

## COMPARISON TABLE - STABILIZER BARS

Comparison of approximate spring rates for PORSCHE factory stabilizer bars vs. H & H Specialties CARRERA adjustable bars.

$$\text{Rate} = \frac{\pi G d^4}{16 b^2 L}$$

$$\begin{aligned} \text{Rate} &= \text{lbs./in.} \\ \pi &= 3.14159 \\ G &= 12 \times 10^6 \end{aligned}$$

d = diameter of bar  
b = length of Lever Arm  
L = working length of bar

### Factory 911 1974-75 (New Design)

#### Front Stabilizer

L 28 1/2"

b 8 1/4"

d = 16mm \*1

d = 20mm \*2

Rate 191 lbs./in.

Rate 467 lbs./in.

### Factory 911/912 1965-73

#### Front Stabilizer 914 1970-75

L 36"

b 4.5"

d = 15mm \*3,4

d = 16mm

d = 17mm

d = 18mm

d = 19mm

d = 20mm

d = 22mm

Rate 394 lbs./in.

Rate 510 lbs./in.

Rate 649 lbs./in.

Rate 817 lbs./in.

Rate 1012 lbs./in.

Rate 1240 lbs./in.

Rate 1820 lbs./in.

### H & H Specialties

#### Adjustable Front Stabilizer

L 36.5"

d 3/4" (19mm)

d 13/16" (21mm)

b = 6.25"

b = 5.25"

b = 4.25"

b = 3.25"

b = 6.25"

b = 5.25"

b = 4.25"

b = 3.25"

Rate 524 lbs./in.

Rate 742 lbs./in.

Rate 1133 lbs./in.

Rate 1539 lbs./in.

Rate 720 lbs./in.

Rate 1020 lbs./in.

Rate 1558 lbs./in.

Rate 2665 lbs./in.

### Factory 911

#### Rear Stabilizer

L 36.5"

b 6.25"

d = 15mm \*5

d = 16mm

d = 17mm

d = 18mm \*6

d = 19mm

Rate 202 lbs./in.

Rate 264 lbs./in.

Rate 332 lbs./in.

Rate 418 lbs./in.

Rate 518 lbs./in.

### H & H Specialties

#### Adjustable Rear Stabilizer

L 37.5"

d 5/8" (16mm)

d 3/4" (19mm)

d 13/16" (21mm)

b = 7"

b = 6"

b = 5"

b = 7"

b = 6"

b = 5"

b = 7"

b = 6"

b = 5"

Rate 196 lbs./in.

Rate 266 lbs./in.

Rate 384 lbs./in.

Rate 402 lbs./in.

Rate 547 lbs./in.

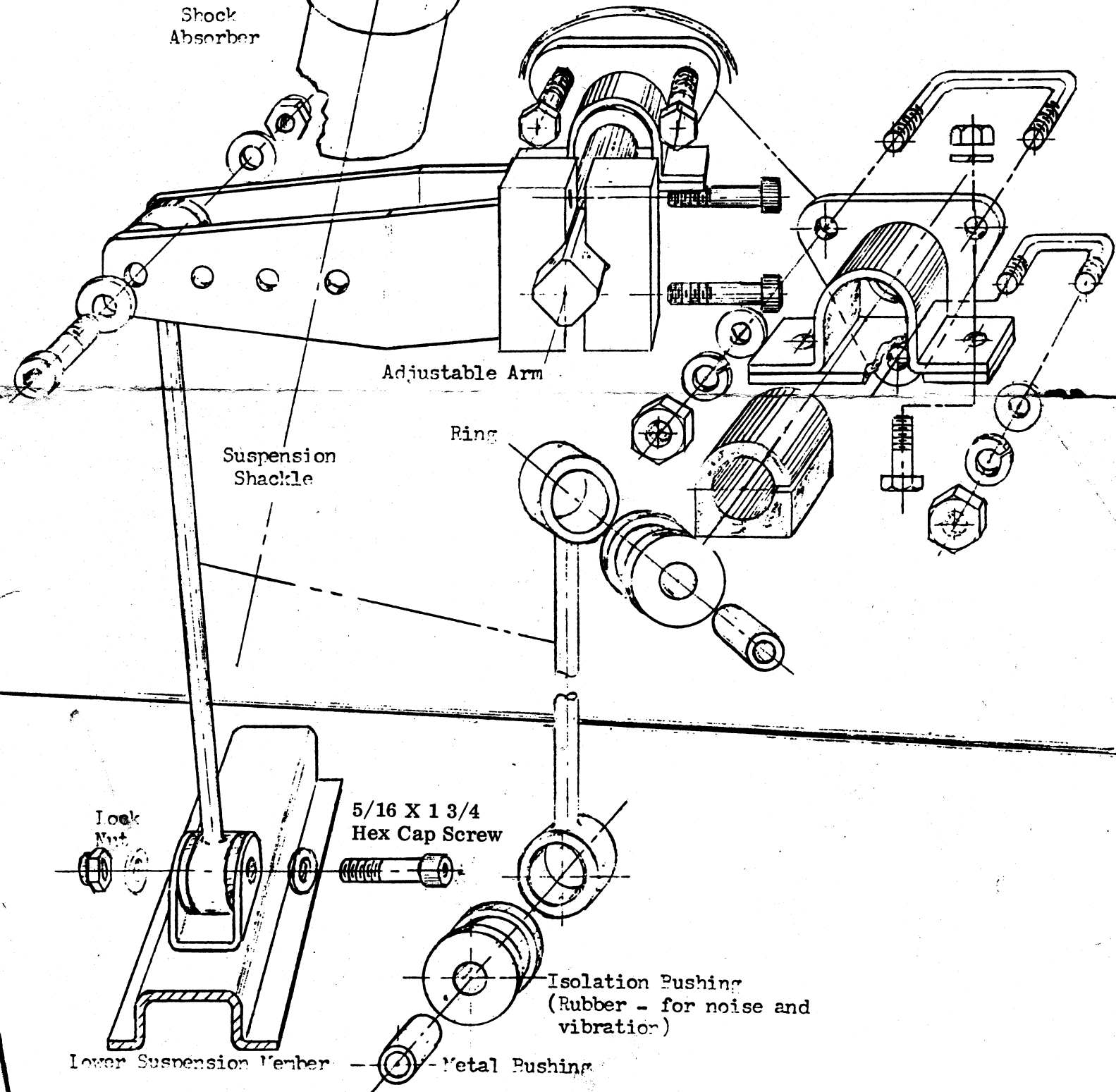
Rate 788 lbs./in.

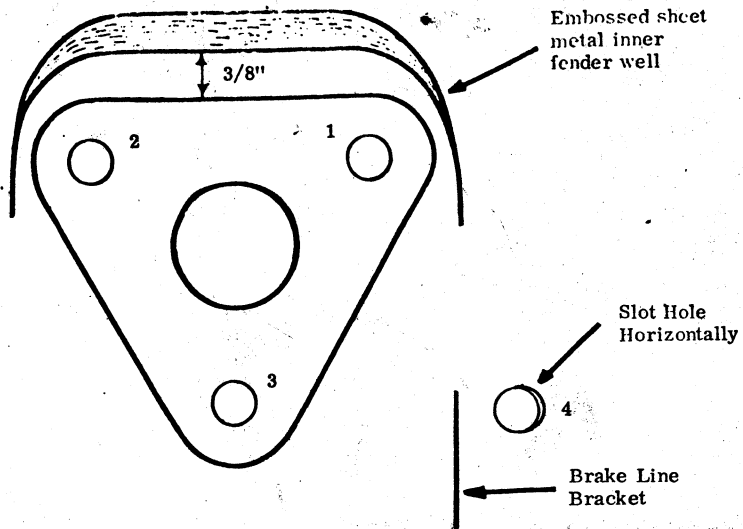
Rate 558 lbs./in.

Rate 760 lbs./in.

Rate 1095 lbs./in.

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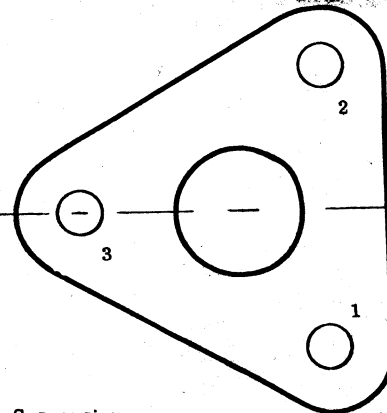




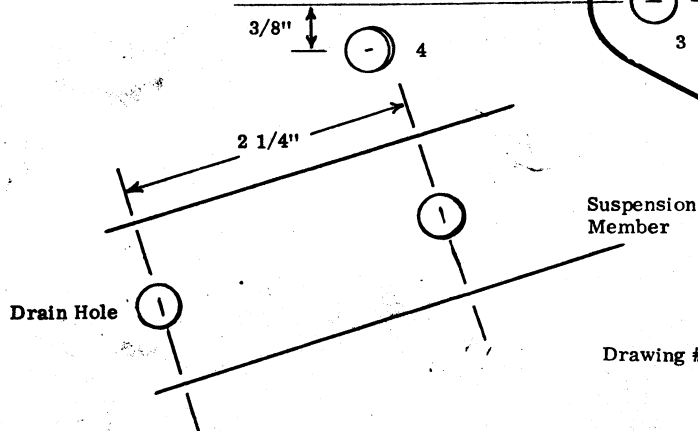
Drawing #1

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Drawing #2



Drawing #3



Adjustable Front Stabilizer Bar For Porsche 911/912/914/All

Parts List

- 1 - 19mm bar
- 2 - Adjustable Arms
- 2 - Chassis mtg. plates
- 2 - Bushing keepers
- 2 - Chassis rubber bushings
- 2 - Suspension shackles
- 4 - Shackle rubber bushings
- 4 - Steel bushings
- 8 - 9/16 OD washers
- 4 - 5/16-24 x 1 3/4 Socket head cap screws
- 4 - 5/16-24 x 1 3/4 Hex head cap screws
- 4 - 5/16-24 x 1 Hex Cap Screws
- 4 - 5/16-24 Lock nuts
- 4 - 5/16-24 Hex nuts
- 4 - 5/16 Lock washers

1 Square U-bolt set (914, 911, '74-'77)

- 4 - U-bolts
- 4 - 5/16-24 Hex nuts
- 4 - 5/16 Lock washers
- 2 - 5/16 Fender washers

1 Lower Suspension Bracket set (914, '74-'76) (911, '74-'77)

- 2 - Suspension U Brackets
- 2 - 3/8-16 x 2 1/4 Hex cap screws
- 2 - 3/8-16 Lock nuts
- 2 - 5/16 Bolt washers

Early 911/912 obtain factory part #901-343-735-00 Bearing Brkt.

Race Kits (in addition to and/or replacing their respective street parts)

- 1 - 21mm bar
- 2 - Delrin bushings
- 2 - Race shackle sets
  - 2 - Shackle rods
  - 4 - hyam joints
  - 4 - 5/16-24 x 1 1/2 Socket head cap screws
- 8 - spacer bushings

## FRONT STABILIZER BAR INSTALLATION INSTRUCTIONS

## GENERAL INSTRUCTIONS

Model No. SBFA 911/912/914 - 19/21mm

1. Raise front of vehicle. Remove both front wheels.
  2. Remove factory stabilizer bar or blank chassis mounting plates; or, locate the embossed area on inside fender well, sheet metal opposite and slightly behind shock absorber, whichever applies. All 914 and 911, 1974-1976, see special instructions where applicable.
  3. Install chassis mounting plates in place of the blank or factory plates.
  4. Install bar through chassis mounting plates.
  5. Center bar, lubricate rubber chassis bushings with rubber parts lube, or silicone spray, and work into position around bar and seat in chassis mounting plate. Install bushing keeper to chassis mounting plates with 2 5/16-24 x 1" hardware sets. Tighten securely.
- Assemble adjustable arms to bar. Arms should face the front of the car. Assemble with 5/16" x 1 3/4" socket cap screws. The certain arms are tight against nylon bearings. Tighten securely.
7. Lubricate rubber bushings and force into rings at ends of suspension shackles with screwdriver. [Lubricant - rubber parts lube, soapy water, glycerine, saliva.]
  8. Lubricate metal sleeves and force into rubber bushings.
  9. Assemble shackle to adjustable arm with 5/16" x 1 3/4" hex cap screws, washers and locknuts. To use position one and four, mount non-angled ring at adjustable arm, angled ring at lower suspension A arm. To use position two and three, mount angled ring at adjustable arm, non-angled ring at suspension A arm. Suggest position one (as shown in drawing) to start. See caution at end of instructions.
  10. Reassemble wheels, etc.

**CAUTION** - Start with mildest position as the four positions can change the handling attitude from mild over-steer, to neutral, to mild initial under-steer depending on speed, tires, road surface, use of rear stabilizer bar, tire pressure, etc.

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1. Center chassis mounting plate within embossed area per Drawing No. 1 (914), Drawing No. 2 (911). Be certain spacing is correct. Mark center, punch and drill four (4) 5/16" holes as indicated. Slot holes No. 1 and 4 horizontally for 914, holes No. 1 vertically, No. 4 in line with No. 3 for 911.
2. Mark center, punch and drill hole for the bar 1" diameter or drill undersize and file to correct size.
3. 911 (1974-76 only) - Remove factory bar. Burn, chisel, saw, or otherwise remove bracket welded to lower suspension arm that held factory bar. Grind or file smooth.
4. To install lower suspension U bracket, locate center, punch and drill a 3/8" hole from the underside of the suspension A arm 2 1/4" inboard of the drain hole all the way through the suspension member per Drawing No. 3.
5. Install U bracket with 3/8-16 x 2 1/2" bolt through bracket, suspension member, bolt washer and secure with lock nut. Align parallel with suspension member. Tighten securely; but, do not crush suspension member. Early 912 models should obtain the special bracket designed for the factory stabilizer bar from their local dealership. Part # 901 343 735 00.
6. Assemble shackle to suspension U bracket per General Instructions. Use a 5/16" fender washer on either side of the rubber bushing within U bracket for spacers.

## RACE KITS

Use delrin bushings, special end plates, and race shackles.

1. Thoroughly grease nylon/Delrin bearing inside and out with a grease containing molybdenum disulfide (moly-grease, Mobil grease Special or equivalent). Center bar and install bearings over bar into chassis mounting plates. Tighten chassis mounting plates. Bearings will be a force-fit in the chassis mounting plates.
2. Race shackles are manufactured 1" shorter for better alignment, as it is assumed the car will be lowered.
3. Assemble 5/16-24 nut onto each end of threaded 3/8" diameter shaft.
4. Assemble hyam joints all the way onto shaft ends. Do not tighten. Length of completed shackle may be adjusted no more than 1/2" either end.
5. Install assembled shackle to adjustable arm with 5/16-24 x 1 1/2" Hex cap screws. Spacer bushings go on either side of hyam joint. Secure with stop nut.
6. Install assembled shackles to lower suspension U bracket as above with spacer bushings. Secure with stop nut.
7. Align hyam joints and secure position with nuts.