INSTRUCTIONS

J01725 2017-07-07

BRAKE PADS AND DISCS

GENERAL

Kit Number

44082-00E

Additional Parts Required

⚠ WARNING

Rider and passenger safety depend upon the correct installation of this kit. Use the appropriate service manual procedures. If the procedure is not within your capabilities or you do not have the correct tools, have a Harley-Davidson dealer perform the installation. Improper installation of this kit could result in death or serious injury. (00333b)

NOTE

This instruction sheet references Service Manual information. A Service Manual for your model motorcycle is required for this installation and is available from a Harley-Davidson Dealer.

Kit Contents

See Table 1.

Table 1. Kit Contents

Quantity	Description
1	Pad and Holder, Inner
1	Pad and Holder, Outer

INSPECTION

⚠ WARNING

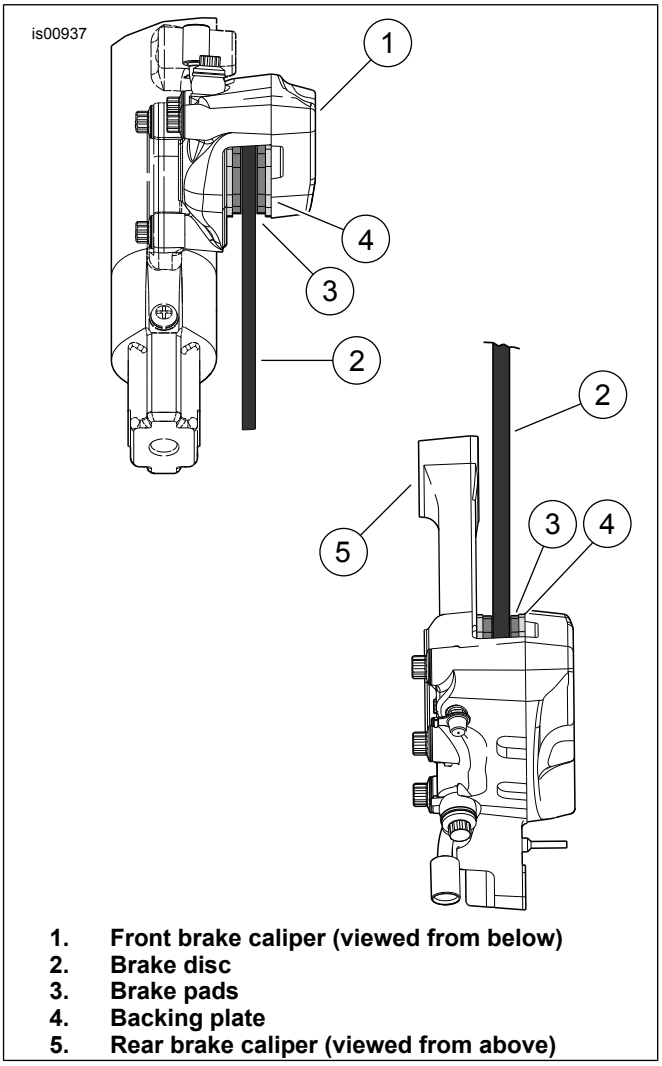
Always replace brake pads in complete sets for correct and safe brake operation. Improper brake operation could result in death or serious injury. (00111a)

See Figure 1. Replace brake pads (3) if brake pad friction material on either the front or rear caliper is worn to 0.04 in. (1 mm) or less above the backing plate. Always replace both pads in a caliper as a set.

When checking the brake pads and discs, inspect the brake hoses for correct routing and any signs of damage.

NOTE

Inspect pad pins for wear or grooving. Replace both pins if wear of either pin exceeds 0.015 inch (0.38 mm).



1. **Front brake caliper (viewed from below)**
2. **Brake disc**
3. **Brake pads**
4. **Backing plate**
5. **Rear brake caliper (viewed from above)**

Figure 1. Brake Pad Inspection

Brake Disc Thickness

The minimum brake disc thickness is stamped on the side of the disc. Replace disc if warped or badly scored.

Brake Disc Lateral Runout

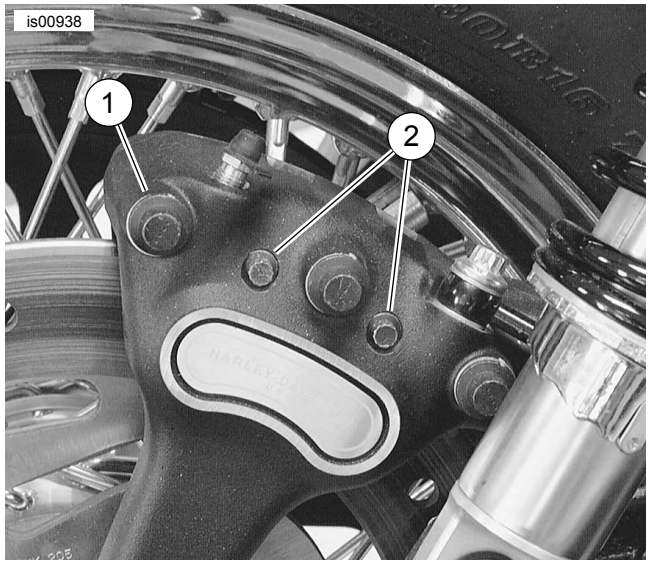
The maximum brake disc lateral runout is 0.008 inch (0.2 mm) when measured near the outside diameter.

BRAKE PAD REPLACEMENT

Rear Brake Caliper

1. If present remove right saddlebag.

2. Remove the rear master cylinder reservoir cap. As the pistons are pushed back into the caliper, fluid level may rise more than 1/8 in. (0.32 mm). You may need to remove fluid to allow for this.



1. Bolt
2. Pad pins (12 pt/0.25 inch)

Figure 2. Pad Retaining Bolts (Rear Caliper Shown)

3. See Figure 2. Loosen, but do not remove both pad pins (2).

NOTE

Do not remove any of the three bolts (1). There is an internal O-ring which could be damaged.

4. Using a putty knife with a stiff blade, pry the inside pad back. Use steady pressure to prevent scoring the brake disc. Pry between the pad and the brake disc in order to push the caliper pistons back into their bores.

NOTE

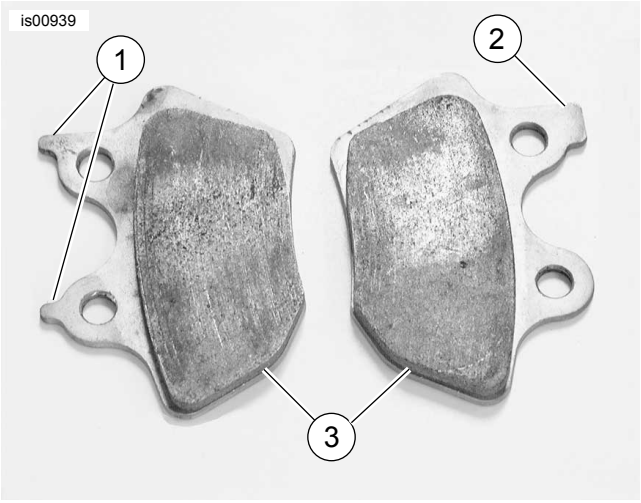
Do not completely pull pad pins from caliper during the next step. Completely removing pad pins at this time will cause difficulty during assembly.

5. Once the pistons have been fully retracted into their bores, pull pad pins until the inside pads drop free. Note the pad's original orientation for replacement purposes.

NOTE

See Figure 3. The front left, front right (not present on all vehicles) and rear brake calipers use the same exact brake pad set.

- *On the right side of the vehicle, the pad with two tabs (1) installs on the inboard side of the caliper.*
- *On the left side of the vehicle, the pad with two tabs (1) installs on the outboard side of the caliper*



1. Two tabs on backing plate
2. Single tab on backing plate
3. Curved portion

Figure 3. Brake Pad Orientation

6. Install new inside brake pad using the same orientation as the pad previously removed. Curved portion of pad must face rear of motorcycle (up on Softail rear).

7. Install pad pins until the pins snap into place with an audible click. Do not fully tighten at this time.

8. Pry the outside pad back. Pry between the pad and the brake disc in order to push the caliper pistons back into their bores.

NOTE

Inspect pad pins for wear or grooving. Replace both pins if wear of either pin exceeds 0.015 inch (0.38 mm).

9. Verify that inside pads are captured between brake disc and pistons. Completely remove pad pins to free outside brake pad. Note the pad's original position for reinstallation purposes.

10. Install new outside brake pad using the same orientation as the pads previously removed. Curved portion of pad must face rear of motorcycle.

11. Install both pad pins through holes in inner and outer brake pads. Tighten pad pins.

    Torque: 20.3–22.6 N·m (180–200 **in-lbs**) *pad pins*

⚠ WARNING

After servicing brakes and before moving motorcycle, pump brakes to build brake system pressure. Insufficient pressure can adversely affect brake performance, which could result in death or serious injury. (00279a)

12. Pump brake pedal to move pistons out until they contact both brake pads. Verify piston location against pads.

NOTE

Do not overfill the master cylinder. Overfilling the master cylinder could cause excessive pressure resulting in damage to system components.

NOTE

Refer to your Owner's Manual for the proper hydraulic brake fluid for your year and model motorcycle.

13. Check brake fluid level in master cylinder. Fill to 1/8 in. (3 mm) below the top of cylinder if necessary. Use the correct D.O.T. hydraulic brake fluid type as specified in the Owner's Manual. Install master cylinder reservoir cap. Tighten reservoir cap screws.

    Torque: 0.7–0.9 N·m (6–8 **in-lbs**) *reservoir cap screws*

14. Install saddlebag, if necessary.

⚠ WARNING

After repairing the brake system, test brakes at low speed. If brakes are not operating properly, testing at high speeds can cause loss of control, which could result in death or serious injury. (00289a)

15. Test brake system.

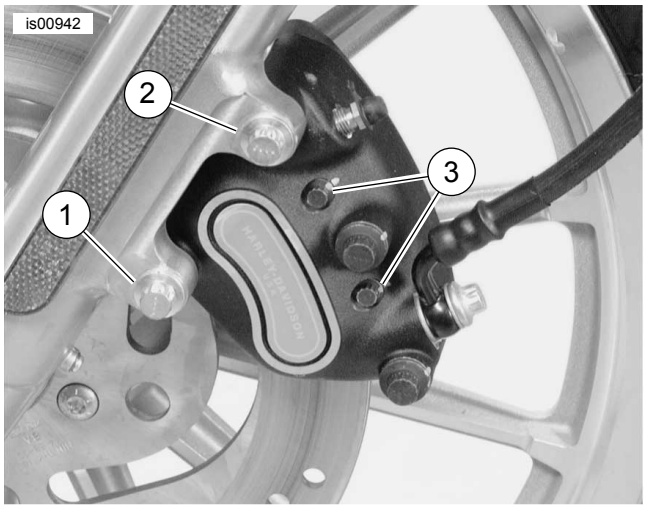
    a. Turn ignition switch to ON. Pump brake pedal to verify operation of the brake system.

    b. Test ride the motorcycle. If the brakes feel spongy, bleed the system according to Service Manual instructions.

NOTE

Avoid making hard stops for the first 100 miles (160 km). This allows the new pads to become conditioned to the brake discs.

Front Brake Caliper



1. Short mounting bolt (12 pt/10 mm)
2. Long mounting bolt (12 pt/10 mm)
3. Pad pins (12 pt/0.25 inch)

Figure 4. Front Brake Caliper (Left Side Shown)

1. Remove the front master cylinder reservoir cap. As the pistons are pushed back into the caliper, fluid level may rise more than 1/8 in. (0.32 mm). You may need to remove fluid to allow for this.

2. See Figure 4. Loosen, but do not remove, both pad pins (3).

3. Remove both caliper mounting bolts (1, 2) (metric). Detach caliper from front forks and brake disc.

4. Pry the pads back to force all four caliper pistons into bores.

5. With the pistons retracted, remove the pad pins and brake pads.

NOTE

Inspect pad pins for wear or grooving. Replace both pins if wear of either pin exceeds 0.015 inch (0.38 mm).

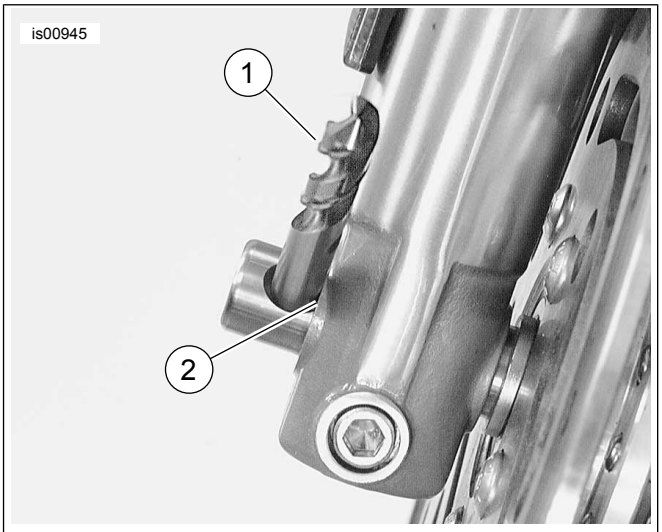
NOTE

See Figure 3. The front left, front right (not present on all vehicles) and rear brake calipers use the same exact brake pad set. Each brake pad set has four tabs.

- *On the right side of the vehicle, the pad with two tabs (1), installs on the inboard side of the caliper.*
- *On the left side of the vehicle, the pad with two tabs (1), installs on the outboard side of the caliper.*

6. Install new pads into the caliper. Curved portion of pad must face rear of motorcycle.

7. Loosely install the pad pins until you hear an audible click.



1. Drill bit
2. Contact point

Figure 5. Dual Caliper Arrangement

8. Attach caliper to front fork.

    a. See Figure 5. On models with dual front calipers, check alignment of brake discs to fork. Loosen slider cap nuts and axle nut. Insert a 7/16 in drill bit (1) through hole in front axle. Contact point (2) must have edge of drill touching the edge of fork leg. Tighten front axle to proper torque. Refer to applicable Service Manual.

    b. See Figure 4. Place caliper over brake disc with bleeder valve facing upwards.

c. Loosely install long mounting bolt (2) into top hole of fork leg.

d. Install short mounting bolt (1) into bottom mounting bolt to 38–51.5 N·m (28–38 ft-lbs).

e. Tighten the top mounting bolt to 38–51.5 N·m (28–38 ft-lbs).

f. Tighten both pad pins to 20.3–22.6 N·m (180–200 **in-lbs**).

g. On models with dual calipers, tighten axle nut. Insert 7/16 in. drill bit into hole in axle. Pull fork leg against drill bit and tighten axle cap nut or pinch bolt to proper torque. Refer to applicable Service manual.

h. Remove drill bit.

⚠ WARNING

After servicing brakes and before moving motorcycle, pump brakes to build brake system pressure. Insufficient pressure can adversely affect brake performance, which could result in death or serious injury. (00279a)

9. Pump brake lever to move pistons out until they contact both brake pads. Verify piston location against pads. If the front wheel is off the ground, rotate wheel to check for brake pad drag.

NOTE

Refer to your Owner's Manual for the proper hydraulic brake fluid for your year and model motorcycle.

10. Check brake fluid level in master cylinder. Fill to 1/8 in. (3 mm) below the top of cylinder if necessary. Use the correct D.O.T. hydraulic brake fluid type as specified in the Owner's Manual. Install master cylinder reservoir cap. Tighten reservoir cap.

    Torque: 0.7–0.9 N·m (6–8 **in-lbs**) *reservoir cap screws*

⚠ WARNING

After repairing the brake system, test brakes at low speed. If brakes are not operating properly, testing at high speeds can cause loss of control, which could result in death or serious injury. (00289a)

11. Test brake system.

    a. Turn ignition switch to ON. Pump brake lever to verify operation of the brake system.

    b. Test ride the motorcycle. If the brakes feel spongy, bleed the system according to Service Manual instructions.

NOTE

Avoid making hard stops for the first 100 miles (160 km). This allows the new pads to become conditioned to the brake discs.