

SUSP-08, Front Wheel Bearings - Checking, Adjustment, Repacking, and Replacement

Checking and Adjustment

Tools

- Small Flat Tip Screwdriver or Probe (Early Cars)
 - Medium Flat Tip Screwdriver
 - Hammer
 - Chisel
 - 6 mm Allen Head Wrench or Long Allen Head Socket
 - Floor Jack
 - Jack Stands
1. Raise the front of the vehicle on jack stands.
 2. Spin the front wheel and listen for noise. Also, make sure the wheel rolls freely without excessive resistance.
 3. To check the wheel bearing adjustment, first remove the front wheel.
 4. Remove the wheel bearing grease cap by tapping around the back edge with of the cap with a hammer and chisel. On early models (pre-1985.5), the speedometer is driven by a cable off of the left front wheel. To remove the grease cap on that side, you'll first have to remove the E-clip from the end of the cable using a small flat tip screwdriver or probe.
 5. After the grease cap is removed, use the medium flat tip screwdriver to turn the bearing thrust washer (just behind the locking collar). When you try to turn the washer ensure that the screwdriver is not resting on the locking collar or on the hub. If the washer spins freely or if you are unable to turn the washer using the screwdriver, the wheel bearing needs to be adjusted.
 6. If adjustment is required, loosen the locking collar Allen head bolt using a 6 mm Allen head wrench or long Allen head socket. To get the wrench into the head you'll have to turn the hub until the detent in the lip of the hub lines up with the head of Allen bolt.
 7. Once the Allen head bolt is loosened, turn the locking collar as necessary to achieve proper adjustment on the bearing (as described in the previous steps). If the washer turns too freely, turn the locking collar in the clockwise direction to tighten the bearing. If the washer is too tight, turn the collar in the counter-clockwise direction to loosen the bearing.
 8. When the bearing is properly adjusted, tighten the Allen head bolt on the locking collar, replace the bearing cap, replace the front wheel, and lower the vehicle.

Bearing Replacement

Tools

- Small Flat Tip Screwdriver or Probe (Early Cars)
 - Hammer
 - Chisel
 - Medium Round Tip Punch preferably Brass
 - 6 mm Allen Head Wrench or Long Allen Head Socket
 - Floor Jack
 - Jack Stands
1. Raise the front of the vehicle on jack stands.
 2. Remove the front wheels.
 3. Remove the brake pads using [BRAKE-02](#).
 4. Remove the two caliper retaining bolts that attach the caliper to the steering knuckle, slide the caliper off the rotor, and hang the caliper out of the way with shock cord or wire.
 5. Remove the wheel bearing grease cap by tapping around the back edge with of the cap with a hammer and chisel. On early models (pre-1985.5), the speedometer is driven by a cable off of the left front wheel. To remove the grease cap on that side, you'll first have to remove the E-clip from the end of the cable using a small flat tip screwdriver or probe.
 6. After the grease cap is removed, loosen the locking collar Allen head bolt using a 6 mm Allen head wrench or long Allen head socket. To get the wrench into the head you'll have to turn the hub until the detent in the lip of the hub lines up with the head of Allen bolt.
 7. Turn the locking collar counter-clockwise to remove it from the spindle. Then, pull the hub and rotor assembly as a unit straight off of the spindle.
 8. The thrust washer and outer wheel bearing will likely fall out of the hub when you slide it off the spindle so, be prepared to catch them.
 9. Pry the grease seal out of the back of the hub and remove the inner wheel bearing.
 10. Use the hammer and round punch to tap the bearing races out of the hub. Alternate tapping on one side of the bearing and then the other along the two channels inside the hub. If you do not have access to a brass punch, be extremely careful of the angle you hold the punch to keep from damaging the inner surface of the hub.
 11. Once both bearing races are removed, clean the inner surfaces of the hub thoroughly.

12. Install the new bearing races into the hub as follows:
 - a. Place the new bearing races in a freezer for a minimum of an hour, preferably overnight.
 - b. Heat the hub assemblies in an oven at 250°F for at least 30 minutes. The longer you leave the hubs in the oven the easier the races will go into the hub.
 - c. Using a pair of gloves, remove the hub(s) from the oven and place on a flat working surface which can not be damaged by the hub.
 - d. Remove the races from the freezer and insert them into the hub. The bearing should drop right into the hub with little or no effort.
13. Pack the new bearings with a good quality moly bearing grease. A bearing packer is the preferred method of packing the bearing but, they can be packed almost as well by placing the bearing in the palm of your hand and pushing grease into the bearing rollers using your fingers.
14. Place the inner bearing into the back of the hub and install a new bearing seal.
15. Place the hub assembly onto the spindle and insert the outer wheel bearing.
16. Place the thrust washer and locking collar onto the spindle.
17. Adjust the bearing as described in the "Checking and Adjustment" section of this procedure.
18. When the bearing is properly adjusted, tighten the Allen head bolt on the locking collar, replace the bearing cap, replace the front wheel, and lower the vehicle.

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