snorkel

TB100J



Manufactured/EMS Kits Installed
7-05 and after

Replaces 0192517 September 2011

OPERATOR'S MANUAL

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Appendix A – Glossary

Limited Warranty

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Engine Specifications

Engine	Displacement	Fuel Grade	Coolant	Operating Temperature	Oil Capacity	Oil Grade
Cummins B3.3	199 cu. in. (3.26 liter)	**Diesel** ASTM No. 20 fuel with a minimum Cetane number of 40.[1] For operating temperatures below 32°F (0°C) use winterized No. 2D.	50% Water 50% Antifreeze[2]	140°F to 212°F 60°C to 100°C	2 gal (7.5 liter) total 1.6 qt (1.5 liter) Low to High	SAE 15W-40[3] API: CH4/SG
GM 2.4L	150 cu. in. (2.4 liter)	**Gasoline** Unleaded 87 octane **LPG** HD-5	50% Water 50% Antifreeze	176°F to 183°F 80°C to 84°C	With filter: 1.12 US gal (4.5 liter) Without filter: 1.18 US gal (4.25 liter)	ILSAC GF-4[4]

Note 1: Refer to the engine manufacturers manual for specific fuel recommendations and specifications.

Note 2: Ethylene glycol or Propylene glycol may be used. Refer to the Cummins® Operation and Maintenance Manual B3.3 Series Engines for specific coolant recommendations and specifications.

Note 3: Refer to the engine manufacturers manual for specific lubricating oil recommendations and specifications.

Note 4: API Starburst symbol on GF-4 oils reads "API Service SM."

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The aerial platform is equipped with several gauges to monitor the condition of the machine before and during operation.

Hour Meter

The hour meter is located on the right side of the lower controls (refer to Figure 5.1). It measures the accumulated engine operating time.

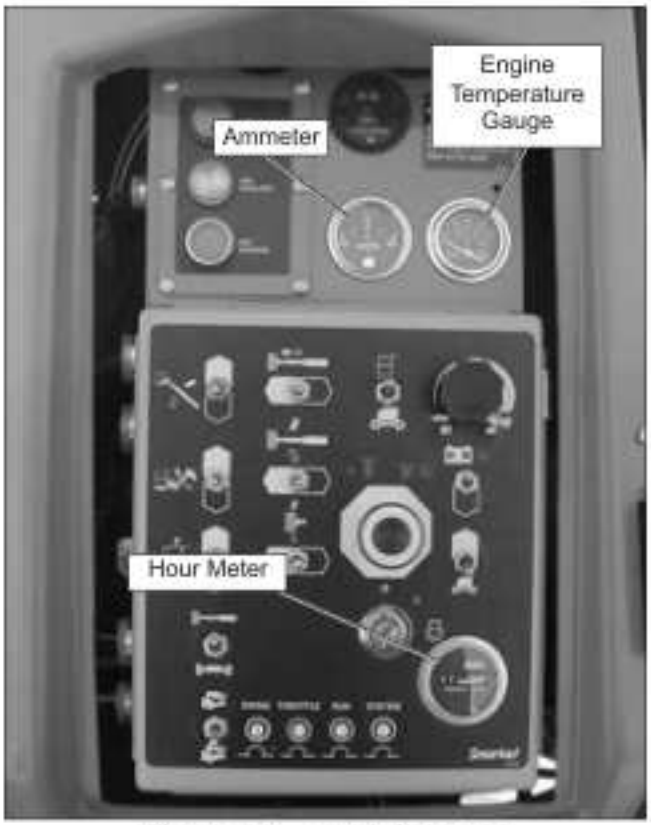


Figure 5.1 – Lower Controls

Engine Temperature Gauge

The temperature gauge is located on the lower control panel (refer to Figure 5.1). The gauge displays the temperature of the water and antifreeze mixture in the engine block.

Ammeter

The ammeter is located on the lower control panel (refer to Figure 5.1). The ammeter displays the level of current flow from the alternator to the batteries.

After the engine has been running for a few minutes under normal operating conditions, the ammeter gauge indicator should read approximately "0."

Engine Air Filter Gauge

The air filter gauge (refer to Figure 5.2) is located above the lower control panel. The gauge measures the air pressure between the intake manifold and the air filter.



Figure 5.2 – Air Filter Gauge

The yellow indicator disk inside the sight glass stays at its highest level when the engine is turned off.

When the yellow indicator disk reaches the red area, it's time to change the filter element. After changing the filter, press the reset button to reset the indicator disk to the bottom of the sight glass.

Fuel

The fuel tank is translucent. The amount of fuel in the tank can be gauged by raising the door on the right rear of the machine (refer to Figure 5.3) and looking at the tank. On older machines the fuel tank is behind the cowling door on the right side of the machine. These tanks have a gauge on top of them that measures the amount of fuel in the tank.

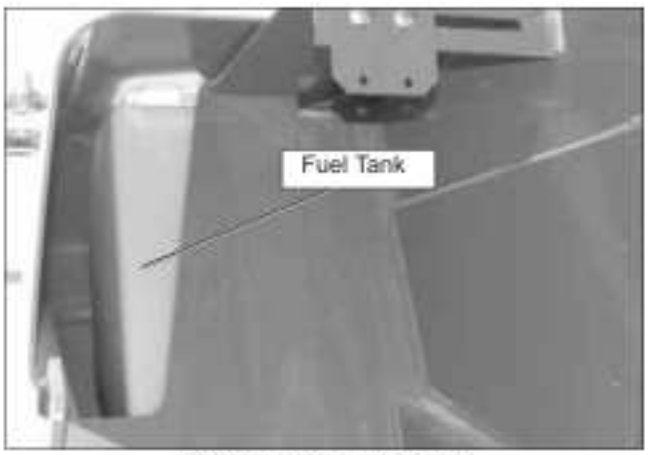


Figure 5.3 – Fuel Tank

Note
Do not run a diesel fuel tank empty. Air in the fuel line makes the engine hard to start.

LPG tanks have a fuel gauge that has two scales. One scale measures the fuel level when the tank is mounted vertical and the other is used when the tank is mounted horizontal (refer to Figure 5.4).

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Chapter 10 – Emergency Operation

If the main hydraulic system fails, the aerial platform may be lowered and stowed using the emergency power system. The main boom may be lowered using the emergency bleed down system. The machine may be towed if the drive system fails. Refer to Emergency Power System, Emergency Lowering or Towing for the appropriate procedure.

Emergency Power System

The emergency power system can be used to operate the machine from the lower or upper controls.

⚠Caution

The emergency power system is for emergency lowering and stowing only. The length of time the pump can be operated depends on the capacity of the battery. Do not use this system for normal operation.

Only use the emergency power system if the main power system fails.

Lower Controls

Use the following procedure to operate the machine using the emergency power system from the lower controls.

1. Place the battery disconnect switch in the on position (refer to Figure 10.1).



Figure 10.1 – Battery Disconnect Switch

2. Place the control selector switch (refer to Figure 10.2) in the lower controls position.
3. Pull the emergency stop button outward.
4. Hold the ground operation switch in the on position while holding the engine/emergency power switch in the emergency power position.
5. Hold the appropriate function toggle switch in the desired direction.

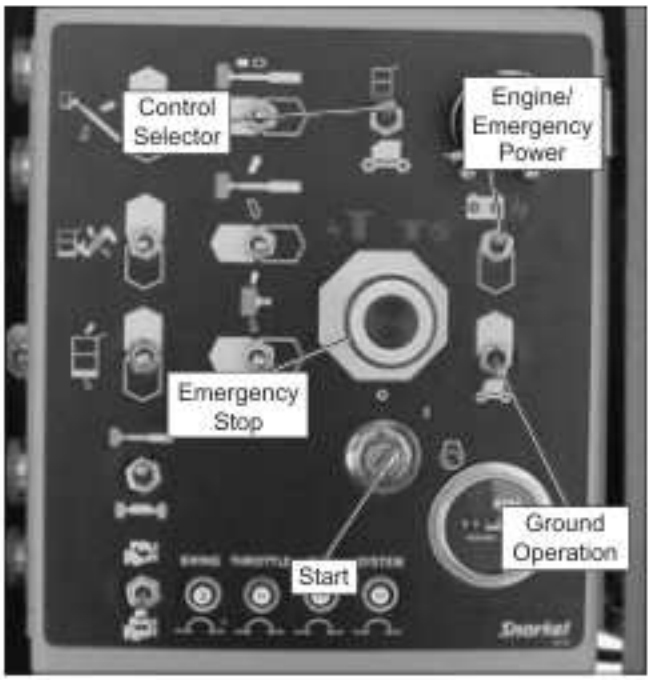


Figure 10.2 – Lower Controls

Upper Controls

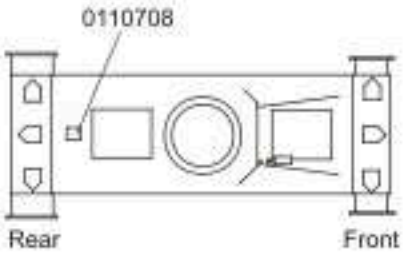
For the upper controls to be operational:

- the battery disconnect switch must be in the on position.
- the start switch at the lower controls must be turned on.
- the emergency stop button at the lower controls must be in the on position.
- the control selector switch at the lower controls must be in the platform position.

Use the following procedure to operate the machine using the emergency power system from the upper controls.

1. Pull the emergency stop button outward (refer to Figure 10.3).
2. Turn the start switch on.
3. Step down on the platform foot switch (refer to Figure 10.4).

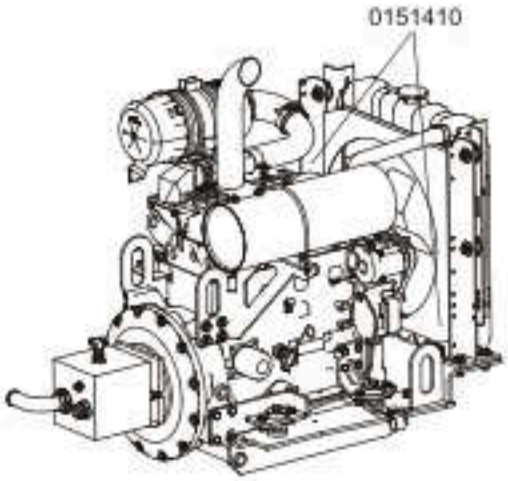
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Top View of Chassis



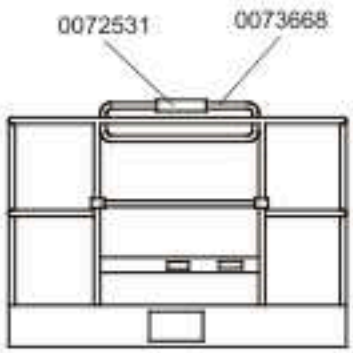
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Radiator



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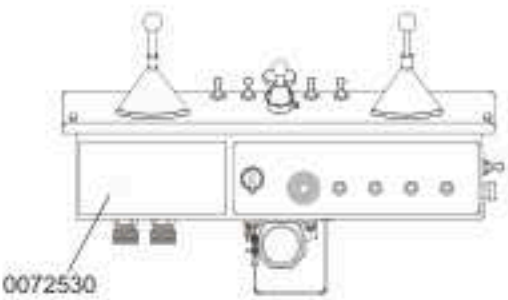
Platform



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Upper Controls



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