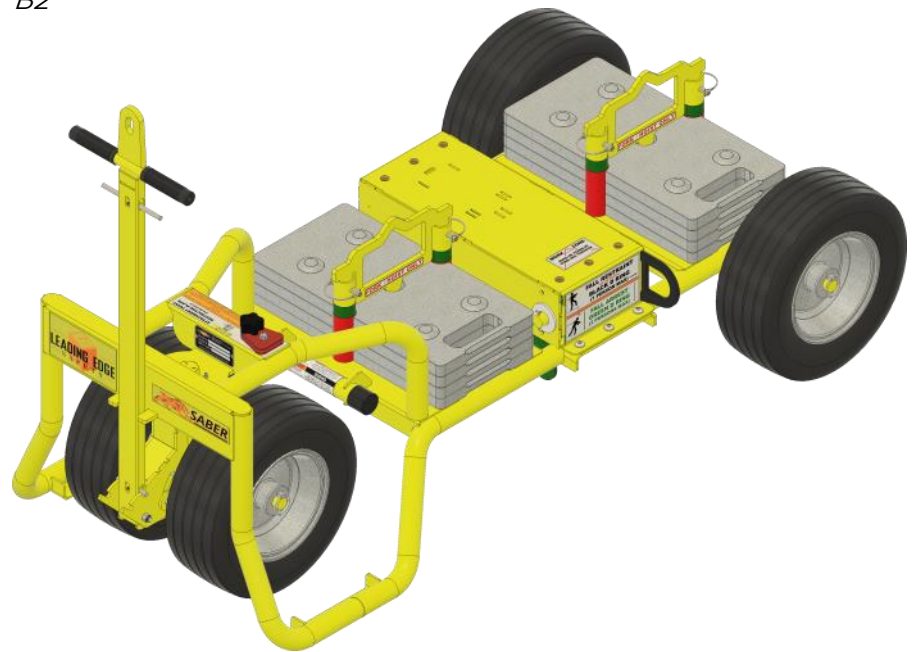




## INSTRUCTION MANUAL

# **SABER** PATENT # US 8240431 B2

**Mobile Fall Protection System**



## **Instruction Manual**

**\*WARNING\***

Serious injury or death may result if this product is used for purposes other than designed. The manufacturer provides the following instructions for the use and care of this equipment. It is the responsibility of the purchaser to understand and convey explicit instruction to each user. The AES Manufacturing/Leading Edge Safety SABER complies with the requirements of the Federal Occupational Safety and Health Administration (OSHA) when set up and used according to the manufacturers' instructions.

LIT ID: SBR-IM-23.0228

# SABER INSTRUCTION MANUAL

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## ***LEADING EDGE SAFETY, LLC*** **SABER Instruction Manual**

Published by Leading Edge Safety, LLC  
North Kansas City, MO

### **SABER COMPLETE MOBILE FALL PROTECTION SYSTEM**

Leading Edge Safety, LLC  
1345 Taney  
North Kansas City, MO 64116  
[www.LeadingEdgeSafety.net](http://www.LeadingEdgeSafety.net)

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# SABER INSTRUCTION MANUAL

## 1.0 Standards and Requirements

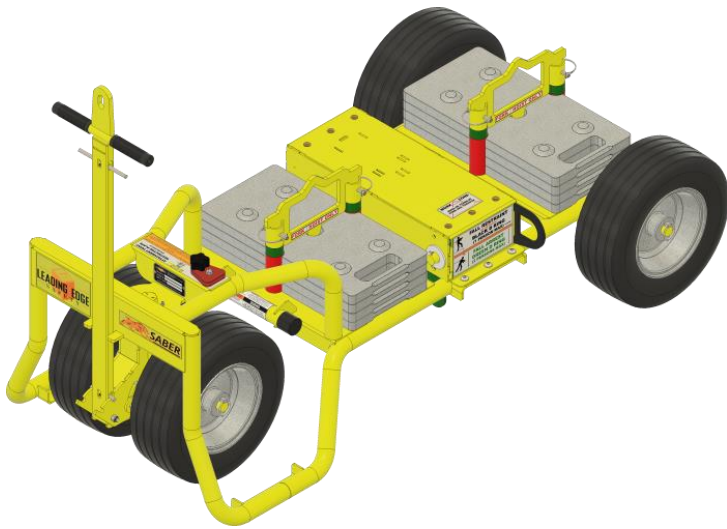
**1.1** The SABER, manufactured by Leading Edge Safety LLC, is a dynamic anchor designed to dissipate the energy generated from a fall event into the surrounding substrate and arrest a fall. The SABER is capable of supporting a Maximum Arresting Force (MAF) of 1,800lbs for up to (2) workers on approved substrates. Therefore, the SABER is an acceptable component of a complete active fall arrest system and satisfies those requirements specified in: ANSI/ASSE Z359.6-2009 "Specifications and Design Requirements for Active Fall Protection Systems."

**1.2** Let it be noted that this mobile fall protection anchorage unit shall only be used as part of a complete active fall protection system. Therefore, the following criteria must be met to satisfy ANSI/ASSE Z359.6-2009:

- 1.2a** Use of full body harness(s) in compliance with Z359.1-2007 "Safety Requirements for Personal Fall Arrest Systems, subsystems, and Components"
- 1.2b** Use of Lanyard(s) In compliance with Z359.13-2009 "Personal Energy Absorbers and Energy Absorbing Lanyards"
- 1.2c** Use of Connection(s) In compliance with Z359.12-2009 "Connecting Components for Personal Fall Arrest Systems"
- 1.2d** Use of Manufacturer's Recommendations; the SABER shall not be installed/positioned/utilized in a manner that violates the literature, instructions, technical bulletins or any other documentation produced by Leading Edge Safety LLC.
- 1.2e** Calculations by an authorized user (qualified person) to verify that the substrate, edge distance, free fall distance, and the number of workers attached to cart satisfies those requirements of ANSI Z359.6.
- 1.2f** The use of component(s) used in combination with the SABER that are not covered by ANSI/ASSE Z359 will not result in an acceptable Active Fall Protection System.

**1.3** In addition to satisfying Z359.6, the SABER is also in compliance with OSHA's "Fall protection systems criteria and practices" (CFR › Title 29 › Subtitle B › Chapter XVII › Part 1926 › Subpart M › Section 1926.502). Section 1926.502(d)(15) requires that an anchor either support 5,000 pounds per employee attached or is used as part of a complete personal fall arrest system. Note that this anchorage unit is never intended to withstand a force of 5,000 lbs per user, but rather to be used as part of a complete personal fall arrest system. Determining if this complete personal fall arrest system can maintain a safety factor of at least (2) will require an authorized user to verify the above criteria.

# SABER INSTRUCTION MANUAL



**SABER SBR-0000-23**  
MOBILE FALL PROTECTION SYSTEM

**MODEL# SBR-0000-23**

**2-PERSON FALL ARREST**  
**1-PERSON FALL RESTRAINT**

## **SABER RAPTOR RESCUE**

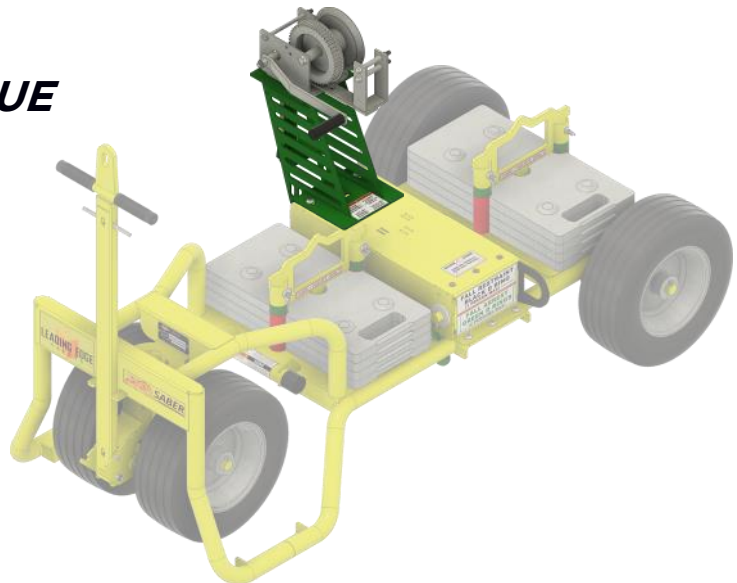
**RMS-SBR-0000-23**

FALL RESCUE RETRIEVAL SYSTEM

**MODEL# RMS-SBR-0000-23**

- 100 LF STAINLESS STEEL CABLE
- INCLUDES RETRIEVAL POLE

COMPATIBLE WITH ALL SABER MODELS



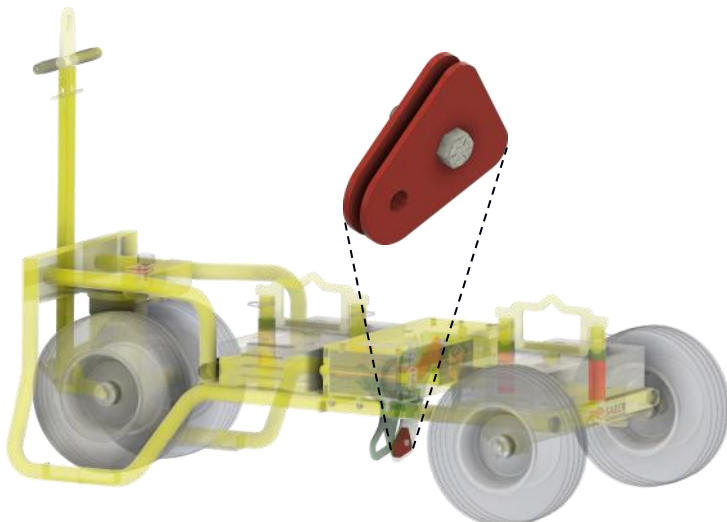
## **SABER ATTACHMENT POINT RESTRICTOR PLATE**

**APR-SBR-0000-23**

ATTACHMENT POINT RESTRICTOR PLATE

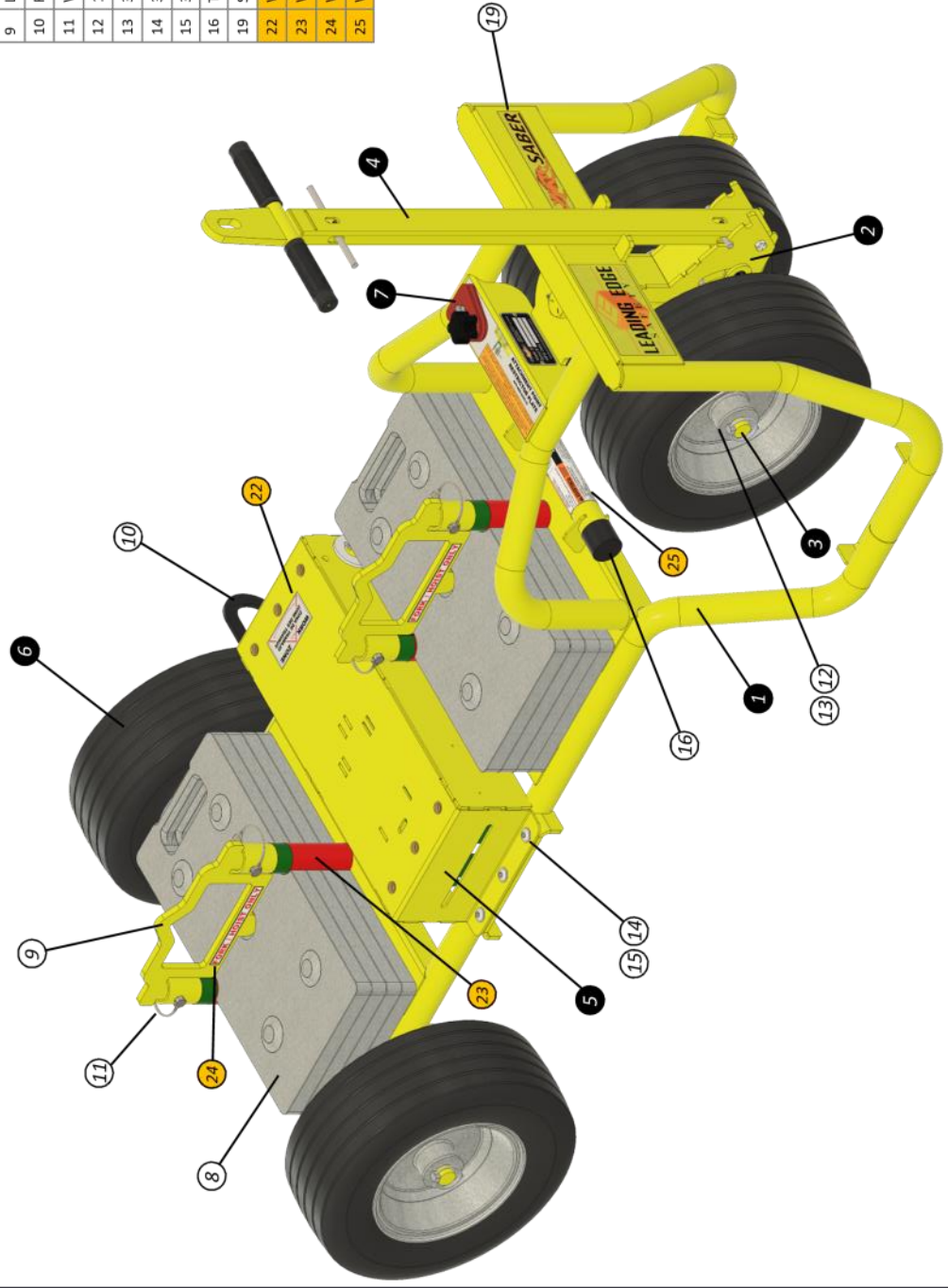
**MODEL# APR-SBR-0000-23**

COMPATIBLE WITH SABER MODELS  
LIMITS NUMBER OF ATTACHMENT POINTS  
WHEN THE SUBSTRATE REQUIRES A  
REDUCTION IN NUMBER OF USERS



# SABER INSTRUCTION MANUAL

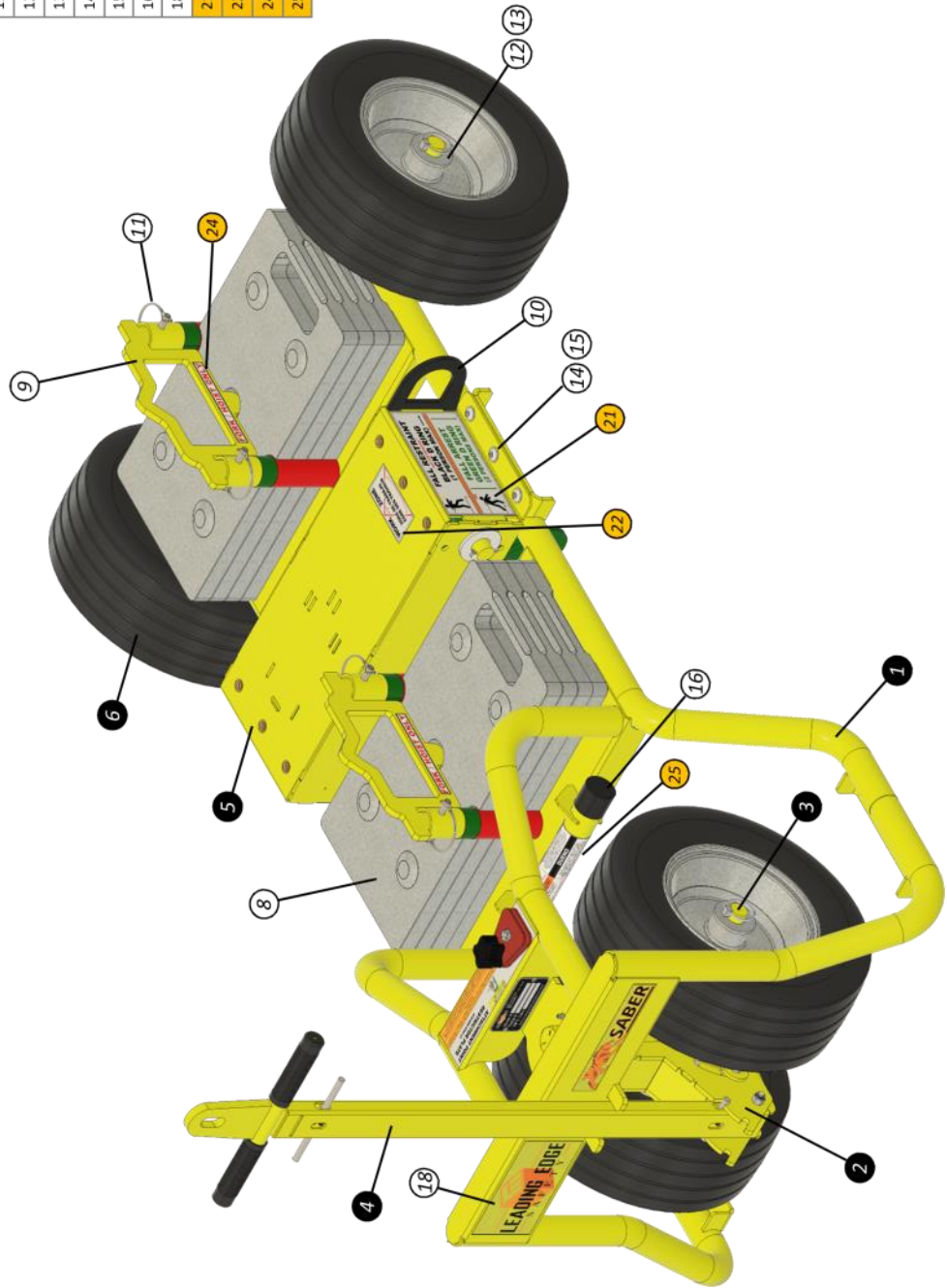
1	SABER FRAME ASSEMBLY	SBR-1000-23
2	FRONT AXLE MOUNT ASSEMBLY	SBR-2000-23
3	FRONT AXLE ASSEMBLY	SBR-3000-23
4	HANDLE ASSEMBLY	SBR-4000-23
5	SABER ENGAGEMENT BOX ASSEMBLY	DEBA-000-23
6	FLAT-FREE TIRE	T-18-8.50-8-SP
7	ATTACHMENT POINT RESTRICTOR PLATE	APR-SBR-0000-23
8	UNIVERSAL WEIGHT	UCW-000-23
9	LIFTING POINT/HOLD DOWN	SBR-5001-23
10	FALL RESTRAINT TIE OFF RING	SBR-5002-23
11	WIRE-LOCK CLEVIS PIN	SNAP-375-2250R
12	1" FLAT WASHER	W-1-FLT-ZC
13	3/16" x 1-1/4" LINC PIN	LP-187-1312
14	3/8-16 x 1 FLANGE HEAD SCREW	B-38[_375]16-01-ZC
15	3/16-16 NYLON-INSERT LOCK NUT	N-NL-38[_375]-16-ZC
16	TUBE CAP	VC-1625-1500
19	SABER DECAL LOGO DECAL	LAB-SBR-001-23
22	WARNING-WORK ZONE DECAL	LAB-GB-001-09
23	WARNING-WEIGHTS DECAL	LAB-SBR-002-23
24	WARNING-FORK HOIST DECAL	LAB-SBR-003-23
25	WARNING-INSTRUCTION DECAL	LAB-IB-002-09c





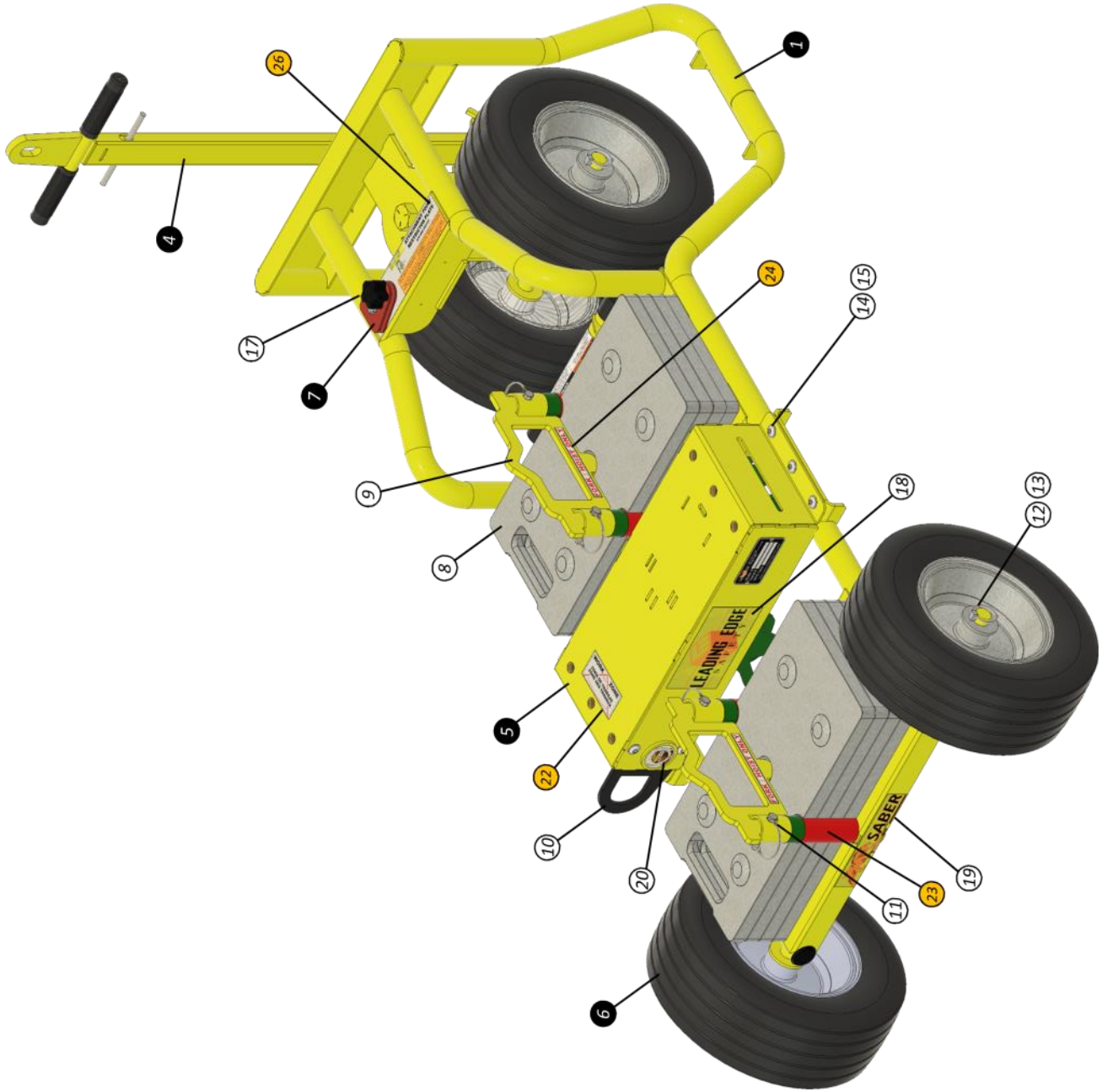
# SABER INSTRUCTION MANUAL

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14	3/8-16 x 1 FLANGE HEAD SCREW	B-38[_375]16-01-ZC
15	3/6-16 NYLON-INSERT LOCK NUT	N-NL-38[_375]-16-ZC
16	TUBE CAP	VC-1625-1500
18	LEADING EDGE LOGO DECAL	LAB-LE-001-23
21	WARNING-FALL RESTRAINT DECAL	LAB-CEB-001-23
22	WARNING-WORK ZONE DECAL	LAB-GB-001-09
24	WARNING-FORK HOIST DECAL	LAB-SBR-003-23
25	WARNING-INSTRUCTION DECAL	LAB-IB-002-09c



# SABER INSTRUCTION MANUAL

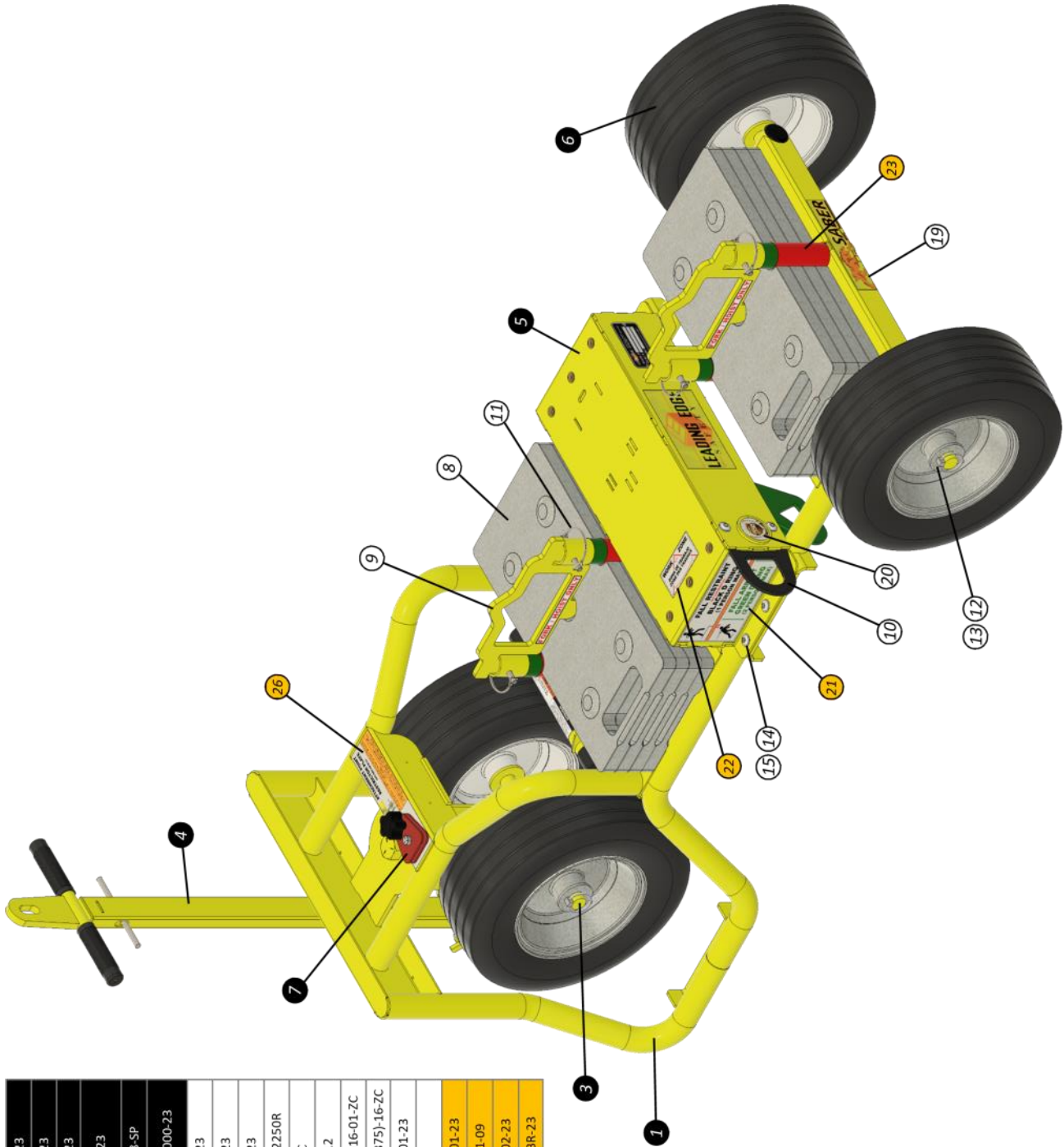
ENGLISH



1	SABER FRAME ASSEMBLY	SBR-1000-23
4	HANDLE ASSEMBLY	SBR-4000-23
5	SABER ENGAGEMENT BOX ASSEMBLY	DEBA-000-23
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15	3/6-16 NYLON-INSERT LOCK NUT	N-NL-38[_375]-16-ZC
17	5-LOBE KNOB - 3/8-16	5 LOBE KNOB
18	LEADING EDGE LOGO DECAL	LAB-LE-001-23
19	SABER DECAL LOGO DECAL	LAB-SBR-001-23
20	PATENT DECAL	LAB-PAT-1
22	WARNING-WORK ZONE DECAL	LAB-GB-001-09
23	WARNING-WEIGHTS DECAL	LAB-SBR-002-23
24	WARNING-FORK HOIST DECAL	LAB-SBR-003-23
25	WARNING-INSTRUCTION DECAL	LAB-JB-002-09c
26	WARNING-RESTRICTOR PLATE	LAB-APR-SBR-23



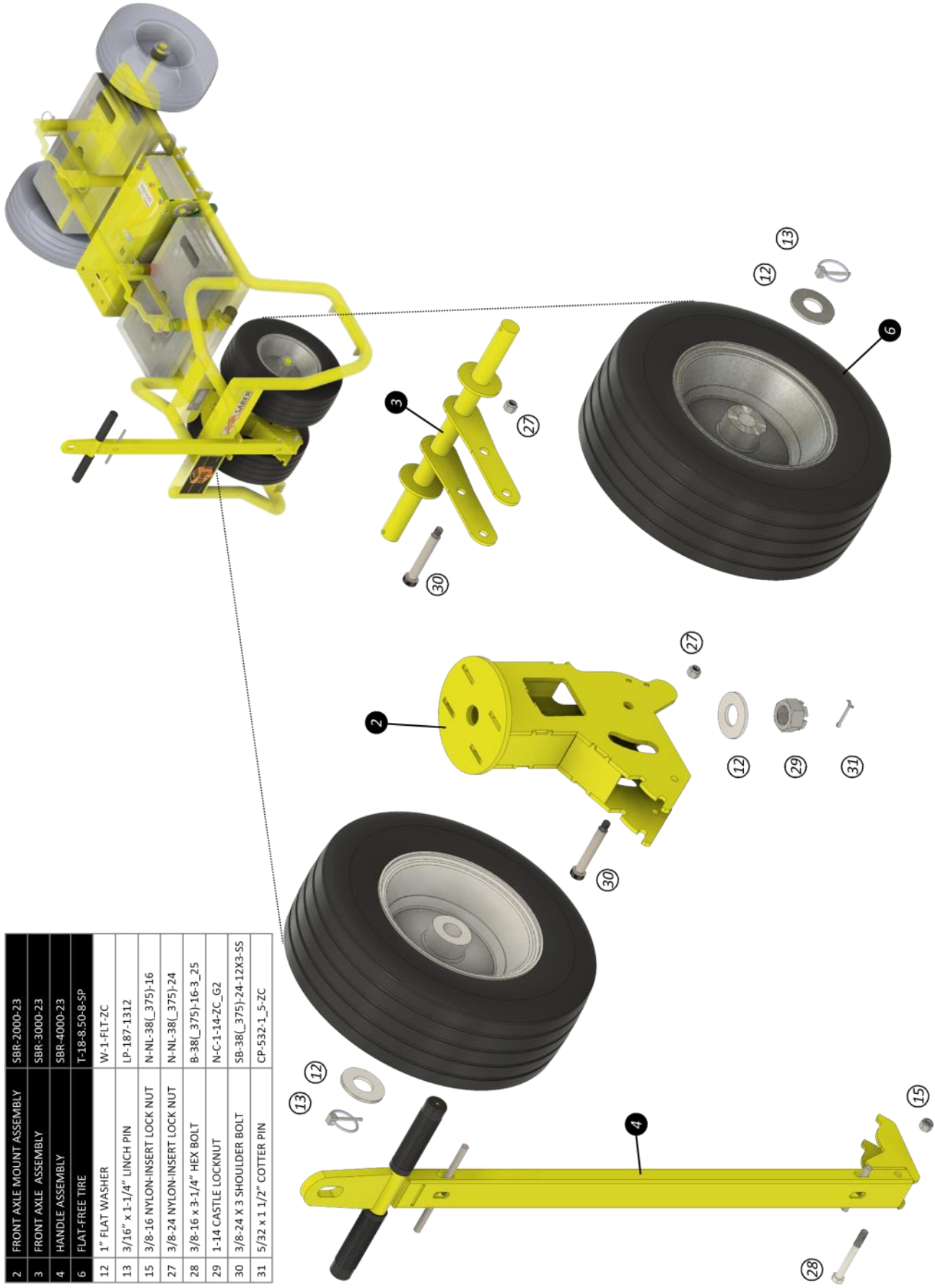
# SABER INSTRUCTION MANUAL



1	SABER FRAME ASSEMBLY	SBR-1000-23
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26	WARNING-RESTRICTOR PLATE	LAB-APR-SBR-23

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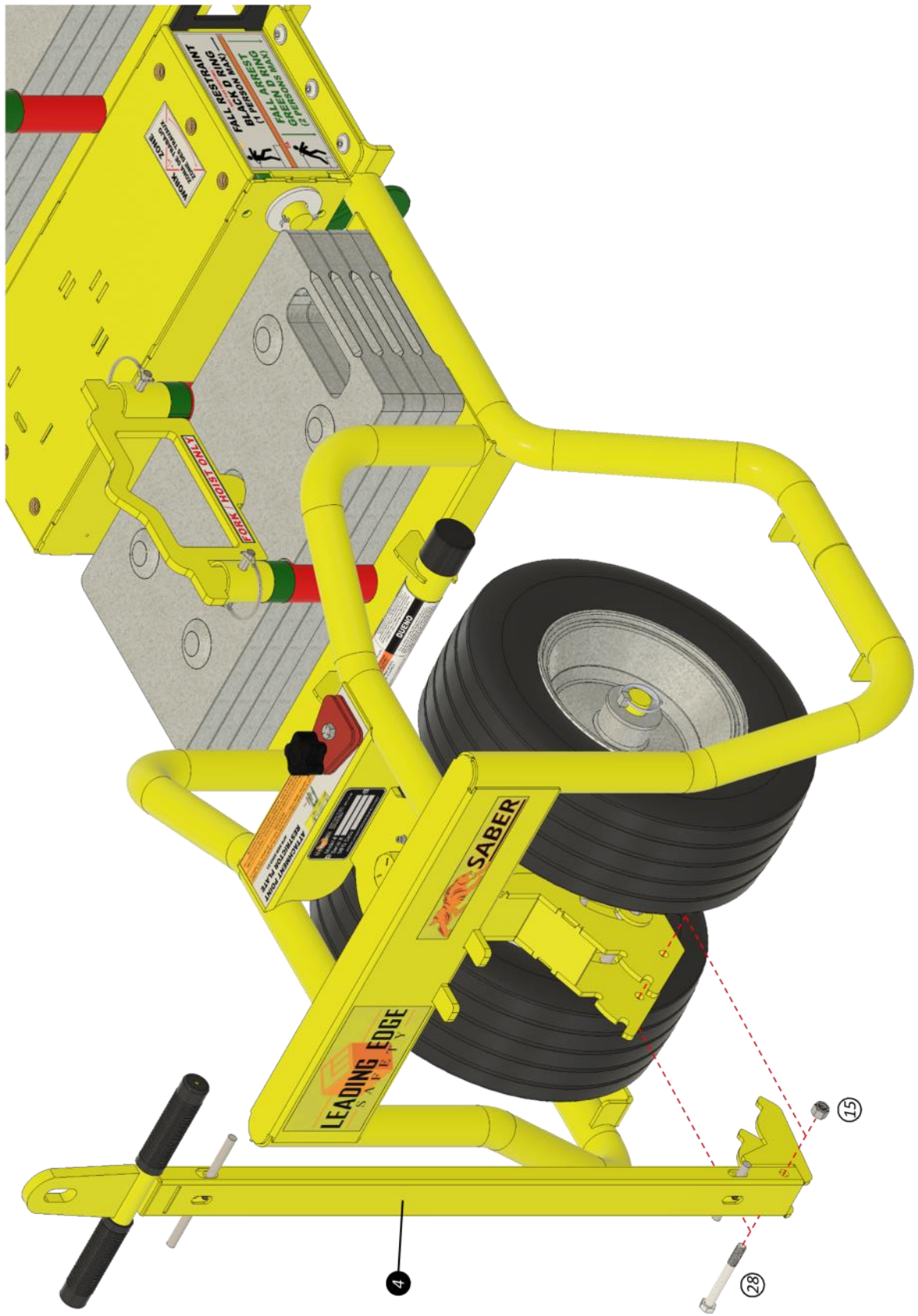
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2	FRONT AXLE MOUNT ASSEMBLY	SBR-2000-23
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13	3/16" x 1-1/4" LINC PIN	LP-187-1312
15	3/8-16 NYLON-INSERT LOCK NUT	N-NL-38[_375]-16
27	3/8-24 NYLON-INSERT LOCK NUT	N-NL-38[_375]-24
28	3/8-16 x 3-1/4" HEX BOLT	B-38[_375]-16-3_25
29	1-14 CASTLE LOCKNUT	N-C-1-14-ZC_G2
30	3/8-24 X 3 SHOULDER BOLT	SB-38[_375]-24-12X3-SS
31	5/32 x 1 1/2" COTTER PIN	CP-532-1_5-ZC

# SABER INSTRUCTION MANUAL

## SABER HANDLE ATTACHMENT



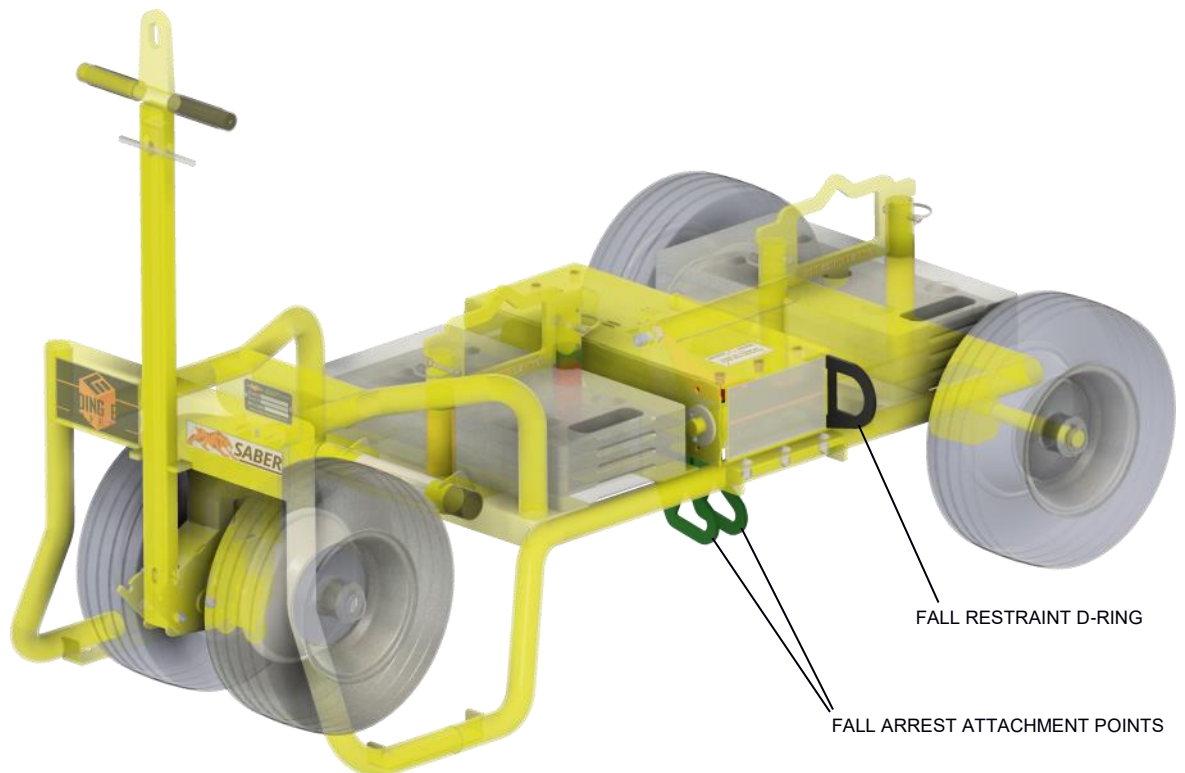
4	HANDLE ASSEMBLY	SBR-4000-23
15	3/8-16 NYLON-INSERT LOCK NUT	N-NL-38(.375)-16
28	3/8-16 x 3-1/4" HEX BOLT	B-38(.375)-16-3_25



# SABER INSTRUCTION MANUAL

## 2.0 APPLICATIONS

- 2.1 The SABER is designed to be used as an anchorage as part of a complete mobile fall protection system. The SABER may be used where worker mobility and fall protection are required. See [WWW.OSHA.GOV](http://WWW.OSHA.GOV) for all regulations and standards.
- 2.2 The SABER allows for up to two workers to be tied-off simultaneously for fall arrest to the *Fall Arrest Attachment Points* and an additional one worker tied-off simultaneously for fall restraint to the *Fall Restraint D-Ring*. See the following definitions (Section 3.0):



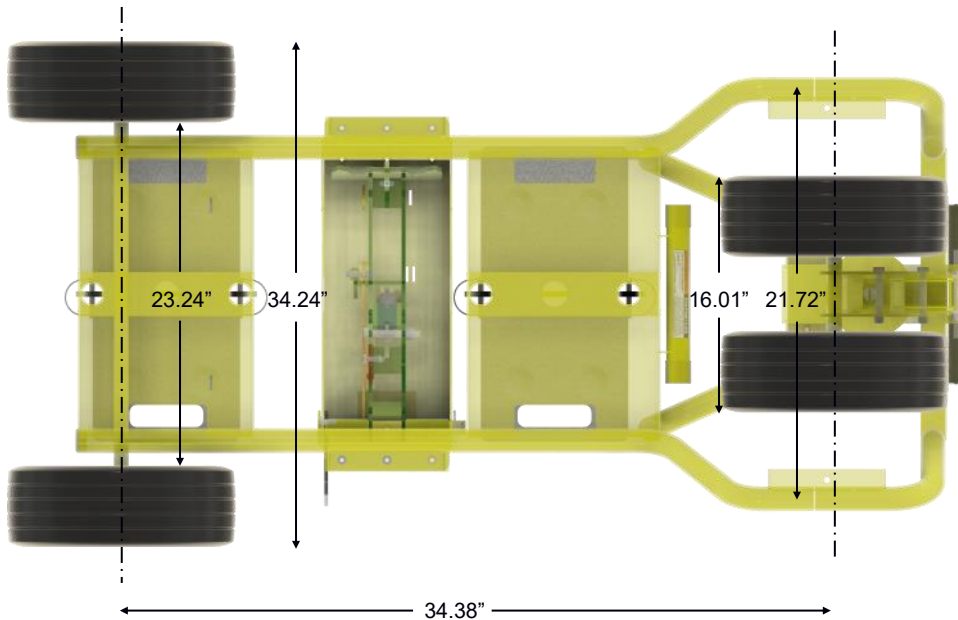
## 3.0 DEFINITIONS:

- 3.1 **Fall Restraint System** – A fall restraint system (FRS) *prevents* the user from falling. The system is comprised of a body harness along with an anchorage, connectors and other necessary equipment. The components typically include a lanyard and also may include a lifeline and other devices. The SABER can be used as an anchorage in a fall restraint system for up to one worker.
- 3.2 **Personal Fall Arrest System** – A personal fall arrest system (PFAS) arrests a fall *after* a fall has begun. The system is comprised of an anchorage, connectors, and a body harness and may include a deceleration lifeline, or suitable combinations. Note that a PFAS does NOT prevent a fall from occurring. The SABER can be used as an anchorage in a PFAS for up to two workers. A Personal Fall Arrest System must meet the following OSHA requirements:
- Limit maximum arresting force on an employee to 1,800 pounds when used with a body harness;
  - Be rigged so that an employee can neither free-fall more than 6 feet (1.8 meters) nor contact any lower level;
  - Bring an employee to a complete stop and limit maximum deceleration distance an employee travels to 3.5 feet (1.07 meters); and
  - Have sufficient strength to withstand twice the potential impact energy of an employee free-falling a distance of 6 feet (1.8 meters) or the free-fall distance permitted by the system, whichever is less.
- 3.3 **Anchorage** — An anchorage is a secure point of attachment for lifelines, lanyards, or deceleration devices. The SABER can be used as an anchorage.

# SABER INSTRUCTION MANUAL

## 4.0 USE AND LIMITATIONS

**4.1 LOAD REQUIREMENTS**—Before the SABER is hoisted to any roof surface, the user must verify that the deck assembly can accommodate the live load requirements of the SABER.



Approximate Unit Weight: 643 lbs  
 Tire Footprint: 2.5" x 4.75"  
 Approximate Weight per Tire: 160.75 lbs  
 Approximate Pounds per SqIn: 13.54 psi

## 4.2 APPROVED SUBSTRATES:

BUILT-UP ROOFING (BUR) <sup>4</sup> THERMOPLASTIC POLYOLEFIN (TPO) <sup>4</sup> POLYVINYL CHLORIDE (PVC) <sup>4</sup> BUILT-UP ROOFING (BUR) AND GRAVEL <sup>4</sup> ROOF COATINGS <sup>4</sup>	MODIFIED BITUMEN <sup>4</sup> ETHYLENE PROPYLENE DIENE MONOMER (EPDM) <sup>4</sup> BALLASTED SINGLE-PLY MEMBRANES <sup>4</sup> INVERTED ROOF MEMBRANE ASSEMBLY (IRMA) <sup>4</sup>
PLYWOOD DENSDECK <sup>® 3,6</sup> POLYISOCYANURATE (ISO) <sup>3,6</sup> EXTRUDED POLYSTYRENE (XPS) <sup>3,6</sup> INSULATING LIGHTWEIGHT CONCRETE	HIGH DENSITY FIBERBOARD <sup>3,6</sup> GYPSUM BOARD <sup>3,6</sup> EXPANDED POLYSTYRENE (EPS) <sup>3,6</sup> SPRAY-APPLIED POLYURETHANE <sup>3,6</sup>
METAL DECK (22GA AND 20GA) STRUCTURAL LIGHTWEIGHT CONCRETE <sup>1,2,8</sup> TOPSOIL—COMPACTED ASPHALT PAVEMENT PANELIZED SLAB FORMWORK <sup>7,8</sup>	METAL DECK (18GA) <sup>1,2,5,6,8</sup> CONCRETE DECK <sup>1,2,8</sup> (4000-9000psi) GYPSUM DECK GRAVEL—COMPACTED

FLAT SURFACES AND UP TO 2:12 SLOPE.

### **DO NOT USE THE SABER ON THE FOLLOWING SUBSTRATES:**

- ICE
- SNOW
- TECTUM DECK<sup>5</sup>
- METAL DECKS LESS THAN 22GA<sup>5</sup> OR GREATER THAN 18GA<sup>5,6</sup>

- 1 REDUCE MAXIMUM NUMBER OF USERS IN FALL ARREST TO 1 (ONE).
- 2 REDUCTION IN NUMBER OF USERS IN FALL ARREST DOES NOT APPLY IF AN APPROVED INSULATION(S) THICKNESS IS 3.875" OR GREATER. FIG 4-1
- 3 WHEN MECHANICALLY FASTENED OR ADHERED TO AN APPROVED SUBSTRATE.
- 4 WHEN USED AS PART OF A COMPLETE ROOF ASSEMBLY.
- 5 SUBSTRATE IS ALLOWABLE WHEN COVERED WITH 3/4" PLYWOOD SECURED WITH A MINIMUM OF EIGHT (8) FASTENERS. FIG 4-2
- 6 SUBSTRATE IS ALLOWABLE WHEN TOTAL INSULATION THICKNESS IS GREATER THAN 3.875" OR USED WITH AN APPROVED METAL DECK. FIG 4-2
- 7 FALL RESTRAINT ONLY—MAXIMUM 1 USERS
- 8 UTILIZE ATTACHMENT POINT RESTRICTOR PLATE TO ELIMINATE OR LIMIT THE NUMBER OF USERS IN FALL ARREST

*DensDeck<sup>®</sup> is a registered trademark of Georgia-Pacific Gypsum, LLC.*



# SABER INSTRUCTION MANUAL

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FIG. 4-1

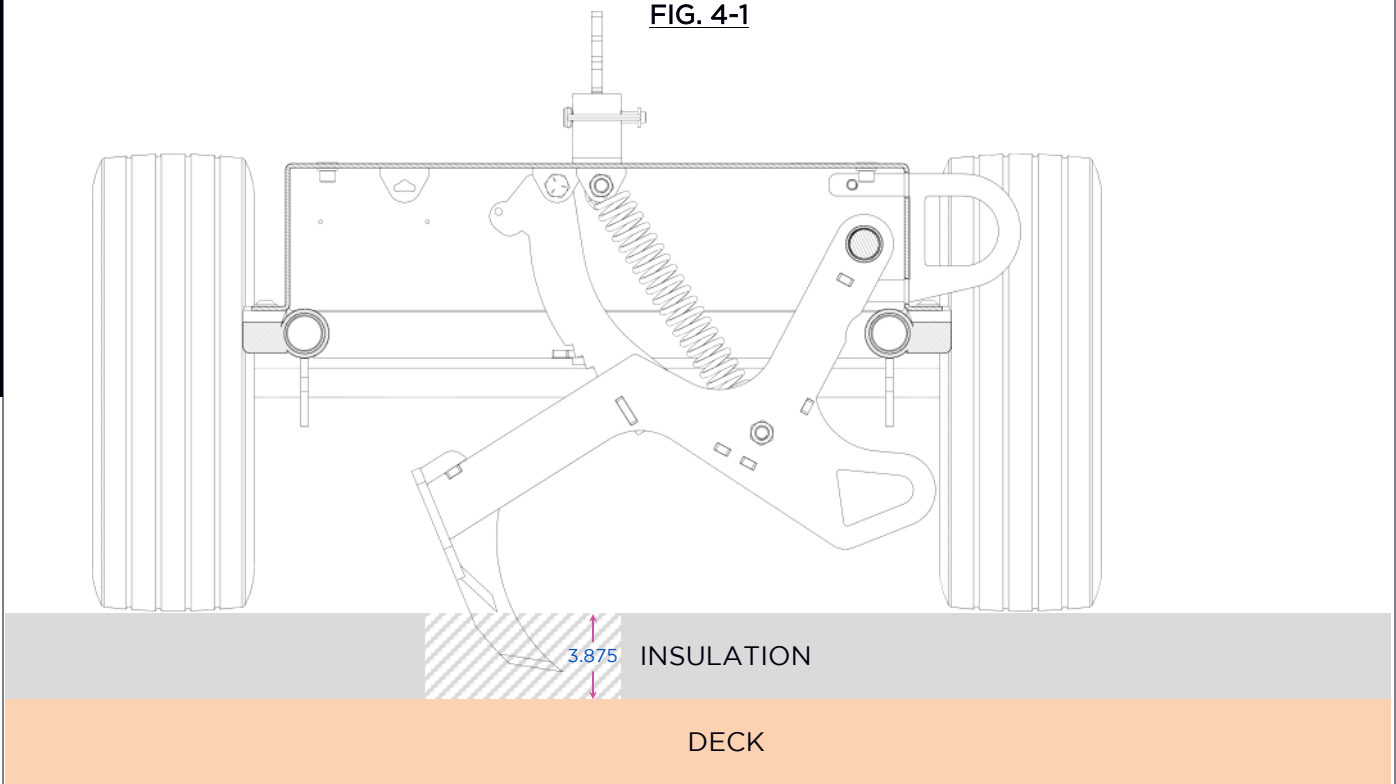
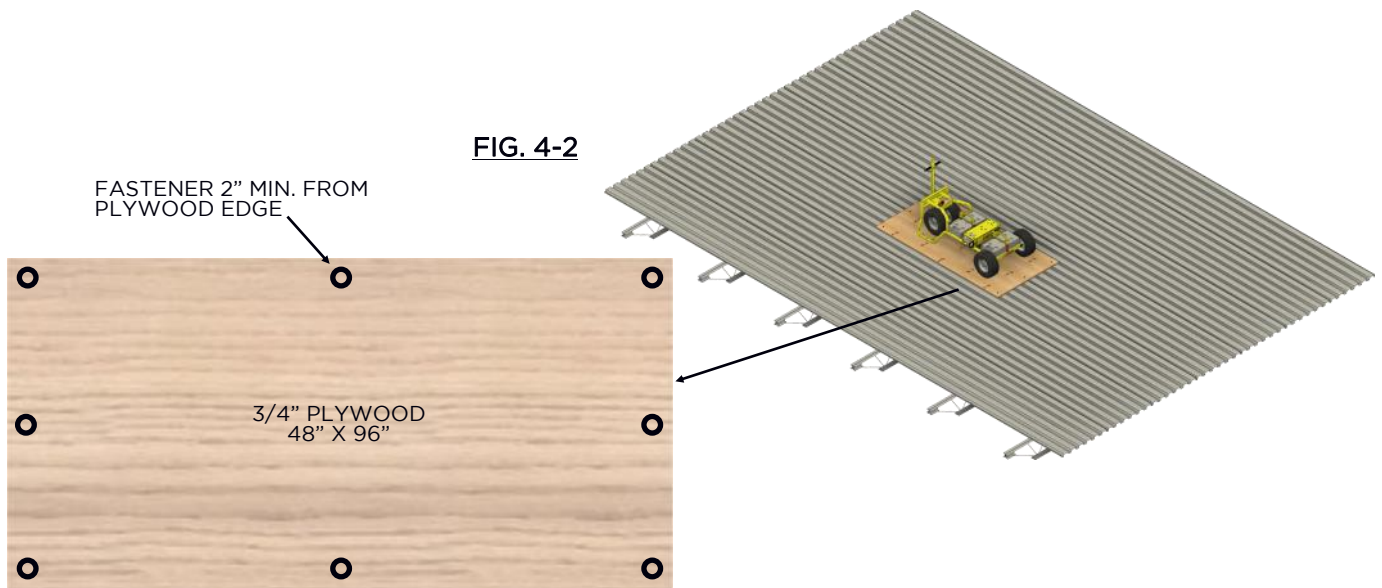


FIG. 4-2



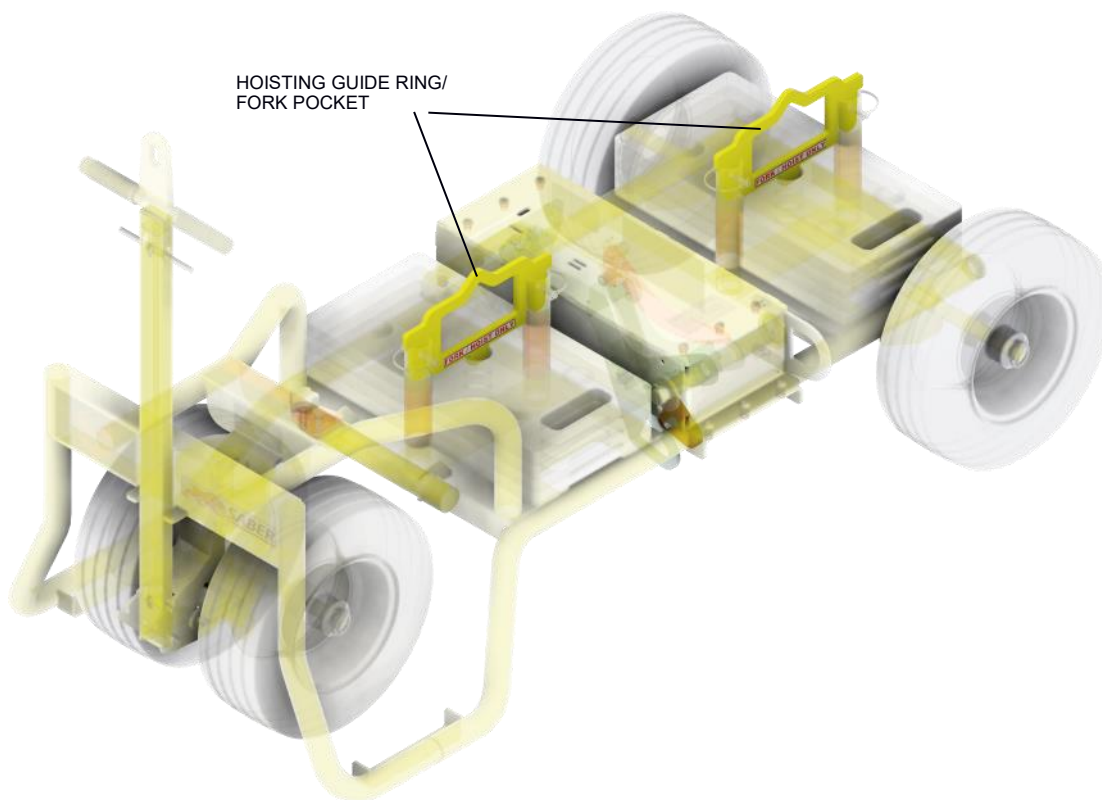
**4.3 CAPACITY:** The SABER Mobile Fall Protection System is designed for a maximum of two persons for fall arrest and one for fall restraint with a combined weight (clothing, tools) of no more than 310 lbs. per person. No more than three persons may be connected to the SABER at any time.

**IMPORTANT:** DO NOT begin work for which fall protection is required until the SABER unit and corresponding Fall Restraint System (FRS) or Personal Fall Arrest Systems (PFAS) have been completely installed. Do NOT disable any part of the FRS or PFAS, including the SABER unit, or reposition the SABER unit, until work for which fall protection is required has ceased.

# SABER INSTRUCTION MANUAL

## 5.0 HOISTING OR LIFTING

- 5.1 Loads may slip or fall if the SABER is not hoisted or lifted properly and may result in injury or death.
- 5.2 Never hoist or lift the SABER if any of the hoisting rings/fork pockets are damaged.
- 5.3 Never hoist or lift the SABER with unsecured materials on the unit.
- 5.4 Ensure any auxiliary equipment is properly and securely attached to the SABER before hoisting or lifting.
- 5.5 Ensure Hoisting Guide Ring/Fork Pockets are secured with Wire-Lock Clevis Pins before hoisting or lifting.
- 5.6 The SABER shall be hoisted or lifted following good industry practices, State and Federal Regulations, and hoisting and lifting equipment manufacturer's guidelines.
- 5.7 The SABER was designed to be hoisted by a crane or lifted by a forklift and is equipped with dual purpose hoisting guide rings/fork pockets.



## 6.0 GENERAL SAFETY

- 6.1 **USE COMMON SENSE!** Most accidents can be avoided by using common sense and focusing on the job at hand.
- 6.2 The SABER should not be used by persons whose ability or alertness is impaired by fatigue, intoxication, prescription or illegal drugs, or any other physical or mental cause that may expose the user or others to injury.
- 6.3 Always wear proper Personal Protective Equipment.
- 6.4 Keep hands and feet clear of moving parts including the Engagement Arm.
- 6.5 Do not use the equipment near electrical lines.
- 6.6 Do not allow passengers to ride on the safety cart.
- 6.7 Do not use on wet, slippery or icy substrates.

# SABER INSTRUCTION MANUAL

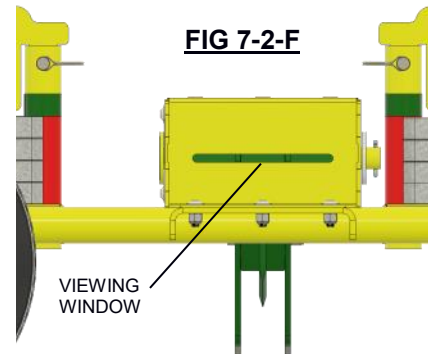
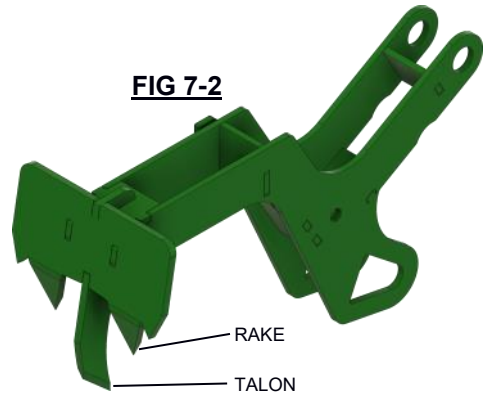
## 6.0 GENERAL SAFETY (Continued)

- 6.8 Only use the SABER on substrates and assemblies for which it has been tested. (Reference Sect 4.2 Approved Substrates)
- 6.9 Always lower the unit using the locking handle so the frame is resting on the substrate when not in use.
- 6.10 Always use caution and common sense when moving the unit. Additional workers may be needed to safely move the unit when additional materials, tools or equipment have been added to the unit.

## 7.0 BEFORE EACH USE

- 7.1 Before using this unit, a rescue plan and procedure in accordance with OSHA Standards must be in place to ensure prompt rescue in the event of a fall.
- 7.2 Inspect the unit for any damage. *A maintenance log has been provided in this manual that may be copied and used to track inspections and damage.*

- 7.2.A Check for loose, bent or damage parts, including the talon and rake tips of the engagement arm. FIG 7-2
- 7.2.B Check welded connections for visible distortion, cracks or other damage.
- 7.2.C Check Tie-off Ring for distortion or damage.
- 7.2.D Ensure all safety labels are present and fully legible. (Reference parts list pages 5-8)
- 7.2.E Check for corrosion on entire unit.
- 7.2.F Ensure the Engagement Arm Locking Mechanism is in the proper spring loaded position using the viewing window. FIG 7-2-F
- 7.2.G **DO NOT USE DAMAGED EQUIPMENT OR EQUIPMENT THAT HAS BEEN MODIFIED.**

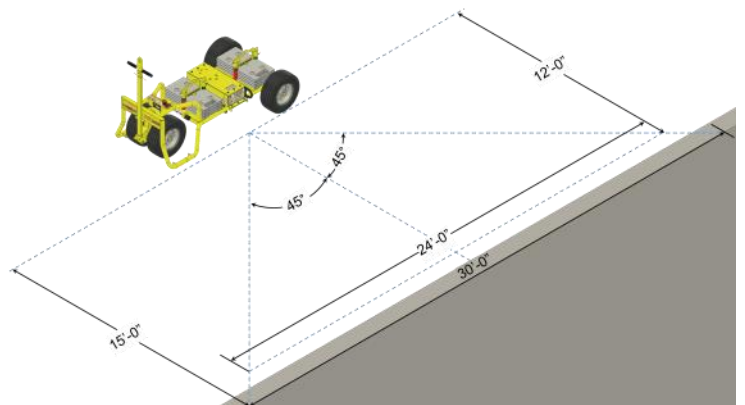


## 8.0 POSITIONING THE UNIT

- 8.1 Verify that the substrate the unit is to be used on is acceptable (Reference Sect 4.2 Approved Substrates) and the entire working surface has the strength and structural integrity to safely support both the workers and the unit.
- 8.2 Position the unit with the Fall Arrest Attachment Point side 12' - 15' away and parallel to the working edge to maximize the work zone. FIG 8-2a

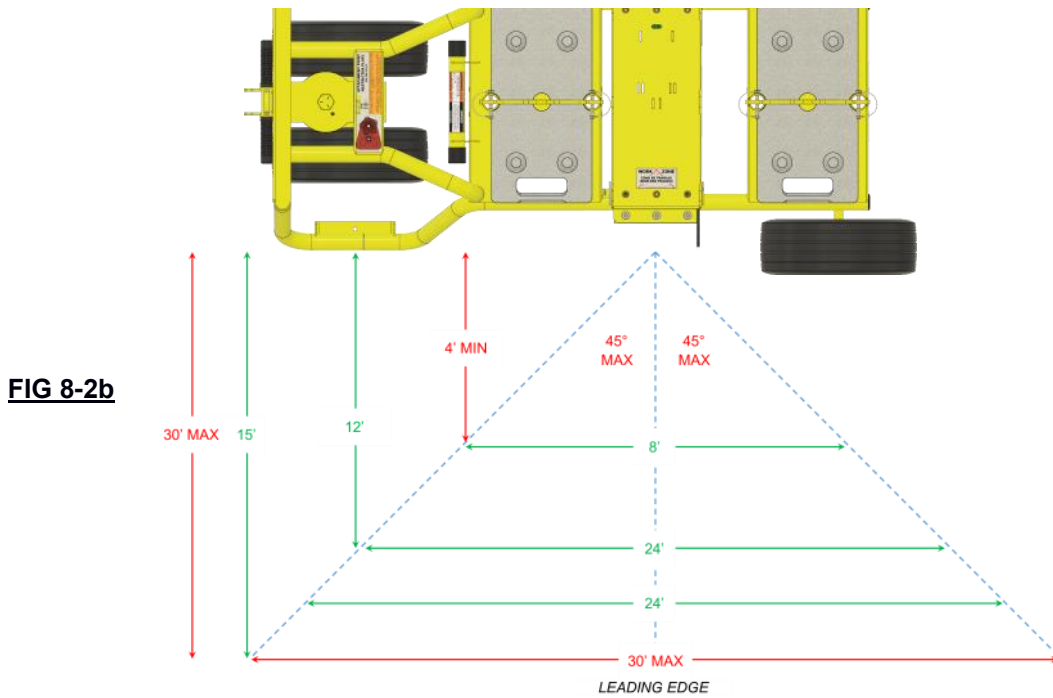
The unit may be used a minimum of 4' from the leading edge, maintaining a maximum work zone of 45° or 2' from the center of the attachment point. FIG 8-2b

The unit may be used a maximum of 30' from the leading edge, however the work zone may not exceed 15' from the center of the attachment point. FIG 8-2b

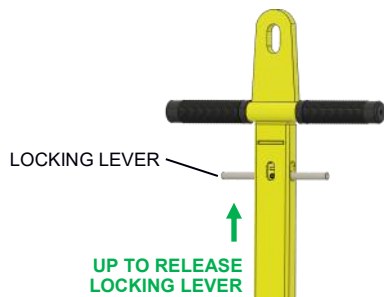


# SABER INSTRUCTION MANUAL

## 8.0 POSITIONING THE UNIT (Continued)



**8.3** Once the unit is properly positioned, ensure front axle is perpendicular to the leading edge, the handle is vertical to lock the front axle and lower the frame to the substrate. FIG 8-3

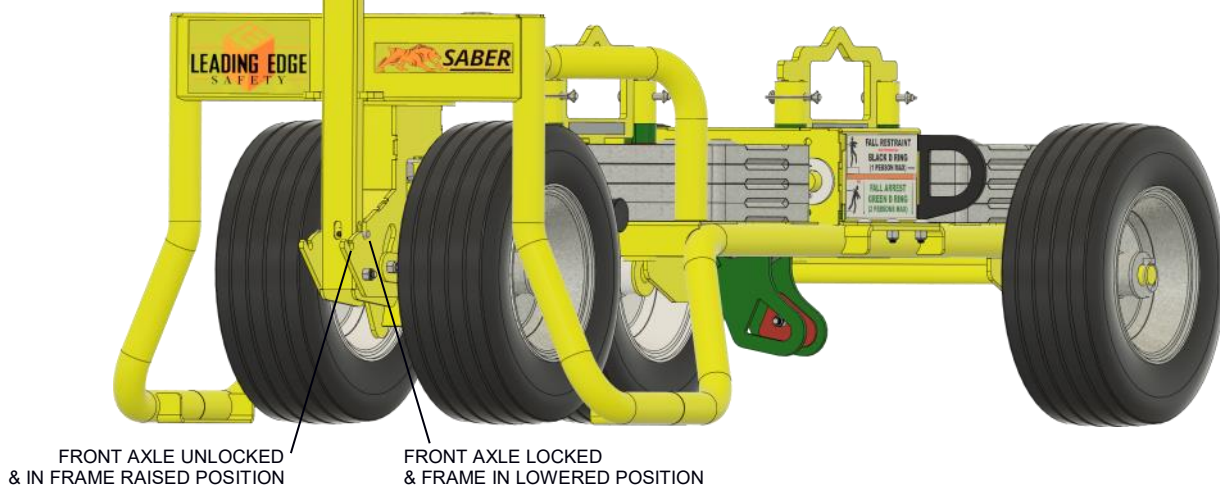


**8.3.A** To lower the SABER frame to the frame down 'brake position', move the locking lever up and slowly raise the handle to the upright and locked position.

**8.3.B** To raise the SABER frame and release from the 'brake position', move the locking lever up and lower the handle to the down and locked position.

**8.3.C** After moving the unit, always lower the SABER frame to rest securely on the substrate in the 'brake position'.

**FIG 8-3**

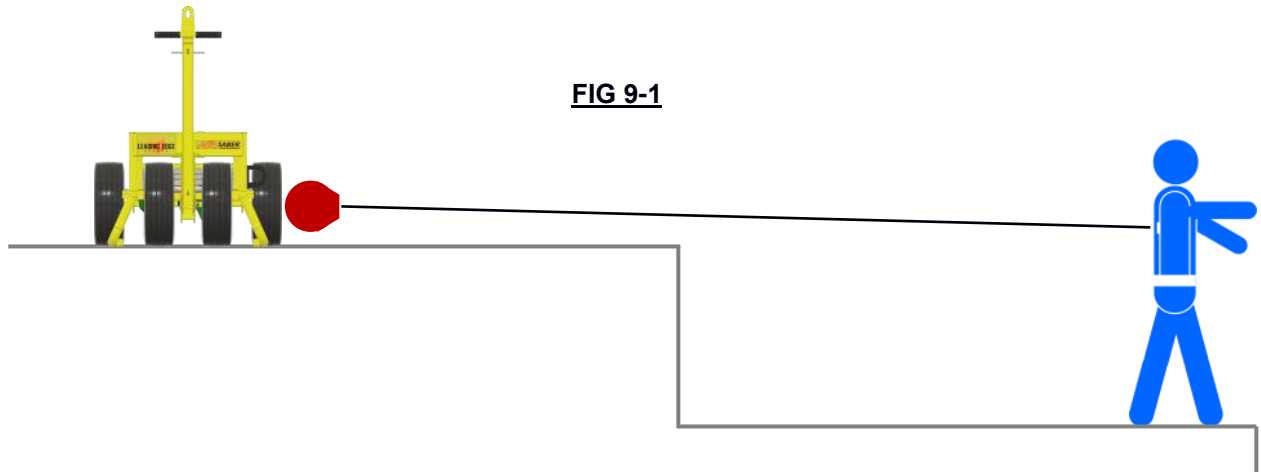


# SABER INSTRUCTION MANUAL

## 9.0 SPECIAL APPLICATIONS

### 9.1 DISSIMILAR HEIGHT WALKING/WORKING SURFACES

**9.1.A** The SABER may be used for fall arrest and fall restraint in dissimilar height applications where worker(s) are located on a surface lower than the surface the SABER is positioned on and when properly set up and used with an SRL ANSI approved for leading edge conditions. FIG 9-1



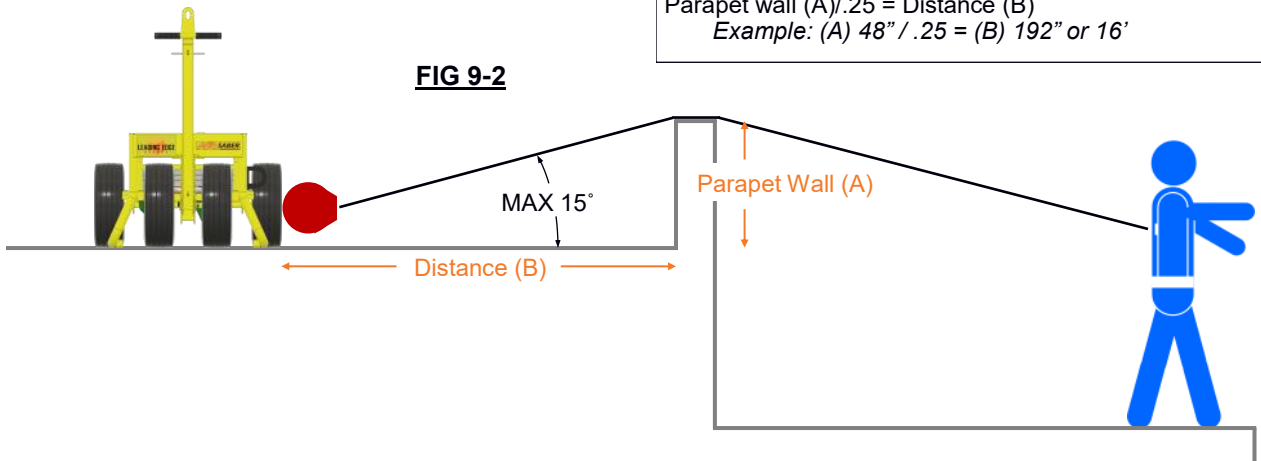
**FIG 9-1**

### 9.2 USE AT PARAPET WALLS

**9.2.A** The SABER may be used at parapet walls up to 42" in height when properly set up 12' - 15' from the leading edge and used with an SRL ANSI approved for leading edge conditions. FIG 9.2

**9.2.B** The SABER may be used at parapet walls in excess of 42" in height when the SRL cable angle is 15 degrees or less. The distance between the SABER and the leading edge may be increased beyond 15' to reduce the angle of the cable to 15 degrees or less. However, the leading edge work zone shall never exceed 30' in width. FIG 9-2

For parapet walls up to 45", Distance (B) = 15' (180")  
For parapet walls over 45", use the formula below:  
Parapet wall (A) / .25 = Distance (B)  
Example: (A) 48" / .25 = (B) 192" or 16'



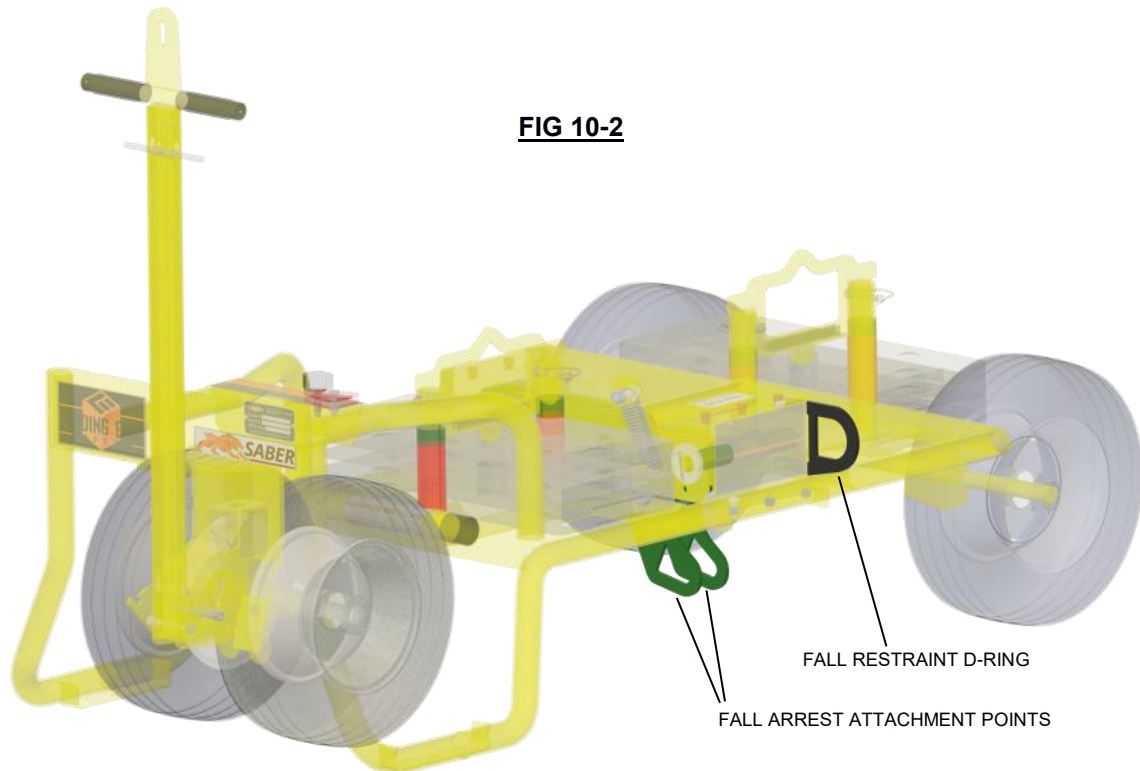
**FIG 9-2**



# SABER INSTRUCTION MANUAL

## 10.0 MAKING CONNECTIONS

- 10.1 Only connect to Fall Arrest Attachment Points for use as fall arrest. Only connect to Fall Restraint D-Ring for use as fall restraint.
- 10.2 SRL's and lifelines shall only be connected to the 2-Ring Fall Arrest Attachment Points or to Fall Restraint D-Rings. FIG 10-2



- 10.3 Only use self-locking snap hooks and self-locking carabiners when connecting SRL and lifelines to the SABER. Only use connectors that are suitable to each application. Ensure connections are compatible in size, shape and strength. Do not use equipment that is not compatible with the SABER connection points.
- 10.4 Ensure that all connections are fully closed, locked and secure prior to use.
- 10.5 When connecting to the Fall Restraint D-Ring, ensure that the fall restraint system, including lanyards, lifelines, harnesses, etc., do not allow the user to travel close enough to a leading edge to experience a fall.

# SABER INSTRUCTION MANUAL

## 11.0 MAINTENANCE, CARE & STORAGE

- 11.1 If the Engagement Arm has been activated by a fall, the Engagement Box Assembly (5) must be replaced before using the unit in fall arrest. Refer to assembly drawings for the location and part number and Appendix A for replacement instructions.
- 11.2 Keep tires free from build up and debris. Asphalt or adhesive build up on the tires can cause the unit to function improperly.
- 11.3 Inspect all bolts, pins, springs, welds and paint for visible damage. Damaged or missing parts can prevent the SABER from working properly.
- 11.4 Maintain the paint finish to prevent corrosion. Use rust inhibitive paint compatible with the powder coat finish.
- 11.5 Store the SABER in a place protected from the weather. Vinyl Weather Covers are available for long-term outdoor storage. Contact your local distributor or Leading Edge Safety for pricing and availability.
- 11.6 Rotate the tires or block the axles to avoid flat spots on the tires during long-term storage.

## 12.0 IN THE EVENT OF A FALL

- 12.1 Call 911 and report the fall emergency immediately.
- 12.2 Follow your company policy and site-specific rescue plan.
- 12.2 Before attempting to rescue a fall victim connected to the SABER, ensure the SABER is stable with the claw engaged into the substrate and/or all four tires are contacting the walking/working surface.
- 12.3 Rescuers should attach themselves in fall restraint to a secondary mobile fall cart not involved in the fall or other certified anchor point before attempting to rescue a fall victim. In the event a secondary mobile fall cart or certified anchor point is not available, rescuers may use the SABER involved in the fall for fall restraint only.
- 12.4 If your SABER is equipped with the Raptor Rescue Retrieval System, the fall victim should be lowered to the ground to await emergency services. In the event the fall victim cannot be lowered to the ground, they may be raised to the roof to await emergency services. Refer to the Raptor Rescue manual for complete instructions on its use.
- 12.5 Once a fall victim has been recovered, the SABER may be disengaged from the substrate. Use caution when disengaging the unit, keep hands and feet clear of moving parts and pinch points. In some cases, the Talon may become wedged into the substrate; to disengage the Talon from the substrate, unbolt the Engagement Box Assembly. Alternatively, use a wooden or metal beam to apply leverage against the underside of the frame to pry the unit free from the substrate, then remove the Engagement Box Assembly for return and replacement. FIG A-1
- 12.6 Remove the unit from fall arrest service by appropriate lock out/tag out procedures until the Engagement Box Assembly has been replaced.
- 12.7 If no damage has occurred to the unit as a result of the fall, the unit may be used in fall restraint only until Engagement Box Assembly is replaced.

# SABER INSTRUCTION MANUAL

## APPENDIX A— SABER ENGAGEMENT BOX ASSEMBLY REMOVAL & INSTALLATION

In the event of a fall or any damage to Engagement Box Assembly (DEBA-000-23) or it's associated components, the Engagement Box Assembly must be replaced before returning the unit to service.

### **STEP 1**

Remove the six 3/8-16 x 1" Flange Head Screws (13) and 3/8-16 Nylon-Insert Lock Nuts (14)

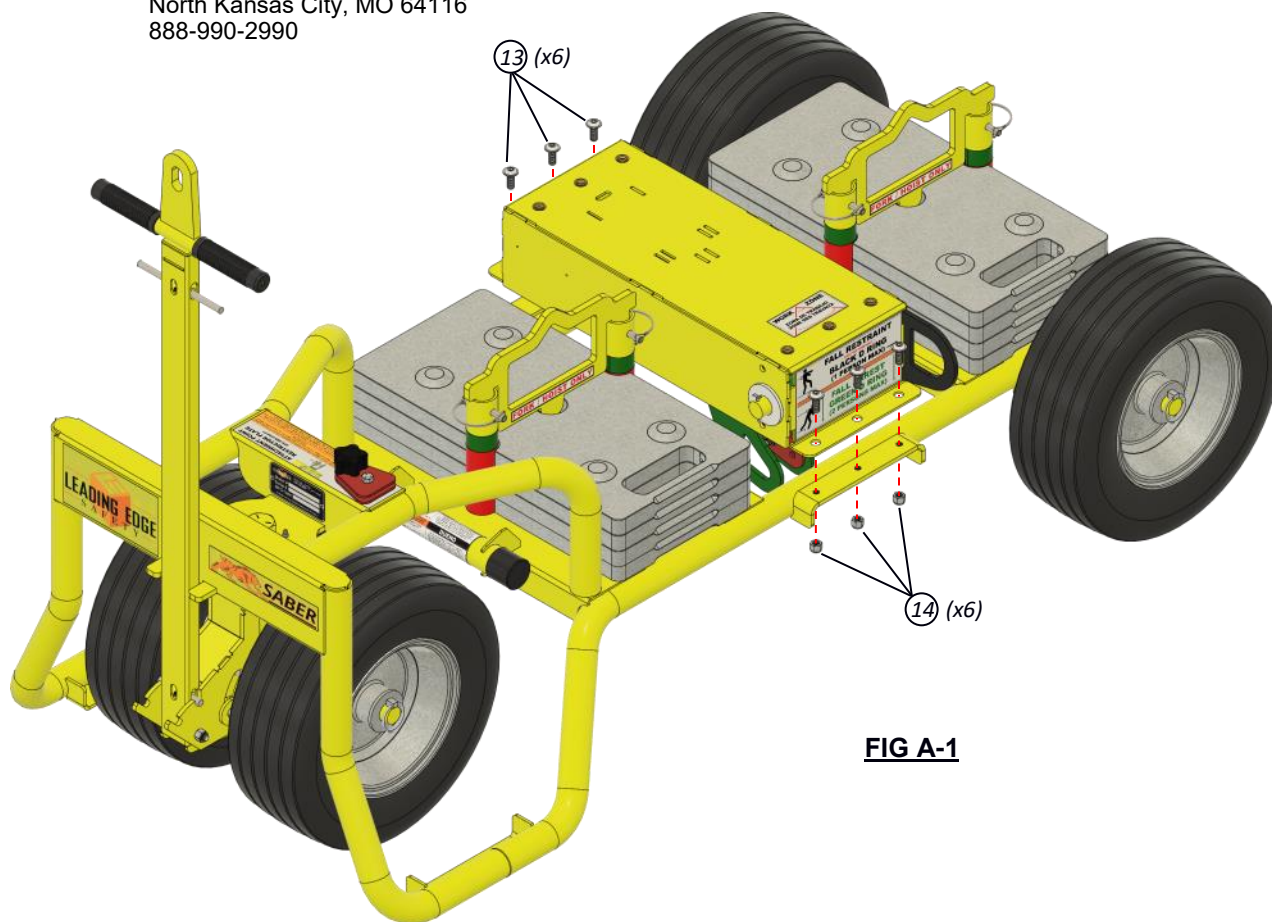
### **STEP 2**

Remove the SABER Engagement Box Assembly

### **STEP 3**

Return the damaged Engagement Box Assembly to Leading Edge Safety:

Leading Edge Safety, LLC  
1400 Taney St  
North Kansas City, MO 64116  
888-990-2990



**FIG A-1**

### **STEP 4**

Install new SABER Engagement Box Assembly with Fall Restraint Tie Off Ring toward the rear tires as shown above.

### **STEP 5**

Secure the Engagement Box Assembly with six 3/8-16 x 1" Flange Head Screws (13) and 3/8-16 Nylon-Insert Lock Nuts (14)

**Once the new SABER Engagement Box Assembly is properly installed, the SABER may be returned to service for both fall arrest and fall restraint applications.**

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# SABER INSTRUCTION MANUAL

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## MOBILE FALL CART INSPECTION AND MAINTENANCE LOG

PLEASE COPY THIS LOG, FILL IT OUT BEFORE EACH USE, AND KEEP IT IN YOUR RECORDS.

EQUIPMENT MODEL #: \_\_\_\_\_

EQUIPMENT SERIAL #: \_\_\_\_\_

DATE OF PURCHASE: \_\_\_\_\_

INSPECTION DATE: \_\_\_\_\_

Inspection Item	Corrective Action Needed?		Maintenance Performed
Overall Cart Parts	Yes	No	_____
Inspected By: _____			_____
Welded Connections	Yes	No	_____
Inspected By: _____			_____
Attachment Point Rings and Hoisting Rings	Yes	No	_____
Inspected By: _____			_____
Engagement Box Assembly	Yes	No	_____
Inspected By: _____			_____
Engagement Arm Freely Moving	Yes	No	_____
Inspected By: _____			_____
Warning Labels	Yes	No	_____
Inspected By: _____			_____
Overall Cart Corrosion	Yes	No	_____
Inspected By: _____			_____





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