

# SERVICE BULLETIN

Rev. No.	Date	Author	Description
	19-01-2016	G. Cheetham	Original Issue

**MACHINE OR VEHICLE AFFECTED:** TF Model MEWPs

**SERIAL NOS:** All fitted with Non-Flexible Subframe Front Fish Plates

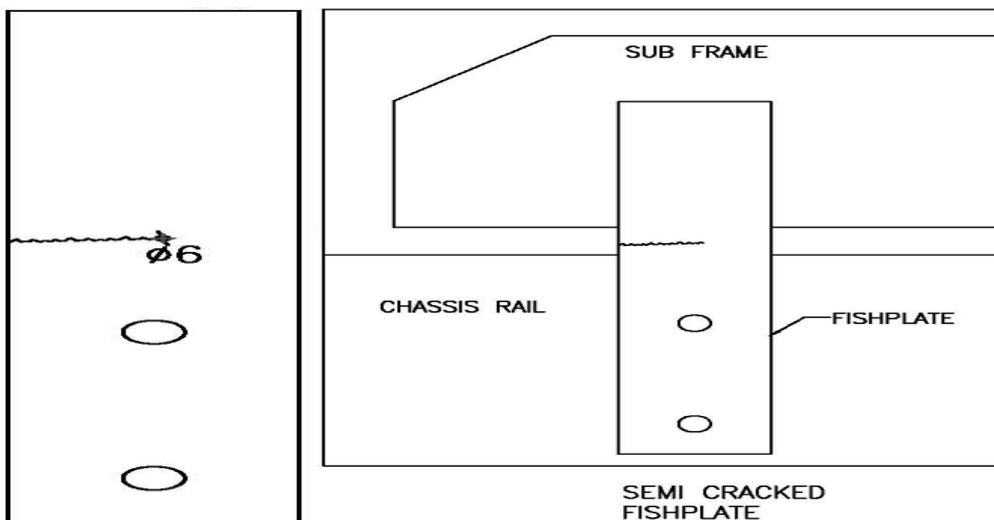
**RISK IDENTIFIED:** Structural Cracks

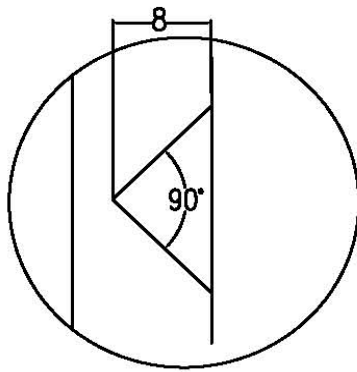
**DESCRIPTION:** Cracking of Non-Flexible Subframe Front Fish Plates

## PROCEDURE TO REPAIR CRACKED FISH PLATE

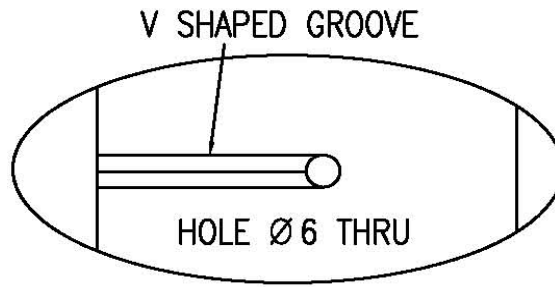
Inspect fish plates for extent of cracks. Cracks normally appear across the joint between the subframe and the truck chassis.

1. If a crack is detected and does not appear to go through more than 50% of the fish plate width, the following repair procedure can be used:





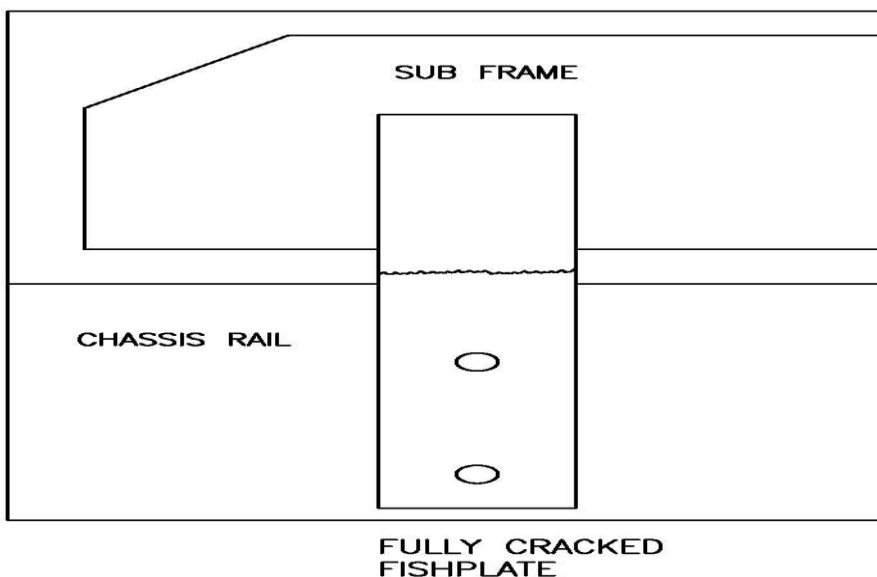
DETAIL A



DETAIL B

- (a) Use dye-type crack test method to determine where the crack ends.
- (b) Using a centre punch, mark the end of the crack with a deep centre punch mark.
- (c) Use a 6mm drill, to drill a hole through the fish plate using the centre punch mark as a guide.
- (d) Using a grinder, grind a groove in the fish plate along the crack to a depth of approx. 8-10mm. The groove should be V-shaped, approx. 90° included angle.
- (e) Check the area to be welded, making sure there are no wires or hoses or other componentry that may be affected by heat. It may be necessary to remove these components before welding.
- (f) Weld the fish plate to repair the crack using low hydrogen rods or a mig welder.
- (g) Re-paint welded surface to prevent rust.

2. If crack traverses completely across the fish plate from one side to the other, in this case, the fish plate should be completely removed and the fish plate on the opposite side to the cracked fish plate should also be removed. Procedure for removal is as follows:



- (a) Remove all brackets and other obstructions from around the welded connection of the fish plate to the MEWP subframe.
- (b) Make sure all hoses and electrical wiring and other items that may be affected by heat are removed or held well clear of the cutting zone.
- (c) Shield areas around the cutting zone using leather or metal shields so that sparks will not damage adjacent equipment or parts.

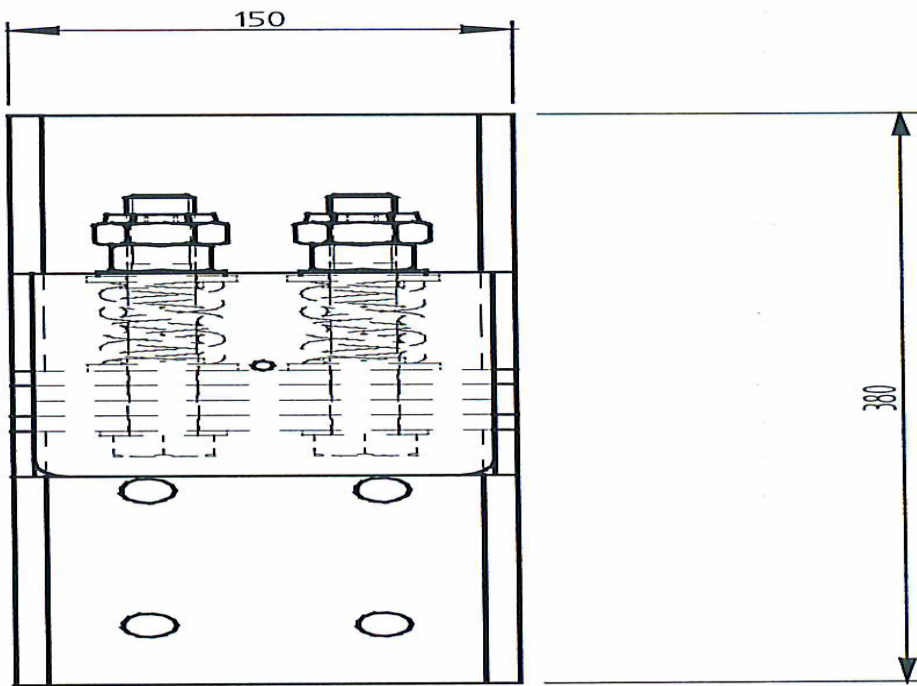
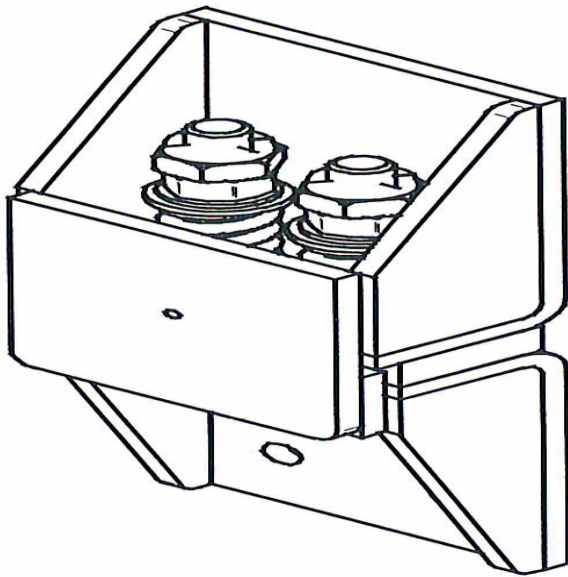
- (d) Using an oxy torch, cut off the fish plate welds, remove the bolts from the truck chassis and remove the damaged fish plate.
- (e) If, during the cutting process, damage has been caused to the MEWP subframe, repair by using a mig welder or low hydrogen stick welder.
- (f) Use a grinder to prepare the surface of the subframe so that it is flat and clean, ready to fit new fish plates.
- (g) At this stage, you can either replace the damaged fish plates with standard fish plates (Part No. 11A020) available from Redmond Gary Australia or replace the standard fish plates with flexible fish plates (**recommended option**).

3. The procedure for replacing the fish plates is as follows:

- (a) Bolt new fish plate onto the truck chassis using new bolts.
- (b) Check that the MEWP subframe is tight against the chassis rail. If not, apply a weight or clamp to pull the subframe down against the chassis rail.
- (c) Weld fish plate to the MEWP subframe, using mig welder or low hydrogen rods. At this stage, you should already have cleared the area of hoses, wiring or other items that may be affected by heat.
- (d) Touch up welds with zinc primer and black paint.
- (e) Check tension of bolts, as per recommended bolt torque table in Section 6 of the operator's manual.
- (f) Reassemble and relocate all brackets to bring the MEWP back into service.

4. Procedure for fitting flexible front fish plates (**recommended option**):

- (a) Purchase flexible fish plate assemblies as pairs - Part No. 11A205 (see attached drawing) from Redmond Gary Australia Pty Ltd is a typical assembly. Note - there are alternative assemblies available as well, to suit different truck models.
- (b) Locate fish plates onto the subframe and chassis taking into consideration that flexible fish plates are larger than standard fish plates and it may be necessary to move brackets, wiring and other componentry to make room for the larger flexible fish plates.
- (c) Drill chassis to accept the new bolt holes for the flexible fish plates. Please note, chassis should only be drilled in accordance with recommendations from cab chassis manufacturer's body building handbook.
- (d) Check that the MEWP subframe is tight against the chassis rail. If not, apply a weight or clamp to pull the subframe down against the chassis rail.
- (e) Weld fish plate to the MEWP subframe using mig welder or low hydrogen rods. At this stage, you should already have cleared the area of hoses, wiring or other items that may be affected by heat.
- (f) Touch up welds with zinc primer and black paint.
- (g) Check tension of bolts, as per recommended bolt torque table in Section 6 of the operator's manual.
- (h) Reassemble and relocate all brackets to bring the MEWP back into service.



Part Number: 11A205 (Typical Assembly)

**CUSTOMER ACTION REQUIRED:**

MEWP owners must circulate this bulletin to all their maintenance personnel.

In addition, the correct methods for deploying and stowing the MEWP stabilisers should be reinforced with operational personnel, ie the front stabiliser jacklegs are always deployed first, to take the majority of the weight off the vehicle's front wheels, then the rear stabiliser jacklegs are deployed to take the majority of the rear

wheels weight. The MEWP can then be levelled by using a combination of the front and rear jacklegs.

Conversely, the rear stabiliser jacklegs are always operated first when stowing the MEWP, to reduce the majority of the load on the rear wheels. The front jacklegs are then operated, to reduce the majority of the load on the front wheels.

Incorrect stabiliser operation can place excessive loads through the subframe front fish plates over a period of time, leading to fatigue cracks developing.

**RG ACTION REQUIRED:**

Nil

Please contact Grant Cheetham, our Service & Spare Parts Manager, on (07) 5594 9844 or Mobile 0438 748 363, if further information is required.

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Grant Cheetham  
Service & Spare Parts Manager