

**TRUCK, AMBULANCE, LIGHT, 4 LITTER, FFR,
WINCH, MC2 - LAND ROVER 110 6X6**

REPAIR OF AIR CONDITIONER HOSES

MISCELLANEOUS INSTRUCTION

This instruction is authorised for use by command of the Chief of the General Staff. It provides direction, mandatory controls and procedures for the operation, maintenance and support of equipment. Personnel are to carry out any action required by this instruction in accordance with GENERAL A 001.

Introduction

1. This instruction details the replacement of the air conditioner hoses fitted to the Land Rover 110 6x6 Ambulance air conditioner. The hose assembly is currently a one piece assembly from the compressor to the condensor/evaporator and on failure is to be replaced by three separate hose sections, however no retrofit action is required. This instruction is to be read in conjunction with VEHICLE G 227-3, which details the fitment of a hose support bracket, and ELECTRICAL T 009-1 for procedures concerning the handling of refrigerant.

2. The three new hose sections are shown in Table 1 and are to be fitted using the procedures detailed in paragraph 8. The manufacture of individual hose sections under local arrangements is authorised provided that the components shown in Figure 1, or equivalent, are used.

General

3. **Estimated Rework Time.** 5.0 hr (initial planning only).

4. **Rework to be Applied to.** All Land Rover 110 6 x 6 Ambulance on failure of the air conditioner hoses.

5. **Item Affected.** Air Conditioner Hoses.

6. **Action Required.** The rework is to be carried out by ECN 147 Electrical Fitter Refrigeration qualified or civil equivalent authorised to carry out unit, field or base repairs.

7. **Authority.** Land Rover Australia Engineering Change 2213 introduces the replacement hoses for spare parts action.

NOTE

NSN, MPN and Designations used in this instruction were correct at the time of issue. If 12 months or more have passed since issue, the NSN or MPN should be checked for supersession.

Table 1 - Stores Required (To be obtained through normal supply channels)

Item	NSN/MPN	Designation	Qty per Equip
1	AYG566	Hose, dual from compressor (AMC Part No 20-7082)	1
2	AYG567	Hose, compressor discharge (AMC Part No 20-6075)	1
3	AYG568	Hose, compressor suction (AMC Part No 20-7083)	1
4	5330-66-021-6691	Packing preformed, 13/16 in ID, 1 1/16 in OD, 1/8 nom width	2
5	5330-66-128-6087	Packing preformed, 7/16 in ID, 9/16 in OD	1
6	5330-66-021-6691	Packing preformed, 9/16 in ID, 11/16 in OD	1

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Hose Replacement

WARNING

THE PROCEDURES DETAILED IN ELECTRICAL T 009-1 ARE TO BE ADHERED TO FOR THE EVACUATION OF REFRIGERANT GASES.

8. The hose replacement is to be carried out as follows:

- a. Reclaim airconditioner gas, if applicable.
- b. Remove hoses from rear of airconditioner compressor and remove 'o' rings from fittings at compressor.
- c. Carefully cut the metal plate holding the two hoses together and remove the support clamps.
- d. Remove passenger seat from vehicle to expose access panel to fuel tank. Remove access panel.
- e. Pull hoses to the rear of the vehicle and place hoses down behind fuel tank.
- f. Remove access panel at front left of Ambulance module.
- g. Remove the fibreglass panel on the top of the module to gain access to the condensor unit.

NOTE

There is limited access to where the hoses are fed through between the inner module and the outer module. Care must be taken to avoid damaging the hose fitting and fibreglass.

- h. Disconnect the hose to the condensor unit and remove the rubber grommet.

NOTE

Do not remove the old condensor hose until the new hose is connected to the old hose. If the new condensor hose is not connected to the old hose before removal, the new hose will have to be fitted by using wire to pull it through the module wall.

- i. Remove cover plate on the wall inside the module behind the clock. This allows access to the evaporator unit.
- j. Disconnect the hose to the evaporator unit and remove the rubber grommet.
- k. Remove evaporator hose from the module by pulling hose from the outside at access panel.
- l. Connect the new condensor hose to the old condensor hose at condensor unit.
- m. Pull the old condensor hose out through the access panel until the old condensor hose is fully removed from the access panel and the new condensor hose is in a position to be connected to the condensor.
- n. Fit rubber grommet to new condensor hose and seal into mounting position using silastic. Place 'o' ring into fitting, connect new hose to condensor unit.
- o. Separate old condensor hose from new hose and discard old hose.
- p. Insert new evaporator hose by pushing it through from the access panel into the module, until it is in a position to be connected to the evaporator.

NOTE

It may be necessary to connect wire to the hose and feed the wire through the access panel. This wire can be used to carefully pull the hose through into its mounting position. Mirrors and torch will provide assistance. Ensure adequate care is taken not to damage the hose fitting.

- q. Place grommet on to hose and press into position. Fit 'o' ring into hose connection and connect hose to evaporator unit.
- r. Feed both new hoses from base of access panel over the top of the fuel tank through to the engine bay.

- s. Place 'o' rings into fittings at rear of compressor and fit the new dual hose assembly to the compressor.

NOTE

Ensure recharging valves are facing uppermost before tightening.

- t. Connect the dual hose assembly to the evaporator and condensor hoses.
- u. Replace clamps.

- v. Evacuate, leak test and regas unit adding approximately 25 ml of compressor refrigerant oil to the system.

- w. Refit cover plate located behind clock inside module.

- x. Refit front access panel at left front of module.

- y. Refit fuel tank access panel and passenger seat.

- 9. **Recording.** Enter the details of the rework in the GM 120, Record Book for Service Equipment, for the subject vehicle.

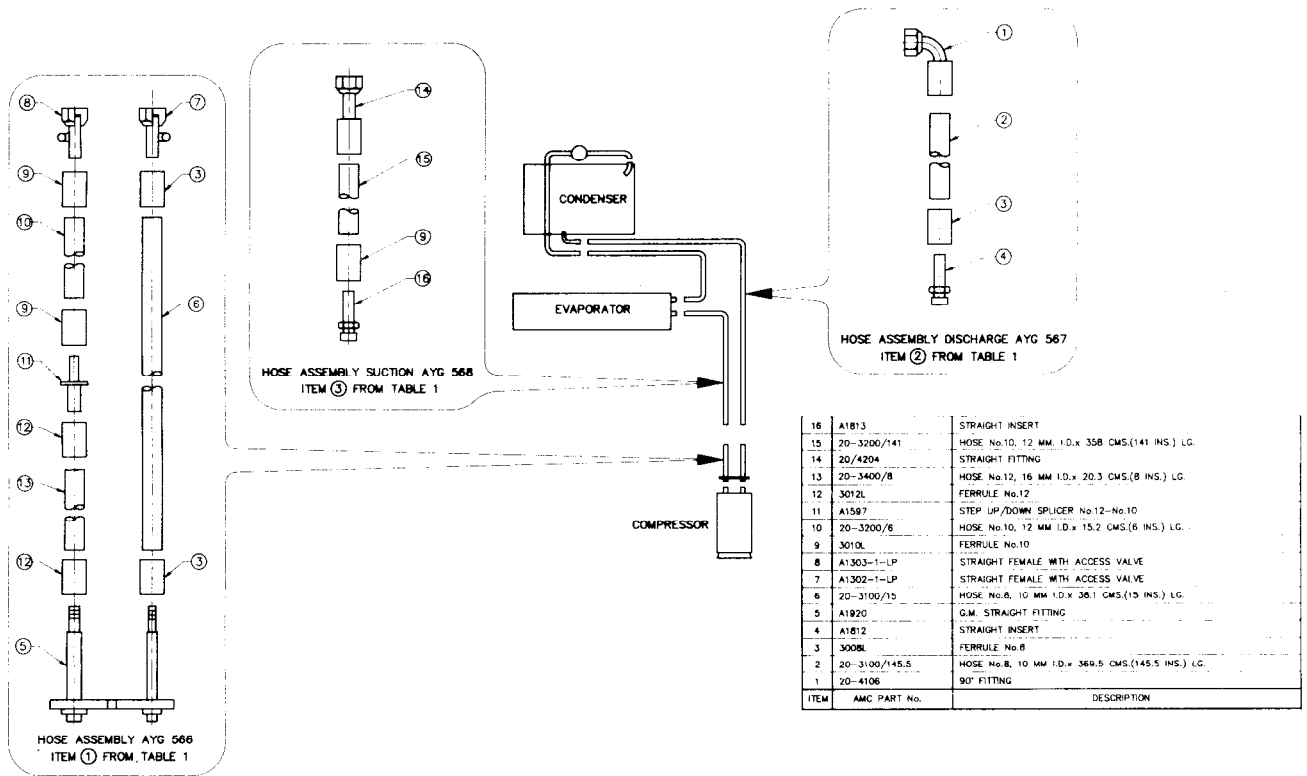


Figure 1 - New Hose Design

END

List VEH G 20.0 - Code 4 (MEA 910529)

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