

DRAWING
NUMBER

214291

REMOVE ALL BURRS & SHARP EDGES

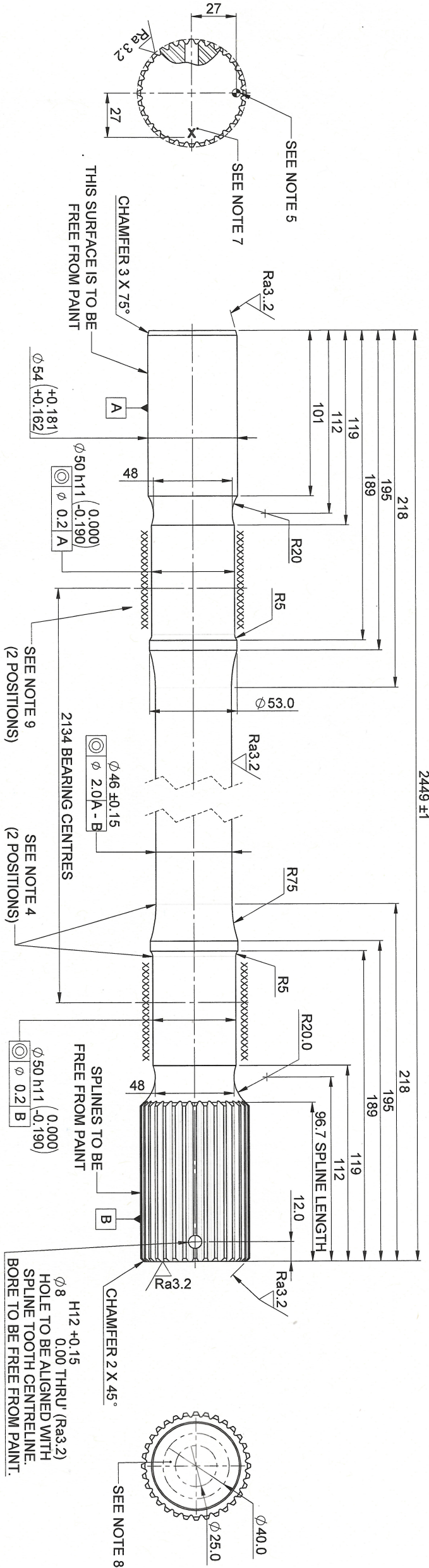
IF IN DOUBT ASK

DO NOT SCALE

DRAWING TO COMPLY WITH BS 5536

MODIFICATIONS

FIRST ISSUE	
S CRS 0399-1	A



DRAWING NOTES:

- EXTERNAL SPLINE TO BE MANUFACTURED TO BS ISO 4156-2:2005 AS FOLLOWS:
 - EXT 322 x 2m x 30° R x 4f - ISO 4156
- SURFACE ROUGHNESS TO Ra 0.8 UNLESS OTHERWISE STATED AS PER BS 1134:2010
- SURFACE ROUGHNESS OF SPLINE SLOPE AND ROOT TO BE Ra 1.6.
- RADI TO BLEND SMOOTHLY, TANGENT TO SHAFT BODY, AT MARKED LOCATIONS.
- PRIOR TO SHOT PEENING, HARDNESS TEST TO BE CARRIED OUT AT THIS POINT TO CONFIRM MATERIAL UTS IS WITHIN RANGE 1500 - 1650 MPa.
- SHOT PEEN SPLINED END AT 100% COVERAGE TO THE FOLLOWING SPECIFICATION:
 - BS ISO 12686:1999, INTENSITY = 0.15 TO 0.25mm, CAST STEEL SHOT (SIZE 70), HARDNESS = HRC 55 TO HRC 65.
 - OVERSPRAY ACCEPTABLE ON ADJACENT RADIUS. MASK BOTH BEARING SURFACES.
- 5MM 'X' TO BE STAMPED AND ALIGNED WITH $\phi 8.0$ HOLE AND SPLINE TOOTH CENTRELINE USING SLOW STRESS STAMP.
- SPLINED END TO BE MARKED WITH MANUFACTURERS NAME, PLANT IDENTITY, MONTH & YEAR OF MANUFACTURE AND UNIQUE 4 DIGIT SERIAL NUMBER USING LOW STRESS STAMPS WITHIN DIAMETERS SHOWN.
- ALL SURFACES TO BE PAINTED AS FOLLOWS (UNLESS OTHERWISE SPECIFIED):
 - DEGREASE AND APPLY PRIMER, INTERMEDIATE AND FINISH COAT (WET PAINT) RAL 9017 TRAFFIC BLACK, 60% GLOSS.
 - BEARING SURFACES MARKED 'XXXXX' TO HAVE PRIMER ONLY, LESS THAN 40µm.
- CENTRE HOLES ON END FACES TO AID MANUFACTURE ARE ALLOWABLE.
- ANTI-ROLL BAR TO BE PROVEN FREE OF SURFACE DEFECTS VIA MAGNETIC PARTICLE INSPECTION.

UNCONTROLLED DOCUMENT
FIT FOR MANUFACTURE
CRS TO FOLLOW

APPROVED BY: MAURICE BYKOWSKI
POSITION: MECHANICAL DESIGN PRINCIPAL ENGINEER
SIGNED: M.B. Bykowski
DATE: 27th Aug 2019.

SEE NOTE 9

FINISH & SPECIFICATION:

STEEL
BS EN 10089:2002
1.7701 (52CrMoV4)

MATERIAL & SPECIFICATION:

[THIS DRAWING WAS PRODUCED FROM A CONTROLLED SOLIDWORKS MODEL]

TOLERANCES

UNLESS OTHERWISE STATED TOLERANCES ON
DIMENSIONS NOT LIMITED ARE:

NO DECIMAL PLACES ± 0.25
ONE DECIMAL PLACE ± 0.1
TWO DECIMAL PLACES ± 0.05
ANGULAR
METRIC THREADS TO BS 3643 Pt. 2: 1981
CLASS 6H & 6g

DIMENSIONS IN
MILLIMETRES

CAD
A2 594:420

DATE

DRAWN

SH

04/06/19

CHECKED

SO

01/08/19

CONTRACTORS NAME
DRAWING NUMBER & ISSUE
CREACTIVE DESIGN

DESIGN
APPROVED

APPROVED

Transport for London
London Underground



ROLLING STOCK
ENGINEERING

STOCK, LOCATION & ZONES

S STOCK

BOGIE AND SUSPENSION

14.00

ANTI-ROLL BAR

BUSINESS
OWNER

SSL

USED ON

STOCK

214290

STOCK

DRG. No.

WEIGHT (g)

S/L No.

F

E

D

C

B

A

0

200