



TECHNICAL SERVICE BULLETIN

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CONDITIONING
NO.: AC92-006
DATE: DEC. 18, 1992
MODEL: 3VZ-E TRUCK/
4-RUNNER

A/C INSTALLATION CHANGE ON 1993 TRUCK/4-RUNNER

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The A/C installation procedure for the 1993 3VZ-E Truck and 4-Runner with ABS has been changed. This change must be placed in your 1993 A/C installation manual (MDC P/N **00400-AC093.**)

The 1993 3VZ-E Truck and 4-Runner are equipped with a timing belt tensioner mounted on the passenger side of the engine at the timing belt cover. This tensioner, on models with ABS, obstructs compressor installation. The revised procedure outlined in this TSB will allow clearance to install the compressor.

Note: There are several steps in the revised procedure that require special caution. Please pay attention to all cautions listed within this procedure.

Insert this revised procedure in your A/C installation manual (MDC P/N 00400-AC093) on page IV-35 for Truck, and on page III-37 for 4-Runner.

- 1) Remove the timing belt tensioner:
 - a) Slowly loosen the two bolts on the tensioner evenly and remove them.

Caution: Do not use an impact wrench on the bolts.

- b) Carefully remove the tensioner and dust boot.

Caution: Never start or turn the engine while the belt tensioner is removed from the vehicle.

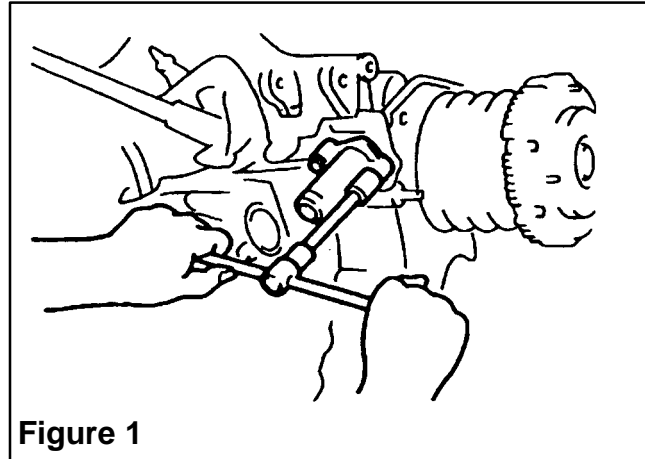


Figure 1

- 2) Install the Compressor:
 - a) Install the compressor to the compressor bracket as outlined in your 1993 A/C installation manual (MDC P/N **00400-AC093**).

- 3) Resetting the timing belt tensioner:
 - a) Align and position the holes of the push rod and housing.
 - b) Using a press or a vise, slowly compress the push rod in the tensioner's housing over a period of approximately 30 seconds or greater. (See Figure 2)

Caution: Protect the top of the push rod from damage during this procedure.

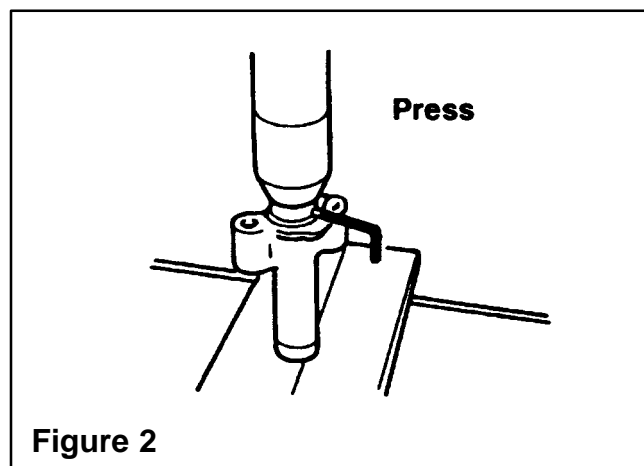


Figure 2

c) After depressing the push rod, recheck the alignment for the holes as shown in Figure 3 by passing a 1.3 - 2.0 mm hexagon wrench through the hole of the housing and push rod.

Caution:

- Use only a hexagon wrench when setting the holes.

When installing the hexagon wrench into the belt tensioner, do not have the hexagon wrench protrude on the other side of the housing after passing through the push rod. (See Figure 4)

- Make sure that the top of the push rod and housing are flush after inserting the hexagon wrench.

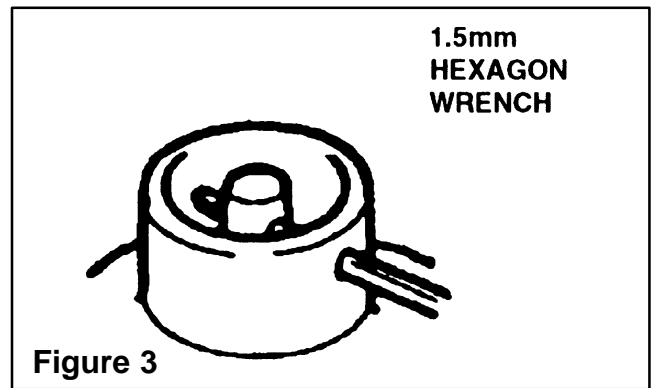


Figure 3

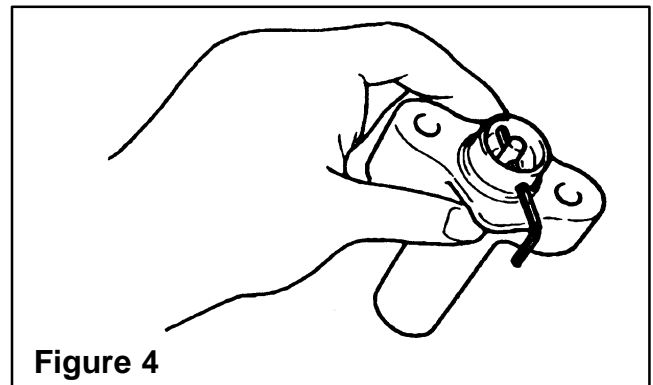


Figure 4

d) Install the dust boot to the timing belt tensioner.

4) Installation of the timing belt tensioner:

a) Temporarily install the belt tensioner.

b) Tighten and torque the 2 mounting bolts to specifications alternating between them.

Torque: 26 N•m (270 kg•cm, 20 ft•lb)

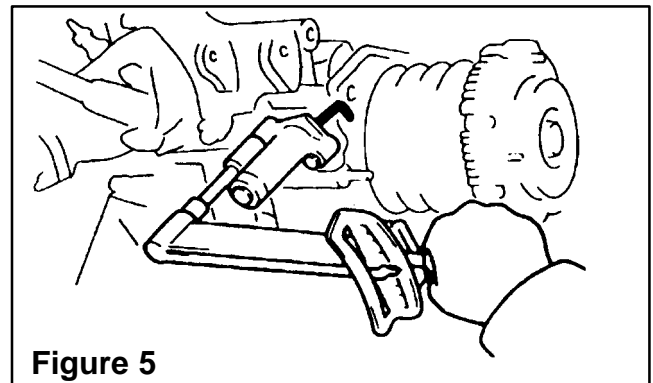


Figure 5

c) Using pliers, carefully pull the hexagon wrench out from the timing belt tensioner.

d) Continue with the remainder of the procedure outlined in your A/C installation manual.
(MDC P/N **00400-AC093**)

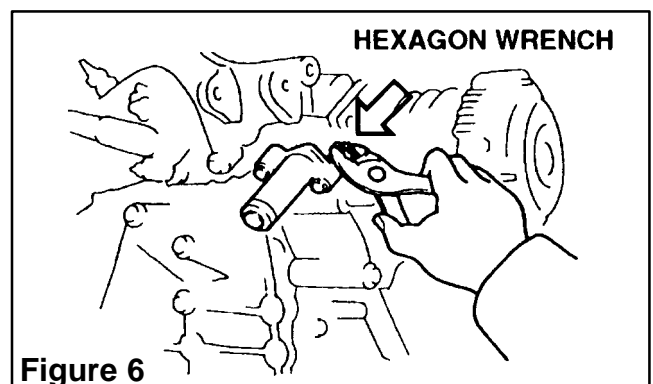


Figure 6