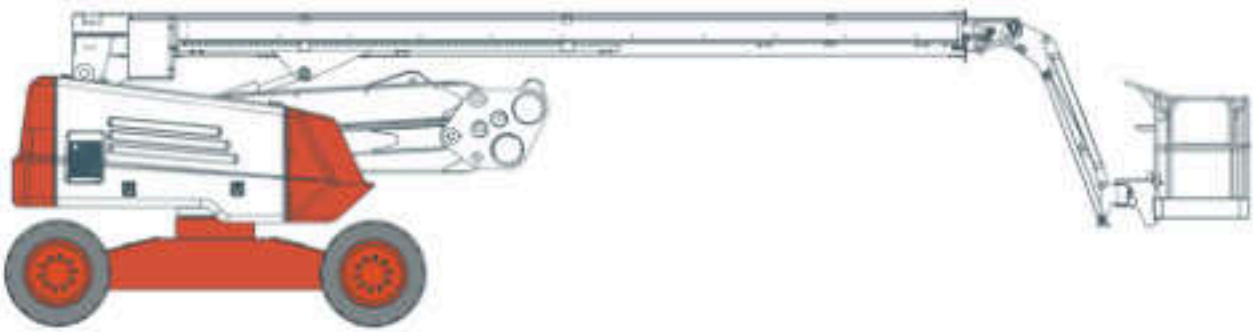
Operator's Manual



AB80J



AB85RJ

Part Number 0420453EE
July 2007

CE

Snorkel
INTERNATIONAL

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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 Diesel	3.26 liter (199 cu. in.)	**Diesel** ASTM No. 2D fuel with a minimum Cetane number of 40.[1] For operating temperatures below 0°C (32°F) use winterized No. 2D.	50% water 50% Antifreeze[2]	60°C to 100°C (140°F to 212°F)	7.5 liter (2 gal) total 1.5 liter (1.6 qt) Low to High	SAE 15W-40[3] API: CH4/SG
Deutz F4L-2011F	3.11 liter (190 cu. in.)	**Diesel** • 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 0°C F (32°) use winter grade diesel.	Air	78°C to 95°C (172°F to 203°F)	6.0 liter (1.59 US gal)	API: CD or higher[3]
GM 2.4	2.4 liter (150 cu. in.)	**Gasoline** • Unleaded 87 octane **LPG** • HD-5	50% Water 50% Antifreeze	80°C to 84°C (176°F to 183°F)	With filter: 4.5 liter (1.12 US gal) Without filter: 4.25 liter (1.18 US gal)	ILSAC GF-4[4]

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

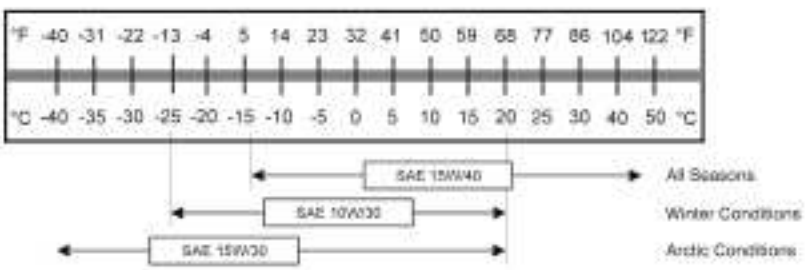
Note 2: Ethylene glycol or Propylene glycol may be used. Refer to the Cummins® Operation and Maintenance Manual B3.3 Series Engines for specific coolant recommendations and specifications.

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."

Engine Oil Viscosity

Cummins B3.3



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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 lower control panel (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 gauge panel above the lower controls (refer to Figure 5.2).

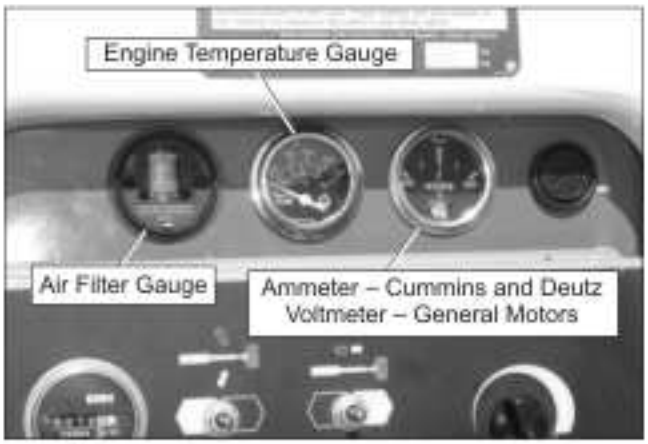


Figure 5.2 – Gauge Panel

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 on the gauge panel above the lower controls (refer to Figure 5.2). 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 needle should be to the right of "0."

Voltmeter – GM Engines

The voltmeter is located on the gauge panel above the lower controls (refer to Figure 5.2). The voltmeter displays battery voltage.

After the engine has been running for a few minutes under normal operating condition, the voltmeter should indicate between 12.5 and 14 volts.

Engine Air Filter Gauge

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

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 Gauge

The fuel gauge is located on top of the diesel or gasoline tank (refer to Figure 5.3). Read the fuel gauge at the line in the clear plastic window. The gauge indicates the fuel tank level in fractions of a full tank.

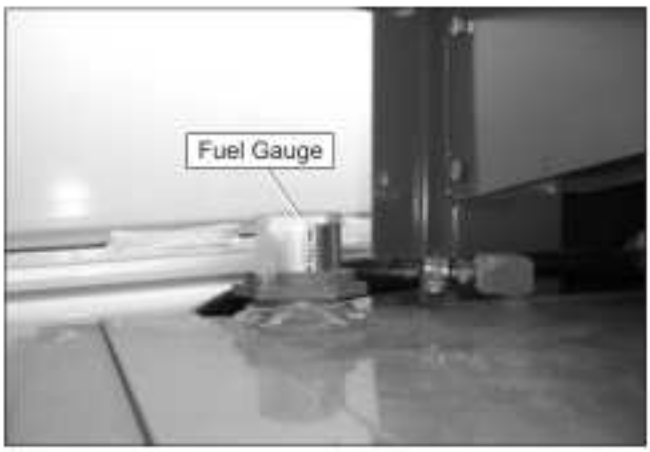


Figure 5.3 – Fuel Tank

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

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Lower Control Station

With no personnel in the platform, test the operation of each control from the lower controls (refer to Figure 7.12).

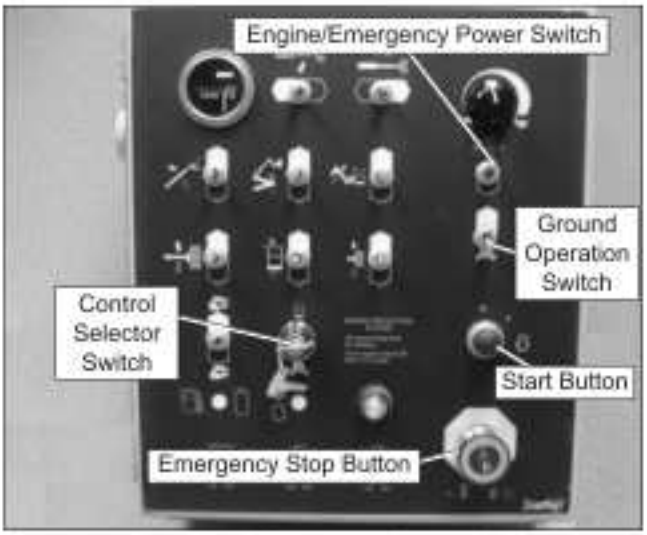


Figure 7.12 – Lower Controls

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, pull the emergency stop button outward. Insert the key in the control selector switch and turn the switch to the lower control position.
3. Press the start button until the engine starts, then release.

Note
If the machine has a GM engine, there will be a 7 to 10 second delay after starting the engine, before the throttle will go to mid or high. Start the engine and wait 10 seconds before proceeding with machine operation.

4. Let the engine warm to operating temperature.
5. Hold the ground operation 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 pre-start inspection.

⚠Warning

The potential for an accident increases when operating an aerial platform that is damaged or malfunctioning. Death or serious injury can result from such accidents. Do not operate the aerial platform if it is damaged or malfunctioning.

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.

Emergency Stop

Push the emergency stop button inward 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 start switch in the on position.

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

Manual Emergency Lowering Pump

The riser and main booms can be lowered in an emergency using the emergency lowering pump. The emergency lowering pump is behind the cowling door on the left side of the machine.

Use the following procedure to test the emergency lowering system.

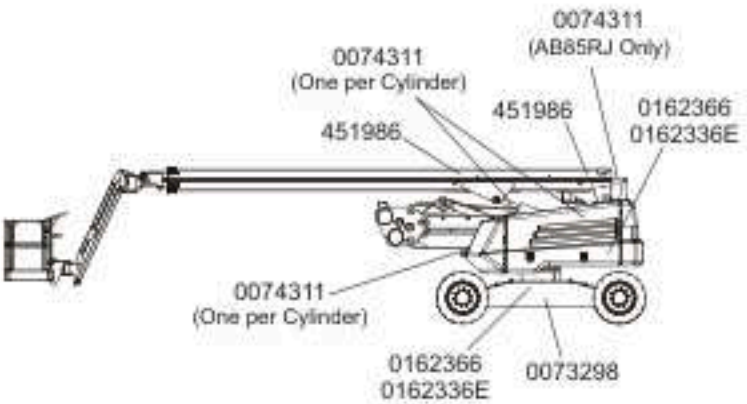
1. Use the lower controls to raise the riser and main booms a few feet.
2. Turn the engine off.

⚠Danger

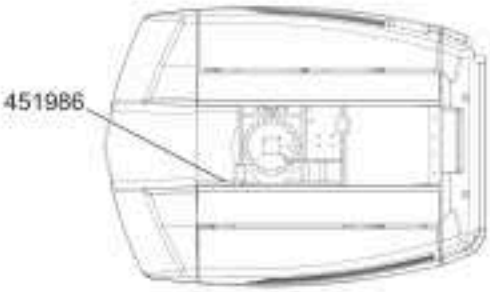
Pinch points may exist between moving components. Death or serious injury can result from becoming trapped between components. Stand clear of moving components while test operating the machine.

3. The pump handle is mounted next to the Operator's Manual holder. Insert the handle into the pump (refer to Figure 7.13).

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Right Side



Top View of Turntable



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