



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	T PUMP	TROPHY TRUCK PUMP	1
2	IDLER	STOCK TRUCK IDLER	1
3	4400-05	.496 IDLER SPACER	1
4	4416-01	FRONT PLATE	1
5	4416-02	REAR PLATE	1
6	4400-3850	3.850" SPACER	3
7	1-2 X 2-1-4 FLANGE BOLT	1/2 X 2-1/4 FLANGE BOLT	1
8	M10-LW	M10-LW	2
9	M10-130	M10 X 130 BOLT	2
10	M10-120	M10 X 120 BOLT	1
11	.375-16 X 1 HHCS	.375-16 X 1 HHCS	4
12	.375 LW	.375 LW	4
13	3-8-FHSCS	.375-16 FHCS	1
14	1-2-13FLN	1/2-13 IDLER NUT	1



TITLE:

## LS TRUCK TT PUMP BRACKET

SIZE DWG. NO.

**A**

**4416**

SCALE: 1:1

WEIGHT:

SHEET 1 OF 1



## GOAT BUILT TROPHY TRUCK-PUMP MOUNTING 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 4416 TT pump bracket:

- This bracket kit is intended for 99 to current GM truck Vortec 4.8/5.3/6.0 pulley spacing, including balancer, water pump, idler and Goat Built 4405, alternator bracket. If want to use an F-body water pump, you will need some 3/4" water pump spacers, another alternative to truck water pump is the 2010+ Camaro water pump, it has truck spacing and front (upper) outlet, but the outlet is on the driver side
- The bracket was developed around a Howe Trophy Truck pump with the dished pulley that places the belt closest to the pump
- The idler pulley is from any 2002-2013 GM truck/Tahoe application with a 4.8/5.3. or 6.0, Gates 36299, GM 12580771, Dorman 419602, Dayco 89006
- A 90 degree pressure fitting is recommended at the back of the pump
- Belt routing is shown below, the **belt length** varies based on which alternator and alternator pulley you are using. When using the Goat Built 4405-10 alternator bracket and 2005+ model alternator, a 78.25" belt is a good start. If you are using the Goat Built 4405 alternator bracket, a 81.25" belt is a good start. Based on these components, you can estimate the belt length for your specific configuration, 2005 and earlier alternator would use a smaller belt. Many of the belt manufacturers use the belt length as part of the part number, for example Dayco belt 5060805 would be a 6 rib, 80.5" length, the last 3 number are the length

1. It works best to bolt the pump to the brackets, and then bolt the complete bracket/pump assembly to the cylinder head.
2. Install the rear bracket to the rear of the pump using the 3/8 x 1 bolt, lock washer and the flat head socket head bolt, refer to the diagram for the bracket orientation.
3. Install the front bracket to the front of the pump using the 3x 3/8 x 1 bolts and lock washers
4. Torque all the 3/8 bolts to 35 ft-lbs
5. You can install the pump pulley now or wait until the pump and bracket are installed on your engine.
6. Install the 3x 3.85 spacers and M10 x 130 bolts with lock washer in the upper bolt holes, use the M10 x 120 bolt in the lower hole without a washer.
7. Install the complete pump and bracket assembly to the head and torque the M10 bolts to 40 ft-lbs
8. Remove the stock bolt and spacer from the idler pulley. Install the idler to the front bracket using the 4400-05 spacer, 1/2" flange bolt and flange lock nut. Torque the idler bolt to 70 ft-lbs

