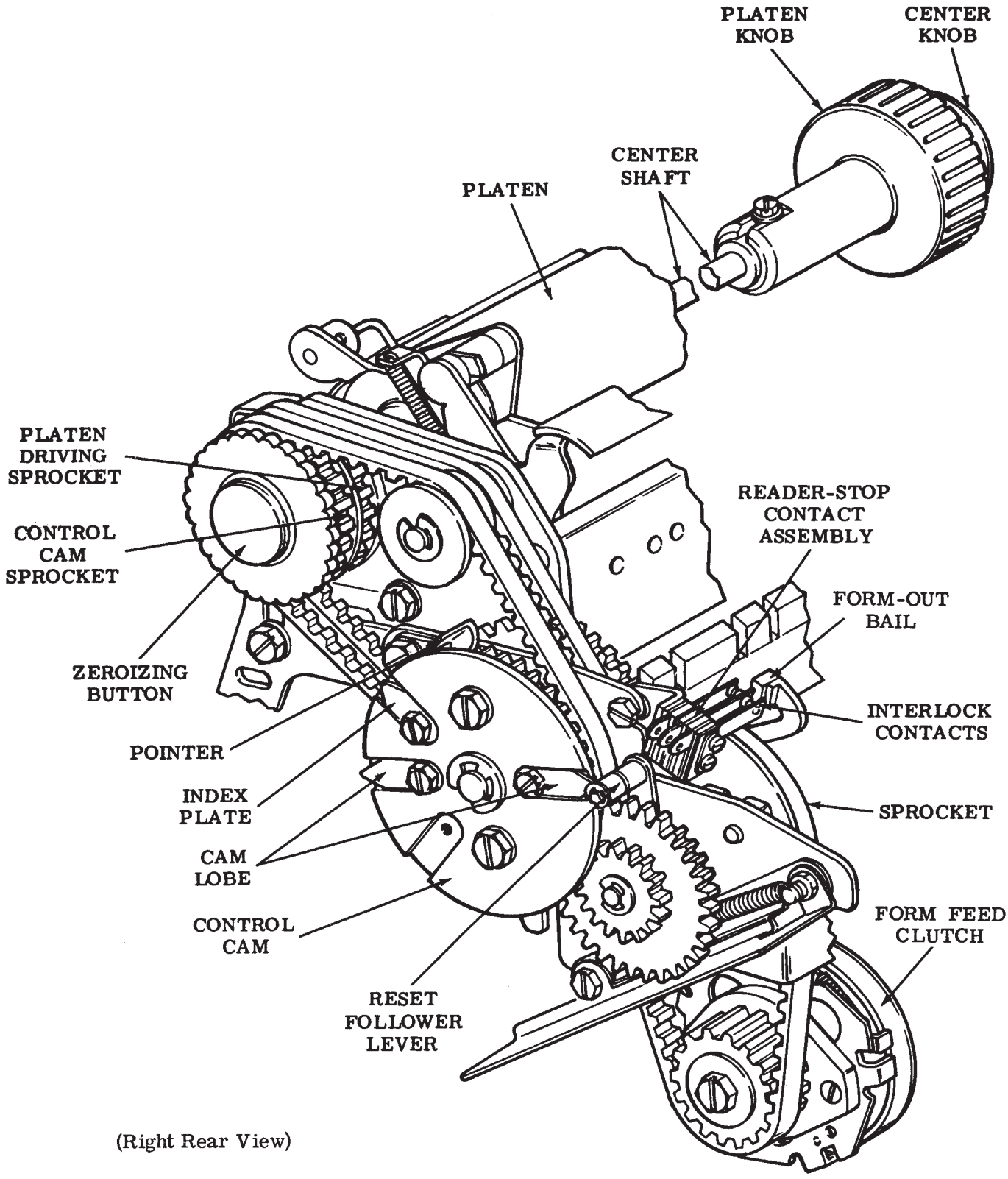

Figure 32 - Platen Drive Mechanism (Sprocket Feed)

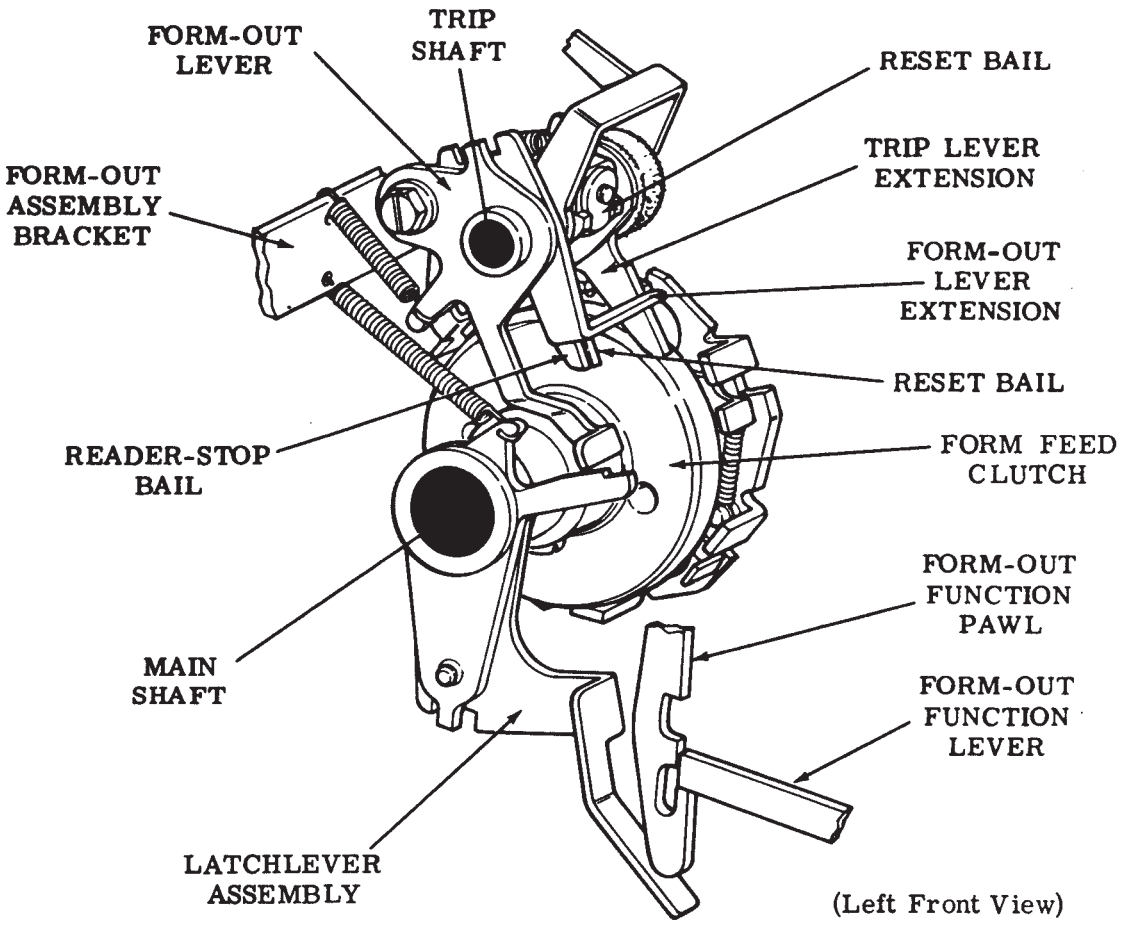

Figure 33 - Form-Out Mechanism (Sprocket Feed)

4.95 Late in the function cycle the strip pawl strikes the tail of the line feed strip lever and moves to the rear. The lug on the strip pawl moves the function pawl to the rear, disengaging it from the function lever. Due to spring tension the line feed lever and its extension return to their front position. The trip lever strikes the clutch shoe lever and the clutch is disengaged.

4.96 The number of lines the form advances depends on how much the clutch rotates before it is disengaged. If the clutch becomes disengaged at the first shoe lever, the form will advance one line; if the clutch becomes disengaged at the second shoe lever, the form will advance two lines; and so on. The amount of clutch rotation depends on how soon the strip pawl comes in contact with the line feed lever. This time will depend upon the distance between the strip pawl and the line feed lever. When the distance is small the clutch will trip and engage sooner, rotating a greater amount before it is disengaged. Double line feed will result. If the distance is greater the clutch will trip and engage later, rotating a smaller amount before it is latched. Single line feed will result.

4.97 Form-Out: When the typing unit receives the "form out" code combination, the form-out function lever (Figure 33) moves up to engage the form out function pawl in slot no. 14. During the function cycle the pawl is pulled down. This action pivots the latchlever assembly which becomes disengaged from the form-out lever. Due to spring tension the form-out lever pivots to the rear. An extension on the form-out lever pivots the trip lever extension which in turn moves the clutch trip lever away from the clutch shoe lever. The form feed lever engages and remains engaged throughout the form-out cycle.

4.98 When engaged the clutch drives the platen drive mechanism which consists of belts, gears, and sprockets. The platen drive mechanism is illustrated in Figure 32.

4.99 As long as the form-out lever stays pulled to the rear by spring tension, the form will advance except as regulated by the control cam of the platen drive mechanism. Whenever the platen rotates, the control cam, being related to the platen by belts and gears, also rotates. The rotating cam, through cam lobes, a reset follower lever, and a reset bail initiates the action to terminate the advance of the platen and thus the form-out cycle.

4.100 When a cam lobe contacts the reset follower lever and rotates it toward the rear, a reset bail also rotates and pivots the form-out lever extension away from the trip lever extension. The trip lever engages a shoe lever and disengages the clutch, terminating form-out.

4.101 With the form-out just terminated the reset follower lever remains on the high part of a cam lobe, and the form-out lever is blocked by the reset bail from rotating to its latched position. When a "form feed" code combination is received, however, the control cam rotates and the reset follower lever moves from the high part of the cam lobe. This causes the reset bail to rotate downward and move away from the form-out lever extension. As a result, the form-out lever is permitted to latch. The typing unit can now receive another "form-out" command.

Note: It is in order to allow the cam lobe to clear the reset follower lever that a "form feed" command is given before another form-out cycle can begin.

4.102 The gearing on the platen drive mechanism varies to accommodate various size forms.

4.103 When the platen drive mechanism advances the form one or two lines during "form feed" the cam lobe rotates an equivalent distance. Then, when "form-out" is received the rest of the form will be advanced with the cam lobe merely rotating until it strikes the reset follower lever.

4.104 The control cam can have three lobes with the result that the form may be advanced one-third the distance for which the gears were installed. For example, if the gears on the platen drive mechanism were designed to advance a form of a certain length, by installing cam lobes, this length can be varied to smaller lengths.

4.105 When an Automatic Send-Receive Teletypewriter Set receives a "form-out" code combination, the form-out bail (Figure 32) is rotated toward the front by the form-out lever extension. This action causes the interlock contacts of the reader stop contact assembly to be operated with the following results:

(a) A pair of normally closed contacts are opened during the "form-out" function. This stops the tape reader from transmitting and prevents characters "on the fly" from being printed.

(b) A pair of normally open contacts are closed. This keeps the typing unit motor operating in case the typing unit is turned off before the form-out cycle is completed. Thus, synchronization of the forms is maintained.

4.106 The form can be manually advanced any length by pressing the zeroizing button on the platen (Figure 32). This will disengage the platen from the platen drive sprocket and allow it to rotate freely.

R. Margin Bell and End of Line Bell ←

4.107 Margin Bell: As the carriage moves to ← the right during printing, the carriage upper rear roller makes contact with and depresses a latch which is secured to a lever mounted on the rear rail. As the latch is depressed, the lever is rotated and moves the automatic carriage return-line feed codebar to the right a short distance, where a notch in the codebar permits the bell function lever to move up to its selected position, where it is latched by its function pawl. During the middle portion of the function cycle, the lever moves the pawl down against the pressure of the latter spring. When the stripper bail strips the pawl late in the function cycle, the pawl moves up and causes a clapper mounted on a wire spring to snap up and ring a gong.

4.108 End of Line Bell: End of line bell oper- ← ation proceeds in the same manner as above, except that a projection on the carriage picks up the automatic carriage return-line feed codebar at a predetermined point and moves the codebar to the right a short distance until a notch in the codebar permits the bell function lever to move up to its selected position.