

## Series 1000 and 1500

39.11. The **lighting circuit** is hot whenever the engine is running. It does not draw from the battery, but runs directly off its own circuit on the alternator. See Figure 39.11.

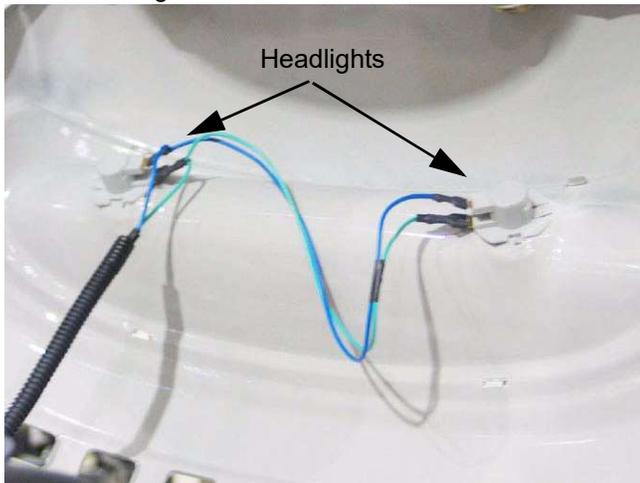


Figure 39.11

- The blue wire carries alternator current, the green wire is a ground.

39.12. The 20A fuse is located near the RMC module / key switch assembly, under the dash panel. See Figure 39.12.

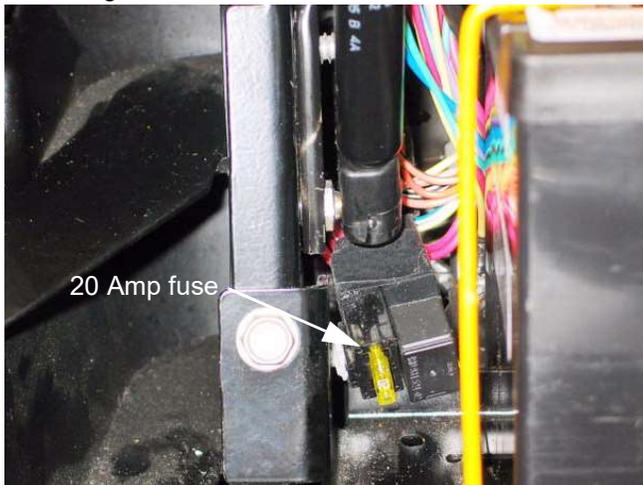


Figure 39.12

- The solid red wire feeds the fuse with power picked-up from the battery cable connection to the "hot" post of the starter solenoid.

- The red wire with white trace carries fused power to the B terminal on the key switch.

**NOTE:** On units with an auxiliary power point a second red wire with white trace will supply a 5 amp service to the power point.

**CAUTION: DO NOT PUT A CIGARETTE LIGHTER IN THIS POWER POINT.** This will cause the fuse to blow and can seriously damage the harness.

- A failed fuse will disable most of the tractor's electrical system.
- Remember that a failed fuse has done its job of protecting the rest of the circuit from an overload. If a fuse blows, figure-out why and correct the core problem before returning the tractor to service.

39.13. Refer to the engine manufacturer's specifications to test the engine and charging systems.

39.14. **Ground issues:** It is relatively easy to track where power is on the positive side of the system. The negative side is frequently neglected, though it may account for just as many electrical problems as the positive side.

39.15. Most technicians' first instinct when testing ground paths is to set the multi meter to the Ohms scale ( $\Omega$ ) and look for continuity using resistance as a measurement. This method does give a rough idea if the circuit is complete or not.

39.16. Resistance is not the most definitive scale for identifying circuits that are complete, but have reduced current carrying capacity because of bad connections, physical damage, or corrosion.