
Shockproof waterproof cases

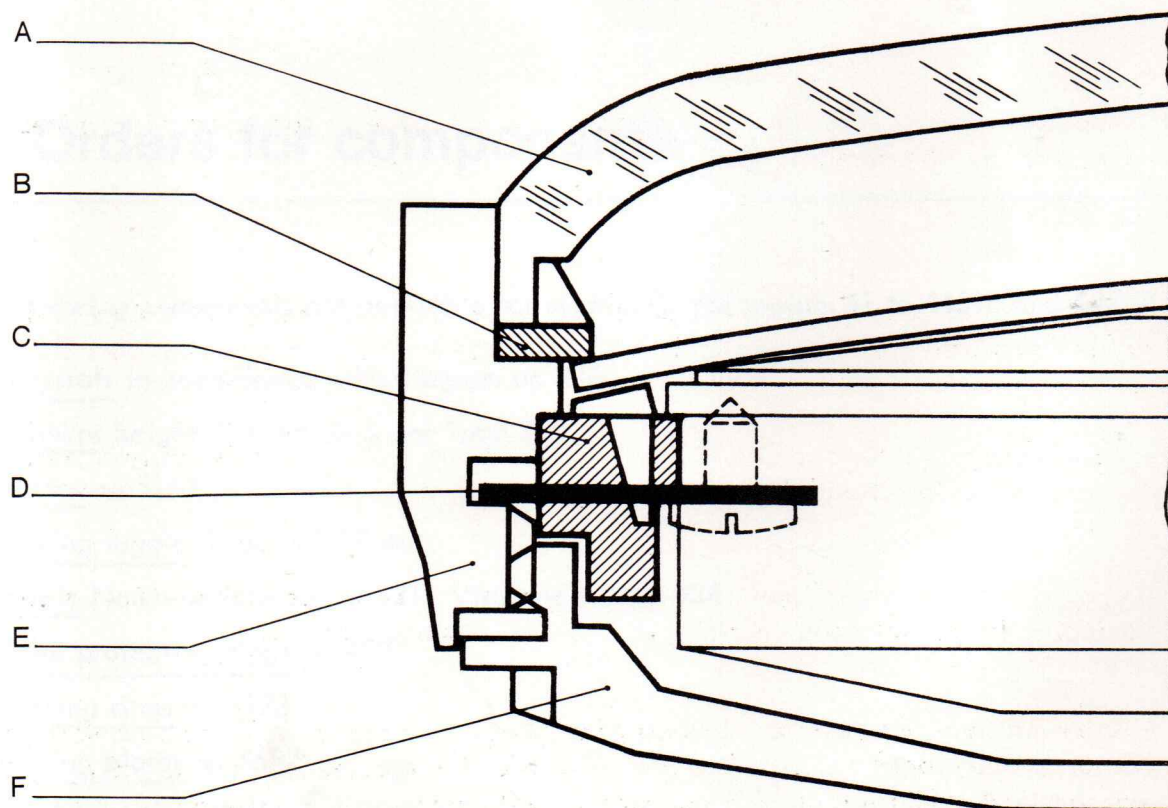
Suspended movement system



I Component parts

This is a waterproof case with a system especially designed to protect the movement against shocks however they may originate and comprising the following components :

- A A particularly strong armoured crystal
- B A flexible dial protecting ring
- C An elastic casing ring
- D Two flexible fixing plates
- E A reinforced case
- F A rugged screw-on base with extra-long thread



II Functioning of the system

The casing ring of a synthetic material protects the movement against all lateral shocks. Thanks to its specially-designed shape, this ring is capable of being deformed by such shocks and then resuming its original outline, acting to some extent similarly to a pneumatic tyre.

The two fixing plates of steel attach the movement to the case by way of the casing ring. By reason of their flexibility they serve as leaf springs to absorb axial shocks.

The dial protecting ring of a soft synthetic material serves to obviate damage to the dial when shocks occur by creating a supple surface between the dial and the crystal ring.

In the special case of the new watch model PR 516 (PR = performance + ruggedness), the following points may be noted:

1. A plexiglass armoured crystal 1.50 mm thick (instead of 1.20 mm), or 25 % more than on conventional watches. This crystal is set in the case and protected against shocks.
2. A waterproof crown with a tube diameter of 2.50 mm. This crown is partly recessed into the case to provide it with better resistance to shocks.
3. The case with increased material at the exposed points. These reinforcements permit in particular the partial countersinking of the crystal and the crown.
4. A screw-on steel base with a thickness of 0.70 mm. (instead of 0.50 mm), or 40 % greater than on conventional watches. This base is in addition provided with a threading 1.40 mm deep (instead 1.20 mm), or 20 % deeper than with conventional waterproof cases.

III Handling

1. Opening and closing

These operations are carried out with a TISSOT standard wrench. In the case of PR 516 models with serials 41 to 44516 and 44517, wrench no 11 must be used.

2. Positioning

It is advisable to use the EMO jig fitted with standard TISSOT pegs, or for serials 41 to 44516 and 44517 pegs 295-1 and 6606. It is advisable to take the opportunity to change the dial protecting ring.

3. Check on waterproofing

These checks should be made at 3 atm. pressure and 300 mm Hg vacuum.

4. Electronic test for the movement

As the movement is practically suspended inside the case, the vibrations of the balance are not fully transmitted to the recording appliance. To obtain a good trace it is therefore advisable to press the winding crown against the microphone.

IV Orders for components

The following components are available for models PR 516 serials 41 to 44516 and 44517 :

1. Crystals in accordance with diagram no 816
2. Crowns height 2.4 mm $\varnothing$ 5 mm Tube 250
3. Tubes no 5167
4. Spring toggle Type NC 18 mm
5. Dials Non-visodate : type 421. Visodate : type 424
6. Dial protecting rings no 4597
7. Casing rings no 5123
8. Fixing plates no 4697
9. Fixing screws standard