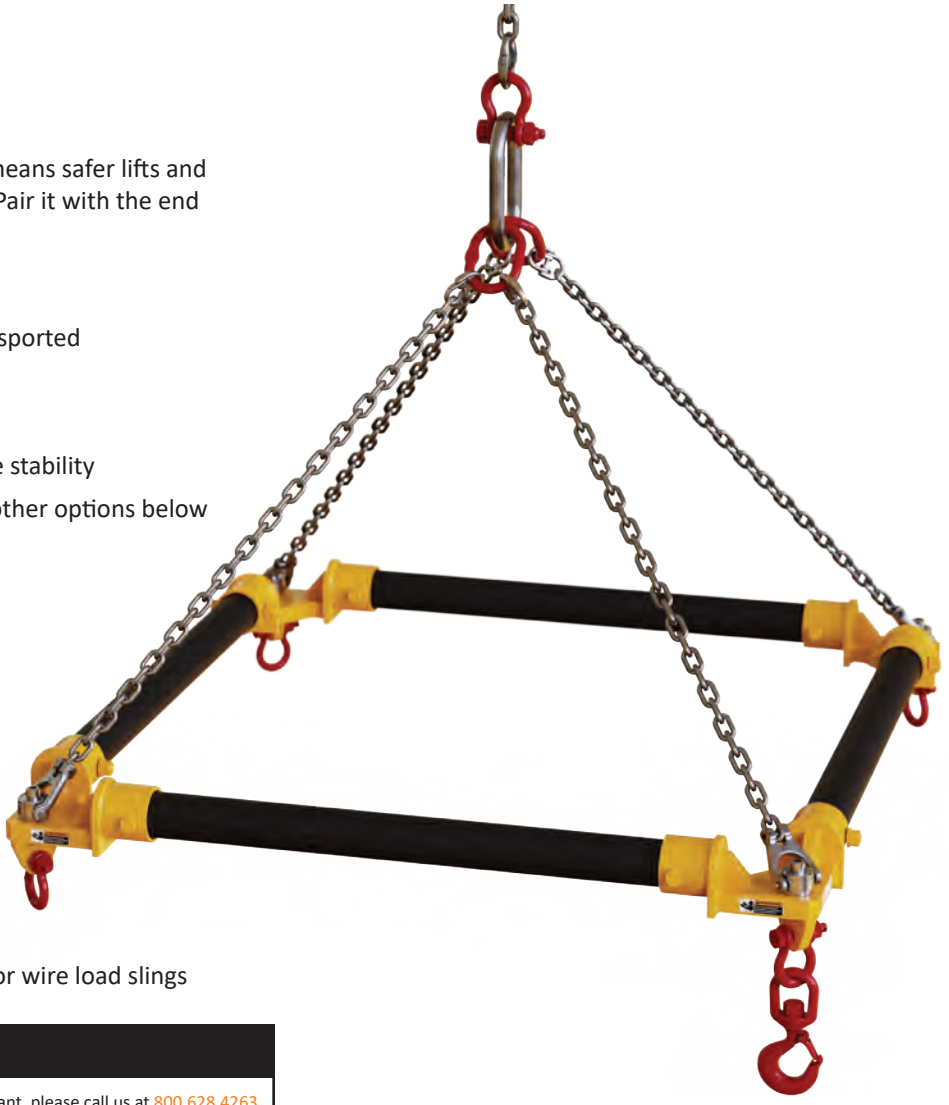
Model 34

4-Point Spreader Beam

More stability and knock-down design means safer lifts and easier transport. Want to customize it? Pair it with the end fittings below.



Product Features:

- New knock-down design is easily transported
- 6- or 9-ton capacity
- Spreads up to 10' x 10'
- 4-point spreader beam provides more stability
- Lower lifting shackles standard - see other options below
- Complies with ASME standards

Top Rigging Options:

- All include swivel hoist ring
- C – Chain Top Rigging
- W – Wire Rope Top Rigging
- A – Adjust-A-Leg Top Rigging

Bottom Rigging Options:

- F – Fixed Lower lifting hooks
- SH – Swivel Lower lifting hooks
- We can also provide synthetic, chain or wire load slings

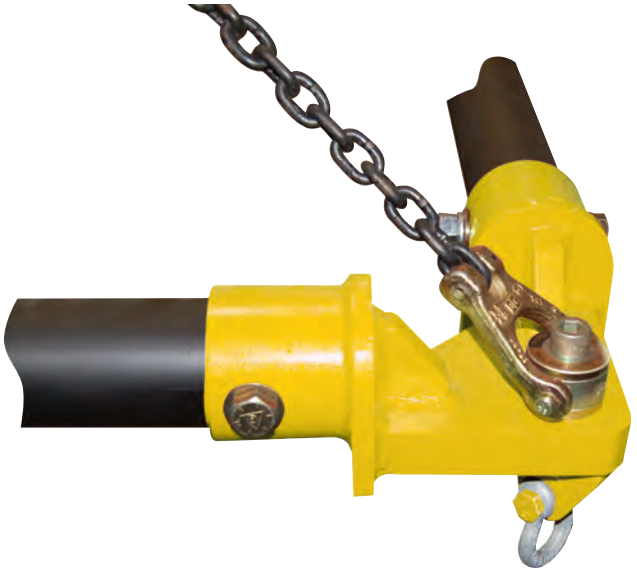
ORDER TODAY!

This product is customizable. To get exactly what you want, please call us at 800.628.4263.

Model BEF-FSB

Beam End Fittings For 4-Point Spreader Beam

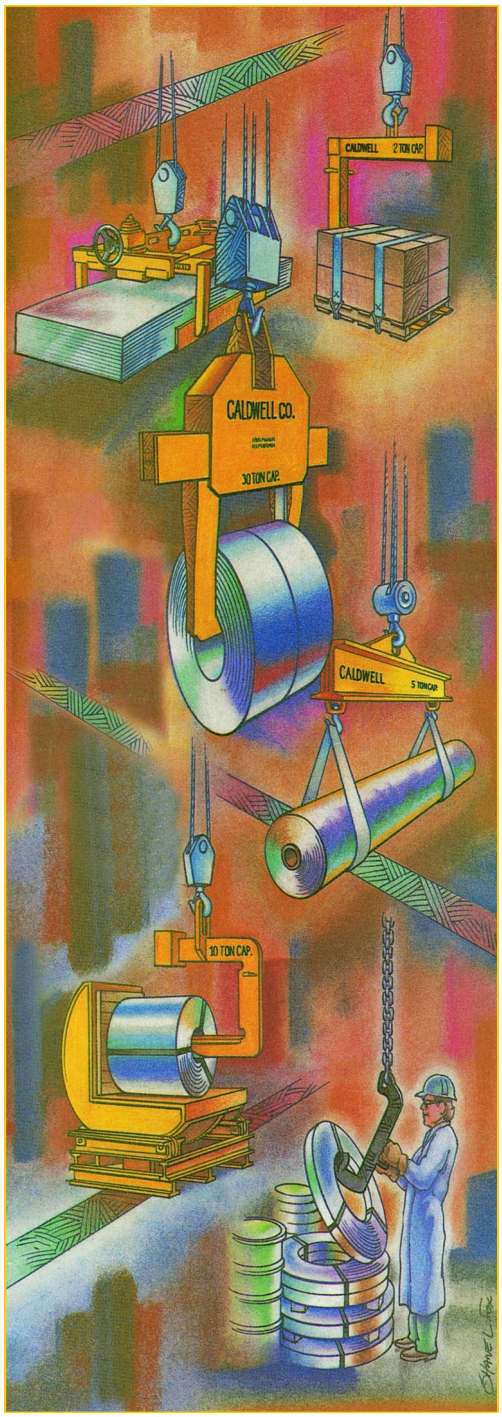
Add these end fittings to your Model 34 (sold above) to create a 4-point beam to meet your specific application.



Product Features:

- Build your own spreader beam
- Designed to work with hoist rings for flexibility
- Complies with ASME standards when assembled to specification using designated pipe and rigging

	Model Number	Max. Capacity (tons)	Weight (lbs.)
IN STOCK	BEF-2.1/2-FSB-6	6	78
IN STOCK	BEF-2.1/2-FSB-9	9	86



CALDWELL LIFTING SOLUTIONS

STRONG-BAC®
Below Hook Lifters

INSTRUCTION MANUAL

Model 34

Four Point

Spreader Beam

PREFACE

WARNING

All qualified persons responsible for assembly, disassembly, operation, inspection, and maintenance shall read and understand all the contents of this manual to avoid serious injury, death, or property damage. Keep this manual.

Your new Model 34, Four Point Spreader Beam, is a load supporting lifting attachment, which only supports loads up to the maximum capacity when loaded correctly. The Model 34 is for specific tasks, withstanding forces based on the unit's maximum capacity. The assembly, disassembly, operation, inspection, and maintenance instructions in this manual are typical of the Model 34. Use the following guidelines in this manual for your protection and for optimal operation of your equipment. The safety precautions listed in this manual are not all-inclusive. The owner or user is responsible for understanding and acting according industry standards and any other location, city, state, and federal regulations.

Also, your unit may look different than the pictorial images in this manual, however, the information: safety, operating, loading, and disassembling applies to your lifting unit.

Equally important, modifications to your lifting equipment without prior written approval from The Caldwell Group voids your warranty. Refer to ASME B30.20, regarding liability of repaired or modified lifters

Record your Serial Number :_____

TABLE OF CONTENTS

Safety Information

WARNING

Before Operating

- Read and understand this manual before operating, inspecting, maintaining , or servicing the Model 34, four point “end fitting” spreader beam.
- Allow only qualified persons to install, operate, inspect, and maintain your Model 34.

Receiving

- Check your unit upon arrival, ensuring no damage or lost parts occurred during transit. Contact the carrier’s agent, reporting any loss or damage.

Operating Practices

- Verify each operator is qualified or certified in proper lifting and rigging techniques.
- Request each operator to demonstrate proper lifting techniques, using the Model 34.
- Verify the travel path is clear.
- Test the Model 34 before initial use.
- Barricade people from swing zones, fall zones, and crush zones.
- Confirm the weight of the load does NOT exceed the Model 34’s rated capacity.
- Confirm the combined weight of the load and the Model 34 does NOT exceed the hoist’s rated capacity.
- Confirm the bottom rigging is equal to or greater than the Model 34’s rated capacity
- Confirm all lifting devices are free from twists, kinks, or any damages.
- Confirm all lifting devices are correctly, completely seated in the hoist hook.
- Confirm the load’s center of gravity is in-line with the hoist’s center of gravity—before lifting or transporting the load.
- Confirm the bottom rigging is securely attached to the Model 34 and the load.
- Inspect the load, making sure nothing can fall from the load, during the 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.

Safety Information

WARNING

Operating Practices

- Prohibit any person from riding on the load or the Model 34.
- 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.

Lifting Cycle

- Do NOT lift an unsafe or unbalanced load.
- Do NOT use a lifter labeled with an “Out of Service” tag.
- Lift the load with the hoist line vertical.
- Start lifting the load slowly and gently.
- Raise, lower, or transport the load ONLY over specified areas.
- Avoid swinging the load—Transport the load slowly.
- Do NOT use shock loading or side loading.
- Do NOT drag loads along the ground.
- Prohibit people from standing under a suspended load.
- Prohibit operators from leaving a suspended load unattended.

Safety Information

WARNING

Inspecting

- An appointed person shall visually inspect the lifter 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

- Inspect the Model 34 for any visible damage:

—cracks, excessive wear, deformation, any damage:
- end pipes
- hook attachment points
- fasteners
- slings
- hoist ring
- shackle
- end fitting

—loose, damaged, or missing:
- fasteners
- slings
- hoist ring
- end fitting
- product safety labels
- product identification tag

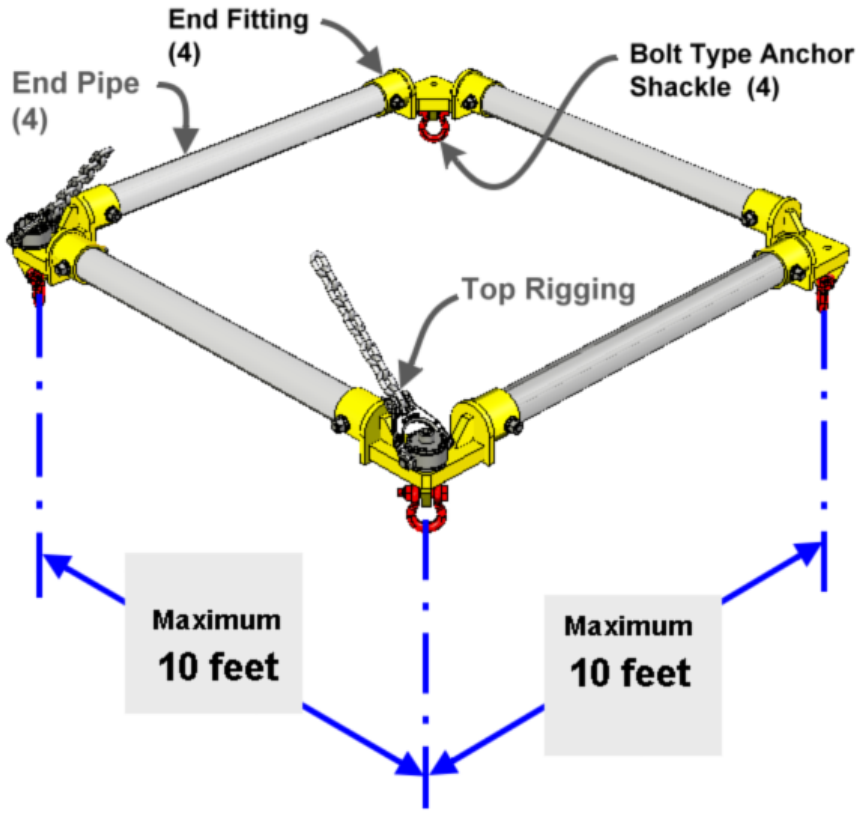
If inspection reveals any defects, remove the Model 34 from service, and tag "Out of Service". Immediately notify your Safety Administrator or Supervisor—contact The Caldwell Group regarding any defect.

GENERAL LAYOUT

Your Model 34, Four Point Spreader Beam, is either a six ton or nine ton maximum capacity unit that is equipped with:

- top chain rigging
- four hoist rings
- four end fittings
- four end pipes~~— up to a maximum twelve foot by twelve foot spread~~.
- four shackles for bottom rigging attachment

One of three types of slings: chain, wire rope, or synthetic, plus four sling hooks, either fixed or swivel, comprise the *optional* bottom rigging.



⚠ WARNING

Use *only* a vertical pull.

OPERATING

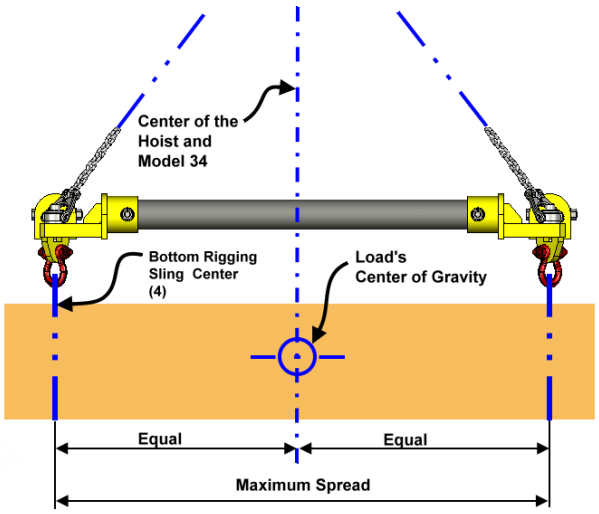
BEFORE attaching the load, verify the following:

- The top rigging is securely attached to all four end fittings.
- The four end pipes are securely fastened into all four end fittings.
- The bottom rigging is securely attacked to all four shackles.

1. Know the:
   - weight of the designated load.
   - size of the designated load.
   - location of the load's center of gravity.
   - Model 34's rated capacity.
2. Confirm the weight of the load is equal to or less than the Model 34's rated capacity.
3. Confirm the Hoist's rated capacity is equal to or greater than the combined weight of the load and the Model 34.
4. Confirm the bottom rigging's rated capacity is equal to or greater than the Model 34's rated capacity.
5. Slowly position the Model 34 above the load.
6. Confirm the center of both the hoist and the Model 34 top rigging is in-line with the load's center of gravity.
7. Attach the bottom rigging slings to the load.
8. Again, verify the center of the hoist is in-line with the load's center of gravity, front view and side view.
9. Verify the load's center of gravity is symmetrically located between the bottom rigging hooks, front view and side view.
10. Perform a test lift of several inches, verifying:
    - the load is secure and properly balanced.
    - the load is level and horizontal.
11. Do NOT suddenly accelerate or decelerate a loaded or unloaded Model 34 , while lifting or transporting.

PROPER LOADING

Model 34
Front View or
Side View

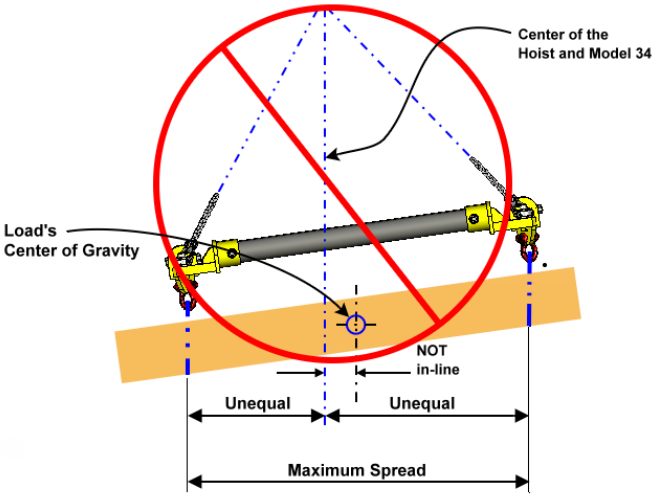


The load's center of gravity is :

- in-line with the hoist 's center.
- symmetrical between bottom rigging sling centers.

IMPROPER LOADING

Model 34
Front View or
Side View

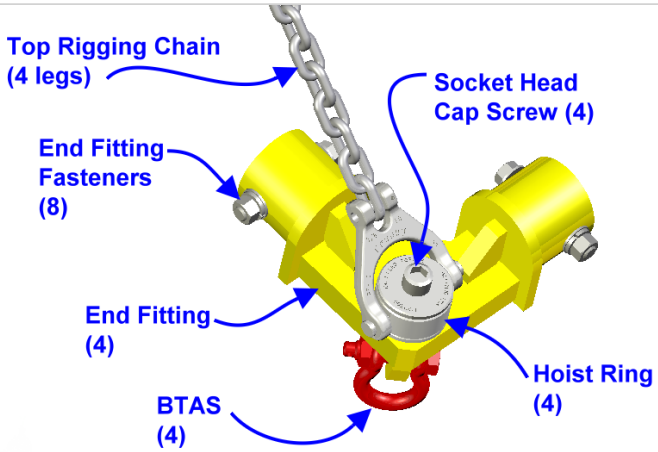


The load's center of gravity is :

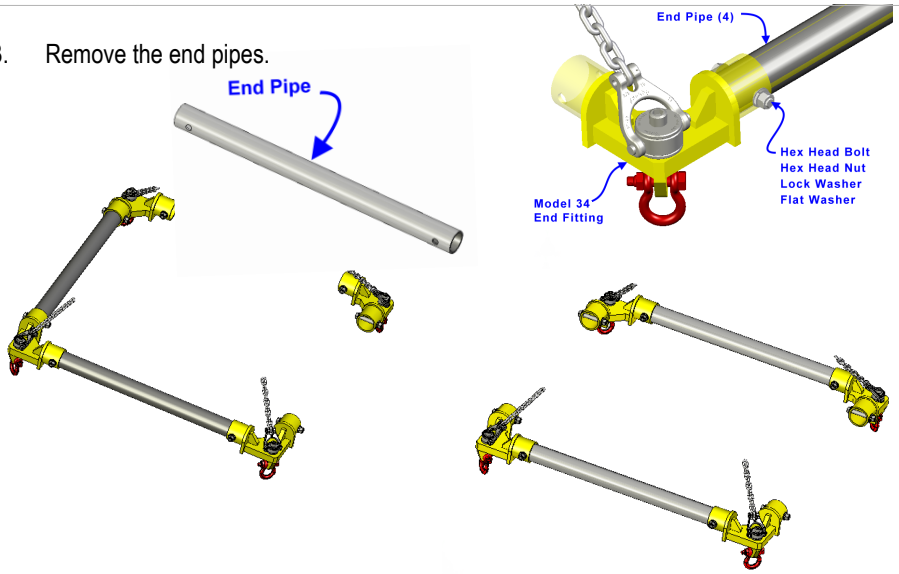
- ***NOT*** in-line with the hoist 's center.
- ***NOT*** symmetrical between bottom rigging sling centers.

DISASSEMBLING

1. Decide which end pipes you want to remove.
2. Loosen and remove the end fitting fasteners, disconnecting the selected end pipes.



3. Remove the end pipes.



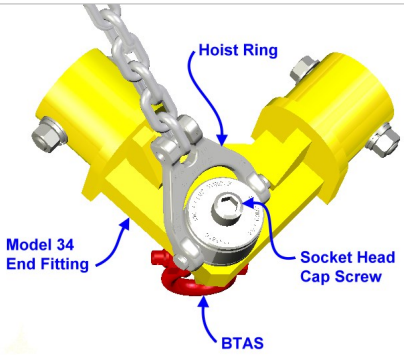
4. After removing the end pipes, the top rigging remains connected to all four end fittings.

⚠WARNING

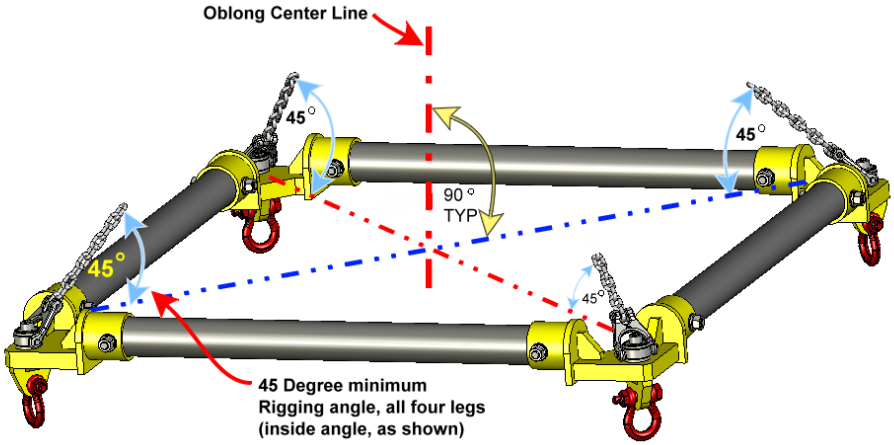
Top rigging must be at a 45 degree angle, as shown below.
Hoist ring socket head cap screw must meet manufacturer's torque specs.
For manufacturer's specs, see
http://www.thecrosbygroup.com/html/en-US/pdf/pgs/182_184.pdf

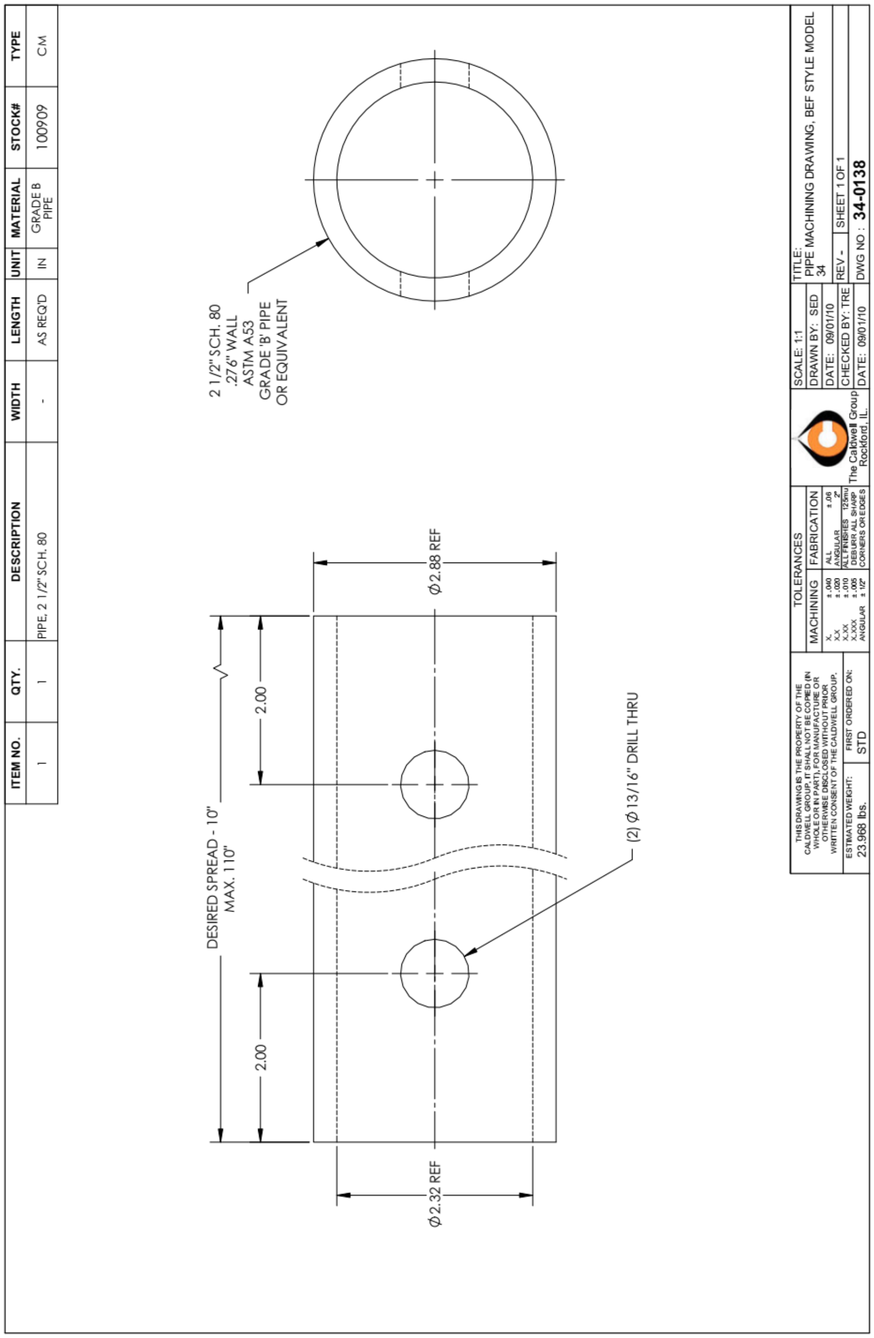
DISASSEMBLING

1. To remove the top rigging from the Model 34, loosen the hoist ring socket head cap screw.



2. When re-assembling the top rigging, confirm the rigging angle is 45 degrees from the inside of all four end fittings and chain legs; and confirm the hoist ring manufacturer's specs have been met.




ITEM NO.
QTY.
DESCRIPTION
WIDTH
LENGTH
UNIT
MATERIAL
STOCK#
TYPE
1
1
PIPE, 2 1/2" SCH. 80
-
AS REQ'D
IN
GRADE B PIPE
100909
CM
2 1/2" SCH. 80
.276" WALL
ASTM A53
GRADE 'B' PIPE
OR EQUIVALENT
Ø2.88 REF
Ø2.32 REF
2.00
2.00
DESIRED SPREAD - 10"
MAX. 110"
(2) Ø13/16" DRILL THRU
TOLERANCES
MACHINING
FABRICATION
ESTIMATED WEIGHT:
23.968 lbs.
FIRST ORDERED ON:
STD
The Caldwell Group
Rockford, IL.
SCALE: 1:1
DRAWN BY: SED
DATE: 09/01/10
CHECKED BY: TRE
DATE: 09/01/10
TITLE:
PIPE MACHINING DRAWING, BEF STYLE MODEL
34
REV -
SHEET 1 OF 1
DWG NO : 34-0138

4080 Logistics Parkway
Rockford, IL 61109

P.O. Box 6005
Rockford, IL 61125

800.628.4263
815.229.5667

815.229.5686 fax
caldwellinc.com

The Caldwell Group, Inc.
Quality. Guaranteed.