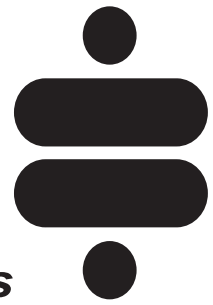


ridetech

Air Ride Technologies



41173000

70-81 Camaro TigerCage
Shoulder Harness Bar Installation

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70-81 Camaro TigerCage Shoulder Harness Bar Installation

350 S. St Charles St. Jasper, In. 47546 Ph. 812.482.2932 Fax 812.634.6632



IMPORTANT: Please read the entire installation procedures before starting any work. We suggest professional help with installation. AirRide Technologies does not take responsibility for any damage done to your car or AirRide Technologies products that are not properly installed.

Included Parts And Quantities:

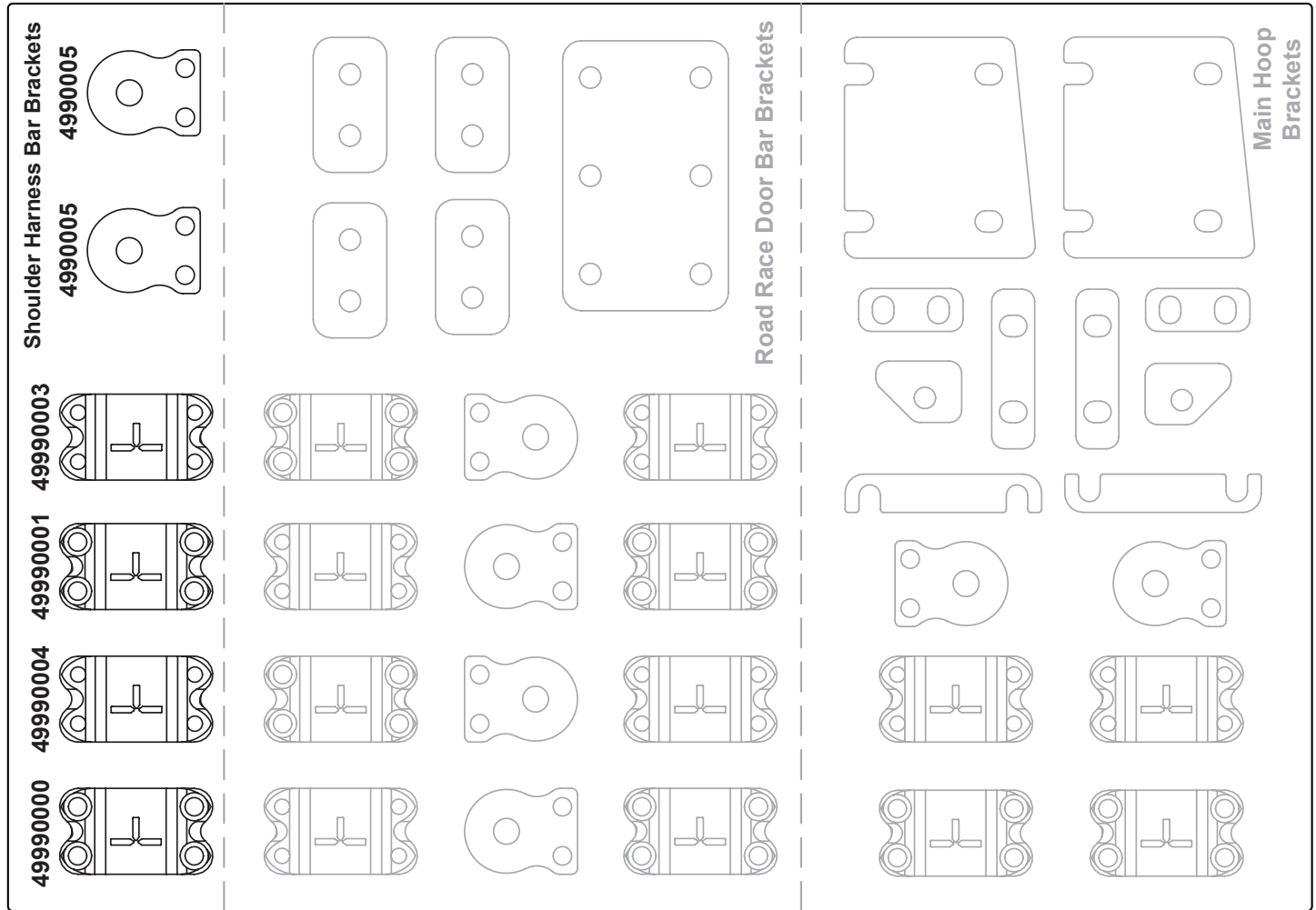
Shoulder Harness Bar Components:

1	41173001	Shoulder harness bar
2	49990005	Clamp tab
1	49990003	Tiger Clamp P (threaded)
1	49990001	Tiger Clamp P
1	49990004	Tiger Clamp D (threaded)
1	49990000	Tiger Clamp D
1	Tube of Anti-Seize	

Hardware:

8	3/8" x 1" USS SHCS	Clamps
2	1/2" x 1 1/2" 12 point Gr. 8 bolt	Bar to clamp tab
2	1/2" Flange nut	Bar to clamp tab

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Shoulder Harness Bar Assembly Brackets

The brackets needed for the Shoulder Harness Bar installation are shown in this figure along with their part numbers. Those parts in grey are not needed for the shoulder harness Bar installation.

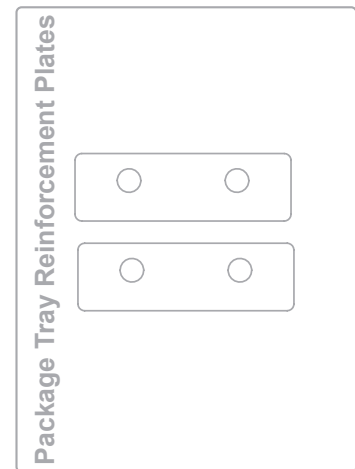
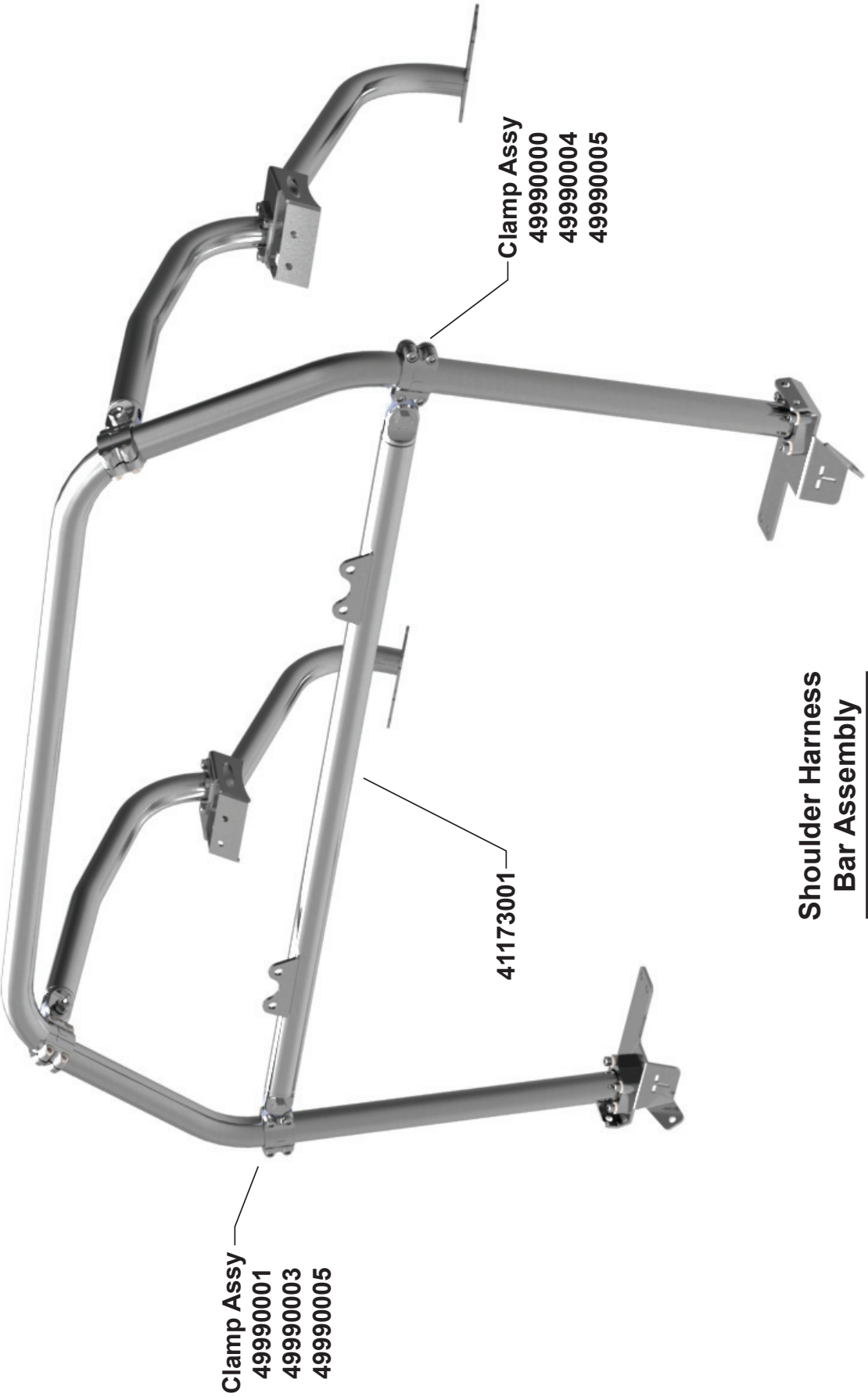


Fig. 1

70-81 Camaro TigerCage Shoulder Harness Bar Installation



**Shoulder Harness
Bar Assembly**

Fig. 2

70-81 Camaro TigerCage Shoulder Harness Bar Installation

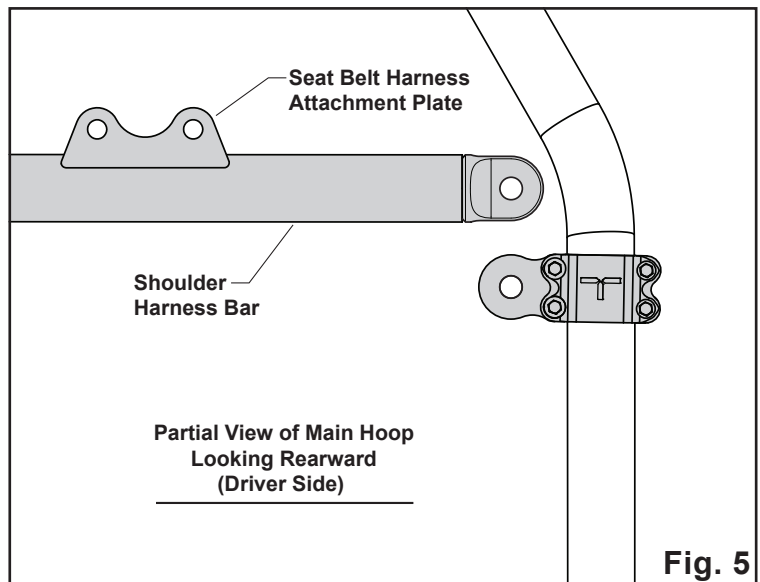
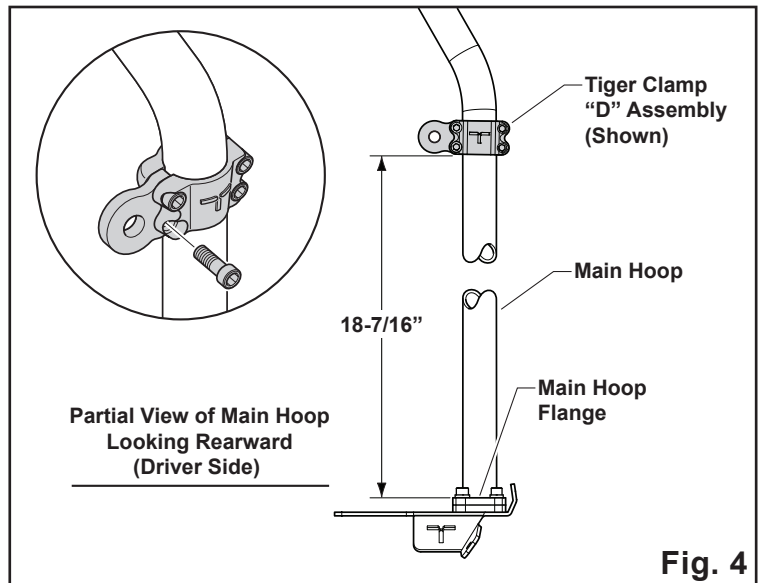
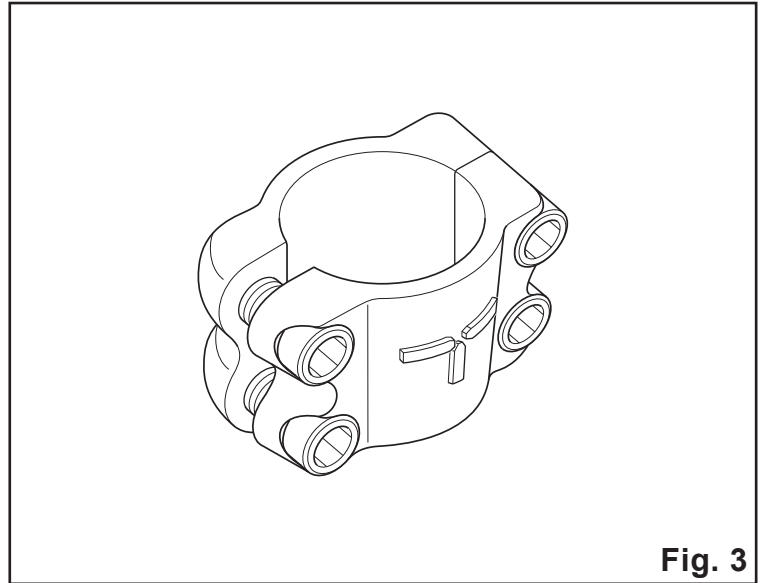
Step 1. Position the driver and passenger front seats towards the front of the vehicle and fold the seat backs forward to gain access to the rear seat.

IMPORTANT: Before performing step 2 be aware there are two different direction clamps that make up a tiger clamp assembly. Care must be taken as to which clamp halves are bolted together. The “T” in the casting must be facing up at all times and there must be a gap on one side for the tiger tab to slide into (See Fig 3).

NOTE: Fig 2 on page 3 shows the proper clamp locations for the Shoulder Harness Bar.

Step 2. Loosely fasten the tiger clamp “D” assembly to the main hoop on the driver side and clamp “P” on the passenger side using four 3/8” x 1” socket head cap screws. Position the clamps just below the bend in the main hoop approximately 18-7/16” above the main hoop flange (See Fig 4).

Step 3. With the seat belt harness attachment plate upright and facing forward in the vehicle, slide the ends of shoulder harness bar into the tiger clamp assemblies (See Fig 5). The tiger clamps may need to be adjusted slightly to achieve proper fit. Be careful not to scratch the main hoop when positioning the tiger clamps.



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Step 4. Align the hole in the tiger tab with those in the shoulder harness bar and secure using a $\frac{1}{2}$ " x $1\frac{1}{2}$ " 12 point bolt and $\frac{1}{2}$ " flange nut (See Fig 6). Do both the driver and passenger sides. After the shoulder harness bar is positioned correctly finish tightening all fasteners. **Always tighten the tiger tab side of the clamp first.** Remember to use Anti- Seize on all fasteners that are threaded into stainless clamps. Torque all $\frac{3}{8}$ " fasteners to 45 ft-lbs and $\frac{1}{2}$ " fasteners to 75 ft-lbs.

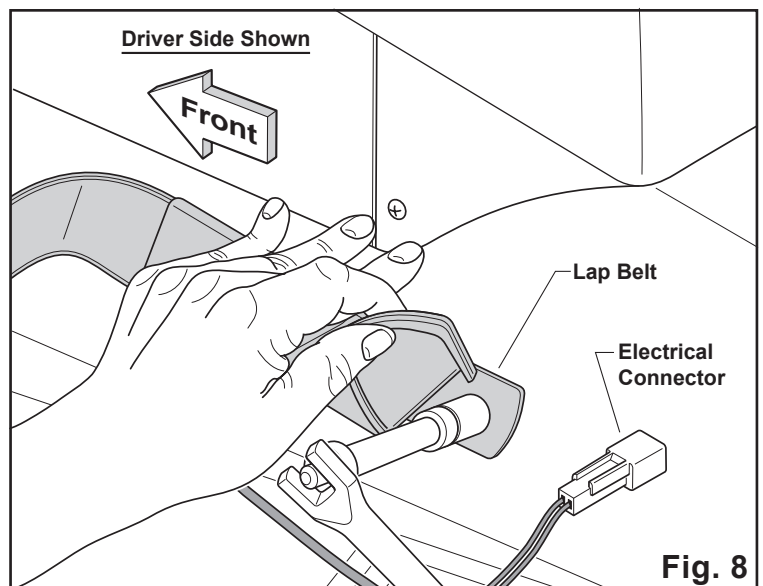
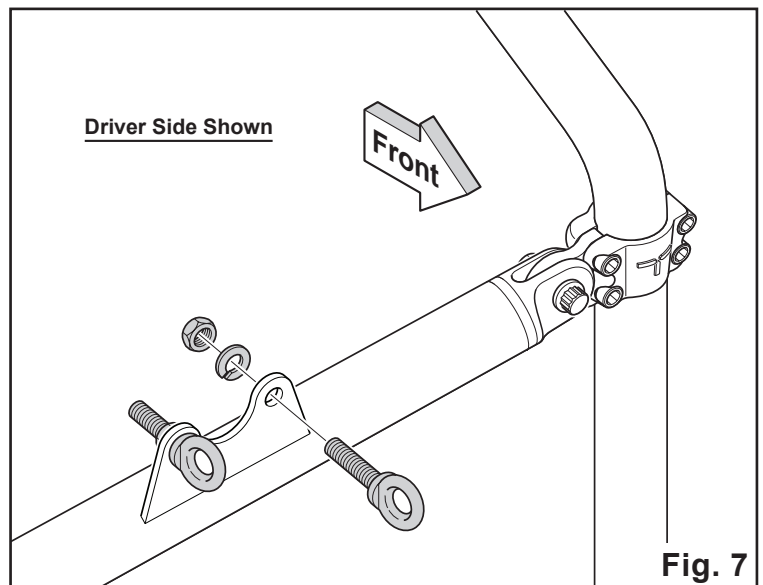
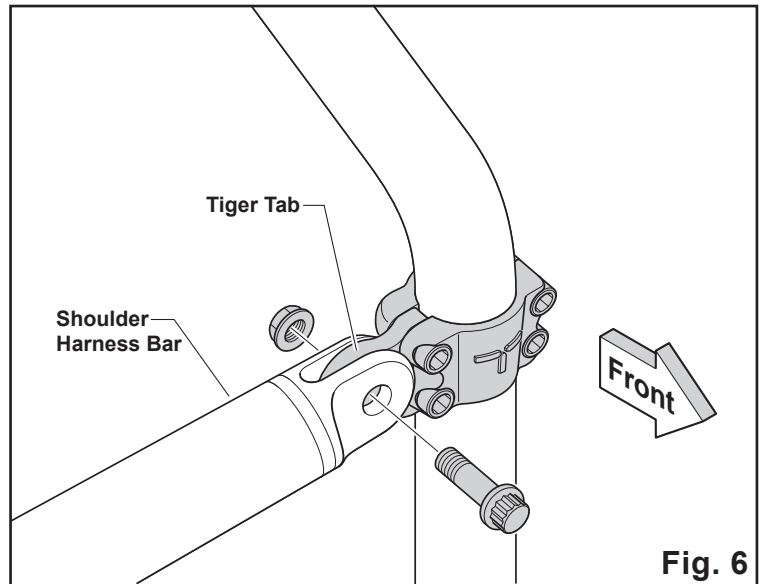
NOTE: If you have purchased the five point safety harness kit **Part # 49999999** proceed with step 5.

SAFETY HARNESS DISCLAIMER

PLEASE READ: The safety harness is sold without warranty expressed or implied. No warranty or representation is made as to the product's ability to protect the user from any injury or death in any manner of use. The user assumes that risk. The effectiveness of this equipment is directly related to the manner in which it is installed, used, and/or maintained. Proper installation is solely the responsibility of the installer, and will not be assumed by Ridetech Air Ride Technologies.

Step 5. Install two eyebolts, supplied with harness kit **Part # 49999999**, in each of the seat belt harness attachment plates. Secure each eye bolt using a lock washer and jamb nut (See Fig 7). Do both Driver and passenger sides of the vehicle.

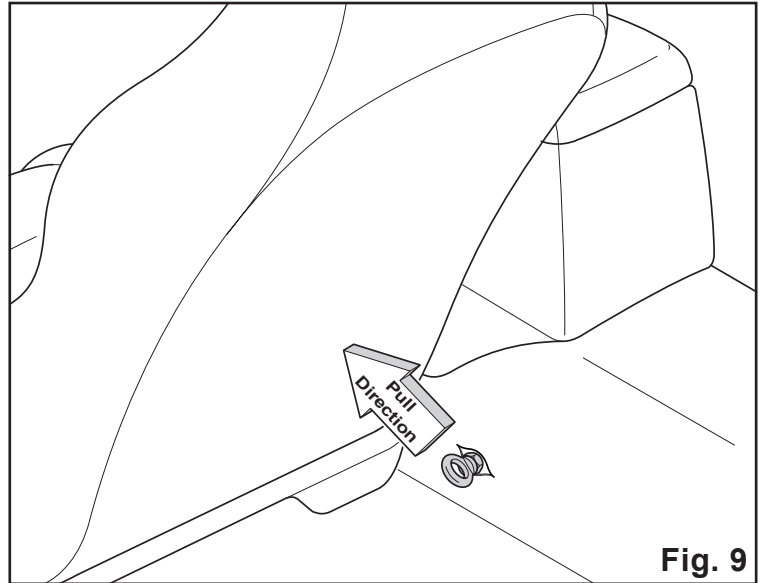
Step 6. Disconnect the electrical connector from the seat belt sensor if equipped. Remove the inboard and outboard front seat lap belts from the driver and passenger sides of the vehicle (See Fig 8).



70-81 Camaro TigerCage Shoulder Harness Bar Installation

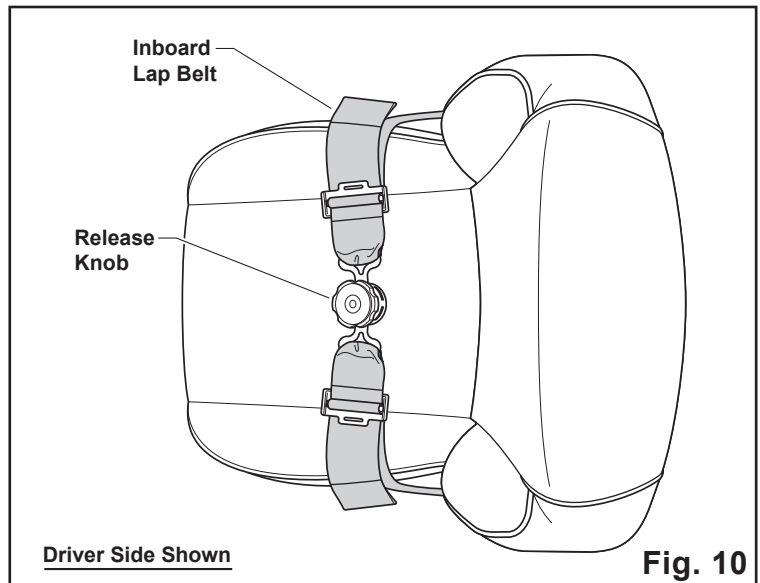
IMPORTANT: When performing step 7 make sure the eyebolt jamb nuts are mounted flush against the floor pan without any carpet interference.

Step 7. Install an eyebolt and jamb nut, supplied with harness kit **Part # 49999999**, in both the existing inboard and outboard seat belt mounting holes. The jamb nut must be bottomed out against the head of the eyebolt when installing. Position the head of the eyebolt at an angle compatible with the direction of pull on the seat belt webbing under full load (See Fig 9). Tighten the eyebolt jamb nut to the floor pan. Do both the driver and passenger sides of the vehicle.

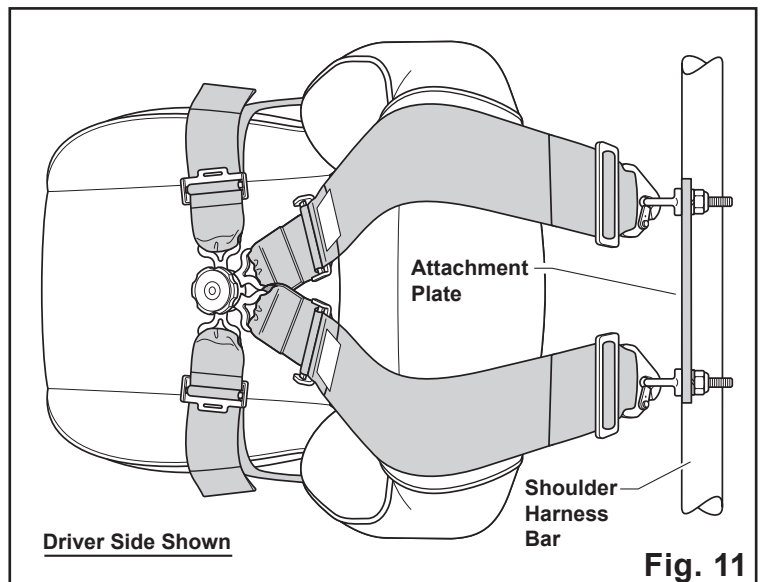


Step 8. Clip the lap belt with the release knob to the inboard eyebolt in the floor pan on the drivers side. Then clip the remaining lap belt to the outboard eyebolt in the floor pan and route the two belts forward along side the seat and connect to each other (See Fig 10). Do both the driver and passenger sides of the vehicle.

NOTE: When installing the passenger side lap belts, the belt with the release knob will be clipped to the outboard eyebolt in the floor pan. The remaining lap belt will clip to the inboard eyebolt in the floor pan.

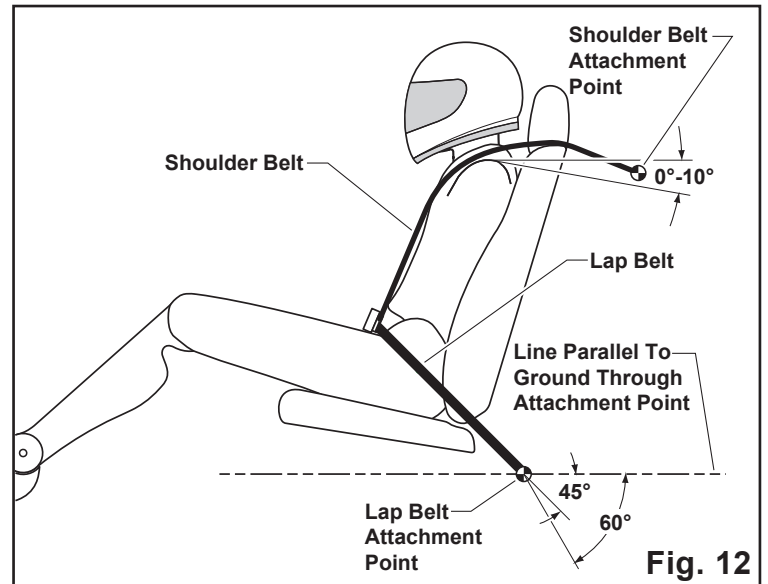


Step 9. Clip the two shoulder belts to each of the eyebolts in the attachment plate on the shoulder harness bar. Route the two belts over the back of the seat and connect to the release knob (See Fig 11). Do both the driver and passenger sides of the vehicle.



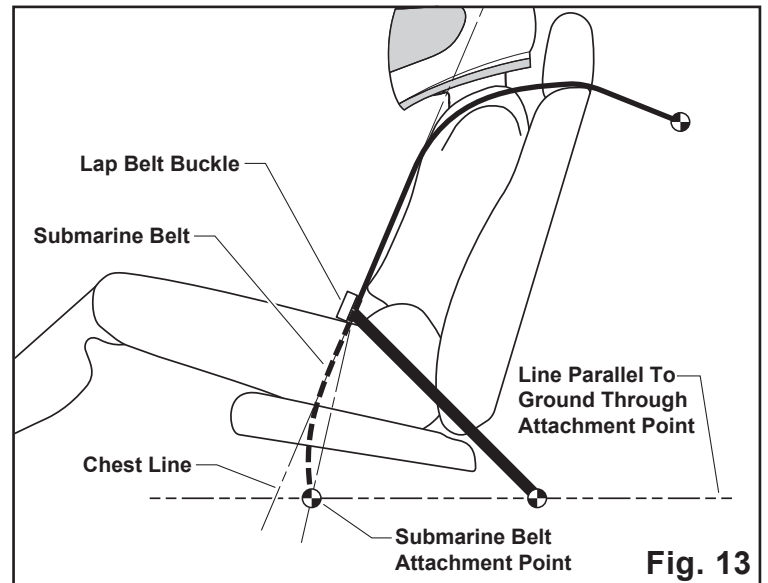
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IMPORTANT: After the safety harnesses have been properly installed check to make sure the proper restraint angles are correct. Depending on the type of front seat being used it may be necessary to adjust the shoulder harness bar to achieve the proper restraint angle required for the Shoulder Belts. The shoulder belt must be anchored between 0° - 10° below the shoulder of the occupant (See Fig 12). The Lap Belts must be anchored as close to the hip as possible at an angle of 45° but no greater than 60° to the ground.

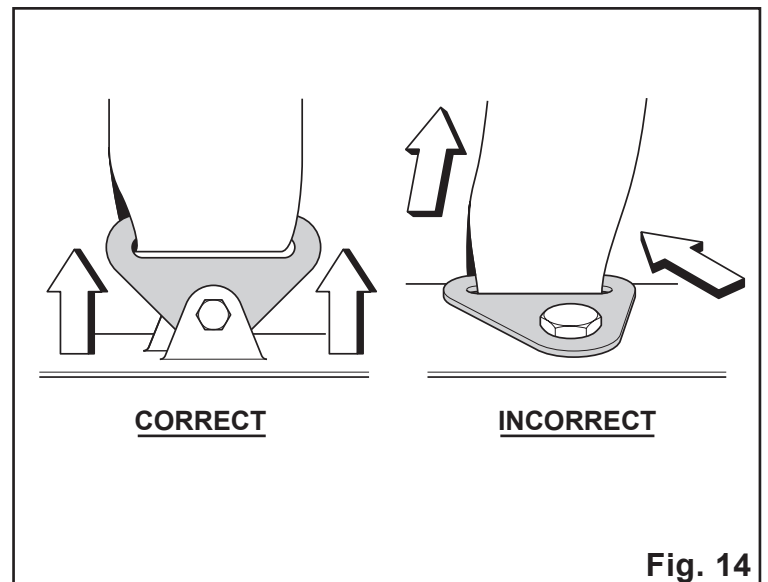


Step 10. Install the Anti-Submarine Belt or (Sub-Belt). The Sub-Belt must be anchored on or slightly behind the chest line of the occupant as measured from the intersection of the chest line and the lap belt buckle (See Fig 13).

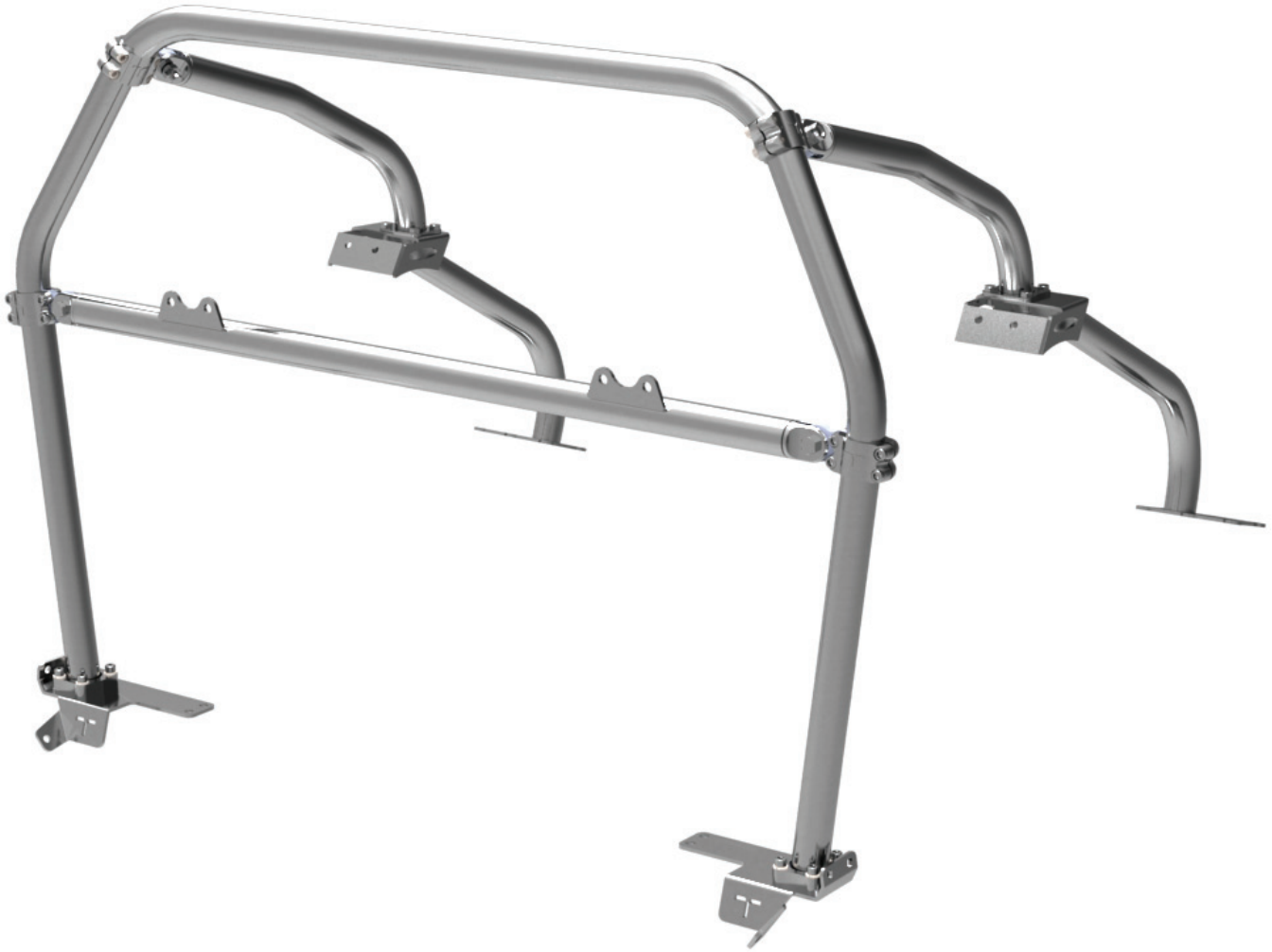
NOTE: Minimum grade specification for hardware used to attach the Anti-Submarine belt are Grade 8.



IMPORTANT: When using mounting brackets (Not included) to install the Submarine Belt, the mounting brackets must be installed at an angle that is compatible with the direction of pull on the webbing under full load. Preferred mount is in a double shear with allowance for the bolt in the bracket to pivot and align toward the direction of the load (See Fig 14). All mounting brackets should be attached directly to the frame or chassis of the vehicle and installed to limit the occupants body travel both upward and forward. Do not weld around or near belts or belt hardware.

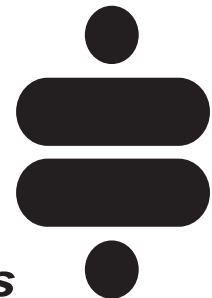


thank you!



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