



S&W Race Cars and Components, Inc.

11 Mennonite Church Road
Spring City, PA 19475

TECH & INFORMATION: 610-948-7303

ORDERS: 1-800-523-3353

FAX: 610-948-7342

CAUTION!!! - The most important requirement for a successful installation of this, or any, S&W chassis component is that you take your time and use good common sense. Check & recheck all measurements before cutting or welding. If at any time before or during the installation you have any questions - STOP - and call our tech line at 610-948-7303 and we will gladly explain in more detail any step in the installation.

Please read complete instructions thoroughly before beginning! Installation Instructions for Tubular Pro/Series Wheelie Bars Part Numbers 40-312 & 40-313



This kit contains chrome-moly tubing which will require the use of a TIG (Heli-Arc) welder for proper installation.

Assembly of wheelie bars:

- 1) You will need to determine the width of the wheelie bars for your application. When determining the width make sure to check the clearance between the shocks, tires and any other brackets or components that may come in contact with the wheelie bars during the rear housing's travel up and down. (Maximum width for this set of wheelie bars will be 24" center to center on the upper and lower struts).
- 2) Assemble both upper struts **as shown in drawing #1**.
- 3) Tack weld a tube clevis into one end of one of the 3/4" x .058 x 20" pieces of tubing for a cross-brace.
- 4) Secure the tack welded tube clevis on the cross brace tab of the upper strut with a 5/16" x 7/8" grade 8 fine thread bolt and nylock nut.
- 5) Secure a second tube clevis to the other cross brace tab with a 5/16" x 7/8" grade 8 fine thread bolt and nylock nut.
- 6) Place the cross-brace tube up to the second tube clevis and mark it for length.

- 7) Remove the cross-brace and the second tube clevis from the struts.
- 8) Cut the cross-brace to length (the length will vary depending on the width you determined in step # 1).
- 9) Tack weld the second tube clevis to the cross-brace.
- 10) Tack weld the support-brace bracket to the **center** of the cross-brace.
- 11) Reinstall the cross-brace to the two upper struts.
- 12) Square the wheelie bar assembly by "X" measuring **as shown in drawing #3**.
- 13) Tack weld a tube clevis into another 3/4"x.058x20" piece of tubing for a support brace.
- 14) Secure the tack welded tube clevis to the support-brace bracket on the cross-brace with a 5/16"x7/8" grade 8 fine thread bolt and nylock nut. (See **drawing #3** for placement of the support-braces.)
- 15) Secure a second tube clevis to the support-brace tab on the upper strut with a 5/16"x7/8" grade 8 fine thread bolt and nylock nut.
- 16) Place the support-brace up to the second tube clevis and mark it for length.
- 17) Remove the support-brace and second tube clevis and cut the support-brace to length.
- 18) Tack weld the second tube clevis into the support-brace.
- 19) Reinstall the assembled support-brace to the cross-brace and upper strut.
- 20) Repeat steps 13 through 19 for a second support-brace.
- 21) Assemble the two upper struts to the lower strut wheel brackets securing them in place with a quick release wheelie bar pin. (**As shown in drawing #s 1 & 2**).
- 22) Install the two housing brackets to the upper and lower struts **as shown in drawing # 1 & 2**, securing them in place with two 3/8"x1-1/4" grade 8 fine thread bolt and nuts.
- 23) Recheck for square **as shown in drawing #3**.
- 24) Install the two wheel spacers into the wheels and install the wheels into the wheel brackets with the 3/8"x2-1/2" grade 8 bolts and nylock nuts.

Preparation for installation of wheelie bars:

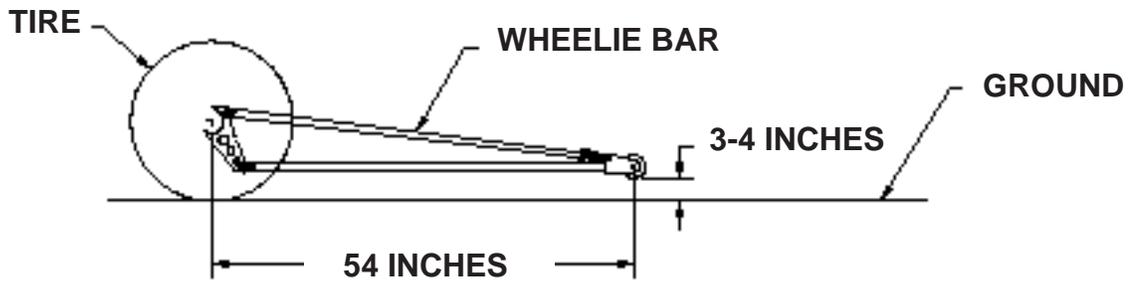
- 25) Raise the car to a comfortable working height and level it front to back and side to side.
- 26) In order to insure that your wheelie bars are centered in the car properly, you must first find the chassis centerline (C/L). The chassis C/L is the midpoint line that runs the length of the car. To find the C/L, drop a plumb line from the same two points on opposite sides of the car to the shop floor. Do this at the front and rear of the car. We suggest using the front control arm mounting points and the seam between the rear of the rocker panel and the quarter panel. Now measure half the distance between the plumb line marks on the floor. Each of these half distances can be connected and a straight line can be drawn on the floor running from front to back, which represents the center line of the car. It is a good idea to drop a plumb line to the C/L line on the floor and transfer it onto the car by punching marks on a few crossmembers. Now if you have to move the car or when you do future work, the C/L can be quickly reestablished. The C/L can also be used for suspensions alignment work.

Installation of wheelie bars:

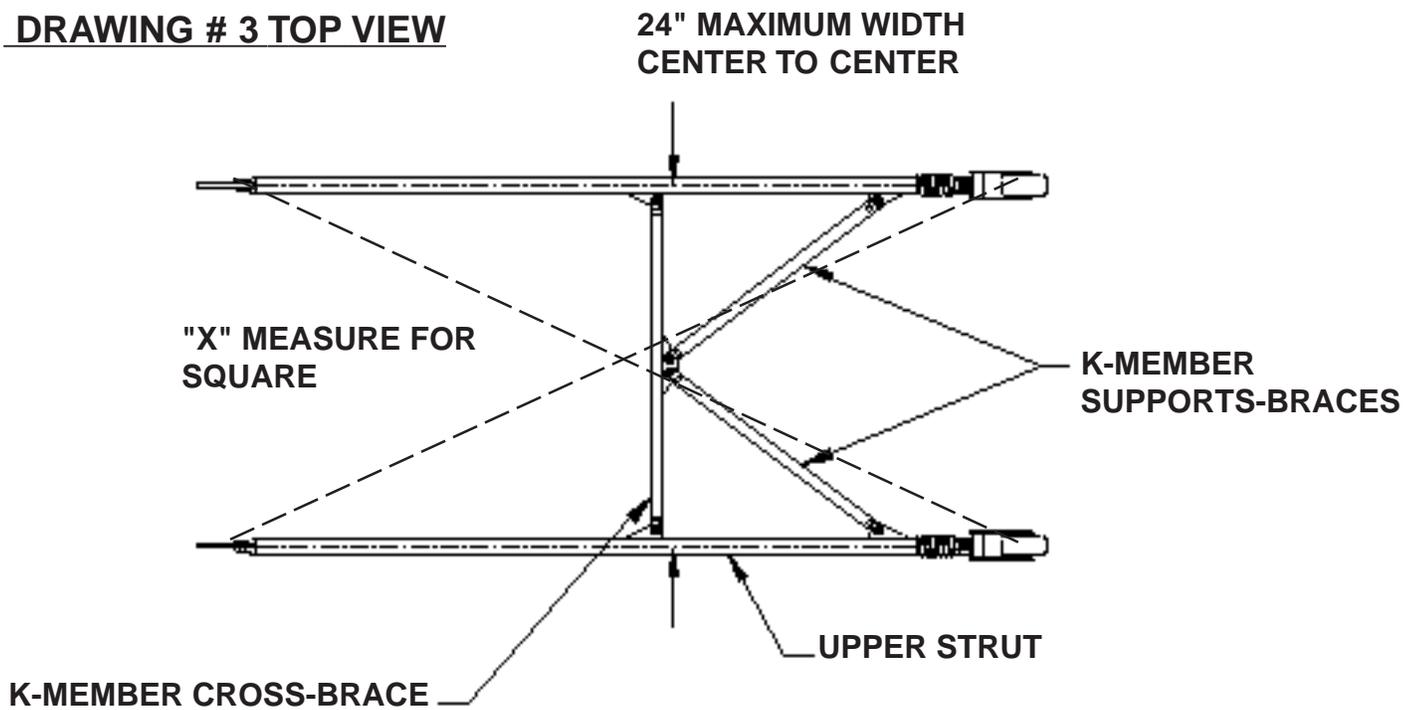
- 27) Position the assembled wheelie bar up to the rear housing centering it under the car using the chassis C/L you found in step # 26, also make sure the wheels of the wheelie bar are 3" to 4" from the ground to the bottom of the wheel **as shown in drawing #2**.
- 28) Tack weld the housing brackets to the rear housing.
- 29) Recheck all Measurements and clearances including tire and body clearance.
- 30) If all measurements and clearances are okay, remove the wheelie bar assembly from the housing brackets.
- 31) Finish welding housing brackets to the housing.
- 32) Remove the support braces and cross-brace from the upper struts and finish welding all the welds.
- 34) Reassemble and reinstall the wheelie bar to the car.

Installation Diagram for 54" Tubular Wheelie Bars

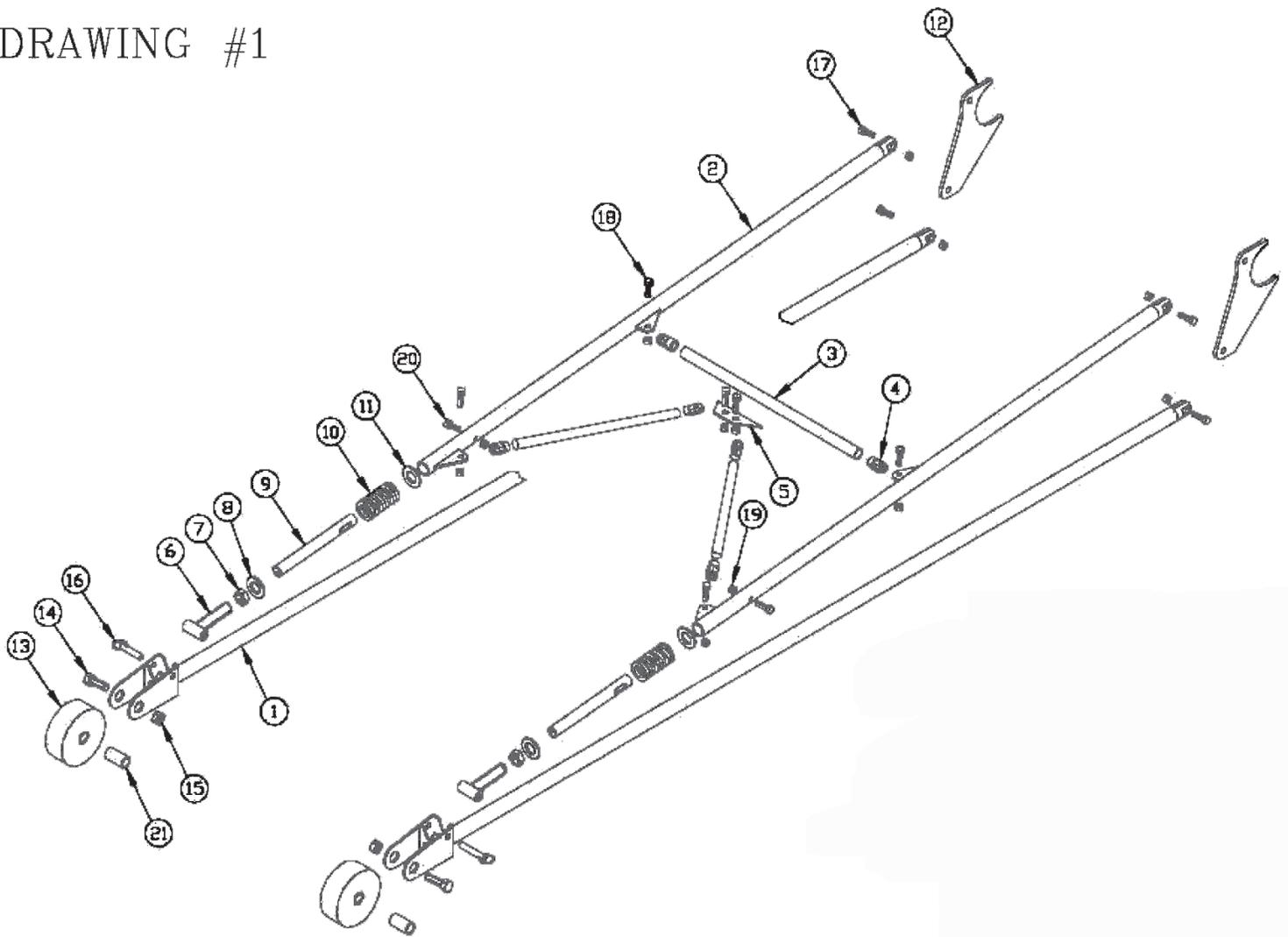
DRAWING # 2 SIDE VIEW



DRAWING # 3 TOP VIEW



DRAWING #1



Parts List

No.	Qty.	Part Description
1	2	Lower Strut
2	2	Upper Strut
3	3	K-Member Tube
4	6	3/4" Tube clevis
5	1	Crossmember bracket
6	2	Threaded tee
7	2	5/8" R/H Jam nut
8	2	5/8" SAE Flat washer
9	2	Slider tube
10	2	Spring
11	2	3/4" SAE Flat washer
12	2	Housing bracket
13	2	Wheel
14	2	3/8" x 2-1/2" Grade 8 bolt
15	6	3/8" Nylock nut
16	2	Wheelie bar pin
17	4	3/8" x 1-1/4" Bolt
18	6	5/16" x 7/8" Bolt
19	8	5/16" Nylock nut
20	2	5/16" x 1-1/2" Bolt
21	2	Wheel spacer tube