

- (b) the Company may refuse the Supplier, its employees, agents and Delivery and Servicing Vehicles entry onto any property that is owned, occupied or managed by the Company for any purpose (including but not limited to deliveries).

50 CompeteFor

- 50.1 Without prejudice to Clause 29 the Supplier will, on a non-exclusive basis, use the CompeteFor electronic brokerage service (or such alternative web-based tool as the Company may direct from time to time) ("**CompeteFor**") to make available to other suppliers all appropriate opportunities, arising in connection with the Agreement and each Contract, to supply goods, works and services to the Supplier.
- 50.2 The Supplier will use all reasonable endeavours to ensure that its sub-contractors (for the purposes of this clause, the "**Supplier's Sub-contractors**") use CompeteFor, on a non-exclusive basis, to make available to other sub-contractors all appropriate opportunities, arising in connection with the Agreement and each Contract, to supply goods, works and services to the Supplier's Sub-contractors.
- 50.3 The Supplier will monitor (and maintain a record of) the number, type and value of opportunities, arising in connection with the Agreement and each Contract, made available to other suppliers via CompeteFor, whether by the Supplier or the Supplier's Sub-contractors, as required by this Clause 50, and will report this information on a quarterly basis by way of email to the Company Representative.

51 Criminal Record Declarations

- 51.1 For the purposes of this Clause 51:
- "**Relevant Individual**" means any servant, employee, officer, consultant or agent of either the Supplier or any subcontractor or supplier involved in the provision of , or intended to provision of, any aspect of the Goods; and
- "**Relevant Conviction**" means any unspent criminal conviction relating to actual or potential acts of terrorism or acts which threaten national security.
- 51.2 The Supplier shall procure from each Relevant Individual (as the case may be) a declaration that he has no Relevant Convictions ("**Declaration**") or disclosure of any Relevant Convictions. A Declaration shall be procured prior to a Relevant Individual providing any of the Goods. The Supplier shall confirm to the Company in writing on request or in any event not less than once in every year that each Relevant Individual has provided a Declaration. The Supplier shall procure that a Relevant Individual notifies the Supplier immediately if he commits a Relevant Conviction

and the Supplier shall notify the Company in writing immediately on becoming aware that a Relevant Individual has committed a Relevant Conviction.

- 51.3 The Supplier shall not engage or allow to act on behalf of the Supplier or any subcontractor in the performance of any aspect of the Goods any Relevant Individual who has disclosed a Relevant Conviction.
- 51.4 The Company shall have the right in accordance with the audit rights set out in Clause 5 to audit and inspect the records of the Supplier and its subcontractors and its and their respective employees and agents in order to confirm and monitor compliance with this Clause 51 at any time during performance of this Agreement and each Contract.
- 51.5 If the Supplier fails to comply with the requirements under Clauses 51.2 and/or 51.3 the Company may, without prejudice to its rights under Clause 17.1, serve notice on the Supplier requiring the Supplier to remove or procure the removal of (as the case may be) any Relevant Individual who has not provided a Declaration from the Contract and/or Company's site with immediate effect and take such steps as are necessary to ensure that such Relevant Individual has no further involvement with the provision of the Goods unless (in the case of non-compliance with Clause 51.2) within seven (7) days of receipt of the notice the Supplier confirms to the Company that he has procured all of the relevant Declarations required under Clause 51.2.
- 51.6 A persistent breach of Clause 51.2 and/or Clause 51.3 by the Supplier shall entitle the Company to terminate the Agreement and each Contract in whole or in part with immediate effect in accordance with Clause 17.1(a).
- 51.7 In the event the Company becomes aware that a Relevant Individual has committed a Relevant Conviction, the Supplier shall remove or procure the removal (as the case may be) of such Relevant Individual from the Agreement and each Contract and/or the Company's site with immediate effect and take such steps as are necessary to ensure that such Relevant Individual has no further involvement with the provision of the Goods.
- 51.8 Nothing in this Clause 51 shall in any way waive, limit or amend any obligation of the Supplier to the Company arising under the Agreement and each Contract and the Supplier's responsibilities in respect of the provision of the Goods remain in full force and effect and the Supplier cannot claim any extra costs or time as a result of any actions under this Clause 51.

Schedule 1
Detailed
Terms

Commencement Date	June 2019
Term	4 (from) years
The Initial Period is:	4 (four) years from date of this agreement
The Liquidated Damages for delay for the purpose of Clause 10.3 payable for such order for the delivery of Goods is:	REDACTED
The period of delay over which the Liquidated Damages shall be calculated for the purpose of Clause 10.3 is every:	REDACTED
The maximum amount of Liquidated Damages payable under Clause 10.3 expressed as a percentage of the price payable for such Goods in respect of each order for the delivery of goods is:	REDACTED
Security required pursuant to Clause 43.1:	
Bond	No
Parent Company Guarantee	No
Additional comments	

Schedule 2
Pricing Breakdown

REDACTED

Schedule 3 Framework Specification

Technical Specification EO.10.05.04 Issue 5: 1973 Tube Stock Fleet Brake Head Overhaul

TUBELINES LTD PICCADILLY LINE 1973 TUBE STOCK FLEET BRAKE HEAD OVERHAUL

Technical Specification EO.10.05.04 Issue 5

1. INTRODUCTION

The brake head, also known as a 'brake hanger', supports the friction brake blocks and transmits the forces generated by the air brake actuator to the block, pressing it against the wheel. Figure 1 shows the complete brake rigging assembly, of which the brake head forms a part. This is a harsh and abrasive environment, resulting in significant wear to the brake head over time, introducing play in the brake rigging assembly and reducing the degree of support and guidance imparted by the brake head to the brake block. This can lead to the block not fully contacting the wheel tread, reducing brake efficiency, as well as cracking of the block due to uneven support. It is therefore necessary to periodically overhaul the brake heads to restore them to their as-new dimensions. This specification details the necessary work, along with the incorporation of a modification designed to increase the future wear resistance of the component. The various Tubelines (TLL) and London Underground (LUL) drawings and specifications referred to in the text are included in a reference pack accompanying this document.

2. GENERAL DESCRIPTION

The brake head has a cast steel body produced from material to BS3100, grade A1. Drawing 46127 shows the brake head assembly. These items are handed, with left and right-handed versions being employed in equal quantities. Manganese-steel wear plates (drawing 46127 items 5 & 6) are attached to the casting body by welds. A case-hardened pivot bush is pressed in to a reamed hole at the top of the casting. Cylindrical pockets in the upper part of the casting accommodate springs and plungers which help to stabilise the brake head against its supporting bracket. Figures 2 and 3 show the general arrangement of the brake head.

The wear plates and pivot bush are subject to gradual wear and therefore require inspection. If the prescribed wear limits are exceeded, they are to be replaced. The attachment welds for the wear plates are also to be examined for cracking and are to be

repaired if cracks are found. Details of the relevant inspection criteria and replacement processes are given in this document.

The brake head is designed to hold a composite brake block. The block is held in place by a combined striking block/key assembly which is inserted through the central channel in the casting, passing through the lug at the rear of the block. Figures 4 and 5 show the general arrangement. The block is held vertically in the brake head by its retaining lug and by alignment pegs at the ends of the block, which locate in slots at the ends of the radiused block face.

The striking block bears on to the back of the brake head, transmitting force generated by brake actuator, which has been magnified by the brake lever. The striking block/key assembly is prevented from riding upwards due to vibration by engagement with a locking lug on the back of the brake head. To keep it in the correct vertical position, the key has a 'nose' projection, which rests on a shelf at the rear of the casting.

Various areas of the brake head casting are subject to wear and are to be restored to their original dimensions by weld build-up, followed by machining or grinding back, as detailed in the relevant sections of this document.

Brake head castings will be supplied to the Contractor in the condition in which they were removed from the train. They are likely to have a coating of adhering dirt and grease which will require removal by pressure/steam cleaning, or other suitable means, before work can begin. Components will normally be supplied fully stripped, but on occasions, items such as springs corroded in to the spring pockets may remain, and these will require removal. Items will not normally be labelled, having been routinely removed from vehicles for overhaul. However, in the case of items removed prematurely due to some specific defect, this will normally be indicated on an attached red defect label.

Work to be completed on each brake head can be summarised as follows:

- Clean the casting sufficiently to permit full inspection,
- Thoroughly inspect the casting any damage or cracks falling outside of the conditions described in this specification; report any such findings to TLL, so that remedial repair actions can be agreed,
- Inspect wear plates – replace if worn above limits,
- Inspect wear plate retaining welds – repair any cracks found,
- Inspect support bush – replace if worn above limits,
- Inspect spring pockets, remove any debris or internal burrs and ensure drain holes are clear,

- Build up worn areas of casting with weld and machine/grind back to original dimensions,
- Fit hardened wear inserts to block face orifice,
- Perform a final functional assembly inspection.

3. CASTING WEAR RECTIFICATION

3.1 General

Wearing areas of the casting requiring attention are as follows:

- Block face,
- Block locating slots,
- Striking block bearing face,
- Striking block locking lug,
- Key support shelf.

Figure 6 provides a summary of these locations.

3.2 Block Face and locating slots

Constant movement of the block causes wear to the block face, increasing its radius. This results in increasing play between the block and the brake head. Wear to the edges of the central lug orifice in the block face permits increased vertical movement of the block, accelerating the wear process. If left unattended, wear will become sufficient that the block locating pegs can move out of the locating slots, leaving the block free to twist on its central locating lug. Figures 7 and 8 show a heavily worn brake head demonstrating these features.

The locating slots themselves also become widened due to contact with the block locating pegs, allowing the block to move laterally off the wheel tread. Figures 9 and 10 show typical examples of worn slots, alongside those restored to the correct dimensions. In extreme cases, the slots can become worn to the point that the block locating peg has cut in to the side wall of the casting.

The block face is to be built up with weld to allow the original 1' 5" radius ($432 \pm 2\text{mm}$) to be restored, referenced to the wheel centre location shown on drawing 46127. The block locating slots are also to be machined or ground back to the $1\frac{1}{16}"$ ($27 \pm 1\text{mm}$) width specified in the drawing.

The basic weld repair process, based on BS3100 grade A1 parent material is as follows:

- Remove all oil, grease, rust, scale, paint etc from the worn areas by degreasing followed by grinding or wire brushing,

- Pre-heat the repair area to 100-150°C immediately before commencement of welding and maintain this temperature during welding (a suitable temperature measurement device should be employed),
- Build up the worn areas by depositing single overlapping runs (50% overlap), ensuring that enough weld metal is deposited for final machining,
- Maximum interpass temperature is 250°C,
- Carry out a 100% visual inspection to confirm weld quality and coverage,
- Upon completion of welding, allow the casting to cool in still, dry air,
- Machine or grind the reclaimed areas to the original drawing dimensions.

3.3 Wear to Rear of Casting

3.3.1 Striking Block Bearing Face

The area of the brake head casting immediately above the locking lug may become deformed over time due to the striking block bearing upon it. This is the area with a 1' 8" (508 ± 2mm) radius shown on drawing 46127. This can cause the striking block to sit unevenly, driving the brake head at an angle, so that the brake block is not placed fully on the wheel tread. It can also mean that the cut-out in the striking block starts to wear on the locking lug. Figure 11 shows an example of a brake head with significant wear on the back face. Typically, only a part of the radiused area will be worn in this way, allowing the 'true' original surface profile to be determined. If the wear on this area is greater than 0.7mm, the affected area is to be built up by welding and then ground back to match the original profile. The same overlapping weld deposition process should be used as described for the block face weld build-up process in section 3.2, above. Given the impracticality of machining in this area, hand-grinding will be employed in profiling the built-up section.

3.3.2 Striking Block Locking Lug

As described in section 3.3.1 above, and illustrated in figure 11, the top of the locking lug can become worn down by the striking block if the radiused back of the casting is eroded beyond a certain level. Additionally, the lug edges can become rounded. Both conditions can allow the striking block to jump over the locking lug due to vibration. If this occurs, the striking block may become wedged between the locking lug and the brake rigging; the result will be to force the brake block permanently against the wheel, resulting in overheating and damage to the wheel tread. If the top of the lug has been reduced in height by more than 1mm at any point, the worn areas should be built up with weld and manually ground back to its correct height. Referring to figures 6, 11 and 19, the locking face should be dressed to provide a sharp edge between it and the top of the lug, removing any rounding. If necessary, the ledge below the lug should be lightly ground to maintain the dimensions shown in drawing 46127.

3.3.3 Key Support Shelf

The key support shelf gradually wears to a 'U' shape due to contact with the key locating nose. This wear means that the striking block/key assembly sits lower than intended. Figure 12 shows a typical example. If the degree of wear exceeds 2mm, the top of the shelf should be built up with weld and manually ground back to its original height. Figure 13 shows an example restored in this way.

4. PIVOT BUSH AND WEAR PLATE INSPECTION

4.1 Pivot Bush

The pivot bush is to be visually inspected for signs of breakage, as well as being checked for diameter. If worn to an internal diameter of more than 1.055" (26.8mm), or showing signs of cracking or broken out material, it is to be replaced by a new item made to drawing 46127, item 7. Case hardening of this bush is to be undertaken to LUL specification RME 41E (provided in the reference document pack accompanying this specification).

4.2 Wear Plates

Side wear plates (drawing 46127, item 5) are to be replaced if visibly bent, or their thickness falls below 0.1875" (4.75mm) at any point.

Top wear plates (drawing 46127, item 6) are to be replaced if wear is such that the distance between their outer faces falls below 2.375" (60.3mm) at any point.

4.3 Inspection, Repair and Replacement of Wear Plate Welds

The attachment welds for the side and top wear plates should be visually checked for cracking. Any cracked welds should be repaired by grinding out the damaged area, plus a further 10mm section, and re-making the weld.

As shown in drawing 46127, the side wear plate (item 5) is attached using a continuous $\frac{3}{16}$ " (5mm) fillet weld along three sides of the plate. Figure 14 shows an example of the extent of the weld.

The two top wear plates (item 6) are also retained by welds. This detail has been omitted from drawing 46127 and figure 15 is therefore provided to show the required weld geometry.

To cover both the repair of cracks to existing welds and the welding in of new wear plates, the Contractor will propose a process to produce welds of suitable strength and longevity between the manganese-steel wear plate and the cast steel body.

5. INSPECTION OF SPRING POCKETS

The spring pockets should be checked to ensure that they are free from spring fragments, which may have become seized in to the bores. Figure 16 shows an example of this. Any such fragments should be removed, and any burrs intruding in to the bores should be dressed out. The drain holes at the closed ends of the pockets are to be checked for debris or blockages and cleared out as necessary.

6. FITTING OF HARDENED WEAR INSERTS

The edges of the block securing lug opening in the block face tend to wear rapidly, as shown in figures 7 and 17. The resulting increase in block movement causes accelerated wear to the block face of the casting. A modification has therefore been developed which involves fitting of hardened steel inserts to the edges of the opening, as shown in drawing TL106220. The insert itself is shown in drawing TL106102. The inserts are case-hardened on their radiused faces to London Underground specification RME 41E. Figure 17 shows a worn casting as removed from service alongside an overhauled unit with the hardened wear inserts fitted.

To fit the inserts, the block face must first have been restored to its original radius by welding and machining, as per section 3.2. Cut-outs are then milled in to the casting as shown in drawing TL106220, of sufficient depth to place the tops of the insert flush with the restored block face, with their faces spaced at $50^{+1}/_0$ mm across the central opening. The insert is retained in place by a mixture of V-butt and fillet welds, as illustrated in figure 18. The edges of the milled cut-outs are to be bevelled to accommodate the V-butt welds. Referring to drawing TL106220 and figure 18, the welds between the tops of the inserts and the block face should be dressed flat to provide a smooth bearing face for the brake block. The weld between the outer (non-wear plate) side of the casting and insert should also be ground flat. Additional 5mm fillet welds are applied to the legs and wear-plate side of the insert as shown in figure 18. Care should be taken that these welds do not protrude in to the keyway channel, potentially fouling against the block retaining key.

7. GENERAL REQUIREMENTS FOR WELDING

The Contractor is required to generate suitable Welding Procedure Specifications (WPS) for each of the required welding operations. These will be compatible with the material of the castings and the wear plates, and which conform to the requirements of BS 4570: 1985 (Fusion Welding of Steel Castings). These processes will be submitted to TLL for approval before the commencement of work. Each WPS will be based on a relevant Weld Process Approval Record (WPAR) held by the Contractor, which have been approved in accordance with BS EN 15614-1 (Specification and Qualification of Welding Procedures for Metallic Materials – Welding Procedure Test - Part 1: Arc and Gas Welding of Steels and Arc Welding

of Nickel and Nickel Alloys). Welding staff will have been qualified to the specified welding processes in accordance with BS EN ISO 9606-1 (Qualification Test of Welders – Fusion Welding - Part 1: Steels).

8. INSPECTION REQUIREMENTS

Visual Examination of welds should be carried out in accordance with BS EN ISO 17637: 2011 (Non-Destructive Testing of Welds - Visual Testing of Fusion Welded Joints).

Where cracked wear plate welds are repaired, or new wear plates fitted, the resulting welds are to be proven to be crack-free by Visual and Magnetic Particle Inspection (MPI). MPI examination is to be undertaken in accordance with BS EN ISO 9934-1: 2015 (Non-Destructive Testing – Magnetic Particle Testing – General Principles). Acceptance criteria for any defects revealed are to BS EN ISO 23278:2015 (Non-destructive testing of welds – Magnetic particle testing — Acceptance levels) acceptance level 1.

A final fitting check will be undertaken on all completed brake heads by fitting a new brake block and retaining key/striking block (free-issued by TLL). The block should form a close fit to the radius of the block face. With the block in place, it should be possible to insert and withdraw the key without noticeable resistance. If such resistance is noted, the causes should be investigated and rectified. The striking block should bear correctly on to the back of the casting, with a clearance between the locking lug and the corresponding recess in the striking block. Figure 5 shows a made-up assembly with brake block and key/striking block fitted to a new brake head, whilst figure 19 shows the correct relationship of the striking block and the brake head in the area of the locking lug.

Due to their safety-critical function, these items will be subject to a first article inspection as part of the acceptance process.

9. PROTECTION AND PACKAGING OF OVERHAULED ITEMS

Completed assemblies are to be protected from surface corrosion by application of a suitable wax/oil-based metal preservative, which will typically be brush-applied.

Transit packaging should be sufficient to ensure adequate protection during handling and transportation, so that components are received by TLL in the same condition as when they passed through the Contractor's final inspection.

10. REFERENCE DOCUMENTS

- London Transport Board drawing 46127 Issue B: 'Brake head',
- London Transport Board specification RME 41E: 'Case-hardening of bolts, pins and bushes for use on rolling stock',
- Tubelines Ltd drawing TL106102 Issue B: 'Hanger Insert',
- Tubelines Ltd drawing TL106220 Issue A: 'Brake head welded assembly (hardened wear pads)'.



Figure 1. Brake rigging assembly

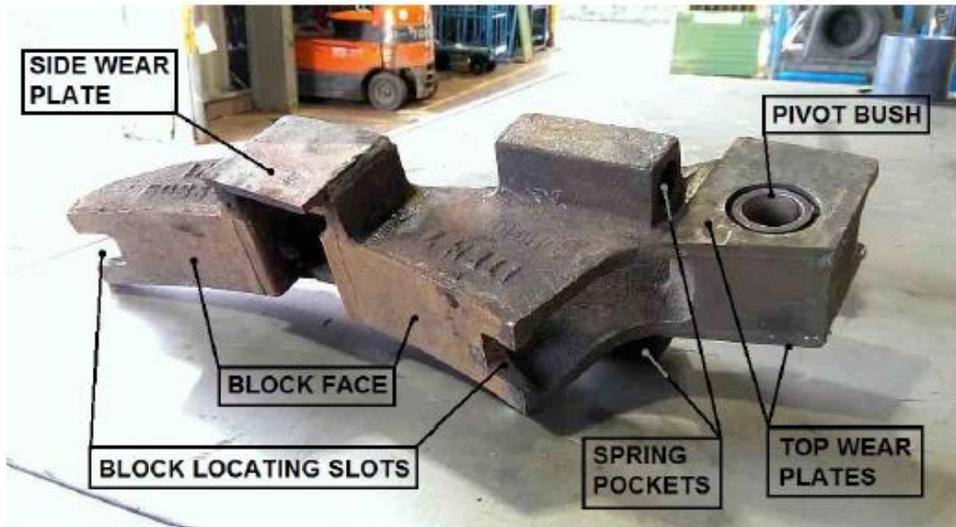


Figure 2. Brake head general arrangement – front view

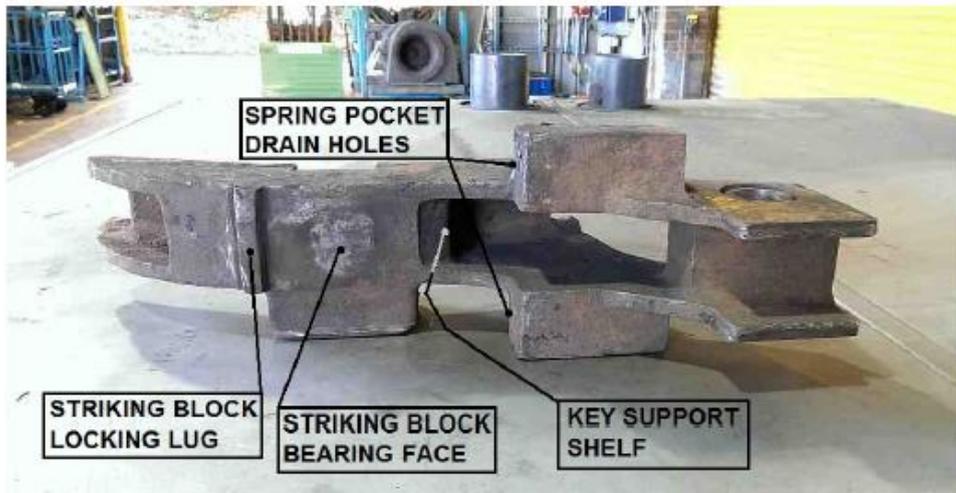


Figure 3. Brake head general arrangement – rear view

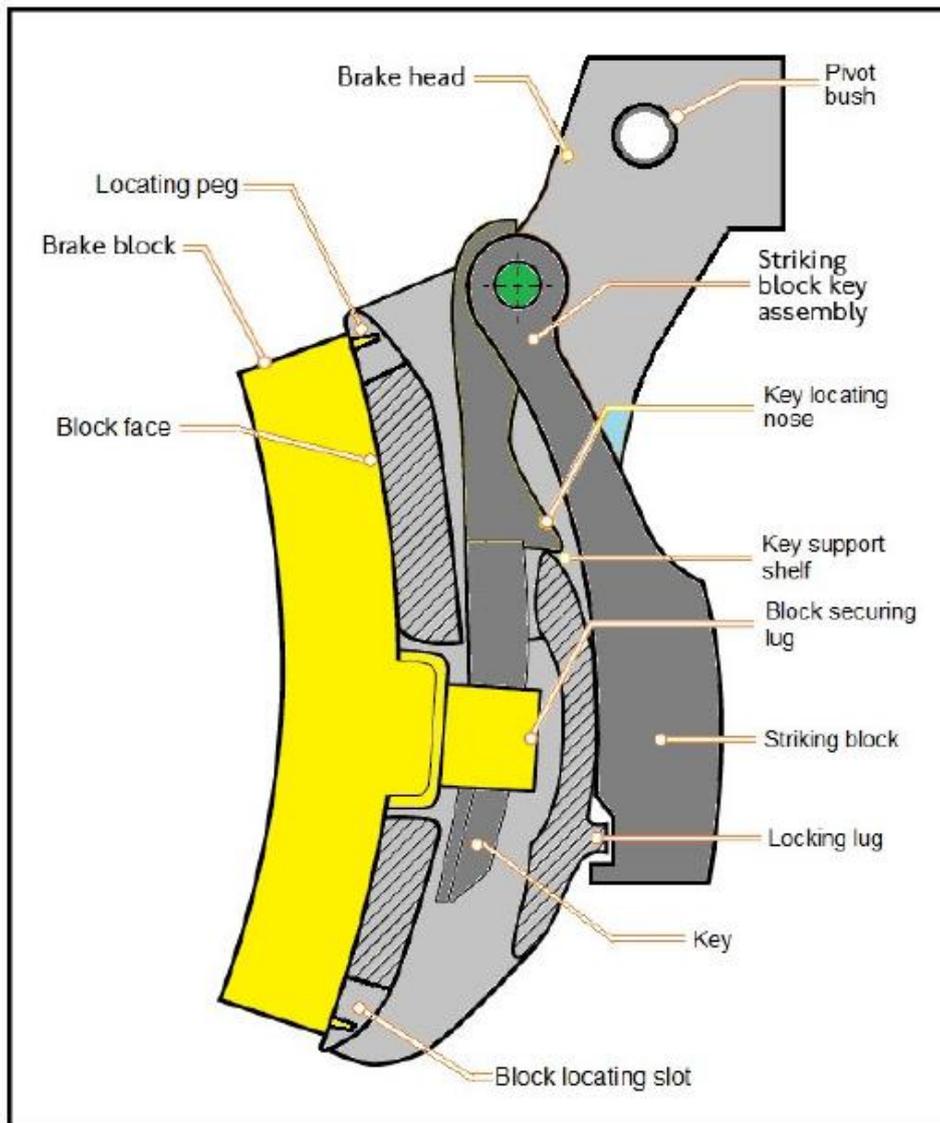


Figure 4. General arrangement of brake head assembly



Figure 5. Brake head fitted with brake block and key/striking block

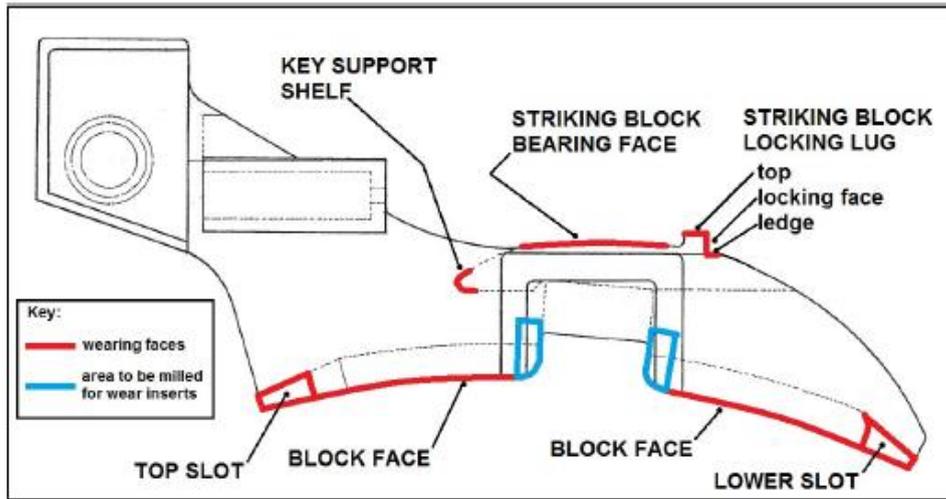


Figure 6. Summary of wearing areas of casting requiring repair



Figure 7. Heavily worn brake head

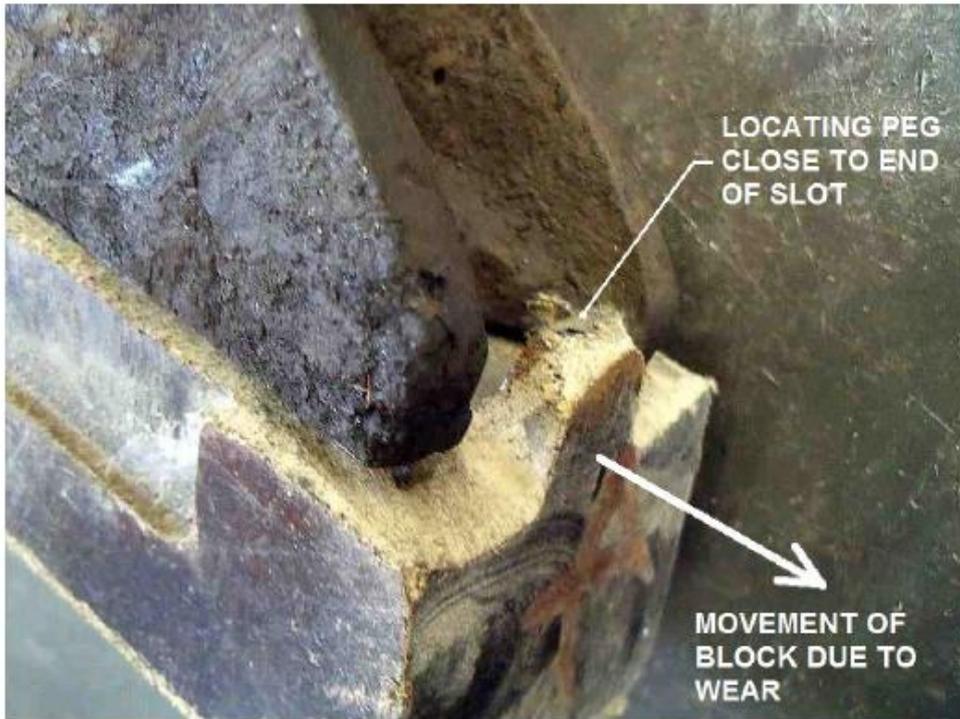


Figure 8. Bottom locating peg position on worn brake head



Figure 9. Worn (left) and restored (right) lower block locating slots



Figure 10. Worn (left) and restored (right) upper block locating slots

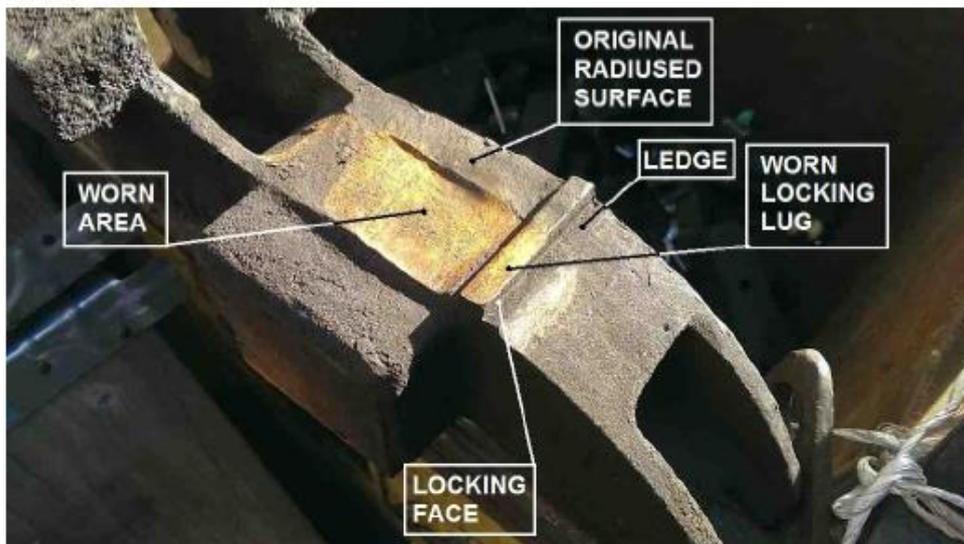


Figure 11. Wear to brake head back face



Figure 12. Worn key support shelf



Figure 13. Restored key support shelf



Figure 14. Welding of side wear plate

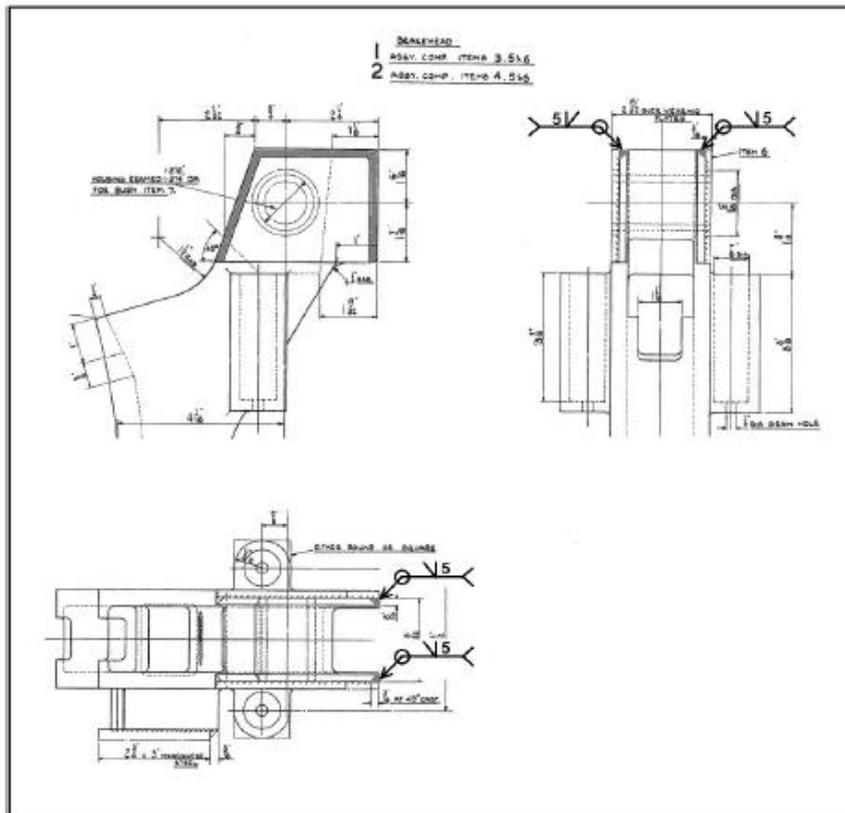


Figure 15. Weld detail for top wear plates



Figure 16. Spring seized in pocket



Figure 17. Worn (left-hand) and overhauled (right hand) casting with wear inserts fitted

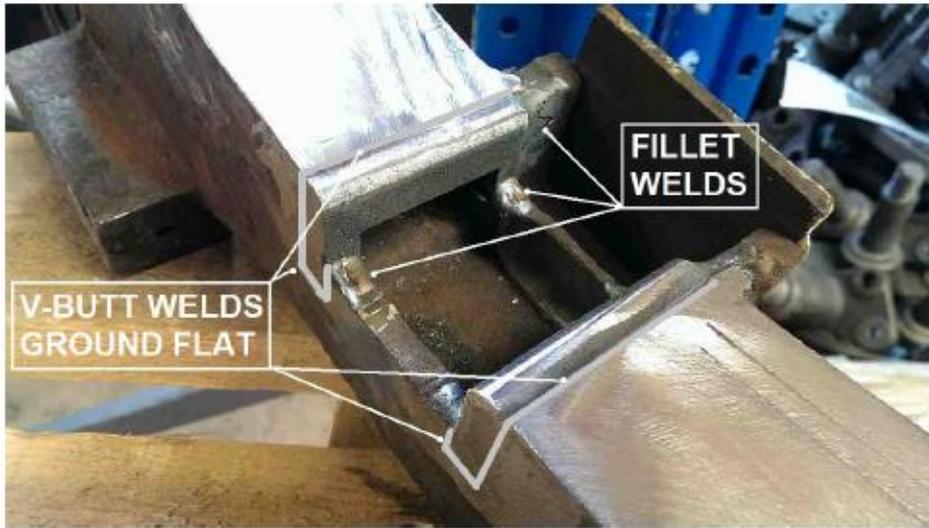


Figure 18. Welding of hardened wear insert

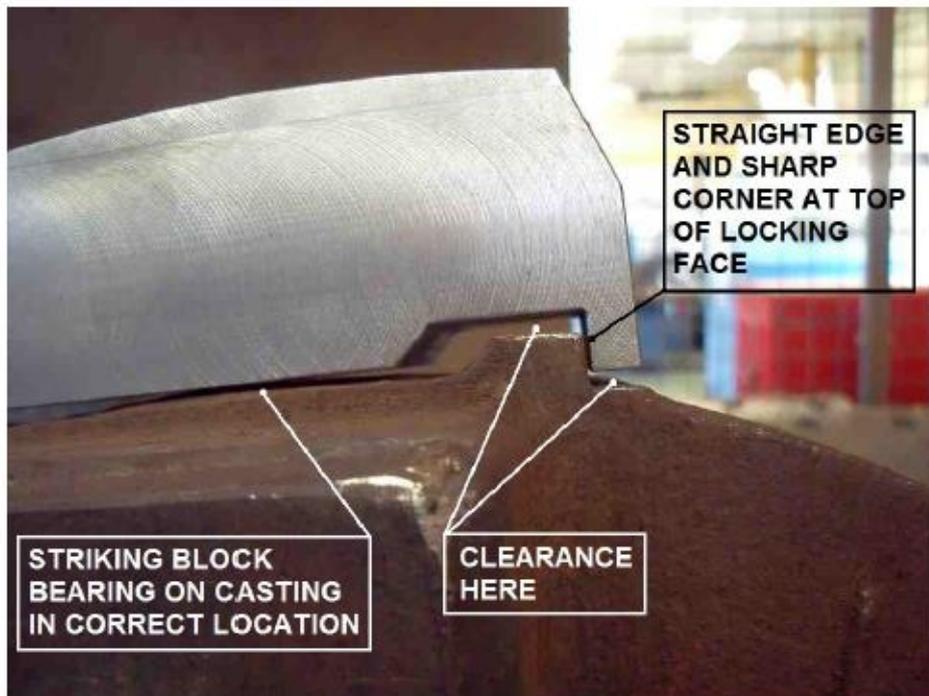


Figure 19. Correct relationship between striking block and locking lug area

Mike Lipscomb
73ts LE Engineer
17th February 2016

RME 41E - Case Hardening Specification

**UNCONTROLLED
DOCUMENT**

NOT SUBJECT TO Q.A.
UPDATING PROCEDURE

The Manufacturer is required to assure himself that any drawings or specifications to which he may wish to work and which were in his possession before the receipt of the current order are the Board's latest issues.

LONDON TRANSPORT BOARD

See D.D. 4436.

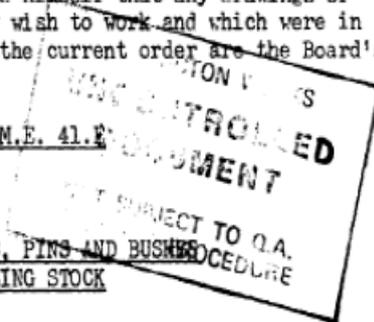
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SPECIFICATION R.M.E. 41.E

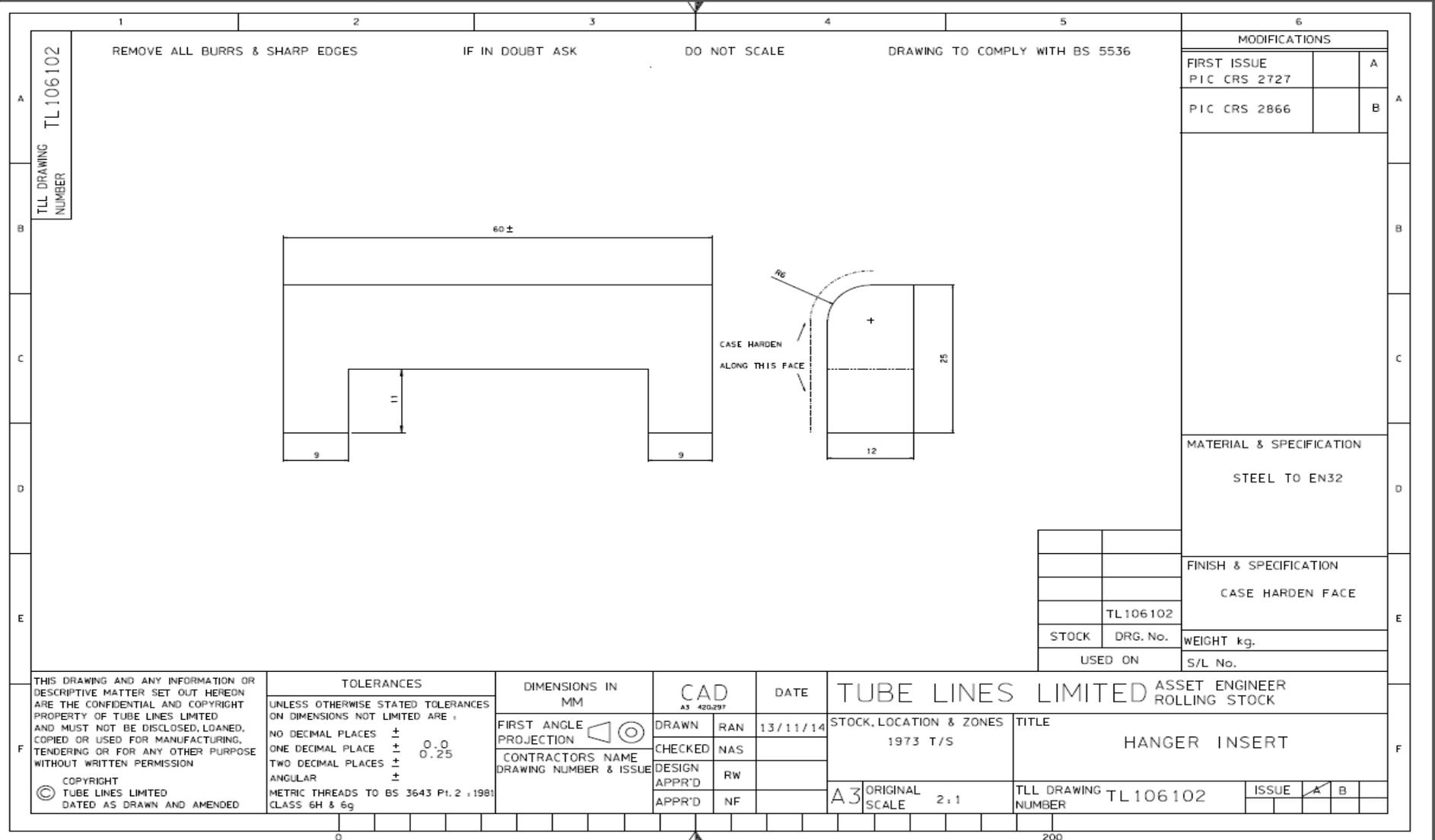
FOR

CASE-HARDENING OF BOLTS, PINS AND BUSHES
FOR USE ON ROLLING STOCK

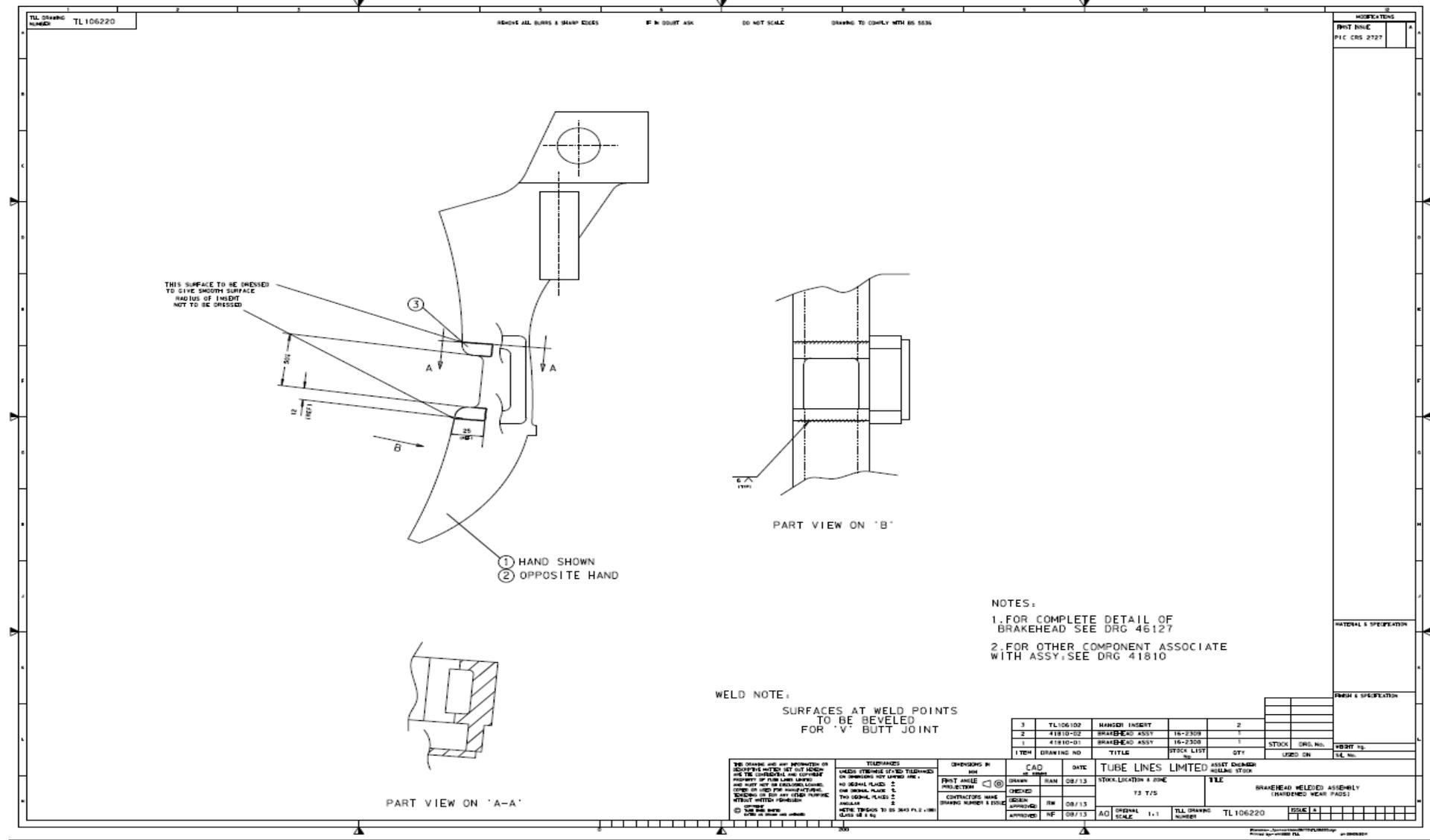


1. Articles shall be made from steel to B.S.970, EN.32B. and shall be treated as follows:-
 - (a) Carburise at 880°C. - 930°C
 - (b) Refine at 870°C - 900°C and cool in air, oil or water.
 - (c) Heat to 760°C - 780°C and quench in water
2. The articles shall be case-hardened where indicated to a depth of not less than 3/64" and not more than 1/16" with a hardness of not less than 60 Rockwell on the C Scale.
3. The threads of shouldered bolts shall not be case-hardened.
4. With each batch of articles to be case-hardened a test piece of the same quality steel, turned to 1" diameter, shall be carburised with the articles represented. When the articles and the test piece are hardened and cool, the test piece shall be broken and submitted to the Inspector for his approval, and shall show case-hardening to a depth of not less than 3/64" and not more than 1/16" all over. If the test piece is not satisfactory the articles represented shall be re-hardened at the discretion of the Inspector.

TL106102 Issue B - Hanger Insert



TL106220 Issue A - Brake Head Welded Assembly



TLL46127 Issue B - Brake Head

Uncontrolled Copy Confirm validity before use

Uncontrolled Copy Confirm validity before use

Uncontrolled Copy Confirm validity before use

1 BRAKEHEAD
2 ASSY. COMP. ITEM 3. 516
3 ASSY. COMP. ITEM 4. 516

9 ROLLER SPRING
 1/2" DIA. 1.5" HGT.
 1/2" DIA. 1.5" HGT.
 1/2" DIA. 1.5" HGT.

8 TURNED SPHERICAL
 1/2" DIA. 1.5" HGT.
 1/2" DIA. 1.5" HGT.

7 CAME HARDEN. DEPTH TO
 1/2" DIA. 1.5" HGT.

6 ROLLER SPRING
 1/2" DIA. 1.5" HGT.

5 ROLLER SPRING
 1/2" DIA. 1.5" HGT.

SECTION AA

ITEM 6

ITEM 7

ITEM 8

ITEM 9

MATERIAL LIST

ITEM	DESCRIPTION	MATERIAL	SPEC. NO.	ORG. NO.	QTY.	REMARKS
1	BRAKEHEAD	STEEL	1010	1010	1	
2	ASSY. COMP. ITEM 3. 516	STEEL	1010	1010	1	
3	ASSY. COMP. ITEM 4. 516	STEEL	1010	1010	1	
4	ROLLER SPRING	STEEL	1010	1010	1	
5	ROLLER SPRING	STEEL	1010	1010	1	
6	ROLLER SPRING	STEEL	1010	1010	1	
7	CAME HARDEN. DEPTH TO	STEEL	1010	1010	1	
8	TURNED SPHERICAL	STEEL	1010	1010	1	
9	ROLLER SPRING	STEEL	1010	1010	1	

BRAKEHEAD

DRAWER No. 68 **FIELD OFFICE** 470

CLASS OF STOCK 1967 TUBE STOCK

SCALE 12 INCHES TO A FOOT

DATE 3-11-67

LONDON TRANSPORT BOARD
CHIEF MECH. ENGINEERS OFFICE
DRAWING No. 46127
DATE 3-11-67

Uncontrolled Copy Confirm validity before use

Schedule 4 Form of Order

Master Agreement for the supply of Goods Contract Reference Number: TfL-01189

THIS ORDER IS AGREED AND ENTERED INTO BY THE COMPANY AND THE SUPPLIER PURSUANT TO, AND STRICTLY SUBJECT TO THE TERMS OF, THE ABOVE-REFERENCED MASTER AGREEMENT FOR THE SUPPLY OF GOODS.

- Notes:**
1. Please confirm receipt of this Order immediately by signing and dating where indicated and returning to the Company's Representative.
 2. Please quote the Contract Reference Number and the Order number in all correspondence and on all applications for payment.
 3. Please address all correspondence and enquiries to the Company's Representative.

Company:	London Underground Limited
Supplier:	William Cook Rail Limited
Contract Reference Number:	TfL-01189
Order Title:	Repair/Overhaul of Brake Head Assembly
Company's Representative: Address for service of notices: Telephone: Email :	REDACTED REDACTED REDACTED REDACTED
Supplier Representative: Address for service of notices: Telephone: Email:	REDACTED REDACTED
Delivery Address:	Cockfosters Train Maintenance Depot, Bramley Road, Oakwood, London N14 4HX
Expected Order Delivery Date and times for delivery:	As set out in Delivery Schedule Appendix 1
Specification	As set out in Schedule 3
Warranty Period	12 months in service, 18 months in Stores.

Key personnel:	REDACTED
Order Specification:	As set out in Schedule 3
Order Price (exclusive of VAT)	As set out in Schedule 2
Order Payment Profile and application for payment dates:	Not used
Additional Comments/Special Instructions:	1) A First Article Inspection (FAI) to be undertaken on the first batch of 24 by the Company before dispatch of the Goods. 2) The actual delivery dates may be adjusted if necessary. 3) Tolerance for replacement of hardened bush, side wear plate, top wear plate to be agreed with TfL Engineering.

Signed by:
Title:
On behalf of:
London Underground Limited

REDACTED

.....

15 July 2019

Date:.....

Signed by:
Title:
On behalf of:
William Cook Rail Limited

REDACTED

.....

15 July 2019

Date:.....

Appendix 1
Delivery Schedule

Period End Dates 2019-2020 (Brake Hanger Assembler's)							
Part Numbers				Shipped 16/2307	Received 16/2307	Shipped 16/208	Received 16/208
Period	Start Date	End Date	No of Days	Quantity	Quantity	Quantity	Quantity
Pe01-20	1st Apr 2019	27th Apr 2019	27	24	24	24	24
Pe02-20	28th Apr 2019	25th May 2019	28	24	24	24	24
Pe03-20	26th May 2019	22nd Jun 2019	28	24	24	24	24
Pe04-20	23rd Jun 2019	20th Jul 2019	28	24	24	24	24
Pe05-20	21st Jul 2019	17th Aug 2019	28	24	24	24	24
Pe06-20	19th Aug 2019	14th Sep 2019	28	24	24	24	24
Pe07-20	15th Sep 2019	12th Oct 2019	28	24	24	24	24
Pe08-20	13th Oct 2019	9th Nov 2019	28	24	24	24	24
Pe09-20	10th Nov 2019	7th Dec 2019	28	24	24	24	24
Pe10-20	8th Dec 2019	4th Jan 2020	28	24	24	24	24
Pe11-20	5th Jan 2020	1st Feb 2020	28	24	24	24	24
Pe12-20	2nd Feb 2020	29th Feb 2020	28	24	24	24	24
Pe13-20	1st Mar 2020	31st Mar 2020	31	24	24	24	24

The above are the planned schedule quantities
There will be an additional requirement for casualty repairs throughout the period

Schedule 5

Contract Variation Procedure

- 1 The cost of any Variation Order shall be agreed between the parties taking account of the reasons why the Variation Order was required.
- 2 The Company may propose a variation by completing Part A of the Variation Proposal and supplying three (3) copies of it to the Supplier. Within five (5) Working Days of receipt, or such other time as may be agreed by the Company, the Supplier shall complete Part B of the Variation Proposal and shall supply two (2) copies of the Variation Proposal to the Company. The Company shall be entitled, at any time within thirty (30) days of receipt, to instruct and authorise the Supplier to proceed with the variation on the terms so set out by each party by completing and signing Part C of one copy of the Variation Proposal (which, following such signature, will be referred to as a “**Variation Order**”) and supplying such Variation Order to the Supplier. The relevant part(s) of the Agreement and the relevant Contract shall thereupon be varied accordingly.
- 3 The Supplier may propose a variation, after requesting the issue by the Company of a Variation Proposal variation number, by completing Parts A and B of a Variation Proposal and supplying two (2) copies of it to the Company. The Company shall be entitled, at any time within thirty (30) days of receipt, to instruct the Supplier to proceed with the variation on the terms so set out by the Supplier by completing and signing Part C of one copy of the Variation Proposal (which, following such signature, will be referred to as a “**Variation Order**”) and supplying such Variation Order to the Supplier. The relevant part(s) of the Agreement and the relevant Contract shall thereupon be varied accordingly.
- 4 The Supplier may indicate in a Variation Proposal that the price is an estimated price but, if it does so, it shall supply a firm price to the Company in writing at least seven (7) days before the expiry of the time within which the Company is entitled to instruct the Supplier to proceed with the variation.
- 5 The price indicated by the Supplier must be the full price and shall cover all costs associated with the variation. If appropriate a range of prices may be shown corresponding to the quantity of Goods to be supplied.
- 6 In an emergency, both parties shall use their reasonable endeavours to expedite the actions permitted or required under the Agreement and each Contract Variation Procedure.

- 7 The Company will not accept any retrospective claims for additional work caused by a variation which has not been approved by the Company in accordance with the Agreement and each Contract Variation Procedure before the commencement of such additional work.
- 8 All authorised additional work resulting from any Variation Proposal shall be priced in accordance with any applicable rates set out in Schedule 2.
- 9 The Supplier shall at all times act reasonably and shall price each Variation Proposal at the least possible additional cost to the Company that it is reasonably and economically practicable for the Supplier to offer and which has the least possible impact on the terms of the Agreement and the relevant Contract, including, but not limited to the Specification.
- 10 Strict adherence to the procedure described in this Schedule 5 shall be a condition precedent to any addition to the price for the Goods. If the Supplier does not adhere to each paragraph in this Schedule 5 then the Supplier shall not be entitled to any addition to the price notwithstanding that the Supplier may have supplied additional or varied Goods.

Appendix 1
Form of Variation Proposal/Variation Order

To:	From:
------------	--------------

Contract Reference Number:
Order Number
Variation Number:
Variation Title:

PART A (TO BE COMPLETED BY THE ORIGINATOR OF THE VARIATION ORDER)

Description of change:	
Reason for changes and impact (if any) on Contract:	
Variation Proposal Authorised by:	Proposal Date:

PART B (TO BE COMPLETED BY THE SUPPLIER)

Price Breakdown Note: If a further breakdown is needed please append details as a separate sheet.	
Expected Order Delivery Date:	
Supplier's Representative:	
Print Name: Signature: Date:	
Completed document to be returned to the Company's Representative	

PART C (TO BE COMPLETED BY THE COMPANY'S REPRESENTATIVE)

Comment on Parts A and B:	
Variation Authorisation	
Company's Representative:	
Print Name: Signature: Date:	

Schedule 6
Quality and Safety Plan

REDACTED

every way as if the New Company were and had been a party to the Contract at all times in lieu of the Company;

2.3 for the avoidance of doubt, it is hereby expressly agreed that:

2.3.1 any and all rights, claims, counter-claims, demands and other remedies of the Supplier against the Company accrued under or in connection with the Contract prior to the date hereof shall be exercisable and enforceable by the Supplier against the New Company; and

2.3.2 any and all rights, claims, counter-claims, demands and other remedies of the Company against the Supplier accrued under or in connection with the Contract prior to the date hereof shall be exercisable by the New Company against the Supplier.

2.4 the Company transfers its rights and obligations under the Contract to the New Company.

3. A person who is not a party to this Deed may not enforce any of its terms by virtue of the Contracts (Rights of Third Parties) Act 1999.

Executed as a deed by the parties and delivered on the date of this Deed

Executed as a deed by affixing the Common Seal of)

London Underground Limited)

in the presence of:-)

.....

[Authorised Signatory]

Executed as a Deed by [SUPPLIER])

acting by)

) Authorised Signatory

and

)

) Authorised Signatory

Executed as a Deed by [NEW COMPANY]

)

acting by

)

) Authorised Signatory

and

)

) Authorised Signatory

Schedule 8

Form of Parent Company Guarantee and Performance Bond

THIS GUARANTEE is made the _____ day of _____ 201

BETWEEN:

- (1) [] a company registered in England and Wales under number [] and having its registered office at [] (the "**Guarantor**");
- (2) [] (1) London Underground Limited, a company registered in England and Wales under number 01900907 and having its registered office at 55 Broadway, London SW1H 0BD (the "Company" which expression shall include its successors and assigns);
- (3) [] a company registered in England and Wales under number [] and having its registered office at [] (the "**Supplier**").

WHEREAS:

- (A) This Guarantee is supplemental to a framework agreement pursuant to which contracts may be made (together the "**Contract**") for the carrying out of [] at [] made between (1) the Company and (2) the Supplier.
- (B) The Guarantor has agreed to guarantee to the Company the due and punctual performance of the Contract by the Supplier in the manner hereinafter appearing.
- (C) The Supplier is a party to this Guarantee in order to confirm its request that the Guarantor provide this Guarantee on the terms set out herein.

NOW IT IS HEREBY AGREED as follows:

1. The Guarantor unconditionally guarantees to the Company the proper and punctual performance and observance by the Supplier of all its obligations, warranties, duties, undertakings and responsibilities under the Contract and shall forthwith make good any default thereunder on the part of the Supplier and the Guarantor shall pay or be responsible for the payment by the Supplier to the Company of all sums of money, liabilities, awards, losses, damages, costs, charges and expenses that may be or become due and payable under or arising out of the Contract in accordance with its terms or otherwise by reason or in consequence of any such default on the part of the Supplier.
2. This Guarantee shall be a continuing guarantee and indemnity and accordingly shall remain in full force and effect until all obligations, warranties, duties and undertakings now or hereafter to be carried out or performed or observed by the Supplier under or arising out of the Contract have been duly and completely performed and observed in full.
3. The Guarantee is in addition to and not in substitution for any other security or warranty which the Company may at any time hold for the performance of any obligations, warranties, duties and undertakings under the Contract and may be enforced by the Company without first taking any

proceedings or exhausting any right or remedy against the Supplier or any other person or taking any action to enforce any other security, bond or guarantee.

4. The Guarantor shall be under no greater obligation or greater liability under this Guarantee than it would have been under the Contract if it had been named as the Supplier in the Contract.
5. The obligations and liabilities hereunder shall remain in full force and effect and shall not be affected, lessened, impaired or discharged by:
 - (a) any alteration or variation to the terms of the Contract;
 - (b) any alteration in the extent or nature or sequence or method or timing or scope of the works, services or supplies to be carried out under the Contract;
 - (c) any extension of time being given to the Supplier or any other indulgence or concession to the Supplier or any forbearance, forgiveness or any other thing done, omitted or neglected to be done under the Contract;
 - (d) any other bond, security or guarantee now or hereafter held for all or any part of the obligations of the Supplier under the Contract;
 - (e) the release, modification, exchange or waiver of any such bond, security or guarantee;
 - (f) any amalgamation or reconstruction or dissolution including liquidation of the Supplier;
 - (g) the making of a winding up order, the appointment of a provisional liquidator, the passing of a resolution for winding up, liquidation, administration, receivership or insolvency of the Supplier;
 - (h) any legal limitation, disability or incapacity relating to the Supplier (whether or not known to you);
 - (i) any invalidity in, irregularity affecting or unenforceability of the obligations of the Supplier under the Contract;
 - (j) the termination of the Contract; or
 - (k) anything the Company or the Supplier may do or omit or neglect to do including, but without limitation, the assertion of or failure or delay to assert any right or remedy of the Company or the pursuit of any right or remedy by the Company.
6. Until all amounts which may be or become payable and all liabilities, obligations, warranties, duties and undertakings in respect of the Supplier's obligations have been irrevocably paid, performed or discharged in full, the Guarantor shall not, after a claim has been made or by virtue of any payment, performance or discharge by it under this Guarantee:
 - (a) be subrogated to any rights, security or moneys held, received or receivable by the Company or be entitled to any right of contribution or indemnity in respect of any payment made or moneys received on account of the Guarantor's liability under this Guarantee;

- (b) claim, rank, prove or vote as a creditor of the Supplier or its estate in competition with the Company unless the Company so directs; or
 - (c) receive, claim or have the benefit of any payment distribution or security from or on account of the Supplier, or exercise any right of set-off against the Supplier unless the Company so directs.
7. This Guarantee is irrevocable.
8. The benefit of this Guarantee may be assigned by the Company at any time to any assignee of the benefit of the whole of the Contract. No further or other assignments shall be permitted.
9. The Guarantor:
- (a) gives the guarantee contained in this Guarantee as principal obligor and not merely as surety;
 - (b) agrees to indemnify the Company on written demand against any loss or liability suffered by it if any provision set out in the Contract guaranteed by the Guarantor becomes unenforceable, invalid or illegal, and
 - (c) waives any right it may have of first requiring the Company to proceed against, or enforce any other rights or security or claim payment from, any person before claiming from the Guarantor under this Guarantee.
10. Until all amounts which may be or become payable in respect of the Supplier's obligations have been irrevocably paid in full by the Guarantor, the Company may:
- (a) refrain from applying or enforcing any other moneys, security or rights held or received by the Company in respect of those amounts, or apply and enforce the same in such manner and order as it sees fit (whether against those amounts or otherwise) and the Guarantor shall not be entitled to the benefit of the same; and
 - (b) hold in a suspense account any moneys received from the Supplier on account of these Supplier's obligations or on account of the Guarantor's liability under this Guarantee.
11. The Company is entitled to make any number of demands under this Guarantee.
12. The invalidity, illegality or unenforceability in whole of or in part of any provisions of this Guarantee shall not affect the validity, legality and enforceability of the remaining part or provisions of this Guarantee.
13. This Guarantee may be executed in any number of counterparts each of which shall be an original and all of such counterparts taken together shall be deemed to constitute one and the same instrument.

14. No person other than TfL (as such term is defined in the Contract) and its subsidiaries (as defined in section 1159 of the Companies Act 2006) shall have any right to claim or remedy under or pursuant to this Guarantee and the provisions of the Contracts (Rights of Third Parties) Act 1999 are hereby excluded.

15. This Guarantee, executed and delivered as a deed, shall be governed by and interpreted according to the laws of England and the Courts of England shall have exclusive jurisdiction save that the Company shall have the right to bring proceedings in the courts of any other jurisdiction in which any of the Guarantor's assets may be situated.

16. Not used

Executed as a deed by the parties and delivered on the date of this Guarantee

Executed as a Deed by [GUARANTOR])
acting by)
) Authorised Signatory
and)
) Authorised Signatory

Executed as a deed by affixing the Common Seal of)
[COMPANY])
in the presence of:-)
.....
[Authorised Signatory]

Executed as a Deed by [SUPPLIER])
acting by)
) Authorised Signatory
and)
) Authorised Signatory

FORM OF ON DEMAND PERFORMANCE BOND WITH ANNEX 1

BOND

(Letterhead of Guarantor)

To: [Company name] (its successors in title and assigns)

Contract Bond No. [•]

1. Whereas our clients [•] (the “**Supplier**”) have entered into a contract with you dated [•] (the “**Contract**”) in respect of [•], we [•] (the “**Guarantor**”, which term shall include our successors in title and assigns) hereby irrevocably undertake as a primary obligation upon first demand in writing made by you upon us from time to time or at any time to pay to you on each occasion the sum demanded by you within five (5) banking days upon service of your demand.

PROVIDED THAT:

2. This Bond shall come into force on the date hereof.
3. Any demand hereunder shall be substantially in the form of Annex to this Bond, and as between you and us the facts set out in that demand shall be: (a) deemed to be true and (b) accepted by us as conclusive evidence for the purposes of this Bond that the amount claimed in the demand is due and payable to you hereunder, it being our intention that the event upon which payment must be made hereunder is the service of your demand without any rights on our part to raise any objections, irrespective of the validity or the effectiveness of the Contract and the obligations arising thereunder and irrespective of the underlying facts or their significance under the Contract.
4. All sums payable under this Bond shall be paid in pounds sterling to such bank account as may be specified in your demand in immediately available funds, free of any restriction or condition and free and clear of and without any deduction or withholding whether for or on account of tax, by way of set-off, or otherwise, except to the extent required by law.
5. For the purpose of this paragraph 5, the expression “Expiry Date” means [•] Our liability hereunder shall be limited as follows:
 - (a) we shall have no liability in respect of any demand received after the Expiry Date; and
 - (b) in respect of a demand or demands received on or before the Expiry Date, our liability shall not exceed the aggregate sum of £[•].
6. Our obligations hereunder shall remain in full force and effect and shall not in any way be affected, reduced or discharged by:
 - (a) any alteration to the terms of the Contract made by agreement between you and the Supplier; and/or
 - (b) any defence, counterclaim, set-off or other deduction available to the Supplier under the Contract; and/or

- (c) any alteration in the extent or nature or sequence or method or timing of the works/services to be carried out under the Contract; and/or
 - (d) any time being given to the Supplier or any other indulgence or concession to the Supplier or any forbearance, forgiveness or any other thing done, omitted or neglected to be done under the Contract; and/or
 - (e) any other bond, security or guarantee now or hereafter held by you for all or any part of the obligations of the Supplier under the Contract; and/or
 - (f) the release or waiver of any such other bond, security or guarantee; and/or
 - (g) any amalgamation or reconstruction or dissolution including liquidation or change in control or constitution of the Supplier; and/or
 - (h) the termination of the Contract; and/or
 - (i) any other event which might operate to discharge a guarantor at law or in equity.
7. Terms defined in the Contract and not otherwise defined herein shall have the same meaning in this Bond unless inconsistent with the context.
 8. This Bond shall be governed by, and interpreted according to, the laws of England and the Courts of England shall have exclusive jurisdiction in relation to any claim, dispute or difference concerning this Bond and any matter arising from it save that you shall have the right to bring proceedings in the Courts of any other jurisdiction in which any of our assets may be situated.
 9. This Bond may be assigned or transferred without our prior consent to any member of the TfL Group. Any other assignment or transfer of this Bond by either party shall require the consent of the other party, such consent not to be unreasonably withheld or delayed.
 10. This bond may not be amended, varied or supplemented in any manner whatsoever without your prior written consent, other than in accordance with its express terms.
 11. Each of the provisions of this bond is severable and distinct from the others, and if at any time any such provision is or becomes ineffective, inoperable, invalid or unenforceable it shall be severed and deemed to be deleted from this bond, and in such event the remaining provisions of this bond shall continue to have full force and effect.
 12. All bank charges and other fees payable in relation to or in connection with this bond are for the account of the Manufacturer and you shall have no liability or responsibility therefor.
 13. Except to the extent it is inconsistent with the express terms of this bond, this bond is subject to the ICC Uniform Rules for Demand Guarantees, 2010 revision, ICC Publication No. 758.

Executed as a deed by the parties and delivered on the date of this Bond.

Executed as a Deed by [GUARANTOR])

acting by)

) Authorised Signatory

and)

) Authorised Signatory

Executed as a deed by affixing the Common Seal of)

[COMPANY])

in the presence of:-)

.....

[Authorised Signatory]

ANNEX 1

Form of Demand from the Company to the Guarantor

Dear Sirs

[Contract Title]

Contract No: [•] (the “Contract”)

We refer to the Bond given by you to us dated [•].

An event has occurred of the type described in Clause [•] of the Contract.

We hereby demand payment from you of the sum of £[•] under the Bond. Please make payment by CHAPS made payable to **[Company name / bank account details]**.

Yours faithfully

.....

[Company name]

55 Broadway

London

SW1H 0TL

- (i) the design of any goods, works or services to the extent that the Sub-Contractor has or will be responsible for such design;
 - (ii) the selection of all goods and materials comprised in the Sub-Contract Supply (in so far as such goods and materials have been or will be selected by the Sub-Contractor);
 - (iii) the satisfaction of any performance specification or requirement in so far as the same are included or referred to in the contract between the Supplier and the Sub-Contractor in relation to the Sub-Contract Supply (the “**Sub-Contract**”);
 - (iv) the execution and completion of the Sub-Contract Supply;
 - (v) the Sub-Contract Supply will, on completion of the Main Contract, comply with all Applicable Laws and Standards (as such capitalised terms are defined in the Main Contract);
- (c) the Sub-Contract Supply will be reasonably fit for the purposes for which they are intended (awareness of which purposes the Sub-Contractor hereby acknowledges) and in particular but without limitation will be so fit for the period and with a rate of deterioration reasonably to be expected of high quality, reliable, well designed and engineered goods, materials and construction; and
- (d) it has the right to grant to the Company all licences (including without limitation all rights to sub-licence) of all intellectual property rights as contemplated in this Agreement.

For the purposes of construing the warranties in this Clause 1 references to the Sub-Contract Supply shall include any part of the Sub-Contract Supply. Each warranty shall be construed as a separate warranty and shall not be limited by reference to, or reference from, the terms of any other warranty or any other term of the Sub-Contract.

2. The Sub-Contractor shall, save in so far as he is delayed by any event in respect of which the Supplier is granted an extension of time under the Main Contract for completion of the Supply:
- (a) Execute and complete the Sub-Contract Supply in accordance with the provisions of the Sub-Contract; and

- (b) ensure that the Supplier shall not become entitled to any extension of time for completion of the Supply or to claim any additional payment under the Main Contract due to any failure or delay by the Sub-Contractor.
3. The Sub-Contractor shall from time to time supply the Company and the Supplier with such information as either may reasonably require.
4. To the extent that the intellectual property rights in any and all Documents have not already vested in the Company or the Supplier, the Sub-Contractor hereby grants to the Company an irrevocable, non-exclusive, non-terminable, royalty-free licence to copy and make full use of any and all Documents and all amendments and additions to them and any works, designs or inventions of the Sub-Contractor incorporated or referred to in them for the following purposes:
- (a) understanding the Supply;
 - (b) operating, maintaining, repairing, modifying, altering, enhancing, re-figuring, correcting, replacing, re-procuring and re-tendering the Supply;
 - (c) extending, interfacing with, integrating with, connecting into and adjusting the Supply;
 - (d) enabling the Company to carry out the operation, maintenance repair, renewal and enhancement of the Underground Network (as such capitalised terms are defined in the Main Contract);
 - (e) executing and completing the Supply; and
 - (f) enabling the Company to perform its functions and duties as Infrastructure Manager and Operator of the Underground Network (as such capitalised terms are defined in the Main Contract)

provided always that the Supplier shall not be liable for the consequences of any use of the Documents as aforesaid for any other purpose. Such licence shall carry the right to grant sub-licences and shall be transferable to third parties without the prior consent of the Sub-Contractor.

For the purposes of this Clause, the term “**Documents**” shall mean documents, items of information, data, reports, drawings, specifications, plans, software, designs, inventions and any other materials provided by or on behalf of the Sub-Contractor in connection with the Sub-Contract (whether in existence or to be made).

5. The Sub-Contractor agrees:
 - (a) on request at any time to give the Company or any persons authorised by the Company access to the material referred to in Clause 4 and at the Company's expense to provide copies of any such material; and
 - (b) at the Sub-Contractor's expense to provide the Company with a set of all such material on completion of the Sub-Contract Supply.

6. The parties hereby agree that:
 - (a) this Agreement shall be personal to the Sub-Contractor;
 - (b) the Company may assign the benefit of this Agreement to any third party;
 - (c) the rights and remedies contained in this Agreement are cumulative and shall not exclude any other right or remedy available to either party in law or equity.

7. The Sub-Contractor warrants and undertakes to the Company that he has maintained and will continue to maintain all insurances required to be maintained pursuant to the terms of the Sub-Contract and that, insofar as he is responsible for the design of the Sub-Contract Supply, he has professional indemnity insurance with a limit of indemnity of not less than *two million pounds £2,000,000* in respect of each and every claim which may be made against the Sub-Contractor in respect of the Sub-Contract Supply. The Sub-Contractor shall maintain such professional indemnity insurance for a period of 12 years from completion of the Supply provided such insurance remains available at commercially reasonable rates and shall notify the Company forthwith if such insurance ceases to be so available. When deciding whether such insurances are available at commercially reasonable rates, no account shall be taken of any increase in the premium or imposition of terms which arise as a result of the Sub-Contractor's insurance claims record.

8. If any dispute of any kind whatsoever arises between the parties in connection with this Agreement or the Sub-Contract Supply which raises issues which are in opinion of the Company the same as or substantially the same as issues raised in a related dispute (the "**Related Dispute**") between the Company and the Supplier and such Related Dispute has already been referred to a conciliator or arbitrator appointed under the provisions to that effect contained in the Main Contract, then the Sub-Contractor hereby agrees that the Company may at his discretion by giving notice in writing to the Sub-Contractor refer the dispute arising out of

this Agreement or the Sub-Contract Supply to the adjudicator, conciliator, arbitrator or other party (the “**Appointed Party**”) appointed to determine the Related Dispute. In this event the Appointed Party shall have power to give such directions for the determination of the dispute and the Related Dispute as he may think fit and to make such awards as may be necessary in the same way as if the procedure of the High Court as to joining one or more defendants or joint co-defendants or third parties was available to the parties and to him.

9. (a) Neither the Sub-Contractor nor the Supplier shall exercise or seek to exercise any right which may be or become available to it to terminate or treat as terminated the Sub-Contract or discontinue or suspend the performance of any of its duties or obligations thereunder or treat the Sub-Contract as determined without first giving to the Supplier or the Sub-Contractor (as applicable) not less than 35 days prior written notice of its intention to do so, with a copy to the Company, specifying the Sub-Contractor's or Supplier's grounds for terminating or treating as terminated the Sub-Contract or discontinuing or suspending its performance thereof or treating the Sub-Contract as determined.
- (b) If the Main Contract is terminated for any reason, within 35 days of such termination the Company may give written notice to the Sub-Contractor and to the Supplier (a “**Step-in Notice**”) that the Company or its appointee shall henceforth become the Supplier under the Sub-Contract in accordance with the terms of sub-clause (c) below.
- (c) With effect from the date of the service of any Step-in Notice:
- (i) the Company or its appointee shall be substituted in the Sub-Contract as the Supplier thereunder in place of the Supplier and references in the Sub-Contract to the Supplier shall be construed as references to the Company or its appointee;
 - (ii) the Sub-Contractor shall be bound to continue with the performance of its duties and obligations under the Sub-Contract and any exercise or purported exercise by the Sub-Contractor prior to the date of the Step-in Notice of any right to terminate or treat as terminated the Sub-Contract or to discontinue or suspend the performance of any of its duties or obligations thereunder or to treat the Sub-Contract as automatically determined shall be of no effect;
 - (iii) the Company shall become bound by the terms and conditions of the Sub-Contract in respect of all obligations and duties of the Supplier thereunder which fall to be performed after the date of the Step-in Notice and shall

promptly thereafter make payment of any amounts properly due to the Sub-Contractor as at the date of the Step-in Notice and still outstanding; and

(iv) the Supplier shall be released from further performance of the duties and obligations of the Supplier under the Sub-Contract after the date of the Step-in Notice, but without prejudice to any rights and remedies of:

(1) the Sub-Contractor against the Supplier in respect of any matter or thing done or omitted to be done by the Supplier on or before the date of the Step-in Notice; and

(2) the Supplier against the Sub-Contractor in respect of any matter or thing done or omitted to be done by the Sub-Contractor on or before the date of the Step-in Notice.

(d) Notwithstanding anything contained in this Agreement and notwithstanding any payments which may be made by the Company to the Sub-Contractor, the Company shall not be under any obligation to the Sub-Contractor and the Sub-Contractor shall not be under any obligation to the Company unless the Company shall have served a Step-in Notice pursuant to Clause 9(b) above.

10. The Sub-Contractor's liabilities, duties and obligations hereunder shall be no greater and of no longer duration than the liabilities, duties and obligations which the Sub-Contractor owes to the Supplier under the Sub-Contract.

11. The Sub-Contractor further undertakes to indemnify the Company from and against the consequences of any breach by the Sub-Contractor of any of the warranties, covenants and undertakings contained in this Agreement.

12. The rights and benefits conferred upon the Company by this Agreement are in addition to any other rights and remedies that the Company may have against the Sub-Contractor including, without prejudice to the generality of the foregoing, any remedies in negligence.

13. Nothing contained in this Agreement shall in any way limit the obligations of the Supplier to the Company arising under the Main Contract or otherwise undertaken by the Supplier to the Company in relation to the Sub-Contract Supply.

14. No amendment to this Agreement shall be valid unless it is in writing and signed by all parties.

15. Any person who is not a party to this Agreement may not enforce any of its terms under the Contracts (Rights of Third Parties) Act 1999.
16. This Agreement shall be governed by and construed in accordance with English law and shall be subject to the exclusive jurisdiction of the Courts of England and Wales.

Executed as deed by the parties and delivered on the date of this Agreement.

Executed as a deed by affixing the Common Seal of)

London Underground Limited)

in the presence of:-)

.....

[Authorised Signatory]

Executed as a Deed by [SUB-CONTRACTOR])

acting by)

) Authorised Signatory

and)

) Authorised Signatory

Executed as a Deed by [SUPPLIER])

acting by)

) Authorised Signatory

and)

) Authorised Signatory

Schedule 10
Not used

Schedule 11

Heavy Goods Vehicle Direct Vision Standard Schedule

1 Introduction

1. In this Schedule, the following terms shall have the corresponding meanings:

“Agreed HGV DVS Plan” means the Initial HGV DVS Plan as updated and approved in accordance with the terms of this Schedule;

“Business Day” means any day excluding Saturday, Sundays or public or bank holidays in England;

“Category N2 Lorry” means a vehicle designed and constructed for the carriage of goods and having a MAM exceeding 3,500 kilograms, but not exceeding 12,000 kilograms;

“Category N3 Lorry” means a vehicle designed and constructed for the carriage of goods and having a MAM exceeding 12,000 kilograms;

“Direct Vision Standard” or “DVS” means Direct Vision Standard, a performance based assessment and rating tool, as updated from time to time, that measures how much direct vision a driver has from a Category N3 Lorry cab in relation to other road users. Further information can be found at: www.tfl.gov.uk;

“Initial HGV DVS Plan” means the initial plan set out at Appendix 1 which sets out and proposes how the Service Provider shall ensure that:

- (a) from and including 1 October 2018, all Category N3 Lorries used in the provision of the [Services] achieve a minimum of a one (1) star Direct Vision Standard rating;

(b) from and including 1 April 2020 all Category N3 Lorries used in the provision of the Services achieve a minimum of three (3) star Direct Vision Standard rating; and

(c) so far as reasonably practicable, the conditions at all sites and locations within the control of the Service Provider where:

(i) the Services are being delivered, or

(ii) in connection with the performance of the Services, any waste is being disposed of or supplies are being delivered to or from,

are appropriate for each Category N2 Lorry and Category N3 Lorry being used in the provision of the Services. The Service Provider] shall not incur any costs or make any changes to the site(s) without the prior written consent of the Authority;

“MAM” means the Maximum Authorised Mass of a vehicle or trailer including the maximum load that can be carried safely while used on the road.

2 HGV DVS Plan

2.1 The Service Provider shall comply with the Initial HGV DVS Plan from the Contract Commencement Date. Within fifteen (15) Business Days of the Contract Commencement Date the Contracting Authority shall either;

2.1.1 confirm that the Initial HGV DVS Plan is approved, in which case such plan shall become the Agreed HGV DVS Plan; or

- 2.1.2 provide the Service Provider with any comments on and/or amendments to the Initial HGV DVS Plan.
 - 2.2 Within thirty (30) Business Days (for the purpose of paragraph 2.1.2) or 15 Business Days (for the purpose of paragraph 2.3.2) of receipt of any comments and/or amendments from the Contracting Authority in accordance with paragraph 2.1.2 or paragraph 2.3.2 (as applicable), the Service Provider shall:
 - 2.2.1 develop the Initial HGV DVS Plan to reflect such comments and/or amendments; and
 - 2.2.2 submit an updated Initial HGV DVS Plan to the Contracting Authority for approval.
 - 2.3 Within fifteen (15) Business Days of receipt of the updated Initial HGV DVS Plan, the Contracting Authority shall confirm that either the updated Initial HGV DVS Plan:
 - 2.3.1 is approved, in which case it shall become the Agreed HGV DVS Plan; or
 - 2.3.2 not approved and provide its further comments and/or amendments to the Service Provider and the Service Provider shall revise and re-submit the updated Initial HGV DVS Plan for approval in accordance with paragraph 2.2.
- The process set out in this paragraph 2.3 shall be repeated until the updated Initial HGV DVS Plan is approved by the Contracting Authority.
- 2.4 Where the Contracting Authority, acting reasonably, has not approved the updated Initial HGV DVS Plan, the Service Provider may refer that decision to the dispute resolution process set out in the Contract.
 - 2.5 Without limiting any other provision of this Contract, the Service Provider shall, at no additional cost to the Contracting Authority, and as part of the Services:
 - 2.5.1 implement, observe and comply with the Agreed HGV DVS Plan; and

2.5.2 review and amend the Agreed HGV DVS Plan (as necessary) on each 12 month anniversary of the Contract Commencement Date or earlier if requested by the Contracting Authority, to reflect:

2.5.2.1 any changes to the nature of the Services; and

2.5.2.2 any comments and/or amendments made or proposed by the Contracting Authority.

3 HGV DVS Co-ordinator

3.1 The Service Provider shall nominate an employee/member of the Service Provider Personnel with the necessary experience, competency and authority to:

3.1.1 be responsible for implementation and compliance with the Agreed HGV DVS Plan; and

3.1.2 act as the Service Provider's authorised representative on all matters concerning the Agreed HGV DVS Plan ("**HGV DVS Co-ordinator**").

3.2 The Service Provider shall add the HGV DVS Co-ordinator's details to the list of Key Personnel set out in Schedule 11

4 Self Certification and Reporting

On each 12 month anniversary of the Contract Commencement Date, the Service Provider shall submit a report to the Contracting Authority which sets out the Service Provider's progress in respect of implementation of the Agreed HGV DVS Plan and confirms (with supporting evidence) that the Service Provider has complied with the Agreed HGV DVS Plan.

5 DVS Infractions

5.1 Without limiting the effect of any other provision of this Agreement relating to termination, if the [Service Provider] fails to comply with the terms of this Schedule:

- 5.1.1 the Service Provider shall be deemed to have committed a material breach of this Agreement; and

- 5.1.2 TfL may refuse the Service Provider, its employees, agents/[Service Provider Personnel and each Category N3 Lorry and Category N2 Lorry entry onto any property that is owned, occupied or managed by or on behalf of TfL for any purpose (including but not limited to deliveries).

APPENDIX 1 TO SCHEDULE 11

Appendix 1 will be the Initial HGV DVS Plan submitted as part of the framework and will be developed to form the Agreed HGV DVS Plan

EXECUTION PAGE:

Executed as a deed by the parties and delivered on the date of this Contract

Executed as a deed by affixing the Common Seal of)

London Underground Limited

in the presence of:-

.....
REDACTED
.....

Authorised Signatory

Executed as a Deed by William Cook Rail Limited)

acting by

) **REDACTED**

) *Authorised Signatory*

and

) **REDACTED**

) *Authorised Signatory*