



WHEELCHAIR TIE DOWN SYSTEM X-801-2

USER MANUAL





XINDER-TECH ELECTRONICS

CATALOGUE

CATALOGUE	1
1. Product Introduction	2
2. After-sales Service	3
3. Shipment Information	4
3.1. Basic Parts	4
4. General Safety Precaution	5
5. Installation Instruction	6
5.1 General Requirements	6
5.2 System Location	6
5.2 Track Location	7
5.3 Track Installation	8
5.4 Installation Of Shoulder Belt (Option)	10
6. Operation Instruction	11
6.1 Mount Retractor and Round Track	11
6.2 Mount Retractor and Wheelchair	12
6.3 Mount Lap Belt	12
6.4 Mount Shoulder Belt	13
7. Parts List for Installation	14
ATTACHMENT 1: Owner Registration Card	15

1. Product Introduction

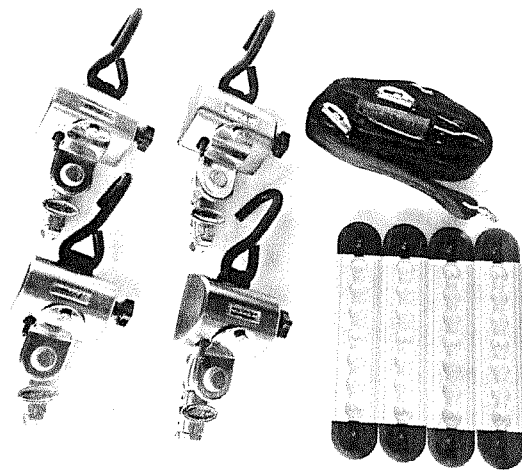
- Wheelchair tie down system is installed on vehicle floor. It is engineered as a complete security system; every component is designed, engineered and tested to work together to provide safe transportation.
- There are 4 pcs of cupped track mounted in vehicle floor. The four retractors connect with the cupped track and wheelchair separately to ensure safety of wheelchair during vehicle running.

Advantages:

- There is self-adjusting and self-tensioning equipment which can offer an easy, quick and flexible solution to securing wheelchairs.
- Retractable and static lap/ shoulder belts are also provided for passenger comfort and safety.
- This tie down system is well designed even a small part, and it's a complete security system.

Parts List:

One set of wheelchair tie down system X-801-2 includes below parts.



This user manual is only suitable for model X-801-2. Please contact with Xinder for operating manual of other models.

CHANGZHOU XINDER-TECH ELECTRONICS CO., LTD
ADD: NO 1 KELE RD., XINBEI DIST., CHANGZHOU JIANGSU CHINA 213022
TEL: 0519-85122329 FAX: 0519-85120805
EMAIL: cgr@xinder.cn WEB: www.china-wheelchair-lift.com



XINDER-TECH ELECTRONICS

2. After-sales Service

We warrant the original buyers that Xinder-Tech will repair or replace any part failed due to defective material or workmanship during warranty period. Details are as follows:

1. Warranty Period:

- Warranty Period: 12 Month from the delivery date from seller.
- Repair or replace parts failed due to defective material or workmanship during warranty period.
- Repair or replace parts of power units failed due to defective material or workmanship during warranty period.
- The parts can be got from Xinder-Tech Electronics.

2. After-sales Service

- If there is some problem happened, please call Xinder Quality Department (0086-519-85139690) or send e-mail to quality@xinder.cn or cgr@xinder.cn, we will analyses the problem and give solution within 24 hours. If the problem is failed due to defective material or workmanship, we will provide part free for replacement.
- If you need to return some part for repair, please give us advanced notice as possible, and allow reasonable amount of time to repair it. Shipping charges for returning parts to Xinder-Tech shall be the responsibility of the customer. Xinder-Tech will pay shipping charges when returning warrantable parts to the customer. Xinder-Tech will not accept C.O.D. shipments of any returned goods.
- The warranty does not cover: Malfunction or damage to parts caused by accident, misuse, lack of proper maintenance, improper adjustment, alteration, mechanical of vehicle, hazards, overloading, failure to follow operating instruction, or acts of nature (i.e. weather, lightning, and flood).
- Xinder's obligation under this warranty is exclusively limited to the repair or exchange of parts that fail within the applicable warranty period.
- We assume no responsibility for expenses or damages, including incidental or consequential damages. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply.

3. Note and Warning

- Xinder-Tech recommends that this product should be inspect very six months, and it is batter to do some maintenance if necessary at that time. Details of maintenance can be seen in User Manual.
- This lift has been designed and manufactured to exact specification. It is hazardous to make any modification.
- The warranty is void if: Modification to any parts of this lift is not authorized by Xinder-Tech. Moreover, it is dangerous.
- Xinder-Tech has no responsibility for any personal injury or property damage due to the operation of lifts that has been modified from our original design. No one or company should alter lift without written authorized by Xinder-Tech.



XINDER-TECH ELECTRONICS

3. Shipment Information

- When the product is received, unpack it and check for freight damage. Claims for damage should be made to freight carrier immediately.
- The owner registration cards must be completed and returned to Xinder within 20 days for the warranty to be valid.

3.1. Basic Parts

NO	Item NO.	Name	Qty	Remark
1	—	Retractor	4	—
2	—	cupped track	4	—
3	—	End of cupped track	8	—
4	—	Lap belt	1	—
5		User manual	1	

4. General Safety Precaution

- This system should be installed by professional technician;
- Any modification to this system is not allowed;
- Do not installed this system at the space where is unstable, such as corrosive material, wood, plastic, glass-steel board and so on;
- Protect the belt from interface with other parts around;
- Be sure the installation meets all installation requirements;
- If it is not very clear about the installation, contact with Xinder or Xinder's authorized dealer;
- The parts of this system should be used together, mixed usage or exchange usage is not allowed;
- Xinder will not be responsible for the trouble cause by wrong installation;
- This product is taken as a complete system in some countries, that is to say, the shoulder belt must be installed;
- Check with Xinder's local authorized dealer to see whether there is special requirements;
- Be sure the wheelchair will not move back if there is headrest in vehicle to avoid danger for passenger.

5. Installation Instruction

5.1 General Requirements

Be sure there is no other part in the clear space except the condition that the parts have effective gasket for protect. Clear space is decided according to the basis of passenger potential motions during crash.

Recommended clear space:

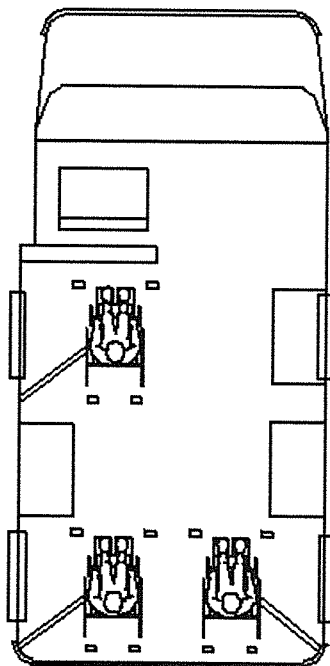
Range of overall height (HHT): mini height for children is 1000mm; Mini height for adult is 1550mm.

[NOTE] It is strongly recommended to used shoulder belt and lap belt, in order to reduce the possibility of crash of head and chest with vehicle parts.

5. 2 System Location

The first thing should be done is to decide where to install this system. Passenger should sit in wheelchair and keep wheelchair forward. Check the space between vehicle wall and wheelchair to provide space to install belts. (Refer to figure 5.1.1)

- Allow clear space for belts
- Be aware of windows
- Keep wheelchair forward



[WARNING] Check vehicle bottom for obstructions such as oil tube, brake lines or other parts before installation.

Figure 5.1.1

【NOTE】 Allow as much space as possible around wheelchair, so that driver or attendant can fix passenger and wheelchair correctly.

5.2 Track Location

Put the tracks in vehicle floor before installation. The position of tracks can be seen from figure 5.2.1.

- Distance between front and rear tracks-A: 1118 - 1372 mm
- Distance between the two rear tracks-B: 400 - 500 mm
- Distance between the two front tracks-C: 710 - 800 mm

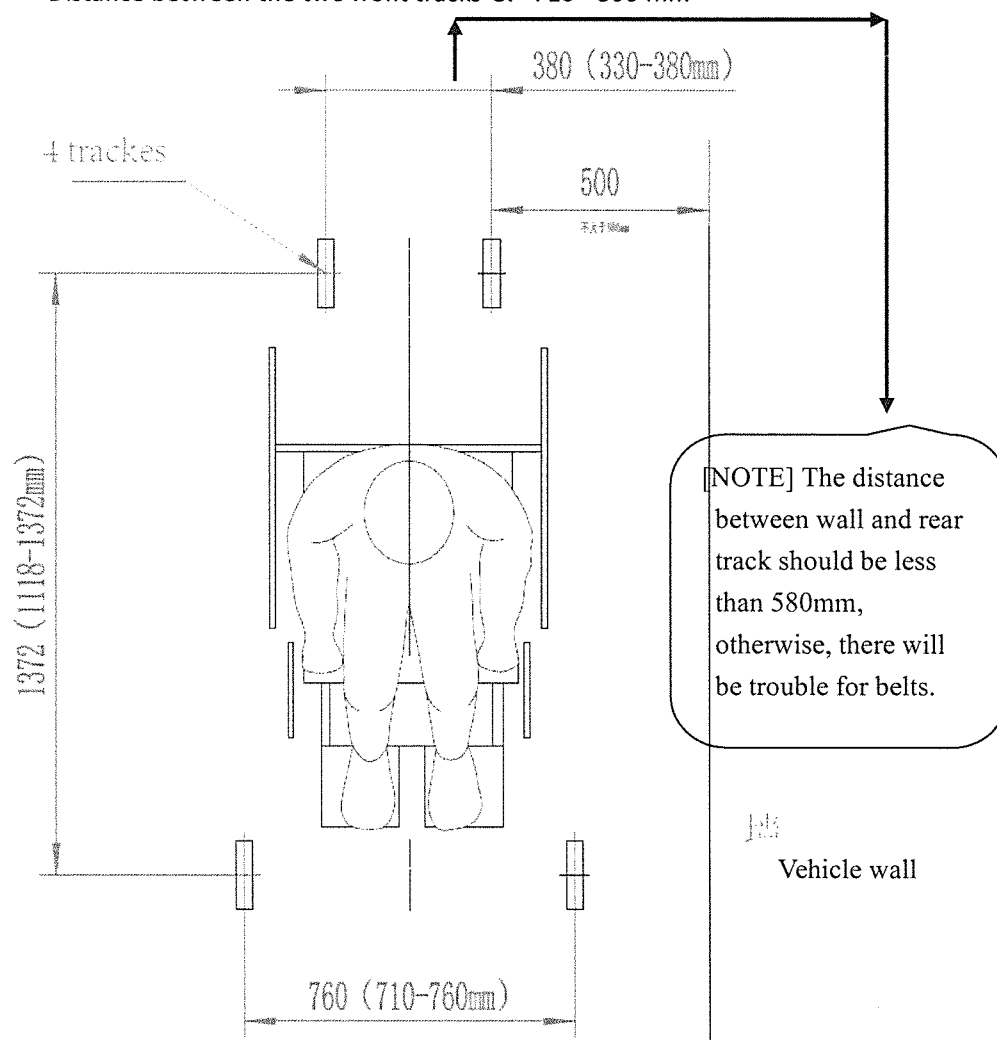


Figure 5.2.1

[NOTE] The distance we recommended is decided at the basis of the specification of common wheelchair, and it will be different if the wheelchair is too big or small.

Distance can be decided according the belt's angle as figure 5.2.2:

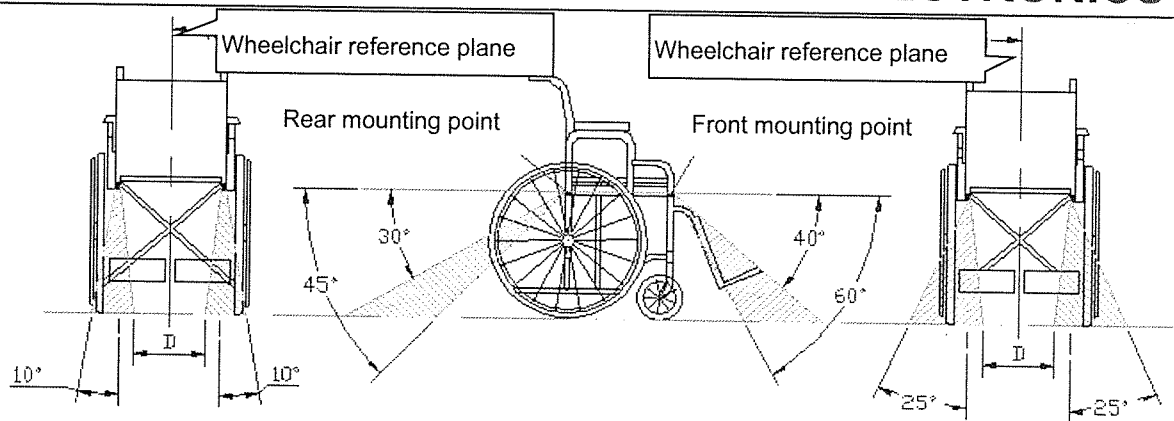


Figure 5.2.2

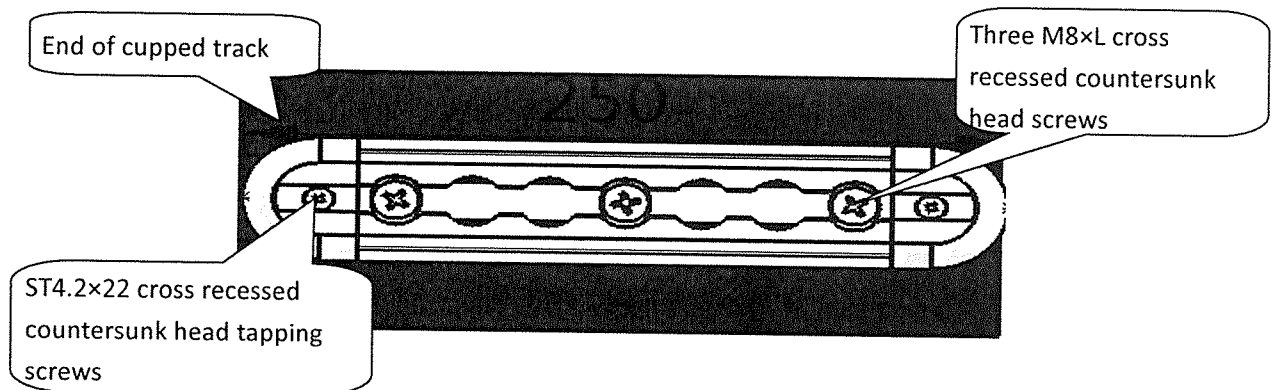
When decide the mounting position of tracks, the below items should be considered:

- This system should not cross the wheel of wheelchair;
- There should be clear space between wheelchair and system. Barrier as footstool is not allowed;
- The best angle of protection for system can be seen from figure 5.2.2;
- The best stability of wheelchair is below:

Prefer angles and locations of straps from wheelchair security points to vehicle anchorage points.
Front system should be angled out for lateral stability when possible. D=300 mm

5.3 Track Installation

- Place tracks at right position;
- Mount and drill three holes of M8×L cross recessed countersunk head screw, and make groove as 35*250*14 mm;
- Cross the screw through track and hole;
- Put the plate, plat washer, spring washer and hexagon nut on screw orderly. (Refer to figure 5.3.1)
-



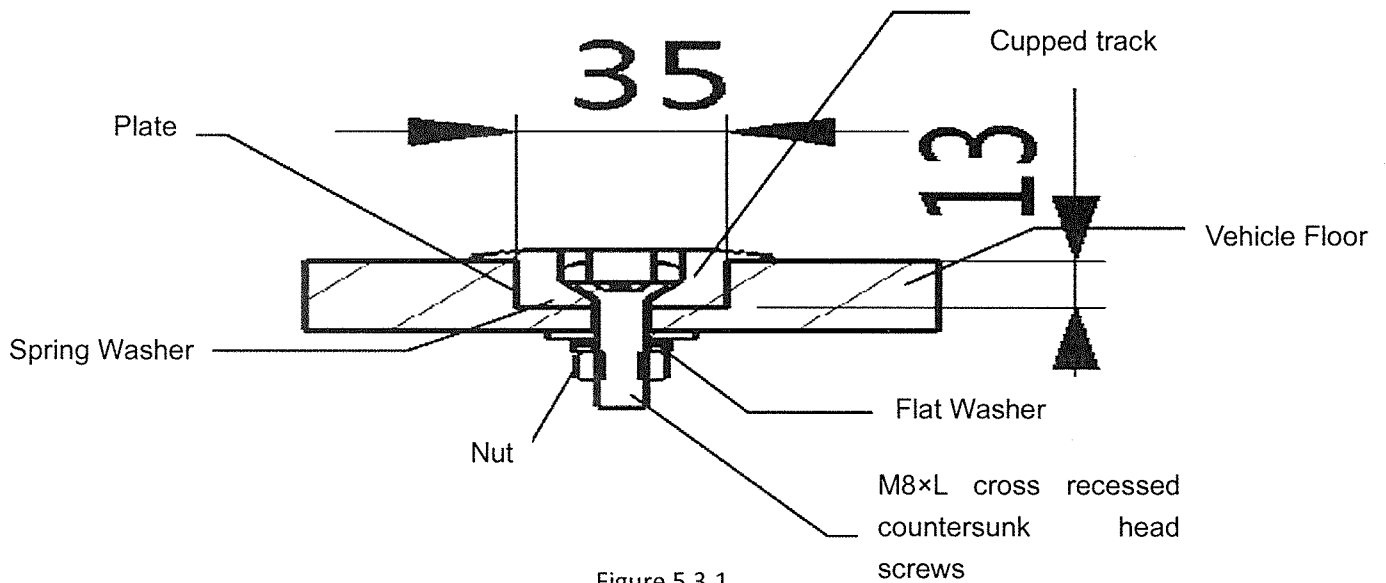


Figure 5.3.1

[NOTE] The base of vehicle floor can be installed vertically or parallel with the position of wheelchair. Sealing material can be used between the plate and vehicle floor if necessary. The plate should be self-provided, and its material is Q235 with thickness of 2mm. refer to figure 5.3.3 to see the detail size.

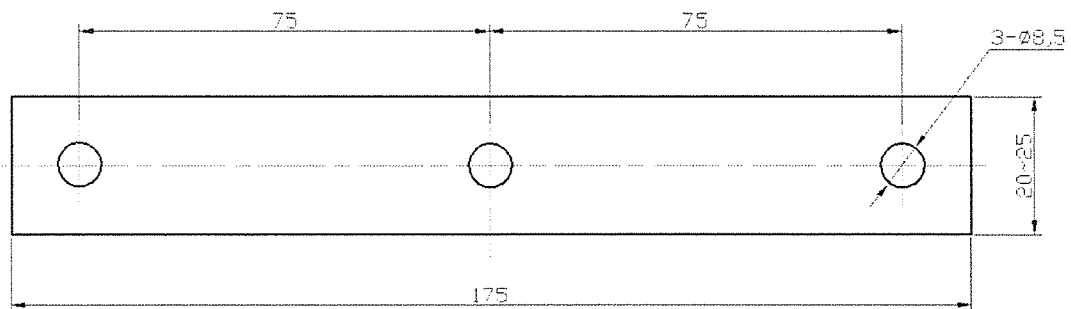


Figure 5.3.2

5.4 Shoulder Belt Installation (Option)

The distance from vehicle floor to the upper anchorage is 1170-1220mm, and belt relative position with system can be seen from figure 5.1.1. Recommended location is close to or slightly behind the rear of system.

[WARNING] The installer or manufacturer is responsible for ensuring that the installation meets wall strength requirement. Wall anchorage should always be above the shoulder level of the seated occupant to avoid downwards forces on the spine.

Drill 5 screws of $\phi 5$ on vehicle frame. Refer to figure 5.4.1:

【NOTE】 A series of in-line rivets or screws usually indicate the location of frame of wall structure. The point of Wall bracket must face wheelchair.

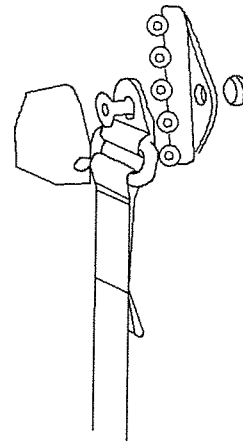


Figure 5.4.1

6. Operation Instruction

6.1 Mount Retractor and Round Track

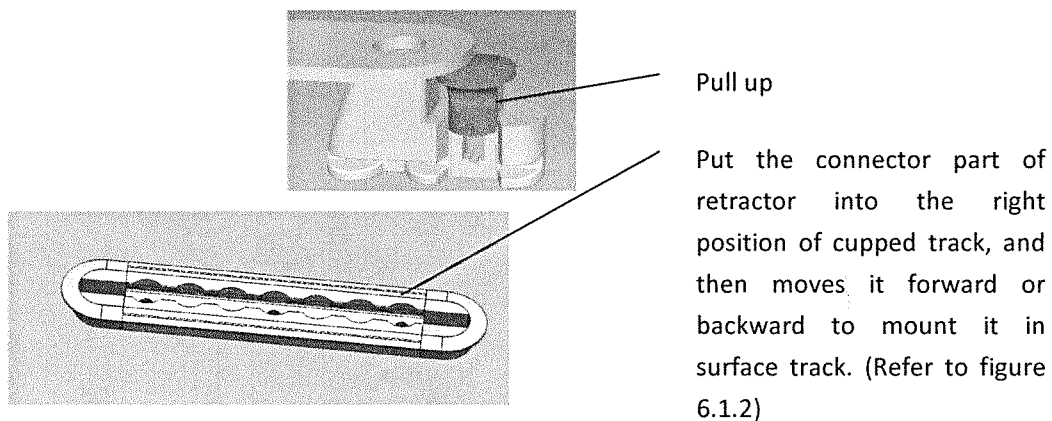


Figure 6.1.1

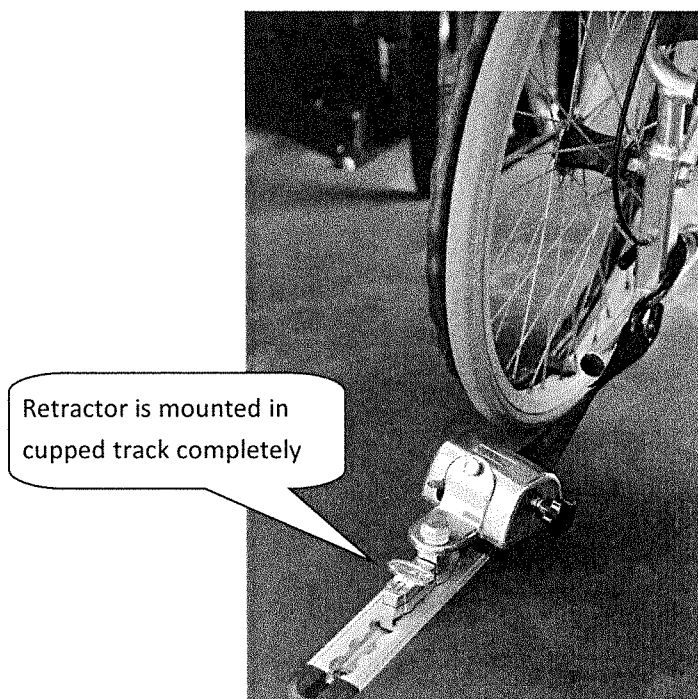


Figure 6.1.2

6.2 Mount Retractor and Wheelchair

- The retractors are mounted on wheelchair by the hooks
- Pull the hook, press the red button, and then pull out the belt as figure 6.2.1;
 - Pull out the belt until the hook can hitch wheelchair, and then release the red button as figure 6.2.2;
 - The belt will withdraw automatically until it is tight;
 - Mount the other three retractors on wheelchair in the same way.

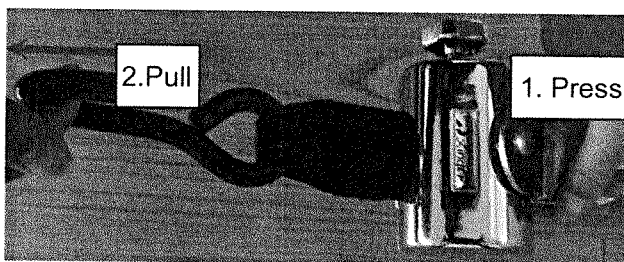


Figure 6.2.1

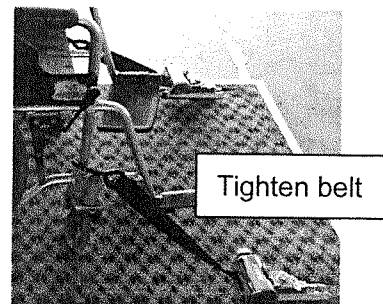


Figure 6.2.2

6.3 Mount Lap Belt

- Mount the two terminals of lap belt on the two rivets of rear retractors as figure 6.3.1;
- Connect the locker of lap belt as figure 6.3.2;
- Adjust the length of lap belt to conform passenger. (Refer to figure 6.3.3).

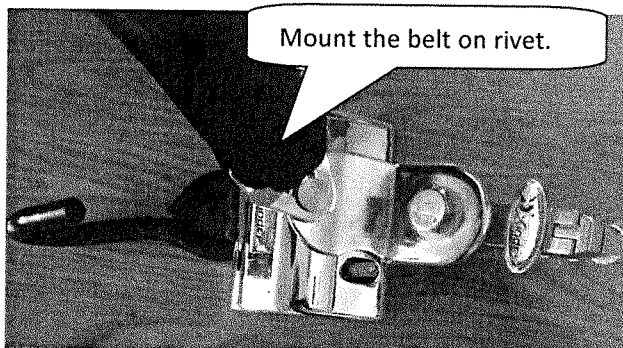


Figure 6.3.1

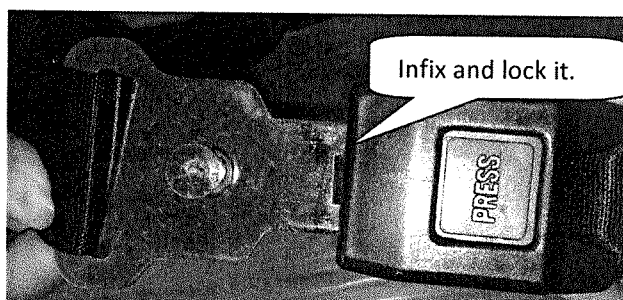


Figure 6.3.2

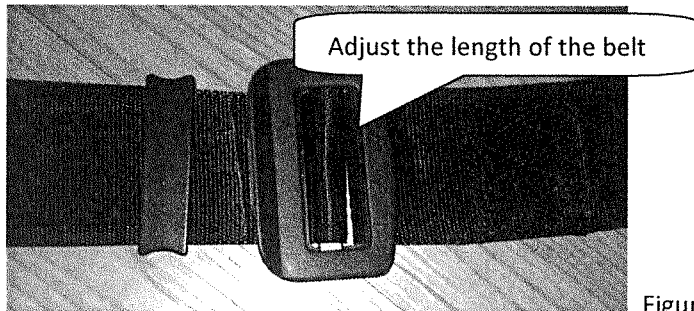


Figure 6.3.3

6.4 Mount Shoulder Belt

Shoulder belt should be mounted after the lap belt is mounted. Shoulder belt may be not necessary in eastern countries if there is no mandatory requirement.

- Install shoulder belt on vehicle according to section 5.4;
- Mount the other side of shoulder belt on the rivet of lap belt. (Refer to figure 6.4.1)
- Adjust the length of shoulder belt to comfort passenger as figure 6.3.3.

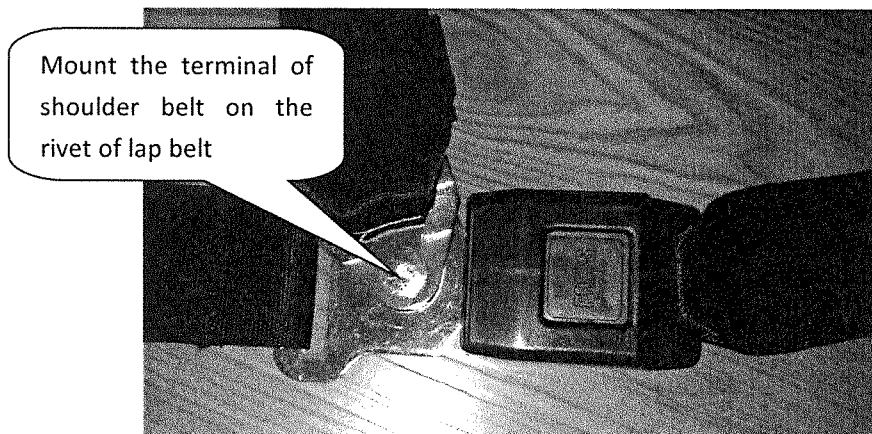
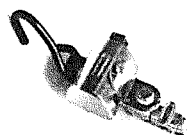
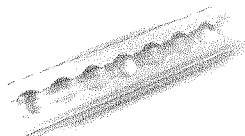
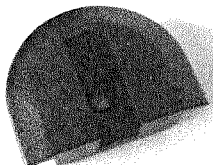

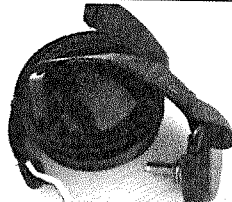


Figure 6.4.1

7. Parts List for Installation

NO.	Reference Photo	Name	Model	Qty	Remark
1		Retractor	—	4	
2		Cupped track	—	4	Mounted in vehicle floor
3		End of cupped track	—	8	Mounted on vehicle floor
4		Lap belt	—	1	
5		Shoulder belt	—	1	Option
6		Plate	Refer to figure 5.3.2	4	Self-provide
7		Cross recessed countersunk head tapping screws	GB846-1985 ST4.2×22	8	Self-provide
8		Cross recessed countersunk head screw	GB/T819.2-1997 M8×35	12	Self-provide
9		Flat washer	GB95-2002 8	12	Self-provide
10		Spring washer	GB93-1987 8	12	Self-provide
11		Hexagon nut	GB/T 6170-2000 M8	12	Self-provide



XINDER-TECH ELECTRONICS

ATTACHMENT 1: Owner Registration Card

OWNER INFORMATION			
Name		Add	
Tel		Fax	
Zip Code		E-mail	
PRODUCT INFORMATION			
Product		Model	
Quantity		Serial Number	
Place of Purchase		Date of Purchase	

Owner Signature:

[NOTE]

- Owner should confirm by signature after filling out the above information.
- All the owners should fill out the above information factually after purchasing XINDER product, then give it back to XINDER authorized dealer or mail to XINDER.
- XINDER or XINDER authorized dealer is responsible for tracking using condition of XINDER product and provide with warranty in time after receiving *OWNER REGISTRATION CARD* filled out by owner.
- If owner don't fill out and mail *OWNER REGISTRATION CARD* after purchasing XINDER product, XINDER will not answer for unnecessary loss due to service not to be provided by XINDER.