

Installation Requirements

Assembly of this kit is very straightforward. However, overall fabrication, mounting and layout considerations may make a divorced mount conversion a more advanced project.



Clocking Information & Driveshaft Clearance

The Novak adapter maintains factory clocking of your transfer case.

Transfer Case Shifter

This transmission conversion will allow for the retention of the factory Dana 18 twin-stick shifters, Dana 18 single-stick shifter, and many of the Dana 20 shifters. This aspect will depend largely on your installation.

Yoke & Driveshaft Clearance

Use of the factory size driveshaft and yoke is recommended, but there is room for larger units if desired. Our adapter design has maximized clearance between the transmission and yoke. No transmission modifications are required for clearance on this wise.

Driveshafts

Driveshaft length changes will be required, as this geartrain combination is longer than most factory Jeep combinations. However, since the transfer case can be divorced mounted, the driveshaft angle can be shared and mitigated between the jackshaft and the rear driveshaft.

Driveshafts

Driveshaft length changes are often required. Most conversions to these transmissions will require that the rear driveshaft be modified to be shorter and front driveshaft longer.

Some of our customers, fearful at the perceived expense of new or modified driveshafts, attempt to let the existing driveshafts dictate engine, transmission and transfer case location, usually to the detriment of the project. Our recommendation is to always value the correct position of drivetrain components over saving a few dollars which is usually regretted in the long run with compromised positioning. Sometimes the application allows use of the existing shafts without modification. While that is perfectly acceptable, it should not be the first priority. Driveshaft modifications and rebalancing can be affordable when performed by driveline, RV or tractor implement specialists. New driveshafts are an option, but not necessarily a requirement in regards to the actual successful conversion if your existing driveshafts are in good condition. Jeeps that require extensive travel or specialty-built driveshafts have this option available through several fabricators across the nation. These are normally specified after placement of the new transmission and measured at vehicle ride height. As the rear driveline gets shorter, it is often advantageous to us a Double Cardan or “CV style” rear shaft with the correct geometry at the axle to minimize vibrations and possible binding. Novak can also accommodate your needs on this if provided with dimensions for the shafts at a reasonable rate.

Axles

Use of factory axles is completely acceptable with this conversion. Axle upgrades are not necessary, but they may be chosen for reasons external to this transmission upgrade.