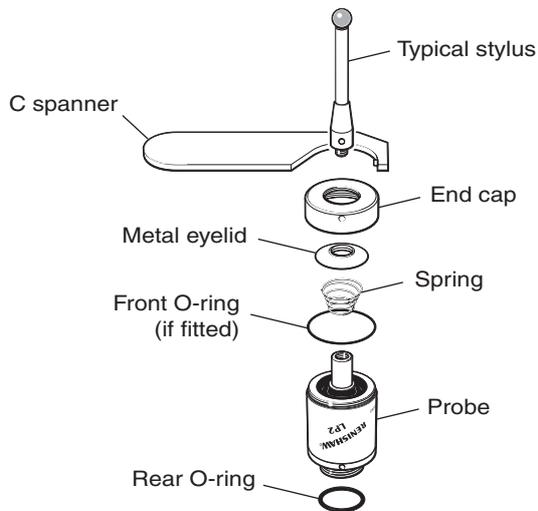
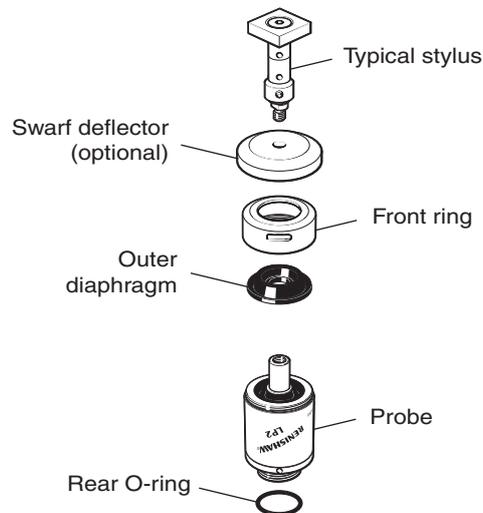


# LP2/LP2H probe diaphragm conversion/replacement kit

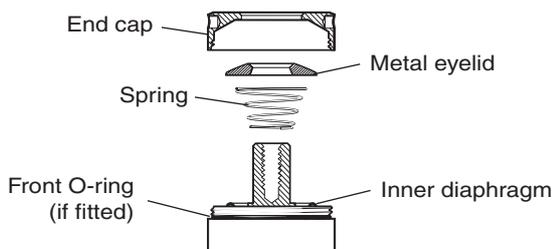
## BEFORE CONVERSION with metal eyelid



## AFTER CONVERSION with outer diaphragm and optional swarf deflector



### Removing obsolete parts



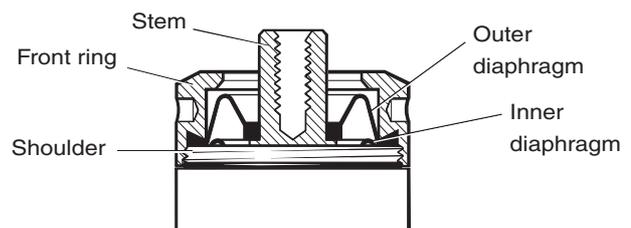
1. Remove the stylus.
2. Remove the end cap using the special C spanner.
3. Remove the metal eyelid and spring.
4. Remove the front O-ring (if fitted).

**WARNING:** DO NOT remove the inner diaphragm.

5. Thoroughly clean the exposed end of the probe with a jet of coolant.

**CAUTION:** Never use a degreasing agent. To avoid damaging the inner seal, do not use sharp cleaning tools.

### Fitting new conversion parts



1. Before fitting the outer diaphragm, ensure that the inner and outer surfaces are free from visible particles.
2. Push the diaphragm over the stem. Do not stretch the centre hole (ID) more than 8 mm (0.3 in), otherwise tearing may occur. The diaphragm must be fully located against the shoulder. The void between the inner and outer diaphragm must be clean.
3. Screw the front ring in place until it is finger-tight. Ensure the outer diaphragm is centrally located with no wrinkles and is held firmly by the front ring around the entire circumference.
4. Finally fit the stylus and check the diaphragm location by overtravelling in the  $\pm X$ ,  $\pm Y$  and  $+Z$  direction.

## Fitting new replacement parts

1. Remove the O-ring from the rear of the probe (this is necessary only when the probe has been removed).
2. Remove the swarf deflector (if fitted).
3. Remove the front ring using the C spanner provided.

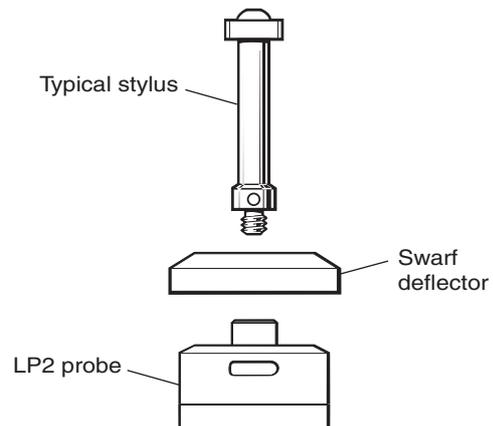
**NOTE:** The C spanner is for removal of the front ring only. The front ring is only to be tightened by hand.

4. Remove the diaphragm.

To fit the new diaphragm, reverse the above procedure.

## Swarf deflector (optional)

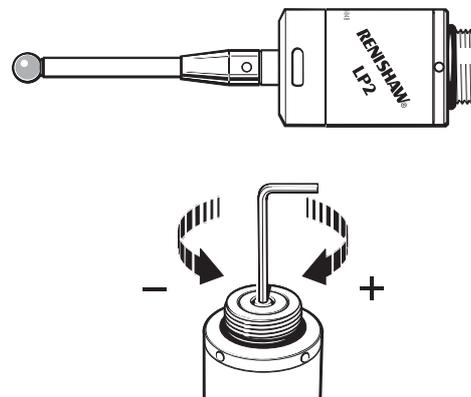
The optional swarf deflector is recommended if the probe is mounted in a vertical position, or if hot chips contact the outer diaphragm. The swarf deflector locates between the stylus and the probe.



## Stylus trigger force adjustment (LP2 only)

**NOTE:** The stylus trigger force of the LP2H is NOT adjustable.

When the swarf deflector is fitted, the Z overtravel is limited to 4.75 mm (0.19 in). As a consequence of fitting the retrofit kit, the probe spring pressure may be reduced. To restore the probe trigger force value to its original setting of 50 gf to 90 gf (1.76 ozf to 3.17 ozf) depending on sense direction, turn the adjusting screw one turn in a clockwise direction.



## Parts list (please quote the part number when ordering equipment)

Type	Part number	Description
Conversion kit	A-2063-8023	Front ring, two C spanners, outer diaphragm, O-ring
Replacement kit	A-2063-8030	Outer diaphragm, O-ring
Swarf deflector	M-2063-8003	Ø28 mm, protects probe from hot swarf
Stylus adaptor with break protection	M-5000-7582	8 mm long, protects probe from excessive overtravel forces

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