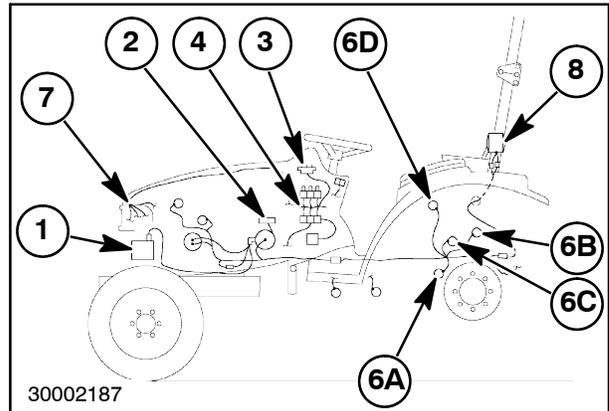


DESCRIPTION OF OPERATION

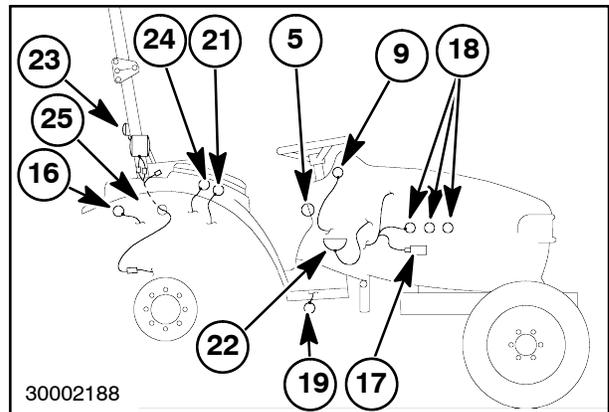
Op. 55 100

The TC Series Class 3 electrical system is a 12-volt negative (-) ground system consisting of 3 main wiring harnesses.

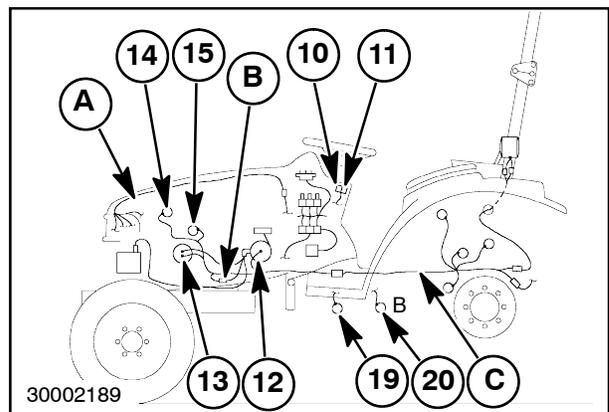
COMPONENT LOCATION AND FUNCTION



1



2



3

SECTION 55 - ELECTRICAL - CHAPTER 1

1. **Battery** - Located under the hood, in front of the radiator; electrical power source. Group 47
2. **Main Fuse (40 Amp.)** - Located on the left side of the engine directly above the starter; protects the entire electrical system from damage due to excessive current.
3. **Fuse Block** – Located underneath instrument panel; contains fuses that protect individual circuits from damage due to excessive current.
4. **Relay/Diode Panel** – Located behind the left side panel; houses relays utilized by individual circuits and diodes which direct current within a circuit to allow the use of one wire within multiple circuits to control a relay.
5. **Key Switch** – Located on the right side of the operator's console; used to switch battery power on or off to the tractor's electronic circuits, supply power to the engine glow plugs, or to start the tractor.
6. **Safety Start Switches (4)** – Shuttle for 12x12 transmission and range gear (A)HST transmission, rear PTO (B), mid PTO (if equipped) (C), and the operator's seat switch (D); will not allow the tractor to start with the transmission or the PTO engaged, or without an operator in the operator's seat.
NOTE: The parking brake switch also lights the parking brake indicator light on the instrument panel when the parking brake is engaged.
NOTE: The tractor may be started without the operator being seated when the parking brake lever is engaged.
7. **Headlights** – Located on the front grill of the tractor; Economy models have two headlights, Deluxe models have four headlights; headlights illuminate the area in front of the tractor.
8. **Taillights/Directional Signals/ Flasher Warning (Hazard) Lights** – Located at the rear of the tractor, on both sides of the ROPS; provide warning during transportation and emergency.
9. **Instrument Panel** – Located in the center of the dash panel; houses gauges and indicator lights that monitor tractor functions.
10. **Light Switch** – Located on the left side of the dash panel; switches the headlight, taillight and the instrument panel lights on or off.
11. **Hazard (Flashing Warning Lights) Switch** – Located on the left side of the dash panel; switches the flashing warning (hazard) lights on and off.
12. **Starter** – Located on the left side of the engine; rotates the engine for starting.
13. **Alternator (40 Amp.)** – Located on the left side of the engine; generates power to charge the battery.
14. **Engine Oil Pressure Switch** – Located in front of the cylinder head; provides warning of low engine oil pressure.
15. **Engine Coolant Temperature Sending Unit** – Located in the thermostat housing on the front left side of the engine; warns the operator of high operating temperatures.
16. **Fuel Level Sending Unit** – Located inside the fuel tank; sends a signal indicating fuel level to the instrument panel.
17. **Fuel Shutoff Solenoid** – Located on the right side of the engine; shuts off the fuel flow to the injection pump to stop the engine.
18. **Engine Glow Plugs** – Located on the right side of the cylinder head, adjacent to the fuel injectors; aid in engine startup by warming the air in the combustion chamber.
19. **Parking Brake Switch** – Located under the right (A) (standard), left (B)(deluxe), platform; actuates with the parking brake mechanism; indicates when the parking brake is engaged by illuminating a light on the instrument panel.
20. **Brake HST Cruise Release Switch – (Deluxe Only)** – Located under the left near the brake pedal pivot shaft; releases the HST speed control when the brakes are applied.
21. **HST Cruise Control Switch (Deluxe Only)** – Located on the right fender; controls current to the speed control magnet.
22. **HST Control Magnet (Deluxe Only)** – Located on the right transmission side of the steering column; locks the HST linkage in place to set constant transmission speed.
23. **Rear Work Light (50 Watt Halogen) (Optional)** – Located on the right side of the ROPS; power leads for the light are provided on the right fender wiring harness.
24. **HST Hi/Lo Range Selector Switch (Deluxe Only)** – Located on the right fender; momentary toggle switch used to select either of the two different HST gear ranges. Located on optional front two spool valve control handle.
25. **Auxiliary Electrical Power Socket** – Located at the right rear of the operator's platform; provides electrical current for any auxiliary 12 volt electrical item (15 amp maximum).