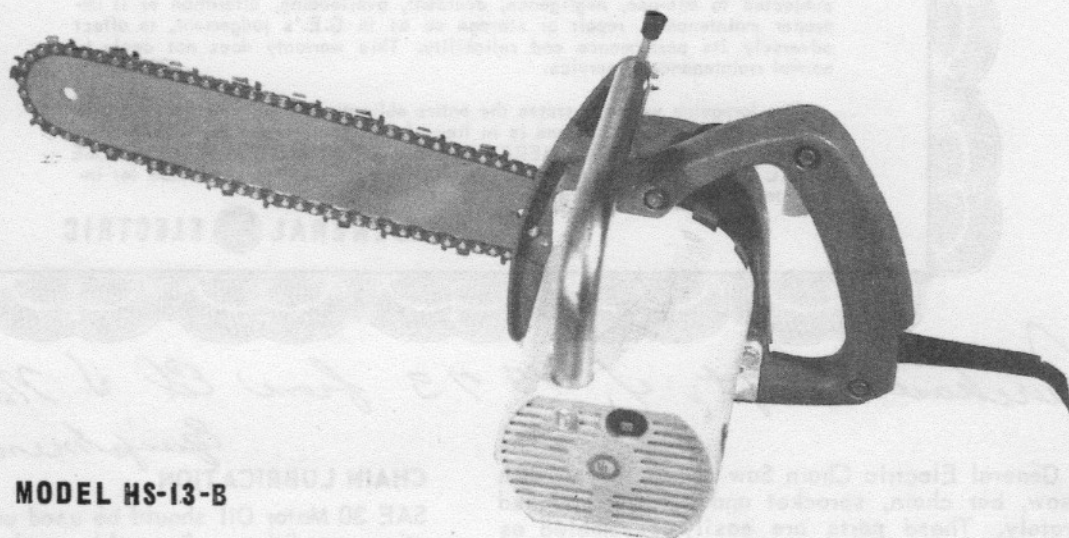




Electrak[®]

36 VOLT DC ELECTRIC CHAIN SAW



MODEL HS-13-B

HOW TO ORDER REPAIR PARTS

**ALL PARTS LISTED HEREIN MAY BE ORDERED
THROUGH GENERAL ELECTRIC CHAIN SAW SERVICE CENTER
SELLING PRICES WILL BE FURNISHED ON REQUEST
OR PARTS WILL BE SHIPPED AND BILLED AT
PREVAILING PRICES.**

**IF AND WHEN YOU NEED REPAIRS OR SERVICE
ALWAYS MENTION THE FOLLOWING INFORMATION
AS SHOWN IN THIS LIST.**

- 1. THE MODEL NUMBER - HS-13-B**
- 2. THE NAME OF ITEM - CHAIN SAW**
- 3. THE PART NUMBER -**
- 4. THE PART NAME -**

GENERAL  **ELECTRIC**

36 VOLT DC ELECTRIC CHAIN SAW

WARRANTY

For a period of one year from the date of original purchase, General Electric warrants that its Chain Saw will be free from defects in material and workmanship under normal use and service.

General Electric's obligation under this warranty is limited to repair or replacement (at its option) at its authorized chain saw Service Station of any part which examination discloses to G.E.'s satisfaction to be defective within said one year period and does not apply if the chain saw or any part thereof has been subjected to mis-use, negligence, accident, overloading, alteration or if improper maintenance, repair or storage so as in G.E.'s judgement, to affect adversely its performance and reliability. This warranty does not apply to normal maintenance or service.

The foregoing warranty states the entire obligation of General Electric with respect to said Chain Saw and is in lieu of all other warranties, expressed or implied. NO WARRANTY OF MERCHANTABILITY OR FITNESS FOR PURPOSE SHALL APPLY. In no event will General Electric Company be liable for incidental or consequential damages.

GENERAL  ELECTRIC

*Purchased Sept. 4, 1973 from Ed J. Nelson
Equipment Company*

Your General Electric Chain Saw comes to you with the saw, bar chain, sprocket and hardware packed separately. These parts are easily assembled as shown in the exploded view. (dwg. 32495).

TO ASSEMBLE

1. Place the sprocket, item 10 on the hub, item 11.
2. Install the chain, item 19, on the chain bar, item 18.
3. Place the chain on the sprocket with the chain bar over the studs, make certain that the pin on the adjusting nut, item 42, fits into the mating hole in the chain bar.
4. Install the flanged nuts, item 41, on the studs, item 34. TIGHTEN FINGER TIGHT.

ADJUSTING THE CHAIN TENSION

To avoid unnecessary loading of the saw motor, proper chain tension should always be maintained.

CAUTION: Always disconnect the electrical cord before adjusting the chain tension.

1. Turn the adjusting screw, item 44, clockwise, this will tighten the chain. Proper tension is applied when the chain has no slack below the guide bar, yet can be pulled around the guide bar easily by hand. Care should be exercised so as not to cut your hands on the chain saw's teeth.

2. When proper tension is obtained, tighten the two Hex. Nuts, item 41, securely.

NOTE: Always check the chain tension before cutting. If the chain appears loose during operation, allow the saw to cool for approximately 5 minutes before setting tension.

3. Install the chain guard, item 40, secure with the three screws shown, item 43.

CHAIN LUBRICATION

SAE 30 Motor Oil should be used under normal operating conditions, (in cold weather use a lighter grade oil).

Maintain a full supply of oil in the oil chamber at all times. During saw operation, push oil pumper frequently – at least once a minute – to insure proper lubrication of the chain track.

Failure to oil saw properly can produce excessive friction and heat – this reduces the life of the motor, gears, bar and chain.

OPERATING INSTRUCTIONS

There are a number of basic rules that must be followed to assure proper operation of your chain saw.

1. The saw must be operated on the DC voltage shown on the nameplate (top of motor housing).

Do not operate this saw on 115 or 230 volt line, or the motor will burn out.

2. When operating the chain must be at full speed at all times. If chain slows or stops, release motor switch, and withdraw the saw from the cut before pressing the motor switch.

3. Keep chain sharp at all times – a dull chain saw will overload the motor. Do not run chain in sand, dirt, stone or against metal. Avoid running saw close to the ground – cooling fan may draw dirt into the motor.

4. The use of extension cords will result in voltage drops that could possibly damage the motor. Use only the cord supplied with this chain saw.

BREAKING IN A NEW CHAIN SAW

1. Soak the chain and bar with SAE-30 oil – the rust inhibitor on a new saw chain is not a lubricant.

2. Make certain of the proper chain tension.

3. Allow chain and motor to warm up by running 3 to 5 minutes. without cutting.
4. Make a few test cuts – stop motor, check chain tension and oil thoroughly after each cut.
5. Check the chain tension carefully during the first 30 minutes of cutting. Chain will stretch rapidly for the first half hour of operation.

MAINTENANCE

To insure the proper operation of your chain saw, follow these maintenance steps carefully;

AVOID MOTOR OVERLOAD – This is caused by –

1. Starting a saw pinched in a cut.
2. Applying too much pressure causing the speed of the blade to slow excessively.
3. Dull or improperly sharpened chains.

LUBRICATION

Every 6 months, the grease in the gear box should be removed, the gear box washed with kerosene and repacked using –

Lubriplate No. 3 10, Light Density.

MOTOR BRUSHES

The motor brushes should be replaced when they are worn down to approximately 5/8" length. Should they wear to a length of less than 5/8 inch, an automatic stop, built into the saw will prevent the brush from touching the armature. If the saw motor should stop or operate irratically, check the brushes immediately by removing the rear screen. Replace if they are 5/8" or shorter in length.

ARMATURE AND COMMUTATOR

When these become dirty, clean with 3/0, or finer, sandpaper. NEVER USE EMERY PAPER. A badly grooved commutator must be turned in a lathe or returned for service repair.

AIR CIRCULATION

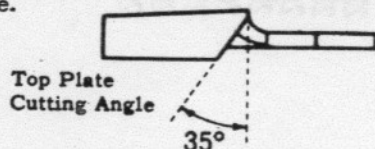
Your saw should be kept free from dirt and dust deposits so that air circulation will properly cool the motor, when the saw is used.

FILING INSTRUCTIONS

Available as an optional accessory are the following items;

Depth Gauge – 0.025	Part No. 32723*
Filing Guide W/File	Part No. 32721*
1/8" Dia. Rd. File	Part No. 32722*

Inspect chain daily for sharpness, when saw is in use. If chain needs sharpening, use the following procedure.



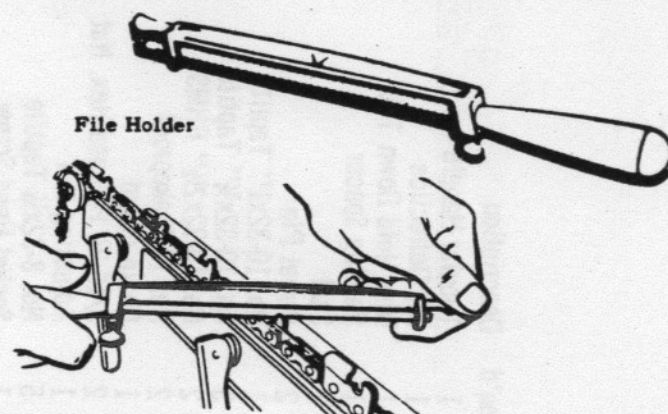
1. Use 1/8" round straight chain saw file only. (DO NOT USE A FLAT FILE).
Part No. 32722.*

2. Hold file level with cutter plate (horizontal) at a 35o angle to the chain.

3. Apply a long firm, even pressure on the forward stroke. Keep file up against the cutter plate, with 1/4 of the file diameter above the top of the cutter plate. Avoid low under cutting.

WITH FILE HOLDER

Order file holder – Part No. 32721*



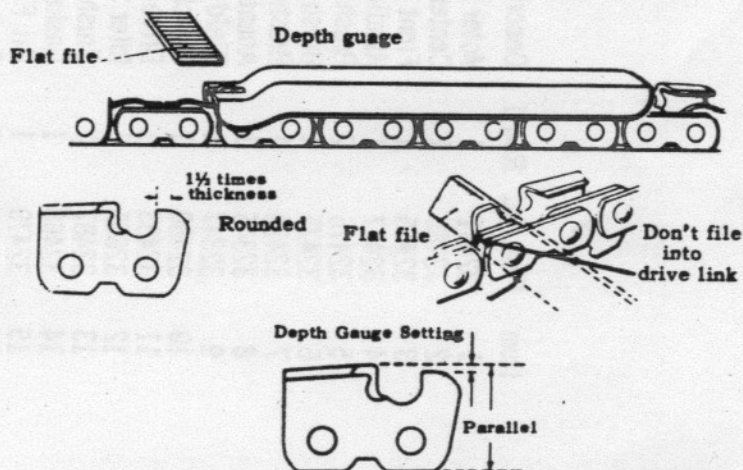
Hold file like this

1. Hold file level by pressing flat side of file holder firmly against the top of the cutter.
2. Make certain that the notched 35° angle guides are lined up on the file holder parallel to the chain. With these notches in the parallel position, the recommended 35° angle is obtained.
3. Apply a firm pressure on the foreward stroke. Rotate the file occasionally for best results.

DEPTH GAUGE JOINTER

Order Depth Gauge Jointer–Part No. 32723*

All Depth Gauges on chain must be at a uniform height of 0.20" to 0.25". Too much height prevents full tooth bite – decreases cutting efficiency. Too low a setting causes saw to grab. A depth gauge jointer permits accurate and correct depth clearance.



Place gauge tool so that it rests on top of at least two cutters and so that the top of the depth gauge projects up through the filing notch.

Using a flat file, file off all chain depth gauge projecting above filing notches. (Prongs will not be damaged – they are of hardened steel.

*Available through Chain Saw Service Centers

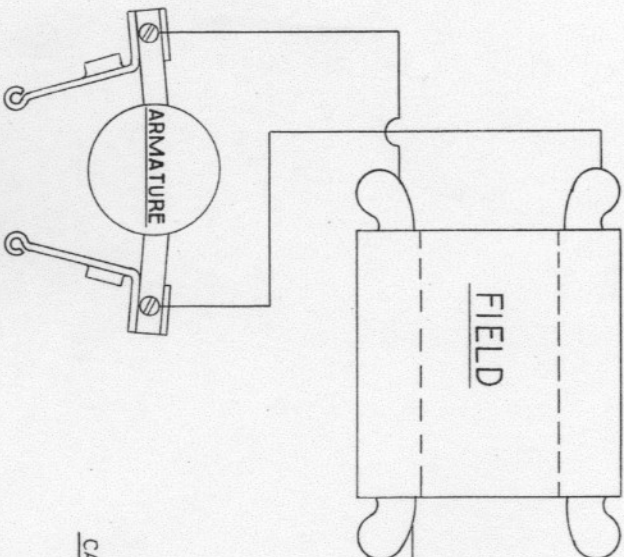
Item	Part No.	Req'd	Description
30	26277	1	Tubular Handle
31	26796	1	Air Deflection
32	26849	1	Wire Hold Down Tab
33	27139	1	Bearing Spacer
34	25751	2	Stud
35	22104	2	Dowel Pin
36	24611	1	No. 10-32x1" Tapite
37	24679	3	No. 10-32x3/4" Tapite
38	22151	2	No. 10-32x2 1/2" RHMS
39	22769	2	No. 10 Shakeproof
40	32500	1	Chain Guard
41	32499	2	5/16-24 Flanged Hex. Nut
42	32486	1	Adjusting Nut
43	26902	5	No. 8-32x1/4 Tapite
44	28409	1	Socket Head Screw
45	27117	3	1/4-2" Tapite
46	24489	1	No. 10-32x3/8" Tapite
47	32482	1	Rear Screen
*48	27071	2	Special Washer
49	33292	2	Brush Shim
*50	34919	2	Drive Rim Retainer

Not
Shown

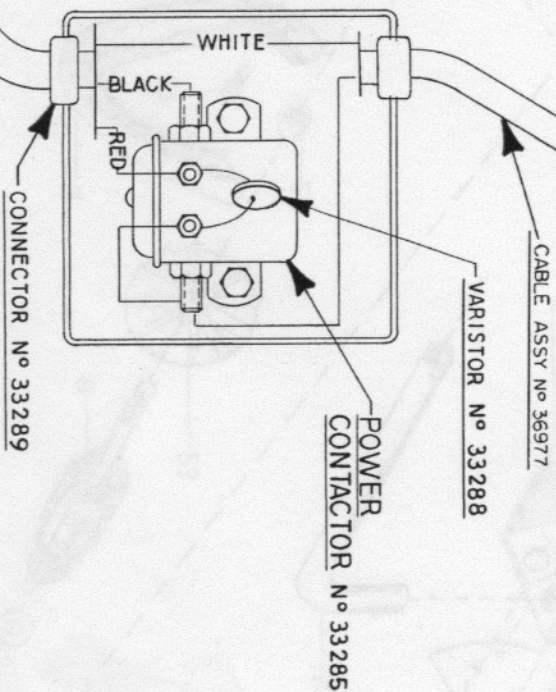
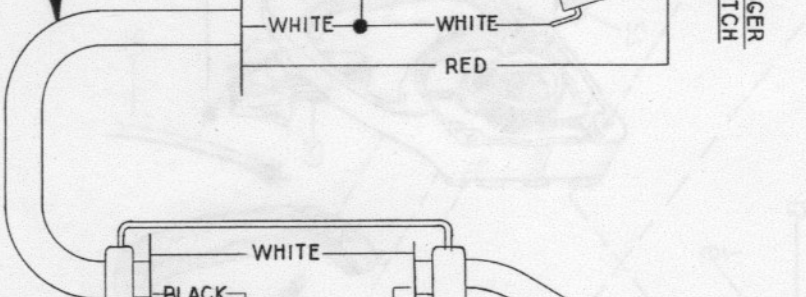
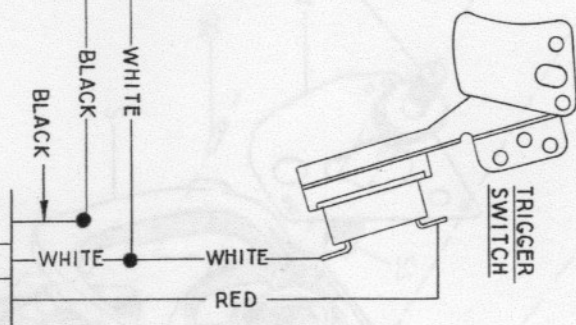
*These pieces are held in place by nut 41.
Item 50 should be positioned on Item 18 so
that it extends over and covers Item 10.

Item	Part No.	Req'd	Description
1	32461	1	Motor Housing
2	32463	1	Center Section
3	32465	1	Front Housing
4	32467	1	Handle
5	32476	2	Brush
6	32475	1	Brush Holder R.H.
7	32474	1	Brush Holder L.H.
8	32346	1	Armature
9	32347	1	Field Assembly
10	32480	1	Sprocket
11	32483	1	Drive Hup
12	32655	1	Idler Shaft Assembly
13	32487	2	Brush Holder Spring
14	32468	1	Gasket
15	32479	1	Oil Fill Cap
16	32491	2	Snap Ring
17	22774	2	No. 8 Sheet Metal Sc.
18	32477	1	Chain Bar - 13"
19	32478	1	Chain - 13"
20	36975	1	Cord Assembly
21	26713	2	No. 6-32x1-1/8 Brass Sc.
22	23636	2	No. 6 Brass-Shakeproof
23	25174	1	Fan
24	25177	1	Bearing
25	32493	1	Relay & Box Assy (not shown)
26	25229	1	Bronze Bearing
27	25230	1	Bronze Bearing
28	25231	1	Bronze Bearing
29	25238	1	Switch

BRUSH HOLDERS (VIEWED
FROM REAR OF SAW)



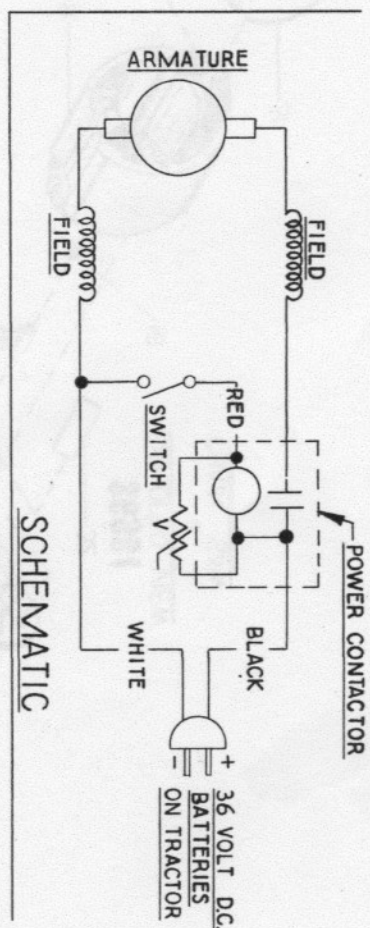
CABLE ASSY. No 36975

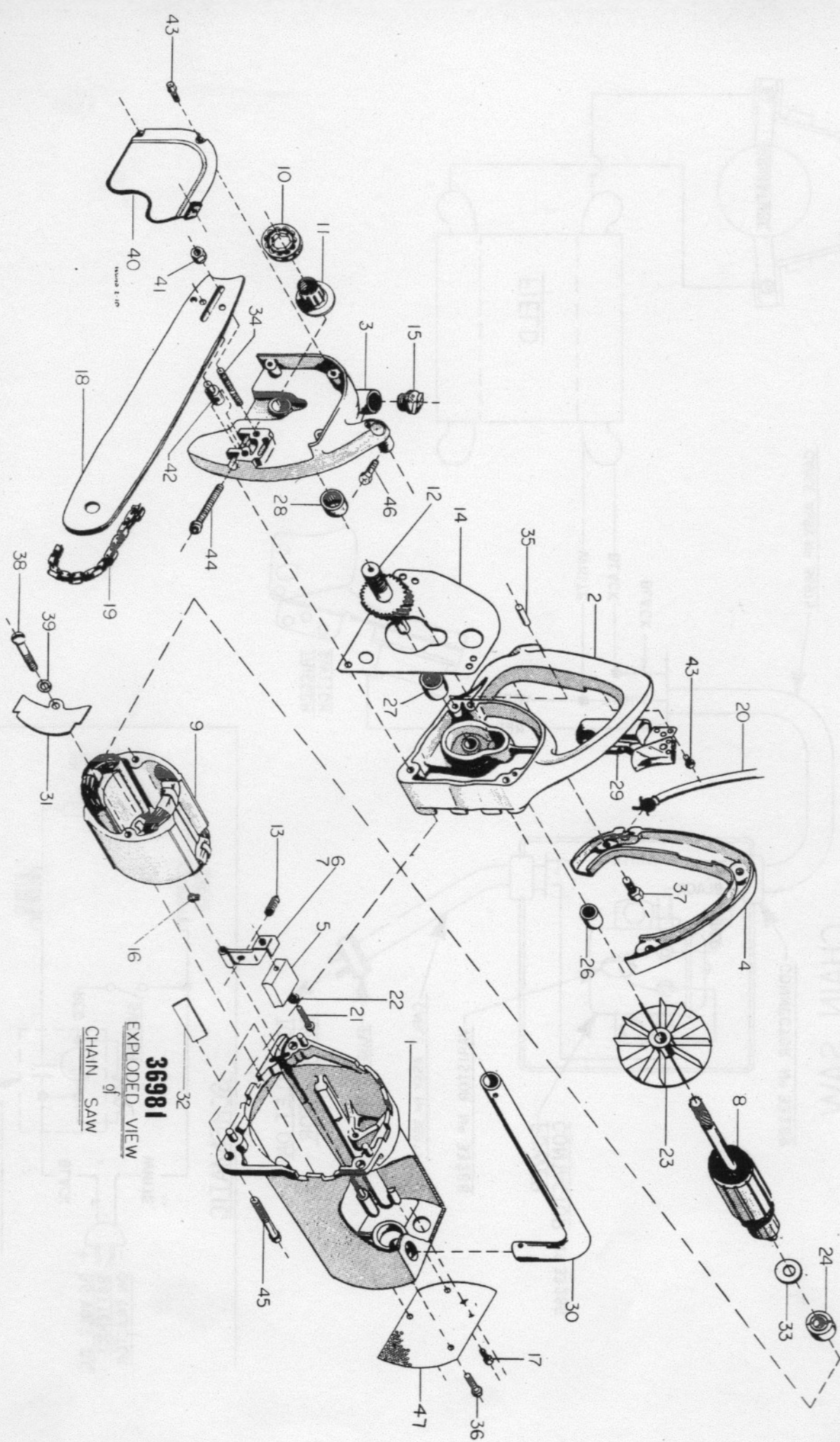


TO OUTLET ON
36 V. TRACTOR

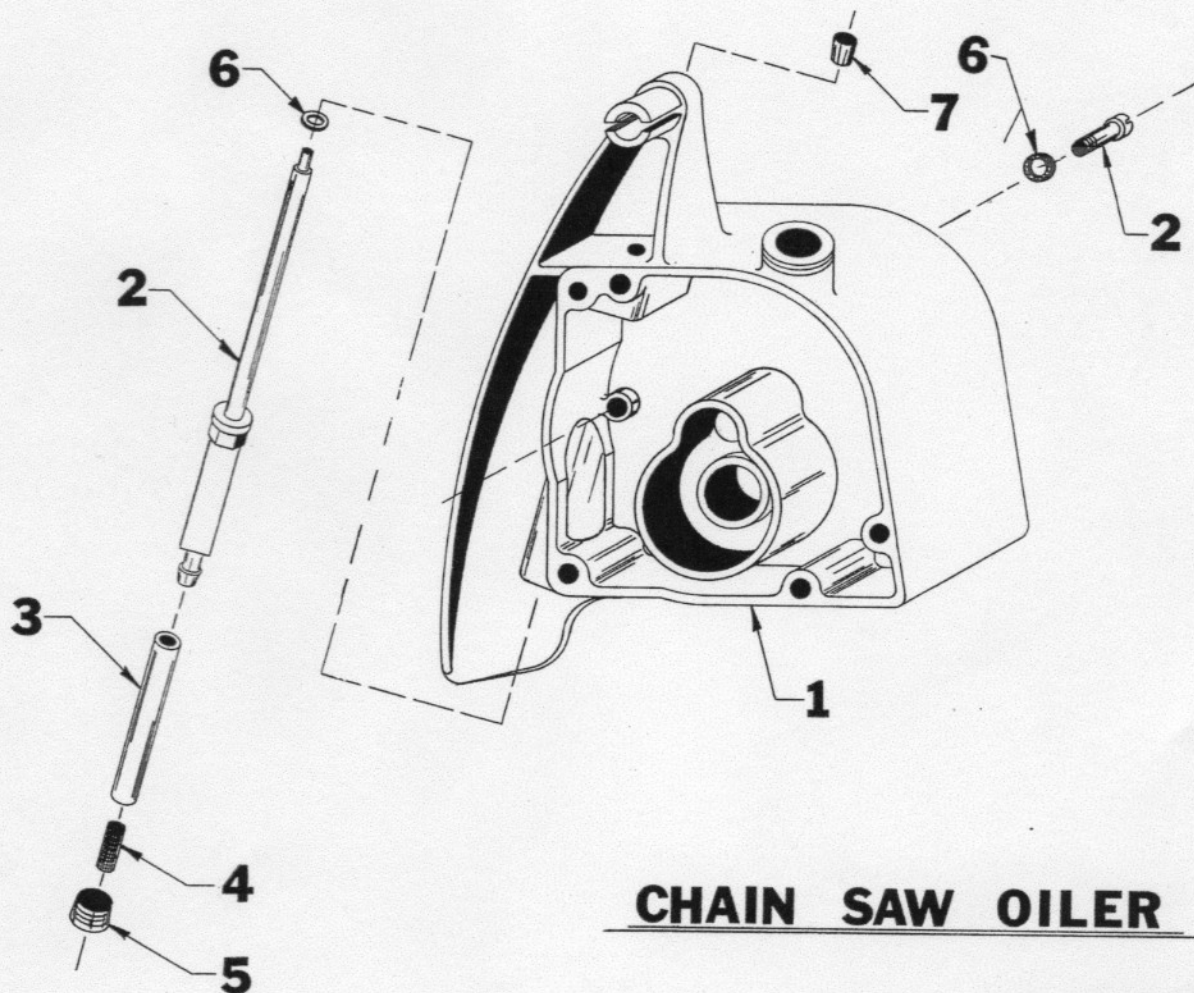
CHAIN SAW WIRING DIAGRAM

36979





Item	Part No.	Req'd	Description
1			Front Gear Housing Assembly
2	32652	1	Oil Pump Assembly
3	28716	1	Oil Sump Hose
4	25570	1	Soil Screen
5	29174	1	3/8 N.P.T. Pipe Plug
6	28715	2	"O" Ring
7	26603	1	Knob



CHAIN SAW OILER

32497