Periodic Service

JOHN DEERE PARTS—YOUR BEST CHOICE

WE RECOMMEND JOHN DEERE quality parts and lubricants, available at your John Deere dealer.

A PARTS CATALOG is available for your machine. To order a catalog, use the Service Literature page, located near the end of this manual.

WHEN YOU ORDER PARTS your John Deere dealer needs machine identification numbers. These are the numbers you have recorded in the Specifications section.
SERVICE INTERVALS

BREAK-IN:

After 10 and 30 hours of operation:

• Check wheel bolt torque.

After 50 hours of operation:

• Change engine oil and filter.
• Check fan belt tension.
• Check hose clamps.

During first 100 hours of operation, check:

• Tightness of wheel bolts.
• Fan belt tension.
• Hose clamps on air intake and cooling system hoses.

10 HOURS OR DAILY:

• Check OPTIONAL air restriction indicator.
• Check engine oil level.
• Check hydraulic oil level.
• Check coolant level.
• Clean grille and radiator screen.
• Check fuel filter sediment bowl.
• Check water trap bowl.
• Check safety interlock system.
• Lubricate grease fittings. (Only necessary when operating in extremely wet and muddy conditions.

50 HOURS:

• Check wheel bolt torque.
• Check OPTIONAL MFWD oil level.
• Check battery.
• Check for loose nuts and bolts.
• Inspect tires and check pressure.
• Lubricate grease fittings

200 HOURS:

• Change engine oil and filter.
• Replace fuel filter.
• Inspect fan belt.
• Lubricate 3-point hitch.
• Clean fuel filter bowl.
• Clean radiator.

400 HOURS:

• Air cleaner.

500 HOURS:

• Change hydraulic oil and filter.
• Change hydraulic oil (on tractors without filters).
• Clean transmission screen.
• Clean transmission vent tube.
• Change MFWD oil.
• Repack front wheel bearings.
• Check engine speeds.
• Tighten air intake hose clamps.

• Have your John Deere dealer:
  —Inspect fuel injectors.
  —Check front axle pivot pin.
  —Adjust engine valve clearance.

2 YEARS:

• Air cleaner.
• Flush cooling system.
• Replace coolant.

SERVICE AS REQUIRED:

• Air cleaner.
• Fuel sediment bowl.
• Clean or replace battery.
• Charge battery.
• Adjust throttle.
• Replace fuses.
• Replace hood headlight bulb.
• Replace taillight bulb.
• Replace warning light bulb.
• Adjust toe-in.
• Adjust brakes.
• Adjust clutch.
CHECKING ENGINE OIL LEVEL

1. Park tractor on a level surface.
2. Check engine oil when oil is cold.
3. Open hood.
5. Install dipstick.
6. Remove dipstick. Check oil level on dipstick.
7. Oil level should be between two marks (B) on dipstick.

8. If oil level is low, remove oil filler cap (A).

IMPORTANT: If oil level is at or below bottom mark on dipstick, DO NOT run engine.

9. Add oil to bring oil level no higher than top mark on dipstick. (See Fuels and Lubricants section for correct oil.)
10. Install dipstick.
11. Install and tighten oil filler cap.
CHECKING HYDRAULIC OIL LEVEL

1. Park tractor on a level surface.
2. Lower attachments and STOP engine.
3. Check hydraulic oil level before operating tractor when oil is cold.
4. Remove dipstick (A). Wipe dipstick off with a clean cloth.
5. Install dipstick.
6. Remove dipstick and check oil level. Oil level should be to top mark (B).

IMPORTANT: If oil level is low, DO NOT run engine.
7. If oil level is low, remove oil filler cap (A).
8. Add oil to bring oil level no higher than top level mark on dipstick. (See Fuels and Lubricants section for correct oil.)
CHECKING OPTIONAL AIR RESTRICTION INDICATOR—DAILY

NOTE: An OPTIONAL air restriction indicator is available.
- The air restriction indicator visibly informs operator when air cleaner service is necessary.

IMPORTANT: DO NOT service air cleaner (A) until air restriction indicator (B) shows 25 in. (635 mm) vacuum or every two years, whichever occurs first.

1. STOP engine and open hood.
2. Observe air restriction indicator.
3. When yellow plunger inside indicator is up to the top red line 25 in. (635 mm) vacuum, air cleaner requires immediate service. (See REPLACE AIR CLEANER ELEMENTS in Service/400 Hours or Every 2 Years section.

ENGINE COOLANT

John Deere Low Silicate Antifreeze is recommended.

Also recommended is low silicate antifreeze formulated to GM6038M or equivalent.

Other antifreezes that may be used:
- Ethylene-glycol type.
- Those containing not more than 0.1 percent anhydrous metasilicate.
- Those meeting General Motors Performance Specification GM1899M

IMPORTANT: Some types of ethylene-glycol antifreeze are intended for automotive use. These products are often labeled for use in aluminum engines and usually contain more than 0.1 percent of anhydrous metasilicate.

Check container label or consult with antifreeze supplier before using.

Mix 50-67 percent low silicate antifreeze with 33-50 percent distilled or deionized water.

Low silicate antifreeze provides:
- Adequate heat transfer.
- Corrosion-resistant environment within the cooling system.
- Compatibility with cooling system hose and seal material.
- Protection during cold and hot weather operations.

Certain geographical areas may require special antifreeze or coolant practices. If you have any questions, consult your authorized servicing dealer to obtain the latest information and recommendations.
CHECKING ENGINE COOLANT LEVEL

⚠️ CAUTION: Do not remove radiator cap unless the engine is cool.
• Then turn cap slowly to the stop.
• Release all pressure before you remove cap.

IMPORTANT: To prevent damage to cylinder head or block:
• Do not pour coolant into radiator when engine is hot.
• Do not operate engine without coolant.

1. Lift hood.
2. Coolant level must be 25-51 mm (1-2 in.) in recovery tank (A).
3. If coolant is low, remove coolant recovery tank cap (B).
4. Add 50 percent low silicate ethylene glycol (without stop-leak additive) antifreeze and 50 percent water to proper level.
5. Install and tighten coolant recovery tank cap.
6. Clean debris from grille and radiator.
7. Check condition of hoses. Check for leaks or loose connections.
CLEANING GRILLE AND RADIATOR SCREEN

IMPORTANT: To prevent engine from overheating:
- Clean debris from grille. This also allows good air intake for air cleaner.

1. Check grille (A) and side screens (B) to make sure they are clean from debris.
2. Clean grille and side screens with compressed air, brush, or cloth.

3. Open hood.
4. Carefully pull up radiator screen (A) to remove.
5. Clean screen with compressed air, brush or cloth.
6. Install screen.
7. Close hood.
CHECKING FUEL FILTER SEDIMENT BOWL

1. Open hood.
2. Remove right hand engine shield.
3. Check for dirt in sediment bowl (A). If necessary, clean bowl and replace filter. (See Service/200 Hours section.)

CHECKING FUEL/WATER SEPARATOR SEDIMENT BOWL

NOTE: Fuel/water separator is located on the right-hand side of fuel tank.

Check for water in sediment bowl (A). If necessary, clean bowl and replace filter. (See Service/200 Hours section.)

SAFETY INTERLOCK SYSTEM CHECKOUT PROCEDURE

Use following checkout procedure to check for normal operation of tractor.

If there is a malfunction during one of these procedures, DO NOT operate tractor. (See your John Deere dealer for service.)

1. Check operation of indicator lights:
   - Turn key switch clockwise to FIRST position.
   - Two indicator lights (B and C) MUST come on.
   - Park brake indicator light (D) will flash if park brake is LOCKED.

2. If any indicator light DOES NOT come on, see your John Deere dealer.
3. FIRST TEST:
- Sit on tractor seat.
- Depress clutch pedal.
- Put transmission shift lever (A) into any gear.
- Turn key switch to START position. (Starter MUST NOT ENGAGE.)
- Turn key switch off and put transmission shift lever in NEUTRAL position.

4. SECOND TEST:
- Sit on tractor seat.
- Engage rear PTO lever (B).

**NOTE:** Mid PTO (A) is OPTIONAL equipment.
- Turn key switch (C) to START position. (Starter MUST NOT ENGAGE.)
- Turn key switch off and DIENGAGE PTO lever.
- If equipped with mid PTO—Repeat Tests 1—4 for mid PTO.
5. THIRD TEST:
- Sit on tractor seat.
- Start tractor engine.
- ENGAGE rear PTO lever (B).

*NOTE: Mid PTO (A) is OPTIONAL equipment.*
- Raise off seat or stand up. (Engine SHOULD STOP.)
- Engine solenoid MUST de-energize in 1/2 second causing engine to STOP.
- If equipped with mid PTO—Repeat Tests 1—5 for mid PTO.

6. FOURTH TEST:
- Sit on tractor seat and hold clutch pedal down.
- Put transmission shift lever in any gear.
- Raise off seat slightly while holding clutch pedal down.
- Engine SHOULD STOP.