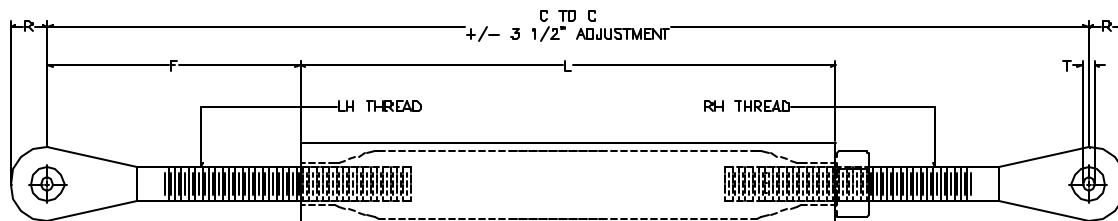


# AAA TECHNOLOGY & SPECIALTIES CO., INC.

**FIG. 330  
REPLACEMENT THREADED SWAY STRUT**



**APPLICATION:** Replacement threaded Sway Strut Assemblies are used in power plants and process plants of all types. When design constraints enable the replacement of snubbers with rigid sway struts, these replacement units offer a viable alternative which restricts movement of piping in one direction while allowing for movement lateral to the axis of the sway strut. A Replacement Threaded Sway Strut allows for adjustment of the length in the field at the time of installation.

**APPLICABLE CODES AND STANDARDS:** Replacement Threaded Sway Struts are manufactured in accordance with the requirements of the U.S. Government and the power and process industries. These include the Federal Specification WW-H-171E, Manufacturers Standardization Society MSS-SP-58, ASME B31.1, B31.3 and B31.5 piping codes.

**FEATURES:**

- Handles both compressive and tensile loads
- Requires minimal maintenance
- Provides up to 3 1/2" field adjustment (plus or minus)
- Provides for + or - 5 ° combined angular rotation and misalignment
- Field adjustment accomplished by rotating the extension piece in one direction to shorten the assembly and in the other direction to lengthen the assembly. Once the desired length is achieved, the lock nut is to be locked to eliminate further length changes resulting from vibration, etc.

**SELECTING THE CORRECT SIZE REPLACEMENT SWAY STRUT**

1. Determine the pin diameter of the unit to be replaced.
2. Find the same pin diameter on the Replacement Sway Strut data sheet and note the replacement sway strut size.
3. For this replacement sway strut size, check the tension load rating. The rated load must be greater that the load carried by the unit being replaced.
4. Then check the compression load rating. Use the Compression Load Table for Fig. 305. The rated load must be greater that the load carried by the unit being replaced.
5. Determine the required C - C dimension and verify that the C - C length is equal to or greater than the minimum length and equal to or less than the maximum length shown in the Replacement Sway Strut data sheet.

**CONSTRUCTION:** A-36 Carbon Steel, Special materials available on request.

**FINISHES AVAILABLE:** Carbon Steel - Black, Painted or Hot Dip Galvanized. Stainless Steel - Plain (Special)

**ORDERING:** Specify figure number (Fig. 330), name (Replacement Threaded Sway Strut), sway strut size (0 thru 11), "C-C" dimension, design tension load, design compression load, material, if other than carbon steel, and finish.

**EXAMPLE:** Fig. 330 Replacement Threaded Sway Strut, Size 2, C-C = 5'-0", Tension Load = 9,000 lbs, Compression Load = 7,500 lbs, HDG.

**INSTALLATION:**

1. Insert rod ends into the extension piece and turn the rod ends equally until the C - C dimension equals the distance between the pin connections in the rear bracket(s) and/or the strut clamp,
2. Attach one rod end to the rear bracket and the other to the strut clamp or rear bracket, as applicable,
3. Align the strut so that the components between the pinned connections form a straight line and are tight. To achieve the tightened condition, rotate the extension piece until the strut components are snug.
4. Tighten the lock nut.

DIMENSIONAL DATA - FIG. 330 REPLACEMENT THREADED SWAY STRUT									
SWAY STRUT SIZE	MAXIMUM RATED TENSION LOAD (LBS)	ROD END			EXTENSION PIECE		NOMINAL PIN/STUD DIA. (IN)	C - C	
		ROD END DIA. (IN)	PADDLE RADIUS MAX. (IN)	F (IN)	PIPE DIA. (IN)	LENGTH W MINIMUM (IN)		MIN. (IN)	MAX. (IN)
0	738	1/2	3/4	3 3/4	1/2 STD	8 3/4	3/8	16 1/4	3'-0"
1/2	1434	3/4	1	4 1/8	3/4 STD	9 1/4	1/2	17 1/2	4'-6"
1	5950	1	1 3/8	4 3/4	1 1/4 XS	9 1/4	5/8	18 3/4	7'-0"
2	9750	1 1/4	1 1/2	5 7/16	1 1/2 XS	9 5/8	3/4	20 1/2	9'-0"
3	11900	1 1/2	1 1/2	6 1/8	2 XS	10 1/2	1	22 3/4	11'-0"
4	19350	1 3/4	2 1/4	8 3/16	2 1/2 XS	11 1/8	1 1/4	27 1/2	14'-0"
5	22800	2	2 1/4	8 1/2	2 1/2 XS	11 1/2	1 1/4	28 1/2	14'-0"
6	27600	2 1/4	2 1/2	9 1/8	3 XS	13	1 1/2	31 1/4	17'-0"
7	40850	2 1/2	3	10 3/4	3 1/2 XS	13 1/2	1 3/4	35	20'-0"
8	46200	3	3	11	4 XS	14 1/2	1 3/4	36 1/2	23'-0"
9	64400	3 1/2	3 1/4	11 7/8	5 XS	15 3/4	2	39 1/2	25'-0"
10	95950	4 3/4	4 3/4	14 1/8	6 XS	18 1/2	2 3/4	46 3/4	25'-0"
11	145400	5 3/4	6 5/16	19 1/4	8 XS	20 1/2	3 3/4	59	25'-0"