# **INSTALLATION GUIDE**



#### MITSUBISHI TRITON INTERCOOLER KIT



**P/N PWI64898K** 



# Installation Instructions

## Mitsubishi Triton MQ

P/N: PWI64898 P/N: PWA64899



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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 then 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 your PWR Performance Product.



**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 manufactured or by PWR. Product must meet the current AS2108 or manufactures 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 manufacturers 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 manufacturers 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 manufacturers 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:

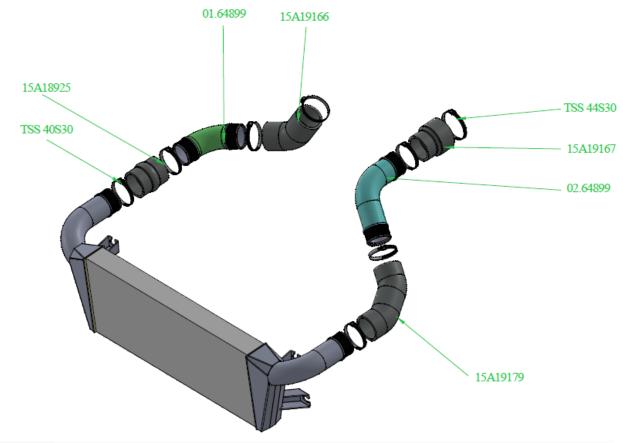
- Select a coolant that is recommended by the manufactured or by PWR. Product must meet the current AS2108 engine coolant/inhibitor standard and refill system. Cycle the fluids through the system to remove air locks. Re-Check the coolant level and top up if necessary. USE ONLY DISTILLED WATER
- PLEASE be careful when fitting and make sure all mounting points are tight (to manufacturers 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 Triton Intercooler	PWI64898	1
Hot Intercooler Intake Pipe	01.64899	1
Cold Intercooler Outlet Pipe	02.64899	1
Silicone Hose 57mm x 65.5 x 113 Degree	15A19166	1
Silicon Hump Hose 57mm x 80mm	15A18925	1
Silicon Hose 57mm x 113 Degree Double Bend	15A19179	1
Silicone Hose 57mm – 70mm Reducer	15A19167	1
Murry Hose Clamps 57-79mm	TSS40S30EP00C	7
Murry Hose Clamps 64 - 86mm	TSS44S30EP00C	1
Clips - flares	MU000977	18
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
- 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<sup>®</sup> 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 grille starting with the top edge of the grille using screw driver.



5. Next remove the screws from behind the grille.



6. Use a trim tool to slide under the grille to release the clips and pop out the grille.



 Once the grille is removed it is recommended that begin removal of the mud flaps and flares if fitted. (This give access required later to remove the front bar)



8. Remove the bolts and clips under the wheel holding the inner guard.





 Once the fasteners are all removed manipulate the plastic inner guard to pull it clear from the vehicle.



10. Next step is to remove the clips holding the flare in place. As PWR supply 18 new clips in the kit these can be cut from under the wheel arch if need be to prevent the flare from being damaged.





11. Disconnect fog lights at this stage (if fitted).



12. Using sockets undo the screws from the front of the bumper.



13. Pop out the sides of the bumper and remove front bumper carefully.



14. Once the bar is removed undo the bumper reinforcment panel. First disconnect and remove horns.



15. Once the reinforcement panel is removed, move back to the engine and remove the plastic engine cover to gain access to the intake hose clamped to the throttle body.



16. Undo and remove the intake pipe from the filter to the turbo.



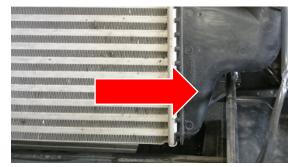
17. Remove the OEM intercooler hose from the turbo and throttle body.



18. Next undo the flanged hard pipes on the top of the intercoolerand remove separately.



19. Undo the 4 bolts 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 Intercooler and Pipe Kit

20. After the OEM intercooler has been removed take the 4 rubber bushes out and reinstall into the PWR intercooler mounts as indicated below.



21. Next slide the PWR intercooler through the holes in the radiator core support panel. Take care when installing to make sure the outlets to not rub on the body panels. And install the 4 bolts



22. Reinstall the bumper reinforcement panel.



23. Reinstall the horns by doing up the bolts and plug in the wiring.



24. Install the new PWR hot pipe (01.64899) to the turbo out let using silicone 15A19166 and join the other end of the pipe to intercooler inlet as indicated below using silicone
15A18925. Secure pipes and silicone using 4 x TSS40 Murray clamps. Ensuring the Murray clamps are tightened to manufacturers specs.





25. Install the cold pipes using the supplied silicone 15A19179 from the intercooler to the pipe (02.64899) and silicone piece 15A19167 from the pipe to the throttle body. Using 3 x TSS40 Murray clamps on the pipe and intercooler ends of the silicone and use the 1x TSS44 supplied at the throttle body send as indicated in the image. Ensuring the Murray clamps are tightened to manufacturers specs to prevent the hoses from blowing off or clamp failure.



26. Once all the silicone is confirmed to be clear of obstruction and tight replace the engine cover.



27. Reinstall the air intake from the airbox to the turbo. Tighten the bolts as indicated below.



 Reinstall the front bumper bar. Ensuring that all bolts an reinstalled firmly and fog lights (if fitted) are plugged back in.



29. Remove all the cut and broken clips from the flares and install the 18 new ones supplied in the PWR kit.



 Clip the flares back into place by pushing firmly along the flares where the clips are located.



31. Replace the inner guards ensuring that all the bolts and clips are replaced.



 Reinstall the front grille and lock panel cover.
 Ensure that the pipes do not rub anywhere and tighten up all clamps to tension.



- Reconnect the battery and confirm that all nut bolts, washers, clips and clamps are done up.
- 34. Ensure there are no tools or obstructions left under the bonnet and your PWR intercooler

and pipe kit is now installed. Enjoy and thank you from the team at PWR.