# Service Manual

# Models
# 1644, 1732,
# 7013H, 8010H

***PVC 1911***
***PVC 2005***

***31211378***

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An Oshkosh Corporation Company

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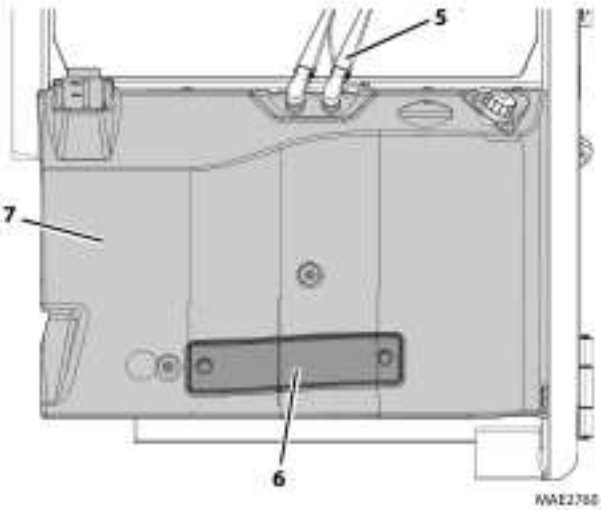
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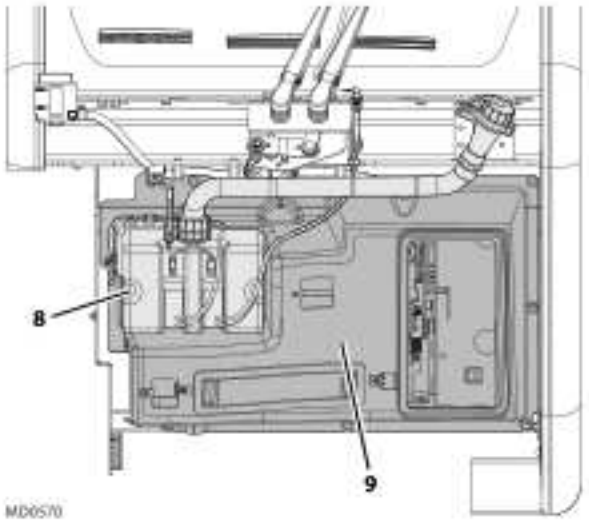
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9. Remove heater cover (**20**) inside cab.




10. If equipped, remove the windshield wiper assembly (**5**).
11. Remove cab air filter cover (**6**).
12. Remove access cover (**7**) from front of cab.




13. If equipped, remove windshield washer assembly (**8**) and heater cover (**9**).



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## 6.6 GEARBOX REPLACEMENT

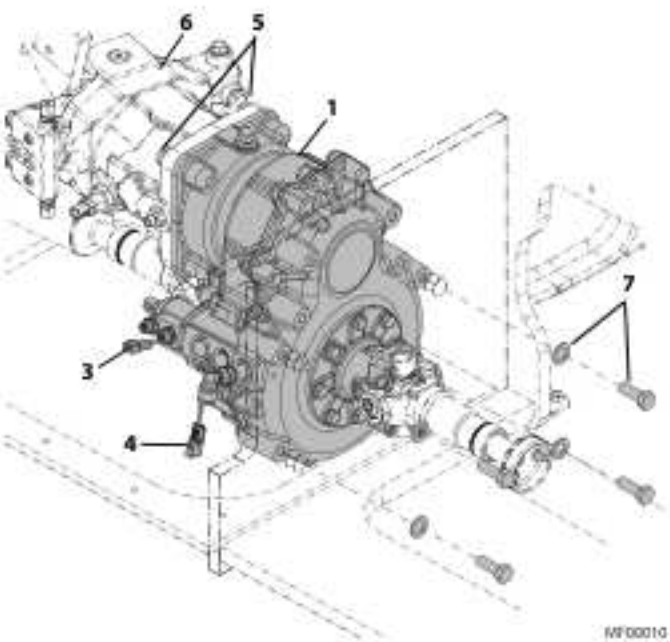
### 6.6.1 Removal

**WARNING**

Use a suitable lifting device with a minimum lifting capacity of 146 lb (66kg).

For internal service instructions and detailed specifications, contact the local JLG dealer for Gearbox Repair Manual (PN 31211292).

1. Park machine on a firm, level surface, level machine, fully retract boom, raise boom, place transmission in (N) NEUTRAL, engage park brake and shut engine OFF.
2. Place a Do Not Operate Tag on both the ignition key switch and steering wheel.
3. Properly support boom.
4. Open engine cover. Allow system fluids to cool.
5. Properly disconnect the battery. Refer to Section 9.8, "Battery" for procedure.
6. Place a suitable container beneath gearbox (**1**).
7. Block wheels.




8. Remove upper and lower access panels located above and below gearbox (**1**). Retain panels and mounting hardware.
9. Disconnect both driveshafts from gearbox (**1**). Refer to Section 5.8.3, "Drive Shaft" for procedure.
10. Label and disconnect gear select switch (**3**) and vehicle speed sensor (**4**) electrical connectors.
11. Remove four bolts and washers (**5**) securing drive motor (**6**) to gearbox (**1**). Pull drive motor way from gearbox, being careful not to damage drive motor spline, and properly support.
12. Secure gearbox (**1**) using a suitable lifting device.
13. Remove four bolts and washers (**7**) securing gearbox (**1**) to frame weldment. Retain bolts and washers.
14. Carefully lower gearbox (**1**). Place upright on a flat surface.

### 6.6.2 Installation

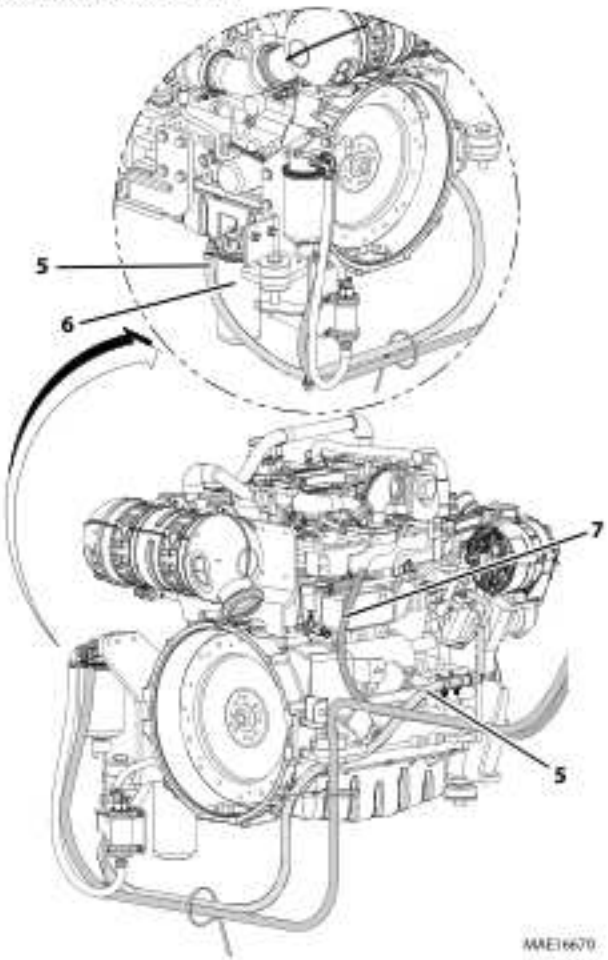
1. Using a suitable lifting device, lift gearbox (**1**) into position and mount onto frame weldment using retained bolts and washers (**7**). Torque as required.
2. Lightly coat o-ring with oil, and install on the gearbox (**1**) and drive motor (**6**).
3. Mount drive motor (**6**) to gearbox (**1**) with the four previously removed bolts and washers (**5**). Torque bolts to 209-230 lb-ft (283-312 Nm).
4. Connect all previously labeled electrical connectors (**3,4**).
5. Remove lifting device(s).
6. Connect both driveshafts to gearbox (**1**). Refer to Section 5.8.3, "Drive Shaft" for procedure.
7. Replace previously removed upper and lower access panels located above and below gearbox (**1**).
8. Wipe up any hydraulic fluid spillage in, on, near and around the machine, work area and tools.
9. Properly connect the battery. Refer to Section 9.8, "Battery", for procedure.
10. Close and secure engine cover.
11. Unblock wheels.
12. Remove the Do Not Operate Tags from both the ignition key switch and the steering wheel.
13. Return machine to service.



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***Note:*** *Engine/transmission harness is routed and attached to engine/transmission using hold-down clamps and plastic wire ties at various places on engine. Before removing engine/transmission, ensure that harness has been completely separated (disconnected) from engine/transmission. Move harness clear of engine/transmission, and with help of an observer, ensure that engine/transmission clears the harness during removal.*

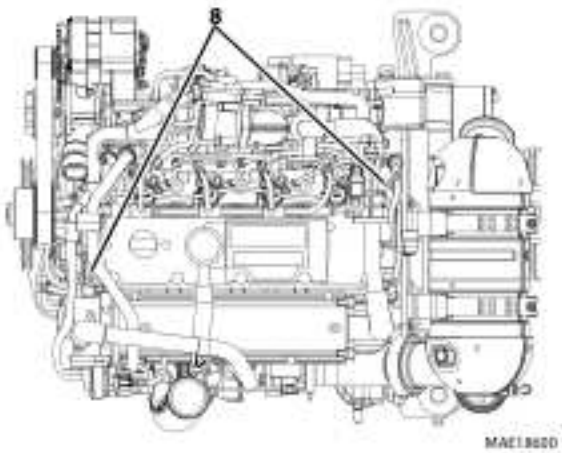
10. Label and disconnect all electrical wire connections on engine/transmission.

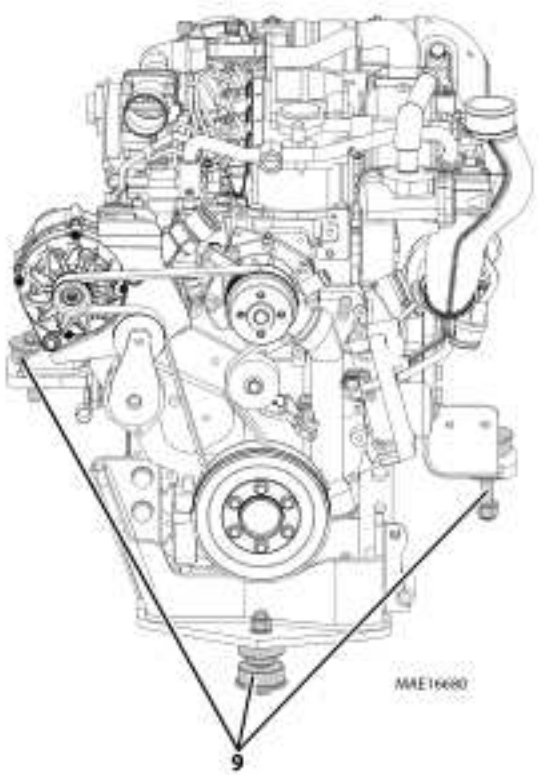



11. Label, disconnect and cap the fuel inlet lines (**5**).
12. Loosen and remove three fuel filter bracket bolts and fuel filter assembly (**6**).
13. Disconnect and cap the fuel return line (**7**) located near rear engine mount.
14. Label and remove all clamps securing any fuel line on engine.
15. Remove exhaust pipe from exhaust manifold. Refer to Section 7.7, "Engine Exhaust System".

***Note:*** *Emission Sensitive Exhaust. Assembly must be replaced exactly as removed.*

16. Remove air cleaner assembly. Refer to Section 7.8, "Air Cleaner Assembly".
17. Remove drive shaft assemblies. Refer to Section 5.8, "Drive Shafts".
18. Drain and Remove the radiator/oil cooler assembly. Refer to Section 7.4.3, "Radiator Assembly Replacement", for detailed removal instructions.
19. Label, disconnect and cap all hydraulic hoses attached to engine and transmission, cap all fittings and plug hoses to keep dirt and debris from entering hydraulic system.






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## 9.6 DIELECTRIC GREASE APPLICATION

Dielectric grease helps to prevent corrosion of electrical contacts and improper conductivity between contacts from moisture intrusion. Non-waterproof connectors benefit from the application of dielectric grease.

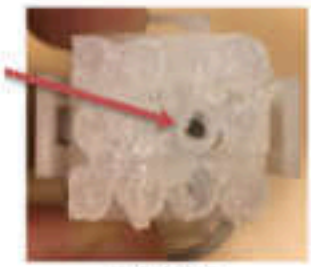
### 9.6.1 Installation

1. The following is general guidance for the installation of dielectric grease in a connector system.
2. Use dielectric grease in a tube for larger connection points or apply with a syringe for small connectors.
3. Apply dielectric grease to plug/male connector housing which typically contains sockets contact/female terminals.
4. Leave a layer of dielectric grease on the mating face of the connector, completely covering each connector terminal hole. Refer the pictures shown below.
5. Assemble the connector system immediately to prevent moisture ingress or dust contamination.

The following connector systems are specifically addressed because of their widespread use at JLG. However, this guidance may be applied to similar devices.

#### AMP Mate-N-Lok

This connector system is widely used inside enclosures for general-purpose interconnect. Follow the general guidance for installation.



Improper



Proper

#### AMP Faston

This connector system is typically used on operator switches at JLG. Follow the general guidance for installation.



Improper



Proper

#### AMP Micro-Fit

This connector system is typically used on control modules at JLG. Follow the general guidance for installation.



Improper



Proper

#### AMP Mini Fit Jr

This connector system is typically used on control modules at JLG. Follow the general guidance for installation.



Improper



Proper



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