



VACGEN

## Assembly Guide

MD95 Overhaul AS0029

VGS03-02T29



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Revision	Date	Comment	Initials
1			
2			
3			

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Diamond Drive, Lower Dicker  
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BN27 4EL, UK



## MD95 Overhaul Information

1. Release the pressure on the seal by opening the valve with the "T" Bar and remove the Index Screw.
2. Undo the 6 cap headed screws by one or two turn, these do not need to be removed.
3. Unscrew the valve body, taking care not to drop the inner parts out of the valve, this can normally be done by hand.
4. Remove the upper Schnorr Spring Assembly, noting the orientation, especially of the Schnorr Washers (0.8mm).
5. Carefully remove the Nickle Disc.
6. If this is stuck, push a small pin through the outlet hole in the base flange and tap the disc out.
7. Remove the Schnorr Washers, noting the orientation (0.7mm), taking care not to damage the knife edge.
8. Blow out the inside of the valve with dry clean gas, not a compressed air line as may contain water.

Assembly in reverse, taking particular care to assemble the correct size Schnorr Washer and the correct orientation of the Schnorr Washers.

1. Once assembled place on a Leak Checker.
2. Tighten the 6 cap headed screws enough to seal the Nickle Disc, these do not need a lot of force, but must be even force.
3. Tighten the adjusting screw with the "T" Bar until you feel pressure, but take care not to tighten, the valve will have a small leak at this point.
4. Pump down and turn the "T" bar until the valve is Leak Tight and check the body joint for leaks at the same time with Helium.
5. Reset the index ring to Zero by releasing the grub screw on the Index cap.
6. Vent the Leak Checker and fully open and close to the zero mark (do not go passed the set mark) 3 or 4 times to bed in seal.
7. Re leak check to see it is still sealed, if not, repeat from 4.
8. Try the valve for controlled leak rate, this should be smooth from  $1 \times 10^{-9}$  until the  $1 \times 10^{-5}$ , the leak checker will probably trip out once in the 5's!



# DRAWINGS

Carefully open the body to see the orientation of the schnorr washers, as it is important to get these in the correct order

