






**Part Number: 00602-16491-002**

Section I - Installation Preparation

**Kit Contents**

Item #	Quantity	Description
1	1	Cooler (Radiator)
2	1	Cooler Hose, 3/8" / 10mm Diam.
3	1	Protective Webbing Sleeve
4	2	"A" Brackets
5	2	"B" Brackets, L shaped
6	2	"C" Brackets, V shaped
7	4	Hose Clamps
8	2	90° Hose Fittings
9	6	Bolts, Hex 6mm x 1.0 x 12
10	4	Nylock Nuts, 6mm x 1.0
11	10	Flat Washers, 6mm
12	2	Bolts, HHCS 8mm x 1.25 x 10
13	2	Flat Washers, 8mm
14	4	Lord Mounts
15	4	Tie Wraps

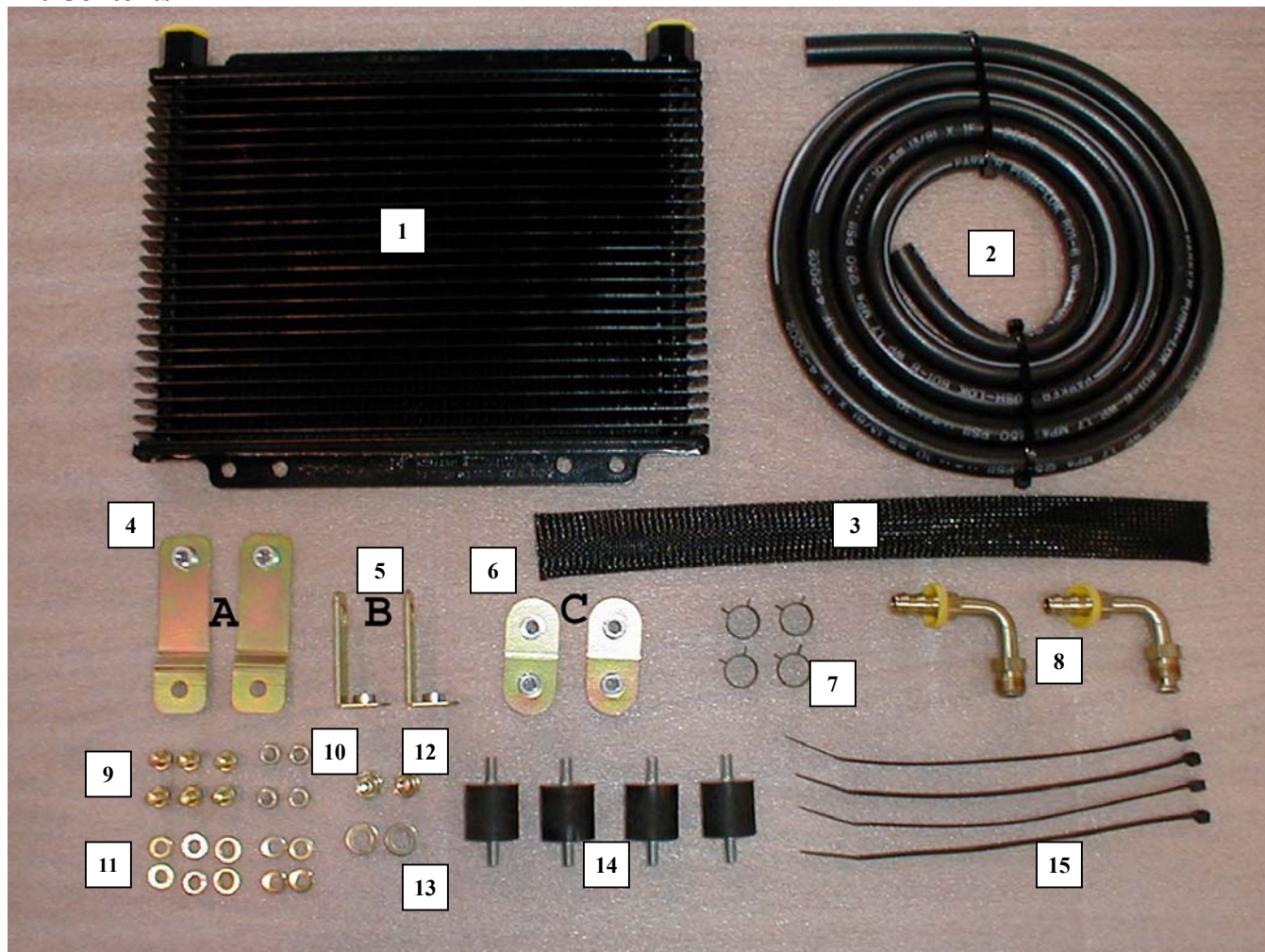
**Legend**

	<b>STOP:</b> Damage to the vehicle may occur. Do not proceed until process has been complied with.
	<b>OPERATOR SAFETY:</b> Use caution to avoid risk of injury
	<b>CRITICAL PROCESS:</b> Proceed with caution to ensure a quality installation. These points will be audited on a completed vehicle installation
	<b>GENERAL PROCESS:</b> This highlights specific processes to ensure a quality installation. These points will be audited during the accessory installation
	<b>TOOLS &amp; EQUIPMENT:</b> This calls out the specific tools and equipment required for this process

**Tools Required**

<b>Safety Tools</b>	
Safety Goggles	Safety Gloves
<b>Special Tools</b>	
Automobile Lift or Automobile Ramps	Hose Plugs or Clamps for Transmission Hose Lines
Trans. Fluid Catch Pan	
<b>Installation Tools</b>	
Drop Light	Grease Pencil
Metric Combo. Wrenches	Ice Pick
Metric Socket Set with Ratchet and Extensions	Hose Cutters
1/2", 5/8", & 7/8" Line Wrenches	1/16" & 1/4" Drill Bits and Electric Drill (2WD only)
Pliers	Channel Locks
Genuine Toyota Service Manual	

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A.

## Section II - Installation Procedure

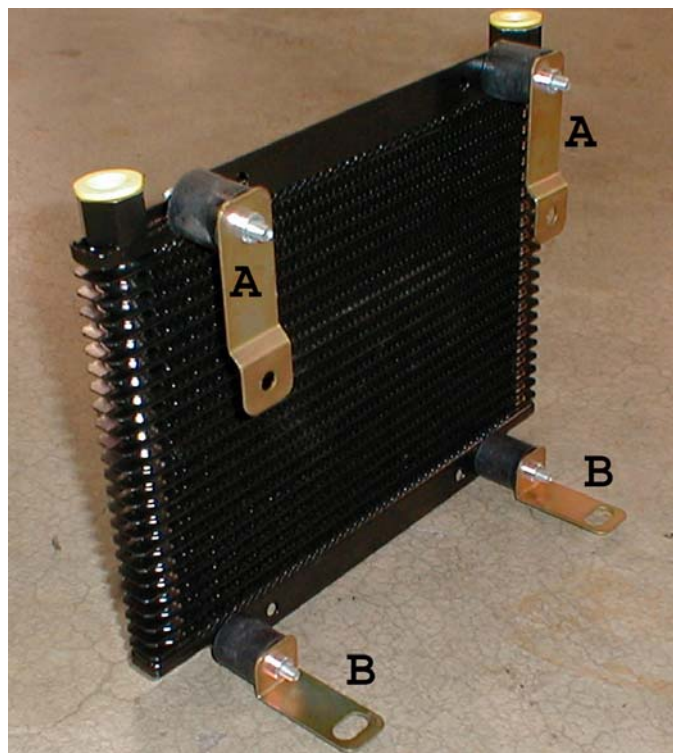
### A. Check the Contents of the Kit



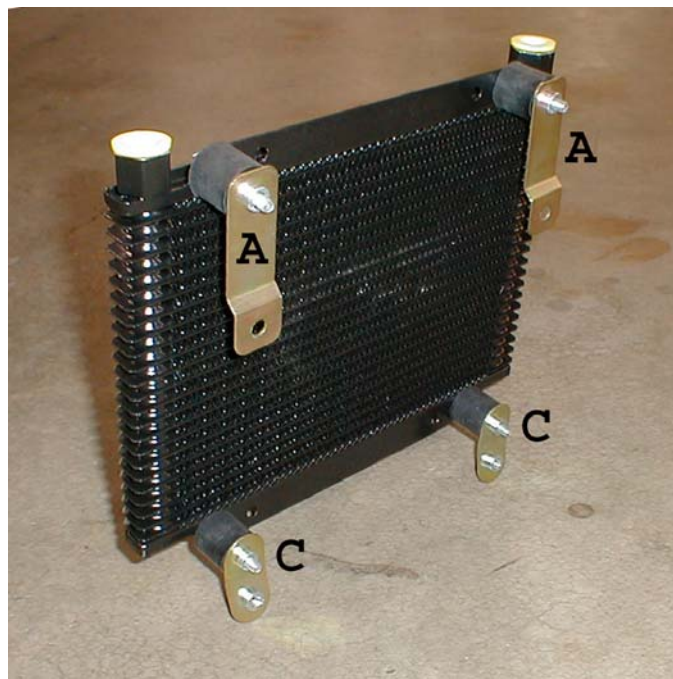
1. Make sure that the kit contains all of the parts listed in the Kit Contents Section of the previous page. Refer to the parts photo above for identification.
2. If the kit is not complete, return to dealer or call TRD at (800) 688-5912.

### B. Mounting the Transmission Cooler

1. Remove the gravel pans (if necessary).
2. **For 4WD and PreRunner vehicles:** Attach the “A” and “B” brackets to the cooler, using the supplied Lord mounts, Nylock nuts and washers (Figure 1). The brackets go into the **outside** holes of the cooler.
3. **For 2WD vehicles:** Attach the “A” and “C” brackets to the cooler, using the supplied Lord mounts, Nylock nuts and washers (Figure 2). These brackets also go into the **outside** holes of the cooler.

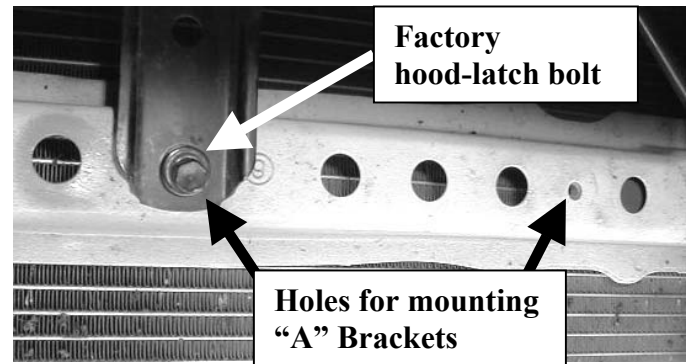


**Figure 1**  
4WD & PreRunner



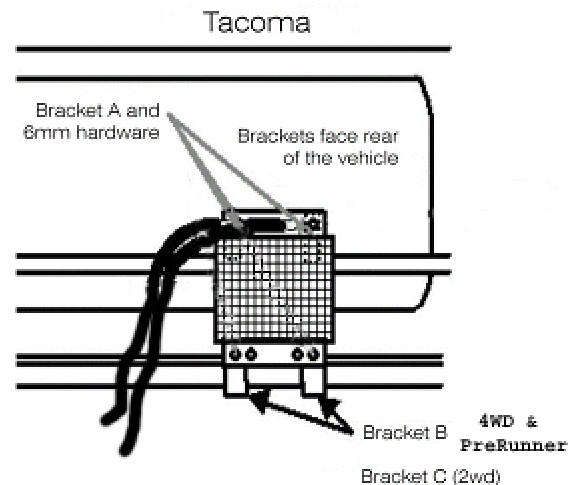
**Figure 2**  
2WD

4. Locate the mounting holes on the vehicle. These are located between the front grille and the radiator of the vehicle (Figure 3). Remove lower factory hood-latch bolt and save for re-assembly. Adjust the TRD brackets so that the holes in the TRD brackets align with the holes on the vehicle. **NOTE:** It may be necessary to loosen up the remaining (upper) factory hood-latch bolts in order to get the factory bracket to align properly for reassembly.



**Figure 3**

5. Using the supplied 6mm Nylock nuts and washers, install the “A” brackets to the radiator core support (Figure 4).

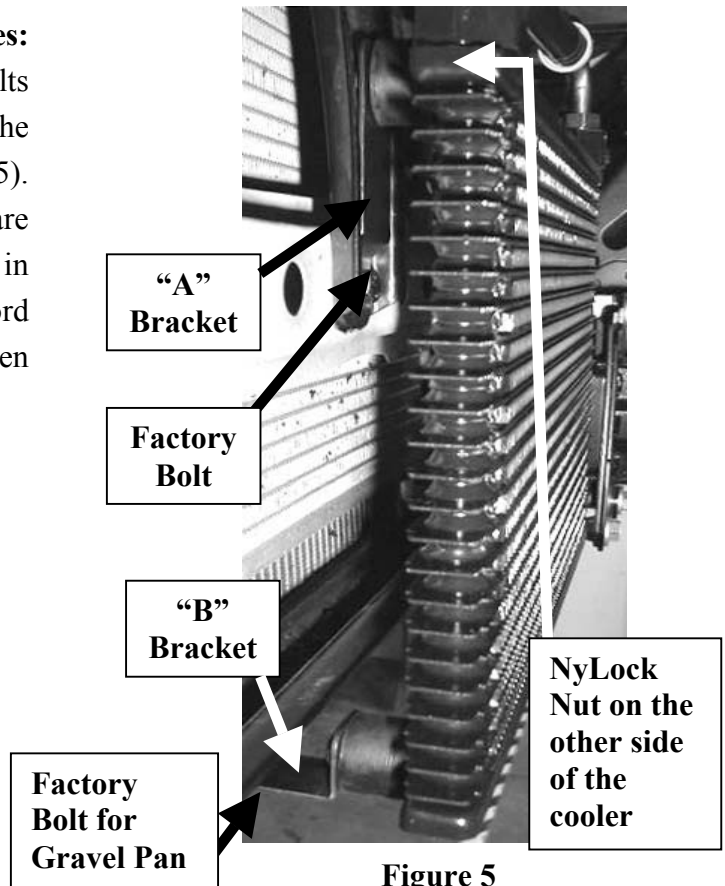


**Figure 4**



6. **For 4WD and PreRunner vehicles:**

**Temporarily** use the factory gravel pan bolts and washers to secure the “B” brackets to the lower portion of the core support (Figure 5). The rubber Lord mounts on the brackets are designed to allow for slight misalignments in the installation, so don’t worry if the Lord mounts become slightly deflected when fastened.



**Figure 5**  
**4WD & PreRunner**

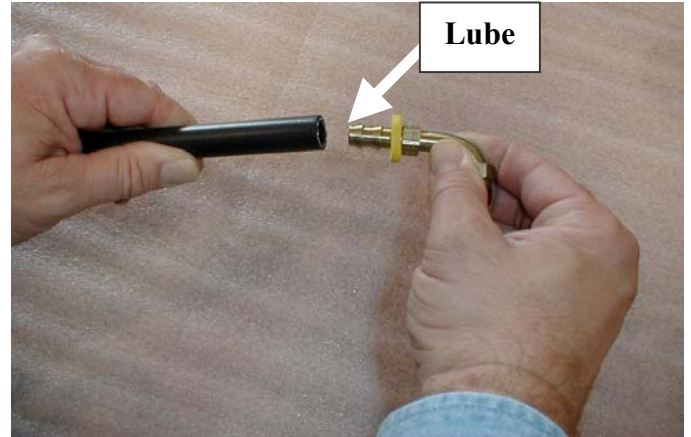
7. **For 2WD vehicles:** Using the “C” Brackets as a guide, mark the plastic cross-member with a grease pencil and/or an ice pick (Figure 6). Drill pilot holes in the plastic cross-member with a 1/16” drill bit. Verify that the holes line up correctly with the “C” brackets and use a 1/4” drill bit to drill holes to their final size. Attach “C” brackets with TRD 6mm hardware. The rubber Lord mounts on the brackets are designed to allow for slight misalignments in the installation, so don’t worry if the Lord mounts become slightly deflected when fastened.



**Figure 6**  
**2WD**

### C. Installing the Cooler Lines

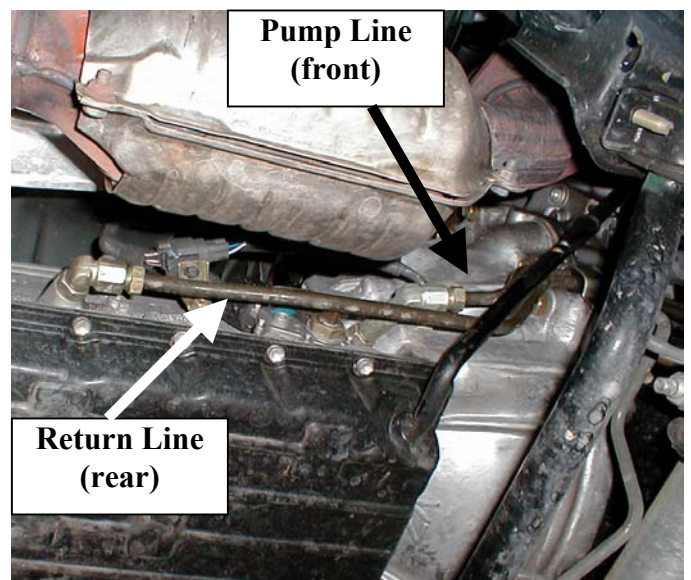
1. Slide the Protective Webbing Sleeve over both ends of the supplied cooler hose and bring it to the center. This will make the hose look like a hang-man's noose, with one end in a loop and the other two ends free. Now slide a TRD-supplied hose clamp onto each of the free ends.
2. Attach both free ends of the supplied cooler hose to the 90° fittings indicated in Figure 7. Use lubricant (ATF) as needed. Make sure that the hose is all the way on and the yellow collars on the 90° fittings are not free to rotate. Do NOT cut the hose yet. Slide the hose clamps into position.
3. Remove the plastic plugs in the fittings of the cooler and install the 90° fittings as shown in Figure 4. Leave the fittings hand-tight until the supplied cooler hoses have been completely installed, as this will allow the ends of the fittings to be easily oriented.
4. Route the hoses down from the TRD cooler as shown in Figure 8.
5. Inspect the factory transmission lines at the transmission (Figure 9). The forward cooler line carries hot fluid from the transmission pump to the factory radiator. Make sure you do NOT disconnect this line. TO FIND OUT HOW THE LINES ARE CONNECTED ON THE VEHICLE YOU ARE WORKING ON, TRACE THE LINES FROM THE TRANSMISSION to the factory radiator. The TRD Transmission Cooler is to be connected so that the transmission fluid passes through the factory radiator first, and then through the TRD cooler second.



**Figure 7**



**Figure 8**



**Figure 9**

6. Locate (and label as needed) where the transmission fluid lines enter into the stock radiator. See Figure 10.
7. Determine the proper length to cut the TRD-supplied cooler hose by holding the loop up next to the factory outlet hose. See Figure 10. Mark the TRD-supplied cooler hose with a grease pencil. Recheck that the length is sufficient and make the cut. Slide the two remaining TRD-supplied hose clamps onto the ends of each hose with enough room to install the hose ends onto the fittings.
8. Clamp and remove the stock flexible return line from the factory radiator outlet. Pre-clamping the hose helps to prevent transmission fluid from leaking out of the system. NOTE: Fluid WILL drain from the radiator so a Transmission Fluid Catch Pan is advised.
9. Quickly install the TRD hose onto the factory radiator outlet. Slide the appropriate hose clamp into position. NOTE: Because of the differences in hose size, you cannot re-use the factory hose clamps.
10. Route the remaining free end of the TRD hose to the factory transmission hard line, i.e. the factory return line. See Figure 9. If needed, cut the supplied hose to the appropriate length.
11. Completely remove the factory return hose. NOTE: Fluid WILL drain from the transmission so a Transmission Fluid Catch Pan is advised.
12. Quickly install the remaining TRD hose onto the “hard” transmission return line. Slide the TRD-supplied hose clamp into position. NOTE: Because of the differences in hose size, you cannot re-use the factory hose clamps.



**Figure 10**

13. When all the brackets have been installed, tighten all fasteners securely. Make sure that that cooler has been mounted rigidly.
14. Position and tighten hose fittings on the TRD Transmission cooler/radiator.
15. Secure the hoses to the vehicle with tie wraps as necessary.
16. Start the vehicle. Inspect for leaks at the hose connections.
17. Check and add transmission fluid as necessary.
18. Reinstall gravel pans if equipped.
19. NOTE: These kits are used for multiple vehicle platforms and therefore not all hardware is used on all applications.