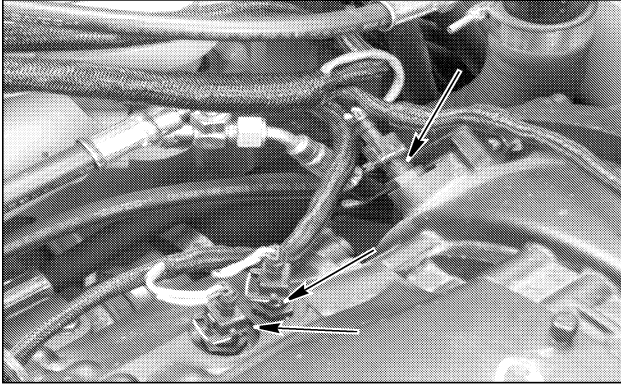
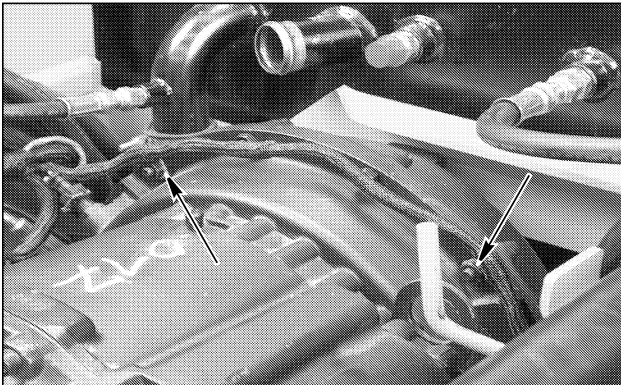


**STEP 42**

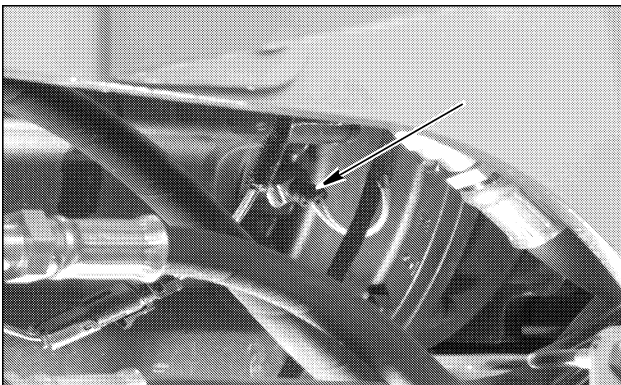
BD01D312

Connect transmission wiring harness connectors to turbine speed sensor, intermediate speed sensor, and engine speed sensor following tags installed during removal. Remove and discard tags.

**STEP 43**

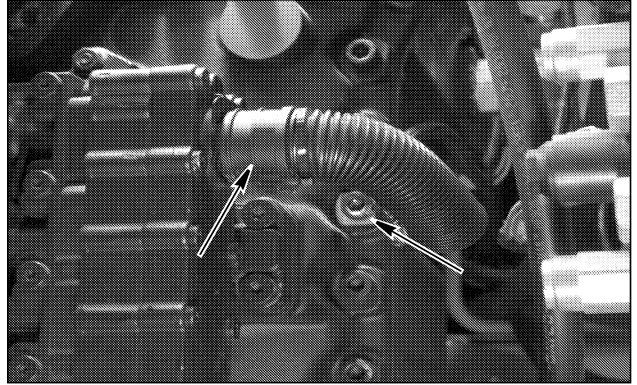
BD01D310

Install two socket head bolts to secure transmission wiring harness clamps.

**STEP 44**

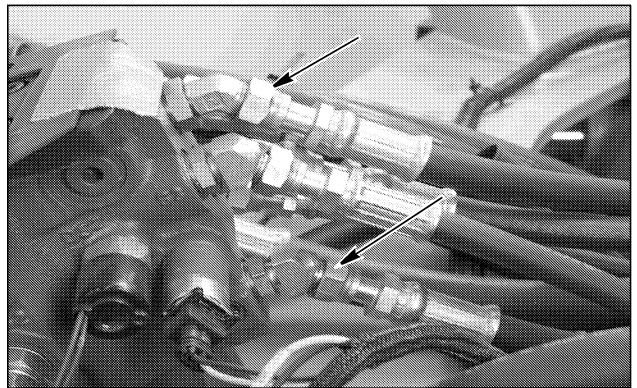
BD01D317

Connect transmission wiring harness connector to temperature sensor following tag installed during removal. Remove and discard tag.

**STEP 45**

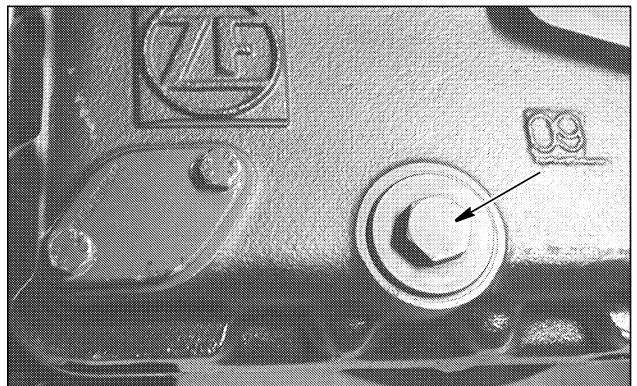
BD01D315

Install socket head bolt to secure wiring harness clamp. Connect transmission wiring harness connector to control valve connector.

**STEP 46**

BD01D306

At brake valve, install new O-ring face seals in fittings. Connect brake to hydraulic reservoir hose and brake pump pressure hose following tags installed during removal. Remove and discard tags.

**STEP 47**

BD03A177

Check that transmission drain plug is tight.

6001-12

**STEP 48**

Fill transmission with 15-40W engine oil until oil level is up to the arrow in sight glass.

**STEP 49**

Refer to Section 8001 and install the hydraulic pump.

**STEP 50**

Refer to Section 9007 and install ROPS cab or ROPS canopy.

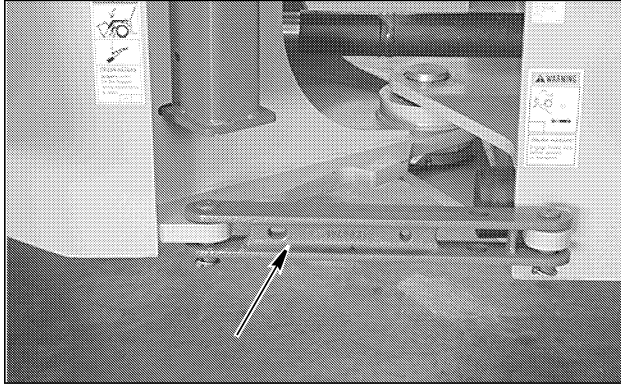
**STEP 51**

Start and run engine at idle speed with transmission in neutral. If transmission oil level is at or below bottom of crosshatch region, put articulation lock in LOCKED position and add oil specified in Section 1002 until oil level is up to crosshatch region. Shut down engine and put articulation lock in OPERATING position.

## FRONT AXLE

### Removal

#### STEP 1

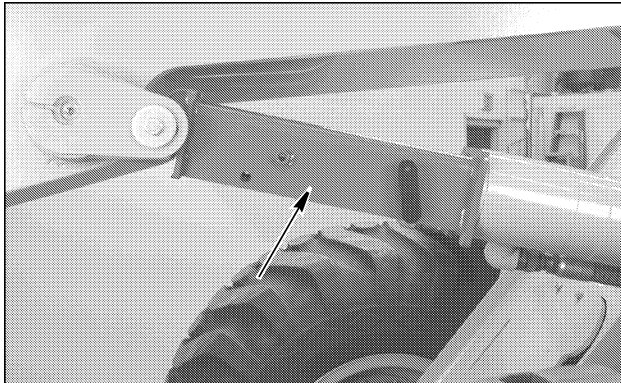


BD03A040

Park machine on level surface. Have assistant put articulation lock in LOCKED position.

**IMPORTANT:** *If machine is equipped with quick-attached components, disconnect them from machine prior to proceeding.*

#### STEP 2



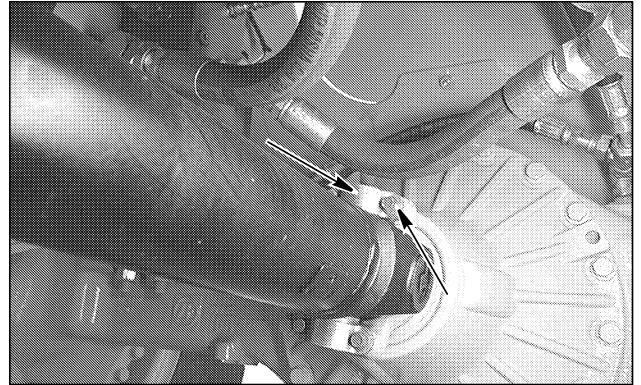
BD03A092

Raise bucket and have assistant install safety link. Lower loader arms slowly until safety link is supporting loader arms.

#### STEP 3

Stop engine. Actuate brake pedal several times to discharge brake accumulators. Put key switch in ON position and move loader control lever back and forth at least 30 times to release any pressure from hydraulic circuit. Put key switch in OFF position.

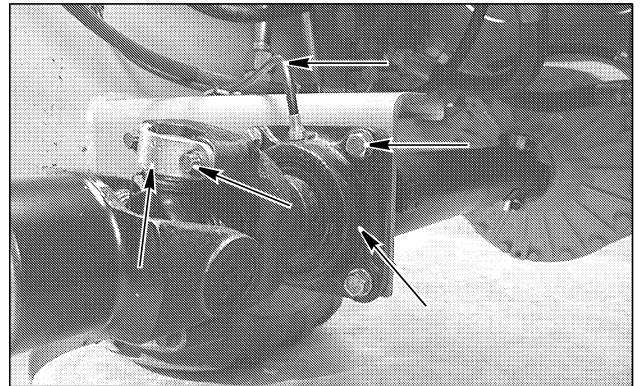
#### STEP 4



BD03A167

Remove four bolts and two straps securing front drive shaft to front axle.

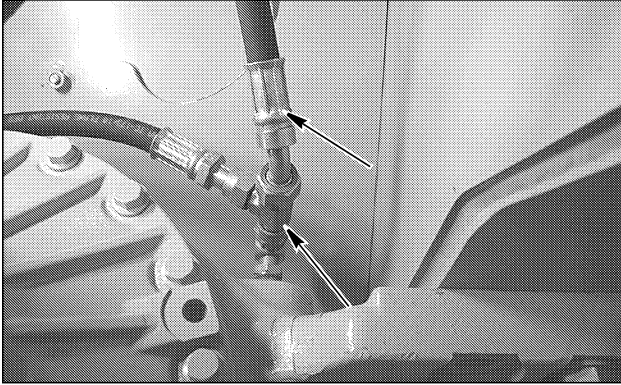
#### STEP 5



BD03A166

Remove clamp securing lubrication hose to machine and nut securing opposite end of hose. Remove four bolts and two straps securing center drive shaft to front drive shaft. Use a pry bar to separate drive shafts. While supporting center bearing and front drive shaft, remove four nuts and bolts and eight washers. Lower center bearing and front drive shaft from mounting plate and remove from machine.

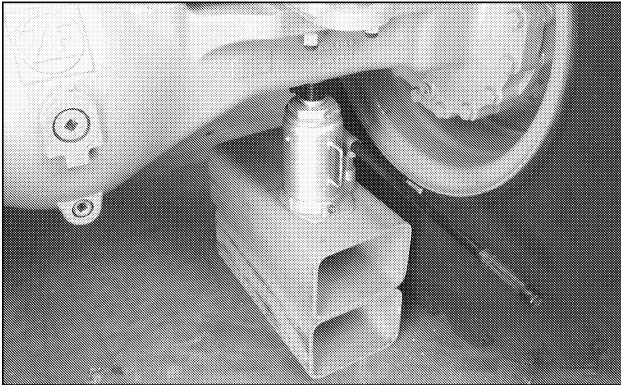
**STEP 6**



BD03A168

Disconnect brake hose from elbow. Remove and discard O-ring face seal from elbow.

**STEP 7**



BD01F298



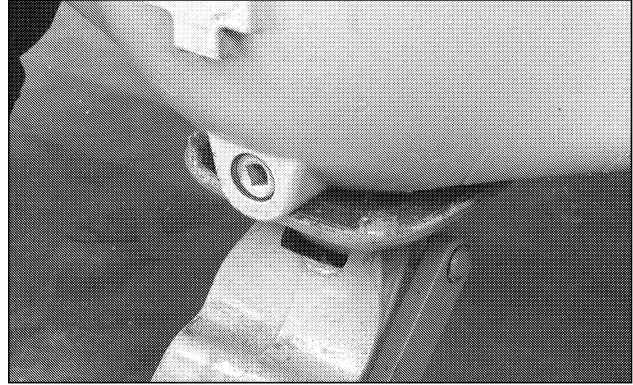
BD01D392

Using an acceptable hydraulic jack, raise one tire from ground and install an acceptable jack stand under machine.

**STEP 8**

Repeat Step 7 to raise other front axle tire from ground.

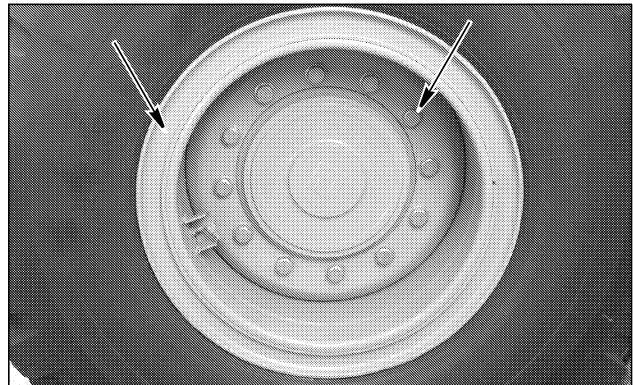
**STEP 9**



BD01F297

Use an acceptable jack to hold front axle.

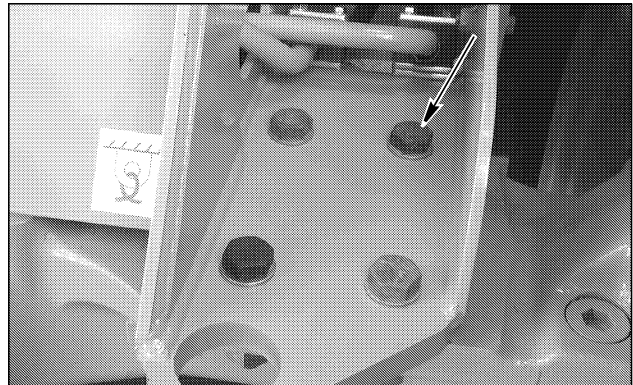
**STEP 10**



BD01F295

Remove bolts and washers from front wheels. Remove both wheels from front axle.

**STEP 11**



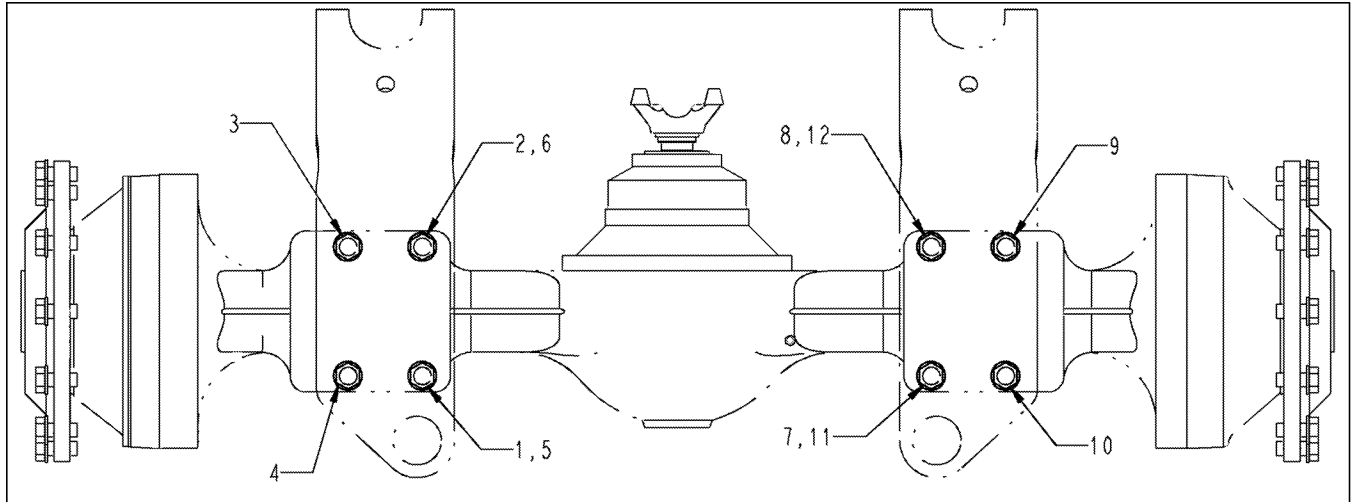
BD01F296

Remove eight nuts, bolts, and washers securing front axle to machine.

**STEP 12**

Carefully lower front axle and remove from under machine.

## Front Axle Mounting



FRONT AXLE TORQUE SEQUENCE

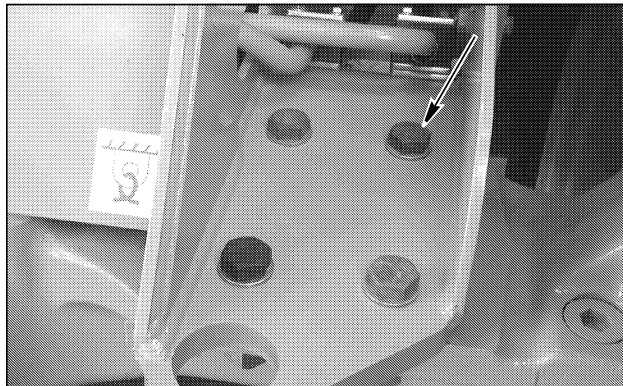
BS07D018

### Installation

#### STEP 13

Carefully move front axle under machine and raise against mounting pads on machine.

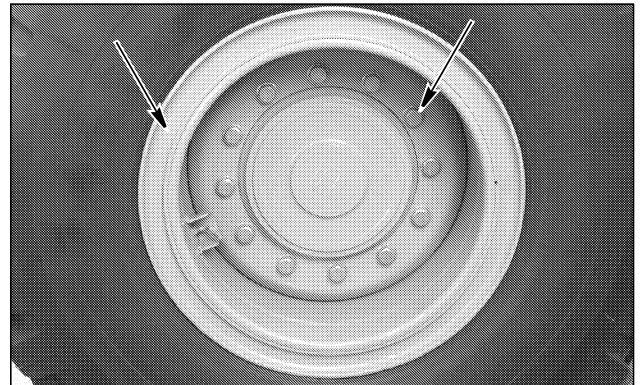
#### STEP 14



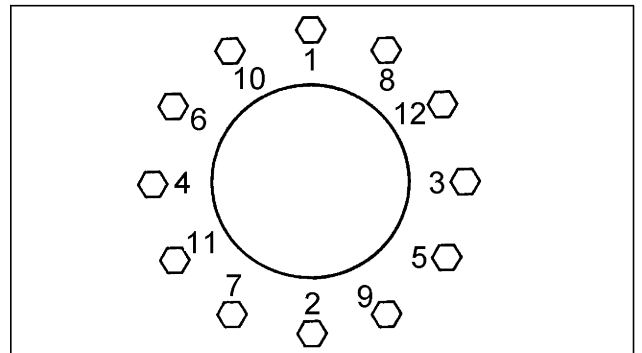
BD01F296

Apply one drop of engine oil to threads prior to assembly. Install eight washers, bolts, washers, and nuts to secure front axle to machine. Tighten bolts to a torque of 765 to 855 Nm (565 to 630 pound feet) using torque sequence shown.

#### STEP 15



BD01F295

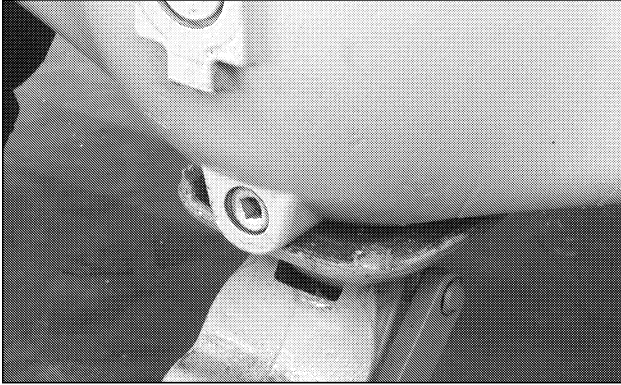


B0987A88

Install both wheels on front axle and secure. Tighten bolts to a preliminary torque of 298 Nm (230 pound feet) in sequence indicated; then tighten to a torque of 640 to 720 Nm (475 to 530 pound feet) in same sequence.



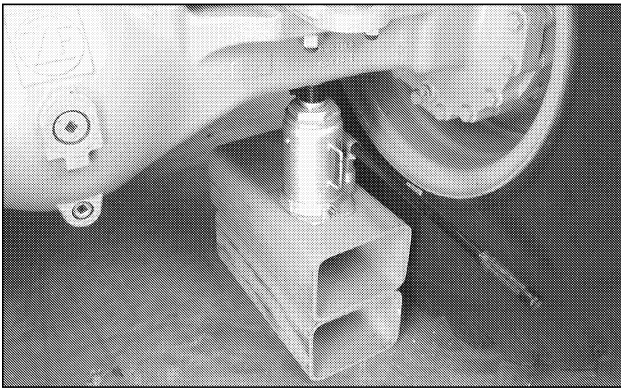
### STEP 16



BD01F297

Remove jack from front axle.

### STEP 17



BD01F298



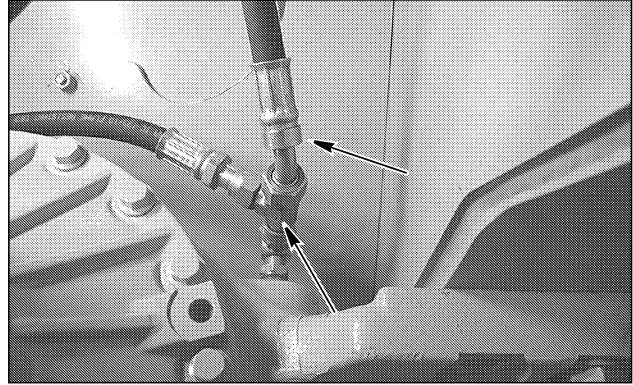
BD01D392

Using an acceptable hydraulic jack, raise axle and remove jack stand from under machine.

### STEP 18

Repeat Step 17 to remove other jack stand from under machine.

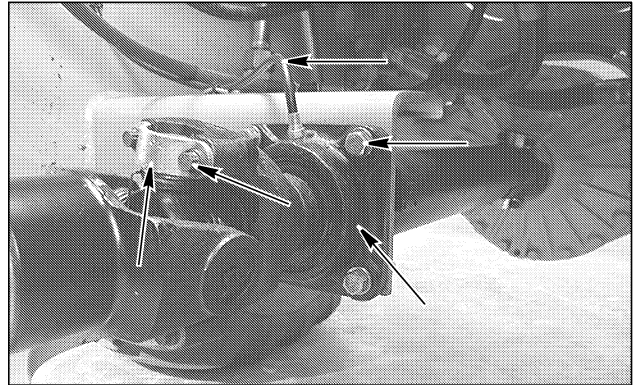
### STEP 19



BD03A168

Install a new O-ring face seal in elbow. Connect brake hose to elbow.

### STEP 20



BD03A166

Position and support center bearing and front drive shaft and install eight washers and four bolts and nuts. Tighten bolts to a torque of 99 to 128 Nm (73 to 94 pound feet). Install two straps and four bolts. Tighten bolts to a torque of 75 to 81 Nm (50 to 60 pound feet). Secure lubrication hose to machine using clamp; secure opposite end of hose using nut.