

TM11431 - 326D, 328D, 329D, 332D and 333D Skid Steer Loader(Manual Controls)

Track Adjuster Cylinder Disassemble and Assemble

Track Adjuster Cylinder Disassemble and Assemble



CAUTION:

Prevent cylinder damage, spring or rod may break if dropped while handling, transporting or disassembling. Nicks or weld craters in spring and rod assembly can cause stress concentration resulting in a weak spot. Weak spots may result in immediate or eventual failure of spring or rod creating a risk of personal injury. Put a heavy protective covering around spring assembly when handling, transporting or disassembling.

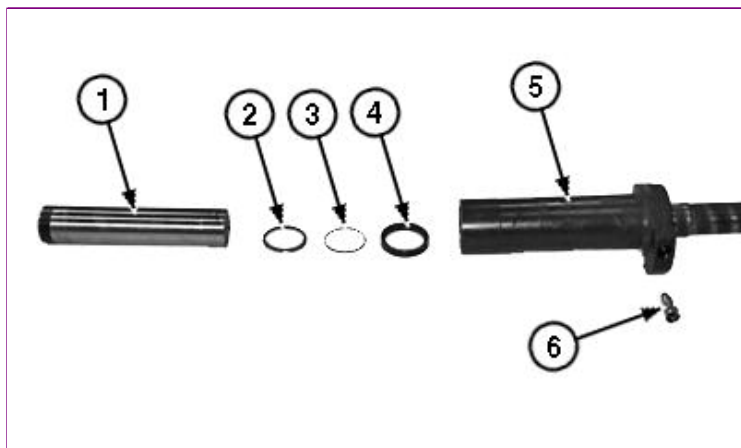
A compression tool MUST be used for disassembly and assembly because of extreme preload on spring.



CAUTION:

Prevent personal injury from heavy component. Use appropriate lifting device.

Item	Measurement	Specification
Track Adjuster and Recoil Spring	Weight (approximate)	32 kg 70 lb.



1. T213214A-UN: Track Adjuster Cylinder

LEGEND:

- 1 - Piston Rod
- 2 - Outer Seal
- 3 - Seal Retaining Ring
- 4 - Inner Seal
- 5 - Cylinder
- 6 - Track Adjuster Valve

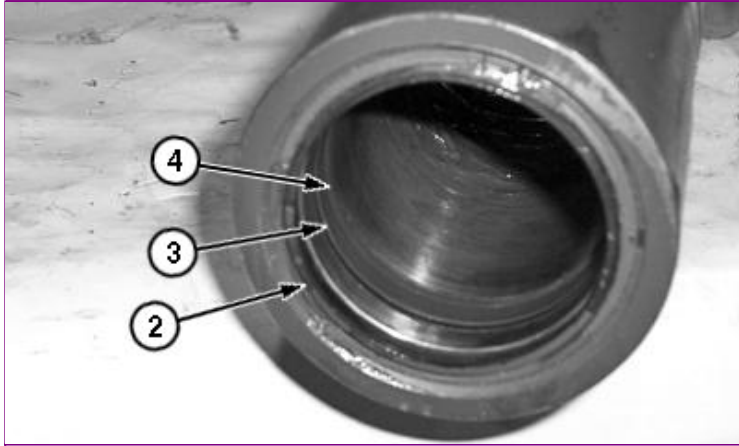
Remove track adjuster and recoil spring assembly from machine. [See Track Adjuster and Recoil Spring Assembly Remove and Install](#) . (Group 0130.)

2. **NOTE:**

It is not necessary to remove recoil spring to replace cylinder seals (12 and 13).

Remove recoil spring (8), if necessary. [See Track Adjuster Recoil Spring Remove and Install](#) . (Group 0130.)

3. Tighten track adjuster valve (6).
4. Pump cylinder (5) with grease and remove piston rod (1) from cylinder.
5. Clean out excess grease from cylinder to access seals in end of cylinder.



6. T213208A-UN: Cylinder Seals (S.N. —192141)

LEGEND:

- 2 - Inner Seal
- 3 - Seal Retaining Ring
- 4 - Outer Seal



- TX1081382A-UN: Cylinder Seals (S.N. 192142—)

LEGEND:

- 2 - Inner Seal
- 3 - Seal Retaining Ring
- 4 - Outer Seal

Remove outer seal (2) from cylinder.

7. **NOTE:**

For cylinders on machines (S.N. —192141), remove seal retaining ring (3) from inner seal (4) before removing seal from cylinder.

Remove seal retaining ring (3) and inner seal (4) from cylinder.

8. Clean and inspect parts for damage. Repair or replace parts as necessary.

9. **NOTE:**

For cylinders on machines (S.N. —192141), install inner seal in cylinder with retaining ring groove facing outward. Install seal retaining ring into groove of inner seal.

Install inner seal and seal retaining ring in cylinder.

10. Install outer seal in cylinder.
11. Loosen track adjuster valve.
12. Apply grease to piston rod and install in cylinder.
13. Completely compress piston rod in cylinder.
14. Tighten track adjuster valve.
15. Install recoil spring, if necessary. [See Track Adjuster Recoil Spring Remove and Install](#) . (Group 0130.)
16. Install track adjuster and recoil spring assembly to machine. [See Track Adjuster and Recoil Spring Assembly Remove and Install](#) . (Group 0130.)

TM11431 - 326D, 328D, 329D, 332D and 333D Skid Steer Loader(Manual Controls)

Axle Housing Remove and Install

Axle Housing Remove and Install

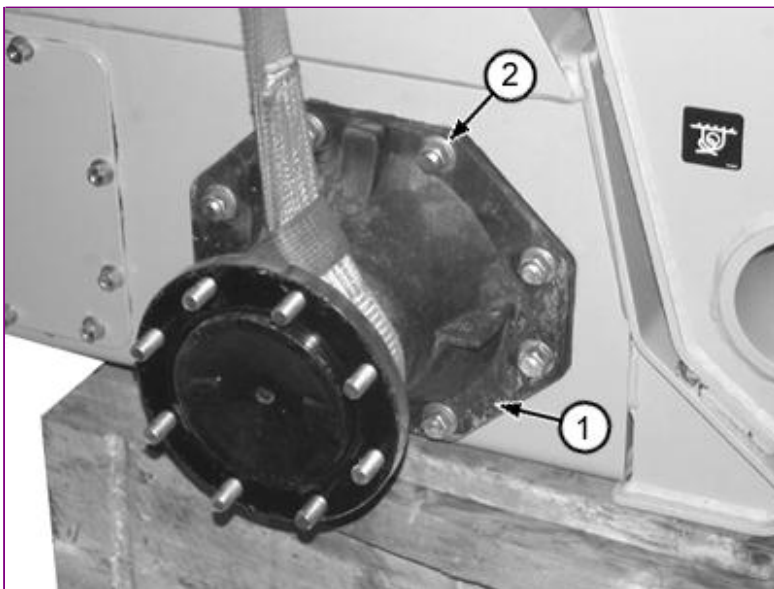
1. Remove front attachment and park machine on flat level surface.
2. Raise and block machine. [See Raising and Blocking Machine](#) . (Group 1740.)
3. Remove wheel from axle being serviced. [See Wheel Remove and Install](#) . (Group 0110.)
4. Drain chain case oil. [See Change Chain Case Oil](#) . (Operator's Manual.)
5. Clean area around axle housing to prevent debris from entering chain case.

6.



CAUTION:

Prevent possible crushing injury from heavy component. Use appropriate lifting device.



T198842A-UN: Axle Housing

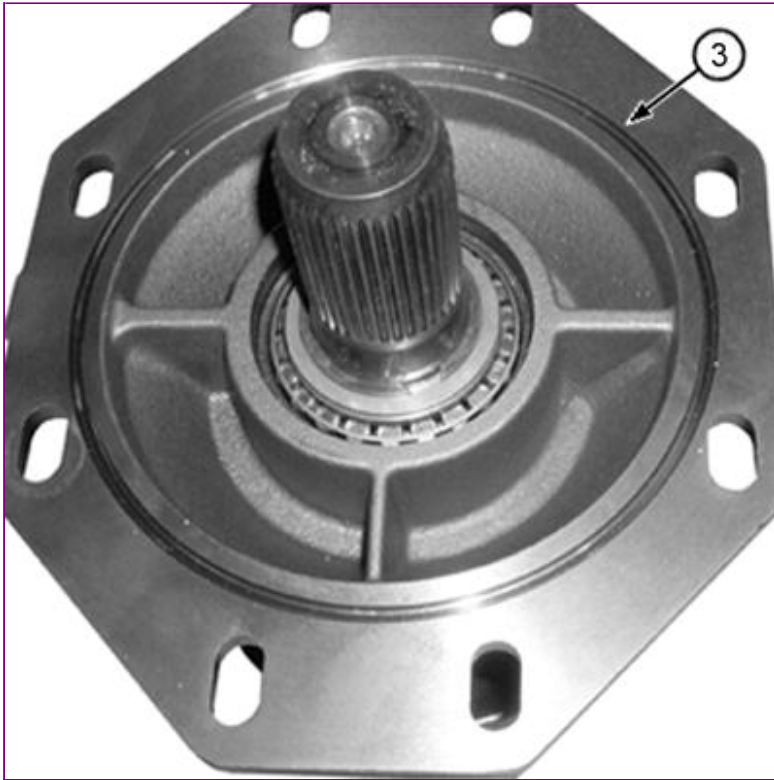
LEGEND:

- 1 - Axle Housing
- 2 - Nut (8 used)

Support axle housing (1) using appropriate lifting device. Remove axle housing.

Item	Measurement	Specification
Axle Housing	Weight (approximate)	33 kg 72 lb.

7. Clean and inspect parts. Repair or replace parts as necessary. [See Axle Housing Disassemble and Assemble](#) . (Group 0201.)
-



8. T198847A-UN: Axle Housing O-Ring

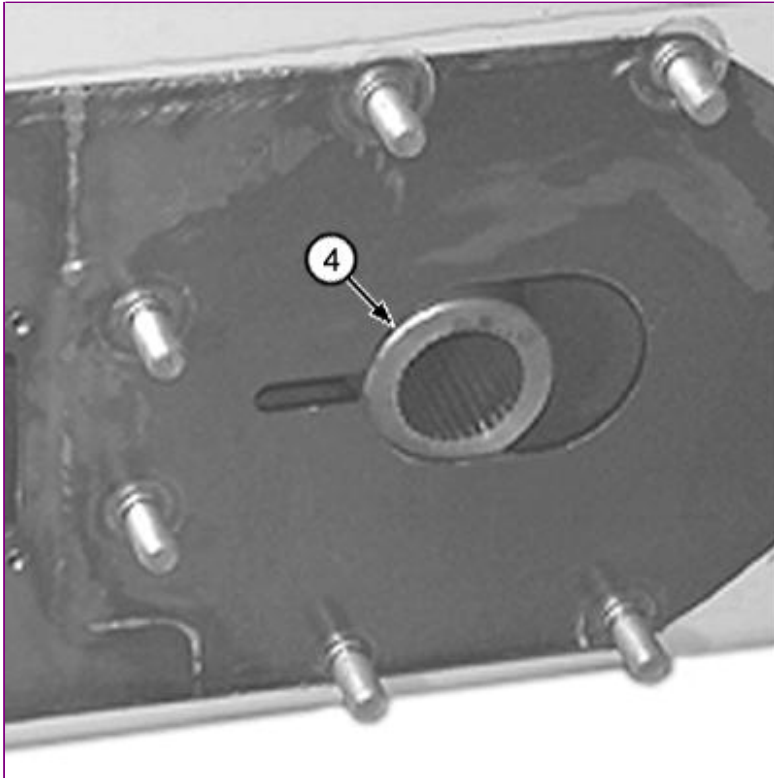
LEGEND:

3 - O-Ring

Install new O-ring (3) in groove on axle housing.

9. Fill axle housing with oil.

Item	Measurement	Specification
Axle Housing	Capacity	237 mL 8 oz.



10. T198848A-UN: Chain Sprocket Position

LEGEND:

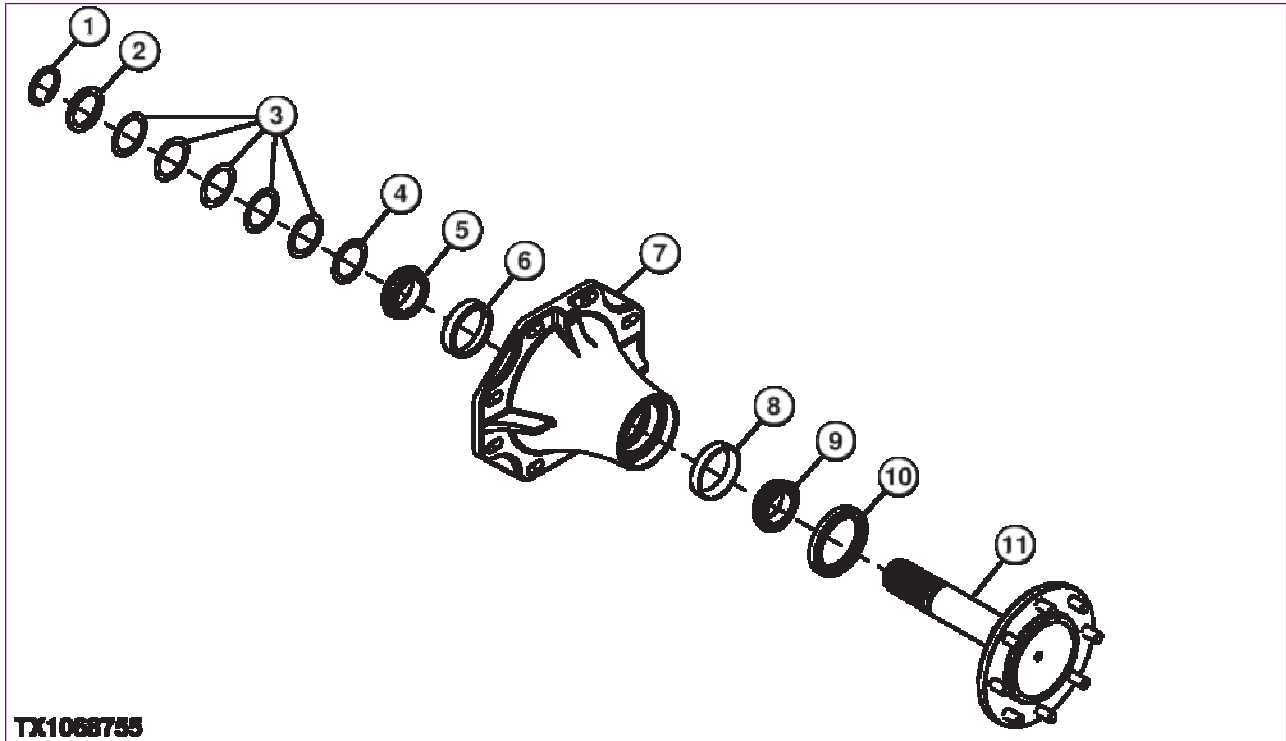
4 - Chain Sprocket Hub

Position chain sprocket hub (4) to be visible through hole in chain case.

11. Install UP marking in axle housing, facing up.
12. Install axle shaft into chain sprocket hub and slide axle housing over mounting studs. Loosely install nuts.
13. Slide axle housing to tighten drive chain. [See Drive Chain Tension Check and Adjustment](#) . (Group 9020-25.)
14. Fill chain case with oil. [See Change Chain Case Oil](#) . (Operator's Manual.)
15. Install wheel. [See Wheel Remove and Install](#) . (Group 0110.)
16. Remove blocking. [See Raising and Blocking Machine](#) . (Group 1740.)

**TM11431 - 326D, 328D, 329D, 332D and 333D Skid Steer Loader(Manual Controls)
Axle Housing Disassemble and Assemble**

Axle Housing Disassemble and Assemble



TX1068755

TX1068755-UN: Axle Housing Assembly

LEGEND:

- 1 - Snap Ring
- 2 - Washer
- 3 - Shim (as required)
- 4 - Washer
- 5 - Inner Bearing
- 6 - Inner Bearing Cup
- 7 - Axle Housing
- 8 - Outer Bearing Cup
- 9 - Outer Bearing
- 10 - Seal
- 11 - Axle Shaft

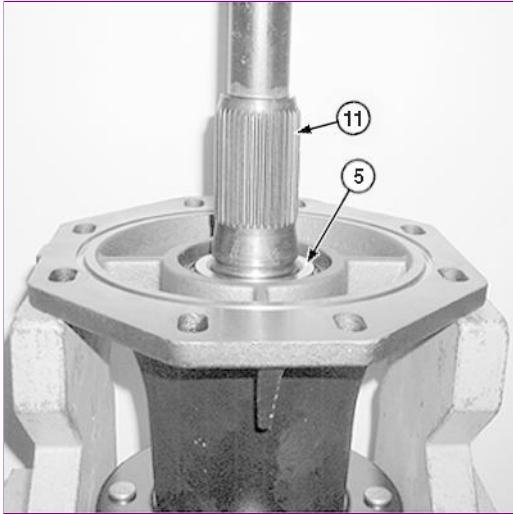


1. T198859A-UN: Axle Housing

LEGEND:

- 1 - Snap Ring

Place axle housing in a press. Remove snap ring (1), washer and shims.



2. TX1068760A-UN: Axle Shaft

LEGEND:

- 5 - Inner Bearing
- 11 - Axle Shaft

Place axle housing in a press with support under housing flange. Press axle shaft (11) down until axle shaft drops free of inner bearing (5).

3. Remove inner bearing and cup.

4. Remove seal.

5. **IMPORTANT:**

Outer axle bearing will be destroyed when removed. Remove bearing only if replacement is necessary. Replace bearing and cup as a set.

Remove outer axle bearing and cup only if necessary. Do not reuse bearing and cup.

6. Inspect axle shaft for wear or damage. Repair or replace as necessary.

7. If removed, install new outer bearing with taper facing up. Press bearing onto shoulder of axle shaft.

8. If removed, install outer bearing cup.

9. Install seal.

10. Install axle housing over axle shaft.

11. Install inner bearing over axle shaft.

12. **NOTE:**

Rotate axle housing while installing bearing.

Press bearing onto axle housing until resistance is felt.

13. Install washer and snap ring. Push snap ring to top of groove. Do not install shims at this time.



14. T198863A-UN: Rolling Drag Torque

Install a temporary cap screw and nut in one hole of the mounting flange and tighten.

15. Place torque wrench on temporary cap screw at a right angle to the centerline. Check rolling drag torque. Apply pressure until rolling drag torque is reached.

Item	Measurement	Specification
Axle Bearing	Rolling Drag Torque	4.52—13.56 N·m 40—120 lb-in.



16. T198864A-UN: Bearing Pre-Load Measurement

While maintaining pressure, measure distance between washer and snap ring. Add 0.025 mm (0.001 in.) to the measured value to determine the number of shims required for bearing pre-load.

17. Remove snap ring and washer. Install required shims and washer.
 18. Install snap ring.
 19. Apply force to axle shaft to seat bearing and shims against snap ring.

Item	Measurement	Specification
Axle Shaft	Force	44 482 N 10 000 lb-force

20. Check rolling drag torque. Repeat procedure until specification is reached.

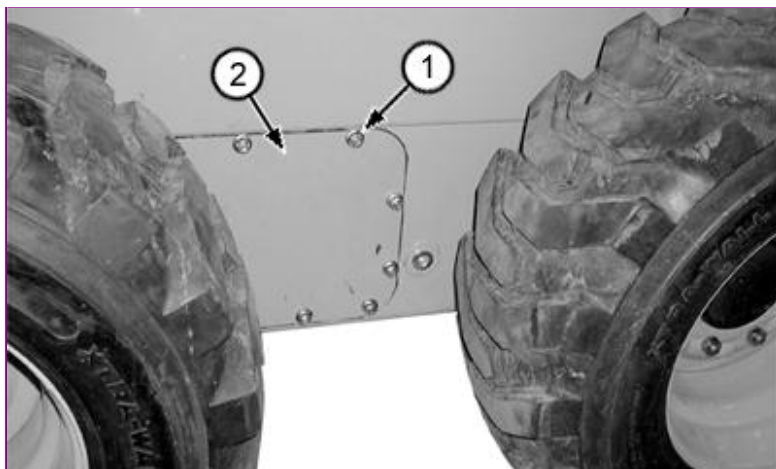
Item	Measurement	Specification
Axle Bearing	Rolling Drag Torque	4.52—13.56 N·m 40—120 lb-in.

TM11431 - 326D, 328D, 329D, 332D and 333D Skid Steer Loader(Manual Controls)

Chain Case Access Plate Remove and Install

Chain Case Access Plate Remove and Install

1. Remove front attachment and park machine on flat level surface.
 2. Drain chain case oil. [See Change Chain Case Oil](#) . (Operator's Manual.)
-



3. T198871A-UN: Chain Case Access Plate

LEGEND:

- 1 - Nut (12 used)
- 2 - Access Plate

Remove access plate (2).

4. Clean and inspect parts.
5. Install access plate with gasket.

Item	Measurement	Specification
Chain Case Access Plate Nut	Torque	45 N·m 33 lb-ft

6. Fill chain case with oil. [See Change Chain Case Oil](#) . (Operator's Manual.)
-

TM11431 - 326D, 328D, 329D, 332D and 333D Skid Steer Loader(Manual Controls)

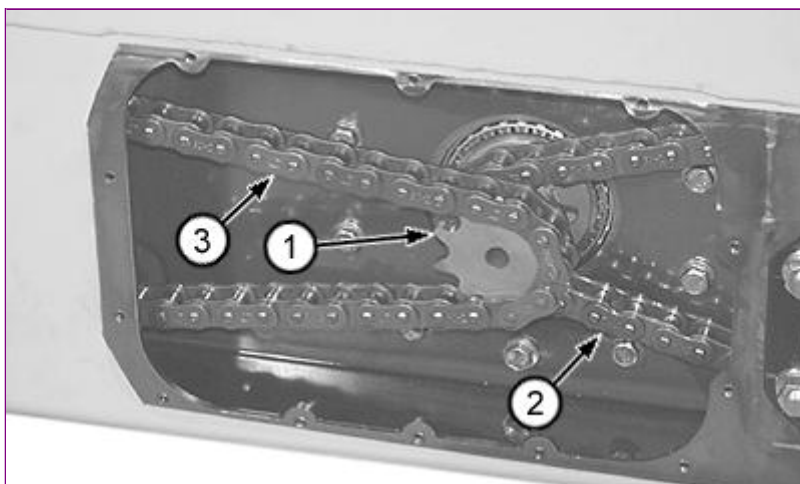
Drive Chain and Sprocket Remove and Install

Drive Chain and Sprocket Remove and Install

1. Remove front attachment and park machine on flat level surface.
2. Raise and block machine. [See Raising and Blocking Machine](#) . (Group 1740.)
3. Drain chain case oil. [See Change Chain Case Oil](#) . (Operator's Manual.)
4. Remove chain case access plate. [See Chain Case Access Plate Remove and Install](#) . (Group 0250.)
5. Remove axle housing for each drive chain being serviced. [See Axle Housing Remove and Install](#) . (Group 0201.)

6. **NOTE:**

Remove rear axle housing and rear drive chain from drive sprocket before removing front drive chain.



T198879A-UN: Chain Case

LEGEND:

- 1 - Drive Sprocket
- 2 - Front Drive Chain
- 3 - Rear Drive Chain

Slide rear axle sprocket forward. Remove rear drive chain (3) from drive sprocket (1) and rear axle sprocket.

7. **NOTE:**

To remove rear axle sprocket, lift sprocket to top of chain case and pull bottom of sprocket out over lip of chain case.

Remove rear axle sprocket.

8. Slide front axle sprocket rearward. Remove front drive chain (2) from drive sprocket and front axle sprocket.

9. **NOTE:**

If removal of front axle sprocket is necessary, hydrostatic motor must be removed. [See](#)

**Thank you very much for
your reading. Please Click
Here. Then Get COMPLETE
MANUAL. NO WAITING**



NOTE:

**If there is no response to
click on the link above,
please download the PDF
document first and then
click on it.**

Hydrostatic Motor and Park Brake Remove and Install . (Group 0360.)

Remove front axle sprocket.

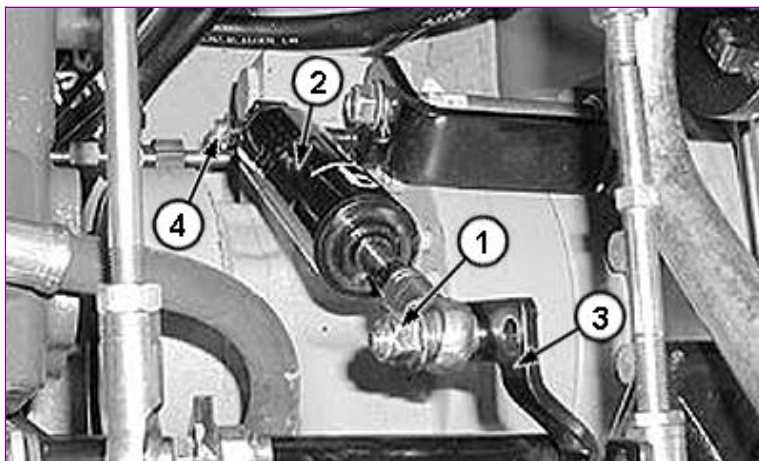
10. Clean and inspect parts. Repair or replace parts as necessary.
11. If removed, install front axle sprocket.
12. Install front drive chain.
13. Install rear axle sprocket and rear drive chain.
14. Install axle housing. See Axle Housing Remove and Install . (Group 0201.)
15. Install chain case access plate. See Chain Case Access Plate Remove and Install . (Group 0250.)
16. Fill chain case with oil. See Change Chain Case Oil . (Operator's Manual.)
17. Lower machine to ground.

TM11431 - 326D, 328D, 329D, 332D and 333D Skid Steer Loader(Manual Controls)

Steering Dampener Remove and Install

Steering Dampener Remove and Install

1. Remove front attachment and park machine on flat level surface.
 2. Raise operator's station. [See Raising Operator's Station](#) . (Group 1810.)
-



3. T199894A-UN: Steering Dampener

LEGEND:

- 1 - Mounting Hardware
- 2 - Steering Dampener
- 3 - Cross Shaft Bell Crank
- 4 - Cap Screw

Remove mounting hardware (1) from top of steering dampener (2).

4. Remove cap screw (4) from bottom of steering dampener. Lift steering dampener out of machine.
5. Inspect steering dampener. [See Steering Dampener Inspection](#) . (Group 0315.)
6. Lower steering dampener into machine. Install cap screw (4) in bottom of steering dampener.
7. Install mounting hardware to top of steering dampener.
8. Make sure the steering lever contacts the stop screws in both forward and reverse positions before dampener reaches its travel limit. Install or remove shim washer(s) on rod end as required.
9. Tighten dampener mounting cap screws to specification.

Item	Measurement	Specification
Dampener Mounting Hardware	Torque	40 N·m 30 lb·ft

10. Lower operator's station. [See Raising Operator's Station](#) . (Group 1810.)
-

TM11431 - 326D, 328D, 329D, 332D and 333D Skid Steer Loader (Manual Controls) Steering Dampener Inspection

Steering Dampener Inspection

1. Move steering dampener rod through its full range of motion. Steering dampener should operate smoothly with some resistance to movement. If no resistance is noted, or if steering dampener is leaking, replace steering dampener.
2. Test steering dampener as follows:
 - With steering dampener fully extended, apply 9 kg (20 lb) of force to rod end. It must take 1—5 seconds for dampener to fully retract.
 - With steering dampener fully retracted, apply 9 kg (20 lb) of pull to rod end. It must take 1—5 seconds for dampener to fully extend.
3. Replace steering dampener if test results are not within specification.