



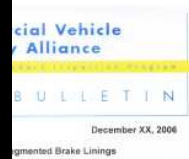
Commercial Vehicle Safety Alliance

North American Standard Inspection Program

The Express Brake shoe uses different wear points for measuring worn linings. Furthermore, the shoes utilize segmented linings which differ from riveted shoes. For detailed information regarding Out-of-Service Criteria for the Express Brake System, including legal wear limit, segmented lining usage, and visual inspection procedures, the Commercial Vehicle Safety Alliance has issued an Inspection Bulletin to all DOT offices in the U.S. For a copy of this information, please log onto:

<http://www.cvsa.org/programs/documents/nas/2007-01%20Express%20Brake%20International%20-%20%20Segmented%20Brake%20Linings%20Revised%2009-15-08.pdf>

When using this product in areas where D.O.T. personnel may not be familiar with it, a copy of this document may be placed in the cab and used for reference.



Express Brake International, Inc. at (888) 844-7734 (website: www.expressbrake.com).

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EXPRESS BRAKE INTERNATIONAL

Installation Guide—Express Brake / EXTREME Brake Shoes

The Express/XTREME Brake shoe is a replacement for FMSI 4515 / 4707 Rockwell brake shoe. A brake shoe is also available for 4515/4707 Fruehauf style shoes.

1. Properly locate the vehicle and support it with approved jackstands and disable the ignition system. Remove the wheel and tire assembly. Adjust the slack adjuster so that the brake shoe is in the fully retracted or zero position. Remove the brake drum with a drum caddy or other safe method and discard the brake drum (for new shoe installation).



2. Remove and discard the original riveted brake shoes from the spider assembly. Carefully inspect the foundation brake components. Replace any components that are worn, such as the S-cam, S-cam bushings, and slack adjusters. Follow TMC recommended practice per RP 607B. Also remove the old anchor pin and bushing. The old anchor pin and bushing will not be re-used. Make sure the new anchor pin bushing (supplied) is installed before installing the new EBI anchor pin. Also replace the old brake spring with EBI's special heavy duty brake spring.



3. Install the Express Brake stainless steel anchor pin bushings into the spider using the appropriate bushing driver tool. It is imperative to install the Express Brake stainless steel bushings into the brake spider to prevent the anchor pin from sticking during future brake service. Coat the inside of the bushing surfaces liberally using a high temperature grease. (Grease tubes are no longer supplied by EBI).



4. Install the shoe roller and clip onto the web of the brake shoe, making sure that the retainer clip is installed properly and not pinched between the roller and the ears of the web of the brake shoe. Bend the roller clip upward and inward such that it does not protrude out past the sides of the brake shoe webs.



5. Lay the brake shoes on a flat surface in their respective mounting position. Temporarily remove the anchor pin retaining lock nut (#10) and anchor pin (#9) from each shoe and set aside on a clean surface. Install the return spring onto the roll pin in the web of each brake shoe.



NOTE: Brake shoes can usually be mounted with gripper bar retaining nuts (#7/8) facing either inward (recommended) or outward (reverse mount). For XTREME Brake, there is no need to remove anchor pin. They will be in the hardware kit.

6. Grasp the upper shoe assembly and pick up both brake shoes. Drape the upper shoe over the top of the brake spider and rest the roller end on the S-cam upper pocket.



7. Grasp the lower shoe and rotate it so that the roller comes into contact with the S-cam lower pocket. Align the lower shoe so that the anchor pin bosses on the webs of the lower shoe line up with the lower anchor pin hole on the brake spider. Slide the freshly lubricated anchor pin through the brake shoe and into the brake spider. Make sure that the anchor pin retainer slides over the retainer stud on the brake shoe. Install the locknut (#10) on the retainer pin mount stud and tighten to approx 60 inch/lbs torque.

7. Using a short pry bar, slide the bar underneath the end of the upper brake shoe, between the brake shoe table and the spider boss. Lift up on the bar to raise the upper brake shoe until the retainer pin boss on the web of the upper shoe lines up with the upper anchor pin hole in the spider. Lubricate the anchor pin (#9) and slide the pin through the brake shoe and into the brake spider. For Express Brake install the locknut on the retainer pin mount stud and tighten to approx 60 inch/lbs torque. **For XTREME Brake, securely install snap rings on both ends of anchor pins.**



In case of inadequate clearance to install anchor pin, remove snap ring and slide anchor pin through spider from reverse side, then reinstall snap ring on anchor pin.

IMPORTANT:

***** Tighten locknuts to approximately 60 inch/pounds torque. *****

8. Install new brake drum using a drum caddy. If installing an inboard mount drum, or spoke wheel with inboard mount drum, refer to manufacturer's procedures, or refer to TMC recommended procedures per **RP618**.

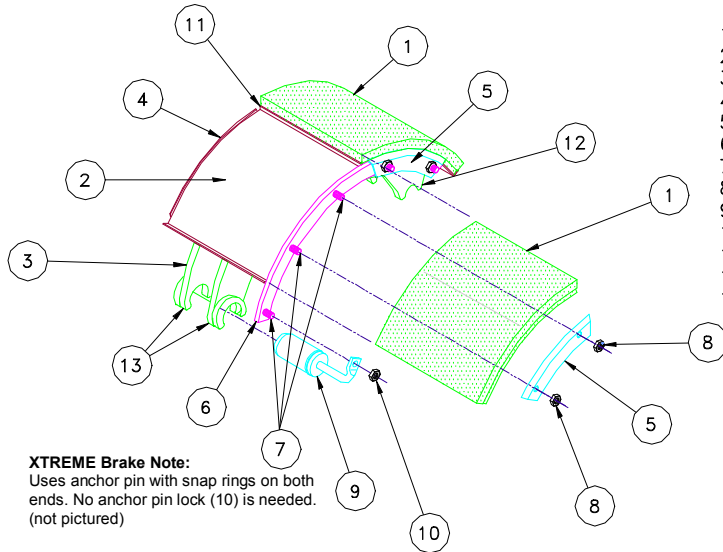


9. Adjust the slack adjuster to specifications so the brake shoes do not drag and the slack adjusters can work properly. Use manufacturers procedures or TMC recommended practices per **RP 609B** for brake adjustment.

Note the installation date, mileage, and/or hours. Make note of the grade of lining installed with the brake shoes to ensure the correct lining material is replaced at the next brake service.

BRAKE PARTS LIST

1. BRAKE LINING
2. LINING TABLE TOP
3. SHOE WEB
4. INNER GRIPPER
5. FLOATING GRIPPER
6. GRIPPER BAR
7. STUD
8. LOCK NUT
9. ANCHOR PIN
10. ANCHOR PIN LOCK
11. STOP BAR
12. CAM END
13. ANCHOR END



XTREME Brake Note:
Uses anchor pin with snap rings on both ends. No anchor pin lock (10) is needed. (not pictured)

Technical Support / Customer Service

TOLL FREE 1-888-844-7734
Express Brake International, Inc.



EXPRESS BRAKE INTERNATIONAL

Reline Guide—Installation of Express Brake/XTREME Brake Relines

The Express/XTREME Brake shoe is a replacement for FMSI 4515 / 4707 Rockwell brake shoe. A brake shoe is also available for 4515/4707 Fruehauf style shoes.

1. Properly locate the vehicle and support it with approved jack-stands and disable the ignition system. Remove the wheel and tire assembly. Adjust the slack adjuster so that the brake shoe is in the fully retracted position. Remove the brake drum with a drum caddy or other safe method and check it for reusability.



2. Inspect return spring, roller pins, and other brake hardware as per approved inspection practices to determine if removal of the brakes from spider is necessary.



3. With Brake Shoes mounted on the spider or removed, installation procedure is the same: Remove the four—5/16" lock nuts (#8) and the floating grippers (#5). **These nuts should NOT be reused.** New nuts are supplied in your new lining kit.

4. With the floating grippers removed, slide out the old brake pad linings (#1). Make sure the lining table top (#2) is clean and free of buildup or grease. Inspect the floating grippers. If they are deformed or damaged, replace with new grippers, reference EBI Part number: EBI-HWK.



5. Install new linings being careful to install the proper lining grade. Linings are edge color coded for convenience in identifying lining grade. In case of questions about which lining grade to use, please consult your local EBI distributor or contact EBI's technical support center.



EBI linings use a wear mark notched into the lining. Place the lining pad with the wear notch in one of the middle locations with the wear mark facing inward when the brake shoes are installed.

IMPORTANT: Be sure lining grooves are properly seated on the lining table top. Grooves should fit snugly under inner gripper and floating gripper



6. Reinstall the two floating grippers (#5) with four New lock nuts (#8) supplied in the reline kit. Tighten nuts to approx 60 inch lbs. If the floating gripper are damaged or deformed, replacements are available in EBI's Hardware Kit (Part No. EBI HWK).



7. If brake shoes were removed from wheel during reline process, reinstall shoes using installation procedure as noted. If shoes were not removed, reinstall brake drum in accordance with manufacturers specifications.

