

Summary	Retro to Feig Absolute Encoder on System 3 Spiral Doors				
Products Affected	All Spiral doors with the old pulse encoder				
Key Word Tags	Spiral, Encoder, System 3, Retro				
Tools/Equipment (If Required)					
Parts/Materials (If Required)	KIT,FEIG ENCODER MOUNT,90 FRM R1070102-0 OR KIT,FEIG ENCODER MOUNT,80 FRM R1070103-0				
Related Media					
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Please Read The Entire Bulletin Before Proceeding

The purpose of this bulletin is to retrofit an existing spiral door from the old style pulse encoder that needed to be synchronized when power was removed to the absolute Feig encoder that stores positioning in memory.

Installing the Encoder:

1. With door in closed position, disconnect main power and any other external power source to the control panel



The disconnect must be in the OFF position and properly locked and tagged before performing the next step of the procedure.

2. Using a minimum of (2) per side, place safety clamps / vise clamps on top of rollers in the track to prevent door movement. Manually release the motor brake and allow the door panel to settle and stop against the clamps. ****VERY IMPOTRANT - **Reset the brake release handle.**



An appropriate number of clamps must be placed across both door tracks to prevent the door panel from free-falling to the floor while performing the following procedure.



3. Remove brake cable/ unscrew release arm from motor brake – (See Figure 1).



Figure 1

4. Remove motor cover (8mm nut driver or 5/16") – if cover is to be re-used it will need to be modified before it can be re-installed. The vented end must be removed (cut off). (See Figure 2 & 3).

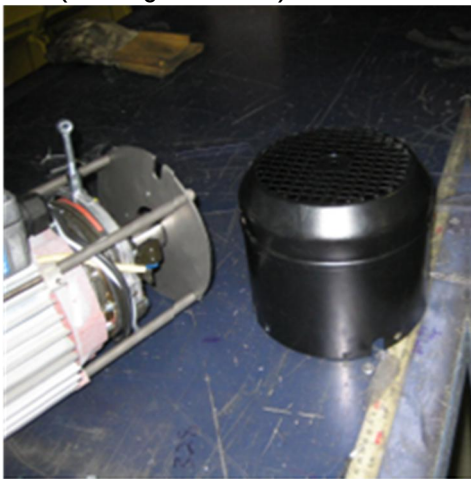


Figure 2 Before

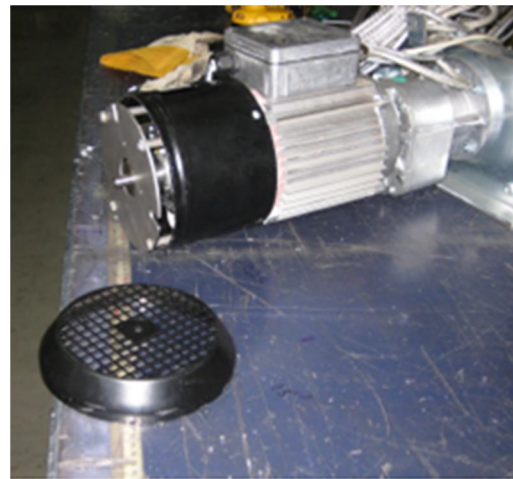


Figure 3 After

5. Remove snap ring on motor shaft and remove fan – (See Figure 4). (discard fan – it will not be re-used).

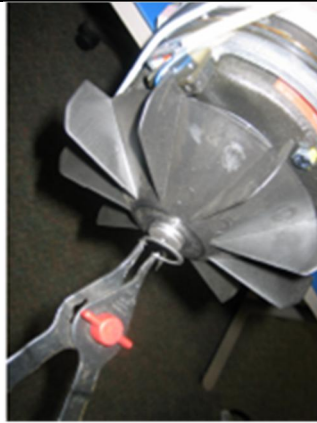


Figure 4

6. Using vise-grips, remove 1" woodruff key off motor shaft and discard. (See Figure 5).



Figure 5

7. Place new encoder adaptor on motor shaft, making sure it is bottomed on motor shaft and tighten set screws (1/8" Allen) (See Figure 6)



Figure 6

8. Install encoder magnet on adaptor shaft, tighten with 1.5mm Allen. (See Figure 7)



Figure 7

9. ***IMPORTANT:*** to ensure the motor does not rotate, make sure the clamps used to lock door panel are tight and the door panel cannot move (step 2). To install new encoder mounting plate assembly - *using the retro-tool provided* - carefully remove the 4 threaded rods that hold the brake assembly and outer case to the motor. (See Figure 8 & 9).



Figure 9

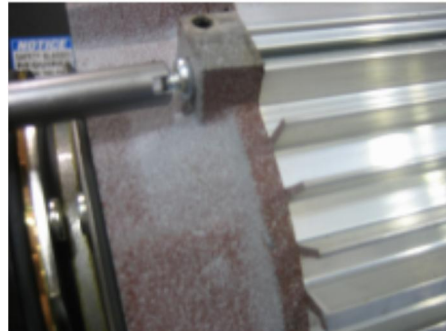


Figure 10

10. Insert 4 new rods with spacers and end plate as shown, making sure to clock the end plate with one of the relief grooves positioned to allow proper routing of the new encoder cable, tighten with 10mm wrench or socket.



Figure 11



Figure 12

11. Install new encoder assembly on mounting plate with self-tapping screws provided. Route the new encoder cable through one of the end plate relief grooves. ***NOTE:*** If modified cover is re-used – make sure cable is routed so it is not pinched in any way when cover is installed.

Wiring the Encoder:**⚠ WARNING**

The disconnect must be in the OFF position and properly locked and tagged before performing the next step of the procedure.

12. Route the new encoder cable directly to the controller. DO NOT SPLICE THE CABLE.
13. You are going to have to move the wires for the encoder from the existing terminals to the new terminals: (Figure 13)- shows correct new encoder termination points.
Brown -- to 29
White -- to 30
Green -- from 26 to 36
Yellow -- from 28 to 35

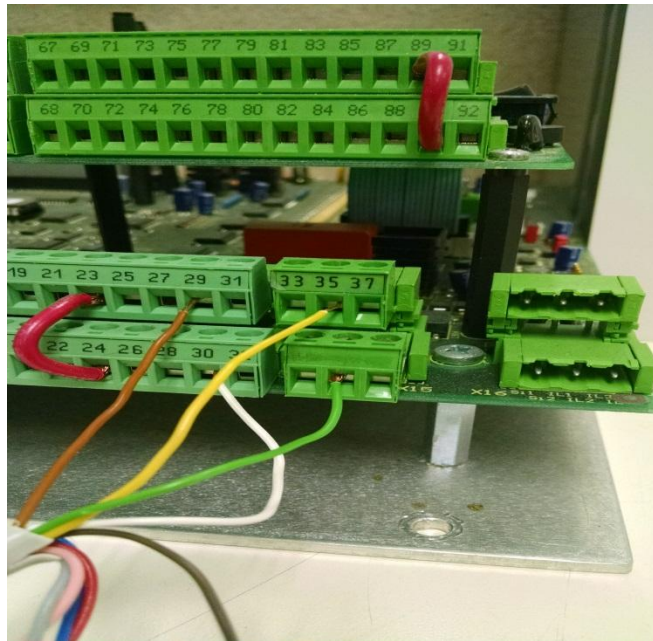


Figure 13

14. If re-using – install modified motor cover. Install brake cable/arm and adjust cable if applicable. (See Figures 2 & 3).
15. Carefully remove safety clamps. CAUTION: Some door panel settling may occur
16. Before installing the new version software you have to find out if there is any special programming with the current software (day/night switch, lights and horns, interlock etc.) If you aren't sure call Rytec customer support (800-628-1909) and we will walk you through finding out if there is any special programming.
17. Install new software chip-if applicable.

18. Reprogram System 3 parameters. Call Customer Support for Rytec level password - *you will need to have the door serial # and the current cycle count*)
19. It will be necessary to re-configure the three jumper blocks-located on the System 3. All 3 jumper blocks should be across the top two pins in vertical position in all 3 rows. (Figure 14)- arrow shows plug orientation on the board. (Figure 15) - shows corrected plug position.



Figure 14

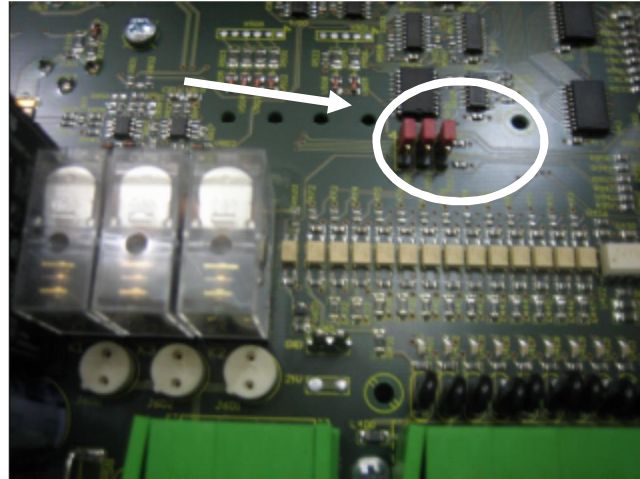


Figure 15

If you have any questions please contact Rytec Customer Support at 1-800-628-1909.