

INSTALLATION NOTES

(AUXILIARY A/C COMPRESSOR MOUNTING BRACKET/HARDWARE)

1. The buyer is responsible for providing trained and experienced installation decision making with technical know-how to apply professional judgment that specifically applies to each individual installation.
2. Be sure to read and understand all available information including but not limited to instructions, warnings, sale terms, and warranties for the vehicle and all system components prior to attempting installation.
3. Disconnect the negative battery cable. Battery is located under the driver's side floorboard. Remove the splash shield from underneath the passenger side of the van. After allowing the engine to cool, drain the engine coolant completely. The best way is to remove one of the lowest heater hoses at the front of the engine.
4. Remove both heater hoses connected to the lower radiator hose. Then, remove the complete lower radiator hose from the engine to the radiator, including the quick-disconnect at the radiator. Remove the OEM serpentine belt.
5. Remove the plug from the transmission bell housing to gain access to the ring gear. Use a pry bar through the hole in the bell housing to keep the engine from turning. Remove the crankshaft pulley bolt. Remove the plastic support clip holding the A/C line to the frame and discard. Install pulley (1) with bolt (2) and washer (3) finger tight. Make certain the pulley pilots into the engine damper. Rotate the pulley counter-clockwise until the pins make contact with the damper spokes. Torque bolt (2) to 220 ft/lbs.
6. Remove the A/C compressor from the engine (NOTE: Do not disconnect the A/C lines from the compressor). Support the compressor with a wire hook or other suitable tool. Remove the A/C compressor bracket from the engine. Install base plate bracket (4) with mounting hardware (5-7) at mounting locations [A-C]. Torque bolts (5-6) to 24 ft/lbs. Torque bolt (7) to 35 ft/lbs.
7. Remove the bolt holding the two steel heater hoses to the oil pan. Install the OEM compressor with OEM bolt (12) at the back of the compressor. Do not tighten completely. Place mounting bracket (8) over the OEM compressor. Install it with mounting hardware (10-11). Bolt (11) must go in the lower, most inward hole to avoid any contact with the steel heater hose. Tighten bolts (10-11) lightly. Then, torque them to 24-28 ft/lbs. Tighten OEM compressor bolt (12).
8. Reinstall the OEM belt to the same routing as OE.
9. Remove the rear nut from the air filter bracket and install brace (13) over the stud. Install adel clamp (14) over the A/C hose. Then, tighten the OEM nut and the clamp bolt (15) and nut (16) securely. This is to prevent the A/C line from impacting the add-on drive pulley and other moving components.
10. Install tensioner assembly (24-25), smooth idler pulley assembly (17-20), and grooved idler pulley assembly (21-23) with bolt (29) onto mounting bracket (8). Torque all bolts to 28 ft/lbs.
11. Install aftermarket A/C compressor with mounting hardware (26-28). Tighten securely.
12. Install belt (47) and route it as shown in the illustration.

INSTALLATION NOTES

(MODIFIED LOWER RADIATOR HOSE LINE ASSEMBLY)

1. Install the radiator quick-disconnect elbow (40) onto the radiator with the hose end facing inward. Install hose (39) marked with "RAD" and clamp (42) onto the coupler. Do not tighten.
2. Install the longer end of hose (37) marked with "ENG" and clamp (42) onto the engine. Do not tighten.
3. With clamps (42) installed over hoses (37-39), install steel pipes (35-36) with elbow (38). The nipple on steel pipe (36) should face inward.
4. Install adel clamp (32) over steel pipe (35). Install hose standoff (31) onto the back of idler bolt (29) with nut (30). Attach adel clamp (32) to hose standoff with bolt (33) and nut (34) loosely.
5. Adjust all hoses and pipes for best fit and clearances to the belt and any hot or moving parts. Tighten all hose clamps, adel clamp, nuts, and bolts securely.

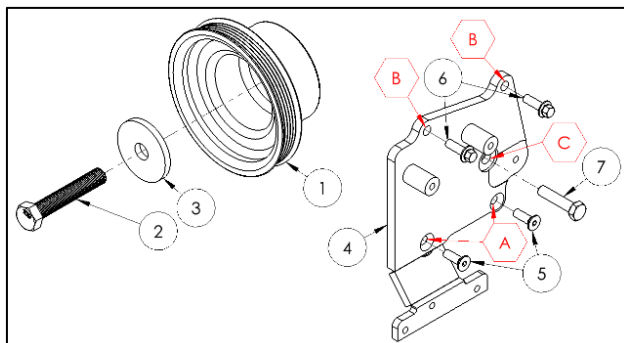
NOTE: It is the installer's responsibility to make certain the hoses have adequate clearance to belts, and any other obstacles that might cause hose failures.

6. Using bolt (46) and spacers (44-45), secure the heater hoses to the oil pan as shown in image C (the 3/16" spacer (44) goes on top).
7. The hose in image D may need to be shortened approximately 1" for better fit and clearance. Use clamp (43) and tighten securely.
8. Install hose (41) with clamps (43) as shown in Image B. Tighten clamps securely.
9. Cut the hose coming from the reservoir for best fit and connect it to pipe (36). Use clamps (43).
10. Replace the engine coolant and reconnect the battery cable.
11. Trim the splash shield if necessary. Reinstall using OEM hardware.

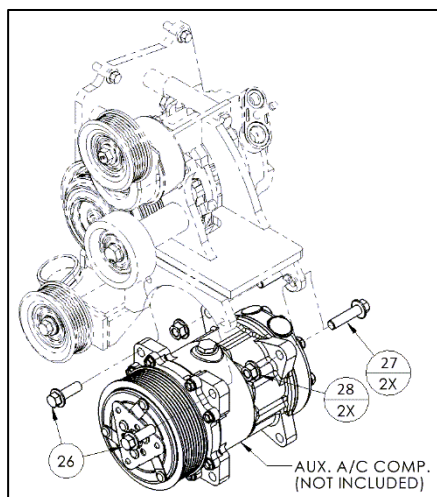
CAUTION: Before starting the engine, check to make certain no wires, hoses, etc. that may have been disturbed during installation do not come in contact with any hot or moving parts. Properly refill any fluids that may have been drained. Check for leaks. Run the engine and check for proper belt tracking and clearance of any hoses, wires, etc. It is the installer's responsibility to correct/adjust any components, if necessary, before vehicle is put into service.

For use w/ TM13, TM15 or TM16 Ear-Mount Compressor
 Requires 6 or 8-Groove, 119mm Diameter Clutch
 128% Overdrive Ratio w/ 119mm Diameter Clutch

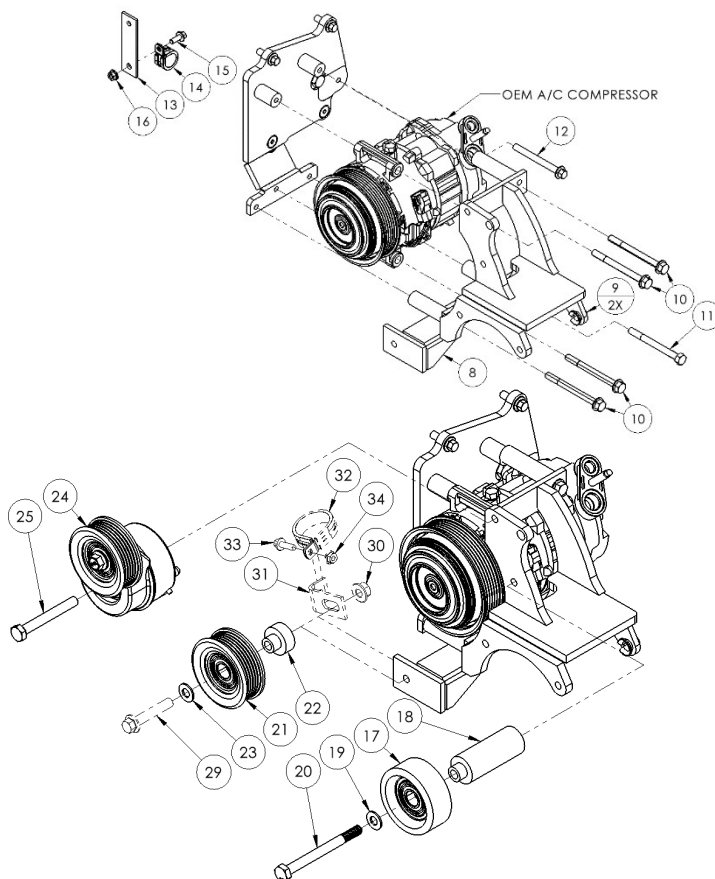
Mounting Hardware



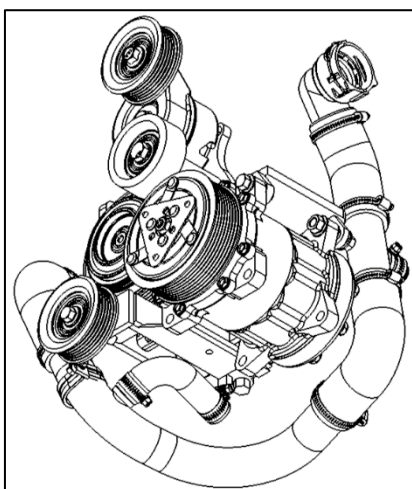
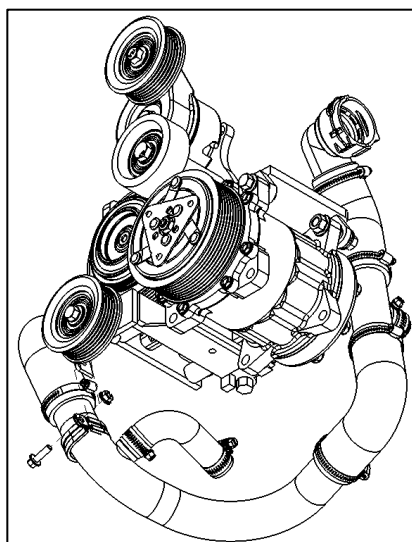
Add-on Pulley Assembly (1-3), Base Plate Bracket Assembly (4-7)



Auxiliary A/C Compressor Mounting Hardware (26-28)

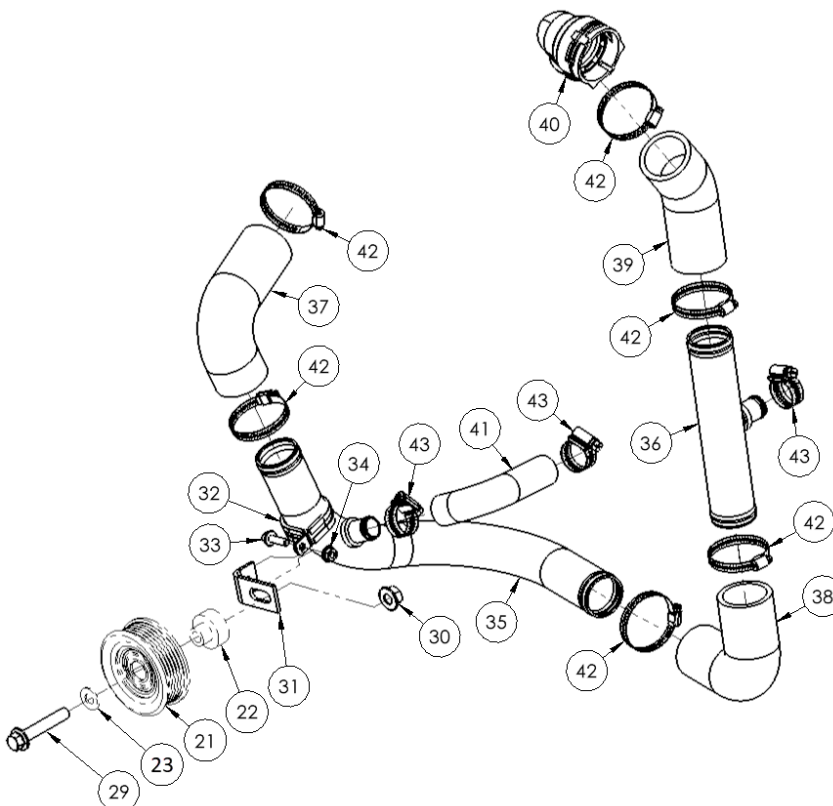


PARTS LIST							
Item	Part Number	Description	Qty.	Item	Part Number	Description	Qty.
Add-on Pulley Assembly				15	1016329	M6-1.0 x 16mm 10.9Gr Hex Flg. Bolt	1
1	VDPC306	Add-on Pulley (6" Diameter)	1	16	1016331	M6-1.0 10.9Gr Hex Flg. Nut	1
2	1022530	M16-1.5 x 90mm 10.9Gr Hex Bolt	1	Smooth Idler Pulley Assembly			
3	1022537	M16 Thick Flat Washer	1	17	89007	Dayco Smooth Idler Pulley	1
Base Plate Bracket				18	VDMB305	Machined Idler Pulley Bushing (1.25" Dia.)	1
4	VRMB301	Base Plate Bracket	1	19	1007644	3/8" Flat Washer	1
Base Plate Bracket Mounting Hardware				20	1005539	M10-1.5 x 110mm 10.9Gr Hex Bolt	1
5	1022556	M8-1.25 x 25mm 10.9Gr Torx FHSCS	2	Grooved Idler Pulley Assembly			
6	1011887	M8-1.25 x 25mm 10.9Gr Hex Flg. Bolt	2	21	89051	Dayco Grooved Idler Pulley	1
7	1006630	M10-1.5 x 45mm 10.9Gr Hex Bolt	1	22	VDMB306	Machined Idler Pulley Bushing (1.25" Dia.)	1
Auxiliary A/C Compressor Bracket				23	1007644	3/8" Flat Washer	1
8	VDMP30SD508-6	Auxiliary A/C Compressor Bracket	1	Tensioner Assembly			
9	1011888A	M14 Slide Bushing (Installed)	2	24	89260-051M	Custom Assembled & Modified Tensioner	1
Auxiliary A/C Compressor Bracket Mounting Hardware				25	1003980	M10-1.5 x 80mm 10.9Gr Hex Bolt	1
10	1011688	M8-1.25 x 90mm 10.9Gr Hex Flg. Bolt	4	Auxiliary A/C Compressor Mounting Hardware			
11	1022549	M8-1.25 x 85mm 10.9Gr Hex Bolt	1	26	1006927	M10-1.5 x 30mm 10.9Gr Hex Flg. Bolt	2
12	N/A	OEM A/C Compressor Bolt	1	27	1006933	M10-1.5 x 40mm 10.9Gr Hex Flg. Bolt	2
A/C Line Hose Clamp Assembly				28	1018204	M10-1.5 10.9Gr Hex Flg. Nut	2
13	VDMB3013	A/C Line Brace	1				
14	1005112	#12 Adel Clamp	1				



Lower Radiator Hose Line Assembly
 (Reference Only)

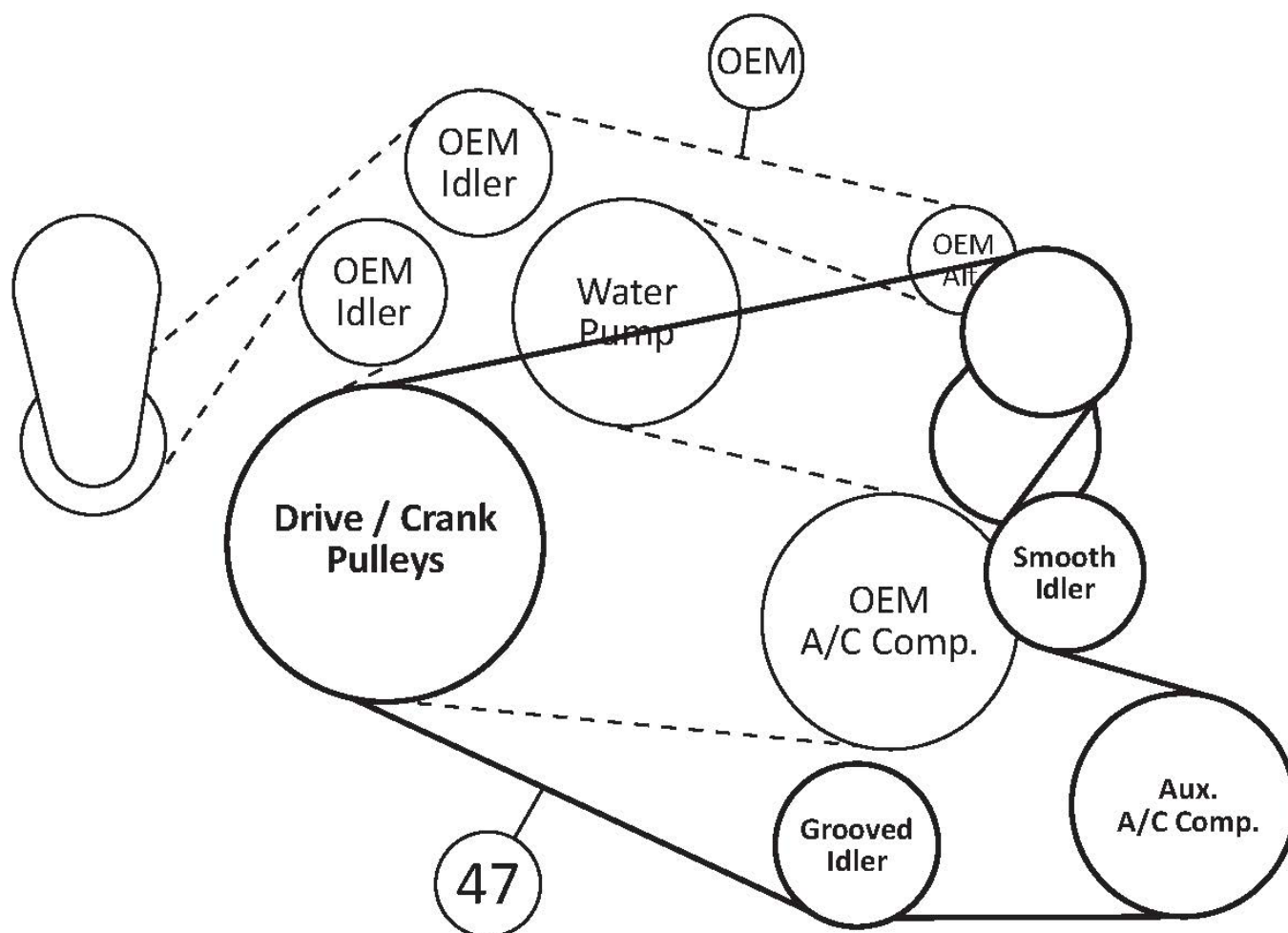
Lower Radiator Hose Line Assembly (VR30HK)



PARTS LIST

Item	Part Number	Description	Qty.	Item	Part Number	Description	Qty.
Radiator Hose Support Assem. (Attaches to Grooved Idler Assem.)				38	VRMB306	1-1/2" 90° Rubber Elbow	1
29	1006934	M10-1.5 x 50mm 10.9Gr Hex Flg. Bolt	1	39	VRMB307	1-1/2" 40° Rubber Elbow (Radiator)	1
30	1018204	M10-1.5 10.9Gr Hex Flg. Nut	1	40	1022510	90° Quick-Disconnect Elbow	1
31	VRMB302	Hose Support Brace	1	41	VRMB308	3/4" 90° Rubber Elbow	1
32	1007886	#24 Adel Clamp	1	42	1016325	#24 Hose Clamp	6
33	1016330	M6-1.0 x 20mm 10.9Gr Hex Flg. Bolt	1	43	1006198	#10 Hose Clamp (Qty. 2 Not Shown)	5
34	1016331	M6-1.0 10.9Gr Hex Flg. Nut	1	Heater Hose Support Brace Hardware (Shown in Image C)			
Radiator Hose Line Assembly				44	SP64-0.1875	13/32" ID, 3/4" OD, 3/16" Length Spacer	1
35	VRMB303	1-1/2" Steel Pipe (Two Bends)	1	45	SP64-0.25	13/32" ID, 3/4" OD, 1/4" Length Spacer	1
36	VRMB304	1-1/2" Steel Pipe (Straight)	1	46	1011887	M8-1.25 x 25mm 10.9Gr Hex Flg. Bolt	1
37	VRMB305	1-1/2" 70° Rubber Elbow (Engine)	1				

Belt Routing



PARTS LIST			
Item	Part Number	Description	Qty.
Auxiliary A/C Compressor Drive Belt (Only One is Supplied)			
47	5060555	Dayco 6-Groove, 55.5" Belt	1
47	K060555	Gates 6-Groove, 55.5" Belt	1
47	555K6	Imperial 6-Groove, 55.5" Belt	1
47	6PK1410	Metric 6-Groove, 1410mm Belt	1

VRK30SD508-6

2022-2026 RAM ProMaster 1500-3500
3.6L V6 Gas, w/ A/C

For use w/ TM13, TM15 or TM16 Ear-Mount Compressor
Requires 6 or 8-Groove, 119mm Diameter Clutch
128% Overdrive Ratio w/ 119mm Diameter Clutch

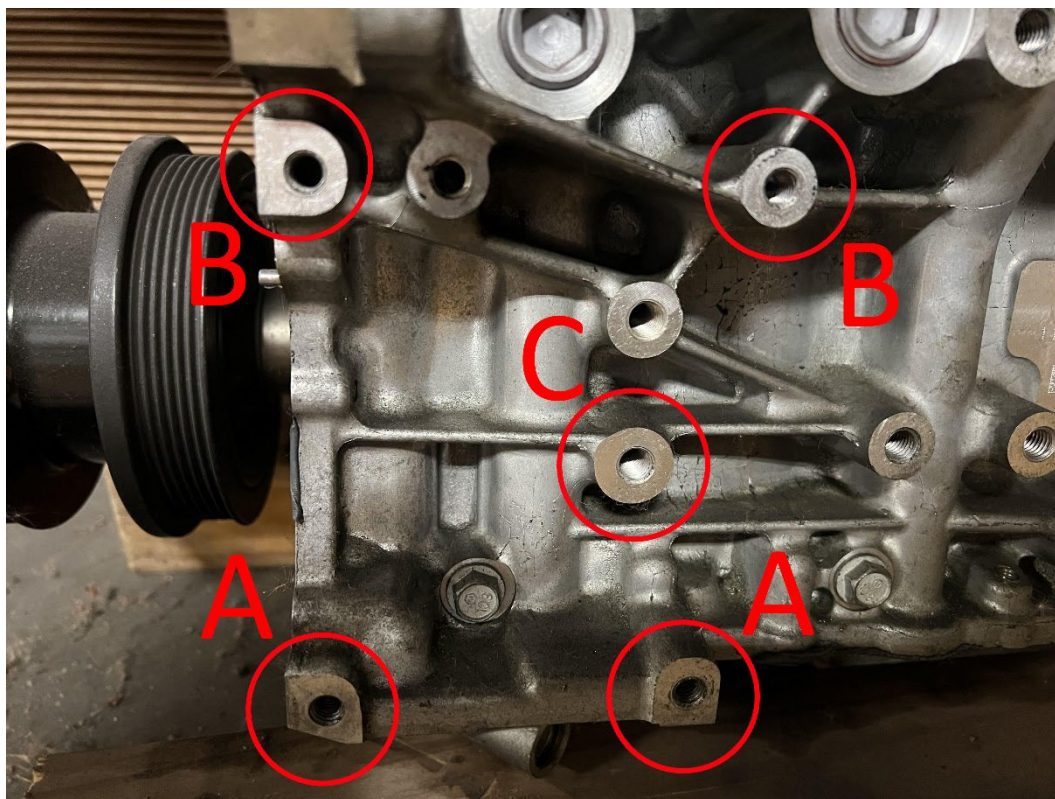


Image A

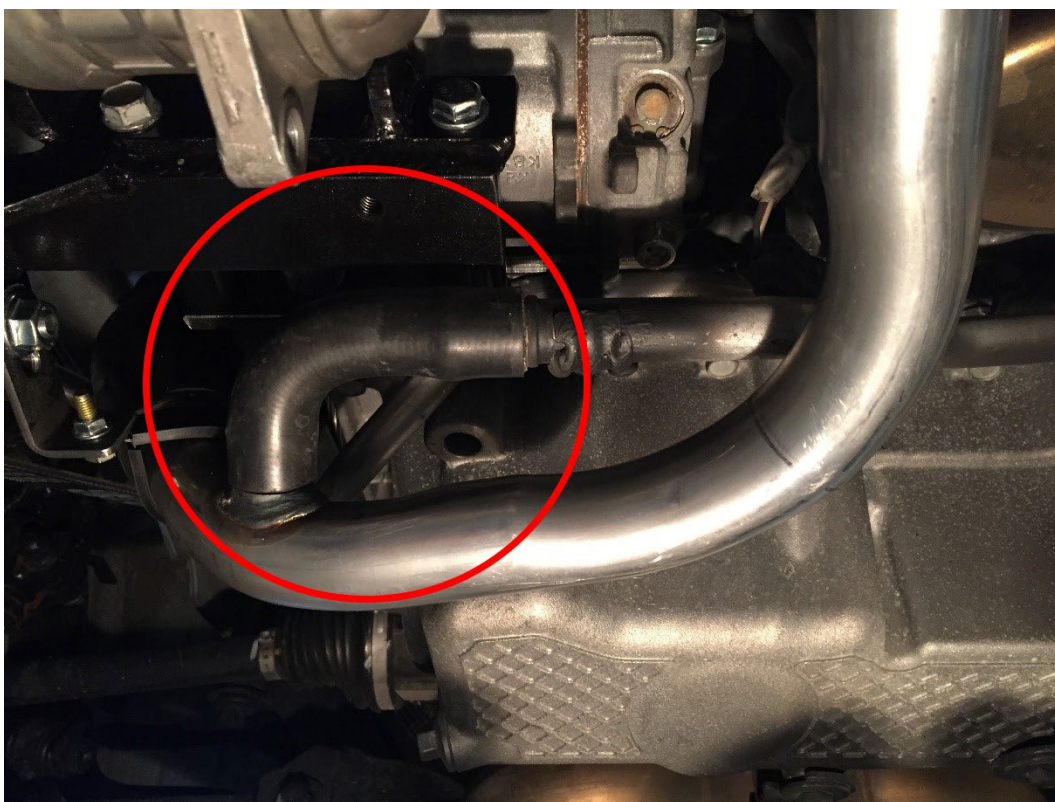


Image B

VRK30SD508-6

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3.6L V6 Gas, w/ A/C

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Image C

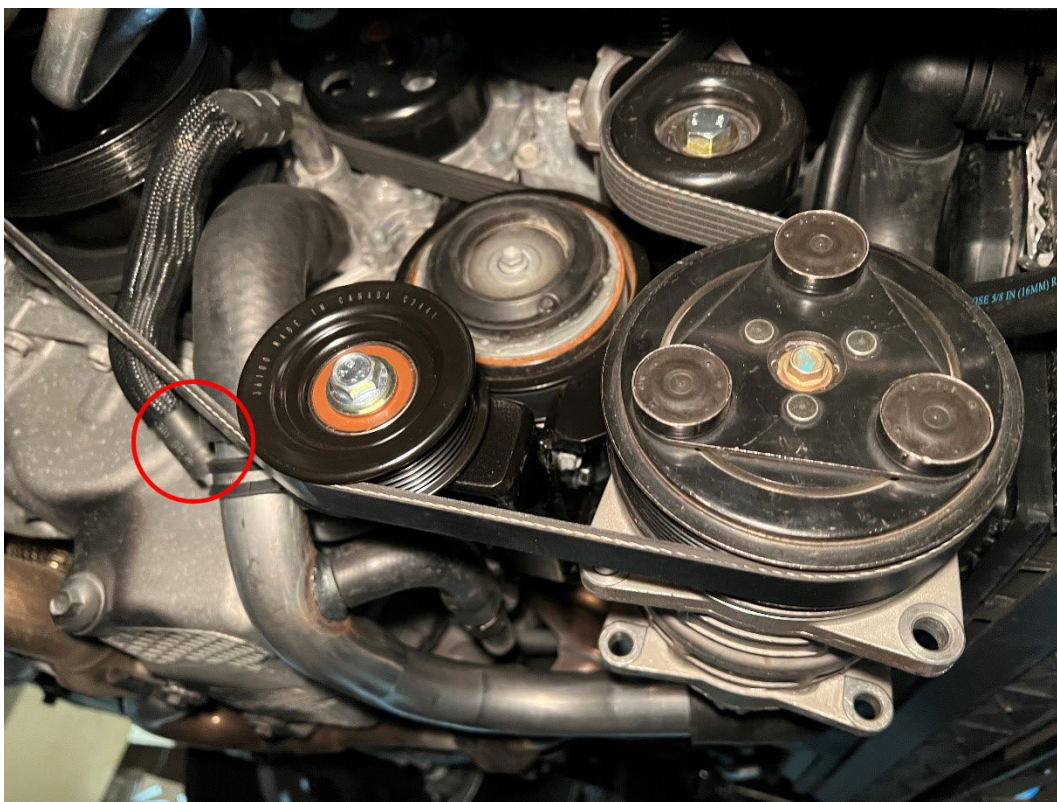


Image D

