LPE Magnuson Rear Jackshaft Bracket Kit

PN's: L220160000, L220280000

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Parts List

LPE Magnuson rear jackshaft bracket kit

#	Description	Part number
1	Rear TVS SC bracket, black anodized	XX09737-0070
	or Rear TVS SC bracket, polished	XX09737-0071
1	Retainer clip	MAG69-00-01-009
1	Rear bearing	MAG55-00-62-204
2	M10 x 1.5 x 20 flat head countersunk bolts	KP82415
1	M10 x 1.5 x 65 bolt (for ribbed belt idler)	11516109
1	M10x1.5x70 bolt (for cogged belt idler)	11516356
1	Tensioner pulley cap	XX09737-0078
1	Tensioner pulley base	XX09737-0077
1	Tensioner pulley base spacer (for cogged belt idler)	XX09737-0076
1	LPE T-nut	XX09737-0054
1	M8 x 1.25 x 40 SS set screw	92029A325
1	M8 x 1.25 x 60 SS set screw	LINSS6x08060
1	M8 x 1.25 x 70 SS set screw	MM-916A2 8X70
1	M8 x 1.25 SS jam nut	47385
1	M8 SS flat washer	47395
1	LPE decal	L920010000
12	Instructions	N/A

Tools & Materials Required

- Arbor press or equivalent
- Blue loctite
- 1” wrench
- 11/16” wrench
- Socket wrench
- 1” socket
- 10mm socket
- 15mm socket
- 4mm Allen socket
- 6mm Allen socket
- Clean shop towel
- Lubricant for pressing the bearing and pulley hub
- Calipers
- Snap ring pliers
- Torque wrench

Additional Required Components

#	Description	Part number
2	30 tooth cogged pulley	L220320030
1	70mm x 50mm cogged belt idler/tensioner pulley	L220350070
1	600mm x 50mm x 8mm pitched cogged belt	GAT600-8MGT-50
1	30 tooth cogged pulley	L220320030
1	35 tooth cogged pulley	L220330035
1	70mm x 50mm cogged belt idler/tensioner pulley	L220350070
1	624mm x 50mm x 8mm pitched cogged belt	BS-624-8M-50

Additional Required Components

#	Description	Part number
2	3.00" 14 rib pulley	L220180000
1	70mm 14 rib idler/tensioner pulley	ATISK086H5
1	23.4" 14 rib belt	K140234
2	3.25" 14 rib pulley	L220190000
1	70mm 14 rib idler/tensioner pulley	ATISK086H5
1	644mm 14 rib belt	14PK644
1	3.49" 14 rib pulley	L220200000
1	3.25" 14 rib pulley	L220190000
1	70mm 14 rib idler/tensioner pulley	ATISK086H5
1	644mm 14 rib belt	14PK644
1	3.49" 14 rib pulley	L220200000
1	3.00" 14 rib pulley	L220180000
1	70mm 14 rib idler/tensioner pulley	ATISK086H5
1	644mm 14 rib belt	14PK644

Optional Items

#	Description	Part number
2	Magnuson press-on 4 bolt hub (if needed)	69-00-87-010
1	TVS2300 Camaro carbon fiber jackshaft	52-02-18-168-CF
1	TVS2300 Corvette carbon fiber jackshaft	52-02-16-593-CF

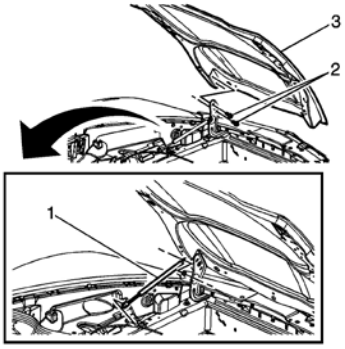
Read the entire instruction manual before beginning installation. Some stock parts will be used in reassembly.

When referencing the side of the vehicle, the driver side of the vehicle is considered the left side and the passenger side of the vehicle is considered the right side of the vehicle.

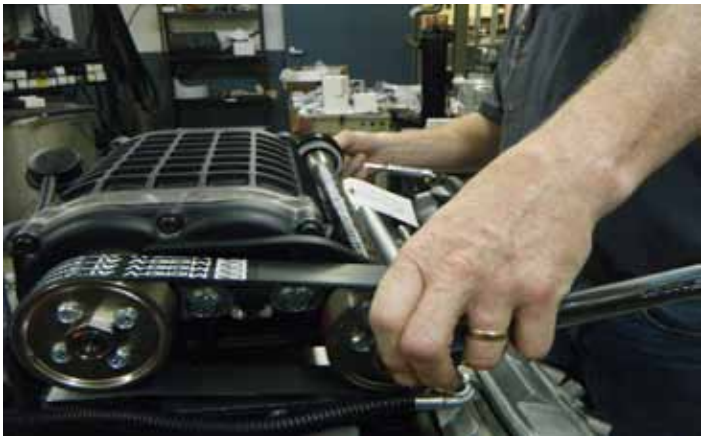
The four (4) bolt hub must be pressed onto the supercharger shaft and the bearing must be pressed into the bracket prior to installation of the new bracket assembly.

LPE is currently developing an installation tool to make the installation of the jackshaft and rear pulley hub easier. This installation tool was used for the installation pictured in this manual. Until the tool is released, the installer must come up with other means of pressing the jackshaft into the bearing, as well as the rear pulley hub onto the jackshaft.

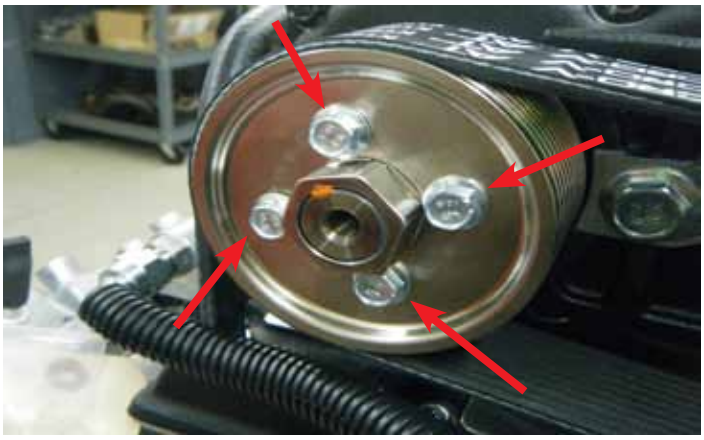
WARNING: When pressing the jackshaft out of the bearing, make sure that you are not pressing against the entire rod as it can cause the carbon fiber jackshaft to fail.



1. Open the hood of the vehicle. If you have been driving the vehicle, allow the vehicle to cool down for a few hours before starting this installation.



2. Using a 1” wrench and 1” socket, break the bolts loose that hold the jackshaft in place.



3. Using a 10mm socket, break the rear pulley bolts loose. There are four (4) pulley bolts on each rear pulley, as shown in the illustration by the red arrows.

4. Using a 10mm socket, remove the front supercharger pulley.

5. Loosen the rear tensioning screw on the passenger side of the supercharger with a 4mm Allen socket.

6. Remove the two (2) rear pulley bracket bolts using a 15mm socket.

7. Using a 10mm socket, remove the bolts on both rear supercharger pulleys.

8. Using an 11/16” wrench, remove the rear fuel line hose from the passenger side fuel line.

9. Remove the rear supercharger belt and pulleys.

10. Gently pulling towards the rear of the supercharger, remove the supercharger jackshaft assembly from the forward jackshaft housing.

11. Using an arbor press or equivalent, press the jackshaft out of the pulley hub and bearing. Inspect the individual components after their separation is complete to confirm that no components have been damaged. If any component was damaged during the pressing process, it will need to be replaced.

12. Wipe off the surface on the end of the jackshaft where the bearing will make contact to ensure that there are no particulates on the contact surface.

13. The adjacent illustration shows the LPE supplied rear tensioner bracket and it's bearing, which will be installed in the following step. Make sure to apply lubricant to the bearing before attempting to press the bearing into the bracket.

14. Using an arbor press or equivalent, press the new bearing into the new tensioner bracket until some resistance is felt. This operation should not take excessive force to complete.

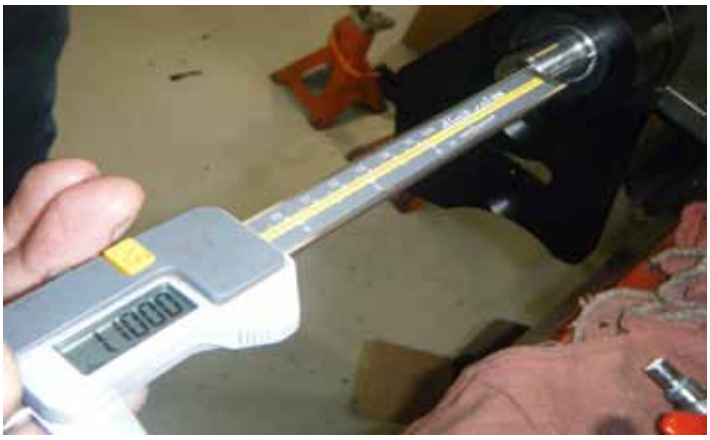
WARNING: Make sure that you are pressing on the outer race of the bearing, not the inner. Pressing on the inner race of the bearing could cause the bearing to fail

15. After pressing the bearing into the rear tensioner bracket to the correct depth, the snap ring groove inside the bearing housing should be visible, as shown in the adjacent picture.

16. Using a pair of snap ring pliers, install the supplied snap ring into the groove directly above the bearing in the rear tensioner bracket bearing housing.

17. The adjacent illustration shows the snap ring installed into the bearing housing.

18. Using whatever method you choose, pull the end of the jackshaft through the bearing. Again, this operation should not take excessive force to complete. As illustrated in the following step, the end of the jackshaft should portrude out of the bearing by roughly 1.1 inches.

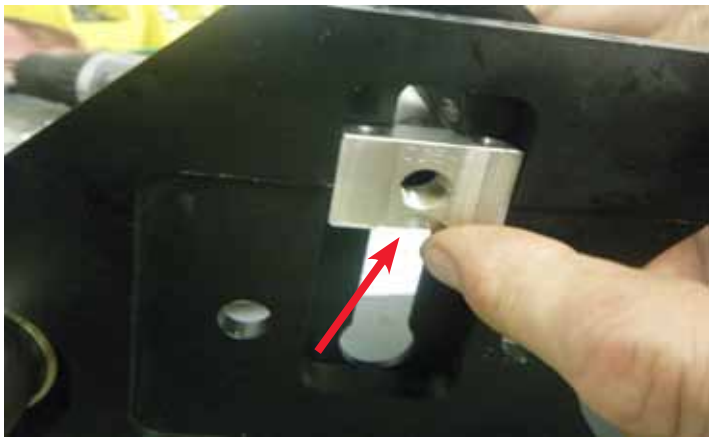


19. The adjacent illustration shows the jackshaft portruding from the bearing by 1.1000 inches.

20. Slide the front of the jackshaft into the foward bearing housing. After lubricating the end of the shaft, install the pulley hub onto the shaft. Whatever method you use to install the pulley hub, make sure that the hub stays square as you tighten it, or else you may damage the hub.

21. For ribbed belts:
Install the stainless steel pulley cap (PN: XX09737-0078) onto the M10x1.5x65 bolt (PN: 11516109). Then, install the tensioner pulley and tensioner pulley base (PN: XX09737-0077) onto the same bolt.

22. For cogged belts:
Install the stainless steel pulley cap (PN: XX09737-0078) onto the M10x1.5x70 bolt (PN: 11516356). Then, install the guided tensioner pulley and tensioner pulley base (PN: XX09737-0077) onto the same bolt followed by the spacer (PN: XX09737-0076).



23. Install the rear idler pulley using the supplied T-nut. The cut-out on the back of the T-nut should be pointed down, as shown by the red arrow.

24. The adjacent illustration shows the tensioner pulley fastened to the tensioner bracket by the T-nut from the rear.

25. The adjacent illustration shows the tensioner pulley fastened to the tensioner bracket by the T-nut from the front.

26. Using a 6mm allen socket and blue loctite, install the two (2) M10x1.5x30 flat head countersunk bolts (PN: KP82415) that fasten the tensioner bracket to the rear of the supercharger. Torque the bolts to 35 ft-lbs.

27. Tighten the pulley hub against the end of the jackshaft. The end of the jackshaft should be flush with the outside of the pulley hub, as shown in the picture.

28. If the MAP sensor was disconnected to create added clearance earlier in this installation, reconnect the MAP sensor at this time.

29. It there is sufficient clearance under the rear jackshaft pulley, re-install the stock fuel line onto the fuel rail. If there is not enough room for the stock fuel line, as is true with a 3.49” rear jackshaft pulley, install a new fuel line that allows clearance for the new rear pulleys or modify the stock fuel line accordingly.

30. Using a 10mm socket the eight (8) bolts that were removed in step 7, we will now install the new 14-rib rear pulleys. Start all eight bolts, but only tighten the passenger-side pulley. Torque the bolts on the passenger-side pulley to 106 in-lbs.

31. Install the belt onto the rear pulleys. This will help hold the driver-side pulley in place while being tightened. Work the belt onto the pulleys by running the belt back and forth over the pulleys.

32. Using the belt to hold the pulley in place, tighten the bolts on the driver-side pulley. Torque the bolts to 106 in-lbs.

33. Lower the tensioner pulley into position. Install the proper set screw for your pulley/belt configuration. There are three different size set screws supplied in this kit.

34. Using the supplied washer, nut, and a 4mm Allen socket, secure the set screw to the bracket.

35. Tighten the idler pulley bolt until belt is secure.

36. Using a 10mm socket, re-install the front supercharger pulley. Torque the bolts to 106 in-lbs.

Installation of the LPE Magnuson rear jackshaft bracket kit is now complete.

For additional product installation information and technical support, contact LPE or your LPE products distributor. You can also find technical support and usage discussions regarding this product and many other LPE products in our Internet forums:

http://www.lingenfelter.com/LPEforumfiles

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