

1930-37 Cadillac Inner Wheel Bearing Seals

1930-33 Cadillac All Models • 1934-35 All except LaSalle • 1936-37 Series 90 Only



Replacement Of Front Wheel Inner Seal Felt

Notes:

1. The original felt washer was 3/8" thick. Each replacement consists of two felt washers, each 3/16" thick, making a total of 3/8" thickness.
2. These felt washers are not interchangeable with rear wheel seal felts. The construction is in general the same, but the dimensions differ.

These replacement felts have been tested and found satisfactory, but since the supplier cannot control installation, they are not guaranteed.

Disassembly - Remove the following:

1. Hubcap, wheel and tire, inner dust cap and cotter pin.
2. Spindle nut. Note: Nut on let wheel has left hand thread.
3. Flat washer. Note that tongue in washer fits groove in spindle.
4. Outer bearing inner ring and ball assembly (two separate parts). It may be necessary to rock hub and drum gently to dislodge these parts.
5. Hub and drum assembly. This assembly can be pulled straight off by hand, but be careful as it is heavy. Avoid bumping, as this may damage inner bearing ball assembly. To facilitate hub and drum removal, the brake lining may be backed off by turning the cam adjusting out one or two full turns counter clockwise.
6. Inner bearing inner ring. Pry with screwdriver to start. It is not on tight.
7. Before proceeding, measure distance from inner face of hub to edge of outer lip of seal retainer. Lip should be at least flush with face of hub, and it may be indented a fraction of an inch. Record this measurement for use at assembly. **Note:** Do not try to pry the seal retainer out of the hub. This is impossible and will result in damage to the retainer. This must be avoided, as the retainer must be reassembled with the new felts. Damage to the retainer will affect sealing.
8. Inner seal retainer. Note: This is a difficult and yet delicate task. Proceed exactly as follows:

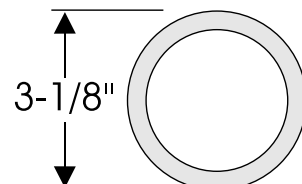
- Place hub and drum assembly, inner face down, on a paved floor or driveway, preferably on several thickness' of newspaper, supporting drum on wood blocks so that face of hub is about 1" above pavement.

- With a 1/2" diameter x 12" long soft steel or brass drift, feel inside the bore of the hub for two diametrically opposite notches next to the inner bearing outer ring. These notches must be carefully located.

- With the drift held securely in a notch, strike one hard blow with a heavy hammer.
- Repeat with drift in opposite notch. Do not place drift anywhere except in one of these notches. Failure to follow this instruction may result in wrecking the inner bearing ball assembly.
- Strike alternate, single, heavy blows at each notch until seal and inner bearing ball assembly drop out. Do not drive inner bearing outer ring out of hub. This is neither necessary nor desirable unless Bearing is to be replaced.

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**FELT WASHER
OUR PART #70-0619-38**



Cleaning And Inspection

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1. Discard old seal felts and old cotter pins.
2. Remove all old grease from bearings, interior of hub and other parts.
3. Wash bearings, hub interior and other parts with unleaded gasoline or other safe solvent.
4. If seal has leaked, wash drum, brake linings and other brake parts with solvent.
5. Wash inner and outer bearing ball assemblies a second time with perfectly clean solvent. Blow ball assemblies out with compressed air if available.
6. When parts are clean and dry, turn each ball assembly on its inner ring and check for any catchy feel as it rotates. If any catch is noted, wash ball assembly again in perfectly clean solvent and recheck. Ball assemblies must be absolutely free of any impediment to rotation. This is of primary importance.
7. Inspect balls and inner and outer ring raceways for heat discoloration and pock marks. A tan color is permissible, but if any part is blue it should be replaced. Pock marks, known as spalling, indicate bearing failure due to overload. This occurs most often on inner rings, occasionally on balls and rarely on outer rings, although the latter can be indented by debris from failure of one of the other two elements. Failed or damaged parts should be replaced. Re-use of such parts may cause further damage and may affect the safety of the vehicle.
8. Before reassembling, lubricate brake cam and brake shoe pivots with white lithium grease. See shop manual for additional lubrication instructions.

Assembly **Note: Keep all parts perfectly clean until and during assembly**

1. Assemble inner seal and bearings as follows:
 - With hub and drum assembly placed outer face down, on newspapers on a firm surface, and with drift held firmly against hub bore and upper face of inner bearing outer ring, drive the ring back into place. Do this after cleaning and before greasing the hub. Single, heavy blows, each one nearly diametrically opposite the last, working all around the ring, will be most efficacious. Do not use a hardened steel drift for this, as a slip with such a tool might cause damage to the raceway. Be sure to seat the ring in its original position. This can usually be determined by the sound and feel of the final blows, but a careful visual inspection, from the other side of the hub, should be made. Failure to seat the ring will cause a false bearing adjustment, with resulting later damage and poor operation.
 - Apply generous quantities of a good grade of wheel bearing grease (not ordinary chassis lubricant) to ball assemblies, ring and hub interior. It is not necessary to pack the hub interior full of grease, but an extra handful is OK.
 - Soak new seal felts in new, clean engine oil before assembly. Allow to drip dry.
 - Install inner bearing ball assembly. Pack it full of grease.
 - Install seal retainer inner plate.
 - Insert inner bearing inner ring into ball assembly. Slide (2) seal felts on.
 - Place seal retainer in hub bore and gently tap it into place, tapping all around as with bearing ring, to avoid cocking. This is difficult, and extreme care must be exercised. Return retainer to its original position as measured.
2. With inner bearing inner ring inserted in ball assembly, as above, move hub and drum assembly straight onto spindle. Be careful to avoid tipping.
3. Holding hub and drum assembly upright and centered as well as possible, insert outer bearing ball assembly followed immediately by outer bearing inner ring.
4. Still holding hub and drum assembly upright, install tongued washer and screw on the spindle nut finger tight,
5. Tighten spindle nut with pliers or wrench with a handle no more than 12" long. Note: Excessive tightening may wreck bearing,
6. Mount wheel and tire. Tighten all wheel capscrews as usual. Test bearing adjustment by rocking tire on vertical and then horizontal axis. There must be no play.
7. Turn nut, preferably to tighten, until new cotter pin can be inserted either vertically or horizontally through both nut and spindle. Tap inner prong inward. Cut off excess length if necessary.
8. Install dust cap and hubcap.
9. Adjust brakes if adjustment has previously been backed off. Road test for pull.