ARC ONE INDUSTRIES INSTALLATION MANUAL

5TH GEN 4RUNNER

SHEET 2

WHAT'S IN THE BOX? REQUIRED TOOLS

SHEET 3

DISCLAIMER SAFETY CHECKLIST

SHEETS 4-7

INSTALLATION GUIDE

SHEET 8

LIMITED WARRANTY CONTACT INFO

POWER STEERING COOLER KIT (KDSS & NON-KDSS)

SKU# T4R52-10

Our Power Steering Cooler Kit represents the most well-designed aftermarket product of this nature for your fifth gen Toyota 4Runner. Each one is proudly designed and built in British Columbia, Canada. The design process starts with a combination of advanced 3D scanning and hand measuring to ensure dimensional accuracy. Using 3D scans of the vehicle allows us to create not only a well-fitting product, but also one that works with a variety of aftermarket combinations. Our goal with this product was to create what should have come on your 4Runner from factory. This kit has two main purposes. Firstly, it tucks in the power steering cooler hardlines away from the outside of the frame. This improves both protection and aesthetics when running an aftermarket front bumper like out Phantom One Series (T4R52-01). Secondly, it improves cooling with a 14-1/2" aluminum finned cooler. This is especially important when running aftermarket accessories which may limit airflow. We look forward to your continuing to put our product to the test and cannot wait to see photos from all your adventures. #ARCOneIndustries



Sheet 1 of 8 Revision [P2]

DISCLAIMER



Your safety and the safety of others is very important

- All ARC One Industries products are intended for OFF ROAD USE ONLY. All liability for installation and use on highways rests with the owner.
- This product may not be legal for use on roads in the state of California. Check with all provincial and state regulations prior to installation.
- Mounting fasteners require re-torqueing after the first 100 miles (160km) and periodically afterwards. Failure to do so may result in damage, injury, or death.
- All products must be installed by a professional installer. ARC One Industries assumes no fault or liability for installation failure when installed by anyone other than ARC One Industries.
- 5.0 Design Company (ARC One Industries) does not advise tying into your vehicles
 electrical system beyond wiring harness relocation/reuse. Electrical modification
 requires professional training and certification. Improper electrical modification my
 result in damage, injury, or death.
- 5.0 Design Company (ARC One Industries) recommends upgrading stock suspension whenever gross vehicle weight and distribution is altered. Failure to do so may result in pre-mature wear of suspension components.
- In order to help you make informed decisions about safety, we have provided installation instructions and other information. CARELESS INSTALLATION AND OPERATION CAN RESULT IN EQUIPMENT DAMAGE, SERIOUS INJURY, OR DEATH.

SAFETY CHECKLIST

Failure to observe these instructions could lead to severe injury or death

Always remove jewelry and wear eye protection
Always use extreme caution when jacking up a vehicle. Set the emergency brake and use tire chalks. Locate and use the vehicle manufacturers designated lifting points. Use jack stands
Always use appropriate and adequate care in lifting components into place
Always ensure components will remain secure during installation and operation Always wear safety glasses when installing this kit. Drilling, grinding, and cutting operations will cause flying chips and sparks. Flying chips and sparks can cause
serious eye injury
Always use extreme caution when drilling on a vehicle. Thoroughly inspect the area to be drilled (on both sides of the material) prior to drilling. Relocate any objects that may be damaged
Always use extreme caution when cutting and trimming during fitting
Always tighten all nuts and bolts securely as per installation instructions
Always route electrical cables carefully. Avoid moving parts, components that may
become hot, and rough or sharp edges
Always insulate and protect all exposed wiring and electrical terminals
Always perform regular inspections and maintenance on mounts and related
hardware



Sheet 2 of 8 Revision [P2]



WHAT'S IN THE BOX?

Take inventory on all supplied parts prior to installation. Call our customer service line if any parts are damaged or missing. The following parts are required for installation:

- 1. Power Steering Cooler (Qty 1)
- 2. Hardlines (Set of 2)
- 3. Power Steering Cooler Mounting Plate (Qty 1)
- 4. 3/8" Rubber Hose (0.5m)
- 5. Stainless Gear Clamp (Qty 2)
- 6. #6 Female Swivel JIC x Hose Barb (Qty 2)
- 7. 3/4NPT x #6 Male JIC Adaptor (Qty 2)
- 8. 1/4x3/4UNC Hex Head Cap Screw (Qty 4)
- 9. 1/4" Flat Washer (Qty 6)
- 10. 1/4UNC Nylock (Qty 4)

RECCOMENDED TOOLS:

The following tools are recommended for installation:

- 1. 3/8" Ratchet
- 2. 10mm socket
- 3. 11mm Socket
- 4. 12mm Socket
- 5. 5/16" Socket
- 6. 11mm Wrench
- 7. Needle Nose Pliers
- 8. Oil Drain Pan

- 9. Sharpie
- 10. Drill
- 11. 5/16" Drill Bit
- 12. Utility Knife
- 13. Oil Rate Teflon Tape
- 14. 8" Zip Ties
- 15. 1L Dexron III Automatic Transmission Fluid



Sheet 3 of 8 Revision [P2]

INSTALLATION GUIDE

STEP 1:

- Remove the front bumper & associated brackets/hardware*
- Using a 10mm socket, remove the two bolts from the cooler brackets on the front crossmember
- Using a 12mm socket, remove the two bolts from the cooler brackets on driver's side frame rail
- Repeat process on opposing side



*Contact us for additional instructions if required for removing the stock front bumper



STEP 2:

- Using Needle Nose Pliers, remove the clamps securing the hose to the driver's side power steering cooler hardline
- Drain and remove the driver's side power steering cooler hardline
- Repeat process on opposing side

ASC-1

Sheet 4 of 8 Revision [P2]



STEP 3:

- Install the passenger's side hardline
- Use zip ties to fasten it to the frame rail

STEP 4:

- Install the driver's side hardline*
- Use zip ties to fasten it to the frame rail



*Installation of this hardline can be tricky with the KDSS models. Patience while passing the hardline through the rad support will help a lot at this step



STEP 5:

- Loosely assembly the Cooler bracket to the cooler using the 1/4" nuts, bolts & washers
- Center the bracket on the rad support cross bar, and mark the bracket hole locations with a sharpie

NSC-1

Sheet 5 of 8 Revision [P2]



STEP 6:

- Place a piece of scrap metal behind the rad support cross bar to protect the AC condenser while drilling
- Drill two 5/16" holes as marked

STEP 7:

- Using a crescent wrench, assemble the provided NPT x JIC Adaptor to the cooler using Oil Rated Teflon Tape
- Using a crescent wrench, assemble the #6 Female Swivel JIC x Hose Barb to the cooler
- Use an 11mm socket and wrench to fasten the cooler assembly to the rad support cross bar





STEP 8:

- Hold the rubber hose up to the connections and cut to suit. Make sure there is at least 1" (25mm) of overlap on the hardline
- Repeat process on opposing side

ASC-1

Sheet 6 of 8 Revision [P2]



STEP 9:

- Slide the gear clamp over the hardline on both sides
- Install both hoses ensuring that they are properly seated to the barb and hardlines*
- Using a 5/16" socket, tighten both gear clamps over the end of the hardlines

*Hose installation can be made easier by using a heat gun to soften the rubber

STEP 10:

- Refill the power steering reservoir with Dexron III ATF as per your owner's manual
- Turn on the vehicle, and alternate turning the steering wheel from lock to lock to release air from the system
- Continue bleeding the system while checking and adding fluid to the reservoir. Some squealing and foaming of the reservoir are to be expected until all the air has been bled from the system*





STEP 11:

 Reinstall the front bumper and enjoy your improved power steering cooling from ARC One Industries!



Sheet 7 of 8 Revision [P2]

^{*}Continue to monitor the system for fluid level and leaks over the next 100km

5.0 DESIGN COMPANY (ARC ONE INDUSTRIES) LIMITED WARRANTY:

5.0 Design Company (Operating as ARC One Industries) warrants all parts of its manufacture, furnished under this agreement, to be free from defects in workmanship and material for a period of one (1) year from the date of purchase. This limited warranty covers the cost of the product.

This limited warranty does not cover:

- 1. Installation
- 2. Labor
- 3. Freight
- 4. Finish
- 5. Normal wear and tear
- 6. Abuse
- 7. Damage caused by misuse
- 8. Damage caused by collision
- Electrical components/parts after 60 days from purchase*

This limited warranty is conditioned upon:

- a) 5.0 Design Company being notified by Purchaser within one month after discovery of any defects,
- b) The return of the defective product(s) to 5.0

 Design Company at Purchaser's expense within the limited warranty period; and
- c) 5.0 Design Company's examination of such product(s) and its satisfaction that such defects were not caused by negligence, misuse, improper maintenance, accident, or unauthorized repair or alteration.

This limited warranty does not cover any consequential damages, including but not limited to the expense of being without the vehicle during inspection or repair/replacement period, delay, or mileage. Additionally, any and all implied warranties (including the warranty of fitness or merchantability) are limited for a period of one year from the date of purchase. This limited warranty is void if the product shows signs of alteration, modification, misuse, mishandling, improper care, and/or neglect. Also, this limited warranty is void in the event of improper installation. The liability of 5.0 Design Company under this warranty is limited, and at 5.0 Design Company's option, solely to repair or replacement with equivalent products within a reasonable time.

The original limited warranty period of any product repaired or replaced by 5.0 Design Company shall not thereby be extended. During the warranty period, this limited warranty is not transferable and limited to the original purchaser.

*Warranty and return policy for products other than those from 5.0 Design Company will vary depending on the manufacturer. Contact 5.0 Design Company for more information.

CONTACT INFO

5.0 Design Company (ARC One Industries)

2039 Sandalwood Crescent Abbotsford, BC, Canada V2S 3H5

Website: www.arconeindustries.com **Email:** mchristensen@5-0design.com

Phone: +1(604)819-6453

VSC-1

Sheet 8 of 8 Revision [P2]