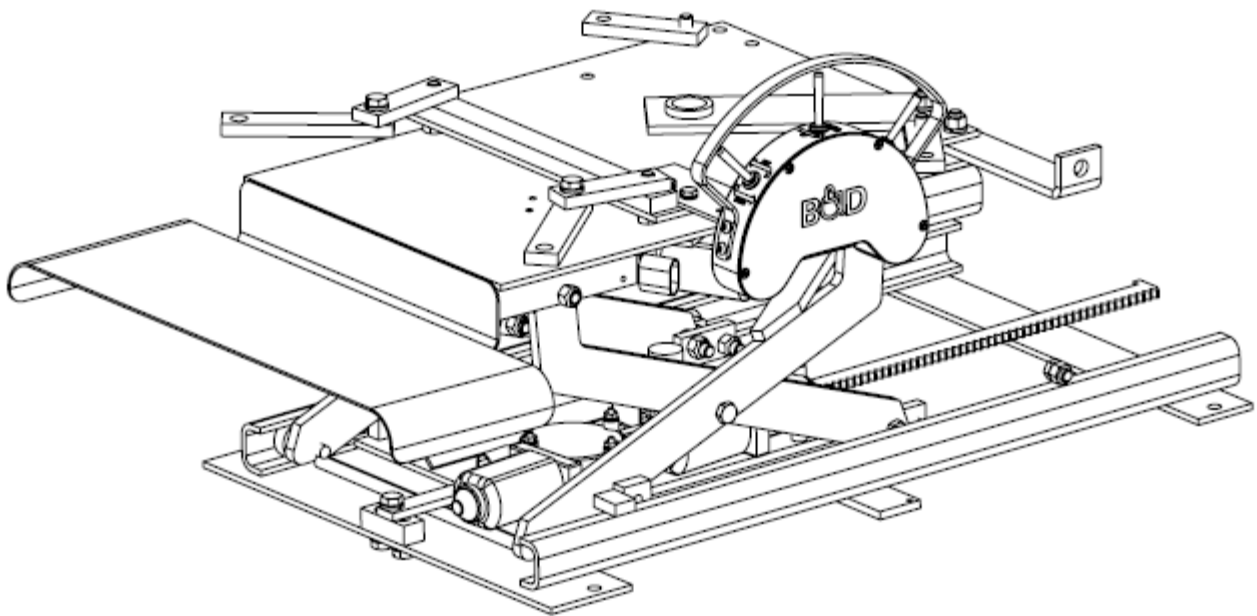


Leadership 71 Series Installation Instructions



For Use with the L71D & L71P B&D Seat Bases.



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Contact Us

For further information about B&D Independence or our products:

Write to:
B&D Independence, Inc.
1024 Empire Street
Mt. Carmel, IL 62863

Phone: (618) 262 – 7117
Fax: (618) 263 - 3904
Email: info@bdindependence.com

Visit our website at: www.bdindependence.com

Precautions and Warnings

Throughout these installation instructions, you will find several safety precautions highlighted for easy identification. Please familiarize yourself with these symbols and be sure to read through each carefully.



B & D Independence Inc. Limited Warranty

B&D Independence Inc. (B&D) has one of the most comprehensive service warranties in the industry. The B&D warranty, outlined herein, covers its Transfer Seat Bases to be free from defects in material and workmanship for a period of **two years on parts and one year limited labor** from the date the product is placed in service in the original vehicle.

This Limited Warranty is effective when:

- The Transfer Seat Base has been installed in accordance with the B&D Installation Guidelines.
- A certified mobility dealer performs the installation.
- The Warranty Registration Card is filled out and on file at B&D.
- The Transfer Seat Base is placed in service within 6 months from date of manufacture.

The Warranty Registration Card must be completely filled out and in the possession of B&D within 30 days after installation. If the Warranty Registration Card is not returned to B&D, the warranty will revert to 1 year from the date the Transfer Seat Base shipped from our factory.

B&D will repair or replace, at B&D's option, any factory installed part that is found to be defective. This is the sole and exclusive remedy for the customer and shall be limited to such repair or replacement. Labor charges for the repair and/or replacement of warranty parts, will be reimbursed to the authorized B&D Dealer as per the B&D Limited Labor Reimbursement Schedule during the first year. Pre-authorization is required for labor charges prior to parts being sent.

Warranty Claims for parts must be submitted to B&D during the warranty period. B&D will not reimburse the cost of replacement parts, nor the labor, if the replacement parts are obtained from a source other than from B&D. The B&D Limited Warranty will not apply to defective parts or workmanship caused by misuse, abuse, modification, alteration, neglect, improper installation, operator error, or collision.

Warranty replacement parts will be sent from B&D to the servicing dealer via Fed-Ex Ground at no charge. If the servicing dealer requests an expedited shipping method, the servicing dealer will be billed for the difference between the expedited & ground shipping charges.

B&D Limited Warranty is NOT transferable and applies to the original purchaser only. This Limited Warranty excludes incidental or consequential damages, towing charges, rental vehicles, travel expenses, or any other expenses associated either directly or indirectly due to loss of use or defective parts covered under warranty. General maintenance and adjustments are not included in the B&D Limited Warranty. B&D will not be responsible for any damages due to use of its products.

The B&D Limited Warranty extends to our products that are installed in transportation vehicles only. Any other use of any of the products manufactured by B&D, other than as specified above, is not authorized by B&D and all warranties will be null and void. Entities that use and/or install a B&D transfer seat base in an unauthorized manner will do so at their own risk.

The above warranty states the entire liability of B&D with respect to the products it manufactures. There are no other warranties either expressed or implied. B&D reserves the right to make design changes to improve its products without obligation to update or retrofit existing products in service.

Dealer Warranty Claim/Replacement Parts Program

1. The following procedure applies to Warranty Parts needed for Transfer Seat Bases covered by the B&D Independence Limited Warranty.
2. B&D does not sell or ship parts to anyone other than an Authorized B&D Independence Sales & Service Dealerships.
3. Please have the Transfer Seat Base Serial Number, description of the problem and the parts required.
4. Obtain a Return Material Authorization (RMA) Number from B&D Independence.
5. Warranty replacement parts will be sent from B&D to the servicing dealer via Fed-Ex Ground at no charge. If expedited, shipping charges will be at the dealers expense.
6. B&D may require that the defective parts are to be returned for credit.
7. When the defective part is ready for pickup, please call B&D and we will arrange for pickup and further instructions. Parts sent to B&D freight-collect or COD will be refused. Returned warranty parts that are unused may be subject to a 20% restocking fee.
8. IF DEFECTIVE PART IS NOT RETURNED TO B&D WITHIN 60 DAYS OF THE ORIGINAL INVOICE DATE, THE WARRANTY CLAIM WILL BE DEEMED ABANDONED AND NO CREDIT WILL BE ISSUED.

L71 Sub Assembly Part Listing

Figure 1.1 is a sub assembly listing of Model L71. Note: PN 7128 & 7130 are not sold individually.

| DET# | PART# | DESCRIPTION |
|------|---------------|------------------------------------|
| 1 | 7201 | SLIDE RAIL ASSEMBLY |
| 2 | 71101 | SLIDE GEAR BAR |
| 3 | 71120 | BOTTOM PLATE ASSEMBLY |
| 4 | SA-19-L71 | SOLENOID KIT |
| 5 | DSM-L71 | DUAL SLIDE MOTOR ASSEMBLY |
| 6 | SA-3 | LEG BOLT KIT |
| 7 | 7128 | INSIDE LEG X2 |
| 8 | 7130 | OUTSIDE LEG ASSEMBLY |
| 9 | 8605 | 4" STROKE 1500# ACTUATOR |
| 10 | SA-8 | UPPER PLATE ASSEMBLY |
| 11 | SA-12-L71-GEN | GENERIC SEAT MTG. BARS |
| 12 | SA-15-3 | SWITCH BOX ASSEMBLY |
| 13 | 7191 | FOOTREST ASSEMBLY (OPTIONAL) |
| 14 | SA-6-1 | SWIVEL MOTOR ASSEMBLY |
| 15 | SA-13-DEL | DELRIN BEARING KIT |
| 16 | 8125 | GEAR BAR MOUNT |
| N/A | SA-16 | COMPLETE WIRE HARNESS |
| N/A | SA-17 | WIRE HARNESS & SWITCH BOX ASSEMBLY |

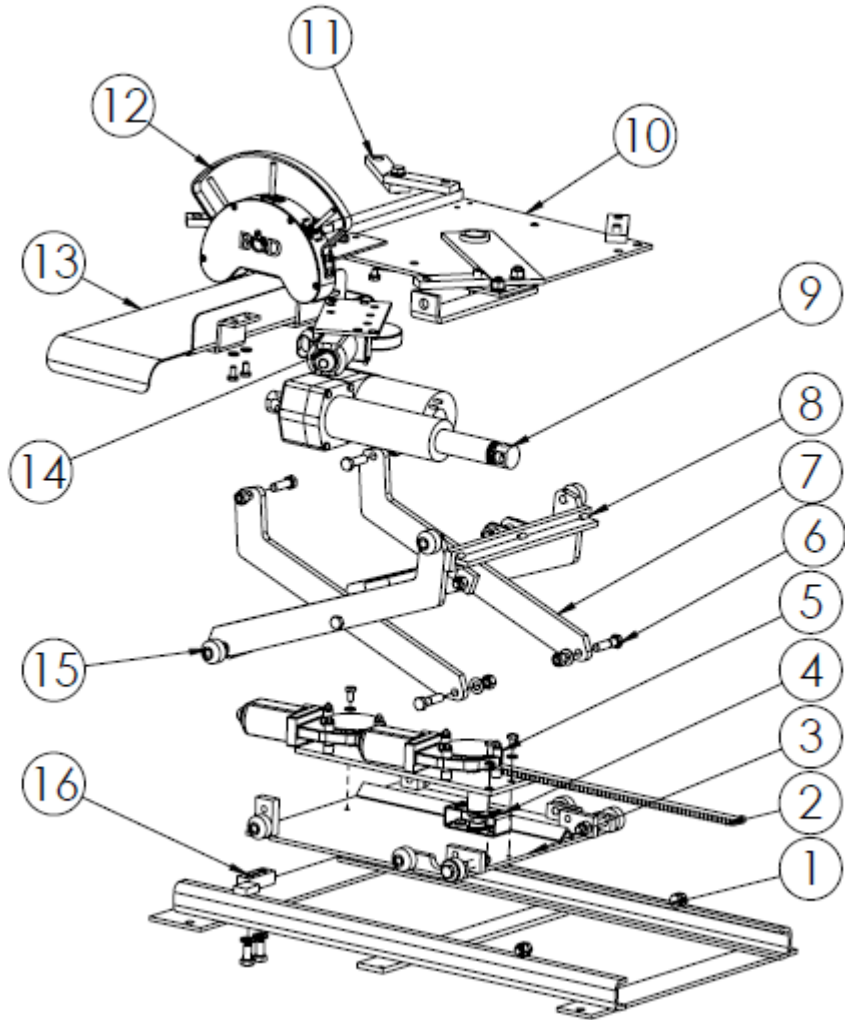


Figure 1.1

L71 Top Plate Assemblies

Figure 1.2 contains the three major variations of the L71 Driver Top Plate; note that the Universal L71 Driver and Passenger have the swivel gear and motor located on the underside of the top plate. Each top plate features a sticker denoting the front of the seat base to assist with installation.

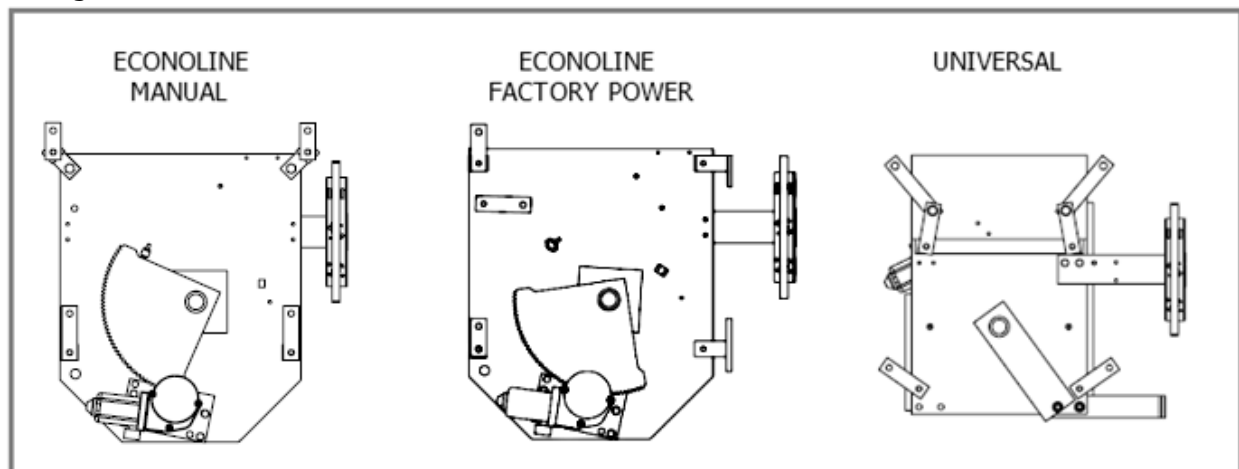


Figure 1.2

Installation Guide

1.) Prepare the Transfer Seat Base

Place the transfer seat base on a work table. If applicable, remove the optional footrest plate assembly from the box and set aside; it will be installed as one of the last steps. Leave the switch box assembly attached to the top plate with the plastic tie wraps at this time.

2.) Attach the Switch Box

Attach the switch box (#1 in Figure 1.3) to the top plate using the provided bolts (#2 in Figure 1.3). Note that the switch box is always installed on the inboard side.

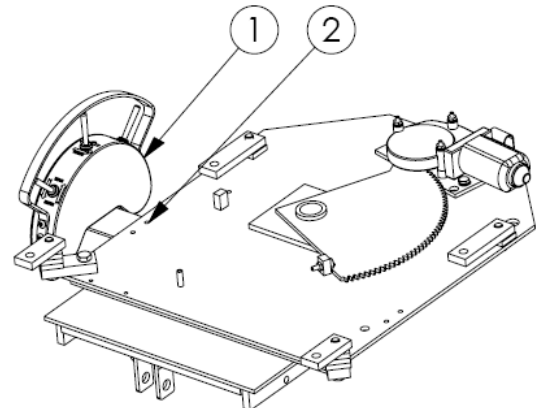


Figure 1.3

3.) Measure Distance from Seat to Dash

Before removing the factory seat and pedestal from the vehicle, run the seat to its full forward and downward (if applicable) position. Take measurements from the dash and/or steering wheel to the front of the seat cushion; these measurements are where the seat will be re-positioned.

4.) Remove Seat & Pedestal from Van

Remove factory seat and pedestal from vehicle as one unit.

5.) Mount Seat onto Transfer Seat Base

a.) *Econoline Only:* Secure using the factory nuts. Set the front 2 seat studs into the front seat mounting bars first; loosely install the factory nuts. Set the rear 2 studs into the rear seat mounting bars.

b.) *Universal Only:* The B & D seat mounting system consists of 4 bars at the front (#1 in Figure 1.4) of the base and 2 bars (#2 in Figure 1.4) at the rear. Remove the factory seat and slides from the factory pedestal. Install the factory seat and slides onto the B & D rear 2 mounting bars first; then install front of seat onto the B & D front 4 mounting bars.

c.) *Universal Only:* If the seat belt receptacle is integrated into the factory seat, you will not need to relocate the seat belt receptacle; simply remove the seat belt bracket (#3 in Figure 1.4) from the top plate & discard. If the seat belt receptacle is mounted on the factory pedestal, remove the receptacle and attach it to the seat belt bracket (#3 in Figure 1.4). Adjust the seat belt bracket so the seat belt receptacle just clears the side of the factory seat; this may require cutting and/or drilling additional holes in the bracket.

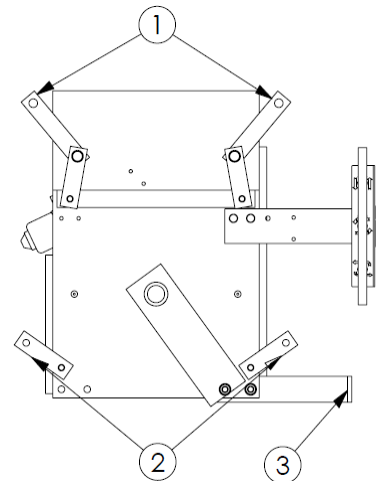


Figure 1.4

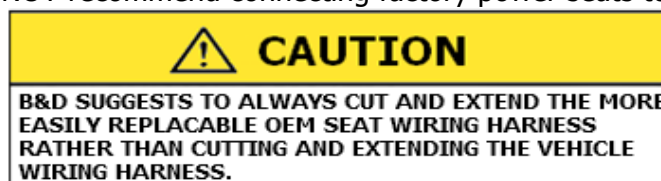
6.) Ensure Seat Clears Seat Base Through all Ranges of Motion of Seat & Base

Check clearance of the plastic seat panels. Make sure plastic seat panel clears the Center Plate Assembly through all the ranges of motion. If seat is factory power, apply temporary power and ground to run the factory seat through all of its ranges of motion, and verify that no piece of any plastic panel hangs down beyond the top surface of the center plate. Once verified, disconnect the temporary power and ground.

7.) Extend OEM Wiring Harness

a.) B & D recommends extending ALL wires going to the factory seat. "Fault" lights may illuminate on the dash if wires are not re-connected.

- o B & D does NOT supply wiring harness extensions.
- o B & D does NOT recommend connecting factory power seats to the B & D electrical system



b.) The longest length of wire harness required is usually 36" or less when:

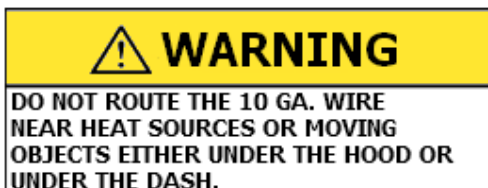
- o The transfer seat base is in the FULL-REARWARD, FULL-UP, and NOT SWIVELED

- The factory seat is all the way forward and raised up all the way (if factory power seat).
- c.) Suggested Routing of the factory Harness Extension:
 - Run seat base as far rearward and as far up as possible in the vehicle.
 - Have the factory seat all the way forward and raised up all the way.
 - Route from the center of the transfer seat base top plate towards the rear outboard corner of the top plate.
 - Attach harness at this location.
 - Choose a location somewhere along the side of the slide rails on the floor.
 - Hold harness extension there while operating transfer seat base to full down, full forward position.
 - Note the size of the 'loop' created by the harness extension.
 - "Experiment" by moving the location of the harness on the slide rails to find the smallest loop.
 - Secure harness.
 - Disconnect the vehicle's battery prior to re-connecting the harness extension to the vehicle harness.



8.) Providing Power & Ground to Transfer Seat Base Area

- a.) B&D always recommends using the provided 30 Amp fuse & holder connected directly to the battery.
- b.) In the vehicle engine compartment, remove "+" battery cable from battery. Attach the ring terminal with fuse to the battery terminal and re-install "+" battery cable. Route the red 10 gauge wire to the vehicle chassis.



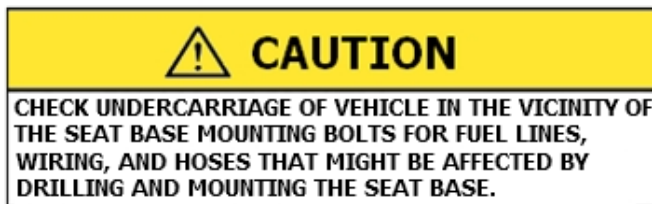
- c.) In the vehicle engine compartment, locate a wiring grommet on the firewall that leads behind the dash. Insert the end of the red 10 gauge wire (without a wiring terminal), through the grommet behind the dash.
- d.) Route the red 10 gauge wire from behind the dash to the driver side of the vehicle, and back to the "B" Pillar. B&D suggests covering any exposed red 10 gauge wire from under the dash to the transfer seat base with convoluted tubing, and make sure wire is routed out of the way of feet.

9.) Install Seat & Base into Vehicle

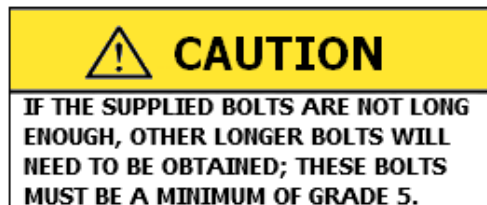
- a.) Place the B & D transfer seat base, with the factory seat installed on top of it, into vehicle.
- b.) Locate the 18" long ground strap next to where the red 10 gauge power wire attaches to the transfer seat base. Temporarily attach this ground strap to chassis ground.
- c.) Temporarily attach power to the transfer seat base.
- d.) Run the transfer seat base to the full-forward position. Adjust and position the transfer seat base so the front of the seat is the same distance from the dash as the factory seat and pedestal were originally located. The seat back needs to be in its full-upright position, not reclined.
- e.) Run the transfer seat base to the full-back position, and if applicable, as far 'up' as possible.
- f.) Swivel the seat to the side and check the distance between the back of the seat and the side of the van; the seat back should not hit the side of the van with the seat back in its full-upright position. If the seat back hits the side of the vehicle with the seat swiveled, move the rear of the transfer seat base towards the center of the vehicle for clearance.
- g.) Swivel the seat forward as far as it will go; continue activating toggle switch until seat base completely stops turning; the seat base is now against its Positive Stop. Run the transfer seat base to full-down and full-forward positions.
- h.) (L71 Universal Only) B & D Independence has installed the Lock Bar on the transfer seat base. If the dealer needs to adjust the angle of the seat to position it squarely with the dash, remove the

3/8" bolt & nut, manually rotate the seat to face square to the dash, drill a new 3/8" hole through both the Lock Bar & the center plate, and re-install the 3/8" nut & bolt.

- i.) Double check measurement from seat to dash. Install one 1/2" spacer between the floor and seat base at all 4 corners. Seat base rails must be level from front to rear and side to side
- j.) Drill and mount seat base to floor using the supplied Installation Bolt Kit.



- k.) If the supplied 3/8"-16UNC x 2" Grade 5 bolts are not long enough, use longer bolts with Grade 5 hardness.
- l.) Grade 8 Bolts: Grade 8 bolts are an acceptable substitute for the supplied grade 5 bolts; however, B&D Transfer Seat Bases do NOT require the use of grade 8 bolts and nuts. All seat bases are tested to meet or exceed FMVSS 207/210 using Grade 5 bolts.
- m.) After the transfer seat base is completely installed to the vehicle's floor, cut the red 10 gauge wire to length to reach the connector on the seat base wiring harness; then crimp the supplied yellow insulated female spade connector to the end of the red 10 gauge wire. Permanently connect the red 10 gauge wire to the seat base wiring harness.
- n.) Permanently attach the 18" long Ground Strap to chassis ground. The Power Transfer Seat Base is ready to operate.



10.) Adjust the Swivel Gear Stops (L71 Econoline Only)

- a.) The Adjustable Swivel Gear Stop is pre-set so that the factory seat is positioned squarely with the dash.
- b.) If you want the seat angled with respect to the dash, you will need to re-set the swivel gear stop; loosen the jam nut (#1 on Fig 1.5) on the #10-32 flat-head cap screw (#2 on Fig 1.5), thread the screw all the way into the Adjustable Swivel Gear Stop, and tighten the jam nut to secure.

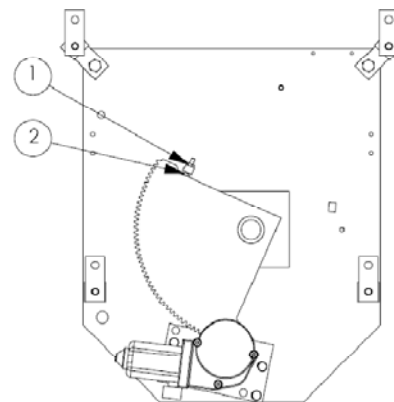


Figure 1.5

11.) Footrest Installation

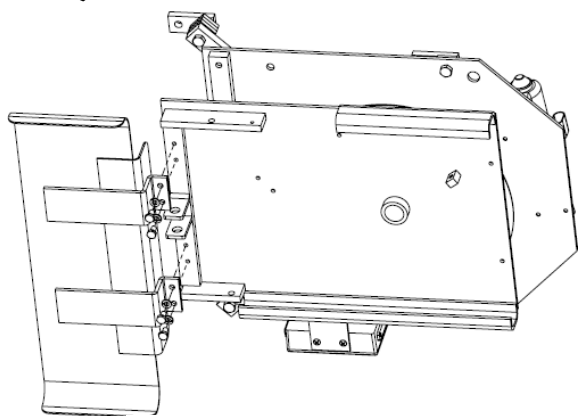


Figure 1.6
(Viewed from Bottom)

- a.) Recline the seat to the greatest angle possible; run the transfer seat to the full back and up position to install the footrest mounting bolts.
- b.) Bolt the Footrest Plate Assembly to the underside of the Center Plate Assembly (See Figure 1.6). The Center Plate Assembly has been pre-drilled; bolts must be inserted from underneath.
- c.) Close the driver door. Run the seat base all the way down and forward. Make sure the Footrest Plate does not hit the door panel, the engine cover, or the top of the slide rails.
- d.) Carpet the footrest plate (if applicable).
- e.) Please note that the footrest is 6" long; it can be used as-is or extensions can be added to increase height or length.

12.) Final Inspection

A final check of the entire transfer seat base, wiring, the factory seat, and anything else concerning or involving the transfer seat base, should be done to ensure safe, trouble-free operation. Some suggested items to check (But not limited to) are:

- Exposed wiring and-or wiring connections
- Factory seat wiring harness extension does not get snagged or caught through entire range of motion
- Check Seat Base and all other areas for any exposed edges or surfaces that are sharp or rough.
- Ensure all installation bolts are tight.
- Verify that all warning lights are OFF on the dash.
- Verify that all functions of the factory seat work correctly.
- If any of the above items pertain to this installation, correct all items PRIOR to delivering to the end-user.

13.) Procedure to Re-Adjust Leg Bolts to Their Correct Tightness

During the final check, you may find the outside and inside legs providing too much or too little resistance. Below are easy steps to re-calibrate the leg bolts for optimal effectiveness.

- a.) Tools required: 2 box-end 9/16" wrenches.
- b.) Run base to the full-up position.
- c.) Steps d.) through h.) are repeated for each leg bolt.
- d.) Loosen the locknut 1 full turn.
- e.) Loosen the bolt enough to see clearance between the bottom of the head of the bolt and the leg.
- f.) Tighten the bolt until snug (not tight.)
- g.) Loosen (back-off) the bolt 1/8 of a turn.
The bolt is now adjusted to the correct tightness.
- h.) Prevent bolt head from rotating using 1 box-end wrench while tightening the locknut with the other box-end wrench.

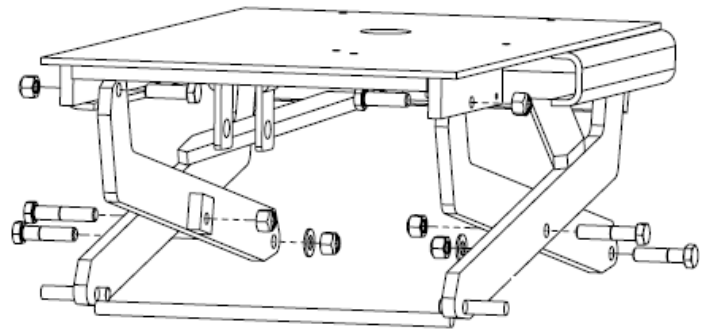
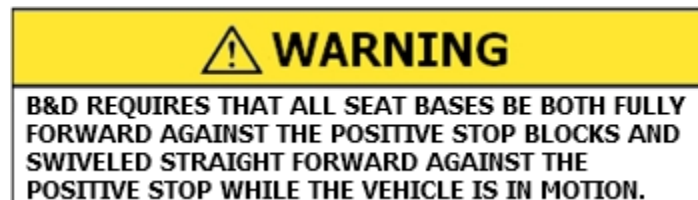


Figure 1.7

Correct Driving Position



Important Items to Note:

- While swiveled, do not raise or lower the transfer seat base or move the transfer seat base back and forth. This may cause damage to the wiring harness.
- The Seat Base may be at any vertically adjusted position during driving

Correct Operation of Toggle Switches on B & D Switch Box

- **To Transfer From the Driving Position to the Wheelchair or Scooter**
 - Push rearward on front toggle switch. Release when all the way back.
 - Push rearward on middle toggle switch to raise transfer seat base to desired position.
 - Push rearward on rear toggle switch to swivel the seat to point sideways.
- **To Transfer From the Wheelchair or Scooter to the Steering Wheel**
 - Push forward on rear toggle switch, until the seat stops, to swivel the seat to point straight ahead.
 - Push forward on middle toggle switch to lower transfer seat base to desired position.
 - Push forward on front toggle switch. Release when all the way forward against the positive stop blocks.