Operator's Manual



TB42J

Part Number 0172310
March, 2005

Snorkel
INTERNATIONAL

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Appendix A – Glossary

Limited Warranty

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Engine Specifications

Engine	CID	Fuel Grade	Coolant	Operating Temperature	Oil Capacity	Oil Grade
Cummins B3.3 Diesel	199 cu. in. (3.26 liter)	ASTM No. 2D 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
Deutz F3L-2011F Diesel	125 cu. in. (2.0 liter)	• DIN 51 601 (February 1986).[1] • BS 2869: A1 and A2 (with A2 refer to Deutz manual about sulfur content)[1] • ASTM D 975-88: 1-D and 2-D • CEN EN 590 or DIN EN 590 • NATO Code F-54 and F-75 • For operating temperatures below 32°F (0°C) use winter grade diesel.	Air	172°F to 203°F 78°C to 95°C	1.59 US gal (6.0 liter)	API: CD or higher[3]

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.

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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 below the lower controls (refer to Figure 5.1). It measures the accumulated engine operating time.

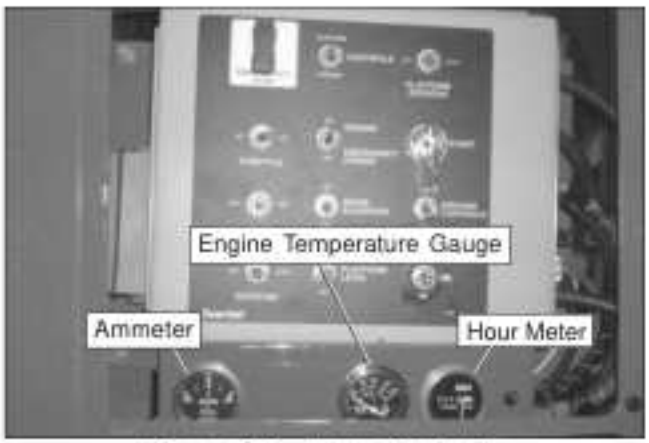


Figure 5.1 – Lower Controls

Engine Temperature Gauge

The temperature gauge is located below the lower control panel (refer to Figure 5.1).

On liquid cooled engines it shows the temperature of the water and antifreeze mixture in the engine block. The gauge on air cooled engines shows the temperature of the engine oil as the oil leaves the filter.

Ammeter

The ammeter is located below 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 "0."

Engine Air Filter Gauge

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



Figure 5.2 – Air Filter Gauge

When the area inside the clear section of the indicator is red, it's time to change the filter element.

Fuel

The fuel gauge is located on top of the tank (refer to Figure 5.3). The gauge indicates the fluid level in fractions-of-a-full-tank.

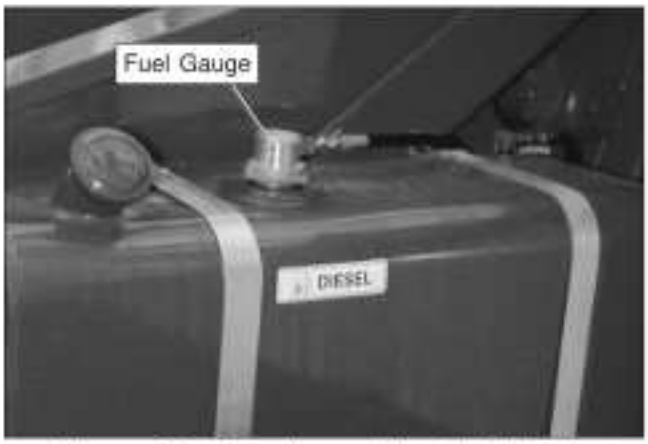


Figure 5.3 – Gasoline or Diesel Fuel Tank

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

Engine Oil

The engine oil level is measured with a dipstick. The dipstick is the only way to accurately determine the engine oil level. The engine oil level should always be between the add and full marks on the dipstick.

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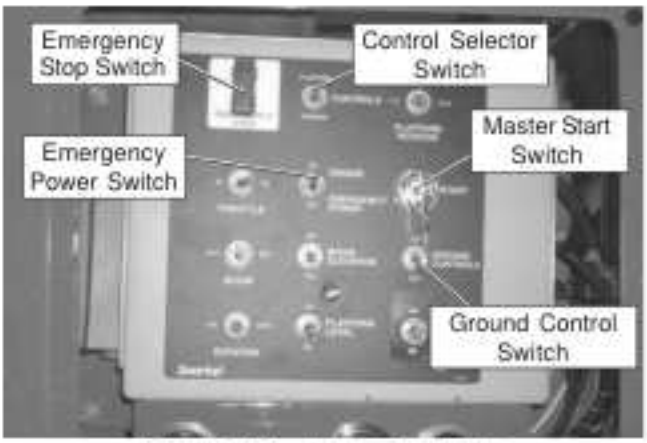


Figure 7.12 – Lower Controls

Operating Controls
Use the following procedure to operate the machine from the lower controls.

1. Turn the battery disconnect switch on.

2. At the lower controls, lift the emergency stop safety guard up, and push the toggle switch up to the on position.

3. Insert the key into the master switch and turn the switch to start until the engine starts, then release.

4. Let the engine warm to operating temperature.

5. Hold the ground controls switch upward.

⚠ Danger

Pinch points may exist between moving components. Death or serious injury can result from becoming trapped between components, buildings, structures, or other obstacles. Make sure all personnel stand clear of the aerial platform while performing the prestart inspection.

6. Test the operation of each function in both directions.

Note
When checking the turntable rotation function in the clockwise direction, the turntable will rotate toward you.

Envelope Restriction
Raise the main boom so it is horizontal and then extend the tip boom until it stops and will no longer extend.

The black and yellow caution tape on the right side of the tip boom should be within 2" (5 cm) of being flush with the end of the base boom. The envelope restriction light on the upper control panel should also be on.

If the tip boom does not stop extending with the caution tape within the tolerance mentioned above, take the machine out of service and have it repaired by qualified maintenance personnel before putting it back into service.

Emergency Stop
Push the emergency stop safety guard down to turn off the engine. The lower control functions should not operate with the emergency stop in this position.

Emergency Power
Place the battery disconnect switch, the emergency stop switch, and the master switch in the on position.

Hold the engine/emergency power switch in the emergency power position and the ground controls switch upward to operate the aerial platform from the lower controls using the emergency power system.

Emergency Lowering

The main boom can be lowered in an emergency using the emergency lowering knob. The emergency lowering knob is at the base of the main boom lift cylinder.

Use the following procedure to test the emergency lowering system.

1. Use the lower controls to raise the main boom until the emergency lower knob is visible in the access hole as shown in Figure 7.13.



Figure 7.13 – Emergency Lowering Knob

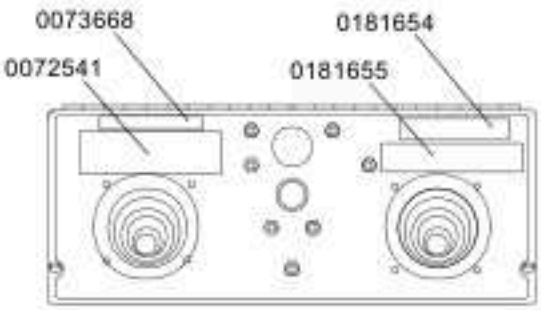
2. Turn the engine off.

⚠ Danger

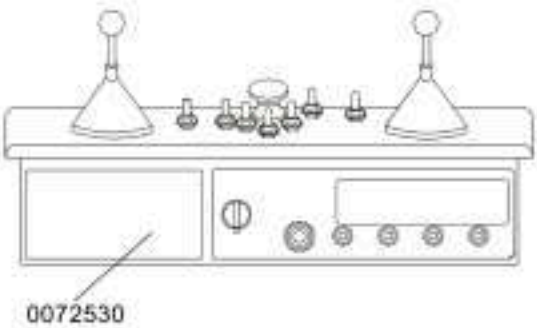
Pinch points may exist between moving components. Death or serious injury can result from becoming trapped between components. Stand clear of moving components while test operating the machine.

3. Slowly turn the knob to open the bleed down valve. The boom should slowly lower by gravity.

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Upper Control Panel Top



Upper Control Panel Front



0073668



0072541



0181654



0181655



0072530

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