

# ASSEMBLY, OPERATING INSTRUCTIONS AND PARTS LIST FOR SEARS

## 12 VOLT STARTER GENERATOR KIT CONVERSION KIT FOR CUSTOM TRACTOR

### MODEL NUMBER 917.250260

The above number is the Model Number of your 12 Volt Starter Generator. Always mention this Model Number when communicating with us regarding the 12 Volt Starter Generator 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 IN THIS LIST:

1. The PART NUMBER
2. The PART NAME
3. The MODEL NUMBER-917.250260
4. The NAME of Item-Starter Kit

### COAST TO COAST NATION-WIDE

#### SERVICE FROM SEARS

Sears, Roebuck and Co. and Simpsons-Sears Limited in Canada back up your investment with quick, expert mechanical service and genuine replacement parts.

If and when you need repairs or service, call on us to protect your investment in this fine piece of equipment.



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

## SETTING UP INSTRUCTIONS

Setting-Up and Operating Instructions should be studied very closely before beginning to assemble your Starter Generator. A number at the beginning of a paragraph in the following Instructions refers to an arrow in the adjoining figure except when otherwise stated. When R.H. (Right Hand), and L.H. (Left Hand), are used, it should be understood to mean from a position behind and facing the tractor (or direction of travel).

1. Lift hood, close fuel shut off valve located under left front end of tank. Refer to Fig. A. Remove belt guard from R.H. front side of tractor.
2. Remove fuel line hose from fuel shut off valve under tank and slip clamp from end of fuel line.
3. Remove the five bolts holding fan housing and recoil starter to engine. Three on top of engine and two on each side of fan housing. Remove fan housing and starter from engine sliding fuel line from housing.
4. Attach shortest of three wires (3761H field wire) found in plastic bag to field terminal (terminal marked F) of voltage regulator. NOTE: Open end terminals are all to regulator.
5. Attach longest wire (5115H battery wire) to battery terminal (terminal marked Bat) of voltage regulator.
6. Attach remaining wire (3759H ground to generator wire) to ground terminal on underside of regulator as shown.
7. Assemble motor generator to tractor with  $5/16 \times 9$  hex machine bolt, 3 spacers and huglock nut. Note shortest spacer in between pulley end of generator and L.H. frame, longest spacer between frame and other end of generator. Medium spacer is between generator and idler bracket and support. Secure with huglock nut. Be sure that nut is not tightened too tightly.
8. Remove bolt holding L.H. grill brace to tractor frame and assemble adjusting strap (8) between left hand grill brace and frame, with  $5/16 - 18 \times 1$  hex hd. machine screw w/sems lockwasher in place of bolt removed. Tighten bolt securely. Assemble adjusting strap (8) to generator (7) with  $5/16 - 18 \times 3/4$  hex bolt (1),  $5/16$  lockwasher, and flat washer as shown. NOTE: Bolts, lockwasher, and flat washer furnished in bag of parts.
9. Bolt voltage regulator to inside of L.H. tractor frame as shown using two truss head machine screws and two keps nuts provided. Note: Terminals on regulator should be up and assemble other end of ground wire assembled in step 8 to front mounting screw of regulator.

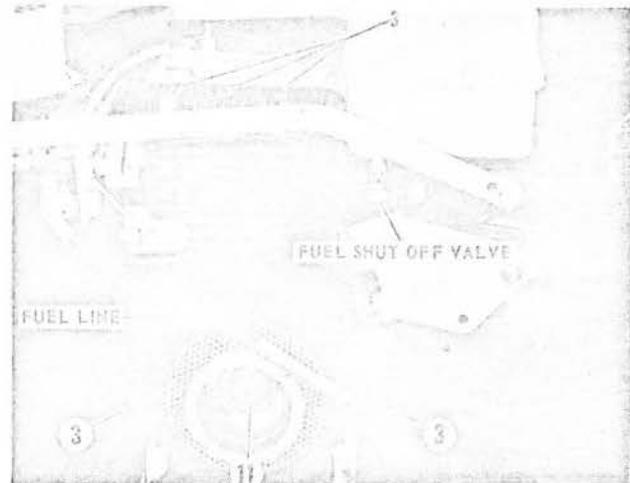


FIG. A

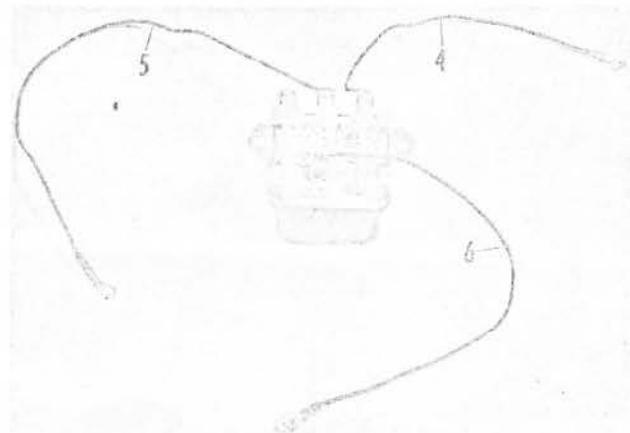


FIG. B



FIG. C

## SETTING-UP CONTINUED

For Models 917.99501 and 917.99520 only.  
See Fig. D.

1. Remove old key switch & detach shorting wire and from switch and assemble new key starter switch found in carton as shown. Secure to dash with nut found on switch. Discard push button switch and two adapters and battery support, found in carton.
2. Attach formed end of battery cable and battery wire from regulator assembled in step 5 above to upper terminal of key switch. Use #10-32 x 3/8 screw with lock washer provided.
3. Assemble shorting wire removed from old switch to center terminal of key switch. Use screw removed from old switch.
4. Assemble other battery cable, formed end to lower terminal of key switch. Attach other end to A terminal (front) of motor generator. At the same time connect 3759H ground wire from regulator *to B terminal* (see step 6) tighten nut securely.

FOR MODEL 917.9950  
See Figure E

1. Bolt push button starter to dash as shown with two 1/4 x 3/8 hex Hd. machine screws and keps nuts provided. Tighten nuts securely. Discard key switch provided.
2. Assemble battery cable adapter plates 6403H to both terminals of switch. Assemble 1 battery cable (formed end) and wire from battery terminal of voltage regulator see (step 5) to left hand adapter plate with #10-32 x 3/8 screws lockwashers and nuts provided.
3. Assemble other battery cable to R.H. adapter plate with other #10-32 x 3/8 screw lockwasher & nut provided. Attach other end of cable to A terminal (front) of motor generator. At the same time attach 3759H ground wire from regulator (see step 6) tighten nut securely.

FOR ALL MODELS

10. Attach 3761H field wire to rear or F terminal of motor generator. Tighten nut securely.
11. Remove nut and washer holding recoil starter cup to flywheel, and remove starter cup. Fig. A.
12. Assemble new fan housing to engine. Replace 5 bolts removed in step 3. Tighten bolts securely. Retighten remaining cylinder head bolts securely. Fig. C. NOTE: leave lower front housing bolt loose.
13. Assemble new pulley furnished to engine with washer and nut removed in step 11. Tighten nut securely. Fig. C.
14. Assemble screen to pulley with the 3 screws and washers provided. Fig. C

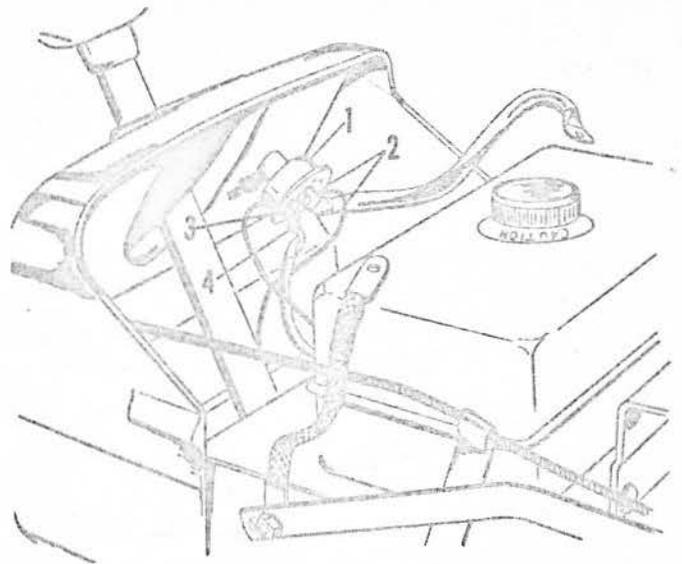


FIG. D

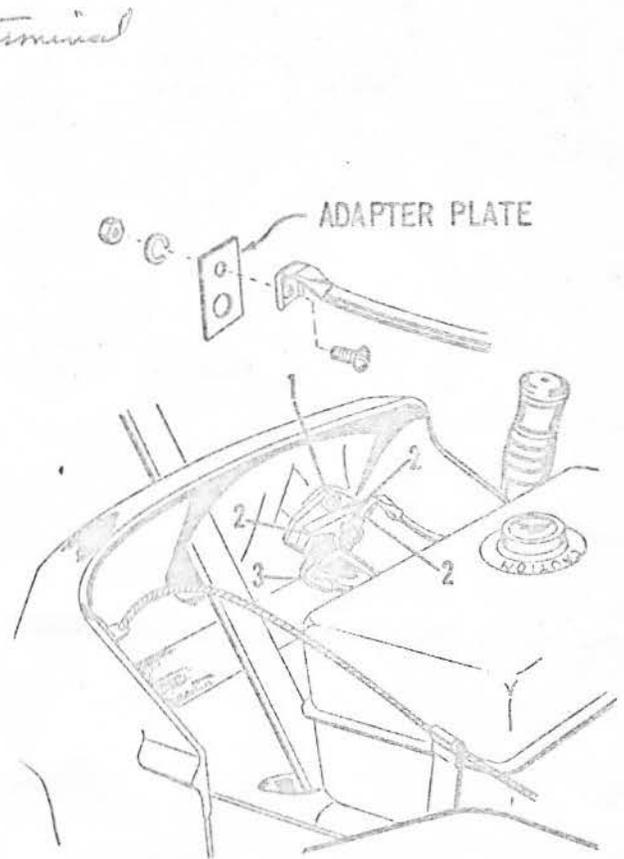


FIG. E

## SETTING-UP CONTINUED

- Place belt over engine and motor generator pulleys as shown. Push generator back to adjust belt. Belt should be just tight enough to prevent slipping. Tighten bolt securely.

See Illustration 1, Fig. C.

- Bolt belt guard to housing bracket using two  $\frac{1}{4} \times \frac{1}{2}$  bolts provided. Slide front bracket under bolt left loose in step 12 above. NOTE: Fine thread bolt is to top of belt guard bracket.
- Slip fuel line through housing. Install clip and install line on fuel shut off valve. Open shut off valve.
- Bolt battery support to frame as shown using four  $\frac{5}{16} - 18$  UNC  $\times \frac{5}{8}$  bolts & nuts provided. The above battery support is used for 917.9950 tractor only. For all other model tractors discard battery support. NOTE: Attach ground strap to front R.H. bolt in frame as shown. Clean around bolt so that a good ground is made, and place external lockwasher between ground strap & frame. Tighten bolt securely.

- Lift cowl and install battery in battery box so that (+) positive and (-) negative terminals are to front of tractor. Secure battery to battery support with two battery bolts (A), battery, clamp (B), washers, and wing nuts.
- Connect starter switch cable (covered cable) to (+) positive terminal. Tighten bolt securely. Assemble terminal cover (C) over positive (+) terminal at battery.
- Connect ground strap to (-) negative terminal. Tighten bolt securely.

**CAUTION:** When fastening cables to battery, keep cables even with or lower than top of battery terminal. If cable is too high, it can short cowl. Replace belt guard on R.H. front side of tractor.



FIG. F

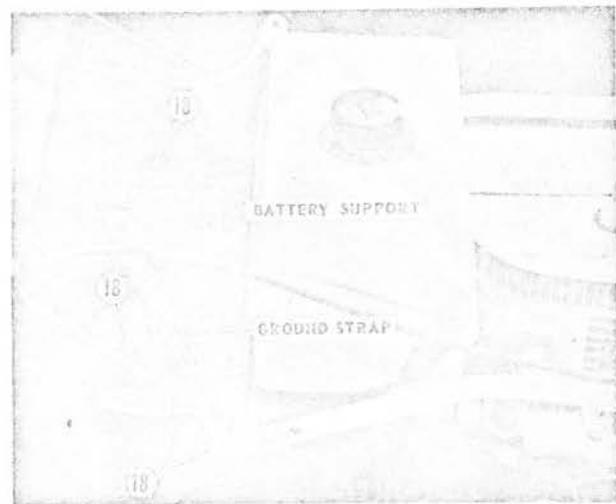


FIG. G

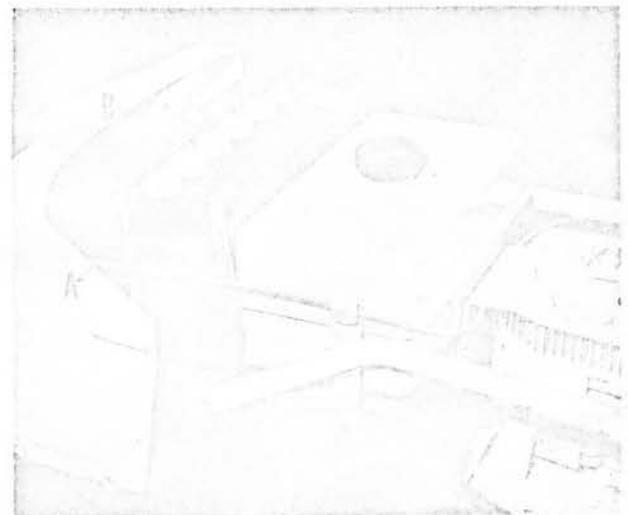


FIG. H

## MAINTENANCE AND SERVICE

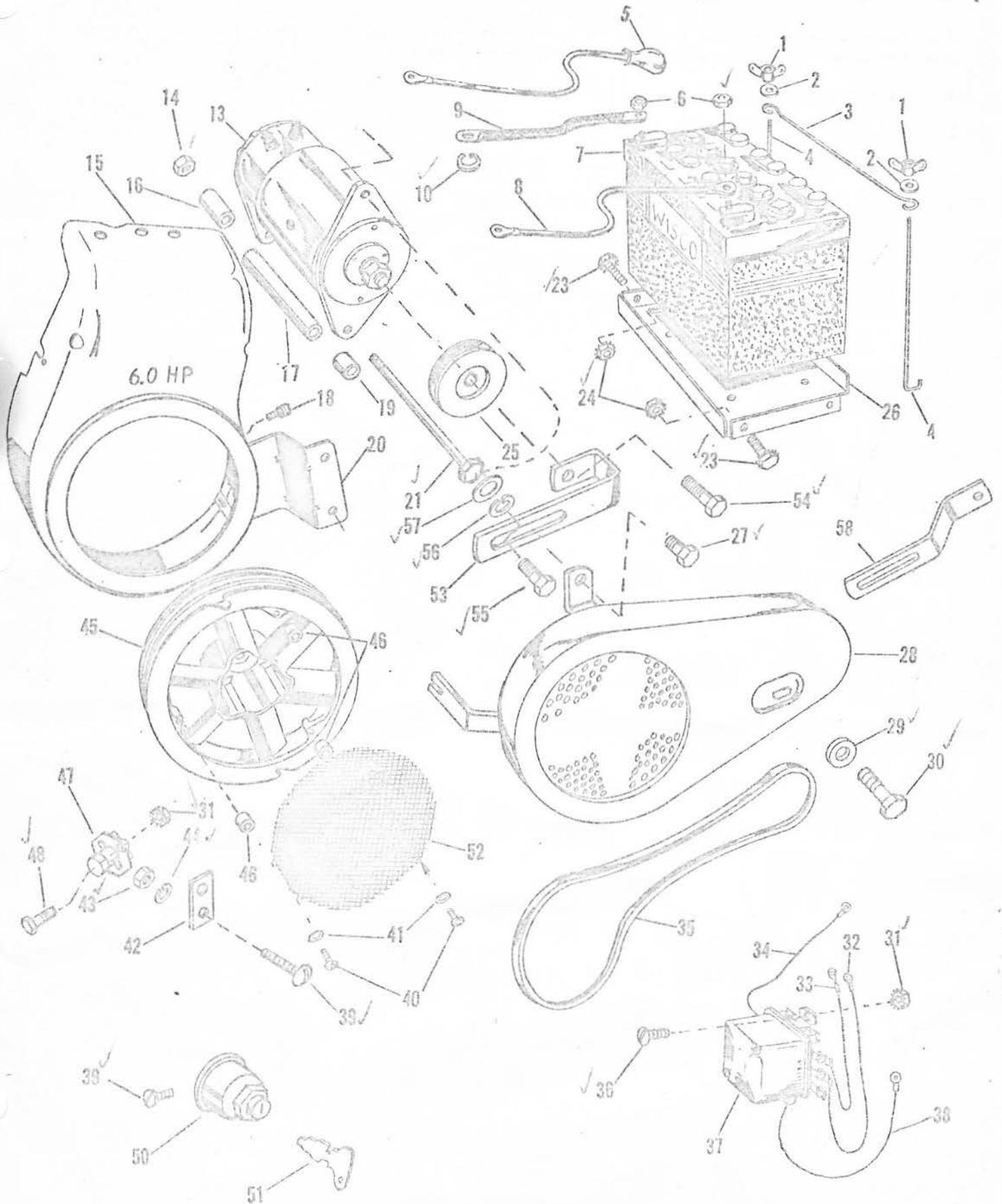
### CARE OF BATTERY

This starter is also a generator, therefore, it is not necessary to charge the battery unless tractor is operated at short periods of time. We suggest a trickle charger if extra charging is necessary.

1. Keep connections tight.
2. Keep terminals free from corrosion, Wash terminals with soda and water to remove corrosion.
3. Keep water level up in battery cells. Use distilled water.
4. Keep battery at full charge during winter to prevent freezing. Store battery in cool place prevent freezing in winter if tractor is not to be used.
5. Keep starter belt just tight enough to prevent slipping.
6. DO NOT run starter motor for more than thirty seconds at a time. This prevents starter from overheating.

SEARS 12 VOLT ELECTRIC STARTER GENERATOR KIT

MODEL NUMBER 917.250260



another free manual from [www.searstractormanuals.com](http://www.searstractormanuals.com)

## SEARS 12 VOLT ELECTRIC STARTER GENERATOR KIT

MODEL NUMBER 917. 250260

KEY NO.	PART NO.	DESCRIPTION	NO. REQ'D	KEY NO.	PART NO.	DESCRIPTION	NO. REQ'D
1	3748M	Wing Nut	2	✓29	120392	Washer 9/32 x 5/8 x 16 Ga.	1
2	19091216	Washer 17/64 x 3/4 x 16 Ga.	4	✓30	178785	Hex Hd. Mach. Screw W/Sems	1
3	5110H	Battery Clamp	1			Lockwasher 1/4-20 UNC x 1/2	1
4	5072H	Battery Bolt	2	✓31	271178	Keps Nut 1/4 - 20 UNC	4
5	626A140	Cable and Cover	1	32	5115H	Battery Wire	1
6	120375	Finished Hex Nut 1/4 - 20 UNC	3	33	3761H	Field Wire	1
				34	3759H	Ground to Generator Wire	1
7	5111H1	Battery	1	35	5436H	V Belt	1
8	6121H1	Battery Cable	1	✓36	137138	Truss Hd. Machine Screw 1/4-20 UNC x 3/4	2
9	5114H	Ground Strap	1			Voltage Regulator	1
10 ✓	138485	External Lockwasher Shake-proof 1120-00	1	37	606A190	Ground to Generator Wire	1
				38	5959H	Slotted R.H. Machine Screw W/Sems ext Lockwasher	
13	606A189	Motor Generator	1	✓39	424535	10 - 32 x 3/8	2
14 ✓	319H	Huglock Nut 5/16 - 18UNC	1			Screw	3
15	*31754A	Blower Housing	1	40	*28404	Washer	3
16	6041H1	Spacer	1	41	*650490	Battery Cable Adapter Plate for 917.9950 only	2
17	6043H	Spacer	1	42	6403H	ASF Hex Nut #10-32 UNF	2
18	*650229	Screw & Lockwasher	1	43	456156	Lockwasher #10	2
19	6042H1	Spacer	1	44	131096	Pulley	1
20	*31755	Guard Bracket	1	45	*31753	Spacer	3
21 ✓	99000083	Hex Bolt W/.3125 max Body dia. 5/16 - 18UNC x 9	1	46	*31880	Starter Switch for 917.9950 only	1
23 ✓	191677	Hex Hd. Machine Screw W/Sems ext Lockwasher 5/16 - 18 UNC x 3/4	4	47	4767H	Hex Hd. Machine Screw 1/4 - 20 UNC x 3/4	2
24 ✓	271184	Keps Nut 5/16 - 18 UNC	4	48	9415477	Ignition & Starter Switch	1
25	3763H	Generator Pulley	1	50	5797H	Key Set	1
26	5079H	Battery Support	1	51	5913H	Screen	1
27 ✓	456808	Hex Hd. Machine Screw W/Sems Lockwasher 1/4 - 20UNFx 3/8	1	52	*31756	Adjusting Strap	1
				53	7145H	Hex Hd. Machine Screw W/Sems Lockwasher 5/16-18x1	1
28	625A66	Belt Guard Assembly	1	54 ✓	191679	Hex Bolt 5/16 - 18 x 3/4	1
				✓55	122007	Lockwasher 5/16	1
				✓56	120638	Washer 11/32 x 11/16 x 16 Ga.	1
				✓57	120393	Generator Adjusting Strap	1
				58	6419H	Instruction & Parts Book	1
				58	7456H		

\*Items with asterick before No. order from gasoline engine parts list 143.00.