- Do not operate the lights without the protective lens cover in place or with a lens cover that is cracked or damaged.
- Replace or repair electrical components with components that are identical in rating and performance to the originals.

While operating the machine

- Keep the area behind the trailer clear of people and obstructions while raising and lowering the tower.
- Do not raise the tower or operate the machine in high winds. Lower the tower immediately if high winds or electrical storms are expected in the area.
- Do not raise, lower, or turn the tower while the unit is operating.
- If any part of the tower hangs up, or the winch cable develops slack while raising or lowering the tower, STOP immediately! Contact an authorized Wacker Neuson service representative.
- Do not disengage the tower locking pin while the tower is up.
- Lamps become extremely hot in use! Allow the lamps and fixtures to cool 10–15 minutes before handling.
- Lower the tower when not in use.

1.4 Lamp Safety

Description

The lamps provided with your Light Tower are electric discharge lamps. They are designed for use with metal halide ballasts only, and require time to reach full brightness on initial startup and after a power interruption. These lamps comply with FDA regulation performance standards 21 CFR 1040-30.

WARNING

Personal injury hazard. Broken or punctured lamps can cause serious skin burns and eye inflammation from shortwave ultraviolet radiation.

► Do not operate the Light Tower if a lamp is damaged.

► Replace damaged lamps immediately.

Operating safety

- Replace damaged lamps according to the instructions in section *Removing / Replacing Lamps.*
- Alternative lamps that automatically extinguish when the outer envelope is broken or punctured are commercially available.

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

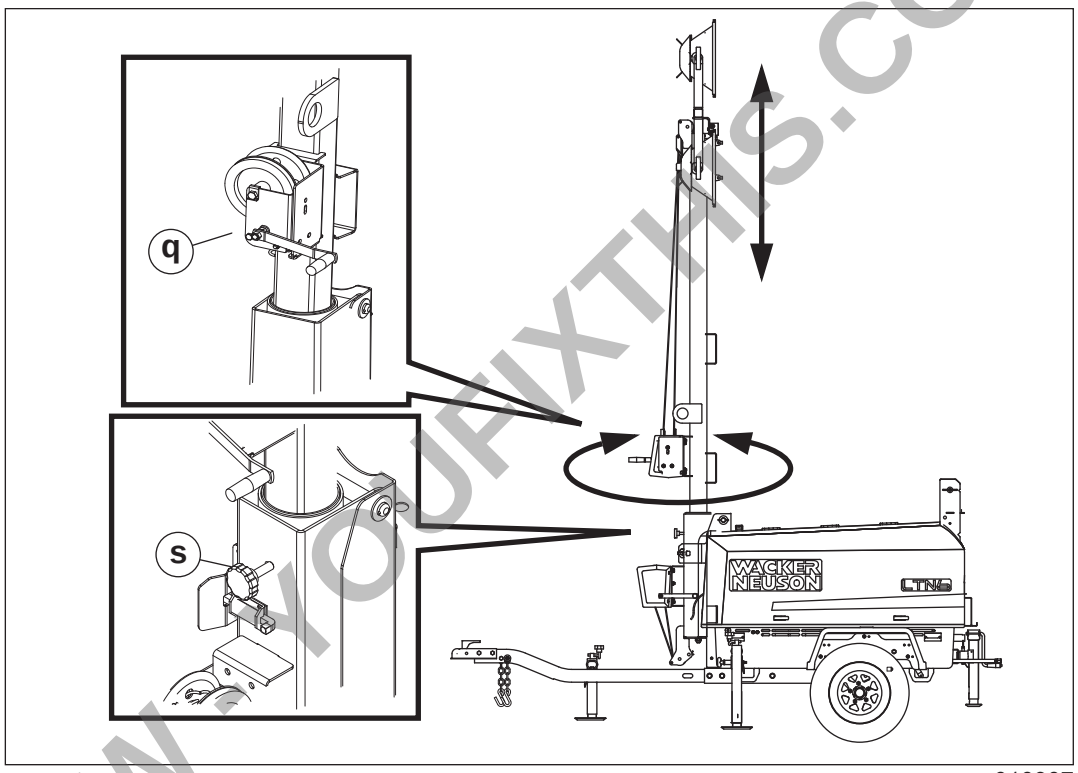
Continued from the previous page.

Raising the tower

4. After the tower is vertical, check the operation of the telescoping winch **(q)** by rotating the handle 1/4 turn clockwise (“cable in” direction). The winch pawl must engage the winch gear teeth. When operating properly, the winch pawl will make a “clicking” sound when its handle is rotated clockwise.

NOTICE: Do not attempt to raise the tower if the winch is damaged or not operating properly, or if the winch cables are worn or damaged.

5. Continue rotating the winch handle until the tower is at the desired height. Do not overcrank the winch when the tower is fully extended.



wc_gr010907

Rotating the tower

Once the tower is at the desired height, rotate the tower to the desired direction.

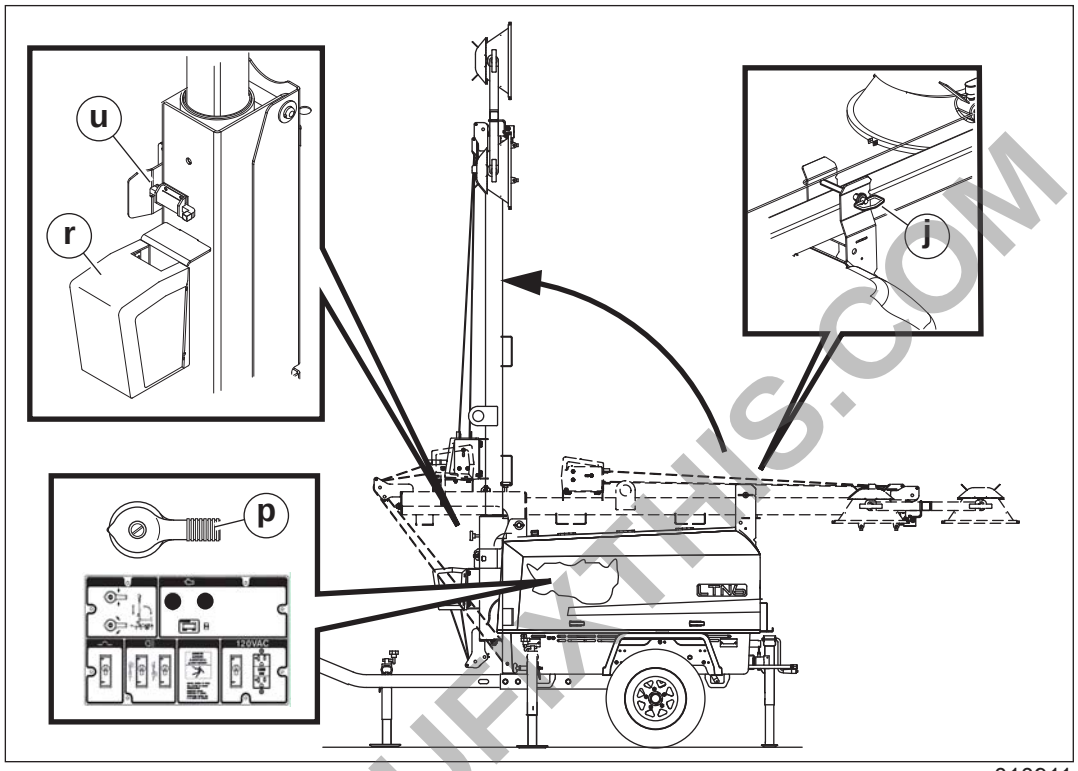
1. Loosen the rotation locking knob **(s)**.
2. Rotate the tower until the lights face the desired direction.
3. Retighten the rotation locking knob.

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

Continued from the previous page.

Reference graphic



wc_gr010911

Procedure

Perform the procedure below to raise the tower.

Tilting the tower

1. Remove the cradle locking pin **(j)** from the cradle.
2. Check the operation of the tilt winch **(r).** Turn the tilt rotary switch **(p)** on the control panel to the up position. The tower should begin to tilt.

NOTICE: Do not attempt to lift or raise the tower if the winch is damaged or not operating properly, or if the winch cables are worn or damaged. Continuous running of the winch in excess of four minutes will damage the winch motor.

3. Hold the tilt rotary switch in the up position and raise the tower to the vertical position until the vertical tower locking pin **(u)** locks the tower in place. Be certain the vertical tower locking pin is fully engaged in the locking position before raising the tower.

This procedure continues on the next page.

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

Continued from the previous page.

6. Start the engine and check the oil pressure.

Does the engine hold sufficient pressure?

Yes ____	No ____
The oil pressure switch has failed. Replace it.	There is a problem within the engine. See the manufacturer's information.

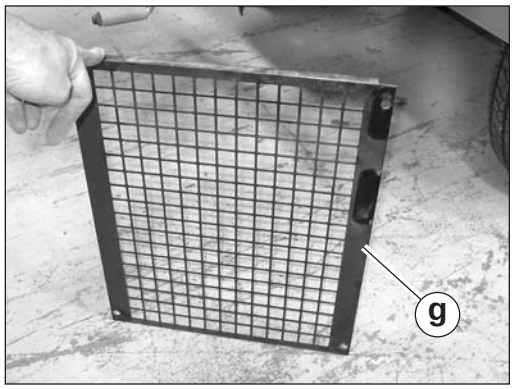
Result The oil pressure circuit has now been checked.

PREVIEW - YOUFIXTHIS.COM

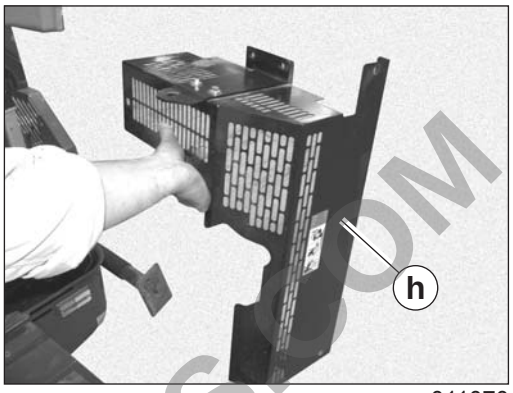
Download full manual at youfixthis.com

Continued from the previous page.

6. Remove the front grill **(g)**.

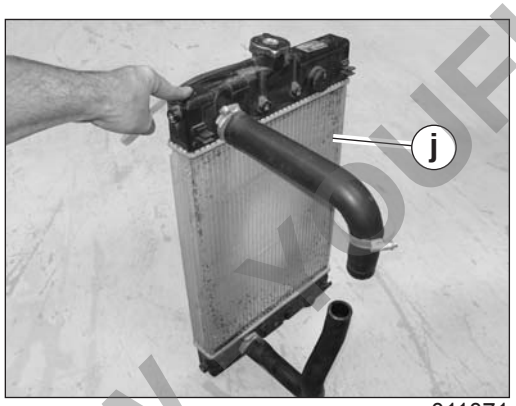


wc_gr011069

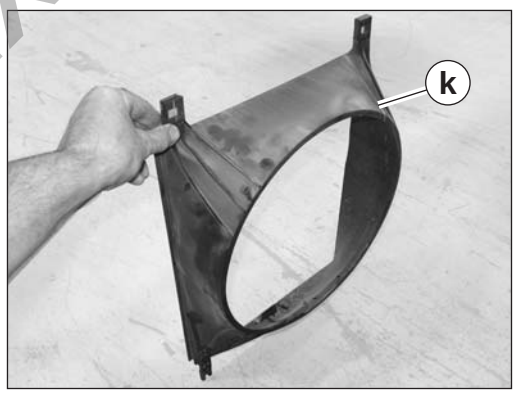


wc_gr011070

7. Remove the side shroud **(h)**.
8. Remove the screws that hold the radiator to the mounting bracket.
9. Separate the radiator from the air shroud **(k)**.
10. Remove the radiator from the machine **(j)**.



wc_gr011071



wc_gr011083

11. Remove the air shroud **(k)** from the machine.

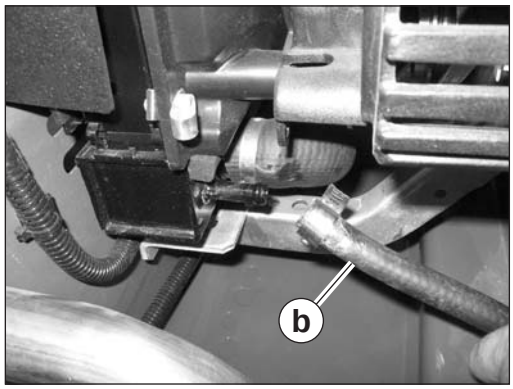
Result The procedure to remove the radiator is now complete.

PREVIEW YOUFIXTHIS.COM

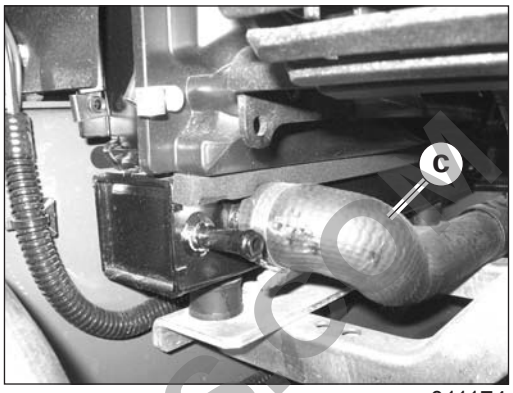
Download full manual at youfixthis.com

Continued from the previous page.

3. Remove the lower thinner radiator hose **(b)**.

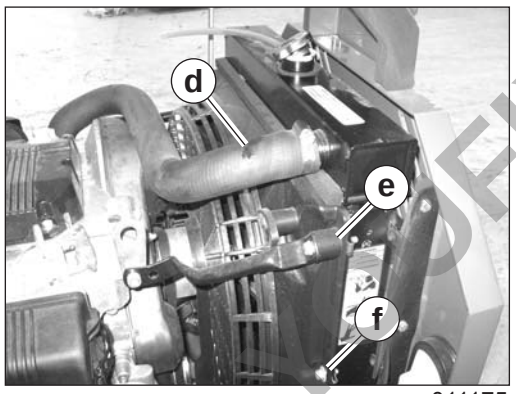


wc_gr011173

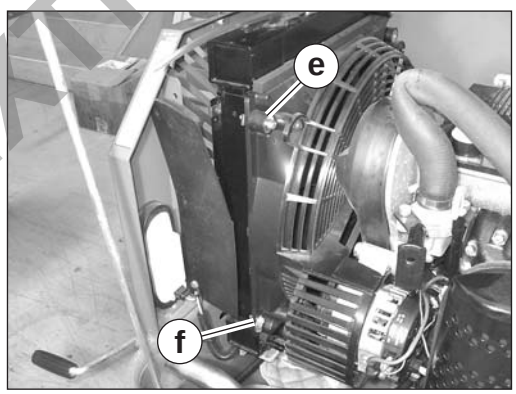


wc_gr011174

4. Remove the lower larger radiator hose **(c)**.
5. Remove the upper radiator hose **(d)**.



wc_gr011175



wc_gr011176

6. Remove the shockmounts **(e)** and the screws that hold the fan cover **(f)**.
7. Remove the nuts **(g)** that hold the radiator to the machine and remove the radiator.

Result The procedure to remove the radiator is now complete.

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

13.10 Installing the Fuel Tank

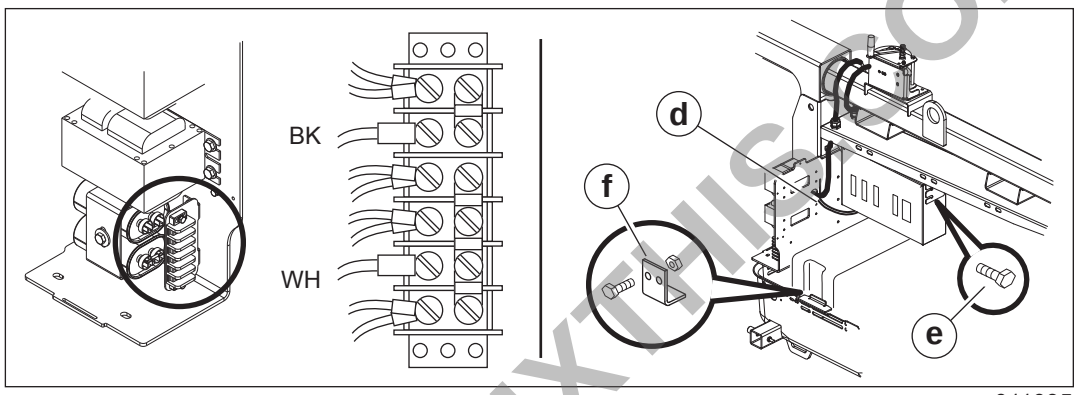
Requirements

- Assistant
- Fuel tank drained

Procedure

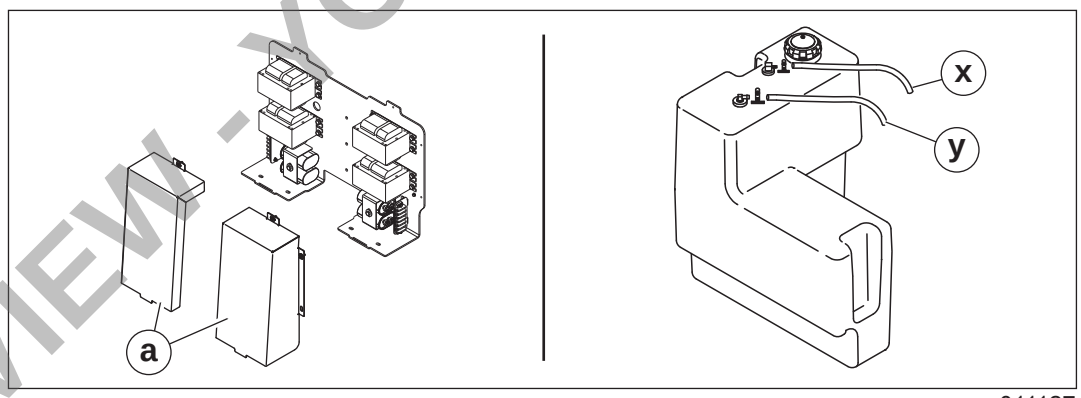
Perform the procedure below to install the fuel tank.

1. With the help from an assistant, set the fuel tank into the machine.
2. Install the brackets **(f)** to hold the fuel tank.



wc_gr011035

3. Mount the control panel with screws **(e)**.
4. Thread the loom **(d)** through the bulkhead and connect the black wire (BK) and the white wire (WH) from each ballast terminal strip.
5. Re-install the covers **(a)**.



wc_gr011127

6. Reconnect the supply hose **(x)** and the return hose **(y)** to the fuel tank.
7. Reconnect the battery.
8. Fill the fuel tank.

Result

The procedure to install the fuel tank is now complete.

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

13.19 Removing the Engine—Kohler

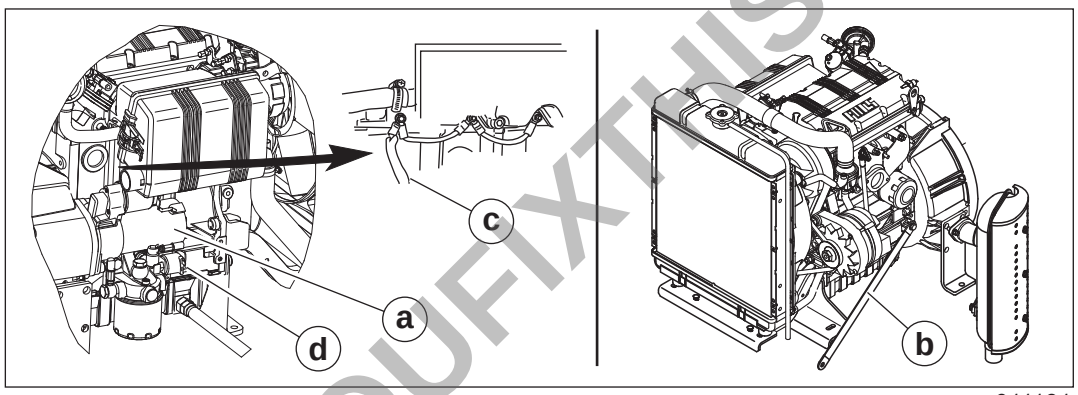
Requirements

- Doors and spine removed
- Engine lift or crane

Procedure

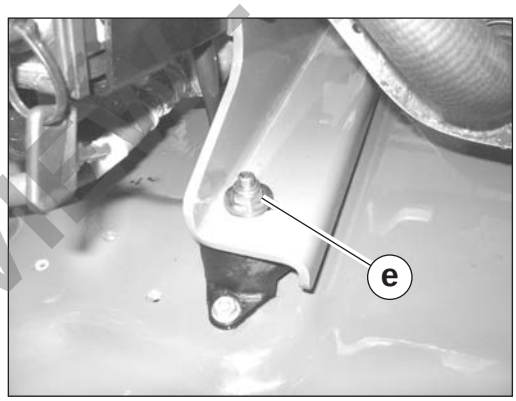
Perform the procedure below to remove the engine.

1. Remove the doors and the spine.
2. Remove the radiator.
3. Remove the muffler.
4. Mark, then disconnect the electrical components from the engine — for example, disconnect the starter **(a)**, the ground strap **(b)**, the glow plugs **(c)**,and the fuel solenoid **(d)**, etc.



wc_gr011181

5. Check and clear any obstructions that may be still in the tub — for example, fuel lines, control panel, and stator assembly.
6. Remove the screws **(e)** that hold the engine to the tub.



wc_gr011182

7. Using an appropriate lift or crane, lift the engine up and out of the tub.

Result

The engine has now been removed.

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

13.26 Installing the Tilt Cable

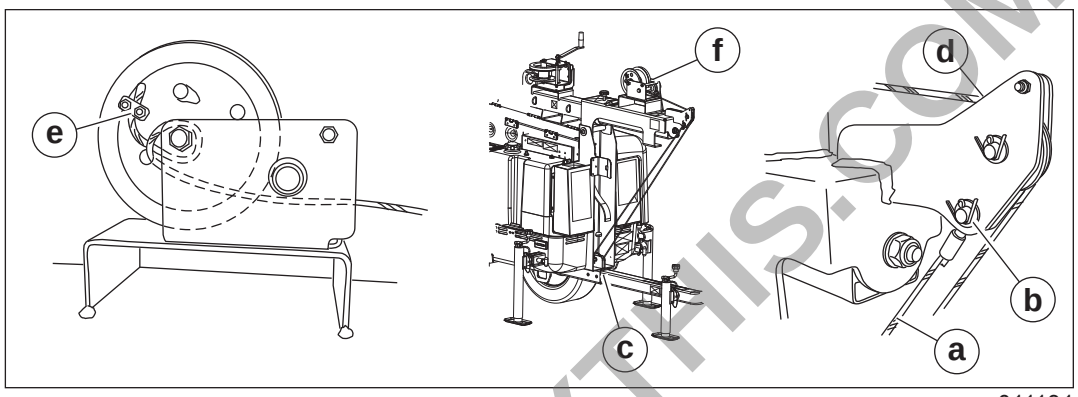
Requirements

- Tower is lowered
- New tilt cable

Procedure

Perform the procedure below to install the tilt cable.

1. Connect the tilt cable **(a)** to the lower tube with pins **(b)**.



wc_gr011131

2. Route the tilt cable through pulley **(c)** and then through pulley **(d)**.
3. Route the tilt cable under the spool of the tilt winch **(f)**, out the hole in the side of the spool, wrap it around the hub, and then connect it to the tilt winch with the cable clamp and two screws **(e)**.
4. Wind the winch to take up the slack in the tilt cable.

Result

The tilt cable is installed into the machine.

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

Machine documentation

- From this point forward in this documentation, Wacker Neuson Production Americas LLC will be referred to as Wacker Neuson.
- Keep a copy of the Operator's Manual with the machine at all times.
- Use the separate Parts Book supplied with the machine to order replacement parts.
- If you are missing any of these documents, please contact Wacker Neuson to order a replacement or visit www.wackerneuson.com.
- When ordering parts or requesting service information, be prepared to provide the machine model number, item number, revision number, and serial number.

Expectations for information in this manual

- This manual provides information and procedures to repair the above Wacker Neuson model(s). For your own safety and to reduce the risk of injury, carefully read, understand, and observe all instructions described in this manual.
- Wacker Neuson expressly reserves the right to make technical modifications, even without notice, which improve the performance or safety standards of its machines.
- The information contained in this manual is based on machines manufactured up until the time of publication. Wacker Neuson reserves the right to change any portion of this information without notice.

CALIFORNIA Proposition 65 Warning

Combustion exhaust, some of its constituents, and certain vehicle components contain or emit chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

Laws pertaining to spark arresters

NOTICE: State Health Safety Codes and Public Resources Codes specify that in certain locations spark arresters be used on internal combustion engines that use hydrocarbon fuels. A spark arrester is a device designed to prevent accidental discharge of sparks or flames from the engine exhaust. Spark arresters are qualified and rated by the United States Forest Service for this purpose. In order to comply with local laws regarding spark arresters, consult the engine distributor or the local Health and Safety Administrator.

Manufacturer's approval

This manual contains references to *approved* parts, attachments, and modifications. The following definitions apply:

- **Approved parts or attachments** are those either manufactured or provided by Wacker Neuson.
- **Approved modifications** are those performed by an authorized Wacker Neuson service center according to written instructions published by Wacker Neuson.
- **Unapproved parts, attachments, and modifications** are those that do not meet the approved criteria.

Unapproved parts, attachments, or modifications may have the following consequences:

- Serious injury hazards to the operator and persons in the work area
- Permanent damage to the machine which will not be covered under warranty

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

Foreword 3

1 Safety Information 13

1.1 Signal Words Used in this Manual 13
1.2 Machine Description and Intended Use 14
1.3 Safety Guidelines for Operating the Machine 15
1.4 Lamp Safety 16
1.5 Operator Safety while Using Internal Combustion Engines 17
1.6 Safety Guidelines for Towing the Machine 18
1.7 Service Safety 19

2 Operation 21

2.1 Starting 21
2.2 Stopping 21
2.3 Raising the Tower (Manual Winch System) 22
2.4 Lowering the Tower (Manual Winch System) 25
2.5 Raising the Tower (Power Winch System) 27
2.6 Lowering the Tower (Power Winch System) 30

3 Troubleshooting Engine Starting (no crank, no start) 32

3.1 Preparing for Diagnostic Procedures 32
3.2 Troubleshooting Sequence 33
3.3 Checking the Battery and Ground Wiring 34
3.4 Checking the Key Switch and Power to the Starter Solenoid 36

4 Troubleshooting Engine Starting (crank, no start) 38

4.1 Troubleshooting Sequence 38
4.2 Checking the Key Switch 39
4.3 Checking the 15A Fuse 40
4.4 Checking the Shut-down Relay 41
4.5 Checking the Diode 43
4.6 Checking Power to the Fuel Solenoid 44
4.7 Checking Power to the Glow Plugs 45
4.8 Checking a Glow Plug 46

5 Troubleshooting Engine Start (starts, then shuts down) 47

5.1 Preparing for Diagnostic Procedures 47

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

1 Safety Information

1.1 Signal Words Used in this Manual

This manual contains DANGER, WARNING, CAUTION, *NOTICE,* and NOTE signal words which must be followed to reduce the possibility of personal injury, damage to the equipment, or improper service.



This is the safety alert symbol. It is used to alert you to potential personal hazards.

► Obey all safety messages that follow this symbol.



DANGER

DANGER indicates a hazardous situation which, if not avoided, will result in death or serious injury.

► To avoid death or serious injury from this type of hazard, obey all safety messages that follow this signal word.



WARNING

WARNING indicates a hazardous situation which, if not avoided, could result in death or serious injury.

► To avoid possible death or serious injury from this type of hazard, obey all safety messages that follow this signal word.



CAUTION

CAUTION indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.

► To avoid possible minor or moderate injury from this type of hazard, obey all safety messages that follow this signal word.

NOTICE: Used without the safety alert symbol, NOTICE indicates a situation which, if not avoided, could result in property damage.

Note: *A Note contains additional information important to a procedure.*

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

PREVIEW ONLY

You're viewing 12 of 216 pages

The full manual includes:

- All 216 pages, complete
- Searchable PDF (find any keyword)
- No watermarks
- Instant download
- Print-ready quality

GET FULL MANUAL NOW

Wacker Neuson LTN 6C, LTN 6K, LTN 8K, LTN 6L, LTN 6, LTN 8 Repair Manual

Scan or click anywhere
youfixthis.com

Click anywhere on this page to get the full manual