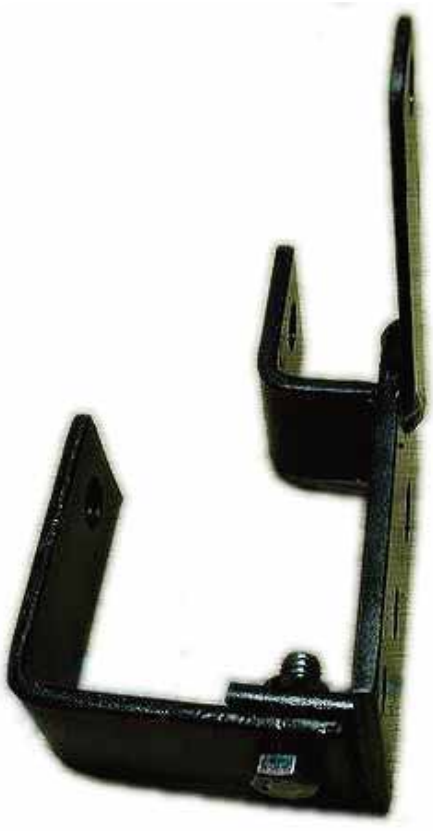
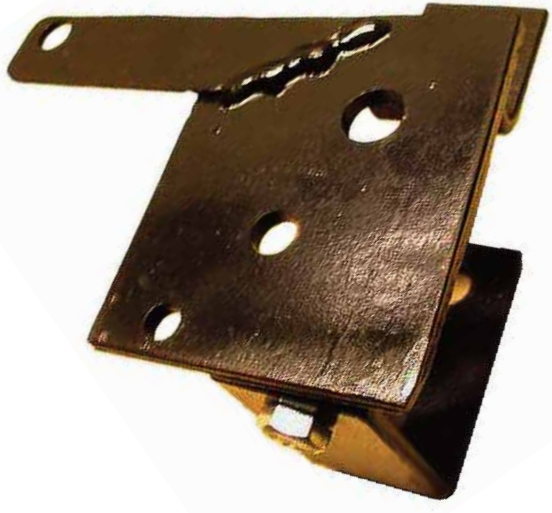
Dodgerunner's

V6 Spring Belt Tensioner

Installation Guide



The bracket consists of two pieces of 1/8" steel bolted together. The main piece is flat plate with welded-on alternator mounting arm and “L” shaped mounting leg. The second piece is a larger “L” leg that bolts to a mounting flange on the bottom of the main piece. Both pieces bolt to the front of the engine at the mount.



Tools Required:

- 3/8" Ratchet
- 4" (or longer) 3/8" extension
- 13mm Socket
- 14mm Socket
- 15mm Socket
- 18mm Socket

Work safely while installing the bracket.

- Park the car on a firm level surface.
- Chock the wheels so the car will not roll.
- Jack according to instructions.
- Make sure your tools are clean and servicable.
- Clean and prep the work area.
- Keep this guide handy.

Installation:

- Raise the right rear corner of the car.
- Remove the right rear wheel.
- Remove the inner splash shield.
  (WD40 or PB-blaster on the plastic fasteners and a needle nose to lever the center of the plug out works well.)

  For added safety place a jack under the engine oil pan (using a block of wood as a cushion) and gently support the engine to prevent shifting.

- Clean the areas around the two motor mount bolts and the front of the alternator bracket. Remove any grease, oil and dirt. The surfaces must be clean so the bracket will seat flat and tight.


Clean
Cleàn
Clean

- Remove the large “L” leg and bolt of the tensioner bracket and set aside.

- Remove and retain the lower alternator bolt currently used to adjust the belt tension (13mm).

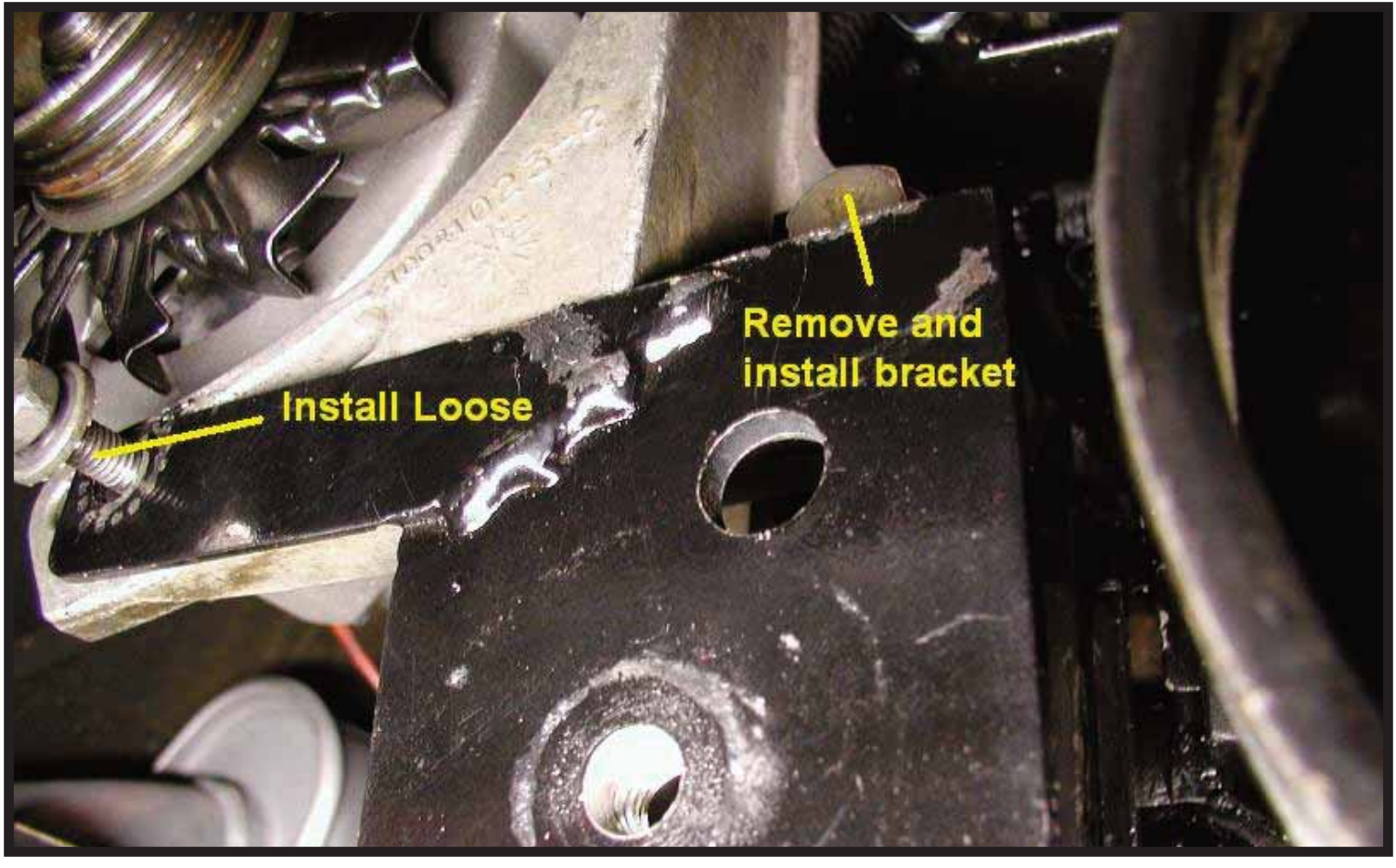
- Verify the BOTTOM motor mount bolt (18mm) is tight to prevent any movement of motor when the top bolt is removed.

- Remove and retain the TOP motor mount bolt that also goes through the alternator bracket (18mm).

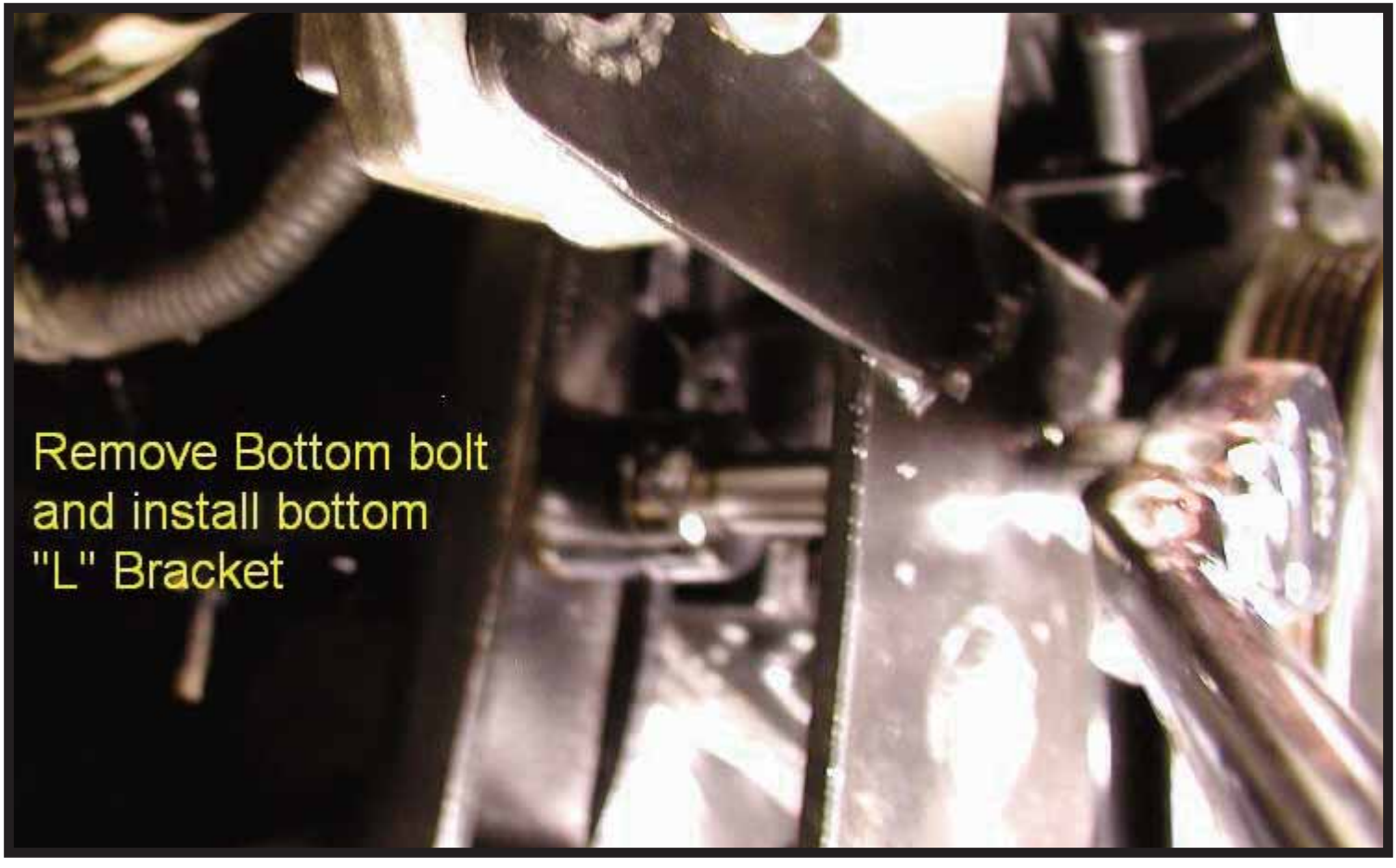
  Note: DO NOT REMOVE BOTH MOTOR MOUNT BOLTS AT THE SAME TIME. They will be removed and replaced one at a time. This will retain the alignment of the holes in the mount and the block and simplify installation.

  Gently supporting the engine with a floor jack as mentioned above helps greatly.

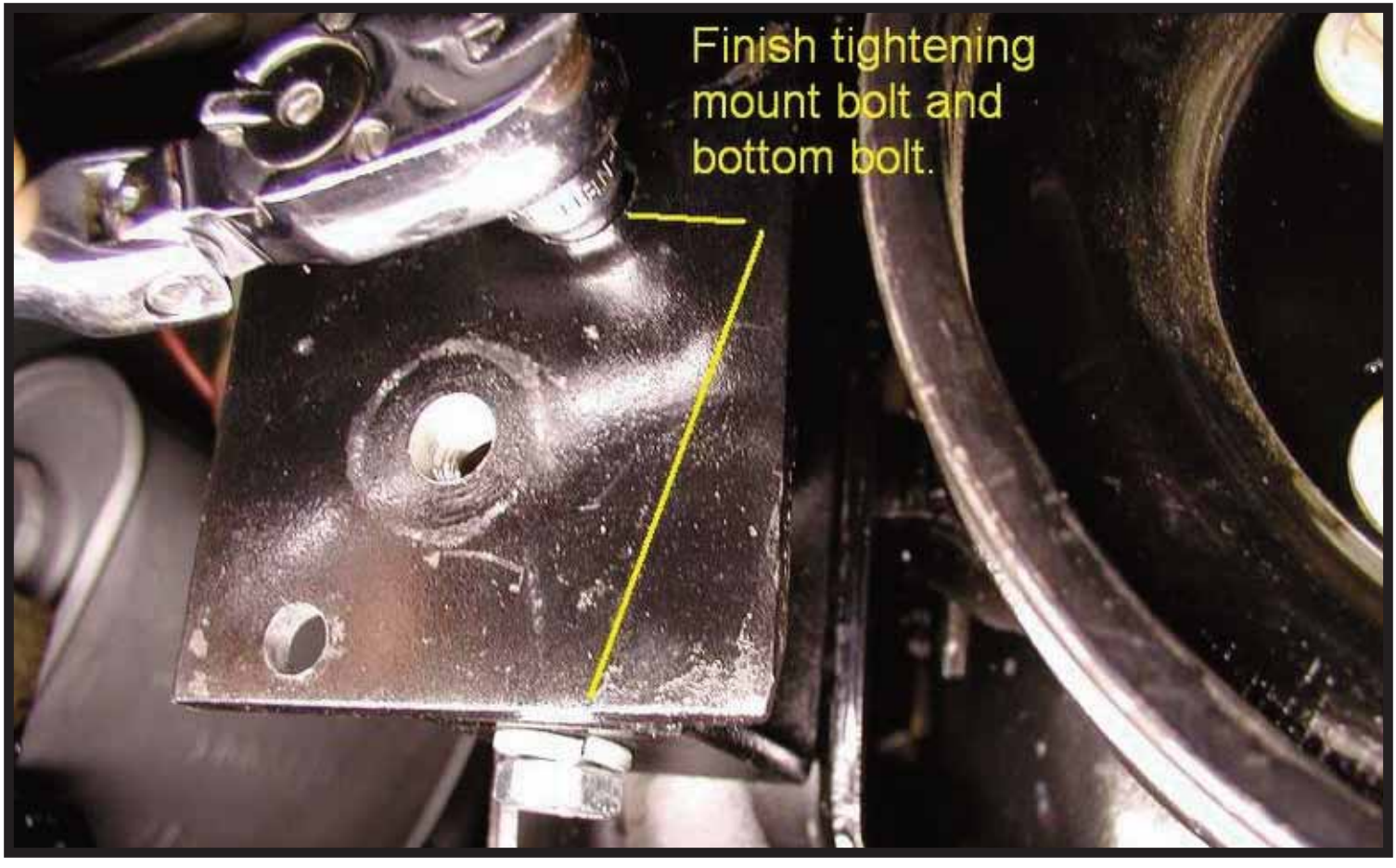
- Install the large part of the bracket using the long top motor mount bolt. Do not tighten completely.
- Move the alternator as needed and install the lower alternator bolt through the hole in the bracket arm. Tighten finger tight.
- Torque the top motor mount bolt (18mm) to 70-92 ft/lbs.
- Remove the lower motor mount bolt by holding the (18mm) socket behind the bracket and inserting a 4" (or longer) socket extension through the large hole in the bracket.
- Install the remaining large “L” leg behind the bracket with the lower motor mount bolt. Do not tighten completely.

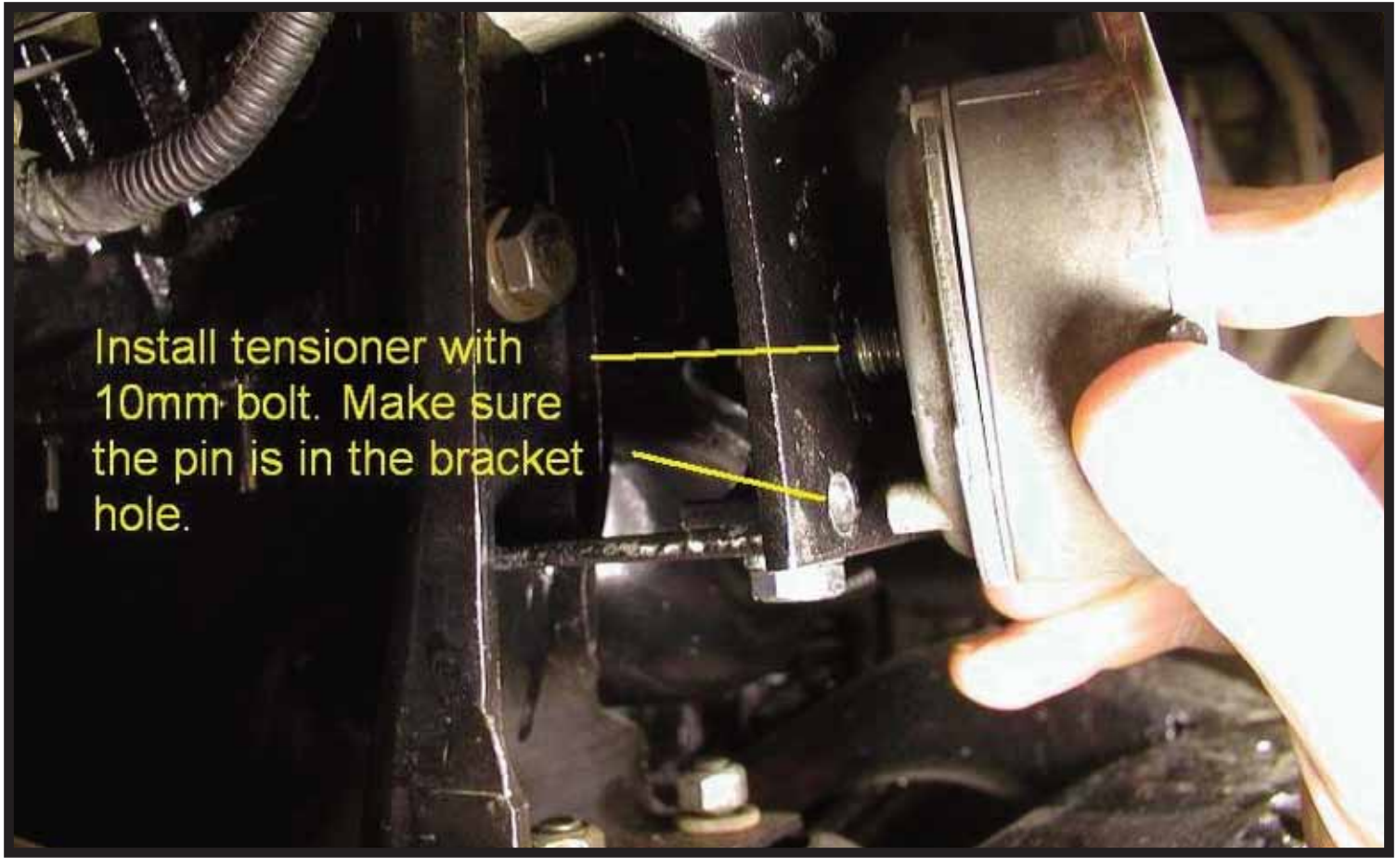

Remove and
install bracket
Install Loose

- Fasten the large “L” leg to the bracket with the supplied small bolt (through the hole in the “L” leg and into the threaded mounting flange on the bracket). Tighten until the lock washer is about half compressed.
- Torque the lower motor mount bolt to 70-92 ft/lbs.
- Tighten the bolt securing the large “L” leg to the bracket (14mm).
- Tighten the lower alternator bolt (13mm).
- Mount the spring tensioner to the middle threaded hole on the bracket using the supplied bolt (15mm). Make sure the small stud on the back of the tensioner is inserted into the bottom hole of the bracket (located near the left edge).


Remove Bottom bolt
and install bottom
"L" Bracket


Install bracket bolt
and compress lock
lock washer half
way


Finish tightening
mount bolt and
bottom bolt.


Install tensioner with 10mm bolt. Make sure the pin is in the bracket hole.

- Insert 3/8" drive ratchet into the square hole of the tensioner and move the tensioner to the left.

- Install Gates K050450 belt or equivalent 45" belt.

  Note: If you are running non-standard pulleys you will have to size your belt accordingly.

- Re-install the splash guard and wheel.

NOTE: If you have trouble getting either motor mount bolt threaded back into the block the motor may have shifted causing misalignment. To correct this, loosen the two rubber motor mount nuts a couple of turns. Using your support jack and block of wood (under the oil pan) raise the motor until you see the mount move on the rubber mount studs. You should now be able to realign the mount hole(s) to the block hole(s) while starting the bolt. Tapping the motor mount left or right with a hammer may help. Use caution that the motor does not shift causing injury. Don't forget to re-tighten the rubber mount nuts loosened above.