

Model Number

MSA Permanent Roof Anchor User Instructions

WARNING

National standards and state, provincial and federal laws require the user to be trained before using this product. Use this manual as part of a user safety training program that is appropriate for the user's occupation. These instructions must be provided to users before use of the product, and retained for ready reference by the user. The user must read, understand (or have explained), and heed all instructions, labels, markings and warnings supplied with this product and with those products intended for use in association with it. Failure to do so may result in serious injury or death.

1.0 SPECIFICATIONS

- The Permanent Roof Anchor meets federal OSHA requirements and ANSI A10.14. These instructions and markings borne by the product fulfill the instruction and marking requirements of those regulations and standards.
- Material: steel with galvanized finish, stainless steel
- Capacity is one person with a combined weight not to exceed 310 lbs (140 kg) including weight of the user + clothing + other user-borne objects.
- Free fall distance (limit) must not exceed 6.0 ft (1.8 m) in accordance with OSHA. The Canadian Occupational Health & Safety Act of 1990 and ANSI A10.14 specify that free fall distance must not exceed 5 ft (1.5 m). The user must comply with applicable standards and regulations.
- When used as part of a personal fall arrest system, fall arresting forces must not exceed 1,800 lbf (8 kN).

2.0 DESCRIPTION

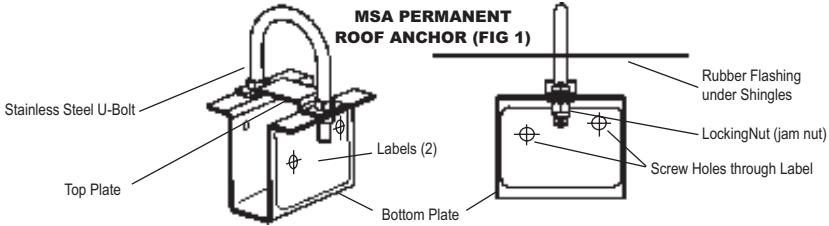
The MSA Permanent Roof Anchor is a stainless and galvanized steel anchorage for use as a fall arrest anchorage connector on wood frame roofs. The bottom plate slides on the under side of the rafter and is attached by six (6) screws (provided). The top plate fits over the rafter and held in place by the flat jam nuts on the stainless steel U-bolt, which is the only exposed element of the Permanent Roof Anchor.



For More Information, call 1-800-MSA-2222 or Visit Our Website at www.MSAnet.com



MINE SAFETY APPLIANCES COMPANY
PITTSBURGH, PENNSYLVANIA, U.S.A. 15230



3.0 SELECTION AND APPLICATION

3.1 PURPOSE OF PERMANENT ROOF ANCHOR

The Roof Anchor is designed as a permanent anchorage component in a personal fall arrest system. It provides the means to connect a vertical or horizontal lifeline to the structural member of a suitable wood roof. The Roof Anchor enables the user to secure a compatible rope grab fall arrester to the roof peak and traverse the roof pitch with hands free. The Roof Anchor can also be used as an anchorage connector point with any MSA connector.

3.2 USAGE LIMITATIONS

The Roof Anchor should be used only in conjunction with compatible MSA personal fall arrest components. The following applications limitations must be considered and planned for:

3.2.1 PROPER ANCHORAGE

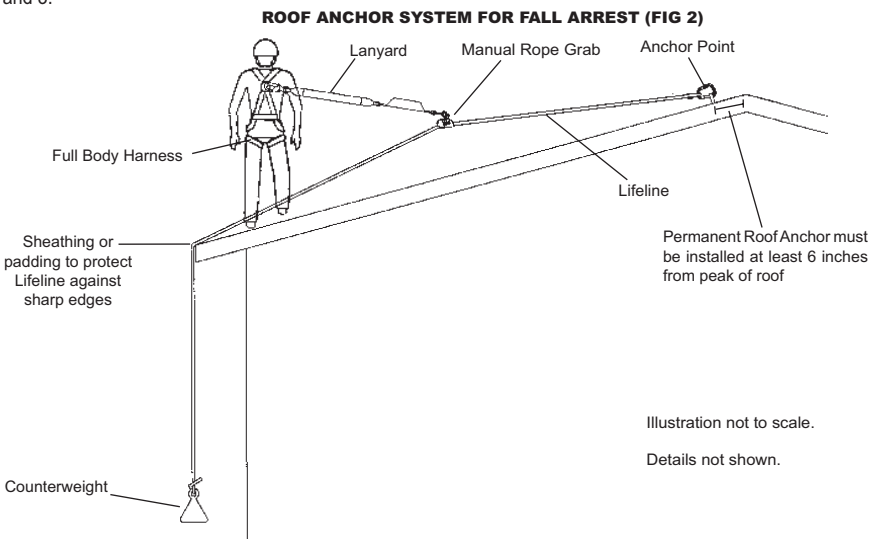
The roof member must support the required loads, reduce free fall hazards and avoid worker contact with objects in the path of the fall. MSA recommends metal framing ties on the rafter the Permanent Roof Anchor is attached to.

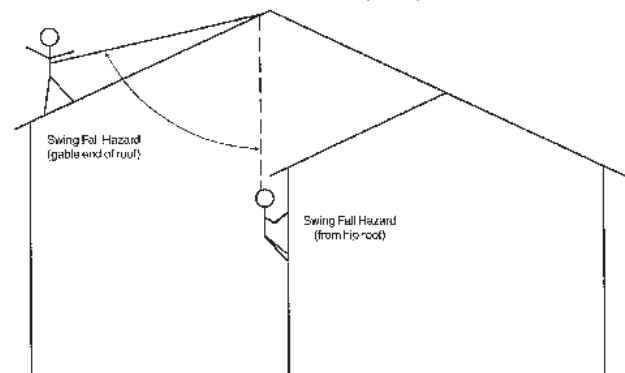
3.2.2 WORK PRACTICES

Users must not work above the anchor point and must limit potential free fall distance to less than 6 ft (1.8 m). The connecting subsystem of one worker (lifeline, lanyard, etc.) must not cross or tangle with that of another worker. Connecting subsystems must never be knotted or tied to each other.

3.2.3 ANCHOR POINT LOCATION

The anchorage should be directly above the user. Minimize the hazards due to swing falls. See Figures 2 and 3.



SWING FALL HAZARD (FIG 3)**3.2.4 SHARP EDGES AND ABRASIVE SURFACES**

Do not expose workers or their personal protective equipment to sharp edges or abrasive surfaces. Protect by padding or sheathing sharp edges while work is being performed.

3.2.5 ELECTRICAL HAZARDS

Use extreme caution when working near energized electrical sources. Metal Roof Anchor and other components connected to it will conduct electrical current. Maintain a safe working distance – preferably at least 10 feet (3 m) – from electrical hazards.

3.2.6 MOVING MACHINERY

When working near moving machinery (for example: conveyors, rotating shafts, etc.) make sure that the Roof Anchor and other components connected to it are secured. Maintain a safe working distance from machinery which could entangle clothing or components of the user's personal fall arrest system.

3.2.7 WEAR AND DETERIORATION

Any Roof Anchor which shows signs of excessive wear or deterioration should be removed from service and destroyed. Refer to section 7.0 for inspection criteria.

3.2.6 IMPACT FORCES

Any Roof Anchor which has been exposed to the forces of arresting a fall must be inspected for damage by a competent person.

3.3 RESCUE AND EVACUATION PLAN

A means must be provided for rescue and evacuation for workers in the event that a fall may occur. Have a plan in place and the means to implement it.

3.4 TRAINING

It is the responsibility of the purchaser of this equipment to provide training. Users must be familiar with these User Instructions and trained in the correct selection, inspection, use and care of this product, its limits of application and the consequences of improper usage. Training must not expose the trainee to fall hazards. For best results, fall protection training should be reviewed or repeated at least once per year.

4.0 USAGE

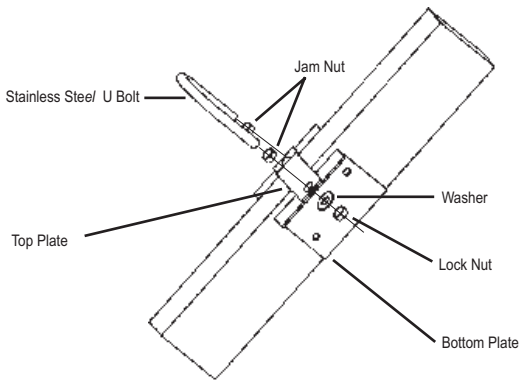
4.1 INSPECTION BEFORE EACH USE

Perform a thorough visual and tactile inspection of the Roof Anchor before each use. Refer to the inspection instructions in section 7.0

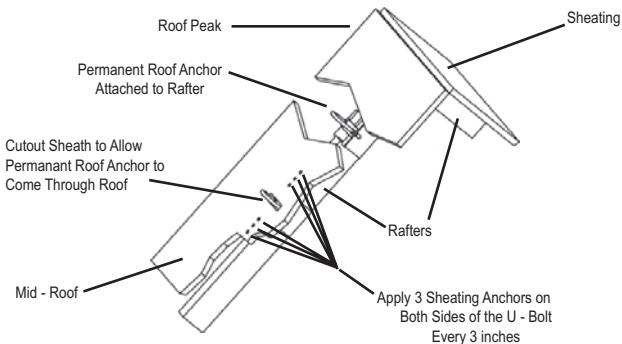
4.2 INSTALLATION

When possible, Roof Anchors should be located at least 6 inches from the roof peak, no more than 12 inches from roof peak when using Dyna-Line™, and at least 6 ft (1.8 m) from exposed roof edges to reduce swing falls. Roof Anchors should be installed at least 8 feet (2.4 m) apart along the roof peak. On hip roofs, one Roof Anchor should be installed on each hip face. Multiple Roof Anchors should be installed on long, low-pitched roofs along the gable ends. See Figures 5 and 7. When installing sheathing, cut a slot approximately 1" wide by 3.5" long in the location of the Roof Anchor. Feed the rubber gasket and stainless steel U-Bolt through the slot in the sheathing. When roofing, roll tar paper under rubber gasket. Shingle around U-Bolt and over rubber gasket. Check for any possible leaks.

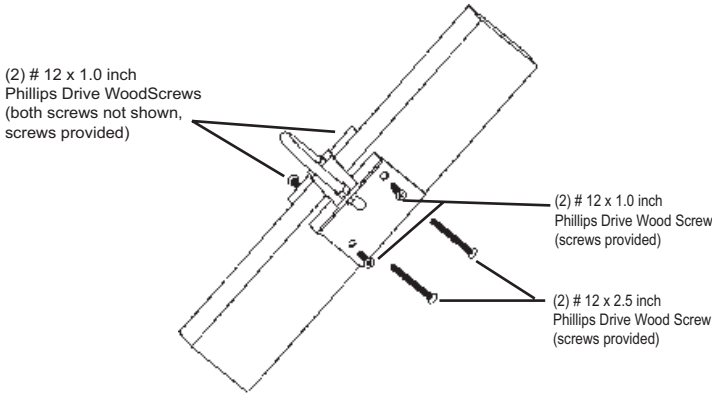
Roof Anchor Installation (Fig 4)



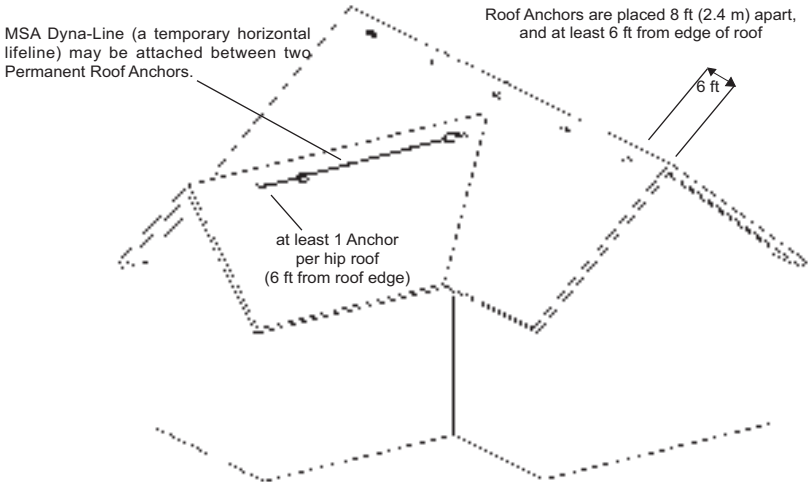
ROOF PEAK INSTALLATION (FIG 5)



WOOD SCREW PLACEMENT (FIG 6)



LOCATION OF ANCHORS ON ROOF (FIG 7)



Roof framing to which the Roof Anchors are attached must be strong enough to support the required loads. Roof members should be free of cracks, splits, knots, rot or deterioration which may weaken the framing. MSA recommends that roof trusses used for anchorage should be attached to the roof structure with metal hangers for increased strength. Do not install Roof Anchors on unsupported roof structures such as eaves or gable overhangs. Do not install Roof Anchors on fascia boards.

Each Roof Anchor must be installed using 4 No. 12 x 1 inch and 2 No. 12 x 2.5 inch Phillips-drive galvanized wood screws. For best results, pre-drill screw holes into roof structural member using a 0.086 inch diameter No. 44 drill bit.

All six (6) screws must be seated against the Roof Anchor, two (2) No. 12 x 1 inch screws on each anchor leg and two (2) No. 12 x 2.5 inch screws underneath. Do not over-tighten screws. Screws should not be reused. Damaged screws must be replaced with screws of the same size, type and length. Roof Anchors with damaged or enlarged screw holes must be removed from service and destroyed (see Figure 6.).

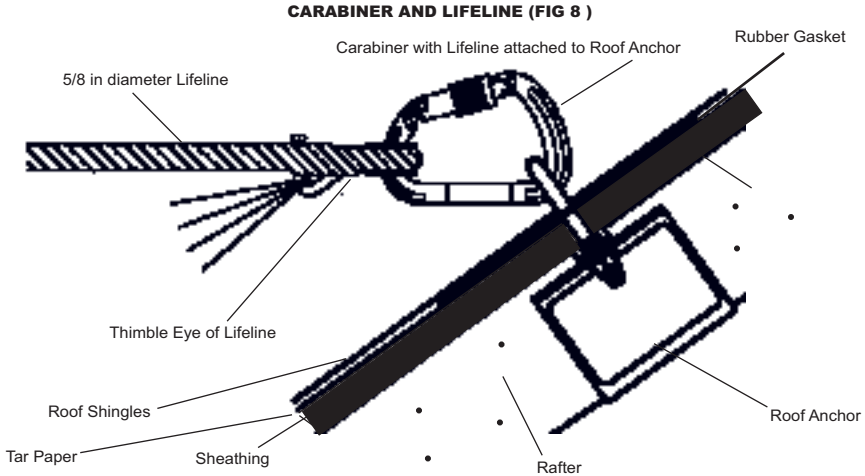
Horizontal lifeline systems must be designed, installed and used under the supervision of a qualified person.

⚠ WARNING

Roof framing must be capable of supporting 5,000 lbf load per Roof Anchor.

4.3 MAKING PROPER CONNECTIONS

Use only compatible connectors supplied by MSA. Attach the lifeline to Roof Anchor using a self-closing, self-locking anchor. See Figure 8.



When using the MSA FP Pro™ Vertical Lifeline, be certain that the Carabiner is securely closed and locked on the attachment bolt of the Roof Anchor. Visually check all connections. Do not rely solely on sound or touch. Connect only one anchorage connector to a single Roof Anchor. Always follow the manufacturer's instructions supplied with each component in the personal fall arrest system.

5.0 CARE, MAINTENANCE AND STORAGE

5.1 CLEANING INSTRUCTIONS

Wipe clean with cloth. Do not use water or soap solutions on installed anchors as this may weaken the underlying wood structure.

5.2 MAINTENANCE AND SERVICE

The Roof Anchor requires no regular maintenance. Equipment which is damaged or in need of maintenance must be removed from service and tagged as "UNUSABLE" until repaired or destroyed. Repairs must be performed by the manufacturer. Do not attempt field repairs.

5.3 STORAGE

Unused Roof Anchors should be stored in a cool, dry place. Avoid areas where heat, moisture, oil and chemicals or their vapors or other degrading elements may be present.

6.0 MARKINGS AND LABELS

The following labels must be present and legible on the product.



PERMANENT ROOF ANCHOR

Model Number:

- 2" x 4" – P/N 10016468
- 2" x 6" – P/N 10017593
- 2" x 8" – P/N 10017594
- 2" x 10" – P/N 10017595
- 2" x 12" – P/N 10017596

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 P.O. Box 426 • Pittsburgh, PA 15230, USA
 www.MSAnet.com

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MODEL NUMBER

- 2" x 4" - P/N 10016468
- 2" x 6" - P/N 10017593
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- 2" x 10" - P/N 10017595
- 2" x 12" - P/N 10017596



DO NOT REMOVE THIS LABEL

MADE IN USA



MSA Corporate Headquarters
 P.O. Box 426 • Pittsburgh, PA 15230, USA

▲ WARNING

Use only No. 12 x 2.5 inch & No. 12 x 1 inch Phillips-drive galvanized wood screws.

SELECTION AND USE

Have rescue and evacuation plans and means at hand to implement

RIGGING AND USE

Attach to suitable roof framing capable of supporting 5,000 lbs (22kN) minimum per attached worker, in the direction permitted by the system while in use. • Install on solid roof members (ie: studs, joists, or rafters) using 2 (two) No. 12 x 2.5 inch & 4 (four) No. 12 x 1 inch Phillips-drive galvanized wood screws. • Install at least 6 ft. (2m) from any roof edge. • Always check connections. Connector must fully capture and enclose the roof anchor. Carabiner must be securely closed and locked when coupled to roof anchor. Be sure dimensions, shape and pressure of nearby objects cannot unlock or open carabiner gate. • Do not connect lifelines, snaphooks or carabiners to each other. • Space below user must be void of objects in potential fall path. • Compatible with MSA vertical lifeline and MSA Dyna-Line System.

INSPECTION

Inspect for missing or bent parts, cracks, breaks, or corrosion. If product is defective, **DO NOT USE**; remove from service and destroy. • User must inspect before each use. • Competent person other than user must inspect at least every 6 months.

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7.0 INSPECTION

7.1 INSPECTION FREQUENCY

Inspect the Roof Anchor before each use by visual and tactile examination, according to the procedure in section 7.2.

The Roof Anchor must be inspected by a competent person other than the user at intervals of no more than six (6) months. Record the results of Competent Person inspection.

7.2 PROCEDURE FOR INSPECTION

- Step 1 Verify that the Roof Anchor is not cracked or bent and the anchor legs are straight and not deformed.
- Step 2 Check for visible red rust or corrosion.
- Step 3 Check the condition of the roof framing where the anchor is attached. If the framing is rotted or starting to deteriorate, do not use the Roof Anchor.
- Step 4 If the anchor is already installed, verify that it is still properly secured to the roof framing. Check to confirm that all six (6) wood screws are present and intact. Inspect metal parts for cracks or breaks, missing or loose components
- Step 5 Verify that the two product labels are present and legible. Missing or illegible labels must be replaced by contacting the manufacturer at 800-722-1231.

WARNING

If this Roof Anchor is damaged or has been subjected to fall arrest forces (or the equivalent), it must be immediately removed from service and inspected.

Defects, damage and excessive wear are generally not repairable. If detected, remove the Roof Anchor from service and destroy.

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).

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