

# **Service Bulletin No.97/103**

MODEL : T-815/9 45FT DD (T-915/45 DD); T-900/40 & T-900/45;

T 2140 & T 2145

VIN : See list attached

TYPE : Field change program

SECTION : Chapter 5 - Brakes

DATE : **July 18<sup>th</sup>, 1997** 

SUBJECT : Slack adjuster anchor bracket on drive axle

CONDITIONS: Refer to customer letter accompanying this bulletin

DESCRIPTION: The drive axle slack adjuster control arm and anchor bracket are subject to cracks and breakage due to lack of flexibility. This could lead to a loss of automatic adjustment of the drive axle brakes. The anchor bracket must be replaced by a redesigned one.

#### SPARE PARTS REQUIRED

Always use genuine maintenance products and parts. Do not accept imitations!

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Part No.	Description	Qty.		
VH 10612855 VH 10613314 VH 637308740 VH 660222301 VH 660625805 VH 660207107	Bracket retaining plate Anchor bracket Flat nut M16 Bolt M8 x 20 Washer Lock nut M8	2 2 4 2 2		
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Please file this Service bulletin at the end of the relevant chapter in the maintenance manual and replace the present Service Bulletin Index by the one attached. Customers wishing to file the Service Bulletin by the number can do so refering to the separate Numerical Service Bulletin Index.

List of vehicle identification numbers (VIN)								
19678	29015	29058	29102	29309	29352	29395		
27691	29016	29059	29103	29310	29353	29396		
27692	29017	29060	29104	29311	29354	29397		
27693	29018	29061	29105	29312	29355	29398		
27694	29019	29062	29106	29313	29356	29399		
27695	29020	29063	29107	29314	29357	29400		
28480	29021	29064	29108	29315	29358	29401		
28481	29022	29065	29109	29316	29359	29402		
28482	29023	29066	29110	29317	29360	29403		
28483	29024	29067	29111	29318	29361	29404		
28484	29025	29068	29112	29319	29362	29405		
28485	29026	29069	29113	29320	29363	29406		
28572	29027	29070	29114	29321	29364	29407		
28573	29028	29071	29115	29322	29365	29408		
28574	29029	29073	29116	29323	29366	29409		
28575	29030	29074	29117	29324	29367	29410		
28576	29031	29075	29118	29325	29368	29411		
28577	29032	29076	29119	29326	29369	29412		
28578	29033	29077	29120	29327	29370	29413		
28579	29034	29078	29121	29328	29371	29414		
28580	29035	29079	29122	29329	29372	29415		
28581	29036	29080	29123	29330	29373	29416		
28582	29037	29081	29124	29331	29374	29701		
28583	29038	29082	29125	29332	29375	29702		
28584	29039	29083	29126	29333	29376	29703		
28585	29040	29084	29127	29334	29377	29704		
28586	29041	29085	29128	29335	29378	29705		
28587	29042	29086	29129	29336	29379	29706		
28588	29043	29087	29130	29337	29380	29711		
28589	29044	29088	29131	29338	29381	29712		
28590	29045	29089	29132	29339	29382	29713		
28591	29046	29090	29133	29340	29383	29714		
28592	29047	29091	29134	29341	29384	29715		
28593	29048	29092	29135	29342	29385	40000		
28594	29049	29093	29137	29343	29386	40001		
28595	29050	29094	29301	29344	29387	40002		
28596	29051	29095	29302	29345	29388	40003		
28597	29052	29096	29303	29346	29389	40004		
28598	29053	29097	29304	29347	29390	43000		
28599	29054	29098	29305	29348	29391	43001		
28600	29055	29099	29306	29349	29392	43002		
29013	29056	29100	29307	29350	29393	43004		
29014	29057	29101	29308	29351	29394			

## **CAUTIONS AND BASIC SAFETY RULES**

### BASIC SAFETY RULE WHEN USING AN AIR CHISEL

When using an air chisel, always wear appropriate eye protection and leather working gloves.

#### BASIC SAFETY RULES FOR GRINDING

Grinders improperly used are dangerous. They are responsible for many serious and lasting injuries to the eyes, hands and face. Therefore you must ALWAYS observe the following safety rules:

- 1. Always wear eye protection (safety goggles, face shield).
- 2. Keep abrasive discs tight, clean and true.
- 3. Allow grinder to reach full rpm before using.
- 4. Keep persons without goggles away from the tool you are using.
- 5. Wear leather gloves.
- 6. Never strike a grinding wheel while revolving. It may shatter and explode.
- 7. Do not grind in the presence of explosive vapors (gasoline, paint thinner, batteries).
- 8. Before installing a new grinding disc, disconnect the electric mains or air supply line.
- 9. When installing a new disc make certain:
  - It is designed for the rpm of the grinder.
  - It has the correct size.
  - It is not damaged.
  - It is properly fixed.
- 10. Never remove the grinding disc guard.

DATE: JULY 18th, 1997

# SLACK ADJUSTER ANCHOR BRACKET WORK PROCEDURE

### WHAT YOU NEED:

#### **Parts**

- Bracket retaining plate
- Anchor bracket
- Flat nut M16
- Bolt M8 x 20
- Washer
- Lock nut M8

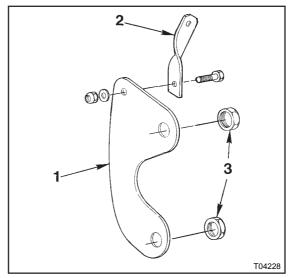


Figure 1: Slack adjuster anchor bracket replacement parts

- 1. Bracket retaining plate
- 2. Anchor bracket
- 3. Nuts

#### **Products**

WD40

Anti-corrosion paint

## **Tools**

Air chisel
Set of box and open end wrenches
1/2" socket wrench set
Snap ring pliers
Cold solvent parts washer
Air blow gun
Paint brush
Clean rags
Wire brush
Portable lamp

# Safety equipment

### Personal:

- Safety glasses
- Leather work gloves
- Ear protection
- Breathing mask
- Safety shoes

#### PROCEDURE:

#### **!!! CAUTION !!!**

**USE SAFE SHOP PRACTICES AT ALL TIMES.** 

READ THE ENTIRE PROCEDURE BEFORE BEGINNING WORK.

## **Preliminary inspection:**

- Slack adjuster anchor bracket
- 1. Put vehicle on work pit.
- 2. Chock wheels to prevent coach from rolling.
- 3. Release parking brake.
- 4. Make sure vehicle's air system pressure is 116 psi. When using external air supply, do not exceed 125 psi.
- 5. From underneath the vehicle, at the drive axle, check the slack adjuster anchor bracket (see figure 2, No.1 and 2)

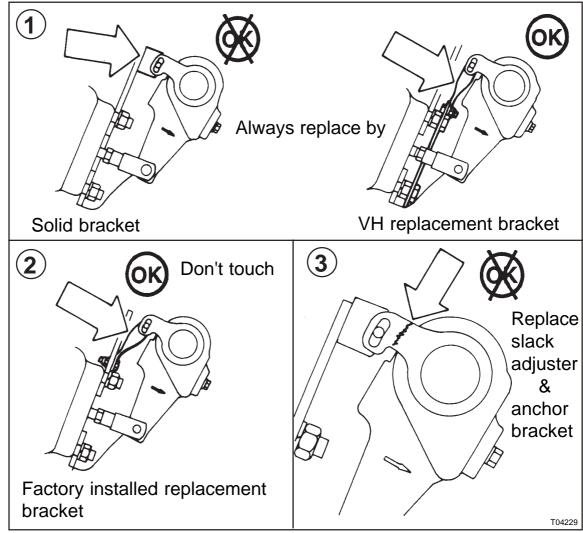


Figure 2: View on slack adjuster of drive axle

- 1. Always replace a solid welded on anchor bracket by a VH replacement bracket
- 2. Don't touch the factory installed redesigned anchor bracket
- 3. When the slack adjuster control arm is cracked, replace slack adjuster

#### !!! CAUTION !!!

# LOSS OF AIR PRESSURE MAY CAUSE UNEXPECTED BRAKE APPLICATION. FULL PRESSURE MUST BE MAINTAINED AT ALL TIMES.

## Slack adjuster control arm

To inspect the slack adjuster control arm, the slack adjuster must be removed from the brake camshaft.

- 1. Check that the brake chamber pushrod is fully retracted and remove the release bolt dust cap.
- Using a 24 mm socket and ratchet, unscrew the release bolt counterclockwise as far as it will go without undue pressure, to cage the power spring.
- 3. At the pushrod yoke, remove the cotter pin from the clevis pin and knock out the clevis pin. Remove the slack adjuster from the pushrod yoke by turning the adjusting hex counterclockwise with 7/16 inch box wrench.
- 4. Remove the snap ring with snap ring pliers and remove the spacer.
- 5. Undo and remove the slack adjuster control arm to anchor bracket bolt. Remove the slack adjuster from the brake camshaft.
- 6. Wash slack adjuster thoroughly in cold solvent parts washer. Blow dry with air blow gun.
- 7. Carefully inspect slack adjuster control arm for cracks. Even if minor cracking is visible, slack adjuster should be replaced (see figure 2, No. 3).

# Slack adjuster anchor bracket replacement

- 1. Remove the original welded on anchor bracket from the frame by using an air chisel or grinder. Be sure to wear appropriate eye protection and leather work gloves during this procedure!
- 2. Clean brake cilinder to anchor plate bolt threads with wire brush. Be sure to wear appropriate eye protection!
- 3. Spray threads with WD40.
- 4. Mount brackets (1) and (2) together with the supplied bolt, washer and lock nut. Do not fully tighten at this time. Bracket (1) should be on top of bracket (2).
- 5. Install the assembled brackets onto the brake chamber mounting bolts with the ears facing the outside of the vehicle. Secure with nuts (3).

# Slack adjuster installation

- 1. Apply "Anti-Seize" type lubricant to splines of camshaft.
- 2. Reinstall slack adjuster, fit spacer and secure with snap ring.
- 3. Turn adjusting hex clockwise until clevis pin hole in slack adjuster arm is aligned with pushrod clevis pin hole.
- 4. Install clevis pin. Do not install cotter pin yet.
- 5. Turn the release bolt clockwise as far as it will go to release the power spring. Torque to 35 ft.lbf. and reinstall dustcap.

# Adjustment

- 1. Attach slack adjuster control arm to new anchor bracket.
- 2. Perform slack adjuster adjustment procedure as outlined in chapter 5 of maintenance manual.
- 3. Tighten all remaining hardware and verify proper brake operation.
- 4. Coat ground area on brake cilinder mounting frame with anti-corrosion paint. Allow to dry.
- 5. Apply parking brake and remove wheel blocks.

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