

# CSBBRS1EG

Branch Line Restraint, Structural Attachment Fitting for steel 12 gauge (0.1094"[2.78mm] to 0.50"[12.7mm] thick

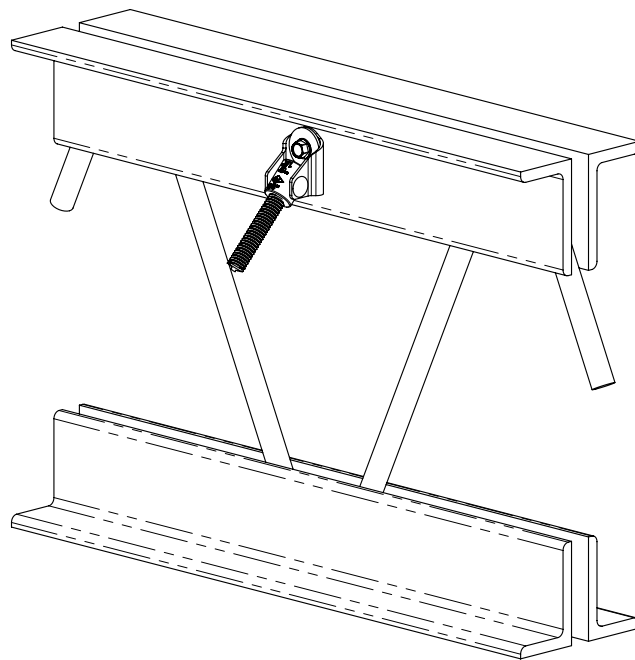
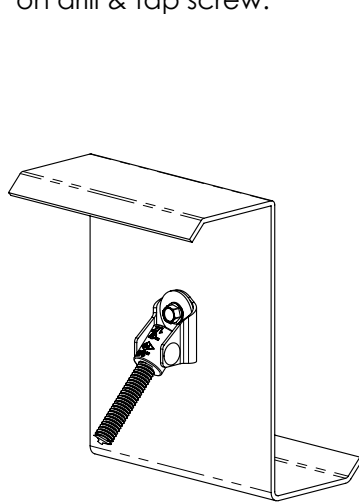
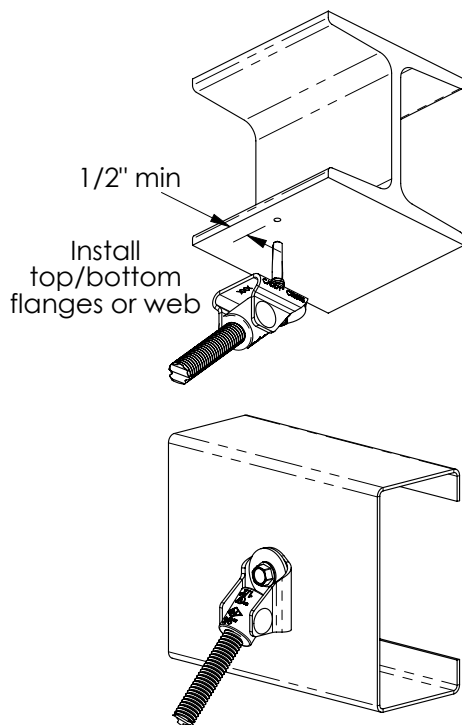
NA Part Number	EU Article Number	Rod Size	UL® Load Rating	FM® Load Rating		
				45° - 59°	60° - 74°	75° - 90°
CSBBRS1EG	---	3/8"	425 lbs (1891N)	310 lbs (1380N)	210 lbs (935N)	210 lbs (935N)
CSBBRS1MEG	402239	M10				
CSBBRS1EG	---	1/2"		290 lbs (1290N)	200 lbs (890N)	220 lbs (980N)
CSBBRS1MEG	402239	M12				

Rod Size	Root Dia.	Least Radius of Gyration r	Maximum Unbraced Length (L)			
			L/r = 100	L/r = 200	L/r = 300	L/r = 400*
3/8"	0.300"	0.075"	7"	14"	22"	30"
M10	7.94mm	1.99mm	198mm	397mm	595mm	794mm
1/2"	0.404"	0.101"	10"	20"	30"	40"
M12	9.60mm	2.40mm	240mm	480mm	720mm	960mm

Reference: NFPA®13, (2007)

\*Reference: NFPA13, (2010)

1. Orient part in the direction needed for installation.
2. Install with a standard screw gun with a depth sensitive nosepiece or clutch for correct seating of fastener. Use a size 5/16" [8mm] hex head on drill & tap screw.



Branch Line Restraints are intended to be installed in accordance with NFPA®-13 and manufacturer's installation instructions.

#### WARNING:

1. ERICO products shall be installed and used only as indicated in ERICO product instruction sheets and training materials. Instruction sheets are available at [www.erico.com](http://www.erico.com) and from your ERICO customer service representative.
2. ERICO products must never be used for a purpose other than the purpose for which they were designed or in a manner that exceeds specified load ratings.
3. All instructions must be completely followed to ensure proper and safe installation and performance.
4. Improper installation, misuse, misapplication or other failure to completely follow ERICO's instructions and warnings may cause product malfunction, property damage, serious bodily injury and death.
5. Products that are manufactured using spring steel components shall be used only in a non-corrosive indoor environment.
6. All pipe supports, hangers, intermediate components and structural attachments must ONLY be used as described herein and are NEVER to be used for any other purpose.

NOTE: All load ratings are for static conditions and do not account for dynamic loading such as wind, water or seismic loads, unless otherwise noted.

The customer is responsible for:

- a. Conformance to all governing codes.
- b. The integrity of structures to which the products are attached, including their capability of safely accepting the loads imposed, as evaluated by a qualified engineer.
- c. Using appropriate industry standard hardware as noted above.

#### SAFETY INSTRUCTIONS:

All governing codes and regulations and those required by the job site must be observed. Always use appropriate safety equipment such as eye protection, hard hat, and gloves as appropriate to the application.

ELCO is a registered trademark of Asia Fastening (US), Inc.  
FM is a registered certification of FM Approvals LLC, LTD.  
NFPA is a registered trademark of National Fire Protection Association, Inc.  
UL is a registered trademark of UL LLC.

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TECHNICAL SUPPORT:  
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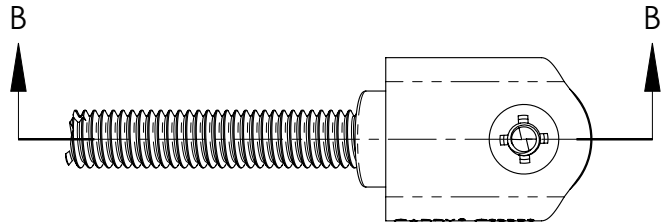
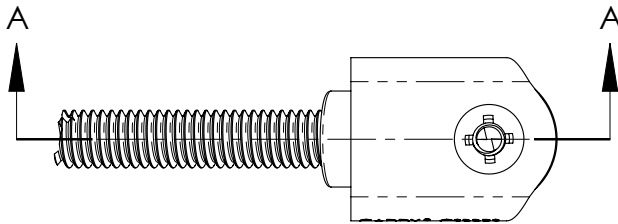
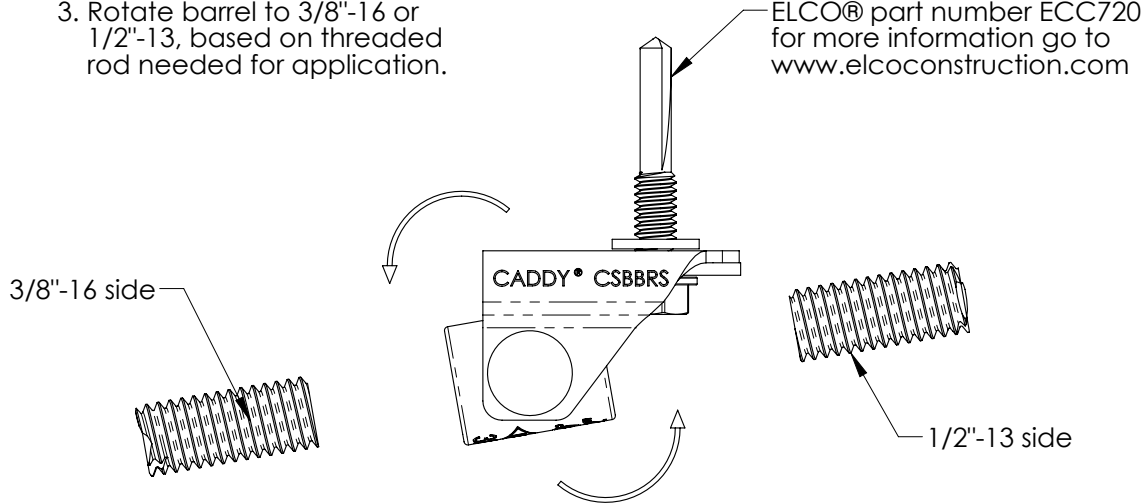


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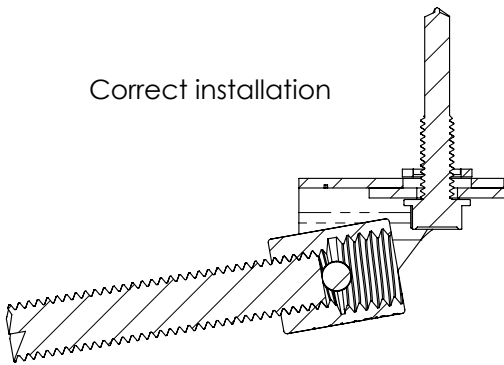
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3. Rotate barrel to 3/8"-16 or 1/2"-13, based on threaded rod needed for application.

ELCO® part number ECC720 for more information go to [www.elcoconstruction.com](http://www.elcoconstruction.com)

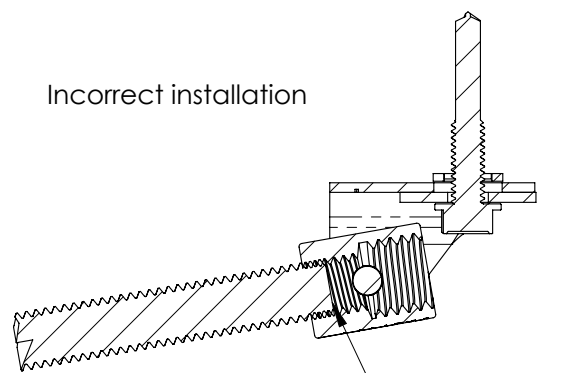


Correct installation



SECTION A-A

Incorrect installation



SECTION B-B

Rod not fully threaded into barrel nut.

4. Fully thread rod into barrel nut.



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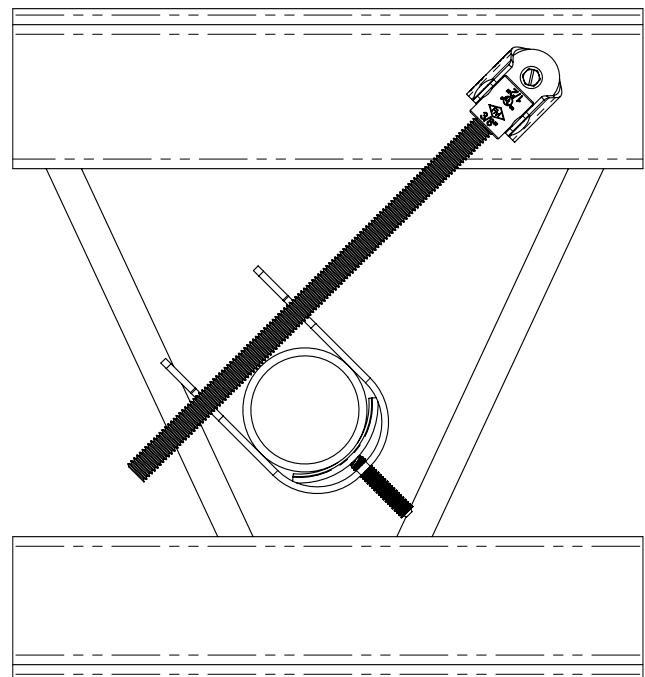
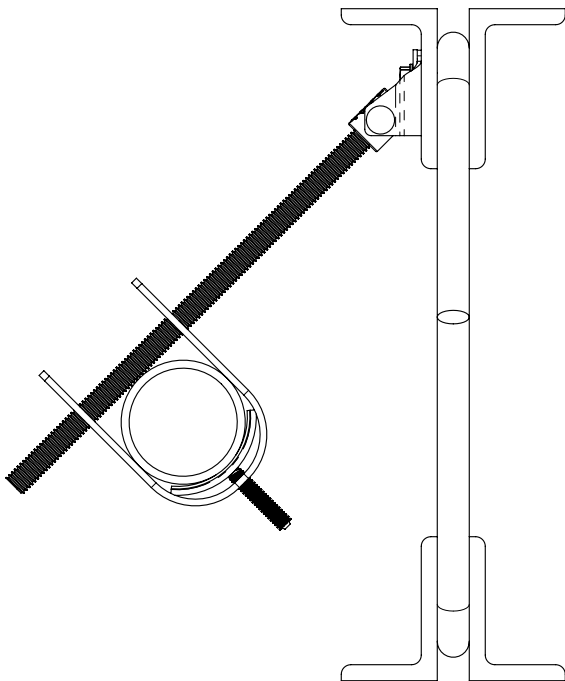
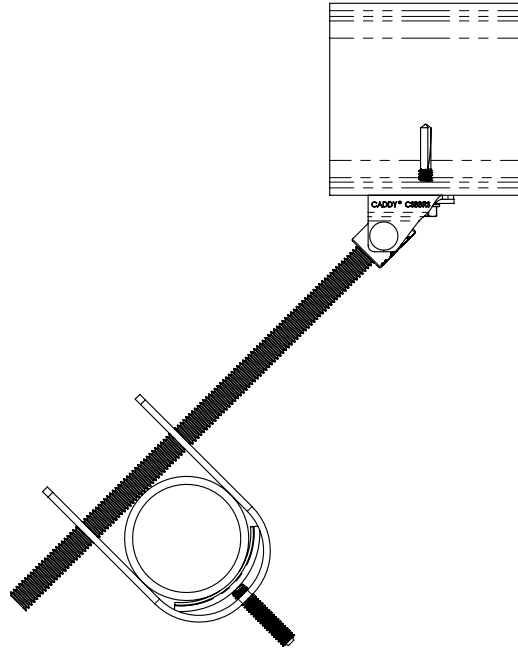
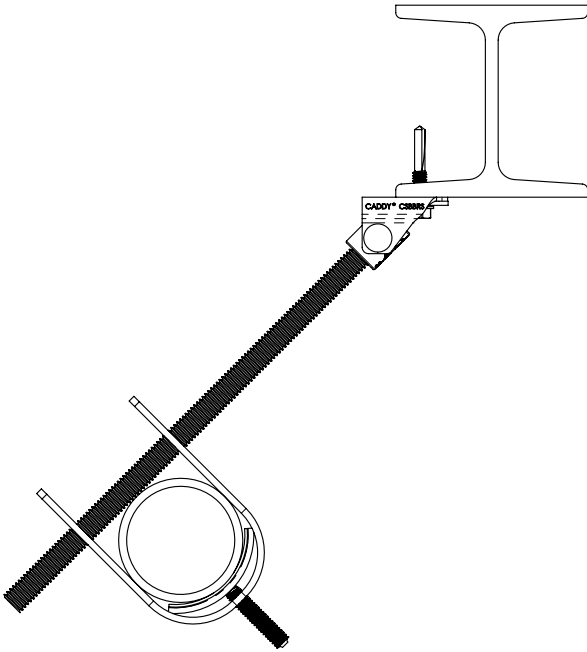
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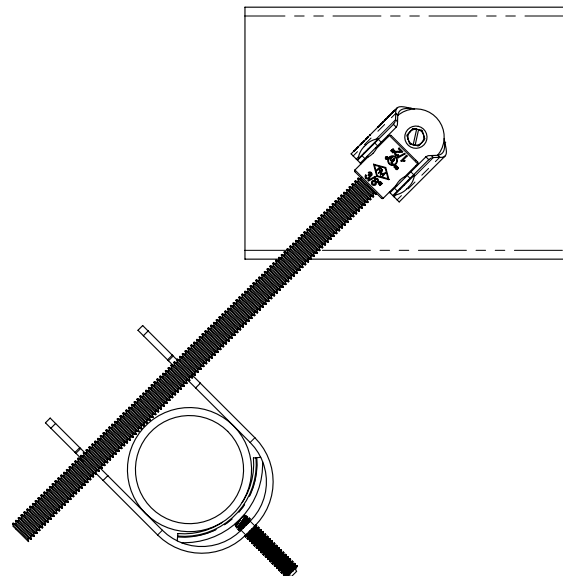
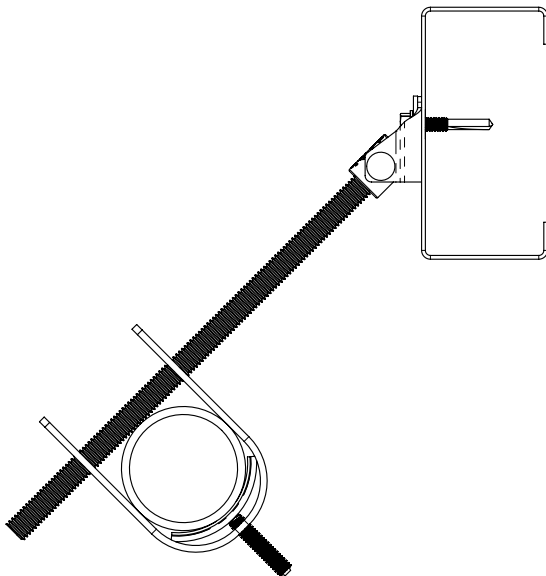
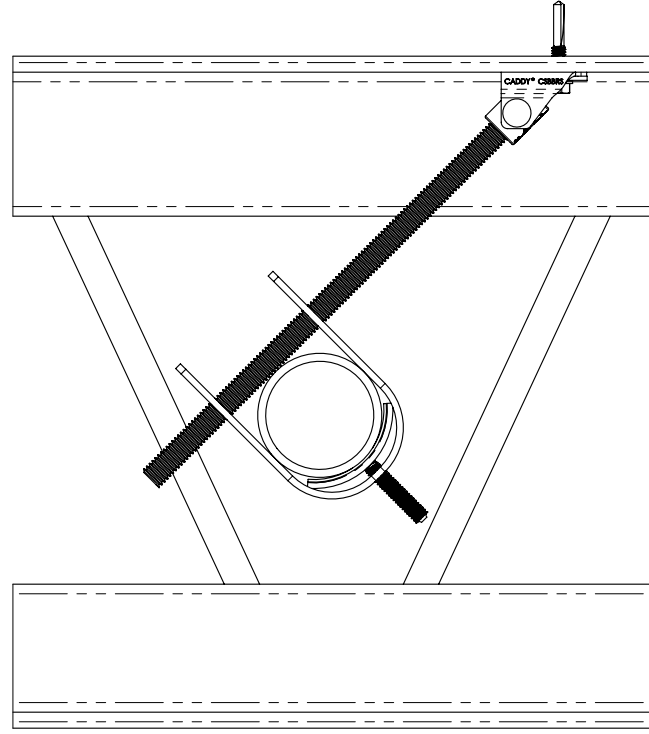
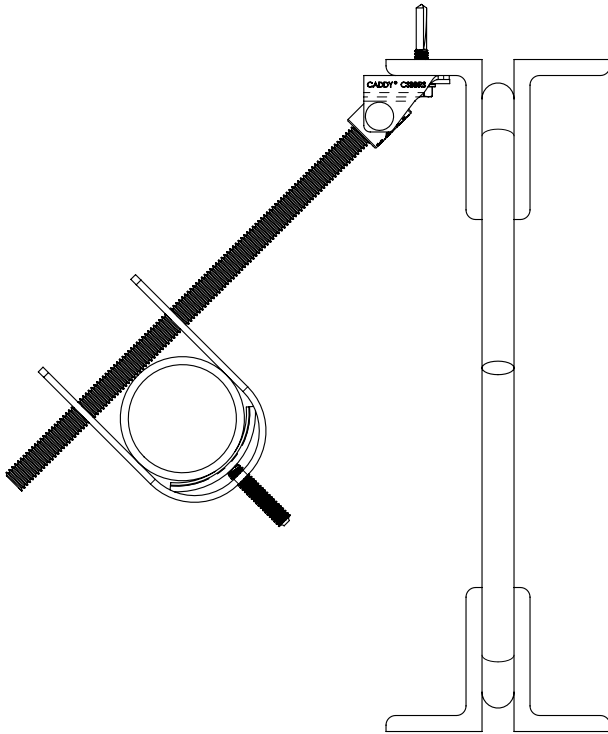
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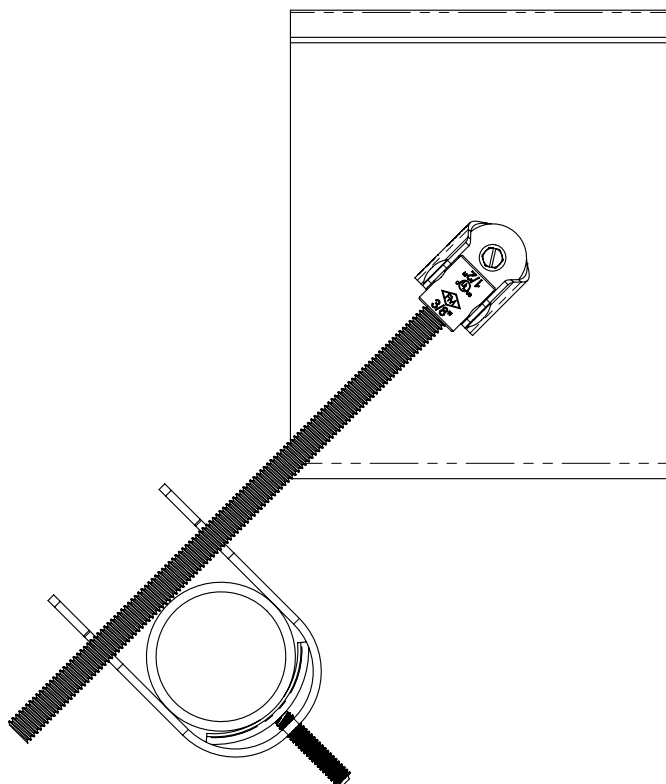
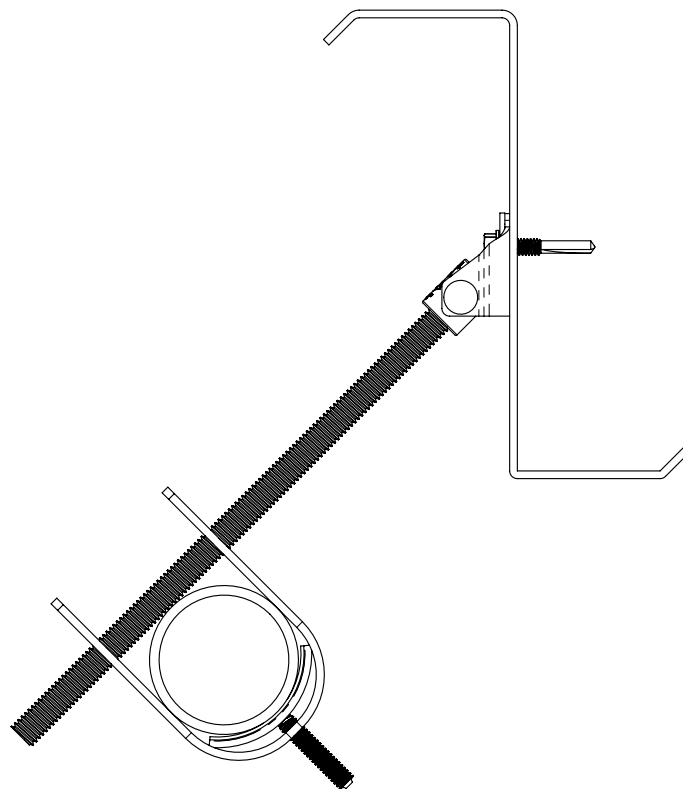
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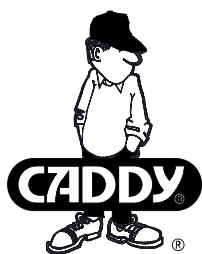
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