



# DEALER SERVICE BULLETIN

Bulletin: 95-2-3

Reference: 25

Date: 3-95

## Subject: DUAL GROOVE PULLEY DRIVE SYSTEM (Reduced Alternator Belt Life Or Belt Slippage)

### Models Affected: All 1992 AND 1993 Vehicles

Some of the above listed Hummer vehicles operating with heavy electrical loads may experience alternator belt wear. A check of the belt drive pulleys and belts should be performed to ensure proper mounting and All alternator belts should be Dayco Top Cog brand. Vehicles with an 85 amp alternator should be equipped with belt 05743317. Vehicles with a 124 amp alternator should be equipped with belt 05743318. All belts should be checked for proper tension at regular service intervals using belt tensioner gauge 05737554 or equivalent.

If an inspection reveals the belts and pulleys are properly mounted, but the vehicle is experiencing belt wear, an alternate accessory drive belt path and an alternator dual groove pulley drive system is available to help extend the useful service life of the alternator belt.

The dual groove alternator pulley replaces the single groove pulley currently on the vehicle. An additional belt can be installed for the alternator by changing the belt path of the air conditioning compressor from over the power steering pulley, crankshaft pulley and water pump pulley to a shorter belt driven directly from the power steering pulley. This re-routing of the belt path allows an additional drive belt to be installed over the water pump pulley and crankshaft pulley to the alternator. The re-routing requires a new shorter length Top Cog belt for the air conditioning compressor and a matched set of Top Cog belts of the same length for the alternator.

The following parts are required for installation of the alternate accessory drive belt path and the dual groove pulley drive system:

<u>ITEM</u>	<u>PART NAME</u>	<u>PART NUMBER</u>	<u>QTY</u>
1	Accessory Drive Belt, Top Cog, (124 amp Alternator)*	05743318	2
2	Accessory Drive Belt, Top Cog, (85 amp Alternator)*	05743317	2
3	Dual Groove Pully, Alternator	05744288	1
4	Accessory Drive Belt, Top Cog	05744289	1

\* Belts should be a matched set.

All parts are available through the Dealer Communication System (DCS).

Instructions and illustrations for installing the dual groove pulley and rerouting the accessory drive belt path are attached to this bulletin.

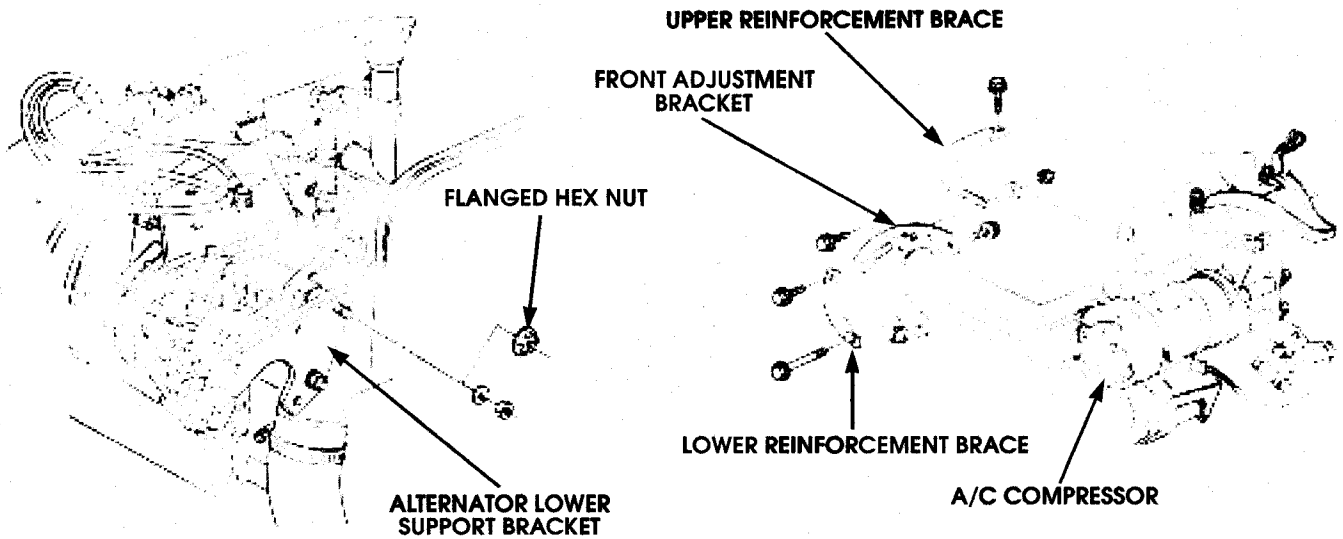
Changing to the dual groove pulley belt system and belt path rerouting requires 0.8 hours (Labor Operation 50203). Use Claim Code "A", Malfunction Code 88.

This procedure should be performed at no cost to the customer.

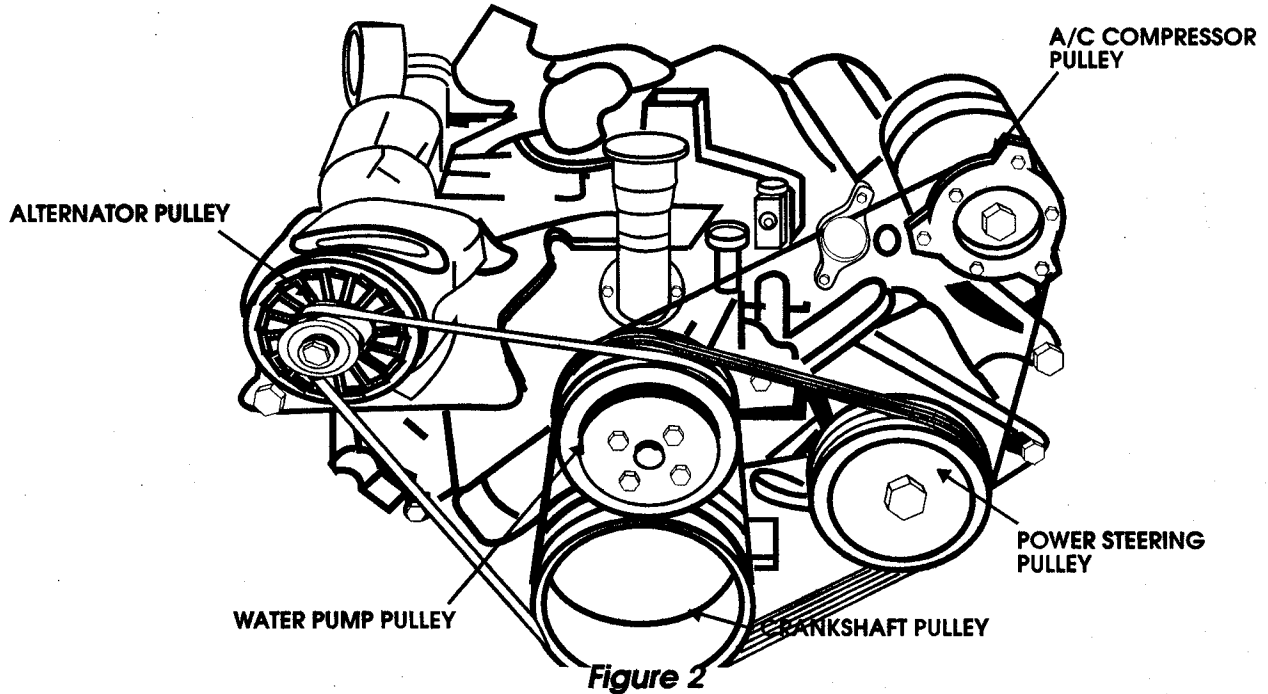


Vehicles with air conditioning should be equipped with air conditioning reinforcement braces providing enhanced mounting support as shown in Service Bulletin 94-29-9. Also, vehicles with or without air conditioning should already be equipped with the alternator lower support bracket hex nuts as shown in Service Bulletin 93-25-1 (Figure 1).

The appropriate supports and brackets should be on the vehicle prior to changing the accessory drive belt path and alternator pulley. If the supports and brackets are not installed, refer to the Dealer Service Bulletins listed for parts and installation instructions.



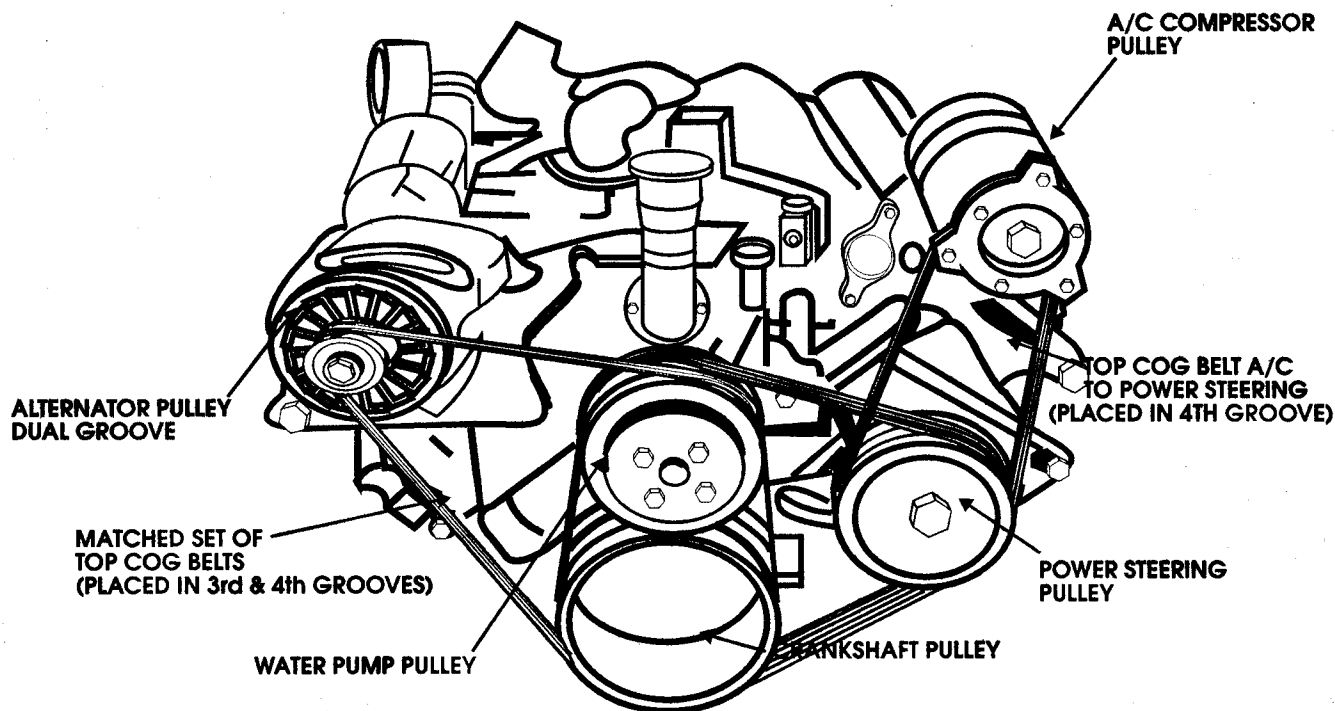
The existing 6.2L accessory belt paths:



## INSTALLATION PROCEDURE

### Dual Belt Drive System:

1. Check the alignment of all belts and mountings ensuring the belt paths over each pulley groove are in line. If they are not in line shimming of the brackets may be required. If the alignment is correct proceed with the installation. If the alignment is not satisfactory repair and realign prior to any further installation.
2. Loosen the alternator adjustment bolt and pivot bolt and remove the alternator belt from the pulley. The belt should be in the third pulley groove out from the engine.
3. Loosen the adjustment bolt on the A/C compressor and remove the drive belt.
4. Remove the drive belts for the A/C and alternator from around the water pump and crankshaft pulleys.
5. Place the new dual groove pulley onto the alternator with the spacer towards the alternator (Figure 3). Secure the nut on the shaft and tighten the nut to 66-80 lb-ft (89-108 N•m).
6. Place the two drive belts over the pulley grooves on the alternator and around the third and fourth grooves on the water pump and crankshaft (Figure 3) and, using a belt tension gauge, tighten to 140-145 lb-ft (189-196 N•m). These settings are for new matched belts.
7. Once the correct belt tension is set tighten the lower pivot bolt and upper adjustment bolt on the alternator bracket to 40-42 lb-ft (54-57 N•m).
8. Place a new Top Cog belt 05744201 over the A/C compressor pulley and around the power steering pulley in the fourth groove out from the engine.
9. Tighten the belt, using a belt tension gauge, to 100-110 lb-ft (136-149 N•m).
10. With the belt tensioned, tighten the adjustment bolt that secures the front adjustment bracket to the lower brace and the compressor bracket to 25-37 lb-ft (34-50 N•m).



**Figure 3**

11. Tighten the upper brace bolt to the front adjustment bracket to 25-37 lb-ft (34-50 N•m).
12. Tighten the rear adjusting bolt to the rear bracket.
13. Start engine and check for the operation of all drive belts.
14. Recheck all belt tensions, belt tensions on the alternator belts should be no less than 80 lb-ft (108 N•m) retention belts if required. Retention new belts to 110-120 lb-ft (149-162 N•m) for alternator belts.

Regular checks and inspection of drive belts should be made at service intervals for proper tension and belt conditions.

Check the tension on drive belts regularly at scheduled service intervals. Belt tensions for the alternator should not be below 80 lb-ft (108 N•m) on a used belt. A used belt is defined as any belt operated for more than 3 minutes. Belts that are found under-tensioned should be inspected for wear and retentioned to 100-110 lb-ft (136-149 N•m). Belt tensions should be read after the vehicle is operated for approximately 5 minutes.