

## Front crank support installation instructions Small Block Chevrolet



The Ken Lowe Race Cars small block Chevrolet crank support mounts to the four lower front holes on the engine block. If you have an engine mount going there then you can shorten the side mount plates by the thickness of the engine mounts and proceed with the installation. The shortening procedure must be done in a milling machine and most machine shops can handle this for you. If you want KLRC to do this we will be glad to do this for you. The cranks support kit can be ordered with short side plates as well.

To insure you get a product that fits and works during our quality control every thread and diminution has been checked. Every crank support kit has been assembled on an engine before it was boxed. We have made every effort to insure that you get a high quality product but if you have any problems be sure to call us and let us know

### **Preparation:**

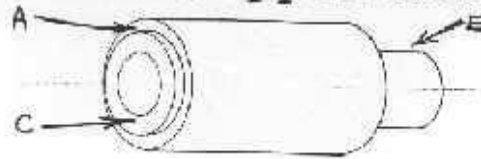
**A.** Use a 3/8 unc tap and clean the threads on the front of the block that the crank support studs will thread into.

**B.** The crank "nose" or snout will have to be drilled and threaded for 1/2 unf for the spindle bolt to thread into.

**C.** Assemble the clamp rings on the front support plate. The clamp ring with the through holes goes on the front of the front support plate with the 1/4" unc x 1" bolts passing through the clamp ring and through the front support plate and into the threaded clamp ring. It is a good idea to use anti seize on these threads into the aluminum clamp rings. It is a good idea to use anti seize on any threads into aluminum.

## KEN LOWE RACE CARS

### Crankshaft Support Installation



## Installation:

**1.** Please refer to the attached drawing. Install surface "A" against the outside of the crankshaft blower hub. Be certain surface "C" clears the end of the crankshaft.

**2.** Insert the bearing over the diameter "B" and install 1/2" unf. Use red locktite and torque to 55 foot pounds. If a smaller bolt is used reduce the torque.

**3.** Using a dial indicator check the "run out" on the bearing while rotating the crankshaft. If the run out exceeds .005" then tap lightly to correct a few thousandths; if the spindle bearing still has run out, then check surface "A" to see that it is seated on the blower drive hub. Check hub to insure the mating surface is smooth and true. Check that surface is not hitting the crankshaft.

Surface "A" is turned between centers in one set up with the bearing surface on the opposite end. If the bearing still runs out it is probably that the crank hub is marred on its face, causing misalignment or that surface "C" is hitting the crankshaft. **SURFACE "C" SHOULD NOT HIT THE CRANKSHAFT!** This can be a problem with "homemade" hubs that are not made to the correct length.

**4.** After the bearing is trued, install the four 3/8" studs in the engine block. The thread holes in the block should have been cleaned and the thread chased. First thread the studs into the block to check the fit. The studs should thread all the way into the block up to where the bottom of the stud hits the bottom of the hole or the thread runs out on the stud. You should **NOT** have to force the studs into the block or pull them in with a tool. Once the studs will thread into the block by hand remove them and use blue locktight (262) or equivalent to hold the studs in

place. Install the studs by hand until they bottom out and then back them out 1/4" turn.

**5.** Put the side plates on the studs.

**6.** Put the front plate on the studs with the logo facing out and install the 3/8" flat washers provided. Install the 3/8 unf nuts provided torque them to 35 foot pounds

**7.** Now you can tighten the clamp ring bolts to 120 inch pounds. With the spindle installed with no run out the clamp rings will now be locked on the crankshaft centerline. To remove the crankshaft support for engine service just loosen and remove the 3/8" mounting nuts and remove the front plate. You do not have to reset the clamp ring each time. This is the extra value in a KLRC crank support as it does the job of supporting the front of the crankshaft and removes easily for servicing and reinstalls quickly not requiring resetting. If you bore the tunnel of the engine block all you have to do is reset the spindle and reset the clamp rings. It is just that easy!

**NOTE:** It is a good idea to check the torque on the studs and the centre bolt after every pass until you are sure nothing is moving. Then it is still a good idea to check it at least after every race

Torque Settings:

1/2" Main centre bolt 55 foot pounds

3/8" Mount bolts 35 foot pounds

1/4" Clamp bolts 120 inch pounds

## **Blower drive hubs**

KLRC blower hubs are machined from tough 4140 steel and honed for a correct fit. The keyways cut correctly and comes with instructions for fitting the key so the key and the hub will fit properly

36335-01100 Hub 4140 steel SBC

36335-01200 Hub 4140 steel BBC

36335-01201 Hub 4140 steel BBC counterweighted

36335-01300 Hub 4140 steel 392, 426

36335-01500 Hub 4140 steel 351CWF

36335-99900 Hub 4140 steel blank

36600-63750 **Timing ring** 6.375 DIA (not installed) fits on blower hub so you can mark for the TDC and other marks. It makes the diameter large enough so your timing can be accurate.. Comes with lightning holes and pilot holes for magnets for computer pick ups if you need them.

Installed free if you order one when you order your blower drive hub

Blower stud set of 8 studs and nuts (anodized aluminum) 36720-10437

## **Burst Panels & kits**

36525-19000 Burst panel complete kit with burst plate

36525-19010 Burst panel replacement

36525-19020 Burst panel clamp ring

36525-19030 Burst panel weld ring

36525-19040 Burst panel inner plate

36525-19100 Burst panel deflector plate kit

36525-19110 Burst panel deflector plate stands 5/16 x .058 chrome moly x .75