

## Hurtback

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**Sent:** Friday, May 27, 2005 3:26 PM  
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**Subject:** PART2

### PART - 2

Putting the NP-198AM1 back together.

Once you scrounge the shift fork and the shift plate from a jeep 208 or a ford 208 will work in a pinch.

The fork you need has no plastic pieces to ride in the groove you want a smooth fork or just sand them like I did so it fits in the nylon slot in the tug planetary shell.

First remove the snap ring that holds the planet shell to the shaft. Then it can slide up unlocking it for hi range.





Here are the parts you scrounged up. First notice the new plate on right has the slot for the hi range fork tug plate is left and has no slot. Notice the plastic rub tabs on the ford fork. You need a fork without this feature or weld them up and file slots smooth so they don't eat the nylon shift collar.





Now we need to look at the ford and jeep planet shell they are different as you see the jeep tug has the machined spline ring and ford doesn't. ford left shell. The ford also has the thin 31 spline and the jeep and dodge have a 23 spline that is thicker so a dodge will be a Bolton swap for the 198 except that it is a right drop rather than left.







You cant use the ford shell as it is too long and hits the low range gear in bottom of case so You cant just swap out the hole plant assembly as some have suggested they did...

Install the new shift plate with the extra slot. Install the Torrington. Fit the planetary in place using grease on all the bearings. To hold them in place. Don't forget to grease the seals first to prevent them from melting the first time you spin them. Don't forget the pin after you add the spline collar.





Put the chain gear on the spline color before the snap ring goes on. I did it wrong the first time and forgot the sprocket...and drop it all in the case with the forks engaging the plate like this. Don't forget the Torrington bearings in the case!





Again add the gears and with 2 guys and a monkey put the chain on, and add the torringtons to the case with the thick shim towards case then bearing, and then the thin shim. Don't forget lots of white grease...







Colored link goes out and don't forget the magnet! Add the other case half bearings and bolt together with sealing goop. Then add oil pump and Speedo collars with the white oil pump groove down and push till it gets flush like this.





Add oil pump plate with white grease holding it in the slots and bolt on. Hopefully your output yolk looks like this with NO groove you can feel with your finger nail. If it has a groove don't pound the seal in so far and it will have a new place to ride on or get a speedy sleeve to fit the shaft.







Bolt Speedo in and check for leftover parts and if you got none then you pass t-case overhaul 101!

A word on Torrington bearings if you have them some cases use copper washers like ford... instead of bearings. Bearing are the better of the two that is why it is so easy to find ford junk parts! Chevy and doge use way better parts and even AMC used all bearing t-cases except for the one nylon piece on the shell gear. Anyway back to torringtons look at this pix and tell me what is wrong with this one...





Yes it is missing one roller but that is not it...

It has a wear spot just to the inside of the one missing roller and that is why it is missing the race metal was bent by the last moron that put it together and you see the rub spots across from my thumb on the inside it got so thin it cracked and let the one roller fall out. It would not have lived much longer in the ford it came out of. It also has a wear spot on the other side under my thumb and you can see overheating of the 4 bearing at top of the of the race they are bluish in color because it was run without oil or towed for a long way in neutral. Replace any you see have any signs of pitting or color change or rub spots on the bearings. They must look brand new or they will fail. Also replace the shims as that is the riding surface of the bearings sometimes you can just flip them over and they are new again If they show NO makings from rubbing or fretting.





Almost have enough parts! Notice my Dana 70 front and rear axles. This will get a 440 stage 6 with an auto bolted to a NP205 and Dana 70 front and rear with lockers and 4:88 gears so stay tuned!!!

The small block 360 is out of the ramcharger just before we killed it and it took longer than I thought!!!





