

INSTALLATION INSTRUCTIONS



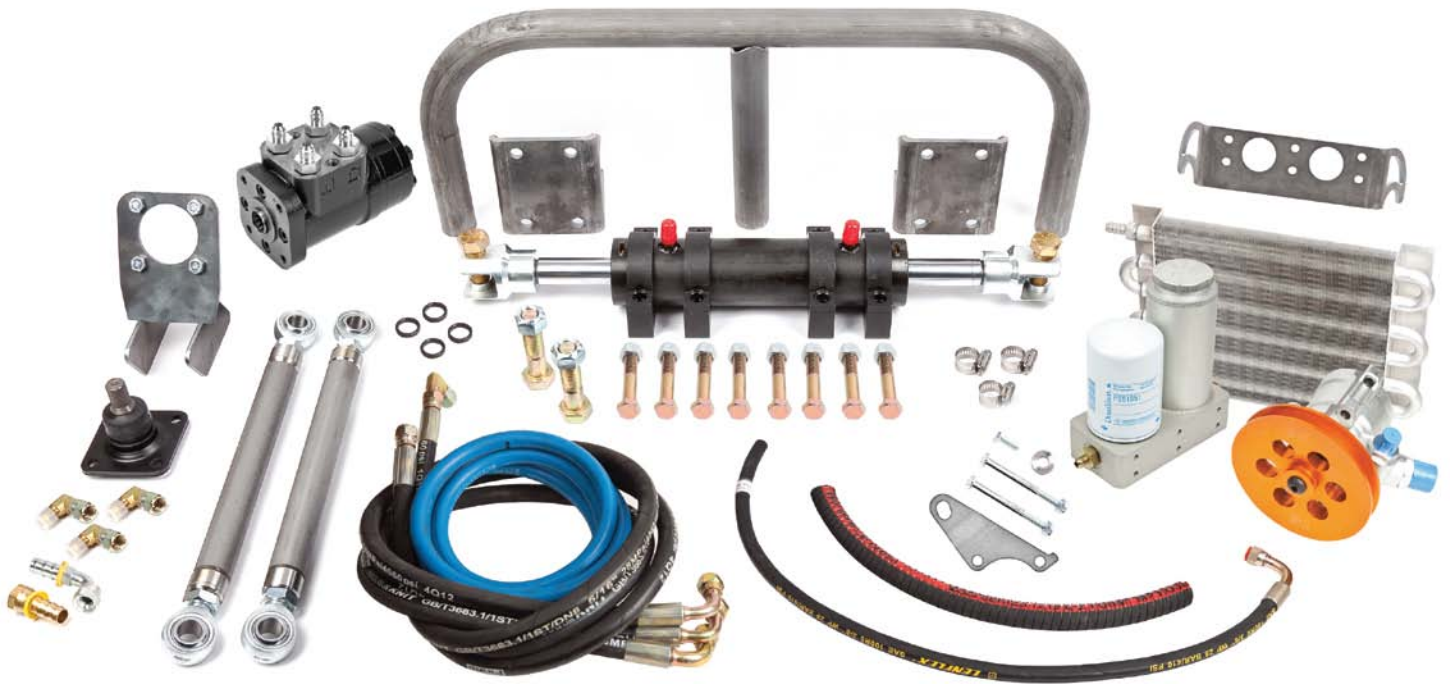
TACOMA FULL HYDRAULIC STEERING KIT, 3.4L

300891-KIT FULL HYDRAULIC STEERING KIT, 6" RAM (1995-2004 TACOMA, 3.4L)

300892-KIT FULL HYDRAULIC STEERING KIT, 8" RAM (1995-2004 TACOMA, 3.4L)

300893-KIT FULL HYDRAULIC STEERING KIT, 10" RAM (1995-2004 TACOMA, 3.4L)

KIT CONTENTS





RECOMMENDED TOOLS

| | |
|------------------------------|---|
| metric socket set | welder |
| metric wrench set | grinder |
| ratchet / extension | hamer |
| screw drivers – slot/philips | dykes |
| crescent wrench | jack stands |
| drill ¾" unibit | torque wrench |
| hose cutter | tape measure |
| jack | allen wrenches/sockets 7/32", 5/8" |
| | power steering fluid (Royal Purple Recommended) |

CAUTION

1. Read all instructions completely and carefully before you begin.
2. Check to make sure the kit is complete and that no parts are missing (refer to the Kit Contents List on the first page of these instructions). If anything is missing, please contact Trail-Gear at 559.252.4950.
3. Park vehicle on a clean, dry, flat, level surface and block the tires so the vehicle can not roll in either direction.

INSTALLATION INSTRUCTIONS



STEP 1

Disconnect Battery.



STEP 2

Remove Air Box, disconnecting vacuum lines, and electrical connections as needed.



STEP 3

Remove marker lights, and grill.



STEP 4

Drain radiator, disconnect hoses, remove lower fan shroud, and remove radiator.



STEP 5

Remove power steering pump retaining main bolt for later use.



STEP 6

Fasten tension bracket to power steering pump using 5/16 x 2 3/4" bolt and washer, and M8 x 19mm bolt, and split washer.



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STEP 7

Install new power steering pump using retained main bolt and provided spacer. Spacer should be placed behind pump body.



STEP 8

Install the power steering cooler. Connect the return line (#6 hose with the single 90° fitting) to the upper cooler connection point. You will need to drill holes in shroud to run your hose's through locations may vary depending on desired routing.



STEP 9

With a 3/4" drill bit, drill out the rear most tapered holes on your steering arms. Use a drill press if possible. You can trim of the excess material from the longer arm as shown if desired.



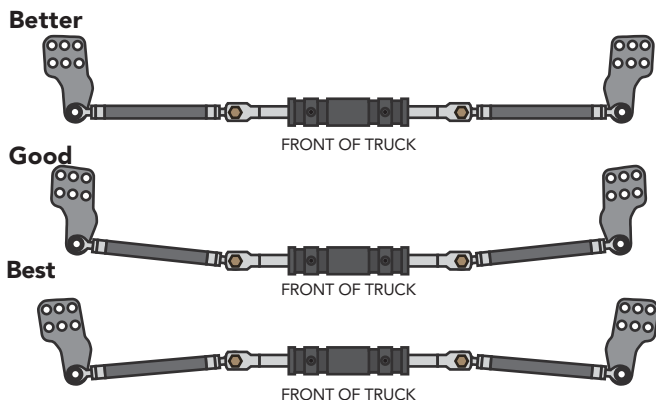
STEP 10

Install all cylinder clamps and bolts through cylinder mounting plates. With the truck at full compression, position the cylinder assembly in front of the axle housing in desired location.



STEP 10 CONTINUED

Mount the ram level with the ground, and parallel with the axle housing, slightly behind the steering arm attachment point. See desired layout below. Positioning may vary depending on axle housing, and appreciate the ram does not need to be centered.



STEP 11

Install Clevis ends on cylinder and cut tie rod tubes to length. Locktite and tighten Allen head clevis bolts.



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STEP 12

Cope cylinder mounting hoop, and straight tube to fit up to the axle. Tack weld in place.



STEP 14

Whenever possible mount the Reservoir filter so the outlet is above the power steering pump inlet. It is recommended that the battery box be relocated to allow for the reservoir filter.



STEP 16

Position orbital assembly on frame rail. Install Tacoma steering shaft/U-Joint on end of column. Install gussets inside and outside frame rails.



STEP 13

By hand manually cycle steering lock to lock and make sure tie rods are adjusted so that the same amount of ram shaft is exposed from right to left.

STEP 15

Mount Orbital and steering column to orbital mounting plate.

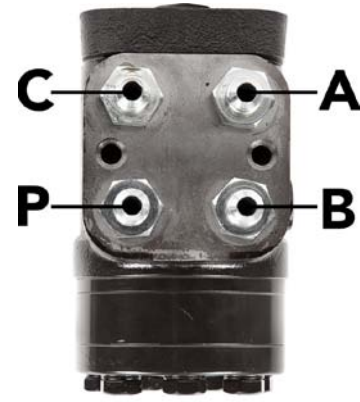
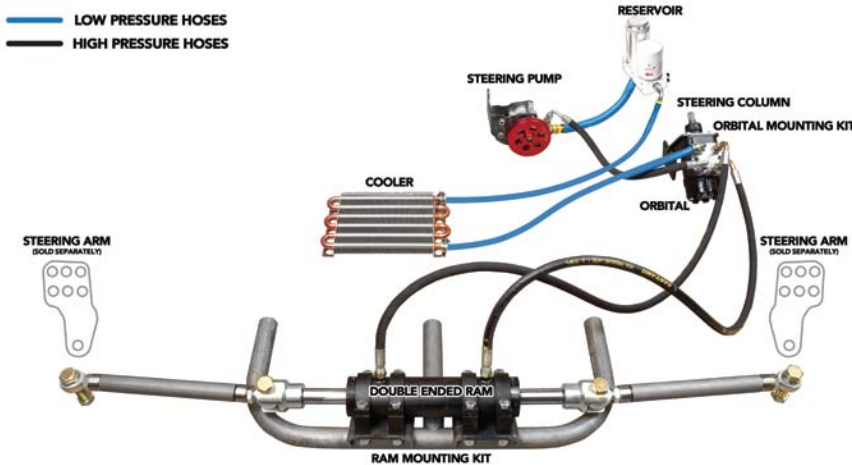


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STEP 17

Install hoses per diagram below. Do not over tighten as this can damage fittings. **Note:** colors of the hoses provided in kit may vary from the illustration below.



C = Cooler A = Left
P = Pump B = Right

STEP 18

Install radiator and re-assemble remaining components in reverse order

STEP 19

Fill the power steering system with power steering fluid. When filling the reservoir, do not fill to the top. Allow about 1/2" for fluid expansion due to heat. With the vehicle on jack stands and tires completely off the ground, engine not running, turn steering wheel from lock to lock several times and then refill the power steering reservoir with fluid. Note, this is done so that the power steering pump does not get started dry, which can cause damage to the pump. Now you're ready to start the engine. Start the engine and immediately add fluid to reservoir. Once reservoir is about 3/4 full SLOWLY cycle the steering wheel to full lock one direction, then slowly to the opposite direction. We recommend that you run the motor for about 5 minutes at a time during the bleeding. Allow the oil to set until all the bubbles have separated out of the oil, then run the motor again for 5 minutes. Repeat this procedure until the oil runs without foam or bubbles.