buns
CF Senic
Membe
★★★★

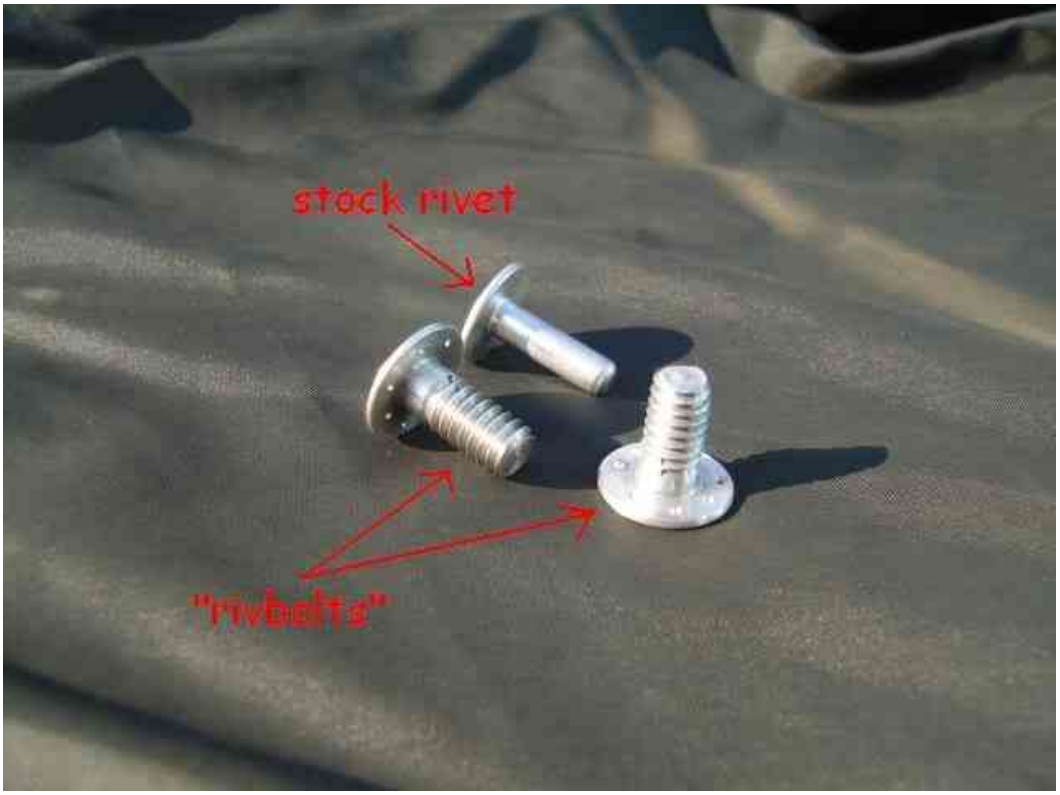

My Cory
Photos
Member
Since: I
2006

DansYellow66....good point. I'm amazed that ,even after doing a search, I couldn't find any info on this subject. My car had a lot of loose rivets and I didn't know what to do. Plan A was to remove the doorskin as this is the only way you can hammer new rivets in. Plan B came to me in a rare moment (sober).....( Just kidding.) I came up with this invention that I call the "rivbolt".....half rivet(head), half bolt (thread). I have a lathe so I decided to give it a try. I cut the shank to 1/4" and drilled out the holes in the door to 1/4" as they were already larger than 3/16" as they had been loose for a long time. I used a punch to create some divets on the underside of the head, a little Loctite on the threads , and ...voila! Works like a hot damn, and totally undetectable from the outside.

Only problem is, they take about 30 minutes each to manufacture with my non C.N.C. machine. So as I'm making them ( I did about 14 ), I'm thinking , why doesn't any of the vendors sell these. This has to be a common problem. Plus, there are lots of other places on the car where you can't get at the rivets to set them.

Then I find out that someone does manufacture something called a "projection weld screw". I believe they are meant to be welded through a hole to provide a "captured" bolt. They have 3 nibs on the underside of the head. You could drill 3 shallow divets to accept these nibs so that the screw doesn't turn. The heads are a bit thicker than the original rivets, but they could probably be turned down on a belt sander if you don't have a lathe.

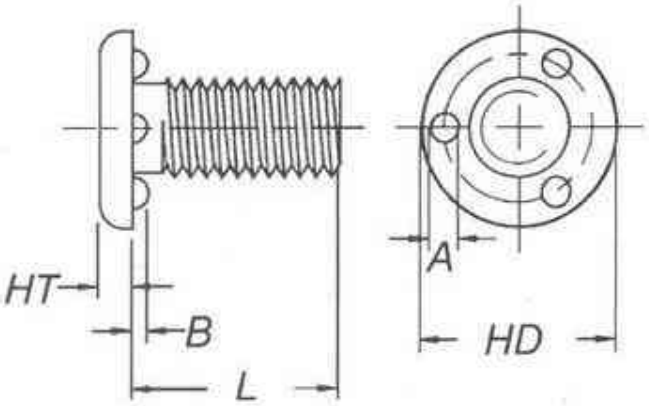
The "rivbolts"



On the door.


Projection Weld Screws from H.Paulin Co. .....also known as Papco.
http://www.hpaulin.com/welcome.html

# Easy-Spot® "50" Inch Projection Weld Screws




Easy-Spot "50" Inch Weld Screws have three precision projections located 120° apart, under the head. Recommended for through hole applications.

## "50" Inch

| Thread Size | | 6-32 | 8-32 | 10-24 | 10-32 | 1/4-20 | 1/4-28 | 5/16-18 | 5/16-24 | 3/8-16 | 3/8-24 | 1/2-13 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| "HD" HEAD Diameter | | .323<br>.303 | .385<br>.365 | .448<br>.428 | .448<br>.428 | .575<br>.550 | .575<br>.550 | .755<br>.725 | .755<br>.725 | .880<br>.850 | .880<br>.850 | 1.005<br>.975 |
| "HT" Thickness | | .052<br>.042 | .068<br>.058 | .068<br>.058 | .068<br>.058 | .083<br>.073 | .083<br>.073 | .099<br>.089 | .099<br>.089 | .114<br>.104 | .114<br>.104 | .146<br>.136 |
| "A" PROJ. Diameter | | .055<br>.045 | .075<br>.065 | .085<br>.075 | .085<br>.075 | .105<br>.095 | .105<br>.095 | .125<br>.115 | .125<br>.115 | .135<br>.125 | .135<br>.125 | .156<br>.145 |
| "B" PROJ. Height | | .022<br>.018 | .027<br>.023 | .032<br>.028 | .032<br>.028 | .042<br>.038 | .042<br>.038 | .047<br>.043 | .047<br>.043 | .052<br>.048 | .052<br>.048 | .062<br>.058 |
| Length Tolerance | Length "L" Under Head | Part Number | | | | | | | | | | |
| Under 1" +.000 -.031 | 1/4 | 50-1104 | 50-1404 | | | | | | | | | |
| | 5/16 | 50-1105 | 50-1405 | | | | | | | | | |
| | 3/8 | 50-1106 | 50-1406 | 50-1506 | 50-1606 | 50-2106 | | | | | | |
| | 1/2 | 50-1108 | 50-1408 | 50-1508 | 50-1608 | 50-2108 | 50-2208 | 50-2708 | | 50-3308 | | |
| | 9/16 | | | | 50-1609 | | | | | | | |
| 1" - 2" +.000 -.062 | 5/8 | 50-1110 | 50-1410 | 50-1510 | 50-1610 | 50-2110 | 50-2210 | 50-2710 | 50-2810 | | | |
| | 3/4 | 50-1112 | 50-1412 | 50-1512 | 50-1612 | 50-2112 | 50-2212 | 50-2712 | 50-2812 | 50-3312 | 50-3412 | |
| | 7/8 | 50-1114 | | | 50-1614 | 50-2114 | | 50-2714 | | 50-3314 | 50-3414 | |
| | 1 | 50-1116 | 50-1416 | 50-1516 | 50-1616 | 50-2116 | 50-2216 | 50-2716 | 50-2816 | 50-3316 | 50-3416 | 50-4416 |
| Over 2" +.000 -.093 | 1 1/4 | | 50-1420 | 50-1520 | 50-1620 | 50-2120 | | 50-2720 | | 50-3320 | 50-3420 | 50-4420 |
| | 1 1/2 | | 50-1424 | 50-1524 | 50-1624 | 50-2124 | | 50-2724 | 50-2824 | 50-3324 | 50-3424 | 50-4424 |
| | 1 3/4 | | | | | 50-2128 | | | | 50-3328 | 50-3428 | 50-4428 |
| | 2 | | | 50-1532 | | 50-2132 | | 50-2732 | | 50-3332 | 50-3432 | |
| | 3 | | | 50-1548 | | 50-2148 | | | | | | |

All dimensions are in inches.
Also available in Stainless Steel - price on application.

01-29-2007, 08:26 AM #8

kenEDMUNDS
CF Senior Member


My Corvette Photos
Member Since: May 2003
Location: DAVIE/FORT LAUDERDALE FL

Buns, that is some great information, I can think of a buch of uses for those riv bolts.
Thanks, Ken

01-29-2007, 01:29 PM #9

JohnZ
CF Senior Member

Lifetime Gold Member

My Corvette Photos
Member Since: Oct 2000
Location: Washington Michigan

These are essentially the same thing - 1/4"-20 projection weld screws from McMaster-Carr, with the heads faced off nice and flat in a lathe.