



Service Bulletin No. VR20060922
Subject: Engine Mounting Bolt Replacements
Model: P33/24/HHMR SERIES
Product Group: Walk-Behind Vibratory Roller
Date: 09/22/2006

SERVICE BULLETIN

Group: VR

☒ **Mandatory**

☐ **Information**

☐ **Recommended Change**

Series/Parts Affected:
ENGINE MOUNTING BOLTS

Machines Affected
P33/24HHMR S/N 153674 ~1537393 (Hatz 2G40 Engine)

SERVICE INFORMATION

Existing or current engine mounting bolts have been known to become loose due to type of bolt and installation procedure used. The existing engine mounting bolts are being replaced with a new tensile type locking bolt. This type bolt is designed to bite into the metal surface of the bracket and is non-reversible (will not back out). Failure to replace these engine mounting bolts may cause **severe engine damage**.

SOLUTION

Immediately perform the following on all units listed above. See the Procedure section for illustrated instructions.

- Replace the existing 14 bolts that secure engine mounting bracket to the frame and engine with the new tensile locking type bolts.
- Remove paint from the bolt-hole openings on both sides of the engine mounting bracket.

Multiquip recommends that a qualified mechanic or an Authorized Service Center perform this modification. To locate a Multiquip Authorized Service Center nearest you, call 800-478-1244 or check for ASC locations on-line at www.multiquip.com.

PARTS INFORMATION

| Quantity | Part # | Description | Remarks |
|----------|---------|------------------------|---------|
| 8 | 3-55960 | 10M X 25 BOLT (ENGINE) | |
| 6 | 3-55961 | 12M X 30 BOLT (FRAME) | |

Required Tools

- Ratchet
- 15 and 17 mm sockets with extensions
- Engine Hoist with chain/strap and lifting hook/eye.
- Set of Combination Wrenches

MODIFICATION PROCEDURE

1. Grasp and unlock hood Latch (Figure 1), lift engine hood and pull back.

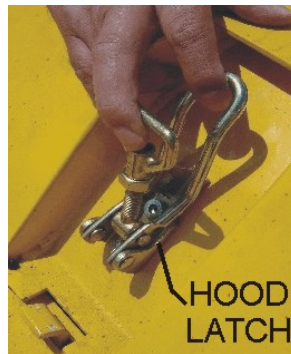


Figure 1. Hood Latch

2. Remove the lower bolt from the hood support cable (Figure 2) and tilt hood backwards.

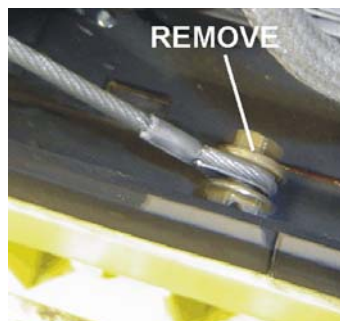


Figure 2. Hood Support Cable/Bolt

Battery/Cover Removal

3. Remove the 2 bolts securing the battery cover (Figure 3) to the frame.



Figure 3. Battery Cover Removal

Air Cleaner Removal

- Loosen clamp (Figure 4) that connects air cleaner hose to engine body. Pull air cleaner hose away from engine body. Set clamp aside.

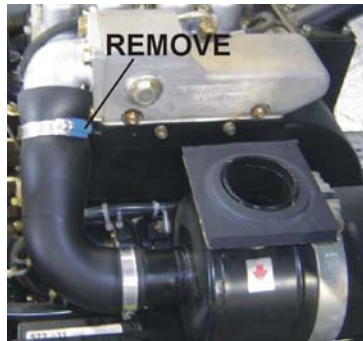


Figure 4. Air Cleaner Clamp

- Remove the screws and clamps (Figure 5) that secure the air cleaner to the support bracket.

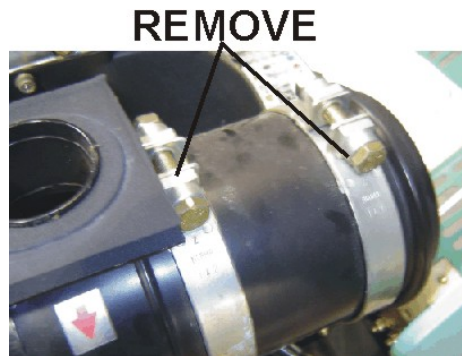


Figure 5. Air Cleaner Clamp Screws Removal

- Completely remove the air cleaner from the unit. Place air cleaner in a safe location where it will not get damaged.

Battery Removal

- Disconnect the positive (+) and negative (-) battery cables (Figure 6) from the battery terminals. Remove the battery from the unit.

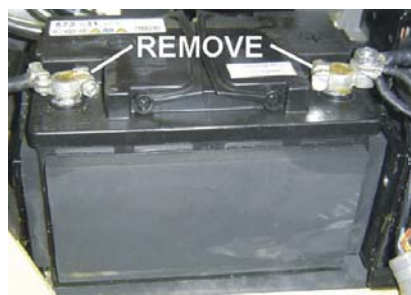


Figure 6. Battery Removal

Battery Box Removal

8. Cut the tie wraps (Figure 7) that are secured to the battery box (support plate).

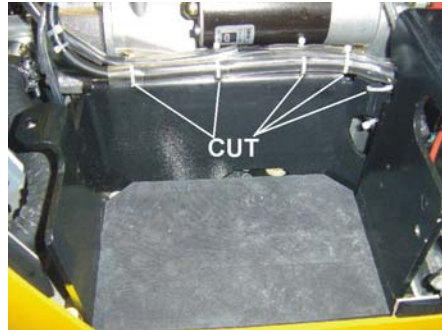


Figure 7. Tie Wrap Removal

9. Using a ratchet with a 17 mm socket and extension, remove the battery box (Figure 8).

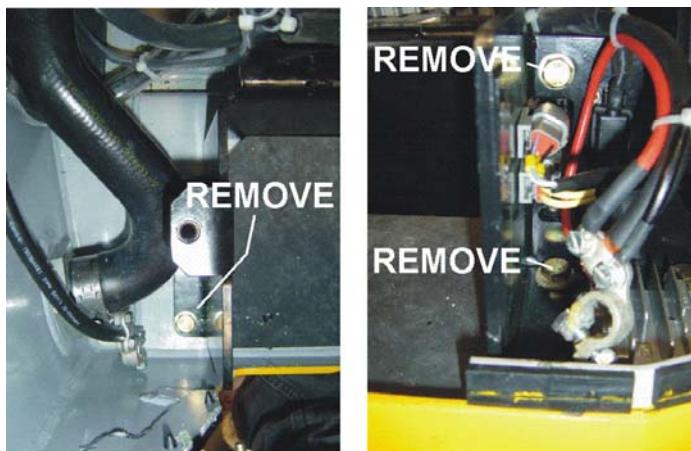


Figure 8. Battery Box Removal

Throttle Cable Removal

10. Disconnect the throttle cable by loosening the jam nut (Figure 9) at one end of the cable and at the other end of the cable disconnect the cable from the clevis pin.

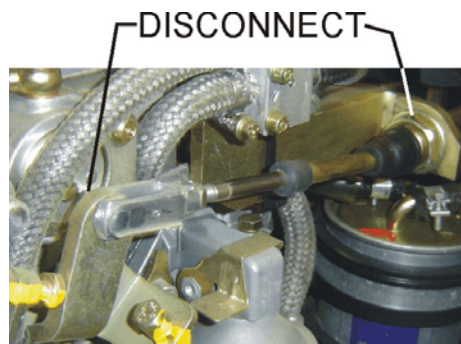


Figure 9. Throttle Removal

Oil Drain Hose Clamp Removal

11. Loosen oil drain hose clamp (Figure 10). Push oil drain hose inward when lifting of the engine is required.



Figure 10. Oil Drain Clamp

Engine Mounting Bolts Removal (Frame Side)

12. There are six 12 mm bolts (3 per side) that secure the engine mounting bracket (Figure 11) to the frame. Using a 17 mm socket remove and discard these bolts.

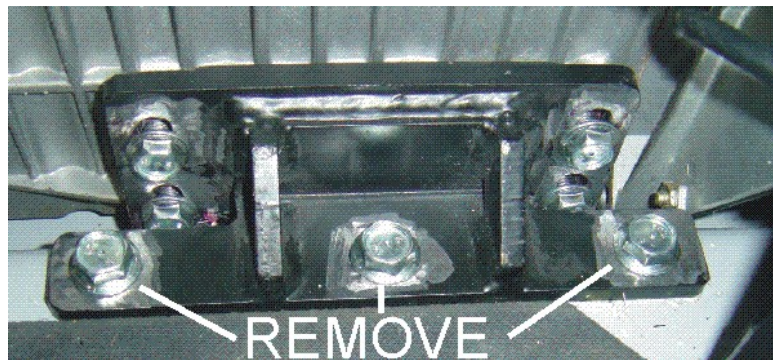


Figure 11. Engine Mounting Bolts (Frame)

Lifting of Engine

13. Insert a lifting eye or hook (Figure 12) into the engine body.
14. Attach a chain (Figure 12) or strap to the lifting eye or hook on the engine.
15. Using a hoist of adequate lifting capability, lift the engine upward slowly about 4 to 5 inches.

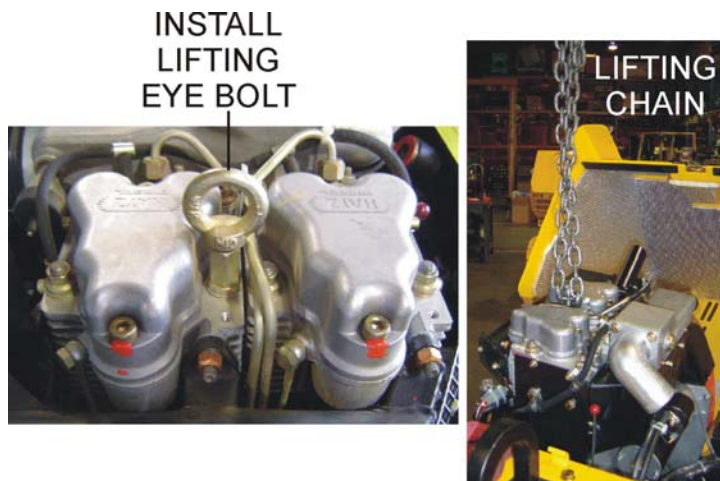


Figure 12. Lifting Eye/Lifting Chain

Engine Mounting Bolts Removal (Engine Side)

16. There are eight 10 mm bolts (4 per side) that secure the engine mounting bracket to the engine (Figure 13). Using a 15 mm socket remove and discard these bolts.
17. Remove mounting bracket from engine.

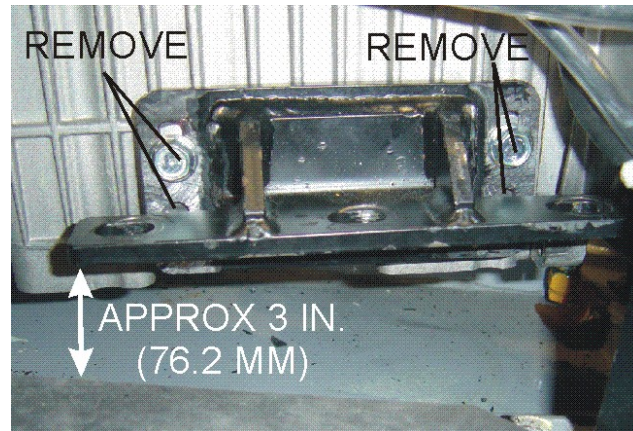


Figure 13. Engine Mounting Bolts (Engine)

Engine Mounting Bracket Paint Removal

18. Remove paint around the bolt-hole openings on the engine mounting bracket. Do this to both sides of the engine mounting bracket (Figure 14).

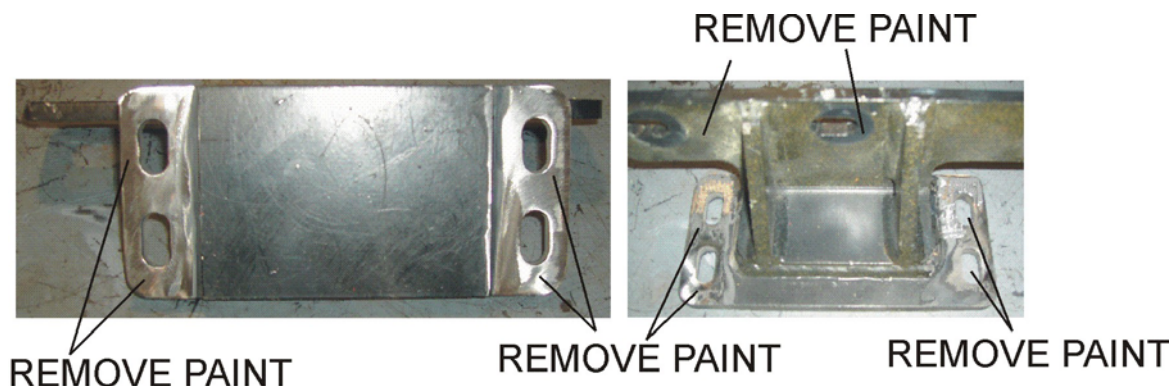


Figure 14. Engine Mounting Bracket

Engine Mounting Bracket Installation

19. Apply Loctite™ to each of the eight new mounting bolts (P/N 3-55960). Align and hold engine mounting bracket against the engine.
20. Insert the eight engine mounting bolts through the bolt-hole opening on the engine mounting bracket. Hand-tighten each bolt.
21. Using a torque wrench, torque the eight (engine side) 10M X 25 bolts to 37 ft/lbs.
22. Apply Loctite™ to each of the six new mounting bolts (P/N 3-55961).
23. Lower the engine and align mounting holes on engine bracket with mounting holes on frame.
24. Insert the six mounting bolts (P/N 3-55961) through the bolt-hole opening on the engine mounting bracket. Hand-tighten each bolt.
25. Using a torque wrench, torque the six (frame side) 12M X 30 bolts to 66 ft/lbs.
26. Install all components back onto the unit using this procedure in reverse. Secure all electrical connections using tie-wrap.

Engine Start-up

23. After the engine and all components have been re-installed, start the engine and look for any leaks, also listen for any abnormal sounds that might be associated with loose hardware.

WARRANTY INFORMATION

Multiquip will pay a flat rate labor time of 1 hour to replace the bolts (14) that secure the engine mounting bracket and paint removal from engine mounting bracket. Warranty will pay for the labor and cost of those parts. Please keep any defective parts for 90 days in case we request them for evaluation.

Campaign: Reference No. 20060922

Please contact Chris Fairchild or Wendy Sanchez @ 1-800-421-1244 for warranty claim number and warranty form.

Labor Allowance: Flat Rate to install – 2 HRS