

TRUCK, SURVEILLANCE, LIGHTWEIGHT, WINCH, MC2 — LAND ROVER 110

LIGHT GRADE REPAIR

This instruction is authorised for use by command of the Chief of Army. 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 EMEI General A 001.

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INTRODUCTION

1. This EMEI contains procedures for removing, dismantling, repairing, assembling and installing various components of the Truck, Surveillance, Lightweight, with winch. Where applicable, instructions for the adjustment, lubrication and minor servicing of these items are included.



Do not use adhesive tapes to seal fuel or oil openings. The adhesive tape is soluble in fuel or oil and can cause contamination. Remove temporary covers before assembling.

2. Prevent dirt and foreign objects from entering any component by placing clean temporary coverings over all exposed openings, including hoses, tubes and lines.



Before removing any electrical system components, disconnect the battery leads.

3. When disconnecting electrical connectors, hoses and fittings, remove clamps as required, to gain slack and avoid damage to connectors and fittings.

4. Discard all used gaskets, seals, cotter pins, tab washers, lock pins, key washers and lock washers. Discard all contaminated fuel and lubricants drained from the truck.

5. Use only those fuels and lubricants specified in the Servicing Instruction, EMEI Vehicle G 109, the User Handbook and this EMEI when replenishing fuel or lubricants.

6. Any fastenings or fittings being tightened to prescribed torques are to have dry, clean threads unless otherwise specified. When specified, thread sealants are to be applied to dry, clean, oil free threads.

7. The engine cooling system contains Nalcool corrosion inhibitor in water at a ratio of 1:12.



Precautions should be taken prior to carrying out repairs which include painting, sanding, scraping or welding. Refer to EMEI Workshop D 701 – Repair Policy for Equipment Painted in Polyurethane Paint.

8. This vehicle is painted in polyurethane paint.

Associated Publications

9. Reference may be necessary to the latest issue of the following documents:

- a. Defence Road Traffic Instructions;
- b. Complete Equipment Schedules (CES):
 - (1) SCES 12109; and
 - (2) Equipment Kit SCES 12036;
- c. Block Scale 2406/31 – Special Tools for RAEME- B Vehicles – Truck, Utility and Truck, Light, MC2 (Land Rover Model 110);
- d. EMEI Electrical Q 017-1 – B and C Vehicle/Trailer, Semi-Trailer and Towed Equipment Electrical Connections – Fitting of 12 Pin NATO Plugs and Sockets;
- e. EMEI Vehicle A 029 – Vehicles General – Servicing of B Vehicles, Trailers, Motorcycles, Stationary Equipment, Auxillary and Small Engines;
- f. EMEI Vehicle A 291-5 – General Service B Vehicle Tyre Guide – Operating Instructions;

- g. EMEI Vehicle G 103 – Truck, Utility, Lightweight , MC2, Land Rover 110 and Truck, Utility, Lightweight , W/Winch, MC2, Land Rover 110 – Light Grade Repair;
 - h. EMEI Vehicle G 109 – Truck, Lightweight, MC2, Land Rover 110 4X4, All Types – Servicing Instruction;
 - i. EMEI Vehicle G 130 – Truck, Surveillance, Lightweight, Winch, MC2, Land Rover 110 – Data Summary;
 - j. EMEI Vehicle G 132 – Truck, Surveillance, Lightweight, Winch, MC2, Land Rover 110 – Technical Description;
 - k. EMEI Vehicle G 134-1 – Truck, Surveillance, Lightweight, Winch, MC2, Land Rover 110 – Medium and Heavy Grade Repair;
 - l. EMEI Workshop D 701 – Repair Policy for Equipment Painted in Polyurethane Paint;
 - m. EMEI Workshop E 410 – Occupational Health and Safety – Asbestos – General Instruction; and
 - n. RPS 02207.
10. A number of modifications and improvements have been made during the service life of the vehicle. Reference to the following publications may be required during repair activities:

NOTE

Any effect of these publications pertaining to the technical content of this document has been included in the text.

- a. EMEI Vehicle G 137-1 – Truck, Surveillance, Lightweight, Winch, MC2, Land Rover 110 – Fitting of Rollover Protection and Head Restraints; and
- b. EMEI Vehicle G 137-2 – Truck, Surveillance, Lightweight, Winch, MC2, Land Rover 110 – Relocation of the Fuse Box.

WARNING

All industrial safety, work practices and equipment operating and maintenance instructions pertaining to this EMEI are to be adhered to.

The handling, storage and use of chemical substances are to be in accordance with MOHS, MSDS and EMEI Workshop series requirements.

Location of Identification Numbers

11. The location of identification numbers on components of the vehicle is described in Table 1.

Table 1 Location of Identification Numbers

Serial	Identification Number	Location
1	Chassis number	Right hand side of the chassis, forward of the spring mounting turret
2	Chassis nameplate	Left hand seat box, in the cab
3	Engine number	Left hand side of the engine block
4	Injection pump identification	Side of the pump
5	Transmission and transfer case	Rear of the transfer case
6	Torque limiter	On rear end of the drive plate
7	Front axle number	Adjacent to the axle breather
8	Rear axle number	Adjacent to the axle breather
9	Air compressor	Front outer mounting point

Special Tools

12. The special tools are listed in Table 2 and illustrated in Figure 1.

NOTE

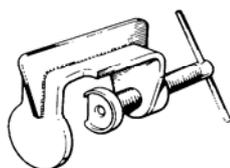
NSN and Manufacturers part numbers and designations used in this EMEI were current at the date of issue. If twelve months or more have expired since issue, the NSN and Manufacturers part number should be checked for supersession.

Table 2 Special Tools

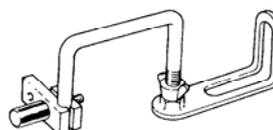
Serial	Part No.	NSN	Item Name	Use
1	RO606435A	5120-66-128-4322	Spanner, hub adjustment	Hub adjusting spanner
2	18G672	5120-99-820-6918	Tool, disc brake	Disc brake piston compressor
3	RO530106	5220-66-128-4307	Bracket, dial gauge	Bracket, dial gauge indicator



RO606435A
HUB ADJUSTING SPANNER



18G672
DISC BRAKE PISTON COMPRESSOR



RO530106
BRACKET DIAL INDICATOR

Figure 1 Special Tools

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List of Lubricants

13. The list of lubricants appears in Table 3.

Table 3 List of Lubricants

Serial	Equipment	Lubricant	Capacity (litres)
1	Engine (including filter)	OMD-115	8.5
2	Transmission	OMD-115	2.7
3	Transfer case (with PTO)	OMD-115	5.8
4	Front differential	OEP-220	1.7
5	Rear differential	OEP-220	2.3
6	Swivel pin housings	Molytex grease	EP00 Sachet
7	Brake master cylinder	OX (Aust) 8	Fill to level
8	Clutch master cylinder	OX (Aust) 8	Fill to level
9	Power steering system reservoir	OX 46	1.25
10	Wheel bearings	XG-274	As required
11	Winch rope	Rocol wire rope lube NSN 9510-66-150-1763	As required
12	Radiator inhibitor	Nalcool	As required (1:12 ratio)
13	Clutch pedal trunnion	XG-274	As required
14	Speedometer cable	XG-274	As required
15	Propeller shaft	XG-274	As required
16	Winch drive line	XG-274	As required
17	Windscreen wiper drive cable	XG-274	As required
18	Winch	OEP-220	1.3

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ENGINE – GROUP 1

Air Compressor

14. **Removal.** Remove the air compressor as follows:
- a. Disconnect the battery.
 - b. Slacken the hose clamp and disconnect the air inlet hose from the compressor inlet manifold.
 - c. Slacken the pinch bolt (refer Figure 2) securing the idler pulley lever to the drive shaft tube.

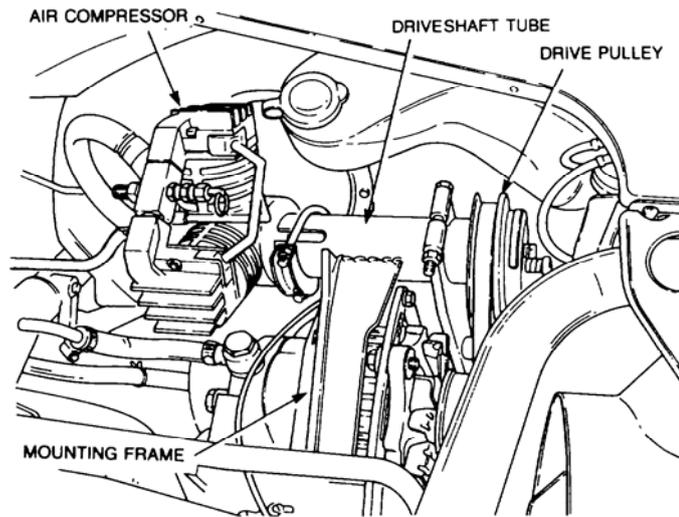


Figure 2 Air Compressor Removal

- d. Rotate the idler to allow the drivebelt to be removed.
 - e. Secure the compressor drive pulley.
 - f. Remove the compressor drive pulley retaining bolt and lock washer.
 - g. Discard the washer.
 - h. Remove the pulley from the drive shaft.
 - i. Discard the roll pin.
 - j. Slacken the U bolt adjacent to the compressor.
 - k. Remove the compressor and shaft from the drive shaft tube.
 - l. Remove the grubscrew securing the drive shaft to the compressor crankshaft.
 - m. Remove the drive shaft and key from the crankshaft.
15. **Installation.** Install the air compressor as follows:
- a. Install the key on the compressor crankshaft.
 - b. Align the keyway in the drive shaft with the key.
 - c. Install the drive shaft.
 - d. Install and securely tighten the grubscrew.
 - e. Install the compressor and drive shaft through the drive shaft tube.

NOTE

- Ensure that the shaft bearing is not dislodged and that the compressor housing is fully installed in the tube.
- f. Turn the compressor to the correct position and tighten the U bolt adjacent to the compressor securely.
 - g. Connect the air inlet hose to the inlet manifold.
 - h. Tighten the hose clamp securely.
 - i. Fit a new roll pin onto the drive shaft.
 - j. Install the drive pulley.
 - k. Using a new lock washer, install and tighten the retaining bolt securely.
 - l. Install the drivebelt onto the drive and idler pulleys.

- m. Rotate the idler pulley lever and check the tension of the belt by applying moderate thumb pressure to the longest span of the belt.
- n. When a belt deflection of 7–12 mm has been obtained, tighten the pinch bolt ensuring that the idler pulley lever is unable to move.
- o. Connect the battery.

Air Compressor Fault Finding

16. The procedures for air compressor fault finding are detailed in Table 4.

Table 4 Air Compressor Fault Finding

Serial	Symptom	Probable Cause	Action
1	No air pressure.	Stuck or worn valves.	Replace valves.
		Worn piston and rings.	Replace compressor.
		Manifold O-ring damaged.	Replace O-ring.
		Relief valve faulty.	Clean and adjust.
		Air hose damaged.	Replace air hose.
		Drive belt loose.	Adjust.
2	Slow delivery.	Clogged air cleaners.	Clean.
		Drive belt loose.	Adjust.
		Stuck or worn valves.	Replace valves.
		Worn piston and rings.	Replace compressor.
3	Noisy operation (compressor).	Worn connecting rod bearings.	Replace compressor.
		Worn crankpin.	Replace compressor.
		Worn gudgeon pin.	Replace compressor.
		Worn main bearing.	Replace compressor.
4	Noisy operation (driveline).	Worn clutch bearing.	Replace.
		Idler pulley bearing worn.	Replace.
		Drive shaft bearings worn.	Replace.
5	Mounting bracket loose.	Mounting bolts loose.	Tighten.
		Bracket cracked.	Replace.

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BRAKE SYSTEM – GROUP 12



Under no circumstances is compressed air to be used to remove dust from the brake drums or discs.

New brake parts provided by Land Rover do not contain asbestos. Older parts still fitted to vehicles may contain asbestos. If any doubt exists as to whether parts contain asbestos or not, the procedures described in EMEI Workshop E 410 shall be complied with.

Rear Brake Disc, Pads and Caliper

17. **Removal.** Remove the rear brake disc, pads and caliper as follows:
- a. Clean the area around the rear axle hub and caliper and allow to dry.

WARNING

Prevent the vehicle from rolling by chocking the front wheels and engaging the transmission differential lock prior to raising the rear of the vehicle. Always use suitable axle stands.

- b. Chock the front wheels.
- c. Loosen the rear wheel nuts.
- d. Using a suitable hydraulic jack, raise the rear of the vehicle.
- e. Position suitable stands beneath the rear axle.
- f. Lower the vehicle onto the stands.
- g. Remove the rear wheel nuts and the wheels.
- h. Disconnect the brake pipe from the caliper.

NOTE

Plug the pipe to prevent the loss of fluid and/or ingress of dirt.

- i. Remove the disc pad retaining pins and springs from the caliper (refer Figure 3).
- j. Remove the pads.

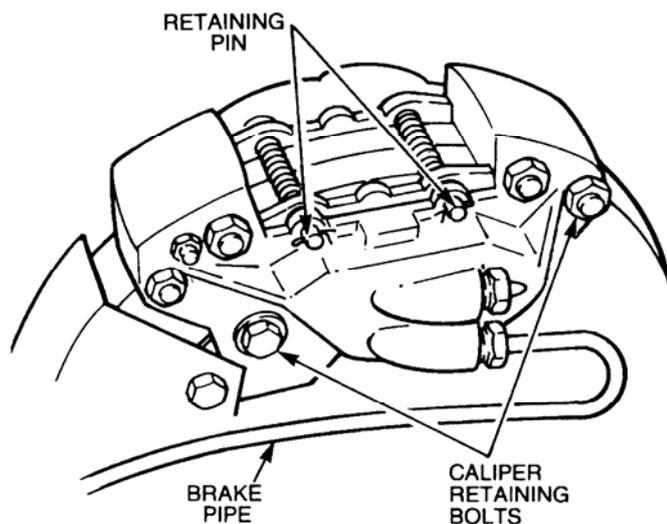


Figure 3 Brake Caliper Removal

- k. Remove the two bolts securing the brake caliper to the axle housing.
- l. Remove the caliper from the disc.
- m. Pry the hub cap from the hub.
- n. Remove the circlip from the drive shaft.
- o. Remove the five bolts securing the driving flange to the hub.
- p. Remove the driving flange.
- q. Discard the gasket and the spring washers.
- r. Remove all trace of gasket material.
- s. Remove the hub lock nut, using special tool RO606435A.
- t. Remove the lock washer, the adjusting nut and the keyed washer.
- u. Remove the hub and disc assembly.

- v. Match mark the disc to the hub (if reusing the original disc).
- w. Remove the five bolts and separate the hub from the disc.

18. **Disassembly.** Disassemble the brake caliper as follows:



Do not separate the two halves of the caliper. The piston seals can be replaced without splitting the caliper.

- a. Thoroughly clean the caliper and allow to dry.
- b. Install special tool 18G672, to retain both pistons in the mounting flange half of the caliper (refer Figure 4).

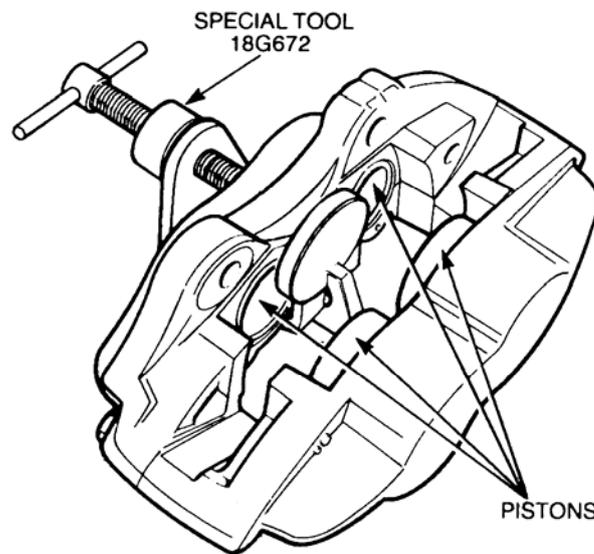


Figure 4 Piston Removal Rim Half

WARNING

Keep fingers clear when expelling the pistons from the caliper.

- c. Apply air pressure to the fluid inlet port to expel the rim half pistons.
- d. Mark the pistons internally to identify them with their respective bores.
- e. Remove the wiper seal retainer by inserting a screwdriver between the retainer and the seal.
- f. Prise the retainer carefully from the mouth of the bore.
- g. Taking care not to damage the seal grooves, remove the wiper seal and fluid seal.
- h. Repeat sub paragraphs c to g, to remove the pistons from the mounting half of the caliper.

19. **Cleaning and Inspection.** Clean and inspect the brake caliper as follows:

- a. Thoroughly clean the caliper (refer Figure 5), bores, pistons and in particular the seal grooves and allow to dry.
- b. Check the pistons and caliper bores for corrosion and scoring, replacing parts as necessary.

20. **Reassembly.** Reassemble the brake caliper as follows:

NOTE

The fluid seal and the groove are not the same in section so that when the seal is seated it feels proud to the touch at the edge furthest away from the mouth of the bore.

- a. Smear the new fluid seal with Dow Corning 44 Silicone grease, or equivalent.
- b. Insert the seal into the groove using the fingers only and ensure that the seal is properly seated.

NOTE

Do not lift the piston during installation and leave approximately 8 mm projecting from the bore.

- c. Slacken the bleed screw on the rim half, one complete turn.

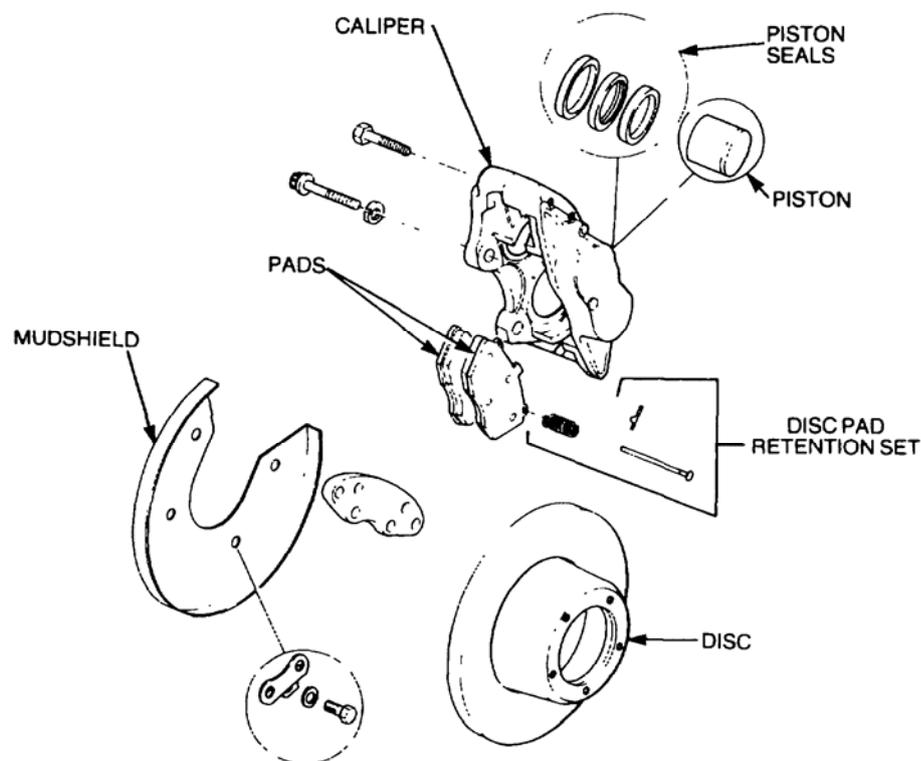


Figure 5 Brake Caliper Exploded View

- d. Smear the appropriate piston with Dow Corning 44 Silicone grease, or equivalent.
- e. Insert the piston squarely into the bore by hand only.
- f. Smear the new wiper seal with Dow Corning 44 Silicone grease, or equivalent.
- g. Fit the new wiper seal into a new seal retainer.
- h. Slide the assembly, seal side first, over the protruding piston and into the bore recess.
- i. Remove the piston clamp, using special tool 18G672, from the mounting half of the caliper and use the clamp to press home the seal retainer and piston.
- j. Tighten the bleed screw.
- k. Repeat sub paragraphs a to j to install the pistons in the mounting half of the caliper.
- l. Install the disc pads into the caliper.
- m. Fit the two retaining springs and pins.

- 21. Installation.** Install the rear brake disc, pads and caliper as follows:
- a. Fit the disc on the hub (align the match marks if using the original disc).
 - b. Smear Loctite 275, or equivalent, on the bolt threads and install the bolts with new spring washers.
 - c. Torque the bolts to 50 N.m.
 - d. Fit the hub on the stub axle.
 - e. Install the keyed washer and adjusting nut.
 - f. Spin the hub to settle the bearings.
 - g. Tighten the nut by hand until there is no end float.

NOTE

Use of the dial indicator (refer Figure 6) is no longer required for the hub bearing adjustment procedure (Authority: ECN No. 2536. 27 Sep 99).

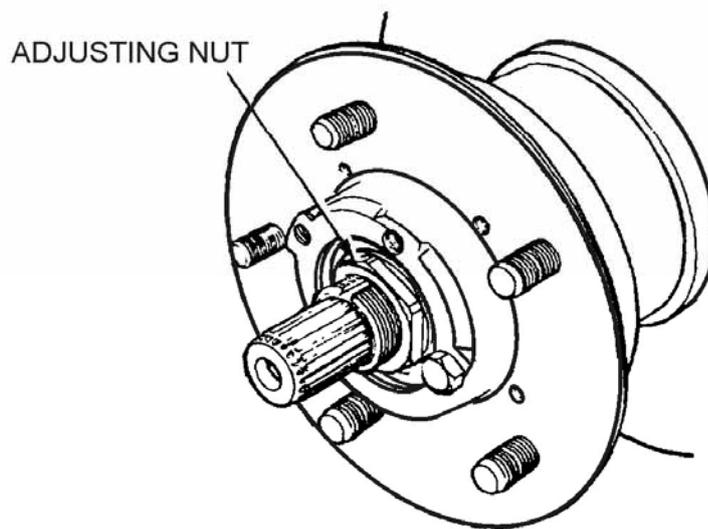


Figure 6 Hub Bearing Adjustment

- h. Back-off the hub nut 90 degrees, then torque to 10 N.m (7 lbf.ft.).
- i. Fit a new lock washer.
- j. Install the lock nut, tighten to 50 N.m (37 lbf.ft) and tab over the lock washer.
- k. Install the driving flange and a new gasket ensuring the splines are aligned with those on the drive shaft.
- l. Fit each bolt with a new spring washer then apply Loctite 271, or equivalent, to the bolt threads.
- m. Install the bolts and torque to 60 – 70 N.m.
- n. Install the drive shaft shim and secure with the circlip.
- o. Install the hub cap securely.
- p. Ensure the brake disc is free from oil and grease, then install the caliper.
- q. Apply Loctite 271, or equivalent, to the bolt threads.
- r. Install the bolts and torque to 120 – 150 N.m.
- s. Fit the brake hose on the retaining bracket and tighten the lock nut.
- t. Bleed the brake system (as described in paragraph 22).

Bleeding the Brake System

22. **Procedure.** Bleed the rear brake system as follows:

NOTE

To bleed a replacement master cylinder or completely drained system, slacken a bleed screw in both the front and rear circuits. Top up the fluid reservoir to the maximum mark and allow the fluid to prime both circuits by gravity for approximately five minutes. Close off the bleed screws, and then start the bleeding procedure at the front wheel nearest the master cylinder. Ensure that the brake fluid level is continuously monitored during brake bleeding procedure.

- a. Attach a length of rubber tube to the caliper bleed screw and immerse the other end in a glass jar containing a quantity of clean, fresh hydraulic fluid.
- b. Check that the reservoir is full.
- c. Unscrew the bleed screw approximately half a turn.
- d. Depress the brake pedal fully, pause, then allow the pedal to return rapidly; pause, then repeat the procedure until all air is expelled from the tube.
- e. Close the bleed screw immediately after the last stroke.
- f. Remove the tube and jar.
- g. Repeat the procedure for each wheel.

POWER STEERING – GROUP 14

Power Steering Fluid Reservoir

23. **Removal.** Remove the power steering fluid reservoir as follows:

- a. Remove the fluid reservoir filler cap.
- b. Disconnect the return hose from the steering box.
- c. Drain the fluid from the reservoir into a container.



Do not reuse the fluid drained from the reservoir.

- d. Reconnect the power steering return hose to the steering box.
- e. Slacken the clamps securing the supply and return hoses to the fluid reservoir.
- f. Disconnect the hoses from the fluid reservoir (refer Figure 7).
- g. Plug the hoses to prevent ingress of dirt.
- h. Slacken the nut and bolt on the reservoir clamp sufficiently to allow the reservoir to be lifted up and out of the clamp.

NOTE

The reservoir filter is designed to function effectively for the life of the vehicle therefore replacement of the filter is not necessary.

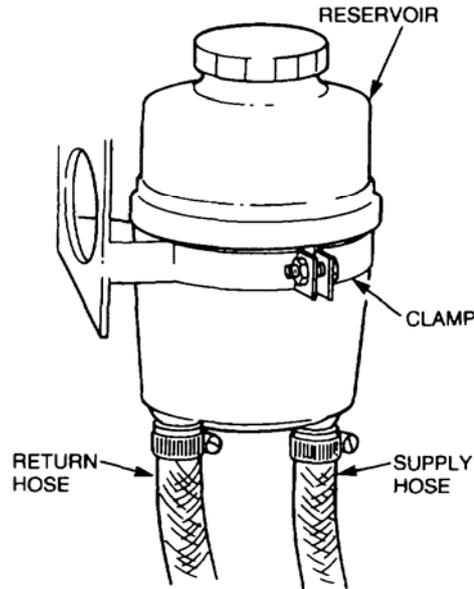


Figure 7 Return And Supply Hoses To Reservoir Removal

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24. **Installation.** Install the power steering fluid reservoir as follows:
- Install the reservoir in the clamp and tighten securely with the nut, washer and bolt.
 - Remove the plugs.
 - Connect the supply and return hoses to the fluid reservoir.
 - Tighten the hose clamps securely.
 - Fill the reservoir with the recommended fluid to the correct level.
 - Bleed the power steering system (as detailed in paragraph 25).
 - Install the reservoir cap.

Bleeding the Power Steering System

25. **Procedure.** Bleed the power steering system using the following procedure:



During the bleeding procedure ensure that the reservoir is always full. Do not increase engine speed. Do not move the steering wheel.

- Fill the steering fluid reservoir with the recommended fluid to the correct level.
- Start and run the engine until the operating temperature is reached.
- Run the engine at idle speed (580 rpm).
- Slacken the bleed screw in the steering box (refer Figure 8) until fluid is observed at the bleed screw.
- Tighten the bleed screw.
- Check the reservoir dipstick for the correct fluid level.
- Top up if necessary.

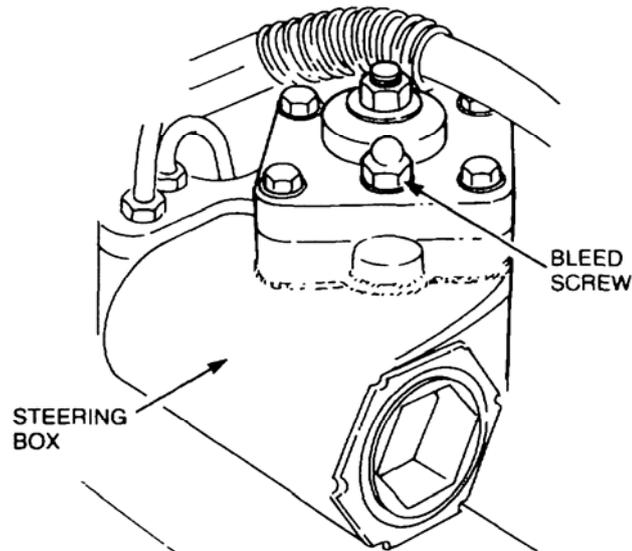


Figure 8 Power Steering Bleed Screw Location

- h. Check all hose connections.

CAUTION

To avoid causing the oil to overheat and possible damage to the oil seals, do not maintain this pressure for longer than thirty seconds in any one minute.

- i. Check the steering pump and the steering box for fluid leaks by holding the steering hard on full lock in both directions as this causes high pressure in the system.

NOTE

The steering operation should be smooth from lock to lock, any heavy or light spots when changing direction in a stationary vehicle is unacceptable and requires inspection of the steering system.

Power Steering Pump

- 26. **Removal.** Remove the power steering pump as follows:

- a. Remove the power steering pump reservoir cap.
- b. Disconnect the low pressure hose from the power steering pump.
- c. Drain the fluid into a container.

CAUTION

Do not reuse the fluid drained from the reservoir.

- d. Disconnect the high pressure hose from the power steering pump.
- e. Plug both the high and low pressure hoses.
- f. Remove the three bolts securing the power steering pump to the timing gear housing.
- g. Remove the pump (refer Figure 9).
- h. Discard the O ring seal and plug all apertures on the power steering pump.

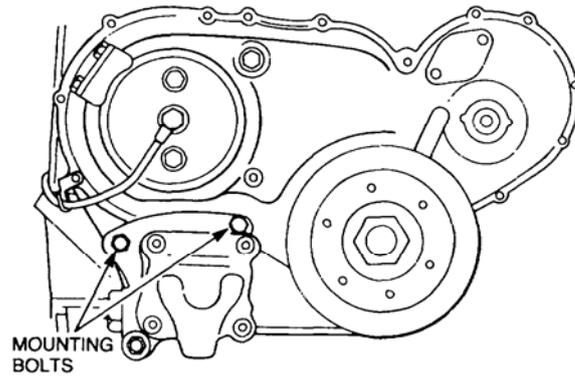


Figure 9 Power Steering Pump Removal

- 27. Installation.** Install the power steering pump as follows:
- Remove all trace of gasket from the pump and mating surface.
 - Remove the plugs from the power steering pump and the high and low pressure hoses.
 - Using a new O ring and gasket, install the power steering pump to timing gear housing.
 - Torque to 64 N.m.
 - Connect the high and low pressure hoses to the power steering pump and tighten securely.
 - Fill the power steering fluid reservoir with a recommended fluid to the correct level.
 - Install the reservoir filler cap.
 - Bleed the power steering (as detailed in paragraph 25).

ELECTRICAL – GROUP 15

Fuse Box

28. The fuse box in this variant has been relocated to a higher position in the dash area to reduce water ingress during fording operations. Refer to EMEI Vehicle G 137-2 for details of the location of the fuse box.

Driving Lights

- 29. Removal.** Remove the driving lights as follows:
- Remove the screw securing the driving light earth wire to the brush guard.
 - Disconnect the power supply wire at the connector.
 - Remove the nut and washer securing the driving light to the mounting bracket.
 - Lift the light from the mounting bracket.
- 30. Installation.** Install the driving lights as follows:
- Insert the driving light mounting bolt through the hole in the mounting bracket.
 - Install the nut and washer, but do not tighten.
 - Connect the earth wire to the brush guard and tighten the screw securely.
 - Connect the power supply wire at the connector.
 - Turn the driving lights on.
 - Align the driving lights.
 - Tighten the mounting nut securely.

Wiring Diagram

31. A vehicle wiring diagram is located at Figure 13.

BODY – GROUP 17

Boat Rack

32. **Removal.** Remove the boat rack as follows:
- Support both sections of the boat rack.
 - Remove the four bolts, lock nuts, washers and gaskets securing each section of the rack to the front and rear roll bars (refer Figure 10).

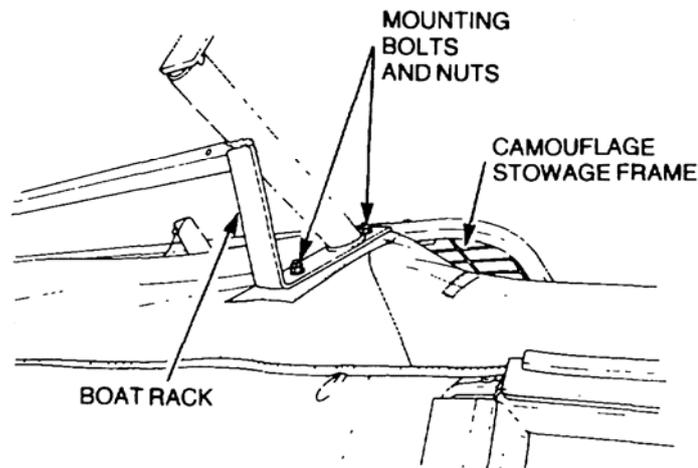


Figure 10 Right Hand Front View of Boat Rack and Camouflage Stowage Frame

- Discard the lock nuts and gaskets.
 - Lift each section of the rack from the vehicle.
33. **Installation.** Install the boat rack as follows:
- Lift each section of the boat rack (in turn) into position on the front and rear roll bars.
 - Align the bolt holes in the rack mounting brackets with those in the canopy and the roll bars.
 - Place the flat washers on the bolts, then insert the bolts up through the roll bar, canopy and boat rack.
 - Place new gaskets over the bolts.
 - Install new lock nuts and tighten securely, taking care not to damage the gaskets.

Camouflage Stowage Frame

34. **Removal.** Remove the camouflage stowage frame as follows:
- Remove the bolts and washers securing the camouflage stowage frame to the top of the front and rear roll bars.
 - Lift the stowage frame and the four rubber insulators from the canopy.
35. **Installation.** Install the camouflage stowage frame as follows:
- Position the camouflage stowage frame together with the four rubber insulators on top of the canopy and on the roll bars.

NOTE

- Ensure that the end with the rounded corners is toward the front of the vehicle.
- Position the rubber insulators below the bolt holes in the stowage frame.

- c. Align the bolt holes in the stowage frame with the bolt holes in the insulators, the canopy and the front and rear roll bars.
- d. Install the bolts and washers and tighten securely.

Roll Over Protection

36. Refer to EMEI Vehicle G 137-1 for fitting instructions.

WARNING

The roll over protection assembly is to be replaced should any of the following occur:

- the vehicle is involved in a roll over accident;
- distortion has occurred to the roll-over-structure capping rail; or
- weld failure occurs.

37. **Removal.** Remove the roll over protection as follows:

- a. Remove the boat rack (refer paragraph 32).
- b. Remove the camouflage carrier (refer paragraph 34).
- c. Remove the canopy from the rear of the vehicle and fold it forward over the cabin roof.
- d. Remove the two horizontal canopy rails connecting the front roll tube to the front and intermediate canopy bows (refer Figure 11).

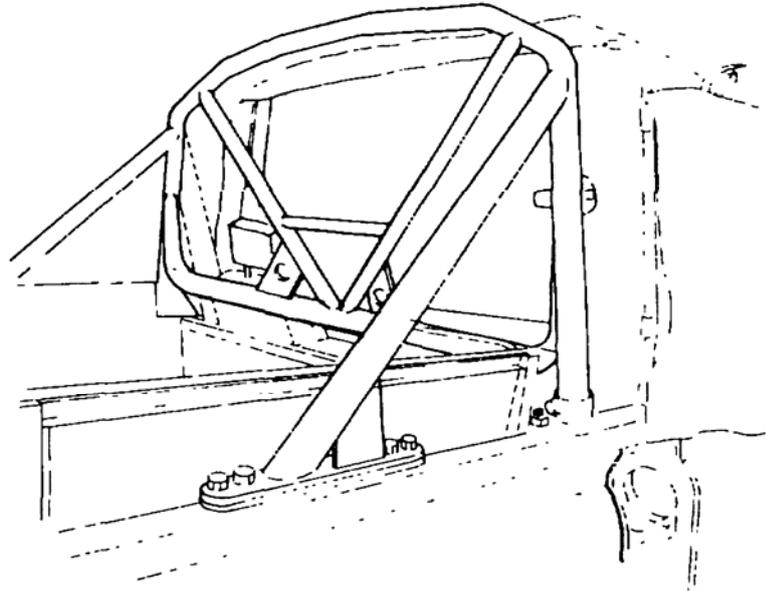


Figure 11 Front Roll Bar Removal

- e. Remove the seat belts from the front roll over tube or lower mounting point.
- f. Remove the spare wheels from the vehicle.
- g. Remove the bolts securing the roll over protection to the cargo body.
- h. Using suitable lifting equipment remove the roll over protection from the vehicle.

38. **Installation.** Install the roll over protection as follows:

NOTE

Use Loctite 277 on all the capping plate bolts.

- a. Using suitable lifting equipment position the roll over protection on the vehicle.
- b. Secure the roll over protection to the vehicle body with the bolts, washers and nuts and tighten securely.
- c. Position the seat belts at the front roll over tube and secure with the bolts, washers and nuts.
- d. Install the two horizontal canopy rails to the front roll over tube and the front and intermediate canopy bows and tighten the bolts securely.
- e. Secure the spare wheels to the spare wheel carriers.
- f. Position the canopy over the cargo area and secure it to the vehicle body.
- g. Install the camouflage carrier (refer paragraph 35).
- h. Install the boat rack (refer paragraph 33).

Rear Seat

39. **Removal.** Remove the rear seat as follows:

- a. Remove the four bolts and washers securing the rear seat to the frame (refer Figure 12).
- b. Remove the seat from the frame.

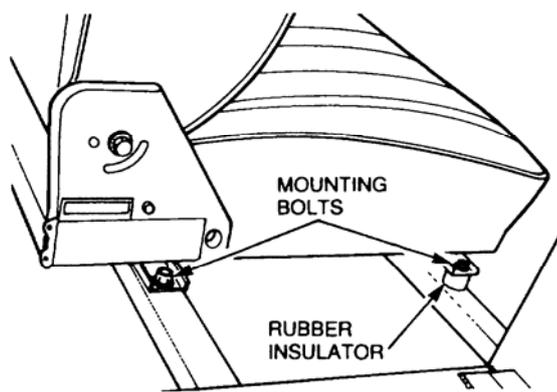


Figure 12 Rear Seat Mounting Bolts

40. **Installation.** Install the rear seat as follows:

- a. Position the seat (facing rearward) on the frame.
- b. Align the bolt holes in the seat mounting brackets with the holes in the frame, then install the washers and bolts and tighten securely.

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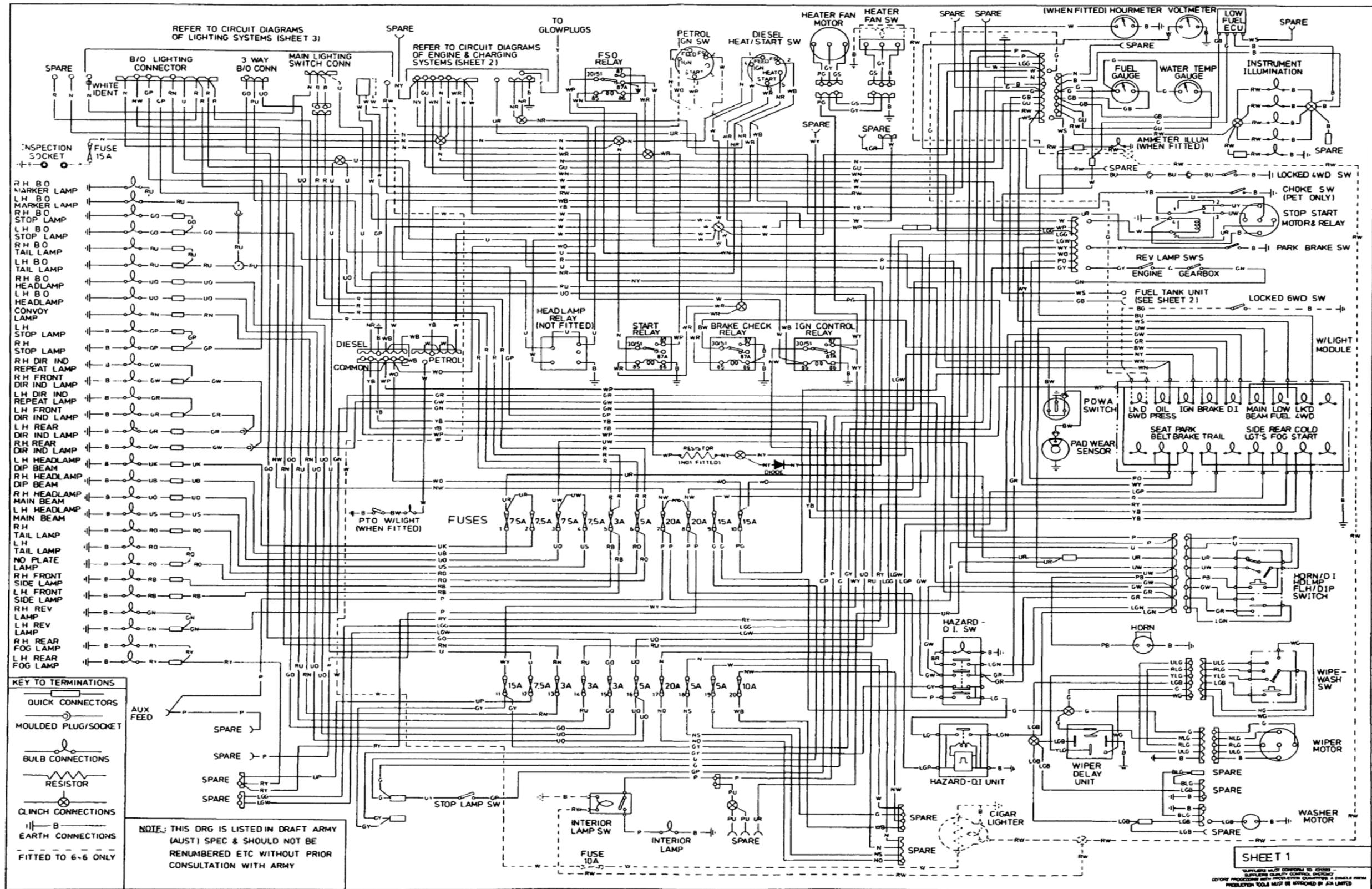


Figure 13 Wiring Diagram (Sheet 1 of 3)

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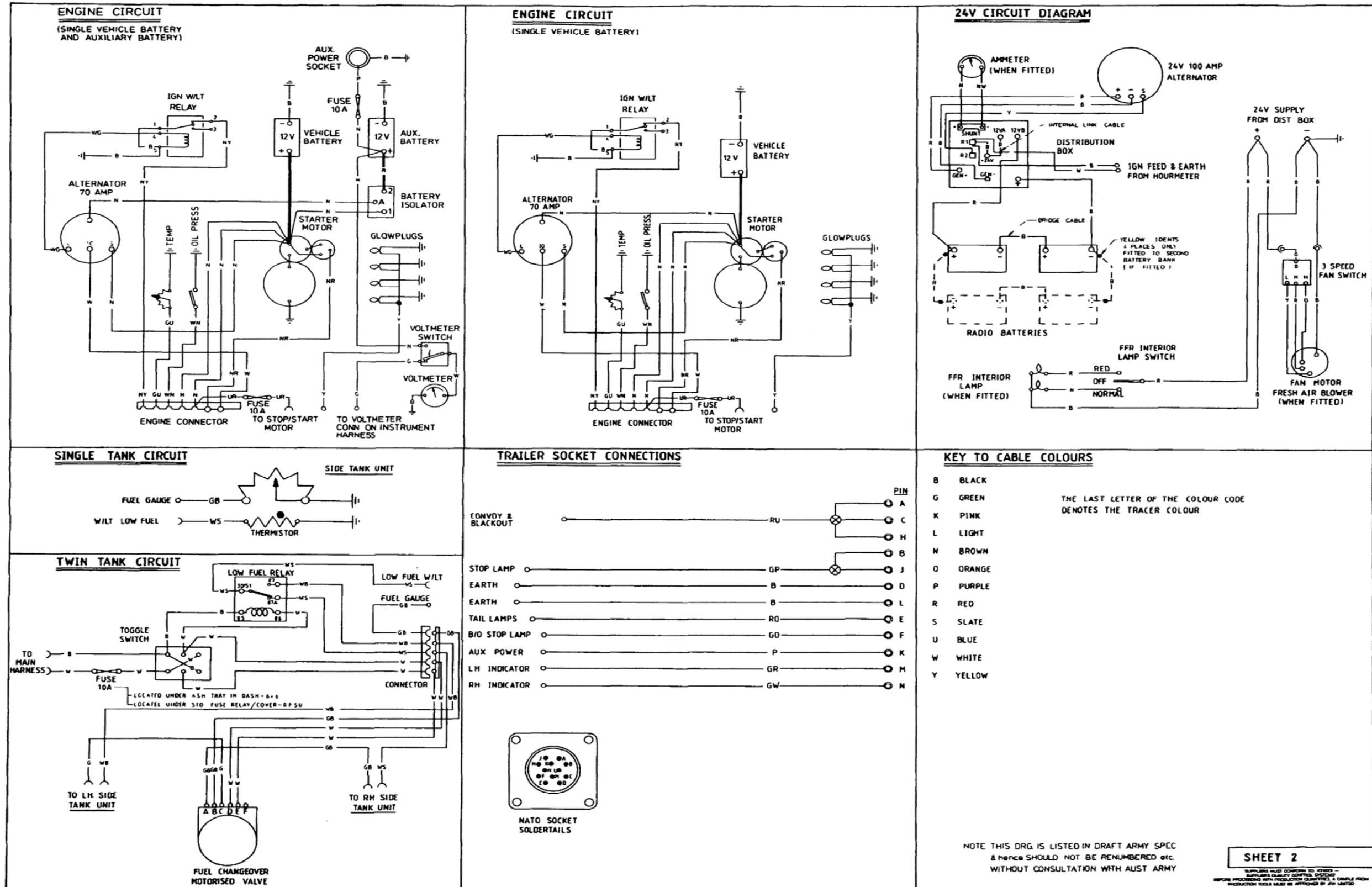


Figure 13 Wiring Diagram (Sheet 2 of 3)

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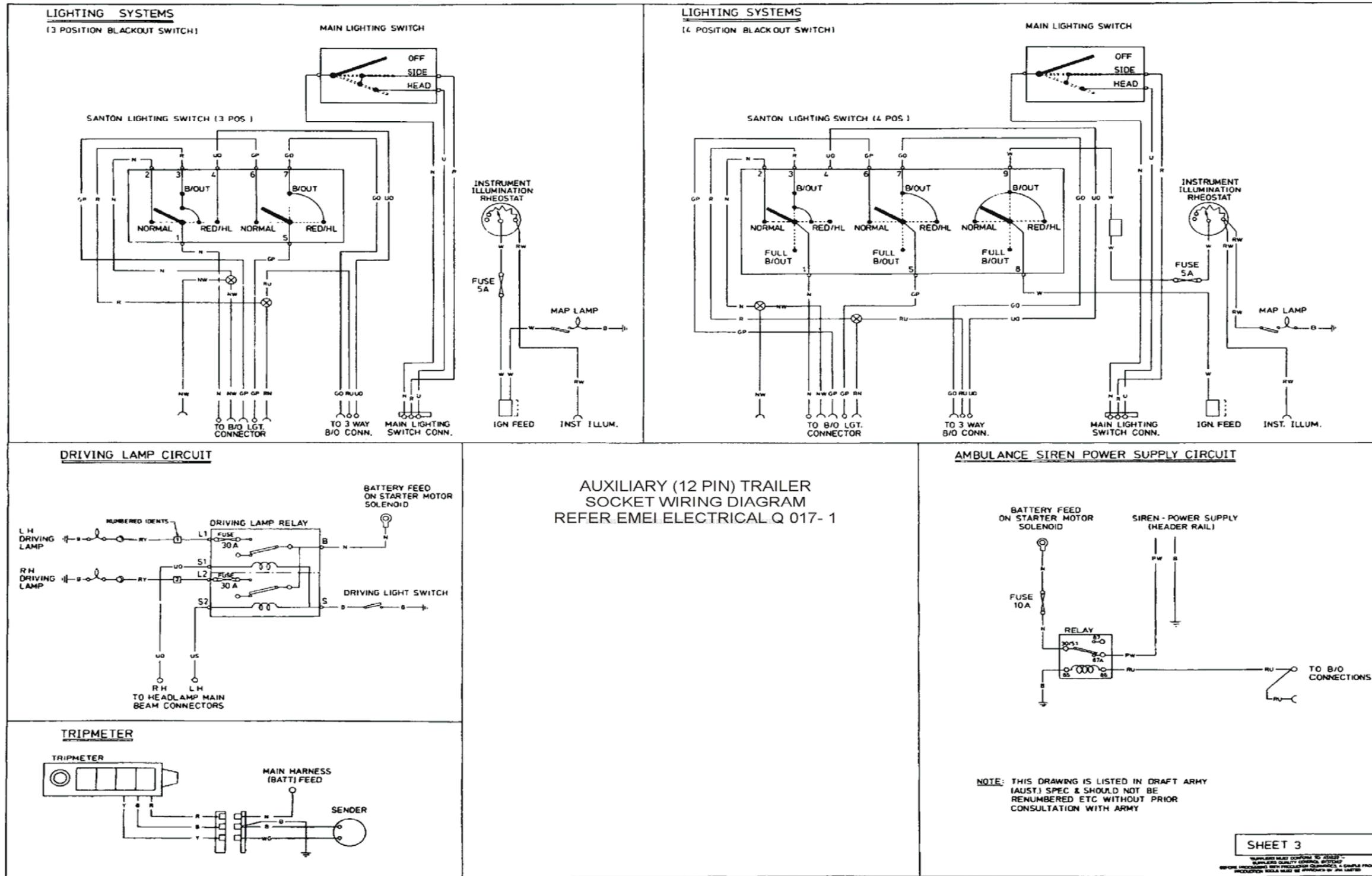


Figure 13 Wiring Diagram (Sheet 3 of 3)

END
Distribution List: **VEH G 16.7** – Code 2 (Maint Level)
(Sponsor: LV SPO, Light B Vehicles)
(Authority: TRAMM)