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Caldwell DURA-LITE™

DURA-LITE

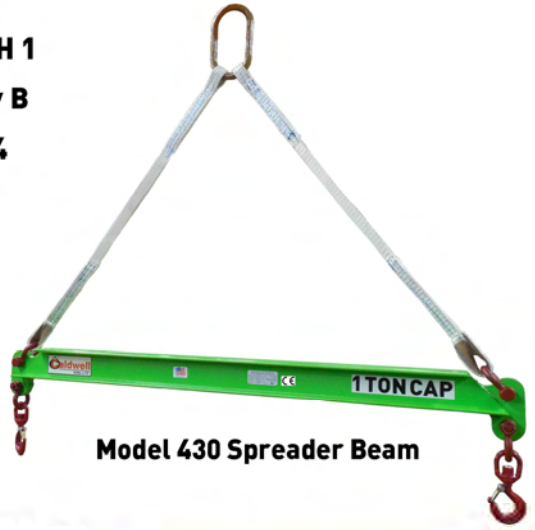
Composite Lifting and Spreader Beams

Instruction Manual

Model 416 Adjustable Lifting Beam

Model 419 Lifting Beam

ASME B30.20 BTH 1
Design Category B
Service Class 4



Model 430 Spreader Beam

DLLB_REV_03 07252017

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DURA-LITE

Lifting & Spreader Beams

Made From Composite Materials

The DURA-LITE™ Lifting and Spreader Beams are innovative, patent-pending devices made of composite materials that are lightweight, easy to handle, strong, and durable.

These fiber-reinforced polymer composite devices, meeting ASME standards, are assembled with high-quality, proven adhesive and are proof tested at the factory to 200% of their rated capacity. The lugs are manufactured from an innovative strip material. Lug attachment holes include steel bushings to reduce wear. A high-quality, Acrylic Polyurethane finish provides excellent U.V. protection and a long lasting finish.

DURA-LITE™ Lifters are designed for 2 million cycles at capacity used in accordance with this manual in an environment with a maximum air temperature of 150 ºF (66 ºC) and a minimum air temperature is -40 ºF (-40 ºC).

The Caldwell Group, Inc.
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815.229.5667 ● www.caldwellinc.com

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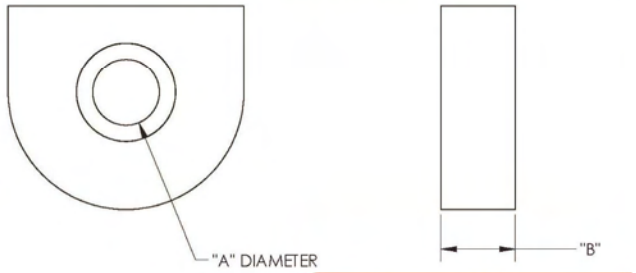
Caldwell DURA-LITE™

Hardware Requirements

MODEL 419 LIFTING BEAM				"A" DIAMETER	"B" THICK
BEAM CAPACITY	SWIVEL HOOK with LATCH	SHACKLE BOLT TYPE	BAIL	IN (CM)	IN (CM)
1/4 t	3/4 t	1/2 t	3/8" PEAR LINK	.34 (.86)	.38 (.96)
1/2 t	3/4 t	3/4 t	3/8" PEAR LINK	.40 (1.0)	.50 (1.2)
1 t	3/4 t	2 t	1/2W OBLONG	.67 (1.7)	.75 (1.9)
2 t	1 t	3 1/4 t	1/2W OBLONG	.81 (2.0)	1.0 (2.5)
3 t	1 1/2 t	3 1/4 t	1/2W OBLONG	.81 (2.0)	1.0 (2.5)

MODEL 430 SPREADER BEAM			"A" DIAMETER	"B" THICK
BEAM CAPACITY	SWIVEL HOOK with LATCH	SHACKLE BOLT TYPE	IN (CM)	IN (CM)
1/4 t	3/4 t	1/2 t	.34 (.86)	.38 (.96)
1/2 t	3/4 t	3/4 t	.40 (1.0)	.50 (1.2)
1 t	3/4 t	2 t	.67 (1.7)	.75 (1.9)
2 t	1 t	3 1/4	.81 (2.0)	1.0 (2.5)
3 t	1 1/2 t	3 1/4 t	.81 (2.0)	1.0 (2.5)

MODEL 416 ADJUSTABLE LIFTING BEAM				"A" DIAMETER	"B" THICK
BEAM CAPACITY	SWIVEL HOOK with LATCH	SHACKLE BOLT TYPE	BAIL	IN (CM)	IN (CM)
1/4 t	3/4 t	1/2 t	3/8" PEAR LINK	.34 (.86)	.38 (.96)
1/2 t	3/4 t	3/4 t	3/8" PEAR LINK	.40 (1.0)	.50 (1.2)
1 t	1 t	2 t	1/2W OBLONG	.67 (1.7)	.75 (1.9)
2 t	2 t	3 1/4 t	1/2W OBLONG	.81 (2.0)	1.0 (2.5)
3 t	3 t	3 1/4 t	1/2W OBLONG	.81 (2.0)	1.0 (2.5)



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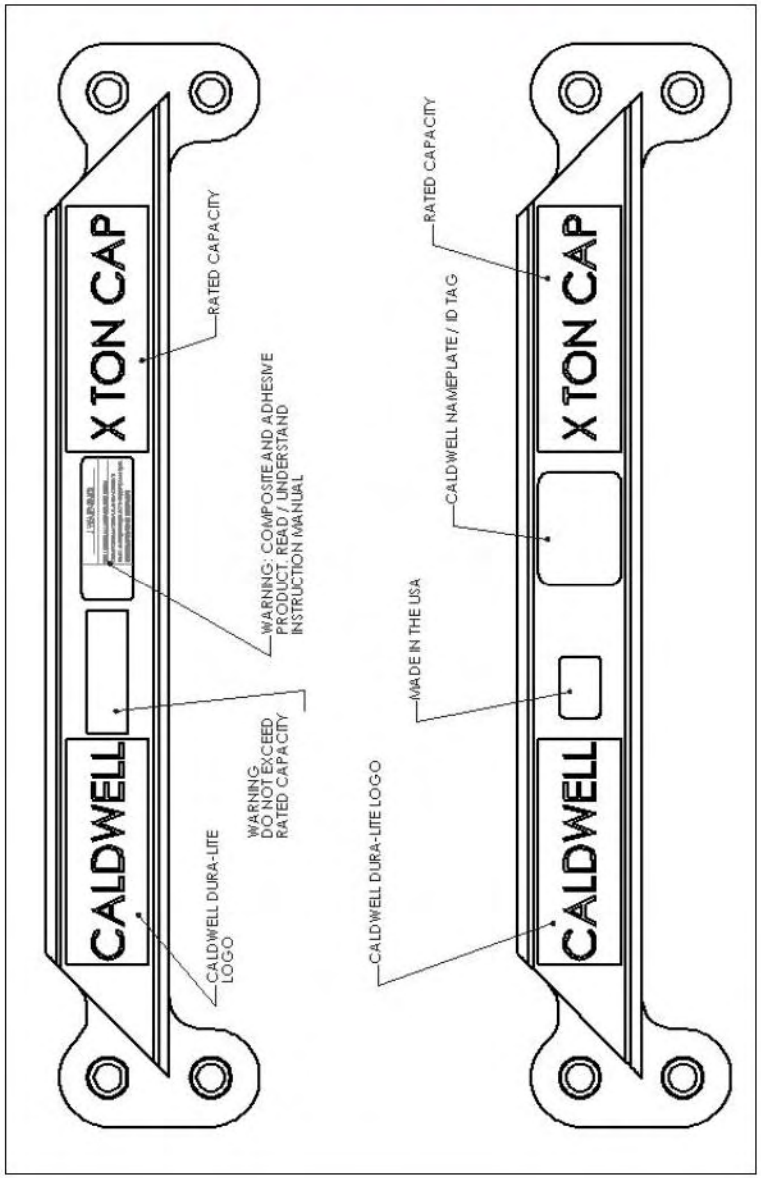
ID TAG AND PRODUCT SAFETY LABEL LOCATIONS



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PREFACE

⚠WARNING

All qualified persons responsible for installation, operation, maintenance, and service shall read and understand all the contents of this manual, avoiding serious injury, death, or property damage. Keep this manual.

Your new DURA-LITE™ product meets ASME B30.20 Standard and Structural Design Criteria BTH-1, Design Category B, Service Class 4. Your product is for specific tasks withstanding forces based on the unit's rated capacity. DURA-LITE™ Lifting and Spreader Beams made from composite materials support loads up to their rated capacity, when loaded correctly.

DURA-LITE™ product is compliant with European Community standards. CE

Use the following guidelines in this manual for your protection and for optimal operation of your equipment.

The safety information listed in this manual is not all-inclusive. The owner or user is responsible for understanding and acting according to industry standards and any other location, city, state, and federal regulations. Refer to the Manufacturer's Instruction Manual for product and safety information on other attachments, components, or both used with your lifting equipment.

A custom designed DURA-LITE™ product may not look exactly like the representations in this manual, however, the information still applies.

Model Number _____

Serial Number _____

Rated Capacity _____

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Table of Contents

ID TAG AND PRODUCT SAFETY LABELS

LEGEND

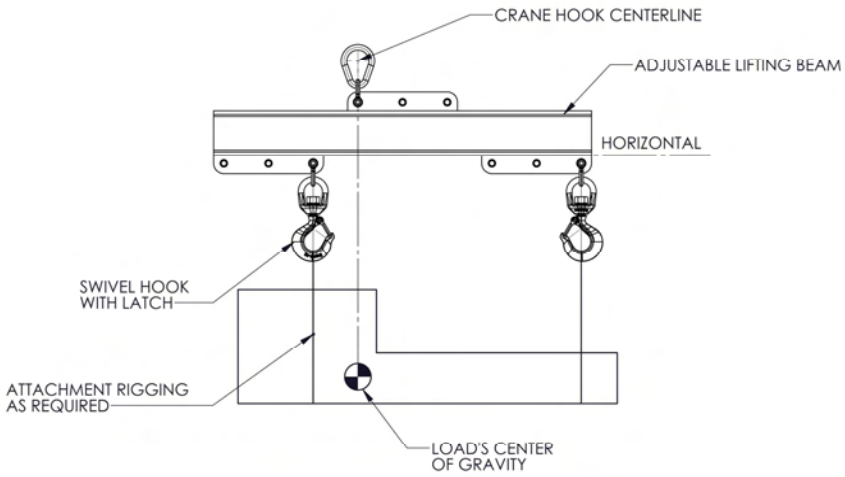
1		**Caldwell Logo**
2		**Unit Rated Capacity**
3		**Product identification tag with ASME B30.20 BTH 1: Design Category and Service Class**
4		**Made in the USA**
5		**Warning - Read Instruction Manual**
6		**Warning - Do not exceed rated capacity**

When the ID tag or any product safety label is damaged or missing, contact The Caldwell Group for complimentary replacements. Please reference the model and serial number information in the preface of this manual

Model 416 Adjustable Lifting Beam

1. See Tag and Decal Location; Know the beam weight and the rated capacity of the beam (located on the Caldwell Nameplate/ID tag).
2. Determine the load's center of gravity and position the crane hook attachment to that location.
3. Position the swivel hooks to the proper location for attaching to the load.
4. Confirm all hardware is installed properly.
5. Perform a test lift of several inches to verify the load is

Model 416—Proper Lifting



⚠WARNING

Do NOT allow people to remain near, around, or under the Lifting or Spreader Beam working area or traveling path.
Use only a vertical lift.
Do Not bump or drag a loaded or unloaded lifter during loading, lifting, or transporting.

⚠WARNING

General

The fundamental objective of the following safety suggestions is to protect authorized, qualified persons responsible for installation, operation, and inspection of DURA-LITE™ products from serious injury or death. The owner or user is responsible for providing all proper devices, tools and methods that may be necessary to effectively protect each employee from recognized hazards during installation, operation, maintenance, or servicing. The safety precautions stated in this manual are not all-inclusive.

Training

Authorized, qualified individuals need comprehensive training in the use of protective equipment, safeguards, and safe operation of DURA-LITE™ products. Permit only authorized, qualified people to operate, maintain, and service your Model.

Personal Protection

Personal protective equipment is required whenever there are hazards that can do bodily harm through physical contact. The construction requirements of all personal protective equipment must be concurrent to the work performed.

⚠DANGER

DANGER indicates a hazardous situation which, if not avoided, will result in death or serious injury.

⚠WARNING

WARNING indicates a hazardous situation which, if not avoided, **could** result in death or serious injury.

⚠CAUTION

CAUTION, used with the safety alert symbol, indicates a hazardous situation which, if not avoided **could** result in minor or moderate injury.

This is the safety alert symbol. It is used to alert you to **potential personal** injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.

Safety Information

⚠WARNING

Receiving

- Check your DURA-LITE™ equipment upon arrival, ensuring no damage or lost parts occurred during transit. Contact the carrier's agent, reporting any loss or damage.
- Contact The Caldwell Group to replace worn or damaged tags and/or decals.

Before Operating

- Read and understand this manual before operating, inspecting, maintaining, or servicing DURA-LITE™ equipment.
- Allow only qualified persons to install, operate, inspect, and maintain your equipment.
- Inspect your equipment for damage or excess wear before each use. SEE INSPECTION CRITERIA. If inspection reveals defect(s), remove the equipment from service, and tag "Out of Service." Immediately notify your Safety Administrator or Supervisor to contact The Caldwell Group regarding any defect.

Operating

- Use Dura-Lite composite beams when the ambient temperature does not exceed maximum 150 degrees Fahrenheit (66 degrees Celsius) or go below –40 degrees Fahrenheit (-40 degrees Celsius).
- Verify each operator is qualified or certified in proper lifting and rigging techniques.
- Request each operator to demonstrate proper lifting techniques, using DURA-LITE™ equipment. Verify the travel path is clear.
- Test the equipment before initial use.
- Barricade people from swing zones, fall zones, and crush zones.
- Confirm the force applied to the unit does NOT exceed the DURA-LITE™ equipment's capacity.

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Caldwell DURA-LITE™

Model 416 Adjustable Lifting Beam

Capacity Tonnes (kg)	Model Number	Spreads Max. in.	Spreads Max. m	Spreads Mid. In.	Spreads Mid. m	Spreads Min. in.	Spreads Min. m	Bail Adjust Increment In.	Bail Adjust Increment m	Headroom In.	Headroom m	Beam Only Weight lbs.	Beam Only Weight kg.	Weight with Hardware lbs.	Weight with Hardware kg.	Bail Dimensions "A" in. (cm)	Bail Dimensions "B" in. (cm)	Bail Dimensions "C" in. (cm)	Hook "O" in. (cm)
1/4 (250)	416-1/4-2	24	0.6	18	0.5	12	0.3	3	0.08	13.5	0.3	7	3.2	9	4.1				
	416-1/4-3	36	0.9	30	0.8	24	0.6	3	0.08	13.5	0.3	9	4.1	11	5.0				
	416-1/4-4	48	1.2	42	1.1	36	0.9	3	0.08	13.5	0.3	11	5.0	13	5.9	0.38 (.96)	1.5 (3.8)	2 (5.1)	0.89 (2.2)
	416-1/4-6	72	1.8	60	1.5	48	1.2	6	0.15	16.5	0.4	27	12.2	28	12.7				
	416-1/4-8	96	2.4	84	2.1	72	1.8	6	0.15	16.5	0.4	32	14.5	35	15.9				
	416-1/4-10	120	3.0	108	2.7	96	2.4	6	0.15	18.5	0.5	54	24.5	55	24.9				
	416-1/4-12	144	3.7	132	3.4	120	3.0	6	0.15	18.5	0.5	63	28.6	64	29.0				
	416-1/4-14	168	4.3	156	4.0	144	3.7	6	0.15	18.5	0.5	101	45.8	102	46.3				
1/2 (500)	416-1/2-2	24	0.6	18	0.5	12	0.3	3	0.08	13.9	0.4	9	4.1	11	5.0				
	416-1/2-3	36	0.9	30	0.8	24	0.6	3	0.08	13.9	0.4	10	4.5	13	5.9	0.38 (.96)	1.5 (3.8)	1.9 (4.8)	0.89 (2.2)
	416-1/2-4	48	1.2	42	1.1	36	0.9	3	0.08	14.9	0.4	14	6.4	16	7.3				
	416-1/2-6	72	1.8	60	1.5	48	1.2	6	0.15	16.9	0.4	30	13.6	32	14.5				
	416-1/2-8	96	2.4	84	2.1	72	1.8	6	0.15	18.9	0.5	49	22.2	51	23.1				
	416-1/2-10	120	3.0	108	2.7	96	2.4	6	0.15	18.9	0.5	80	36.3	82	37.2				
1 (1000)	416-1-2	24	0.6	18	0.5	12	0.3	3	0.08	20.4	0.5	14	6.4	20	9.1				
	416-1-3	36	0.9	30	0.8	24	0.6	3	0.08	20.4	0.5	16	7.3	22	10.0	0.62 (1.6)	2.8 (7.1)	4.5 (11.4)	0.91 (2.3)
	416-1-4	48	1.2	42	1.1	36	0.9	3	0.08	22.4	0.6	23	10.4	29	13.2				
	416-1-6	72	1.8	60	1.5	48	1.2	6	0.15	24.4	0.6	48	21.8	54	24.5				
	416-1-8	96	2.4	84	2.1	72	1.8	6	0.15	25.4	0.6	72	32.7	79	35.8				
2 (2000)	416-2-2	24	0.6	18	0.5	12	0.3	3	0.08	23.5	0.6	19	8.6	30	13.6				
	416-2-3	36	0.9	30	0.8	24	0.6	3	0.08	25.5	0.6	25	11.3	36	16.3	0.62 (1.6)	2.8 (7.1)	4.3 (11.4)	1.09 (2.7)
	416-2-4	48	1.2	42	1.1	36	0.9	3	0.08	27.5	0.7	45	20.4	57	25.9				
	416-2-6	72	1.8	60	1.5	48	1.2	6	0.15	27.5	0.7	68	30.8	79	35.8				
3 (3000)	416-3-2	24	0.6	18	0.5	12	0.3	3	0.08	26.5	0.7	22	10.0	38	17.2	0.62 (1.6)	2.8 (7.1)	4.3 (11.4)	1.36 (3.4)
	416-3-3	36	0.9	30	0.8	24	0.6	3	0.08	26.5	0.7	25	11.3	41	18.6				
	416-3-4	48	1.2	42	1.1	36	0.9	3	0.08	28.5	0.7	45	20.4	62	28.1				

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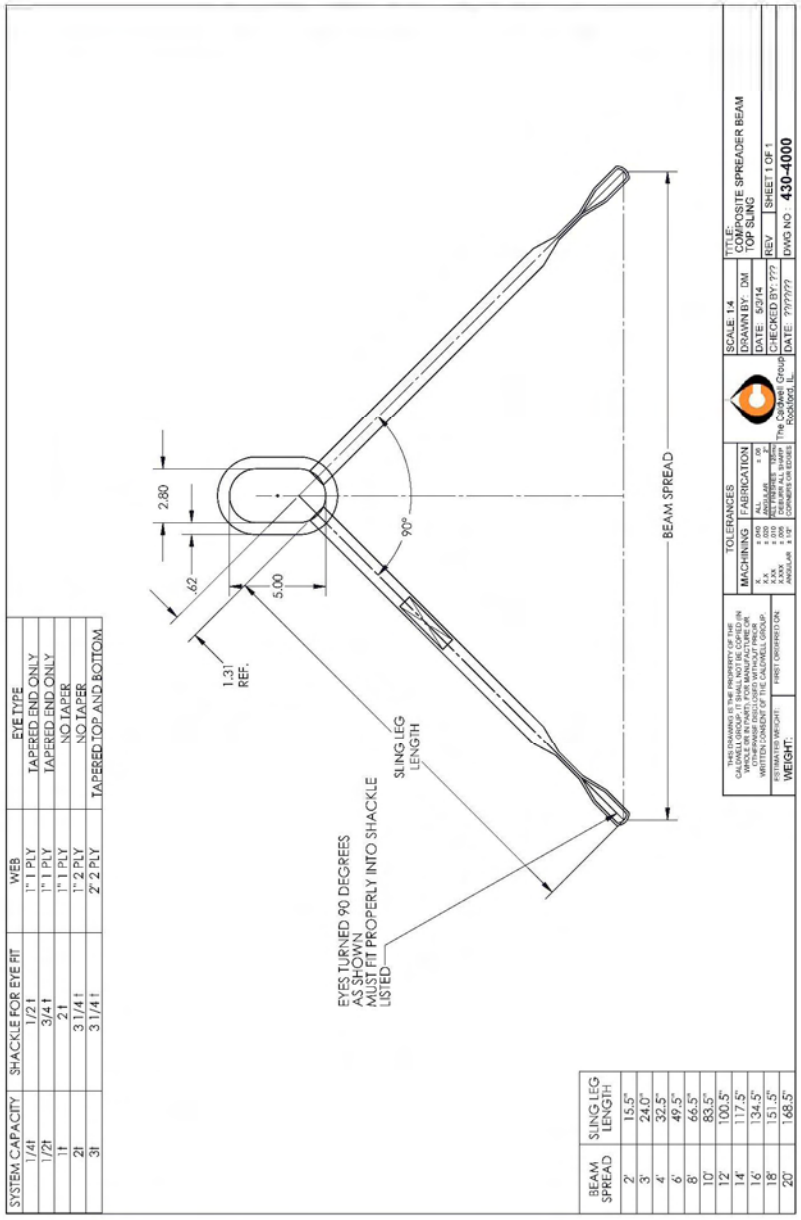
Model 430 Sling Data



SYSTEM CAPACITY	SHACKLE FOR EYE FIT	WEB	EYE TYPE
1/4t	1/2 t	1" 1 PLY	TAPERED END ONLY
1/2t	3/4 t	1" 1 PLY	TAPERED END ONLY
1t	2 t	1" 1 PLY	NO TAPER
2t	3 1/4 t	1" 2 PLY	NO TAPER
3t	3 1/4 t	2" 2 PLY	TAPERED TOP AND BOTTOM

BEAM SPREAD	SLING LEG LENGTH
2'	15.5"
3'	24.0"
4'	32.5"
6'	49.5"
8'	66.5"
10'	83.5"
12'	100.5"
14'	117.5"
16'	134.5"
18'	151.5"
20'	168.5"

⚠WARNING

Operating (continued)

- Confirm the combined weight of the load and the lifter does NOT exceed the hoist's rated capacity.
- Confirm all lifting devices are free from twists, kinks, or any damage.
- Confirm all lifting devices are correctly and completely seated in the hoist hook.
- Confirm the load's center of gravity is aligned with the hoist center—before lifting or transporting the load.
- Ensure the load can withstand forces applied by the lifter.
- Inspect the load, making sure nothing can fall from the load or lifter, during loading, lifting, or transporting cycle.
- Inspect the lifter, verify all equipment adjustments are correct and secure.
- Do NOT lift loads over people.
- Do NOT lift people.
- Do NOT lift higher than necessary.
- Do NOT leave suspended load unattended.
- Prohibit any person from riding on the load or the lifter.
- Obey stop signals from anyone.
- Lift or transport only properly balanced loads.
- Confirm the load is ready for the lifting or transporting cycle.
- Verify the transport area is clear of people and physical obstructions before the lifting and transporting cycles begin.
- Accelerate and decelerate all loads slowly and smoothly.

Safety Information

⚠WARNING

Lifting Cycle

- Do NOT lift an unsafe or unbalanced load.
- Do NOT use equipment labeled with an "Out of Service" tag.
- Use ONLY a vertical lift.
- Lifting at angles less than or greater than 90° voids your warranty.
- Start lifting a loaded or unloaded lifter slowly and gently.
- Raise, lower, or transport the load ONLY over specified areas.
- Do NOT allow the lifter to make any contact with any object, during loading, lifting, or transporting.
- Avoid swinging the load—transport the load slowly.
- Bumping the lifter, loaded or unloaded, causes excessive swinging.
- Do NOT use shock loading.
- Do NOT drag loads along the ground.
- Transport a loaded or unloaded lifter slowly and smoothly.
- Prohibit people from standing under a suspended load.
- Prohibit operators from leaving a suspended load unattended.
- Set the load down gently.

Storing

- Store clean lifters in a designated place.

Modifying

- DO NOT MODIFY

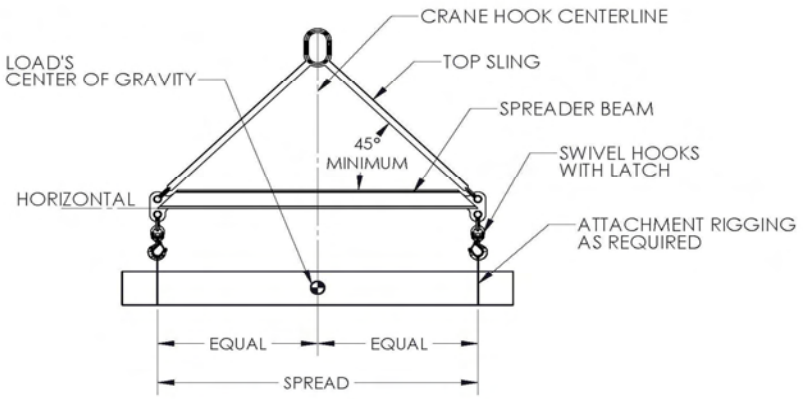
Proper Lifting

Caldwell DURA-LITE™

Model 430 Spreader Beam

1. Do not attach the crane hook directly to the Model 430-Fixed Spreader Beam and lift a load.
2. See Tag and Decal Location; Know the beam weight and the rated capacity of the beam (located on the Caldwell Nameplate/ID tag).
3. Top rigging of 45° is the minimum angle; angles less than 45° overload your spreader system.
4. Prevent tilting of the Model 430 Fixed Spreader Beam and the load by positioning the load's center of gravity in-line with the center of the crane hook.
5. Perform a test lift of several inches to verify the load is properly balanced and the lifter is level/horizontal.

Model 430—Proper Lifting



⚠WARNING

Do NOT allow people to remain near, around, or under the Lifting or Spreader Beam working area or traveling path.
Use only a vertical lift.
Do NOT bump or drag a loaded or unloaded lifter during loading, lifting, or transporting.

Assemblies

Model 430 Spreader Beam

Capacity Tonnes (kg)	Model Number	Spread		Headroom		Beam Only Weight		Weight with Hardware		Bail Dimensions			Hook
		Inches	Meters	Inches	Meters	Pounds	Kilograms	Pounds	Kilograms	"A" in. (cm)	"B" in. (cm)	"C" in. (cm)	"O" in. (cm)
1/4 (250)	430-1/4-2	24	0.6	24	0.6	5	2.3	9	4.1	0.62 (1.6)	2.8 (7.1)	5 (12.7)	0.89 (2.2)
	430-1/4-3	36	0.9	30	0.8	7	3.2	11	5.0				
	430-1/4-4	48	1.2	36	0.9	9	4.1	13	5.9				
	430-1/4-6	72	1.8	48	1.2	14	6.4	17	7.7				
	430-1/4-8	96	2.4	60	1.5	18	8.2	22	10.0				
	430-1/4-10	120	3.0	72	1.8	22	10.0	26	11.8				
	430-1/4-12	144	3.7	85.5	2.2	42	19.1	46	20.9				
	430-1/4-14	168	4.3	98.5	2.5	64	29.0	69	31.3				
	430-1/4-16	192	4.9	110.5	2.8	73	33.1	78	35.4				
	430-1/4-18	216	5.5	122.5	3.1	83	37.6	87	39.5				
	430-1/4-20	240	6.1	134.5	3.4	132	59.9	137	62.1				
1/2 (500)	430-1/2-2	24	0.6	24.5	0.6	5	2.3	9	4.1	0.62 (1.6)	2.8 (7.1)	5 (12.7)	0.89 (2.2)
	430-1/2-3	36	0.9	30.5	0.8	7	3.2	11	5.0				
	430-1/2-4	48	1.2	36.5	0.9	10	4.5	14	6.4				
	430-1/2-6	72	1.8	48.5	1.2	14	6.4	18	8.2				
	430-1/2-8	96	2.4	62	1.6	29	13.2	34	15.4				
	430-1/2-10	120	3.0	75	1.9	47	21.3	51	23.1				
	430-1/2-12	144	3.7	87	2.2	57	25.9	62	28.1				
	430-1/2-14	168	4.3	99	2.5	93	42.2	98	44.5				
	430-1/2-16	192	4.9	111	2.8	107	48.5	112	50.8				
1 (1000)	430-2-2	24	0.6	25	0.6	6	2.7	13	5.9	0.62 (1.6)	2.8 (7.1)	5 (12.7)	0.89 (2.2)
	430-1-3	36	0.9	31	0.8	9	4.1	15	6.8				
	430-1-4	48	1.2	37	0.9	11	5.0	18	8.2				
	430-1-6	72	1.8	51	1.3	25	11.3	32	14.5				
	430-1-8	96	2.4	64	1.6	44	20.0	51	23.1				
	430-1-10	120	3.0	76	1.9	76	34.5	83	37.6				
2 (2000)	430-2-2	24	0.6	27	0.7	11	5.0	22	10.0	0.62 (1.6)	2.8 (7.1)	5 (12.7)	0.91 (2.3)
	430-2-3	36	0.9	33	0.8	13	5.9	24	10.9				
	430-2-4	48	1.2	40	1.0	21	9.5	32	14.5				
	430-2-6	72	1.8	53	1.3	34	15.4	46	20.9				
	430-2-8	96	2.4	65	1.7	63	28.6	76	34.5				
3 (3000)	430-3-2	24	0.6	27	0.7	11	5.0	24	10.9	0.62 (1.6)	2.8 (7.1)	5 (12.7)	1 (2.5)
	430-3-3	36	0.9	33	0.8	13	5.9	27	12.2				
	430-3-4	48	1.2	42	1.1	25	11.3	40	18.1				
	430-3-6	72	1.8	54	1.4	49	22.2	64	29.0				

Model Numbers shown in green are In Stock.

Safety Information

Caldwell DURA-LITE™

⚠WARNING

Inspecting

- An appointed person shall visually inspect the DURA-LITE™ product on a daily or weekly schedule depending on the severity of service.
- Establish a regular inspection schedule:

Every Lift Inspection

Visual examination by the operator before and during each lift.

Frequent Inspection

Visual examination by the operator or other designated persons—records not required.

Normal service	monthly
Heavy service	weekly to monthly
Severe service	daily to weekly
Special or infrequent service	qualified person recommendation

Periodic Inspection

Visual inspection by a qualified person, keeping records for continuing evaluations.

Normal service	monthly
Heavy service	weekly to monthly
Severe service	daily to weekly
Special or infrequent service	qualified person recommendation

MODIFICATIONS TO YOUR DURA-LITE EQUIPMENT VOIDS YOUR WARRANTY.

DURA-LITE

General Inspection

Below is a list of specific types of damage that can occur with your DURA-LITE product. The Guidelines below define indicators for acceptable use and unacceptable use.

If inspection reveals any unacceptable damage, remove the lifter from service, tagging with an "OUT of SERVICE" tag. Contact The Caldwell Group for professional consultation and evaluation, regarding replacement: 815-229-5667.

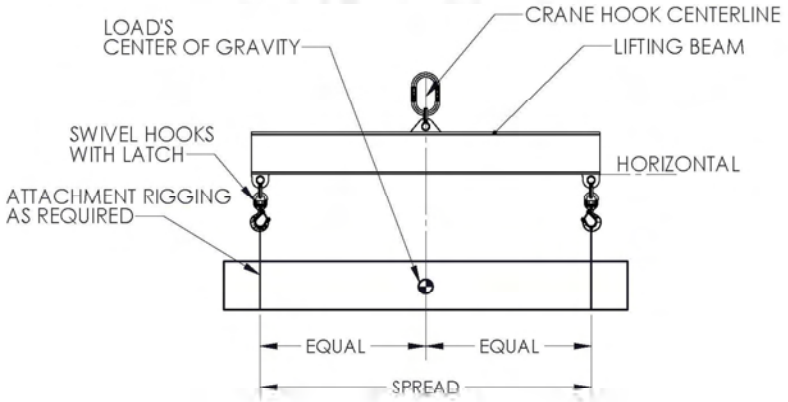
- Chips—Chipped paint or minor chips in the surface of the material is acceptable.
- Gouges—Areas where the material is removed past the surface layer are not acceptable.
- Delamination—Any area that layers of material have separated is unacceptable.
- Fiber Bloom—A pultrusion surface condition exhibiting a fiber prominence or fiber showing that usually has a white or bleached color and a sparkling appearance. It may indicate an adverse reaction to a chemical and is unacceptable.
- Burn—A discoloration, distortion, or destruction of the surface as a result of thermal decomposition is unacceptable.
- Scuffing—Scrape marks on the material and / or paint is acceptable.
- Damage to the corner of the channel—If the corner of a flange is damaged it can be sanded until the defect is gone limited to half of the flange length. If any damage in that area shows up again it is unacceptable. (SEE THE FOLLOWING ILLUSTRATION).

Caldwell DURA-LITE™

Model 419 Lifting Beam

1. See Tag and Decal Location; Know the beam weight and the rated capacity of the beam (located on the Caldwell Nameplate/ID tag).
2. Confirm that all hardware is installed properly.
3. Use only vertical pull (the center of the crane hook must be 90° to the beam).
4. Prevent tilting of the Model 419 Lifting Beam and the load by positioning the load's center of gravity in-line with the center of the crane hook.
5. Perform a test lift of several inches to verify the load is properly balanced and the lifter is level/horizontal.

Model 419—Proper Lifting



⚠WARNING

Do NOT allow people to remain near, around, or under the Lifting or Spreader Beam working area or traveling path.
Use only a vertical lift.
Do Not bump or drag a loaded or unloaded lifter during loading, lifting, or transporting.

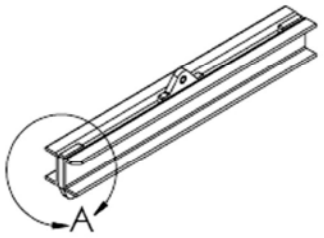
Model 419 Lifting Beam

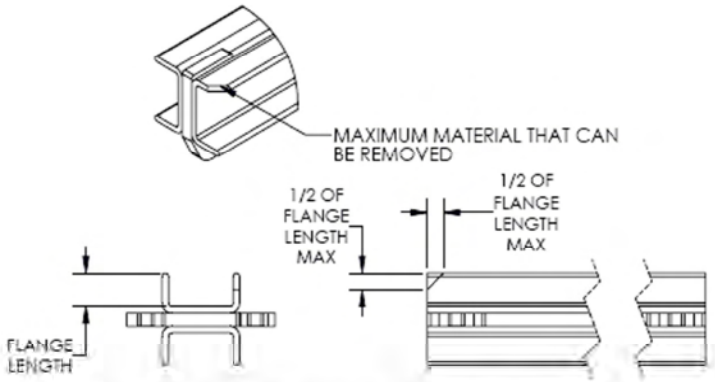
Capacity Tonnes (kg)	Model Number	Spread		Headroom		Beam Only Weight		Weight with Hardware		Bail Dimensions			Hook
		Inches	Meters	Inches	Meters	Pounds	Kilograms	Pounds	Kilograms	"A" in. (cm)	"B" in. (cm)	"C" in. (cm)	"O" in. (cm)
1/4 (250)	419-1/4-2	24	0.6	13.5	0.3	6	2.7	8	3.6	0.38 (.96)	1.5 (3.8)	2 (5.1)	0.89 (2.2)
	419-1/4-3	36	0.9	13.5	0.3	8	3.6	10	4.5				
	419-1/4-4	48	1.2	13.5	0.3	10	4.5	12	5.4				
	419-1/4-6	72	1.8	16.5	0.4	23	10.4	25	11.3				
	419-1/4-8	96	2.4	16.5	0.4	30	13.6	32	14.5				
	419-1/4-10	120	3.0	18.5	0.5	49	22.2	51	23.1				
	419-1/4-12	144	3.7	18.5	0.5	63	28.6	65	29.5				
	419-1/4-14	168	4.3	18.5	0.5	96	43.5	98	44.5				
1/2 (500)	419-1/2-2	24	0.6	13.9	0.4	7	3.2	9	4.1	0.38 (.96)	1.5 (3.8)	1.9 (4.8)	0.89 (2.2)
	419-1/2-3	36	0.9	13.9	0.4	9	4.1	11	5.0				
	419-1/2-4	48	1.2	14.9	0.4	12	5.4	14	6.4				
	419-1/2-6	72	1.8	16.9	0.4	25	11.3	27	12.2				
	419-1/2-8	96	2.4	18.9	0.5	42	19.1	44	20.0				
	419-1/2-10	120	3.0	18.9	0.5	77	34.9	79	35.8				
1 (1000)	419-1-2	24	0.6	19.6	0.5	9	4.1	15	6.8	0.62 (1.6)	2.8 (7.1)	4.5 (11.4)	0.89 (2.3)
	419-1-3	36	0.9	19.6	0.5	11	5.0	17	7.7				
	419-1-4	48	1.2	21.6	0.5	19	8.6	25	11.3				
	419-1-6	72	1.8	23.6	0.6	34	15.4	39	17.7				
	419-1-8	96	2.4	23.6	0.6	62	28.1	67	30.4				
2 (2000)	419-2-2	24	0.6	21.9	0.6	15	6.8	24	10.9	0.62 (1.6)	2.8 (7.1)	4.3 (11)	0.91 (2.3)
	419-2-3	36	0.9	24.1	0.6	24	10.9	33	15.0				
	419-2-4	48	1.2	25.9	0.7	46	20.9	56	25.4				
	419-2-6	72	1.8	25.9	0.7	60	27.2	69	31.3				
3 (3000)	419-3-2	24	0.6	24.9	0.6	21	9.5	32	14.5	0.62 (1.6)	2.8 (7.1)	4.3 (11)	1 (2.5)
	419-3-3	36	0.9	24.9	0.6	24	10.9	35	15.9				
	419-3-4	48	1.2	26.6	0.7	46	20.9	58	26.3				

Model Numbers shown in green are In Stock.

DURA-LITE

General Inspection Continued





- Adhesive Joints—Inspect all joints for gouges, soft spots, or separation. If any exist, it is unacceptable.
- Bushings—inspect the bushings to verify they are not cracked, deformed, worn, or loose.
- Top Sling
  - ◊ Remove from service and replace if the following exists:
    - Core yarn is visible
    - Webbing is cut, frayed, melted, charred, or chemical damage is visible
    - Webbing has holes, tears, snags, or abrasions
  - ◊ Remove from service and repair if ID is missing or illegible.
  - ◊ Consult manufacturer sling information for more details.

DURA-LITE™ Composite Products Environmental Information

Fire Rating
Flame Spread Class I per ASTM E84
Flame Resistance Class V1 per UL94

Electrical Properties
120 second arc resistance (LW) per ASTM D495
40 KV/in Dielectric Strength (LW) per ASTM D149
Dielectric Constant (PF) 5.2 at 60 HZ per ASTM D150

Below is a listing of chemical families that will not adversely impact the DURA-LITE™ Composite products. This list applies to the beam only. Accessories like Polyester slings, etc. may be different. Refer to their specific information if included.

- Alcohols
- Diesel Fuel
- Gasoline
- Glycols (Anti-Freeze Liquid)
- Motor Oils
- Saltwater
- Water

For information regarding other chemicals, contact The Caldwell Group with the following information:

1. Exact chemical description
2. Minimum and maximum temperatures the DURA-LITE™ product will be exposed to
3. Percent of chemical concentration in the DURA-LITE™ product's operating environment

Consult The Caldwell Group if there are any other environmental concerns before use.

Maintenance

Equipment should be maintained in good, usable condition at all times. Hardware, fittings, and accessories should be checked frequently and kept in proper working condition.

The end user shall establish a best judgment to determine when equipment maintenance is required. A general maintenance program should include the following:

- Equipment should be cleaned of any build-up of dirt, grime, dust, grease, carbonaceous and other conductive materials.
- If the equipment is used indoors, there are fewer environmental concerns unless it is in a chemical environment. In that case, additional inspection and may be warranted. Maintenance in a chemical environment requires specific consultation. Contact The Caldwell Group.

When structural damage is found, the equipment shall be taken out of service.

Exposure to Fire - If equipment is exposed to excessive heat as in the case of fire, the equipment shall be taken out of service.

Chemical Compatibility - When equipment is to be subjected to chemicals, consult the guide prior to their use. Contact The Caldwell Group if any environmental concerns exist.