



## IBEX 4405-20-LS3-B GM LS PASSENGER SIDE ALTERNATOR BRACKET

### GOAT BUILT PASSENGER ALTERNATOR RELOCATION BRACKET

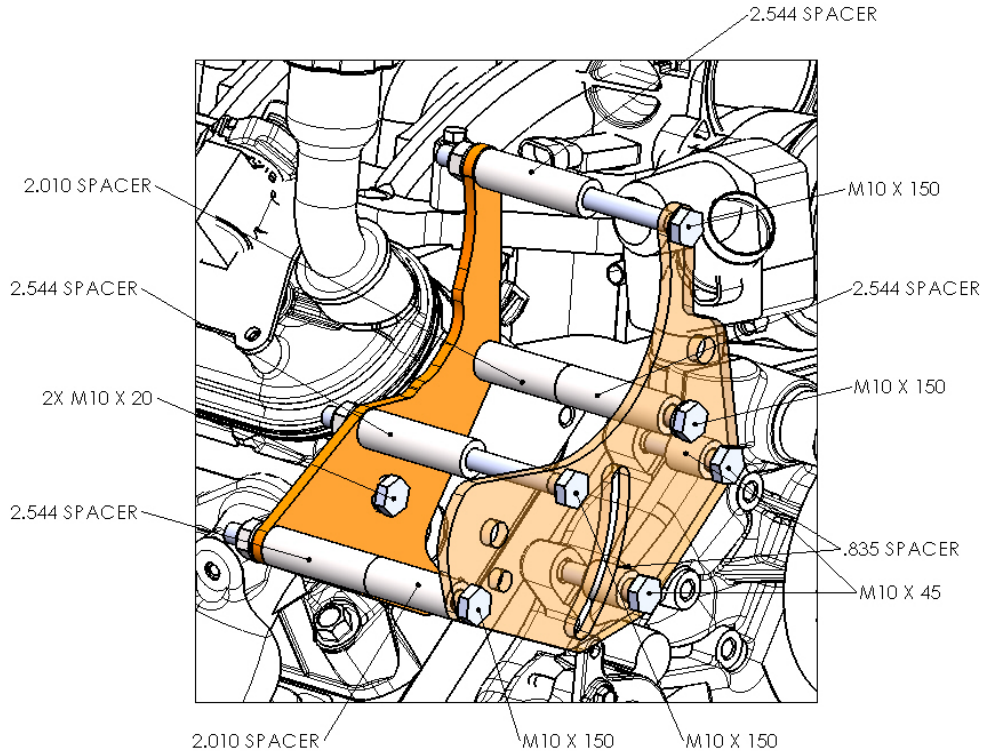
Thank you for purchasing Goat Built components, before starting your installation, we recommend that you read through these instructions to familiarize yourself with the steps and parts so you can plan and prepare for your install accordingly.

A few notes about the 4405-20-LS3 Alternator bracket:

- This bracket kit is intended for 2010-2015 Camaro LS3 or 99 to current GM truck Vortec 4.8/5.3/6.0 pulley spacing. This does not work on the Supercharged LS3
  - A 99-15 to current GM truck alternators is required
  - The **belt length** varies based on which alternator you are using and which power steering pump, bracket and pulley diameter you are using.
  - A new belt tensioner is provided with this kit, the spring tensioner is from a 92-02 Chevy Cavalier/Pontiac Sunfire, the Gates version works the best and is p/n 38164
  - If you want to upgrade to a shouldered pulley for the tensioner, the pulley is a Gates 89003
  - We also make a manual tensioner kit so you can set your own belt tensioner. If you use the manual tensioner kit, you may need to drill one of the holes out to ½ so do that before you install the kit
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1. If you are using the spring tensioner, install the tensioner to the 4405-21 bracket with the 4405-23 spacer and M10 x 80 bolt.
  2. Loosely install all the brackets, alternator, and bolts before you fully tighten any of the bolts, unless instructed to.
  3. Install the 4406-22 rear bracket directly to the head using the two M10 x 20 bolts & lock washers.
  4. Install the 4406-21 front bracket to the head using 2 of the M10 x 150 bolts with the 2.010" spacers stacked with the 2.544" spacers between the brackets. The far outer bolt will need a flat washer and lock nut. The inner bolt goes in the upper threaded hole in the head. Do not use any washers under these bolt heads, apply blue tread locker to the bolt threads that go into the head or water pump. If you are using the spring tensioner, do not tighten outer M10 x 150 bolt yet.
  5. Install the M10 x 45 bolts with the .835" spacers between the front bracket and water pump tensioner bolt holes. Do not use any washers under these bolt heads, apply blue tread locker to the bolt threads that of the head or water pump.
  6. Torque all the 10 MM bolts to 40 ft-lbs.
  7. Install the grooved idler with the spacer to the 4420-21 bracket using the ½ flange bolt and lock nut, torque to 60 ft-lbs



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8. If you are using the spring tensioner, install the tensioner to the 4405-21 bracket with the 4405-23 spacer and ½" bolt. The outer M10 x 150 bolt goes thru the 4405-23 idler spacer to secure it to the front bracket. Refer to figure1 as a guide.
9. If you are using the manual tensioner kit, install the manual tensioner arm to the back of the 4405-21 bracket using figure 2 as a guide. The manual tensioner arm pivots on the ½ x 1.5" carriage bolt, the ½ x 2 carriage bolt will go thru the end of the arm, thru the slot in the 4405-21 bracket, thru the idler spacer and idler puller and secured with the flanged lock nut.
10. Install the alternator between the 4405-21 front bracket and 2.544 spacers that are in front of the 4405-22 brackets using an M10x150 bolt and nylock nut, use a flat washer under the nut.
11. Torque the 10 MM bolts to 40 ft-lbs, Torque the tensioner bolt to 60 ft-lbs

Figure 1

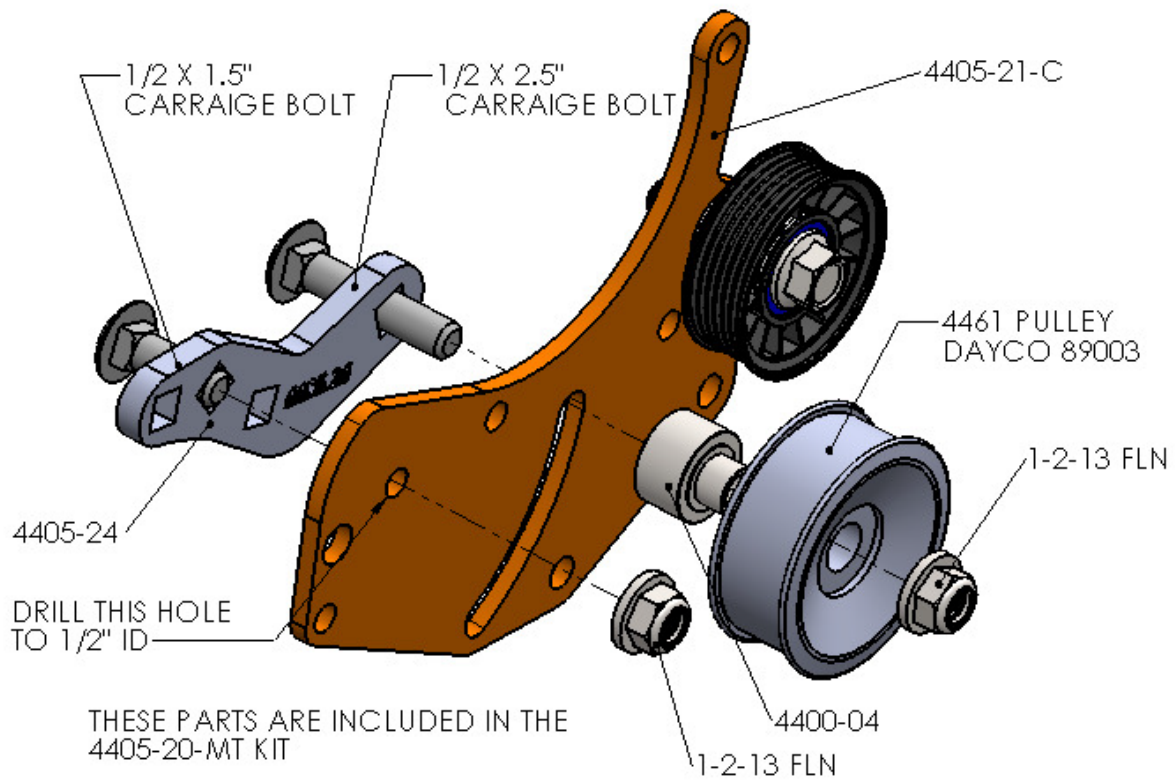
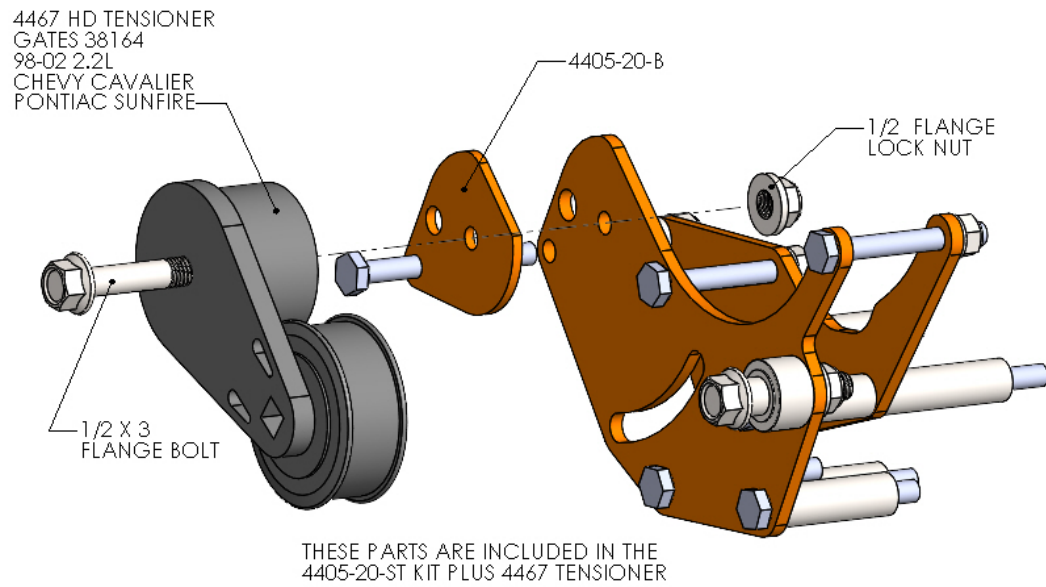
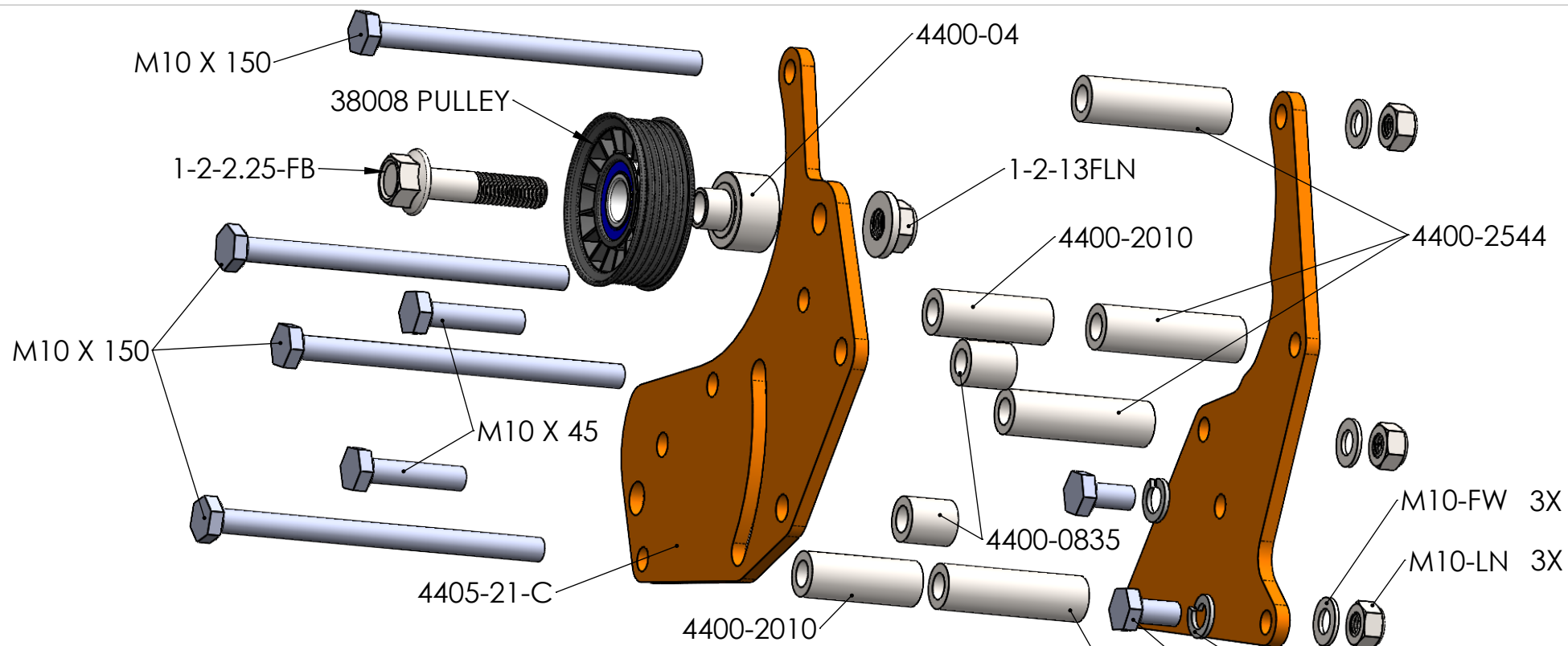


Figure 2



| ITEM NO. | PART NUMBER | DESCRIPTION             | 4405-20-LS3/QTY |
|----------|-------------|-------------------------|-----------------|
| 1        | 4405-21-C   | FRONT BRACKET           | 1               |
| 2        | 4405-22-B   | REAR BRACKET            | 1               |
| 3        | M10-LN      | M10 LOCK NUT            | 3               |
| 4        | M10-LW      | M10-LW                  | 2               |
| 5        | M10-FW      | M10-FLAT WASHER         | 3               |
| 3        | M10 X 45    | M10 X 45 BOLT           | 2               |
| 7        | M10 X 20    | M10 X 20 BOLT           | 2               |
| 8        | M10 X 150   | M10 X 150 BOLT          | 4               |
| 9        | 4400-0835   | .835" SPACER            | 2               |
| 10       | 4400-2010   | 2.010" SPACER           | 2               |
| 11       | 4400-2544   | 2.544" SPACER           | 4               |
| 12       | 4400-04     | IDLER SPACER            | 1               |
| 13       | 1-2-13FLN   | 1/2-13 IDLER NUT        | 1               |
| 14       | 1-2-2.25-FB | 1/2 X 2-1/4 FLANGE BOLT | 1               |
| 15       | 4464        | GROOVED PULLEY, 38008   | 1               |



TITLE: ALTERNATOR BRACKET  
PASS SIDE, TRUCK ALT  
TRUCK SPACING

SIZE DWG. NO.  
**A** 4405-20-LS3

SCALE: 1:1 WEIGHT: SHEET 1 OF 1