



**MALTA DYNAMICS**

# **Cross Arm Strap Instruction Manual**

**A6350 & A6351**



# Cross Arm Strap INSTRUCTION MANUAL

These instructions apply to the following model(s):

**A6350 - Cross Arm Anchor Strap - 4'**

**A6351 - Cross Arm Anchor Strap - 6'**

Manual Revision Code:

**MD-CASUIM201015**

*A copy of this manual must be available to users at all times. Visit [www.MaltaDynamics.com](http://www.MaltaDynamics.com) for the latest user instruction manual based upon date of manufacture.*

**A6350**



**A6351**



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# UNDER PENALTY OF LAW

This manual must be read and understood in its entirety and used as part of your fall protection training program as required by OSHA 1926 and State and local regulatory agencies. This instruction manual is intended to meet industry standards required by ANSI Z359.18-2017 and should be used as part of an Employee Fall Safety training program as required by OSHA. User must read and fully understand the limitations and proper use of the equipment, and be properly trained by employer prior to use per OSHA 29 CFR 1910.66, 29 CFR 1926.503, and applicable local standards.

NOTE: This *User Instruction Manual* is not to be removed except by the user of this equipment. Current *User Instruction Manuals* must always be available to the user. Read and understand these instructions before using equipment. *Do not discard these instructions.*

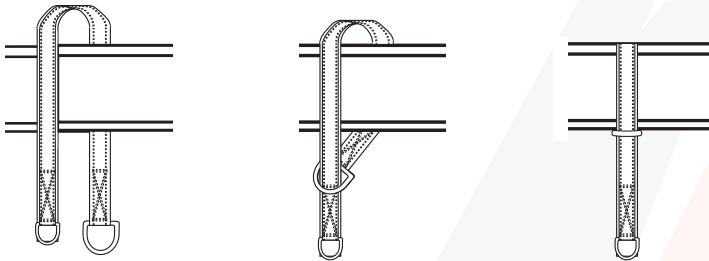
## WARNING

Misuse or failure to follow warnings, instructions and limitations on the use of this equipment may result in serious personal injury or death. For further instructions about proper use, refer to supervisor or contact Malta Dynamics at 1-800-494-1840.

## PURPOSE

Malta Dynamics Cross Arm Anchor Straps are intended for use as part of a Personal Fall Arrest System. Cross Arm Anchor Straps must be used only in combination with other components designed for such use in compatible systems. Cross Arm Anchor Straps may be installed in basket, saddle or choker configurations. Installation using multiple wraps of the Cross Arm Strap is acceptable.

### Illustration 1: Cross Arm Strap Installation





# INSTRUCTIONS FOR USE

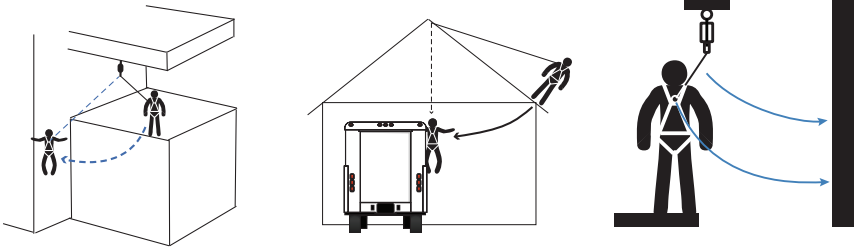
## **WARNING**

Do not alter or intentionally misuse this equipment.

- Cross arm anchor straps which meet ANSI Z359.18-2017 are intended to be used with other components of a Personal Fall Arrest system that limit maximum arrest forces to 1800 lbs. (8 kN) or less.
- Employees shall be trained in accordance with the requirements of OSHA 29 CFR 1910.66 in the safe use of the system and its components before using a PFAS.
- Inspect all Personal Fall Arrest System equipment for wear, damage, and other deterioration prior to each use. Defective components must be removed from service immediately in accordance with requirements of OSHA 29 CFR 1910.66 and 1926.502.
- Thoroughly evaluate and plan all elements of Fall Protection System(s) before using this equipment. Make sure that your Personal Fall Arrest System is appropriate for your needs and facility. Calculate fall clearance and swing fall clearance. The amount of clearance required is dependent on the type of connecting subsystem, the anchorage location, and other factors. When calculating distance, be sure to consider:
  - Deceleration Distance
  - Movement of harness attachment element (D-ring)
  - Free Fall Distance
  - Height of the worker (how tall is the worker?)
  - Elevation of Anchorage Connector
  - Connecting Subsystems length
  - D-Ring connector length
  - Length of Full Body Harness stretch
- Swing falls occur when the anchorage point is not directly above the point where a fall occurs. The force of striking an object in a swing fall may cause serious injury or death. Minimize potential for swing falls by working as close to the anchorage point as possible. Do not permit a swing fall if injury could occur. Swing falls significantly increase the amount of clearance required. **See Illustration 2.**



## Illustration 2: Examples of Swing Fall Hazards



- Users must have a written rescue plan and the means to implement it. This plan must provide prompt employee rescue or assure that employees have the ability to rescue themselves in the event of a fall.
- Store this equipment in a cool, dry, and clean environment that is out of direct light when not in use to prevent UV degradation.
- This equipment must be removed from service immediately if a fall is incurred.

## LIMITATIONS FOR USE

### WARNING

Do not use this equipment if you are unable to tolerate the impact of a fall arrest. Age and fitness can seriously affect your ability to withstand a fall. Consult with a physician if in doubt. Minors, pregnant women, and anyone with a history of back and/or neck problems must not use this equipment.

### WARNING

Use caution when employing this equipment around machines, electrical hazards, chemical hazards and sharp edges or abrasive surfaces, as contact may cause equipment failure, personal injury, or death.

### WARNING

Altering or misuse of this product could lead to injury or death.

- Use only with compatible components of subsystems. Substitutions or replacements made with non-approved components or subsystems may jeopardize compatibility of equipment and may affect the safety and reliability of the complete system.
- Malta Dynamics cross arm straps are designed for a single user only. To maintain ANSI compliance, the ANSI working capacity range is 130 lbs. to maximum 310 lbs. including clothing, tools, etc. Use only with structures capable of supporting static loads required for Personal Fall Arrest Systems (PFAS). Anchorages used for PFAS must be capable of sustaining static loads in the direction permitted by the PFAS of at least: 3,600 lbs. with certification of a qualified person; or 5,000 lbs. without certification. When more than one PFAS is attached to an anchorage, the strengths stated above must be met independently at and for each anchorage location.
- Do not expose this equipment to chemicals or harsh solutions that may have a harmful effect.
- User must not use or install equipment before receiving proper training from a Competent Person, as defined by OSHA 29 CFR 1926.32(f).
- Only Malta Dynamics shall make repairs or alterations to the equipment.
- All synthetic material must be protected from slag, hot sparks, open flames, or other heat sources. The use of heat resistant materials is recommended in these applications.
- This equipment is designed to be used in temperatures ranging from -40 degrees Fahrenheit to +130 degrees Fahrenheit (-40 degrees Celsius to +54 degrees Celsius).

## CONNECTOR COMPATIBILITY LIMITATIONS

Malta Dynamics equipment must be coupled only to compatible connectors that are suitable to the specific application. Ensure all connections are compatible in size, shape and strength.

Ensure all connectors are fully closed and locked. OSHA 29 CFR 1926.502 prohibits the use of snap hooks/rebar hooks to engage to objects unless the following requirements are met:

- Snap hook/rebar hook must be a locking type.
- Snap hook/rebar hook must be explicitly designed for such a connection. “Designed for” means that the manufacturer of the snap hook specifically created the snap hook/rebar hook to be used to connect to the equipment in question.

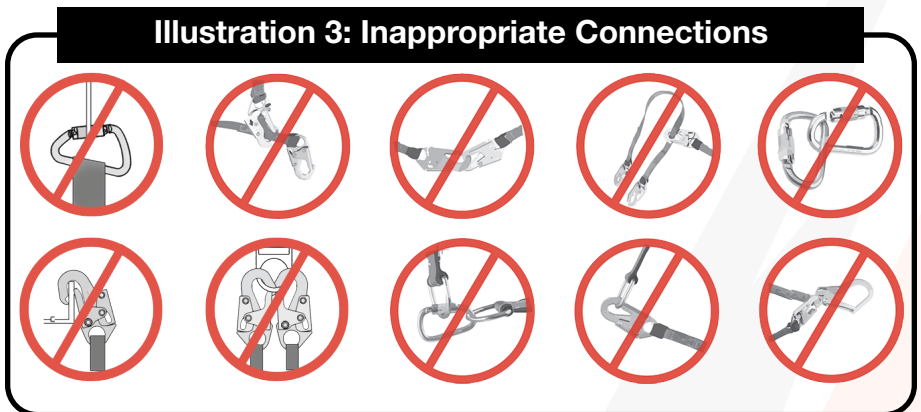
Use of a non-locking snap hook/rebar hook can result in rollout (a process by which a snap hook/rebar hook or carabiner unintentionally disengages from another connector or object to which it is coupled. ANSI Z359.18-2017). Malta Dynamics connectors (snap hooks/rebar hooks and carabiners) are designed to be used only as specified in each product’s user’s instructions.



## Avoid the following types of connections:

- Connection of two (or more) snap hooks/rebar hooks or carabiners to one D-ring.
- Connection of a snap hook/rebar hook back to its integral lanyard.
- Direct connection of a snap hook/rebar hook to horizontal lifeline.
- Connection in a manner that results in a load on the gate. NOTE: *Large throat opening snap hooks should not be connected to standard size D-rings or similar objects, as such use will result in a load on the gate if the hook or D-ring twists or rotates. Large throat snap hooks are designed for use on structural elements such as rebar or cross members that are not shaped in such a way that they may capture the gate of the hook.*
- False engagement connections, where protruding features of the snap hook/rebar hook or carabiner may catch on the anchor and seem to be fully engaged to the anchor point. Always confirm engagement.
- Connection to snap hooks or carabiners.
- Do not connect a snap hook/rebar hook into a loop or thimble of a wire rope or attach in any way to a slack wire rope.
- Direct connection to webbing lanyard, webbing loop, rope lanyard or tie-back (unless the manufacturer's instructions for both the lanyard and connector specifically allow such a connection).
- Connection of a snap hook to a D-ring, rebar, or other connection point of improper dimensions in relation to the snap hook dimensions or configurations that could cause the snap hook keeper to be depressed by a turning motion of the snap hook, or such that snap hook or carabiner will not fully close and lock, or that roll-out could occur.

**Illustration 3 depicts examples of a few of these inappropriate connections:**



- A Competent Person must ensure compatibility of all connections and the system.
- Do not use the system if any connector does not lock or if any other component in the system does not operate properly.



- Allow sufficient safe clearance in the event of a Free Fall.
- System must be rigged to limit the total Free Fall Distance according to the type of system, and in compliance with ANSI and OSHA directives.
- Do not use if any part of the system appears to be damaged.
- Do not use a body belt for fall arrest applications.

## PERFORMANCE

Each Malta Dynamics Cross Arm Anchor Strap has a minimum tensile breaking strength of 5,000 lbs. (22.2 kN) when statically tested in accordance with the requirements of the ANSI Z359.18-2017 standard.

Model/ Part #	Description	ANSI Rated Capacity	Standard
A6350	4' High Tenacity Polyester Webbing Cross Arm Anchor Strap; Breaking strength: 5000 lbs.	130-310 lbs.	ANSI Z359.18-2017
A6351	6' High Tenacity Polyester Webbing Cross Arm Anchor Strap; Breaking strength: 5000 lbs.	130-310 lbs.	ANSI Z359.18-2017

### Applicable Standards:

Refer to national standards, including ANSI Z359.1, and local, state and federal (OSHA 1910.66, appendix C, 1926.500) requirements for more information on personal fall arrest systems and associated components.

### Anchorage Strength:

In accordance with ANSI Z359.1, anchorage selected for **Personal Fall Arrest Systems must meet all** anchorage strength requirements.

- **Personal Fall Arrest:** Anchorages used for PFAS must be capable of sustaining static loads in the direction permitted by the PFAS of at least: 3,600 lbs. with certification of a qualified person; or 5,000 lbs. without certification. When more than one PFAS is attached to an anchorage, the strengths stated above must be met independently at and for each anchorage location.
- **Work Positioning:** The structure to which the work positioning system is attached must sustain static loads applied in the directions permitted by the work positioning system of at least 3,000 lbs., or twice the potential impact load, whichever is greater. See OSHA 1926.502. When more than one work positioning system is attached to an anchorage, the strengths stated above must be multiplied by the number of work positioning systems attached to the anchorage.
- **Restraint:** Anchorages selected for rescue systems must be capable of sustaining static loads of at least: 1,100 lbs. When more than one restraint and travel restraint system is attached to an anchorage, the strengths stated above must be multiplied by the number of work positioning systems attached to the anchorage.
- **Rescue:** The structure to which rescue system is attached must sustain static

loads applied in the directions permitted by the work positioning system of at least 3,000 lbs., or five times the potential impact load, whichever is greater. See OSHA1926.502. When more than one work positioning system is attached to an anchorage, the strengths stated above must be multiplied by the number of work positioning systems attached to the anchorage.

Fall Arrest	Non-Certified Anchorage	5,000 lbs. (22.2kN)	Multiple Systems: When more than one of the defined systems is attached to an anchorage, the strength defined shall be multiplied by the number of systems attached to the anchorage.	
	Certified Anchorage	3,600 lbs. (16.1kN)		
Restraint	Non-Certified Anchorage	1,100 lbs. (22.2kN)		
	Certified Anchorage	≥ 2 Times the Maximum Potential Impact Load		
Work Positioning	Non-Certified Anchorage	3,000 lbs. (22.2kN)		Certified Anchorage: An anchorage for Personal Fall Arrest, Work Positioning, Restraint or Rescue systems that a qualified person certified to be capable of supporting the potential fall or that meets the criteria for a certified anchorage point, as prescribed by relevant ANSI and OSHA standards.
	Certified Anchorage	≥ 2 Times the Maximum Potential Impact Load		
Rescue	Non-Certified Anchorage	3,000 lbs. (22.2kN)		
	Certified Anchorage	≥ 5 Times the Maximum Potential Impact Load		

**Free Fall:**

Maximum free fall distance allowed for use in a Personal Fall Arrest System is 6 ft. For use in a Restraint or Rescue System, no Free Fall is permitted. For use in a Work Positioning System, maximum free fall distance allowed is 2 ft.

**Fall Arrest Forces:** Personal Fall Arrest system must limit maximum arrest forces to 1800 lbs. (8 kN) or less.

**Swing Falls:** Minimize swing fall by working as directly below the anchorage point as possible. Do not permit a swing fall if injury could occur.

**Fall Clearance:** Consider the following when calculating fall clearance. Clearance required is dependent on the following factors:

- Elevation of Anchorage
- Connecting Subsystem Length
- Deceleration Distance
- Free Fall Distance
- Worker Height
- D-ring / connector length
- Movement of Harness Attachment Element
- Length of Full Body Harness (FBH) Stretch
- Working Level See **Illustration 4**.

### Illustration 4: Fall Clearance Considerations

A. Connecting Subsystems (Energy Absorbing Lanyard shown) Length + Movement of Harness Attachment + Length of FBH Stretch

B. Working Level (thickness)

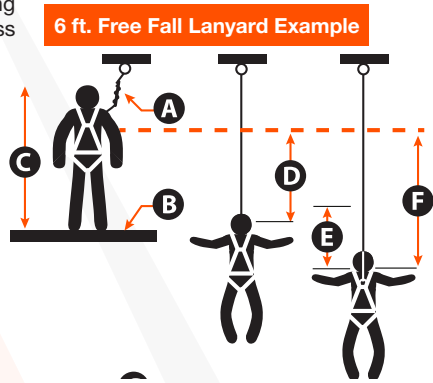
C. Worker Height + Connector Length

D. Free Fall - 6 ft. Max. (per ANSI Z359.1)

E. Deceleration Distance

F. Total Fall Distance: Sum of A through E

G. Lower Level or Obstruction



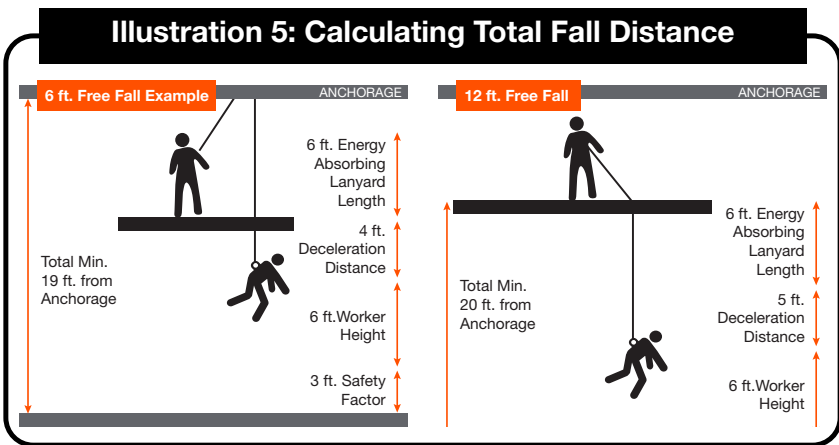
If there is a risk of a fall or if the only anchorage point is below the attachment points on the harness, it is essential to use a lanyard provided with an energy absorber. Before using a shock absorbing lanyard, ensure that there is sufficient fall clearance below the user to prevent any collision with the structure or the ground.

### Calculating Total Fall Distances:

Total Fall Clearance below worker is calculated from Anchorage Connection. Free Fall Distance + Working Level + Energy Absorber + Deceleration Distance + Worker Height + Connector Length + Safety Factor. Ensure that the total fall distance is clear of obstructions and equipment. Avoid potential contact with a lower level. See **Illustration 5**.



## Illustration 5: Calculating Total Fall Distance



## TRAINING

Employers are responsible for providing training to any employee who may be exposed to fall hazards in order to enable the employee to recognize and reduce fall hazards. Training must be conducted by a Competent or Qualified Person. Trainer and trainees must not be exposed to fall hazards during the training course.

## INSPECTION

### Competent Person Inspection

Cross Arm Anchor Straps must be inspected by an OSHA defined Competent Person a minimum of **once a year**. If exposed to extreme or severe conditions, more frequent formal inspections may be required. Record the results of each formal inspection in your Hog Tracker account or inspection log. Remove equipment from service immediately after a fall has occurred.

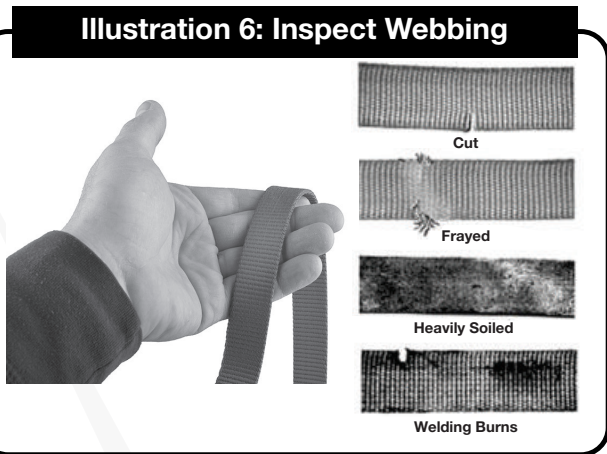
### User Inspection

All equipment should be inspected by a Qualified Person on a regular basis. Cross Anchor Straps should be inspected by the user before each use using the following inspection below. In addition, unit should be fully examined to ensure:

- Markings are legible.
- Metal parts are free from corrosion, bending, cracks, dents or deformity.
- Webbing shows no evidence of rips, tears, frayed edges, broken fibers, pulled stitches, cuts, burns, and chemical damage. (**Illustration 6**)
- Cross Arm Anchor Strap is clean and free of dirt, oil, mold, mildew and other contaminants.

## Inspection Procedure:

**Step 1:** Webbing/Stitches  
Grasp webbing in your hands approximately 6 in. (152mm) to 8 in. (203mm) apart. Bend webbing in an inverted “U” as shown. (**Illustration 6**)



The resulting surface tension will allow easier detection of damaged fibers or cuts. Follow this procedure along the entire length of the

webbing, inspecting both sides of each strap. Watch for frayed edges, broken fibers, pulled stitches, cuts, burns, and chemical damage.

## Step 2: D-Rings

Check D-rings for distortion, cracks, breaks, and rough or sharp edges. D-ring should pivot freely. Inspect for any unusual wear, frayed or cut fibers, or broken stitching of the D-ring attachments.

**If inspection reveals any defect, inadequate maintenance, or unsafe condition, remove Cross Arm Anchor Strap from service immediately.**

## CLEANING AND MAINTENANCE

**Thoroughly inspect the anchor strap after any period of extended storage.**

Excessive buildup of dirt, paint, oil and other contaminants may interfere with the safe function of the Cross Arm Anchor Strap. In cases of severe contamination, webbing may be degraded to a point where it weakens and should be removed from service. If you have any questions concerning the condition of your equipment, contact Malta Dynamics.

### Cleaning

Wipe off all surface dirt. Use solution of water and mild detergent to cleanse anchor strap free of contaminants. Wipe dry. Hang away from heat to dry. Store in clean, dry area, away from heat and areas where chemical vapors may exist. Avoid storing in direct light to prevent UV degradation.

### Maintenance

Do not attempt to disassemble. **Only Malta Dynamics or entities authorized in writing by Malta Dynamics shall make repairs, authorized maintenance or alterations to the equipment.**





# PRODUCT LABELS

The following labelling is affixed to product and must not be removed:



**4'** Cross Arm Anchor Strap  
4' Web Anchor Strap





OSHA 1926.502  
ANSI Z359.18-2017  
A10.32-2012

**MALTA DYNAMICS**

**MATERIAL:** Polyester & Steel  
**CAPACITY:** 1 Worker  
**ANSI Capacity Range:** 130-310 lbs.

**MFG. DATE:** \_\_\_\_\_ **PART#:** A6350  
**SERIAL#:** \_\_\_\_\_ **BATCH#:** \_\_\_\_\_

**IMPORTANT:** All PFAS equipment must be selected and deemed compatible with Cross Arm Anchor Strap by a Competent Person. Only make compatible connections; refer to instructions for proper connection methods. MAXIMUM 1 connection per anchor. Avoid contact with hazards including but not limited to: heat chemicals, electricity, and sharp or abrasive edges and surfaces.

 **WARNING:**


Prior to use, fully read and understand manufacturer's instructions provided with this product at time of shipment.

**USER MUST INSPECT EQUIPMENT PRIOR TO EACH USE.** Competent Person shall indicate "pass" or "fail" status on formal inspection of equipment, conducted at least every 12 months. **If equipment fails inspection, REMOVE FROM SERVICE IMMEDIATELY.**

Inspection Date	Initials	Inspection Date	Initials	Inspection Date	Initials

**DATE OF FIRST USE:** \_\_\_\_\_

**DO NOT REMOVE THIS LABEL.**  
Made in China

  
**MALTA DYNAMICS**  
800-494-1840  
210 13th Street | Malta, OH 43758  
www.MaltaDynamics.com



**6'** Cross Arm Anchor Strap  
6' Web Anchor Strap





OSHA 1926.502  
ANSI Z359.18-2017  
A10.32-2012

**MALTA DYNAMICS**

**MATERIAL:** Polyester & Steel  
**CAPACITY:** 1 Worker  
**ANSI Capacity Range:** 130-310 lbs.

**MFG. DATE:** \_\_\_\_\_ **PART#:** A6351  
**SERIAL#:** \_\_\_\_\_ **BATCH#:** \_\_\_\_\_

**IMPORTANT:** All PFAS equipment must be selected and deemed compatible with Cross Arm Anchor Strap by a Competent Person. Only make compatible connections; refer to instructions for proper connection methods. MAXIMUM 1 connection per anchor. Avoid contact with hazards including but not limited to: heat chemicals, electricity, and sharp or abrasive edges and surfaces.

 **WARNING:**


Prior to use, fully read and understand manufacturer's instructions provided with this product at time of shipment.

**USER MUST INSPECT EQUIPMENT PRIOR TO EACH USE.** Competent Person shall indicate "pass" or "fail" status on formal inspection of equipment, conducted at least every 12 months. **If equipment fails inspection, REMOVE FROM SERVICE IMMEDIATELY.**

Inspection Date	Initials	Inspection Date	Initials	Inspection Date	Initials

**DATE OF FIRST USE:** \_\_\_\_\_

**DO NOT REMOVE THIS LABEL.**  
Made in China

  
**MALTA DYNAMICS**  
800-494-1840  
210 13th Street | Malta, OH 43758  
www.MaltaDynamics.com



# WARRANTY

THE FOLLOWING IS MADE IN LIEU OF ALL WARRANTIES OR CONDITIONS, EXPRESS OR IMPLIED, INCLUDING THE IMPLIED WARRANTIES OR CONDITIONS OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Equipment offered by Malta Dynamics is warranted against factory defects in workmanship and materials for a period of one year from date of installation or first use by the original owner. LIMITED REMEDY: Upon notice in writing, Malta Dynamics will repair or replace all defective items at Malta Dynamics's sole discretion. Malta Dynamics reserves the right to require that the defective item be returned to its plant for inspection before determining the appropriate course of action. Warranty does not cover equipment damage resulting from wear, abuse, damage in transit, failure to maintain the product or other damage beyond the control of Malta Dynamics. Malta Dynamics shall be the sole judge of product condition and warranty options. This warranty applies only to original purchaser and is the only warranty applicable to this product. Please contact Malta Dynamics customer service department at 800-494-1840 for assistance. LIMITATION OF LIABILITY: IN NO EVENT WILL MALTA DYNAMICS BE LIABLE FOR ANY INDIRECT, INCIDENTAL, SPECIAL OR CONSEQUENTIAL DAMAGES INCLUDING, BUT NOT LIMITED TO LOSS OF PROFITS, IN ANY WAY RELATED TO THE PRODUCTS REGARDLESS OF THE LEGAL THEORY ASSERTED.

# NOTES











# MALTA DYNAMICS

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