

User Instructions MOD 6

Modulift[®]
working between the hook and the load

The Modulift Spreader is modular in length, and every spreader consists of 1 pair of End Units and Drop Links, with intermediate struts that can be bolted into the assembly to achieve different spans. MOD 6 has an assembled span ranging from 16 inches to 176 inches in 4 inch increments.

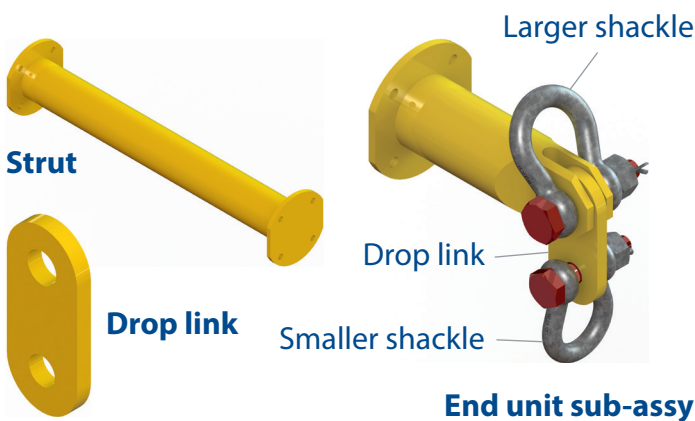
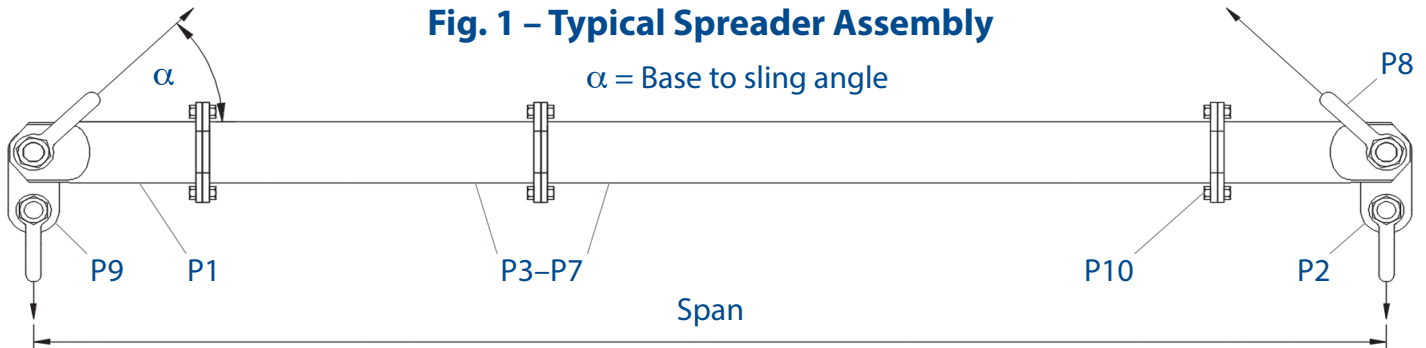


Table 1 – Component List

Part Ref.	Description	Weight/item
P1	End Unit	7 lbs
P2	Drop Link	1.3 lbs
P3	40" Strut	18 lbs
P4	24" Strut	12 lbs
P5	12" Strut	8 lbs
P6	8" Strut	6 lbs
P7	4" Strut	5 lbs
P8	4.75t Shackle	2.6 lbs
P9	3.25t Shackle	1.6 lbs
P10	M10 x 30, Grade 8.8, HT Bolts, Nuts & Washers	

MOD 6 Beam Specification

- Rated at 6 tonnes SWL at 112 inch span. (60° BSA). See Load Table for SWL at longer spans.
- 'Base to Sling' angle, α , 45 degrees or more.
- End Units & Drop Links are rated at 3 tonnes WLL each (6 tonnes combined capacity).
- **Bolt tightening torque: 44 Pound-Foot.** Spanner size required: 17mm.
- Recommended additional equipment: Torque Wrench, Podger Spanner and Ring Spanner.

! WARNING!

- Personnel using this system should be suitably trained, competent and have a clear understanding of Safe Slings procedures.
- The use of Modulift equipment must be in accordance with the procedures laid down in 'ASME B30.20 - 2013'.
- **Never exceed stated SWL** – Adhere to SWL in **Table 2** for particular sling angle used.
- **The top sling length is critical to the safe use of the spreader** – Adhere to **Table 2**.
- Ensure Drop Links hang down, and smaller shackles are connected to bottom hole of Drop Link.
- Do not under any circumstances hang load(s) from the tube or flanges – the spreader is designed for axial compression, not bending.

User Instructions

MOD 6

Assembly Procedure

- Check the ID plates on each Modulift component to ensure the correct size is used.
- Lay out the Struts and End Units in the correct configuration (see **Table 2**), laid on flats to prevent rolling.
- Check that all pairs of flanges are clear from debris, sand etc. before connection.
- Bolt the components together using bolts, nuts & washers provided. Tighten the bolts to a torque as shown overleaf, 4 bolts per connection. The number and grade of bolts is critical for the safe use of the spreader particularly at longer spans.
- Place drop link inside the jaw of an end unit, with the larger hole of drop link lined up with the End Unit hole.
- Place a top sling onto the body of a top shackle, and put jaw of top shackle over the end unit jaw.
- Put top shackle pin through shackle, end unit jaw and drop link, and repeat for other spreader beam end.
- Attach free ends of top slings to crane hook.
- Attach lower slings and shackles to lower holes of drop links, and attach them to the load to be lifted.
- The assembled spreader beam and lifting rig must be thoroughly checked by a competent person prior to lifting.

Do's & Don'ts

- Do ensure to load the spreader through the drop links only. i.e. adhere to **Fig. 1**.
- Do keep the loaded spreader clear of obstacles – any contact could cause beam failure.
- Do ensure correct use of appropriate top slings, do not twist any slings unnecessarily.
- Do not hang any load from the spreader tube or flanges.
- Do not exceed stated SWL for that particular span – adhere to **Table 2**.
- Do not rig the lower slings more than 6 degrees from vertical.
- When moving or positioning long struts or assemblies use tag lines to control movement.
- Individual components can be heavy and extreme care must be taken if manual handling.

Recommended top sling types:

Textile slings, wire rope slings with soft eyes and chain slings with small end fittings. If thimble eyes are used with wire rope slings, make sure sling angle is 60 degrees or more. Other types exist but not all are suitable due to end fitting size, particularly larger capacity chain hook and thimble eyes.

Note: Lengthening the slings can give greater clearance. Refer to Modulift supplier if in doubt.

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Table 2 – Load v Span

Span (in)	Base to Sling Angle (BSA) α						Recommended Configuration EU - End Unit (8")						
	45°		60°		70°								
	SWL metric tons (tonnes)	Min. top sling length (in)	SWL metric tons (tonnes)	Min. top sling length (in)	SWL metric tons (tonnes)	Min. top sling length (in)							
16	6	11	6	16	6	23	EU	EU					
20	6	14	6	20	6	29	EU	4	EU				
24	6	17	6	24	6	35	EU	8	EU				
28	6	20	6	28	6	41	EU	12	EU				
32	6	23	6	32	6	47	EU	12	4	EU			
36	6	25	6	36	6	53	EU	12	8	EU			
40	6	28	6	40	6	58	EU	24	EU				
44	6	31	6	44	6	64	EU	24	4	EU			
48	6	34	6	48	6	70	EU	24	8	EU			
52	6	37	6	52	6	76	EU	24	12	EU			
56	6	40	6	56	6	82	EU	40	EU				
60	6	42	6	60	6	88	EU	40	4	EU			
64	6	45	6	64	6	94	EU	40	8	EU			
68	6	48	6	68	6	99	EU	40	12	EU			
72	6	51	6	72	6	105	EU	12	40	4	EU		
76	6	54	6	76	6	111	EU	12	40	8	EU		
80	6	57	6	80	6	117	EU	24	40	EU			
84	6	59	6	84	6	123	EU	24	40	4	EU		
88	6	62	6	88	6	129	EU	24	40	8	EU		
92	5.6	65	6	92	6	135	EU	24	40	12	EU		
96	5.1	68	6	96	6	140	EU	24	40	12	4	EU	
100	4.6	71	6	100	6	146	EU	24	40	12	8	EU	
104	4.2	74	6	104	6	152	EU	24	40	12	12	EU	
108	3.9	76	6	108	6	158	EU	40	40	12	EU		
112	3.5	79	6	112	6	164	EU	40	40	12	4	EU	
116	3.3	82	5.7	116	6	170	EU	40	40	12	8	EU	
120	3	85	5.3	120	6	175	EU	40	40	24	EU		
124	2.8	88	4.9	124	6	181	EU	40	40	24	4	EU	
128	2.6	91	4.5	128	6	187	EU	40	40	24	8	EU	
132	2.4	93	4.2	132	6	193	EU	40	40	24	12	EU	
136	2.2	96	3.9	136	6	199	EU	40	40	40	EU		
140	2.1	99	3.6	140	5.8	205	EU	40	40	40	4	EU	
144	1.9	102	3.4	144	5.4	211	EU	40	40	40	8	EU	
148	1.8	105	3.2	148	5.1	216	EU	40	40	40	12	EU	
152	1.7	107	3	152	4.7	222	EU	40	40	40	12	4	EU
156	1.6	110	2.8	156	4.4	228	EU	40	40	40	12	8	EU
160	1.5	113	2.6	160	4.2	234	EU	40	40	40	24	EU	
164	1.4	116	2.4	164	3.9	240	EU	40	40	40	24	4	EU
168	1.3	119	2.3	168	3.7	246	EU	40	40	40	24	8	EU
172	1.2	122	2.1	172	3.4	251	EU	40	40	40	24	12	EU
176	1.1	124	2	176	3.3	257	EU	40	40	40	40	EU	

WARNING!

- The rigger must ensure that there is a clearance between the sling end fitting and the end unit as shown opposite.
- Max number of struts allowed in spreader assembly: 5
- Assemble longer struts in the centre of the spreader configuration.
- Sling angle is crucial to safe use of spreader.

