Electrical System

Alternator

The alternator is connected to the rotating crank shaft of the engine with a serpentine belt. It converts the mechanical energy of the crank shaft's rotation to electricity. This electricity is used to recharge the batteries and power the electrical systems of the machine.

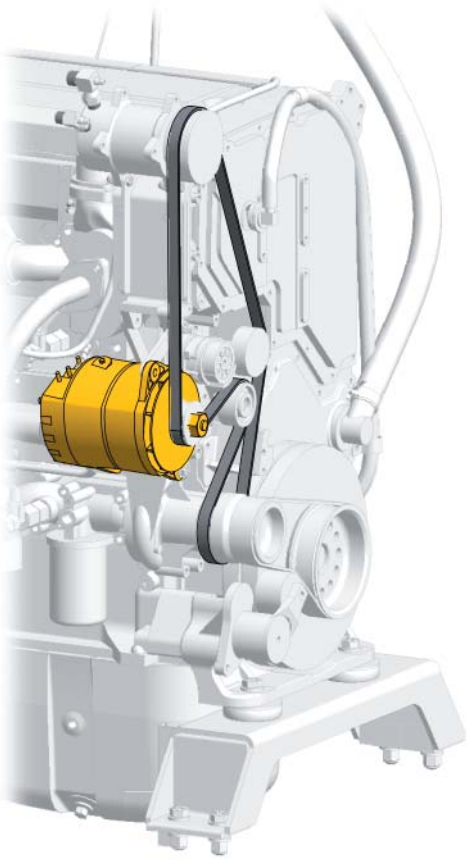

Figure 3-4-1 Alternator

Ignition

The ignition system uses an electric starting motor, activated with a key switch, much like the one on your personal vehicle.

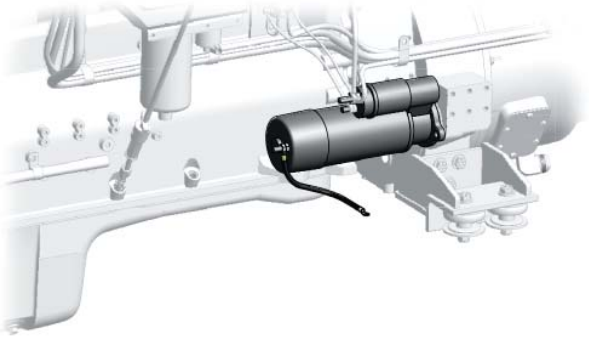

Figure 3-4-2 Starter Motor

Batteries

Your Wagner's electrical system is powered by two 12 volt lead acid batteries connected in series. At 0°F, these batteries supply 1300 cranking amps. They are 20.75" x 11" x 9.63" and weigh approximately 130 lbs. These batteries are continuously charged by the alternator when the engine is running.

Fuses

Two 400 Amp fuses in parallel provide protection from over-current conditions that might arise.

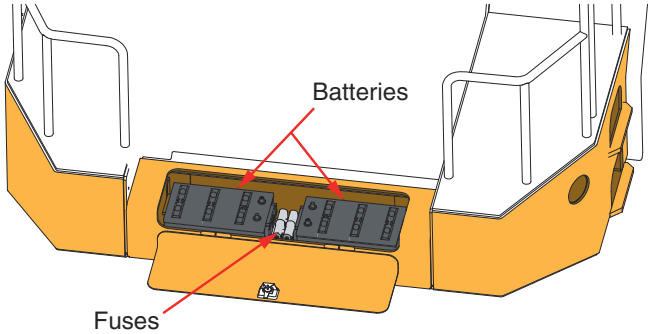

Figure 3-4-3 Batteries and Fuses

Gauges

The gauges in your vehicle are powered through the electrical system. They must receive an electrical signal to provide a reading.

The Powerview Display Module is a multifunction tool that displays information from the engine and transmission for the operator. For the mechanic, the Powerview Display Module provides fault codes with text translations for the most common fault codes.

Indicator Lights

Various indicator lights provide feedback to the operator. Transmission direction and gear are indicated. Optional filter service lights alert the operator when filter elements must be replaced.

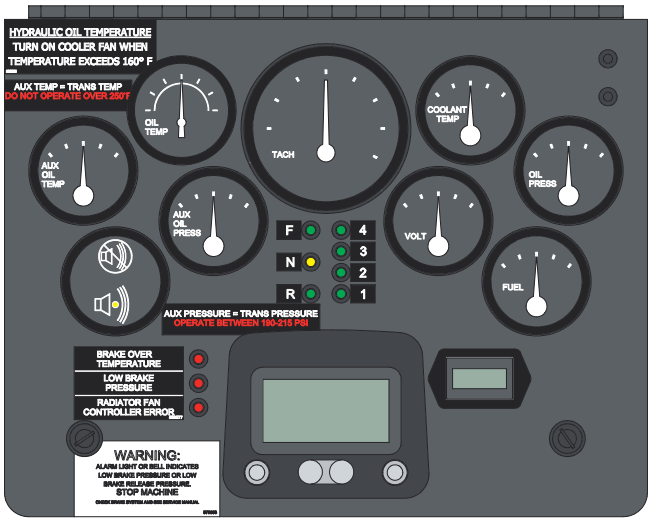

Figure 3-4-6 Gauges and Indicator Lights

Controls

Machine implements and the transmission are controlled by the electronic seat-mounted joysticks. The throttle is controlled by an electronic foot pedal.

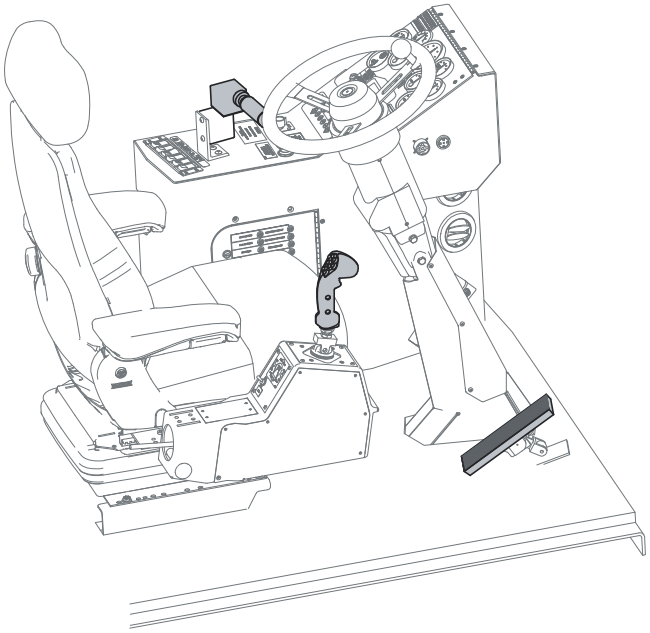

Figure 3-4-4 Operator Controls

Lights

Standard and optional external lighting groups enhance safety by providing illumination of surroundings during night time and adverse weather conditions. Halogen lights are standard, with HID or LED lights as options.

Figure 3-4-5 Lights

Automatic Fire Suppression System (Optional)

The electric detection and actuation system is designed for use with the ANSUL fire suppression system, which uses pneumatic actuation as a means of system actuation. This system automatically actuates the fire suppression system when a fire is detected. Of course, the operator can always actuate the system manually if necessary. See Section 4-5 for manual activation procedures.

Environmental

The environmental system in the operator's cab maintains a comfortable working environment. A/C and Heater units maintain a comfortable working temperature inside the cab, and an optional AM/FM/CD player is available for the operator.

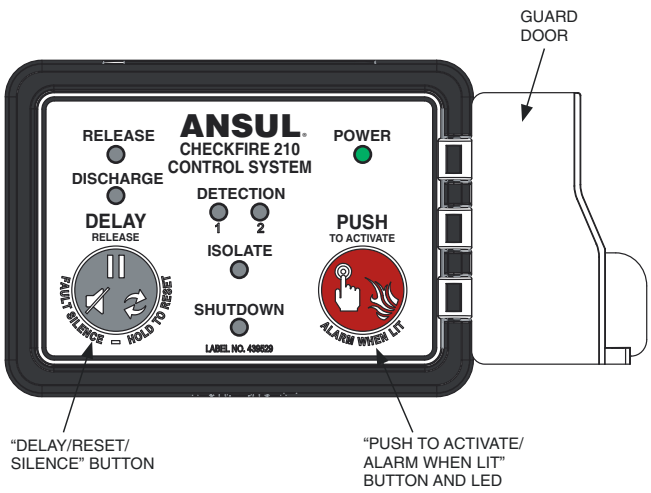

Figure 3-4-7 Checkfire 210 Detection and Actuation

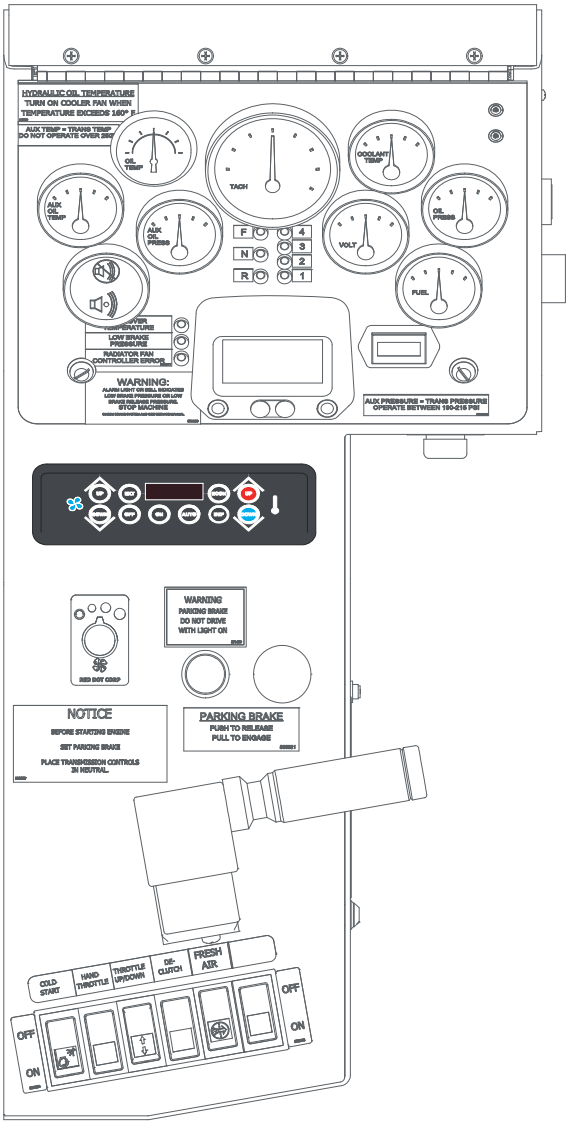

Figure 3-4-8 Environmental Controls

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