBE W/CAP	014642 ¹	1	
2	FITTING, 3/4FPT X 3/4 MPT	014636 ²	1	
3	FITTING, WATER LUBE SHUTOFF VALVE	014100 ²	1	
4	FITTING, 5/8" NPT TO 3/8" HOSE BARB	014113 ²	1	
5	TUBING, WATER LUBE 3/8" I.D.	R01885	7 ft.	
6	TRAY WELDMENT, WATER BOTTLE	W04729	1	
7	SCREW, #10-24 X 2 3/4" SLOTTED ROUND HEAD	F05004-99 ³	1	
8	NUT, #10-24 SELF-LOCKING HEX	F05010-14	1	

¹ Use Water Bottle Assembly w/Cap 014642 to service all bottle/cap combinations previously supplied. Bottle 014367, 61mm Cap 014773 and 70mm Cap 036744 no longer available separately. 014642 Bottle Kit replaces P04357 bottle & P09088 cap originally supplied (requires fittings 014636, 014113, and valve 014100).

² Fittings apply only to retrofit bottle supplied after 3/97. [See Section 2.17](#) for original bottle replacement parts.

³ Longer screw F05004-99 replaces F05004-5 when original bottle P04357 replaced with 014642. New bottle size requires longer clamping screw.

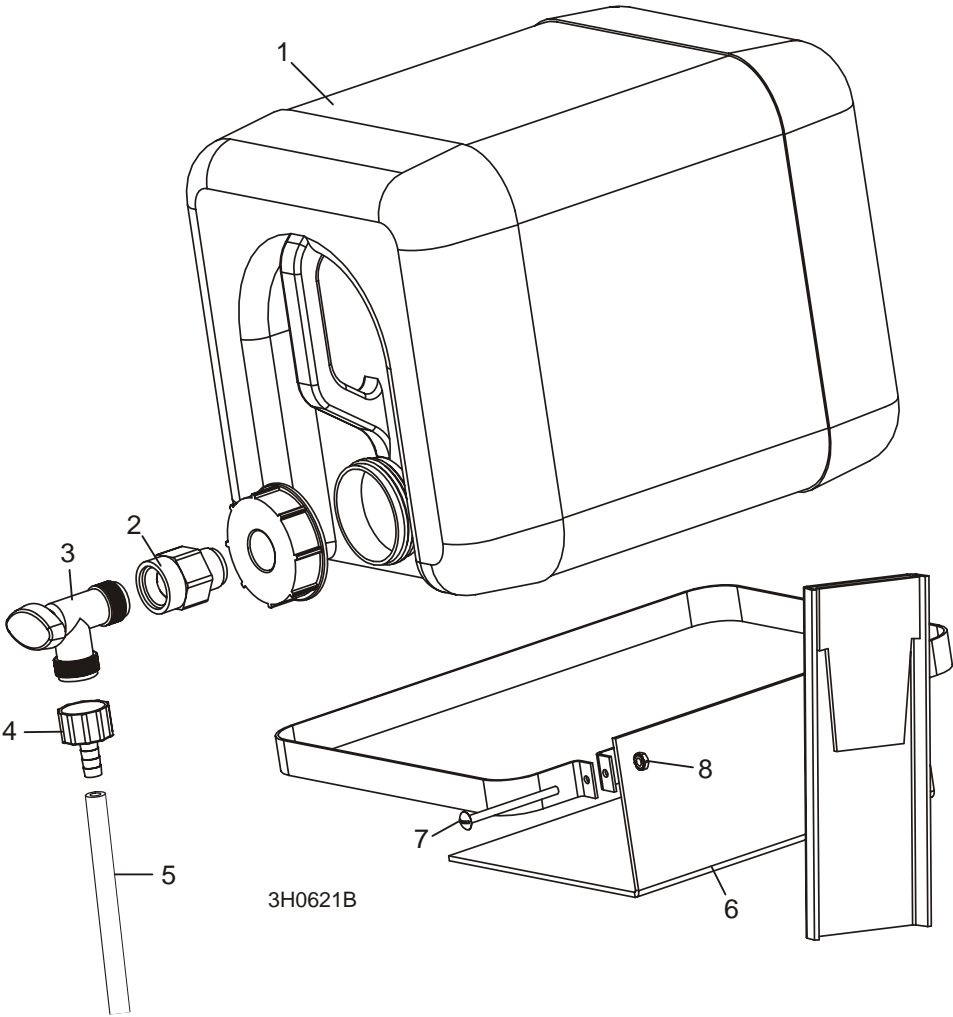


FIG. 2-15

2.16 Water Lube Assembly w/Auto-Shutoff				
LT30HD		Rev. C3 - C6		
LT40HD		Rev. AP - C6		
REF	DESCRIPTION (◆ Indicates Parts Available In Assemblies Only)	PART #	QTY.	
	WATER LUBE KIT, AUTO SHUTOFF	LTWLS-A ¹	1	◆
1	Bottle, 5-Gallon Water	P04357 ²	1	◆
2	Cap, 5 Gallon Water Bottle	P09088 ²	1	◆
3	Fitting, Water Lube Reducer	P04695 ³	1	
	Water Lube Retro, Auto Shutoff	LTWLS-RF	1	
4	Fitting, 1/4" NPT Male x 3/8" Hose Barb Elbow	P04730 ³	1	
5	Hose, 3/8" ID x 1/2" OD Nylon	R01885	2 ft.	
6	Fitting, 3/8" x 3/8" Hose Barb Connector	P04681	1	
7	Clamp, 1/2" Coated EMT	P07584	1	
8	Bolt, 1/4-20 x 3/4" Hex Head Full Thread	F05005-1	1	
9	Nut, 1/4-20 Self-Locking Hex	F05010-9	1	
10	Hose, 1/2" ID x 3/8" OD x 12" Long Latex	S04663	1	
11	Fitting, 1/4" FPT x 3/8" Hose Barb	P04688	1	
12	Valve, Water Shutoff	P04669 ³	1	
13	Clamp, 1/2" EMT	P05088	1	
14	Washer, 1/4" Split Lock	F05011-14	1	
15	Bolt, 1/4-20 x 1/2" Hex Head	F05005-15	1	
16	Fitting, 1/4" NPT x 3/8" Hose Barb	P04682	1	
17	Hose, 3/8" ID x 1/2" OD Nylon	R01885	2.5 ft.	
	Collar Assembly, Auto-Shutoff Clutch Handle	A09921	1	
	Washer, 5/8" ID x 15/16" OD x .094" Thick Nylon	F05011-19	1	
18	Tray Weldment, Water Lube Hanger	W04729	1	
19	Screw, #10-24 x 3/4" Slotted Round Head	F05004-5 ³	1	
20	Nut, #10-24 Self-Locking Hex	F05010-14	1	

¹ Auto Water Lube no longer available. Use component parts for service replacement.

² Use Water Bottle Assembly w/Cap 014642 to service all bottle/cap combinations previously supplied. Bottle 014367, 61mm Cap 014773 and 70mm Cap 036744 no longer available separately. Bottle P04357 & Cap P09088 no longer available. New bottle 014642 available 3/97 provides higher UV resistance ([See Section 2.15](#)).

³ Fittings, valve and screw apply only to original P04357 bottle. [See Section 2.15](#) for replacement parts if bottle replaced after 3/97.

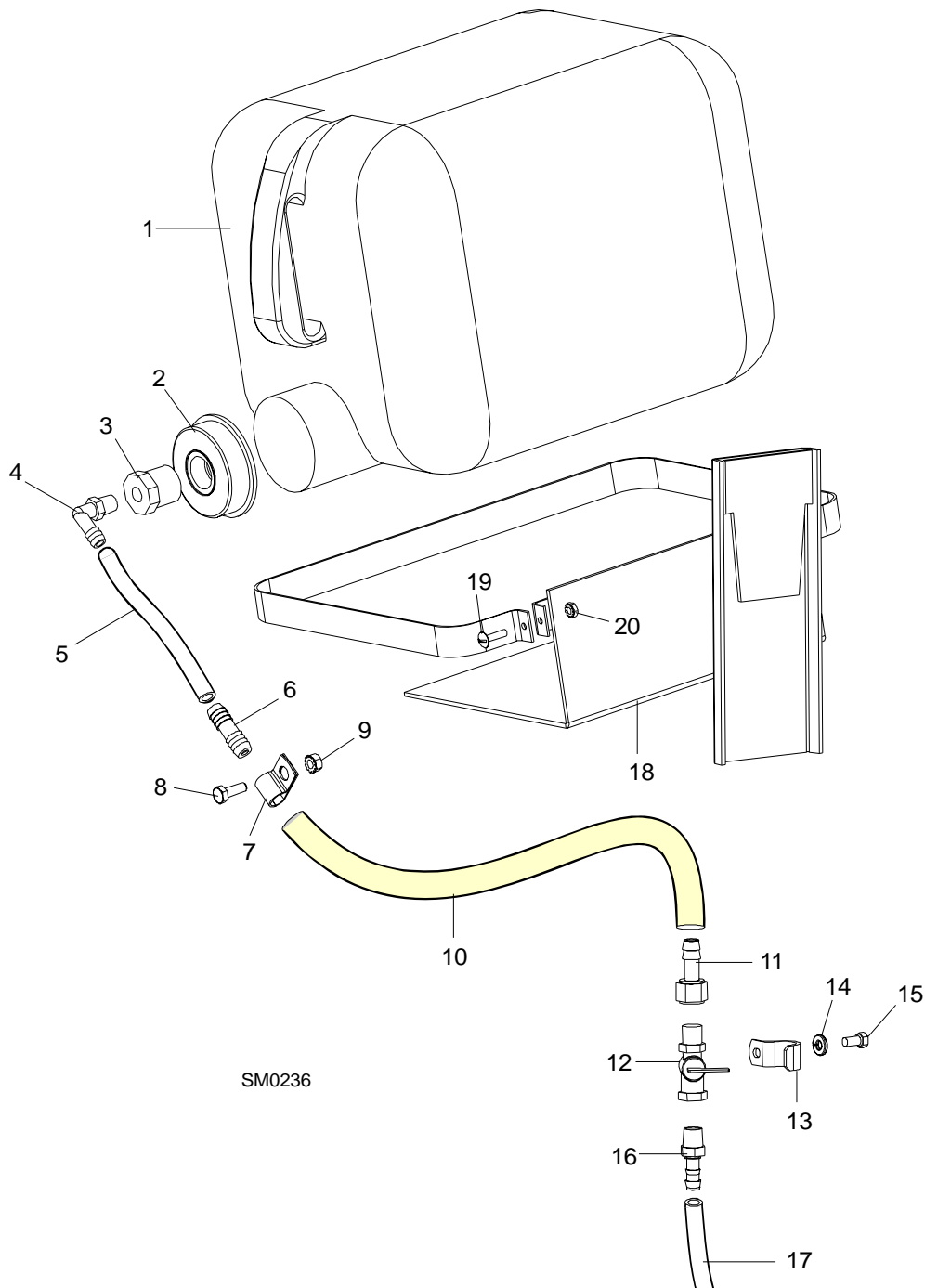


FIG. 2-16

2

Blade Drive & Guides

Water Lube Assembly

2.17 Water Lube Assembly				
<i>LT40HD Rev. A - AN</i>				
REF	DESCRIPTION (◆ Indicates Parts Available In Assemblies Only)	PART #	QTY.	
1	BOTTLE, 5 GALLON WATER	P04357 ¹	1	◆
2	Cap, 5 Gallon Water Bottle	P09088 ¹	1	◆
3	FITTING, 3/4" TO 1/4" REDUCER	P04695 ²	1	
4	VALVE, WATER FLOW	P04669 ²	1	
5	FITTING, 3/8" HOSE BARB	P04730 ²	1	
6	HOSE, PLASTIC WATER LUBE	R01885	6.5 Ft	
7	TRAY WELDMENT, WATER BOTTLE	W04729	1	
8	SCREW, #10-24 X 3/4" SLOTTED ROUND HEAD	F05004-5 ²	1	
9	NUT, #10-24 SELF-LOCKING HEX	F05010-14	1	

¹ Use Water Bottle Assembly w/Cap 014642 to service all bottle/cap combinations previously supplied. Bottle 014367, 61mm Cap 014773 and 70mm Cap 036744 no longer available separately. Bottle P04357 & Cap P09088 no longer available. New bottle 014642 available 3/97 provides higher UV resistance ([See Section 2.15](#)).

² Fittings, valve and screw apply only to original P04357 bottle. [See Section 2.15](#) for replacement parts if bottle replaced after 3/97.

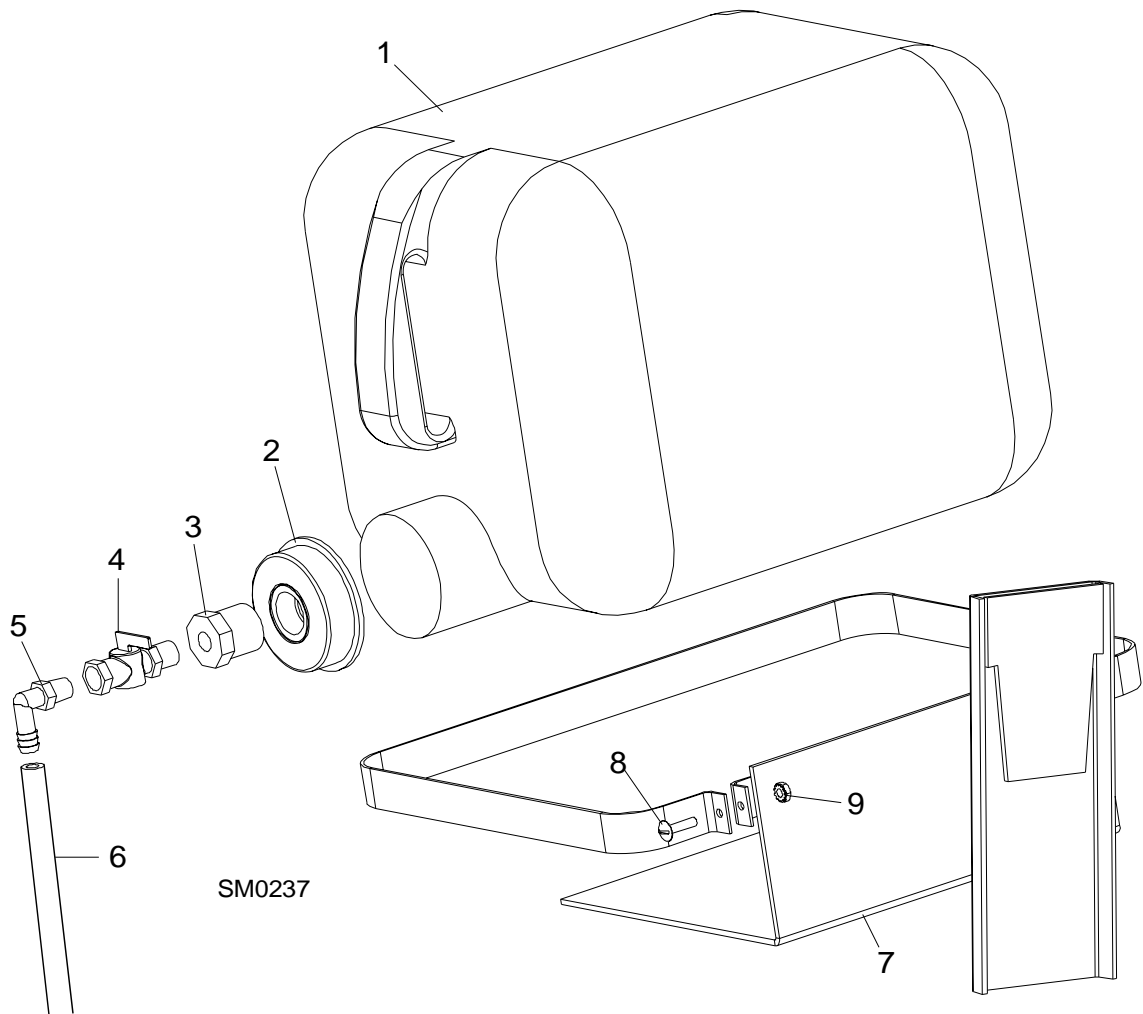


FIG. 2-17

2 Blade Drive & Guides

Middle Throat Cam

2.18 Middle Throat Cam				
		<i>LT30HD</i>	<i>Rev. C6</i>	
		<i>LT40HD</i>	<i>Rev. C6</i>	
REF	DESCRIPTION (◆ Indicates Parts Available In Assemblies Only)	PART #	QTY.	
1	BOLT, 3/8-16 X 3" HEX HEAD FULL THREAD	F05007-73	1	
2	NUT, 3/8-16 HEX SELF-LOCKING	F05010-19	2	
3	CAM, MIDDLE THROAT	S11818	1	

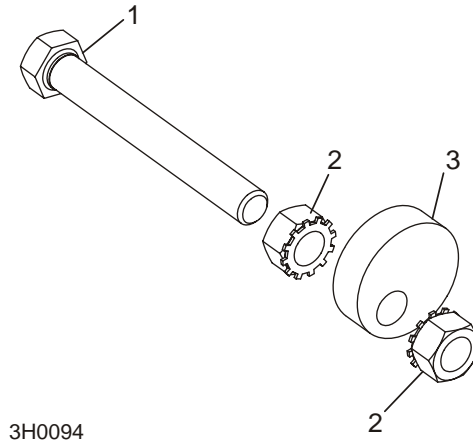


FIG. 2-18

2.19 Middle Throat Bearing				
<i>LT30HD</i> <i>Rev. C3 - C5</i> <i>LT40HD</i> <i>Rev. A - C5</i>				
REF	DESCRIPTION (◆ Indicates Parts Available In Assemblies Only)	PART #	QTY.	
	BEARING KIT, MIDDLE THROAT	A07539	1	
	Bearing Assembly, Middle Throat	A04244	1	
1	Bracket, Middle Throat Bearing Mount	W04245	1	
2	Nut, 5/8-11 Hex Lock	F05010-4	1	
3	Bearing, R10	P04156	1	
4	Nut, 5/8-11 Nylon Lock	F05010-34	1	
5	Bolt, 1/2-13 x 3" Hex Head Full Thread	F05008-7	1	
6	Washer, 1/2" SAE Flat	F05011-2	1	
7	Nut, 1/2-13 Nylon Lock	F05010-8	1	
8	Nut, 3/8-16 Hex	F05010-1	2	
9	Washer, 3/8" Split Lock	F05011-4	1	
10	Bolt, 3/8-16 x 2 Hex Head Full Thread	F05007-16	1	

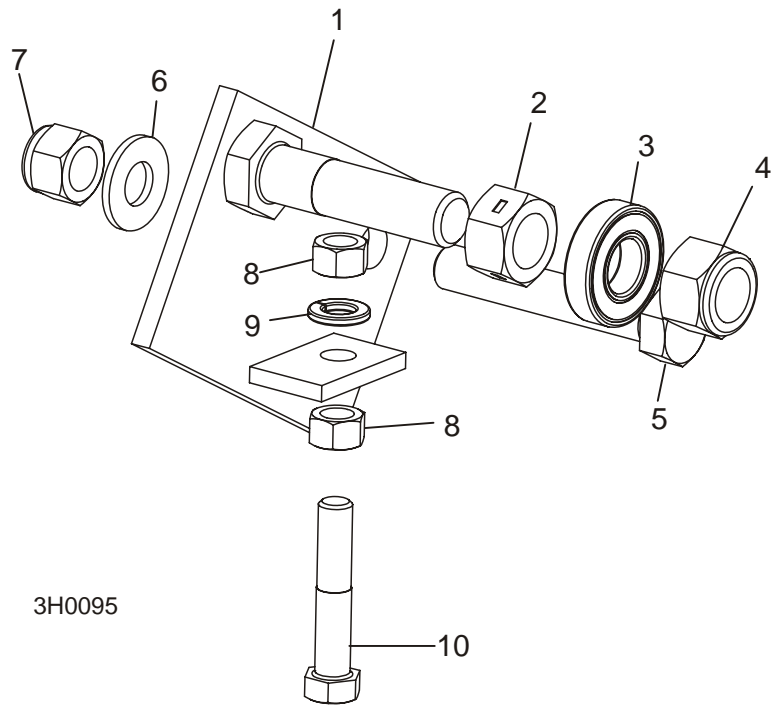


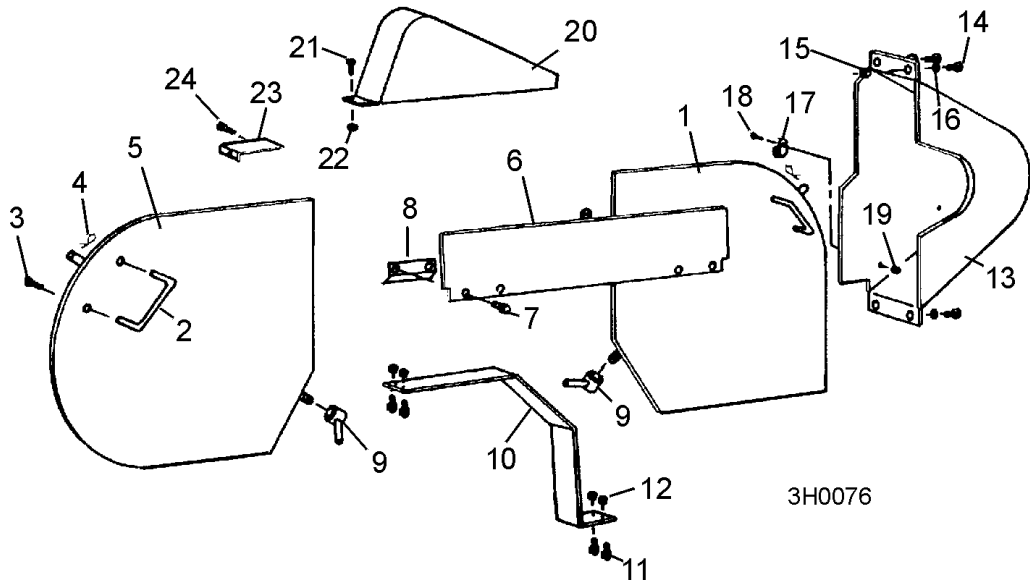
FIG. 2-19

SECTION 3 SAW HEAD COVERS

3.1 Saw Head Covers				
REF	DESCRIPTION (◆ Indicates Parts Available In Assemblies Only)	PART #	QTY.	
	COVER, DRIVE SIDE BLADE HOUSING WITH HANDLE	A09420	1	
1	Cover, Drive Side Blade Housing	W07948	1	◆
2	Handle, Blade Housing Cover	P08065	1	
3	Screw, #8-32 X 3/8" Self-Tap	F05015-8	2	
	Pin Assembly, Cover Retainer	A12812 ¹	1	
4	Pin, Safety Retainer	P05059	1	
	Cable, 1/8" O.D. Coated Nylon	R02075	.92 Ft.	
	Clamp, 1/8" Dual Cable	P11830	1	
	COVER, IDLE SIDE BLADE HOUSING WITH HANDLE	A09419	1	
5	Cover, Drive Side Blade Housing	W09351	1	◆
2	Handle, Blade Housing Cover	P08065	1	
3	Screw, #8-32 X 3/8" Self-Tap	F05015-8	2	
	Pin Assembly, Cover Retainer	A12812 ¹	1	
4	Pin, Safety Retainer	P05059	1	
	Cable, 1/8" O.D. Coated Nylon	R02075	.92 Ft.	
	Clamp, 1/8" Dual Cable	P11830	1	
6	COVER, MIDDLE BLADE HOUSING	W07409 ²	1	
	DECAL, LT40HDG24	S12597	1	
	DECAL, LT40HDE15	S12596	1	
7	BOLT, 1/4-20 X 3/4" HEX HEAD	F05005-1	4	
8	HINGE, MIDDLE BLADE HOUSING COVER	S07522	2	
9	NUT, COVER TURN	021145 ³	3	
	GUARD KIT, LOWER BELT	K07500	1	
10	Guard, Lower Belt	S07512	1	
11	Bolt, 1/4-20 x 3/4" Hex Head	F05005-1	4	
12	Nut, 1/4-20 Self-Locking	F05010-9	4	
	GUARD KIT, DRIVE PULLEY	K07229	1	
13	Guard, Drive Pulley	W09003	1	
14	Bolt, 1/4-20 x 3/4" Hex Head	F05005-1	4	
15	Nut, 1/4-20 Self-Locking	F05010-9	4	
16	Washer, 1/4" SAE Flat	F05011-11	4	
17	Clamp, 1/2" Plastic Wire	F05114-1	2	
18	Screw, #10-24 x 1/2" Slotted	F05004-1	2	
19	Nut, #10-24 Self-Locking	F05010-14	2	

20	GUARD, MOTOR PULLEY	W09010	1	
21	BOLT, 1/4-20 X 3/4" HEX HEAD	F05005-1	2	
22	NUT, 1/4-20 SELF-LOCKING	F05010-9	2	
23	COVER, 2X4 TUBE	S09055	1	
24	SCREW, 1/4-20 X 3/8" SELF-TAPPING	F05005-44	2	

¹ Hole must be drilled in cover pin to accept retainer pin. Retainer secures cover while traveling.
² Replaces W09467. Order appropriate model decal for cover label.
³ Directly replaces W07511 nut weldment (8/97).



3H0076

FIG. 3-1

4 Battery Box and Instrument Panel

Battery Box Assembly, LT30HD/LT40HD

SECTION 4 BATTERY BOX AND INSTRUMENT PANEL

4.1 Battery Box Assembly, LT30HD/LT40HD				
<i>LT30HD</i>		<i>Rev. C3 - C6</i>		
<i>LT40HD</i>		<i>Rev. AK - C6</i>		
REF	DESCRIPTION (◆ Indicates Parts Available In Assemblies Only)	PART NUMBER	QTY.	
	BOX ASSEMBLY, 8T24 BATTERY	K09856 ¹	1	◆
1	Battery, 8T24 Deka 12 Volt Deep Cycle Dry	P09853-1 ²	1	
2	Terminal, Battery	P05085	2	
3	Bracket, Circuit Breaker Mount	S09538 ³	1	
	Breaker Assembly, 50 Amp Circuit	A04706 ³	1	
4	Breaker, 50 Amp Circuit	P05086	1	
5	Washer, #10 Split Lock	F05011-20	2	
6	Nut, #10-24 Hex	F05010-27	2	
7	Washer, Battery Terminal	P12161 ⁴	1	
8	Retainer Loop, Battery	P09790	1	
9	Nut, 5/16-18 Hex Nylon Lock	F05010-58	2	
10	Bolt, 3/8-16 X 4" Hex Head Grade 2	F05007-4	2	
11	Washer, 3/8" SAE Flat	F05011-3	2	
12	Nut, 3/8" Hex Nylon Lock	F05010-10	2	
13	Washer, 1/4" SAE Flat	F05011-11	2	
14	Nut, 1/4-20 Wing	F05010-13	2	
15	Box Weldment, Battery	W09727	1	
16	Lid, Battery Box	S09722	1	
17	Fitting, 1" Cable Clamp	P05065-4	1	
18	Fitting, 3/8" Cable Clamp	P05065-2	3	

¹ Kit obsolete. Use components to service.

² P09853-1 Dry battery replaces P09853 wet battery. Wood-Mizer is not able to ship batteries containing electrolyte.

³ Circuit breaker moved to instrument panel after Rev. AL. Replace bracket with S09855. See Section 4.4 for recommended position.

⁴ Protective terminal washer added to positive battery terminal after 5/92 to prevent corrosion.

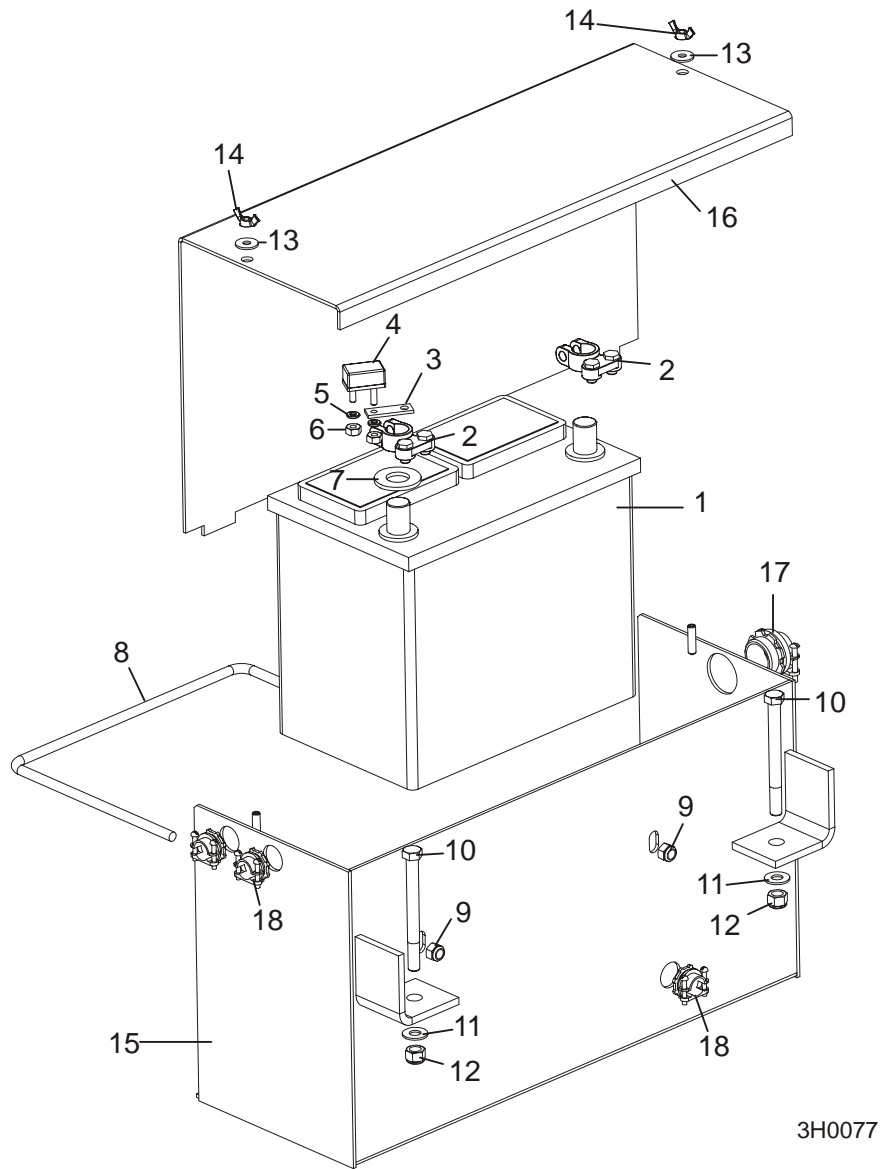


FIG. 4-1

4

Battery Box and Instrument Panel

Battery Box Assembly, LT30HD/LT40HD

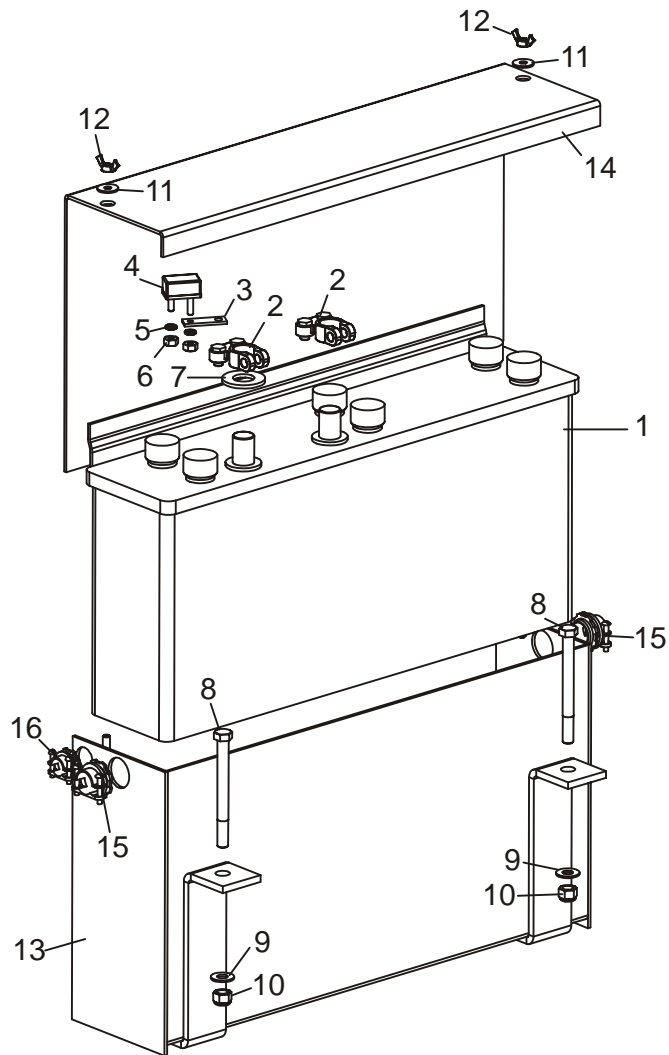
4.2 Battery Box Assembly, LT30HD/LT40HD				
<i>LT40HD</i>		<i>Rev. A - AJ</i>		
REF	DESCRIPTION (◆ Indicates Parts Available In Assemblies Only)	PART NUMBER	QTY.	
	BOX ASSEMBLY, 12 VOLT BATTERY	K07303 ¹	1	◆
1	Battery, Deka 12 Volt Dry	P04325 ²	1	
	Box Assembly, Battery	A07973 ¹	1	◆
2	Terminal, Battery	P05085	2	
3	Bracket, Circuit Breaker Mount	S09538 ³	1	
	Breaker Assembly, 50 Amp Circuit	A04706 ³	1	
4	Breaker, 50 Amp Circuit	P05086	1	
5	Washer, #10 Split Lock	F05011-20	2	
6	Nut, #10-24 Hex	F05010-27	2	
7	Washer, Battery Terminal	P12161 ⁴	1	
8	Bolt, 3/8-16 X 4" Hex Head Grade 2	F05007-4	2	
9	Washer, 3/8" SAE Flat	F05011-3	2	
10	Nut, 3/8" Hex Nylon Lock	F05010-10	2	
11	Washer, 1/4" SAE Flat	F05011-11	2	
12	Nut, 1/4-20 Wing	F05010-13	2	
13	Box Weldment, Battery	W09017	1	
14	Lid, Battery Box	W09004	1	
15	Fitting, 3/4" Cable Clamp	P05065-1	2	
16	Fitting, 3/8" Cable Clamp	P05065-2	1	

¹ Battery kit K07303 and assembly A07973 obsolete. Use components to service.

² Battery supplied is dry. Wood-Mizer is not able to ship batteries containing electrolyte.

³ Circuit breaker moved to instrument panel after Rev. AL. Replace bracket with S09855. See Section 4.4 for recommended position.

⁴ Protective terminal washer added to positive battery terminal after 5/92 to prevent corrosion.



3H0078

FIG. 4-2

4

Battery Box and Instrument Panel*Instrument Panel*

4.3 Instrument Panel				
<i>LT30HD</i>		<i>Rev. C3 - C6</i>		
<i>LT40HD</i>		<i>Rev. B4 - C6</i>		
REF	DESCRIPTION (◆ Indicates Parts Available In Assemblies Only)	PART NUMBER	QTY.	
	INSTRUMENT PANEL ASSEMBLY, 24HP ONAN ENGINE	A10000-W	1	
	INSTRUMENT PANEL ASSEMBLY, 15HP ELECTRIC MOTOR	A10108-W	1	
1	Panel, Instrument Mounting	S10002-2	1	◆
	Decal, Instrument Panel w/Alternator	014779 ¹	1	
2	Boot, Toggle Switch	P02575	1	
3	Gauge, Hour Meter	P09631	1	
4	Switch, On/Off Key	P04350	1	
5	Light Assembly, Red Indicator	P04986	1	
6	Fitting, 3/4" Cable Clamp	P05065-1	2	
7	Fitting, 3/8" Cable Clamp	P05065-2	2	
8	Light Assembly, Green Indicator	P20436	1	
9	Switch, Blade Guide Arm Toggle	P10006	1	
10	Bracket, Circuit Breaker Mount	S09855	1	
	Breaker Assembly, 50 Amp Circuit	A04706	1	
11	Breaker, 50 Amp Circuit	P05086	1	
	Washer, #10 Split Lock	F05011-20	2	
	Nut, #10-24 Hex	F05010-27	2	
12	Harness, 24Hp Onan Upper Wire	A10034	1	
13	Harness, Lower Wire	A10030	1	
14	Harness, Up/Down Motor Wire	A05097	1	
15	BOLT, 1/4-20 X 3/4" HEX HEAD FULL THREAD	F05005-1	2	

¹ Replaces silkscreened text 5/97.

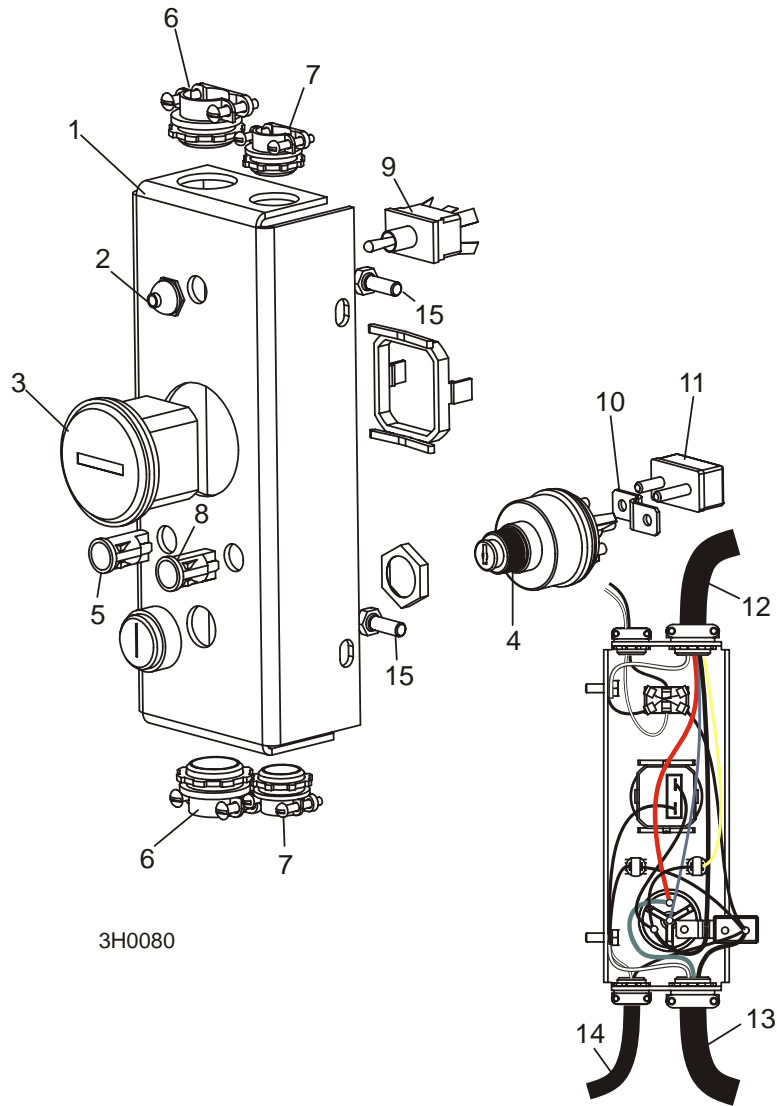


FIG. 4-3

4

Battery Box and Instrument Panel*Instrument Panel*

4.4 Instrument Panel				
<i>LT40HD Rev. A - B3</i>				
REF	DESCRIPTION (◆ Indicates Parts Available In Assemblies Only)	PART NUMBER	QTY.	
	INSTRUMENT PANEL ASSEMBLY	A07476 ¹	1	
	Panel Assembly	A07920	1	◆
1	Panel, Instrument Mounting	S07514	1	◆
2	Gauge, Amp Meter	P04270	1	
3	Gauge, Hour Meter	P09631 ²	1	
4	Switch, On/Off Key	P04350	1	
5	Light Assembly, Red Indicator	P04986	1	
6	Fitting, 3/4" Cable Clamp	P05065-1	2	
7	Fitting, 3/8" Cable Clamp	P05065-2	1	
8	Grommet, Heyco Wire	P04137	1	
9	Wire, Switch to Hour Meter	A07929	1	
10	Bracket, Circuit Breaker Mount	S09855	1	
	Breaker Assembly, 50 Amp Circuit	A04706 ³	1	
11	Breaker, 50 Amp Circuit	P05086	1	
	Washer, #10 Split Lock	F05011-20	2	
	Nut, #10-24 Hex	F05010-27	2	
12	Harness, Upper Wire	A07470	1	
13	Harness, Lower Wire	A07245	1	
14	Wire, Switch to Amp Meter	A07248	1	
15	Wire, Switch to Starter	A09540	1	
16	BOLT, 1/4-20 X 3/4" HEX HEAD FULL THREAD	F05005-1	2	

¹ See Section 4.3 if engine retrofitted with external alternator.

² Replaces P04296. Requires modification of mounting hole on Rev. A - AE.

³ Circuit breaker moved from battery terminal after Rev. AL.

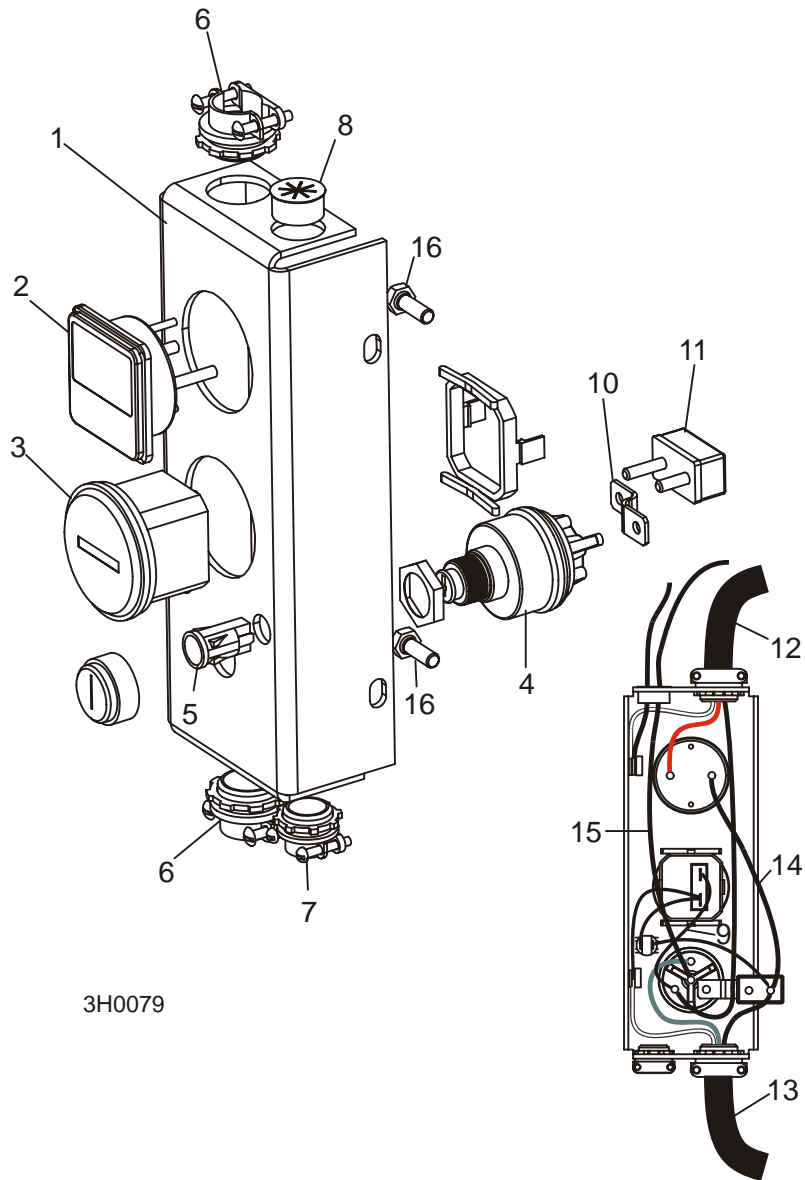


FIG. 4-4

SECTION 5 UP/DOWN SYSTEM & SCALES

5.1 Saw Head V-Brace Mount				
REF	DESCRIPTION (◆ Indicates Parts Available In Assemblies Only)	PART #	QTY.	
1	V-BRACE, SAW HEAD MOUNT	W04099	1	
2	BOLT, 5/16-18 X 3/4" HEX HEAD GRADE 5	F05006-5	11	
3	BOLT, 5/16-18 X 1 1/4" HEX HEAD FULL THREAD	F05006-18	5	
4	PAD, PLASTIC SLIDE	M04096	8	
5	NUT, 5/16-18 NYLON LOCK	F05010-58	16	
6	NUT, 5/16-18 HEX	F05010-17	5	
7	PLATE, V-BRACE WASHER	S07935	4	
8	BOLT, 1/2-13 X 3" HEX HEAD	F05008-1	4	
9	NUT, 1/2-13 NYLON LOCK	F05010-8	4	
10	BOLT, 3/8-16 X 3" FULL THREAD	F05007-1	2	
11	NUT, 3/8-16 HEX	F05010-1	4	
12	WASHER, 3/8" SAE FLAT	F05011-3	2	
13	WASHER, 3/8" SPLIT LOCK	F05011-4	2	
	SIGHT GAUGE KIT	A10087 ¹	1	
	Sight Gauge Assembly	A09997	1	◆
14	Bracket, Sight Gauge Mount	S09998	1	◆
15	Spring, Sight Gauge	S10031	1	
16	Bolt, 3/8-16 X 2" Hex Head Full Thread	F05007-16	1	
17	Nut, 3/8-16 Hex Lock	F05010-25	1	
18	Washer, 5/16" SAE Flat	F05011-17	2	
19	Nut, 5/16-18 Hex Lock	F05010-6	2	
	Instruction Sheet, Sight Gauge	A10087-257	1	

¹ Sight gauge assembly can be retrofitted to all sawmills to accurately set cutting height of blade.

5 Up/Down System & Scales

Blade Height Scale

5.2 Blade Height Scale				
REF	DESCRIPTION (◆ Indicates Parts Available In Assemblies Only)	PART #	QTY.	
	SCALE KIT, 30" BLADE HEIGHT	K04810	1	
1	Scale, 30" Quarter	S09363-W	1	
	Decal, 35" Quarter Scale	P11039 ¹	1	
	Decal, Grade Hardwood Quarter	P12912	1	
	Decal, Quarter Scale w/o Shrinkage	P09473	1	
2	Scale, 30" Inch	S09362-W	1	
	Decal, 35" Inch (See Optional Metric Scale Below)	P11038 ¹	1	
3	Strap, Scale Hold-Down	S04805	2	
4	Screw, 1/4-20 X 5/8" Wing	F05005-16	2	
5	Screw, 1/4-20 x 1/2" Slotted Hex Head Self-Tapping	F05015-1	3	
6	Washer, 1/4" X .020 Thick Nylon Flat	F05011-22	2	
	Instruction Sheet, Sliding Scale Retrofit	K04810-198	1	
	INDICATOR KIT, BLADE HEIGHT	K07709	1	
7	Bolt, 1/4-20 X 3/4" Hex Head Full Thread	F05005-1	2	
8	Washer, 1/4" SAE Flat	F05011-11	2	
9	Indicator Assembly, Blade Height	A07377	1	◆
	Indicator, Plastic Blade Height	M07267-N ²	1	
	Bracket, Blade Height Indicator Mount	S07503	1	
	Screw, #10-24 x 3/8" Phillips Head	F05004-3	2	
	Nut, #10-24 Self-Locking	F05010-14	2	
10	Plate, Indicator Washer	S07527	1	
	DECAL, METRIC 88 MM	S11670 ¹	1	

¹ Modify decal to fit 30" scale.

² Replaces M07267. Part Number change only.

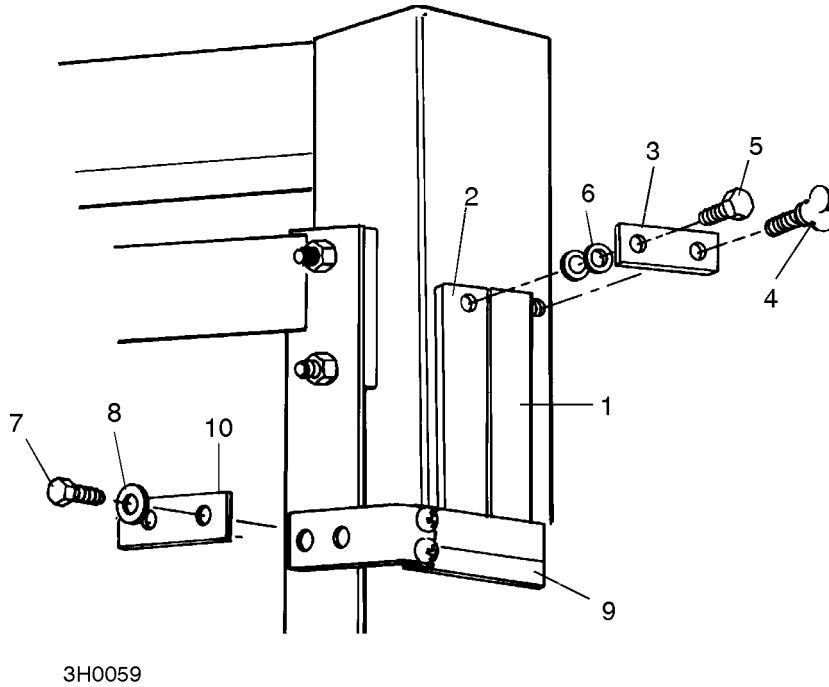


FIG. 5-2

5 Up/Down System & Scales

Up/Down Drive Assembly

5.3 Up/Down Drive Assembly				
REF	DESCRIPTION (◆ Indicates Parts Available In Assemblies Only)	PART #	QTY.	
	MOTOR, UP/DOWN REPLACEMENT	A04367	1	
1	Motor, Up/Down External Brush	016706 ¹	1	◆
	Brush Kit, Up/Down Leeson Motor External	034002 ²	1	
	Brush Kit, Up/Down Owosso Motor External	A12198 ²	1	
	Brush Kit, Up/Down Motor Internal	A07969 ²	1	
2	Pulley, Up/Down Motor	S04338	1	
3	Screw, 1/4-28 X 3/8" Cup Point Set	F05005-24	1	
4	CLAMP, 3 1/4" DIA. SCREW	P11456	2	
5	BELT, 3L290 RIBBED V	P04349	1	
	REDUCER KIT, UP/DOWN GEAR	A09078	1	
6	Pulley, 8" Up/Down	P04343	1	
7	Reducer, 60:1 Gear	P07977	1	
8	Sprocket, Up/Down #40 Dual	S07976	1	
9	BOLT, 5/16-18 X 1" HEX HEAD GRADE 5	F05006-27	4	
10	BRACKET, UP/DOWN MOTOR MOUNT	S09077	1	
	SWITCH KIT, UP/DOWN DRUM	A11758 ³	1	
11	Switch, Up/Down Drum	P11535	1	◆
12	Handle, Drum Switch	P12500	1	
	Decal, Up/Down	P08384	1	
13	Screw, #10-24 x 5/8" Hex Head	F05004-18 ⁴	2	
14	Washer, #10 SAE Flat	F05011-18	2	
15	Nut, #10-24 Self-Locking	F05010-14 ⁵	2	
	Instruction Sheet, Up/Down Switch Replacement	A11758-300	1	
	Instruction Sheet, Switch Greasing Information	A11758-416	1	
16	PLATE, REDUCER SPACER	S09052	1	
17	PLATE, UP/DOWN MOUNTING	S09080	1	
18	COVER, UP/DOWN PULLEY	S09082	1	
19	HANDLE, UP/DOWN MANUAL CRANK	W09062	1	
20	HANDLE, UP/DOWN LOCK	W07517	1	
21	BOLT, 5/16-18 X 1 1/2" HEX HEAD FULL THREAD	F05006-2	1	
22	NUT, 5/16-18 HEX	F05010-17	2	
23	WASHER, 5/16" SPLIT LOCK	F05011-13	1	
24	NUT, 5/16-18 HEX LOCK	F05010-6	1	
	OIL, 8 OZ. BOTTLED SYNTHETIC GEAR	L04869-4 ⁶	1	

¹ Motor kit A04367 revised 10/01. Leeson motor 016706 replaces Leeson motor 034001 (12/00) and Owosso motor P12093 originally supplied.

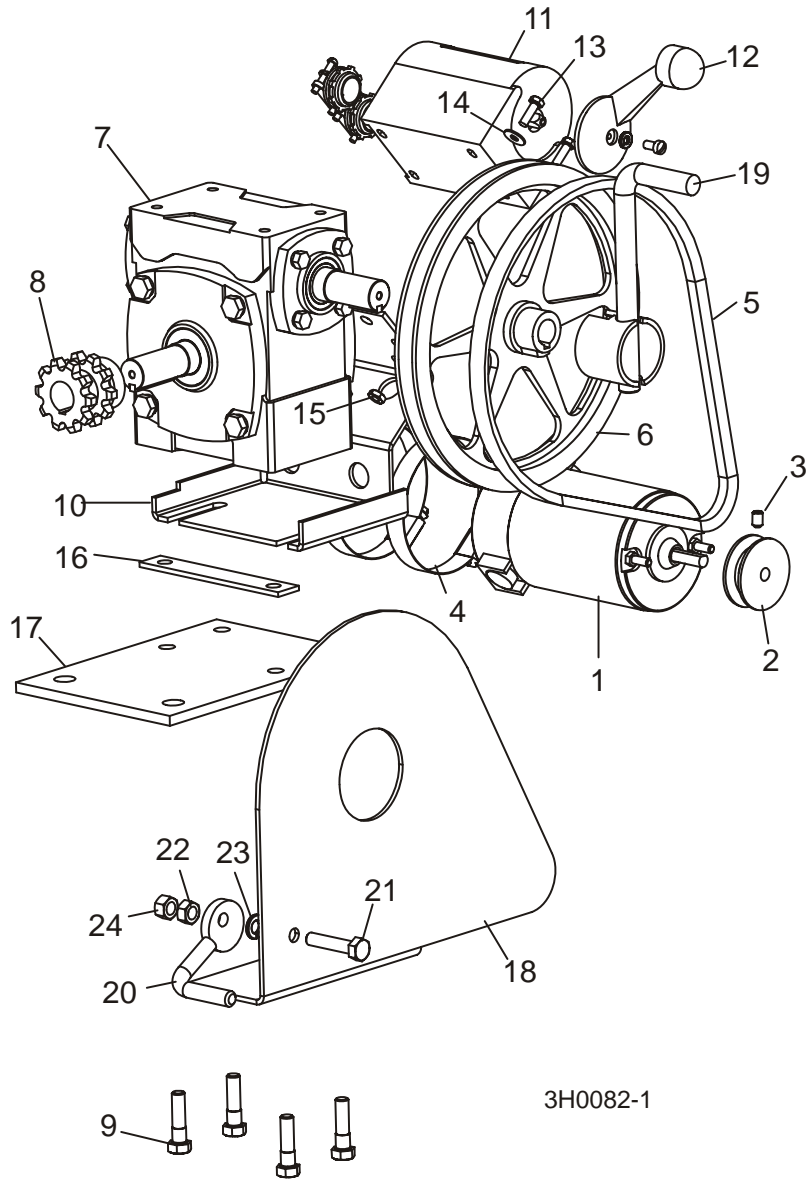
² Use 034002 Brush Kit for Leeson motors supplied after 12/00. Use A12198 Brush Kit for Owosso motor supplied from 6/92-12/00. Use A07969 if sawmill equipped with original internal brush up/down motor.

³ Replaces A04705 Drum Switch Assembly w/Spring. Replacement spring P04020 still available for old drum switch.

⁴ Replaces F05005-1 1/4-20 x 1" Hex Bolt used to mount original drum switch.

⁵ Replaces F05010-9 1/4-20 Self-Locking Nut used to mount original drum switch.

⁶ 8 - 11 oz. required for complete oil replacement.



3H0082-1

FIG. 5-3

5 Up/Down System & Scales

Up/Down Chain Assembly

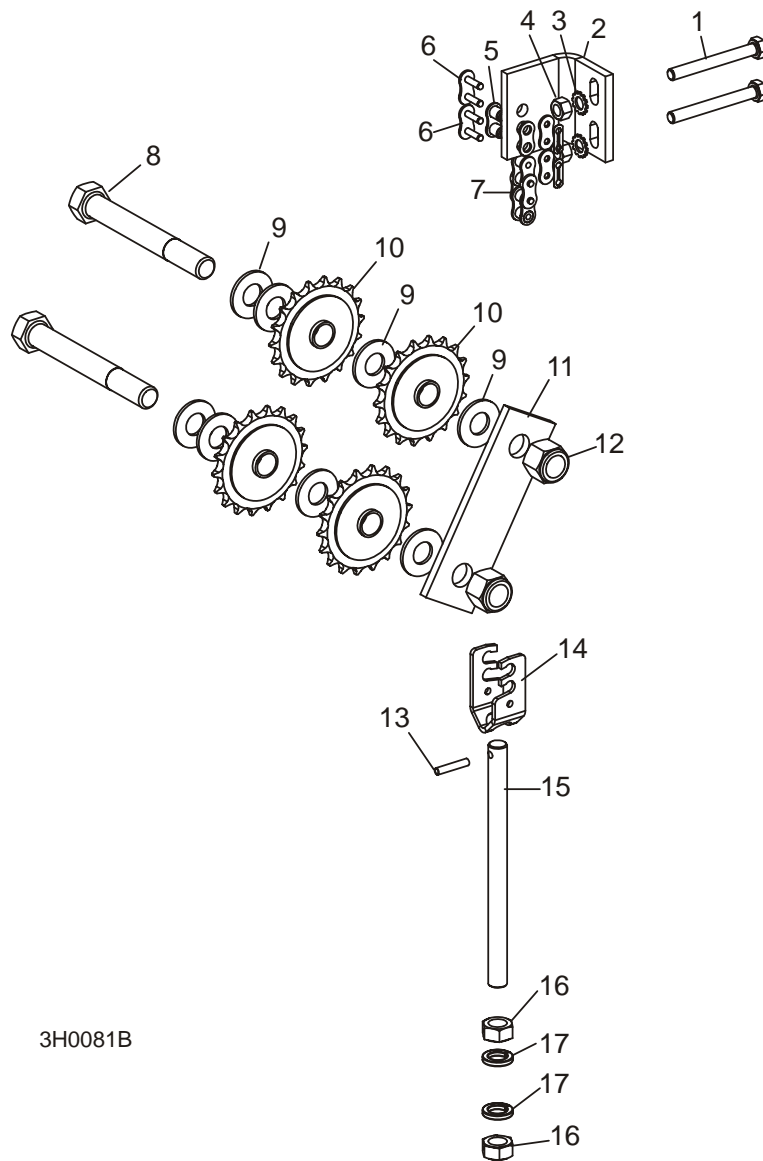
5.4 Up/Down Chain Assembly				
REF	DESCRIPTION (◆ Indicates Parts Available In Assemblies Only)	PART #	QTY.	
1	BOLT, 5/16-18 X 2 3/4" HEX HEAD GRADE 5	F05006-28	2	
2	BRACKET, UPPER UP/DOWN CHAIN	S09051	1	
3	WASHER, 5/16" EXTERIOR TOOTH LOCK	F05011-33	2	
4	NUT, 5/16-18 HEX LOCK	F05010-6	2	
	CHAIN KIT, UP/DOWN REPLACEMENT	014487	1	
5	Link, #40 Roller	P09607	2	
6	Link, #40 Master	P04200	4	
7	Chain, #40 X 85.5" Up/Down	P04199	2	
	Instruction Sheet, Up/Down Chain Replacement	014487-492	1	
8	BOLT, 5/8-11 X 5" HEX HEAD GRADE 2	F05009-6	2	
9	WASHER, 5/8" SAE FLAT	F05011-5 ¹	8	
10	SPROCKET, UP/DOWN IDLER G1-40-41-17 5/8" BORE 17 TOOTH	P04333 ¹	4	
11	PLATE, UP/DOWN IDLER SPROCKET	S09084	1	
12	NUT, 5/8-11 HEX NYLON LOCK	F05010-34	2	
13	PIN, 3/16" X 1" ROLL	F05012-11	1	
	TENSIONER ASSEMBLY, UP/DOWN CHAIN	A09046 ²	1	
14	Bracket, Up/Down Chain Tensioner	014216 ³	1	◆
15	Bolt, 1/2-13 x 7 1/2" Hex Head Full Thread	F05008-87 ⁴	1	◆
16	Nut, 1/2-13 Hex	F05010-35	2	
17	Washer, 1/2" Split Lock	F05011-9	2	

¹ (4) 016366 Idler Sprocket Assemblies and (6) 016433 Spacers replace (4) P04333 Idler Sprocket Assemblies and (8) F05011-5 5/8" Flat Washers originally supplied (available 01/00; not shown).

² Assembly includes new bolt F05008-87 and bracket 014216. Assembly replaces original rod S04201, bracket S09053, roll pin F05012-11, and bracket retrofit kit A12037 originally supplied until 2/96.

³ Replaces S09053 bracket previously supplied.

⁴ Replaces 014233 threaded rod/nut weldment previously supplied.



3H0081B

FIG. 5-4

SECTION 6 POWER FEED & TRACK ROLLERS

6.1 Upper Track Rollers And Wipers				
REF	DESCRIPTION (◆ Indicates Parts Available In Assemblies Only)	PART #	QTY.	
1	ROLLER, TRACK CAM BEARING	012797 ¹	1	
	FITTING, 3/16" 45° GREASE (FOR A05044 GREASABLE ROLLERS ONLY)	P05045	1	
2	ROLLER, TRACK CAM BEARING	012797 ²	1	
	FITTING, 3/16" STRAIGHT GREASE (FOR A05043 GREASABLE ROLLERS ONLY)	P04107	1	
3	NUT, 5/8-18 HEX JAM	F05010-11	4	
4	COVER, MIDDLE TRACK OILER ASSEMBLY	A09918 ³	1	
	Cover, Middle Track Oiler	S09917	1	◆
	Wiper, Middle Track Felt	S09915	1	
5	SCREW, 1/4-20 X 5/8" THUMB	F05005-64 ⁴	4	
6	HOUSING, UPPER TRACK ROLLER	W07526	2	
7	COVER, UPPER TRACK ROLLER REAR	S07521	1	
8	COVER, UPPER TRACK ROLLER FRONT	S07520	1	
9	WIPER, PLASTIC TRACK	M04113	2	

¹ Use 012797 to replace P12843 or A05044 greasable rollers originally supplied.

² Use 012797 to replace P12843 or A05043 greasable rollers originally supplied.

³ Replaces S07505 originally supplied on Rev. A - AN. Cover redesigned with "dual-flange" to prevent sawdust buildup (3/97).

⁴ Replaces F05005-1 1/4-20 x 3/4" Hex Bolt and F05015-1 1/4-20 x 1/2" Hex Screw originally supplied.

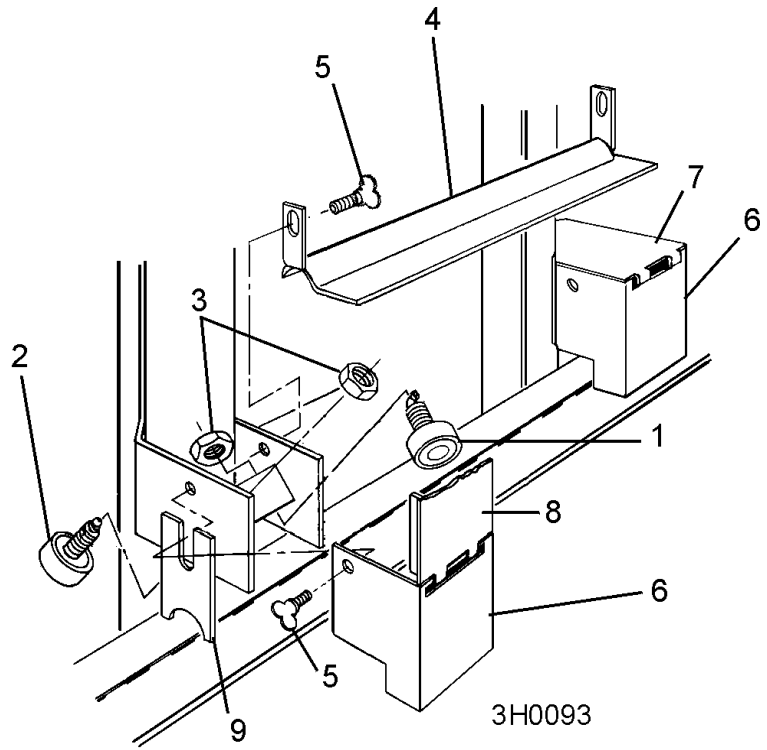


FIG. 6-1

6

Power Feed & Track Rollers

Lower Track Rollers

6.2 Lower Track Rollers				
REF	DESCRIPTION (◆ Indicates Parts Available In Assemblies Only)	PART #	QTY.	
	ROLLER KIT, LOWER TRACK	K07278	1	
	Roller Assembly, Lower Track	A04938	2	
1	Bracket, Lower Track Roller Mounting	W09001 ¹	1	◆
2	Roller, Track Cam Bearing	012797 ²	1	
3	Fitting, 3/16" Straight Grease (For A05043 Greasable Rollers Only)	P04107	1	
4	Nut, 5/8-18 Hex Jam	F05010-11	1	
5	Nut, 5/8-11 Hex	F05010-5	2	
6	Washer, 5/8" Split Lock Grade 8	F05011-118 ³	4	
7	Nut, 5/8-11 Hex Lock	F05010-4	2	
8	Bolt, 1/2-13 x 3 1/2" Hex Head Grade 5	F05008-61 ⁴	1	
	Bolt, 3/8-16 x 3 1/2" Hex Head Grade 8	F05007-6 ⁵	1	
9	Nut, 1/2-13 Hex Lock	F05010-3 ⁴	1	
	Nut, 3/8-16 Hex Lock	F05010-10 ⁵	1	

¹ Replaces original bracket supplied.

² Use 012797 to replace P12843 or A05043 greasable rollers originally supplied.

³ Grade 8 washers replace F05011-27 originally supplied to improve durability.

⁴ Use 1/2" bolt and nut on Rev. C2+.

⁵ Use 3/8" bolt and nut on Rev. A - C1.

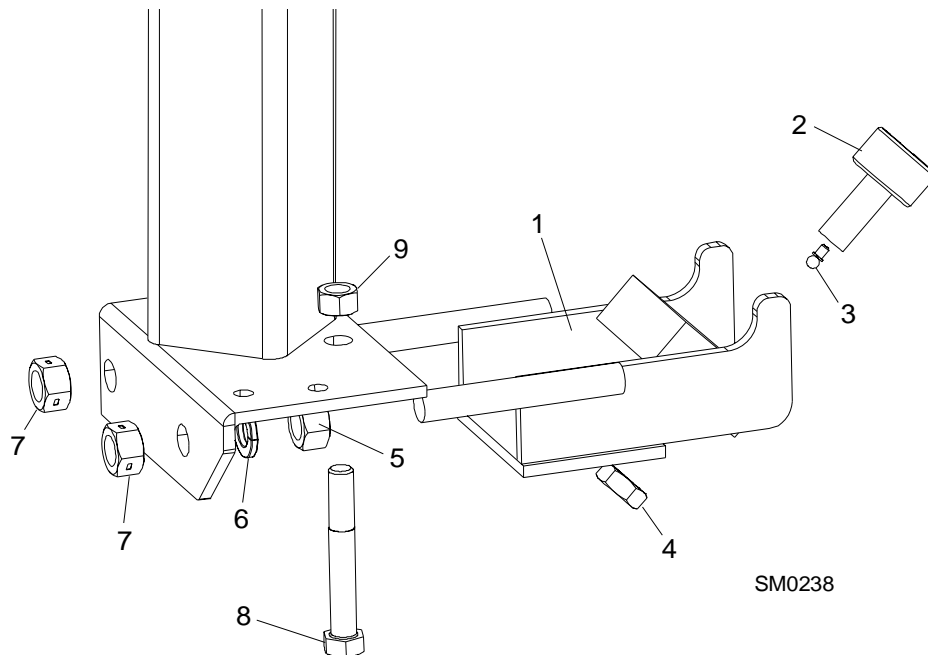


FIG. 6-2

6.3 Power Feed Drive Assembly				
<i>LT30HD</i>		<i>Rev. C3 - C6</i>		
<i>LT40HD</i>		<i>Rev. B - C6</i>		
REF	DESCRIPTION (◆ Indicates Parts Available In Assemblies Only)	PART #	QTY.	
	POWER FEED ASSEMBLY	A09572 ¹	1	◆
	Motor, Power Feed Replacement	A07974	1	
1	Motor, Power Feed	006877 ²	1	◆
	Brush Kit, 12V Motor (2008)	061794 ²	1	
	Brush Kit, 12V Motor (2007)	006619 ²	1	
	Brush Kit, 12V Motor	A09086 ²	1	
	Brush Holder, Motor	034000 ²	1	
2	Pin, 1/8" x 1" Roll	F05012-2	2	
3	Pulley, Power Feed Motor	S09579 ³	1	
4	Screw, 3/8-16 X 1/2" Cup Point Socket Set	F05007-12	1	
5	Belt, 4L280 V	P04031	1	
6	Belt, 3L290 V	P04349	1	
7	Pulley, 8" Power Feed	P04343	1	
8	Pulley, 2-3-4 Step	P04100	1	
9	Pulley, 4-5-6 Step	P04103	1	
10	Spring, Power Feed	P04060	2	
11	Pin, 1/8" x 1" Cotter	F05012-1	3	
12	Bracket, Lower Power Feed Mount	W09018	1	
13	Bearing, R10	P04156	4	
14	Shaft, Lower Power Feed With Sprocket	W09577	1	
15	Key, #606 Woodruff	P04101-1	3	
16	Washer, 5/8" I.D. Nylon	F05011-19	4	
17	Washer, Nylon Power Feed	S09090	1	
18	Bolt, 5/16-24 X 1" Hex Head	F05006-11	2	
19	Washer, 5/16" Split Lock	F05011-13	6	
20	Nut, 5/16-24 Hex	F05010-28	2	
21	Roller, Feed Chain	012797 ⁴	1	
22	Fitting, 3/16" x 45° Grease (For A05044 Greasable roller only)	P05045	1	
23	Washer, 5/8" SAE Flat	F05011-5	10	
24	Nut, 5/8-11 Hex Jam	F05010-11	1	
25	Guard, Power Feed Belt	W09015	1	
26	Bracket, Upper Power Feed Mounting	W09008	1	
27	Shaft, Upper Power Feed	S04097	1	
28	Nut, 5/16-18 Hex	F05010-17	4	
29	Bolt, 5/16-18 x 1 1/2" Hex Head Full Thread	F05006-2	2	
30	Bolt, 5/16-18 x 2" Hex Head Full Thread	F05006-13	1	
	Control Assembly, Power Feed/Drum Switch	A07800-W	1	

6

Power Feed & Track Rollers

Power Feed Drive Assembly

	Switch Assembly, Replacement Power Feed Drum	A07799 ⁵	1	
31	Switch, S14 Power Feed Drum	E20445	1	◆
32	Handle, Drum Switch	P12500	1	
	Decal, Forward/Reverse Switch	P08386	1	
33	Screw, #10-24 x 5/8" Hex	F05004-18 ⁶	2	
34	Washer, #10 SAE Flat	F05011-18	2	
35	Nut, #10-24 Self-Locking	F05010-14 ⁷	2	
	Instruction Sheet, Drum Switch Lubrication	A07799-416	1	
	Module Assembly, MOSFET Power	A06963	1	
	Circuit Board, Power Feed	A07751	1	
	Diode Assembly, Power Feed (Pre-92)	024756	1	
	Potentiometer, Power Feed	A07793	1	
36	Knob, Power Feed Control w/Set Screw	P06257	1	
37	Grommet, Heyco Wire	P04137	3	
	Terminal Kit, Power Feed Control Service	A12950	1	
38	Bolt, #10-24 x 1 1/4" Hex Head	F05004-19	1	
39	Bushing, Flanged Insulator	P07769	1	◆
40	Bushing, Nylon Spacer	P05694	1	◆
41	Washer, #10 SAE Flat	F05011-18	1	
42	Nut, #10-24 Self-Locking	F05010-14	1	
43	Bolt, 1/4-20 x 3/4" Hex Head Full Thread	F05005-1	1	
44	Nut, 1/4-20 Self-Locking	F05010-9	2	
45	Bolt, 1/4-20 x 1/2" Hex Head	F05005-15	2	
46	Nut, 1/4-20 Self-Locking	F05010-9	2	
47	Lid/Insulation Assembly, Control Box	A07756	1	
48	Screw, #8 x 1/2" Cross-Slotted Round Head	F05015-13	4	
49	Plate, Power Feed Control Mount	S07518	1	
50	BOLT, 3/8-16 X 3 1/2" HEX HEAD BOLT GRADE 8	F05007-6	1	
51	BOLT, 3/8-16 X 1 1/4" HEX HEAD	F05007-2	1	
52	WASHER, 3/8" SAE FLAT	F05011-3	2	
53	NUT, 3/8-16 HEX NYLON LOCK	F05010-10	2	

¹ High-Speed return parts not used Rev. B and later. [See Section 6.4](#) for high-speed return service parts.

² Motor 006877 replaces P04140 originally supplied before 1/09. Use brush kit 061794 for new motor. Motor P04140 changed by vendor 7/07. Use brush kit A09086 for original motor supplied prior to 7/07. Use brush kit 006619 for newer P09140 motor (identified by red & black motor terminal spacers). Brush Holder 034000 applies only to original P04140 motor.

³ Replaces S09579-W originally supplied (part number change only).

⁴ Use 012797 to replace P12843 or A05044 greasable rollers originally supplied.

⁵ Replaces M04237 Drum Switch originally supplied on Rev. A - C5.

⁶ Replaces F05005-15 1/4-20 x 1" Hex Bolt used to mount original drum switch supplied on Rev. A - C5.

⁷ Replaces F05010-9 1/4-20 Self-Locking Nut used to mount original drum switch supplied on Rev. A - C5.

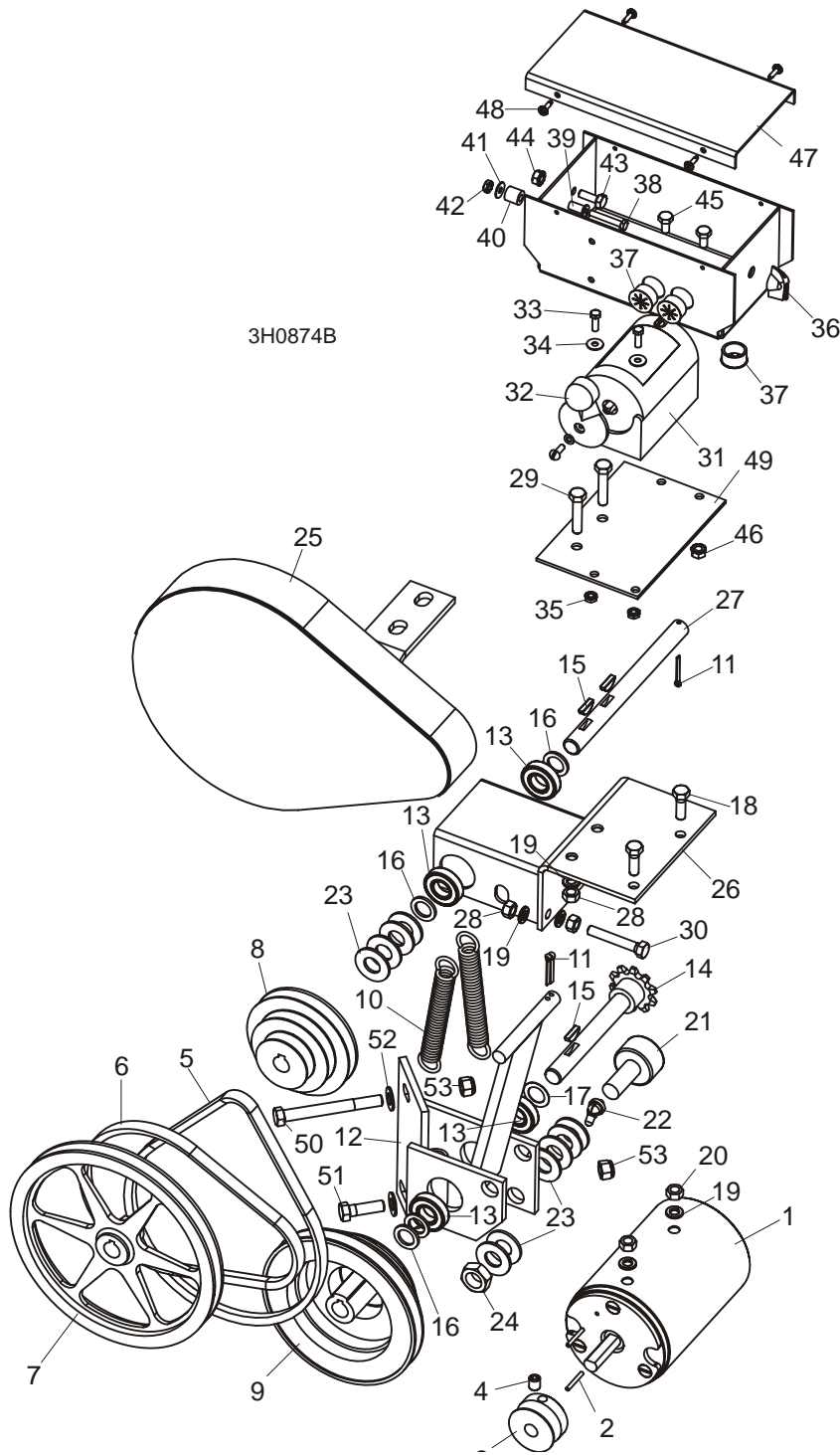


FIG. 6-3

6

Power Feed & Track Rollers

Power Feed Drive Assembly

6.4 Power Feed Drive Assembly				
LT40HD Rev. A				
REF	DESCRIPTION (◆ Indicates Parts Available In Assemblies Only)	PART #	QTY.	
	POWER FEED ASSEMBLY	A05069 ¹	1	◆
	Motor, Power Feed Replacement	A07974	1	
1	Motor, Power Feed	006877 ²	1	◆
	Brush Kit, 12V Motor (2008)	061794 ²	1	
	Brush Kit, 12V Motor (2007)	006619 ²	1	
	Brush Kit, 12V Motor	A09086 ²	1	
	Brush Holder, Motor	034000 ²	1	◆
2	Pin, 1/8" x 1" Roll	F05012-2	2	
3	Pulley, Power Feed Motor Double-Groove	S04347-W ¹	1	
4	Screw, 3/8-16 X 1/2" Cup Point Socket Set	F05007-12	1	
5	Belt, 4L280 V	P04031	1	
6	Belt, 3L290 V	P04349	1	
7	Belt, 3L320 V (High-Speed Return)	P04348 ¹	1	
8	Pulley, 8" Power Feed	P04343	1	
9	Pulley, 2-3-4 Step	P04100	1	
10	Pulley, 4-5-6 Step	P04103	1	
	Pulley Assembly, High-Speed Return	A09546 ¹	1	
11	Pulley, 4.5" O.D.	P04346	1	
12	Guard, High-Speed Return Belt	S09438	1	
13	Screw, #8 X 3/8" Self-Tapping Hex Washer Head	F05015-20	5	
	Handle Assembly, High-Speed Return	A05116 ¹	1	
14	Handle Weldment, High-Speed Return	W09007	1	◆
15	Bracket, Handle Roller Mount	W09006	1	
16	Pin, 1 1/2" Clevis	F05012-18	1	
17	Roller, Nylon	P05586	2	
18	Washer, 5/16" Standard Flat	F05011-16	1	
19	Pin, 3/32" x 3/4" Cotter	F05012-9	1	
20	Screw, 1/4-28 x 3/8" Cup Point Socket Set	F05005-24	2	
21	Ball, Plastic Round	P04211	1	
22	Spring, Power Feed (High-Speed Return)	P09591 ¹	2	
23	Pin, 1/8" x 1" Cotter	F05012-1	4	
24	Bracket, Lower Power Feed Mount (High-Speed Return)	W04093 ¹	1	
25	Bearing, R10	P04156	4	
26	Shaft, Lower Power Feed With Sprocket (High-Speed Return)	W04102 ¹	1	
27	Key, #606 Woodruff	P04101-1	4	
28	Washer, 5/8" I.D. Nylon	F05011-19	4	
29	Washer, Nylon Power Feed	S09090	1	
30	Bolt, 5/16-24 X 1" Hex Head	F05006-11	2	

31	Washer, 5/16" Split Lock	F05011-13	6	
32	Nut, 5/16-24 Hex	F05010-28	2	
33	Roller, Feed Chain	012797 ³	1	
34	Fitting, 3/16" x 45° Grease (For A05044 Greasable roller only)	P05045	1	
35	Washer, 5/8" SAE Flat	F05011-5	10	
36	Nut, 5/8-11 Hex Jam	F05010-11	1	
37	Guard, Power Feed Belt	W09015	1	
38	Bracket, Upper Power Feed Mounting	W09008	1	
39	Shaft, Upper Power Feed	S04097	1	
40	Nut, 5/16-18 Hex	F05010-17	4	
41	Bolt, 5/16-18 x 1 1/2" Hex Head Full Thread	F05006-2	2	
42	Bolt, 5/16-18 x 2" Hex Head Full Thread	F05006-13	1	
	Control Assembly, Power Feed/Drum Switch	A07800-W	1	
	Switch Assembly, Replacement Power Feed Drum	A07799 ⁴	1	
43	Switch, S14 Power Feed Drum	E20445	1	◆
44	Handle, Drum Switch	P12500	1	
	Decal, Forward/Reverse Switch	P08386	1	
45	Screw, #10-24 x 5/8" Hex	F05004-18 ⁵	2	
46	Washer, #10 SAE Flat	F05011-18	2	
47	Nut, #10-24 Self-Locking	F05010-14 ⁶	2	
	Instruction Sheet, Drum Switch Lubrication	A07799-416	1	
	Module Assembly, MOSFET Power	A06963	1	
	Circuit Board, Power Feed	A07751	1	
	Diode Assembly, Power Feed (Pre-92)	024756	1	
	Potentiometer, Power Feed	A07793	1	
48	Knob, Power Feed Control w/Set Screw	P06257	1	
49	Grommet, Heyco Wire	P04137	3	
	Terminal Kit, Power Feed Control Service	A12950	1	
50	Bolt, #10-24 x 1 1/4" Hex Head	F05004-19	1	
51	Bushing, Flanged Insulator	P07769	1	◆
52	Bushing, Nylon Spacer	P05694	1	◆
53	Washer, #10 SAE Flat	F05011-18	1	
54	Nut, #10-24 Self-Locking	F05010-14	1	
55	Bolt, 1/4-20 x 3/4" Hex Head Full Thread	F05005-1	1	
56	Nut, 1/4-20 Self-Locking	F05010-9	2	
57	Bolt, 1/4-20 x 1/2" Hex Head	F05005-15	2	
58	Nut, 1/4-20 Self-Locking	F05010-9	2	
59	Lid/Insulation Assembly, Control Box	A07756	1	
60	Screw, #8 x 1/2" Cross-Slotted Round Head	F05015-13	4	
61	Plate, Power Feed Control Mount	S07518	1	
62	BOLT, 3/8-16 X 3 1/2" HEX HEAD BOLT GRADE 8	F05007-6	1	
63	BOLT, 3/8-16 X 1 1/4" HEX HEAD	F05007-2	1	
64	WASHER, 3/8" SAE FLAT	F05011-3	2	

6

Power Feed & Track Rollers

Power Feed Drive Assembly

65	NUT, 3/8-16 HEX NYLON LOCK	F05010-10	2	
----	----------------------------	-----------	---	--

¹ Parts applicable for units equipped with high-speed return handle (Rev. A). [See Section 6.3](#) for replacement parts for Rev. B+ saw-mills.

² Motor 006877 replaces P04140 originally supplied before 1/09. Use brush kit 061794 for new motor. Motor P04140 changed by vendor 7/07. Use brush kit A09086 for original motor supplied prior to 7/07. Use brush kit 006619 for newer P09140 motor (identified by red & black motor terminal spacers). Brush Holder 034000 applies only to original motor and is no longer available (vendor discontinued 3/09).

³ Use 012797 to replace P12843 or A05044 greasable rollers originally supplied.

⁴ Replaces M04237 Drum Switch originally supplied.

⁵ Replaces F05005-15 1/4-20 x 1" Hex Bolt used to mount original drum switch originally supplied.

⁶ Replaces F05010-9 1/4-20 Self-Locking Nut used to mount original drum switch originally supplied.

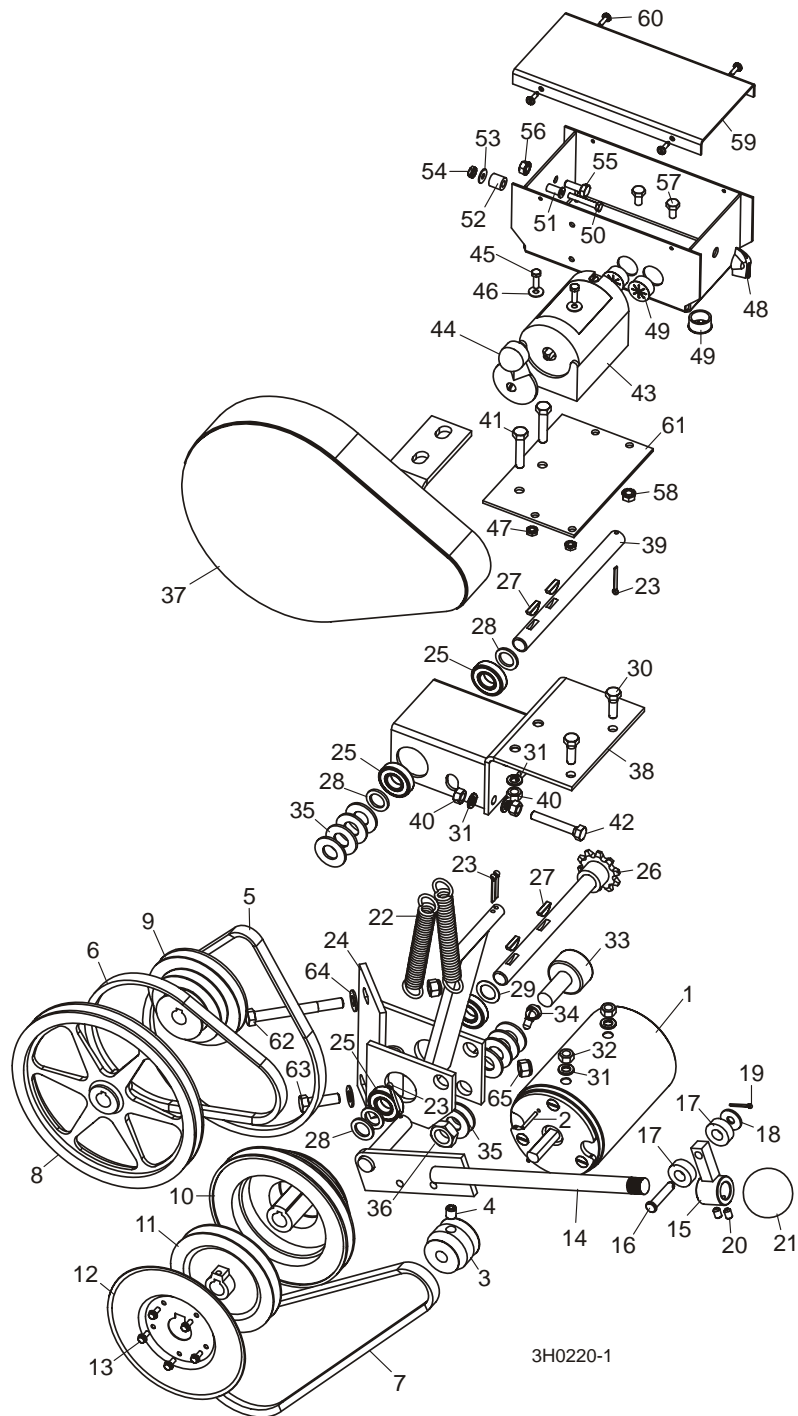


FIG. 6-4

6

Power Feed & Track Rollers

Power Feed Chain

6.5 Power Feed Chain				
	<i>LT30HD</i>	<i>Retrofit</i>		
	<i>LT40HD</i>	<i>Retrofit</i>		
REF	DESCRIPTION (◆ Indicates Parts Available In Assemblies Only)	PART #	QTY.	
1	CHAIN, #41 X 462.5" LT30 FEED	P04175 ¹	1	
	CHAIN, #41 X 567.5" LT40 FEED	P04978 ²	1	
2	LINK, #41 MASTER	P04176	1	
3	SCREW, #10-24 X 1 1/2" SOCKET HEAD	F05004-31	3	
4	WASHER, #10 SAE FLAT	F05011-18	3	
5	NUT, #10-24 SELF-LOCKING	F05010-14	3	
6	SHAFT/SPROCKET WELDMENT, LT30 FRONT POWER FEED	W04308	1	
	SHAFT/SPROCKET WELDMENT, LT40 FRONT POWER FEED	W04972	1	
	HANDLE ASSEMBLY, MANUAL FEED CRANK	A07714	1	
7	Handle Weldment, Manual Feed Crank	W04171	1	◆
8	Handle, Wood Crank	M05057	1	◆
9	Bolt, 3/8-16 x 5" Hex Head	F05007-5	1	
10	Washer, 3/8" SAE Flat Washer	F05011-3	2	
11	Nut, 3/8-16 Hex	F05010-1	2	
12	Washer, 3/8" Split Lock	F05011-4	1	
13	Bolt, 1/4-20 x 1 1/4" Hex Head Full Thread	F05005-3	1	
14	Nut, 1/4-20 Self-Locking	F05010-9	1	
15	BEARING, R10	P04156	2	
16	WASHER, 5/8" I.D. NYLON	F05011-19	4	
17	PIN, 1/8" X 1" COTTER	F05012-1	1	
	GUARD RETROFIT, POWER FEED CHAIN	K12933 ³	1	
18	Tensioner Weldment, Rear Feed Chain	W12926	1	◆
19	Bracket, Rear Tensioner Guard	S12928	1	
20	Screw, 1/2-20 x 3/4" Wing	F05004-59	1	
21	Decal, Chain Guard Danger	S12957	1	
22	Washer, 1/2" Split Lock	F05011-9	2	
23	Nut, 1/2-13 Hex	F05010-35 ⁴	2	
24	Washer, 5/16" Split Lock	F05011-13	3	
25	Bolt, 5/16-18 x 3/4" Hex Head	F05006-5	3	
26	Guard, Front Feed Chain Sprocket	W12929	1	◆
	Instruction Sheet, Feed Chain Guard Retrofit	K12933-261	1	
	Drill Bit, .261" "G"	P12935	1	
	Tap, 5/16-18	P12946	1	
	CHAIN RETROFIT, POWER FEED STATIONARY	K09622 ⁵	1	
27	Shaft, Feed Chain Mount	W09618	1	
28	Collar, 5/8" I.D. Lock	P05035	1	
29	Bearing, R10	P04156	2	
30	Link, #41 Master	P04176	2	

31	Rod, Rear Feed Chain 1/2-20 Tensioner	S09569 ⁶	1	
32	Washer, 1/2" Split Lock	F05011-9	2	
33	Nut, 1/2-20 Hex Jam	F05010-16	2	
	Instruction Sheet, Stationary Chain Retrofit	K09622-243	1	
34	CHAIN, #40 X 232.5" LT30 FEED	P09575	1	
	CHAIN, #40 X 284.5" LT40 FEED	P09574	1	
	LINK, #40 MASTER	P04200	2	

¹ Use P09575 #40 x 232.5" Chain if feed chain is retrofitted to stationary type chain. [See Item 34](#). Two P04200 #40 Master Links also required.

² Use P09574 #40 x 284.5" Chain if feed chain is retrofitted to stationary type chain. [See Item 34](#). Two P04200 #40 Master Links also required.

³ Guard kit available to retrofit all sawmills with original loop-style feed chain.

⁴ Use F05010-16 1/2-20 Hex Jam Nut if tensioner rod retrofitted with S09569 1/2-20 Tensioner Rod. [See Item 31](#).

⁵ Kit replaces loop-style feed chain, front and rear sprockets originally supplied. Solid-state power feed control required.

⁶ Replaces S09615 1/2-13 Tensioner Rod originally supplied. Requires two F05010-16 1/2-20 Jam Nuts.

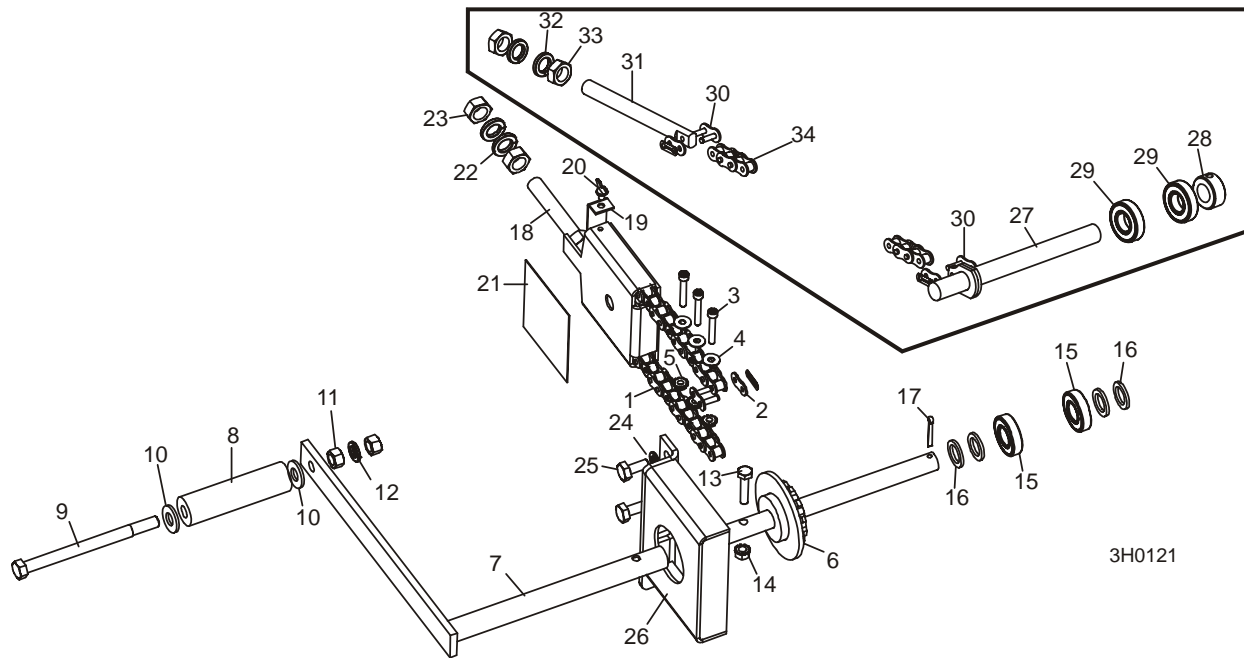


FIG. 6-5

6

Power Feed & Track Rollers

Power Feed Chain

6.6 Power Feed Chain				
<i>LT40HD Rev. A</i>				
REF	DESCRIPTION (◆ Indicates Parts Available In Assemblies Only)	PART #	QTY.	
1	CHAIN, #41 X 567.5" LT40HD FEED	P04978 ¹	1	
2	LINK, #41 MASTER	P04176	1	
3	SCREW, #10-24 X 1 1/2" SOCKET HEAD	F05004-31	3	
4	WASHER, #10 SAE FLAT	F05011-18	3	
5	NUT, #10-24 SELF-LOCKING	F05010-14	3	
6	TENSIONER, REAR SPROCKET CHAIN	W09021 ²	1	◆
7	WASHER, 1/2" SPLIT LOCK	F05011-9	2	
8	NUT, 1/2-13 HEX	F05010-35 ³	2	
9	SHAFT/SPROCKET WELDMENT, FRONT POWER FEED	W04972	1	
	HANDLE ASSEMBLY, MANUAL FEED CRANK	A07714	1	
10	Handle Weldment, Manual Feed Crank	W04171	1	◆
11	Handle, Wood Crank	M05057	1	◆
12	Bolt, 3/8-16 x 5" Hex Head	F05007-5	1	
13	Washer, 3/8" SAE Flat Washer	F05011-3	2	
14	Nut, 3/8-16 Hex	F05010-1	2	
15	Washer, 3/8" Split Lock	F05011-4	1	
16	Bolt, 1/4-20 x 1 1/4" Hex Head Full Thread	F05005-3	1	
17	Nut, 1/4-20 Self-Locking	F05010-9	1	
18	BEARING, R10	P04156	2	
19	WASHER, 5/8" I.D. NYLON	F05011-19	4	
20	PIN, 1/8" X 1" COTTER	F05012-1	1	
	CHAIN RETROFIT, POWER FEED STATIONARY	K09622 ⁴	1	
21	Shaft, Feed Chain Mount	W09618	1	
22	Collar, 5/8" I.D. Lock	P05035	1	
23	Bearing, R10	P04156	2	
24	Link, #41 Master	P04176	2	
25	Rod, Rear Feed Chain 1/2-20 Tensioner	S09569 ⁵	1	
26	Washer, 1/2" Split Lock	F05011-9	2	
27	Nut, 1/2-20 Hex Jam	F05010-16	2	
	Instruction Sheet, Stationary Chain Retrofit	K09622-243	1	
28	CHAIN, #40 X 284.5" LT40HD FEED	P09574	1	
	LINK, #40 MASTER	P04200	2	

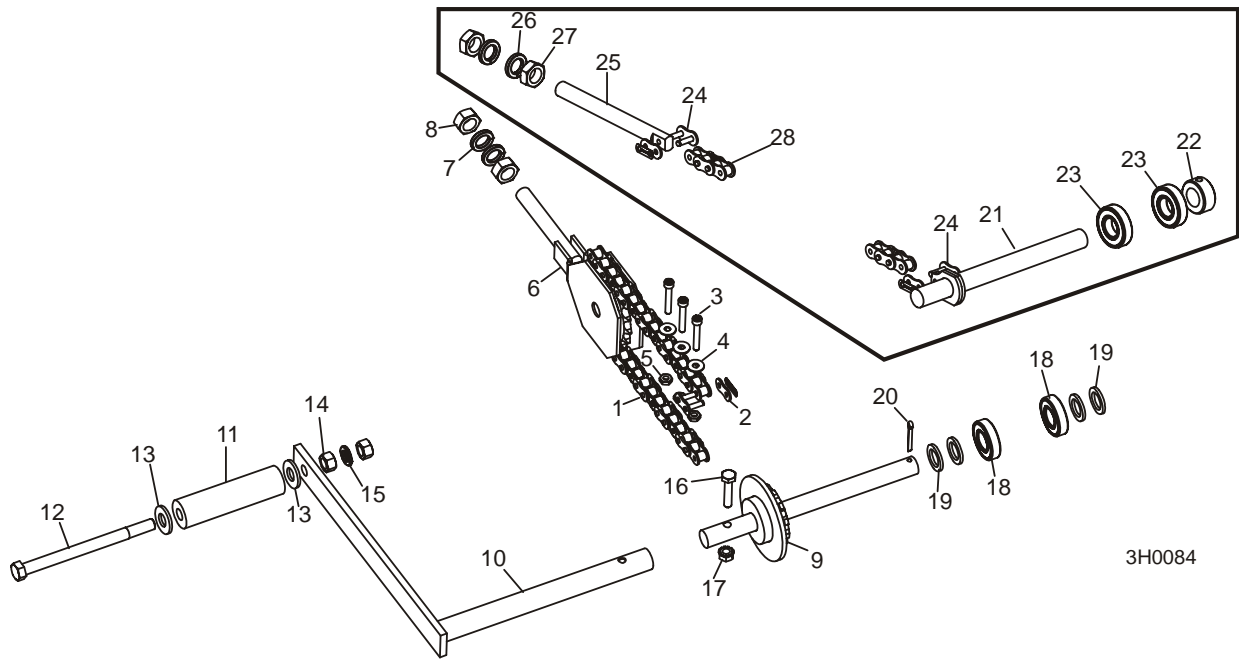
¹ Use P09574 #40 x 284.5" Chain if feed chain is retrofitted to stationary type. [See Item 28](#). Two P04200 #40 Master Links also required.

² Rear tensioner W09021 replaced by guarded tensioner in retrofit K12933. [See Section 6.5](#).

³ Use F05010-16 1/2-20 Hex Jam Nut if tensioner rod retrofitted with S09569 1/2-20 Tensioner Rod. [See Item 27](#).

⁴ Kit replaces loop-style feed chain, front and rear sprockets originally supplied on Rev. A.

⁵ Replaces S09615 1/2-13 Tensioner Rod originally supplied. Requires two F05010-16 1/2-20 Jam Nuts.



3H0084

FIG. 6-6

6

Power Feed & Track Rollers

Power Feed Chain

6.7 Power Feed Chain				
<i>LT30HD</i>		<i>Rev. C3 - C6</i>		
<i>LT40HD</i>		<i>Rev. B - C6</i>		
REF	DESCRIPTION (◆ Indicates Parts Available In Assemblies Only)	PART #	QTY.	
	CHAIN KIT, LT30 FEED	K10408 ¹	1	◆
	CHAIN KIT, LT40 FEED	K10410 ¹	1	◆
1	Chain, #40 X 232.5" LT30HD Feed	P09575 ²	1	
	Chain, #40 X 284.5" LT40HD Feed	P09574 ²	1	
2	Link, #40 Master	P04200 ³	2	
3	Rod, Feed Chain Tension	S09569	1	
4	Nut, 1/2-20 Hex Jam	F05010-16	2	
5	Washer, 1/2" Split Lock	F05011-9	2	
	STOP KIT, RUBBER CARRIAGE	K09630 ⁴	1	
6	Stop, Rubber Carriage	P12165 ⁵	1	◆
7	Pin, Rubber Carriage Stop	W09293	1	
8	Pin, 3/16" X 1" Cotter	F05012-21	1	

¹ Kits modified and no longer service '87 model sawmills. Use component parts for service.

² Replaces #41 chain originally supplied.

³ Use P04176 #41 master link for feed chain originally supplied.

⁴ For Rev. AM - C6 Only.

⁵ Replaces two P05032 rubber stops originally supplied.

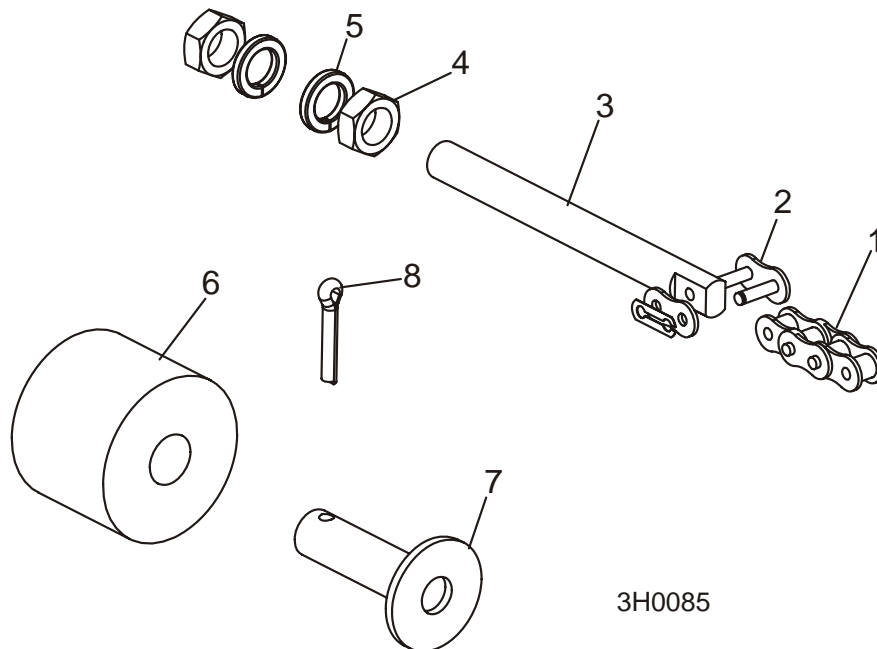


FIG. 6-7

SECTION 7 BED FRAME ASSEMBLY

7.1 Bed Rail Assembly, Front And Rear				
REF	DESCRIPTION (◆ Indicates Parts Available In Assemblies Only)	PART #	QTY.	
	BED RAIL ASSEMBLY, FRONT/REAR PAINTED	A09774	2	
1	Bed Rail Tube, Long	S09102 ¹	1	◆
2	Pin, Ramp Mount	S04030	1	
3	Block, Log Stop	S09034	1	
	Bolt Assembly, Bed Rail	A09775	2	◆
4	Nut, 5/8-11 Hex	F05010-54	21	
5	Bolt, 5/8-11 X 2 1/2" Hex Head Full Thread	F05009-12	21	
	BED RAIL ASSEMBLY, FRONT PAINTED	A09564	1	
1	Bed Rail Tube, Long	S09102 ¹	1	◆
2	Pin, Ramp Mount	S04030	1	
3	Block, Log Stop	S09034	1	
	Tube, Ramp Retainer Mount	S09334	1	◆
	Bolt Assembly, Bed Rail	A09775	2	◆
4	Nut, 5/8-11 Hex	F05010-54	2	
5	Bolt, 5/8-11 X 2 1/2" Hex Head Full Thread	F05009-12	1	
6	BOLT, 1/2-13 X 4" HEX HEAD	F05008-26	4	
7	WASHER, 1/2" SAE FLAT	F05011-2	8	
8	NUT, 1/2-13 NYLON LOCK	F05010-8	4	
	COVER ASSEMBLY, STAINLESS STEEL BED RAIL (LONG)	A09956 ²	2	
9	Cover, Stainless Steel Bed Rail	S09944	1	◆
10	Bolt, 5/16-18 X 2 1/2" Hex Head	F05006-10	3	
11	Nut, 5/16-18 Hex Lock	F05010-6	3	

¹ Replaces S09102-W for all mills.

² Rail covers longer than those originally supplied on Rev. A - AP. Additional mounting hole should be drilled through bed rail tube.

7

Bed Frame Assembly

Bed Rail Assembly, Front And Rear

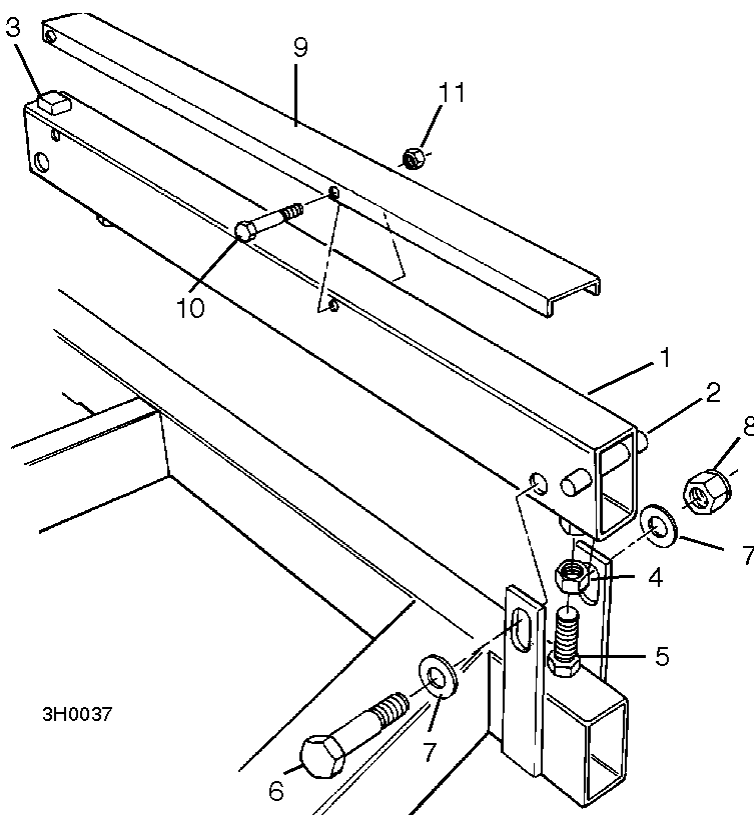
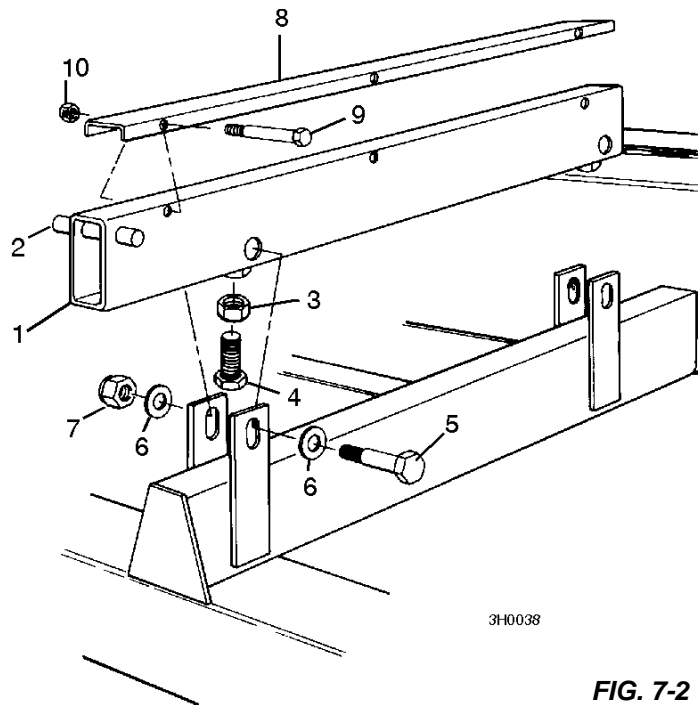


FIG. 7-1

7.2 Bed Rail Assembly, Middle

REF	DESCRIPTION (◆ Indicates Parts Available In Assemblies Only)	PART #	QTY.	
	BED RAIL ASSEMBLY, FRONT/REAR MIDDLE PAINTED	A09566	2	
1	Bed Rail Tube, Short	S09103	1	◆
2	Pin, Ramp Mount	S04030	1	
	Bolt Assembly, Bed Rail	A09775	2	◆
3	Nut, 5/8-11 Hex	F05010-54	2	
4	Bolt, 5/8-11 X 2 1/2" Hex Head Full Thread	F05009-12	2	
	BED RAIL ASSEMBLY, REAR MIDDLE PAINTED	A09565	1	
1	Bed Rail Tube, Short	S09103	1	◆
2	Pin, Ramp Mount	S04030	1	
	Tube, Ramp Retainer Mount	S09334	1	◆
	Bolt Assembly, Bed Rail	A09775	2	◆
3	Nut, 5/8-11 Hex	F05010-54	2	
4	Bolt, 5/8-11 X 2 1/2" Hex Head Full Thread	F05009-12	2	
5	BOLT, 1/2-13 X 4" HEX HEAD	F05008-26	4	
6	WASHER, 1/2" SAE FLAT	F05011-2	8	
7	NUT, 1/2-13 NYLON LOCK	F05010-8	4	
	COVER ASSEMBLY, STAINLESS STEEL BED RAIL (LONG)	A09956 ¹	2	
8	Cover, Stainless Steel Bed Rail	S09944	1	◆
9	Bolt, 5/16-18 X 2 1/2" Hex Head	F05006-10	3	
10	Nut, 5/16-18 Hex Lock	F05010-6	3	

¹ Rail covers longer than those originally supplied on Rev. A - AP. Additional mounting hole should be drilled through bed rail tube.



7

Bed Frame Assembly

Pivot Bed Rail Assembly

7.3 Pivot Bed Rail Assembly				
REF	DESCRIPTION (◆ Indicates Parts Available In Assemblies Only)	PART #	QTY.	
	PIVOT BED RAIL COMPLETE KIT	K06897	2	
	Pivot Bed Rail Assembly	A09435	1	◆
1	Pivot Bed Rail Weldment	W09320	1	◆
2	Bolt, 1/2-13 X 2 1/4" Hex Head Full Thread	F05008-2	1	
3	Washer, 1/2" Split Lock	F05011-9	1	
4	Nut, 1/2-13 Hex	F05010-35	1	
	Bag Assembly, Pivot Bed Rail	A06893	1	◆
5	Screw, 1/2-13 X 1" Socket Head Oval Point	F05008-9	1	
6	Screw, 1/2-13 X 1 1/2" Socket Head Flat Point	F05008-31	3	
7	Nut, 1/2-13 Hex Jam	F05010-31	3	
	Instruction Sheet, Pivot Bed Rail	K06897-270	1	
8	Bolt, 3/8-16 X 5" Hex Head	F05007-5	4	
9	Nut, 3/8-16 Nylon Lock	F05010-10	4	
	COVER ASSEMBLY, STAINLESS STEEL PIVOT BED RAIL	A09609	2	
10	Cover, Stainless Steel Pivot Bed Rail (Short)	S09252	1	◆
11	Bolt, 5/16-18 X 2 1/2" Hex Head	F05006-10	2	
12	Nut, 5/16-18 Hex Lock	F05010-6	2	

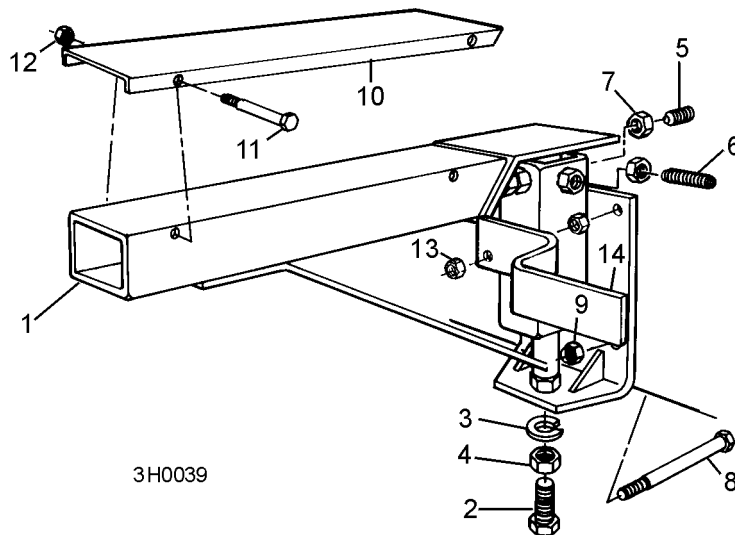


FIG. 7-3

7.4 Log Side Support Assembly (Manual)				
REF	DESCRIPTION (◆ Indicates Parts Available In Assemblies Only)	PART #	QTY.	
1	SUPPORT, LOG SIDE	015235 ¹	2	
	MOUNTING KIT, LOG SIDE SUPPORT	K09440	2	
2	Pin, Log Side Support Pivot	W09238	1	
3	Bolt, 1/4-20 X 1 1/2" Hex Head	F05005-5	2	
4	Washer, 1/4" SAE Flat	F05011-11	4	
5	Nut, 1/4-20 Self Locking	F05010-9	2	
6	Plate, Log Side Support Clamping	S09224	2	
7	Fitting, 3/16" Grease	P04107	1	
8	Plate, Log Side Support End	S09148	1	
9	Bolt, 1/2-13 X 3 1/2" Hex Head	F05008-15	2	
10	Washer, 1/2" SAE Flat	F05011-2	3	
11	Nut, 1/2-13 Hex Nylon Lock	F05010-8	3	
12	Bolt, 1/2-13 X 1 1/2" Hex Head	F05008-4	1	

¹ Replaces W12566 or unpainted W09401 originally supplied. Side support redesigned for added strength.

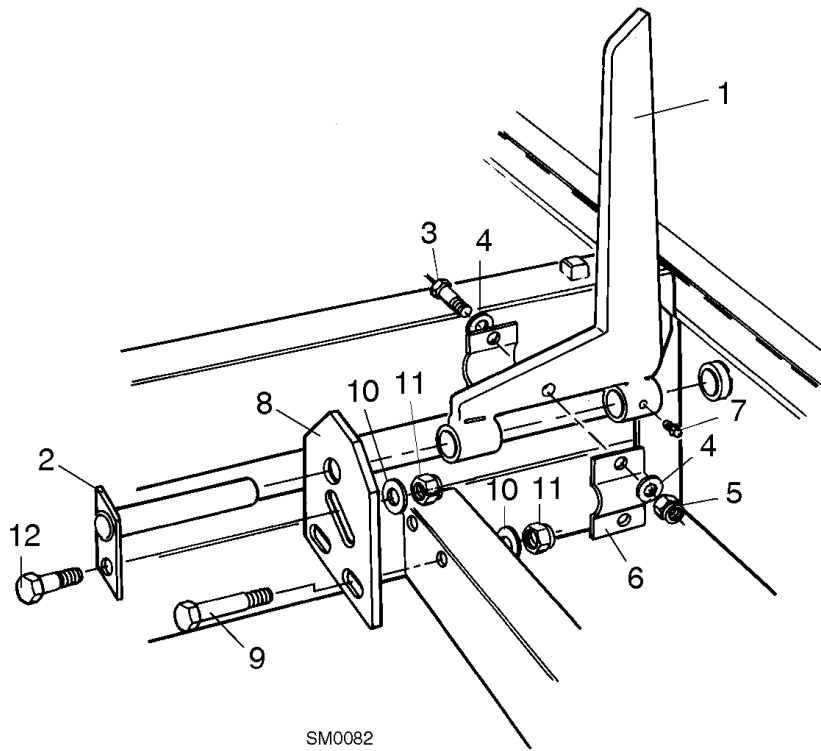


FIG. 7-4

7

Bed Frame Assembly

Leg, Stationary

7.5 Leg, Stationary

REF	DESCRIPTION (◆ Indicates Parts Available In Assemblies Only)	PART #	QTY.
1	LEG, LONG STATIONARY	W09513	3 ¹
2	BOLT, 3/8-16 X 5" HEX HEAD GRADE 2	F05007-5	8
	BOLT, 3/8-16 X 1" HEX HEAD GRADE 2	F05007-7	4 ²
3	NUT, 3/8-16 HEX NYLON LOCK	F05010-10	12 ²
4	LEG, SHORT STATIONARY	W09515	2
5	BOLT, 3/8-16 X 1" HEX HEAD GRADE 2	F05007-7	8
6	NUT, 3/8-16 HEX NYLON LOCK	F05010-10	8
7	LEG, FRONT STATIONARY	W09517	1
8	BOLT, 5/8-11 X 5 1/2" HEX HEAD GRADE 5	F05009-11	2
9	NUT, 5/8-11 HEX LOCK	F05010-4	2

¹ Two legs originally supplied. One leg may be added at the rear of the sawmill for additional support when cutting long logs.

² Four nuts & bolts used to mount optional rear leg.

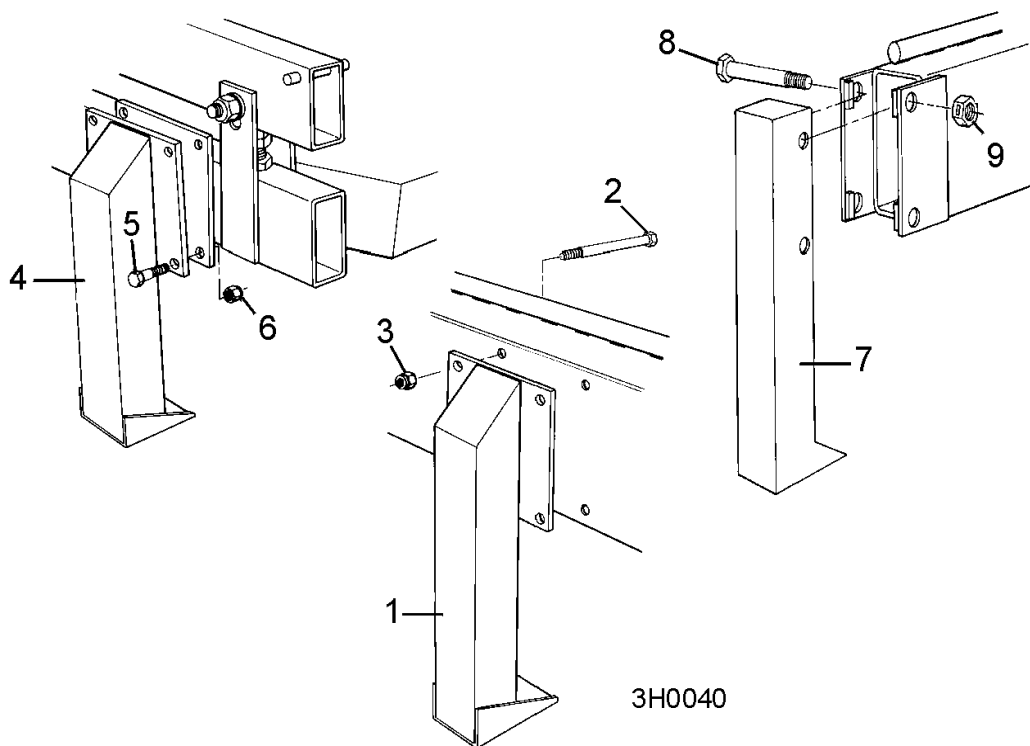


FIG. 7-5

7.6 Manual Toe Board				
<i>LT40HD Rev. A - AL</i>				
REF	DESCRIPTION (◆ Indicates Parts Available In Assemblies Only)	PART #	QTY.	
	TOE BOARD KIT, MANUAL	TB-A ¹	1	
	Toe Board, Front Manual	A09306	1	
	Shaft Assembly, Manual Toe Board	A09490	1	
1	Shaft, Toe Board	W09289	1	◆
2	Collar, 5/8" I.D.	S09561	1	
3	Block, Toe Board Shaft Pivot	S09168	1	
4	Bearing, 5/8" Thrust	P04214	1	
5	Spacer, 5/8" I.D. x 3/4" O.D. x .945 Bronze	P09130	1	
6	Pin, 3/16" x 1 1/4" Roll	F05012-16	3	
7	Plate, Front Toe Board	W09491	1	
8	Block, Manual Toe Board Threaded Trunnion	S04427	1	
	Toe Board, Rear Manual	A09307	1	
	Shaft Assembly, Manual Toe Board	A09490	1	
9	Shaft, Toe Board	W09289	1	◆
10	Collar, 5/8" I.D.	S09561	1	
11	Block, Toe Board Shaft Pivot	S09168	1	
12	Bearing, 5/8" Thrust	P04214	1	
13	Spacer, 5/8" I.D. x 3/4" O.D. x .945 Bronze	P09130	1	
14	Pin, 3/16" x 1 1/4" Roll	F05012-16	3	
15	Plate, Rear Toe Board	W09492	1	
16	Block, Manual Toe Board Threaded Trunnion	S04427	1	
	Handle Assembly, Manual Toe Board Crank	A09432	2	
17	Handle, Manual Toe Board Crank	W09431	1	◆
18	Handle, Crank	060170 ²	1	
19	Screw, 3/8-16 x 2 1/2" Socket Head Cap	F05007-24	1	
20	Nut, 3/8-16 Hex	F05010-1	2	
21	Washer, 3/8" Split Lock	F05011-4	1	
22	Ring, 7/8" O.D. Retaining	F04254-7	2	
23	Pin, 3/16" x 1" Roll	F05012-11	4	
	Instruction Sheet, Manual Toe Board Installation ('87 + Model Mills)	TB-237A	1	

¹ See [Section 8.21](#) for hydraulic toe boards standard on sawmills after Rev. AL.

² Replaces S08291-W originally supplied.

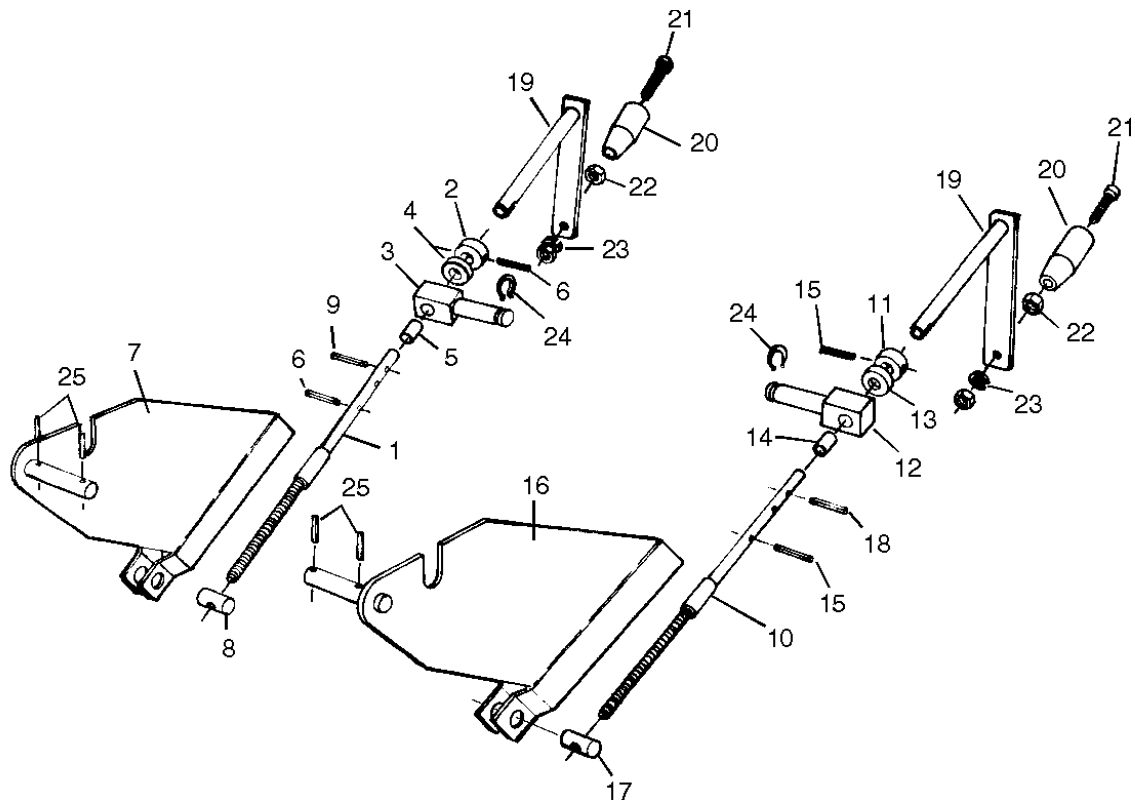


FIG. 7-6

SECTION 8 HYDRAULIC SYSTEM

8.1 Hydraulic Hoses					
COLOR	LENGTH "A"	DESCRIPTION (◆ Indicates Parts Available In Assemblies Only)	PART #	QTY.	
Brown	22"	TOE BOARD RETURN	P12534 ¹	2	
Gold	45"	LOG TURNER CYLINDER BASE	P12536 ²	1	
Grey	45"	LOG TURNER CYLINDER TOP	P12536 ²	1	
Bright Yellow	85"	FRONT TOE BOARD (LT30HD)	P12540	1	
	108"	FRONT TOE BOARD (LT40HD)	P12542 ³	1	
Silver	151"	SIDE SUPPORT CYLINDER BASE (LT30HD)	P12545	1	
	173"	SIDE SUPPORT CYLINDER BASE (LT40HD)	P12549 ⁴	1	
White	151"	CLAMP CYLINDER TOP (LT30HD)	P12545	1	
	173"	CLAMP CYLINDER TOP (LT40HD)	P12549 ⁴	1	
Orange	151"	CLAMP CYLINDER BASE (LT30HD)	P12545	1	
	173"	CLAMP CYLINDER BASE (LT40HD)	P12549 ⁴	1	
Plain	159"	SIDE SUPPORT CYLINDER TOP (LT30HD)	P12547	1	
	186" ⁵	SIDE SUPPORT CYLINDER TOP (LT40HD)	P12550 ⁶	1	
Black	173"	REAR TOE BOARD (LT30HD)	P12549 ⁴	1	
	208" ⁵	REAR TOE BOARD (LT40HD)	P12551 ⁷	1	
Dark Green	52"	LOADING ARM BRANCH TOP	P12537 ⁸	2	
Dark Yellow	55" ⁵	LOADING ARM BRANCH BASE	P12538 ⁹	2	
Blue	151"	LOADING ARM CYLINDER TOP (LT30HD)	P12545	1	
	173"	LOADING ARM CYLINDER TOP (LT40HD)	P12549 ⁴	1	
Red	151"	LOADING ARM CYLINDER BOTTOM (LT30HD)	P12545	1	
	173"	LOADING ARM CYLINDER BOTTOM (LT40HD)	P12549 ⁴	1	

¹ Replaces A09799 hose. Hydraulic toe boards standard on Rev. AM+ only.

² Replaces A09282 hose.

³ Replaces A09796 hose.

⁴ Replaces A09279 hose. Hydraulic toe boards standard on Rev. AM+ only.

⁵ Hose longer than hose originally supplied. Longer hose is interchangeable.

⁶ Replaces A09278 hose.

⁷ Replaces A09797 hose. Hydraulic toe boards standard on Rev. AM+ only.

⁸ Replaces A09281 hose.

⁹ Replaces A09280 hose.

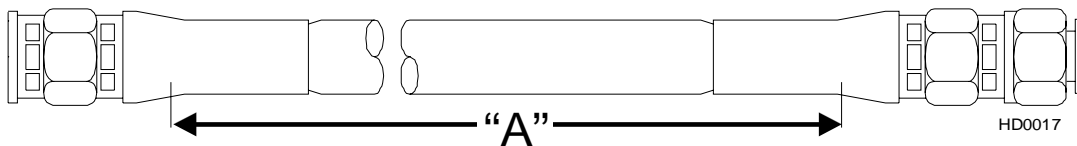


FIG. 8-1

8

Hydraulic System

Hydraulic Control Box

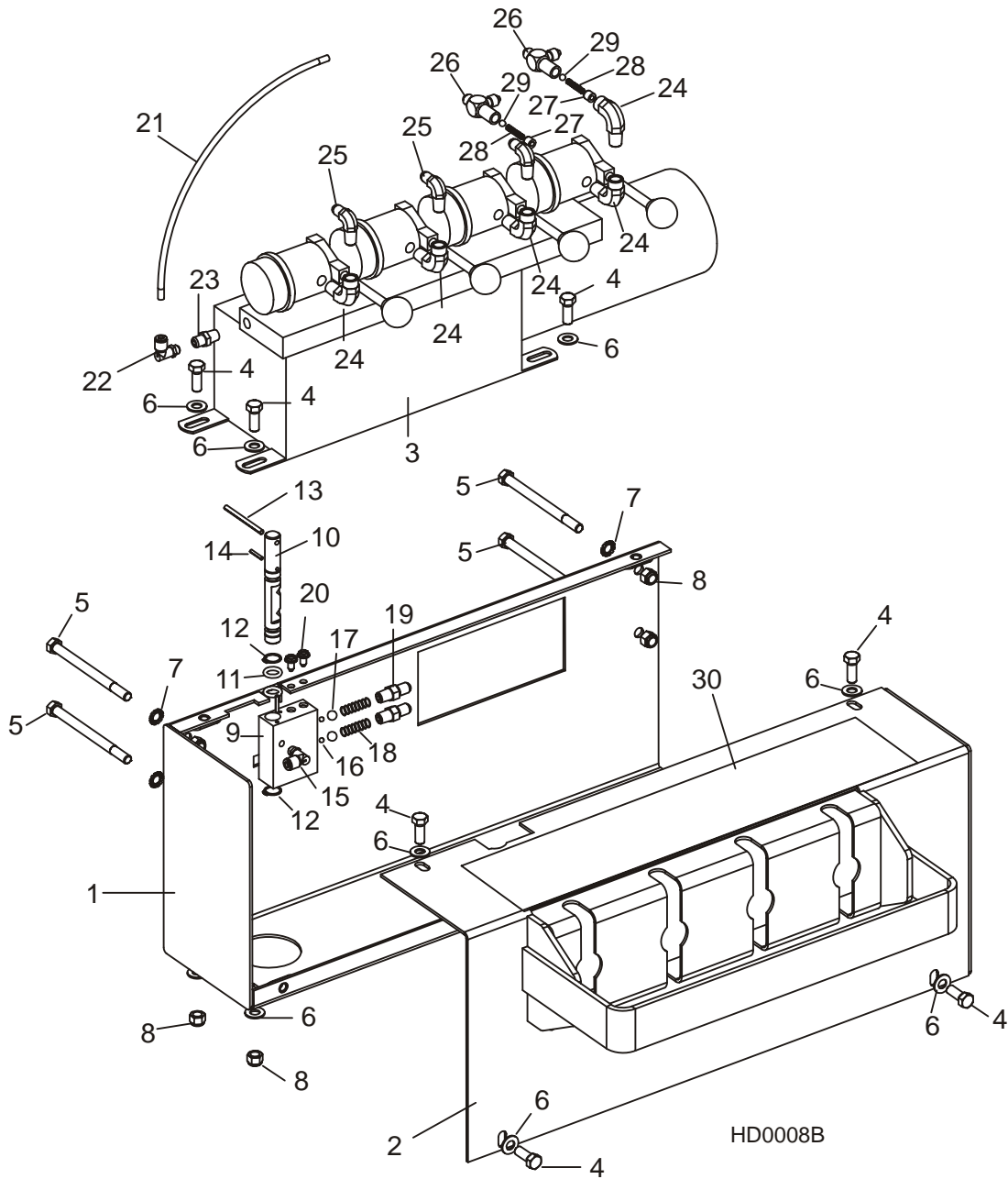
8.2 Hydraulic Control Box

LT30HD
LT40HD

Rev. C5 - C6
Rev. C5 - C6

REF	DESCRIPTION (◆ Indicates Parts Available In Assemblies Only)	PART #	QTY.	
1	BOX, HYDRAULIC PUMP HOUSING	W10164	1	
2	COVER, HYDRAULIC PUMP HOUSING	W10169	1	
3	PUMP, FOUR 4-WAY VALVE HYDRAULIC (See Section 8.3 Hydraulic Pump/Valve For Pump Detail)	P10371	1	
4	BOLT, 3/8-16 X 1" HEX HEAD GRADE 5	F05007-87	7	
5	BOLT, 3/8-16 X 5" HEX HEAD GRADE 2	F05007-5	4	
6	WASHER, 3/8" SAE FLAT	F05011-3	10	
7	WASHER, 3/8" EXTERNAL STAR LOCK	F05011-36	4	
8	NUT, 3/8-16 HEX NYLON LOCK	F05010-10	7	
	VALVE ASSEMBLY, HYDRAULIC TOE BOARD RELEASE	A09680	1	
9	Block, Toe Board Release Valve	S09681-W	1	◆
10	Spool, Toe Board Release Valve	S09682-W	1	◆
11	O-Ring, Hydraulic Toe Board Release Valve	P09685	2	
12	Ring, 5/8" Shaft #5100-62	F04254-2	2	
13	Pin, 3/16" X 2 1/2" Roll	F05012-27	1	
14	Pin, 1/8" X 3/4" Roll	F05012-6	3	
15	Fitting, 90° Elbow 1/8" NPT X 1/4" Tube	P09736	1	
16	Ball, 3/16" Diameter Steel	P09744	2	◆
17	Ball, 3/8" Diameter Steel	P09133	2	◆
18	Spring, Toe Board Release Valve	P09135	2	◆
19	Fitting, C5205 X 4 X 4 Male	P09143	2	
20	SCREW, 1/4-20 X 1/2" SLOTTED HEX HEAD	F05015-1	2	
21	HOSE, TOE BOARD RETURN	S09798	1	
22	FITTING, 90° ELBOW 1/8" NPT X 1/4" TUBE	P09736	1	
23	FITTING, 1/4" NPT TO 1/8" REDUCER	P10373	1	
24	FITTING, C3409X4 90° STREET ELBOW	P09139	5	
25	FITTING, 90° MALE ELBOW	P09142	3	
	VALVE, TOE BOARD CHECK 'T'	A11687 ¹	2	
26	Body, Tapped Check Valve	S11688-W	1	◆
27	Seat, Brass Check Valve	S11689-W	1	◆
28	Spring, Check Valve	P11690	1	◆
29	Ball, 1/4" Hardened Steel	P11691	2	◆
30	DECAL, HYDRAULIC CONTROL BOX 4-HANDLE	S11760	1	

¹ Replaces P10359 originally supplied until 3/91.



8 Hydraulic System

Hydraulic Pump/Valve

8.3 Hydraulic Pump/Valve					
LT30HD		Rev. C5 - C6			
LT40HD		Rev. C5 - C6			
REF	DESCRIPTION (◆ Indicates Parts Available In Assemblies Only)	MONARCH PART #	PART #	QTY.	
	PUMP, FOUR 4-WAY VALVE HYDRAULIC	#02414	P10371	1	
1	Valve Assembly, 4-Way Monarch (Toe Board)	#00647	P11581	1	
2	Electrical Parts Kit, Hydraulic Pump Valve	#03721	P09593	1	
3	Spring, Hydraulic Pump Valve Contact	#00188	P09846	1	
4	O-ring, Hydraulic Pump Valve Cover	#02354	P09592	1	
5	Valve Assembly, 4-Way Monarch	#00524	P10143	3	
6	Electrical Parts Kit, Hydraulic Pump Valve	#03721	P09593	1	
7	Spring, Hydraulic Pump Valve Contact	#00188	P09846	1	
8	O-ring, Hydraulic Pump Valve Cover	#02354	P09592	1	
9	Handle Assembly, Hydraulic Pump Valve	#00172	P09594	4	
10	Spring, Hydraulic Pump Valve Handle	#00018	P09753	4	
11	Solenoid, 12 VDC 3 Post Insulated Ground	#3301	P09595 ¹	1	
	Motor Kit, Hydraulic Replacement	N/A	052807	1	
12	Motor, 12 VDC Hydraulic Pump #08714 (Iskra)	#08714	038683 ²	1	◆
	Brush Kit, 4-Valve Hydraulic Pump Motor #08658-I (Iskra)	#08658-I	038682 ²	1	
	Brush Kit, 4-Valve Hydraulic Pump Motor #08658	#08658	P09585 ²	1	◆
	Field Kit, 4-Valve Hydraulic Pump Motor	#08618	P09584 ³	1	◆
	Bearing, Base Motor #02318	#02318	P12513	1	
	Wire Assembly, Motor Brush Ground	N/A	052806 ⁴	1	
13	Cap, Hydraulic Pump Vented Fill	#01143	P09596	1	
14	O-ring, Hydraulic Pump/Reservoir	#02352	P10198	1	
15	Seal, Hydraulic Pump/Motor	#02330	P10315	1	
16	Pump, Hydraulic Replacement	#02414	P10392	1	
	WASHER KIT, HYDRAULIC MOTOR THRUST		P12275 ⁵	1	

¹ Flat base solenoid #3301 replaces curved base solenoid #03336. Solenoid bracket may be bent to fit mount on motor.

² Bosch motor P09955 replaced by vendor with Iskra motor 1/06. Brush kit P09585 no longer available to service Bosch motor. Replace motor using kit 052807. Use Brush Kit 038682 to service Iskra motor. Replaces Monarch #08111 originally supplied before 8/94.

³ Part no longer available. Replace entire motor (retro kit 052807).

⁴ Brush Ground Wire 052806 added 7/06 to improve ground connection. Kit 052805 to be supplied to all customers who purchased sawmills with Iskra pump motors after 1/06. Kit includes wire, hardware and instructions.

⁵ Kit contains one .010" Steel Thrust Washer, two .020" Fiber Thrust Washers, and four .050" Fiber Thrust Washers for use in adjusting drive motor end-play.

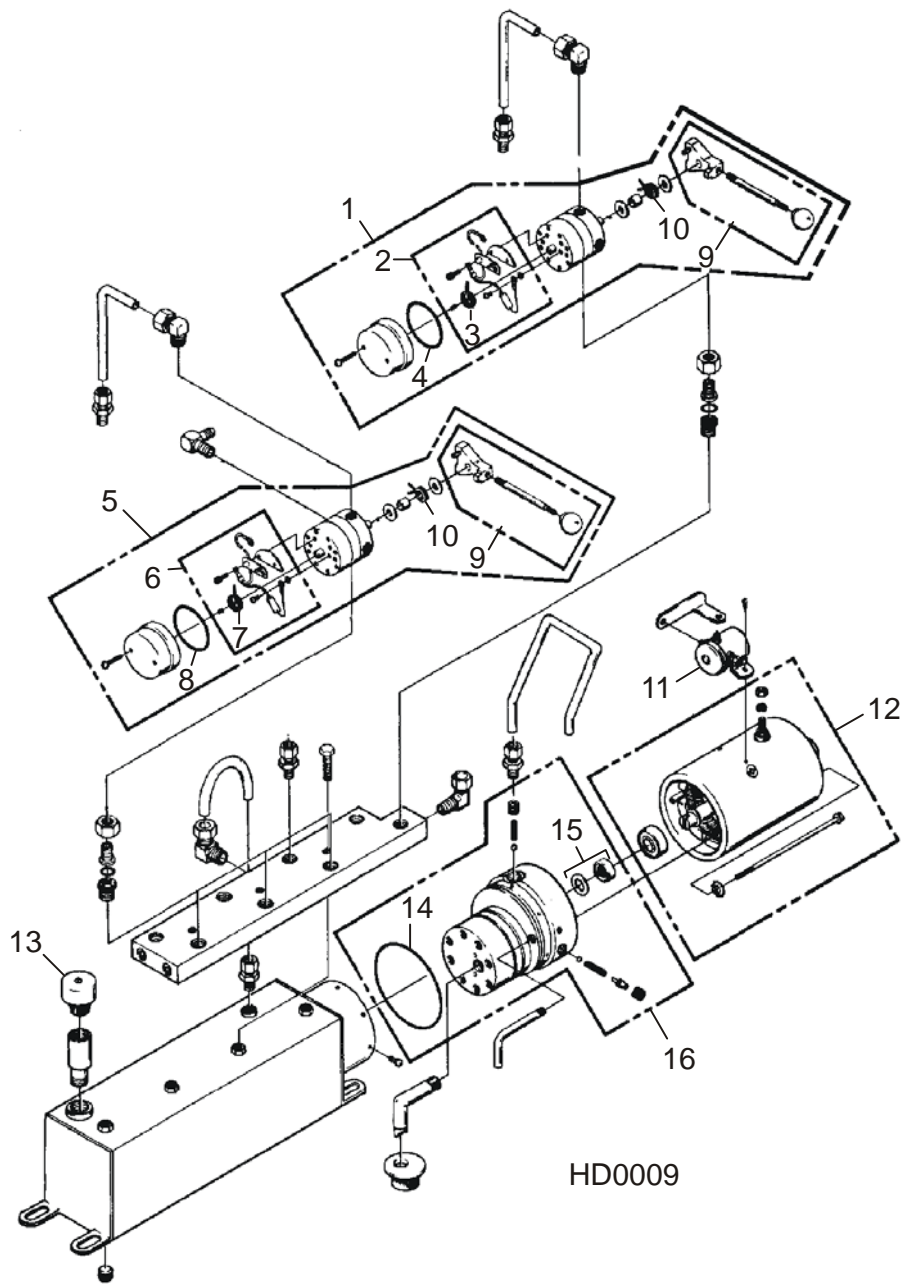


FIG. 8-2

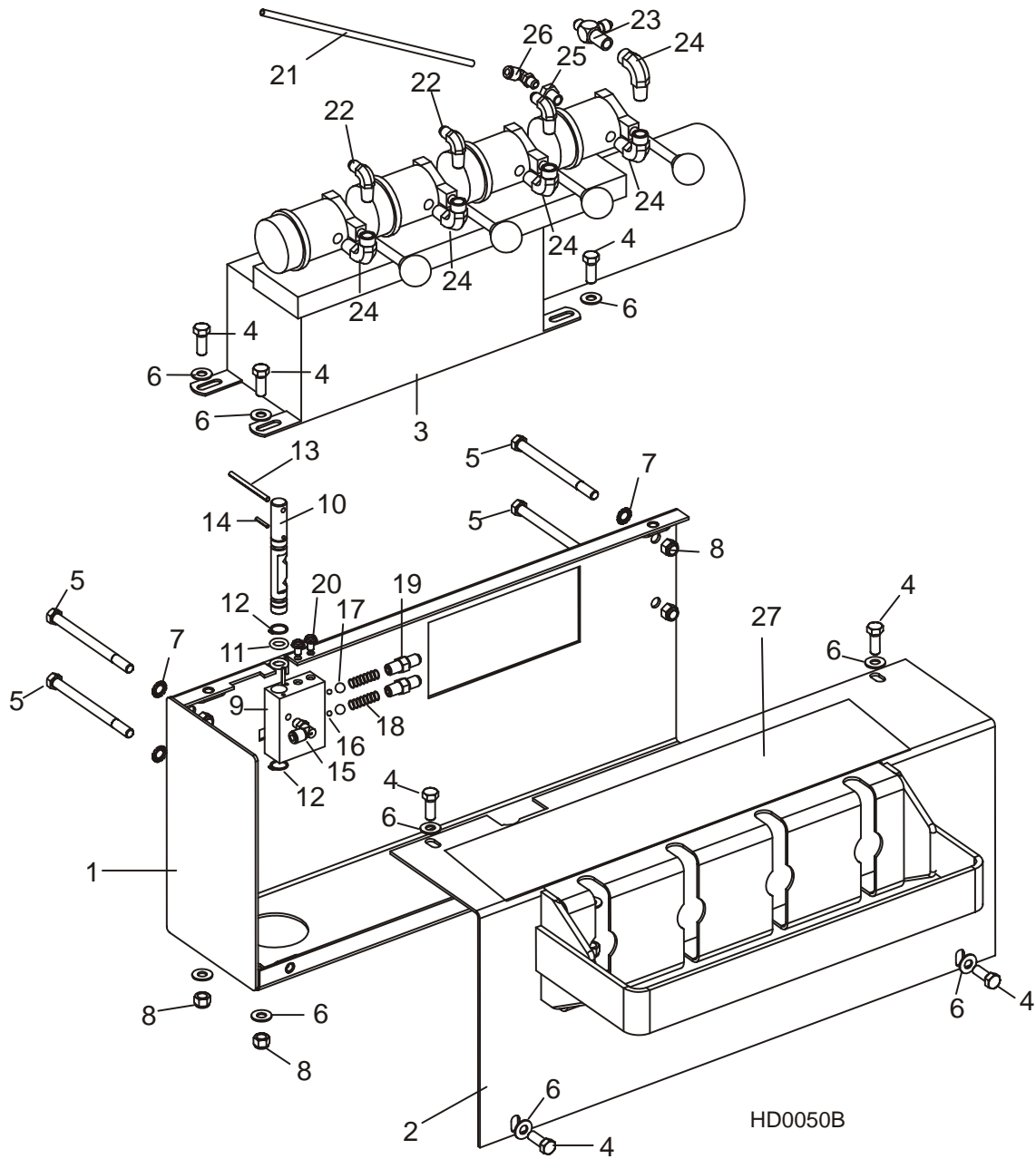
8

Hydraulic System

Hydraulic Control Box

8.4 Hydraulic Control Box				
LT30HD		Rev. C3 - C4		
LT40HD		Rev. B8 (12/89+) - C4		
REF	DESCRIPTION (◆ Indicates Parts Available In Assemblies Only)	PART #	QTY.	
1	BOX, HYDRAULIC PUMP HOUSING	W10164	1	
2	COVER, HYDRAULIC PUMP HOUSING	W10169	1	
3	PUMP, EXTENDED VALVE HYDRAULIC (See Section 8.5 Hydraulic Pump/Valve For Pump Detail)	P10160 ¹	1	◆
4	BOLT, 3/8-16 X 1" HEX HEAD GRADE 5	F05007-87	7	
5	BOLT, 3/8-16 X 5" HEX HEAD GRADE 2	F05007-5	4	
6	WASHER, 3/8" SAE FLAT	F05011-3	10	
7	WASHER, 3/8" EXTERNAL STAR LOCK	F05011-36	4	
8	NUT, 3/8-16 HEX NYLON LOCK	F05010-10	7	
	VALVE ASSEMBLY, HYDRAULIC TOE BOARD RELEASE	A09680	1	
9	Block, Toe Board Release Valve	S09681-W	1	◆
10	Spool, Toe Board Release Valve	S09682-W	1	◆
11	O-Ring, Hydraulic Toe Board Release Valve	P09685	2	
12	Ring, 5/8" Shaft #5100-62	F04254-2	2	
13	Pin, 3/16" X 2 1/2" Roll	F05012-27	1	
14	Pin, 1/8" X 3/4" Roll	F05012-6	3	
15	Fitting, 90° Elbow 1/8" NPT X 1/4" Tube	P09736	1	
16	Ball, 3/16" Diameter Steel	P09744	2	◆
17	Ball, 3/8" Diameter Steel	P09133	2	◆
18	Spring, Toe Board Release Valve	P09135	2	◆
19	Fitting, C5205 X 4 X 4 Male	P09143	2	
20	SCREW, 1/4-20 X 1/2" SLOTTED HEX HEAD	F05015-1	2	
21	HOSE, TOE BOARD RETURN	S09798	1	
22	FITTING, 90° MALE ELBOW	P09142	3	
23	FITTING, C5755X4X4X4 MALE 'T'	P09738	1	
24	FITTING, C3409X4 90° STREET ELBOW	P09139	5	
25	FITTING, 3/8" NPT TO 1/8" REDUCER	P09737	1	
26	FITTING, 90° ELBOW 1/8" NPT X 1/4" TUBE	P09736	1	
27	DECAL, HYDRAULIC CONTROL BOX 4-HANDLE	S11760	1	

¹ Replace pump with P10371 Four 4-Way Valve Pump. Also requires two A11687 check valves and one P10373 1/8" NPT to 1/4" NPT reducer fitting. See Section 8.2 Hydraulic Control Box.



8.5 Hydraulic Pump/Valve					
LT30HD		Rev. C3 - C4			
LT40HD		Rev. B8 (12/89+) - C4			
REF	DESCRIPTION (◆ Indicates Parts Available In Assemblies Only)	MONARCH PART #	PART #	QTY.	
	PUMP, FOUR VALVE HYDRAULIC EXTENDED MANIFOLD		P10160 ¹	1	◆
1	Valve Assembly, 3-Way Monarch (Toe Board)	#00522	P09634 ²	1	
2	Electrical Parts Kit, Hydraulic Pump Valve	#03721	P09593	1	
3	Spring, Hydraulic Pump Valve Contact	#00188	P09846	1	
4	O-ring, Hydraulic Pump Valve Cover	#02354	P09592	1	
5	Valve Assembly, 4-Way Monarch	#00524	P10143	3	
6	Electrical Parts Kit, Hydraulic Pump Valve	#03721	P09593	1	
7	Spring, Hydraulic Pump Valve Contact	#00188	P09846	1	
8	O-ring, Hydraulic Pump Valve Cover	#02354	P09592	1	
9	Handle Assembly, Hydraulic Pump Valve	#00172	P09594	4	
10	Spring, Hydraulic Pump Valve Handle	#00018	P09753	4	
11	Solenoid, 12 VDC 3 Post Insulated Ground	#3301	P09595 ³	1	
	Motor Kit, Hydraulic Replacement	N/A	052807	1	
12	Motor, 12 VDC Hydraulic Pump #08714 (Iskra)	#08714	038683 ⁴	1	◆
	Brush Kit, 4-Valve Hydraulic Pump Motor #08658-I (Iskra)	#08658-I	038682 ⁴	1	
	Brush Kit, 4-Valve Hydraulic Pump Motor #08658	#08658	P09585 ⁴	1	◆
	Field Kit, 4-Valve Hydraulic Pump Motor	#08618	P09584 ⁵	1	◆
	Bearing, Base Motor #02318	#02318	P12513	1	
	Wire Assembly, Motor Brush Ground	N/A	052806 ⁶	1	
13	Cap, Hydraulic Pump Vented Fill	#01143	P09596	1	
14	O-ring, Hydraulic Pump/Reservoir	#02352	P10198	1	
15	Seal, Hydraulic Pump/Motor	#02330	P10315	1	
16	Pump, Hydraulic Replacement	#02414	P10392	1	
	WASHER KIT, HYDRAULIC MOTOR THRUST		P12275 ⁷	1	

¹ Replace pump with P10371 Four 4-Way Valve Pump. Also requires two A11687 check valves and one P10373 1/8" NPT to 1/4" NPT reducer fitting. [See Section 8.2 Hydraulic Control Box.](#)

² Use P11581 4-Way Valve if pump upgraded to P10371. [See Section 8.3 Hydraulic Pump/Valve.](#)

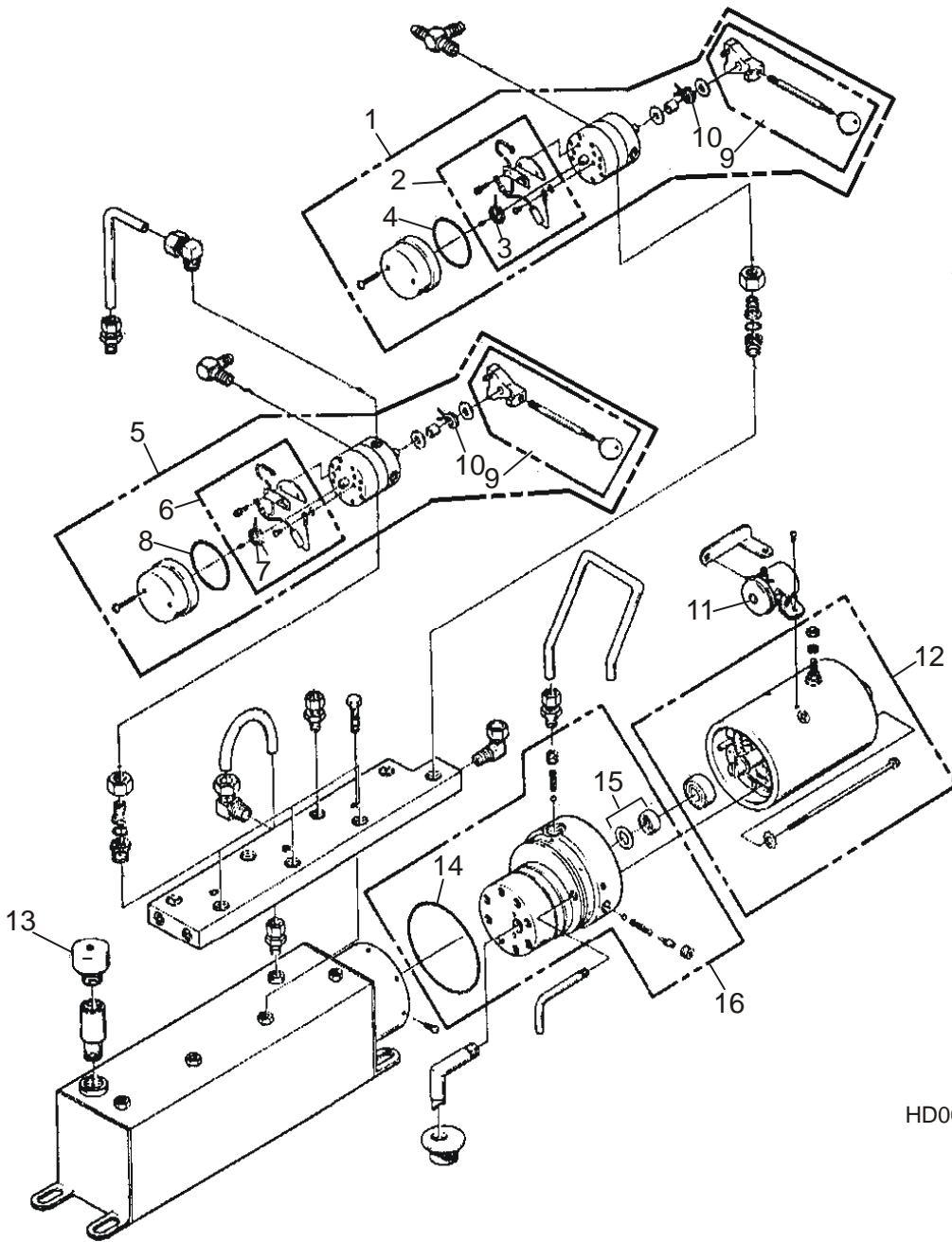
³ Flat base solenoid #3301 replaces curved base solenoid #03336. Solenoid bracket may be bent to fit mount on motor.

⁴ Bosch motor P09955 replaced by vendor with Iskra motor 1/06. Brush kit P09585 no longer available to service Bosch motor. Replace motor using kit 052807. Use Brush Kit 038682 to service Iskra motor. Replaces Monarch #08111 originally supplied before 8/94.

⁵ Part no longer available. Replace entire motor (retro kit 052807).

⁶ Brush Ground Wire 052806 added 7/06 to improve ground connection. Kit 052805 to be supplied to all customers who purchased sawmills with Iskra pump motors after 1/06. Kit includes wire, hardware and instructions.

⁷ Kit contains one .010" Steel Thrust Washer, two .020" Fiber Thrust Washers, and four .050" Fiber Thrust Washers for use in adjusting drive motor end-play.



HD0051

FIG. 8-3

8

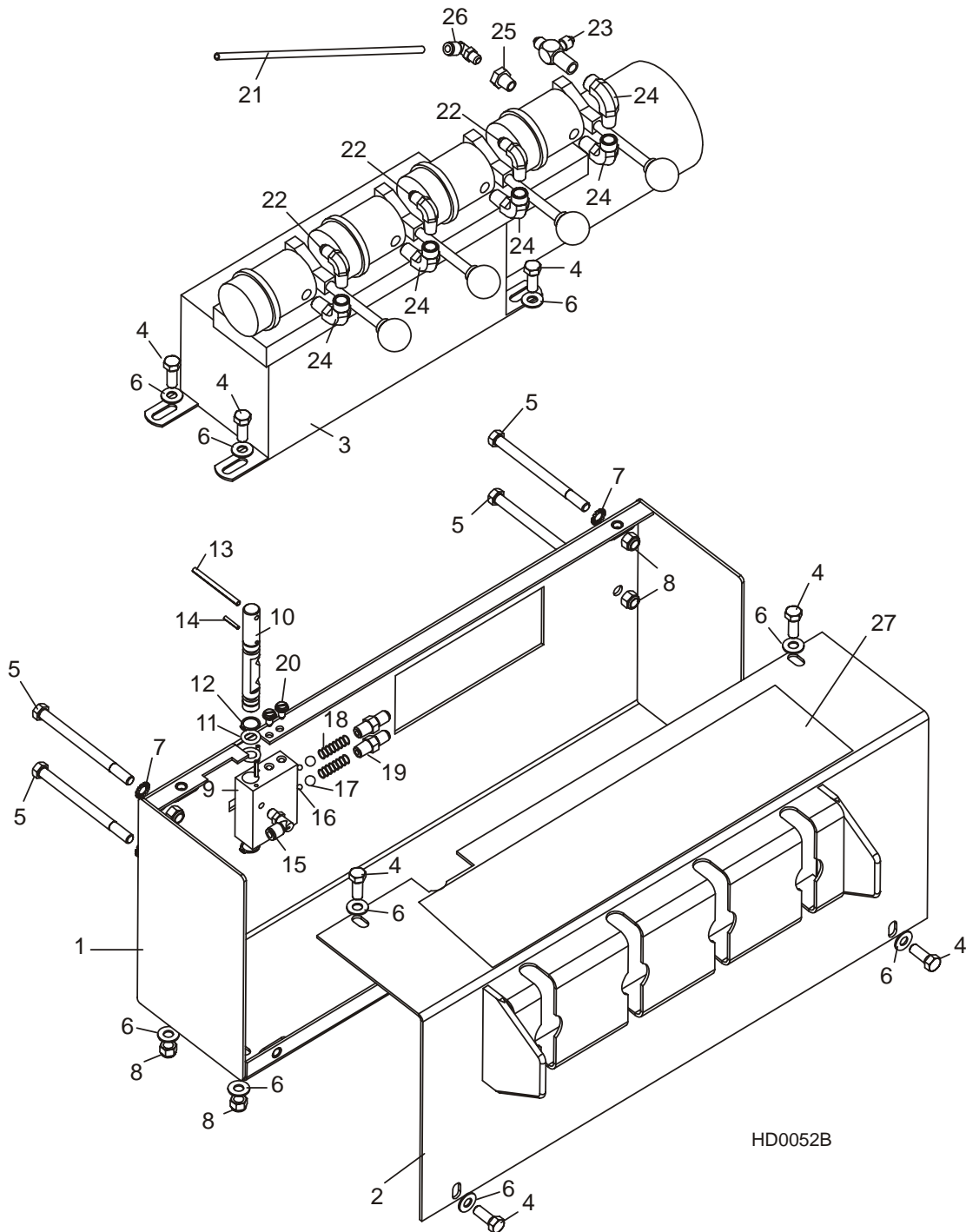
Hydraulic System

Hydraulic Control Box

8.6 Hydraulic Control Box				
<i>LT40HD Rev. AM - B8 (12/89-)</i>				
REF	DESCRIPTION (◆ Indicates Parts Available In Assemblies Only)	PART #	QTY.	
1	BOX, HYDRAULIC PUMP HOUSING	W09297 ¹	1	
2	COVER, HYDRAULIC PUMP HOUSING	W09299 ¹	1	
3	PUMP, FOUR VALVE HYDRAULIC (See Section 8.7 Hydraulic Pump/Valve For Pump Detail)	P09695 ²	1	◆
4	BOLT, 3/8-16 X 1" HEX HEAD GRADE 5	F05007-87	7	
5	BOLT, 3/8-16 X 5" HEX HEAD GRADE 2	F05007-5	4	
6	WASHER, 3/8" SAE FLAT	F05011-3	10	
7	WASHER, 3/8" EXTERNAL STAR LOCK	F05011-36	4	
8	NUT, 3/8-16 HEX NYLON LOCK	F05010-10	7	
	VALVE ASSEMBLY, HYDRAULIC TOE BOARD RELEASE	A09680	1	
9	Block, Toe Board Release Valve	S09681-W	1	◆
10	Spool, Toe Board Release Valve	S09682-W	1	◆
11	O-Ring, Hydraulic Toe Board Release Valve	P09685	2	
12	Ring, 5/8" Shaft #5100-62	F04254-2	2	
13	Pin, 3/16" X 2 1/2" Roll	F05012-27	1	
14	Pin, 1/8" X 3/4" Roll	F05012-6	3	
15	Fitting, 90° Elbow 1/8" NPT X 1/4" Tube	P09736	1	
16	Ball, 3/16" Diameter Steel	P09744	2	◆
17	Ball, 3/8" Diameter Steel	P09133	2	◆
18	Spring, Toe Board Release Valve	P09135	2	◆
19	Fitting, C5205 X 4 X 4 Male	P09143	2	
20	SCREW, 1/4-20 X 1/2" SLOTTED HEX HEAD	F05015-1	2	
21	HOSE, TOE BOARD RETURN	S09798	1	
22	FITTING, 90° MALE ELBOW	P09142	3	
23	FITTING, C5755X4X4X4 MALE 'T'	P09738	1	
24	FITTING, C3409X4 90° STREET ELBOW	P09139	5	
25	FITTING, 3/8" NPT TO 1/8" REDUCER	P09737	1	
26	FITTING, 90° ELBOW 1/8" NPT X 1/4" TUBE	P09736	1	
27	DECAL, HYDRAULIC CONTROL BOX 4-HANDLE	S11760	1	

¹ Hydraulic pump housing box (W09297) and cover (W09299) no longer available (11/89). Use hydraulic pump housing box (W10164) and cover (W10169) to service.

² Pump assembly not available. Use component parts to service ([See Section 8.7](#)) or upgrade to extended manifold pump, housing, and cover.



HD0052B

FIG. 8-4

8 Hydraulic System

Hydraulic Pump/Valve

8.7 Hydraulic Pump/Valve					
<i>LT40HD Rev. AM - B8 (12/89-)</i>					
REF	DESCRIPTION (◆ Indicates Parts Available In Assemblies Only)	MONARCH PART #	PART #	QTY.	
	PUMP, FOUR VALVE HYDRAULIC		P09695 ¹	1	
1	Valve Assembly, 3-Way Monarch (Toe Board)	#00522	P09634 ²	1	
2	Electrical Parts Kit, Hydraulic Pump Valve	#03721	P09593	1	
3	Spring, Hydraulic Pump Valve Contact	#00188	P09846	1	
4	O-ring, Hydraulic Pump Valve Cover	#02354	P09592	1	
5	Valve Assembly, 4-Way Monarch	#00524	P10143	3	
6	Electrical Parts Kit, Hydraulic Pump Valve	#03721	P09593	1	
7	Spring, Hydraulic Pump Valve Contact	#00188	P09846	1	
8	O-ring, Hydraulic Pump Valve Cover	#02354	P09592	1	
9	Handle Assembly, Hydraulic Pump Valve	#00172	P09594	4	
10	Spring, Hydraulic Pump Valve Handle	#00018	P09753	4	
11	Solenoid, 12 VDC 3 Post Insulated Ground	#3301	P09595 ³	1	
	Motor Kit, Hydraulic Replacement	N/A	052807	1	
12	Motor, 12 VDC Hydraulic Pump #08714 (Iskra)	#08714	038683 ⁴	1	◆
	Brush Kit, 4-Valve Hydraulic Pump Motor #08658-I (Iskra)	#08658-I	038682 ⁴	1	
	Brush Kit, 4-Valve Hydraulic Pump Motor #08658	#08658	P09585 ⁴	1	◆
	Field Kit, 4-Valve Hydraulic Pump Motor	#08618	P09584 ⁵	1	◆
	Bearing, Base Motor #02318	#02318	P12513	1	
	Wire Assembly, Motor Brush Ground	N/A	052806 ⁶	1	
13	Cap, Hydraulic Pump Vented Fill	#01143	P09596	1	
14	O-ring, Hydraulic Pump/Reservoir	#02352	P10198	1	
15	Seal, Hydraulic Pump/Motor	#02330	P10315	1	
16	Pump, Hydraulic Replacement	#02414	P10392	1	
	WASHER KIT, HYDRAULIC MOTOR THRUST		P12275 ⁷	1	

¹ Not available. Use component parts to service or upgrade to extended manifold pump, housing, and cover. [See Section 8.2 Hydraulic Control Box.](#)

² Use P11581 4-Way Valve if pump upgraded to P10371. [See Section 8.3 Hydraulic Pump/Valve.](#)

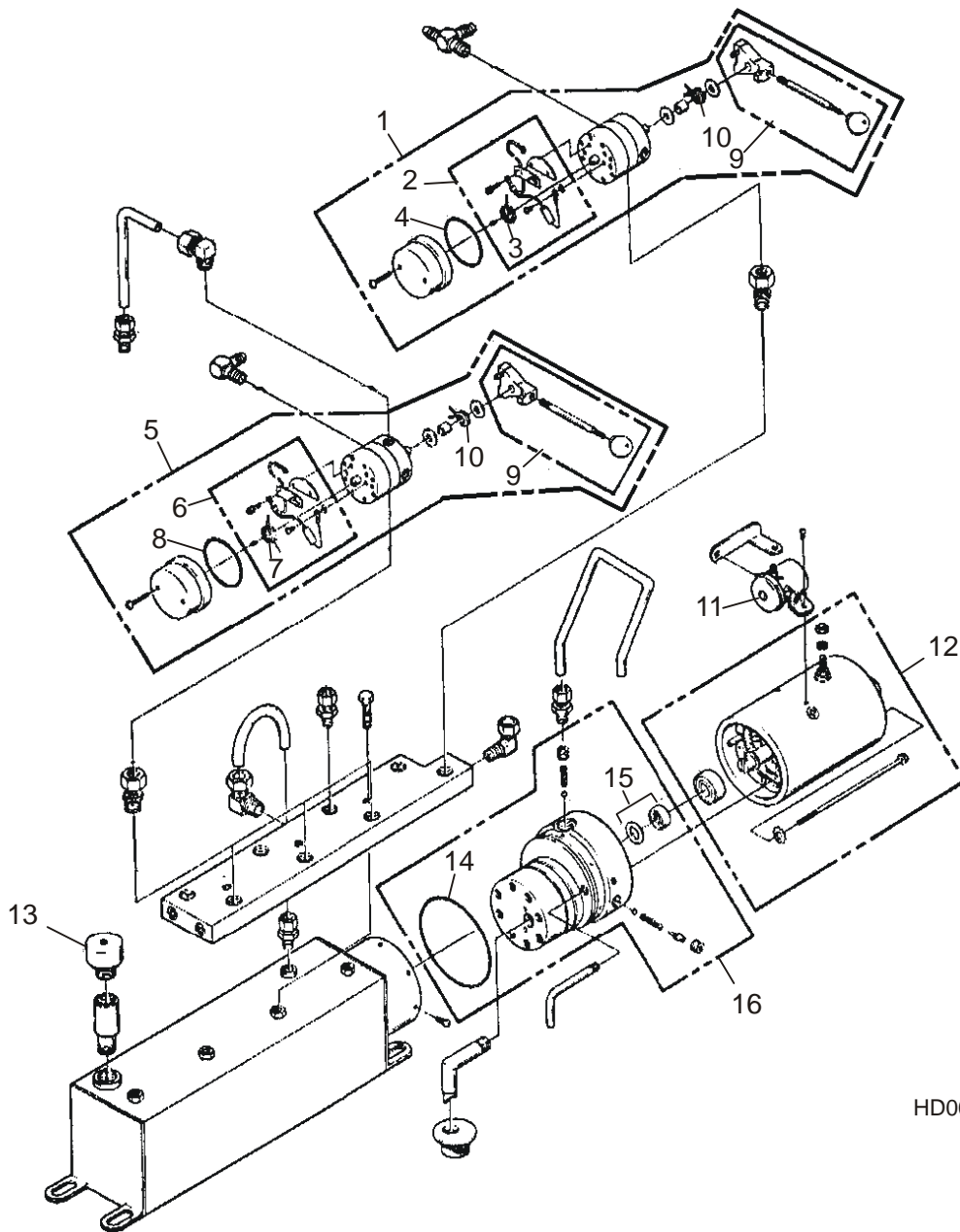
³ Flat base solenoid #3301 replaces curved base solenoid #03336. Solenoid bracket may be bent to fit mount on motor.

⁴ Bosch motor P09955 replaced by vendor with Iskra motor 1/06. Brush kit P09585 no longer available to service Bosch motor. Replace motor using kit 052807. Use Brush Kit 038682 to service Iskra motor. Replaces Monarch #08111 originally supplied before 8/94.

⁵ Part no longer available. Replace entire motor (Retro Kit 052807).

⁶ Brush Ground Wire 052806 added 7/06 to improve ground connection. Kit 052805 to be supplied to all customers who purchased sawmills with Iskra pump motors after 1/06. Kit includes wire, hardware and instructions.

⁷ Kit contains one .010" Steel Thrust Washer, two .020" Fiber Thrust Washers, and four .050" Fiber Thrust Washers for use in adjusting drive motor end-play.



HD0053

FIG. 8-5

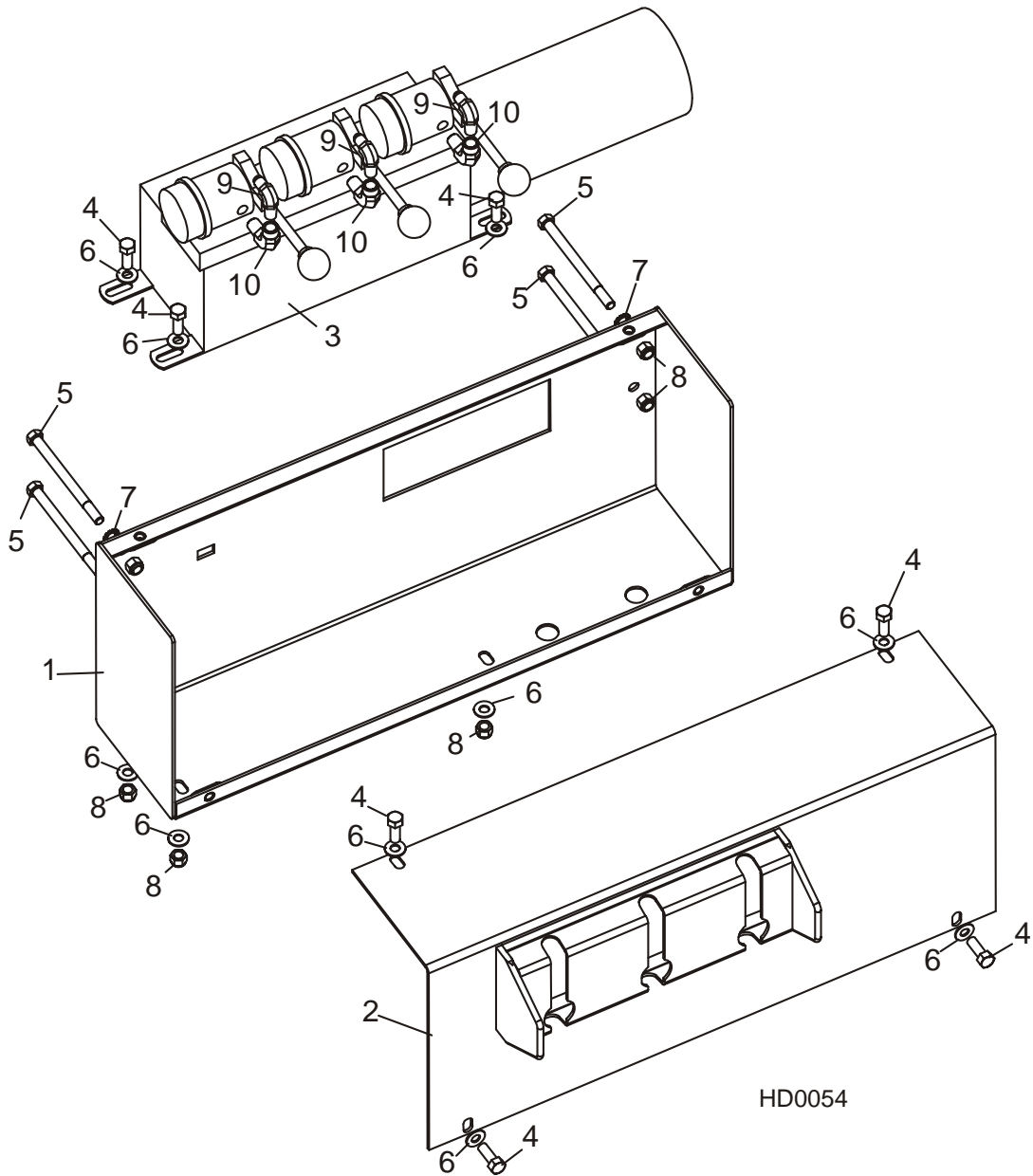
8

Hydraulic System

Hydraulic Control Box

8.8 Hydraulic Control Box				
<i>LT40HD Rev. A - AL</i>				
REF	DESCRIPTION (◆ Indicates Parts Available In Assemblies Only)	PART #	QTY.	
1	BOX, HYDRAULIC PUMP HOUSING	W09297 ¹	1	
2	COVER, HYDRAULIC PUMP HOUSING	W09299 ¹	1	
3	PUMP, THREE VALVE HYDRAULIC (See Section 8.9 Hydraulic Pump/Valve For Pump Detail)	P09122	1	
4	BOLT, 3/8-16 X 1" HEX HEAD GRADE 5	F05007-87	7	
5	BOLT, 3/8-16 X 5" HEX HEAD GRADE 2	F05007-5	4	
6	WASHER, 3/8" SAE FLAT	F05011-3	10	
7	WASHER, 3/8" EXTERNAL STAR LOCK	F05011-36	4	
8	NUT, 3/8-16 HEX NYLON LOCK	F05010-10	7	
9	FITTING, 90° MALE ELBOW	P09142	3	
10	FITTING, C3409X4 90° STREET ELBOW	P09139	5	

¹ Housing and lid changed from 3-slot to 4-slot to accommodate toe board handle. Hydraulic pump housing box (W09297) and cover (W09299) no longer available (11/89). Use hydraulic pump housing box (W10164) and cover (W10169) to service.



8 Hydraulic System

Hydraulic Pump/Valve

8.9 Hydraulic Pump/Valve					
<i>LT40HD Rev. A - AL</i>					
REF	DESCRIPTION (◆ Indicates Parts Available In Assemblies Only)	MONARCH PART #	PART #	QTY.	
	PUMP, THREE VALVE HYDRAULIC		P09122	1	
1	Valve Assembly, 4-Way Monarch	#00524	P10143	3	
2	Electrical Parts Kit, Hydraulic Pump Valve	#03721	P09593	1	
3	Spring, Hydraulic Pump Valve Contact	#00188	P09846	1	
4	O-ring, Hydraulic Pump Valve Cover	#02354	P09592	1	
5	Handle Assembly, Hydraulic Pump Valve	#00172	P09594	3	
6	Spring, Hydraulic Pump Valve Handle	#00018	P09753	3	
7	Solenoid, 12 VDC 3 Post Insulated Ground	#3301	P09595 ¹	1	
	Motor Kit, Hydraulic Replacement	N/A	052807	1	
8	Motor, 12 VDC Hydraulic Pump #08714 (Iskra)	#08714	038683 ²	1	◆
	Brush Kit, 4-Valve Hydraulic Pump Motor #08658-I (Iskra)	#08658-I	038682 ²	1	
	Brush Kit, 4-Valve Hydraulic Pump Motor #08658	#08658	P09585 ²	1	◆
	Field Kit, 4-Valve Hydraulic Pump Motor	#08618	P09584 ³	1	◆
	Bearing, Base Motor #02318	#02318	P12513	1	
	Wire Assembly, Motor Brush Ground	N/A	052806 ⁴	1	
9	Cap, Hydraulic Pump Vented Fill	#01143	P09596	1	
10	O-ring, Hydraulic Pump/Reservoir	#02352	P10198	1	
11	Seal, Hydraulic Pump/Motor	#02330	P10315	1	
12	Pump, Hydraulic Replacement	#02414	P10392	1	
	WASHER KIT, HYDRAULIC MOTOR THRUST		P12275 ⁵	1	

¹ Flat base solenoid #3301 replaces curved base solenoid #03336. Solenoid bracket may be bent to fit mount on motor.

² Bosch motor P09955 replaced by vendor with Iskra motor 1/06. Brush kit P09585 no longer available to service Bosch motor. Replace motor using kit 052807. Use Brush Kit 038682 to service Iskra motor. Replaces Monarch #08111 originally supplied before 8/94.

³ Part no longer available. Replace entire motor (Retro Kit 052807).

⁴ Brush Ground Wire 052806 added 7/06 to improve ground connection. Kit 052805 to be supplied to all customers who purchased sawmills with Iskra pump motors after 1/06. Kit includes wire, hardware and instructions.

⁵ Kit contains one .010" Steel Thrust Washer, two .020" Fiber Thrust Washers, and four .050" Fiber Thrust Washers for use in adjusting drive motor end-play.

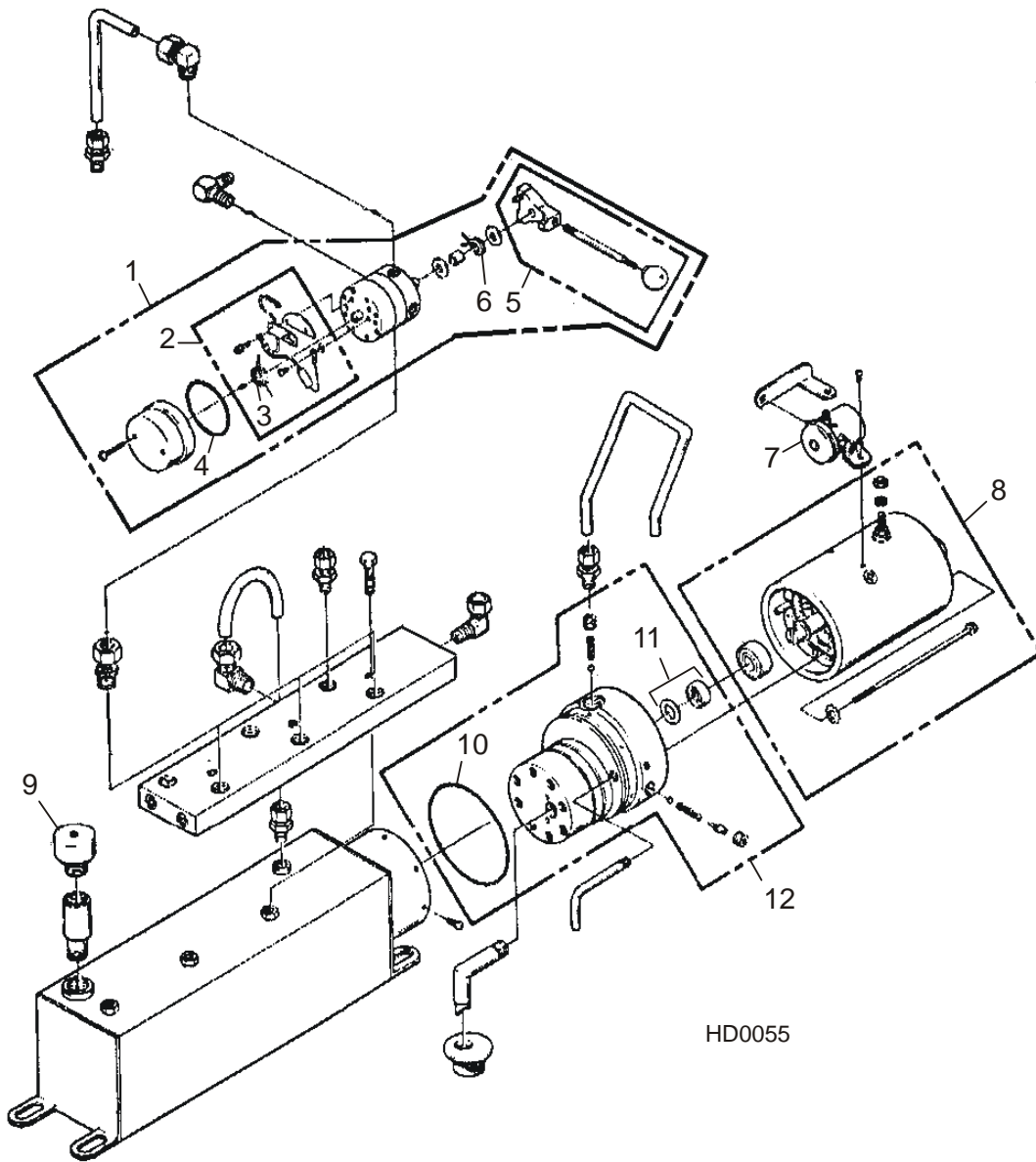


FIG. 8-6

8.10 Hydraulic Power Supply Strip				
<i>Retrofit</i>				
REF	DESCRIPTION (◆ Indicates Parts Available In Assemblies Only)	PART #	QTY.	
	CONTACT KIT, HYDRAULIC 6' POWER SUPPLY	036659 ¹	1	
	Contact Hardware Kit	A10073-N	1	
	Contact Assembly, Hydraulic Power Supply (Positive)	A11971 ²	1	
	Contact Kit, Hydraulic Power Supply Positive	007720	1	
1	Contact, Hydraulic Power Supply	014532	1	◆
2	Spring, Positive Contact	P10077	2	
3	Bolt, 5/16" X 3/4" Shoulder (1/4-20 Thread) Stainless	F05006-143 ³	2	
4	Bolt, 5/16-18 x 1/2" Socket Button Head	F05006-20	1	
5	Insulator, Positive Contact	S10072	1	
6	Bracket, Positive Contact Mounting	S11972	1	
7	Washer, 1/4" SAE Flat	F05011-11	2	
	Cable Assy, Hydraulic Positive Contact	015885	1	
8	Cable, #1 Weld	R01971	2.5 Ft	◆
9	Terminal, 5/16" Ring #1-2 Gauge	F05092-16	2	
10	Bolt, 1/4-20 X 1" Hex Head Grade 2	F05005-38	2	
11	Nut, 1/4-20 Hex Self-Locking	F05010-9	2	
12	Bolt, 3/8-16 X 1 1/4" Carriage Head Grade 5	F05007-127	2	
13	Washer, 3/8" SAE Flat	F05011-3	2	
14	Nut, 3/8-16 Hex Nylon Lock	F05010-10	2	
	Contact Assembly, Hydraulic Power Supply (Ground)	010102 ⁴	1	
	Contact Kit, Hydraulic Power Supply Ground	007721	1	
15	Contact, Hydraulic Power Supply (Ground)	014320	1	◆
16	Bolt, 5/16-18 X 1/2" Hex Head Grade 5	F05006-15	2	
17	Washer, 5/16" Split Lock	F05011-13	2	
18	Spring, Ground Contact	P04282	2	
19	Bracket, Ground Contact Mounting	S10067	1	
	Cable Assembly, Hydraulic Negative Contact	024676	1	
20	Cable, #1 Weld	R01971	2.2 Ft	◆
21	Terminal, 5/16" Ring #1-2 Gauge	F05092-16	1	
22	Bolt, 3/8-16 X 4 1/2" Hex Head Grade 2	F05007-35	2	
23	Washer, 3/8" SAE Flat	F05011-3	2	
24	Nut, 3/8-16 Hex Nylon Lock	F05010-10	2	
	Washer, 3/8" Star External	F05011-36	4	
	Tie Wrap, 3/16" x 6" UV Black	F05089-3	2	
	Connector, 3/8" Romex	P05065-2	1	

	Contact 6' Strip Assembly	A12042-N	1	
25	Screw, 1/4-20 X 1/2" Slotted Hex Head	F05015-1	8 ⁵	
26	Housing, 6' Contact Strip	P11976	1	
	Strip, 6' Contact With Cable	A12043-N	1	
27	Strip, 6' Contact	S10075	1	◆
28	Cable, #1 Weld	R01971	3 Ft	◆
29	Terminal, 5/16" Ring #1-2 Gauge	F05092-16	2	
30	Bolt, 5/16-18 X 3/4" Hex Head Black Nylon	F05006-45	1	
31	Nut, 5/16-18 Hex Black Nylon	F05010-86	1	
	Tube, 5/8" Heat Shrink	R01950-5	.10 Ft	◆
32	Grommet, 5/8" Wire	P04137	1	

¹ Kit 036659 replaces A10130 Kit previously supplied (9/04).

² Kit A11971 includes updated contact and hardware. [See Section 8.11](#) to service original components.

³ Stainless Steel Bolt F05006-143 replaces F05006-44 to prevent corrosion (12/09).

⁴ Kit 010102 includes updated contact and hardware. [See Section 8.11](#) to service original components.

⁵ Quantity changed from 14 to 8 (2/97).

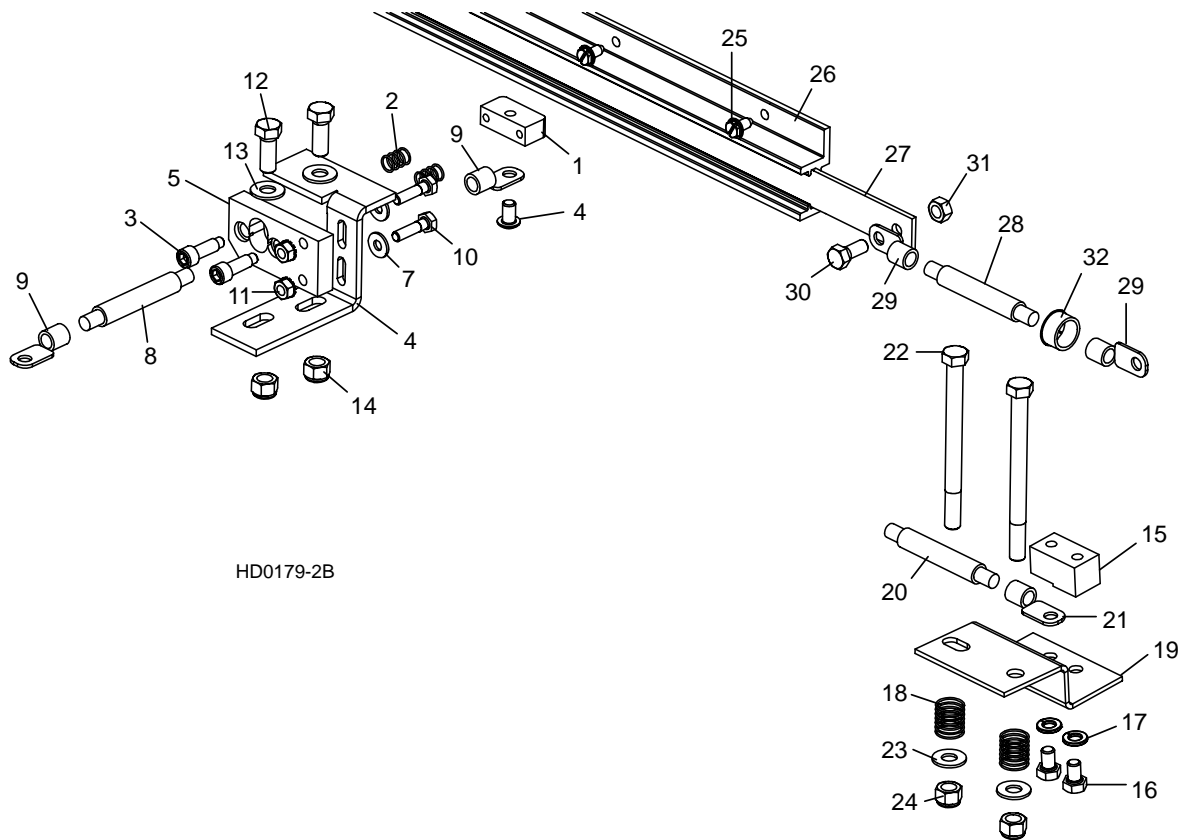


FIG. 8-7

8.11 Hydraulic Power Supply Strip				
LT30HD		Rev. C3 - C6		
LT40HD		Rev. B6 - C6		
REF	DESCRIPTION (◆ Indicates Parts Available In Assemblies Only)	PART #	QTY.	
	CONTACT KIT, HYDRAULIC 6' POWER SUPPLY	A10130 ¹	1	◆
	Contact Hardware Kit	A10073-N	1	
	Contact Assembly, Hydraulic Power Supply (Positive)	A11971 ²	1	◆
	Contact Kit, Hydraulic Power Supply Positive	007718	1	
1	Contact, Hydraulic Power Supply w/Set Screw	S11970 ³	1	
2	Screw, 5/16-24 X 3/8 Socket Head Oval Point Set	F05006-40	1	
3	Spring, Positive Contact	P10077	2	
4	Bolt, 5/16" X 3/4" Shoulder (1/4-20 Thread) Stainless	F05006-143 ⁴	2	
5	Insulator, Positive Contact	S10072	1	
6	Bracket, Positive Contact Mounting	S11972	1	
7	Washer, 1/4" SAE Flat	F05011-11	2	
	Cable Assy, Hydraulic Positive Contact	015885	1	
8	Cable, #1 Weld	R01971	2.5 Ft	◆
9	Terminal, 5/16" Ring #1-2 Gauge	F05092-16 ⁵	2	
10	Bolt, 1/4-20 X 1" Hex Head Grade 2	F05005-38	2	
11	Nut, 1/4-20 Hex Self-Locking	F05010-9	2	
12	Bolt, 3/8-16 X 1" Hex Head Grade 5	F05007-87	2	
13	Washer, 3/8" SAE Flat	F05011-3	4	
14	Nut, 3/8-16 Hex Nylon Lock	F05010-10	4	
	Contact Assembly, Hydraulic Power Supply (Ground)	A10066 ⁶	1	
	Contact Kit, Hydraulic Power Supply Ground	007719	1	
15	Contact, Hydraulic Power Supply (Ground)	S10048 ⁷	1	
16	Bolt, 5/16-18 X 1/2" Hex Head Grade 5	F05006-15	2	
17	Washer, 5/16" Split Lock	F05011-13	2	
18	Spring, Ground Contact	P04282	2	
19	Bracket, Ground Contact Mounting	S10067	1	
	Cable Assembly, Hydraulic Negative Contact	024676	1	
20	Cable, #1 Weld	R01971	2.2 Ft	◆
	Terminal, 5/16" 1-2Ga Ring	F05092-19	1	
21	Bolt, 3/8-16 X 4 1/2" Hex Head Grade 2	F05007-35	2	

Contact 6' Strip Assembly		A12042-N ⁸	1	
22	Screw, 1/4-20 X 1/2" Slotted Hex Head	F05015-1	8 ⁹	
23	Housing, 6' Contact Strip	P11976 ¹⁰	1	
	Strip, 6' Contact With Cable	A12043-N	1	
24	Strip, 6' Contact	S10075	1	◆
25	Cable, #1 Weld	R01971	3 Ft	◆
26	Terminal, 5/16" Ring #1-2 Gauge	F05092-16	2	
27	Bolt, 5/16-18 X 3/4" Hex Head Black Nylon	F05006-45	1	
28	Nut, 5/16-18 Hex Black Nylon	F05010-86	1	
	Tube, 5/8" Heat Shrink	R01950-5	.10 Ft	◆
29	Grommet, 5/8" Wire	P04137	1	

- ¹ Kit A10130 no longer available (9/04). Use kit 036659 to replace entire contact strip system ([See Section 8.10](#)).
- ² Kit A11971 includes updated parts ([See Section 8.10](#)). Use component parts to service original design.
- ³ Replaces S10047-W originally supplied. Set screw included with block after 1/99. [See Section 8.10](#) for updated contact parts.
- ⁴ Stainless Steel Bolt F05006-143 replaces F05006-44 to prevent corrosion (12/09).
- ⁵ Additional ring terminal added with change of contact button 8/96.
- ⁶ Use kit 010102 to upgrade ground contact ([See Section 8.10](#)).
- ⁷ Replaces S10048-W originally supplied. [See Section 8.10](#) for updated contact parts.
- ⁸ Replaces A10069 originally supplied. Requires new contact button S11970.
- ⁹ Quantity changed from 14 to 8 (2/97).
- ¹⁰ Replaces P11032 originally supplied. Requires new contact button S11970.

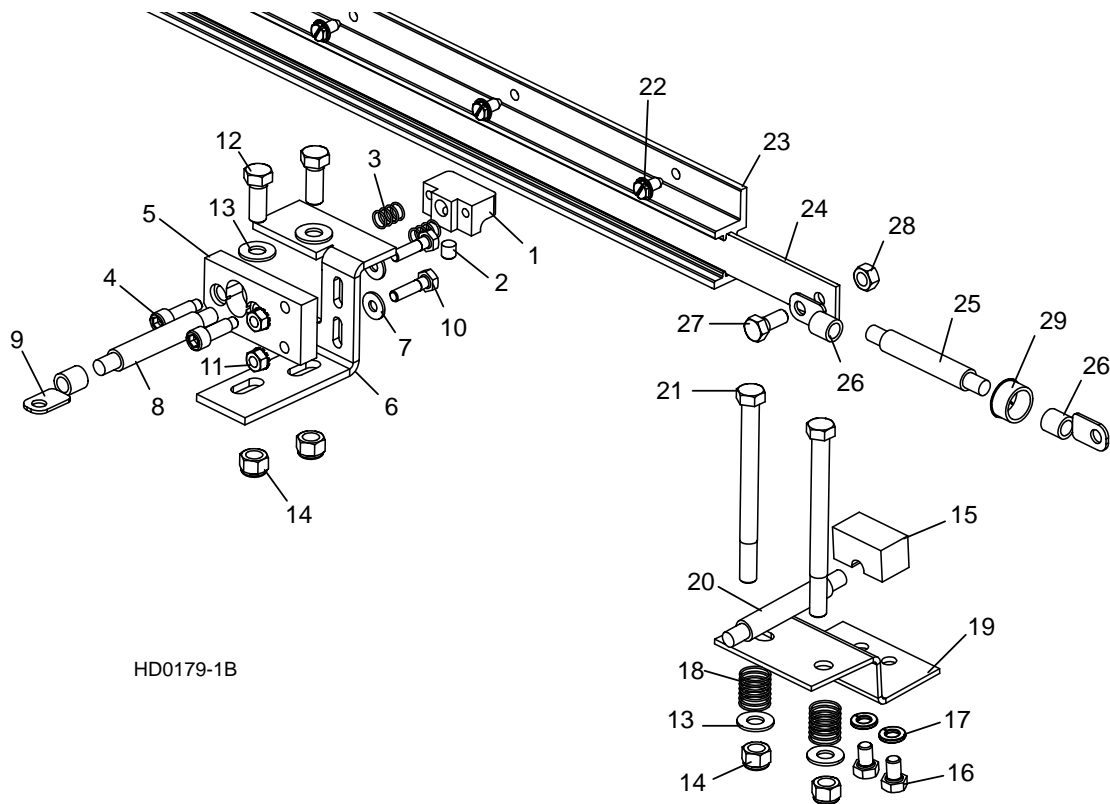


FIG. 8-8

8.12 Hydraulic Power Supply Buttons				
<i>LT40HD Rev. A - B5</i>				
REF	DESCRIPTION (◆ Indicates Parts Available In Assemblies Only)	PART #	QTY.	
	CONTACT BUTTON KIT, HYDRAULIC POWER	A09460 ¹	1	◆
1	Bracket, Contact Button Mount	W09291	1	◆
2	Button With Cable, Positive Contact	A09232 ²	1	◆
3	Button With Cable, Ground Contact	A09233 ²	1	◆
4	Bushing, Nylon Insulator	S09169	1	◆
5	Ring, 5/8" Shaft	F04254-2	1	
6	Spring, Contact Button	P09131	2	◆
7	Ring, 1 1/4" I.D. Retaining	F04254-6	2	
8	Bolt, 3/8-16 x 1" Hex Head	F05007-7	2	
9	Nut, 3/8-16 Hex Nylon Lock	F05010-10	2	
10	CONTACT BRACKET WITH CABLE, POSITIVE	A09234 ²	1	◆
11	CONTACT BRACKET WITH CABLE, GROUND	A09235 ²	1	◆
12	PAD, NYLON INSULATING	S09227	1	◆
13	BUSHING, NYLON INSULATOR	P09129	4	◆
14	SCREW, CONTACT BRACKET MOUNT	S09295	4	◆

¹ Contact kit and components no longer available. Upgrade button-style contacts to contact strip with retrofit kit 036659 ([See Section 8.10](#)).

² Positive and ground contacts and buttons reversed on Rev. AE+ to prevent hot contact from contacting feed chain. Rev. A - AD should exchange button and contact positions.

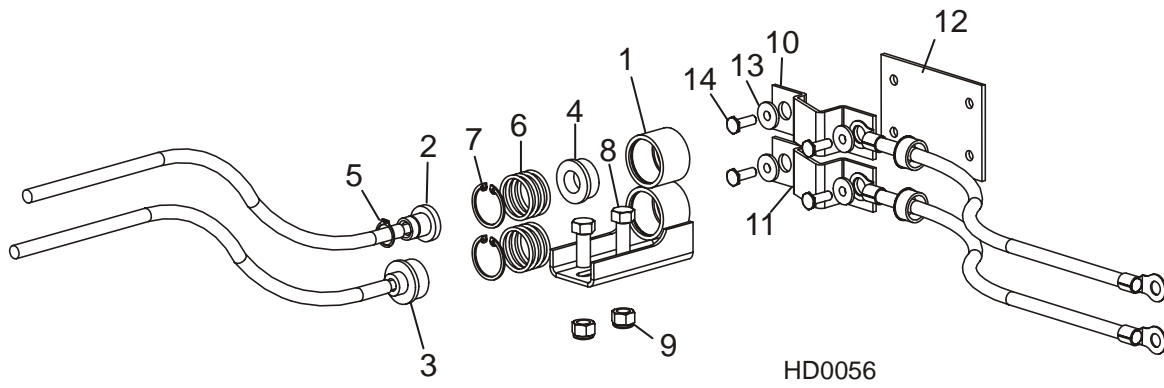


FIG. 8-9

8.13 Hydraulic Log Loader

REF	DESCRIPTION (◆ Indicates Parts Available In Assemblies Only)	PART #	QTY.	
1	ARM, HYDRAULIC LOG LOADING	W09445	1	
2	Fitting, 3/16" Grease	P04107	2	
3	Chain, Hydraulic Log Loader Safety	A04376	1	◆
4	CHANNEL, HYDRAULIC LOG LOADING FOOT	W09444	2	
5	Fitting, 3/16" Grease	P04107	2	
	CYLINDER, HYDRAULIC LOG LOADING ARM	A12899 ¹	2	◆
6	Cylinder, 8" X 3" Hydraulic (Monarch #TQ3008-Q0002)	P09128	1	◆
7	Fitting, C5205x4x4 Male Connector	P09143 ²	2	
	Fitting Kit, 1/4NPT 4.0GPM Velocity Fuse	015832	1	
8	Fitting, 1/4NPT 4.0GPM Velocity Fuse	015750 ³	2	◆
	Instruction Sheet, Velocity Fuse Replacement	015832-255	1	
9	Fitting, 0455x4x4 90° Swivel Elbow	P12199 ⁴	1	
10	PIN, LOADING ARM MOUNT	W09446	4	
11	SCREW, 5/16-24 X 5/8" SELF TAPPING	F05015-15	8	
12	PIN, LOADING ARM CYLINDER MOUNT	S09251	2	
13	WASHER, 1" SAE FLAT	F05011-28	4	
14	PIN, 3/16" X 1 1/2" COTTER	F05012-23	4	
15	FITTING, C5705X5X4 UNION 'T'	P09145	2	
16	CLAMP, HYDRAULIC HOSE	S09245	6	
17	BOLT, 5/16-18 X 3/4" HEX HEAD GRADE 5	F05006-102 ⁵	2	
18	NUT, 5/16-18 HEX LOCK	F05010-6	2	

¹ Cylinder assembly A12899 and tie rod cylinder P09128 no longer available for service. Sell welded cylinder w/o fittings P12847 to insure compatibility of velocity fuse. Replaces A09284 originally supplied. Seal kit A12238 for tie-rod cylinder no longer available. Entire cylinder must be replaced.

² Replaces P09144 originally supplied.

³ Replaces 3.0GPM velocity fuse P11566 and P09197 originally supplied.

⁴ Replaces P09142 originally supplied.

⁵ Grade 5 Hex Head Bolt F05006-102 replaces self-tapping bolt F05006-30 to eliminate shearing of bolts head (4/08).

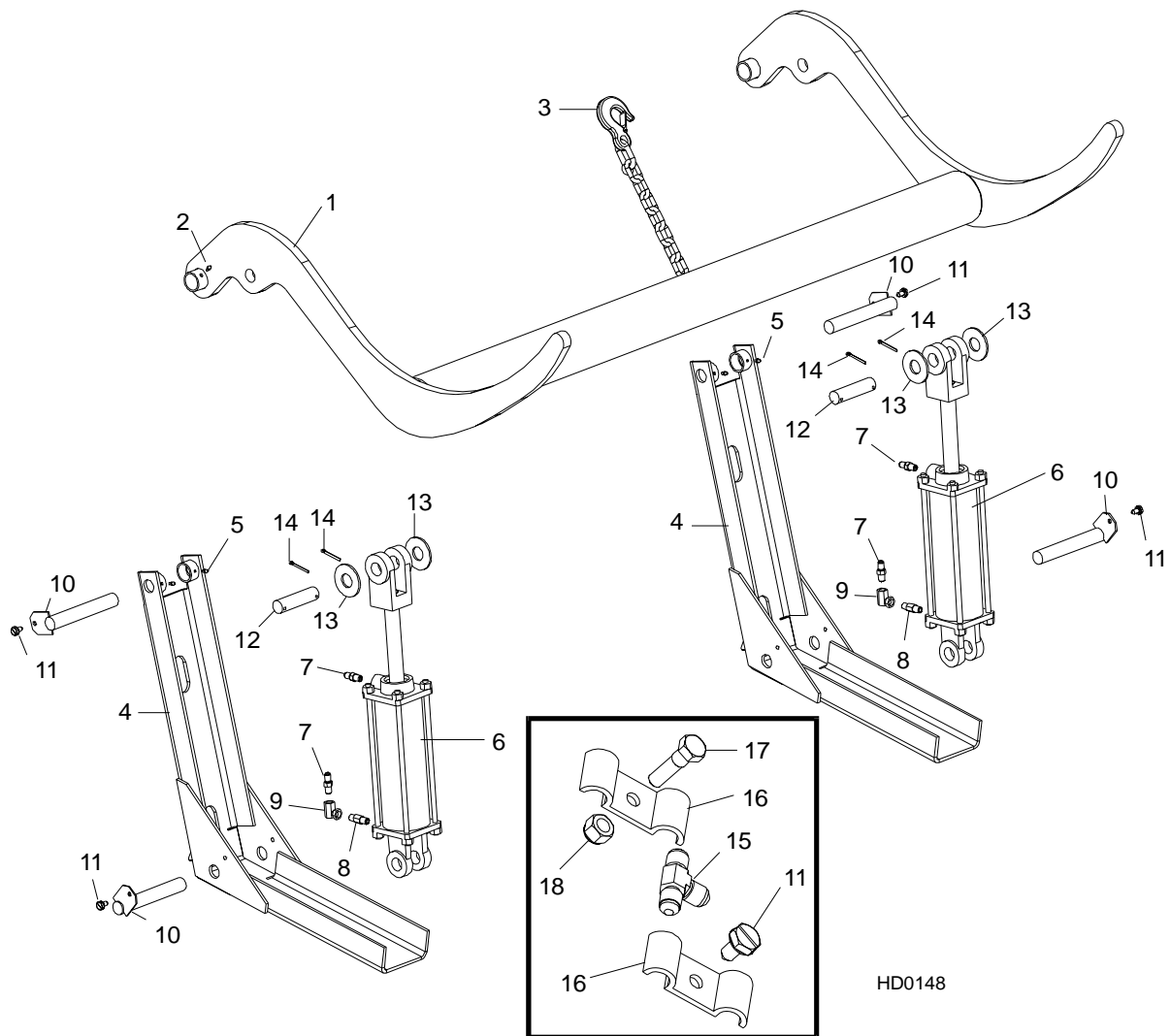


FIG. 8-10

8

Hydraulic System

Hydraulic Log Turner

8.14 Hydraulic Log Turner				
REF	DESCRIPTION (◆ Indicates Parts Available In Assemblies Only)	PART #	QTY.	
	TURNER KIT, HYDRAULIC LOG (WITHOUT CYLINDER)	K09686	1	
1	Arm, Hydraulic Log Turner Link	W09260	1	
	Arm Assembly, Hydraulic Log Turner	A09258	1	
2	Arm, Hydraulic Log Turner	015233 ¹	1	
	Spacer, Log Turner Arm	S10170 ²	1	
3	Claw, Hydraulic Log Turner	014675 ³	2	
4	Bolt, 1/2-13 X 1 1/2" Hex Head Grade 5	F05008-33 ⁴	4	
5	Bolt, 1/2-13 X 4 1/2" Hex Head Grade 5	F05008-35	1	
6	Nut, 1/2-13 Hex Nylon Lock	F05010-8	5	
7	Pin, Log Turner Stop	S09211 ⁵	1	
8	Spacer, Log Turner Stop Pin	S09913 ⁵	2	
9	Collar, 5/8" I.D. With Set Screw	P05035 ⁵	1	
10	Pin, Log Turner Mount	W09446	2	
11	Bolt, 5/16-18 X 1" Hex Head Grade 2	F05006-1	2	
12	Washer, 5/16 SAE Flat	F05011-17	2	
13	Nut, 5/16-18 Hex Lock	F05010-6	2	
14	Pin, Log Turner Pivot	S09247 ⁶	1	
15	Washer, 1" SAE Flat	F05011-28	2	
16	Pin, 3/16" X 1 1/2" Cotter	F05012-23	2	
17	Spring, Hydraulic Log Turner	P09136	2	
18	Plate, Log Turner Cylinder Mount	S09155 ⁷	1	
19	Plate, Log Turner Brace Mount	S09109	2	
	Brace Assembly, Hydraulic Log Turner	A09606 ⁸	2	
20	Plate, Log Turner Mount	S09604	1	◆
21	Plate, Log Turner Brace	S09605	1	◆
22	Bolt, 1/2-13 X 1 1/2" Hex Head Grade 5	F05008-33	1	
23	Washer, 1/2" SAE Flat	F05011-2	1	
24	Nut, 1/2-13 Hex Nylon Lock	F05010-8	1	
	Paint, Orange Aerosol	P04498	1	

CYLINDER ASSEMBLY, HYDRAULIC LOG TURNER		A09286	1	
25	Cylinder, 8" X 2 1/2" Hydraulic	P12846 ⁹	1	◆
	Seal Kit, 8" x 2 1/2" Hydraulic Cylinder	P12955 ¹⁰	1	
26	Fitting, 90° Male Elbow	P09142	2	

- ¹ Painted arm 015233 replaces W12340 and unpainted W09257. Requires change in quantity of F05008-35 bolts and F05010-8 nuts from 5 to 2.
- ² One collar P05035 removed, one S10170 spacer and two S09913-W spacers added 12/89 to prevent binding. S10170 spacer part of arm weldment after 11/91.
- ³ Painted claw 014675 replace unpainted S09146.
- ⁴ Replaces F05008-4 originally supplied.
- ⁵ Parts not required if turner arm replaced after 5/97. New arm includes welded stop pin. S09913 replaces S09913-W (part number change only).
- ⁶ Replaces S09247-W.
- ⁷ Replaces S09116 originally supplied.
- ⁸ Adjustable braces added for Rev. D+.
- ⁹ Welded cylinder P12846 replaces P09127 tie rod cylinder originally supplied.
- ¹⁰ Seal kit applicable only to welded cylinders. Seal kit A12239 for tie-rod cylinder no longer available. Entire cylinder must be replaced.

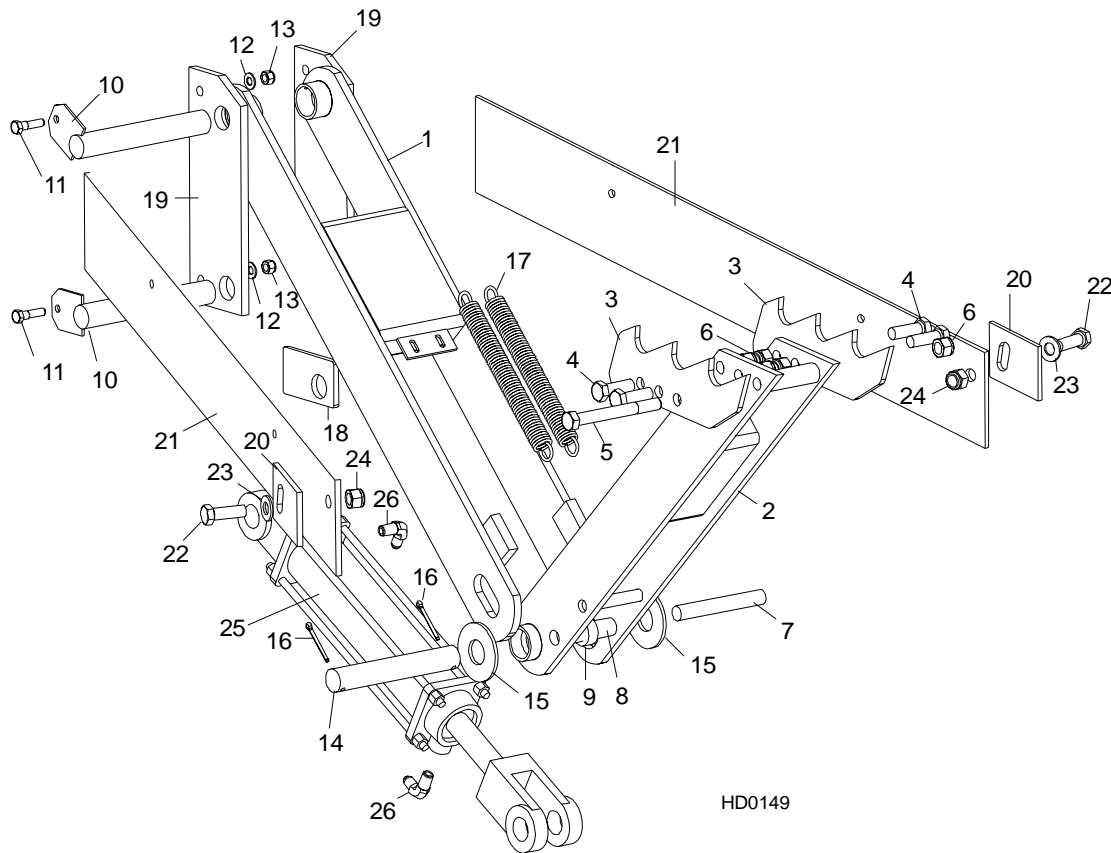


FIG. 8-11

8.15 Hydraulic Log Side Supports				
REF	DESCRIPTION (◆ Indicates Parts Available In Assemblies Only)	PART #	QTY.	
1	SUPPORT, HYDRAULIC LOG SIDE	W12339 ¹	2	
	MOUNTING KIT, HYDRAULIC LOG SIDE SUPPORT	K09344	2	
2	Pin, Log Side Support Pivot	W09238	1	
3	Plate, Log Side Support End	S09148	1	
4	Bolt, 1/2-13 X 3 1/2" Hex Head	F05008-15	2	
5	Washer, 1/2" SAE Flat	F05011-2	2	
6	Nut, 1/2-13 Hex Nylon Lock	F05010-8	3	
7	Bolt, 1/2-13 X 1 1/2" Hex Head Grade 5	F05008-33	1	
8	Washer, 1/2" I.D. X 1 1/2" O.D. X .1196"	S09225	1	
9	FITTING, 3/16" GREASE	P04107	4	
	CYLINDER ASSEMBLY, HYDRAULIC LOG SIDE SUPPORT	A09283	1	
10	Cylinder, 6" X 2" Hydraulic	P12845 ²	1	
	Seal Kit, 6" x 2" Hydraulic Cylinder	P12954 ³	1	
11	Fitting, 90° Male Elbow	P09142	1	
12	Fitting, C3529x4 90° Pipe	P09140	2	
13	Fitting, C3759x4 Male 'T'	P09141	2	
14	Fitting, C5205x4x4 Male Connector	P09143	3	
	Valve Assembly, Hydraulic Sequence	A09207 ⁴	2	
15	Block, Sequence Valve	S09205-W	1	◆
16	Plug, 1/16" NPT Pipe	P09206	2	
17	Ball, 3/8" Steel	P09133	2	◆
18	Spring, Hydraulic Sequence Valve	P09135	1	◆
19	Spring, Hydraulic Sequence Valve (Heavy)	P11644	1	◆
20	Retainer, Valve Spring	S09204-W ⁵	2	◆
21	ROD, HYDRAULIC SIDE SUPPORT LINK	S12744 ⁶	1	
22	END, 1/2" ROD	P09137	2	
23	BOLT, 1/2-13 X 2 1/4" HEX HEAD GRADE 5	F05008-10	2	
24	WASHER, 1/2" SAE FLAT	F05011-2	4	
25	NUT, 1/2-13 HEX NYLON LOCK	F05010-8	2	
26	NUT, 1/2-20 HEX JAM	F05010-16	1	
27	PIN, CYLINDER MOUNT	S09251	2	
28	WASHER, 1" SAE FLAT	F05011-28	4	
29	PIN, 3/16" X 1 1/2" COTTER	F05012-23	4	

¹ Painted side support W12339 replaces unpainted W09262.

² Welded cylinder P12845 replaces P09125 tie rod cylinder originally supplied.

³ Seal kit applicable only to welded cylinders. Seal kit A12240 for tie-rod cylinder no longer available. Entire cylinder must be replaced.

⁴ Valve Rebuild Kit A10356 not available. Replace complete valve assembly.

⁵ Removed from assembly 7/94. Fittings hold the springs in the assembly which is not field-serviceable.

⁶ Rod Kit K09343 not available. Order individual items as required. Painted rod S12744 replaces unpainted S09172-W.

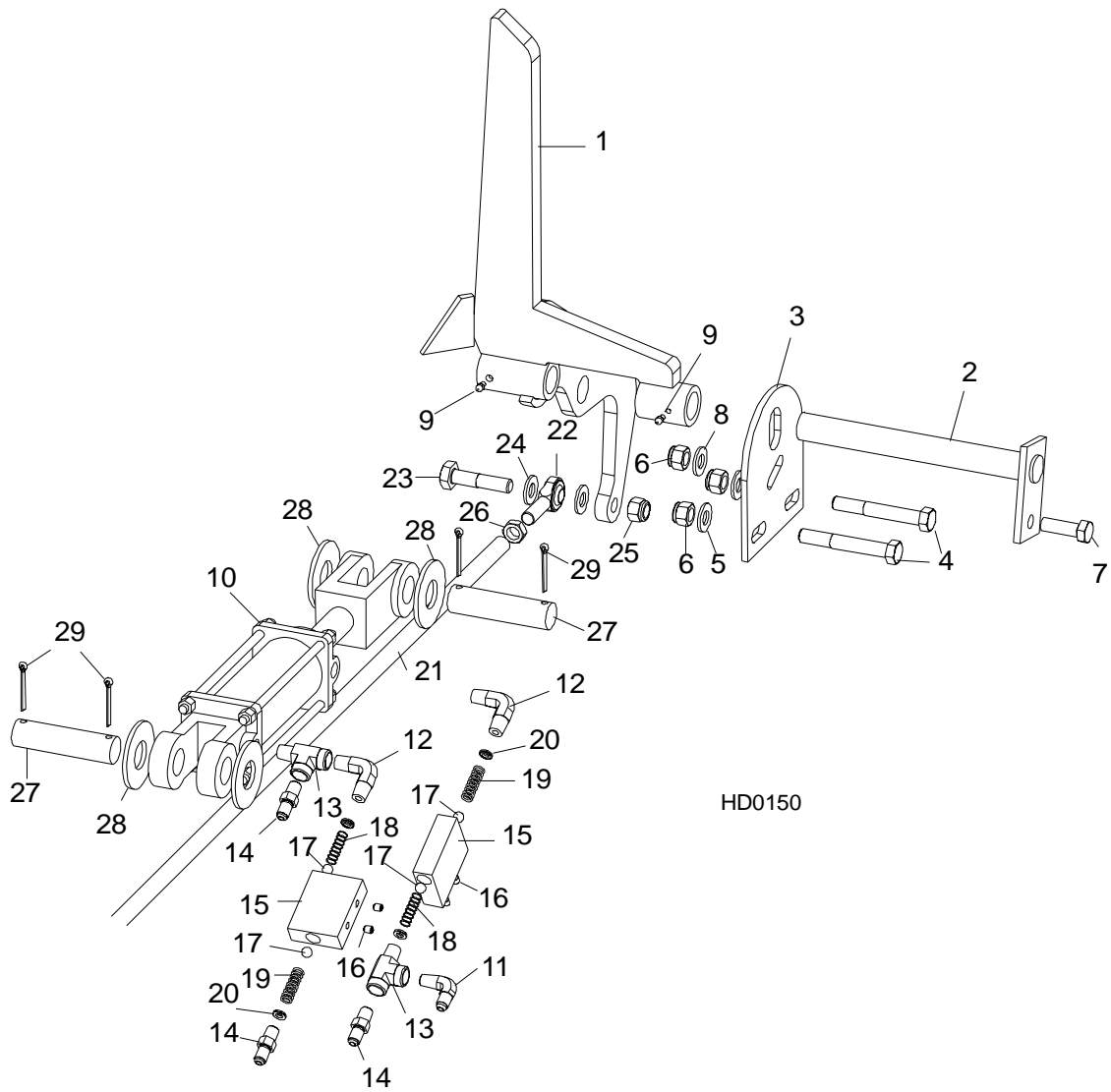


FIG. 8-12

8.16 Hydraulic Log Clamp Activator

LT30HD
LT40HD

Retrofit
Retrofit

REF	DESCRIPTION (◆ Indicates Parts Available In Assemblies Only)	PART #	QTY.
	PLATE ASSEMBLY, HYDRAULIC CLAMP END	014614 ¹	1
1	Plate, Hydraulic Clamp End	S09660	1
2	Arm Pivot, Clamp Activator	014615	1
3	Arm, Clamp Activator	014613	1
4	Spring, Clamp Activator Compression	014617	1
5	Fitting, 3/16" Grease	P04107	1
6	Nut, 3/8-16 Hex Nylon Lock	F05010-10	1
7	Collar, Clamp Activator Arm	014616	1
8	Screw, 1/4-20 x 3/8" Socket Head Cup Point Set	F05005-47	1
9	Spring, Clamp Activator Torsion	014618	1
10	Pin, 3/16" x 1 1/4" Roll	F05012-16	2
11	Washer, 3/8" SAE Flat	F05011-3	1
12	Washer, 5/16" Split Lock	F05011-13	1
13	Bolt, 5/16-18 x 3/4" Hex Head	F05006-5	1

¹ Replaces A09640 originally supplied. Spring-loaded activator provides more consistent clamp operation.

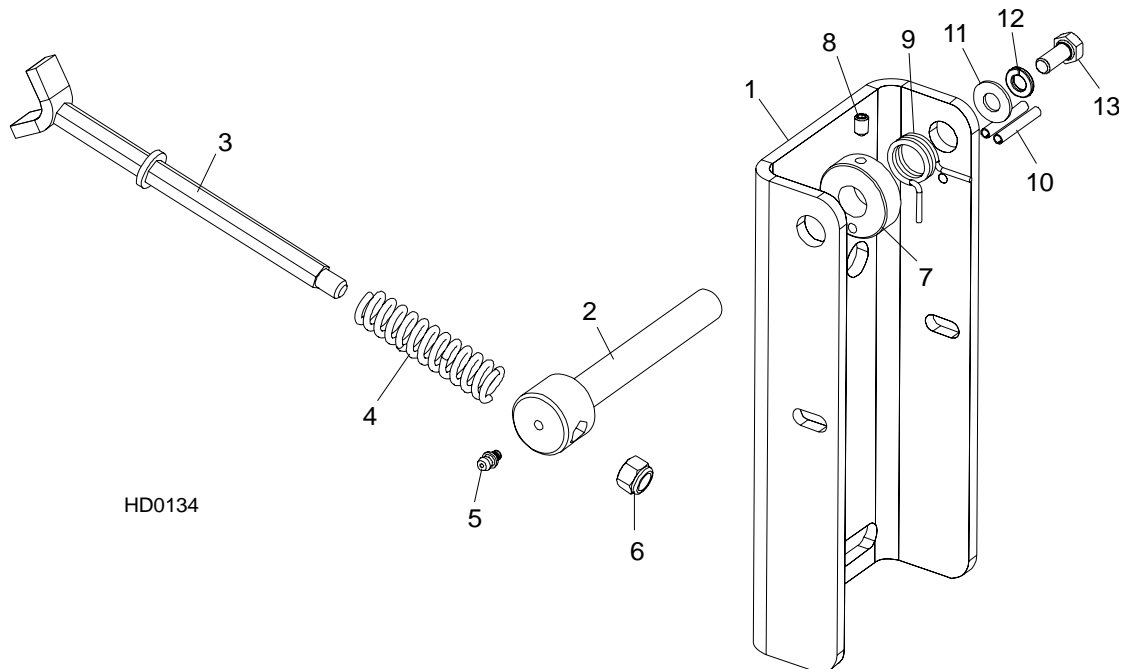


FIG. 8-13

8.17 Hydraulic Log Clamp				
	<i>LT30HD</i>	<i>Retrofit</i>		
	<i>LT40HD</i>	<i>Retrofit</i>		
REF	DESCRIPTION (◆ Indicates Parts Available In Assemblies Only)	PART #	QTY.	
	CLAMP KIT, 30" HYDRAULIC LOG	K09465	1	
	Clamp Assembly, 30" Hydraulic Log	A11792	1	◆
1	Tube, 30" Hydraulic Log Clamp	W11802	1	
2	Arm, 30" Hydraulic Log Clamp (Front)	W11793	1	
3	Fitting, 3/16" Straight Grease	P04107	1	
4	Arm, 30" Hydraulic Log Clamp (Rear)	W11795	1	
	Fitting, 3/16" Straight Grease	P04107	1	
5	Arm, 30" Hydraulic Log Clamp Link	W11799	1	
6	Fitting, 3/16" Straight Grease	P04107	2	
7	Plate, Clamp Slide Pad Mount	W09422	1	
	Box/plate Assembly, Hydraulic Clamp	A09635 ¹	1	
8	Box Weldment, Hydraulic Clamp	W12069	1	
9	Plate Weldment, Hydraulic Clamp	W12752 ²	1	
10	Pin Weldment, Hydraulic Clamp Plate Pivot	W09639	1	
11	Arm, Clamp Prop	W09638	1	
12	Plate, Clamp Prop Arm End	S09649	1	
13	Spacer, Clamp Prop Arm	S09657	1	
14	Bolt, 1/4-20 X 1 1/2" Hex Head Grade 2	F05005-5	1	
15	Bolt, 1/4-20 X 1" Hex Head Grade 2	F05005-38	1	
16	Nut, 1/4-20 Hex Self-Locking	F05010-9	4	
17	Spring, .36 O.D. X 2.5" Extension	P11817	2	
18	Nut, 1/4-20 Hex Lock	F05010-21	2	
19	Screw, 3/8-16 X 1/2" Socket Head	F05007-50	2	
20	Washer, 5/8" SAE Flat	F05011-5	2	
21	Bushing, 5/8" I.D. Bronze	P05135	2	
22	Screw, 1/4-20 X 3/4" Socket Head	F05005-26	1	
23	Fitting, 3/16" Straight Grease	P04107	1	
24	Pad, Clamp Box Plastic Slide	S09219	2	
25	Button, Bronze	S09167	4	
26	Screw, 1/2-13 X 1 1/2" Flat Point Set	F05008-31	3	
27	Nut, 1/2-13 Hex Jam	F05010-31	3	
	Plate Assembly, Hydraulic Clamp End	A09640 ³	1	◆
28	Plate, Hydraulic Clamp End	S09660	1	
	Clamp Kit, Y-Activator	K12872	1	
29	Arm Pivot, Clamp Activator	W09642	1	
30	Arm, Clamp Activator	W09641-N	1	
31	Spring, .5 X 3.75 X .08 Extension Modified	S09661	1	
32	Spring, Clamp Die Compression	P09663	1	

8

Hydraulic System

Hydraulic Log Clamp

33	Bolt, 5/16-18 X 1 1/2" Hex Head Full Thread	F05006-2	1	
34	Nut, 5/16-18 Hex Self-retaining	F05010-20	2	
35	Bolt, 3/8-16 X 3 1/2" Square Head Grade 5	F05007-38	1	
36	Nut, 3/8-16 Hex	F05010-1	1	
37	Collar, 5/8" I.D.	P05035	2	
38	Nut, 5/8-11 Hex Nylon Lock	F05010-34	2	
39	Bearing, Hydraulic Clamp Bronze	P09464	2	
40	Bolt, 1/2-13 X 6 1/2" Hex Head	F05008-6	1	
41	Spacer, Clamp	S09493	1	
42	Nut, 1/2-13 Hex Nylon Lock	F05010-8	1	
	Cylinder Assembly, Hydraulic Log Clamp	A09285	1	
43	Cylinder, 8" X 3" Hydraulic	P12847 ⁴	1	◆
	Seal Kit, 8" x 3" Hydraulic Cylinder	P12956 ⁵	1	
44	Fitting, 90° Male Elbow	P09142	2	
45	Pin, Clamp Cylinder Mount	S09246	2	
46	Pin, Clamp Pivot	S09247	1	
47	Washer, 1" SAE Flat	F05011-28	6	
48	Pin, 3/16" X 1 1/2" Cotter	F05012-23	6	
49	Bolt, 3/8-16 X 5" Hex Head Grade 2	F05007-5	2	
50	Washer, 3/8" SAE Flat	F05011-3	2	
51	Nut, 3/8-16 Hex Nylon Lock	F05010-10	2	
52	Bolt, 3/8-16 X 4 1/2" Hex Head Grade 2	F05007-35	2	
53	Bolt, 1/2-13 X 1 1/2" Hex Head Grade 5	F05008-33	2	
54	Washer, 1/2" SAE Flat	F05011-2	2	
55	Nut, 1/2-13 Hex Lock	F05010-3	2	
	Clamp Extension Assembly	A12208	1	
56	Clamp Extension, 3" Hydraulic	W09922	1	◆
57	Pin, 5/16" X 1" Retaining	F05012-45	1	
	CLAMP STOP KIT, HYDRAULIC LOG	K09485	1	
58	Plate, Clamp Stop	W09404	1	
59	Bolt, 1/2-13 X 1 1/2" Hex Head Grade 5	F05008-33	2	
60	Washer, 1/2" Sae Flat	F05011-2	2	
61	Nut, 1/2-13 Hex Nylon Lock	F05010-8	2	
62	BRACKET, LOG CLAMP SUPPORT	S11810 ⁶	1	

¹ Updated clamp design automatically flips clamp up and down with the throw of the hydraulic clamp handle. For 1987 mills only. Order Automatic Hydraulic Clamp Retrofit K09693; includes Hydraulic Clamp Box Assembly A09635 and Hydraulic Clamp End Plate Assembly A09640.

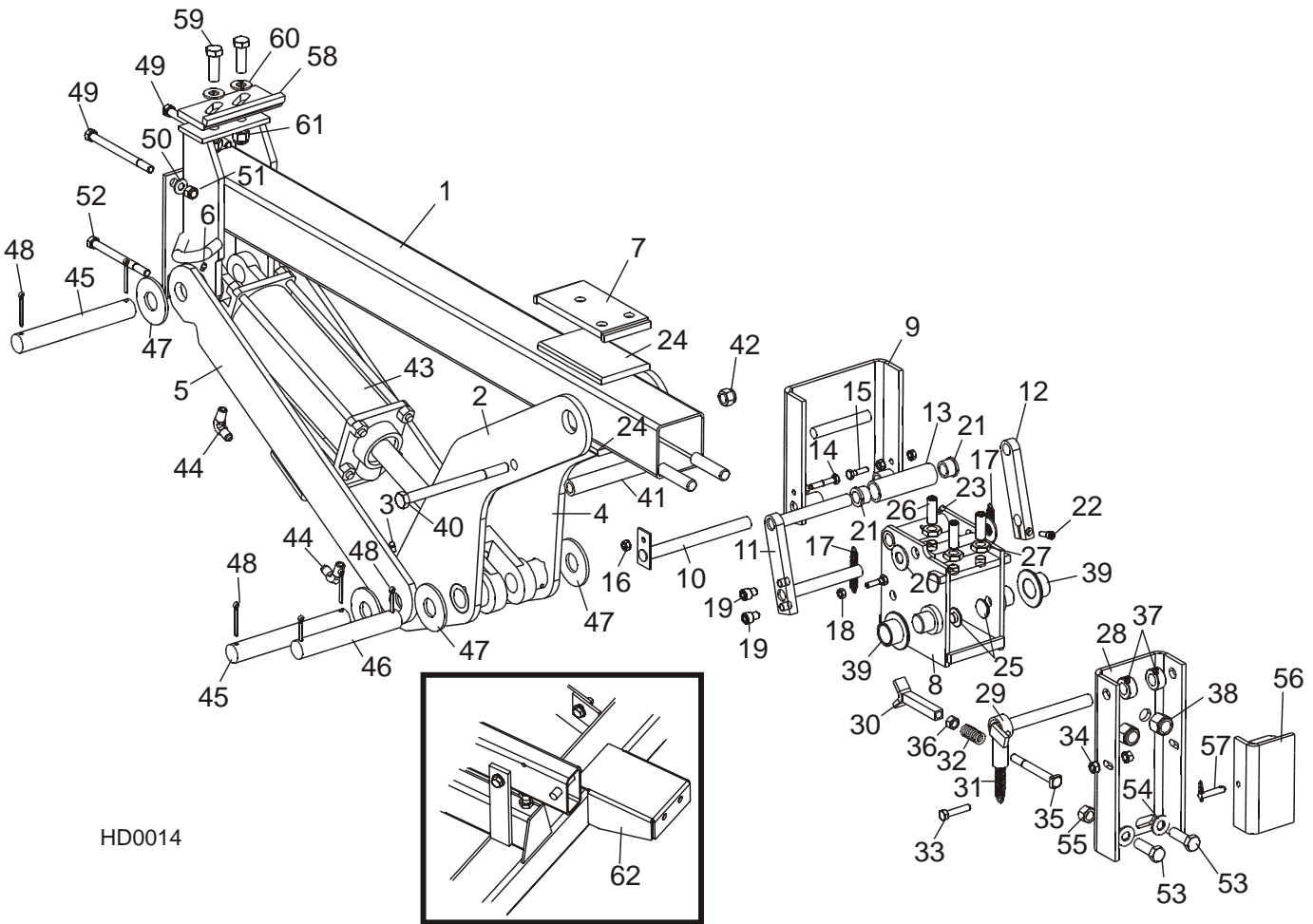
² Use W12752 painted clamp plate to replace W12068 unpainted clamp plate.

³ Use 014614 to replace original activator assembly A09640 ([See Section 8.16](#)). Updated clamp design automatically flips clamp up and down with the throw of the hydraulic clamp handle. For 1987 mills only. Order Automatic Hydraulic Clamp Retrofit K09693; includes Hydraulic Clamp Box Assembly A09635 and Hydraulic Clamp End Plate Assembly 014614.

⁴ Welded cylinder P12847 replaces P09128 tie rod cylinder originally supplied.

⁵ Seal kit applicable only to welded cylinders. Seal kit A12238 for tie-rod cylinder no longer available. Entire cylinder must be replaced.

⁶ S11810 required if retrofitting Rev. A - C6 with 30" clamp.



HD0014

FIG. 8-14

8.18 Hydraulic Log Clamp				
<i>LT30HD</i>		<i>Rev. C3 - C6</i>		
<i>LT40HD</i>		<i>Rev. AH - C6</i>		
REF	DESCRIPTION (◆ Indicates Parts Available In Assemblies Only)	PART #	QTY.	
	CLAMP KIT, 24" HYDRAULIC LOG	K09465 ¹	1	◆
	Clamp Assembly, 24" Hydraulic Log	A09287	1	
1	Tube, 24" Hydraulic Log Clamp	W09263	1	◆
2	Arm, 24" Hydraulic Log Clamp (Front)	W09269	1	
3	Fitting, 3/16" Straight Grease	P04107	1	
4	Arm, 24" Hydraulic Log Clamp (Rear)	W09271	1	
	Fitting, 3/16" Straight Grease	P04107	1	
5	Arm, 24" Hydraulic Log Clamp Link	W09273	1	
6	Fitting, 3/16" Straight Grease	P04107	2	
7	Plate, Clamp Slide Pad Mount	W09422	1	
	Box/Plate Assembly, Hydraulic Clamp	A09635 ²	1	
8	Box Weldment, Hydraulic Clamp	W12069 ³	1	
9	Plate Weldment, Hydraulic Clamp	W12752 ⁴	1	
10	Pin Weldment, Hydraulic Clamp Plate Pivot	W09639	1	
11	Arm, Clamp Prop	W09638	1	
12	Plate, Clamp Prop Arm End	S09649	1	
13	Spacer, Clamp Prop Arm	S09657	1	
14	Bolt, 1/4-20 X 1 1/2" Hex Head Grade 2	F05005-5	1	
15	Bolt, 1/4-20 X 1" Hex Head Grade 2	F05005-38	1	
16	Nut, 1/4-20 Hex Self-Locking	F05010-9	4	
17	Spring, .36 O.D. X 2.5" Extension	P11817 ⁵	2	
18	Nut, 1/4-20 Hex Lock	F05010-21	2	
19	Screw, 3/8-16 X 1/2" Socket Head	F05007-50	2	
20	Washer, 5/8" SAE Flat	F05011-5	2	
21	Bushing, 5/8" I.D. Bronze	P05135	2	
22	Screw, 1/4-20 X 3/4" Socket Head	F05005-26	1	
23	Fitting, 3/16" Straight Grease	P04107	1	
24	Pad, Clamp Box Plastic Slide	S09219	2	
25	Button, Bronze	S09167	4	
26	Screw, 1/2-13 X 1 1/2" Flat Point Set	F05008-31	3	
27	Nut, 1/2-13 Hex Jam	F05010-31	3	
	Plate Assembly, Hydraulic Clamp End	A09640 ⁶	1	◆
28	Plate, Hydraulic Clamp End	S09660	1	
29	Arm Pivot, Clamp Activator	W09642	1	
30	Arm, Clamp Activator	W09641-N	1	
31	Spring, .5 X 3.75 X .08 Extension Modified	S09661 ⁷	1	
32	Spring, Clamp Die Compression	P09663	1	
33	Bolt, 5/16-18 X 1 1/2" Hex Head Full Thread	F05006-2	1	

34	Nut, 5/16-18 Hex Self-Locking	F05010-20	2	
35	Collar, 5/8" I.D.	P05035	2	
36	Bolt, 3/8-16 X 3 1/2" Square Head Grade 5	F05007-38	1	
37	Nut, 3/8-16 Hex	F05010-1	1	
38	Nut, 5/8-11 Hex Nylon Lock	F05010-34	2	
39	Bearing, Hydraulic Clamp Bronze	P09464	2	
40	Bolt, 1/2-13 X 6 1/2" Hex Head	F05008-6	1	
41	Spacer, Clamp	S09493	1	
42	Nut, 1/2-13 Hex Nylon Lock	F05010-8	1	
	Cylinder Assembly, Hydraulic Log Clamp	A09285	1	
43	Cylinder, 8" X 3" Hydraulic (Monarch #TQ3008-Q0002)	P12847 ⁸	1	◆
	Seal Kit, 8" x 3" Hydraulic Cylinder	P12956 ⁹	1	
44	Fitting, 90° Male Elbow	P09142	2	
45	Pin, Clamp Cylinder Mount	S09246 ¹⁰	2	
46	Pin, Clamp Pivot	S09247 ¹¹	1	
47	Washer, 1" SAE Flat	F05011-28	6	
48	Pin, 3/16" X 1 1/2" Cotter	F05012-23	6	
49	Bolt, 3/8-16 X 5" Hex Head Grade 2	F05007-5	2	
50	Washer, 3/8" SAE Flat	F05011-3	2	
51	Nut, 3/8-16 Hex Nylon Lock	F05010-10	2	
52	Bolt, 3/8-16 X 4 1/2" Hex Head Grade 2	F05007-35	2	
53	Bolt, 1/2-13 X 5 1/2" Hex Head Grade 5	F05008-28	2	
54	Washer, 1/2" SAE Flat	F05011-2	2	
55	Nut, 1/2-13 Hex Lock	F05010-3	2	
	Clamp Extension Assembly	A12208 ¹²	1	
56	Clamp Extension, 3" Hydraulic	W09922	1	◆
57	Pin, 5/16" X 1" Retaining	F05012-45	1	
58	PLATE, CLAMP STOP	W09404	1	
59	BOLT, 1/2-13 X 1 1/2" HEX HEAD GRADE 5	F05008-33	2	
60	WASHER, 1/2" SAE FLAT	F05011-2	2	
61	NUT, 1/2-13 HEX NYLON LOCK	F05010-8	2	

¹ 24" Clamp assembly replaced by 30" assembly. Also requires support bracket S11810. [See Section 8.17 Hydraulic Log Clamp.](#)

² Updated clamp design automatically flips clamp up and down with the throw of the hydraulic clamp handle. For 1987 mills only. Order Automatic Hydraulic Clamp Retrofit K09693; includes Hydraulic Clamp Box Assembly A09635 and Hydraulic Clamp End Plate Assembly A09640.

³ Replaces W09636 originally supplied.

⁴ Replaces W09637 originally supplied on Rev. C7 - D3. Use W12752 painted clamp plate to replace W12068 unpainted clamp plate.

⁵ Replaces P08539 originally supplied.

⁶ Use 014614 to replace original activator assembly A09640 ([See Section 8.16](#)). Updated clamp design automatically flips clamp up and down with the throw of the hydraulic clamp handle. For 1987 mills only. Order Automatic Hydraulic Clamp Retrofit K09693; includes Hydraulic Clamp Box Assembly A09635 and Hydraulic Clamp End Plate Assembly 014614.

⁷ Service part only. Modified P08538 spring.

⁸ Welded cylinder P12847 replaces P09128 tie rod cylinder originally supplied.

⁹ Seal kit applicable only to welded cylinders. Seal kit A12238 for tie-rod cylinder no longer available. Entire cylinder must be replaced.

¹⁰ Replaces S09246-W.

¹¹ Replaces S09247-W.

¹² Extension added after Rev. AP. May be used with all hydraulic sawmills to assist clamping small logs. Replaces W09922 originally supplied. Retaining pin allows convenient storage of clamp extension.

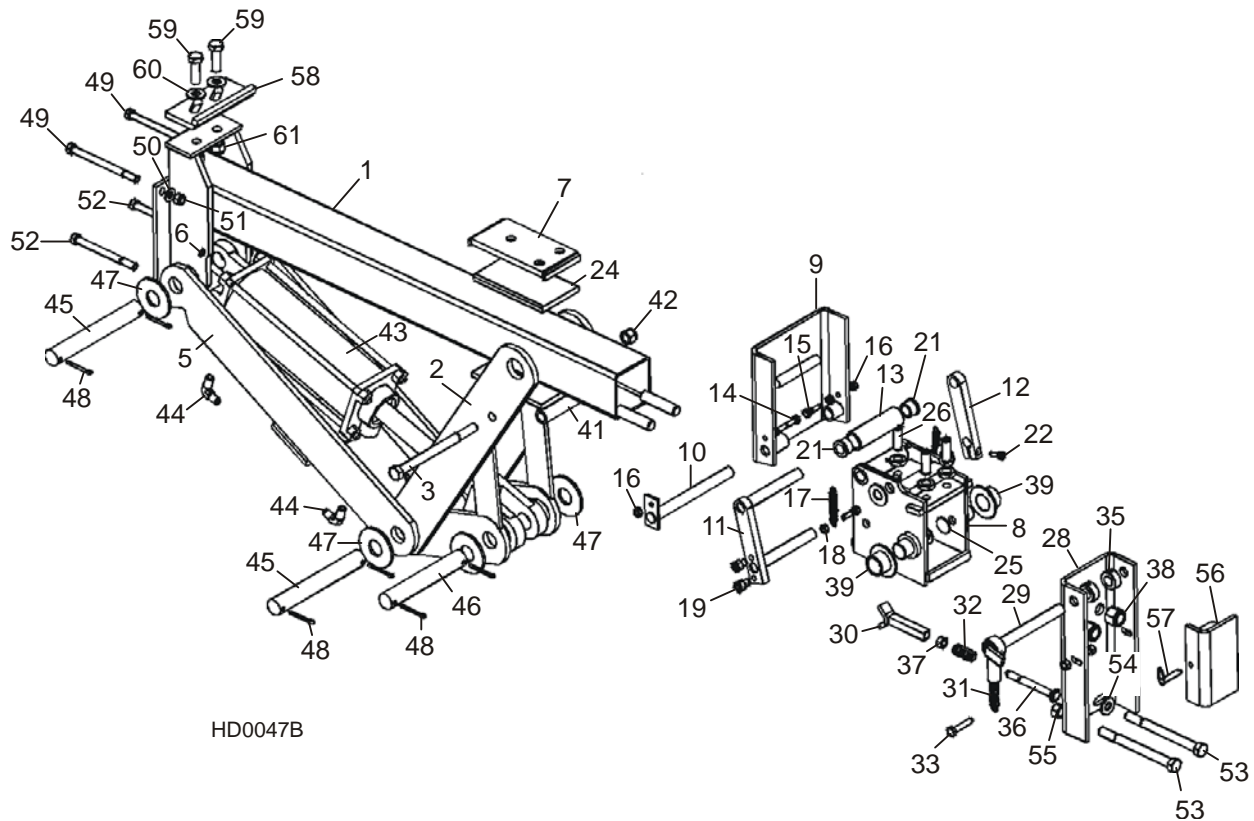


FIG. 8-15

8.19 Hydraulic Log Clamp				
<i>LT40HD Rev. A - AG</i>				
REF	DESCRIPTION (◆ Indicates Parts Available In Assemblies Only)	PART #	QTY.	
	CLAMP KIT, 24" HYDRAULIC LOG	K09465 ¹	1	◆
	Clamp Assembly, 24" Hydraulic Log	A09287 ²	1	
1	Tube, 24" Hydraulic Log Clamp	W09263	1	◆
2	Arm, 24" Hydraulic Log Clamp (Front)	W09269	1	
3	Fitting, 3/16" Straight Grease	P04107	1	
4	Arm, 24" Hydraulic Log Clamp (Rear)	W09271	1	
	Fitting, 3/16" Straight Grease	P04107	1	
5	Arm, 24" Hydraulic Log Clamp Link	W09273	1	
6	Fitting, 3/16" Straight Grease	P04107	2	
7	Plate, Clamp Slide Pad Mount	W09422	1	
8	Box Weldment, Hydraulic Clamp	W09265 ³	1	◆
9	Plate, Hydraulic Clamp	S09277 ³	1	
10	Arm, Clamp Plate Prop	W09267 ³	1	
11	Pin, Clamp Pivot	S09421 ³	1	
12	Bolt, 1/2-13 x 1 1/2" Square Head	F05008-21	1	
13	Pad, Clamp Box Plastic Slide	S09219	2	
14	Button, Bronze	S09167	4	
15	Screw, 1/2-13 X 1 1/4" Oval Point Set	F05008-5	3	
16	Nut, 1/2-13 Hex Jam	F05010-31	4	
17	Washer, 5/8" SAE Flat	F05011-21	4	
18	Pin, 3/16" x 1" Cotter	F05012-21	4	
19	Plate, Hydraulic Clamp End	S09423 ³	1	
20	Nut, 5/8-11 Hex Nylon Lock	F05010-34	2	
21	Bearing, Hydraulic Clamp Bronze	P09464	2	
22	Spacer, Clamp	S09493	1	
23	Bolt, 1/2-13 x 6 1/2" Hex Head	F05008-6	1	
24	Nut, 1/2-13 Hex Nylon Lock	F05010-8	1	
	Cylinder Assembly, Hydraulic Log Clamp	A09285	1	
25	Cylinder, 8" X 3" Hydraulic (Monarch #TQ3008-Q0002)	P12847 ⁴	1	◆
	Seal Kit, 8" x 3" Hydraulic Cylinder	P12956 ⁵	1	
26	Fitting, 90° Male Elbow	P09142	2	
27	Pin, Clamp Cylinder Mount	S09246 ⁶	2	
28	Pin, Clamp Arm Pivot	S09247 ⁷	1	
29	Washer, 1" SAE Flat	F05011-28	6	
30	Pin, 3/16" x 1 1/2" Cotter	F05012-23	6	
31	Bolt, 3/8-16 X 5" Hex Head Grade 2	F05007-5	2	
32	Washer, 3/8" SAE Flat	F05011-3	2	
33	Nut, 3/8-16 Hex Nylon Lock	F05010-10	2	

8

Hydraulic System*Hydraulic Log Clamp*

34	Bolt, 3/8-16 X 4 1/2" Hex Head Grade 2	F05007-35	2	
35	Bolt, 1/2-13 X 5 1/2" Hex Head Grade 5	F05008-28	2	
36	Nut, 1/2-13 Hex Lock	F05010-3	2	
	Clamp Extension Assembly	A12208 ⁸	1	
37	Clamp Extension, 3" Hydraulic	W09922	1	◆
38	Pin, 5/16" X 1" Retaining	F05012-45	1	
39	PLATE, CLAMP STOP	W09404	1	
40	BOLT, 1/2-13 X 1 1/2" HEX HEAD GRADE 5	F05008-33	2	
41	WASHER, 1/2" SAE FLAT	F05011-2	2	
42	NUT, 1/2-13 HEX NYLON LOCK	F05010-8	2	

¹ 24" Clamp assembly replaced by 30" assembly on Rev. C8+. Also requires support bracket S11810. [See Section 8.17 Hydraulic Log Clamp.](#)

² Clamp assembly includes upgraded two-stage clamp. [See Section 8.18 Hydraulic Log Clamp.](#)

³ Clamp may be upgraded to two-stage design. [See Section 8.18 Hydraulic Log Clamp.](#)

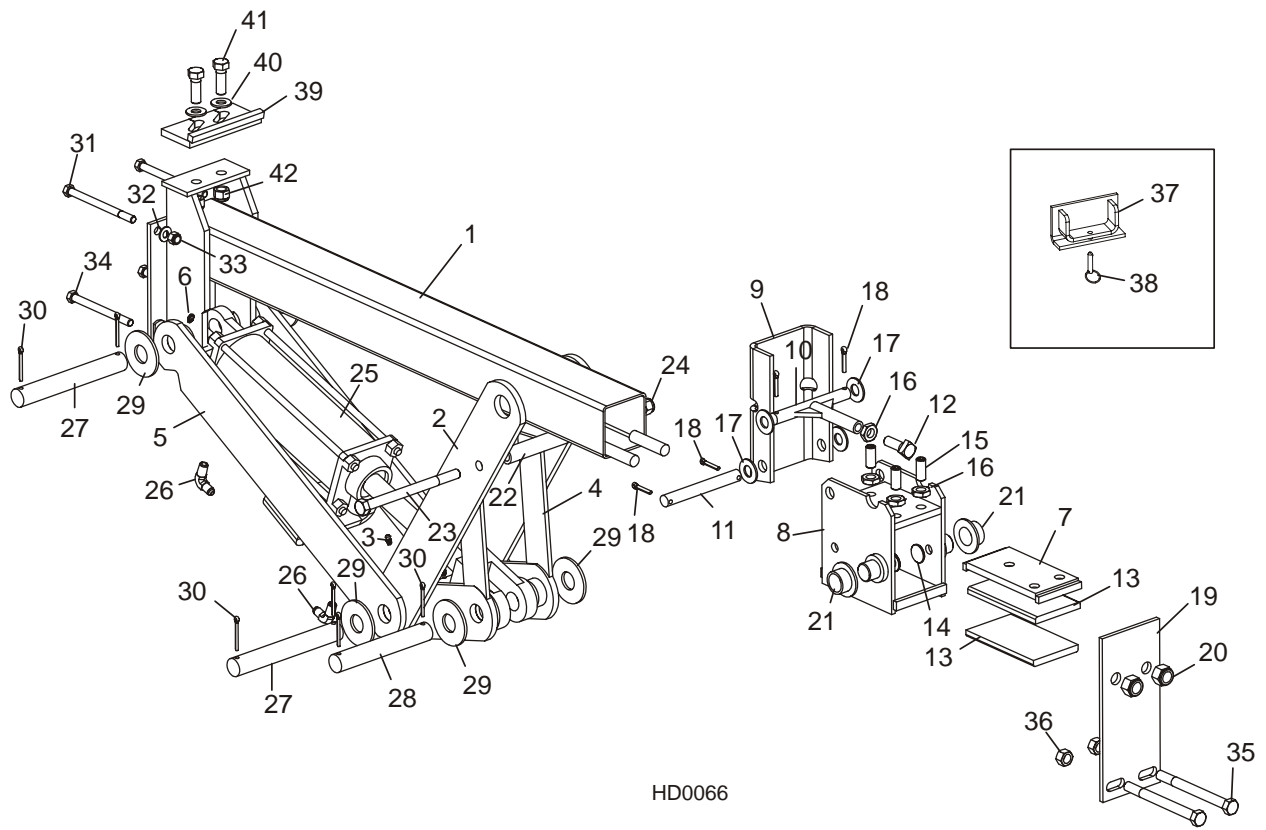
⁴ Welded cylinder P12847 replaces P09128 tie rod cylinder originally supplied.

⁵ Seal kit applicable only to welded cylinders supplied on Rev. F5 - F7. Seal kit A12238 for tie-rod cylinder no longer available. Entire cylinder must be replaced.

⁶ Replaces S09246-W.

⁷ Replaces S09247-W.

⁸ Extension added after Rev. AP. May be used with all hydraulic sawmills to assist clamping small logs.



HD0066

FIG. 8-16

8

Hydraulic System*Hydraulic Toe Board (Roller-Style)*

8.20 Hydraulic Toe Board (Roller-Style)				
	<i>LT30HD</i>	<i>Retrofit</i>		
	<i>LT40HD</i>	<i>Retrofit</i>		
REF	DESCRIPTION (◆ Indicates Parts Available In Assemblies Only)	PART #	QTY.	
	TOE BOARD ASSEMBLY, HYDRAULIC	014440 ¹	1	
1	Bed Rail, Adjustable Long	S09102	2	◆
	Bolt, Assembly, Bed Rail	A09775	2	◆
	Nut, 5/8-11 Hex	F05010-54	1	
	Bolt, Bed Rail Adjustment	S13006	1	
2	Toe Board Weldment	W13025	2	
3	Pin, 1/2-1 3/4 Clevis	F05012-82 ²	4	
4	Pin, 1/8" x 3/4" Cotter	F05012-3 ³	4	
5	Washer, 1/2" SAE Flat	F05011-2	8	
6	Mount, Toe Board Cylinder	S13022	2	
7	Bracket, Toe Board Cylinder Mount	S13023	2	
	Bolt, 5/6-18 x 1 1/2" Hex Head Full Thread	F05009-19	4	
	Washer, 5/8" Split Lock	F05011-27	4	
8	Cylinder, Toe Board	014426	2	◆
	Muffler, 1/4" NPT Air	P20904	2	
	Fitting, 90° Elbow Male	P09142	2	
9	Spring, Toe Board Retrofit	014428	4	
10	Pin, Clevis Toe Board	014427	4	
11	Washer, 1" ID SAE Flat	F05011-28	2	
12	Nut, 3/4-10 Self-Locking	F05010-80	4	
13	Washer, 3/4" Flat	F05011-29	4	
	Hose Assembly, 1/4" x 9" Hydraulic	014437	2	◆
	Hose, 1/4" ID	R02130	.75 ft.	
	Fitting, 1/4" Hydraulic Compr.	P09132	2	◆
	Fitting, 1/4" JIC Coupling	016539 ⁴	2	

¹ Optional retrofit upgrades mill to roller-style toe boards. Available 4/96.

² Clevis pin replaces F05008-25 bolt (8/96). Use of clevis pin also requires F05012-3 cotter pin.

³ Cotter pin replaces F05010-8 nut (8/96). Use of cotter pin also requires F05012-82 clevis pin.

⁴ Replaces 014436 (duplicate part numbers).

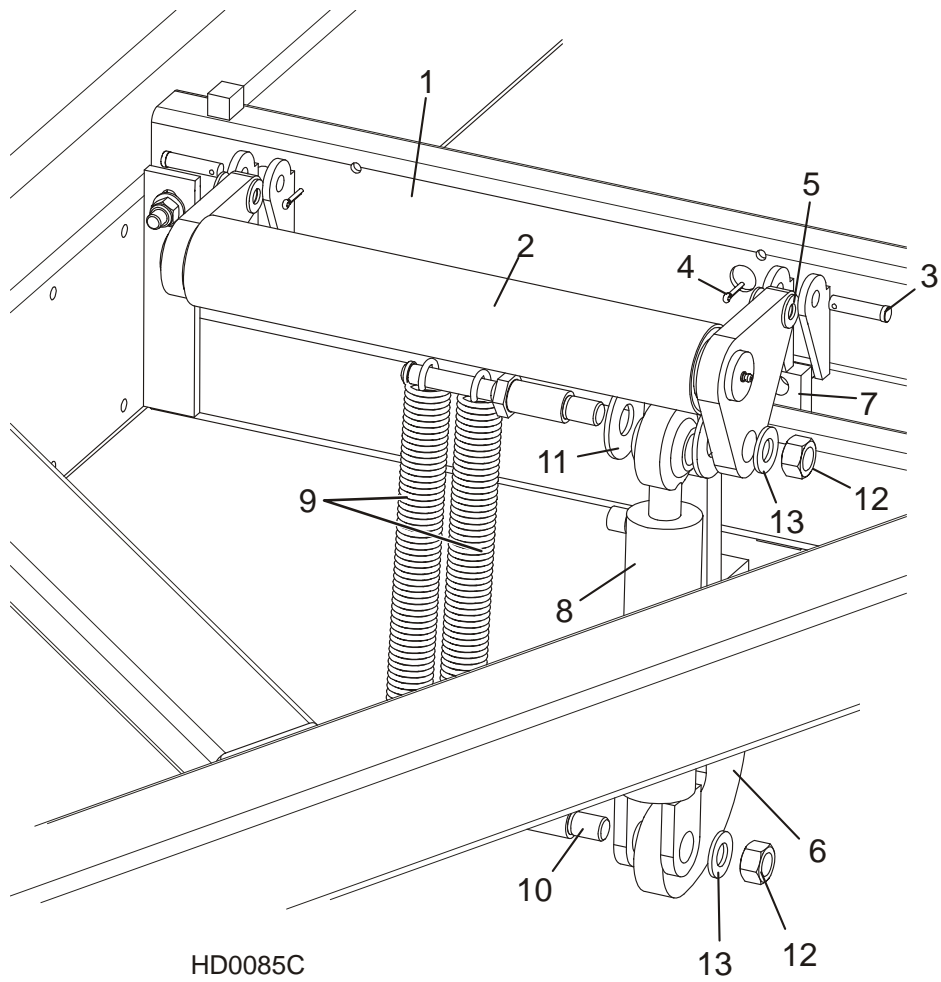


FIG. 8-17

8

Hydraulic System*Hydraulic Toe Board*

8.21 Hydraulic Toe Board				
<i>LT30HD</i>		<i>Rev. C3 - C6</i>		
<i>LT40HD</i>		<i>Rev. AM - C6</i>		
REF	DESCRIPTION (◆ Indicates Parts Available In Assemblies Only)	PART #	QTY.	
	TOE BOARD ASSEMBLY, HYDRAULIC	A09665 ¹	2	
1	Housing, Hydraulic Toe Board	W09666	1	
2	Piston, Hydraulic Toe Board	W09667	1	
3	Seal, Hydraulic Toe Board	P09740	1	
4	Tube, Hydraulic Toe Board Guide	W10027	2	
5	Spring, Hydraulic Toe Board	P09742	2	
6	Washer, 1/2" SAE Flat	F05011-2	2	
7	Nut, 1/2-13 Hex Nylon Lock	F05010-8	2	
8	Fitting, 90° Male Elbow	P09142	1	
9	Bolt, 1/2-13 X 3" Hex Head Full Thread	F05008-7	2	
10	WASHER, 1/2" SAE FLAT	F05011-2	4	
11	NUT, 1/2-13 HEX NYLON LOCK	F05010-8	4	

¹ See [Section 7.6 Manual Toe Board](#) for manual toe boards standard on sawmills before Rev. AM.

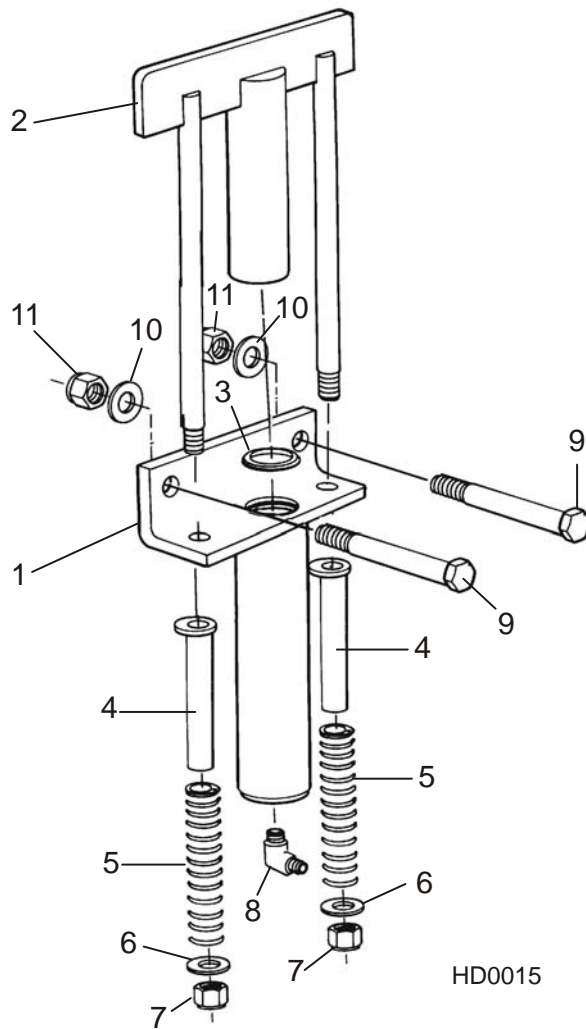


FIG. 8-18

INDEX

B

battery box 4-1, 4-3

bed rails

front/rear 7-2

middle 7-4

pivot 7-6

blade guide

drive side 2-3

idle side 2-1

throat bearing 2-36

throat cam 2-35

blade guide arm 2-23, 2-25

blade tensioner 2-17

blade wheel

drive side 2-5, 2-7

idle side 2-9, 2-11, 2-13, 2-15

C

clutch/brake lever 2-27, 2-29, 2-31

covers 3-1

H

hydraulic

control box 8-3, 8-7, 8-11, 8-15

hoses 8-1

log loader 8-25

log turner 8-27

power strip 8-19, 8-21, 8-23

pump replacement parts 8-5, 8-9, 8-13, 8-17

side support 8-29

toe board 8-43, 8-45

I

instrument panel 4-5, 4-7

L

legs

stationary 7-8

M

manual toe board 7-10

P

parts list

how to use 1-1

power feed 6-4, 6-7

S

scale

blade height 5-3

side supports 7-7

sight gauge 5-1

T

track rollers

lower 6-3

upper 6-1

U

up/down 5-5, 5-7

v-brace mount 5-1