

Installing Your GPS Rack and Pinion Kit



With Simple Hand tools and some time you can easily install your own rack. Here's how...

Installing the unit that can be completed in a day. Alignment needs to be checked and set by a qualified automotive alignment and frontend tech. Please have the technician double check the torque of all

fasteners. All bolts should be the correct torque spec and fittings should be tight before use. Your rack was carefully assembled and checked before

leaving GPS. Please make sure that the rack has no shipping damage before installation. If there is shipping damage contact us at 866-805-1878 for any replacement parts that may be necessary.

Put the car on jack stands on a stable floor surface that will allow you to have at least 25-inches of free space under the car.

Tools Required: Standard and Metric tool set, hack saw or cut off wheel, ball peen hammer and small wood block (shown) **NOTES:** '65-'66 Mustang will require V8 manual steering outer tie-rods and adjuster sleeves. Power Steering applications will require the use of GM power steering fluid Use of non-approved fluids will void warranty.



Remove the front wheels to allow easy access to the steering components. If you are only installing a rack it is not necessary to remove the original suspension. However since we are installing a strut kit on this application, we will be removing the entire assembly as a unit.



A narrow tie rod splitter makes short work of the outer tie rod removal. It is recommended that you replace the

outer tie rods when upgrading to the GPS rack and pinion. For ease of removal we recommend separating the steering knuckle from the steering box to facilitate the boxes removal. You will also need to remove the steering wheel to allow the steering shaft to slide out of the tube.

Make sure that all the attaching hardware for the column is removed. At this point we recommend taking the column off of the shaft. This will allow more “wiggle” room for the steering box removal. It is also a good idea to wrap the steering shaft in towels to prevent damage to the interior.



Remove the steering box and idler arm bolts as well as the attaching bolts for the power steering if applicable. The original steering assembly should come out. If you have an original power steering system carefully remove these components as they are quite valuable.



Optional billet adjuster sleeves in above picture. You will not need to re-use your inner tie rod links. Inner tie rods are included, outer tie-rods are not included.



Currently GPS does not support column shift applications. If your car is column shift it will need to be converted to cable operation at your own expense.



We recommend that you use a straight edge and mark the column on the underside where it intersects the firewall and come out 1/4-inch for your cut line. This allows you to measure twice and cut once.



Make sure of your mark and remove the column. Measure the distance from the end of the column to the mark and repeat the mark around the column. Use an awl or endurable marker to scribe mark lines. Place tape around the column to aid in cutting the end off as shown.

Then pull the switch assembly out of the way and removed the old steering column upper bearing and test fit the new bearing in the hole. Note that some applications require the reuse of the original bearing outer race.



A cut-off wheel or hack saw will do just fine. Be sure to de-burr the column to remove sharp edges.



Next install the bearing into the end of the column. The bearing is held in place by three Allen head screws.



Next mate the universal shafts to the upper shaft. This is easier to accomplish on a bench as shown than trying to assemble this in the car.

Then remove the horn relay and turn signal switch.



All assemblies come with two rack brackets, universals the open double D shaft at the top of the picture and the column bearing at lower right.

Nineteen sixty to '67 models will come with the upper shaft shown at bottom and the column mount at the upper left.



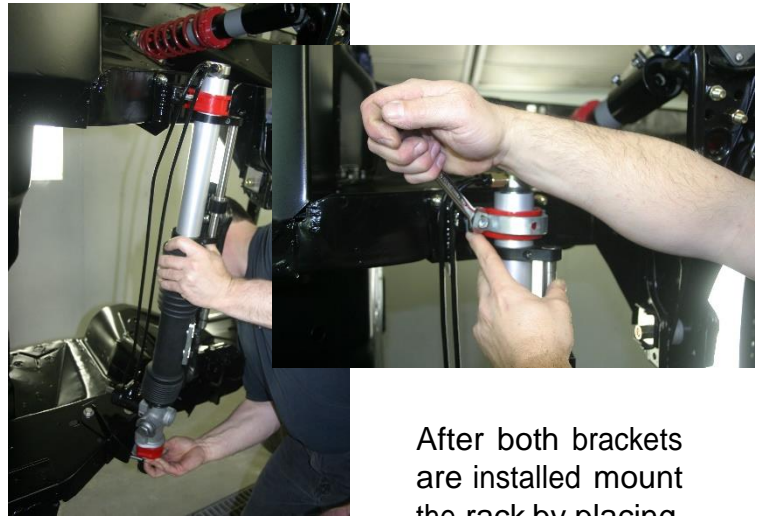
Mount the brackets firmly into position.



This display shot shows the mounting position for the inner tie-rod ends for the '65-'66 Mustang. The '67-'70 tie-rods mount to the inner holes (Arrows)



Use a 3/8-inch drill bit to bore the two per side outer mounting holes in the frame rail lip.

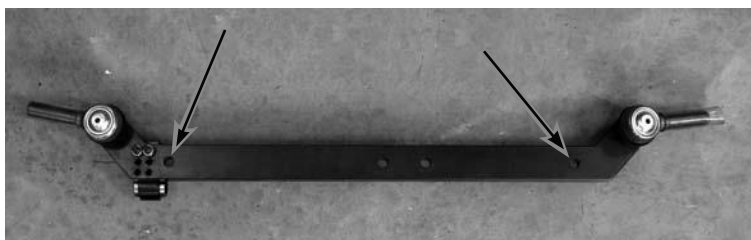


After both brackets are installed mount the rack by placing

the U brackets on the rack itself then placing the rack on the brackets and install the fasteners. The bolts are tightened until the U bracket mates to the frame rail bracket.



The bolts are installed and tightened. They are used to triangulate the load of the brackets giving a good, strong mounting point for the rack.



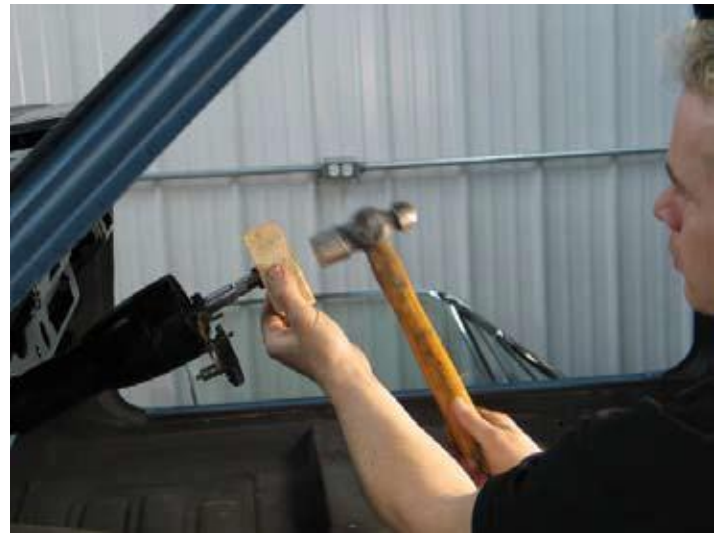
The '64 Falcon rack uses this specific tie-rod bar. on '65 Falcons you would use the inner set of holes (arrows) and the longer Mustang style tie-rods provided.



The basic rack is now installed on the chassis. Check fit and clearance of the rack.



Install the adjuster sleeves. Start both the inner and outer tie-rod ends at the same time to assure equal deployment on the adjuster.



Tighten the column down in its final position. Tap the upper shaft into the lower shaft until the upper bearing seated into the bearing cup in the steering head.



For '60-'67 Applications GPS provides two column supports, the one shown at left is for the '60-'65 Falcon and '65-'66 Mustang. Your column mount may vary slightly. All kits '60-'67 will come with

a column mount to stabilize the steering column. After 1967 Ford used a rag joint at the steering box and a column mount.

After loose fitting the column to floor mount feed the column assembly with the column support bracket and rubber gasket through the firewall and loosely bolt it to the column support on the dash.



Installation is almost complete. Check rack for ease of movement; there should be no binding in the universals. Use a mirror to check for any contact between the bearing flanges. If they are where they should be the rack should operate smoothly. You may experience some "soft" binding from the collapse of the bellows as the wheel is turned—this is normal. Any hard binding should be worked out by movement of the shafts.



Attached the lower universal joint to the steering head of the rack and push the top universal into the column until there is no binding in the joints. Leave the lower column mount

loose, only tighten the mount when the universal joints can move comfortably without binding.

Need help?
9:00AM-5:00PM Eastern USA
1-866-805-1878

1. Place the front end of the car on jack stands with the car in park. Place wheel chocks behind and in front of the rear wheels. Make sure the pump is full to the recommended level with GM power steering fluid. Start the car and watch the fluid level, adding fluid as the level drops.
2. When the GM power steering fluid re-mains at a constant fill level, turn the steering wheel from lock to lock five times (DO NOT hold the wheel hard up against the locks) for 10 seconds at each lock. Check the fluid level. Make sure to fluid does not have air in it. If there is still air in the system repeat the procedure.

Pump bleeding Procedure

When setting up a power rack the following procedure should be followed for best performance.

Recommended Wheel Alignment Specifications For Your Ford:

Caster positive 2° to 3°

Camber negative .5° to negative 1°

Toe-in neg 1/16 to 1/8 inch