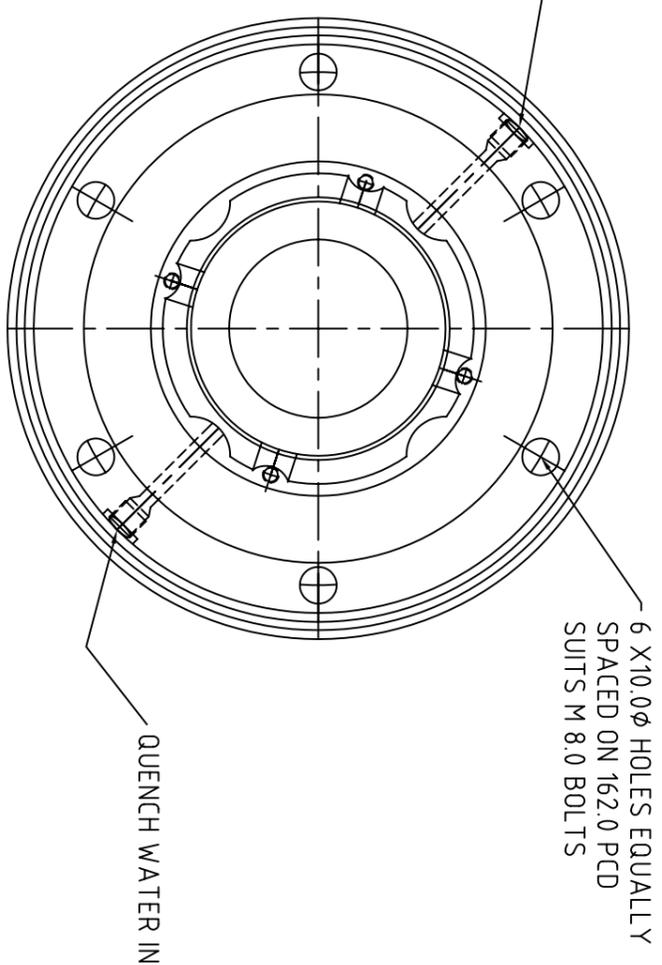


### SEAL INSTALLATION PROCEDURE

- 1: INSURE PUMP BEARINGS AND SHAFT / SHAFT SLEEVE ARE IN GOOD ORDER AND BURR FREE, FIT CARTRIDGE SEAL ASSEMBLY TO PUMP SHAFT SLEEVE
- 2: SLIDE SHAFT SLEEVE ITEM 22 AND SEAL ASSEMBLY ON TO PUMP SHAFT, CHECK THAT TAPINGS ARE POSITIONED SIMILAR TO SEAL END VIEW
- 3: FIT AND SECURE SEAL PLATE ADAPTER ITEM 9 AND ASSOCIATED PUMP PARTS. BOLT SEAL ASSEMBLY TO SEAL PLATE ADAPTER.
- 4: FIT PUMP VOLUTE AND PUMP IMPELLER, SCREW UP IMPELLER AND NIP TIGHT
- 5: ADJUST IMPELLER CLEARANCES, THEN LIGHTLY AND EVENLY TIGHTEN DOWN 4, OFF SET 15 SCREWS ITEMS THEN REPEAT TO A FIRM TORQUE
- 6: ROTATE PUMP BY HAND TO INSURE SEAL ASSEMBLY AND IMPELLER ROTATE FREELY

NOTE 1: SOME RESISTANCE FROM THE SEAL FACES AND PTFE SETTING BUSH ITEM 17 CAN BE EXPECTED  
 NOTE 2: TO INSURE THAT THE DRIVE COLLAR SET SCREWS REMAIN TIGHT ON THE PUMP SHAFT, IN THE EVENT OF PUMP CAVITATION OR VIBRATION A MID STRENGTH LOCTITE CAB BE APPLIED TO ITEMS 15 SET SCREWS ON ASSEMBLY  
 NOTE 3: DO NOT REMOVE PTFE SETTING BUSH ITEM 17 SETTING BUSH ITEM 19 REMAINS IN PLACE

REF	DESCRIPTION	PART NUMBER	MATERIAL	QTY	UNIT
1	CARTRIDGE SLEEVE	TC1862	316S/S	1	EA
2	ORING	513PR-234	EPR	1	EA
3	ORING	513PR-229	EPR	1	EA
4	ROTARY HEAD	WC10060	NI TUNGSTEN CARBIDE	1	EA
5	STATIONARY HEAD	WC10063	NI TUNGSTEN CARBIDE	1	EA
6	ORING	513PR-236	EPR	1	EA
7	ORING	513PR-254	EPR	1	EA
8	THRUST RING	WC10062	DUPLEX 2205	1	EA
9	SEAL PLATE	TC1861	316S/S	1	EA
10	SEC SEAT	BQ1-F1855H85-X4.0	SILICON CARBIDE	1	EA
11	ORING	513PR-239	EPR	1	EA
12	ORING	513PR-038	EPR	1	EA
13	QUENCH ROTARY	BQ1-H1677CXS-65.4	ALLOY 625, SIC	1	EA
14	SET SCREW HD	565023-11-S11	S/S	2	EA
15	SET SCREW CP	565021-17-S11	S/S	4	EA
16	COIL SPRING	C7360	HASTELLOY C	16	EA
17	SETTING CLIP	F144L12-X4.0	GF PTFE	1	EA
18	PAN HEAD SCREW	568636-2	S/S	4	EA
19	SNAP RING	VH-4.00-S02	S/S	1	EA
20	RETAINING RING	RET F1856S20-X4.0	S/S	1	EA
21	SHAFT SLEEVE ORING	513PR-134	EPR	1	EA
22	SHAFT SLEEVE ORING	513PR-031	EPR	1	EA
23	SEAL PLATE ADAPTER	TC1896	316S/S	1	EA
24	PUMP SHAFT SLEEVE	TC1897	316S/S	1	EA
25	MODIFIED FRAME PLATE	LINNER TC1943	A05	1	EA



REV	DATE	EGN	SIGNED	SPEED
1				

FLUID	SLURRIES	PUMP MAKE	WARMAN
TEMP.	UP TO 170 °C	PUMP TYPE	C & CAH
VISC.		VP	
SG		PUMP SIZE	3 / 2
SUCT. PRESS.		SER No.	
DISC PRESS.		S/BOX No.	A1-110-0-132882
S/BOX PRESS.		ITEM No.	
PIPING PLAN			

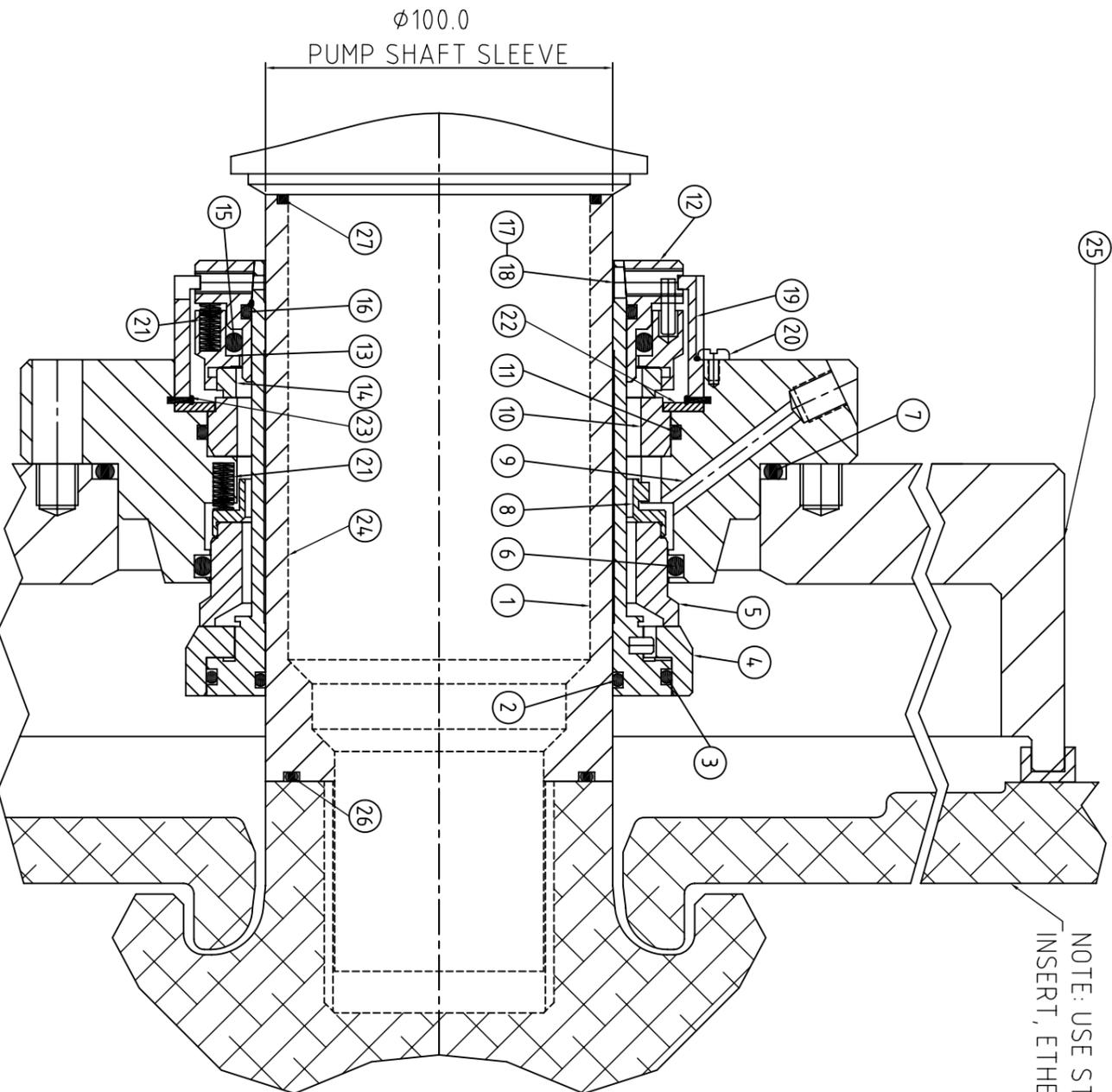


**TRISEAL PTY LTD**  
 Protecting Industry and the Environment  
 ACN 066 343 495  
 UNIT 1, 41 PARAMOUNT DRIVE  
 WANGARA WA 6065  
 Ph : 08 9302 3833  
 Fx : 08 9302 2933  
 EMAIL : triseal@triseal.com.au

**Quality System**  
 Quality Endorsed Company  
 AS/NZS ISO 9001:2000  
 OEC21393  
 Standards Australia

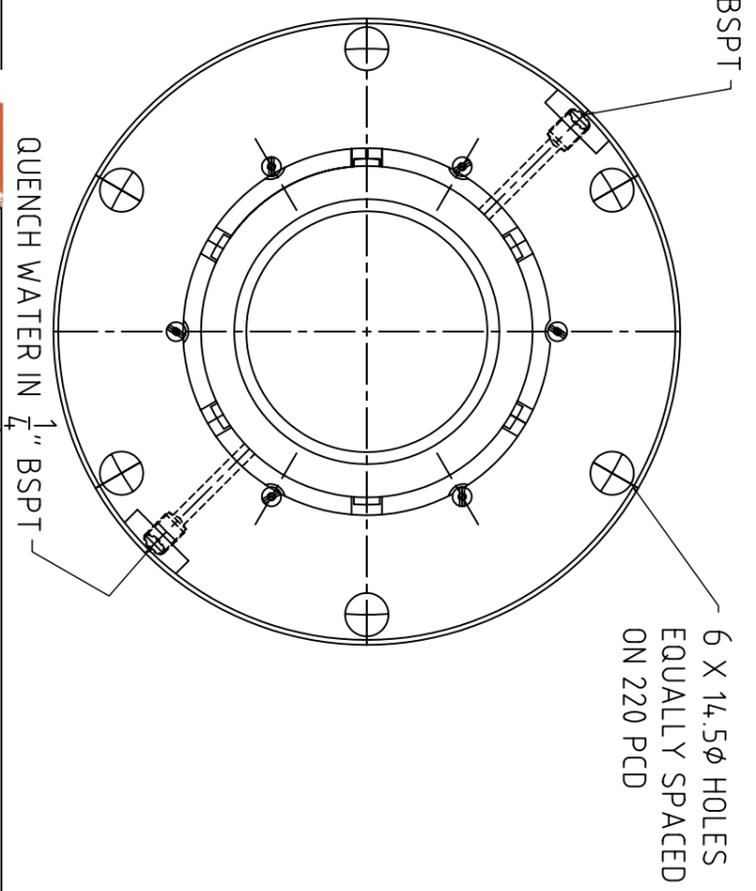
DATE	26/11/2009	CUSTOMER	TRISEAL
CHECKED		END USER	VARIOUS
DRAWN	RELLY	SEAL CODE	TCHSS/BQ12011GLN-060
SCALE		TITLE	GENERAL ASSEMBLY
SHEET SIZE	A3	DRAWING NUMBER	TC2011
		REVISION	2

NOTE: USE STANDARD WARMAN FRAME PLATE LINER INSERT, EITHER A05 HARD METAL OR RUBBER LINED



REF	DESCRIPTION	PART NUMBER	MATERIAL	
1	CARTRIDGE SLEEVE	TC3220	316S/S	1 EA
2	ORING	513 PR-250	EPR	1 EA
3	ORING	513 PR-242	EPR	1 EA
4	ROTARY HEAD	WC10740	NI-TUNGSTEN CARBIDE	1 EA
5	STATIONARY HEAD	WC10739	NI-TUNGSTEN CARBIDE	1 EA
6	ORING	513PR-355	EPR	1 EA
7	ORING	513PR-366	EPR	1 EA
8	THRUST RING	TC10741	DUPLEX 2205	1 EA
9	SEAL PLATE	TC10742	316 S/S	1 EA
10	SEC SEAT	WC10744	SILICON CARBIDE	1 EA
11	ORING	513PR-252	EPR	1 EA
12	DRIVE COLLAR	WC11307	316S/S	1 EA
13	SHELL	WC11308	316S/S	1 EA
14	CARBON INSERT	WC11309	CARBON	1 EA
15	ORING	513PR-349	EPR	1 EA
16	ORING	513PR-244	EPR	1 EA
17	SET SCREWS CUP POINT	565021-30-S11	S/S	6 EA
18	SET SCREWS HALF DOG	565023-11-S11	S/S	2 EA
19	SETTING BUSH	WC11310	GF PTFE	1 EA
20	PAN HEAD SCREW	568636-2	S/S	6 EA
21	COIL SPRING	NZ-C4545-903-N30	HASTELLOY C	41 EA
22	SPACER	WC10964	316S/S	1 EA
23	SNAP RING	VH-600-S02	S/S	1 EA
24	PUMP SHAFT SLEEVE	TC2337	316S/S	1 EA
25	SEAL PLATE ADAPTER	TC2338	316S/S	1 EA
26	PUMP SLEEVE ORING	513PR-236	EPR	1 EA
27	PUMP SLEEVE ORING	513PR-237	EPR	1 EA

- SEAL INSTALLATION PROCEDURE
- 1: INSURE PUMP BEARINGS AND SHAFT / SHAFT SLEEVE ARE IN GOOD ORDER AND BURR FREE. FIT CARTRIDGE SEAL ASSEMBLY TO PUMP SHAFT SLEEVE
  - 2: SLIDE SHAFT SLEEVE ITEM 18 AND SEAL ASSEMBLY ON TO PUMP SHAFT, CHECK THAT TAPING ARE POSITIONED SIMILAR TO SEAL END VIEW
  - 3: FIT AND SECURE SEAL PLATE ADAPTER ITEM 19 AND ASSOCIATED PUMP PARTS. BOLT SEAL ASSEMBLY TO SEAL PLATE ADAPTER.
  - 4: FIT PUMP VOLUTE AND PUMP IMPELLER, SCREW UP IMPELLER AND NIP TIGHT
  - 5: ADJUST IMPELLER CLEARANCES, THEN LIGHTLY AND EVENLY TIGHTEN DOWN 6 OFF SET SCREWS ITEM11 THEN REPEAT TO A FIRM TORQUE
  - 6: ROTATE PUMP BY HAND TO INSURE SEAL ASSEMBLY AND IMPELLER ROTATE FREELY
- NOTE 1: SOME RESISTANCE FROM THE SEAL FACES AND PTFE SETTING BUSH ITEM 13 CAN BE EXPECTED
- NOTE 2: TO INSURE THAT THE DRIVE COLLAR SET SCREWS REMAIN TIGHT ON THE PUMP SHAFT, IN THE EVENT OF PUMP CAVITATION OR VIBRATION A MID STRENGTH LOCITITE CAB BE APPLIED TO ITEMS 11 SET SCREWS ON ASSEMBLY
- NOTE 3: DO NOT REMOVE PTFE SETTING BUSH ITEM 13 SETTING BUSH ITEM 19 REMAINS IN PLACE



REV	DATE	ECN	SIGNED	SPEED	PIPING PLAN
1					

FLUID	PUMP MAKE	NOTES
TEMP.	WARMAN	
VISC.	PUMP TYPE E & EEAH	
VP		
SG	PUMP SIZE 6 / 4 & 8 / 6	
SUCT. PRESS.	SER No.	
DISC PRESS.	S/BOX No.	
S/BOX PRESS.	ITEM No.	



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Quality Endorsed Company  
AS/NZS ISO 9001:2000  
OEC21393  
Standards Australia

DATE	CUSTOMER
01/03/2002	TRISEAL
CHECKED	END USER
REILLY	VARIOUS
DRAWN	SCALE
REILLY	SCALE
SHEET SIZE	TITLE
A3	GENERAL ASSEMBLY
DRAWING NUMBER	REVISION
TC3357	