

# Installation Instructions TF2342R



## Land Rover Defender 1998-2007 RHD TD5 Engine

Coolair Logan
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### **Component List**

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## Coolair Mount & Drive logan









AK1165/01	TD5 Land Rover Defender Mount and Drive Kit	
Part number	Description	Quantity
M1097/01	Compressor Bracket-Top	1
M1097/02	Compressor Bracket-Bottom	1
M1128	Spacer	1
BSC10-068	M10 x 130 Skt HD	2
N10-009	M10 Nyloc Nut	2
W10-005	M10 Plain Washer	4
BSC8-042	M8 x 30 Skt HD	4
W8-020	M8 Spring Washer	4
8028	Compressor	1
7PK1800	Belt	1

# **coolair**Evaporator Assembly logan





AK1255/02	RHD TD5 Land Rover Defender Evaporator Assembly	
Part number	Description	Quantity
1369-408-02	Evaporator Assembly	1
1369-958-01DE	Drain Tube	1
1369-956-01DE	Drain Tube Grommet	1
1369-955-01DE	Firewall Grommet	1
W6-006	M6 Mudguard washer	1
1369-954-01DE	Defender Fixing Brackets	2
ST-008	4.2 x 19 Self tappers	4
	(Black)	
ST-016	#10 x 2.5 Self Tapper	1
1369-953-01DE	Weld nut fixing brackets	2
BSC5-137	M5 x 20 Hex HD	4
W5-008	M5 Spring Washer	4

# Coolair Drier Assembly Ogan



SB1162	RHD TD5 Land Rover Defender Drier Assembly	
Part Number	Description	Quantity
M2449	Defender RHD Drier	1
	Bracket	
62038	Defender Aluminium Drier	1
BR-004	4.8 Aluminium Rivet	4
BSC6-012	M6 x 16 Hex HD Setscrew	2
BSC6-015	M6 x 25 Hex HD Setscrew	4
C-001	Cable Ties	10
M1195	No.10 P-Clip	1
M1429	18/15 P-Clip	1
M2432	Condenser Top Mounts	2
N6-007	M6 Nyloc Nut	4
N6-011	M6 Flange Nut	2
W6-003	M6 Plain Washer	2
W6-014	M6 Shake Proof Washer	4

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## Coolair Hoses and Pipes logan



AK1251	TD5 Land Rover Defender Hoses & Pipes	
Part Number	Description	Quantity
1. M2465/03	DEFENDER TD5 #6 PIPE EVAP:DRIER	1
2. M2465/04	DEFENDER TD5 #6 PIPE COND-DRIER	1
3. M2440/04	DEFENDER TD5 #8 HOSE COND:COMP	1
4. M2440/06	DEFENDER TD5 #10 HOSE EVAP-COMP	1

### Coolair Wiring Looms logan



AK1251	TD5 Land Rover Defender Wiring Looms	
Part Number	Description	Quantity
1. RDMP62B	Main Loom	1
2. RDMP63A	Evap Loom	1

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# Coolair Condenser Assembly Logan



SB1187	TD5 Land Rover Defender Condenser Assembly	
Part Number	Description	Quantity
M2431	Condenser mounting	1
	Frame	
1991-455-01	Condenser	1
M2432	Top Condenser Mounting	2
	Bracket	
VA07-AP7/C-31S	Condenser Fan	1
BSC6-016	M6 x 35 Hex HD	8
W6-030	M8 Rubber Washer	8
	30mm O/D	
N6-007	M6 Nyloc nut	8
W6-003	M6 Plain Washer	12
W6-006	M6 x 20 O/D washer	4
BR-004	4.8 x 12 Rivets	4
BSC8-025	M8 x 16 Hex HD	1
N8-008	M8 Nyloc Nut	1
W8-004	M8 Plain washer	1

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### Fitting the Kit

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- 1. Disconnect the battery
- 2. Remove the front grill and grill surroundings and store somewhere safe.
- 3. Remove 'A' frame assembly
- 4. Remove bonnet 'slam panel' screws from both wings.



#### Vehicle preparations

- 5. Disconnect the battery
- 6. Remove the front grill and grill surroundings and store somewhere safe.
- 7. Remove and retain 'A' frame assembly
- 8. Remove bonnet 'slam panel' screws from both wings.

### Interior



(For instruction demonstration purposes, the evaporator installation is carried out on a LHD 200TDI)

- 1. Remove speakers from vehicle facia, retain all parts.
- 2. Remove the fuse box cover
- 3. Locate the brown seven way connector in the area of the fuse carrier brackets and remove the blank connector from the unit. Later instructions follow if your vehicle does not have this connector.
- 4. Drill out the two outer speaker fixing holes to 7mm diameter
- 5. Fit the two 90 degree brackets and weld nut assemblies to the drilled out speaker holes with the fixings provided.
- 6. Remove the bulkhead grommet and drain tube grommet from the vehicle firewall and transmission tunnel.
- 7. Drill hole for the new firewall grommet and fit.





### coolair Interior continued...

- 8. Locate the oval firewall grommet on the either the right hand or left hand side of the fuse box and cut to allow the white connector on the under bonnet wiring harness to pass through. (Later vehicle do not have oval bulk head grommets is it therefore necessary to cut a 25mm hole in the firewall behind the fuse board and fit the grommet supplied on the loom.
- Lift the under dash unit into position on the vehicle, pushing the round A/C pipe manifold block into the firewall grommet fitted earlier (lubricate if necessary)
- 10. The 90 degree brackets fitted earlier will fit inside the fascia moulding
- 11. Centralise the fascia and using the centre fixing hole as a location drill a 5.5mm hole into the vehicle dash board. Fix the fascia to the dashboard using the long self-tapping screw provided with the kit.
- 12. Drill 3mm holes either side of the mounting into the 90 degree brackets and fix with the self-tappers provided in the kit.
- 13. Re-fit the speakers to the A/C fascia
- 14. Connect the 3 way electrical harness (2 x Brown 7-way connectors and 1 x white 4-way connector) to the fuse box connector block and the fascia connector block.
- 15. If the vehicle does not have the 7-way brown connector, wire as follows; Connect an ignition feed onto the white/green

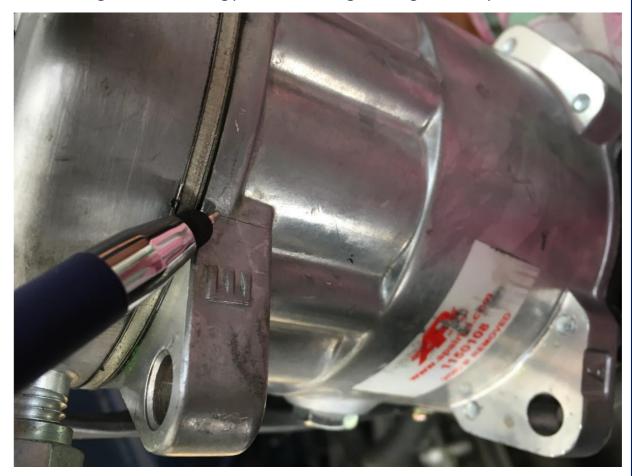
  Connect a 20A main feed onto the brown wire

  Connect an earth onto the blue and black wire
- 16. From the engine side push the white 4-way connector from the main harness through the oval grommet previously cut. Connect to the reciprocal on the three way harness.
- 17. Re-fit the fuse box
- 18. Fit the drain tube to the evaporator and through the drain tube grommet.



#### **Compressor and Engine Dress**

- 1. Remove plastic engine cover and plastic cover above the radiator
- 2. Remove and discard the drive belt and top idler pulley
- 3. Fix mounting brackets to fixing points on the engine using the bolts provided



- 4. Fit compressor to the mounting brackets and fit new drive belt. Caution: Check the compressor fitment before overtightening as this can cause damage to the lugs. (See picture above) if there is a gap, it needs to be shimmed. Any damage to the compressor is not covered by the warranty.
- 5. Fit the receiver drier to the right side chassis rail (when viewed from the front of the vehicle)



- 6. Holes are available for both receiver/drier installations as the positions are as fitted by Land Rover
- 7. Fit pipes and hoses ensuring a smooth run of hose, connect condenser on installation

### Condenser fan assembly

- 1. Fit condenser and frame to the lower A Frame fixing points, do not tighten at this point
- 2. Carefully drill out the four rivets from the bonnet/hood latch/anti-tamper cover.
- 3. Using rivets supplied refit cover and fix top condenser brackets to slam panel.
- 4. Ensure secure fitment to A Frame fixing points





#### **Under Bonnet Electrical Harness**

- 1. Lay the harness over the engine and plug in to the condenser fan and compressor. The plug on the compressor locates onto the tabs on the compressor guard.
- 2. Ensure that the wiring harness is clear of any heat/damage sources and tie wrap in position.
- 3. Re-fit removed components from vehicle
- 4. Charge the A/C system with 600gm +/- 25gm of R134a refrigerant gas.
- 5. Run the system to ensure that the condenser fan cuts in at the appropriate pressure and is running in the right direction (blowing on the condenser).