INSTALLATION INSTRUCTIONS

SHOE AND LINING KITS FOR 12-1/4" ELECTRIC BRAKES

K71-496-00: 12-1/4" X 2-1/2" Electric Shoe and Lining Kit, Manual (RH)
K71-497-00: 12-1/4" X 2-1/2" Electric Shoe and Lining Kit, Manual (LH)
K71-498-00: 12-1/4" X 3-3/8" Electric Shoe and Lining Kit (RH)
K71-499-00: 12-1/4" X 3-3/8" Electric Shoe and Lining Kit (LH)
K71-500-00: 12-1/4" X 4" Electric Shoe and Lining Kit (RH
K71-501-00: 12-1/4" X 4" Electric Shoe and Lining Kit (LH)
K71-502-00: 12-1/4" X 5" Electric Shoe and Lining Kit (RH
K71-503-00: 12-1/4" X 5" Electric Shoe and Lining Kit (LH)
K71-981-00: 12-1/4" X 2-1/2" Electric Shoe and Lining Kit, FSA (LH)
K71-982-00: 12-1/4" X 2-1/2" Electric Shoe and Lining Kit, FSA (RH)

Replace all four shoe/linings on the axle at the same time to ensure balanced brake performance. Manual adjust brakes follow a similar procedure, with the differences detailed in the manual brake sections. Only complete one brake at a time, using the other brake for reference.

⚠ CAUTION

Do not lift or support the trailer on any part of the axle or suspension system. Never go under any trailer unless it is properly supported on jack stands which have been rated for the load. Improperly supported vehicles can fall unexpectedly and cause serious injury or death.

Appropriate installation procedures are essential for the safe, reliable operation of all running gear as well as the personal safety of the individual doing the work. This sheet provides general directions for performing installation with tested, effective techniques. Following these guidelines will help assure reliability. Installer must wear proper safety gear to protect themselves.

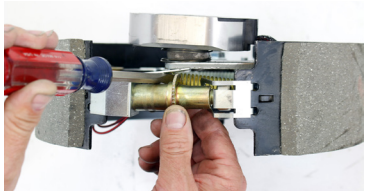
Disassembly:

⚠ CAUTION

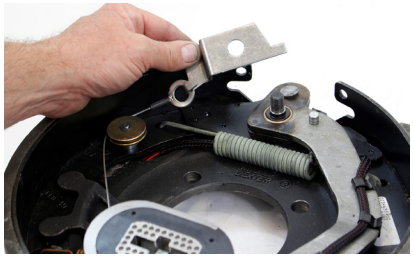
Protect the magnet brake wiring through the backing plate, gray retractor spring, and on the arm leading to the magnet when replacing the shoes. Ensure the wire is undamaged and properly rerouted after the repair to avoid potential loss of brakes, which can result in property damage, serious injury, or death.

1. Remove the wheel and drum from the spindle, leaving the brake exposed.

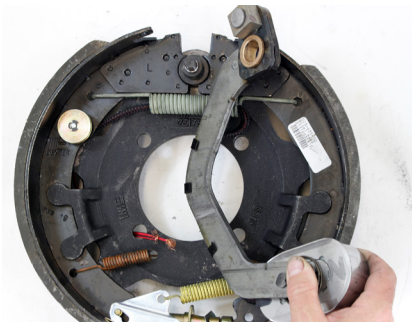
2. Inspect the brake magnet, drum, seal, bearings, and spindle for excessive wear or damage and address any issues prior to reassembly of the brake. Best repair practice includes drum replacement or resurfacing the interior of the drum brake lining wear surface to the Dexter's recommended tolerances.
3. Clean the brake assembly with an appropriate evaporating brake cleaning solvent to remove loose brake dust and any lubricant contamination.
4. Readjust the brake shoes to their full retracted position by rotating the adjuster star wheel until the adjustment screw is at the minimum possible length. You may need to slightly lift the adjustment lever up off the star wheel to be able to rotate the star wheel in the reverse direction.



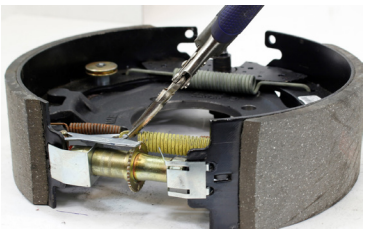
5. Remove the locknut from the brake anchor post and set it aside.
6. Lift off the cable anchor bracket from the anchor post by pulling slightly on it to resist the cable tension. After removing the bracket from the post, release the tension on the cable and remove the cable from around the pulley on the rear facing brake shoe and the adjusting lever hole, and set the parts aside.



7. Lift the magnet lever arm up off the pivot and temporarily move the arm to the side without disconnecting the brake wire, unless replacing the magnet as part of the repair.

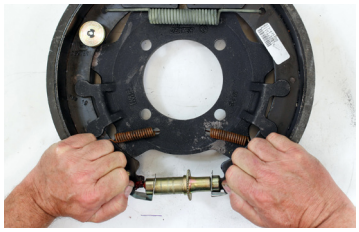


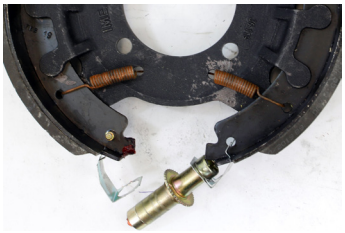
8. Use the vice grips to stretch the yellow spring at the adjusting lever enough to remove the spring from the lever, and set the spring aside.



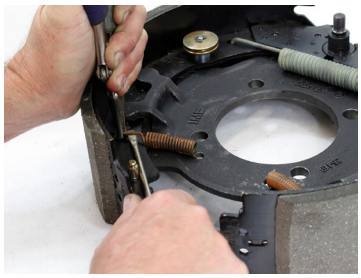
9. Slide the adjusting lever until the brake shoe post is at the large end of the slot in the lever, lift the lever off the post and set the lever aside.

10. Grasp the brake shoes at the bottom using both hands. Spread the shoes simultaneously apart far enough so that the adjustment screw can be removed from the brake assembly. Pivot the silver zinc retainer clips on both sides rotating the adjuster and clips downwards and out. The adjuster retainer clips should pivot out of the shoes without any damage.





11. Press the shoes in at the bottom to take some tension off the small orange centering springs. Use a combination of small vice grips and a flat blade screwdriver to pull and lift the springs from their holes in the brake shoes and set the springs aside.



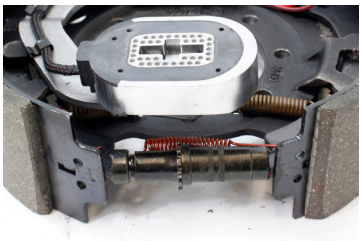
12. Pivot the front (primary) shoe forward on the anchor post enough to extend the gray extractor spring so that the shoe clears the fingers on the backing plate, then pivot the shoe back on the anchor post until the extractor spring tension is released. The shoe then can be removed from the spring and off the backing plate.

13. Remove the gray extractor spring from the rear (secondary) shoe and pull the shoe out of the backing plate. Leave the magnet wire connected inside the spring and magnet arm temporarily supported unless replacing the magnet. Dispose of the original shoes.

14. Clean the brake springs, loose parts, adjuster screw assembly/ threads, and brake backing plate with appropriate brake cleaner.

Manual Adjust Brakes Disassembly:

Follow all disassembly steps for self-adjusting brakes above excluding disassembly steps 6, 8, 9, and 10 to remove the brake shoes and hardware. In place of step 10, use locking pliers to stretch the red adjuster spring on the overhand hooked side and remove the spring from the brake shoes. Spread the brake shoes apart enough to pull the adjustment screw out of the bottom of the brake. Follow the remainder of the disassembly steps from step 11-14.



Reassembly:

The primary (front facing) replacement shoe is the one with the shortest brake lining length. The secondary (rear facing) replacement shoe has the longer lining length and also has the small pin extending up from the shoe web at the shoe bottom.

1. Prior to reassembly, screw the adjuster screw assembly apart and lubricate the threads with high temperature brake lubricant or anti-seize grease. Then screw the adjuster screw assembly all the way back in to the shortest possible length. Also lubricate the brake anchor post, pivot arm, and the brake shoe alignment pads on the backing plate where they will come in contact with the brake shoe web.

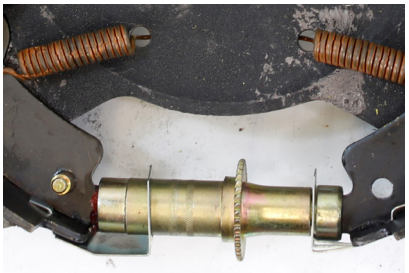
2. Hook the gray retractor spring into the rear (secondary) shoe and install that shoe into the rearmost backing plate alignment pad.

3. Hook the gray extractor spring into the front (primary) shoe. Then pivot the front (primary) shoe on the anchor post outward to extend the gray spring. Then the shoe can be slipped into the front-most backing plate alignment pad.

4. Install the silver zinc retaining clip onto the threaded end of the adjusting screw assembly, snapping into place over the head of the slotted screw.

5. Slide the adjuster retainer end into the end of the primary shoe bottom. The clip and adjusting screw will be facing downward from the rear shoe bottom.

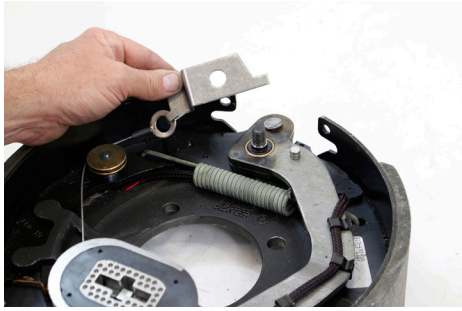
6. Install the opposing end of the adjuster retainer, already attached to the adjuster, into the hole at the bottom of the secondary shoe.
7. In one motion, spread the brake shoes apart. Align the brake shoes so that the adjuster can slide into the retainer clip as they are pushed back together while being held by the backing plate.
8. Ensure the slots at the end of the adjusting screw are fully seated on the bottom tabs of the shoes. (Right hand brake shown, left hand brake is opposite.)



9. Install the orange centering springs into the holes in the backing plate and brake shoes. Ensure the hooked ends of the springs are fully seated and secured on both holes.
10. Install the adjusting lever over the pivot pin in the rear (secondary) shoe and slide the lever in until the pin is inserted into the narrow end of the slot.

11. Hook the long end of the yellow adjuster spring and into the same hole in the web as the forward facing (primary side) orange centering spring. Stretch the short end of the yellow adjusting spring hook into the adjusting lever hole.

12. If replacing the magnet at this time, follow magnet replacement instruction sheet 059-511-00. Ensure the magnet wire is secured to the arm with it's three clips, the anti-chafing sleeve and wire are correctly routed through the gray retractor spring. Properly secure the wire in the plastic strain relief in the brake dust shield. Slide the magnet arm down over the backing plate anchor post.
13. Hook the end of the adjusting cable underhand into the hole in the adjusting lever alongside the yellow return spring hook. Route the cable around the grooved pulley on the rear shoe, and hook the looped end over the tab on the cable anchor bracket. Pull on the bracket to extend the cable, lever arm, and adjuster spring to slide the bracket down over the backing plate anchor post on top of the magnet lever arm.



14. Install the anchor post locknut and torque to 200 in.-lbs. After the nut is tightened, the cable anchor bracket and magnet arm need to be able to pivot 20-30 degrees under the tightened nut.

15. For a functional check of the automatic brake adjuster lever, tug on the cable enough to raise and lower the lever. This should move the adjuster screw. If you over adjust the drum will not go back on.
16. Remount the brake drum over the brake assembly. Carefully avoid getting the bearing lubricant on any of the brake linings. Install/adjust bearings per Dexter's instructions.

⚠ CAUTION

When installation is complete, torque the wheel nuts to the trailer manufacturer's specifications. Re-torque nuts again at 10, 25, and 50 miles to avoid a possible wheel separation, which can result in property damage, serious injury or death.

⚠ CAUTION

To ensure maximum stopping power, brake shoes must be fully burnished to the drum.

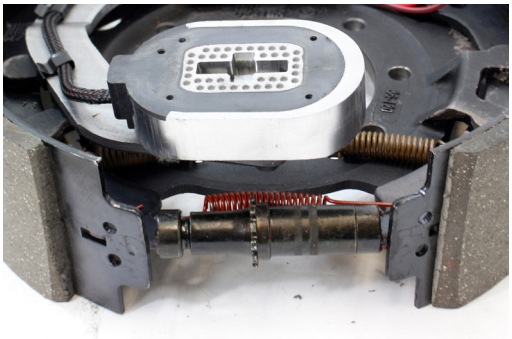
17. Forward self-adjusting brakes are designed to maximize shoe contact with drum. This process can only occur during a normal braking event during the lifetime of the brake. Do not attempt to drag the brakes or falsely attempt to adjust the brake, necessary adjustment only occurs in each instance where the brakes are applied then fully released.

Manual Adjust Brakes Assembly:

1. Use a hammer to remove the adjusting lever pivot pin from the bottom of the new rear (secondary) shoe. Support the new shoe adequately while knocking out the pin to ensure the shoe web is not distorted or damaged during removal. Discard the pin.

2. Prior to reassembly, screw the adjuster screw assembly apart and lubricate the threads with high temperature brake lubricant or anti-seize grease. Then screw the adjuster screw assembly all the way back in to the shortest possible length. Also lubricate the brake anchor post, pivot arm, and the brake shoe alignment pads on the backing plate where they will come in contact with the brake shoe web.

3. Hook the gray retractor spring into the rear (secondary) shoe and install that shoe into the rearmost backing plate alignment pad.
4. Hook the gray extractor spring into the front (primary) shoe. Then pivot the front (primary) shoe on the anchor post outward to extend the gray spring. Then the shoe can be slipped into the front-most backing plate alignment pad.
5. In one motion, spread the brake shoes apart. Align the brake shoes so that the adjuster can slide onto each brake shoe. Attach red adjuster spring after shoes and adjuster are in place. Please note the star wheel should be orientated so the wheel is facing the front of the trailer.



6. Install the orange centering springs into the holes in the backing plate and brake shoes. Ensure the hooked ends of the springs are fully seated and securely in both holes.
7. If replacing the magnet at this time, follow instruction sheet 059-511-00. Ensure the magnet wire is secured to the arm with the three clips, the anti-chafing sleeve and wire are correctly routed through the gray retractor spring. Properly secure the wire in the plastic strain relief in the brake dust shield. Slide the magnet arm down over the backing plate anchor post.
8. Install cable anchor bracket over the magnet arm and install anchor post locknut. Torque to 200 in.-lbs. After the nut is tightened, the cable anchor bracket and magnet arm need to be able to pivot 20-30 degrees under the tightened nut.
9. Remount the brake drum over the brake assembly. Avoid contaminating the brake linings with bearing lubricant. Install/adjust bearings per Dexter's instructions.
10. Using a brake spoon or flat head screwdriver, tighten the star adjuster to expand the brake shoes while rotating the wheel/drum in the forward direction. NOTE: Always spin the drum/wheel in the forward direction as if the trailer was traveling forward on the road. Tighten the star adjuster until the drum/wheel reaches a point where the brake shoes begin to engage the drum. Continue adjusting the shoes out until the pressure of the linings against the drum make the wheel/drum difficult to turn.
11. Loosen the star adjuster one click at a time while continuing to turn the drum/wheel in a forward rotation. Continue adjusting one click at a time until the wheel/drum easily rotates, with a slight sound of the linings rubbing the drum.
12. Install the rubber access hole plug(s) on the rear of the brake.
13. For best results repeat this procedure for all brakes to ensure they are set at the same clearance.
14. Install the wheel and torque the lug nuts to the wheel manufacturer's specifications.
15. Re-adjust the brakes after the first 200 miles of travel and every 3,000 miles thereafter.