



## **Battery and Cable Inspection & Rework**

Product: Groundsmaster® 4500 & 4700-D May 16, 2007

Affected Units: Models: Serial Numbers:

 Groundsmaster 4500-D
 30856
 220000101 – 270000693

 Groundsmaster 4700-D
 30868
 220000101 – 270000479

### Situation:

The battery and cables may be installed incorrectly on some Groundsmaster 4500 & 4700-D units. Incorrect installation places the positive battery terminal and cable too close to the Turbocharger & Exhaust Manifold and contact may only be prevented by the battery Case Strap. If the Strap fails (or cable not retained by strap) the positive cable could move and contact the exhaust manifold, resulting in a severe electrical short.

#### Instructions:

If the battery's positive Cable is positioned next to the Turbocharger & Exhaust Manifold (as shown in Pic. 1 of the <u>Inspection and Rework Instructions</u>) the Battery must be lifted and rotated 180<sup>0</sup> so the positive post & cable will be away from these components (as shown in Pic. 2). The battery cables then must be repositioned to complete the rework. Secure Battery and Case with original Strap. All machines must be inspected and corrected if the battery and cables are found to be installed in the incorrect position. No additional parts are required to complete this procedure.

Please review the attached Inspection & Rework Instructions, and perform the inspection process. If the inspection reveals that the installation needs to be reworked, please complete this process also.

If for any reason you do not feel comfortable about completing this Inspection/Rework, be sure to contact your local Toro Commercial Products Distributor promptly and they will arrange to complete it for you.



# A

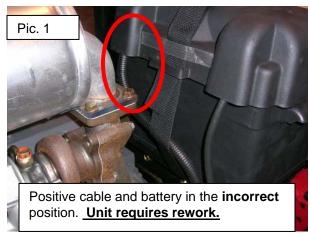
# Battery and Cable Inspection & Rework

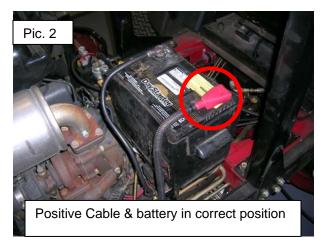
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## **Inspection Instructions**

- 1. Raise Hood and visually inspect the Battery Case and Cable positions. If the battery positive cable (corrugated covering) is closer to the Turbocharger/Exhaust Manifold than the negative cable (Pic.1), then proceed with the rework.
- 2. If the negative cable is closer to the Turbocharger/Exhaust Manifold (Pic. 2) then no rework is required. Machine has been inspected.





### **Rework Instructions**

- 1. Remove Battery Case cover.
- Disconnect negative Battery Cable.
   Disconnect positive Cable. Place cables off to the sides of the battery case.
- 3. Lift Battery Case (and Battery)and rotate 180° so the positive battery post is now away from the Turbocharger/Exhaust Manifold (Pic. 2).
- 4. Remove the retainer bolt and nut that secure the cable clamps at the base of the battery stand (Pic. 3). Swap the clamps from the cables and re-position so the positive cable is now nearest the main Frame of the machine (as shown).
- Pic. 3

  Positive Cable

  Negative cable

  Corrected cables and clamps
- 5. Replace the retainer bolt and nut and tighten.
- 6. Re-install the positive Cable onto the positive Battery Post (in new position). Re-install the negative Cable and tighten post clamps.
- 7. Re-install the battery cover and secure with original Strap. **Note:** If strap is missing or failed, install replacement Strap (3339-175). Rework complete.