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Thank you for purchasing a Wagonmeister strut tower brace for your Volvo 240.



The brace comes with the following parts:

1. Left and right crescent base plates
2. Long cross bar section
3. Short cross bar section
4. Jack screw
5. Left hand threaded jam nut
6. Right hand threaded jam nut
7. Ten, black oxide washers
8. Two, 8mm x 1.25 x 20mm flange bolts
9. Eight, 8mm stainless steel acorn nuts

Please follow the instructions carefully to insure proper installation

The vehicle should be parked on a level surface with the hand brake set. Automatics should be in park, manuals, in gear. Open the hood and remove the nuts at the tops of

each of the front suspension strut mounts. Remove any washers at the back, and remove the crescent shaped plate on the front two studs of each mount.

Clean the body surface of any dirt and/or rust and treat any rusted areas to prevent further corrosion prior to installing the brace. If you have firewall braces installed, they must be removed from the firewall as well.

Place the crescent plates on the strut towers. The single large hole goes to the rear. The pylons point in, toward the center of the engine bay. Replace the crescent plates on the front two studs, followed by black oxide washers and acorn nuts. **DO NOT TIGHTEN.** Just run the nuts down enough to assure the base plates are flat against the strut tower, no more.

Wagonmeister highly recommends running firewall braces with the strut brace for best results. If you have purchased firewall braces, or just removed them, install the braces at this time. Do not tighten the fasteners in the firewall or on the strut mount studs. Place each brace over its stud, **ON TOP OF** the strut brace's base plate, and install a black oxide washer and acorn nut over the firewall brace. As you did at the front of each base plate, run the nut down just enough to make sure everything is in contact with the strut tower. Loosely mount the firewall brace at the firewall also. Repeat the process on the other side.

The cross bar is designed to have the right hand threads on the right side of the car. This means the short piece is on the right. You can swap it if you like.

The jack screw is shipped already threaded into the small piece of the cross bar. Thread this entire assembly into the long section of the bar. Do not tighten any fasteners yet.

Place a black oxide washer on one of the 20mm flange bolts and then insert the bolt through the front of either base plate. Note that the black oxide washers have a rounded side. This should be against the coated surfaces. The head of the bolt goes toward the front of the car. Next, place one end of the cross bar onto the bolt, followed by another black oxide washer, and an acorn nut. No tightening yet! Do the same on the opposite end of the cross bar. You will need to adjust the jack screw to align the second bolt at the base plate pylon. Do not tighten the jam nuts yet, and make sure everything is free to turn. If you cannot get the cross bar onto both bolts, adjust the length until it slides on easily on both ends.

With the cross bar in place, tighten the cross bar's two acorn nuts just enough to assure that the cross bar ends are flat against the pylons on the base plates. This is critical. If the acorn nuts on the strut mount studs are too tight, the parts cannot align. Everything must be loose enough, at this point, to assure the mounting tabs on the cross bar mate flush with the pylons.

With the cross bar just snug, and flush with the pylons, tighten down all the strut mount acorn nuts. 20-25 foot pounds is fine.

NOTE: If you have installed strut tower reinforcement plates on your strut mounts, there is a good chance the studs will not be long enough for the acorn nuts to get a good grip. A minimum of  $\frac{1}{4}$ " of thread must extend above all the plates and washers for the nuts to get a safe grip. If you do not have enough thread exposed, we highly recommend you do NOT complete the installation. When strut mounts are installed with reinforcement plates here at Wagonmeister, we weld in longer studs to assure a safe installation if a tower brace and firewall braces are to be installed. Be safe!

If you have firewall braces installed, now is the time to tighten the bolts at the firewall.

With the base plates solidly bolted down, it is now time to adjust the jack screw to tension the cross bar. There is no torque spec. You are lengthening the cross bar to take any slack out of the assembly only. Over-tightening of the jackscrew may damage the threads.

Once the cross bar is tensioned, tighten the bolts and acorn nuts at each end where the cross bar attaches to the pylons. 20 lbs is more than enough. Once all the other fasteners are tight, use two  $\frac{3}{4}$ " wrenches to lock the jam nuts against the nuts on the two cross bar sections. One wrench on the jam nut, the other on the nut welded to each section of the cross bar. Move the jam nut, while holding the cross bar section steady. **DO NOT HOLD THE JACK SCREW'S CENTER NUT WHILE TIGHTENING THE JAM NUTS.** Installation is complete!

If you live in an area where the engine bay is often damp, and especially in areas where roads are salted, we highly recommend that you paint the jack screw and jam nuts. This will protect the parts from corrosion and the paint will seal the threads and prevent moisture from wicking into the cross bar sections.

The cross bar is easily removed by removing the 20mm bolts and acorn nuts. We recommend releasing the tension on the jack screw before removing the cross bar.