
INSTALLATION GUIDE

TOYOTA LANDCRUISER 200 SERIES 4.5LT V8 TTD
TOYOTA LANDCRUISER VDJ V8 70 SERIES



P/N PWA81932 - POLISHED FAN SHROUD KIT



ENGINEERING THE UNFAIR ADVANTAGE

Contents

CONDITIONAL MANUFACTURERS WARRANTY	2
<i>Warranty voids</i>	2
<i>Warranty does not cover</i>	2
LIMIT OF LIABILITY STATEMENT	2
SAFETY PRECAUTIONS	3
IMPORTANT INFORMATION FOR FITTING	4
<i>RADIATORS:</i>	4
<i>INTERCOOLERS:</i>	4
<i>OIL COOLERS:</i>	4
<i>LIQUID TO AIR BARREL INTERCOOLER KITS:</i>	4
PACKING LIST	5
EQUIPMENT AND SUPPLIES REQUIRED FOR FITMENT	5
DISASSEMBLY	6
ASSEMBLY	9

CONDITIONAL MANUFACTURERS WARRANTY

PWR Custom Aluminum 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 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 re-check 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:

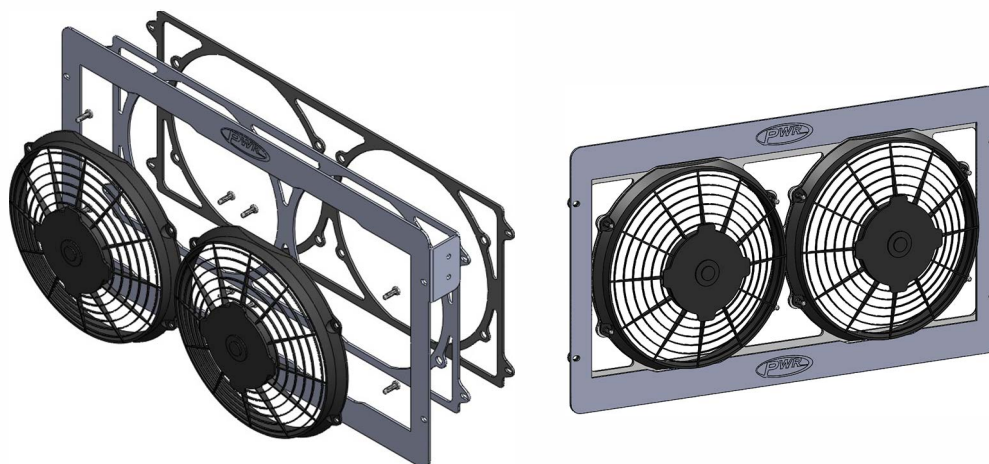
- Select a coolant that is recommended by the manufacturer or by PWR. Product must meet the current AS2108 engine coolant/inhibitor standard and refill system. Cycle the fluids through the system to remove air locks. Re-check the coolant level and top up if necessary. USE ONLY DISTILLED WATER
- PLEASE be careful when fitting and make sure all mounting points are tight (to 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	Quantity
Air Induction		
PWR Lower Shroud with Fan Mounts and Foam Seal	81932SM01	1
PWR Upper Shroud Cover	81932SM02	1
10" Spal Thermo Fans Pushers	PWAC10SKP-200	2
Wiring Loom for Thermo Fans	HARNESS-200	1
M6 Allen Key Bolts 25mm	SHCSM625ZP	4
M6 Spring Washers	SWM6SZ	4
M6 Spacers 5mmx15mm	02A19221	4
M6 Nuts	SSH304M6	8
Ezy Clip	EZY01	1
Decals/Labels/Warranties		
Warranty Card		1



Assembly

1. Make sure the vehicle is parked safely on flat ground with it in park and the hand brake secured.



2. Open bonnet of vehicle.
3. Disconnect positive battery terminal in engine bay to cut power with a 10mm open end spanner.
4. Use a 10mm socket to remove and retain the two front nuts holding the factory plastic cover.



5. Lift the cover from the front and unclip the cover at the rear of the intercooler.
6. Install the supplied shroud kit.
7. Install the lower shroud (foam face down) on the OEM intercooler first, position so the thermo fan plugs are facing the firewall.
8. Position the top shroud cover over the top with the relay and loom on the passenger side.
9. Line both shrouds bolt holes up with the OEM mounts.
10. One by one use the supplied 4 x M6 bolts and washers (top side) with spacers between the lower shroud and the OEM threads to fill in the gap. All finger tight first then tighten once all aligned.



11. Run the wiring loom thermo fan connectors behind the intercooler to meet the thermo fan connectors.
12. Click together and leave up behind the intercooler along the firewall.
13. Now you are ready for the wiring steps.

If you are unclear, please consult an authorised auto electrician.



Wiring and thermo fan

Toyota 200 Series (turn over to see 70 Series set up)

1. Connect the 8mm eyelets to the battery posts.



2. Red to positive battery post
(the wiring with the fuses close to termination).
3. Black to negative battery post.
(This will connect the main power supply to the fans and relays)
4. Connect the trigger wire using the EZ tap joiner supplied (yellow clip) to the thick white wire in the 4-pin plug.
5. Use the supplied EZ Yellow clip by opening the clip, place it over the white wire as indicated, close the clip until it locks. Insert the EZ clip into the connector as shown below.



6. Clip the yellow EZ tap connector onto the white wire in the 4 plug.



(This will connect ignition to the relays enabling the fans to be only switched ON with ignition.)

7. Switch ignition on, the fans should now be working
There is an optional trigger plug in the harness for an external toggle or temp switch Deutsch DTM2 way plug in the loom - (This will allow the fans to be triggered by ignition via an external switching method, only if required)

Toyota 70 Series



1. Connect the 8mm eyelets to the battery posts.
2. Red to positive battery post (the wiring with the fuses close to termination).
3. Black to negative battery post.
(This will connect the main power supply to the fans and relays)
4. Connect the trigger wire using the EZI clip joiner supplied to the blue wire powering the washer bottle near the firewall. Soldering the wires is an option if available.



5. Use the supplied EZI clip by opening the clip, place it over the blue wire as indicated, close the clip until it locks.
6. Insert the EZ clip into the connector as shown below.



8. This will connect ignition to the relays enabling the fans to be only switched ON with ignition.
9. Switch ignition on, the fans should now be working.
10. There is an optional trigger plug in the harness for an external toggle or temp switch Deutsch DTM2 way plug in the loom (This will allow the fans to be triggered by ignition via an external switching method, only if required.)

Please note, these EZI Clips are designed for an easy install use, PWR does also recommend a soldered/hard wire connection. Please consult your auto electrician if you are unclear.

11. Once your wiring is all complete, switch ignition on and the fans will start working, start the engine, shut the hood and let your adventures begin.

Thank you for choosing Australian Made PWR cooling products.