

Battery Kit Workman® MD/MDX Utility Vehicle Model No. 119-9680

Installation Instructions

Loose Parts

Use the chart below to verify that all parts have been shipped.

Procedure	Description	Qty.	Use
1	Battery	1	Charge the battery.
2	Quick attach terminal connectors	2	Assemble the battery.
3	No parts required	_	Remove the old battery.
4	Bracket Carriage bolt Locknut Hold down Bolt Locknut Washer Nut Cover	1 4 4 1 1 1 2 2	Install the new battery



Charging the Battery

Parts needed for this procedure:

1 Battery

Procedure

Bulk electrolyte with 1.265 specific gravity must be purchased from a local battery supply outlet.

A DANGER

Battery electrolyte contains sulfuric acid which is a deadly poison and causes severe burns.

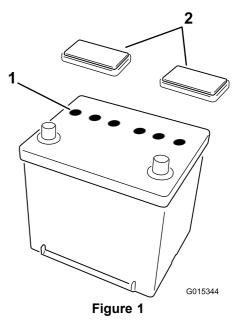
Do not drink electrolyte and avoid contact with skin, eyes or clothing. Wear safety glasses to shield your eyes and rubber gloves to protect your hands.

Fill the battery where clean water is always available for flushing the skin.

Follow all instructions and comply with all safety messages on the electrolyte container.

Important: Never fill the battery with electrolyte while the battery is installed on a machine. Electrolyte could be spilled on other parts and cause corrosion.

- 1. Make sure the top of the battery is clean and dry.
- 2. Remove the vent caps from the battery (Figure 1). Carefully fill each cell with electrolyte until the plates are covered with about 1/4 inch (6 mm) of fluid.



1. Cell vents

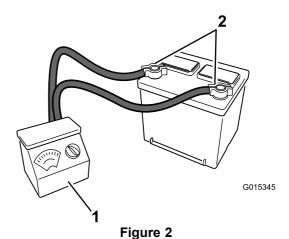
2. Vent caps

- 3. Allow approximately 20 to 30 minutes for the electrolyte to soak into the plates. Refill as necessary to bring the electrolyte to within about 1/4 inch (6 mm) of the bottom of the fill well (Figure 1).
- 4. Install the battery vent caps.
- 5. Connect a 3 to 4 amp battery charger to the battery posts (Figure 2). Charge the battery at a rate of 3 to 4 amps until the specific gravity is 1.250 or higher and the temperature is at least 60°F. (16°C) with all cells gasing freely.

A WARNING

Charging the battery produces gasses that can explode.

Never smoke near the battery and keep sparks and flames away from the battery.



1. Battery charger

2. Charger leads

6. When the battery is fully charged, unplug the charger from the electrical outlet, then disconnect the charger leads from the battery posts (Figure 2).

Note: After the battery has been activated, add only distilled water to replace normal loss, although maintenance-free batteries should not require water under normal operating conditions.



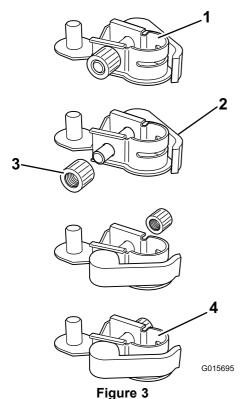
Assembling the Battery

Parts needed for this procedure:

Quick attach terminal connectors

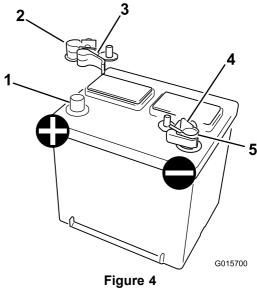
Procedure

1. Locate the quick attach terminal connectors in loose parts. One of the connectors must be adjusted from its original state to accommodate the installation.



- Quick attach terminal
- connector, original state
- Jam nut
- Clamp arm
- Quick attach terminal connector, altered state
- Loosen and remove the jam nut on one of the connectors (Figure 3).

- Remove the clamp arm from the connector and reinsert from the opposing side (Figure 3).
- Install the jam nut removed previously to the clamp arm post and tighten just enough to retain the nut on the post (Figure 3).
- 2. Install the quick attach connectors to the battery terminals with the clamp arms facing outward (Figure 4). Install the unaltered connector to the positive batter post. Instal the altered connector to the negative batter post.



- Positive battery post
- Quick attach connector
- Lever

- Altered quick attach connector
- 5. Negative battery post

Note: The jam nut may need to be adjusted to allow the connector to fit over the post.

3. Install the clamp over the battery post. Close the lever to tighten the clamp around the post.

Note: Ensure that the clamp is snug on the battery post. If it is loose, turn the jam nut clockwise until the clamp is snug.



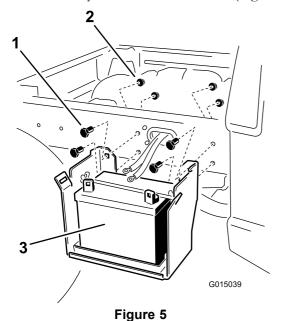
Removing the Old Battery

No Parts Required

Procedure

1. Raise the bed of the machine the battery kit will be installed on.

- 2. On the right side of the machine, locate the battery. Remove the cover.
- 3. Disconnect the battery cables from the battery. Refer to the Operator's Manual for more information.
- 4. Remove the fasteners securing the battery and bracket assembly to the machine frame (Figure 5).



- 1. Bolt
- 2. Lock nut
- 3. Battery assembly and
- bracket



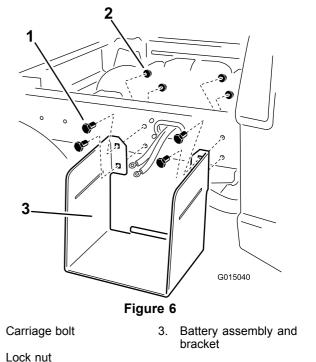
Installing the New Battery

Parts needed for this procedure:

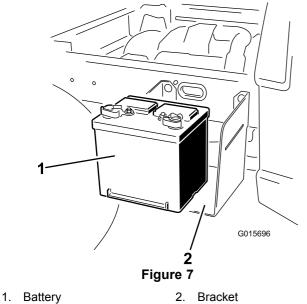
1	Bracket
4	Carriage bolt
4	Locknut
1	Hold down
1	Bolt
1	Locknut
2	Washer
2	Nut
1	Cover

Procedure

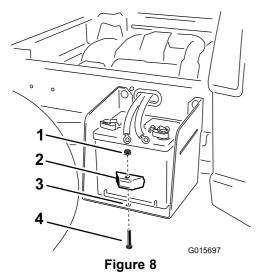
1. Install the battery bracket to the machine frame. Secure the battery assembly using 4 carriage bolts and four lock nuts.



- 1. Carriage bolt
- 2. Install the battery assembly to the bracket.



- 3. Secure it with a hold down block, bolt and locknut.



Bolt Bracket 2.

- 3. Hold down
- Lock nut
- 4. Install the battery leads to the posts on the quick attach connectors. First, install the positive cable (red) to the positive (+) terminal and then the negative cable (black) to the negative (-) terminal of the battery. Secure the leads using 2 washers and 2 nuts.

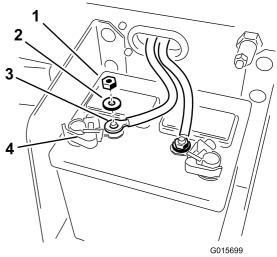
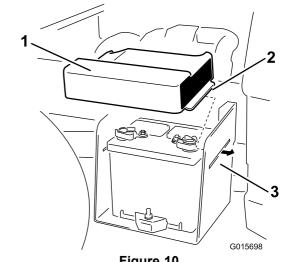


Figure 9

- 1. Nut
- Washer

- 3. Battery lead
- Post on quick attach connector
- 5. Install the cover. Make sure the tabs in the cover are seated in the slots on the battery bracket.



- Figure 10
- 1. Cover
- Tab

3. Slot in bracket

Notes:

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