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CLEANING THE 5001 SERIES SLIDING SHIELD

The 5001 Series moisture/density gauge contains a sliding shield located inside the gauge base to allow the extension of the gamma source rod while taking measurements in the field. This part provides shielding for the Cs-137 gamma source when the gauge is not in use.

During use, the cavity occupied by the shield will pick up a small amount of material from the source rod. After many uses, the accumulation of material will make the shield difficult to move aside when the source rod (handle) is pushed down and this indicates the need for cleaning. Care must be taken to prevent or minimize exposure to personnel during the process of cleaning.

Bottom Plate Removal

Place the gauge on a workbench with the base pointed away from the user and all other personnel within 20 feet (7 meters) of the gauge base. The operator must stand on the side of the gauge base opposite the gauge base.

Remove the two hex socket flat head screws holding the cover plate in position and remove the cover plate. Using a screwdriver or other similar tool remove the sliding shield and spring by prying outward from the top. Watch the spring as it is under compression and will tend to fly out some distance.

Clean the bottom plate and sliding shield by scraping off all accumulated material and lubricate the surfaces with a dry lubricant, T.F.E. Dry Lube Humboldt Scientific Part # HS-000155.

Cavity Cleaning

Exposure of the operator's hands to the open cavity must be kept to a minimum. Use a stiff brush, putty knife (if necessary) and compressed air to remove all loose material and spray coat the inside of the cavity with the same material as above.

Replacing the Sliding Shield

Allow all coatings to dry before re-installing the sliding shield. Place the spring in the hole in the sliding shield and put the shield into place making certain the opposite end of the spring snaps into a small recess inside of the cavity. The latter is important since the spring may slip sideways and not allow the sliding shield to operate properly.

Place bottom plate into position and secure with the two screws.

Place the gauge in an upright position on a flat surface (concrete floor) and push the source rod handle down to assure that the sliding shield functions properly.