L, CJ, C & H Type Elastomeric Jaw Type

Installation Instructions for the L, AL, LS, CJ, CS, C and H type hubs.

Jaw hubs and elastomers come in many sizes and types. First, determine the size and type of the components being used. Remove all components from their boxes and loosely assemble the coupling on any convenient surface. Also, check maximum RPM values in Table 3 for L, AL, C & H hubs, Table 5 for LS & CS hubs and Table 6 for CJ hubs, against operating speed.

1. Inspect all coupling components and remove any protective coatings or lubricants from bores, mating surfaces, and fasteners. Remove any existing burrs, etc., from the shafts.

2. Slide one coupling hub onto each shaft, using keys where required. Keys should fit snugly.

3. Position the hubs on the shafts to approximately achieve the "G" dimension shown in Table 3 for the L, AL, C and H hubs, Table 6 for the CJ hubs or Table 5 for the LS and CS hubs. It is usually best to have an equal length of shaft extending into each hub. Tighten one hub in its final position using the set screw tightening torque given in Table 1 for L, AL, LS, C, CS and H hubs or Table 2 for the CJ hubs.

For the L, AL and CJ hubs, if possible, slide the other hub far enough back on the shaft to install the elastomer. If hub cannot be slid back, or if "blind" assembly is required, tighten second hub on shaft and bring equipment together approximately achieving the "G" dimension shown in Table 3 for the L and AL hubs or Table 6 for the CJ hubs.

For the LS and CS hubs position second hub onto the shaft approximately achieving the "G" dimension shown in Table 5, do not install spider and retaining ring at this time. Tighten set screws to the appropriate value shown in Table 1.

For the C and H hubs, position second hub on the shaft approximately achieving the "G" dimension shown in Table 3, do not install cushions and collar at this time. Tighten set screws to the appropriate value shown in Table 1.

4. Check Parallel alignment by placing a straight edge across the two coupling hubs, and measuring the maximum offset at various points around the periphery of the coupling without rotating the coupling. If the maximum offset exceeds the figure shown under "Parallel" in Table 3 for L, AL, C and H hubs, Table 5 for LS and CS hubs, or Table 6 for CJ hubs, realign the shafts. See Figures 1 - 4.

5. Check Angular alignment with a micrometer, vernier, or caliper. Measure "X" from one hub to the other at intervals around the coupling. See “X” in Figures 1 - 4. Determine the maximum and minimum dimensions without rotating the coupling, the difference of these two measurements must be less than the Angular value in Table 3 for L, AL, C and H hubs, Table 5 for LS and CS hubs, or Table 6 for CJ hubs. If a correction is necessary, be sure to recheck the Parallel alignment.

6. Install the spider and retaining ring for the LS and CS hubs at this time, making sure that the retaining ring locks into place on the spider.

7. Install the cushions and collar for the C and H hubs at this time.

RRS, RRC and LC Type Elastomeric Jaw Type

Determine the size and type of coupling being used. Also check maximum RPM values in Tables 3 and 4, against operating speed. Remove all components from their boxes and loosely assemble the coupling on any convenient surface.

Inspect all coupling components and remove any protective coatings or lubricants from bores, mating surfaces, and fasteners. Remove any existing burrs, etc., from the shafts.

Use appropriate section for the type of coupling assembly.

RRS Type - Styles 1, 2 and 3

1. Slide one hub onto each shaft, using keys where required. Keys should fit snugly. Position the hubs on the shafts to achieve spacer gap as shown in Figures 5 and 6. It is usually best to have an equal length of shaft extending into each hub. Line up the jaws of both hubs and tighten hubs onto the shafts using the set screw torque from Table 1.

2. Check Parallel alignment by placing a straight edge across the two hubs and measuring the maximum offset at various points around the periphery of the hubs without rotating the couplings. If the maximum offset exceeds the Parallel value in Table 4, realign the shafts.

3. Check Angular alignment with a micrometer, vernier or caliper. Measure the "X" dimension from one hub to the other at intervals around the hubs. See “X” in Figures 5 and 6. Determine the maximum and the minimum dimensions without rotating the coupling. The difference of these two measurements must be less than the Angular value in Table 4. If a correction is necessary, recheck the Parallel alignment.

4. Position the spacer between the two hubs with collars either loose on the hub or the spacer. Install the snap-wrap spiders and fasten collars with cap screws.

RRC Type - Style 4

1. Slide one adapter hub onto each shaft, using keys where required. Keys should fit snugly. Position the hubs on the shaft to achieve a spacer gap as in Figure 7. It is usually best to have an equal length of shaft extending into each hub. Tighten both hubs with the set screw torque from Table 1.

2. Install the spacer section between the two hubs. The spacer section includes two jaw rings, the cushions, and a collar. Fasten the spacer section to the adapter hub with the axial mounting screws and torque them to 68 - 76 ft.-lbs.

3. Slide collar off jaw ring and set on the adapter hub. Some cushions at the bottom side of the coupling can fall out and may be set aside while checking shaft alignment.

4. Check Parallel alignment by placing a straight edge across the two hubs and measuring the maximum offset at various points around the periphery of the hubs without rotating the coupling. If the maximum offset exceeds the Parallel value in Table 4, realign the shafts.

5. Check Angular alignment with a micrometer, vernier or caliper. Measure the "X" dimension from one hub to the other at intervals around the hubs. See “X” in Figure 7. Determine the maximum and the minimum dimensions without rotating the coupling. The differ ence of these two measurements must be less than the Angular value in Table 4. If a correction is necessary, recheck the Parallell alignment.

6. Reinstall the cushions and fasten the collar with cap screws.

LC Type

For LC Type - Styles 1 and 2

1. Slide one hub onto each shaft, using the keys where required. Keys should fit snugly. Position the hubs on the shafts to approximately achieve the "G" dimension shown in Table 3. It is usually best to have an equal length of shaft extending into each hub. Tighten both hubs in their final positions using the set screw torque from Table 1. Slide the collar to the edge of the hub and do not install the snap-wrap spider at this time.

2. Check Parallel alignment buy placing a straight edge across the two hubs and measuring the maximum offset at various points around the periphery of the hubs without rotating the coupling. If the maximum offset exceeds the appropriate Parallel value in Table 3, realign the shafts.

3. Check Angular alignment with a micrometer, vernier or caliper. Measure the "X" dimension from one hub to the other at intervals around the hubs. Refer to Figures 3 and 4, below for Styles 1 and 2, respective-ly. Determine the maximum and minimum dimen sions without rotating the coupling. The difference of these two measurements must be less than the Angular value in Table 3. If a correction is necessary, recheck the Parallel alignment.

4. Install the snap-wrap spider and fasten the collar with cap screws.

Note: Install coupling guards per OSHA or ASME 815.1 requirements.

Table 1 Tightening Torque for Set Screws For L, AL, C and H Hubs

	Inch Set Screws				Metric Set Screws			
	Set Screw		Tightening Torque		Set Screws		Tightening Torque	
Coupling Size	Size	Length Inch	in.-lbs	N-m	Size	Length mm	in.-lbs.	N-m
L035	6-32	3/32	3-4	0.34-0.45	M3	3	4.4	0.5
		1/8	7-8	0.8-0.9		4 & up	5.3	0.6
		3/16 & up	9-10	1.0-1.1				
L050	1/4-20	3/16	45-50	5-5.6	M4	3 & up	18	2
L070		1/4 & up	78-87	9-10	M6	4-6	44	5
L075						8 & up	58-62	6.6-7
L090								
L095	5/16-18	1/4	80-90	9-10	M8	5-8	84-88	9.5-10
L099		5/16 & up	150-165	17-19		10 & up	142-150	16-17
L100								
AL110								
AL150								
L110	3/8-16	1/4	135-150	15-17	M10	6-10	168-177	19-20
L150		5/16	225-250	25-28		12 & up	283-300	32-34
		3/8 & up	260-290	29-33				
L190	1/2-13	1/2 & up	540-600	61-68	M12	8-12	372-396	42-45
L225						14 & up	504-528	57-60
L276								
C226								
C276								
C280								
C285	5/8-11	5/8 & up	110-1200	124-136	M16	16	756-792	86-90
C295						18 & up	1260-1320	142-150
C2955								
H3067								
H3567								
H3667	3/4-10	3/4 & up	1800-2000	203-226	M20	20	98-103	133-140
H4067						25 & up	210-221	285-300
H4567								

Table 2 Tightening Torque for Set Screws For CJ Hubs

	Inch Set Screws				Metric Set Screws			
Hub Size and	Set Screw		Tightening Torque		Set Screw		Tightening Torque	
Material	Size	Length	in-lbs	Nm	Size	Length	in-lbs	Nm
14 Sint	8-32	3/16 & up	18-20	2-2.2	M4	3 & up	18	2
19/24 Sint	10-24	3/16 & up	32-36	3.6-4	M5	4-5	26	3
24/38 Sint						6 & up	35	4
28/38 Sint	5/16-18	1/4	80-90	9-10	M6	8 & up	58-62	6.6-7
38/45 Sint		5/16 & up	150-165	17-19	M8	10 & up	142-150	16-17
42/55 CI								
48/60 CI								
55/70 CI	3/8-16	1/4	133-150	15-17	M10	6-10	168-177	19-20
65/75 CI		5/16	225-250	25-28		12 & up	283-300	32-34
75/90 CI		3/8 & up	260-090	29-33				
90/100 CI								
100/110 CI	1/2-13	1/2 & up	540-600	61-68	M12	8-12	372-396	42-45
						14 & up	504-528	57-60
110/125 CI	5/8-11	5/8 & up	1100-1200	124-136	M16	16	756-792	86-90
125/145 CI						18 & up	1260-1320	142-150

Table 3 Maximum RPM and Allowable Misalignment for L, AL, LC, C & H Types

				Allowable Misalignment, inch (at 3600 RPM or lower)					
			G	w/NBR or Urethane		w/ Hytrel		w/ Bronze	
Size	Style	RPM[1]	Diam	Parallel	Angular[2]	Parallel	Angular[2]	Parallel	Angular[2]
L035	1	31000	0.281	0.015	0.010	---	--	--	--
L050	1	18000	0.469	0.015	0.018	0.015	0.012	0.010	0.012
L070	1	14000	0.500	0.015	0.022	0.015	0.012	0.010	0.012
L075	1	11000	0.500	0.015	0.030	0.015	0.015	0.010	0.015
L090	1	9000	0.500	0.015	0.035	0.015	0.018	0.010	0.018
L095	1	9000	0.500	0.015	0.035	0.015	0.018	0.010	0.018
L099	1	7000	0.750	0.015	0.040	0.015	0.022	0.010	0.022
L100	1	7000	0.750	0.015	0.040	0.015	0.022	0.010	0.022
L110	1	5000	0.875	0.015	0.055	0.015	0.030	0.010	0.030
L150	1	5000	1.000	0.015	0.065	0.015	0.033	0.010	0.033
L190	2	5000	1.000	0.015	0.075	0.015	0.040	0.010	0.040
L225	2	4200	1.000	0.015	0.085	0.015	0.044	0.010	0.044
L276	2	1800	1.625	0.015	0.100	--	--	--	--
C226	3	4800	1.500	0.015	0.090	0.015	0.046	0.010	0.046
C276	3	4200	1.625	0.015	0.100	0.015	0.054	0.010	0.054
C280	3	3500	1.625	0.015	0.130	0.015	0.065	0.010	0.065
C285	3	3200	1.625	0.015	0.145	0.015	0.075	0.010	0.075
C295	3	2300	1.875	0.015	0.160	0.015	0.080	0.010	0.080
C2955	3	2300	1.875	0.015	0.160	0.015	0.080	0.010	0.080
H3067	3	2300	2.125	0.015	0.180	0.015	0.090	0.010	0.090
H3567	3	2100	2.375	0.015	0.195	0.015	0.100	0.010	0.100
H3667	3	1900	2.625	0.015	0.210	0.015	0.105	0.010	0.105
H4067	3	1800	2.875	0.015	0.235	0.015	0.120	0.010	0.120
H4567	3	1500	3.125	0.015	0.265	0.015	0.135	0.010	0.135

Notes: 1. Maximum RPM for bronze spiders and cushions is 250 RPM regardless. Maximum speed for hytrel spiders size L070 - L100 is 3600 RPM.
2. Angular misalignment is the difference between X and X(max).

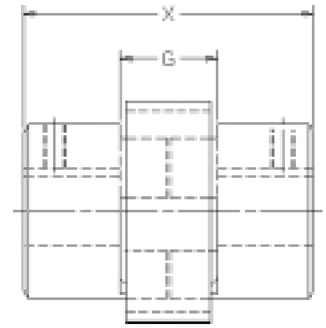
Table 4 Maximum RPM and Allowable Misalignment for RRS & RRC Types

Size	Style	Max. RPM	G Dim.	Allowable Misalignment, inch (at 3600 RPM or lower)				
				Combined		Parallel with zero angular		
				Parallel	Angular[1]	3.5" spcr.[2]	5" spcr.	7" spcr.
RRS090	1	3600	0.50	0.030	0.070	0.050	0.080	0.110
RRS095	1	3600	0.50	0.030	0.070	0.050	0.080	0.110
RRS099	1	3600	0.75	0.030	0.080	0.050	0.075	0.110
RRS100	1	3600	0.75	0.030	0.080	0.050	0.075	0.110
RRS110	1	3600	0.88	0.030	0.110	0.045	0.070	0.105
RRS150	2	3600	1.00	0.030	0.130	0.045	0.070	0.105
RRS190	3	3600	1.00	0.030	0.150	0.045	0.070	0.105
RRS225	3	3600	1.00	0.030	0.170	0.045	0.070	0.105
RRC226	4	3600	1.50	0.015	0.090	0.015	0.015	0.015
RRC276	4	3600	1.63	0.015	0.100	0.015	0.015	0.015
RRC280	4	3500	1.63	0.015	0.130	0.015	0.015	0.015
RRC285	4	3200	1.62	0.015	0.145	0.015	0.015	0.015
RRC295	4	2300	1.88	0.015	0.160	0.015	0.015	0.015
RRC2955	4	2300	1.88	0.015	0.160	0.015	0.015	0.015

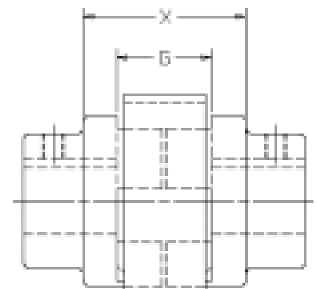
Note: 1. Angular misalignment is the difference between X and X(max).
2. RRC295 and RRC2955 are the standard with minimum 4 inch spacers.

Table 5 Maximum RPM and Allowable Misalignment for LS & CS Types

Size	Max. RPM	G Dim	Allowable Misalignment, inch		
			Parallel	Angular	Axial
LS090	9200	1.00	0.030	0.074	0.031
LS095	9200	1.00	0.030	0.074	0.031
LS099	7700	1.40	0.030	0.089	0.031
LS100	7700	1.40	0.030	0.089	0.031
LS110	5900	1.64	0.030	0.116	0.031
LS150	5200	1.94	0.030	0.131	0.047
LS190	4300	1.94	0.047	0.157	0.047
LS276	3100	3.19	0.047	0.216	0.063
CS280	2600	3.19	0.047	0.262	0.063
CS285	2300	3.19	0.047	0.297	0.063



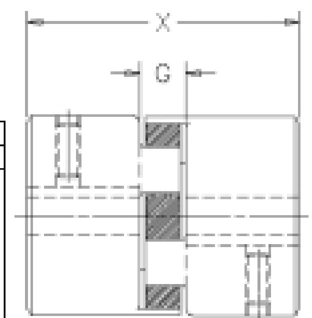
LS in Style 1
Figure 1



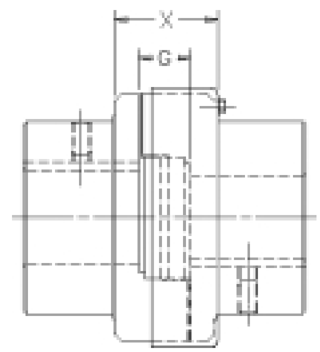
LS & CS in Style 2
Figure 2

Table 6 Maximum RPM and Allowable Misalignment for CJ Types

Size	Max RPM	G DIM	Allowable Misalignment, inch			Allowable Misalignment, mm		
			Parallel	Angular	Axial	Parallel	Angular	Axial
CJ 14	19000	0.51	0.008	0.031	0.023	0.2	0.8	0.6
CJ 19/24	14000	0.63	0.016	0.041	0.047	0.4	1.0	1.2
CJ 24/32	10600	0.71	0.029	0.057	0.059	0.7	1.4	1.5
CJ 28/38	8500	0.79	0.039	0.067	0.059	1.0	1.7	1.5
CJ 38/45	7100	0.94	0.039	0.083	0.071	1.0	2.1	1.8
CJ 42/55	6000	1.02	0.039	0.098	0.079	1.0	2.5	2.0
CJ 48/60	5600	1.10	0.051	0.108	0.082	1.3	2.7	2.1
CJ 55/70	4750	1.18	0.051	0.124	0.090	1.3	3.1	2.3
CJ 65/75	4250	1.38	0.051	0.139	0.102	1.3	3.5	2.6
CJ 75/90	3550	1.57	0.067	0.165	0.118	1.7	4.2	3.0
CJ 90/100	2800	1.77	0.067	0.206	0.134	1.7	5.2	3.4
CJ 100/110	2500	1.97	0.067	0.232	0.149	1.7	5.9	3.8
CJ 110/125	2240	2.17	0.086	0.263	0.165	2.2	6.7	4.2
CJ 125/145	2000	2.36	0.086	0.299	0.181	2.2	7.6	4.6



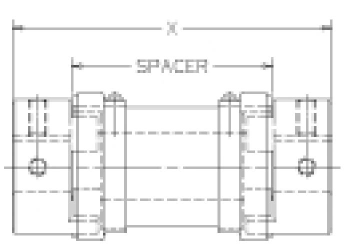
L, AL,CJ & LC in Style 1
Figure 3



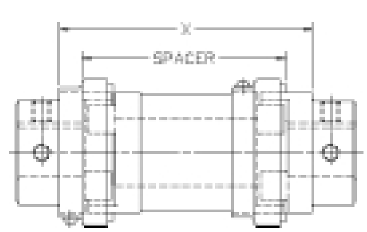
L,LC,C,CJ & H in Styles 2 & 3
Figure 4

Note: These values are valid for an operating temperature of -13° to +86°F (-25° to +30°C).
If the temperature is higher, multiply the permissible misalignment value by the temperature factor.

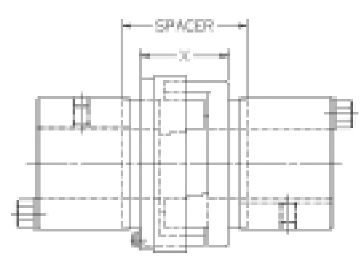
Temperature	+86° to +104°F(+30° to +40°C)	+104° to +140°F (+40° to +60°C)	+140° to +212°F (+60° to +100°C)
Factor	0.8	0.7	0.6



RRS-type in Styles 1 & 2
Figure 5



RRS-type in Style 3
Figure 6



RRC-type in Style 4
Figure 7