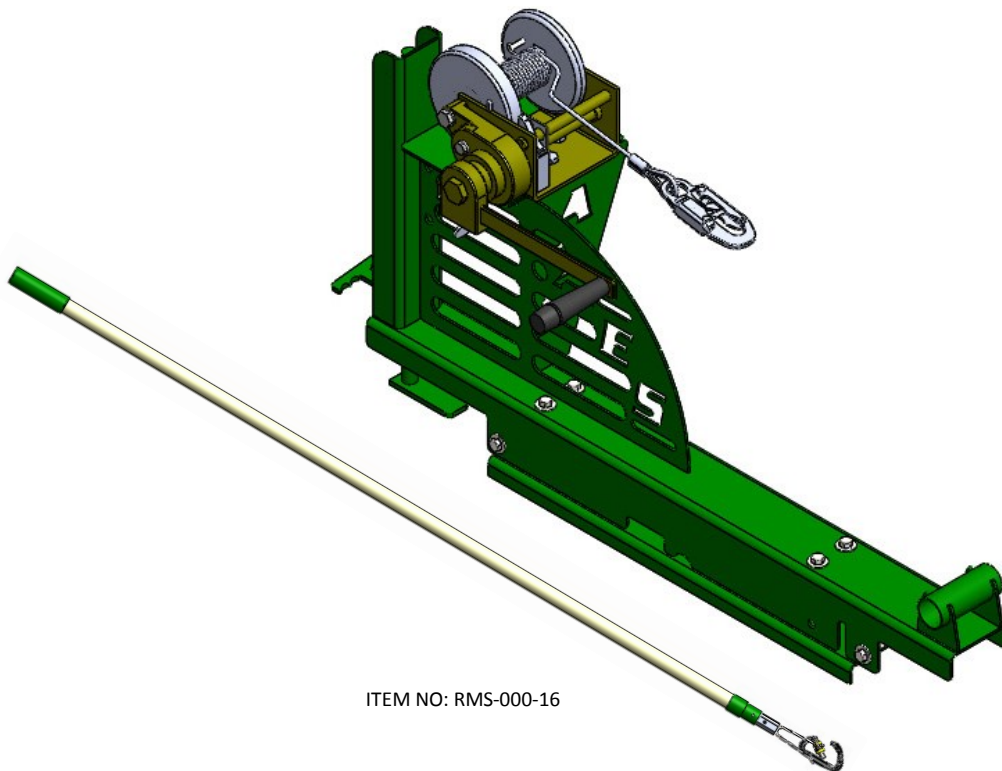




**INSTRUCTION MANUAL**

***RAPTOR RESCUE™***  
*Rescue Retrieval System*



ITEM NO: RMS-000-16

**\*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 LES Raptor Rescue™ complies with the requirements of the Federal Occupational Safety and Health Administration (OSHA) when set up and used according to the manufacturers' instructions.

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# LES RAPTOR RESCUE™ INSTRUCTION MANUAL

## Leading Edge Safety, LLC - Raptor Rescue™ Instruction Manual

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

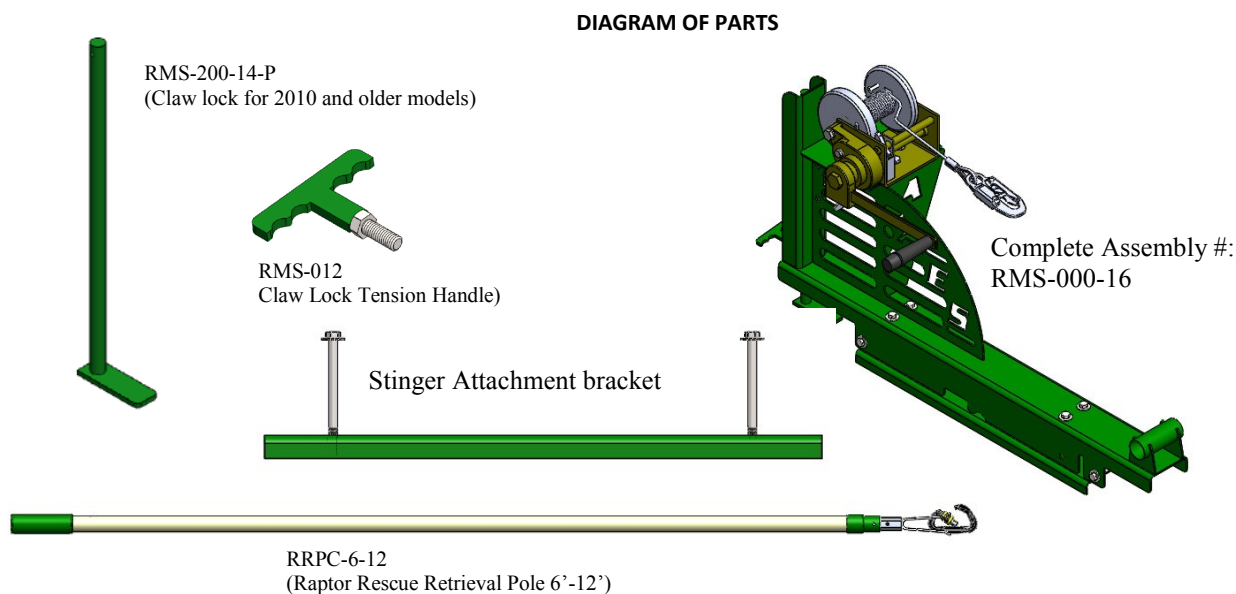
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Leading Edge Safety, LLC  
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North Kansas City MISSOURI 64116  
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# LES RAPTOR RESCUE™ INSTRUCTION MANUAL



## 1.0 ASSEMBLY / INSTALLATION

- 1.1 The Raptor Rescue System™ is designed to fit onto the current existing TriRex, R-2000, Stinger and Older models (2010 or older) with the option Claw lock.
- 1.2 Install the Raptor Rescue Safety onto Raptor Fall Protection cart frame using the supplied fasteners and parts given (see Diagram 1).

## 2.0 APPLICATIONS

The Raptor Rescue Retrieval System is to be used for rescue of a fallen worker in conjunction with a Raptor mobile fall protection cart. Warning – do not use the Raptor Rescue System with any other product not associated with Leading Edge Safety, LLC—AES Raptor, LLC

## 3.0 REGULATIONS

ANSI Z359.2-2007 states, “Employers shall develop and maintain written fall protection and rescue procedures for every location where an active fall protection system is used to control a fall hazard.” Furthermore, “The employer shall provide prompt rescue to all fallen authorized persons.”

OSHA also requires prompt rescue. OSHA 1910.66, subpart F, section 1(e)(8), states, “The employer shall provide for prompt rescue of employees in the event of a fall or shall assure the self-rescue capability of employees.” OSHA 1926.502 (d)(20) reads similarly.

Within ANSI Z359.2, the recommended contact time, defined as communication or physical contact, is less than 6 minutes, but it gives leeway on the definition of “prompt rescue” as dependent on the situation. Most consultants recommend full rescue within 5 minutes, and no longer than 15 minutes. An efficient rescue will take between 4 and 6 minutes, in which time physical or verbal contact with the victim must be made.

# LES RAPTOR RESCUE™ INSTRUCTION MANUAL

## DEFINITIONS:

- A. **Prompt Rescue** – Prompt rescue, as required under §1926.502(d)(20), is not defined in the standard. The particular hazard that §1926.502(d)(20) addresses is being suspended by the fall arrest system after a fall. While an employee may be safely suspended in a body harness for a longer period than from a body belt, the word "prompt" requires that rescue be performed quickly – in time to prevent serious injury to the worker.
  
- B. **Suspension Trauma** – (Syn. "orthostatic shock while suspended")[1], also known as Harness Hang Syndrome (HHS), or Orthostatic Incompetence is an effect which occurs when the human body is held upright without any movement for a period of time. If the person is strapped into a harness or tied to an upright object they will eventually suffer the Central Ischemic Response (commonly known as fainting). If one faints but remains vertical, one risks death due to one's brain not receiving the oxygen it requires.

## 4.0 USE AND LIMITATIONS

### 4.1 PROCEDURES FOR RESCUE **\*\*IT IS RECOMMENDED TO CALL 911 BEFORE MAKING RESCUE ATTEMPT\*\***

- 4.1.1 Assess the Situation the event that led to the fall may create additional risks that need to be addressed.
- 4.1.2 Make sure the rescue workers are protected against falling.
- 4.1.3 Lower the Safety engagement arm lock onto the engagement arm and lock into place (on 2010 and older models)
- 4.1.4 Release the cable from the winch and lower it to the fallen worker.
- 4.1.5 Have the fallen worker hook the cable to his harness.
- 4.1.6 If fallen worker is unconscious or unable to hook themselves up to rescue cable, use provided Rescue Pole to attached cable from roof top.
- 4.1.7 Raise or lower the fallen worker to safety.
- 4.1.8 Treat victim for Suspension Trauma and any other injuries.
- 4.1.9 Arrange for transportation to nearest hospital.

**4.2 CAPACITY:** The Design working load limit is 350 lbs. Do Not Exceed Working Limits

**4.3 Do Not Use the Raptor Rescue System to Hoist Material – For Personnel use only**

# LES RAPTOR RESCUE™ INSTRUCTION MANUAL

## 5.0 BEFORE EACH USE:

5.0 OSHA 1926.502 requires that before operating the system there must be an inspection for damaged equipment.

### INSPECTION STEPS

STEP 1: Check for loose, bent or damaged parts.

STEP 2: Check welded connections for distortion, cracks, or other damage.

STEP 3: Check cables for rusting and/or wear before each use – DO NOT use if cable and cable connections have been damaged.

STEP 4: All labels must be present and fully legible. (Copies of all labels are attached at the back of the manual for accurate inspection)

STEP 5: Check for corrosion on entire unit.

**DO NOT OPERATE DAMAGED EQUIPMENT.  
DO NOT OPERATE EQUIPMENT THAT HAS BEEN MODIFIED.**

*(Please use the Inspection and Maintenance Log)*

## 6.0 GENERAL SAFETY

6.1 USE COMMON SENSE! Most accidents can be avoided by using common sense and concentrating on the job to be done.

6.2 The Raptor Rescue should not be used by persons whose ability or alertness is impaired by fatigue, intoxicating beverages, illegal or prescription drugs, or any other physical cause that exposes the user or others to injury.

6.3 Always wear proper safety attire.

6.4 Keep hands and feet clear of moving parts. DO NOT stick hands or fingers in the equipment when operating.

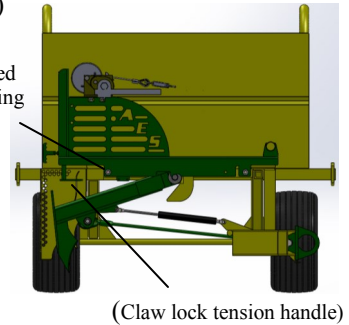
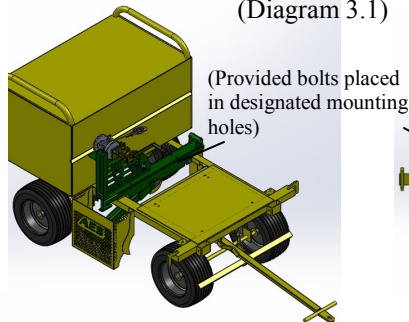
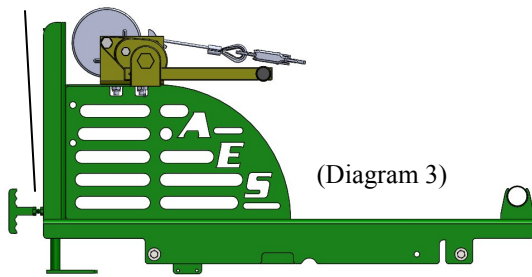
# LES RAPTOR RESCUE™ INSTRUCTION MANUAL

## 7.0 Installation diagrams

### 7.1 Installation on 2006-2010 Model R1000 and TriRex (Diagram 3) (Diagram 3.1)

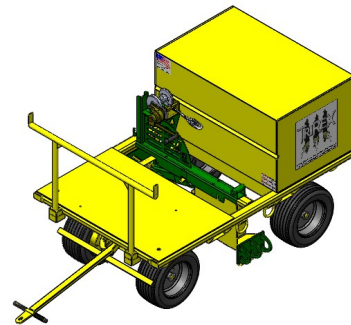
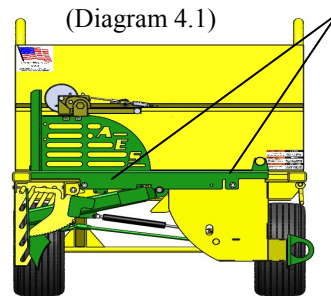
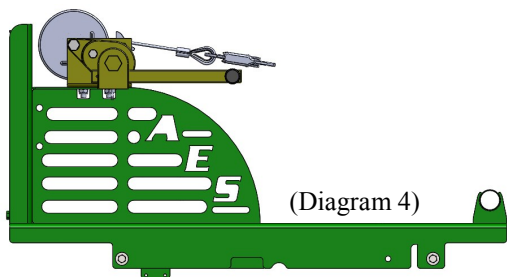
7.1.2 Mount RMS to frame using provided fasteners, attach claw lock leveling arm and tension handle

(claw lock leveling arm and Tension handle)



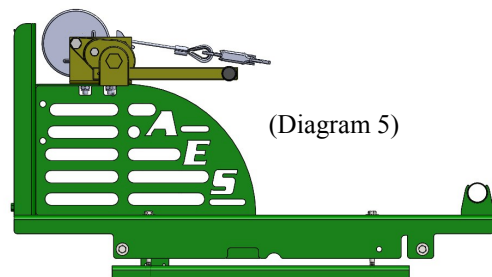
### 7.2 Installation on 2011 and newer TriRex and R-2000 (Diagram 4) (Diagram 4.1)

7.2.2 Mount to center frame using provided Fasteners. (Claw lock leveling arm is unneeded on newer models with ratcheting engagement arm lock standard)

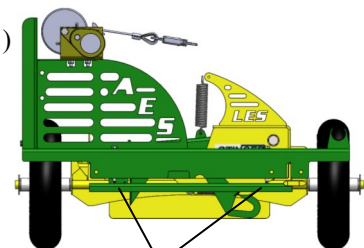
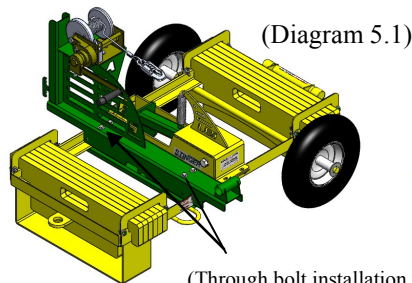


### 7.3 Installation on 2011 and newer Stingers (Diagram 5) (Diagram 5.1)

7.3.2 Mount RMS to frame using provided secure attachment bracket and provided fasteners.



(Stinger Attachment bracket)

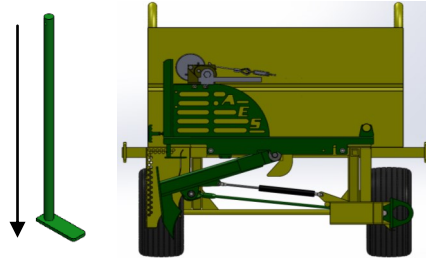


# LES RAPTOR RESCUE™ INSTRUCTION MANUAL

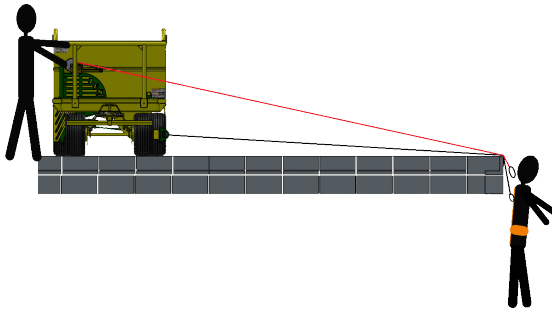
## 8.0 PROCEDURES FOR RESCUE DIAGRAMS

**\*\*IT IS RECOMMENDED TO CALL 911 BEFORE MAKING RESCUE ATTEMPT\*\***

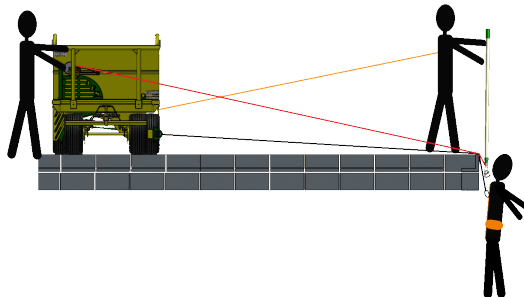
- 8.1 Assess the Situation – the event that led to the fall may create additional risks that need to be addressed.
- 8.2 Make sure the rescue workers are protected against falling.
- 8.3 Lower the Safety engagement arm lock onto the engagement arm and lock into place (on 2010 and older models)



- 8.4 Release the cable from the winch and lower it to the fallen worker.



- 8.5 Have the fallen worker hook the cable to his harness.
- 8.6 If fallen worker is unconscious or unable to hook themselves up to rescue cable, remained tied off to Fall Cart and use provided Rescue Pole to attach cable from roof top.





- 8.7 Raise or lower the fallen worker to safety. When able to, it is recommended to lower the fallen worker to ground level.
- 8.9 Treat victim for Suspension Trauma and any other injuries.
- 8.10 Arrange for transportation to nearest hospital.



# LES RAPTOR RESCUE™ INSTRUCTION MANUAL

 <b>WARNING</b>	 <b>ADVERTENCIA</b>	 <b>AVERTISSEMENT</b>
<b>BEFORE USE OF RESCUE SYSTEM LOWER ENGAGEMENT ARM LOCK</b> 	<b>BAJAR EL DISPOSITIVO DEL SEGURIDAD PARA ACOPLAMIENTO AL TECHO ANTES DE UTILIZAR PARA EL RESCATE</b> 	<b>AVANT D'UTILISER LE SYSTÈME DE SAUVETAGE, ABAISSER LE VERROU DU BRAS D'ENCLÈCHEMENT.</b> 

## APENDIX A - WARNING LABELS

 <b>WARNING</b>	 <b>ADVERTENCIA</b>	 <b>AVERTISSEMENT</b>
<b>USE FOR PERSONNEL RESCUE ONLY</b>  <b>*NOT FOR MATERIAL HOISTING*</b>	<b>SOLAMENTE PARA EL PERSONAL DE RESCATE</b>  <b>*NON ES PARA IZAR DE LOS MATERIALES*</b>	<b>UTILISER UNIQUEMENT À DES FINS DE SAUVETAGE DES PERSONNES</b>  <b>* NON DESTINÉ AU LEVAGE DE MATÉRIEL *</b>

Upon each inspection please use this page to verify that both Warning Labels are present and fully legible.

# LES RAPTOR RESCUE™ INSTRUCTION MANUAL

## APPENDIX B - ASSEMBLY, INSPECTION AND MAINTENANCE LOG

\*\*\* PLEASE COPY THIS EXAMPLE LOG AND REVIEW BEFORE EACH USE AND DURING REGULARLY SCHEDULED MAINTENANCE \*\*\*

E  
N  
G  
L  
I  
S  
H

<b>DATE IN-SERVICE:</b>	
<b>ASSEMBLED BY: (PRINT NAME)</b>	
<b>SIGNATURE:</b>	
<b>COMPANY:</b>	
<b>INTENDED USE OR OTHER RELEVANT DETAILS:</b>	

<b>DATE:</b>	
<b>INSPECTED BY:</b>	
<b>NOTE CONDITION OF:</b>	
<b>FRAME/ARM:</b>	
<b>WINCH:</b>	
<b>FASTENERS:</b>	
<b>NOTES:</b>	

<b>DATE:</b>	
<b>INSPECTED BY:</b>	
<b>NOTE CONDITION OF:</b>	
<b>FRAME/ARM:</b>	
<b>WINCH:</b>	
<b>FASTENERS:</b>	
<b>NOTES:</b>	

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