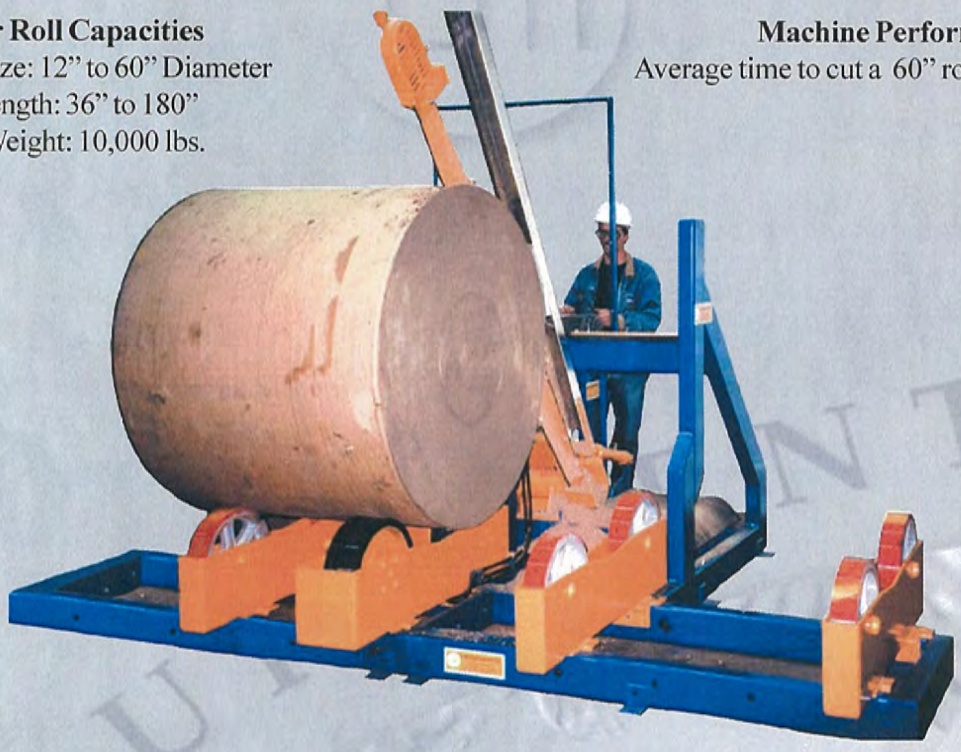
L-M PAPER ROLL SAW

Model PS150-7-404 Paper Roll Cut Off Saw

Cut Off Damaged Ends, or Split Rolls For Recycling

Paper Roll Capacities
Roll size: 12" to 60" Diameter
Roll length: 36" to 180"
Roll Weight: 10,000 lbs.

Machine Performance
Average time to cut a 60" roll = 5 Minutes



* 15HP Heavy duty **forgiving** saw drive assembly, engineered to minimize chain breakage
* 2HP hydraulic power unit to actuate the saw through the cut
* 18" of side shifting travel to ensure precise placement of the cut
* Large plexiglass operators safety shield
* Aluminum following guide/guard, guides the bar into the cut and protects against flying debri
* Heavy duty construction with reinforced back bracing for easy loading
* 60" maximum roll diameter, larger capacities are available
* Compact design to minimize floor space and simplify installation
* Optional dust collection systems are available

L-M Equipment Co. Ltd
5278 - 185A Street
Surrey, BC, Canada, V3S 7A4
Web Site: www.LMSaws.com

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Phone (604) 576-0088
Fax (604) 576-0089
E-Mail: Sales@LMSaws.com

"Built To Provide Service, Not Require It"

L-M Equipment Co. (1981) Ltd.

INDEX

Page #	Description
1	Safety instructions
2	Maintenance instructions
3 -7	Operating instructions
8	Trouble shooting
9	Installation diagram
10	Mounting following guide
11	Mounting take-up and following guide bracket
12	Mandrel parts list
13	Mandrel diagram
14	Take-up assembly parts list
15	Take-up assembly diagram
16	Saw bar oiler schematic
17	Electrical schematic
18	L-M 2 x 10 cylinder
19	Saw chain parts list
20	Filing instructions
21	Chain diagnosis

NOTE: WHEN ORDERING PARTS USE SERIAL NUMBER.

MODEL# **SERIAL#**

L-M Equipment Co. (1981) Ltd.

SAFETY INSTRUCTIONS FOR THE PAPER ROLL SAW

PLEASE READ THE FOLLOWING BEFORE OPERATING MACHINE

1) Familiarize all operators with this manual.
2) This is a **DANGEROUS** machine if not operated correctly.
3) Before starting equipment, ensure there are no obstructions in the way of the saw bar.
4) Check to see the saw chain has proper tension.
5) Be sure chain oiler is on and oil reservoir is full.
6) Ensure workers are clear of equipment.
7) Start the electric motor.

NOTE: DO NOT RUN SAW CHAIN UNLESS A PACKAGE OF LUMBER IS IN FRONT TO PROTECT PEOPLE FROM WALKING INTO IT.

8) When changing the chain or removing the saw bar, be sure power supply is locked out and you are using gloves.
9) The best way to ensure safety with the equipment is to train certain individuals to operate the machine and let them be responsible.
10) In general, when doing any work in the machine **LOCK IT OUT** to prevent accidental starting.

L-M Equipment Co. (1981) Ltd.

MAINTENANCE INSTRUCTIONS FOR THE PAPER ROLL SAW

THE FOLLOWING INSTRUCTIONS SHOULD BE FOLLOWED TO ENSURE EFFICIENT SAW OPERATION

BAR AND CHAIN MAINTENANCE:

1) Tighten chain so that is can be lifted clear of the bar approximately 1/2" with thumb and fore finger.

2) Check alignment of saw bar. Center groove of saw bar should align with a spot 3/8" from the inside edge of the sprocket.

3) Use a well sharpened chain.

4) Make certain chain is being oiled.

5) Regularly turn saw bar upside down, end for end and also reverse sprocket to ensure even ware.

OILING INSTRUCTIONS

1) Grease mandrel bearing once every two weeks with ESSO Arcam or equivalent.

2) Oil reservoir for chain should be checked every shift and filled with 30W lubricating oil or equivalent.

L-M Equipment Co. (1981) Ltd.

OPERATING INSTRUCTIONS FOR THE PAPER ROLL SAW

1) Be sure chain is tight so you can lift chain clear of the bar approximately ½: with thumb and forefinger.

2) Close speed control fully (clockwise)

3) Start hydraulic unit.

4) Start saw chain motor.

5) Push manual valve forward to start cut.

6) Open speed control valve slowly until saw bar starts moving.

7) Cut 1/3 through roll. Stop the saw motor and raise the saw bar out of the cut.

8) Using the correct control valve rotate the paper roll 1/3. Do not rotate too far. You want the saw bar to line up with your first cut. You may have to shift the saw to line up.

9) If chattering occurs you may have to repeat steps 7 and 8 again.

10) Once you cut through, turn saw chain off and raise the saw up. If you are cutting a short end off, it may fall without notice.

11) This process should take approximately 5 minutes per 60" roll.

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ADJUST CUTTING SPEED

1) Remove saw chain for safety.

2) Close speed control fully (clockwise).

3) Start hydraulic unit.

4) Open speed control ¾ turn.
5) Push manual valve forward to start cycle and note time.

6) It should take 5 minutes to complete cutting cycle.

7) If it takes less than 5 minutes to complete cycle repeat steps 4 and 5 again with speed control open ½ turn.

8) This will give you a feeling on how fast the cutting speed should be.

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ADJUST CUTTING PRESSURE

NOTE: ONLY AFTER YOU HAVE SET CUTTING SPEED YOU THEN CAN SET THE CUTTING PRESSURE

1) Remove saw chain for safety.

2) Start hydraulic unit.

3) Lower saw bar down half way using correct cutting speed.

4) Go to the far end of the saw bar where the take-up is. It should be at head level.

5) Hold saw bar up while the operator operates the manual valve for cutting.

6) The down pressure you are holding back should be approximately 70lbs (32 kg).

7) If the pressure is not enough, locate the relief valve under the manual control and remove silver acorn nut. Loosen off jam nut and turn screw clockwise. If pressure is too much turn screw counter clockwise.

8) Repeat steps 4 and 5

9) If valve bottoms out and you do not have enough pressure you must increase pressure at the pump. Follow instructions for adjusting hydraulic pump pressure.

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ADJUSTING HYDRAULIC PUMP PRESSURE

1) The pump pressure is set at the factory. Nut adjustments may be necessary on some installations.

2) First turn relief valve adjusting screw counter clockwise from bottoming position.

3) Locate hydraulic pump next to the electric motor and remove the hexagon cap, directly opposite of the pressure port beside the suction pipe.

4) Turn the adjusting screw in (clockwise) ¾ turn and replace the hexagon cap. Never turn adjusting screw in all the way as it must be ½ turn counter clockwise to keep from bottoming out.

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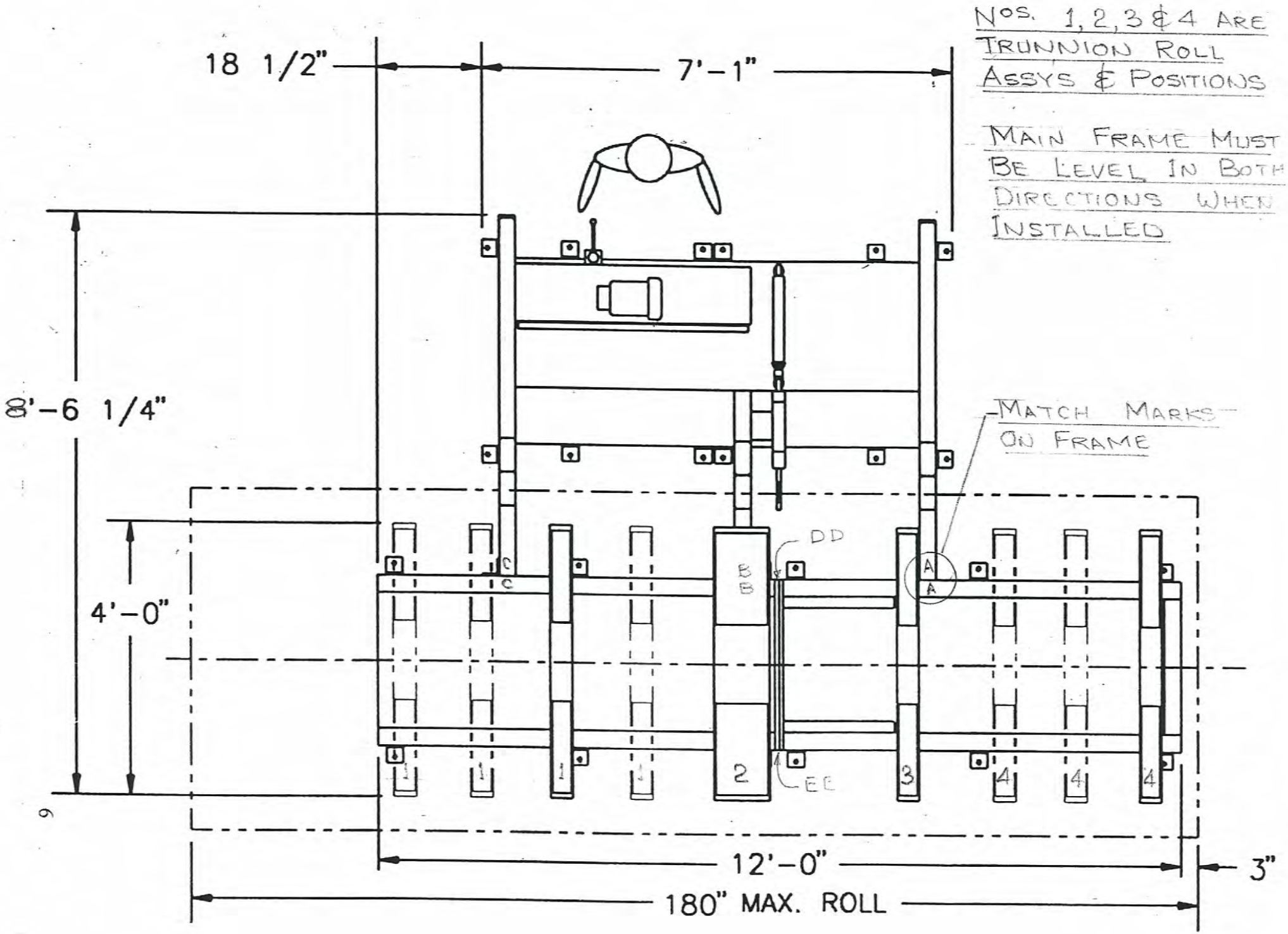
TROUBLE SHOOTING FOR L-M PAPER ROLL SAW

Problems with chain breaking

- Chain may be dull
- Cutting speed may be too fast, chattering occurs
- Paper roll supports may not be even and can cause pinching
- Sporadic cutting (speed must be continuous and even)
- Check condition of saw bar
- Be sure chain is tight
- Check oil reservoir. Chain must be lubricated

Saw will not cut through paper roll

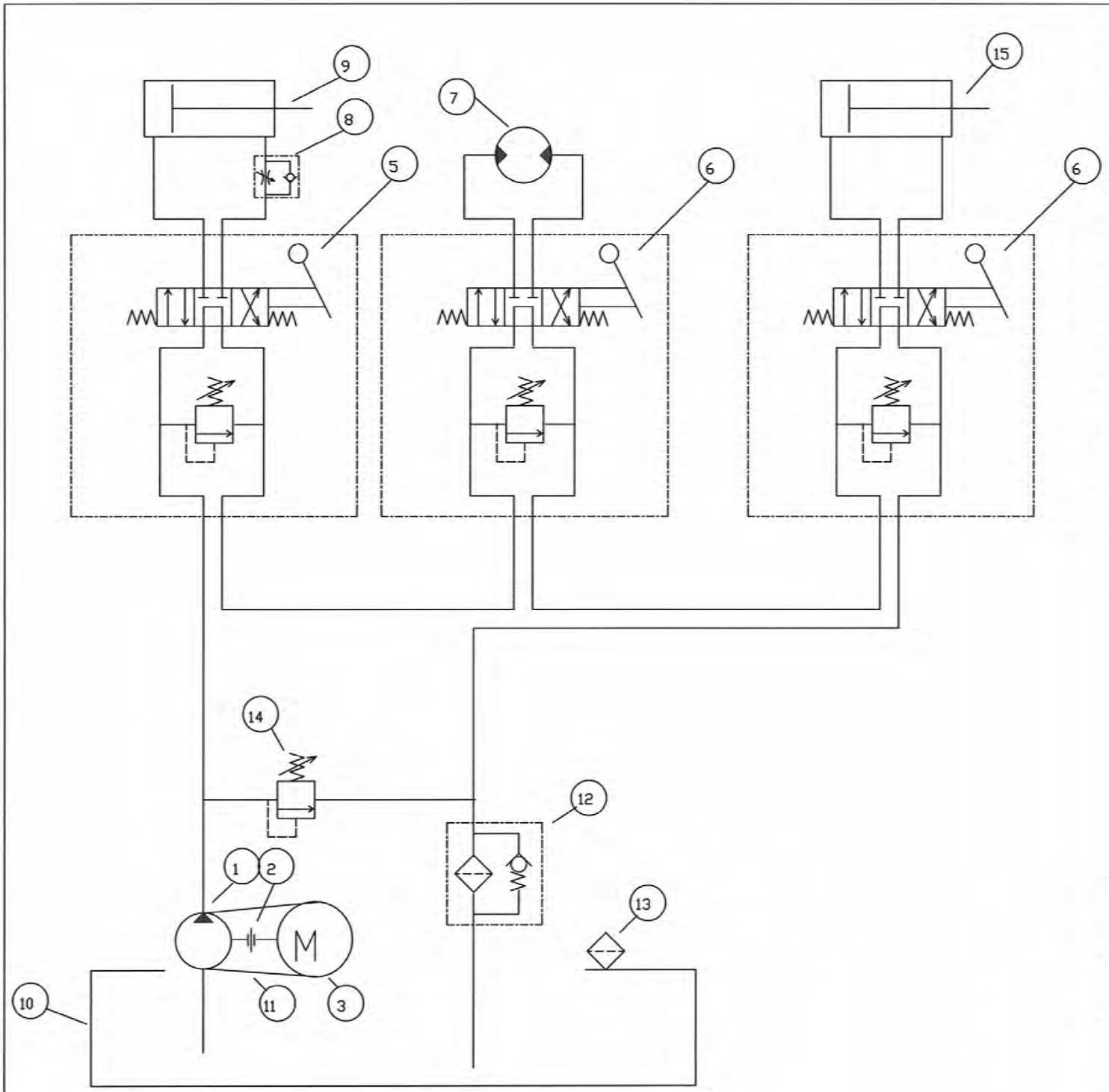
- Chain may be dull
- Check cutting pressure
- Be sure chain is travelling in the correct direction
- Check to see if the kerf is collapsing, causing the bar to be pinched
- Be sure the paper roll is square to the saw



NOS. 1, 2, 3 & 4 ARE TRUNNION ROLL ASSYS & POSITIONS

MAIN FRAME MUST BE LEVEL IN BOTH DIRECTIONS WHEN INSTALLED

MATCH MARKS ON FRAME



ITEM	QTY	DESCRIPTION
1	1	30B1E1B2-L WEBSTER PUMP
2	1	MAGNALOY M300 1/2 X 7/8 COUPLING
3	1	1 HP TEFC "C" FACE 1800 RPM MOTOR
5	1	CROSS CD11FCA0 DETENT VALVE
6	2	BRAND SDCF 755-TM6-4LS CONTROL VLV
7	1	P/H TB0230FS100AAAB HYD. MOTOR
8	1	MP TMF 375-S FLOW CONTROL
9	1	CROSS 2 x 10 CYLINDER
10	1	LM 5 GALLON RESERVOIR
11	1	MAGNALOY 6042 BELL HSNG.
12	1	MPSG-050-R-G2-P10A FILTER
13	1	MPTA80-N10-A000 FILLER/BREATHER
14a	1	ACRB-050 MANIFOLD
14b	1	COMPACT CP200-3-B-0-E-B RELIEF VLV.
15	1	CROSS 2 x 18 CYLINDER

AKTIV CONTROLS LTD

Customer

L-M EQUIPMENT INC.

HYDRAULIC SCHEMATIC PAPER ROLL SAW

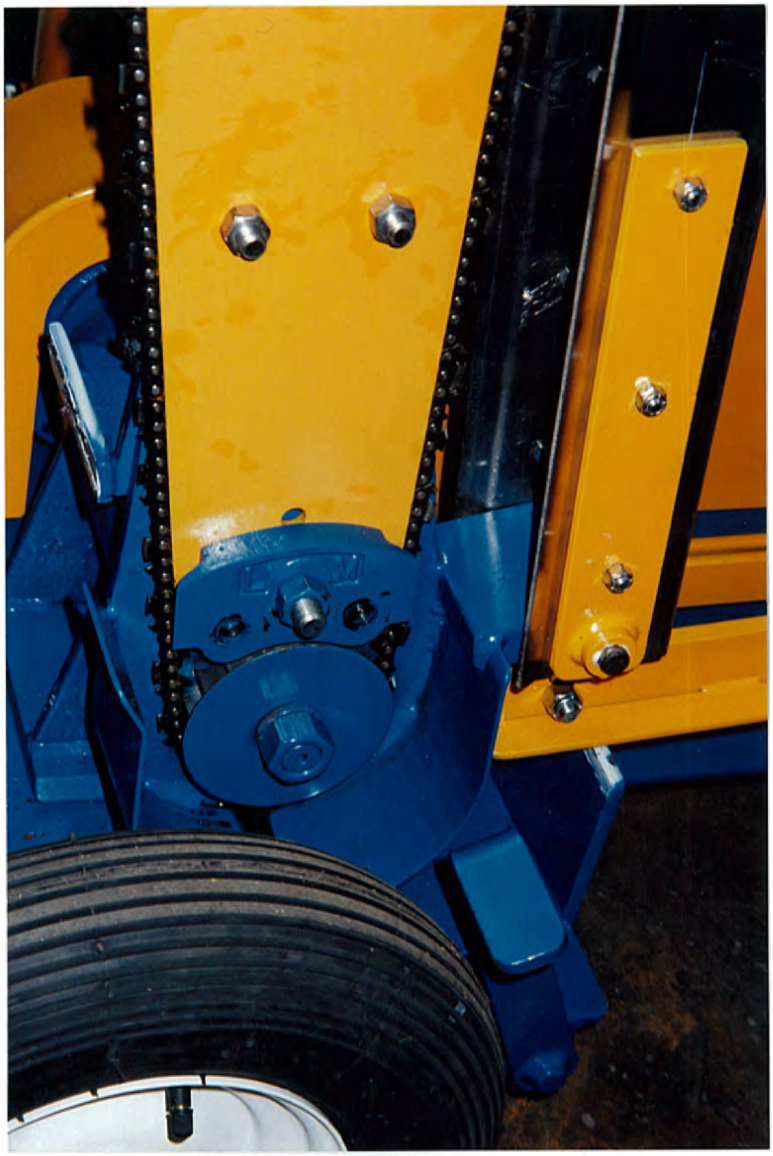
Design	Drawn	Date	Dwg.No.
GM	BS.	02/19/07	A77406

L-M Equipment Co. (1981) Ltd.

TAKE UP AND GUIDE BRACKET ASSEMBLY

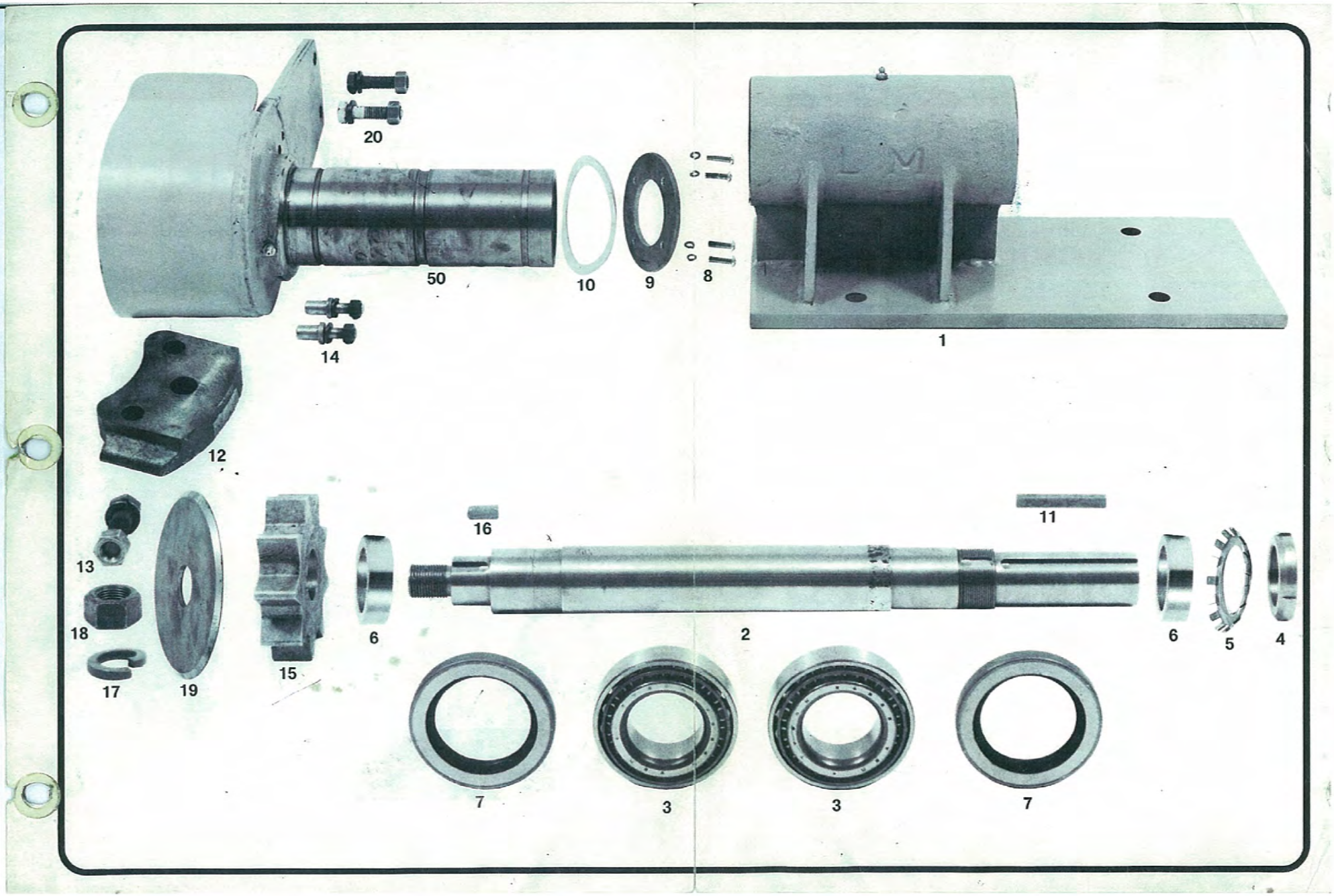
L-M Equipment Co. (1981) Ltd.

SAW BAR AND FOLLOWING GUIDE ASSEMBLY



L-M EQUIPMENT Co. Ltd.
MANDREL ASSEMBLY
PARTS LIST

PART No.	DESCRIPTION	No. REQ'D
100DE-404LH	Saw Mandrel Extended Bar Mount	1
50DE-404LH	Bearing Housing Extended Mount	1
1B	Cast Iron Bushing	1
2	Mandrel Shaft	1
3	Taper Roller Bearings	2
4	Bearing Nut	1
5	Bearing Lock Washer	1
6	Bearing Spacer	2
7	Seal	2
8	End Plate Screw c/w Washer	4
9	End Plate	1
10	Shim	3
11	Pulley Key	1
12	Saw Bar Clamp	1
13	Clamp Bolt c/w Nut and Washer	1
14	Cutter Bar Dowel c/w Nut and Washer	2
15	Sprocket 9 Tooth	1
16	Sprocket Key	1
17	Lock Washer	1
18	Sprocket Nut	1
19	Chain Guard	1
20	Bar Bolt c/w Nut and Washer	2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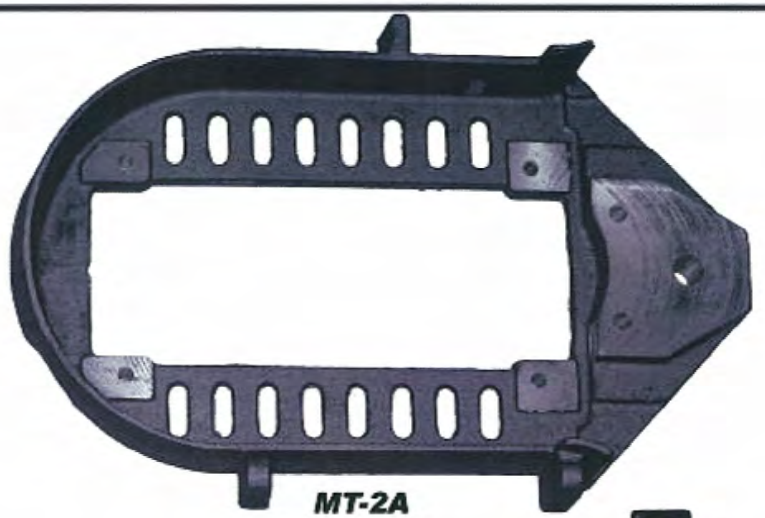
L-M EQUIPMENT Co. Ltd.
TAKE-UP ASSEMBLY
PARTS LIST

PART No.	DESCRIPTION	No. REQ'D
MT-1-404	Take Up Assembly (complete)	1
	Housing Assembly *(consisting of)*	
MT-2A	Aluminum Housing	1
AT-4A	Aluminum Cover	1
RF-1	Hinge Rivet	2
ZT-50A	Latch Bolt C/W Wing Nut	1
SC-8	Cutter Bar Clamp Bolt	
ZT-16-404	.404" Idler Wheel Assembly *(consisting of)*	1
ZT-12-404	.404" Idler Wheel (only)	1
BA-3	Idler Wheel Bearing	1
ZT-13	Set of 2 Washers C/W screws	1
NJ-8	Idler Wheel Bearing Nut	1
TC-4	Tension Spring	1
UE-1	Guide Bracket Bolt & Nut	4
ZT-70	Guide Bracket	2
ZT-10	Stud Block	1
ZT-20	Guide Rod	2
ZT-48	Front Cutter Bar Dowels C/W nuts	2
ZT-61	Tension Adjusting Bolt	1
ZT-65	Tension Nut	1

ZT-61


MT-2A

ZT-48

UE-1

UE-1

ZT-70

ZT-10

TC-4

ZT-65

ZT-20

ZT-20

UE-1

UE-1

ZT-70

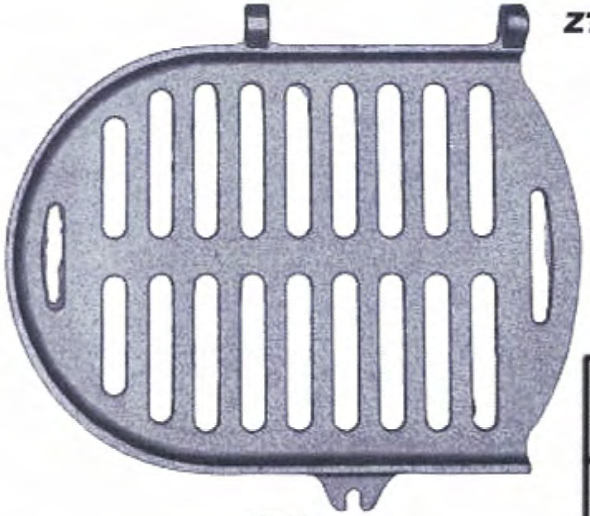
ZT-12-404

BA-3

ZT-13
(2 req'd)

ZT-16-404

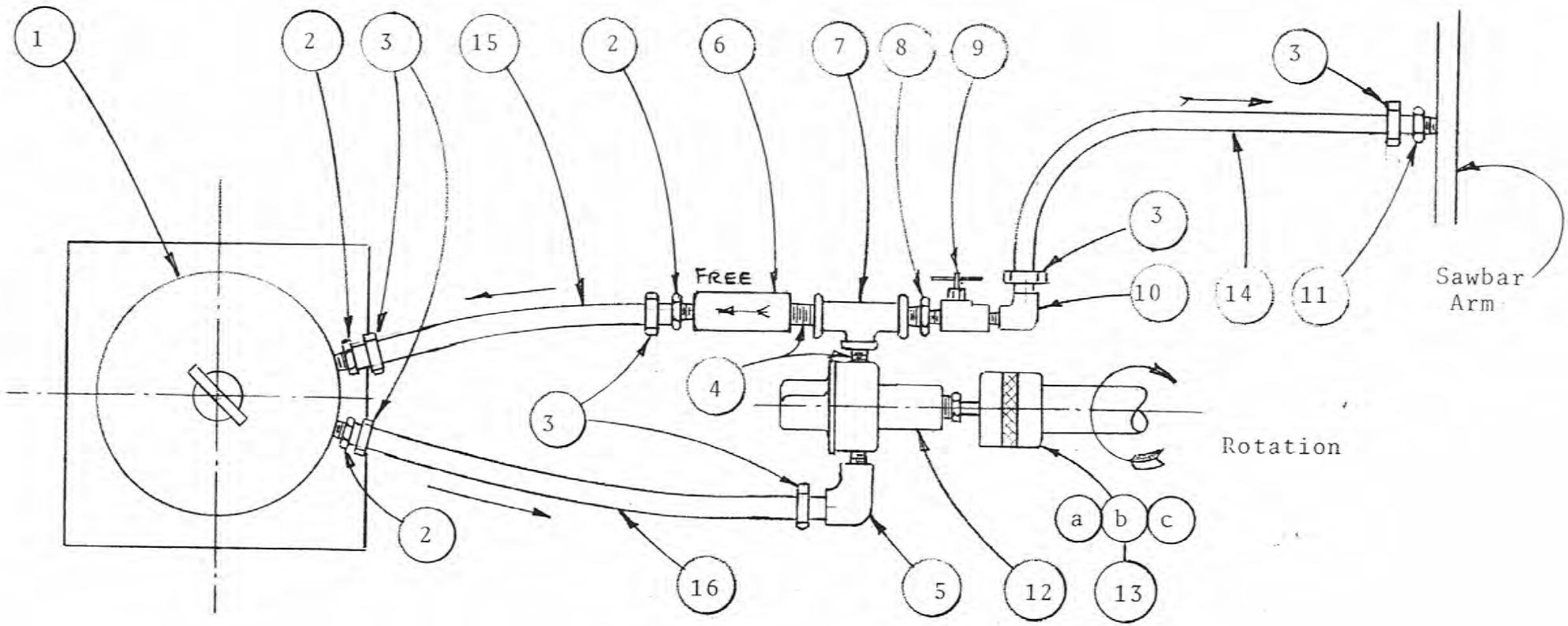
NJ-8


AT-4A

L-M Equipment Co. Ltd
604-431-8800

TAKE UP ASSEMBLY PARTS

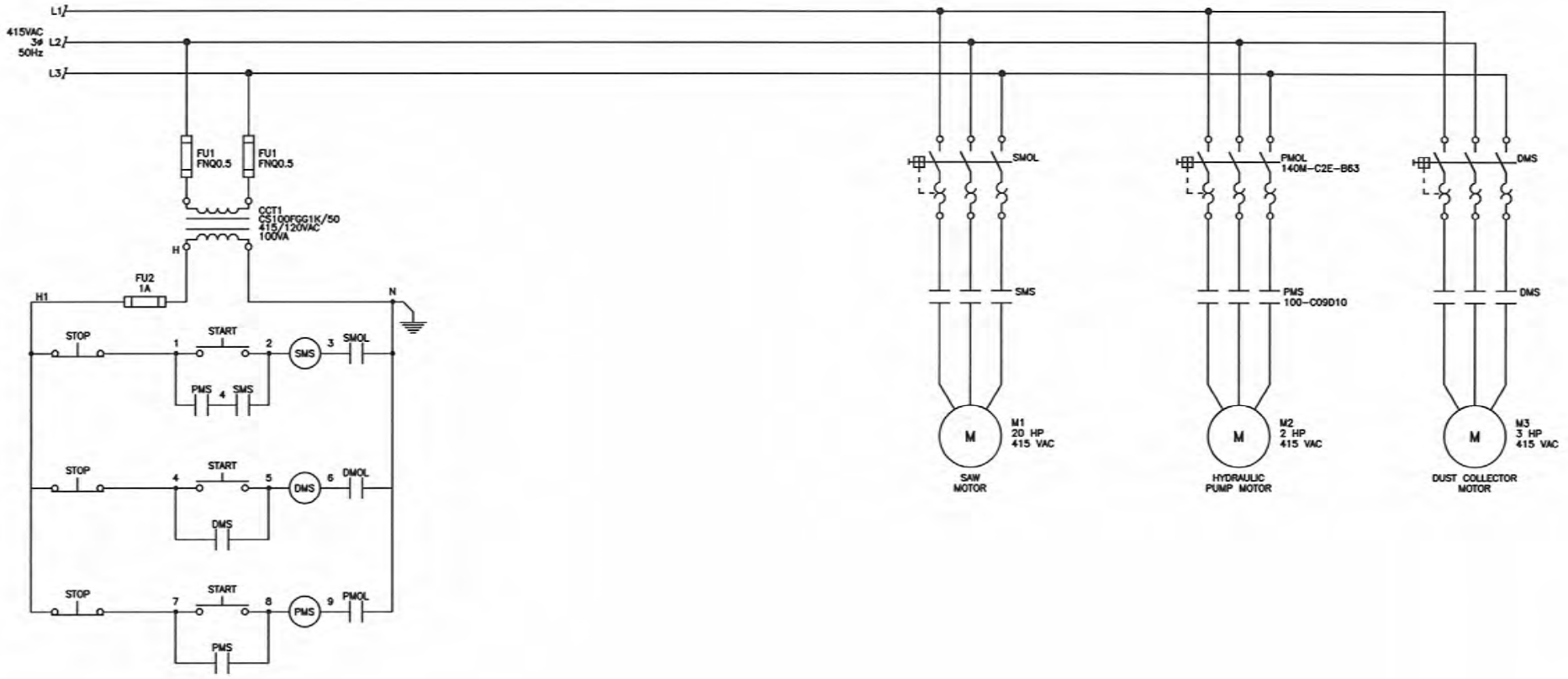
MT1-A-404



1. Reservior
2. 125 HBL-4-4 hose fitting
3. 1/2" hose clamp
4. 1/4" close std. pipe nipple
5. 129 HB-4-4 hose fitting
6. C 400 S-20 check valve
7. 1/4" std. tee
8. 1/4" to 1/8" std. reducing bushing
9. A/C 3/20A needle valve
10. 129 HB-4-2 hose fitting
11. 125HBL-4-2 hose fitting
12. 1000B oil pump
13. FS2 Coupling
    a) 1/2" bore
    b) insert
    c) 1 3/8" bore
14. PVC-84 hose 33" long
15. PVC-84 hose 20" long
16. PVC-84 hose 10 1/2" long

SAW BAR OILER

L-M EQUIPMENT CO. (1981) LTD.
5784 Byrne Road
Burnaby, B. C. V5J 3J4



Produced For:
LM Equipment Ltd.
5784 Byrne Road
Burnaby, BC V5J 3J4
Phone: (604) 431-8800; Fax: (604) 431-7711

Paper Roll Saw c/w Dust Collector

REV	DATE	DRN BY	APRV BY	DESCRIPTION

NOTE:
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CONTROL TERMINAL / WIRING LEGEND
- CABINET CONTROL TERMINAL
- CABINET CONTROL WIRING
- FIELD CONTROL WIRING
- CABINET POWER TERMINAL
- CABINET POWER WIRING
- FIELD POWER WIRING

Western Integrated Systems Ltd.
6409 Beresford Street
Burnaby, BC V5E-1B5 CANADA
Phone: 604-430-1202 Fax: 604-430-5636

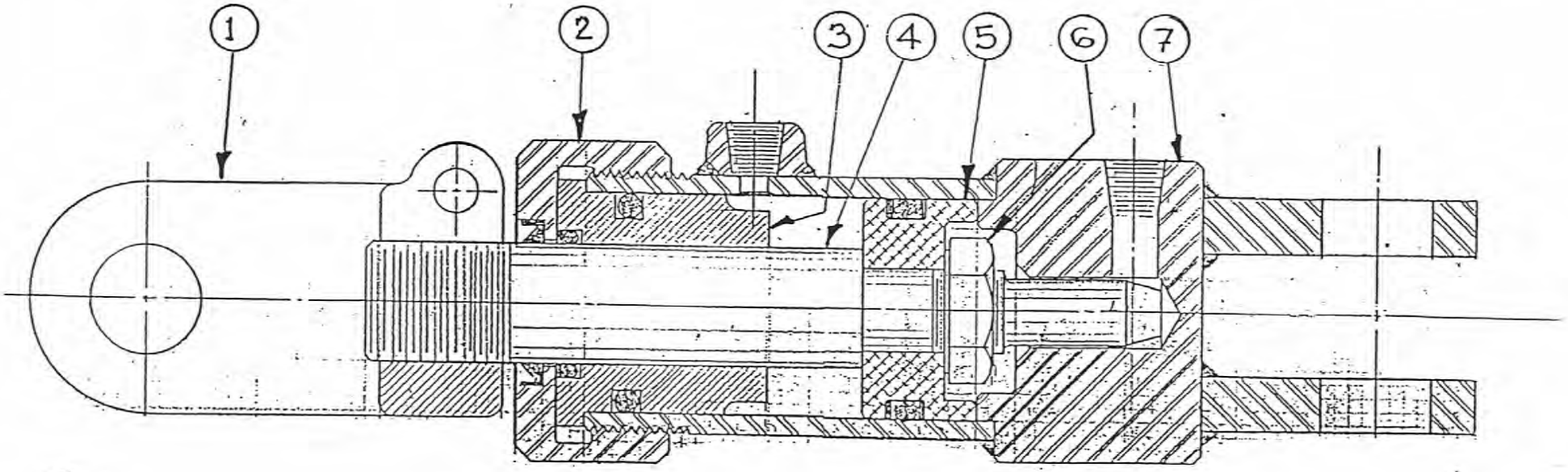
Size	Document Number	Title
B	SAMPLE	Schematic Diagram

Sheet: 1 of 1

L-M 2 x 10 DECKSAW CYLINDER

ITEM	PART NO.	DESCRIPTION
1)	2x10-1	Rod clevis
2)	2x10-6	Head end cap
3)	2x10-10	Gland bushing
4)	2x10-11	Piston rod
5)	2x10-14	Piston
6)	2x10-15	Piston retaining nut
7)	2x10-16	Cylinder barrel assembly
8)	2x10-19	Rod clevis pin
9)	2x10-10	Clip pin
10)	2x10-11	Base clevis pin
11)	LM210K	Seal repair kit

(Ref DWG #SD-500-3)



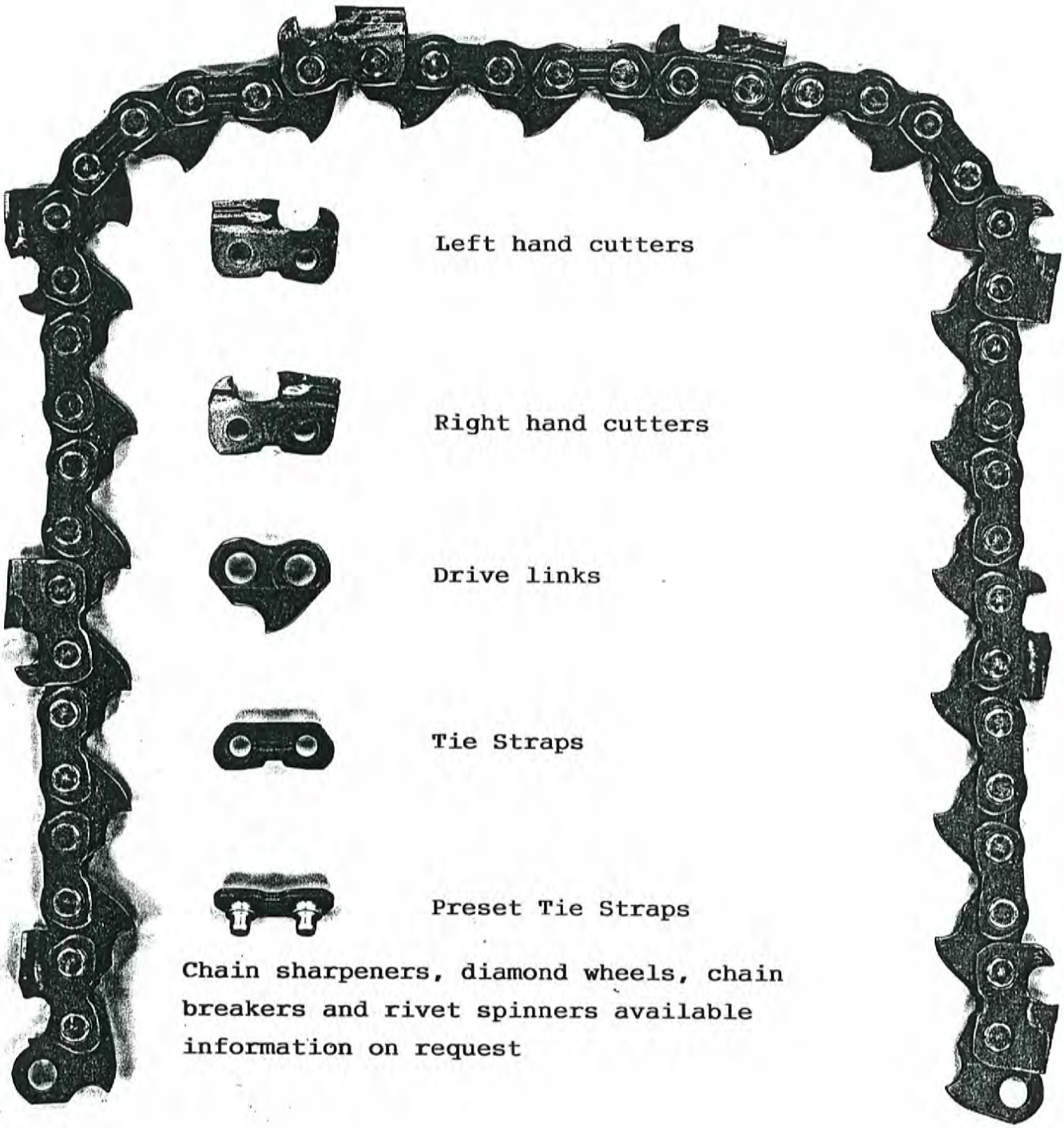
L-M Equipment Co. (1981) Ltd.
5784 Byrne Road, Burnaby, B.C. V5J 3J4

L-M Equipment Company Ltd.
5784 Byrne Road, Burnaby, B.C.,
Canada V5J 3J4
Tel. (604) 431-8800 Fax (604) 431-7711

SAW CHAIN PARTS LIST

Sawchain 27A - 236 drive links for Model 150-7-404 HC

27A - 206 drive links for Model 150-6-404 HC



Left hand cutters

Right hand cutters

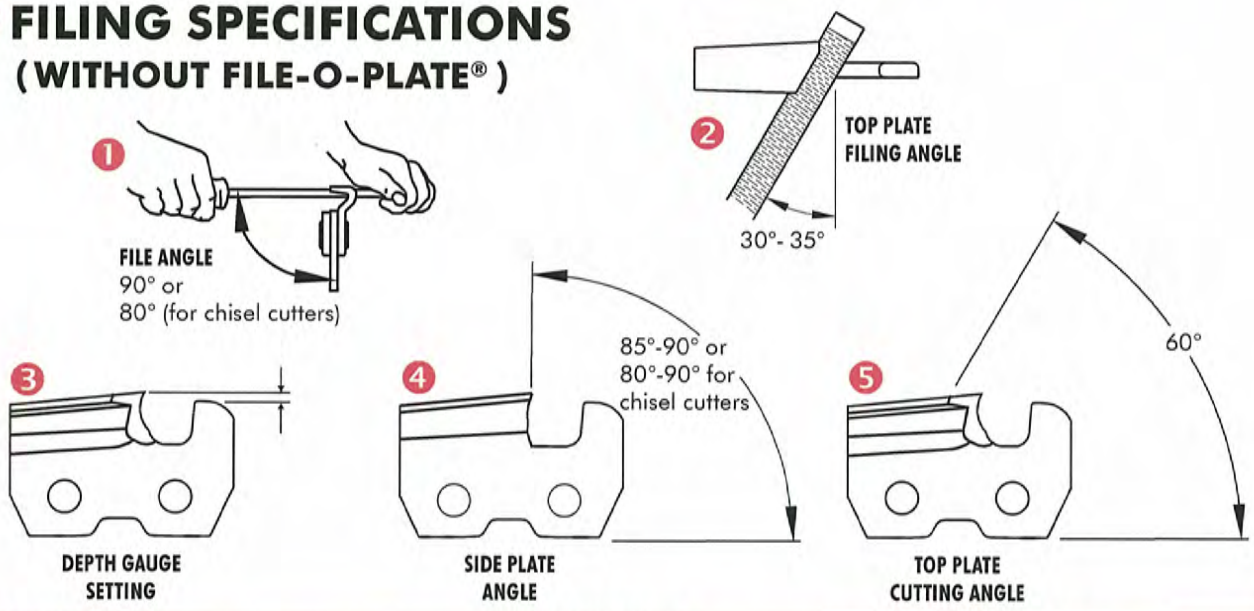
Drive links

Tie Straps

Preset Tie Straps

Chain sharpeners, diamond wheels, chain breakers and rivet spinners available information on request

FILING SPECIFICATIONS
(WITHOUT FILE-O-PLATE®)



CARLTON CHAIN	FILING SPECIFICATIONS					FILING TOOLS		
PART NUMBER	❸ DEPTH GAUGE	❹ SIDE PLATE ANGLE	❺ TOP PLATE CUTTING ANGLE	❷ TOP PLATE FILING ANGLE	❶ FILE ANGLE	FILE-O-PLATE® PART NUMBER	FILE SIZE In.	FILE SIZE mm
K1C, K2C, K3C	.022"	85°-90°	60°	35°	90°	65980	3/16	4,8
K1C-BL, K2C-BL, K3C-BL	.022"	85°-90°	60°	35°	90°	65980	3/16	4,8
K1NK	.022"	85°-90°	60°	35°	90°	65980	3/16	4,8
K1NK-BL	.022"	85°-90°	60°	35°	90°	65980	3/16	4,8
K1L, K2L, K3L	.028"	80°-90°	60°	35°	80°	65981	11/64	4,5
K1L-BL, K2L-BL, K3L-BL	.028"	80°-90°	60°	35°	80°	65981	11/64	4,5
E1MC, E1MC-BL	.028"	85°-90°	60°	30°	90°	-	5/32	4,0
N4C, N4C-BL	.022"	85°-90°	60°	35°	90°	65993	5/32	4,0
N1C, N1C-BL	.022"	85°-90°	60°	35°	90°	65993	5/32	4,0
A1S, A2S, A3S	.022"	85°-90°	60°	35°	90°	65985	7/32	5,5
A1EP, A2EP, A3EP	.022"	85°-90°	60°	35°	90°	65985	7/32	5,5
A1EP-BL, A2EP-BL, A3EP-BL	.022"	85°-90°	60°	35°	90°	65985	7/32	5,5
A1EP-GL, A2EP-GL, A3EP-GL	.022"	85°-90°	60°	35°	90°	65989	7/32	5,5
A1EP-RP, A2EP-RP, A3EP-RP	.028"	85°-90°	60°	5°-10°	90°	-	7/32	5,5
A1LM, A2LM, A3LM	.028"	80°-90°	60°	30°	80°	65986	7/32	5,5
A1LM-BL, A2LM-BL, A3LM-BL	.028"	80°-90°	60°	30°	80°	65986	7/32	5,5
A1LM-GL, A2LM-GL, A3LM-GL	.028"	80°-90°	60°	30°	80°	65972	7/32	5,5
B2EP, B3EP	.032"	85°-90°	60°	35°	90°	65999	7/32	5,5
B2LM, B3LM	.038"	80°-90°	60°	35°	80°	65996	7/32	5,5
B3RM35	.035"	85°-90°	60°	35°	90°	65993	7/32	5,5
B3RM10	.035"	50°-55°	60°	10°	80°	65993	7/32	5,5
B2S, B3S	.035"	85°-90°	60°	35°	90°	65998	7/32	5,5

HARVESTER CHAINS	FILING SPECIFICATIONS					FILING TOOLS		
B2H/B3H	.040"	85°-90°	60°	35°	90°	65995	7/32	5,5
B2H-RP, B3H-RP	.036"	85°-90°	60°	5°-10°	90°	65996	7/32	5,5
B3M	.047"	85°-90°	60°	35°	90°	65957	7/32	5,5
B5M	.047"	85°-90°	60°	35°	90°	65957	7/32	5,5
G7S	.060"	85°-90°	60°	35°	90°	65960	5/16	8,0
G7EP	.060"	85°-90°	60°	35°	90°	65960	5/16	8,0

INFO: ALL CHAINS DEPTH GAUGE FILE/6" FLAT FILE

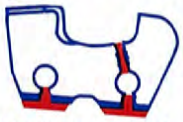
ARE YOU GETTING YOUR MONEY'S WORTH?

SAW CHAIN PROBLEMS WHICH COULD BE PREVENTED:

HIGH DEPTH GAUGES

GREATEST CAUSE OF ALL CHAIN FAILURE:
WEAR ON BAR AND CHAIN • CHAIN STRETCH • SAW WON'T FEED • SLOW CUTTING

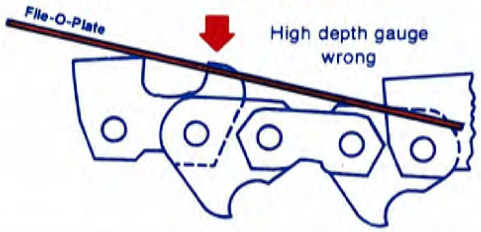
Wear under cutter
bottom edges burred



Breakage into rivet
front or back

Wear under tie strap
bottom edges burred

If you have this problem, we have the answer.
Use the File-O-Plate!



LOW DEPTH GAUGES

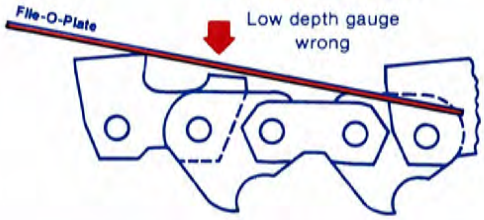
NOTICEABLE VIBRATION • ROUGHNESS • BAR PEENING
CAN CAUSE SEVERE KICK-BACK

Excessive heel
wear on cutter

Excessive peening
causing tight joints

Breakage into
back rivet

A properly maintained
chain is a safer chain.



OTHER PROBLEMS

BACK SLOPE

Wear under cutter and
chain cuts poorly

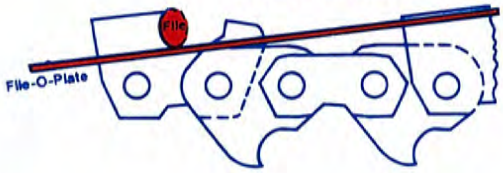
HOOK

Cutters dull quickly
Possible chain failure

DULL

Wear under cutter and
chain won't cut

File-O-Plate
Holds the edge for good
chain maintenance



WORN SPROCKET PROBLEMS

ALWAYS INSTALL A NEW CHAIN ON A NEW SPROCKET OF PROPER PITCH

Peened notch
tight joints
spur sprocket

Peened or broken
drive links
rim or spur sprocket

Peened notch
tight joints
possible chain failure
spur sprocket

Worn spur sprocket

Most of the wear on a
rim sprocket is on the
driving part and not
easily seen

A WORN SPROCKET WILL CAUSE A NEW CHAIN TO STRETCH QUICKLY AND BADLY
UNTIL IT IS FORCED INTO FITTING THE WORN SPROCKET CAUSING CHAIN FAILURE.

CARLTON® SAW CHAIN™
P.O. BOX 68309
MILWAUKIE, OREGON
97268-0309 U.S.A.

WARNING: FOR SAFE OPERATION, FOLLOW ALL SAFETY PRECAUTIONS IN CHAINSAW OPERATOR'S MANUAL.
IMPROPER USE CAN CAUSE SERIOUS INJURY. BEWARE OF KICKBACK!

#80050

Revised 9/86