DOOR ADJUSTMENT PROCEDURES

Proper door adjustment is essential in applications with extended use of sliding door and rear cargo doors. Misadjusted doors will reduce the service life of door hinges and related parts.

This module covers the adjustment procedures for:

- Sliding doors
- Rear hinged cargo doors

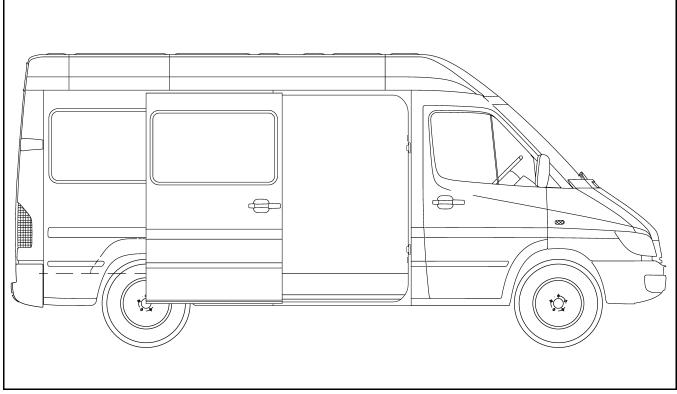


Figure 1 Sprinter Sliding Door

SLIDING DOOR ADJUSTMENT PROCEDURE

1. Check the sliding door gap all the way around (Figure 2). The gap nominal value is $7 \text{ mm } \pm 0.5 \quad (0.276 \text{ in } \pm 0.019).$

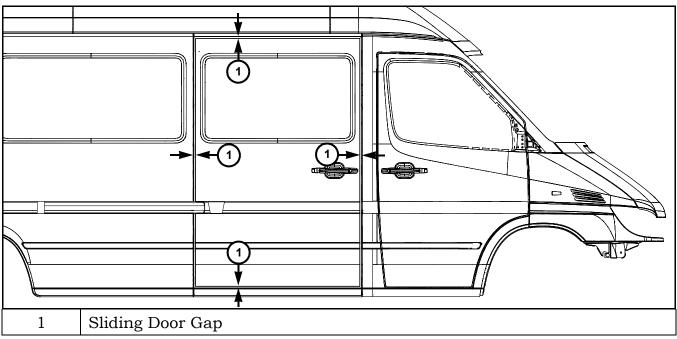


Figure 2 Sliding Door Gap

2. Check the sliding door ridge at the B-pillar and side panel areas (Figure 3). The door ridge should be flush without offset.

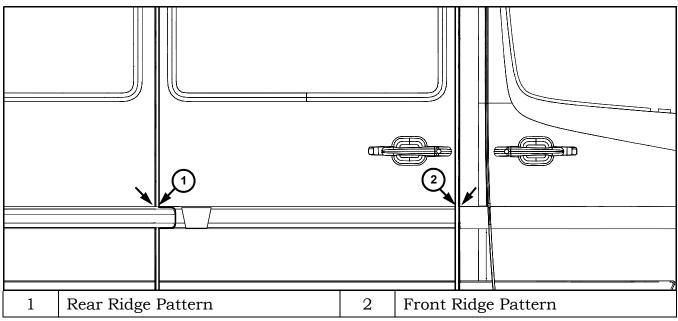


Figure 3 Sliding Door Ridge Pattern

3. Tighten door stabilizer receiver bolts to 10 N·m (89 in. lbs). See Figure 4.

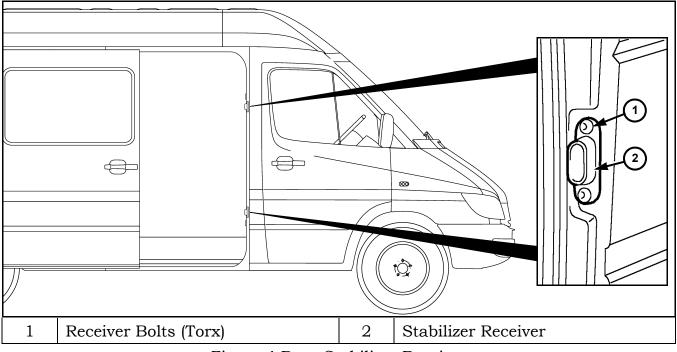


Figure 4 Door Stabilizer Receiver

4. Loosen stabilizer closing wedge bolts to allow wedge to move. It must be possible to move the closing wedge during the entire adjusting procedure. In order to close the door during adjustment move guide wedge if necessary (Figure 5).

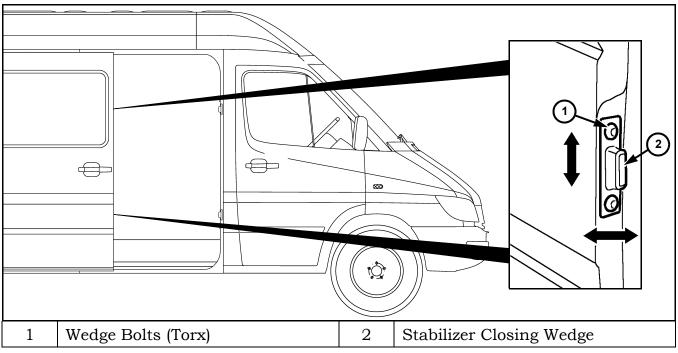


Figure 5 Door Stabilizer Closing Wedge

5. Loosen center roller arm bolt and adjust rear ridge pattern by lifting or lowering sliding door (Figure 6). Tighten center roller arm bolt.

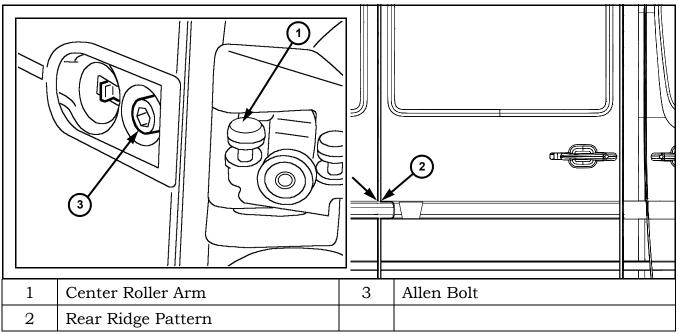


Figure 6 Rear Ridge Pattern Adjustment

- 6. Loosen upper roller arm bolts (Figure 7). Loosen lower roller arm bolts.
- 7. Adjust front ridge pattern at upper roller arm by raising or lowering the sliding door.

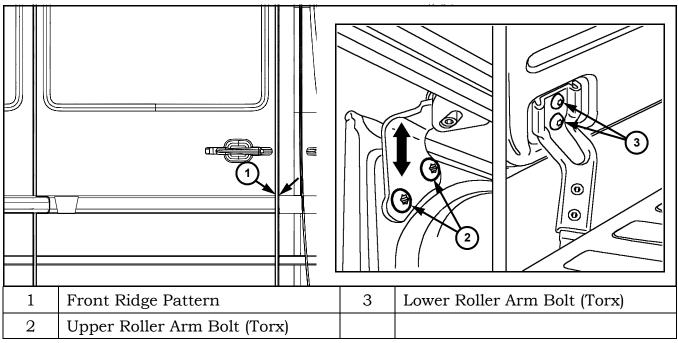


Figure 7 Front Ridge Pattern Adjustment

- 8. Tighten upper and lower roller arm bolts to 25 N·m (18 ft. lbs).
- 9. Loosen latch striker bolts and adjust to the modified door position by moving striker vertically (arrow). See Figure 8.

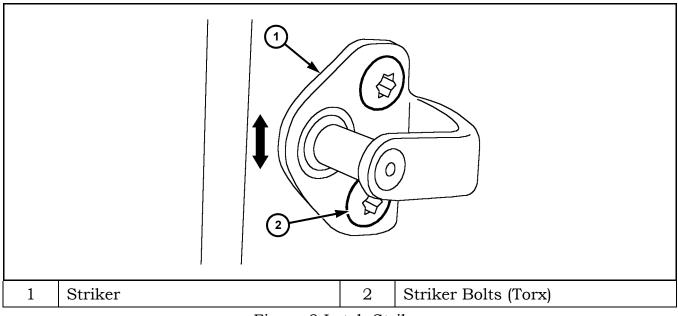


Figure 8 Latch Striker

10. Tighten latch striker bolts to 25 N·m (18 ft. lbs).

NOTE: Do not lift or pull down the sliding door over the striker. When the ridge pattern is even, the bottom and top door gaps should be within the specified tolerance range (Figure 9). For optical reasons a slightly wedge-shaped door gap at the top and bottom is preferable to a ridge offset.

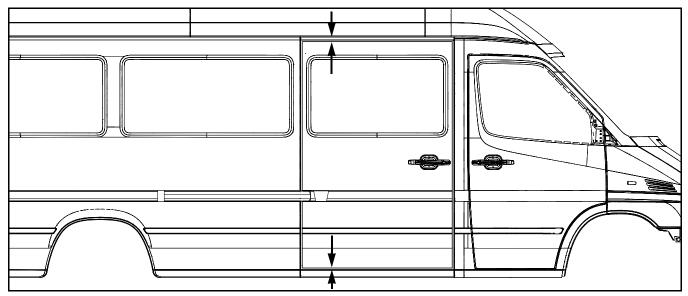


Figure 9 Bottom and Top Door Gaps

11. Loosen center roller arm bolt and adjust side gaps by adjusting center roller arm horizontally (arrow). See Figure 10.

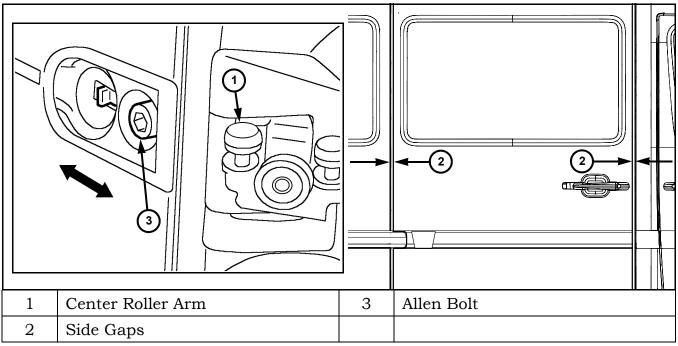


Figure 10 Side Gap Adjustment

12. Tighten center roller arm bolt (3).

NOTE: To avoid wind noises, the sliding door flushness at B-pillar should be flush to 1 mm (0.039 in.) recessed, and flush to 1 mm (0.039 in.) protruded at C-pillar (See steps 13-14).

13. Loosen upper and lower roller arm adjustment bolts (Figure 11).

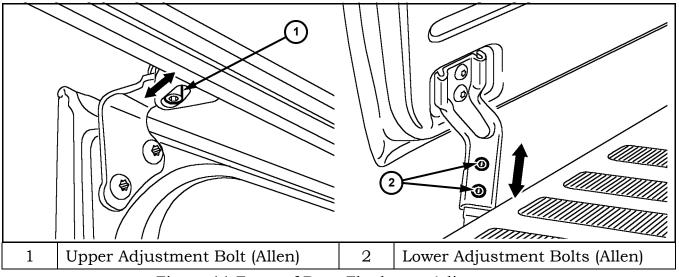


Figure 11 Front of Door Flushness Adjustment

- 14. Adjust front of door flushness to B-pillar by altering the position of top and bottom roller arms.
- 15. Tighten upper and lower roller arm adjustment bolts.
- 16. Loosen latch striker bolts (See Figure 12).

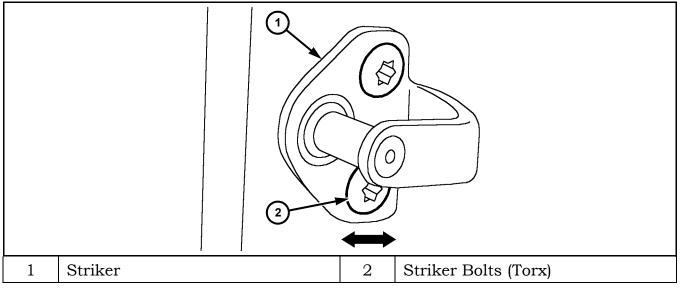


Figure 12 Rear of Door Flushness Adjustment

- 17. Adjust rear of door flushness by moving striker horizontally (arrow). See Figure 12. Rear edge of sliding door should be flush or with a 1 mm (0.039 in.) protrusion. Tighten latch striker bolts to 25 N·m (18 ft. lbs).
- 18. Loosen stabilizer closing wedge bolts (Figure 13).
- 19. Adjust the position of the stabilizer closing wedges in relation to the stabilizer receivers by moving the guide wedges (arrows A, B). See Figure 13.

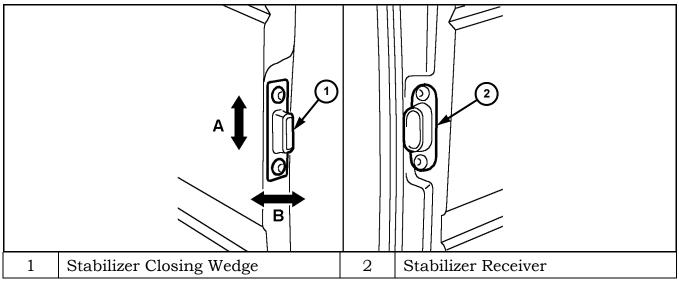


Figure 13 Stabilizer Closing Wedge Adjustment

- 20. Close sliding door to center the stabilizer closing wedge at the receiver.
- 21. Check front of door flushness in relation to B-pillar. The front of door should be flush or recessed 1 mm (0.039 in).
- 22. Open door and tighten stabilizer closing wedge bolts to 10 N·m (89 in. lbs).
- 23. Loosen door stop bumper bolts (See Figure 14).

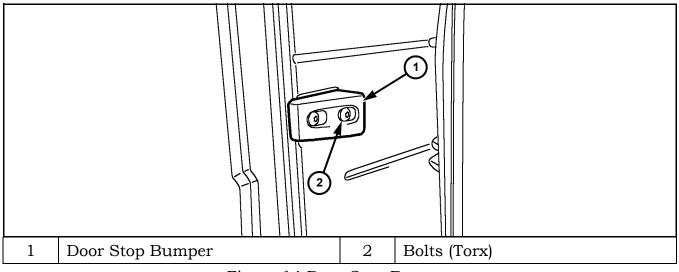


Figure 14 Door Stop Bumper

- 24. Open sliding door and hold tight in end position.
- 25. Hold door stop bumper tight against C-pillar and tighten bolts to 10 N·m (89 in. lbs).
- 26. Inspect B-pillar rubber buffers. Replace if broken or missing to avoid damage to B-pillar when sliding door is closed with a swing. Glue upper rubber buffer to B-pillar approximately 30 mm (1.18 in.) above upper stabilizer receiver (Figure 15).

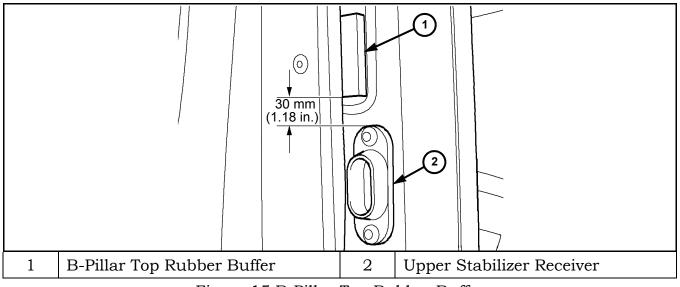


Figure 15 B-Pillar Top Rubber Buffer

27. Glue bottom rubber buffer to B-pillar approximately 35 mm (1.38 in.) below bottom stabilizer receiver (Figure 16).

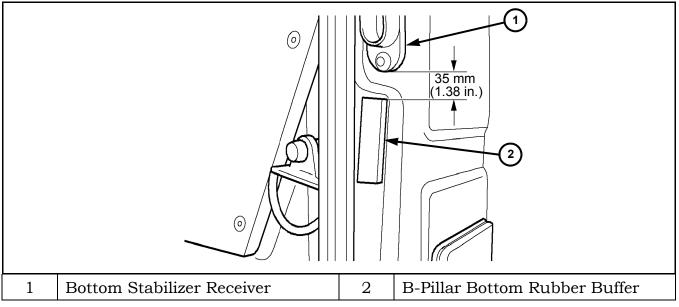


Figure 16 B-Pillar Bottom Rubber Buffer

NOTE: Glue rubber buffers only to outer edge of B-pillar to avoid pinching the weatherstrip between the door and rubber buffer when closing the sliding door.

28. Check sliding door for easy motion.

REAR DOOR ADJUSTMENT PROCEDURE

1. Check door gap around rear doors (Figure 17). The door gap all around except at the top should be 8 mm ± 0.5 (0.315 in ± 0.019). The door gap at the top should be 13 mm ± 0.5 (0.512 in ± 0.019).

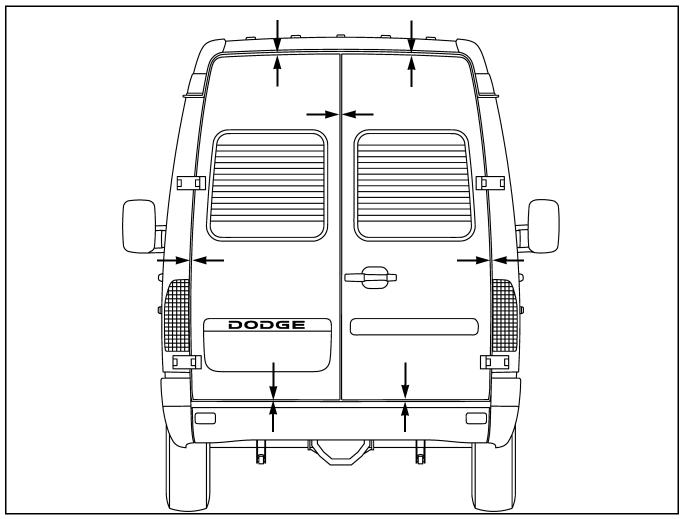


Figure 17 Rear Door Gap Measurements

2. Open doors and loosen the hinge rounded-head torx bolts (Figure 18).

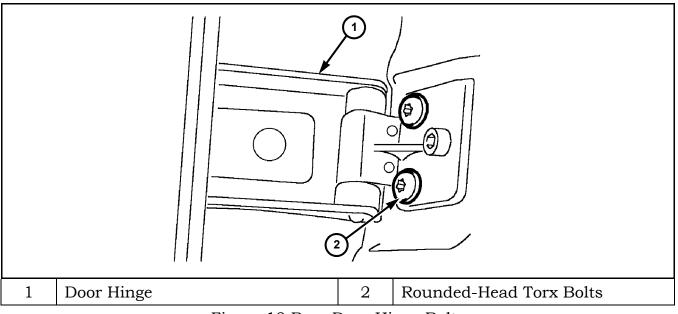


Figure 18 Rear Door Hinge Bolts

3. Close the door and check gap measurement. Loosen socket-head torx bolt through hole in hinge (Figure 19).

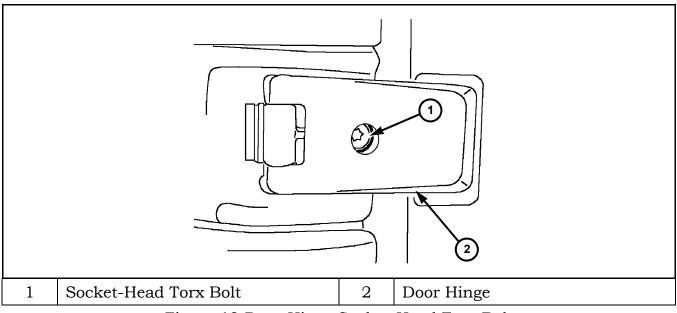


Figure 19 Door Hinge Socket-Head Torx Bolt

- Adjust rear door so that bottom closing wedges (Figure 21) make contact and door gaps are uniform all the way around. Tighten socket-head torx bolt to 25 N⋅m (18 ft. lbs).
- 5. Open doors and tighten rounded-head torx bolts to 25 N·m (18 ft. lbs).

6. Loosen door striker and adjust horizontally so right door is flush with the left door (Figure 20).

NOTE: Striker should engage in latch at center. Door should not be lifted or pushed downward with striker.

7. Tighten door striker.

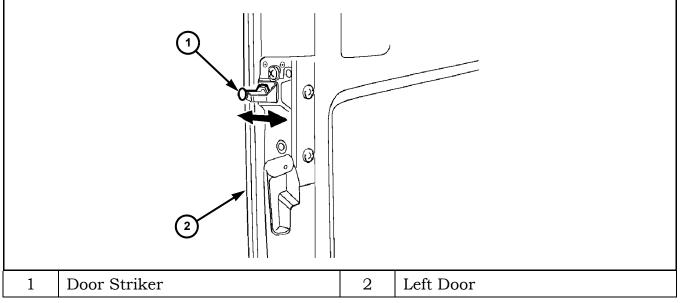


Figure 20 Door Striker Adjustment

8. Check adjustment of rear door closing wedges (See Figure 21). Closing wedges at bottom must be resting free of play on plastic closing plates when rear doors are closed. To adjust, loosen door hinges and raise or lower complete doors.

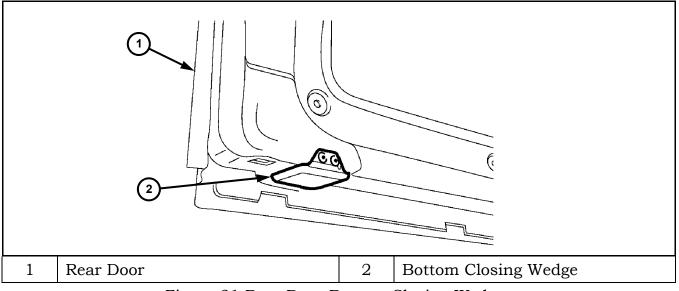


Figure 21 Rear Door Bottom Closing Wedges

NOTE: Since the rear doors are involved with vehicle stability, it is important that the rear doors fasten securely when the vehicle is moving. This prevents excessive torsion of the vehicle and leaky rear doors. The rear doors are fastened by adjusting the closing wedges.

Construct a gauge block out of hardwood or plastic (See Figure 22). The gauge is required for adjusting the upper closing wedges on the rear doors.

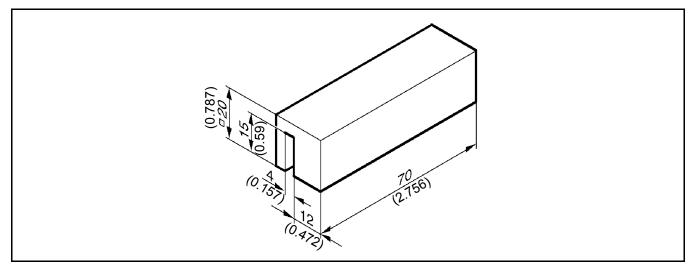


Figure 22 Gauge Block Dimensions in mm (inches)

9. To adjust upper closing wedge of left rear door, push gauge block onto door at top near lock pin so that the 12 mm-thick side (0.472 in.) faces the cargo space (Figure 23).

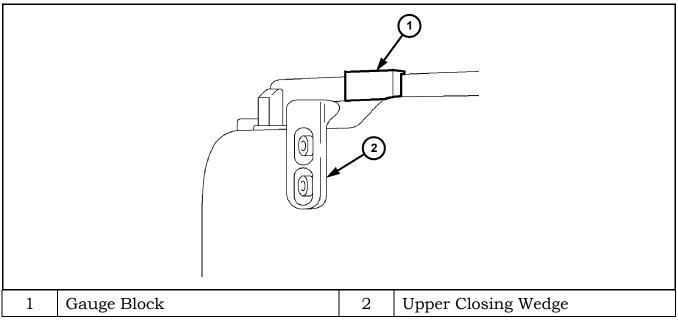


Figure 23 Upper Closing Wedge Adjustment

- 10. Close rear door until the gauge block makes contact below the roof drip molding. Adjust upper closing wedge so that it rests on plastic closing plate free of play. Tighten closing wedge screws to 10 N·m (89 in. lbs.).
- 11. Adjust upper closing wedge of right rear door, so that it rests on plastic closing plate free of play when the rear door is closed. Tighten closing wedge screws to 10 N·m (89 in. lbs.).

NOTE: If the contact pressure is too low, leakage can occur on the seal of the left rear door. To seal rear door, pad the vertical seal at the top using sealing strip (part number 000 989 97 98) to increase the contact pressure (See Figure 24).

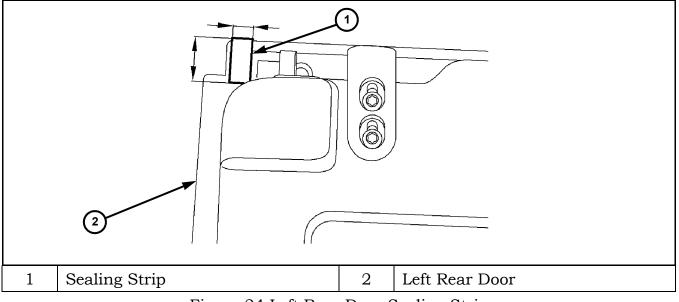


Figure 24 Left Rear Door Sealing Strip

12. Check and adjust the hinges. On rear doors, the retaining magnets should run up to the middle of the mating plate at the side wall. If this is not the case, correct as listed (Figure 25).

NOTE: There are two adjustment allen setscrews on each rear door hinge. In some cases, an additional third allen setscrew may be found (Figure 25).

CAUTION: Do not overadjust the allen setscrews (risk of control cam breaking). The adjustment range of the allen setscrews is 1 turn **MAXIMUM**. See Figure 25.

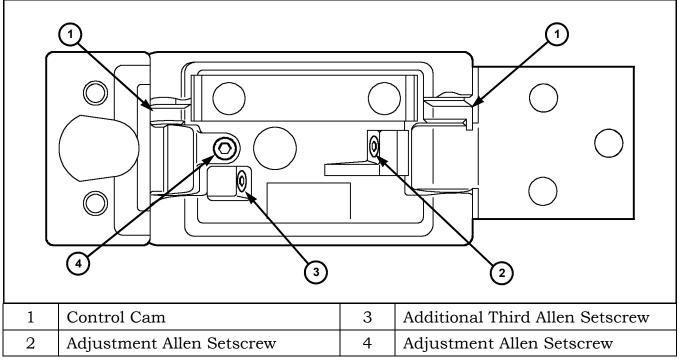


Figure 25 Rear Hinge Adjustment Setscrews

- Retaining magnet is too far forward relative to mating plate: Turn in adjusting screw (2) at top and bottom hinge.
- Retaining magnet is too far back relative to mating plate: Turn out adjusting screw (2) at top and bottom hinge.
- Retaining magnet is too deep relative to mating plate: Turn in adjusting screw (2) at top hinge, turn out adjusting screw (2) at bottom hinge.
- Retaining magnet is too high relative to mating plate: Turn out adjusting screw (2) at top hinge, turn in adjusting screw (2) at bottom hinge.
- Retaining magnet strikes too hard against mating plate. Turn in adjustment screw (3) at top and bottom hinge.
- Retaining magnet does not make contact with mating plate. Turn out adjustment screw (3) at top and bottom hinge.
- Door projects at corner paneling when closed: Turn out adjusting screw (4) at hinge.
- Door is too far recessed at corner paneling when closed: Turn in adjusting screw (4) at hinge.
- 13. Check rear doors for ease of movement.
- 14. Finish paint in adjustment range of hinges on rear pillars using brush Since the hinges are already installed on the body shell at the factory it is not possible for a corrosion protection agent to adhere to the contact surfaces. The unprotected areas must therefore be touched up after adjustment.