PFADT

RACE ENGINEERING

Please read all instructions before you begin. You must be careful not to damage the arms or bars during assembly.

Pfatty/Comp Sway Bar
Installation Instructions
Part# SBA.C56.PFATTY.KIT
1-888-9RACING

END LINKS

The photo on the right shows the installed end link assemblies.

1. Thread one jam nut each on a right-hand thread bearing and a left-hand thread bearing. *(4 right hand Jam Nuts & 4 left hand Jam Nuts are supplied)*
2. Thread each bearing into the end of the turnbuckle. *To differentiate between left and right hand thread ends. The left end has incomplete flats.*
3. Do not attach the end links to the arms yet.
4. The Endlinks shoud be made as short as pos -sible.
5. The small stepped sleeves that are supplied

Fig 1. End Link Assemblies

Front

Rear

HARDWARE for Pfatty/Comp sway bars

2x -Pfatty Rear Arms
2x -Pfatty Front Arms
1x -Pfatty Front Bar
1x -Pfatty Rear Bar

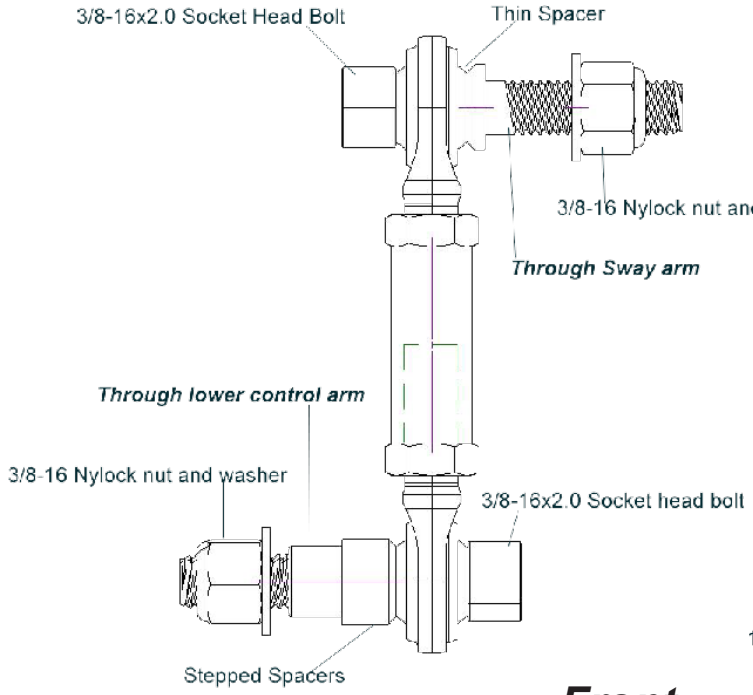
1x - Bag of sway bar rings - 12pcs
- *2x Small rings*
- *2x Large rings*
- *4x Bolts*
- *4x Hex stoppers*

1x - Large hardware bag - 34pcs
- *4x Left hand sphericals*
- *4x Right hand sphericals*
- *6x Long bolts*
- *6x Nyloc Nuts*
- *6x Washers*
- *4x Left hand jam nuts*
- *4x Right hand jam nuts*

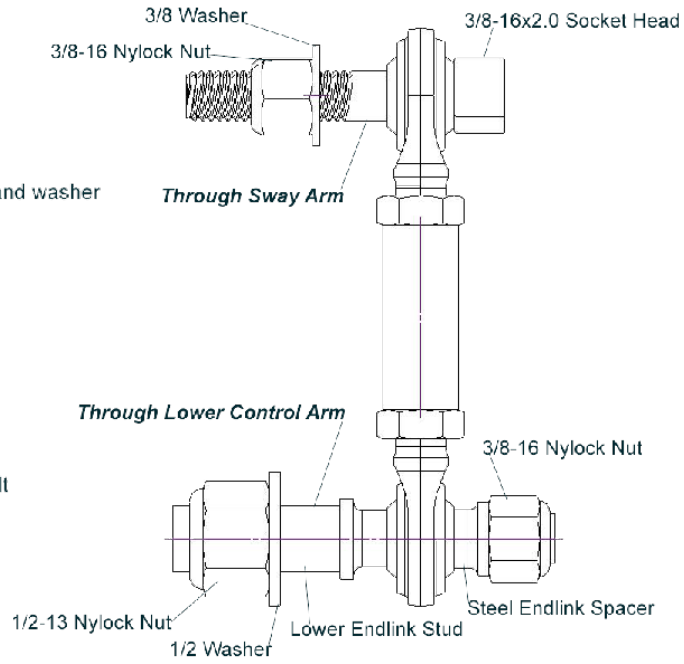
1x -Small bag - 10pcs
- *2x Steel threaded studs*
- *2x 1/2" nyloc nuts*
- *2x 3/8" nyloc nuts*
- *2x 1/2" washers*
- *2x Stepped spacers*

1x - Small bag - 10pcs
- *4x Aluminum long threaded sleeves*
- *2x Blue small stepped sleeves* **(check fit)**
- *2x Silver small stepped sleeves* **(check fit)**
- *2x Aluminum thin spacers*

4x -Tubes of lubrication
2x - 38mm front sway bar bushings
2x - 32mm rear sway bar bushings



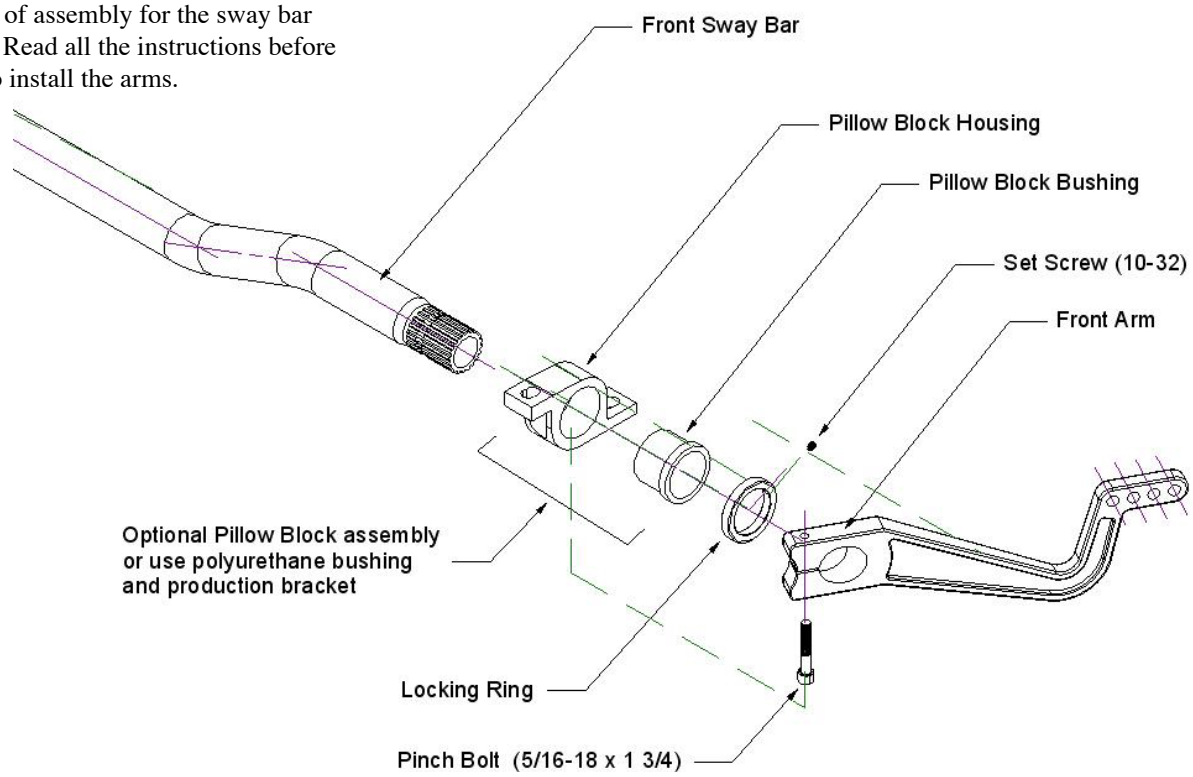
Front



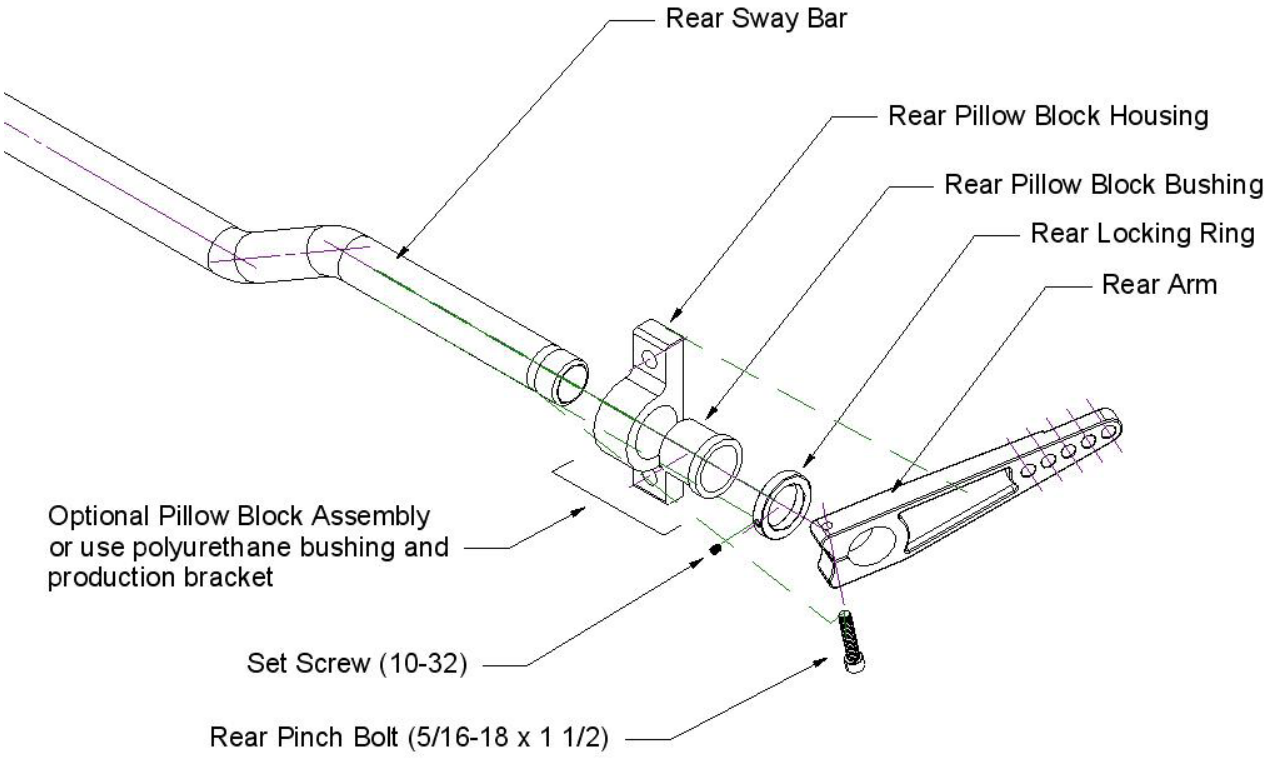
Rear

BAR ASSEMBLY

The blow-up diagrams below show the correct order of assembly for the sway bar components. Read all the instructions before attempting to install the arms.



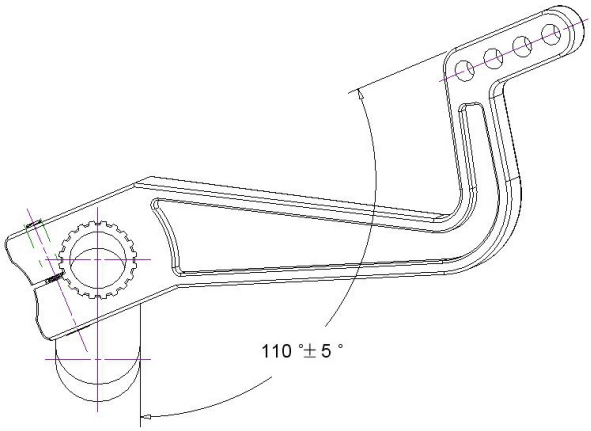
1. If using 'Pillow Blocks' - press the grey nylon bushings into the housing.
2. Lube only the inside of the bushing where it touches the bar.
3. Slide the pillow blocks, or poly-bushings and locking ring onto the bar per the drawings
4. Leave lockrings loose for now.
5. Install the arms onto the bar per instructions on the next page.

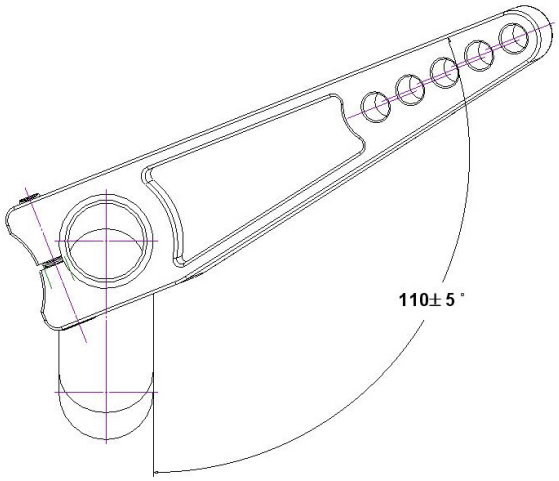


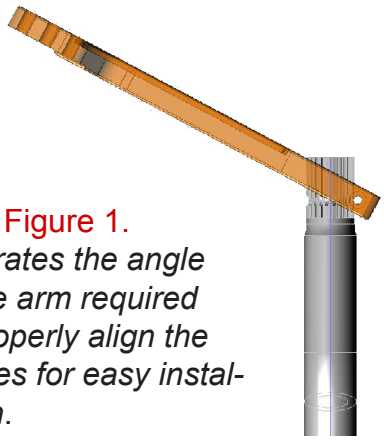
ARM ASSEMBLY

Take your time assembling the arms. It is possible to damage both the arms and the bar it you force them together. When aligned correctly they WILL slide right on. Do not use any tools! You do not need a screw driver or hammer or any other tool.

1. Orient the bar to the arm per the drawing below.
2. It is easiest to stand the bar on end on the ground and look down through the hole in the am to assure proper alignment. You must angle the arm appropriate to the angle of the hole. DO NOT TRY SLIDING THE BAR ON FLAT! IT WILL NOT WORK. *Figure 2.*
3. You will engage only a few teeth at first (the teeth nearest to the split in the arm).







Note Figure 1.
Illustrates the angle of the arm required to properly align the splines for easy installation.

Fig 1

Note Figure 2.
Illustrates the impropor angle of the arm during installation.

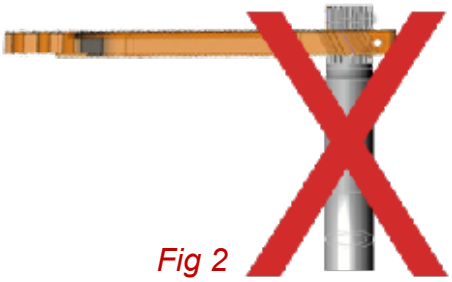


Fig 2

4. The arm is on correctly when the groove in the bar is aligned with the pinch bolt hole in the arm. The pinch bolt is designed to rest in the groove in the bar.
5. You may find that the spline cut angles may differ from side to side. This is not a problem.
6. The shorter pinch bolts are used on the rear arms. (Pinch bolts are in same bag as locking rings)
7. Lube the threads on the pinch & torque to *25 ft/lbs*.
8. Install the front bar assembly on the car. Center the bar and torque the bushing mounting bolts to *34 ft/lbs*.
9. Push the locking rings agaist the bushings and tighten the set screws.
10. Install the end links using the diagrams and photos on Page 1.
11. The stepped sleeves are used on the lower front control arms -
12 . The sleeves may be tight - you may need to tap them in gently
12.. Install studs in lower rear control arm. Per diagrams on page 1.
13. Install the spherical assemblies on teh car per diagrams on page 1 & torque the bolts to *30 ft/lbs*.
14. Align the spherical heads appropriatley with the bolts and tighten down the jam nuts. (See Photos on Page 1).
15. The turnbuckle should be used to relieve tension in the bar when the car is sitting on level ground. This will allow for a neutral load on the assembly.

Suspension Tuning - The very basics

Suspension Components	Less Understeer More Oversteer	More Understeer Less Oversteer
Front spring rate	Lighter (softer rate)	Heavier (higher rate)
Rear spring rate	Heavier (higher rate)	Lighter (softer rate)
Front sway Bar	**Thinner or adjust to lengthen arm**	**Thicker or adjust to shorten arm**
Rear sway bar	**Thicker or adjust to shorten arm**	**Thinner or adjust to lengthen arm**
Weight distribution	More rearward	More forward
Front shock setting	Softer	Harder
Rear shock setting	Harder	Softer
Front wheel camber	More negative	More positive
Rear wheel camber	More positive	More negative
Front tire width	Larger	Smaller
Rear tire width	Smaller	Larger
Front tire pressure	Higher	Lower
Front track	Wider	Narrower
Rear track	Narrower	Wider
Front spoiler	Larger	Smaller
Rear Spoiler	Smaller, or less angle	Larger, or more angle
Front spring rate	Lighter (softer rate.)	Heavier (higher rate)

Pfatty Sway Bar Adjustment