

To Replace Rear Brakes On A 2013 Ford Escape

How to Replace Rear Brakes on a 2013 Ford Escape: A Complete DIY Guide

If you own a 2013 Ford Escape, you already know it is a dependable compact SUV that offers a comfortable ride and solid performance. However, like any vehicle, its braking system wears down over time, especially the rear brakes. Learning how to replace rear brakes on a 2013 Ford Escape is a valuable skill that can save you hundreds of dollars in labor costs at a repair shop. More importantly, it gives you the confidence to maintain your vehicle's safety and performance. This guide will walk you through every step of the process, from recognizing the signs of worn brakes to completing the job safely in your own driveway or garage.

Before we dive into the mechanical details, it is worth noting that the 2013 Ford Escape features an electronic parking brake system, which adds a small layer of complexity compared to older vehicles. However, with the right tools and a methodical approach, this is a job that a competent DIYer can absolutely handle. Let us begin by understanding when it is time to replace your rear brake pads and rotors.

When Should You Replace Rear Brakes on a 2013 Ford Escape?

Knowing the warning signs of worn brakes is just as important as knowing how to perform the replacement. Driving with worn-out brakes compromises your safety and can cause damage to other components, such as the brake rotors and calipers. Here are the most common indicators that your rear brakes need attention:

Squealing or Screeching Noises

Most brake pads come with a built-in wear indicator, which is a small metal tab that makes a high-pitched squealing sound when the pad material becomes too thin. If you hear this noise when braking, it is time to inspect your brake pads immediately. Ignoring this sound can lead to metal-on-metal contact, which damages the rotors and significantly increases repair costs.

Reduced Braking Performance

If you notice that your Escape takes longer to stop or that the brake pedal feels spongy or soft, your brake pads may be worn. Warped rotors can also cause a pulsating sensation through the pedal when you apply the brakes. Both issues indicate that a brake inspection and likely a replacement are necessary.

Visible Wear Through the Wheel

You can often get a visual indication of your brake pad thickness by looking through the spokes of your rear wheels. If the friction material on the pad appears less than about a quarter of an inch thick, it is time to replace them. Additionally, if you see deep grooves or scoring on the rotor surface, the rotors should be replaced or resurfaced as part of the job.

Dashboard Warning Lights

Some 2013 Ford Escape models are equipped with brake pad wear sensors that trigger a warning light on the dashboard. While this is more common on front brakes, it is worth noting if your model has this feature. If the brake warning light illuminates, always inspect the system before driving further.

Vehicle Pulling to One Side

While pulling to one side during braking is often associated with front brake issues, it can also be caused by a stuck caliper or unevenly worn rear brakes. If your Escape pulls when you brake, check all four corners of the braking system.

Tools and Parts Needed to Replace Rear Brakes on a 2013 Ford Escape

Before you begin, gather all the necessary tools and parts. Being prepared will make the job smoother and prevent frustrating trips to the auto parts store mid-project. Here is a comprehensive list:

Parts Required

- **Rear brake pads** – Choose a high-quality ceramic or semi-metallic set designed for the 2013 Ford Escape. Ceramic pads tend to produce less dust and noise.
- **Rear brake rotors** – It is highly recommended to replace the rotors whenever you replace the pads. This ensures a smooth, even braking surface and prevents brake pulsation.
- **Brake cleaner spray** – For cleaning components and removing dust and grease.
- **High-temperature brake grease or lubricant** – Used on caliper slide pins, contact points, and the back of the brake pads.
- **New caliper bolts (optional but recommended)** – If your existing bolts are corroded or damaged, replacing them ensures a proper fit.
- **Anti-seize compound (optional)** – Apply to the hub surface where the rotor sits to prevent future rust buildup.

Tools Required

- Car jack and two jack stands (or a hydraulic lift if available)

- Lug wrench or breaker bar with a 21mm socket (for the lug nuts)
- Socket set with extensions (common sizes: 13mm, 14mm, 15mm, 21mm)
- C-clamp or brake caliper piston compression tool
- Flathead screwdriver
- Torque wrench (essential for tightening bolts to manufacturer specifications)
- Wire brush or steel wool for cleaning
- Gloves and safety glasses
- Penetrating oil (like WD-40 or PB Blaster) in case of rusted bolts

Step-by-Step Guide to Replace Rear Brakes on a 2013 Ford Escape

Now that you have everything you need, let us walk through the process. This guide assumes you are working on a flat, level surface. Safety should always be your top priority when working on your vehicle.

Step 1: Prepare the Vehicle and Ensure Safety

Park your 2013 Ford Escape on a solid, level surface. Engage the parking brake (even though we will be working on the rear brakes, it is still a good safety measure initially). Loosen the rear lug nuts slightly while the vehicle is still on the ground. Then, jack up the rear of the vehicle using the manufacturer-recommended jacking points. Place two sturdy jack stands under the rear subframe or the designated lift points. Never rely solely on a jack to support the vehicle. Once the vehicle is securely on stands, remove the rear wheels and set them aside.

Step 2: Disable the Electronic Parking Brake (Important)

The 2013 Ford Escape is equipped with an electronic parking brake that applies the rear caliper pistons automatically. Before you can retract the caliper pistons, you must disable this system. The simplest method is to disconnect the negative battery terminal. Let the vehicle sit for a few minutes to allow any residual charge to dissipate. Some DIYers also use a scan tool to retract the parking brake actuator, but disconnecting the battery is a reliable approach for most home mechanics. Alternatively, you can remove the parking brake actuator motor from the caliper, but the battery disconnect method is less invasive.

Step 3: Remove the Rear Caliper and Bracket

Start by spraying the brake caliper bolts and slide pins with penetrating oil if they appear rusted. Using a 15mm socket (or the appropriate size for your specific model), remove the two caliper slide pin bolts. Carefully lift the caliper off the rotor. Do not let the caliper hang by the brake hose, as this can damage the hose. Use a bungee cord or a piece of wire to hang the caliper from the suspension spring or another secure spot. Once the caliper is out of the way, remove the two caliper bracket bolts (typically 18mm or 21mm) using a breaker bar, as these are often torqued very tight. Remove the bracket and set it aside.

Step 4: Remove the Old Rotor

The rear rotor on a 2013 Ford Escape may be held in place by two small threaded screws, or it may simply be free. If there are screws, remove them using a Phillips head screwdriver or a flathead screwdriver. If the rotor is stuck due to rust, gently tap the back of the rotor with a hammer between the studs. Be careful not to hit the wheel studs. You can also apply some penetrating oil to the hub area where the rotor meets the axle. Once free, slide the old rotor off the hub.

Step 5: Clean the Hub and Install the New Rotor

Use a wire brush or steel wool to clean the hub surface where the new rotor will sit. Apply a very thin layer of anti-seize compound to the hub to prevent the rotor from seizing in the future. Be careful not to get anti-seize on the wheel stud threads. Slide the new rotor onto the hub. If your new rotor comes with a protective coating, use brake cleaner to remove it before installation. Spin the rotor by hand to ensure it turns freely and is not warped.

Step 6: Prepare the Caliper Bracket and Piston

Before reinstalling the caliper bracket, clean the slide pin holes and apply a thin layer of high-temperature brake grease to the slide pins. Reinstall the bracket onto the knuckle and torque the bolts to the manufacturer's specification (typically around 75-85 ft-lbs, but always verify for your specific model).

Now, the caliper piston must be compressed to accommodate the new, thicker brake pads. On a standard brake system, you can use a C-clamp to push the piston back into the caliper. However, for the rear calipers on a 2013 Ford Escape, you will need a brake caliper piston compression tool that can also rotate the piston clockwise as it is pushed back. This is because the electronic parking brake mechanism requires the piston to be rotated while being compressed. If you do not have this tool, you can use a large pair of pliers with a cloth to gently rotate and push the piston. Take your time with this step to avoid damaging the piston seal.

Step 7: Install the New Brake Pads

Apply a small amount of brake grease to the back of each new brake pad and to the contact points where the pad meets the caliper bracket. This reduces noise and ensures smooth operation. Insert the inner pad (the one with the wear indicator) into the caliper piston. Place the outer pad onto the caliper bracket. Ensure that both pads are seated correctly and that the anti-rattle clips are in place.

Step 8: Reinstall the Caliper

Slide the caliper back over the rotor and the brake pads. Align the slide pin holes and install the caliper slide pin bolts. Torque them to the manufacturer's specification (usually around 25-35 ft-lbs). Do not overtighten these bolts, as they can break or strip.

Step 9: Reconnect the Electronic Parking Brake and Bleed the System (If Necessary)

Reconnect the negative battery terminal. If you removed the parking brake actuator motor, reinstall it now. Pump the brake pedal several times until it feels firm. This will reset the caliper pistons and the electronic parking brake system. Start the engine and test the parking brake by engaging and disengaging it a few times. If the brake pedal feels spongy, you may need to bleed the rear brakes to remove air from the system. However, if you were careful not to let the brake fluid level drop too low, bleeding may not be necessary.

Step 10: Reinstall the Wheels and Lower the Vehicle

Place the rear wheels back on the hubs and hand-tighten the lug nuts. Lower the vehicle to the ground using the jack. Once the vehicle is on the ground, torque the lug nuts to the manufacturer's specification in a star pattern. For the 2013 Ford Escape, the standard torque is 100 ft-lbs. Double-check all your work before taking a test drive.

Tips for a Successful Brake Replacement

- **Replace in pairs:** Always replace brake pads and rotors on both rear wheels at the same time. This ensures even braking and prevents pulling.
- **Bed in your new brakes:** After installation, perform a bedding procedure. This involves making several moderate stops from 30-40 mph without coming to a complete stop, then allowing the brakes to cool. This helps the pad material transfer evenly to the rotor surface.
- **Check brake fluid level:** When you compress the caliper pistons, brake fluid is pushed back into the master cylinder reservoir. Check the fluid level and top it off if necessary with the recommended DOT 3 or DOT 4 brake fluid.
- **Take your time on the first wheel:** The first rear brake replacement can take 1-2 hours per side. The second side will be much faster as you become familiar with the process.
- **Consult the owner's manual:** Always refer to your 2013 Ford Escape owner's manual for specific torque values and any model-specific notes.

Common Mistakes to Avoid

- **Letting the caliper hang by the hose:** This can damage the brake hose and cause leaks. Always support the caliper with a bungee cord or wire.
- **Overtight**