

*Simplicity*®

**ELECTRIC STARTER**

**GENERATOR**

**Mfr's. No. 316**

**FOR THE**

**LANDLORD**

**RIDING TRACTOR**

**SIMPLICITY MANUFACTURING COMPANY / PORT WASHINGTON, WIS.**

*TP1260*

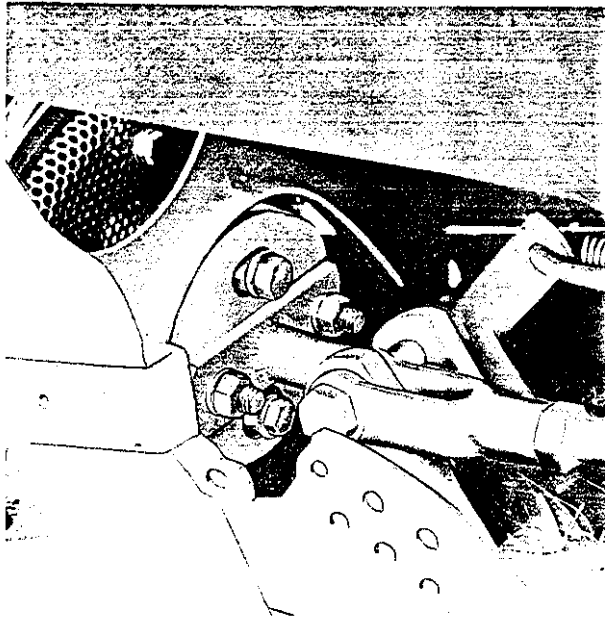


Fig. SG-1

#### INSTALLATION OF KIT

Remove the three attaching screws and take off the side panel located at the lower right hand side of the battery. Then remove the two screws, spacers, etc., holding the coupling disc to the engine pulley hub.

Insert the generator drive belt between the coupling disc and the pulley, then place it in position in the pulley groove. Replace the capscrews, etc., through the coupling and into the pulley hub as before. Replace the side panel.

Install generator support bracket on side of engine block with 5/16-18 x 3/4" screws.

Attach upper generator support bracket to engine head by means of the two head bolts shown ( 1 ), Fig. SG-3. ( Note: these two bolts must be re-tightened to 175 to 200 inch pounds of torque.

Attach belt tension lever to the starter generator ( 2 ), Fig. SG-3 with 5/16-18 x 3/4" screw, etc.

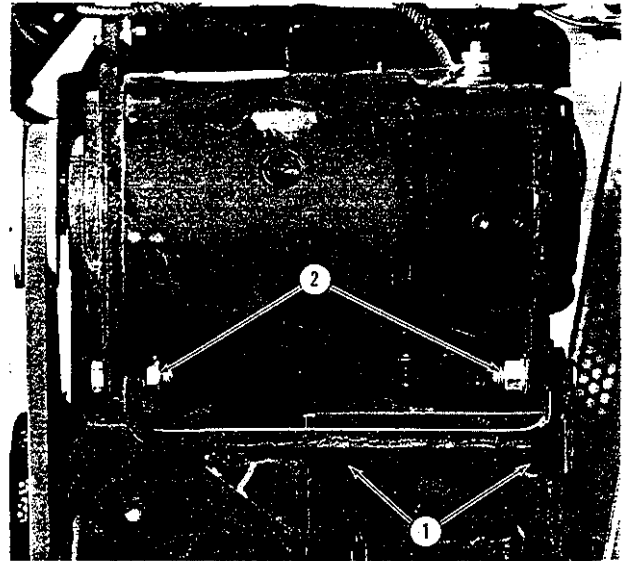


Fig. SG-2

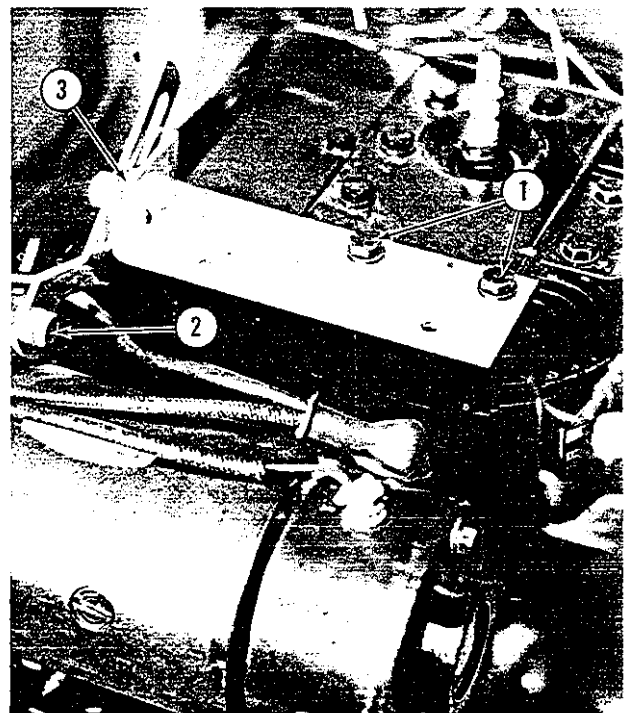


Fig. SG-3

Position the starter generator between the upper and lower supports with the pulley toward the rear. Attach to the lower supports with 5/16-18 x 1/4" screws, ( 2 ), Fig. SG-2 and to the upper support by 5/16-18 x 3/4" screw through slot in the adjustment lever, ( 3 ), Fig. SG-3.

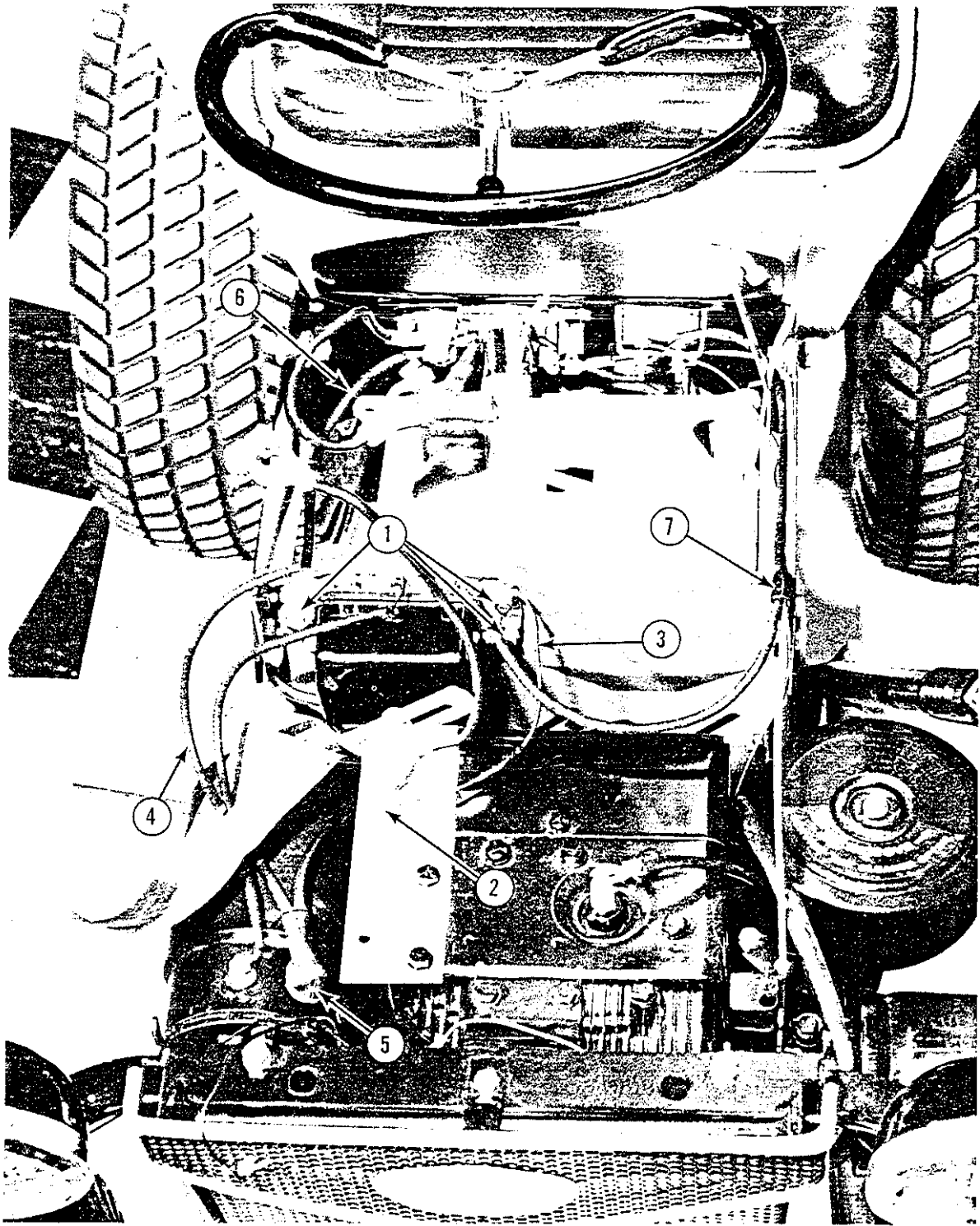


Fig. SG-4

Place the belt around the engine pulley and the starter pulley, then position the generator to give adequate belt tension ( deflection of about 3/8" mid-way between pulleys. ) Secure in this position by tightening screw at ( 3 ), Fig. SG-3.

Attach the voltage regulator to the front panel of the tank support assembly with three 1/4-20 x 3/4" screws, ( 1 ), Fig. SG-4.

Shut off the gasoline valve under tank and dis-  
.the fuel line at that point.

Remove the two screws holding the support straps, ( 1 ), Fig. SG-5, and lift out the gas tank, after open-  
ing the straps slightly.

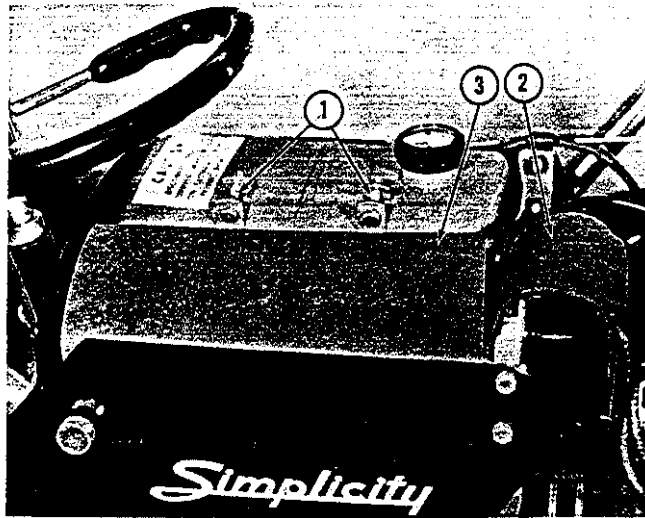


Fig. SG-5

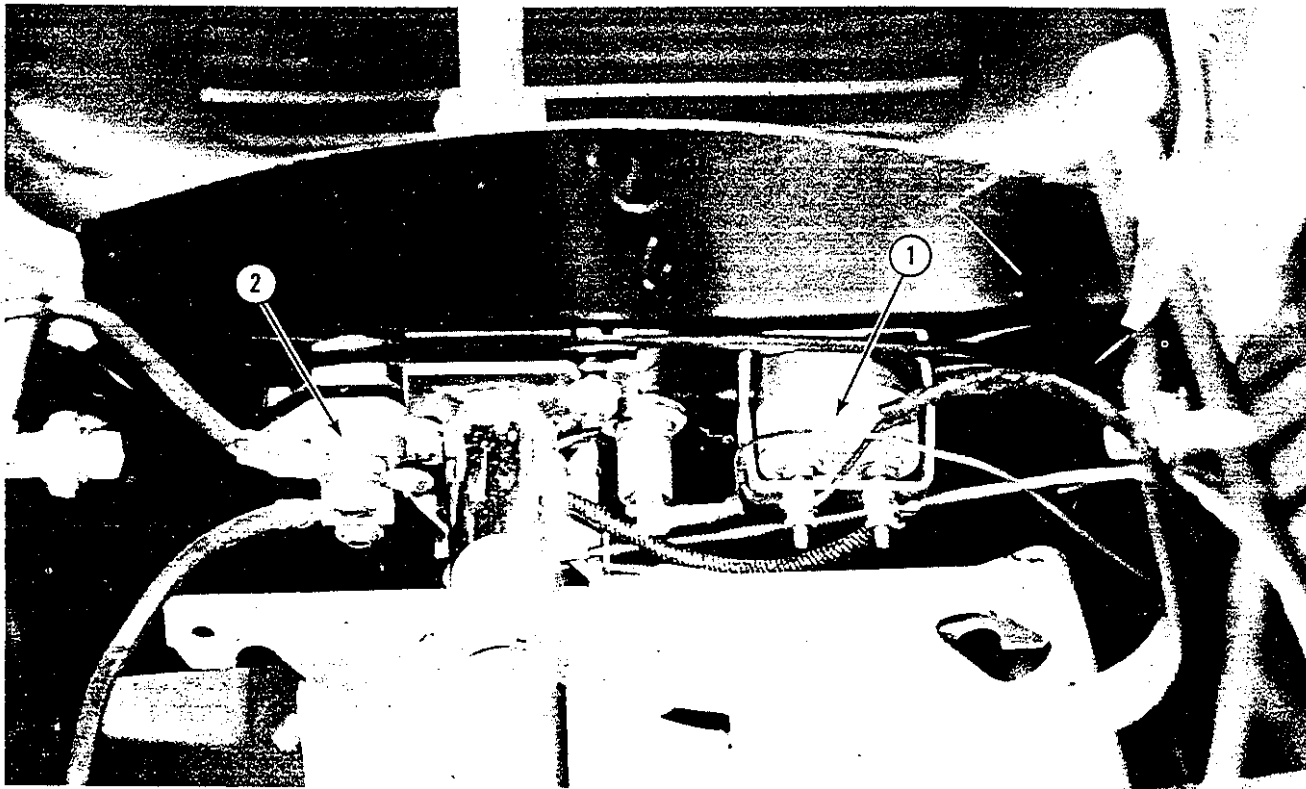


Fig. SG-6

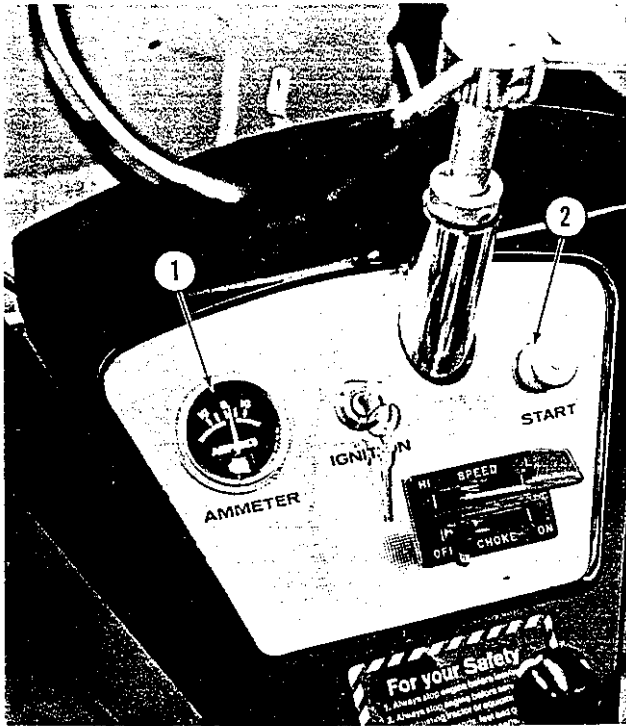


Fig. SG-7

Remove the two button plugs from the front panel and install the ammeter in the left hand side and the starter switch on the right hand side, ( 1 ) and ( 2 ), Fig. SG-6, also ( 1 ) and ( 2 ), Fig. SG- 7.

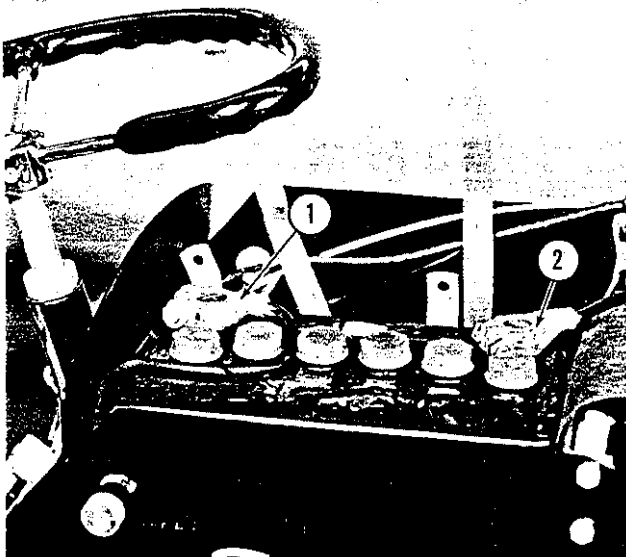


Fig. SG-8

## WIRING

Connect the small terminal end of the 13'' battery cable to one end of the 8'' plastic coated wire and attach both to the upper support bracket by means of the 1/4-20 x 5/8'' capscrew ( 2 ), Fig. SG-4. Attach the other end of the small 8'' wire to the attaching screw on the side of the voltage regulator, ( 3 ) Fig.-SG-4.

Attach one end of one 14½'' fabric covered wire to the terminal post ( F ) on starter, then run through the hole in insulating paper. Attach the other end to the terminal ( F ) on the voltage regulator ( 4 ), Fig. SG-4.

Attach one end of the 27'' plastic coated wire and one end of other 14½'' fabric coated wire to the terminal ( A ) on starter, ( 5 ), Fig. SG-4. Run the 14½'' wire through the other hole in insulating paper, then attach the other end to the middle terminal ( GEN ) on the voltage regulator. Run the plastic coated wire underneath the regulator and along the side of the battery compartment to the starter button ( 6 ), Fig.-SG-4. Attach the wire to the bottom terminal of the starter button.

Attach one end of the 10½'' battery cable and one end of the fabric covered 9'' wire to the top terminal of the starter switch, and the other end of 9'' fabric covered wire to the left hand terminal of ammeter.

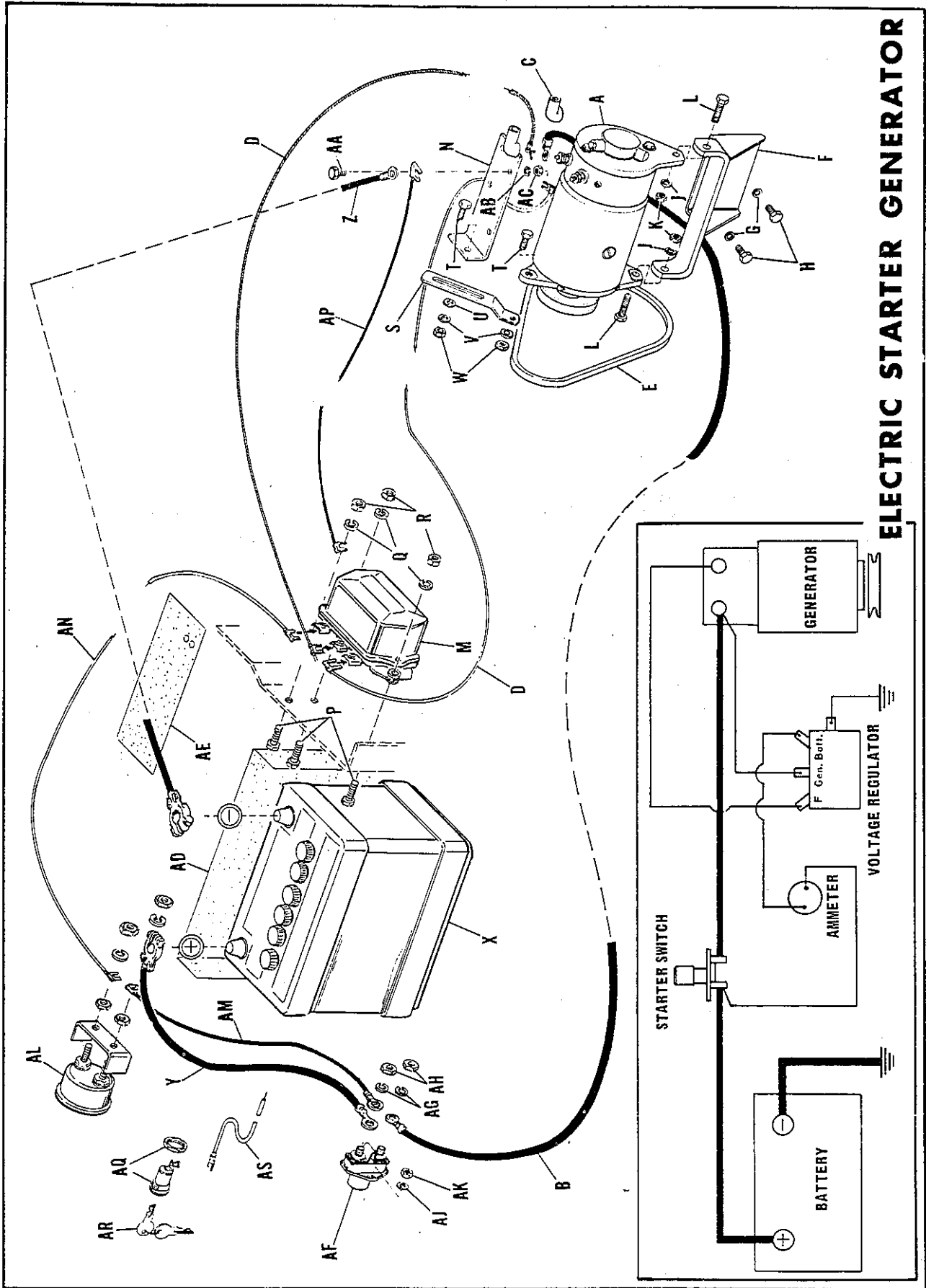
Attach 27'' fabric covered wire to the other ammeter terminal and run it along the left hand side panel, through the clip, ( 7 ) Fig. SG-4, to terminal ( BAT ) on voltage regulator.

## BATTERY

The battery used with this starter system is a dry charge type, and must be activated in accordance with the instructions furnished by the battery manufacturer. The battery should then be checked periodically as recommended by the manufacturer, in order to insure peak performance at all times.

Install the battery into the right side compartment behind the dash board, with the negative terminal toward the front of the tractor.

Connect the ground cable securely to the negative terminal on the battery, ( 1 ) Fig. SG-8. Then connect the other battery cable to the positive terminal and secure with the attaching bolt.



**ELECTRIC STARTER GENERATOR**

# ELECTRIC STARTER-GENERATOR SYSTEM

Order by Part Number

Ref. Letter	Part No.	Description
A	122041	Motor-Generator
B	122149	Cable, Generator, Start
C	122023	Terminal Cover
D	122140	Wire, Reg. Gen.
E	122146	"V"-Belt
F	157004	Support Assembly
G	720001	Lock Washer, 5/16"
H	705017	Hex Capscrew, 5/16"-18 x 3/4" lg.
J	720001	Lock Washer, 5/16"
K	717001	Hex Nut, Full, 5/16"-18
L	705019	Hex Capscrew, 5/16"-18 x 1-1/4"
M	122148	Voltage Regulator
N	154002	Bracket
P	705030	Hex Capscrew, 1/4"-20 x 3/4" lg.
Q	720003	Lock Washer, 1/4"
R	717005	Hex Nut, Full, 1/4"-20
S	157102	Belt Tightener
T	705017	Hex Capscrew, 5/16"-18 x 3/4" lg.
U	719002	Plain Washer, 5/16"
V	720001	Lock Washer, 5/16"
W	717001	Hex Nut, Full, 5/16"-18
X	122135	Battery
Y	122139	Cable ( Battery to Starter )
Z	122138	Cable ( Battery to Ground )
AA	705015	Hex Capscrew, 1/4"-20 x 5/8" lg.
AB	720003	Lock Washer, 1/4"
AC	717005	Hex Nut, Full, 1/4"-20
AD	122142	Battery Insulation
AE	122143	Fuel Tank Insulation
AF	122046	Starter Switch
AG	720002	Lock Washer, 3/8"
AH	717003	Hex Nut, Full
AJ	720003	Lock Washer, 1/4"
AK	717005	Hex Nut, Full, 1/4"-20
AL	122131	Ammeter
AM	122145	Wire ( Ammeter to Starter )
AN	122144	Wire ( Ammeter to Regulator )
AP	122147	Wire ( Ground to Ground )
AQ	122048	Ignition Switch
AR	122111	Keys
AS	122141	Wire ( Switch to Engine )

NOTE: Starter-Generator, voltage regulator, and starter switch are products of Delco-Remy and are serviced by authorized Delco-Remy dealers. Correspondence regarding battery must be addressed to the battery manufacturer.

Replace the gasoline tank and secure in position by means of the two bolts through the mounting straps ( 1 ) Fig. SG-5. Re-connect the fuel line, and open the shut-off valve.

Position the voltage regulator insulation sheet as shown, ( 2 ) Fig. SG-5. Place larger insulation sheet over battery as shown, ( 3 ) Fig. SG-5.

Replace and secure the hood by means of the four thumb screws.

#### OPERATION

For operation of the electric starting unit, refer to the instructions in your tractor operators manual.

**FOR YOUR SAFETY**

1. ALWAYS STOP ENGINE BEFORE LEAVING MACHINE
2. ALWAYS STOP ENGINE BEFORE SERVICING OR ADJUSTING MACHINE OR EQUIPMENT
3. ALWAYS KEEP HANDS, FEET AND CLOTHING AWAY FROM POWER-DRIVEN PARTS

