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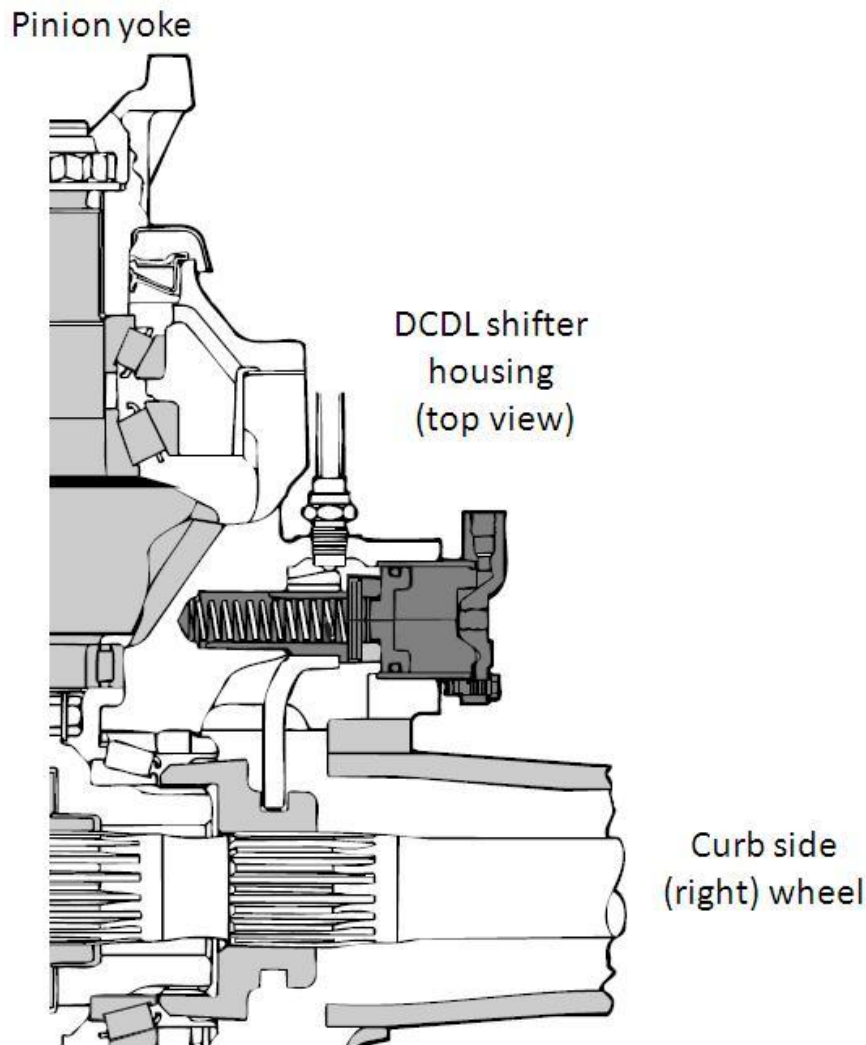
Coding Information

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Title: Meritor drive axles with optional driver controlled differential lock (DCDL)-axle shaft removal and towing precautions

Applies To: All models with Meritor drive axles with DCDL

When transporting a vehicle with the wheels of one or both drive axles on the road AND the axle has a driver controlled differential lock (DCDL), it is possible to damage the axles if the wrong procedure is used before transporting begins. The information below is intended to compliment Meritor publication TP-9579. Meritor recommends that you follow procedure: [TP-9579](#)



You must read and understand Meritor TP-9579 before making any repairs.

Note: When removing an axle shaft from a Meritor axle with the DCDL feature this same procedure must be followed. Read all of these instructions before beginning the repair.

WARNING

To prevent serious eye injury, always wear safe eye protection when you perform vehicle maintenance or service.

WARNING

Engage the parking brake to prevent the vehicle from moving before you begin maintenance or service procedures.
Serious personal injury can result.

CAUTION

When removing the axle shaft on the side of the truck that has the differential lock shifter housing, the DCDL shift collar splines must be engaged with the differential case splines. The collar splines must be completely engaged with the differential case splines. This must be done to prevent the shift collar from dropping out of position when removing the axle shaft. Cage (engage) the shift collar with the differential case before removing the axle shaft or damage to components can result.

NOTE

The differential lock is air engaged (locked) and spring released. If the shifter loses air pressure the

differential becomes disengaged (unlocked)

If there is 70 psi or more air in the truck air system:

The shift collar splines must be engaged with the differential case splines before removing the axle shaft.

1. Engage the DCDL shift collar using the switch on the dash. The key must be on. The lamp on the dash (if equipped) will indicate that the DCDL is LOCKED. If the dash lamp does not illuminate, roll or rock the vehicle slightly until the lamp is ON.
2. Re-apply park brake if vehicle needed to be rolled or rocked to illuminate the DCDL dash lamp.
3. Turn DCDL OFF with dash switch. This allows air to exit the shifter housing. Turn key OFF.
4. Remove the "plug bolt" from the center of the differential lock shifter. Note- if air begins leaking out the DCDL dash switch was not turned off
5. Remove the "manual engaging capscrew" from its storage location in the shifter housing
6. Install the "manual engaging capscrew" into the shifter housing where the "plug bolt" was removed. Tighten until the capscrew head is 1/4" to 1/2" away from the shifter housing (see image below). The DCDL is now locked and the axle shaft can be removed. If towing the vehicle, install the "plug bolt" into the "manual engaging capscrew" storage location so it does not become lost. Follow all the steps in TP-9579
7. Return the DCDL system back to its normal position and test before driving the vehicle.

CAUTION

If when turning the "manual engaging capscrew" you feel a high resistance before the capscrew head is 1/2" from the shifter housing, STOP TURNING THE CAPSCREW. A high resistance against the capscrew indicates that the splines of the shift collar and differential case are not aligned. Damage to the threads of the cylinder and capscrew will result. To align the splines raise only the tire on the side of the DCDL shifter off the ground. Support with jack stands. Slowly rotate the wheel until it stops. The differential lock is now engaged (locked).

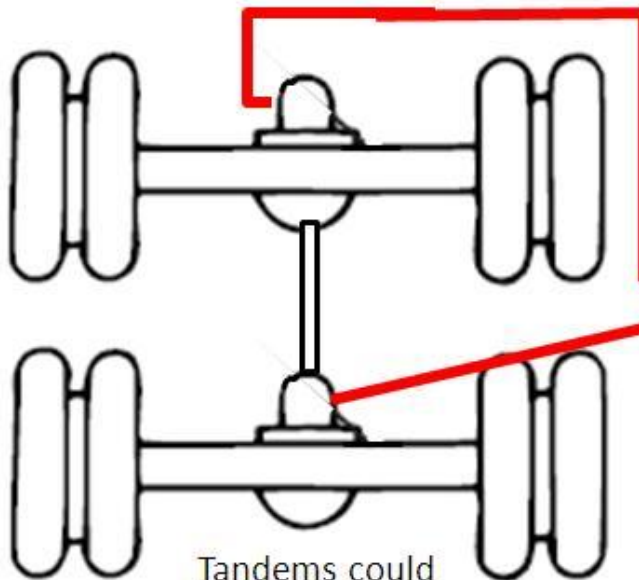
If there is NOT air in the truck air system (or too low of pressure):

The shift collar splines must be engaged with the differential case splines before removing the axle shaft. Engage the DCDL shift collar using the Manual Engaging Method as follows.

1. Remove the "plug bolt" from the center of the differential lock shifter
 2. Remove the "manual engaging capscrew" from its storage location in the shifter housing
 3. Install the "manual engaging capscrew" into the shifter housing where the "plug bolt" was removed. Tighten until the capscrew head is 1/4" to 1/2" away from the shifter housing (see image below). The DCDL is now locked and the axle shaft can be removed. If towing the vehicle, install the "plug bolt" into the "manual engaging capscrew" storage location so it does not become lost. Follow all the steps in TP-9579
- Return the DCDL system back to its normal position and test before driving the vehicle.

CAUTION

If when turning the "manual engaging capscrew" you feel a high resistance before the capscrew head is 1/2" from the shifter housing, STOP TURNING THE CAPSCREW. A high resistance against the capscrew indicates that the splines of the shift collar and differential case are not aligned. Damage to the threads of the cylinder and capscrew will result. To align the splines raise only the tire on the side of the DCDL shifter off the ground. Support with jack stands. Slowly rotate the wheel until it stops. The differential lock is now engaged (locked).

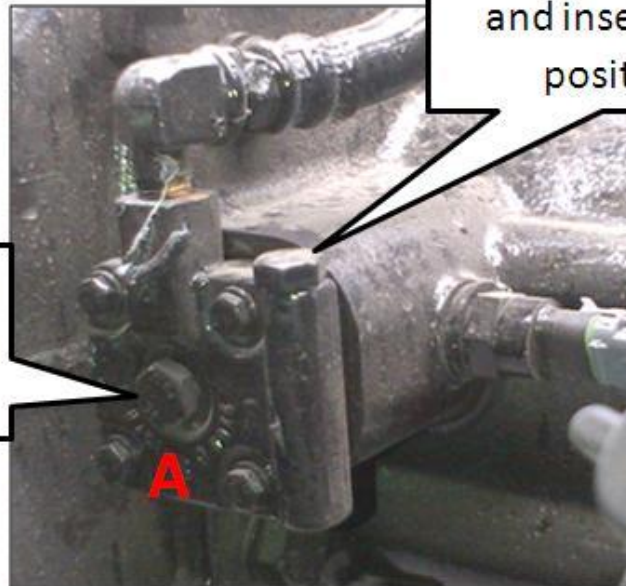


Tandems could
have 1 or 2 DCDL's

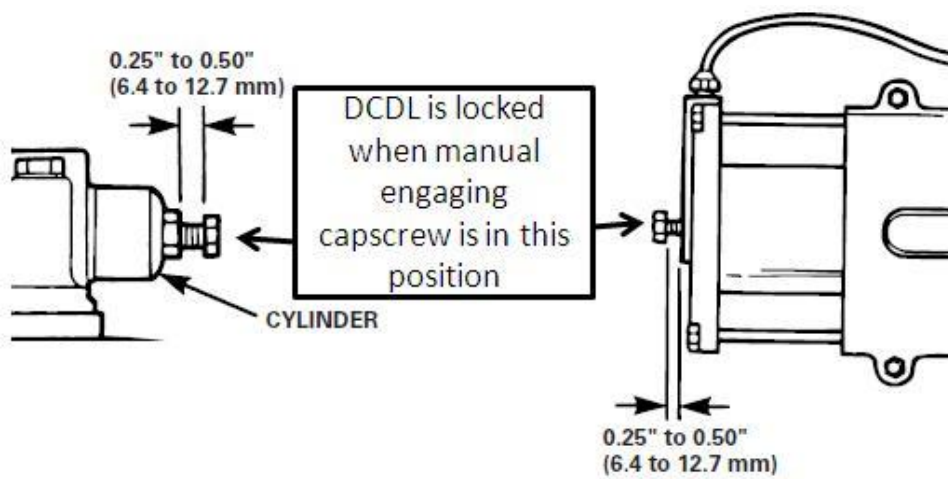
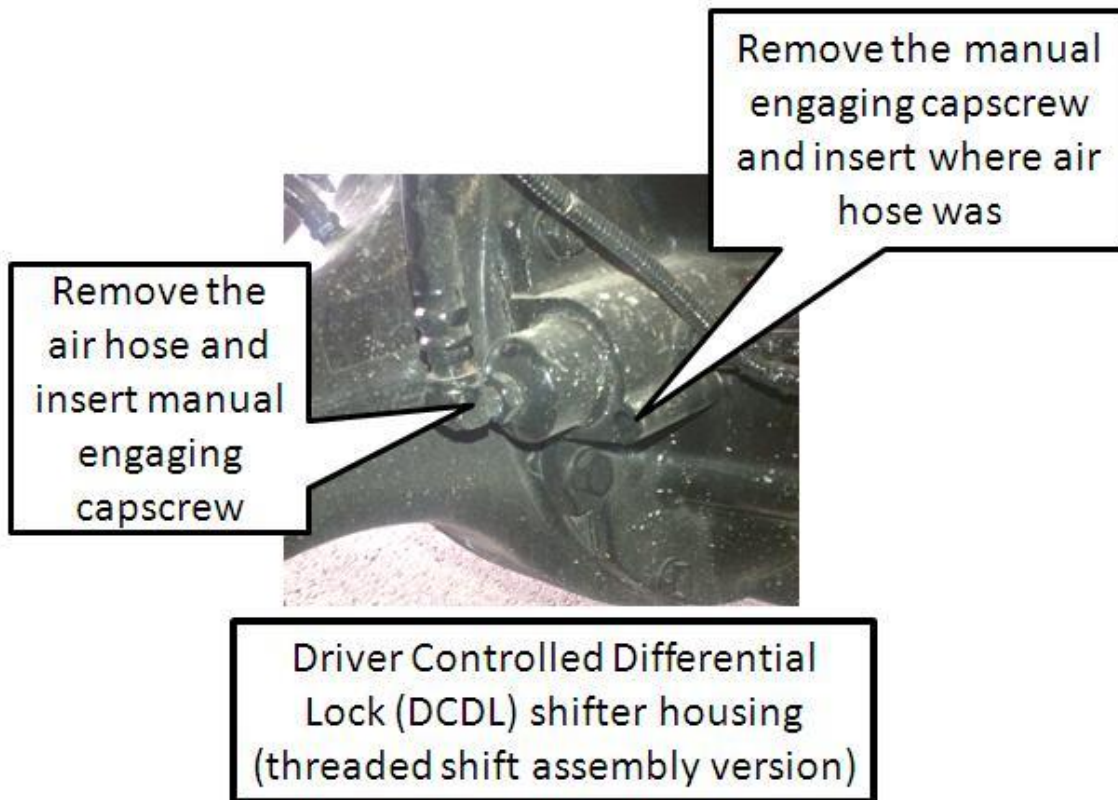


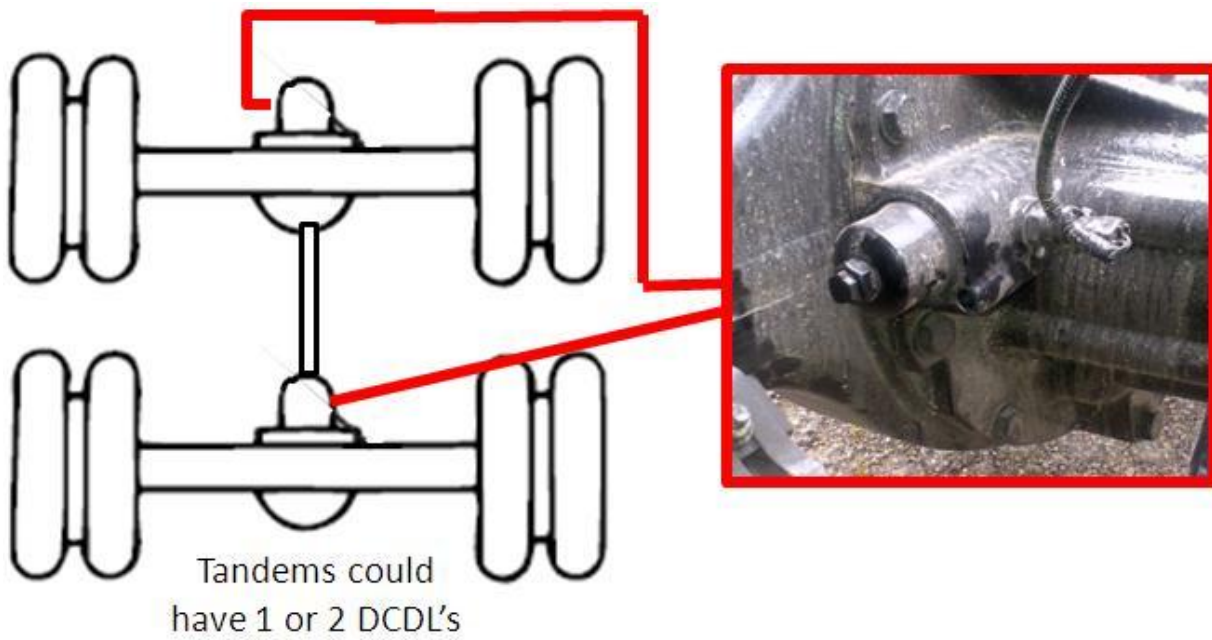
Remove the manual
engaging cap screw
and insert it into
position **A**

Remove the plug
bolt and keep it
for re-insertion



Driver Controlled Differential
Lock (DCDL) shifter housing





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