

OVERHAUL OF ROTARY (R.E.) UNIONS

- a. Remove Bolts and Washers 4 which allows removal of Adaptor 5 and Body 11.
- b. Remove Bellows Sub Assembly and Gasket of Seal Kit 6.
- c. Remove Locking Screws and unscrew Carbon Sub Assembly (R.H. thread) of Seal Kit 6.
- d. Remove Spacer 7.
- e. Thoroughly clean Ball Bearing Kit 9 and check condition of the bearings (if there is any doubt replace the Bearing Kit, pre-packing with an approved grease). Re-grease the bearings if re-using.
- f. To replace Bearing Kit 9, remove Circlip 8 then press off Bearing Kit 9.
- g. If the Adaptor 5 is type RS, remove Locking Screw 3, unscrew Locking Ring 1 (R.H. thread) and remove CT Bush 2.
- h. **REPLACE:** Seal Kit 6, Bearing Kit 9 and if type RS, CT Bush 2.
- i. Thoroughly clean all parts before reassembly, which is virtually the reverse of the above.
- j. Handle Seal Kit carefully to avoid damaging the lapped seal faces.
- k. After reassembly, run-in as indicated in the Installation Instructions and test to ensure the seals are working correctly before re-fitting to the machine.

OVERHAUL OF ROTARY (C.B.) UNIONS

- a. Remove Bolts and Washers 4, which allows the removal of Adaptor 5 and Body 17..
- b. Remove Bellows Sub-Assembly and Gasket of Seal Kit 6.
- c. Remove Locking Screws and unscrew Carbon Sub Assembly (R.H. thread) of Seal Kit 6.
- d. Remove Spacer 12.
- e. If the Spindle Sub Assembly 13 is in poor condition, i.e. considerable wear on the bearing, discard this and replace it completely.
- f. If the condition of the Spindle Sub Assembly 13 appears reasonable then it can be dismantled by removing all Locking Screws and unscrewing Thrust Ring 14 (R.H. thread) Bearing Sub Assembly 15 can now be removed, this should be replaced. The Spindle 16 should be examined on the hard chromed bearing diameter and if wear of more than 0.05 has occurred on the hard chromed surface, this should be discarded and the whole Spindle Sub Assembly 13 be replaced.
- g. If the Adaptor 5 is type RS, remove Locking Screw 3, unscrew Locking Ring 1 (R.H. thread) and remove CT bush 2.
- h. **REPLACE:-** Seal Kit 6, Spindle Sub Assembly 13 (or see 'f') and if type RS, CT Bush 2.
- i. Thoroughly clean all parts before reassembly, which is virtually the reverse of the above.
- j. Handle Seal Kit carefully to avoid damaging the lapped seal faces.
- k. After reassembly, run-in as indicated in the Installation Instructions and test to ensure the seals are working correctly before re-fitting to the machine.

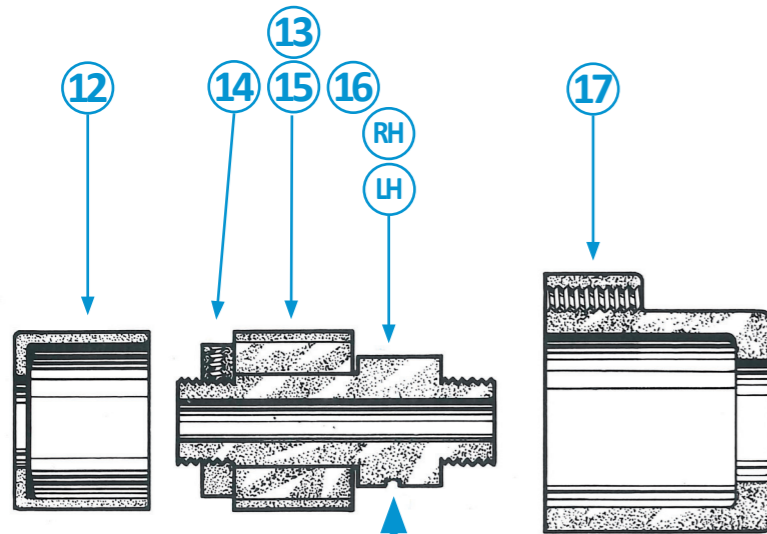
WE MANUFACTURE MANY SPECIALS. IF YOU HAVE ANY DOUBT CONTACT US GIVING THE PART No. AND SERIAL No. FROM THE IDENTIFICATION LABEL FITTED.

CHECK THE LABEL FOR PART NO. IDENTIFY THE SIZE AND TYPE FROM THIS TABLE. REFER TO PARTS LISTED UNDER NOMINAL SIZE.

Nominal Size	ROTARY (R.E.) UNION			ROTARY (C.B.) UNION		
	TYPE B.E.	TYPE S.T.	TYPE R.S.	TYPE B.E.	TYPE S.T.	TYPE R.S.
8 (¾")	14642	14643M	17196	14645	14646M	17215
10 (¾")	14636	14637M	17197	14639	14640M	17216
15 (½")	14536	14535	16657	14554	14525	16658
20 (¾")	14460	14534	16659	14524	14523	16660
25 (1")	14396	14542	16661	14545	14386	16662
32 (1¼")	14377	14379	16663	14546	14488	16664

NOMINAL SIZE	1	2	3	4	5			6	7	8	9	10	11	NOMINAL SIZE
	RETAINER	C/T BEARING	SCREW	BOLT	ADAPTOR			SEAL KIT	R.E. SPACER	CIRCLIP	BEARING KIT	R.E.SPINDLE R.H. or L.H.	R.E. BODY	
					B.E.	S.T.	R.S.							
8 (¾")	Not used	17196/2 (RE)* 17215/2 (CB)*	Not used	M5	14642/21	14643/21M	17196/21	S.1100/1	14636/6	M.184/2	S.1234/1	14642/2	14636/22	8 (¾")
10 (¾")	Not used	16265/9 (RE)* 17216/2 (CB)*	Not Used	M5	14636/21	14637/21M	17142/21	S.1100/1	14636/6	M.184/2	S.1234/1	14636/3	14636/22	10 (¾")
15 (½")	16657/3	16657/2	M3 x 0,5	M6	14536/1	14525/1	16657/1	S.1100/2	14534/3	M.184/3	S.1234/2	14535/1	14534/1	15 (½")
20 (¾")	16659/3	16659/2	M3 x 0,5	M6	14524/1	14523/1	16659/1	S.1100/2	14534/3	M.184/3	S.1234/2	14534/2	14534/1	20 (¾")
25 (1")	16661/3	16661/2	M3 x 0,5	M8	14396/1	14386/1	16661/1	S.1100/3	14396/3	M.184/4	S.1234/3	14396/4	14396/2	25 (1")
32 (1¼")	16663/2	16663/3	M4 x 0.7	M10	14377/1	14488/1	16663/1	S.1100/4	14377/8	M.184/5	S.1234/4	14377/3	14377/2	32 (1¼")

* Press fit in adapter



GROOVE indicates L.H. thread.
PLAIN DIA indicates R.H. thread.

ROTARY (R.E.) UNIONS

The Filton Bellows Seal fitted to the **Rotary (R.E.) Union** is self-adjusting within its working life. Before despatch we lubricate the ball bearings with Total Multis Complex EP2 grease. This is a lithium complex soap/thickener and is miscible with most other conventional soap greases. The ball bearings will need occasional greasing with the frequency depending on the working conditions. We recommend that you contact the grease manufacturer for specific lubrication or compatibility information.

Note: For sub-zero temperatures check with our Technical Department that the Rotary Union you are considering is acceptable for the temperature and fluid.

ROTARY (C.B.) UNIONS

The Filton Bellows Seal fitted to the **Rotary (C.B.) Union** is self-adjusting within its working life.

The Rotary (C.B.) Union has dry carbon journal and thrust bearings operating on hardened surfaces. **DO NOT GREASE.** We advise periodic inspection for bearing wear.

HEALTH & SAFETY

The Rotary Unions shown in this leaflet should not present any hazard when correctly fitted and used. **To ensure satisfactory performance, every Rotary Union is run-in and leakage tested before despatch.**

De-pressurise and drain the system before removing Rotary Unions for repair. It is essential to use the correct hand of rotary connection thread to ensure the Rotary Union will not unscrew (see the Installation Instructions). If a shaft reverses rotation the connection thread should be locked or preferably a flanged connection should be used.

At some time the seals in the Rotary Union will leak, so inspect daily. Also, ensure that leakages are not hazardous to personnel and that the Rotary Union is removed for repair immediately. If leakages are not attended to promptly, bearing seizure may occur causing flexible hose failure and massive leakage. Fit protective guards if leakages or the rotating spindle are likely to be hazardous to personnel. For hazardous application fit an excess torque detector to stop the machine before major damage occurs to flexible hoses causing massive leakage.

With oil systems minor leakages occur due to the natural characteristics of oil preventing seal faces from contacting fully. Gaskets are now non-asbestos but existing units may have gaskets manufactured from compressed asbestos fibre fitted.

These should be handled and disposed of according to the Asbestos Products (Safety) Regulations 1985.



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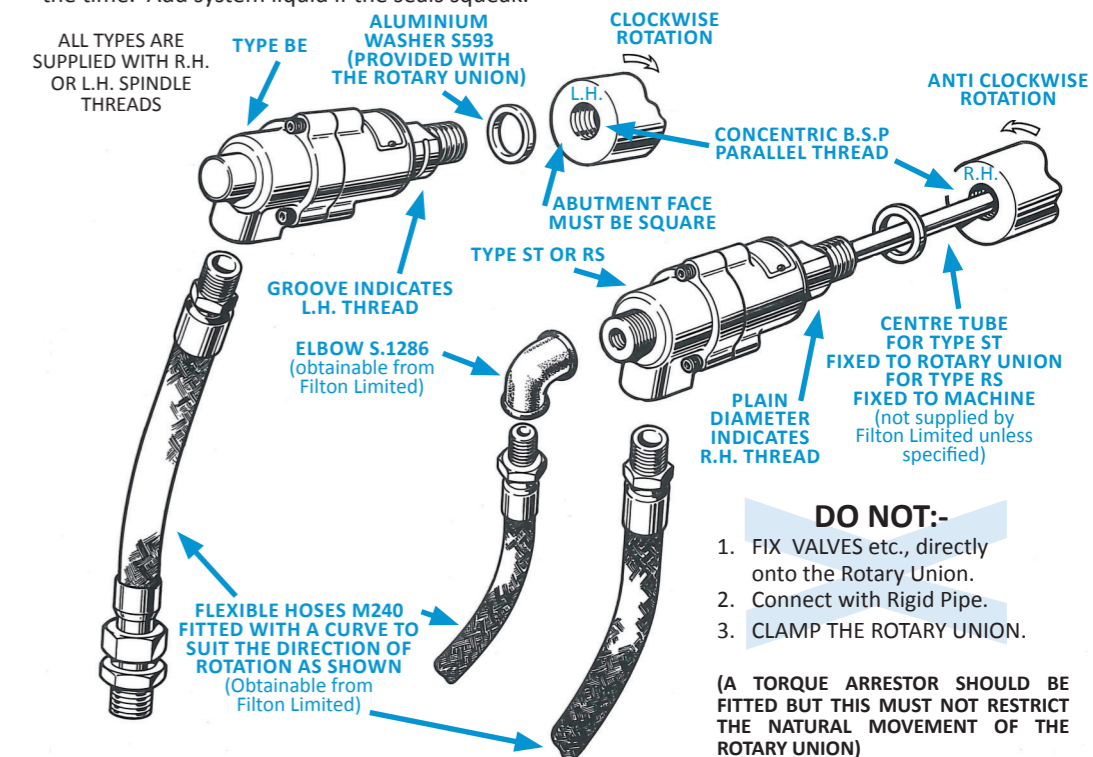
NOMINAL SIZES 8 (3/4") TO 32 (1 1/4") WORKING CONDITIONS (maximum)

Storage Safety Fluids	- store indoors in a dry area within the temperatures -10° to 30°C						
	- see back page						
Pressure	- R.E. – Water, steam, mineral oils, heat transfer fluids and compressed air (lubricated)						
	- C.B. – Water, steam, mineral oils, heat transfer fluids						
Temperature	- All fluids should be clean and free from abrasive particles.						
	- 17 bar						
Speed (r.p.m)	- 20° to +180°C (R.E.) Vacuum -740mm Hg (R.E. only)						
	- 100° to 300°C (C.B.)						
	- Size	8 (3/4")	10 (1 1/8")	15 (1/2")	20 (3/4")	25 (1")	32 (1 1/4")
	- R.E.	1000	1000	1000	1000	1000	800
	- C.B.	500	500	500	500	500	400

DO NOT EXCEED OR COMBINE MAXIMUMS – IF IN DOUBT ASK. ALL OF THESE PRODUCTS HAVE BEEN LEAKAGE TESTED – DISMANTLING INVALIDATES THE WARRANTY.

INSTALLATION

Run in before fitting – rotate R.E. at 300 r.p.m. for 15 minutes and C.B. at half this speed for twice the time. Add system liquid if the seals squeak.



DO NOT:-

1. FIX VALVES etc., directly onto the Rotary Union.
2. Connect with Rigid Pipe.
3. CLAMP THE ROTARY UNION.

(A TORQUE ARRESTOR SHOULD BE FITTED BUT THIS MUST NOT RESTRICT THE NATURAL MOVEMENT OF THE ROTARY UNION)

MINIMUM LENGTHS FOR FLEXIBLE HOSE

Nom size	8 (3/4")	10 (1 1/8")	15 (1/2")	20 (3/4")	25 (1")	32 (1 1/4")
Length mm	150	230	305	305	380	460
FILTON HOSE	M.240/1	M.240/2	M.240/3	M.240/4	M.240/5	M.240/6

WE MANUFACTURE MANY SPECIALS. IF YOU HAVE ANY DOUBT CONTACT US GIVING THE PART No. AND SERIAL No. FROM THE IDENTIFICATION LABEL FITTED.

12	13	14	15	16	17	NOMINAL SIZE
C.B. SPACER	SPINDLE SUB ASSY	THRUST PAD	BEARING	C.B.SPINDLE R.H. or L.H.	C.B. BODY	
14639/3	14645/2	14639/4	14639/7	14645/1	14639/22	8 (3/4")
14639/3	14639/8	14639/4	14639/7	14639/1	14639/22	10 (1 1/8")
14397/8	14525/3	14397/9	14397/20	14525/2	14397/2	15 (1/2")
14397/8	14397/25	14397/9	14397/20	14397/13	14397/2	20 (3/4")
14386/12	14386/21	14386/7	14386/19	14386/11	14386/2	25 (1")
14398/5	14398/18	14398/6	14398/14	14398/10	14398/2	32 (1 1/4")