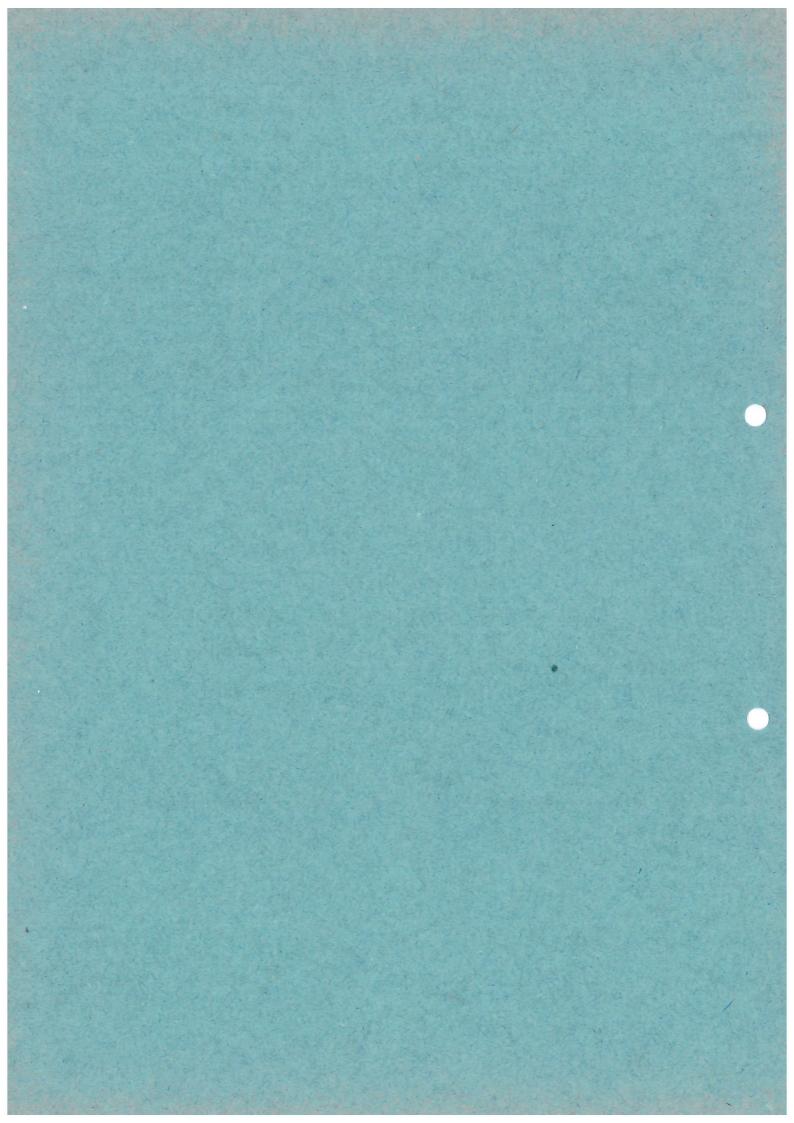
## British Railways Board

Mechanical & Electrical Engineer's Department

OVERHAUL AND TESTING OF COOLANT
HEADER TANK AND RELIEF VALVE
DMU WITH MECHANICAL OR
HYDRAULIC TRANSMISSION





PROCESS SPECIFICATION
C.E.P.S. 1045

OVERHAUL AND TESTING OF COOLANT
HEADER TANK AND RELIEF VALVE
DMU WITH MECHANICAL TRANSMISSION

Should any query arise regarding the contents of this specification, contact:

G.P.O. 0332-42442 Ext 3524

B.R. 056-3524

JULY 1982

Issued by: D of M & EE
Railway Technical Centre
Derby

#### REVISION RECORD

REVISION	DATE	INSERTED BY
1	3 8 82 2012.82 7.6.83	ST
2	20.12.82	22
3	7.683	35
	+	
	-	
	-	
10020	es Misson	

REVISION NUMBER	DATE	BY
		-
	-	
	-	
	-	
	2 2 7 7 2	
	+	
	-	-

#### PROCESS SPECIFICATION NO CEPS 1045

### OVERHAUL AND TESTING OF COOLANT HEADER TANK AND RELIEF VALVE (DMU WITH MECHANICAL TRANSMISSION)

#### GENERAL

This specification details the method of overhauling and testing engine coolant header tanks and relief valves removed from a vehicle undergoing workshop repair or returned from a Depot.

#### **OPERATIONS**

#### 1. OVERHAUL AND TESTING OF COOLANT HEADER TANK

- a) Remove the pressure relief valve and attend to as in 2 below.
- b) Clean the tank and examine for leakages, signs of corrosion and damage. Renew tank if any corrosion is evident. Repair minor leaks and damage but if extensive, renew the tank. A small bead of weld is to be applied to all captive nuts which are inaccessible for holding from outside the tank. Newly welded areas must be treated with an epoxy pitch and cured in accordance with manufacturers instructions.
- c) When re—assembling, graphite of molybdenum disulphide grease shall be applied to all threads.
- d) Fit new or inspected IRL relief valve, using a new gasket between the tank and the adaptor plate BR Drawing No M—A3—9013206 Item 11, BR Cat No 2/131840 (where necessary).
- e) Test as follows (on Power Cars with pressurised systems).
  - i) Fill the header tank to capacity and fit filler cap with special adaptor and pressure gauge.
  - ii) Blank off one relief valve (outlet pipe).
  - iii) Pressurise the system slowly to check that the relief valve opens at 0.28-0.42 bar, (4-6) lbf/in<sup>2</sup>) DO NOT PRESSURISE IN EXCESS OF 0.7 bar ( 10 lbf/in<sup>2</sup>).
  - iv) Remove the blank from the relief valve.
  - v) Repeat ii), iii), iv) for the other valve.
  - vi) Blank both relief valves off and pressurise the tank to 0.7 bar (10  $1 \mathrm{bf/in}^2$ ) checking for leakage.
  - vii) De-pressurise the system, remove the blanks, adaptor and pressure gauge. Refit the standard filler cap after checking the cap seal.
  - viii) Empty tank using bottom drain to ensure relief valves admit air.

#### 2. VISUAL CHECK OF PRESSURE RELIEF VALVES

A visual check of both the rubber seal condition and the ball cleanliness should be undertaken before a pressure relief valve is reused on a header tank.

Header tanks that are the integral type should be tested when complete with radiator.

policies policies form (prolifications to bestign and official and their base of the policy of the p

NAME AND ADDRESS OF THE OWNER, AND ADDRESS.

property of the private and the color to the color to the color of the

service in the service of the servic

The real of the property of the state of the state of the past of the state of the

The section approximate this each countries will be each

The product of the pr

lead between the terms of the small

entre aviat factor and the sense of the sens

· Primary and the second second second

Appear 11 (11), 111), 10 Top the course of the

The rest of the control of the land of the control of the control

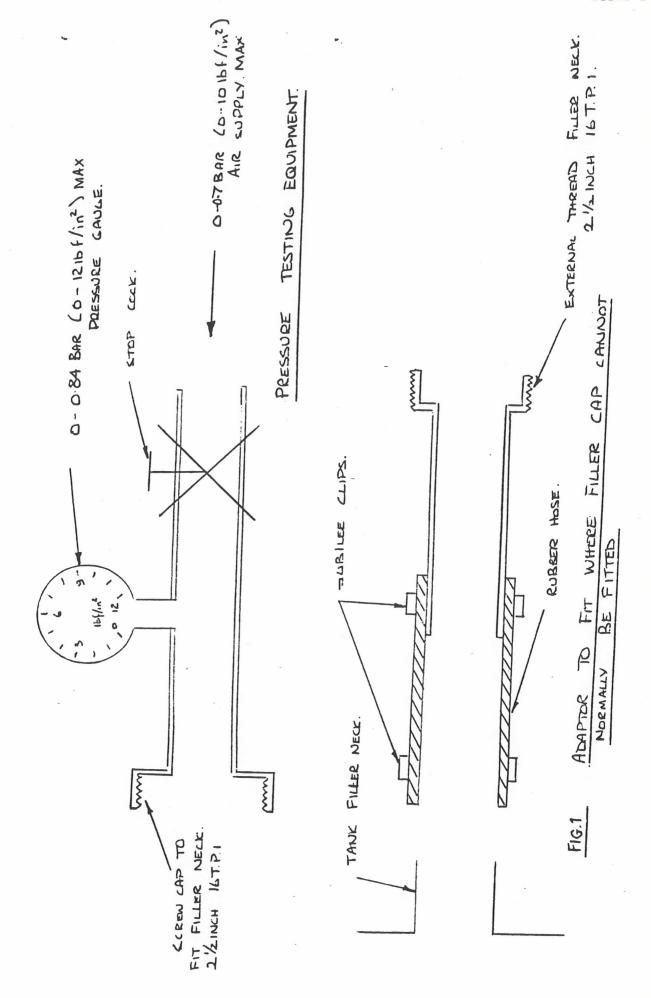
Case and wat private totals out to 150 or to 150 or annual to 150 or 150

the last marker to be a common their method point what stort itter

AND THE PROPERTY OF A SECTION AND ASSESSMENT OF THE PROPERTY O

Tograndings - The kind and residence their regimes our dated to Albert Charle & Albert Charles And the Albert Char

COLUMN TO THE COLUMN TO THE STATE STATE STATE STATE STATE STATE OF THE COLUMN TO STATE STATE STATE OF THE COLUMN TO THE COLUMN T



# PROCESS SPECIFICATION OVERHAUL AND TESTING OF COOLANT HEADER TANK AND RELIEF VALVE DMU WITH MECHANICAL TRANSMISSION B R PUBLICATION NO C.E.P.S 1045 REVISION LETTER NO 3

LOCATION

ACTION

REASON FOR CHANGE

Page 1, Issue 3

Replace with Issue 4

of this page

Paragraph 1 (b) amended

After incorporating the above, endorse the "Revision Record" at the front of the manual accordingly.

When this Revision letter has been actioned, it is to be stored at the back of the publication (capacity permitting), for easy future reference.

DATE: May 1983

REF: SSS 220-6-2

TEL: 056-3582

Issued by:

D of M & EE

Railway Technical Centre

Derby

THE RESERVE OF THE PARTY OF THE

when the following the court of the court of

typ meants.

watered transferred greatest

#### PROCESS SPECIFICATION

#### OVERHAUL AND TESTING OF COOLANT HEADER TANK

#### AND RELIEF VALVE. DMU WITH MECHANICAL TRANSMISSION

#### BR PUBLICATION NO CEPS 1045

#### REVISION LETTER NO 2

LOCATION	ACTION	REASON FOR CHANGE
Page 1 Issue 2	Replace with Issue 3 of this page.	Paragraph 1(b) and 1(c) revised.
Figs 1 and 2	Replace with Fig 1 Issue 2 (This was previously Fig 2)	Drawing for Teddington Relief Valves no longer required.

After incorporating the above, endorsed the "Revision Record" at the front of the manual accordingly.

When this Revision letter has been actioned, it is to be stored at the back of the publication (capacity permitting), for easy future reference.

DATE : DECEMBER 1982

REF : SSS 220-6-2

TEL : 056-3582

Issued by:-

D of M & EE, BRB

Railway Technical Centre

Derby

CONTRACTOR OF THE LOCAL PROPERTY TWO CONTRACTOR OF THE LOCAL PROPERTY OF THE LOCAL PROPE

The Act agency and a second of the account

Added in Discount 6 meet 1 g23 value special 6 meet nog on keviet Teles (Since Somethous Fig. 2) (Since Teles of Oncomment of the same special (Since Since Since

The second of th

#### PROCESS SPECIFICATION

#### OVERHAUL AND TESTING OF COOLANT HEADER TANK

#### AND RELIEF VALVE

#### DMU WITH MECHANICAL OR HYDRAULIC TRANSMISSION

BR PUBLICATION NO C.E.P.S. 1045

REVISION LETTER NO 1

LOCATION

ACTION

REASON FOR CHANGE

Front cover and contents of book

Remove and destroy, replace with new issue dated July 1982 Specification up-dated

After incorporating the above, endorse the "Revision Record" at the front of the manual accordingly.

When this Revision letter has been actioned, it is to be stored at the back of the publication (capacity permitting) for easy future reference.

Date: JULY 1982

Ref : SSS 171-172-502

Tel: 056-3582

Issued by:

D of M & EE BRB

Railway Technical Centre

Derby

RESTRUCTION OF STREET OF STREET

