

Lingenfelter Toyota Land Cruiser Auxiliary Fan Kit Installation Instructions



PN: L300199900

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Parts List

Lingenfelter Toyota Land Cruiser Auxiliary Fan Kit (PN: L300199900)

#	Description	Part number
1	VA01-AP70/LL-36S 12" Fan	30102025
1	Toyota aux fan harness with relay & mating connector	XX00359-0001
1	Fuse, 25 Amp ATO	
2	Rubber isolator mount, round rubber	88467-20190
2	Rubber isolator mount, bolt thru	88897-50020
1	Upper bracket, powder coated black	XX00359-0005
1	Lower bracket, left side, powder coated black	XX00359-0006
1	Lower bracket, right side, powder coated black	XX00359-0007
2	M6 stud	11589406
1	M8-1.25 free spinning washer nut 18MM O.D.	AV15333
1	M8 x 1.25 x 30 mm flange cap screw, black	98093A548
6	Nylock nut, 1/4-20	30634
2	M6 x 1.00 Nylon lock nut	47214
8	M6 SS flat washer	47393
60	Rubber foam weatherstrip, 3/8"	93695K42
10	Cable Tie, 8"	
1	Butt connector	940005

Tools & Materials Required

- Wire crimping tools
- 13 mm socket
- 10 mm socket
- 7/16" socket
- Drill
- 5/8" drill bit or hole saw
- 11/32" drill bit or hole saw
- Heat gun
- Marker or center punch
- Underhood paint

The Lingenfelter Toyota Land Cruiser Auxiliary Fan Kit can be used as a higher flow replacement for the OEM condenser fan. The Lingenfelter Toyota Land Cruiser Auxiliary Fan can also be used to add a condenser fan when there is not one equipped. Wiring for these applications may differ from the installation instructions.

Notes:

- Read all the instructions before beginning the installation process in order to make sure you have all of the tools and equipment needed and that you feel comfortable performing the installation.
- Be sure to save all of the parts you remove from the vehicle. Many components will be re-used during the installation of this system.
- Be careful not to damage any components while removing them from the vehicle.
- When referencing the different sides of the vehicle inside the installation instructions:
 - (Sitting in the vehicle facing forward) the left side of the vehicle is considered the driver's side and the right side of the vehicle is considered the passenger's side.

1. Remove the negative terminal of the battery

2. Remove the bumper assembly per OEM instructions.



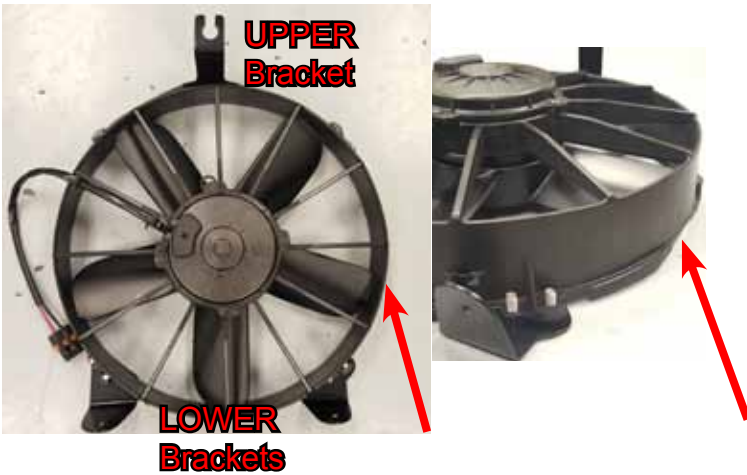
3. Remove the horn on the passenger's side of the vehicle.



- Remove the two center braces and the ground wire (indicated by the arrow in the picture to the left) that is connected to the one of the braces.



- Reroute the harnesses as shown in the picture.



NOTE: Make note of the modified edge (indicated by the red arrows in the pictures to the left) when installing the SPAL fan (PN: 30102025) brackets. The modified edge is a flat edge on the fan. The modified edge is necessary for clearance when installing the fan assembly into the vehicle.



NOTE: When installing the brackets on to the fan, the order of components from top to bottom is as follows (from top to bottom):

- Lock Nut (PN: 30634)
- Washer (PN: 47393)
- Fan (PN: 30102025)
- Bracket



6. Install the upper bracket (PN: XX00359-0005) onto the SPAL fan. Use the washers (x2) (PN: 47393) and lock nuts (x2) (PN: 30634) to secure the bracket into place.

NOTE: Make note of the modified edge (indicated by red line in the picture to the left) when installing the upper bracket.



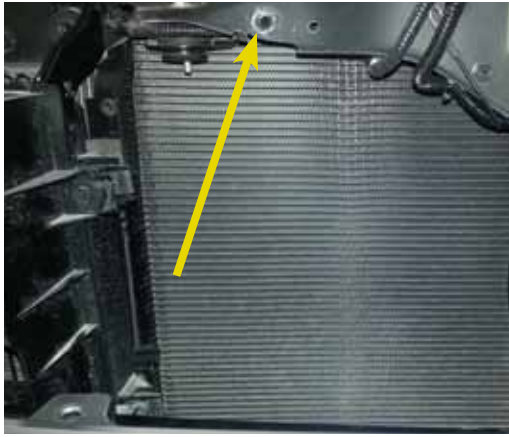
7. Install the left side lower bracket (PN: XX00359-0006) onto the fan on the same side as the modified edge. Use the washers (x2) (PN: 47393) and 1/4" lock nuts (x2) (PN: 30634) to secure the bracket into place.



8. Install the right side lower bracket (PN: XX00359-0007) onto the fan on the opposite side as the modified edge. Use the washers (x2) (PN: 47393) and 1/4" lock nuts (x2) (PN: 30634) to secure the bracket into place.



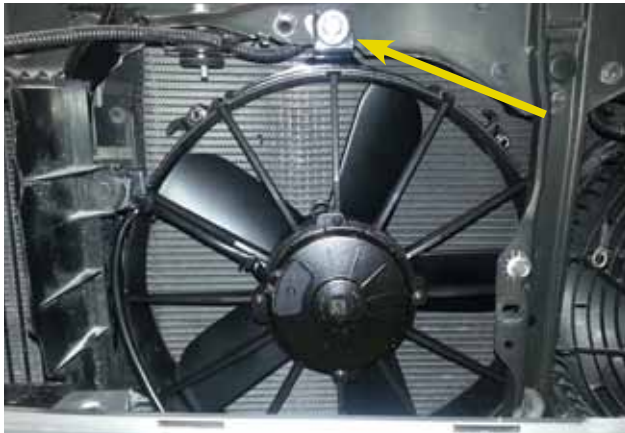
9. Install the foam (PN: 93695K42) on the back of the SPAL fan.



10. Drill a new hole (11/32") for the horn roughly 1-1/2" to the left of the existing hole.

NOTE: Be careful not to drill into the heat exchanger.

OPTIONAL: Now would be a good time to paint over the drilled hole to help prevent corrosion.



11. Secure the upper bracket to the vehicle using the upper bracket rubber isolator mount (PN: 88897-50020), the free spinning washer nut (PN: AV15333), and the M8 x 1.25 x 30 mm bolt (PN: 98093A548).

NOTE: Use the hole where the horn was initially located to secure the upper bracket for the SPAL fan.

NOTE: When installing the rubber isolator mount, make sure the mount is oriented so the rubber will be resting against the frame of the vehicle.



12. Using a bright colored marker or center punch, mark the center of your holes for the lower brackets.



13. Remove the fan assembly from the vehicle.

14. Drill 5/8" holes into the frame so you can secure the lower brackets.

OPTIONAL: Now would be a good time to paint over the drilled holes to help prevent corrosion.



15. Install the M6 studs (PN: 11589406) onto the lower brackets. Use the washers (x2) (PN: 47393) and M6 lock nuts (x2) (PN: 47214) to secure the M6 stud into place. When securing the stud, the stud is pointed in the direction away from the fan. The washer goes on the same side as the lock nut.



16. Place the two lower bracket rubber isolator mounts (PN: 88467-20190) onto the holes you drilled in the previous step.



17. Reinstall the fan assembly and the passenger side horn into the vehicle.





18. Reinstall both of the braces. Then connect the ground wire (indicated by the arrow in the picture to the left).



19. Locate the fuse box and remove the Condenser FAN Relay indicated by the circle in the picture to the left.



20. The relay has 4 wires.

- Denso Fan +12V - White and Blue
- Control Wire - Red (smaller AWG)
- +12V Battery - Red (larger AWG)
- +12V Switched - Green

Splice into the red Control Wire from the relay and connect the yellow wire from the harness.



21. Find the +12V terminal from the battery. Connect the white wire from the harness to the +12V battery terminal.



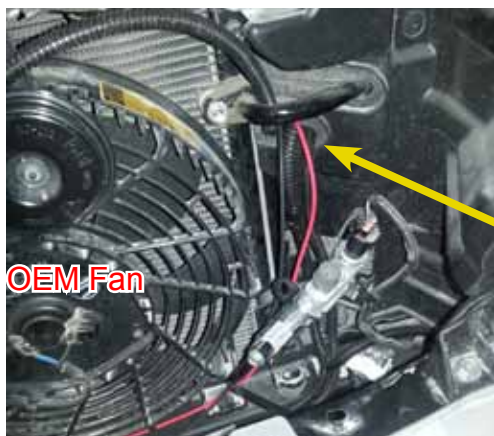
22. Install the 25 Amp fuse into the fuse holder in the supplied wiring harness (PN: XX00359-0001). Secure the fuse holder using one of the supplied cable ties.



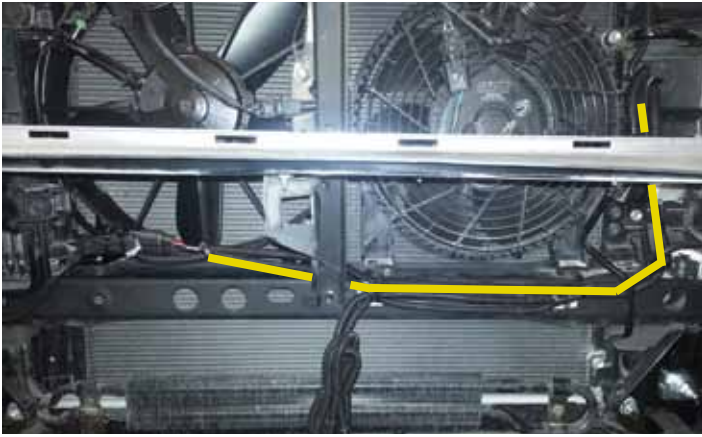
23. Connect the black wires from the harness to a suitable ground. In the picture to the left, the ground that is used is located next to the windshield wiper fluid reservoir.



24. Secure the relay from the harness to the harness using one of the supplied cable ties.



25. Feed the power connector for the SPAL fan from the harness through the hole shown in the picture.



26. Route the connector/harness for the SPAL fan as shown to the connector from the SPAL fan.

27. Connect the connector from the harness for the SPAL fan to the connector coming from the SPAL fan.

Installation of the Lingenfelter Toyota Land Cruiser Auxiliary Fan Kit is now complete! If wired per the instructions, the Lingenfelter Toyota Land Cruiser Auxiliary Fan will be powered when the OEM condenser fan is commanded on by the vehicle.

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NOTICES:

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