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MSA Wingspan™ HLL Stanchion

Application, Operation, Maintenance & Inspection Instructions Manual

Please read this manual.

This information is vital to your safety.

WARNING

THESE INSTRUCTIONS MUST BE PROVIDED TO THE USER. MANAGEMENT AND USER MUST READ AND UNDERSTAND THESE INSTRUCTIONS; FAILURE TO DO SO COULD RESULT IN SERIOUS INJURY OR DEATH.

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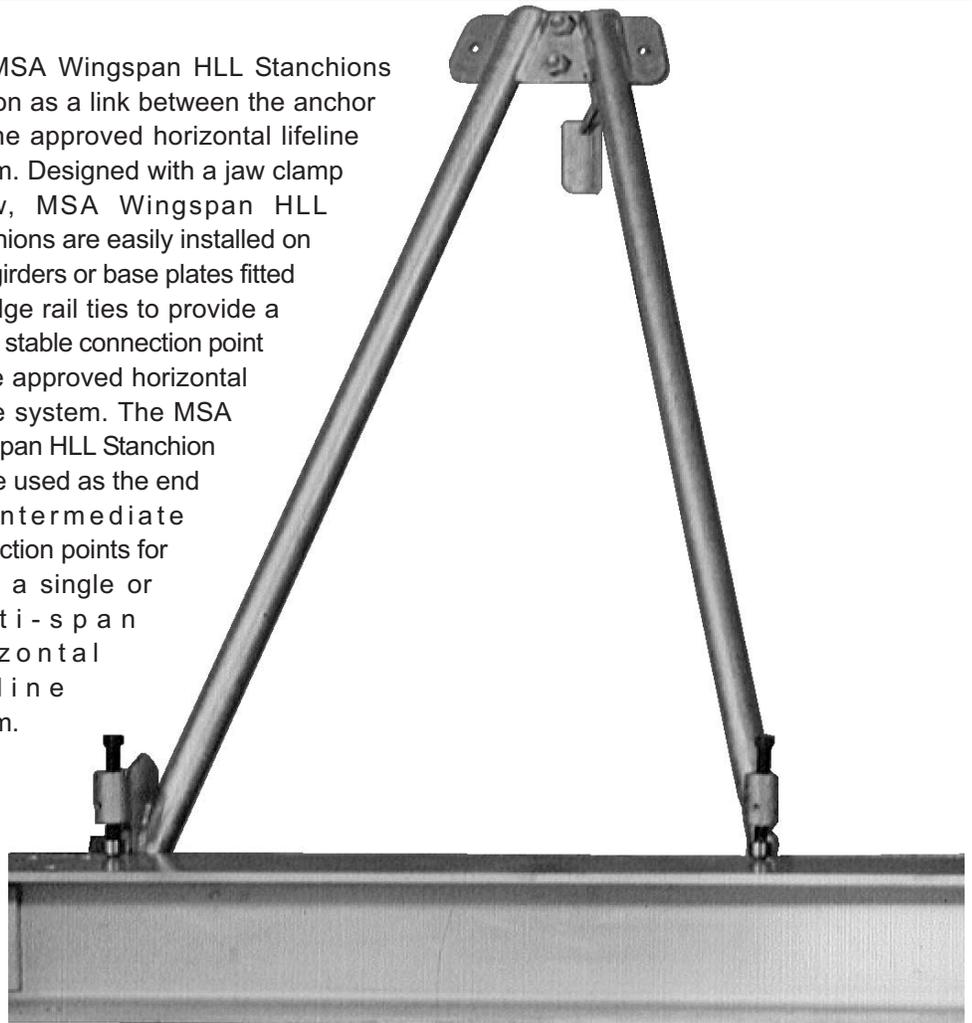
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Application

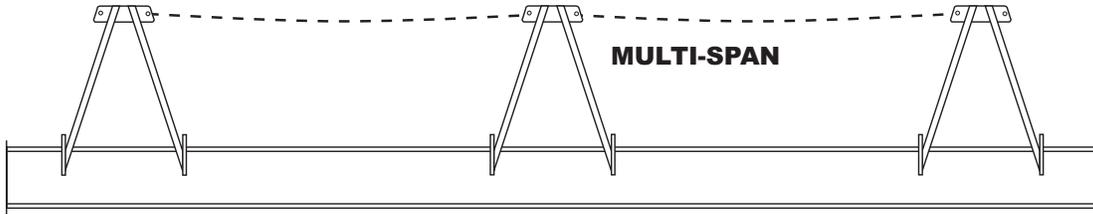
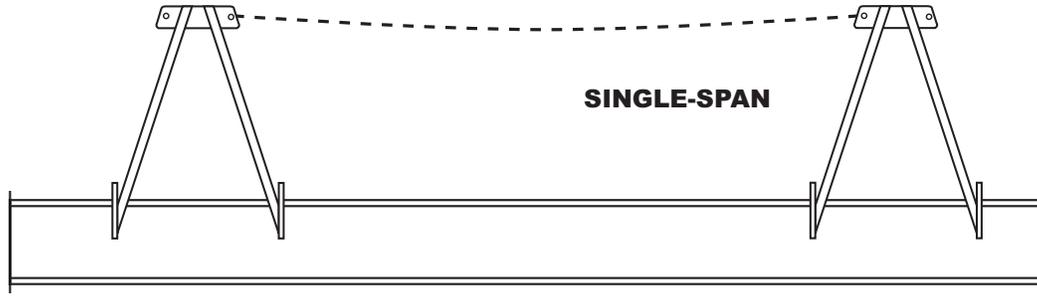
The MSA Wingspan HLL Stanchion is an anchorage connector used for the installation of horizontal lifeline systems. Applications include railway bridges and steel girders for iron work. The MSA Wingspan HLL Stanchion is available in a variety of models to accommodate a wide variety of fall protection needs.

Function

The MSA Wingspan HLL Stanchions function as a link between the anchor and the approved horizontal lifeline system. Designed with a jaw clamp screw, MSA Wingspan HLL Stanchions are easily installed on steel girders or base plates fitted to bridge rail ties to provide a strong stable connection point for the approved horizontal lifeline system. The MSA Wingspan HLL Stanchion can be used as the end or intermediate connection points for either a single or multi-span horizontal lifeline system.

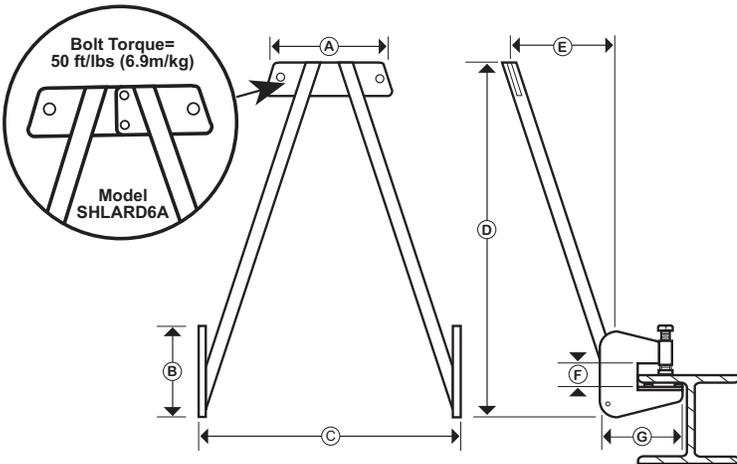


Specifications



SPECIFICATIONS

- Steel Girder Applications
- Engineered Design
- Fabricated Steel
- Hot Dip Galvanized
- Support Strength Greater Than 6,750 lbs (30kN)
- On-Site Assembly Custom Fabrication and Modifications Available
- Certificate Supplied
- Replaceable Jaw Teeth and Clamping Screw & Nut
- Collapsible for Easy Transport; D1, D3, D6 Only
- Must be used with approved Surety Horizontal Lifelines



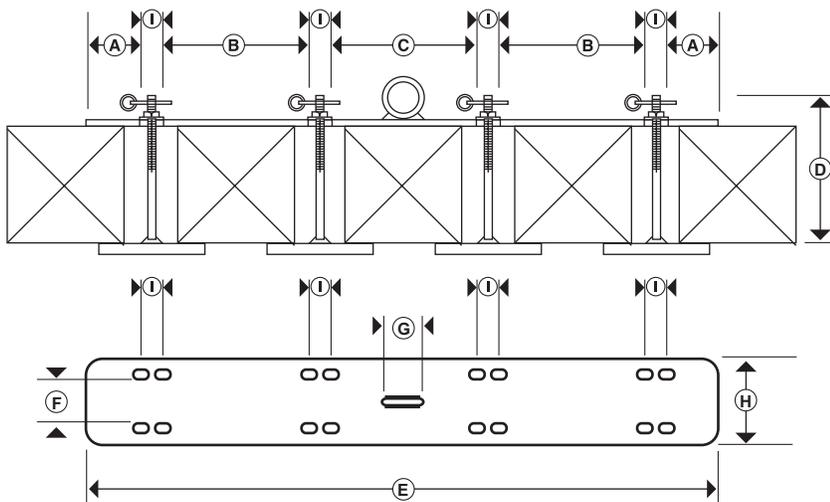
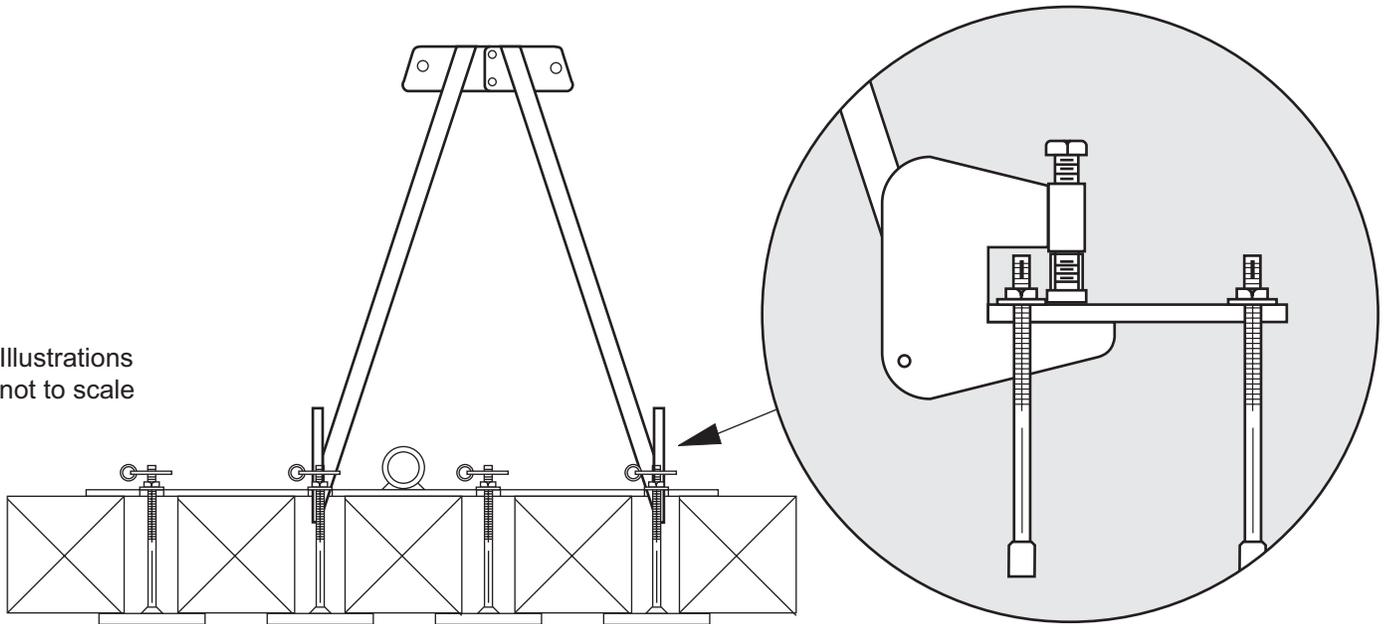
- This bracket may not provide sufficient clearance to allow trains or other heavy equipment to pass. Please contact the Clearance Bureau for service restrictions.
- Installation Note: Bolt Torque = 120 ft/lbs (16.5m/kg)

Catalogue Numbers	Approximate Dimensions - Inches (cm)							WEIGHT (Approx.)
	A	B	C	D	E	F	G	
SHLARD6A*	12.5" (31.8cm)	11.5" (29.2cm)	36.75" (93.3cm)	54" (137.1cm)	18" (45.7cm)	3.75" (9.5cm)	7" (17.8cm)	50 lbs (22.7kg)

* Bolted Head Plates For Easy Transport

Specifications

Illustrations
not to scale



Note: 19" T-Bolt (Dimension D) also available

- Bridge Rail Tie Applications
- Engineered Design
- Fabricated Steel
- Hot Dip Galvanized (Plate)
- Cadum plated (T-Bolts)
- Support Strength Greater Than 6,750 lbs (30kN)
- On-Site Assembly
- Custom Fabrication and Modifications Available
- T-Bolt torque: 120 ft./lb.

T-Bolt rail tie clamping range adjustable:

14"(35.5cm) T-Bolt = 8" (20cm) to 12" (30cm) Rail Tie Standard SHLARTB14
 19" (48cm) T-Bolt = 12" (30cm) to 16" (46.6cm) Rail Tie Optional SHLARTB19



• **Installation Note: Bolt Torque = 120 ft/lbs (16.5m/kg)**

Catalogue Number	Approximate Dimensions - Inches (cm)									WEIGHT (Approx.)
	A	B	C	D	E	F	G	H	I	
SHLARE4	6" (15.2cm)	10.5" (26.6cm)	6.25" (15.9cm)	14" (35.5cm)	60" (152cm)	4.25" (10.8cm)	5" (12.7cm)	8" (20.3cm)	3.5" (8.9cm)	110 lbs (50kg) c/w 14" TB

Installation Instructions

1. Select a safe location for the assembly of the MSA Wingspan HLL Stanchion. Using two opposing legs, align the two bolt holes at the top of the legs to create an A-frame structure (fig. 1). Connect the two stanchion bracket legs together by inserting the provided nut and bolt into the aligned holes. The bolts used for the connection must be torqued to 50 ft/lbs (fig. 2).

2. Move the stanchion bracket to the desired location. Ensure that all individuals involved with the installation process of the stanchion brackets and subsequent horizontal lifeline use appropriate fall protection measures while working at heights.

3. For steel girder applications, proceed to step 9. For bridge rail tie applications, installation of the base plate is required, proceed to step 4.

4. Place the base plate along the outer edge of the railway ties. In most cases, the tie spacer will have to be removed to allow the base plate to sit level and even with the outside edge of the ties (fig. 3).

5. Align the holes in the base plate so as to have them located between the ties. This may require ties to be slightly moved to align all eight holes.

6. Insert T-bolts upwards into the base plate holes placing the bottom T of the T-bolt perpendicular against the bottom of the ties. Torque the nut on the T-bolts to 120 ft/lbs. Repeat procedure for the eight T-bolts per base plate. (fig. 4)

7. Insert coder pin into the top of exact T-bolt to prevent any accidental disengagement of the T-bolt.

8. Measure the distance required between each stanchion bracket and repeat step 1-8 to install additional stanchion brackets.

9. Insert the mouth at the base of each leg of the stanchion bracket into the upper portion of the steel girder or base plate. Slide the stanchion bracket inwards until the mouth of each leg is against the outer edge of the steel girder or base plate (fig. 5).

10. Torque the clamping screw down against the top of the steel girder or base plate with 120 ft/lbs pressure. Repeat the procedure for the other stanchion bracket leg.

11. Install additional stanchion brackets at the recommended intervals for the horizontal lifeline system being used. Refer to the particular horizontal lifeline system's instructions for the necessary interval distances.

12. As an optional precautionary step, connect a MSA Anchor Sling around the steel girder or base plate connecting both flemish eyes into the 1/2" shackle provided attached to the base of each stanchion bracket leg. (fig. 6) Repeat procedure for all stanchion brackets. MSA Anchor Slings are purchased separately. Please contact your MSA representative for further details.

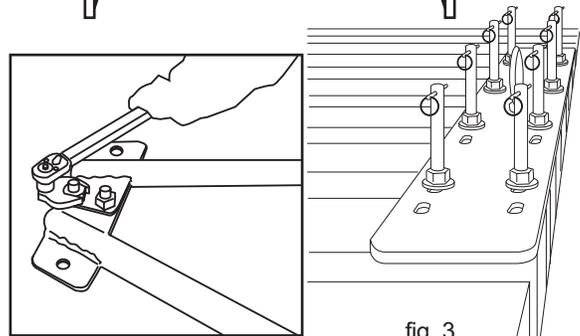
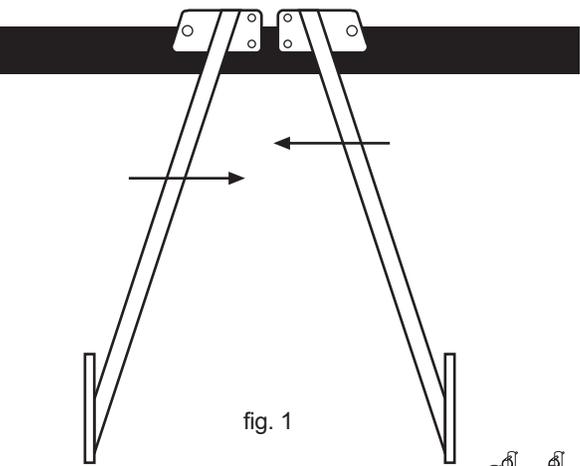


fig. 2

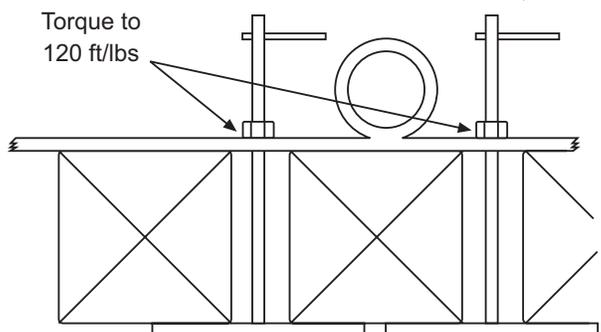


fig. 5

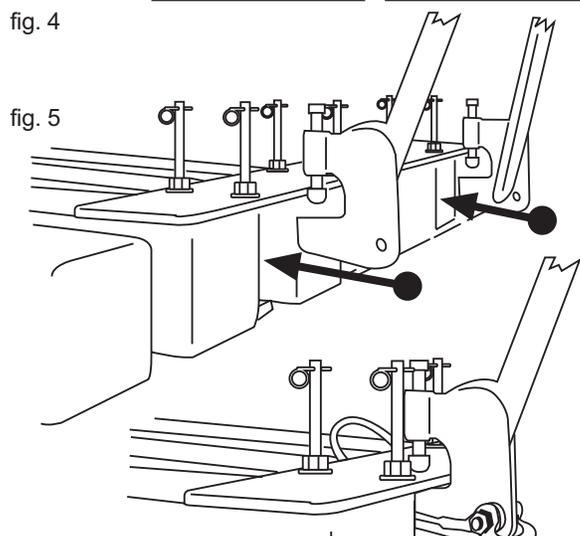


fig. 6

Inspection

1. The MSA Wingspan HLL Stanchions shall be inspected before each use and additionally by a competent person other than the user at intervals of no more than one year. Detailed inspections must be recorded in the inspection log.
 - if inspection reveals evidence of defects or damage to including cracks, dents, sharp edges, deformation, corrosion, chemical attack, excessive heating, excessive aging, or excessive wear.
2. When inspection reveals defects, damage, or inadequate maintenance of any component of the stanchion bracket system, the component affected shall be permanently removed from service and replaced or undergo adequate corrective maintenance before returning to service.
3. Remove stanchion bracket from service immediately if:
 - it has been subjected to excessive shock loading.
 - labels are missing or illegible.
 - there is evidence of improper function, improper fit, missing components or alterations of any portion.
4. A required component of the daily inspection routine will include ensuring that all bolts remain torqued to the designated torque specified in the installation instructions.
5. MSA or persons or entities authorized in writing by the manufacturer, shall make all repairs to the equipment. No unauthorized repairs and/or modifications are permitted.

Maintenance and Storage

1. Maintenance and storage of equipment shall be conducted by the user's organization in accordance with MSA instructions. Unique issues, which may arise due to conditions of use, shall be addressed with MSA.
2. Stanchion brackets and/or any component of the system which are in need of or scheduled for maintenance shall be tagged as "unusable" and removed from service until maintenance is completed.
3. To clean use a mild soap. Wipe device dry after cleaning.
4. Nuts, bolts, and clamping screw should be lubricated with a light oil to ensure good working order.
5. Store in a clean, dry area free from excessive heat, harmful fumes, and corrosive agents.
6. When in doubt of the method of operation, maintenance or inspection procedures, **DO NOT USE.**

Design Statements

1. The MSA Wingspan HLL Stanchion shall comply with ANSI Z359.1-1992, as well as other government regulations and standards set forth for anchorage connectors.
2. Allowing for a 2:1 safety factor, end anchorages must be capable of sustaining a force of 6750 lbs (30 kN) without deformation in directions permitted by the system and must be certified by an engineer in writing.
3. Only MSA approved connectors are permitted for use to connect into the anchorage brackets. Approved connectors for the MSA Wingspan HLL Stanchions are the MSA Carabiner P/N SRCC643 or appropriate 5/8" shackle.
4. The MSA Wingspan HLL Stanchions are designed to be used solely for horizontal lifeline systems. The approved horizontal lifelines for the MSA Wingspan HLL Stanchions are the MSA Sure-Line™ P/N# SHL1009060BLK temporary synthetic horizontal lifeline and the MSA Sure-Line™ P/N# SHL2009 060G cable horizontal lifeline. No other horizontal lifeline system shall be used unless authorized by MSA .
5. Custom fabrication or modification services are available for anchorage brackets and base plates. Call MSA at 1-800-661-3013 for further information.
6. During railway bridge application, verify that all clearance requirements are met to ensure safe operation of the anchorage brackets and horizontal lifeline system. Please contact the Clearance Bureau for service restrictions.

⚠ WARNINGS

- 1. MSA Wingspan HLL Stanchions are not to be used in conjunction with any vertical lifeline fall protection system.
- 2. MSA Wingspan HLL Stanchions are to be designated and used solely for fall protection applications.
- 3. Fall Protection products may not be used while under the influence of drugs or alcohol.

Detailed Inspection and Maintenance

Model Number _____ Date Purchased _____

Inspection Date	Corrective Action Taken	Maintenance Performed
Inspection Items Noted		
Approved by		
Inspection Date	Corrective Action Taken	Maintenance Performed
Inspection Items Noted		
Approved by		
Inspection Date	Corrective Action Taken	Maintenance Performed
Inspection Items Noted		
Approved by		

WARRANTY

Express Warranty – MSA warrants that the product furnished is free from mechanical defects or faulty workmanship for a period of one (1) year from first use or eighteen (18) months from date of shipment, whichever occurs first, provided it is maintained and used in accordance with MSA's instructions and/or recommendations. Replacement parts and repairs are warranted for ninety (90) days from the date of repair of the product or sale of the replacement part, whichever occurs first. MSA shall be released from all obligations under this warranty in the event repairs or modifications are made by persons other than its own authorized service personnel or if the warranty claim results from misuse of the product. No agent, employee or representative of MSA may bind MSA to any affirmation, representation or modification of the warranty concerning the goods sold under this contract. MSA makes no warranty concerning components or accessories not manufactured by MSA, but will pass on to the Purchaser all warranties of manufacturers of such components. THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS, IMPLIED OR STATUTORY, AND IS STRICTLY LIMITED TO THE TERMS HEREOF. MSA SPECIFICALLY DISCLAIMS ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

Exclusive Remedy - It is expressly agreed that the Purchaser's sole and exclusive remedy for breach of the above warranty, for any tortious conduct of MSA, or for any other cause of action, shall be the repair and/or replacement, at MSA's option, of any equipment or parts thereof, that after examination by MSA are proven to be defective. Replacement equipment and/or parts will be provided at no cost to the Purchaser, F.O.B. Purchaser's named place of destination. Failure of MSA to successfully repair any nonconforming product shall not cause the remedy established hereby to fail of its essential purpose.

Exclusion of Consequential Damages - Purchaser specifically understands and agrees that under no circumstances will MSA be liable to Purchaser for economic, special, incidental, or consequential damages or losses of any kind whatsoever, including but not limited to, loss of anticipated profits and any other loss caused by reason of the non-operation of the goods. This exclusion is applicable to claims for breach of warranty, tortious conduct or any other cause of action against MSA.

For additional information, please contact the Customer Service Department at 1-800-MSA-2222 (1-800-672-2222).