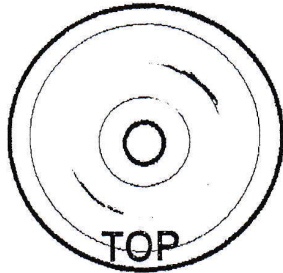


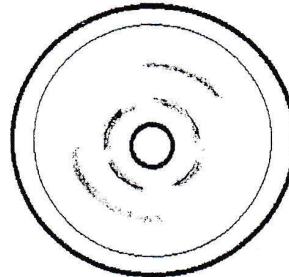
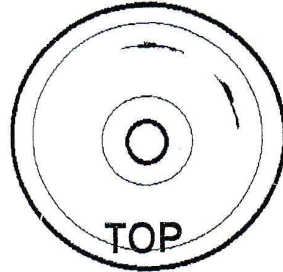
Common causes of diaphragm failure



Two marks in correspondence to valve seat

Causes

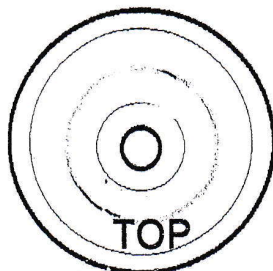
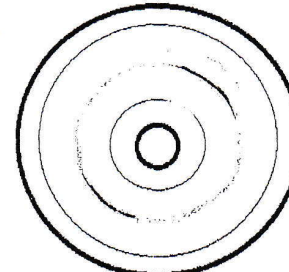
1. Restricted suction. Blocked suction filter. Suction hose blocked or kinked. Suction lift too high. Spray mixture too thick (dense)
2. Pump RPM above specification
3. Suction valve not sealing
4. Cylinder Sleeve holes not in correct position
5. Chemical incompatible with diaphragm material, in addition to one of the above causes.



Fatigued and worn underneath piston retaining disc and two marks in correspondence to valve seat.

Causes

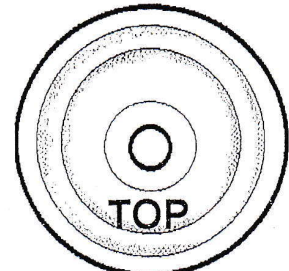
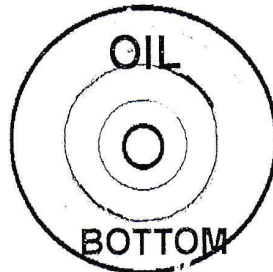
1. Chemical incompatible with diaphragm material
2. Diaphragm swollen and soft
3. Diaphragm soft and spongy (Below 60°)
4. Diaphragm profile distorted
5. Diaphragm shape distorted
6. Increase in external diameter
7. Diaphragm swollen



Circular fracture on piston side of diaphragm that is same size as piston.

Causes

1. Excessive wear between piston and valve
2. Suction has too much pressure (excessive head)
3. Low pump RPM
4. Cylinder sleeve holes not in correct position
5. Delivery valve not sealing
6. Low oil level in pump



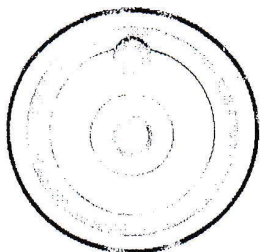
Fracture on external diameter and worn or fatigued under piston retaining disc.

Causes

Fatigue breakage, diaphragm worn out

Remedy

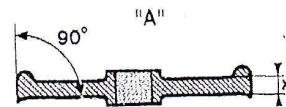
Diaphragm must be checked once a year.



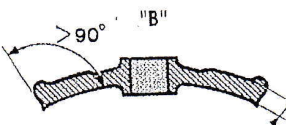
Straight fracture

Causes

Incorrect air bleeding, air trapped under diaphragm



A. Standard shape



B. Diaphragm distorted

B. Swollen diaphragm

