Bendix Air Disc Uneven Brake Caliper Movement

Service Update #20-0923

Running Clearance Must Be Checked

Recently it was found during a service/inspection that when the service brake was applied that a caliper was not moving in a straight linear fashion as designed. When the service brake was applied, the caliper moved applying the brakes but while closely watching, it appeared as if the caliper was “twisting”.

We contacted Bendix and they referred to the Bendix Service Data Sheet #SD-23-7541 on the Air Disc Brake options #ADB22X & #ADB22X-V. In particular, they referenced “Running Clearance” (Figure #1a & #1b).

We did find that in instances where this movement was present that there was a tappet “timing” issue and seeing as this timing is no field serviceable that the caliper needed replacement.

While working with Bendix, it was determined that when the issue was found and that it was a tappet timing issue, that while the caliper needed to be replaced at the first opportunity the unit did not need to be removed from service.

4.1 CALIPER MOVEMENT TEST

CAUTION: Follow all safe maintenance practices.

Remove the wheel. With the spring brakes released or caged, push the caliper assembly inboard on its guide pins. *Note: To fully release the spring brakes, assure that the air system pressure is at least 90 PSI.* Using a suitable tool (for example a large flat-blade screwdriver), press the inboard pad (12) away from the tappets. Check that there is no dirt, etc. in the gap, and clean if necessary. Then use two long-blade feeler gauges to measure over the whole tappet surface the gap between them and the inboard pad backplate. *(See Figure 16.)* The gap should be between 0.024 in. (0.6 mm) and 0.043 in. (1.1 mm). **If the gap is within the range given, the test is complete.**

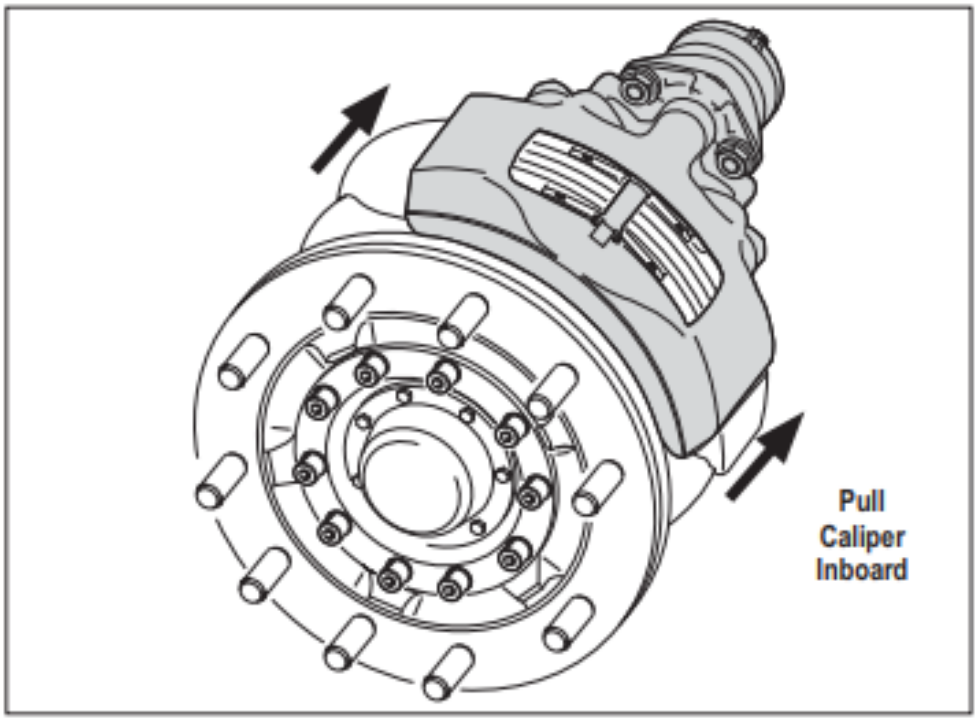

FIGURE 15 - *PULL CALIPER INBOARD*

FIGURE #1a

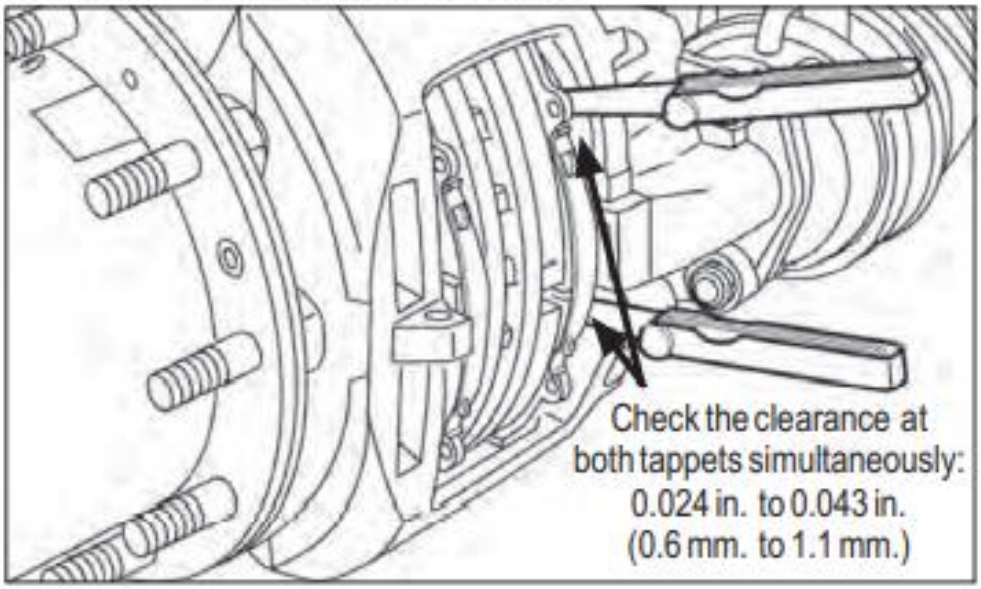

FIGURE 16 - *RUNNING CLEARANCE CHECK*

CAUTION: If the clearance is too wide, there is a danger of brake failure. If the clearance is too small, or if there is no gap at all, there is a danger of the brake overheating. These conditions must be corrected before returning the vehicle to service.

For further investigation, where there is some gap, go to Section 4.2 and check the adjuster mechanism. Where there is no movement at all (and so no gap to measure), go to Section 4.5 "Guide Pin Inspection."

FIGURE #1b

CONTACT OUR SERVICE OR PARTS DEPARTMENT WITH ANY QUESTIONS

SERVICE

Director of Service

Ryan Hemund
rhemund@newyorkbussales.com
CELL 315-561-9121

Chittenango: 800-962-5768

Daryl Wallace
dwallace@newyorkbussales.com

Brian Lamaitis
blamaitis@newyorkbussales.com

Bob Reith
breith@newyorkbussales.com

Phil Tucker
ptucker@newyorkbussales.com

Albany: 866-867-1100

Ben Reiling
breiling@newyorkbussales.com

Rochester: 800-463-3232

Brandon Shepard
bshepard@newyorkbussales.com

Middletown: 845-609-7070

Moncia McDonald
mmcdonald@newyorkbussales.com

PARTS

Director of Parts

Dave Reichel
dreichel@newyorkbussales.com
CELL 315-396-5709

Chittenango: 800-962-5768

Gari McQuade
gmcquade@newyorkbussales.com

Bill Cox
bcox@newyorkbussales.com

Dave Grant
dgrant@newyorkbussales.com

Albany/Middletown: 866-867-1100

Sean Conway
sconway@newyorkbussales.com
Dan Haight
dhaight@newyorkbussales.com

Rochester: 800-463-3232

James Roeser
jroeser@newyorkbussales.com

ALL of our Service Updates can be found on the New York Bus Sales website
Or at the New York Head Mechanic website

Comments or Concerns:
John Johnston
jjohnston@newyorkbussales.com
Cell 315-263-0766