

**GALVANIZED LOAD RATED SHACKLES** are used extensively for lifting in static environments as removable links to connect all types of slings to fittings and attachments.

### Shackle Types

Anchor type shackles are generally used on multi-leg systems or where more space at the top is required. Chain Shackles are generally used on single leg assemblies only, and are rated for inline tension only. Screw Pin Shackles should be used in applications where they need to be connected and disconnected frequently. However, **NEVER** use them in long term or permanent applications, or where there is a chance that the load may rotate the pin. Please use Bolt Type (Safety) Shackles in these types of applications. ProCraft shackles are hot dipped galvanized and meet or exceeds US Fed Spec RR-C-271 and ASME B30.26. Working Load Limits (WLL) are marked on all shackles, and the factor of safety is 6:1. The WLL marked on shackles is for in line loading, angular loading should be avoided wherever possible. Manufacturers traceability code is forged on the pin and body for easy identification.

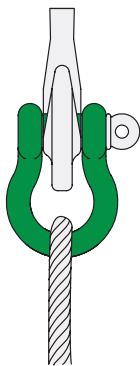
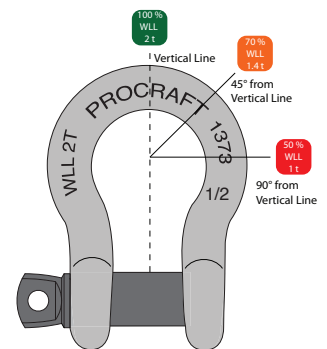
### Rigging Practices

When installing screw pin shackles make sure that the pin is fully engaged and the collar makes contact with the shackle body, a wrench or screw driver can be used to lock the pin. If you are using a safety pin shackle make sure the nut is secured and the cotter pin is in good condition and inserted correctly. Check that the pin has penetrated the entire length of the threaded eye, if it does not remove from service as you may have a bent pin or incorrect pin for the shackles. When using screw pin shackles for an extended time the pin should be moused or secured to the body of the shackle, this will prevent the pin from backing out.

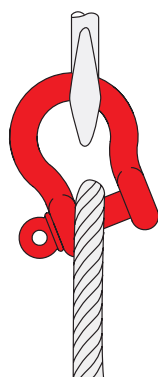
Make sure that you have selected the correct shackle for your application and that the shackle's working load limit will not be exceeded. Contact with any sharp edges should be avoided. The load applied to the shackle should be centered in the bowl of the shackle to prevent side loading. If angular loading is to occur the following reductions should be considered:

- 0 Deg - 100% of marked working load limit
- 45 Deg - 30% reduction on marked working load limit
- 90 Deg - 50% reduction on marked working load limit
- Over 90 Deg is not recommended

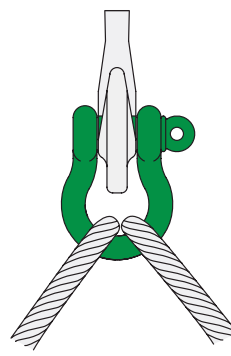
Multiple leg slings should never be applied to the shackle pin, place the shackle pin in the hook. When shackles are used with multi leg slings the angle should never exceed 120 deg included angle, and consideration should also be given to the effect of the angle between the legs. As the horizontal angle decreases so does the load on the sling leg and shackle. Chain shackles should never be used for angular loading, chain shackles load should be inline with the centre point of the shackle.



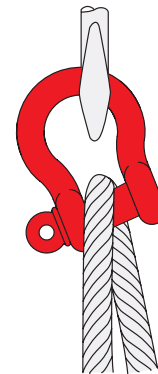
Keep the load centred in the bowl of the shackle



Avoid side loading and place sling eye on shackle body

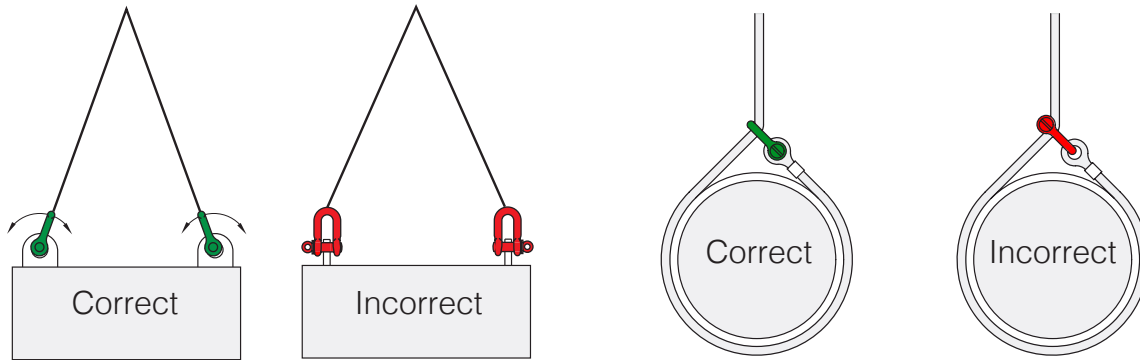


Slings should be in bowl of shackle (do not use chain / Dee shackles) 120 deg sling angle is max



Avoid side loading and place sling eye on shackle body

When a shackle is used in a choke hitch, the pin must be secured in the choking eye of the sling. Packing can be placed in shackle pins to make sure the hook is centered.



Ensure shackles are seated correctly and pin is fully engaged, do not side load shackles or angle load chain shackles

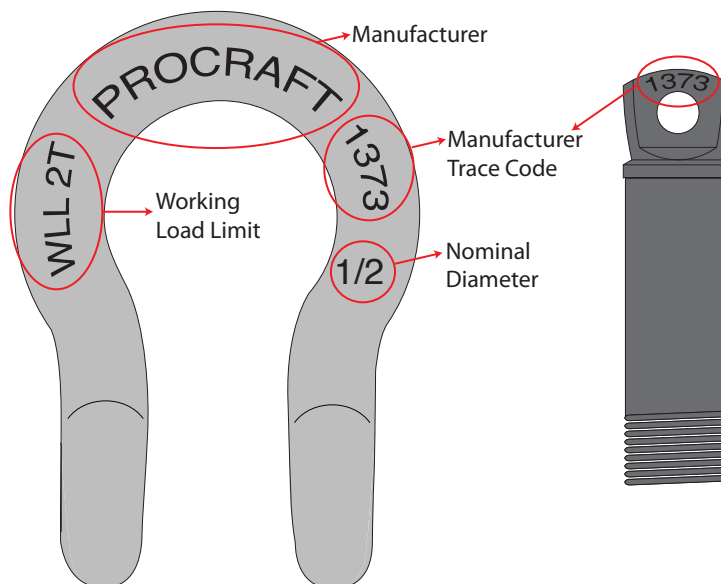
Pin must be secured in the choking eye of the sling.

### Inspection Before Use

As with all lifting equipment, shackles should be inspected before being used each day. Begin your visual inspection of the shackle by checking for a clearly marked working load limit. If you can not determine the working load limit remove shackle from service. Check the body for wear, cracks, nicks and gouges especially in the bowl of the shackle and the pins. A reduction of 10% on the original or catalogue dimensions, at any point around the body or pin, is reason for retirement of the shackle. Make sure the shackle pin and body are compatible and are from the same manufacturer. NEVER use a shackle with a pin that has been replaced by a nut and bolt. Check the shackle pin thread for wear or damage. Make sure it fits correctly and snugly into the shackle body. Check that the shackle has not opened up between the ears, and the shackle is not bent or twisted. If the shackle pin is not seating properly due to this, remove shackle immediately from service.

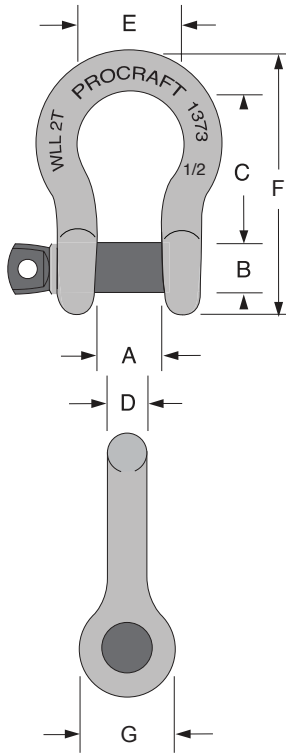
**Evidence of heat damage including weld splatter or arc strike, and unauthorized welding of shackle is reason for removal from service.**

ProCraft load rated shackles are hot dipped galvanized and meet or exceed US Fed Spec RR-C-271. Working Load Limits (WLL), diameter and traceability code are forged on all ProCraft load rated shackles as per ASME Standard B30.26. Load rated shackles are available as an Anchor (Bow) or Chain (Dee) type shackle, and are available with either a Screw Pin or Bolt Type (Safety) with nut and cotter pin.



## ProCraft Screw Pin Load Rated Anchor Shackle

Load Rated Screw Pin Anchor (SPA) Shackles are hot dipped galvanized and meet or exceeds US Fed Spec RR-C-271G Type IVA Class 2 Grade A and ASME B30.26. The screw pin is the most common type of shackle due to its ease of installation, DO NOT use screw pin shackles or fit pins in contact with moving parts if the pin can roll and unscrew.

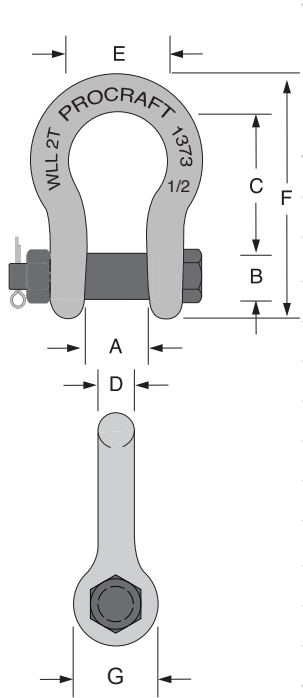


Stock Code	Size Inches D	Working Load Limit Tons	Dimension Inches						Weight per Piece Pounds
			A	B	C	E	F	G	
50LSP-G06	3/16	1/3	0.38	0.25	0.88	0.60	1.47	0.56	0.06
50LSP-G08	1/4	1/2	0.47	0.31	1.13	0.78	1.84	0.61	0.10
50LSP-G10	5/16	3/4	0.53	0.38	1.22	0.84	2.09	0.75	0.19
50LSP-G12	3/8	1	0.66	0.44	1.44	1.03	2.49	0.91	0.31
50LSP-G14	7/16	1-1/2	0.75	0.50	1.69	1.16	2.91	1.06	0.38
50LSP-G16	1/2	2	0.81	0.63	1.88	1.31	3.28	1.19	0.72
50LSP-G20	5/8	3-1/4	1.06	0.75	2.38	1.69	4.19	1.50	1.37
50LSP-G24	3/4	4-3/4	1.25	0.88	2.81	2.00	4.97	1.81	2.35
50LSP-G28	7/8	6-1/2	1.44	1.00	3.31	2.28	5.83	2.09	3.62
50LSP-G32	1	8-1/2	1.69	1.13	3.75	2.69	6.56	2.38	5.03
50LSP-G36	1 1/8	9-1/2	1.81	1.25	4.25	2.91	7.47	2.69	7.41
50LSP-G40	1 1/4	12	2.03	1.38	4.89	3.25	8.25	3.00	9.5
50LSP-G44	1 3/8	13-1/2	2.25	1.50	5.25	3.63	9.16	3.31	13.53
50LSP-G48	1 1/2	17	2.38	1.63	5.75	3.88	10.00	3.63	17.20
50LSP-G56	1 3/4	25	2.88	2.00	7.00	5.00	12.34	4.19	27.78
50LSP-G64	2	35	3.25	2.25	7.75	5.75	13.68	4.81	45.00
50LSP-G80	2 1/2	55	4.13	2.75	10.50	7.25	17.84	5.69	94.00
50LSP-G96	3	85	5	3.25	13.00	7.88	21.50	6.50	145.00



## ProCraft Bolt Type (Safety) Anchor Shackle

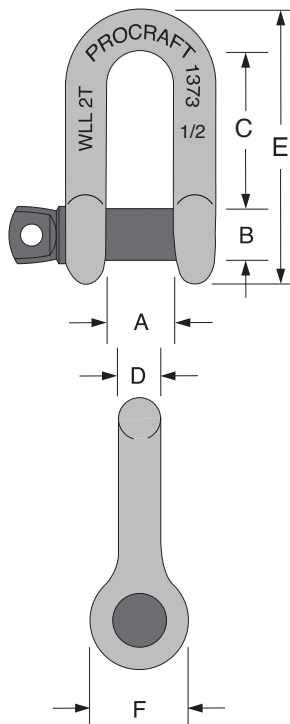
Load Rated Screw Pin Anchor (SBA) Shackles are hot dipped galvanized and meet or exceeds US Fed Spec RR-C-271F Type IVA Class 3 Grade A and ASME B30.26. Bolt type shackles are perfect for permanent or semi-permanent installations.



Stock Code	Size Inches D	Working Load Limit Tons	Dimension Inches						Weight per Piece Pounds
			A	B	C	E	F	G	
50LSA-G16	1/2	2	0.81	0.64	1.88	0.50	3.28	1.19	0.79
50LSA-G20	5/8	3-1/4	1.06	0.75	2.38	0.63	4.19	1.50	1.68
50LSA-G24	3/4	4-3/4	1.25	0.89	2.81	0.75	4.97	1.81	2.72
50LSA-G28	7/8	6-1/2	1.44	1.02	3.31	0.88	5.83	2.09	3.95
50LSA-G32	1	8-1/2	1.69	1.15	3.75	1.00	6.56	2.38	5.66
50LSA-G36	1 1/8	9-1/2	1.81	1.25	4.25	1.13	7.47	2.69	8.27
50LSA-G40	1 1/4	12	2.03	1.40	4.69	1.29	8.25	3.00	11.71
50LSA-G44	1 3/8	13-1/2	2.25	1.53	5.25	1.42	9.16	3.31	15.83
50LSA-G48	1 1/2	17	2.38	1.66	5.75	1.53	10.00	3.63	20.80
50LSA-G56	1 3/4	25	2.88	2.04	7.00	1.84	12.34	4.19	33.91
50LSA-G64	2	35	3.25	2.30	7.75	2.08	13.68	8.81	55.25
50LSA-G80	2 1/2	55	4.13	2.80	10.50	2.71	17.90	5.69	98.25
50LSA-G96	3	85	5.00	3.30	13.00	3.12	21.50	6.50	154.00

## ProCraft Screw Pin Chain Shackle

Load Rated Screw Pin Chain (SPC) Shackles are hot dipped galvanized and meet or exceeds US Fed Spec RR-C-271G Type IVB Class 2 Grade A and ASME B30.26. The screw pin is the most common type of shackle due to its ease of installation, DO NOT use screw pin shackles or fit pins in contact with moving parts if the pin can roll and unscrew.



Stock Code	Size Inches D	Working Load Limit Tons	Dimension Inches					Weight per Piece Pounds
			A	B	C	E	F	
51LSP-G08	1/4	1/2	0.47	0.31	0.97	1.59	0.62	0.11
51LSP-G10	5/16	3/4	0.53	0.38	1.07	1.91	0.75	0.17
51LSP-G12	3/8	1	0.66	0.44	1.28	2.31	0.92	0.28
51LSP-G14	7/16	1-1/2	0.75	0.50	1.48	2.67	1.06	0.43
51LSP-G16	1/2	2	0.81	0.63	1.66	3.03	1.18	0.60
51LSP-G20	5/8	3-1/4	1.06	0.75	2.04	3.76	1.50	1.25
51LSP-G24	3/4	4-3/4	1.25	0.88	2.40	4.53	1.81	2.63
51LSP-G28	7/8	6-1/2	1.44	1.00	2.86	5.33	2.10	3.16
51LSP-G32	1	8-1/2	1.69	1.13	3.24	5.94	2.38	4.75
51LSP-G36	1 1/8	9-1/2	1.81	1.25	3.61	6.78	2.69	6.75
51LSP-G40	1 1/4	12	2.03	1.38	3.97	7.50	3.00	9.06
51LSP-G44	1 3/8	13-1/2	2.25	1.50	4.43	8.28	3.31	11.63