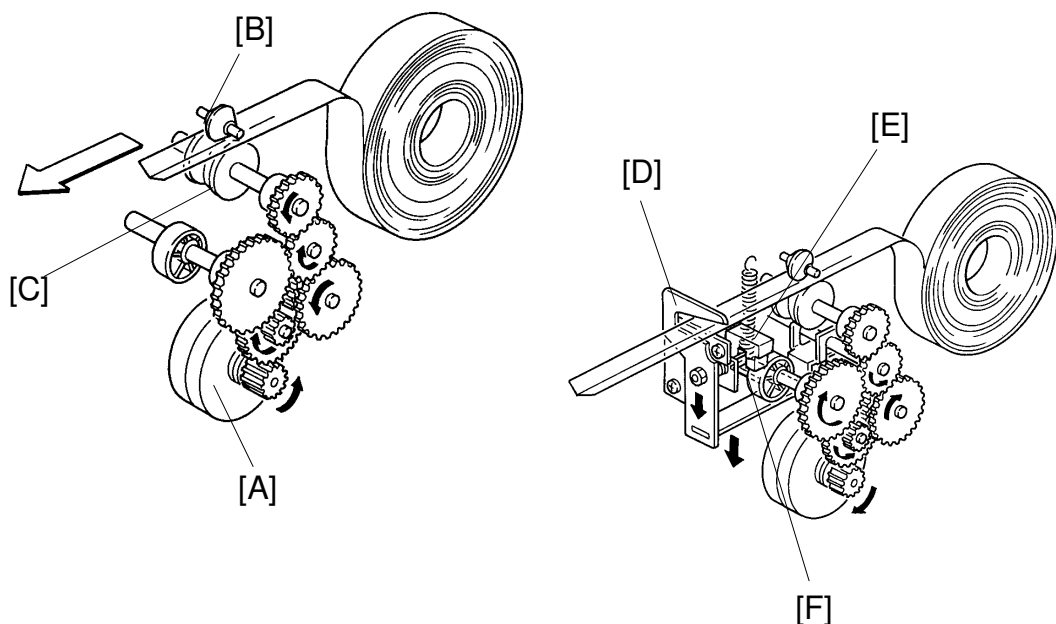TAPE MARKER

1. SPECIFICATIONS

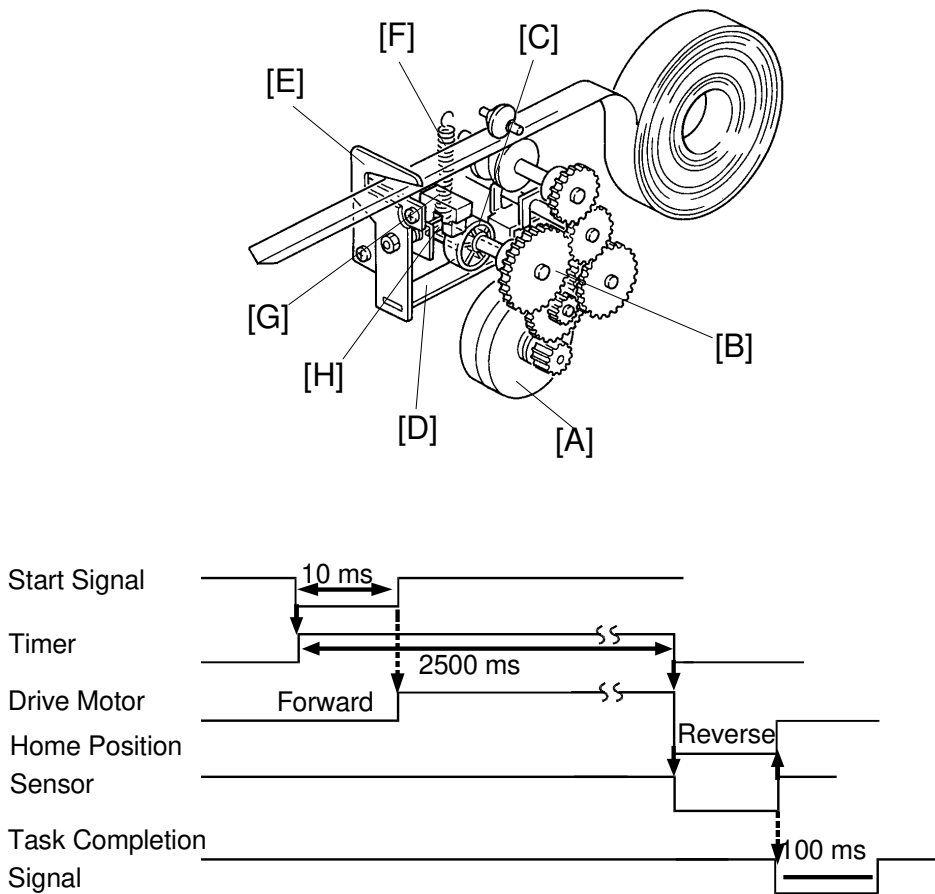|	
Tape Feed Length:	250 mm (9.8")
Tape Feed Speed:	100 mm/s (3.9"/s)
Tape Size:	Outside Diameter 80 mm (3.1") or smaller Inside Diameter 20 mm (0.8") or larger Width 17 mm to 18 mm (0.67" to 0.71")
Dimensions:	155 mm (W) x 105 mm (D) x 60 mm (H) (6.1" x 4.1" x 2.4")
Weight:	700 g (1.5 lb)
Power Source:	+24 VDC and +5 VDC from main body
Power Consumption:	15 W

2. BASIC OPERATION

2.1 OVERVIEW

After the tape dispenser receives the start signal from the main body, the drive motor [A] rotates counterclockwise to feed out the tape. The pinch roller [B] presses the center of the tape against the feed roller [C] flexing the tape into a V shape. This keeps the tape stiff as it is fed out. After the tape has fed out the proper length, the drive motor rotates in the opposite direction (clockwise) and the cutter [D] moves down to cut the tape. After the cutter home position sensor [E] detects the cutter actuator [F], the drive motor stops and sends the task completion signal to the main body. The main body starts the next job after receiving this signal.

Tape Marker
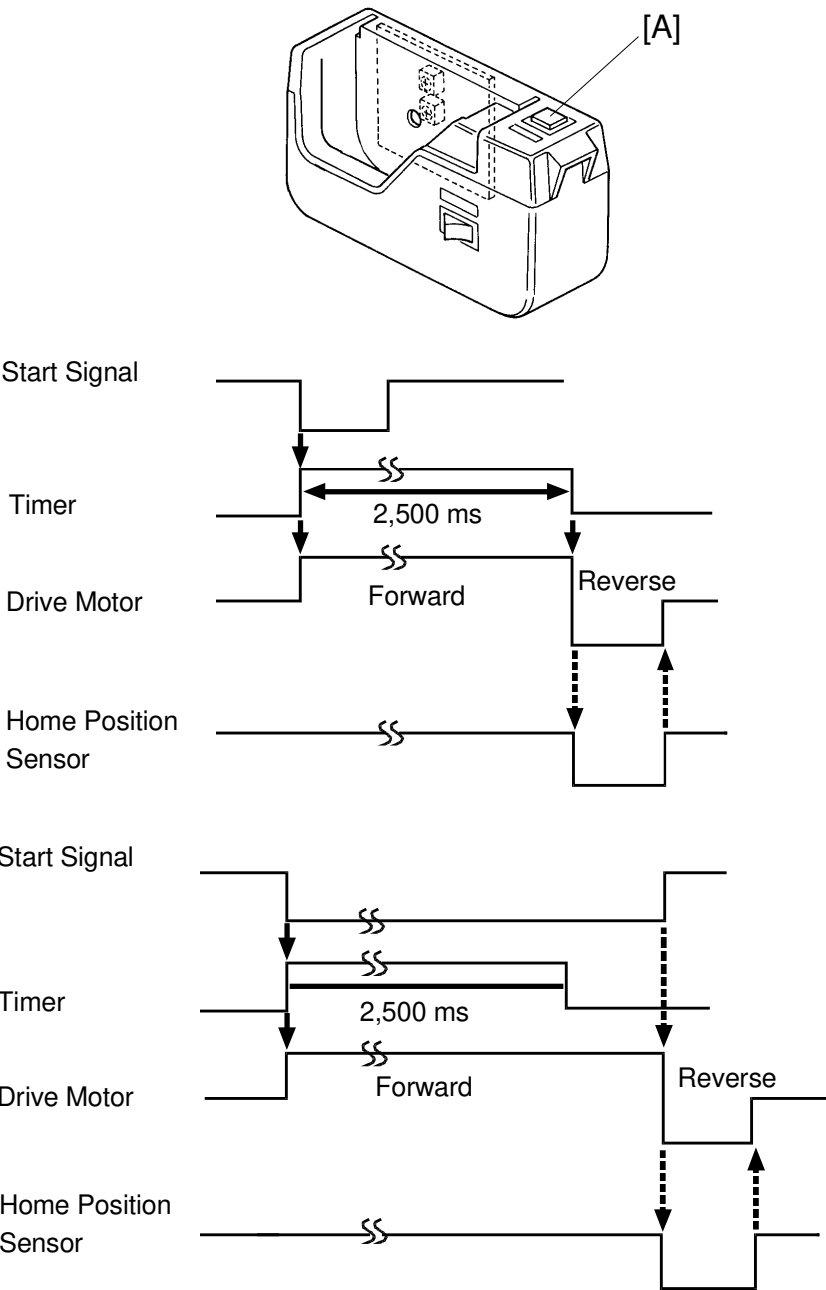
2.2 DRIVE AND CUTTING MECHANISM

The tape dispenser uses a stepping motor, which is driven at 460 pulses per second, as a drive motor.

When the print counter of the main body becomes 0, the start signal from the main body changes from high (+5 VDC) to low (0 VDC) to start the timer on the tape dispenser PCB. When the start signal changes to high 10 milliseconds later, the drive motor [A] starts to rotate counterclockwise to feed tape. However, since a one-way bearing is mounted in the cam drive gear [B], the cutter cam [C] does not rotate.

The drive motor starts rotating in the opposite direction 2,500 milliseconds after the timer starts. At this time, the tape has been fed out 250 mm (9.8") from the tape dispenser. The drive motor rotates the cam drive gear clockwise and the eccentric shaped cutter cam presses down the cutter arm [D]. The cutter [E] then goes down to cut the tape. The cutter spring [F] returns the cutter to its original position. After the cutter home position sensor [G] detects the cutter actuator [H], the drive motor stops and the tape dispenser PCB sends the task completion signal to the main body.

2.3 MANUAL CUT

When the manual cut switch [A] is pressed, the timer starts counting and the drive motor starts feeding tape. 2,500 milliseconds later, the drive motor reverses to cut the tape.

If the manual switch is pressed longer than 2,500 milliseconds, the tape continues to be fed out until the manual switch is released. Afterward, the motor reverses to cut the tape.
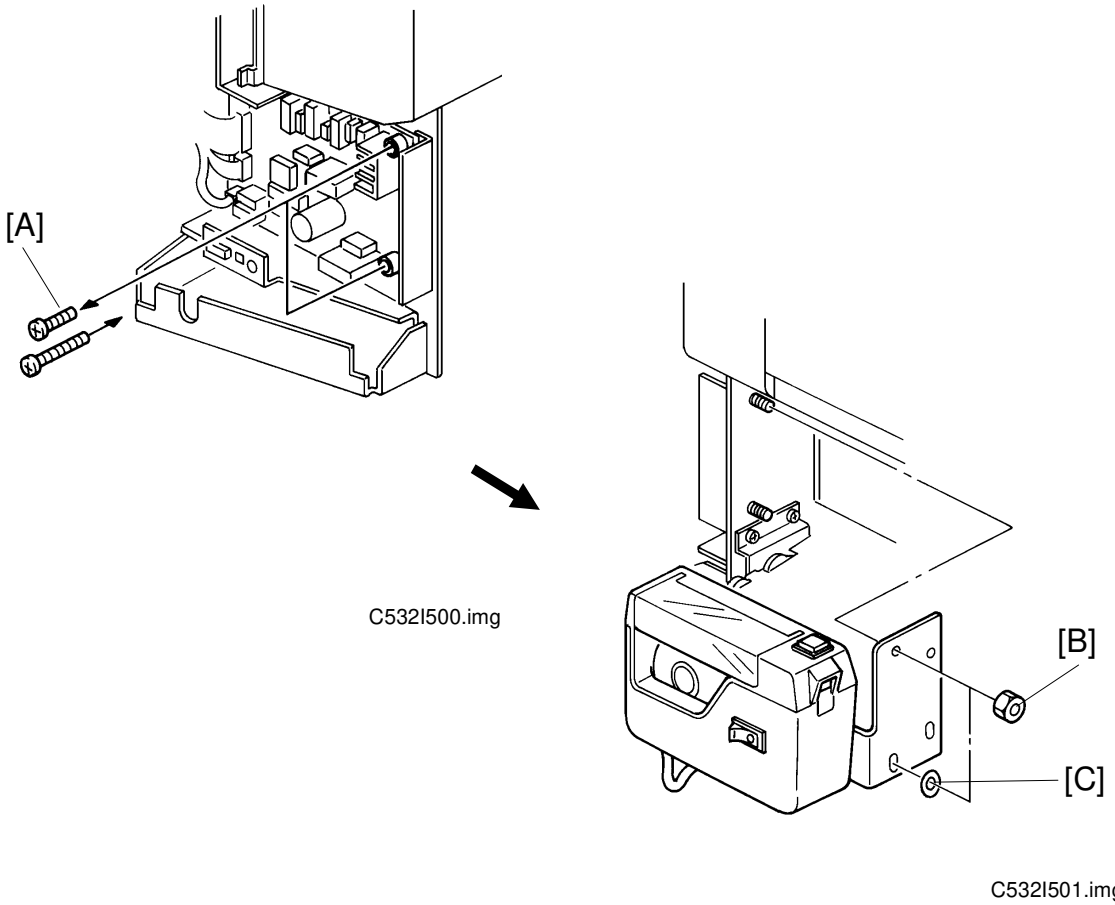
Tape Marker

3. TAPE MARKER INSTALLATION

3.1 ACCESSORY CHECK

Check the quantity and condition of the accessories in the box against the following list:

1. Knob Screw
   (For models #C210, C217, C218, C219, C222, C223,
   and C225 only) 2
2. Screw M4 x 25
   (For models # C211, C212, C213, C214, C216, C224,
   and C226 only) 2
3. Hexagon Nut M4
   (For models # C211, C212, C213, C214, C216, C224,
   and C226 only) 2
4. Auxiliary Bracket (For model # C226 only) 1
5. Screw M4 x 8 (For model # C226 only) 2
6. Lock Washer (For model # C226 only) 1
7. Lock Washer 1
8. Tape 1

3.2 C211, C212, C213, C214, C216, and C224

[A]

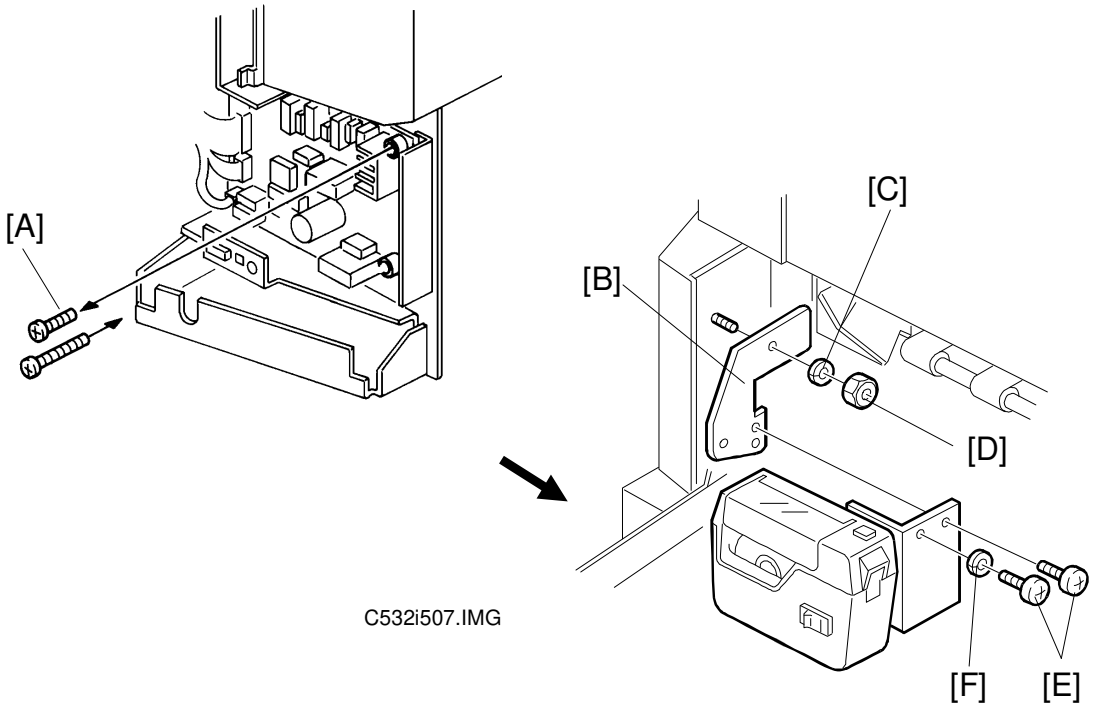C532I500.img

[B]

[C]

C532I501.img

Main Body:
1. Turn off the main switch and unplug the power cord.

2. Remove the rear cover (6 screws).

3. Replace two screws [A], to secure the AC drive PCB with M4 x 25 screws (accessory).

4. Reinstall the rear cover.

Tape Marker:
5. Install the tape marker on the main body in the two inner holes of the tape marker bracket. Then, tighten the two hexagon nuts [B] (accessory).

   NOTE: Install the lock washer [C] (accessory) with the lower of the two nuts.

3.3 C226

C532i507.IMG

C532I506.wmf

Main Body:

1. Turn off the main switch and unplug the power cord.

2. Remove the rear cover (6 screws).

3. Replace the screw [A], to secure the AC drive PCB with M4 x 25 screws (accessory).

4. Reinstall the rear cover.

5. Install the auxiliary bracket [B] on the main body with the hexagon nut [D] (accessory) as shown.

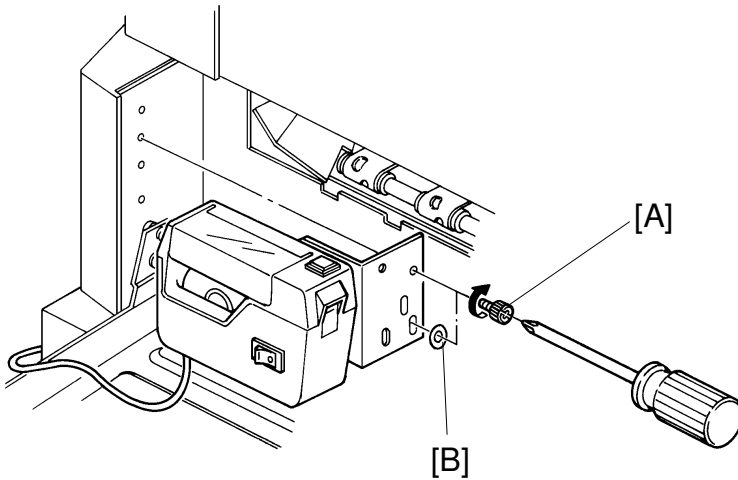   **NOTE:** Install the lock washer [C] (accessory) with the nut.

Tape Marker:

6. Install the tape marker on the auxiliary bracket with two M4 x 8 screws [E] (accessory).

   NOTE: Install the lock washer [F] (accessory) with one of the two screws.

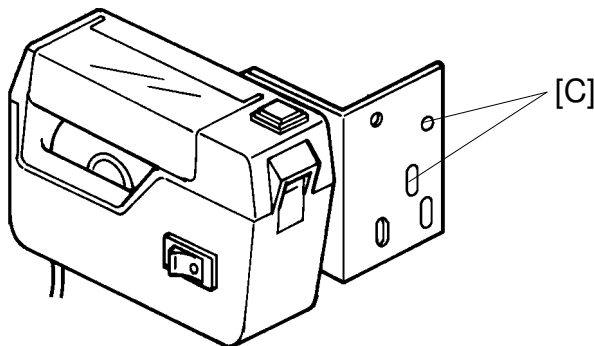## 3.4 C210, C218, C219, C222, and C223

C532I502.img

1. Turn off the main switch and unplug the power cord.

2. Install the tape marker on the main body with two knob screws [A]
   (accessory) in the two outside holes of the tape marker bracket.

NOTE: 1) Tighten the knob screws with a screwdriver to prevent them from
             coming loose.
          2) Install the lock washer [B] (accessory) with the lower of the two
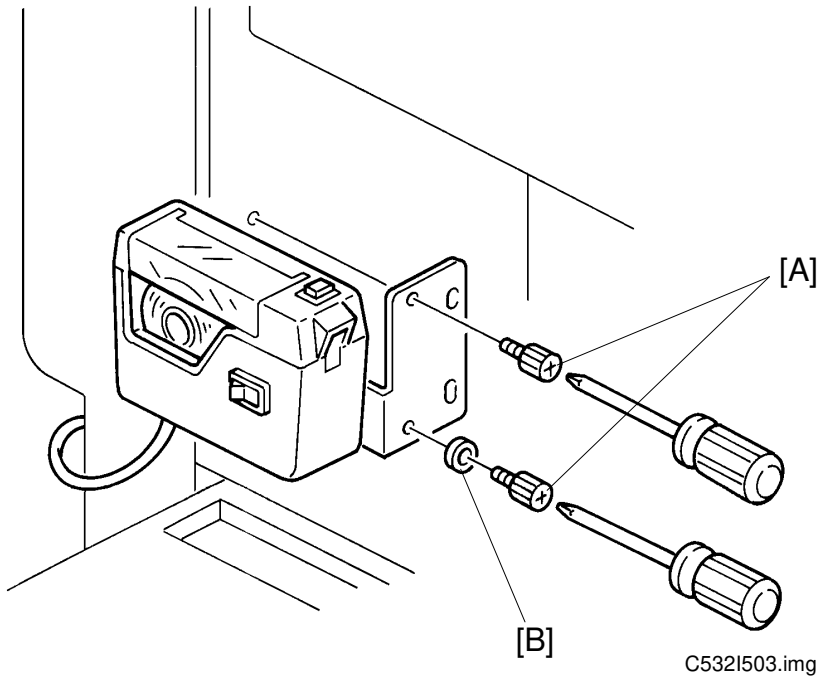   knob screws.

– When The New Paper Delivery Table is Installed –

Use the two holes of the tape marker bracket [C] as shown below.

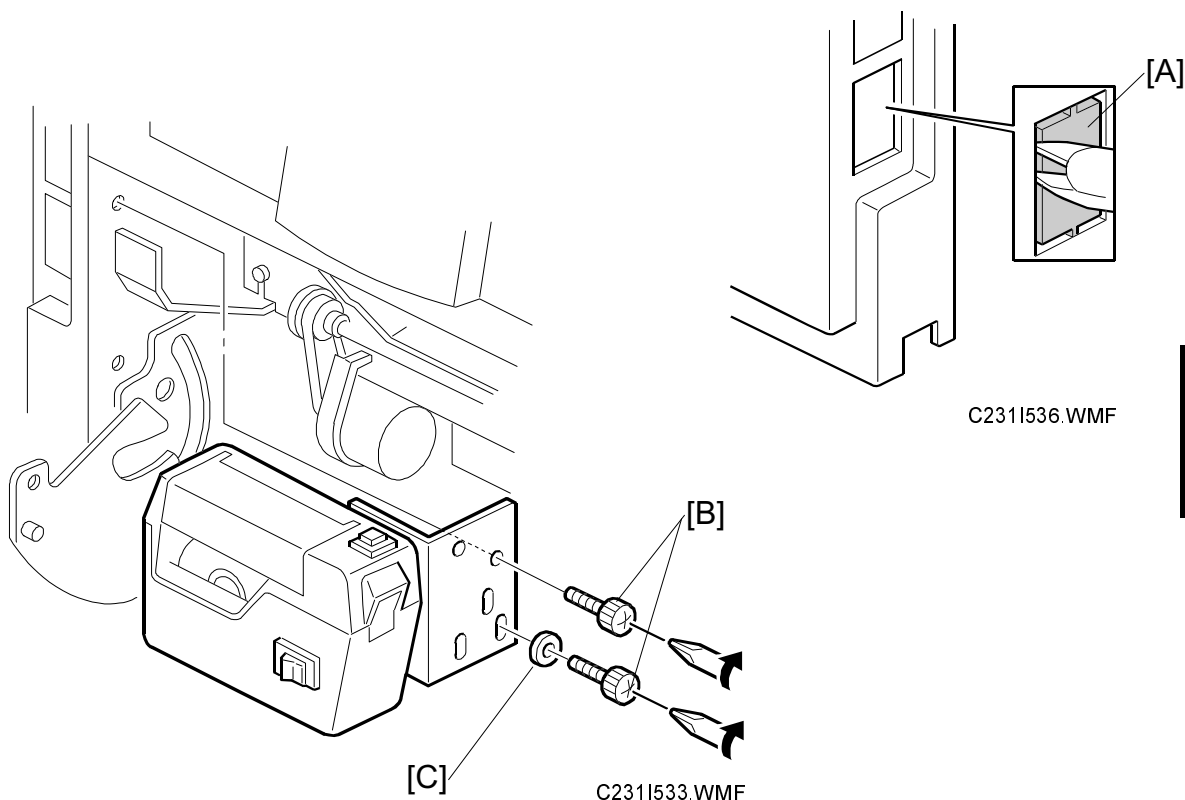A532I504.img

3.5 C217 and C225

C532I503.img

1. Turn off the main switch and unplug the power cord.

2. Install the tape marker on the main body with two knob screws [A] (accessory) in the two inside holes of the tape marker bracket.

NOTE: 1) Tighten the knob screws with a screwdriver to prevent them from coming loose.

   2) Install the lock washer [B] (accessory) with the lower of the two knob screws.

Installation Procedure
- For C231 -
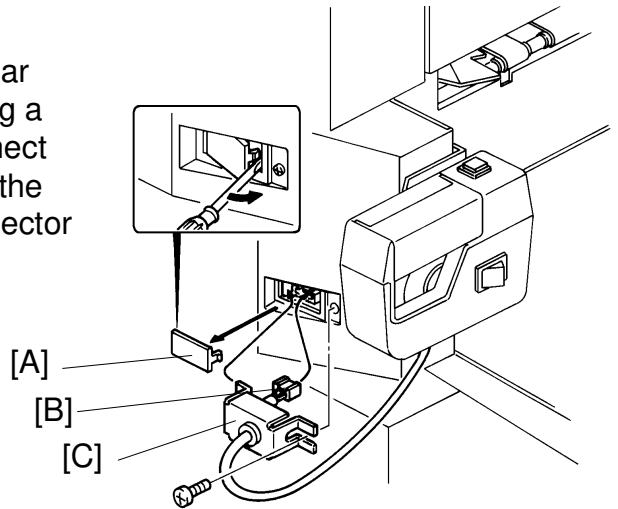

C231I536.WMF

Installation

C231I533.WMF

1. Turn off the main switch and unplug the power cord.

2. Remove the paper delivery table (2 screws).

3. Remove the paper delivery plate (4 screws).

4. Cut the cap [A] off the rear cover with pliers.

5. Remove the small cap in the rear cover of the main body. Then, connect the tape marker harness to the main body, and install the connector cover using one of the rear cover securing screws.

6. Install the tape marker on the main body with two knob screws [B] (accessories) in the two outside holes of the tape marker bracket.

7. Reinstall the paper delivery plate and paper delivery table.

8. Refer to "Common Steps".

NOTE: 4) Tighten the knob screws with a screwdriver to prevent them from coming loose.
5) Install the lock washer [C] (accessory) with the lower of the two knob screws.
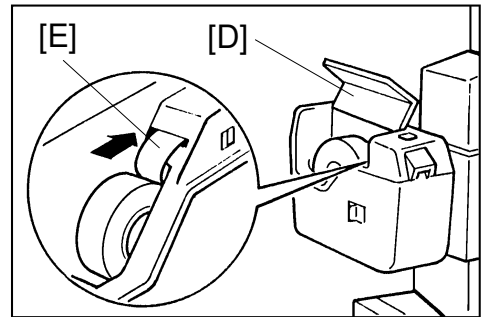
[Common Steps]

1. Remove the small cap in the rear cover of the main body [A] using a minus screw driver. Then, connect the tape marker harness [B] to the main body, and install the connector cover [C] using one of the rear cover fixing screws.
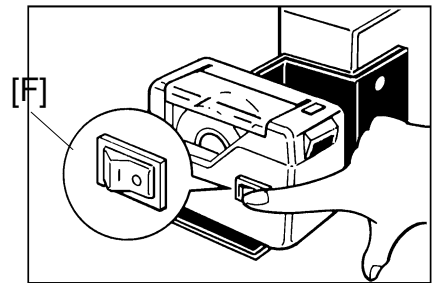
[A]

[B]

[C]

2. Open the tape marker cover [D]. Then, insert the leading edge of the tape into the tape entrance until it stops as shown in the illustration [E].

   NOTE: Be sure that the tape is installed in the proper direction. If it is not correct, the tape marker will not work correctly.
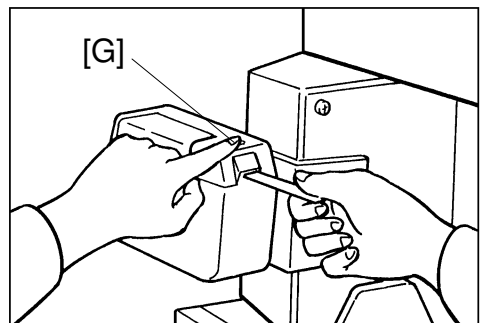
[E]   [D]

3. Turn on the main switch of the main body and the tape marker switch [F].
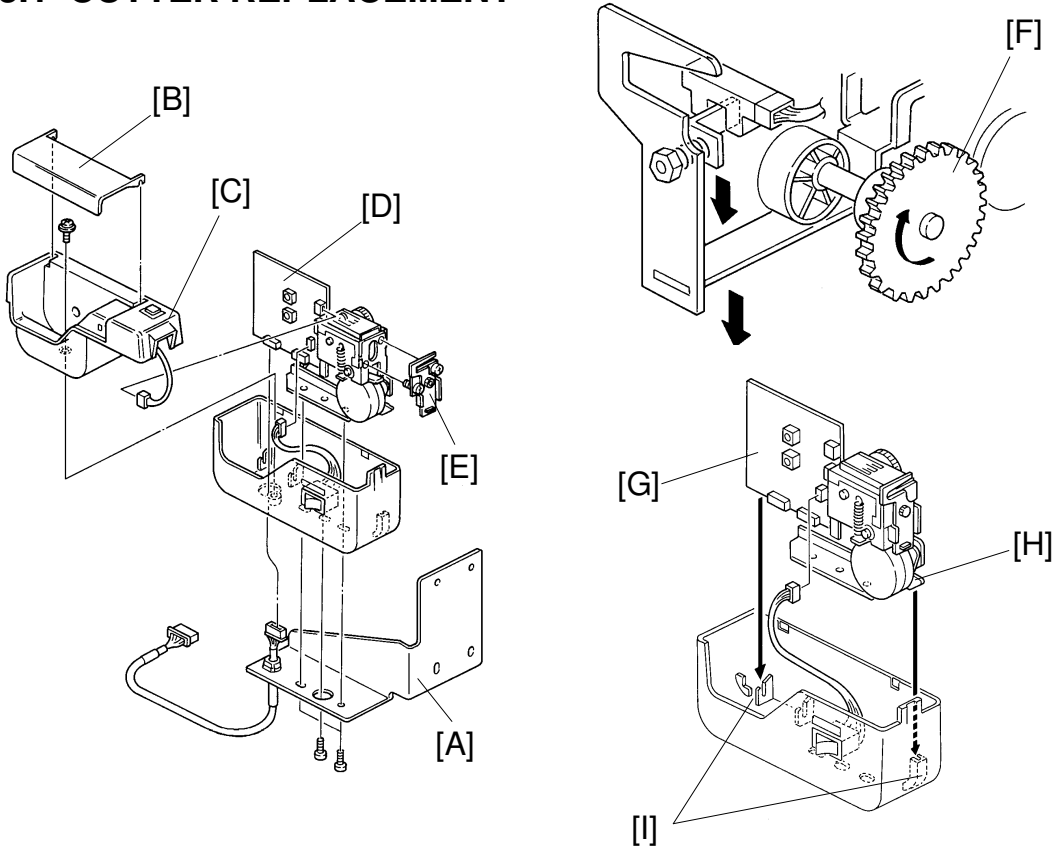
[F]

4. Press the tape cut button [G] to cut off the leading edge of the tape.

5. Check the tape marker operation using the memory/class modes of the main body.

[G]

3. REPLACEMENT AND ADJUSTMENT
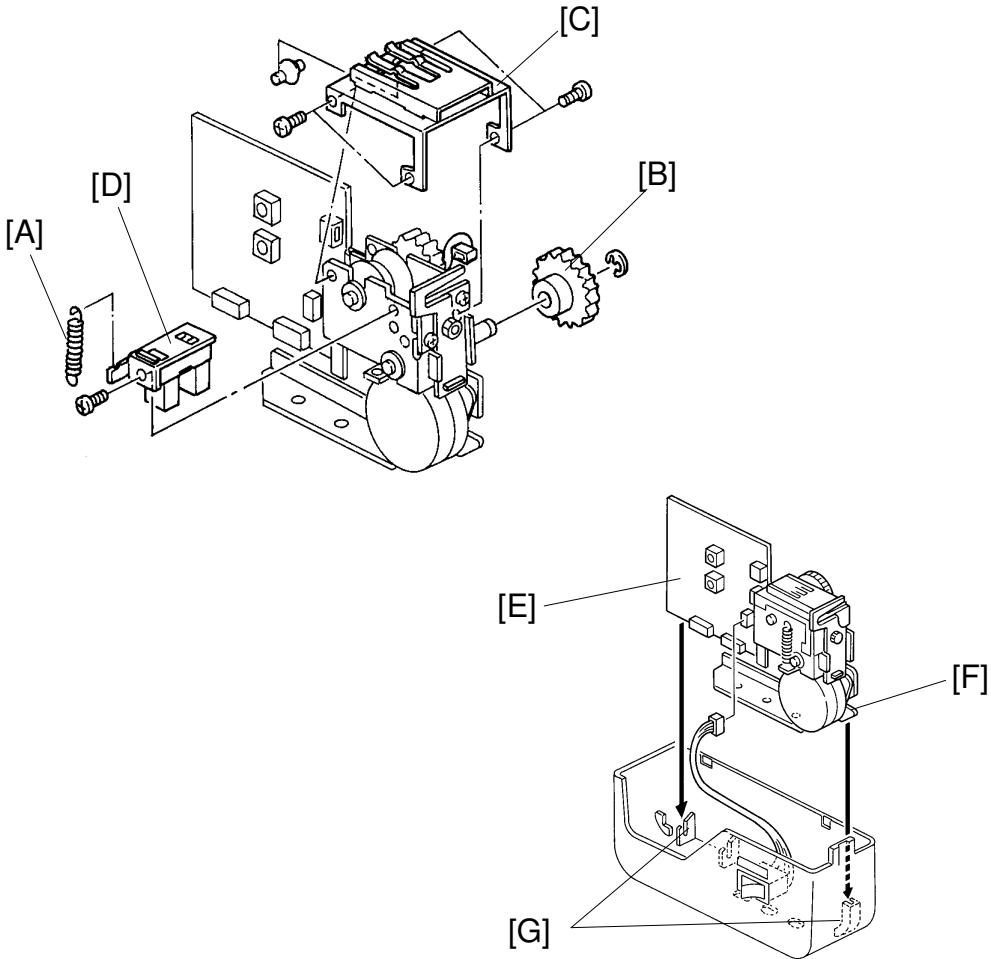
3.1 CUTTER REPLACEMENT

1. Remove the tape dispenser from the main body. (1 connector, 2 nuts or screws)

2. Remove the support bracket [A]. (3 screws)

3. Remove the tape dispenser cover [B] and the upper housing [C] (1 screw, 1 connector)

4. Remove the tape dispensing assembly [D]. (2 connectors)

5. Replace the cutter assembly [E]. (2 screws)

   NOTE: Make sure that the cutter moves smoothly by rotating the cam drive gear [F] clockwise manually after the replacement.

6. Reassemble the tape dispenser.

   NOTE: Make sure that the tape dispenser PCB [G] and the tape dispensing bracket [H] are in lower housing slots [I].
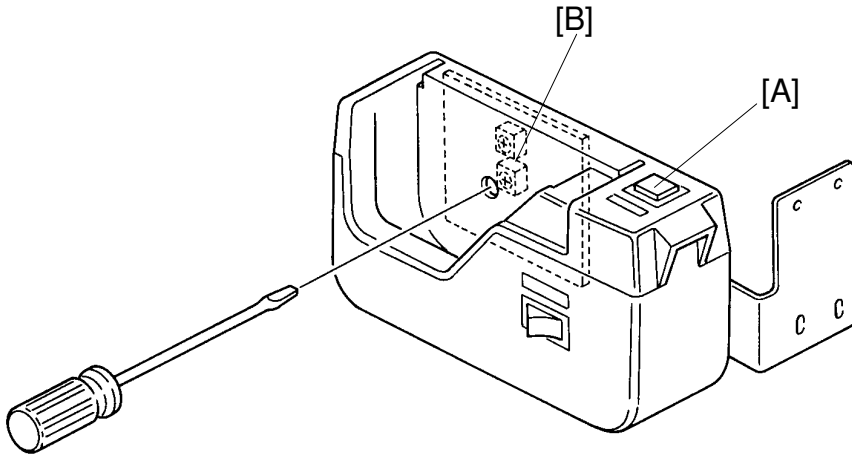
3.2 CUTTER HOME POSITION SENSOR REPLACEMENT

1. Remove the tape dispensing assembly. (See steps #1 to #4 on of
   " 3.1 CUTTER REPLACEMENT".)

2. Unhook the cutter spring [A].

3. Remove the cam drive gear [B]. (1 E-ring)

4. Remove the pinch roller support bracket [C]. (4 screws)

5. Remove the cutter home position sensor assembly [D] and replace the
   sensor. (1 screw, 1 connector)

6. Reassemble the tape dispenser.

   NOTE: Make sure that the tape dispenser PCB [E] and the tape
   dispensing bracket [F] are in lower housing slots [G].

Tape Marker

3.3 TAPE CUT LENGTH ADJUSTMENT

Adjustment standard : 250 mm ± 15 mm

1. Turn on the main body and the tape dispenser main switches.

2. Press the manual cut switch [A].

   NOTE: Do not press the switch longer than 2.5 seconds.

3. Measure the tape length.
   If the tape is longer than 250 mm, turn VR2 [B] counterclockwise.
   If the tape is shorter than 250 mm, turn VR2 clockwise.

⚠ **CAUTION**

Do not turn VR1. It is for factory adjustment only.