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## Part # ST-5964GS

This kit does not come with a power steering pump. It is available as a separate part.

## Parts list

- Power Steering box
- Adapter plate --- attached to the steering box
- Steering coupler
- Intermediate shaft
- Pitman arm
- Idler arm
- Center link assembled with Global West's Cross bar, inner tie rods adjusting sleeves and outer tie rods. The unit is pre-assembled.
- Miscellaneous hardware
- Sway bar with end links and sway to frame bushings and brackets

Installation is fairly straight forward. The only holes you will be required to drill are for the sway bar. Note: There is a second designed idler arm on 59-62 Impala, El Camino applications; if you have this design you will be required to drill mounting holes in your frame for the idler arm. Installation requires removing the steering system including the steering box, coupler, and intermediate shaft but not the column. The intermediate shaft is the shaft the goes from the base of the steering column to the steering coupler located at the steering box. Remove the idler arm, center link (also called a drag link) inner tie rods, tie rod adjusting sleeves, and the outer tie rods. You will also remove the sway bar if you have one.

1. Install the steering coupler onto the steering box. The steering coupler slides over the input shaft of the box, you may have to back the jam nuts and unscrew the set screws on the coupler so the coupler slides on. Align the coupler so one of the set screws lines up with the indent in the steering input shaft. Tighten down the set screws and then the jam nuts. At this time check to make sure the box is in its center of its travel. To check this turn the coupler (attached to the





box) one direction until the gear hits the internal stops. Now turn the input shaft the other direction, counting the number of revolutions until it stops again, rotate the input back ½ the number of rotation and the box will be centered.

2. You are now ready to install the steering box onto the frame. You will notice the steering box adapter bracket is already assembled onto the steering box. Slide the steering box up into position and use the new steering box bolts supplied in the kit.





Use the flat washers and lock washers supplied in the

kit --- torque to 65 foot pounds.

- 3. Next install the pitman arm onto the steering box. Torque the pitman shaft to the box 120 foot pounds. Set the steering box in the center of its travel. There are 4 wide splines on the output shaft, align the pitman arm also with 4 wide splines onto the steering box shaft so the pitman arm is pointing to the back of the car.
- 4. Install the idler arm to the frame on the passenger side. We have supplied new bolts in the kit. Hold the idler arm up and slide the bolts through the frame into the idler arm bracket. Tighten the idler arm bolts to 35 foot pounds. It should bolt directly on to the passenger side frame rail unless you have a second style idler that has the bolts offset to the sides of the idler arm shaft. This style will require drilling the frame for the new idler arm to install. You will have to put this step on hold and go to the next step. We will revisit this in step six.
- 5. Install the steering assembly (Center link / inner tie rods / outer tie rods w/sleeves) the unit was shipped assembled. Install the center link onto the pitman arm and the idler arm (style one). Make sure the black plastic washer remains on the center link pivot studs located at the pitman arm and the idler arm. Install the center link with black washers up through the pitman arm and idler arm. Run the nuts down so the tapper seats. Go to the outer tie rod ends and install the tie rods into the steering knuckle arms (from the bottom up). Run the nuts down so the tapper seats. When all the steering is assembled the idler arm and the pitman should be pretty close to parallel to each other. At this time if they are not simply rotate the input shaft on the steering box until they are appear to look parallel.

You are doing this so you can install the intermediate shaft to the steering box and get the steering wheel close to being centered.

6. For those that have the second designed idler arm you will install the center link to the pitman arm and install the outer tie rods to the steering knuckle arms. Tighten the center link to the pitman arm. The pitman arm should be in the center of the box travel from step 3. Install the idler arm onto the center link (remember the black washers need to be installed on the center link studs) and run the nut down on the taper so it is snug. What you are going to do is determine where to drill the new idler arm holes 3/8 inch diameter. You will need as tape measure, 3/8 drill and drill motor, marking pencil, and a level. The center link must be parallel to the frame and level in the frame. The center link cannot be angled up or down as it goes across to the idler arm. It also must be the same distance from the cross member on each side. This is not hard to do because we have a straight bar across the middle of the center link.

Step one: Measure the top of the frame to ground and on both sides and make them equal be adjusting the floor jack location forward or aft. Use a level across the frame rails to level.

Second: Place a level on the center link bar and raise the idler arm up towards the frame rail until the center link is level. Rotate the idler arm mount over to the frame and mark the bracket location by scribing a line across the top of the bracket and down the side. Do not drill yet.

Third: Measure the distance from the center link located at the inner pivot to the cross member. The distance should be the same on both sides. If not move the idler arm fore or aft until the distance matches the driver side. Once you have the distance the same and the center link is level based off your scribe marks, you now can mark the hole position for drilling.

Fourth: Drill the upper hole first. Place a bolt through and recheck the center link level

position. If you are slightly off you can tilt the idler slightly to level the center link and then drill the second hole. Once drilled bolt the idler to the frame and proceed to step 7.

7. Install the intermediate shaft into the coupler. Make sure the factory shaft clamp is on the new shaft. Line up the set screw in the coupler with the indent in the shaft. Slide the shaft into the coupler. Next with the steering wheel in the straight ahead position, slide the other end of the intermediate shaft up into the steering column coupler. The bottom of the steering shaft coupler should slide up enough to get the shaft installed. Once the shaft





is engaged slide the coupler down onto the shaft. Position the intermediate shaft at the box so the set screw is in align with the indent in the shaft and tighten down the set screw and jam nut. Next position the column coupler lower on the shaft so it has a good grip on the splines. Use factory clamp and clamp the intermediate shaft.

8. Next step is tightening down the tie rods, idler arm, and the pitman arm slotted hex nuts.

Idler and pitman arm – to frame – 35 foot pounds – to center link 35 foot pounds Outer tie rods --- 25 foot pounds Lubricate all grease fittings now in steering system

- 9. Install the power steering lines to the box and install fluid.
- 10. Install the sway bar.



1959 – 1964 Impala front sway bar Installation will require drilling holes in the frame for mounting the sway bar bushings and brackets.

Special tools required: Electric drill motor 3/8 drill bit ½ drill bit ¾ drill bit

This sway bar installs differently than the original sway bar for 1958-64 Impala, El Camino. The original sway bar installed between the steering box and the pitman arm that is bolted to the steering box. The new sway bar installs in front of the steering box. Holes will be drilled into the frame for mounting the bar.

1. The easiest way to position the sway bar



- correctly is to have the vehicle sitting at ride height on a lift. The factory sway bar should be removed first.
- 2. Using new end link hardware supplied in your kit, slide the bolt through a steel washer, followed by a poly bushing. Drop the assembly through the sway bar. Next from the bottom up on the bolt add one poly bushing, one steel washer, slide one of the steel sleeves onto the bolt, next one steel washer, one poly bushing, and slide the assemble through the lower control arm sway bar mount. Next install one more poly bushing, one steel sleeve and finally the nut.
- 3. Tighten down the nut until the poly bushings start to deflect.
- 4. Install the other end link on the sway bar before moving forward.
- 5. Once both end links are installed you will place on the sway bar the sway bar to frame bushings supplied in the kit. Install both bushings on the sway bar.



6. Install the bracket next- slide the bracket over the bushing.



7. You are going to mark the slots on the frame for drilling purposes.

Important: The sway bar end links holding the sway bar to the lower control arm should be straight up and down to slightly tilt to the rear of the car, not leaning forward. You can lean the end links back to about 5 degrees --- again but not forward.



With the sway bar positioned properly mark the frame on both sides of the bracket.

- 8. Now that the frame is marked, drill a 3/8 hole through the frame. The front hole is easy to see how you are going to run the bolt but the back hole will be inside the boxed section of the frame. You still will drill the holes but in order to get to the head of the rear bolt you will need to drill a hole in the side of the frame.
- 9. For drilling the holes on the side of the frame you will require unbolting the bumper brace.





10. Once you have the bottom holes drilled you are going to mark the side of the frame and drill a hole for access. Mark the side of the frame directly above the bottom hole you just drilled. Measure up from the bottom of the frame 1-1/8 inches.

You should be about 1-1/8

inches forward from the center line of the lower steering box bolt. Open the hole in the frame to 3/4 of an inch. This is large enough to get the bolt in the hole and a

wrench.

11. Next after the access holes are drilled, install the sway bar to frame brackets. Lubricate the sway bar bushings first with grease. Tighten down the sway bar bolts.





12. Note: If you have an aftermarket radiator you may need to space the sway bar down with a 3/8 plate. This is not supplied in your kit. Spacer plates can be purchased from Global West.