

680 Series & 741 Series – Rear Plate Attachment Screw Replacement Procedure on Loaded Devices

Dear Customer:

Our records indicate that you possess a 680 Series or 741 Series exposure device. As part of the most recent Type B package approvals for the 680-OP and 741-OP packages, a requirement was added to replace the screws used to attach the rear plate to the device with screws that comply with ASTM F879 Austenitic Alloy Group 1, CW or CW1. This replacement needs to be completed by July 31, 2016. After that date, any 680 or 741 that has not replaced the rear plate screws with ones compliant to ASTM F879 will no longer be able to be transported under the Type B(U) certificates.

In addition to this bulletin, QSA Global, Inc. is providing a kit to aid customers in updating their exposure devices. The kit contains (4) lot controlled, Quality Class A replacement screws, (4) lockwashers, safety wire, a T30 Torx Bit and torque wrench adaptor.

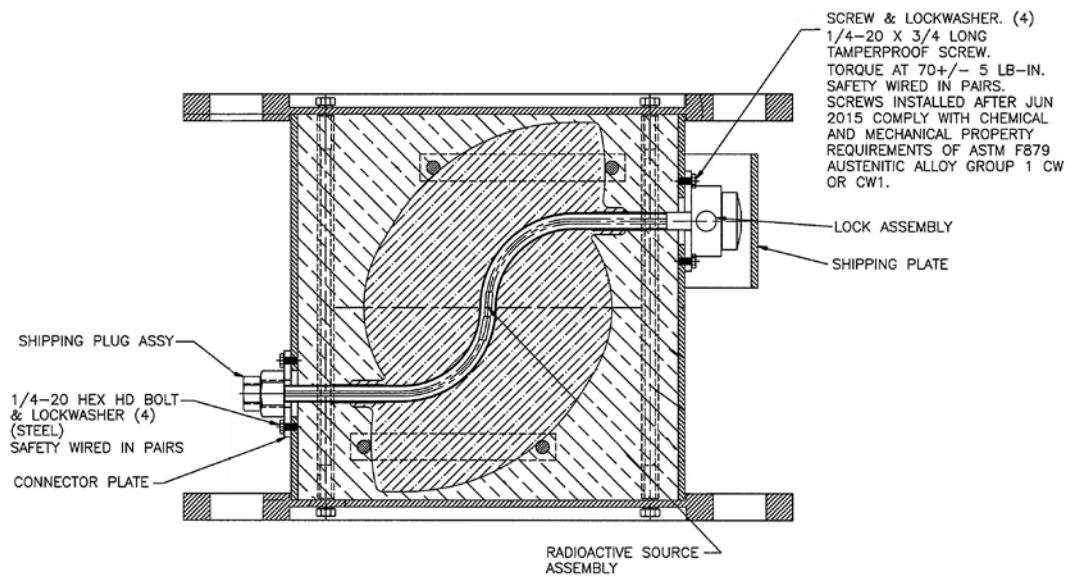
NOTE: If your company has more than one unit, if additional hardware is needed, if you do not have access to a calibrated torque wrench that can be used to produce a torque of 70 ± 5 in-lbs or if you would prefer to arrange for a QSA Global, Inc. Service Technician to perform the screw replacement, contact **SENTINEL Customer Service at 1-800-225-1383 for assistance.**

Rear Plate Screw Replacement Procedure

This procedure is intended for screw replacement on a loaded 680 or 741 Series exposure device. A calibrated, operable survey meter must be available during this operation and ALL safety instructions must be followed as specified to ensure the security of the radioactive source wire assembly within the exposure device shielding at all times during this procedure.

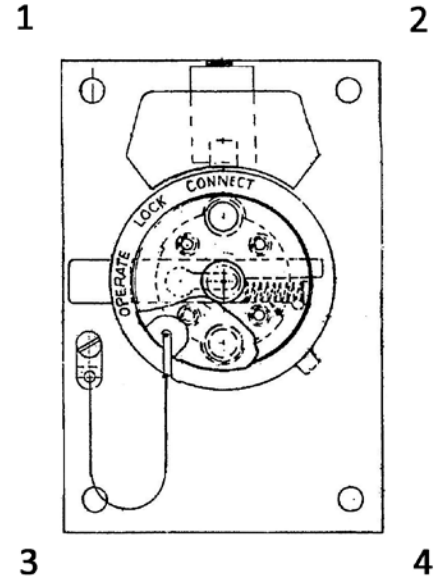
WARNING: Failure to following this procedure as written could cause increased radiation levels and possible elevated personnel radiation exposures.

1. Remove the shipping plate cover from the exposure device. Survey the exposure device taking reference radiation readings at the rear plate and the front plate.



- With wire cutters, clip and remove the safety wire from the existing rear plate screws **DO NOT REMOVE the screws at this time, ONLY the safety wire.**

CAUTION: **NEVER LOOSEN OR REMOVE MORE THAN 2 SCREWS AT ONE TIME DURING THIS PROCEDURE. Keeping two screws attached and tightened at all times avoids the risk of losing control of the radioactive source locked in the exposure device.**



- Remove lockwashers and screws from Screws 1 and 4 as shown in the picture to the right.
- Using a calibrated 3/8 Drive Torque Wrench with the provided T30 Torx Bit and drive bit adapter, install a lot controlled 68001-32 screw with lockwasher in holes 1 and 4. Torque both screws to **70 ± 5 in-lbs.**
- Perform a radiation survey of the rear plate to ensure that dose rates have not changed. If a change in dose rates is observed, stop operations, secure the exposure device and contact QSA Global, Inc. for assistance.
- Repeat steps 3 through 5 for lockwashers and Screws 2 and 3 as shown in the picture to the right.
- Install safety wire after all four screws have been replaced and torqued. Wire screws 1 and 2 together as a pair and then wire screws 3 and 4 together as a pair.

NOTE: A special tool is not required for installation of the safety wire so long as the wire is installed through the heads of each screw and twisted securely closed on either screw end.

- Retain the lot identification of the 68001-32 screws installed and the date in your Service History for your 680 (or 741) exposure device (see example below). This information will demonstrate that your device complies with the Type B(U) requirements for the 680-OP or 741-OP as applicable.

Rear Plate Screw Replacement Record	
Device Model Number:	Serial Number:
68001-32 Lot Number:	
Torque Wrench ID:	Torque Wrench Calibration Date:
Screw Installation Completed:	Technician Signature:

Contact QSA Global, Inc. **SENTINEL** Customer Service at 1-800-225-1383 if you have any questions regarding this procedure or would like additional assistance.