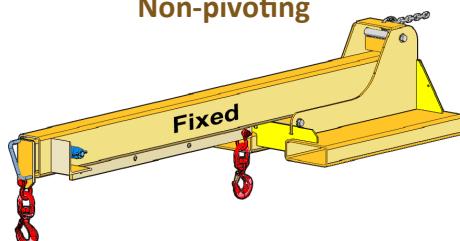
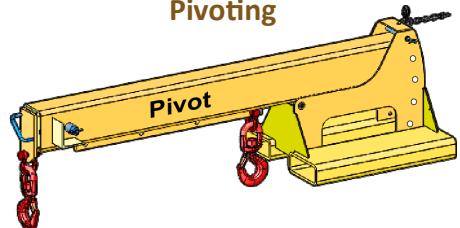
**LIF-TRUC**TM

Fork Truck Attachments

INSTRUCTION MANUAL
Fork Lift BoomModel FB
Telescoping
Non-pivotingModel PB
Telescoping
PivotingCaldwell quality.
Guaranteed.

PREFACE

⚠ WARNING

The lift truck capacity is affected by the load weight, boom weight, and hook positions. Whenever an attachment is used with a lift truck, the lift truck capacity changes and may be less than capacity shown on attachment. Consult truck nameplate.

Your new Model FB, Telescoping, *Non-pivoting* Lift Boom, or Model PB, Telescoping, *Pivoting* Lift Boom, is a lift truck, load supporting, attachment, which only supports loads up to the maximum capacity at specific hook positions when loaded correctly. The booms are for specific tasks, withstanding forces based on the unit's maximum capacity. Contact your lift truck manufacturer for written approval to attach and use the Model FB or Model PB with your lift truck, requesting the lift truck's rated capacity with attachment. The installation, operation, and maintenance instructions in this manual are typical of the Model FB and PB. 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.

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

Record your Serial Number :
(see unit identification tag)

Your Model Number Indicate Below:		
	Model Number	Weight (lbs.)
	FB-30	340
	FB-40	340
	FB-60	390
	FB-80	500

Your Model Number Indicate Below:		
	Model Number	Weight (lbs.)
	PB-30	370
	PB-40	370
	PB-60	420
	PB-80	540

Contact The Caldwell Group for a custom sized boom.

Table of Contents

Preface	2
Safety Information	4
Model FB Center of Gravity	9
Model PB Center of Gravity	10
Model PB Extended Boom	11
Vertical Center of Gravity	
Model PB Retracted Boom	11
Vertical Center of Gravity	
Model FB General Layout	12
Model FB and PB	12
Fork Pocket Dimensions	
Model PB General Layout	13
Attaching the Boom	14
Adjusting the Spread	15
Pivoting the Boom	17
Proper Loading	20
 Using Two Hooks	20
 Using One Hook	22
Model FB or PB	24
Improper Loading	
Model FB Marking and Label Legend	26
Model PB Marking and Label Location	27

**⚠ WARNING****GENERAL**

The fundamental objective of the following safety suggestions is to protect authorized, qualified people who are responsible for installation, operation, and inspection of the Model FB or PB, 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. The owner or user is responsible for understanding and acting according to industry standards and regulations—and any other applicable local, city, state, or federal regulations.

TRAINING

Authorized, qualified individuals need comprehensive training in the use of protective equipment, safeguards, and safe operation of the Model FB or PB. Permit only authorized, qualified people to operate, maintain, and service your Model FB or PB.

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.



(ANSI Z535.4-2007)

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.

The Caldwell Group accepts no responsibility or liability for any of its products that are improperly used. The safety information in this manual is provided as a guide for the user, and is not a substitute for proper training and usage.

WARNING**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.

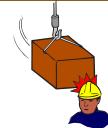
Before Operating

- Read and understand this manual before operating, inspecting, maintaining, or servicing your Model FB or PB.
- Allow only qualified persons to install, operate, inspect, and maintain your Model FB or PB.

Operating Practices

- Verify each operator is qualified or certified.
- Request each operator to demonstrate proper lifting techniques, using the fork lift boom.
- Verify the travel path is clear.
- Test the fork lift boom before initial use.
- Barricade people from swing zones, fall zones, and crush zones.
- Confirm the weight of the load does NOT exceed the Model FB's or Model PB's rated capacity.
- Confirm the combined weight of the load and the fork lift boom does NOT exceed the lift truck'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.
- Inspect the lifter verify all equipment adjustments are correct and secure, before load attachment and lifting cycle begin
- Ensure the load can withstand forces applied by the lifter.
- Inspect the load; make sure nothing can fall from the load, during the lifting or transporting cycle.

⚠ WARNING



Operating Practices

- Use only the hooks provided with the fork lift boom.
- Confirm the load's center of gravity is in-line with the hoist's center of gravity—for single hook lifting.
- Confirm the load's center of gravity is equal distance, symmetrical, between the center of each hook—for dual hook lifting.
- Do NOT lift loads over people.
- Do NOT lift people.
- Prohibit any person from riding on the load or the fork lift boom.
- 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 loads—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.
- Set the load down gently.

WARNING**Inspecting**

- An appointed person shall visually inspect the lifter on a daily or weekly schedule, depending on severity of use and environmental conditions.
- Do NOT use a lifter labeled with an "Out of Service" tag.
- 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

⚠ WARNING



Inspecting

- Inspect for:
 - Loose, damaged, missing, cracks, excessive wear, and any deformation
 - fasteners
 - welds
 - hook
 - hook attachment points
 - mechanical parts
 - pins
 - slings
 - stops
 - load supporting clevises or pins
 - identification tag
 - product safety labels

Inspection and Maintenance in this manual is only a guide for the user. Adjust inspection and maintenance schedules, according to actual environmental conditions and severity of use. If inspection reveals any damage, remove the lifter from service, tagging with an "OUT of SERVICE" tag. Contact The Caldwell Group for professional consultation and evaluation, regarding replace or repair:
815-229-5667

If the identification tag or any product safety tags are missing or damaged, contact The Caldwell Group for complimentary replacements.



Model FB Center of Gravity

Model FB Center of Gravity

LIF-TRUC™

Unit Weight

FB-30 Unit Weight = 348 lbs

FB-40 Unit Weight = 348 lbs

FB-60 Unit Weight = 401 lbs

FB-80 Unit Weight = 522lbs

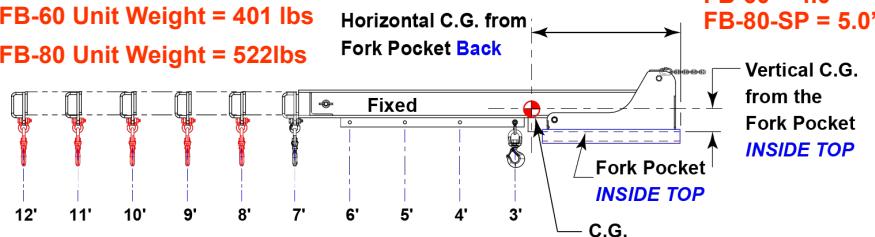
Vertical CG is:

FB-30 = 3.50"

FB-40 = 3.50"

FB-60 = 4.0"

FB-80-SP = 5.0"



FB-30 & FB-40 Boom Position (feet)	3' to 7' Boom Closed	8'	9'	10'	11'	12'
Horizontal CG (inches)	33.25	36.25	39.25	42.25	45.25	48.25

FB-30 Boom Position (feet)	3' to 6' Boom Closed	7'	8'	9'	10'	11'	12'
Rated Capacity (pounds)	3000	3000	2600	2200	1900	1600	1500

FB-40 Boom Position (feet)	3' to 6' Boom Closed	7'	8'	9'	10'	11'	12'
Rated Capacity (pounds)	4000	3200	2600	2200	1900	1600	1500

FB-60 Boom Position (feet)	3' to 7' Boom Closed	8'	9'	10'	11'	12'
Horizontal CG (inches)	35.0	38.5	42.75	45.25	48.75	52.0

FB-60 Boom Position (feet)	3' to 6' Boom Closed	7'	8'	9'	10'	11'	12'
Rated Capacity (pounds)	6000	5000	4200	3500	3000	2700	2500

FB-80 Boom Position (feet)	3' to 7' Boom Closed	8'	9'	10'	11'	12'
Horizontal CG (inches)	37.5	40.75	44.0	47.25	50.5	53.5

FB-80 Boom Position (feet)	3' to 6' Boom Closed	7'	8'	9'	10'	11'	12'
Rated Capacity (pounds)	8000	7000	5700	4800	4100	3600	3100

Model PB Center of Gravity

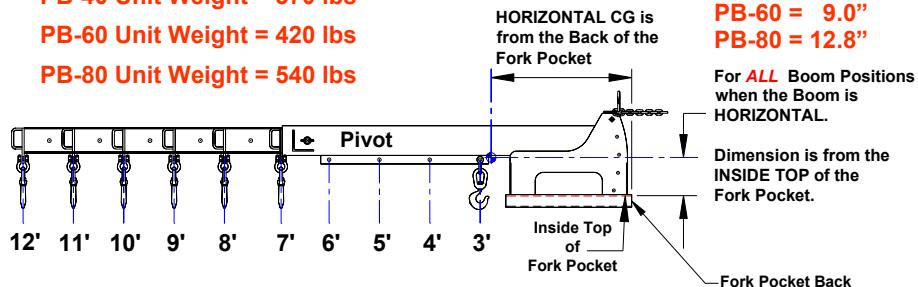
LIF-TRUC™

Unit Weight:

PB-30 Unit Weight = 370 lbs
PB-40 Unit Weight = 370 lbs
PB-60 Unit Weight = 420 lbs
PB-80 Unit Weight = 540 lbs

Vertical CG :

PB-30 = 10.8"
PB-40 = 10.8"
PB-60 = 9.0"
PB-80 = 12.8"



PB-30 & PB-40 Boom Position (feet)	3' to 7' Boom Closed	8'	9'	10'	11'	12'
Horizontal CG (inches)	32.5	35.5	38.5	41.5	44.0	47.0

PB-30 Boom Position (feet)	3' to 6' Boom Closed	7'	8'	9'	10'	11'	12'
Rated Capacity (pounds)	3000	3000	2600	2200	1900	1600	1500

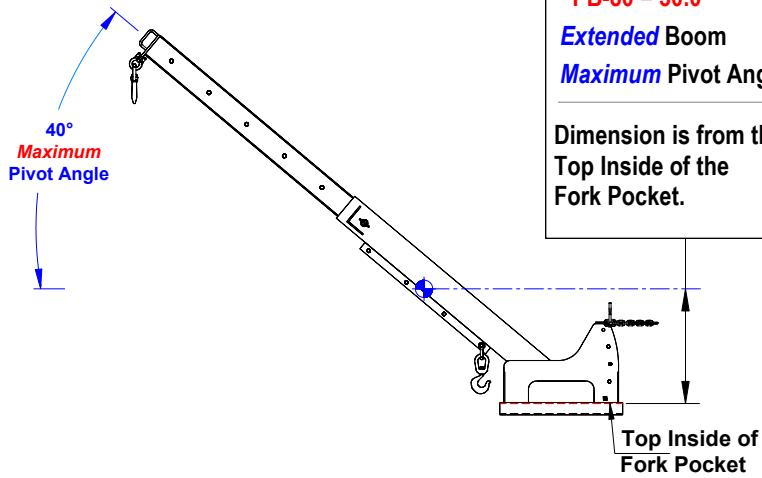
PB-40 Boom Position (feet)	3' to 6' Boom Closed	7'	8'	9'	10'	11'	12'
Rated Capacity (pounds)	4000	3200	2600	2200	1900	1600	1500

PB-60 Boom Position (feet)	3' to 7' Boom Closed	8'	9'	10'	11'	12'
Horizontal CG (inches)	33.5	37.0	40.5	42.5	45.5	48.5

PB-60 Boom Position (feet)	3' to 6' Boom Closed	7'	8'	9'	10'	11'	12'
Rated Capacity (pounds)	6000	5000	4200	3500	3000	2700	2500

PB-80 Boom Position (feet)	3' to 7' Boom Closed	8'	9'	10'	11'	12'
Horizontal CG (inches)	36.5	39.5	42.5	45.5	48.5	51.5

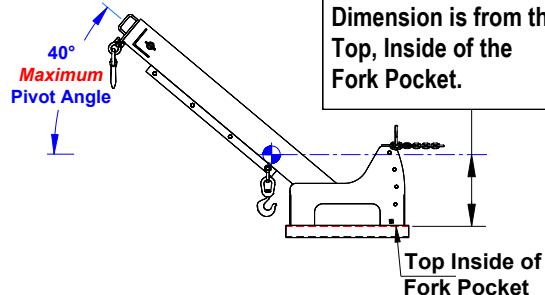
PB-80 Boom Position (feet)	3' to 6' Boom Closed	7'	8'	9'	10'	11'	12'
Rated Capacity (pounds)	8000	7000	5700	4800	4100	3600	3100

Model PB
Extended Boom**Vertical CG :**

PB-30 = 26.5"
PB-40 = 26.5"
PB-60 = 27.0"
PB-80 = 30.0"

Extended Boom**Maximum Pivot Angle**

Dimension is from the
Top Inside of the
Fork Pocket.

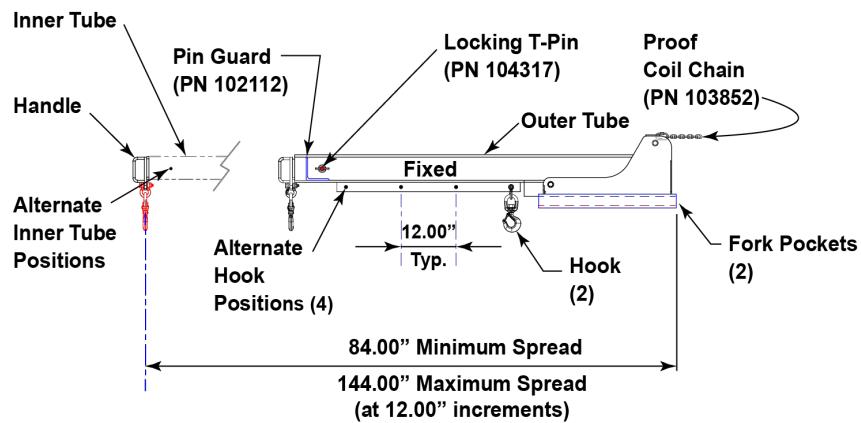
Model PB
Retracted Boom**Vertical CG :**

PB-30 = 17.0"
PB-40 = 17.0"
PB-60 = 16.0"
PB-80 = 20.5"

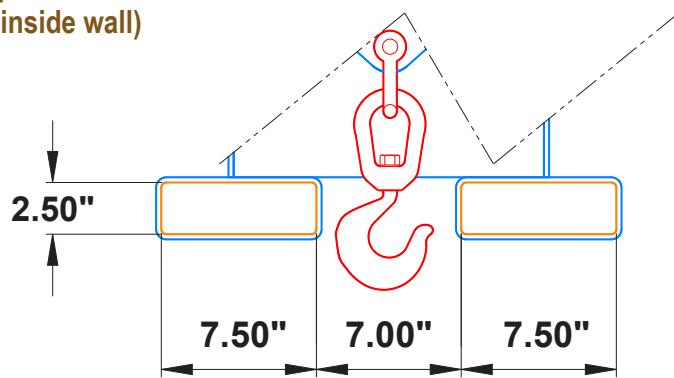
Retracted Boom**Maximum Pivot Angle**

Dimension is from the
Top, Inside of the
Fork Pocket.

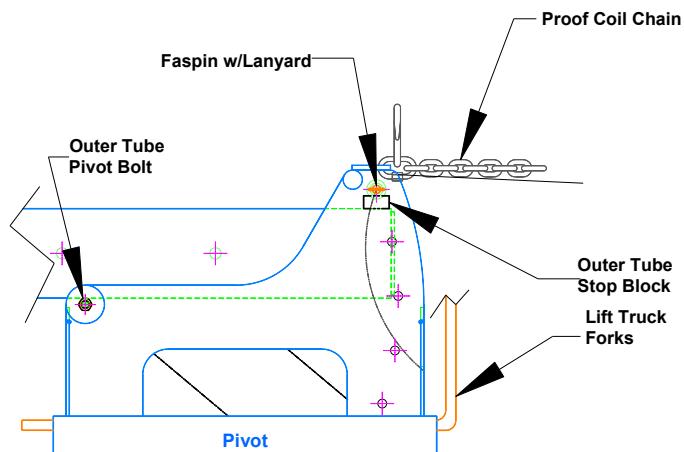
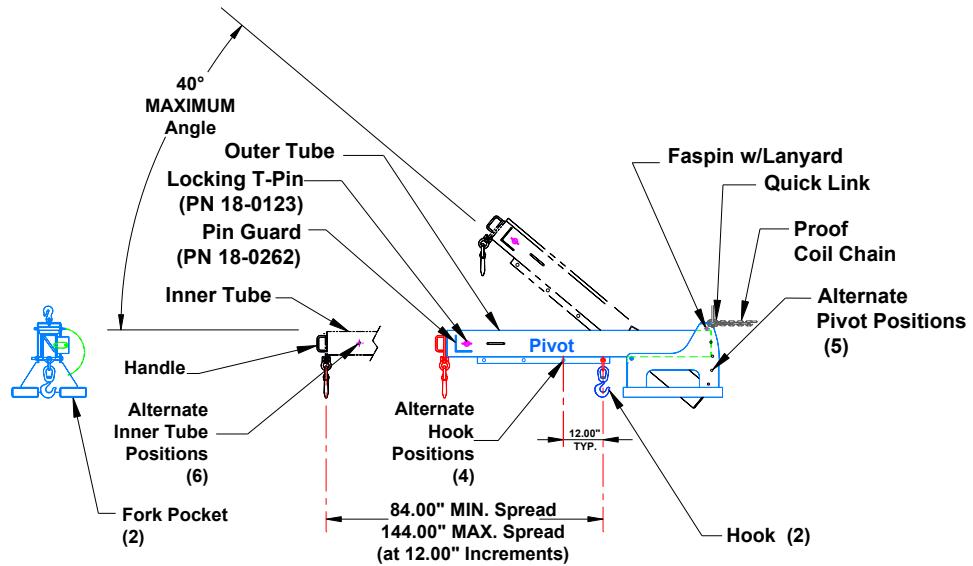
Model FB
Telescoping, Non-pivoting Fork Lift Boom



Model FB and PB
Standard fork pocket dimensions
(inside wall to inside wall)



Model PB Telescoping, Pivoting Fork Lift Boom

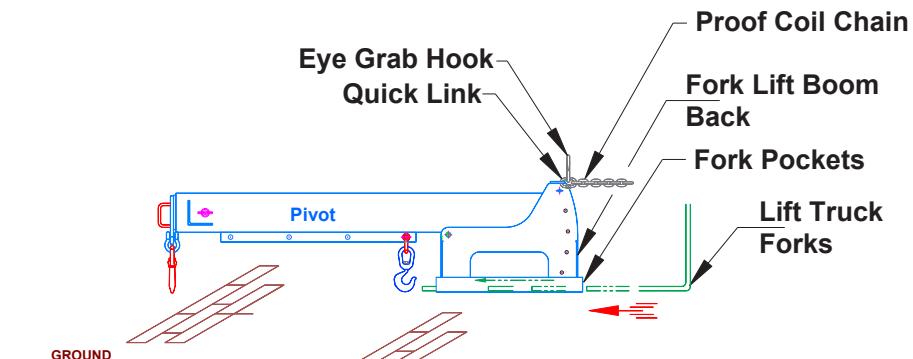


Model FB or PB Attaching

WARNING

BEFORE attaching and using the Model FB or Model PB Fork Lift Boom:

- Contact your Lift Truck Manufacturer.
- Request written approval to use the Model FB or Model PB with your lift truck.
- Rated capacity on your boom is only for the Model FB or Model PB.
- The lift truck manufacturer must provide the rated capacity for the boom and lift truck combined.



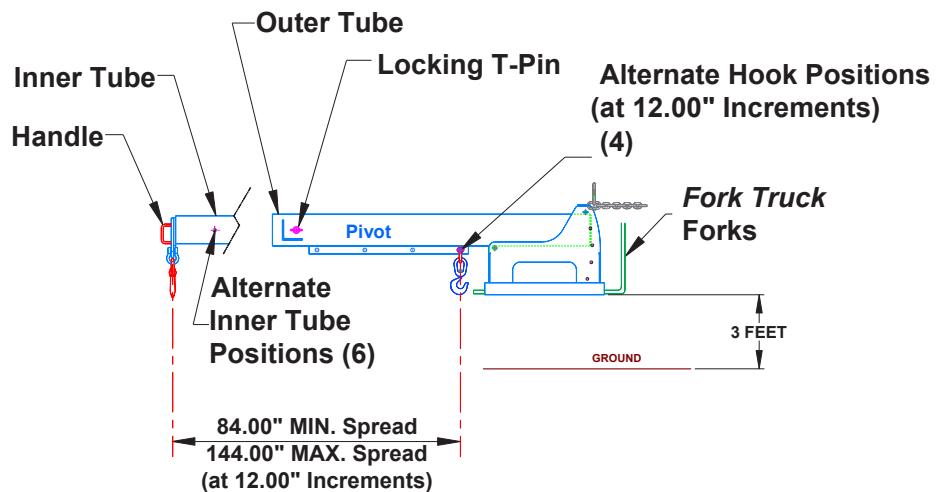
Load the Fork Lift Boom on the lift truck:

1. Lift the lift truck forks several inches off the floor.
2. Slowly, drive the lift truck towards the back of the boom.
3. Stop the lift truck.
4. Slowly, adjust the height of the lift truck forks, aligning with the boom fork pockets.
5. Slowly, drive the lift truck forward.
6. Stop the lift truck.
7. Make any additional adjustments, assuring the lift truck forks are aligned with the boom fork pockets.
8. Insert the forks into the boom fork pockets.
9. Continue driving the lift truck forward until the forks are supporting the boom; and the back side of the boom is next to the lift truck's fork carriage.
10. Stop the lift truck.
11. Secure the boom to the lift truck with the Proof Coil Chain, tightly (no slack in the Proof Coil Chain).

Model FB or PB
Adjusting

WARNING

Moving parts can crush and cut.
 Adjust only when unloaded.
 Secure all pins.
 Attach load *after* all adjustments are secured.
 Perform a test lift.

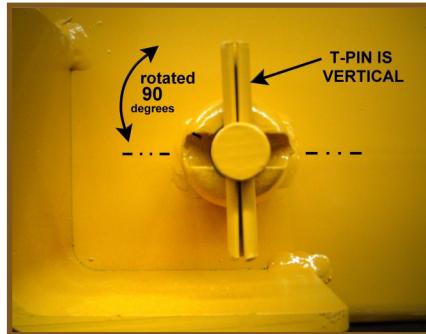


Ready to adjust the spread when the:

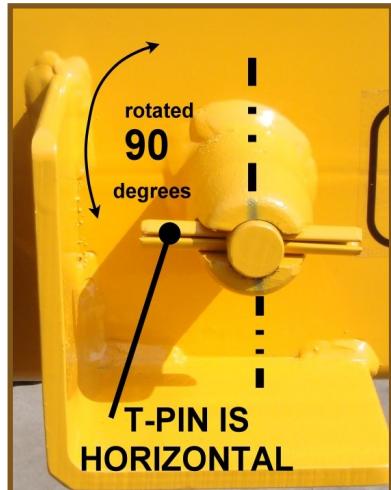
- Fork Lift Boom is securely attached to the lift truck.
- Boom has NO load attached.
- Boom is lifted about three feet off the ground.
 1. Know the intended load's size and weight.
 2. Determine the required spread for the intended load's size and weight (spread is center to center between two hooks, using symmetrical loading).
 3. Pull the Locking T-Pin out, freeing the inner tube for required spread adjustment.

**Model FB or PB
Adjusting****DANGER**

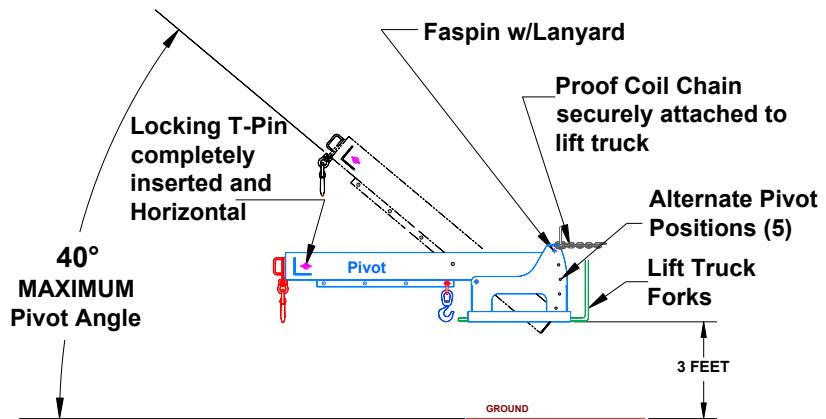
Falling load will cause serious injury or death.
Completely insert pin through the inner tube, *before* load attachment.



4. Turn the T-Pin 90 degrees, from horizontal to vertical.
5. Hold the Inner Tube handle.
6. Push or pull the inner tube until the approximate overall length is obtained.



7. Rotate the T-Pin 90 degrees, returning to horizontal.
8. Slightly, push or pull the INNER TUBE handle until you hear a click. The clicking sound, indicates the Locking T-Pin is completely inserted through the INNER TUBE pin diameter.
9. Position the hooks, according to the spread dimension.

Model PB
Pivoting

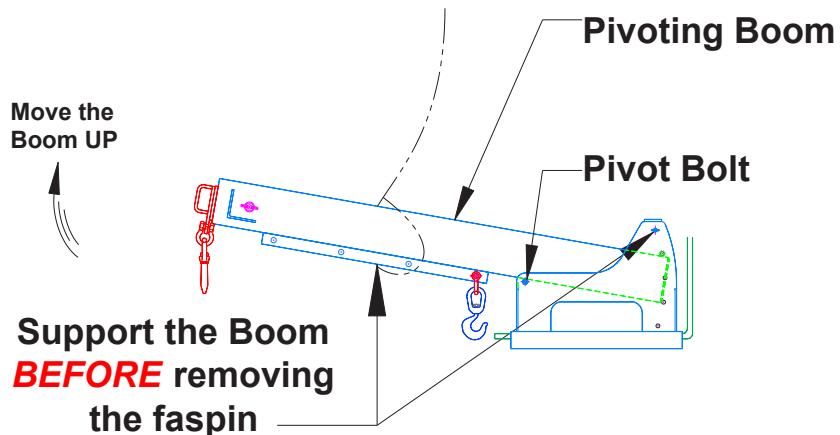
Ready to adjust the Model PB pivot angle when the:

- Proof Coil Chain is securely attached to both the Model PB and the lift truck.
- Locking T-Pin is completely inserted and horizontal.
- Hook positions are concurrent with the required spread dimension.
- Model PB is lifted about three feet off the ground.

Model PB
Pivoting**DANGER**

Falling load will cause serious injury or death.
Fully support the boom, before removing the faspin.
Do NOT allow people to support the boom.
Completely insert faspin, before load attachment.

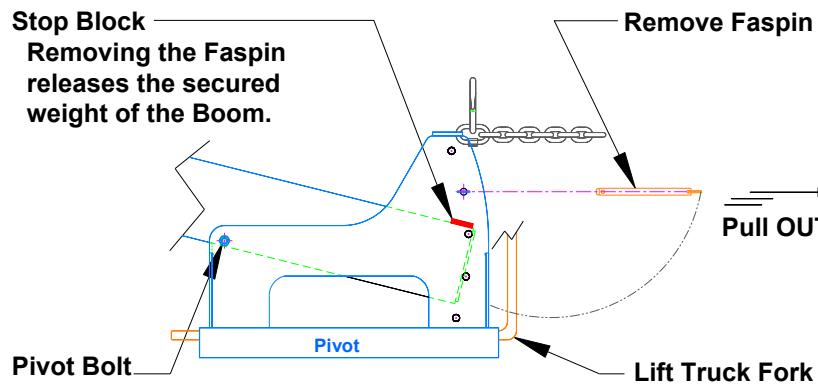
1. Support the boom with a hoist or overhead crane, before removing the faspin.
2. Remove the faspin.



3. Move the Pivoting Boom up, slowly, with a hoist or overhead crane, while the boom rotates on the Pivot Bolt.

Model PB Pivoting

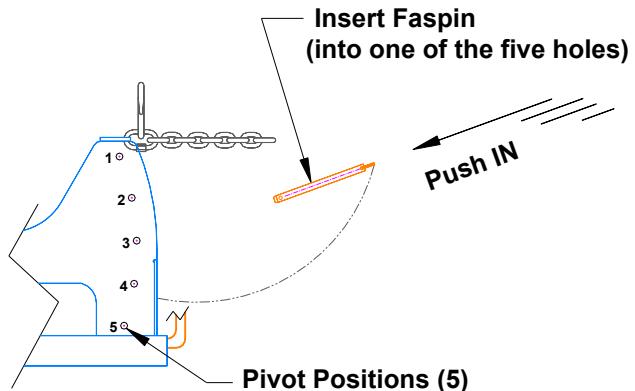
4. Rotate the Boom upwards enough so the stop block clears the "new" Faspin hole.
5. Continue supporting and stabilizing the boom with a hoist or overhead crane.



6. Insert the Faspin in one of the five alternate Pivot Positions.

7. Completely insert the Faspin before loading and transporting the Model PB.

8. After completely inserting the Faspin, remove the supporting hoist or overhead crane from the boom.



Model FB or PB Using Two Hooks

WARNING

During lifting, transporting, and lowering, the designated load:

- When either Model, FB or PB, is loaded on the lift truck, keep the lift truck forks level or slightly above horizontal, preventing the boom from falling off the lift truck forks.
- Ensure the lift truck is on firm, level footing, when raising, lowering, or transporting a loaded or unloaded boom.
- Drive the fork truck slowly.
- Do NOT suddenly accelerate or decelerate the lift truck with an attached boom, loaded or unloaded, while raising, lowering, or transporting.

BEFORE attaching the load, verify the following for both Models, FB and PB:

- Proof Coil Chain is securely attached to both the boom and the lift truck.
- Telescopic spread is adjusted for the designated load size and weight.
- Locking T-Pin is completely inserted and horizontal .
- Faspin is completely inserted.

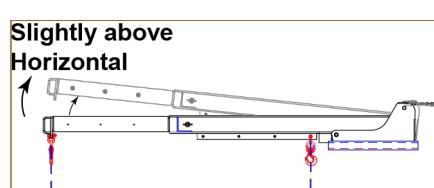
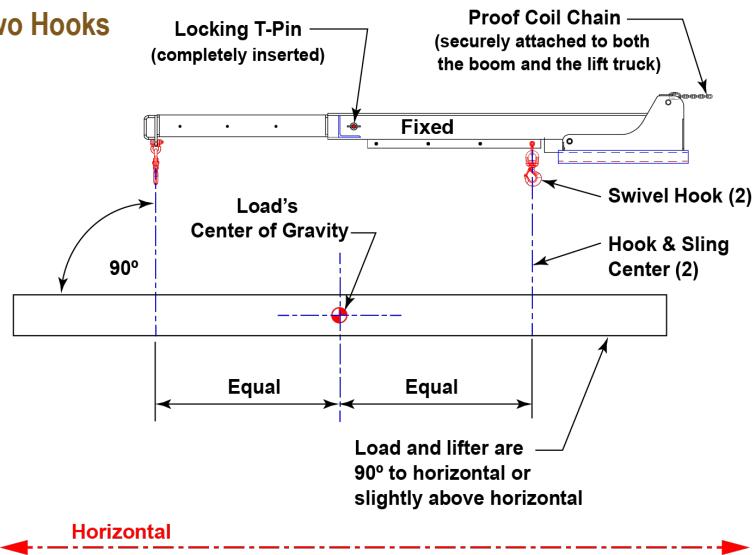
Verify the following **only** for the **Model PB**, Pivoting Boom:

- Pivoting Boom has been adjusted parallel to horizontal.
- Faspin is completely inserted.
- Outer Tube is resting on the pivot bolt and the weight of the boom is pressing on the faspin.

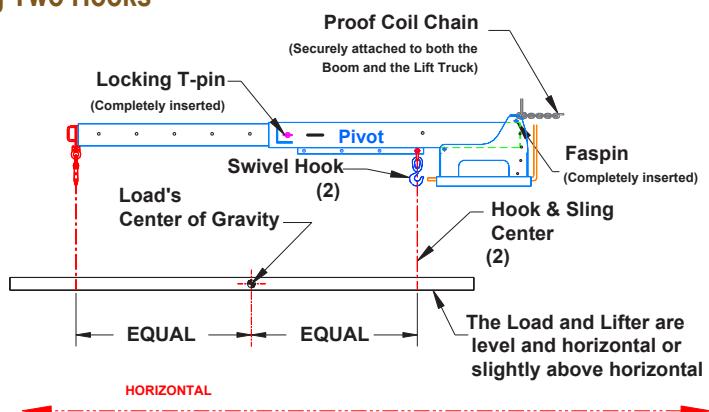
Model FB and Model PB

1. Know the:
 - Weight of the designated load.
 - Size of the designated load.
 - Maximum capacity at the selected hook position for your boom.
2. Move and securely fasten the hooks, achieving the required spread, center to center between both hooks.
3. Attach one sling to each hook, using only the hooks
 - use only the hooks supplied with your unit.
 - use slings with a rated capacity equal to or greater than the weight of the load.
4. Position the Boom above the designated load.
5. Slowly, lower the Boom over the load for sling attachment.
6. Attach both slings, one on each hook, and to the designated load.
7. The load's center of gravity must be equal distance between the center of each sling, symmetrical loading.
8. Perform a test lift of several inches, verifying load security and balance; verify the lifter is level and horizontal or slightly above horizontal.

Model FB Using Two Hooks



Model PB Using Two Hooks



Model FB or PB Using One Hook

BEFORE attaching the load, verify the following for both Models, FB and PB:

- Proof Coil Chain is securely attached to both boom and the lift truck.
- Telescopic spread is adjusted for the designated load size and weight.
- Locking T-Pin is completely inserted.

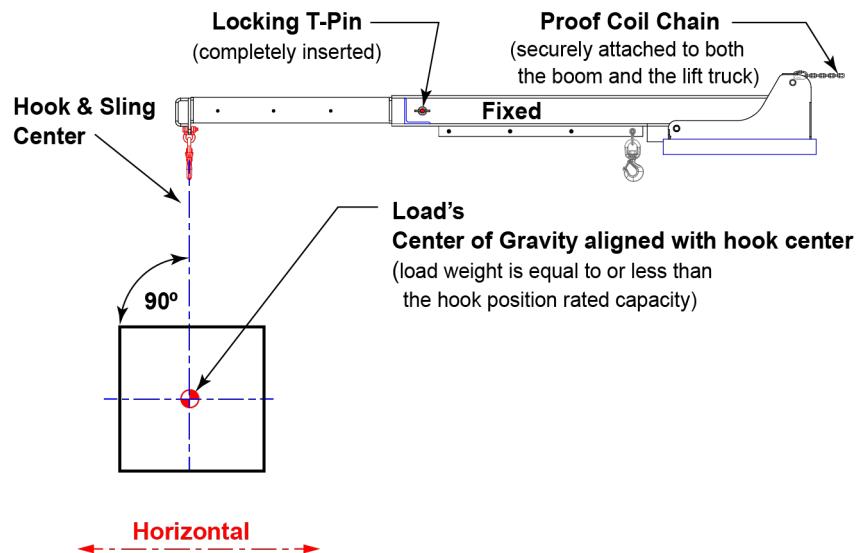
Verify the following **only** for the **Model PB**, Pivoting Boom:

- Pivoting Boom has been adjusted at the correct angle for the load size and weight.
- Faspin is completely inserted.
- Outer Tube is resting on the pivot bolt and the weight of the boom is pressing on the faspin.

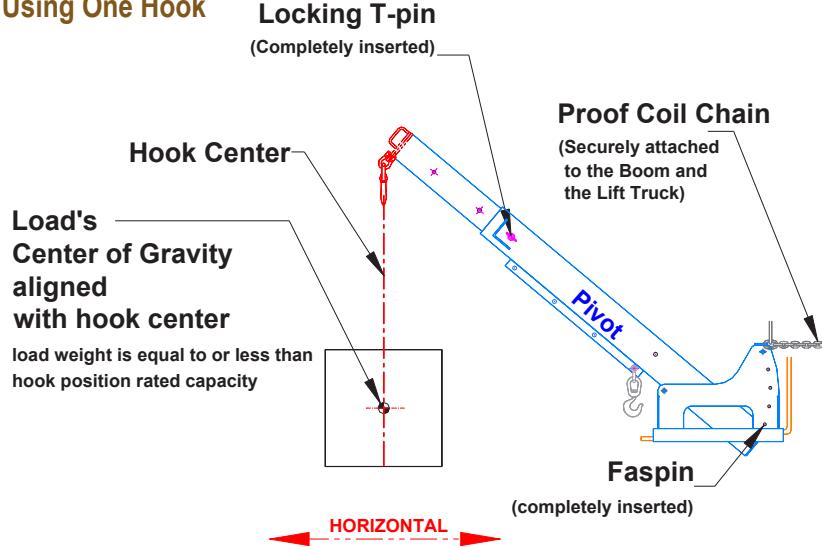
Model FB and Model PB

1. Know the:
 - Weight of the designated load.
 - Size of the designated load.
 - Maximum capacity at selected hook position for your boom.
2. Attach a sling to the hook:
 - use only the hook supplied with your unit.
 - use a sling with a rated capacity equal to or greater than the weight of the load.
3. Position the boom above the designated load.
4. Slowly, lower the boom over the load for sling attachment.
5. Attach the sling to the load.
6. The load's center of gravity must be aligned with the center of the hook.
7. Perform a test lift of several inches, verifying load security and balance; verify the lifter is level and horizontal or slightly above horizontal.

Model FB Using One Hook



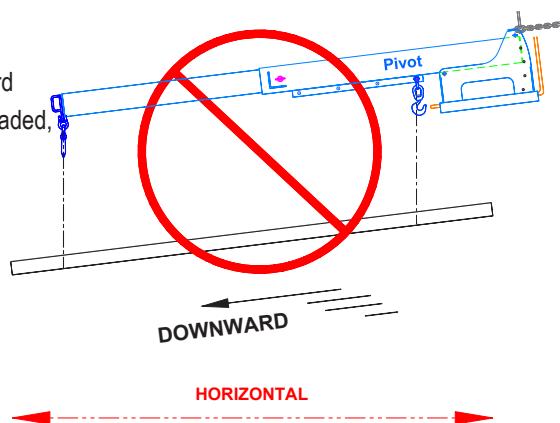
Model FB Using One Hook



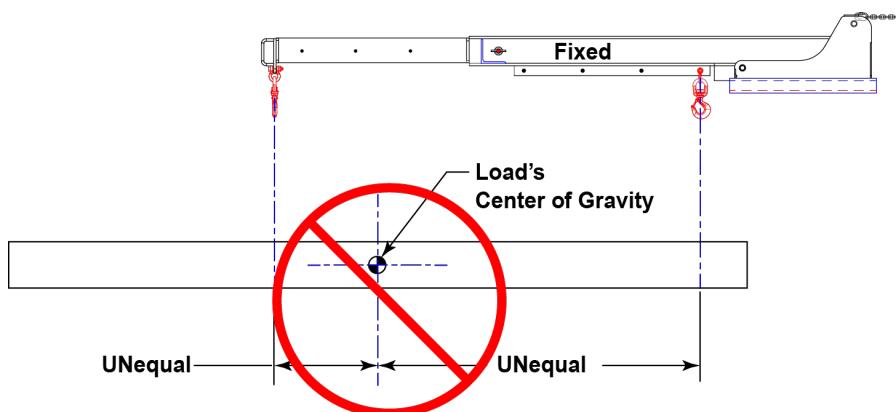
Model FB or PB
Improper Loading, Lifting, and Transporting

⚠️WARNING

1. Do NOT drive the lift truck forward when the Boom, loaded or unloaded, is pointing downward.
2. Stop the lift truck.
3. Re-adjust lift truck forks level or slightly above Horizontal.



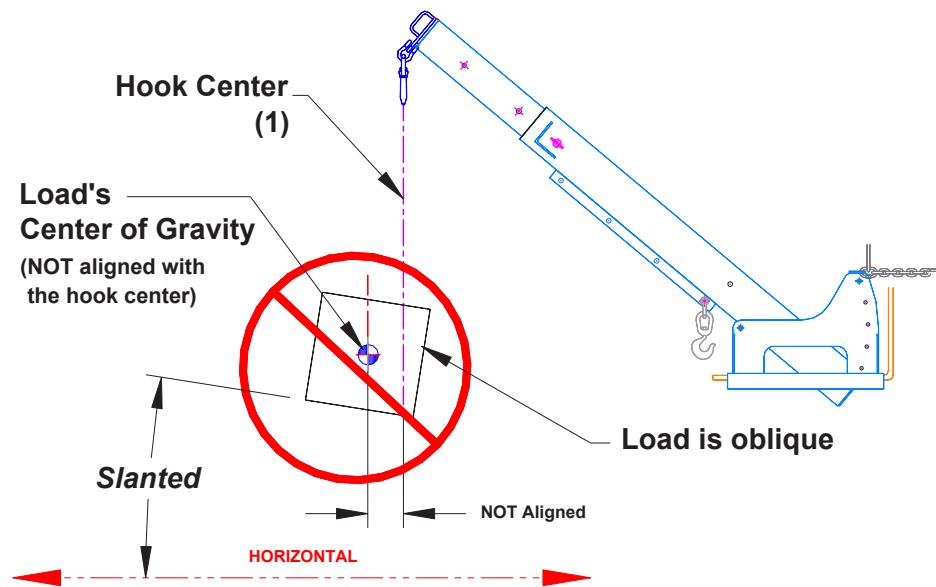
1. Do NOT lift or transport an asymmetrical load.
2. Stop the lift truck.
3. Re-adjust the load position, aligning the load's center of gravity equal distance between both hook centers, symmetrical.



Model FB or PB
Improper Loading, Lifting, and Transporting

⚠ WARNING

1. Do NOT lift or transport a load when the load's center of gravity is NOT aligned with the hook center.
2. Do NOT lift or transport a load when the load is oblique to horizontal, slanted.
3. Stop the lift truck.
4. Re-adjust the load position:
 - a. align the load's center of gravity with the hook center
 - b. adjust the load until it is parallel to horizontal



Model FB Legend

<div style="border: 1px solid black; padding: 2px;"> WARNING Rated capacity is ONLY for the boom; based on a single point load. Maximum capacity is in pounds at hook positions in feet. </div>	FB Rated Capacities
	Caldwell Logo
<div style="border: 1px solid black; padding: 2px;"> DANGER Completely insert pin before loading. Falling load causes serious injury or death. </div>	DANGER Completely insert pin
<div style="border: 1px solid black; padding: 2px;"> DANGER Capacity of lift truck and attachment combination may be less than capacity shown on attachment. Consult lift truck manufacturer. </div>	DANGER Consult lift truck manufacturer
<div style="border: 1px solid black; padding: 2px;"> WARNING Read and understand instruction manual before operating equipment. </div>	WARNING Read-understand instruction manual
<div style="border: 1px solid black; padding: 2px;"> WARNING Do NOT exceed rated capacity. </div>	WARNING Do NOT exceed rated capacity
<div style="border: 1px solid black; padding: 2px;"> WARNING Pinch Points. Keep hands clear. </div>	WARNING Pinch Points
<div style="border: 1px solid black; padding: 2px;"> MADE IN THE U.S.A. <small>CG65</small> </div>	Made in the USA
<div style="border: 1px solid black; padding: 2px;"> THE CALDWELL GROUP Parts and Service 800-628-4263 www.caldwellinc.com </div>	The Caldwell Group Parts & Service 800-628-4263
<div style="border: 1px solid black; padding: 2px;"> The Caldwell Group <small>PH 800-628-4263</small> Rated Cap _____ Lbs <input type="checkbox"/> Model No. _____ <input type="checkbox"/> Unit Wt. _____ Lbs </div>	Product Identification Tag

When the ID tag or any product safety label is damaged or missing, contact The Caldwell Group for complimentary replacements.

Model PB Legend

1		PB Rated Capacities
2		Caldwell Logo
3		DANGER Completely insert pin
4		DANGER Consult lift truck manufacturer
5		WARNING Read-understand instruction manual
6		WARNING Do NOT exceed rated capacity
7		WARNING Pinch Points
8		Made in the USA
9		The Caldwell Group Parts & Service 800-628-4263
10		Product Identification Tag

When the ID tag or any product safety label is damaged or missing, contact The Caldwell Group for complimentary replacements.



The Caldwell Group
4080 Logistics Pkwy
Rockford, IL 61109

P.O. Box 6005
Rockford, IL 61109

800.628.4263
815.229.5667

815.229.5686 fax
caldwellinc.com



FB-PB_REV_03