

BUCKINGHAM MFG.

INSTRUCTIONS / WARNINGS

Step Bolt with Anchor Loop (part numbers 3058, 3075, 3078 & 3010)

Inspection

Inspection prior to each installation should include but not be limited to:

- ♦ Visually check the entire product to ensure no cracks, corrosion, dents, or damage (especially threads) exist.
- ♦ Visually inspect to ensure no excessive wear, especially in the anchor loop area exists.

Remove from service, destroy and discard unit if it does not pass this inspection and replace immediately.

Installation Instructions

- ♦ Prior to installation, ensure inspection to the step bolt per the inspection section has been completed.
- ♦ The support structure hole must be compatible with the step bolt threads. (3058 utilizes 5/8" thread diameter, 3075 utilizes 3/4" thread diameter, 3078 utilizes 7/8" thread diameter and 3010 utilizes a 7/8" thread diameter).
- ♦ The flange (flat portion adjacent to threads) of the step bolt **MUST** be attached **FLUSH** with the support structure (see Fig.1).
- ♦ Insert the threaded portion of the step bolt (shank) into the support structure hole. Assure that the hole and shank are properly matched. Do not use a step bolt with a smaller shank diameter on a structure with holes designed for step bolts with larger shank diameters.
- ♦ Place the supplied washer onto the shank of the step bolt (rear side of the support structure).
- ♦ Visually inspect that the washer cannot be forced into the hole, otherwise the use of a larger washer (not supplied) may be necessary.
- ♦ Carefully thread the supplied nut onto the shank of the step bolt (rear side of the support structure). Do not "cross-thread" while installing the nut.
- ♦ With the anchor support loop of the step bolt positioned at the bottom (pointing towards the ground-see Fig.1), tighten the nut until the washer is visually flat against the mounting surface as shown in Fig.2.
- ♦ Inspect that the step bolt flange (adjacent to threads) is flush with the support structure (Fig. 1), and that the washer is flush against the mounting surface (Fig. 2).
- ♦ Ensure the nut has been properly tightened (Maximum Torque 150 ft. lbs.).
- ♦ Certain models of Buckingham step bolts are supplied with two nuts that are intended only for the use of the two-nut locking method (tightening two nuts together, Fig 4). This method must only be used by properly trained and qualified professionals with the skill, knowledge, and ability to perform this locking method.
- ♦ Visually inspect the entire installation for any obvious defects prior to use.



Fig.1

Mount Flange Flush to Support Structure

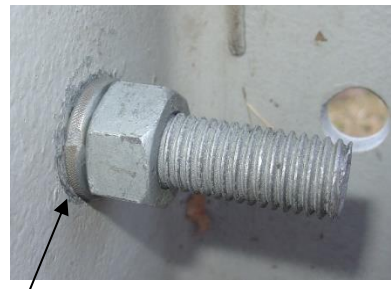


Fig.2

Ensure Nut Has Been Properly Tightened To Support Structure. Maximum Torque 150 ft. lbs.

NOTICE: IMPROPER USE OF STEP BOLTS



Fig.3

Unless the welded flange is:

1. capable of supporting at least 5,000 pounds (22.2 kN) for each employee attached; or
2. designed, installed, and used, under the supervision of a qualified person, as part of a complete personal fall protection system that maintains a safety factor of at least two
3. and at a width sufficient to allow the complete step bolt flange to mount flush against it, step bolts must not be used in the manner shown in Fig. 3.

Step bolts are designed to be used with the complete step bolt flange mounted flush to the structure.

Installation Inspection

Installed upon a support structure:

- ♦ Visually check the entire product for any cracks, corrosion, dents, damage and for any excessive wear, especially in the anchor loop area.
- ♦ Inspect that the anchor support loop is positioned at the bottom at the connection point (pointing towards the ground).
- ♦ Inspect that the step bolt flange (adjacent to threads) is flush with the support structure, that the washer is flush against the mounting surface and the nut has been adequately tightened (max. torque 150 ft. lbs.).



Fig. 4

Remove from service, destroy and discard unit if it does not pass this inspection and replace immediately.

Warning

- ♦ This equipment is intended for use by properly trained professionals only.
- ♦ Manufacturer's instructions shall be provided to the user of this product. If additional copy is needed, contact Buckingham Mfg. Co. or obtain on Buckingham's website at www.buckinghammfg.com.
- ♦ Completely read, understand, and follow all instructions, warnings, and guidelines pertaining to this and all associated equipment before use. Failure to do so could result in your serious injury or death.
- ♦ Employer - instruct your employees as to proper use, warnings and cautions before use of this equipment.
- ♦ The double locking nut method must only be used by properly trained and qualified professionals with the skill, knowledge, and ability to perform this locking method.
- ♦ Buckingham step bolts are available in a wide variety of threaded shank lengths and diameters and thread pitch. Ensure the step bolts you are using are only attached to structures that are compatible.
- ♦ This product is designed to be used by a person with a maximum weight of 350 lbs. when fully equipped.
- ♦ Buckingham step bolts comply with the manufacturers criteria of the OSHA 1910.24 regulation, subparts (a)1, (a)2, (a)4 and (a)7. In regard to the terminology "maximum intended load" used in (a)7, the assumption used is that reference is being made to the maximum user weight rating generally specified by personal protective equipment standards such as ANSI Z359 and ASTM F887.
- ♦ Fall protection equipment, (i.e. fall arrest, work positioning, retrieval, suspension, travel restraint, etc.) should not be resold or provided to others for re-use after use by original user as assurance cannot be granted that a used product meets criteria of applicable standards and is safe for use to a subsequent user.
- ♦ Selection of products should be such that they aid the worker in the performance of their job and particular work situation. Therefore, be certain this equipment is suitable for the intended use and work environment. It should only be used as personal protection equipment. If suitability for intended use is questionable, always consult your Supervisor, Safety Director or contact Buckingham Mfg. at (607) 773-2400 or 1-800-937-2825.
- ♦ Equipment subjected to impact loading must be immediately removed from service, destroyed, and discarded.
- ♦ This step bolt anchorage connector shall not be attached to more than one personal fall arrest system.
- ♦ Anchorages used for attachment of personal fall arrest equipment shall be independent of any anchorage being used to support or suspend platforms and capable of supporting at least 5,000 pounds (22.2 kN) for each employee attached; or designed, installed, and used, under the supervision of qualified person, as part of a complete personal fall protection system that maintains a safety factor of at least two.
 - *Qualified person describes a person who, by possession of a recognized degree, certificate, or professional standing, or who by extensive knowledge, training, and experience has successfully demonstrated the ability to solve or resolve problems relating to the subject matter, the work, or the project.*
- ♦ OSHA requires that impact force in a fall NOT exceed an 1800 lbf. limit with a harness. Keep connecting device slack to a minimum or use a deceleration unit to stay under these limits.
- ♦ Rig to avoid contact with structures below in a fall.
- ♦ Always keep anchor point above rear D-ring of your personal fall arrest unit.
- ♦ Always work directly under fall arrest anchor point to avoid swing fall injuries (pendulum effect).
- ♦ Only Buckingham Mfg. Co. or those people authorized in writing by Buckingham Mfg. Co. may make repairs / modifications to this equipment.
- ♦ Use PPE equipment only for the specific purpose for which it is designed and intended, Step bolts are for personal use only. NOT for hoisting.
- ♦ When utilizing the anchor point of this product, it should only be used with a locking snap hook / carabiner meeting applicable OSHA requirements.
- ♦ Ensure there is no pressure on the snap hook locking mechanism sufficient to depress it as this will, due to its length, render it incompatible with currently designed D-rings and make it very susceptible to rollout.
- ♦ Always visually check that the snap hook/carabiner freely engages D-ring or anchor point and the keeper / gate is completely closed with each use. Never rely solely on the feel or sound of the snap hook/carabiner engaging.
- ♦ Ensure snap hooks / carabiners are positioned so that their keepers / gates are never load bearing.

- ◆ Avoid contact of this product with electrical hazards, moving machinery, chemicals, high temperature surfaces, welding, or other heat sources which may damage the material.
- ◆ Always visually check the entire product for any cracks, corrosion, dents, or damage (especially threads). If any defects are found, immediately destroy the product to prohibit its use.
- ◆ Ensure step bolt is properly secured to anchorage according to the instructions above.
- ◆ Product covered under these instructions / warnings should not be resold / redistributed or reused after use by original user.

Storage

- ◆ Proper maintenance and storage of your equipment will prolong its useful life and contribute toward its performance.
- ◆ Step bolts not in use must be stored in a clean dry area and should be protected from dirt, chemicals and moisture in closed containers.
- ◆ Step bolts that accumulate rust resulting from plant or job-site conditions should not be used.
- ◆ When removed from storage, the step bolts MUST be inspected per the above inspection criteria prior to installation.

NOTE: Ensure proper fit / size of product before use. This product cannot be returned unless it is in new / unused condition.

Statement of Obsolescence

Precise “useful life expectancy” or “shelf life” for this product is not specified, as the degree of use, conditions of use, and the degree of care and storage determines useful life. All users maintain responsibility to select proper equipment for the job, be properly trained in its use, and ensure all personnel support equipment passes inspection before each use. Upon evidence of defects, damage or deterioration, all equipment shall be removed from service immediately and tagged or marked as unusable or destroyed. Additionally, all equipment shall be inspected on a regular basis not to exceed one year by a Competent Person, as defined by OSHA/ANSI, to verify that the equipment is safe for use. In the event of any question or concern regarding the condition of such equipment, users shall remove the equipment from service for further inspection. All users must comply with OSHA/ANSI/ASTM standards prior to and in using such equipment. For more information regarding safe and appropriate use of equipment, please contact Buckingham Manufacturing at 1-800-937-2825.

International Users:

Notwithstanding the above, please know that certain international jurisdictions require manufacturers of equipment to provide customers with a maximum useful lifespan (sometimes referred to as a “Statement of Obsolescence”). To the extent required, Buckingham personal protective equipment manufactured from synthetic fiber materials including but not limited to items such as webbing and/or rope are subject to a maximum useful lifespan of ten (10) years from the date of manufacture. As stated above proper usage, storage, maintenance, and care impacts the useful lifespan of equipment. Extreme circumstances may require that product must be retired after only one use. This statement is made in conformance and compliance with BS EN 365:2004. International users must ensure that product inspections are completed by Competent Persons as defined by international standards including but not limited to British Standard (“BS”). If equipment fails any inspections, it must be immediately withdrawn from service and destroyed. For more information regarding safe and appropriate use of equipment, please contact Buckingham Manufacturing at 1-800-937-2825

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