4WD VANAGON MAINSHAFT BEARING THRUST PLATE

Updated 11/5/12

9375-INST

GENERAL NOTES

In a stock 4WD Vanagon transaxle, the mainshaft bearing has a tendency to beat its way into the aluminum low gear housing. This allows the bearing to move back and forth in its bore, which in turn allows the mainshaft to move axially in the trans. Eventually, this movement can lead to catastrophic failure. The Weddle 9375 bearing thrust plate is designed to prevent this type of failure by providing a heat treated, precision ground steel surface for the mainshaft bearing to thrust against. When used in combination with a remanufactured gear carrier housing (part # 6387), it will greatly extend the life of your rebuilt 4wd Syncro transaxle.

WHAT'S INCLUDED

The following parts should have been included when you purchased part number 9375:

(1) Bearing thrust plate
(1) Dowel shaft to locate plate on gear housing
(1) M6 x 16mm socket head cap bolt
(1) M6 self locking nut
(2) Hardened flat washers

IMPORTANT: These instructions are for 4WD Syncro Vanagon transaxles only. The depth of machining is different for 2WD transaxles. If you are installing a mainshaft bearing thrust plate in a 2WD Vanagon, refer to the instructions for part number 9374 instead.

ROTATION STOP

You will need to install a 6mm socket head cap bolt in your gear carrier housing. The head of the bolt acts as a stop to keep the mainshaft bearing thrust plate from rotating. It is important that the head of this bolt fits snuggly up against the edge of the thrust plate so that the plate cannot rotate downward. To install the bolt, a hole must be drilled through the housing in the specified location (see Figure 1).

TECH TIP: *If you aren't able to measure this location accurately, here's a shortcut: On the back side of the gear carrier, you will see the word "GERMANY" cast into the housing. Drill a pilot hole right through the center of the letter "E". This will get you get pretty close to where you need to be.*

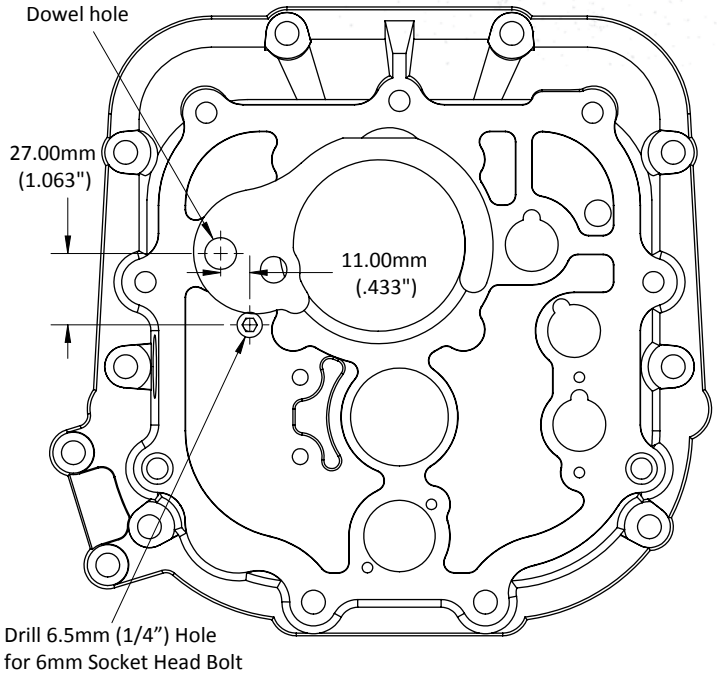

Figure 1: Rotation Stop in Gear Carrier Housing

THRUST PLATE INSTALLATION

1. You will find a steel plug in the bottom of the dowel hole in your gear carrier housing. This must be removed and discarded (it can be knocked out from the back side).

2. Install the front mainshaft bearing and half-moon locking piece in the gear carrier as you normally would.

3. Press the small end of the dowel shaft into the larger of the two holes in the bearing thrust plate. If you don't have a press, you can use a brass drift, but be very careful not to damage (or "mushroom") the end of the dowel.

4. Press the dowel shaft (with thrust plate attached) into the gear carrier housing. The dowel should be a tight fit, and care must be taken not to damage the parts. Align the thrust plate as shown in Figure 1, with the flat at the top of the plate parallel to the top of the housing.

(Continued on back)

WEDDLE INDUSTRIES • 7200 HOLLISTER AVENUE, SUITE C, GOLETA, CA 93117 • PH: (805) 562-8600 • FAX: (805) 562-8661 • INFO@**WEDDLEINDUSTRIES.COM**

5. Install the socket head cap bolt and secure it with the self locking nut, using a washer on each side of the housing. When the bolt is tight, the head should be right up against the thrust plate, as shown in Figure 1. This is what keeps the plate from rotating downward. If you don't get the bolt in the exact right position on the first try, it's OK to ovalize the hole a bit.

LOW GEAR HOUSING MODIFICATION

Your existing low gear housing will have to be machined to a depth of 5.66mm to accommodate the 9375 bearing thrust plate (see Figure 2). The machined area must be flat and parallel to the gasket surface, and it must be cut to the correct depth to provide preload against the bearing thrust plate. An allowance has been made for the thickness of the factory VW low gear housing gasket, so make sure to install one (this is the thick green gasket, VW part # 094-301-215A).

It is important that this modification be done accurately, so please use a qualified machine shop if you don't have the equipment to do it properly yourself.

If you have any questions or comments, feel free to give us a call at (805) 562-8600.

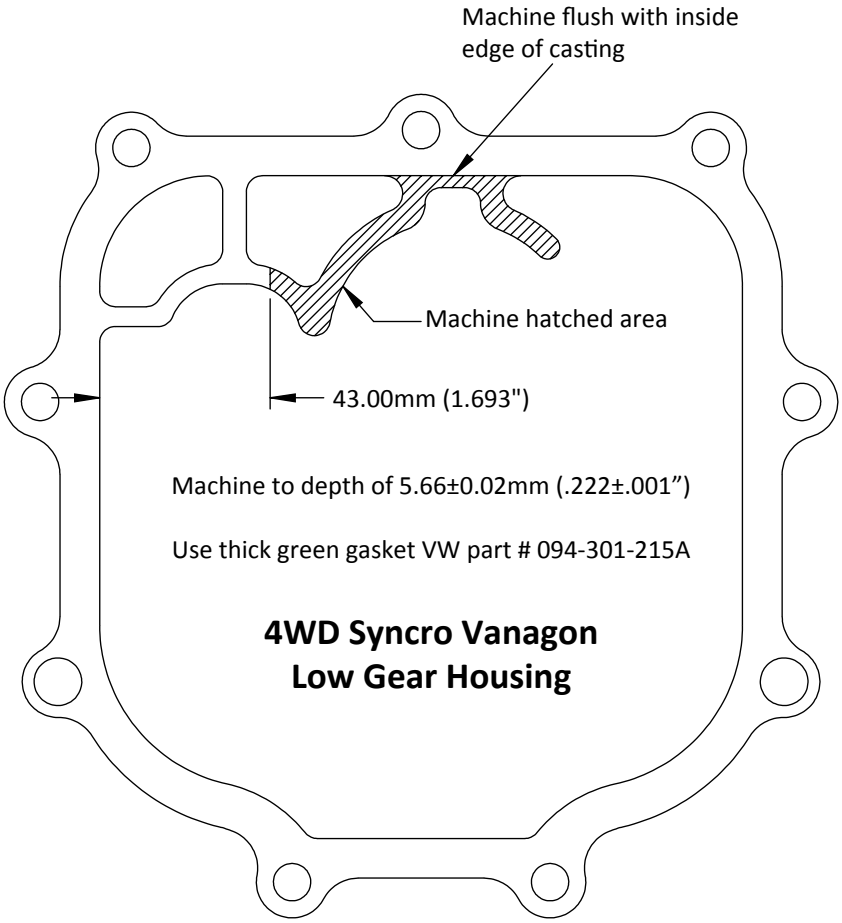

Figure 2: Low Gear Housing Modification

WEDDLE INDUSTRIES • 7200 HOLLISTER AVENUE, SUITE C, GOLETA, CA 93117 • PH: (805) 562-8600 • FAX: (805) 562-8661 • INFO@**WEDDLEINDUSTRIES.COM**