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INSTALLATION INSTRUCTIONS FOR REAR SWAY BAR KITS FOR ALL TRIUMPH TR SERIES IRS CARS WITH STOCK CHASSIS MODEL NO: RSBK

1. INTRODUCTION

The rear sway bar kit is designed to compliment the front sway bar kit designed by RATCO. They can be used independently of one another but as a team, are designed to provide minimal sway with neutral steering. It is usual practice to use a larger sway bar in the front than in the rear of a performance vehicle. Therefore you can use the front sway bar without a rear bar, or with a smaller diameter rear bar installed. All the original TR6 series cars had factory installed front bars and no rear bar at all. Both RATCO bars are _ inch in diameter and would seem to break this rule. But the rear bar in our system is designed to compliment the front in the same way that a smaller bar would and at the same time, provide reduced sway in hard cornering. Since our rear sway bar mounts over the differential and connects to the swingarm at the point where the lever shock or tube shock would, you can only use our rear sway bar with a coil over shock kit installed. The rear sway bar is designed to mount over the differential because it is more efficient mounted this way. Its force is applied to the longest lever of the swing arm where it can do the most good and provides greater ground clearance under the car as well.

The front sway bar, rear sway bar and the coil over shock kits are a system, which results in great performance on or off the track but with conformable ride characteristics for around town cruising. The sway bars were designed with the help of the engineers from Hellwig Suspension in sunny California.

2. CONSIDERATIONS BEFORE INSTALLATION

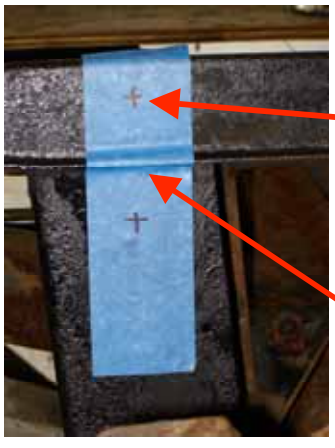
Installation of the rear sway bar kit requires that you have found another way to use a shock absorber in the system. The most typical way is the use

of the coil over shock conversions available today. In any event you will have to drill some holes in your rear spring tower support and fit the brackets included in the kit. We have provided you with some tools that you will need. First, you will have to drill hole in very tight places, which require the use of a right angle drill. Since most home mechanics don't have a right angle drill we have provided an adapter, which converts a regular drill to a right angle drill. Also you have received a stubby 3/8-inch drill bit. This and the right angle drill and allow you to get into the tight spot mentioned before. All the other tools required are familiar to most shops and should not be a problem.

The installation is really simple especially if you are doing it in conjunction with the coil over shock conversion kit. It is much easier to install the sway bar if the spring is out of the way. Installation time should be about two hours and can be done alone. We remind you that you are working under a vehicle and safety should be the first order of business. Use jack stands when you raise the car and don't depend on a jack alone to support the vehicle. The condition of the spring tower structure should be appraised as described in the coil over shock conversion kit installation instructions. You can find that in our website under in the coil over shock menu in the performance upgrade section. If your spring tower's structure is suspect, then don't install this kit until the problems are resolved. Although this system applies minimal forces to the tower structure it could be a problem when it is used with the coil over shock system as well. Be safe not sorry.

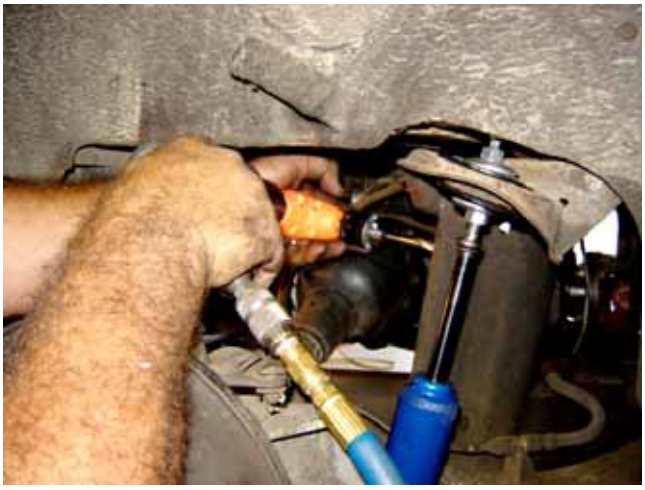
3. INSTALLATION INSTRUCTIONS

1. Jack up the vehicle to a comfortable working height and use jack stands to support the weight of the car. Remove the rear wheels and inspect the spring tower structure as describe above.
2. Working on one side or the other clean the area on the rear most side of the spring tower of loose dirt, grease and road grime. Place a piece of painters tape or masking tape (2 inch wide tape would be best) over the structure as shown in the photo below



3. Notice that the spring tower crossmember has a ridge that runs its length and crosses the vertical support in the place where you have placed the tape. Find in your hardware kit, the powder coated spacer bracket about 3/8 inch thick with the slot on one side. That slot will fit over the ridge and help you align and hold the bracket steady as you mark the hole location with a marker. Simply lay the slotted bracket on the ridge engaging the slot and the ridge. Allow the ridge to determine the level of the bracket and eyeball the center of the vertical tower support while holding it is place. Now mark the hole locations with marker and remove the bracket. See photo below.

4. Remove the bracket and center punch the holes. Using your right angle drill adapter and the stubby drill bit, drill the holes through the tower support. Remove any chips form the back of the holes. Perform the same procedure on the other side.



5. After you have finished with the drilling and cleaning of the holes, you are ready to install the sway bar on the tower. Smear some grease on the interior of the polyurethane bushings. The bushings break open at the slits to make it easy to slip over the bar. Attach the bushing at each end of the bar. Pass the bar with the bushing in place, above the differential and over the emergency brake cable and allow it to rest on the differential unit. Now, working from one side, place the U bracket over the bushing, pass the bolts with flat washers trough the U brackets and then through the spacer bracket and the holes in the tower. Place the backing plate on the inside of the tower, then the flat washers and the nyloc nut. Start the nut but do not tighten as yet. The assembly should now look like the photo below.

6. Perform the same procedure on the other side leaving the nuts started by not tight. Now, center the sway bar in the center of the car so that equal lengths are exposed at each end. Not tighten the nuts on both sides securing the bar to the spring towers.
7. The last item to install is the end links and they will not reach there mounting points until the spring is compressed slightly. Two methods of doing this are as follows;
    1. Use you floor jack and a piece of wood to jack up the swingarm to the point that the end link meets the mounting hole.
    2. Replace the wheels on the car and lower the wheel onto ramps or blocks of some design to allow the weight to compress the spring yet high enough to allow you to work under the car.

I prefer the floor jack idea but make sure that your jack cannot roll after the weight is on it. Either way you have to compress the spring slightly in order to mate the end links in their mounting hole. Study the end links and learn how the bushing, washers, sway bar eye and swingarm hole interrelate. Use the picture below as your guide. Once the end link is in place and the bushings are orientated in the correct direction, tighten the nut on the lower end of the link. Compress the bushing slightly but do not over tighten.

The installation is now complete. Check the orientation of the bushings and make sure that all the bolts are secure, replace the wheels if you haven't already done so and you're on your way.

Just one not of advice for when you are servicing the car in the future. If the rear wheels are going to be off the ground for any period of time longer that a few hours, then release to end links. Having the weight of the suspension on the sway bar bushings for any length of time is not recommended.

Good luck and good driving