



Instructions for Differential Support Cover

TFS-8510300

Thank you for purchasing this cast aluminum differential support cover. With lightly preloaded support posts placed against the center of each bearing cap the cover will greatly reduce the rearward deflection of the carrier bearings during hard launches. The rearward forces are transferred through the support posts to the cover and cover bolts.

Installation:

1. Place a drain pan under the rear axle housing. Back out the bolts on the old cover about 3/8"; if needed, tap the cover to loosen it. Let the old gear oil drain out, then remove the old cover. Wipe the gasket surface and bolt holes clean.
2. Visually inspect the gears and bearing caps for unusual wear, cracks, or looseness. Check the gear oil left in the bottom of the housing. If there are a lot of large metal shavings and debris floating in the fluid, have the rear axle inspected by a professional.
3. Wipe out any remaining gear oil with paper towels or lint-free rags. With everything inspected and clean, hold the Trick Flow support cover up to the housing and check for any interference with the sway bar or other chassis components.
4. Put the load studs in the cover with the pivoting shoe side towards the bearing cap. Make sure to back the stud out so it will not touch the cap when the cover is bolted in place.
5. Place the gasket between the housing and differential cover and press the cover firmly and evenly against the housing. Install the mounting bolts and torque them to 25 ft-lbs using a criss-cross pattern.
6. Apply a small amount of new differential oil to the load studs prior to installation. Torque the bearing cap load studs to a maximum of 10 ft-lbs. Over-tightening may damage the bearings by creating an out-of-round condition on the bearing caps.

DO NOT USE AN IMPACT WRENCH TO RUN THE LOAD STUDS INTO THE COVER; THIS MAY CAUSE THE THREADS TO SEIZE.
7. Apply a small amount of silicone sealer to the load stud threads underneath the jam nuts. This will help prevent gear oil seepage. Tighten the jam nuts to a maximum of 10-ft. lbs. Do not over tighten!
8. Remove the fill plug. Fill the housing with the proper gear oil for your application until the oil just trickles out of the fill hole. This is the proper fill level.
9. Test drive the vehicle and check for leaks.

Note – Some applications such-as the Chevy 10-Bolt, 7.5" Differential Covers will require the use of (2) 5/16-18NC x 1-1/2" hex head bolts (supplied) to mount the parking brake cable brackets to the rear end housing.

IMPORTANT NOTE

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TFS-8510300 (8.5" 10 Bolt): GM used four different bolts on these differentials, metric and standard, with different lengths. When replacing your cover, you will need to pull out one of your stock bolts out and measure the length and determine whether it is metric or standard.

* Metric bolts will have 1.25 threads per mm (20 threads per inch), standard will have 18 threads per inch.

* Bolt lengths will be either 16mm or 21mm (metric) or 5/8" or 7/8" (standard).

The bolts supplied with the pan replace the standard thread 5/8" bolts. If you have the metric or 7/8" standard thread bolts, we recommend using the following ARP fasteners.

| Stock Bolt | Stock Length | Recommended Bolts |
|------------|--------------|-----------------------|
| Standard | 7/8" | ARP-612-1500 (5 pack) |
| Metric | 16mm/ 21mm | ARP-771-1004 (5 pack) |

Ultimate Bolt-On Performance® Lifetime Warranty

Trick Flow Specialties cylinder head castings are backed by a lifetime warranty. If a cylinder head casting fails to provide the original purchaser with complete satisfaction, Trick Flow Specialties will repair or replace it free of charge — guaranteed!

Moreover, the valves, valve guides, valve seats, valve job, valve springs, valve spring retainers, valve locks, rocker arm studs, guideplates, and valve stem seals included on assembled Trick Flow Specialties cylinder heads are warranted to the original purchaser to be free from defects in materials and workmanship for a period of two years from the date of purchase. All other Trick Flow Specialties products are warranted to be free from defects in materials and workmanship for a period of 90 days. There are no mileage limitations.

Extent of Warranty

Customers who believe they have a defective product should return it to the dealer from which they purchased or ship it freight prepaid to Trick Flow Specialties along with proof of purchase and a complete description of the problem. If a thorough inspection indicates defects in materials or workmanship, our sole obligation is to repair or replace the product.

This warranty is only if the product is properly installed, subjected to normal use and service, did not fail due to owner negligence or misuse, and has not been altered or modified.

Trick Flow Specialties warranties do not cover any installation or removal costs.

Trick Flow Specialties is not liable for consequential damages for breach of contract of any warranty in excess of the purchase price of the product sold.

PROPOSITION 65 WARNING

This product may contain one or more substances or chemicals known to the state of California to cause cancer, birth defects or other reproductive harm.

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