

Seats and Seat Belts



Table of Contents

Sub-Headings

Safety	2
Warning	2
Cautions	2
Notes	2
Introduction	2
Seats	2
Driver's Seat Adjustment	2
Weight and Height Adjustment	3
Fore and Aft Adjustment	3
Back Angle Adjustment	3
Cushion Tilt Adjustment	3
Lumbar Adjustment	3
Manually-Operated Seat	3
Driver's Seat Lubrication	3
Driver's Seat Inspection and Maintenance	4
Driver's Seat Care and Cleaning	4
Driver's Seat Removal	4
Driver's Seat Installation	5
Driver's Seat Belt Tether Installation	5
Driver's Seat Cushion Removal And Installation—DOT Seats	5
Track-Mounted Passenger Seats	5
Track-Mounted Passenger Seat Removal	5
Track-Mounted Passenger Seat Installation	6
Seat Belts	6
Seat Belt Inspection and Maintenance	6
Driver's Seat Belt Operation	6
Driver's Seat Belt with Shoulder Harness	6
Driver's Seat Belt Removal	7
Driver's Seat Belt Installation	7
Passenger Seat Belt Operation	8
Passenger Seat Belt Removal	8
Passenger Seat Belt Installation	8

List of Figures

Figure 1—Driver's Seat Adjustment	2
Figure 2—Manually-Operated Driver's Seat	3
Figure 3—Driver's Seat Attachment Points	5
Figure 4—Track-Mounted Passenger Seat Removal and Installation	6
Figure 5—Driver's Seat Belt Attach Points	7

Seats and Seat Belts

Safety

The purpose of this safety summary is twofold. First, it is to help ensure the safety and health of individuals performing service and maintenance on, or operation of, this Blue Bird product. Second, it is to help ensure protection of equipment. Before performing any service, maintenance or operating procedure on this product, individuals should read and adhere to the applicable warnings, cautions and notes located throughout this Blue Bird Service Manual.

Warnings

Warnings apply to a procedure or practice that, if not correctly adhered to, could result in injury or death. Particular attention should be paid to sections of this manual where warnings appear.

Cautions

Cautions apply to a procedure or practice that, if not correctly adhered to, could result in damage to or destruction of equipment.

Notes

Notes are used to explain, clarify, or otherwise give additional insight for a given subject, product or procedure. Please note that on occasion, notes too may advise of potential safety issues.

Introduction

The seating in your Blue Bird All American bus is designed for your safety and comfort. The bus seating meets or exceeds

FMVSS222 School Bus Passenger Seating and Crash Protection.

Caution

Do not attempt to modify the location of the passenger seats in your Blue Bird All American without reading the FMVSS222 specifications.

Note

There are federal mandates governing the proper placement and installation of school bus passenger seats. If it is necessary to repair or replace any of the seating in your Blue Bird All American bus, reference the removal and installation section.

Seats

Driver's Seat Adjustment

Warning

Do not attempt to adjust the driver's seat while vehicle is in motion. A sudden, unexpected adjustment to the driver's seat while vehicle is in motion, could result in serious injury or death.

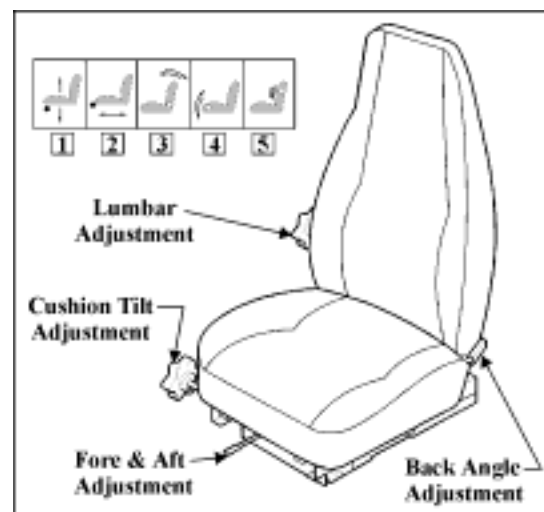


Figure 1—Driver's Seat Adjustment Points

Weight and Height Adjustment

To adjust, push valve knob in to raise seat and pull out to lower seat. When properly adjusted, the seat should neither top nor bottom against the end limits of the vertical travel, under normal driving conditions. Adjustment position should also provide for driving visibility and vehicle control.

Figure 1—Driver's Seat Adjustment Points.

Fore and Aft Adjustment

Hold lever to the left to adjust seat position forward or backward.

Back Angle Adjustment

Lean forward slightly to remove pressure from seat back. Hold the handle rearward to adjust to any position within the seat's range.

Cushion Tilt Adjustment

Rotate seat tilt knob to decrease or to increase seat tilt.

Lumbar Adjustment

Rotate knob forward to increase or rearward to decrease the support in the lumbar area.

Manually-Operated Seat

To adjust seat position forward or backward, hold lever (**Figure 2, A**) to the left.

To adjust the height:

1. Loosen handle in front (**Figure 2, B**).
2. Lift height adjust handle on side.
3. Slowly sit or stand to position seat at desired height.
4. Release height adjust handle prior to applying full weight.
5. Tighten handle in front.
6. Fasten and adjust seat belt.

To adjust the back angle, lean forward slightly to remove pressure from seat back. Hold the handle (**Figure 2, C**) rearward to adjust to any position within the seat's range.

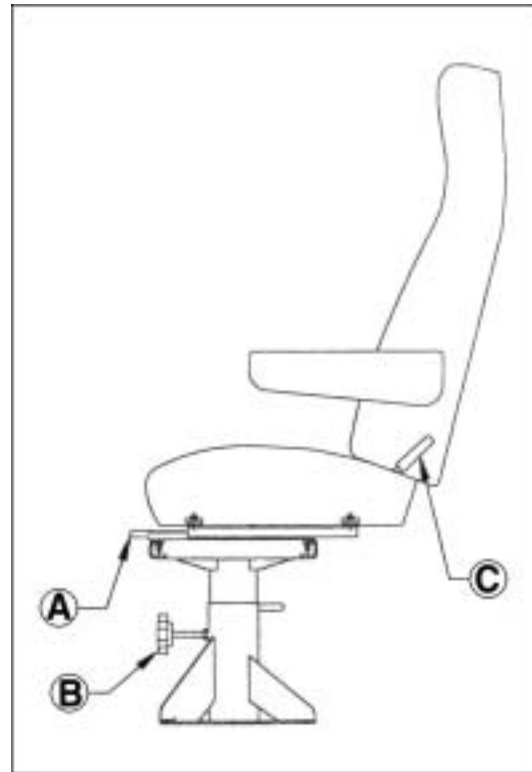


Figure 2—Manually-Operated Driver's Seat

Driver's Seat Lubrication

Caution

Lubricants can damage vinyl. Use caution around upholstery.

- The moving parts of the driver's seat require occasional lubrication for ease of operation, as well as the longevity of the seat. Lubrication also prevents excessive wear.
- White lithium-based grease in an aerosol can is currently available, and is recommended by Blue Bird Corporation.
- Motor oil 10W30 or 10W40 will also provide adequate lubrication, although it may not be as easy to apply.
- All moving part joints, tilt pivots, slide forward. Back adjustment and vertical motion pivots (4 total) require lubrication.

Driver's Seat Inspection and Maintenance

Blue Bird seats are built to meet Federal Motor Vehicle Safety Standards. To provide safer passenger transportation, the following inspections should be done.

1. Inspect and retighten seat leg and wall side mounting bolts every 90 days.
2. Inspect and retighten cushion attachments with a Phillips head screwdriver each week.
3. Inspect upholstery for cuts and tears every 90 days.
4. If torn, remove upholstery by removing the staples at the bottom front of seat back, or bottom of cushion.

Note

School bus seats are equipped with a special foam back pad. When the pad is damaged, replace with an approved replacement part.

Driver's Seat Care and Cleaning

It is imperative that the interior of the bus is kept clean; seats are an important part of this maintenance. Regular cleaning and care will prolong the life of the seats and improve the general appearance.

Dirt and Soil

Most dirt and soil may be removed with soap and warm water solution. If a stain is persistent, a stiff bristle brush may be used. Fabric covered seats should be rinsed with clean water after stain is removed.

Paint, Tar and Asphalt

Paint, tar and asphalt stains may become permanent if not cleaned immediately. Remove stain immediately, using a damp cloth and kerosene. Rub the stain gently, using small strokes.

Nail Polish and Lacquer-based Stains

Immediately soak up as much as possible with a dry cloth. Any remaining stain may be removed with a nonflammable cleaning fluid, such as Tuff Stuff™ or Armorall™ cleanser. Rinse thoroughly with clean water.

Gum, Grease and Shoe Polish

Immediately remove as much as possible. Shoe polish can permanently stain, if left unattended for a long period. Clean any remaining stain with a Tuff Stuff™ or Armorall™ cleanser.

Ink

Immediately remove stain using a damp cloth and alcohol.

Driver's Seat Removal

1. Remove two (2) bolts and washers from seat belt tether assembly., if equipped.
Figure 3—Driver's Seat Attachment Points.
2. Remove six (6) bolts from seat base mount and floor.

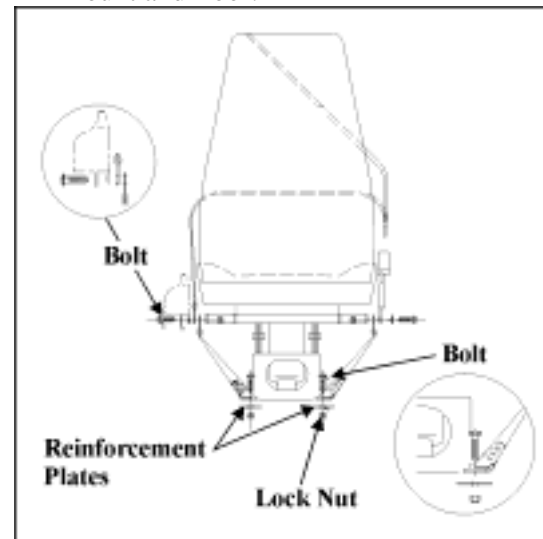


Figure 3—Driver's Seat Attachment Points

Note

Manual seat information not included.

Driver's Seat Installation

1. Clean the six (6) bolts, removing dirt and grease.
2. Apply Loctite™ 242 Blue to five or six threads.
3. Install six (6) bolts and washers into the driver's seat mount.
4. Torque the six (6) bolts 15 to 20 foot-pounds.

Driver's Seat Belt Tether Installation (Air Seat Only)

1. Install two (2) washers and two (2) bolts.
2. Hand-tighten two (2) bolts. **Figure 3—Driver's Seat Attachment Points.**

Caution

If washers are not installed, belt will not function as designed.

Driver's Seat Cushion Removal and Installation-DOT Seats

Warning

If seat cushions are removed for maintenance, they must be re-installed using the following instructions. Failure to comply with these instructions could result in injury from unattached seat cushions in the event of an accident.

Caution

Do not remove front swivel clamps.

To Remove the Seat Cushion

1. Loosen (do not remove) the two front swivel type clamps at the front

underside of the cushion, with a Phillips tip screwdriver.

2. Rotate the swivel clamps to clear the front retaining channel frame.
3. Lift the forward edge of seat cushion 2 to 3 inches and pull cushion forward to remove.

To Install New or Replace Cushions

1. Place the rear edge of cushion down on the base portion of the seat frame, lifting the forward edge 2 to 3 inches.
2. Slide the cushion to the rear edge to engage the positive type clamp into the rear-retaining channel.
3. Lower the forward edge to the frame, making sure the swivel clamps are inside the frame and the positive type clamps are secure on the rear-retaining channel.
4. Rotate the swivel clamp to engage the forward retaining channel frame.
5. Tighten with a Phillips tip screwdriver until clamps no longer rotate.

Track-Mounted Passenger Seats

If your Blue Bird All American bus is equipped with track-mounted passenger seats and you relocate a row of seats to accommodate wheelchairs, you must observe rules of spacing and placement. See FMVSS222 School Bus Passenger Seating and Crash Protection.

Track-Mounted Passenger Seat Removal

1. Remove flange nut from the anchor bolt at the seat/barrier foot. **Figure 4—Track Mounted Passenger Seat Removal and Installation.**
2. Lift seat frame up to expose the anchor bolt.

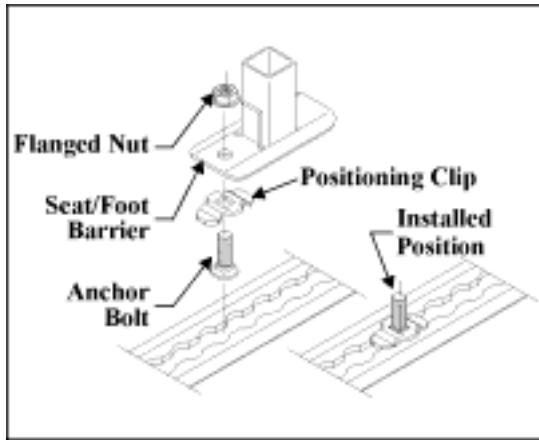


Figure 4—Track-Mounted Passenger Seat Removal and Installation

Track-Mounted Passenger Seat Installation

1. Set seat/barrier down on the anchor bolt and positioning clip.
2. Torque flange nut 34 to 37 foot-pounds.

Seat Belts

Seat Belt Inspection and Maintenance

The seat belts and their attachments must be inspected on a weekly basis. Check seat belt buckles and adjustment option to ensure proper operation.

If necessary, lubricate seat belt buckles with a graphite lubricant.

If a seat belt buckle is found inoperable, replace immediately.

Caution

Do not bleach or re-dye the seat belt webbing. Such processing may severely weaken the assembly.

If there are any defects in the webbing of the seat belt (i.e., torn or frayed), the seat belt

must be replaced as soon as possible to ensure passenger or driver safety. Hand-wash seat belt webbing with warm water and a mild soap. Rinse thoroughly and dry in shaded area.

Driver's Seat Belt Operation

Warning

Be sure the lap belt is fitted snugly around the hips and not the waist. Failure to do so may increase the chance of injury in the event of a collision.

The driver's seat belt should be worn at all times when the vehicle is being driven.

Blue Bird driver's seat belts have automatic locking retractors and are self-adjusting.

The seat belts also have an anti-cinch device that prevents the belt from tightening uncomfortably as the vehicle is driven.

Withdraw an ample length of the seat belt from retractor(s) to allow engagement of the buckle halves.

Engage buckle halves and allow retractor to withdraw belt to a snug, comfortable fit.

Pull seat belt from retractor after it has been withdrawn to ensure the automatic locking mechanism is operating properly.

The seat belt can be released by pushing down in center of buckle.

Driver's Seat Belt with Shoulder Harness

The driver's seat belt should be worn at all times when the vehicle is being driven.

The driver's seat belt shoulder harness is an emergency locking lap belt. The harness may be either emergency locking or automatic locking, depending on the seat belt option chosen.

The emergency locking retractor used for all shoulder harness, and specified lap belts, is dual sensitive. The emergency locking retractor engages when the vehicle tips 15 degrees or more, or if the belt speed exceeds a preset rate.

Automatic locking retractors for specified lap belts are self-adjusting. Adjust the shoulder belt bracket upward for taller drivers downward for shorter drivers, or until maximum comfort is achieved.

To use, withdraw an ample length of seat belt from retractor(s) to allow engagement of buckle halves. Engage buckle halves and allow retractor to draw belt to a snub, comfortable fit. The seat can be released by pushing button in center of buckle.

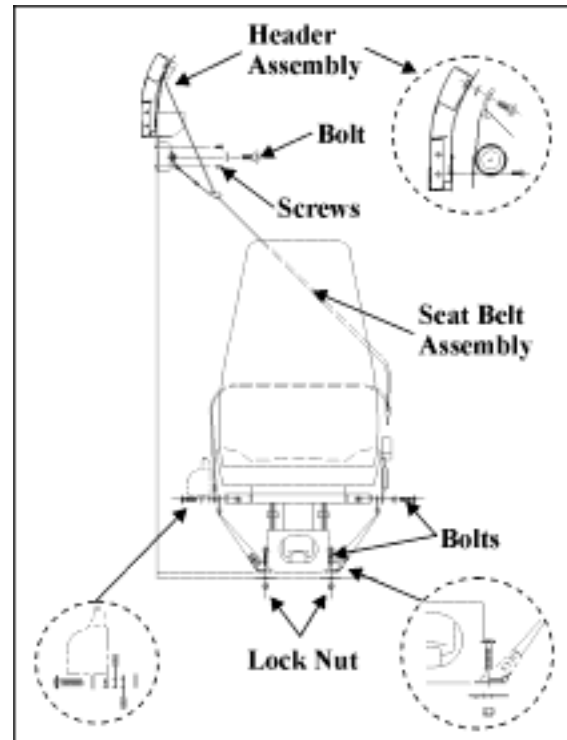


Figure 5—Driver's Seat Belt Attach Points

Driver's Seat Belt Removal

1. Remove one (1) capscrew and flat washer at seat belt retractor. **Figure 5—Driver's Seat Belt Attach Points.**
2. Remove one (1) shoulder bolt and flat washer at the header assembly.
3. Remove two (2) screws at the header assembly.
4. Remove one (1) bolt from the mounting bracket. **Figure 5—Driver's Seat Belt Attach Points.**
5. Remove two (2) bolts and washers from seat belt tether assembly. **Figure 5—Seat Belt Attach Points.**
6. Remove one (1) lock nut, one (1) reinforcement plate and one (1) bolt from floor.

Driver's Seat Belt Installation

1. Clean bolt, removing dirt and grease.
2. Apply Loctite™ 242 Blue to five (5) or six (6) threads.
3. Install one (1) bolt, one (1) reinforcement plate, lock nut and washer into floor.
4. Torque nut on bolt 15 to 20 foot-pounds.
5. Install two (2) bolts and washers at the rear of the driver's seat. **Figure 5—Driver's Seat Belt Attach Points.**
6. Install one (1) bolt at the mount bracket. **Figure 5—Driver's Seat Belt Attach Points.**
7. Install one (1) flat washer and one (1) shoulder bolt at the header assembly
8. Install one (1) capscrew and flat washer at seat belt retractor. **Figure 5—Driver's Seat Belt Attach Points.**
9. Install two (2) screws at the header assembly.

Passenger Seat Belt Operation

Warning

Be sure the lap belt is fitted snugly around the hips and not the waist. Failure to do so may increase the chance of injury in the event of a collision.

Individual lap belts for passengers are retractable or non-retractable, depending upon the option chosen.

Insert the catch into the buckle, test for assurance of latch fit and pull loose end of strap until belt fits snugly across the lower hips, and not the waist.

The seat belt buckle can be released by pushing button in center of buckle. Turning the strap 90 degrees and pulling can move the adjustable end outward.

3. Install ten (10) screws from seat belt cover on cross bar at the rear of seat on the aisle side and wall side.

Note

Screws are for the cover only, not the belt. Make sure they are in the plywood-tacking strip. Exposed screw points are not allowed inside back of seat.

[Back to Top](#)

Passenger Seat Belt Removal

1. Remove ten (10) screws from seat belt cover on cross bar at the rear of seat on the aisle side and wall side. **Figure 5—Passenger Seat Belt Removal and Installation.**
2. Remove one (1) flange head screw from rear frame under seat on the aisle side and wall side.

Passenger Seat Belt Installation

1. Install one (1) flange head screw to rear frame under seat on the aisle side and wall side.
2. Torque head screw 15 to 20 foot-pounds.