

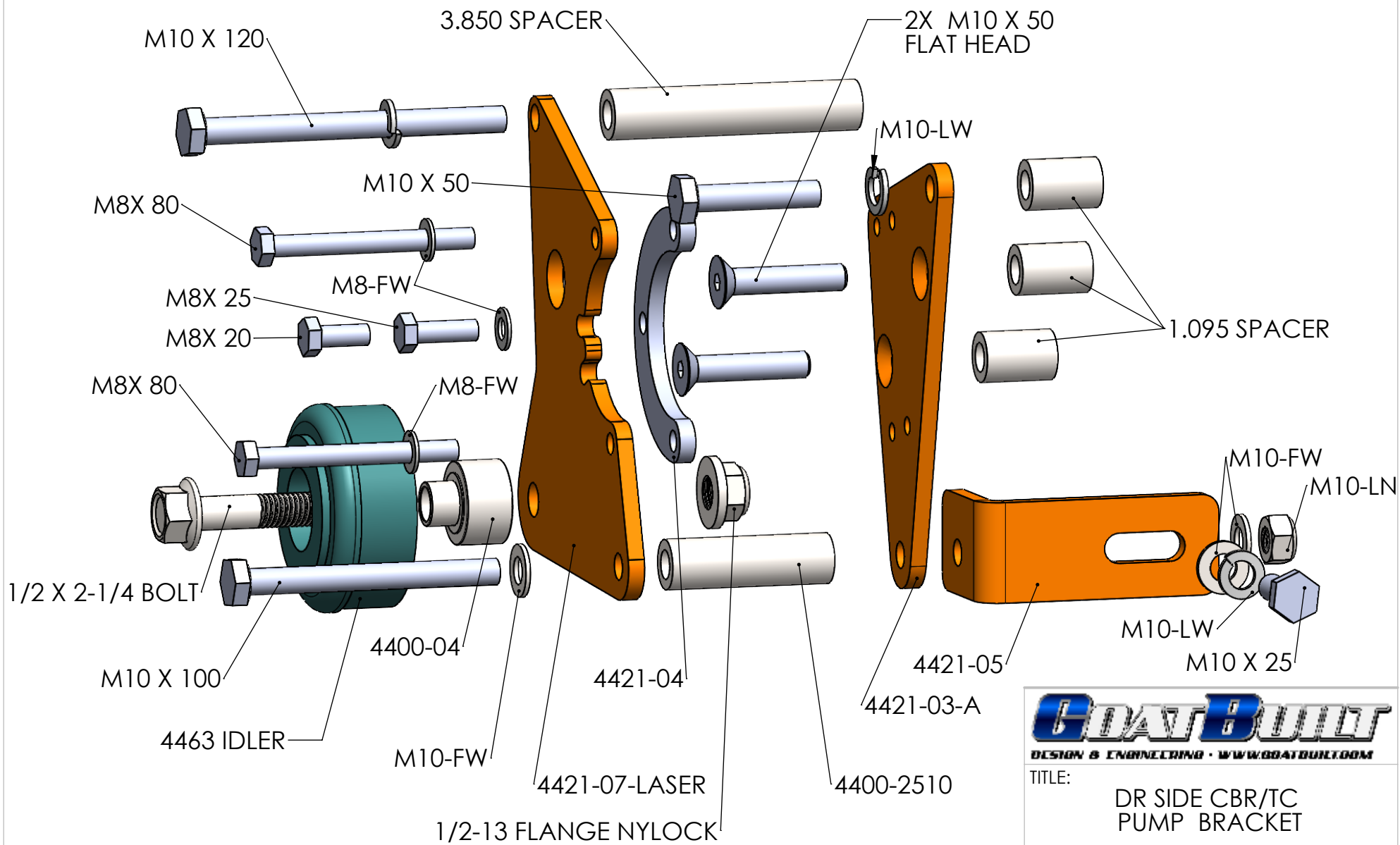


## GOAT BUILT CBR/TC-PUMP RELOCATION BRACKET

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 4422 CBR/TC pump bracket:

- This bracket kit is intended for 99 and up GM truck Vortec 4.8/5.3/6.0, or 2010+ Camaro LS3 pulley spacing including balancer, water pump, tensioner, and idler.
  - Another LS Car option is the 2010+ Camaro LS3 water pump, it is the same as the truck spacing, but the upper water pump outlet points forward on the driver side. Use the Camaro belt tensioner if you are using the Camaro water pump.
  - This kit fits a CBR or TC pump, this shim goes behind a CBR pump or in front of a TC pump
1. Loosely install all the brackets, pump, and bolts before you fully tighten any of the bolts.
  2. Install the 4421-03 rear lower bracket to the head using the two M10 x 50 flat head allen head bolts and M10 x 50 bolt, lock washer with the three 1.095" spacers between the bracket and the head. Go ahead and tighten these bolts to 40 ft-lbs.
  3. Loosely install the lower angle bracket, 4421-05 to the side of the block and rear of the 4421-03 bracket. Use a M10 x 25 bolt with a lock washer and flat washer on the side of block.
  4. Install the 4421-07 bracket to the head using the M10x120 bolt, lock washer and 3.850 spacer in the upper inner hole of the 4421-07 bracket. Install a M10 x 100 bolt with a 2.510 spacer in the lower outer hole of the 4421-07 thru the 4421-03 bracket and 4421-05 bracket. Use a flat washer and lock nut on the back. The aluminum LS blocks have a M10 tapped hole on the front that aligns with the lower hole where the M10x100, 2.510 spacer and 4421-05 lower angle bracket line up. You could eliminate that 4421-05 rear lower angle bracket by using a M10x120 bolt with an additional 1.095 spacer. You could even drill and tap an Iron truck block for that M10 hole.
  5. Install the pump using the 8mm bolts, use a flat washer under the bolt heads and blue Loctite on the treads. The 4421-06 shim normally goes behind a CBR pump or in front of a TC pump. Use the shorter M8 x 20 bolt if you are installing the shim on the back of the pump. Use the longer M8x25 bolt if you are installing the shim at the front of the pump. The pump has two clocking options. Only one of longer M8x90 bolts will go through the 4421-07 bracket.
  6. Torque the 10 MM bolts to 40 ft-lbs, 8 mm bolts to 15 ft-lbs
  7. Install the idler to the 4421-07 bracket using the 4400-04 spacer, 1/2" flange bolt and flange lock nut. Torque the idler nut to 70 ft-lbs



TITLE:  
 DR SIDE CBR/TC  
 PUMP BRACKET

|          |             |
|----------|-------------|
| SIZE     | DWG. NO.    |
| <b>A</b> | <b>4422</b> |

|            |         |              |
|------------|---------|--------------|
| SCALE: 1:1 | WEIGHT: | SHEET 1 OF 3 |
|------------|---------|--------------|

| ITEM NO. | PART NUMBER    | DESCRIPTION                       | QTY. |
|----------|----------------|-----------------------------------|------|
| 1        | 4421-07        | LS ALT PS BRACKET, FRONT PLATE    | 1    |
| 2        | 4421-03-A      | LS ALT PS BRACET, REAR PUMP PLATE | 1    |
| 3        | 4421-04        | LS ALT PS BRACKET, PUMP SHIM      | 1    |
| 4        | 4421-05        | LS AL PS BRACKET, LOWER BRACE     | 1    |
| 5        | M8X 80         | M8 X 80 BOLT                      | 2    |
| 6        | M8X 25         | M8 X 25 BOLT                      | 1    |
| 7        | M8X 20         | M8 X 20 BOLT                      | 1    |
| 8        | M8-FW          | M8-FLAT WASHER                    | 3    |
| 9        | M10 X 120      | M10 X 120 BOLT                    | 1    |
| 10       | M10 X 100      | M10 X 100 BOLT                    | 1    |
| 11       | M10 X 50       | M10 X 50 BOLT                     | 1    |
| 12       | M10 X 25       | M10 X 25 BOLT                     | 1    |
| 13       | M10 X 50 FH    | M10 X 50 FLAT HEAD ALLEN BOLT     | 2    |
| 14       | M10-LN         | M10 LOCK NUT                      | 1    |
| 15       | M10-FW         | M10-FLAT WASHER                   | 3    |
| 16       | M10-LW         | M10-LW                            | 3    |
| 17       | 4400-1095      | 1.095" SPACER                     | 3    |
| 18       | 4400-2510      | 2.510 SPACER                      | 1    |
| 19       | 4400-3850      | 3.850" SPACER                     | 1    |
| 20       | 1-2 X 2-1-4 FB | 1/2 X 2-1/4 IDLER FLANGE BOLT     | 1    |
| 21       | 1-2-13FLN      | 1/2-13 IDLER NUT                  | 1    |
| 22       | 4400-04        | IDLER SPACER                      | 1    |
| 23       | 4463-IDLER     | 89007 IDLER PULLEY                | 1    |



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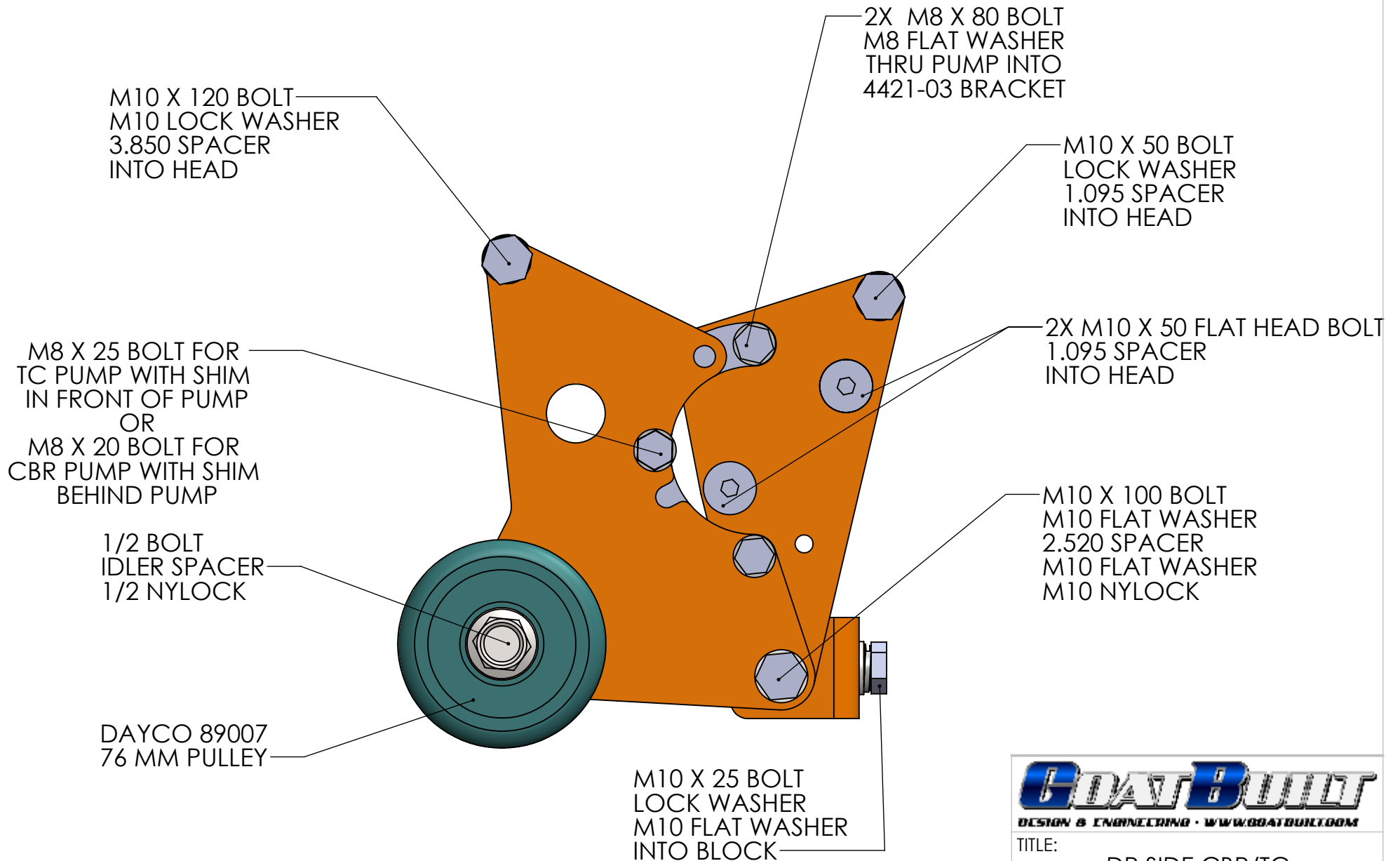
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**4422**

SCALE: 1:1

WEIGHT:

SHEET 2 OF 3



TITLE:  
DR SIDE CBR/TC  
PUMP BRACKET

|          |             |
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| SIZE     | DWG. NO.    |
| <b>A</b> | <b>4422</b> |

|            |         |              |
|------------|---------|--------------|
| SCALE: 1:1 | WEIGHT: | SHEET 3 OF 3 |
|------------|---------|--------------|