

The following photos and instructions are to Install the 928 Motorsports, LLC **Cross-Member Exchange**For the Porsche 928

Section 1: Removing the One-Piece Cross-Member

Section 2: Installing the 3-piece Cross-Member

Section 3: Using the 3-piece Member: Removing the Center Section



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Section 1: Removing the One-Piece Cross-Member

- 1. Put car high on jack-stands in front. Tires can remain on.
- 2. Position engine hoist or engine support bar in place and ready to lift.
- 3. Remove 4 bolts from front sway-bar mounts and swing sway-bar down. The sway bar does not have to be removed, it can hang down from the drop-links.
- 4. If 1978-82 model, unbolt the two lower engine mount shocks from the cross-member. If 1983-95 model, skip this step.
- 5. Remove the bottom plate from the cross-member.
- 6. Pull down the steering rack until it is completely out of the cross-member and swinging freely on the tie rod ends. It does not have to be removed. You will likely have to pry it down, just be careful what and where you pry on the steering rack. If your steering rack mounts are old and rusted, soak with penetrating oil.
- 7. Remove two 19mm bolts/nuts inside the cross-member that go up and into the motor mounts, one on each side of the motor.
- 8. Take up slack on your engine hoist/support bar and lift slightly.
- 9. Find the 4 bolts that hold the lower control arm to the frame on each side of the car.
- 10. At the front lower a-arm mount, you will see a steel member that angles up and forward where it attaches to the frame with 2 17mm bolts. Remove the rear only of these two bolts, and loosen the front one.





- 11. Now remove the two front bolts from the lower A
- 12. Now remove the two rear bolts from the lower A-arm cap on each side.
- 13. Pull the lower A-arms down and swing away.
- 14. Looking down from over the top of the fenders, locate the steel strap that comes down from an upper-arm nut to the engine cross-member. Remove the 17mm bolt that goes thru that strap.



- 15. From under the car again, locate and remove the last two cross-member to frame bolts. They are at the extreme ends of the cross-member on the L and R sides, near the rear lower a-arm mount.
- 16. Pull the cross-member down and out of the car.

Note: before proceeding – this is a good time to inspect/replace motor mounts, oil pan gaskets, rod bearings, front sway bar mounts and drop links, and steering rack mounts.



Section 2: Installing the 3-piece Cross-Member

In general, the installation of the new 3-piece cross-member is the reversal of the procedure to take it out, but we offer these important tips to make it easier.

- 1. Bolt the 3-piece cross-member together first before installing it into the car.
- 2. Put the new cross-brace into position and hold it there with the two bolts you removed in step 15 above. Do not fully tighten these bolts at this time.
- 3. Use a floor jack as shown to lift the lower a-arm up and locate it correctly.



- 4. While the floor-jack is holding it up, start all the bolts in to the lower a-arms caps and the forward straps that you removed in steps 10,11,12 above. Use anti-seize compound on the threads. Spin them up into place, but do not fully tighten these bolts at this time.
- 5. Install the cross-bolt into the strap that you removed in step 14 above. Here are some tips: a) use a screwdriver or a lineup punch to position the strap into the holes correctly so the bolt can slide through; or b) grind the tips of the bolts into a cone shape so they can install easier through the strap; or c) loosen the nut on the top strap that holds into place so it has a little play.
- 6. Tighten all the bolts you have now installed. The 4 bolts through the lower a-arm caps into the chassis get torqued to 95 ft lbs.
- 7. Now you can put your steering rack back up into the cross-member and put the lower cross-member bottom plate on. Be careful not to pull out or pinch the plastic line on the outside of the power steering rack.
- 8. Re-attach the front sway bar mounts.



Section 3: Using the 3-piece Member: Removing the Center Section

- 1. Put car high on jack-stands in front. Tires can remain on.
- 2. Position engine hoist or engine support bar in place and ready to lift.
- 3. Remove 4 bolts from front sway-bar mounts and swing sway-bar down. The sway bar does not have to be removed, it can hang down from the drop-links.
- 4. Remove the bottom plate from the cross-member.
- 5. Pull down the steering rack until it is completely out of the cross-member and swinging freely on The tie rod ends. It does not have to be removed. You will likely have to pry it down, just be careful what and where you pry on the steering rack.
- 6. Take up slack on your engine hoist/support bar and lift slightly.
- 7. Remove the 4 metric allen screws that hold the center section in place. We recommend a foot-long 3/8" drive extension on an allen-socket. Please see the pictures below to remove the left side bolts, you access across the oil pan from the right side, to remove the right side bolts you access from the left with that same tool.





8. Pull the center section of the Cross-Member down and out.