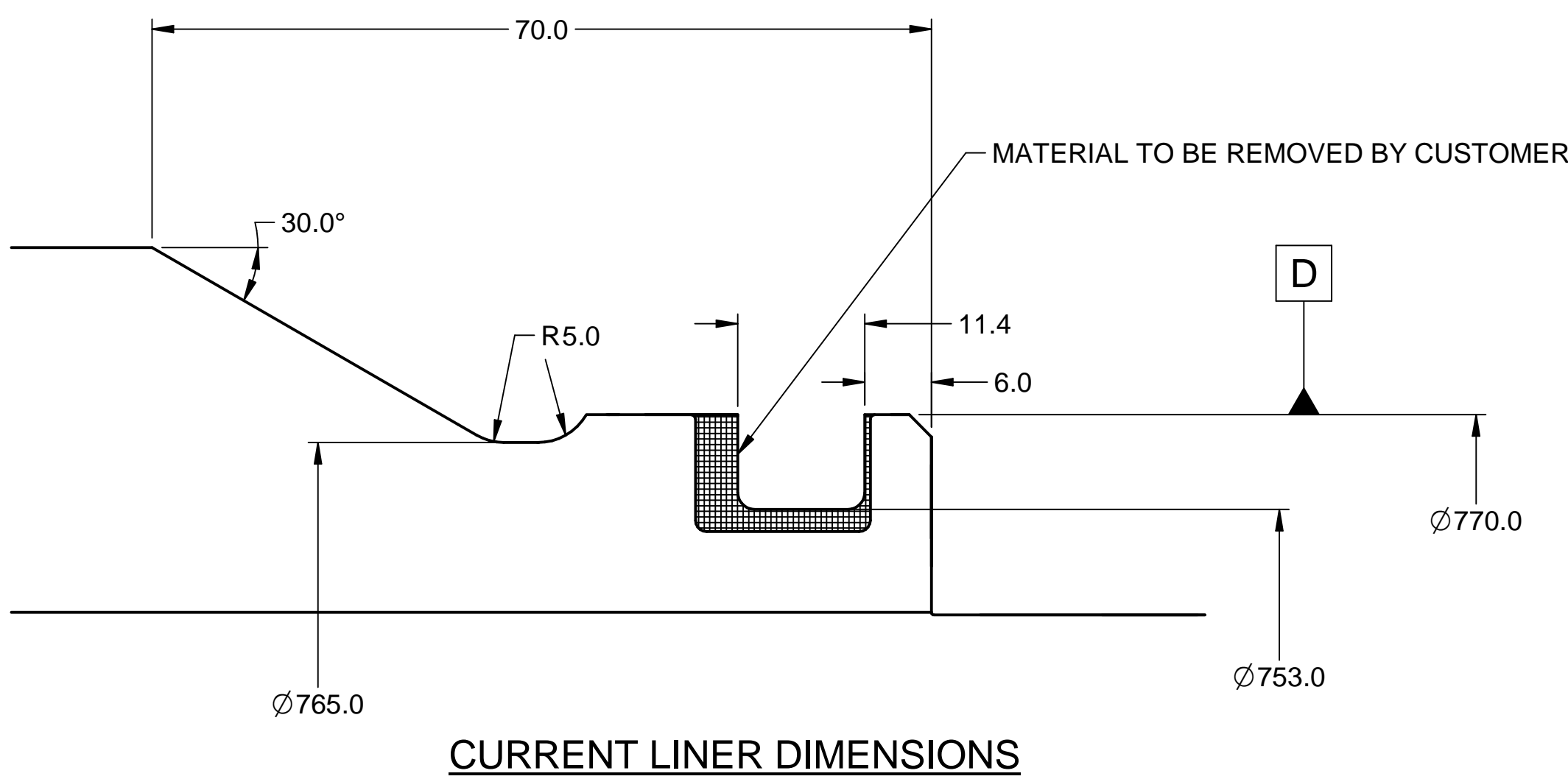


- NOTES.**
- ALL DIMENSIONS IN mm.
 - AIR SUPPLY TO INFLATABLE SEAL
MAX.....: 5 BAR
MIN SEALING.....: 2 BAR ABOVE SERVICE PRESSURE.
 - VENT INFLATABLE SEAL TO ATMOSPHERE WHEN NOT IN USE.
 - ITEM 1-2 MUST BE HOT BONDED AROUND THE SHAFT AT INSTALLATION AND OVERHAUL.
 - ITEMS 1-5, 1-6, 4-3, 4-5, 6-2, 7-2, 8-2, 8-5 & 8-6 TO BE SECURED USING LIQUID THREADLOCKER ON INSTALLATION.
 - FOR FACTORY TEST/ASSEMBLY CRITERIA SEE T.D.S. 16/011.
 - SHAFT LINER WILL REQUIRE MACHINING TO ACCOMODATE SPLIT LINER.
SHAFT Ø ACHIEVED WILL THEN BE USED TO ESTABLISH THE BORE OF SPLIT LINER. SEE NOTE 11.
 - ITEM 1-1 MUST BE CENTRALISED AROUND THE SHAFT LINER AND DRILLED AND DOWELLED ON INSTALLATION.
 - OVERHAUL TYPES LISTED BELOW ARE BASED ON LEVEL OF MAINTENANCE REQUIRED:
MINOR OVERHAUL ORDER SERVICE KIT A (CONSISTS OF FACE (SPLIT) ASSEMBLY, INFLATABLE SEAL, ADAPTOR RING SCREWS, DRIVE CLAMP RING BUTT SCREWS, DRIVE CLAMP RETENTION SCREW, SPLASH GUARD, SEAT O CORDS, JOINT AND COMPRESSION TOOLING ASSEMBLY)
 - MAJOR OVERHAUL ORDER SERVICE KITS A & B (CONSISTS OF BELLOWS ASSEMBLY, MAIN CLAMP RING FASTENERS, SEAT DRIVE SCREWS AND SEAT ALIGNMENT SCREWS AND NUTS, LINER O CORD AND BUTT SCREWS)
 - COMPLETE OVERHAUL ORDER SERVICE KITS A, B & C (CONSISTS OF SEAT (SPLIT) ASSEMBLY)
- HOLES FOR ITEM 7-6 TO BE DRILLED IN-SITU INTO ITEM 8-1 ON INSTALLATION.
 - BORE OF LINER (ITEM 8-1) SUPPLIED UNDERSIZE. ONCE SHAFT AND LINER STEP HAVE BEEN MACHINED AND DIMENSIONS CONFIRMED, CUSTOMER TO MACHINE LINER TO T.D.S. 06/030.
 - HOLES FOR ITEM 8-3 TO BE DRILLED IN-SITU ON INSTALLATION AFTER COMPLETION OF SHAFT/SPLIT LINER MACHINING.
 - DIMENSIONS MARKED ★ ARE ESTIMATED FROM SHIPS DRAWINGS A109716 / 7.088.426 - A, A006700 / 1000421 - A - CUSTOMER TO CONFIRM.
 - CUSTOMER TO MACHINE EXISTING SHAFT LINER 'O' CORD GROOVE TO SUIT WUK SUPPLY O-CORD.

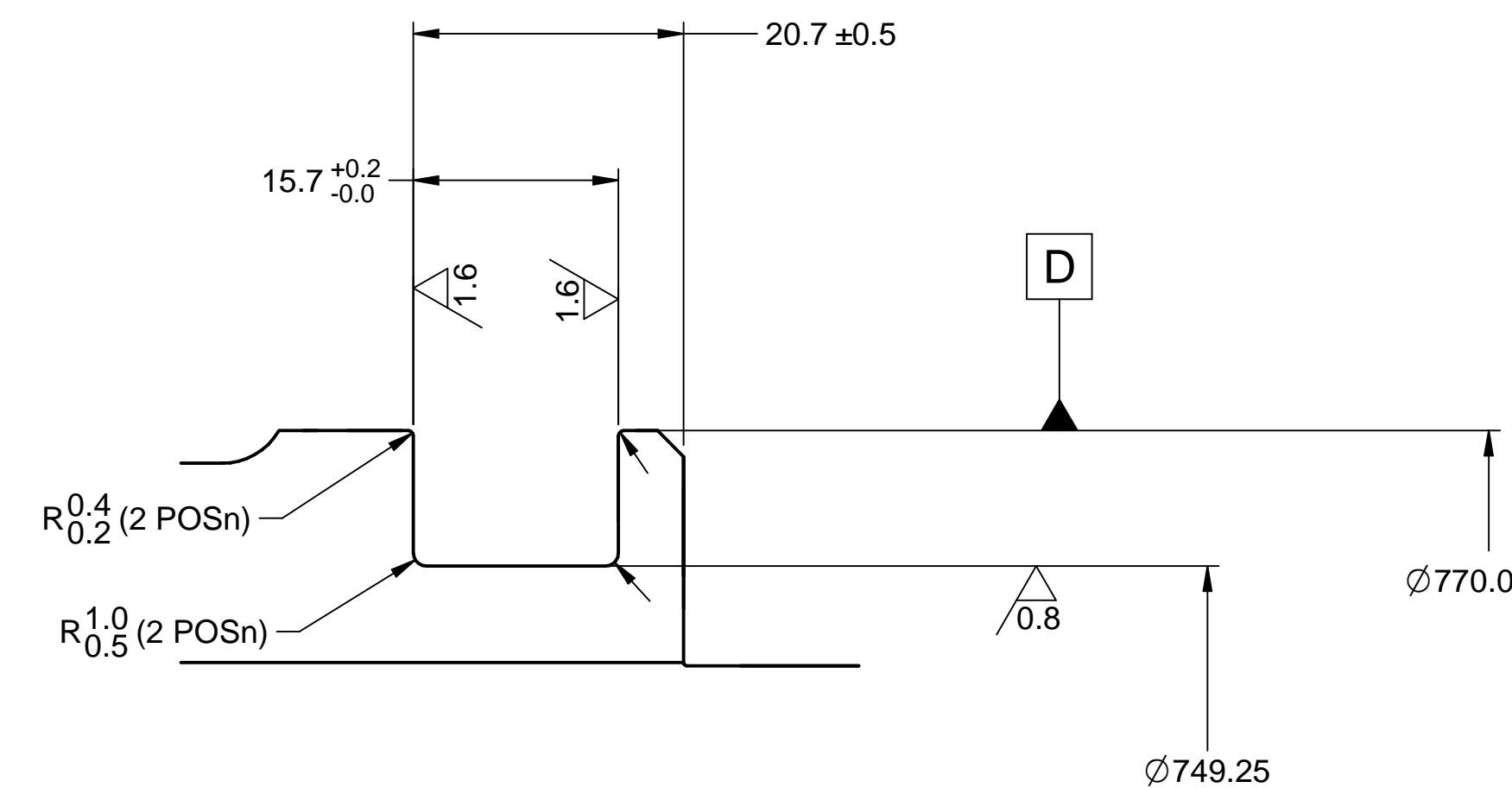
DRG POSn	THREAD METRIC	TORQUE (Nm)
1-5	M10	24
8-5	M10	18
2-2	M30	275
4-3	M20	176
1-6, 4-5	M16	96
6-2, 8-6		
1-9, 7-2	M24	347.5
1-8, 8-2	M12	41

SEAL PARAMETERS.

FITTING COMPRESSION.....: 20.0
MAX. OPERATING COMPRESSION.....: 37.5
MIN. OPERATING COMPRESSION.....: 9.0



CURRENT LINER DIMENSIONS

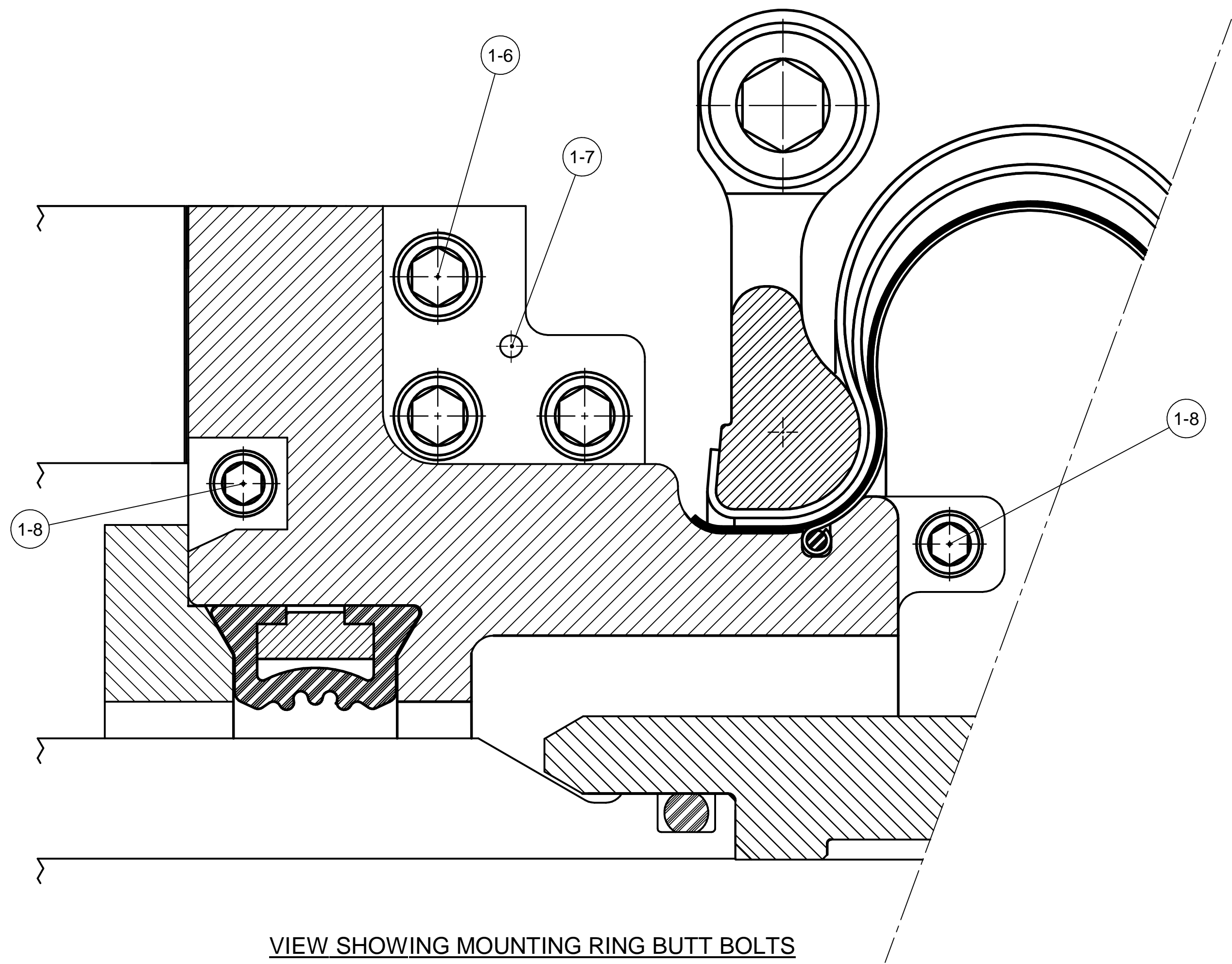


CUSTOMER TO M/C EXISTING O-CORD
GROOVE TO SUIT WUK STANDARD GROOVE
FOR Ø12mm O-CORD
SEE NOTE 14

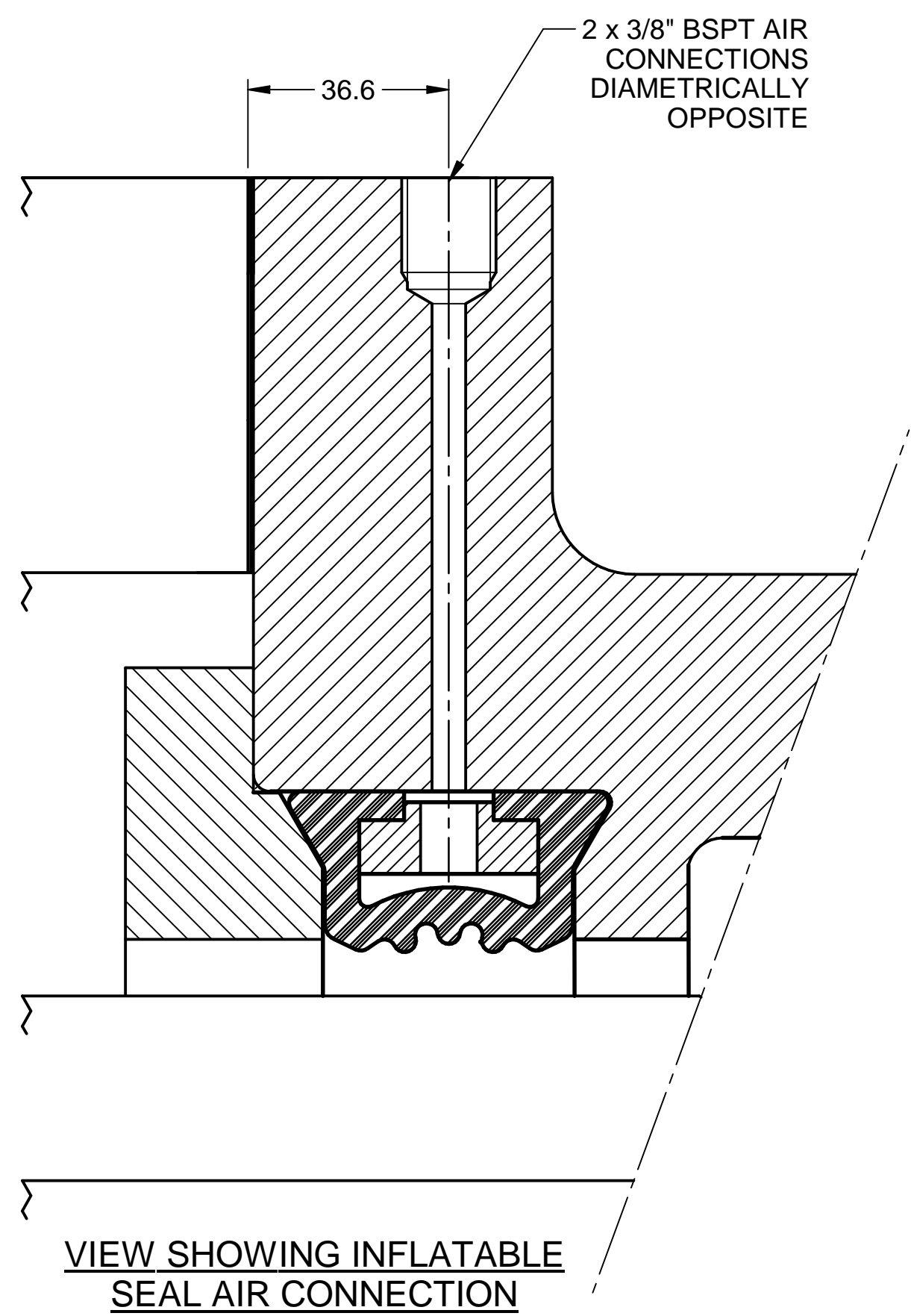
DRAWING POSn	DESCRIPTION	MATERIAL	QTY
H30850-01 -1	MOUNTING RING (SPLIT) ASSY		1
-1-1	MOUNTING RING (SPLIT)	ALUMINIUM BRONZE	1
-1-2	INFLATABLE SEAL	CHLOROPRENE (NEOPRENE)	1
-1-3	SUPPORT RING	PHOSPHOR BRONZE	1
-1-4	ADAPTOR RING	ALUMINIUM BRONZE	1
-1-5	SCREW	NICKEL ALUMINIUM BRONZE	24
-1-6	SCREW	NICKEL ALUMINIUM BRONZE	6
-1-7	DOWEL	NICKEL ALUMINIUM BRONZE	2
-1-8	SCREW	NICKEL ALUMINIUM BRONZE	4
-1-9	STUD	NICKEL ALUMINIUM BRONZE	20
-1-10	NUT	NICKEL ALUMINIUM BRONZE	20
-1-11	WASHER	NICKEL ALUMINIUM BRONZE	20
-1-12	JOINT	COMPOSITE	1
H30850-01 -2	MAIN CLAMP RING ASSY		1
-2-1	MAIN CLAMP RING	ALUMINIUM BRONZE	2
-2-2	SCREW	NICKEL ALUMINIUM BRONZE	8
-2-3	NUT	NICKEL ALUMINIUM BRONZE	8
H30850-01 -3	BELLOWS ASSY		1
-3-1	SUPPORT SPRING	MONEL	1
-3-2	INTERLAYER	COMPOSITE	1
-3-3	BRIDGING SPRING	MONEL	1
-3-4	BACKING SPRING	MONEL	1
H30850-01 -4	CARRIER (SPLIT) ASSY		1
-4-1	CARRIER (SPLIT)	ALUMINIUM BRONZE	1
-4-2	GUARD	CHLOROPRENE (NEOPRENE)	1
-4-3	SCREW	NICKEL ALUMINIUM BRONZE	2
-4-4	DOWEL	NICKEL ALUMINIUM BRONZE	2
-4-5	SCREW	NICKEL ALUMINIUM BRONZE	2
H30850-01 -5	FACE (SPLIT) ASSY		1
-5-1	FACE (SPLIT)	COMPOSITE	1
-5-2	SEALING STRIP	CHLOROPRENE (NEOPRENE)	1
H30850-01 -6	SEAT (SPLIT) ASSY		1
-6-1	SEAT (SPLIT)	PHOSPHOR BRONZE	1
-6-2	SCREW	NICKEL ALUMINIUM BRONZE	6
-6-3	SEAT DOWEL	NICKEL ALUMINIUM BRONZE	2
-6-4	SPRING PIN	CARBON STEEL	2
-6-5	O CORD	CHLOROPRENE (NEOPRENE)	2
H30850-01 -7	DRIVE CLAMP RING ASSY		1
-7-1	DRIVE CLAMP RING	ALUMINIUM BRONZE	1
-7-2	SCREW	NICKEL ALUMINIUM BRONZE	4
-7-3	DRIVE SCREW	NICKEL ALUMINIUM BRONZE	4
-7-4	SCREW	NICKEL ALUMINIUM BRONZE	6
-7-5	NUT	NICKEL ALUMINIUM BRONZE	10
-7-6	SCREW	NICKEL ALUMINIUM BRONZE	4
H30850-01 -8	LINER (SPLIT) ASSY		1
-8-1	LINER (SPLIT)	ALUMINIUM BRONZE	1
-8-2	SCREW	NICKEL ALUMINIUM BRONZE	6
-8-3	SCREW	NICKEL ALUMINIUM BRONZE	8
-8-4	DOWEL	PHOSPHOR BRONZE	4
-8-5	SCREW	NICKEL ALUMINIUM BRONZE	2
-8-6	SCREW	NICKEL ALUMINIUM BRONZE	2
-8-7	O CORD	CHLOROPRENE (NEOPRENE)	1
H30850-01 -9	SERVICE KIT A	SPARES ONLY (SEE NOTE 9)	
H30850-01 -10	SERVICE KIT B	SPARES ONLY (SEE NOTE 9)	
H30850-01 -11	SERVICE KIT C	SPARES ONLY (SEE NOTE 9)	
H30850-01 -CT	COMPRESSION TOOL ASSY		1
-CT-1	COMPRESSION TOOL	MILD STEEL	8
-CT-2	STUDDING	MILD STEEL	4
-CT-3	NUT	ALLOY STEEL	16
-CT-4	WASHER	STEEL	16

INSTALLATION

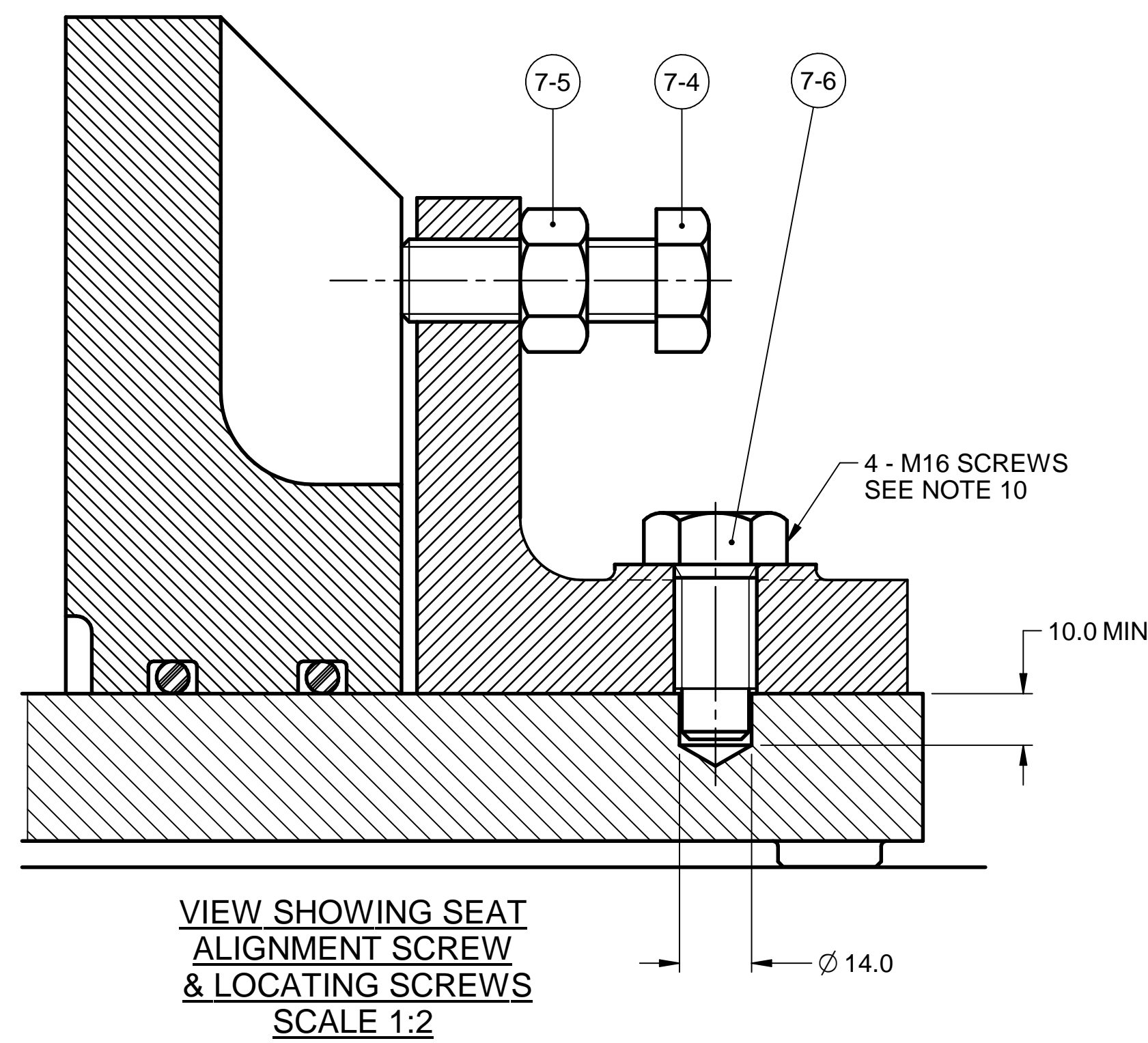
CLASSIFICATION: LR	1ST ANGLE:	ACCESS CODE: 4	OWNER: COG	YARD: -	CUSTOMER: WCA
FLUIDS: INTERNAL EXTERNAL	WATER AIR	MIN NOMI MAX	VESSEL NAME: COCS TERRY FOX	USED ON: ICEBREAKER	REF/FUNC. LOC.: 100015596
PRESSURES: BAR	INTERNAL EXTERNAL	MIN NOMI MAX	DRAWN BY: W. CROOK	CHECKED BY: J. BURT	MAX. MASS: -
SHAFT MOVEMENTS: AXIAL INBOARD, mm	N/A	- 2.5	WÄRTSILÄ	DATE: 2 MAR 2015	SHEET: 1 OF 2
AXIAL OUTBOARD, mm	N/A	- 8.5	Wärtsilä UK Ltd., 4, Marples Way, Havant, Hampshire, PO9 1NX, UK	DATE REVISED: 5 OCT 2015	
RADIAL, mm	N/A	- 10	The information contained in this document is the property of Wärtsilä UK Ltd and must not be disclosed without written consent. This is information is neither sold nor transferred and document is subject to return upon demand. Values in this document are not binding. Right of deviation reserved.	TITLE: GA OF 840 MOD 800 TYPE MA SEAL	
ANGULAR, °	N/A	-	© 2015 Registered Office: Wärtsilä UK Ltd, Havant, Hampshire, UK	SIZE: A0	DRAWING NUMBER: H30850-01
SHAFT SPEED, RPM	INTERNAL EXTERNAL	-5 -40 -40			REV: C
TEMPERATURE, °C	INTERNAL EXTERNAL	-5 -40 -40			



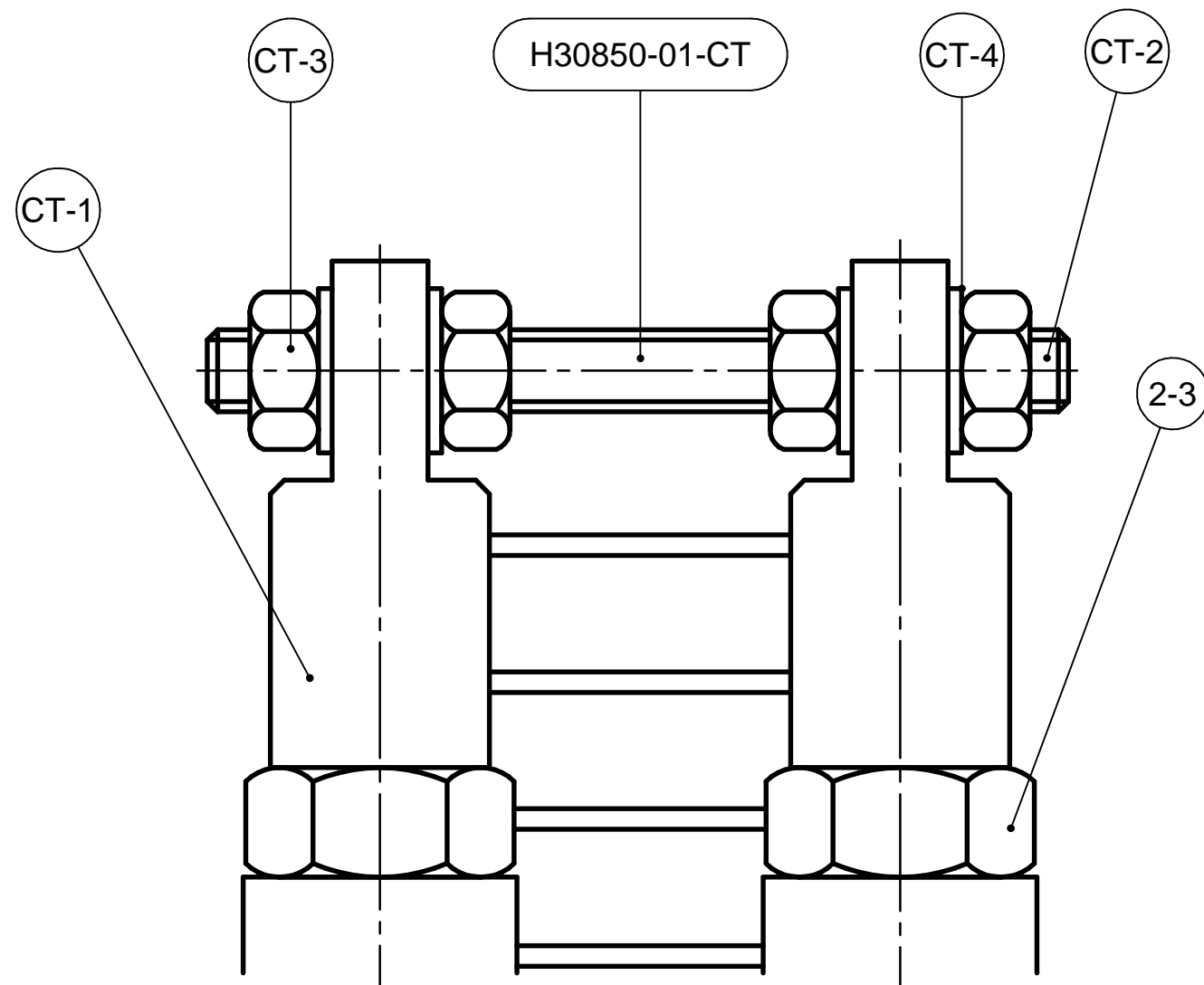
VIEW SHOWING MOUNTING RING BUTT BOLTS



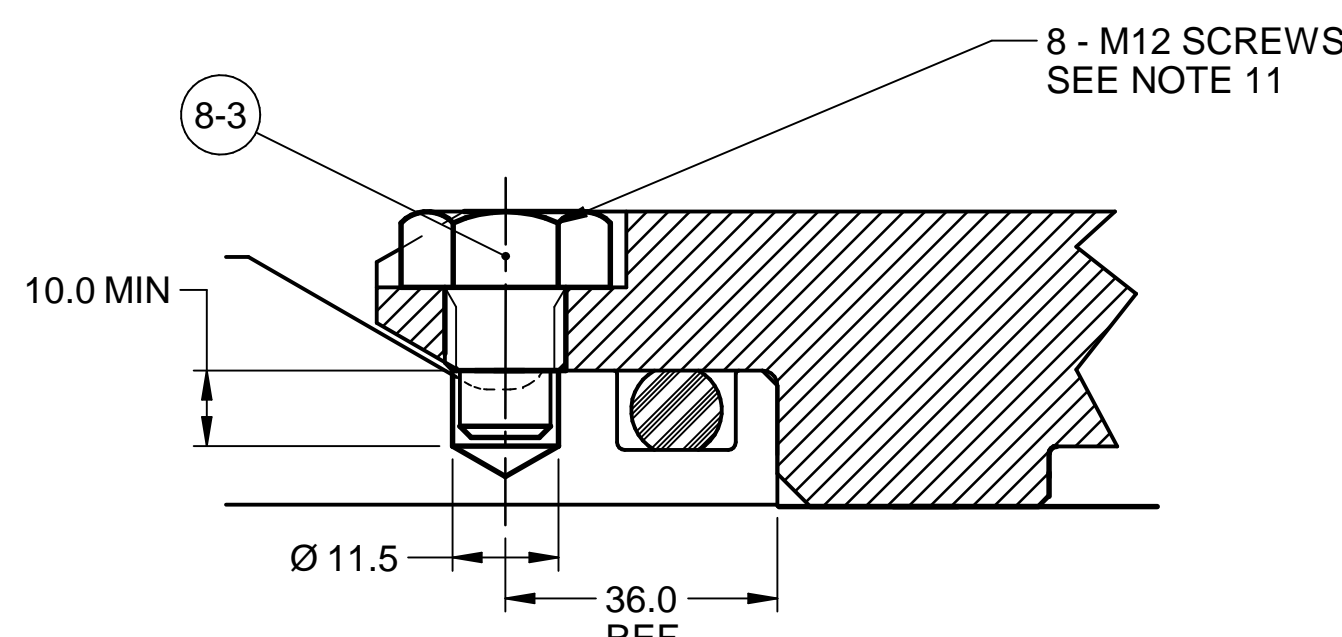
VIEW SHOWING INFLATABLE SEAL AIR CONNECTION



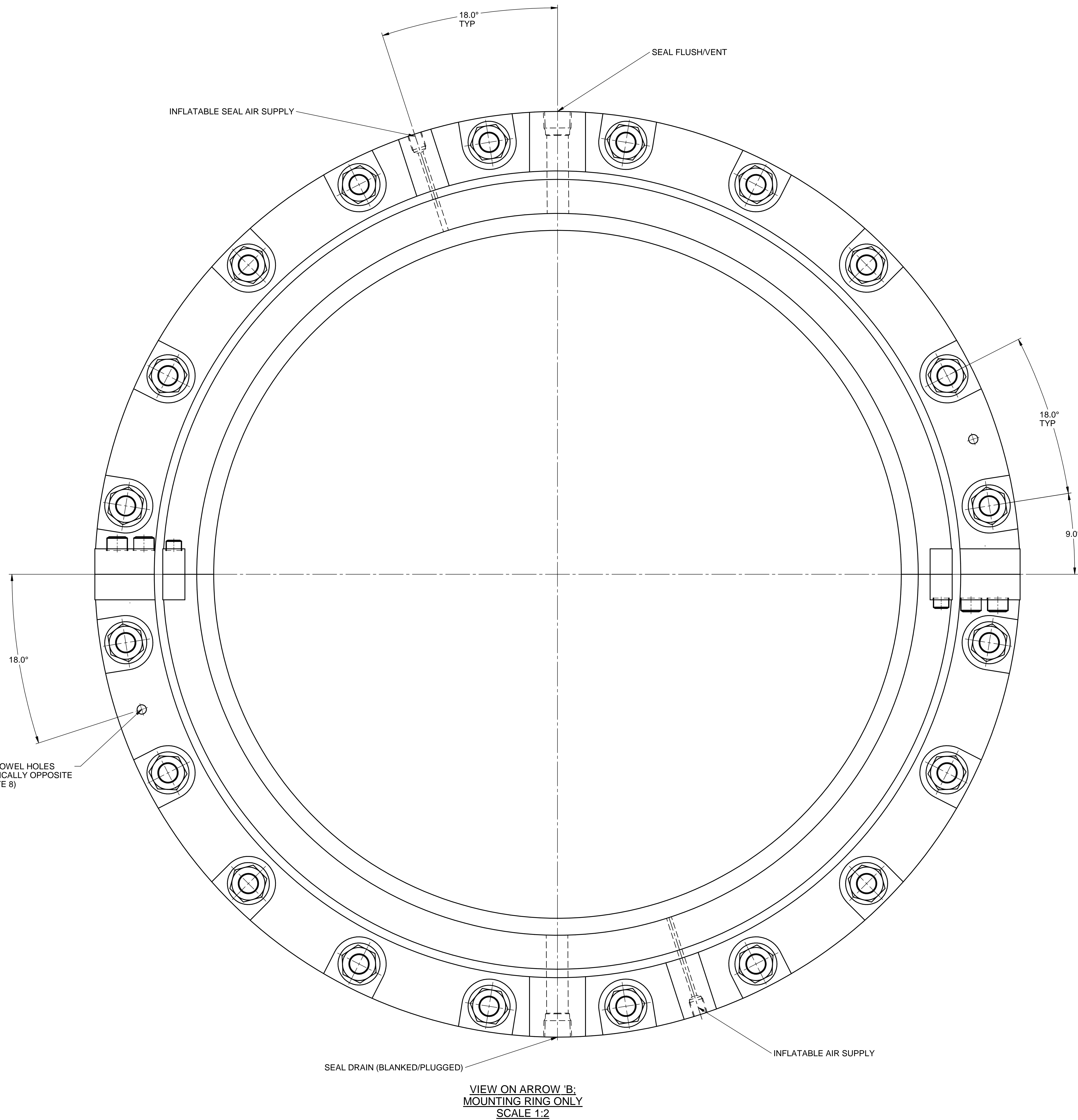
VIEW SHOWING SEAT ALIGNMENT SCREW & LOCATING SCREWS
SCALE 1:2



VIEW ON ARROW 'A' SHOWING COMPRESSION TOOL ASSEMBLY LOCKED FOR TRANSIT PURPOSES
REMOVE BEFORE ROTATING SHAFT
(NOT TO SCALE)


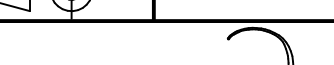


VIEW SHOWING OFFSET SPLIT LINER SCREWS



VIEW ON ARROW 'B': MOUNTING RING ONLY
SCALE 1:2

INSTALLATION

CLASSIFICATION: LR		1ST ANGLE: 		ACCESS CODE: 4		OWNER: CCG		YARD: -		CUSTOMER: WCA	
FLUIDS:	INTERNAL	WATER	AIR	VESSEL NAME: OCGS TERRY FOX		USED ON: ICEBREAKER		REF/FUNC. LOC.: 100015596			
	EXTERNAL			DRAWN BY: W. CROOK		CHECKED BY: J. BURT		MAX. MASS:			
PRESSURES, BAR:		MIN	NOM	MAX	DRAWN DATE: 2 MAR 2015		DATE REVISED: 5 OCT 2015		SHEET: 2 OF 2		
INTERNAL		-	-	1							
EXTERNAL		-	-	-							
DIFFERENTIAL		-	-	-							
SHAFT MOVEMENTS:		 Wärtsilä UK Ltd, a Marples Way Havant, Hampshire, PO9 1NX, UK									
AXIAL INBOARD, mm		N/A	-	2.5	The information contained in this document is the property of Wärtsilä UK Ltd and must not be disclosed without written consent. This is information is neither sold nor transferred and document is subject to return upon demand. Values in this document are not binding. Right of alteration reserved. © 2015 Registered Office: Wärtsilä UK Ltd, Havant, Hampshire, UK						
AXIAL OUTBOARD, mm		N/A	-	8.5							
RADIAL, mm		N/A	-	10							
ANGULAR, °		N/A	-	-							
SHAFT SPEED, RPM		-	120	-	SEAL CODE BASED ON: 41615/910/41/1013/38/75/41863 FL = 429 ± 3.3						
TEMPERATURE, °C:						TITLE: GA OF 840 MOD 800 TYPE MA SEAL					
INTERNAL		-5	-	40	SIZE: A0 DRAWING NUMBER: H30850-01						
EXTERNAL		-5	-	40							
		20	-	40	REV: C						