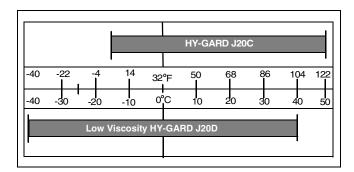
# **Service Transmission**

### **Transmission and Hydraulic Oil**

IMPORTANT: Avoid damage! Transaxle is filled with John Deere HY-Gard™ (J20D) transmission oil at the factory. DO NOT mix oils.



Do not use type "F" automatic transmission fluid.

Use Low Viscosity Hy-Gard™ (J20D) transmission oil.

John Deere Low Viscosity Hy-Gard transmission oil is specially formulated for operation below -18°C (0)°F to provide maximum protection for the hydraulic system.

Use oil viscosity based on the expected air temperature range during the period between oil changes.

IMPORTANT: Avoid damage! Use recommended oil only. Do not use engine oil or "Type F" automatic transmission fluid.

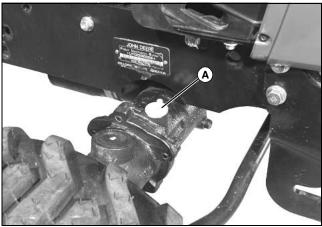
Other oils may be used if they meet John Deere standard JDM J20D or J20C.

### **Checking Front Axle Oil Level**

IMPORTANT: Avoid damage! Allow oil one hour to settle before checking level to ensure accurate dipstick reading. Repeat oil level check after several hours of operation.

1. Park machine safely. (See Parking Safely in the SAFETY section.) Allow machine to cool down for at least one hour.

IMPORTANT: Avoid damage! Dirt and debris in oil may cause damage to the transaxle. Clean area around opening before removing dipstick.



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- 2. Loosen and remove dipstick (A) located on right side of front axle.
- 3. Wipe dipstick clean with a rag. Install dipstick but do not tighten. Allow dipstick to rest on top of threads.



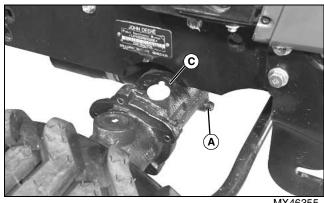
MX46354

- 4. Remove dipstick. Oil level should be between high (B) and low (C) levels on dipstick. If oil level is low:
  - a. Add recommended oil through dipstick fill opening until oil level is correct.
  - b. Install and tighten dipstick.
- 5. Check front axle oil level again after the first several hours of operation.

## **Changing Front Axle Oil**

- 1. Operate machine to warm front axle oil.
- 2. Park machine safely. (See Parking Safely in the SAFETY section.)

# **Service Transmission**



MX46355

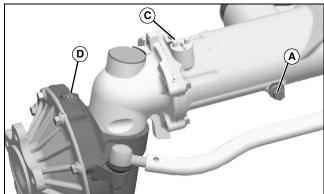
3. Position drain pan under differential drain plug (A).

### NOTE: For draining purposes, front axle contains approximately 2.8 L (3.0 qt) of oil.

4. Remove differential drain plug and allow oil to drain.



- 5. Position drain pan under each front axle drain plug (B).
- 6. Remove both drain plugs and allow oil to drain.
- 7. Install and tighten both drain plugs after all oil has drained.



- 8. Remove dipstick (C) located on right side of front axle and vent plug (D).
- 9. Add approximately 2.8 L (3.0 qt) of recommended oil

through dipstick fill opening until oil level is correct.

10. Install and tighten dipstick.

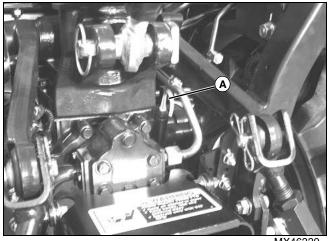
IMPORTANT: Avoid damage! Allow oil one hour to settle before checking level to ensure accurate dipstick reading. Repeat oil level check after several hours of operation.

11. Check front axle oil level.

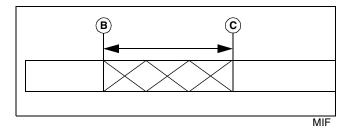
## **Checking Transmission Oil Level**

1. Park machine safely. (See Parking Safely in the SAFETY section.) Allow machine to cool down for at least one hour.

**IMPORTANT: Avoid damage! Dirt and contamination** can enter transmission when checking oil level. Clean area around dipstick before removing.



- 2. Pull to remove dipstick (A), located at the right side of the transmission. Wipe with a clean cloth.
- 3. Install dipstick.
- 4. Remove dipstick.



5. Check oil level on dipstick. Oil level should be between levels (B) and (C) on dipstick.

# **Service Transmission**

IMPORTANT: Avoid damage! Help prevent dirt and other contaminants from entering the transmission. Clean area around fill cap before removing.

Do not overfill transmission. Oil expands during operation and could overflow.



MX27911

- 6. If oil level is low:
  - Remove filler cap (D).
  - Add recommended oil through fill opening until oil level is correct.
- 7. If oil is above top mark on the dipstick, drain to proper level.
- 8. Install dipstick.
- 9. Install and tighten filler cap.

# **Changing Transmission Oil and Filter**



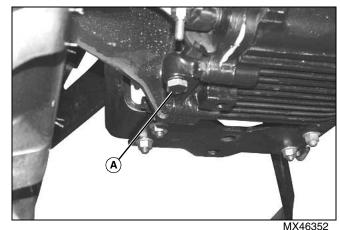
CAUTION: Avoid injury! Touching hot surfaces can burn skin. The engine, components, and fluids will be hot if the engine has been running. Allow the engine to cool before servicing or working near the engine and components.

IMPORTANT: Avoid damage! Contamination of hydraulic fluid could cause transmission damage or failure. Do not remove cap from fill opening unless absolutely necessary.

Severe or unusual conditions may require a more frequent service interval.

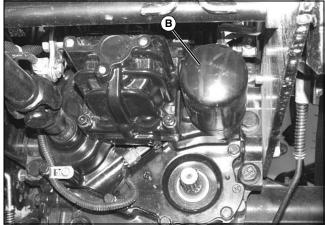
- 1. Run engine a few minutes to warm the transmission oil.
- 2. Park machine safely. (See Parking Safely in the SAFETY section.)

NOTE: For draining purposes, the transmission contains approximately 12.3 L (13 qt) of oil.



-:-- -- (A)

3. Position drain pan under transmission drain plug (A). Remove plug and allow oil to drain completely.



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- 4. Position drain pan under transaxle oil filter (B). Remove and discard filter. Allow residual oil to drain completely.
- 5. Put a film of clean transmission oil on seal of new filter.
- 6. Fill the filter 1/3 1/2 full of oil.
- 7. Install filter and turn clockwise until gasket makes contact with the mounting surface. Tighten 1/2 3/4 turn after gasket contact.
- 8. Install and tighten drain plug.