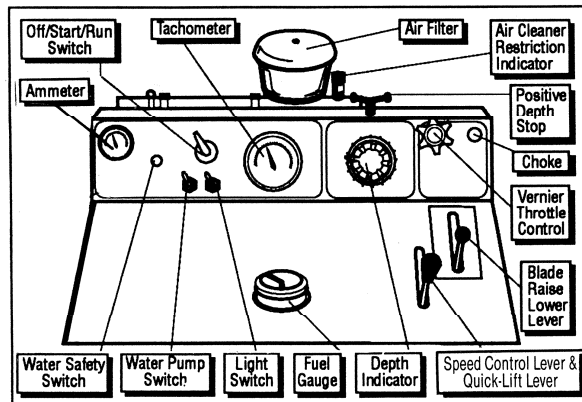


OPERATING INSTRUCTIONS • PARTS LIST FOR PRO 40 II CONCRETE/ASPHALT SAW

GENERAL INSTRUCTIONS

Before operating saw review instructions in engine manual for operation of engine and become familiar with controls and features.



BEFORE SAWING:

IMPORTANT: Follow detailed operating instructions on the top of the cowl.

1. Mount the blade solidly and firmly on the arbor. The lock pin in the outer blade flange must go completely through the blade and into the matching hole on the inside blade flange. Tighten blade flange nut securely.
2. The front and rear pointer must be checked for alignment with blade. They must be in line with a blade mounted on the blade shaft. Use a chalk line or long straight edge to verify alignment.
3. Saw in a straight line. Mark the cutting line clearly so the saw operator can follow line without difficulty and not have to twist the saw from side to side trying to force the blade back on line.
4. Start engine. Follow procedure in Wisconsin Engine Manual. Always have the hydrostatic transmission speed control lever in the stop position when starting the engine.
5. Let engine warm up at moderate speed for a few minutes.
6. For wet sawing, open water valve FULL open. Be sure water jets in blade guard are open and each side of blade has an adequate supply of water before you lower the blade. You must have from 2-1/2 to 5 gallons of water per minute flowing over the blade to get maximum blade life. If water supply is interrupted, stop cutting immediately. Water safety switch will stop engine.

Note: The safety switch cannot detect a clogged water line as it senses pressure, *NOT* flow.

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To start saw when cutting dry, or when the water is not under pressure, push in the re-set button in the center of the water safety cut/off switch. Once switch is pushed in to reset, water pressure **MUST** be present to activate safety shutdown. **Never run the water pump without water flowing through it.**

7. All sawing is done at full throttle. Governor is factory-set for correct speed. *Do not change governor setting* unless you are changing blade capacity and need to adjust blade shaft speed. (Refer to charts on page 3)

TO MANEUVER: MANUALLY AND WITH SPEED CONTROL

1. Raise blade as high as required so blade will not strike pavement when maneuvering.

This saw is equipped with electric powered hydraulic lift. By pulling back on lift lever or engaging quick-lift switch, the blade will be lifted quickly, without operator effort. Engine need not be running. To lower blade simply push lever forward. To lower slowly, push lever forward only very slightly. The rate of descent of the saw is proportional to the distance the lever is pushed.

OPERATING INSTRUCTIONS AND PARTS LIST

TARGET®

Pro 40 II Concrete/Asphalt Saw

TARGET.



17400 W. 119th St.
Olathe, KS 66061

Printed in U.S.A.

2. Pull out extension guide handles to length where the operator has the desired leverage. Lift rear wheels just clear of pavement and maneuver as desired.
3. The hydrostatic speed control lets operator quickly maneuver the saw forward or reverse at infinitely variable speeds from 0 to approximately 250 ft. per minute forward and 250 ft. per minute in reverse. By moving speed control lever backward from "STOP" position, the saw will move in reverse. By moving speed control lever forward from "STOP" position, the saw will move forward. For maximum maneuvering speeds, push the speed control lever all the way forward, or all the way backward for reverse.

IMPORTANT—When maneuvering with power, the engine should be running at half or more maximum speed so hydraulic pump can operate efficiently. For maximum speeds forward or reverse the engine must be running at maximum speed.

TO START SAWING:

1. Follow all the instructions outlined above.
 2. Lower the blade into the cut (never deeper than required) by pushing forward on raise-lower hydraulic control lever located on right side, top of cowl. A flow control limit is built into the line to prevent abnormally fast lowering of blade into cut. Care must be used when lowering blade into the cut to prevent damage to blade.
- CAUTION:** *If the engine should stall for any reason—raise the blade completely out of the cut before starting the engine again!* When lowering the blade into a partially made cut be certain the blade is perfectly aligned within the cut.
3. **ADJUSTMENT AND USE OF DEPTH INDICATOR.** To properly use the depth indicator, lower the blade until it touches the pavement, then set the pointer on the dial to "0". The pointer will then indicate on the dial the actual depth of cut, as the blade penetrates the concrete.

POSITIVE DEPTH STOP. Lower the blade until it touches the pavement. Set the depth indicator to "0". Cut into the pavement until the blade reaches the desired depth. Turn positive depth stop handle to the RIGHT until resistance to turning is noticeable. For greater depth, turn handle to left; for lesser depth, turn handle to right.

STOP BOLT ADJUSTMENT. To prevent blade flange wear from contact with pavement, adjust ½"-13 stop bolt, located between saw frame and front axle.

4. Move speed control lever slowly forward until desired cutting speed is obtained. Monitor engine speed shown on tachometer for greater cutting efficiency.
5. **ADJUSTMENT FOR STRAIGHT LINE SAWING.** (Adjustment bolt is located at rear, lower left of saw.) Varying job conditions, blade diameter and differences in aggregate hardness can some times cause saw to lead-off. If this

occurs, loosen the two bearing mounting bolts, then turn the adjustment bolt to the RIGHT to correct if saw is leading-off to the left or turn the adjustment bolt to the LEFT if the saw is leading-off to the right. **DO NOT FORCE** the adjustment bolt. Re-tighten the bearing mounting bolts.

AT FINISH OF CUT:

1. Move speed control lever to STOP position. Bring blade out of the cut by pulling back on the hydraulic blade raising lever or by engaging quick-lift switch. Raise blade high enough to clear the pavement when maneuvering the saw.
2. Push engine throttle to IDLE location.
3. Turn off water valve.
4. If hydrostatic speed control is used for maneuvering, the engine should be at half throttle or more—then operate speed control lever to get desired speed in either direction.

MAINTENANCE INSTRUCTIONS:

1. **LUBRICATION:** The blade shaft bearings must be greased after every 8 hours of operation. Lubricate the blade shaft while the shaft is rotating at a slow speed by slowly pumping 3 to 5 pumps or until grease just starts to "ooze" out from under seal. All other fittings should be greased after a maximum of every 40 hours of operation. If a bearing is subject to continual water spray it should be greased more often. Use a general purpose #2 lithium based grease without molybdenum disulfide.
2. **CHECK ENGINE OIL DAILY**—Keep oil at proper level—keep oil clean. Change every 50 hours of operation using oil meeting API classification MS, SD, SE or better. Change filter with every oil change. System capacity with filter is 5 quarts.
3. **CLEAN AIR FILTER** outer element when restriction indicator red signal appears. Do not clean inner safety element! Replace inner element yearly or if it becomes damaged. Clean precleaner dust bowl when dust accumulates.
4. **CHECK HYDROSTATIC TRANSMISSION OIL** level in the oil expansion tank periodically. When adding oil use SAE30W30 API classification SE-CC-CD or better.
5. **HYDRAULIC LIFTING PUMP**—Check oil level periodically and add DEXRON II transmission fluid to bring level to full. Do not overfill, or fluid will be expelled through fill filter and cap assembly when lowering saw. System capacity is 1.25 quarts.
6. **BELT CARE**—This saw is equipped with factory tensioned high-tensile V-belts. Check tension as set on new saw and never tension beyond this point. Use a V-belt tension test to check the setting on a single belt of a matched set of V-belts by applying load at the center of the belt span. Deflection should be 5/16" with a 5 to 6 lb. load. Never allow belts to slip as not enough tension will destroy the belts quickly. Change belts in sets only.

7. HYDROSTATIC TRANSMISSION OUTPUT CHAIN. If the chain becomes too loose it may be tightened by loosening the four hydrostatic transmission bolts and moving the unit up in the adjusting slot. A jack screw is under the transmission to assist movement and retain position. Retighten transmission bolts after adjustment.

CAUTION: Do not overtighten chain. The correct tightness allows a slight amount of slack. After tightening chains, rotate each sprocket, stopping at each 90 degrees and recheck to make sure chain is not overtightened.

Periodically lubricate chain with oil to reduce chain wear. The easiest way to apply is with a small brush.

8. ENGINE CARE. See Wisconsin engine manual. Clean dust and dirt from cooling fins daily, or as required, to provide adequate cooling.

GOVERNOR SETTING Wisconsin Engine Model VG4D

GOVERNOR ADJUSTMENT—The governor rod connection to the carburetor must be very carefully adjusted for length, otherwise the governor will not function properly and cause the engine to surge. With the engine at rest, the governor spring will keep the flyweights in, and the control rod must be long enough to hold the carburetor throttle wide open at that point.

With the control rod disconnected from the governor lever, as illustrated in Figure 1, push the rod toward the carburetor as far as it will go. This will put the carburetor throttle lever in a wide open position. The governor lever should then be moved as far as possible in the same direction. Holding both parts in the above position, the rod should be screwed in or out of the swivel block on the carburetor until the bent end of the rod will register with hole in lever, then screw rod in one more turn. The extra turn will shorten the linkage

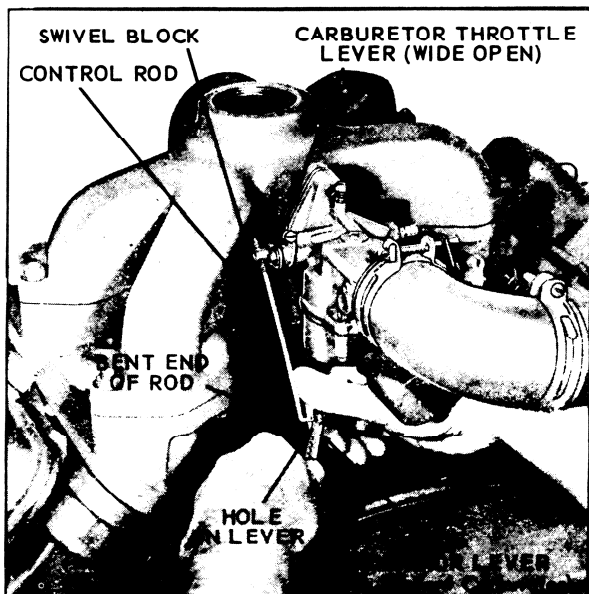


Figure 1

slightly and will enable the carburetor throttle lever to bounce back from the stop pin rather than jam against the pin when a load is suddenly applied to an idling engine. This will eliminate excessive wear on the threads in the carburetor throttle swivel block.

GOVERNOR LEVER—The governor lever, Figure 2, is furnished with 12 holes for attaching the governor spring. It is very important that the spring is hooked into the proper hole to suit the speed at which the engine is to be operated. The governor lever chart shows the full load and no load speeds of the engine and the hole corresponding thereto. Note that the full load speed is less than the no load speed and this must be taken into consideration when readjusting the governor. As an example; if the engine is to be operated at 2400 revolutions per minute under load, the spring should be hooked into the 11th hole in the governor lever and the spring tension adjusted with the adjusting screw to run 2550 RPM under no load. The speed at full load will then be approximately 2400 revolutions per minute.

A tachometer or revolution counter should be used against the crankshaft to check speed while adjusting the governor spring tension. Tightening the adjusting screw locknut will give higher speeds, while loosening the locknut will lower the spring tension and reduce the RPM.

FULL LOAD R.P.M.	NO LOAD R.P.M.	HOLE NO.	GOVERNOR LEVER	HOLE NO.
1400	1550	4		12
1500	1650	5		11
1600	1725	5		10
1700	1850	6		9
1800	1950	7		8
1900	2050	8		7
2000	2125	8		6
2100	2250	9		5
2200	2350	10		4
2300	2425	10		3
2400	2550	11		2
				1

Figure 2

INSTRUCTIONS FOR TRANSPORTING SAW:

When transporting saw on truck speed control lever **MUST** be in STOP POSITION.

Completely lower the unit to relieve weight on the front axle assembly and depth stop while transporting.

To prevent undue stress and strain on the propelling mechanism, for prolong hauling the saw must be blocked.

Use **EXTREME CAUTION** and **SLOW SPEED** when using the self-propelled drive to move the saw up or down ramps or when loading or unloading from trucks. Going **DOWN** ramps: **DRIVE** the saw **FORWARD SLOWLY**. Going **UP** ramps: **BACK** the saw in **REVERSE SLOWLY**.

FIGURE 1 COWL & FRAME GROUP

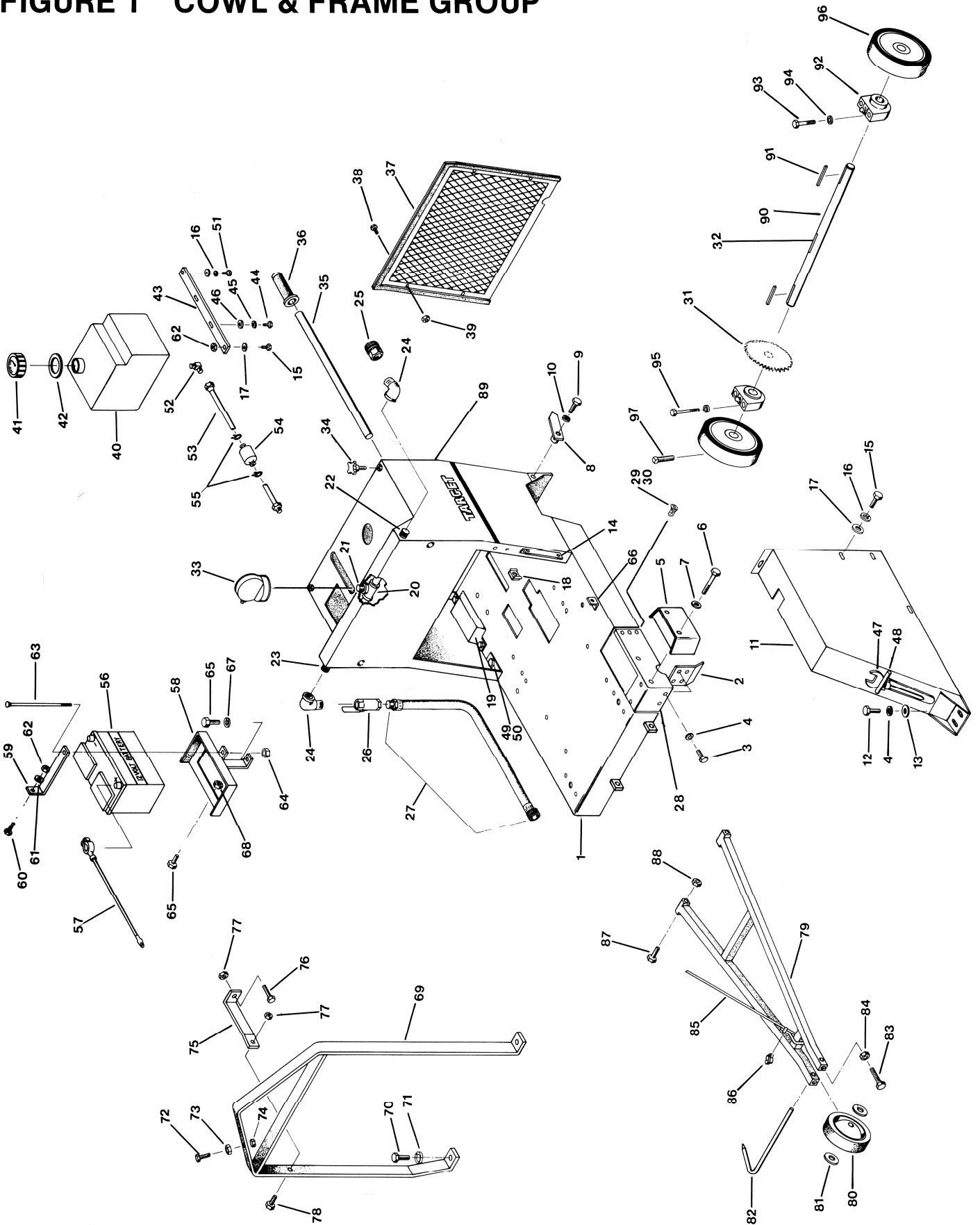


FIGURE 1 - PARTS LIST

DIAG LOC.	PART NO.	QTY. REQ.	DESCRIPTION	DIAG LOC.	PART NO.	QTY. REQ.	DESCRIPTION
1	163630	1	Frame Base	53	043740	1	Fuel Line
2	163608	1	Sheave Guard	54	045639	1	Fuel Filter
3	020323	2	Hex Head Capscrew, 3/8-16 x 1" lg.	55	045641	2	Hose Clamp
4	020786	4	Lockwasher, split type, 3/8"	56	163121	1	Battery
5	163022	1	Shaft Guard	57	163179	1	Battery Cable, Neg., 40" lg.
6	020334	2	Hex Head Capscrew, 3/8-16 x 4" lg.		163180	1	Battery Cable, Pos., 52" lg.
7	020786	2	Lockwasher, split type, 3/8"	58	163055	1	Battery Bracket
8	047091	1	Rear Pointer	59	163056	1	Battery Hold Down Bracket
9	020509	1	Hex Head Capscrew, 3/8-16 x 2" lg.	60	020370	1	Hex Head Capscrew, 1/4-20 x 3/4" lg.
10	020786	1	Lockwasher, split type, 3/8"	61	020762	1	Flat Washer, SAE 1/4"
11	163733	1	Belt Guard	62	020195	3	Lock Nut, fiber type, 1/4-20
12	020322	2	Hex Head Capscrew, 3/8-16 x 3/4" lg.	63	163123	1	Battery Hold Down Bolt
13	020764	2	Flat Washer, SAE 3/8"	64	020197	1	Lock Nut, fiber type, 5/16-18
14	163075	1	Mounting Bracket	65	020322	3	Hex Head Capscrew, 3/8-16 x 3/4" lg.
	020370	2	Hex Head Capscrew, 1/4-20 x 3/4" lg (NS)	66	139017	1	Tab
	020199	3	Locknut, fiber type, 1/4-20		020370	2	Hex Head Capscrew, 1/4-20 x 3/4" lg (NS)
15	020370	6	Hex Head Capscrew, 1/4-20 x 3/4" lg.		020784	2	Lockwasher, split type, 1/4" (NS)
16	020784	6	Lockwasher, split type, 1/4"	67	020786	1	Lockwasher, split type, 3/8"
17	020762	8	Flat Washer, SAE 1/4"	68	020199	2	Lock Nut, fiber type, 3/8-16
18	139052	2	Retainer Nut, 1/4-20	69	163084	1	Lift Frame
19	163026	2	Fender	70	15700260A	2	Hex Head Capscrew, 3/4-10 x 2" lg.
	020370	4	Hex Head Capscrew, 1/4-20 x 3/4" lg (NS)	71	020791	2	Lockwasher, split type, 3/4"
	020762	4	Flat Washer, SAE 1/4" (NS)	72	020509	1	Hex Head Capscrew, 3/8-16 x 2" lg.
	020784	4	Lockwasher, split type, 1/4" (NS)	73	020168	1	Jam Nut, 3/8-16
20	020730	1	Pipe Tee, 1/2" NPT	74	020136	1	Hex Nut, 3/8-16
21	020293	1	Close Nipple, 1/2" NPT	75	163655	1	Brace
22	020280	1	Pipe Nipple, 1/2" NPT x 6" lg.	76	020340	1	Hex Head Capscrew, 1/2-13 x 1-1/4" lg.
23	163623	1	Pipe Nipple, 1/2" NPT x 23" lg.	77	020201	2	Lock nut, fiber type, 1/2-13
24	020810	2	Elbow, 90° Street, 1/2" NPT	78	020464	1	Hex Head Capscrew, 1/2-13 x 1-1/2" lg.
25	045642	1	Hose Swivel w/washer	79	163072	1	Front Pointer Frame
26	040261	1	Ball Valve	80	163582	1	Wheel
27	163656	1	Hose Assy., Water, 60" lg.	81	020766	2	Flatwasher, SAE 1/2"
28	163632	1	Cover	82	160196	1	Pointer
29	020445	3	Machine Screw, Flat Head, 1/4-20 x 3/4"	83	020377	2	Hex Head Capscrew, 3/8-16 x 1-1/2" lg.
30	020199	3	Lock Nut, fiber type, 1/4-20	84	020136	2	Hex Nut, 3/8-16
31	163251	1	Sprocket w/set screw, #50, 35 tooth	85	043204	1	Sash Cord, 130" lg.
32	020073	1	Key, 1/4" sq. x 3" lg.	86	043203	3	Cord Clamp
33	047136	1	Water Safety Switch	87	021411	2	Hex Head Capscrew, 5/8-11 x 3-1/2" lg.
34	166038	2	Hand Knob	88	020204	2	Lock Nut, fiber type, 5/8-11
35	117194	2	Handle Extension	89	163650	1	Cowl Weldment (decals not shown)
36	139568	2	Hand Grip		163694	1	Decal, Depth Indicator
37	163250	1	Rear Guard		166289	1	Decal, Operating Instructions
38	020494	4	Hex Head Machine Screw, 5/16-18 x 1" lg.		166288	2	Decal, Pro 40 II
39	020197	4	Lock Nut, 5/16-18		163515	2	Decal, Target (side)
40	160071	1	Fuel Tank		166092	1	Decal, Target (rear)
41	160194	1	Fuel Cap w/gauge		163233	1	Decal, Positive Depth Stop
42	045390	1	Grommet, Rubber		166294	1	Decal, Instrument Panel
43	163025	2	Mounting Bar, Fuel Tank		163695	1	Decal, Throttle and Choke
44	020313	4	Hex Head Capscrew, 5/16-18 x 3/4" lg.		163719	1	Decal, Raise & Lower
45	020785	4	Lockwasher, split type 5/16"	90	163024	1	Rear Axle
46	020742	4	Flat Washer, SAE 5/16"	91	163130	2	Key, 1/4" sq. x 3-1/4" lg.
47	163281	1	Wrench - 15/16 (Q.D. Bladeshift)	92	047161	2	Bearing w/grease fitting
	043650	1	Wrench - (STD Bladeshift)	93	021415	2	Hex Head Capscrew, 1/2-3 x 3-1/4" lg.
48	048510	1	Pin	94	020788	4	Lockwasher, split type, 1/2"
49	020339	6	Hex Head Capscrew, 1/2-13 x 1"	95	021404	2	Hex Head Capscrew, 1/2-13 x 3" lg.
50	020788	6	Lockwasher, split type, 1/2"	96	162065	2	Wheel w/setscrew, 10" x 3" x 1-1/4" dia.
51	021423	2	Hex Head Capscrew, 1/4-20 x 1/2" lg.	97	020531	4	Sq. Head Setscrew, 5/16-18 x 1" lg.
52	046296	1	Brass Elbow				

FIGURE 2 ENGINE & BLADE SHAFT GROUP

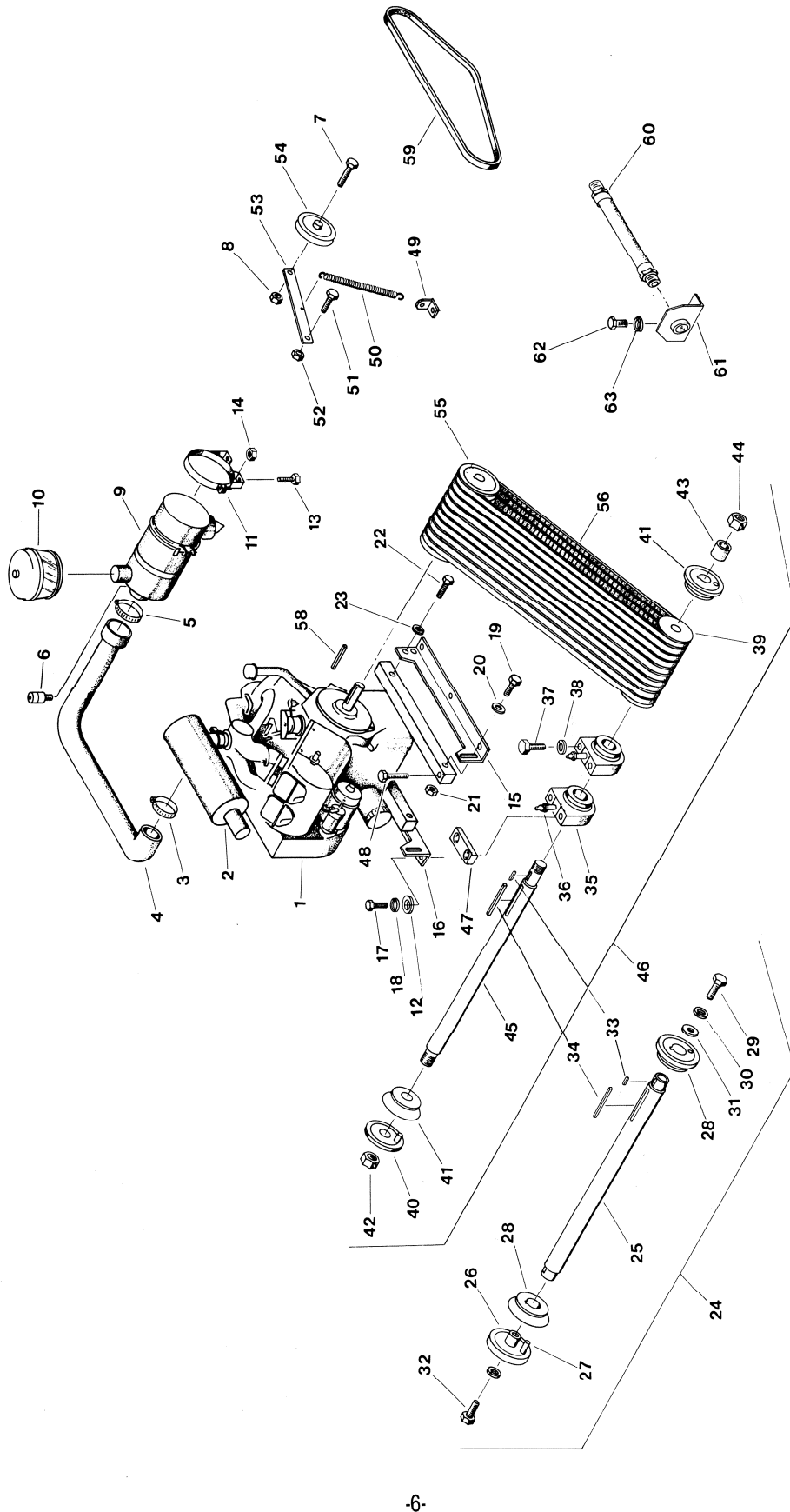


FIGURE 2 - PARTS LIST

DIAG LOC.	PART NO.	QTY. REQ.	DESCRIPTION	DIAG LOC.	PART NO.	QTY. REQ.	DESCRIPTION
1	166282	1	Engine	33	043054	2	Key, 1/4" sq. x 27/32" lg. Rd. End
	166323	1	Oil Filter	34	020076	1	Key, 3/8" sq. x 4" lg.
2	166322	1	Muffler	35	163137	2	Bearing, Roller 1-3/4" dia.
3	020050	1	Hose Clamp		160575	2	Bearing, Ball 1-3/4" dia.
4	163644	1	Hose, Air Intake	36	163140	2	Grease Fitting, 1/8 NPT x 2-5/8" (roller)
5	15700702	1	Hose Clamp	37	163136	4	Hex Head Capscrew, 5/8-18 x 3" (roller)
6	163664	1	Indicator, Filter		163547	4	Hex Head Capscrew, 5/8-18 x 3-1/2" (ball)
7	020380	1	Hex Head Capscrew, 3/8-16 x 1-3/4" lg.	38	020790	4	Lockwasher, split 5/8"
8	020199	1	Locknut, fiber type, 3/8-16	39	048067	1	Pulley w/setscrew, 8 Gr. 3VX 4.12 OD 14" & 18"
9	163658	1	Air Cleaner Assy.				
	163659	1	Filter Element, primary		166304	1	Pulley w/setscrew, 7 Gr. 3VX 4.75 OD 26" & 30"
	163660	1	Filter Element, safety				
	015002	1	Rubber Dust Unloader	40	167367	1	Outer Flange w/dowel pin, 5" dia.
10	15700704	1	Pre-Cleaner	41	167187	2	Inner Flange, 5" dia.
11	045631	2	Mounting Band	42	020017	1	Hex Nut, 1"-14 UNF LH Thread (right side)
12	020766	3	Flat Washer, 1/2"	43	043051	1	Thread Protector Sleeve
13	020313	4	Hex Head Capscrew, 5/16-18 x 3/4" lg.	44	020018	1	Hex Nut, 1"-14 UNF RH Thread (left side)
14	020197	4	Lock Nut, fiber type, 5/16-18	45	047008	1	Blade Shaft, Standard
15	163015	1	Bracket, Engine Base, left	46	166318	1	Blade Shaft Assy., Standard, 14" & 18" (Inc. Items 33 thru 45) w/Roller Bearing
16	166320	1	Bracket, Engine Base, right				
17	020340	6	Hex Head Capscrew, 1/2-13 x 1-1/4" lg.		166319	1	Blade Shaft Assy., Standard, 26" & 30" (Inc. Items 33 thru 45) w/Roller Bearing
18	020788	6	Lockwasher, split, 1/2"				
19	021431	2	Hex Head Capscrew, 5/8-11 x 3" lg.	47	047005	2	Spacer, Blade Shaft (ball bearing only)
20	160393	2	Washer, 5/8" x 5/16" thick	48	020272	1	Belt Adjustment Bolt, full thread
21	020204	2	Lock Nut, fiber type, 5/8-11	49	163259	1	Clip, Idler Spring
22	15701291	2	Hex Head Capscrew, 5/8-11 x 1-3/4" lg.	50	163260	1	Spring, Idler
23	020790	2	Lockwasher, split, 5/8"	51	043452	1	Hex Head Capscrew, 3/8-16 x 1-3/4" lg.
24	166316	1	Blade Shaft Assy. Quick Disconnect, 14", 18" (Inc. Items 25 - 39)	52	020168	1	Hex Jam Nut, 3/8-16
	166317	1	Blade Shaft Assy. Quick Disconnect, 26" & 30" (Inc. Items 25 - 39)	53	043451	1	Idler Arm
				54	163714	1	Idler Pulley
25	163098	1	Blade Shaft, Quick Disconnect	55	166304	1	Pulley, Engine, 7 Gr. 3VX, 4.75 OD 14" & 18", w/Accessory Pulley
26	166307	1	Outer Flange w/dowel Pin, Quick Disconnect, 5" dia.		048072	1	Pulley w/setscrews, 7 Gr. 3VX, 3.65 OD, w/Accessory Pulley, 26", 30"
27	020304	1	Dowel Pin	56	166305	1	V-Belt, set of 7, 3VX520, 14" & 18"
28	166284	2	Inner Flange, Quick Disconnect, 5"		166306	1	V-Belt, set of 7, 3VX500, 26" & 30"
29	163487	1	Hex Head Capscrew, 5/8-11 x 3-1/2" lg. Quick Disconnect R.H. Thread	58	020039	1	Key, Bevel End, 3/8" sq. x 4" lg.
				59	163790	1	V-Belt, Accessory, 3V x 560
30	020790	2	Lockwasher, split, 5/8", Quick Disconnect	60	166293	1	Hose, Oil Drain
31	020747	1	Flat Washer, 5/8", Quick Disconnect	61	163594	1	Bracket
32	163488	1	Hex Head Capscrew, 5/8-11 x 3-1/2" lg. Quick Disconnect L.H. Thread	62	020322	2	Hex Head Capscrew, 3/8-16 x 3/4" lg.
				63	020786	2	Lockwasher, split type, 3/8"

FIGURE 3 SELF-PROPELLING GROUP

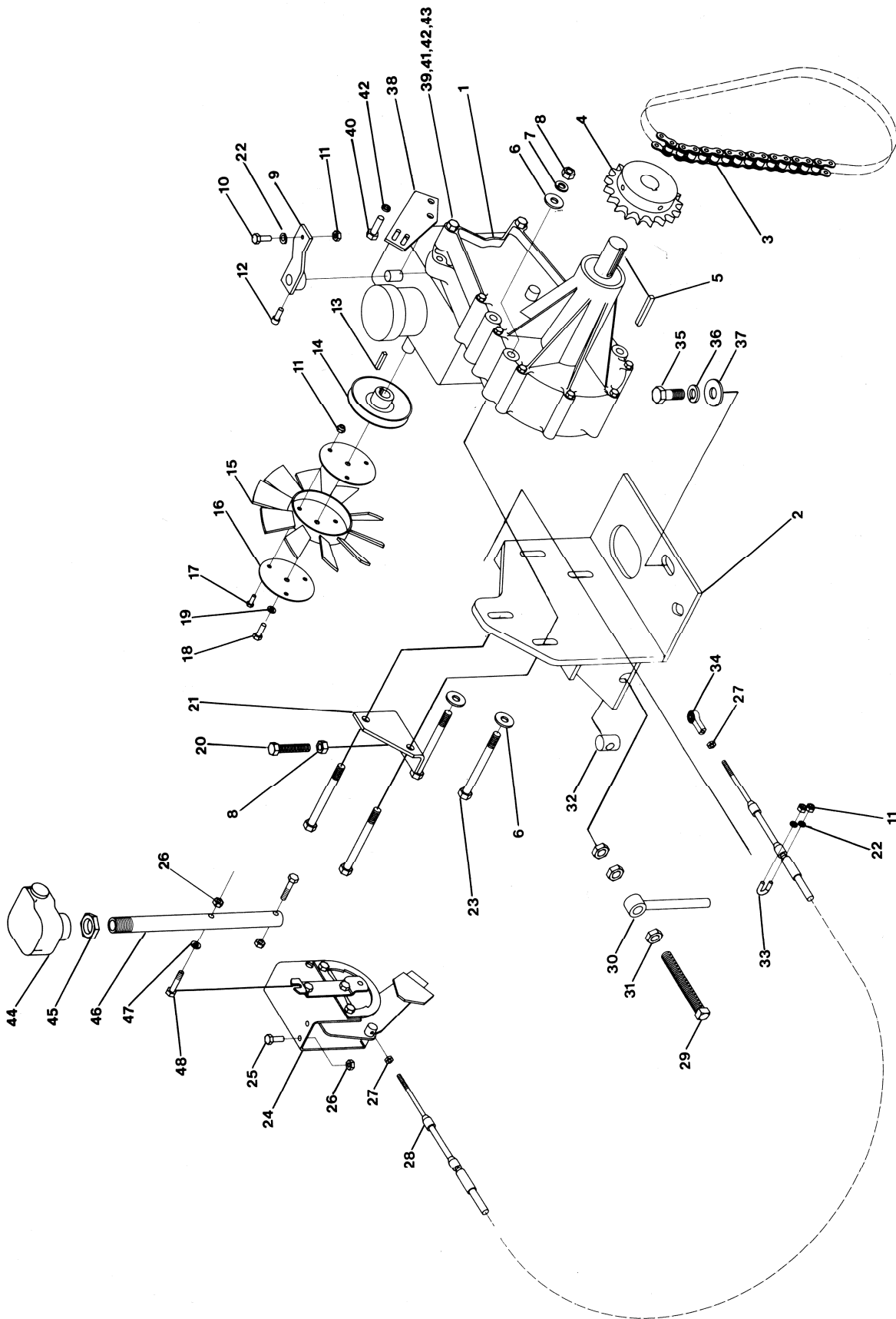


FIGURE 3 - PARTS LIST

DIAG LOC.	PART NO.	QTY. REQ.	DESCRIPTION	DIAG LOC.	PART NO.	QTY. REQ.	DESCRIPTION
1	163611	1	Transmission Assy,	24	166026	1	Speed Control Lever
	166203	1	Hydro Only	25	020370	4	Capscrew, Hex Hd 1/4-20 x 3/4"
	166204	1	Transmission only (See Fig. 3)	26	020195	6	Nut, Fiber Lock 1/4-20
2	163978	1	Support	27	136685	2	Nut, Jam #10-32
3	163643	1	Chain, #50 x 60 Pitch w/Connector	28	164616	1	Cable, Speed Control
4	163728	1	Sprocket, w/setscrew, 27 Tooth #50	29	020219	1	Set Screw, Sq Hd 1/2-13 x 4"
5	163686	1	Key, 1/4 Sq x 1 3/4"	30	163132	1	Guide Pin
6	020743	6	Washer, Flat 3/8	31	020177	3	Nut, Hex Jam 1/2-13
7	020786	4	Lock Washer 3/8	32	045071	1	Swivel
8	020136	5	Nut, Hex 3/8-16	33	046195	1	Clamp, Cable
9	163653	1	Lever, Control	34	046591	1	Rod End, #10-32
10	020411	1	Machine Screw, Hex Hd #10-24 x 3/4"	35	020340	1	Capscrew, Hex Hd 1/2-13 x 1 1/4"
11	020194	6	Nut, Fiber Lock #10-24	36	020788	1	Lock Washer 1/2
12	020393	1	Capscrew, Socket Head, 1/4-28 x 5/8"	37	020745	1	Washer, Flat 1/2
13	020060	1	Key, 3/16 Sq x 1"	38	163984	1	Bracket, Cable Support
14	163734	1	Pulley, W/Set Screw	39	020374	1	Capscrew, Hex Hd 5/16-18 x 3"
15	163105	1	Fan Blade	40	020313	1	Capscrew, Hex Hd 5/16-18 x 3/4"
16	163040	2	Plate, Fan Attachment	41	020742	1	Washer, Flat 5/16
17	020430	3	Machine Screw, Hex Hd, #10-24 x 1/2"	42	020785	2	Lock Washer, 5/16
18	163688	1	Capscrew Metric, Hex Hd, M6	43	020134	1	Nut, Hex 5/16-18
19	163689	1	Lock Washer, Metric M6	44	163948	1	Handle & Switch
20	020155	1	Setscrew, Sq Head. 3/8-16 x 2"	45	15700353	1	Nut, 3/4-16
21	166020	1	Bracket, Adjustment	46	163946	1	Lever
22	020771	3	Washer, Flat #10	47	020762	1	Washer Flat 1/4
23	020334	4	Capscrew, Hex Hd, 3/8-16 x 4"	48	020372	2	Capscrew 1/4-20 x 1 1/4"

FIGURE 3A - TRANSMISSION DETAIL

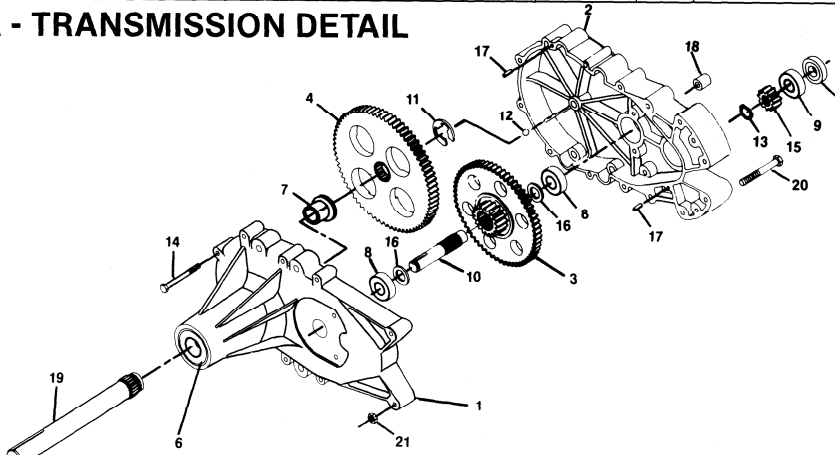


FIGURE 3A - DETAIL PARTS LIST FOR 166204

DIAG LOC.	PART NO.	QTY. REQ.	DESCRIPTION	DIAG LOC.	PART NO.	QTY. REQ.	DESCRIPTION
1	166101	1	Axle Carrier Housing	12	166112	1	Ball 3/8" Dia.
2	166102	1	Hydro Mount Housing	13	166113	1	Retaining Ring
3	166103	1	Splined Reduction Gear	14	166114	8	Capscrew, 1/4-20 x 2 1/2"
4	166104	1	Splined 72 Tooth Final Drv Gear	15	166115	1	Gear, Input, 11 Tooth
5	166105	1	Bearing Spacer	16	166116	2	Washer, Ht., 62 Id x 1.0 Od x .05
6	166106	1	Ball Bearing, 52mm x 25mm x 15mm	17	166117	2	Pin, Spring, 3/16 x 1/2"
7	166107	1	Flanged Bearing	18	166118	2	Spacer, Mounting
8	166108	2	Ball Bearing, .62ID x 1.38 x .44	19	166119	1	Axle Shaft, Straight
9	166109	1	Ball Bearing, 15 mm x 35mm x 11mm	20	020374	2	Capscrew, 5/16-18 x 3.0
10	166110	1	Brake Shaft, Splined	21	020134	2	Nut, 5/16-18
11	166111	1	"E" Ring				

FIGURE 4 BOLT-ON BLADE GUARD ASSEMBLY

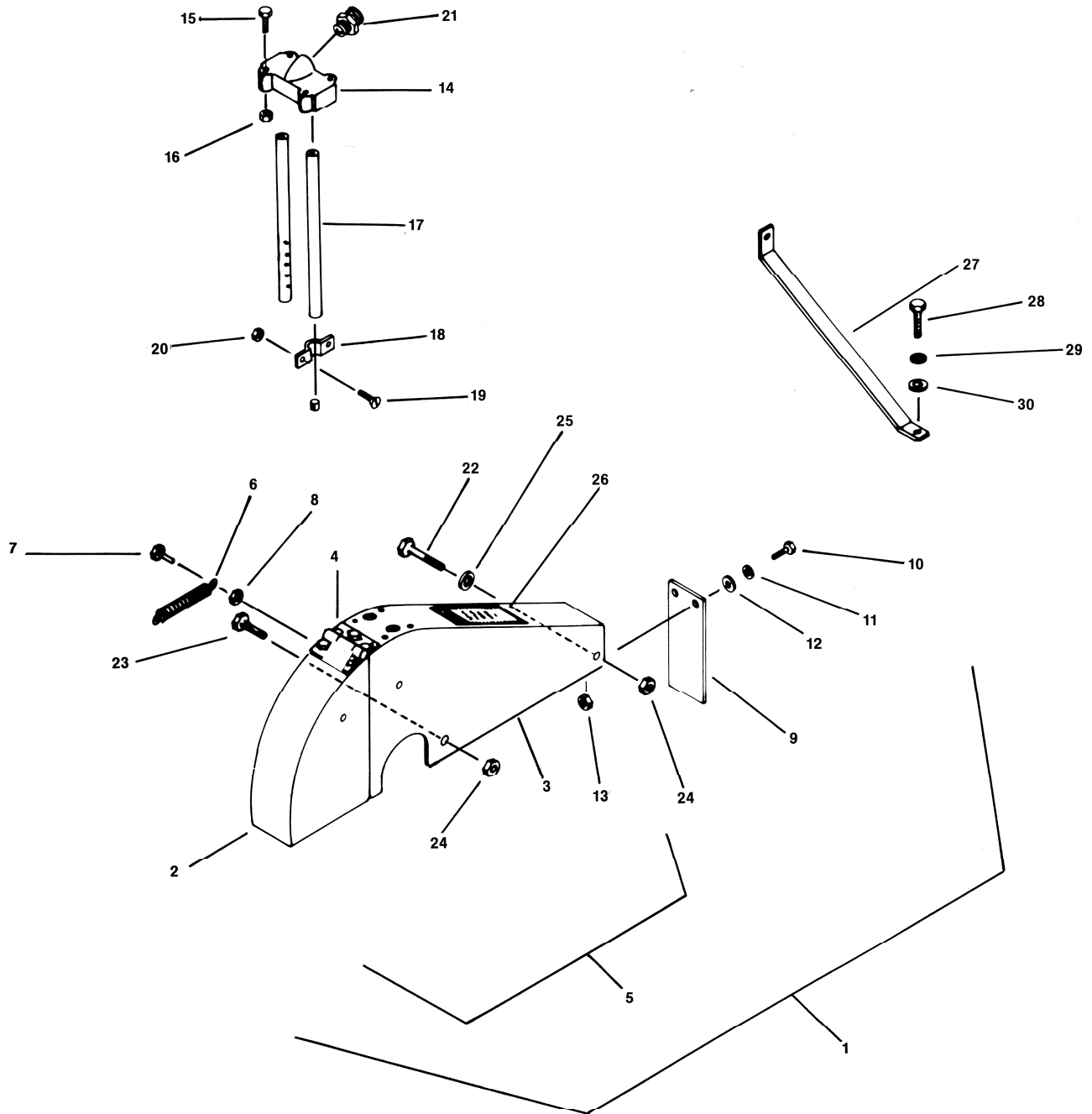


FIGURE 4 - PARTS LIST

DIAG LOC.	PART NO.	QTY. REQ.	DESCRIPTION	DIAG LOC.	PART NO.	QTY. REQ.	DESCRIPTION
1	160882	1	14" Blade Guard Assy. complete (Inc. items 2 - 26)	11	020784	2	Lockwasher, split type, 1/4" dia.
	160558	1	18" Blade Guard Assy. complete (Inc. items 2 - 26)	12	020741	2	Washer, 1/4" dia.
				14	049196	1	Water Manifold
	049151	1	26" Blade Guard Assy. complete (Inc. items 2 - 26)	15	020371	4	Hex Head Capscrew, 1/4"-20 x 1-1/2"
	160559	1	30" Blade Guard Assy. complete (Inc. items 2 - 26)	16	020195	4	Lock Nut, fiber type, 1/4"-20
17				161003	2	Water Tube w/pipe plug, 14"	
				161004	2	Water Tube w/pipe plug, 18"	
2	160877	1	Guard, Front only, 14"		161005	2	Water Tube w/pipe plug, 26"
	160523	1	Guard, Front only, 18"		161006	2	Water Tube w/pipe plug, 30"
	049185	1	Guard, Front only, 26"	18	049212	2	Water Tube Clamp
	160526	1	Guard, Front only, 30"	19	020445	4	Machine Screw, 1/4"-20 x 3/4" lg.
	3	160878	1	Guard, Rear only, 14"	20	020195	4
160524		1	Guard, Rear only, 18"	21	040275	1	Hose Adaptor
049159		1	Guard, Rear only, 26"	22	020352	1	Hex Head Capscrew, 1/2"-13 x 5" lg., 14" & 18" Guard
160527		1	Guard, Rear only, 30"		020353	1	Hex Head Capscrew, 1/2"-13 x 5-1/2" lg. 26", 30" Guard
049154		1	Hinge only				
4	160876	1	14" Guard & Hinge Assy. (items 2-4)	23	020339	1	Hex Head Capscrew, 1/2"-13 x 1" lg.
	160522	1	18" Guard & Hinge Assy. (items 2-4)	24	020140	2	Hex Nut, 1/2"-13
	049153	1	26" Guard & Hinge Assy. (items 2-4)	25	020788	1	Lockwasher, split type, 1/2"
	160525	1	30" Guard & Hinge Assy. (items 2-4)	26	046128	1	Caution Decal
6	043145	1	Spring	27	163537	1	Brace, Blade Guard, 26"
7	020370	2	Hex Head Capscrew, 1/4"-20 x 3/4" lg.		163540	1	Brace, Blade Guard, 30"
8	020133	4	Hex Nut, 1/4"-20	28	020323	1	Hex Head Capscrew, 3/8"-16 x 1"
9	163275	1	Splash Guard	29	020199	1	Hex Nut, fiber type, 3/8"-16
10	020370	2	Hex Head Capscrew, 1/4"-20 x 3/4" lg.	30	020743	1	Flat Washer, 3/8"

FIGURE 5 SLIP-ON BLADE GUARD ASSEMBLY

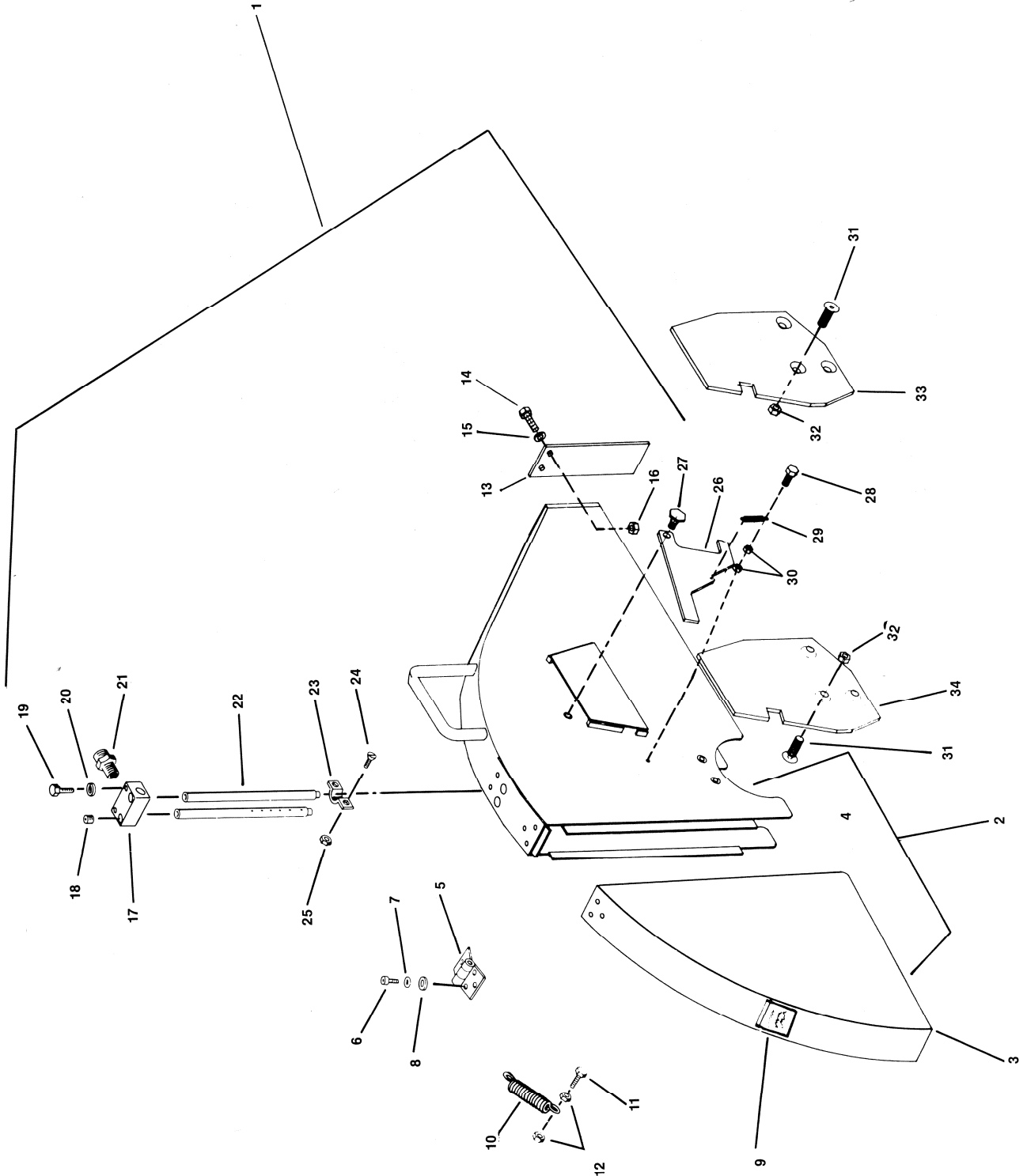


FIGURE 5 - PARTS LIST

DIAG LOC.	PART NO.	QTY. REQ.	DESCRIPTION	DIAG LOC.	PART NO.	QTY. REQ.	DESCRIPTION
1	165956	1	Blade Guard Complete, 14" (incl. items 2-30)	17	163388	1	Manifold
1	165967	1	Blade Guard Complete 18" (incl. items 2-30)	18	020864	2	Pipe Plug
1	165976	1	Blade Guard Complete 26" (incl. items 2-30)	19	020382	2	Hex Hd. Capscrew, 1/4"-20 x 1-3/4" lg.
2	165951	1	Blade Guard and Hinge Assy., 14"	20	020784	2	Lockwasher, split type, 1/4" dia.
2	165946	1	Blade Guard and Hinge Assy., 18"	21	040275	1	Hose Adaptor
2	165941	1	Blade Guard and Hinge Assy., 26"	22	164449	2	Water Tube, 14"
3	164440	1	Guard Front Weldment, 14"		163394	2	Water Tube, 18"
3	163407	1	Guard Front Weldment, 18"		163427	2	Water Tube, 26"
3	163417	1	Guard Front Weldment, 26"	23	163395	2	Clamp
4	165931	1	Guard Rear Weldment, 14"	24	020455	4	Flat Hd. Mach. Screw, 1/4"-20 x 3/4" lg.
4	164849	1	Guard Rear Weldment, 18"	25	020195	4	Locknut, fiber type, 1/4"-20
4	164853	1	Guard Rear Weldment, 26"	26	165986	2	Latch
5	163413	1	Hinge	27	164927	2	Latch Pivot
6	020389	6	Socket Hd. Capscrew, 1/4"-20 x 3/4" lg.	28	020408	2	Slot Head Capscrew, 10-24 x 7/8"
7	020794	6	Internal Lockwasher, 1/4" dia.	29	163188	2	Spring
8	020762	6	SAE Washer, 1/4" dia.	30	020132	4	Hex Nut, #10-24
9	046128	1	Caution Decal	31	020513	6	C'sunk Hd. Screw, 3/8"-16 x 1" lg.
10	043145	1	Spring	32	020199	5	Locknut, fiber type, 3/8"-16
11	020370	2	Hex Hd. Capscrew, 1/4"-20 x 3/4" lg.	33	164859	1	Left Slip-on Spade
12	020133	4	Hex Nut, 1/4"-20	34	164858	1	Right Slip-on Spade
13	163389	1	Splash Guard	35	163736	1	14" Complete Field Install Kit
14	020370	2	Hex. Hd. Capscrew, 1/4"-20 x 3/4" lg.	36	163737	1	18" Complete Field Install Kit
15	020741	2	Flatwasher, 1/4" dia.	37	163738	1	26" Complete Field Install Kit
16	020195	2	Locknut, fiber type, 1/4"-20				

FIGURE 6 LIFT ASSEMBLY

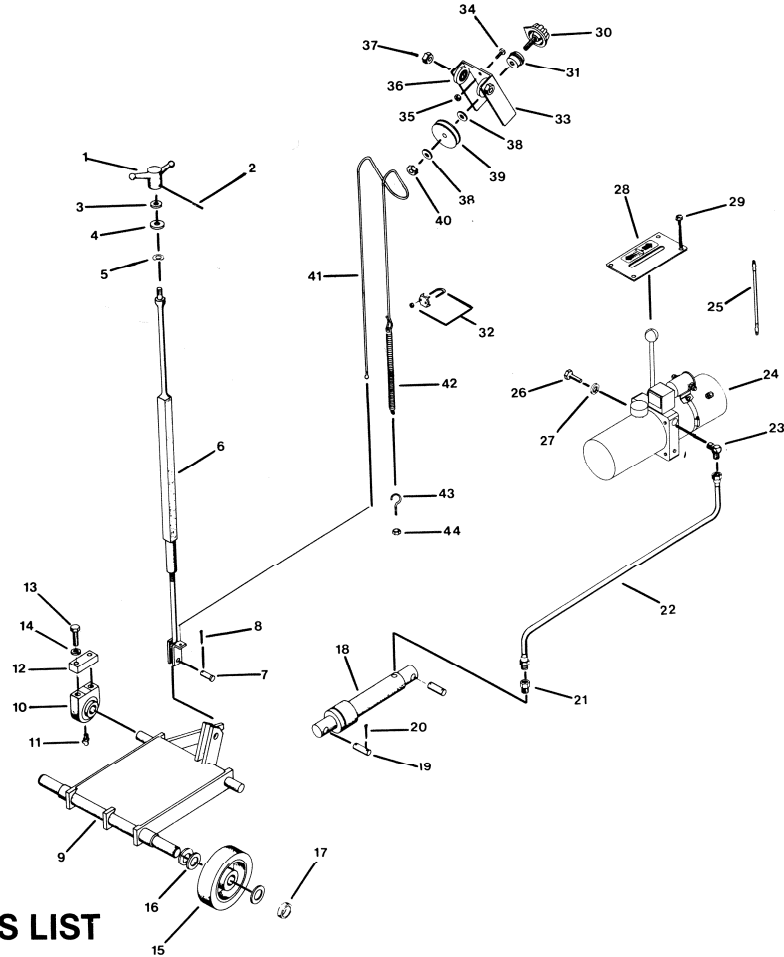


FIGURE 6 - PARTS LIST

DIAG LOC.	PART NO.	QTY. REQ.	DESCRIPTION	DIAG LOC.	PART NO.	QTY. REQ.	DESCRIPTION
1	047591	1	Handle	24	166125	1	Hydraulic Pump
2	020641	1	Roll Pin	25	048542	1	Battery Cable, pos.
3	020745	1	Flat Washer, 1/2"	139260	1	Battery Cable, neg.	
4	046424	1	Fiber Washer, 1-1/4" x 3/32"	26	173005	3	Hex Head Capscrew, M10 x 16 lg.
5	046425	1	Bowed Washer, 1/2"	27	162004	3	Lockwasher, split, M10
6	163238	1	Stem Assembly	28	166083	1	Cover Plate, w/decal
7	160164	1	Pivot Pin	163719	1	Decal, Raise & Lower	
8	020612	1	Cotter Pin, 3/32" x 3/4"	29	020587	4	Screw, self-tapping, #10-24 x 3/8"
9	163605	1	Front Axle Assembly	30	163261	1	Pointer Knob
10	047161	2	Bearing, 1-1/4"	31	043696	1	Bearing
11	041175	2	Grease Fitting	32	043698	1	Cable Clamp
12	163044	2	Riser Block	33	043711	1	Mounting Bracket
13	020351	4	Hex Head Capscrew, 1/2-13 x 4-1/2" lg.	34	020602	2	Machine Screw, #10-24, 1/2" Pan Head
14	020788	4	Lockwasher, split, 1/2"	35	020194	2	Lock Nut, fiber type, #10-24
15	047150	2	Wheel, 8" x 2-1/2" x 1"	36	030822	2	Pulley & Bearing
	047152	2	Seal & Bearing Kit	37	032366	2	Keps Nut, 5/16-18
16	020751	6	Flat Washer, 1"	38	020763	2	Flat Washer, SAE 5/16"
17	048078	2	Set Collar, 1"	39	043694	1	Plastic Cable Pulley
18	048310	1	Hydraulic Cylinder	40	020197	1	Lock Nut, fiber type, 5/16-18
19	048321	2	Pin, Hydraulic Cylinder	41	163228	1	Cable Assy.
20	020622	4	Cotter Pin, 3/16" x 2"	42	163168	1	Spring
21	163610	1	Fitting, Adapter, 3/8 Pipe - 1/4 tube	43	020250	1	Eye Bolt, 1/4-20
22	163642	1	Hose Assembly, 36" lg.	44	020133	1	Nut, Hex Jam, 1/4-20
23	163035	1	Fitting, Elbow, 90°, 1/4 tube - 3/8 O-ring				

FIGURE 7 HYDRAULIC PUMP GROUP

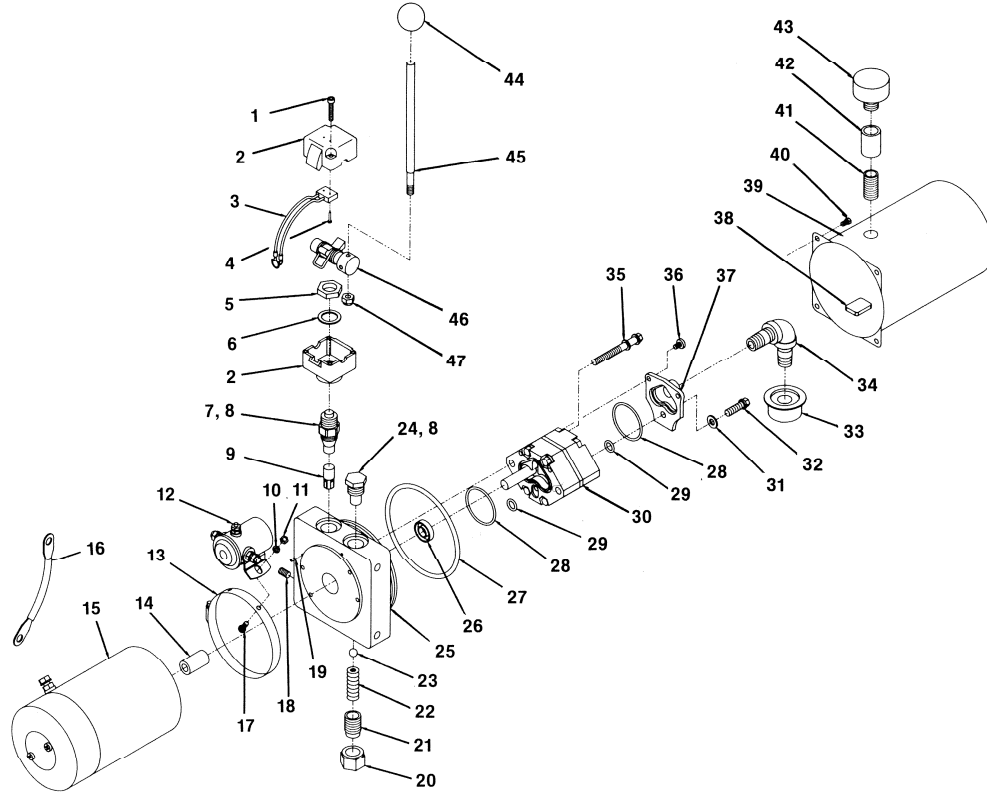


FIGURE 7 - PARTS LIST FOR 166125

DIAG LOC.	PART NO.	QTY. REQ.	DESCRIPTION	DIAG LOC.	PART NO.	QTY. REQ.	DESCRIPTION
1	166260	2	Screw, Shcs #10-32 x 1" lg	29	166263	2	O-Ring
2	166261	1	Bracket, Release	30	166242	1	Pump Assy
3	166258	1	Switch, Electric	31	166232	1	Washer, 0.338 x 0.625 x 0.60
4	166259	2	Screw, #2-56 x 3/8" lg	32	166236	1	Bolt, 5/16-18 x 1" Torx
5	166265	1	Nut, Jam 3/4-16 1/4" Thick	33	048213	1	Filter, Inlet Screen
6	166266	1	Washer, Internal Tooth	34	166244	1	Plumbing Assy, Inlet
7	166245	1	Valve, Cartridge, Release	35	166228	2	Bolt, 5/16-24 x 2.75" Torx
8	045659	2	O-Ring	36	166234	2	Screw, M6-1.0 x 12 Taptite
9	166239	1	Valve, Flo-Control .5 GPM	37	166233	1	Cover, Suction 3/8" NPT
10	020740	2	Washer, .211 x .560 x .03	38	163327	1	Magnet
11	020132	2	Nut, #10-24	39	166243	1	Reservoir
12	166121	1	Solenoid	40	166238	4	Screw, 12-24 x .29 Hex Washer Hd
13	166262	1	Clamp, Hose	41	166098	1	Nipple, Close 3/8" NPT
14	166229	1	Coupling, Drive	42	020847	1	Coupling, 3/8" NPT
15	048205	1	Motor, 12V DC	43	043871	1	Breather, 3/8" NPT
16	163344	1	Cable, Motor	44	166255	1	Knob
17	020462	2	Screw, Pan Hd. #10-24 x 1/2" lg	45	166257	1	Handle
18	170569	1	Plug, 1/16" NPT	46	166246	1	Cam & Shaft Assy (includes 46A-46H)
19	045664	1	Pin, 1/8 x 1/4	46A	166247	1	Pin, roll .156 dia x 5/8" lg
20	048297	1	Relief Cap Assy (w/O-Ring)	46B	166248	2	E-Series Circlip
21	048202	1	Screw, Adjustment	46C	166249	1	Pin, Roll .156 dia x 7/8" lg
22	166237	1	Spring	46D	166250	1	Pin, Roll .156 dia x 1 3/8" lg
23	166230	1	Ball, 3/8" Steel	46E	166251	1	Spring, Torsion
24	166235	1	Valve, Cartridge, Check	46F	166252	1	Cam
25	166241	1	Endhead	46G	166253	1	Camshaft
26	166231	1	Seal, Shaft	46H	166254	2	Bushing
27	166240	1	O-Ring	47	166256	1	Locknut, 5/16-24
28	166264	2	O-Ring				

FIGURE 8 INSTRUMENT & CONTROL PANEL GROUP

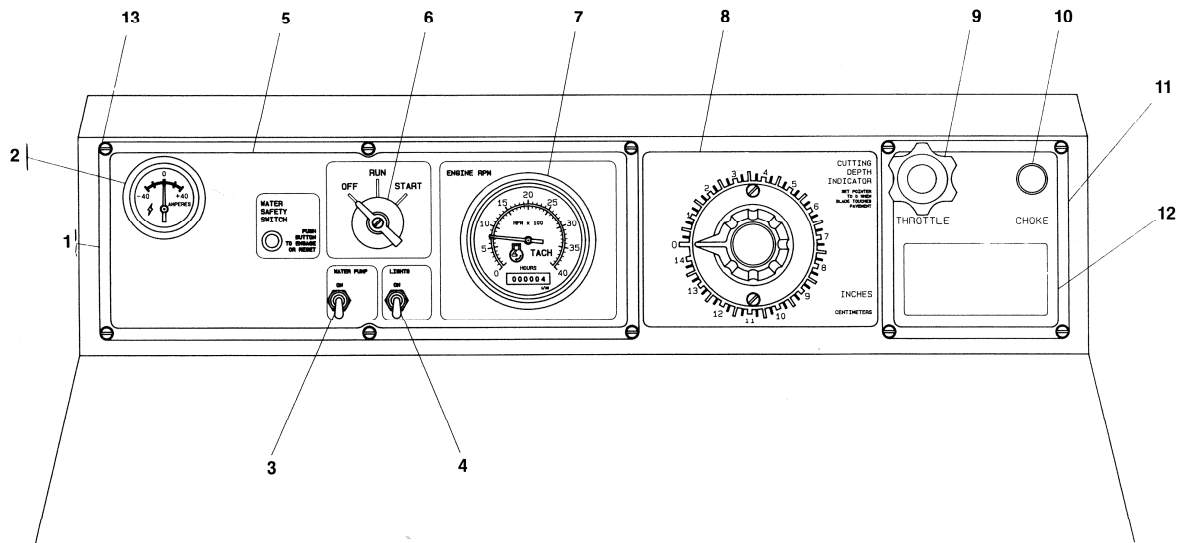


FIGURE 8 - PARTS LIST

DIAG LOC.	PART NO.	QTY. REQ.	DESCRIPTION	DIAG LOC.	PART NO.	QTY. REQ.	DESCRIPTION
	166310	1	Panel Assy. (Inc. Items 1-7 and 166294)	8	163694	1	Decal, Depth Indicator
1	166291	1	Panel, Gauge	9	160467	1	Throttle Cable
2	163666	1	Gauge, Ammeter	10	160409	1	Choke Cable
3	052120	1	Switch, Water Pump	11	163670	1	Panel, Dash Cover
4	052120	1	Switch, Lights	12	163695	1	Decal, Throttle and Choke
5	166290	1	Decal, Instrument Panel	13	020537	10	Screw, Self-Tapping, #10-24 x 3/4" lg.
6	046360	1	Switch, Ignition		166294	1	Wiring Harness, Instrument (not shown)
7	163665	1	Gauge, Tach/Hour Meter		166295	1	Wiring Harness, Engine (not shown)

FIGURE 11 LIGHT ASSEMBLY

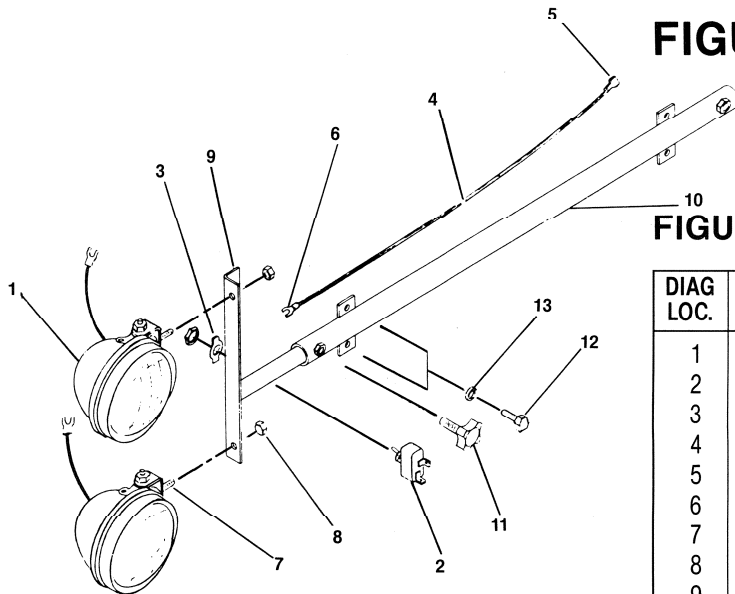


FIGURE 11 - PARTS LIST

DIAG LOC.	PART NO.	QTY. REQ.	DESCRIPTION
1	0499919	2	Light
2	052120	1	Switch
3	090552	1	Switch Plate
4	0499925	1	16 Ga. Wire x 36"
5	164370	1	Terminal, Male
6	046440	3	Terminal
7	020313	2	Hex Hd. Capscrew, 5/16-18 x 3/4
8	020197	2	Locknut, 5/16-18
9	163758	1	Support Bar
10	163754	1	Support Tube
11	046125	1	Knob
12	020370	4	Hex Hd. Capscrew, 1/4-20 x 3/4
13	020784	4	Lockwasher, 1/4"

FIGURE 9 WATER PUMP KIT

WATER PUMP KIT COMPLETE P/N 164978

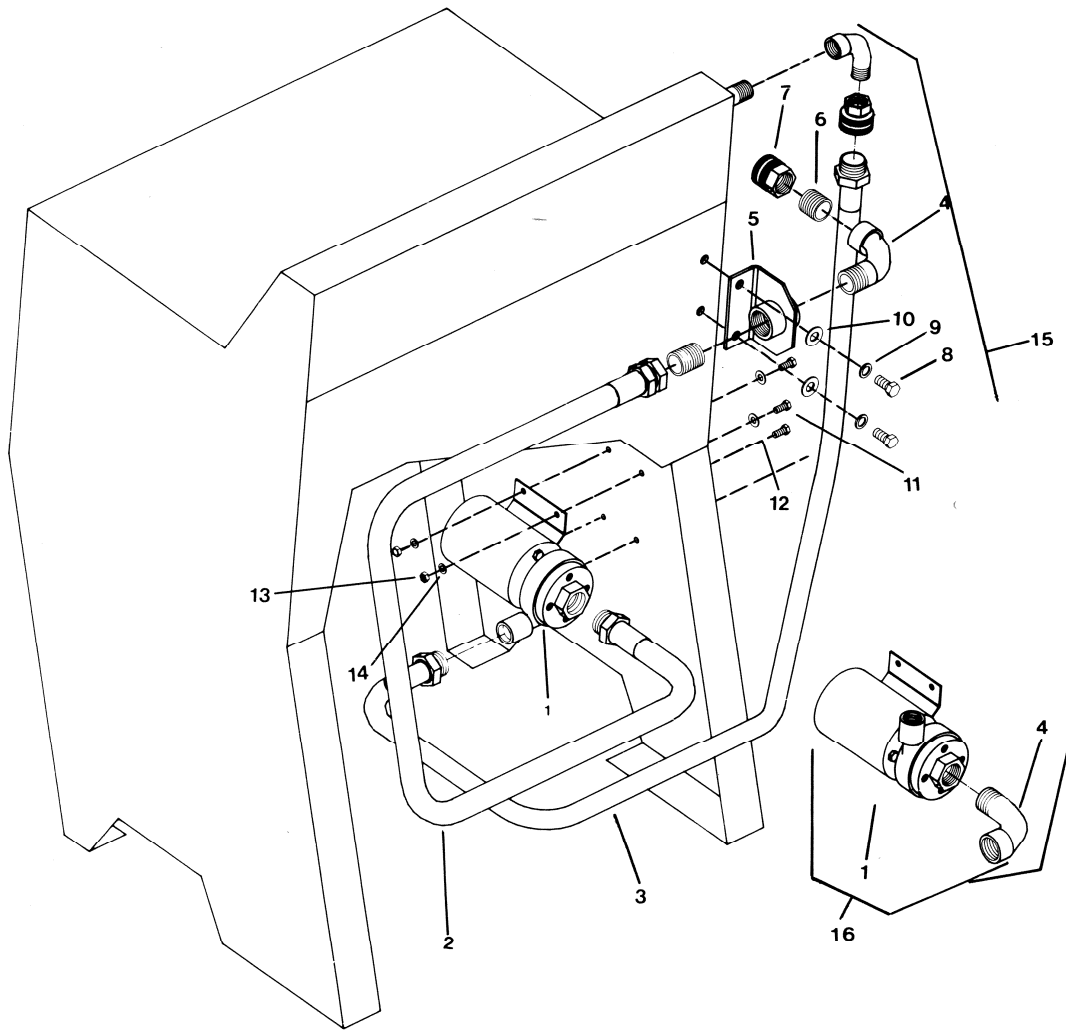


FIGURE 9 - PARTS LIST

DIAG LOC.	PART NO.	QTY. REQ.	DESCRIPTION	DIAG LOC.	PART NO.	QTY. REQ.	DESCRIPTION
1	164977	1	Water Pump with Wire Terminals		040271	1	Hose Swivel, 3/4" NPT
	164083	1	Gasket, Seal, Impeller & Motor		045640	1	Hose Filter Washer
	164580	1	Gasket & Seal Kit	8	020322	2	Hex Head Capscrew, 3/8-16 x 3/4" lg.
	164578	1	Gasket Only	9	020786	2	Lockwasher, 3/8" split type
	164579	1	Seal Only	10	020764	2	3/8" Flat Washer
	164581	1	Replacement Impeller Only	11	020381	4	Hex Head Capscrew, 1/4-20 x 7/8" lg.
	164582	1	Replacement Only	12	020741	4	1/4" Flat Washer
2	163770	1	Hose, 3/4"	13	020195	4	Locknut, fiber type, 1/4-20
3	163769	1	Hose, 1/2"	14	020762	4	SAE Flat Washer, 1/4"
4	040273	2	Street Elbow, 3/4" NPT	15	164978	1	Complete Water Pump Kit
5	163594	1	Water Pump Bracket	16		1	Rotate Water Pump Outlet and use 3/4" Street Elbow for Pro 65 and Pro 40 Installation Only
6	020296	2	Close Nipple, 3/4" NPT				
7	045643	1	Hose Swivel with filter washer				

FIGURE 10 ELECTRICAL DIAGRAM

SWITCH POSITION: Off - D to Ground
 Run - O to D
 C to B
 Start - C to B to S

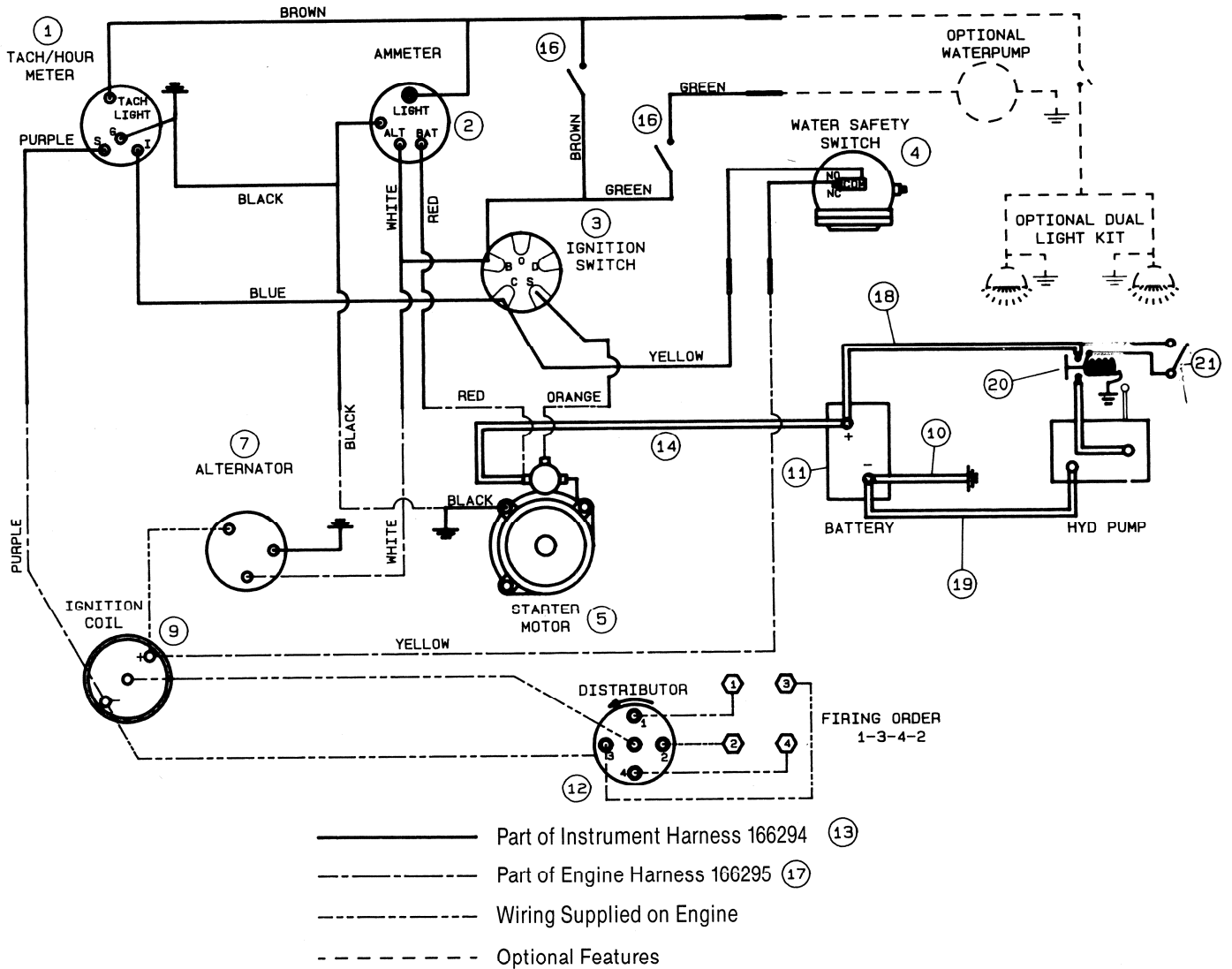


FIGURE 10 - PARTS LIST

DIAG LOC.	PART NO.	QTY. REQ.	DESCRIPTION	DIAG LOC.	PART NO.	QTY. REQ.	DESCRIPTION
1	163665	1	Tach/Hour Meter	12		1	Electronic Distributor #YF50BS1
2	163666	1	40 Amp Ammeter	13	166294	1	Instrument Wiring Harness
3	046360	1	Ignition Switch #YC27BS1	14	163180	1	#52-4 Battery Cable
4	047136	1	Water Safety Switch	16	052120	2	Switch
5		1	Starter & Solenoid #YA53B	17	166295	1	Engine Wiring Harness
6				18	048542	1	Pos. Cable
7		1	30A 12V Alternator	19	139260	1	Neg. Cable
8		1	High Temp Safety Switch #YC66D	20	166121	1	Solenoid
9		1	Ignition Coil #YF41AS1	21	166258	1	Switch
10	163179	1	#40-4 Battery Cable				
11	163121	1	12V Battery #62				

SPECIAL INSTRUCTIONS

FOR CHANGING BLADE SPEEDS ON CONCRETE/ASPHALT SAWS • PRO 40 II

CAUTION

Do not exceed blade shaft speed shown for each blade size. Excessive blade speed could result in blade breakage and serious personal injury. As shown on chart, some blade guards accept more than one size blade.

Blade SIZE	Blade Shaft		Engine Speed			Governor Lever
	Loaded RPM	Pulley Size	Loaded RPM	Pulley Size	Max. RPM	Hole No.
14"	2750	4.12"	2400	4.75"	2550	11
18"	2750	4.12"	2400	4.75"	2550	11
26"	1850	4.75"	2400	3.65"	2550	11
30"	1700	4.75"	2200	3.65"	2350	10

Maximum Blade Capacity and Cutting Depths

Blade Size	Depth of Cut Up To
14"	4-1/2"
18"	6-1/2"
24"	9-1/2"
26"	10-1/2"
30"	12-1/2"

Never use a larger diameter blade than necessary to cut to a specific depth.

For maximum safety and economy, *always* use the proper pulleys and engine speeds for the diameter blade being used. See chart for correct engine and blade shaft speeds.

CAUTION

When changing blade size on Model Pro 40 II use this table to select the components that must be changed.

MODEL Pro 40 II	14"	18"	26"	30"
Blade Guard-Slip-On	165956	165967	165976	N/A
Blade Guard-Wide	160882	160558	049151	160559
Blade Shaft Pulley	048067	048067	166304	166304
Engine Pulley	166304	166304	048072	048072
Drive Belts, Set of 7	166305	166305	166306	166306
Mfg. P/N	3VX520	3VX520	3VX500	3VX500
Accessory Belt, Mfg. P/N	163790	163790	163790	163790
	3VX560	3VX560	3VX560	3VX560
Bearing Assy., Roller	163135	163135	163135	163135
Bearing Assy., Ball	163546	163546	163546	163546
Blade Shaft with Flanges QD 5"	166298	166298	166298	166298
Inner Flange QD 5"	166284	166284	166284	166284
Outer Flange w/Pin QD 5"	166307	166307	166307	166307
Bladeshaft w/Flanges 5"	166299	166299	166299	166299
Inner Flange Std 5"	167187	167187	167187	167187
Outer Flange w/Pin Std 5"	167367	167367	167367	167367

SAFETY WARNINGS WHEN OPERATING SAW

DO

DO read and understand instructions before operating saw.
 DO always keep guards in place.
 DO always wear safety approved hearing, eye, head and respiratory protection.
 DO keep all parts of your body away from blade and all other moving parts.
 DO know how to stop saw quickly in case of emergency.
 DO shut off engine and allow to cool before refueling.
 DO inspect blade, flanges, and shafts for damage before installing blade.
 DO use only reinforced abrasive blades or steel center diamond blades manufactured for use on concrete saw.
 DO use only blades marked with a maximum operating speed greater than blade shaft speed.
 DO use caution and follow instructions when loading and unloading saw.

DO NOT

DO NOT use an abrasive blade that has been dropped.
 DO NOT allow other persons to be near the saw when starting, refueling, or when cutting.
 DO NOT operate gasoline engines in enclosed area unless it is properly vented.
 DO NOT use damaged equipment or blades.
 DO NOT operate saw in areas of combustible material. Spark from saw could cause fire or explosion.
 DO NOT allow blade exposure from guard to be over 180 degrees.
 DO NOT leave saw unattended with the engine running.
 DO NOT operate saw while using drugs or alcohol.

FAILURE TO COMPLY WITH ABOVE WARNINGS COULD RESULT IN SERIOUS BODILY INJURY



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