# **TECHNICAL MEMO**

| Product:      | CFT-212-MK2 Diff – upgrading from CFT-212 |       |            |           |   |
|---------------|---|-------|------------|-----------|---|
| Reference No: | CFT-Memo-015                              |       |            |           |   |
| То:           | CUPRA                                     |       |            |           |   |
| Author:       | JMB                                       | Date: | 09/05/2024 | Issue no. | 2 |

The CFT-212-MK2 differential has 2 main differences from its predecessor CFT-212.

- Upgraded Tripod Housing
- Introduction of Molybdenum core plates

It is possible to upgrade an existing CFT-212 differential to include both or either of these changes.



CFT-212-MK2 Differential

## Upgrading the tripod housing

The upgraded tripod housing part number is CFT-218-MK3 and this replaces CFT-218-S. To upgrade, the spacer SK-2075-A needs to be replaced with CFT-213-9. It is recommended that the wire-ring which retains the tripod housing into the differential is also replaced – part number CIR-052 (specification of this part has not changed)



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## Switching core plates from PARCO to Molybdenum coated

Due to the additional thickness of the Molybdenum coating (across the 6 core plates), the overall differential internal cluster would increase in length if only the plates were changed. This would result in an issue with installation into the CFT gearbox, due to the additional length (as it would clash with the maincase oilway). To overcome this issue, when fitting the Moly plates, it is necessary to modify both the adjuster carrier and the diff end cap.



Previous specification (PARCO) Part No. **TPT-213-8** Thickness = 1.6-1.7mm





Revised Specification (MOLY) Part No. **TPT-213-8B** Thickness = 1.95-2.0mm

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The following images outline how to modify the existing parts (all dimensions in mm):-



CFT-214 DIFF CAP → becomes CFT-214-A after modification



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EGTA-213-5 ADJUSTER CARRIER → becomes EGTA-213-5A after modification

Hewland have given these modified parts a new designation (-A suffix). Customers wishing to upgrade any existing CFT-212 units to run with the Moly plates (part number TPT-213-8B) will need to undertake the modifications shown, or alternatively they can order the revised parts CFT-214-A and EGTA-213-5A from Hewland.



Previous Specification (CFT-212)



Latest specification (CFT-212-MK2)



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It should be noted that even with the modifications to the carrier & diff cap, the overall length of the CFT-212-MK2 differential assembly is approx. 0.3mm longer than the previous unit. Due to this, when fitting the MK2 differential, it is important that customers check the clearance in the area shown below:-





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If the diff cap contacts the casing in this area, it may be necessary to dress a clearance into the maincase (by using a Dremel or similar tool). No more than 0.75mm should be removed due to the proximity of the oil drilling in the casing

## Note:-

Gearboxes built by Hewland to CFT-200-004 *"2024 CUPRA specification"* will be installed with latest CFT-212-MK2 differentials and will already have the revised adjuster carrier and end caps fitted. The clearance between the differential and maincase will have been checked.

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