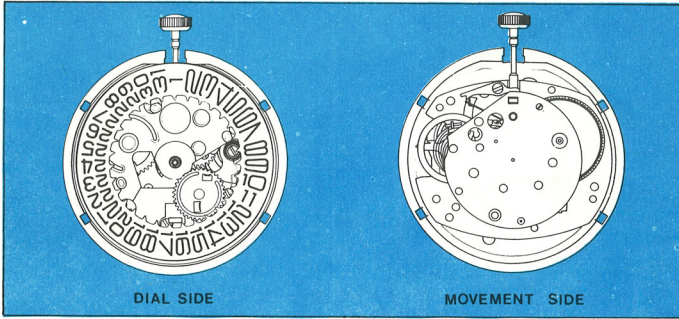


# TIMEX® Model 105

13 lig.  
29.4 mm  
1.160 in.

SERVICE MANUAL  
MODEL 105

# The **TIMEX**® Model 105 Movement



SHOWN ACTUAL SIZE

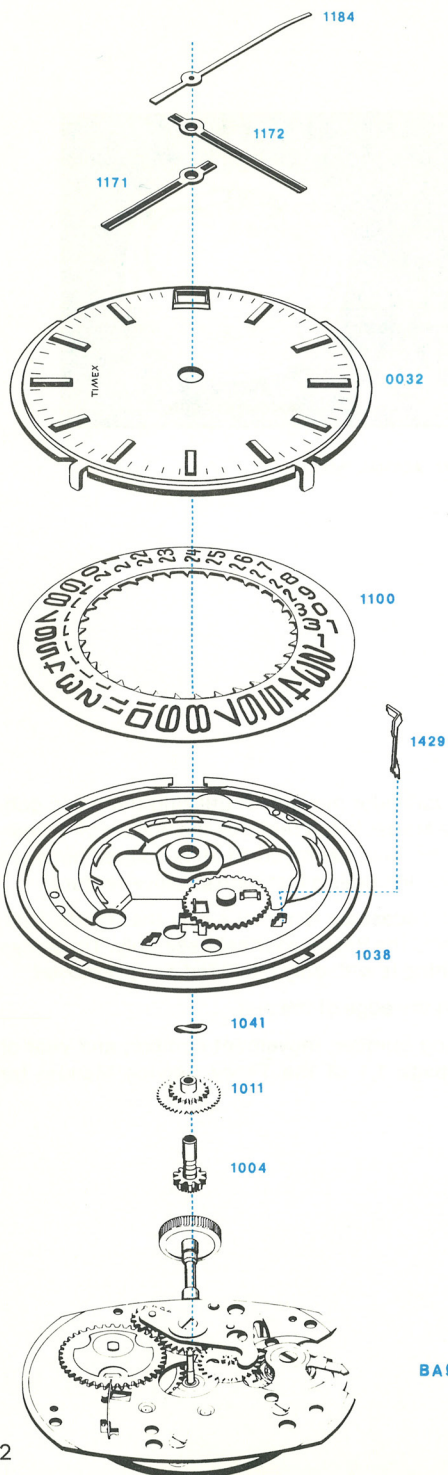
The Timex Model 105 is a 13 ligne calendar movement utilizing the basic construction of the Model 104. Like the Model 104, it features the 'V-Conic®' bearing system and two plate design. The calendar mechanism is housed between the dial plate and the dial. The design includes a fast date advance feature.

To clean the Timex Model 105, it is necessary to remove only the Hands, Dial, Date Ring, Date Frame Assembly, and the Balance Wheel Assembly. Timex has found that the best method of cleaning is with only the listed parts removed.

The Timex code number appears on the edge of the dial.

The code number shows the catalog number, movement number, and year of manufacture for the watch (see page 1.1 of the Timex Service Manual for explanation).

# The **TIMEX**® Model 105 Movement (exploded view)



- 0032 DIAL
- 1004 CANNON PINION ASS'Y
- 1011 HOUR WHEEL ASS'Y.
- 1041 HOUR WHEEL WASHER
- 1100 DATE RING
- 1171 HOUR HAND
- 1172 MINUTE HAND
- 1184 SWEEP SECOND HAND
- 1429 DATE DETENT SPRING
- 1038 DATE FRAME ASS'Y

**BASIC MOVEMENT**

# Disassembly of the Model 105 Movement

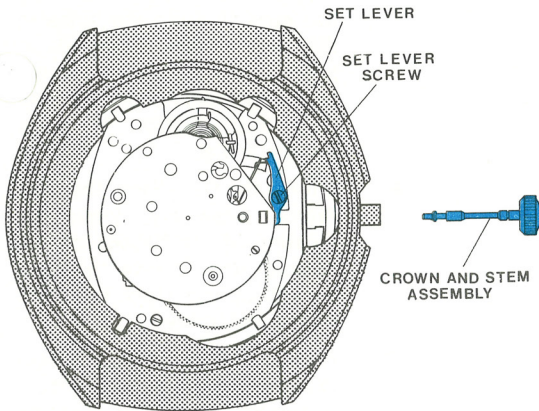


FIGURE 3

To disassemble the Model 105 for cleaning, use the following procedure:

- A. Remove the case back and support ring (this is not always used).
- B. Loosen the screw on the set lever (beside the stem) to release the Crown and Stem assembly. Pull the Crown and Stem Assembly out of the movement and the case.
- C. Turn the assembly over and remove the crystal using a crystal remover. The Reflector Ring and the Movement and Dial Assembly can then be removed through the front of the bezel, (some designs permit removal of the movement and dial assembly through the back of the case).

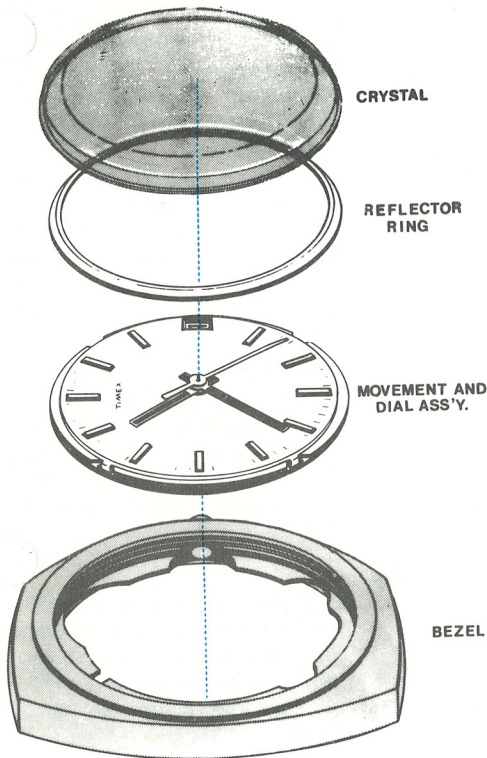
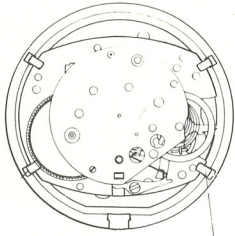


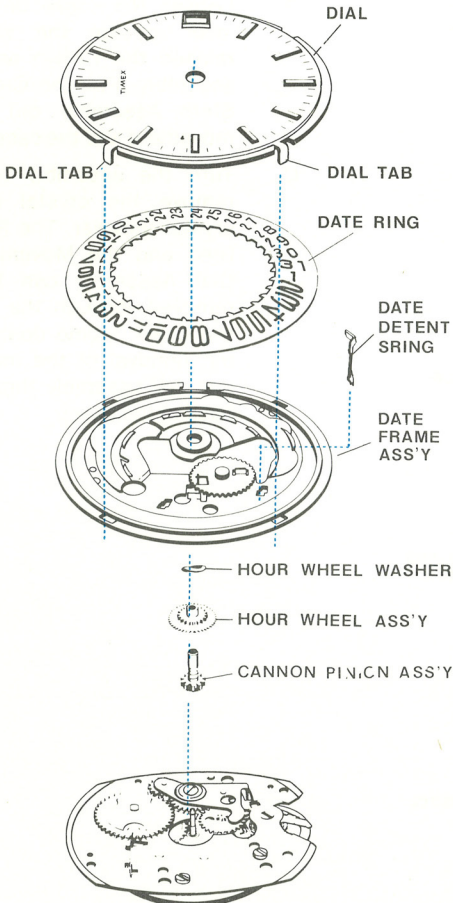
FIGURE 4

# Disassembly of Movement Cont'd.



DIAL TAB (4)

- D. Remove all hands.
- E. Straighten the dial tabs so they will pass through the holes in the Date Frame. Hold dial in position, turn the assembly over and then lift off the dial. Note the position of parts under the dial.
- F. Lift off the Date Ring, the Date Frame Assembly, (note the location of the bosses on the bottom) and remove the Date Detent Spring from the Date Frame Assembly.
- G. Remove the Hour Wheel Washer, the Hour Wheel Assembly, and the Cannon Pinion Assembly.



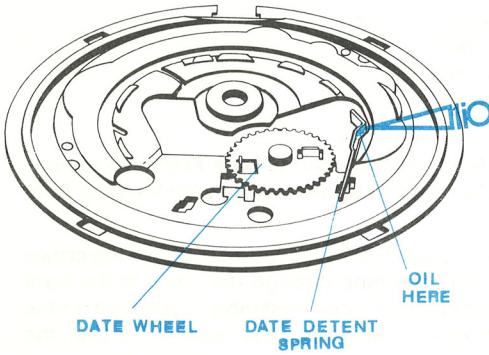
WITH THE ABOVE PARTS REMOVED, THE BASIC MOVEMENT MAY BE REPLACED WITH A TIMEX RECONDITIONED MOVEMENT. THE PARTS REMOVED ABOVE ARE ASSEMBLED TO THE RECONDITIONED MOVEMENT AS DESCRIBED STARTING ON PAGE 105.5

- H. After the above parts have been removed, the basic movement can be disassembled, cleaned, lubricated, and reassembled as outlined for the Model 104 movement starting on page 104.3
- I. The Hour Wheel Washer, Hour Wheel Assembly, Cannon Pinion Assembly, Date Detent Spring, and the Date Frame Assembly may be cleaned using standard watch cleaning solutions.

### CAUTION:

Extreme care must be exercised in cleaning Dials, Hands, and Date Rings. Solvent type cleaning solutions will often damage the finish on these parts.

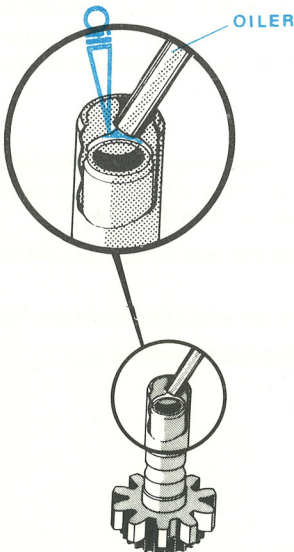
# Reassembly of the Model 105 Movement



After the basic movement has been cleaned, lubricated, and reassembled as outlined for the Model 104 movement, the Model 105 movement reassembly is completed as follows (be sure crown and stem assembly is in movement):

- A. Insert the Date Detent Spring into the Date Frame Assembly as shown in the illustration at the left.
- B. Lubricate the bearing face of the Date Detent Spring with a thin film (AVOID EXCESS LUBRICATION) of non-spreading watch oil (Moebius Synt-A-Lube oil is used in the factory) where shown in the illustration at the left.

DO NOT LUBRICATE DATE WHEEL AREA. Apply non-spreading watch oil to the end of the Cannon Pinion as shown in the illustrations at the left.



# Reassembly of the Model 105 Movement

- C. Replace parts on the movement in the following order:
- Cannon Pinion Assembly
  - Hour Wheel Assembly
  - Hour Wheel Washer
  - Date Frame Assembly—orient frame with the slot at the stem (see illustration on Page 105.2) and seat bosses in holes.
- D. Date Ring—Position Date Ring centrally on the Date Frame Assembly. With fine tweezers, Deflect Date Detent Spring inward until the Date Ring drops into place.
- E. Dial—Orient Dial as shown on page 105.2 with window toward the crown and stem assembly, and insert dial tabs through the holes in the Date Frame Assembly. Hold Dial and Date Frame Assembly in position on the movement, turn the assembly over and bend the tabs firmly over the edge of the Dial Plate.
- F. Pull crown and stem out and rotate in a clockwise direction until date changes (with a snap). Stop turning the crown and assemble hands at the 12 o'clock position.

Check assembly to be sure date changes as follows:

Rotate hands counterclockwise until they indicate 9 o'clock then rotate hands clockwise until date changes with a snap, (this change should occur about midnight). Rotate hands clockwise through 24 hours and date should advance again.

Loosen the set lever screw and remove the crown and stem. Position the Dial and Movement Assembly into the bezel, insert the reflector ring and replace the crystal (not necessary if assembly is inserted from the back).

Insert the crown and stem assembly through the bezel into the movement and retighten the set lever screw.

Position the case back so the crown is to the left when the words are upright.

Recheck watch for proper function of the date setting mechanism.