Movement ETA Cal. 7750, 7751

AVIATOR
STURMANSKIE

Product Manual
International Warranty

## Product Manual

Movement ETA Cal. 7750, 7751

You are now the owner of a
Poljot Automatic Mechanical Chronograph
with one of movements of the Swiss
firm ETA Cal. 7750 or Cal. 7751.

For best results, please read the instructions
in this bucklet carefully before using
your Poljot Mechanical Chronograph.

Please keep this manual handy for ready reference.

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## FEATURES

## TIME

Cal. 7751

- Hour, minute, sub-second and sub-24-hours hands;

Cal. 7750

- Hour, minute and sub-second hands;


## CALENDAR

## Cal. 7751

- Date - central hand and special scale on the dial;
- Month and Day - 3 letters in abbreviated form in the dial windows;
- Moon phase - the stylized image of the Moon and starlight sky in the dial shaped window.


## FEATURES

Cal. 7750

- Date and Day in the dial window (windows).


## STOPWATCH

## Cal. 7750 and Cal. 7751

- The stopwatch can mesure up to 12 hours in $1 / 4$ seconds;
- Central second hand, sub - minute hand (minute counter), sub-hour hand (hour counter);
- Tachymeter function (for models with tachymeter scale on the dial);
- Telemeter function (for models with telemeter scale on the dial).


## DISPLAY AND CROWN/PUSHERS OPERATIONS

## Cal. 7750



## Notes:

1.Crown of the watch has 3 positions:

- a - normal running position and manual winding;


## DISPLAY AND CROWN/PUSHERS OPERATIONS

## Cal. 7751

- b - first click

Cal. 7750

- turning crown clockwise
- fast date correction;
- turning crown counterclockwise - fast day correction.



## DISPLAY AND CROWN/PUSHERS OPERATIONS

## Cal. 7751

- turning crown counterclockwise fast date and month correction;
- turning crown clockwise - fast moon phase correction.;
- c - second click - time/calendar (Day, Date, Month, Moon phase) setting and second hand locking.

2. Pusher "A" - start and stop of the stopwatch.
3. Pusher "B" - reset of the stopwatch.
4. Pusher "C"- fast day correction (Cal. 7751)

## HOW TO OPERATE THE SCREW IN LOCK TYPE CROWN

(for models with screw in lock type crown)

To unscrew the crown:

1. Turn it counterclockwise until tight.
2. Then you can wind the mainspring manually or pull crown out in Pos."b" or Pos."c"


To screw in the crown:

1. Return the crown in Pos. "a".
2. Turn crown clockwise while pressing it lightly until tight.


## WATCH WINDING

- Turn crown clockwise in Pos. "a" for 3... 5 turnings. The second hand beqins its motion;
- Setting of time/calendar;
- Put the watch on your wrist. If you wear your watch more then 10 hours per a day with a normal motion activity, no necessity will occur to wind it manually (even if you leave it lying motionless all the day.


## Notes:

1. It is possible to wind the watch manually completely. For that turn crown clockwise for $12 \ldots . .15$ turnings. (It is impossible to feel full winding in the automatic watch, but there is no way to break the mainspring as well.)
2. Do not wind your watch with all your might otherwise automatic device can be used up untimely.

Cal. 7750

1. Pull out the crown in Pos. "b", turn it clockwise until the previous day's name appears.
2. Turn the crown in Pos. "b" counterclockwise until the previous day's date appears.
3. Pull out the crown in Pos. "c", when the second hand aligns 12 hours marker. The second hand stops.

## Note:

When setting the hour hand, check that AM/PM is correctly set. The watch is so designed that the date changes once in 24 hours. Turn the hands past the 12 o'clock marker to determine whether the watch is set for the A.M. or P.M. period. If the date change, the time is set for the A.M. period. If the date do not change, the time is set for the P.M. period.
4. Turning the crown counterclockwise, (hour and minute hands move clockwise) turn hands until the
desired date appears. Continuing turning the crown set hands to the desired time.

| COUTION: |
| :--- |
| It's forbiden to make fast cor- |
| rection of calwithin period |
| starting 21.00 till 02.00 |
| morning. As that can lead to |
| brakage of the movement |
| and will be considired as |
| consumer' fault and not sub- |
| ject for guarantee repair! |


5. Return the crown in Pos. "a". If you want to set exact time, fullfill this procedure with time signal.


## TIME/CALENDAR SETTING

Cal. 7751

1. Press the pusher "C" by the intermittent cycle, using, for example, a ball-point pen, until the previous day's name appears.
2. Pull out the crown in Pos. "b", turn it clockwise until the previous day's moon phase is set.


Note: Check the newspapers or other source for the previous day phase of the moon.
3. Turn the crown in Pos. "b" counterclockwise until the current month appears in window and the calendar hand aligns the previous day's date.

4. Pull out the crown in Pos. "c", when the second hand aligns 12 hours marker. The second hand stops.
5. Turning the crown counterclockwise, (hour, 24-hours and minute hands move clockwise) turn hands until the calendar hand aligns the cur-

## ATTENTION!

It is necessary to correct the date and the month manually by fast correction (by turning the crown in Pos. "b") at the end of February and all short (30 days) months
rent date, the current day appears in the window, the current moon phase is set. Continuing turning the crown set hands to the desired time.
6. Return the crown in Pos. "a". If you want to set exact time, fullfill this procedure with time signal.

## Notes:

When setting the hour hand, check by the position of 24 -hour hand that AM/PM is correctly set. The watch is so designed that the date changes once in 24 hours.

- The stopwatch can mesure up to 12 hours in $1 / 4$ seconds;
- The stopwatch has sweep second hand, its hour hand (hour counter) moves smoothly, its minute hand

(minute counter) moves at oneminute intervals.
- After 12 hours, it will start counting again from " 0 ".
- To start and to stop - press the pusher "A".
- To reset - press the pusher " B ".


## Standard measurement <br> $A>A>B$ <br> Start Stop Reset

Accumulated elapsed time measurement

\author{

```
Start 
```

}
stopwatch.

> Stopwatch operation (Standard measurement)

Use the tachymeter with the

The tachymeter can be used for the following purposes.

1. To mesure the hourly average

## HOW TO USE THE TACHYMETER

(for the models with a tachymeter scale on the dial)
speed of a vehicle

- Use the stopwatch to determine

how many seconds it takes to go one kilometer (or one mile). The tachymeter scale indicated by the stopwatch second hand gives the average speed per hour.
* Please note that the tachymeter scale can be used only when the time required is less than 60 second. If it exceeds 60 seconds, shorten the measuring distance (Refer to "Ex 2" below).
Ex. 1


## HOW TO USE THE TACHYMETER

If it takes 40 seconds to go one kilometer (or one mile), the stopwatch second hand indicates " 90 " on the tachymeter scale. This means that the average speed of the vehicle is 90 kilometers (or miles) per hour.

90 (Tachymeter scale figure $\times 1$ (Kilometer or mile) $=90 \mathrm{~km} / \mathrm{h}(\mathrm{mph})$ at 40 second position)

## Ex. 2

If the measuring distance is extended to 2 kilometers (or miles) or short-
ened to 0.5 kilometers (miles), multiply the figure on the tachimeter scale by 2 or 0.5 , respectively.
We recommend that you utilize the tachymeter in a rally, speedway or circuit rase.

90 (Tachymeter scale figure $\times 2$ (Kilometers or miles) $=180 \mathrm{~km} / \mathrm{h}$ (mph) at 40 second position)

90 (Tachymeter scale figure $\times 0.5$ (Kilometers or miles) $=45 \mathrm{~km} / \mathrm{h}$ (mph) at 40 second position)

## HOW TO USE THE TACHYMETER

- To mesure the hourly rate of opeation

The tachymeter is extremely useful in calculating factory operation efficiency or machine production amount.

## Ex. 1

Use the stopwatch to mesure the time required to do one job.
If it takes 20 second, the stopwatch


## HOW TO USE THE TACHYMETER

second hand indicates "180" on the tachymeter scale. This means that 180 jobs will be completed in one hour.

180 (Tachymeter scale figure $\times 1$ job $=$ 180 jobs at 20 second position)

## Ex. 2

Use the stopwatch to determine how many jobs are completed in a specific period of time.

If 15 jobs are completed in 20 seconds, multiply " 180 ", the figure on the tachymeter scale indicated by the stopwatch second hand, by 15 . Thus, it is estimated that 2,700 jobs will be completed in one hour.

180 (Tachymeter scale figure x 15 jobs $=2,700$ jobs per hour at 20 second position)

## HOW TO USE TELEMETER

(for models with telemeter scale on the dial)

1. Use the stopwatch to mesure the time since the moment when you have seen the outburst of the forked lightning or the shot, till the moment when you have heard the thunder or the sound of the shot.
2. The telemeter scale indicated by the stopwatch second hand gives the distance as far as the epicenter of the thunderstorm or the place of the shot.


* Please note that telemeter scale can be used when the time period is less than 60 seconds


## HOW TO USE THE WORLD TIME FUNCTION

(for models with World time scale)

The revolving World time scale on the dial or on the rotating bezel unables you

to find the time of 24 cities in different time zones throughout the world.


## HOW TO USE THE WORLD TIME FUNCTION

1. Turning the crown " $D$ " or bezel clockwise or counterclockwise set the name of the city with the local time in front of the hour hand arrow.

Note: Cities of the 12 time zones easterly GMT are at the external scale. Cities of the 12 time zones westerly GMT are at the internal scale. The time of day of cities at the external scale is in opposition the time of day of cities at the internal scale.
2. Current hour in the disired city will be indicated opposite its name or the name of the city, which is at the same time zone.

## HOW TO USE THE WORLD TIME FUNCTION

Ex.:

1. You are in Moscow. The local time of Moscow is $4: 37 \mathrm{P}$. M. Set the name of the city - Moscow in front of the hour hand arrow. Current hour in the disired city is read opposite its name or the name of the city, which is at the same time zone.

- PARIS is at the same scale as MOSCOW - PARIS time is $2: 37 \mathrm{P}$. M.;
- TOKYO is at the same scale as MOSCOW - TOKYO time is $10: 37$ P. M.;
- NEW YORK is at the internal scale NEW YORK time is $8: 37 \mathrm{~A}$. M.;
- HONOLULU is at the internal scale HONOLULU time is $3: 37 \mathrm{~A}$. M.
(GMT) $=$ Greenwich Mean Time


## GMT

K Name of the main cities hours of the time zone

0 London*, Casablanca, Dakar
+1 Paris*, Рим Rome*, Amsterdam*, Frankfurt*, Berlin*
+2 Cairo*, Athens*, Istanbul*, Kiev*, Cape Town, Tripoli
+3 Moscow*, Mecca, Nairobi
+4 Volgograd*, Dubai
+5 Ekaterinburg*, Tashkent*, Karachi
+6 Novosibirsk*, Dacca
+7 Irkutsk*, Bangkok, Phnom
Penh, Jakarta
+8 Hong Kong, Manila, Beijing*, Singapore
+9 lakutsk*, Tokyo, Seoul
+10 Khabarovsk*, Sydney*, Guam

## TIME DIFFERENCES

| +11 | Magadan , New Caledonia, | $\mathbf{- 7}$ | Denver $^{\star}$, Edmonton <br> Chicago |
| :--- | :--- | :--- | :--- |
|  | Solomon Islands Mexico City |  |  |,

The asterisk ( "*") indicates a city which uses daylight saving time (summer time).


## HOW TO USE THE "SOUNDLESS" TIMER FUNCTION

(for models with the rotating timer scale on the dial or on the bezel)

1. You can mesure time intervals up to 12 hours in 15 minutes increase by the "soundless" timer " A " and time intervals up to 60 minutes in 1 minute increment by the "soundless" timer "B".
2. Turn the rotating scale by the crown "D" clockwise or counterclockwise to align its " $\boldsymbol{\nabla}$ " mark with the hour hand for the timer "A" or minute hand for the timer "B".
3. When the hour hand (minute hand for the timer "B") points to the number of the desired interval fulfil the necessary operation.

## Ex. :

- Now it is 4 : 37 P.M., you must leave the conference in 1 h 45 min to be at the airport in time. Align " $\boldsymbol{\nabla}$ " mark with the hour hand and leave the conference when the hour hand points to $1: 45$ at the timer scale.


## HOW TO USE THE "SOUNDLESS" TIMER FUNCTION

- You were given 15 minutes for your speech. Begining it at $4: 37 \mathrm{P}$. M. you align " $\boldsymbol{\nabla}$ " mark with the minute hand

and you must finish your speech when the minute hand points to " 15 " at the timer scale.


1. Windig manual and automatic winding with ball bearing device
2. Frequency .28,800 (4.0 Hrz)
3. Daily rate -10 to +20 s/day
4. Power reserve minimum (full winding) . . . . . . . . . . . . . . . . . . . . . . . . . 42 h
5. Power reserve after wearing the watch continiously for 10... 12 hours (minimum) .24 h
6. Display system
a) Time

- Cal. 7750 . . . . . . . . . . . . . . . . . 3 hands (hour, minute and sub-second)
- Cal. $7751 \ldots 4$ hands (hour, minute, sub-second and 24 -hours sub-second)
b) Calendar
- Cal. 7750

Date
figure (figures)in window
Day . . . . . . . . . . . . . . . . 3 letters in abbreviatured form in the dial window

- Cal. 7751

Date central hand and special scale
Day 3 letters in abbreviatured form in the dial window Month . . . . . . . . . . . . . . 3 letters in abbreviatured form in the dial window Moon phase .the stylized image of the Moon and the Starlit Sky in the shaped dial window
c) Stopwatch . ........................... . . 3 hands (second, minute, hour)

- Type of the stopwatch . ............................ . .summing up action
- Minutes counter capacity . . . . . . . . . . . . . . . . . . . . . . . 30 min (sub hand)
- Hours counter capacity

12 h (sub hand)
7. Shock protection
8. Jewels number

- Cal. 7750

25
-Cal. 7751 . ................................................................. . . . 2525
9. Calendar type . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . not instantaneous
10. Calendar correction

- Cal. 7750 . . . . . . . . . . . . . . . . . . . fast day and date correction by turning the crown in the middle position
- Cal. 7751

Date, month and moon phase . . . . . . . . . . . . . . . . . . . . . . .fast correction
by turning the crown in the middle position
Day . . . . . . . . . . . . . . . . . . . . . . . . . . fast correction by the special button

## TO PRESERVE THE QUALITY OF YOUR WATCH

## WATER RESISTANCE

## Non- water resistance

If "WATER RESISTANT" is not inscribed on the case back, your watch is not water resistant, and care should be taken not to get wet as water may damage the movement. If the watch become wet, we suggest that you have it checked by the AUTHORIZED POLJOT DEALER or SERVICE CENTER.

## Water resistance (3 bar)

If "WATER RESISTANT" is inscribed on the case back, your watch is designed
and manufactured to withstand up to 3 bar, such as accidental contact with splashes of water or rain, but it is not designed for swimming or diving.

Water resistance ( 5 bar)
If "WATER RESISTANT 5 bar" is inscribed on the case back, your watch is designed and manufactured to withstand up to 5 bar and is suitable for swimming, yachting and taking a shower.

## TO PRESERVE THE QUALITY OF YOUR WATCH

- Before using the water resistance 5,10 , or 15 bar watch in water, be sure that the crown is pushed in completely.
- Do not operate the crowns and pushers when the watch is wet or in water. - If used in sea water, rinse the watch in fresh water and dry it completely.
- When taking the shower with the water

Note: Pressure in bar is a test pessure and should not be considered as corresponding to actual diving depth since swimming movement tends to increase the pressure at a given depth. Care should also be taken on diving into water.

## TO PRESERVE THE QUALITY OF YOUR WATCH

resistance 5 bar watch, or taking the bath with the water resistance 10 or 15 bar watch, be sure to observe the following:

- Do not operate the crowns or push the pushers when the watch is wet with soapy water or shampoo.
- If the watch is left in warm water, a slight time loss or gain may be caused. This condition, however, will be corrected when the watch returns to normal temperature.


## MAGNETISM

Your watch will be adversely affected by strong magnetism. Keep away from close contact with magnetic objects.

## SHOCK \& VIBRATION

Light activities will not affect your watch, but be careful not to drop your watch or hit it against hard surface, as this may cause damage.

## TO PRESERVE THE QUALITY OF YOUR WATCH

## CHAMICALS

Be careful not to expose the watch to solvents (e.g., alcohol and gasoline), mercury(i.e. from the broken thermometer), cosmetic spray, detergents, adhesives or paints. Otherwise, the case, bracelet etc. may become discolored, deteriorated or damaged.

## CARE OF CASE AND BRACELET

To prevent possible rusting of the case and bracelet caused by dust,
moisture and perspiration, wipe them periodically with the soft dry cloth.

## PRECAUTION RECARDING CASE BACK PROTECTIVE FILM

If your watch has a protective and/or a sticker on the case back, be sure to peel them off before using your watch. Otherwise, perspiration getting in under them may rust the case back.

## PERIODIC CHECK

It is recommended that the watch be checked once every 2 to 3 years. Have your watch checked by an AUTHORIZED POLJOT DEALER or SERVICE CENTER to ensure that the case, crowns, pushers, gaskets and crystal sealing remain intact.

Guarantee period is 1 year from the date of purchase.

Gurantee period can be increased for concrete model. The mark of real Guarantee period is done in Guarantee Card.

Within Guarantee period regulation, adjustment, repair or replacement of parts or movement will be performed without charge except the case of damage caused by accidents or lack of care.

## IMPORTANT

1. This GUARANTEE does not cover the glass crystal, bracelet, strap and attachment.
2. This GUARANTEE does not cover scratches on the case caused by using.
3. This GUARANTEE is valid only if properly filled in and dated by the authorized and appointed POLJOT dealer from whom watch was purchased.
4. We bear no responsibility under this GUARANTEE for repairs if the watch is tampered with or damaged by other than POLJOT AUTHORIZED SERVICE facilities.
5. Altered or tampered GUARANTEE CARD or PHOTOCOPIES of the GUARANTEE CARD are not valid and not acceptable.
6. We bear no responcibility for any trouble with or damage to watches due to natural disaster, such as fire, flood or earthquake.

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