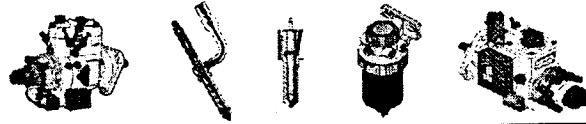


STANADYNE[®]
Diesel Systems



FIVE DECADES OF DIESEL INNOVATION
1950-2000
STANADYNE AUTOMOTIVE CORP.

SERVICE BULLETIN

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SUBJECT: NEW PUMP MODEL FOR 1999 MODEL YEAR GM 6.5L DIESEL

A new DS pump model has been released for the 1999 model year GM 6.5L diesel engine. It is model DS4831-5459, GM Part Number 12561405. It is essentially the same as the previous model DS4831-5288 with a few component and calibration changes as outlined within. The new 5459 model supersedes model 5288 for both production and service.

Inner Bearing Retainer Assembly and Thrust Washer Changes

The bronze thrust bearings used in the DS pump drive shaft/transfer pump group have been eliminated. A new thicker inner bearing retainer assembly, P/N 33856, has been released. It incorporates the axial thrust bearing surface and supersedes the previously used 31267 inner bearing retainer. At the other end of the drive shaft/transfer pump group is a new thicker thrust washer, P/N 33855. It supersedes the previous 29557 washer and 29343 bronze thrust bearing. The previous and new configurations are as shown in Figure 1.

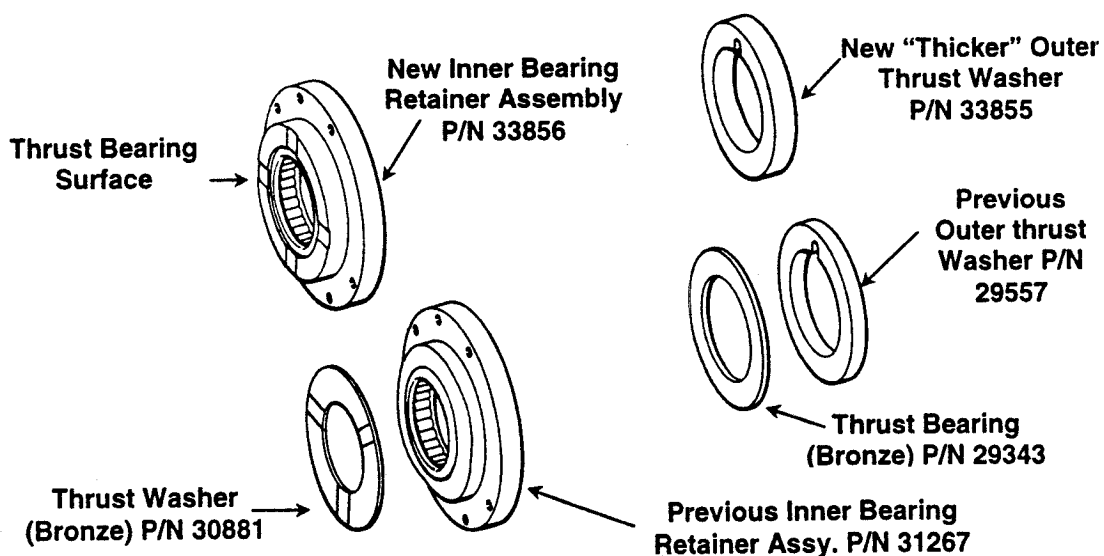


Figure 1

All DS pump specifications have been revised to reflect this change and all are to be serviced with the new components, when required, as follows:

1. If a 31267 inner bearing retainer assembly requires replacement, discard it and the 30881 thrust bearing and replace it with the 33856 inner bearing retainer assembly.
2. The 30881 will continue to be available for service. Therefore, if only a 30881 thrust bearing requires replacement, you may replace the thrust bearing and reuse the previous 31267 inner bearing retainer assembly.
3. If the 29557 outer thrust washer and/or the 29343 bronze thrust bearing require replacement, discard both parts and replace them with the current 33855 outer thrust washer.

Note: It is not necessary to change to the current 33856 inner bearing assembly when changing to the current 33855 thrust washer and vice a versa.

Minor scoring and polishing on the axial thrust face of the new 33856 inner bearing assembly is considered normal. The 33856 should only be replaced during service when the thickness of the assembly is less than 0.567 inches (14.40 mm) as shown in Figure 2.

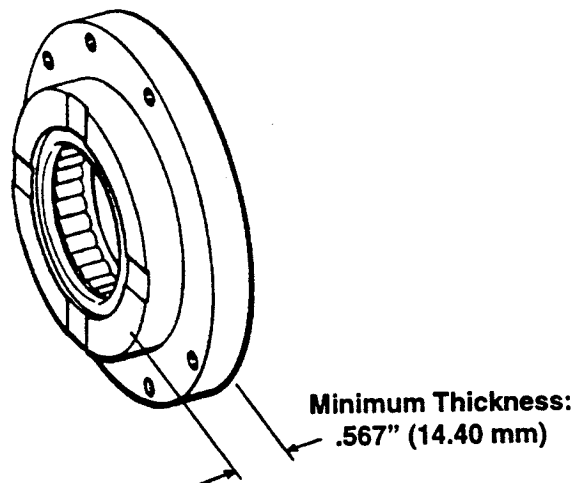


Figure 2

Encoder Sensor

A new encoder sensor, P/N 33883, has been introduced on the DS-5459 pump in place of the previous P/N 32865. The 33883 sensor differs from the 32865 sensor in two ways: (1) it has a slightly revised printed circuit board design; and (2) it uses different sealing compounds inside for greater protection against fuel leakage. This eliminates the need for the external sealant around the connector pins. For identification, the part number "33883" is stamped on the top of its connector. The 33883 encoder sensor supersedes the 32865 encoder sensor and can be used in all DS pumps when sensor replacement becomes necessary.

Transfer Pump Blade Spring

A new transfer pump blade spring has been released to production. The new spring, P/N 33853, can be identified by its "tan" color. It supersedes the previous 31898 "black" colored band spring. Both the previous and new transfer pump springs are dimensionally and functionally identical. Therefore, all stocks of 31898 springs can continue to be used in service until all existing stocks have been depleted.

Pump Calibration Changes and New Diagnostic Applications Cartridge

Because the software for the 1999 model year 6.5L diesels calls for higher fuel delivery, several of the fuel delivery check points in the "Test as Received" and "Test Following Service" calibration routines have been revised. Therefore, a new 31282 Diagnostic Applications Cartridge (version 4.0) has been released and will be shipping in August.

When the DS Warranty program changed from exchange to "repair or replace", February 1st of this year, it became necessary to make one other minor change to the DS calibration software. On DS-5067 and DS-5068 pumps, you will now have the option to skip step 7d on the test following service calibration routine. This is because the inclusion of the pre-positioned spring advance is no longer a requirement when repairing these models.

**Technical Support Group
Product Support Department**