



Spartan Fire, LLC

Technical Service Bulletin TSB23-110-001

DATE: 8/30/2023

APPLIES TO: This service bulletin applies to 2018 through 2024 model year, Gladiator, Metro Star, FC-94, KME Panther, and KME Predator Emergency Response chassis cabs built between April 18, 2019 and August 18, 2023.

CONDITION: Damage to latch frame from striker contact

CORRECTION: Replace door latches and striker

LABOR ALLOCATION: 1.5 Hrs. per door

CLASSIFICATION: E2

PARTS NEEDED:

<u>QTY</u>	<u>Part Number</u>	<u>Description</u>
2	0533-EE3-001	ASM-LATCH LH
2	0533-EE3-002	ASM-LATCH RH
4	1975-EE3-001	STRIKER-DOOR LATCH
1	0764-EE3	INSTL-DOOR LATCH, FRONT DOORS
16	0202-BB1-017	SCREW-M6-1.0X16MM TORX DR PAN HD MACH, ZINC W/THD LOCK
8	M06100FNZ	NUT-FLANGE 6MM X 1.0 ZINC
1	TSB23-110-001	INSTRUCTION DOCUMENT - ENGLISH

Service Bulletins are intended for use by Professional Technicians only. They are written to guide Professional Technicians in performing service to vehicles of specific nature in conjunction with industry standards. Professional Technicians should be appropriately trained on industry standards and have the tools and equipment to perform procedures safely and properly.

GENERAL INSTRUCTIONS:

Thoroughly review entire service bulletin before starting work. If there are questions or concerns with steps defined in this service bulletin, contact Spartan Fire LLC. Customer & Product Support Group.

All applicable industry safety standards **must** be followed when performing work identified in this procedure.

NOTE: This bulletin applies to all cab doors.

STEP-BY-STEP INSTRUCTIONS:

1. Roll window all the way down to prevent glass from falling when un-hooked from door panel.
2. Remove door panels. While removing the door panels the window regulator will need to be disconnected from the door glass. Refer to FIG. 2-1, FIG. 3-1 and FIG. 3-2.

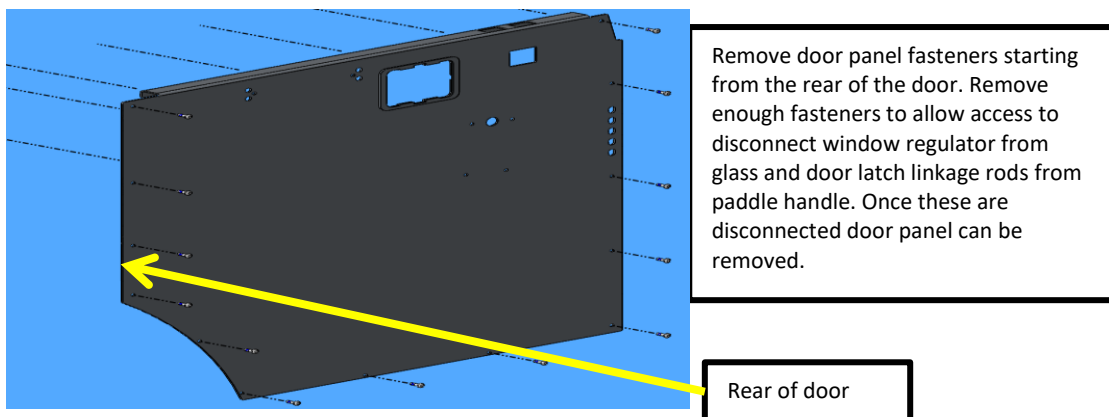


FIG. 2-1

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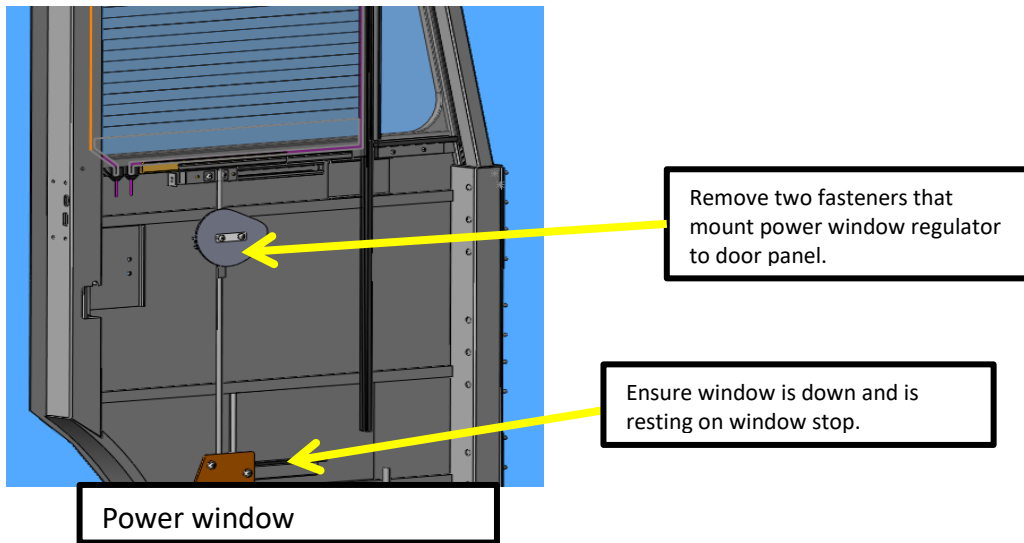


FIG. 3-1

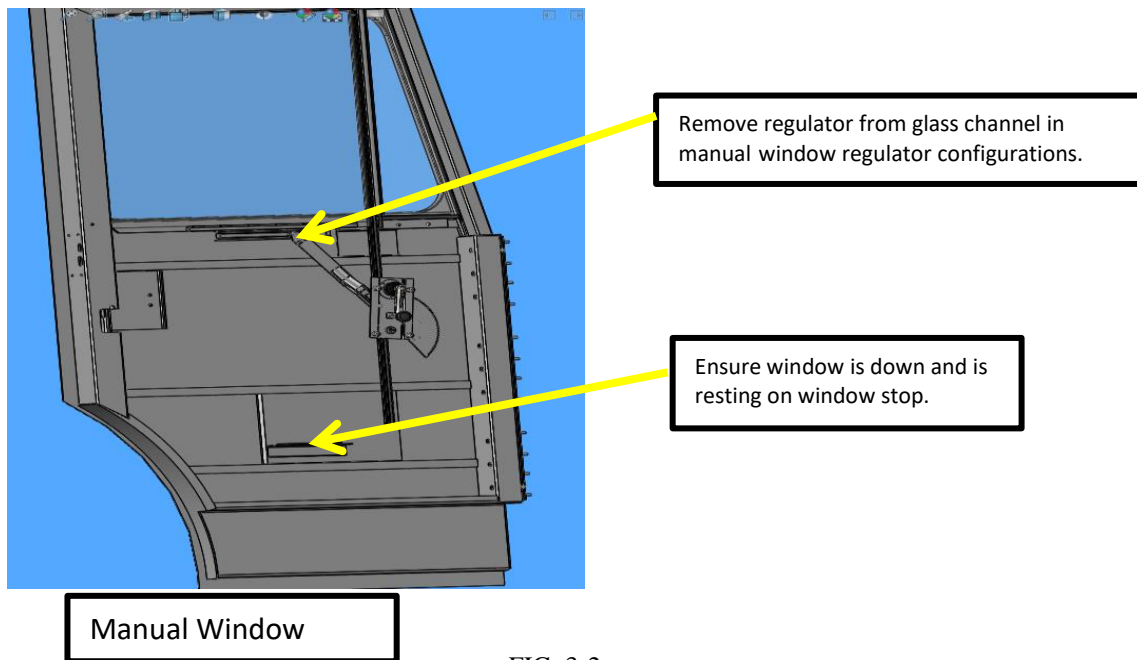


FIG. 3-2

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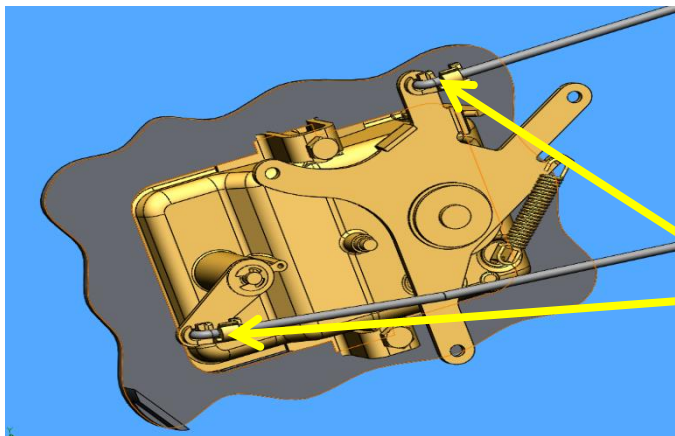
3. For view showing front door with door panel removed. Refer to FIG. 4-1.



Front door shown with door panel removed.

FIG. 4-1

4. While removing the door panels the door latch rods will need to be disconnected. Refer to FIG. 4-2.



Remove door latch rods from back of paddle handle by pressing the clips off the rods then slide rods out of clips. Ensure clips stay in place on back of paddle handle.

FIG. 4-2

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5. While removing the door panels, any electrical wires connected to the door panels such as power window switches or door lights will need to be disconnected.
6. Remove and discard the door latch and fasteners. NOTE: two fasteners toward outside of door utilize nuts to secure the latch to the door frame. Ensure these do not fall into the doorframe when removing or installing parts. Refer to FIG. 5-1.

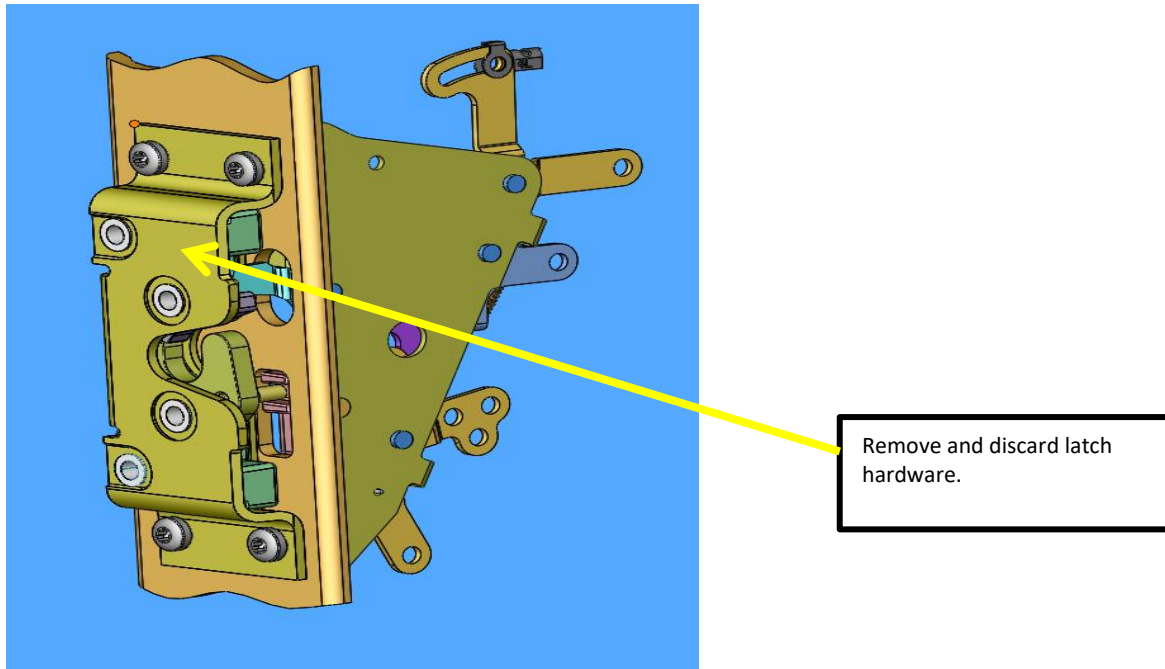


FIG. 5-1

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7. Inspect threaded mounting holes in latch logic for damage. Refer to FIG. 6-1. Replace latch logic (P/N 0557-EE3-001 LH, 0534-EE3-001 RH) if thread damage is present.

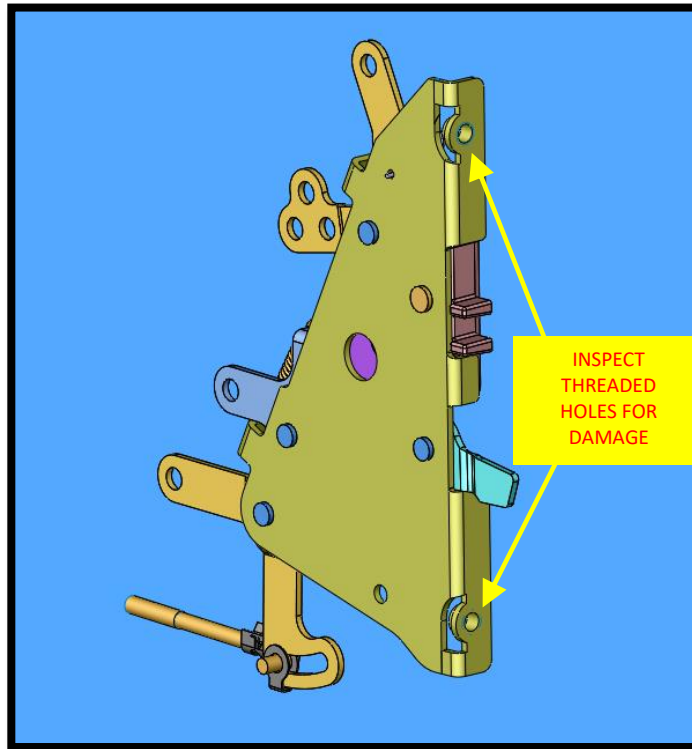


FIG. 6-1

8. Install new door latches and fasteners: P.N. 0533-EE3-001, 0533-EE3-002, 0202-BB1-017 and M06100FNZ. NOTE: two fasteners toward outside of door utilize nuts for mounting. Ensure these do not fall into the door frame when removing or installing parts. Torque fasteners to 45 lbf-in. Refer to FIG. 7-1, FIG. 7-2 and FIG. 8-1.

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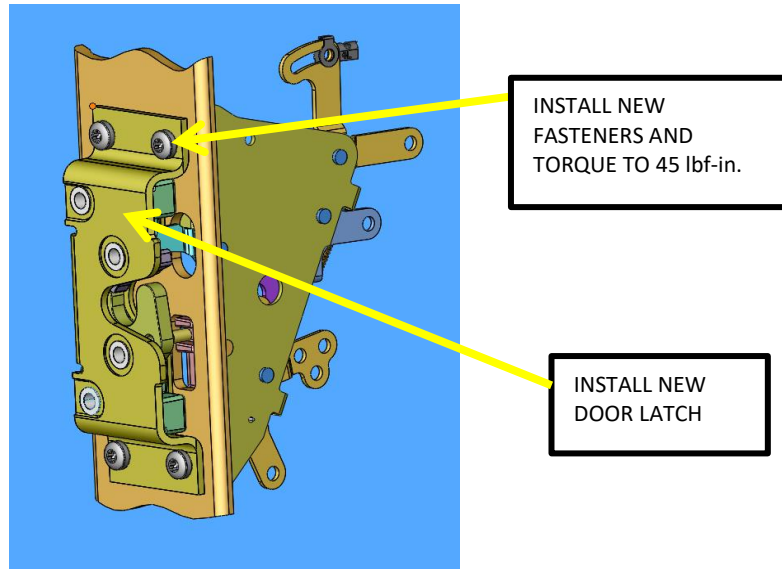
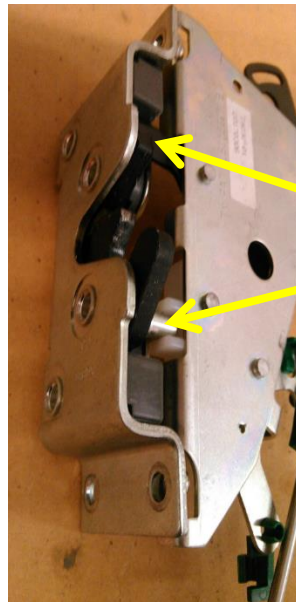


FIG.7-1



FIG. 7-2

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Ensure control levers are engaged properly when assembled. Shown with door removed for better clarity.

FIG. 8-1

9. Remove the door latch striker. Take note of any additional spacers/washers used behind each door latch striker washer. Save spacers/washers for reuse: Refer to FIG. 8-2.

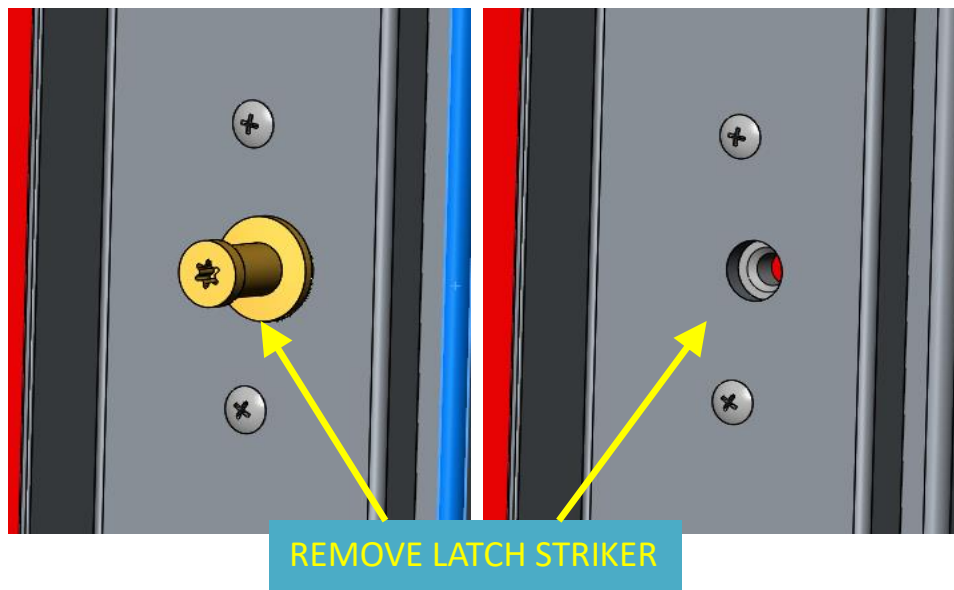


FIG. 8-2

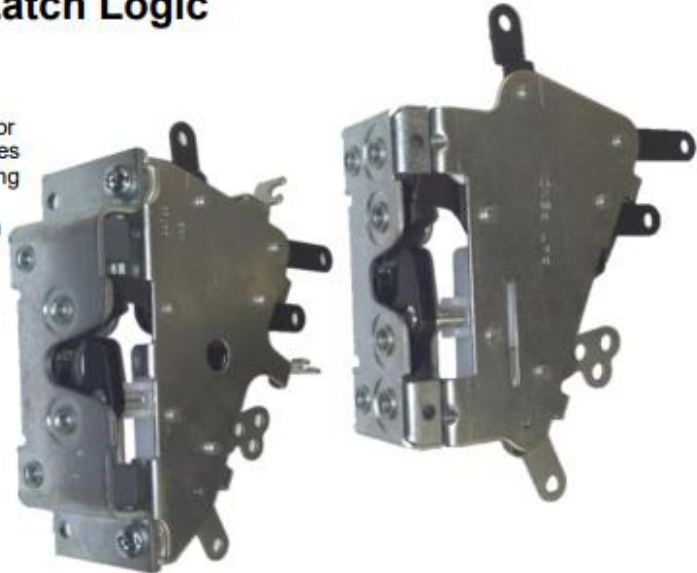
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10. Replace the door latch striker with P.N. 1975-EE3-001. If applicable, transfer any additional spacers/washers found in Fig. 8-2 to replacement striker. Spacers/washers are necessary for latch alignment. Install striker snug tight. Check alignment to latch. Once alignment is achieved, tighten striker to recommended torque. Refer to FIG. 9-1 and 10-1.

050-0810 Single Rotor Latch Logic

APPLICATIONS:

- This product includes 2 versions that allows for internal or external door mounting and provides automotive logic function with remote activating handles
- Door weights up to 150 lbs. (68 kg) maximum
- Door seal pressures of 25-50 lbs. (11-23 kg) recommended for best results



INSTALLATION:

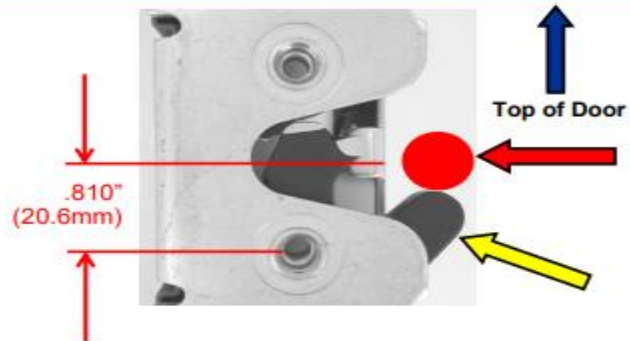
- Latch/Logic
 - ◊ Four 1/4-20 UNC grade 5 or M6 x 1 class 8.8 or better fasteners are recommended
 - ◊ Tighten Grade 5 or better fasteners to the manufacturers' recommended torque value; however, do not exceed 96 in-lbs. (10.7 N-m)
 - ◊ It is recommended that the latch is mounted to the door with non-adjustable holes
- Striker Bolt
 - ◊ Installation torque for striker to be 56 ft-lbs. (74.7 N-m) minimum
 - ◊ Typically, the striker bolt is mounted to a cage nut that adjusts up and down / forward and back or a bracket that slides forward and back and has a slot that allows the striker bolt to move up and down
 - ◊ Aligning the latch and the striker bolt is KEY to proper function of the latch

FIG. 9-1

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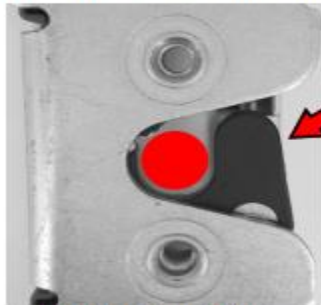
LATCH ALIGNMENT TO STRIKER BOLT :

- The latch rotor should always be on the bottom when installed in the door. The picture shows a driver's side latch.
- If the striker bolt is too high, closing the door will actually lift the door and cause early wear on the latch and striker.
- The striker bolt (red dot) should just clear the rotor (pointed by yellow arrow) when fully open. This is the best location to start with for the vertical alignment. The center line for the striker bolt to the rotor axle is .810" (20.6mm).

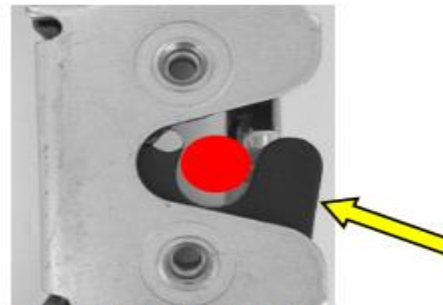


PRIMARY AND SECONDARY POSITIONS:

- Primary position is when the latch is fully closed. The striker should be centered in the 'V' shape case. The door should be fully closed at this position. (red arrow)
- Secondary position is when the rotor is not fully closed. This will make the door appear closed but the door is not fully secured—care should be taken to ensure that the latch and striker bolt will go into the primary and fully closed position. (yellow arrow)



PRIMARY POSITION



SECONDARY POSITION

TROUBLESHOOTING:

- A door that sticks or has to be lifted up over the striker bolt might have a damaged latch. This is due to misaligned striker to the latch. (Please refer to Latch Alignment to Striker Bolt—above)
- Signs of a misaligned striker bolt are evident on the latch case halves. The striker bolt will have corresponding grooves to these case halves.
- The latch should be replaced and properly aligned with the striker.



FIG 10-1

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11. Reinstall retained door panels. During door panel re-installation, window regulator and door latch rods **must** be re-connected. Ensure rod clips are clipped onto rods securely. Refer to FIG. 11-1.

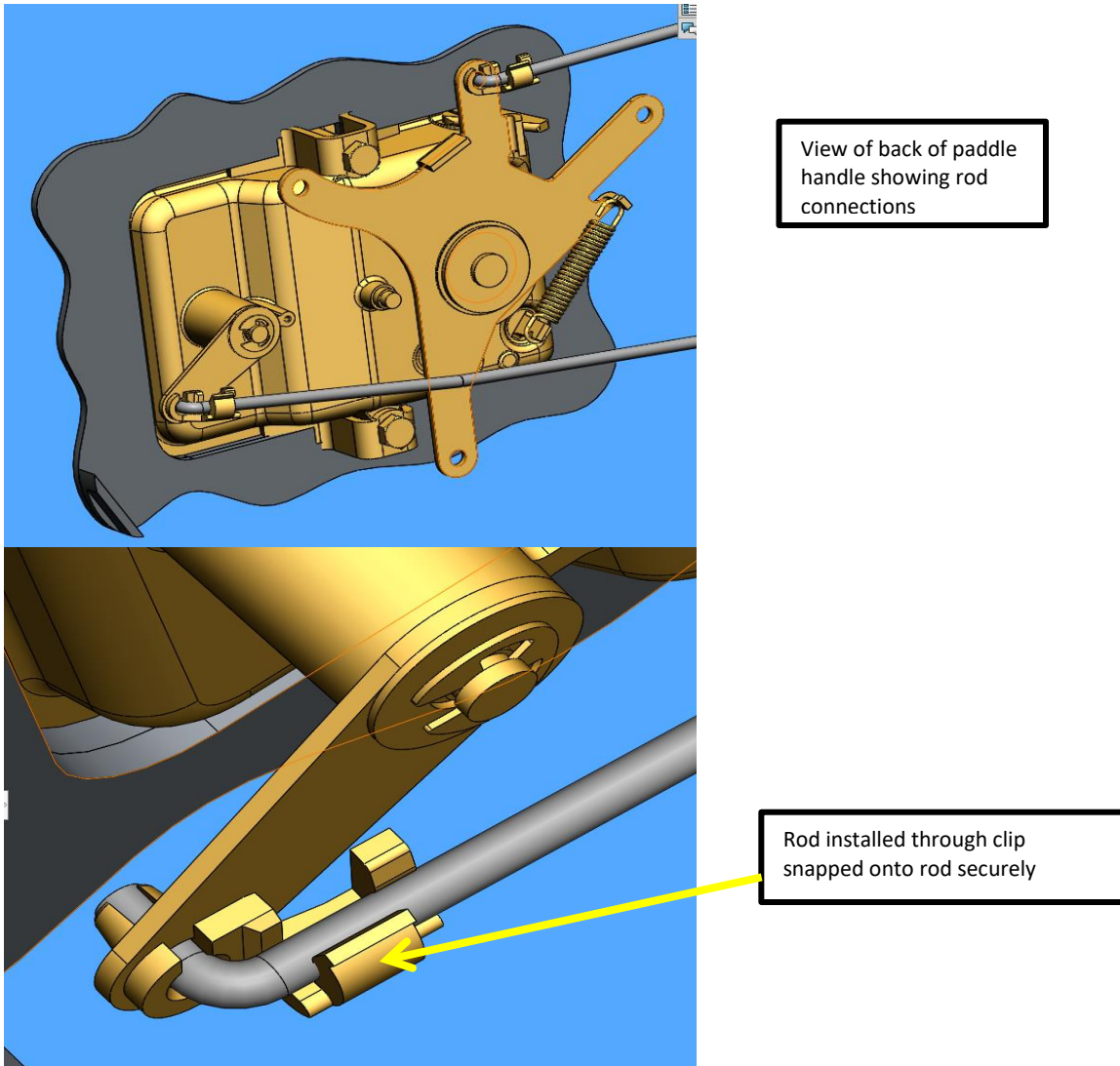


FIG. 11-1

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12. For power window regulator alignment Refer to FIG 12-1.

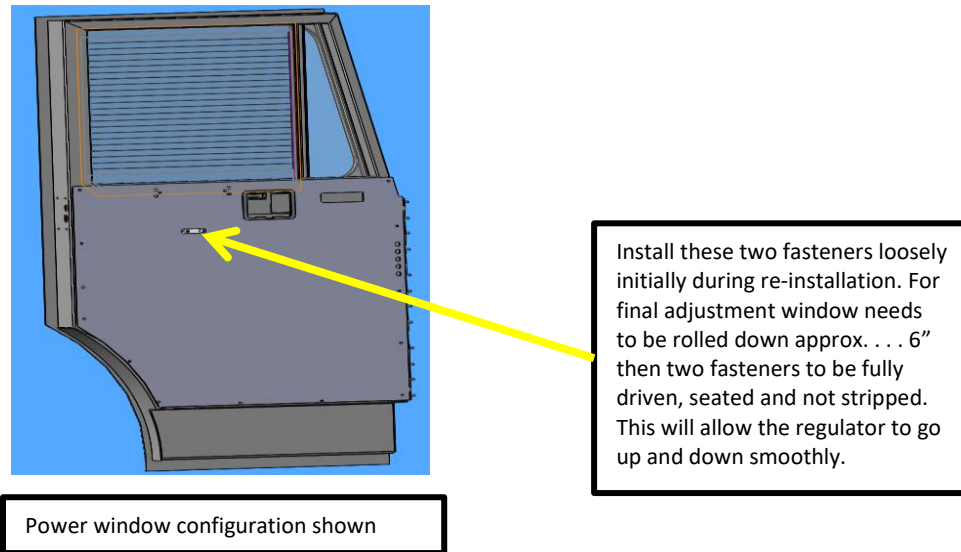


FIG. 12-1

13. Once door panel is re-installed, tighten all fasteners.

14. Ensure door latches properly and all door functions work correctly.

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