SERVICE INFORMATION

INFORMATION UPDATE: The above referenced serial number light towers may experience the following:

The Deutz F3M1008 diesel engine may become difficult to start in temperatures below 5 degrees Fahrenheit (-15 degrees Centigrade). Deutz recommends the use of a heavy duty, high amperage, cold climate 1.6KW starter.

If the light tower will be used in extreme cold weather conditions that are below 5 degrees Fahrenheit, it is recommended to replace the factory shipped 1.1KW starter (standard) with a 1.6KW heavy duty starter.

In addition it is recommended to provide a battery with more cold cranking amps (CCA) and a lower viscosity engine oil when using the light tower in extreme cold weather conditions.

PARTS INFORMATION

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Quantity</th>
<th>Part #</th>
<th>Description</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>LTHDSTARTERKIT</td>
<td>Kit, 16KW Starter</td>
<td>Includes items 2 thru 4</td>
</tr>
<tr>
<td>2</td>
<td>1</td>
<td>12851721</td>
<td>1.6KW Starter-Heavy Duty</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>1</td>
<td>12850526</td>
<td>Flange, Starter</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>2</td>
<td>12850528</td>
<td>Screw, Starter Mounting</td>
<td></td>
</tr>
</tbody>
</table>
INSTALLATION INSTRUCTIONS

WORK SAFELY!
Only a qualified service technician with proper training should perform this installation.

Required Tools/Materials
• Ratchet with extension (6-inches)
• Socket Set Standard
• Combination Wrenches

Safety Procedures
Perform the following before attempting installation of the Starter Kit:
1. Place the machine on level secure ground that is free of dirt and debris.
2. Wear safety glasses; steel toed boots and any other safety protection that might be required for the modification.
3. Disconnect the negative battery cable from the battery.
4. Remove the ignition key from the ignition switch.

Starter Removal (1.1KW)
1. To prevent electrical shock and damage to the unit, make sure that the negative cable (BLACK) has been disconnected from the negative battery post.
2. Disconnect ALL wires connected to the starter. Mark orientation of all wiring. These wires will be connected to the new starter.
3. Using a ratchet/socket or combination wrench, remove the starter. Discard the starter mounting screws(2), they are not required for the mounting of the new starter.

Starter Installation (1.6KW)
1. Holding the starter, place the flange (P/N 12850526) between the starter and the engine housing as shown in Figure 1.
2. Insert the new starter (P/N 12851721) into the starter opening on the engine housing while aligning the flange and pinion gear.
3. Insert the mounting screws (P/N 12850528) into the starter and flange, and tighten securely.
4. Reconnect wiring to starter.
5. Reconnect negative battery cable.
EXISTING STARTER SOLENOID
REMOVE AND DISCARD
REMOVE BATTERY

NEW STARTER P/N 12850521 (HEAVY DUTY)
INSTALL FLANGE P/N 12850526
INSERT SCREW P/N 12850528
CONNECT
CONNECT

STARTER KIT P/N LTHDSTARTERKIT

Figure 1. Starter Kit Installation