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General Information

Symbols used in this document

DANGER
Description of an immediate situation which will result in irreversible injury or death if the warning is ignored.

WARNING
Description of a possible situation which may result in irreversible injury or death if the warning is ignored.

CAUTION
Description of a possible situation which may result in irreversible injury if the warning is ignored.

NOTICE
Description of a possible situation which may result in material damage if the warning is ignored.

Important information, notes and/or tips

Reference to information on the internet

– Action step
  – Action step
  ⇒ Consequence of an action

■ List
  • List

Note on the use of a tool/WABCO tool

How to Obtain Additional Maintenance, Service and Product Information

If you have any questions about the material covered in this publication, or for more information about the WABCO product line, please contact WABCO Customer Care Center at 855-228-3203, by email at wnacustomercare@wabco-auto.com, or visit our website, www.wabco-auto.com.
General Information

WABCO Academy

https://www.wabco-academy.com/home/

WABCO Online product catalogue

http://inform.wabco-auto.com/

Your direct contact to WABCO

WABCO North America LLC
WABCO USA LLC
1220 Pacific Drive
Auburn Hills, MI 48326
Customer Care Center: (855) 228-3203
www.wabco-auto.com
Provisions for a safe work environment

Read and observe all Danger, Warning and Caution hazard alert messages in this publication. They provide information that can help prevent serious personal injury, damage to components, or both.

- Read this publication carefully.
- Follow all warnings, notices and instructions to avoid personal injury and property damage.
- Only trained and qualified technicians may carry out work on the vehicle.
- Always abide by the vehicle manufacturer's specifications and instructions.
- The workplace should be dry, sufficiently lit and ventilated.
- Use personal protective equipment if required (safety shoes, protective goggles, respiratory protection and ear protectors).

⚠️ WARNING
To prevent serious eye injury, always wear safe eye protection when you perform vehicle maintenance or service.

⚠️ WARNING
Park the vehicle on a level surface. Block the wheels to prevent the vehicle from moving. Support the vehicle with safety stands. Do not work under a vehicle supported only by jacks. Jacks can slip or fall over. Serious personal injury and damage to components can result.

⚠️ WARNING
WABCO air disc brake linings do NOT contain asbestos. However, some manufacturers' brake linings do contain asbestos fibers, a cancer and lung disease hazard. Some brake linings contain non-asbestos fibers, whose long-term effects to health are unknown. You must use caution when you handle both asbestos and non-asbestos materials.
3 Mandatory Air Disc Brake Component Inspection

⚠ The following braking system components should be inspected immediately:
- Pad springs
- Pad retainer bar (if applicable)
- Pad-to-caliper abutment (if applicable)
- Caliper guiding pin bearing play (if applicable)

An updated preventive maintenance schedule (included herein) should be followed.

3.1 Inspection Guidelines

**NOTICE**
This service bulletin does not provide complete service information for individual products referenced within. For appropriate service instructions related to your product visit our website, http://inform.wabco-auto.com.

Refer to WABCO Document No. 815 010 109 3, “General Repair and Test Hints”, for additional information. During inspection, observe the following guidelines detailed in this reference document.
- Replace damaged equipment components.
- Always use all parts of the repair kit for the equipment.
4.1 Pad Spring Inspection

Inspect all wheel end pad retaining springs. Verify the springs are not broken or cracked. Ensure all wheel ends have three complete retaining springs in place. If all springs are intact, no further action is needed.

If one or more retaining springs is cracked, broken or missing, install all components of a pad service kit; including pads, springs, retainer bar, and all other supplied hardware. Before replacing the pads, an additional inspection of the pad retainer bar and pad-to-caliper abutments, as detailed in this publication, should also be performed. Figure 1 and Figure 2.
4.2 Pad Retainer Bar Inspection

⚠ Inspect the pad retainer bar mounting holes for excessive wear. If holes appear oblong, measure the holes as shown in Figure 3. If they measure 12 mm (0.472 inches) or more at their widest point, replace the caliper and carrier assembly.

![Example - Retainer Bar Holes](4014752a)

4.3 Pad-to-Caliper Abutment Inspection

Check depressions on carrier surfaces by running your fingernail over the surfaces (fingernail test). If you notice grooving of pad abutment areas indicated below, replace the caliper and carrier assembly. Figure 4, Figure 5 and Figure 6.

![Pad-to-Caliper](4014753a)
4.4 **Caliper Guiding Pin Bearing Play Inspection**

Inspect the guide bushings for excessive play.

1. Press the dial indicator against the measuring point (arrow) on the brake caliper. Figure 7 and Figure 8.

Fig. 7

MAXX22T MODEL

Fig. 8

PAN19-1 AND PAN22-1 MODELS
2. Applying little force, tilt the caliper as far as possible (direction as illustrated in Figure 9) and set the dial indicator to the value zero.

3. Now, and again applying little force, tilt the brake caliper as far as possible in the opposite direction.

4. Read the dial indicator. The bearing play must not be greater than 2 mm.

5. If the bushings are worn beyond specification, replace them.
### Revised Inspection Schedule for WABCO Air Disc Brakes

#### Inspection Schedule*

<table>
<thead>
<tr>
<th></th>
<th>Every 6 months (4 months severe duty**)</th>
<th>Every 12 months</th>
<th>Every Pad Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wheel ON</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wheel OFF</td>
<td>X</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Inspection Item</th>
<th>Every 6 months</th>
<th>Every 12 months</th>
<th>Every Pad Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inspect the pad thickness by visual inspection or measure caliper position with a ruler.</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inspect the rotors for cracks through to vent channels, etc. (see manual for details).</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Check boots, seals and end caps for rips, tears, damages, or cracks.</td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Inspect all retaining hardware for damage (pad retainer bar, pad springs).</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Measure pad wear and inspect all retaining hardware for damage (pad retainer bar, pad springs and mounting holes)</td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Check running clearances and adjuster operation.</td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Check caliper slide movement (should move easily in and out by hand) and check caliper guiding pin bearing play (see manual).</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Inspect all caps, hoses, and brake exterior for damage, etc.</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Ensure brake pad retainer bar is torqued to specification (see manual for details).</td>
<td></td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>

*Visually inspect the brakes through the wheel during every tire pressure check.

**WABCO Warranty Terms & Conditions Defines Standard & Severe Duty Application as follows:**

<table>
<thead>
<tr>
<th>Category</th>
<th>Standard Application</th>
<th>Severe Duty/Off-Highway Application</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard application: Line-Haul/On-highway operation is defined as 100% on-highway use.</td>
<td>Severe Duty/Off-Highway operation includes, but is not limited to, garbage trucks, cement trucks, logging trucks, oil/gas field trucks, utility trucks, or trucks with mixed on/off highway use.</td>
<td></td>
</tr>
</tbody>
</table>

**Note:** The table above is meant to provide a guide to maintenance interval planning. However, depending on the particular vehicle’s application (e.g., corrosive environment, heavy usage on rough or gravel roads, etc.) more frequent inspections of the braking system components may be necessary.
Warranty Information

The inspection procedure presented in this document is intended to reduce, not eliminate, the risk of component failure.

Contact WABCO for warranty support:

WNAcustomerercare@wabco-auto.com/ +1 (855) 228-3203

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www.wabco-auto.com