

35 EDGE PUNCHED CARD TYPING REPERFORATOR

(1A CARD REPERFORATOR)

DISASSEMBLY AND REASSEMBLY

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1. GENERAL		2. DISASSEMBLY AND REASSEMBLY
1.01 This section provides the disassembly and reassembly procedures for the 35 Edge Punched Card Typing Reperforator (1A CARD REPERFORATOR — Figure 1). It is		2.01 In removing a subassembly from the unit, the procedure followed and the location from which parts are removed must be carefully noted so that reassembly can be done correctly. Where no specific instructions are given

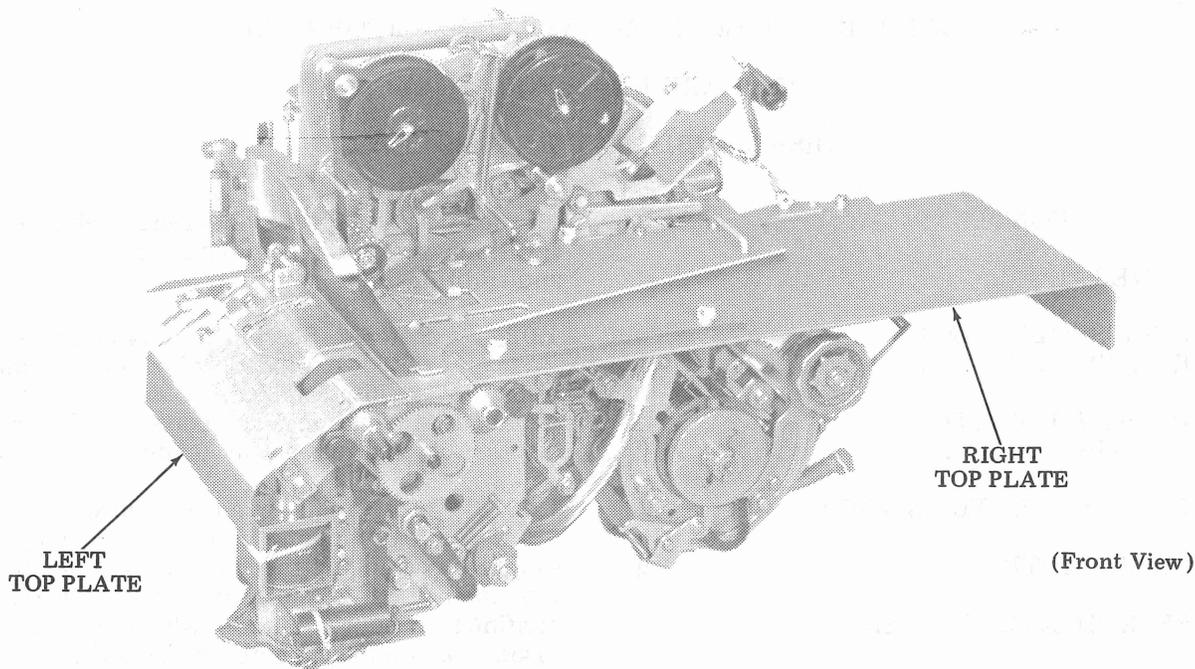


Figure 1 - 35 Edge Punched Card Typing Reperforator

for reassembly, reverse the procedure used in removing it.

RIGHT TOP PLATE ASSEMBLY

2.02 To remove the right top plate assembly, remove the mounting screw (TP152893) and flat washer (TP125011).

Note: Some units may require removal of two thumbscrews (TP309396), lockwashers (TP110743), and flat washers (TP125011) from the right and left ends of the right top plate.

Remove the right top plate assembly (Figure 1).

LEFT TOP PLATE ASSEMBLY

2.03 Remove the lid latchlever spring (TP91120) from the post on the back side of the punch assembly. Remove the center screw (TP152893) and lockwasher (TP3640) from under the tape lid torsion spring (TP309255). Remove screw (TP100759) from the front left corner of the left top plate. Remove the left top plate assembly (Figure 1).

CHAD CHUTE

2.04 Remove the two each screws, lockwashers, and flat washers that mount the chad chute. Remove the chad chute (Figure 2).

SELECTOR MECHANISM

2.05 Remove the screw, nut, and lockwasher that secure the selector clutch drum to the main shaft. Place the reset bail (TP170238) in its raised position. Hold the stop lever (TP170198) and the marking locklever (TP170236) out of the way while slowly pulling forward on the cam-clutch until it is removed.

2.06 Unhook the spring on the function clutch latchlever (TP150355). Remove the orange and brown wires from the selector magnet coils. Remove the spring post (TP309268) by removing its locknut and lockwasher. Remove the screw and lockwasher that secure the selector lever guide (TP170234) to the selector plate. Remove the oil wick holder. Remove the selector mechanism (Figure 2).

TRANSFER MECHANISM

2.07 Remove the main trip lever spring (TP150241). Remove the mounting screws (TP151631 and TP151632) with lockwashers and flat washers from the transfer mounting bracket (TP192820). Remove the transfer mechanism (Figure 2).

PRINT SUPPRESSION MECHANISM

2.08 Remove the retaining ring (TP119651), printing latch (TP324518), and disengage the lower end of the rod (TP324517) from

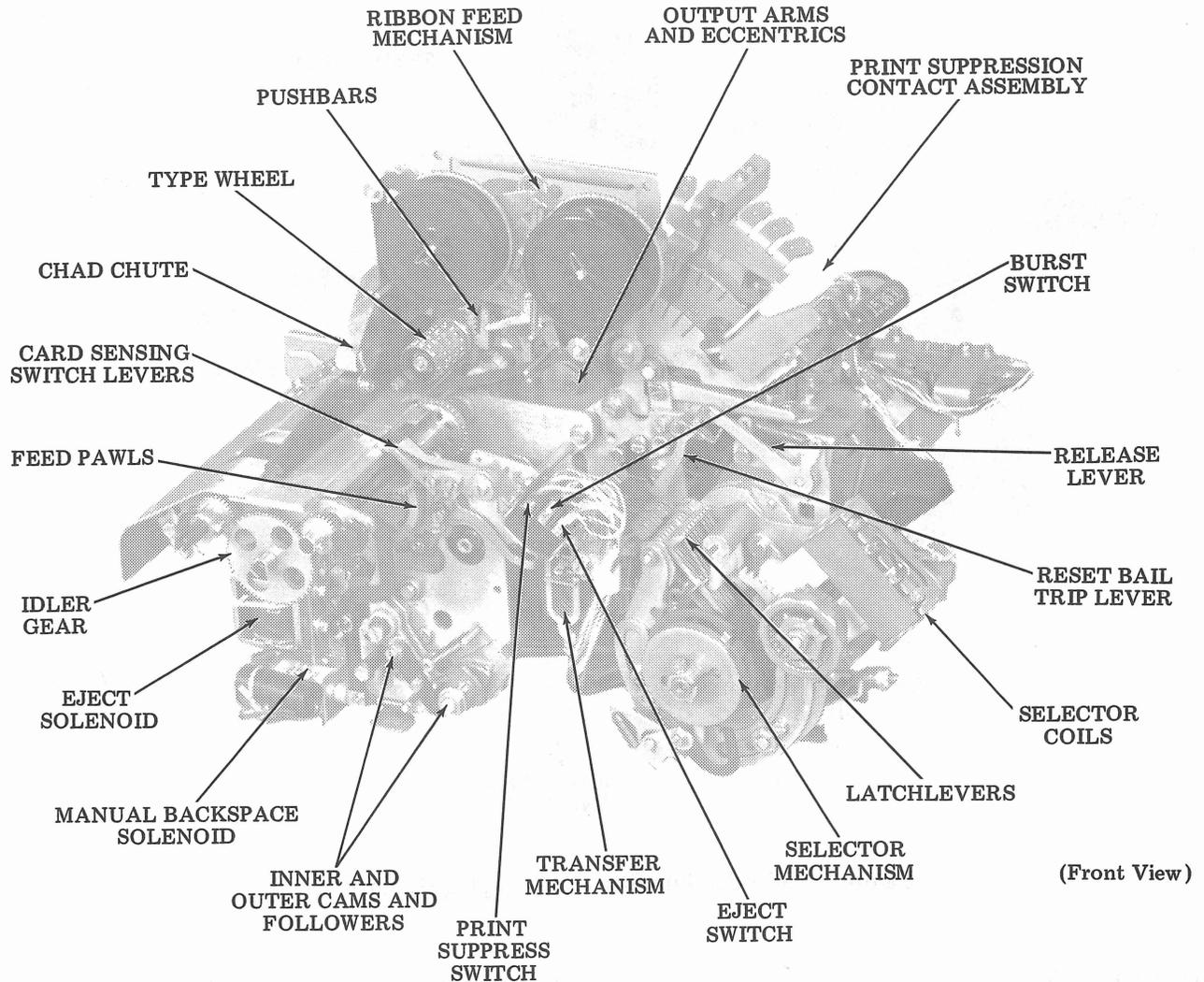


Figure 2 - 35 Edge Punched Card Typing Reperforator (Without Top Plates)

the printing latch. Remove the rod. Remove the yellow and blue wires from the magnet coil. Remove the screws (TP151722 and TP153841), and two lockwashers (TP2191) that mount the coil mounting bracket (TP176450) to the handle (TP162850) and plate with studs (TP164521). Remove the magnet assembly (Figure 5).

RIBBON FEED MECHANISM

2.09 Remove the ribbon from the ribbon spools. Remove the print suppression mechanism as described in the previous paragraph. Remove the one remaining mounting screw and lockwasher that mount the ribbon feed mechanism plate. Remove the handle (TP176445) and the ribbon feed mechanism (Figure 2).

RAPID FEED SHAFT

2.10 Remove the nut (TP3595) and lockwasher (TP2449) on the front end of the shaft (TP305387). Remove the screw (TP152893) and lockwasher from the cam (TP309235). Remove the cam (Figure 2). Loosen the mounting screws (TP151631) on the rear bearing plate (TP309228 — Figure 4) and move the plate to the left side of the unit (looking from the rear of the unit). Loosen the two setscrews on the toothed pulley. Remove the pulley and timing belt by pulling the pulley toward the rear of the unit. Remove the screw (TP151658) and lockwasher (TP124177) from the bearing clamp (TP158745). Remove the shaft from the mounting plate by moving it to the rear of the unit.

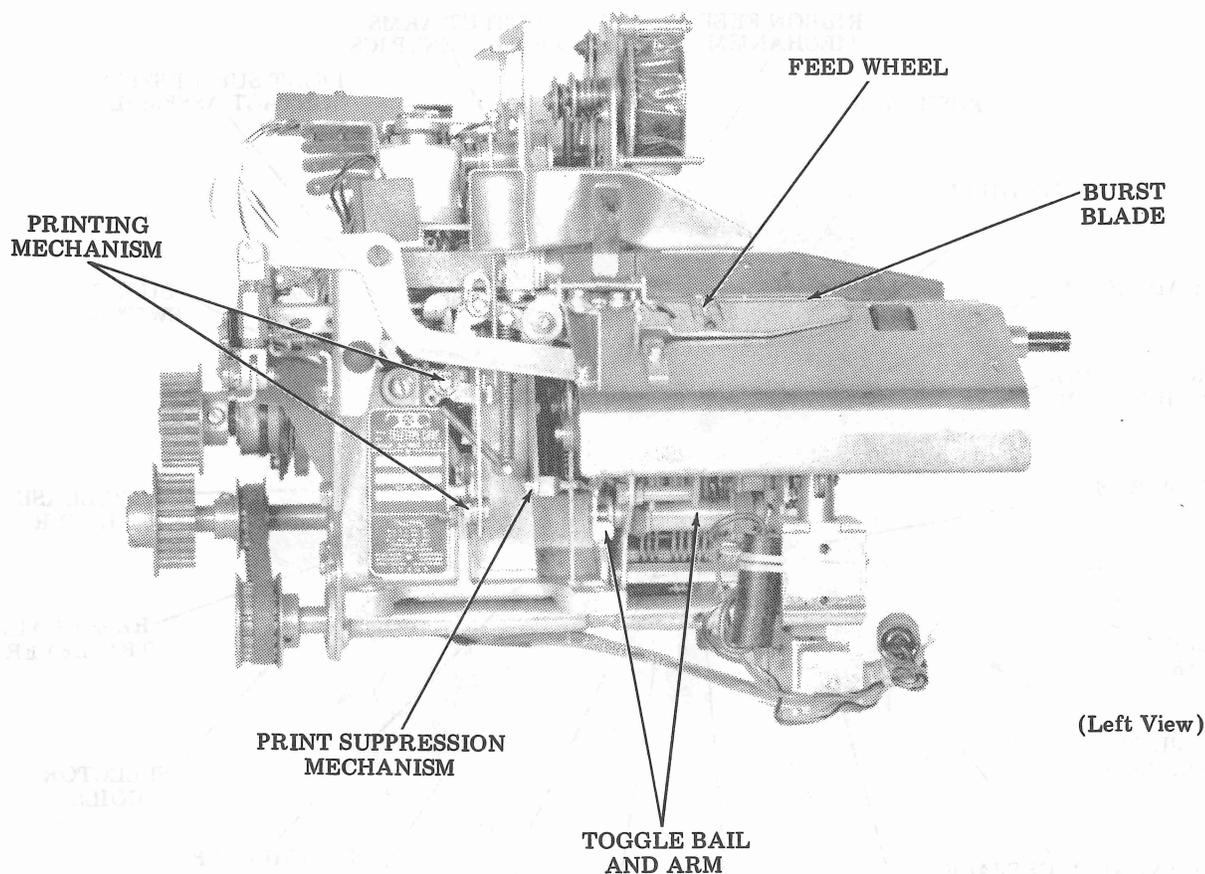


Figure 3 - 35 Edge Punched Card Typing Reperforator

BURST BLADE

2.11 Remove the nut (TP3599) and the shoulder screw (TP102057) holding the blade (TP309271) to the upper clevis (TP309212 — Figure 3). Remove the nut (TP3598) and the shoulder screw (TP128271) holding the blade to the bracket (TP309262). Remove the blade.

PERFORATOR MECHANISM

2.12 Before removing the perforator mechanism (Figures 2 and 3), the top plate assemblies, rapid feed shaft, print suppression shaft, and burst blade must be removed as outlined in previous paragraphs.

2.13 Remove the two screws (TP152893), lockwashers (TP3640), and flat washers (TP125011) holding the switch assembly (Figure 2) to the center plate (TP309258) of the punch mechanism. Remove the screw, lockwasher, and flat washer mounting the cable clamp (TP121244) and move the cable to one side.

2.14 Remove the spring (TP90573) from the drive link (TP192709) and the rocker arm (TP170211). Remove the screw, lockwasher, and flat washer holding the upper right-hand corner of the rear plate (TP309259) to the front plate (TP192828). Remove the screw, lockwasher, and flat washer holding the lower right-hand corner of the rear plate. Remove the perforator assembly being careful to unhook the drive link (TP192709) from the rocker arm (TP170211).

2.15 Mount the switch assembly and cable clamp by means of its mounting screw to the post (TP309208). Remove the eight latchlevers (TP309234) and springs (TP151103 — Figure 2).

BURST MECHANISM

2.16 Remove the shoulder screw (TP112624) and the nut (TP3599) at the actuating end of the cutoff lever (TP305380 — Figure 4). Remove the two screws and lock-

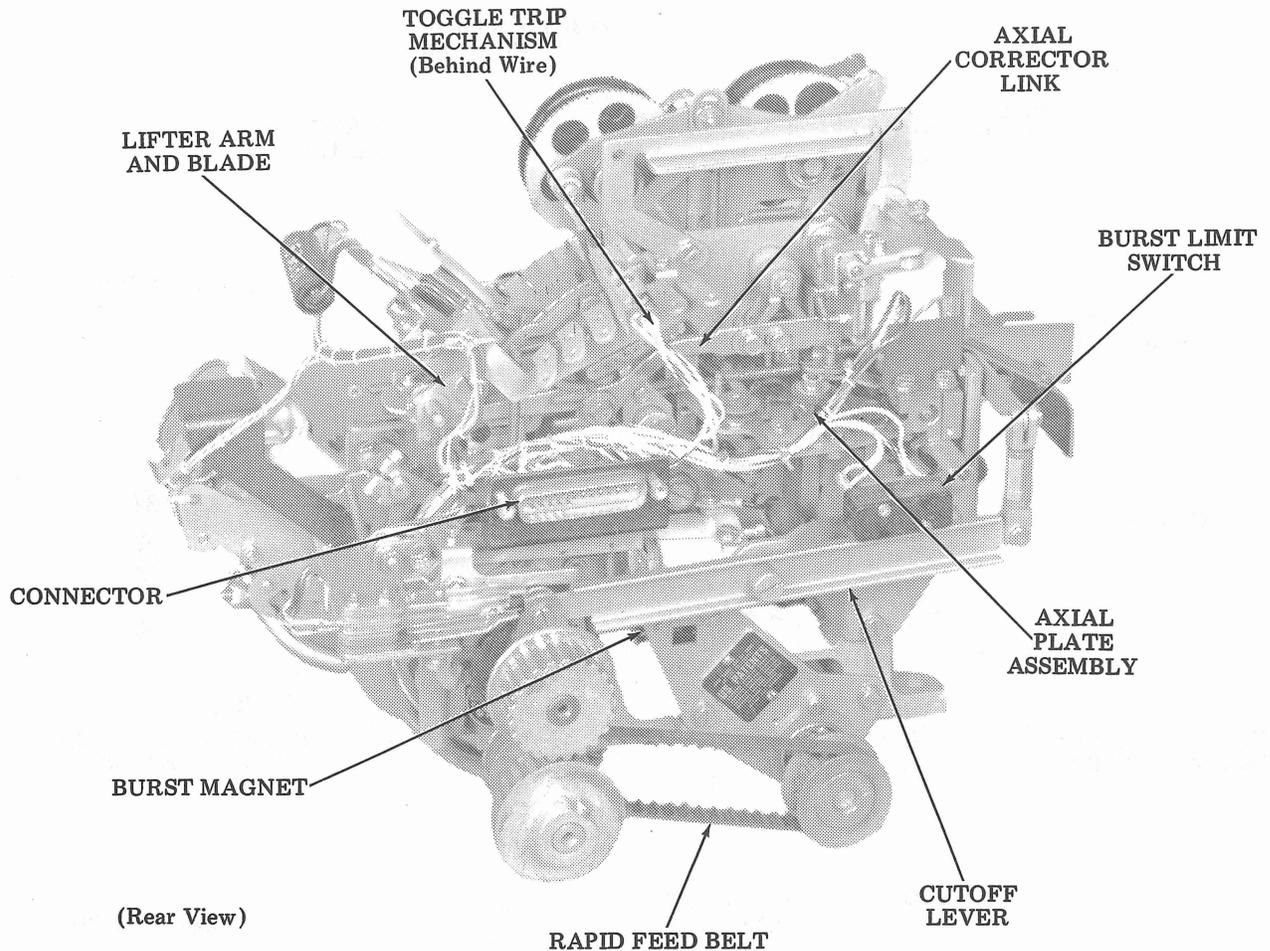


Figure 4 - 35 Edge Punched Card Typing Reperforator (Without Top Plates)

washers holding the knife switch (TP158163) to its bracket (TP309314). Remove the switch. Remove the two screws, lockwashers, and flat washers holding the cutoff lever mounting bracket (TP309262) to the casting. Remove the cutout lever and mounting bracket.

2.17 Remove the screw, lockwashers, flat washer, and nut holding the cable clamp (TP121244) to the trip mechanism (Figure 5). Remove the trip bail spring (TP80581) between the trip bail (TP309200) and the magnet assembly mounting bracket (TP309228). Remove the two screws and lockwashers holding the trip mechanism bracket (TP309202) to the frame casting. Remove the trip mechanism.

2.18 With the rapid feed shaft removed, remove the purple and green wires from the magnet assembly (TP178903). Remove the

two screws, lockwashers, and flat washers holding the magnet assembly and the rear bearing plate (TP309228) to the casting. Remove the bearing plate with magnet assembly.

2.19 With the wires removed from the selector coils, print suppression magnet coil, and burst magnet coil, and with the knife switch removed, remove the connector (TP145914 — Figure 4) by removing the two nuts (TP146542) and posts holding it to the bracket.

2.20 Remove the print suppression contacts (Figure 5) by removing the two screws, lockwashers, and flat washers that mount the contact bracket to the square post (TP162862). Remove the screw holding the cable clamp and switch assemblies to the guide post (TP309208).

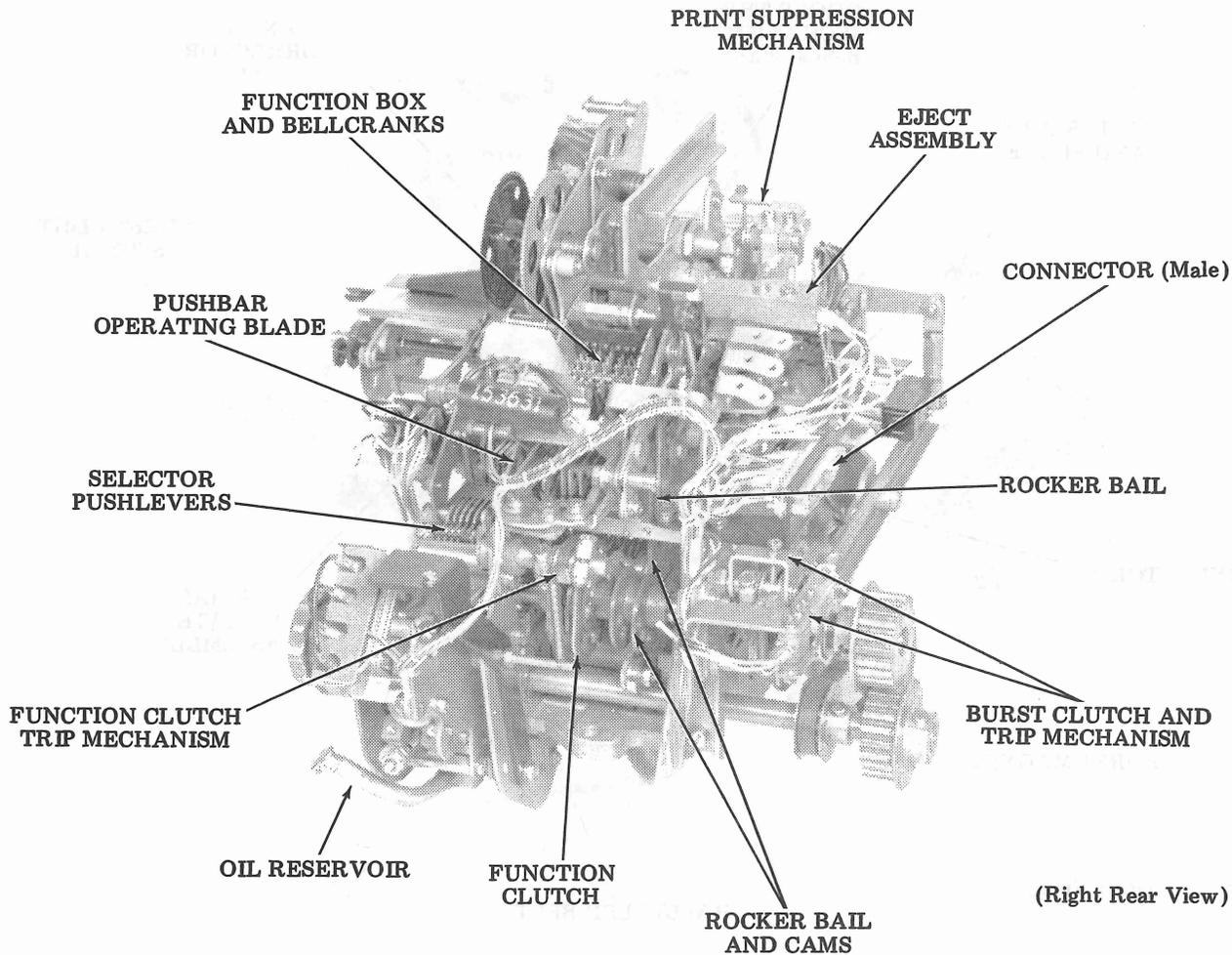


Figure 5 - 35 Edge Punched Card Typing Reperforator (Without Top Plates)

2.21 Loosen the screw mounting the right side of the contact bracket (Figure 4) to the function box rear plate (looking from the rear). Loosen the nut holding the left side of the contact bracket to the function blade spring plate. Raise the spring loaded function blade slightly, remove the contact bracket with contact assembly. Remove the cable assembly.

TYPING MECHANISM

2.22 Remove the pushbar operating bail (TP156871 — Figure 5) from its pilot stud bushing assembly. Disconnect the print hammer drive link (TP156937). Remove the nut on the eccentric shoulder screw (TP163429) at the printing pivot arm (TP159539) and disconnect the printing link.

2.23 Remove the lifter blade return spring (TP90606). Remove the screw (TP153839) and lockwasher (TP2191) from the square bar (TP162862) on the casting. Remove the screw (TP159658), nut (TP151629), and eccentric assembly (TP159659). Remove three screws (TP151631) and lockwashers (TP2191) from the main frame and remove the plate (TP192828).

2.24 Remove three screws (TP151631) which hold the plate (TP192831) to the casting. Remove the screw (TP151630) and lockwasher (TP2191) holding the axial plate (TP159525 — Figure 4) to the post (TP159404). Lift the typing mechanism while backing off screw and remove it from the casting.

2.25 Remove the print hammer accelerator spring (TP55089).

2.26 Remove the two screws (TP151630) and lockwashers (TP2191), and one screw (TP111017) and lockwasher (TP92260) securing the function box assembly (Figure 5). Remove the function box assembly.

2.27 Remove corrector drive link (TP156413), spring (TP3870), three screws (TP151630) and lockwashers (TP2191) securing the axial plate assembly (Figure 4). Remove axial plate assembly.

2.28 To remount the axial plate assembly, reverse the procedure used to remove it. The rearmost tooth of the rack on the type wheel shaft (TP309230) must mesh with the rearmost tooth space in the axial sector (TP156294), and the forward tooth space on the shaft (there is an extra tooth space on the forward portion of the shaft's rack).

2.29 To remove the pushbars (Figure 5) after removing the typing mechanism, remove the function box mechanism from the typing mechanism (if not previously removed). Remove the pushbar by disengaging the pushbar rack from its associated pinion.

2.30 The correct gear tooth engagement of the racks for pushbars 1 through 5 is as follows: In assembling the pushbars to the various eccentric assemblies, great care must be exercised to assure the correct rack-pinion gear mesh. The correct mesh is such that the first tooth on the pinion and the first tooth space on the rack are meshed. On later units this is identified by a mark on the pushbar and a mark on the eccentric. The last tooth on the pinion and the last tooth space on the rack should therefore also mesh.

CAUTION: MISALIGNMENT OF THE MESH BY AS LITTLE AS ONE TOOTH WILL PRODUCE A JAM IN THE MACHINE AND CAUSE PART BREAKAGE IF THE MACHINE IS PUT UNDER POWER WHILE THIS CONDITION EXISTS.

BURST CLUTCH MECHANISM

2.31 The burst clutch mechanism (Figure 5) is located at the rear end of the upper shaft. Remove the screw (TP150040) and lock-

washer (TP2191) that mount the pulley (TP176073) to the lower shaft (TP309251). Remove the pulley and belt (TP309303).

2.32 Remove the screw (TP150040) and lockwasher (TP2191) that mount the pulley (TP176073) to the upper shaft (TP309253). Remove the pulley. Remove the spring (TP87401) from the clutch latchlever (TP150355) and the spring (TP80501) from the clutch reset bail (TP309200). Remove the screw and lockwasher that mount the burst clutch drum (TP150000) to the upper shaft. Remove the bushing (TP309256), flat washer (TP144643), cutoff actuator arm (TP309203), eccentric (TP309257), adapter (TP309247), and burst clutch assembly by pulling parts off the upper shaft and out the rear of the unit.

UPPER SHAFT ASSEMBLY

2.33 Remove the spring from the function clutch latchlever. Remove the nut (TP3595) and lockwasher (TP82832) from the forward end of the upper shaft.

2.34 Remove the screw and lockwasher from the function clutch drum (TP150000). Remove the screw and lockwasher from the collar (TP173340). Remove the screw and lockwasher from the bearing clamp (TP158745).

2.35 Pull the upper shaft out of the rear of the unit, removing the cam-clutch and collar.

CAUTION: NOTE THE LOCATION OF THE UPPER SHAFT NEEDLE ROLLER BEARINGS AS SHOWN IN SECTION 574-243-800. MOVE THE UPPER SHAFT TOWARD THE REAR OF THE UNIT, A SMALL AMOUNT AT A TIME, AND EXERCISE CARE NOT TO DROP OR CONTAMINATE THE 20 NEEDLE ROLLERS IN EACH RACE. A SMALL SPRING MAY BE STRETCHED AROUND THE SHAFT AND ROLLERS WITH THE ENDS OF THE SPRINGS HOOKED TOGETHER. THE GARTER SPRING, IN CONJUNCTION WITH THE GREASE, WILL HOLD THE ROLLERS IN PLACE. WHEN REPLACING THE UPPER SHAFT, MAKE SURE THE ROLLERS ARE CLEAN. LUBRICATE THE RACE AND BEARINGS WITH BEACON 325 GREASE (TP195298). APPLY A LIBERAL

AMOUNT OF OIL AT EACH END OF THE BEARING SLEEVE.

Note: When the upper shaft is inserted in the cam-clutch, hold the latter firmly so that the drum is not pushed off the clutch. Compress the drum and cam disc together so that holes in the drum and clutch bearings are aligned.

LOWER SHAFT ASSEMBLY

2.36 Remove two each shoulder screws (TP155995), flat washers (TP115941), lockwashers (TP2191), and nuts (TP3598) that retain the rear bearing. Remove two screws (TP151346), lockwashers (TP2191), and shoulder nuts (TP158881) that retain the front bearing.

Remove the shaft with bearings out the rear of the unit.

ROCKER BAIL ASSEMBLY

2.37 Remove the nut, lockwasher, and adjusting lever guide (TP309267), and remove the rocker bail shaft (TP309269). Remove the rocker bail (TP162350 — Figure 5).

CAUTION: MOUNT THE TRANSFER LEVER ASSEMBLY PRIOR TO MOUNTING THE PUNCH UNIT. MOUNT THE EIGHT LATCHLEVERS AND THEIR RESPECTIVE SPRINGS AFTER BOTH THE PUNCH ASSEMBLY AND SELECTOR MECHANISMS ARE MOUNTED.