

ARP-K-DG-HEMI1.3.6

HEMI LX CAR 5.7/6.1/6.4

INSTALLATION GUIDE



QUALITY AMERICAN MADE SUPERCHARGERS



Installation Instructions

MOPAR HEMI CAR TUNER KIT

ARP-K-DG-HEMI1 ARP-K-DG-HEMI3

ARP-K-DG-HEMI6



STEP 1

Disconnect battery.

Remove engine cover and stock airbox assembly



STEP 2

Drain coolant system

STEP 3

Pull radiator top cover and unplug cooling fans. Remove upper and lower radiator hoses, remove cooling fans, remove radiator.

Installation Instructions

MOPAR HEMI CAR TUNER KIT

ARP-K-DG-HEMI1 ARP-K-DG-HEMI3

ARP-K-DG-HEMI6



STEP 4

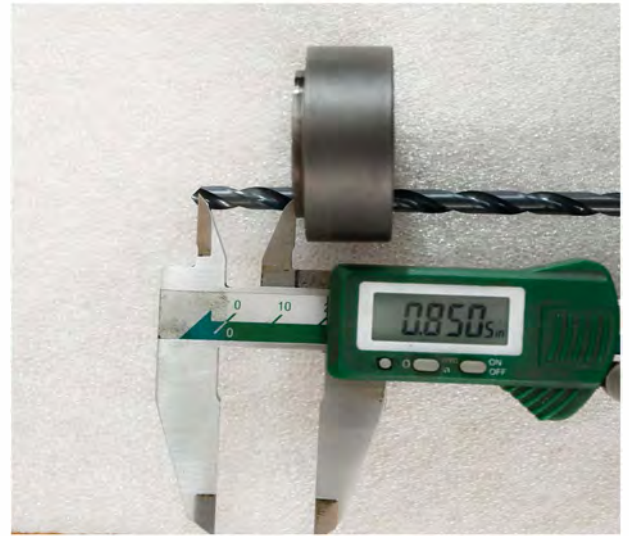
Measure the drill bit through your alignment tool.

Make sure it is through .850" from the

end of the taper of the drill bit to the inside face

of the tool. Wrap a piece of tape around the back

side of the tool on the drill bit.



STEP 5

Slide the bit out of the tool. Check your measurement.

From the end of the taper to the tape should be 1.650".



Installation Instructions

MOPAR HEMI CAR TUNER KIT

ARP-K-DG-HEMI1 ARP-K-DG-HEMI3

ARP-K-DG-HEMI6



STEP 6

Install the pin tool with supplied bolt.

Snug down so tool is locked in position while drilling.

STEP 7

Install drill bit into your drill of choice, a 90 degree air drill works well for fitting into tight areas. Make sure you drill in till the tape hits the surface of the tool. Repeat process for the other hole.

Clean shavings from area.



Installation Instructions
MOPAR HEMI CAR TUNER KIT
ARP-K-DG-HEMI1 ARP-K-DG-HEMI3
ARP-K-DG-HEMI6



STEP 8

For ATI Installation

Install short pins into drilled holes. Verify the pins are both flush or below the surface of the Bolt/Washer surface of the pulley.



STEP 9

Apply some gasket sealer to the ATI keyway so oil does not seep through.

Apply red loctite and install supplied bolt

Tighten to factory torque specs

Chrysler 130 ft lbs



STEP 10

For stock balancer and hub.

Insert pins into holes in hub.

Install the hub into the crank face, lining up the drilled holes.

Be sure the hub is seated flat against the crank face.



STEP 11

*Apply red loctite and install supplied crank
bolt with lockwasher.*

Tighten to factory torque specs

Chrysler 130 ft lbs



STEP 12

*Install supercharger pulley using (4) 5/16 bolts and
washers. Apply a small amount of blue loctite.*

Torque to 19 ft lbs



Installation Instructions

MOPAR HEMI CAR TUNER KIT

ARP-K-DG-HEMI1 ARP-K-DG-HEMI3 ARP-K-DG-HEMI6



STEP 13

Remove accessory belt.



STEP 14

Remove power steering pulley

STEP 15

Remove power steering lines from pump
and un bolt power steering pump from head.

Mount the fluid reservoir with supplied bracket, spacer
and bolt to fenderwell. (5.7/6.1 with remote reservoir)

FOR HEMI6

09-10 Challenger manual cars require
changing the ps pump to one from an
automatic, as well as the pulley and line
going to the rack.

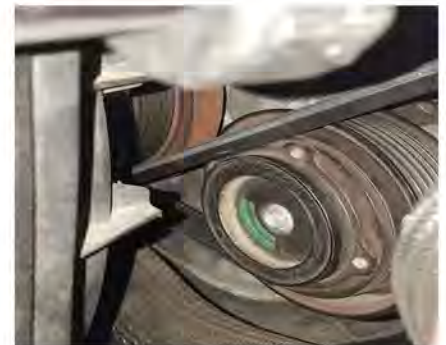
Pump: 4782524AF

Pulley: 4892093AA

Also require a special hub or ATI for
proper crank spacing

STEP 16

To make clearance between the ac clutch and the supercharger
belt we need to remove the bolts that attach the ac
compressor. Then install the supplied (3) 0.850" spacers. The top
left mount is a stud. Unscrew the stud and slide the spacer in
between the block and compressor. Then re mount the compressor
with (M8x120mm) bolts and spacers in all mounting holes. **Hemi-3
will use .250" spacers and reuse the stud and (2) M8x100mm bolts**
Torque to 19 ft lbs



Install the provided 6 rib accessory belt for Hemi 1 and 2.

Installation Instructions

MOPAR HEMI CAR TUNER KIT

ARP-K-DG-HEMI1 ARP-K-DG-HEMI3 ARP-K-DG-HEMI6



STEP 17

Install the supercharger bracket
with (3) small spacers between the bracket
and ps pump. As well as the long bolt and spacer to head.

Refer to layout sheets in packet for bolt and spacer locations.

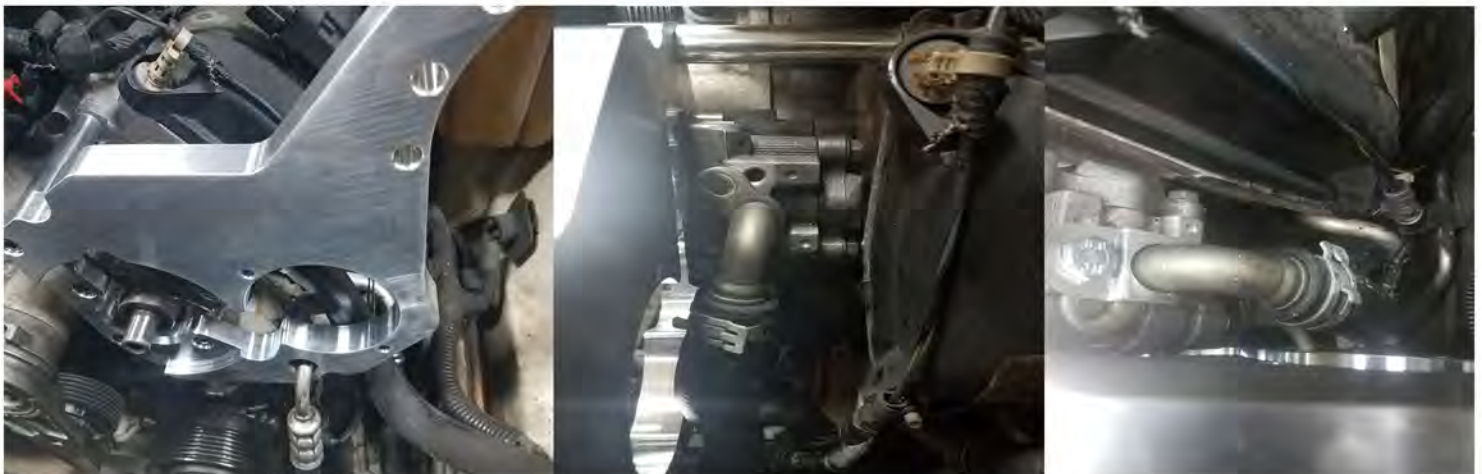
TORQUE TO 19 FT LBS on 8mm bolts



STEP 18

Insert the factory ps line through the hole in the bracket. Turn low pressure line and attach
the supplied hold down tab ARP-DG-LXH-01 with (1) 8mm x 15 mm bolt.

TORQUE TO 19 FT. LBS.



Installation Instructions

MOPAR HEMI CAR TUNER KIT

ARP-K-DG-HEMI1 ARP-K-DG-HEMI3

ARP-K-DG-HEMI6



STEP 19

Re-install power steering pulley. Don't go on to far or it may come into contact with the bracket. Re-install factory accessory belt.

For the 6.4 kit you do not need to remove pulley.

STEP 20

Install supercharger head unit ARP-TORQ-10001 using (7) 3/8-16 x 1 1/4" bolts and AN washers.

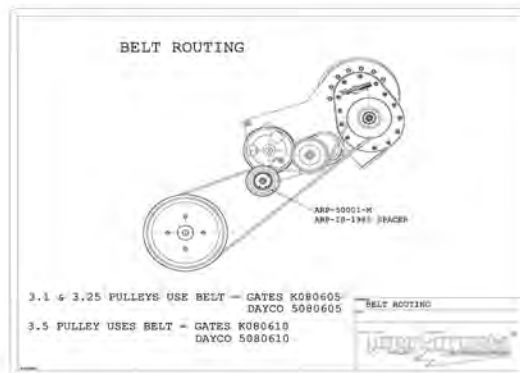
Torque to 29 ft lbs

Clock the compressor housing to desired outlet location. Loosen v-band nut and rotate. To tighten, only go until the compressor housing is unable to rotate. 1/8-1/4" of thread showing.



STEP 21

Install supercharger belt. (Refer to layout sheets in your packet). Install on crank and supercharger, then release tension from the tensioner and slide the belt under the pulley. Release the tensioner and all set.



Installation Instructions

MOPAR HEMI CAR TUNER KIT

ARP-K-DG-HEMI1 ARP-K-DG-HEMI3

ARP-K-DG-HEMI6



STEP 22

Install supercharger filter and 45 deg coupler, tube and clamps. Will require trimming to achieve desired location.



STEP 23

Install radiator/support with radiator spacer kit ARP-DG50028A. M6 bolts on the upper spacers, threaded hole down. On the lower spacers, M8 threaded holes facing the front of vehicle. The point of these are to space the radiator 1" down and forward.



Installation Instructions

MOPAR HEMI CAR TUNER KIT

ARP-K-DG-HEMI1 ARP-K-DG-HEMI3

ARP-K-DG-HEMI6



OPTIONS:

Do to the large size of the factory coolant tank, you will need to replace it with one that will allow clearance for the supercharger inlet. There may be other options out there. We offer a nice solution.



COOLANT TANK

P/N ARP-DG50024

Use factory mounting hardware and cap.

Along with factory hoses and clamps



Installation Instructions

MOPAR HEMI CAR TUNER KIT

ARP-K-DG-HEMI1 ARP-K-DG-HEMI3

ARP-K-DG-HEMI6



OPTIONS:

MAP SENSOR ADAPTER
P/N ARP-6.4HEMI-ADP (6.4)

ARP-LXH-MAP-ADP (5.7)

2 BAR MAP SENSOR: 5033224AB

IAT sensor: 56027872

To run above atmospheric pressure, (positive) you will need to switch to a 2 bar map sensor.

We can provide you with the map sensor and adapter. These are the steps to adapt to your vehicle. Remove factory map. Shave off the extra tab so it fits in the plug. Mount to adapter. Install adapter into intake, gently twist to lock in place. Plug back in and you are finished. **You will not be able to run the vehicle once this is installed. This requires a retune.**



Installation Instructions

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ARP-K-DG-HEMI1 ARP-K-DG-HEMI3

ARP-K-DG-HEMI6



Other important information

Plumb the supercharger outlet according to your vehicle, you may have to adjust the supercharger scroll for proper alignment to supercharger. Note: Do not over tighten V-band clamp on scroll. Tighten clamp just until scroll cannot be rotated. Approx. 1/8"-1/4" threads showing past nut on clamp.

Hook up ARP-BOV-TORQ 52 BOV with ARP-TEMP-BUNG1 aluminum weld in bung in between the supercharger and throttle body. Hook up to vacuum source off of the intake with supplied vacuum line. Cut to length.



Installation Instructions

MOPAR HEMI CAR TUNER KIT

ARP-K-DG-HEMI1 ARP-K-DG-HEMI3

ARP-K-DG-HEMI6



- 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.

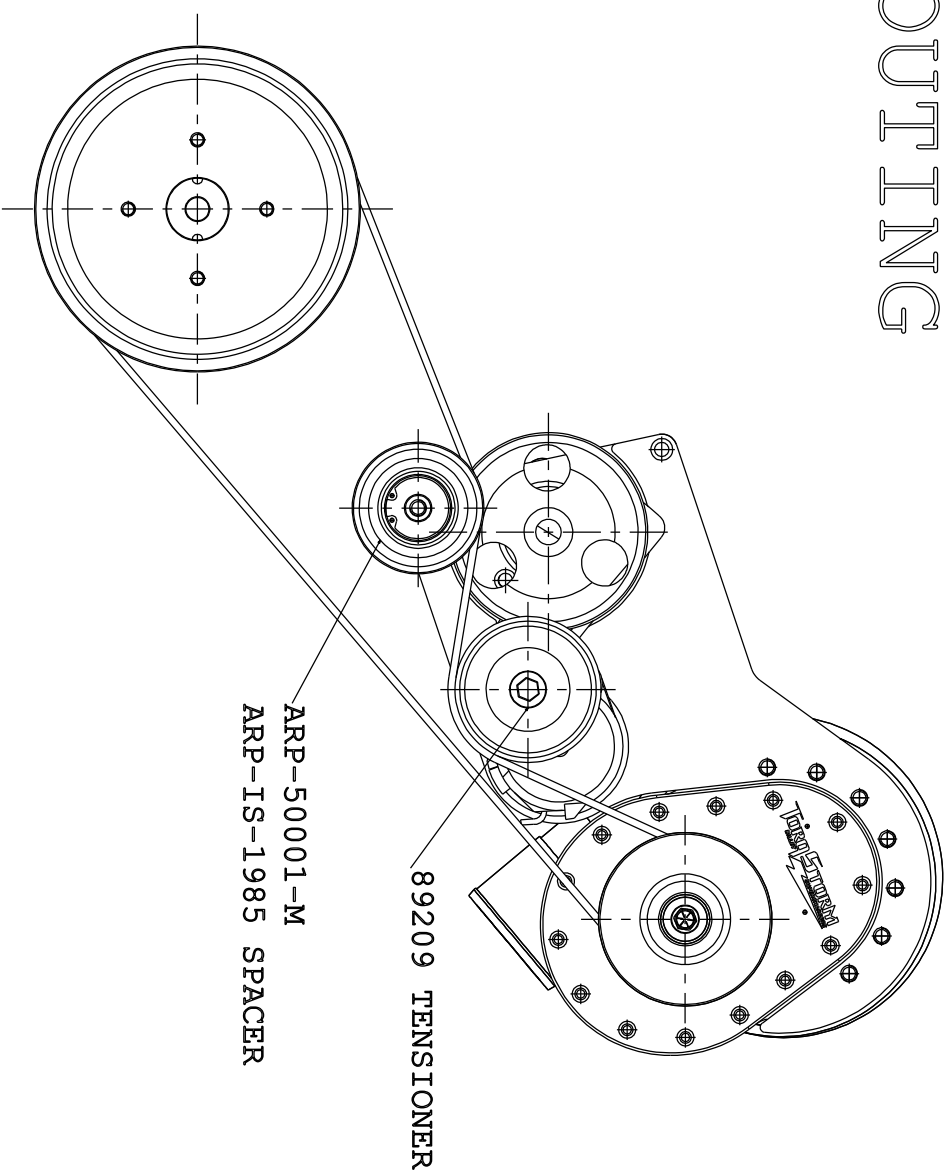
Order oil direct from TorqStorm. Part number ARP-OIL-MTL

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*

BELT ROUTING



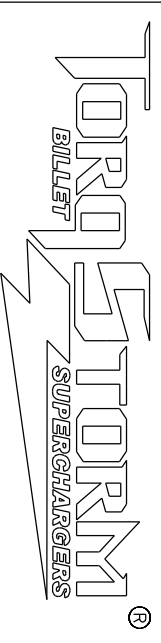
ACCESSORY BELT = GATES K060840
DAYCO 5060840

3.1 & 3.25 PULLEYS USE BELT = GATES K080605
DAYCO 5080605

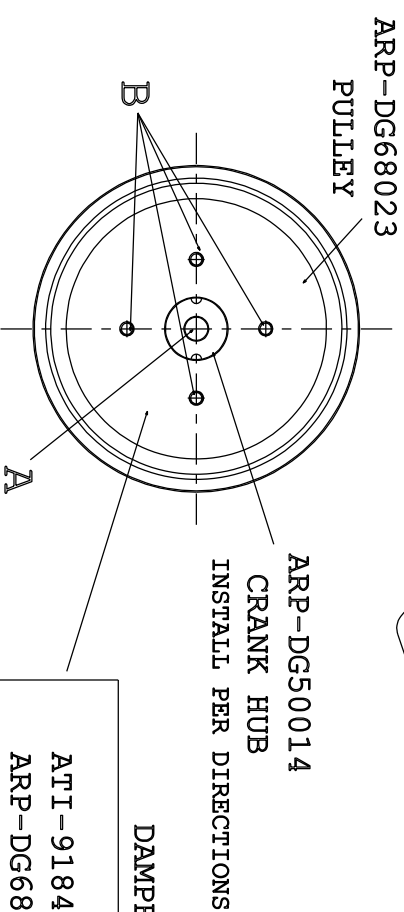
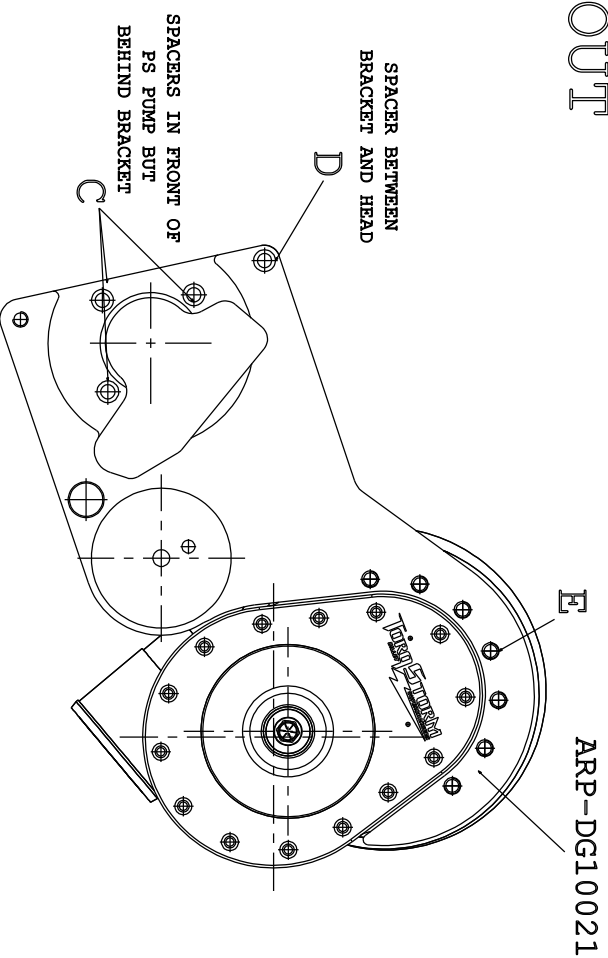
3.5 PULLEY USES BELT = GATES K080610
DAYCO 5080610

Illustration
BELT ROUTING

Part 1
ARP-K-DG-HEMI-1



BOLT AND SPACER LAYOUT



SPACERS

- C = 3 @ ARP-S-75-0640
- D = 1 @ ARP-S-75-3390

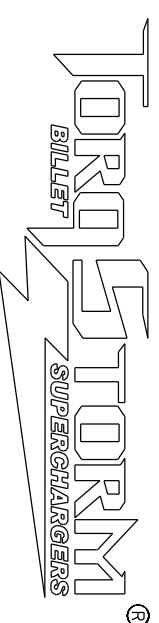
BOLTS

- A = ARP-DG50015 M14x1.5 x 110mm HHB
- B = 4 @ 5/16-24 x 3/4 SS SHCS
- B = 3 @ ATI SUPPLIED WITH ATI UPGRADE
- C = 3 @ M8-1.25 x 90mm SS SHCS
- D = 1 @ M8-1.25 x 120mm SS SHCS
- E = 7 @ 3/8-16 x 1-1/4^W SS SHCS

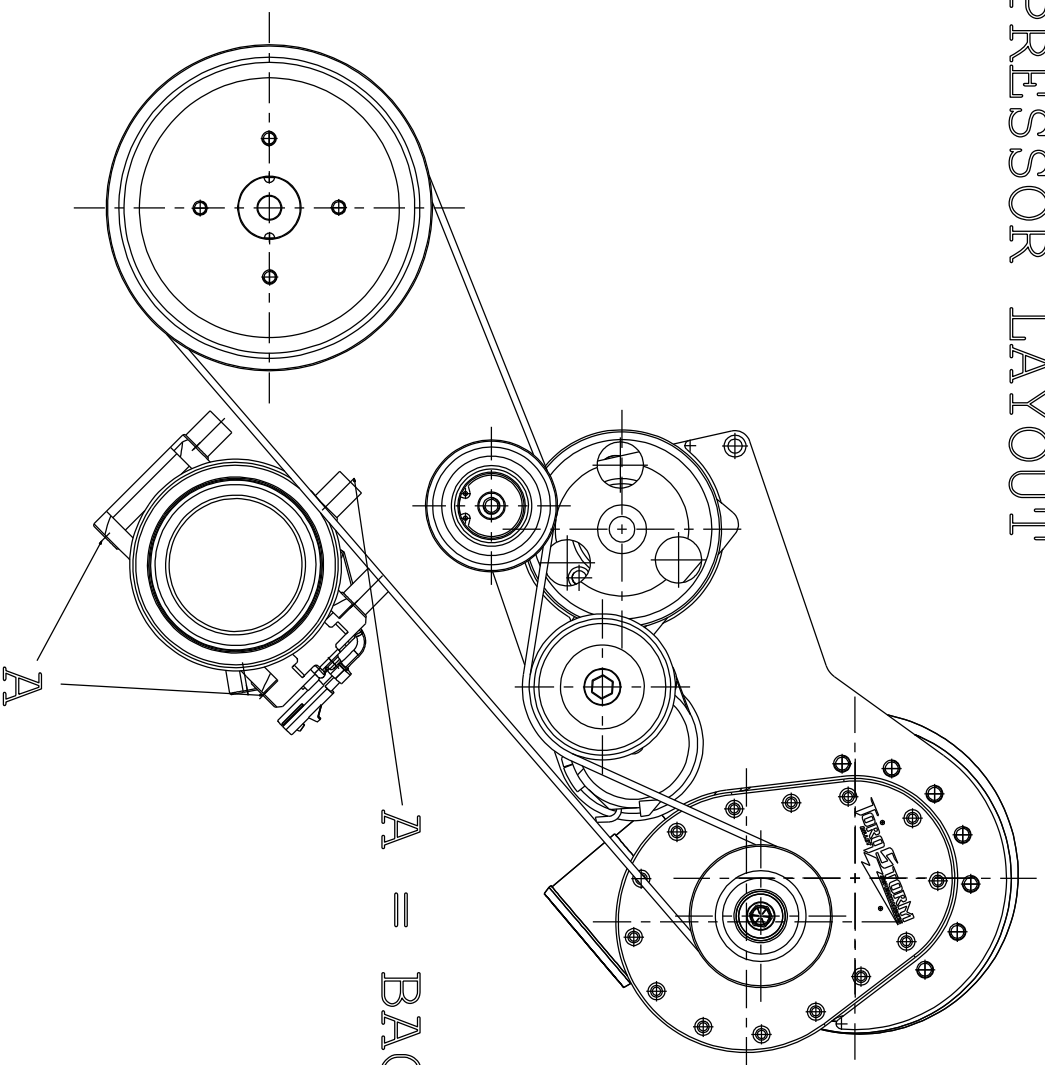
DAMPER UPGRADE

ATI-918435 DAMPER
ARP-DG68042 CRANK PULLEY

Illustration
BOLT AND SPACER LAYOUT
PAGE 1
ARP-K-DG-HEMI-1



AC COMPRESSOR LAYOUT

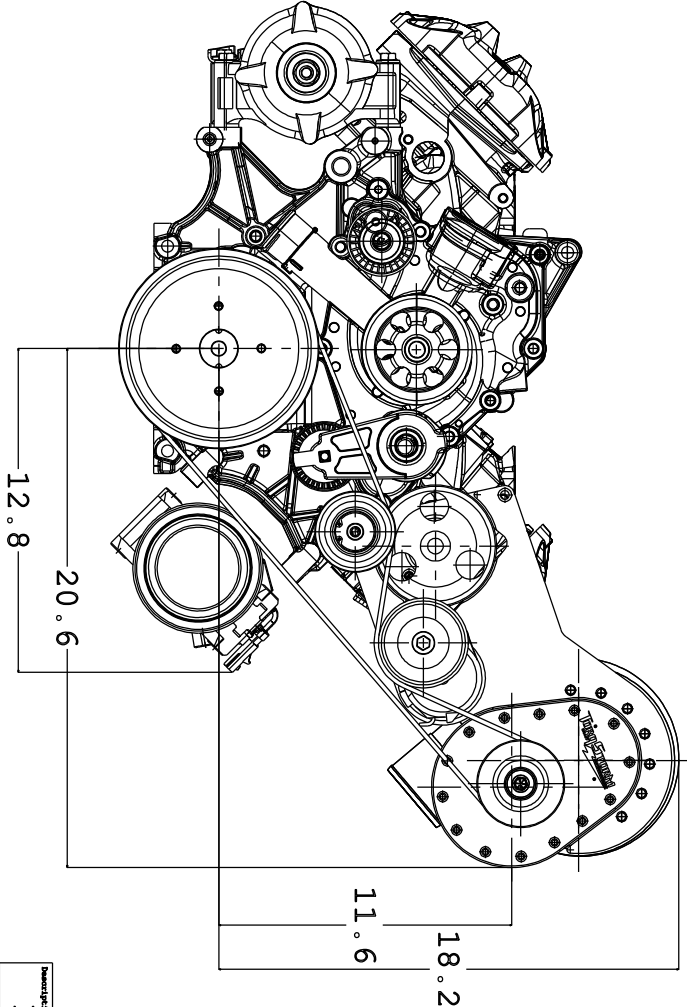
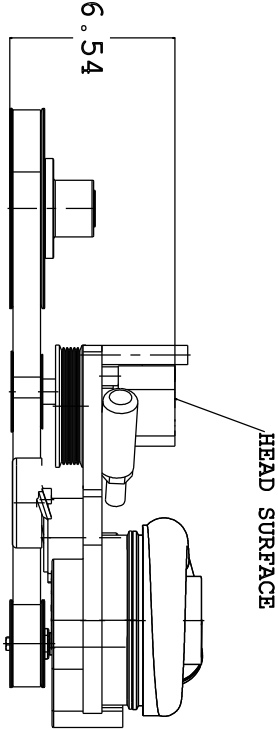


A = BACK BOLT

A = 3 @ ARP-S-75-0850 SPACERS
A = 3 @ M8x1.25 x 120mm SS FHB

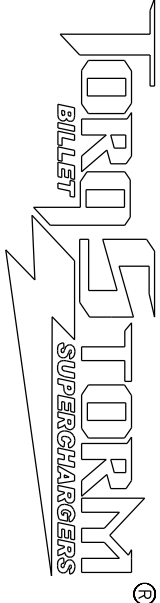
Dimension
AC COMPRESSOR LAYOUT
Part 1
ARP-K-DG-HEMI-1

KIT DIMENSIONS

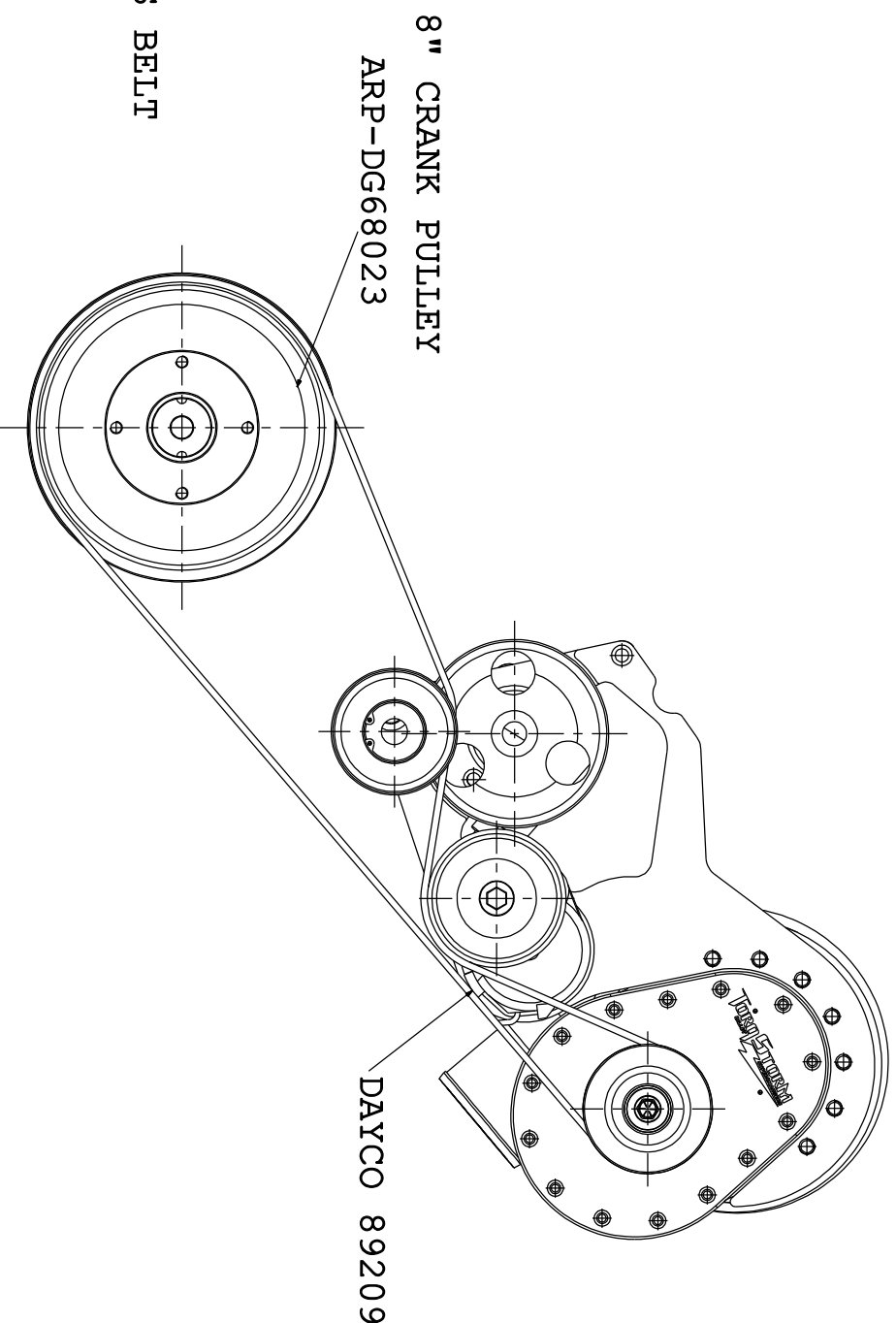


Part 1
KIT DIMENSIONS

ARP-K-DG-HEMI-1



BELT ROUTING



3.1" SC PULLEY USES BELT

DAYCO 5080605

GATES K080605

3-1/4" SC PULLEY USES BELT

DAYCO 5080610

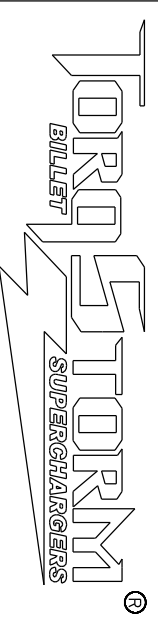
GATES K080610

3-1/2" SC PULLEY USES BELT

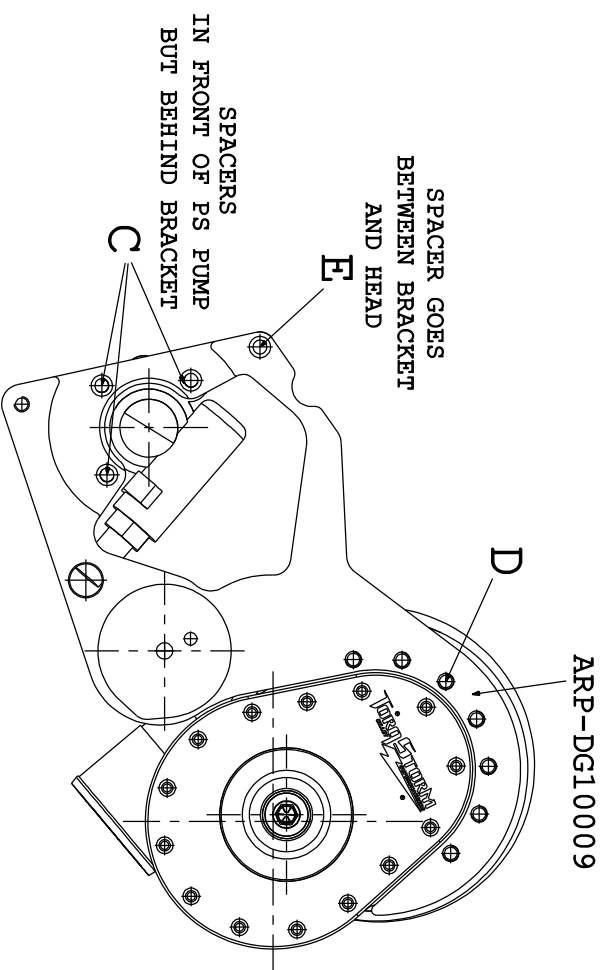
DAYCO 5080615

GATES K080615

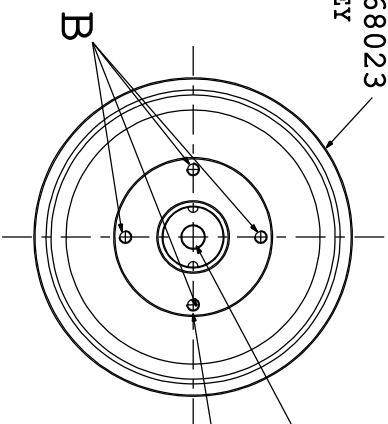
Description	
Belt Routing 8" Pulley	
Part #	ARP-K-DG-HEMI-3



BOLT & SPACER LAYOUT



ARP-DG68023
PULLEY



ARP-DG50013

CRANK HUB - INSTALL PER DIRECTIONS

SPACERS

C = 3 @ ARP-75-0850

E = 1 @ ARP-75-3850

A = ARP-DG50015 M14x1.5 x 110mm HHB

B = 4 @ 5/16-24 x 3/4 SS SHCS

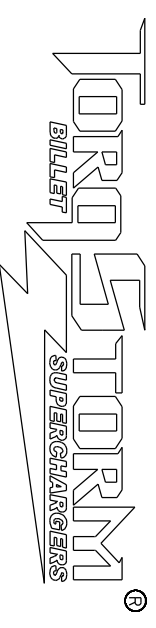
C = 3 @ M8-1.25 x 110mm SS SHCS

D = 7 @ 3/8-16 x 1-1/4 SS SHCS

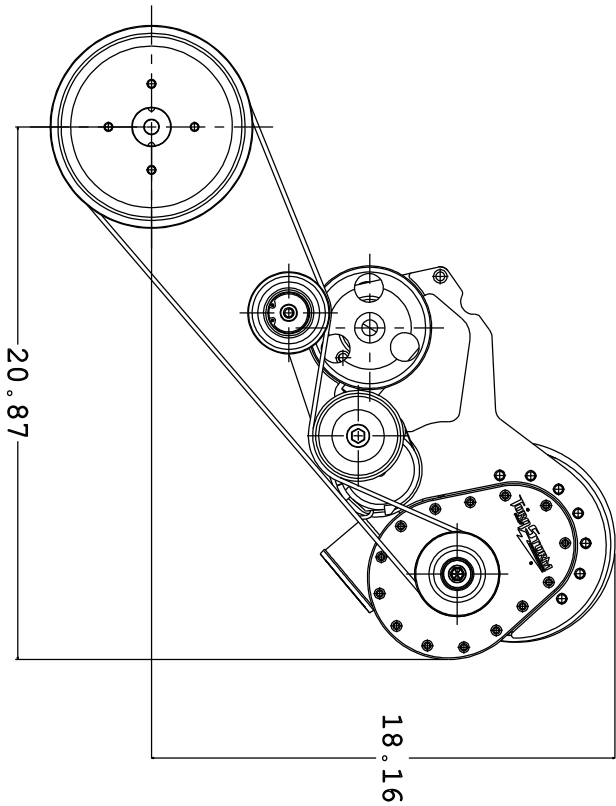
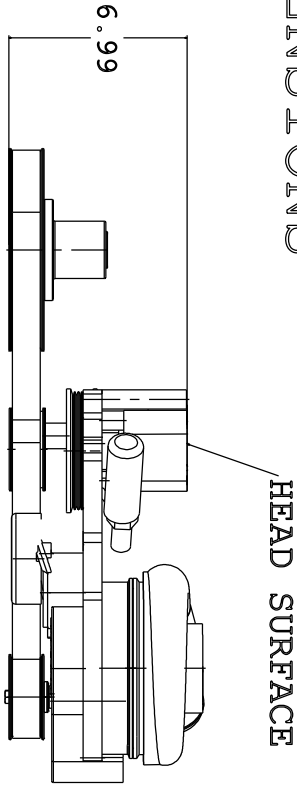
E = 1 @ M8-1.25 x 120mm SS SHCS

BOLT AND SPACER LAYOUT

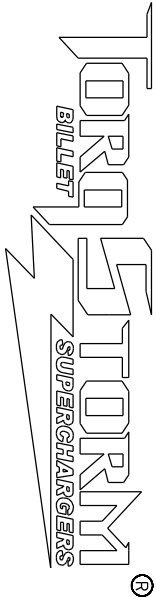
ARP-K-DG-HEMI-3



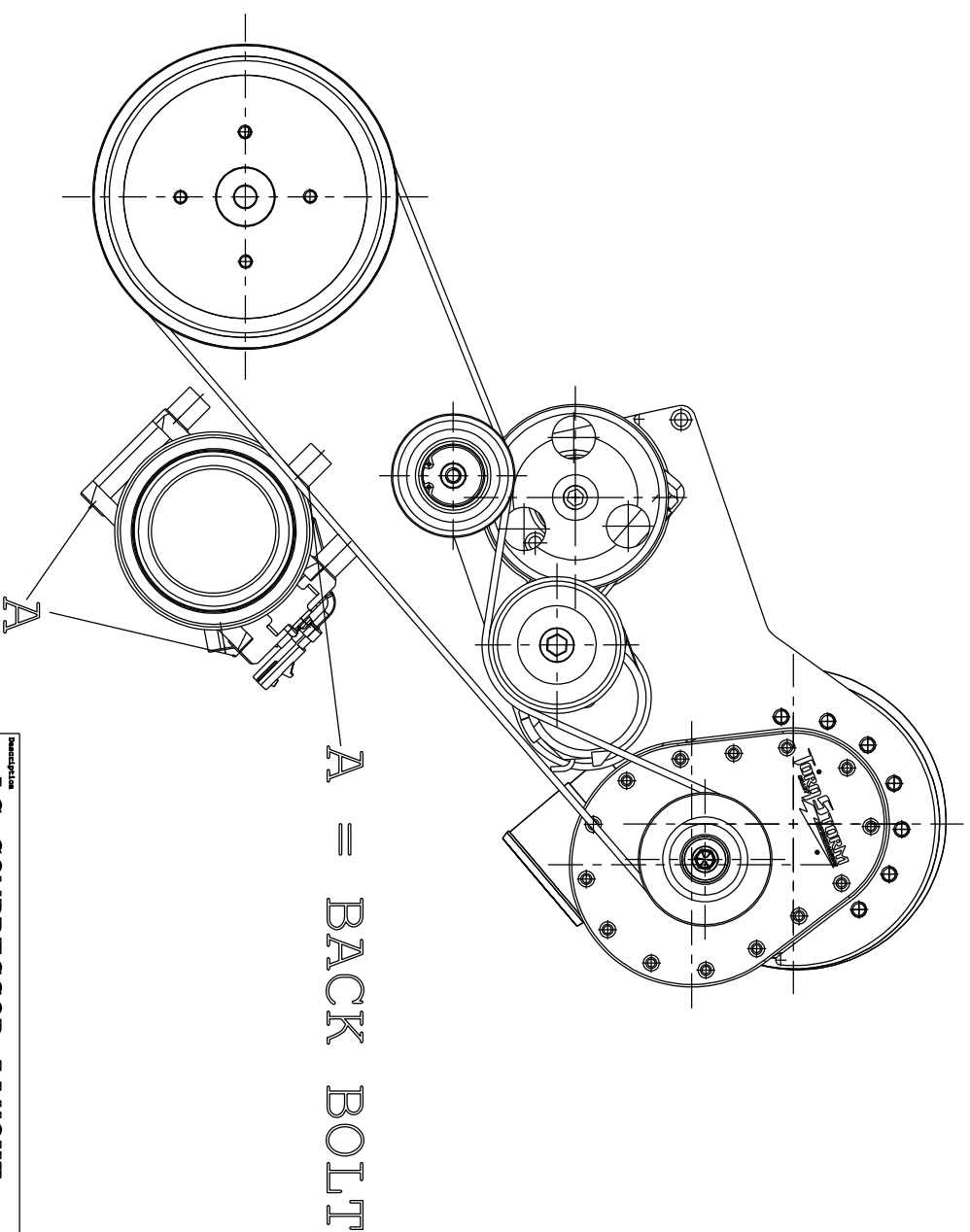
KIT DIMENSIONS



Description	
KIT DIMENSIONS	
Part #	ARP-K-DG-HEMI-3



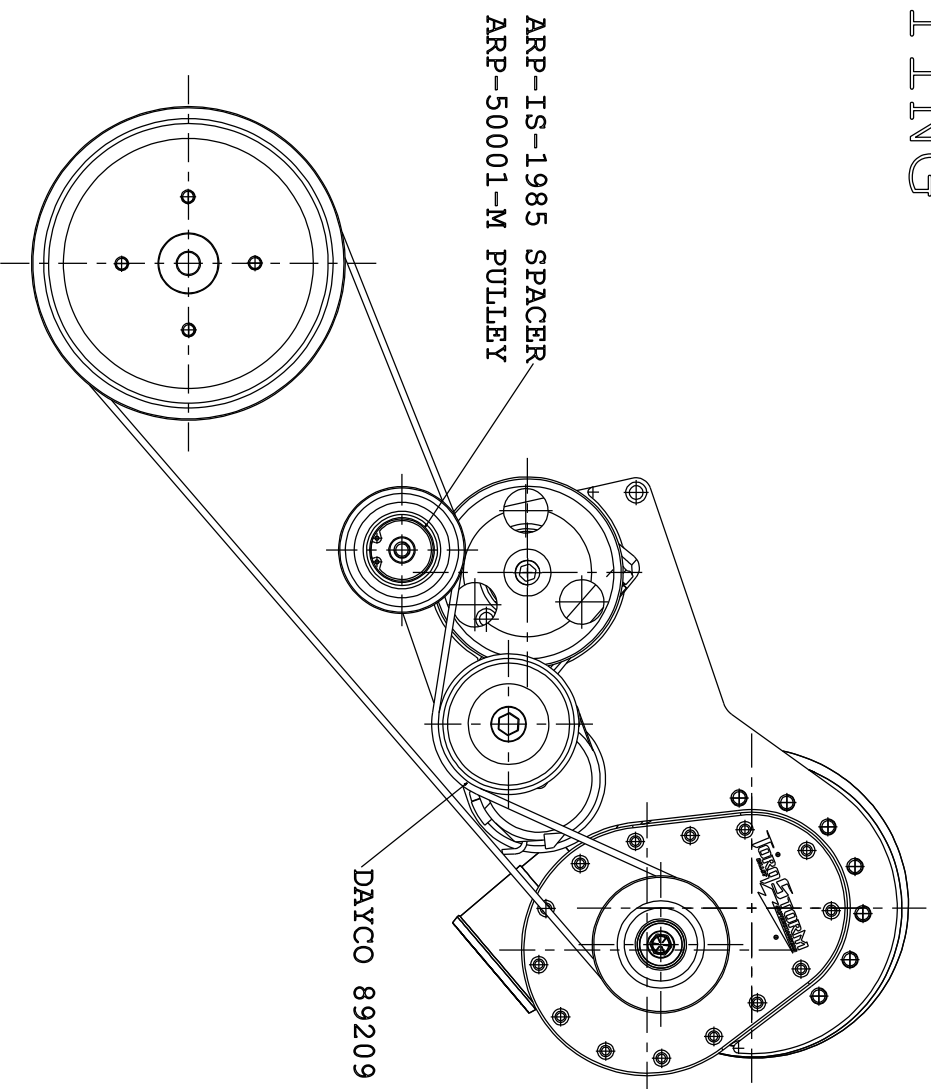
AC COMPRESSOR LAYOUT



A = 3 @ ARP-S-75-0850 SPACERS
 A = 3 @ M8x1.25 x 120mm SS FHB

DESCRIPTION
 AC COMPRESSOR LAYOUT
PAGE 1
 ARP-K-DG-HEMI 6

BELT ROUTING



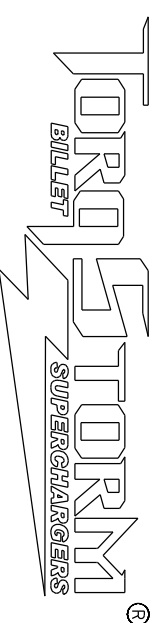
ACCESSORY BELT = GATES K060840
DAYCO 5060840

3.1 & 3-1/4" SC PULLEY
DAYCO 5080605
GATES K080605

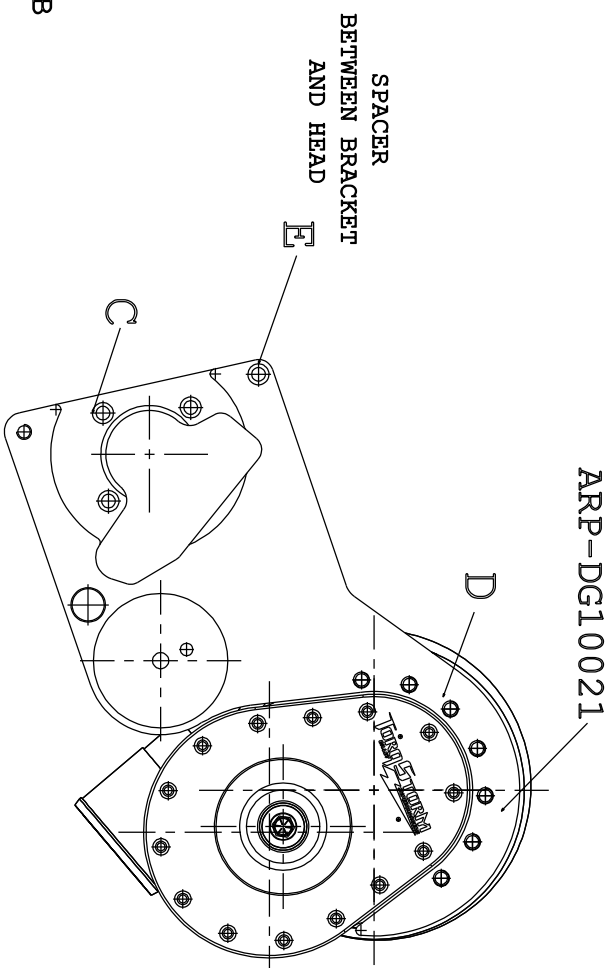
3-1/2" SC PULLEY
DAYCO 5080610
GATES K080610

Description
BELT ROUTING

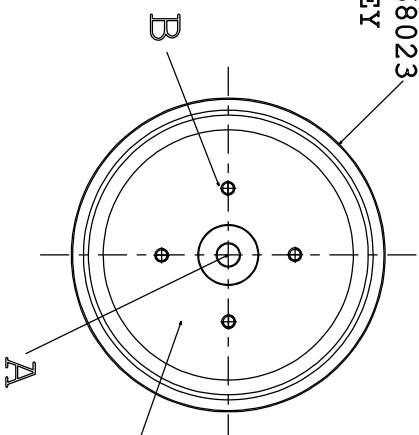
Part #
ARP-K-DG-HEMI6



BOLT & SPACER LAYOUT



ARP-DG50014 HUB
&
ARP-DG68023
PULLEY



SPACERS

C = 3 @ ARP-75-0640
E = 1 @ ARP-75-3390

BOLTS

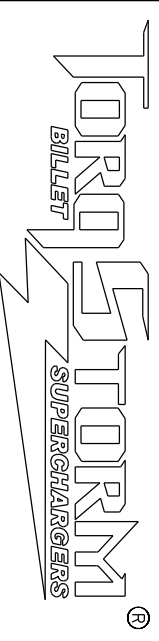
A = 1 @ ARP-DG50015 M14x1.5 x 110mm HHB
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B = 3 @ ATI SUPPLIED WITH ATI UPGRADE
C = 3 @ M8-1.25 x 90mm SS SHCS
D = 7 @ 3/8-16 x 1-1/4 SS SHCS
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DAMPER UPGRADE

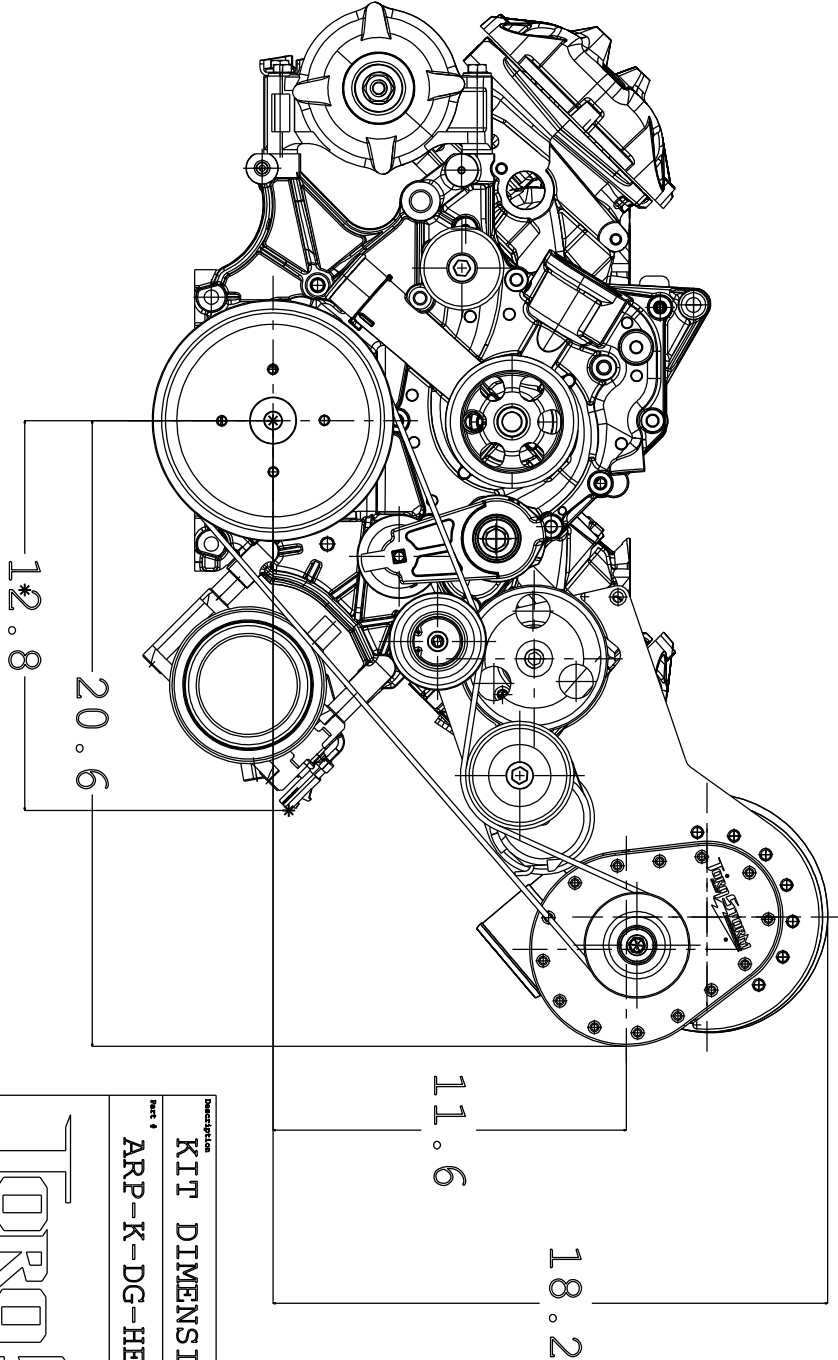
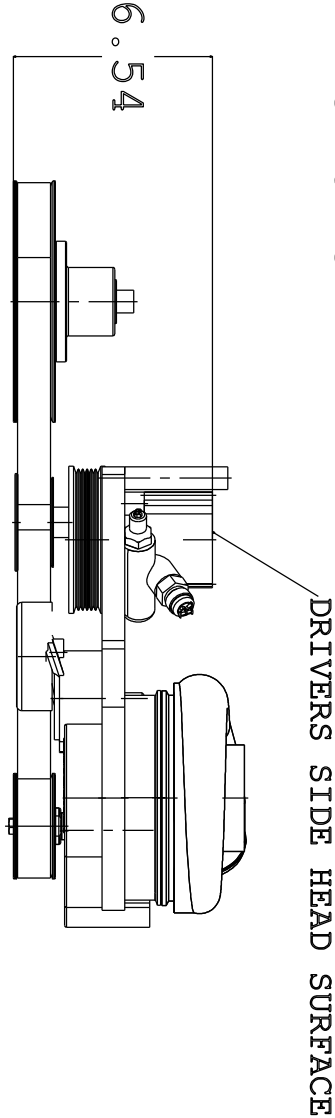
ATI-918445
ATI916246 HUB
ATI917071 SHELL
ATI950200 FASTNERS

BOLT & SPACER LAYOUT

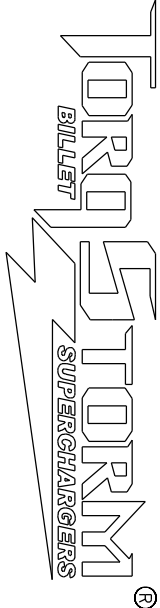
ARP-K-DG-HEMI6



KIT DIMENSIONS



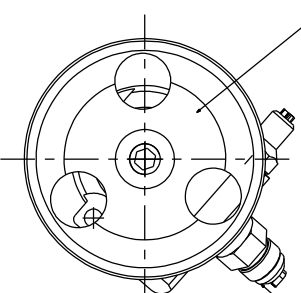
Description	
KIT DIMENSIONS	
Part #	ARP-K-DG-HEMI 6



2009-2010 MANUAL CARS

OEM - 4892093AA PULLEY
DORMAN - 300-319

OEM PUMP 4782524AF

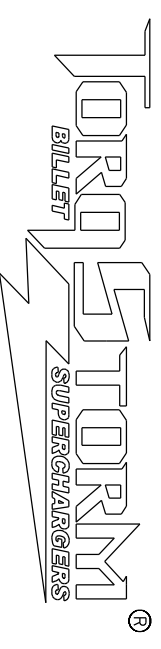


* STOCK IMAGE *

OEM HIGH PRESSURE LINE = 68043618AA

OEM LOW PRESSURE LINE = 68043769AA

Description
POWER STEERING
Part #
ARP-K-DG-HEMI 6



**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.