Driveline System

The driveline consists of the following:

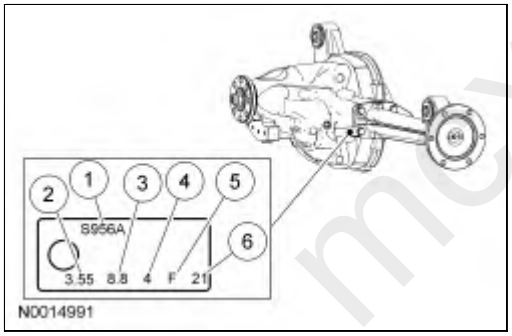
- Front drive axle
- Rear drive axle
- Front axle halfshafts
- Front driveshaft
- Rear driveshaft
- Center support bearings
- CV joints
- U-joints and flanges
- Flex couplers

The source of the drivetrain power is generated by the engine and delivered to the transmission. The driveline transfers the engine torque through the driveshaft to the axle. The rear driveshaft is connected to the output shaft of the transmission or transfer case and to the rear axle. The front driveshaft is connected to the transfer case and to the front axle. Slip yokes are used to allow for any changes to the length of the driveshaft. Changes in length are self-adjusted up in the driveshaft slip mechanism. The engine torque enters the axle through the drive pinion, which rotates the ring gear. The ring gear is mounted to the differential case, which contains the gears that transmit power to the rear axle shafts or front halfshafts. These shafts and halfshafts rotate the drive wheels. The Electronic Locking Differential (ELD) rear axle assembly, except for the differential case and its internal components, is identical to the conventional rear axle. The ELD employs an electronically operated magnetic coil to engage the unit. The Traction-Lok rear axle assembly, except for the differential case and its internal components, is identical to the conventional rear axle. The Traction-Lok employs 2 multi-disc differential clutch packs to control differential action. The mounting distance of the differential side gear is controlled by plates on each side, friction and steel. Also included is a steel selective shim to control the position of the differential side gear, and a spring which provides initial preload to the clutch pack. The steel clutch plates are splined to the axle shafts. The friction plates are contained in the case by matching slots, thus providing continuous engagement of the differential clutch packs. The Torsen® front differential case houses the parallel axis planetary helical side gears to which the axle shafts are splined. The engine angle is built into the engine mounts. If the engine angle is out of specification, the engine mounts must be inspected for damage.

Vehicle Certification (VC) Label Example

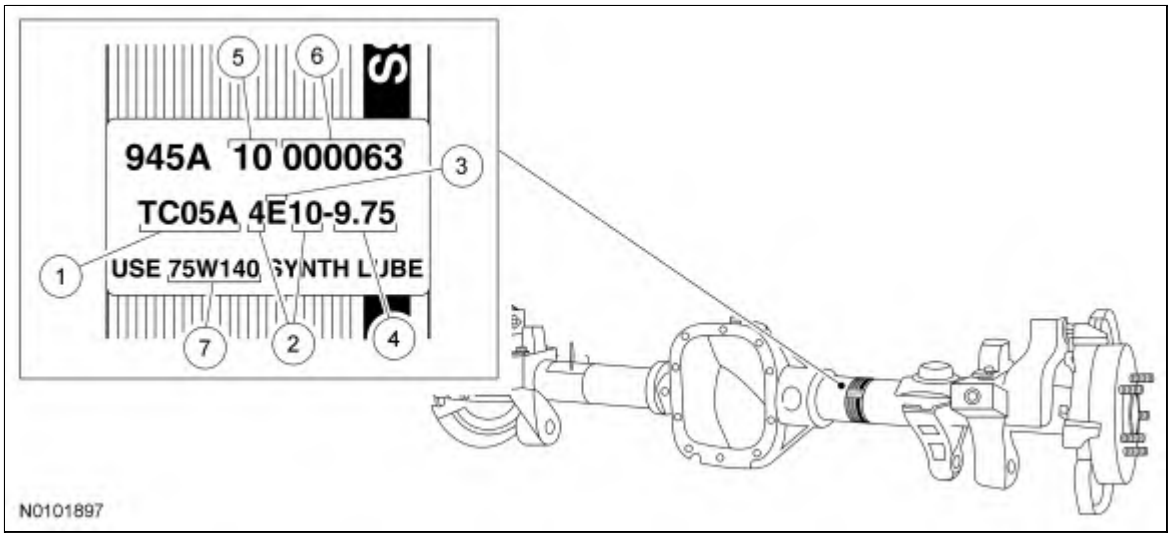
The Vehicle Certification (VC) label is located in the driver door jamb. The first 2 digits of the axle code indicate the rear axle and the third digit refers to the front axle, if equipped. For information on the VC label, refer to Section 100-01 .

Front Axle Identification Tag



Item	Description
1	Plant code
2	Axle ratio
3	Ring gear diameter (inch)
4	Build year
5	Build month
6	Build day

Rear Axle Identification Tag



Item	Description
1	Plant code
2	Axle ratio
3	Differential type C= Open/conventional L= Limited slip E= Electronic Locking Differential (ELD)
4	Ring gear diameter (inch)
5	Build year
6	Axle serial number
7	Lubricant type

NOTE: The axle identification tag is the official service identifier. Do not damage the tag.

The axle identification tag identifies a particular axle design, a specific ratio, and if it is a conventional or limited slip type. In addition, the plant code will not change as long as that particular axle assembly never undergoes an external design change. If, however, an internal design change takes place during the production life of the axle and that internal change affects the interchangeability of the components, a dash and numerical suffix is added to the plant code. This means that, as an assembly, both axles are interchangeable; however, internally they are different. Therefore, each requires different internal components at the time of repair.