

ARP-K-FD-302S
ARP-K-FD-351S

SBF SERPETINE DRIVE KIT

INSTALLATION GUIDE



QUALITY AMERICAN MADE SUPERCHARGERS



Installation Instructions

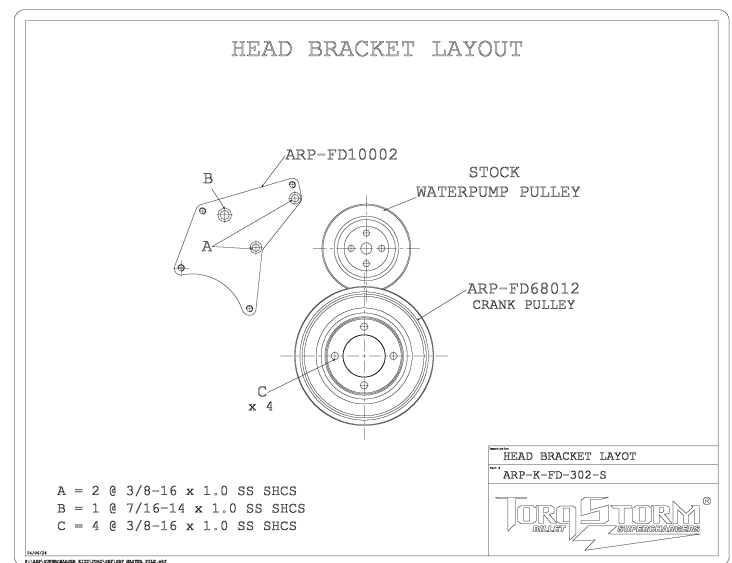
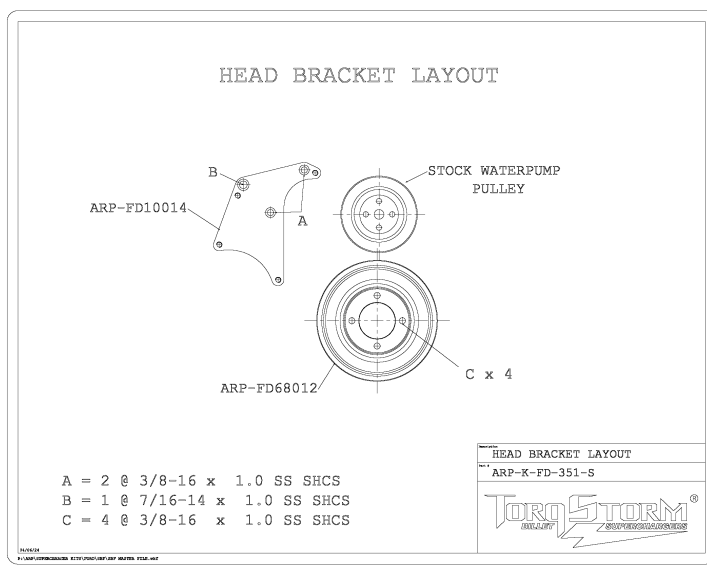
FORD 302 APR-K-FD-302-S



VERIFY THAT YOU HAVE THE CONTENTS ON THE CHECKLIST BEFORE STARTING THE INSTALLATION PROCESS.
FAMILIARIZE YOURSELF WITH THE BOLT/SPACER LOCATION DIAGRAMS AND BELT ROUTING DIAGRAM.
CONTACT US WITH ANY QUESTIONS. 616-706-5580 or sales@torqstorm.com

Step:1

Mount the supercharger head bracket (ARP-FD10002) for 302, (ARP-FD10014) for 351. Use the 2) 3/8"-16 X 1.0" 88 SHCS and 1) 7/16-14 x 1.0" SS SHCS. Tighten bracket to 29 FT/LBS. Refer to the layout sheets below for bolt locations.



Step:2

Mount the crank pulley, if an aftermarket damper is being used it is possible you will need a spacer to correct the spacing. In the back of the booklet, there is a list of the spacer sizes. Refer to those and measure what spacer you will need, part numbers are also supplied. Spacers are available online from various suppliers. Torque the damper bolts to 29FTLBS.

Installation Instructions

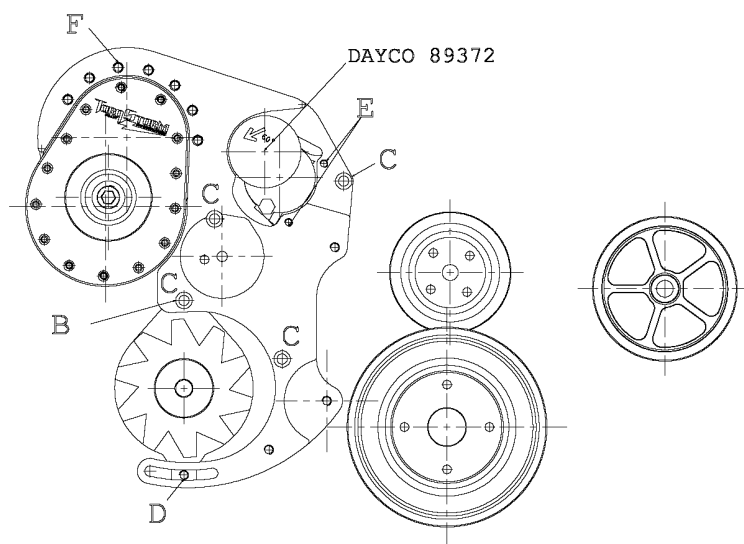
FORD 302 APR-K-FD-302-S



STEP:3

Mount the supercharger bracket (ARP-FD10001) with 3) 3/8"-16 x 6.0" SS SHCS and 3) ARP-S-75-4675 Spacers. Leave hand tight until step 3. Use the layout sheet below for more bolt and spacer locations. Install the Dayco 98372 tensioner before installing the bracket. The mounting bolts for the bracket may have to be sanded down so they do not bottom out on the cylinder head.

SUPERCHARGER BRACKET LAYOUT



- B = 1 @ 3/8-16 x 6.0 SS SHCS
- B = 1 @ ARP-S-75-1800 (BEHIND ALTERNATOR)
- C = 3 @ 3/8-16 x 6.0 SS SHCS
- C = 3 @ ARP-S-75-4675
- D = 1 @ 3/8-16 x 1-1/2 SS FHB
- E = 2 @ 5/16-18 x 3/4 SS SHCS
- F = 7 @ 3/8-16 x 1-1/4 SS SHCS

DESCRIPTION
SUPERCHARGER BRACKET LAYOUT
Part #
ARP-K-FD-351-S



04/06/24
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Installation Instructions

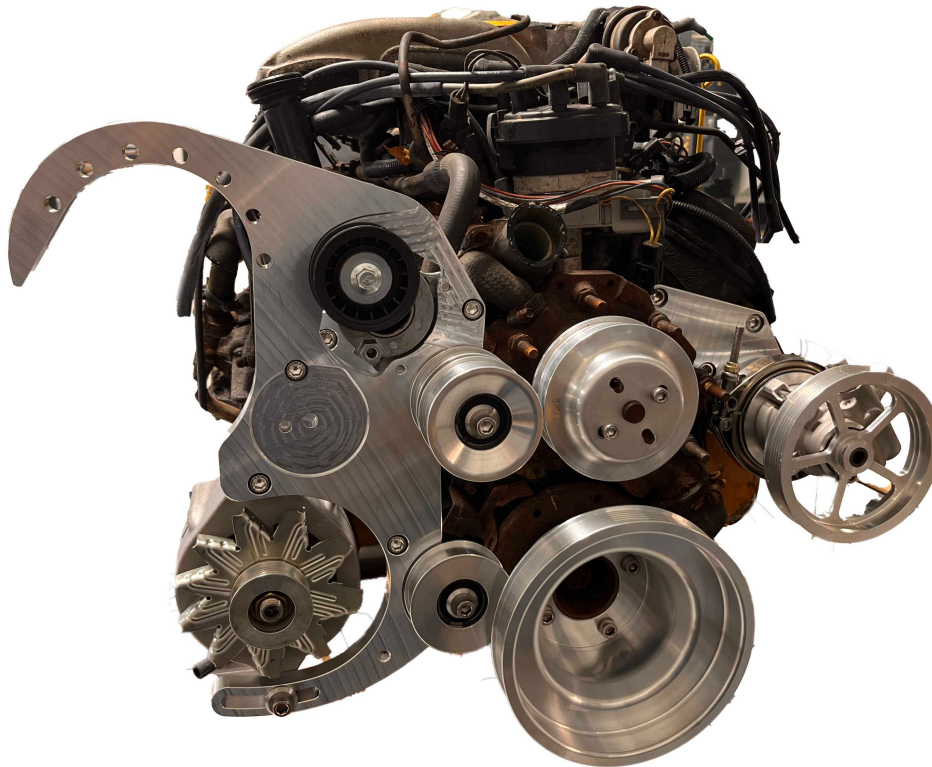
FORD 302 APR-K-FD-302-S



STEP:4

Install alternator and spacer ARP-S-75-1675 with 1) 3/8"-16 x 5.75" SS SHCS in CZ mounting hole in S/C bracket. Tighten all 4 SC bracket bolts to 29 FT-LBS. Install alternator adjustment bolt (D).

The power steering kit shown is not included with the kit, it can be purchased separately.



Installation Instructions

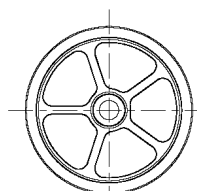
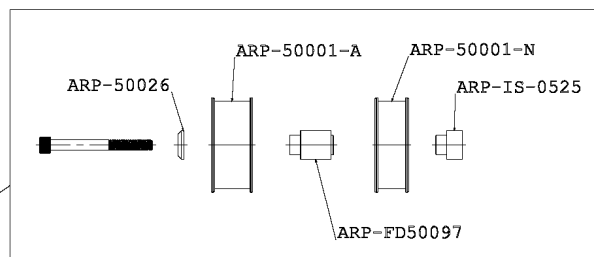
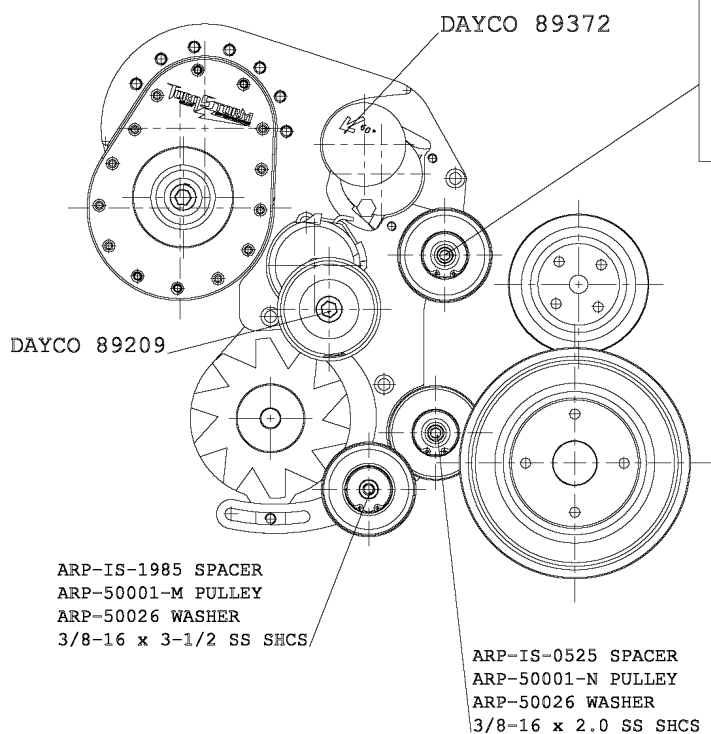
FORD 302 APR-K-FD-302-S



Step:5

Install the idler pulleys and the tensioner assembly on to the bracket. Use the pulley layout sheet shown below for pulley location. Please follow the diagram of the dual idler layout shown on the page to correctly install the double idler assembly.

PULLEY LAYOUT



Description
PULLEY LAYOUT
Part #
ARP-K-FD-351-S



04/06/24

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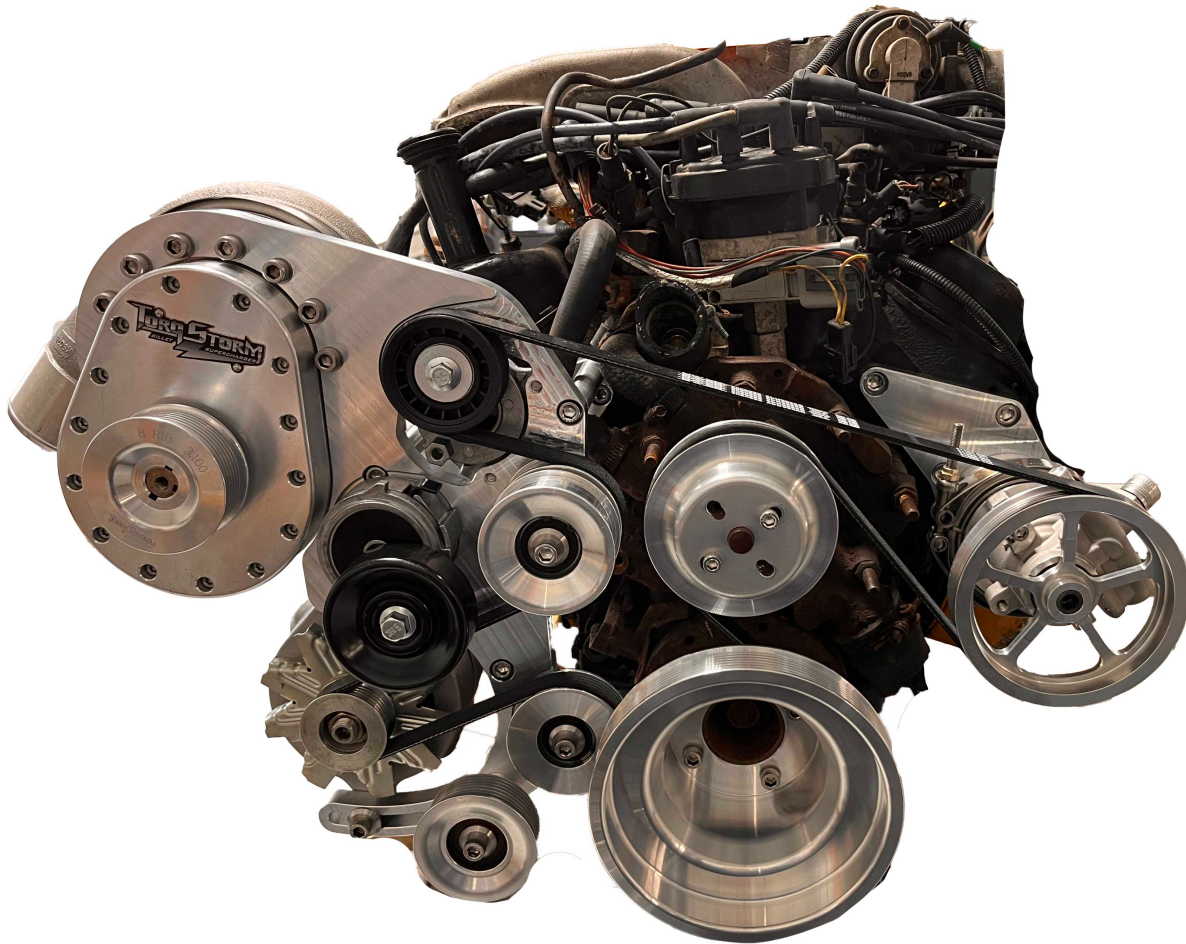
Installation Instructions

FORD 302 APR-K-FD-302-S



Step:6

Install the 6-rib accessory belt. Depending on the accessories that you are running you will have to measure the belt size. The image below shows the proper routing for the belt. The water pump pulley shown is not part of the kit. The stock water pump pulley for a reverse rotation pump can be used.



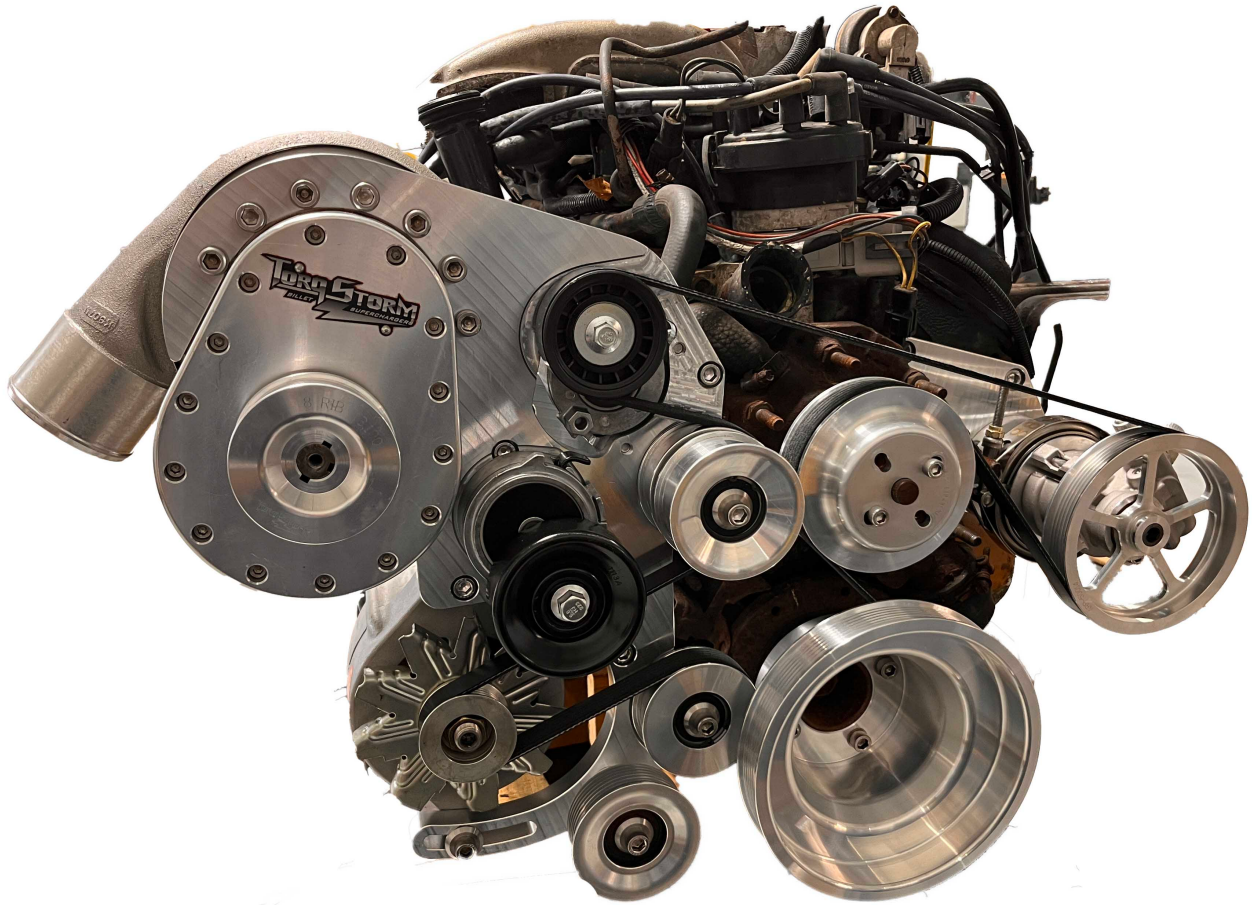
Installation Instructions

FORD 302 APR-K-FD-302-S



STEP:7

Mount the SC to the bracket using the (7) 3/8" x 1.25 SHCS with AN washers. Tighten to 29 FT-LBS. Adjust the super-charger outlet for plumbing alignment prior to mounting on bracket. Loosen the V-band clamp to move and re-tighten to 75 IN-LBS.



Installation Instructions

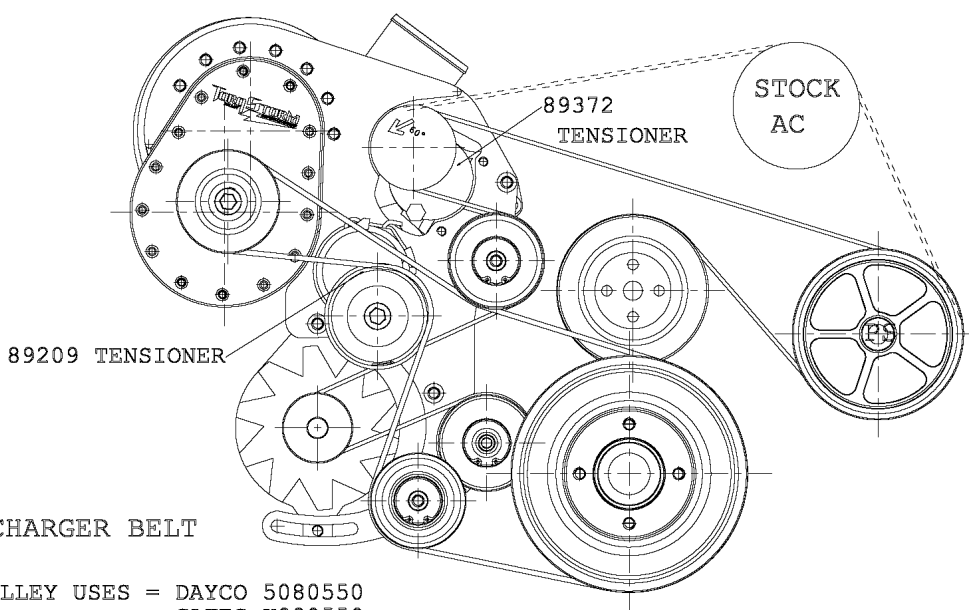
FORD 302 APR-K-FD-302-S



STEP:8

Route 8 Rib serpentine belt per supplied belt routing diagram. Move tensioner to position into proper location.

BELT ROUTING



SUPERCHARGER BELT

- 3.1" PULLEY USES = DAYCO 5080550
GATES K080550
- 3.25" PULLEY USES = DAYCO 5080555
GATES N/A
- 3.5" PULLEY USES = DAYCO 5080560
GATES K080560
- 4.0" PULLEY USES = DAYCO 5080565
GATES K080565

Description	
BELT ROUTING	
Part #	ARP-K-FD-302-S

04/06/24

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Installation Instructions

FORD 302 APR-K-FD-302-S



STEP:9

Install 3" silicone boot on SC outlet, connect to tubing with BOV valve bung. Use silicone 3" to 3.5" to carb hat with supplied clamps. Adjust and tighten. Make sure you are using the supplied O-ring in between the carb hat and carb. **Note: you may need to trim silicone hoses for best fit.**



Installation Instructions

FORD 302 APR-K-FD-302-S



STEP:10

Hook up BOV to a full manifold vacuum source.
Do not hook up to a ported vacuum source.



STEP:11

Install air filter on supercharger inlet.
Adjust and **tighten clamp to 75 IN-LBS.**



STEPS:

11. Replace all spark plugs with one or two steps colder heat range.
12. Reset total timing to stock factory specs minus 1.0* to 1.5* for every pound of boost or install a boost retard ignition. Always listen for any sign of detonation (pinging) and discontinue hard use (no boost) until problem is resolved. For best results we recommend using the MSD boost timing ignition control products for your supercharged ignition needs.
13. Reconnect battery.
14. Check all fittings, nuts, bolts and clamps. Make sure all wires and lines are properly secured with clamps or wire ties.
15. Make sure fuel tank is filled with 91 octane or higher fuel.
16. Start engine and allow to idle a few minutes then shut off.
17. Recheck to be sure that no hoses, wires, ect are near the exhaust headers or moving parts and for signs of any fluid leakage. Recheck ignition timing to make sure it is properly set before commencing test drive.
18. After test drive recheck for leaks and recheck belt tension.
19. Change your oil in the supercharger, every 10,000 miles or once a year. Failure to run TorqStorm® approved oil will void the warranty. Order direct from Torqstorm® PART NO. ARP-OIL-MTL
20. TorqStorm units come standard with a 1 year warranty.

Installation Instructions

BBC SINGLE WITH ACCESSORIES

ARP-K-GM-BBC-AC



- *Replace all spark plugs with one or two heat ranges cooler.*
- *Fuel/ Ignition managment system must be tuned when installing Torqstorm Supercharger.*
- *Reconnect battery*
- *Double check all fittings, bolts, clamps. Make sure all wires and lines are properly secured with clamps or wire ties .*
- *Make sure fuel tank is filled with 91 octane or higher fuel.*
- *Start engine and allow to idle a few minutes then shut down.*
- *Recheck to be sure that no hoses, wires, ect are near the exhaust, headers, or supercharger components.*
- *Recheck tune before commencing test drive.*
- *After test drive examine all bolts, belts and check for leaks or running issues before finishing with the vehicle.*
- *Oil must be changed every 10k miles or once a year, whichever comes first.*

Order oil direct from TorqStorm. Part number ARP-OIL-MTL

Your TorqStorm Supercharger will have a 1 year limited warranty from the date on your paid invoice.

Additional information for Boost

- *It is suggested to run a wideband o2 sensor to monitor correct air/fuel ratio. 11.5 is ideal for 91 octane or higher pump gas.*
- *PLEASE TAKE SPECIAL NOTE: Operating the vehicle without all the sub assemblies completed and properly installed and working may cause FAILURE OF MAJOR ENGINE COMPONENTS.*
- *If you have any questions or concerns contact us at sales@torqstorm.com*
- *Torqstorm superchargers come from the factory filled with 6 oz of ARP-OIL-MTL*
- *Supercharger is ready to run*

TorqStorm® Billet Superchargers Tech update

Our Small block Ford Supercharger systems part number

ARP-K-FD302-S, ARP-FD302-V, ARP-351W-S, ARP-351-V

Are designed to work with the 1981-1995 5.0L/302 engine damper 4 bolt pulley pattern

If you are using other then this 4 bolt damper and have belt misalignment you may need to use these crankshaft pulley spacers

These spacers are offer by Ford Racing performance parts

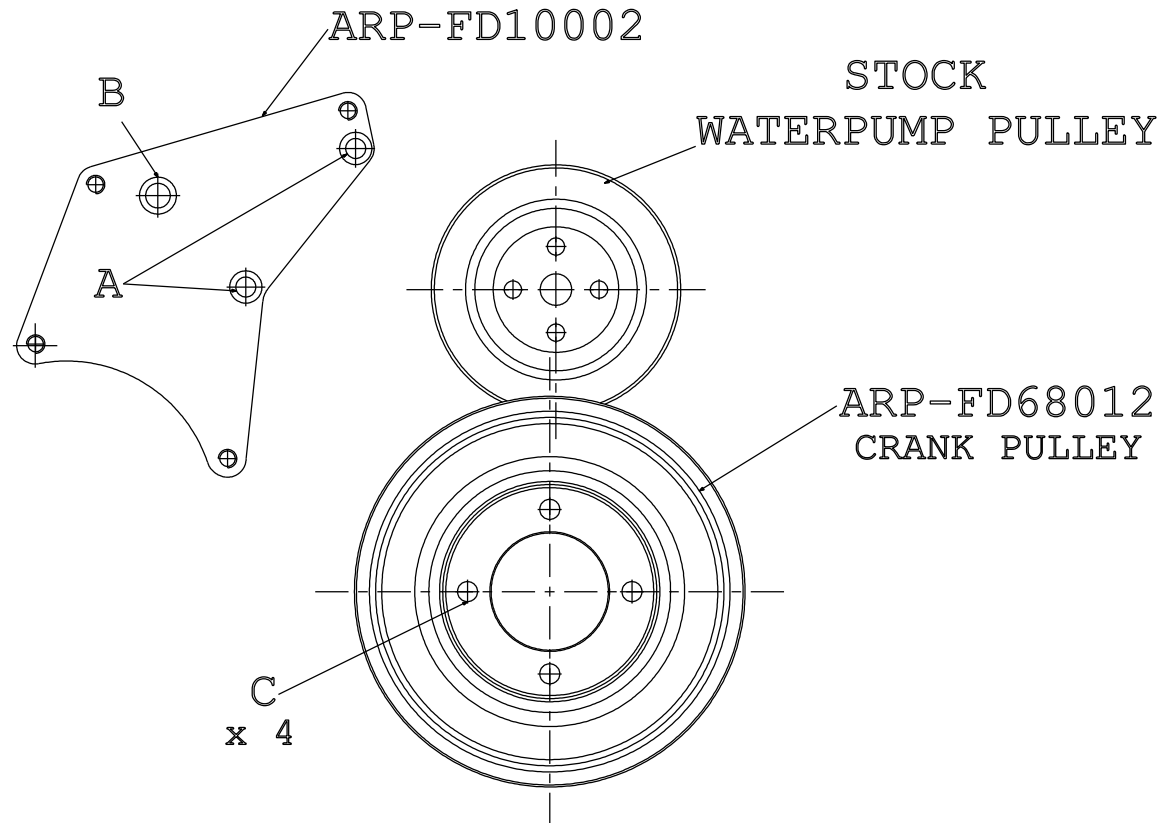
M-8510-A351 Spacer thickness 0.350"

M-8510-B351 Spacer thickness 0.950"

M-8510-C351 Spacer thickness 0.875"

M-8510-D351 Spacer thickness 0.909"

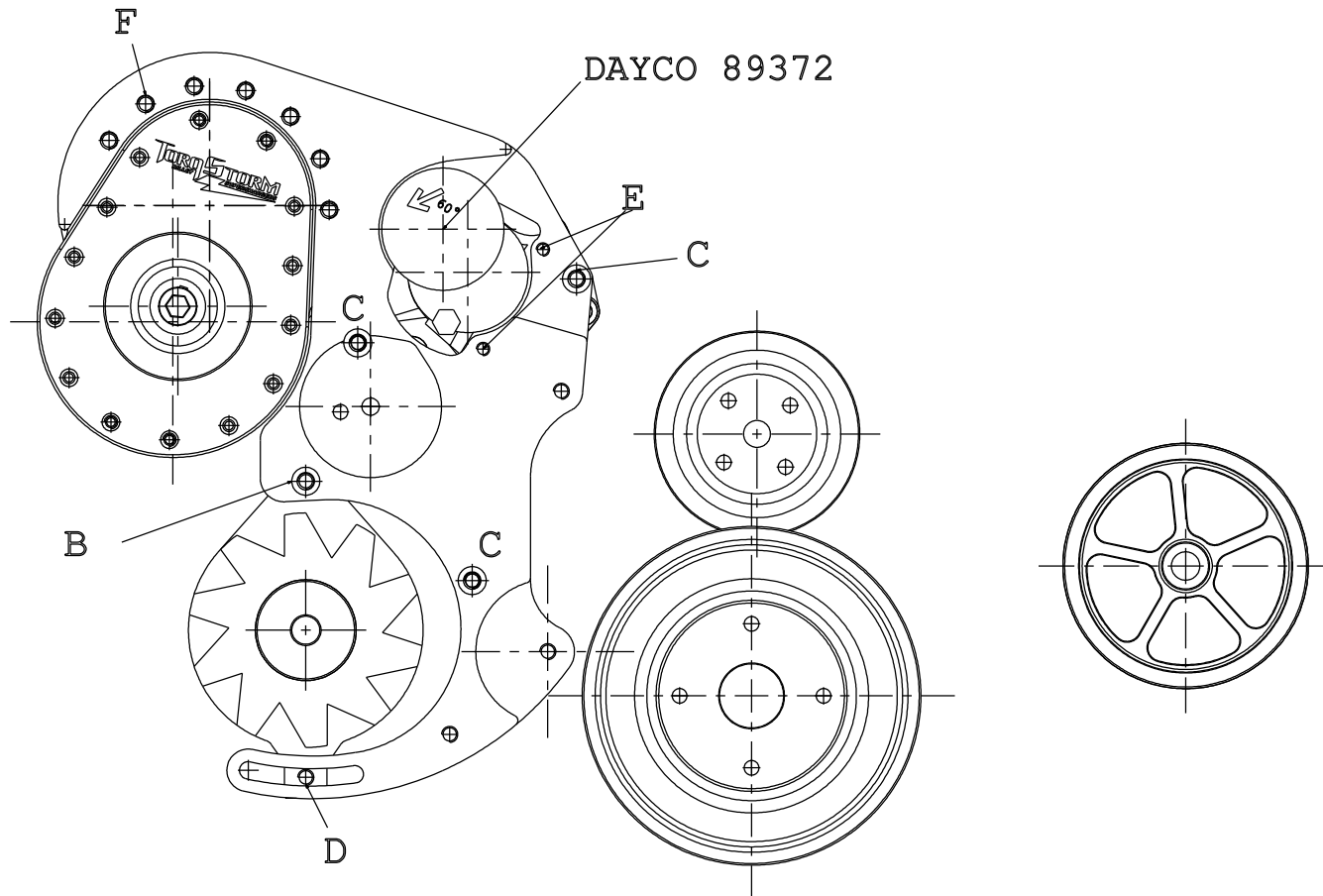
HEAD BRACKET LAYOUT



A = 2 @ 3/8-16 x 1.0 SS SHCS
B = 1 @ 7/16-14 x 1.0 SS SHCS
C = 4 @ 3/8-16 x 1.0 SS SHCS

Description
HEAD BRACKET LAYOUT
Part #
ARP-K-FD-302-S
TORQSTORM[®] BILLET SUPERCHARGERS

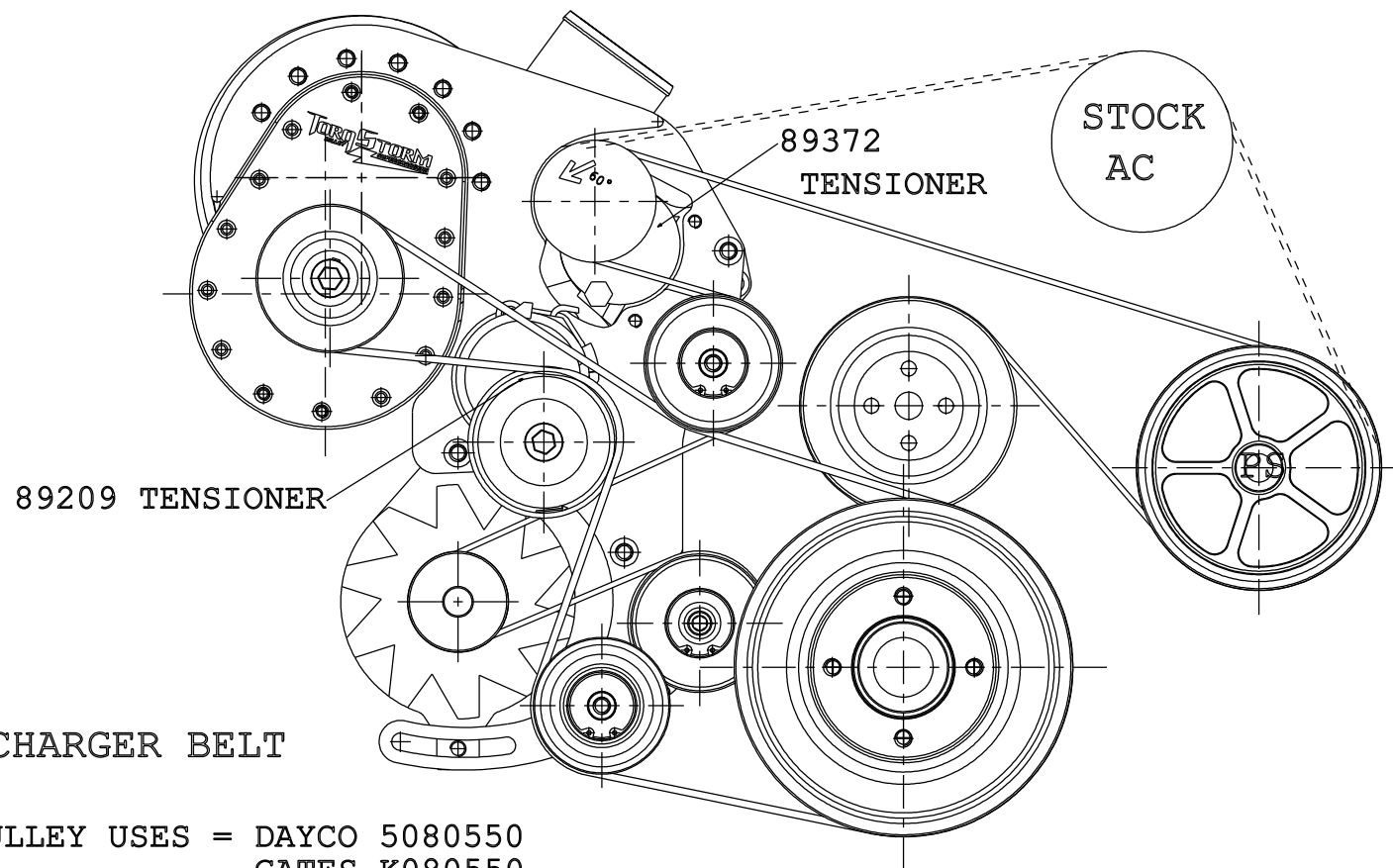
SUPERCHARGER BRACKET LAYOUT



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- D = 1 @ 3/8-16 x 1-1/2 SS FHB
- E = 2 @ 5/16-18 x 3/4 SS SHCS
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Part #	ARP-K-FD-302-S

BELT ROUTING



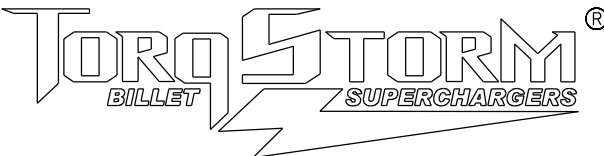
SUPERCHARGER BELT

3.1" PULLEY USES = DAYCO 5080550
GATES K080550

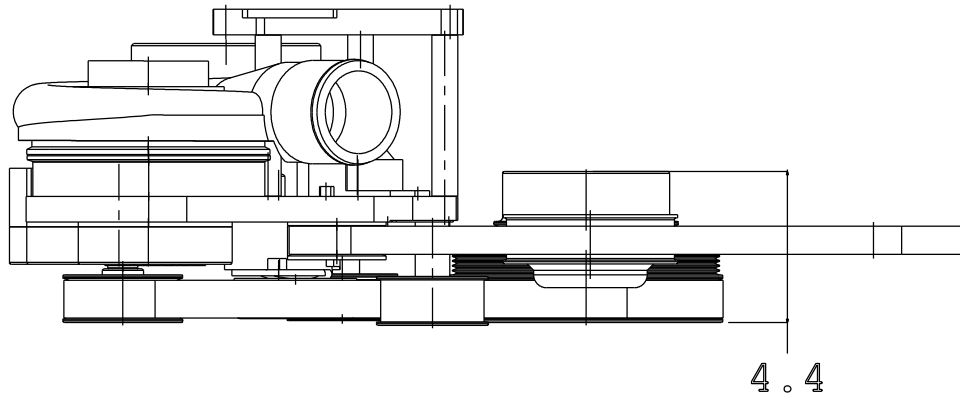
3.25" PULLEY USES = DAYCO 5080555
GATES N/A

3.5" PULLEY USES = DAYCO 5080560
GATES K080560

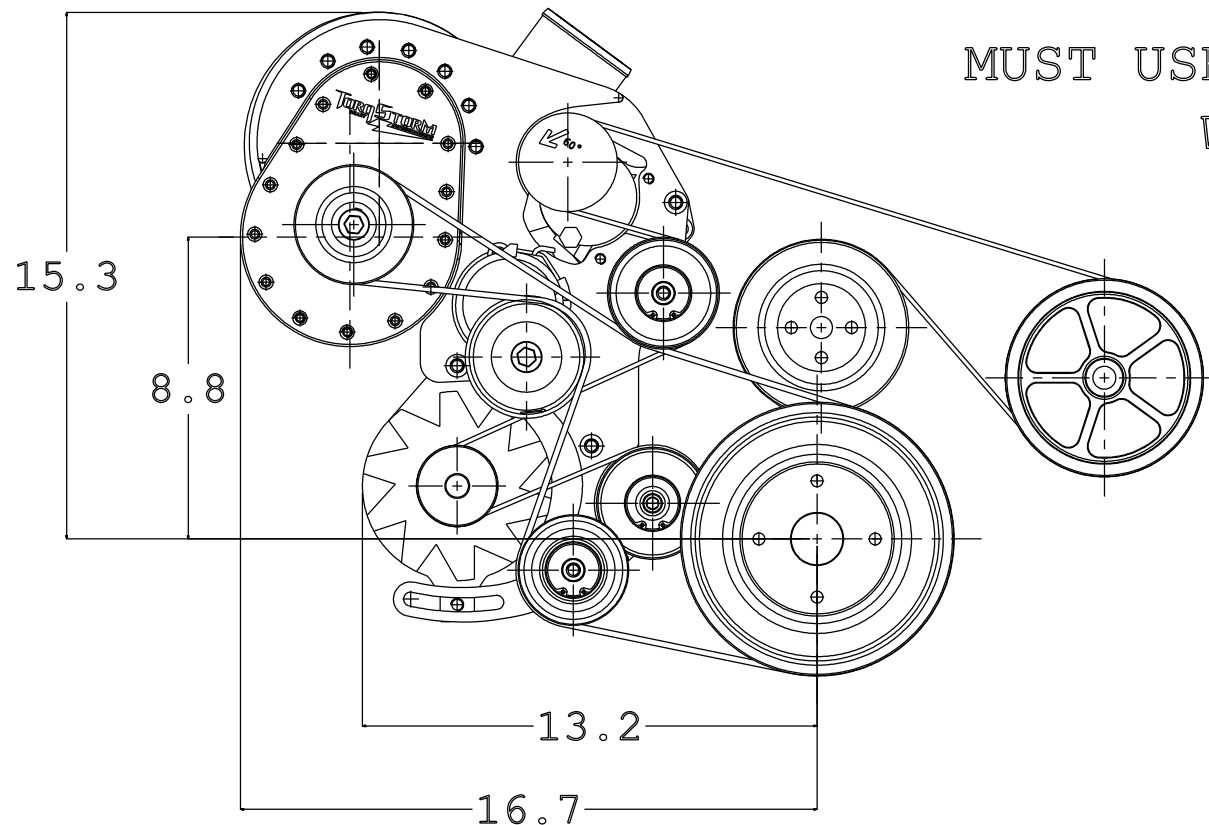
4.0" PULLEY USES = DAYCO 5080565
GATES K080565

Description	BELT ROUTING
Part #	ARP-K-FD-302-S
	

KIT DIMENSIONS



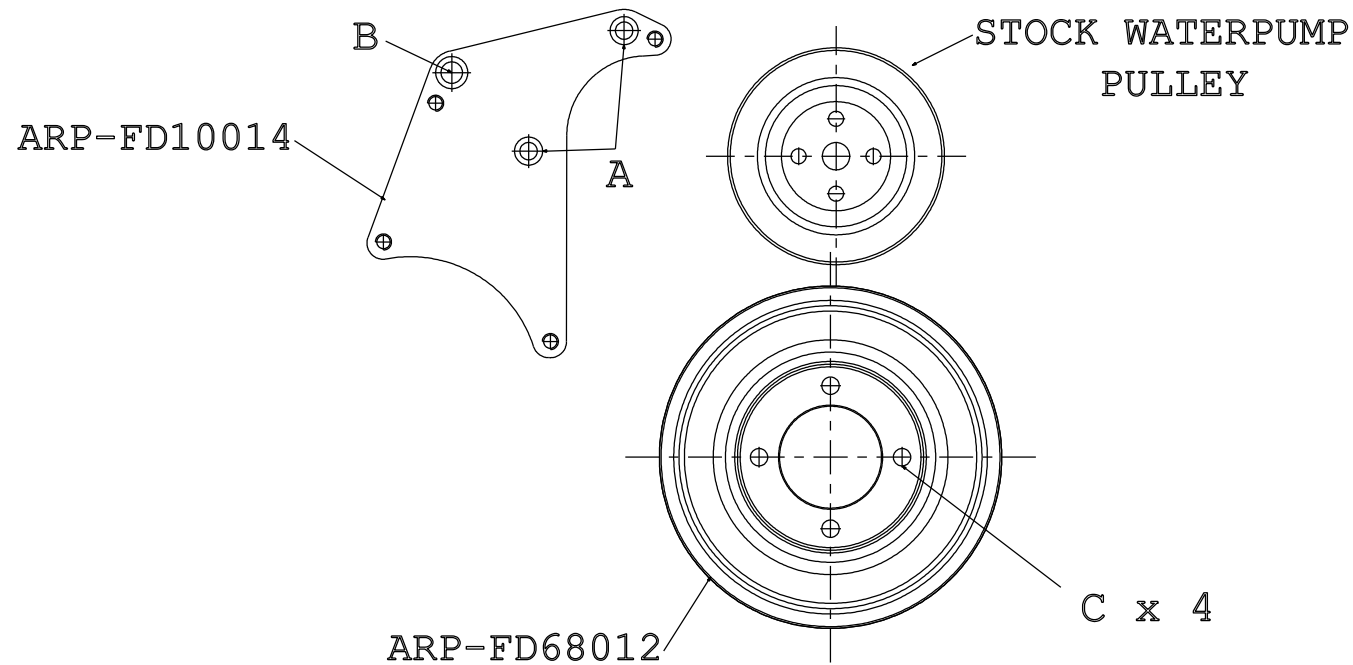
MUST USE REVERSE ROTATION
WATER PUMP



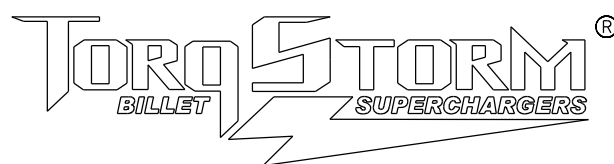
ALL DIMENSIONS ARE FROM
THE FACE OF THE DAMPER

Description
KIT DIMENSIONS
Part #
ARP-K-FD-302-S
TORQSTORM[®] BILLET SUPERCHARGERS

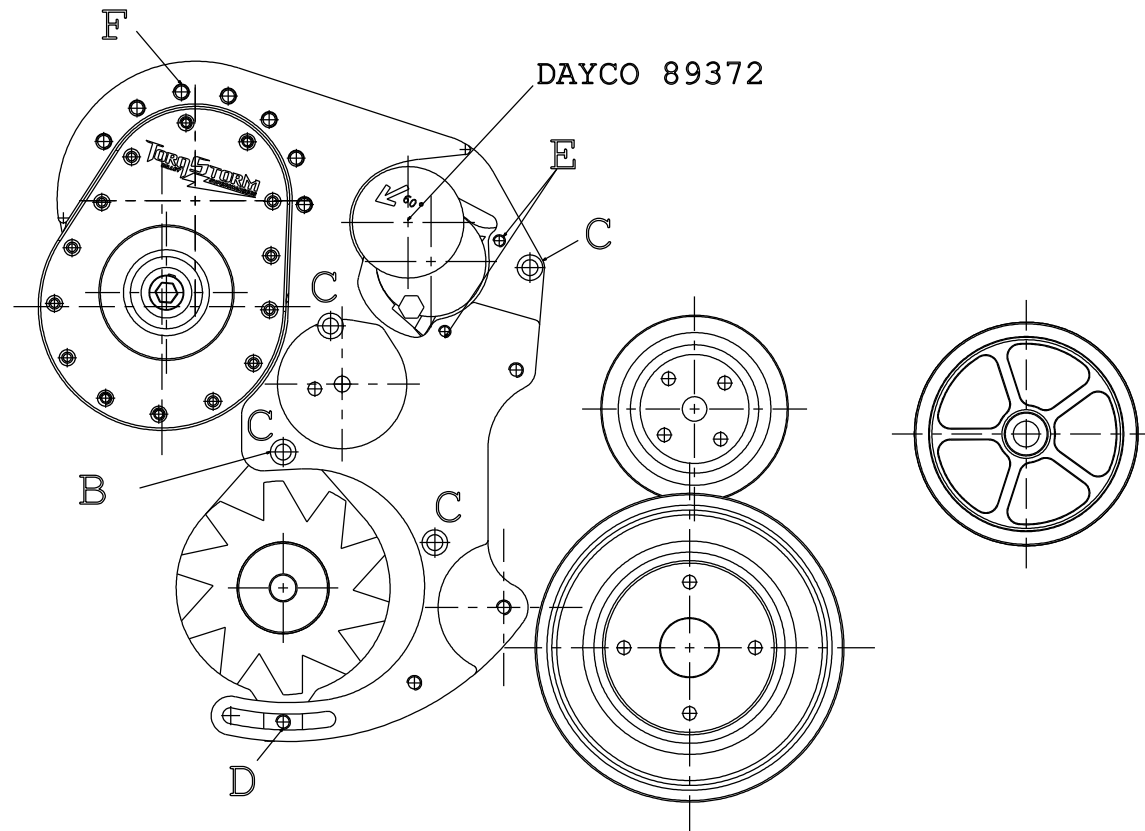
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HEAD BRACKET LAYOUT
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ARP-K-FD-351-S


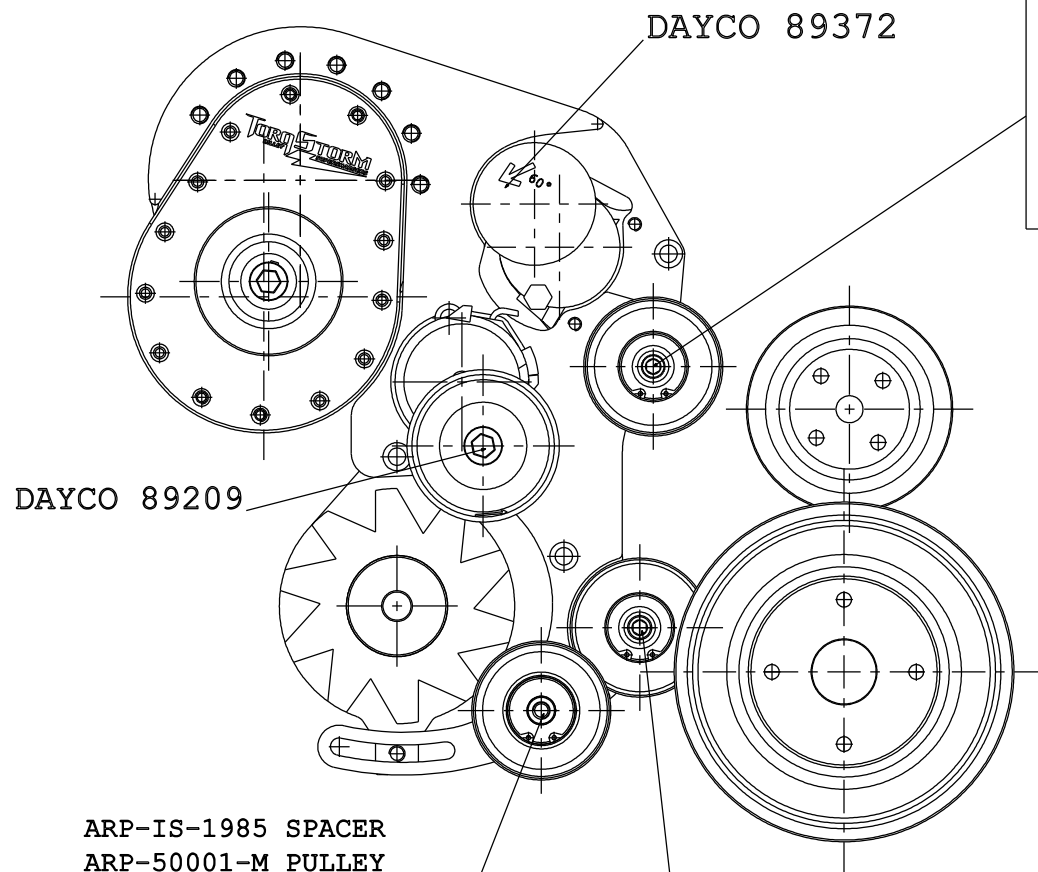
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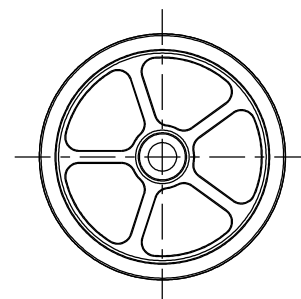
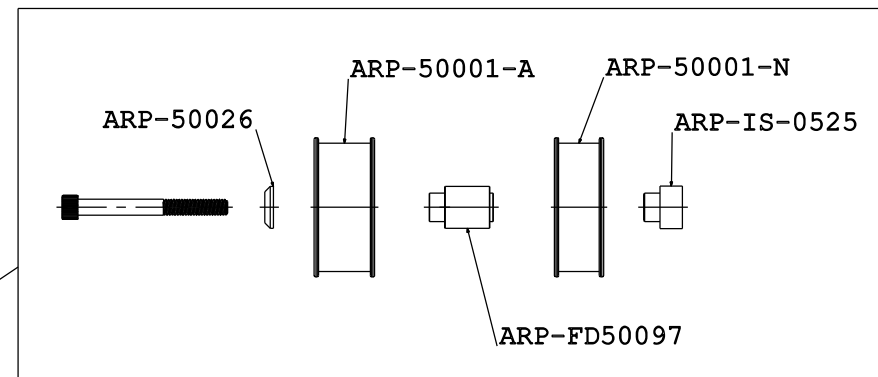
PULLEY LAYOUT



ARP-IS-1985 SPACER
 ARP-50001-M PULLEY
 ARP-50026 WASHER
 3/8-16 x 3-1/2 SS SHCS

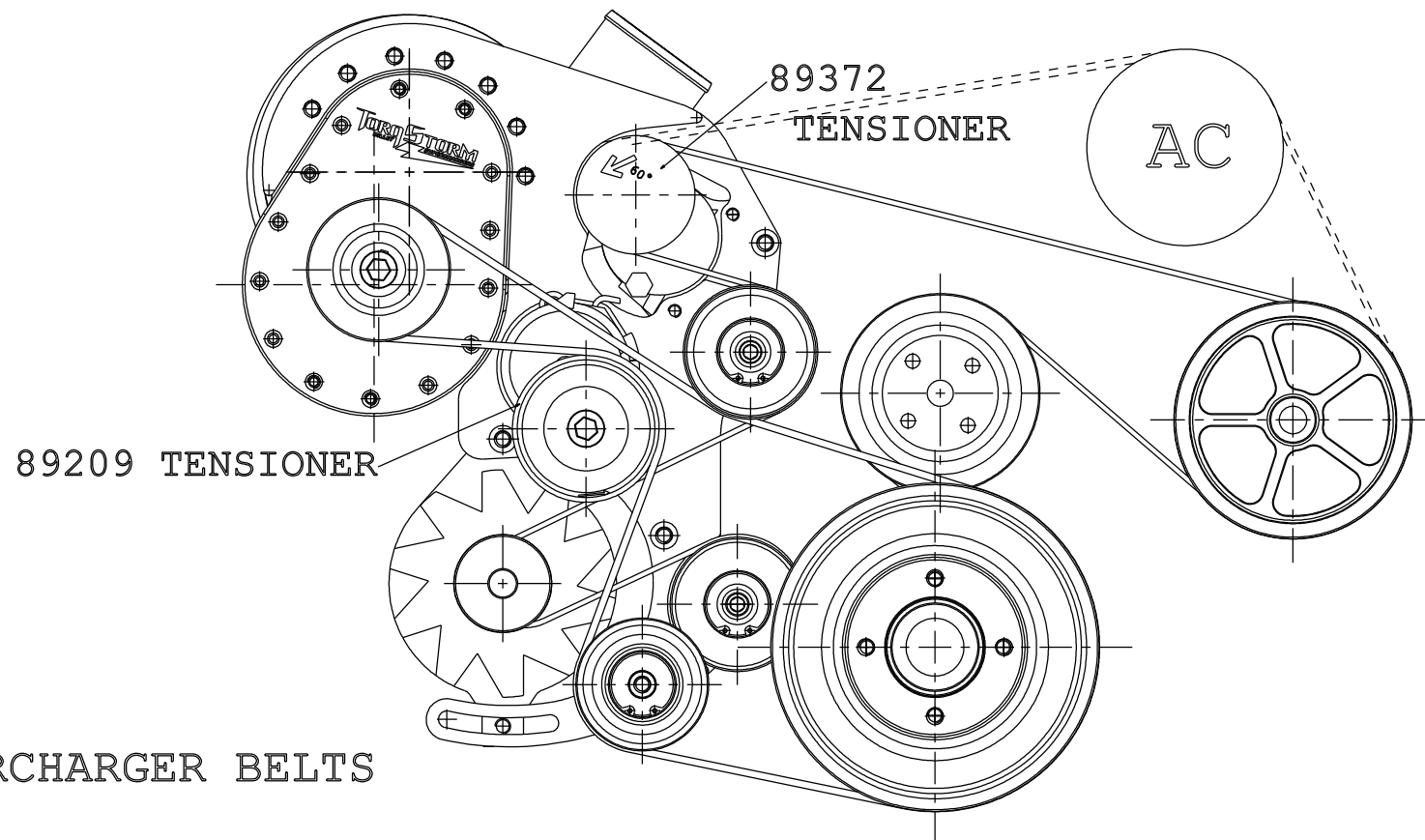
DAYCO 89372

ARP-IS-0525 SPACER
 ARP-50001-N PULLEY
 ARP-50026 WASHER
 3/8-16 x 2.0 SS SHCS



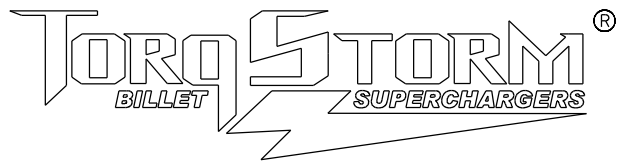
Description
PULLEY LAYOUT
Part #
ARP-K-FD-351-S
TORQSTORM[®] BILLET SUPERCHARGERS

BELT ROUTING



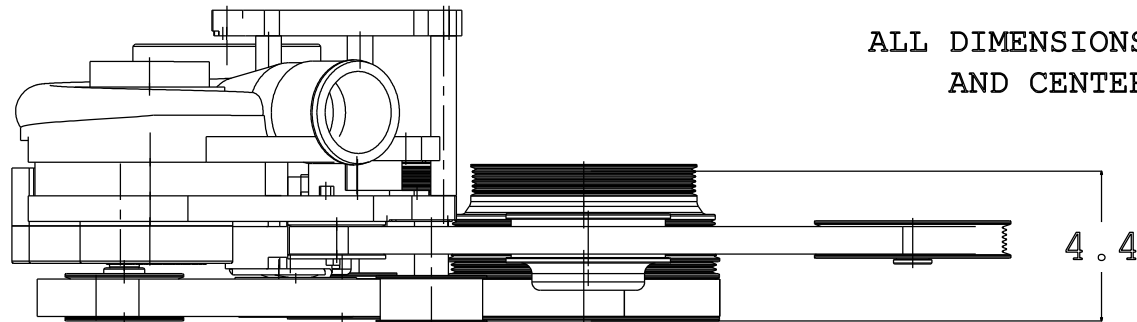
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GATES K080565

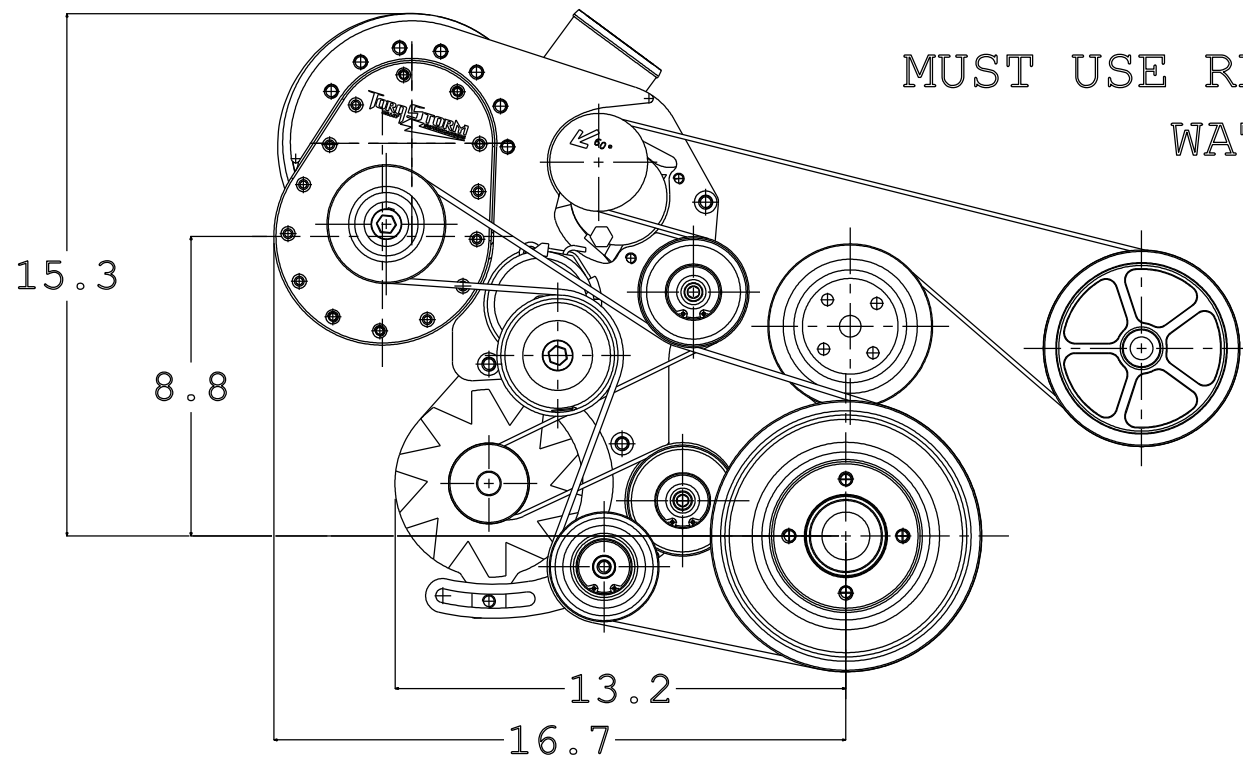
Description	BELT ROUTING
Part #	ARP-K-FD-351-S
	

KIT DIMENSIONS

ALL DIMENSIONS ARE FROM THE FACE
AND CENTER OF THE DAMPER



MUST USE REVERSE ROTATION
WATER PUMP



Description

KIT DIMENSIONS

Part #

ARP-K-FD-351-S

TORQSTORM[®]
BILLET SUPERCHARGERS

Oil Change Instructions



OIL CHANGE MUST BE PERFORMED EVERY 10,000 MILES OR ONCE A YEAR, WHICHEVER COMES FIRST.

FAILURE TO DO SO WILL VOID YOUR WARRANTY.

YOU CAN PURCHASE OIL

FROM US DIRECTLY AT

TORQSTORM.COM

PART # ARP-OIL-MTL

STEP 1

Remove your supercharger from your car and flip over to backside to access the drain plug.

STEP 2

Remove drain plug with a 1/4" allen and drain oil.



STEP 3

*Pour in your Torqstorm specific oil,
6oz into the same hole you drained
from.*



STEP 4

*Replace the drain plug.
Torque to 15 ft lbs*



STEP 5

*Re-install the supercharger on your vehicle.
Take note of the mileage on your odometer.*

In many cases your vehicle is exposed to harsh weather and road debris. Regular maintenance is important in order for your mechanical pieces to function properly. BOV inspection every oil change interval.

STEP 1

You can leave the body of the BOV attached to your plumbing as long as your able to remove the lid from your BOV. Remove the lid, counter clockwise, there is a strong spring beneath it.



STEP 2

Remove the spring and brass piston. Clean and inspect the piston and spring for any abnormal wear or defects.



STEP 3

Using Silicone paste apply a modest amount inside the body of the BOV.

STEP 4

Install the brass piston into the body of the BOV, checking to make sure it goes in and out smoothly.

STEP 5

Install the spring into the piston, making sure it is seated flat in the “Cup”



STEP 6

Install the BOV cap. Make sure the spring is seated properly. Be careful not to cross thread it. A little wd-40 on the threads will help it to assemble easier.



STEP 7

Attach your vacuum line and check operation.



Accelerated Racing Products, LLC

Billet Supercharger Limited 1-Year Warranty

Accelerated Racing Products, LLC ("we," "our" or "us") warrants only to the original consumer purchaser ("you" or "your") that your new Billet Supercharger head unit (referred to herein as your "supercharger") shall be free of defects in workmanship and materials for 1 year, from the date of purchase. This Limited 1-Year Warranty (this "Limited Warranty") does not extend to any subsequent owner or other transferee of your supercharger and shall terminate upon any transfer of your supercharger. This Limited Warranty is effective for superchargers purchased on or after 1/01/2023.

Our authorization must be obtained before you return the supercharger for warranty inspection. Superchargers that we authorize to be inspected must be shipped freight prepaid, at your expense. Additional warranty procedures are set forth below.

Subject to the other limitations set forth in this Limited Warranty, we will, in our sole discretion, either repair or replace the supercharger or portion thereof subject to warranty free of charge. No refunds or credits will be allowed.

Superchargers will not qualify for warranty if (i) the supercharger pulley or impeller has been removed or changed, (ii) the pulley or impeller warranty seal has been broken or tampered with and/or (iii) the kit parts have been altered or improperly installed.

Further, this Limited Warranty does not cover any defects or damage due to: (i) transportation; (ii) storage; (iii) improper installation or use; (iii) failure to follow the product instructions; (iv) alterations or modifications without our prior written consent; (v) use of a component or accessory not approved by us; (vi) unauthorized repair; (vii) normal wear and tear; or (viii) external causes such as accidents, abuse, misuse or other actions or events beyond our reasonable control.

Superchargers that we repair or replace will be returned to you with ground transportation charges prepaid by us, within the continental United States, or to the point of embarkation within the continental United States, via UPS ground (or similar) service. You will be responsible for any charges associated with expedited delivery or freight charges outside the continental United States.

Superchargers authorized to be returned and inspected but which do not qualify for warranty, and which are not repaired at your expense, will be subject to a US\$100.00 inspection fee and returned to you, at your expense.

Warranty Procedure

Go to the website and fill out the Warranty/Repair form at: <https://torqstorm.com/warranty-repair-form/>

1. Serial number of the supercharger.
2. Description of the problem.
3. Make, Model, and Year of the vehicle.
4. Your name, shipping address (No PO Boxes allowed), and your daytime telephone number.
5. A copy of your original purchase invoice.
6. A clear picture of supercharger mounted in the vehicle.

Upon receipt of the above, if warranty service is appropriate, an Accelerated Racing Products Return Authorization Number will be assigned. You should then send the supercharger or other defective part, with all of the above information to:

Accelerated Racing Products LLC
2909 Buchanan Ave SW
Wyoming, MI 49548

The return authorization number must be included on the package. Freight collect shipments will be refused and returned to the sender at the sender's expense.

Disclaimers

THIS LIMITED WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS AND YOU MAY ALSO HAVE OTHER RIGHTS, WHICH VARY FROM STATE TO STATE.

WE HEREBY LIMIT THE DURATION AND REMEDIES OF ALL IMPLIED WARRANTIES, INCLUDING WITHOUT LIMITATION THE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, TO ONE YEAR.

SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATION MAY NOT APPLY TO YOU.

OUR RESPONSIBILITY FOR DEFECTIVE SUPERCHARGERS IS LIMITED TO REPAIR OR REPLACEMENT AS DESCRIBED ABOVE IN THIS LIMITED WARRANTY.

Limitation of Liability

THE REMEDIES DESCRIBED ABOVE ARE YOUR SOLE AND EXCLUSIVE REMEDIES AND OUR ENTIRE LIABILITY FOR ANY BREACH OF THIS LIMITED WARRANTY. OUR LIABILITY SHALL UNDER NO CIRCUMSTANCES EXCEED THE ACTUAL AMOUNT PAID BY YOU FOR THE DEFECTIVE SUPERCHARGER, NOR SHALL WE UNDER ANY CIRCUMSTANCES BE LIABLE FOR ANY CONSEQUENTIAL, INCIDENTAL, SPECIAL OR PUNITIVE DAMAGES OR LOSSES, WHETHER DIRECT OR INDIRECT (INCLUDING, WITHOUT LIMITATION, ENGINE DAMAGE).

SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU.