

# 64, 72, 76 Meter Irrigation Boom



# OPERATING AND PARTS MANUAL 2022 Edition

CB-MAN-64

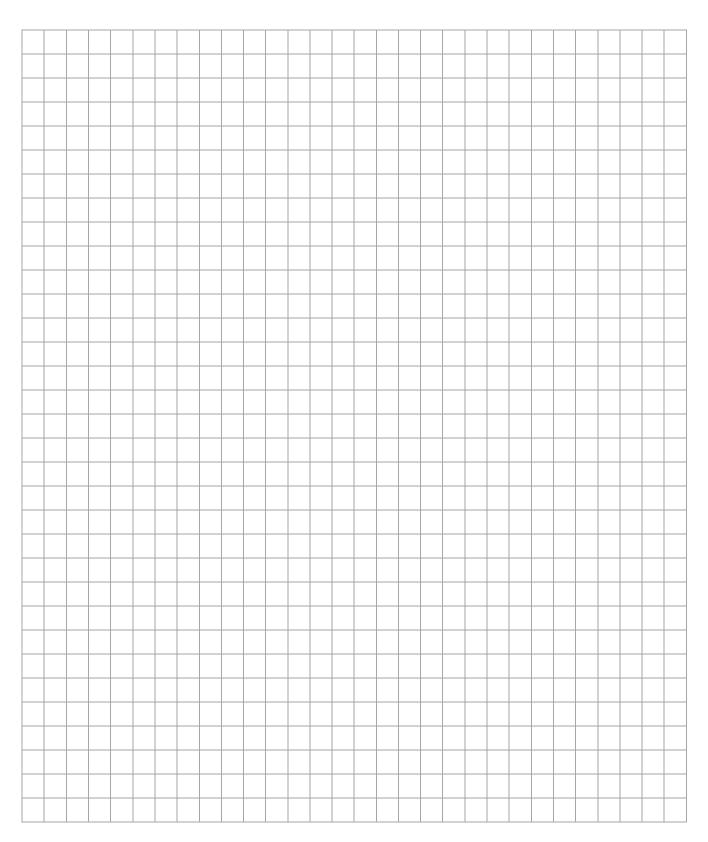


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## **Notes:**





# **Cadman Irrigation Boom**

We would like to thank you for purchasing your new **Cadman Irrigation Boom**. You have purchased a product of superior quality that will serve your needs for a long time as long as you follow this manual and safety procedures.

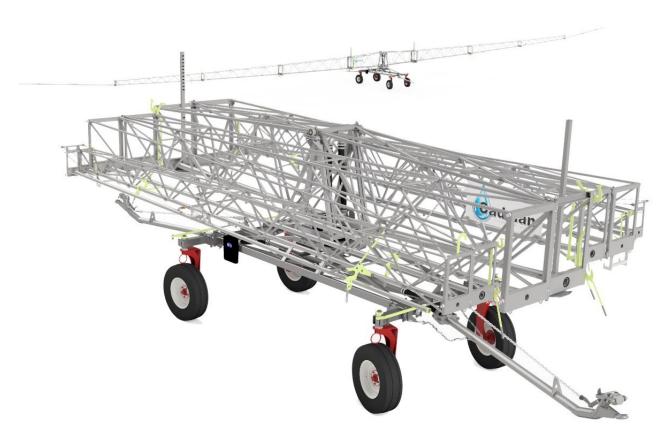


Figure 1 - 64 Meter Irrigation Boom

img-01457

BEFORE operating your new Cadman Irrigation Boom, inspect the machine for any damage or parts that may have come loose during shipping. REPORT ANY DAMAGE TO CADMAN POWER EQUIPMENT LIMITED OR YOUR LOCAL DEALER IMMEDIATELY.



#### **Warranty Policy**

**CADMAN POWER EQUIPMENT LIMITED** warrants that each machine it manufactures shall be free from defects in materials and workmanship. The terms of this warranty are as follows:

- All components manufactured by CADMAN POWER EQUIPMENT LIMITED shall be warranted for a period of one (1) year from the date of delivery, except the frame and hose drum structures which shall be warranted for a period of three (3) years.
- CADMAN POWER EQUIPMENT LIMITED makes no warranty whatsoever in regard to tires, engines, and other trade accessories used on its equipment. The customer shall rely solely on the warranties offered (if any) by the respective manufacturer of these trade accessories.

The sole obligation to **CADMAN POWER EQUIPMENT LIMITED** under this warranty is limited to the repair or replacement of any part it manufactured, which, in the judgment of **CADMAN POWER EQUIPMENT LIMITED**, failed under normal and proper use and maintenance due to defective materials or workmanship. All freight charges incurred shall be the sole responsibility of the customer.

CADMAN POWER EQUIPMENT LIMITED and its dealers (who are neither authorized nor qualified to undertake any obligations on behalf of CADMAN POWER EQUIPMENT LIMITED) DO NOT, under any circumstances, accept any responsibility for any losses or costs incurred due to parts failure and/or delays during the parts replacement process.

This warranty will be considered void if any alterations or modifications have been made to the machine without the express written consent of **CADMAN POWER EQUIPMENT LIMITED** outlining the nature and the extent of such modifications. **CADMAN POWER EQUIPMENT LIMITED** will not provide any warranty express or implied to any overdue accounts.

**CADMAN POWER EQUIPMENT LIMITED**, whose policy is one of continuous improvement, reserves the right to change specifications and designs without notice or incurring obligation.

The warranties expressed herein are non-transferable and replace any other warranties, either written or verbal, which may have been given or implied.



#### **When Applying Liquid Manure**

Current and pending laws in agricultural regions of North America change the ways in which the agricultural community needs to manage their liquid animal waste products. As a manufacturer of agricultural equipment, we feel it necessary to make you aware that the municipal, regional and state governing bodies in your area may have created new laws or updated current laws for nutrient handling practices and procedures. The changes in these laws typically target run-off prevention and soil nutrient loading.

#### Run off may result from several factors. Some (but not all) of the factors are:

- Incorrect application
- Difficult application areas containing steep hills or other features that may make run off more likely to happen
- Changes in weather that would allow run off to happen (sudden storms just before or just after applying, ground frost, etc....)

Constant watch must be kept and immediate action taken when needed to prevent run off from happening.

Soil nutrient loading depends on several variables. Some (but not all) of these variables are:

- The type of crop(s) being grown
- The type of soil the crop(s) are growing in
- Nutritional value of what you are applying
- Nutritional needs of the crop(s) and soil they are growing in

Application timing, nutritional value of what you are applying, and the type of soil will determine the intake rate at which liquid may be applied. Soil analysis taken at appropriate times will help you create a correct application plan for your crop(s). In addition; local colleges, universities, and agricultural extension services are a good source of information. They may be able to help you create an application program that will help prevent problems with your application.

**CADMAN POWER EQUIPMENT LIMITED** is unable to provide up-to-date recommendations for the laws you must follow in your area. It is your responsibility to make yourself aware of and follow the law in your area. Please contact your local agricultural representative to obtain the latest information for legal handling and application of nutrient.



#### **Safety Precautions**

Please take the time to read and understand this manual to avoid errors and unnecessary risks. If you have any questions or concerns, please contact **CADMAN POWER EQUIPMENT LIMITED** or your local dealer/distributor.

# FAILURE TO FOLLOW ALL SAFETY INSTRUCTIONS CAN RESULT IN DEATH OR SERIOUS INJURY FOR YOU AND/OR ANY SPECTATORS.

- DO NOT move or operate this machine until you have read and understand these instructions in this manual.
- **NEVER** allow untrained persons to operate this machine.
- **DO NOT** perform service this machine while it is in operation.
- MAKE SURE all mechanical and hydraulic tension has been released before attempting any service on the machine.
- CHECK all fasteners (nuts and bolts) regularly for tightness.
- PERFORM REQUIRED MAINTENANCE as prescribed or as necessary to keep this
  machine in safe operating condition.
- **KEEP ALL SPECTATORS** at a safe distance.
- STAY CLEAR of high pressure supply lines, especially when first pressurizing the system.
- **DO NOT** remove or alter any shielding on this machine.
- KEEP CLEAR of all moving parts.
- **NEVER** tow this machine at speeds greater than **6 mph [10 km/h]** and be certain the tow vehicle has adequate braking capacity to maintain safe control at all times.
- NEVER tow this machine with the boom loaded with fluid.
- **BE AWARE** of any obstacles (i.e. mail boxes, fence posts, and other equipment) that you may encounter when transporting the machine.
- REGULAR INSPECTION of your boom couplings, tubing and gaskets should be a
  part of your regular set-up routine. Any defective parts MUST be replaced or
  repaired before the machine is put into service.



This symbol, the safety-alert symbol, indicates a hazard. When you come across the safety-alert symbol in this manual, make sure you fully understand and abide by the given instructions or warnings.



#### **Safety Decals**

Cadman Power Equipment Limited has determined the potential hazards on your Irrigation Boom and has labeled the machine accordingly. The safety decals on this machine are there to warn operators of potential hazards. Each safety decal on this machine contains a Signal Word Panel which shows the degree of hazard. Definitions of the Signal Words are as noted below.



Figure 2 - Danger Decal

img-00340-A

 DANGER - an immediate, hazardous situation that if not avoided, WILL RESULT IN DEATH OR SERIOUS INJURY.



Figure 3 - Warning Decal

img-00340-B

• **WARNING** - a potentially hazardous situation that if not avoided could result in death or serious injury. This includes hazards that are exposed when guards are removed.



Figure 4 - Caution Decal

img-00340-C

 CAUTION - a potentially hazardous situation that if not avoided may result in minor or moderate injury.

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# **Safety Decals Continued**

- All safety decals must be clean, clear, and easy to read.
- Replace any decal that is not in good condition.
- Replace any missing decals; it is important to double check that all labels are on your machine, especially if you have modified your machine or have had your machine serviced.



Figure 5 - Replace Decals

img-00131-B



#### **Transport**

Before transporting your Cadman Irrigation Boom verify the following:

Verify that all locking pins and latches are secure. When transporting the irrigation boom to the adjacent pull no further action is required. If you are moving the boom to an area further away you must secure the boom with ropes and/or straps.

When transporting your irrigation boom on public roads then you need to be aware of and comply with any laws regarding transportation that apply to the area the irrigation boom is being transported.

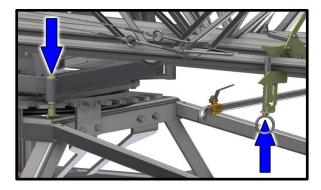


Figure 6 - Lock and Pins Engaged

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When transporting your irrigation boom to an adjacent pull the frame must be either parallel or perpendicular to the boom cart frame.

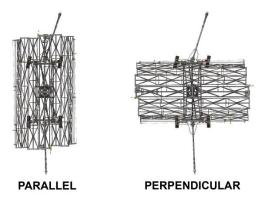


Figure 7 - Boom towing orientation

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Failing to follow these transport guidelines may result in equipment damage and/or personal injury.



#### **Lane Spacing**

Set your desired track width by adjusting the wheel spacing on the boom cart frame. Disassemble the steering joint at (A) and loosen both bolt sets at (B) and (C) before sliding the arm to your desired spacing. Loosen the jam nut on the tie-rod and begin to twist to change the tie-rod to an appropriate length to be able to reassemble joint (A). Lastly tighten bolt sets at (B) and (C).

Wheel spacing is adjustable from **60**" to **80**" with other spacing kits available. Verify bolts are tight after adjusting your track width. Equally adjust the steering tie-rods.

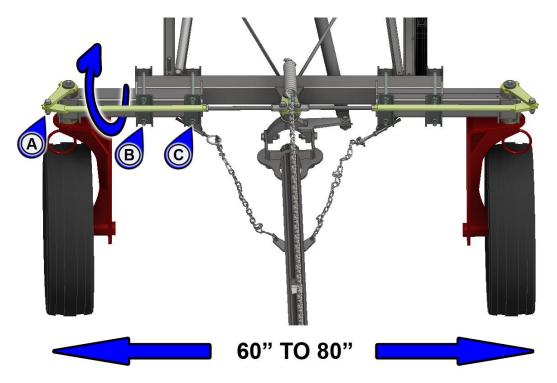


Figure 8 - Lane spacing adjustment

img-01460



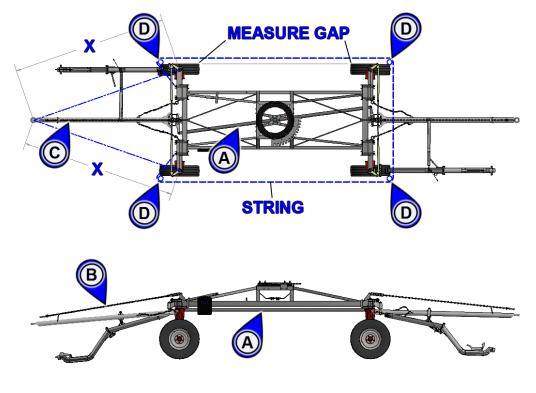
Failing to secure wheels after adjusting spacing will result in an unbalanced irrigation boom that will tip over. This will result in damage to your irrigation boom, and may cause serious injury and/or death.



#### **Wheel Alignment**

It is important to ensure the alignment is true so that the irrigation boom tracks properly. When replacing steering components or changing lane spacing complete this process:

- Ensure the boom is located on a flat surface before checking the wheel alignment.
- Disconnect the center steering bar (A).
- Disconnect/Slacken the tongue chain (**B**) and place on a stand about 20 inches (500mm) from the ground.
- Ensure the tongues (C) are dimensions (X) are equal for each end.
- Using a string and 1 inch (25mm) spacers (**D**). Attach the string to the frame. Install a spacer at the widest points of all wheels as shown in image below.
- Measure the gap of the trailing wheel. The dimension should be between 7/8 29/32 inch (22-23mm) given 3/32 1/8 inch (2-3mm) tow-in. Adjust the tie-rods as required.
- Re-connect the center steering arm, adjusting as required.
- Ensure the water feed and tow bar are parallel.
- Ensure that all fasteners are tightened.



Alignment Detail



#### **Connecting to Traveller**

After choosing which side of the irrigation boom to connect, remove the blanking plate or cap. Once removed attach the blanking plate or cap to the opposite sides inlet pipe.

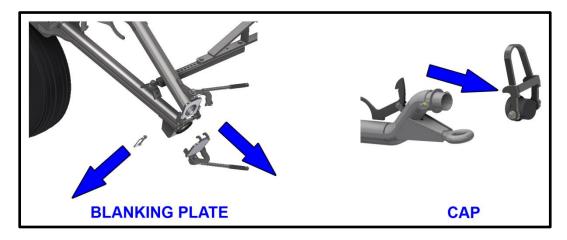


Figure 9 - Blanking Plate or Cap

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For the offset feed option proceed to flip the connector tube (1). Turn the handle (2) locking the connector tube. Replace the quick pin (3) to ensure the tube is secure.

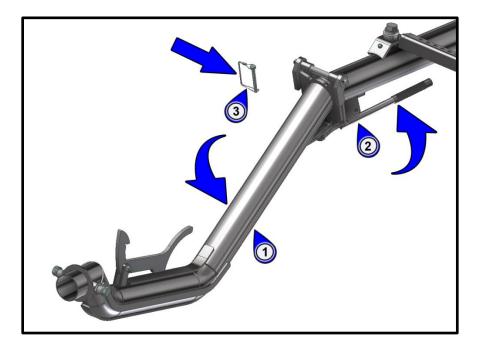


Figure 10 - Offset Connector Tube



To assist the position of the hose during operation a lay-flat hose connector is used and can be attached as shown. Lower the (**A**) hook over top the latch (**B**) which is also lowered to tighten the connection. Part (**C**) is secured to the cart and must be placed over the lay-flat hose where it is locked during operation to prevent hose kinking.

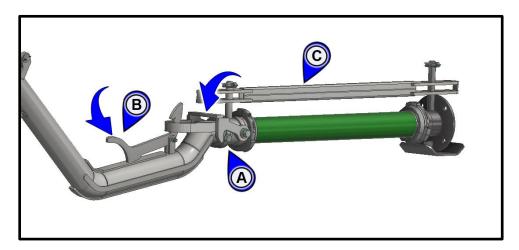


Figure 11 - Lay-Flat Hose Connector

img-01463

#### **Unfolding Boom**

#### Step 1

Begin unfolding your irrigation boom by locking your boom frame to the turntable at 90 degrees to the cart frame. The center sprinklers must face away from the traveller so that the irrigation is behind the irrigation boom.

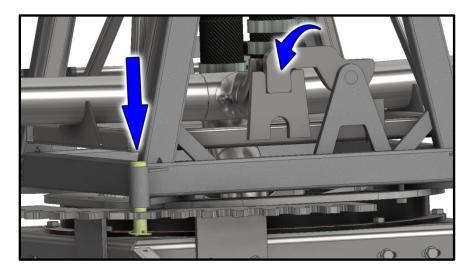


Figure 12 - Locking Pin and Pivot Lock



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Pull the locking pin to lower the stabilizers until they are on the ground, then relock into position. Repeat this process for the opposite side. Verify that they are locked into place.

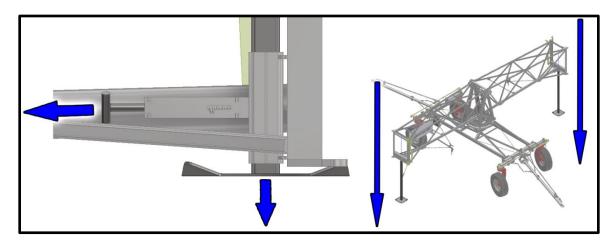


Figure 13 - Lower Stabilizers

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Not locking the boom frame to the cart frame at a 90 degree angle while unfolding it will result in an unbalanced irrigation boom that will tip over. This will result in damage to your irrigation boom, and may cause serious injury and/or death.



Failure to lower and lock your irrigation boom stabilizers before unfolding your irrigation boom will result in an unbalanced irrigation boom that will tip over. This will result in damage to your irrigation boom, and may cause serious injury and/or death.



#### Step 2

Unfold your irrigation boom one section at a time, while alternating sides as you unfold sections one at a time. Guide each section as they rotate to the open position. Verify that each boom section is completely latched before unfolding the next section.

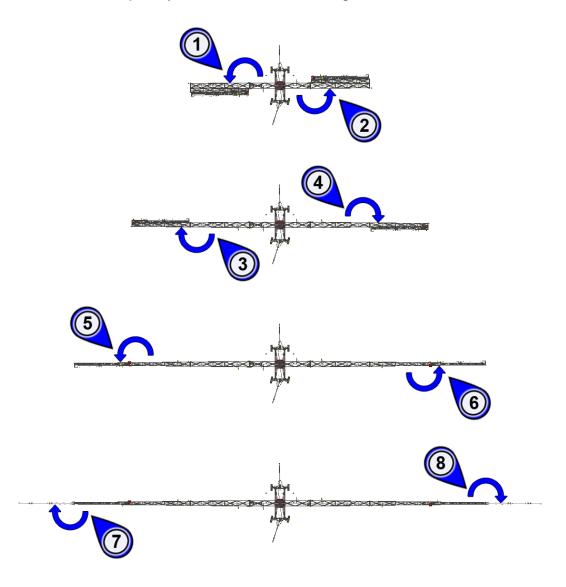


Figure 14 - Unfolding Boom Order

img-01466



Failing to open your irrigation boom by alternating sections will result in an unbalanced irrigation boom that will tip over. This will result in damage to your irrigation boom, and may cause injury and/or death.



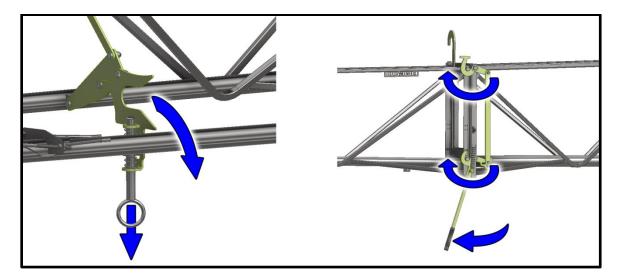


Figure 15 - Unhook Section then Latch

img-01467



Failure to unhook, guide and then securely latch each section as you unfold it will result in the irrigation boom being unable to correctly support itself. This will result in damage to your irrigation boom, damage to crops and/or property during operation. It may also lead to serious injury and/or death.

Once your irrigation boom is completely unfolded you may release the center pivot latch.

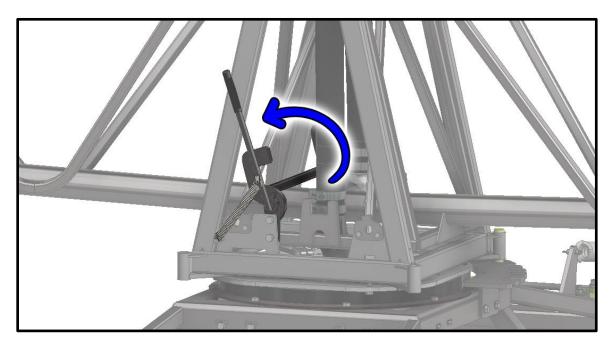


Figure 16 - Release Pivot Latch



Attach leader weights to the boom frame to keep the irrigation boom stable during operation. Ensure that the center boom is balanced by adjusting weights on the outer parts of section 4.

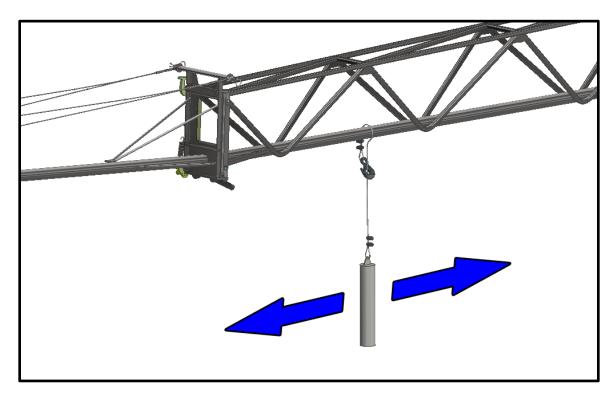


Figure 17 - Leader Weight

img-01469



Failing to balance your irrigation boom with leader weights will result in an unstable irrigation boom that will tip over during a pull. This will cause damage to the irrigation boom, as well as damage to crops and/or property

You may now connect to your water supply line, and then raise the irrigation boom stabilizer legs.



#### **Irrigation Pull**

Pull your irrigation boom out to its start position. Do not exceed 3 mph [4 km/h] while you are pulling your irrigation boom to its start position. The boom inlet feed should always be set in line with the middle of the irrigation traveller (see figure below). Adjust the angle of your irrigation boom if required.

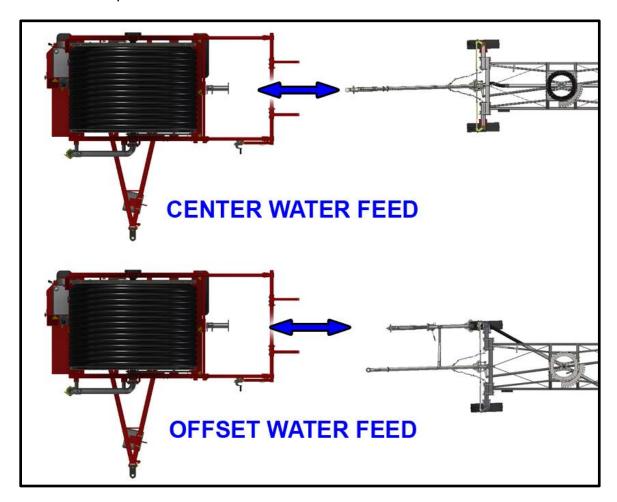


Figure 18 - Connect Irrigation Boom

img-01470



Failure to lock your irrigation boom after rotating it will result in unstable operation. The irrigation boom will tip and damage itself and connected equipment.

Exceeding the maximum pull out speed will result in damage to the irrigation boom and any attached equipment.

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Once your irrigation boom is at the start and adjusted correctly, turn on your water supply. Bring your system up to pressure slowly, and once you have reached operating pressure begin your pull. If you are angled for the headland at the start of your pull you must re adjust your irrigation boom to match the angle of the finishing headland. If there are obstacles in the field the operator must rotate the boom around any obstacles in the irrigation boom's path.



Quickly pressurizing your irrigation boom may lead to unexpected seal failures, damage to your irrigation boom and/or the attached equipment.

Failure to re adjust your irrigation boom before the end of your pull may result in a collision with people or objects. This will cause damage to the irrigation boom, any equipment or items in the area, and serious injury and/or death.

#### **Folding**

#### Step 1

Begin folding your irrigation boom by ensuring your boom frame is locked to the turntable at a 90 degree angle (perpendicular) with the boom cart frame then lower the stabilizers until they are on the ground and locked into position. Verify that they are locked in place.

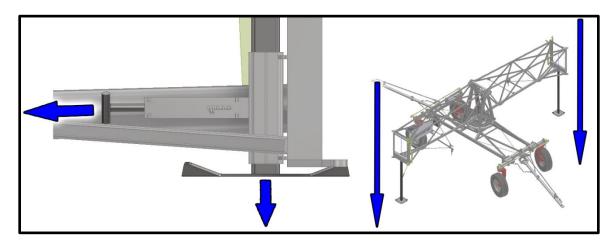


Figure 19 - Lower Stabilizers

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Failure to lower and lock your irrigation boom stabilizers before folding your irrigation boom will result in an unbalanced irrigation boom that will tip over. This will result in damage to your irrigation boom, and may cause injury and/or death.



#### Step 2

Disconnect your irrigation boom from your water supply. Then fold up your irrigation boom one section at a time. Be sure to alternate sides as you fold up sections. The reverse of the unfold process from earlier. Retract stabilizers.



Failing to close your irrigation boom by alternating sections will result in an unbalanced irrigation boom that will tip over. This will result in damage to your irrigation boom, and may cause serious injury and/or death.



Figure 20 - Folded Irrigation Boom



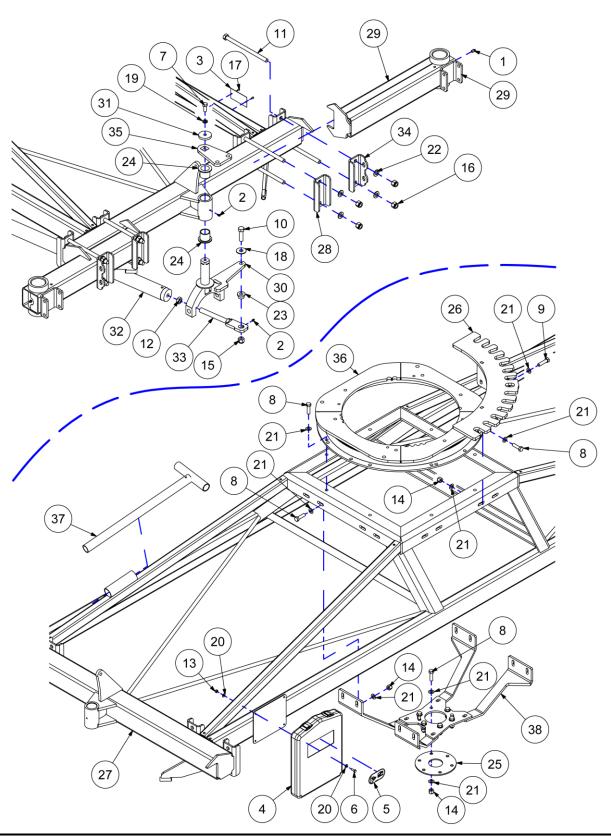
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LEGEND					
•	Standard Equipment	$\hookrightarrow$	Model Variance		
•	Full Assembly	AR	As Required		
<b>*</b>	Optional Equipment	NS	Not Shown		



# **Cart Body Assembly ●**



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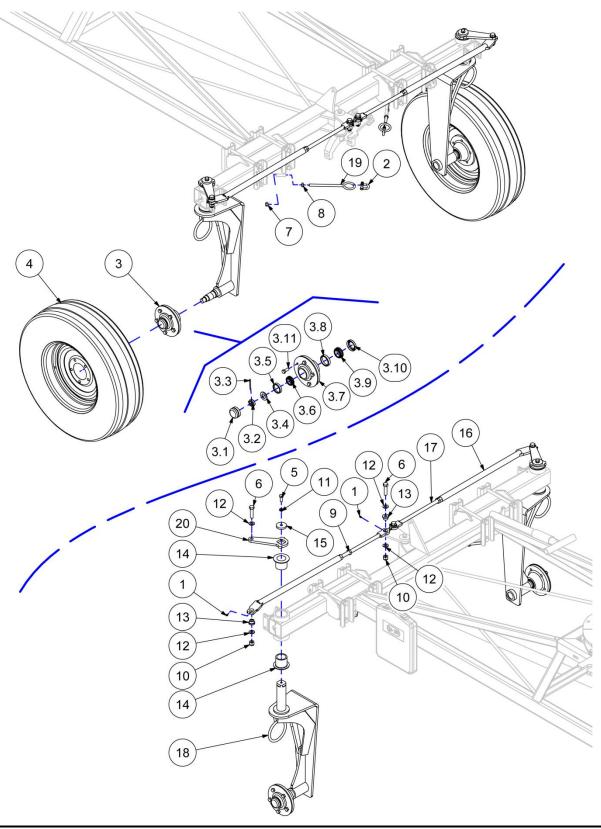


# **Cart Body Assembly ●**

ITEM	DESCRIPTION	PART NUMBER	QTY	NOTES
•	BOOM CART ASSEMBLY	CB-CRT-64		•
1	GREASE FITTING - 1/8 NPT	40-001	4	
2	GREASE FITTING - 1/4-28	40-001-02528	4	
3	CADMAN SERIAL NUMBER TAG	40-238-B	1	
4	MANUAL PAK - LARGE	42-071	1	
5	LABEL - MANUALS	42-LBL-118	1	
6	BOLT - 1/4-20 X 3/4	90-BLT-02520X075	4	
7	BOLT - 1/2-13 X 1 1/4	90-BLT-05013X125	2	
8	BOLT - 1/2-13 X 1 3/4	90-BLT-05013X175	22	
9	BOLT - 1/2-13 X 2.00	90-BLT-05013X200	2	
10	BOLT - 5/8-11 X 2 1/4	90-BLT-06311X225	2	
11	BOLT - 5/8-18 X 10.00	90-BLT-06318X1000	16	
12	NUT JAM - 3/4-10	90-NUT-JAM075-10	1	
13	NUT LOCK - 1/4-20	90-NUT-LOC025-20	4	
14	NUT LOCK - 1/2-13	90-NUT-LOC050-13	24	
15	NUT LOCK - 5/8-11	90-NUT-LOC063-11	2	
16	NUT LOCK - 5/8-18	90-NUT-LOC063-18	16	
17	RIVET - 3/16 X 3/8	90-RIV-019X038	2	
18	WASHER FLAT - 5/8	90-WSR-FLT063	2	
19	WASHER LOCK - 1/2	90-WSR-LOC050	2	
20	WASHER SAE - 1/4	90-WSR-SAE025	8	
21	WASHER SAE - 1/2	90-WSR-SAE050	48	
22	WASHER SAE - 5/8	90-WSR-SAE063	31	
23	MACH - FLANGED INSERT 1.00X0.50	CB-013	2	
24	UHMW FLANGED BUSH SHAFT 1.50	CB-017-A	4	
25	GASKET 64M BOOM URETHANE	CB-019	1	
26	TURNTABLE LOCK WELDMENT	CB-165-061	1	
27	UNDERCARRIAGE MAIN FRAME	CB-665-001-B	1	
28	WHEEL SPACING BRACKET - GALV	CB-665-019	4	
29	WHEEL MOUNT SLIDER	CB-665-022-A	4	
30	LOWER DRAG SWIVEL WELDMENT	CB-665-032	2	
31	STEERING LASER CUT WASHER	CB-665-039	2	
32	CENTER STEERING BAR WELD	CB-665-091	1	
33	CENTER STEERING WELDED BOLT	CB-665-096	1	
34	WHEEL SPACING HOLDER	CB-665-133-A	4	
35	CENTER STEERING LINK	CB-665-157	2	
36	TURN TABLE MACHINING	CB-665-199-A	1	
37	LATCH HANDLE EXTENSION WELD	CB-765-110-B	1	
38	MIDDLE PLUMBING MOUNT	CB-960-011-A	1	



# **Cart Wheel Assembly ●**



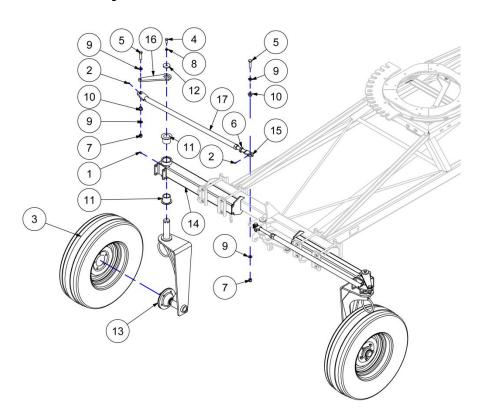


# **Cart Wheel Assembly ●**

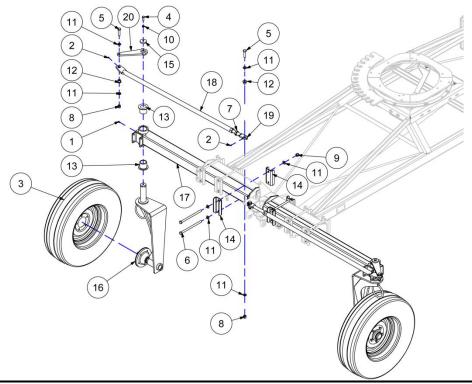
ITEM	DESCRIPTION	PART NUMBER	QTY	NOTES
	BOOM CART ASSEMBLY	CB-CRT-64		•
1	GREASE FITTING - 1/4-28	40-001-02528	8	
2	SHACKLE - 3/8 X 1 1/4 X 2000LBS	42-771	4	
3	HUB ASS'Y - 5 BOLT	55-018	4	<b>*</b>
3.1	CAP - DUST	55-023	1	
3.2	NUT	55-260	1	
3.3	COTTER PIN - 3/16 X 2.00	90-PIN-CT019X200	1	
3.4	WASHER SAE - 1.00	90-WSR-SAE100	1	
3.5	OUTER BEARING - CUP	55-021	1	
3.6	OUTER BEARING - CONE	55-022	1	
3.7	HUB - 5 BOLT	55-018-A	1	
3.8	INNER BEARING - CUP	55-019	1	
3.9	INNER BEARING - CONE	55-020	1	
3.10	SEAL - GREASE	55-015	1	
3.11	WHEEL BOLT - 1/2-20 X 45°	55-007-45	5	
4	TRU-TRAC F-2 750X16 8 PLY ASSY	55-215	4	
5	BOLT - 1/2-13 X 1 1/4	90-BLT-05013X125	4	
6	BOLT - 5/8-11 X 2 1/2	90-BLT-06311X250	8	
7	NUT HEX - 1/2-13	90-NUT-HEX050-13	4	
8	NUT JAM - 1/2-13	90-NUT-JAM050-13	4	
9	NUT JAM - 3/4-16	90-NUT-JAM075-16	4	
10	NUT LOCK - 5/8-11	90-NUT-LOC063-11	8	
11	WASHER LOCK - 1/2	90-WSR-LOC050	4	
12	WASHER SAE - 5/8	90-WSR-SAE063	16	
13	MACH - FLANGED INSERT 1.00X0.50	CB-013	8	
14	UHMW FLANGED BUSH SHAFT 2.00	CB-018-A	8	
15	STEERING LASER CUT WASHER	CB-665-039	4	
16	TIE ROD WELD - 80IN SPACING	CB-665-040-B	4	
17	TIE ROD ADJUSTABLE TIP	CB-665-043-B	4	
18	WHEEL WELDMENT	CB-665-100-C	4	
19	WELDED EYELET	CB-665-123	4	
20	STEER OUTSIDE LINK 55DEG	CB-665-158	4	



# Cart Wheel Assembly - 96 inch ♦



# Cart Wheel Assembly - 120 inch ♦





# Cart Wheel Assembly - 96 inch ♦

ITEM	DESCRIPTION	PART NUMBER	QTY	NOTES
<b>*</b>	CART WHEEL ASSEMBLY - 96 INCH	CB-KIT-WS96		<b>*</b>
1	GREASE FITTING - 1/8 NPT	40-001	4	
2	GREASE FITTING - 1/4-28	40-001-02528	6	
3	TRU-TRAC F-2 750X16 8 PLY ASSY	55-215	4	
4	BOLT - 1/2-13 X 1 1/4	90-BLT-05013X125	4	
5	BOLT - 5/8-11 X 2 1/2	90-BLT-06311X250	8	
6	NUT JAM - 1.00-8	90-NUT-JAM100-08	4	
7	NUT LOCK - 5/8-11	90-NUT-LOC063-11	8	
8	WASHER LOCK - 1/2	90-WSR-LOC050	4	
9	WASHER SAE - 5/8	90-WSR-SAE063	16	
10	MACH - FLANGED INSERT 1.00X0.50	CB-013	8	
11	UHMW FLANGED BUSH SHAFT 2.00	CB-018-A	8	
12	STEERING LASER CUT WASHER	CB-665-039	4	
13	WHEEL WELDMENT	CB-665-100-C	4	
14	WHEEL MOUNT SLIDER 96IN	CB-665-154-A	4	
15	WELD TIE ROD ADJUSTABLE TIP	CB-665-174-A	4	
16	STEER OUTSIDE LINK 55DEG WS120	CB-665-178	4	
17	WELD TIE ROD 96IN WIDE SPACING	CB-665-187	4	

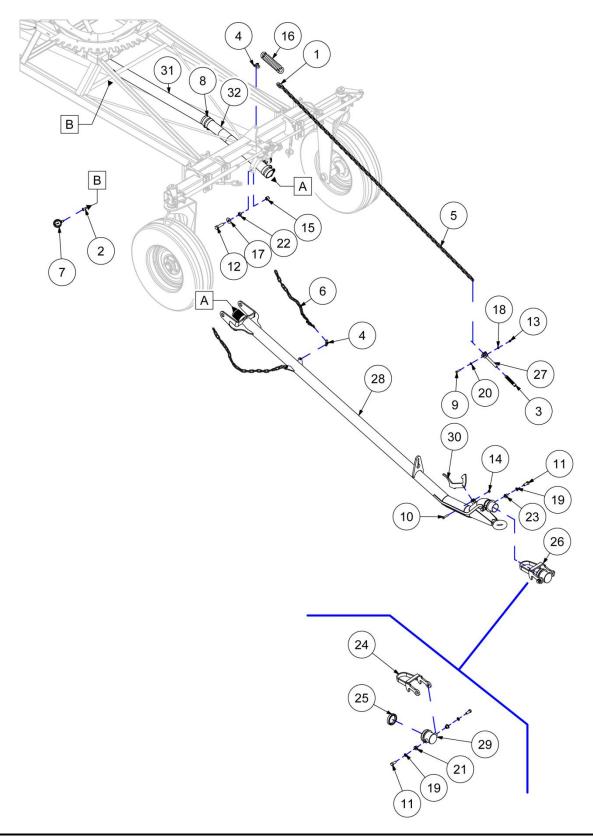
# Cart Wheel Assembly - 120 inch ♦

ITEM	DESCRIPTION	<b>PART NUMBER</b>	QTY	NOTES
•	CART WHEEL ASSEMBLY - 120 INCH	CB-KIT-WS120		<b>♦</b>
1	GREASE FITTING - 1/8 NPT	40-001	4	
2	GREASE FITTING - 1/4-28	40-001-02528	6	
3	TRU-TRAC F-2 750X16 8 PLY ASSY	55-215	4	
4	BOLT - 1/2-13 X 1 1/4	90-BLT-05013X125	4	
5	BOLT - 5/8-11 X 2 1/2	90-BLT-06311X250	8	
6	BOLT - 5/8-18 X 10.00	90-BLT-06318X1000	8	
7	NUT JAM - 1.00-8	90-NUT-JAM100-08	4	
8	NUT LOCK - 5/8-11	90-NUT-LOC063-11	8	
9	NUT LOCK - 5/8-18	90-NUT-LOC063-18	8	
10	WASHER LOCK - 1/2	90-WSR-LOC050	4	
11	WASHER SAE - 5/8	90-WSR-SAE063	32	
12	MACH - FLANGED INSERT 1.00X0.50	CB-013	8	
13	UHMW FLANGED BUSH SHAFT 2.00	CB-018-A	8	
14	WHEEL SPACING BRACKET - GALV	CB-665-019	8	
15	STEERING LASER CUT WASHER	CB-665-039	4	
16	WHEEL WELDMENT	CB-665-100-C	4	
17	WHEEL MOUNT SLIDER 120IN	CB-665-160-B	4	
18	WELD TIE ROD 120IN WIDE SPACING	CB-665-167-B	4	
19	WELD TIE ROD ADJUSTABLE TIP	CB-665-174-A	4	
20	STEER OUTSIDE LINK 55DEG WS120	CB-665-178	4	

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# **Center Feed Tongue Assembly ●**





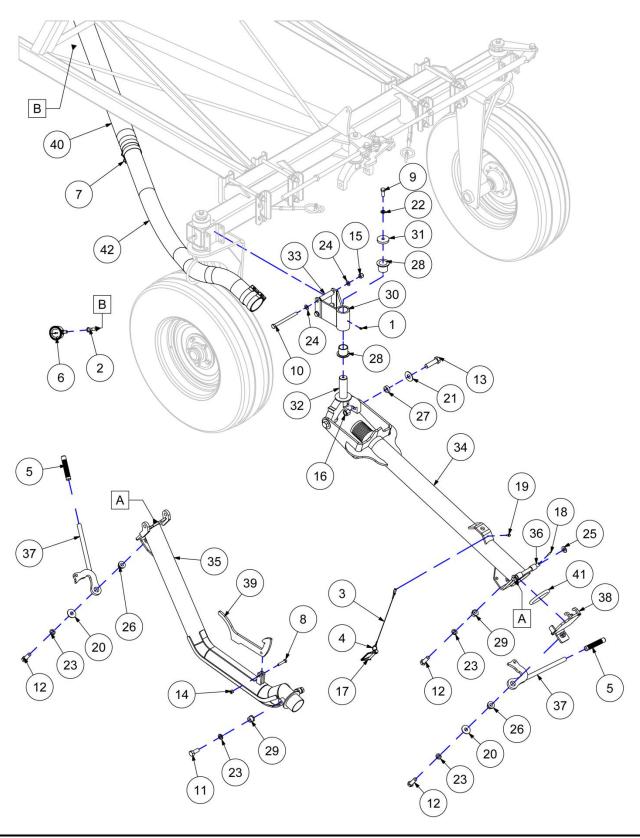
# **Center Feed Tongue Assembly ●**

ITEM	DESCRIPTION	PART NUMBER	QTY	NOTES
•	CENTER WATER FEED	CB-KIT-CWF		<b>•</b>
1	RAPID LINK - 3/8"	40-063	2	
2	ELBOW STREET - 1/2-NPP 45°	40-NPT-ELS025X45G	1	
3	GRIP FITS - 3/4 OD 4.8 OVERALL L	42-678	2	
4	SHACKLE - 3/8 X 1 1/4 X 2000LBS	42-771	6	
5	37 LINK GR 30 PLATED ASSY	42-776-A	2	
6	CHAIN - 5/16 GRADE 30 28 LINKS	42-777-A	4	
7	GAUGE - 0-200PSI LIQUID FILLED	45-018	1	
8	CLAMP - M8 80-85 (3.15-3.38 IN)	50-065	8	
9	BOLT - 3/8-16 X 1 1/2	90-BLT-03816X150	2	
10	BOLT - 7/16-20 X 2.00	90-BLT-04420X200	2	
11	BOLT - 5/8-11 X 1 1/2	90-BLT-06311X150	6	
12	BOLT - 3/4-10 X 2 3/4	90-BLT-07510X275	4	
13	NUT HEX - 3/8-16	90-NUT-HEX038-16	2	
14	NUT HEX - 7/16-20	90-NUT-HEX044-20	2	
15	NUT LOCK - 3/4-10	90-NUT-LOC075-10	4	
16	EXT SPRING 2.313 DIA X 1/2 X 10	90-SPG-231X050X1000	2	
17	WASHER FLAT - 3/4	90-WSR-FLT075	4	
18	WASHER LOCK - 3/8	90-WSR-LOC038	2	
19	WASHER LOCK - 5/8	90-WSR-LOC063	6	
20	WASHER SAE - 3/8	90-WSR-SAE038	2	
21	MACH - FLANGED INSERT 1.00X0.50	CB-013	2	
22	MACHINED INSERT OD1.25ID0.76	CB-014	4	
23	MACH- OFFSET PIN OD1.00 H063	CB-025	4	
24	LOCKING HOOK WELD - LC	CB-034	1	
25	PULL COUPLING LIP SEAL	CB-037	1	
26	DRAG PLUMBING - CAP ASSEMBLY	CB-038	1	
27	CHAIN END - HANDLE	CB-665-108-A	2	
28	TONGUE WELDMENT	CB-665-138-A	2	
29	LARGE WASHER	CB-665-151	1	
30	LATCH	CB-665-153	2	
31	LOWER CENTER PLUMBING CWF	CB-960-121	1	
32	HOSE - 3.00 CADMAN SUPPLY	IR-HOZ-300CSSL.FT	2	





# Offset Feed Tongue Assembly ♦



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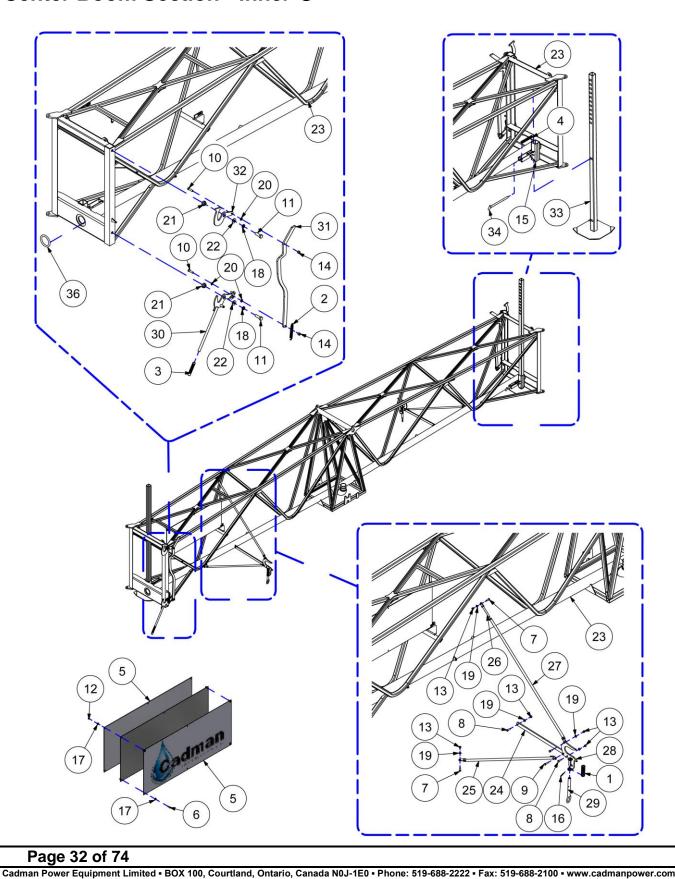
# Offset Feed Tongue Assembly ♦

ITEM	DESCRIPTION	PART NUMBER	QTY	NOTES
<b></b>	OFFSET WATER FEED	CB-KIT-OWF		<b>*</b>
1	GREASE FITTING - 1/4-28	40-001-02528	2	
2	ELBOW STREET - 1/2-NPP 45°	40-NPT-ELS025X45G	1	
3	LANYARD - 12.00 STAINLESS	42-439	2	
4	RING - LANYARD	42-440	2	
5	GRIP FITS - 3/4 OD 4.8 OVERALL L	42-678	3	
6	GAUGE - 0-200PSI LIQUID FILLED	45-018	1	
7	CLAMP - M8 80-85 (3.15-3.38 IN)	50-065	8	
8	BOLT - 3/8-16 X 1 3/4	90-BLT-03816X175	2	
9	BOLT - 1/2-13 X 1 1/4	90-BLT-05013X125	2	
10	BOLT - 1/2-13 X 6.00	90-BLT-05013X600	4	
11	BOLT - 5/8-11 X 1 1/2	90-BLT-06311X150	4	
12	BOLT - 5/8-11 X 2.00	90-BLT-06311X200	5	
13	BOLT - 3/4-10 X 2 3/4	90-BLT-07510X275	4	
14	NUT LOCK - 3/8-16	90-NUT-LOC038-16	2	
15	NUT LOCK - 1/2-13	90-NUT-LOC050-13	4	
16	NUT LOCK - 3/4-10	90-NUT-LOC075-10	4	
17	QUICK PIN - 3/8 X 3" LG.	90-PIN-QD038X300	2	
18	ROLL PIN - 3/16 X 1.25 LG PLATED	90-PIN-RL018X125	4	
19	SCREW TEK - 1/4 X 3/4	90-SCR-TEK025X075	2	
20	WASHER FLAT - 5/8	90-WSR-FLT063	3	
21	WASHER FLAT - 3/4	90-WSR-FLT075	4	
22	WASHER LOCK - 1/2	90-WSR-LOC050	2	
23	WASHER LOCK - 5/8	90-WSR-LOC063	9	
24	WASHER SAE - 1/2	90-WSR-SAE050	8	
25	WASHER SAE - 5/8	90-WSR-SAE063	4	
26	MACH - FLANGED INSERT 1.00X0.50	CB-013	3	
27	MACHINED INSERT OD1.25ID0.76	CB-014	4	
28	UHMW FLANGED BUSH SHAFT 1.50	CB-017-A	4	
29	MACH- OFFSET PIN OD1.00 H063	CB-025	6	
30	DRAG HOSE SWIVEL MOUNT	CB-665-028-E	2	
31	STEERING LASER CUT WASHER	CB-665-039	2	
32	LOWER DRAG SWIVEL WELDMENT	CB-665-045	2	
33	SPACER TUBE ID0.65	CB-665-047-A	4	
34	DRAG PLUMBING WELDMENT 1	CB-665-056-A	2	
35	DRAG PLUMBING	CB-665-064-B	2	
36	ROD 0.625	CB-665-075	2	
37	HOOK-LATCH DRAG PLUMBING	CB-665-076-B	3	
38	BLANK CAP WELDMENT	CB-665-079	1	
39	LATCH PLATE HOOK OWF	CB-665-130	2	
40	PLUMBING WELD OWF Y PIPE	CB-960-013	1	
41	GASKET - 3.00 WIL-LOC	IR-GKT-WL3	2	
42	HOSE - 3.00 CADMAN SUPPLY	IR-HOZ-300CSSL.FT	6	





## **Center Boom Section - Inner ●**



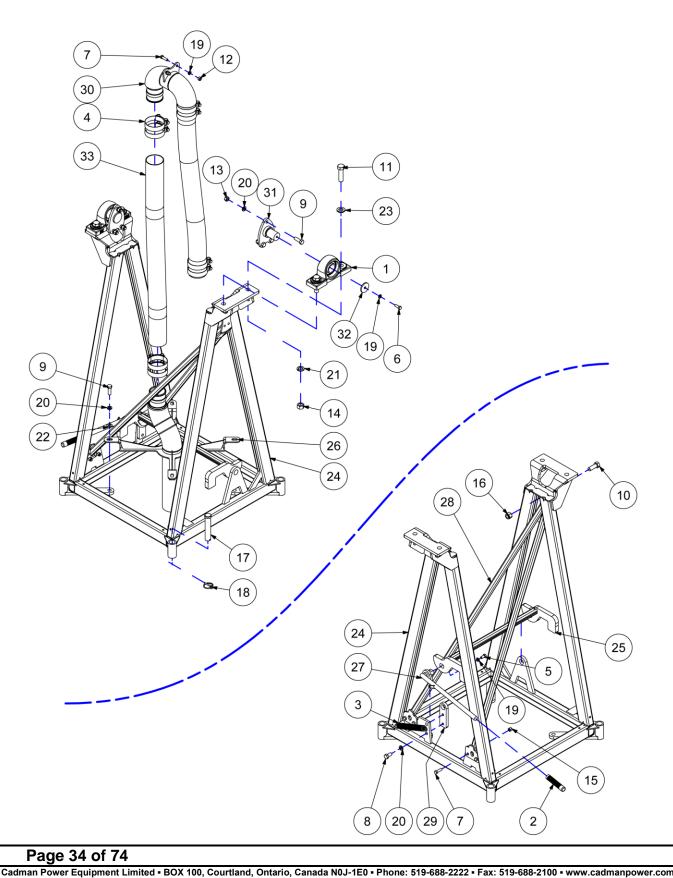


## **Center Boom Section - Inner ●**

ITEM	DESCRIPTION	PART NUMBER	QTY	NOTES
<b>♦</b>	CENTER BOOM SECTION	CB-165-999		<b>♦</b>
1	SPRING COMP - L1-4 OD0.84 10.7lb	42-676	2	
2	SPRING EXT - L6-9 O.D1.00 38.5Lb	42-677	2	
3	GRIP FITS - 3/4 OD 4.8 OVERALL L	42-678	2	
4	SPRING L3.5-6 13.96LB PER INCH	42-679	2	
5	REFLECTIVE CADMAN BOOM DECAL	42-DCL-018	2	
6	BOLT - 1/4-20 X 1.00	90-BLT-02520X100	4	
7	BOLT - 3/8-16 X 1.00	90-BLT-03816X100	6	
8	BOLT - 3/8-16 X 1 1/4	90-BLT-03816X125	4	
9	BOLT - 3/8-16 X 1 1/2	90-BLT-03816X150	2	
10	BOLT - 1/2-13 X 1 3/4	90-BLT-05013X175	4	
11	BOLT - 3/4-10 X 2 1/4	90-BLT-07510X225	4	
12	NUT LOCK - 1/4-20	90-NUT-LOC025-20	4	
13	NUT LOCK - 3/8-16	90-NUT-LOC038-16	12	
14	NUT LOCK - 1/2-13	90-NUT-LOC050-13	4	
15	ROLL PIN - 3/16 X 2.00 LG PLATED	90-PIN-RL018X200	2	
16	PIN ROLL - 1/4 X 2 1/2	90-PIN-RL025X200	2	
17	WASHER FLAT - 1/4	90-WSR-FLT025	8	
18	WASHER LOCK - 3/4	90-WSR-LOC075	4	
19	WASHER SAE - 3/8	90-WSR-SAE038	11	
20	WASHER SAE - 1/2	90-WSR-SAE050	6	
21	FLANGED INSERT 1.25 X H075	CB-028-A	4	
22	LATCH WASHER H075	CB-032	4	
23	CENTER SECTION	CB-165-000	1	
24	LINK - CENTER SECT LOCK	CB-765-031-A	2	
25	CENTER SECT - LOCK HOZ BRACE	CB-765-032-A	2	
26	LINK ADJUSTABLE END	CB-765-036	2	
27	VERTICAL LINK L47.38	CB-765-038-A	2	
28	TRANSPORT LATCH WELDM'T - 1ST	CB-765-040	2	
29	LATCH PIN WELDMENT	CB-765-043	2	
30	LOWER HOOK WELD - SECTION 1-2	CB-765-045-A	2	
31	LATCH LINK - SECTION 1-2	CB-765-049-A	2	
32	UPPER HOOK - SECTION 1-2	CB-765-050-A	2	
33	JACK LEG WELDMENT	CB-765-051	2	
34	JACK LEG PIN WELDMENT	CB-765-057-A	2	
35	ALUPANEL LOGO PLATE	CB-765-101	1	
36	GASKET - 3" (WIL-LOC)	IR-GKT-BAUER076	2	



# **Center Boom Section - Outer ●**





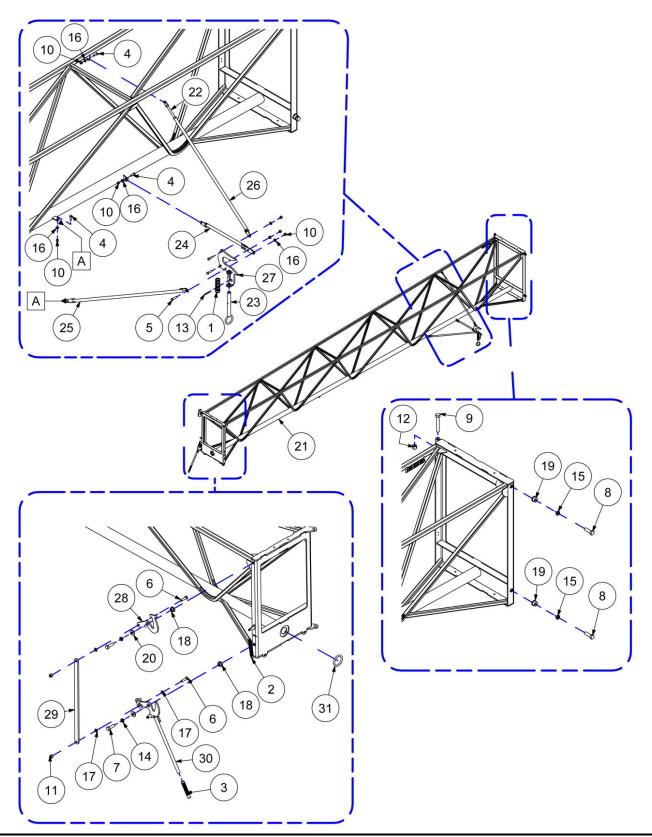
### **Center Boom Section - Outer ●**

ITEM	DESCRIPTION	<b>PART NUMBER</b>	QTY	NOTES
<b>•</b>	CENTER BOOM SECTION	CB-165-999		<b>*</b>
1	PILLOW BLOCK - 1 1/2"	42-671	2	
2	GRIP FITS - 3/4 OD 4.8 OVERALL L	42-678	1	
3	SPRING EXT - L8.5-16 OD1.00 61.5LB	42-680	1	
4	CLAMP - M8 80-85 (3.15-3.38 IN)	50-065	8	
5	BOLT - 3/8-16 X 3/4	90-BLT-03816X075	1	
6	BOLT - 3/8-16 X 1.00	90-BLT-03816X100	2	
7	BOLT - 3/8-16 X 1 1/4	90-BLT-03816X125	6	
8	BOLT - 1/2-13 X 1.00	90-BLT-05013X100	2	
9	BOLT - 1/2-13 X 1 1/2	90-BLT-05013X150	10	
10	BOLT - 5/8-11 X 1 3/4	90-BLT-06311X175	1	
11	BOLT - 3/4-10 X 2 3/4	90-BLT-07510X275	4	
12	NUT HEX - 3/8-16	90-NUT-HEX038-16	2	
13	NUT HEX - 1/2-13	90-NUT-HEX050-13	6	
14	NUT HEX - 3/4-10	90-NUT-HEX075-10	4	
15	NUT LOCK - 3/8-16	90-NUT-LOC038-16	4	
16	NUT LOCK - 5/8-11	90-NUT-LOC063-11	1	
17	PIN CLEVIS - 1.00 DIA X 5.00	90-PIN-CL100X500	1	
18	LYNCH PIN - 3/16	90-PIN-LYNCH019	1	
19	WASHER LOCK - 3/8	90-WSR-LOC038	5	
20	WASHER LOCK - 1/2	90-WSR-LOC050	12	
21	WASHER LOCK - 3/4	90-WSR-LOC075	4	
22	WASHER SAE - 1/2	90-WSR-SAE050	4	
23	WASHER SAE - 3/4	90-WSR-SAE075	4	
24	CENTER PIVOT MOUNT-CRADLE	CB-165-033-A	1	
25	PIVOT LOCK WELDMENT	CB-765-001-A	1	
26	LOWER PLUMBING WELDMENT	CB-765-005-A	1	
27	HANDLE FOR CENTRAL PIVOT	CB-765-013-A	1	
28	CROSS SUPPORT WELDMENT	CB-765-018	1	
29	PIVOT LOCK MOUNTING BRACKET	CB-765-022	1	
30	UPPER PLUMBING WELDMENT	CB-765-023	1	
31	BEARING SHAFT WELD'T - FLANGE	CB-765-026	2	
32	WASHER UPPER PIVOT BEARING	CB-765-029	2	
33	HOSE - 3.00 CADMAN SUPPLY	IR-HOZ-300CSSL.FT	16	





## **Boom Section 2 Assembly ●**



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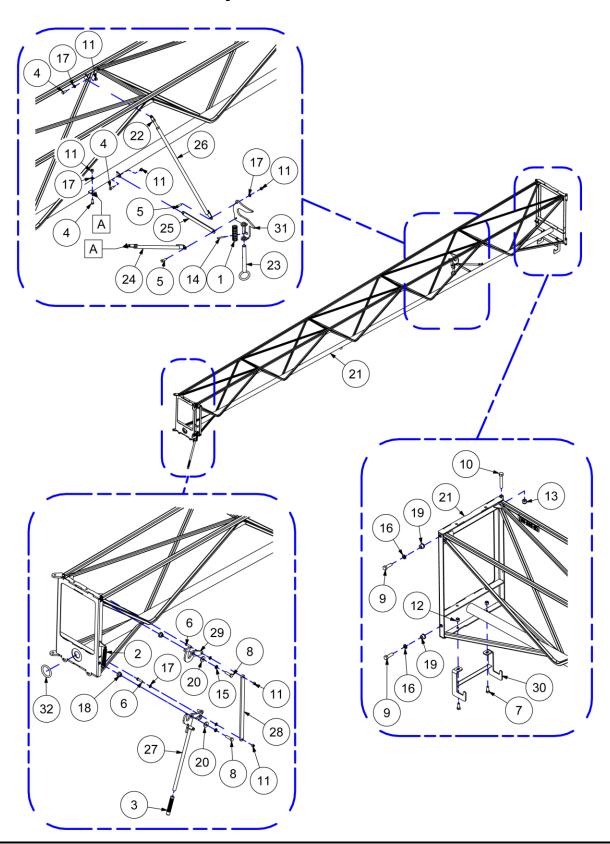


# **Boom Section 2 Assembly ●**

ITEM	DESCRIPTION	PART NUMBER	QTY	NOTES
<b>*</b>	BOOM SECTION 2 ASSEMBLY	CB-265-000		<b>*</b>
1	SPRING COMP - L1-4 OD0.84 10.7lb	42-676	1	
2	SPRING EXT - L6-9 O.D1.00 38.5Lb	42-677	1	
3	GRIP FITS - 3/4 OD 4.8 OVERALL L	42-678	1	
4	BOLT - 3/8-16 X 1.00	90-BLT-03816X100	4	
5	BOLT - 3/8-16 X 1 1/2	90-BLT-03816X150	2	
6	BOLT - 1/2-13 X 1 3/4	90-BLT-05013X175	2	
7	BOLT - 5/8-11 X 2.00	90-BLT-06311X200	2	
8	BOLT - 3/4-10 X 2 1/4	90-BLT-07510X225	2	
9	BOLT - 3/4-10 X 5.00	90-BLT-07510X500	2	
10	NUT LOCK - 3/8-16	90-NUT-LOC038-16	6	
11	NUT LOCK - 1/2-13	90-NUT-LOC050-13	2	
12	NUT LOCK - 3/4-10	90-NUT-LOC075-10	2	
13	PIN ROLL - 1/4 X 2 1/2	90-PIN-RL025X200	1	
14	WASHER LOCK - 5/8	90-WSR-LOC063	2	
15	WASHER LOCK - 3/4	90-WSR-LOC075	2	
16	WASHER SAE - 3/8	90-WSR-SAE038	6	
17	WASHER SAE - 1/2	90-WSR-SAE050	3	
18	FLANGED INSERT 1.00 X H063	CB-026	2	
19	MACH- OFFSET PIN OD1.25 H075	CB-029	2	
20	LATCH WASHER H063	CB-031	2	
21	SECOND SECTION WELDMENT	CB-265-001-A	1	
22	LINK ADJUSTABLE END	CB-765-036	1	
23	LATCH PIN WELDMENT	CB-765-043	1	
24	LINK WELD- SECOND SECT LOCK	CB-765-054-A	1	
25	SHORT LINK BENT END	CB-765-060-A	1	
26	VERTICAL LINK L37.5	CB-765-063-B	1	
27	TRANSPORT LATCH WELD'T -2ND	CB-765-065	1	
28	UPPER HOOK - SECTION 2-3	CB-765-067-A	1	
29	LATCH LINK - SECTION 2-3	CB-765-069-A	1	
30	LOWER HOOK WELD - SECTION 2-3	CB-765-070-A	1	
31	50MM BAUER GASKET	IR-GKT-BAUER050	1	



## **Boom Section 3 Assembly ●**



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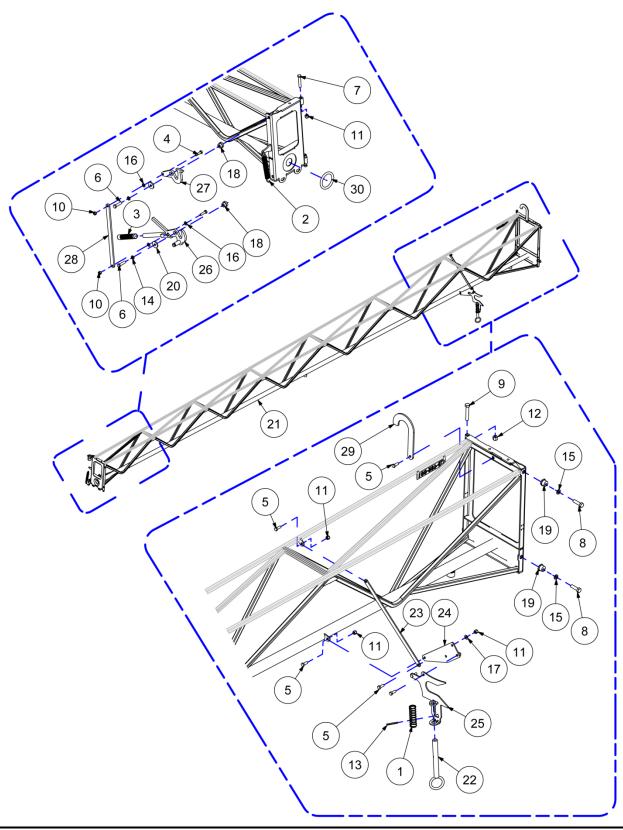
# **Boom Section 3 Assembly ●**

ITEM	DESCRIPTION	PART NUMBER	QTY	NOTES
<b>♦</b>	BOOM SECTION 3 ASSEMBLY	CB-365-000		<b>•</b>
1	SPRING COMP - L1-4 OD0.84 10.7lb	42-676	1	
2	SPRING EXT - L6-9 O.D1.00 38.5Lb	42-677	1	
3	GRIP FITS - 3/4 OD 4.8 OVERALL L	42-678	1	
4	BOLT - 3/8-16 X 1.00	90-BLT-03816X100	3	
5	BOLT - 3/8-16 X 1 1/4	90-BLT-03816X125	2	
6	BOLT - 3/8-16 X 1 1/2	90-BLT-03816X150	2	
7	BOLT - 1/2-13 X 1 1/4	90-BLT-05013X125	2	
8	BOLT - 1/2-13 X 1 3/4	90-BLT-05013X175	2	
9	BOLT - 5/8-11 X 2.00	90-BLT-06311X200	2	
10	BOLT - 5/8-11 X 3 3/4	90-BLT-06311X375	2	
11	NUT LOCK - 3/8-16	90-NUT-LOC038-16	7	
12	NUT LOCK - 1/2-13	90-NUT-LOC050-13	2	
13	NUT LOCK - 5/8-11	90-NUT-LOC063-11	2	
14	PIN ROLL - 1/4 X 2 1/2	90-PIN-RL025X200	1	
15	WASHER LOCK - 1/2	90-WSR-LOC050	2	
16	WASHER LOCK - 5/8	90-WSR-LOC063	2	
17	WASHER SAE - 3/8	90-WSR-SAE038	8	
18	FLANGED INSERT 0.88 X H050	CB-010-A	2	
19	MACH - OFFSET PIN OD1.00 H063	CB-025	2	
20	LATCH WASHER H050	CB-030	2	
21	3RD SECTION	CB-365-001-A	1	
22	LINK ADJUSTABLE END	CB-765-036	1	
23	LATCH PIN WELDMENT	CB-765-043	1	
24	LINK	CB-765-071-A	1	
25	BAR 10.25 IN LONG	CB-765-074-A	1	
26	VERTICAL LINK	CB-765-075	1	
27	LOWER HOOK WELD - SECTION 3-4	CB-765-077-A	1	
28	LATCH LINK - SECTION 3-4	CB-765-079-A	1	
29	UPPER HOOK - SECTION 3-4	CB-765-080-A	1	
30	SECTION HANGER WELDMENT	CB-765-098	1	
31	TRANSPORT LATCH WELD'T - 3 <sup>RD</sup>	CB-765-119	1	
32	50MM BAUER GASKET	IR-GKT-BAUER050	1	





## **Boom Section 4 Assembly ●**



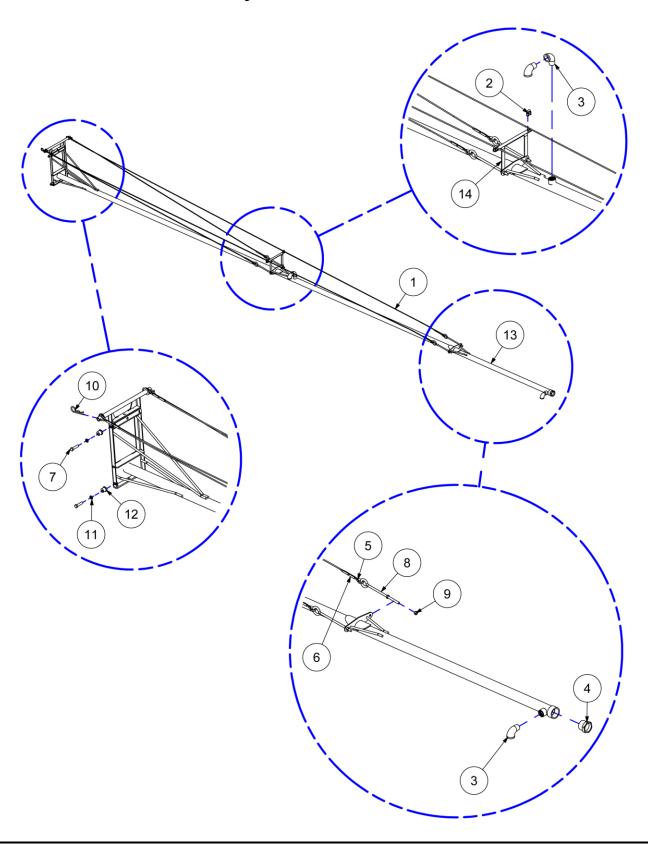


# **Boom Section 4 Assembly ●**

ITEM	DESCRIPTION	PART NUMBER	QTY	NOTES
<b>*</b>	BOOM SECTION 4 ASSEMBLY	CB-465-000		<b>•</b>
1	SPRING COMP - L1-4 OD0.84 10.7lb	42-676	1	
2	SPRING EXT - L6-9 O.D1.00 38.5Lb	42-677	1	
3	GRIP FITS - 3/4 OD 4.8 OVERALL L	42-678	1	
4	BOLT - 5/16-18 X 1 1/4	90-BLT-03118X125	2	
5	BOLT - 3/8-16 X 1.00	90-BLT-03816X100	6	
6	BOLT - 3/8-16 X 1 1/2	90-BLT-03816X150	2	
7	BOLT - 3/8-16 X 2 1/4	90-BLT-03816X225	2	
8	BOLT - 1/2-13 X 1 3/4	90-BLT-05013X175	2	
9	BOLT - 1/2-13 X 3.00	90-BLT-05013X300	2	
10	NUT LOCK - 5/16-18	90-NUT-LOC031-18	2	
11	NUT LOCK - 3/8-16	90-NUT-LOC038-16	8	
12	NUT LOCK - 1/2-13	90-NUT-LOC050-13	2	
13	PIN ROLL - 1/4 X 2 1/2	90-PIN-RL025X200	1	
14	WASHER LOCK - 3/8	90-WSR-LOC038	2	
15	WASHER LOCK - 1/2	90-WSR-LOC050	2	
16	WASHER SAE - 5/16	90-WSR-SAE031	3	
17	WASHER SAE - 3/8	90-WSR-SAE038	5	
18	MACH -FLANGED INSERT 0.75 X H038	CB-003	2	
19	MACH- OFFSET PIN OD1.00 H050	CB-011	2	
20	LATCH WASHER H038	CB-012	2	
21	FOURTH SECTION WELDMENT	CB-465-001-A	1	
22	LATCH PIN WELDMENT	CB-765-043	1	
23	BAR 17.71 LONG	CB-765-081-A	1	
24	LATCH - SMALL OUTER BRACKET	CB-765-082-A	1	
25	TRANSPORT LATCH WELD'T - 4TH	CB-765-083-A	1	
26	LOWER HOOK WELD - SECTION 4-5	CB-765-092-C	1	
27	UPPER HOOK - SECTION 4-5	CB-765-093-C	1	
28	LATCH LINK - SECTION 4-5	CB-765-094-A	1	
29	HANGER LASER CUT	CB-765-099	1	
30	50MM BAUER GASKET	IR-GKT-BAUER050	1	



# **Boom Section 5 Assembly**



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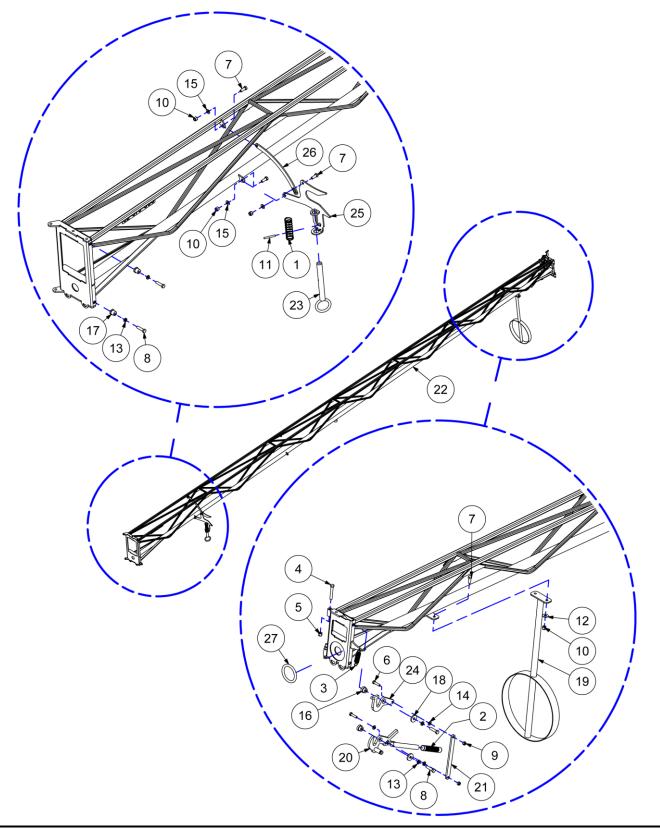


## **Boom Section 5 Assembly**

ITEM	DESCRIPTION	PART NUMBER	QTY	NOTES
•	BOOM SECTION 5 ASSEMBLY	CB-565-000		64M
1	AIRCRAFT CABLE - 3/16 IN	40-058	648	
2	CLAMP CABLE - 1/8	40-060	2	
3	ELBOW STREET 90° - 3/4" NPT	40-NPT-ELS075X90G	3	
4	REDUCER - 24NPTM X 20NPTF GAL	40-NPT-RB150X125G	1	
5	THIMBLE - 5/16 GALV	42-780-A	6	
6	CLAMP - 0.313 ALUM SWAGE OVAL	42-781-A	12	
7	BOLT - 3/8-16 X 1 1/2	90-BLT-03816X150	2	
8	EYE BOLT - 3/8-16 L 8.00 x 4.00	90-EBT-03816X800X400	4	
9	NUT HEX - 3/8-16	90-NUT-HEX038-16GALV	8	
10	HAIR PIN - 0.017DIA 3.25L	90-PIN-HP017X325	2	
11	WASHER LOCK - 3/8	90-WSR-LOC038	2	
12	MACH- OFFSET PIN OD0.75 H038	CB-005	2	
13	END SECTION WELDMENT	CB-565-001-A	1	
14	CENTER CABLE BRACKET - GALV	CB-565-015	1	



# **Boom Section 6 Assembly ♦**



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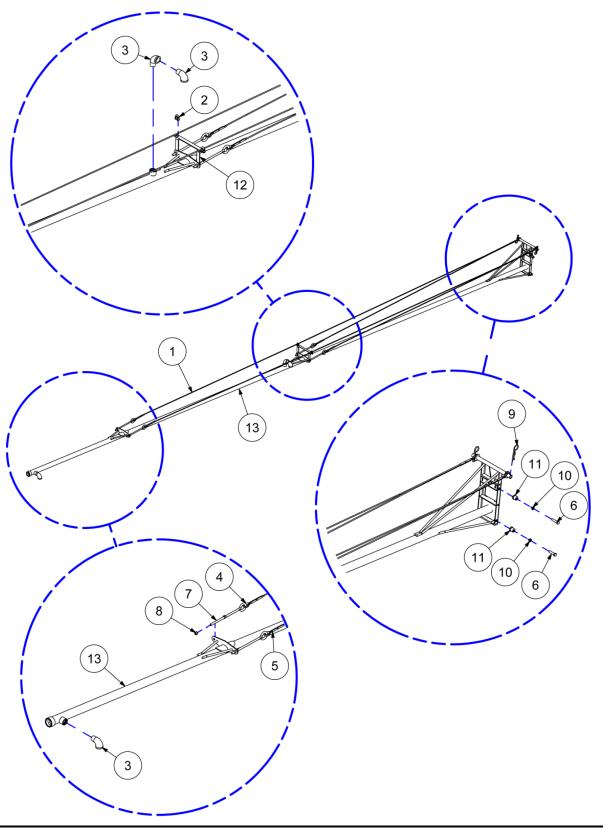
# **Boom Section 6 Assembly ♦**

ITEM	DESCRIPTION	PART NUMBER	QTY	NOTES
<b></b>	BOOM SECTION 6 ASSEMBLY	CB-676-999		72M, 76M
1	SPRING COMP - L1-4 OD0.84 10.7lb	42-676	1	
2	GRIP FITS - 3/4 OD 4.8 OVERALL L	42-678	1	
3	EXT-SPRING OD.75 W0.075 L3.00 H	42-764-H	1	
4	BOLT GR.8 - 3/8-16 X 2 1/4	89-BLT-03816X250	2	
5	NUT LOCK GR.8 - 3/8-16	89-NUT-LOC038-16	2	
6	BOLT - 5/16-18 X 1 1/4	90-BLT-03118X125	2	
7	BOLT - 3/8-16 X 1.00	90-BLT-03816X100	5	
8	BOLT - 3/8-16 X 1 1/2	90-BLT-03816X150	4	
9	NUT LOCK - 5/16-18	90-NUT-LOC031-18	2	
10	NUT LOCK - 3/8-16	90-NUT-LOC038-16	5	
11	PIN ROLL - 1/4 X 2 1/2	90-PIN-RL025X200	1	
12	WASHER FLAT - 3/8	90-WSR-FLT038	2	
13	WASHER LOCK - 3/8	90-WSR-LOC038	4	
14	WASHER SAE - 5/16	90-WSR-SAE031	3	
15	WASHER SAE - 3/8	90-WSR-SAE038	3	
16	MACH -FLANGED INSERT 0.75 X H038	CB-003	2	
17	MACH- OFFSET PIN OD0.75 H038	CB-005	2	
18	LATCH WASHER H038	CB-012	2	
19	SPRINKLER GUARD WELDMENT 76M	CB-576-049	1	
20	LOWER HOOK WELD SECTION 5-6	CB-576-050	1	
21	LATCH LINK - SECTION 4-5	CB-576-052	1	
22	SIXTH SECTION WELDMENT 76/72 M	CB-676-000	1	
23	LATCH PIN WELDMENT	CB-765-043	1	
24	UPPER HOOK - SECTION 4-5	CB-765-093-C	1	
25	TRANSPORT LATCH WELDMENT 76M	CB-765-134	1	
26	PLATE CURVE CATCH LINK 5-6	CB-765-135-A	1	
27	50MM BAUER GASKET	IR-GKT-BAUER050	1	





## **Boom Section 7 Assembly ♦**



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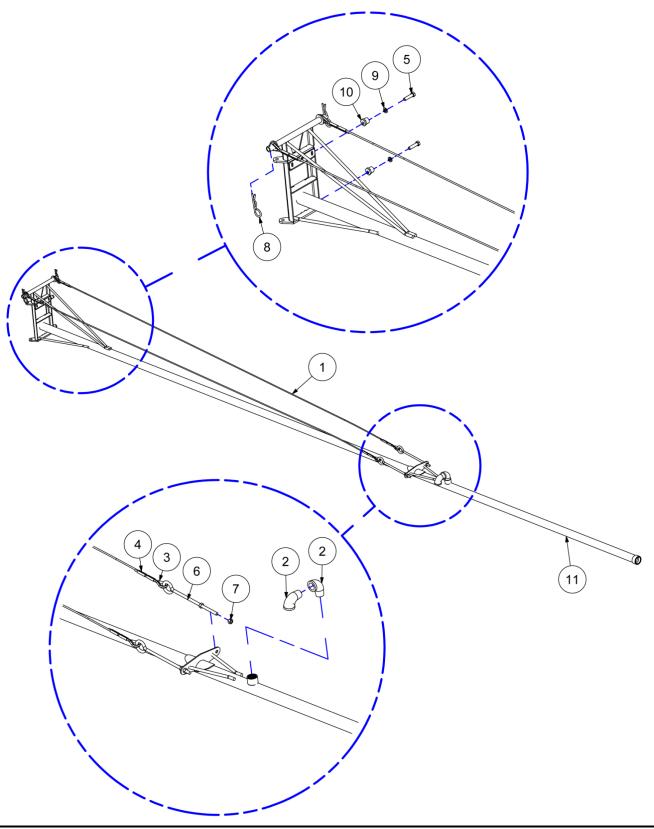


# **Boom Section 7 Assembly ♦**

ITEM	DESCRIPTION	<b>PART NUMBER</b>	QTY	NOTES
<b>*</b>	BOOM SECTION 7 ASSEMBLY	CB-776-999		76M
1	AIRCRAFT CABLE - 3/16 IN	40-058	2	
2	CLAMP CABLE - 1/8	40-060	2	
3	ELBOW STREET 90° - 3/4" NPT	40-NPT-ELS075X90G	3	
4	THIMBLE - 5/16 GALV	42-780-A	6	
5	CLAMP - 0.313 ALUM SWAGE OVAL	42-781-A	12	
6	BOLT - 3/8-16 X 1 1/2	90-BLT-03816X150	2	
7	EYE BOLT - 3/8-16 L 8.00 x 4.00	90-EBT-03816X800X400	4	
8	NUT HEX - 3/8-16	90-NUT-HEX038-16GALV	8	
9	HAIR PIN - 0.017DIA 3.25L	90-PIN-HP017X325	2	
10	WASHER LOCK - 3/8	90-WSR-LOC038	2	
11	MACH- OFFSET PIN OD0.75 H038	CB-005	2	
12	PLATE CABLE BRACKET 76M	CB-676-008	1	
13	END 7TH SECTION WELDMENT 76M	CB-776-000	1	



# **Boom Section 8 Assembly ♦**



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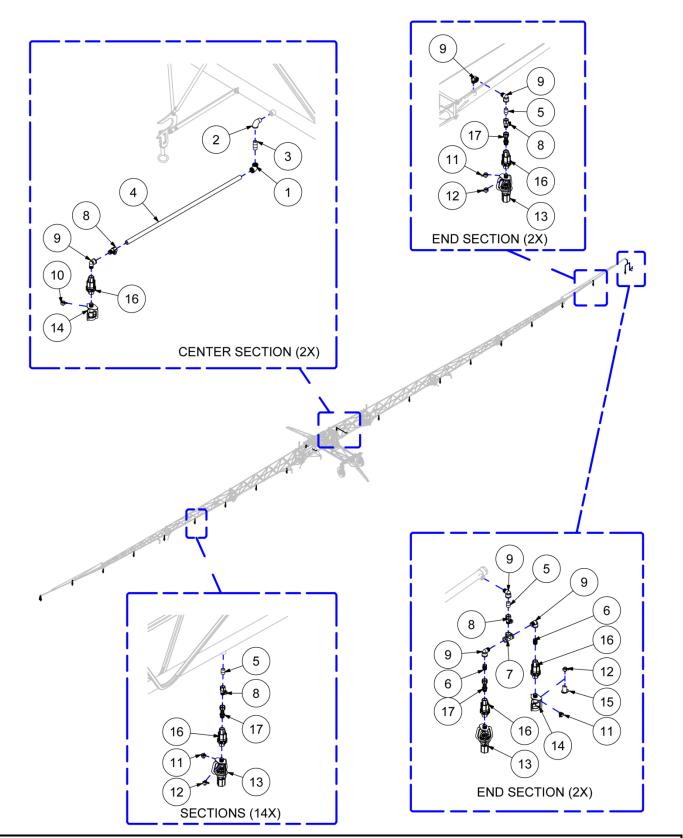


# **Boom Section 8 Assembly ♦**

ITEM	DESCRIPTION	PART NUMBER	QTY	NOTES
•	BOOM SECTION 8 ASSEMBLY	CB-872-999		72M
1	AIRCRAFT CABLE - 3/16 IN	40-058	650	
2	ELBOW STREET 90° - 3/4" NPT GALV	40-NPT-ELS075X90G	2	
3	THIMBLE - 5/16 GALV	42-780-A	4	
4	CLAMP - 0.313 ALUM SWAGE OVAL	42-781-A	8	
5	BOLT - 3/8-16 X 1 1/2	90-BLT-03816X150	2	
6	EYE BOLT - 3/8-16 L 8.00 x 4.00	90-EBT-03816X800X400	2	
7	NUT HEX - 3/8-16	90-NUT-HEX038-16GALV	4	
8	HAIR PIN - 0.017DIA 3.25L	90-PIN-HP017X325	2	
9	WASHER LOCK - 3/8	90-WSR-LOC038	2	
10	MACH- OFFSET PIN OD0.75 H038	CB-005	2	
11	END 8TH SECTION WELDMENT 72M	CB-872-000	1	



## Sprinkler Kit Assembly - Komet ♦



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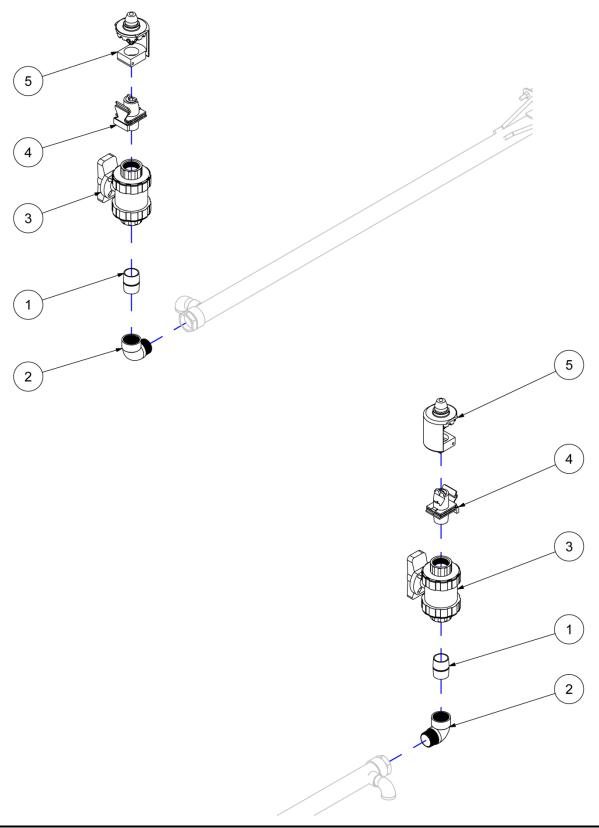


# Sprinkler Kit Assembly - Komet ♦

ITEM	DESCRIPTION	PART NUMBER	QTY	NOTES
•	KOMET SPRINKLER KIT - 64 BOOM	CB-KIT-64KSPR		64M
<b>*</b>	KOMET SPRINKLER KIT - 72 BOOM	CB-KIT-72KSPR		72M
<b>*</b>	KOMET SPRINKLER KIT - 72 BOOM	CB-KIT-76KSPR		76M
1	ELBOW - 3/4 NPT X 90° GALV	40-NPT-ELB075X90G	2	
2	ELBOW STREET 90° - 3/4" NPT GALV	40-NPT-ELS075X90G	2	
3	NIPPLE - 3/4 NPT X 2 1/2 GALV.	40-NPT-NPL075X250G	2	
4	NIPPLE - 3/4 NPT X 44 INCHES LONG	40-NPT-NPL075X4400G	2	
5	NIPPLE CLOSE - 3/4 NPT GALV	40-NPT-NPLC075G	18	64M
$\rightarrow$	NIPPLE CLOSE - 3/4 NPT GALV	40-NPT-NPLC075G	24	72M
<b>→</b>	NIPPLE CLOSE - 3/4 NPT GALV	40-NPT-NPLC075G	24	76M
6	NIPPLE CLOSE - 3/4 NPT PVC	40-NPT-NPLC075P	4	
7	TEE - 3/4 NPTF GALV	40-NPT-TEE075G	2	
8	VALVE BALL - 3/4 NPTM X NPTF PVC	40-NPT-VLV-075BLPMXF	20	64M
$\rightarrow$	VALVE BALL - 3/4 NPTM X NPTF PVC	40-NPT-VLV-075BLPMXF	24	72M
$\rightarrow$	VALVE BALL - 3/4 NPTM X NPTF PVC	40-NPT-VLV-075BLPMXF	24	76M
9	ELBOW - 3/4 PVC NPTM X NPTF	BR-PRT-412-007	12	
10	KOMET 28 RAPID FIT NOZZLE - BLUE	SP-KOM-05010-28	2	
11	KOMET 39 RAPID FIT NOZZLE - BLACK	SP-KOM-05010-39	20	64M
$\rightarrow$	KOMET 39 RAPID FIT NOZZLE - BLACK	SP-KOM-05010-39	24	72M
$\rightarrow$	KOMET 39 RAPID FIT NOZZLE - BLACK	SP-KOM-05010-39	24	76M
12	KOMET 48 RAPID FIT NOZZLE - DRKBLU	SP-KOM-05010-48	20	64M
$\rightarrow$	KOMET 48 RAPID FIT NOZZLE - DRKBLU	SP-KOM-05010-48	24	72M
$\hookrightarrow$	KOMET 48 RAPID FIT NOZZLE - DRKBLU	SP-KOM-05010-48	24	76M
13	KOMET TWISTER W YELLOW PLATE	SP-KOM-05010204	18	64M
$\rightarrow$	KOMET TWISTER W YELLOW PLATE	SP-KOM-05010204	24	72M
$\rightarrow$	KOMET TWISTER W YELLOW PLATE	SP-KOM-05010204	24	76M
14	KOMET PRECISION SPRAY	SP-KOM-05010205	4	
15	KOMET KPS PC-180 DEFLECTOR	SP-KOM-05010206	4	
16	KOMET 20 PSI PRECISION REGULATOR	SP-KOM-05010309	22	64M
$\rightarrow$	KOMET 20 PSI PRECISION REGULATOR	SP-KOM-05010309	26	72M
$\vdash$	KOMET 20 PSI PRECISION REGULATOR	SP-KOM-05010309	26	76M
17	KOMET KPT LINK	SP-KOM-05010333	18	64M
$\rightarrow$	KOMET KPT LINK	SP-KOM-05010333	24	72M
$\rightarrow$	KOMET KPT LINK	SP-KOM-05010333	24	76M



# End Sprinkler Kit - R55 ♦



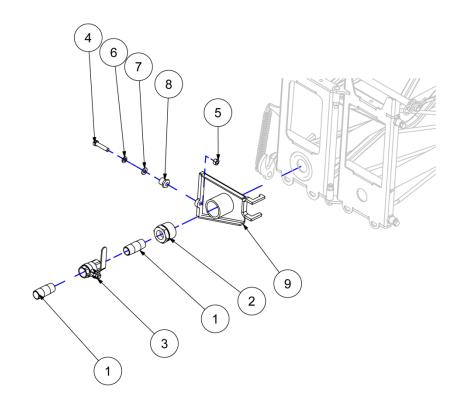


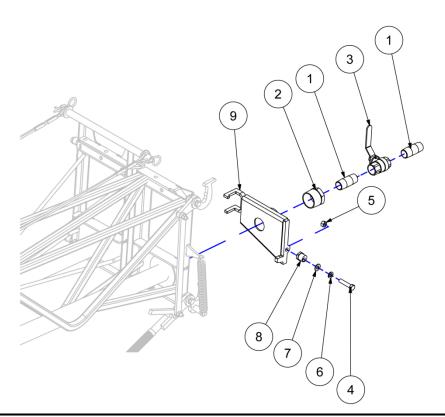
# End Sprinkler Kit - R55 ♦

ITEM	DESCRIPTION	PART NUMBER	QTY	NOTES
•	END SPRINKLER KIT - R55	CB-KIT-EGPR55		<b>•</b>
1	NIPPLE CLOSE - 1.25" GALV.	40-NPT-NPLC125G	2	
2	1 1/4 PVC SCH 40 90 DEG ELBOW MP	BR-PRT-412-012	2	
3	BALL VALVE - 1 1/4 TU 2000 PVC	BR-PRT-3629-012	2	
4	NOZZLE ASSY - SNAP FIT NPT - 52	SP-NEL-12679-052	2	
5	BODY ASSY - BLUE PLATE - R55 VT	SP-NEL-12885	2	



# Blanking Plate Assembly ♦







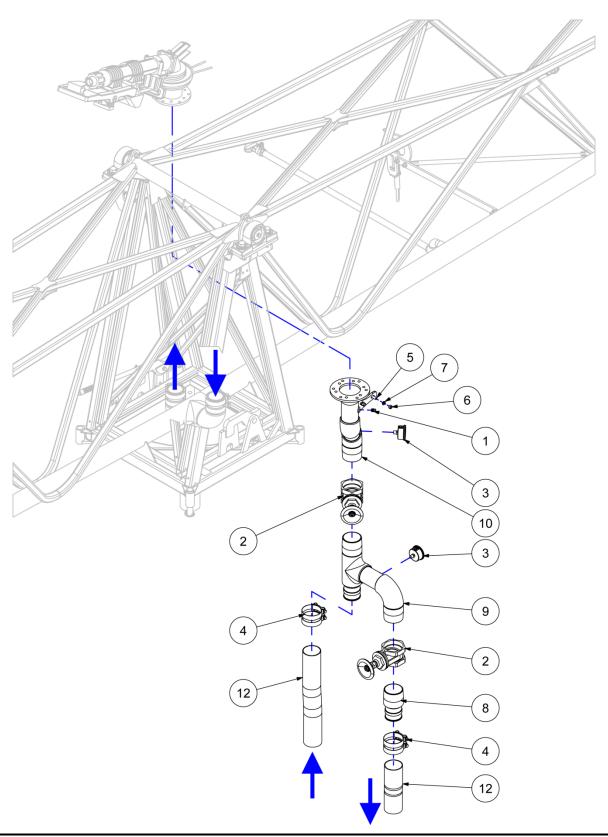
# Blanking Plate Assembly ♦

ITEM	DESCRIPTION	<b>PART NUMBER</b>	QTY	NOTES
•	KIT - 64M BLANKING PLATE	CB-KIT-64BP		64M
•	KIT - 76M BLANKING PLATE	CB-KIT-76BP		72M, 76M
1	NIPPLE - 3/4 NPT X 2 1/2 GALV.	40-NPT-NPL075X250G	4	
2	REDUCER - 1 1/2 NPT X 3/4 NPT GALV	40-NPT-RB150X075G	2	
3	BALL VALVE - 3/4 NPTF X NPTF	40-NPT-VLV075BLLFF	2	
4	BOLT - 3/8-16 X 1 3/4	90-BLT-03816X175	2	
5	NUT HEX - 3/8-16	90-NUT-HEX038-16	2	
6	WASHER LOCK - 3/8	90-WSR-LOC038	2	
7	WASHER SAE - 3/8	90-WSR-SAE038	2	
8	MACH- OFFSET PIN OD0.75 H038	CB-005	2	
9	BLANKING PLATE BRACKET	CB-023-A	2	64M
$\rightarrow$	BLANKING PLATE BRACKET	CB-043	2	72M, 76M





# **Center Sprinkler Assembly ♦**



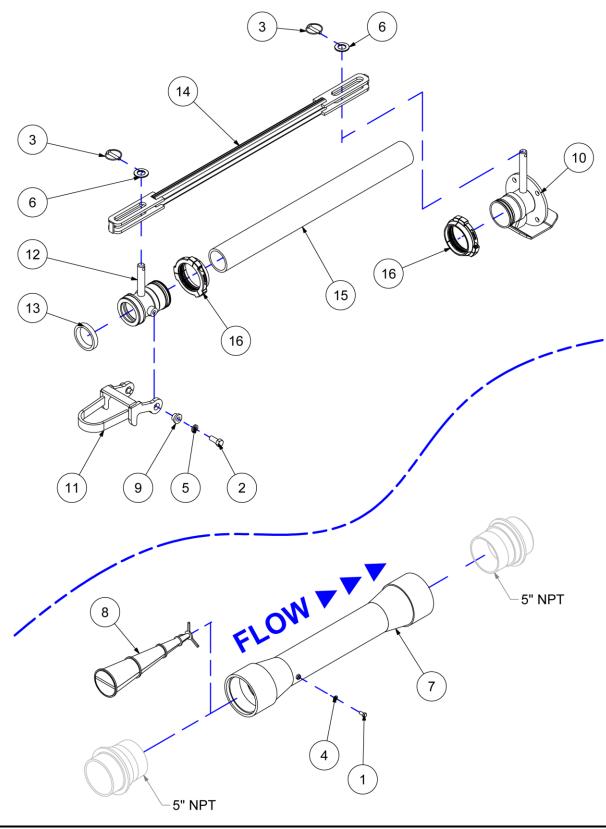


# **Center Sprinkler Assembly ♦**

ITEM	DESCRIPTION	<b>PART NUMBER</b>	QTY	NOTES
<b></b>	KIT - CENTER SPRINKLER	CB-KIT-CS64		•
1	PLUG - 1/4-NPT	40-NPT-PLG025G	1	
2	GATE VALVE - 3.00	40-NPT-VLV300GATFF	2	
3	GAUGE - 0-160 PSI WET	45-059	2	
4	CLAMP - M8 80-85 (3.15-3.38 IN)	50-065	4	
5	BOLT - 3/8-16 X 1 1/4	90-BLT-03816X125	2	
6	NUT HEX - 3/8-16	90-NUT-HEX038-16	2	
7	WASHER LOCK - 3/8	90-WSR-LOC038	2	
8	ADAPTER - 3.00 BARB/NIPPLE	CB-165-052	1	
9	LOWER PIPE WELDMENT CS OPT 64	CB-165-054	1	
10	UPPER PIPE WELDMENT CS OPT	CB-165-074	1	
12	HOSE - 3.00 CADMAN SUPPLY	IR-HOZ-300CSSL.FT	2	



## **Inlet Accessories ♦**



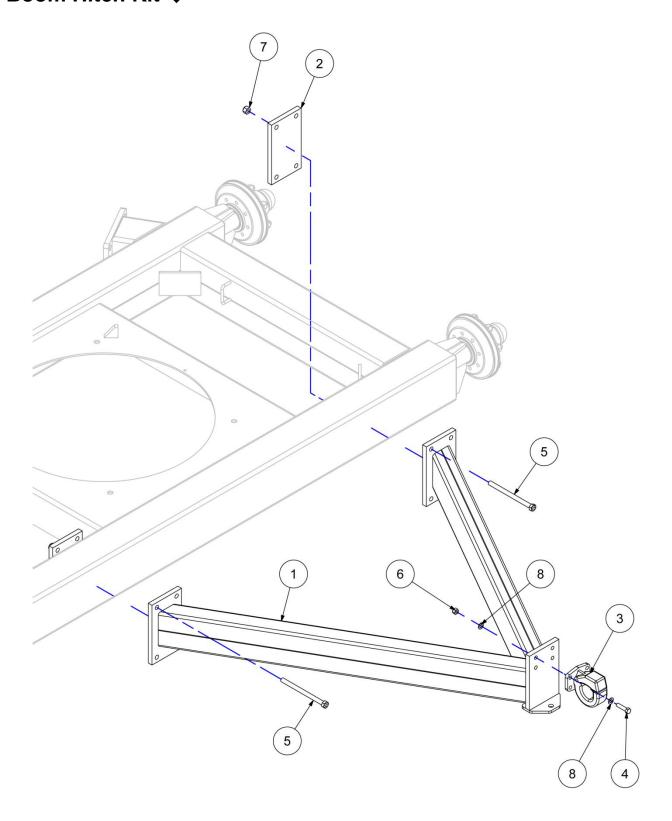


## **Inlet Accessories ♦**

ITEM	DESCRIPTION	PART NUMBER	QTY	NOTES
<b>*</b>	IN-LINE FILTER FOR CADMAN BOOM	CB-PRT-FLTB		•
<b>\lambda</b>	LAYFLAT CONNECTOR FOR BOOM	CB-KIT-LC		<b>♦</b>
1	BOLT - 3/8-16 X 3/4	90-BLT-03816X075	1	
2	BOLT - 5/8-11 X 1 1/2	90-BLT-06311X150	2	
3	LYNCH PIN - STANDARD	90-PIN-LYNCH	2	
4	WASHER SEALING - 3/8	90-WSR-BS038	1	
5	WASHER LOCK - 5/8	90-WSR-LOC063	2	
6	WASHER SAE - 1.00	90-WSR-SAE100	2	
7	INLINE FILTER TUBE WELDMENT	BR-PRT-066	1	
8	INLINE FILTER SCREEN	BR-PRT-069-C	1	
9	MACH - FLANGED INSERT 1.00X0.50	CB-013	2	
10	WELD LAYFLAT BARB FLG	CB-020-B	1	
11	LOCKING HOOK WELD - LC	CB-034	1	
12	FEMALE LAYFLAT END WELDMENT	CB-036	1	
13	PULL COUPLING LIP SEAL	CB-037	1	
14	CART SLOTTED LINK WELDMENT	CB-665-126	1	
15	PREMIUM SUPPLY HOSE - 4 IN	IR-HOZ-400CPSL/FT	1	
16	HOSE CLAMP - 4.00 SINGLE BARB	IR-MIS-20063	2	



## Boom Hitch Kit ♦





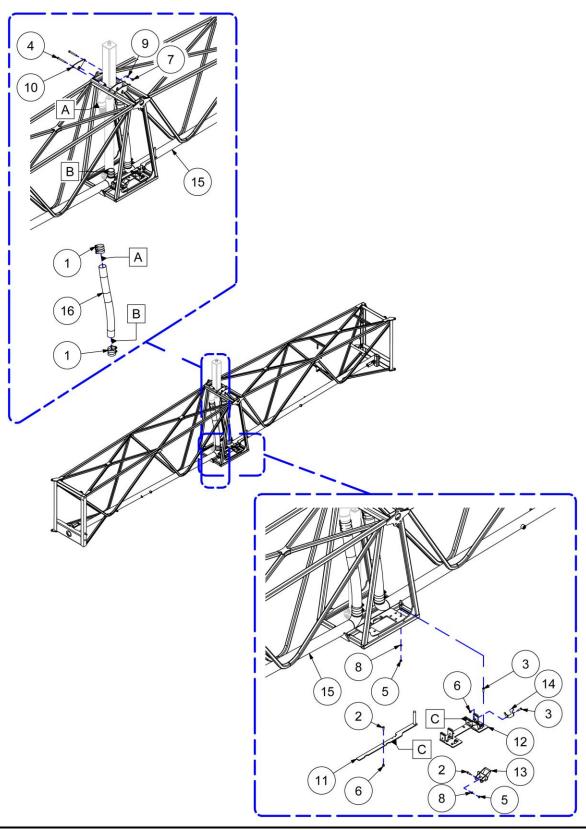
### Boom Hitch Kit �

ITEM	DESCRIPTION	<b>PART NUMBER</b>	QTY	NOTES
<b>*</b>	BOOM HITCH KIT	TR-KIT-BH		•
1	BOOM HITCH	05-641	1	
2	MOUNTING PLATE - PAINTED	05-642	2	
3	PINTLE HITCH	40-800	1	
4	BOLT GR.8 - 1/2-13 X 2.00	89-BLT-05013X200	4	
5	BOLT GR.8 - 5/8-11 X 8 1/2	89-BLT-06311X850	8	
6	NUT LOCK GR.8 - 1/2-13	89-NUT-LOC050-13	4	
7	NUT LOCK GR.8 - 5/8-11	89-NUT-LOC063-11	8	
8	WASHER SAE GR.8 - 1/2	89-WSR-SAE050	8	





# High Crop Assembly - 1 of 3 ♦



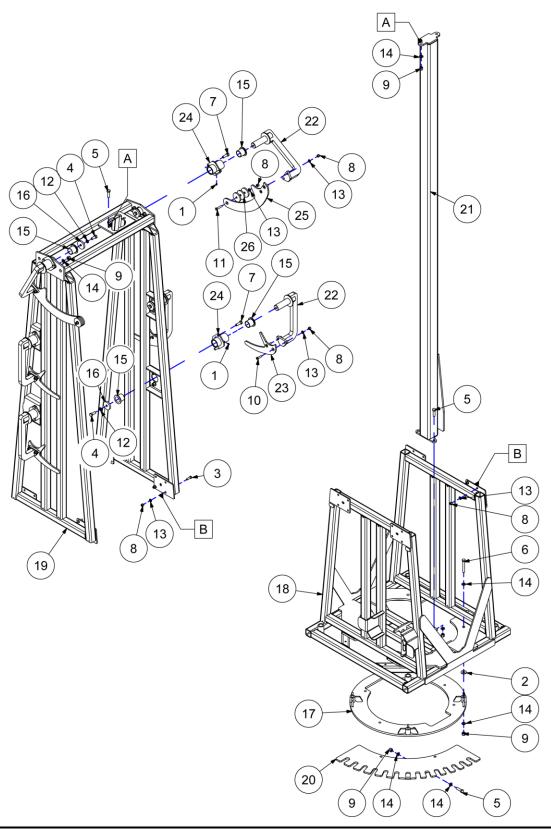


# High Crop Assembly 1 of 3 ♦

ITEM	DESCRIPTION	<b>PART NUMBER</b>	QTY	NOTES
<b>♦</b>	HIGH CROP ASSEMBLY	CB-KIT-HC64		<b>♦</b>
1	CLAMP - M8 80-85 (3.15-3.38 IN)	50-065	8	
2	BOLT - 3/8-16 X 1.00	90-BLT-03816X100	5	
3	BOLT - 3/8-16 X 1 1/4	90-BLT-03816X125	9	
4	BOLT - 1/2-13 X 4 1/4	90-BLT-05013X425	2	
5	NUT HEX - 3/8-16	90-NUT-HEX038-16	12	
6	NUT LOCK - 3/8-16	90-NUT-LOC038-16	2	
7	NUT LOCK - 1/2-13	90-NUT-LOC050-13	2	
8	WASHER LOCK - 3/8	90-WSR-LOC038	12	
9	WASHER SAE - 1/2	90-WSR-SAE050	2	
10	PLATE MANIFOLD SECTION MOUNT	CB-960-082-A	1	
11	WELDMENT SWAY LOCK HANDLE	CB-960-110	1	
12	WELDMENT BRACKET SWAY HC64	CB-960-111	1	
13	WELDMENT SWAY LOCK BRACE	CB-960-119-A	2	
14	PLATE HIGH CROP SWAY BAR LOCK	CB-960-120	1	
15	HC64 BOOM - SECTION 1 ASY	CB-965-000	1	
16	HOSE - 3.00 CADMAN SUPPLY	IR-HOZ-300CSSL.FT	8	



# High Crop Assembly - 2 of 3 ♦



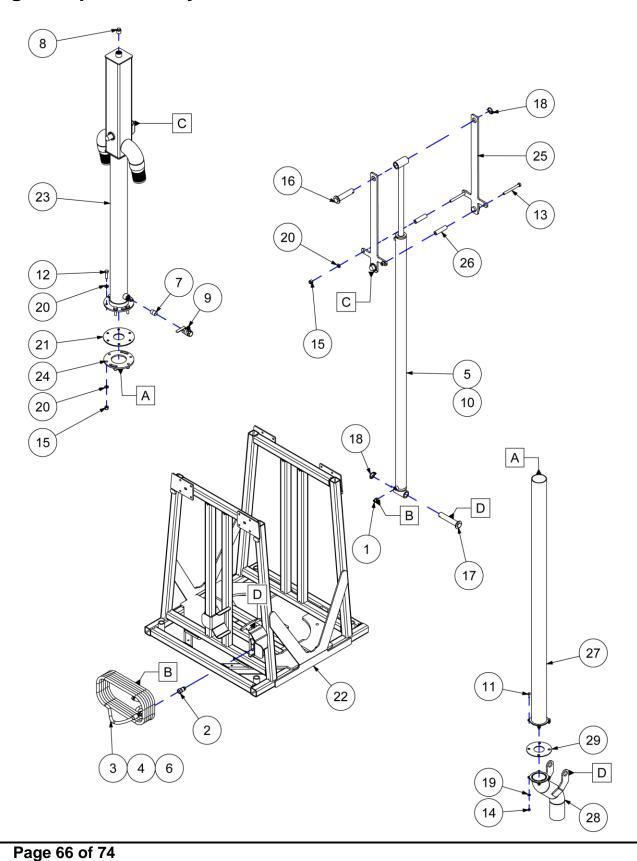


# High Crop Assembly 2 of 3 ♦

ITEM	DESCRIPTION	PART NUMBER	QTY	NOTES
<b></b>	HIGH CROP ASSEMBLY	CB-KIT-HC64		<b>*</b>
1	GREASE FITTING - 1/4-28	40-001-02528	6	
2	SHIM - 1 3/8 OD X 9/16 ID X 10G	45-902-10G	4	
3	BOLT - 3/8-16 X 1 1/4	90-BLT-03816X125	16	
4	BOLT - 1/2-13 X 1 1/4	90-BLT-05013X125	6	
5	BOLT - 1/2-13 X 1 3/4	90-BLT-05013X175	8	
6	BOLT - 1/2-13 X 3 1/2	90-BLT-05013X350	4	
7	BOLT - 1/2-20 X 1 1/2	90-BLT-05020X150	12	
8	NUT LOCK - 3/8-16	90-NUT-LOC038-16	30	
9	NUT LOCK - 1/2-13	90-NUT-LOC050-13	24	
10	SCREW FLATHEAD - 3/8-16 X 1 1/2	90-SCR-FH03816X150	12	
11	SCREW FLATHEAD - 3/8-16 X 2.00	90-SCR-FH03816X200	2	
12	WASHER LOCK - 1/2	90-WSR-LOC050	6	
13	WASHER SAE - 3/8	90-WSR-SAE038	30	
14	WASHER SAE - 1/2	90-WSR-SAE050	32	
15	UHMW FLANGED BUSH SHAFT 1.50	CB-017-A	12	
16	STEERING LASER CUT WASHER	CB-665-039	6	
17	WELDMENT HC RING ADAPTER	CB-665-186	1	
18	WELDMENT BOTTOM BASE HC64	CB-960-002	1	
19	WELDMENT TOP TOWER HC64	CB-960-003	1	
20	TURNTABLE LOCK WELDMENT HC	CB-960-007	1	
21	VERTICAL SUPPORT TUBE	CB-960-069	1	
22	WELDMENT SWING ARM LATCH	CB-960-077	6	
23	PLATE SWING ARM HOLDER	CB-960-081	4	
24	WELDMENT TUBE SWING ARM	CB-960-084-B	6	
25	SWING ARM HOLDER LARGE TOP	CB-960-086-C	2	
26	PLATE SWING BALANCE	CB-960-087	6	



# High Crop Assembly - 3 of 3 ♦



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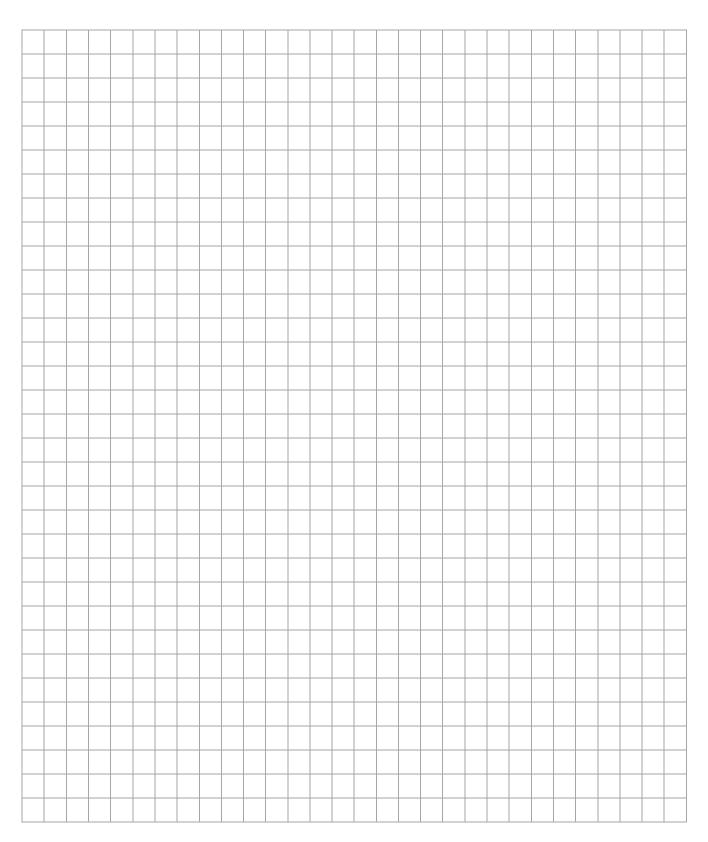


# High Crop Assembly 3 of 3 ♦

ITEM	DESCRIPTION	PART NUMBER	QTY	<b>NOTES</b>
<b></b>	HIGH CROP ASSEMBLY	CB-KIT-HC64		<b>\lambda</b>
1	ADAPTER - 06 JICM X 06 SAEM	25-WHD-5315X6	1	
2	HYDRAULIC COUPLER TIP	40-563	1	
3	4 HOSE CRIMP X 3/8 JIC-F SW 90 D	40-HYD-04HOSX038JICFSW90	1	
4	HOSE END - 6 X 1/2 NPT MALE	40-HYD-06HOSX050NPTM	1	
5	CYLINDER - 2" X 68" STROKE	40-HYD-CYL053	1	
6	HYDRAULIC HOSE - 3/8" (06)	40-HYD-HOSE038	360	
7	NIPPLE CLOSE -3/4 NPT GALV	40-NPT-NPLC075G	1	
8	PLUG - 3/4 NPT GALV.	40-NPT-PLG075G	1	
9	BALL VALVE - 3/4 NPTF X NPTF	40-NPT-VLV075BLLFF	1	
10	BREATHER - 06 SAEM	43-544	1	
11	BOLT - 5/16-18 X 1.00	90-BLT-03118X100	4	
12	BOLT - 1/2-13 X 1 3/4	90-BLT-05013X175	6	
13	BOLT - 1/2-13 X 5.00	90-BLT-05013X500	2	
14	NUT LOCK - 5/16-18	90-NUT-LOC031-18	4	
15	NUT LOCK - 1/2-13	90-NUT-LOC050-13	8	
16	PIN - 1.125DIA X 5.38 USEABLE	90-PIN-CL113X450	1	
17	PIN - 1.125DIA X 5.38 USEABLE	90-PIN-CL113X538	1	
18	LYNCH PIN - 3/16	90-PIN-LYNCH019	2	
19	WASHER SAE - 5/16	90-WSR-SAE031	4	
20	WASHER SAE - 1/2	90-WSR-SAE050	14	
21	GASKET 64M BOOM URETHANE	CB-019	1	
22	WELDMENT BOTTOM BASE HC64	CB-960-002	1	
23	WELDMENT PLUMBING MANIFOLD	CB-960-060-B	1	
24	PLATE FLANGE 6BOLT 3.5 GALV	CB-960-093	1	
25	CYLINDER SUPPORT HC64	CB-960-109	2	
26	TUBE CYLINDER BOLT SPACING	CB-960-130	2	
27	WELD SLIDE HC TUBE FLANGE	CB-960-907	1	
28	WELDMENT INTAKE PLUMBING TUBE	CB-960-908	1	
29	GASKET - 2" X 4 BOLT URETHANE	IR-GKT-FL21	1	



### **Notes:**





### **Required Maintenance**

To make sure your Irrigation Boom performs as intended it is important to follow the maintenance schedule in this manual.



Maintenance must be done only when the irrigation boom is shut down and is in a non-loaded condition. This means that all mechanical and hydraulic tension has been released from the irrigation boom.

Performing maintenance on the irrigation boom during operation may result in serious injury and/or death to operators

#### **Each Use**

MAINTENANCE ITEM	PROCEDURE	
Visually inspect equipment	Walk around the unit and inspect for any items which appear loose, missing, or damaged. This can include Orings, seals, joints, cams and springs among other items. Replace missing or damaged items and tighten loosened items	
Inspect all pins	Check pins for wear and/or damage. Replace worn and/or damaged pins.	
Inspect all lubrication points	Check all grease points. Use grease gun to lubricate grease points as needed. Do not exceed times set in Grease Points Upkeep (see below).	
Inspect tire pressure	Check sidewall tire for operating pressure and use tire pressure gauge to see if inflation is correct. Do not lower the tire pressure below the tire's recommended level. Do not overinflate tires.  Failure to use recommended tire pressure may result in the tire exploding, or separating from the wheel rim. This may result in serious injury and/or death. This will also damage the irrigation boom.	
Inspect all wheel nuts	Check and see if wheel nuts are tight. If they need to be tightened then tighten them with a torque wrench to:  110 ft•lbs [149 N•m]  Do not operate the boom if the wheel nuts are loose.  Using the boom if the wheel nuts are not correctly torqued may result in wheel separation. This may result in serious injuriand/or death, and will damage the boom.	

Table 1 - Each Use



#### **Greases and Lubricants**

Grease: Any good grade, multi-purpose, waterproof grease is compatible with the lubrication needs of your irrigation boom.

#### **After Long Term Storage**

Complete the following procedure prior to start-up of your irrigation boom after long term storage.

MAINTENANCE ITEM	PROCEDURE	
Review operator's manual	Review this manual to verify how to operate the irrigation boom safely. This will reduce the chance of user injury and equipment damage.	
Inspect tires	Verify that tires are in good condition with no cracks, uneven wear, and/or other problems. Check sidewall of tire for operating pressure and use tire pressure gauge to see if inflation is correct.  Do not lower the tire pressure below the tire's	
	recommended level. Do not overinflate tires.  Failure to use recommended tire pressure may result in the tire exploding, or separating from the wheel rim. This may result in serious injury and/or death. This will also damage the irrigation boom.	

**Table 2 - After Long Term Storage** 



Failing to review the operator's manual and/or inspecting the unit after long term storage may result in incorrect irrigation boom operation and/or not performing maintenance on items that may require repair. This may result in serious injury and/or death to operators and/or spectators. This may also damage the irrigation boom.



#### **Grease Point Locations**

GREASE POINT LOCATION				
Turntable	70 hours or one week (whichever comes first)			
Wheel Bearings	Repack and Grease annually			
Front Steering Kingpin	70 hours or one week (whichever comes first)			
Other Steering Components	70 hours or one week (whichever comes first)			
Offset Feed Components	70 hours or one week (whichever comes first)			

**Table 3 - Grease Point** 

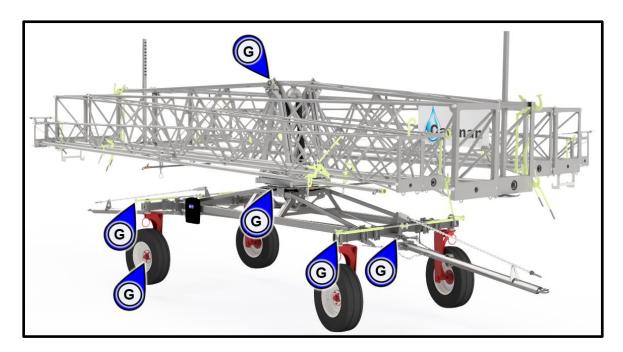
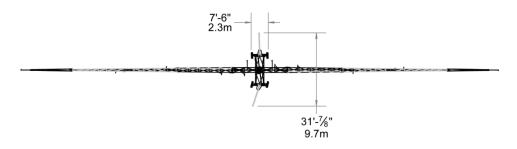


Figure 21 - Grease Point

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## **Irrigation Boom Dimensions and Weight**

The dimensions and weights shown on the following page are only approximate.





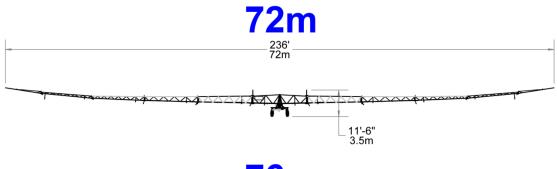




Figure 22 - Overall Dimensions Irrigation Booms

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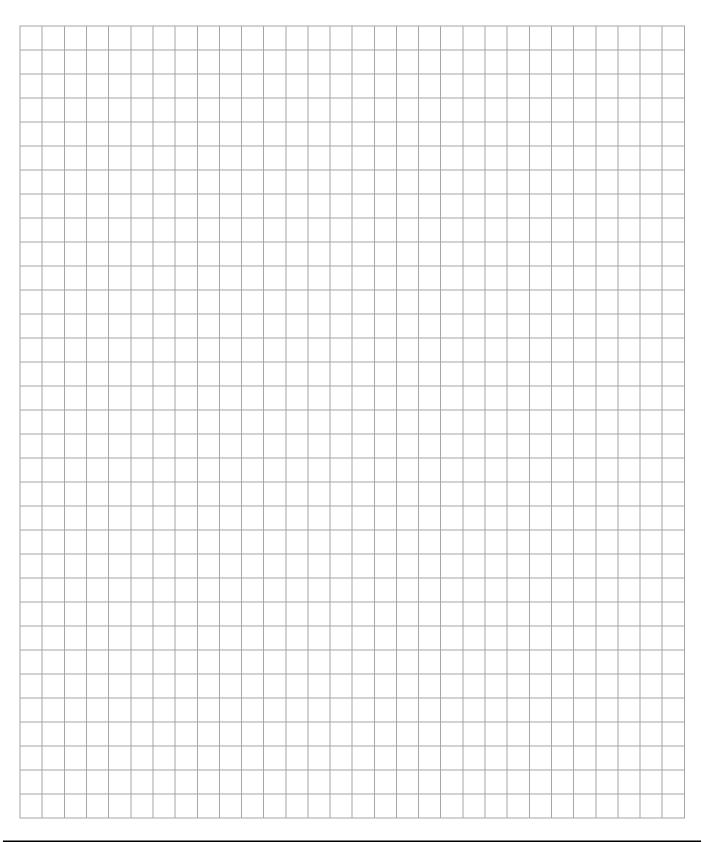
The weight for an empty Cadman 64m Irrigation Boom is 4,750 lbs (2155 kg)

The weight for an empty Cadman 72m Irrigation Boom is 4,915 lbs (2230 kg)

The weight for an empty Cadman 76m Irrigation Boom is 4,990 lbs (2265 kg)



## **Notes:**



#### **Useful Information**

#### **LENGTH**

1 FOOT	= 12 = 0.3048	Inches Meter	1 METER	= 39.37 = 3.2808	Inches Feet
1 ROD	= 198 = 16.5 = 5.5 = 5.029	Inches Feet Yards Meters	1 MILE	= 5280 = 1760 = 320 = 1609	Feet Yards Rods Meters

#### **AREA**

1 SQUARE FOOT	= 144 = 0.0929	Square Inches Square Meters
1 SQUARE YARD	= 1296 = 0.8361	Square Inches Square Meters
1 SQUARE METER	= 1550 = 10.764	Square Inches Square Feet
1 ACRE	= 43560 = 4047 = 0.4047	Square Feet Square Meters Hectare
1 HECTARE	= 107639 = 10000 = 2.47105	Square Feet Square Meters Acres
1 SQUARE MILE	= 640 = 259	Acres Hectares

#### **VOLUME**

1 GALLON (US)	= 0.8327 = 231 = 0.1337 = 8.345	Imperial Gallons Cubic Inches Cubic Feet Pounds
1 CUBIC FOOT	= 1728 = 7.48 = 62.4 = 28.32	Cubic Inches Gallons ( US ) Pounds Liters
1 ACRE INCH	= 27154 = 254	Gallons ( US ) Cubic Meters / Hectare
AREA OF A CIRCLE		= Diameter x Diameter x 0.7

Diameter x Diameter x 0.7854

**CYLINDER VOLUME (US GAL.)** = Diameter (ft) x Diameter (ft) x Length (ft) x 5.8752