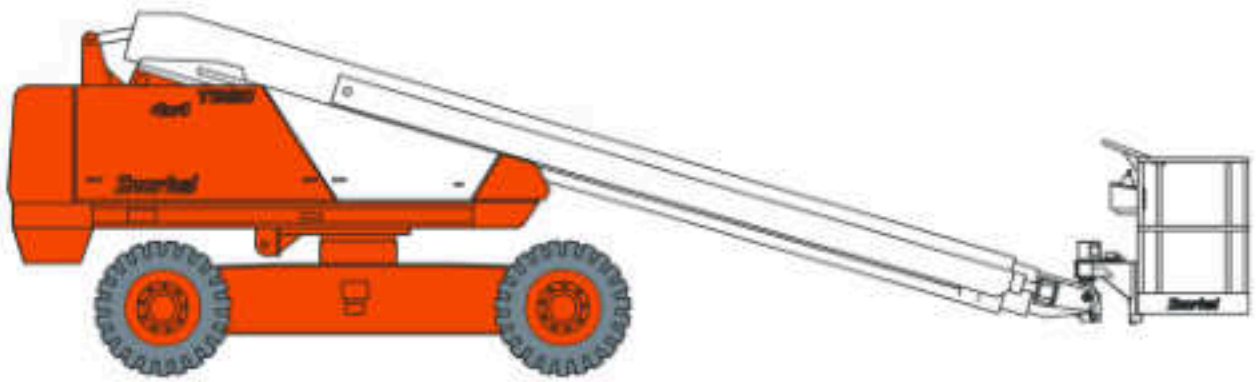
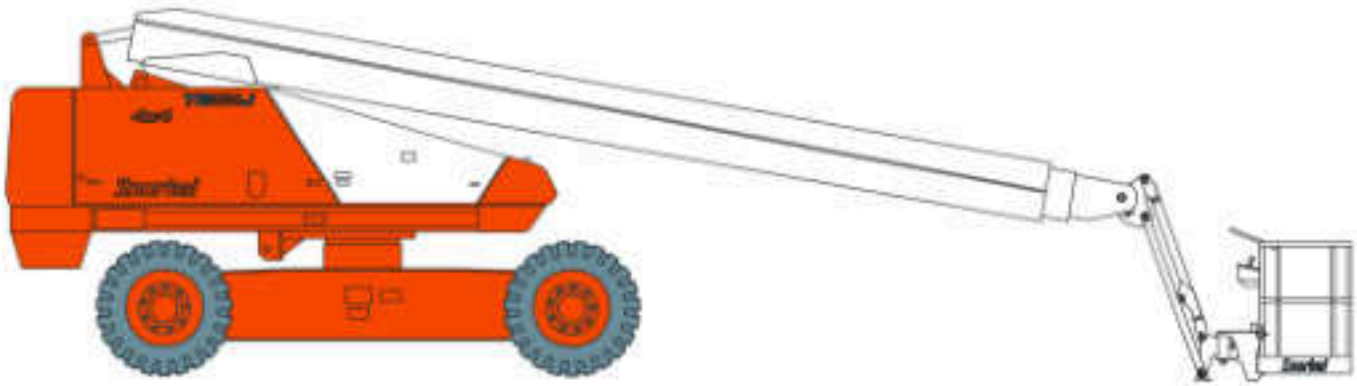
Operator's Manual



TB80



TB85J

CE

Snorkel
INTERNATIONAL

Part Number 0112622EE
August, 2005

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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	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	2.0 liter (125 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 (32°F) 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]

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 on the wiring box on the left side of the lower controls (refer to Figure 5.1). It measures the accumulated engine operating time.

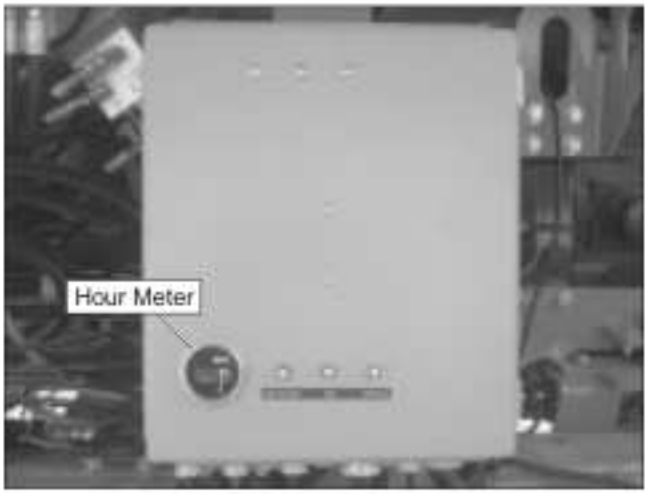


Figure 5.1 – Wiring Box

Engine Temperature Gauge

The temperature gauge is located on the lower control panel (refer to Figure 5.2).

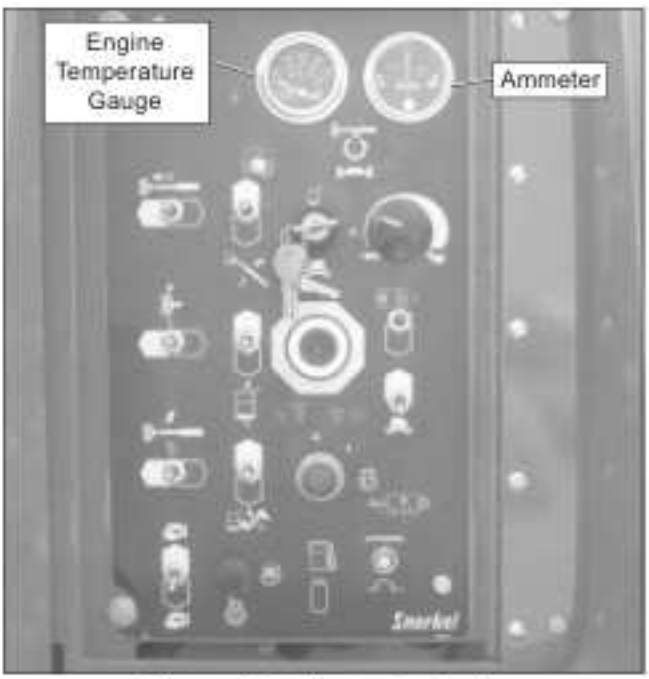


Figure 5.2 – Lower Controls

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 lower control panel (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 gauge indicator should read "0."

Engine Air Filter Gauge

The air filter gauge (refer to Figure 5.3) is located above the lower control panel. The gauge measures the air pressure between the intake manifold and the air filter.



Figure 5.3 – 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 5.4) and looking at the tank.

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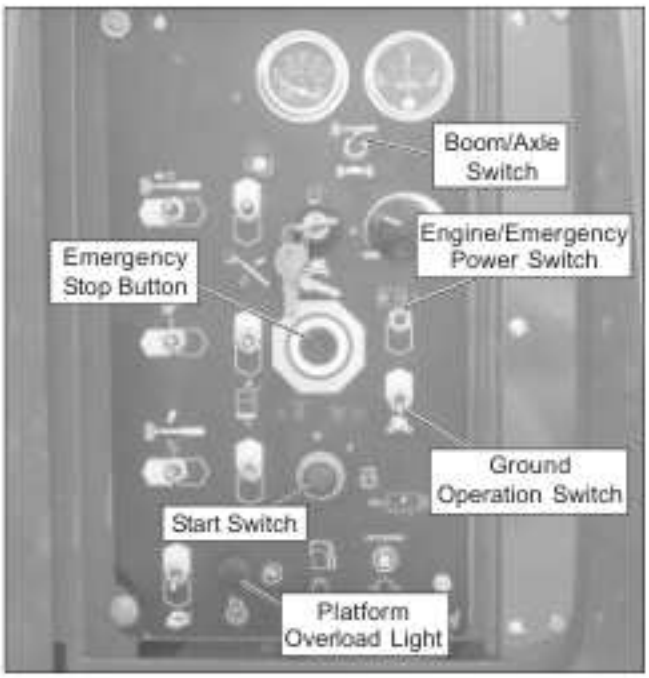


Figure 8.2 – Lower Controls

2. Press the start button until the engine starts, then release. The engine will not start if the controls selector switch is left in the lower control position for 30 seconds or longer before starting the engine. The controls selector switch must be turned back to off before the engine will start.

3. Let the engine warm to operating temperature.

4. Place the boom/axle switch in the axle position to operate the rear axles and in the boom position to operate the boom and turntable functions.

5. Hold the ground operation switch in the on position while operating the boom and turntable control toggle switches.

6. Hold the appropriate toggle switch in the desired direction.

7. Release the function toggle switch to stop movement.

8. Place the ground operation switch in the off position when no functions are being operated.

Axle Controls

To raise the boom above horizontal and to extend the boom fully, while operating from either the lower or upper controls, the rear axles must be extended and properly locked into position.

The machine can be driven from the upper controls with the axles extended or retracted.

Extending The Rear Axles

1. With the machine set up for operation from the lower controls, place the boom/axle switch (refer to Figure 8.2) in the axle position.

⚠ Danger

Make sure the area under the jack shoe is unobstructed and can support the weight of the axles. Use support such as an outrigger pad under the jack shoe if necessary to increase the support area.

2. Hold the jack lever (refer to Figure 8.3) in the raise position until the rear wheels are off the ground and the jack has stopped lifting the chassis.

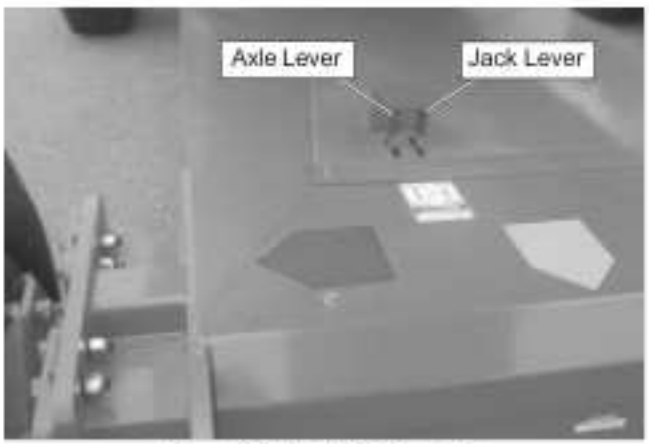


Figure 8.3 – Axle Controls

3. Remove the pin lock and pin (refer to Figure 8.4) from the upper hole in the chassis.

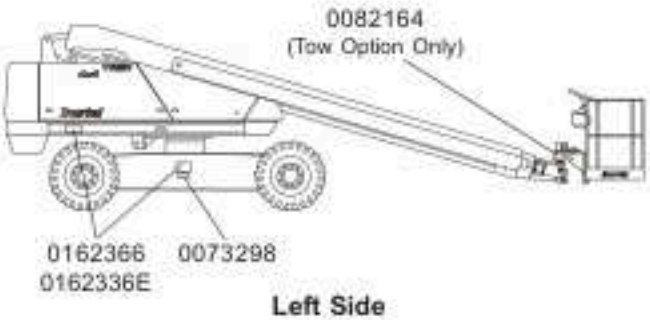


Figure 8.4 – Rear of Chassis

Note
It may be necessary to cycle the axle lever back and forth, to relieve pressure on the pin, while twisting the pin to remove it.

4. Hold the axle lever (refer to Figure 8.3) in the extend position until the axles stop extending.

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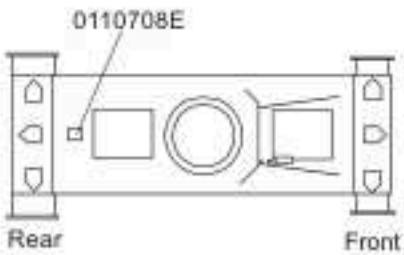
Left Side



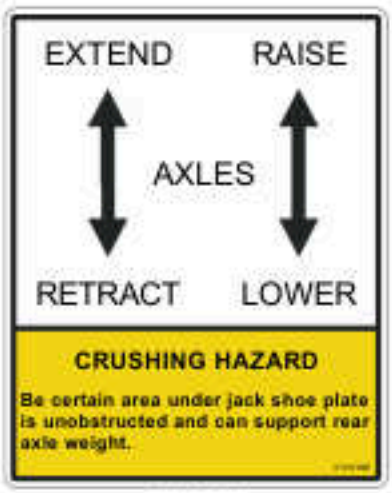
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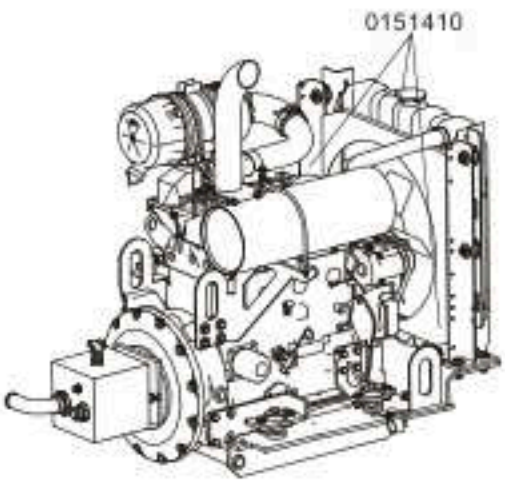
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Top View of Chassis



0110708E



Radiator



0151410

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