A Quick Guide to Bendix[®] Warranty Eligibility

- Help prevent sending warranty claims that can be rejected;
- Save time and shipping costs; and
- See useful examples*

Quick Warranty Guide Symbols

Quick Recognition Symbols Used in this Document:



"Thumbs down"

DO NOT submit these items for warranty consideration, if they display the condition(s) shown



"Thumbs up"

Submit for Warranty Evaluation*

* Submission for warranty evaluation does not guarantee warranty approval. Once parts are received, they will be evaluated; then approved or denied.

A Quick Guide to Bendix® Warranty Eligibility

The First Step for All Devices:

- 1. Verify that the device is a genuine Bendix® brand part by looking for one of the logo markings shown to the right...;
- 2. Is the device fully assembled?; and
- 3. Check the Warranty Policies: Is the date and mileage within the permitted range?







If 1, 2, and 3 are OK, then use this Guide.

Quick Warranty Guide

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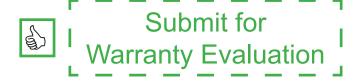
Air Disc Brakes (ADB) & Pads

Air Disc Brakes & Pads

Bendix® ADB Chain Cover Inspection



- The chain cover is damaged or missing.
- The adjuster mechanism has evidence of rust, showing the cap is or has been missing.



Only if the chain cover is intact and undamaged.



Adjuster mechanism (Note: the cover is missing)

Air Disc Brake (ADB) Calipers

Bendix® ADB Tappet Inspection



Immediate Warranty Rejections Occur If:

The tappets are extended past 1.18 inches.

This condition can be the result of incorrect maintenance procedures, or if the pads have been permitted to wear far below the minimum 2 mm thickness. In these cases, the tappet mechanism synchronization has been lost and can only be re-set at the factory.





For more tech info visit the Document Library on www.bendix.com

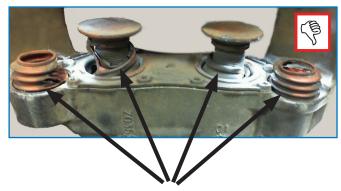
Air Disc Brake (ADB) Calipers

Air Disc Brakes & Pads

Bendix® ADB Boot Inspection



• The guide-pin or tappet boots are damaged. These are maintenance items and should be regularly inspected and replaced as needed.



Worn or damaged air disc brake boot replacements are part of normal recommended maintenance.



Only if all the boots are present and undamaged.





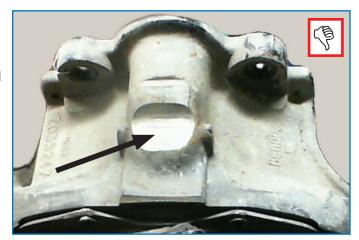
Air Disc Brake (ADB) Calipers

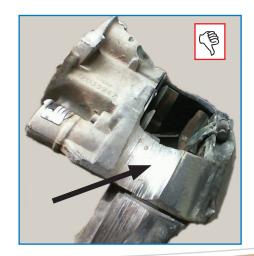
Bendix® ADB Caliper Casting Inspection



Immediate Warranty Rejections Occur If:

• The caliper casting is broken, gouged, or similarly damaged.







· Only if the casting is complete.

Air Disc Brake (ADB) Rotors

Air Disc Brakes & Pads

Bendix® ADB Rotor Inspection



I Immediate Warranty Rejections Occur If: I

- The rotor has deep grooves. For standard rotors, any grooves found must be less than 0.06 in. (1.5 mm); for Bendix® Splined Disc® rotors, the figure is 0.04 in. (1.0 mm).
- The rotor is damaged.



Regular air disc rotors have one-piece hubs and rotors.



Splined disc rotors have separate hubs and rotors.

Air Disc Brake (ADB) Pads

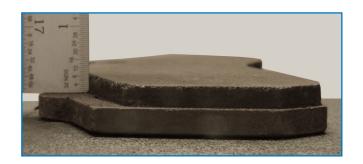




Bendix® Air Disc Brake Pad Inspection



 The pad is worn to below 0.08 in. (2.0 mm) of friction material remaining.





 Only if the air disc brake pad has more than 2 mm of friction material.

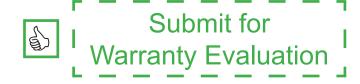
Bendix® Air Dryers, Cartridges & Purge Valves

Bendix® AD-IS® Air Dryer Inspection

Air Dryers, Cartridges & Purge Valves



- The pressure-protection valves are missing, or if there is evidence (socket wrench marks, etc.) that show they have been adjusted.
- The purge valve should be present.



Only if intrusive maintenance has not been performed.





View from beneath. This example also shows a missing purge valve.

Governors

Bendix® AD-IS® Air Dryer Inspection



Immediate Warranty Rejections Occur If:

• The governor is a non-Bendix® brand part (competitive, or knock-off).



Submit for Warranty Evaluation

 Only if the governor is a Bendix-brand part and one of the correct part numbers for use with the Bendix AD-IS air dryer.







Air Dryer Cartridges

Bendix® Air Dryer Cartridge Inspection

Air Dryers, Cartridges & Purge Valves



Immediate Warranty Rejections Occur If:

• The cartridge is a non-Bendix® brand part (another manufacturer's cartridge).





Purge Valves

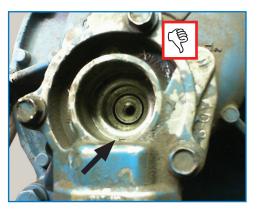
Bendix® Purge Valve Inspection



Immediate Warranty Rejections Occur If:

• The purge valve is missing or is non-Bendix® brand.







Submit for Warranty Evaluation







Only if the purge valve is present and a genuine Bendix brand component (as evidenced by the presence of one of these icons).







Hydraulic Brake Calipers and Brake Shoes

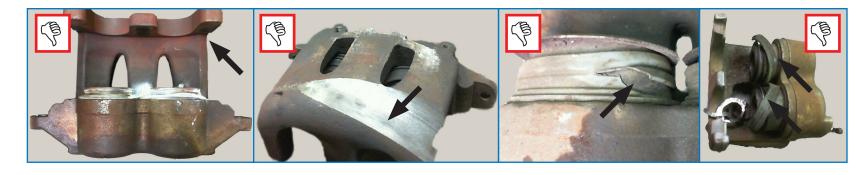


Hydraulic Brake Caliper Inspection



Immediate Warranty Rejections Occur If: 1





- The caliper color has changed due to extreme heat;
- There is external damage;
- One or more boot(s) are torn; and/or
- The boot(s) have separated from the housing.

Calipers & Brake Shoes

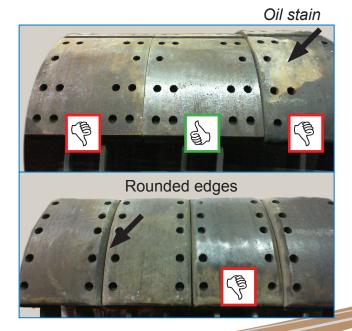


Brake Shoe Inspection



I Immediate Warranty Rejections Occur If: I

- The linings have oil contamination.
- The vehicle operator has modified the profile of the linings from a flat surface (e.g. if rounded edges are present, caused by grinding).



Calipers & Brake Shoes

Did you know?

Calipers & Brake Shoes

Noise complaints are non-warrantable as noise is a normal consequence of the brakes working, and can be affected by many external factors, including road and weather conditions.

Calipers & Brake Shoes

Brake Shoe Inspection



Immediate Warranty Rejections Occur If:

• The brake shoe web or table is damaged.









 After verifying there are no signs of brake shoe web damage.

Bendix® Compressor Inspection

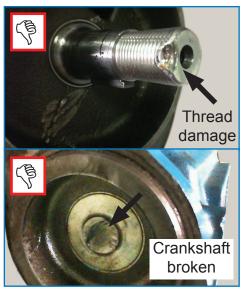


 The crankshaft is broken or the threads are damaged.

Compressors & Governors



Only if the crankshaft is in good condition.





Bendix® Compressor Inspection

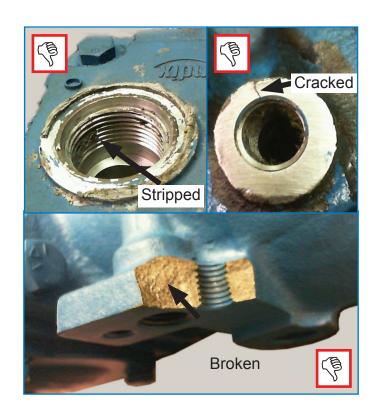


Immediate Warranty Rejections Occur If:

- Any of the port threads are stripped, or cracked due to over-torquing.
- There is evidence that the compressor was dropped.
- The safety-valve is damaged.



Safety-valve and port damage.

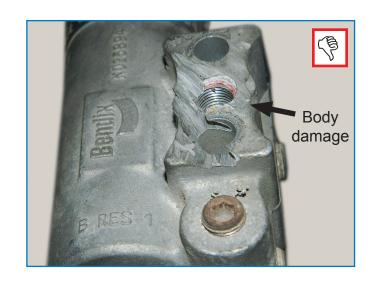


Bendix® Governor Inspection



Immediate Warranty Rejections Occur If:

• The body is damaged, or improper use (e.g. the exhaust port is plugged).



Compressors & Governors



The exhaust port is plugged, showing that the part was mis-installed.

Did you know?

Many compressor & governor components can be returned for a core credit.

Next Step for All Electronics:

- 1. Check that the harnesses and wiring are in good condition (no cuts or chafed sections).
- 2. Always use the latest Bendix® ACom® Diagnostic Software to check the whole system and precisely identify potential problem devices. (Free downloads are available on www.bendix.com.)
- 3. Whenever possible, include a copy of the Bendix ACom Diagnostic Software report with your warranty return.

Electronics

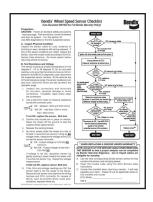
Bendix® Wheel Speed Sensor Inspection



🦃 । Immediate Warranty Rejections Occur If: ।

- The sensor is melted, broken, cracked, disassembled or deformed.
- The harness is cut or chafed.

Use the Bendix Wheel Speed Sensor Checklist (BW2453)









New part shown

for comparison.

Go to the Document Library on www.bendix.com to download BW2453

For more tech info visit the Document Library on www.bendix.com

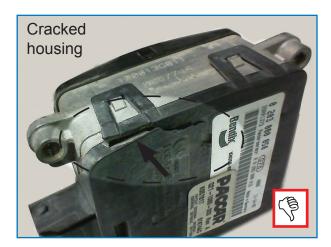


Bendix® Radar Sensor Inspection



🤚 । Immediate Warranty Rejections Occur If: ।

• The housing is bent, cracked or broken.







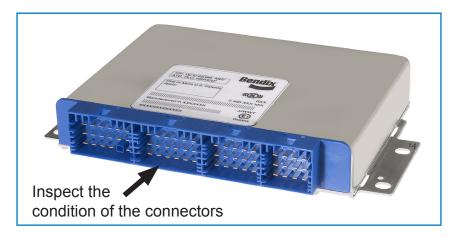
Electronics

Bendix® Tractor ABS Electronic Control Unit (ECU) Inspection



I Immediate Warranty Rejections Occur If: I

- The housing is bent, broken, damaged, or deformed.
- The connectors are corroded, damaged, bent, or broken.

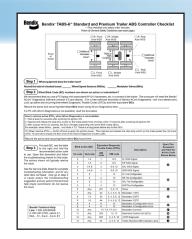


Whenever possible, include a copy of the Bendix® ACom® Diagnostic Software report with your warranty return.



Trailer ABS Electronic Control Units:

- Do NOT replace the Bendix[®] TABS-6[™] unit until all Bendix[®] ACom[®] diagnostic software troubleshooting options have been exhausted.
- 2. Use the Bendix® Trailer ABS Checklist (BW2910).
- 3. Whenever possible, include a copy of the Bendix ACom Diagnostic Software report with your warranty return.
- Do NOT replace the Bendix TABS-6 unit until the pigtails have be checked (and replaced, if necessary).



Use the Bendix® Trailer ABS Checklist (BW2910).

Electronics

Bendix® Steering Angle Sensor Inspection

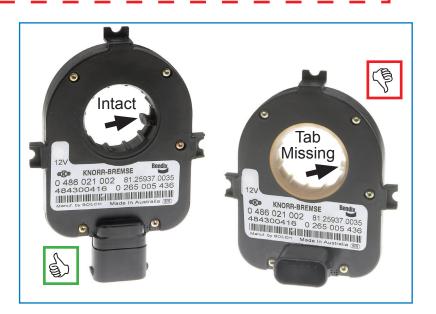


New part shown for comparison.



I Immediate Warranty Rejections Occur If: I

 The sensor tab is missing or broken.



SmarTire® Tire Pressure Monitoring System (TPMS) by Bendix CVS Sensor Inspection



 The yellow sensor component is damaged, broken or plugged by contaminants?



• If the sensor is not functioning, but no visible damage is found.





The cradle that holds the sensor is a maintenance item. Replace it as needed.

Electronics

Bendix® ABS Modulator Inspection



Immediate Warranty Rejections Occur If:

- The housing is bent, broken, damaged or deformed.
- The connectors are found to be corroded, damaged, bent, or broken.

Inspect the connectors.
In this example, the connector is in good condition.





New parts shown for comparison.



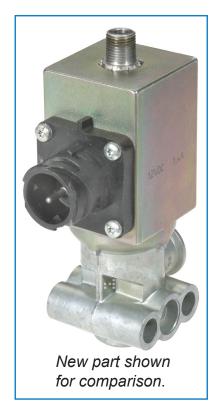
Bendix[®] Automatic Traction Control Unit Inspection (AT-1[™], AT-3[™], etc.)



Immediate Warranty Rejections Occur If:

- The housing is bent, broken, damaged or deformed.
- The connectors are corroded, damaged, bent or broken.





Electronics

Did you know?

Many electronic components can now be returned for core credit.

Actuator Inspection



Immediate Warranty Rejections Occur If:



• The ports or body are damaged.





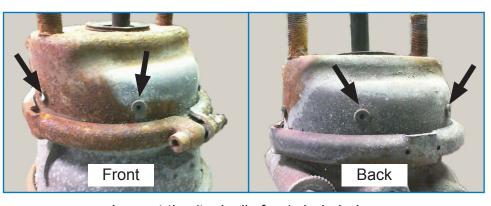
Spring Brakes & Slacks

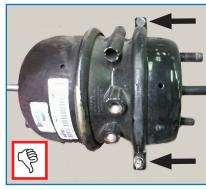
Actuator Inspection



। Immediate Warranty Rejections Occur If: ।

- All the vent holes are plugged.
- The bolt-heads face in the opposite direction to each other.





Inspect the bolt heads
– do they face opposite directions, showing that the ring was re-installed incorrectly?



Inspect the (typically four) drain holes: Reject if **all** the plugs are present – blocking drainage.

Slack Adjuster Inspection



👎 । Immediate Warranty Rejections Occur If: ।

• The slack adjuster has been disassembled.





Spring Brakes & Slacks

Did you know?

Many products & components not eligible for warranty consideration, are still eligible to be returned for core credit.

Special Step for all Valves: Part One



| Immediate Warranty Rejections Occur If: |

The valve was not installed correctly. Are any of the supply and/or control ports plugged?



Valves that have been incorrectly plumbed may not work at all. or with unintended results potentially causing vehicle safety issues.

The example on the left shows a returned Bendix® QR-1C® Quick Release Valve found to have a plug in the supply port.

The example on the right shows a Bendix® TR-3™ Inversion Valve that had been incorrectly plumbed with a plug installed in the control port.

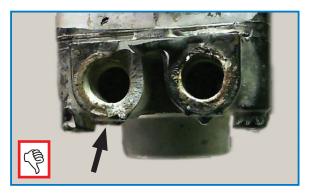


Special Step for all Valves: Part Two



🧐 । Immediate Warranty Rejections Occur If: ।

· Any of the ports are damaged.



Example of a Bendix® R-12® Relay Valve with a damaged port due to an external impact.



Example of a Bendix® QR-1® Quick Release Valve with a damaged port due to an external impact.



Port damaged.

Special Step for all Valves: Part Three

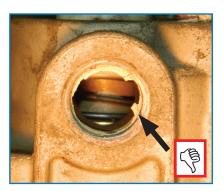


ि । Immediate Warranty Rejections Occur If: ।

• Any of the valve's internal channels have evidence of dirt, grit, and/or foreign material – including Teflon®, or similar, tape – inside.







Special Step for all Valves: Part Four



। Immediate Warranty Rejections Occur If: ।

• The returned part is a maintenance item. Service replacement parts are available for these items.

Wear items like this foot valve pedal cover or dash valve head are not warranty items.







Valves that Feature Quick-Connect Fittings



🧐 । Immediate Warranty Rejections Occur If: ।

• The returned part has had the quick-connect hoses cut off, instead of being removed correctly.



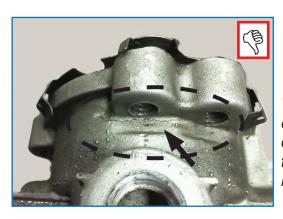


Bendix[®] E-6[™] Brake Valve Inspections

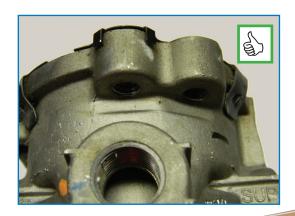


🧐 । Immediate Warranty Rejections Occur If: ।

• The casting has been cracked or damaged by over-torque during installation.



The casting is cracked due to over-torque of the mounting bolt.



Quick Warranty Guide

Questions?

For technical literature, visit the Document Library on www.bendix.com. For your Account Manager, see the Contacts page at www.bendix.com.

To speak to a representative, call 1-800-AIR-BRAKE (1-800-247-2725), then...

- For technical assistance, select option 2, then option 1. You may also contact the Tech Team by email at techteam@bendix.com; or
- For the Warranty Department, select option 2, then option 2. You may also contact the Warranty Department at warranty@bendix.com.



Quick Warranty Guide Save time and money

Quick Warranty Guide

Refer to this Quick Guide to Bendix® warranty eligibility often and it will help you reduce:

- Warranty claim rejections; and
- Wasted time & shipping costs

For more information, visit the www.bendix.com Services & Support page and select "Warranty".



Log-on and Learn from the Best

On-line training that's available when you are -24/7/365. Visit www.brake-school.com.

Bendix® brand wheel end solutions are brought to you by:

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Foundation Brake LLC