

NORTHEAST CORVAIR COUNCIL

Recommended Corvaire Convertible Roll Bar Construction

1. The Northeast Corvaire Council (NECC) requires roll bars in any convertibles without a factory-installed hoop. The following are recommendations for construction of a roll bar for Corvaire convertibles. These instructions can also be used for other makes. The NECC accepts no responsibility or liability and reserves the right to make determinations as to the adequacy of specific installations.

2. Tubing: Tubing shall be 1.75" OD X .120" wall thickness minimum Drawn Over Mandrel (DOM) mild steel tubing. ERW, chrome moly, plumbing pipe or any other material is not allowed.

3. Construction:

3.1 Bends: All bends must have a radius of 3X tubing diameter minimum and show no signs of crimping or wall failure.

3.2 Main Hoop: The main hoop must have an inspection hole of 3/16" at least 3" from a weld or bend with access across the hole for calipers for determining wall thickness. The main hoop must be of the full width design, and may have only a maximum of four (4) bends. The main hoop must have a diagonal in the plane of the main hoop. This diagonal may be removable with at least two (2) 3/8" Grade 5 bolts at each joint and the bolt holes must be sleeved to avoid crushing. A full "double ear" type of bracket may be used as long as the bracket is one piece formed around the main hoop tubing and must be fully welded to the main hoop. Locknuts are highly recommended.

The main hoop must have 2 braces extending rearward with an included angle of at least 30 degrees. These braces may mount to the floor, wheel wells or package shelf. They must attach to the main hoop within 6" of the top and must have no bends. The top of the roll bar must be at least 2" over the driver's helmet when seated normally and no more than 6" behind the top of the seatback.

3.3 Permanent Welded In Roll Bar: Mounting pads at least 3" X 5" X .080" thick must be used for the main hoop mounts. These mounting pads must be angled to mount to the floor and at least 1" up the vertical surface of the rocker box and must bridge the seam of the front and rear floors. Mounting pads for the rear braces must be at least 2" X 4" X .080" thick. It is recommended that these pads extend up a vertical surface.

3.4 Removable Bolt-in Roll Bar: It is recommended that a 3" X 5" X .080" minimum mounting pad be welded to the floor for the main hoop mounts. This plate must be angled to mount to the floor and the vertical surface of the rocker box as in the permanent installation. It is also recommended that a similar pad of at least 2" X 3" X .080" be welded to the car for mounting of the rear braces.

The roll cage mounting feet shall be at least 2" X 4" X .187" thick and bolt to the above pads with at least 3 Grade 5 minimum bolts 3/8" in diameter. The bolts must protrude past the nuts. Locknuts are highly recommended.

If the welded in mounting pads are not used, the mounting feet of the main hoop must be at least 3" X 4" X .187" and use 2 bolts into each section of floor (4 bolts per foot). All 4 mounting feet must utilize backing plates of the same dimensions through bolted sandwiching the floor.