



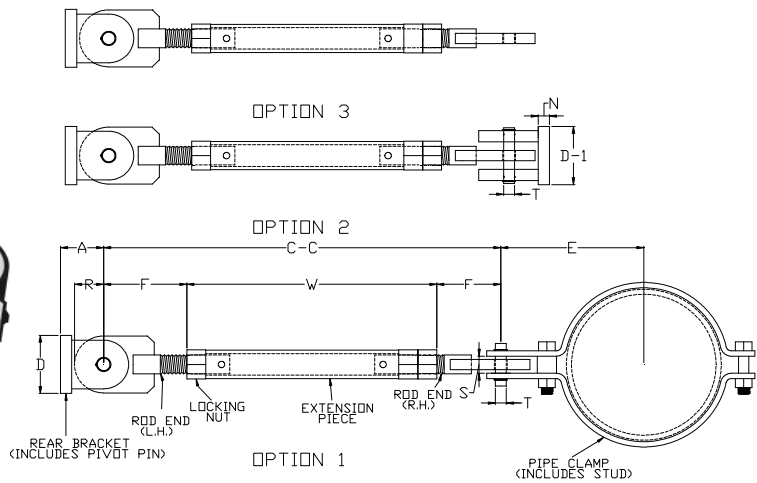
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# PART# 800/801

# Sway Strut Assembly



**FINISH:** Black, Galvanized, or coated to customer specifications.

**APPLICATIONS:** Used to restrain movement of piping while allowing for movement in the other two directions.

**FEATURES:**

- Effective under either tensile or compressive force.
- Self-aligning bushings permits a plus or minus 5-degree misalignment or angular motion. Bushings are coated with dry lubricant.

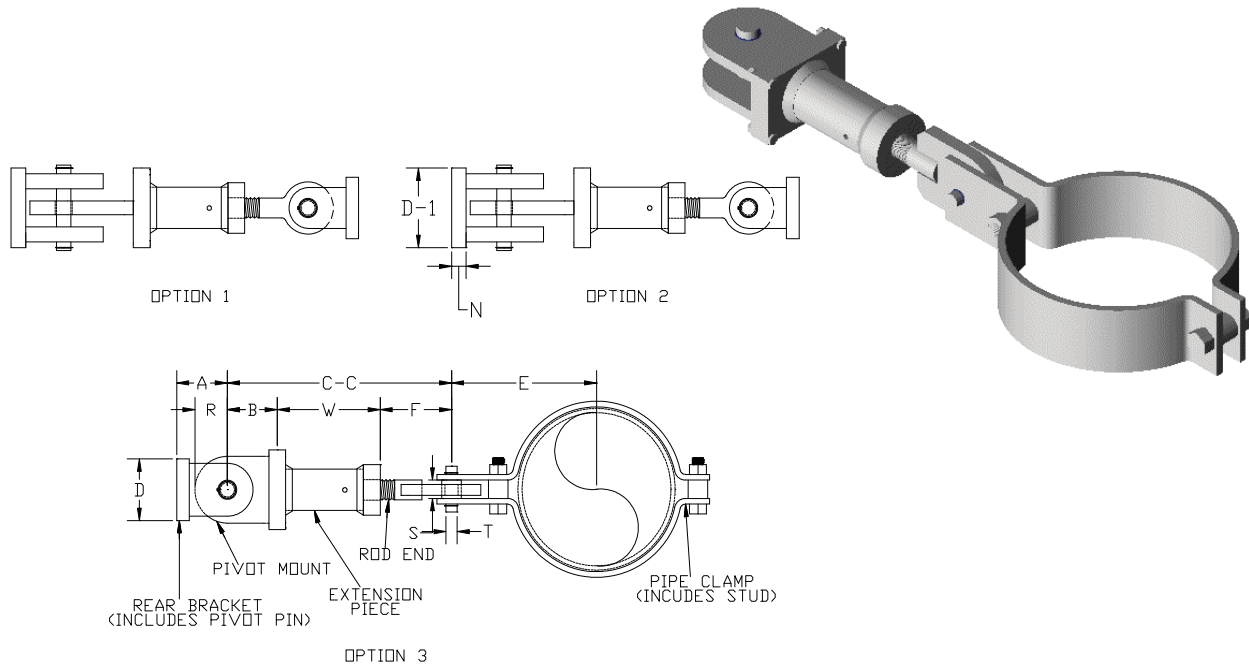
**ORDERING:** Specify assembly size, part number, name, option number, normal pipe or special O.D. and "W" dimensions. Alloy pipe clamps are available as a special order. The rear bracket assembly may be ordered separately. For restraint parallel to the pipe axis using two sway strut assemblies, a riser clamp is available. If a riser clamp is required, contact your RILCO "Support Team" member for assistance and information about this clamp.

**Load (lbs) • Weight (lbs) • Dimensions (inches)**

Size	Part# 800/ Part# 801											Part# 800				Part# 801				
	Load	Ext. Piece	Rod End	A	F	D	D1	N	R	S	T	C-C		W		F	Weld Z	C-C		F
												Max	Min	Max	Min			Max	Min	
A	650	1	3/4	1	3 <sup>7</sup> / <sub>16</sub>	2	1 <sup>1</sup> / <sub>4</sub>	1 <sup>1</sup> / <sub>4</sub>	5 <sup>8</sup> / <sub>8</sub>	5 <sup>8</sup> / <sub>8</sub>	0.374 0.372	60	15 <sup>1</sup> / <sub>2</sub>	53 <sup>3</sup> / <sub>8</sub>	9 <sup>5</sup> / <sub>8</sub>	3 <sup>7</sup> / <sub>16</sub>	3 <sup>16</sup> / <sub>16</sub>	60	12 <sup>1</sup> / <sub>8</sub>	2 <sup>11</sup> / <sub>16</sub>
B	1500	1 <sup>1</sup> / <sub>2</sub>	1	2 <sup>1</sup> / <sub>2</sub>	4 <sup>7</sup> / <sub>16</sub>		2 <sup>3</sup> / <sub>8</sub>	5 <sup>8</sup> / <sub>8</sub>	1 <sup>3</sup> / <sub>8</sub>	1 <sup>3</sup> / <sub>8</sub>	0.749 0.747	108	19	99 <sup>1</sup> / <sub>8</sub>	10 <sup>1</sup> / <sub>8</sub>	4 <sup>7</sup> / <sub>16</sub>		14 <sup>7</sup> / <sub>16</sub>	3 <sup>11</sup> / <sub>16</sub>	
C	4500	2	1		4 <sup>13</sup> / <sub>16</sub>	2 <sup>7</sup> / <sub>8</sub>	3 <sup>3</sup> / <sub>4</sub>	1 <sup>3</sup> / <sub>8</sub>			1 <sup>3</sup> / <sub>8</sub>			0.749 0.747	110 <sup>3</sup> / <sub>8</sub>		111 <sup>1</sup> / <sub>8</sub>			10 <sup>1</sup> / <sub>8</sub>
1	8000		1 <sup>1</sup> / <sub>4</sub>	5	3				3 <sup>3</sup> / <sub>16</sub>	3 <sup>3</sup> / <sub>4</sub>		1 <sup>1</sup> / <sub>2</sub>	1 <sup>11</sup> / <sub>16</sub>	0.999 0.997		21		110	11 <sup>3</sup> / <sub>8</sub>	
2	11630	2 <sup>1</sup> / <sub>2</sub>	1 <sup>1</sup> / <sub>2</sub>	5 <sup>3</sup> / <sub>4</sub>		3	3 <sup>3</sup> / <sub>16</sub>	3 <sup>3</sup> / <sub>4</sub>			1 <sup>1</sup> / <sub>2</sub>			1 <sup>11</sup> / <sub>16</sub>	0.999 0.997		21 <sup>3</sup> / <sub>8</sub>			110
3	15700	3	1 <sup>3</sup> / <sub>4</sub>	6	3				3 <sup>3</sup> / <sub>16</sub>	3 <sup>3</sup> / <sub>4</sub>		1 <sup>1</sup> / <sub>2</sub>	1 <sup>11</sup> / <sub>16</sub>		1.249 1.247	22 <sup>7</sup> / <sub>8</sub>		108 <sup>1</sup> / <sub>2</sub>	5 <sup>3</sup> / <sub>4</sub>	
4	20700		2	3		6	3	3 <sup>3</sup> / <sub>16</sub>			3 <sup>3</sup> / <sub>4</sub>			1 <sup>1</sup> / <sub>2</sub>	1 <sup>11</sup> / <sub>16</sub>		1.249 1.247			25
5	27200	4	2 <sup>1</sup> / <sub>4</sub>	7 <sup>3</sup> / <sub>4</sub>	3	3 <sup>3</sup> / <sub>16</sub>			3 <sup>3</sup> / <sub>4</sub>	1 <sup>1</sup> / <sub>2</sub>		1 <sup>11</sup> / <sub>16</sub>	1.499 1.497			26 <sup>1</sup> / <sub>2</sub>	106 <sup>1</sup> / <sub>2</sub>	13	6 <sup>3</sup> / <sub>4</sub>	
6	33500		2 <sup>1</sup> / <sub>2</sub>	5			7 <sup>5</sup> / <sub>8</sub>	3			3 <sup>3</sup> / <sub>16</sub>		3 <sup>3</sup> / <sub>4</sub>	1 <sup>1</sup> / <sub>2</sub>	1 <sup>11</sup> / <sub>16</sub>					1.749 1.747
7	68200	3	5 <sup>3</sup> / <sub>4</sub>	8 <sup>3</sup> / <sub>4</sub>	3	3 <sup>3</sup> / <sub>16</sub>	3 <sup>3</sup> / <sub>4</sub>		1 <sup>1</sup> / <sub>2</sub>	1 <sup>11</sup> / <sub>16</sub>		1.999 1.997				32 <sup>1</sup> / <sub>2</sub>	102 <sup>1</sup> / <sub>2</sub>	15	8 <sup>3</sup> / <sub>4</sub>	5 <sup>8</sup> / <sub>8</sub>
8	120000	6	4	7 <sup>1</sup> / <sub>4</sub>				3			3 <sup>3</sup> / <sub>16</sub>	3 <sup>3</sup> / <sub>4</sub>	1 <sup>1</sup> / <sub>2</sub>	1 <sup>11</sup> / <sub>16</sub>	2.499 2.497					

### Mini Sway Strut

### PART# 802



**FINISH:** Black, Galvanized, or coated to customer specifications.

**APPLICATIONS:** Used to restrain movement of piping in one direction while providing for movement due to thermal expansion or contraction in another direction.

**FEATURES:**

- Assembly provides a shorter C to C dimension.
- Effective under either tensile or compressive force.
- Self-aligning bushings permits a plus or minus 5-degree misalignment or angular motion. Bushings are coated with dry lubricant.

**ORDERING:** Specify assembly size, part number, name, O.D. or option number, if other than standard, and load.

Ex: Size A-1, Part #802 Mini Sway Strut 10<sup>3</sup>/<sub>4</sub> O.D. pipe, 650#. Alloy pipe clamps are available as a special order.

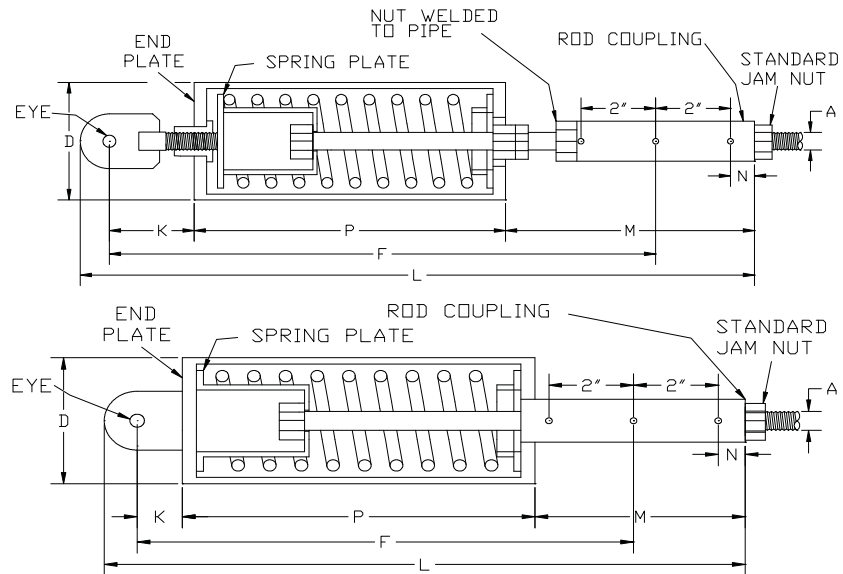
For restraint parallel to the pipe axis using two sway strut assemblies, a riser clamp is available. If a riser clamp is required, consult the nearest RILCO "Support Team" member for assistance and information about this clamp.

**Load (lbs) • Weight (lbs) • Dimensions (inches)**

Assembly Size	Load	C-C		F		W	Rod End	A	D	D1	N	R	S	T Nom.	B
		Max	Min	Max	Min										
A	A-1	6 <sup>5</sup> / <sub>8</sub>	5 <sup>3</sup> / <sub>8</sub>	2 <sup>13</sup> / <sub>16</sub>	1 <sup>9</sup> / <sub>16</sub>	2 <sup>5</sup> / <sub>8</sub>	3/4	1	2	1 <sup>1</sup> / <sub>4</sub>	1/4	5/8	5/8	3/8	1 <sup>3</sup> / <sub>16</sub>
	A-2	8 <sup>1</sup> / <sub>2</sub>	6 <sup>1</sup> / <sub>2</sub>	4 <sup>1</sup> / <sub>4</sub>	2 <sup>1</sup> / <sub>4</sub>	3 <sup>1</sup> / <sub>16</sub>									
	A-3	13 <sup>1</sup> / <sub>4</sub>	8 <sup>1</sup> / <sub>2</sub>	6 <sup>1</sup> / <sub>4</sub>	1 <sup>1</sup> / <sub>2</sub>	5 <sup>13</sup> / <sub>16</sub>									
B & C	BC-1	6 <sup>1</sup> / <sub>2</sub>	6	2 <sup>7</sup> / <sub>8</sub>	2 <sup>3</sup> / <sub>8</sub>	1 <sup>1</sup> / <sub>2</sub>	1 <sup>3</sup> / <sub>8</sub>	2 <sup>1</sup> / <sub>2</sub>	2	2 <sup>3</sup> / <sub>8</sub>	5/8	1 <sup>3</sup> / <sub>8</sub>	1 <sup>3</sup> / <sub>8</sub>	3/4	2 <sup>1</sup> / <sub>8</sub>
	BC-2	7 <sup>3</sup> / <sub>4</sub>	6 <sup>5</sup> / <sub>8</sub>	3 <sup>1</sup> / <sub>2</sub>	2 <sup>3</sup> / <sub>8</sub>	2 <sup>1</sup> / <sub>8</sub>									
	BC-3	8 <sup>11</sup> / <sub>16</sub>	7 <sup>9</sup> / <sub>16</sub>	3 <sup>13</sup> / <sub>16</sub>	2 <sup>11</sup> / <sub>16</sub>	2 <sup>3</sup> / <sub>4</sub>									
	BC-4	10 <sup>15</sup> / <sub>16</sub>	8 <sup>11</sup> / <sub>16</sub>	4 <sup>15</sup> / <sub>16</sub>	2 <sup>11</sup> / <sub>16</sub>	3 <sup>7</sup> / <sub>8</sub>									
	BC-5	15 <sup>7</sup> / <sub>16</sub>	10 <sup>15</sup> / <sub>16</sub>	7 <sup>3</sup> / <sub>16</sub>	2 <sup>11</sup> / <sub>16</sub>	6 <sup>1</sup> / <sub>8</sub>									
	BC-6	19 <sup>9</sup> / <sub>16</sub>	15 <sup>7</sup> / <sub>16</sub>	9 <sup>1</sup> / <sub>4</sub>	5 <sup>1</sup> / <sub>8</sub>	8 <sup>3</sup> / <sub>16</sub>									
I	1-1	8 <sup>7</sup> / <sub>8</sub>	8	3 <sup>11</sup> / <sub>16</sub>	2 <sup>13</sup> / <sub>16</sub>	2 <sup>15</sup> / <sub>16</sub>	1 <sup>1</sup> / <sub>4</sub>	2 <sup>1</sup> / <sub>2</sub>	2	2 <sup>7</sup> / <sub>8</sub>	3/4	1 <sup>9</sup> / <sub>16</sub>	1 <sup>3</sup> / <sub>8</sub>	1	2 <sup>1</sup> / <sub>4</sub>
	1-2	10 <sup>5</sup> / <sub>8</sub>	8 <sup>7</sup> / <sub>8</sub>	4 <sup>9</sup> / <sub>16</sub>	2 <sup>13</sup> / <sub>16</sub>	3 <sup>13</sup> / <sub>16</sub>									
	1-3	11 <sup>7</sup> / <sub>8</sub>	10 <sup>1</sup> / <sub>4</sub>	4 <sup>13</sup> / <sub>16</sub>	3 <sup>3</sup> / <sub>16</sub>	4 <sup>13</sup> / <sub>16</sub>									
	1-4	15 <sup>1</sup> / <sub>8</sub>	11 <sup>7</sup> / <sub>8</sub>	6 <sup>1</sup> / <sub>16</sub>	3 <sup>3</sup> / <sub>16</sub>	6 <sup>7</sup> / <sub>16</sub>									
	1-5	21 <sup>5</sup> / <sub>8</sub>	15 <sup>1</sup> / <sub>8</sub>	9 <sup>11</sup> / <sub>16</sub>	3 <sup>3</sup> / <sub>16</sub>	9 <sup>11</sup> / <sub>16</sub>									

# PART# 830/831

## Vibration Control & Sway Brace



**SIZE RANGE:** Preload from 50 lbs to 1800 lbs and maximum forces 200 lbs to 7200 lbs.

**FINISH:** Black, Galvanized, or coated to customer specifications.

**APPLICATIONS:** Recommended for controlling vibration; absorbing shock, loading; guiding or restraining the movement of pipe resulting from thermal expansion and bracing a pipe line against sway.

**SPECIFICATIONS:** Fulfills the requirements of the ASME code for Pressure Piping as to fabrication details and materials.

**ADJUSTMENT:** The sway brace should be in the neutral position when the system is hot and operating, at which time both

Spring plates should be in contact with the end plates. If they are not, the sway brace should adjusted to the neutral position by use of the load coupling.

**PRELOAD ADJUSTMENT PART # 831:** Turn the preload adjustment nut until desired preload is indicated. Turn thrust nut until it is in contact with the spring plate. Lock in position. Indicated deflection must be greater then thermal movement.

**FEATURES:**

- Vibration is opposed with an instantaneous counter force bringing the pipe back to normal position.
- A single pre-loaded spring provides two-way action.
- One spring valve saves space and simplifies design.
- Spring has 3"-inch travel in either direction.
- Accurate neutral adjustment assured.

**APPROVALS:** Complies with Manufacturers Standardization Society SP-69 (Type 50)

**ORDERING:** Specify part number, name, sway brace size and finish. The RILCO part # 830 and part # 831 consists of the sway brace

**Load (lbs) • Weight (lbs) • Dimensions (inches)**

Sway Brace Size	Pipe Size	Preload And Spring Scale	Max Force	Weight	Rod Size A	Eye Dia. Hole	D	Length F 830 / 831	K 830 / 831	L 830 / 831	M 830 / 831	N	P 830 / 831	R
1	1 1/2 - 24	50	200	22	3/4	1	4 1/2	13 5/8 / 20	1 5/8 / 5 15/16	17 7/8 / 20	6 1/8 / 7 7/8	1	8 7/8 / 9 3/16	1 1/4
2		150	600	25	1			14 3/8 / 20 3/4		18 5/8 / 20 3/4			9 5/8 / 9 15/16	
3		450	1800	36	1 1/4			17 3/4 / 24 1/8		22 / 24 1/8			13 / 13 5/16	
4	6 - 30	900	3600	64	1 1/4	1 1/2	6 5/8	17 / 24 5/16	2 1/4 / 6 9/16	22 5/16 / 24 5/16	6 3/4 / 9 1/4	1 1/2	11 1/2 / 12	1 13/16
5		1350	5400	79	1 1/2			18 1/2 / 25 13/16		23 13/16 / 25 13/16			13 / 13 1/2	
6		1800	7200	95	1 1/2			20 1/2 / 27 13/16		25 13/16 / 27 13/16			15 / 15 1/2	