Engine Alteration Instruction No.751/58 dated 22nd January 1958 Modified steam pipe elbows in smokebox Applicable to 15th Class Garratt locomotives operating on Rhodesia Railways

Notes to readers

The source document for this file was the Office Copy of the E.A.I. held in the National Railways of Zimbabwe Drawing Office in Bulawayo. It was discovered, in March 1998, while I was helping with searching for a complete set of drawings of the 15th Class locomotives after No. 398 had been purchased by a private group in New Zealand for eventual export to that country.

The original document was a duplicated copy hence the slightly indistinct type in some places. This was photocopied (with permission) on to A4 size paper while in the Drawing Office and the photocopies scanned when we were back in New Zealand.

The scanned file has been lightly "Photoshopped" to remove most of the artefacts resulting from the photocopying and scanning processes and to increase the contrast to make it more readable.

Any alterations, amendments or corrections done by hand have all been left in place and this file is a reasonably accurate reproduction of the original.

Alan Bailey December 2010

ENGINE ALTERATION INSTRUCTION

E.A.I. No. 751/58 Dated 22/1/58

FIT MODIFIED STEAM PIPE ELBOWS AND FLANGES
: IN SMOKEBOX:

15th Class.

- (3) Firedoors, Grates, Ashpans & Smokeboxes.
- 1. Reason. The present flanges of steam pipe elbows in smokeboxes fracture and distort causing leakage, thus affecting the steaming of the locos. This is due to the elbows being made of cast iron instead of cast steel, and also because the flanges have only 5 securing bolts (Ref. C.M.E. 6/13 of 12/12/57)

2. Alteration

- (a) Shops: Replace existing cast iron elbows with cast steel elbows Drg. No. 108/49, LN-8844/1, at the front, and Drg. No. L.6745/78 LN-8848/3 at the back. At the same time fit circular steel flanges Drg. No. 108/108 Item B. LN-8990/1 to steam pipes in the smokebox.
- (b) Sheds: Until locos are modified by Shops as per (a) above, Sheds to fit cast steel elbows Drg. No. 81/33 Item A. and B. LN-8847 and LN-8848 at front and back respectively, when existing elbows require replacement. Until these cast steel elbows are to hand in Stores (see para 8 below) existing cast iron elbows are to be fitted.
- 3. Engines concerned. 15th Class 350-423.
- 4. To be carried out (a) At BLR. and US. Shops (para 2a above)
 - (b) At Sheds (para 2b above)
- 5. To be completed
- (a) At General Repairs.
- (b) Para (2b) at Sheds when existing elbows require renewal.

6. Abstract.

E.A.I. NO. 751/58 Date 22/1/58	15th Class Locos Nos. 350-423.	Fit modified steam pipe elbows and flanges in smokebox.	DRAWING NOS 74/46 81/33 L.6745/46 Alt2 L.6745/78
--------------------------------------	--------------------------------------	---	--

- 7. Charge S.W.O. concerned.
- 8. Stores. The C.S.S. per my letter 6/13 of 12/12/57 has been requested to place an initial order for 36 each of Elbows Cat. Nos. LN-8844/1 & LN-8848/3. At the same time, 12 each of Elbows Cat. Nos. LN-8847 & LN-8848 (Which are the original design), have been ordered in cast steel to maintain locos in service until all locos have been modified. Stocks of these latter items should be kept at a minimum and any cast iron elbows in stock are to be used prior to issues of cast steel elbows.
- 9. Drawings. Copies of drawings vide para 6 sent to the C.D.S.B. and M.E.U. Previous issues of these drawings are to be returned to the Drawing Office for destruction.

Adlais