305 X 76mm DLP Brake

Anchor Screw Replacement Procedure

BEFORE SERVICING THIS VEHICLE

This information is not intended to replace the vehicle manufacturers' service publications. Always refer to, and follow, the vehicle manufacturers' recommended procedures and instructions.

WARNING:

Failure to follow these procedures and instructions and/or the vehicle manufacturer's instructions may cause reduced or a lack of brake function, possibly resulting in personal injury or property damage.

CAUTION:

Keep grease and other foreign materials away from the shoe and lining and drum surfaces. Contamination of shoe linings and drum surface may result in degradation of brake holding capability, possibly resulting in personal injury or property damage.

NOTE: Read complete procedure before starting repair.

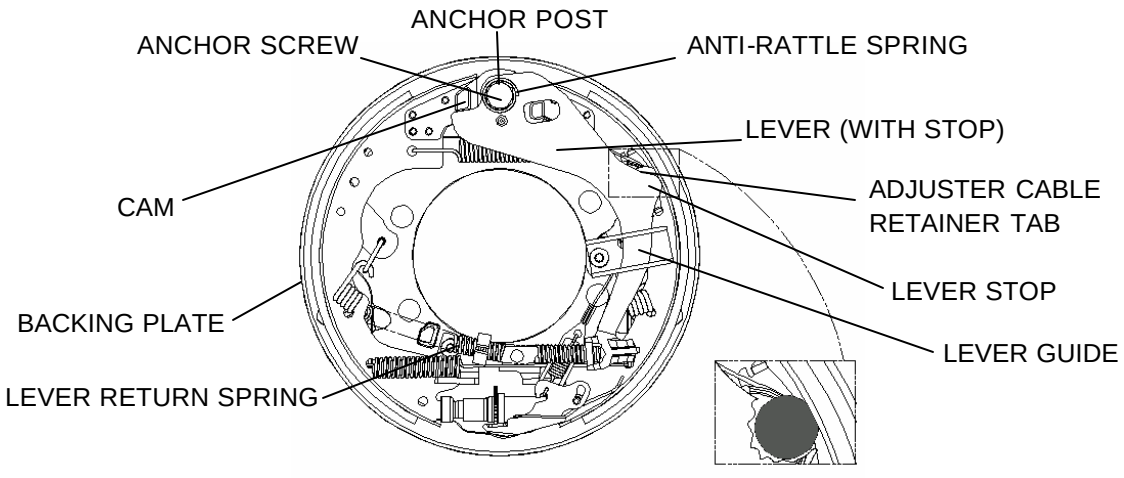

Figure 1

INSPECTION

Before making any repairs, inspect the brake assembly date code. The date for the affected units is between 6/4/04 and 3/14/05. The equivalent Julian date codes for the affected units is between 3E**4156**A and 3E**5073**A where the first digit (4 or 5) is the year and remaining three digits are the day of the year. The date code is etched on the brakes flat outer flange surface that faces the rear of the vehicle and is near the raised cast boss on the side opposite from the apply cable entry boss. See Figure 2.

3E**3303**A

Figure 2

NOTE: This example 3E3303A would NOT require anchor screw replacement.

REMOVING COMPONENTS

1) Block the front wheels to keep the vehicle from moving in each direction.

2) With the engine off, place the transmission in gear and fully release the parking brake.

3) Remove the parking brake drum.

CAUTION:

Do not use a drum puller or a torch to remove a brake drum. Drum distortion may result.

NOTE: If the drum proves difficult to remove, insert a narrow, flat bladed screwdriver through the brake adjuster access slot in the backing plate and disengage the adjuster lever from the adjuster nut starwheel teeth. With the adjuster lever disengaged, insert a brake adjusting tool (or flat bladed screwdriver) through the adjuster access slot to engage

the adjuster nut starwheel teeth. Move the teeth upward enough times to retract the brake shoes to clear the drum. If the drum is rusted to the axle input flange yoke pilot, tap the center of the drum with a nonmetallic mallet to loosen.

4) Detach the parking brake apply cable and return spring from the end of the apply lever. See Figure 3.

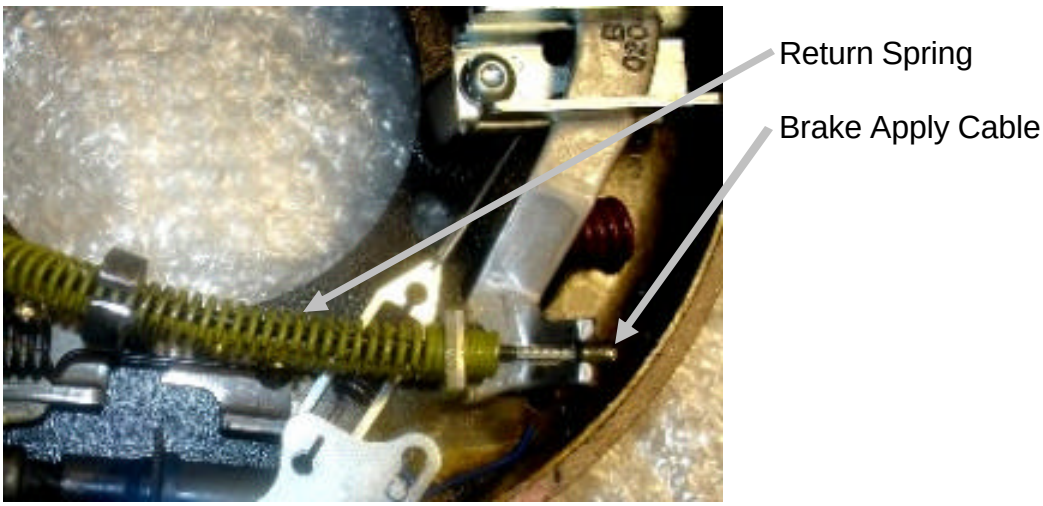

Figure 3

5) Detach the adjuster cable spring from the adjuster lever. See Figure 4.

Figure 4

6) Remove the anchor screw and anti-rattle spring. Keep anti-rattle spring for re-assembly with new anchor screw.

INSTALLING COMPONENTS

7) Remove the old cured thread-locking compound debris from the anchor post hole threads by running an M12 X 1.75mm tap (not included in repair kit) completely into the anchor post hole and back out. Carefully use compressed air to remove the loosened debris from the hole. Make

sure threaded hole is clean and free of debris and grease contamination.

8) Re-install the adjuster cable, cam, apply lever, anti-rattle spring (small coil end toward screw head) and the new anchor screw. See Figure 5.

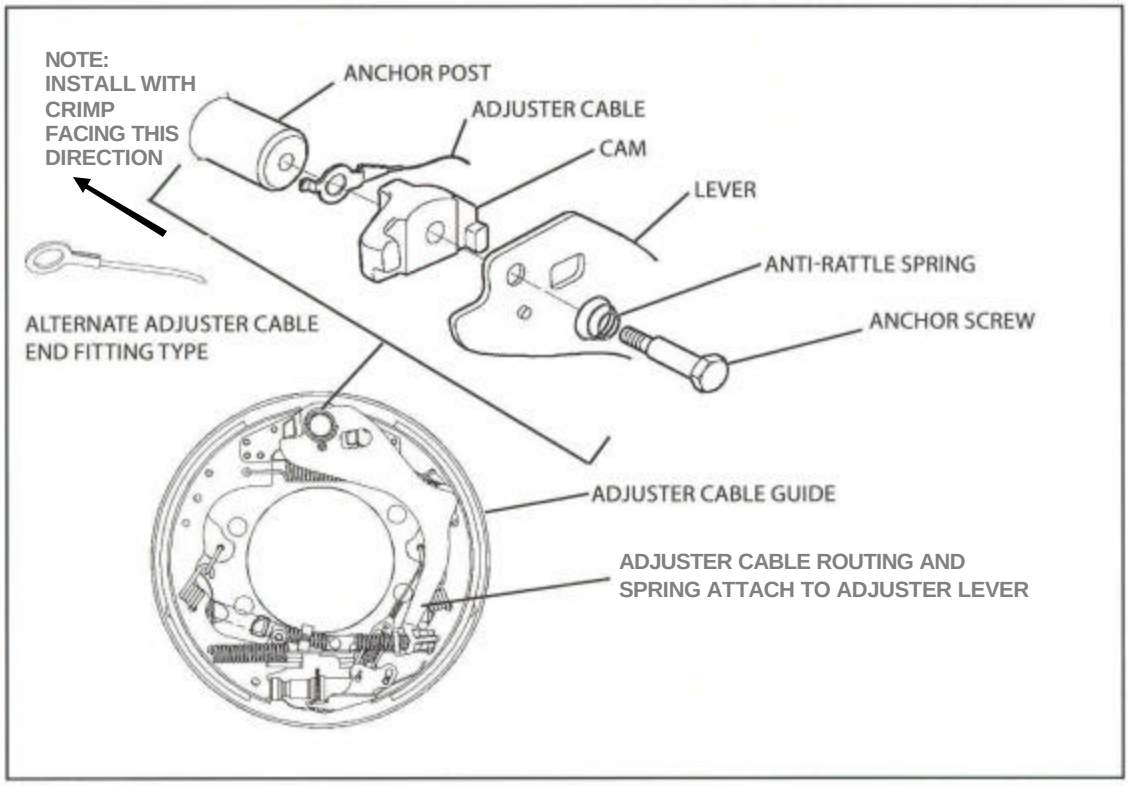

Figure 5

CAUTION:

Only thread anchor screw into the anchor post 1 to 2 turns to temporarily hold the assembly together. Do not thread-in completely until ready to tighten to specification. Faulty installation will result if the thread-locking compound is activated and begins to cure prior to tightening anchor screw to specification.

10) **Tighten the anchor screw to 100 +/- 10 Nm (74 +/-7 LbFt)**.

WARNING:

Only use a known good, recently calibrated, 'clicker' type torque wrench set to the correct torque setting to tighten the anchor screw. Do NOT use universal joints, swivels, crows feet or other add on devices as these can cause inaccurate tightening results. If a known good, reliable, recently calibrated torque wrench is not available, then the repair should not be attempted. Failure to do so may result in personal injury or property damage.

11) Re-install the adjuster cable to the adjuster lever making sure the adjuster cable is routed around the adjuster cable guide and under the shoe hold down spring. See Figure 6.

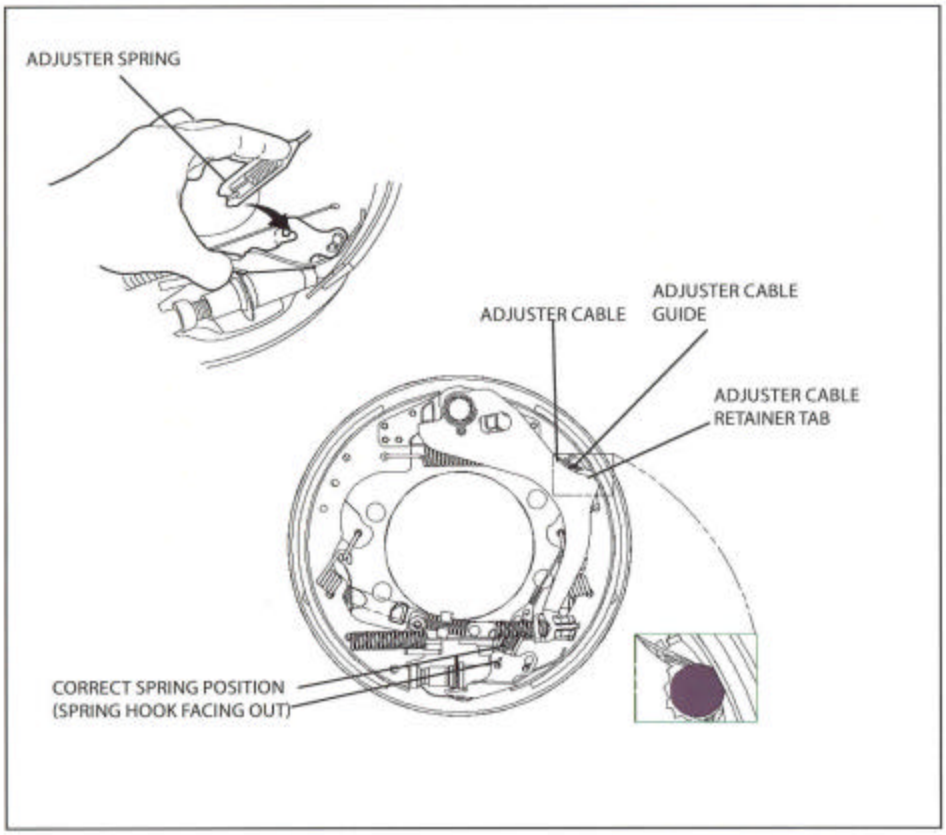

Figure 6

NOTE: When correctly assembled, the adjuster cable end fitting is behind the adjuster lever with the spring hook facing out. Failure to do so may result in reduced brake operation.

12) Re-install the apply lever return spring and the park brake apply cable to the end of the apply lever.

13) Make a final inspection of the shoe linings, and the inside of the drum to ensure that no grease or other contamination is present.

WARNING:

Keep grease and other foreign materials away from the shoe linings and drum surfaces. Contamination of shoe linings or drum surface may result in degradation of brake holding capability, possibly resulting in personal injury or property damage.

14) Inspect, service, then re-install the brake drum per the vehicle manufacturers' service manual.

15) Test the park brake for proper function before returning the vehicle for service use. If necessary, make adjustments per the vehicle manufacturers' service manual.