

TRUCK, LIGHTWEIGHT AND TRUCK LIGHT – ALL TYPES – LAND ROVER 110 4X4 AND 6X6

INSPECTION GUIDELINES LAND ROVER MAASDAM JACKALL HIGH LIFT (DEDITCHING) JACK, NSN 5120-66-128-6175

EQUIPMENT INSPECTION AND EXAMINATION DATA

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.

INTRODUCTION

NOTE

This EMEI is specifically aimed at the Land Rover supplied Maasdam Jackall High Lift Jack (High Lift Jack). As this instruction is equipment specific this EMEI overrides EMEI Workshop H 149-1, Issue 3 should there be any conflict of direction.

1. The purpose of this instruction is to provide identification and inspection guidelines for the Land Rover High Lift Jack to ensure that the correct jack is used and is inspected and classified in a consistent manner. The Land Rover High Lift Jack, shown in Figure 1, is not a specific vehicle jack but is supplied for use as a deditching aid to vehicle self recovery.



Figure 1 Land Rover High Lift Jack - NSN 5120-66-128-6175

2. **Associated Publications.** Reference may be necessary to the latest issue of [Technical Regulation of ADF Material-Land \(TRAMM-L\)](#).
3. **Definitions.** For the purpose of this EMEI the following definitions apply:

- a. **Lever Jack and High Lift Jack.** A lever jack is a jack in which the force exerted by the operator is transformed into a lifting force by means of a first or second order lever, used in conjunction with a ratchet. A High Lift Jack is defined as a general purpose lever jack with a fully raised height of at least 800 mm and which is marked 'Not for vehicle maintenance or wheel removal'.
- b. **Specific Vehicle Jack.** This is a jack which is limited in its application to a specific vehicle or model(s) or model designation(s) of vehicles and is not intended to be used to lift a vehicle at other than the specific engagement points. A specific vehicle jack is only intended for changing wheels.

SAFETY

WARNING

Personnel are not to place any portion of their body under a vehicle that is supported by a High Lift Jack. Failure to comply may result in injury or death.

WARNING

High Lift Jacks are not to be used for vehicle maintenance or wheel removal. Failure to comply may result in injury or death.

4. Prior to inspecting a High Lift Jack, operators are to observe the following safety requirements:
 - a. The jack should be used on level, firm ground wherever possible;
 - b. It is recommended that the wheels of the vehicle be chocked, and that no person should remain in the vehicle while it is being jacked; and
 - c. Persons should not place any portion of their body under a vehicle that is supported by a jack.

Identification / Safety Markings

NOTE

High Lift Jacks that do not have safety markings in accordance with Para 5 are to be classified 'XX – Do Not Use' in accordance with paragraph 17.

5. **Batch Number.** High Lift Jacks are powder coated NATO green in colour except for the steel beam which is black. The lifting foot is stamped with the batch number, as shown in Figure 2.



Figure 2 High Lift Jack Batch Number

NOTE

High Lift Jacks that have a missing or damaged Warning Label, in accordance with paragraph 6, are to have the label replaced prior to classification / use.

6. **Warning Label.** High Lift Jacks have a warning label (as shown at Figure 3) affixed to the jack handle. The label contains manufacturer's details, model information and manufacturer's safety warnings.



Figure 3 Label - Warning - Maasdam Jackall High Lift Jack

7. **Conforming Jack Identification.** Figures 4, 5 and 6 detail what to look for to identify an AS/NZS 2693.2007 conforming Hi Lift Jack. Hi Lift Jacks that do not conform, as depicted in Figure 4, are to be classified 'XX - Do Not Use' and disposed of.

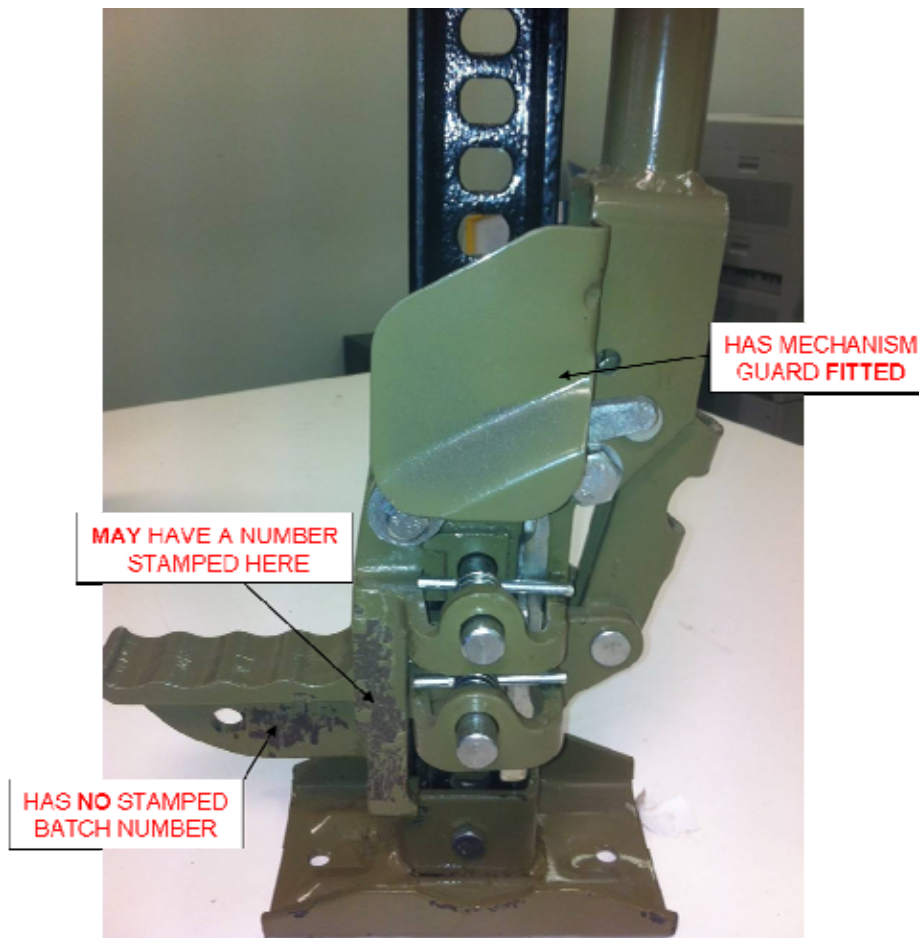


Figure 4 Non-Conforming Hi Lift Jack

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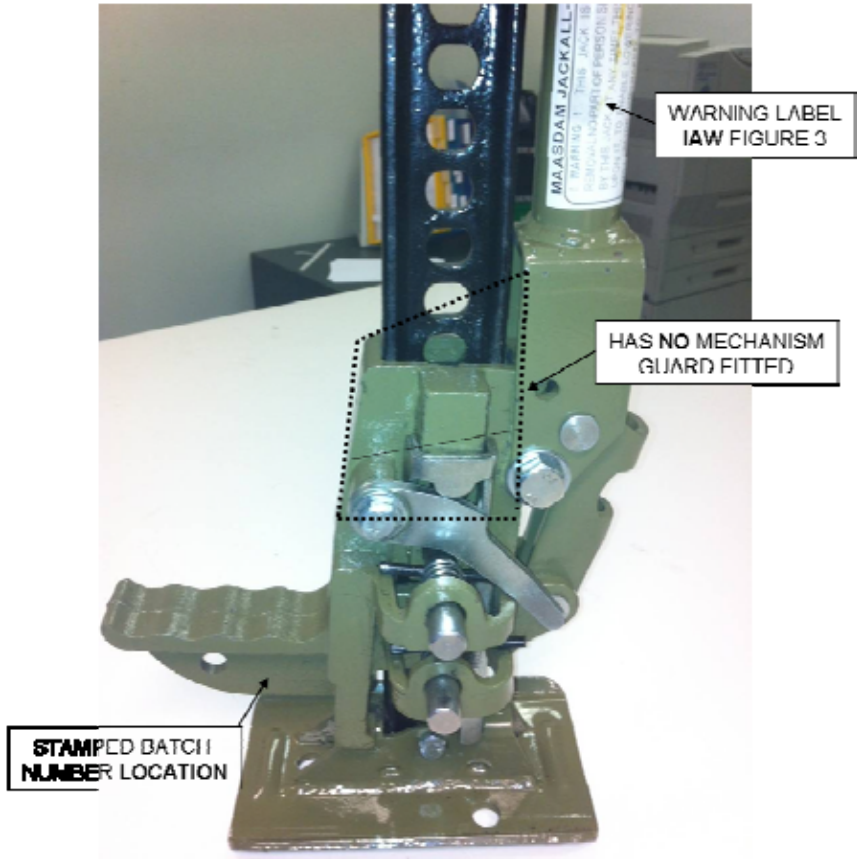


Figure 5 AS/NZS 2693.2007 Conforming Hi Lift Jack

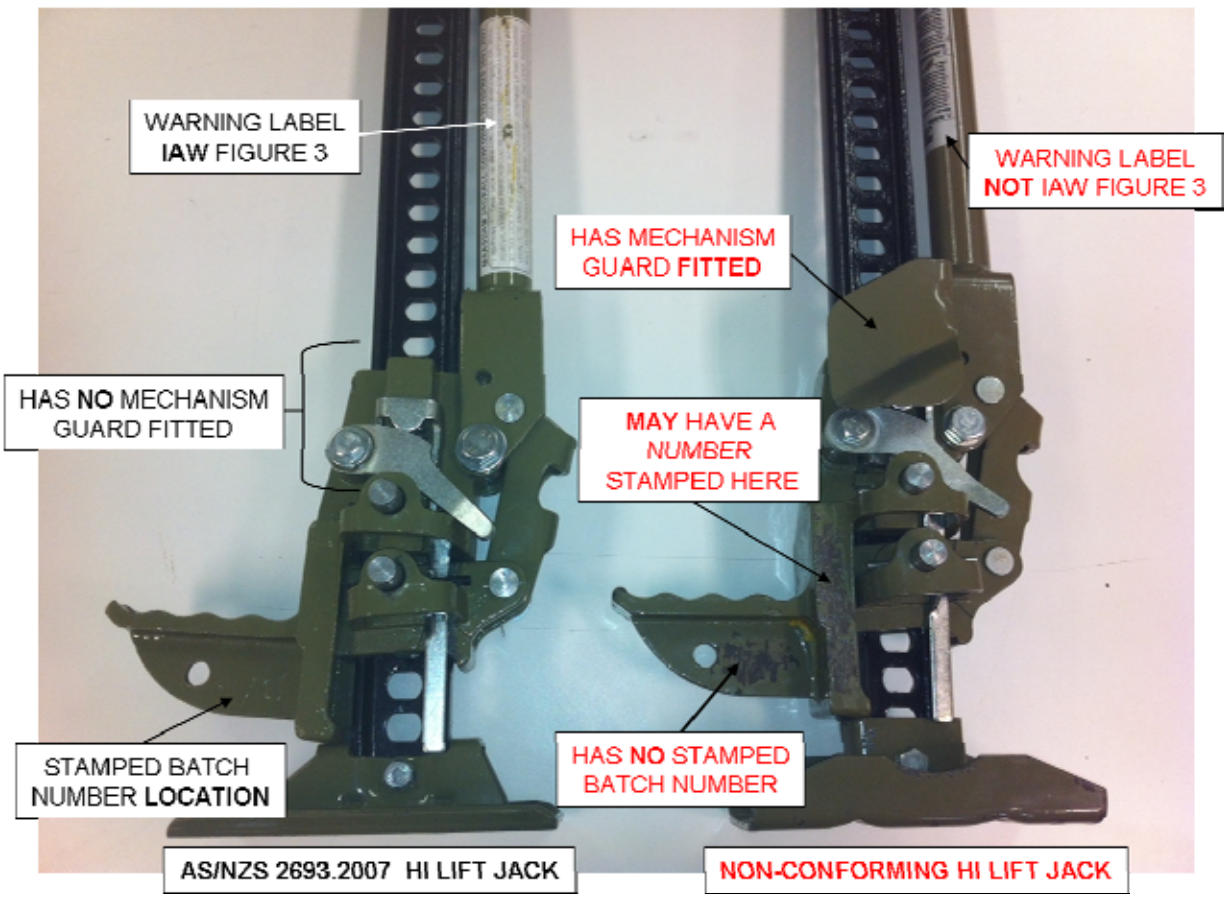


Figure 6 Hi Lift Jack Comparison

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INSPECTION

Joint Logistic Command – Business Units (JLC-BU)

NOTE

High Lift Jack's held in JLC-BU are exempt from Non-Technical and Technical Inspections whilst in warehouse.

8. High Lift Jack Held in Store. High Lift Jack's held at JLC-BU warehouses are exempt from Non-Technical and Technical Inspections. A Technical Inspection is only required when issued from the warehouse to the demanding unit. The issuing JLU-BC is to ensure that on completion of the Technical Inspection that an AD370 label has been applied IAW Para 13.

General

9. Technical Inspection. In accordance with the TRAMM-L, Technical Inspections are to be carried out as follows:

- a. when the Non-Technical Inspection Report has safety tasks or 'XX – Do Not Use' items, required to be rectified;
- b. when a period of 12 months has expired from the last Technical Inspection;
- c. when damage to equipment occurs;
- d. as directed by a higher authority; or
- e. for equipment disposal action.

Application of Label AD370, Fully Functional, Small, Pre-Printed

10. The purpose of the AD370 label is to communicate to High Lift Jack operators and other personnel that the High Lift Jack has been technically inspected, is classified Fully Functional and the date that the next Technical Inspection is required.

11. Stores Required. The stores required to apply the Label AD370 to the High Lift Jack handle are listed in Table 1.

Table 1 Stores Required

| Item | NSN | Designation | Notes |
|------|------------------|---|---------------------------------------|
| 1 | 7530-66-152-3718 | Label AD370, Fully Functional, Small, Pre-printed | Unit of issue is packets of 99 labels |
| 2 | 5110-66-152-3761 | Punch, Hole, Pliers, Spring Loaded, 1.0 mm Hole | |

12. Label Positioning. The Label AD370 is to be positioned centrally between the edges of the lower portion of the Warning Label as shown in Figure 7.

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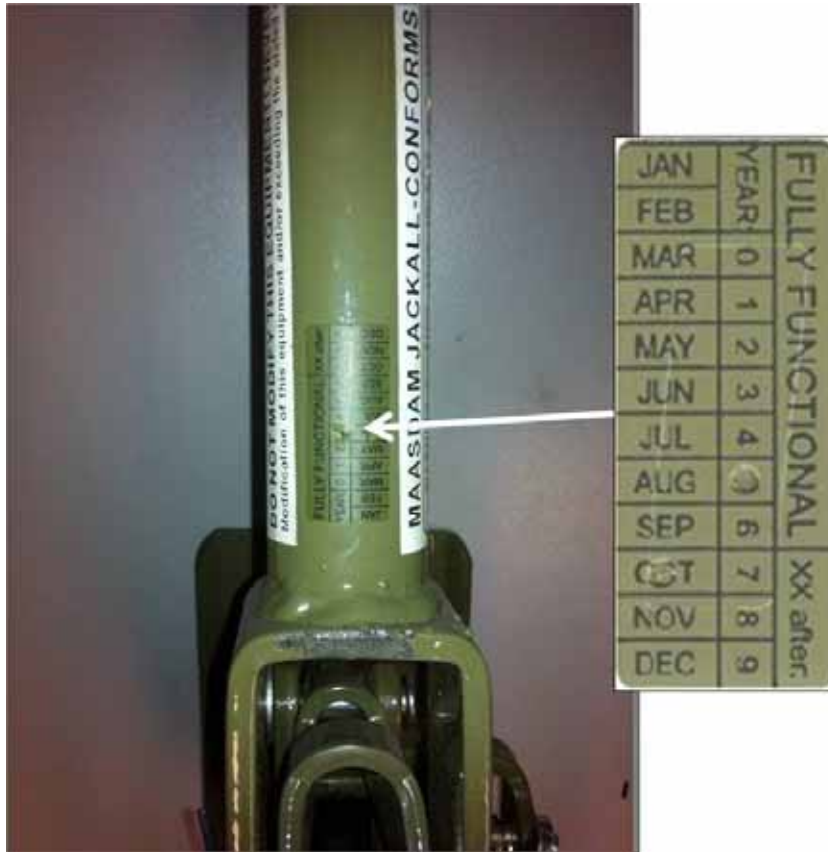


Figure 7 Label Positioning

13. **Application Procedure.** Apply the Label AD370 as follows:
- Ensure the label positioning area, as detailed in Figure 7, of the High Lift Jack handle surface area is clean ensuring oils, grime or adhesive residue from previous labels are removed.
 - Allow the surface to air dry.
 - Indicate the month and year that the next Technical Inspection is due by defacing the appropriate segments of the Label AD370 (Table 1, Item 1) with the Punch, Hole, Pliers, Spring Loaded, 1.0 mm Hole (Table 1, Item 2).
 - Remove the label from the backing film and place the label on the High Lift Jack handle in the position and orientation as detailed in Paragraph 12.
 - Apply light pressure over the Label AD370 surface to ensure full contact between the label adhesive and the High Lift Jack handle surface.
14. **Non-Technical Inspection.** A Non-Technical Inspection is to be carried out in concurrence with its associated vehicle Non-Technical Inspection. High Lift Jack's that are not allocated to a vehicle are to have a Non-Technical Inspection completed as defined in the Unit Maintenance Management Plan. High Lift Jacks listed in Para 0 are exempt from the Non-Technical Inspection.

Authority

15. The following personnel are authorised to carry out Technical Inspections on the vehicle jack:
- ECN 146 (Fitter Armament);
 - ECN 229 (Vehicle Mechanic);
 - a trade qualified vehicle mechanic or NAVY/RAAF equivalent; or
 - a trade qualified fitter or NAVY/RAAF equivalent.

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Modifications

WARNING

Modifications are not permitted to High Lift Jacks. Failure to comply may result in injury or death.

16. Local Modifications. Inspect the equipment for any local modifications. If local modifications have been incorporated, the jack is to be classified ‘XX – Do Not Use’ and replaced in accordance with paragraph 16.

Documentation

17. Technical Inspection Pro-forma. The condition of the equipment is to be recorded utilising the Technical Inspection Report – General (GI 042). A copy of the latest completed GI 042 is to be retained in the unit inspection register.

NOTE

This EMEI does not preclude the requirement for inspectors to use their trade training, skills and experience when identifying faults on the equipment.

18. Table 2 details those components which should be checked as a minimum for the Technical Inspection and classification of a High Lift Jack.

Table 2 Inspection List – High Lift Jack

| 12 Monthly Inspection Requirements | | |
|------------------------------------|--|--|
| Serial | Maintenance Task | Remarks |
| 1 | Inspect for corrosion or structural damage or modifications | |
| 2 | Inspect the pivot pins and mounting fixtures on the mechanical linkages for excessive wear | Use of dry lubricant (minimal) advised |
| 4 | Inspect reversing lever and spring for excessive wear or damage | |
| 5 | Inspect large runner (lifting nose) for damage or distortion | |
| 6 | Ensure freedom of movement of the lifting mechanism | Ensure Hi Lift Jack assembly is in a clean state prior to task |
| 7 | Ensure operating handle is fit for purpose | |
| 8 | Inspect for correct batch and safety markings | As defined in paragraphs 5 and 6 |
| 9 | Carry out a function test | As defined in paragraph 19 |
| 10 | Attach a useability label | |

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Function Tests

19. **High Lift Jack.** Conduct a function test of the High Lift Jack as follows:
- Raise the jack to its maximum travel, unladen. Ensure free movement and positive action of the over-travel mechanism.
 - Lower the jack from the fully raised to the fully lowered position. Examine for freedom of travel or structural failure.

WARNING

A minimum load of 23kg (50lb) is required for step-by-step lowering otherwise the lifting mechanism will slide down to the base plate, dropping the load. Failure to comply may result in serious injury.

- When testing a High Lift Jack, a suitable load is to be applied to the jack to test the jacking mechanism's action for both raising and lowering.

MAINTENANCE PROCEDURES

20. **High Lift Jacks.** Major repairs or replacement of parts are not to be conducted on High Lift Jacks.
21. High Lift Jacks that do not have batch number markings in accordance with paragraph 5 or fail the Technical Inspection are to be classified 'XX – Do Not Use' and disposed of in accordance with current disposal instructions.
22. High Lift Jacks that have batch number markings in accordance with paragraph 5, but do not have or have a damaged label (as shown in Figure 3) and pass all other elements of the Technical Inspection, are to have the label replaced prior to classification. Replacement labels (manufacturer's part number JYG0913) are to be ordered using NSN 7690 -66-159-4806.

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END

Distribution List: **VEH G 16.0 – Code 1** (Maint Level)
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