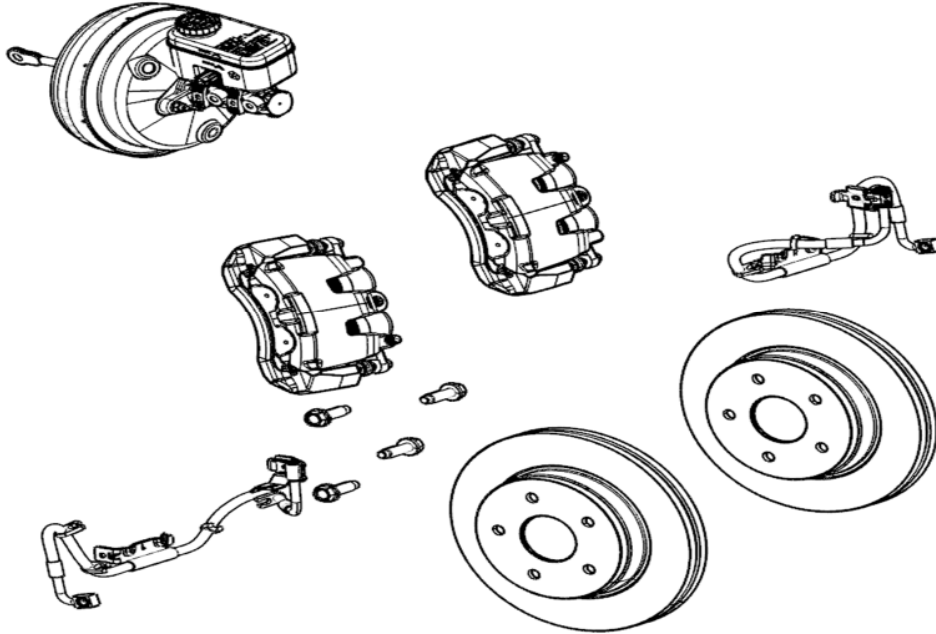




P5160051AC Jeep Wrangler Brake Upgrade

www.mopar.com



PARTS LIST ... The part number is stamped into each part or printed on an adhesive label. Identify each part and place the appropriate mounting hardware with it.

P5160051

Part Number Chrysler	Name	QTY
5143356AC	Brake Bolts	4
68157610AA	Brake Calipers Jk	1
68157611aa	Brake Calipers JK	1
68334862AA	Brake Pads JK	1
68040177AA	13" Brake Rotors	2
68034720AA	Caliper Adaptors	2
68048467AA	Bolt -Adaptors	4
68184809AC	LH Brake Hose	1
68184808AC	RH Brake Hose	1
6502114	Copper Gasket	4
6512427AA	Banjo Bolt	2
68048755AA	Booster	1
68048757AA	Master Cylinder	1
68048758AA	Reservoir	1

Read instructions several times before starting. Be sure you have all needed parts and know where they install. Read each step completely as you go.

NOTES:

This Brake kit is to be used with automatic transmission vehicles. If a MTX vehicle is used a clutch reservoir will be required for the clutch.

NOTE: Save all factory components and hardware for reuse, unless noted.

Perform this install for one side at a time as instructions are the same for left and right sides.

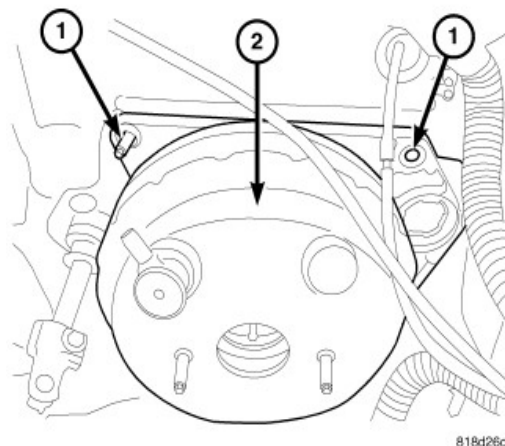
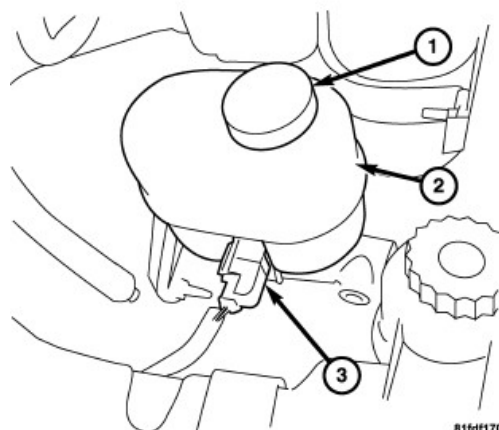
1) PREPARE VEHICLE...

- Place vehicle in neutral. Raise front of vehicle with a jack and secure with a jack stand.

Place transmission in low gear or "park", and chock rear tires. Remove front/rear tires.

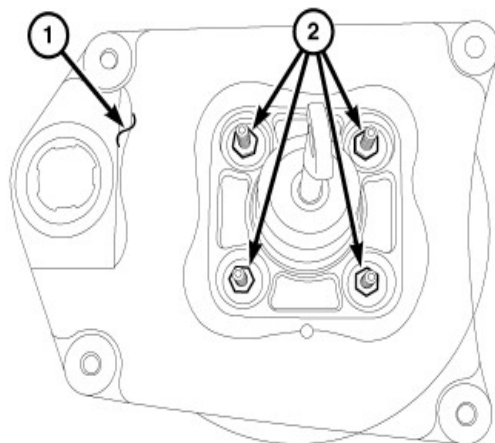
2) Master Cylinder, Booster and Reservoir. - Removal

- Siphon and drain the fluid from the reservoir (2).
- Disconnect the fluid level electrical connector (3) from the reservoir (2).
- Remove the brake lines at the master cylinder.
- Disconnect vacuum hose from booster check valve.
- Remove retaining clip that secures booster push rod to brake pedal and slide the rod off the pin.
- In the engine compartment, slide booster and mounting plate out of the cowl panel, and remove the booster assembly from engine compartment.
- Remove booster mounting nuts (2) from the mounting plate (1).
- Disconnect the clutch pedal from the clutch M/C **if equipped**.
- Remove the booster from the mounting plate (1).

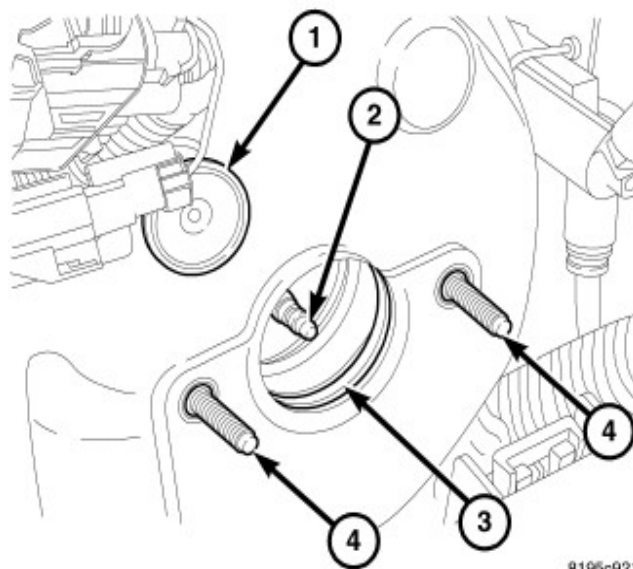


3) Master Cylinder, Booster and Reservoir. – Install

- ❑ Clean the booster mounting surface.
- ❑ Install the booster on the mounting plate (1).
- ❑ Install the booster mounting nuts (2) that attach booster to mounting plate. Tighten booster mounting nuts to 25 N·m (18 ft. lbs.).



- ❑ Install the booster assembly (2) with the mounting plate to the front cowl. Install the booster mounting plate nuts (1) that attach the mounting plate to the front cowl. Tighten booster mounting plate nuts **in an X pattern** to 18 N·m (159 in. lbs.).



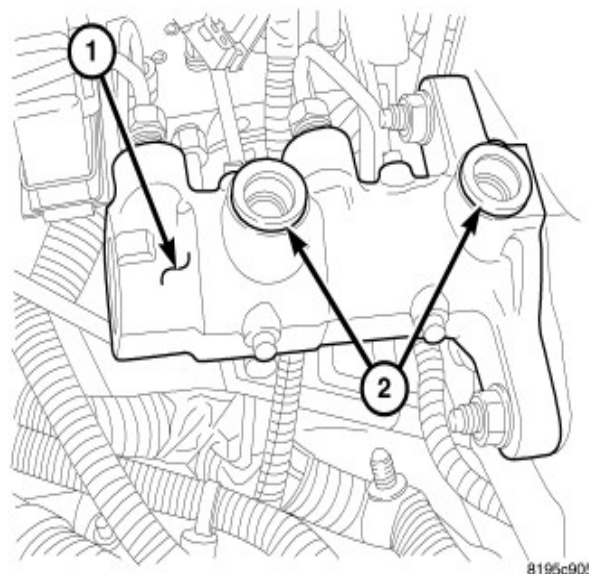
- ❑ Connect vacuum hose to booster check valve.
- ❑ Clean cylinder mounting surface of brake booster (3).
- ❑ Install master cylinder onto brake booster studs (4) and tighten to 17 N·m (151 in. lbs.).

NOTE: A new master cylinder should be bled before installation on the vehicle.

- ❑ Connect the brake lines to the master cylinder and tighten to 19 N·m (168 in. lbs.).
- ❑ Install the reservoir by first Lubricate new grommets (2) with clean brake fluid and Install new grommets (2) onto reservoir outlets (1). Use finger pressure to install and seat grommets.

CAUTION: Do not use any type of tool to install the grommets (2). Tools may cut, or tear the grommets creating a leak problem after installation. Install the grommets using finger pressure only and insure that the grommets are properly seated and checked for leaks after installation.

- ❑ Start the reservoir and grommets into the holes on the master cylinder **Make sure the two tabs on each side are securely seated over the nubs (1).**
- ❑ Connect fluid level electrical connector (3) to the reservoir (2).

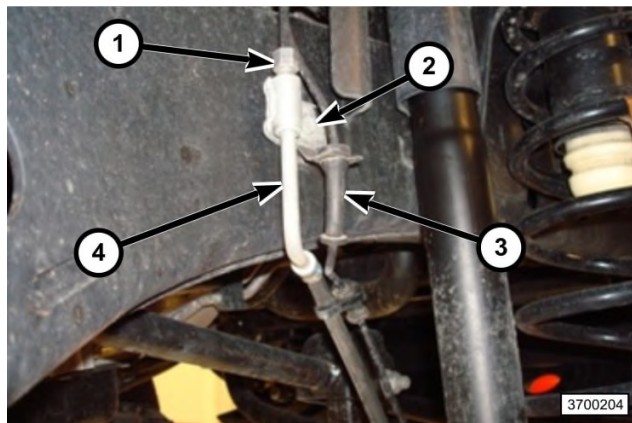


4) Brake Lines, Calipers, Rotors – Front Removal

- Remove the wheel speed sensor wire (2) from all brake hose clips (5).
- Remove the two wheel speed sensor push in type retainers (1) from the brake hose spring bracket (7).
- Remove the brake hose spring bracket bolt (6).
- Remove the wheel speed sensor wire (3) from the brake hose to frame routing clip on the brake hose (4).
- Remove the brake line tube nut (1) from the brake hose (4) at the frame.
- Remove the caliper mounting bolts (3). And support caliper while removing it from the brake rotor.
- Remove the mounting bolt (3) at the brake hose to frame routing clip to remove the brake hose and caliper as one piece. (4).
- Remove retainers securing rotor to hub studs and remove Rotor.
- Remove the caliper adapter mounting bolts and adaptor.

5) Brake Lines, Calipers, Rotors – Front Installation

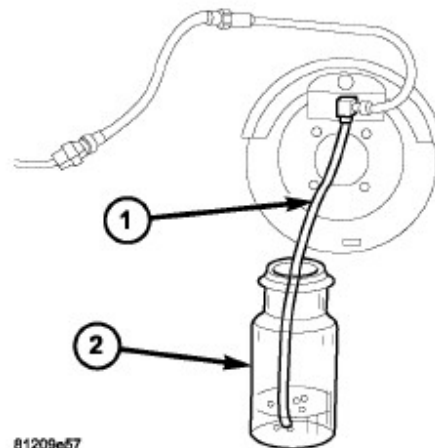
- Install the caliper adapter and mounting bolts. Tighten the mounting bolts to 163 N·m (120 ft.lbs).
- Clean the hub from any rust before installing the rotor.
- Install the rotor on hub.
- Install the inboard and outboard pads
- Install the caliper slide pin bolts and tighten to 35 N·m (26 ft. lbs.).
(Caliper slide pins should be free from debris and lightly lubricated)
- Position the brake hose and verify that hose is not kinked or twisted.
- Install brake hose to caliper with **new copper washers** and tighten new banjo bolt to 31 N·m (23 ft. lbs.).
- Install the mounting bolt (2) for the brake hose to the frame routing clip and tighten to 20 N·m (177 in. lbs.).
- Install the brake line tube nut (1) to the brake hose (4) and tighten to 12 N·m (105 in. lbs.).
- Attach the wheel speed sensor wire (3) to the routing clip on the brake hose to frame routing clip.
- Repeat this for other side.



Brake Bleeding- Reference Service manual for more details

- Remove reservoir filler caps and fill reservoir.
- Open all caliper bleed screws. Then close each bleed screw as fluid starts to drip from it. Top off master cylinder reservoir once more before proceeding.

Attach one end of bleed hose (1) to bleed screw and insert opposite end in glass container (2) partially filled with brake fluid. Be sure end of bleed hose is immersed in fluid.



NOTE: Bleed procedure should be in this order (1) Right rear (2) Left rear (3) Right front (4) Left front.

- Open up bleeder, then have a helper press down the brake pedal. Once the pedal is down, hold the pedal down while closing the bleeder. Repeat bleeding until fluid stream is clear and free of bubbles. Then move to the next wheel.
- Before moving the vehicles verify the pedal is firm and not mushy.
- Top off the brake fluid and install the reservoir cap.

