

Assembly Instructions - Mini Playfield Pinion

1. Unscrew thumb screw (Item 1) from the mini playfield. (See Fig.1) This may be tight the first time it is removed. A straight blade screwdriver may be necessary to remove the thumb screw. Subsequent removals and insertions may be done with just your fingers.

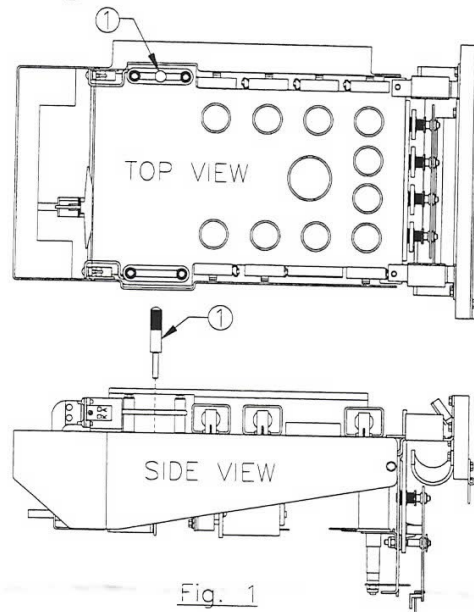


Fig. 1

2. With the main playfield in its service position (i.e. tilted up and moved forward resting on its support brackets), raise mini-playfield and rest it against the back box (See Fig. 2).

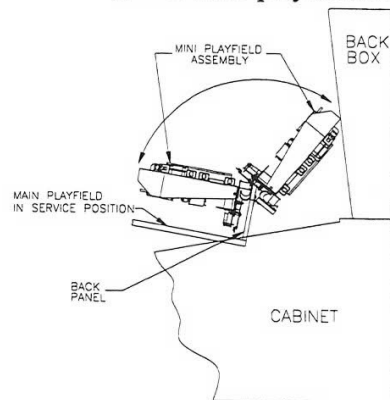


Fig. 2

3. With the mini playfield resting against the backbox, you will be able to see the underside of the mini playfield. Slide the COIL/SLIDE ASSEMBLY (P/N A-19070) all the way to the left hand side of the MINI PLAYFIELD ASSEMBLY (P/N A-18382). Do this manually. You will now be able to see two(2) HEX HEAD MACHINE SCREWS (P/N 4008-01168-10). Using an open ended wrench, box wrench, or nut driver, remove these two screws (See Fig. 3).

FRONT VIEW

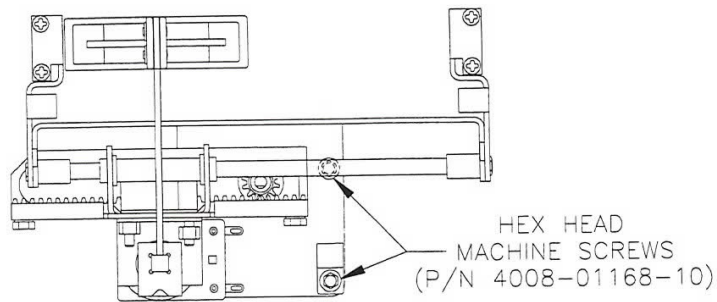


FIGURE 3

4. Slide COIL/SLIDE ASSEMBLY all the way to the right hand side of the MINI PLAYFIELD ASSEMBLY. Also do this manually. You will see two(2) more HEX HEAD MACHINE SCREWS (P/N 4008-01168-10). Remove these two screws also, being careful as not to let the PINION/MOTOR ASSEMBLY (P/N A-19950) fall. Desolder the two motor wire leads. (See Fig. 4)

FRONT VIEW

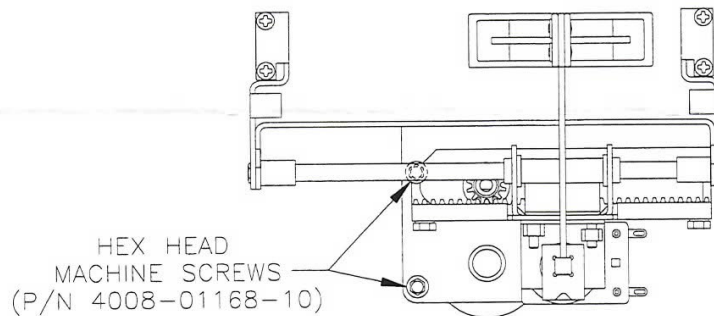


FIGURE 4

5. At this point remove any plastic remnants of the damaged pinion. This will allow the roll pin that attaches the pinion gear to the motor shaft, to be exposed. (See Fig. 5)

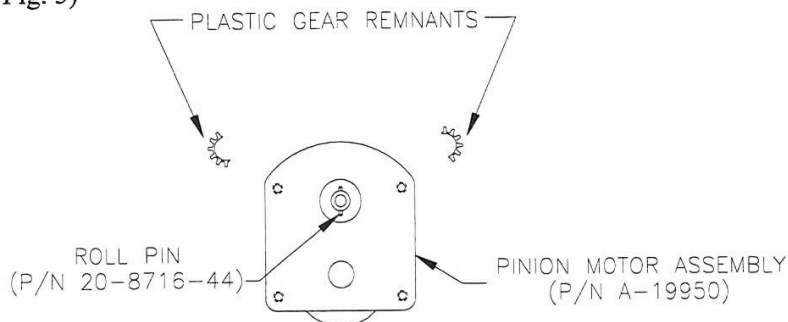


FIGURE 5

6. The motor and shaft must be supported by a vise or any other instrument that will support the motor and shaft rigidly.

7. Using a 3/32 punch and a small hammer, lightly tap the roll pin until it is removed from the motor shaft (See Fig. 6)

USE A 3/32 PUNCH AND
A SMALL HAMMER TO TAP
ROLL PIN OUT OF SHAFT

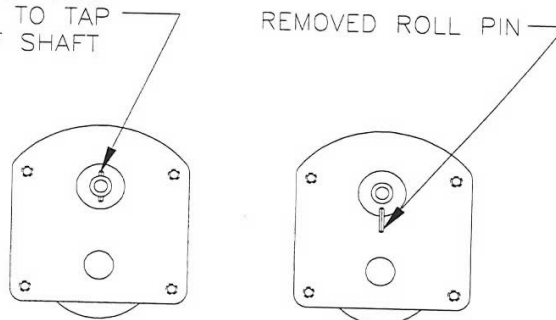


FIGURE 6

8. After roll pin is removed, remove the brass sleeve and discard. (See Fig. 7)

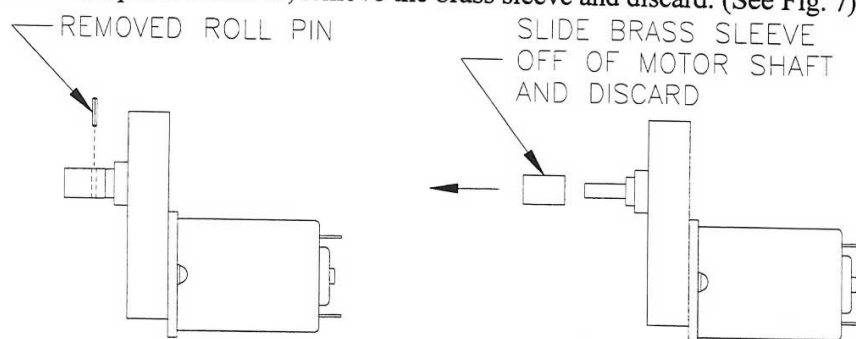


FIGURE 7

- 8A. Using a 1/8" diameter drill, countersink the existing hole in the shaft to a depth of 1/32" on one side only. (See Fig. 7A)

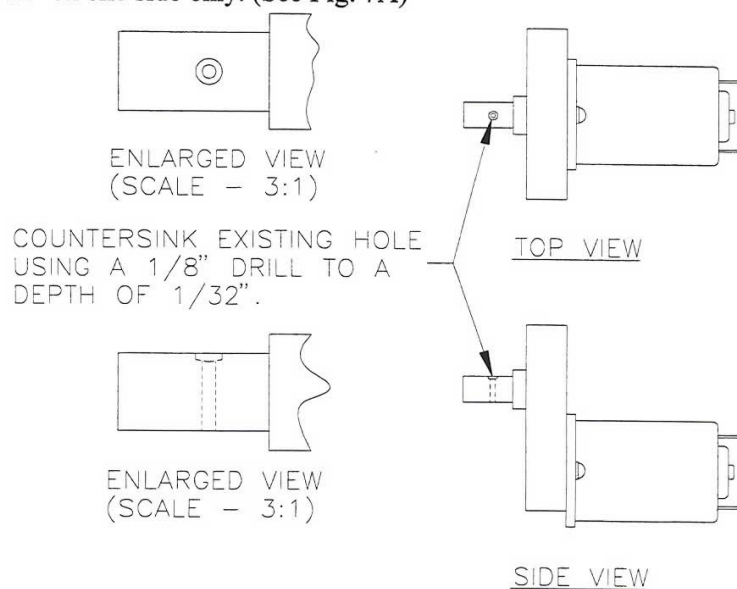


FIGURE 7A

9. Using the ALCOHOL WIPES (P/N 20-10211) supplied with the REPAIR KIT (P/N A-20417), thoroughly clean the motor shaft. Allow the cleaned motor

shaft to air dry (30 to 45 seconds). (See Fig. 8)

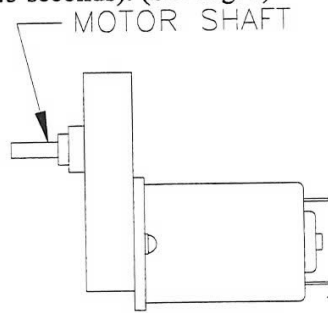


FIGURE 8

10. Remove the small tube of LOCTITE 620 (P/N 20-10210), the BRASS PINION GEAR (P/N 02-5186), and the BRASS TIPPED DOG POINT SET SCREW (P/N 4006-01194-02) from the repair kit. Apply the entire amount of LOCTITE 620 from the tube, on to the motor shaft, distributing it uniformly on the entire shaft. With a sliding and twisting motion, slowly install the BRASS PINION GEAR on the shaft, twisting and sliding back and forth several times to evenly distribute the LOCTITE 620. Make sure that the tapped hole in the pinion gear is lined up with the countersunk through hole left by the old roll pin. (See Fig. 9) Now install the BRASS TIPPED DOG POINT SET SCREW and tighten down securely, making sure that the top of the screw is flush or below flush with the hub of the pinion and that the brass tip of the screw is seated in the old roll pin hole. Carefully wipe off all excess LOCTITE 620, so as not to get any in the motor or gear teeth. Allow this assembly to dry for 24 hours before re-installing into mini playfield assembly and operating. It is very important that the full dry time is allowed in order for the repair to be completely successful.

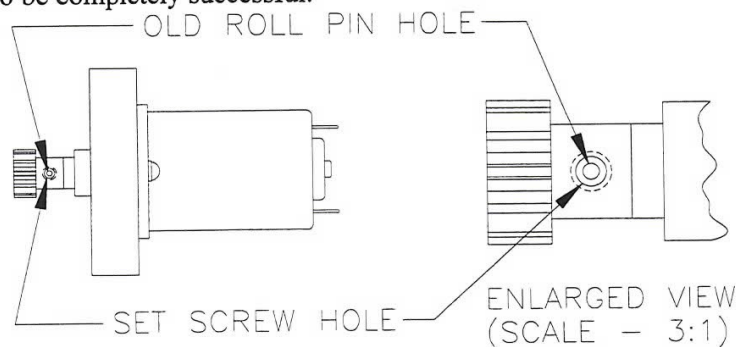


FIGURE 9

11. As an added measure, after step 9 is completed and if facilities and tools allow, a number 52 (.063 diameter) hole can be drilled all the way through the brass pinion gear and motor shaft, using the pilot hole that is already drilled in the brass pinion gear. After the hole is drilled, the new ROLL PIN (P/N 20-8716-44) supplied with the repair kit, can be installed, making sure that it is inserted flush with the pinion hub.



PART

AL-20477
REPAIR KIT, PENDING GEAR - 20477
1

QUAN:



