

Model: 9609-010
2,000 lb (907 kg)
Portable Floor Crane

02/2019 – Rev. 01

REVISION
01

DATE
02/2019

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Original release

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This product can not be modified without the written approval of Tronair, Inc. Any modifications done without written approval voids all warranties and releases Tronair, Inc., its suppliers, distributors, employees, or financial institutions from any liability from consequences that may occur. Only Tronair OEM replacement parts shall be used.

1.0 PRODUCT INFORMATION

1.1 DESCRIPTION

2,000 lb (907 kg) Portable Floor Crane

1.2 MODEL & SERIAL NUMBER

Reference nameplate on unit

1.3 MANUFACTURER

Columbus**Jack**/Regent
1 Air Cargo Pkwy East
Swanton, Ohio 43558 USA

Telephone: 614.443.7492
Fax: 614.444.9337
E-mail: sales@columbusjack.com
Website: www.columbusjack.com

1.4 SPECIFICATIONS

Capacity	2,000 lb (907 kg)
Hook Height	
Position 1	297 in (754.4 cm)
Position 2	303 in (769.6 cm)
Position 3	309 in (784.9 cm)
Position 4	315 in (800 cm)
Boom Height	
Position 1	315 in (800 cm)
Position 2	321 in (815.3 cm)
Position 3	327 in (830.6 cm)
Position 4	332 in (843.3 cm)
Width	
Outriggers Stowed	59 in (149.7 cm)
Outriggers Extended	175 in (444.5 cm)
Length	314 in (797.6 cm)
Towing Speed	5 mph (8 kpm) unloaded & folded
Weight	2,250 lbs (1,021 kg)

2.0 SAFETY INFORMATION

2.1 USAGE AND SAFETY INFORMATION

To insure safe operations please read the following statements and understand their meaning. Also refer to your equipment manufacturer's manual for other important safety information. This manual contains safety precautions which are explained below. Please read carefully.



WARNING! — Warning is used to indicate the presence of a hazard that **can cause severe personal injury, death, or substantial property damage** if the warning notice is ignored.

CAUTION! — Caution is used to indicate the presence of a hazard that **will or can cause minor personal injury or property damage** if the caution notice is ignored.

2.2 PRODUCT SAFETY

Make sure all personnel involved with this jack read and understand these instructions before using.

WARNING!



Observe all safety precautions when operating the crane. Failure to observe safety precautions can result in serious injury and/or damage to equipment. Keep hands away from the hoisting cable, winch cable drum and winch crank-shaft while operating the crane. Should the load begin to fall out of control, do not attempt to stop the spinning winch handle with your hands or any other part of your body.

Do not use the crane to lift more than the 2,000 pound rated load. Apply load evenly. Do not jerk or bounce the load or allow the load to swing. Avoid violent motion and shock to loads.

Never lift a load until all personnel are clear. Keep all personnel not directly involved with operating the crane at a safe distance. Refuse to handle loads until safety has been assured.

Do not divert your attention from the load while operating. Never leave a suspended load unattended. Never walk or work under a suspended load.

Make sure load clears neighboring obstructions when raising, lowering or trans-portioning the load.

3.0 TRAINING

3.1 TRAINING REQUIREMENTS

The employer of the operator is responsible for providing a training program sufficient for the safe operation of the unit.

3.2 TRAINING PROGRAM

The employer provided operator training program should cover safety procedures concerning use of the unit in and around the intended aircraft at the intended aircraft servicing location.

3.3 OPERATOR TRAINING

The operator training should provide the required training for safe operation of the unit.

NOTE: Maintenance and Trouble Shooting are to be performed by a skilled and trained technician.

4.0 OPERATION

4.1 PRE-OPERATION PROCEDURE

1. Check for loose, damaged or missing components.
2. Check hoist cable for any form of damage.
3. Check that caster swivel locks and wheel brakes operate properly.
4. Inspect winch assembly for damage or evidence of corrosion.

4.2 SET UP PROCEDURE



CAUTION!

A minimum of two persons is required to set-up crane.

1. Place crane in position, ensuring area is free of obstacles that could interfere with movement of crane components.
2. Lock swivels on two (2) base weldment casters and lock wheel brakes.
3. Unlock swivels and release wheel brakes on two outrigger casters.
4. Remove two (2) T handles securing spreading assembly to outriggers.



WARNING!

Do not raise boom higher than necessary to clear outriggers. Failure to observe this warning can cause the crane to overturn, resulting in personnel injury and/or equipment damage.

5. Turn winch handle in clockwise direction to raise folded boom and mast assembly. Raise assembly until clear of outriggers.
6. Manually spread outriggers to fully extended position and lock in place using two (2) lock pins. Lock swivels and wheel brakes on outrigger casters to prevent crane from moving. Reinstall spreader assembly T handles.
7. Ensure safety cable is securely fastened to boom and mast.
8. Turn winch handle to lift folded boom and mast assembly until mast is in full vertical position. Lock mast in place using lock pin at base of mast.
9. Turn winch handle in counterclockwise direction to slack off hoisting cable. Release cable hook from pad eye on mast. Remove lock pin at tip of boom and rotate hook weight until it rests against cable guide rollers. Remove slack from hoisting cable and replace lock pin.

NOTE: Assistance by hand may be required for initial movement of boom.

10. Using winch, rotate boom away from mast, while pulling on latch chain .

NOTE: Prior to raising boom, ensure winch cable is properly spooled on winch drum.

11. Release positioning cable from stowed position on mast. Raise boom until support cables are free of boom.



CAUTION!

A minimum of two persons is required to set-up crane.

12. Release support cables from their stowed position on mast and connect to each outrigger.
13. Raise boom until boom is at desired height. Align holes on plate which is attached to positioning cable to correct hole in base weldment bracket and secure using lock pin.
Hole No. 1 – Lowest Boom Position
Hole No. 4 – Highest Boom Position
14. Raise or lower hook to desired position.

4.3 OPERATION

1. Position crane hook directly over load or as close as possible to prevent a load shift.
2. After connecting to load, turn winch handle clockwise to take up cable slack. Ensure load is totally disconnected from its location before lifting.
3. Test winch operation by lifting load a few inches. Proper winch operation will produce a steady clicking sound of the ratchet pawl as lift cable is reeled in. Listen for unusual noises and look for signs of damage.



CAUTION!

Turn handle with a slow consistent motion when lowering load. Due to the design of the winch brake assembly, turning the handle faster than the brake can react may cause the load to jerk.

4. Turn winch handle counterclockwise to lower load. If load continues to coast before stopping, the winch brake friction discs may be worn and replacement of clutch assembly is required.
5. Ensure winch handle rotates smoothly in both directions.
6. Turn winch handle in clockwise direction to raise load. Stop by turning winch handle to stop load in place.

4.0 OPERATION (continued)



WARNING!

Do not rotate the winch drum beyond the point that less than four wraps of the cable remain on the drum.

4.4 STOWING PROCEDURE

1. Lock swivels on two base weldment casters. Lock swivels and wheel brakes on outrigger casters to prevent crane from moving.
2. Turn winch handle in clockwise direction to retract cable hook. Continue to turn handle until tension on boom positioning cable is relieved.
3. Remove positioning cable lock pin from base weldment bracket and position cable in roller groove on boom.



WARNING!

Ensure personnel are clear of boom before lowering. Rapid descent of boom will be experienced during latter stages of boom lowering.

4. Turn winch handle counterclockwise to lower boom toward mast until positioning cable can be attached to stow position on mast. Continue lowering boom until it starts to contact support cables.
5. Remove support cables from outriggers to secure mast.
6. Continue to lower boom until it latches in place with latch. Relieve tension on hoisting cable and remove lock pin from tip of boom, secure hook in pad eye on mast, replace lock pin.
7. Take-up slack in hoisting cable until load is removed from lock pin at base of mast. Remove lock pin and lower mast.
8. With mast and boom lowered to waist height, remove outrigger pins and stow on base.
9. Release wheel brakes on outrigger casters and fold outriggers inward.
10. Lower mast until boom spreader bar rests on outriggers. Install spreader pins.
11. For towing, lock swivel casters on outriggers and remove slack in hoisting cable.

4.5 TOWING PROCEDURE

1. Ensure crane is folded into stowed position.
2. Unlock swivels at towbar end and release wheel brakes on all casters.
3. When crane has been towed to desired position, apply wheel brakes on all casters.

5.0 MAINTENANCE

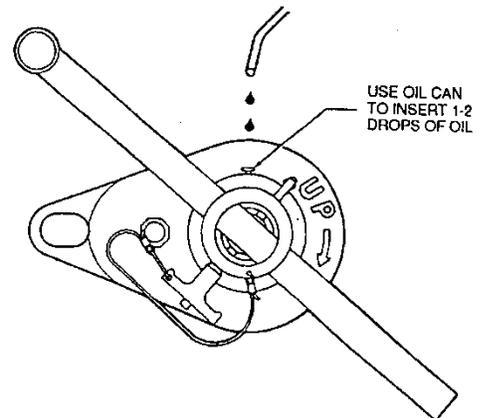
1. Wipe down cables with an oily rag every six months.
2. Brush grease onto winch gear teeth every six months.



CAUTION!

Do not over-lubricate brake bushings. Over-lubricating may result in poor operation of the brake.

3. Lubricate winch brake bushings every six months. Place one or two drops of gear lubricant into hole in brake housing marked OIL. Turn winch handle through several revolutions to distribute oil onto bushings.



6.0 PROVISION OF SPARES

6.1 SOURCE OF SPARE PARTS

Spare parts may be obtained from the manufacturer:
ColumbusJack/Regent
1 Air Cargo Pkwy East
Swanton, Ohio 43558 USA

Telephone: 614.443.7492
Fax: 614.444.9337
E-mail: sales@columbusjack.com
Website: www.columbusjack.com

6.2 RECOMMENDED SPARE PARTS LISTS

Reference the following page(s) for Replacement Parts and Kits available.

7.0 IN SERVICE SUPPORT

Contact Columbus Jack. for technical services and information. See Section 1.3 – Manufacturer.

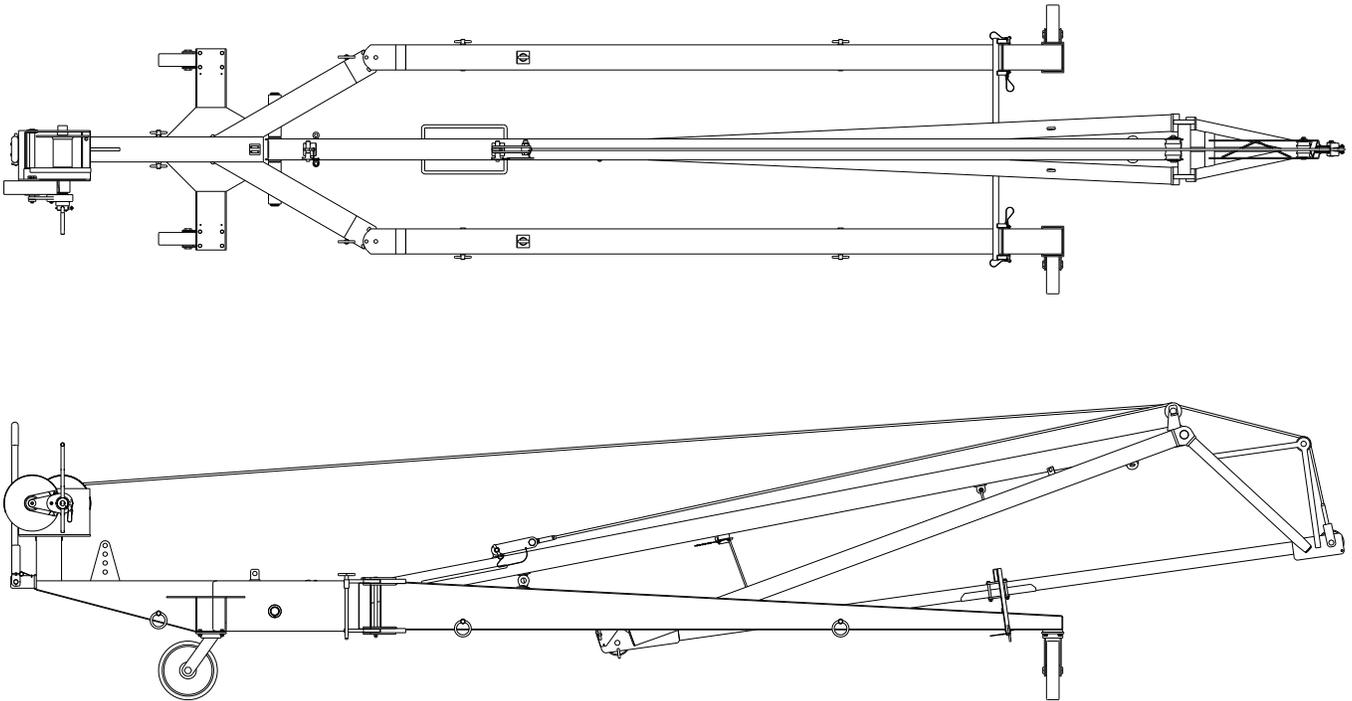
8.0 GUARANTEES/LIMITATION OF LIABILITY

1. ColumbusJACK Corporation, (Seller) warrants each new product of its manufacture to be free from defects in material or workmanship, under proper, reasonable and normal use and service, and for a period of twelve (12) months after date of shipment from Seller's Swanton, OH. USA facility.
2. Where Buyer claims an alleged defect in material or workmanship and so advises Seller in writing within ten (10) days after discovery thereof, then and in such event, Buyer shall return said equipment, transportation prepaid, to the Seller, provided such return is timely and within twelve (12) months form date of original shipment. This warranty and liability of the Seller is expressly limited solely to replacement of repair of defective parts or goods, and return at Buyer's expense to Seller after find by Seller the product was defective prior to original shipment or, at the option of Seller, to making refund to Buyer of the purchase price for said product.
3. It is further expressly understood and agreed that:
 - a. THERE IS NO WARRANTY, representation of condition OF ANY KIND, express or implied, (INCLUDING NO WARRANTY OF MERCHANT-ABILITY OR OF FITNESS) EXCEPT THAT THE MATERIAL SHALL BE OF THE QUALITY SPECIFIED HEREIN, and none shall be implied by law. Except as otherwise provided herein, quality shall be in accordance with seller's specifications. Final determination of the material for the use contemplated by Buyer is the sole responsibility of Buyer and Seller shall have no responsibility in connection with such suitability, and
 - b. The Buyer's sole and exclusive remedy shall be repair or replacement of defective parts by the Seller. Should the goods, in the judgment of Seller, preclude the remedying of the warranted defects by repair or replacement, the buyer's sole and exclusive remedy shall be the refund of the purchase price, and
 - c. Seller shall not be liable for prospective profits or special, indirect or consequential damages, nor shall any recovery of any kind against Seller be greater in amount than the purchase price of the specific material sold and causing the alleged loss, damage or injury. Buyer assumes all risk and liability for loss, damage or injury to persons or property of Buyer or others arising out of use or possession of any product or part sold hereunder, and
 - d. The Seller shall in no way be deemed or held to be obligated, liable or accountable upon or for any guarantees or warranties, express or implied, or created by statute or by operation of law or otherwise, in any manner of form beyond its express agreement above set forth, and
 - e. No warranty herein shall apply to any product which shall have been repaired or altered, unless such alteration or repair has been made by Seller or where, after return to and inspection by Seller, the product is found by Seller to have been subject to misuse, negligence or accident, and
 - f. No warranty of any nature is made by Seller as to any component forming a part of the product sold and Buyer shall receive only such warranties offered by such other manufacturer pertinent to such component, and
 - g. Seller does not assume nor does Seller authorize any other person to assume for it any other liability or make any warranty in connection with the sale of its products.

The obligations of ColumbusJACK expressly stated herein are in lieu of all other warranties or conditions expressed or implied. **Any unauthorized modification of the ColumbusJACK products or use of the ColumbusJACK products in violations of cautions and warnings in any manual (including updates) or safety bulletins published or delivered by ColumbusJACK will immediately void any warranty, express or implied and ColumbusJACK disclaims any and all liability for injury (WITHOUT LIMITATION and including DEATH), loss or damage arising from or relating to such misuse.**

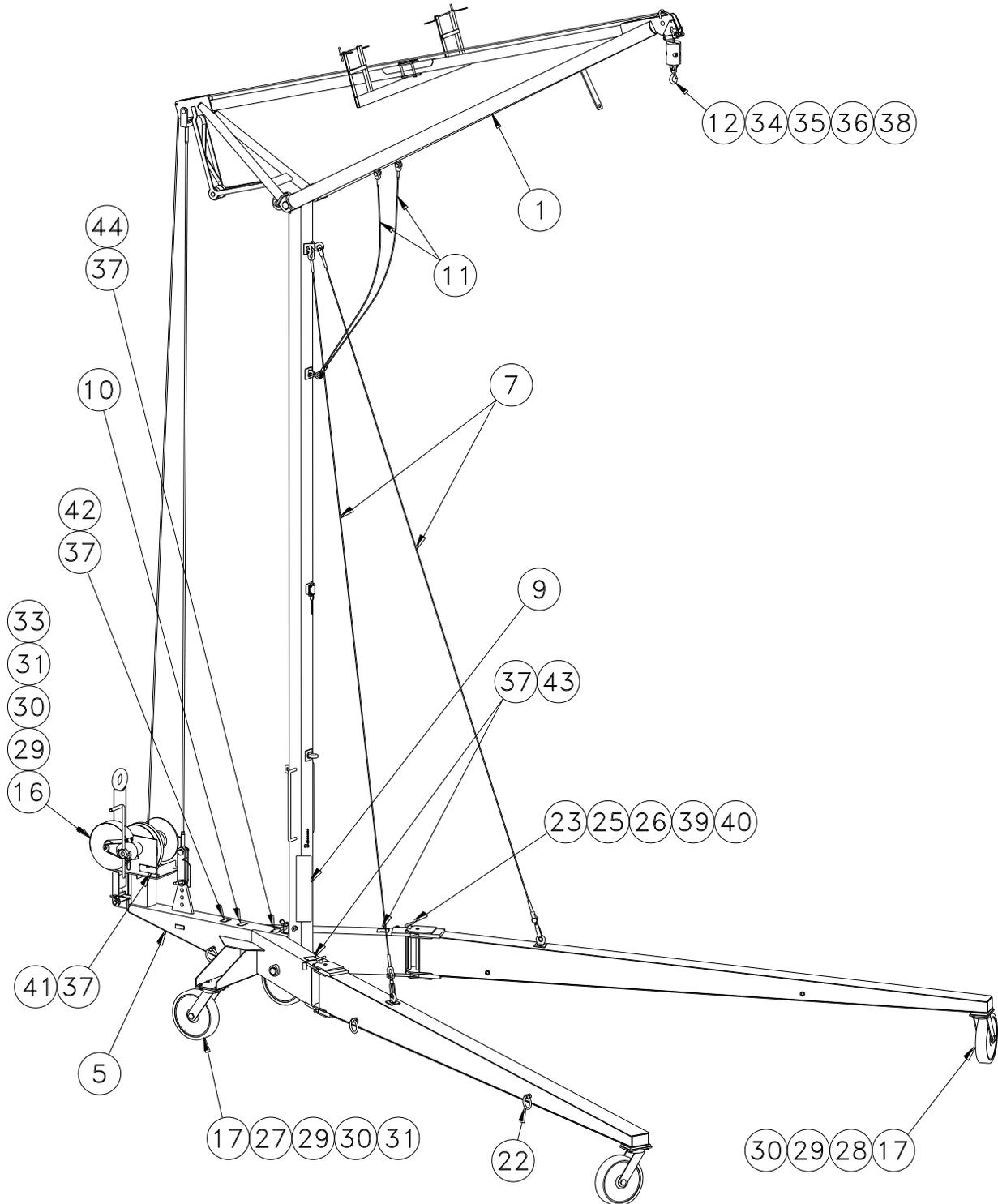
Parts List

When ordering replacement parts/kits, please specify model, serial number and color of your unit.



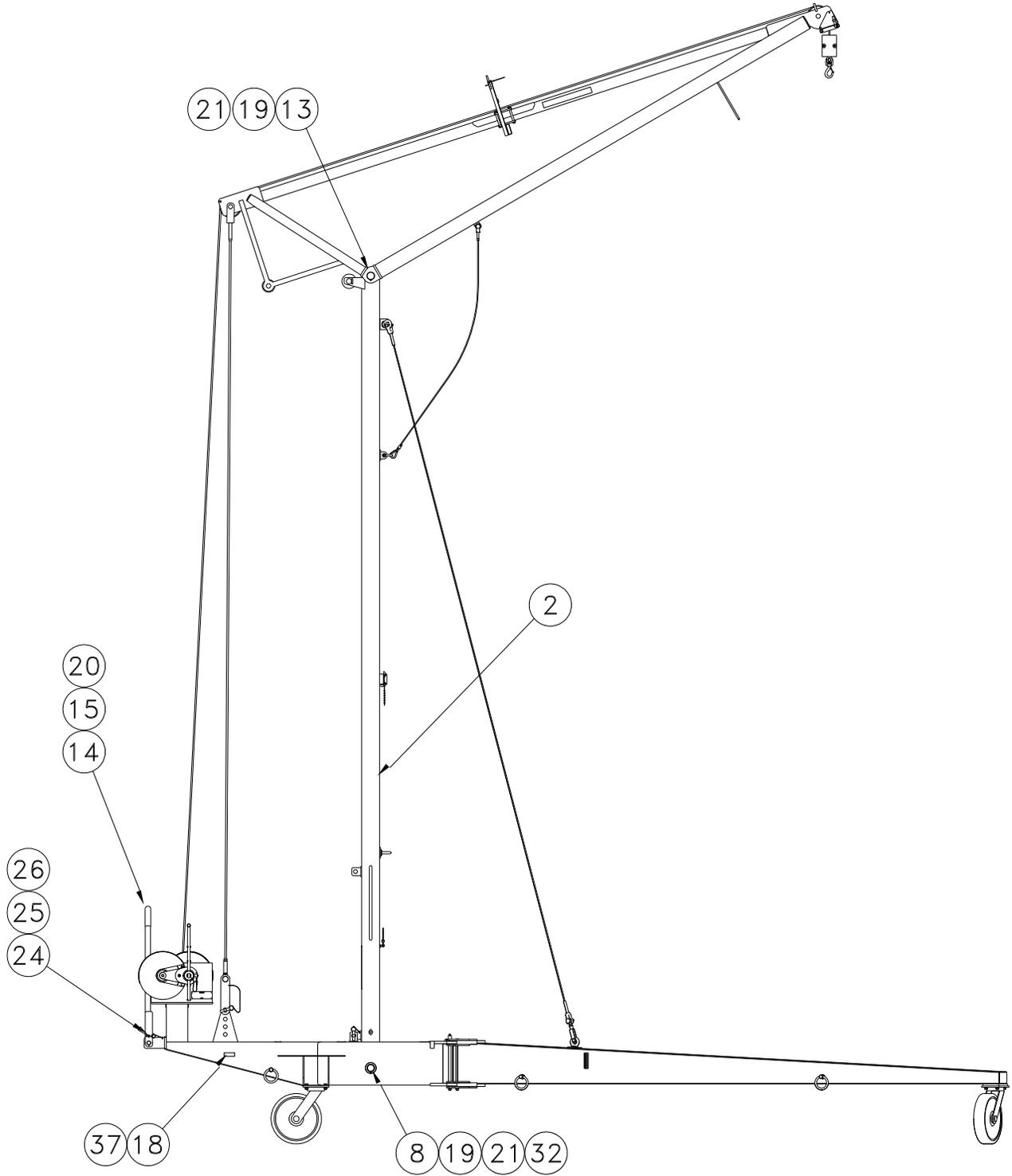
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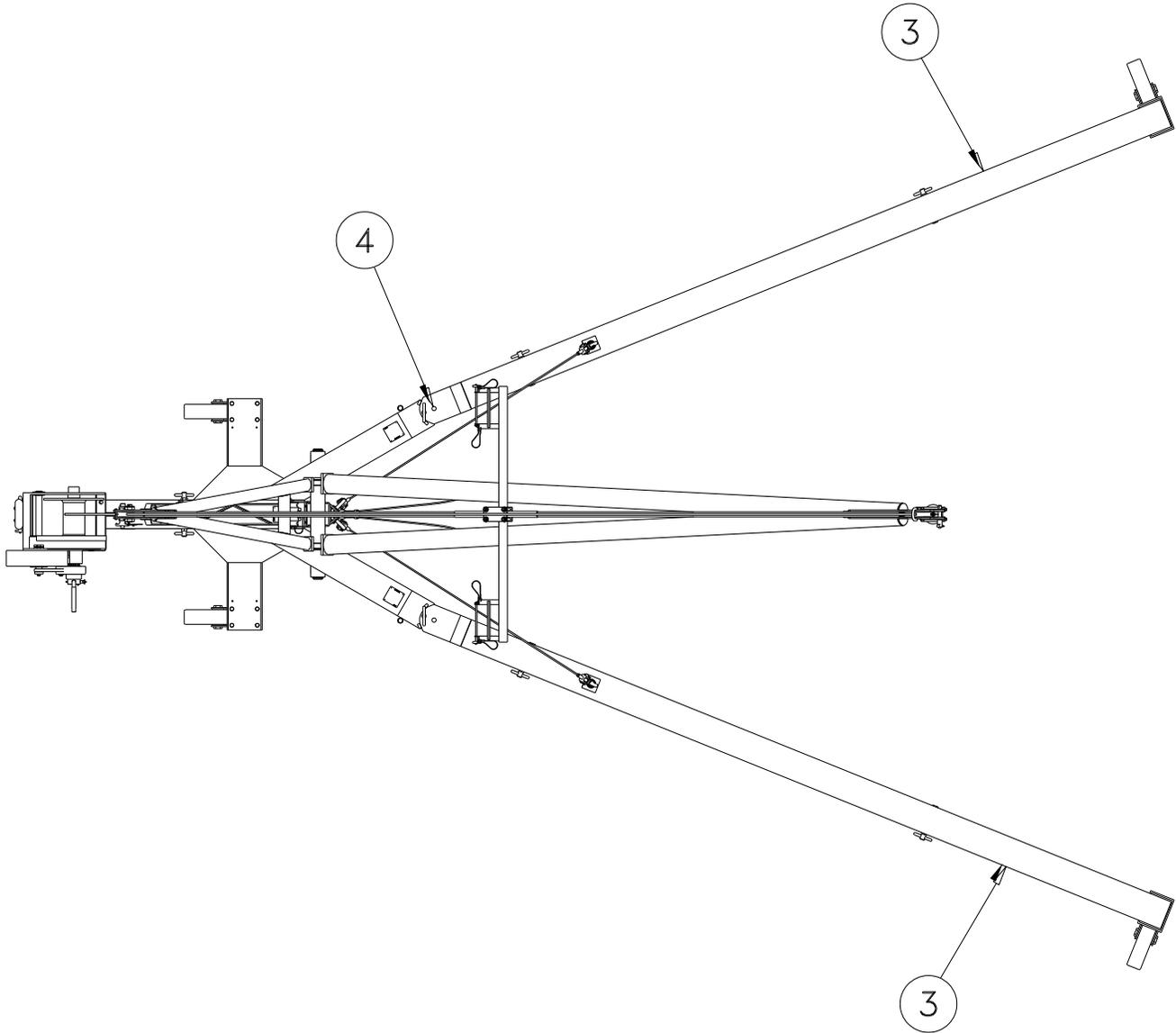
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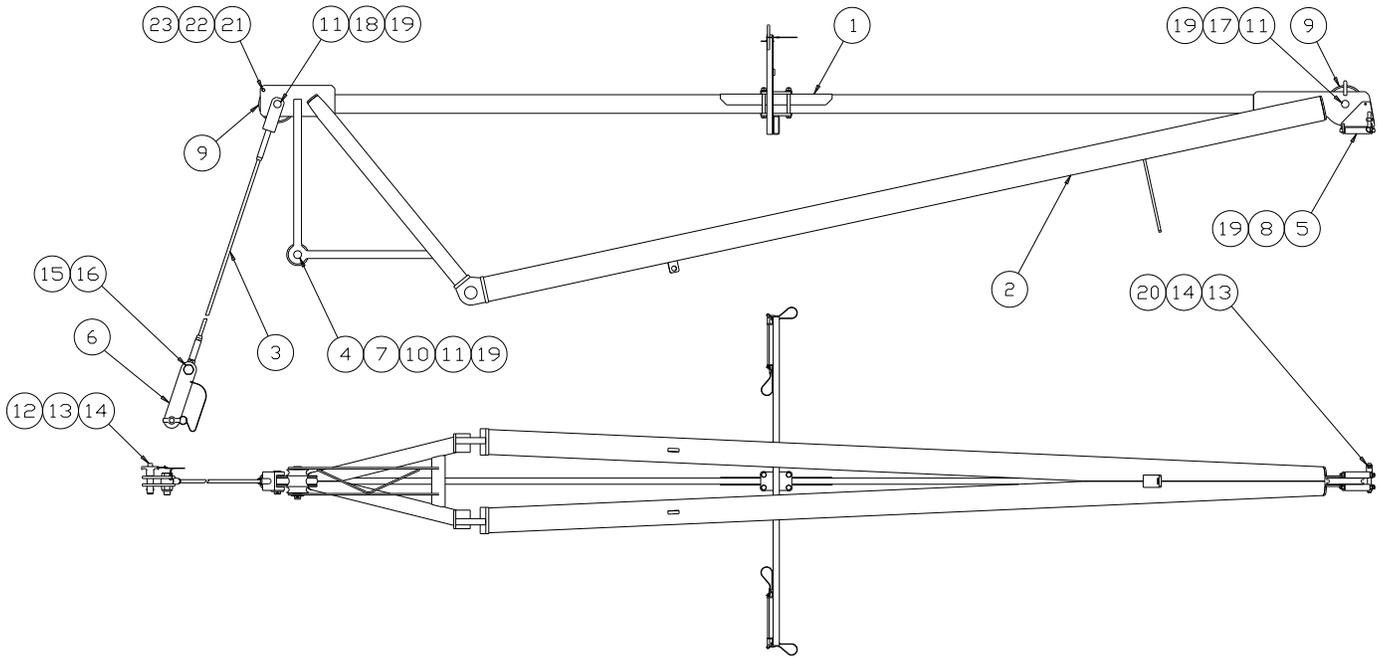
Parts List

When ordering replacement parts/kits, please specify model, serial number and color of your unit.

Item	Part Number	Description	Qty
1	9609-D	Boom Assembly	1
2	9609-F	Mast Assembly	1
3	9609-10	Outrigger	2
4	9609-11	Outrigger Pin	2
5	9609-15	Base Weldment	1
7	9609-27	Support Cable Assembly	2
8	9609-32	Mast Pivot Pin	1
9	9609-3	Operation Placard	1
10	9319-5	Warning Placard	1
11	9609-24	Safety Cable	2
12	9319-27	Cable Weight	1
13	9319-28	Boom Pivot Pin	1
14	9319-61	Towbar	1
15	9319-64	Pin	1
16	9609-J	Winch	1
17	SC-369	Caster	4
18	915-176	Nameplate	1
19	450A5781	Retaining Ring	4
20	450A5776	Retaining Ring	2
21	450A5926	Bearing Thrust	4
22	450A6079	Tiedown Ring	6
23	9609-17	Lock Pin	2
24	450A7091	Lock Pin	1
25	450A5892	Ferrule	10
26	450A7092	Cable	5
27	372-20100	Hex Head Cap Screw	8
28	372-20090	Hex Head Cap Screw	8
29	345-11032	Flat Washer	20
30	346-10032	Lockwasher	20
31	335-52000	Hex Jam Nut	12
32	312-16042	Setscrew, Half Dog Point	2
33	372-20120	Hex Head Cap Screw	4
34	372-12100	Hex Head Cap Screw	2
35	333-41201	Hex Nut	2
36	346-10016	Lockwasher	2
37	450A6987	Drivescrew	28
38	9609-125	Hoist Cable Assembly	1
39	450A7093	Linch Pin	2
40	9609-34	Shim	6
41	9319-101	Caution Descent Placard	1
42	9319-102	Caution Boom Placard	1
43	9319-103	Warning Placard	2
44	9319-104	Warning Placard	1

Parts List

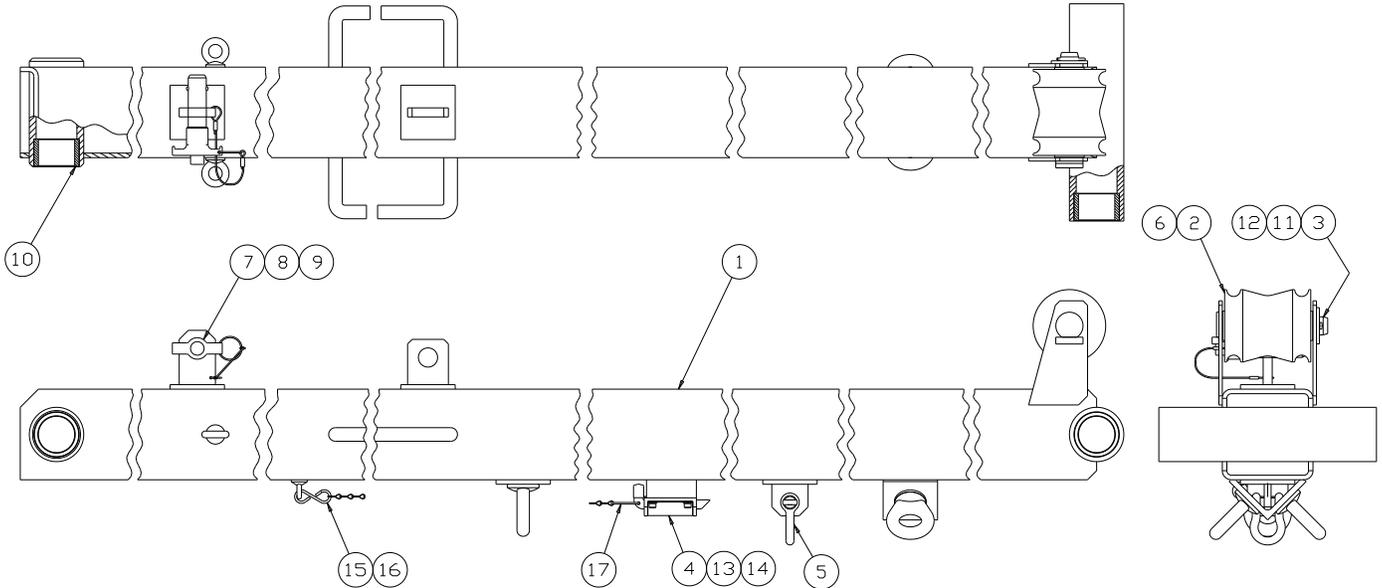
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Item	Part Number	Description	Qty
	9609-D	Boom Assembly ; consists of:	
1	9609-M	Spreader Assembly	1
2	9609-120	Boom Weldment	1
3	9609-26	Positioning Cable	1
4	9609-44	Roller Pin	1
5	9319-69	Roller	2
6	9319-23	Clevis Plate	2
7	9609-38	Roller	1
8	9319-70	Pin	2
9	450A6265	Sheave	2
10	450A5915	Bearing	2
11	345-11068	Flat Washer	3
12	450A5887	Ball Lock Pin	1
13	450A6967	Cable	2
14	450A5892	Ferrule	4
15	373-30240	Hex Head Cap Screw	1
16	333-23000	Hex Locknut	1
17	321-30650	Clevis Pin	1
18	321-30105	Clevis Pin	1
19	322-06480	Cotter Pin	7
20	450A6941	Ball Lock Pin	1
21	372-12160	Hex Head Cap Screw	1
22	346-10016	Lockwasher	1
23	335-41200	Hex Jam Nut	1

Parts List

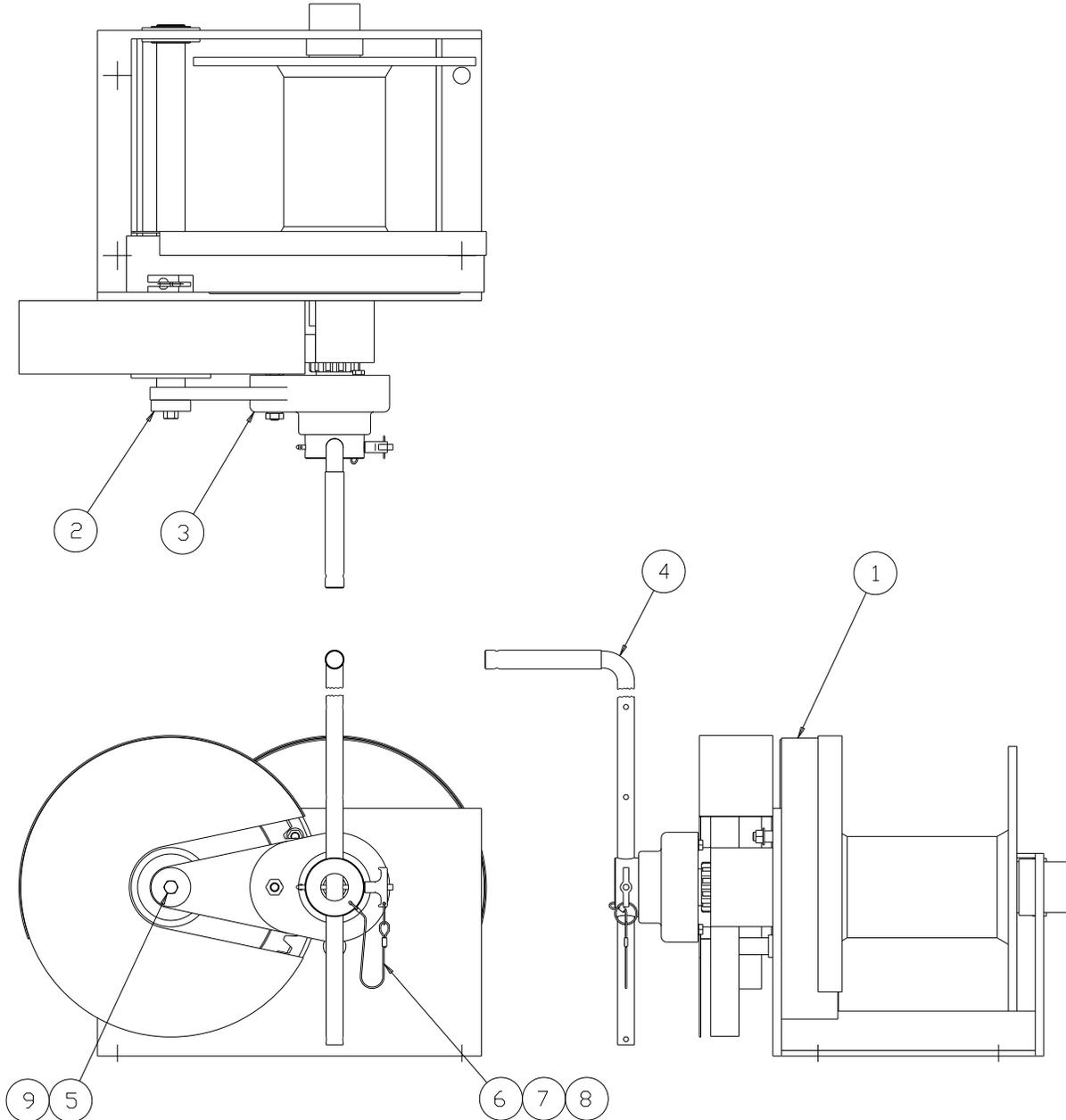
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Item	Part Number	Description	Qty
	9609-F	Mast Assembly ; consists of:	
1	9609-30	Mast	1
2	9609-39	Roller	1
3	9609-40	Pivot Pin	1
4	9609-42	Latch	1
5	450A6268	Anchor Shackle	1
6	450A5915	Bearing	2
7	450A5887	Ball Lock Pin	1
8	450A5888	Ferrule	2
9	450A7094	Cable	1
10	450A5703	Bearing	4
11	322-04480	Cotter Pin	1
12	345-11068	Flat Washer	1
13	377-12060-S	Socket Head Cap Screw	4
14	346-10016	Lock Washer	4
15	450A7095	Chain Sash	1
16	450A5562	S Hook	1
17	450A7096	Steel Ring	1

Parts List

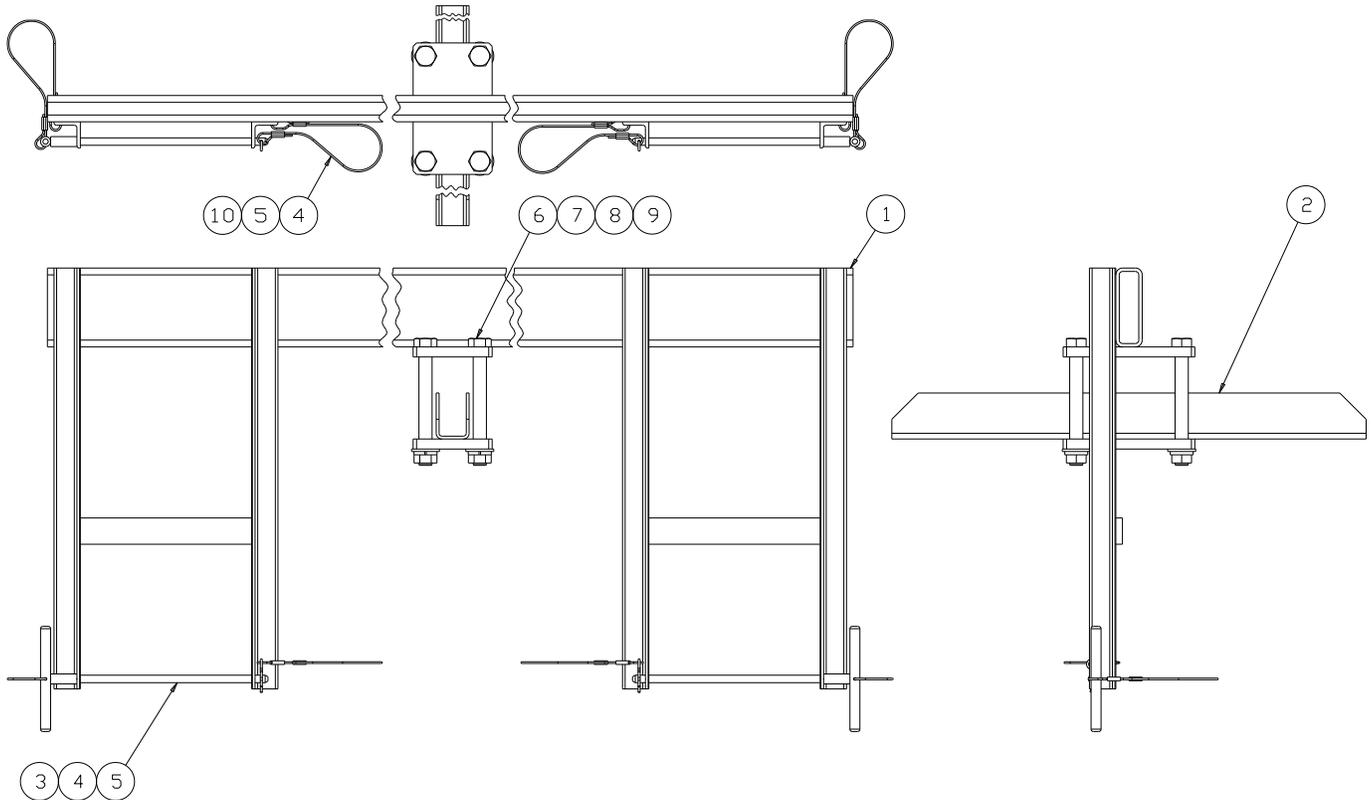
When ordering replacement parts/kits, please specify model, serial number and color of your unit.



Item	Part Number	Description	Qty
	9609-J	Winch Assembly ; consists of:	
1	9609-6	Winch	1
2	9609-13	Brake Lock	1
3	9609-43	Disc Brake	1
4	9609-49	Handle	1
6	450A6169	Ball Lock Pin	1
7	450A6969	Cable	1
8	450A5888	Ferrule	2
9	372-16040	Hex Head Cap Screw	1

Parts List

When ordering replacement parts/kits, please specify model, serial number and color of your unit.



Item	Part Number	Description	Qty
	9609-M	Spreader Assembly ; consists of:	
1	9609-60	Spreader Weldment	1
2	9609-63	Clamp	1
3	9609-18	T Handle	2
4	450A5888	Ferrule	8
5	450A7097	Cable	4
6	372-20400	Hex Head Cap Screw	4
7	345-11032	Flat Washer	4
8	346-10032	Lockwasher	4
9	335-52000	Hex Jam Nut	4
10	450A7098	Hairpin Cotter Pin	2