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RPI PART #GXM002 & GXK038 DRIVE MOTOR KIT & MOUNTING KIT ASSEMBLY INSTRUCTIONS

Removal of the Drive Motor from the old-style Processors

1) Turn power OFF and unplug machine from the wall socket. Drain all tanks and remove all racks, drying them completely before removing any panels to replace the Drive Motor Assembly. Remove any tubing that might interfere with moving the machine around or onto its side.

2) Remove the processor's side panel and end plate panel. Turn the machine onto its side with the exposed PCB facing up, then remove the bottom plate.

3) Disconnect the motor from the PCB at connector J19, then remove the ground wire. It is necessary to cut the cable ties from the bottom cover to allow removal of the motor wiring harness.

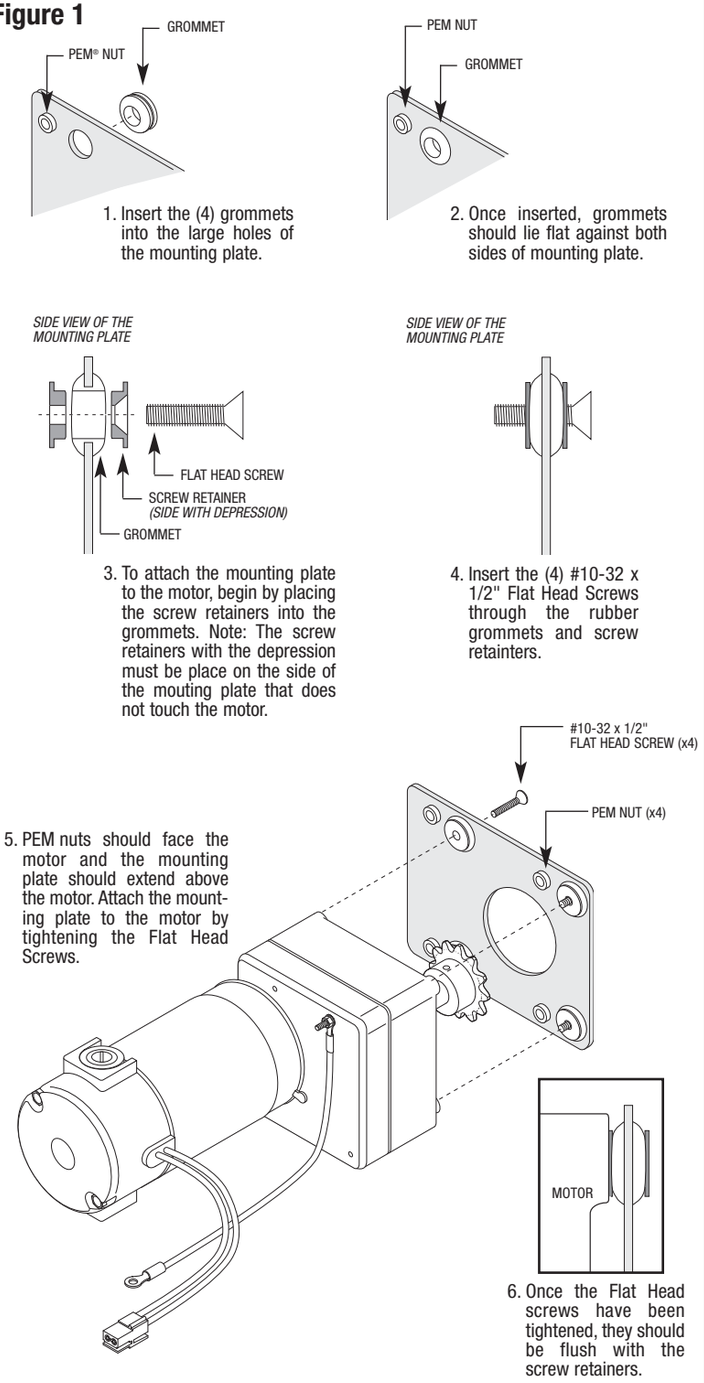
4) Loosen the (4) Hex Head bolts and push the motor sideways, towards the top of the machine, to loosen the Drive Chain. Remove the Drive Chain from the Drive Motor Sprocket.

   IMPORTANT: Before removing the motor in Step #5, note the orientation of the **old** motor in relation to how it mounts in the body of the processor because later in these instructions the **new** motor will need to be mounted in the same direction. *Service Tip*: Using a black felt tip marker, identify the bottom side of the **old** motor as a directional reference to use when you orient the **new** motor to slide it into position.

5) Slide the motor out of the molded motor mount housing through the bottom of the machine. Discard motor.

   NOTE: The Chain Guard is no longer offered by the OEM, but a used Chain Guard in good shape can be used in place of one of the new mounting brackets included in the Drive Motor Kit (RPI Part #GXM002). Instructions regarding the installation of the new motor and mounting plates are discussed later in these instructions.

Figure 1



Preparation before Installation of the New Drive Motor

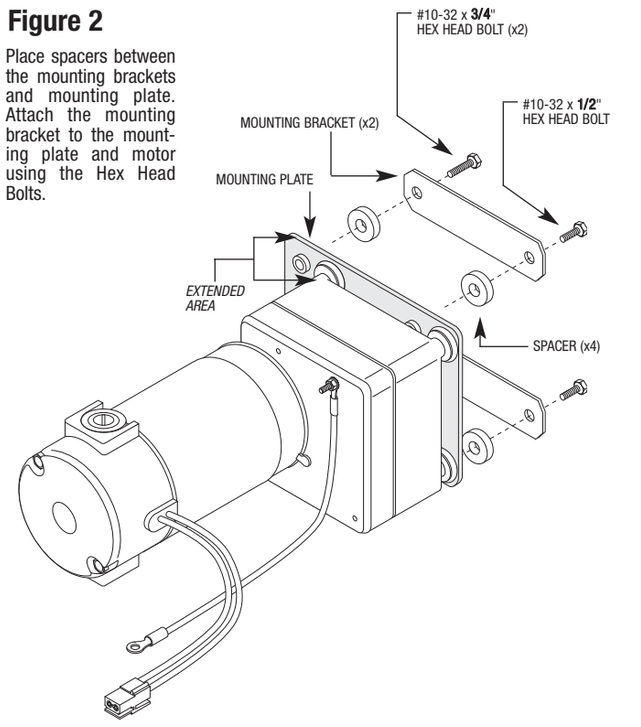
6) Insert (1) rubber grommet into each of the four large holes of the mounting plate. Insert (1) set of screw retainers into each of the openings on the mounting plate. For both the grommets and screw retainers, see assembly detail in **Figure 1**.

   Turn the mounting plate so that the PEM® nuts are facing the motor and the mounting plate extends above the motor. Attach the mounting plate to the motor by inserting the (4) #10-32 x 1/2" Flat Head Screws through the rubber grommets and screw retainers, then tighten. See assembly detail in **Figure 1**.

7) Place (2) spacers against the top two PEM nuts located in the extended area of the mounting plate. Position one of the two mounting brackets against the spacers, and loosely mount them to the mounting plate using (1) #10-32 x 3/4" Hex Head Bolt and (1) #10-32 x 1/2" Hex Head Bolt. Do the same with the remaining spacers, mounting bracket, #10-32 x 3/4" Hex Head bolt, and #10-32 x 1/2" Hex Head Bolt. See **Figure 2**.

Figure 2

Place spacers between the mounting brackets and mounting plate. Attach the mounting bracket to the mounting plate and motor using the Hex Head Bolts.



NOTE: If the Chain Guard that was removed in Step #4 is to be remounted, then mount it in against the (2) spacers against the top two PEM® nuts located in the extended area of the mounting plate. Loosely mount the Chain Guard to the mounting plate using (2) #10-32 x 3/4" Hex Head Bolts and (2) #10-32 x 1/2" Hex Head Bolts. See **Figure 3.** Proceed with Steps #8-14 as if the Chain Guard were the bottom mounting bracket.

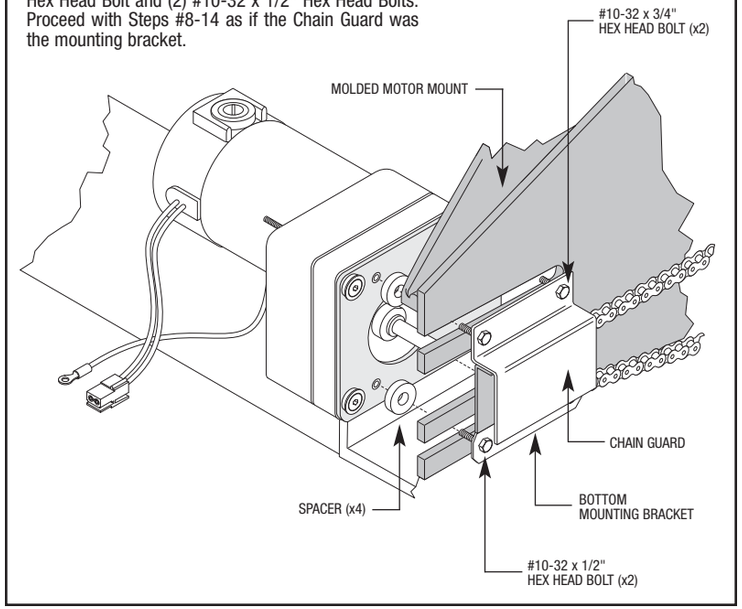
Installation of the New Drive Motor

8) With the mounting brackets in a horizontal position and mounted loosely to the mounting plate, reinstall the motor into the molded motor mount of the processor by sliding the motor up through the bottom of the processor. The spacers that are loosely mounted to the mounting brackets should be on the inside of the molded motor mount, and the mounting brackets should be on the outside of the molded motor mount. See **Figure 4**.

9) Push the motor up, towards the top of the machine, and reinstall the drive chain around the motor sprocket.

Figure 3

If the Chain Guard that was removed in Step #4 is to be remounted, then mount it in against the (2) spacers against the top two PEM nuts located in the extended area of the mounting plate. Loosely mount the Chain Guard to the mounting plate using (2) #10-32 x 3/4" Hex Head Bolt and (2) #10-32 x 1/2" Hex Head Bolts. Proceed with Steps #8-14 as if the Chain Guard was the mounting bracket.



10) Pull the motor towards the bottom of the machine, and finger tighten the (4) Hex Head Bolts to attach the mounting brackets to the processor wall. Place your finger at the middle of the Drive Chain. When the chain has a 1/4" deflection measured at the center point between the Motor Sprocket and the Drive Sprocket (see **Figure 5**), then firmly tighten the (4) Hex Head Bolts.

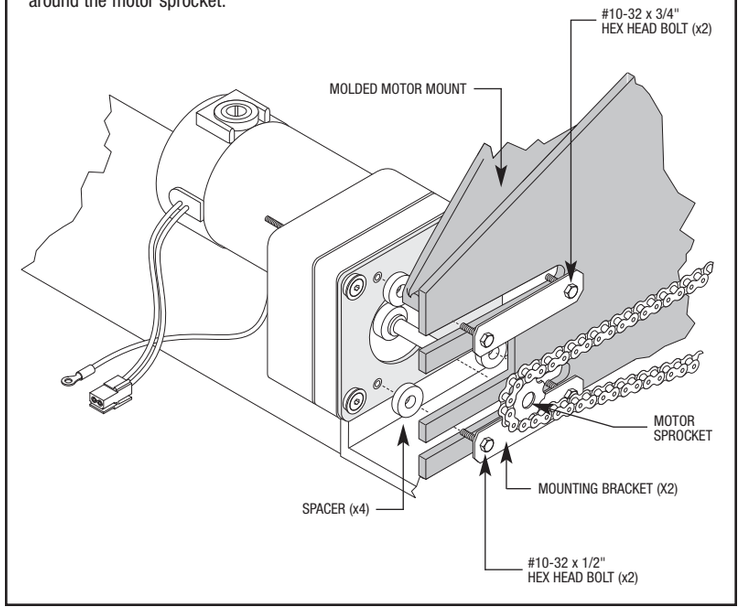
11) Reconnect the ground wire and plug the motor wire harness into the PCB at connector J19. Replace all cable ties removed in Step #3.

12) Reinstall the bottom plate of the processor and bring the processor to the upright position. Reconnect all tubing.

13) a) To check machine operation without fluid in the tanks, jumper the solution plugs in the fixer and developer tanks. Plug the machine into the wall outlet, and turn the machine ON. Check motor operation by depressing the RUN/STANDBY switch to the RUN position. The motor will now drive the transport drive shaft. Verify the motor drives the transport shaft at both speeds.

Figure 4

Reinstall the motor by sliding the motor up through the bottom of the processor. The spacers should be on the inside of the molded motor mount and the mounting brackets should be on the outside. Push the motor towards the top of the machine and reinstall the chain around the motor sprocket.



b) To check machine operation with fluid in the tanks, reinstall the racks removed in Step #1. Plug the machine into the wall outlet, and turn the machine ON. Allow the pumps to fill the solution tanks to their proper levels. Allow the machine to heat for 15-20 minutes until the READY lamp illuminates. Check motor operation by depressing the RUN/STANDBY switch to the RUN position. The motor will now drive the transport drive shaft and the transport rack assemblies. Verify the motor drives the transport shaft at both speeds.

14) Replace the side and end panels removed in Step #1.

Figure 5

Pull the motor towards the bottom of the machine, and finger tighten the (4) Hex Head bolts to attach the mounting brackets to the processor wall. Place your finger at the middle of the Drive Chain. When the chain has a 1/4" deflection measured at the center point between the Motor Sprocket and the Drive Sprocket, then firmly tighten the (4) Hex Head bolts.