ATEX: In order for this coupling to meet the ATEX requirements, it is mandatory to precisely follow these installation instructions along with the included supplement form 0005-08-49-01. This supplement outlines the ATEX requirements. If the operator does not adhere to these instructions, conformity is immediately invalidated.

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

All rotating power transmission products are potentially dangerous and can cause serious injury. They must be properly guarded in compliance with OSHA, ANSI and any other local standards for the speeds and applications in which they are used. It is the responsibility of the user to provide proper guarding.

For ATEX requirements the guard must have a minimum of ½ inch (12.7 mm) radial clearance to the coupling major diameter "A" and allow for good ventilation.

NOTE: Gear Coupling Bolts are not supplied. When connecting to an exposed bolt gear coupling hub, use standard gear coupling exposed bolts. When connecting to a shrouded bolt gear coupling hub however, use exposed (long) bolts of proper diameter due to our thicker flanges. Tighten locknuts to gear coupling manufacturers recommendations.

1. **Purpose —** These instructions are intended to help you to install, align, and maintain your THOMAS coupling.
2. **Scope —** Covered here will be general information, mounting, alignment, locknut torque, disc pack replacement, and part numbers.
3. **General Information —** The coupling is designed to mate with existing rigid half gear coupling hubs (either exposed bolt or shrouded bolt design gear couplings).

   The coupling, as received, is assembled and factory torqued. Examine the assembly to assure there is no visible damage that might have been caused by shipping and handling. No disassembly is needed to install the coupling.

   NOTE: High temperature applications where thermal expansion could be beyond couplings axial limits, measure gap between rigid hubs hot and again when installing coupling. Prestretch coupling accordingly when installing.
4. **Shaft Alignment —** Move equipment into place.

   A. **Soft Foot —** The equipment must sit flat on its base. Any soft foot must now be corrected.

   B. **Axial Spacing —** The axial spacing of the disc coupling is more critical than with a gear coupling as the gear coupling will center itself.

   When installing the assembly, monitor the "N" dimension and shim between the rigid hubs and the SN-GA spool adapters. Add or delete shims as necessary until "N" dimension is within the recommended limits. If further adjustment is required, repositioning of the rigid hugs may be required.

   When measuring the "N" dimension, the use of a vernier caliper can be helpful. Measure this "N" gap at 12:00, 3:00, 6:00, and 9:00 o'clock. The average reading should be used.

   D. **Angular Alignment —** As the SN-GA coupling is usually quite long, it is suggested to use the "Across the disc pack" procedure to correct the

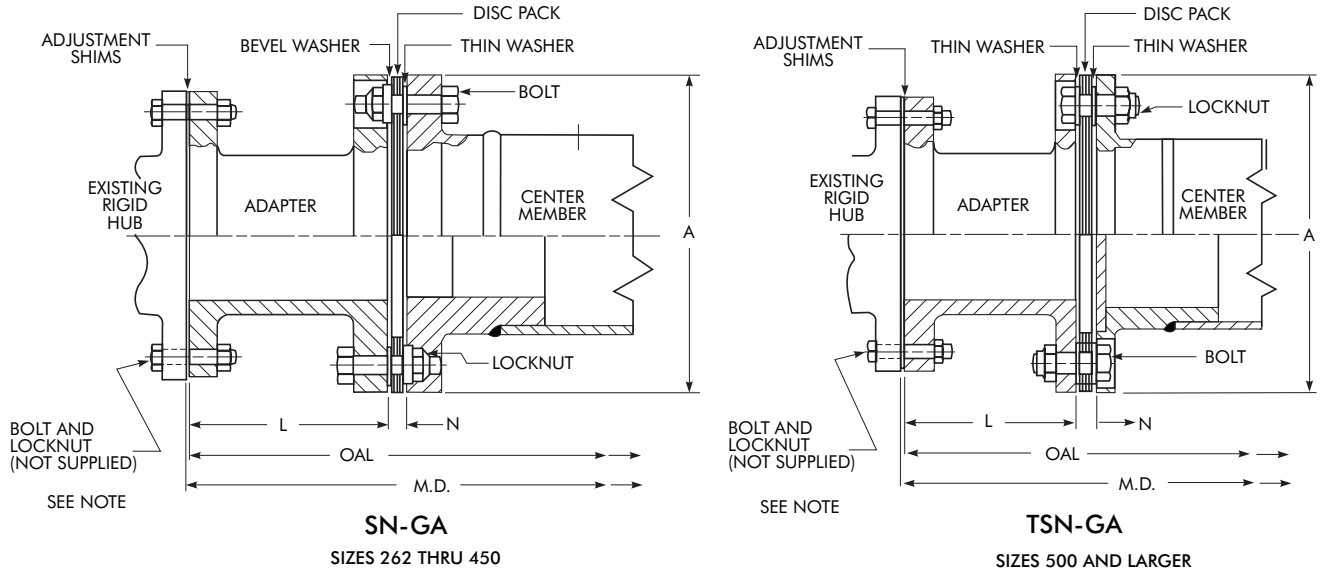

Figure 1

angular misalignment at each end. See Figures 2, and 3. In order to use this procedure, the coupling must be fully installed. See Section 5, Final Assembly.

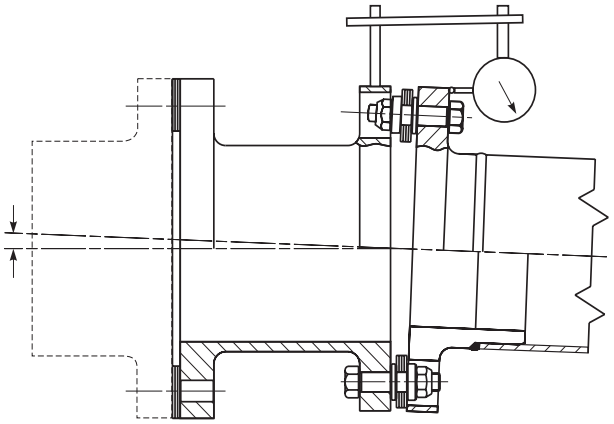

Figure 2

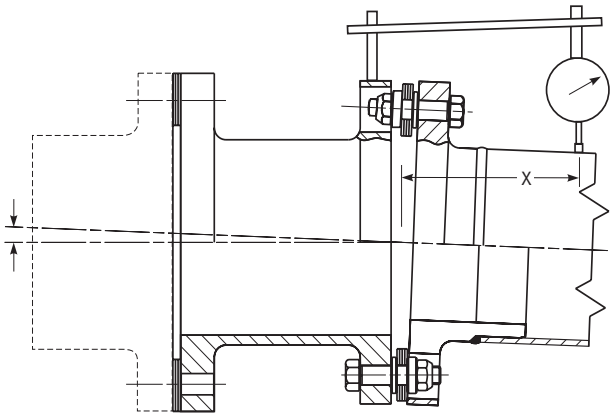

Figure 3

The method shown in Figure 3 is preferred because axial movement of the shafts during the alignment process does not affect the results. Rigidly mount a dial indicator on the adapter, reading out on the center tube a convenient distance “X”. Compensate for indicator sag. Rotate the assembly. Adjust the equipment by shimming and/or moving so that the indicator is within .002 inch per inch of distance “X”. (Center of flex joint to position on the center member tube where readings are taken.) If the method shown in Figure 2 is chosen, use .002 inch per inch of hub flange diameter as the limit. Repeat above for both ends until the coupling is aligned. This procedure will correct the shaft angular and shaft parallel offset misalignments.

NOTE: If the driver or driven equipment alignment specification is tighter than these recommendations, the specification should be used. Also, be sure to compensate for thermal movement in the equipment. The coupling is capable of approximately three times the above shaft alignment tolerances. However, close alignment at installation will provide longer service with smoother operation.

5. Final Assembly

A. The coupling, as received, has all the disc pack bolt locknuts factory tightened and should not be disassembled. Measure the DBSE (Distance Between Shaft Ends) and the coupling OAL (Over All Length) to determine the number of adjustments shims required. Divide the shims between each end. See Figure 1.

B. Position the coupling assemble between the two existing rigid hubs. Install two bolts on each end to hold coupling assembly in place.

NOTE: This hardware is supplied by others. Now take the adjustment shims for one end and slip them in between the flanges sliding a third bolt through one flange, one of the bolt holes in shims, and through the other flange. Add a locknut, finger tight. Support the coupling assembly at this end. Remove the two support bolts. Rotate the shims around until all the remaining holes line up. Install the remaining bolts that hold the coupling adapter to the rigid hub. Add the locknuts and slightly tighten.

C. Repeat “B” for the other end.

Rexnord Industries, LLC, 5555 S. Moorland Road, New Berlin, WI 53131
Telephone: 262-796-4060 Fax: 262-796-4064
e-mail: info@rexnord.com web: www.rexnord.com

6. **Disc Pack Replacement —** If it becomes necessary to replace the disc pack, it can be done as follows:
   A. Remove the total center member assembly, including the adapters, by unbolting at the existing rigid hubs. Take the assembly to your repair shop.
   B. It may be easier to have the coupling in a vertical position. At one end of the coupling, remove all the locknuts. Back out and remove all but one bolt. It may be necessary to tap the ends of the bolt with a soft hammer to start them out. Remove the adapter. Put one of the coupling bolts through the disc pack. Put the locknut on. This will keep the discs together and maintain the disc orientation for later reinstallation. Remove the last bolt and pack.
   C. Now install the new, if required, disc pack to the adapter. Put the bolts through the bolt holes in the adapter flange and add the thin washers. **The radius side of the washer should always be against the disc pack**. Put the disc pack onto the bolts. Add the washers and locknuts. Slightly tighten the locknuts. Do not fully tighten any locknuts at this time.

      NOTE: All bolt threads should be lubricated. A clean motor oil is recommended.

      Lay the center member down. Put the remaining bolts through the bolt holes in the center member flange and add the washers. **The radius side of the washer should always be against the disc pack**. Rotate the adapter or center member so that the adapter bolt holes line up with the center member flange clearance holes. Slide the disc pack, which is attached to the adapter, over the four bolts. Add the washer and locknut. Slightly tighten the locknuts. Do not fully tighten any locknuts at this time.
   D. Repeat B and C above for the other end.
   E. Lay the coupling down in the horizontal position. The disc packs should look flat and parallel with the mating flanges.
   F. Fully tighten the locknuts. See Table 1 for torque values.
   G. Return the assembly back to the unit. Install per Section 5.
   H. It is suggested that the alignment be rechecked and corrected, if necessary. It is recommended that all locknuts be retightened after several hours of initial operation.
   I. For further help with the installation or alignment, consult Rexnord.
7. **For Replacement Parts —** See Table 2.

TABLE 1 — Locknut Tightening Torques, Dimension "N" Limits, and Suggested Maximum Alignment Values

COUPLING SIZE	"A" Diameter	Dimension "N"		Axial Capacity Inch	Thread Size	Torque Ft-Lb (In-Lb)	Alignment Total Indicator Reading	
		Min	Max				Angular	Parallel
262	6.69	.48	.49	± .043	3/8-24	34	.013	.002" per Inch of "X" Dimension
312	7.81	.51	.52	± .051	7/16-20	60	.015	
350	8.69	.55	.56	± .056	1/2-20	95	.017	
375	9.69	.60	.62	± .062	9/16-18	130	.019	
425	10.50	.63	.65	± .067	5/8-18	175	.021	
450	11.31	.79	.81	± .072	11/16-16	150*	.023	
500T	12.88	.79	.81	± .082	3/4-16	190*	.026	
550T	14.44	.92	.94	± .092	7/8-14	255*	.029	
600T	16.00	.99	1.02	± .102	1-14	335*	.032	
700T	18.25	1.22	1.25	± .115	1 1/8-12	425*	.036	
750T	19.81	1.29	1.32	± .125	1 1/4-12	560*	.040	
800T	21.50	1.33	1.36	± .136	1 3/8-12	740*	.045	
850T	23.00	1.42	1.45	± .144	1 1/2-12	950*	.046	

NOTE: 1. These torque values are approximate for steel bolts with lubricated threads.
2. **Bolts should be held from rotating while the locknuts are tightened to the values shown.**
* These locknuts are cadmium plated.

TABLE 2 — Part Numbers and Quantity Required

COUPLING SIZE	Disc Pack (Two Per Coupling)	Parts Kit *		Thin Washers		
	Stainless	Steel	Zinc Plate	Steel	Zinc Plate	Quantity
	Part No.	Part No.	Part No.	Part No.	Part No.	
262	210985	416321	216322	014762	511399	16
312	210957	516321	316322	017142	211674	16
350	010952	616321	416322	019099	111767	16
375	610943	001966	516322	019101	511677	16
425	010986	001967	616322	019102	003752	16
450	410987	001968	001969	711655	911655	16
500T	620735	. . .	. . .	711460	811460	32
550T	310962	. . .	. . .	311750	511750	32
600T	910959	. . .	. . .	612127	712127	32
700T	420803	. . .	. . .	511413	611413	32
750T	921021	. . .	. . .	111803	211803	32
800T	220851	. . .	. . .	911800	011800	32
850T	020793	. . .	. . .	611402	013648	32

✱ Parts Kit consists of bolts, thin washers, bevel washers, and locknuts for one coupling.

COUPLING SIZE	Bevel Washers			Bolts			Locknuts		
	Steel	Zinc Plate	Qty	Steel	Zinc Plate	Qty	Steel	Zinc Plate	Qty
	Part No.	Part No.		Part No.	Part No.		Part No.	Part No.	
262	002167	002169	16	110717 †	110717	16	716506	916506	16
312	002165	002166	16	910966 †	910966	16	116507	316507	16
350	019098	210967	16	310968	510968	16	516508	716508	16
375	019100	010853	16	210924	410924	16	916509	116509	16
425	910928	110928	16	210929	410929	16	316510	516510	16
450	710916	910916	16	010917	210917	16	716511 ✱	916511	16
500				516095	616095	16	116512 ✱	316512	16
550				716096	816096	16	039125 ✱	616514	16
600				916097	016097	16	020253 ✱	. . .	16
700	Not Used on These Sizes			116098	216098	16	020254 ✱	. . .	16
750				316099	416099	16	020255 ✱	. . .	16
800				616200	716200	16	020256 ✱	. . .	16
850				816201	916201	16	035069 ✱	. . .	16

† Stocked only in zinc plate.

✱ These locknuts are cadmium plated.

Rexnord Industries, LLC, 5555 S. Moorland Road, New Berlin, WI 53131
Telephone: 262-796-4060 Fax: 262-796-4064
e-mail: info@rexnord.com web: www.rexnord.com