

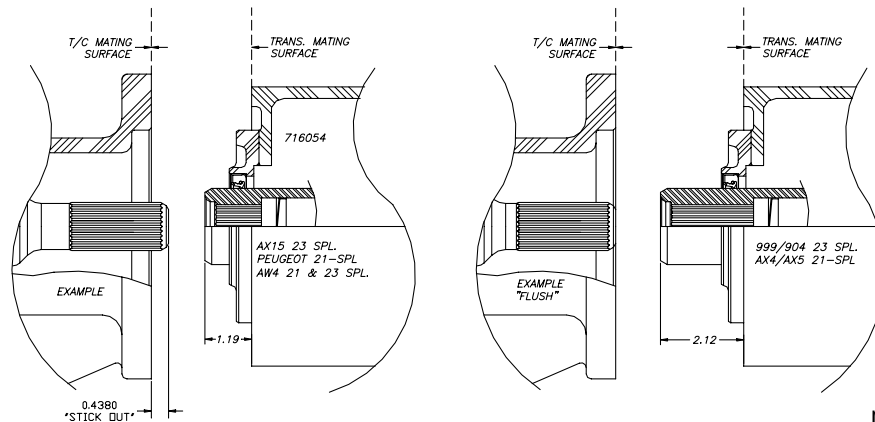
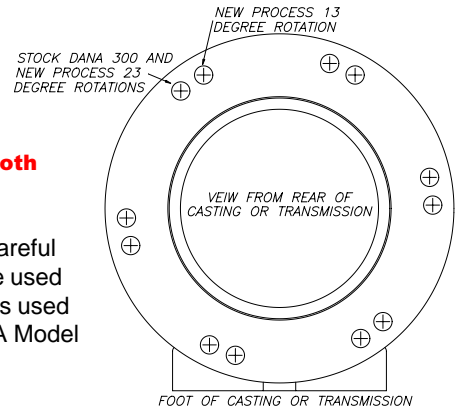
1987-2002 JEEPS (NP200 Series Transfer Cases):

The New Process transfer cases used in late model Jeeps are always a left-hand drop configuration and have the same circular bolt pattern as the Dana 300. One of the differences between the Dana 300 and New Process transfer case is the rotation. The stock rotation on the New Process transfer case depends on the year of the vehicle and the stock transmission used. The rotations are approximately 13 or 23 degrees. Most of our adapter housings will have both sets of six (6) adapter-to-transfer case mounting holes. The illustration (right) shows both rotations.

The input splines on these transfer cases vary from 21 to 23 splines, and the transmission that is mated to these transfer cases had either a long or flush output shaft length. **It is crucial that you identify the correct spline length and tooth count before ordering any adapters.**

There are numerous styles of New Process transfer cases, and you must be very careful in making your identification of such. The first units were the NP207s, and they were used in the early model Cherokee Jeeps. The full size Jeep trucks and Grand Wagoneers used the NP208. Jeep soon added the NP231, which replaced the Model 207 in 1987. A Model NP242 was also added for the full time 4WD models.

SPLINES: With all of the variations in model numbers, the only variation that we see concerning transmission adaption is the size and tooth count of the transfer case input spline. As mentioned in the second paragraph, the New Process transfer case has two basic spline counts and each spline count has two different lengths. Most New Process transfer cases were available with these two different input splines. The input splines of the transfer case can be changed if necessary, but the complete transfer case will need disassembly.



The easiest way that we have found to identify the proper transfer case input is by identifying the stock transmission that Jeep used. The 21 and 23 spline output shafts vary on different transmission models. The AX15 transmission is always 23 spline and protrudes 1/2" beyond the face of the transmission. The Torqueflite is normally a flush 23 spline. The AX4 & AX5 always have 21 splines and is flush with the back of the transmission adapter. The Peugeot transmission is always 21 splines and protrudes 1/2" beyond the back of the transmission adapter housing. We have seen the AW4 automatic transmission in both a long 21 & 23 spline.

On the Transfer Case Selection Chart, we have listed the stock Jeep transmissions used with each transfer case. You can also refer to the Stock Jeep Transmission & Bellhousing section for additional transmission identifications. If you have a 21 spline transfer case, you will notice that some transmission applications are not available. On these applications and on high horsepower applications, we recommend changing your input gear to a 23 spline. This will allow you to use the transmissions listed for the 23 spline applications and will also give you added strength.

- P/N 716053** - New Process T/C 23TH input (used for **flush** output shaft stickout on transmission)
- P/N 716054** - New Process T/C 23TH input (used for **long** output shaft stickout on transmission)

On Jeeps 1995 & newer, New Process used a different planetary assembly. The two part numbers previously listed will not work with these transfer case. To the best of our knowledge, this transfer case can be identified by one of three case model numbers: 52097-894, 52098-361 & 52098-540. If you have one of these model transfer cases and wish to change to a 23 spline input, the Jeep input gear required is 4798113 (**AA Part No. 716095**).

The gears listed above will not work with the NP207 transfer case. If you have a 1987 Jeep equipped with the NP207 21 spline input gear and wish to add some strength to your drivetrain, you can purchase a new 23 spline input gear (**P/N 716096**). This new input gear was designed for transmissions with a flush output shaft stickout. Transmissions having a .500" stickout past the adapter housing will require the input gear length to be modified.



DRIVESHAFT CLEARANCE: When converting to a new transmission, driveshaft modifications are normally necessary. Jeeps with the NP231 now have the advantage of gaining needed length for suspension travel. We offer a new short shaft "Fixed Yoke" kit that will add 4" of rear driveshaft length on a YJ, and up to 6" on a TJ. Refer to **Page 11**.

Regarding front driveshaft clearance, this is not usually a problem. Care should be given on some manual transmissions with reference to the clutch release arm and slave cylinder mounting.

TRANSMISSION/TRANSFER CASE SUPPORT PLATE: All of the adapters we manufacture offer a support pad machined on the casting. In most cases, this pad will not line up with your original skid plate mounting slots. If you are planning to reuse your stock rubber support or one of our new supports, we suggest that you retain your skid plate in the stock location and add two new holes to your skid plate to fasten the rubber support. The numbers below can be used to fasten our adapter to your stock skid plate.

- P/N 716008** - New rubber support (Jeeps 1987-2002) (as pictured)
- P/N 716017** - Aluminum adapter block (used to help retain your stock rubber support)
- P/N 716021** - New rubber support (used in conjunction with 713087 saddle mount & auto transmission)



On some applications vehicles may require a spacer between the adapter crossmember foot and the rubber mount, this is to provide ample clearance between the transmission and the skid pan. We offer a 2" spacer that works well. Since all applications differ, it's hard to recommend when this additional mount is needed.

- P/N 716048** - 2.0" spacer between adapter foot and crossmember

T/C SHIFTERS: There are several configurations used on the New Process transfer cases. We manufacture several brackets to assist you in retaining your stock shifter; however, some applications are not available. You may be required to fabricate your own brackets to work with our adapters. The stock brackets pictured below are the most common brackets we've found on New Process series transfer cases. Some of these brackets were used in specific applications, while others were interchanged. The photos below will help you identify the stock linkage your vehicle may have. This will assist you as to whether or not we offer additional brackets to mount your linkage.



(Brkt. #1)
Jeep# 53004280

This bracket bolts the adapter to the transfer case flange and is the most universal of the 4 brackets. If you are having trouble mounting your transfer case linkage, obtain this bracket to simplify your installation. No additional brackets are normally necessary.



(Brkt. #2)
Jeep# 53005371

This bracket is normally found on Jeep AX15 transmissions.



(Brkt. #3)
Jeep# 53004278

This bracket is normally used with the Peugeot transmission.



(Brkt. #4)

This bracket (used mostly in TJ's and Cherokees) is by far, the hardest linkage to retain when doing any type of conversion. The outside of the bracket is bolted to the frame rail or floorboards, thus causing difficulty adjusting for different transmission lengths.

We offer assistance on mounting some of the above stock transfer case shifters. If we do not offer a bracket for your application, we suggest that you purchase Bracket #1. The part numbers listed below refer to the stock bracket referencing numbers.

AA Part #	Fits AA Casting # or Application	Fits Stock Bracket #
715523	50-6300, 6800, 9100 kit series	Brkt. #2 & 3
715524	Early Cherokee pivot brkt.	Jeep #53000791 (not pictured)
715526	T5 tranny swaps	Brkt. #2 & 3
715531	50-0212, 0204 (NV4500 adapters)	Brkt. #2 & 3
715533	SM465 (short style adapter 5.25")	Brkt. #2 & 3
715538	50-3900 kit series	Brkt. #2 & 3
715542	TJ with 13 degree T/C rotation	Brkt. #4
715545	NV3550 to early NP transfer case	New Brkt.

When replacing the stock transmission on Cherokee vehicles, some fabrication on the transfer case linkage will be required. The transfer case handle is mounted to the body of these vehicles; and this vehicle has a console that fits around the transfer case shifter. The replacement of this linkage would require both floorboard and interior modifications. The type of linkage under the body is shown by Bracket #4. This linkage uses a bellcrank that pivots between a transfer case mounting bracket and a body mount bracket. When the transfer case moves so does the transfer case mounting bracket, which will cause a misalignment of the T/C shifter bellcrank. We recommend modifying the body mount bellcrank support to realign the bellcrank to the transfer case support. The rods on the bellcrank may also need to be lengthened or shortened accordingly.