



SERVICE BULLETIN No.1181

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COACH MODEL	: T2145 and C2045 equipped with a multiplex system
BULLETIN TYPE	: Service Information
SECTION	: Operator's Guide Book: Section 2: Operating Instructions
DATE	: February 16, 2006
SUBJECT	: Operating instructions for coaches with ADA lift
TERMS & CONDITIONS	: No claims will be accepted with reference to this Bulletin.

APPLICATION:

The procedure subject of this Bulletin is applicable to T2145 and C2045 units equipped with a wheel chair lift at the back of the coach.

DESCRIPTION:

1. The present Bulletin describes the steps drivers must take to enable/disable the ADA lift system on the above mentioned coaches.
2. Instructions for use of the wheel chair restraint system have also been included.
3. To deploy and stow the lift, and for emergency procedures, refer to the OEM operating instructions supplied with the coach (see lift manufacturer's manual in lift door pocket).

Service personnel: please read, initial and circulate.

Service Manager	Parts Manager	Warranty Administrator	Workshop Foreman	Service Technician

PROCEDURE:

To deploy the Van Hool wheel chair lift system:

- 1) Park the coach on a level surface with the transmission in neutral, apply the parking brake and leave the engine running (shut down the engine if required by local law).

***NOTE:** The lift system can be activated only with the transmission in neutral.*

- 2) Make sure both of the lift doors are properly closed.
- 3) Press the “Lift Power” push switch once (see Figure 1).



Figure 1: “Lift Power” switch (C2045) and multifunction display symbol indicating that the system is “ON”

- The system is now switched “ON”.
 - The wheelchair symbol appears on the multifunction display (see Figure 1).
 - The drive and tag axle service brakes are activated (interlock).
 - The throttle pedal is disabled.
 - The wheel chair lift system is enabled.
 - The lift can be deployed.
- 4) Deploy the lift according to the OEM operating instructions supplied with the coach (see lift manufacturer's manual in lift door pocket).

To shut off the Van Hool wheel chair lift system:

- 1) Stow the lift carefully according to the OEM operating instructions supplied with the coach (see lift manufacturer's manual in lift door pocket).
- 2) Close the lift doors.
- 3) With the parking brake still applied, press the “Lift Power” switch on the instrument panel once.
 - The system is now switched “OFF”.
 - The wheelchair symbol on the multifunction display disappears.
 - The interlock is released.
 - The throttle pedal is enabled.
 - The wheel chair lift system is disabled.
 - The lift cannot be deployed any more.
- 4) It is now safe to drive the coach.

Emergency procedures:

In case the lift system failed to become activated on non-multiplex coaches, it was still possible to operate the system by throwing a relay switch in the main junction box.

On coaches equipped with a multiplex system this is no longer possible.

However, the lift can be operated manually as described in the lift manufacturer's operating manual.

Use of the "Q'straint" wheelchair restraint system:

Refer to the attached procedure.

Procedure complete.

SERVICE INFORMATION:

Service Bulletins are issued to supplement or supersede information in the Van Hool manuals. Note Service Bulletin number, date and subject on the register at the end of the relevant chapter(s). File Service Bulletin separately for future reference.

"RESTRAINT" system refers to the standard Q'Straint, M-Series and QRT systems.

PRE-BOARDING RECOMMENDATIONS

- Inspect and prepare all your "RESTRAINT" system belts.
- Be sensitive to your passenger
- Be careful in handling the wheelchair
- Explain to your passenger what you are doing to make them feel comfortable with the process

List of belts for each passenger and chair location:

- 2 front wheelchair tiedowns
- 2 rear wheelchair tiedowns
- 1 upper torso belt occupant tiedown
- 1 pelvic belt occupant tiedown

NOTE: Do not alter any of the "RESTRAINT" system belts or components.

Do not interchange belts from one wheelchair position to another. Always keep belts together as a complete kit.

SECURING THE CHAIR

1. Position Wheelchair

Wheel the chair into a forward facing position centering the chair squarely on all four corners of the tiedown anchorage points. The front and rear belts, when fastened, should create angles approximately as shown in figure 1.

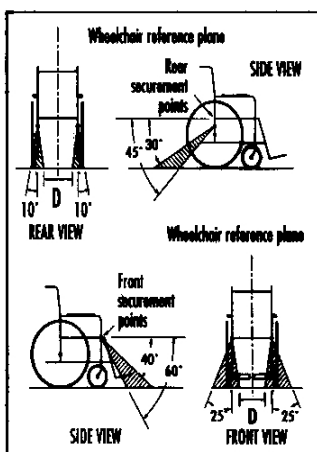


Figure 1. Preferred angles and locations of tiedown straps from wheelchair securement points to vehicle anchor points. Front tiedowns should be angled out for lateral stability when possible. D= 12"

Turn off power on electric chairs and release chair brakes.

NOTE: The "X" in each of the figures indicates a tiedown anchorage point.

2. Secure the Two Front Belts

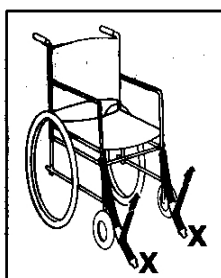


Figure 2

Attach the front belts by connecting the chair hook to a solid frame member of the chair as shown in Figure 2.

Connect the opposite end to the appropriate tiedown anchorage point. Belt angles for the front belts should be maintained as shown in Figure 1.

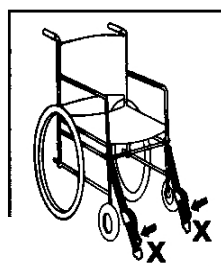


Figure 2A

If necessary, pull the loose end of the belt until snug and connect velcro tabs (if applicable) to keep excess belting off the floor as shown in Figure 2A.

3. Secure the Two Rear Belts

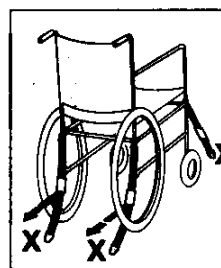


Figure 3

Attach rear belts by connecting the chair hook to a solid frame member close to the point where the chair back and cushion meet as shown in Figure 3. Attach the opposite end to the appropriate tiedown anchorage point. Belt

angles for the rear belts should be maintained as shown in Figure 1.

If necessary, with the buckle open, pull the loose end of the belt until snug. While holding the loose end with one hand, close the lever of the clamp down until it locks and connect velcro tabs (if applicable) to keep excess belting off the floor as shown in Figure 3A. Check that the belts are tight and the chair is

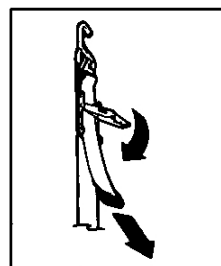


Figure 3A

secure enough so that it does not have any movement back and forth... now apply the chair brake.

NOTE: Front and rear belt tension is essential to firm securement of chair. Final tensioning in chair securement system is provided by rear belt buckles.

SECURING THE PASSENGER

4. Attach the Occupant Tiedowns

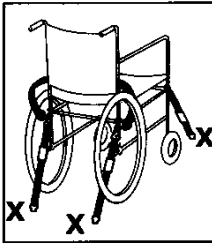


Figure 4

Pass the loose ends of the pelvic belt around the occupant and downward toward the rear wheelchair tiedowns. Connect the loose ends of the pelvic belt to the appropriate connectors on the rear wheelchair tiedowns as shown in Figure 4.

NOTE: Pelvic belt should pass between the gap in the side panels and the seat, or between the gap in the seat and the back rest. Make sure both sides of the pelvic belt are securely fastened.

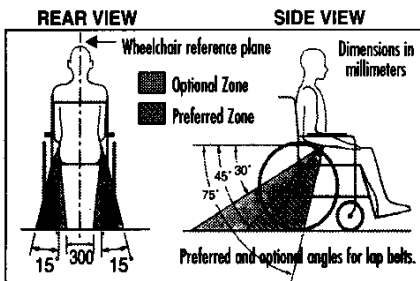


Figure 4A

Belt should bear upon the bony structure of the body and should be worn low across the front of the pelvis with junction between the lap and shoulder belts located near the passenger's hip. Belt angle should be approximately within the zones shown in figure 4A. The belt should be adjusted as firmly as possible consistent with user comfort. Ensure that belt is not twisted.

NOTE: Never situate the pelvic belt over the abdominal area or armrest as shown in Figure 4B.



Figure 4B

5. Attach the Upper Torso Belt

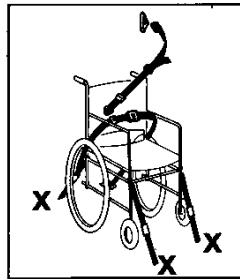


Figure 5

If necessary, connect the upper torso belt to either the left or right pin of the pelvic belt (this depends on which side of the vehicle the chair is located – i.e. right hand pin if the chair is on the left side and left hand pin if the chair is on the right side.) as shown in Figure 5.

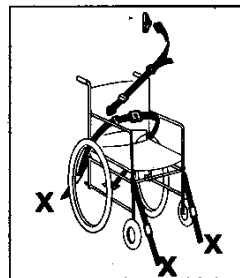


Figure 5A

Pull adjustment snugly. (see Figure 5A). Upper torso belt should be adjusted as firmly as possible consistent with user comfort. Ensure that belt is not twisted.

NOTE: Upper torso belt should lie across the mid point of the shoulder and travel upward and rearward from that point to ensure that downward forces on the spine are avoided.

WARNINGS:

- Occupant restraints should not be held away from the body by wheelchair components or parts such as the wheelchair armrests or wheels (see Figure 4B).
- Never rely on the chair's own lap belt unless it is Q'Straint approved or strength is confirmed.
- Make sure belts are kept clean and off the floor and stored in Wall Pouch.
- Make sure you use your own driver's seat belt.
- The "RESTRAINT" system should be used in accordance with these instructions.
- The "RESTRAINT" system has been dynamically tested with an ATD restrained by both pelvic (lap) and upper torso (shoulder) belts. Use of only a pelvic belt may compromise the safety of the passenger.

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