



Instruction Manual

**WIZARD
POWER CHAIN SAWS**

**Including Parts List
and Sharpening Instructions**

LOMBARD GOVERNOR CORPORATION

CHAIN SAW DIVISION

ASHLAND, MASSACHUSETTS

I N S T R U C T I O N M A N U A L

a n d

P A R T S B O O K

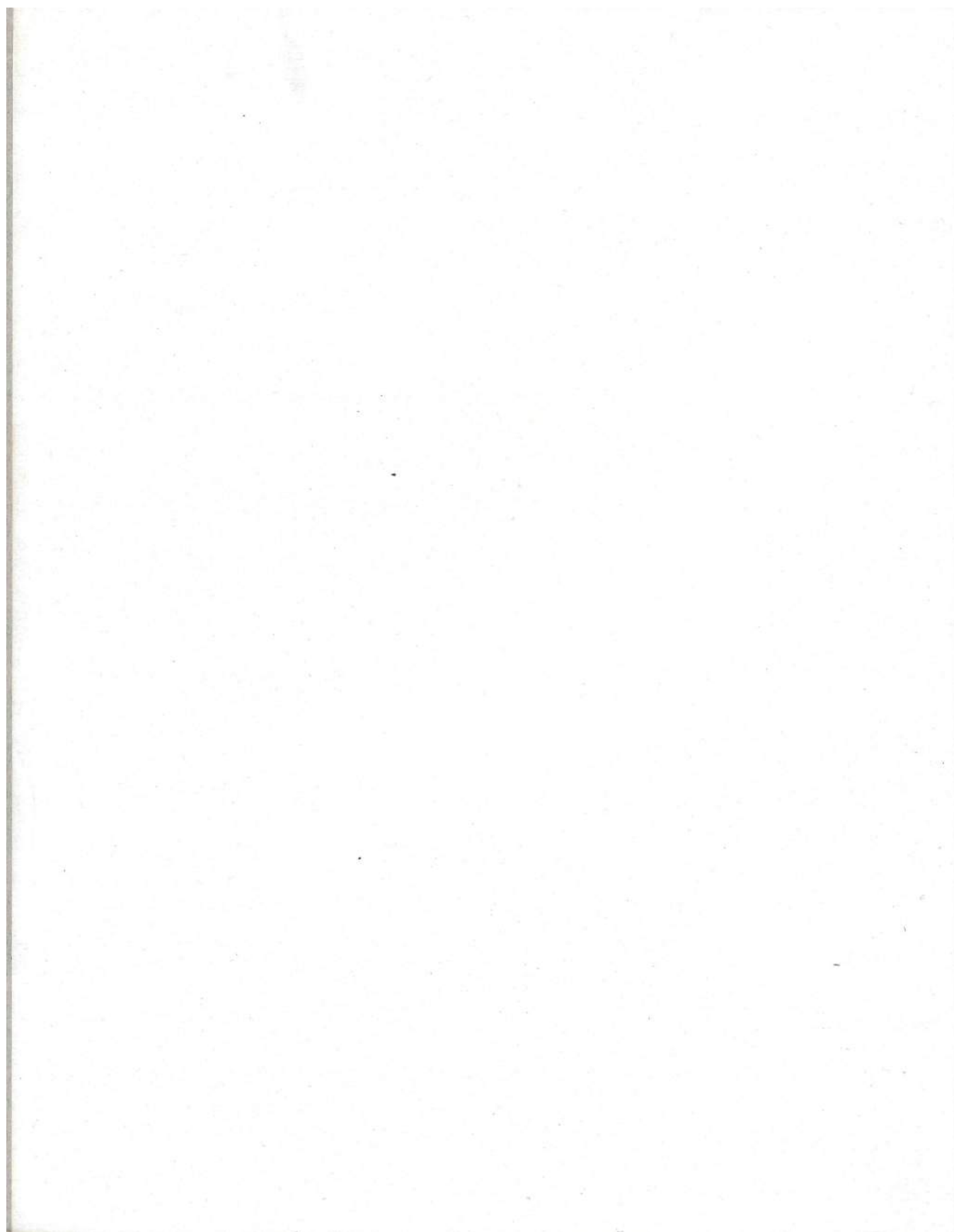
L O M B A R D

W O O D L O T W I Z A R D C H A I N S A W

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L o m b a r d G o v e r n o r C o r p o r a t i o n

A s h l a n d , M a s s a c h u s e t t s



IMPORTANT OPERATING INSTRUCTIONS

AND GENERAL INFORMATION ON

LOMBARD MODEL 3-16 WOODLOT WIZARD CHAIN SAW

1. ENGINE-STARTING INSTRUCTIONS

(A) Fuel

In a clean container thoroughly mix $\frac{1}{2}$ pint of No. 30 motor oil with each gallon of gasoline. (Low grade or white gasoline is preferred, but any grade of gasoline will operate satisfactorily.) Fill the tank with this mixture.

(B) Starting Engine

Completely open the shut-off valve, located on the right side of the engine below gas tank.

Move the choke lever to the choke position. Check to see that the carburetor dial is set at No. 7 NOTE: The choke lever is on the left side of the carburetor and the choke position is back toward the filter.

Pull handle of recoil starter straight out on same angle that it is mounted with your left hand. Hold the saw by placing the right hand on the rear handle bar, and at the same time hold the throttle lever down with the thumb of the right hand. In very cold weather, or if engine has not been run for a long period, two or more pulls may be necessary. After the engine starts gradually move the choke lever back until the engine has warmed up.

When restarting a warm engine, choking is not necessary. Choking a warm engine, or over-choking a cold engine may result in flooding. If this occurs, continue cranking engine, with the choke pushed back until the engine starts. In severe cases of flooding, the shut-off valve should be closed and the engine cranked until it starts. After the engine starts, the valve should again be opened.

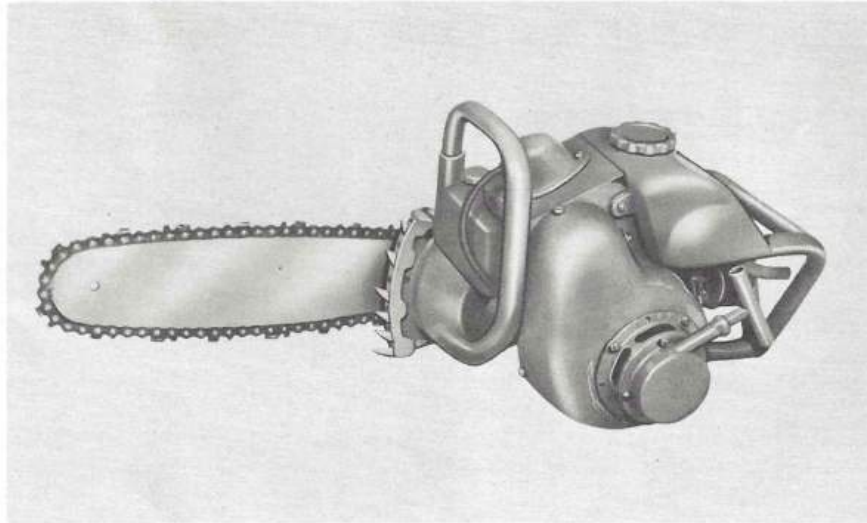
(C) Stopping Engine

To stop the engine, push stop button located on air shroud, left side of engine. Completely close gas shut-off valve.

2. SAW OPERATION

(A) Chain Tension

To get the correct tension of chain, loosen the two nuts on studs so cutter bar can be moved easily. Pull bar out by the end with one hand so chain is reasonably tight. Tighten the



Lombard Wood-Lot Wizard Chain Saw



Felling Position



Bucking Position

two nuts firmly. To check for correct tension, the chain on the lower part of the cutter bar should be hanging loose so there is at least 1/8" between the side links and the edge of cutter bar. The chain tension is an important item and should be watched carefully. CAUTION: Do not pry on end of cutter bar to tighten chain. If chain tension is too tight, chain will not run, or end of bar may become burnt.

(B) Chain Lubrication

The chain is lubricated by an automatic oiler which works only when the chain is moving. Therefore, when engine is idling the chain will not be oiled. Remove the filler cap on the oil reservoir to fill with SAE #30 oil.

It may be necessary in sub-zero weather to mix kerosene with the oil or use a much lighter oil. Kerosene may also be added to cut gummy pitch.

There is a small hole in the sprocket which allows the oil to get on the chain and this should be checked daily to see that it is not plugged with sawdust.

(C) Gear Lubrication

An oil hole cover, on gear case near muffler, has been provided for lubricating gears. Hold the throttle lever down enough so chain is moving very slowly and oil will be distributed on teeth of driven gear inside gear case, (use two or three squirts from an oil can).

REMEMBER: Oil Daily: using SAE 30 oil.

(D) Positions of Cutting (see photos on opposite page)

This Model 3-16 Saw mill cut in any position from vertical to 90° on the right side. The cutter bar side of saw should be held toward the ground when making a felling cut. When cutting, be sure engine is up to speed before entering chain into wood.

3. ENGINE MAINTENANCE

(A) Spark Plug

The spark plug should be checked periodically. A dirty, oily or carboned plug causes starting trouble and poor operation.

The spark plug should be cleaned, and the points set at .030 inches. If there is any doubt about the condition of the plug, it should be replaced with an A.C. No. 45M or equivalent.

(B) Air Filter

Air filters are the dry type and normally need little attention. If the engine is run in a dusty atmosphere, the filter element should be removed and cleaned in gasoline once a week.

These engines are equipped with a tubular filter, and should be cleaned in gasoline and allowed to drain. The filter should be re-installed dry.

(C) Muffler & Exhaust Ports

The muffler and the exhaust ports should be cleaned every 50 hours. Failure to clean these parts periodically results in loss of power.

To clean the muffler, remove from cylinder and scrape carbon from all cavities and the exhaust outlet space.

To clean the cylinder exhaust ports, remove the spark plug, and turn the starter pulley so that the piston is at the bottom of the stroke, below the exhaust holes. With any blunt instrument scrape the carbon from the three cylinder exhaust holes so that they are completely open and remove the carbon from the surrounding exhaust chamber. Crank the engine several times to blow out the loosened carbon. Replace the spark plug and muffler.

(D) Starter - See Fig. 4

To replace starter cable, remove four screws holding cover to body. Remove nut and washer, now take out old cable and handle. Push cable backward through handle to remove lug or pry lug out of handle with a screw driver and remove old cable. Thread new cable through handle and pull tight, until lug is flush with handle. Thread cable through thimble on cover and through hole in sheave from inside. Put one complete turn of cable under washer and replace nut. Rewind cable on sheave and place into cover. Hold cover, and rotate plate and bushing assembly clockwise until spring engages then rotate approximately one full turn and line up holes. Holding cover in this position put four screws through holes in both pieces. Reassemble to starter housing.

To replace rewind spring remove four screws which hold starter assembly to air shroud. Remove four screws holding cover to body. Remove nut and washer then remove sheave from axle. Be careful when removing old spring from sheave it is apt to fly. To put in new spring, hook outside end in slot of sheave and wind in from outside to center. Reassemble as in above.

(E) Carburetor Adjustments

There are two adjustments on the carburetor, the full load adjustment and the idling adjustment. The full load adjustment is the numbered dial located at the back of the carburetor below the air filter. The idling adjustment is located on top of the carburetor. The normal setting of full load adjustment is at No. 7, and the idling adjustment is about 3/4 turn open.

Should it be necessary to check the adjustments, the engine should first be run at full load until it is warmed up. The full load adjustment may then be checked by turning it in (clockwise) until motor slows down or coughs and the position noted. The adjustment should then be turned open (counter-clockwise) until the engine after speeding up again slows down and runs unevenly; this position should be noted. Correct adjustment will be half way between these two points. At this position, the engine should deliver maximum power.

Make sure that the numbered dial is tight on the carburetor shaft. If it should become loose, remove it from the adjustment shaft. Turn the adjustment shaft in until it seats in the carburetor. Do not turn in too tight as this may damage the seat. Then back out 1/8 turn; place the dial on the needle valve, push all the way in and rotate clockwise until the stop on the back of the dial strikes the left side of the projection on the filter cover. Tighten set screw.

To check the idling adjustment, the carburetor throttle must be held in the closed position and the idling adjustment screw on top of carburetor turned in or out until the engine runs smoothly. If after this adjustment the engine keeps stalling, it can be adjusted with the idling adjusting screw on the throttle shaft.

Two-cycle engines when running under light loads may appear to miss. This in no way affects the operation of the engine.

(F) Should Engine Fail to Start

The following material is presented as an aid in the maintenance and repair of the engines. Proper maintenance of an engine will result in hundreds of hours of satisfactory operation.

Check for fuel in the gas tank and check to see that shut-off valve is open.

Check for spark; remove spark plug and with magneto wire attached hold the base of the plug against the engine, crank engine. A spark should jump across the plug points. If it doesn't, clean the plug or replace with a new one.

Check magneto. Hold the spark plug wire 3/16" from engine, spark should jump from the terminal to the engine when cranked. If no spark occurs, test the condenser and coil; if faulty, replace.

Check for gasoline in carburetor. Remove the full load adjustment needle from the carburetor. Gasoline should flow in a small continuous stream. If it does not, clean gas line; also clean filter screen in carburetor inlet and the gas tank outlet.

Check for flooding. Remove spark plug and if plug is wet or if gap is closed by liquid fuel, the plug should be dried, and with main adjustment needle closed, the engine should be cranked until vapor stops coming out of spark plug hole. Re-insert plug and open adjustment dial to No. 7 or 3/4 turn open.

Check for gasket leaks and for leaks around the crankshaft seal.

(G) Should Engine Overheat

Check the flow of air over the cylinder. If restricted by dust or dirt, remove the cylinder shield and clean the cylinder fins, and if necessary, remove the air shroud and clean the flywheel fan and the air intake holes on rewind starter.

Be sure to have correct fuel mixture; 1/2 pt. of No. 30 motor oil to each gallon of gasoline. Use a separate clean container for mixing oil and gasoline.

(H) Should Engine Lack Power

Check carburetor adjustment. See instructions. (Item E in engine maintenance).

Check magneto timing. Corresponding match marks on the stator plate and crankcase should be lined up. If the timing has been changed, loosen the stator plate lock screw. Move the stator plate to the correct timing position as indicated by the marks and tighten the screw. Proper timing is indicated by the breaker points opening when the piston is 1/16" before the top dead center of the stroke.

Check for carbon. If exhaust ports and muffler are restricted by carbon, scrape clean.

Check compression. Remove spark plug and place compression gauge in cylinder spark plug hole. After cranking the engine several times, the gauge should register 55 lbs. or more. If compression is faulty, replace piston rings.

Check for gasoline and oil ratio in fuel. Be sure engine has 1/4 pt. of oil for each gallon of gasoline.

Check cylinder, carburetor, reed plate, and transfer port gaskets for leaks. Also check for leaks around the crankshaft seals.

(I) General Information

Magneto point setting..... .020 inch

Spark Plug gap..... .030 inch

Fuel Ratio..... 1/2 pt. No. 30 oil per gal. of gasoline

Recommended engine speed..... 2700 to 4000 r.p.m.

Clean muffler and exhaust ports every 50 to 75 hours.

If magneto is removed from the engine, be sure to replace cam in original position, with the beveled side out.

When replacing piston, be sure tapered side of baffle is toward muffler side of engine.

4. SAW MAINTENANCE

(A) Chain

One of the most important parts of the saw is the chain. The cutting efficiency of the unit depends on the condition of the chain. Therefore, it should be inspected daily for sharpness and damage. If the chain appears to be dull (noticed by slower cutting) or if it has struck a hard object such as a stone, etc., do not continue to cut. Use a round file with file holder to sharpen this Chipper Chain. A chain cutting wood after becoming dull will damage both chain and cutter bar as it will require forcing the saw. It will also reduce the life of the chain as it necessitates excessive filing of the radius face angles of the cutters.

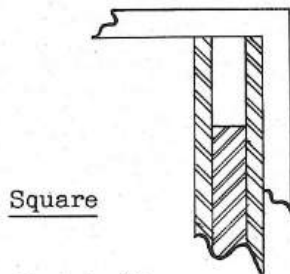
Use your chain with care and see that it has plenty of lubrication so parts will not wear and keep it sharp at all times.

If a cutter is broken or damaged beyond repair, it may be replaced from the spare parts that are shipped with all new chains. Check to be positive the correct cutter, that is, left or right, is assembled into the chain. When peening rivets, do not strike too hard, or you will bulge large diameter of rivet in center blanks; therefore, binding the chain. Light blows using the ball end of a small hammer is sufficient. Always check chain for flexibility at repaired joint.

(B) Cutter Bar

Many cutter bars are damaged by ill use, that is, lack of proper lubrication on chain and cutter bar, unnecessary forcing of saw when cutting, and twisting of cutter bar in some cuts. Always remember the lack of proper oil will cause excess wear on both chain and cutter bar; therefore, reducing the life of both items.

The top edges of slot of cutter bar, where side links of chain run, should be checked for parallelism periodically. A good method is to place a square on side of cutter bar as shown in sketch #7.



Square

Sketch #7

File or stone edges parallel and remove all burrs. If one edge is lower than the other, the chain will cut crooked, and then the operator will force the saw to try and remedy this situation; therefore, resulting in considerable damage to the cutter bar.

(C) Clutch

This saw is equipped with a special shoe-type, automatic clutch mounted on engine shaft, inside gear housing. It will automatically engage and release according to engine speeds, which are controlled by the throttle lever.

This clutch cannot be adjusted. If chain creeps, then the idling speed of the engine is incorrect. This is remedied by adjusting idle mixture.

When repairing saw, never run engine with clutch spider assembly on engine shaft unless drum is also assembled in proper position on same shaft, as the six shoes, part No. OMS-76, will fly off because of centrifugal force, and may be lost or damaged.

(D) Gear Housing

The gear housing contains the gears and clutch assembly. The only attention it requires is to oil gears daily by 3 or 4 squirts of SAE #30 motor oil from an oil can. At the same time, hold throttle lever down a small amount so chain will be traveling very slow, thus gears will be rotating slowly and get oiled properly.

5. SERVICE AND REPAIR INSTRUCTIONS

(A) Suggested Procedure for Dismantling Saw

Remove Cutter Bar and Chain.

Sprocket - remove by striking sprocket teeth on right side a sharp blow while holding shaft with a wrench on flats. The threads in hole of sprocket are left hand.

Cover - Gear Case: Remove eight screws.

Remove lock nut on engine shaft.

Spider: Use puller to remove.

Remove two spider keys.

Remove drum - gear assembly.

Remove bushing and spacers from engine shaft.

Driven gear and transmission shaft assembly are removed as one unit.

Front handle bar, remove three screws.

Gear case, remove three screws.

Gas line, disconnect and remove.

Remove throttle link between carburetor arm and throttle arm.

Gas Tank, remove the two screws holding gas tank to crankcase, remove one screw which holds bottom handle bar support to bottom of engine. Remove one screw on left side which holds gas tank to cylinder.

Oil Pump, -- if necessary to remove oil pump from back of gear case, loosen holder, keeping in mind the threads are left hand.

(B) Suggested Procedure for Dismantling Engine

Air Filter--remove air filter cover and filter.

Carburetor and Reed Plate--remove two nuts.

Muffler--remove the screws holding muffler to the cylinder.

Air Shroud--remove screws holding the air shroud to the shroud base, and remove wire to stop button.

Rewind Starter--remove four screws holding starter to air shroud.

Flywheel--loosen the starter nut two turns; sharply strike the end of the nut with a raw-hide hammer until the flywheel is loosened from the crankshaft taper.

Magneto Stator Plate--loosen the friction screw at the base of the stator plate. Pull the stator plate off by turning back and forth.

Cam and Key--remove by tapping. Note position before removal.

Shroud Base--remove four screws holding the shroud base to the engine.

Cylinder--remove four nuts.

Crank Case--remove six screws holding the crankcase together, then tap the end of the crankshaft gently to separate the case and bearing from shaft, tap the shaft gently.

To replace ball bearing in the case, remove lock ring, washer and seal. Heat the case evenly with a blow torch or over a gas flame until the bearing drops out. At this temperature a new cold bearing can be dropped in. Make sure that the beveled side of the inner race of the bearing is up when it is dropped into the crankcase. Also, be sure when replacing the seal that the lip is toward the center of the engine.

Connecting Rod--to remove the connecting rod from shaft remove the two screws holding the cap to the rod. When reassembling the rod and cap to the shaft be sure that the match markers on the rod and cap are on the same side. Be sure that there are 30 rollers in assembly. Be sure that the straight side of the piston baffle is toward the tapered end of shaft.

To remove the rod from the piston pin, remove the lock ring from one side of the piston and slide the piston pin to one side.

It is extremely important that all parts be thoroughly clean, and the moving parts oiled before assembly. A reassembled engine will require a run-in period of about an hour before full power will be developed.

OUR MOTTO IS:

"GIVE YOUR SAW A LITTLE ATTENTION TODAY AND
YOUR SAW WILL REQUIRE LESS ATTENTION TOMORROW"

EXPLODED VIEWS

AND PARTS LISTS

Note: Kindly order by part number. Do not use
illustration reference numbers.

WIZARD GAS SAW
MODEL 3-16

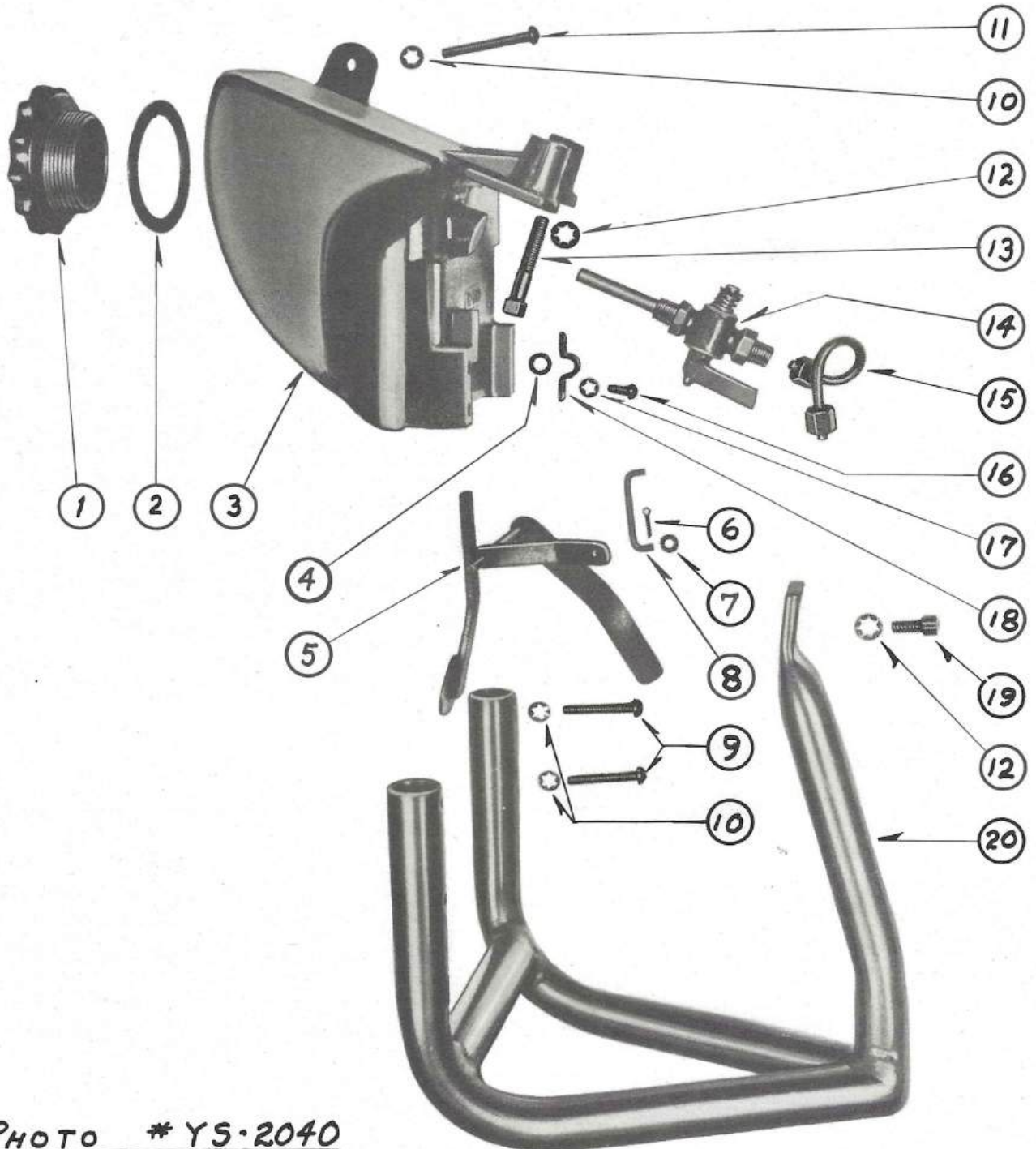


PHOTO #YS-2040
GAS TANK & REAR HANDLE BAR ASSEMBLY
LOMBARD GOVERNOR CORP. ASHLAND, MASS.

3/19/51

PARTS LIST YS-2040

For Gas Tank and Rear Handle Bar Assembly

Wizard Model 3-16

Lombard Governor Corporation, Ashland, Mass.

ITEM NO.	PART NO.	PART NAME	QTY. PER UNIT
1	YS-2015	Cap, Gas Tank	1
2	YS-2023	Gasket, Gas Tank Cap	1
3	YS-2020	Gas Tank	1
4	YS-2014	Bushing, Throttle	2
5	YS-2019	Throttle	1
6	PM-141	Cotterpin	2
7	PW-107	Washer, Plain	2
8	YS-2018	Link, Throttle	1
9	PS-315	Screw, Round H'd #10-24 x $1\frac{1}{4}$ lg	4
10	PW-210	Lockwasher, Shakeproof #1210-00	5
11	PS-314	Screw, Round H'd #10-24 x $1\frac{1}{2}$ lg	1
12	PW-211	Lockwasher, Shakeproof #1214-00	3
13	PS-109	Screw, Socket H'd Cap $\frac{1}{4}$ - 20 x $1\frac{1}{2}$ lg	2
14	YS-2033	Shut-off Valve	1
15	YS-2024	Gas Line	1
16	PS-308	Screw, Round H'd #8-32 x $\frac{3}{8}$ lg	4
17	PW-209	Lockwasher, Shakeproof #1208-00	4
18	VS-2017	Clip, Throttle	2
19	PS-106	Screw, Socket Hd. Cap $\frac{1}{4}$ - 20 x $\frac{5}{8}$ lg	1
20	VS-2021	Handlebar, Rear	1

CAUTION:

When ordering, include serial no. of saw, part number, part name and quantity desired.

WIZARD GAS SAW MODEL 3-16

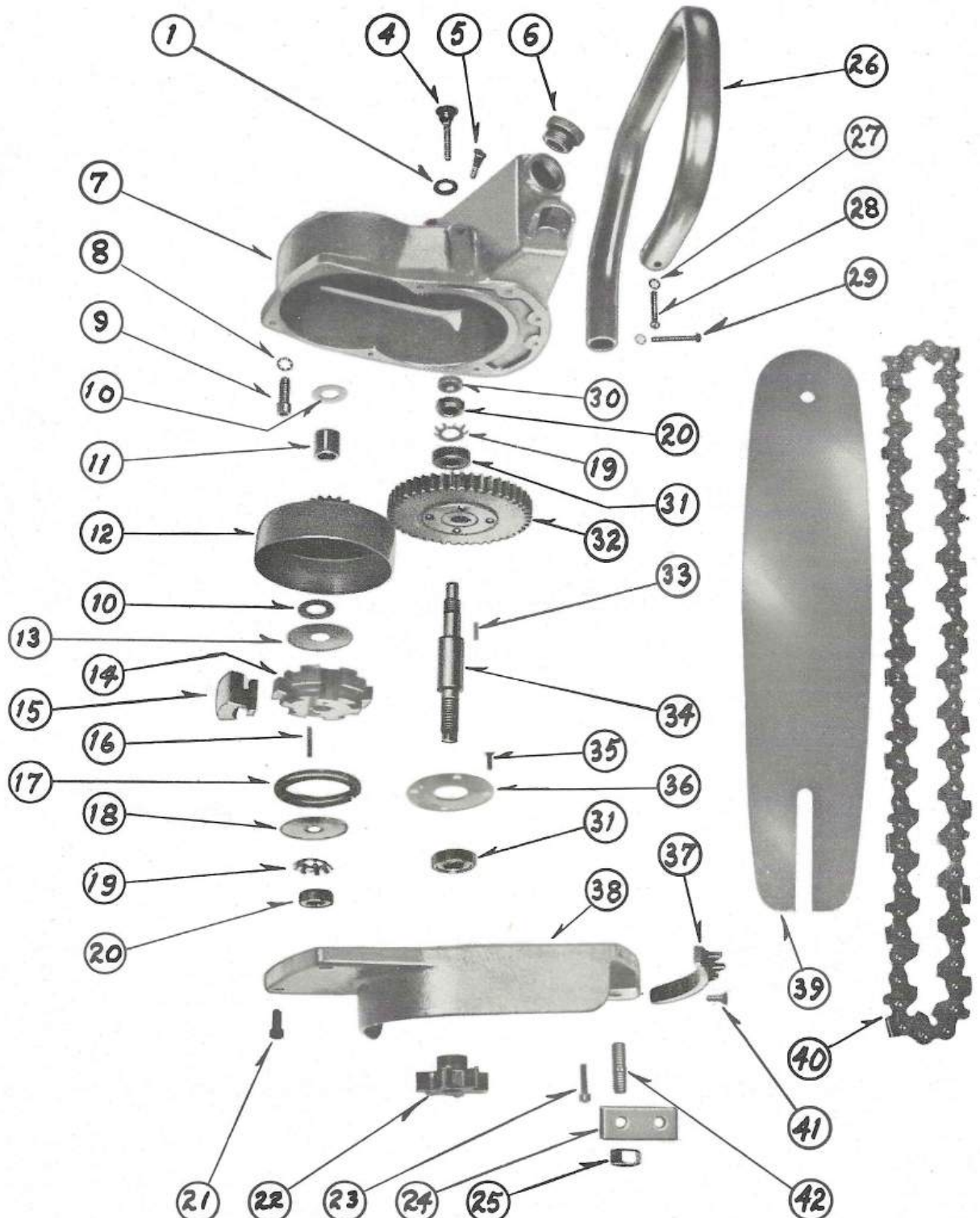


PHOTO * YS-2045 - GEAR CASE ASSEMBLY
LOMBARD GOVERNOR CORP. ASHLAND, MASS.

Date 3/19/51

PARTS LIST YS-2045

For Gear Case Assembly
Wizard Model 3-16

Lombard Governor Corporation, Ashland, Mass.

ITEM NO.	PART NO.	PART NAME	QTY. PER UNIT
1	YS-2031	Gasket, Oil Pump Holder.....	1
4	YS-2051	Oil Pump Assembly.....	1
5	YS-2035	Cover, Oil Hole.....	1
6	GS-1135	Cap, Oil Reservoir.....	1
7	YS-2001	Gear Case.....	1
8	PW-212	Lockwasher, Shakeproof #1218-00.....	3
9	PS-123	Screw, Socket Hd. Cap 5/16-18 x 7/8 lg.....	3
10	YS-2032	Washer, Special.....	2
11	PM-137	Bushing.....	1
12	YS-2008	Gear, Driver.....	1
13	YS-2029-A	Spacer, Special.....	1
14	YS-2010	Spider, Clutch.....	1
15	OMS-76	Shoes, Clutch.....	6
16	YS-2011	Key, Spider.....	2
17	OMS-76	Spring, Clutch.....	2
18	YS-2029-B	Spacer, Special.....	1
19	PM-135	Lockwasher.....	2
20	PM-134	Locknut.....	2
21	PS-124	Screw, Socket Hd. Cap, #10-24 x 1/2.....	6
22	YS-2007	Sprocket.....	1
23	PS-125	Screw, Socket Hd. Cap, #10-24 x 3/4.....	2
24	YS-2041	Plate.....	1
25	PN-103	Nut, Hex 3/8 - 16 St'd.....	2
26	YS-2016	Handlebar, Front.....	1
27	PW-210	Lockwasher, Shakeproof #1210-00.....	3
28	PS-315	Screw, Round Head #10-24 x 1 1/4 lg.....	1
29	PS-314	Screws, Round Head #10-24 x 1 1/2 lg.....	2
30	PM-132	Grease Seal.....	1
31	PB-110	Bearing.....	2
32	YS-2003	Gear, Driven.....	1
33	YS-2025	Key, Driven Gear.....	1
34	YS-2006	Shaft, Gear Case.....	1
35	PS-210	Screw, Flat Head #8-32 x 1/2 lg.....	4
36	YS-2009	Plate, Bearing Cover.....	1
37	YS-2030	Bumper, Spike.....	1
38	YS-2002	Cover, Gear Case.....	1
39	YS-2022	Cutterbar, 16" Cap.....	1
40	PM-142	Chain, 16" Cap. Chipper.....	1
41	PS-607	Screw, Button Head #10-24 x 3/4 lg.....	4
42	YS-2012	Stud, Special.....	2

CAUTION:

When ordering, include serial number of saw, part number, part name and quantity desired.

ALWAYS SPECIFY ENGINE MODEL & SERIAL NUMBER WHEN ORDERING REPAIR PARTS!

ENGINE-MODEL 150-TYPE 58

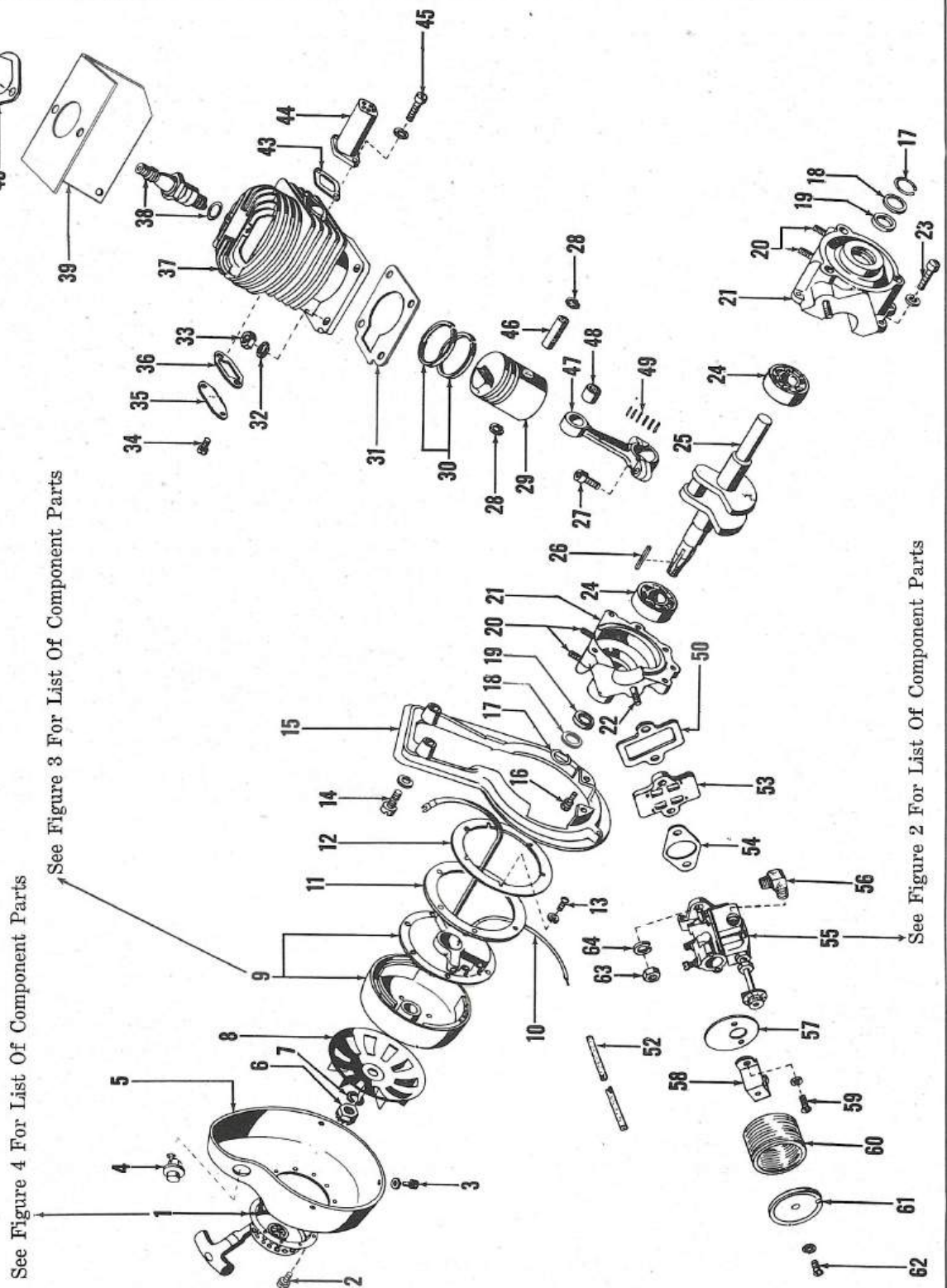


Fig. 1

ALWAYS SPECIFY ENGINE MODEL & SERIAL NUMBER WHEN ORDERING REPAIR PARTS!

ALWAYS SPECIFY ENGINE MODEL & SERIAL NUMBER WHEN ORDERING REPAIR PARTS!

PARTS LIST

Ref. No.	Part No.	Part Name	No. Req.	Ref. No.	Part No.	Part Name	No. Req.
1	1133-03	Starter - Schnacke Rewind	1	36	1065	Gasket - Transfer Port Cover	1
2	PS-604	Screw - 10-24 x $\frac{1}{2}$ Fil. Hd. Sems	4	37	101008	Cylinder	1
3	1007-01	Screw & #10 Lockwasher	8	38	45M	Spark Plug	1
4	3084-01	Button - Stop	1	39	102301	Cylinder Shroud	1
5	1018-03	Shroud - Air	1	40	YS2013	Shield - Spark Plug Protection	1
6	1133-04	Nut - Schnacke Rewind Starter	1	41	PS-604	Screw - #10-24 x $\frac{1}{2}$ Fil. Hd. Sems	2
7	PW-213	Lockwasher - 7/16 S.A.E.	1	42	227	Nipple - Spark Plug	1
8	1063	Fan - Flywheel	1	43	3014	Gasket - Cylinder Exhaust	1
	0-124	Magneto - Complete (Without Fan). See Fig. 3 for Details	1	44	105802	Muffler	1
10	3066-01	Ignition Wire - Cut-off	1	45	PS-606	Screw - 1/4-20 x 5/8 Fil. Hd. Sems	2
11	3117	Seal - Magneto Dust	1	46	1016-01	Pin - Piston	1
12	3118	Plate - Magneto Dust Seal Retainer	1	47		Rod - Connecting	1
13	PS-605	Screw - #8-32 x 1/4 Fil. Hd. Sems	6	48	005-06	Bearing - Cartridge	1
14	PS-604	Screw - #10-24 x $\frac{1}{2}$ Fil. Hd. Sems	2	49		Bearing - Needle	30
15	1019-03	Base - Shroud	1	50	1027	Gasket - Reed Plate	1
16	PS-608	Screw - 1/4-20 x $\frac{1}{2}$ Fil. Hd. Sems	2	52	1136	Sleeve - Ignition Cut-Off	1
17	1004	Spring - Crankshaft Seal Retaining	2	53	026-04	Reed Plate Assembly, w/stops	1
18	1003-01	Retainer - Crankshaft Seal	4	54	1009	Gasket - Carburetor	1
19	1002	Seal - Crankshaft	2	55	MD60A	Carburetor - Complete. See Fig. 2 for Parts Listing	1
20	1022	Stud - Cylinder	4	56	1042-05	Elbow - Gas Line Connector	1
21	020-05	Crankcase - Assembly, Complete with 2 Ball Bearings	1	57	1092	Base - Air Filter	1
22	1031	Stud - Carburetor	2	58	1077	Bracket - Air Filter Cover	1
23	PS-606	Screw - #10-24 x 5/8 Fil. Hd. Sems	6	59	PS-609	Screw - #8-32 x $\frac{1}{2}$ Fil. Hd. Sems	2
24	3203	Ball Bearing - N.D.	2	60	1029	Filter - Air	1
25	1001-20	Crankshaft	1	61	104701	Cover - Air Filter	1
26	1062	Key - Flywheel	1	62	PS-604	Screw - #10-24 x $\frac{1}{2}$ Fil. Hd. Sems	1
27	100702	Screw - Connecting Rod	2	63	PN-102	Nut - 1/4-20	2
28	1119	Ring - Retainer	2	64	PW-204	Lockwasher - 1/4	2
29	101504	Piston	1				
30	101701	Ring - Piston	2				
31	1012-02	Gasket - Cylinder	1				
32	PW-204	Lockwasher - 1/4	4				
33	PN-102	Nut - 1/4-20	4				
34	PS-604	Screw - #10-24 x $\frac{1}{2}$ Fil. Hd. Sems	2				
35	1064	Cover - Transfer Port	1				

WARNING - Order By Part Number - Do Not Use Illustration Reference Numbers

ALWAYS SPECIFY ENGINE MODEL & SERIAL NUMBER WHEN ORDERING REPAIR PARTS!

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TILLOTSON CARBURETOR MODEL MD 60A

**WARNING - Order By Part Number - Do
Not Use Illustration Reference Numbers**

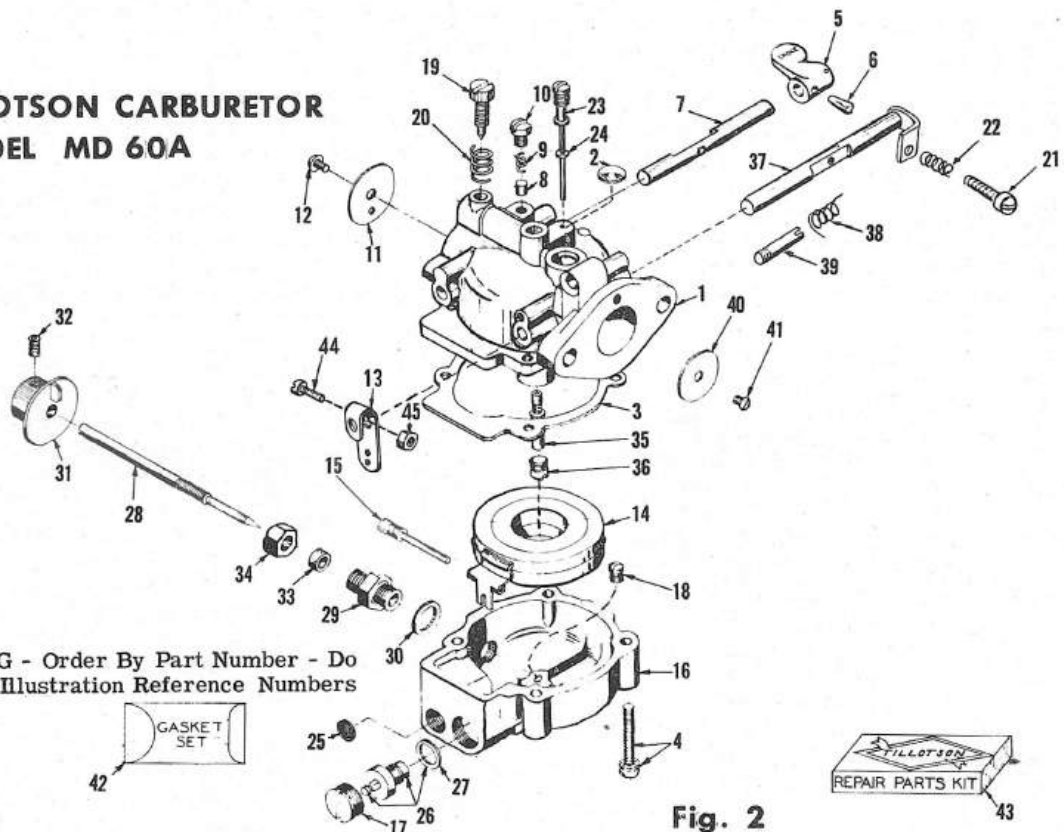


Fig. 2

Ref No.	Part No.	Part Name	No. Req.	Ref No.	Part No.	Part Name	No. Req.
1	09527	Body - Upper Half	1	24	07900	Gasket - Idle Tube	1
2	*02531	Welch Plug - Body Channel	1	25	*07283	Screen - Inlet Connection	2
3	07903	Gasket - Body	1	26	*07895	Seat & Gasket - Needle, Inlet	1
4	08872	Screw & Lockwasher - Body Retaining	4	27	02510	Gasket - Inlet Seat	1
5	05566	Lever - Choke	1	28	*08611	Screw - Main Adjustment	1
6	*03208	Pin - Choke Lever Retaining	1	29	0702	Gland - Main Adjustment Screw	1
7	08454	Shaft - Choke	1	30	0676	Gasket - Main Adjustment Screw Gland	1
8	*05454	Pin - Choke Friction	1	31	08612	Knob - Main Adjustment Screw	1
9	*03860	Spring - Choke Friction Pin	1	32	06969	Screw - Set, Main Adjustment Screw Knob	1
10	*07912	Screw - Choke Friction Pin	1	33	09112	Packing - Main Adjustment Screw	1
11	08585	Shutter - Choke	1	34	0703	Nut - Packing, Main Adjustment Screw	1
12	0120	Screw - Choke Shutter	1	35	*07911	Nozzle - Main	1
13	3105	Lever-Clamp On	1	36	02395	Screw - Channel Plug, Main Nozzle	1
14	07804	Float	1	37	09546	Shaft & Lever - Throttle	1
15	*07901	Screw - Float Pinion	1	38	*08647	Spring - Throttle Lever Return	1
16	09529	Bowl - Fuel	1	39	04594	Pin, Stop - Throttle Lever	1
17	07896	Screw - Fuel Bowl Plug (Large)	1	40	08781	Shutter - Throttle	1
18	*03311	Screw - Fuel Bowl Plug (Small)	1	41	*05204	Screw - Throttle Shutter	1
19	*06910	Screw - Idle Adjustment	1	42	*08025	Gasket & Packing Set	1
20	*05725	Spring - Idle Adjustment Screw	1	43	09548	Kit, Repair Parts	1
21	*05095	Screw - Idle Speed Regulating	1	44	PS609	Screw-8-32 x 1/2 Fil. Hd.	1
22	*0788	Spring - Idle Speed Regulating Screw	1	45	PN108	Nut-Hex #8-32	1
23	*07899	Tube - Idle	1				
* Indicates Contents of Designated Repair Parts Kit							

PHELON MAGNETO 0-124

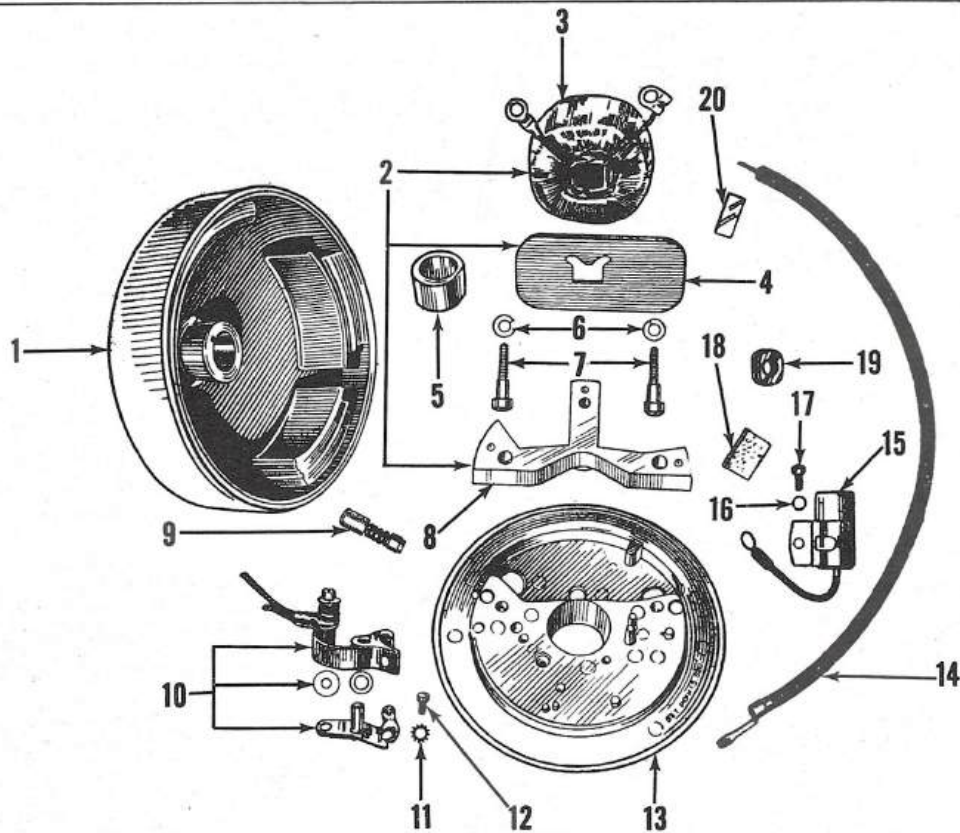


Fig. 3

Ref. No.	Part No.	Description	No. Req.
	0-124	Magneto - Complete (without fan)	1
1	1124-01	Flywheel	1
2	FG-472	Coil & Core Assembly - Includes Items 3, 4, & 8	1
3	FG-470B	Coil	1
4	F-416B	Shield - Coil	1
5	F-111E	Cam - Breaker	1
6	F-148	Lockwasher - Core Screw	2
7	F-130	Screw - Core	2
8	FG-414	Core - Coil	1
9	FG-358	Shoe Group - Friction	1
10	FG-626	Breaker Point Set - Includes plate, arm, pivot, insulator	1
11	F-173	Lockwasher - Fixed Contact Screw	1

Ref. No.	Part No.	Description	No. Req.
12	F-204	Screw - Fixed Contact	1
13	1124-02	Complete Stator Assembly - Includes All Items except Items 1 & 5	1
14	F-240D	Wire - Lead	1
15	FG-471B	Condenser	1
16	F-147C	Lockwasher - Condenser Screw	1
17	F-204	Screw - Condenser	1
18	F-341B	Felt - Cam	1
19	F-503	Grommet - Lead Wire	1
20	F-280	Wedge - Coil	1
	F-422	Screw - Ground Terminal (Not Shown)	1

WARNING - Order By Part Number - Do Not Use Illustration Reference Numbers

STARTER ASSEMBLY No. 1133-03

ALWAYS SPECIFY ENGINE MODEL & SERIAL NUMBER WHEN ORDERING REPAIR PARTS!

STARTER ASSEMBLY
NO. 1133-03

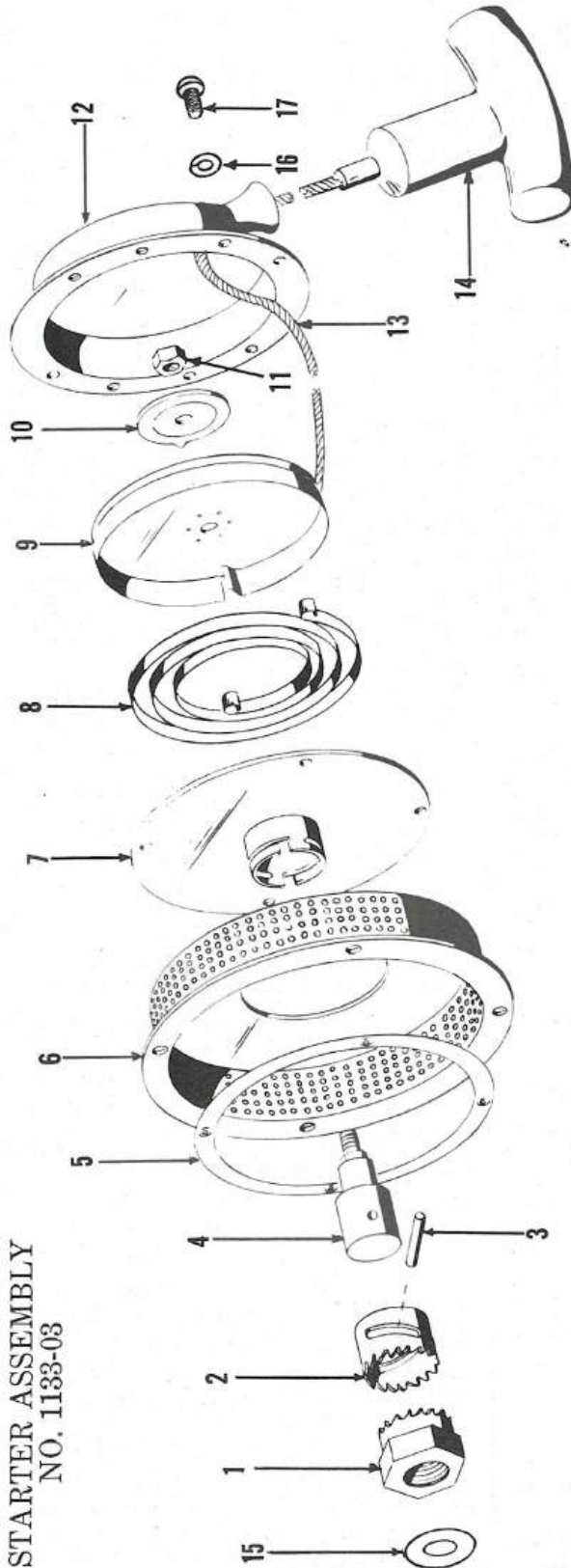


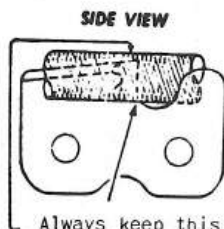
Fig. 4

Warning - Order By Part Number - Do
Not Use Illustration Reference Numbers

Ref No.	Part No.	Part Name	No. Req.	Ref No.	Part No.	Part Name	No. Req.
1	1133-04	Nut - Driven Member	1	9	250-5	Sheave - Assembly	1
2	250-9	Clutch - Driving Member	1	10	250-13	Washer	1
3	250-10	Pin	1	11	250-14	Nut	1
4	250-3	Axle - Sheave	1	12	250-7	Housing - Sheave	1
5	250-15	Plate - Nut	1	13	250-6	Cable - 60" Wire	1
6	250-8	Housing - Starter	1	14	250-12	Pull Bar	1
7	250-16	Mounting Plate & Bushing Assembly	1	15	1135	Shim	1
8	250-4	Spring - Recoil	1	16	PW203	Lock Washer	4
				17	PS317	Screw - #10-32 x 3/8 R. Hd.	4

Filing Instructions

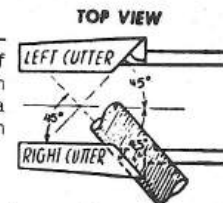
"Your file held in one position does the job"



Use only a 1/4 inch round, straight (not rat-tail) file. Draw long, even strokes. Press firmly back and slightly up. Hold one position.

Always keep this **edge** vertical when viewed from side. Keep 1/5 of file diameter above top plate.

Keep file up. Low filing undercuts side of cutter, causing chain to grab. **Never** use a flat file to sharpen top plate.



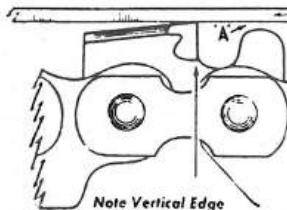
Keep the same 45° angle on both left and right cutters.

END VIEW

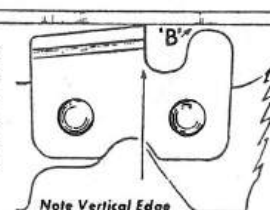


Chain Rider Clearance

To check rider clearance place a flat file on two cutters as illustrated...Use a feeler gauge in space "A".



Move file to right before checking clearance at "B". Use same clearance in all species of wood.



Depth gauge clearance should be about .050 inch, or as set at factory.

