LENTON® LOCK

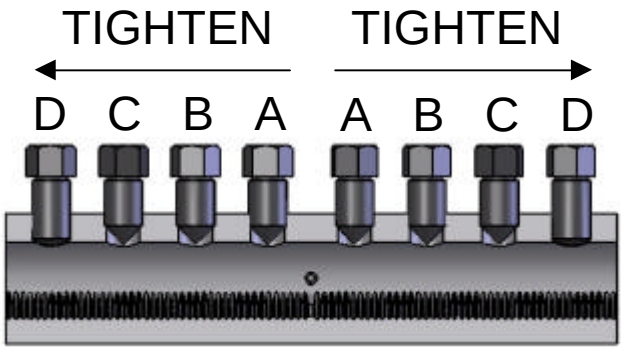
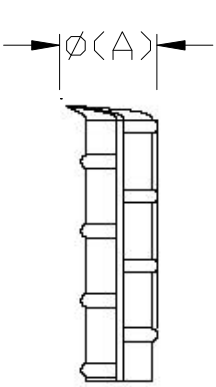


Figure 1 Assembly cross section



Rebar Size	Maximum Rebar Shear Lip Diameter (A)	
	in	mm
10 or 12 (#4)	0.57	14.5
14 or 16 (#5)	0.73	18.5
18 or 20 (#6)	0.93	23.5
22 (#7)	1.08	27.5
25 (#8)	1.16	29.4
28 or 30 (#9)	1.32	33.5
32 (#10)	1.48	37.5
34 or 36 (#11)	1.67	42.5
38 or 40	1.83	46.5
43 (#14)	2.07	52.5

Figure 2 Maximum shear lip

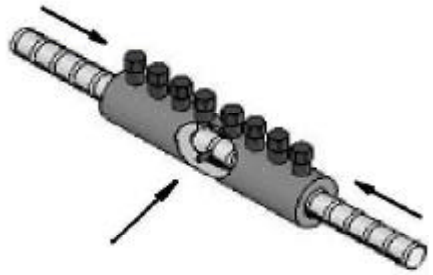


Figure 3 Solid contact between bar and stop pin as shown.

Step 1: Read all instructions and procedures before commencing splicing. Ensure the LENTON LOCK coupler is sized properly for the bars being spliced and per project plans. Product should arrive with bolts configured as shown in Figure 1 (round point bolts should be on the ends).

Step 2: Ensure the rebar is free of any excessive dirt, concrete slurry, rust, etc. which may affect product performance. Ensure maximum rebar lip does not exceed limits set in Figure 2. Excessive shear lip interferes with rebar installation.

Step 3: Insert rebar into LENTON LOCK coupler until contact is made with the center stop pin as shown in Figure 3. Rebar must be flush against center stop pin.

Step 4: Tighten bolts, beginning in the center of the coupler and working to the outside (A to D). A standard wrench, impact or nut runner may be utilized to tighten the bolts. See Alternate Step 4 on page 2 for sizes #10 (32mm) and larger that are required to meet DIBt , BS8110, BS5400 and BNFL requirements.

If bolt head does not shear, the installer should verify the appropriate torque was met (see Tables 1 and 2 on page 2). If a minimum cover must be maintained, the head can be cut off after the proper torque has been applied.

Repeat step 4 for other end of the sleeve.

Note: If during installation the bolt strips, as defined by a loss of resistance to the applied torque, stop the installation immediately. Remove the un-sheared damaged bolt. Contact ERICO for LENTON Technical Support

Alternate Step 4 for sizes #10 (32mm) and larger that are required to meet DIBt , BS8110, BS5400 and BNFL requirements.:

Pre-Torque the bolts beginning in the center of the coupler and working to the outside (A to D). See table 2.
Then go back to bolt A and finish tightening the bolts, once again beginning in the center of the coupler and working to the outside (A to D). A standard wrench, impact or nut runner may be utilized for the final tightening of the bolts.

If bolt head does not shear, the installer should verify the appropriate torque was met (see Table 2). If a minimum cover must be maintained, the head can be cut off after the proper torque has been applied.

Repeat Alternate Step 4 for other end of the sleeve.

Note: If during installation the bolt strips, as defined by a loss of resistance to the applied torque, stop the installation immediately. Remove the un-sheared damaged bolt. Contact ERICO for LENTON Technical Support

Table 1. Torque values for coupler sizes #4 (12mm) through #9 (30mm)

Pre-Torque is not required for these sizes

Rebar Designation				Coupler	Socket Size		Average Torque to Shear Bolts		Number of Bolts
In-lb	Metric	Canada	Soft Metric		in	mm	ft-lb	N-m	
-	10	-	10	LL12B1	1/2	13	150	205	6
#4	12	10 M	13	LL12B1	1/2	13	150	205	6
-	14	-	-	LL16B1	1/2	13	150	205	6
#5	16	15 M	16	LL16B1	1/2	13	150	205	6
-	18	-	-	LL20B1	1/2	13	150	205	8
#6	20	20 M	19	LL20B1	1/2	13	150	205	8
#7	22	-	22	LL22B1	5/8	16	250	340	8
#8	25	25 M	25	LL25B1	5/8	16	350	475	8
#9	28	30 M	29	LL28B1	5/8	16	350	475	10
-	30	-	-	LL28B1	5/8	16	350	475	10

Table 2. Torque values for coupler sizes #10 (32mm) and larger may require two-step torque sequence (see Step 4)

*Pre-Torque is only required to meet DIBt, BS8110, BS5400 and BNFL requirements. Pre-Torque the bolts to the specified torque before final tightening.

Rebar Designation				Coupler	Socket Size		Pre Torque (all bolts if required)		Average Torque to Shear Bolts		Number of Bolts
In-lb	Metric	Canada	Soft Metric		in	mm	ft-lb	N-m	ft-lb	N-m	
#10	32	-	32	LL32B1	13/16	21	400	545	500	680	8
-	34	-	-	LL36B1	13/16	21	400	545	550	750	10
#11	36	35 M	36	LL36B1	13/16	21	400	545	550	750	10
-	38	-	-	LL40B1	13/16	21	400	545	580	790	12
-	40	-	-	LL40B1	13/16	21	400	545	580	790	12
#14	43	-	-	LL43B1	13/16	21	400	545	650	885	12

Closure Pour Splices: When making splices between two potentially fixed members the center stop pin can be removed and the coupler placed completely on one rebar. The second rebar can then be positioned in line with the first rebar and the splice re-centered. When using the splice in this manner it is recommended to mark each rebar at one-half the length of the coupler to ensure proper coupler/rebar engagement. Refer to instruction sheet PDF113 for details. Additional copies of instructions and application information are available at www.erico.com

