METALLARTE 500 SERIES ENTRANCE DOOR INNER THERMOFORMED PANEL REPLACEMENT (WINNEBAGO)

TI-383

DOORS

Purpose

The purpose of this document is to outline the procedure for removal and replacement of the inner thermoformed door panel. If a Campaign #70-75 or 70-77 strut kit, which includes strut bracket and door strut, has not been installed, it will need to be completed after replacement of the inner panel. Refer to instructions included in the strut kit to complete the installation.

⚠WARNING

The "WARNING" symbol above is a sign that a procedure has a safety risk involved and may cause death or serious personal injury if not performed safely and within the parameters set forth in this manual.

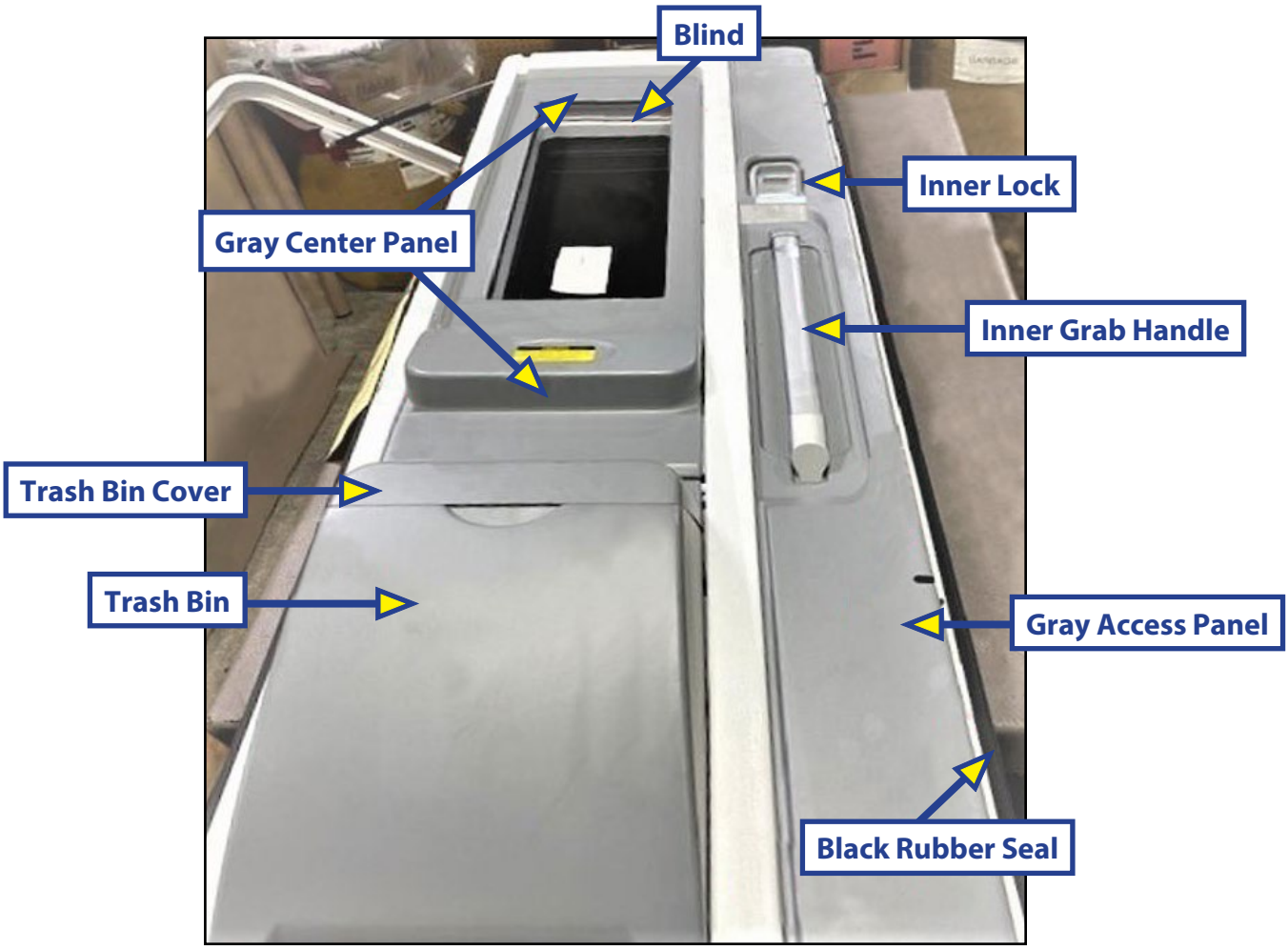
⚠CAUTION

The "CAUTION" symbol above is a sign that a safety risk is involved and may cause personal injury and/or product or property damage if not safely adhered to and within the parameters set forth in this manual.

Resources Required

- Cordless or electric drill or screwdriver
- Phillips bit
- T-20 Torx bit
- 8 mm wrench
- 10 mm wrench
- 2.5 mm hex wrench
- Flat blade screwdriver
- Small pry bar
- Utility knife
- Tape measure
- Scraper
- Adhesive remover
- Adhesive promoter/primer
- Double-sided adhesive tape
- Super Glue (If needed)

Entrance Door Part Descriptions



Entrance Door Part Numbers	
Part #	Description
329933-01-714	Center panel
329933-01-715	Trash bin
329933-01-716	Trash bin cover
329933-01-718	Trash bin cover hinge pins
329933-01-713	Gray access panel
329933-01-701	Inner grab handle
329933-01-719	Black rubber seal
329933-01-703	Blind
329933-01-721	Strut kit - Campaign #70-75 or 70-77
329933-01-707	Christmas tree plug

Procedure

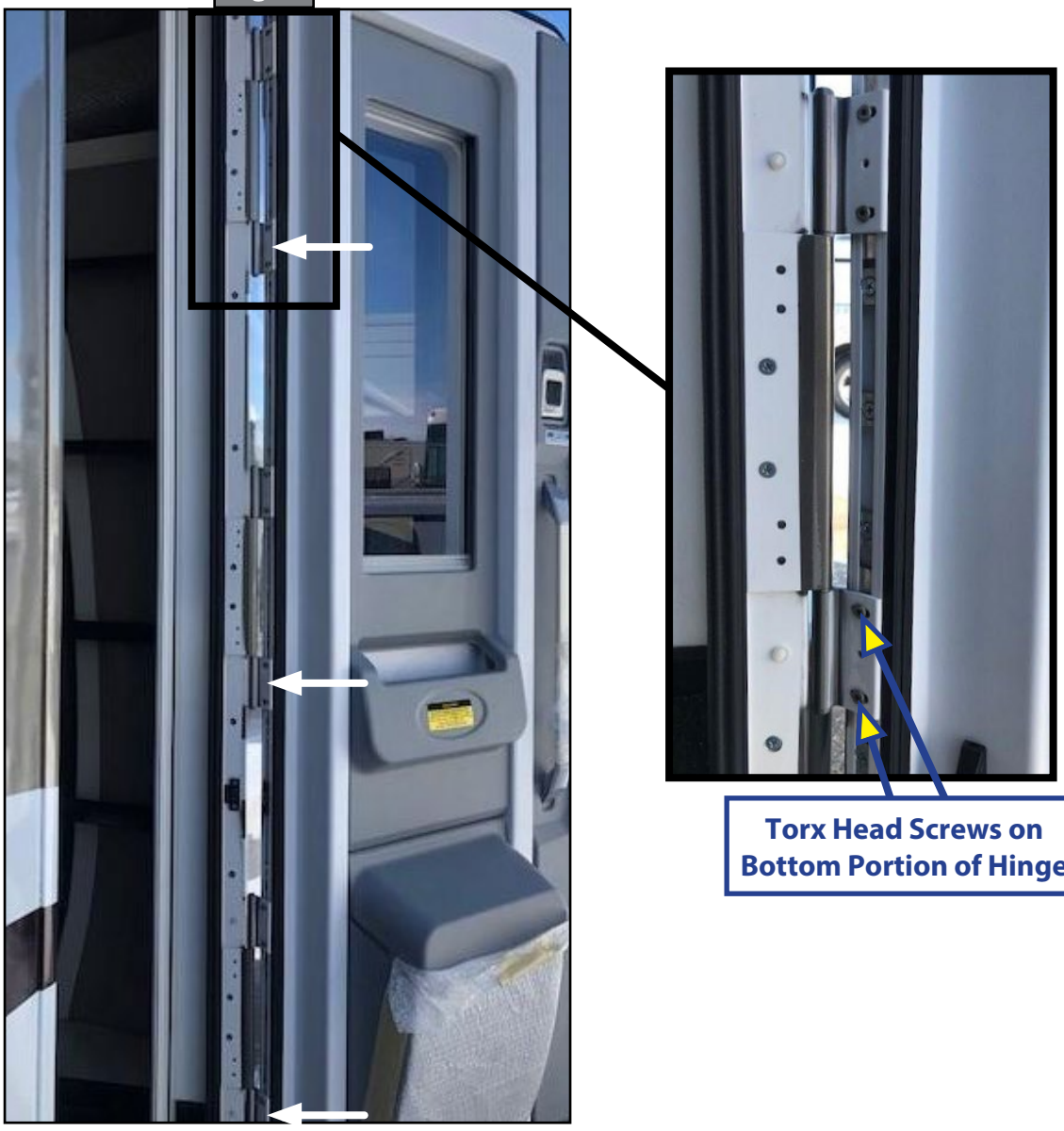
Door Removal

1. Remove the small plastic plugs on the top portion of the hinge (Fig. 1).
2. Remove the two Torx-headed screws holding the bottom portion of each hinge to the door (Fig. 2).
3. Raise the door up off the hinge pins and place the door on a flat surface.

NOTE: Take care not to pull up the hinge pins when removing the door.

Fig. 1

Fig. 2



Remove Internal Gasket

1. Once the door is lying on a flat surface, remove the black rubber seal around the perimeter of the door by gently pulling outward on the seal (Fig. 3).

NOTE: The seal is seamed at the bottom of the door and secured in that area with Super Glue (Fig. 4). Leave the seal attached to this area and take care not to pull on the seal or tear it (Fig. 5). If the seal is torn, it will need to be replaced.

Fig. 3

Fig. 4

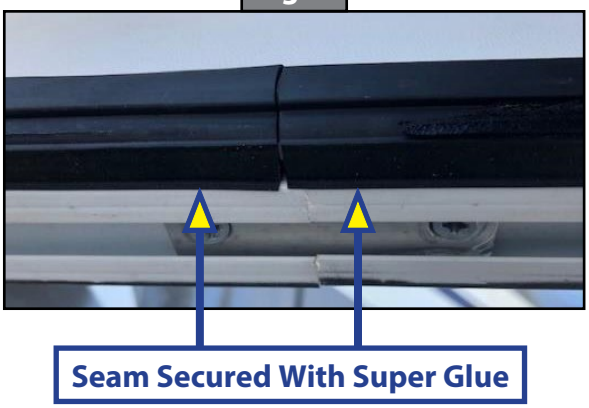


Fig. 5

Remove Grab Handle

1. With a 2.5 mm hex wrench, loosen the set screw securing the upper and lower covers of the inner grab handle to the door (Figs. 6 and 7).
2. Remove covers.
3. Remove the two Phillips head screws securing the inner grab handle to the door (Fig. 8) and remove the handle.

Fig. 6

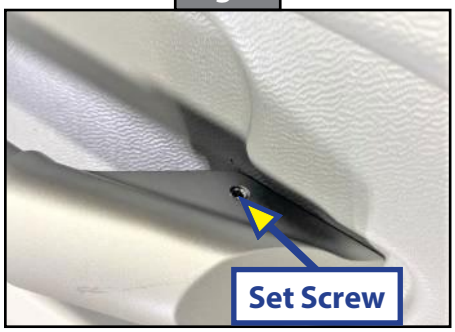


Fig. 7

Fig. 8

Remove Gray Access Panel

1. Remove the four nylon Christmas tree plugs holding the gray access panel in position (Fig. 9). There are two at the upper corner and two at the lower corner.
2. Lift the access panel off the door by lifting up on the outer edge and rotating upward, then feeding the inner lock through the opening in the panel (Fig. 10).

Fig. 9

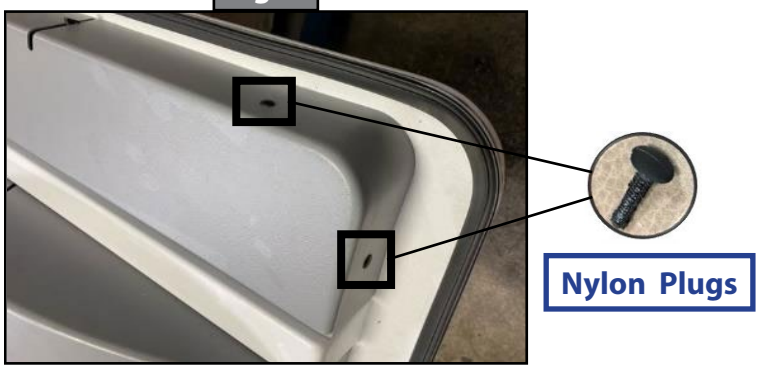
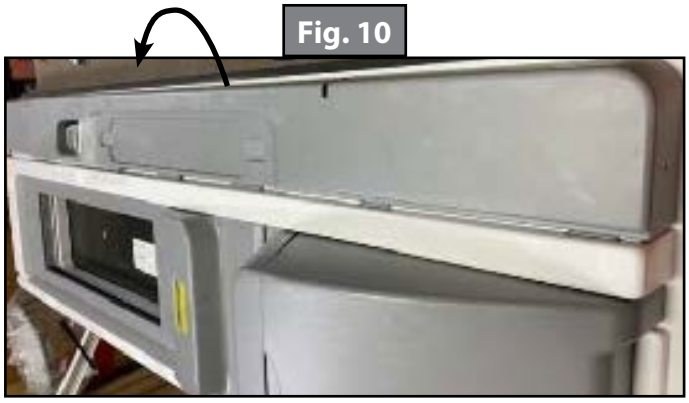


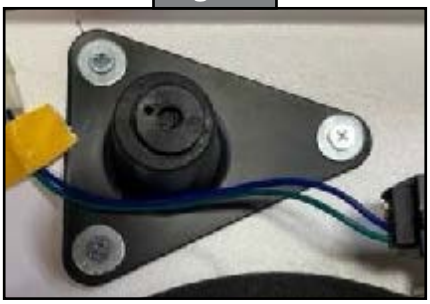
Fig. 10



3. Remove both black plastic triangular-shaped grab handle anchors by removing the three screws on each anchor (Fig. 11).

NOTE: Note the location of both grab handle anchors. They will need to be placed in the same location when reinstalling a door panel.

Fig. 11



Remove Inner Lock

1. Use a small flat screwdriver to pop off the screw cover cap (Fig. 12).
2. Remove the Phillips head screw securing the lock to the door.

NOTE: The inner lock is attached to the central lock assembly by a steel rod. Leave this connected (Fig. 13).

Fig. 12

Fig. 13

Take Measurements

1. Before removing the upper and lower lock assemblies, take measurements from the external sides of the aluminum profile (Figs. 14 and 15).

NOTE: These measurements will be used when installing the new thermoformed inner panel.

Fig. 14

Fig. 15

Remove Lock Assemblies

1. Start removal of the central lock assembly by first removing the eight Phillips-headed screws (Fig. 16).
2. Unplug the wire at the electric actuator (Fig. 17).

NOTE: The cables to the upper and lower lock assemblies do not need to be disconnected at the central lock assembly.

Fig. 16

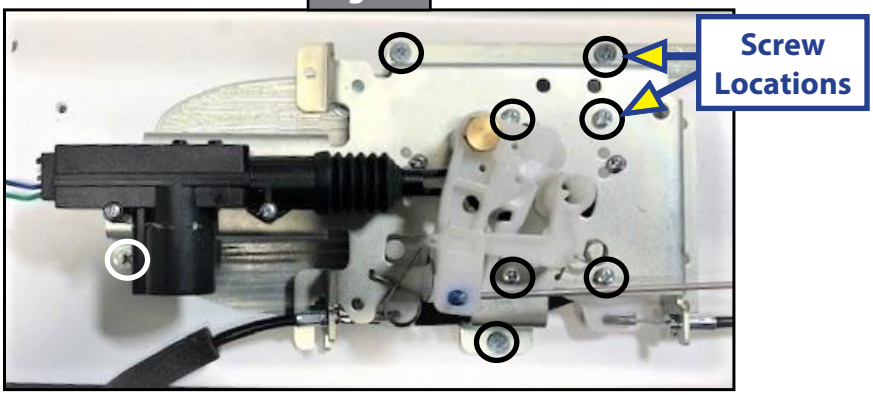
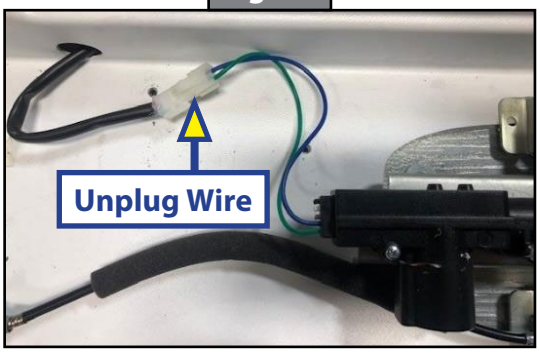
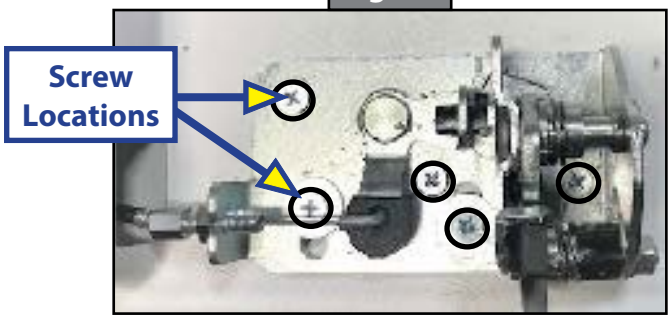


Fig. 17



3. The upper and lower lock assemblies can now be addressed. Loosen the five Phillips head screws on the assemblies (Fig. 18).

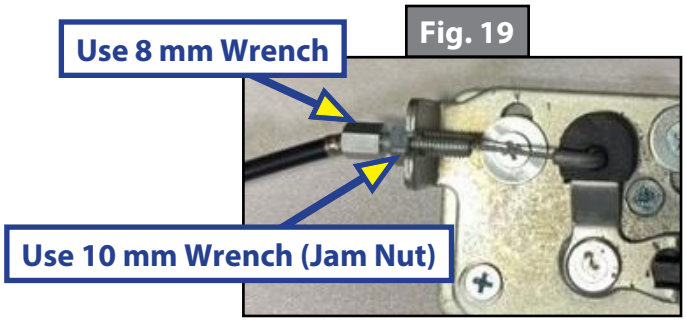
Fig. 18



4. Once the upper and lower lock assemblies are loose, the cable linkage at the upper lock can now be removed. This will allow the cable to pull through the opening in the inner panel.
5. Mark the location of the jam nut (Fig. 19).
6. Using 8 mm and 10 mm wrenches, loosen the jam nut 1/4 turn (Fig. 19).
7. Thread the cable end out of the upper lock assembly and remove the cable from the lock assembly.

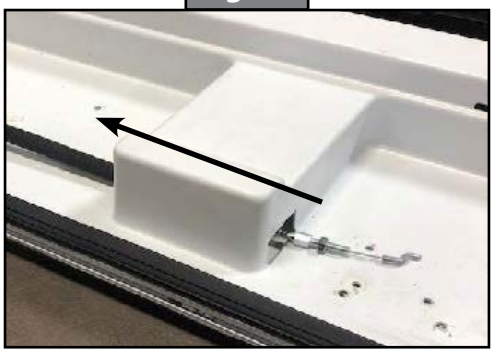
NOTE: Make sure the adjustment is the same when reassembling a new door panel.

Fig. 19



8. With all the lock components loose, they can now be removed. The central lock assembly, the lower lock assembly and the inner lock will be removed as an assembly. The upper lock will be separate.
9. Pull the upper lock cable through the opening in the panel (Fig. 20). The only linkage that should have been disconnected is the upper cable.

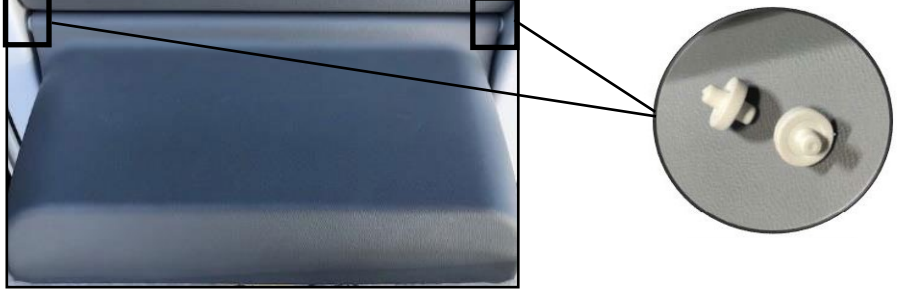
Fig. 20



Remove Thermoformed Accessories

1. Insert a plastic pry bar between the trash bin cover and the white panel near the white hinge pins (Fig. 21).
2. Carefully pry the cover away from the panel until the pin releases.
3. Release the pin on the other side and remove the cover.

Fig. 21



4. The trash bin can be removed by removing the two fasteners inside the bin at the top. Turn the fasteners with a flat blade screwdriver half a turn and pull out fasteners (Fig. 22).
5. Lift trash bin up and out (Fig. 23).

Fig. 22

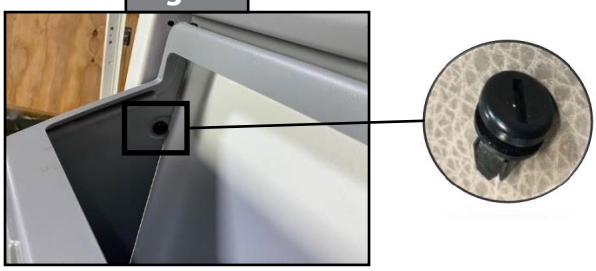
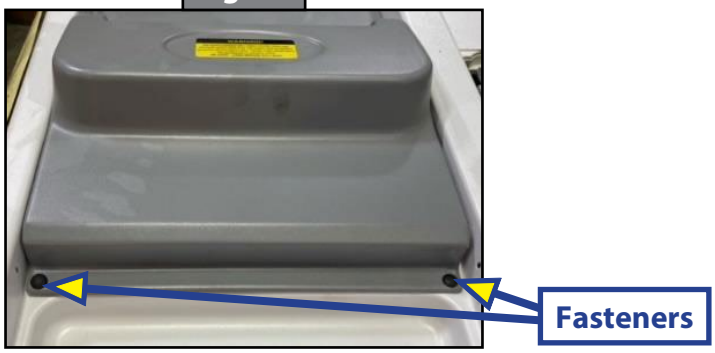


Fig. 23

6. With the trash bin removed, the two Christmas tree fasteners at the bottom of the gray center panel can be removed (Fig. 24).

Fig. 24



7. The gray center panel at the top of the door is attached to the white inner panel with double-sided adhesive tape and six side tabs. Starting at the bottom, CAREFULLY lift the panel with a pry bar and begin cutting the tape with a utility knife (Fig. 25).

8. Continue lifting slowly and cutting until the panel is free (Figs. 26 and 27).

NOTE: This panel can easily crack, so take care when removing it.

Fig. 25

Fig. 26

Fig. 27

9. After the gray center panel is removed, the blind can then be removed (Fig. 28). This is also held in place with double-sided tape.
10. Gently cut around the back side of the blind and lift up (Fig. 29).

Fig. 28

Fig. 29

11. Once the blind is removed, check under the blind for four screws and then remove the screws (Figs. 30 and 31).

Fig. 30

Fig. 31

12. The white inner panel can now be removed. With a utility knife, begin cutting the double-sided tape around the perimeter of the door (Fig. 32).
13. Once the outer strips of tape are released, carefully begin lifting and cutting the double-sided tape (Fig. 33) that is applied at several locations under the panel (Fig. 34) until the panel releases.

NOTE: While cutting around the perimeter of the door, take care not to cut the wire harness near the contacts mounted in the edge of the door (Fig. 35).

14. Once the inner panel is released, feed the lock wire harness through the opening in the panel and remove the panel.
15. Remove the step switch magnet and note its location before discarding the inner panel.

Fig. 32

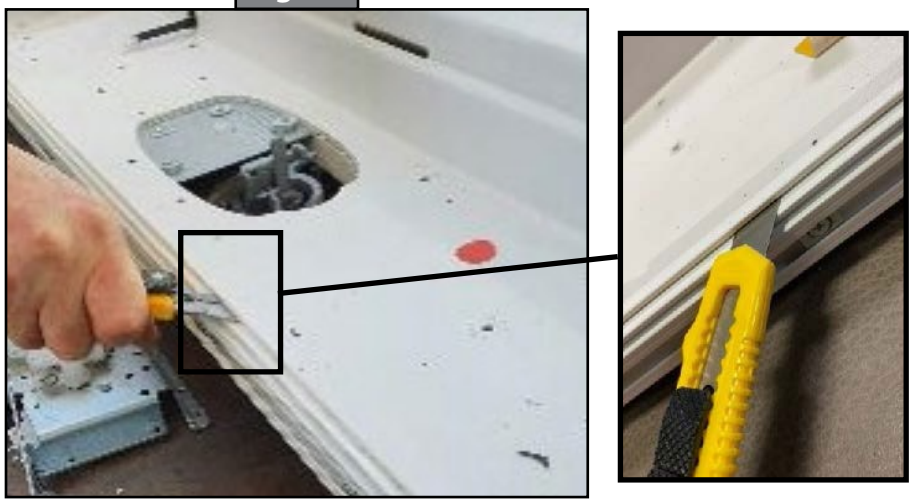


Fig. 33

Fig. 34

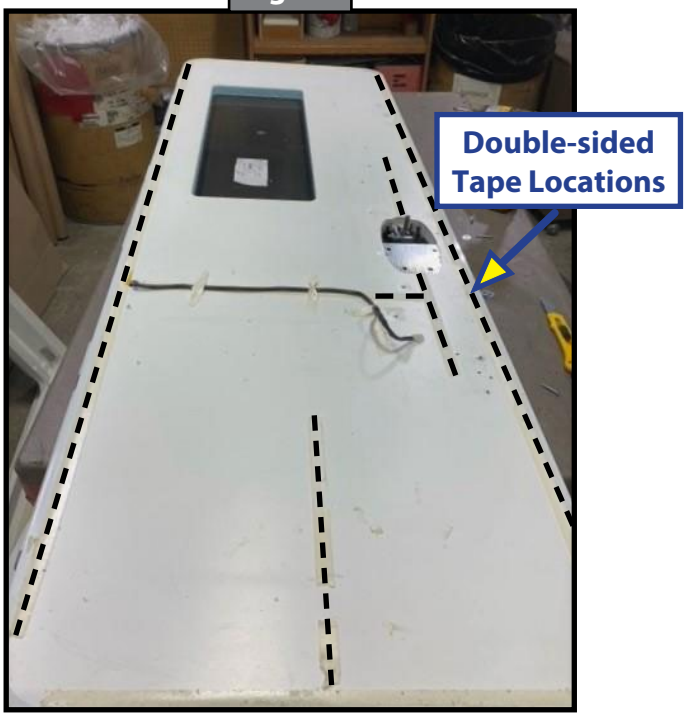
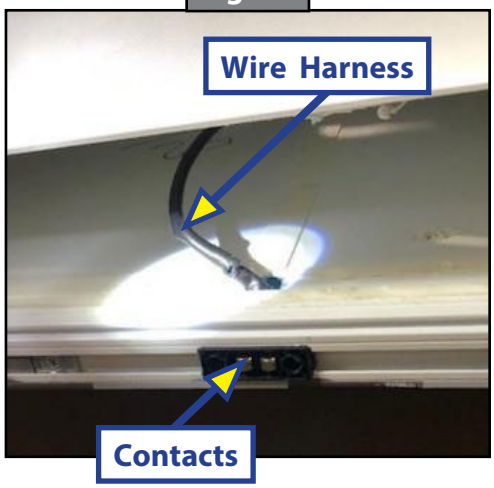


Fig. 35



16. Scrape off double-sided tape residue from the door.
17. Clean with an adhesive remover and wipe with an adhesive promoter.

Fig. 36

Reinstall New Inner Panel

1. Replace new strips of double-sided tape on the door, matching the locations of the previously-installed tape (Figs. 34 and 37).
2. Install new double-sided strips on the new thermoformed white inner panel in the same locations as those on the removed sheet (Fig. 38).
3. Remove protective film from all the double-sided tape on both the door and new inner panel.
4. Position the new thermoformed inner panel over the door and install on door, making sure its placement is correct (Fig. 39).

Fig. 37

Fig. 38

Fig. 39

5. Replace the four screws at the corners of the window compartment (Fig. 40).
6. Replace the double-sided sponge (Fig. 41).

Fig. 40

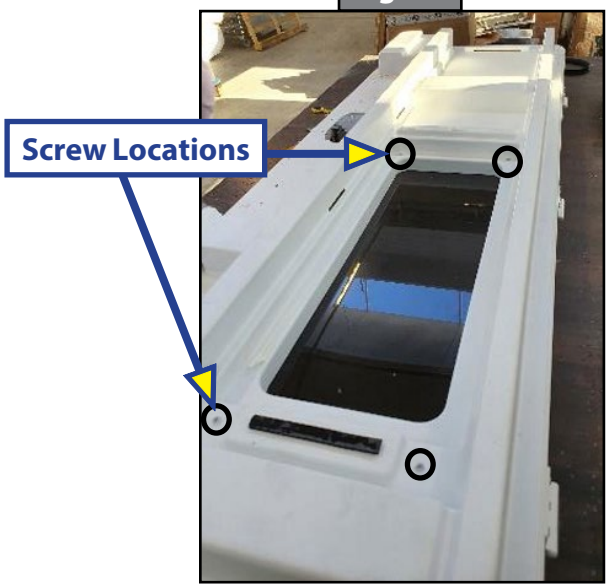
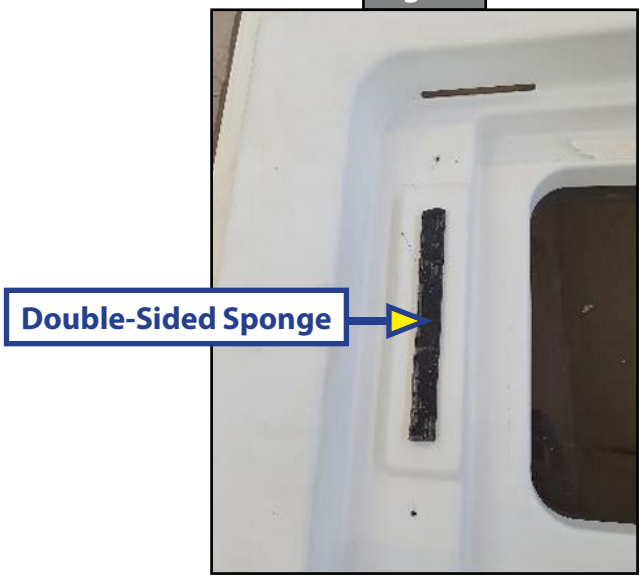


Fig. 41

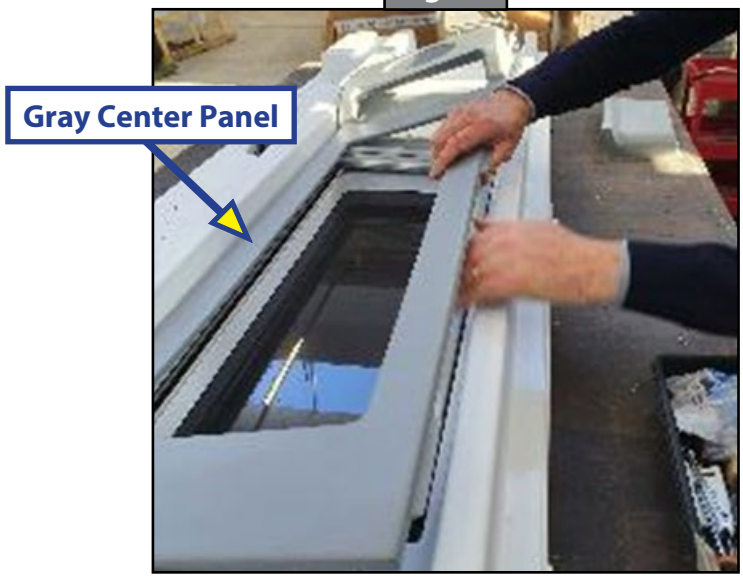


Install Window Blind, Gray Center Panel

1. Apply double-sided adhesive strips to the door surface and place the window blind/shade into the housing (Fig. 42).
2. Apply double-sided adhesive strips to the top of the window blind to secure the gray center panel.
3. Place the gray center panel into its slot (Fig. 43).
4. Install fasteners at the bottom of the gray center panel (Fig. 24).

Fig. 42

Fig. 43



Reinstall Thermoformed Accessories

1. Position trash bin in its seat (Fig. 44).
2. Insert the fasteners on both sides of the trash bin.
3. With a flat blade screwdriver, turn fasteners half a turn to the closed position to secure the trash bin (Fig. 45).

Fig. 44

Fig. 45

4. Place trash bin cover in place.
5. Carefully pry the sides of the cover until it slides into the white hinge pin (Fig. 46).
6. Repeat for the other side.

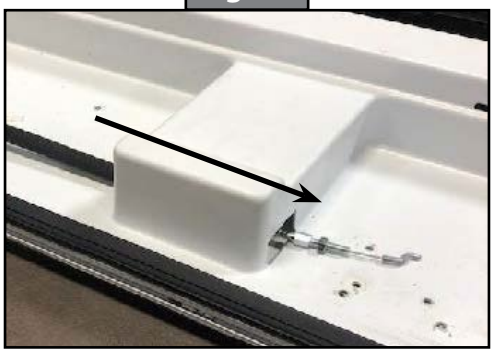
Fig. 46

Reinstall Lock Assemblies

The lock assemblies will now be reinstalled by reversing the procedure used during removal. See Remove Lock Assembly section for more information. The central lock assembly, the lower lock assembly and the inner lock were removed as an assembly. The upper lock is separate.

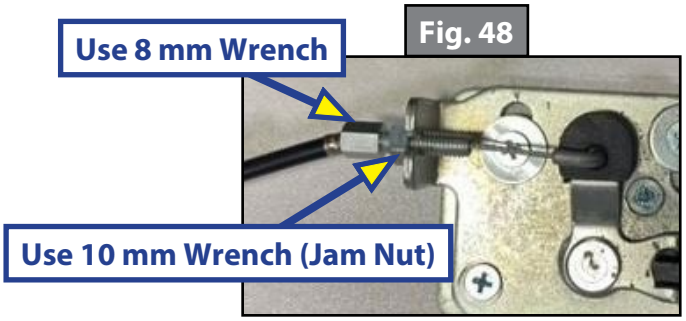
1. Push the upper lock cable through the opening in the panel (Fig. 47). The upper lock cable is the only linkage that should have been disconnected.

Fig. 47



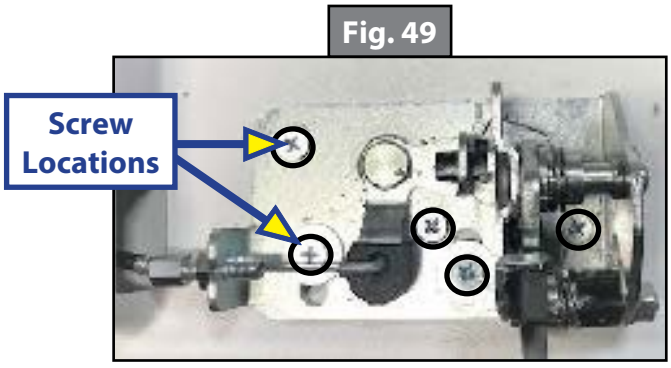
2. Thread the cable into the upper lock assembly and install on the lock assembly.
3. Using 8 mm and 10 mm wrenches, tighten the jam nut to match the marked location when it was removed.

Fig. 48



4. The upper and lower lock assemblies can now be reattached. Tighten the five Phillips head screws on the assemblies (Fig. 49).

Fig. 49



5. Plug in the wire at the electric actuator (Fig. 50).
6. Reinstall the eight Phillips-headed screws securing the central lock assembly (Fig. 51).

Fig. 51

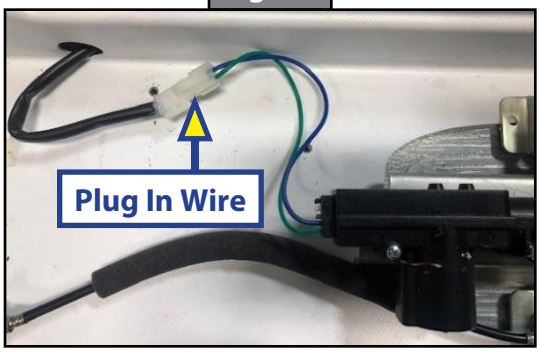
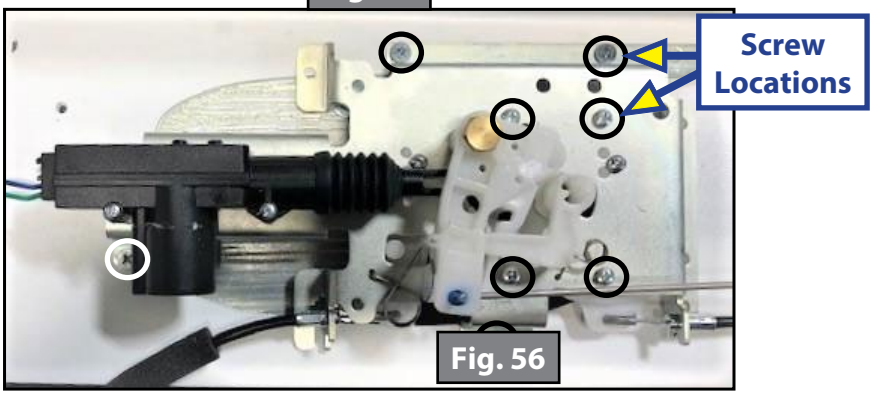


Fig. 50



Reinstall Inner Lock

1. Reinstall Phillips head screw securing inner lock to the door (Fig. 52).
2. Replace screw cover cap (Fig. 53).

Fig. 52

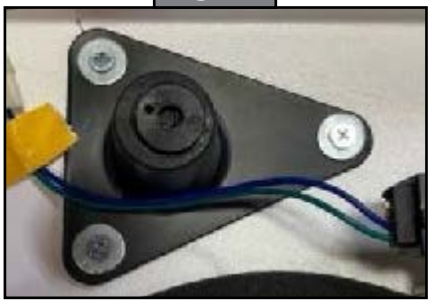
Fig. 53

Reinstall Grab Handle Anchors, Gray Access Panel

1. Reinstall the black plastic triangular-shaped grab handle anchors in the previous locations.
2. Secure the anchors (Fig. 54) using three screws per anchor (Fig. 55).

Fig. 54

Fig. 55

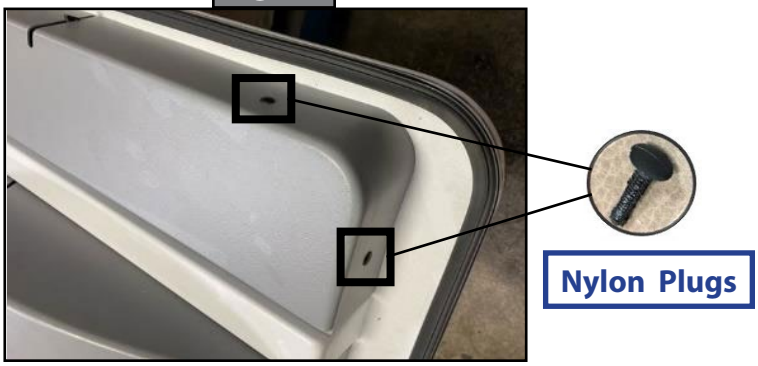


NOTE: In the unlikely event that further adjustment of locks is necessary, complete the procedure prior to reinstalling the gray access panel. For instructions, see the Adjusting Locks section at the back of this document.

3. Reinstall the gray access panel by lifting up on the outer edge and feeding the inner lock through the opening in the panel (Fig. 57).
4. Replace the four nylon Christmas tree plugs securing the gray access panel. There are two plugs in the upper corner and two plugs in the lower corner (Fig. 58).

Fig. 57

Fig. 58



Reinstall Grab Handle

1. Place inner grab handle into the correct position and secure with Phillips head screws (Figs. 59 and 60).
2. Place the two handle covers into position and secure with 2.5 mm set screws (Fig 61).

Fig. 59

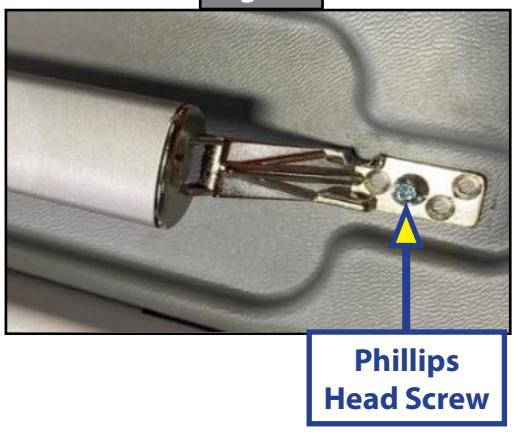


Fig. 60

Fig. 61

Reinstall Door Seal

1. Replace the black rubber seal extending around the entire perimeter of the door (Fig. 62).

Fig. 62

NOTE: If the Strut Kit Service Campaign (campaign numbers 70-75 or 70-77) has not been completed, complete this now. This consists of installing a new style strut bracket and strut to the door. Instructions are included in the kit PN 329933-01-721. After reinstalling door, install the strut.

Reinstall Door

1. Lift up door and reinstall it on the door frame attached to the wall of the vehicle.
2. Reinstall the two Torx-headed screws holding the bottom portion of each hinge to the door.
3. Verify the correct functioning of the door and components (Fig. 63).
   - **A.** Check that the positioning of the door, with respect to the external frame remaining on the vehicle wall, is centered and the gap between the mobile part and the fixed part of the door is uniform throughout the door perimeter.
   - **B.** Verify the door opening is free of obstructions or abnormal stress and that the hinge assemblies are working properly.
   - **C.** Verify the lock system is working properly.
   - **D.** Verify the lock security system can be engaged either manually through the interior handle or through the electrical actuator.
   - **E.** Check the window blind functionality.
   - **F.** Check the functionality of the piston assembly.

Fig. 63

Adjusting Locks

NOTE: The process to replace a thermoformed panel typically doesn't require any further adjustment of the locks. However, if adjustment is needed, it must be completed prior to replacement of the gray access panel. The steps for lock adjustment are outlined below.

1. The lock assembly must be adjusted so that when operating a metal rod, the two lock strikers open simultaneously.
2. Manually bring the two strikers into closed position (Fig. 64).
3. Operate the metal rod by pulling it toward the top of the door to simulate the door opening. It should bring the two strikers into the open position (Fig. 65).
4. To adjust the opening of the strikers, turn the adjustment sleeve (Fig. 66) on both upper and lower strikers.
5. Repeat the operation in sequence until the two strikers open simultaneously.

Fig. 64

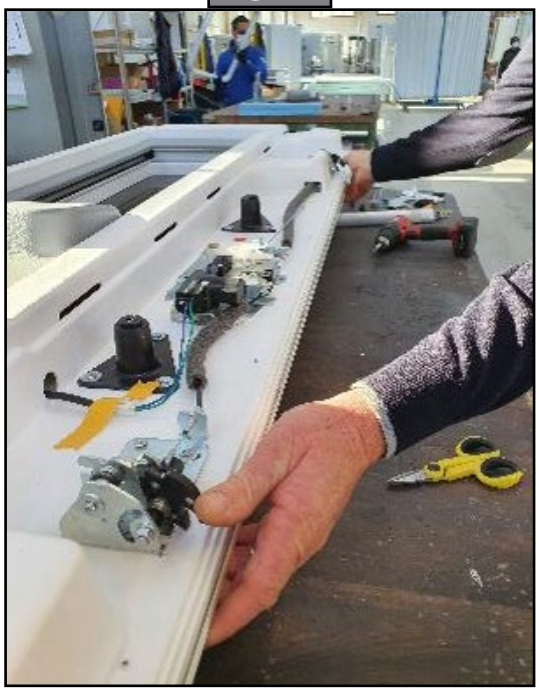
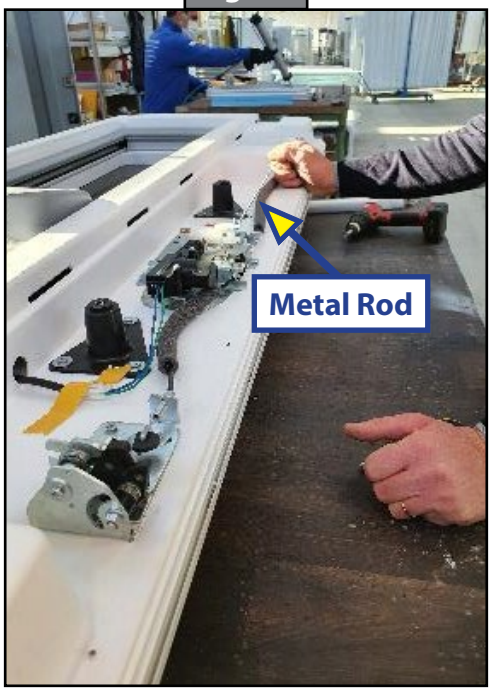


Fig. 65



6. Once the correct adjustment has been reached, tighten the jam nut (Fig. 66) with a 10 mm wrench to fix the position of the cables on the two strikers.
7. Manually bring the two locking hooks (Fig. 67) to the first locking click and check that they remain in this position independently.
8. Manually move the two locking hooks to the second closing action and check that the safety device engages by moving the metal rod downward.
9. Operate the external door handle to simulate opening and check that the lock unit remains in the closed position. This verifies the correct functioning and insertion of the safety device on the lock unit.

Fig. 66

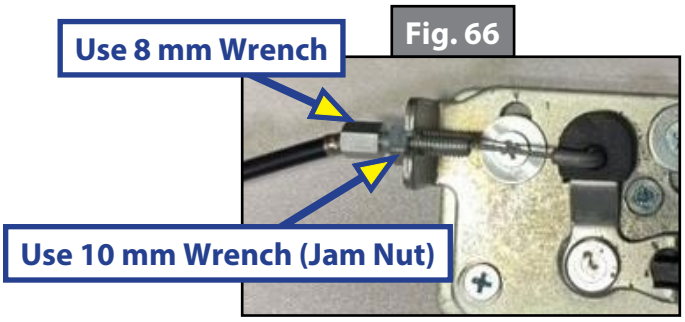
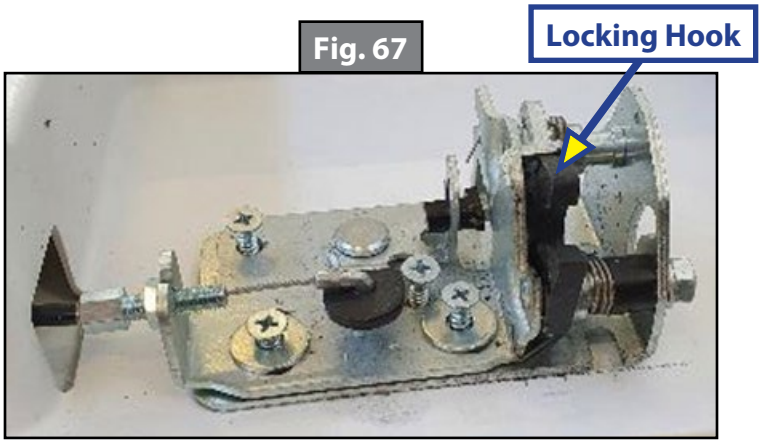


Fig. 67



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