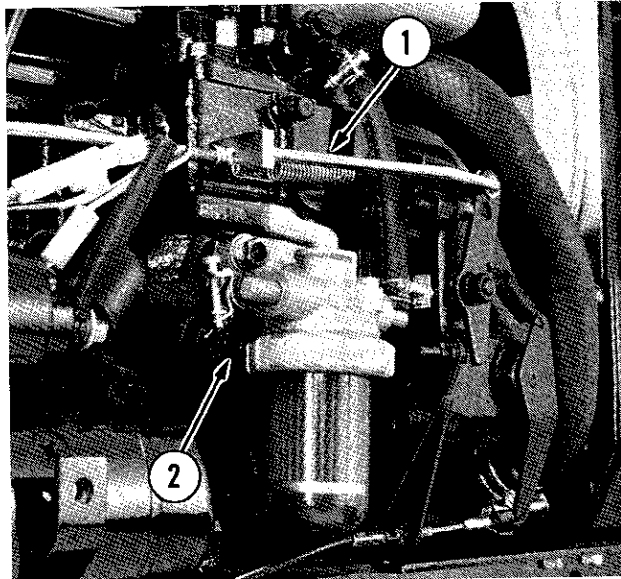


## ALTERNATOR

The alternator is used in the electrical charging system and requires no lubrication. The alternator and regulator are designed for use on only one polarity system. This tractor utilizes a negative ground system. The following precautions must be observed when working on the charging circuit. Failure to observe these precautions will result in serious damage to the electrical equipment.

1. When installing a battery always make absolutely sure the ground polarity of the battery and the ground polarity of the alternator are the same. If a battery is of the wrong polarity, or if the battery is reversed when installing and connecting it into the charging system, the battery is directly shorted through the diodes. This will cause the diodes and wiring to be endangered by high current flow and burned out diodes and wiring harness will probably result.
  2. When connecting a booster battery or auxiliary starting power as a starting aid, make certain to follow the same connection procedures as outlined in the CAUTION steps 1 thru 4 under BATTERY, Figure 13. Failure to observe this precaution will result in burned out diodes and wiring harness.
  3. When connecting a battery charger to the batteries, connect the charger positive lead to the battery positive terminals and charger negative lead to the battery negative terminals. Failure to follow this procedure will result in damage to diodes and wiring harness. Never attempt to start engine or turn key switch to the "ON", "GLOW" or "START" position while charger is in use.
- CAUTION:** Never operate the alternator on an open circuit. With no electrical load in the circuit (wires removed or disconnected), the alternator can build up high voltages which can be extremely dangerous to any one who might accidentally touch the battery terminal on the alternator. Before making tests or checks, make sure all connections in the circuit are tight.
4. Do not short across or ground any terminals of the alternator or regulator. Grounding or shorting any of the alternator or regulator terminals can cause serious electrical malfunctions that may damage components of the electrical system.

5. Do not attempt to polarize the alternator. This is not necessary since the voltage developed within the alternator is of both polarities and the diode rectifier automatically controls the direction of current flow. It is important that the battery ground and the alternator ground be of the same polarity for diode protection.



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FIGURE 18 - R.H. View

1. Rack Cover                      2. Oil Drain Plug

## INJECTION PUMP LUBRICATION (Figure 18)

Injection pump is not lubricated by the crankcase nor does it depend on diesel fuel for lubrication. The pump holds 7 oz. (200 ml) of engine oil for lubrication. The injection pump oil should be changed every 200 hours.

### DRAIN

Remove drain plug (2) and let oil drain out. Replace drain plug.

### REFILL

To fill injection pump oil sump with oil, remove rack cover (1) and pour in 7 oz. (200 ml) of oil and replace rack cover. **NOTE:** If more than 7 oz. (200 ml) of oil is added it will drain off into crankcase.