Novitool®

Aero® Stand
Retrofit Kit Instructions

To Accommodate Aero® 625-925-1225 along with 900-1200-1500

WARNING

IMPROPER OR UNSAFE use of this tool can result in serious bodily injury! This manual contains important information about product function and safety. Please read and understand this manual BEFORE operating the tool. Please keep this manual available for other users and owners before they use the tool. This manual should be stored in a safe place.

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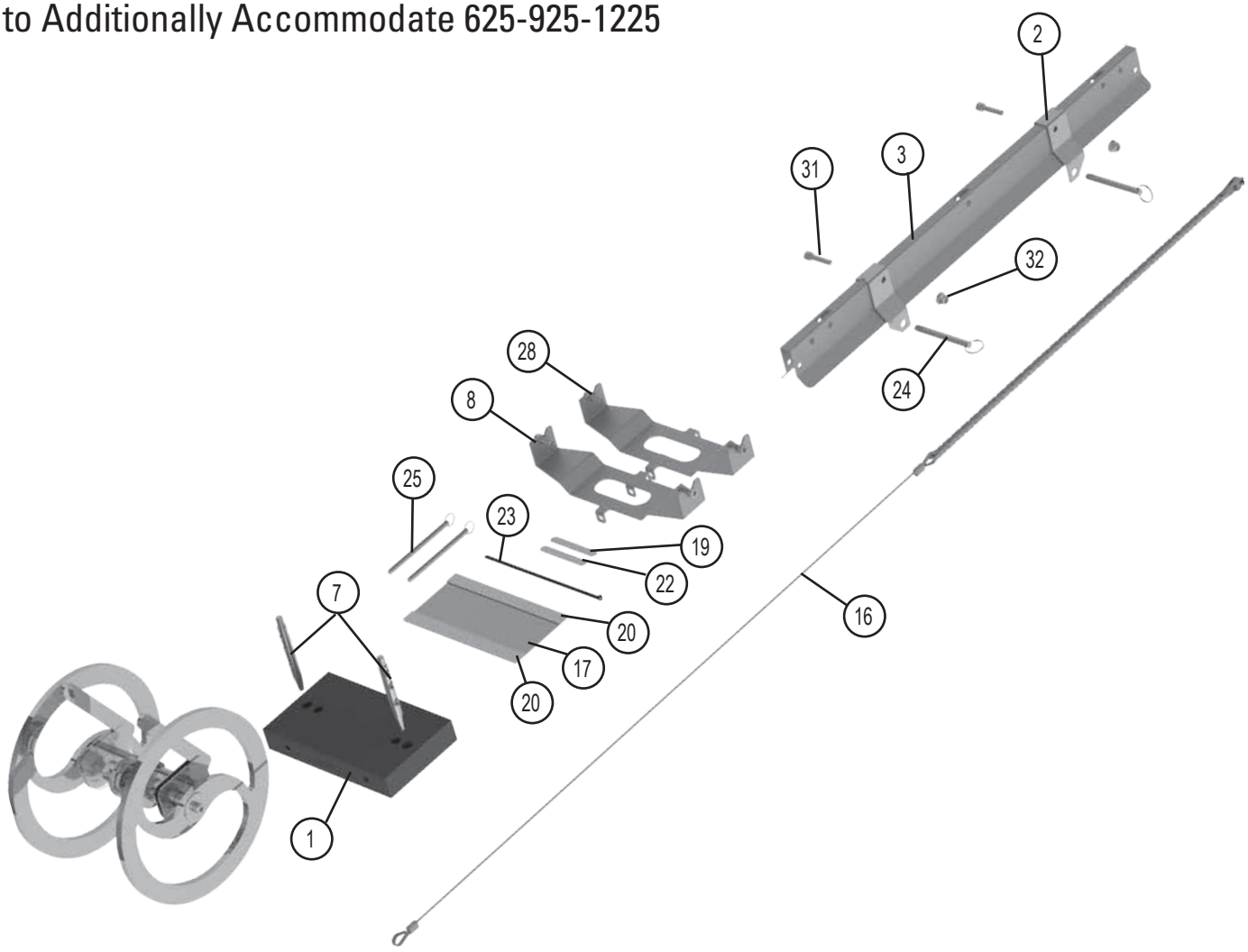
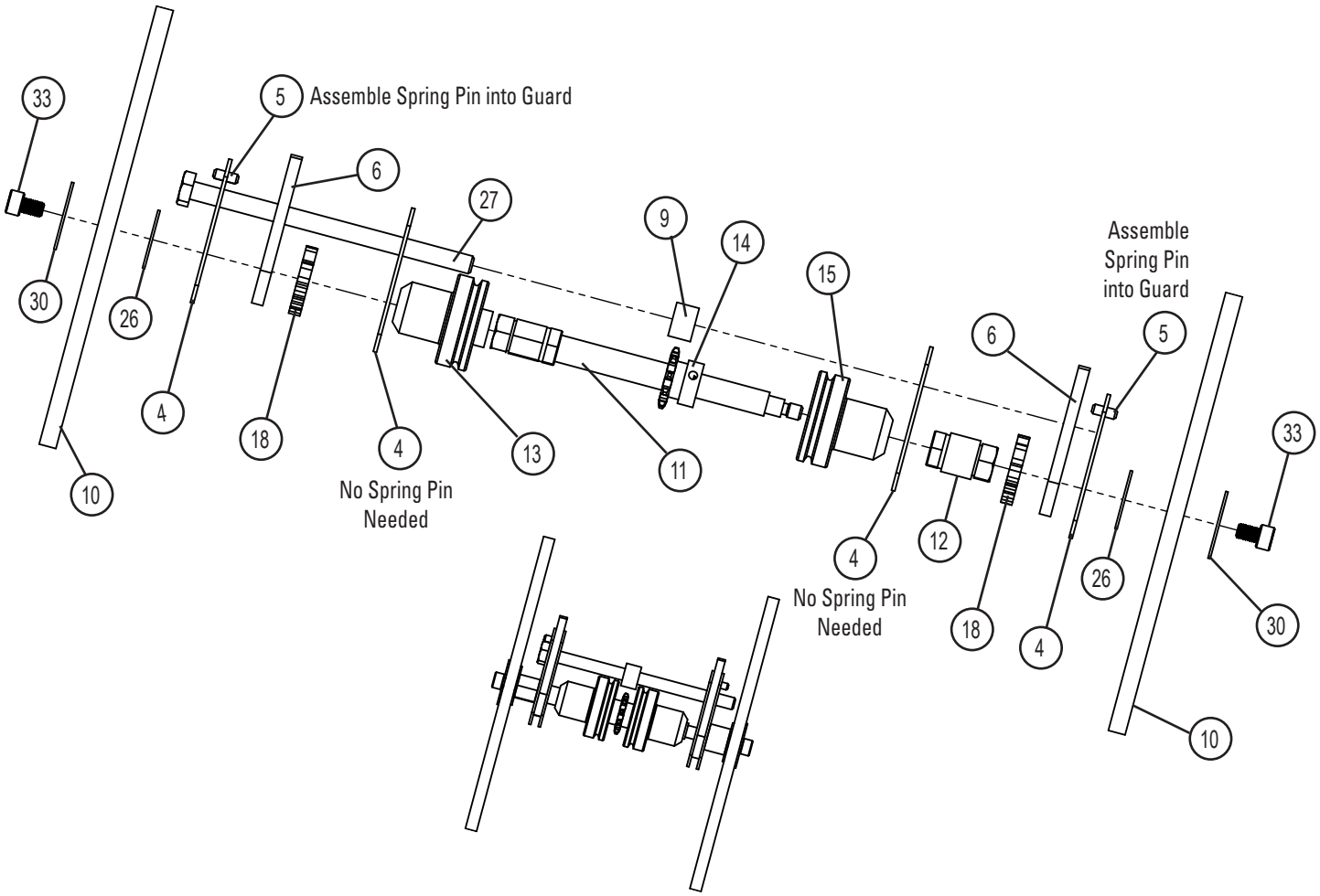
Aero® Stand Retrofit Assembly

to Additionally Accommodate 625-925-1225



Item No.	Part Number	Description	Qty.
1	GQ863	COUNTERWEIGHT AERO® 1225	1
2	GQ860	CHANNEL LB INTERFACE	2
3	GQ865	LIFT BAR G2-G3	1
7	GQ862	PIN WEIGHT ALIGNMENT	2
8	GQ861	ADAPTER ELEV BRACKET	2
16	GQ915	CHAIN WIRE ASSY 625-1225	1
17	GQ909	GUARD CHAIN STAND 625-1225	1
19	G9968	DECAL 925/1500	1
20	G9968	TAPE DBL SD 3M VHB 4936 .75IN (2 PCS 9IN EACH)	1.5 FT
22	GQ858	DECAL 625/1200	1
23	Q2157	CABLE TIE 8 INCH	1
24	GR102	PIN DETENT 9.5mm X 75mm ZN	2
25	G2034	PIN DETENT 8MMX100 ZN	2
28	GQ916	SCRW SHCS M8X20 ZP	4
31	G2036	SCRW SHCS M8X35 ZN	2
32	G2038	NUT NYLOK FLNG M8 ZN	2

Gear Pawl Offloading System



Item No.	Part Number	Description	Qty.
4	GQ868	GUARD PAWL GEAR LIFT SYSTEM	4
5	GQ912	PIN SPRING M5X14 SS	2
6	GQ867	PAWL LIFT SYSTEM	2
9	GQ910	SPACER .406 X .75 X .5	1
10	GQ875	WHEEL LIFT SYSTEM	2
11	GQ876	SHAFT LIFT SYSTEM	1
12	GQ877	NUT SHAFT LIFT SYSTEM	1
13	GQ869	ROLLER LFT SYS SPROCKET STOP	1
14	GQ914	SPROCKET 35B10 THREADED	1
15	GQ870	ROLLER LFT SYS SPROCKET SLEEVE	1
18	GQ866	GEAR PAWL LIFT SYSTEM	2
26	GQ913	RING RETAINING .875 SS	2
27	GQ911	SCREW HHCS M10X160 ZN	1
30	GR145	WSHR OS 8.4IDX240D ZN	2
33	GQ919	SCRW SHCS M8X12 ZP	2

Description

This is the Aero® retrofit kit for your current stand that is required in order to accommodate the Aero 625, 925, and 1225. The stand will continue to provide convenience and time savings for your belt fabrication.

The design allows for the Aero presses to be loaded quickly and conveniently. The lower beam of the Aero is fixed into the stationary cradle of the press stand. The upper beam is connected into the press using a cable interface. One person can operate it easily, where movement of the upper half of the press is assisted with counterweights.

Follow the detailed instructions on page 23 to learn how to off load the pressure in the top beam of the press.

Specifications

Aero Kit Ordering Information

Item Code	09459
Description	AERO-STD-CW-G3-625-1225-KIT
Dimensions Assembled	55" x 44" x 76" (1399 x 1116 x 1930 mm)
Dimensions Working	62-74" x 44" x 76" (1583-1883 x 1116 x 1930 mm)
Shipping Weight	30 lbs (13.6 kg)
Carton Dimensions	32" x 14-5/8" x 7-3/8" (813 x 372 x 187 mm)

Tools Required for Assembly of the Aero® Stand

- Ratchet with metric socket set
- Metric open end wrench set
- Metric hex key set
- Adjustable wrench
- Channel lock or pliers
- Drift punch
- Hammer

General Safety Rules –Save These Instructions–

Signal words:

"DANGER" indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury. This signal word is limited to the most extreme situations.

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

"CAUTION" indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.

Safety Symbol

This international safety symbol is used to identify and call attention to specific safety matters.

Safety Information

To Avoid Severe Personal Injury or Property Damage, read carefully and understand the following Safety Precautions.

1. WORK AREA

⚠CAUTION

Keep your work area clean and well lit.

2. PERSONAL SAFETY

⚠WARNING

Use safety equipment. Always wear eye protection, gloves, non-skid safety shoes, and adhere to other safety standards of the facility where operating the Aero® Press and Stand.

Stay alert, watch what you are doing and use common sense when operating a machine. Do not use machine while tired or under the influence of drugs, alcohol, or medication. A moment of inattention while operating machines may result in serious personal injury.

Do not wear loose clothing or jewelry. Keep your hair, clothing, and gloves away from moving parts. Loose clothes, jewelry, or long hair can be caught in moving parts.

Abide by all instructions and warning labels.

This equipment is not to be used by children or persons with reduced physical, sensory or mental capabilities, or lack of experience and knowledge of the equipment.

3. TOOL USE AND CARE

⚠CAUTION

Check for misalignment or binding of moving parts, breakage of parts, and any other condition that may affect the tool's operation. If damaged, have the tool serviced before using. Poorly maintained tools cause many accidents.

4. SERVICE AND MAINTENANCE

⚠CAUTION

When servicing a tool, use only original replacement parts. Use of unauthorized parts or failure to follow Maintenance Instructions, may create a risk of injury.

Do not wipe plastic parts with solvent. Solvents such as gasoline, thinner, benzene, carbon tetrachloride, and alcohol may damage and crack plastic parts. Do not wipe them with such solvents. Wipe plastic parts with a soft cloth lightly dampened with soapy water and dry thoroughly.

⚠WARNING

Only qualified repair personnel must perform tool service. Service or maintenance performed by unqualified personnel could result in a risk of injury.

NEVER use a tool, which is defective or operating abnormally. If the tool appears to be operating unusually, making strange noises, or otherwise appears defective, stop using it immediately and arrange for repairs.

Maintain tools with care. Keep machine parts clean. Properly serviced tools are less likely to bind or clutter material and are easier to control.

5. AERO® STAND SAFETY

⚠DANGER

Read and understand the Aero® Press operations manual before using the press in the Aero Stand.

⚠CAUTION

Avoid pinch points during the assembly and in operation. Exercise caution when moving weights or lifting and positioning of components.

Exercise care to avoid unbalanced component conditions during assembly.

Do not cut or kink the lifting cables during handling, assembly, or operation of the Aero Stand.

⚠WARNING

Two persons are required for assembly of the Aero Stand. Portions of the process are difficult for one person to perform without risk of injury.

Ensure that Aero Press is secure in stand prior to operation.

Do not move the press stand to a different location while the press is installed.

Do not exceed weight capacity of the Aero Stand cradle. The Aero Stand retrofit kit is designed to accommodate the 625, 925, and 1225, as well as with the 900, 1200 and 1500.

Ensure that the weight pins are installed securely in the proper position before operating the stand.

Ensure that the vertical column door is closed and latched during operation of the stand.

Avoid raising/lowering of the upper beam with excessive speed.

Retrofit Installation Instructions

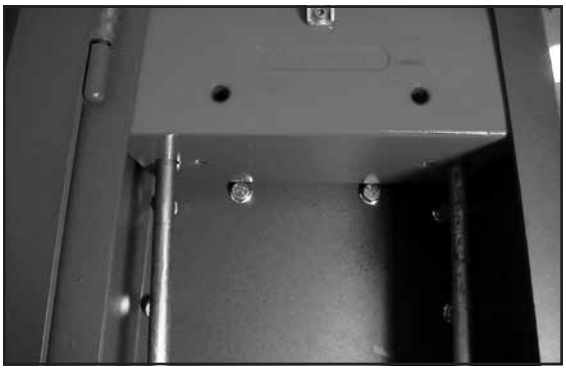
1. Ensure "AERO® 900" weight is secure with the latch **(1a** and **1b)**. Further lock-out of weight is recommended via clamping or blocking.

1a

1b

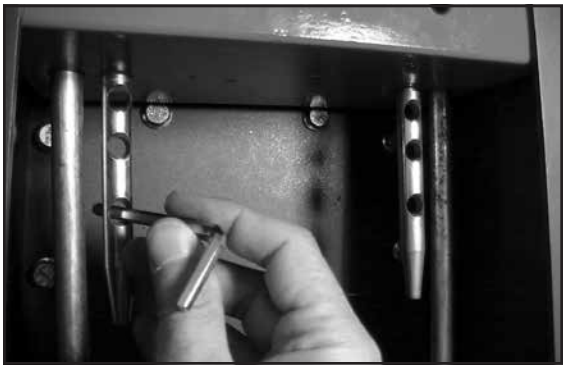
2, Unscrew 2-hole alignment pins **(2a** and **2b)** and replace with 3-hole alignment pins **(2c)** (part GQ862). Thread in fully, then back out to ensure holes face in pin direction **(2d)**.

2a



2b

2c



2d

3. Move 625/1200 & 925/1500 weight plates to upper position shown. Insert pins **(3a)**. Further lock-out of weight is recommended via clamping or blocking.

3a

4. Remove guide rod nuts located below bottom weight plate **(4a)**. On upper weight plate hold down black grommets in place while turning rods and moving rods upward approximately 2" (50 mm) **(4b** and **4C)**. Insert "Aero® 1225" weight (part GQ863) **(4d)**. Hold grommets in place while turning and moving rods downward into their original position. Reinstall guide rod nuts.

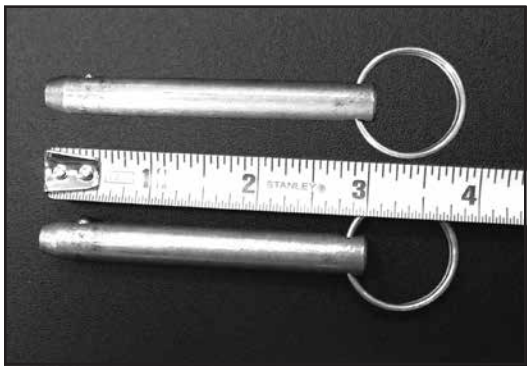
4a

4b

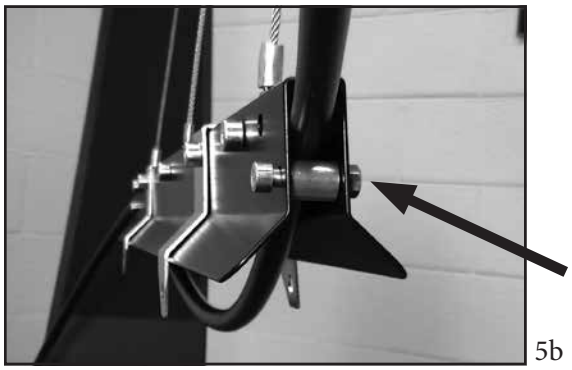
4c

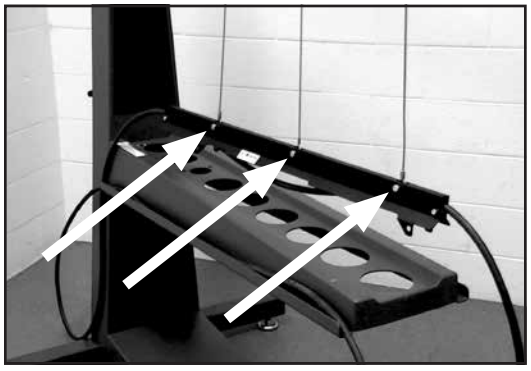
4d

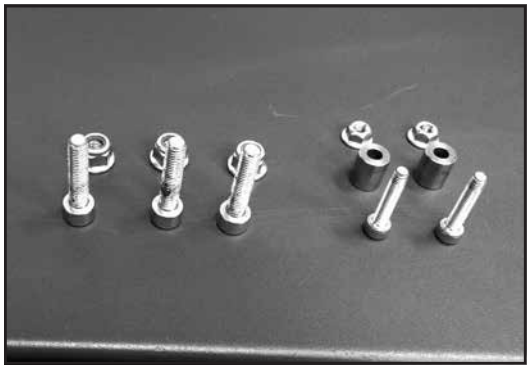
5. Remove the two pins from lifting bar (not required further). **(5a)**
   Remove the two sets of fasteners at both ends of the lifting arm to remove the power cable (save fasteners). **(5b)**
   Remove the three bolts that connect the three cables to lifting arm (save fasteners). **(5c)**
   Remove the lifting bar (not required further).
   Fasteners reserved for reuse **(5d)**.



5a

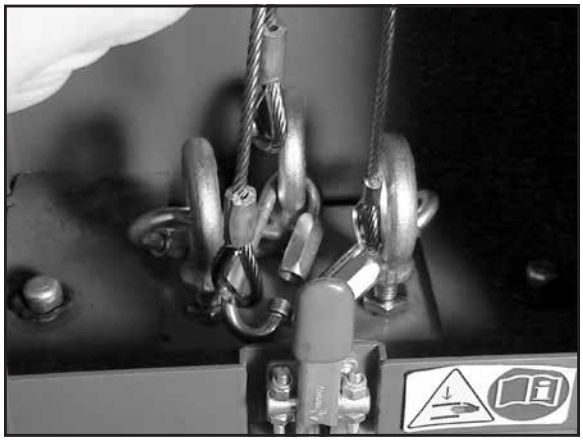

5b


5c


5d

6. Open the center weight eyebolt connecting link **(6a)**. Remove cable loop from connecting link **(6b)**.


6a


6b

7. Remove cable retention bolt on the rear 3-cable roller **(7a)**.

7a

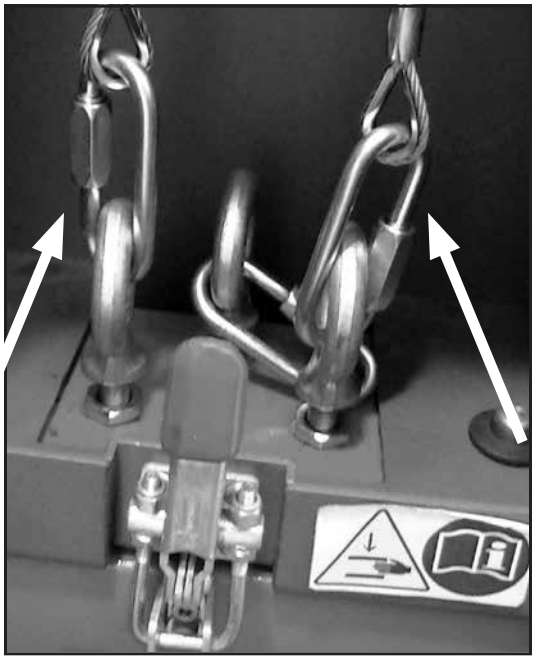
8. Remove cable retention bolt on the center roller (save fasteners) **(8a)**. Remove center cable **(8b** and **8c)**.

8a

8b

8c

9. Disengage links of the two remaining cables from the weight compartment **(9a).** Pull cables and hang over each respective roller and shaft **(9b)**.



9a

9b

10. Remove the shaft bolt **(10a)** and the roller that engaged the three cables positioned directly above the weight compartment **(10b)**.

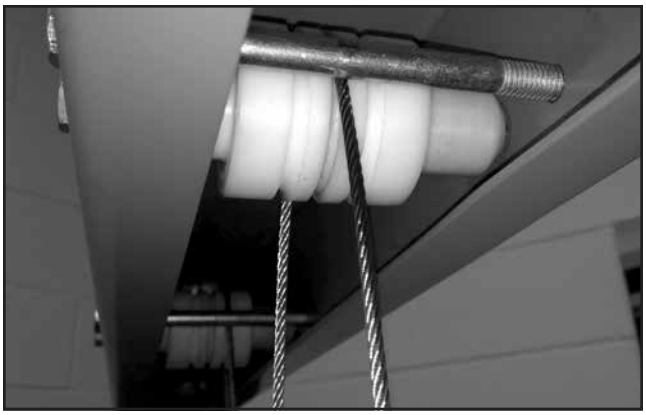
10a

10b

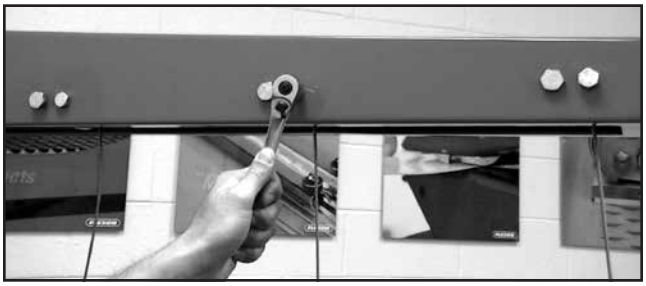
11. Loop the chain-cable assembly (part GQ915) over the center groove of the center roller from the kit **(11a** and **11b)**. Re-install the original cable retention bolt and nut **(11c)**. Re-install the other two cables verifying the cables engage in the three different roller slot positions – front left, center, and rear right.

11b

The cable on the front roller should be placed on the right groove and the cable on the rear roller should be placed on the left groove (as the installer is facing the front of the cradle.)

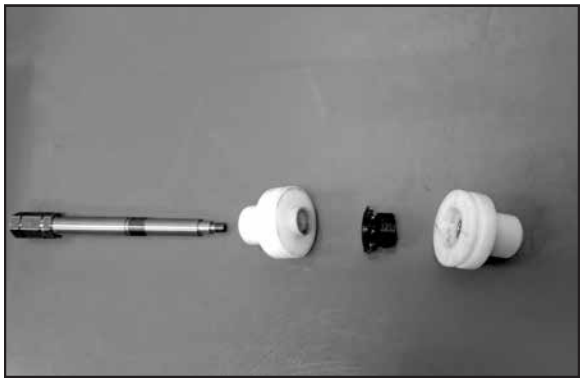


11a

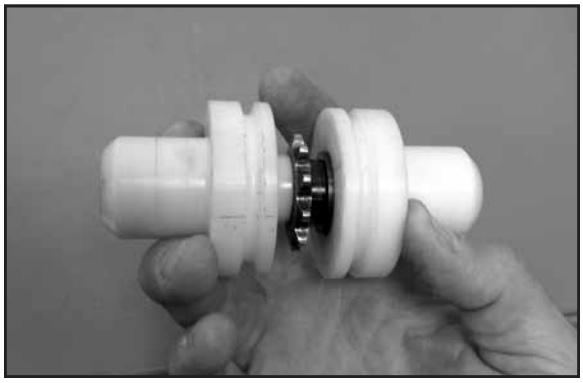


11c

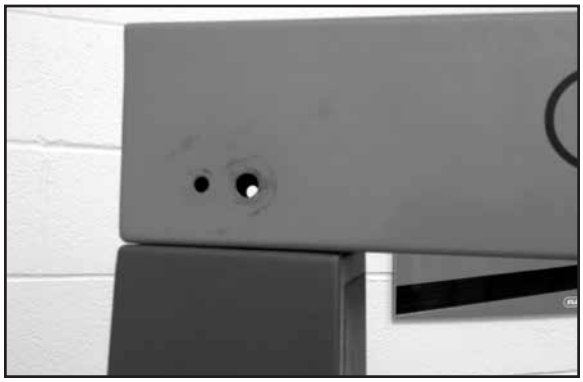
12. Install the weight off-load roller components (parts GQ869, GQ870, GQ876, GQ914) **(12a)**. Assemble the parts together **(12b)**. Place these parts inside the top beam and insert the shaft bolt through the top **(12c/12d)**.



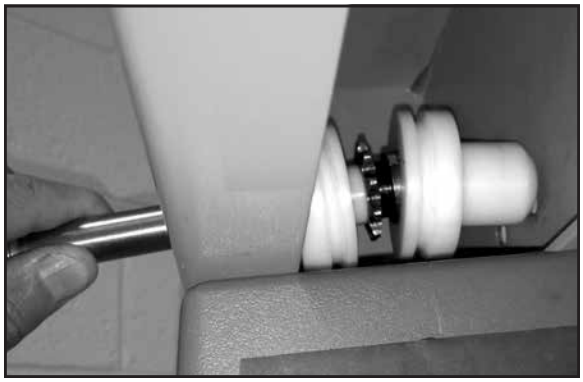
12a



12b



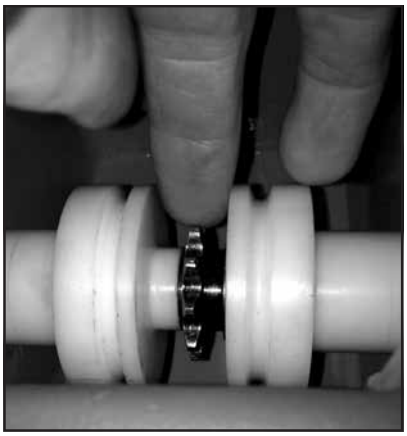
12c



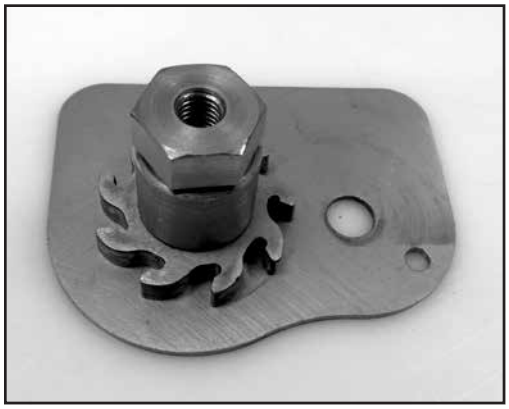
12d

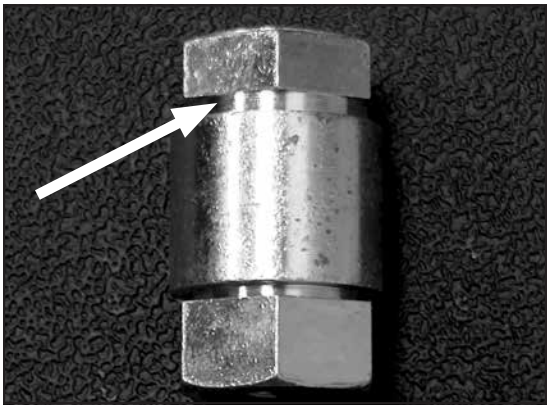
13. While holding the shaft bolt, manually thread the sprocket onto the shaft **(13a)**. Ensure the shaft bolt draws through the opposite top beam hole, and confirm the sprocket is fully threaded on the shaft **(13b)**.


13a


13b

14. Position the (GQ877) nut, (GQ866) gear, and (GQ868) inner gear guard oriented as shown **(14a)**. **NOTE:** direction of gear as shown is critical. The wider grooved end of the nut needs to be closest to the inner gear guard **(14b)**. Install on (GQ876) shaft threads **(14c)** and tighten **(14d)**. **NOTE:** this nut threads onto the shaft with 'left hand threads'.

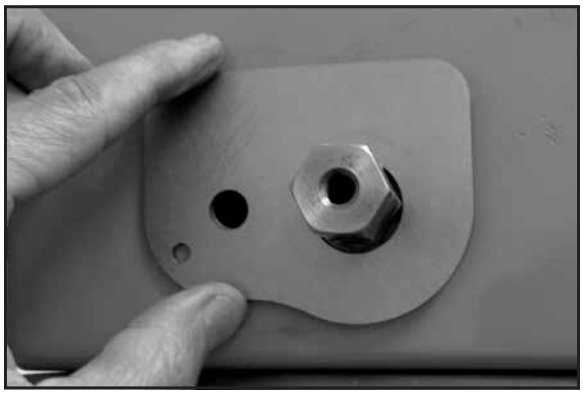

14a


14b

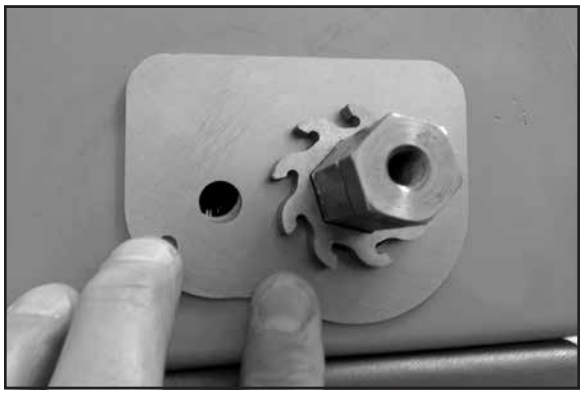

14c


14d

15. On shaft hex side, install inner gear guard (GQ868) **(15a)** and gear (GQ8666) **(15b)**. **NOTE:** direction of gear as shown is critical.

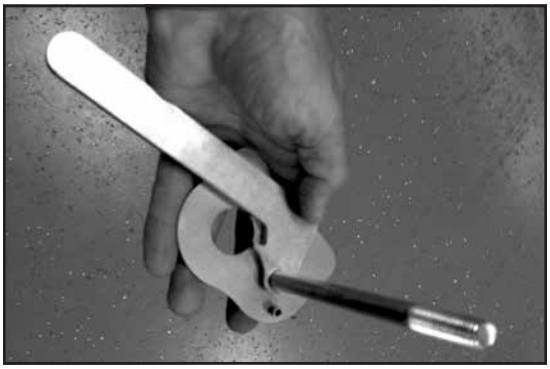


15a

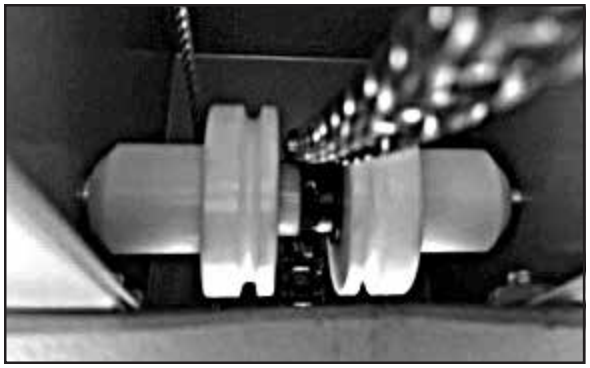


15b

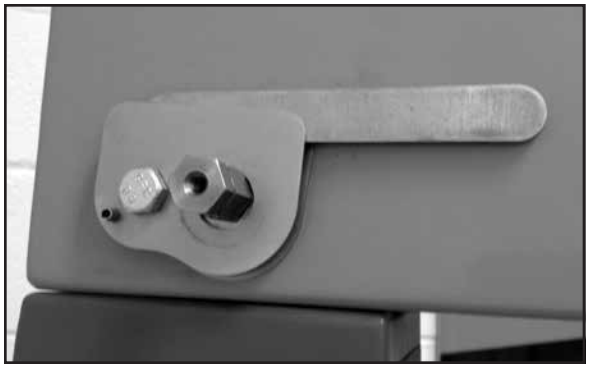
16. Route cables and chain over the roller/sprocket assembly **(16a)**. Ensure cables do not cross and chain is not twisted. Install outer gear guard (with pin) and pawl (GQ867) onto M10 x 160 hex bolt (GQ911) **(16b)**. Insert hex bolt into top beam hole **(16c)**. Inside top beam, install chain spacer (GQ910) onto hex bolt. Ensure proper cables are seated in roller grooves, chain is engaged with sprocket, and the chain spacer is centered between the two rollers **(16d)**.



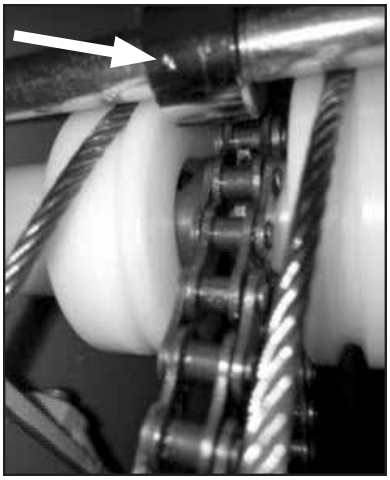
16b



16a

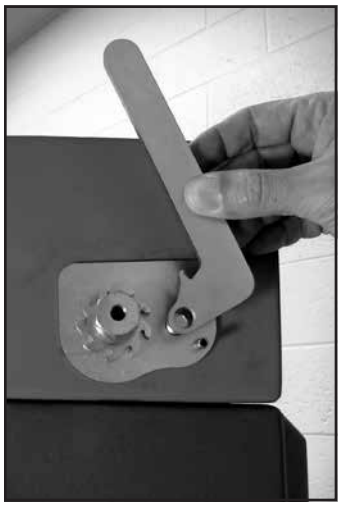


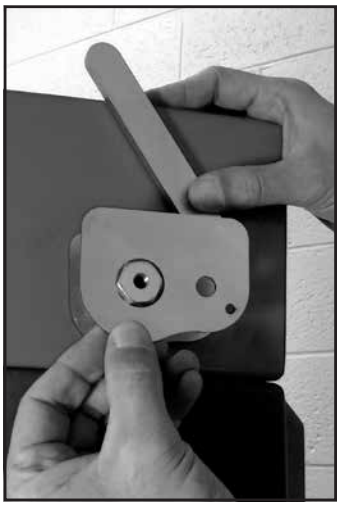
16c

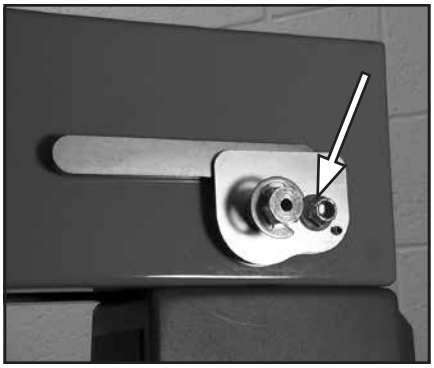


16d

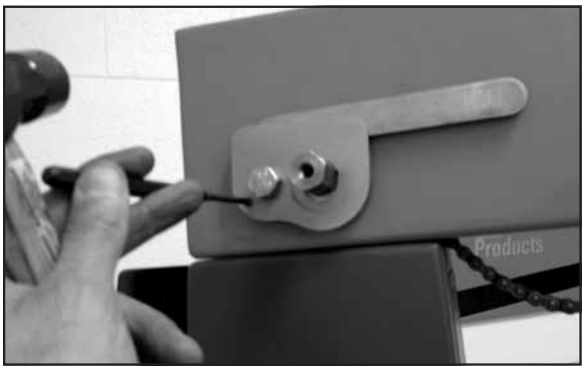
17. Install pawl (GQ867) **(17a)** then install outer gear guard **(17b)** (with pin) and original nylok nut on the cable retention bolt **(17c)**. Tighten nut sufficiently to provide smooth operation for both pawls (GQ867).


17a


17b


17c

18. Drive spring pins into inner gear guard (GQ868), both sides. Ensure operation remains smooth for both pawls. **(18a)**



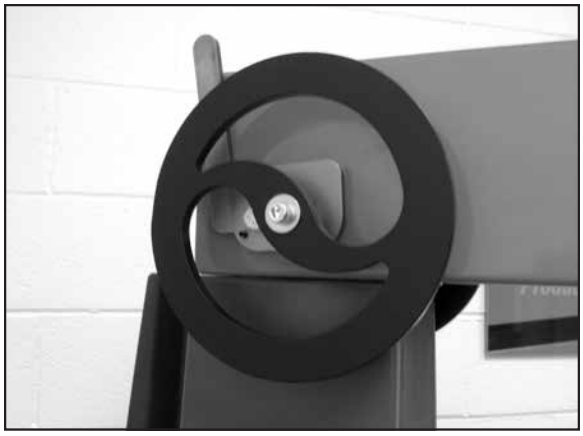
18a

19. Install E-clip retaining rings (GQ913) in the small groove on the shaft and nut. Gently tap into groove **(19a)**. Both sides **(19b)**.


19a

19b

20. Install wheel (GQ875) using washer (GR145) and socket head screw (GQ919). **NOTE:** during screw torque, use wheel as wrenching device to avoid rotation of the left hand threaded shaft nut (GQ877). Both sides **(20a** and **20b)**.



20a

20b

21. Inside weight compartment, remove M4 hex screw and nut from chain clasp **(21a)**. On center lifting eye, ensure connecting link is oriented as shown, with hex nut on top portion of link **(21b)**. Separate chain clasp plates and engage with connecting link. Install M4 hex screw and nut **(21c)**. **NOTE:** ensure chain has no 'twist'.

21a

21b

21c

22. Re-engage cable loops with lift eye connecting links **(22a)**.

22a

23. Apply weight decals as shown **(23a, 23b, 23c and 23d)**.

23a

23b

23c

23d

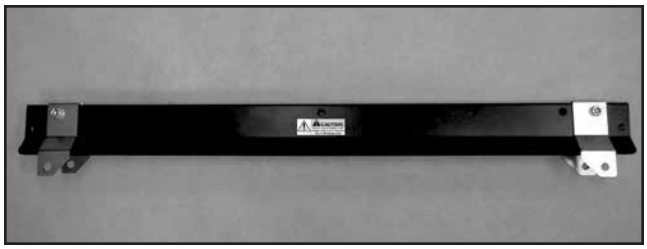
24. Install chain guard (GQ909). Remove adhesive strips from chain guard. Position inside top beam as shown, with adhesive strips down. Engage adhesive strips with top beam inner flanges **(24a)**.

24a

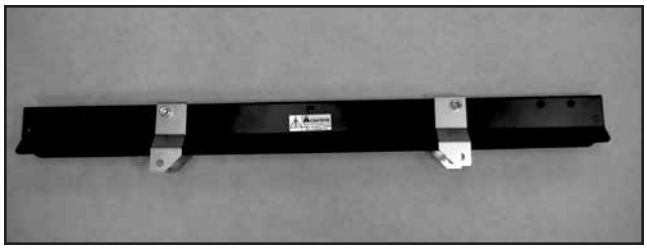
25. Remove original hold down post from stand cradle **(25a)**. Apply Warning Label (for use with Aero® Press 625, 900, 925, 1200, 1225, or 1500).

25a

26. Install two interface brackets (GQ860) on lifting bar (GQ865) in position show for use with Aero 900, 925, and 1500 **(26a)**. Brackets positioned to the inner locations for use with the Aero 600, 625, 1200, and 1225 **(26b)**. Apply Caution Label on both sides of the lifting bar **(26c)**.



26a



26b

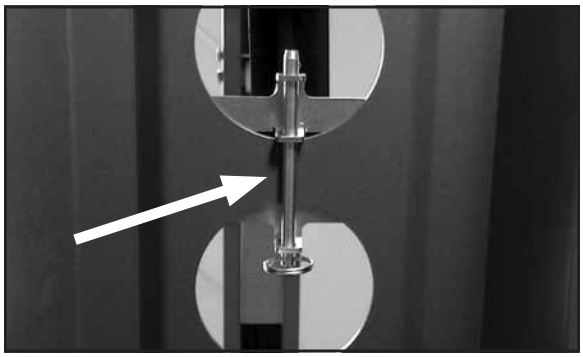
26c

27. Attach lifting bar subassembly to cable eyes using original M8 socket head screws and flanged nylok nuts. Tighten to the point where the bolt and nut are in contact with the lifting bar. Do not over tighten. **(27a)**.

27a

28. Place adapter brackets (GQ861) on Aero® Stand cradle. One at the front of the cradle and the other at approximate position of end of press **(28a)**. Install M8 x 100 detent pins (G2034) through holes in adapter bracket tabs on underside of cradle **(28b)**.

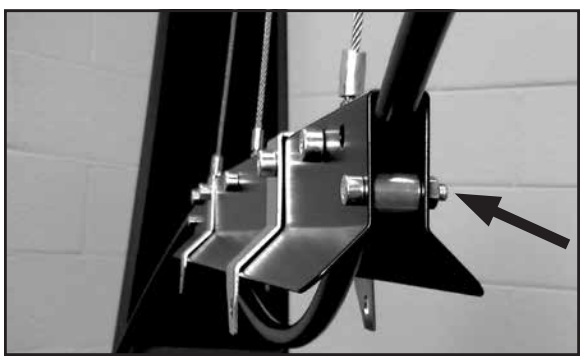
28a



28b

29. Install the umbilical cable. Observe proper electrical connection ends are positioned for top and bottom press mating **(29a)**. Capture in lifting bar as shown, at front and back ends using original M6 socket head screws, flanged Nylok nuts and roller hardware **(29b)**.

29a

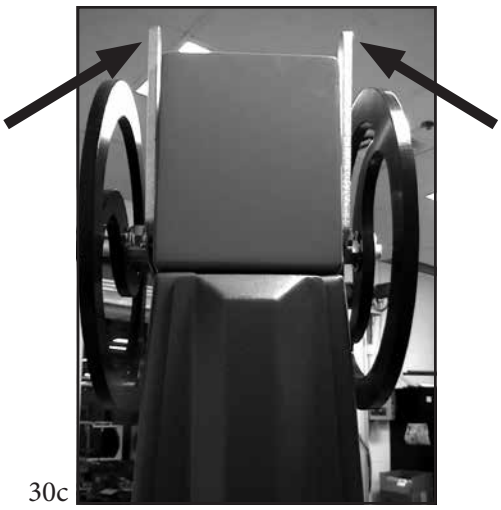


29b

30. Place Aero® Press bottom beam on cradle within the adapter brackets **(30a)**. Place the Aero Press top beam in place and pin to lifting bar using new pins. (GR102) **(30b)** In weight cabinet, pin the appropriate counterweight for the press placed in the stand. Elevate Aero top beam to determine the 'suspended' position, relocate press base if necessary. To lift top press beam the pawl on both sides of the stand beam are to be located in the up position **(30c)**.

30a

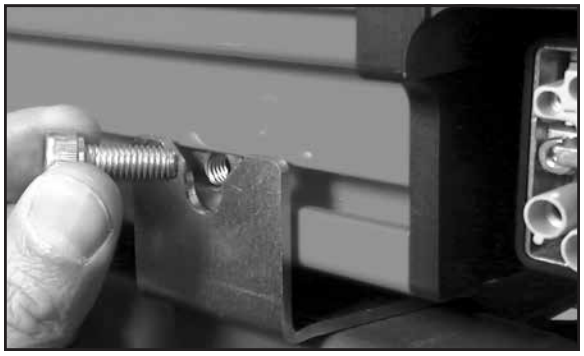
30b



30c

31. Screw the four M8 x 20 socket head screws (GQ916) into the adapter brackets. Locate the 'T' nut in bottom press groove to the appropriate location to engage the adapter bracket as shown. Install screws **(31a** and **31b)**.

31a



31b

32. With Aero® Press top beam suspended, check tension of each cable **(32a)**. If a cable has significantly less tension than the others, unload weight from top press beam, lock out weight in compartment **(32b)**, adjust the counterweight lifting eye thread engagement to better distribute the cable tension **(32c** and **32d)**. **NOTE:** ensure a minimum of ten threads are engaged with the top counterweight. Orient lifting eyes as shown. Once tensions are balanced, tighten lifting eye jam nuts.

32a


32b

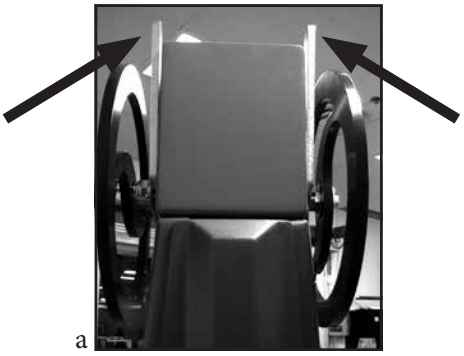

32c


32d

Operation

The Aero® 625, 925 and 1225 air bladders are located in the upper press beam. It is necessary to "off-load" the counterweight system, to achieve appropriate set-down of the top beam on the belt to be spliced.

During lifting and lowering of the upper press beam, the pawl levers are placed in the 'up/ disengaged' position. **(a)**



a

Once the upper press beam is positioned on the process belt, the pawl levers are lowered to the 'down/engage' position. **(b)**

b

Rotate the wheel in the direction to lift counterweights, which will further lower the upper press beam. Approximately 2-3 'clicks' of the pawl lever are typically sufficient to completely off-load the counterweight.

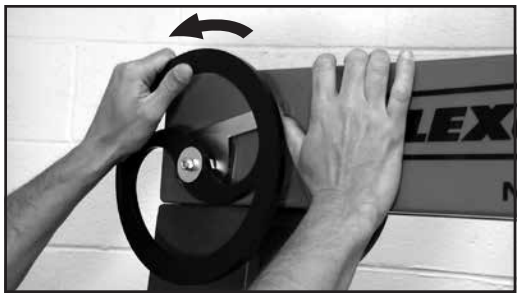
Follow operating instructions from Novitool® Aero® Splice Press Safety and Operation Manual to complete the splice.

Once the splice process is complete, unfasten the press connector bolts.

To off-load the top press beam: Grasp the off-load wheel, **(c)**

c

Rotate the off-load wheel in the counterweight 'lift' direction until the pawl lever is released, **(d)**



d

Rotate the pawl lever to the 'up/disengaged' position (both pawl levers up), **(e)**

e

Lift top press beam with lifting arm attached **(f)**

f

⚠WARNING

Do not use the pawl system to service counterweights. Use counterweight latch system in cabinet, as well as supplemental lock out methods—blocking/clamping of weights.

2525 Wisconsin Avenue • Downers Grove, IL 60515-4200 • USA
Tel: (630) 971-0150 • Fax: (630) 971-1180 • E-mail: info@flexco.com

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