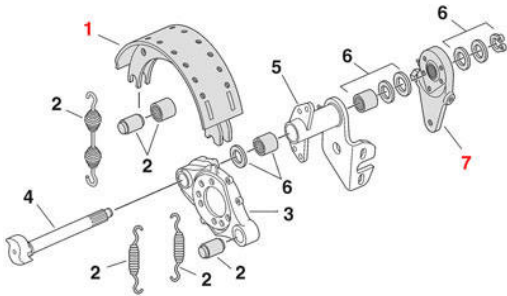


# Brake Noise

## Tech Tip #17-0406



### UPDATED “BURNISHING” PROCEDURE

On occasion, we see or hear about brake noise. When it does appear, it may be all the units delivered to a customer in a particular year and then that customer may not see it again or it may reoccur in a year or two. Sometimes, it may be just one unit in a group that was delivered. We have evaluated units and looked at routes, driver’s habits and other variables. However, we have not been able to pin point anything that could be done to every unit that’s experiencing the issue and say “do this and it will quiet the front brake noise.”

In 2013, New York Bus Sales sent a Tech Tip out (Figure #1) that addressed a process where the brakes were “burnished” in a procedure which Blue Bird had released in 2011 (Figure #2). This helped some units, though not all that experienced noise.

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Or at the [New York Head Mechanic website](#)

Working with Blue Bird we recently brought in Meritor as we were getting more calls and wanted to see if something could be found. We learned that the “burnishing” procedure which Meritor uses (Figure #3) is quite different from the one which Blue Bird had published. The Meritor Representative we worked with was confident that their procedure did a much better job “setting” the brake shoe to the drum. Meaning the noise would not return as we had seen in the past with some units.

New York Bus Sales is currently testing units with this new procedure and are documenting this issue. We ask that if you have a problem with noise that you first try this new procedure and document the date and mileage you perform the burnish. Please let us know if it returns so that we can look further into a resolution.

We greatly appreciate your patience as we work through this issue and look for a permanent resolution! Please find linked below some content about Meritor products.

<http://d230nauvn8vtei.cloudfront.net/Published/Content/CommonContent/MaintenanceManuals/BrakesAndWheelEnds/MM4RevJuly2016.pdf>

Note: If the link above doesn't work, copy it into a web browser to view content. For more information, please visit <http://www.meritor.com>.

**Thank You to Milt Waye, Rick Spsychalski and the crew at Brockport Central School for their patience and help in working with us on this!**

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# Tech Tip

FROM YOUR FRIENDS AT  
NEW YORK BUS SALES!



## BBCV & T3FE Air Brake Noise

- Complaint –** We are getting a brake “squeal” on our new unit(s)
- Cause –** We are currently working with Meritor and Blue Bird to resolve the issue!
- Correction –** New York Bus Sales has received phone calls concerning brake noise on units delivered this year.....NOT necessarily all units of a customer but seems to be only certain units and are currently working with the manufacturers to resolve the issue BUT the fix is not as easily resolved as we had hoped.

Should you have experience the issue we would recommend as a temporary repair that the brake shoes be “burnished” per the attached Blue Bird Service Update SU1107 to remove brake shoe glaze and seat the shoes with the drums. We realize that this is NOT a resolution but will help with the noise until a permanent resolution is found.

We appreciate your patience and help with this until we can get a resolution and implement it!

THANK YOU!



ALL of our Tech Tips can be found on the New York Bus Sales website at  
<http://www.newyorkbussales.com/pages/bulletins.cfm>  
Or at the New York Head Mechanic website at  
<http://www.nyhuma.org/viewforum.php?f=2&start=0>

## FIGURE #1

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**Subject: Brake Burnishing Procedures for Brake Pads or Shoes**

Blue Bird and Meritor recommends that, as needed, brake pads or shoes be seated-in properly. Insufficient burnishing of brake pads or shoes can cause overheating or glazing of the pads or shoes. Proper burnishing of brakes assures a long lasting, high performing, less noisy brakes.

**Maintenance Guidelines:** As needed, follow the procedure below to burnish the brakes to properly heat and eliminate brake shoe glaze.

**Procedure:** Read and understand these burnishing instructions completely before starting. When following these instructions, avoid other vehicles.

1. Check brake adjustment for proper settings per your Blue Bird Service manual.
2. While driving the vehicle at 20 mph (32 km/h), apply the brakes to reduce speed, approximately 10 feet (3.05 m) per second, to five mph (8 km/h). Perform this operation 10 times at regular intervals of 500 feet or 0.1 mile (150 m or 0.16 km) without stopping the vehicle.
3. After 10 brake applications, make one complete stop from 20 to 0 mph (32 to 0 km/h).
4. Check the drum temperatures immediately after burnishing. Any drums that are cooler, approximately 50°F (10°C) side-to-side, 100°F (38°C) front-to-rear, than the others indicate a possible lack of braking effort on those wheels. A temperature difference greater than stated above is a possible indication of brake imbalance. Check for correct brake assembly and automatic slack adjuster setup. In addition, check for correct air system setup. After the imbalance is repaired, reburnish the brakes.
5. Allow the brakes to cool to the ambient temperature.
6. Check brake adjustment for proper settings per your Blue Bird Service manual.

This procedure may be used or repeated as needed.

FIGURE #2

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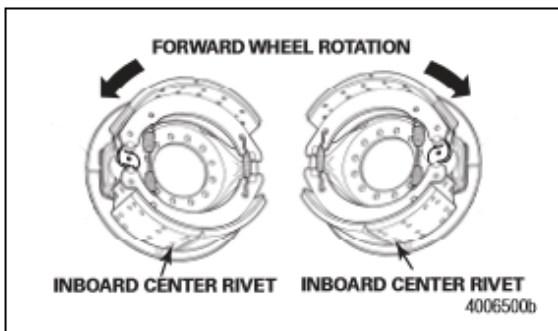


Figure 5.32

## Drum and Wheel

Follow the manufacturer's instructions to install the drum and wheel onto the axle.

## Brake Burnishing Procedure

The brake burnishing procedure can be used to help reduce brake related noise or imbalance concerns which may occur in the field.

### **⚠ WARNING**

To prevent serious personal injury and damage to components, burnish the brakes in a safe area.

1. Adjust the automatic slack adjuster using the initial manual setup procedure. Refer to Section 6.
2. Find a service road or non-busy state road where the vehicle can be driven safely at 20-25 mph (32-40 km/h).
3. Drive the vehicle at a speed of 20-25 mph (32-40 km/h). While driving at this speed, apply a light service brake application while applying a slight engine throttle application for a duration of 15-20 seconds. Release the service brakes for 15-20 seconds.
4. Using a hand-held temperature gun, immediately check the temperatures on the outside of the brake drums. Repeat Step 3 as many times as needed to obtain brake drum temperatures at least 450° F (232° C) at the coolest wheel-end brake, but not to exceed 550° F (260° C) at the warmest wheel end.
5. Drum temperature differences from side-to-side of approximately 50° F (10° C) or greater can indicate brake imbalance. If this condition exists, correct the issue before continuing.

6. Once the brake drums reach a temperature range above 450° F (232° C), return the vehicle to the service facility.
7. Let the truck sit for a minimum of 30 minutes for the brakes to cool to ambient temperature.
8. Check all wheel ends for the correct minimum Free Stroke measurement and ensure the Applied Stroke measurements are within CVSA specifications.
  - If the brake is not within specifications: Readjust the automatic slack adjuster using the initial manual setup procedure. Refer to Section 6.
9. Road test the vehicle and correct any issues if found.
  - If a noise, shimmy or pull still exists after attempting to correct it: Repeat Steps 2-8 again to try to resolve the issue. If the problem still exists, contact the Meritor OnTrac™ Customer Call Center at 866-668-7221.

## Figure #3

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Or at the [New York Head Mechanic website](#)

## CONTACT OUR SERVICE OR PARTS DEPARTMENT WITH ANY QUESTIONS

### SERVICE

**Chittenango:** 800-962-5768  
Daryl Wallace or Brian Lamaitis

**Rochester:** 800-463-3232  
Dave Schaub

**Albany:** 866-867-1100  
Ben Reiling

**Warranty:** 800-962-5768  
Morgan Jenkins

**Customer Service  
Representatives**

**Eastern Region:**  
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JJ Richmond  
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