RDA/RFS 2 STEPPER LEAD SCREW MAINTENANCE

The following procedure is essential to prevent premature wear and maintain smooth operation of the RDA/RFS2 transducer elevator mechanism.
The mechanism consists of two stainless steel lead screw shafts, which run through a brass control block. Failure to periodically lubricate the assembly can lead to premature wear and potentially costly repairs.

Always remember to follow safety procedures, including the use of safety glasses and protective gloves and disconnecting main power to the instrument before attempting service.

1. The necessary tools and lubricants are: 1x 5/64th Allen key with a ball end and tube of premium quality silicone grease.
2. The first lead screw is accessed from the front of the RDA/RFS2 and is located directly behind the FRT/BENDIX transducer. The lead screw shaft is accessed by removing the two 5/64th Allen head screws from the top of the black bellows like cover, and carefully lowering it. This will allow sufficient access for lubrication.
3. The first step is to clean the lead screw using some alcohol and a lint free cloth. The silicone grease can now be liberally applied to the screw shaft. The elevator should then be either manually or electrically raised up and down to completely lubricate the screw shaft assembly. Remove excess grease.
4. Re-assemble in reverse order.
5. To lubricate the second lead screw shaft it is necessary to gain access to the upper rear of the RDA/RFS2. Remove the 4x 5/64 Allen head screws securing the upper rear assembly plate; this plate contains the air pressure gauges, regulators and air filter. Carefully pivot the plate forward, this will allow sufficient clearance to lubricate the second lead shaft. After following the procedure outlined instep 3. Reassemble the upper plate assembly in reverse order and test.