

TRUCK HEAVY MC3 (MACK) - ALL TYPES
CHASSIS WELDING

MISCELLANEOUS INSTRUCTION

Introduction

1. This instruction details the welding techniques to be used to repair cracks in the Mack chassis. All welding repairs to the Mack chassis are to be carried out by a qualified metalsmith in accordance with this instruction.

Note:

1. NSN and Designation used in this instruction were current at the date of issue. If twelve months or more have expired since issue, the NSN should be checked for supersession.

Inspection

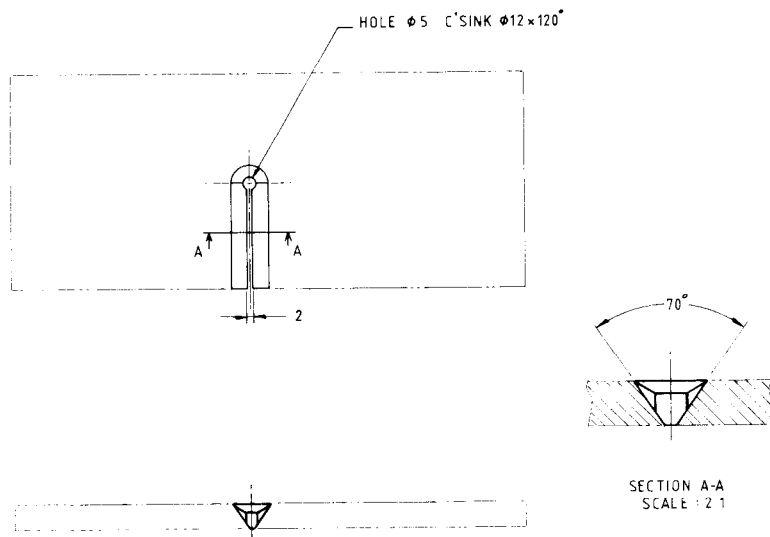
2. Clean all paint, grease, oil and dirt from around the defective area, ensuring the reverse side is also cleaned.
3. Carry out a dye penetrant inspection to determine the exact location and extent of the crack.

Repair Procedure

4. Stop drill the crack using a 5 mm diameter drill.

Note:

1. Where a crack has propagated from a bolt or rivet hole, the hole is to be filled with weld using a copper backing plate, then redrilled.
5. Countersink the stop drill hole to full depth using a 12 mm diameter drill.
6. Using an angle grinder, vee out the crack to form a single vee preparation as shown in Fig 1.



DIMENSIONS ARE IN mm

FIG 1 - WELD PREPARATION

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7. Pre-heat an area 100 mm around the crack to a temperature of 90-100°C.
8. Using items from Table 1, weld the crack using a multi-run technique finishing with a capping run.

Note:

1. Where item 1 from Table 1 is used, it is to be preheated to between 100-110°C for one hour prior to use.

CAUTION:

1. Arc strikes are to be avoided and, should any occur, they are to be ground off using a portable high speed angle grinder.

9. All weld reinforcement is to be ground off to a flush finish.
10. Post heat the weld area to 200°C allowing a soak time of 20 minutes and allow the area to slow cool by wrapping it in a thermal blanket.
11. When the area has cooled, carry out an inspection for any cracks which may have occurred as a result of the repair.
12. On completion of the inspection, paint the affected areas in accordance with WKSP B 700.

TABLE 1 - CONSUMABLES

Item	NSN	Designation
1.	3439-66-033-3076	Electrode Welding E7618-M 3.2 mm diameter
2.	3439-66-033-0215	Electrode Welding ER708-4 1.2 mm diameter
3.	6830-66-118-5919	Argon Technical Code (065) (Argoshield 51)

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