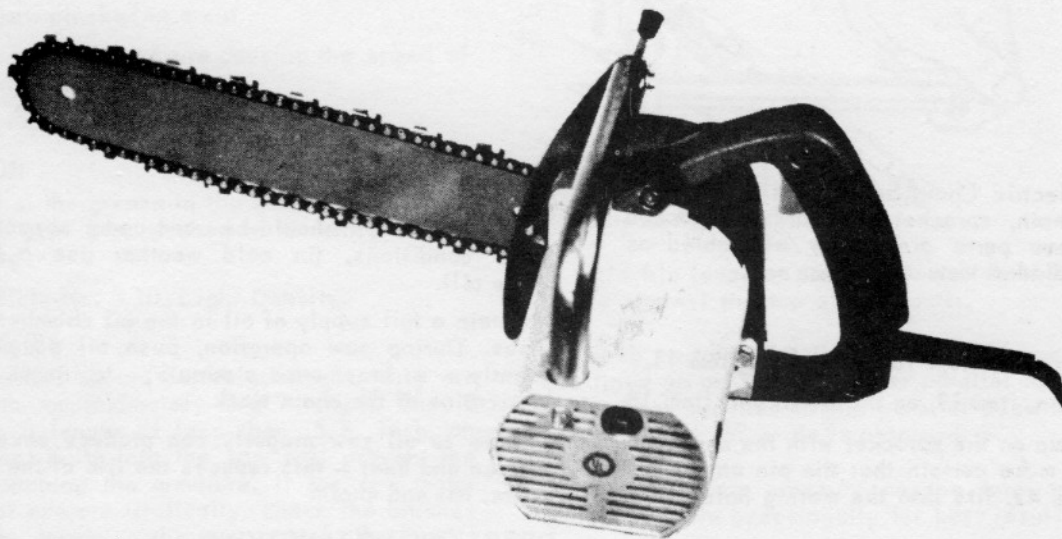


ELECTRIC CHAIN SAW INSTRUCTIONS

PART NO. 120644



Your 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 on the back cover.

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 irrationally, check the brushes immediately by removing the rear screen. Replace if they are 5/8" or shorter in length.

ARMATURE AND COMMUTATOR

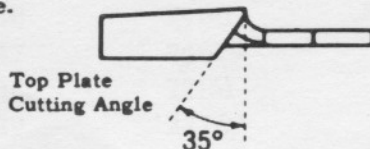
When these become dirty, clean with 3/0, or finer, sandpaper. NEVER USE EMERY PAPER. A badly grooved commutator must be turned in a lathe or returned for service repair.

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

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

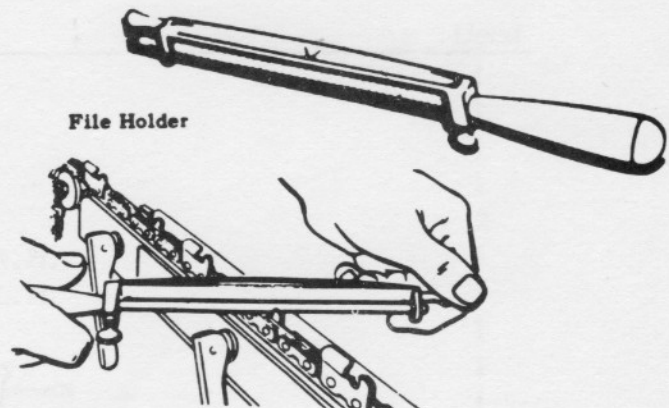


1. Use 1/8" round straight chain saw file only. (DO NOT USE A FLAT FILE).
2. Hold file level with cutter plate (horizontal) at a 35° angle to the chain.

*Available through Chain Saw Service Centers

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

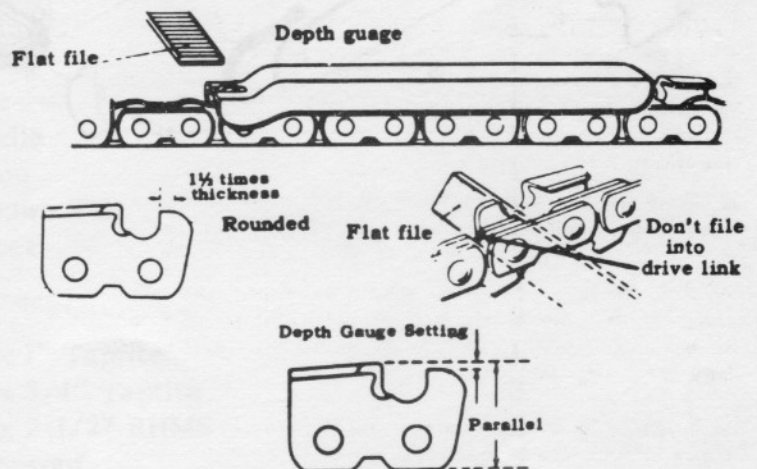


Hold file like this

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 forward stroke. Rotate the file occasionally for best results.

DEPTH GAUGE JOINTER

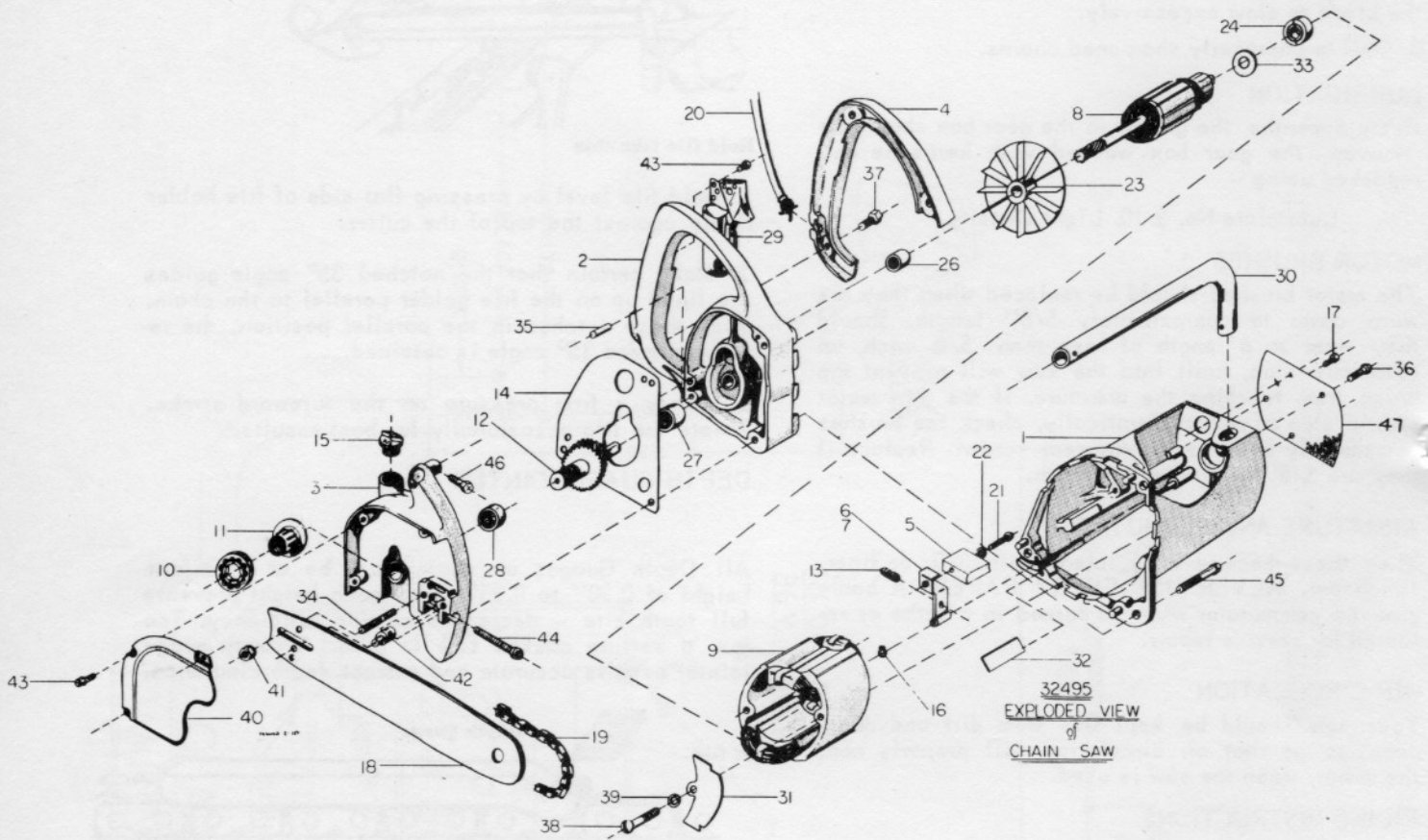
All Depth Gauges on chain must be at a uniform height of 0.20" to 0.25". Too much height prevents full tooth bite – decreases cutting efficiency. Too low a setting causes saw to grab. A depth gauge jointer permits accurate and correct depth clearance.



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.)

Note: See your dealer for special sharpening tools and gauges.



32495
 EXPLODED VIEW
 of
 CHAIN SAW

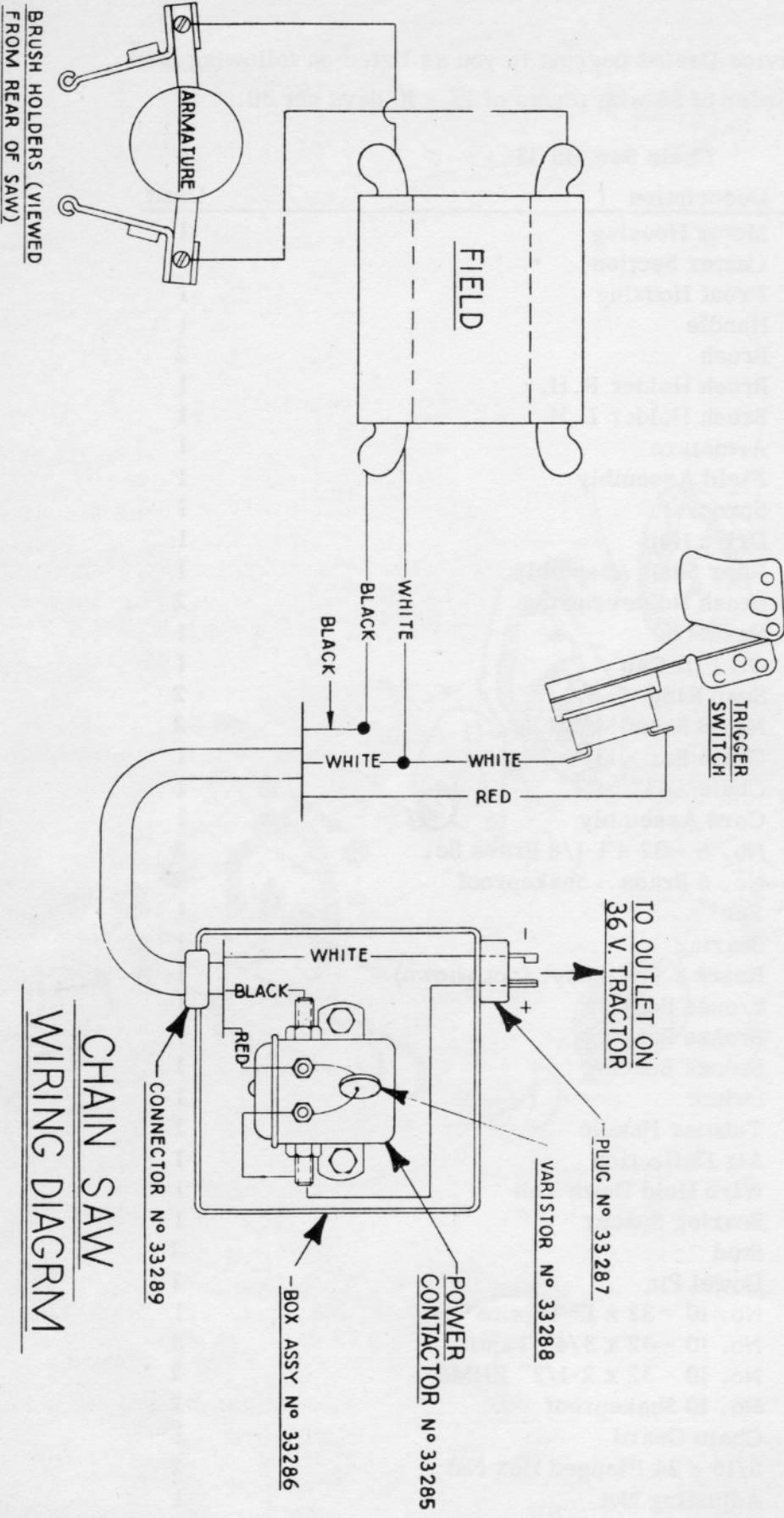
When ordering parts, always specify the quantity, model number, part number, and description.

Send orders to the Service Dealer nearest to you as listed on following page.

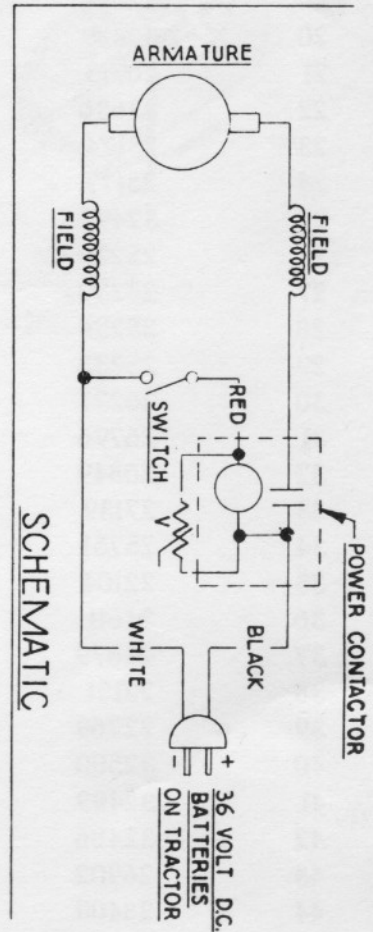
There is a minimum order of \$5 with terms of 1% - 10 days net 30.

Chain Saw HS-13

Key	Part No.	Description	Used
1	32461	Motor Housing	1
2	32463	Center Section	1
3	32465	Front Housing	1
4	32467	Handle	1
5	32476	Brush	2
6	32475	Brush Holder R.H.	1
7	32474	Brush Holder L.H.	1
8	32346	Armature	1
9	32347	Field Assembly	1
10	32480	Sprocket	1
11	32483	Drive Hup	1
12	32655	Idler Shaft Assembly	1
13	32487	Brush Holder Spring	2
14	32468	Gasket	1
15	32479	Oil Fill Cap	1
16	32491	Snap Ring	2
17	22774	No. 8 Sheet Metal Sc.	2
18	32477	Chain Bar - 13"	1
19	32478	Chain - 13"	1
20	32489	Cord Assembly	1
21	26713	No. 6 - 32 x 1-1/8 Brass Sc.	2
22	23636	No. 6 Brass - Shakeproof	2
23	25174	Fan	1
24	25177	Bearing	1
25	32493	Relay & Box Assy. (not shown)	1
26	25229	Bronze Bearing	1
27	25230	Bronze Bearing	1
28	25231	Bronze Bearing	1
29	25238	Switch	1
30	26277	Tubular Handle	1
31	26796	Air Deflection	1
32	26849	Wire Hold Down Tab	1
33	27139	Bearing Spacer	1
34	25751	Stud	2
35	22104	Dowel Pin	2
36	24611	No. 10 - 32 x 1" Taptite	1
37	24679	No. 10 - 32 x 3/4" Taptite	3
38	22151	No. 10 - 32 x 2-1/2" RHMS	2
39	22769	No. 10 Shakeproof	2
40	32500	Chain Guard	1
41	32499	5/16 - 24 Flanged Hex Nut	2
42	32486	Adjusting Nut	1
43	26902	No. 8 - 32 x 1/4 Taptite	5
44	28409	Socket Head Screw	1
45	27117	1/4 - 2" Taptite	3
46	24489	No. 10 - 32 x 3/8" Taptite	1
47	32482	Rear Screen	1



**CHAIN SAW
WIRING DIAGRAM**



AUTHORIZED CHAIN SAW SERVICE DEALERS

D & S Repair Service
20 South Dove Street
Alexandria, Virginia 22314
Phone 703/683-0009
Contact A. Saulnier

United Automotive
229 Second Ave. N.
Twin Falls, Idaho 83301
Phone 208/733-2679
Contact Reid Goold

Lakeside Repair Shop
4112 W. McCollum Lake Rd.
McHenry, Illinois 60050
Phone 815/385-3131
Contact Bob Peterson

Dole Refrigerating Service Co.
5910 N. Pulaski Rd.
Chicago, Illinois 60646
Phone 312/478-3448
Contact Larry Penar

VBT Supply Co.
1729 Country Club Place
Indianapolis, Indiana 46224
Phone 317/248-1441
Contact Bob Schneck

Gruel Bros. Sales & Service
1601 N. Main St.
Crown Point, Indiana 46307
Phone 219/663-0076
Contact

Delmar Supply Co.
5826 Industrial Rd.
Ft. Wayne, Indiana 46805
Phone 219/484-9625
Contact Denny Heller

Lud's Motor Sales
700 S. Clark St.
Gary, Indiana 46406
Phone 219/949-3456
Contact

Frank's Piston Service
120-124 E. 1st St.
Marion, Indiana 46952
Phone 317/664-2341
Contact

Whites Service
1104 S. Walnut
Muncie, Indiana 47302
Phone 317/288-5525
Contact Charles White

Harmon Maintenance Service
2201 Taylor St.
Ft. Wayne, Indiana 46804
Phone 219/432-5713
Contact Ron or Paul Harmon

Erik's Chevrolet, Inc.
1800 So. By-Pass 31
Kokomo, Indiana 46900
Phone
Contact Bill Cpeland

AAA Equipment
P. O. Box 68132
Indianapolis, Indiana 46268
Phone 317/293-8500
Contact Bob

Greenwood RV Service
P. O. Box 272
Greenwood, Indiana 46142
Phone 317/888-7294
Contact Harry

Wabash Auto Parts
30 N. 7th St.
Vincennes, Indiana 47591
Phone 812/882-9450
Contact Jerry

Glenn Electric
9 N. 1st St.
La Fayette, Indiana 47905
Phone 317/742-1878
Contact Kenneth Glenn

McKee Garage
Box 146 Hwy. 4
Hudson, Indiana 46747
Phone 219/587-3322
Contact Bob McKee

Iowa Automotive Electric Service
215 East Walnut St.
Des Moines, Iowa
Phone 515/288-7264
Contact Dennis Hammond

Fleet Electrical Service
334 Southwest Cut Off
Worcester, Massachusetts 01730
Phone 617/755-8666
Contact Don Anderson

Northern Automotive Co.
1401 W. Broadway
Minneapolis, Minnesota 55401
Phone 612/522-6656
Contact Larry Stack

Guarantee Electrical Co.
4161 Gravois Street
St. Louis, Missouri 63116
Phone 314/664-4910
Contact John Steffenow

R. N. Johnson, Inc.
Small Machines Division
Walpole, New Hampshire 03608
Phone 603/756-3321
Contact James P. Johnson

Fairfield Power Company
834 Fairfield
Kenilworth, New Jersey 07033
Phone 201/241-4099
Contact Jim Richards

Bloy Equipment
532 Bloy Street
Hillside, New Jersey 07205
Phone 201/688-0027
Contact

Generfur Power Company
331 Waverly Ave.
Mamaroneck, New York 10543
Phone 914/698-8325
Contact Stanley Kolt

Gibson Electric Company
309 Harrison Street
Reidsville, North Carolina 27320
Phone 919/349-6465
Contact

Kay-Dee Electric Motor Repair
3407 St. Clari Avenue
Cleveland, Ohio 44114
Phone 216/881-2565
Contact

Generac Corp.
920 Pembroke Rd.
Bethlehem, Pennsylvania 18015
Phone 215/691-5361
Contact Chuck Lawton

Havis and Shields Automotive
10 North York Road
Willow Grove, Pennsylvania 19090
Phone 215/659-0108
Contact Bud Gardner

Page Company
1310 4th Street
Catasauqua, Pennsylvania
Phone 215/264-9129
Contact George Moats

Dallas Avenue Auto
621 N. Dallas Ave.
Pittsburgh, Pennsylvania 15208
Phone 412/441-4144
Contact Raymond Winter

Babine Elec. Service, Inc.
315 Jefferson Blvd.
Warwick, Rhode Island 02888
Phone 401/738-0333
Contact Edward Babine

D & S Repair Service
20 South Dove Street
Alexandria, Virginia 22314
Phone 703/683-0009
Contact Andy Saulnier

AFI Direct Service
7515 South 10th Street
Oak Creek, Wisconsin 53154
Phone 414/764-1160
Contact Dave Gralewicz

Automotive Electric Services
1440 Martin Street
Madison, Wisconsin 53703
Phone 608/256-7771
Contact

Fred Hogle and Company LTD
3445 Cote Vertu Rd.
Montreal 382, Quebec
Phone 514/336-4330
Contact Ian Ross or Andre Courte