



Scotsman®
Ice Systems

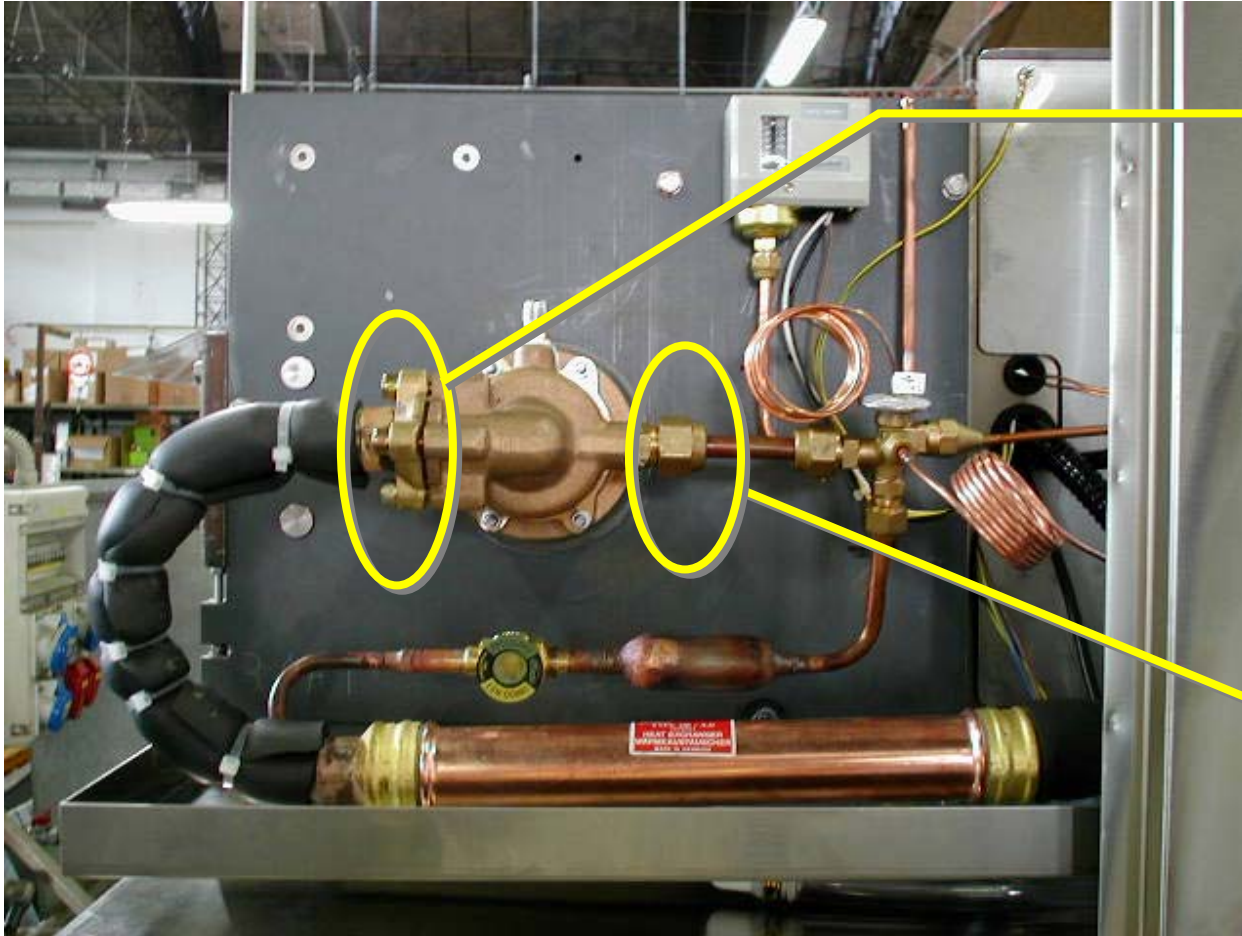
MAR

**REPLACEMENT OF SEAL
MECHANISM KIT**

Before removing the refrigerant manifold it is necessary first to:

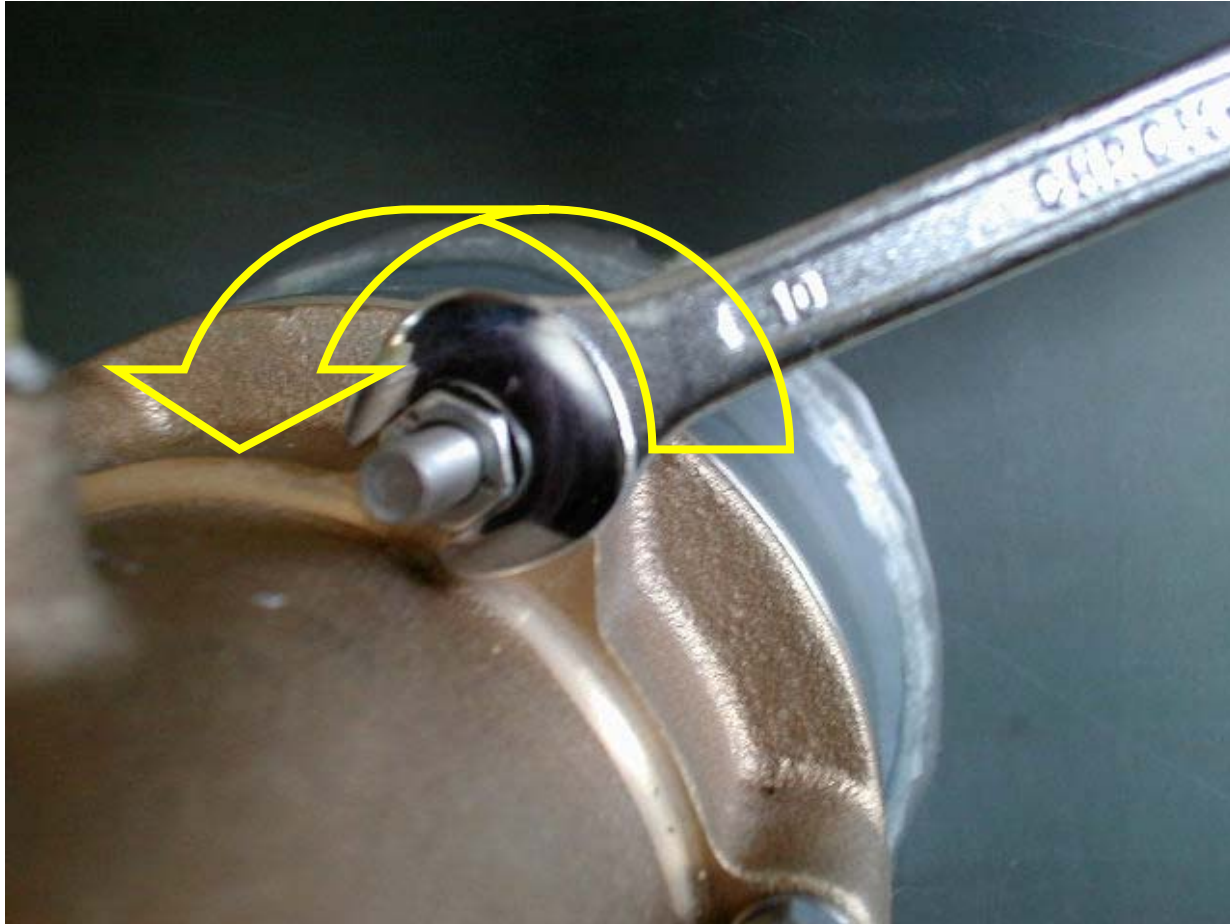


- Recover refrigerant in high side section

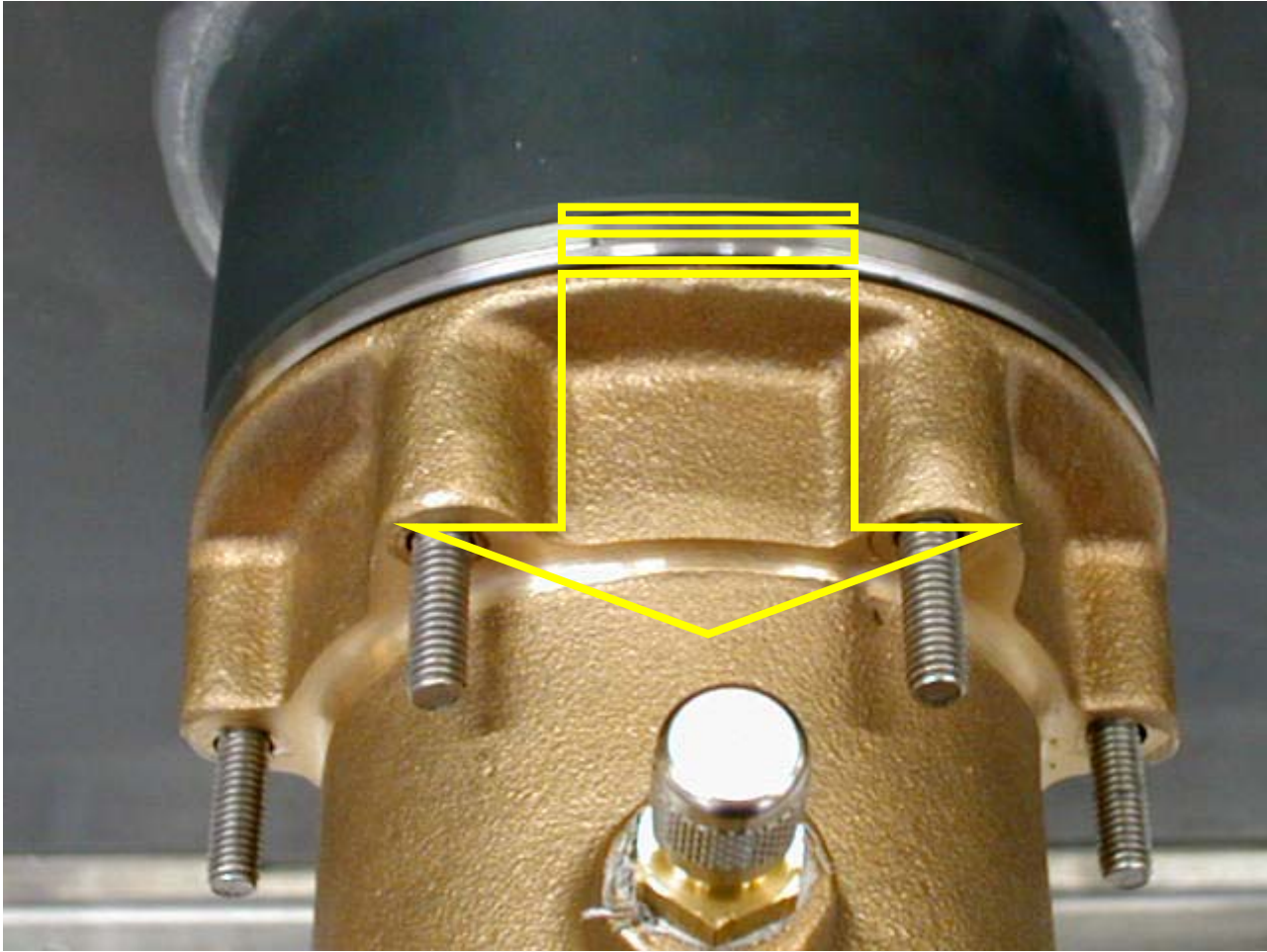


Remove the 4
allen screws of
refrigerant
outlet fitting to
manifold
and.....

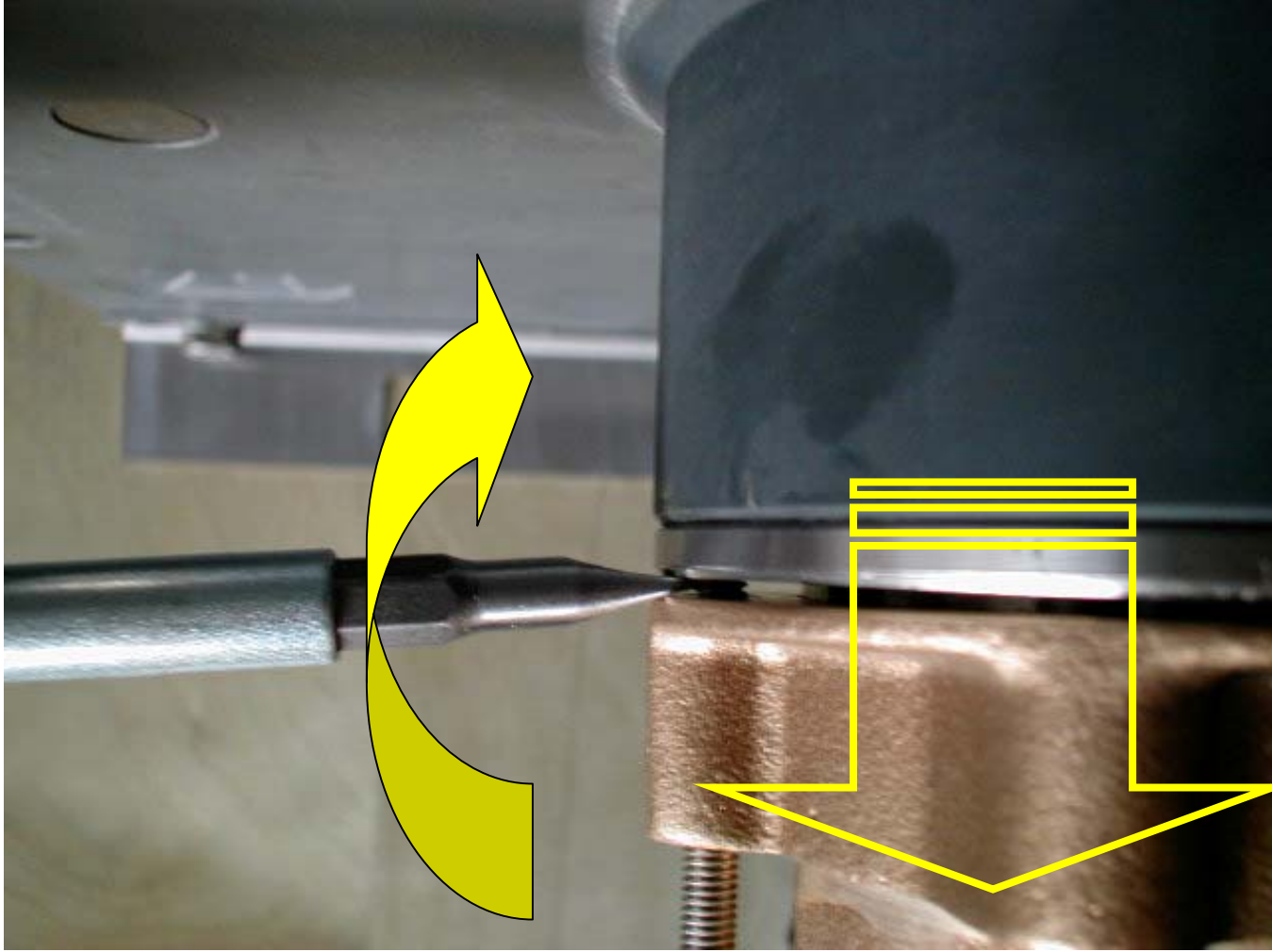
....flared nut
from the inlet.



Unloose and remove the 6 nuts and washers securing the refrigerant manifold to the seal mechanism housing.



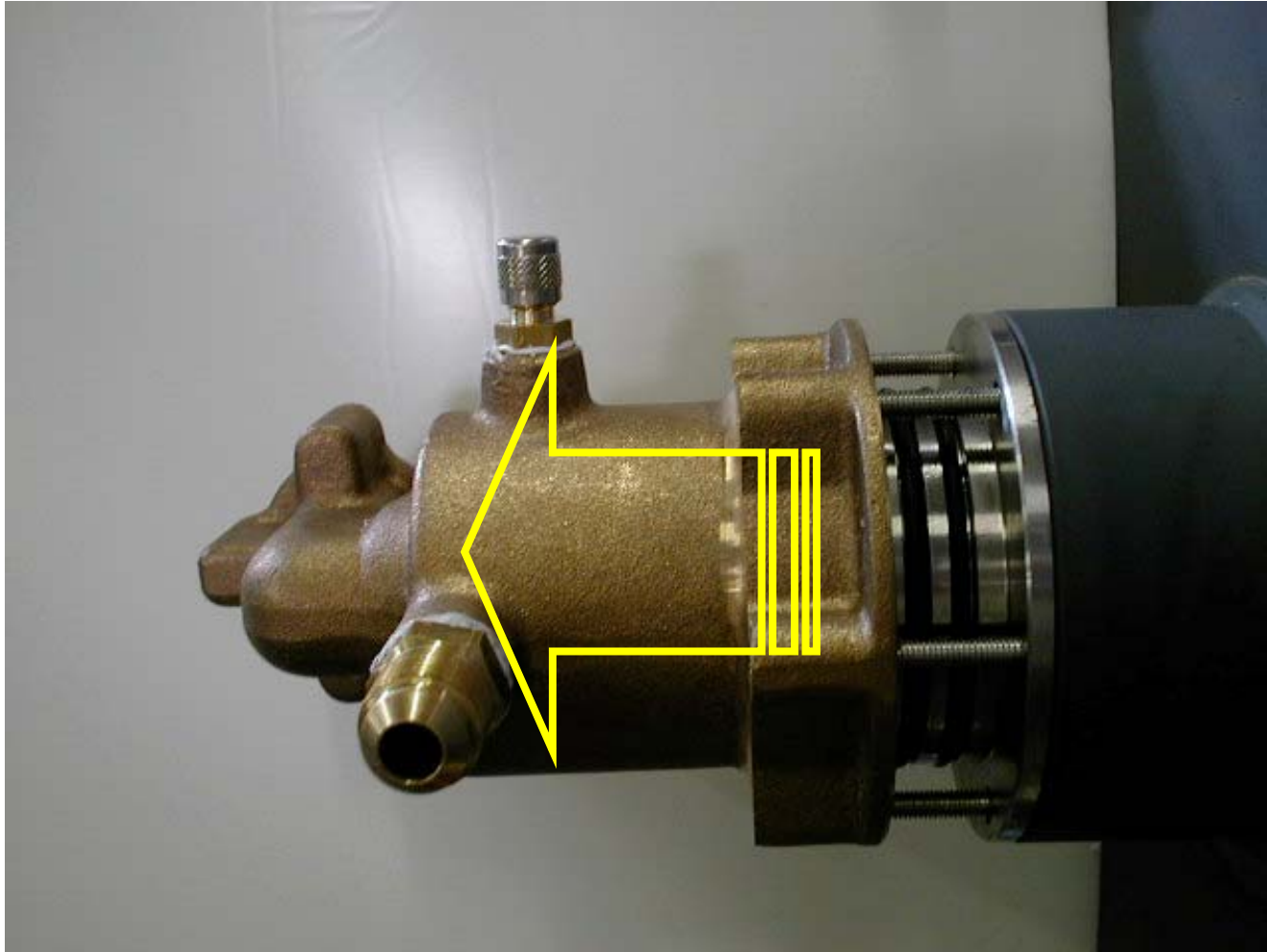
Removed the
refrigerant
manifold.....



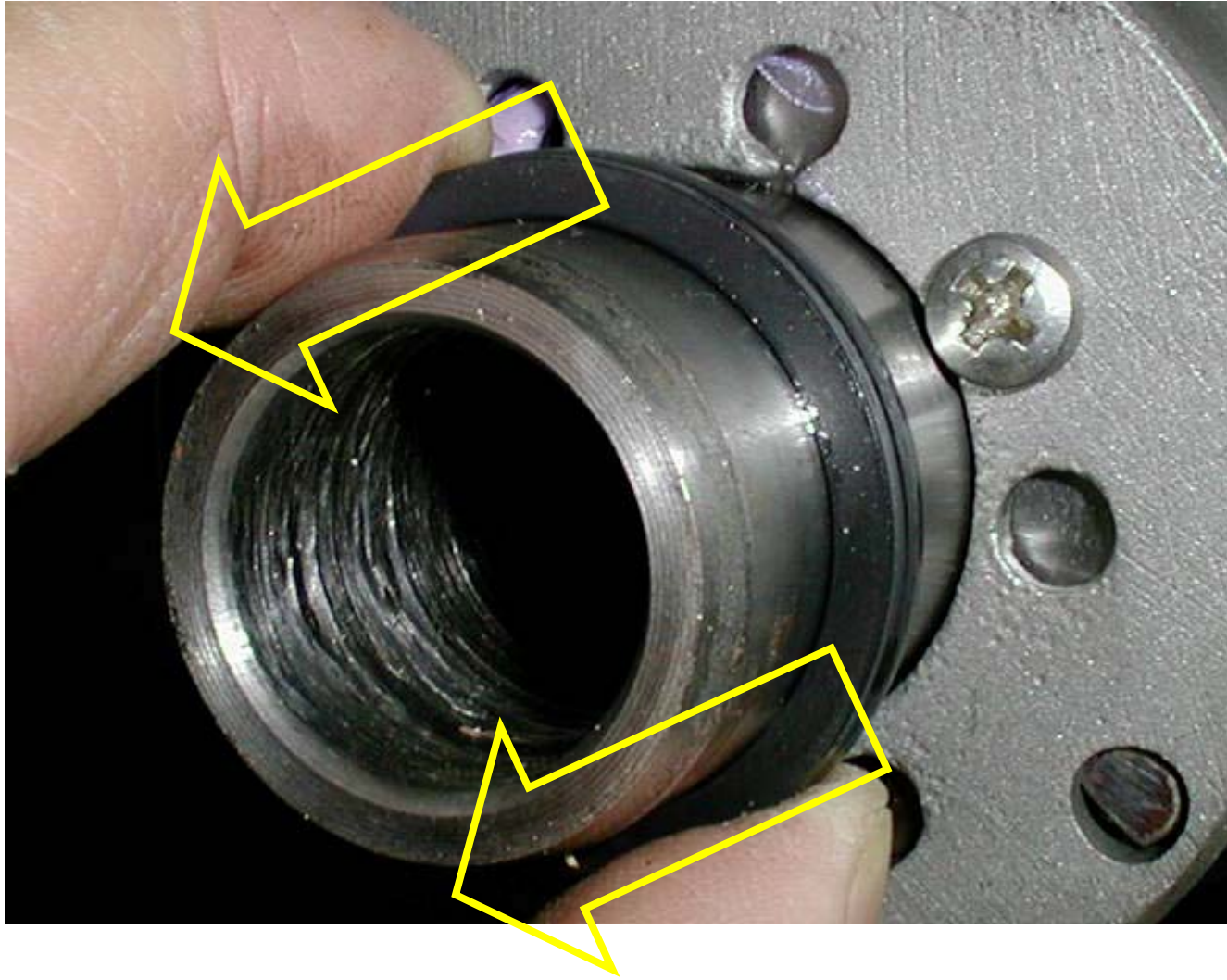
..... with the

help of two

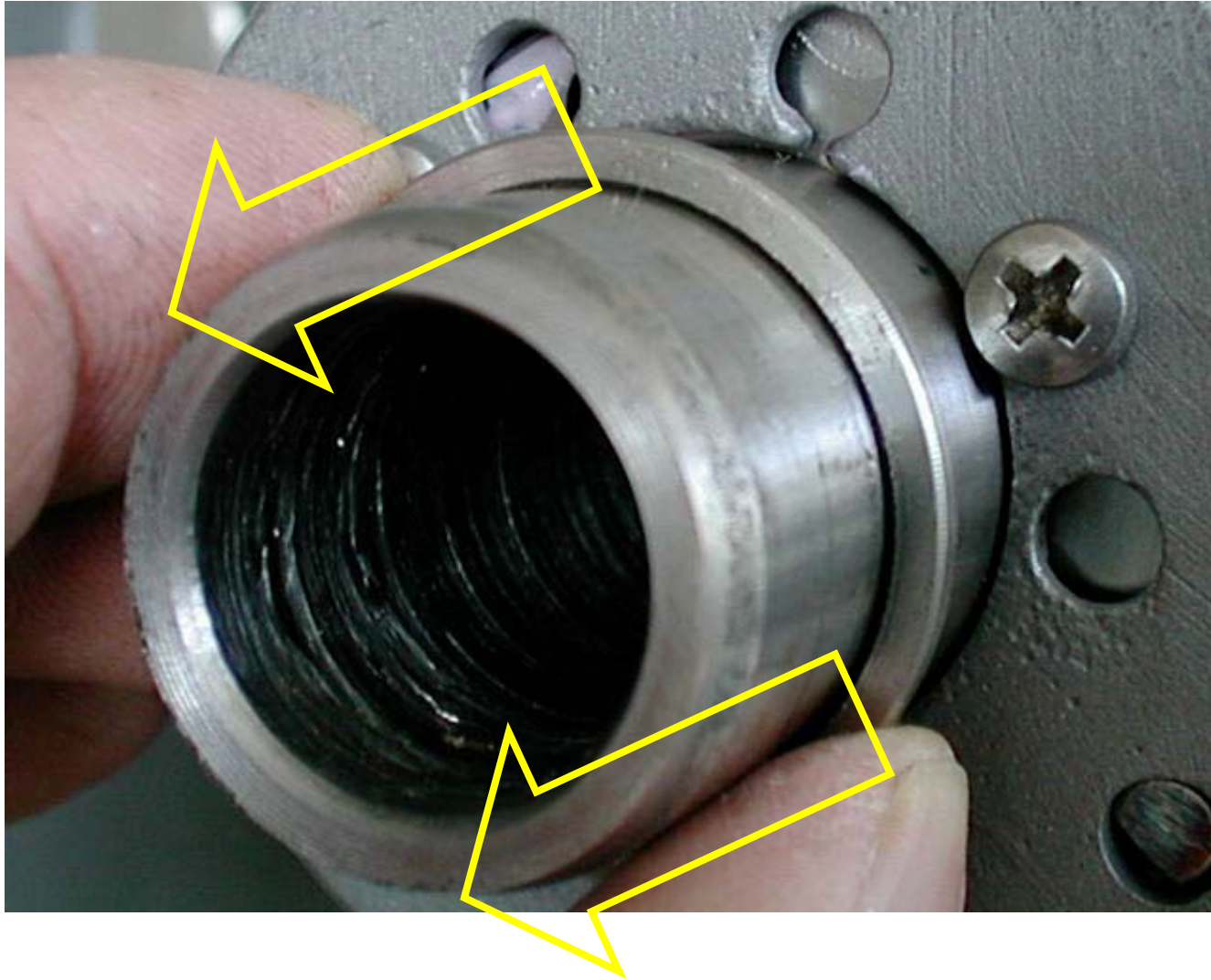
screwdrivers....



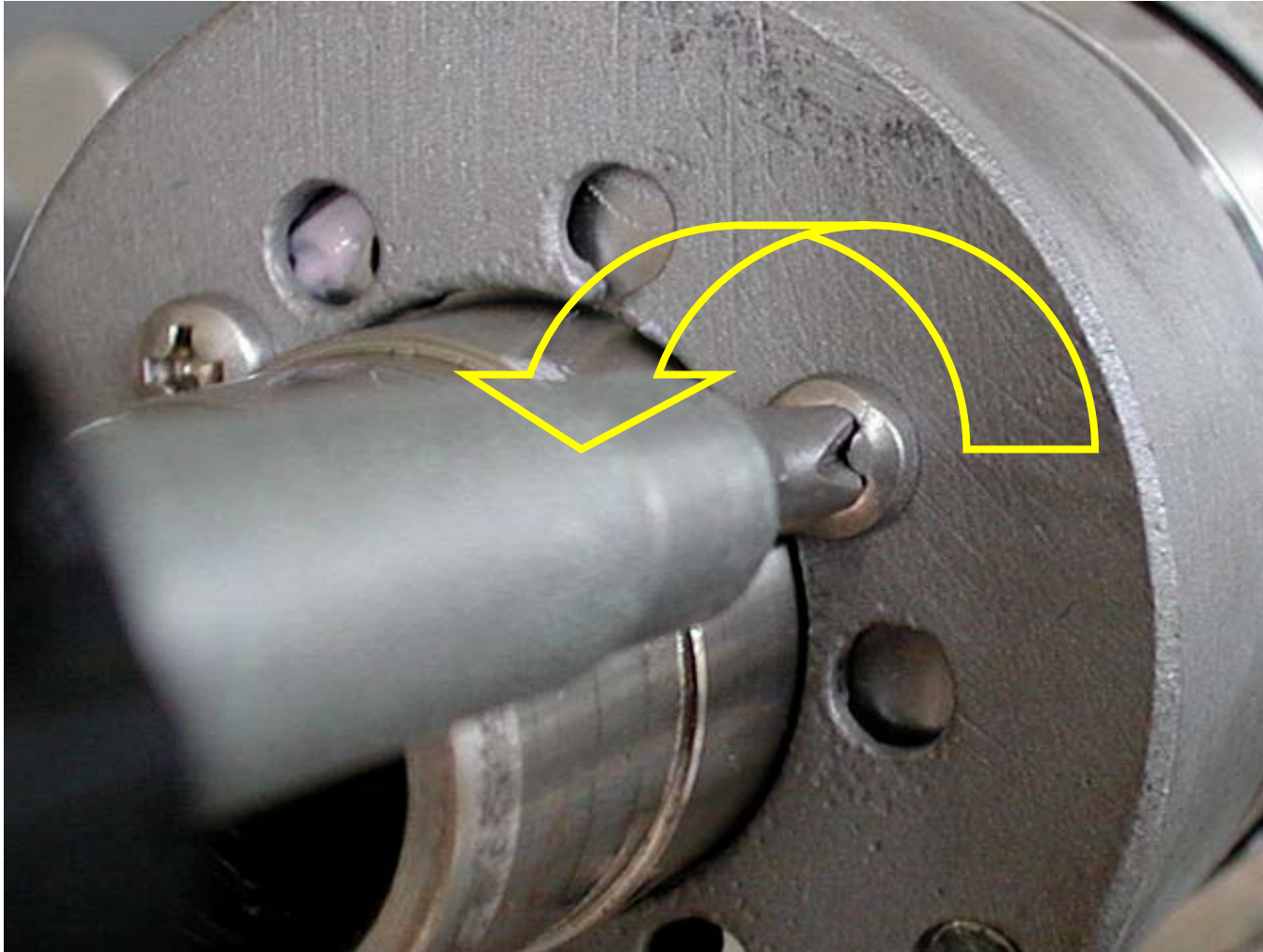
.....by
withdrawing it
from
refrigerant
housing.



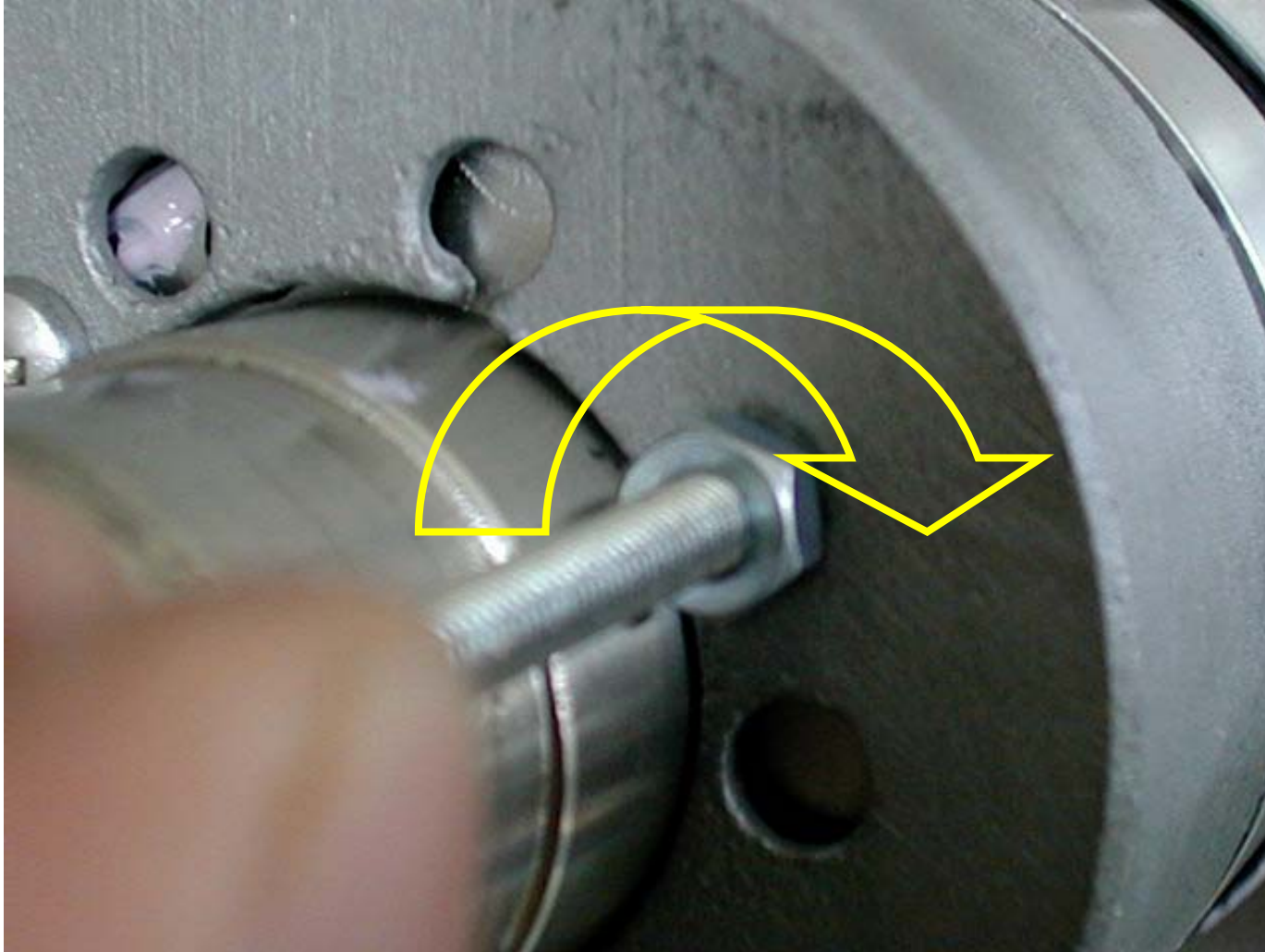
Then remove
the seal first
then.....



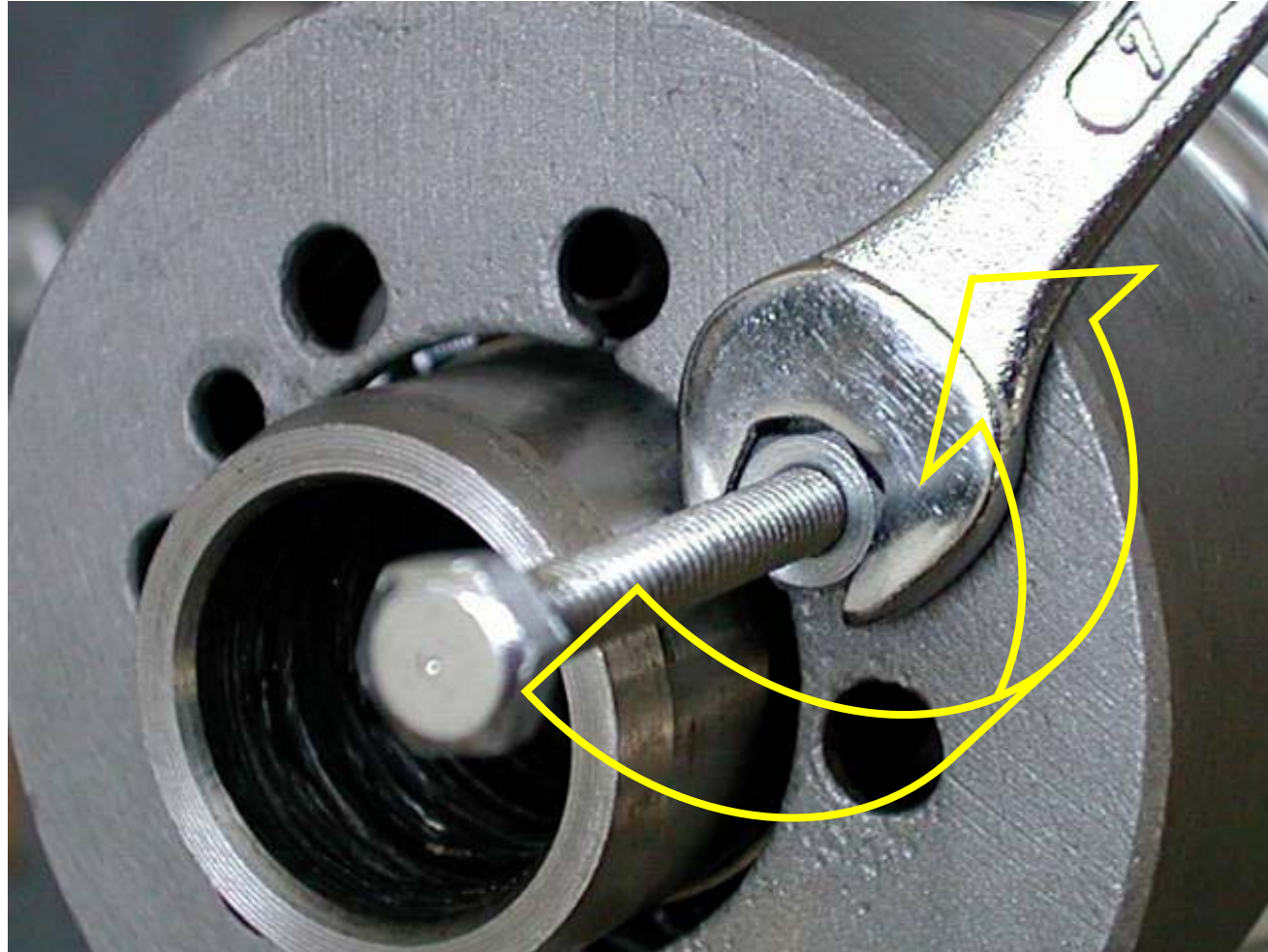
the washer.



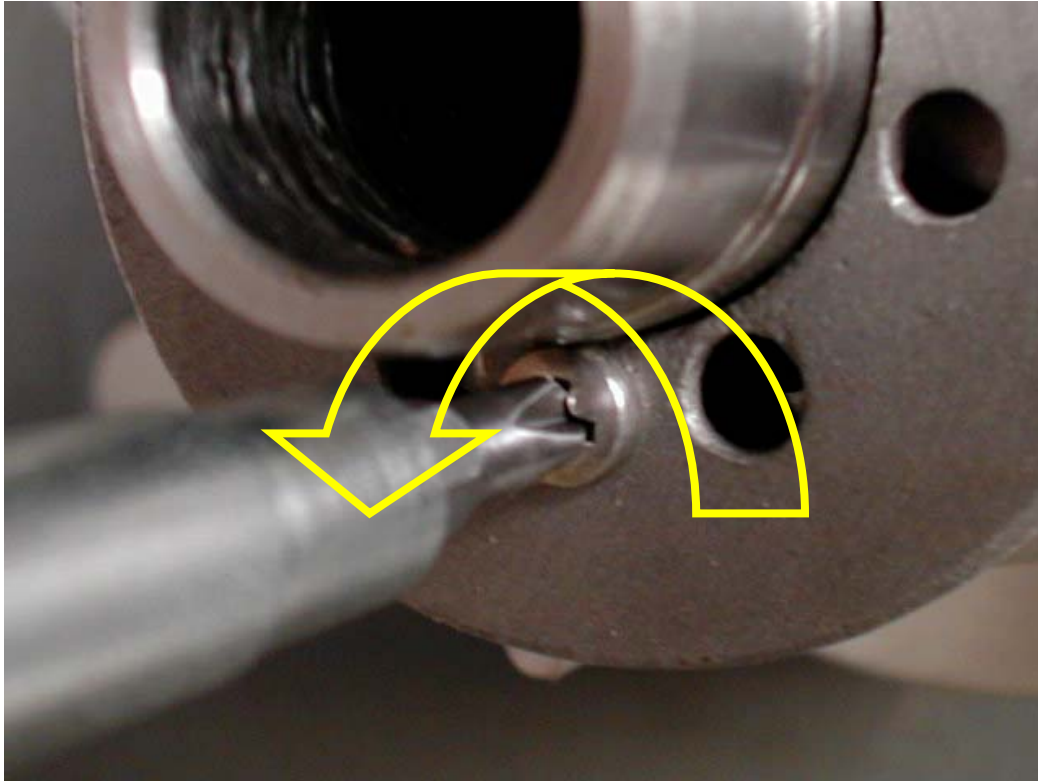
Unloose and
remove one of
the three
screws
securing the
seal
mechanism
ring to the
drum shaft
journal.



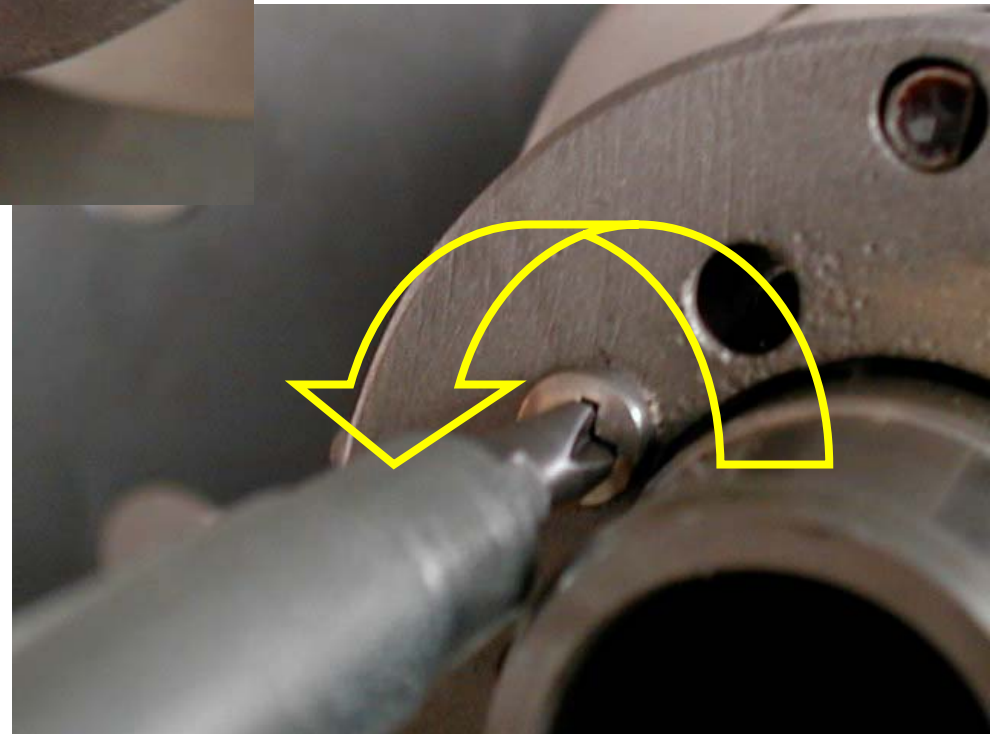
Screw in the
long 4 MA
screw and nut
supplied with
the Seal
Mechanism kit.



Gradually
unloose the nut
of the longer
screw together
with the.....



..... two screws till.....



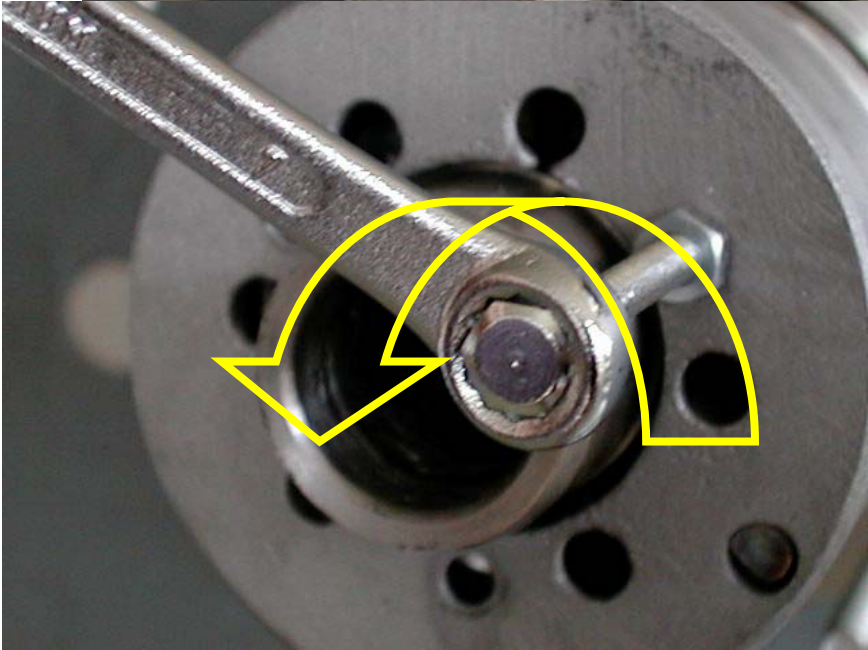


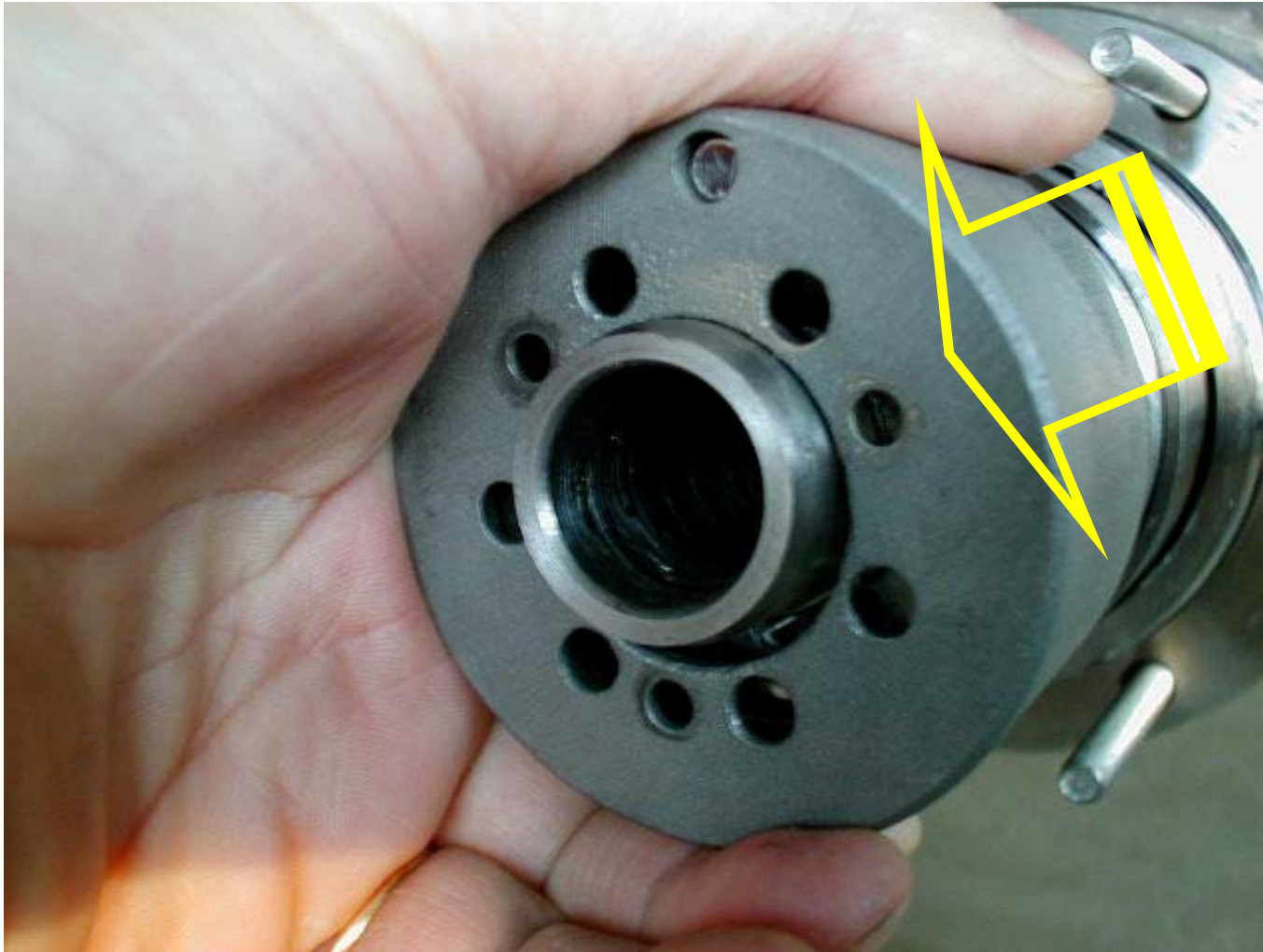
..... release

the spring of

seal

mechanism.

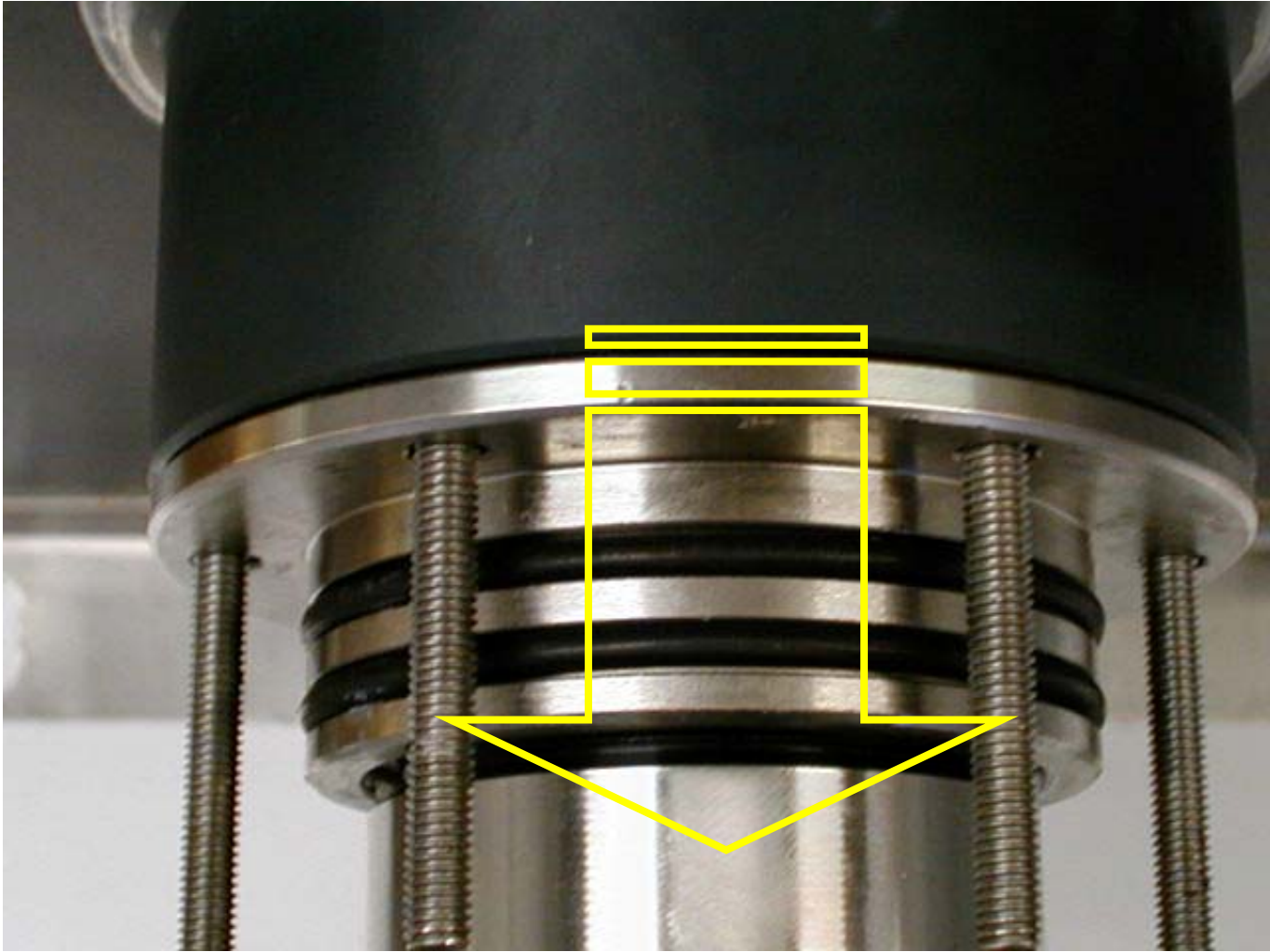




Withdraw
first the seal
mechanism
S.S. cover
then.....



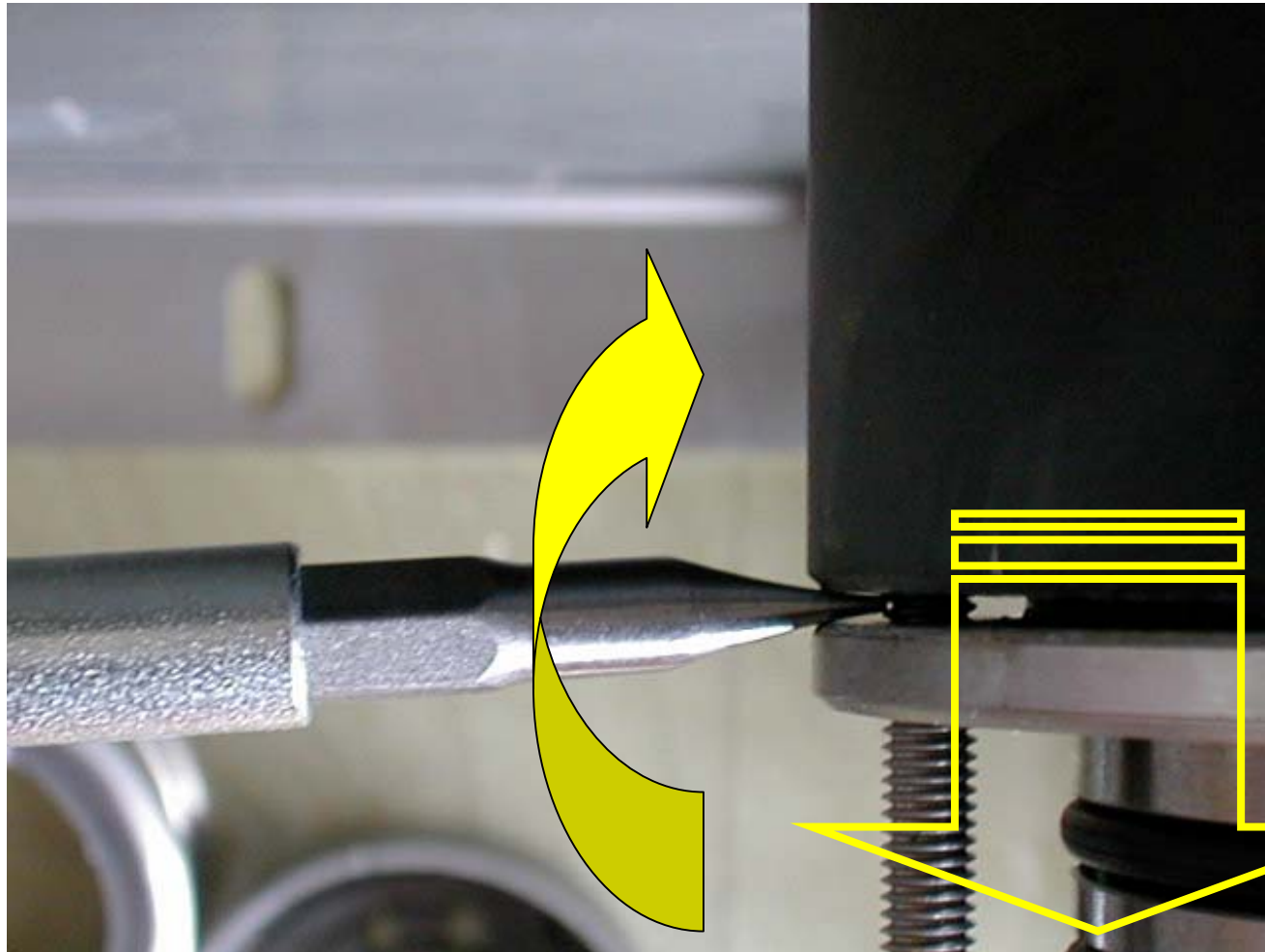
.....the
entire seal
mechanism.



Remove the

graphit

housing.....



....with the
help of a two
screwdrivers



Withdraw
entirely the
stainless
steel ring
that houses
the graphit
seal ring
with....



...the teflon
coated trust
washer.



With two
metal hooks of
2 mm OD (like
the ones on the
photo).....

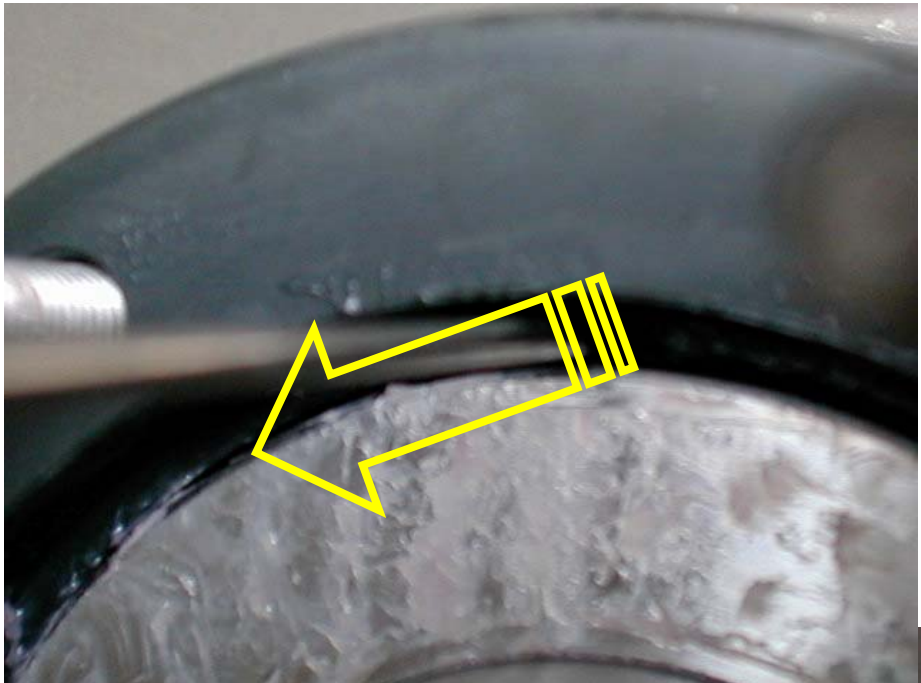


.....remove

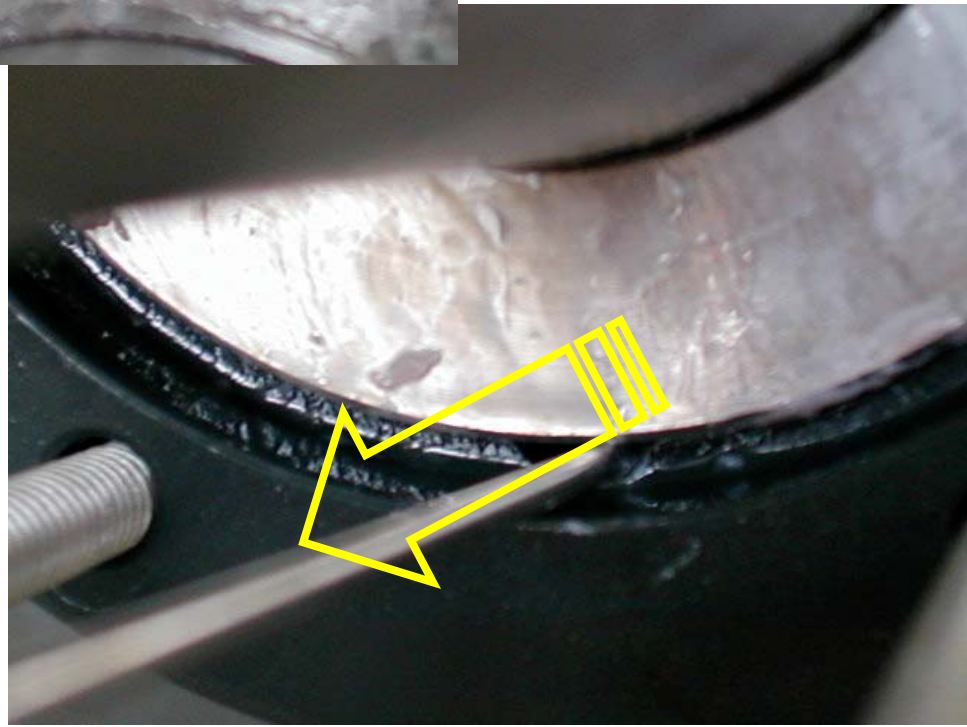
the S.S. trust

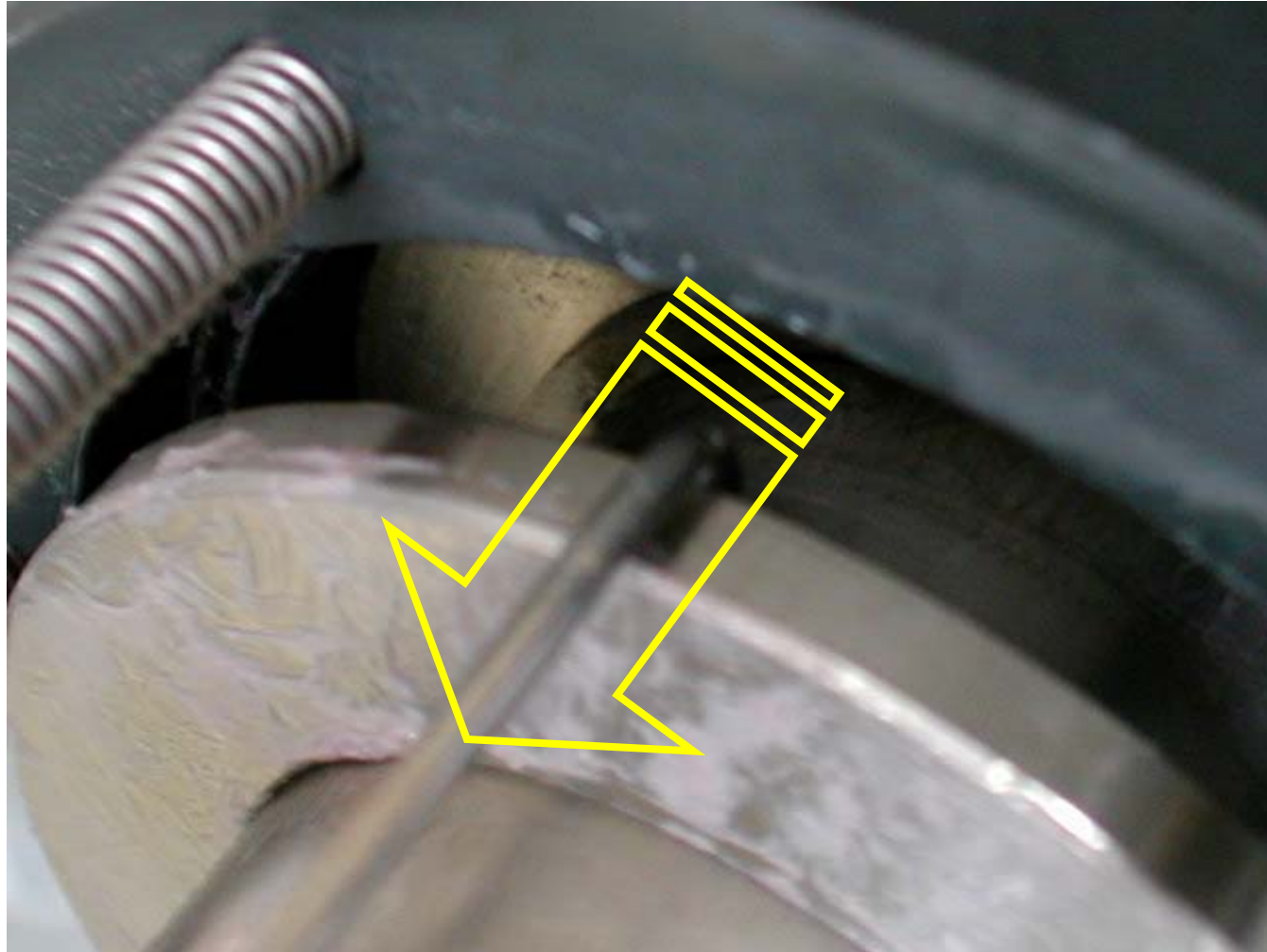
washer....



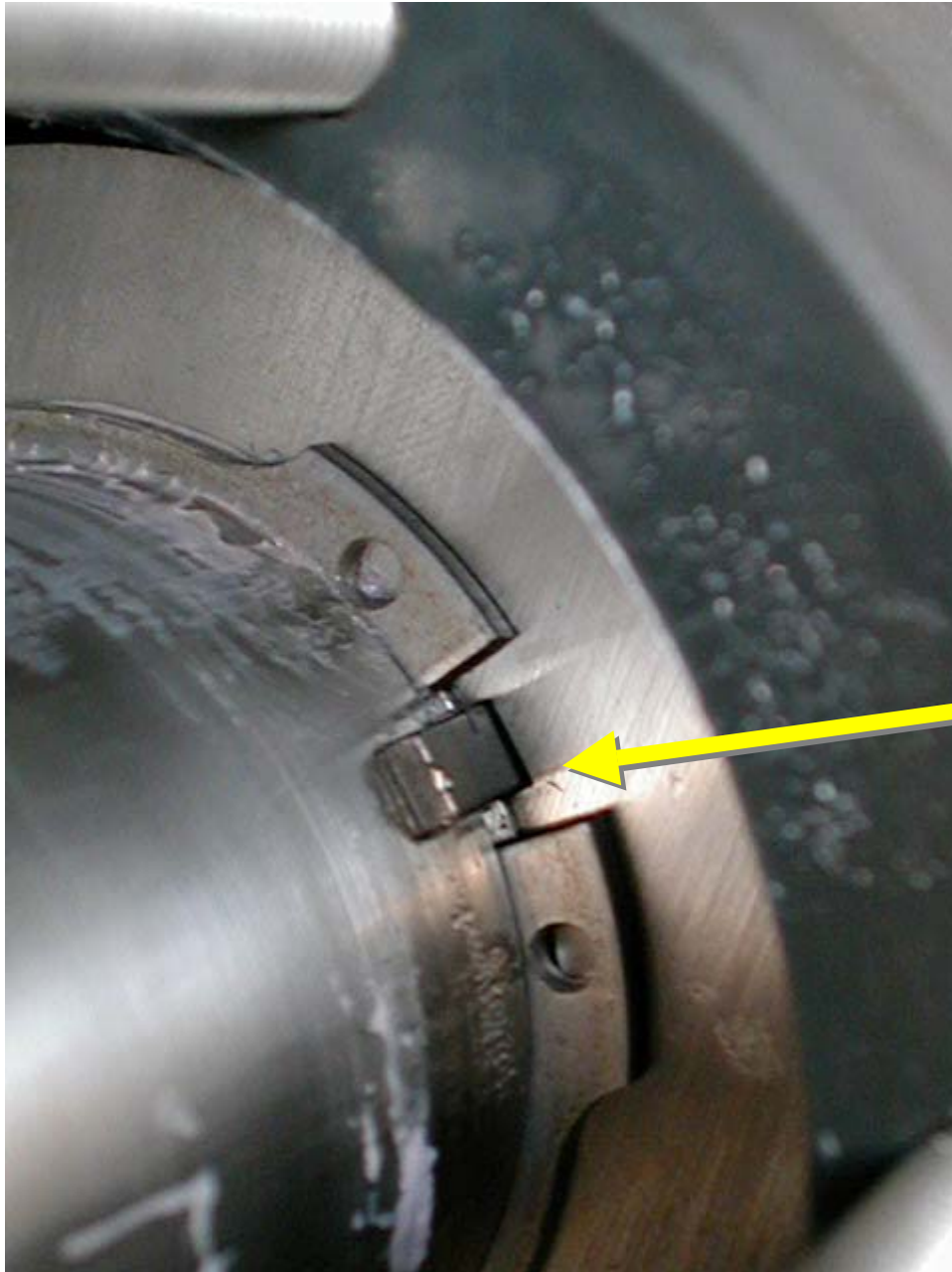


..... by pulling it out.....



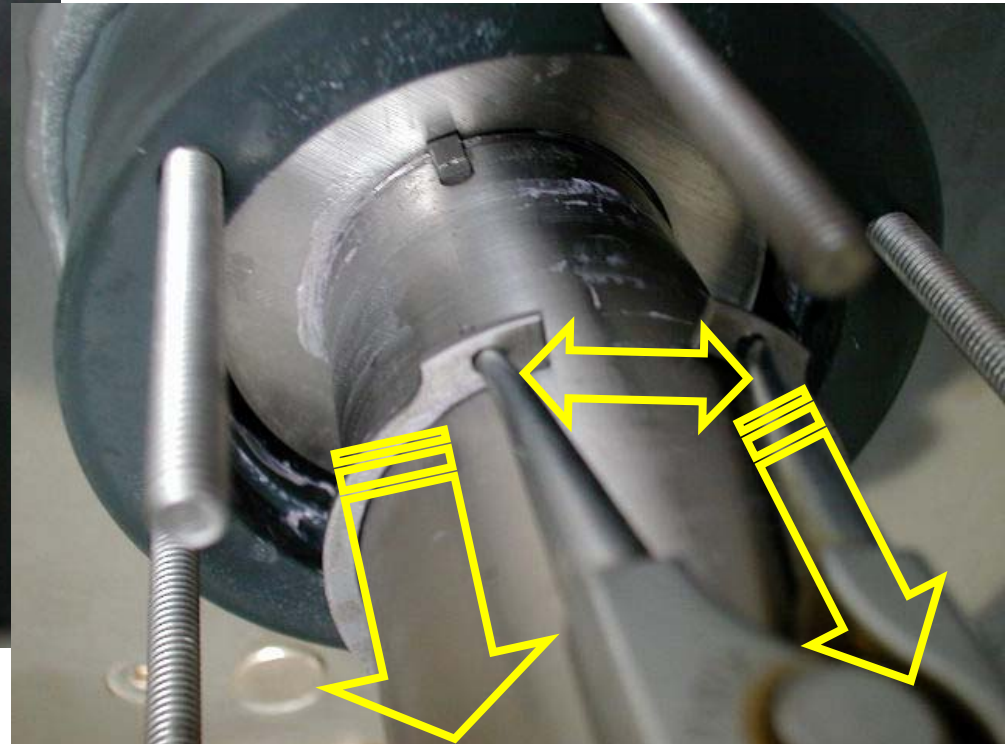
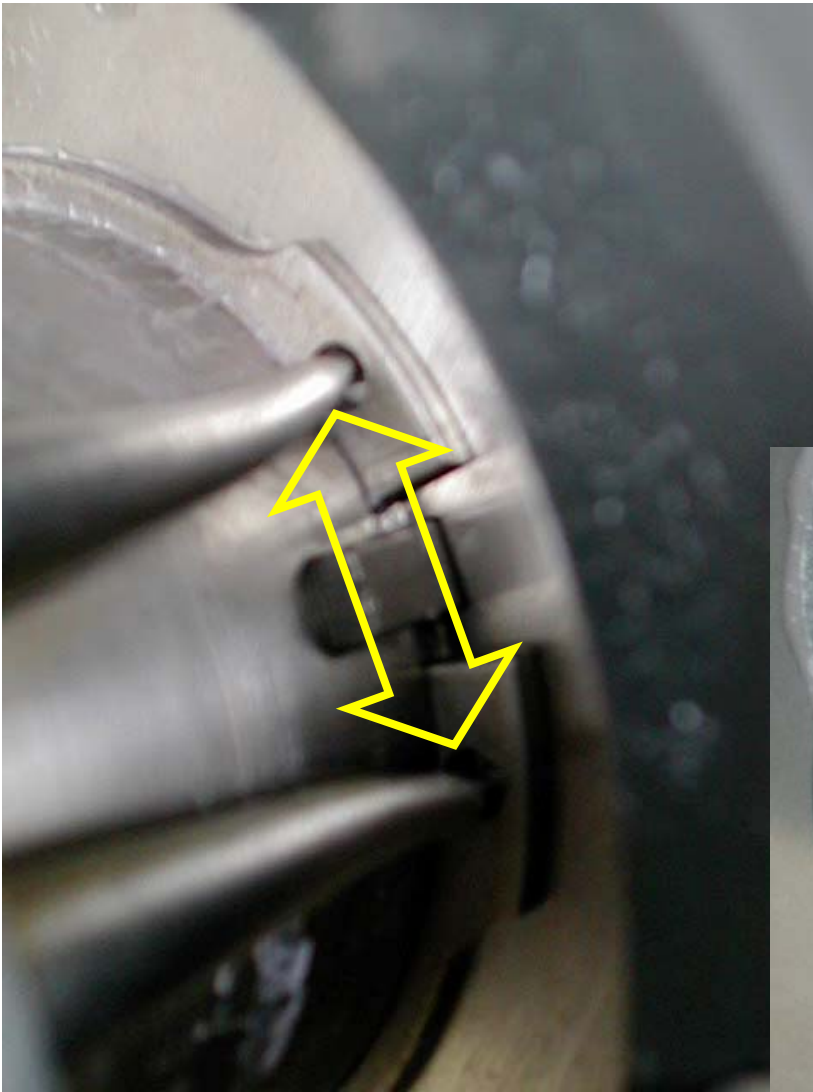


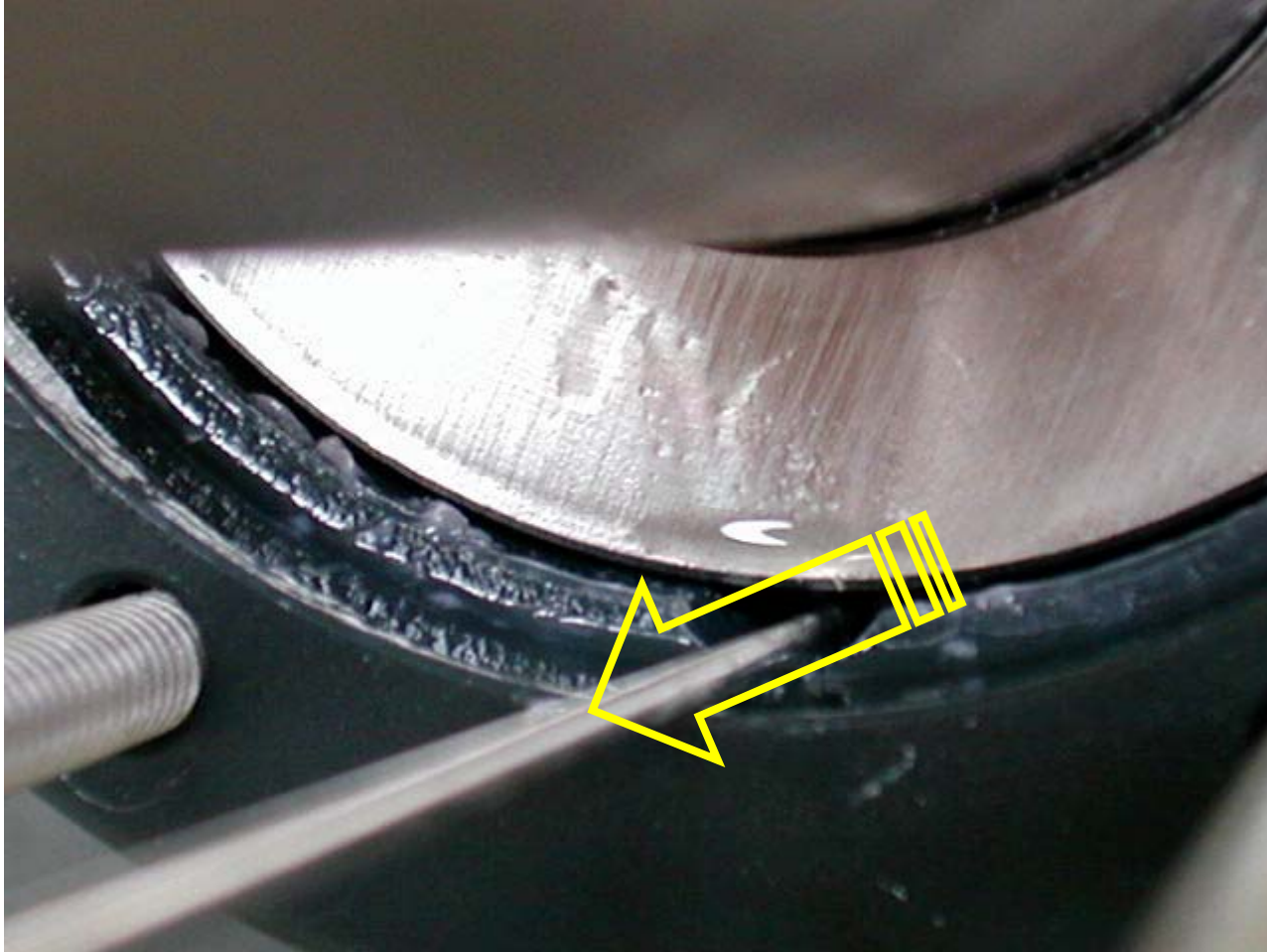
..... along the
drum shaft.



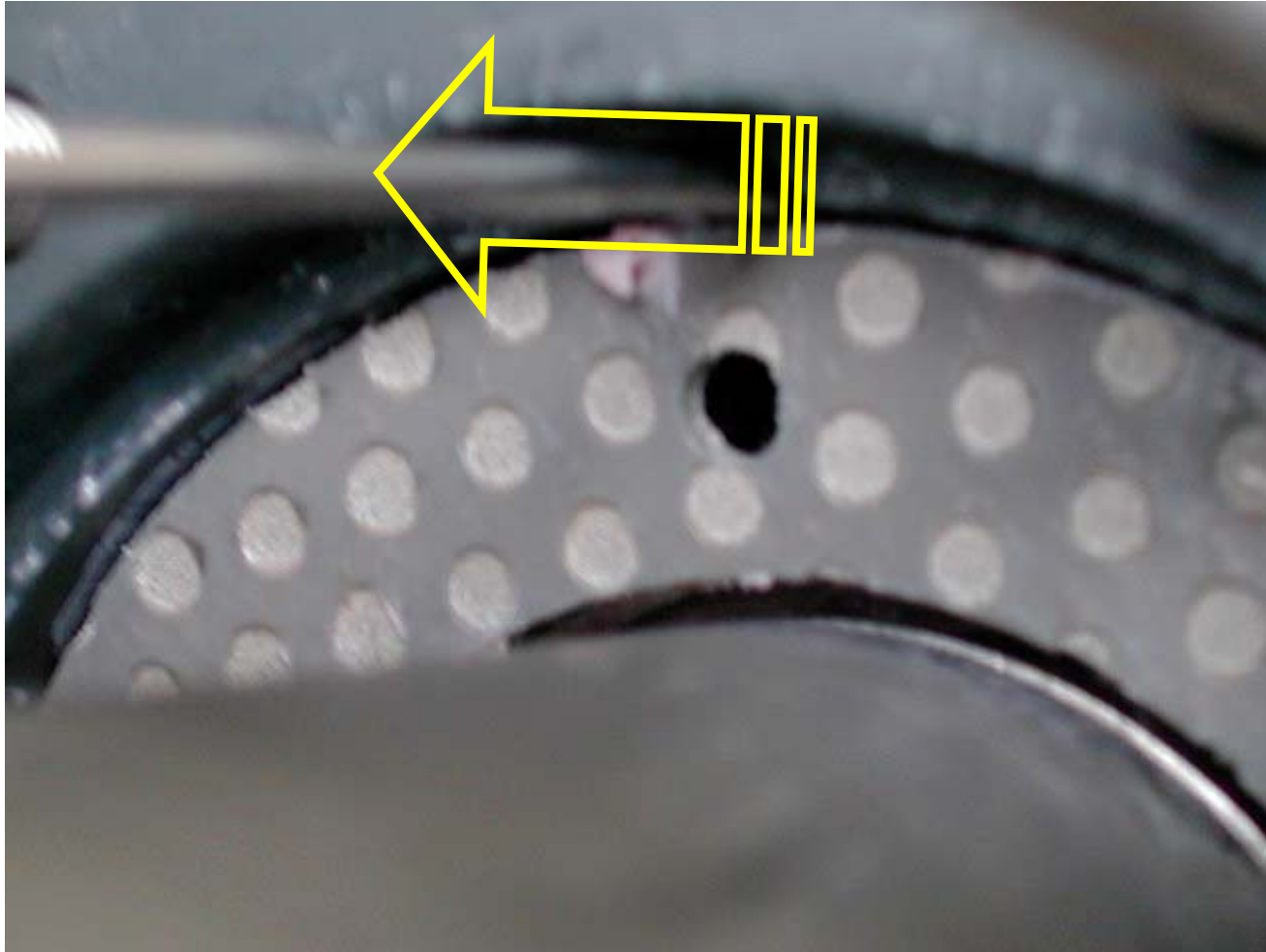
Check to see that clip ring be properly positioned with keyway to match the key.

To check for the proper physical condition of the other teflon coated trust washer, remove first the clip ring then....





.....using the
same metal
hooks, withdraw
the S.S. trust
washer first.....



.....and the
second teflon
coated trust
washer later.



The Seal

Mechanism

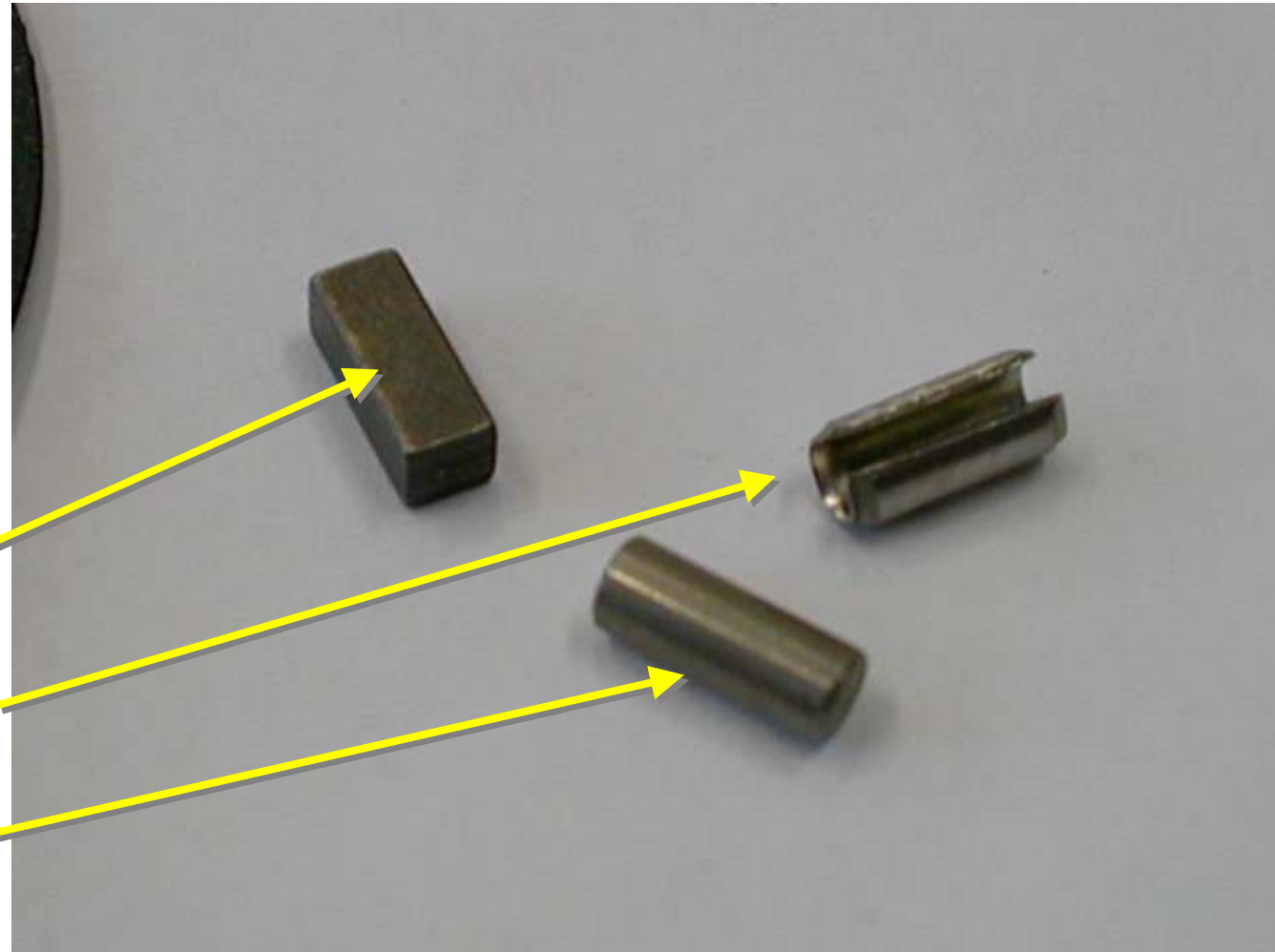
Kit consists

off:

- Metal Key

- Metal Spring

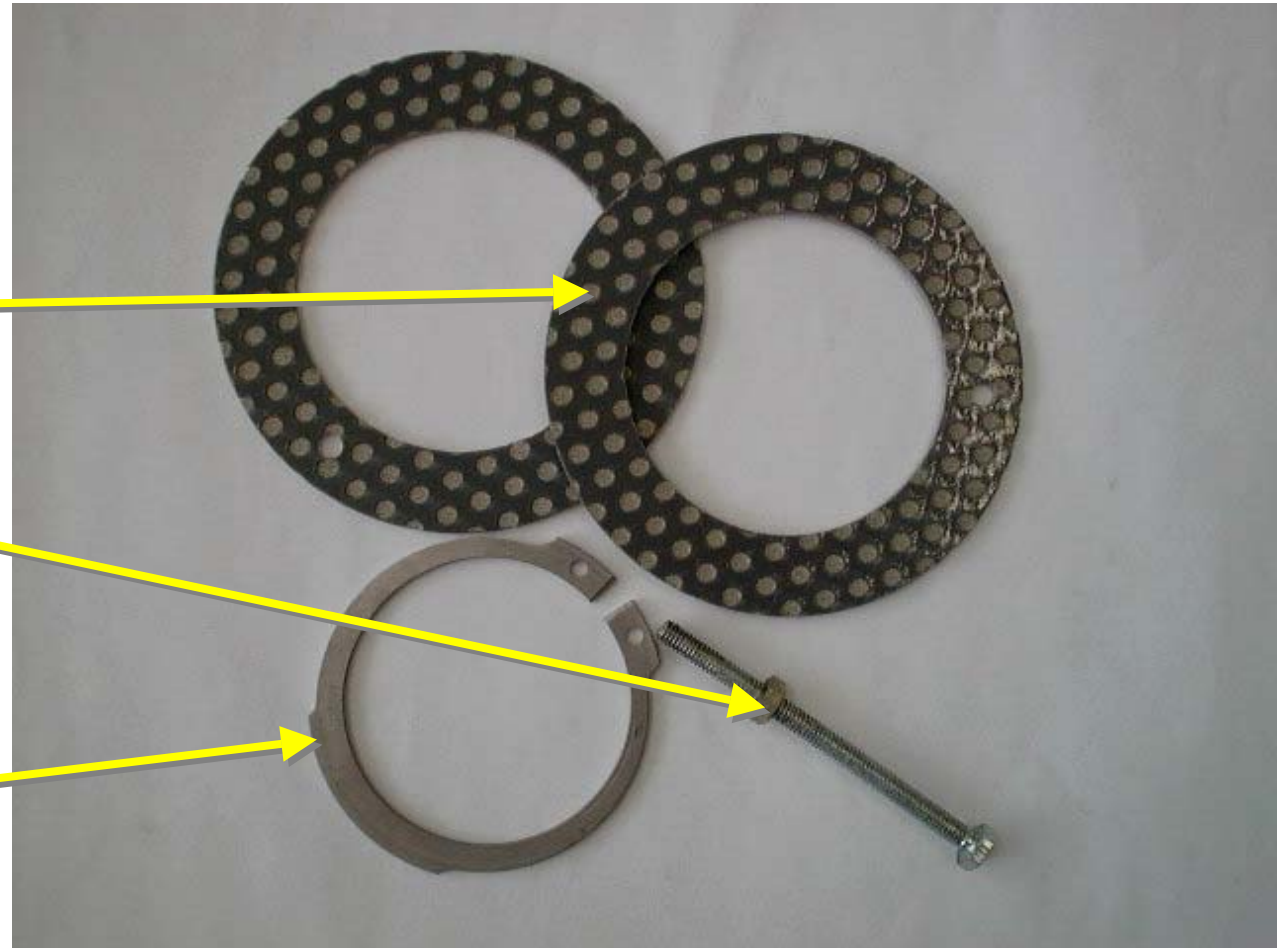
- Parallel Pin



- Two Teflon Coated Trust Washers

- 4 MA screw & nut

- Clip ring



• Gaskets

• O rings

• Spring gasket



- Seal

Mechanism

consisting off:

- Graphit ring with its O ring

- S.S. ring with spring



To install the new Seal Mechanism

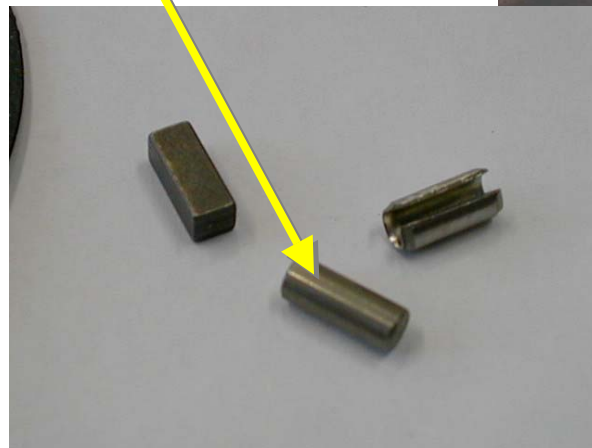
Kit first:

Fit one of the new teflon coated trust washer inside the seal housing paying attention to have the teflon coated surface facing outside and....



.... to match the hole with the metal pin.

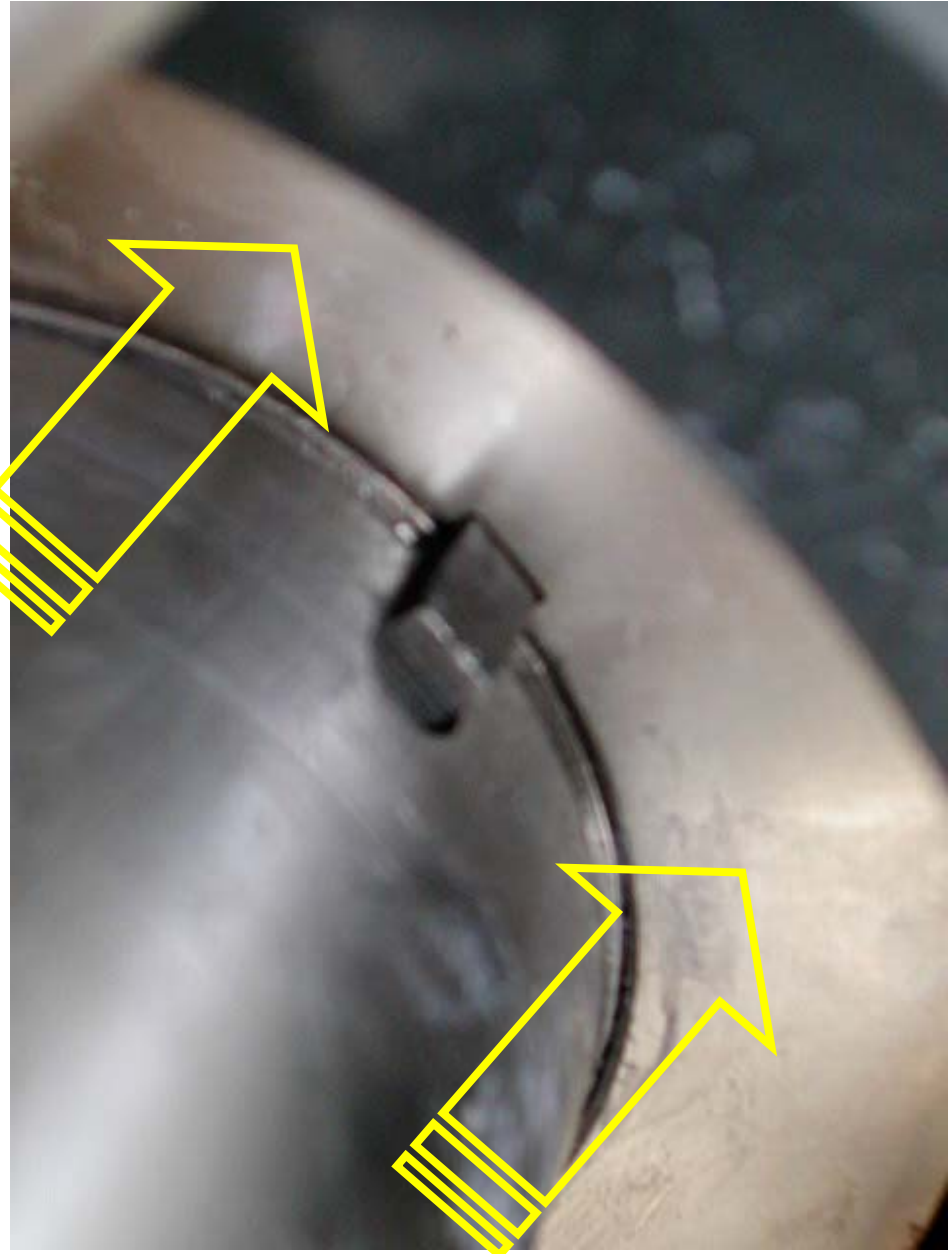
In case the metal pin is damaged replace it with the new one supplied in the kit.



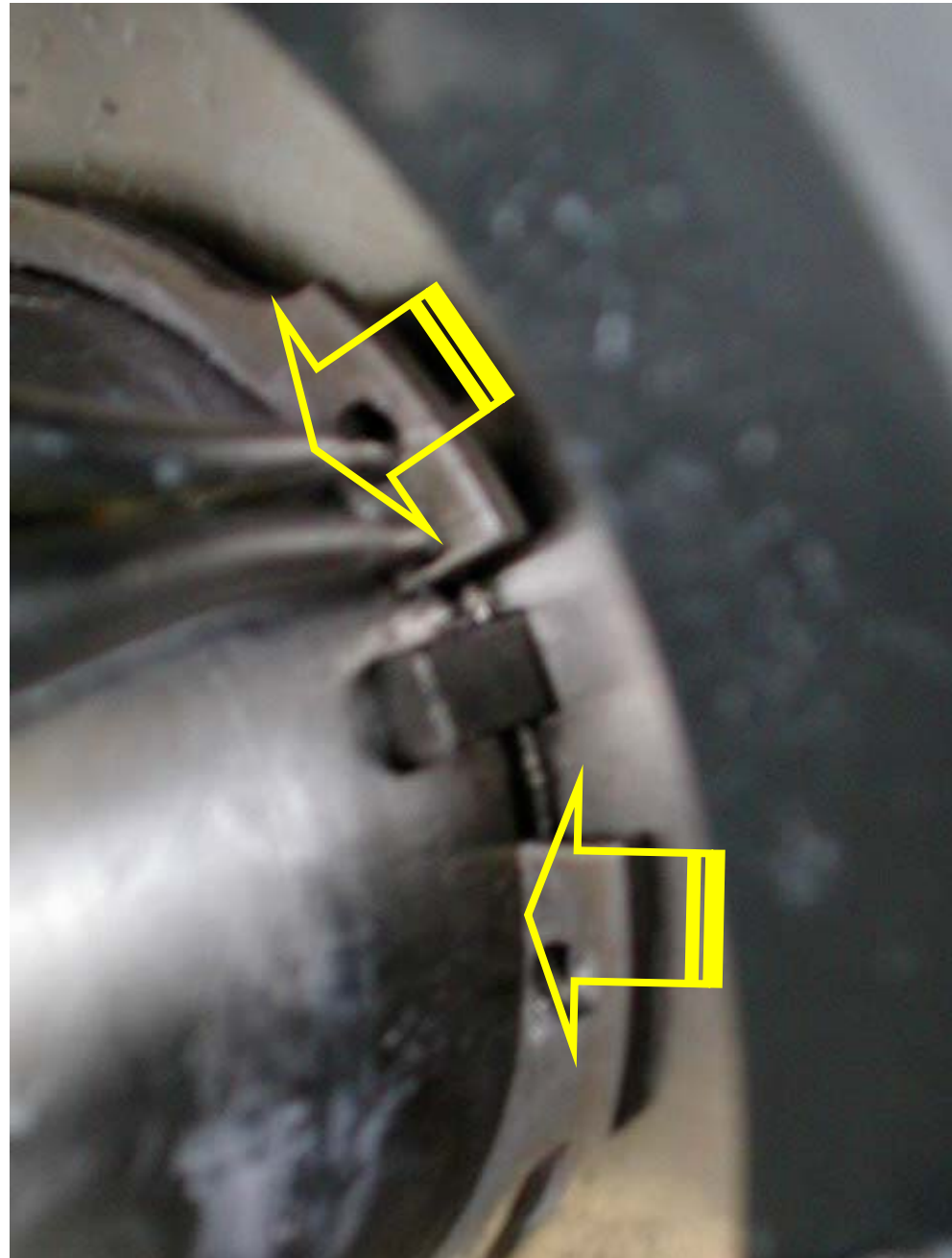
Install again one of the two S.S. trust washer previously removed placing on the surface in contact with the teflon coated trust washer a small quantity of lubricant (molicote).



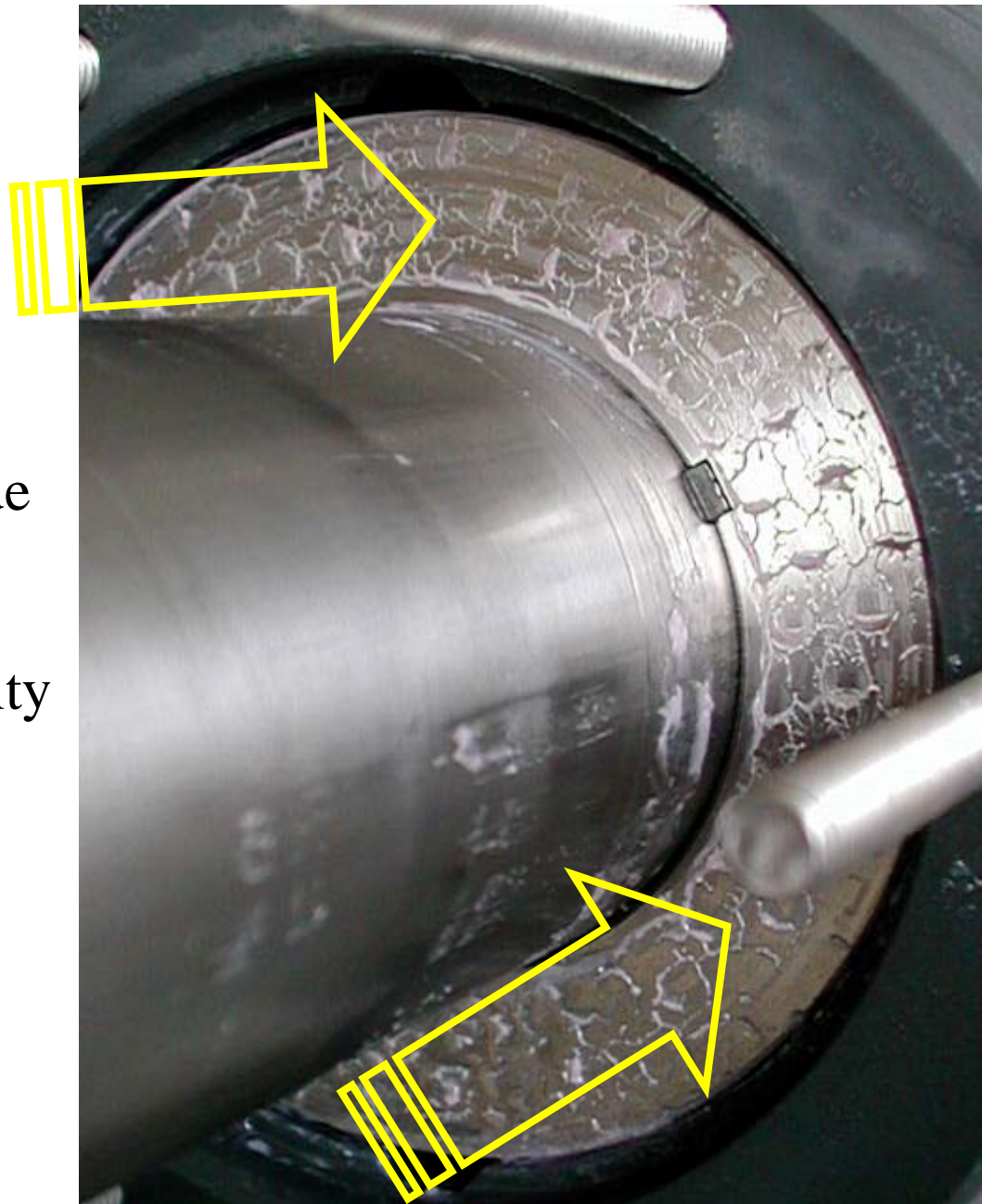
After have correctly inserted
the S.S.washer.....

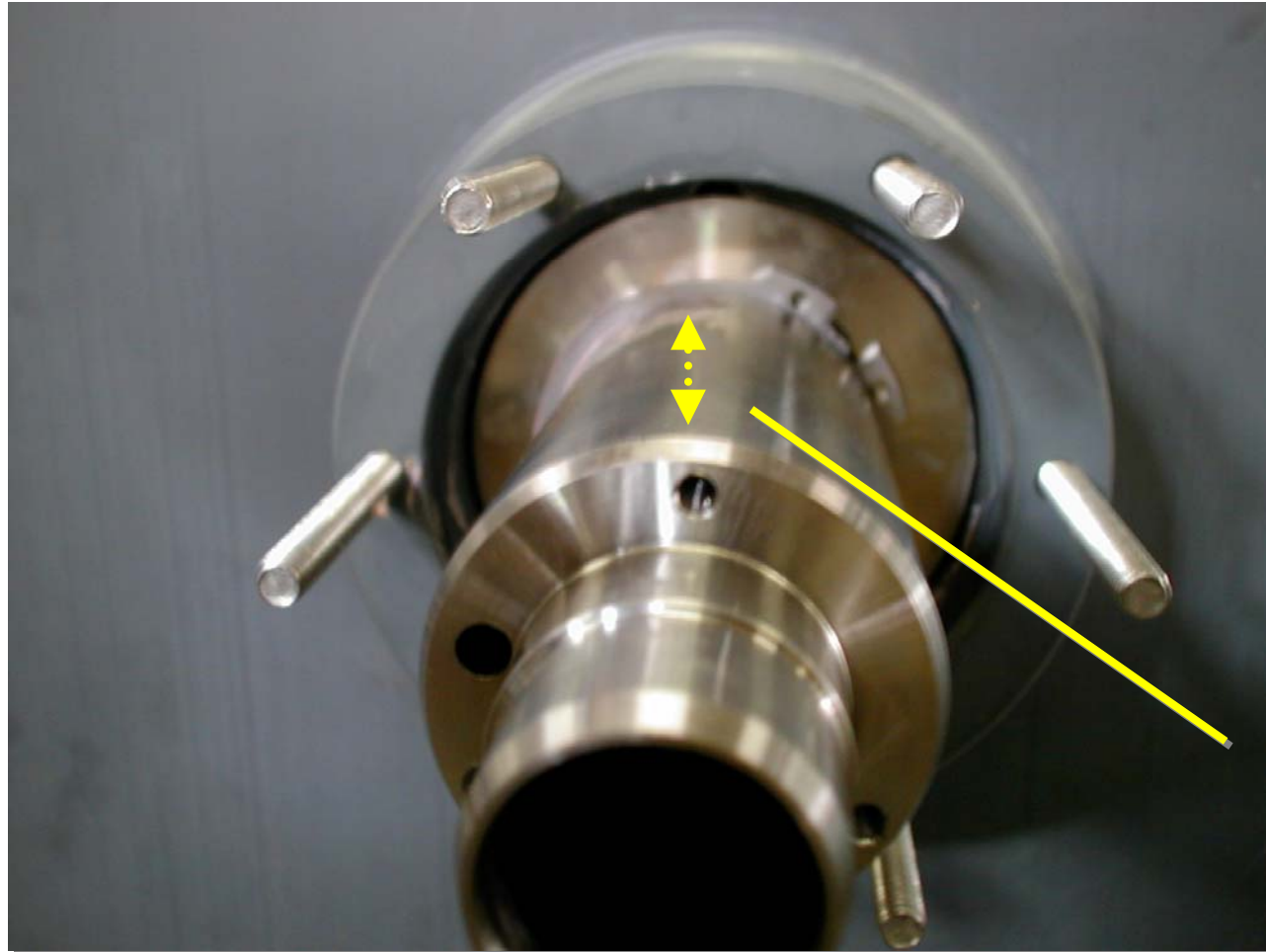


.....install the new Clip
Ring into its groove on the
drum shaft paying attention
that it is properly seated
inside.



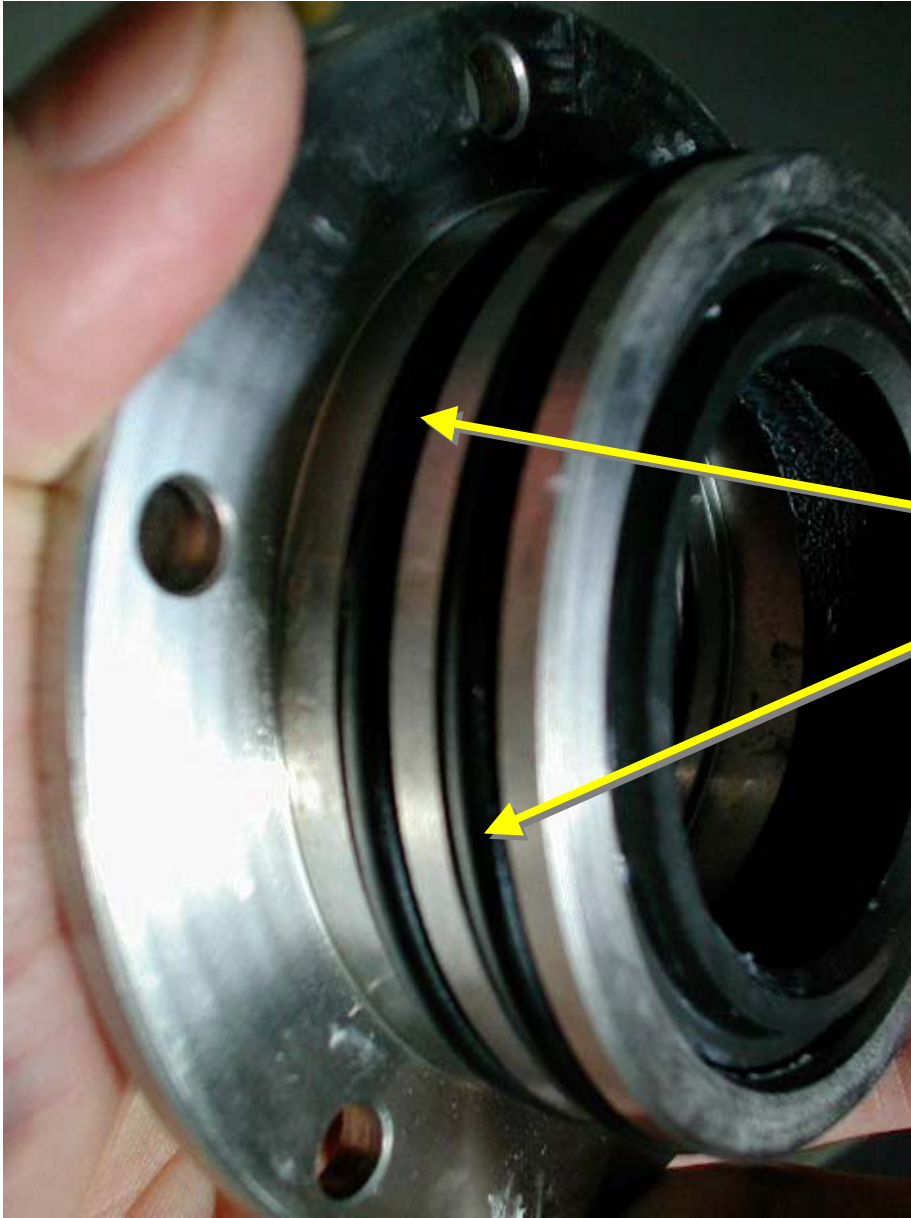
Install again the S.S. trust
washer covering the outside
surface with a small quantity
of lubricant (molicote).



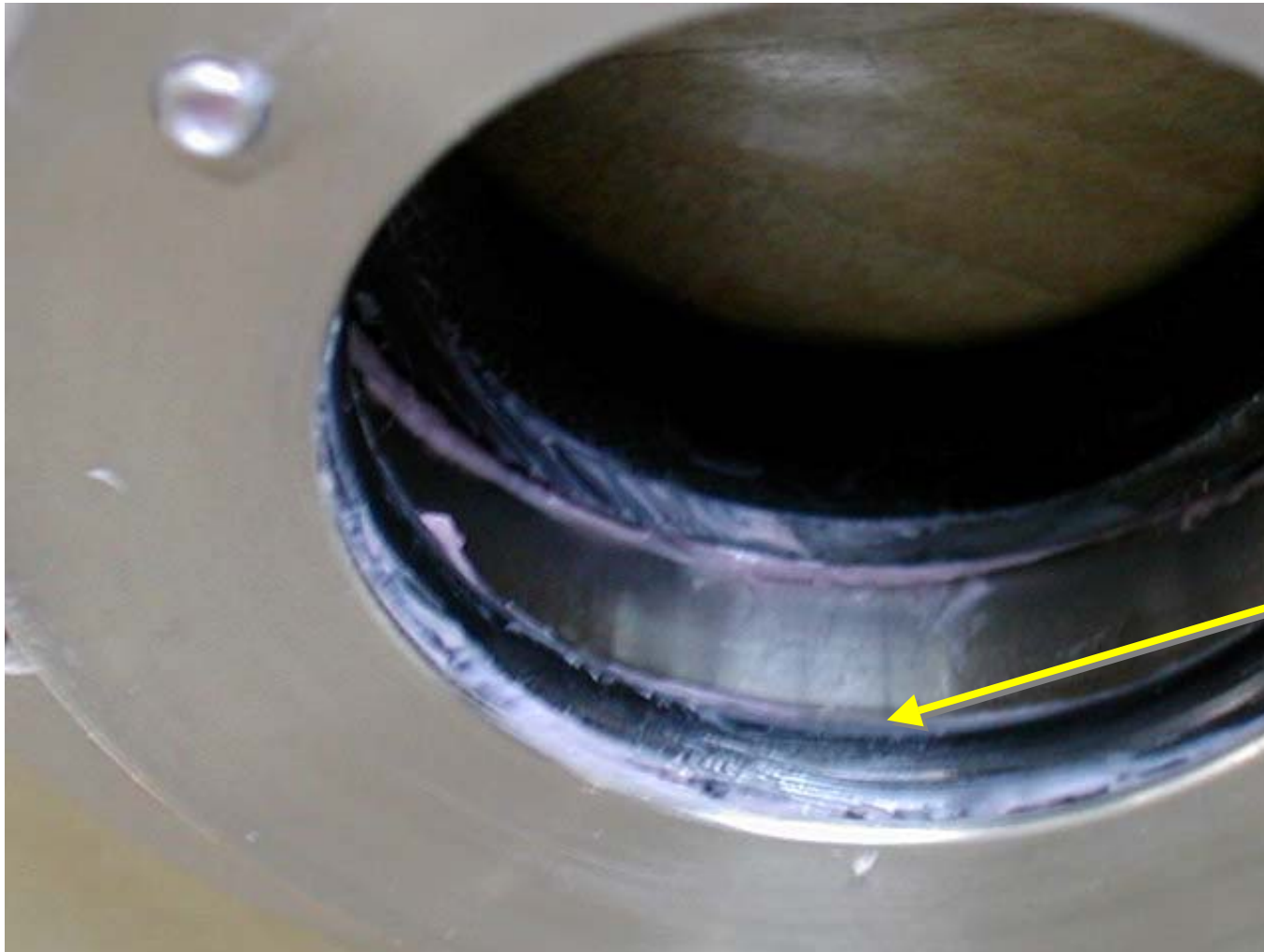


Check for the proper surface conditions of cylinder shaft journal.

In case of scratches along the shaft, remove them before the installation of the new seal mechanism assembly, by means of a very thin sand paper to be used only in round direction.



Replace the two
O-rings of the
stainless steel ring
housing the
graphitic ring.



Replace

the O-ring

on retainer

On the back side of the Graphit Ring Housing, install the new Teflon Coated Trust Washer with the teflon surface facing the outside paying attention to match the hole with the spring pin.



With molicote
grease, lubricate
the O ring of the
Graphit Ring
then.....

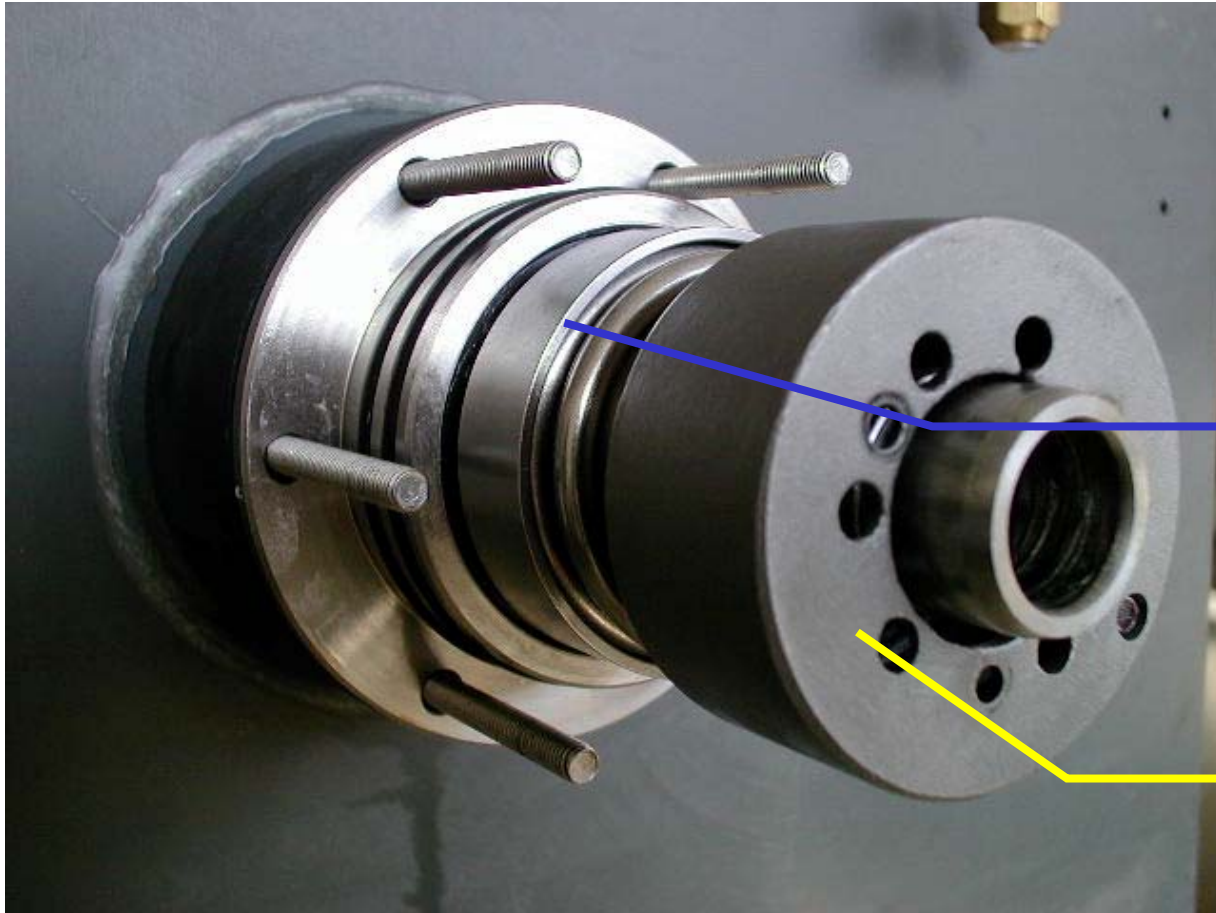


..... insert it
into the S.S.
housing ring.



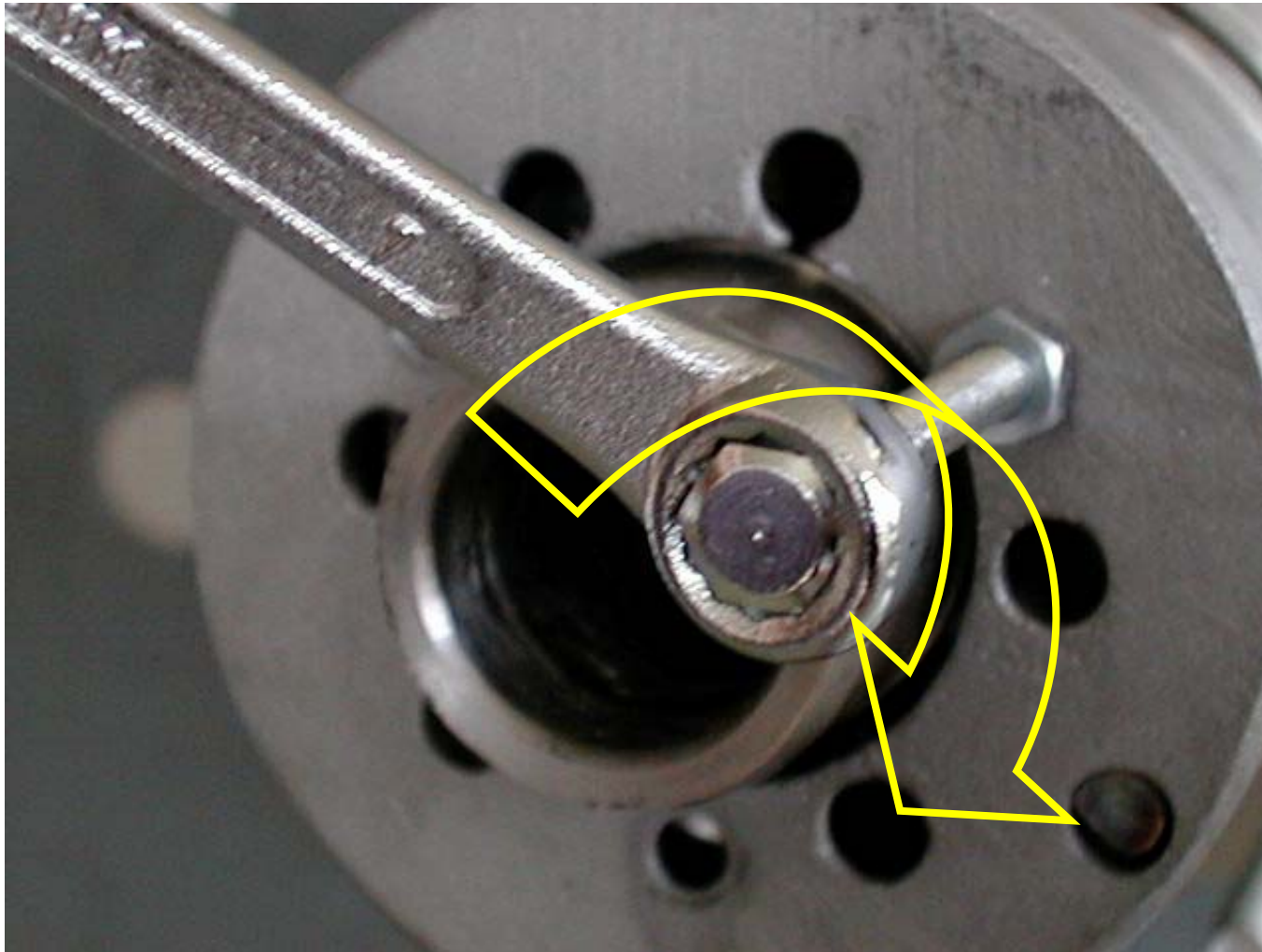


Lubricate the
O ring inner
surface of seal
mechanism
with
refrigerant oil.

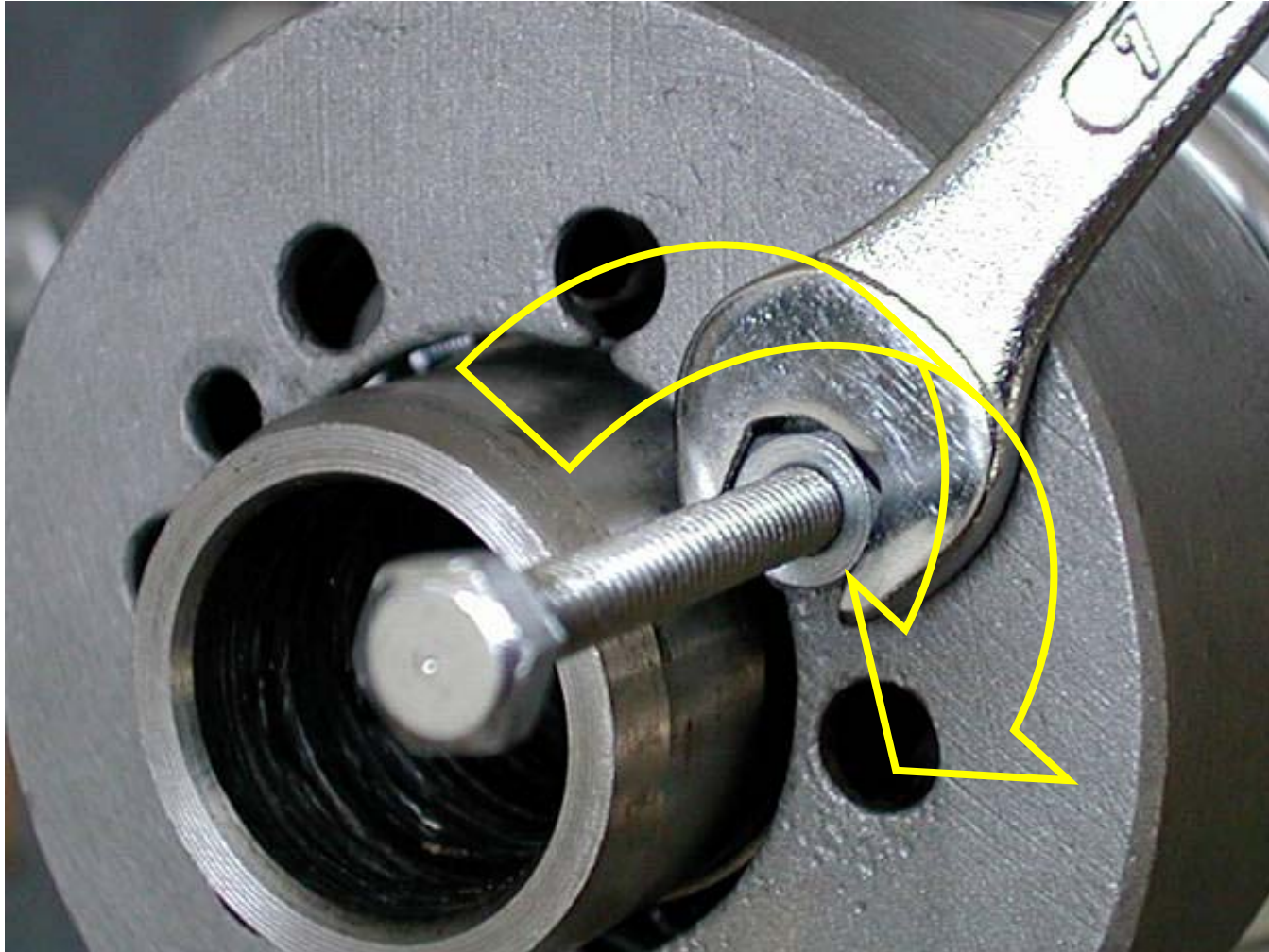


Fit on the drum shaft journal the remaining portion of seal mechanism (stainless steel seal ring with spring), then the.....

spacer ring



Fit the screw
of 4 MA
with its nut
in one of the
three
threaded
holes
then.....



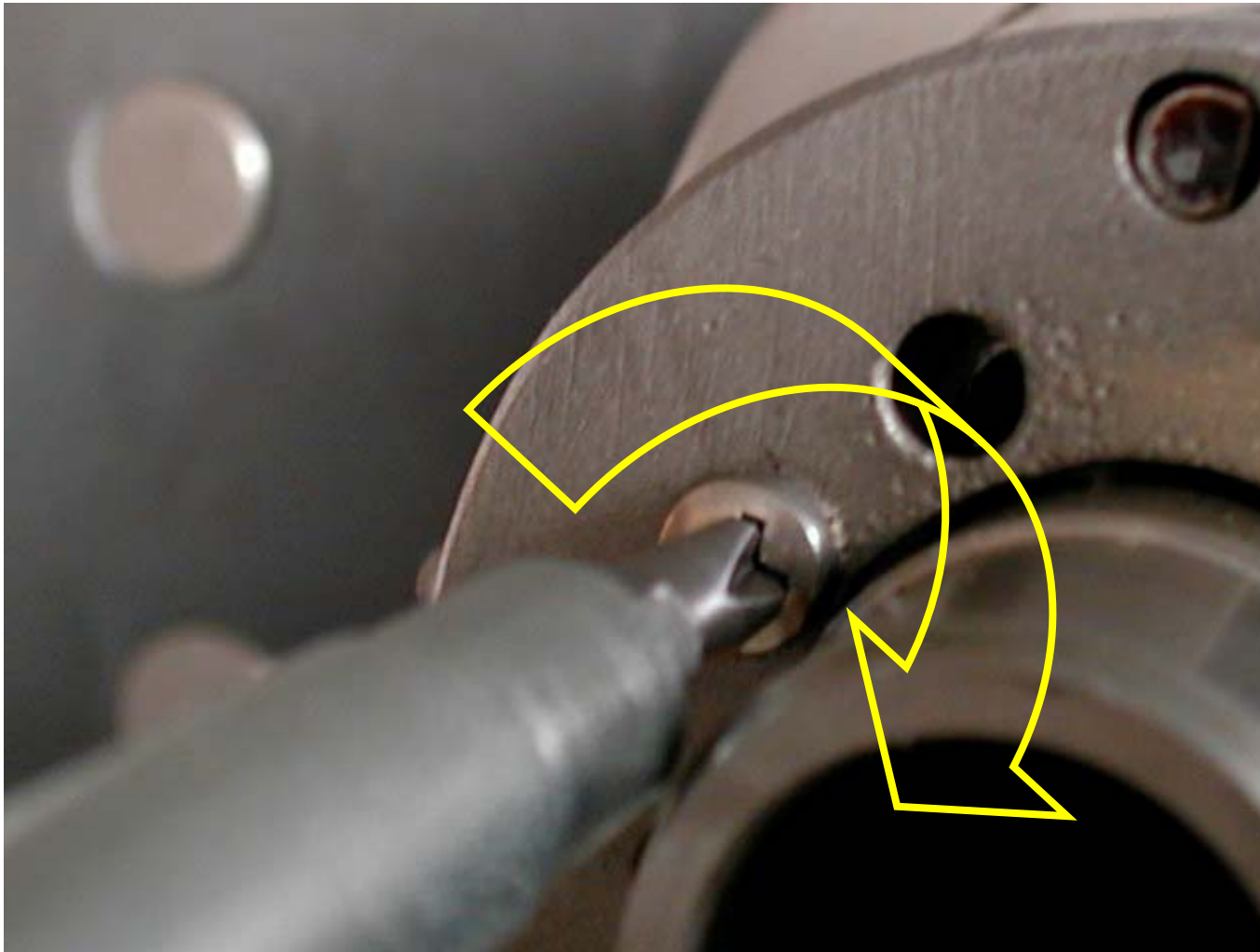
..... screw

down the nut

in order to

press the

spring.



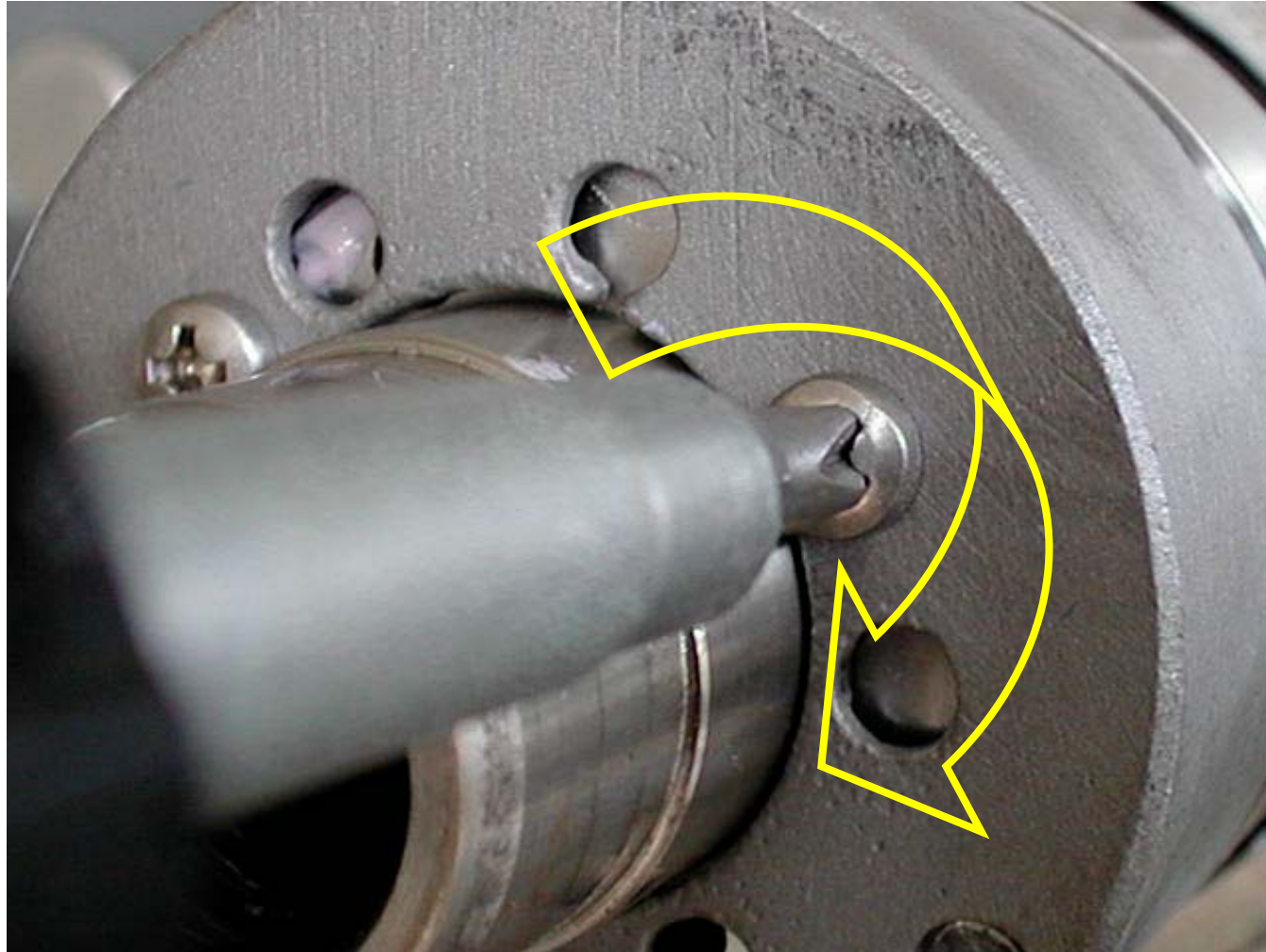
Finally lock

the ring by the

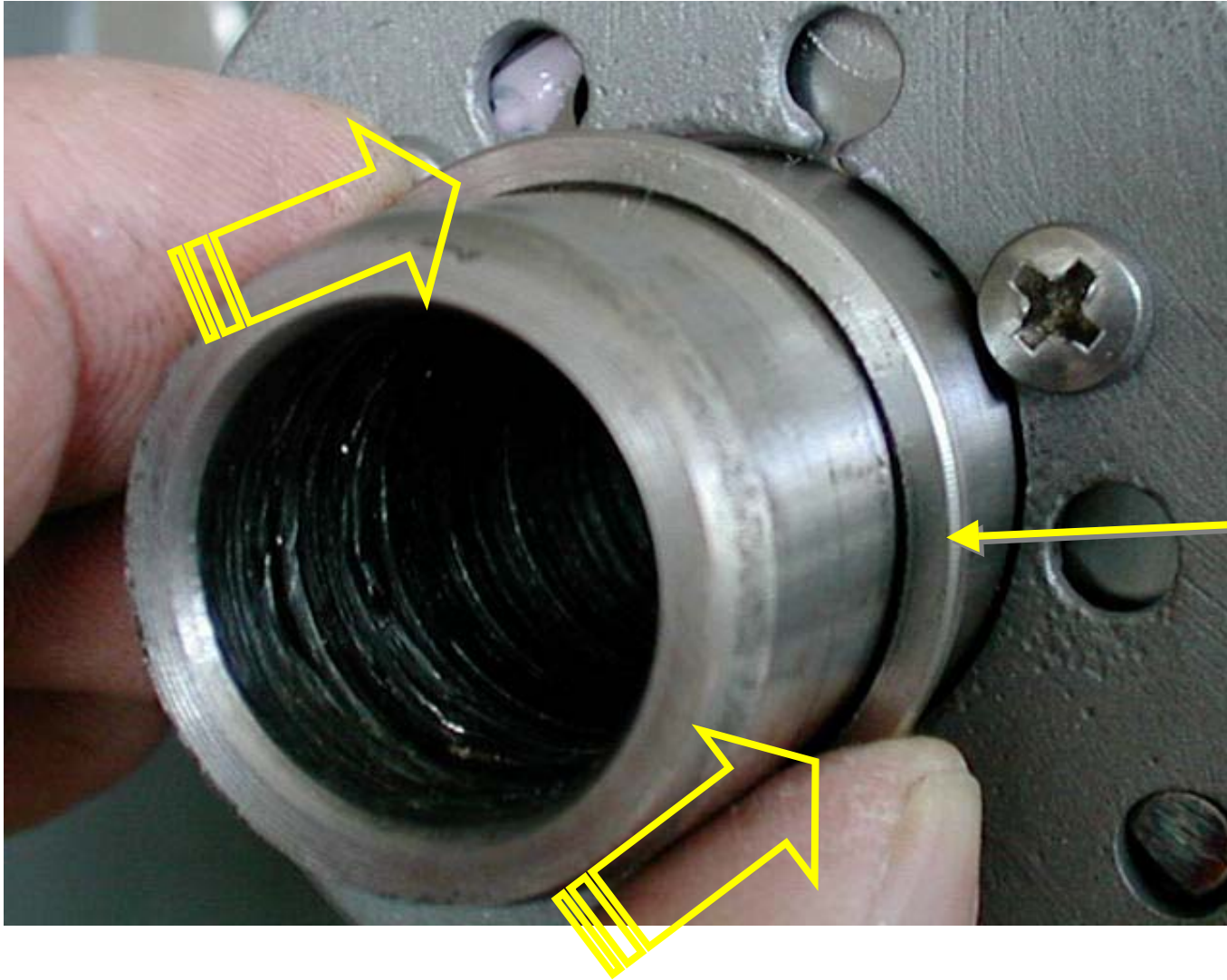
standard

shorter screws

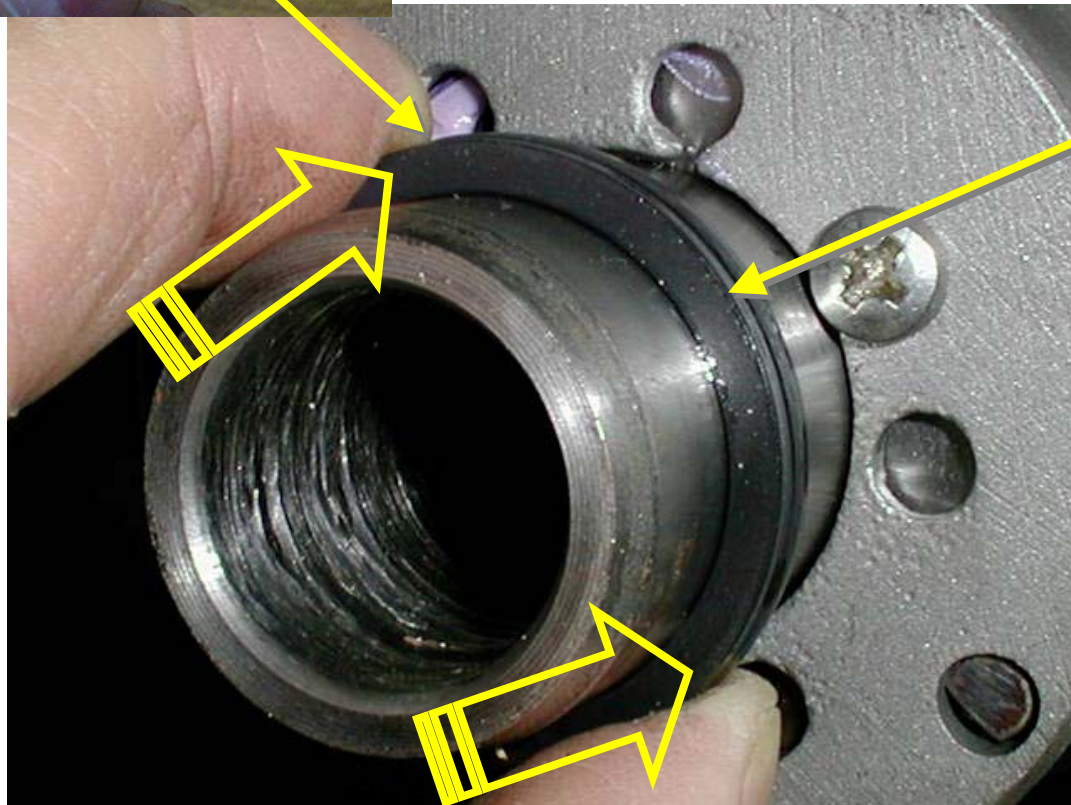
then.....



.....replace
the long screw
with the
standard one
and tight it.



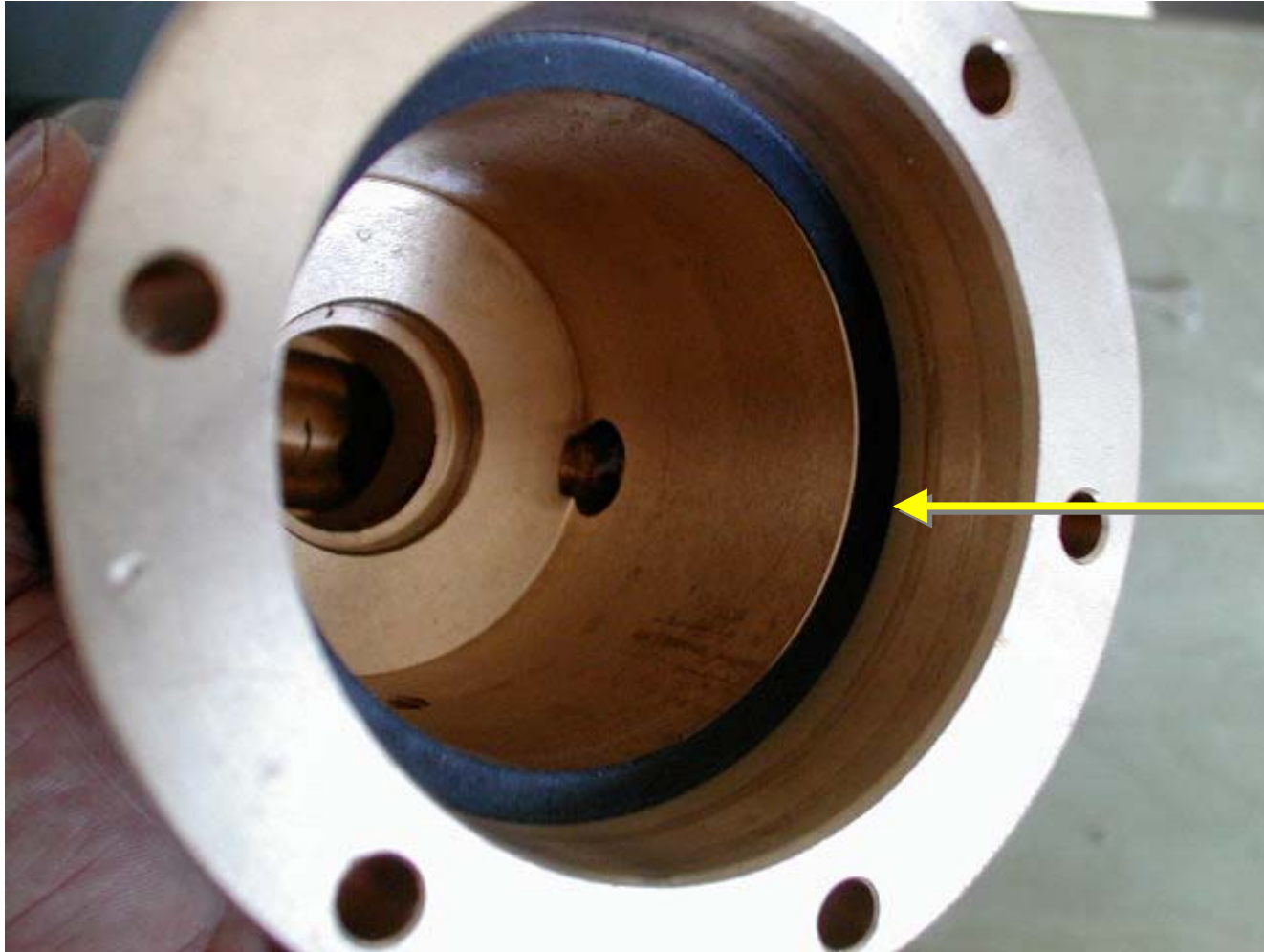
Fit on the
shaft end the
S.S. ring
first....



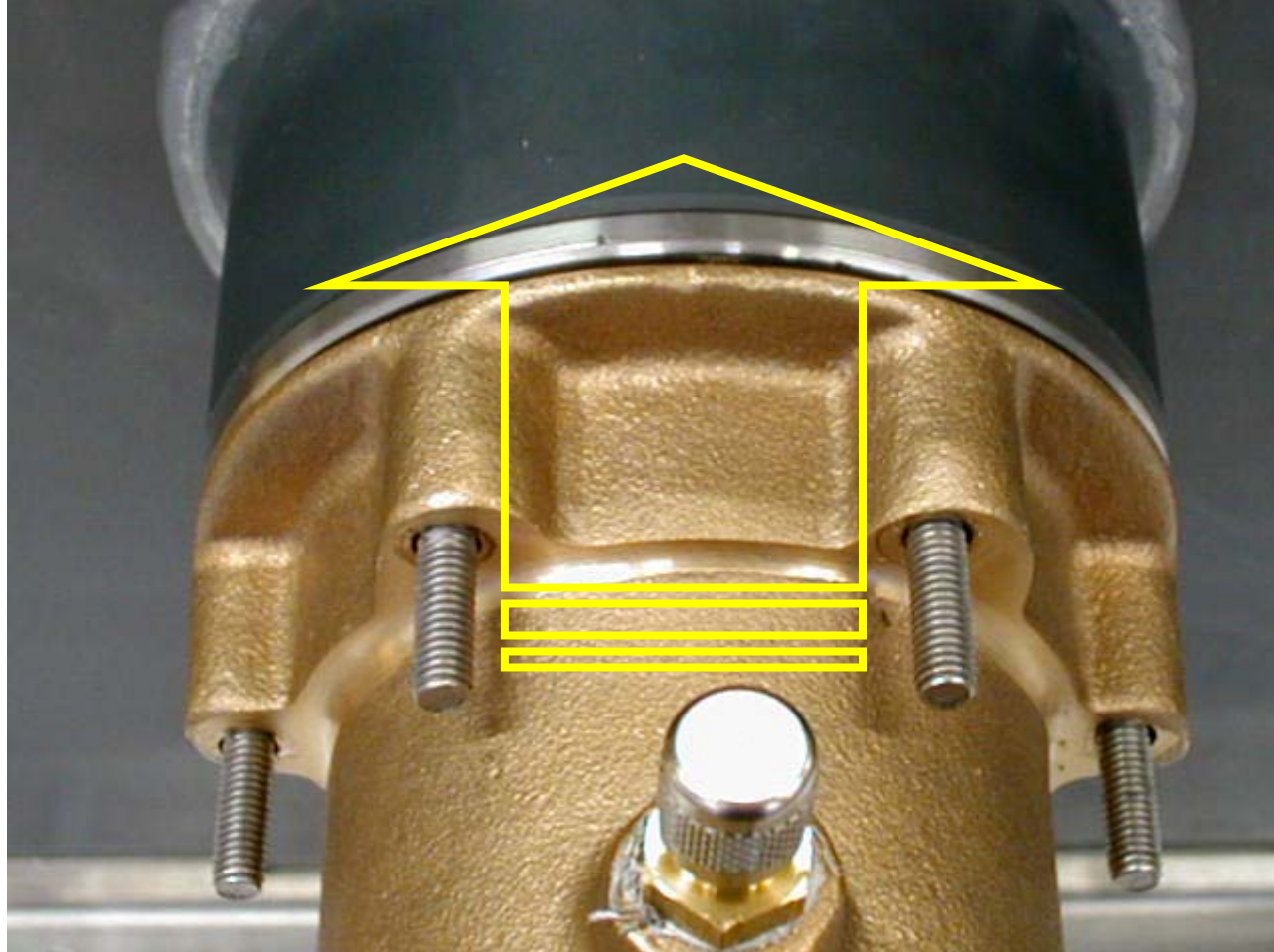
.....then the
spring ring
with the
inside spring
facing the
S.S. ring.



Carefully clean
the inner
surface of
refrigerant
manifold and
lubricate with
refrigerant oil...



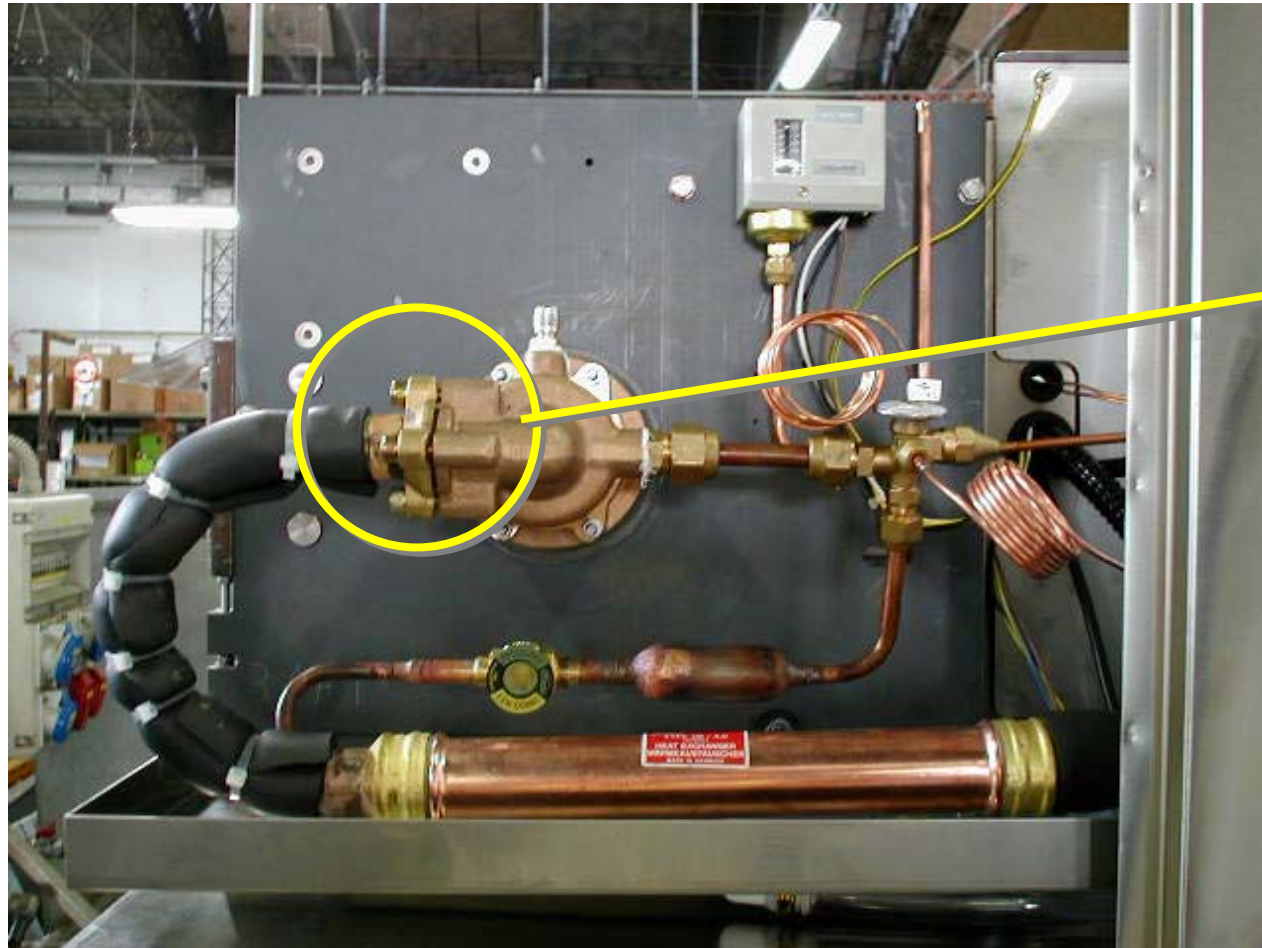
.....install
the flat gasket
around the
manifold
seat.



Reinstall
carefully the
refrigerant
manifold on the
drum shaft
then.....



.....tight nuts with
their lockwasher.



Connect the outlet refrigerant line to the corresponding port of the manifold and tight it with the four allen screw.



Connect the
refrigerant
inlet line on
its manifold
fitting and
tight the
flared nut.