

**ANVIL EPS**  
ENGINEERED PIPE SUPPORTS

No. PE-217-313  
Page 1 of 5  
Rev. 2  
Date 3-1-10

PREP.BY

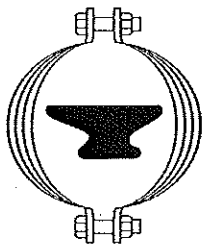
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TITLE:

**INSTALLATION INSTRUCTIONS FOR  
ANVIL FIG. 313N TAPERED STUD**

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**INSTALLATION INSTRUCTIONS FOR  
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**1.0 SCOPE**

The following details the procedure to be followed for the proper installation and removal of the Fig. 313N tapered stud.

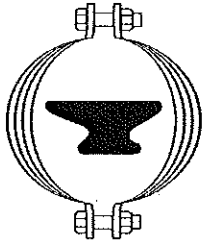
**2.0 INSTALLATION INSTRUCTIONS**

- 2.1 Measure the pipe clamp dimension to determine if the clamp installed is within the dimensions in Fig. 3. The Smax and Bmax dimensions have a tolerance of +0.0625.
- 2.2 Deviations should be directed to Anvil for resolution.
- 2.3 Remove slotted hex nut (two hex nuts on 3/8" stud) and special washer.
- 2.4 Loosen and remove sleeve. Remove jam nut, hex nut, and special spacer from the tapered load stud assembly.
- 2.5 Align spherical bearing with pipe clamp holes.
- 2.6 Install sleeve through clamp halves, clamp spacer washers, and spherical bearing with the thicker end of the sleeve flush with the outer surface of the clamp. See Fig. 2.

**NOTE:**

IT MAY BE NECESSARY TO LOOSEN CLAMP BOLTS TO AID IN ALIGNING THE HOLES IN THE CLAMP.

- 2.7 Install stud.
- 2.8 Install special washer flushed to the clamp and install slotted hex nut hand tight to the special washer.
- 2.9 Install special spacer and hex nut hand tight only at this time.
- 2.10 Install jam nut hand tight to the hex nut. Verify that the stud extends or is flushed with the jam nut. To obtain this the special spacer may need to be turned down to allow full thread engagement of the hex and jam nut.



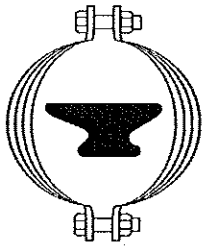
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**INSTALLATION INSTRUCTIONS FOR  
ANVIL FIG. 313N TAPERED STUD**

- 2.11 Back off on the hex nut and jam nut to allow tightening of the slotted hex nut. When tightening the slotted hex nut the load stud will be drawn into the outer sleeve assembly. The sleeve assembly will expand until it comes in contact with the spherical bearing. This contact with the sleeve will not allow the spherical bearing to slide along the sleeve. Ensure the spherical bearing is centered approximately between the S-dimension shown in Fig. 3.
- 2.12 Install cotter pin, by slightly turning the slotted hex nut in the loose direction until the next available slot lines up to the cotter pin hole. For 3/8" studs attached second hex nut and tighten against the first hex nut as a locking mechanism.
- 2.13 Tighten hex nut to obtain the proper S-dimension as shown in Fig. 3.
- 2.14 Tighten jam nut against hex nut as a locking device.
- 2.15 If required, re-tighten the remaining clamp bolts.

**3.0 REMOVAL INSTRUCTIONS**

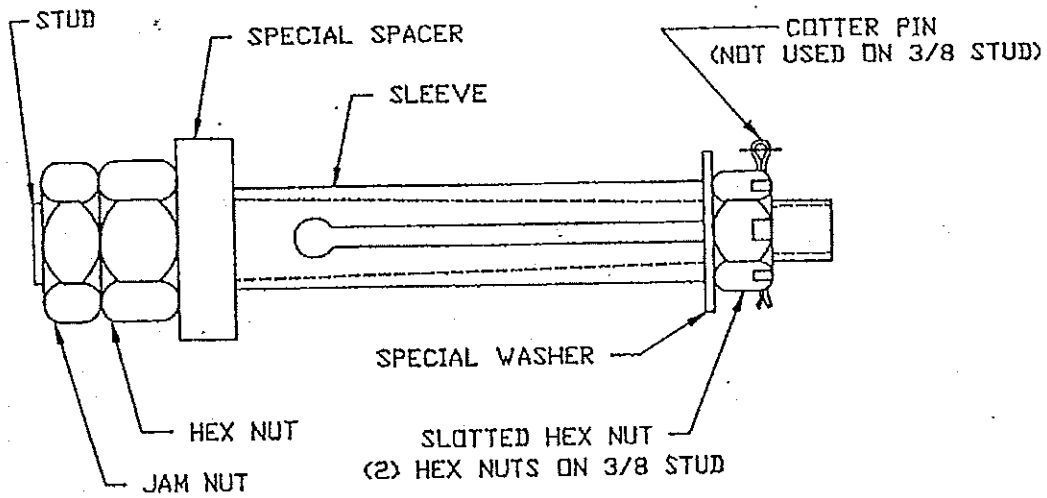
- 3.1 Temporarily support the weight of the strut or snubber to be removed.
- 3.2 Remove cotter pin from the slotted hex nut. Loosen slotted hex nut until it is flushed with the end of the tapered stud.
- 3.3 Slightly tap the end of the slotted nut. This will release the tapered stud from the sleeve.
- 3.4 Remove slotted nut and special washer.
- 3.5 The tapered load stud, jam nut, hex nut, and special spacer can now be removed as an assembly.
- 3.6 The sleeve is free to be removed from the bearing. When removing the sleeve, the clamp spacers must be kept for future use.



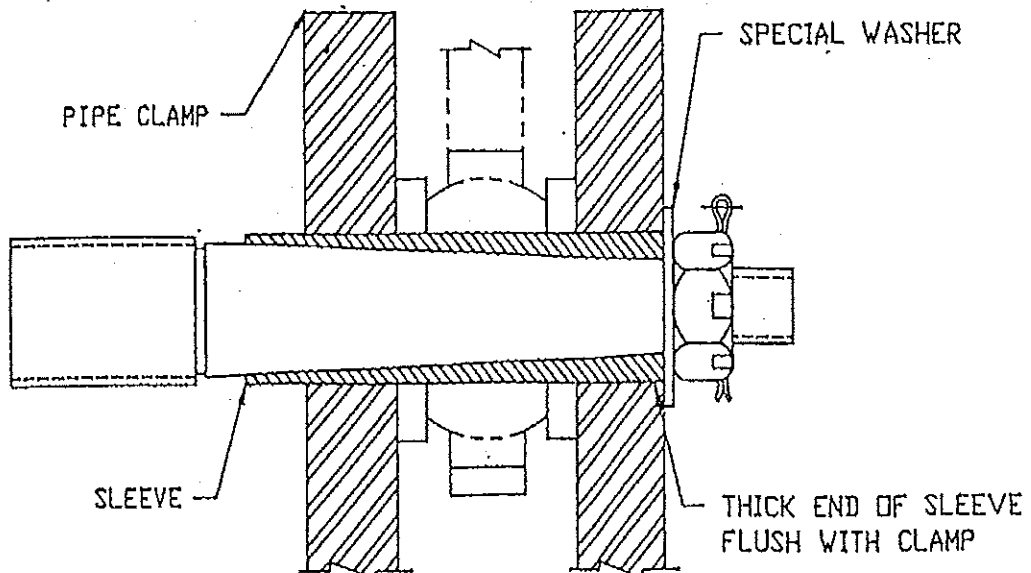
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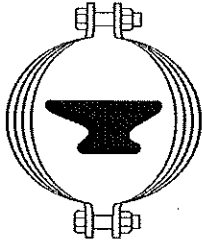
**INSTALLATION INSTRUCTIONS FOR  
ANVIL FIG. 313N TAPERED STUD**

**Figure 1**



**Figure 2**

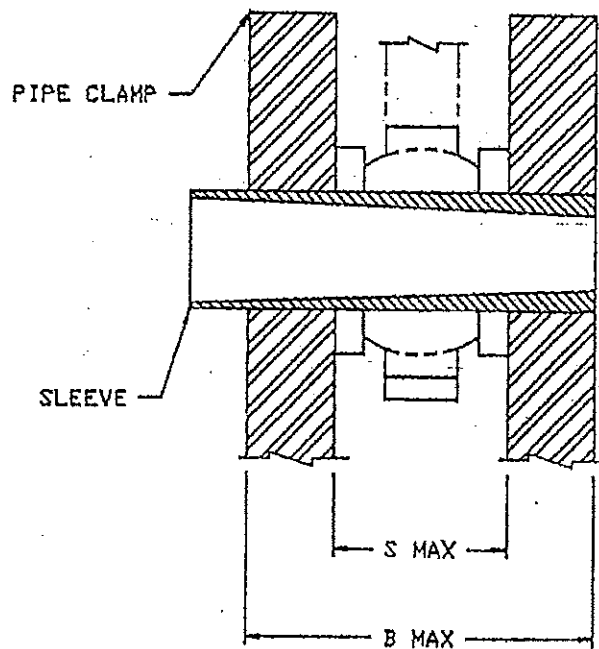




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Figure 3



NOMINAL PIN SIZE	S MAX	B MAX	FOR USE W/ FIG. NO.			
			200N/201N	211N/640N	222N	306N/307N
3/8	.62	1.25	~	A	A	1/4&1/2
1/2	1.00	2.50	~	~	~	1
3/4	1.38	2.88	1 1/2	B&C	B&C	3
1	1.38	3.38	2 1/2	1&2	1	10
1 1/4	1.69	4.19	3 1/4	3&4	~	~
1 1/2	2.00	5.00	4	5	~	35
1 3/4	2.38	5.38	5	6	~	~
2	2.75	6.25	6	7	~	~
2 1/2	3.38	7.75	8	~	~	100