

R E M I N G T O N



INSTRUCTIONS AND SERVICE MANUAL

SAFETY FIRST

1. Never operate your chain saw in an unventilated room.
2. Keep all parts of the body away from the revolving cutting chain.
3. Always stop engine when carrying saw from one location to another.
4. Do not attempt to replace or sharpen the chain with the engine running, even though the clutch is disengaged.
5. In all cutting operations, be positive that you have a clear area in which to work, a secure place to stand, and a safe "get away" position to move to when felling.
6. When removing the saw from a cut, slow engine to stop chain.
7. Do not operate the saw when it is in need of repair.
8. When mixing fuel or refueling the engine, observe fire precautions.

Remington





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Thank You

FOR YOUR PURCHASE OF A REMINGTON SUPER 75 CHAIN SAW. Time has clearly proven that preventive maintenance, on any piece of mechanical equipment, is an important factor in the performance received. The following suggestions are made to assist you in obtaining top performance from this chain saw unit:

- 1 Proper lubrication is IMPORTANT. Always use Remington 2-Cycle Engine Oil (or outboard motor oil or S.A.E. #30 Non-Detergent Oil) as well as a good grade regular gasoline in the fuel mixture. (See Page 14 for mixture ratio.)
- 2 Always filter fuel mixture when filling gas tank. Dirty fuel results in clogged carburetor jets and poor performance. Wipe saw dust from around gas cap.
- 3 Grease guide bar roller nose at least once daily; more often under severe operating conditions. (See Page 15 for instructions.)
- 4 When storing chain saw during non-cutting months, drain fuel mixture from gas tank and start engine and run until fuel in gas line and carburetor is used up.

- 5 Check tightness of screws, nuts and bolts before and during operation. Loose fasteners can produce damage to the chain saw and make operation unsafe.
- 6 Do not operate chain saw with dull chain. The chain is a cutting device and must be kept sharp. (See Chain Sharpening Instructions Booklet.)
- 7 Do not operate chain saw with loose chain when using a roller nose guide bar. A loose chain results in excessive wear on the chain, guide bar and sprocket. (See Page 20 for instructions.)
- 8 Keep your chain saw clean. A dirty saw does not "breathe" and creates excessive heat. (See Page 20 for instructions.)
- 9 Reverse guide bar, top for bottom, every week. You will receive longer guide bar life, just as you receive longer tire life on your car by rotating the tires.
- 10 When your Remington Chain Saw is in need of Maintenance, see your nearest Remington Recommended Chain Saw Service Station.

REMINGTON ARMS COMPANY

PUTTING GUIDE AND CHAIN ON SAW

- A.** Put the GUIDE (4) over the SCREWS (5), PIN (6) and ADJUSTING BLOCK PIN (7).

ADJUSTING BLOCK PIN MUST BE IN THE HOLE IN THE GUIDE

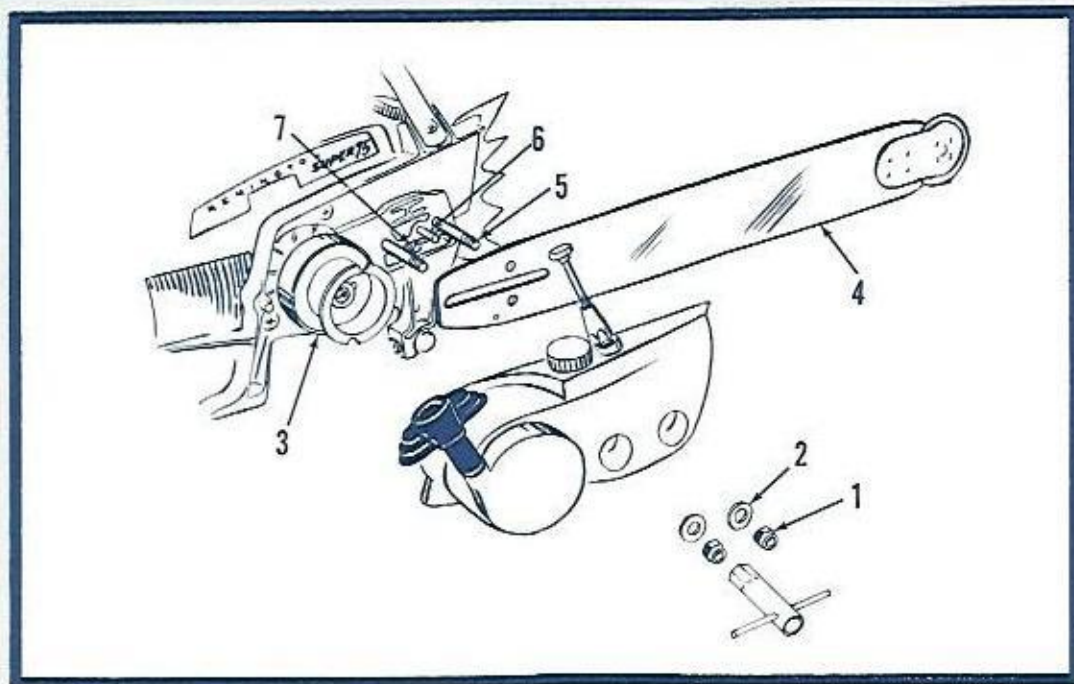
- B.** Install the CHAIN over and onto the CLUTCH DRUM-SPROCKET (3) and onto the GUIDE (4).

CUTTING EDGES OF CHAIN ON TOP OF GUIDE MUST FACE FORWARD TOWARD THE ROLLER NOSE

- C.** Connect ends of CHAIN together with CONNECTING PIN.

- D.** Replace WASHERS (2) and NUTS (1).

DO NOT TIGHTEN NUTS UNTIL CHAIN ADJUSTMENT IS MADE (See next page.)



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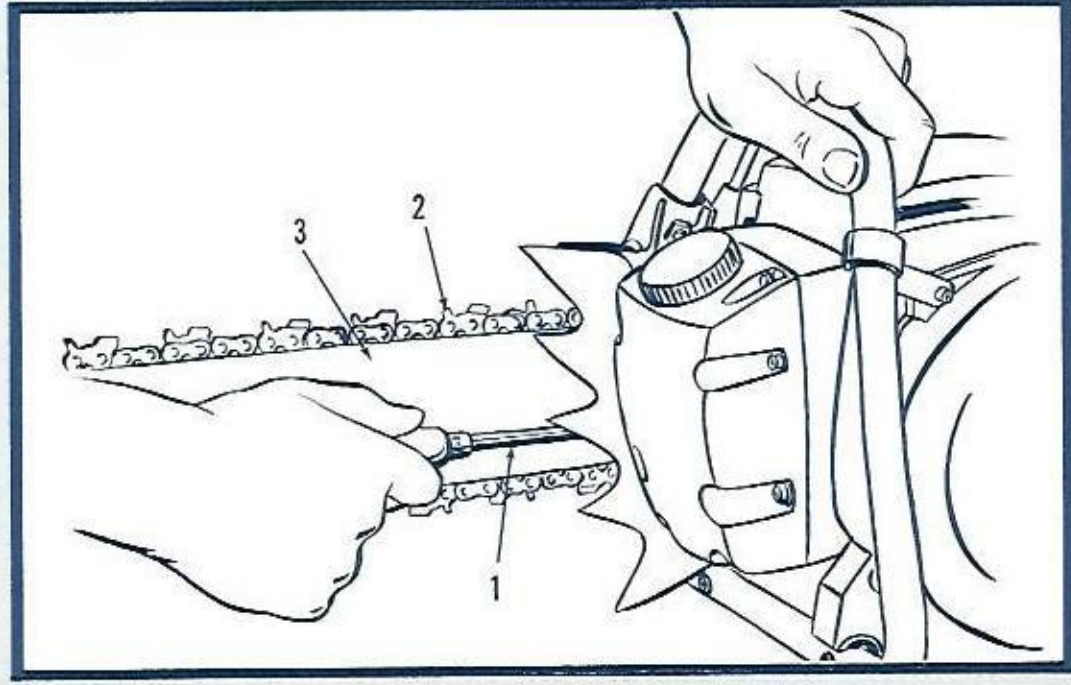
TIGHTENING THE CHAIN

- A.** Tighten the ADJUSTING SCREW (1) until the CHAIN (2) is snug on the GUIDE (3).

SEE CHAIN INSTRUCTIONS – CHAIN TENSION

- B.** Tighten the NUTS in the OIL TANK – STARTER HOUSING. Lift up roller nose end of GUIDE (3) when tightening.

KEEP CHAIN SNUG AT ALL TIMES.

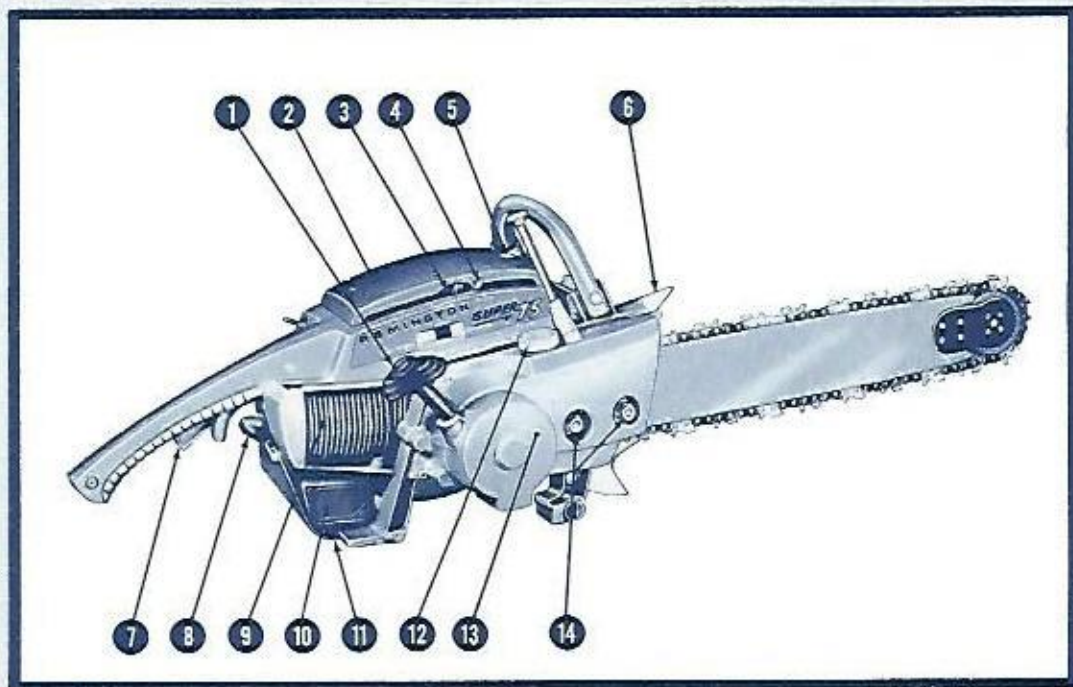


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LEGEND

- | | | | |
|----|----------------------------|-----|--------------------------|
| 1. | STARTER HANDLE | 8. | SPARK PLUG GUARD |
| 2. | CARBURETOR COVER | 9. | CYLINDER |
| 3. | CARBURETOR ADJUSTMENT HOLE | 10. | MUFFLER |
| 4. | CHOKE LEVER | 11. | MUFFLER GUARD |
| 5. | CARBURETOR COVER SCREW | 12. | CHAIN OILER TANK CAP |
| 6. | STICKER | 13. | OIL TANK—STARTER HOUSING |
| 7. | THROTTLE TRIGGER | 14. | GUIDE TIGHTENING NUTS |

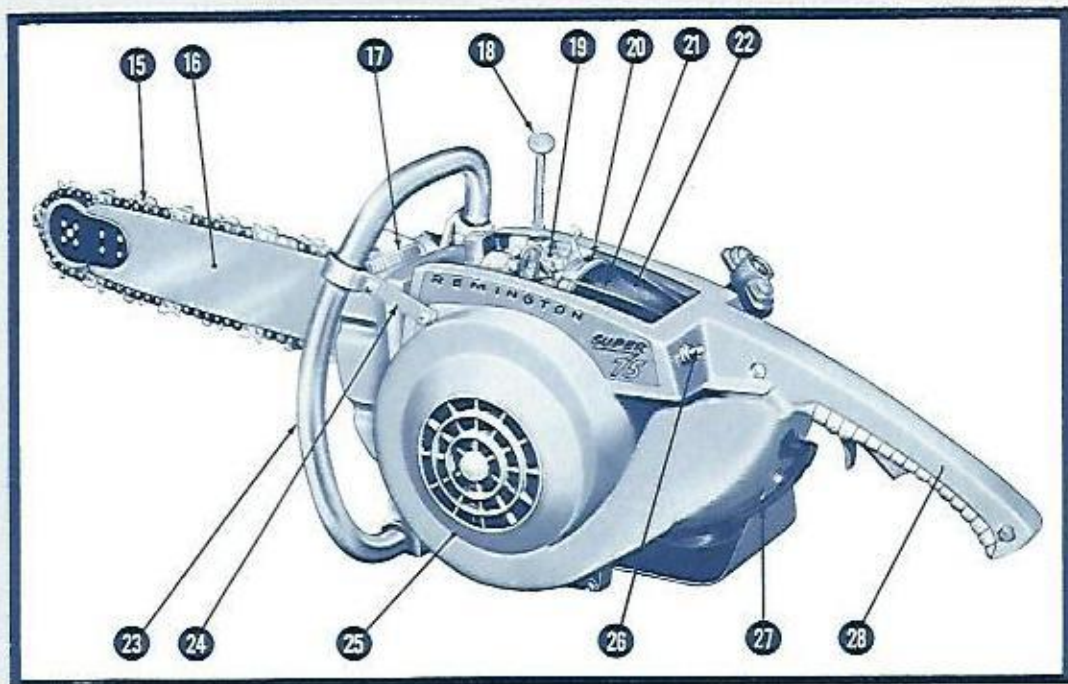


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LEGEND continued

- | | | | |
|-----|-----------------------|-----|-----------------|
| 15. | CHAIN | 22. | AIR FILTER |
| 16. | GUIDE | 23. | HANDLE |
| 17. | FUEL CAP | 24. | BRACKET |
| 18. | OIL PUMP KNOB | 25. | FAN COVER |
| 19. | CARBURETOR | 26. | IGNITION SWITCH |
| 20. | FILTER MANIFOLD | 27. | SPARK PLUG WIRE |
| 21. | FILTER RETAINING RING | 28. | GRIP |



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PREPARATION FOR RUNNING

A. FUELING

Mix well together in a clean container Remington 2-Cycle Engine Oil (or outboard motor oil or S.A.E. #30 Non-Detergent Oil) and a regular gasoline.

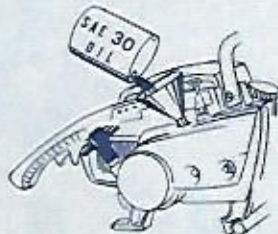
B. CHAIN OILER

Fill the OIL TANK with REMINGTON 2-CYCLE ENGINE OIL or S.A.E. #30 OIL. (Add 25 to 50% kerosene to oil when using saw in cold weather or cutting pitchy wood.)



FUEL MIXING CHART

MIXTURE	GASOLINE	OIL
16:1	1 GAL.	1/2 PT.
	2 GAL.	1 PT.



C. ROLLER NOSE

Grease the ROLLER NOSE by inserting the GREASE GUN TIP into the hole in the ROLLER NOSE SIDE PLATE and push the grease gun HANDLE until grease appears on ROLLER NOSE. Use Remington #18347 or #1 lithium lubricant.

D. CARBURETOR ADJUSTMENT

Remove the carburetor cover by loosening screw and sliding cover forward.

The carburetor has been factory adjusted. Only a minor adjustment may be necessary due to weather or altitude.



CAUTION: NEVER ADJUST THE HIGH SPEED MIXTURE SCREW LESS THAN $\frac{3}{4}$ TURN OPEN. TOO LEAN A MIXTURE MAY DAMAGE THE ENGINE DUE TO LACK OF PROPER LUBRICATION.

STARTING

A. IGNITION SWITCH ON

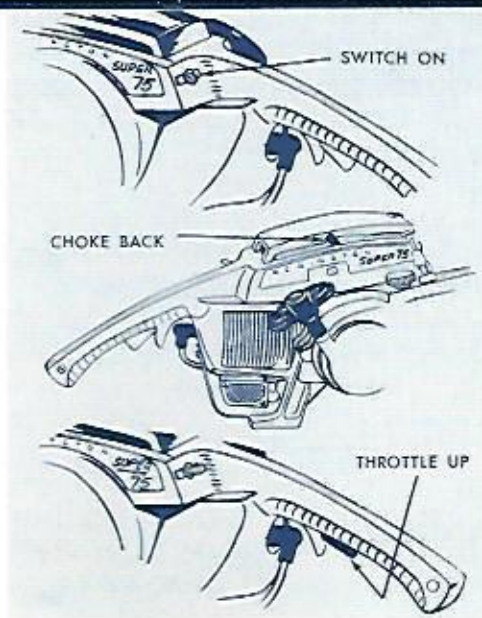
Move the IGNITION SWITCH to the "ON" position.

B. CLOSE CHOKE

Move CHOKE LEVER to the "CHOKE" position. Usually the choke is only needed for starting a cold engine.

C. OPEN THROTTLE

Squeeze the THROTTLE TRIGGER to open the throttle.



D. PULL STARTER

Pull the STARTER HANDLE quickly (return CHOKE to "RUN" position when engine first fires). Repeat until the engine starts. **Only a short pull is necessary.**

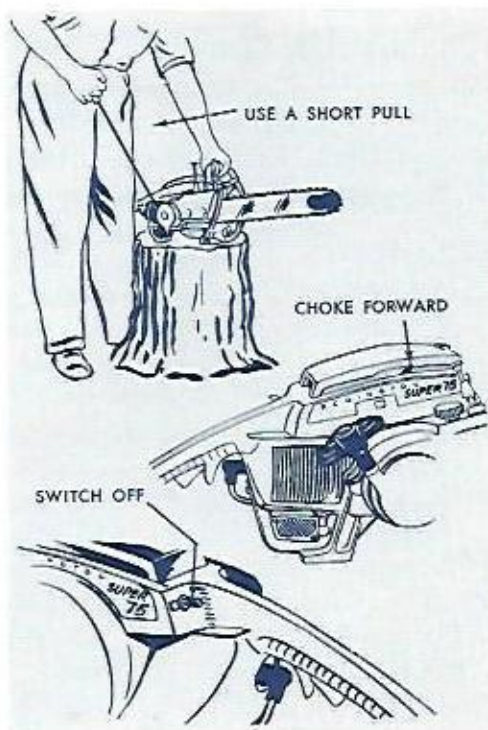
E. RUNNING

After the engine starts, release the THROTTLE TRIGGER and return the CHOKE LEVER to "RUN".

F. STOP

Stop engine by returning IGNITION SWITCH to "OFF" position.

(For carburetor adjustment see Page 38)



FELLING WITH THE CHAIN SAW

Before beginning operations take a few minutes to size up the lean of the tree carefully. Decide beforehand just where the tree may be felled.

UNDERCUTS

Undercuts are made on the side toward which the tree should fall. The undercut provides a hinge point on which to tip the tree in the right direction. Various undercuts are used in different parts of the country—illustrated are a few types—all of which may be made with your Remington SUPER 75 Chain Saw.

The cuts are numbered in the proper order for cutting. The undercut (1 and 2) is made first to a depth of approximately $\frac{1}{4}$ the diameter of the tree, except for larger leaning trees which require a deeper undercut. The usual practice is to saw out the notch at a 45 degree angle.

THE BACKCUT

The backcut (3) is made about 2 inches higher than the bottom of the undercut. The cut should be kept parallel with the undercut. If all cutting is done properly, the tree will begin falling when only an inch or two of holding wood is left.

WHEN THE TREE FALLS

Move to a safe place when a tree begins to fall. Do not depend on a tree to fall the same as one felled under similar conditions.

OPERATING THE SAW

The guide must be kept in the middle of the cut so that the cutters returning in the upper groove do not cut into the sides of the kerf. Feed the saw into the tree—the rate of speed will depend on the type and size of timber. When making a deep cut, the saw slot should be spread with a wedge to prevent pinching the guide and chain. For safer, easier, and faster cutting—keep the chain sharp.

SAFETY FIRST!



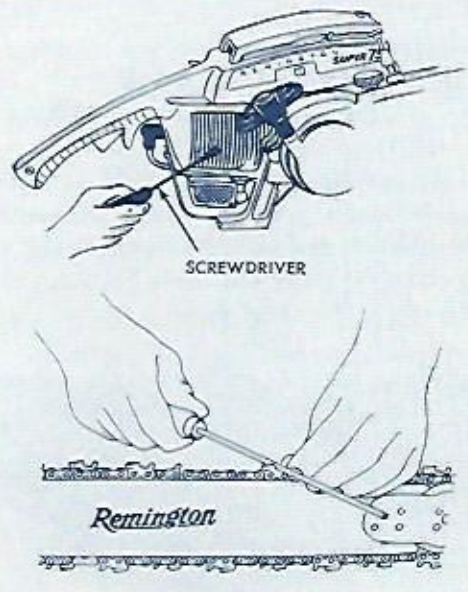
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DAILY MAINTENANCE

Saw must be shut off before any of the following steps are taken.

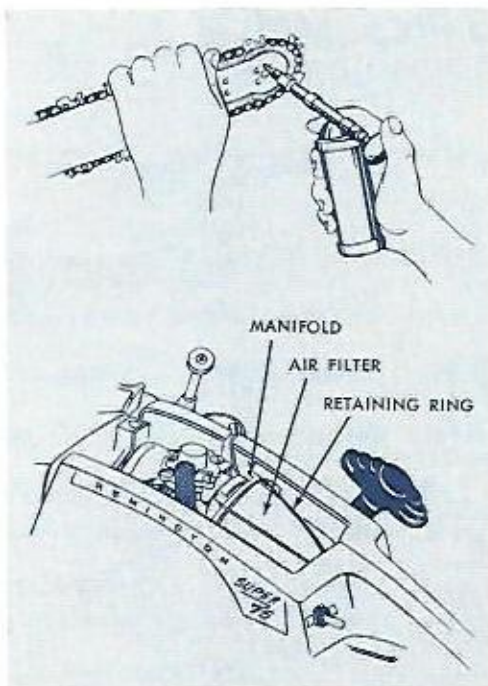
- A. Clean the saw; clean dirt and saw chips from CYLINDER FINS. Clean the starter assembly under severe cutting conditions.
- B. Clean chain and OIL. Sharpen and adjust if necessary. (See sharpening instructions with chain.)



C. Grease the ROLLER NOSE.

D. Remove the carburetor cover by loosening screw and sliding cover forward. Unhook the rubber retaining ring holding the air filter on its manifold. Remove and clean the AIR FILTER inside and outside. Clean with brush or compressed air.

E. Tighten all visible screws and nuts.



TROUBLE SHOOTING DATA

WHAT TO DO IF ENGINE FAILS TO START . . .

DID YOU?

Use the correct fuel mix?
Turn the switch on?
Use the choke?

IF SO: CHECK IGNITION FIRST—

- 1: Remove spark plug. Is it clean and set correctly (gap opening .025 inch)?
- 2: Ground spark plug (cleaned and correctly set) to saw frame. Do this by placing hex portion of spark plug against bare metal of saw (spark plug wire on plug).
- 3: Pull starter. The spark plug should put out a blue hot spark. If no spark is seen, the trouble is in the ignition system. If a good spark is produced, the trouble is in the fuel system.

TROUBLE	POSSIBLE CAUSE	REMEDY
IGNITION	1. Spark plug dirty.	1. Clean, reset to .025 inch gap opening or replace.
	2. Spark plug or switch wire shorted.	2. Find bare spot on wire or break in wire—repair or replace.
	3. Breaker points pitted.	3. Clean, reset or renew points. (See Page 36.) Check magneto position. (See Page 36.)

If, after this is done, there is no spark, see your Remington Dealer for a complete magneto check.

FUEL SYSTEM

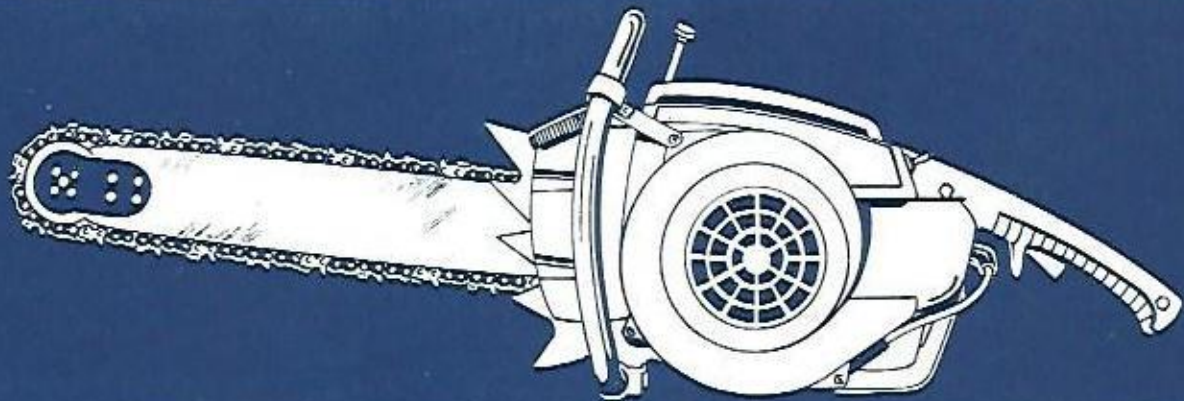
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|--------------------------------|--|
| 1. Carburetor not getting gas. | 1. Check fuel pick-up and fuel line for leaks or break—repair or replace.
Fuel cap not venting (must allow air into tank). Disassemble, clean and reassemble. |
| 2. Incorrect carburetion. | 2. Readjust low and high speed adjusting screw. (See Page 38.) |
| 3. Engine flooding. | 3. Remove spark plug and pull starter several times with adjusting screws closed. Reset screws and start. |
| 4. Carburetor not getting air. | 4. Remove and clean air filter. (See Page 21.) |

If, after this is done, the engine will not start, see your Remington Dealer.

TROUBLE SHOOTING DATA cont.

TROUBLE	POSSIBLE CAUSE	REMEDY
CHAIN CUTS OUT OF LINE (See Chain Instruction Manual)	1. Cutter gage clearance not equal.	1. Check gage clearance of all cutters. (See chain instructions.)
	2. Chain not sharpened correctly.	2. Sharpen all cutters the same.
	3. Dull chain.	3. Keep chain sharp. (See chain instructions.)
	4. Worn guide.	4. Reverse or dress rails of guide.
	5. Damaged guide.	5. Repair or replace.

SERVICE MANUAL



**SEE YOUR RECOMMENDED REMINGTON SERVICE
DEALER FOR ASSISTANCE ON ITEMS IN THIS SECTION**

SUPER 75 CHAIN SAW SPECIFICATIONS

One cylinder

Two-cycle

Bore—2-1/16 inches

Stroke—1 1/2 inches

Displacement—5 cubic inches

Cutting chain speed—3800 FPM

Free chain speed—4600 FPM

Breaker point setting—.020 inch

Firing time—30 degrees before top dead center of piston travel

Spark plug gap opening—.025 inch

Type of spark plug—Remington #25671, AC M44C, Champion J6J

Type of bearings—needle roller and thrust

Type of carburetor—diaphragm pump

Type of starter—rewind

Fuel mixture ratio 16:1 regular gasoline to Remington 2-cycle Engine Oil (or outboard motor oil or S.A.E. 30 Non-Detergent Oil)

Clutch—centrifugal engagement

TUNE-UP SCHEDULE

You may be able to continue the high performance originally built in to this unit by doing some trouble shooting and by making a few minor adjustments on your Chain Saw.

These minor tune-up instructions are given for Super 75 owners with mechanical experience who want to perform their own minor tune-ups.

The procedure suggested here can be performed with a minimum of equipment, and it is not intended that these operations take the place of a complete major tune-up performed by an Authorized Remington Chain Saw Service Station.

If trouble does occur and it can not be found by these simple steps take your saw to the expert—your Remington Chain Saw Service Man.

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TUNE-UP SCHEDULE

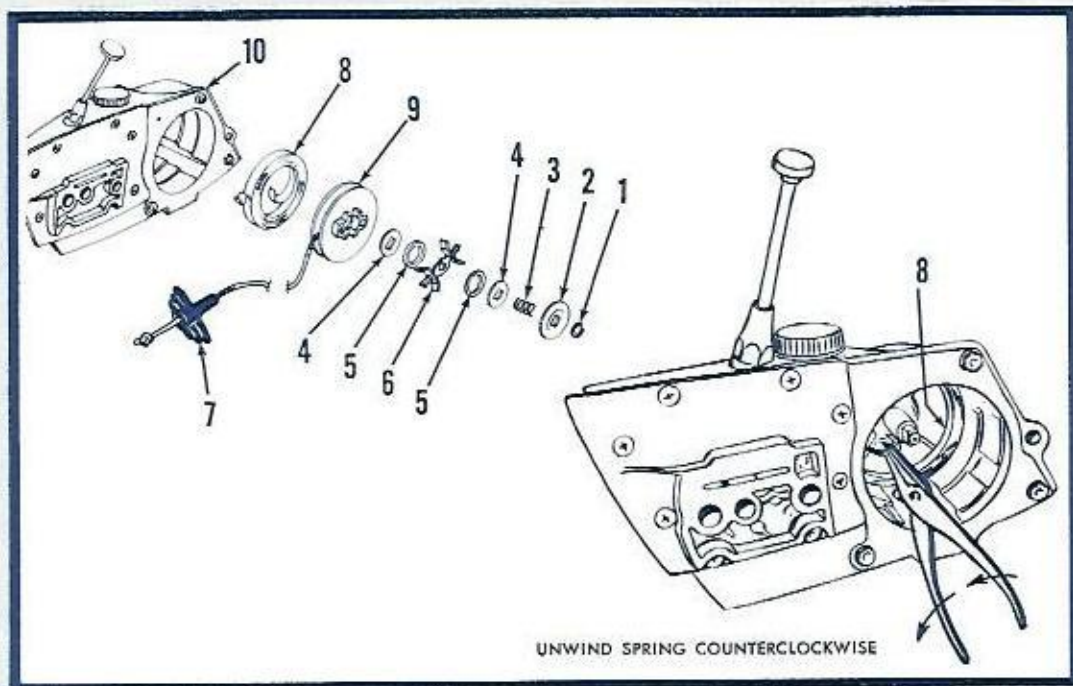
SYSTEM	WHAT TO DO	PAGE	WHEN BASED ON YEAR AROUND USE
IGNITION	1. Clean and set spark plug	22, 23	Weekly
	2. Check magneto timing	36	When needed or twice yearly
	3. Clean and set points or replace	36	When needed
FUEL	1. Clean vent in fuel cap	23	Daily
	2. Renew fuel lines and pick-up tube		Yearly
	3. Replace fuel tank gasket		Whenever tank is disassembled
CARBURETION	1. Adjust high and low speed adjusting screws	38	When needed
	2. Clean air filter	21	Daily—Re- place when needed

SYSTEM	WHAT TO DO	PAGE	WHEN BASED ON YEAR AROUND USE
COOLING	1. Clean fan blades	36	Monthly
	2. Clean cylinder fins	20	Daily
POWER	1. Clean carbon from exhaust ports		When needed —See your Recommended Service Station
STARTER	1. Clean and check starter	30 to 33	Weekly— (Daily under severe cutting conditions)
OILER	1. Clean oil passage in guide bar and housing		Weekly
	2. Check chain oiler system	14	Daily

STARTER DISASSEMBLY

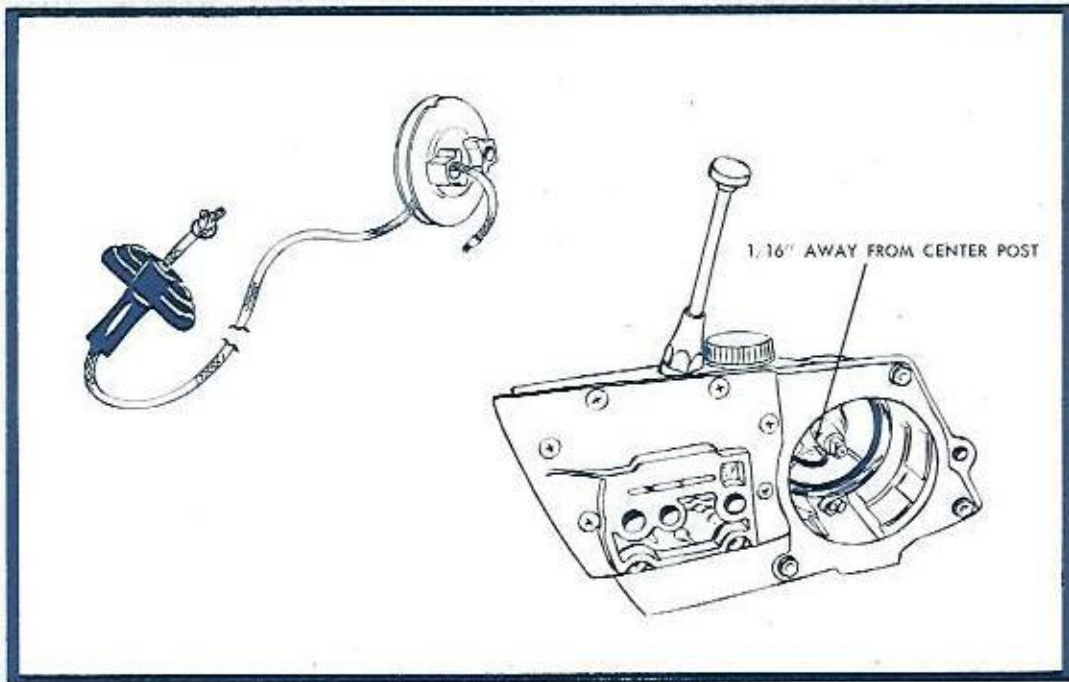
Place starter housing in vise with chain oil plunger facing away from vise.

1. Remove retainer ring (1), brake retainer washer (2), brake spring (3), brake washer (4) and fiber washer (5).
2. Remove friction shoe assembly (6). Note direction in which this assembly is installed. IT MUST BE RE-INSTALLED IN THE SAME MANNER UPON REASSEMBLY.
3. Remove fiber washer (5), brake washer (4), untie knot in cord (7) and remove handle (7).
4. Release rewind tension by turning rotor (9) in clockwise direction.
5. Lift rotor (9) from housing (10). CAUTION: When lifting rotor (9) from housing, be sure rewind spring (8) is disengaged from rotor.
6. Remove rewind spring (8) by gripping inner loop with pliers and unwinding in a counter clockwise direction.



STARTER ASSEMBLY

1. Lay rewind assembly (8) on bench and remove outer steel spring holder while holding spring in wound position with pliers.
2. Replace rewind spring (8) in starter housing (10) with outside loop over pin and loop of spring facing counter clockwise.
3. Adjust inner loop of spring, bending if necessary, to within 1/16" of center post.
4. To install rewind cord tie single knot (if cord does not have clip on end, a single knot is necessary; if cord does have clip on end, no knot is necessary) and thread through hole provided in rotor (9) with knot facing upward. Wind cord on rotor in a counter-clockwise direction four and three quarter ($4\frac{3}{4}$) turns. Place the remaining cord about 10" (which is not around rotor) in the recess slot of rotor (notch on the outside diameter of pulley) and coil around the post of the rotor.
5. Place rotor (9) over center pin, being sure inner coil of spring is engaged in slot in the rotor.
6. To place tension on spring, turn rotor (9) $3\frac{1}{2}$ to 4 turns in counter-clockwise direction and thread cord through eyelet in starter housing (10). Place starter handle (7) over cord and tie double knot.
7. Install brake washer (4) and fiber washer (5).
8. Install friction shoe assembly with the leading edge, marked with a line, facing outward and protruding or camming out with the first few inches of pull on the starter rope.
9. Install fiber washer (5), brake washer (4), brake spring (3), brake retaining washer (2) and retainer ring (1).



CLUTCH-SPROCKET ASSEMBLY

A. REMOVING THE CLUTCH-SPROCKET ASSEMBLY

1. REMOVE the STARTER HOUSING.
2. Remove the NUT R.H. Thread (1) with an impact wrench. Remove LOCKWASHER (2) and STARTER CUP (3).
3. Remove the CLUTCH (4) with a SPANNER WRENCH (5) inserted into the HOLES (6) in the CLUTCH SIDE PLATE (7).

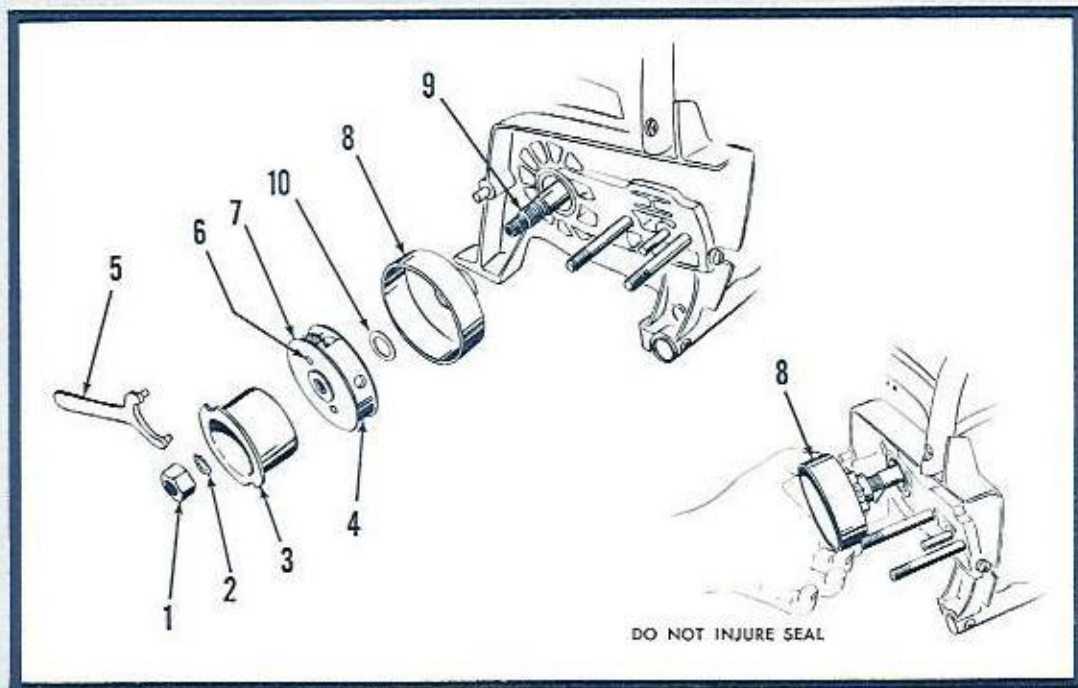
CLUTCH HUB IS THREADED LEFT HAND

4. Remove THRUST WASHER (10).
5. Pull CLUTCH DRUM - SPROCKET ASSEMBLY (8) off the CRANKSHAFT (9).

B. INSTALLING CLUTCH DRUM - SPROCKET ASSEMBLY

1. Grease bearing of CLUTCH DRUM - SPROCKET (8) liberally.
2. Fit the assembly over the CRANKSHAFT with a rotating motion being careful not to injure the seal.
3. Re-install the THRUST WASHER (10), CLUTCH (4), STARTER CUP (3), LOCK-WASHER (2), and NUT (1).

TIGHTEN STARTER NUT TO 360 INCH LBS. TORQUE



MAGNETO ASSEMBLY

A. ACCESS TO MAGNETO

1. Remove the three SCREWS holding the FAN COVER (1) and remove the FAN COVER (1).
2. Remove the NUT (2) and WASHER (3) holding the fan (4).
3. Use a FAN PULLER to remove FAN (4) from CRANKSHAFT (5).

DO NOT REMOVE FAN BY TURNING SCREW ONLY

See your recommended Remington Service Station.

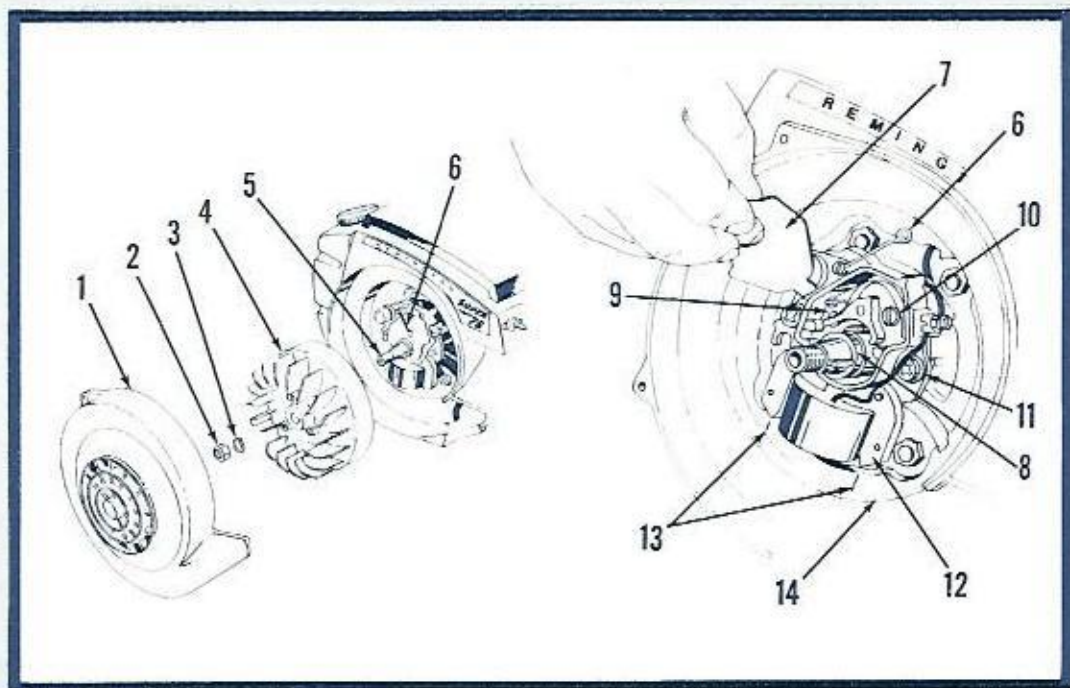
B. MAGNETO TIMING

1. Loosen the two magneto mounting plate SCREWS (11).
2. Rotate the MAGNETO until the two pointed ENDS (12) of the MAGNET line up opposite the TWO LINES (13) marked on the COVER HOUSING (14).
3. TIGHTEN SCREWS (11).

C. BREAKER POINTS ADJUSTMENT

1. Rotate breaker point cover SPRING (6) away from the COVER (7), and remove the COVER (7).
2. Rotate CRANKSHAFT (5) until CAM (8) is at its highest position giving the biggest BREAKER POINT OPENING (9).
3. Loosen point adjusting SCREW (10) and set BREAKER POINT GAP CLEARANCE (9) to .020 inch. The tip of the COVER (7) is a .020 inch GAUGE.

RECHECK THE BREAKER POINT GAP CLEARANCE AFTER RETIMING THE ENGINE



CARBURETOR

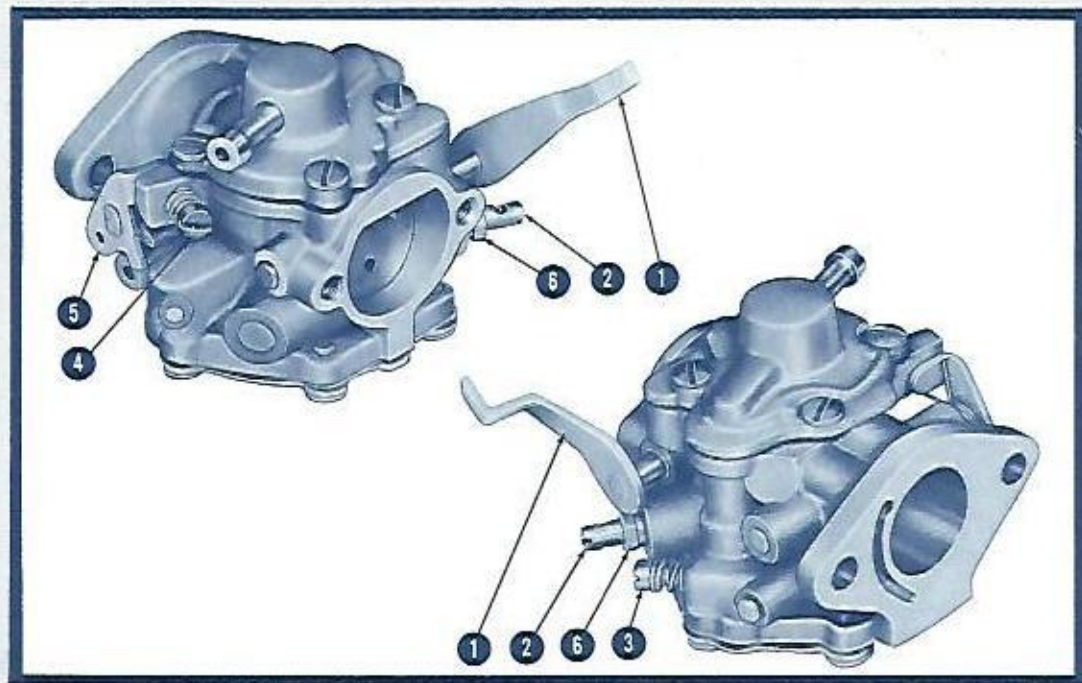
Proper setting for the CARBURETOR at free speed with guide and chain assembled is to adjust the high speed needle valve to the point where the engine obtains a full two cycling effect; then open the high speed needle valve until there is an interrupted two cycle - four cycle effect commonly called the "breaktone." By opening the high speed needle valve to get a "breaktone," the unit will then operate under load at maximum efficiency.

FIRST ADJUSTMENT

1. Carefully close, but do not jam, both the high speed adjustment needle (2) and the idle speed adjustment needle (3).
2. Open high speed adjustment needle (2) one and one-half ($1\frac{1}{2}$) turns.
3. Open idle speed adjustment needle (3) one turn.
4. Back throttle adjusting screw (4) off its contact with throttle shaft and lever assembly (5), then turn throttle adjusting screw (4) in a clockwise direction one full turn.

FINAL ADJUSTMENT

5. Start engine and allow it to warm up thoroughly.
6. After engine is warm, reset throttle adjusting screw (4) to permit clutch to disengage. Readjust idle speed adjustment needle (3) if necessary so that the chain will not turn on guide bar when engine is idling.
7. Squeeze throttle trigger until engine reaches maximum speed; then adjust high speed adjustment needle (2) until "breaktone" is obtained.
8. It may be necessary at this point to slightly enrich the mixture by opening the Low Speed Adjustment Screw (3) an additional $\frac{1}{8}$ turn to provide enough fuel for quick acceleration.
9. The high speed adjusting needle packing nut (6) should be tightened with $\frac{5}{16}$ " deep socket wrench.



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