

BUCKINGHAM MFG.

INSPECTION CRITERIA FOR DIELECTRIC QUICK CONNECT BUCKLES

The below information is intended as a guide in the proper inspection of the Yoke / Niagara (N-DE007) Dielectric Quick Buckles used on Buckingham Mfg. Arc Rated Harnesses.

Prior to shipping, all Buckingham harnesses go through the following internal inspection processes at the factory to ensure proper operation of all attached buckles.

1. An incoming sampling inspection is performed when buckles are received in from the supplier (Yoke Niagara).
2. 100% ongoing inspections are performed by multiple operators during separate manufacturing operations.
3. 100% pre-inspection is performed prior to final inspection.
4. 100% final inspection is performed after the completion of all manufacturing processes and prior to the completed harness being packaged.

Inspection should occur prior to each use of the harness by the user and at a minimum of once a year by a competent person. Inspect proper function / connection of all buckles attached to the harness. Equipment should be replaced if you have any question / doubt about it being safe.

Note: To inspect prior to donning, place the harness on an elevated surface so the harness weight does not interfere with the buckle inspection.

To inspect for proper function / connection:

- Push the receptor end and tab end of the Quick Connect Buckle together ensuring it is fully connected with both locking pawls engaged. When the two halves are properly connected together, a clicking sound should be heard, and the green indicator dot on the tab end must be completely visible through the inspection window of the receptor end (Fig. 1 & 2).
- Note: the clicking sound will be the sound of both pawls snapping shut. A faint sound may be heard from the male end connecting to the female end of the buckle.
- Grasp the webbing and put tension on the buckle by pulling the webbing in opposite directions to ensure both locking pawls are engaged. The buckle halves should not disengage when tension is applied to the buckle assembly.
- Note: if any buckle operates or sounds different than any other buckle on harness, please remove from service and inspect by a competent person.

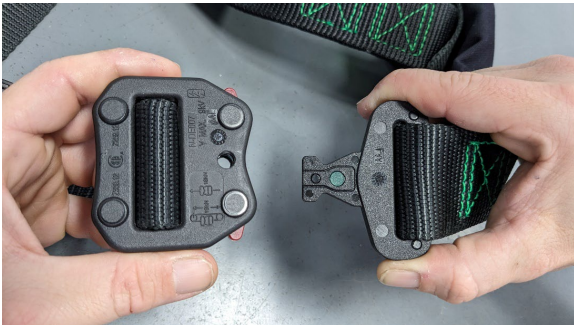


Fig. 1



Fig. 2

Perform a Pawl Function Test on both of the red release pawls on your Quick Connect Buckles to ensure the pawls return back to their original position as follows.

The goal of the Pawl Function Test is to ensure the pawls rotate back into the engaged position to the male end of the buckle. The pawls must not remain open and must return to an engaged position.

- After engaging the receptor and tab ends of the buckle.
- Push one of the red pawls to the open position (Fig. 3).
- Release the pawl. It should rotate back to the closed position. (fig 4).

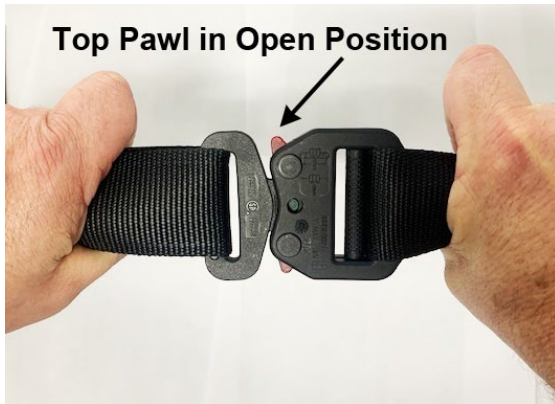


Fig. 3



Fig. 4

- Repeat the above procedure for the opposite red release pawl. Figures 5 and 6 show the strap rotated 180° with the pawls tested in the same manner as above.

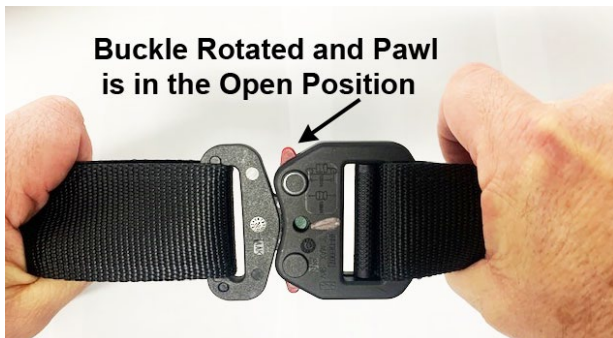


Fig. 5

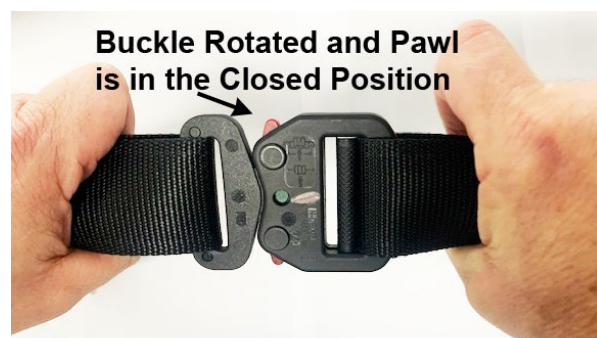


Fig. 6

- If any pawl does not rotate back to the closed position, the buckle should be (a) cleaned as outlined below to ensure there are no obstructions inside the buckle hindering its intended function and (b) lubricated with Rainbow 4410 Clean & Lube or, WD-40® as recommended per Buckingham Harness Instructions and (c) Re-tested with the Buckle Function Test outlined above.
- If the pawl still does not return to the closed position, please remove from service and inspect by a competent person.

Cleaning / Lubrication

Buckingham's primary concern is to provide a quality product to its customers to enable them to carry out their profession in a safe manner. However, we always require our customer's assistance in proper equipment operation, inspection, cleaning and maintenance.

Dielectric Quick Connect Buckles may be cleaned by using a cotton swab, limited air pressure or dipping it into a container of water to remove fine particles and any foreign matter which may enter the receptor end of the buckle and preventing proper engagement and function.

The exterior of the buckle should be dried with a clean cloth. The inside of the receptor end of the buckle should be air-dried and re-lubricated.

Additionally, the Quick Connect Buckle pawls should be lubricated weekly or as often as required to maintain smooth operation (no binding) with Rainbow # 4410 Clean & Lube or WD-40®. To lubricate, disconnect the buckle and aim the spray nozzle (Rainbow Clean & Lube seen in Fig. 7) or insert the spray straw (WD-40 seen in Fig. 8 & 9) near the pivot point of the buckle. Give a quick spray and then repeat for the opposite side. Wipe any excess lubricant off with a clean dry cloth and test the buckle for proper function / connection.

Visually inspect for any damage to the entire component including the slide bar and receptor and tab end of buckle.



Fig. 7



Fig. 8

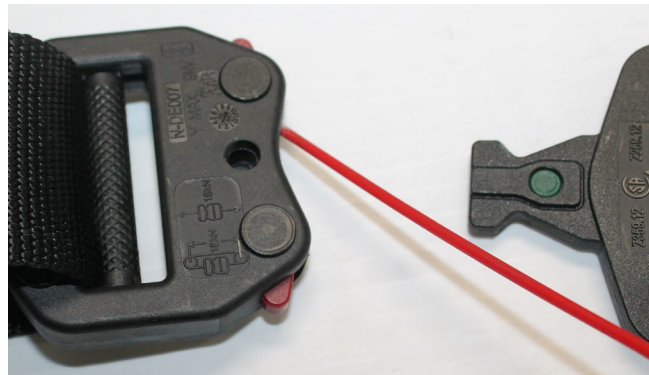


Fig. 9

This document is a supplemental document and does not replace the standard harness instruction supplied with Buckingham Harnesses. Read, understand, and follow supplied harness instructions as well as that of any supplied associated equipment.

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