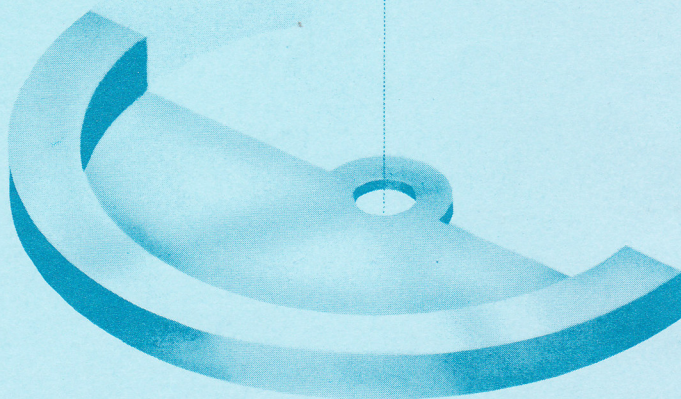
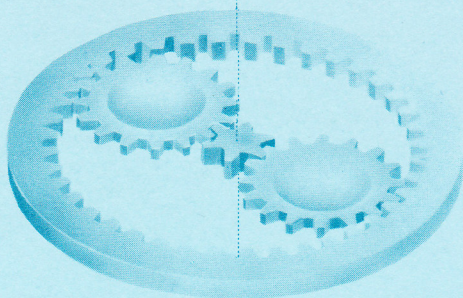


# TIMEX model 74

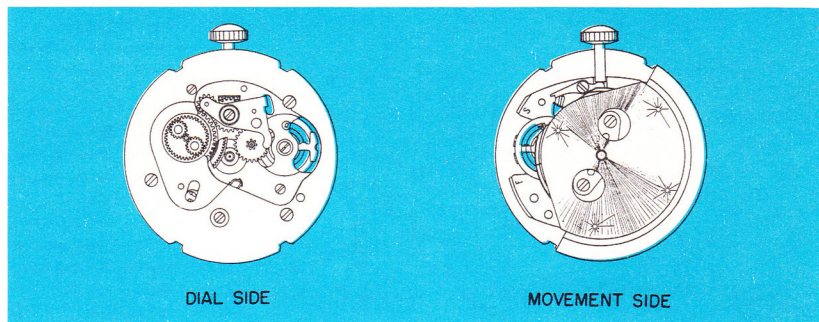


13 lig.

29.08 mm

1.145 in.

## the TIMEX Model 74 movement



The Timex Model 74 movement is a new thin self winding watch which uses the basic construction of the Model 72. A new planetary gear winding system located on the dial plate provides a compact method of obtaining the necessary gear reduction between the self winding weight and the mainspring.

All the features of the Model 72 movement, for example, removable cap jewels, permanently fixed pallet jewels, etc., are also found in the Model 74 movement. The reserve power of the mainspring when the watch is worn by a normally active person is sufficient to run the watch for a full day.

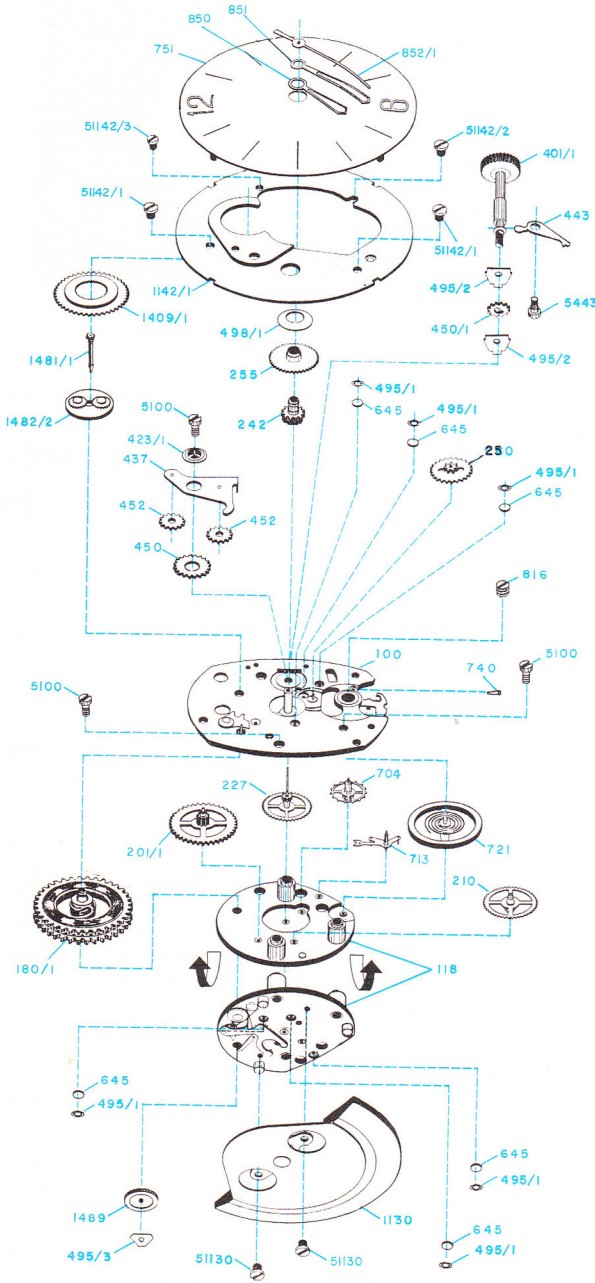
To clean the Model 74 movement, it is necessary to remove only the sweep second hand, dial, wind and set mechanism, minute wheel, mounting ring, planetary gear system, cap jewels, and balance.

Timex has found that the best method of cleaning is with only the afore-mentioned parts removed. The cleaning fluid, while removing any contamination from the movement will also remove oil from the pivots and holes. The illustrations on pages 74.3 and 74.4 show proper procedures for disassembly.

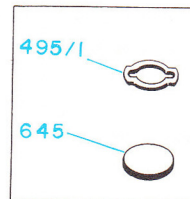
If further dismantling is required, follow the instructions for the Model 72 movement. An exploded view of the Model 74 movement is shown on page 74.2 to guide reassembly.

Cleaning, reoiling and reassembly procedures are given on page 74.5

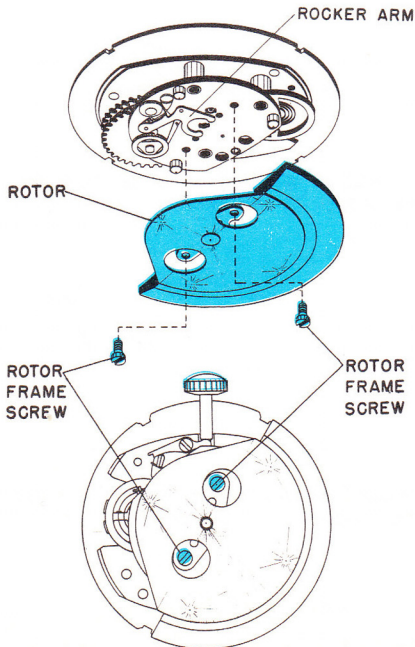
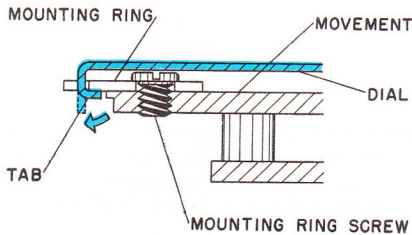
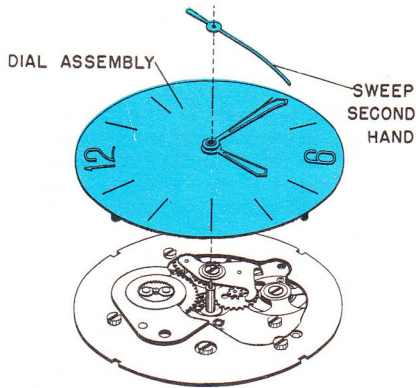
# the TIMEX model 74 movement (exploded view)



- 100 Dial Plate Assembly
- 118 Movement Plate Assembly
- 180/1 Barrel Complete (with Mainspring)
- 201/1 Second Wheel Assembly
- 210 Third Wheel Assembly
- 227 Seconds Wheel Assembly
- 242 Cannon Pinion Assembly
- 255 Hour Wheel
- 260 Minute Wheel Assembly
- 401/1 Winding Stem with Crown
- 423/1 Rocking Bar Bushing
- 437 Rocking Bar
- 443 Setting Lever
- 450 Setting Wheel
- 450/1 Stem Wind Pinion
- 452 Wind and Set Pinion
- 495/1 Retaining Ring (Cap Jewel)
- 495/2 Winding Bridge
- 495/3 Winding Ratchet Wheel Lock Washer
- 498/1 Hour Wheel Washer
- 645 Cap Jewel
- 704 Escape Wheel
- 713 Pallet Lever Assembly
- 721 Balance Assembly
- 740 Hairspring Wedge Pin
- 751 Dial Assembly
- 816 Balance Screw Assembly
- 850 Hour Hand
- 851 Minute Hand
- 852/1 Sweep Second Hand
- 1130 Rotor Plate Assembly
- 1142/1 Mounting Ring
- 1409/1 Ratchet Wheel
- 1481/1 Planet Wind Pinion
- 1482/2 Planet Pinion Assembly
- 1489 Winding Ratchet Assembly
- 5100 Pillar Screw
- 5443 Set Lever Screw
- 51130 Rotor Plate Screw
- 51142/1 Mounting Ring Screw
- 51142/3 Mounting Ring Screw



# Disassembly of movement for Cleaning (Model 74)



## Removing the Dial and Hands

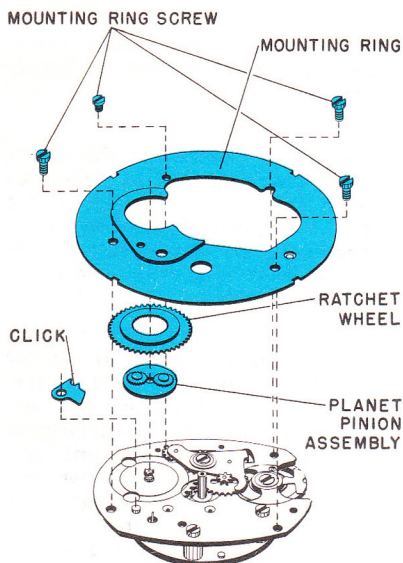
- Remove the sweep second hand. Do not remove the hour or minute hand.
- The dial is clamped to the movement mounting ring by four tabs protruding from the outside of the dial. Straighten these tabs as indicated by arrow and dotted lines in the illustration and remove the entire assembly.
- Once the dial assembly is off the movement there is no need for further dismantling of the dial assembly unless severe contamination is present on the friction and cannon pinions. Should further dismantling be required, removal of the minute hand will free the friction and cannon pinion assembly. The friction pinion is held in the cannon pinion by a snap fit.

## Removing the Rotor

- Invert the movement so that the rotor is facing you and remove the two rotor frame screws.
- Lift the rotor assembly slightly to free the dowels which position it. Since the rocker arm fits between the rotor frame and the rotor weight assembly, the rotor weight assembly must be removed by sliding it along the movement plate until it is free of the rocker arm. Any attempt to lift the weight before it is free of rocker arm will result in damage to the movement.

## Disassembly of movement for Cleaning Cont'd.

### Removing the Mounting Ring

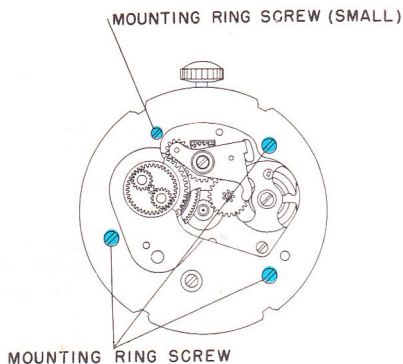


- a) Before removal of the mounting ring, the mainspring power must be fully let down. Grasp the crown in the fingers of one hand and move the click out of engagement with the ratchet wheel. Let the crown revolve slowly in the fingers being careful not to let the crown slip.

Note: To disengage the click, hold the click spring back and turn the crown forward. The click will rotate out of engagement.

- b) After the mainspring is fully let down, remove the four mounting ring screws. Next remove the mounting ring ratchet wheel, planet pinion assembly and click.

### Removing the Wind & Set Mechanism



Proceed as directed on page 72.4 for the Model 72 movement.

### Removing the Crown and Stem

Proceed as directed on page 72.5 for the Model 72 movement.

### Removing the Balance

Proceed as directed on page 72.5 for the Model 72 movement.

### Removing the Cap Jewels

Proceed as directed on page 72.6 for the Model 72 movement.

## Cleaning & Lubricating the Model 74 Movement

After disassembly of the sweep second hand, dial, rotor, mounting ring, planetary gear system, wind and set mechanism, minute wheel, click, balance, and cap jewels, the movement is ready to be cleaned. The same instructions for cleaning as given for the Model 72 movement apply to the Model 74. Care should be exercised to insure complete cleaning of all self winding parts.

The same re-oiling instructions given for the Model 72 movement apply to the Model 74. In addition, all moving parts of the self winding and planetary gear system should be oiled.

As noted on the Model 72 movement, the mainspring is permanently lubricated and should not be oiled.

A drop of oil should be applied between the slip tail and the barrel.

## Reassembly of the Model 74 Movement

Use the disassembly procedure for the Model 74 and 72 movements as a guide for reassembly. Reassembly procedures for the balance, position of the hairspring and positioning of sweep second hand are given on page 72.8.

## Helpful Hints

1. Oiling — When oiling the balance "V-conic" jewel bearing in the movement plate, to facilitate the precise entry of the oil to the bottom of the cup, remove the balance screw from the dial plate and insert the oiler through the dial plate balance screw hole.

2. A drop of oil applied to both sides of the stem wind pinion before assembly will hold the pinion and its bridges together thus facilitating assembly, should complete dismantling of the movement be necessary.

3. Model 74 movement — Examine the action of the rotor on the winding frame. Be certain the staking is secure and that the rotor is free to make a complete revolution without interference. Check that the spring which holds the movement in the bezel is properly located in its groove.

Check the freeness of the rocker arm and the clicks which are attached to it. Check that the yoke of the rocker arm slides freely on the cam attached to the self-wind weight without interference.

Check the action of the winding ratchet wheel. Each rotation of the rotor should move this wheel forward approximately 6 teeth.

Check the action of the mainspring and the barrel. The mainspring should have 6 to 8 full turns before the slip tail begins to revolve in the barrel.