

OWNER'S MANUAL

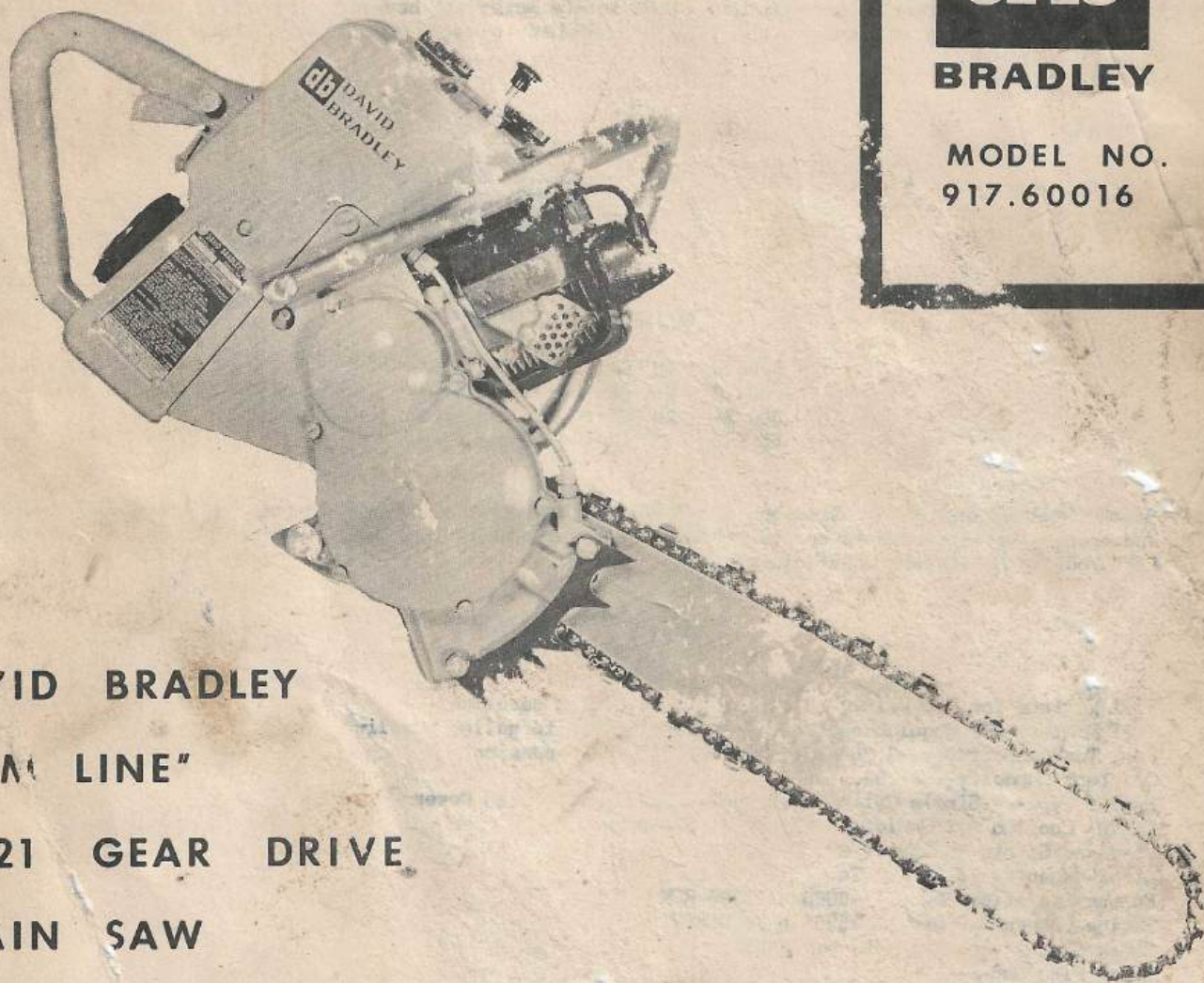
1374

DAVID



BRADLEY

MODEL NO.
917.60016



DAVID BRADLEY

"SLIM LINE"

5G 21 GEAR DRIVE

CHAIN SAW

SEARS, ROEBUCK AND CO. U.S.A.
IN CANADA, SIMPSONS - S. A. LIMITED

INTRODUCTION

Since there is a right way, and many wrong ways to operate any power-driven machinery, it is important that this manual be read carefully before you start your saw. This will avoid unnecessary delays, expense or personal injury which might be caused by improper operation.

Your David Bradley Chain Saw has been designed, engineered and manufactured to give you the best in performance with the least amount of trouble. Should you experience any minor service problem which you cannot remedy, take your saw to your nearest Sears, Roebuck and Co. or Simpsons-Sears Limited store. They have competent, trained mechanics and the proper tools to service and repair your saw. Do not tamper with your saw unless you are qualified to do so.

Each Chain Saw is given a thorough inspection before shipment; however, it is very important that it be again thoroughly checked at the time of receipt to ascertain if any damage has occurred in transit.

20" Saw	26" Saw	32" Saw	
1	1	1	600x70 Slim Line Power Head
1	-	-	600x25 20" Guide Bar and Chain
-	1	-	600x26 26" Guide Bar and Chain
-	-	1	600x16 32" Guide Bar and Chain

OPTIONAL EQUIPMENT

600x26 - 26" Guide Bar and Chain
 600x78 - Bow Saw Blade and Chain
 600x25 - 20" Guide Bar and Chain
 600x16 - 32" Guide Bar and Chain

Sears, Roebuck and Co. or Simpsons-Sears Limited reserves the right to make any changes in design and changes or improvements on its products without imposing any obligation to install the same upon its products heretofore manufactured.

SAW SPECIFICATIONS

Fuel Mixture for Break-in---3/4 pint oil to gallon gasoline
 Fuel Mixture for Regular operation---1/2 pint oil to gallon gasoline
 Fuel Tank Capacity---3.20 pints (leave 3/4" for expansion)
 Oil Tank Capacity---.94
 Engine Type---Single Cylinder--2 cycle--AH-47--type 1148 Power Products
 Engine Cooling Air Cooled---Flywheel Blower
 Bore and Stroke---2x1-1/2
 Displacement---4.71 Cu. In.
 Engine Operating Speed---3000---7800 RPM
 Engine Governed Speed---7500 to 7800 RPM
 Spark Plug---Champion J8J or AC-45M
 Spark Plug Gap---.030
 Magneto Point Setting---.013 to .017
 Carburetor Tillitson---Model HL 65A
 Type Chain Oiler---Manual
 Overall Dimensions without Guide Bar & Chain---22-1/2 long 10-1/2" wide 15" high
 Saw Weight without Guide Bar & Chain & extra spike bar---21 lbs.
 Saw Weight complete with 20" Guide Bar & Chain---28-1/2 lbs.
 Clutch---Dry Centrifugal Type
 Transmission Lubrication---dry type two drops of oil daily
 Gear Ratio---2.30 to 1

TABLE OF CONTENTS

DESCRIPTION	PAGE	DESCRIPTION	PAGE
SAFETY PRECAUTIONS.....	6	OPERATING INSTRUCTIONS.....	8-12
BREAK IN PERIOD.....	9	How To Saw Wood.....	10-11-12
Fuel Mixture.....	9	STARTING PROCEDURE.....	8
CONTROLS AND ADJUSTMENTS.....	7-8	How To Start and Stop.....	8
Carburetor Adjustment.....	7	SETTING UP INSTRUCTIONS.....	4-5
Chain & Guide Bar Lubrication.....	7	TROUBLE SHOOTING.....	19-20
MAINTENANCE AND SERVICE.....	12-19	Carburetor Floods.....	20
Air Filter.....	14	Chain Cuts Out of Line.....	20
Carburetor Adjustment	7	Chain Jumps Off.....	20
Chain.....	15-18	Chain Turns When Engine Idles.....	20
Centrifugal Clutch.....	15	Chain Will Not Cut.....	20
Cylinder Cooling System.....	15	Chain Will Not Turn When Engine Is	
Exhaust Ports.....	13	Speeded Up.....	20
Fuel Filter.....	12	Engine Fails To Start.....	19
Fuel Strainer.....	12	Engine Knocks.....	20
Governor Speed.....	13	Engine Lacks Power.....	19
Guide Bar	18	Engine Misfires or Backfires.....	19
Ignition Timing.....	19	Engine Overheats.....	20
Oil Line Check Valve.....	15	Engine Runs Too Fast.....	19
Oil Screen in Reservoir.....	15	Engine Will Not Accelerate	19
Spark Plug.....	12	Engine Will Not Idle.....	19
Starter.....	14	Guide Bar Chips on Edges.....	20
Transmission.....	15	Vibration or Chain Cutting to	
NORMAL OPERATION.....	9	One Side.....	20
Fuel Mixture.....	9	How To Order Repair Parts.....	21
		Parts Lists.....	22-31

Sears, Roebuck and Co. or Simpsons-Sears Limited reserves the right to make any changes in design and changes or improvements on its products without imposing any obligation to install the same upon its products heretofore manufactured.

Printed 6/59

SETTING UP INSTRUCTIONS

Setting-Up and Operating Instructions should be studied very closely before beginning to assemble your Chain Saw.

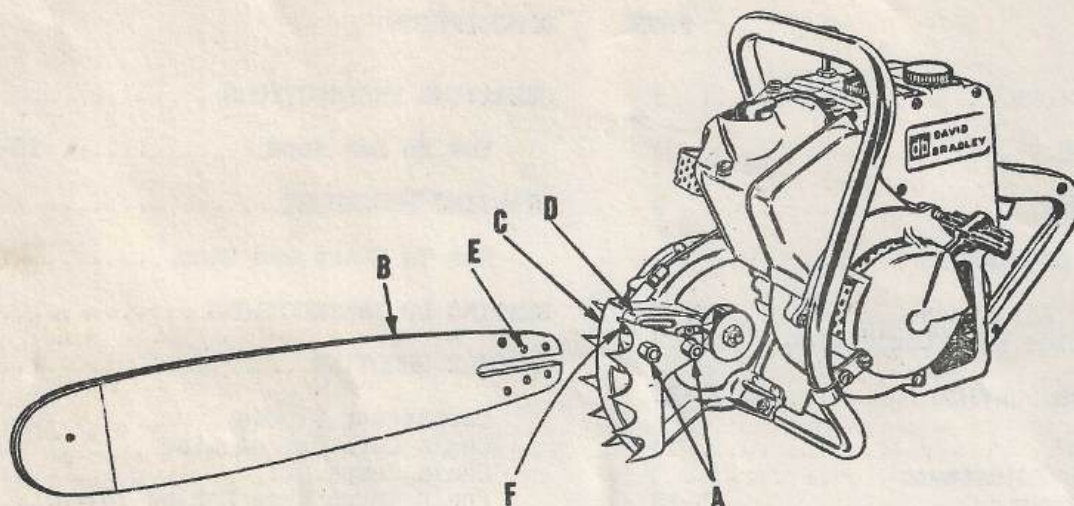


FIGURE A

1. Remove saw and guide bar from carton.
2. Remove chain from carton and soak in a pan of oil. The oily substance on a new chain is a rust preventative not a lubricant.
3. Refer to Figure A. Loosen nuts (A) and slide guide bar (B) between gear case (C) and bumper pad (D). Hook roll pin of chain tightener guide into hole (E) of guide bar (B). To engage roll pin in center hole (E), unscrew the adjusting screw (F) as far as necessary without disengaging screw. Take slack in nuts (A), but do not tighten securely now.

SETTING UP INSTRUCTIONS —Continued

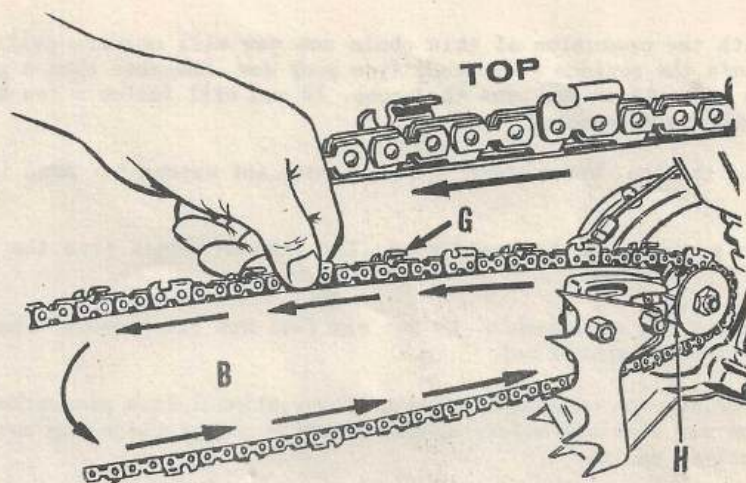
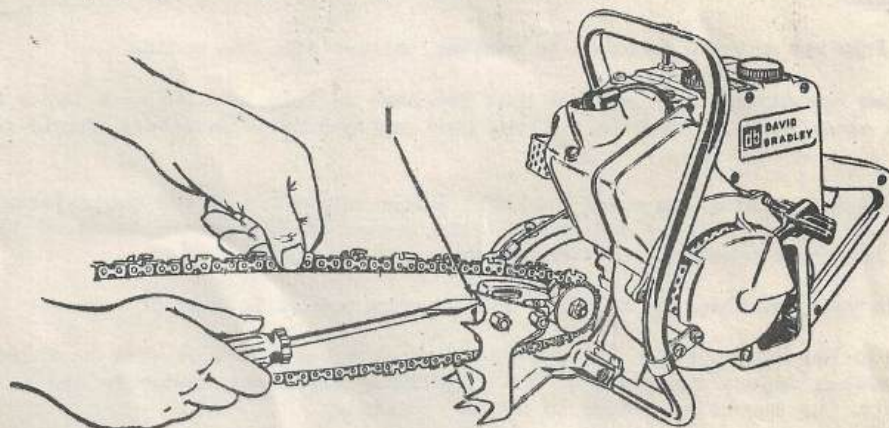


FIGURE B

4. See Figure B. Loop the chain (G) over the guide bar (B) putting the drive links in the groove on the guide bar. The teeth on the chain should be facing away from the engine, when the chain is in place in the top groove of the guide bar.
5. Loop the chain (G) over the sprocket (H). It may be necessary to slide the guide bar (B) toward the sprocket so that the chain will loop over the sprocket.
6. Adjust chain tension by turning adjusting screw (I). Figure C on the chain tightener. Be sure to hold up end of guide bar while making this adjustment. The chain tension should be just loose enough that you are able to pull it freely around the guide bar by hand after tightening nuts (A), Figure A

WARNING: When chain is too tight, guide bar and chain overheat and wear rapidly. If chain is too loose, cutting performance is poor, and there is usually early breakage due to pounding at the sprocket and from chain jumping out of guide bar groove while cutting.



Chain tension is right when
chain can just be pulled around
bar easily by hand.
Correct chain tension gives
maximum chain life - top performance.

FIGURE C

NOTE: Start engine. Run chain slowly without cutting for at least five minutes, while your saw is warming up. Do not exceed 1/2 throttle. Make a few initial cuts. Use plenty of oil on each cut, stop engine check proper chain tension. Watch chain tension very carefully for the first few hours of cutting, as the chain will stretch during the first few hours of cutting. Field test prove that a new chain can be ruined in the first 5 minutes if not properly broken in. Proper breaking in will add weeks to the life of your chain.

YOUR CHAIN WILL CUT BETTER, LAST LONGER AND SAVE YOU MONEY IF YOU PROPERLY TENSION YOUR CHAIN.

SAFETY PRECAUTIONS

As you gain experience with the operation of this chain saw you will acquire skill and judgement that will allow you to obtain the maximum efficiency from your saw. Remember that a good worker is a safe worker. Do not expose yourself or your saw to danger. If you will follow a few simple rules the hazard in cutting timber will be eliminated.

1. Do not fill fuel tank to the top. Leave about 3/4 inch room for expansion. Also let hot saw cool before refueling.
2. Danger--Do not operate your saw in a closed room. The exhaust fumes from the engine contain deadly carbon monoxide.
3. Gasoline and gasoline fumes are inflammable. Do not mix fuel and oil indoors. The fuel should be carried in a closed container, painted red.
4. When mixing fuel or refueling the engine, observe the conventional fire precautions. If gasoline is accidentally spilled on saw wipe off before starting engine. After refueling move saw away from fueling site before starting engine.
5. Do not smoke while using the saw. Gasoline may leak through the fuel tank cap or from carburetor and ignite.
6. Keep spark plug and wire connections tight. This engine as well as every gasoline engine has a spark at the spark plug, ignition points, and in the exhaust at the muffler. Keep saw clean and free from dust and inflammables. Beware of starting fires.
7. We recommend a fire extinguisher and a shovel be kept handy at all times when operating a saw in the woods.
8. Do not touch the chain while engine is running. Stop the engine before tightening, sharpening, removing or testing chain, or when making any adjustment other than a carburetor adjustment.
9. The person operating the saw should start it without assistance. A moving chain can inflict serious injuries.
10. When moving from one cutting location to another, always stop the engine.
11. In all cutting operations, be positive that you have a clear area to work in, a secure place to stand, and a clear retreat from the falling tree and branches. Observers should remain at a safe distance.
12. Plan your work before starting a cut. Serious damage may occur if the chain jerks the saw toward the log or tree. This can be eliminated if the spiked bumper on the front of the gear case is against the log or tree before starting the cut.
13. Never operate your saw when the chain is dull or when saw is in need of repair.
14. Never permit a log to pinch the chain. When a pinch occurs the saw will back out violently and can cause serious injury to operator. Also pinching can cause damage to chain, guide bar, and sprocket shaft. Use magnesium wedges to prevent pinching.
15. We recommend the use of a safety helmet to protect operator from falling branches, loose bark, etc.
16. Under cutting can be hazardous as the saw can be kicked back to the operator.

CONTROLS AND ADJUSTMENTS

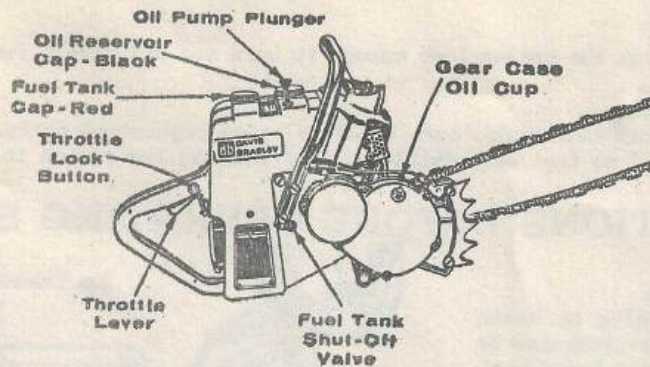


FIGURE E

NOTE: Do not mix the fuel and oil caps. The red fuel tank cap has an air hole and engine will not run if caps are interchanged.

CHAIN AND GUIDE BAR LUBRICATION:

1. Fill oil tank with clean oil--tank has black cap. It is not necessary to use expensive detergent type oil. Use a funnel to avoid spilling oil on engine. Use SAE #50 oil in temperatures above 40° and SAE #30 in cooler weather. In below zero weather use SAE #10 cutting it if necessary with a small amount of kerosene to insure normal flow. Keep oil in tank at all times. Do Not Run the chain on the guide bar without oil. To oil chain, press oil pump plunger located on the top of the oil tank. Before starting engine, be sure to lubricate chain thoroughly by pressing oiler plunger slowly while pulling the chain around the bar slowly by hand several times. While cutting, oil chain and bar by pressing plunger frequently (every ten seconds) during each cut.

CARBURETOR ADJUSTMENT

Carburetor has been properly set at factory, therefore should not have to be adjusted for some time. There are only three adjustments on this carburetor:

1. Idle mixture adjustment.
2. Idle speed adjustment.
3. Main (or high speed) adjustment.

(Reference numbers refer to illustration of carburetor repair parts, Page 30).

The High Speed, (illustration 33), and Low Speed, (illustration 22), adjustment screws are marked with an H for High Speed and L for Low Speed. They are located on the left side of the carburetor.

This carburetor is inherently designed so that frequent adjustment of the Low and High adjusting screws are seldom necessary.

Be sure carburetor air cleaner is clean and engine is thoroughly warmed up before making any carburetor adjustments.

DO NOT TOTALLY CLOSE THE HIGH AND LOW ADJUSTING SCREWS, illustration 33 and 22, too tightly as it will damage the needles.

The normal setting of the Low Speed adjusting screw is generally 3/4 turn open from closed position. To increase the richness of the Low Speed mixture, turn the Low Speed adjusting screw slightly to the left or counter-clockwise as required, to make mixture leaner, turn to right or clockwise.

The normal setting of the High Speed adjusting screw generally is 1 turn open from closed position (counter-clockwise).

A rich setting of the carburetor Low Speed adjusting screw mixture will cause the engine to idle too slow and eventually cause spark plug and exhaust port fouling.

A lean setting of the carburetor will cause the engine to run fast momentarily and then die out. A lean setting will also damage the engine, due to providing insufficient oil.

The High Speed adjusting screw must be re-adjusted so the engine runs smoothly when cutting under heavy load. To do this, turn out the High Speed adjusting screw until the engine runs roughly or four cycles, then screw in the High Speed screw just enough so the engine runs smoothly on two cycles.

CONTROLS AND ADJUSTMENTS CONTINUED:

Before adjusting, be sure to run the engine long enough to burn out any excess fuel that may be in the crankcase.

After the above adjustments have been made, turn the Idle speed regulating screw, illustration 26 in to increase the idling speed as fast as possible without causing the clutch to engage.

INSTRUCTIONS BEFORE OPERATING SAW

HOW TO START THE ENGINE:

1. Open the fuel shut-off valve as shown in Figure F by turning counter-clockwise as far as possible. Move the choke lever back for choke position, refer to Figure G.
2. Flip the ignition switch, located on the shroud to "on" position. See Figure G.
3. Compress the throttle lever and push in the throttle lock button, Figure E. Hold throttle lock button while releasing throttle lever. This will hold the throttle partly open to free your hand for starting the engine. This throttle lock button will automatically release when throttle lever is compressed. As soon as engine starts, reduce the speed by holding the throttle open manually.

WARNING: To avoid serious damage to engine, chain and bar do not run engine at high speed when saw is not cutting.

4. When starting engine, it is important to know how to use the starter, Figure G. Pull rope slowly until starter clutch engages, then pull until resistance of compression is felt. Allow starter rope to recoil, and again pull out slowly until starter clutch engages. Then pull with a fast, steady movement until rope is pulled out 2 to 3 feet. Hold starter grip, while allowing rope to recoil and repeat as necessary.

NOTE: Do not pull rope to extreme end since this will cause rope and spring breakage.

5. After the engine starts gradually move the choke lever, Figure G, forward to open position, as the engine warms up.

6. After the engine warms up, choking may not be necessary to re-start the engine. Choking a warm engine or over choking a cold engine will cause flooding. Should the engine flood, continue cranking with the choke in "off" position until the engine starts.

HOW TO STOP THE ENGINE:

1. Turn the ignition switch located on the shroud to "off" position. Refer to Figure G.

IMPORTANT: STORING SAW.

If saw is to be idle for a long period of time dump fuel completely from tank, start engine and allow to run until it stops. Choke and re-start engine to make sure all fuel has been used from the carburetor. This prevents formation of gum deposits in carburetor. Remove chain and guide bar, clean thoroughly and cover with heavy oil or rust preventative.

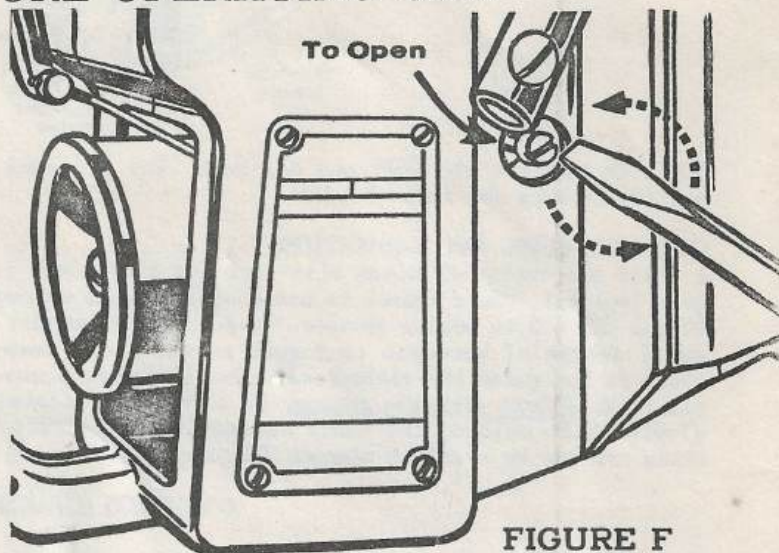


FIGURE F

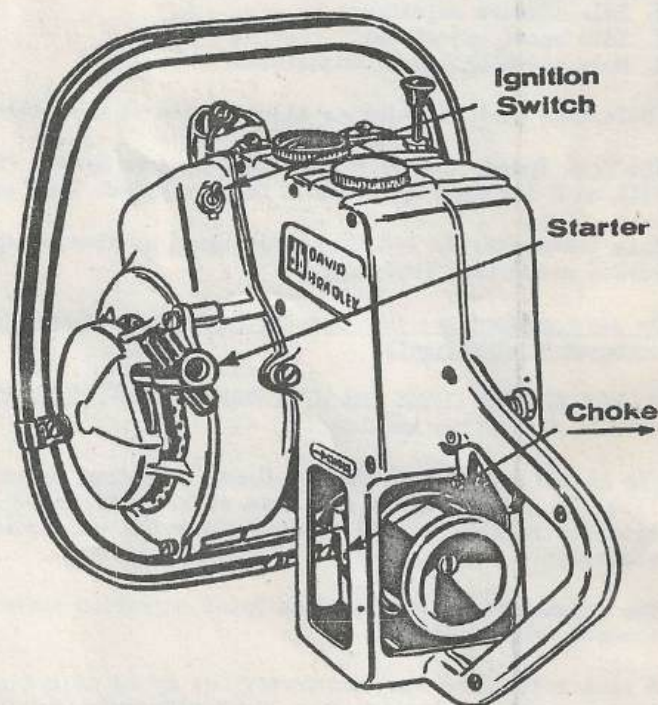


FIGURE G

INSTRUCTIONS BEFORE OPERATING SAW

BREAK-IN PERIOD

Run engine just fast enough to turn chain slowly for 5 minutes. Oil chain frequently. Check for proper chain tension after a few initial cuts.

Your saw has been operated, inspected, tested and adjusted before it left the factory. However, the manufacturer does not consider this sufficient break-in period. For the best possible performance and long life, your chain saw should be operated under an eight hour break-in program. After this eight hour period has elapsed, you can operate your saw under normal operating conditions.

The internal moving parts of the engine are lubricated by oil mixed with the fuel. Use of the wrong viscosity of oil, insufficient oil or failure to mix the oil and fuel properly will cause damage to the engine. Do not use oil containing detergents, compounds or additives.

FUEL MIXTURE FOR BREAK-IN PERIOD:

1. Engine Fuel Mixture--3/4 pint oil to every 1 gallon of gas.
2. Use outboard marine, two cycle oil or non-detergent, high quality motor oil SAE #30.
3. Use clean regular grade gasoline only.
4. IMPORTANT--Mix the oil and gasoline in a clean metal container. Stir, or shake thoroughly being sure that mixture is kept free from all foreign matter. Do not put the oil and the gasoline in the fuel tank separately.
5. Fill fuel tank--fuel tank has red cap with vent hole. Before refueling the engine, wipe the gas cap and the gas cap area free from all dirt and saw dust. The fuel should be carried in a closed container, preferably with a flexible spout and strainer. WHEN MIXING FUEL OR REFUELING THE ENGINE APPLY THE CONVENTIONAL FIRE PRECAUTIONS AT ALL TIMES. See Safety Precautions on page 6.

NOTE: Do not fill fuel tank full--leave 3/4" for expansion.

FUEL AND LUBRICATION AFTER BREAK-IN PERIOD

AFTER THE BREAK-IN PERIOD FOLLOW THE INFORMATION AS GIVEN BELOW:

Lubrication and proper fuel mixture are essential to the useful and long life of your saw. Extreme care should be exercised in following the lubricating and fuel recommendations. Fill with fuel and lubricate as per the following instructions.

ENGINE LUBRICATION

Your engine is lubricated by mixing oil with the gasoline. There is no oil in the crankcase, as in 4 cycle engines. Insufficient oil in the fuel mixture will cause overheating and scoring of the engine, necessitating costly repairs. Too lean a carburetor setting will also damage engine.

Use 1/2 pint of oil to every 1 gallon of clean, high-quality regular grade gasoline. Use outboard marine, two cycle or non-detergent high quality SAE #30 oil. Fuel tank capacity is approximately 1-1/2 quarts.

WARNING: Follow the information above for correct type of oil and mixing of gas and oil. DO NOT POUR UNMIXED OIL AND GAS IN FUEL TANK.

IMPORTANT: Occasionally turn saw upside down with fuel cap removed to drain any possible water from fuel tank.

OIL PUMP:

The oil pump for the guide bar and chain is manually operated. It is necessary to push plunger down to oil chain and guide bar (approximately every 10 seconds) while cutting. If for any reason the oil plunger is removed, replace with deeper well down.

OPERATING INSTRUCTIONS

FELLING AND BUCKING TIMBER

Inexperienced operators should practice making bucking cuts, then progress to small trees before attempting to cut large trees. For bucking instructions see page 11.

Before felling a tree, survey the tree and decide how to proceed to the best advantage. At this point, observe the lean of the tree, direction of wind, and decide where you want the tree to fall for the most efficient bucking and limbing. In preparation for the cut, clear a sufficient working area around the tree. The trees that are less likely to fall on or into other trees should be cut first. Should a tree lean so much toward the standing timber that it cannot be felled away from it, then it must be by-passed until an area has been cleared beyond, and it can then be felled in the direction which it leans without striking the standing timber. If trees are allowed to fall into or close to standing trees it only creates a safety hazard when cutting remaining trees. You will soon learn to judge the timber at a glance and experience will teach you how to make a better cut. New operators should always practice cutting small timber before they attempt to cut large trees. Dig the spiked bumper plates into the tree before starting to cut. Pull throttle lever back to full throttle. Below is shown the proper order of cutting.

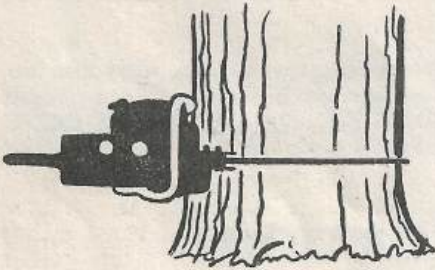


FIGURE H

First cut for notch on side of tree in direction of fall. Notch should be about 1/4 to 1/3 through the tree.

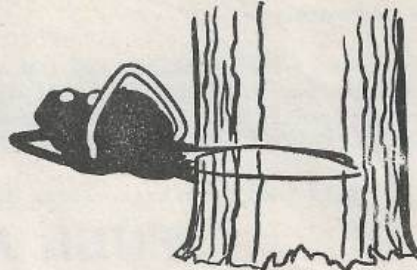


FIGURE I

Completing notch cut.

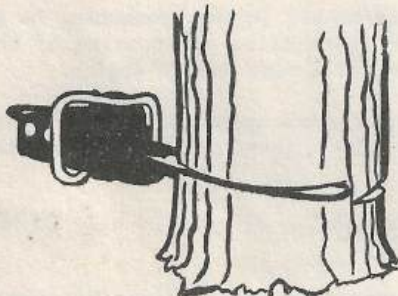


FIGURE J

Cutting tree on side opposite of notch. This cut should be 2 inches above first cut shown in Figure H, and parallel to it.

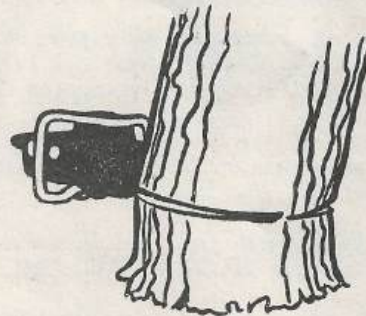


FIGURE K

Completion of cut. Tree is beginning to fall.

OPERATING INSTRUCTIONS—Continued

The cut in Figure J, should be made about two inches higher than the cut made in Figure H, and must be parallel. If the cut is done properly, the tree will begin falling when only an inch or two of holding wood is left, refer to Figure K. As a safety measure, the operator should retreat to a predetermined safe place when the tree begins to fall. This move should be made with the throttle released and the chain stopped. **DO NOT DEPEND ON A TREE TO FALL SIMILAR TO ONE FELLED UNDER SIMILAR CONDITIONS.** Each tree has its own characteristics and will fall accordingly.



FIGURE L

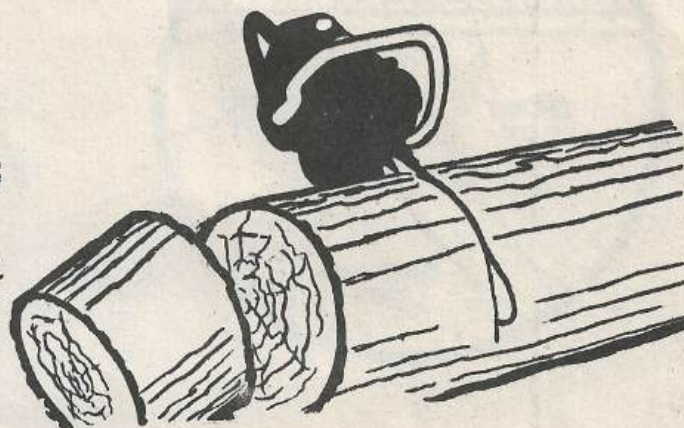


FIGURE M

1. Your David Bradley saw is designed to give you easy cutting. It is not necessary to use great force to make your cut. If much force is required it usually is an indication that the chain is dull, improperly sharpened, or that the depth gauge setting is too shallow. See Pages 16, 17 and 18 for chain and bar maintenance.

2. When bucking, place the spiked bumpers against the wood. Open throttle and when chain reaches cutting speed pull up on rear handle, using the spikes as a pivot, until chain starts cutting. Pull on the handle just enough so that engine speed is not pulled down excessively or clutch slips. Engine speed must be normal. Do not race the engine with no load. It is not necessary to rock the saw back and forth.

Pivot the guide bar through the wood. Stop before chain hits the ground, and with chain running quickly shift the pivot to lower position on the log. Be sure to oil chain and guide bar frequently. See drawing Figure O, Page 12.

When cutting large logs where both ends are supported, saw part way through and insert a magnesium wedge into kerf to prevent the saw from pinching. Under cutting is hazardous so if at all possible use the method mentioned above. On smaller logs, when wedges cannot be used, the method of undercutting is recommended.

IMPORTANT: When the operator under cuts he must have a firm grip on the saw and firm footing, so the saw or blade cannot be kicked back and injure operator.

HOW TO REMOVE A PINCHED SAW:

Avoid pinching the chain, when making a cut. Determine the lean of the tree or position of the log and make your cut so that the saw will not pinch in the cut. If the saw does pinch try pulling the saw straight back out of the cut, never attempt to pry the saw loose as this can cause damage to chain or saw. If the saw cannot be pulled back out of the cut, drive magnesium wedges in the cut to open the kerf enough to pull saw out. If this cannot be done, an ax or saw will be necessary to chip or cut chain saw free.

When bucking avoid running the chain into the ground near completion of the cut. Dirt and sand shorten the life of the chain and guide bar. When possible, roll the log over and complete the cut from the opposite side.

OPERATING INSTRUCTIONS—Continued

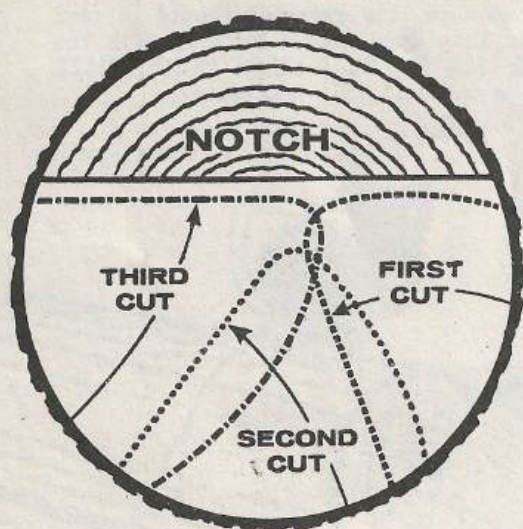


FIGURE N

Above is a sketch showing the proper method of cutting a tree larger than the bar of the saw. See Figure N.

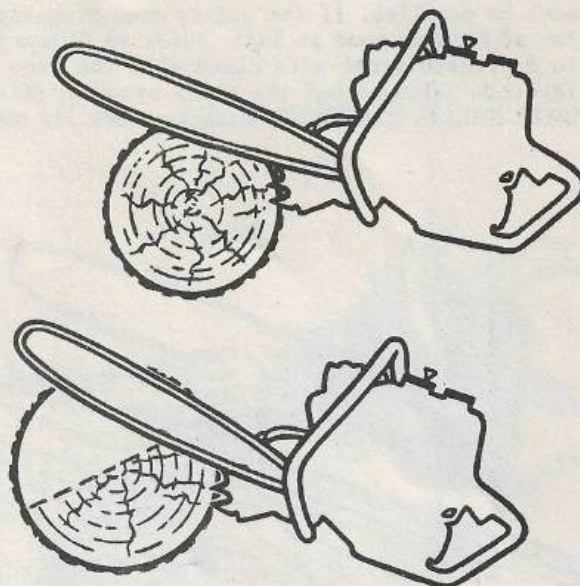


FIGURE O

Another use of your chain saw is "topping of trees", however an inexperienced operator should never attempt topping which is relatively dangerous under any condition. Things to remember in topping are: Accurate determination of direction of fall; ample clearance of limbs above and below cut; careful placement of operators' safety belt to avoid possible entanglement or accidental cutting and careful placement of sling rope for the saw below the cut. Always remove the spiked bumper plate when topping and trimming trees.

Never carry the saw when climbing a tree to top it or when pruning. Use a rope to haul the saw up after you have climbed the tree.

CLEANING FUEL FILTER:

Remove fuel filter from fuel tank by making a hook on a wire, and fishing fuel filter from tank. Make sure that the flexible fuel line will stay above filler hole of fuel tank. Remove fuel filter. Clean and dry filter, because if the filter has been in contact with water, it will swell up the filtering material and not let gas through. This is especially true in freezing weather. Replace fuel filter.

CLEANING FUEL STRAINER SCREEN; (Illustration Numbers refer to Page 30).

If the operator is not careful about keeping the fuel clean it may be necessary at some time to clean the fuel strainer screen located near the bottom of the carburetor. A screw driver may be inserted between the slot under the gas tank to remove the fuel strainer cover retaining screw illustration #21. Carefully remove nylon fuel strainer cover illustration #20, fuel strainer cover gasket illustration #19, and fuel strainer screen illustration #18. Thoroughly clean fuel strainer screen with clean gasoline or by blowing through with compressed air. Replace screen, gasket, and hold nylon fuel strainer cover securely in place. Tighten fuel strainer cover retaining screw securely.

SPARK PLUG:

The spark plug should be cleaned after every 50 hours use or when dirty. A dirty plug causes starting trouble and poor operation. Clean the plug and set at .030. When in doubt about plug, replace with Champion J8J, AC #45 or equivalent.

MAINTENANCE AND SERVICE INSTRUCTIONS—Continued

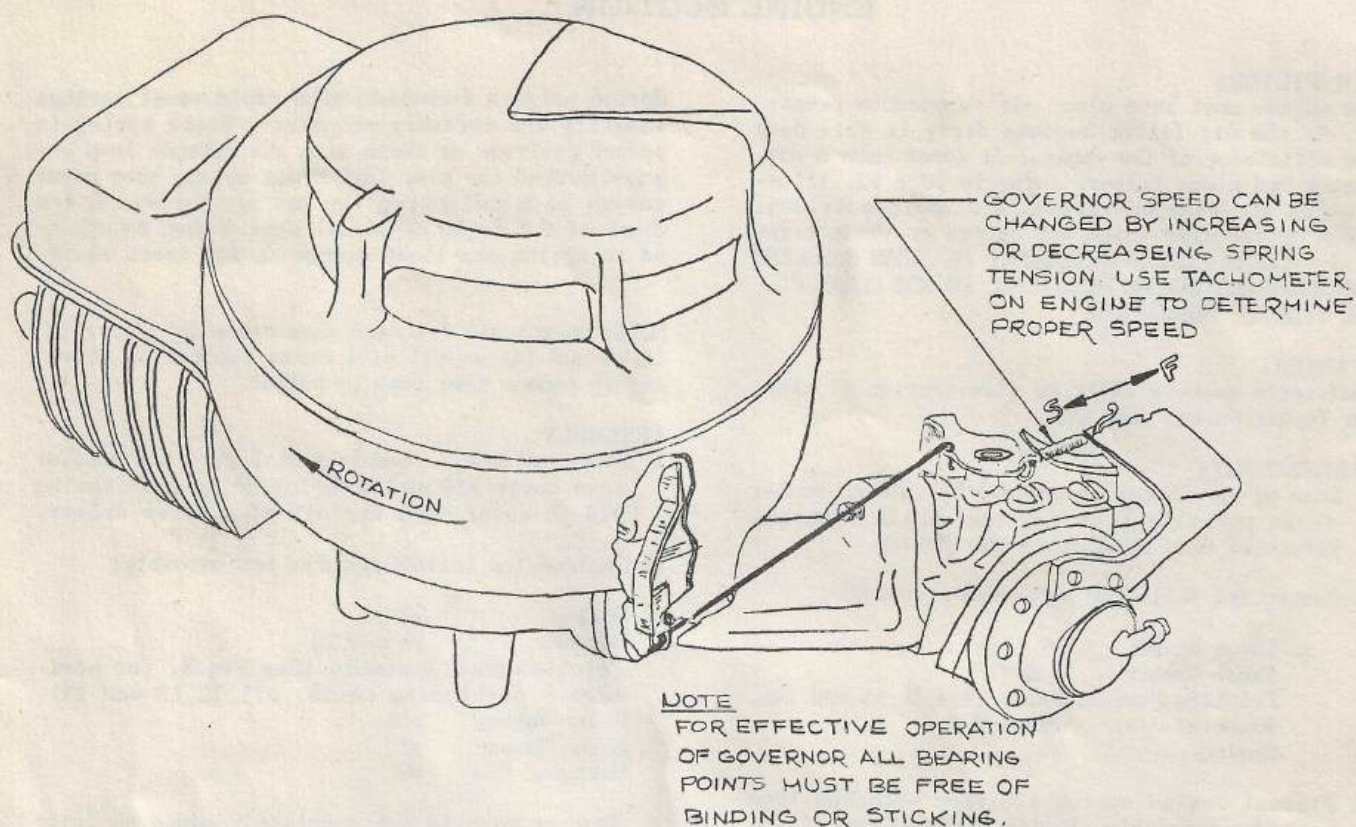


FIGURE P

CLEANING EXHAUST PORTS:

If the exhaust ports, Figure Q, are not cleaned periodically, there will be loss of power in the engine. Clean the muffler and exhaust ports every 50 hours of engine use. To clean the cylinder exhaust ports, refer to Figure Q, remove the spark plug and pull the starter rope so that the piston is at the bottom of the stroke, below the exhaust hole. With a stick i.e., ice cream bar stick, etc. (NOTE: Do not use metal scraping tool), scrape the carbon from the 3 cylinder exhaust holes so they are completely open and remove the carbon from the surrounding exhaust chamber. Blow out the loosened carbon by pulling the starter several times. Replace the spark plug and muffler.

DO NOT DAMAGE PORTS OR PISTON.

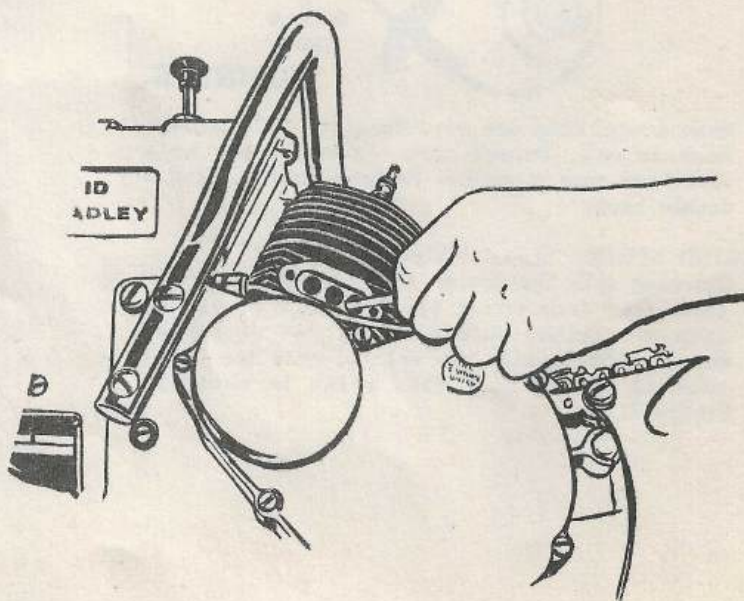


FIGURE Q

MAINTENANCE AND SERVICE INSTRUCTIONS—Continued

ENGINE SECTION

AIR FILTER:

The engine must have clean air to operate properly. As the air filter becomes dirty it cuts down the efficiency of the engine. At least once a day, remove and clean filter, refer to page 22, illustration 31. When operating in dirty conditions, clean as required which may be two or three times daily. CLEAN FILTER THOROUGHLY IN CLEAN GASOLINE AND SHAKE DRY BEFORE REPLACING. DO NOT CLEAN FILTER WITH COMPRESSED AIR.

STARTER:

(Reference numbers refer to illustration of starter repair parts, page 27).

DISASSEMBLY:

1. Loss of spring can be avoided by holding washer #7 in position with the hand while removing retaining ring, #6 with a screw driver.

2. Remove the following parts and assembly:

- | | |
|--|-----------|
| 1. Large Washer | #7 |
| Fibre Washer | #10 |
| Friction Shoe Assembly (#11, 12, 13 and 14). | |
| Washers | #10 and 9 |
| Spring | #8 |

3. Prevent rewind spring #18 from escaping from cover by carefully lifting rotor #17 about 1/4 inch and detach inside spring loop from rotor.

CORD REPLACEMENT:

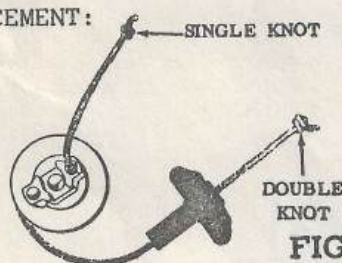


FIGURE R

1. When installing new cord in rotor, tie single knot in end. Thread cord through rotor hole then wind rope on rotor. Replace handle tying a double knot.

REWIND SPRING REPLACEMENT:

1. Starting with the inside loop remove spring #18 carefully from cover #20 by pulling out one loop at a time; holding back rest of turns. When replacing with new spring, note the position of spring loop #50, which is shown in Figure S.

Spring holders furnished with replacement springs simplify the assembly procedure. Place spring in proper position as shown with the outside loop engaged around the pin. Then press spring into cover cavity thus releasing the spring holder. A few drops of S.A.E. 20 or 30 oil should then be applied to spring and light grease on the cover shaft.

NOTE: Do not oil friction shoe assembly (Parts, 11, 12, 13 and 14) as oil will cause failure of starter to engage when rope is pulled.

ASSEMBLY:

1. Place rotor #17 (complete with cord and handle) into cover #20 and hook inside loop of spring #18 to rotor with the aid of a screw driver.

2. Replace the following parts and assembly:

- | | |
|---|-----------|
| Spring | #8 |
| Washers | #9 and 10 |
| Friction Shoe Assembly (See Fig. X, for position.) (Including parts, #11, 12, 13 and 14). | |
| Fibre Washer | #10 |
| Large Washer | #7 |
| Retainer Ring | #6 |

3. Starter cord is now completely wound on rotor in direction as shown by Figure T.

IMPORTANT: Five additional turns are then added in the same direction for pretension.

4. The starter uses a cup on the crankshaft. To insure proper alignment of the pawls inside the starter cup be sure that the centering pin lines up with the countersink on the end of the crankshaft.



FIGURE S

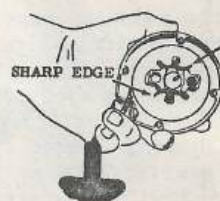


FIGURE T

MAINTENANCE AND SERVICE INSTRUCTIONS—Continued

CYLINDER COOLING SYSTEM:

Cooling is accomplished by a flow of air circulated over the cylinder or the engine by a combination fan flywheel incased in a shroud. The air is directed over the fins of the cylinder for uniform cooling of engine.

IMPORTANT: Never operate engine with shroud removed or fins blocked with saw dust etc.

CENTRIFUGAL CLUTCH:

The saw has a centrifugal clutch. When the engine is idling, the clutch will not be engaged and the chain will not move. As you speed up the engine the clutch engages. If the chain is caught in a pinch or bind, the engine speed will be reduced and the clutch will slip. Do not speed up the engine when the chain is bound as this clutch slippage will wear out the clutch. If your clutch is in need of repair contact your nearest local dealer.

When replacing friction shoes, spring and pins should be on leading side of friction shoe. The friction shoes can be cleaned in gasoline and brushed with a steel brush if excessive slipping is occurring. If worn excessively, new shoes should be installed.

There are two needle bearings in the clutch. These bearings should be greased with a thin coat of grease once each season, or whenever bearing appears to need additional lubrication.

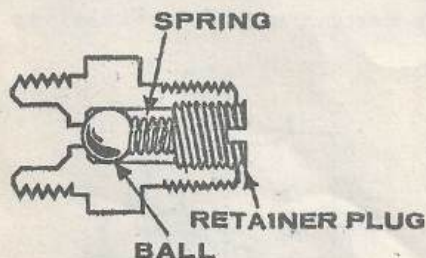
WARNING: Avoid too much grease as it may get on clutch shoes causing them to slip.

TRANSMISSION:

The transmission is a dry type transmission with a fiber gear running against the gear on the clutch drum. The only lubrication necessary is two drops of oil daily. Do not over lubricate, as it may cause the clutch to slip.

OIL SCREEN IN RESERVOIR:

If oil screen in oil reservoir becomes clogged, it can be cleaned by pouring clean gas into oil reservoir. Then shake saw thoroughly to wash off any accumulation on screen in reservoir. Pour gas out of reservoir and refill with clean oil.



OIL LINE CHECK VALVE:

An oil line check valve is located on the front of the oil line at the gear case. This check valve prevents oil from leaking from the oil tank when the pump is not used. If foreign matter gets in the oil it may hold open the check valve allowing oil to leak out. If this happens remove oil line check valve from oil line and gear case, and clean. When re-assembling check valve, do not screw retainer plug into fitting too far. If screwed in too far it will be difficult to pump oil to the guide bar.

CHAIN

Cutting with a sharp chain is the most important factor in chain saw operations. Never cut for extended periods of time with a dull chain. A chain that does not cut freely induces a heavy strain on the entire saw. This strain is reflected in heavy maintenance costs and idle chain saw hours. In addition, cutting with a dull chain wears out the chain and guide bar faster and wastes engine power. The proper chain tension is also important in the success of your chain saw operations. Using the correct chain tension, (refer to page 5 paragraph 6) will result in more efficient cutting, will reduce the drag and wear on the guide bar, also prevent excess heating. For best results in cutting operations, keep the chain flexible and well lubricated. After several initial cuts have been made with a new or recently sharpened chain, tension should be re-adjusted if necessary. In some types of cutting the correct tension depends upon the type of wood being cut and the individual chain saw operator.

Completely immersing the chain in oil or a combination of oil and kerosene overnight will lubricate the rivets and all meeting metal surfaces. This will increase the life of your chain and guide bar and will increase their cutting efficiency.

When installing a new chain it is recommended that a new sprocket and a reconditioned or new guide bar be installed at the same time. A worn sprocket or guide bar may cause unequal wear and breakage of the chain. If old guide bar is used it should be reconditioned, refer to page 18.

MAINTENANCE AND SERVICE INSTRUCTIONS

TO SHARPEN CHAIN

We recommend that the chain be placed in a special chain filing vise, or if one is not available leave it on the guide bar for sharpening. Place your saw on a bench for easier working conditions. Do not attempt to sharpen chain before reading the following instructions carefully and be sure to use the file holder.

REMEMBER... TO GET THE MOST FROM YOUR

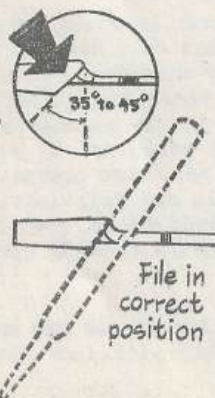
CHAIN

1. FILE IT RIGHT!
 2. SET DEPTH GAUGE RIGHT!
 3. KEEP YOUR BAR IN CONDITION!
- YOU can do it!**



1. Press flat side of file holder firmly against top of cutter, thereby holding file level (horizontal) and at proper depth.
2. Line up notched angle guides on file holder frame parallel to chain. Maintain these notches in parallel position and you are filing the cutting edges close to the recommended 35° angle.
3. A few firm strokes will put a keen cutting edge on each tooth. Always apply pressure on the forward stroke away from you.
4. Occasionally rotate file in the holder to get maximum use from file.

RIGHT!
ALWAYS KEEP
TOP OF CUTTING
EDGE AT 35°-45°
ANGLE

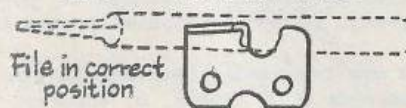


Be sure to maintain this angle on both left and right hand cutters, otherwise saw will lead off, to one side.

RIGHT! KEEP SIDE OF CUTTING-EDGE VERTICAL (straight up and down)

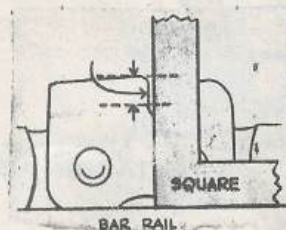


TO OBTAIN THIS VERTICAL EDGE, HOLD THE FILE LEVEL AND WITH ONE TENTH OF THE FILE SHOWING ABOVE TOP PLATE.



HOW TO CHECK FOR CORRECT FILING ANGLES 90° Side Plate Angle

DAVID BRADLEY-Chipper Chain cuts best when filed so the side plate is exactly 90° right angle to the bottom of the cutter. To check this angle, use a small square and place it on the bar rail with the upright arm of the square pushed into the curve of the side plate of the cutter. Do this until you are able to "sight" a 90° angle correctly. Do not be fooled by the optical illusion in which a correctly filed cutter may appear as a hook. Also, what appears to the eye to be correct may be a backslope.



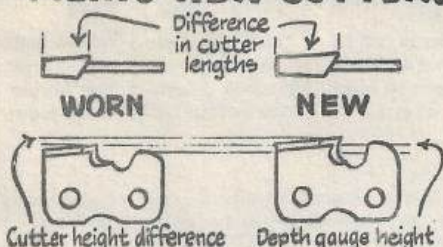
If the chain will not hold an edge, look for these faults:

1. When the file handle has been held too low, the top plate will be feathered, or filed too thin. The cutting edge will then bend over or break off and dull quickly.
2. If the file handle is held too high, the result is a blunt cutting edge on the front of the top plate. In effect, the chain has not been sharpened at all.
3. Depth gauges should be adjusted to the power of the saw and the type of wood being cut. If they are too high, the cutter will rub in the cut, and will become rounded no matter how frequently the chain is sharpened. Adjust the depth gauges downward as the cutters are filed back.

MAINTENANCE AND SERVICE—Continued

4. If the chain has been run in rocks, gravel, or grit, some of the chrome may have been knocked off the cutting edges. Rapid cutter wear will result if the chain is operated under these conditions.
5. The front angle of the top plate on both right and left hand cutters should be approximately the same. If not, the cutters on one side will be doing most of the work and the chain will lead off to that side.

FILING NEW CUTTERS



When a new cutter is installed in a chain it should be filed back to correspond with the top plates of the other cutters. Also be sure that the depth gauge is set to match the others.



Correct depth gauge setting on your chain depends on the horsepower of your saw, speed of chain travel, and the type of wood being cut. Depth gauges should be lowered to the point where pressure to force cutting will cause the clutch to slip. By setting depth gauges to this depth you will use the maximum power of your saw and at the same time reduce friction, vibration and chain chatter.

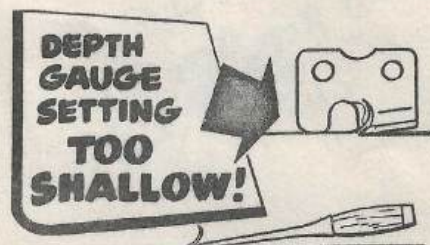
How to use "GAUGIT"



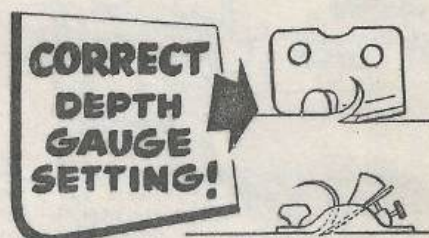
1. Hold "GAUGIT" firmly on top of at least two cutters so that the depth gauge rises through the slotted end of the tool, as illustrated above.
2. Then with a flat file, file the depth gauge until it is level with the slotted end.
3. File down the depth gauges all around the chain so that they are uniform.



RESULT: Cutter bites too deeply; chain grabs, jerks, overloads motor.

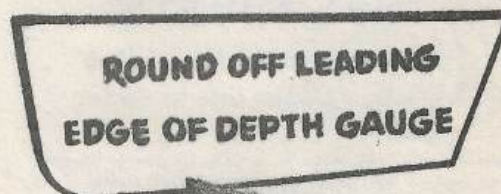


RESULT: Cutter cannot bite into wood; chain will not cut efficiently or to capacity.



RESULT: Cutter bites just deep enough to cut smoothly and efficiently-- No grab, jerk or engine strain.

NOTE: Depth gauge, included, provides proper, accurate method for filing correct Depth—.030 for hard woods—.040 for soft woods.



Rounded leading edge will not dig into wood... helps prevent chain from grabbing

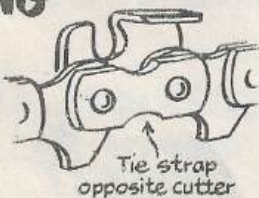
After the chain has been sharpened, clean off all the filings and other material with kerosene or oil. Remove filings after sharpening will prolong the life of the chain. If the chain is to be stored for any length of time, lubricate it well with oil before placing in a dry storage location. Further information can be found in the "Filing and Maintenance Instructions" manual shipped with your chain.

MAINTENANCE AND SERVICE—Continued

CHAIN DISASSEMBLY and REPAIR



INSTALLING NEW CUTTERS



When replacing a cutter, it is recommended that the tie strap opposing the cutter be replaced with a new one if it is at all worn. Otherwise the worn tie strap will be low and will not properly support the cutter.

INSTALLING NEW RIVETS



When installing new rivets in a chain, a gentle tapping action with a ball peen hammer is much better than using one or two heavy blows. An extremely sharp blow sometimes causes a rivet to split.

INSTALLING NEW DRIVE LINKS

Point of hardest wear



The most common place of wear for drive links is the leading front corner. Wear at this point prevents the drive link from keeping the bar groove clean. In some cases it is possible to file the bottom of the drive link so that a new corner is put on the leading edge, thereby enabling it properly to clean out the bar groove. If the drive links are badly worn, you can install a few new ones throughout the chain so the grooves will clean properly.

GUIDE BAR

Correct guide bar maintenance is important too!

THERE ARE THREE MAJOR FORMS OF GUIDE BAR WEAR.



Causes cut to bend or "run"... chain to bind in cut.



Causes friction and heat... binding & general inefficiency.



Shallow groove allows drive link to ride on bottom.

The Guide Bar should be turned over on the saw occasionally to distribute the wear evenly over both edges of the guide bar. This will increase the life of the Guide Bar considerably.



TO DEEPEN BAR GROOVE—

1. For best results, bar grooves should be deepened by a chain saw service expert or in a bar repair shop.
2. Minimum bar groove depth should be $\frac{3}{8}$ ".
3. When groove is too shallow, drive links ride on bottom of bar groove channel, do not allow tie straps to ride on bar rails.

TO CLOSE BAR GROOVES—



1. Place a groove gauge (a piece of steel about 6" long and the same thickness as the drive links) in the groove and lay bar on an anvil with the thin rail up.
2. Use a 3-lb. hammer and close this thin rail snugly down on the groove gauge.
3. After each section is closed, drive the groove gauge forward its entire length and repeat the operation until the groove is to proper gauge throughout the bar.

Important: Do not close nose of bar, because of the hard surface material.



JOINTING BAR RAILS—

Jointing is the process of making the two rails level with each other and square so as to provide proper bearing surfaces for the chain. Jointing is best done at the factory, or in a properly equipped saw shop where radius grinding equipment is available. However, it is quite practical to do this work in the field by working with a flat file held in a cross cut saw jointing gauge and used in the same manner.

When burred edges appear on guide bar, remove guide bar from saw. Lay guide bar flat and file burred edges on both sides of bar, smooth or even with surface of Guide Bar. Use a flat mill file.

MAINTENANCE AND SERVICE INSTRUCTIONS—Continued

IGNITION TIMING:

The timing is preset and cannot be changed. The only adjustments are point setting and spark plug gap. The breaker point gap should be adjusted from .013 to .017. The spark plug gap should be set at .030.

TROUBLE SHOOTING

SHOULD ENGINE FAIL TO START:

1. Ignition switch is set at "Off" position.
2. Check for fuel in tank.
3. Check high and low speed adjustments see Page 7.
4. Check to see that fuel shut off valve is open: Check for disconnected or cracks in fuel line.
5. Check for flooding: Remove spark plug and if plug is wet or if gap is closed by liquid fuel, the plug should be dried. The engine should be cranked with the throttle wide open and the fuel shut off valve closed until vapor stops coming out of spark plug hole.
6. 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 plug or replace with new one.
7. Check magneto: A weak magneto may be determined by a short red spark. A good magneto should jump an open gap of 1/8" or more with a good blue spark, by hand cranking. Make sure that the plug is good as explained above. Then if no spark occurs at the plug points, test the condenser, coil and ignition points. If found faulty, replace.
8. Check flow of fuel to carburetor: Remove hose from carburetor. Fuel should flow in a small continuous stream. If not clean fuel line and filter, inside tank, also clean fuel strainer screen in bottom of carburetor. See page 12 for method of cleaning fuel strainer screen.
9. Check for gasket leaks, and for leaks around the crankshaft seal.
10. Check for grounded wire from magneto to ignition switch.
11. The check valves in carburetor maybe gummed shut. This will occur only if fuel has been permitted to evaporate in the carburetor over an extended period.

ENGINE LACKS POWER:

1. Clean port holes and muffler.
2. Water in fuel tank and filter.
3. Compression below 65 lbs.
4. Adjust carburetor See Page 7.

ENGINE WILL NOT ACCELERATE:

Check carburetor adjustment.
Weak magneto.
Check spark plug.
Clean port hole.

ENGINE WILL NOT IDLE:

Check carburetor setting.
Leaking seals on crankshaft.
Leaking inlet seat gasket.
Leaking transfer port cover gasket compression.
Below 65 lbs.
Check inlet control lever.
Leaking carburetor diaphragm.

ENGINE RUNS TOO FAST:

Check carburetor setting idle and main adjusting screw. adjust idler speed adjusting screw.

ENGINE BACKFIRES OR MISFIRES:

1. Dirty or burned breaker point: Clean or replace and set at .013 to .017.
2. Fouled spark plug: Clean or replace and set at .030.
3. Intermittent shorting in the magneto assembly: Check for loose wires or loose assemblies.
4. Weak condenser: Replace
5. Ignition Switch shorting: Check and replace if necessary.

NOTE: Two cycle engines when idling or running under light loads may appear to miss. This in no way effects the operation of the engine.

TROUBLE SHOOTING—Continued

SHOULD ENGINE KNOCK:

1. Check connecting rod bearings: Move flywheel back and forth quickly a few degrees—if rod is worn, play can be felt and a loud click can be heard. Contact your local dealer for repair or replacement.

SHOULD ENGINE OVERHEAT:

Check the flow of air over the cylinder. If restricted by debris, remove the air shroud and clean the cylinder fins. Be sure to use the correct fuel mixture. A lean fuel mixture, (insufficient oil in mixture) will tend to cause engine to overheat. It is advisable to remove the No. 350259 engine air shroud occasionally to remove saw dust from the fins of the engine. Compressed air can also be used to clean the engine fins if the saw dust has not accumulated too much. If compressed air is available, use it often to clean fins and air shroud. If saw dust blocks the air from flowing over the engine fins, the engine will overheat, causing it to lose power, and to wear rapidly.

CARBURETOR FLOODS:

1. Leaking inlet needle seat
2. Leaking inlet needle gasket
3. Inlet control lever improperly set
Set lever with carburetor
4. Hole in diaphragm

CHAIN WILL NOT CUT:

Dull chain. Sharpen see page 16 and 17.

Depth gauge setting set too shallow, file to correct setting see page 17.

VIBRATION OR CHAIN CUTTING TO ONE SIDE:

1. Dull chain: Refer to section "To Sharpen Chain", page 16, 17. Also, "Chain ", page 15.
2. Chain too loose in guide bar: Refer to "Guide Bar", page 18.
3. Chain filed improperly: Resharpen properly. Refer to Sharpening Instructions, Pages 16, 17 and 18.
4. Incorrect depth gauge setting--See page 17.

CHAIN WILL NOT TURN WHEN ENGINE IS SPEEDED UP:

1. Chain is too tight. Loosen chain, refer to page 5, paragraph 6.
2. Joining rails on guide bar too tight: Refer to "Guide Bar", page 18.
3. Clutch is not working properly: Contact the nearest local dealer.

CHAIN TURNS WHEN ENGINE IS IDLING:

1. The engine is idling too fast: Refer to "Carburetor Adjustments", page 7.
2. Clutch springs may be broken or unhooked.

CHAIN JUMPS OFF:

1. Chain too loose adjust see page 5.
2. Worn guide bar recondition see page 18.

CHAIN CUTS OUT OF LINE:

1. Cutters not filed uniformly see page 16 for proper filing.
2. Guide bar worn unevenly recondition guide bar.

GUIDE BAR CHIPS ON EDGES:

Dull Chain requiring excessive pressure on chain and bar to make it cut. This causes bar to wear with sharp outer rail edges, which then break off. Sharpen chain and recondition guide bar.

Model Number 917.60016 is the model number of your DAVID BRADLEY CHAIN SAW. It will be found on a name plate located on the rear casting. Always mention this model number when corresponding with us or when ordering repair parts.

HOW TO ORDER REPAIR PARTS

All parts listed herein may be ordered through Sears, Roebuck and Co. or Simpsons-Sears Limited. When ordering parts by mail from the mail order house which serves the territory in which you live, selling prices will be furnished on request or parts will be shipped at prevailing prices and you will be billed accordingly. WHEN ORDERING REPAIR PARTS, ALWAYS GIVE THE FOLLOWING INFORMATION AS SHOWN ON THIS LIST:

1. The PART NUMBER.
2. The PART NAME.
3. The MODEL NUMBER.
4. The NAME of item.

This list is valuable. It will assure your being able to obtain proper parts service at all times. We suggest you keep it with other valuable papers.

Some standard hardware items are listed less part numbers. When these items are needed in service they should be purchased at the nearest Sears, Roebuck and Co. or Simpsons-Sears Limited Store or from a local Hardware Store.

Each Part has been give an illustration number which is used only as a key to find the part number. Do not use the illustration number when ordering repair parts.

DAVID BRADLEY CHAIN SAW - MODEL NO. 917.60016

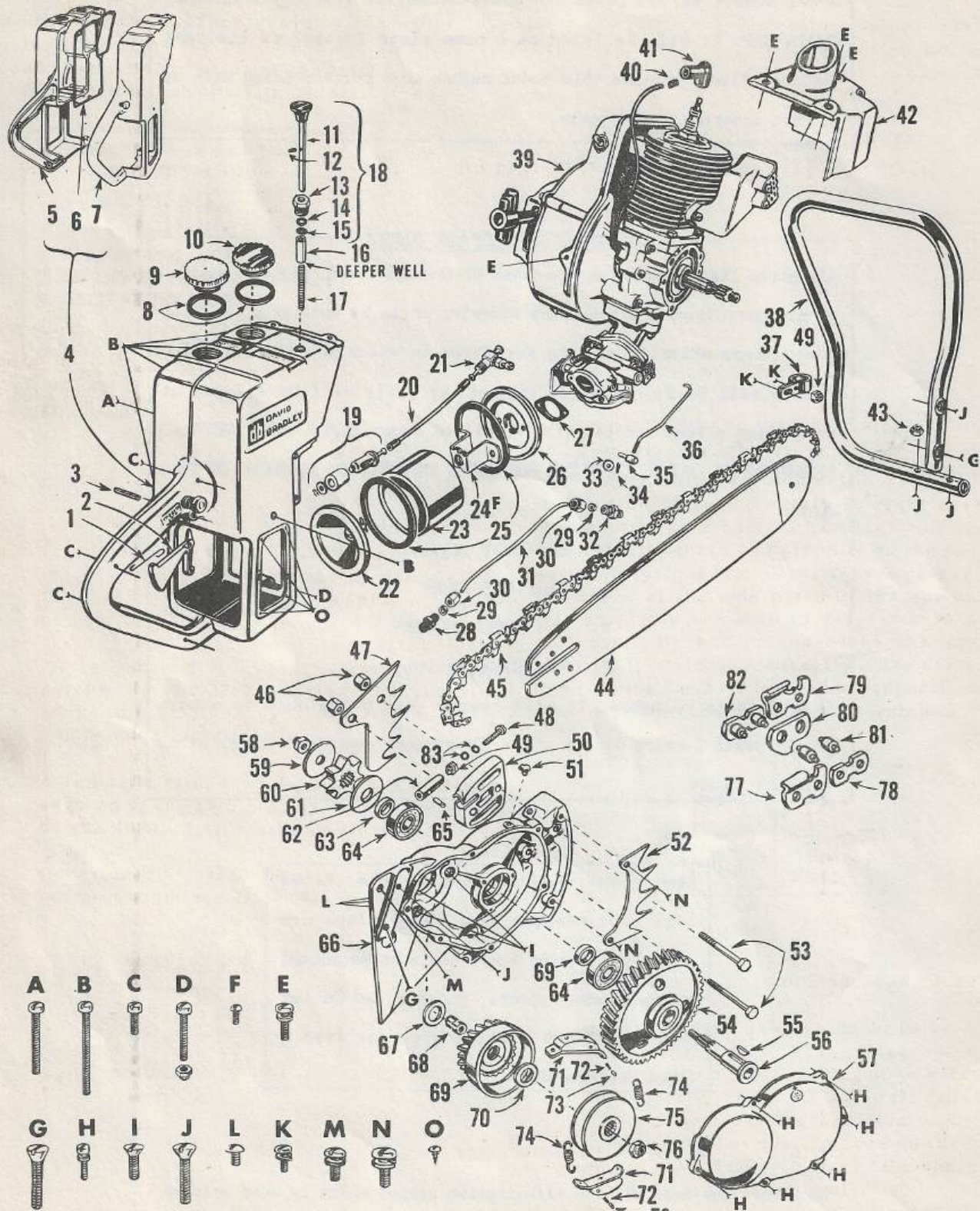


FIGURE W

DAVID BRADLEY CHAIN SAW -- MODEL NUMBER 917.60016

ILLUSTRATION NUMBER	PART NUMBER	QUANTITY REQUIRED	DESCRIPTION
1	960H	1	Spring
2	961H	1	Throttle Lever
3	707H	1	Roll Pin
4	600PA23B	1	Tank Assembly (Includes Illust. 5, 6, 7)
5	600PA96	1	L.H. (Left Hand) Tank
6	371H	1	Gasket
7	600PA99	1	R.H. (Right Hand) Tank and Detent
8	9876M1	2	Tank Cap Gasket
9	600PA255	1	Fuel Tank Cap & Fuel Retainer
10	9905M1	1	Oil Tank Cap
11	600PA9A	1	Oil Plunger Shaft & Knob
12	13H	1	Roll Pin
13	9831M	1	Oil Plunger Guide
14	9877M	1	"O" Ring
15	12H	1	Washer
16	9868M	1	Oil Plunger
17	9849M	1	Spring
18	600PA10A	1	Oil Plunger Shaft Assembly (Includes Illus. 11, 12, 13, 14, & 15)
19	923H	1	Filter Weight
20	9895M	1	Flexible Fuel Line
21	9905M1	1	Fuel Shut-off Valve
22	600PA73	1	Air Filter Cover Stud & Pin W/ R Washers
23	9870M	1	Air Filter
24	600PA87	1	Filter Bracket & Receptacle
25	701H	2	Filter Gasket
26	9842M1	1	Air Filter Back Plate
27	700H	1	Carburetor Gasket
28	9855M	1	Connector Body
29	9852M	2	Sleeve
30	9851M	2	Nut
31	696H	1	Oil Line
32	600PA8	1	Oil Line Check Valve
33	08070718	2	Washer, 7/32 x 7/16 x 18 Ga.
34		1	Cotter, 1/16 x 3/8
35	9819M	1	Throttle Link Swivel
36	372H	1	Throttle Link
37	683H	1	Handle Clamp
38	600PA287	1	Front Handle & Plugs
39	600PA285	1	Engine
40	9902M	1	Terminal Clip
41	9903M	1	Spark Plug Cover
42	1906H	1	Cylinder Shroud
43	319H	1	Huglock Nut
44	925H	1	20" Guide Bar for .063 Chain (Cat. #8304)
44	926H	1	26" Guide Bar for .063 Chain (Cat. #8305)
44	743H	1	32" Hard Tipped Guide Bar (Cat. #8302)
45	600PA84	1	20" Chain (Cat. 8321)
45	600PA85	1	26" Chain (Cat. #8322)
45	600PA86	1	32" Chain (Cat. 8323)
46	9861M	2	High Hex Nut
47	686H	1	Spike Bumper L.H.
48	04670428	1	Slotted Pan Hd. Mach. Screw 1/4x1-3/4-20 UNC Full Thread Cad. Pltd.
49	347H	2	Huglock Nut
50	600PA95	1	Bumper Pad & Tightener Screw (Includes Illus. 48, 49, 83)
51	9850M	1	Oil Hole Cover
52	685H	1	Spike Bumper R.H.
53	678H1	1	Guide Bar Bolt
54	600PA288	1	Gear & Shaft (Includes Illust. 55, 56)
55	102M	1	Woodruff Key
56	1913H	1	Gear Shaft
57	694H	1	Gear Case Cover
58	357H	1	Huglock Nut
59	1918H	1	Outer Washer
60	1914H	1	Chain Sprocket

For Illustration -- See Page 22.

DAVID BRADLEY CHAIN SAW - MODEL NO. 917.60016

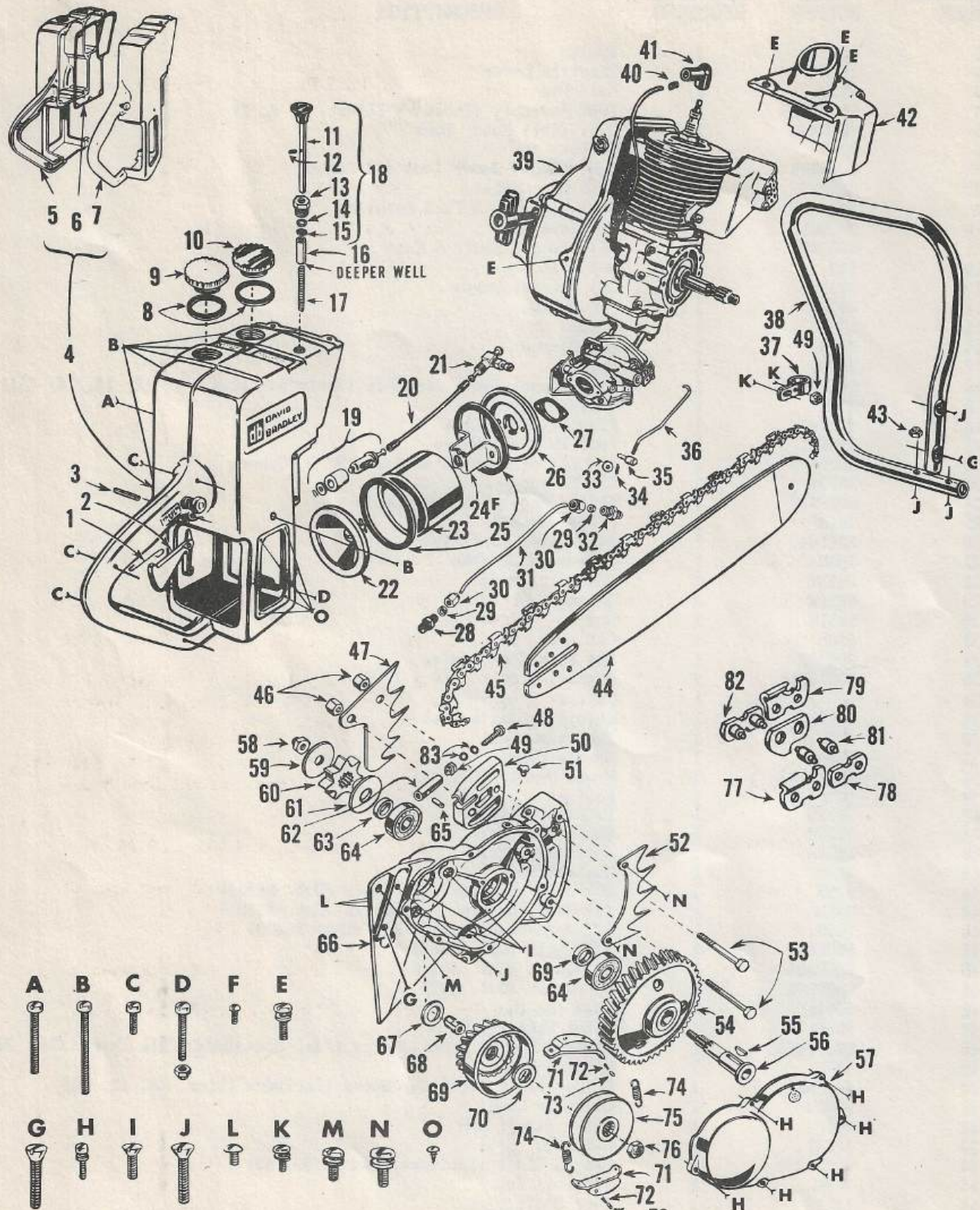


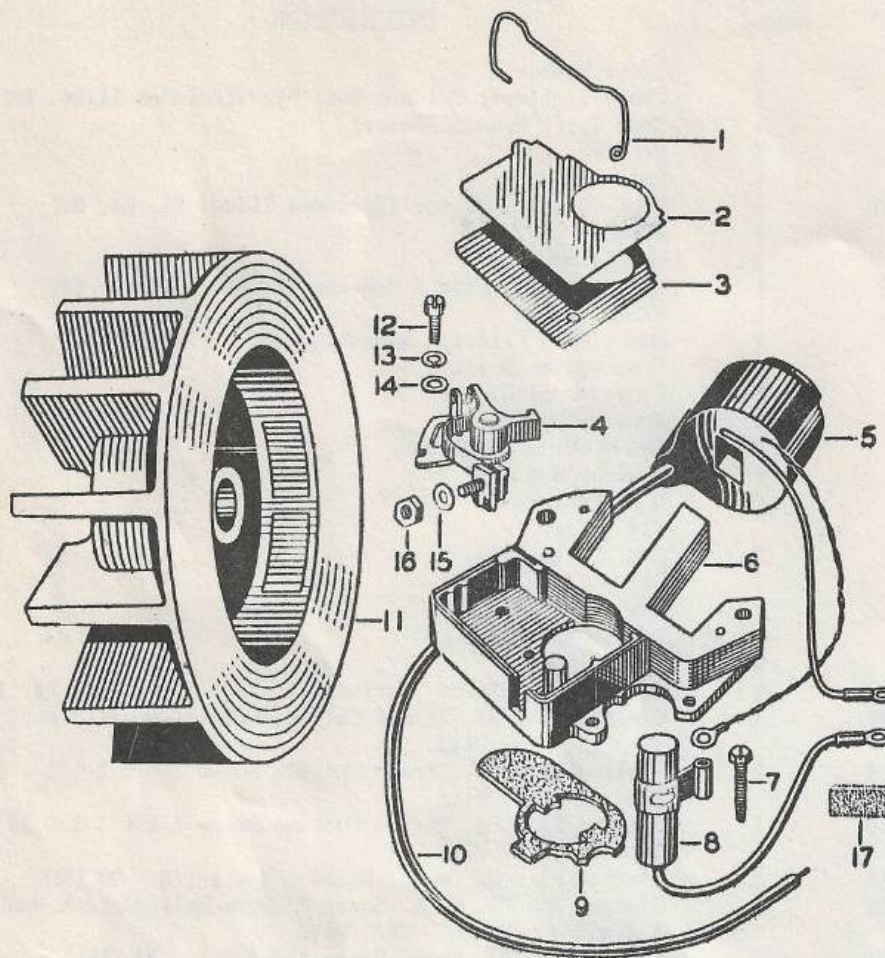
FIGURE W

DAVID BRADLEY CHAIN SAW -- MODEL NUMBER 917.60016

ILLUSTRATION NUMBER	PART NUMBER	QUANTITY REQUIRED	DESCRIPTION
61	1917H	1	Inner Washer
62	600PA5	1	Chain Tightener Guide & Roll Pin (Includes Illus. 65)
63	1912H	1	Gear Shaft Spacer (Outer)
64	697H	2	Bearing
65	9879M	1	Roll Pin
66	600PA290	1	Gear Case & Bearings (Includes Illus. 63, 64, 69)
67	706H1	1	Washer
68	698H	2	Needle Bearing
69	600PA75	1	Pinion Clutch Drum & Bearing (Includes Illus. 68)
70	705H	1	Fibre Washer
71	993H	2	Heavy Duty Friction Assembly
72	9899M	2	Compression Springs
73	992H	2	Cylindrical Plunger
74	724H	2	Tension Spring
75	726H	1	Drive Plate Assembly
76	357H	1	Huglock Nut
77	11070		R.H. Cutter
78	11280		Tie Strap
79	11060		L.H. Cutter
80	10590		Drive Link
81	10040		Rivet
82	14506		Preset Tie Strap
83	1880H	2	Spring Washer
84	600PA65	1	Centrifugal Clutch (Includes Illus. 71, 72, 73, 74, 75)
A	04870428	1	Slotted Fil. Hd. Thread Cutting Screw 1/4 x 1-3/4-20 UNC - Type 23 Cad. Pltd.
B	04870436	6	Slotted Fil. Hd. Thread Cutting Screw 1/4 x 2-1/4 - 20 UNC - Type 23 Cad. Pltd.
C	04870410	3	Slotted Fil. Hd. Thread Cutting Screw 1/4 x 5/8 - 20 UNC - Type 23 Cad. Pltd.
D	14190418	1	Slotted Fil. Hd. Mach. Screw 1/4 x 1-1/8 - 20 UNC
E	14670412	4	Slotted Pan Hd. Mach. Screw W/ Sems Helical Lock Washer 1/4 x 3/4 - 20 UNC Cad. Pltd.
F	04641006	2	Slotted Pan Hd. Mach. Screw #10 x 3/8 - 32 UNF
G	17070528	1	Slotted Oval Hd. Mach. Screw 5/16 x 1-3/4 - 18 UNC Cad. Pltd.
H	14190414	6	Slotted Fill. Hd. Mach. Screw W/Sems Helical Lock Washer 1/4 x 7/8 - 20 UNC
I	643H1	3	Machine Screw
J	17070520	3	Slotted Oval Hd. Mach. Screw 5/16 x 1-1/4 - 18 UNC Cad. Pltd.
K	14630408	2	Slotted Pan Hd. Mach. Screw W/Sems Helical Lock Washer 1/4 x 1/2 - 20 UNC Cad. Pltd.
L	04470406	3	Truss Hd. Mach. Screw 1/4 x 3/8 - 20 UNC (Retainer for bearing in case)
M	14630514	1	Slotted Pan Hd. Mach. Screw W/Sems Helical Lock Washer 5/16 x 7/8 - 18 UNC
N	14670510	2	Slotted Pan Hd. Mach. Screw W/Sems Helical Lock Washer 5/16 x 5/8 - 18 UNC Cad. Pltd.
O	04490606	4	Slotted Pan Hd. Self-Tapping Screw #6 x 3/8 - Type B Cad. Pltd.
NOT ILLUSTRATED			
	600PA4	1	Spark Plug Wrench & Handle
	9987M	1	Gap Gauge
	714H	1	Depth Gage (.040 - .050)
	9888M	1	Wrench
	9889M	1	File (8" long round, 1/4" diameter for 1/2" pitch chain A9 or A10)
	9890M1	1	File Holder
	917.60016		Instruction Manual ORDER PARTS BY PART NUMBER ONLY!

For Illustration-- See Page 24.

DAVID BRADLEY CHAIN SAW -- MODEL NUMBER 917.60016



MAGNETO #610579

ILLUSTRATION NUMBER	PART NUMBER	DESCRIPTION
1	610591	Dust Cover Spring
2	610589	Dust Cover
3	610590	Dust Cover Gasket
4	610587	Breaker Point Assembly
5	610586	Coil Assembly
6	610585	Core and Stator Plate Group
7	610593	Condenser Screw
8	610588	Condenser Assembly
9	610594	Sealing Washer
10	610595	Lead Wire
11	610583	Flywheel
12	610249	Breaker Screw
13	610251	Lockwasher
14	610274	Flatwasher
15	610385	Terminal Washer
16	610408	Terminal Nut
17	610592	Cam Felt
	610584	Stator Plate Assembly (Less lead wire)

DAVID BRADLEY CHAIN SAW -- MODEL NUMBER 917.60016

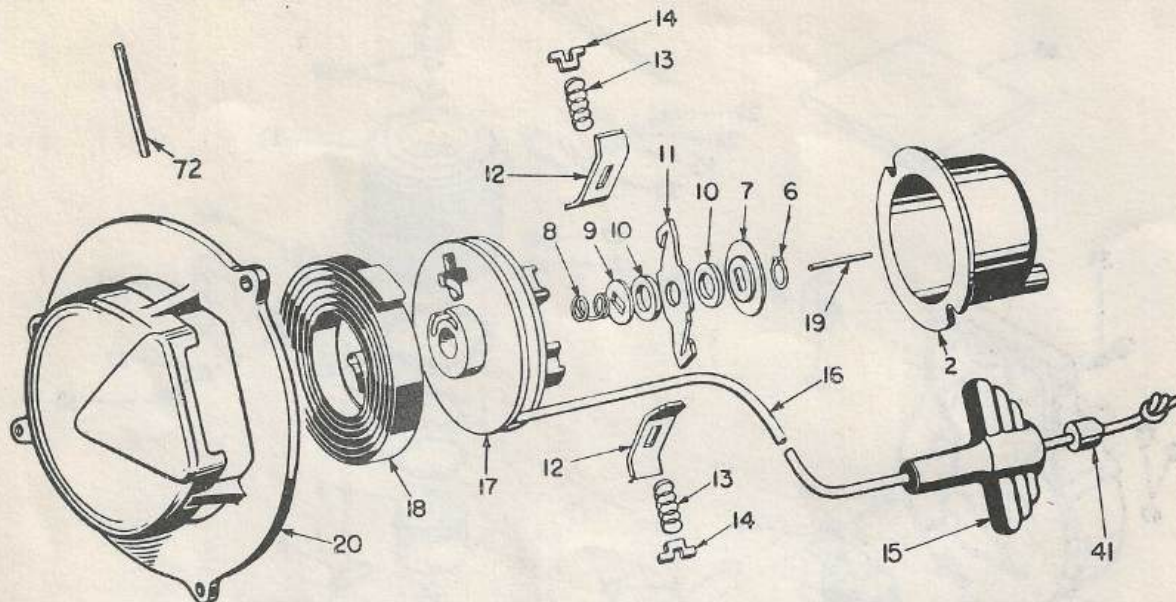


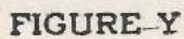
FIGURE X

REWIND STARTER #590305

ILLUSTRATION NUMBER	PART NUMBER	DESCRIPTION
2	590310	Cup
6	590202	Retaining Ring
7	590267	Brake Retainer Washer
8	590179	Brake Spring
9	590192	Brake Washer
10	590191	Fibre Washer
	590222	Friction Shoe Assembly
11	590176	Brake Lever
12	590168	Friction Shoe Plate
13	590178	Friction Shoe Spring
14	590167	Spring Retaining Plate
15	590306	Handle
16	590307	Cord
17	590282	Rotor
18	590261	Rewind Spring
19	590184	Centering Pin
20	590311	Cover
41	590196	Handle Washer
72	590312	Roll Pin

ORDER PARTS BY PART NUMBER ONLY.

ENGINE TYPE 1148--MODEL AH47



For Parts List -- See Page 29

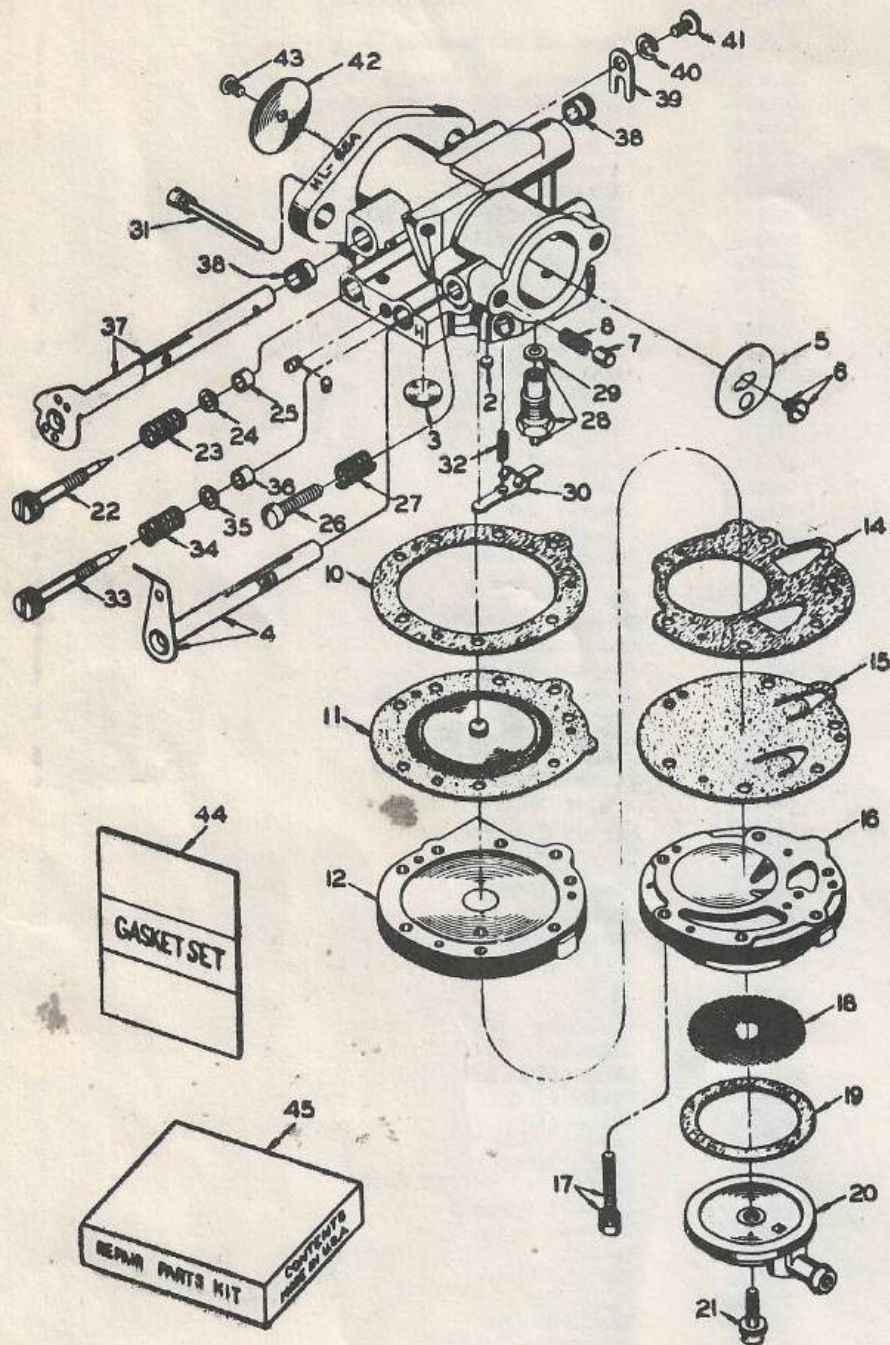
DAVID BRADLEY CHAIN SAW -- MODEL NUMBER 917.60016

ENGINE TYPE 1148---MODEL AH47

ILLUSTRATION NUMBER	PART NUMBER	DESCRIPTION
	310180	Piston and Rod Assembly
1	310179	Connecting Rod Assembly
2	650350	Connecting Rod Screw
3	530104	Cartridge Bearing
4	530114	Needle Bearing Set
5	310181	Piston
6	310178	Piston Pin
7	310167	Piston Pin Retaining Ring
8	310149	Piston Ring Set
9	290246	Crankshaft
10	270234	Crankcase Assembly
11	510105	Crankshaft Seal
12	510106	Seal Retainer
13	510109	Retainer Spring
14	650107	Cylinder Stud
15	650110	Carburetor Stud
16	530110	Ball Bearing
17	650133	Screw, 10-24 x 1
18	650147	Flatwasher, #10
19	550153	Type Tag
20	510183	Cylinder Gasket
21	250147	Cylinder
22	510126	Port Cover Gasket
23	570118	Port Cover
24	650147	Flatwasher, #10
25	650127	Screw, 10-24 x 5/8
26	650131	Lockwasher, 1/4"
27	650129	Hex Nut, 1/4-20
28	610120	Spark Plug (J8J or AC45M)
29	510185	Reed Plate Gasket
30	470113	Reed Plate Assembly
31	470114	Reed
32	470115	Reed Stop
33	650388	Screw, 6-32 x 5/16
34	510184	Reed Plate Gasket
35	570245	Adapter Elbow
36	650331	Carburetor Stud
37	510155	Carburetor Gasket
38	630698	Carburetor
39	570236	Clamp-on Lever
40	650369	Roll Pin
41	570246	Anchor
42	570247	Spring
43	650313	Lockwasher, 1/4"
44	610579	Magneto
45	650133	Screw, 10-24 x 1
46	650389	Woodruff Key
47	610580	Cut-off Wire
48	650146	Hex Nut, 8-32
49	610551	Toggle Switch
50	350272	Shroud
51	650176	Screw, 1/4-20 x 1
52	490210	Air Vane
53	650368	Roll Pin
54	490211	Throttle Link
55	570248	Air Screen
56	590305	Rewind Starter
57	650201	Lockwasher, 7/16"
58	650309	Hex Nut
59	650158	Screw, 1/4-20 x 3/4
60	510152	Exhaust Gasket
61	390230	Muffler
62	650269	Copper Washer, 1/4"
63	650309	Screw, 1/4-20 x 7/8
64	610561	Plug Cover
65	550136	Name Plate
66	650232	Screw, #7 x 1/4
67	430155	Fuel Line
68	510186	Gasket Kit (Incl. Nos. 11, 20, 22, 29, 34, 37 & 60)

For Illustration -- See Page 28.

DAVID BRADLEY CHAIN SAW -- MODEL NUMBER 917 60016



For Parts List -- See Page 31.

FIGURE 2

DAVID BRADLEY CHAIN SAW -- MODEL NUMBER 917.60016

CARBURETOR #630698

ILLUSTRATION NUMBER	PART NUMBER	DESCRIPTION
2	*630144	Body Channel Cup Plug
3	*630172	Body Channel Welch Plug
4	630619	Choke Shaft & Lever
5	630266	Choke Shutter
6	630269	Choke Shutter Screw & Lockwasher
7	630189	Choke Friction Pin
8	630255	Choke Friction Pin Spring
9	630167	Diaphragm Chamber Drain Screw
10	630398	Diaphragm Gasket
11	*630407	Diaphragm
12	630239	Diaphragm Cover
14	630122	Fuel Pump Gasket
15	*630396	Fuel Pump Diaphragm
16	630392	Fuel Pump Body
17	630361	Fuel Pump Body Screw & Lockwasher
18	*630395	Fuel Strainer Screen
19	630394	Fuel Strainer Cover Gasket
20	630393	Fuel Strainer Cover
21	630145	Fuel Strainer Cover Retaining Screw
22	*630707	Idle Adjustment Screw
23	*630253	Idle Adjustment Screw Spring
24	*630632	Idle Adjustment Screw Washer
25	630631	Idle Adjustment Screw Packing
26	*630186	Idle Speed Regulating Screw
27	*630161	Idle Speed Regulating Spring
28	*630408	Inlet Needle, Seat & Gasket
29	630368	Inlet Seat Gasket
30	*630391	Inlet Control Lever
31	*630409	Inlet Control Lever Pinion Screw
32	*630406	Inlet Tension Spring
33	*630660	Main Adjustment Screw
34	*630253	Main Adjustment Screw Spring
35	*630632	Main Adjustment Screw Washer
36	630631	Main Adjustment Screw Packing
37	630708	Throttle Shaft & Lever
38	630332	Throttle Shaft Bushing
39	630318	Throttle Shaft Clip
40	630162	Throttle Shaft Clip Lockwasher
41	630166	Throttle Shaft Clip Retaining Screw
42	630242	Throttle Shutter
43	*630269	Throttle Shutter Screw
44	*630703	Gasket & Packing Set
45	630709	Repair parts Kit

(*) Indicates Contents of Repair Parts Kit.

For Illustration -- See Page 30.

Do not use Illustration Numbers when ordering Repair Parts, always use Part Numbers.

8374

CAUTION: Keep all bolts and nuts
securely tight. Check at regular
intervals.