
INSTALLATION GUIDE



**HOLDEN COLORADO (RG)
INTERCOOLER KIT**



P/N PWI66175K – INTERCOOLER | P/N PWA64553 (2012-13) – PIPE KIT



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CONDITIONAL MANUFACTURERS WARRANTY

PWR Custom Aluminium Radiators, Intercoolers and Oil Coolers along with cores only for these units are warranted to the original purchaser to be free of fault for materials and workmanship for a period of 1 year from the date of purchase and only when used under normal operating conditions. Claims for internal damage to engine or other related components of user's vehicle are not covered by this warranty. The PWR product user is responsible for the monitoring of engine temperature operations and for having the appropriate detection devices in place to warn the user of overheating and other engine related malfunctions. At time of installation an approved coolant must be added to the cooling system. (See important information – Radiator point 3) Responsibility for any damage, injury or loss attributed to any fault in material or workmanship in the above listed products shall be limited by replacing the unit on return of the defective product.

Warranty voids

If the product is repaired or welded by another party other than PWR Performance Products. * If any defect is attributable to an accident, abuse or negligence. * Where the product is used for an application for other than it was intended. * If any parts or accessories are fitted which adversely affect the product

Warranty does not cover

Charge relating to removal and replacement to vehicle. *Internal or external corrosion. * Any consequential damage. * Freight cost incurred to send the item back to PWR

LIMIT OF LIABILITY STATEMENT

The information contained in this publication was accurate and in effect at the time the publication was approved for printing and is subject to change without notice or liability. PWR Performance Products reserves the right to revise the information presented herein or to discontinue the production of parts described at any time.

SAFETY PRECAUTIONS

STOP

CAREFULLY READ THE IMPORTANT SAFETY PRECAUTIONS and WARNINGS BEFORE PROCEEDING WITH THE INSTALLATION!

Appropriate disassembly, assembly methods and procedures are essential to ensure the personal safety of the individual performing the kit installation. Improper installation due to the failure to correctly follow these instructions could cause personal injury or death. Read each step of the installation manual carefully before starting the installation.

- Always wear safety glasses for eye protection.
- Place the ignition switch in the OFF position.
- Always apply the parking brake when working on the vehicle.
- Block the front and rear tyre surfaces to prevent unexpected vehicle movement.
- Operate the engine only in well-ventilated areas to avoid exposure to carbon monoxide.
- Do not smoke or use flammable items near or around the fuel system.
- Use chemicals and cleaners only in well ventilated areas.
- Batteries can produce explosive hydrogen gas which can cause personal injury. Do not allow flames, sparks or flammable sources to come near the battery.
- Keep hands and any other objects away from the radiator fan blades.
- Keep yourself and your clothing away from moving parts when the engine is running.
- Do not wear loose clothing or jewellery that can be caught in rotating or moving parts.

IMPORTANT INFORMATION FOR FITTING

Please read the following before fitting our PWR Performance Product.

WARNING

WARNING: Failure to follow this procedure will void your warranty.

- Do not use this product in any other motor vehicle for which it is not designed.
- Do not use any other mounting location / method other than described in this instruction.
- It is advisable to seek assistance of another person when installing this product.
- Do not repair or modify this product and / or its mounting bracket in any way - repair or modification may affect proper operation of the vehicle or cause destruction of property.
- Ensure all torque settings are followed.
- Be sure to clean and remove any loose debris before removing pipe work as debris entering the engine could be detrimental to the engine and or components

Radiators:

- Before removing the old radiator check the existing coolant for stray current. This is done by connecting a voltmeter between the coolant and the battery ground. The meter should have a range of at least 12 volts (assuming the vehicle have a 12 volt charging system) and a sensitivity of at least one-tenth of a volt. By connecting one test lead to battery ground and placing the other lead into the coolant (DO NOT TOUCH THE METAL CORE OR FILLER NECK) any voltage indicates current passing through the coolant-ELECTROLYSIS.
- If no current found flush cooling system with distilled water to remove the existing coolant/inhibitors. When the entire system has been flushed including the over flow bottles, you can fit the new radiator. DO NOT MIX COOLANTS
- Select a coolant that is recommended by the manufacturer or by PWR. Product must meet the current AS2108 or manufacturer's engine coolant/inhibitor standard and refill system. Bring engine up to temperature and let cool. Re-Check the coolant level and top up if necessary. USE ONLY DISTILLED WATER.
- IMPORTANT- again recheck step 1 for any stray current.
- PLEASE be careful when fitting and make sure all mounting points are tight (to manufacturer's specifications) and there is sufficient clearance so no rubbing occurs.
- PLEASE ensure that all hose clamps are done up.
- Correct cap must be used for each individual system.

Intercoolers:

- PLEASE be careful when fitting and make sure all mounting points are tight (to manufacturer's specifications) and there is sufficient clearance so no rubbing occurs.
- PLEASE ensure that all hose clamps are done up.

Oil Coolers:

- PLEASE be careful when fitting and make sure all mounting points are tight (to manufacturer's specifications) and there is sufficient clearance so no rubbing occurs.
- PLEASE ensure that all hose clamps are done up.
- Do not run over 80 psi rating.

Liquid to Air Barrel Intercooler kits:

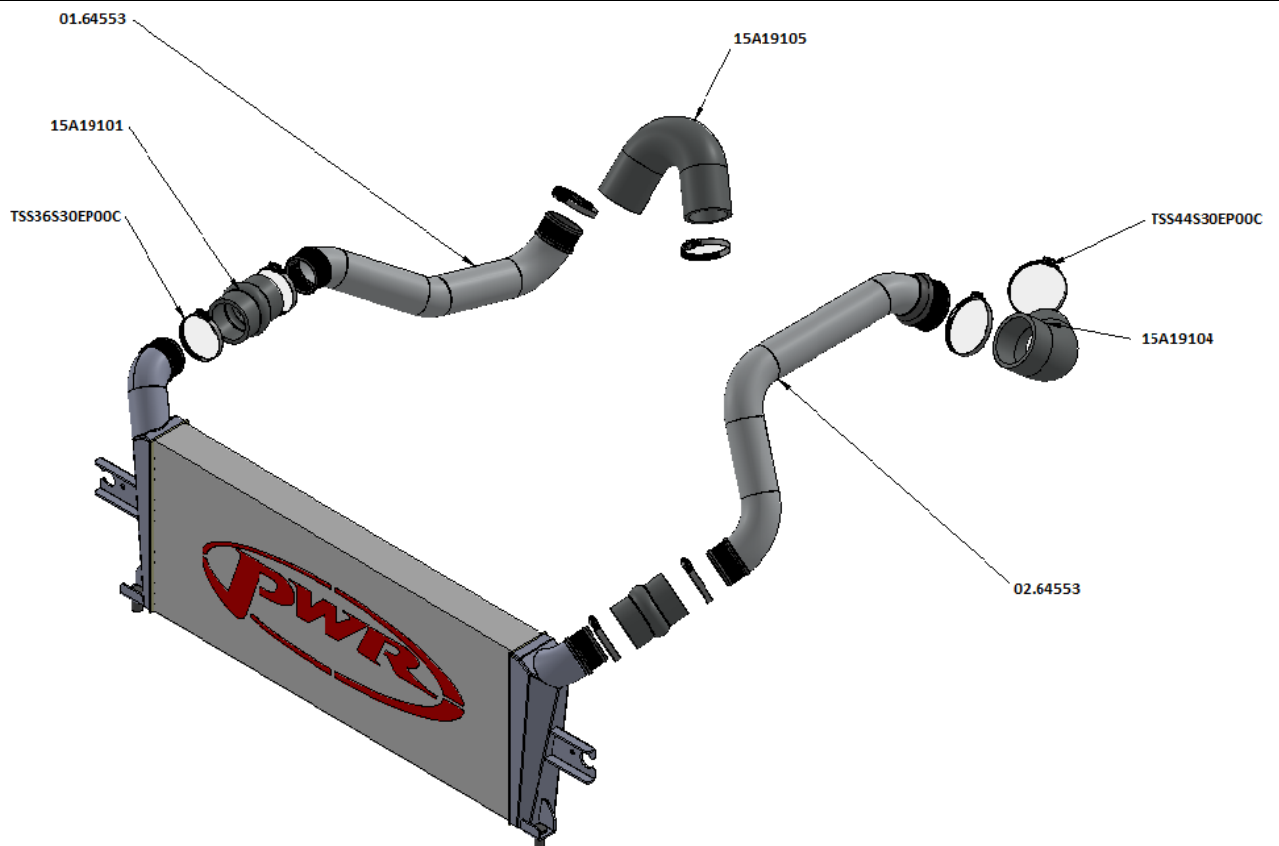
- Select a coolant that is recommended by the manufacturer or by PWR. Product must meet the current AS2108 engine coolant/inhibitor standard and refill system. Cycle the fluids through the system to remove air locks. Re-Check the coolant level and top up if necessary. USE ONLY DISTILLED WATER
- PLEASE be careful when fitting and make sure all mounting points are tight (to manufacturer's specifications) and that there is sufficient clearance so no rubbing occurs.
- PLEASE ensure that all hose clamps are done up.
- Pump must be fitted in accordance to fitting instructions supplied and by a qualified auto electrician.

APPLICATION

Before commencing the procedures outlined please read the guide and verify all parts are present and not damaged. If anything is missing or damaged, please notify PWR Performance Products on 07 5547 1600.

PACKING LIST

Description	Part Number	Quantity
Air Induction		
55mm Colorado Intercooler	PWI64552	1
Hot Intercooler Intake Pipe	01.64553	1
Cold Intercooler Outlet Pipe	02.64553	1
Silicone Hose 51mm x 135 Degree	15A19105	1
Silicone Hump Hose 51mm x 80mm long	15A19101	2
Silicone Hose 62mm x 113 Degree	15A19104	1
Murray Hose Clamps 50 – 73mm	TSS36S30EP00C	6
Murray Hose Clamps 64 - 86mm	TSS44S30EP00C	2
Horn Spacers	02A19221	2
M6 flat washers	MSFWM6Z	2
Bolt M6 x 25 Socket Head Cap Screw	SHCSM625ZP	2
Bolt M6 x 10 Socket Head Cap Screw	SHCSM610ZP	1
Clips - Ducting	GM94215211	10
Decals/Labels		
Warranty Card		1



EQUIPMENT AND SUPPLIES REQUIRED FOR FITMENT

- Fender Cover (2)
- 1/4" and 3/8" Drive Ratchets with Extensions
- 3/8" Drive Torque Wrench (7-35 ft-lb range)
- Metric Socket Sets (short and deep recommended)
- Metric Wrench Sets
- Metric Allen Key Set
- T-25, T-27 AND T-30 Torx Bit Screwdrivers or Sockets
- Short Phillips-head Screwdriver
- Small flat screw driver
- Trim Pad Tool (for pushpin removal)
- Assembly Lubricant (White Lithium Grease or Petroleum Jelly)
- Sharp Knife or Razor Blade
- Hacksaw or snips (to cut plastic)
- Medium Strength Thread Locker – Loctite[®] 242 (blue) or equivalent
- Writing equipment (pen or marker)
- Zip lock / reseal able bags (to store and label removed nuts / bolts clips etc.)

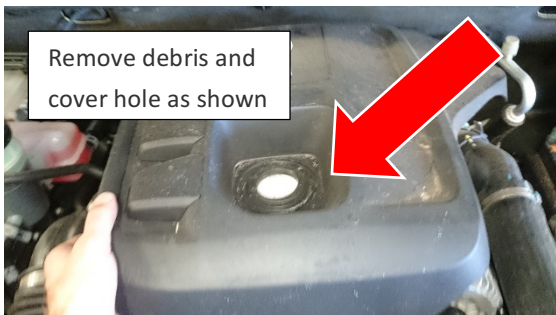
DISASSEMBLY

The following section will guide you through the disassembly of the OEM parts on your vehicle. Special care should be taken to label parts and avoid damaging items as removed since many items will be reused.

1. Open bonnet.
2. Cover guards with fender covers to protect vehicle finish.
3. Disconnect Battery.



4. Remove engine cover (Ensure it is free from loose debris and slide a clean rag under to cover over the oil filler to avoid contamination of engine when removing)



5. Remove bumper starting with the top edge of the grille using T15 torx and M10 socket.



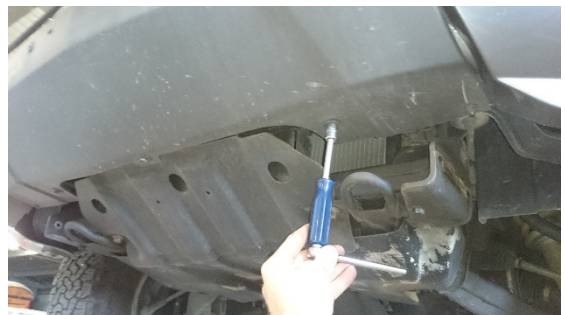
6. Next remove the screws under the wheel well connected to the front bar.



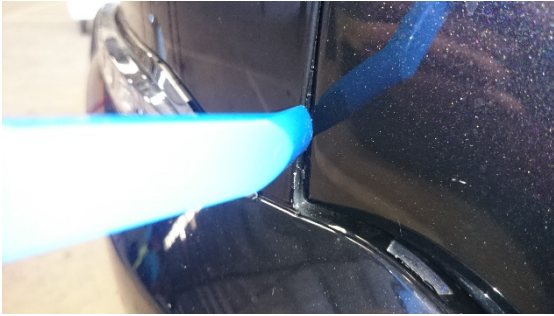
7. Disconnect fog lights if fitted at this stage.



8. Using M10 and M14 sockets, undo the screws under the front lip of the bumper.



9. After all screws are undone, carefully pry the bumper using trim removal tool. It is recommended to have a second person to help hold the bar to prevent damaging the bar during removal.



10. Undo the screws holding the lock panel cover and remove the panel.



11. Remove the covers over the airbag sensors to gain access to the ducting and reinforcement bar.



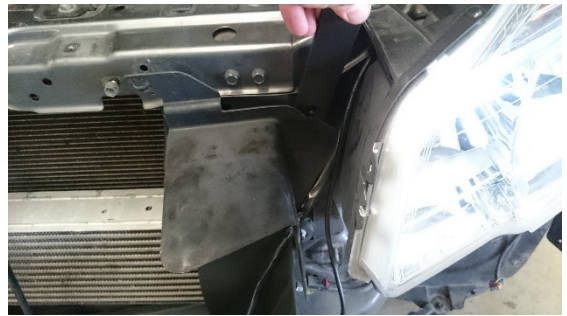
12. Undo the last two bolts in the middle of the reinforcement bar and remove.



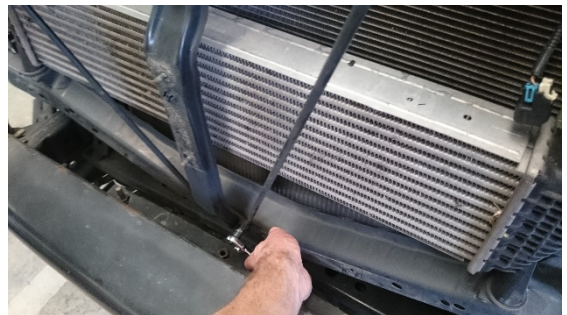
13. Disconnect and remove the horns.



14. Remove the ducting using a trim removal tool.
(Break clips for speedy removal as new clips are supplied in the kit)



15. Remove the lock panel cover support rods.



16. Remove the bonnet latch brace and unclip the sensor from the back side of the brace.



17. Remove bonnet latch and rest to the side. (NOTE - it is recommended to temporarily secure with zip tie if required to prevent it slipping and damaging panels.)



18. Unbolt the lower reinforcement bumper bar in 4 places. (2 on each side)



19. Disconnect the MAF plug.



20. Undo the intake pipe and remove the air box cover.



21. Undo the hose clamps from the top of the intercooler.



22. Remove the clamps that retain the OEM Rubber intercooler pipes from the steel hard pipe. Then undo and remove the steel hard pipe from the radiator core support panel.



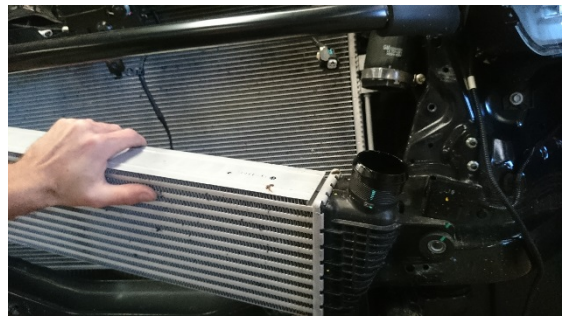
23. Undo and remove the hot pipe from the turbo.



24. Undo and remove the cold pipe from the throttle body.



25. Unbolt and remove the OEM intercooler.



ASSEMBLY

The following section will guide you through the assembly of the PWR Performance Products upgraded intercooler and pipe kit installation in your vehicle.

Assembly Section 1 – Intercooler

1. Remove the rubber grommets from the OEM intercooler and place them into the PWR intercooler.



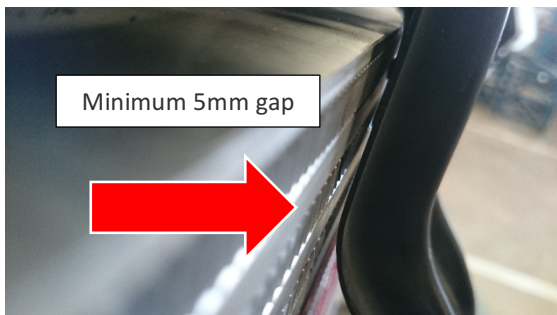
2. Install the 2 inch silicone hump hose (Part number 15A19101) onto the intercooler inlet and rotate hose clamp around as indicated before securing. Mirror this for the intercooler outlet.



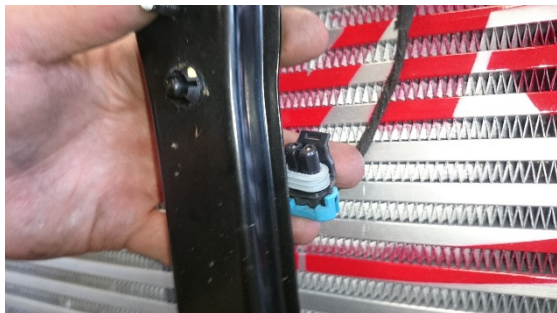
3. Reinstall the intercooler on the car using the original mounting points. Taking care to carefully slide the outlets through the holes in the radiator core support panel before the bottom pins are pushed in as it is a snug fit.



- Reinstall the bonnet latch and brace. (NOTE – use the M6 x 10mm screw supplied in the kit in the second hole of the brace as indicated in the image below to avoid core damage. As the brace is close to the core. There should be a gap of at least 5mm.)



- Reinstall air sensor harness.



- Undo the bolt in the center of the horn and rotate the bracket around so that the plugs do not hit the intercooler when reinstalled.



- Screw the horn on with the aluminium spacer behind the bracket to clear the lip on the radiator core support panel and connect plugs.



- Trim the ducting for both the left and right hand sides along the red lines as shown to clear the new PWR intercooler.



- Reinstall air ducting by clipping into place using the supplied clips.



10. Reinstall the bumper reinforcement panel, lock panel supports and the lock panel.



Assembly Section 2 – Pipe Kit

⚠ WARNING

Ensure torque setting are correct for Murray clamps to avoid under or over tension of clamps which may lead to failure.
 Rated Ultimate Torque: 75in.lbs. min. (8.5Nm)
 Recommended Installation Torque: 50in.lbs. (5.6Nm)

11. Install the 135 degree silicon elbow on to the turbo. Slide on hose clamps but do not tighten until the hard pipe is installed.



12. Install the hot side PWR hard pipe 01.64553 into the 135 degree elbow and slip into the 2 inch hump hose on the intercooler at the same time.



13. Confirm that the silicone is hard up to the shoulder on the hose outlets, check clearances and tighten up all hose clamps firmly.
14. Reinstall the filter box cover and cold air intake back onto the filter box be sure to reconnect the MAF plug.



15. Install the cold pipe and the silicone by sliding in the intercooler end first. Then slip the throttle body end of the tube into position to and rotate silicon and aluminum piping to make sure that nothing is rubbing.



16. Ensure the silicone is pushed all the way onto the ribbed outlet and tighten up all hose clamps firmly.



17. It is recommended to use a socket that has a universal joint and appropriate extensions to get to the hard to reach hose clamps behind the radiator core support panel.



18. Next step is to move back to the front of the car and replace the front bumper and Grill combo.



19. Ensure that all the lights are reconnected behind the bumper before tightening up lower fixing screws.





20. Connect battery and confirm that all hoses, pipes, wires and panels are secure.



21. Ensure that no tools or obstructions have been left under the bonnet and your PWR Intercooler and pipe kit is now installed.



22. Check all lights and sensors that may have been disconnected during the install are now fully functional.



23. Enjoy and thank you from the team at PWR.