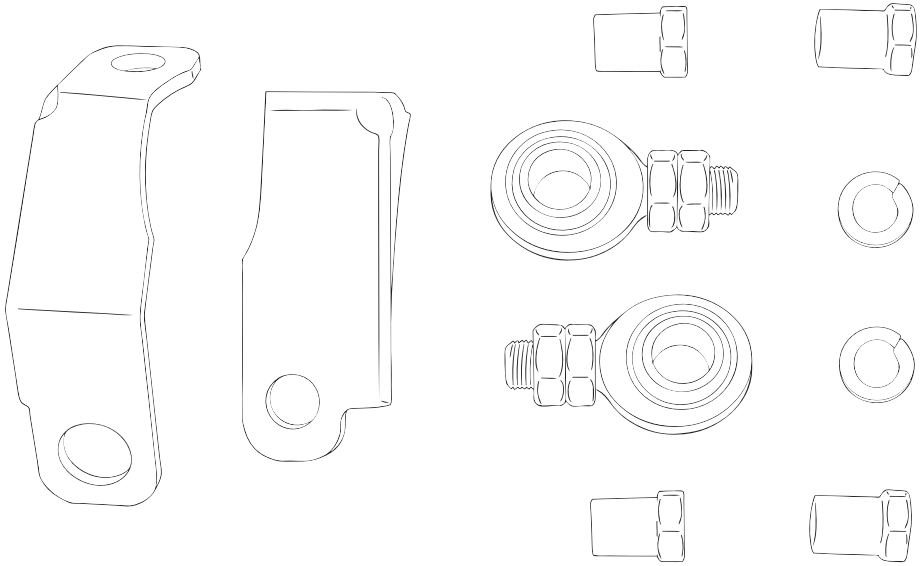


Pacific Performance Engineering, Inc.
www.ppediesel.com



GM 2001-2010 DURAMAX
Pitman/Idler Arm Support Kit
(5130810)

Installation Guide

DISCLAIMER OF LIABILITY

This is a performance product that increases horsepower above and beyond factory specifications. As a result, more horsepower creates more stress on the drivetrain components, which could result in drivetrain failure. This product is intended for off-road use only. Use at your own risk.

This agreement sets forth the terms and conditions for the use of this product. The installation of this product indicates that the Buyer has read and understands this agreement and accepts the terms and conditions.

Pacific Performance Engineering Inc., its distributors, employees, and dealers (the "Seller") shall not be responsible for the product's proper use and service. The buyer hereby waives all liability claims. The Buyer hereby acknowledges no reliance on the Sellers skill or judgment to select or furnish goods suitable for any particular purpose and that there are no liabilities which extend beyond the description on the face hereof, and the Buyer hereby waives all remedies or liabilities expressed or implied, arising by law or otherwise (including without any obligation of the Seller with respect to fitness, merchantability and consequential damages), or whether or not occasioned by the Seller's negligence. The Seller disclaims any warranty and expressly disclaims any liability for personal injury or damages. The Buyer acknowledges and agrees that the disclaimer of any liability for personal injury is a material term for this agreement and the Buyer agrees to indemnify the Seller and to hold the Seller harmless from any claim related to the item of equipment purchased. Under no circumstances will the Seller be liable for any damages or expenses by reason of use or sale of any such equipment. The Seller assumes no liability regarding the improper installation or misapplication of its products. It is the installer's responsibility to check for proper installation and if in doubt contact the manufacturer. The Buyer is solely responsible for all warranty issues from the manufacturer.

LIMITATION OF WARRANTY

The Seller gives Limited Warranty as to description, quality, merchantability, and fitness for a particular purpose, productiveness, or any other matter of Seller's product sold herewith. The Seller shall not be responsible for the products proper use and service and the Buyer hereby waives all rights other than those expressly written herein. This warranty shall not be extended, altered or varied except by a written instrument signed by Seller and Buyer.

The Warranty is limited to two (2) years from the date of sale and limited solely to the parts contained within the products kit. All products that are in question of Warranty must be returned prepaid to the Seller and must be accompanied by a dated proof of purchase receipt. All Warranty claims are subject to approval by Seller. Under no circumstances will the Seller be liable for any labor charged or travel time incurred in diagnosis for defects, removal, or reinstallation of this product or any other contingent expenses. Under no circumstances will the Seller be liable for any damage or expenses incurred by reason of the use or sale of any such equipment. In the event that the buyer does not agree with this agreement: the buyer may promptly return this product, in a new and unused condition in its original packaging, with a dated proof of purchase to the place of purchase within ten (10) days from date of purchase for a full refund. The installation of this product indicates that the buyer has read and understands this agreement and accepts its terms and conditions.

Product Safety and Warning

The installation of this kit will modify the suspension of your vehicle and may cause it to handle differently than a factory equipped vehicle. It will not strengthen nor reinforce the stock frame of the vehicle, nor will it increase rollover protection. It is necessary to periodically inspect all suspension and drive train components for tightness of fit or any damage. Installation of these parts will modify the height of the vehicle and may raise the center of gravity. Altered height modifications and off-road operation may increase your vehicle's susceptibility to roll over conditions and may cause serious injury or death. Many states regulate the height modification to each vehicle. Check the laws in your state for exact specifications. Height modifications may effect the reaction, ride, handling, and wear factor of your vehicle's components.

STEP 1

If there is an existing skid plate and shroud at the front cross member of the vehicle, underneath the front of the engine, they should be removed with a 15mm socket to access the pitman and idler arms. Then set them aside for re-installation later.

STEP 2

Unscrew the factory lock nuts that holding the drag link to the pitman and idler arms, using a 21mm deep socket, and discard them.

STEP 3

Unscrew the large nut holding the pitman arm to the steering box using a 1 5/16" boxed end wrench. Remove it and the large lock washer.



Pitman Arm

STEP 4

Remove the nut holding the idler arm to the idler arm pivot with a 24mm boxed end wrench. On some vehicles, you may have to remove the two bolts (21mm) holding the pivot to the frame brackets in order to get the nut off the stud because of interference with the frame.

**Idler Arm****STEP 5**

Apply a small amount of thread locker on all of the threads on both of the 5/8"x 3/4" rod ends. Then thread one 5/8" jam nut all the way onto both of the rod ends. Then insert the rod end through the 5/8" diameter hole on both the pitman and idler arm brackets as shown below. Now thread a second jam nut on to both rod ends, but do not tighten at this time.

**Idler Arm bracket on left, Pitman Arm bracket on right**

STEP 6

Insert one lock washer over each of the drag link studs, and then install the pitman and idler arm brackets on to the pivot ends where hardware was previously removed in steps 3 and 4. At the same time place the rod end which is connected to the PPE brackets, over the drag link studs so that the lock washer is in between the PPE rod end and the drag link.

STEP 7

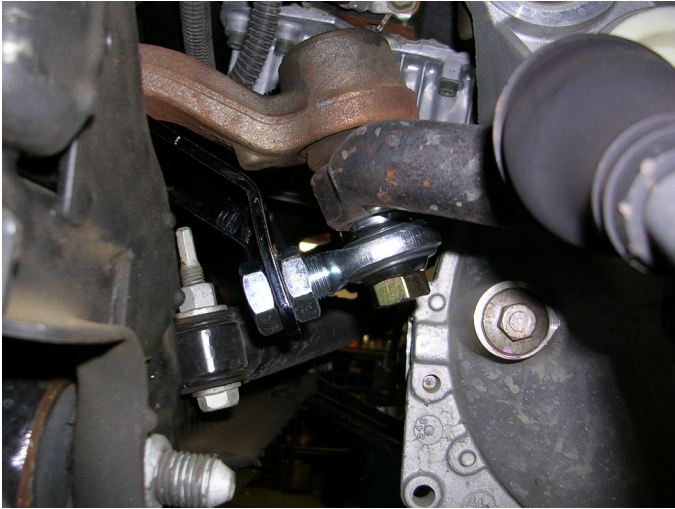
Re-install the factory lock nut on the pivot stud of the idler arm (removed in step 4) and tighten the 2 bolts holding the pivot to the frame (previously removed). Re-install the factory lock washer and nut on the pivot shaft of the steering box that was removed in step 3. Do not tighten yet.

STEP 8

The gold shank nuts are for factory or coarse thread arms, and the silver shank nuts are for aftermarket or fine thread arms. Apply a small amount of thread locker on the threads of the shank nuts and insert a shank nut onto each of the drag link studs; passing through the rod ends and locking against the lock washer and drag link. Jam each support bracket in between the jam nuts. Tighten shank nuts with 7/8" socket and jam nuts with both 15/16" boxed end wrenches, to 85 ft.lb.



Idler arm bracket installed



Pitman arm bracket installed

STEP 9

Tighten the factory hardware mentioned in Steps 3, 4 and 7 at this time. Hardware in step 4 should be tightened to 85 ft-lb. Hardware in Step 7 will not accommodate clearance to use a torque wrench, but need to be tightened as tight as possible with the box end of an end wrench, roughly 85 ft-lb on the idler arm side, and 150 ft-lb on the large pitman arm nut.

STEP 10

Re-install any other hardware or skid plate/shroud previously removed and tighten to factory specification.

*Protected under patent: US 7475891 B2



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