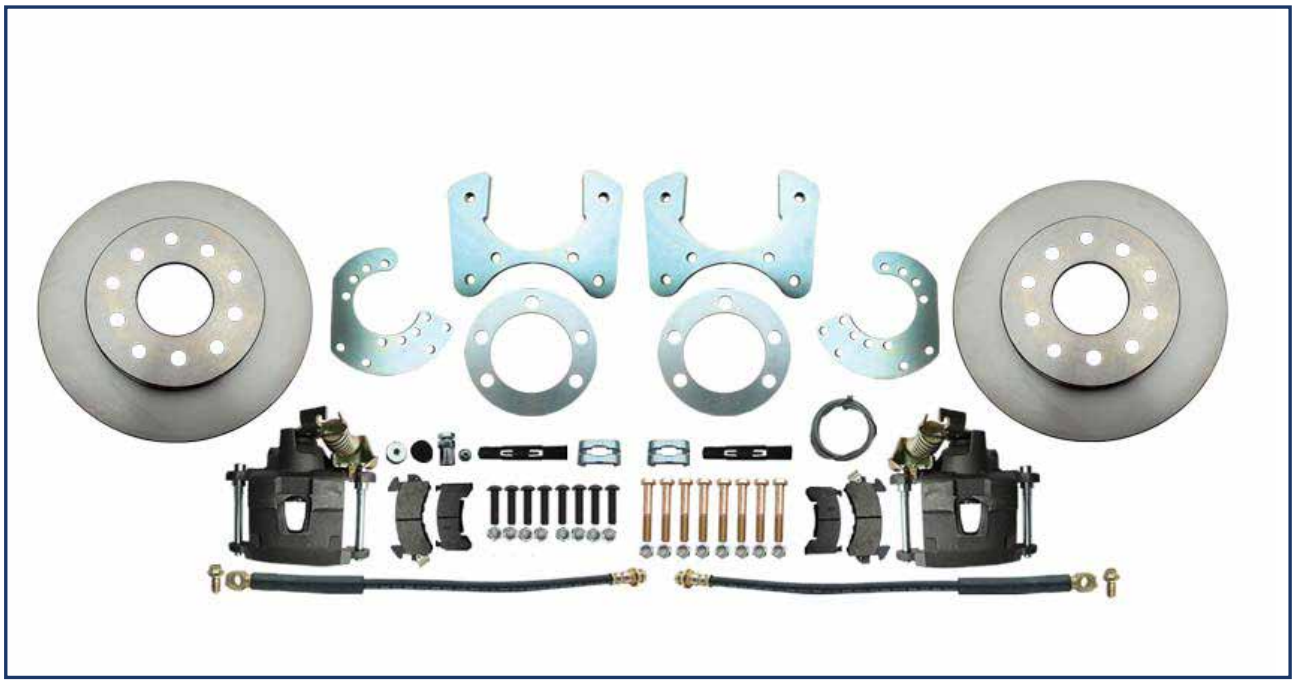
MOPAR 8 3/4" AND DANA 60 5-BOLT REAR END DISC BRAKE CONVERSION KIT

FOR LARGE OR SMALL BOLT PATTERN
5X4 OR 5X4.5 DOES NOT FIT 14" RIMS



INSTALLATION INSTRUCTIONS

NOTE: ALWAYS REFER TO THE VEHICLE OWNER'S MANUAL FOR CORRECT TORQUE SPECIFICATIONS WHEN INSTALLING KIT.

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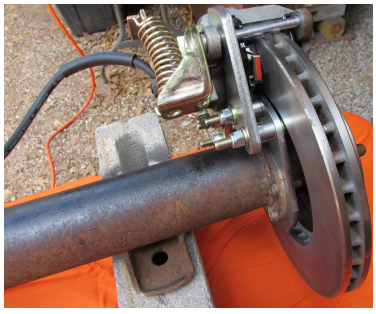
INSTRUCTIONS

NOTE: THE REAR AXLES MUST BE REMOVED TO INSTALL THIS KIT!

Slide Hammer w/ Axle Flange Adaptor

1. Prior to disassembly spray the nuts and bolts that will be removed with a penetrant.
2. Remove the rear tires.
3. Disconnect the drum brake hoses from the hard line using the appropriate flare wrenches
4. Now you can remove the drum backing plate and disconnect the emergency brake.
5. Clean the rotors using brake cleaner first, then with soap and wate . Dry with a clean towel.
6. Check to make sure that the axle flange is 6 1/8” in diamete . (Trial fit the rotor to the axle flange. This will ensure that the rotor will mount flush to the axle flange. (If the axle flange is ger than 6 1/8”, you will need to machine it down to the proper size.)
7. Be sure to check the axle flange size. It should be 6 1/8” in diamete .
8. using a 3/8” extension and 9/16” socket, remove the bearing retainer nuts to pull out the axle. you can access the nuts through the service hole in the axle flange
9. Install the axle spacer plate followed by the axle. (spacer plate takes the place of the backing plate.)
10. Install the primary bracket so that the calipers will be mounted up and toward the rear of the car.
11. Now reinstall and tighten the bearing retainer nuts. Take the supplied bolts, and install those on the primary bracket. Then use the spacers, that are also provided, and install those onto the bolts.
12. Bolt the secondary bracket to the primary bracket and tighten the nylock nuts.

Remove Bearing Retainer Nuts from these studs to remove the Axle before installing this spacer plate.



13. Install the new rotor onto the axle flange. (Note: Use two or three wheel nuts to hold the rotor in place s you can complete the installation. Only hand tighten the wheel nuts so that you will not damage or warp the rotor.) Now rotate the rotor and check that the rotor runs true. you also want to be sure that nothing is interfering with the rotation. To be sure that the rotor is flush to the axle flange and is all the way over t axle center pilot, insert some strips of paper between the back of the rotor and the axle flange. If you canno pull the paper out easily, then the rotor is all the way on.

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REAR CALIPER INSTALLATION

The installation of the rear caliper has three steps:

a . Physically installing the caliper.
B. Physically setting up the emergency brake.
C. Emergency brake adjustment.

1. With the rotor and caliper bracket installed, locate the two metal slider sleeves that the mounting bolts go though (Fig. 2).


Fig. 2


Fig. 3

2. With your thumbs, press the slider sleeves flush against their tabs to allow the caliper to be installed into the caliper bracket smoothly (Fig. 3). Prior to inserting the caliper into the bracket, you need to make sure that the pads are installed correctly.
3. The inboard pad has a special clip (Fig. 4) that snaps over the caliper piston and rests in a groove on the


Fig. 4


Fig. 5

piston. The pad has notches into which the tabs of the clips fit (Fig. 5)

4. Now insert the caliper, with the pads installed, into the caliper bracket. The bleeder screws and springs should be at the top with the caliper on the rear of the axle.
5. It may be necessary to retract the caliper piston to allow the brake pads to clear the rotor.
6. To retract the piston, remove the spring on the emergency brake. Be sure to note the position of the spring. Next remove the nut and its' lever. Be sure to note the position of the lever.
7. Move the piston in or out as needed by turning the shaft with the wrench positioned on the integrated hex nut. You may also use the lever to adjust piston depth.
8. Reinstall the bracket, spring, and pads. install the caliper into the caliper bracket, and press the slider sleeves up against the caliper bracket and tighten down the 2 mounting bolts using an allen wrench. if needed, install the bracket shims between the axle and the caliper bracket in order to center the caliper over the rotor.
9. Test spin the rotor, and once it is centered, tighten down the bracket.
10. Proceed to setting the emergency brake.

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11. If you have not already done so, remove the original drum brake cables from the vehicle.
12. You will be using the front and middle sections of the original drum cable setup.
13. Next feed the end of the new cable though the spring and locate, but do not install the cable into the notch on the lever yet.
14. Now take the clip provided with the kit and stake it over the emergency brake cable to steady the cable against the caliper. Save the old emergency brake clip so you can check the new brake clips for the proper size.
15. With the system physically assembled, proceed to the adjustment of the e brake setup.
16. Attaching the flexible brake hose to the caliper and then to the hard line. Now attach the E-brake cable to the caliper. The parking brake cables are supplied to bring you to a central point, It is the customers responsibility to tie the cables into the system!
17. Bleed the brakes and test for a full pedal. If the back wheels skid before the front you should install a proportional valve to reduce the pressure to the rear brakes.

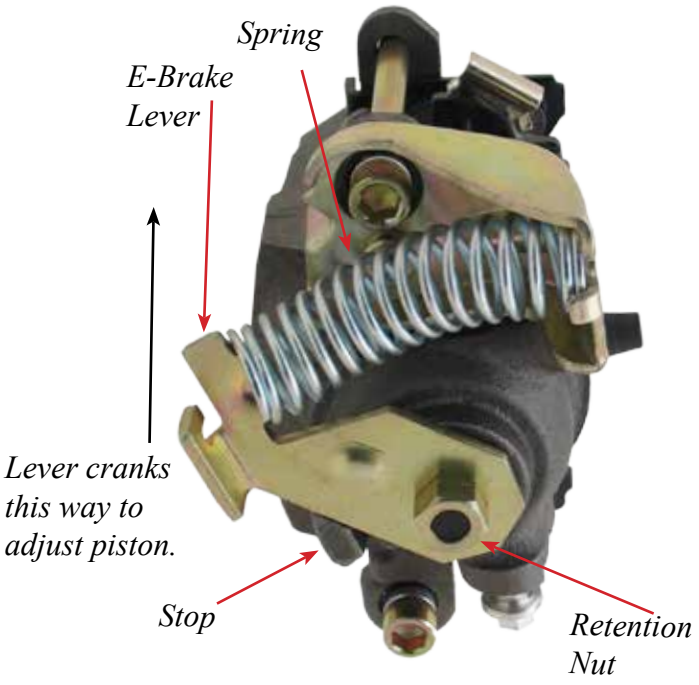
REAR CALIPER ADJUSTMENT

When installing rear disc brakes with calipers that have an internal parking brake you must adjust or set the calipers when installing. Failure to do so will prevent you from getting a firm pedal and you will have no rea brake function. Only do this adjustment with the caliper and rotor installed on the vehicle. You must set the parking brake every time you park to keep the calipers adjusted.

INITIAL ADJUSTMENT

1. Remove the spring.
2. Crank the lever or turn the retention nut to actuate the lever forward.
3. After cranking the lever forward as far as it will go, rotate it back the other way until you hit the stop. you may need to use a long screwdriver to lever the lever back into place.
4. The rear caliper should now be correctly adjusted.
5. Re-install spring

Important: You must use the parking brake mechanism on a regular basis to set the self adjusting calipers. Failure to use the rear parking brake will result in rear brake loss!



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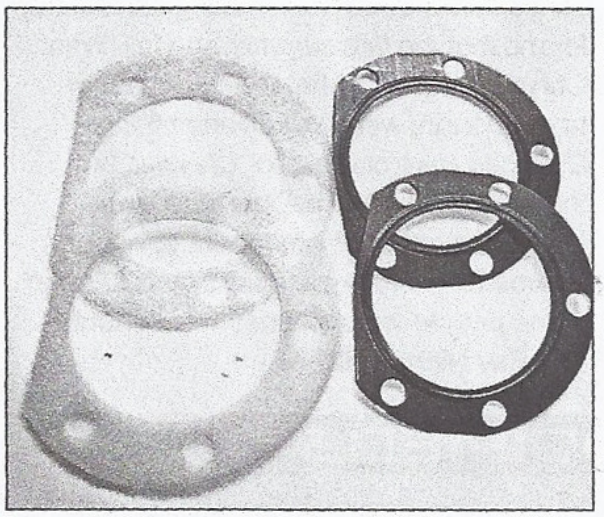


On 8¾″ and 9¾″ (Dana 60) axles, the foam gasket (left) seals the bearing retainer/adjuster to the brake support, and the embossed steel gasket (right) seals the support to the housing flange.

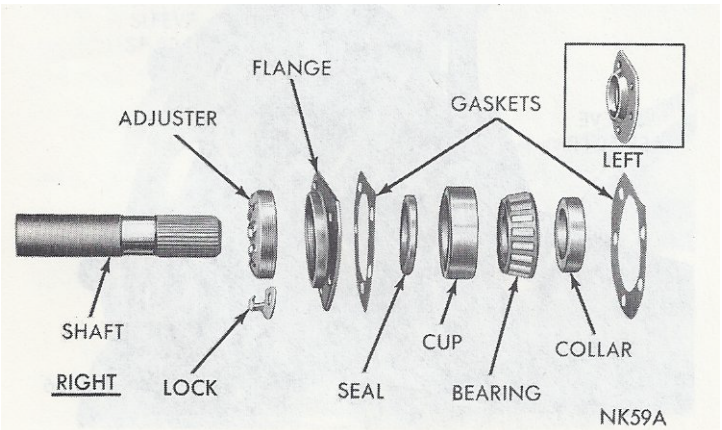
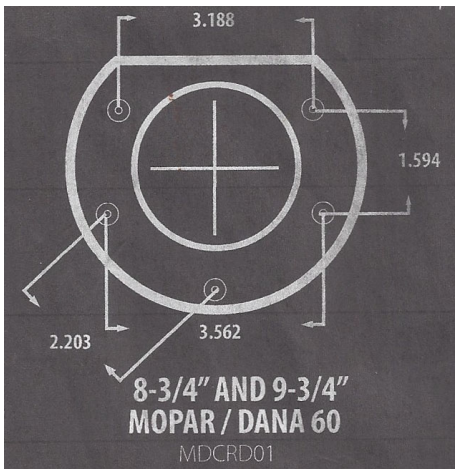


Fig. 2—Axle Shaft Disassembled



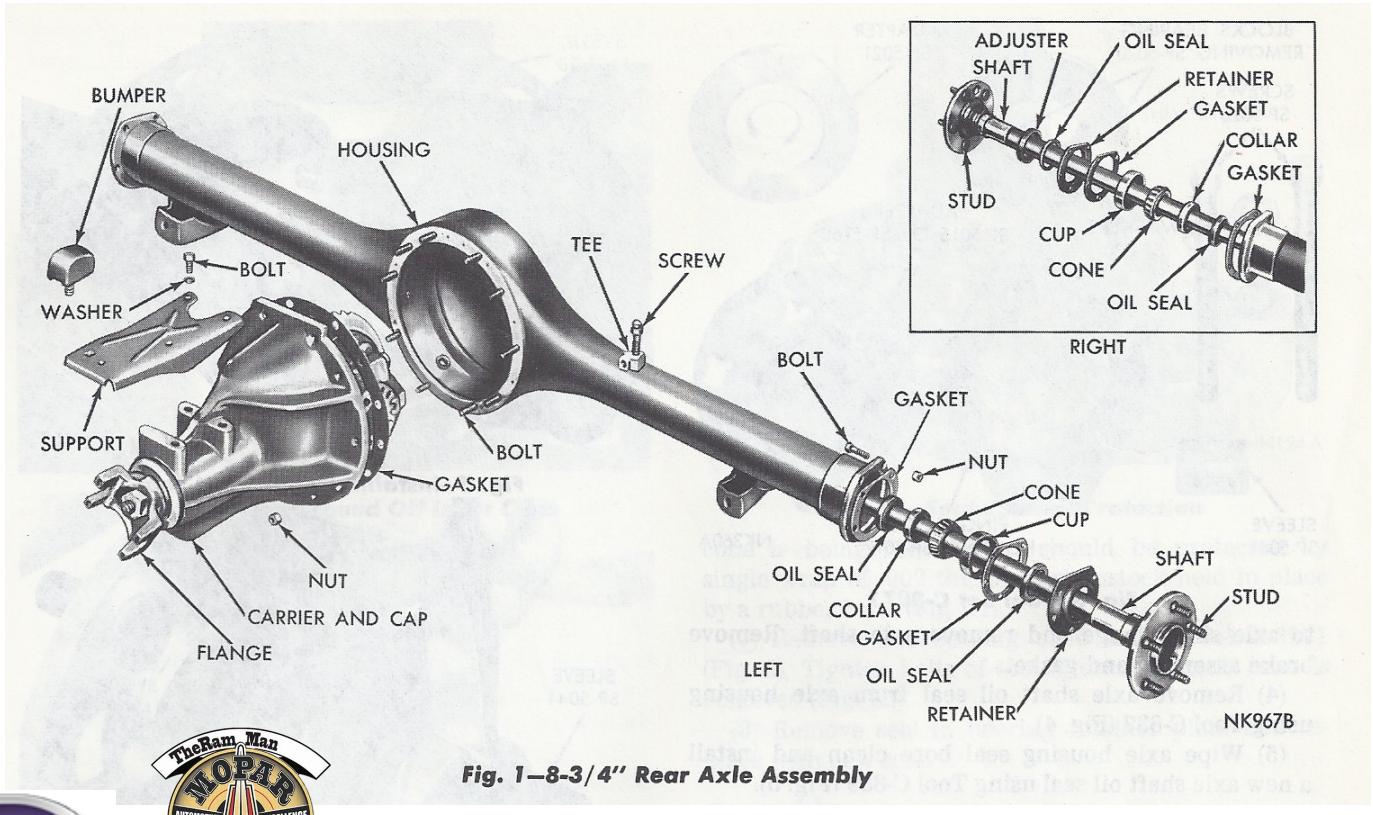
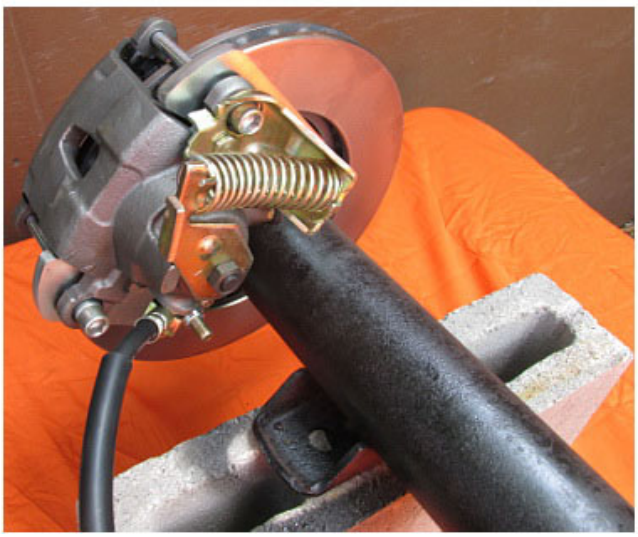


Fig. 1—8-3/4″ Rear Axle Assembly



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Rear Disc Brake Diagnosis

1) Jack up rear axle.

2) Human (assistant) on brake pedal.

3) Human at rear wheels.

4) How fast/soon do the shoes engage?

5) Can tires be rotated at all, full pedal, half pedal?

6) Are both tires stopped equally?

7) Is one different than the other? Slower, faster?

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RETURN POLICY

IMPORTANT
READ THIS

IT IS YOUR RESPONSIBILITY TO BE SURE THAT THE PART(S) ARE THE CORRECT PART(S) BEFORE YOU INSTALL OR ASSEMBLE THEM.

YOU CANNOT RETURN ANY PARTS THAT HAVE BEEN INSTALLED OR ASSEMBLED FOR ANY REASON

WE WILL INSPECT ALL RETURNS VERY CAREFULLY. IF WE DETERMINE THAT THE RETURN IS NOT ACCEPTABLE, YOU WILL NOT RECEIVE ANY REFUND.

We will replace or rebuild or fix anything there is a true problem with. Our motto: Make It Right. Clients that receive products and the wife is mad or kids need books and you want to return the items, you MUST call for approval. These will be received with a 30% restocking fee, minus all shipping.

YOU MUST EMAIL US AT info@therammanINC.com AND GET AN AUTHORIZATION CODE BEFORE RETURNING ANY PRODUCT TO INITIATE REFUND PROCEDURES.

PLEASE SEE our complete Return Policy at: www.TheRamManINC.com

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FANTASTIC TIPS AND IMPORTANT INFORMATION ON BRAKE SYSTEM HYDRAULICS

A major portion of all brake system problems and grief, can definitely be diagnosed with a simple procedure called, 2 person bleeding. Fluid flow issues, component failures and blocked brake lines, can all be identified easily, seeing is believing.

THE AWESOME ADVANTAGES OF THE OLD SCHOOL 2 PERSON BRAKE SYSTEM BLEEDING

1. A human gets to see and interpret the fluid flow at the bleeder fittings, no guessing.
2. This simple act indicates there are no flow restrictions and all components of the system are working correctly. No (or poor) fluid flow definitely indicates problems.

ADVANTAGE OF BENCH BLEEDING THE MASTER CYLINDER

You get to see and interpret the fluid flow, indicating the true status of the master cylinder. This simple act answers all questions. Are both ports flowing? Is only one flowing? Does it leak out of the back?.....etc.

BENCH BLEEDING MASTER CYLINDER

1. Clamp master cylinder securely in a bench vise.
2. Twist/push pointed bleeder tube adaptors into the outlet ports of the master cylinder and bend the tubes into the master cylinder reservoirs. Use the hose retainer.
3. Fill the reservoir with new brake fluid to approximately 1/4" from the top. Be sure the ends of the tubes are covered by the brake fluid.
4. Using a bleeding tool or suitable blunt stroking tool, begin slowly depressing the master cylinder piston using 3/4 to 1 inch strokes. Continue this procedure until you see a nice steady stream of fluid. While fluid is flowing on the compression stroke, you can lift the end of the clear tube out of the brake fluid, observe flow.
5. Remove master cylinder from vise and install on vehicle.
6. Now remove the bleeder tubes from the outlet ports and attach the vehicle's brake lines.
7. The wheel cylinders and calipers must now be bled to remove any remaining air from the system. Refer to the Service Manual or bleeding sequence guide for the proper bleeding procedure.

There are multiple videos on YouTube at theramman01 channel, showing Bleeding and Fluid Flow verification.

TURN OVER FOR MORE NOTES

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TESTING MASTER CYLINDER

Be sure that the master cylinder compensates at both ports. This can be done by applying the pedal lightly with the engine running (power brakes) and observing for a geyser of fluid squirting up in the reservoirs. This may only occur in the front chamber and so to determine if the rear compensating port is open, it will be necessary to pump up the brakes rapidly and then hold the pedal down. Have an observer watch the fluid in the rear reservoir while the pedal is raised. A disturbance in the fluid indicates that the compensating port is open.

IMPORTANT NOTE

There is no warranty for any client that chooses to use Dot 5 Brake fluid. When Dot 5 and Dot 3 mix on any level (even microscopic), a chemical reaction happens that causes the seals, gaskets and cups to swell and drag, increasing resistance. This can cause slow apply and slow or no release. It is the single worst thing you can do to an old car, using original rubber cups and seals.

God Bless America,
Wayne

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