

# BMW E36 RTAB LIMITERS (3030)

(a) introduction.....	2
(b) preparing the vehicle for the INSTALLATION.....	3
(c) removing the Rear Trailing Arm .....	4
(d) installing the RTAB Limiter washers .....	5
(e) re-installing the Rear Trailing Arm .....	5
(f) repeat procedure on the other side of the vehicle .....	5
(g) finishing the job .....	5





### difficulty



This project is **MODERATELY DIFFICULT** to complete. The difficulty ranking is three wrenches out of five. Do not attempt this install unless you are a competent and experienced mechanic.

### tools you will need

	Metric wrench set
	Metric Socket Set
	Torque Wrench

### safety notes

Always wear safety glasses. Mechanics gloves are also recommended.

Do not attempt this install unless you are a competent and experienced mechanic.

## (a) introduction

These RTAB Limiters are installed on either side of the Rear Training Arm Bushing (RTAB) item 4 in the image below. One limiting washer is installed on each side of the bushing, to limit the amount of toe-in change when high cornering loads are introduced to the trailing arm.

NOTE: these limiters must be installed on both sides of the vehicle.

The part number of one full set (four limiter washers) is 3030.

These instructions describe the installation of these limiters.

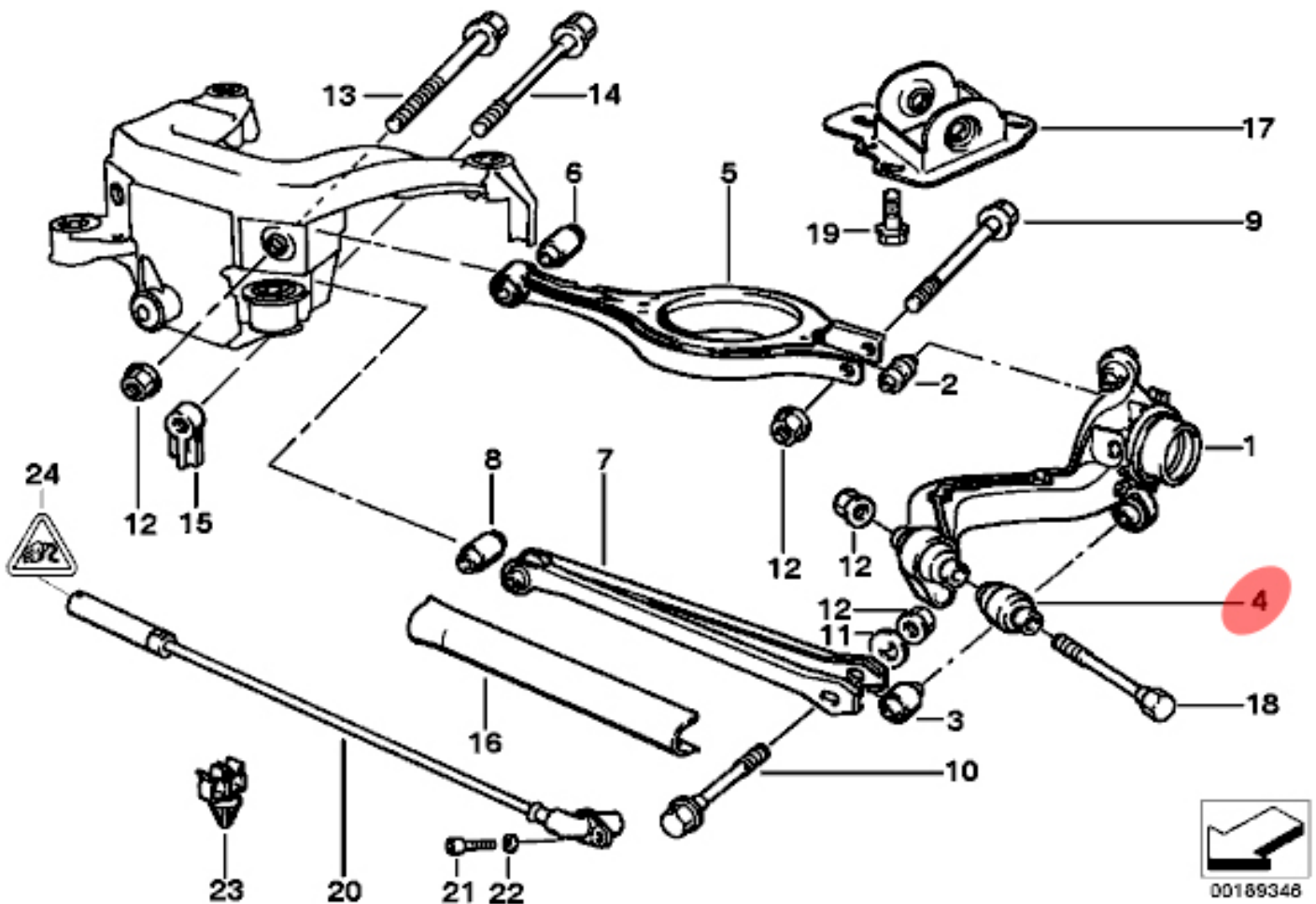
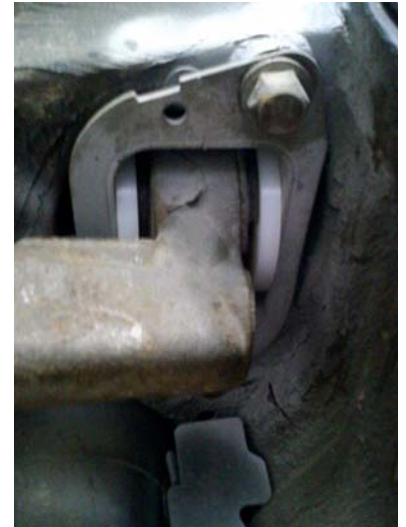


Figure 1. BMW E36 Rear Training Arm Bushing - RTAB (Item 4)

Unpack the set of RTAB Limiters. You should have the following bits and pieces.



Figure 2. 3030 RTAB Limiters as shipped

**IMPORTANT:** If your Rear Trailing Arm Bushings (BMW part number 33 32 6 770 786) are worn, aged, or damaged they should be replaced before the limiters are installed. Replacement of the bushings requires special tools, and is NOT covered in these instructions.

### **(b) preparing the vehicle for the INSTALLATION**

Raise the rear of your vehicle and support it properly. Ensure the vehicle is high enough to work under, but low enough that your jack can reach the trailing arm. Once you start removal, you will need the jack to lower the trailing arm as it is releasing the compression of the vehicle spring. Refer to your vehicle's owner manual for proper jacking and support procedures.

Remove driver side rear wheel from the vehicle. It is best to work on one side of the vehicle at a time. This keeps you focused and ensures you have a template (the other side) in case you forget how things go back together.

### (c) removing the Rear Trailing Arm

Locate the rear trailing arm bracket. This is where the trailing arm connects to the forward portion of the vehicle. See Figure 3 below. Item 17.

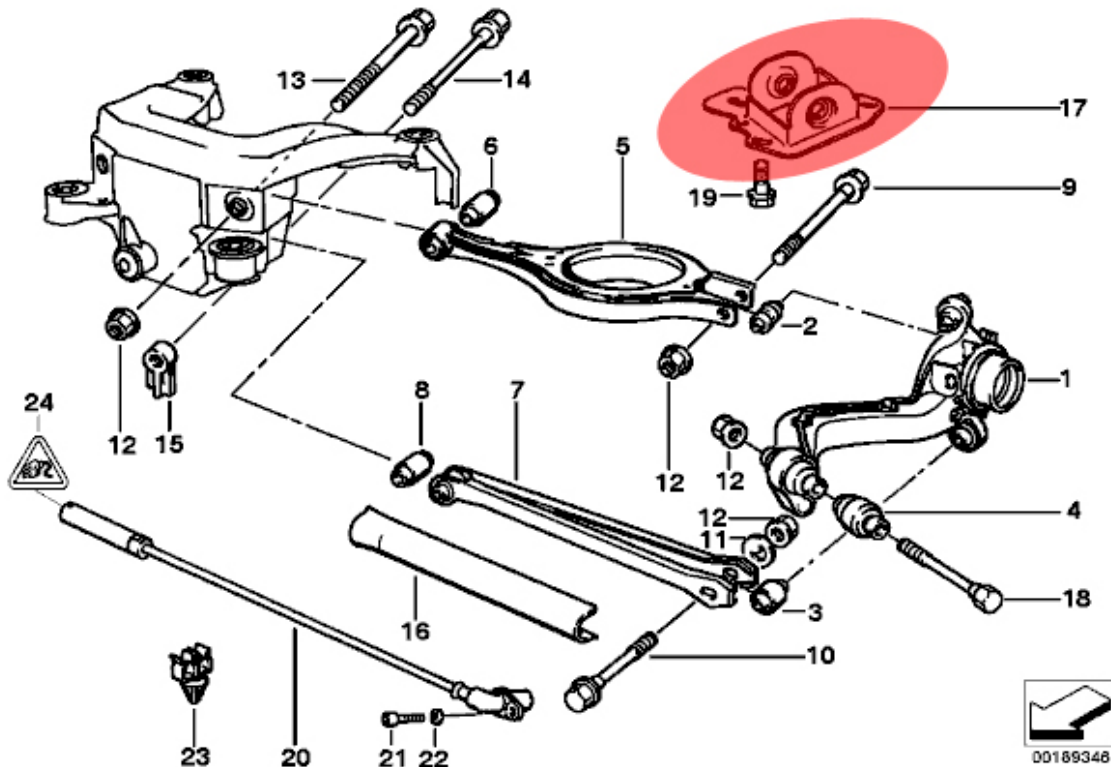


Figure 3. RTAB bracket

Put on your safety glasses. This will prevent the debris created by scribing in the next step from falling in your eyes.

Using a scribe, mark the entire bracket position. Given the amount of adjustment available on the bracket, it is recommended that you scribe as much of the entire bracket position as possible. Markers tend not to work so well, particularly if there is dirt buildup. You will also be cleaning this area later on, so scribe well enough to be able to see it.

Remove the bracket that holds the brake line to the trailing arm. This will prevent the brake line from being stretched when the trailing arm is dropped.

Remove the lower shock bolt from the trailing arm assembly.

Using the floor jack support the trailing arm and remove the three bolts holding the trailing arm bracket to the vehicle: 3X Item 19 in Figure 3 above.

Slowly lower the trailing arm using the floor jack. You are relieving the spring compression, so take your time. If you did not use the floor jack, you will get a nasty surprise as you undo the last bolt. **USE THE FLOOR JACK TO SUPPORT THE TRAILING ARM.**

Remove the bolt holding the rear trailing arm bracket to the rear trailing arm. Note the direction you removed the bolt from the bracket: Item 18 in Figure 3 above.

Remove the trailing arm from the bracket. Inspect the trailing arm bushing. If they are cracked, now is a good time to replace them. Bushing replacement is not covered in these instructions.

Take the time to clean up all bolts and nut with a wire brush. Also, clean all surfaces (on the vehicle and bracket). Use a wire brush and some rust primer to ensure longevity of the brackets and mounting areas. Inspect to ensure the mounting areas are sound and not cracked.

### **(d) installing the RTAB Limiter washers**

Insert one RTAB washer on each side of the bracket. The concave portion of the bushing goes over the raised portion of the bracket. Make sure the flat bushing surfaces end up facing the rubber bushing.

### **(e) re-installing the Rear Trailing Arm**

Insert the trailing arm into the bracket and loosely reinstall the bolt. Align the trailing arm to the bracket and torque the bolt securing the trailing arm to the bracket to 81 ft-lbs.

Using the floor jack, raise the trailing arm into position. Make sure the jack has room to move about, as you will need this to get the arm in proper position. If your spring has become unperched, guide it into position as you raise the trailing arm. Loosely install the three bolts holding the bracket into position.

Align the bracket to the scribed position made earlier. This is where having the jack able to move on the floor really helps. Torque the three bolts to 57 ft-lbs.

Reinstall the lower shock bolt and torque to 57 ft-lbs.

Reinstall the brake line support bracket to the trailing arm

### **(f) repeat procedure on the other side of the vehicle**

Repeat the installation procedure for the other side of the vehicle.

### **(g) finishing the job**

Reinstall both wheels and torque lug bolts (or nuts) to spec.

Perform a rear-end alignment, or get one done professionally, before you drive the car any distance.

### **questions or concerns**

Do not hesitate to contact One Track Mind if you have any questions or concerns regarding the use of the tool:

[support@onetrack.ca](mailto:support@onetrack.ca)