

P.O. Box 247, 4320 Aerotech Center Way

Paso Robles, CA 93447

Telephone: (800) 350-2223 Fax: (805) 238-4201 PAGE 1 OF 4 Page Rev. Date: 02-05-18

P/N: 50-0206

NEW VENTURE 4500 GM 5 SPEED TO GM NP205 1971-1984/85

KIT CONSISTS OF:

No.	Qty	Part No.	Description
1.	1	51-0206	ADAPTER PLATE
2.	1	51-0217	ADAPTER HOUSING 6.375" LG. (Modified 51-0205)
3.	1	715529	T/C LINKAGE MOUNTING BRACKET
4.	1	716056	STEEL TUBING CROSSMEMBER
5.	1	716315	210 SEALED BEARING
6.	1	716462	2 PIECE SET COLLAR
7.	1	716572	NP205 FRONT GASKET
8.	1	716729	NEW SEAL
9.	8	720028	10mm x 1.5 35mm LONG S.H.C.S. (NV4500 TAILHOUSING)
10.	6	723740	3/8"-16 x 1-1/2" LG. S.H.C.S.
11.	8	723730	3/8"-16 x 1-1/4" LG. S.H.C.S. (NP205 T/C ADAPTER)
12.	2	724317	7/16"-14 x 1-1/4" S.H.C.S.

NOTES

- 1. This adapter is designed for exclusive use of the 4WD General Motors version New Venture Model 4500 transmission. You must use this transmission due to the length and spline size of the output shaft. The shaft must be shortened to the 7.625" cutoff length. In order to cut the shaft off, you will need to remove the tailhousing. The shaft can be cut off using an abrasive cutoff saw or skill saw equipped with a special metal cutting blade. Be sure to use safety glasses during this procedure. On pre-1997 transmissions, you must remove the harmonic balancer and install the 2 piece set collar. On 1997 & newer transmissions, the 2 piece set collar is not needed.
- 2. Install the new sealed bearing and oil seal to into the front of the NP205 transfer case and the adapter plate.
- 3. Bolt the new larger tailhousing to the back of the transmission. Make sure all of the gears clear the new housing and the dowel pins are installed. Assemble the plate to the housing.
- 4. The bolt pattern on the front side of the New Venture gear box is unique to only late model GM transmissions. The original GM bellhousing provides a slave cylinder on the passenger side of the vehicle that will interfere with the early GM front driveshaft. We have a new aluminum bellhousing that will have this bolt pattern provided for all Chevy V8 conversions.
- 5. The NP205 transfer case must be equipped with a 32 tooth female input spline as illustrated. This shaft is not part of the kit and must be purchased separately. We have provided a new gasket to be installed between the adapter plate and the transfer case to allow proper load heights on the bearing. This gasket is a stock GM component, and it will require some trimming to fit over the new larger bearing. Due to some variances in spline length on the NV4500 output shaft, the New Process input gear may require to be shortened slightly to avoid over running the transmission output shaft splines. Trial fit the transfer case and gasket, if the transfer case does not fit flush up to the adapter, you may require to shorten the input.
- 6. The transfer case mounting plate, Part No. 715529, mounts to the top cover and provides a hole location for mounting the handle in similar location.



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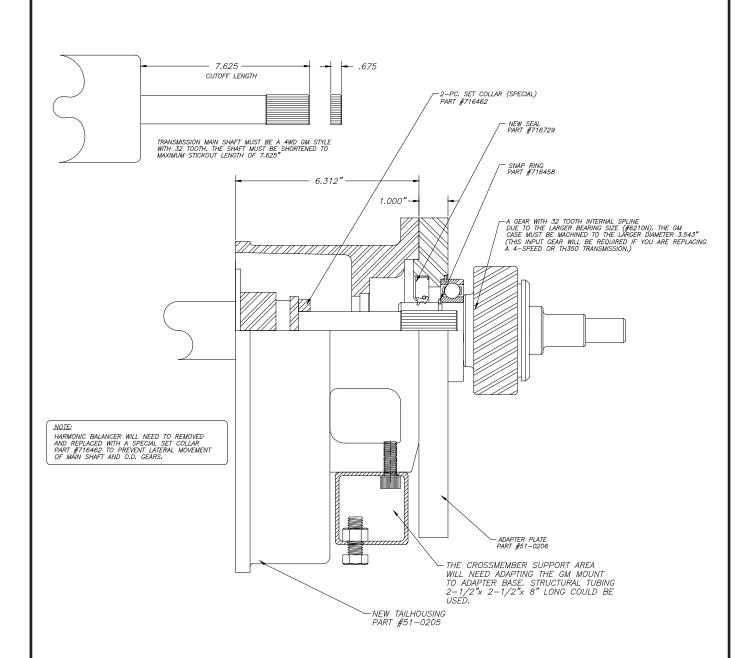
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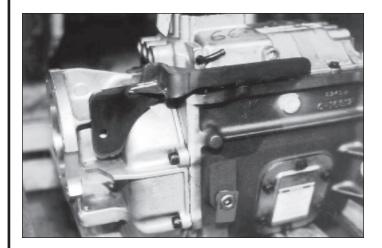
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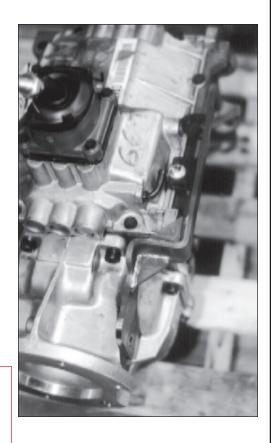
Transmission Lubrication

The NV4500 transmission uses approximately one gallon of synthetic oil. This oil is available at your local GM authorized dealer under Part No. 12346191 (gallon), or Part No. 12346190 (quart). Unlike regular petroleum oil that breaks down when it gets too hot, this synthetic oil is made up of different properties that do not break down. Amsoil MTF & Redline MT-85 75W85 GL-4, are about the only oils that are designed to work in the NV4500 transmissions that are not supplied from GM. **DO NOT SUBSTITUTE** any other lubricant as <u>internal damage may occur</u>. One of the biggest problems encountered is that people substitute different transmission fluids for use with this transmission.

We offer the NV4500 oil under our part number 715690.

CAUTION: Monitor the fluid for possible contamination between transmission and transfer case.







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NP 205 transfer case with adapter in position.



Side view of the transfer case and adapter.