# EPB big brake kit for Explorer 8.8 axle

Begin by unpacking all components and making sure no parts are missing. If any parts are missing, please contact <u>sales@range-industries.com</u> and we will remedy the situation ASAP. See list of all parts below:

• 2x Caliper mounting brackets

- 4x M14 x 35mm bolts
  - Bolts caliper to bracket
- 2x Caliper connectors, terminals, and seals

- 1x Toggle switch
- 1x 15amp breaker
- Spade and ring terminals













#### Install Notes:

- This fits 95-03 Explorer 8.8 solid axles
- You will need calipers and rotors for 2020-23 Ford Explorer, Ford Interceptor, or Lincoln Aviator. There are 2 variants and either will work with this kit:
  - Base explorer brakes are solid rotor and will fit a 17" or larger wheel.
  - Interceptor/ explorer performance/ Lincoln Aviator use a vented rotor and fit 18" or larger wheels.
- You will need to crimp the caliper connector terminals. We recommend the iCrimp IWC-1424B, available on Amazon for approx. \$20. We also recommend a ratcheting style crimper for the ring terminals and spade terminals (such as iCrimp IWS-30J and many others)
- You will also need to provide the 16g wire and wire loom required for your installation.
- After driving for 25 miles, re-check hardware to ensure everything is tight.

#### 1. Strip the old brakes off the axle.

- Remove the wheels and old rotors from the axle.
- Open the differential cover and drain fluid.
- Remove the retaining bolt for the cross pin of the differential.
- Remove the cross pin.
- Push axle shafts further into differential to expose the C-clip.
- Remove the c-clip (can be pushed off with pick or magnet)
- Remove the axle shafts.
- Remove the brake backing plate. Save the bolts for re-use.





- 2. Install the new caliper bracket and re-assemble axle.
- Bolt new brackets to flanges on axle.
  - It can be clocked up or down using the additional holes and can be mounted forward facing or back facing.
- Consider replacing axle seals and outer bearings.
- Insert axle shafts, replace c-clips.
- Pull out on shafts, then install the differential cross pin and retaining bolt.
- Replace the differential cover using RTV or a gasket.



- 3. Install new calipers.
- Put rotors in place.
- Bolt on calipers using supplied bolts. Use blue Loctite. Make sure your bleeder fitting is up.

### 4. Plumb the service brakes.

- Drill out the end of your old brake hoses to fit the banjo bolt for the new calipers. Use a 10mm drill bit (or 13/32"). Remove chips!
- Use the banjo bolt and crush washers that came with your calipers.



### 5. Wire the parking brake

- Wire your system as shown in the diagram (see end of instructions).
- To assemble the caliper connectors, proceed as follows
  - Install wire seal
  - o Strip wire
  - Crimp terminal
  - o Crimp seal
  - o Insert into connector body
  - Click gray cap into place
- Be sure that both calipers are connected with the same polarity (otherwise one will clamp while the other unclamps





## 6. Operation of the parking brake

• The toggle switch is momentary operation. One direction sets the parking brake, while the other releases it.



- To set the brake, hold the switch until the motor makes a straining noise.
- To release the brake, hold the switch for approximately 3 seconds.
- If you hold the brake too long when applying the brakes, the circuit breaker will trip. It will automatically reset after approximately 30 seconds and operation can be resumed.
- The calipers are designed to stall, and the circuit breaker protects the switch and motors from overcurrent, so you cannot harm the system.
- Test the holding power of your brakes in a controlled and safe manner on a hill to get a feel for the operation of the brakes.



 These electric brakes require no adjustments and have exceptional holding power. And when doing a brake job, they can be fully retracted using the toggle switch.







