

**NISSAN 350Z & INFINITI G35  
AIR CONDITIONING COMPRESSOR  
TO GEN III/IV CHEVROLET SMALL BLOCK**



**INSTALLATION INSTRUCTIONS**

**Rev - Jun 2017**

**!!NOTICE!!**

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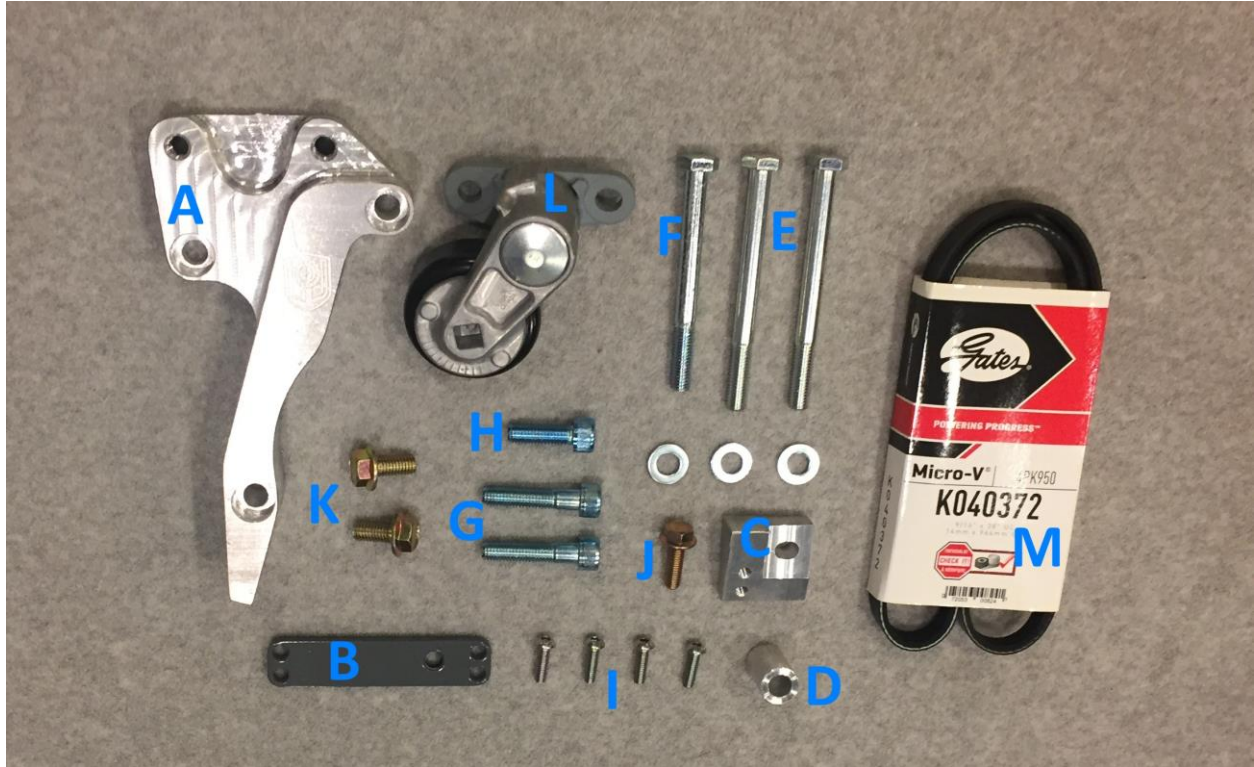
**!!WARNING!!**

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## BEFORE YOU BEGIN:

Please ensure that all of the components required for your installation have been included in your package. The AC Bracket Kit should include the following components:



- A. (Qty 1) – Aluminum AC Compressor Main Bracket
- B. (Qty 1) – Steel Intermediate Bracket
- C. (Qty 1) – Aluminum Sub-Bracket
- D. (Qty 1) – Spacer
- E. (Qty 2) – M10x1.5 110mm long Bolts with Flat Washers
- F. (Qty 1) – M10x1.5 100mm long Bolt with Flat Washer
- G. (Qty 2) – M10x1.5 45mm long Allen Head Bolts
- H. (Qty 1) – M10x1.5 30mm long Allen Head Bolt
- I. (Qty 4) – M6x1 20mm long Button Head Bolts
- J. (Qty 1) – M8x1.25 25mm Flange Head Bolt
- K. (Qty 2) – M10x1.5 25mm long Flange Head Bolts
- L. (Qty 1) – Belt Tensioner
- M. (Qty 1) – Belt

***\*\*If you are installing this kit onto an iron block engine, you will need the tools necessary to drill and tap an additional mounting hole into the block. The template and tools required to do this work are available separately from LOJ Conversions\*\****

## INSTALLATION PROCEDURE:

- 1) Install the Aluminum AC Compressor Main Bracket to the engine block. It is held in place using two M10x1.5 45mm long allen head bolts and one M10x1.5 30mm long bolt. Torque these bolts to 37ft-lb. See Figure 1 below.

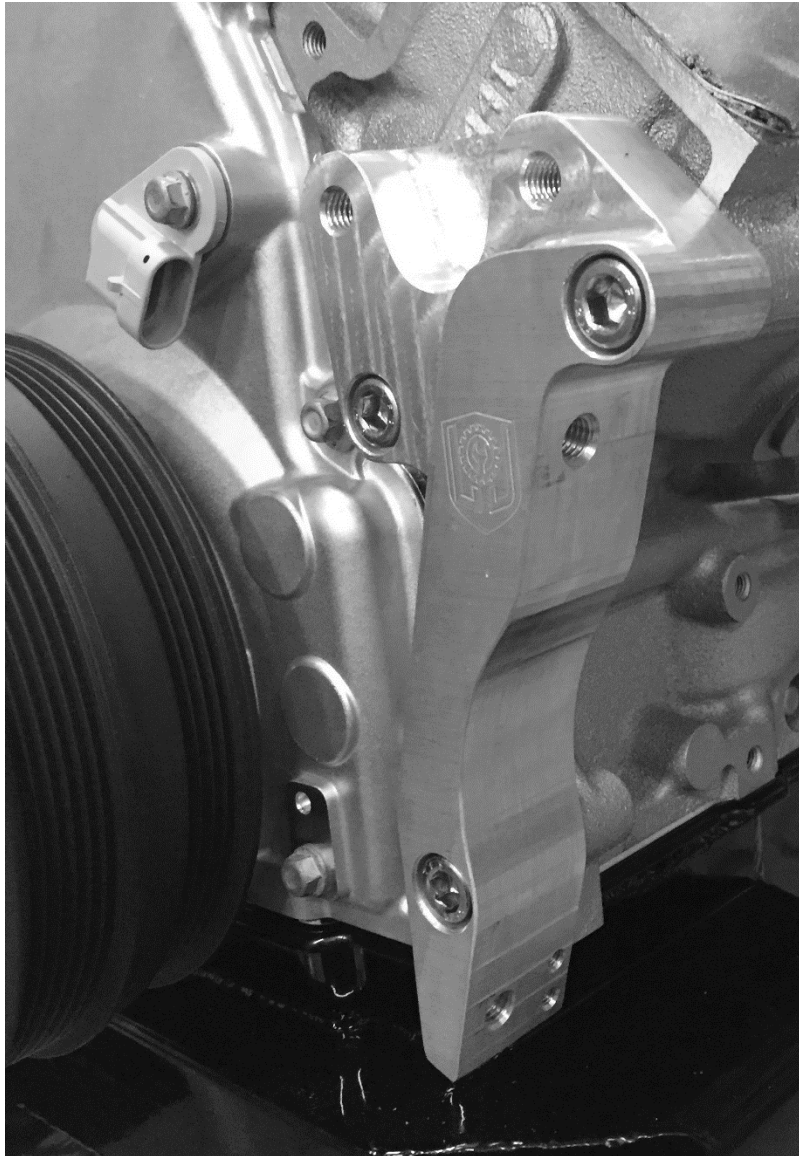
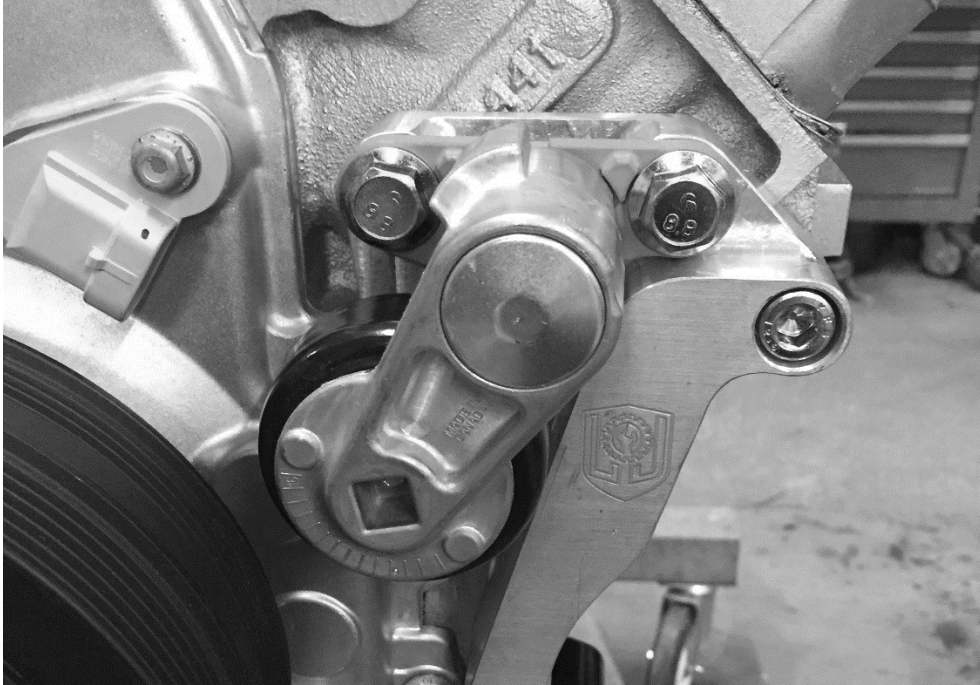


Figure 1

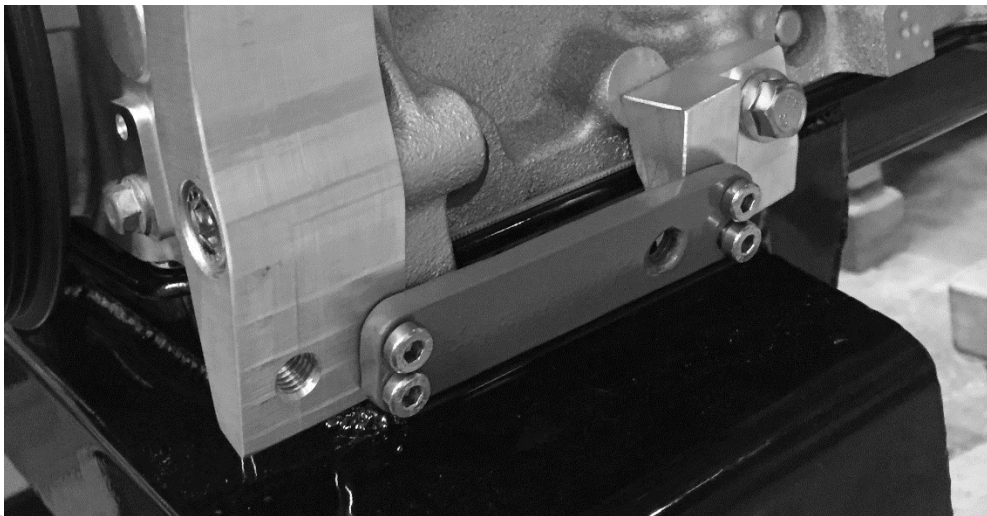
**NOTE –** If you are installing this bracket onto an Iron Block Engine, you will not install the M10x1.5 30mm allen head bolt. Additionally, the upper M10x1.5 45mm bolt hole will need to be drilled and tapped to allow installation. A drill template, bit, and tap are available from LOJ Conversions.

- 2) Install the tensioner using the supplier M10x1.5 20mm long flange head bolts. Torque to 30ft-lb. See Figure 2 below.



**Figure 2**

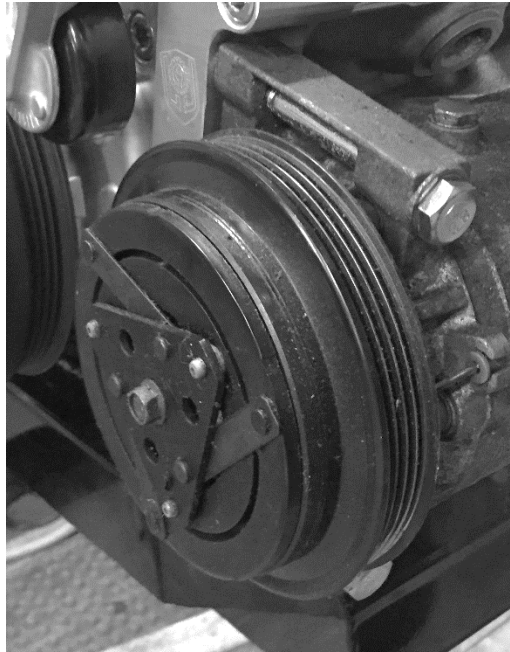
- 3) Install the Aluminum Sub-Bracket to the block using the supplied M8x1.25 25mm long flange bolt. Leave this bolt just loose enough for the bracket to slide freely. Install the Steel Intermediate Bracket between the Aluminum AC Compressor Main Bracket and Aluminum Sub-Bracket using the four supplied M6x1 20mm long button head screws. Leave these screws slightly loose as well. The Steel Intermediate Bracket will be oriented so the M10 hole is offset to the bottom and rear. See Figure 3



below.

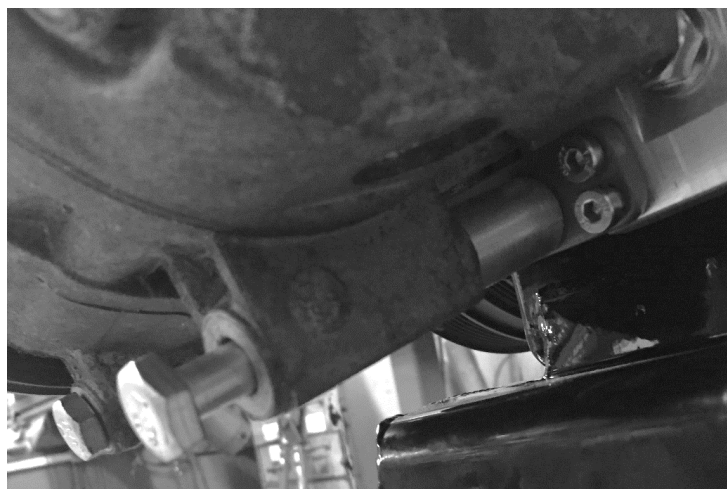
**Figure 3**

Install your AC compressor onto the main bracket using the two M10x1.5 110mm bolts and flat washers. It is easier to align the bolts if the lower bolt is installed first. See Figure 4 below.



**Figure 4**

- 4) Install the spacer between the rear compressor mount hole and the Steel Intermediate Bracket. Bolt the compressor to the Steel Intermediate Bracket using the M10x1.5 100mm long bolt. See Figure 5 below.

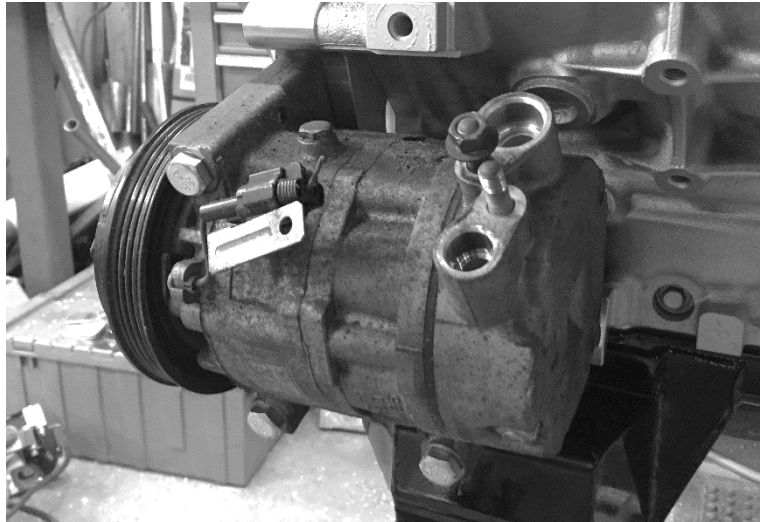


**Figure 5**

- 5) Once all of the compressor bolts are installed, snug down the mounting bolts. Then tighten the M8x1.25 flange head bolt holding the Aluminum Sub-Bracket to the side of the block. Tighten the accessible M6x1 20mm pan head screws that hold the Steel Intermediate Bracket to the

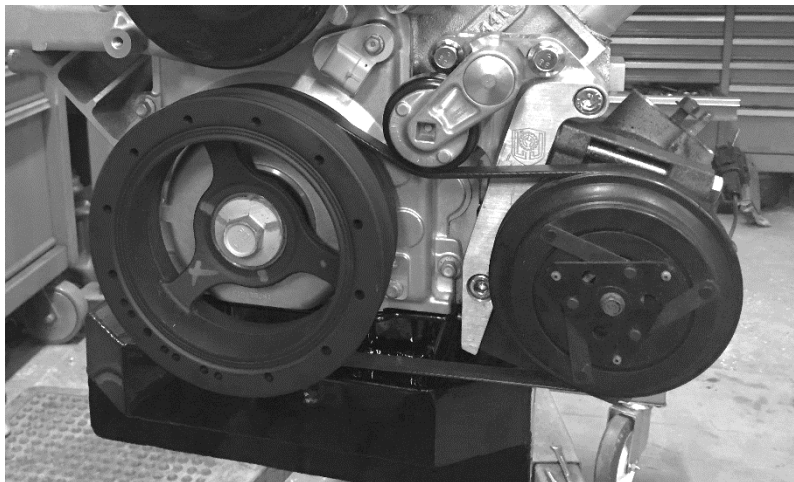
Aluminum AC Compressor Main Bracket and the Aluminum Sub-Bracket. Remove the compressor to allow access to all of the hardware. Tighten the M6x1 pan head screws to 150in-lb and the M8x1.25 bolt to 20ft-lb.

- 6) Reinstall the compressor and tighten the bolts to 30ft-lb. Your assembly should look like Figure 6 as seen below.



**Figure 6**

- 7) Now it is time to install the belt. Because there is such a deep groove that the belt rides on in the compressor, the belt needs to be installed in a specific order. First, place the belt between the crank pulley and timing cover. Second, loosen the tensioner and place the belt over the AC Compressor pulley. Last, walk the belt onto the crank pulley starting at the bottom. It may be necessary to rotate the crankshaft to completely install the belt. See Figure 7 below.



**Figure 7**

***Your installation is complete! Enjoy!***

## **Replacement Parts:**

- **Tensioner:**
  - Gates Part Number 38159
  - AC Delco Part Number 38159
  - Continental Part Number 49276
  - Dorman Part Number 419109
- **Belt:**
  - Gates Part Number K040372
  - Gates Heavy Duty Part Number K040372RPM
  - Continental Part Number 4040372
  - Other manufacturer equivalent 4-rib 37.2" effective length belt.