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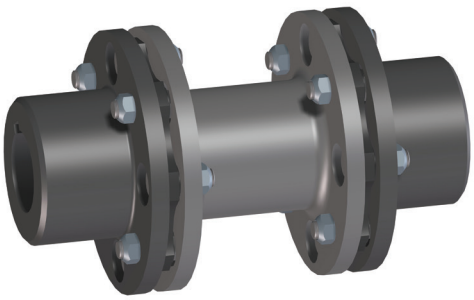

Figure 1 - Thomas Series 52 Coupling

1. General Information

1.1. Thomas Series 52 Couplings are designed to provide a mechanical connection between the rotating shafts of mechanical equipment, using flexible disc elements to accommodate inherent misalignment while transmitting the power and torque between the connected shafts.

1.2. These instructions are intended to help you install and maintain your THOMAS Series 52 coupling. Please read these instructions prior to installing the coupling, and prior to maintenance on the coupling and connected equipment. Keep these instructions near the coupling installation and available for review by maintenance personnel. For special engineered couplings, Rexnord may provide an engineering drawing containing installation instructions that take precedence over this document.

1.3. Rexnord Industries, LLC owns the copyright of this material. These Installation and Maintenance instructions may not be reproduced in whole or in part for competitive purposes.

1.4. Symbol descriptions:

STOP Danger of injury to persons.

Damages on the machine possible.

Pointing to important items.

Hints concerning explosion protection.

2. Safety and Advice Hints

STOP DANGER!

2.1. Safety should be a primary concern in all aspects of coupling installation, operation, and maintenance.

2.2. Proper lockout-tag out procedures must be followed to safeguard against unintentional starting of the equipment.

2.3. Because of the possible danger to person(s) and/or property, from accidents which may result from improper use or installation of these products, it is extremely important to follow the proper selection, installation, maintenance and operational procedures.

PRECAUTION! For this coupling to meet the ATEX requirements, you must precisely follow these installation and maintenance instructions, and the supplement form 0005-08-49-01. This supplement outlines the ATEX requirements. If the operator does not follow these instructions, the coupling will immediately be considered non-conforming to ATEX.

2.4. All personnel involved in the installation, service, operation, maintenance, and repair of this coupling and the connected equipment must read, understand, and comply with these Installation and Maintenance instructions.

2.5. All rotating power transmission products are potentially dangerous and can cause serious injury. They must be properly guarded in compliance with OSHA, ANSI, ATEX, European machine safety standards and other local standards. It is the responsibility of the user to provide proper guarding.

2.6. For ATEX requirements the guard must have a minimum of 12.7 mm (1/2 inch) radial clearance to the coupling outside diameter “A” (see Figure 3 and Table 3) and allow for proper ventilation.

2.7. Make sure to disengage the electrical power and any other sources of potential energy before performing work on the coupling.

2.8. Do not make contact with the coupling when it is rotating and/or in operation.

2.9. All work on the coupling must be performed when the coupling is at rest under no load.

2.10. Do not start or jog the motor, engine, or drive system without securing the coupling components. If the equipment is started with only a hub attached, the hub must be properly mounted and ready for operation, with the key and set screw (if included) fastened. When the full coupling assembly is started, all fasteners and hardware must be completely and properly secured. Do not run the coupling with loose fasteners.

2.11. The coupling may only be used in accordance with the technical data provided in the Thomas catalog for the Series 52 coupling. Customer modifications and alterations to the coupling are not permissible.

⚠ **CAUTION: Air driven wrenches for assembly are not permitted to avoid the potential of excessive speed and heat build up that may lead to thread damage during assembly.**

2.12. All spare parts for service or replacement must originate from or be approved by Rexnord Industries, LLC.

3. Components and Part Numbers

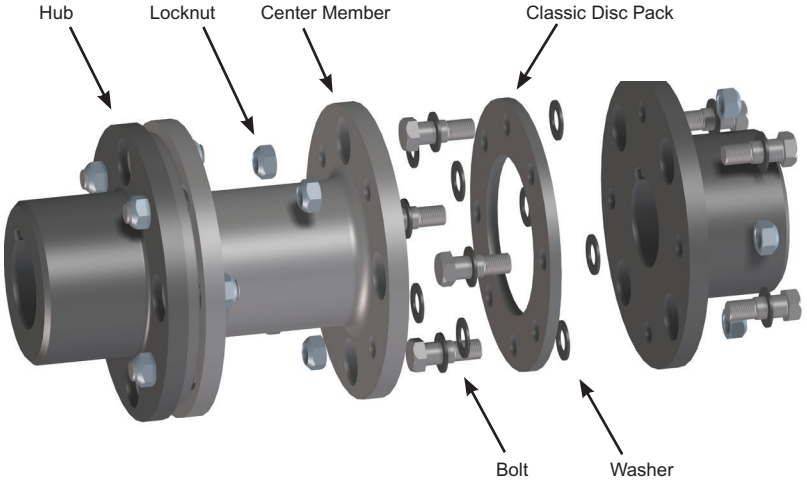

Figure 2 - Thomas Series 52 Coupling Components

Thomas Series 52 couplings may be delivered from the factory assembled or non-assembled. If assembled, the locknuts are not fully tightened. Examine the parts to assure there is no visible damage. If the coupling is assembled, remove the locknuts, bolts, and washers that attach the hubs to the disc packs. Remove both hubs. Leave the disc packs attached to the center member. (The disc pack locknuts will be tightened later to the specifications shown in Table 5 prior to operation.)

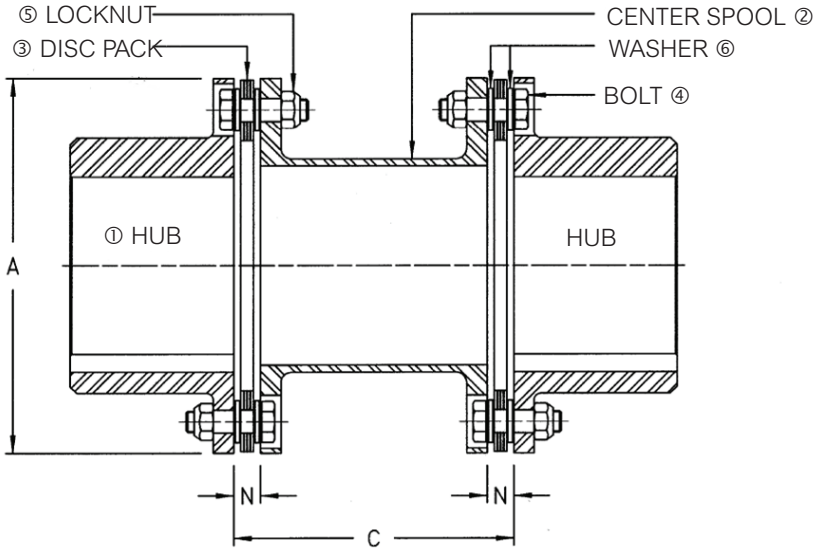

Figure 3 - Thomas Series 52 Cross Sectional View of Components

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Table 1 Part Numbers and Quantity Required

Size of Series 52 coupling	Hub① Rough bored (Quantity 2)	Center Spool "C" Length ② (1 per Coupling)				Disc Pack ③ (2 per coupling)		Parts Kit -- Consists of Bolts, Locknuts, and Washers for One Coupling			
		Part No.	inch	Part No.	mm	Tomaloy	Stainless	Parts Kit	Bolts ④	Locknuts ⑤	Washers ⑥
	Part No.					Part No.	Part No.	Part No.**	Quantity	Quantity	Quantity
125	128790	328791	4,00	567649	100	910618	310618	217934	8	8	16
				605835	140						
162	034406	634420	5,00	050914	100	710663	310663	417934	12	12	24
				580999	140						
200	234407	734421	5,00	567652	100	210665	710665	617934	12	12	24
				567653	140						
225	434408	834422	5,00	567654	100	210984	610984	817934	16	16	32
		934422	7,00	567655	140						
				567656	180						
				592995	250						
262	634409	034423	5,00	581001	140	010985	210985	017934	16	16*	32
		134423	7,00	567658	180						
312	834410	234424	5,50	567659	140	010957	210957	001983	16	16*	32
		334424	7,00	567660	180						
350	034411	434425	6,00	585149	180	810952	010952	001985	16	16	32
		534425	7,00	567662	250						
375	234412	634426	7,00	567663	180	410943	610943	001987	16	16	32
				582676	250						
425	434413	734427	7,00	567665	180	810986	010986	001989	16	16	32
				567666	250						
450	634414	834428	7,00	567667	180	210987	410987	001991	16	16*	32
		934428	8,00	567668	250						
500	834415	034429	9,00	-	-	420735	620735	001993	16	16*	32
550	034416	134430	10,00	-	-	110962	310962	036872	16	16*	32
600	234417	234413	10,00	-	-	710959	910959	001997	16	16*	32
700	434418	003125	11,00	-	-	Not Available	420803	-	16	16*	32
750	003126	003131	11,00	-	-		921021	-	16	16*	32
800	582146	016213	12,00	-	-		220851	-	16	16*	32
850	589364	016214	13,00	-	-		020793	-	16	16*	32
925	007515	039302	14,00	-	-		020958	-	16	16	32
1000	-	-	-	-	-		721034	607667	16	16	32

* These locknuts are cadmium plated.
** Use this kit when replacing original Thomas round, conventional disc packs (non- T-pack). For more information on the benefits of the T-pack replacement option, contact Rexnord.

4. Hub Mounting

STOP DANGER!

Be sure to disengage the electrical power and any other sources of potential energy before you perform work on the hub and coupling assembly.

⚠ **CAUTION: When disc type couplings are installed on "sleeve bearing" motor drives, some precautions are necessary. It is important that the coupling be installed as close to its free state (neutral) axial position as possible and that the motor shaft is on its "magnetic center" (normally defined by a scribed line on the shaft). Disc type couplings, with their flexing element(s) comprised of multiple laminated discs or sheets, will act as a spring in the axial direction (exhibiting non-linear restoring forces) and serve to hold the motor rotor on magnetic center during operation and away from the motor's internal thrust stops. The coupling span ordered for the equipment must consider the motor rotor as being positioned on its magnetic center.**

4.1. Examine the coupling assembly to insure there is no visible damage.

4.2. Clean the hub bores and shafts using lint free cloth. Remove any nicks or burrs.

4.3. When assembled, the key(s) should have a close side-to-side fit in the keyway in both the hub and shaft, with a slight clearance over the top of the key.

⚠ **CAUTION: When heating hubs is required, use of an oven is preferred and an open flame is not recommended. If flame heating is considered mandatory, it is important to provide uniform heating to avoid distortion and excessive temperature. A thermal stick (crayon marker) applied to the hub surface will help determine the hub temperature.**

DANGER!

Touching hot hubs causes burns. Wear safety gloves to avoid contact with hot surfaces.

5. Straight Bore with Clearance/Slip Fit –

5.1. Install the key(s) in the shaft.

5.2. Check to be sure that the set screw(s) in the hub does not protrude into the keyway and/or the bore. If needed, loosen the set screw to provide clearance during assembly.

5.3. Slide the hub up the shaft to the desired axial position.

5.4. Assemble and tighten the set screw(s), using a calibrated torque wrench, to the values shown in Table 2.

Table 2 - Set Screw Tightening Torque

Set Screw Thread Size				Internal Hex Size		Set Screw Thread Size				Internal Hex Size
inch	lb-in	lb-ft	Nm	inch		inch	lb-in	lb-ft	Nm	inch
1/4-20	66	6	7	1/8		3/8-16	240	20	27	3/16
1/4-28	76	6	9	1/8		3/8-24	276	23	31	3/16
5/16-18	132	11	15	5/32		1/2-13	600	50	68	1/4
5/16-24	144	12	16	5/32		1/2-20	660	55	75	1/4

ATTENTION! Never use two set screws with one on top of the other in the same tapped hole.

6. Straight Bore with Interference Fit –

6.1. Accurately measure the bore and shaft diameters to assure proper fit.

6.2. Install the key(s) in the shaft.

6.3. Heat the hub in an oven until the bore is sufficiently larger than the shaft.

6.4. 350°F (177°C) is usually sufficient for carbon steel hubs. Do not exceed 500°F (260°C).

6.5. Higher temperatures may be required for higher interference fit levels where alloy steel hubs may be encountered. A general rule to consider is that for every 160°F increase in temperature, steel will expand 0.001 inch for every inch of shaft diameter (or .029 mm/100°C). When calculating temperatures, also consider additional expansion to provide clearance and allow for a loss of heat and subsequent shrinkage during the handling process.

6.6. With the hub expanded, install it quickly on the shaft to the desired axial position. A pre-set axial stop device can be helpful.

7. Taper Bore –

7.1. Check for acceptable contact pattern between the hub and the shaft.

7.2. Put the hub on the shaft, keeping the keyways (if existing) aligned.

7.3. Lightly tap the face of the hub with a soft mallet. The resultant position will provide a starting point for the hub axial draw up.

7.4. Use a depth micrometer to measure the distance from the shaft end to the hub face, as shown in Figure 4. Record the dimension.

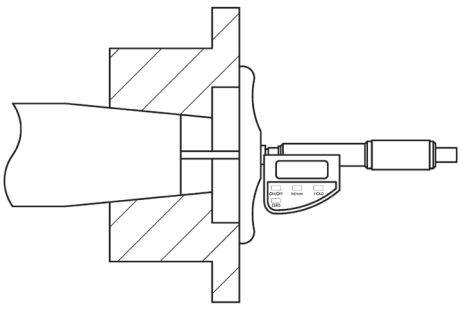

Figure 4 - Shaft end to hub face measurement example.

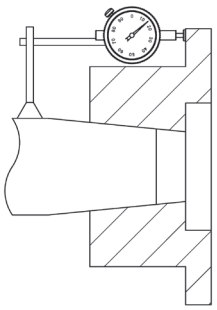

Figure 5 - Dial indicator placement for axial draw measurement example.

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7.5. Mount a dial indicator to read axial hub advancement, as shown in Figure 5. Alternatively, the indicator can be positioned to contact the end of the hub. Set the indicator to "zero".

7.6. Remove the hub and install the key(s) in the shaft.

7.7. Heat the hub in an oven until the bore is sufficiently larger than the shaft.

7.8. 350°F (177°C) is usually sufficient for carbon steel hubs. Do not exceed 500°F (260°C).

7.9. Higher temperatures may be required for higher interference fit levels where alloy steel hubs may be encountered. A general rule to consider is that for every 160°F increase in temperature, steel will expand 0.001 inch for every inch of shaft diameter (or .029 mm/100°C). When calculating temperatures, also consider additional expansion to provide clearance and allow for a loss of heat and subsequent shrinkage during the handling process.

7.10. With the hub expanded, install it quickly on the shaft to the "zero" set point. Continue to advance the hub up the taper to the desired axial position, as defined by Rexnord's customer. Use the indicator as a guide only. A pre-set axial stop device can be helpful.

7.11. Inspect the assembly to verify that the hub is properly positioned. Consult Rexnord if necessary.

7.12. Install any hub axial retention device (if any) in accordance with the equipment manufacturer's specifications.

8. Shaft Alignment –

8.1. Move the equipment into place.

☞ **ATTENTION!** Soft Foot – The equipment must rest flat on its base. If one or more feet of the machine are shorter, longer, or angled in some way to prevent uniform contact (a condition commonly known as "soft foot") it must now be corrected.

☞ **ATTENTION!** To improve the life of the coupling, the shafts must be aligned to minimize deflection of the flexing elements. Shaft alignment is required in the axial, parallel, and angular directions, with each of these values not to exceed the recommended installation limits shown in Table 3. Shaft alignment can be measured using various established methods, including Laser Alignment, Reverse Dial Indicator, and Rim and Face. Refer to Rexnord bulletin 538-214 "Coupling Alignment Fundamentals" for instructions regarding shaft alignment.

8.2. Move the connected equipment to achieve acceptable alignment. When properly aligned, the disc packs will be centered and approximately parallel to their mating flange faces and the flexing elements will have little visible waviness when viewed from the side.

8.3. Table 3 shows recommended installation limits for Parallel, Angular, and Axial alignment.

8.4. The "Parallel Misalignment" value (P) is the offset between the centers of the hubs, as shown in Figure 6.

8.5. When Parallel Offset is measured by rotating the hubs in unison with dial indicators as shown in Figure 7, the total indicated reading (TIR) should be divided by (2) to calculate "P".

8.6. It should be noted that parallel offset measured on the hub surfaces includes misalignment of the equipment shafting plus any variation (TIR) in the hubs. This may be helpful to consider during problem solving for alignment difficulties.

8.7. The "Angular Misalignment" value is the maximum difference between the measurements X and Y taken at opposite ends of the hub flanges, as shown in Figure 8.

8.8. These dimensions are suggested for initial installation. Additional capacity is available to compensate for thermal and structural equipment movement.

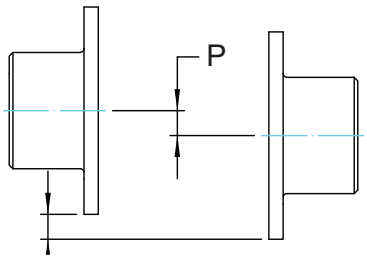

Figure 6 - Parallel Offset Misalignment.

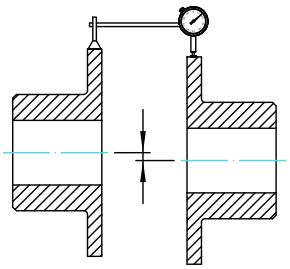

Figure 7 - Parallel Offset Misalignment. (TIR) Measurement.

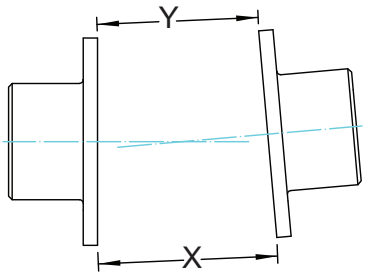

Figure 8 - Angular

Table 3 Installation Alignment Values

Series 52 Coupling	"A" Dimension		"C" Dimension		Recommended Installation Limits ****							
					Maximum Coupling Parallel Misalignment Maximum Measurement Between Hubs Defined in one of two ways				Angular Misalignment Between Hubs Maximum (X-Y) ***		Axial Hub Gap Tolerance from "C" Dimension +/-	
					Parallel Alignment Total Indicator Reading (TIR)*		Parallel Offset "P" **					
Size	Inch	mm	Inch	mm	Inch	mm	Inch	mm	Inch	mm	Inch	mm
125	3,69	93,7	3,94	100,0	0,0039	0,10	0,0020	0,05	0,004	0,10	0,018	0,46
			4,00	101,6	0,0040	0,10	0,0020	0,05				
			5,51	140,0	0,0055	0,14	0,0028	0,07				
162	4,34	110,2	3,94	100,0	0,0039	0,10	0,0020	0,05	0,004	0,10	0,018	0,46
			5,00	127,0	0,0050	0,13	0,0025	0,06				
			5,51	140,0	0,0055	0,14	0,0028	0,07				
			7,09	180,0	0,0071	0,18	0,0035	0,09				
200	5,44	138,2	3,94	100,0	0,0039	0,10	0,0020	0,05	0,005	0,13	0,018	0,46
			5,00	127,0	0,0050	0,13	0,0025	0,06				
			5,51	140,0	0,0055	0,14	0,0028	0,07				
			7,09	180,0	0,0071	0,18	0,0035	0,09				
			9,84	250,0	0,0098	0,25	0,0049	0,13				
225	5,69	144,5	3,94	100,0	0,0039	0,10	0,0020	0,05	0,006	0,15	0,018	0,46
			5,00	127,0	0,0050	0,13	0,0025	0,06				
			5,51	140,0	0,0055	0,14	0,0028	0,07				
			7,00	177,8	0,0070	0,18	0,0035	0,09				
			7,09	180,0	0,0071	0,18	0,0035	0,09				
			9,84	250,0	0,0098	0,25	0,0049	0,13				
262	6,62	168,1	5,00	127,0	0,0050	0,13	0,0025	0,06	0,007	0,18	0,022	0,55
			5,51	140,0	0,0055	0,14	0,0028	0,07				
			7,00	177,8	0,0070	0,18	0,0035	0,09				
			7,09	180,0	0,0071	0,18	0,0035	0,09				
			9,84	250,0	0,0098	0,25	0,0049	0,13				
312	7,81	198,4	5,50	139,7	0,0055	0,14	0,0028	0,07	0,008	0,20	0,026	0,65
			5,51	140,0	0,0055	0,14	0,0028	0,07				
			7,00	177,8	0,0070	0,18	0,0035	0,09				
			7,09	180,0	0,0071	0,18	0,0035	0,09				
			9,84	250,0	0,0098	0,25	0,0049	0,13				
350	8,69	220,7	6,00	152,4	0,0060	0,15	0,0030	0,08	0,009	0,23	0,028	0,71
			7,00	177,8	0,0070	0,18	0,0035	0,09				
			7,09	180,0	0,0071	0,18	0,0035	0,09				
			9,84	250,0	0,0098	0,25	0,0049	0,13				
375	9,69	246,1	7,00	177,8	0,0070	0,18	0,0035	0,09	0,010	0,25	0,031	0,79
			7,09	180,0	0,0071	0,18	0,0035	0,09				
			9,84	250,0	0,0098	0,25	0,0049	0,13				
425	10,50	266,7	7,00	177,8	0,0070	0,18	0,0035	0,09	0,011	0,28	0,034	0,85
			7,09	180,0	0,0071	0,18	0,0035	0,09				
			9,84	250,0	0,0098	0,25	0,0049	0,13				
450	11,31	287,3	7,00	177,8	0,0070	0,18	0,0035	0,09	0,012	0,30	0,036	0,91
			7,09	180,0	0,0071	0,18	0,0035	0,09				
			8,00	203,2	0,0080	0,20	0,0040	0,10				
			9,84	250,0	0,0098	0,25	0,0049	0,13				
500	12,88	327,2	7,09	180,0	0,0071	0,18	0,0035	0,09	0,012	0,30	0,041	1,04
			9,00	228,6	0,0090	0,23	0,0045	0,11				
			9,84	250	0,0098	0,25	0,0049	0,13				
550	14,44	366,8	9,84	250	0,0098	0,25	0,0049	0,13	0,014	0,36	0,046	1,17
			10,00	254,0	0,0100	0,25	0,0050	0,13				
600	16,00	406,4	10,00	254,0	0,0100	0,25	0,0050	0,13	0,016	0,41	0,051	1,30
700	18,25	463,6	11,00	279,4	0,0110	0,28	0,0055	0,14	0,018	0,46	0,058	1,46
750	19,81	503,2	11,00	279,4	0,0110	0,28	0,0055	0,14	0,020	0,51	0,063	1,59
800	21,50	546,1	12,00	304,8	0,0120	0,30	0,0060	0,15	0,022	0,56	0,068	1,73
850	23,00	584,2	13,00	330,2	0,0130	0,33	0,0065	0,17	0,023	0,58	0,072	1,83
925	25,00	635,0	14,00	355,6	0,0140	0,36	0,0070	0,18	0,025	0,64	0,078	1,98

* Parallel misalignment measured by rotating the hubs with a dial indicator on the outside hub diameter will result in a maximum Total-Indicated-Reading of 0.001 inch per inch of "C" dimension (or 0.001 mm per mm of "C" dimension). For non-standard "C" dimensions, multiply "C" x 0.001 to calculate the TIR.

** Parallel offest "P" is equivalent to one-half of the TIR measurement using dial indicators.

*** Subtract Measurement Y from Measurement X to obtain Angular Misalignment dimension.

**** During installation and/or operation, do not exceed the maximum misalignment capacity of 1/3°per disc pack.

Refer to Rexnord Bulletin 538-214 "Coupling Alignment Fundamentals" for more details regarding alignment methods and procedures.

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9. Final Assembly –

9.1. Verify that the hubs have been mounted to provide the correct "C" dimension shown in Figure 9 and defined in Table 1. The "C" dimension is the distance measured between the faces of the two mounted hub flanges.

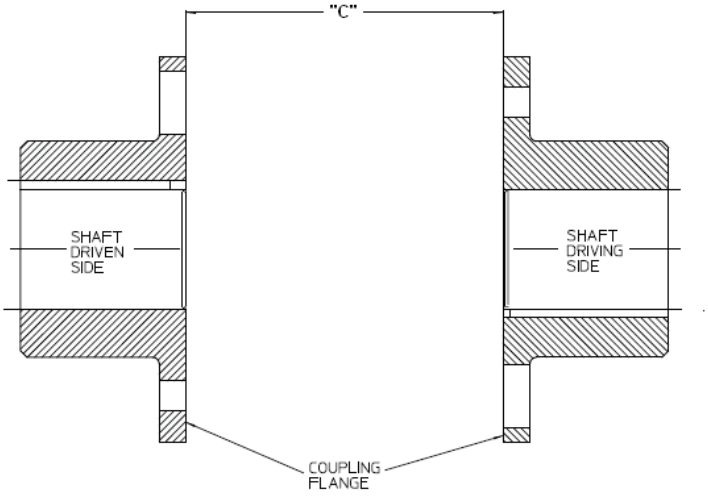

Figure 9 - Mounting Hubs on Shafts

9.2. If the coupling arrived assembled, the disc packs are still attached to the center member. Remove the locknuts, bolts, and washers that attach the disc packs to the center member.

9.3. For reference during assembly, measure and record the compressed thickness of the compressed disc pack "S" (as shown in Figure 10) by using a micrometer or caliper positioned midway between the OD and ID and between two adjacent holes.

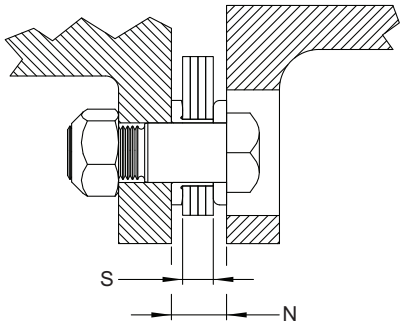

Figure 10 - Bolt, Washers, Locknuts and Disc pack assembly

9.4. With the hubs mounted, put the center member into place between the two hubs.

⚠ **CAUTION: Care should be taken when handling the center member as the tubular section can be damaged. Support the center member at both ends on wood blocks, with nylon straps from a hoist, or some convenient way. It may be helpful to support the end that is not being worked on with bolts through the center member flange bolt holes.**

STOP **DANGER!**

When handling the coupling, components may sometimes slip and fall.
To prevent loss of fingers or injury do not insert fingers into any fastener holes.

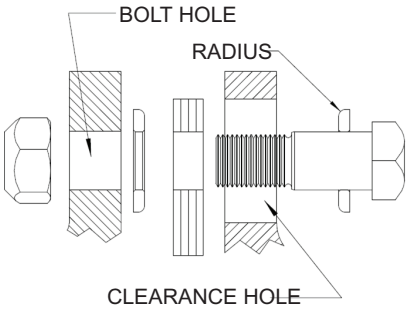

Figure 11 - Alignment confirmation values.

9.5. Place a loose washer on a bolt, with the flat side of the washer facing the bolt hex head. This will properly position the side of the washer with the radius facing the disc pack, as shown in Figure 11.

⚠ **CAUTION: It is important that the radius side of the washer must always be against the disc pack.**

9.6. Hold the disc pack in one hand and slip it down between the two flanges so that the bushing heads in the disc pack line up with the bolt holes in the flanges as shown in Figure 1 and Figure 11.

9.7. Install the disc pack by rotating the hub or center member so that the hub bolt holes line up with the center member flange clearance holes. Align any match marks, if existing.

9.8. Insert a bolt and washer through the clearance hole in one flange, through the disc pack bushing, and through the bolt hole of the opposite flange. Make sure all parts are positioned on the body ground diameter of the bolt.

9.9. Lubricate the bolt threads with clean motor oil, and install a locknut onto the bolt, but do not tighten it at this time.

☞ **ATTENTION!** All bolt threads must be lubricated prior to assembly. A clean motor oil is recommended. Do not use lubricants containing molybdenum disulfide or greases, unless otherwise noted (see Table 5, Footnote 3 regarding stainless fasteners).

9.10. Pivot the disc pack around until the bushing heads are aligned with the rest of the bolt holes.

9.11. Place a loose washer on each remaining bolt and install the bolts through the clearance holes, through the disc pack bushings, and through the flange bolt holes.

9.12. The last bolt may offer slight resistance and require light tapping on the head of the bolt to insert it through the disc pack and flange bolt hole.

9.13. Slightly tighten all locknuts using an alternating progressive pattern making sure the disc pack is not distorted and all the bolts are fully seated.

9.14. Proceed to the other end of the coupling. Remove the support bolts, if used, and continue to support the center member. Repeat these installation steps to install the second disc pack.

9.15. The disc packs, when installed, should be centered and parallel with the mating flanges. The disc surface should never be in direct contact with the flange or the bolt head.

9.16. As an assembly and alignment check, measure the distance “N” between the flanges of the hub and the center spool at each end, as shown in Figure 3 and Figure 10. Dimension “N” should be measured at four (4) positions equally spaced around the circumference of the disc pack gap (at top, bottom, and side positions) at each end.

- Calculate the “$N_{average}$” value at each end by adding the measurements and dividing by 4.
- $N_{average}$ = (N1 +N2 +N3 +N4)/4
- $N_{average}$ should be between the minimum and maximum values shown in Table 4.
- If the $N_{average}$ value is outside of these specifications, use a more precise measurement method to verify an acceptable gap, by first measuring the thickness of the disc pack “S” as shown in Figure 10. The discs should be tightly compressed during the measurement. Calculate “G” by subtracting “S” from $N_{average}$.
  - $G = N_{average} – S$
  - G should be between the minimum and maximum values shown in Table 4 for allowable G values.
- Calculate the Angular Misalignment at each end by subtracting the smallest (minimum) N value from the largest (maximum) N value. The Angular Misalignment should be less than the maximum value shown in Table 4.
  - Angular Misalignment = $(N_{maximum} – N_{minimum})$

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Table 4 - Alignment Check Values												
Series 52 coupling size	"A" dimension		Dimension "N" Allowable Range for "N average" *				Maximum Allowable Coupling Angular Misalignment per disc pack (N maximum)-(n minimum)**		Allowable Range for G=(N average)-S***			
			Min	Max	Min	Max	Maximum Capacity		Min	Max	Min	Max
	inch	mm	inch	inch	mm	mm	inch	mm	inch	inch	mm	mm
125	3,69	93,7	0,264	0,282	6,71	7,16	0,021	0,55	0,115	0,133	2,92	3,38
162	4,34	110,2	0,281	0,299	7,12	7,58	0,025	0,64	0,115	0,133	2,92	3,38
200	5,44	138,2	0,356	0,374	9,03	9,49	0,032	0,80	0,175	0,193	4,45	4,90
225	5,69	144,5	0,354	0,372	8,99	9,45	0,033	0,84	0,175	0,193	4,45	4,90
262	6,63	168,4	0,463	0,484	11,76	12,29	0,039	0,98	0,239	0,261	6,07	6,63
312	7,81	198,4	0,491	0,516	12,47	13,11	0,045	1,15	0,237	0,263	6,02	6,68
350	8,69	220,7	0,522	0,550	13,26	13,97	0,051	1,28	0,236	0,264	5,99	6,71
375	9,69	246,1	0,575	0,606	14,61	15,39	0,056	1,43	0,235	0,266	5,97	6,76
425	10,50	266,7	0,606	0,639	15,39	16,23	0,061	1,55	0,233	0,267	5,92	6,78
450	11,31	287,3	0,696	0,732	17,68	18,59	0,066	1,67	0,294	0,330	7,47	8,38
500	12,88	327,2	0,757	0,798	19,23	20,27	0,075	1,90	0,292	0,333	7,42	8,46
550	14,44	366,8	0,890	0,936	22,61	23,77	0,084	2,13	0,353	0,399	8,97	10,13
600	16,00	406,4	0,941	0,992	23,90	25,20	0,093	2,36	0,351	0,402	8,92	10,21
700	18,25	463,6	1,171	1,228	29,74	31,19	0,106	2,70	0,471	0,529	11,96	13,44
750	19,81	503,2	1,222	1,284	31,04	32,61	0,115	2,93	0,469	0,531	11,91	13,49
800	21,50	546,1	1,301	1,369	33,05	34,77	0,125	3,18	0,466	0,534	11,84	13,56
850	23,00	584,2	1,365	1,437	34,67	36,50	0,134	3,40	0,464	0,536	11,79	13,61
925	25,00	635,0	1,460	1,538	37,08	39,07	0,145	3,69	0,461	0,539	11,71	13,69

* "N average" is the average of four dimensions measuring the gap at four positions equally spaced around the circumference of the disc pack (at top, bottom, and side positions, or otherwise stated as 0°, 90°, 180°, and 270°).

** At each end, subtract the minimum N measurement from the maximum N measurement. The calculated value allows a maximum of 1/3° angular misalignment at each end.

*** G = (N average) - S, where S = measured thickness of stack of disc pack laminates (when tightly compressed).

Refer to Rexnord Bulletin 538-214 "Coupling Alignment Fundamentals" for more details and procedures regarding alignment methods and procedures

9.17. If the "N average," and "G" values are outside of these specifications, or the angular misalignment exceeds the maximum capacity, it is suggested that the alignment is rechecked and improved. Dimensional measurements should also be made to verify the set up is accurate.

9.18. Now fully tighten each locknut using an incremental torque in a progressive alternating pattern to the appropriate torque value shown in Table 5.

9.19. When possible, it is recommended that all locknuts have their tightening torque checked after several hours of operation, per Table 5.

Table 5 - Locknut tightening torques							
Series 52 Coupling Size	A Dimension		Tightening Torque for Steel Locknut (For Stainless Steel see Note 3)				Bolt Head
			Thread Size	Torque		Wrench Hex Size	WrenchHex Size
	Inch	MM	Inch	lb-ft* (in-lbs)	Nm	inch	inch
125	3,81	97	1/4 - 28 UNF	(156)	18	7/16	7/16
162	4,34	110	1/4 - 28 UNF	(156)	18	7/16	7/16
200	5,44	138	5/16 - 24 UNF	25	34	1/2	1/2
225	5,69	145	5/16 - 24 UNF	25	34	1/2	1/2
262	6,63	168	3/8 - 24 UNF	30*	41*	9/16	5/8
312	7,81	198	7/16 - 20 UNF	40*	54*	11/16	11/16
350	8,69	221	1/2 - 20 UNF	95	129	3/4	13/16
375	9,69	246	9/16 - 18 UNF	130	176	7/8	15/16
425	10,50	267	5/8 - 18 UNF	175	237	15/16	1-1/16
450	11,31	287	11/16 - 16 UNF	150*	203*	1-1/8	1-1/8
500	12,88	327	3/4 - 16 UNF	190*	258*	1-1/4	1-1/4
550	14,44	367	7/8 - 14 UNF	255*	346*	1-7/16	1-7/16
600	16,00	406	1 - 14 UNF	335*	454*	1-5/8	1-5/8
700	18,25	464	1 1/8 -12 UNF	425*	576*	1-13/16	1-13/16
750	19,81	503	1 1/4 - 12 UNF	560*	759*	2	2
800	21,50	546	1 3/8 - 12 UNF	740*	1003*	2-3/16	2-3/16
850	23,00	584	1 1/2 - 12 UNF	950*	1288*	2-3/8	2-3/8
925	25,00	635	1 5/8 - 12 UNF	1350*	1830*	2-5/8	2-5/8

* These locknuts are cadmium plated (for steel). Do not use any lubricant other than clean motor oil.

1. These torque values are for steel bolts with threads lubricated with clean motor oil. The locknuts are prevailing torque type and some resistance will be felt. If thread galling is suspected, immediately stop and contact Rexnord.
2. Bolts should be held stationary while the locknuts are tightened to the values shown. Do not tighten the fastener by rotating the bolt.
3. The use of Stainless Steel bolts and locknuts requires the tightening torque to be reduced to 60% of the values shown. Stainless steel bolt and locknut threads must also be liberally coated with molybdenum disulfide grease (do not use motor oil).
4. Air driven wrenches for fastener assembly are not permitted (heat build up may lead to thread damage during assembly).

10. Disc Pack Replacement –

⚠ **CAUTION: Series 52 sizes 225 through 750 use the Tpack™ unitized disc pack. The Tpack disc pack will replace the original Thomas round disc pack (without Tpack bushings) without modification to the coupling. Be sure to use the washers that are supplied with the Tpack replacement kit. It is not permitted to use Tpacks with washers supplied with the original Thomas round disc pack. If it becomes necessary to replace the disc packs, it can be done as follows.**

10.1. Support the coupling at one end, and remove all locknuts from this end.

10.2. Back out and remove the bolts and loose washers. It may be necessary to tap the ends of the bolts with a soft hammer to remove them.

10.3. Slide the disc pack out while supporting the center member at this end.

10.4. Support the other end of the coupling, and disassemble the locknuts and fasteners to remove the disc pack.

STOP **DANGER!**

When handling the coupling, components may sometimes slip and fall, to prevent loss of fingers or injury do not insert fingers into any fastener holes.

10.5. Replace parts as necessary. If an original Thomas round disc pack (with no Tpack bushings) is being replaced, discard the washers (they cannot be used with the Tpack).

☞ **ATTENTION!** Match marks (if applied) must be in-line to maintain balance integrity.

10.6. Recheck alignment and reassemble the coupling per the instructions in Section 9.0, Final Assembly.

10.7. When possible, it is recommended that all locknuts have their tightening torque checked after several hours of operation, per Table 5.

10.8. For spare replacement part numbers, see Table 1.

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