

**INSTALLATION MANUAL: GReddy Honda CIVIC TYPE-R 2017+ FK8 Hi-Capacity Front Mount Oil Cooler
Kit**

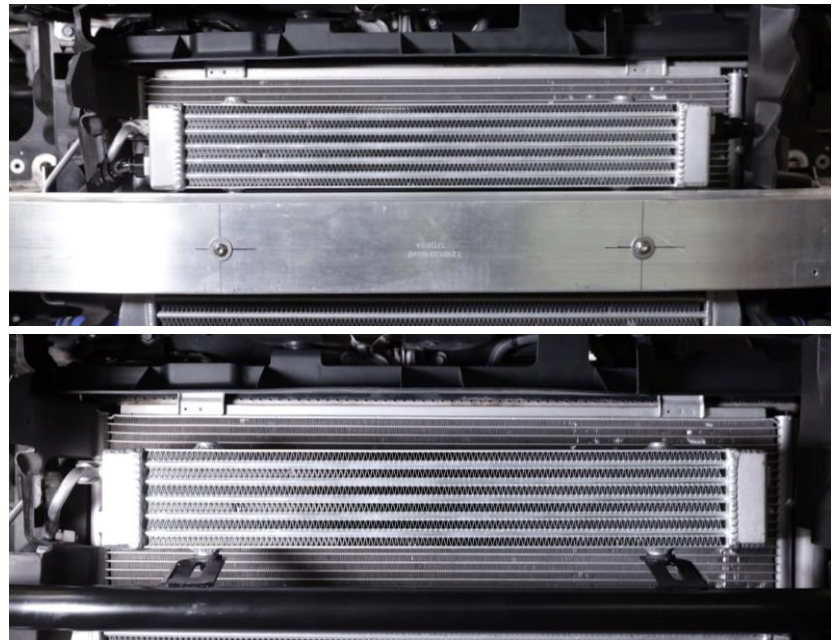
Part Number: 12058003



**Mounted to OEM Crash
Beam**

OR

**Mounted to GReddy Front
Bumper Bar, PN 14258003**



PRODUCT DISCLAIMER

Use and installation of GReddy Performance Products may not meet the legal requirements for usage on public roads and/or highways. It is the purchaser and/or installer's responsibility to check local, state and Federal laws to make sure this product complies prior to installation. Installation may also void factory or supplemental vehicle warranties, and may affect insurance claims. Please consult with respective representatives prior to installation.

Parts List

1. KOYO 5 Row High Capacity Oil Cooler Core	x 1
2. GReddy Sandwich Adapter Block M20xP1.5 w/thermostat	x 1
3. Oil Line -10 hose w/ 45deg and 45deg ORB hose ends	x 1
4. Oil Line -10 hose w/ straight and 180deg ORB hose ends	x 1
5. Cooler Core Mounting Brackets (universal)	x 2
6. M8 x 70mm P=1.25 Button Head Bolt	x 2
7. M8 P=1.25 Teflon Locking Nuts	x 2
8. M8 x 20mm Fender Washers	x 2
9. M8 x 10mm P=1.25 Bolt	x 1
10. Rubber isolators for mounts	x 2
11. M8 x 15mm P=1.25 Lock Bolts (packaged with the KOYO core)	x 4
12. Split Corrugated tubing, 24" length	x 1
6" length	x 1
13. Zip Ties	x 8

Other parts needed for this installation

1. New oil filter (GReddy filter recommend Part# 13901105, OX-05), QTY 1
2. New engine oil (factory recommend spec, see owner's manual). The cooler core has a capacity of 1 quart
3. Grease or oil for fittings and o-rings

Installation

Caution: When removing stock parts, make sure you read the factory repair manual for proper procedures.

1. Stock Parts Removal

- 1.1 Disconnect the negative side of the battery.
- 1.2 Remove the undercover, and the front bumper.
- 1.3 Remove the oil filter

2. Kit Installation

2.1 Install the gold fittings and o-rings exactly as shown in the pictures below (ITEM #2)

IMPORTANT - Use grease or oil to lightly lube the o-rings when tightening the fittings to the sandwich adapter block. We recommend to secure the sandwich adapter block in a table vise with aluminum jaws so you do not damage the flat surfaces of the adapter. Torque to 132-155 **INCH**-LBS. (11-12.9 FT-LBS).

2.2 Install the GReddy sandwich adapter block to the engine block as shown. Do not tighten the adapter completely to the block at this point. This will allow the sandwich adapter to swivel and make the hose connection easier.



2.3 Remove plastic clip and move the external air temp sensor out of the way until the core has been mounted.



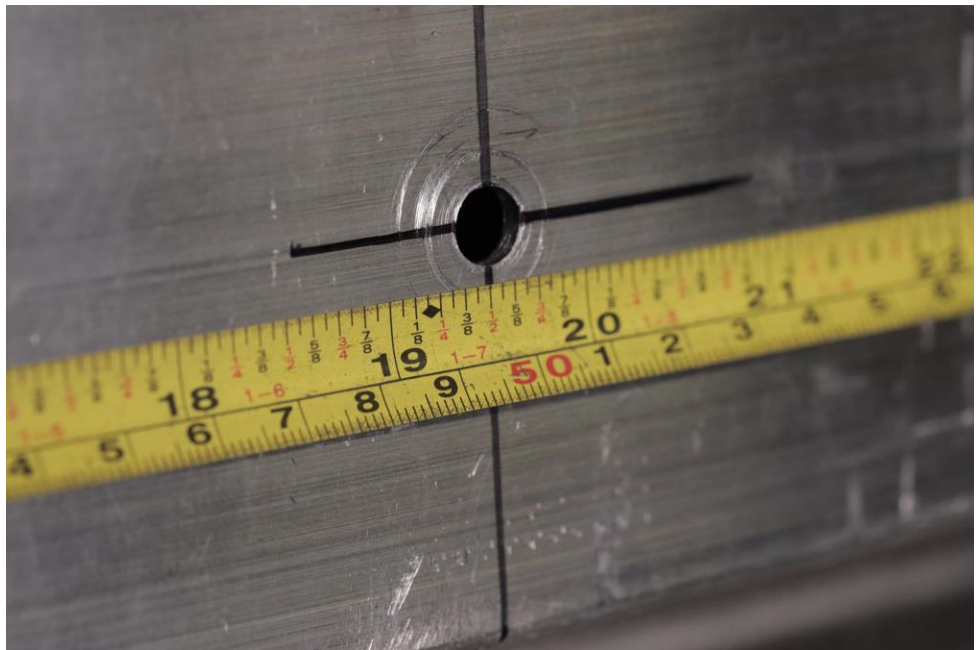
2.4 If you have Greddy front bumper bar, PN 14258003, skip to step 2.9

2.4 Measure and mark the factory bumper reinforcement beam for the holes for the oil cooler core brackets as shown. 19 1/2" from the outsides and 1 7/8" from the top.

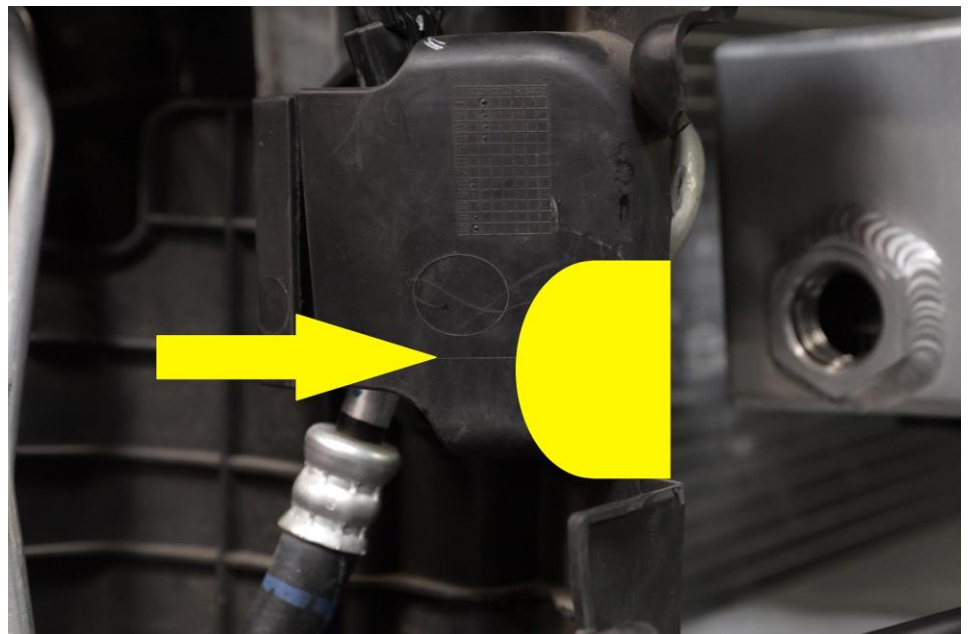
WARNING - When drilling through the support beam make sure that you do not go through the beam and puncture the AC condenser if you are working with long drill bits.



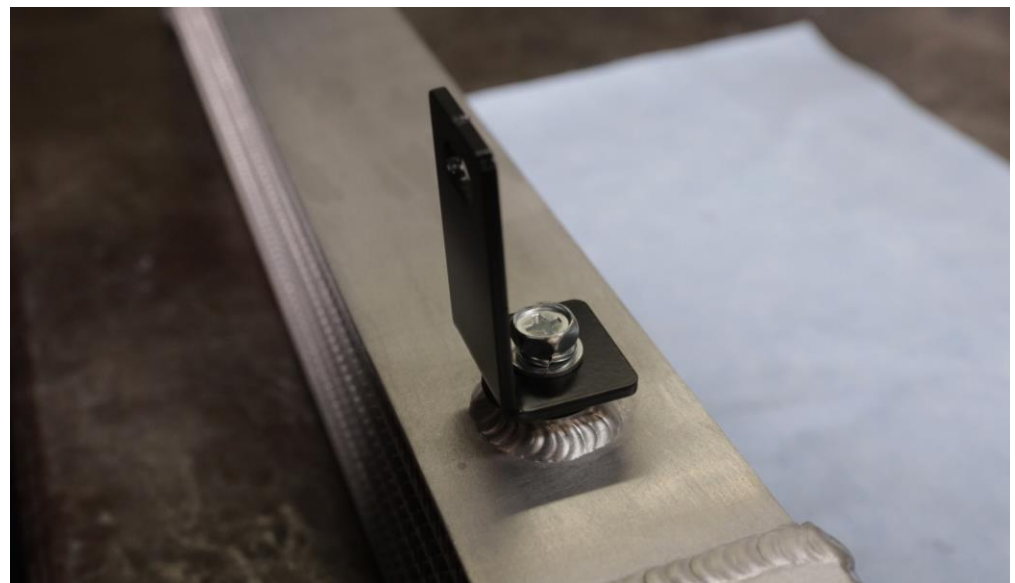
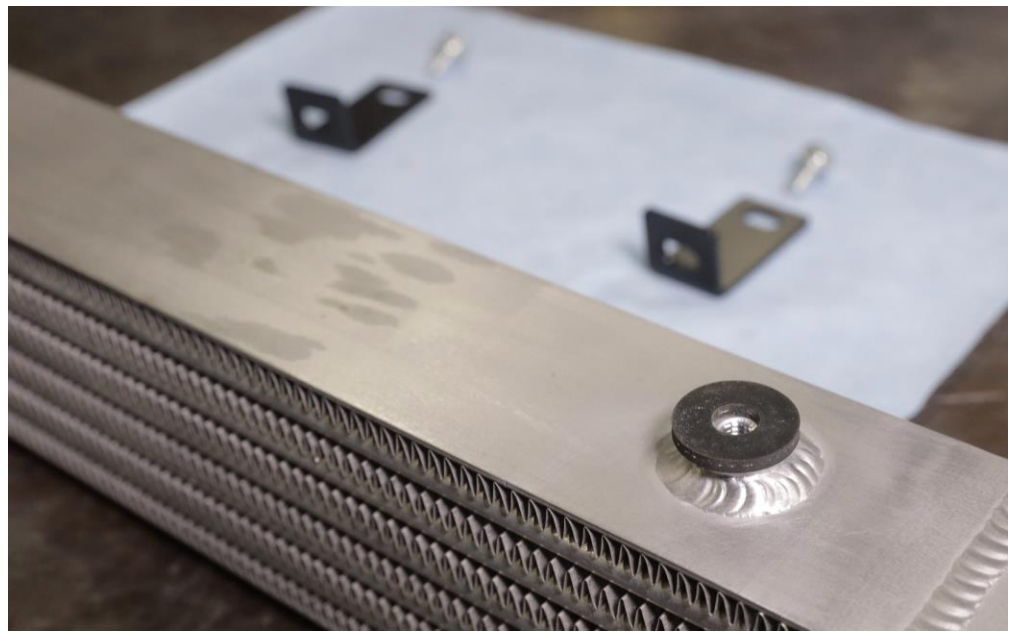
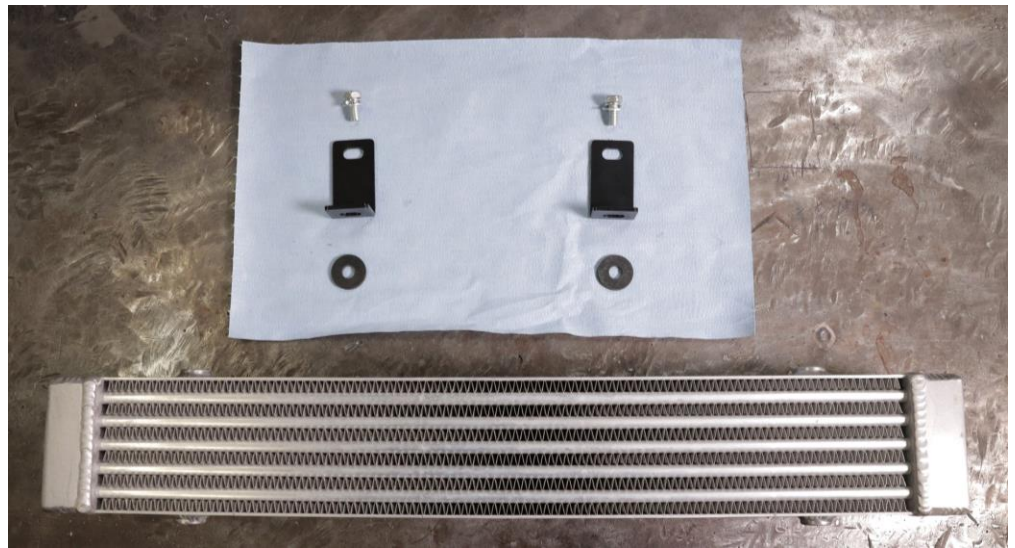
2.5 Drill the two marks that you made with at least a 5/16" drill bit. Make sure you hold the drill level top to bottom and centered left to right when going through the support beam. You may have to step up to a larger size drill bit if you cannot pass the bolt all the way through the support beam.



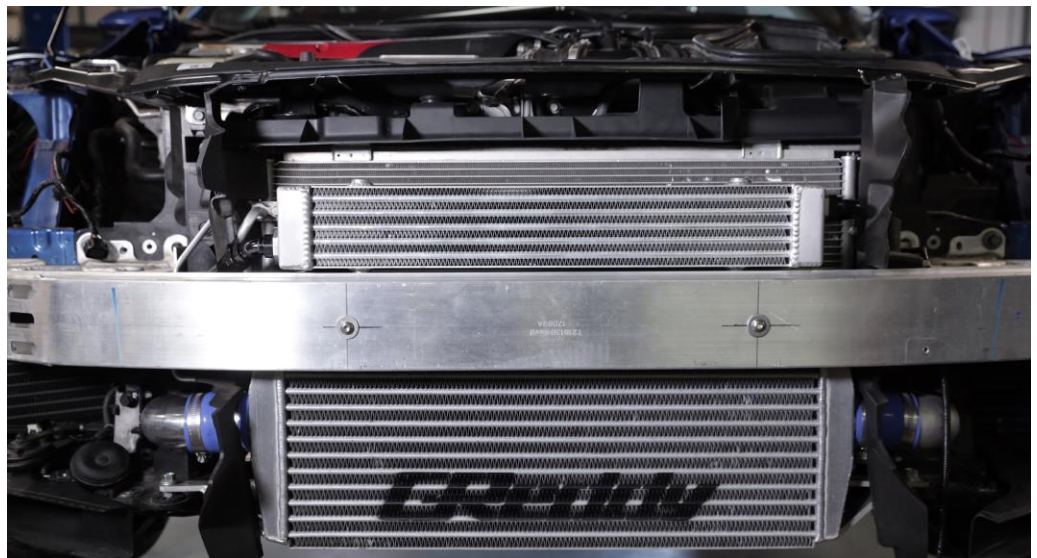
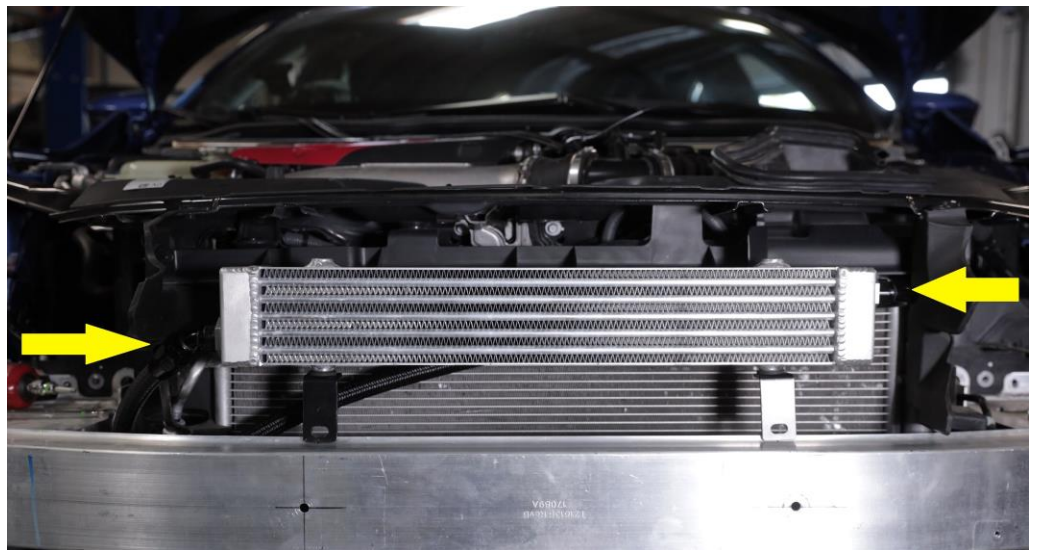
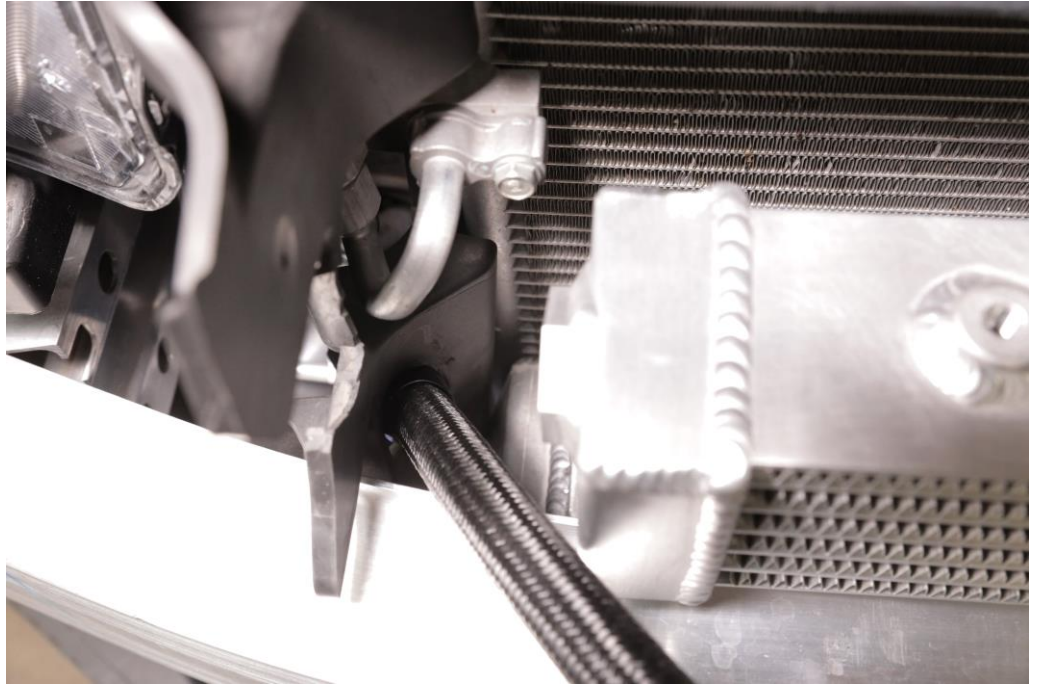
2.6 Cut a 2" hole in the factory plastic air duct panel on the passenger side next to the condenser as shown. You will also need to trim the panel where the passenger side hose exits the oil cooler core. Start small and keep cutting until you have trimmed enough material that the hose can pass through without any rubbing.



2.7 Install the mounting brackets to the Koyo Oil Cooler core with the rubber isolators sandwiched in between as shown in the pictures. The mounts are identical and can be used on either side. Do not tighten the bolts completely at this time. (ITEMS #1,5,10,11



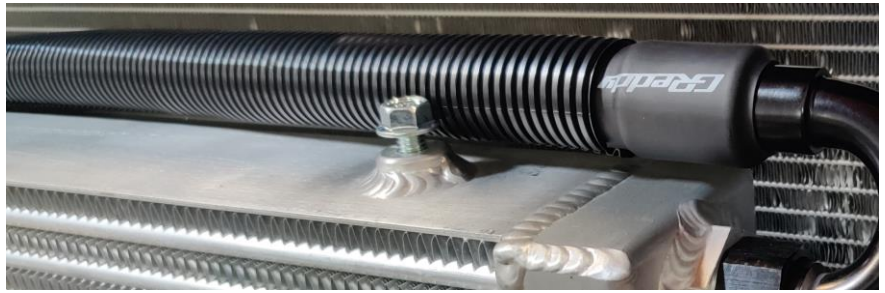
2.8 Mount the core to the Factory bumper reinforcement beam with the lower oil cooler core port on the passenger side and the higher core port on the driver side. Use the two 70mm long M8 Button head bolts with the two fender washers and slide them through the beam and through the oil cooler core mounts on the back side. Use the two teflon lock nuts to tighten the mounts to the support beam. Once these two bolts have been fully tightened you can continue to tighten the mounts to the oil cooler core from the previous step 2.7. **Once completed skip to step 2.10 (ITEMS #6,7,8)**



2.9 Mount the core to the GPP Front bumper bar with the lower oil cooler core port on the passenger side and the higher core port on the driver side. Place a M8 rubber isolator atop each tab of the bumper bar. Use the M8 bolts provided with the Koyo cooler core through the vibration washer, and thread into the bung on the bottom of the core. (ITEMS #1,10,11)

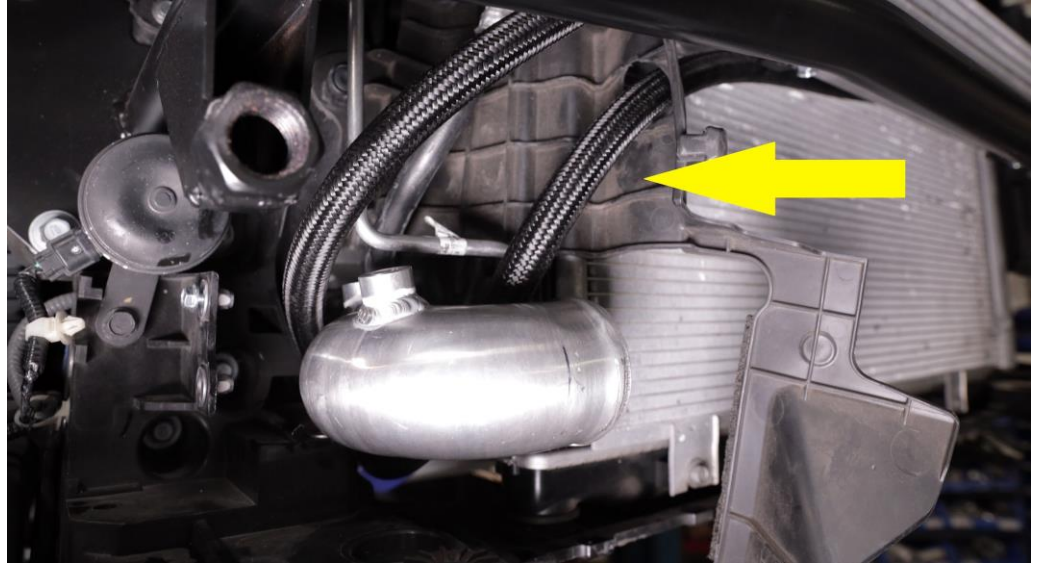


2.10 Install the 24" section of split corrugated plastic sleeve onto the longer hose to protect the hose from contact between the cooler core and condenser. Secure with the supplied zip ties. Using the longer oil hose, push the end with the straight fitting through the hole you cut in step 2.6 and route it as shown in the pictures below for the easiest fitment. (ITEM #4,12,13)



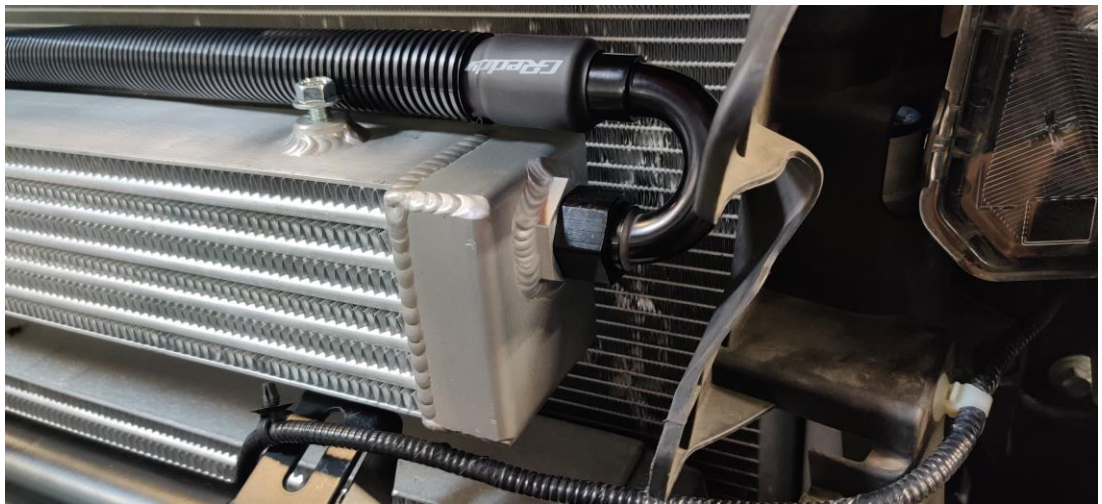
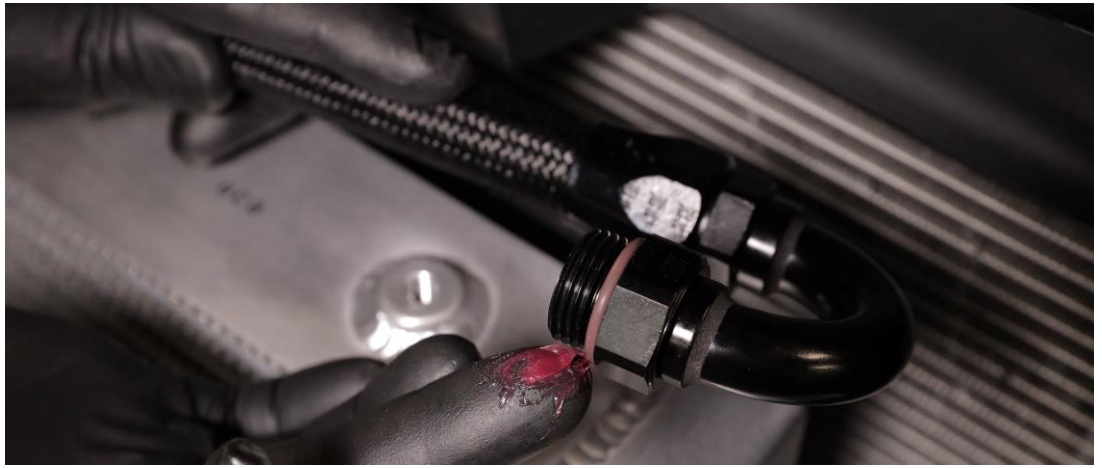
NOTE: Hose routing may differ based on what intercooler setup you have. Kit was tested with Greddy intercooler kit.

IMPORTANT: DO NOT kink the hose during installation. Parts may need to be removed to aid in proper installation.



2.11 Route the hose above the oil cooler core. Use grease or oil to lightly lube the threads and o-ring on the 180 degree ORB fitting. This will allow the threads to smoothly spin into the oil cooler core and let the o-ring seat perfectly without tearing. Use a tool to support the aluminum hex port on the oil cooler side, and tighten the ORB fitting into the driver side hole.

WARNING: If you do not hold the oil cooler side while you tighten the hose end, you could bend the brackets holding the core to the support beam, or damage the cooler core.

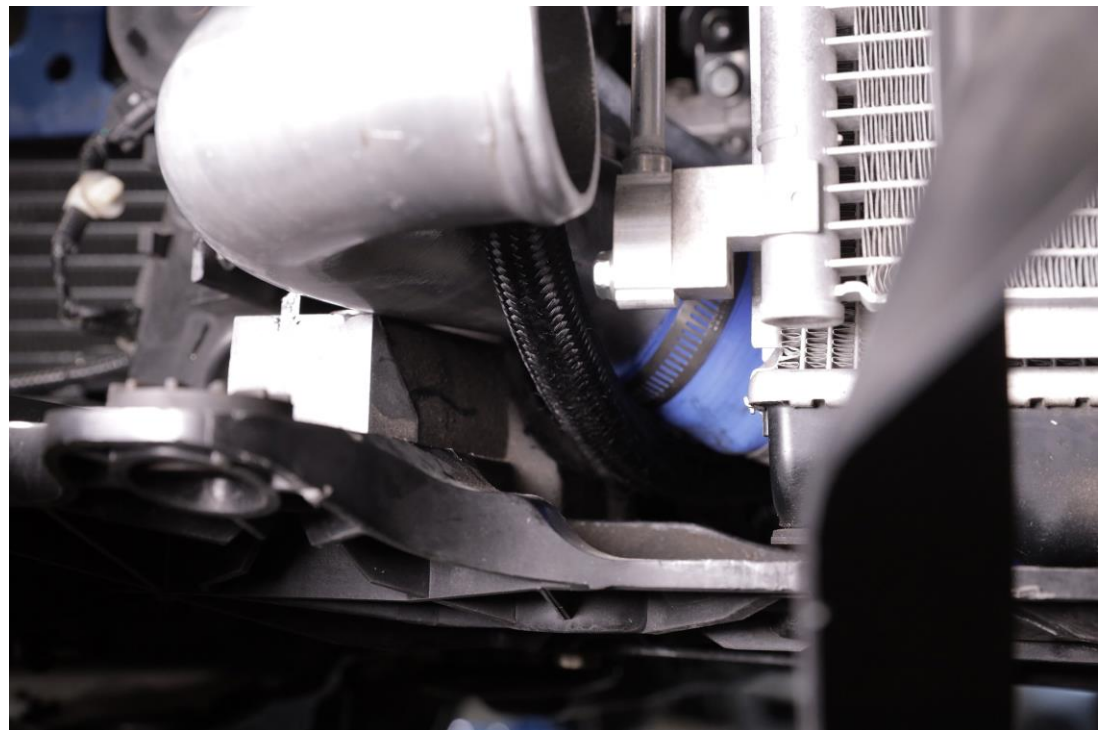


2.12 Install the 6" section of split corrugate tubing to the shorter hose and position closer to the straight hose end. Using the short oil hose, push the hose down and route it the way it is as shown in the pictures below for the easiest fitment.

(ITEM #3)

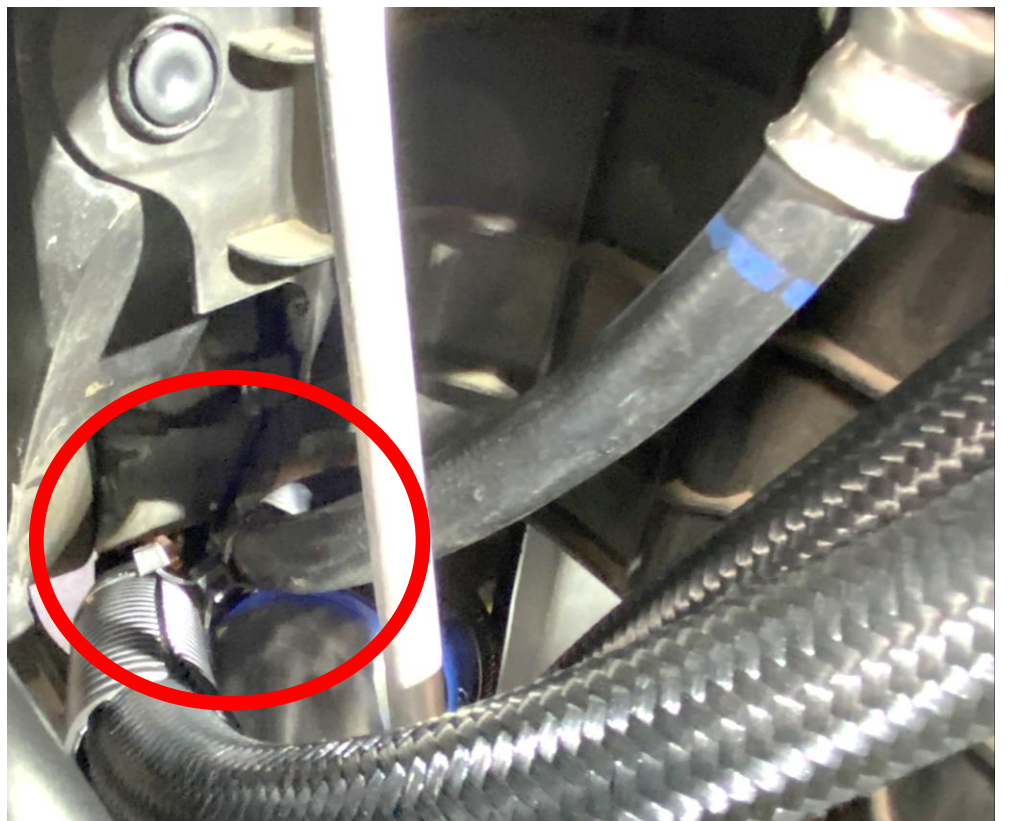
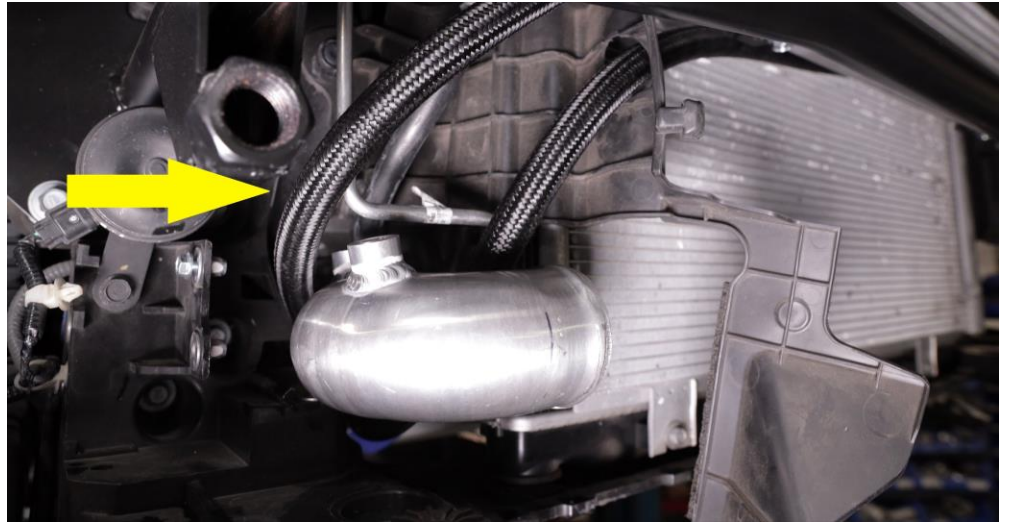
NOTE: Hose routing may differ based on what intercooler setup you have. Kit was tested with Greddy intercooler kit. Intercooler and some piping was removed to aid installation of the hoses.

IMPORTANT: DO NOT kink the hose during installation. Parts may need to be removed to aid in proper installation.



2.13 Position the plastic tubing and secure the -10 oil cooler line to the factory AC line using supplied zip ties. Use two zip ties to create a figure 8 which secures two lines without them touching each other. See Reference at the end of this manual.

NOTE: Ensure the hoses are not rubbing on anything that can damage them over time.



2.14 Use grease or oil to lightly lube the threads and o-ring on the 45deg ORB fitting the same way you did in step 2.10. Again while holding the aluminum hex on the oil cooler side tighten the 45 degree ORB fitting into the passenger side port.

2.15 The longer hose from the driver's side will connect to PORT 1 on the oil sandwich adapter. Do not tighten the -10AN fitting completely at this point. Next, connect the shorter hose from the passenger side to PORT 2. Again, do not fully tighten at this point.



2.16 Once both fittings are threaded on hand tight use a 27mm socket and fully tighten the sandwich adapter block to the engine block. Recommended torque is 16 ft-lbs. At this time you can now install a new filter and fully tighten both -10AN hose ends.

IMPORTANT It is best to hold the gold fittings while tightening the hose ends. Otherwise the gold fittings may spin and the seal between the hose end and gold fitting will not be sufficiently tight.

2.17 Use the single 10mm long m8 bolt to fasten the external air temp sensor to the top of the oil cooler core. (ITEM# 9)



3. Installation inspection

- 3.1 Check and make sure all the fittings, hose ends, oil filter, bolts, and nuts are tight.
- 3.2 Make sure the hoses are not rubbing any edges, sharp objects, heat sources that could potentially damage the hose.
- 3.3 Reconnect the negative terminal of the battery.
- 3.4 Fill an additional ~1.2 quarts of engine oil.
- 3.5 Start the engine and check for any leaks. Re-tighten fittings if it shows signs of leaks.
- 3.6 After letting it idle for couple minutes, check the oil level, and refill if necessary.
- 3.7 Let the engine oil fully warm up. Our oil block adapter is equipped with a Thermostat to aid in cold start warm up. Thermostat begins to opens at 70 C/ 158 F and fully opens at 80 C/ 176 F. After engine oil is fully up to temp, recheck oil and fill as needed.

4. Stock Parts reinstallation

Reinstall the factory parts in the order they were removed by following factory procedures.

Installation is complete. We recommend that all hose ends, oil sandwich adapter be checked after a short interval to ensure no parts are loose or leaking.

If you have any further question regarding installation or this product, please feel free to contact your GReddy Authorized dealer or GReddy Performance Product, Inc.

TECHNICAL INFORMATION

STANDARD TORQUE LIMITS FOR HOSE AND TUBE COUPLING NUTS *Inch Pounds Shown

TUBE O.D.	HOSE SIZE	NUT HEX	A	B	C
1/4"	-4	9/16"	50-65	135-150	100-120
3/8"	-6	11/16"	110-125	270-300	210-250
1/2"	-8	7/8"	210-250	400-500	340-420
5/8"	-10	1"	300-350	650-700	400-480
3/4"	-12	1-1/4"	425-500	900-1000	725-850
1"	-16	1-1/2"	600-700	1200-1400	900-1150
1-1/4"	-20	2"	680-800	1200-1400	900-1150

$$\frac{\text{*Inch Pounds}}{12} = \text{Foot Pounds}$$

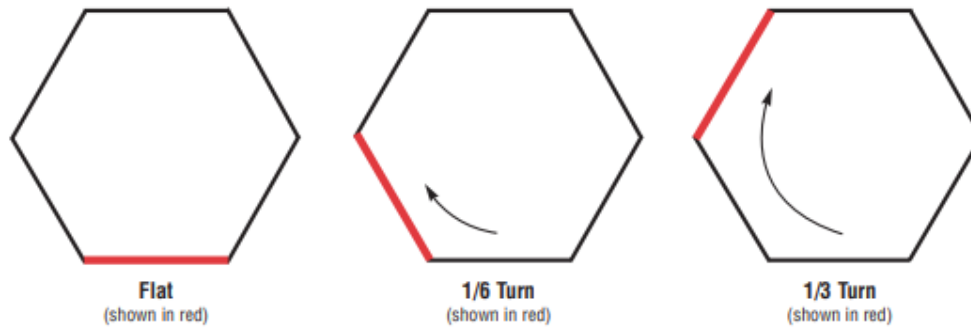
Over tightening of hose and tube coupling nuts will cause **thread and seal damage** and can result in **leakage**. Torque values are for threads lubricated with hydraulic fluid, 30 weight motor oil or antiseize compound.

KEY

- A** - Steel or aluminum flared fitting nuts and tube sleeves, AN818 and AN819: used on aluminum tube.
- B** - Steel or aluminum flared fitting nuts and tube sleeves, AN818 and AN819: used on steel tube.
- C** - Steel or aluminum flared fitting hose coupling nuts.

Where use of a torque wrench is not feasible, use a conventional wrench to tighten the coupling nuts. Tighten until a distinct increase in the torque is noted. Continue tightening an additional 1/6 of a turn. Back off the nut. Again, tighten until a distinct increase in the torque is noted. Continue tightening an additional 1/6 to 1/3 of a turn.

NOTE: One hex flat = 1/6 of a turn



Reference. How to secure two hoses/ lines without the two directly touching each other with two medium sized zip ties. Outcome resembles and figure 8 or bow tie.

1. With the hoses parallel to each other. Loosely place one zip tie around both hoses.
2. Place a second zip tie between the two hoses and around the first zip tie.



3. Slowly tighten both in small increments.



4. Full tighten and trim ends.

