

# Premier Seat Service Instructions

Rev. 0

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**General Notes:**

- Updates to seat design and components do occur. Verify seat version information and obtain respective service instructions at website:  
[www.safeguardseat.com](http://www.safeguardseat.com)
- Always observe necessary safety precautions when servicing seats. Always disconnect electrical power when servicing seats with electrical outlets or any other features that are electrical powered.
- Replacement parts may be ordered through SafeGuard/IMMI and/or American Seating
- Tools required for seat service:
  - Medium Flat Blade Screwdriver
  - Two (2) open end/box end wrenches - ½”
  - Open end/box end wrenches – 5/8”
  - Socket wrench with short extension – ½” and 5/8” sockets
  - Socket driver – 5/16” socket bit
  - Hex drive wrench or socket bit – 3/16”
  - Torx-50 Socket bit

## PREMIER SEAT SERVICE INSTRUCTIONS

### Seat Cushion Assembly Pivot Release:

1. Under seat cushion, find spring loaded latch mechanism, then push release lever
2. Grasp seat cushion at forward edge and lift upward.



### Seat Cushion Assembly Removal:

1. Remove inside nut (5/16 –18 x 3/4") from each side of the seat cushion pivot bolts.
2. Pry one pivot bracket to the inside and remove the seat cushion hinge bracket from the pivot bolt.
3. Slide entire seat cushion from the opposite pivot bolt and remove from the seat.
4. Assembly is reverse of removal.



**Kick Panel Assembly Removal:**

1. Release seat cushion latch and tilt seat cushion up.
2. Insert standard screwdriver tip between the kick panel upper attachment bracket and the seat base.
3. Pry or twist screwdriver until pine tree fastener falls out.
4. Repeat steps 2 and 3 for other side.
5. From rear side of seat, grasp the top edge of kick panel, then tilt panel out and up.
6. Assembly is reverse of removal. Assure alignment of holes prior to installing pine tree fastener.
7. Assembly is reverse of removal.



**Buckle Removal:*****Aisle Side***

1. Pry out and remove hole plug with tip of standard screwdriver
2. Remove hex bolt (7/16–20 x 1”) with socket wrench (5/8”)

***Center***

1. Locate bolt at base of center buckle
2. Remove hex bolt (7/16-20 x 1”) using” box end wrench (5/8”)

**Release Handle Removal:**

1. Perform *Buckle Removal*
2. Remove 5/16 nut at Release Handle pivot (1/2 wrench)
3. Slide handle off weld stand, twist handle to remove cable end (long-nosed needle nose pliers may be helpful)
4. Assembly is reverse of removal.



**Recline Mechanism Removal:**

1. Pull up on seat recline release lever and tilt seat back to a slight reclined position.
2. Release Seat Cushion Latch, tilt seat cushion up.
3. Remove mechanism attachment bolt (5/16-18 x 2") and nut.
4. Swing mechanism down.
5. Insert flat blade screwdriver tip under cable clip and then detach cable end. Pry and slide clip cable fitting off mechanism.
6. Allow mechanism to swing down fully, slide off of the mechanism pivot pin.
7. Assembly is reverse of removal.



**Cable Removal:**

1. Perform *Buckle Removal*
2. Perform *Release Handle Removal*
3. Perform *Kick Panel Assembly Removal*
4. At recliner release lever, squeeze cable end attachment clip protruding through bracket hole and push into hole using long-nosed needle nose pliers
5. Cut wire ties.
6. At release mechanism end, insert flat blade screwdriver tip under cable clip and then detach cable end. Pry and slide clip cable fitting off mechanism. (see **Recline Mechanism Removal**)
7. Remove cable from seat, noting the routing path.
8. Assembly is reverse of removal.



**Seat Back Removal:**

1. Perform *Seat Cushion Assembly Removal*
2. Perform *Recline Mechanism Removal* (leave attached to cable)
3. Perform *Kick Panel Assembly Removal*.
4. Remove hex bolt (7/16-20 x 3/4") from web end fitting with box wrench (5/8")
5. Remove hex bolt (7/16-20 x 3/4") retractor attaching retractor from rear of seat frame with socket wrench (5/8"). Allow retractor to swing freely.
6. Remove hex bolts (7/16-20 x 2") from pivot joints on both sides of seat back with socket wrench (5/8"). Bolts are located under the lower edge of seat back with the hex head facing the center of the seat back.
7. Grasp the top and the bottom of the seat back with each hand, and then pull the seat back up and away from the seat base.
8. Assembly is reverse of removal. Make sure seat back pivot bushings are kept fully seated to clear seat frame.



**3-Point Restraint Removal:**

1. Perform *Seat Back Removal*
2. Lift up and open lower outer cover tab on each side
3. With seat back assembly lying on bench top, locate torx bolt along each side (approximately 3" up from bottom).
4. Remove both torx bolts (7/16-20 x 1.75"), located on each side of the seat inside the upholstery openings with torx drive (T-50).
5. Carefully separate the inner panel assembly from the outer panel assembly.
6. Remove the screw (5/16" hex self-drilling type) attaching the web guide from the under side of web guide.
7. Remove the screw (5/16" hex self-drilling type) attaching the adjuster web to the seat frame from the adjuster web.
8. Unthread the adjuster web from the shoulder height adjuster.
9. Assembly is reverse of removal. Confirm that belt webbing lays flat and no twists occur prior to assembly of panels. Use drift pin to force hole alignment between inner and outer panels before installing Torx-50 bolts.



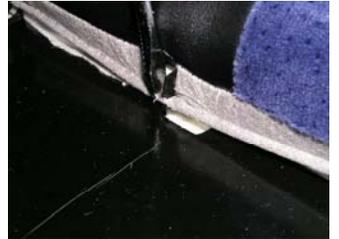
**Inner Cover Removal:**

1. Perform *Seat Back Removal*
2. Perform *3-Point Retraint Removal*
3. Pry the cover j-channel off the perimeter of the inner panel
4. Pry out the pine tree fasteners located at each corner using standard tip screwdriver.
5. Unwrap cover from around inner frame
6. Pull center kip strip firmly away from back of panel.
7. Twist kip strip 90 degrees and then insert through slots in panel and foam. Separate cover from inner frame assembly.
8. Assembly is reverse of removal.



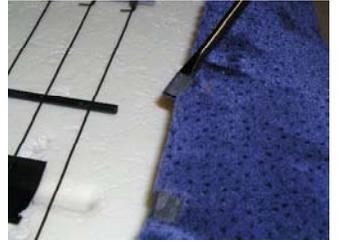
**Outer Cover Removal:**

1. Perform *Seat Back Removal*
2. Perform *3-Point Restraint Removal* (inner and outer panel separation only)
3. Pry off j-channel strips from the bottom edge outer seat frame with a flat blade screwdriver.
4. Locate hook tabs at the top of the panel near the bottom edge of the headrest. With a flat blade screwdriver tip, press the cover attachment wire down and away to clear the hook tabs.
5. Locate hook tabs along the inside channels of each side of the outer panel. With a flat blade screwdriver tip, press the cover attachment wire down and away to clear the hook tab. Continue this procedure until all tabs are cleared (6 each side).
6. On each lower corner of the seat outer panel, lift the cover tab and carpet tab off the locating screw.
7. Peel cover from foam, starting at the bottom and working towards the headrest. Peel cover off of head rest.
8. Assembly is reverse of removal.



**Seat Cushion Cover Removal:**

1. Perform *Seat Cushion Removal*
2. Remove u-clips that attach cover to frame from under side of seat cushion assembly.
3. Separate the metal frame from the seat cushion cover and foam.
4. Starting at the back (rear) side of the cushion assembly, peel cover away from foam sides.
5. Pull each center kip strip firmly away from under side of foam cushion.
6. Twist each kip strip 90 degrees and then insert through slot in seat cushion foam. Separate cover from foam.
7. Assembly is reverse of removal. Make sure to insert frame hinge tabs through slots on each rear side of the cover when inserting the frame.



**Aisle and Wall Armrest Removal:**

1. Perform *Kick Panel Assembly Removal* for seat of armrest to be removed.
2. Perform *Recline Mechanism Removal* (do not detach release cable end). Allow seat back to lay rearward.
3. From rear of seat, locate and remove nut (5/16") at lower rear of seat base frame.
4. From front of seat, locate and remove nut (5/16") at lower front of seat base frame.
5. Remove lower buttonhead socket bolt (3/16" hex key) from inside center of armrest pivot. Do not remove the upper buttonhead bolt.
6. Grasp the bottom of the seat side panel and the armrest assembly at the pivot joint. Slide the armrest assembly upward and then pull side panel out for armrest to clear seat.
7. Assembly is reverse of removal.



**Center Armrest Removal:**

1. Perform *Kick Panel Assembly Removal* (wall side only)
2. Perform *Recline Mechanism Removal* (do not detach release cable end). Allow seat back to lay rearward.
3. Remove lower buttonhead socket bolt (3/16" hex key) from inside center of armrest pivot. Do not remove the upper buttonhead bolt.
4. Grasp the armrest assembly at the pivot joint. Slide the armrest assembly upward to clear seat.
5. Assembly is reverse of removal.

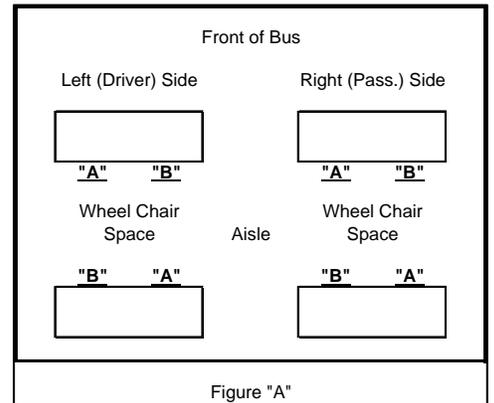


# WHEELCHAIR RESTRAINT SYSTEM SERVICE INSTRUCTIONS

## Wheelchair Tie-down Retractor Removal and Replacement

### Removal

1. Determine the correct code, "A" or "B", for the tie-down retractor to be replaced by using chart in Figure "A".
2. Verify the hook orientation of the new tie-down is the same as the tie-down to be replaced.
3. Make note of the general direction the current tie-down is pointed (forward or rearward), then remove tie-down bolt. Discard bolt.



### Replacement

1. Point tie-down in same general direction as noted in Removal Step 3. Mount the new tie-down retractor as shown in Figure "B1" if mounting to a pedestal that is behind the wheelchair; or Figure "B2" if mounting the tie-down retractor to a pedestal that is in front of the wheelchair. The mounting angle should be at 30 degrees off the floor.
2. Tighten the mounting bolt to 25 ft-lbs.

Figure "B1"

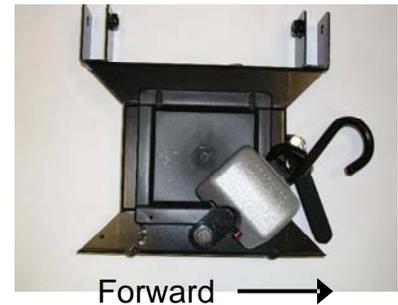
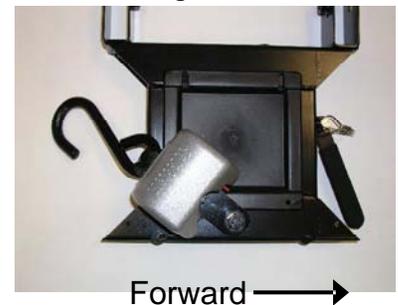


Figure "B2"



**Wheelchair Occupant Restraint System Removal and Replacement****WARNINGS**

- **Discard all previously installed fasteners and do not reuse. Replace with supplied new fasteners.**
- **If any component of the occupant restraint system is to be replaced, the complete system must be replaced. Wheelchair tie-downs may be replaced individually.**

**Removal**

1. Make note of the general direction the current pedestal mounted retractors are pointed.
2. The occupant restraint system pedestal mounted retractors differ. One has only a latch plate at the end of the web strap. The other retractor has buckle and a latch plate at the end of the web strap. Make note of which retractor is mounted to which pedestal.
3. Remove the bolts securing the pedestal mounted retractors. Discard bolts.
4. Remove the endcap attaching screw from the boot on the wall mounted retractor, Figure C.
5. Remove the mounting bolt. Discard bolt.

**Replacement**

1. Mount the new wall mounted retractor and tighten the bolt to 25 ft-lbs.
2. Close the endcap and install the screw to secure the endcap to the boot, Figure C.
3. Identify the latch plate only pedestal mounted retractor. Mount this retractor to the wall side of the pedestal nearest the wall. Point the retractor forward and at the mounting angle of 45 degrees off the floor as shown in Figure D. Install mounting bolt and tighten to 25 ft-lbs.
4. Identify the buckle and latch plate pedestal mounted retractor. Mount this retractor to the aisle side of the pedestal nearest the aisle. Point the retractor forward and at the mounting angle of 45 degrees off the floor as shown in Figure E. Install mounting bolt and tighten to 25 ft-lbs

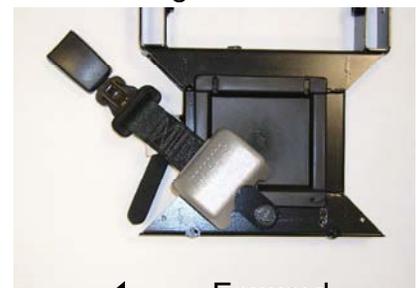
Figure "C"



Figure "D"



Figure "E"



## Inspection of Components

### ***Pedestal Mounted Retractors***

1. Fully extract web strap from the retractor, wheelchair tie-downs; and occupant restraint retractors as shown in Figure F. Web strap will fully extract on a good retractor.

Mounting to end of web strap feature lengths:

Wheelchair tie down retractor: ~ 34"

Occupant restraint latch plate: ~ 62"

Occupant restraint Buckle and latch plate: ~ 54"

2. After fully extracting the web strap, then release to a locking length. Finally, attempt to extract additional web strap. A good retractor must lock and not allow additional web strap to extract.
3. If a wheelchair tie-down retractor does not pass both tests, replace a wheelchair tie-down retractor with a new wheelchair tie-down retractor.
4. If an occupant restraint retractor does not pass both tests, then replace occupant restraint retractor and all other components of the entire occupant restraint system.

### ***Wall Mounted Occupant Restraint Retractor***

1. Fully extract web strap from the retractor, Figure G. Web strap will fully extract on a good retractor.
2. Attempt to lock retractor by giving shoulder strap web strap a rapid and sharp pull. A good retractor will lock with sufficient web strap extraction speed.
3. If wall mounted occupant restraint retractor does not pass both above tests, then replace the occupant restraint retractor and all other components of the entire occupant restraint system.

Figure "F"



Figure "G"

