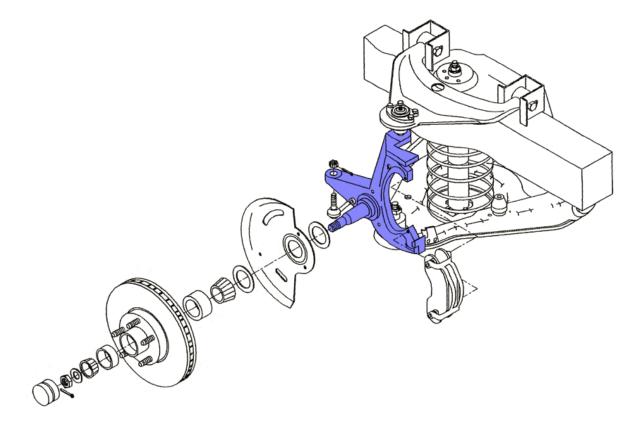
# General Spindle Instructions



## **WARNING**

Proper operation of your brakes & suspension is essential for your safety and the safety of others. Any service should be performed ONLY by persons experienced in the installation and proper operation of brake & suspension systems. It is the responsibility of the person installing any component or kit to determine the suitability of the component or kit for the particular application. After installation and before operating your vehicle, be sure to test the function of the brakes and suspension under controlled conditions. DO NOT DRIVE WITH UNTESTED BRAKE AND SUSPENSION PARTS!

# **IMPORTANT**

Take time to read all the literature that came with this kit. Check the provided list of parts against what you received to ensure all parts are present. NOTE: WITH SOME KITS IT MAY BE NECESSARY TO MAKE MINOR CHANGES TO YOUR CAR! READ ALL WARRANTY DISCLAIMERS AND RETURN POLICIES INCLUDED IN THIS KIT PRIOR TO INSTALLATION!

# **NOTE:**

Before operating the vehicle after installation, test the function of the spindles under controlled conditions. Make several stops in a safe area from low speed and gradually work up to normal speeds. Always utilize safely restraints when operating the vehicle.



# Spindle Component Sheet





Part #: 64004 Mopar B & E Body Stock Height



## Instructions

At this point you can choose one of two methods...

Method 1. Remove the spindle with drums mounted as a unit, which is heavy, or ...

Method 2. You can remove the components individually.

## Method 1. Removing the unit as one assembly

- 1. Remove the wheels. Mark them Left and Right so you will not effect any tire rotation that you have ongoing. Similarly if you have directional tires, place them accordingly.
- 2. Remove the steering arm/tie rods from the O.E. drum spindles. Disconnect / remove the tie rod ends from the drum-spindle setup. (Put the Tie rod nuts back on the tie rods so you don't lose or contaminate them.) (See Figure 2)
- 3. Disconnect the brake hoses at the frame and remove them.
- 4. Support the drum and spindle assembly so it won't fall on you by using a transmission jack, a body brace or similar device.
- 5. Remove the cotter pins from the upper and lower control arms nuts and break the spindle mounting nuts free.
- 6. With the ball joint nuts attached, use a ball joint separator tool to separate the joints from the spindles.
- 7. Remember that the coil springs are loaded, so you must relieve coil spring tension as you remove the upper ball joint nut. The safest option is to use a coil spring compressor so that the assembly can be removed in a controlled, safe method.
- 8. Next remove the ball joint nuts and remove the assembly from its' home between the control arms.
- 9. Put the ball joint nuts back on as you will need to reuse them.

## Method 2. Removing the component s individually

- 1. Remove the wheels. Mark them Left and Right so you will not effect any tire rotation that you have ongoing. Similarly if you have directional tires, place them accordingly.
- 2. Next remove the cotter pins and spindle nut. Set these aside as extras.
- 3. Crack open the bleeder screws on the front wheel cylinders to allow fluid to drain so the cylinders can retract slightly.
- 4. Remove the drum using the drum brake tool and or screwdriver. Remember, the drums will not pull off of the shoes if the wheel adjusters are not turned to allow the shoes to retract inward towards one another.
- 5. Remove the brake line or hose from the wheel cylinder to the frame mounts.
- 6. Remove the backing plate bolts so that the whole plate can be removed with cylinder, shoes and mounting hardware in tact.
- 7. Brace the lower control arm.
- 8. Remove the cotter pins from the upper and lower control arms nuts and break the spindle mounting nuts free.



- 9. With the ball joint nuts attached, use a ball joint separator tool (See Figure 2) to separate the joints from the spindles.
- 10. Remember that the coil springs are loaded, so you must relieve coil spring tension as you remove the upper ball joint nut. The safest option is to use a coil spring compressor (See Figure 3) so that the assembly can be removed in a controlled, safe method.
- 11. Next remove the ball joint nuts and remove the spindle from its' home between the control arms.
- 12. Put the ball joint nuts back on as you will need to reuse them.



Tie rod end / Ball joint Separator (Different fork sizes)



Spring compressor Various types available

### Spindle Installation and Disc Conversion

- 1. Mount spindles to ball joints. Be mindful of LH and RH markings. Tighten the ball joint nuts, install washers and pins.
- 2. Fasten steering control arms and or tie rod ends. Grease the ball joints until grease runs out from the rubber.
- 3. Then tighten the steering control arms to the appropriate torque, install cotter pins, and check for smooth steering range of motion. Grease the tie rod ends until grease runs out from the rubber. (Remember that it is likely that an alignment will be needed.)
- 4. Next test fit your inner wheel bearing onto the spindle.
- 5. Now it is time to prepare your rotor, install the inner wheel bearing and seal, and remember to discard the race provided with the bearing, as one is already pressed in for you.
- 6. Pack the bearings and the rotors with grease if this has yet to be done.
- 7. Press in the wheel seals using a block of wood or seal driver.
- 8. Install rotors and tighten down spindle nuts, add cages and install cotter pins.
- 9. Install grease caps after adding your final grease to the bearings.
- 10. Give the rotor a "test spin" and check for proper installation and true mounting.
- 11. Wash the protective film off of the rotors using brake parts cleaner.
- 12. Remove any packing material from the loaded calipers and remove the two 4-1/4" long bolts provided. Use disc brake quiet on the back of your brake pads if you have not done this already.
- 13. Mount the caliper into the spindle cradle. You made need to move the two silver bolt sleeves in the calipers, to avoid contacting the spindle's housing.
- 14. Grease the caliper slide pins and secure the mounting bolts to the appropriate torque.
- 15. Fasten brake hoses and be sure to put the copper washers on both sides of the banjo bolt fittings.



- 16. Using an assistant, turn the steering wheel lock to lock so you can see if there is any interference of steering components and flexible brake hoses. Bleeding order is rear passenger, rear driver, front passenger, front driver. Repeat.
- 17. Bleed the brakes, and when done use brake cleaner to make sure that the rotors are clean and ready for use. They should be chemical free.
- 18. Mount wheels and torque down lug nuts.
- 19. Remove the jack stands and slowly let down the vehicle and inspect for any clearance problems.
- 20. Using an assistant, turn the steering wheel lock to lock so you can see if there is any interference of steering components and flexible brake hoses.
- 21. Depress brake pedal and check for brake pressure and response.
- 22. Re-bleed if necessary.
- 23. Remember if you are upgrading to discs for the first time, you will need a residual pressure Valve for the front, a residual pressure valve for the rear and a proportioning valve. See typical brake system configurations. Get a wheel alignment.

