

Late '67-'70 Mustang Rack Kit Instructions 8010830-01 & 8010920-01

UniSteer offers a 2-year, unlimited mile warranty against all manufacturer defects of their kits and supplied parts. Unisteer will not honor any warranty on any parts that have been modified or improperly installed. Full refund will NOT be granted to any kits that are damaged, scratched, or altered in any fashion. Unisteer will not reimburse any labor money to the customer to change out the part even under a warranty repair.

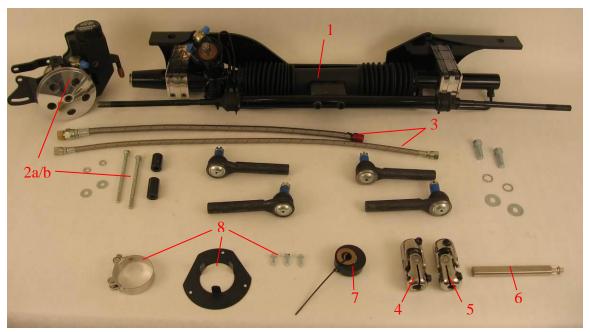


- *USE ONLY POWER STEERING FLUID IN SYSTEM. DO NOT USE ATF.
- *ALTHOUGH THIS KIT IS FAIRLY SIMPLE TO INSTALL, SOME MODIFICATIONS MAYBE NECESSARY.
- *BEFORE STARTING INSTALLATION, PLEASE BE AWARE OF THE MODIFICATIONS THAT ARE NEEDED TO INSTALL.
- *MUST USE A MINI STARTER (I.E. POWER MASTER) ON SMALL BLOCK EQUIPED CARS.
- **USED HOOKER SUPER COMPS HEADERS ON BIG AND SMALL BLOCK WITH FACTORY FOUR SPEED TRANSMISSION AND LINKAGE.

*DUE TO VARIABLES OUTSIDE OUR CONTROL THESE KITS MAY NOT FIT ALL APPLICATIONS. ALSO, PLEASE VERIFY KIT WILL FIT YOUR APPLICATION BEFORE ALTERING VEHICLE.

Page 1 655650

KIT CONTENTS:



#	Part Number	Description	Kit used In	Qty	Inspected By / Date
1	8010810-01	Rack & Pinion	All	1	
	8021320	- Outer Ends 67'-69'		2	
	8021330	- Outer Ends 70'		2	
	620810	- Rack Install Kit		1	
	200150	½" Star Washer		2	
	200860	7/16" Flat Washer		2	
	231120	½"-13 x 1 ½" Bolt		2	
2a	8061410	SB Pump Kit	8010830-01	1	
	8061390	- TC Pump w/ Reservoir		1	
	8022490	- Pump Belt Tension Bracket		1	
	8022480	- Stabilizer Bracket		1	
	620910	- Install Kit		1	
	200850	5/16" Flat Washer		2	
	201090	5/16" Lock Washer		2	
	206070	1 5/8" Stand Off		1	
	206270	1.365" Stand Off		1	_
	231780	5/16"-18 x 5 ½" Hex Bolt		2	
2b	8060670	BB Pump Kit	8010920-01	1	
	8061390	- TC Pump w/ Reservoir		1	
	8022380	- BB Mounting Bracket		1	
	620820	- Install Kit		1	
	200840	3/8" Lock Washer		2	
	200850	5/16" Flat Washer		2	
	205990	Stand Off		1	
	230660	3/8"-16 x 1" Bolt		1	
	231660	3/8"-16 x 2 1/4" Hex Bolt		1	
3	8027750	Line Kit	All	1	
	8027730	- 40" #6 Hose Assembly		1	
	8027740	- 34" #8 Hose Assembly		1	
4	8050640	U-Joint 17mm – DD x ¾"-DD (Pinion)	All	1	
5	8051410	U-Joint Smooth x 9/16"-30 (Column)	All	1	
6	543970	7 ½" DD Shaft	All	1	
7	545310	U-Joint Bushing	All	1	
8	620830	Install Kit	All	1	
	130330	- Column Clamp		1	
	205720	- Column Gasket		1	
	205780	- Column Bushing		1	
	231130	- ¼"-14 x ¾" Screw		3	
	480260	- ¾" x 1 3/8" x 1/8" Thrust Bearing		1	
	545030	- Column Insert		1	
	620630	- Shaft Install Kit		1	
	220060	¼" x 1 ½" Roll Pin		1	
	220070	5/32" x 1 ½"		1	
	230600	¼" Drill Bit		1	
	8021270	- Mustang Column Bracket		1	

Page 2 655650

Disassembly

The first step is to disassemble and remove the stock steering linkage, steering box and column.

- 1. Disconnect steering shaft from steering box. Raise vehicle and support it on stands. Note be sure not to put the stand in a location by the stock round cross member.
- 2. Remove the cotter pins and nuts from outer tie rod ends and remove tie rods from spindles. Disconnect the center link and idler arm assembly from the frame and remove the entire steering linkage.



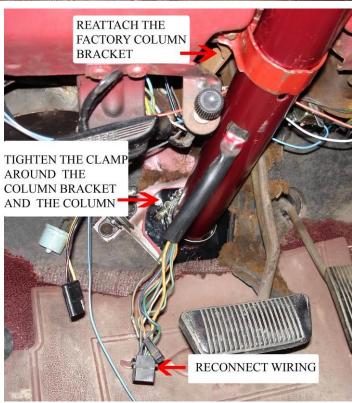
- 3. Remove bolts retaining the gearbox to the frame and remove the box. If equipped remove the power steering pump, brackets and lines. All the pieces removed will not be used.
- 4. You need to modify your stock column slightly. If you have an Early 1967 or 1970 refer to the appropriate section at the end of the instruction sheet. Remove the steering column and tube assembly in one piece. Do not remove the steering wheel. Cut off the rag joint assembly at the end closest to the joint itself. Next install the supplied column tube bearing by sliding it over the steering shaft and up to the column tube and tap it in with a hammer. Once the bearing is seated measure from the flat of the bearing down 1-3/4" and cut off the excess shaft. Next slide on the brass washer and install the supplied U-joint so that the shaft is flush to the inside of the new joint. Drill and pin the joint in place with the provided bit and roll pins. That is all that is needed for modification to the column.



Page 3 655650

5. Once you have this done install the appropriate floor plate provided in your kit using the hardware provided. Slide the floor plate over the column tube with the clamp and install the column through the firewall and bolt back in place. Attach the new floor plate with supplied hardware and complete the installation.



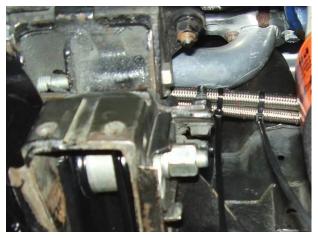


Page 4 655650

6. From under the car remove the stock round cross member from the frame rail to frame rail. Install the new power rack and bracket in place using the stock holes where the cross member was and install new hardware provided. Note: Always check to make sure that your bracket is clear of the control arms and the lip of the frame around the camber adjusting bolts. If the bracket rubs or hits anywhere it is necessary to grind a little of the edge of the rolled lips of the metal on these parts. DO NOT GRIND ON THE SUPPLIED BRACKET.



7. Your rack has been shipped with the pressure and return line ports connected to it. You will need to install the pressure and return line to the ports and install the rack with them connected. The lower larger port on the rack is the pressure port and the higher smaller port is the return. As you are going up into place with the bracket you will need to position the lines around the motor mounts and header. This may take some time to find the angle you need but position the lines where you need so that clearance is provided. Your rack and pinion are also centered before shipping and is marked make sure not to move it off center or loosen the mounting blocks on the gear itself.







Page 5 655650

8. Once the rack is in place leave the bolts loose and install the shaft and joint from the rack and pinion to the steering column. Slide the shaft onto the u-joint on the column and snug the pinch bolt. Run the shaft down to the pinion, with the pinion joint on the shaft, raise the rack into place to spline the lower joint to the pinion. NOTE: It is important that you phase the u-joint 90 degrees out or opposite of each other before you install and tighten. Also make sure that you center your steering wheel before sliding the u-joints together. Torque the u-joint bolts to 40ft. lbs.

Note: MAKE SURE YOUR RACK AND PINION IS CENTERED AND YOUR STEERING WHEEL IS RESONABLY STRAIGHT.



9. You can now torque the mounting bolts for your rack to 65 ft. lbs.





10. Install the outer tie rod ends and tighten to 45 ft. lbs. Adjust the toe by eye so you can drive to an alignment shop. Align cotter pin hole and install provided cotter pin and crimp.





Page 6 655650

11. The power steering pump is an easy install and comes with the pump brackets attached to it. If your car was equipped with power steering, you will need to remove the stock pump and brackets that held it on the motor.







12. Once removed, install the new pump and bracket in place and attach it with supplied hardware and standoffs provided in kit.

Big Block Pump

Small Block Pump





13. The power steering lines have fittings on them that can only be installed one way at the pump. If you are unclear at all you can trace the lower port on the rack and pinion following the lineup to the pump. This is the pressure line. The top port at that rack is the return port, which goes to the plastic reservoir. Be sure to tighten the clamp.





NOTE: If your car is equipped with the OE Pump, we found on our car the replacement belt size to be (13/32 X 41 5/8)

Page 7 655650

- 14. When your lines are connected and the top bolt on the pressure port is torque to 20 ft. lbs. You may top off the fluid in the reservoir and start the car.
- 15. Let the car idle and turn the wheels back and forth slowly to remove air from the system.
- 16. Shut the car off and make sure you have no leaks, and the level is full.
- 17. When your install is complete it will be necessary to have an alignment done.



Alignment Instructions

Toe In: 0 - 0.125 Camber: O.E. Specs Caster: O.E. Specs

If you have any questions or problems regarding this product, please contact:

UNISTEER® Performance Products

1555 Enterprise Parkway Twinsburg OH 44087 800-338-9080

WWW.UNISTEER.COM

Copyright $\ensuremath{\texttt{@}}$ by MAVAL Manufacturing Corporation All rights reserved.

No part of these materials can be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying, recording or by any information storage and retrieval system, without permission in writing from MAVAL Manufacturing Corporation.

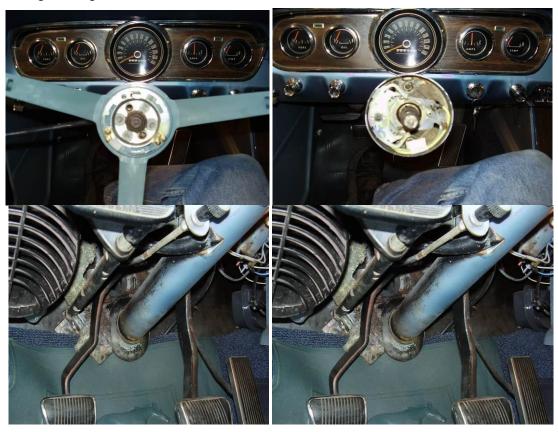
Page 8 655650



WARNING: for Early 1967 model year ONLY

Early 1967 Mustang Column Modification

1. The steering column tube needs to be modified by first removing the steering wheel and the column tube bolts. Then disconnect the wiring, making note of their location to ease reinstallation.



2. Remove the column tube assembly.



3. From under the car remove the gear box and shaft assembly, (all one piece.)

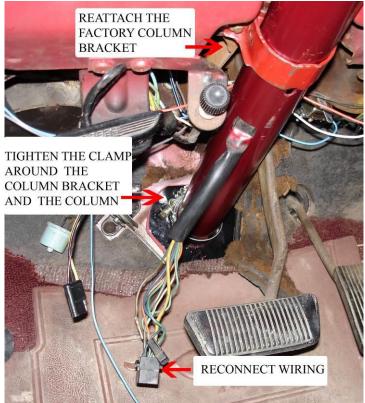
Page 9 655650

4. Place your column tube on a flat surface and measure from the very bottom of the column towards the steering wheel 3-1/8". Mark the column check the measurement again and cut the tube off squarely at you mark. Next install the supplied column bearing into the bottom of the tube by tapping it into place with a hammer.



5. Once you have this done install the appropriate floor plate provided in your kit using the hardware provided. Slide the floor plate over the column tube with the clamp and install the column through the firewall and bolt back in place. Attach the new floor plate with supplied hardware and complete the installation.





6. Install the brass bearing collar from the old steering shaft onto the new steering shaft and slide the new shaft through the column tube and wiggle through the bearing hole. Then install the steering wheel and finger tighten the nut only.

Page 10 655650

7. From under the hood, you can now install the provided brass washer and shaft u-joint to the splined end. Once the brass washer and u-joint are in place and tight, finish securing the steering wheel. This will seat the tapered piece in your column, and you should have minimal movement up and down on the steering wheel.

If you have any questions or problems regarding this product, please contact:

UNISTEER® Performance Products

1555 Enterprise Parkway Twinsburg OH 44087 800-338-9080 WWW_UNISTEER_COM

Copyright © by MAVAL Manufacturing Corporation All rights reserved.

No part of these materials can be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying, recording or by any information storage and retrieval system, without permission in writing from MAVAL Manufacturing Corporation.

Page 11 655650



WARNING, for 1970 model year ONLY

1970 Mustang Column Modification

- 1. Remove 4 bolts at firewall plate.
- 2. Remove lower plastic trim panel to access dash hardware.
- 3. Remove the 3 nuts that retain the steering column to the dash.
- 4. Disconnect the main wire harness off the ignition switch and the turn signal switch.
- 5. Make sure the steering box is disconnected and remove the steering column from the vehicle.



6. Once the column is out of the car, do the following. In a band saw or using a reciprocating saw cut the steering shaft off as close to the weld of the rag joint as you can.



Page 12 655650

7. Next you need to cut off the inner tube of the steering column tube. This is the tube that has the lever on it. Cut it off as close to the steering column tube as you can. DO NOT CUT THE ACTUAL STEERING COLUMN TUBE. When cutting the inside tube be sure to only cut the tube itself and not the inside steering shaft. You can accomplish this by going around the

tube with your saw.



- 8. Once you have cut the inside piece off remove it from the column by sliding it off the end you cut the rag joint off of.
- 9. Next take a brass or a drift and tap the inner tube into the steering column tube.

Note: this piece is collapsible. Tap it in about 1" This will allow the clearance needed to install the bearing.



10. Once that is complete you need to make sure the steering shaft itself is clean and free of burs. Install the supplied bearing over the steering shaft and tap it into the column tube by walking it in with a small hammer.



- 11. When that step is done you now need to measure down 1-3/4" from the flat surface of the bearing to the end of the steering shaft and mark it. Cut the steering shaft off at that mark.
- 12. You now need to install the provided aluminum bushing over the shaft.

Page 13 655650



13. Next install the solid piece of steel stock into the steering shaft. Make it flush with the steering shaft.



- 14. Next install the u-joint over the steering shaft. Using the supplied drill bit and the pilot hole in the u-joint drill through the pilot hole and clear through the other side of the u-joint. Note keep your drill as straight as possible. We recommend the use of a drill press.
- 15. Next install the roll pin provided in the kit. Tap it into place and then install the smaller pin inside of it. This will lock it in place.



16. You can now reinstall your steering column assembly.

Page 14 655650

If you have any questions or problems regarding this product, please contact:

UNISTEER® Performance Products

1555 Enterprise Parkway Twinsburg OH 44087 800-338-9080

WWW.UNISTEER.COM

Copyright $\mbox{\ensuremath{\texttt{©}}}$ by MAVAL Manufacturing Corporation All rights reserved.

No part of these materials can be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying, recording or by any information storage and retrieval system, without permission in writing from MAVAL Manufacturing Corporation.

Page 15 655650