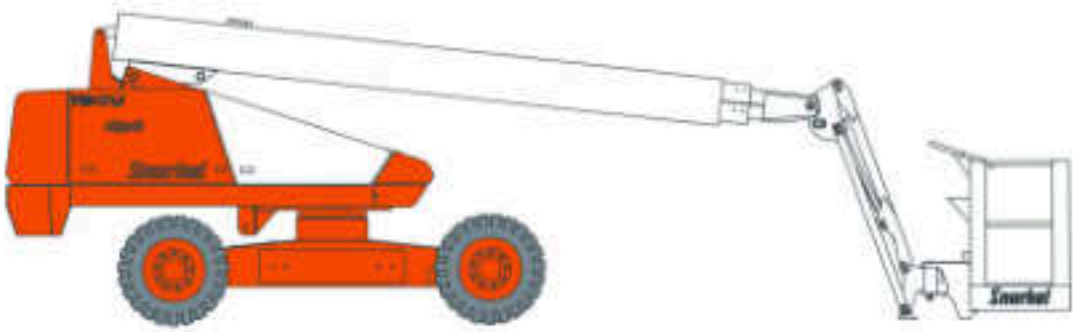
snorkel

TB47J



OPERATOR'S MANUAL

Part Number 0075182
August 2018

Replaces 0075182 March 2014

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Table of Contents

Chapter 1 – Introduction

Aerial Platform Features 1
Options 1
Operator's Manual 1
Safety Alerts 1
Operation 2
Maintenance 2
Manual of Responsibilities 2
Additional Information 2

Chapter 2 – Specifications

Component Identification 3
Working Envelope 4
General Specifications 5
- Aerial Platform 5
- Platform 5
- Function Speed 5
- Drive System 5
- Tires 5
- Electrical System 5
- Hydraulic System 5
- Engine 5
- Fuel Tank Capacity 5
- Ambient Air Temperature Operating Range 5
- Maximum Wind Speed 5

Engine Specifications 6
Engine Oil Viscosity 7
- Cummins B3.3 7
- Deutz F3L-2011F 7
- Ford LRG 425 7

Chapter 3 – Safety

Electrocution Hazards 9
Minimum Safe Approach Distance 9
Prestart Inspection 10
Work Place Inspection and Practices 10
Operation 10
Tip-Over and Falling Hazards 10
Electrical System 11
Hydraulic System 11
Engine and Fuel Handling Precautions 11
Placards and Decals 12

Chapter 4 – Safety Devices

Emergency Stop Controls 13
Emergency Power System 13
Emergency Lowering Knob 13
Ground Operation Switch 14
Platform Foot Switch 14
Guardrails 14
Lanyard Anchors 14
Ground Fault Circuit Interrupter 14
Tilt Alarm 15
Engine Protection Systems 15
- High Engine Temperature Alarm 15
- Low Oil Pressure Alarm 15

Horn 16
Drive Motion Alarm 16
Flashing Light 16
Driving Lights 16
Platform Work Lights 16

Chapter 5 – Gauges and Displays

Hour Meter 17
Engine Temperature Gauge 17
Ammeter 17
Engine Air Filter Gauge 17
Fuel 17
Engine Oil 18
Hydraulic Fluid Filter Gauge 18
Fluid Level and Temperature Gauge 18

Chapter 6 – Controls

Battery Disconnect Switch 19
Lower Controls 19
- Start Switch 19
- Emergency Stop Button 19
- Control Switch 19
- Ground Operation Switch 20
- Rotation Switch 20
- Boom Elevation Switch 20
- Boom Extend/Retract Switch 20
- Jib Articulation Switch 20
- Platform Level Switch 20
- Platform Rotation Switch 20
- Engine/Emergency Power Switch 20
- Throttle Switch 20
- Fuel Switch 20
- Circuit Breaker Reset Buttons 20

Upper Controls 21
- Start Switch 21
- Emergency Stop Button 22
- Speed Knob 22
- Boom Joystick 22
- Drive Joystick 22
- Drive Range Switch 22
- Jib Articulation Switch 22
- Boom Extend/Retract Switch 22
- Platform Rotate Switch 22
- Platform Level Switch 22
- Engine/Emergency Power Switch 23
- Throttle Switch 23
- Horn Button 23
- Platform Foot Switch 23

Machine/Generator Switch 23
Dual Fuel 23
Driving and Platform Work Lights 23

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Chapter 7 – Prestart Inspection

Operator's Manual 25
Engine 25
- Oil Level 25
- Coolant 25
- Radiator 26
- Fuel Tank 26
- Fuel Line 26
- Air Filter 26
- Charging System 27
- Cold Weather Start Kit—Block Heater 27

Electrical System 27
- Emergency Power Battery 27
- Battery Fluid Level 27
- Battery Terminals 27

Cables and Wiring Harness 27
Hydraulic System 27
- Fluid Level 27
- Fluid Filter 28
- Hoses, Tubes, and Fittings 28

Tires and Wheels 28
- Air Filled 28
- Foam Filled 29

Lower Control Station 29
- Operating Controls 29
- Emergency Stop 29
- Emergency Power 29

Emergency Lowering 29
Level Sensor 30
Flashing Light 30
Sandblast Protection Kit 30
Structures 30
- Weldments 30
- Slide Pads 31
- Wire Ropes 31
- Fasteners 31

Upper Control Station 32
- Guardrail System 32
- Lanyard Anchors 32
- Operating Controls 32
- Emergency Stop 33
- Emergency Power 33
- Horn 33
- Electrical Power Outlet 33
- Drive Motion Alarm 33
- Driving and Work Lights 33
- Platform Control Cover 33

Tow Kit 34
Placards and Decals 34
Prestart Inspection Checklist 39

Chapter 8 – Operation

Cold Weather Start-Up 41
Engine Cold Weather Start Kit 41
- Cummins and Ford — Block Heater 41
- Deutz — Manifold Preheater 41

Hydraulic System Cold Weather Warm-Up 41
Preparing for Operation 42
Lower Controls 42
Upper Controls 42
- Boom Operation 43
- Driving and Steering 43
- Drive Speeds 44
- Motion Warning Alarm 44

Four Wheel Drive 44
Electrical Power Outlet 44
AC Generator 44
Dual Fuel 45
Air Line 45
Driving Lights 45
Platform Work Lights 45

Chapter 9 – Stowing and Transporting

Stowing 47
- Tucked Stow 47

Transporting 48
- Driving 48
- Winching 48
- Hoisting 49
- Securing for Transport 50

Chapter 10 – Emergency Operation

Emergency Power System 51
- Lower Controls 51
- Upper Controls 51

Emergency Lowering 52
Towing 52

Chapter 11 – Troubleshooting

Troubleshooting Chart 55

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]
Ford LRG 425	153 cu. in. (2.5 liter)	**Gasoline** Unleaded 87 or 89 octane.[1] Do not use gasoline blends with more than 10% ethanol by volume octane index of 87 or 89. **LPG** HD-5 USA[1] EN589 European	50% water 50% Antifreeze[4]	195°F to 220°F 91°C to 104°C	4.5 US qt (4.26 liter)	API: SH or SJ[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.

Note 4: Refer to the Ford® engine manual for specific coolant 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).

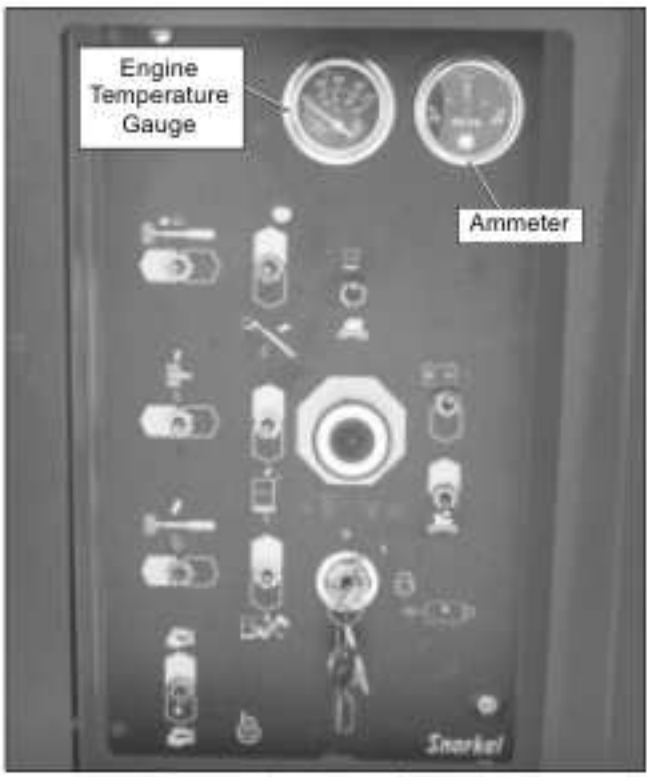


Figure 5.2 – Lower Controls

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.

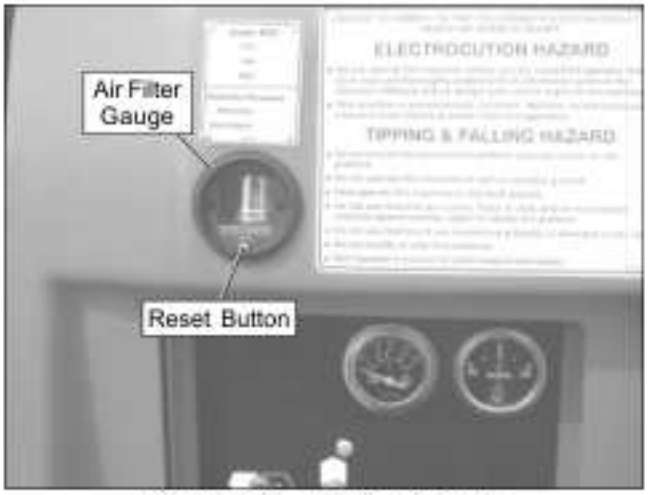


Figure 5.3 – Air Filter Gauge

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 (refer to Figure 5.4). The amount of fuel in the tank can be gauged by raising the doors on the right side of the machine and looking at the 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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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 lowering knob. 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).

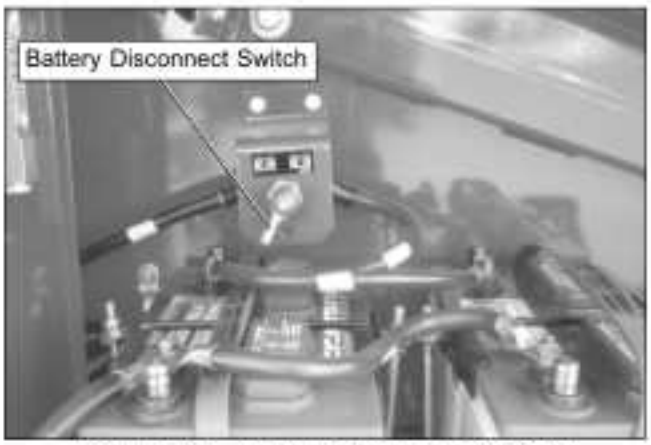


Figure 10.1 – Battery Disconnect Switch

2. Place the key in the start switch (refer to Figure 10.2) and turn the start switch on.
3. Place the emergency stop button in the on position.
4. Place the control selector switch in the ground position.
5. Hold the ground controls switch in the on position while holding the emergency power switch down in the emergency power position.

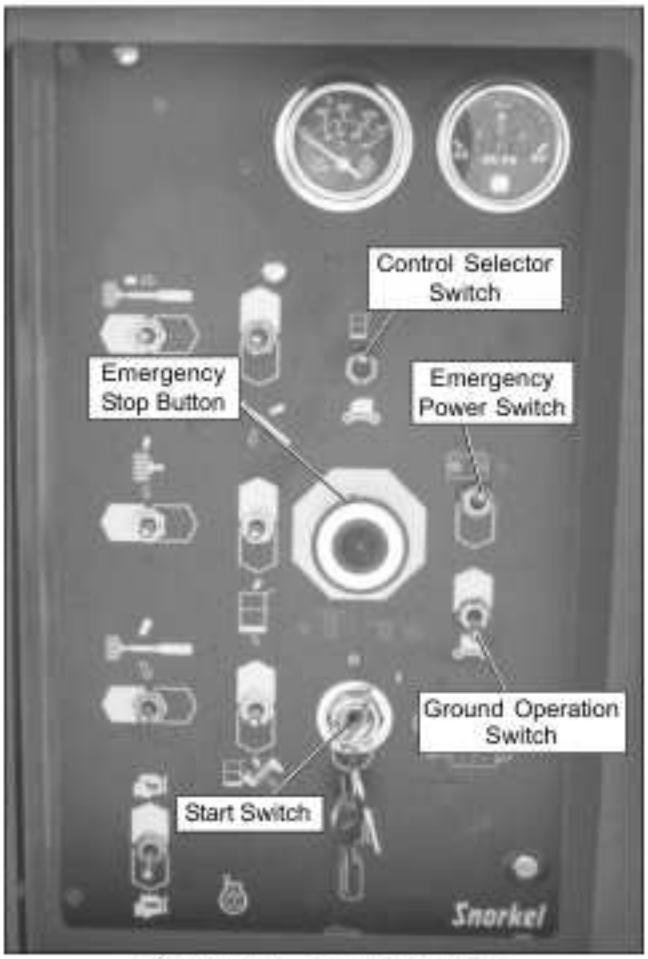


Figure 10.2 – Lower Controls

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

Upper Controls

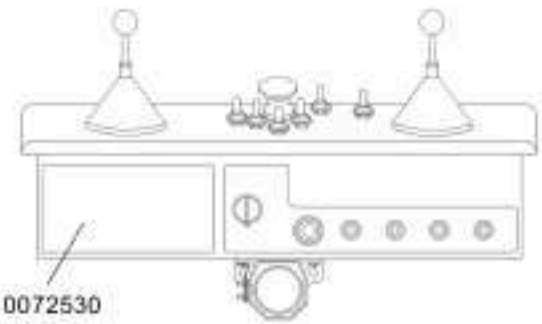
For the upper controls to be operational:

- 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 controls 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 out (refer to Figure 10.3).
2. Turn the start switch on.

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Upper Control Panel Front



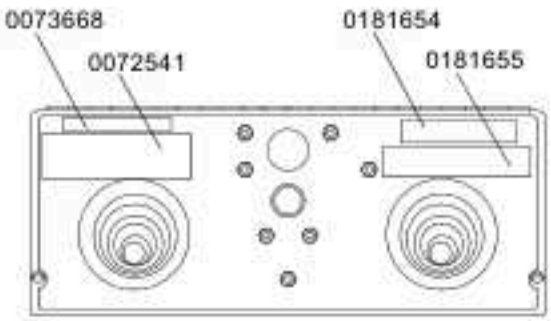
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Upper Control Panel Top



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