



**Design &
Manufacturing Ltd.**

**FALCON LASHER
61800-000
Operating Manual**



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FALCON LASHER
Part # 61800-000
Pull-Type Lasher

Specifications:

Lasher Weight: 21 lbs.

Shipping Weight: 45 lbs. (Including Carry Case)

Lasher Dimensions: 19.5" long x 10-5/8" wide x 9-1/4" high

Capacity:

- Single cable – 3-1/4" OD maximum
- Multiple Cables – not to exceed 3-1/2" OD as a bundle

Capabilities:

The Falcon Lasher will single or double lash without strand traction. It is compatible with standard size coils of .045" and .038" lashing wire, metallic or non-metallic. Depending on bundle size, double lashing provides a support approximately every 6", while single lashing provides a support approximately every 12". It is also equipped with a clutch handle to allow easy mounting and passing the unit around a pole without cutting the lashing wire or removing it from the drive wheels.

General Information:

The DCD Falcon Lasher is a lightweight lasher that was designed to lash cables or up to 3-1/4" diameter. It weighs just 21 pounds and does not need traction from the supporting strand to drive the lasher making it very beneficial to use when overlashing existing cables.

This lasher is a piece of precision equipment. Treat it as such. Keep the lasher, operating manual and accessories in the protective storage case after use. This measure will prolong the useful life of your lasher.

Safety:

- The Falcon Lasher is intended for use only as described in this manual. Do not modify or dismantle the lasher. It has been assembled and inspected and is only covered by a warranty in its “as shipped” form. Any attempt to dismantle or modify the lasher will void the warranty and may result in property damage, severe bodily harm, or death.
- Keep hair, loose clothing, and all parts of body away from openings and moving components. Wear gloves and other appropriate safety equipment to avoid pinch hazards.
- Never use a worn, defective or incomplete equipment. Ensure that all components of the setup are able to withstand the maximum pulling loads. Components not rated for the pull force may break and release the stored energy during operation.
- Do not operate in live environment. The lasher is composed of metal components, and tow ropes connected to the unit can conduct electricity. The weight of the lasher can cause cables to sag and could increase proximity to live wires. Plan work accordingly.
- Do not operate when judgement is impaired (medication, alcohol or otherwise). Improper use can result in property damage, injury or death.
- Be aware of and follow all safety rules applicable to overhead cable installation, including, but not limited to, the Occupational Safety and Health Act of 1970, Subpart V - Power Transmission and Distribution.

1. Loading the Wire Spools on the Lasher

To prepare the Falcon Lasher for lashing, the first step is to load the lashing wire. Whether using .045" or .038" lashing wire, follow these steps.

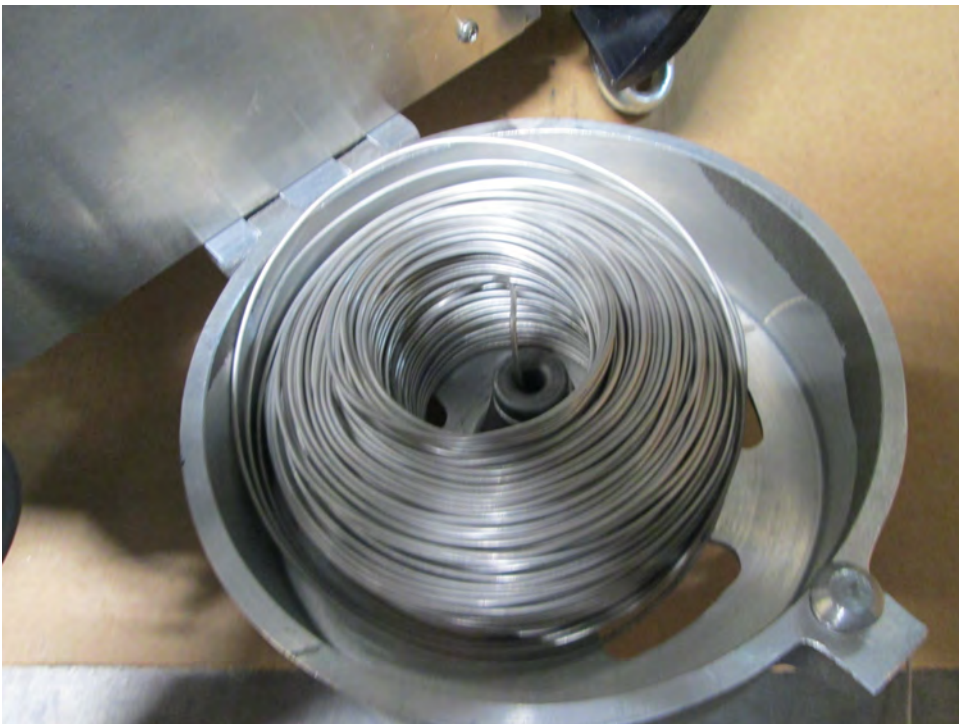
- 1a) Release latch located under the handle and on top front of magazine door. Swing open magazine door.



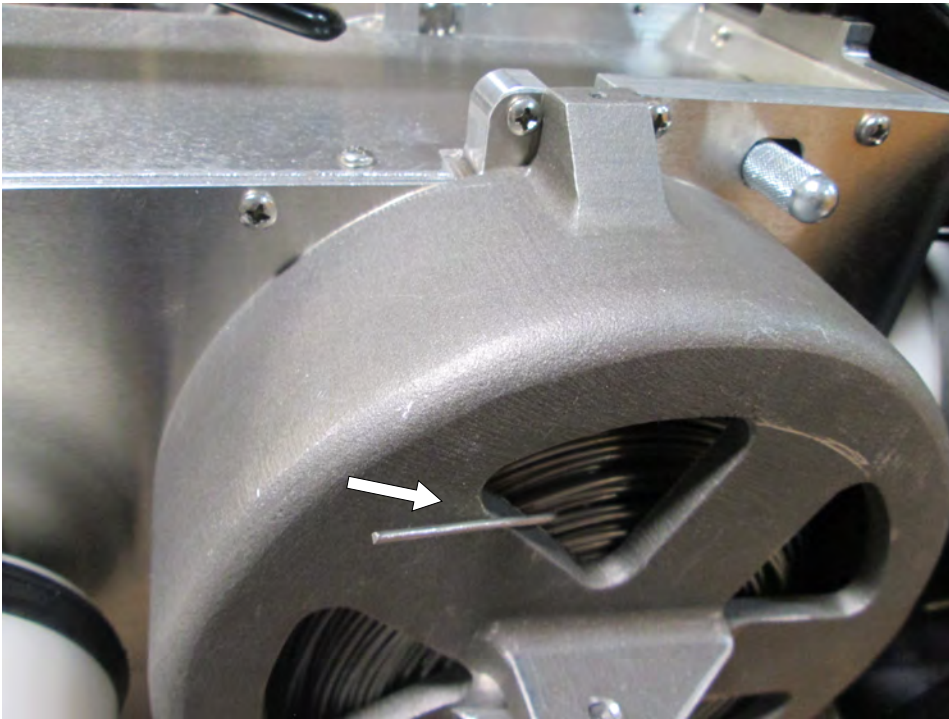
- 1b) Remove two coil ties from the wire coil and pull out approximately 12" of wire from inside of coil. Take loose end of wire and insert through wire guide in center of the wire magazine door pulling out at least a 12" length.



- 1c) Place coil in magazine. Remove the last two wire ties and close magazine door. Load the second wire magazine in same manner.



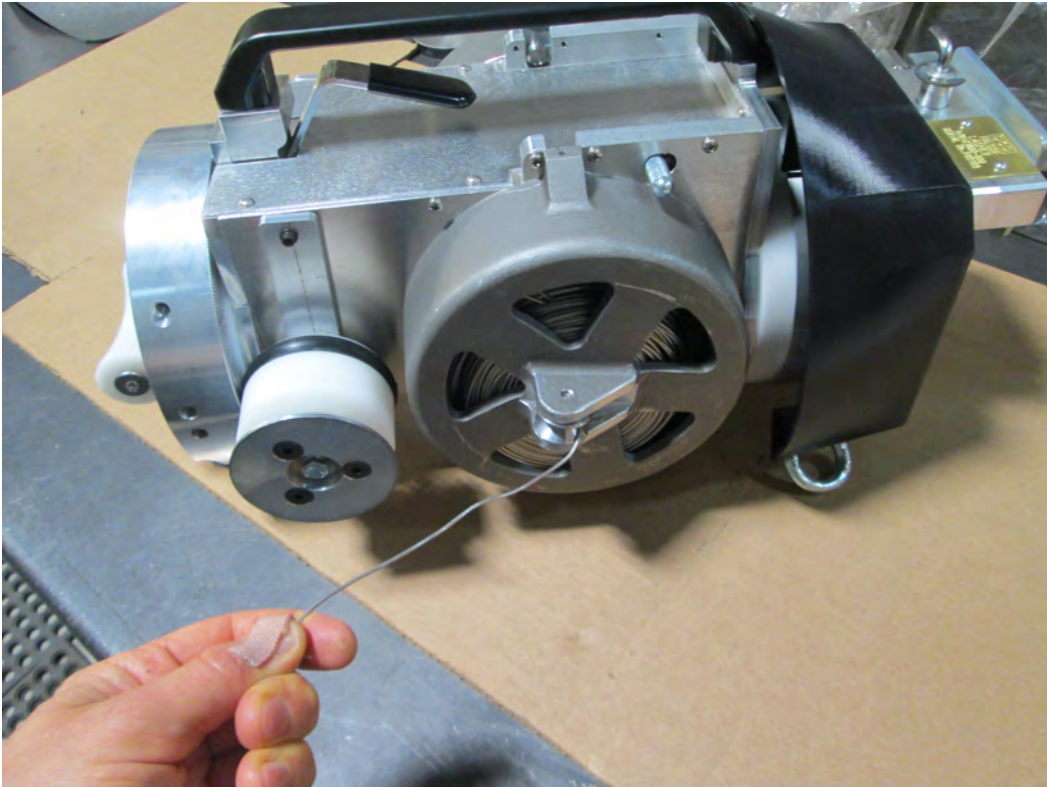
1d) It is optional to take the Outside coil of wire and, pulling out approx 12", feed it through the small hole in the outside of the magazine. This can later be attached to the body of the Lasher once the magazine is closed. This will prevent any possibility of the Wire coil spinning inside the magazine.



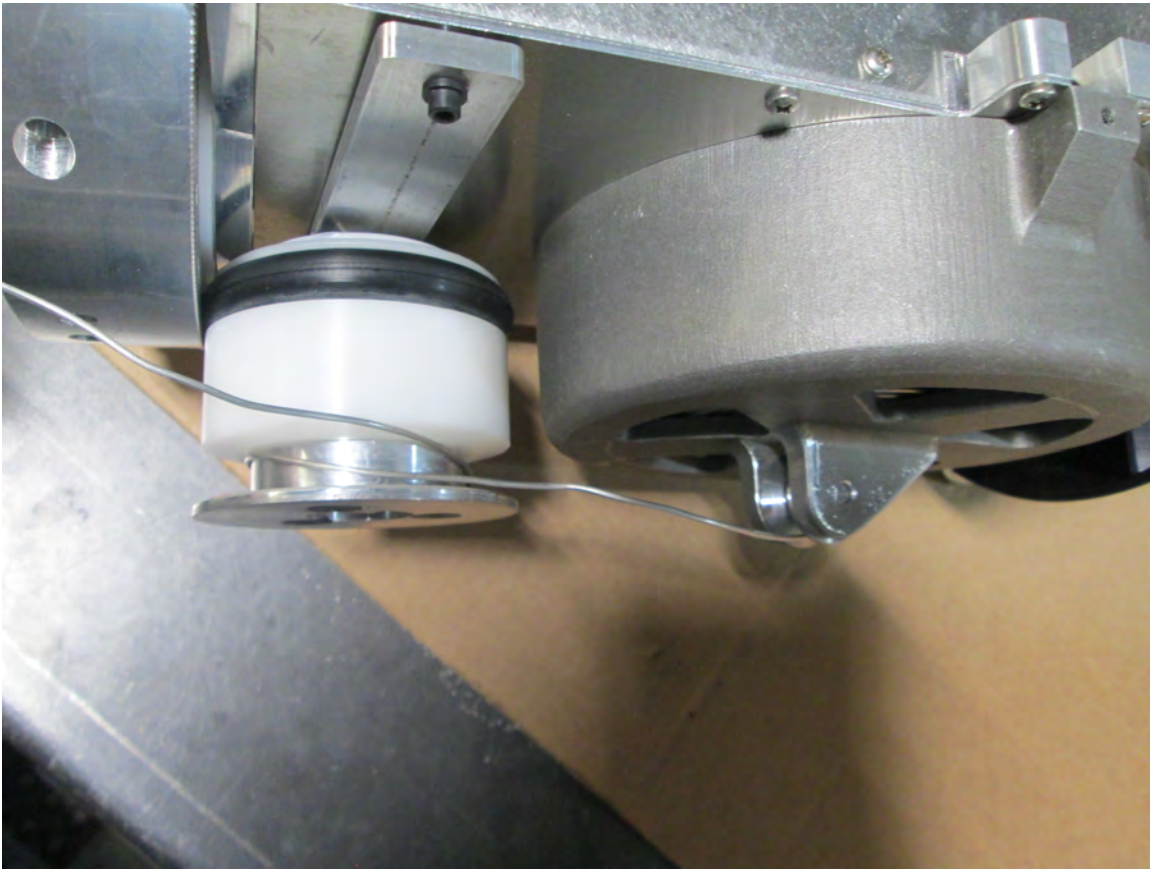
2. Threading the Lashing Wire

You have loaded the lashing wire, now you are ready to thread the lashing wire. Note that when facing the direction the Lasher will travel, the LHS is on your left and the RHS is on your right. Just follow these steps: For the RHS:

- 2a)** Take the free end of the lashing wire from center of wire magazine door and pull out approximately 2 feet of wire.



2b) Pass the wire over the guide roller on the magazine cover and then form a loop with wire such that the entry onto the drive wheel is at the **BOTTOM** and toward the outside of the drive wheel and the exit from drive wheel also at the **BOTTOM** but toward the inside. Follow the label above the Drive wheel.

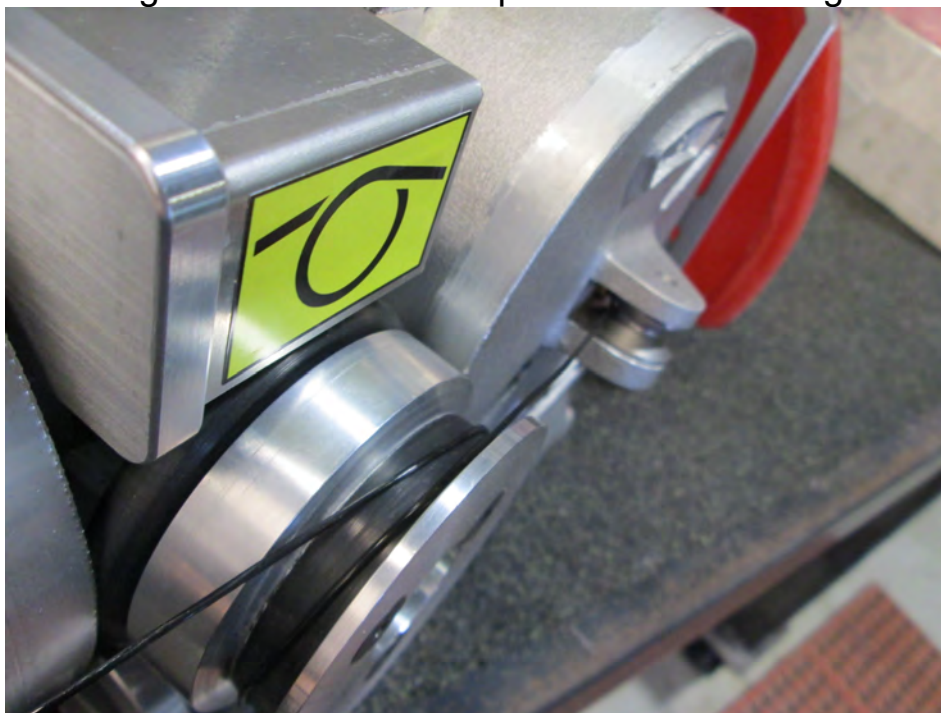


2c) Repeat steps for the LHS of lasher. Take the free end of the lashing wire from center of wire magazine door and pull out approximately 2 feet of wire.

2d) Pass the wire over the guide roller on the magazine cover and then form a loop with the wire such that the entry onto the drive wheel is at the **TOP** and toward the outside of the drive wheel and the exit from drive wheel also at the **TOP** but toward the inside. The LHS and RHS looping pattern should form a mirror image from eachother.

Follow the label above the Drive wheel.

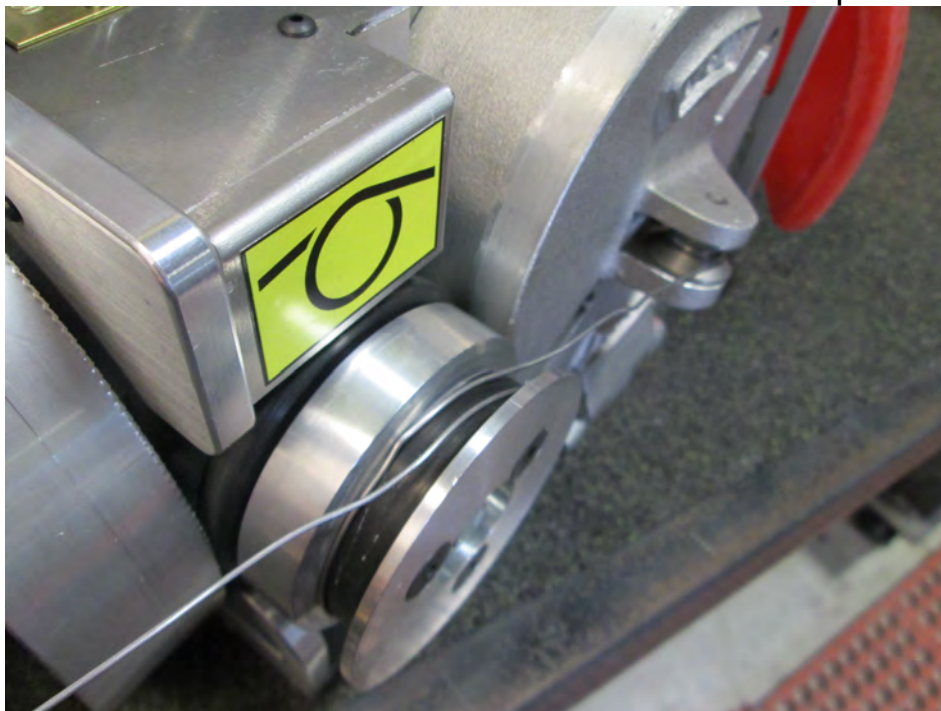
2e) When using non-metallic wire, it is recommended that the wire is threaded under the guide wheel on the lashing wire door as shown. This will ensure alignment of the wire to prevent it from falling off the drive wheel.



Note: Alternate lasher shown, threading method is the same.

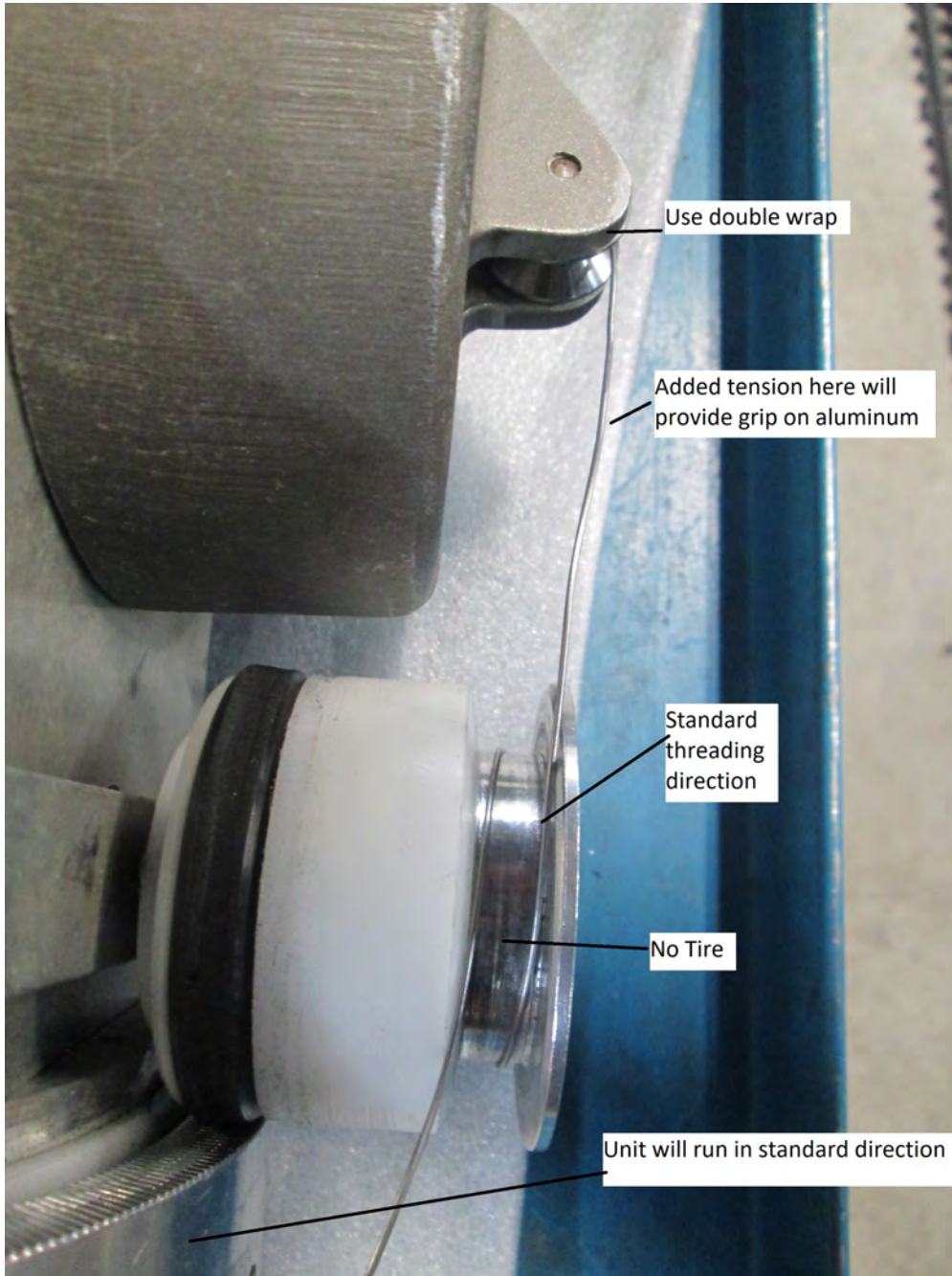
2e) Alternate threading method:

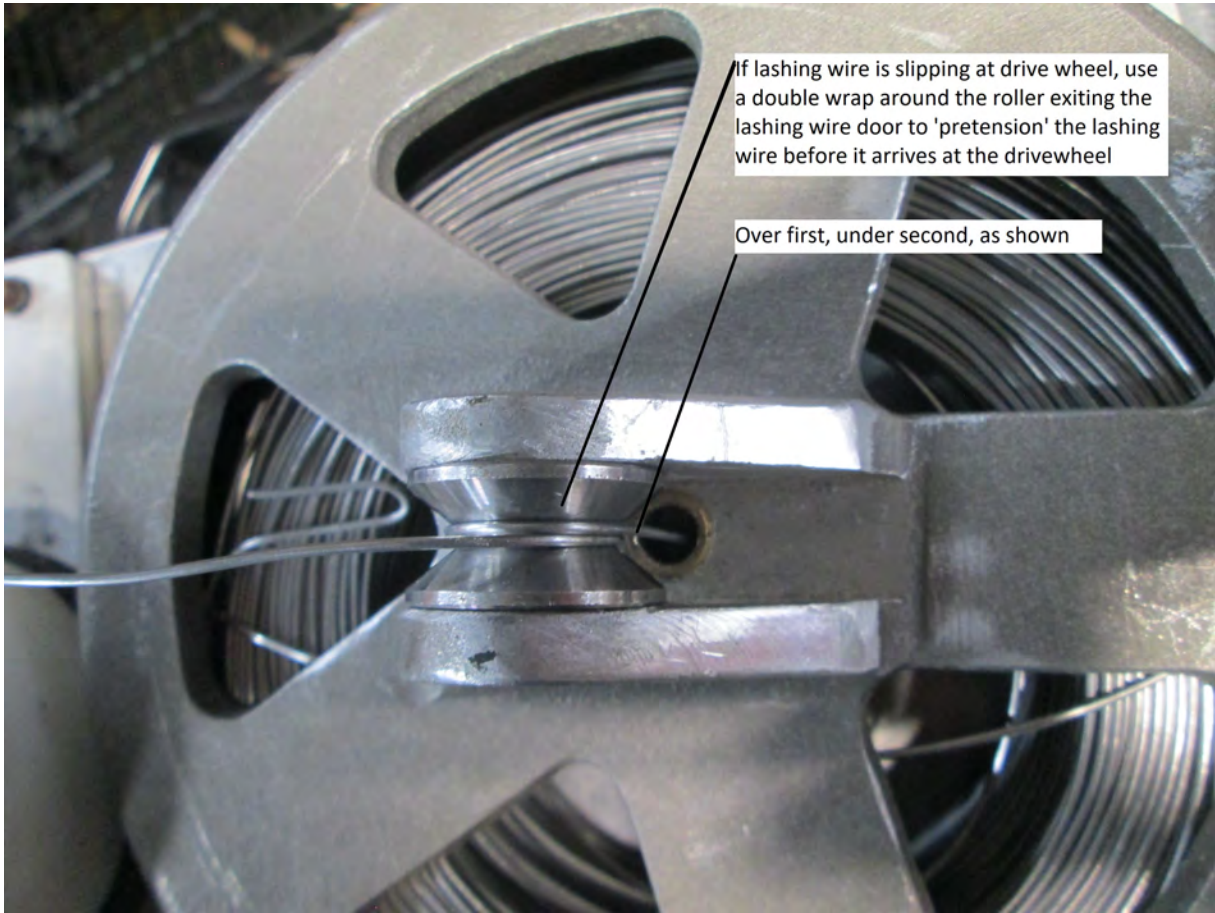
When using metallic wire, additional friction may be encountered, resulting in a higher pull force. If your model has rubber drive wheels, the lashing wire can be threaded in reverse orientation to reduce pull force, as shown:



Note: Alternate lasher shown, threading method is the same.

2f) Alternate threading method for wrap on aluminum wheels:
When galvanized or stainless lashing wire on aluminum hub wheels, in poor weather conditions, a double wrap around the roller at the lasher wire door may be used to add tension to the wire to ensure grip:





3. Setting the Front Gate:

To open the front gate, follow these steps:-

3a) Pull front cable roller until lock releases.



3b) Once the lock is released, swing roller completely open to clear the cable. This will engage the drum lock and keep the drum from rotating.

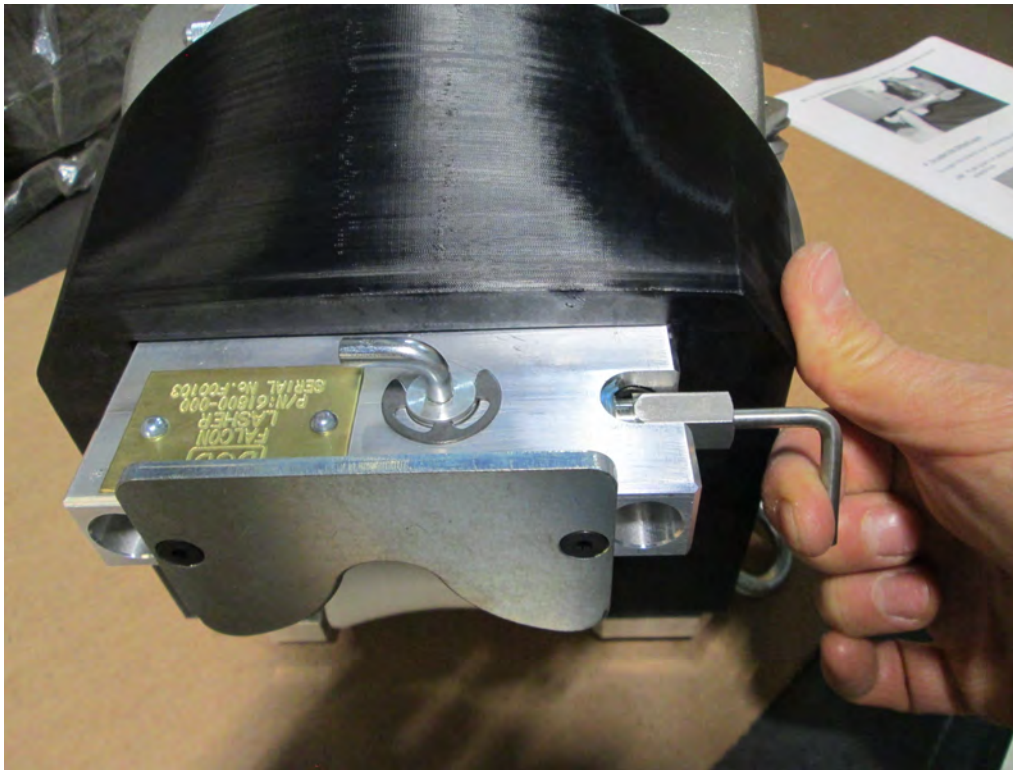


3c) To release drum lock, push front cable roller back to the closed position.

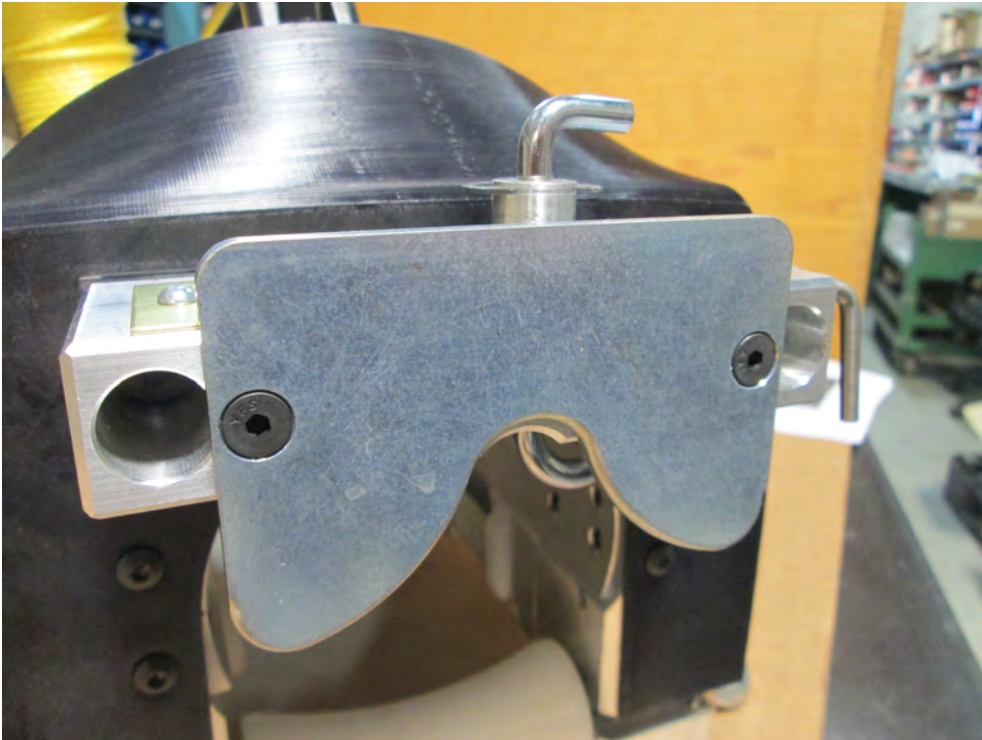
4. To open the Strand Lock:

To open the Strand Lock, follow these steps:-

4a) Pull the strand lock lever on the LH side of the strand lock. The center pin should drop down to the level of the retaining ring.



4b) To turn the strand lock out of the way, turn the top lever 180 degrees. The lever can be pulled up until it locks into position to lock the strand lock in position. Note that when overlapping, leave strand lock open.



Strand lock locked in open position

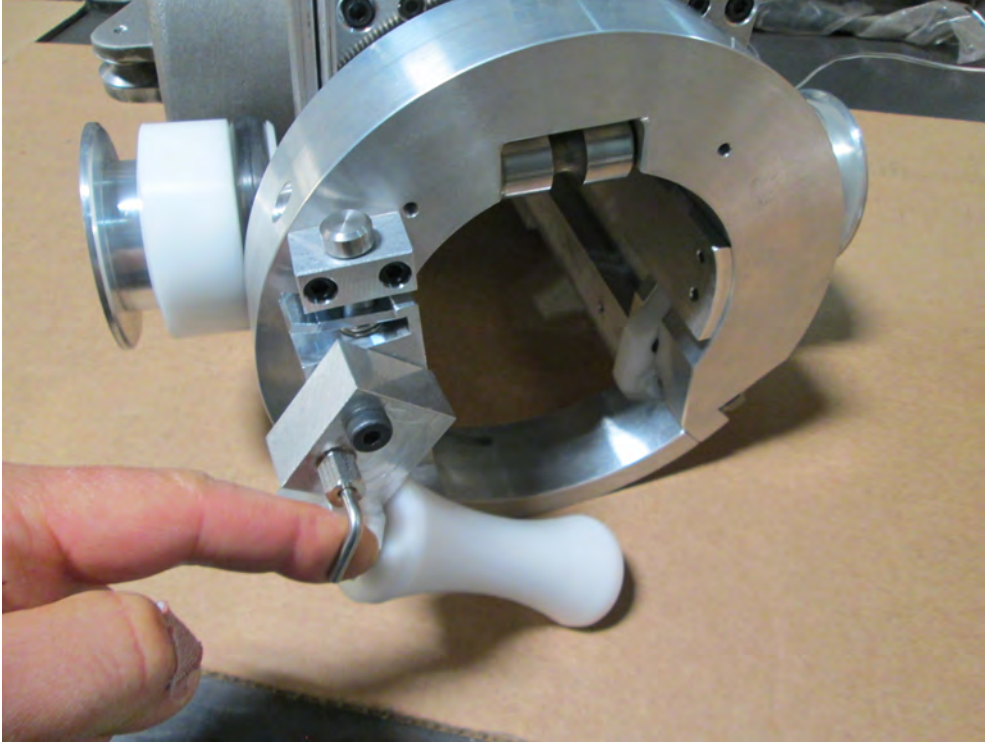


Strand lock locked in closed position.

5. Setting the Rear Gate:

To open rear gate, follow these steps:-

5a) To open rear gate simply pull the level and swing the roller to the side.

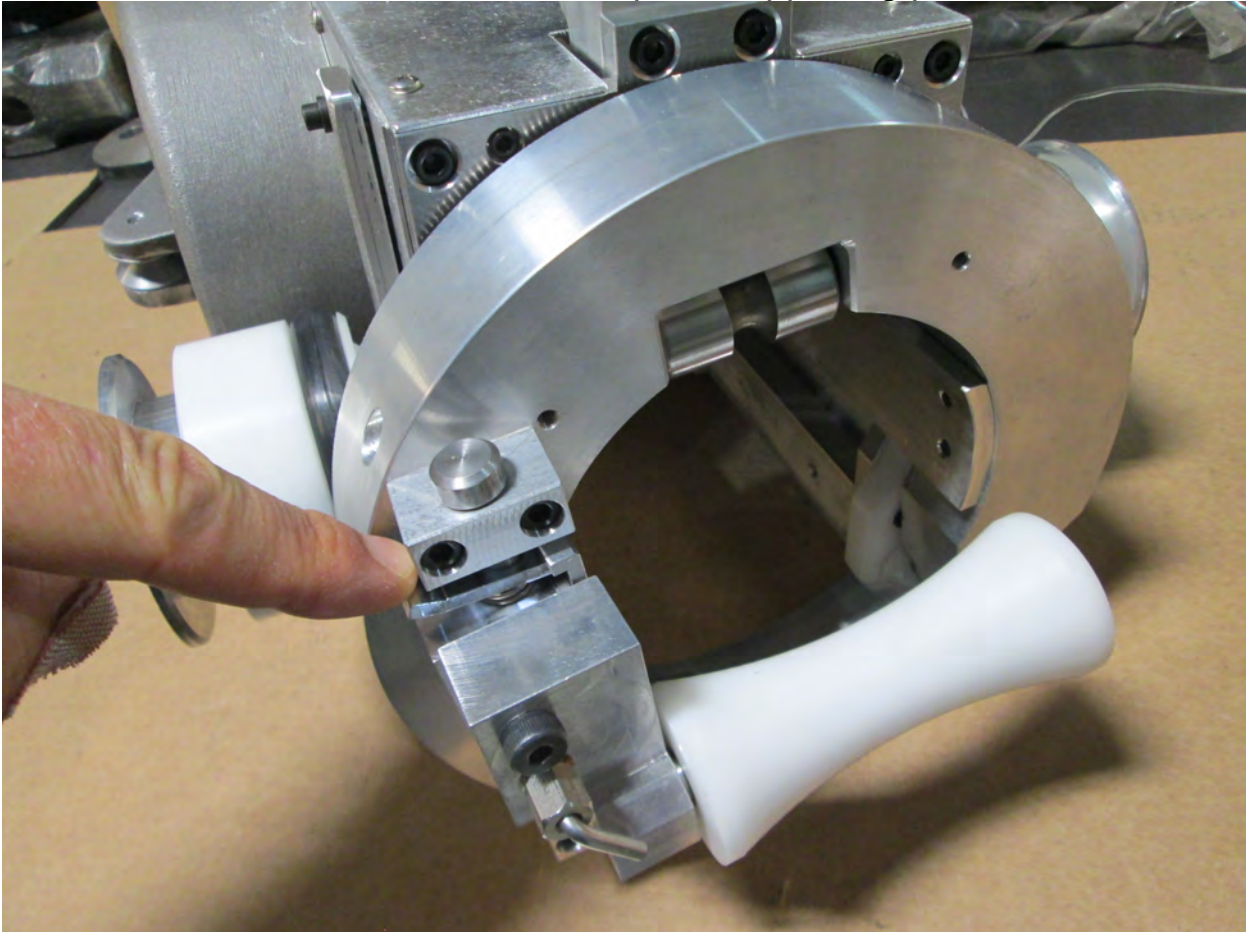


The pin will lock the roller in the open position:



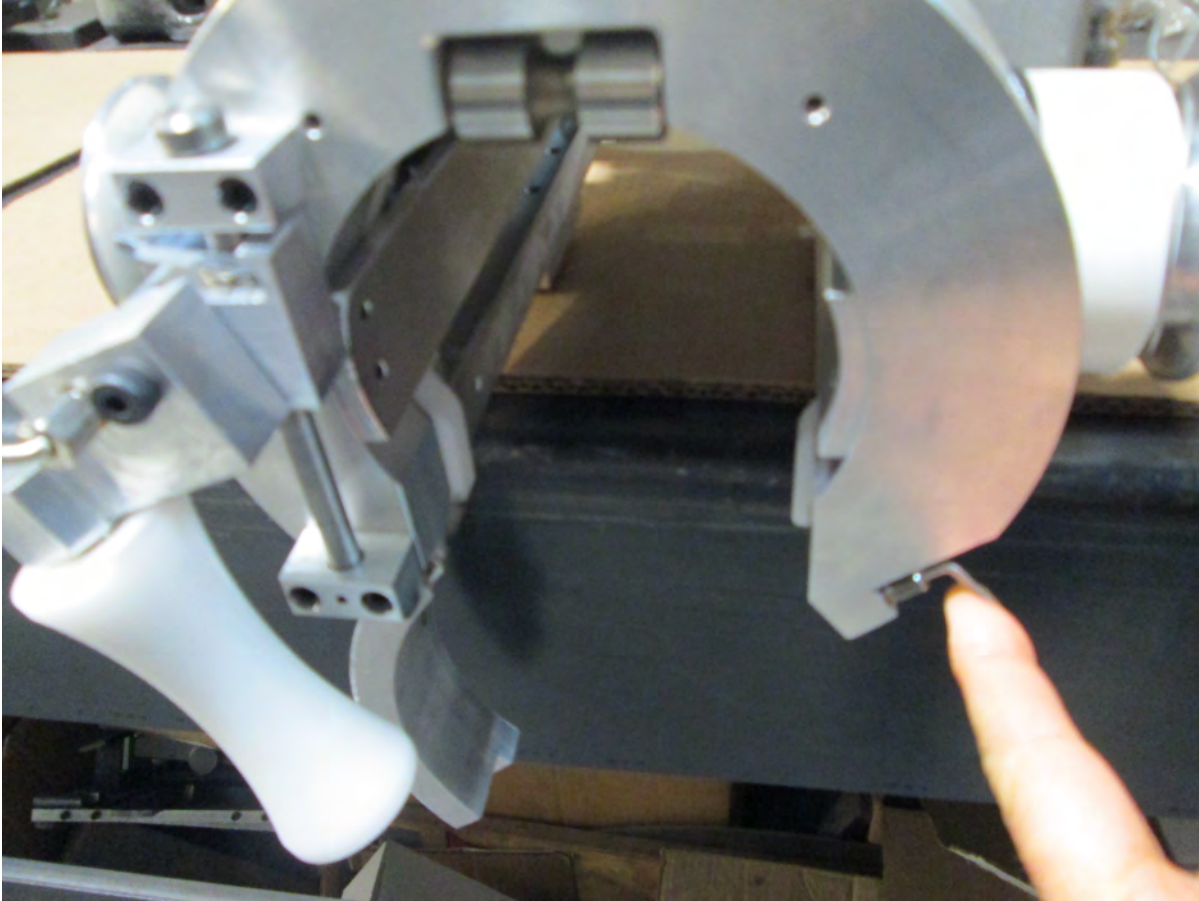
5b) To close rear gate, pull the lever again and swing into the closed position.

5c) To adjust the height of the rear gate roller up or down, push down on the side tab and the roller sub assembly to slide it on it's supporting post. Grab this same tab to slide the roller back up the supporting post:



To open the rear bearing race, follow these steps:-

5d) In order to insert a cable, the rear bearing race needs to be opened. Pull on the lever on the RH side of the machine and the bearing race will swing open:

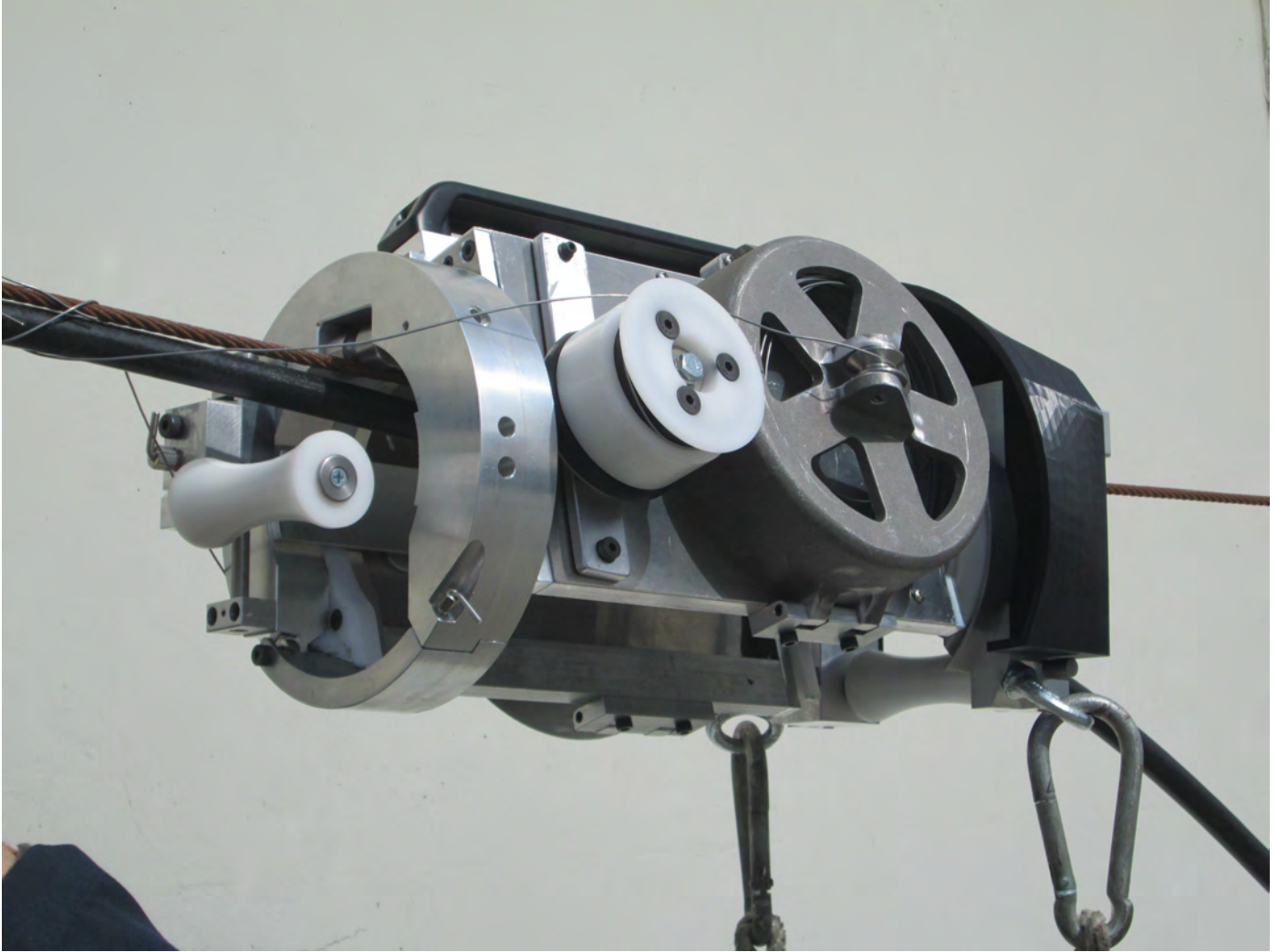


Manually swing the rear bearing race shut once the cable is in place, before operating the machine.

You are now ready to proceed to place the Falcon Lasher on the supporting strand. Position the cable in the lasher. Close front and rear gates and rear bearing race. Adjust rear roller to center and support the cable. Raise the clutch handle to allow additional wire to be pulled out of the machine without rotating the machine to tie off lashing wire to strand:



Attach towing rope to pulling rings on front of lasher.



6. Installing the overlap assembly front rollers

DCD offers the 61438-000 Overlash assembly for installing larger cables or overlapping smaller cables to existing bundles.



6a) To install, remove the bumper plate provided with your lasher by removing the two flat head screws on the front of the unit. Install the Overlash assembly in place of the bumper plate as shown so that the side rollers are in a vertical position at the front opening of the machine.

Troubleshooting

If lashing wire won't pay out:

This indicates the wire isn't threaded properly. Refer to "Threading the Lashing Wire".

NOTE: If you are unable to achieve positive drive, the lashing wire can be threaded twice around the drive wheel.

NOTE: If using metallic wire and machine is difficult to pull, the wire can be threaded in the opposite direction on the drive wheel. If using non-metallic lashing wire, always thread in the standard indicated fashion.

If wire jumps off drive wheel:

This also indicates the lashing wire is improperly threaded. Refer to "Threading the Lashing Wire".

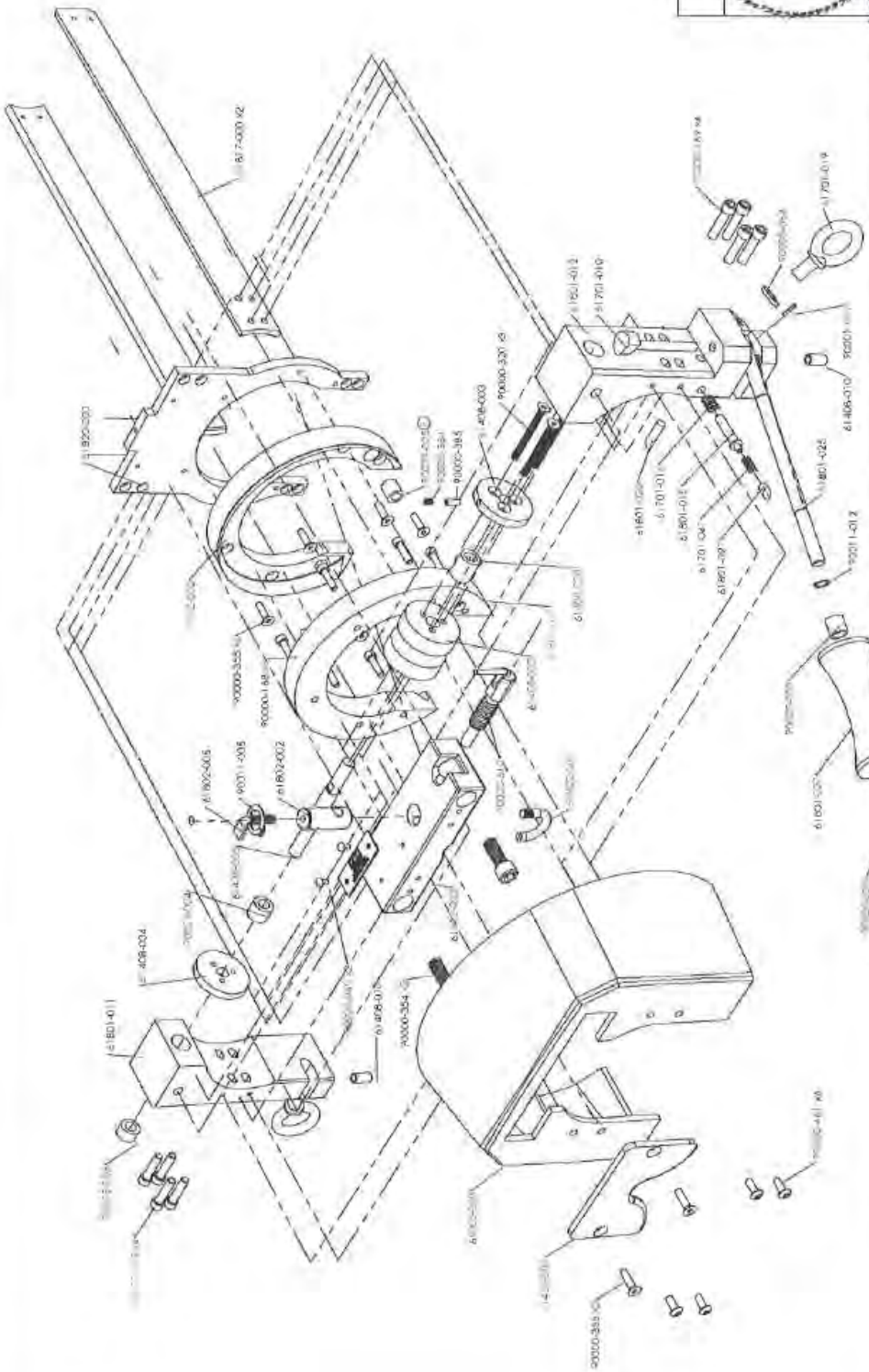
If lasher draws back and loosens lashing wire:

Just pull lasher forward. The wire will tighten.

If you need any parts or repairs:

Contact DCD Design & Manufacturing Inc. at 1-888-794-8357.





DCD PERMIT TO PRACTICE NUMBER 1000958

MATERIAL DESCRIPTION:

SEE BILL OF MATERIALS

- UNLESS OTHERWISE SPECIFIED
- REMOVE ALL BURRS & SHARP CORNERS
- MACHINE SURFACES TO 125 MICROINCHES OR BETTER
- DIMENSIONS IN INCHES
- FRACTIONS $\frac{1}{32}$
- XX .001"
- XXX .003"
- ANGLES $\pm 1/2^\circ$

DCD Design & Manufacturing Ltd.

FALCON LASHER

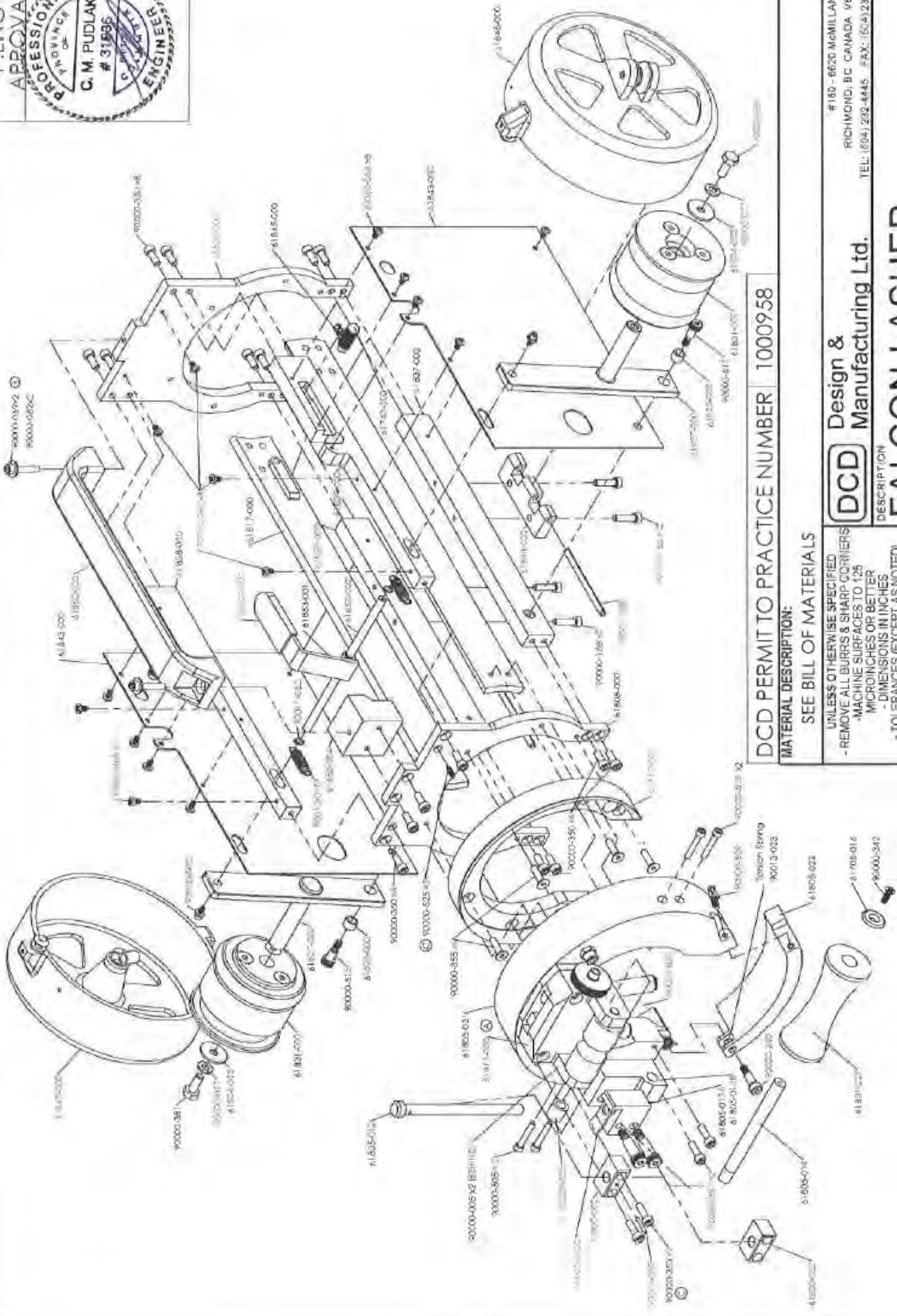
DRAWN BY: STEPHEN XU
 DATE: MAR 06, 2018
 APPROVED BY: [Signature]
 DATE: OCT 22 2021

DRAWING NUMBER: 61800-000
 REV: C

#180 - 6620 MACILLAN WAY
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REV.	DESCRIPTION	DATE
A	ADDED 61411-050, 61805-015, REMOVED 61803-027, 90029-030	2020-01-07
B	90000-069 WAS 90000-516, ADDED 90000-082, 90029-025 WAS 90029-030	2020-03-31
C	REMOVED 61705-001, 61805-004, 90000-517, 90000-350, ADDED 90000-353, 90000-525	2021-10-20

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DCD PERMIT TO PRACTICE NUMBER 1000958

MATERIAL DESCRIPTION:
SEE BILL OF MATERIALS

- UNLESS OTHERWISE SPECIFIED
- REMOVE ALL BURRS & SHARP CORNERS
- MACHINE SURFACES TO 125
- MICROINCHES OR BETTER
- DIMENSIONS IN INCHES
- TOLERANCES (EXCEPT AS NOTED)
- XXX ±0.01"
- XXXX ±0.003"
- ANGLES .1/2°

DCD Design & Manufacturing Ltd.
 #180 - 6620 McMillan Way
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 TEL: (604) 232-4445 FAX: (604) 232-4446

DESCRIPTION:
FALCON LASHER

DATE	MAR 06 2018
DRAWN BY	STEPHEN XU
APPROVED BY	[Signature]
REVISION	C

SCALE	SHEET 2 OF 2
DO NOT SCALE	2 OF 2
DRAWING NUMBER	61800-000

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