

# **Service Manual**

### 248 SKID STEER LOADER

S/N 6LZ00001-00999

RENR2868-03 236, 246, 248, 252 and 262 Skid Steer Loaders	
Engine Supplement	2
RENR2872-03 236, 246 and 248 Skid Steer Loaders Power Train $\_$	121
RENR2891-01 248 Skid Steer Loader Machine Systems	222
SENR3828-02 RA1.2, R1.4, R2.0, R2.2, R2.5, R2.7, R3.0, R4.5	
and R5.5 Series Reduction Starting Motors	430
SENR5013-08 3034 Engine for Caterpillar Built Machines	448
SENR5664-31 Air Conditioning and Heating R134a for All Caterpill-	
ar Machines	709
UENR3262-00 Seal Installation	740

Air Cleaner - Remove and Install	2
Alternator - Remove and Install	9
Battery and Battery Cable - Separate and Connect	14
Cab - Tilt	17
Electric Starting Motor - Remove and Install - 248 Skid Steer	
Loader	24
Engine - Install - 248 Skid Steer Loader	30
Engine - Remove - 248 Skid Steer Loader	4′
Engine Enclosure - Remove and Install	5′
Fuel Filter - Remove and Install	56
Gear Motor (Fan) - Install	60
Gear Motor (Fan) - Remove	64
Hydraulic System Pressure - Release (2)	68
Hydraulic System Pressure - Release	70
Muffler - Remove and Install	72
Pump Mounting - Remove and Install	79
Radiator and Hydraulic Oil Cooler - Install	83
Radiator and Hydraulic Oil Cooler - Remove	93
Water Pump - Remove and Install	103
Water Separator - Remove and Install	11′
Water Temperature Regulator - Remove and Install	115



#### **Service Information System**

Shutdown SIS

Previous Screen

Product: SKID STEER LOADER

Model: 248 SKID STEER LOADER 6LZ

Configuration: 236, 246, 248 Skid Steer Loader 6LZ00001-00999 (MACHINE) POWERED BY 3034 Engine

#### **Disassembly and Assembly**

236, 246, 248, 252 and 262 Skid Steer Loaders Engine Supplement

Media Number -RENR2868-03 Publication Date -01/08/2004

Date Updated -10/08/2004

i01467471

#### Air Cleaner - Remove and Install

**SMCS - 1051-010** 

## **Removal Procedure**

## 236 and 252 Skid Steer Loaders

- 1. Lower the work tool to the ground.
- 2. Turn the engine start switch to the OFF position.
- 3. Open the engine access door.
- 4. Release the latch on the radiator. Raise the radiator. This will allow access to the air cleaner.

**Note:** The 236 and 252 are not equipped with a turbocharger.

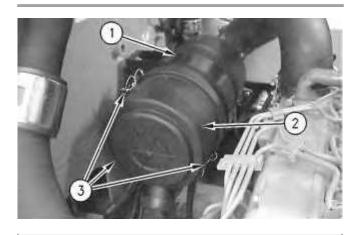


Illustration 1

g00766191

5. Disconnect three clamps (3). Remove air cleaner cover (2) from air cleaner housing (1).

6. Remove the primary air filter and the secondary air filter from inside air cleaner housing (1).



Illustration 2 g00595258

7. Loosen two clamps (4). Disconnect hose (5).

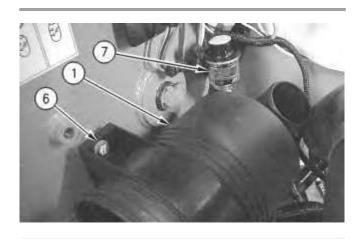


Illustration 3 g00595271

- 8. Remove two bolts (6). Remove air cleaner housing (1).
- 9. Remove service indicator (7).

## **Removal Procedure**

## 246, 248 and 262 Skid Steer Loaders

- 1. Lower the work tool to the ground.
- 2. Turn the engine start switch to the OFF position.
- 3. Open the engine access door.

4. Release the latch on the radiator. Raise the radiator. This will allow access to the air cleaner.

Note: The 246, 248 and 262 are equipped with a turbocharger.

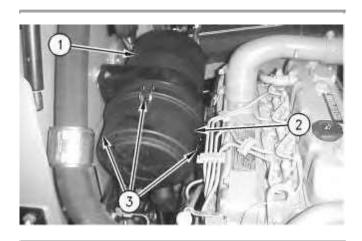


Illustration 4

g00766044

- 5. Disconnect three clamps (3). Remove air cleaner cover (2) from air cleaner housing (1).
- 6. Remove the primary air filter and the secondary air filter from inside air cleaner housing (1).

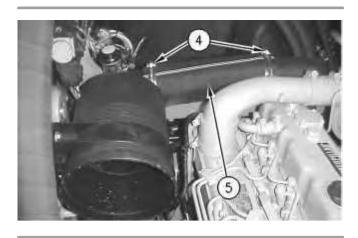


Illustration 5

g00766054

7. Loosen two clamps (4). Disconnect hose (5).

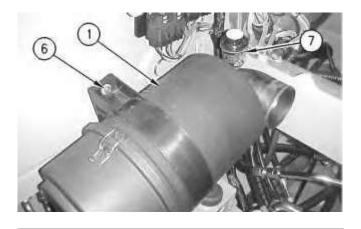


Illustration 6

g00779924

- 8. Remove two bolts (6). Remove air cleaner housing (1).
- 9. Remove service indicator (7).

## **Installation Procedure**

## 236 and 252 Skid Steer Loaders

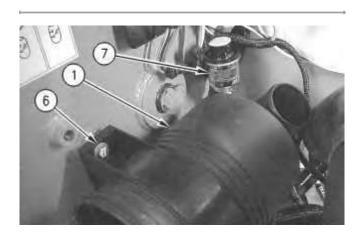


Illustration 7

g00595271

- 1. Apply **5P-3413** Pipe Sealant to the threads of service indicator (7). Install service indicator (7) into air cleaner housing (1). Tighten the service indicator until the service indicator makes contact with the base of the fitting. Tighten the service indicator by another 1/4 turn.
- 2. Clean any debris or dirt from air cleaner housing (1) prior to installation.
- 3. Place air cleaner housing (1) into position. Install two bolts (6). Tighten two bolts (6) to a torque of  $18.5 \pm 1.5 \text{ N} \cdot \text{m}$  ( $13.6 \pm 1.1 \text{ lb ft}$ ).

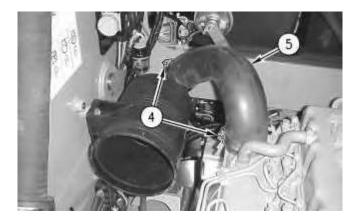


Illustration 8 g00595258

4. Connect hose (5). Tighten two clamps (4) to a torque of  $4.5 \pm 1 \text{ N} \cdot \text{m}$  ( $40 \pm 9 \text{ lb in}$ ).

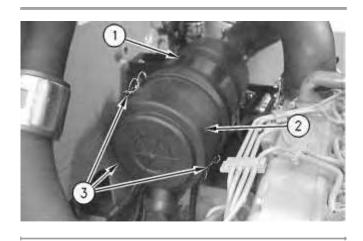


Illustration 9 g00766191

- 5. Install the primary air filter and the secondary air filter into air cleaner housing (1).
- 6. Install air cleaner cover (2) and connect three clamps (3).
- 7. Lower the radiator and lock the radiator into position.
- 8. Close the engine access door.

## **Installation Procedure**

## 246, 248 and 262 Skid Steer Loaders

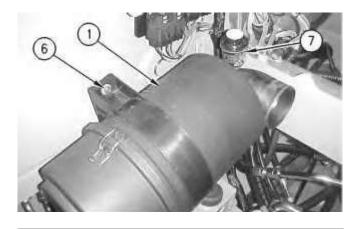


Illustration 10 g00779924

- 1. Apply **5P-3413** Pipe Sealant to the threads of service indicator (7). Install service indicator (7) into air cleaner housing (1). Tighten the service indicator until the service indicator makes contact with the base of the fitting. Tighten the service indicator by another 1/4 turn.
- 2. Clean any debris or dirt from air cleaner housing (1) prior to installation.
- 3. Place air cleaner housing (1) into position. Install two bolts (6). Tighten two bolts (6) to a torque of  $18.5 \pm 1.5 \text{ N} \cdot \text{m}$  ( $13.6 \pm 1.1 \text{ lb ft}$ ).

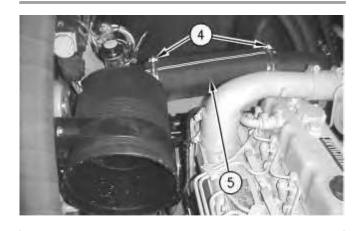


Illustration 11

4. Connect hose (5). Tighten two clamps (4) to a torque of  $4.5 \pm 1 \text{ N} \cdot \text{m}$  ( $40 \pm 9 \text{ lb in}$ ).

g00766054

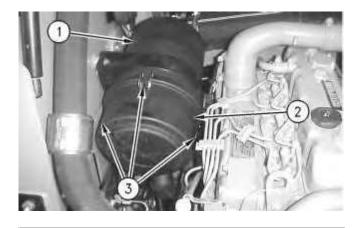


Illustration 12 g00766044

- 5. Install the primary air filter and the secondary air filter into air cleaner housing (1).
- 6. Install air cleaner cover (2) and connect three clamps (3).
- 7. Lower the radiator and lock the radiator into position.
- 8. Close the engine access door.

Copyright 1993 - 2020 Caterpillar Inc.
All Rights Reserved.
Private Network For SIS Licensees.

Mon Jun 29 10:07:59 UTC+0530 2020