



CLAMP-ON SADDLES

Simple Two-Piece Design Engineered for Reliability



Spears® PVC Clamp-On Saddles allow quick, easy and reliable addition of branch lines to existing piping system lines. These versatile saddle units can be used in either temporary or permanent installations on all types of pipe with IPS (Iron Pipe size) outside diameter, such as PVC, CPVC, Polyethylene, Polypropylene and Steel.

Excellent Metal-to-Plastic System Transition

Easily installs on metal pipe as a transition to plastic system.

PVC Tee or Cross Configurations

Available in PVC White, PVC Gray in 2" - 12" IPS pipe saddle with socket outlets in sizes 1/2" - 6" and Special Reinforced (SR) threaded outlets in sizes 1/2" - 6", single Tee or double Cross configurations.

Patented SR Design Female Threads

Patented Special Reinforced (SR) design on female thread outlets for superior strength.

O-ring Options

Choice of high grade Buna-N or EPDM O-rings for Schedule 40 and EPDM or FKM O-rings for Schedule 80, for application specific selection for optimum chemical resistance.

Multi-Bolt Design, Choice of Hardware

Positive attachment eliminates splitting problems associated with plastic wedge fasteners and outperforms 2-Bolt clamp saddle designs. Choose zinc plated or stainless steel nut, bolt and washer hardware.

Excellent Pressure Capabilities

Maximum internal pressure rating of 235 psi through 4", 200 psi for 6", and 150 psi for 8" - 12" at 73°F.

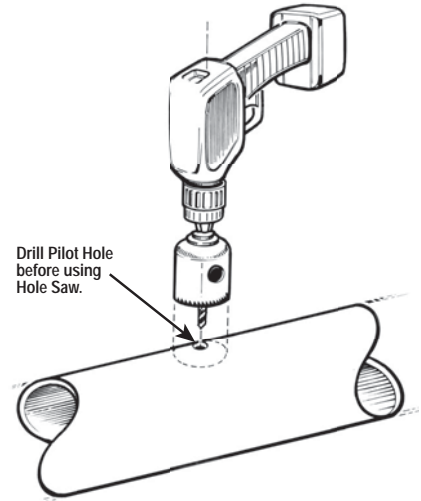
Sample Engineering Specification

All thermoplastic saddles shall be clamp-on type with O-ring seal constructed from PVC Type I cell classification 12454. All O-rings shall be Buna-N, EPDM or FKM. All saddles shall be piloted at O-ring area for positive positioning in pipe. All bolt clamping hardware shall be zinc plated steel or stainless steel. All threaded saddle outlets shall be Special Reinforced (SR) design. Saddles shall be pressure rated at 235 psi for use on pipe sizes through 4" nominal IPS diameters, 200 psi for use on 6" pipe, and 150 psi for use on 8" - 12" pipe, maximum internal pressure for water at 73°F, as manufactured by Spears® Manufacturing Company.



Clamp-On Saddle Installation Instructions

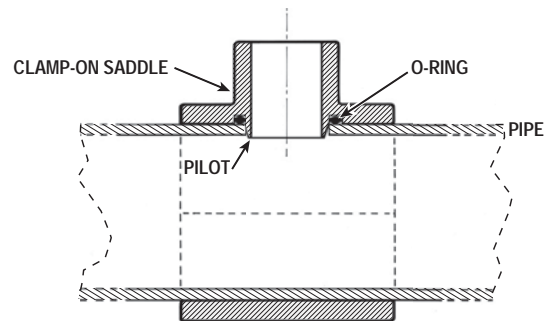
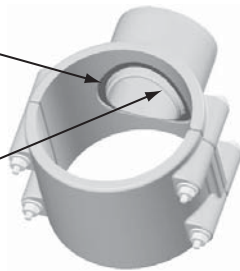
1. Using a standard industrial grade hole-saw, cut specified hole in desired position on pipe according to recommended hole saw size engraved on the saddle. **Note:** Care must be taken to deburr hole and remove all residue from hole area to assure tight fit and avoid leakage.
2. Fully seat O-ring in groove on underside of saddle outlet component. Position over hole and fully seat saddle onto pipe. Note: Certain saddle outlets are piloted. Be sure pilot lip fully engages with hole in pipe.
3. Place strap component opposite outlet and secure with bolts (4), nuts (4) and washers (8). Important: Washers **MUST** be placed under each bolt head (1) and under each nut (1) to avoid damage to saddle.
4. Tighten bolts to specified torque.



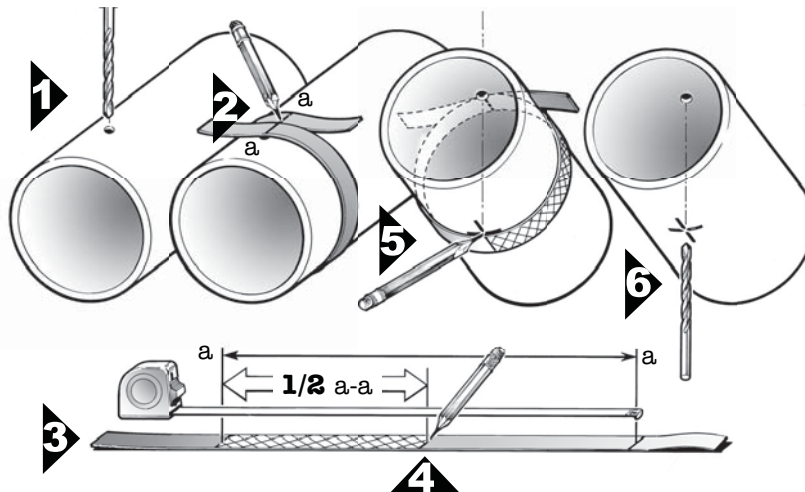
Saddle Size	2	3	4	6 & up
Recommended Bolt-Torque -ft/lb	8	8	8	10

O-ring seal provides positive, trouble-free sealing to pipe.

Special pilot engages with hole in pipe to prevent saddle dislocation.



For Double Outlet Saddle Installation —Determine second outlet hole position as shown

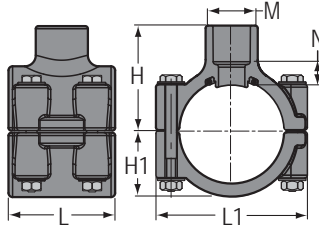




CLAMP ON SADDLE x SOCKET SINGLE OUTLET

Dimensions Also Applicable to
866S-XXX, 866V-XXX & 866SV-XXX

2" - 4" 235 psi @ 73°F
6" 200 psi @ 73°F
8" - 12" 150 psi @ 73°F



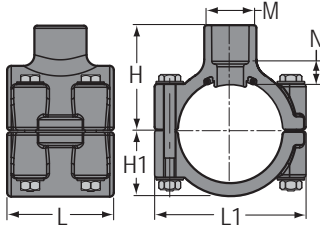
Part Number	Size	H	H1	L	L1	M	N	Hole Size	Bolt Torque ft./lbs.	Approx. Wt. (Lbs.)
866-247	2x1/2	2-3/8	1-1/2	2-7/16	3-7/16	1-3/16	5/16	3/4	8	.56
866-248	2x3/4	2-1/2	1-1/2	2-7/16	3-7/16	1-3/8	5/16	7/8	8	.57
866-249	2x1	2-5/8	1-1/2	2-7/16	3-7/16	1-11/16	5/16	1-1/8	8	.40
866-250	2x1-1/4	2-3/4	1-1/2	2-7/16	3-7/16	2-1/16	5/16	1-1/2	8	.68
866-251	2x1-1/2	2-15/16	1-1/2	2-7/16	3-7/16	2-3/8	5/16	1-1/2	8	.65
866-291	2-1/2x1-1/2	3-3/16	1-11/16	4-1/16	4	2-3/8	3/8	1-3/4	8	1.02
866-333 ¹	3x1/2	3-5/16	2-1/16	3	4-5/8	1-3/8	13/16	7/8	8	.88
866-334	3x3/4	3-1/16	2-1/16	3	4-5/8	1-3/8	9/32	7/8	8	.85
866-335	3x1	3-3/16	2-1/16	3	4-5/8	1-11/16	5/16	1-1/8	8	.91
866-336 ¹	3x1-1/4	4-1/32	2-1/16	4-3/32	4-5/8	3	1-1/32	2-1/4	8	1.48
866-337 ¹	3x1-1/2	4-1/32	2-1/16	4-3/32	4-5/8	3	29/32	2-1/4	8	1.41
866-338	3x2	3-5/8	2-1/16	4-3/32	4-5/8	3	3/8	2-1/4	8	1.24
866-415 ¹	4x1/2	4-3/32	2-5/8	3	5-9/16	2-3/8	31/32	1-1/8	8	1.31
866-416 ¹	4x3/4	4-3/32	2-5/8	3	5-9/16	2-3/8	27/32	1-1/8	8	1.29
866-417	4x1	3-13/16	2-5/8	3	5-5/8	1-11/16	7/16	1-1/8	8	1.24
866-418 ¹	4x1-1/4	4-13/32	2-5/8	4-3/32	5-5/8	2-3/8	29/32	1-3/4	8	1.70
866-419	4x1-1/2	4-1/8	2-5/8	4-3/32	5-9/16	2-3/8	1/2	1-3/4	8	1.63
866-420	4x2	4-3/16	2-5/8	4-1/8	5-5/8	3	7/16	2-1/4	8	1.69
866-421 ¹	4x2-1/2	5	2-5/8	5-7/16	5-23/32	4-9/32	3/4	3	8	2.78
866-422	4x3	4-5/8	2-19/32	5-7/16	5-11/16	4-1/4	1/2	3	8	2.39
866-523 ¹	6x1/2	5-13/32	3-7/8	3	7-3/4	1-11/16	1-7/32	1-1/8	10	2.35
866-524 ¹	6x3/4	5-7/16	3-7/8	3	7-3/4	1-11/16	1-1/8	1-1/8	10	2.33
866-525	6x1	5-1/8	3-7/8	3	7-15/16	1-11/16	11/16	1-1/8	10	2.29
866-526 ¹	6x1-1/4	5-15/16	3-7/8	4-1/8	7-3/4	3	1-3/8	2-1/4	10	3.28
866-527 ¹	6x1-1/2	5-15/16	3-7/8	4-1/8	7-3/4	3	1-1/4	2-1/4	10	3.22
866-528	6x2	5-1/2	3-7/8	4-1/8	7-3/4	3	11/16	2-1/4	10	3.04
866-529 ¹	6x2-1/2	6-7/16	3-7/8	6	7-15/16	4-1/4	1-1/8	3	10	4.73
866-530	6x3	5-15/16	3-7/8	6	7-15/16	4-1/4	25/32	3	10	4.35
866-532	6x4	6	3-29/32	6	7-15/16	5-3/16	5/8	4	10	5.09

¹ Outlet sized with bushing

**CLAMP ON SADDLE x SOCKET (continued)**
SINGLE OUTLET

Dimensions Also Applicable to
866S-XXX, 866V-XXX & 866SV-XXX

2" - 4" 235 psi @ 73°F
6" 200 psi @ 73°F
8" - 12" 150 psi @ 73°F



Part Number	Size	H	H1	L	L1	M	N	Hole Size	Bolt Torque ft./lbs.	Approx. Wt. (Lbs.)
866-573 ¹	8x1/2	7-3/4	4-7/8	9-1/2	8-1/2	5-5/16	1-1/2	4	10	9.70
866-574 ¹	8x3/4	8-3/32	4-7/8	8-1/2	10-1/8	5-1/4	2-3/4	4	10	9.65
866-575 ¹	8x1	8-3/32	4-7/8	8-1/2	10-1/8	5-1/4	2-5/8	4	10	9.67
866-576 ¹	8x1-1/4	8-3/32	4-7/8	8-1/2	10-1/8	5-1/4	2-1/2	4	10	9.79
866-577 ¹	8x1-1/2	8-3/32	4-7/8	8-1/2	10-1/8	5-1/4	2-3/8	4	10	10.23
866-578 ¹	8x2	7-11/16	4-7/8	8-1/2	10-1/8	5-1/4	1-7/8	4	10	10.28
866-579 ¹	8x2-1/2	8-5/32	4-7/8	8-15/32	10	5-7/32	2-1/2	4	10	9.43
866-580 ¹	8x3	7-11/16	4-7/8	8-1/2	10-1/8	5-1/4	1-7/16	4	10	10.21
866-582	8x4	7-5/16	4-7/8	8-1/2	10-1/8	5-1/4	11/16	4	10	12.22
866-585	8x6	8-3/32	4-7/8	8-1/2	10-1/8	7-5/8	11/16	6	10	9.80
866-621 ¹	10x2	8-7/8	6-1/32	8-1/2	12-5/16	5-1/4	1-15/16	4	10	13.02
866-624	10x4	8-15/32	6-1/32	8-1/2	12-5/16	5-1/4	13/16	4	10	11.92
866-626	10x6	9-9/32	6-1/32	8-1/2	12-5/16	7-5/8	13/16	6	10	12.92
866-664	12x4	9-9/16	7-5/32	8-1/2	14-5/16	5-1/4	7/8	4	10	15.47
866-666	12x6	10-3/8	7-5/32	8-1/2	14-5/16	7-5/8	7/8	6	10	16.33

¹ Outlet sized with bushing

- 1) Clamp On Saddle Standard Hardware: Zinc Bolts w/EPDM O-ring Seal
e.g. Part Number 866-247 = 2x1/2 PVC Clamp On Saddle, Socket, EPDM O-ring, Zinc Bolts.
- 2) Clamp On Saddles w/Stainless Steel (SS) Bolts, Add The Letter "S" Before The Dash.
e.g. Part Number 866S-247 = 2x1/2 PVC Clamp On Saddle, Socket, EPDM O-ring, Stainless Steel Bolts.
- 3) Clamp On Saddles w/FKM O-ring Seal, Add The Letter "V" Before The Dash.
e.g. Part Number 866V-247 = 2x1/2 PVC Clamp-On Saddle, Socket, FKM O-ring, Zinc Bolts.
- 4) Clamp-On Saddles w/Stainless Steel Bolts & FKM O-ring Seal, Add The Letter "SV" Before The Dash.
e.g. Part Number 866SV-247 = 2x1/2 PVC Clamp On Saddle, Socket FKM O-ring, Stainless Steel Bolts.