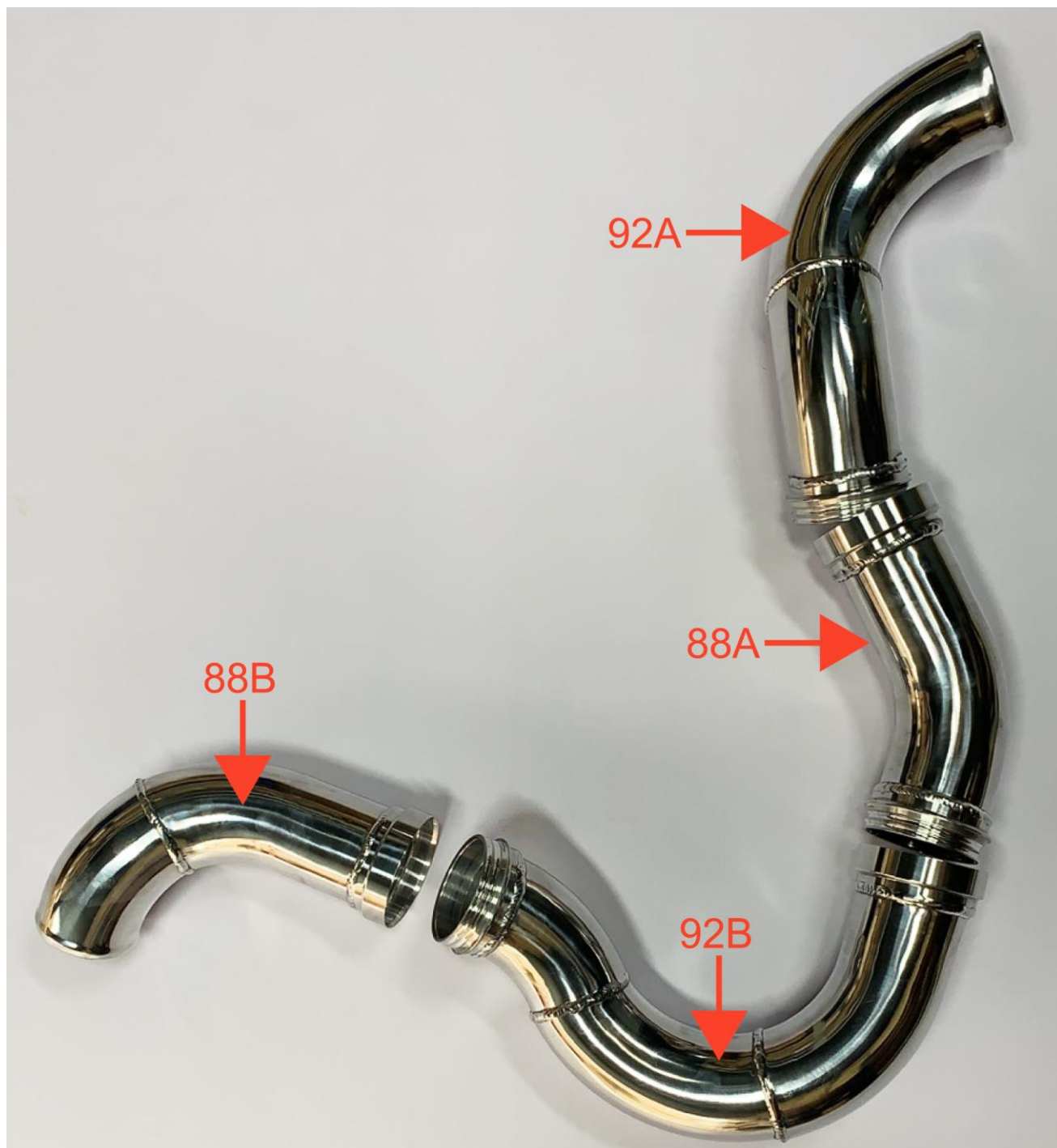


# HYBRID DEVELOPMENT INTERNATIONAL RACING INTERCOOLER KIT INSTALLATION MANUAL



## PIPING CONNECTING





Please check instruction of connecting Piping

## **Please read before continuing**

Please read through all the instruction and practice all precaution in all aspect of safety and every step prior and during the installation. This installation manual is purely for **HYBRID DEVELOPMENT INTERNATIONAL**

### **RACING INTERCOOLER KIT**

And is used as guide only. As different vehicles in different countries may have different specifications and component layout. Therefore, it is important to make sure the connection is properly done by authorized technician or HDi Technical Dealers.

### **Warning**

- Check and clean all open area for foreign object inside.
- Installation should only be carried out by authorized dealer or agent only.
- Avoiding water, liquid or fluid during and post installation.
- Do not install the unit in a place that will interface the driver.
- This product is for off road use only not for public road.
- Never adjust the fitment when the car is moving or on public road ,doing so is dangerous to yourselves and others
- Make sure there is adequate ventilation if you are installing or setting it indoors.

### **LIMITED WARRANTY**

Hybrid Development (HK) ltd will warranty for the period of 1 year from original purchase against all defects in workmanship and materials. Hybrid Development (HK) ltd is not responsible for expenses incurred for labor, personal injury or inconvenience. Hybrid Development (HK) ltd sole responsibility is to offer a replacement product or to repair the damaged product. Hybrid Development (HK) ltd cannot warranty products damaged by improper installation. All other products sold by Hybrid Development (HK) ltd are warranted by the original manufactures and is not the responsibility of Hybrid Development (HK) ltd.

All products are for racing use only.

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For more information please visit [www.hybrid-power.com](http://www.hybrid-power.com) or contact [tech@hybrid-power.com](mailto:tech@hybrid-power.com)

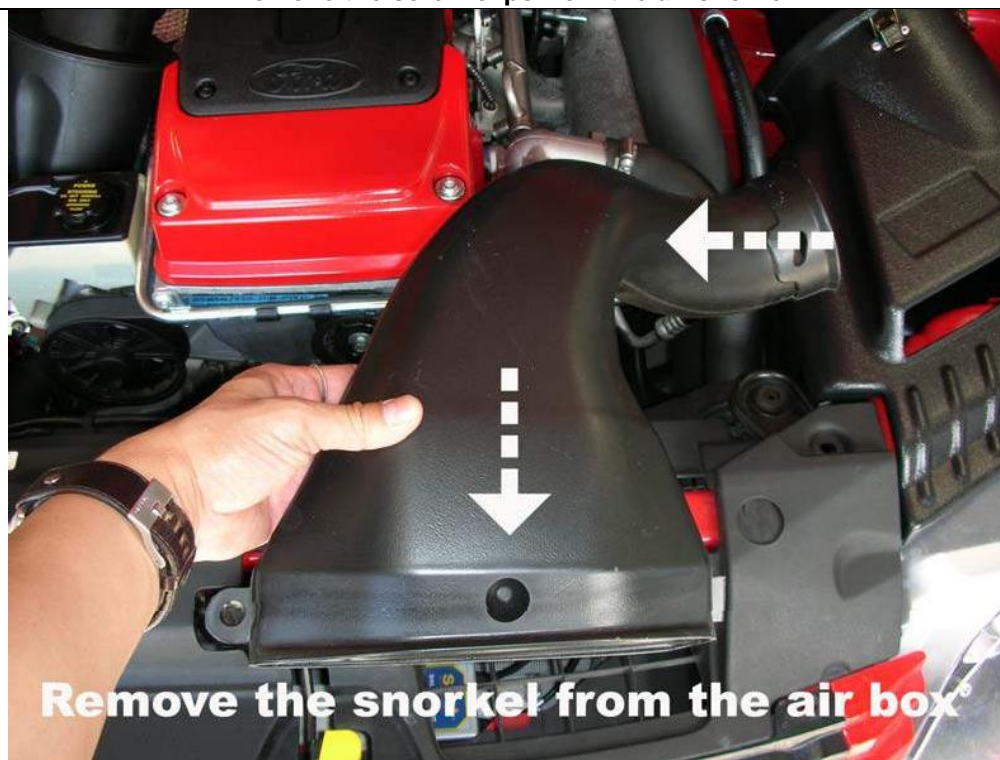
**This installation manual is a guide only. Pictures are for illustration purposes only as the vehicles and product may vary in different countries / regions. Before opening the content of the Intercooler Kit please read through the installation manual to confirm your vehicle is suitable for this Intercooler Kit.**



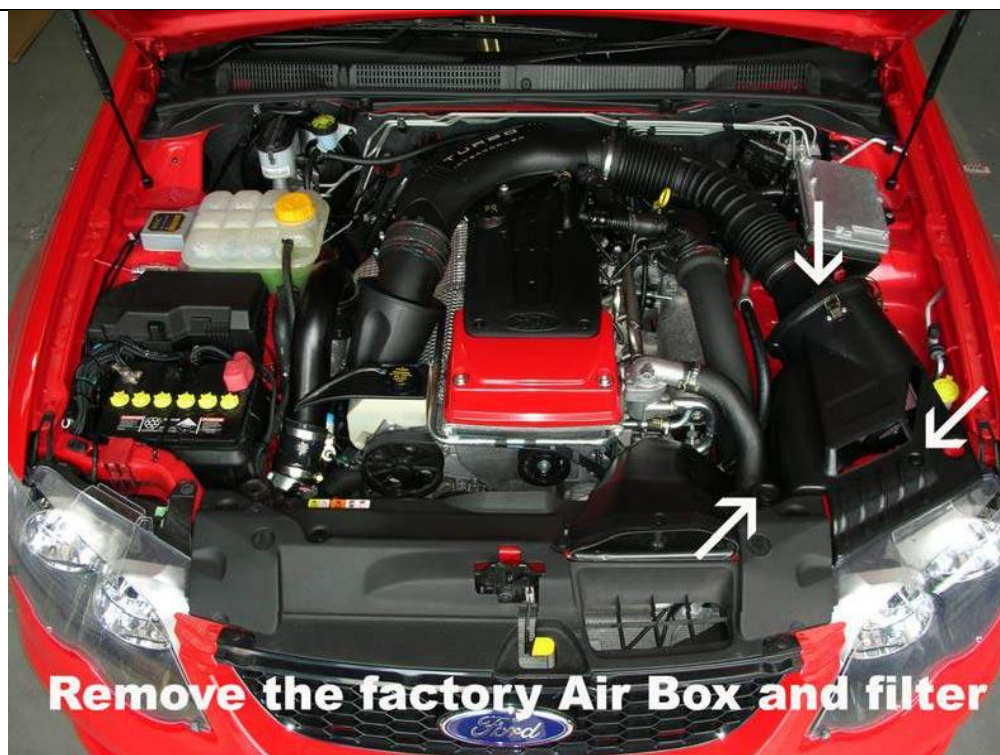
Using a heavy duty car jack lift the vehicle and place heavy duty car stands in the appropriate position as recommended in the Manufacturer's Owners Manual.



Remove the screw clips from the air snorkel



Permanently remove the air snorkel from the air box



**Remove the factory Air Box and filter**

Remove the factory air box. Bolt location may vary to picture.



**Remove shroud and grill**

Remove the grill shroud and grill by unscrewing the clips





**Remove the grill and shroud. Unscrew the clips near the headlights**



**Remove the screws from both, drivers and passenger side from under the bumper bar, see over page for complete fixing points.**



Unbolt the lower splash tray in the indicated points



Remove the 3 screw clips from the inner wheel arch on both the drivers and passengers side

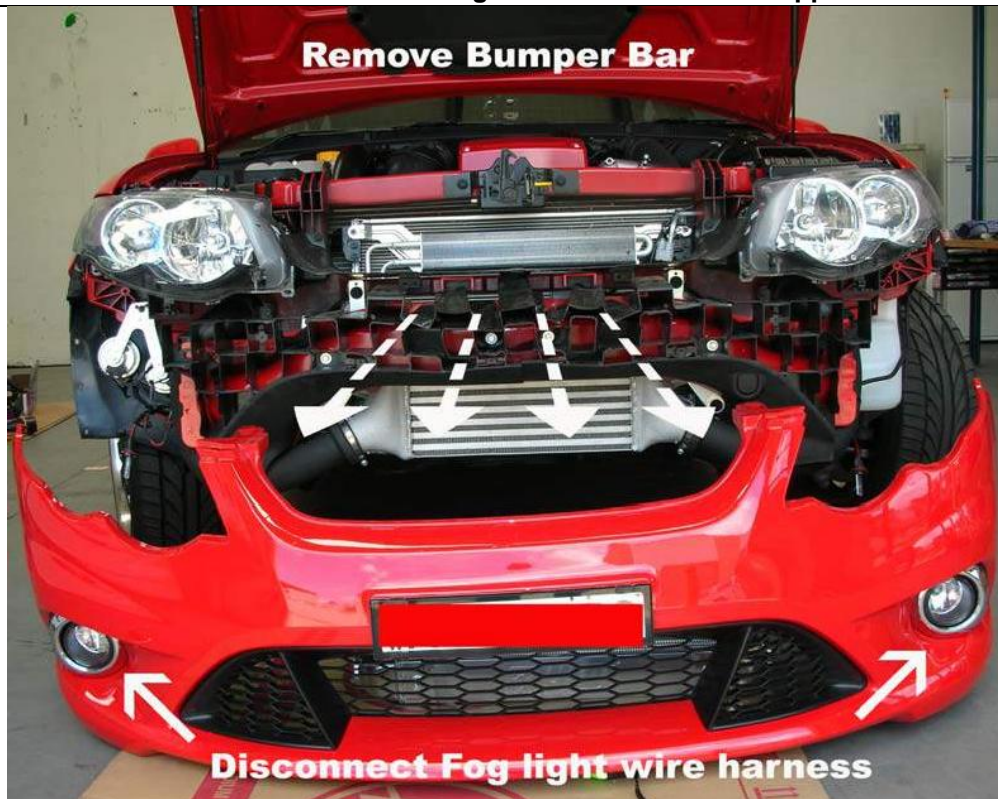


**Unbolt from behind the wheel arch splash gaurd**



**Push aside the inner wheel arch guard and unbolt from support bracket**

**Remove Bumper Bar**



**Disconnect Fog light wire harness**

**Carefully remove the front bumper bar in a slide forward movement. Prior to complete separation unclip the fog light harness.**



**Remove plastic bumper support**

**Remove the plastic bumper bar support mesh by unbolting 6 bolts**



**Unbolt front headlight bracket**

**HEAD LIGHT REMOVAL (both Passenger and Drivers side). Unbolt the headlight from the front.**





Unbolt the top and side bolt from the head light brackets



Carefully unclip the wiring harness from the back of the Head Light



**Very carefully remove the Head Light by sliding the light out.**



**PIPE REMOVAL:** The factory clamps have metal caps over the screws. These will all need to be removed prior to unscrewing the clamp.





Starting at the intake manifold, unscrew and loosen the clamp



Remove the factory intercooler pipe from the intake manifold end only

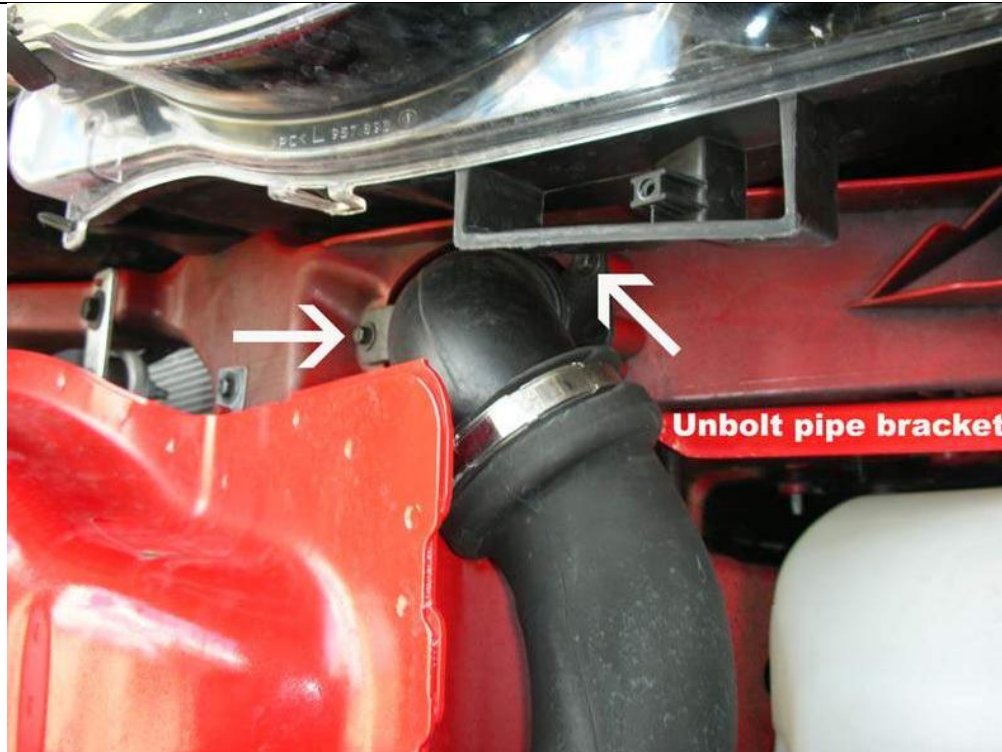


Unscrew the clamp close to the radiator of the factory intercooler pipe on the intake manifold side.



Now all screw clamps are loosened permanently remove the factory intercooler pipe





**Unbolt the intercooler pipe bracket from the head light reinforcement from under the passenger side headlight location.**



**Unscrew the clamp from the passenger side of the factory intercooler**



**Remove intercooler piping**

Permanently remove the factory intercooler piping by sliding through the plastic reinforcement and away from the vehicle

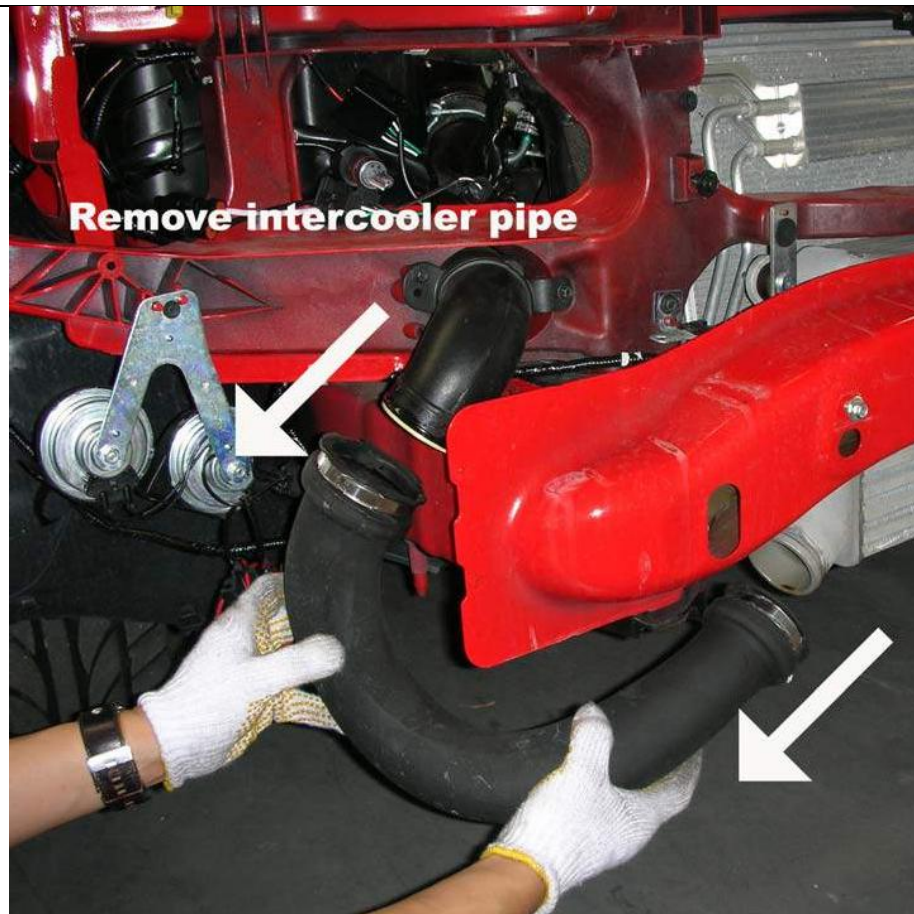




On the drivers side unscrew the clamp from the factory intercooler pipe



On the drivers side unscrew the clamp from the factory intercooler

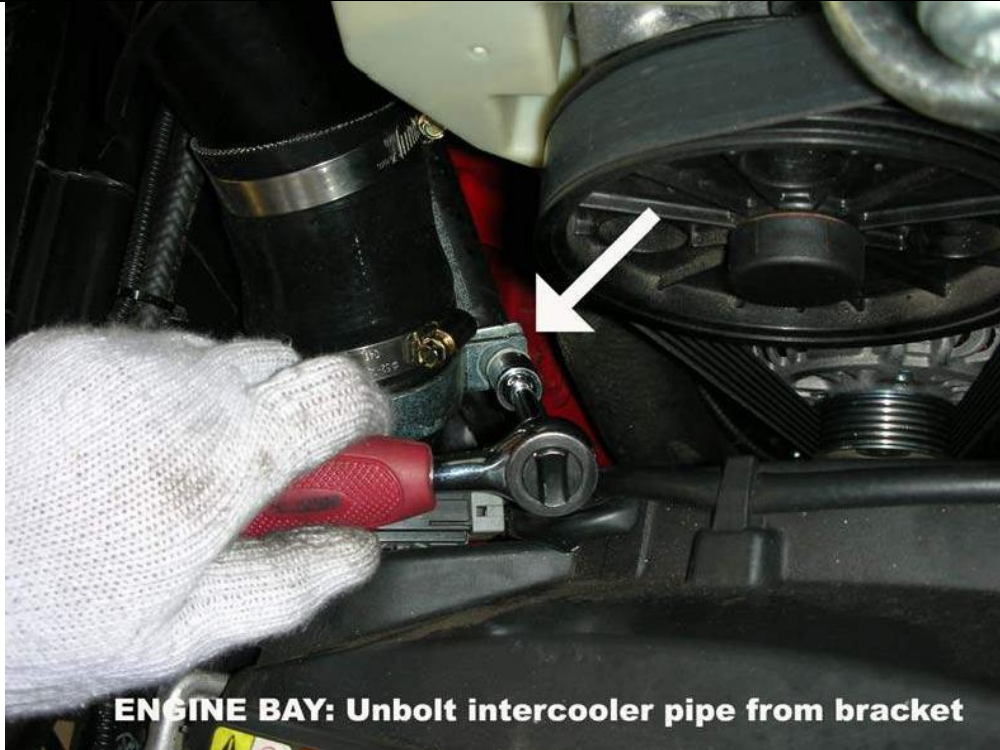


**Now permanently remove the factory intercooler pipe from the intercooler**



**Unbolt the intercooler pipe bracket from under the head light reinforcement**





**ENGINE BAY: Unbolt intercooler pipe from bracket**

**ENGINE BAY on the drivers side: Unbolt the factory intercooler pipe from the metal support bracket**

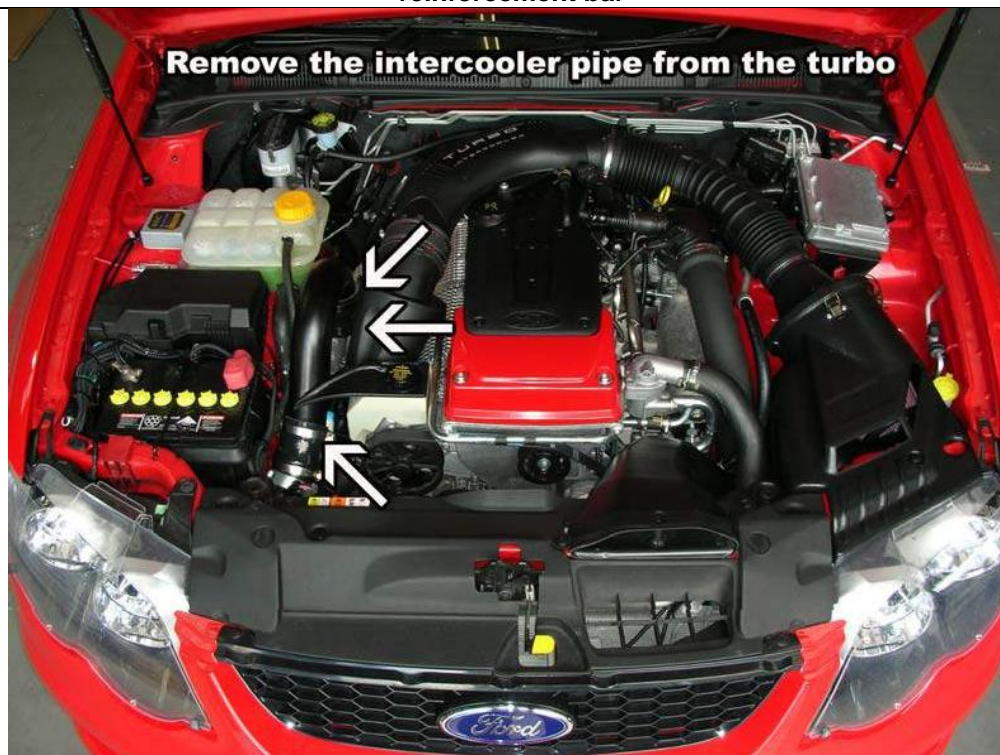


**Unscrew intercooler pipe clamp**

**Unscrew the clamp from the factory intercooler pipe**

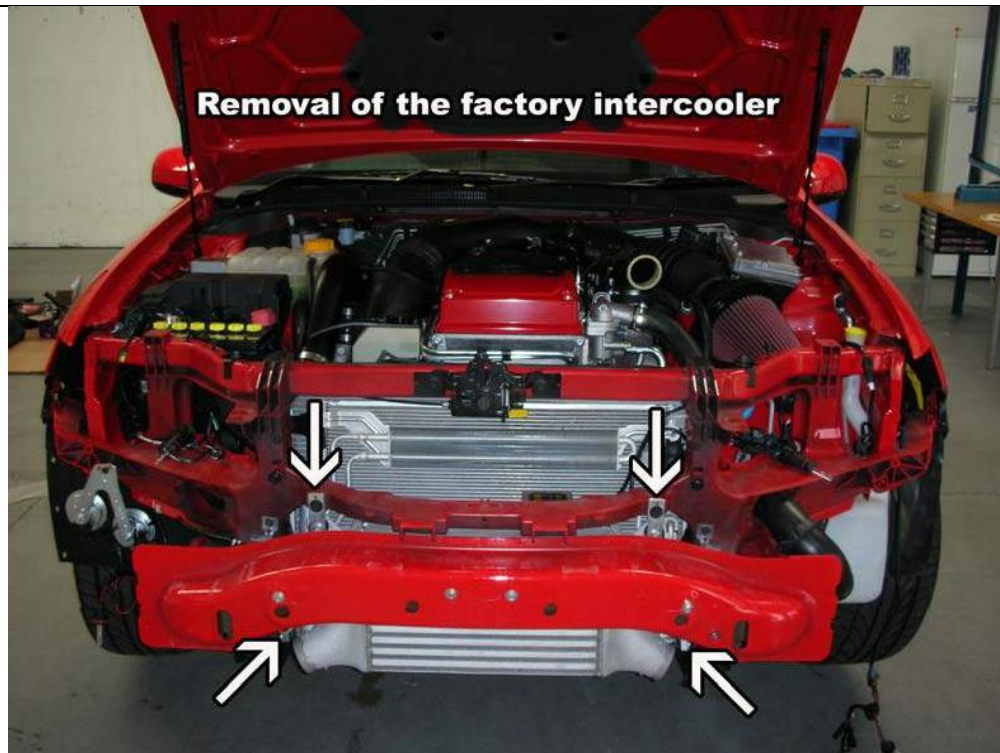


On the drivers side remove the factory intercooler pipe by sliding through the hole in the plastic headlight reinforcement bar



Finally, unscrew the clamps on the intercooler pipe and permanently remove from the turbo.

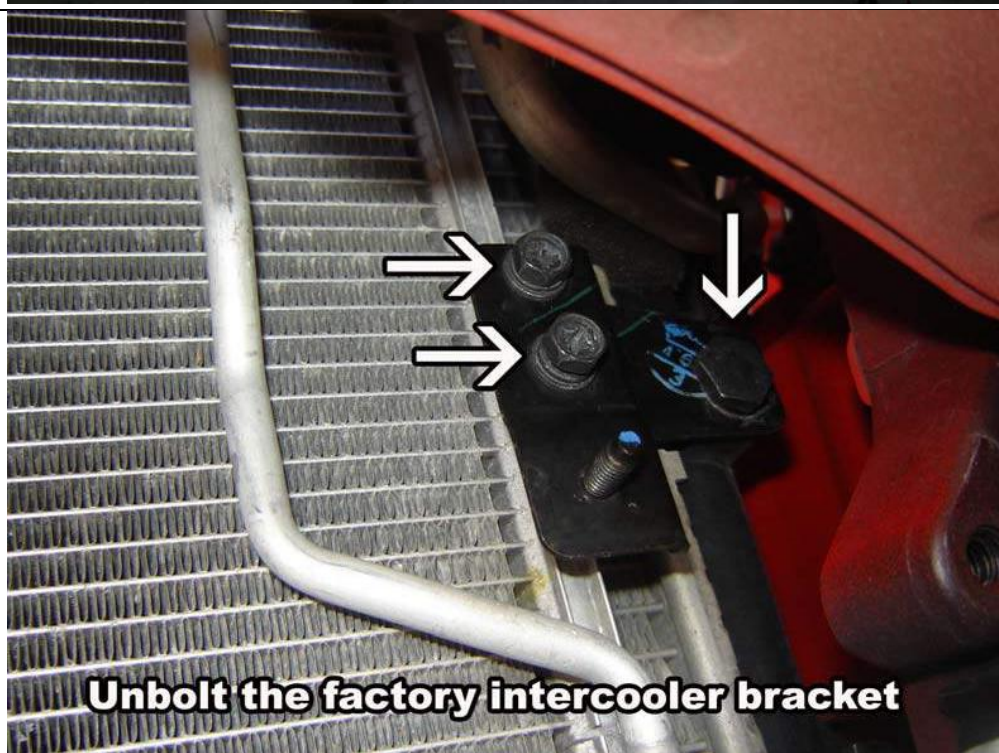




The factory intercooler needs to be unbolted in 4 points



Slide the factory intercooler down behind the reinforcement bar and remove permanently. Take care not to damage the air conditioning radiator.

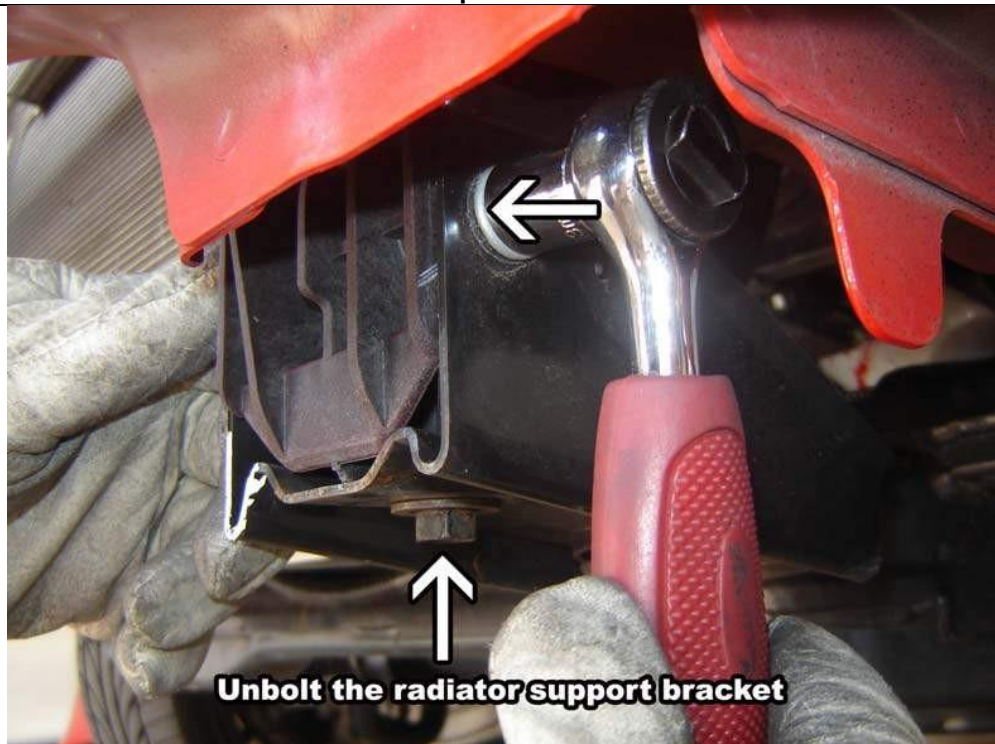


Unbolt the intercooler bracket from both the drivers and passenger side





Trim the bolt thread on the bracket from both the drivers and passenger side and reinstall to its original position

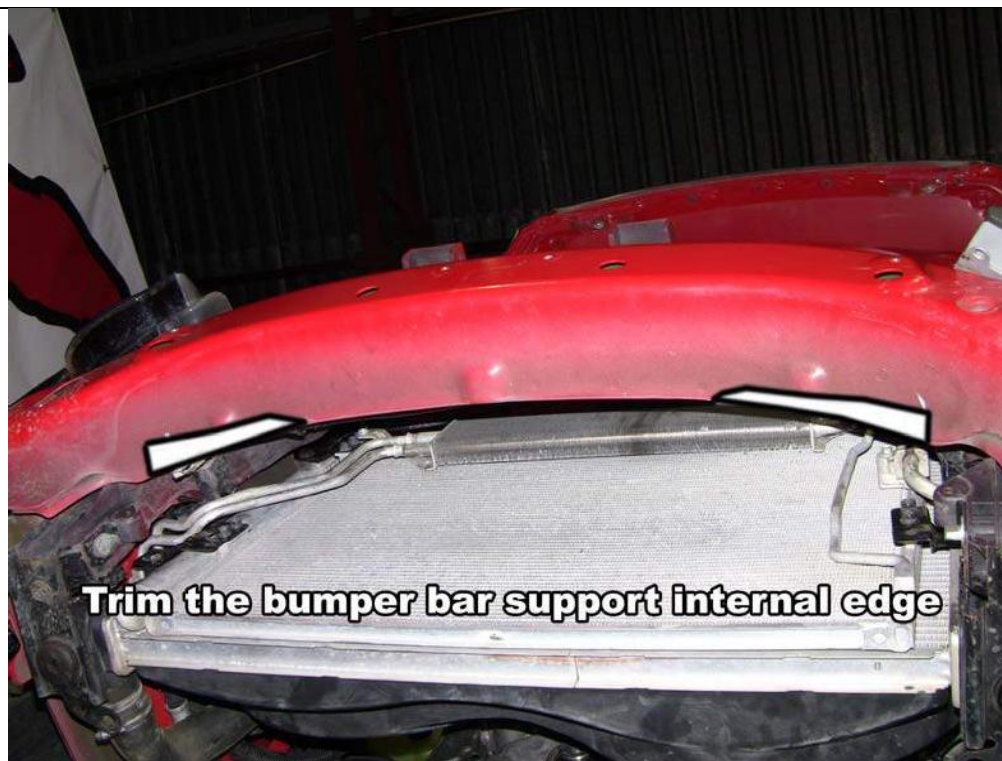


Unbolt the radiator support bracket from the passenger side. ONLY REMOVE ONE BRACKET AT A TIME TO AVOID RADIATOR FALLING FROM POSITION



Replace the original radiator support with supplied support brackets





Trim the internal edge of the bumper bar support to provide intercooler clearance.



Trim the plastic support bar between the headlights for intercooler clearance.



Remove the bonnet release catch from the radiator support. Place the HDi top bracket behind the bonnet release and reinstall the bonnet release then fasten tightly

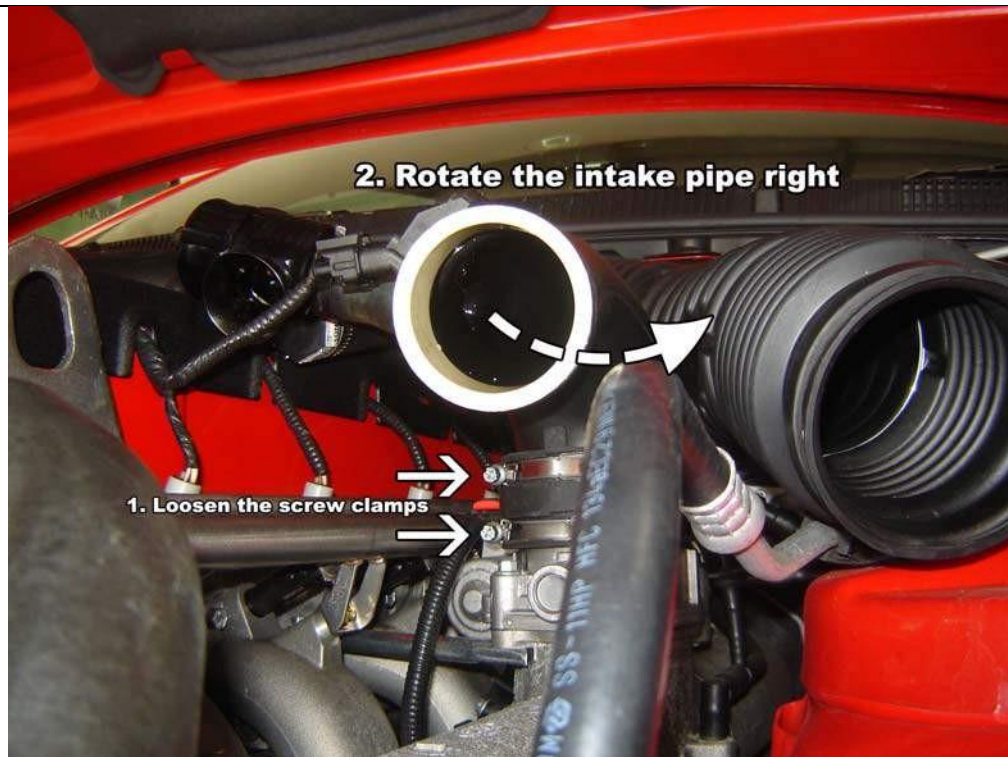


Carefully install the HDi GT2 Pro intercooler behind the bumper bar support bar to avoid scratching. Connect the HDi GT2 Pro intercooler to the HDi top intercooler bracket using the supplied M8 bolts. Secure tightly.

**PICTURE INSTALL LOWER BRACKET**

Install the HDi Lower brackets to the lower metal front cross member utilizing the existing holes. Fasten tightly with supplied bolts. Then fasten to the HDi GT2 PRO intercooler and secure tightly.





Loosen the two screw clamps at the bottom of the intake pipe and rotate approximately 10 degrees to the right. Fasten securely after pipe work is installed.



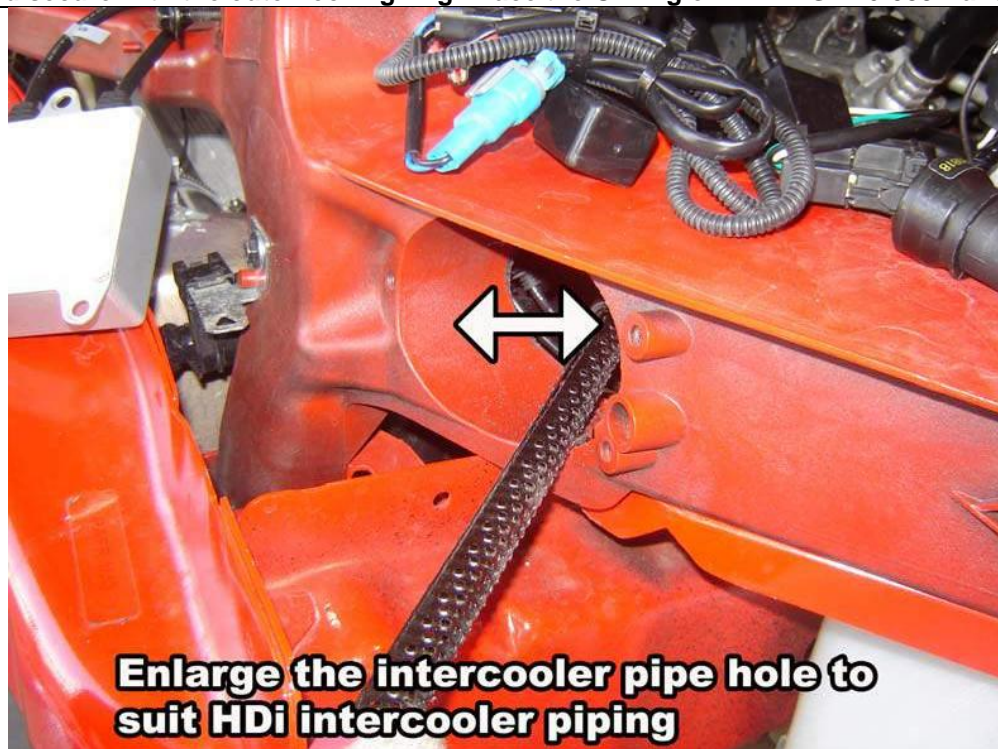
Install an HDi 2.75" Silicon Hose to the intake pipe and fasten tightly with one 2.75" HDi Super Clamp. Slide another 2.75" clamp on the HDi Intercooler pipe. Insert the HDi Intercooler pipe ALP-FGXR6-092A into silicon. And connect 092A to 088A with HDi-Clamp.

Slide the Super Clamp back on to the HDi Silicon hose into position and secure, but not tightly to allow for adjustment.





Place the O-Ring on ALP-FGXR6-092B and lubricate. Connect HDi Pipe ALP-FGXR6-088A to pipe ALP-FGXR-092B and secure with the outer locking ring. Place the O-Ring on ALP-FGXR6-088B and lubricate.



**Enlarge the intercooler pipe hole to suit HDi intercooler piping**

Enlarge the intercooler piping hole on the passenger side to suit the HDi Intercooler Piping ALP-FGXR6-088B





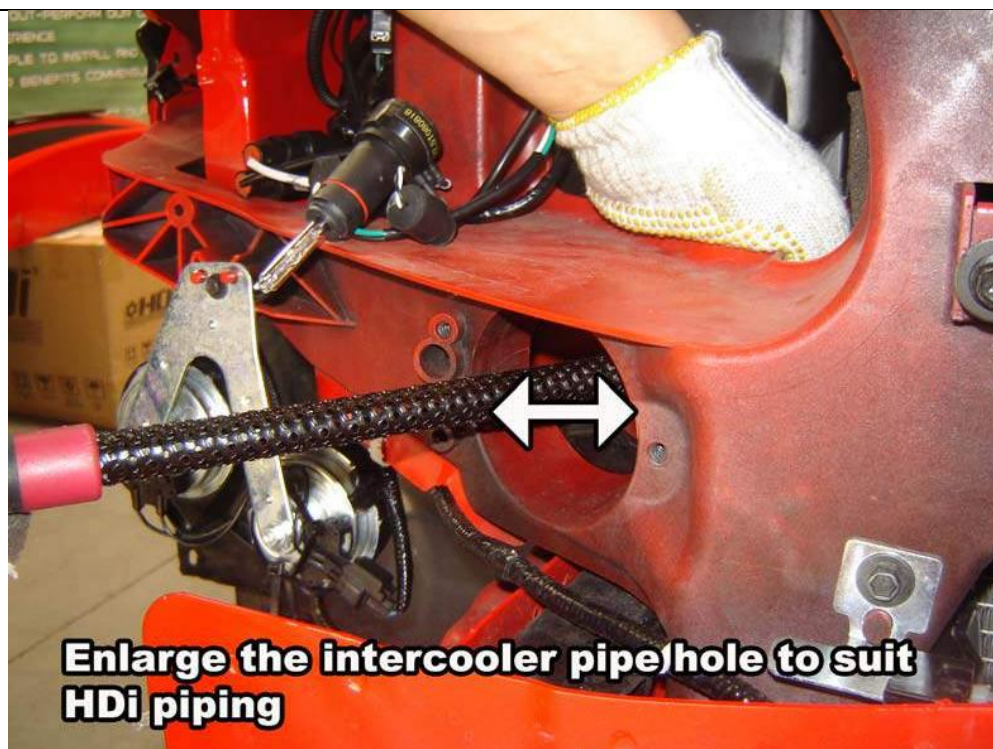
Insert ALP-FGXR6-088B through the enlarged intercooler piping hole and check for clearance. Now connect ALP-FGXR6-092B to ALP-FGXR6-088B and secure with the outer locking ring.



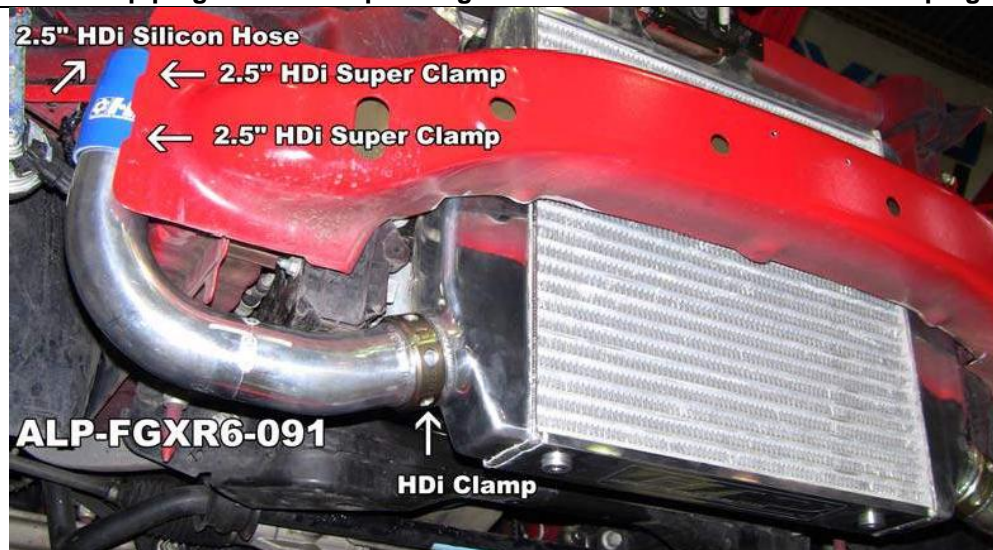
Install an HDi 2.75-2.5" Silicon Hose to ALP-FGXR6-088B and fasten tightly with one 2.75" HDi Super Clamp. Slide another 2.5" clamp on the HDi Intercooler pipe. Insert the HDi Intercooler pipe ALP-FGXR6-087 into silicon. Slide the Super Clamp back on to the HDi Silicon hose into position and secure, but not tightly to allow for adjustment. Place the O-Ring on ALP-FGXR6-087 and lubricate. Connect HDi Pipe ALP-FGXR6-087 to the HDi GT2 PRO Intercooler and secure with the outer locking ring.

**MAKE FINAL PIPE ADJUSTMENTS THEN SECURE ALL HDI CLAMPS AND THE FACTORY INTAKE PIPE SCREW CLAMPS**





Enlarge the intercooler piping hole on the passenger side to suit the HDi Intercooler Piping ALP-FGXR6-090



Place the O-Ring on ALP-FGXR6-091 and lubricate. Connect ALP-FGXR6-091 to the HDi GT2 PRO Intercooler and secure with the outer locking ring. Install an HDi 2.5" Silicon Hose to ALP-FGXR6-091 and fasten with one 2.5" HDi Super Clamp.





Slide HDi Intercooler pipe ALP-FGXR6-090 through the enlarged piping hole under the head light. Slide a 2.5" Super Clamp over the pipe then connect the pipe to the HDi Silicon hose. Slide the 2.5" Super Clamp back over the silicon and fasten.



Connect the HDi 2" – 2.5" Silicon hose to the turbo outlet. Secure tightly with a 2" clamp. Slide an HDi 2.5" Super Clamp on the HDi intercooler pipe ALP-FGXR6-089 then insert the pipe into the silicon hose. Slide the clamp over the silicon hose in position and fasten. Place an O-Ring on to ALP-FGXR6-090 and lubricate. Connect HDi pipe ALP-FGXR6-090 to ALP-FGXR6-089 and secure with outer locking ring.  
**MAKE FINAL PIPE ADJUSTMENTS THEN SECURE ALL HDi CLAMPS**



The installation of the HDi GT2 PRO Intercooler kit is now complete. Check all pipe clearances and make adjustments then fasten tightly all HDi Super Clamps.

Reinstall the headlights, bumper bar, splash tray (some trimming maybe required), grill and air box to their original position.

**Note:**

Due to the high flow and low pressure drop characteristic of the HDi intercoolers – the turbo efficiency may increase and the factory boost limiter maybe reached. If this is experienced, please consult an HDi Technical Dealer.



\*\*\*\*\*Trim the splash tray if needed





**END OF INSTALLATION MANUAL**