

POWER BY THE HOUR PERFORMANCE

**INSTRUCTIONS FOR COYOTE SWAP
ACCESSORY DRIVE ALTERNATOR BRACKET FOR
NATURALLY ASPIRATED APPLICATIONS**

**THESE INSTRUCTIONS CORRESPOND
TO THE FOLLOWING KITS :
PBH-100/1100/1111/1112/1121/1122**

AFTER 2/26/2020

Thank you for purchasing the PBH Speed Drive for your Naturally Aspirated Coyote engine. The PBH Speed Drive is offered with different AC compressor and Power Steering pump options. Before you begin your installation, find the part number on the back of the packaging on each bracket module. Locate the corresponding instruction set in below to ensure you are following the correct directions.

All PBH Speed Drives are designed to work with Mustang Model Timing covers. All alternators need to be from 2011 up Mustang models or the 15-17 3.5L Ecoboost F150 for proper fitment. In all cases, a clutchless pulley must be used.

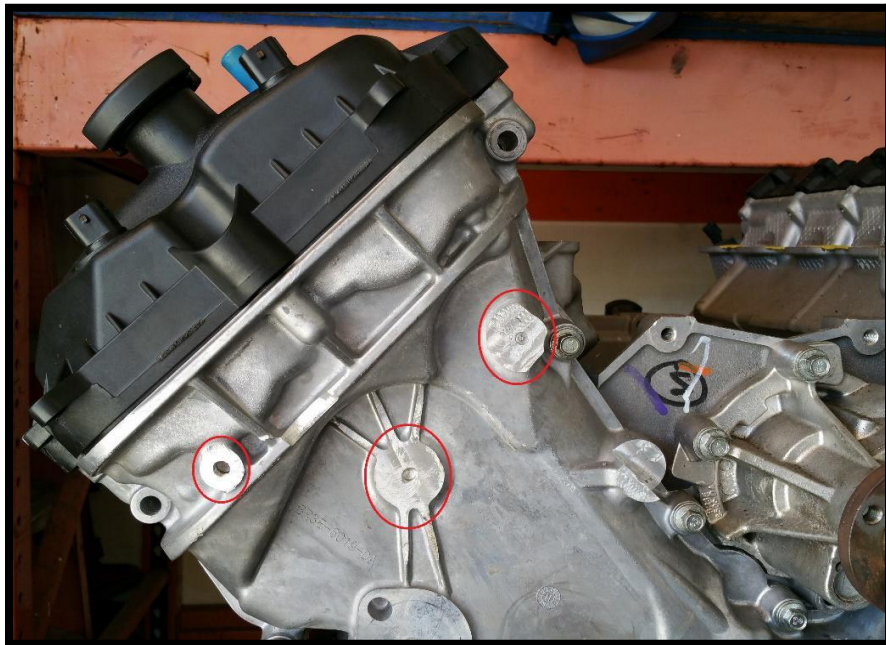
In some cases additional clearancing may be needed for proper fitment.

If you have any questions about your installation you can call PBH M-F 8am-5pm est at 561-737-2331 or email us info@pbhperformance.com

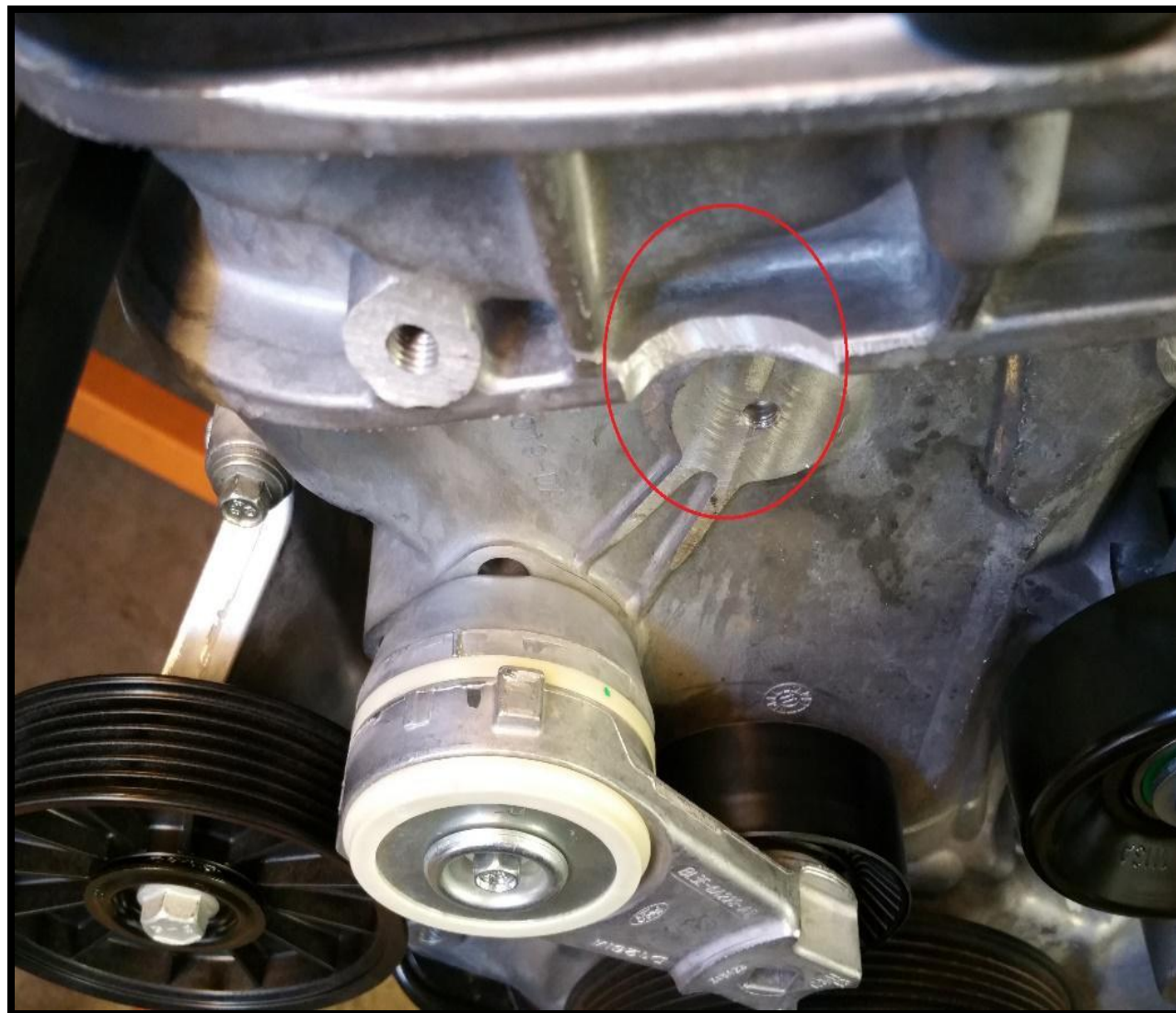
PBH-100 N/A ALT BRACKET FOR COYOTE ALTERNATOR PARTS LIST

SWAP-1001	1	ALT BRACKET	HDW-1015	2	3.4" STAND OFF
HDW-1086	1	3.89" STAND OFF	HDW-1018	1	1.85" SPACER
HDW-1022	1	ALT BOLT M10-1.5X100	HDW-1023	1	ALT BOLT M10-1.5X40
HDW-1025	1	ALT NUT M10-1.5	HDW-1024	3	ALT NUT M8-1.25

- 1. Remove stand-offs illustrated below. This is done best with a sawzall or cut-off wheel. Cut them off within 1/8" of the timing cover**



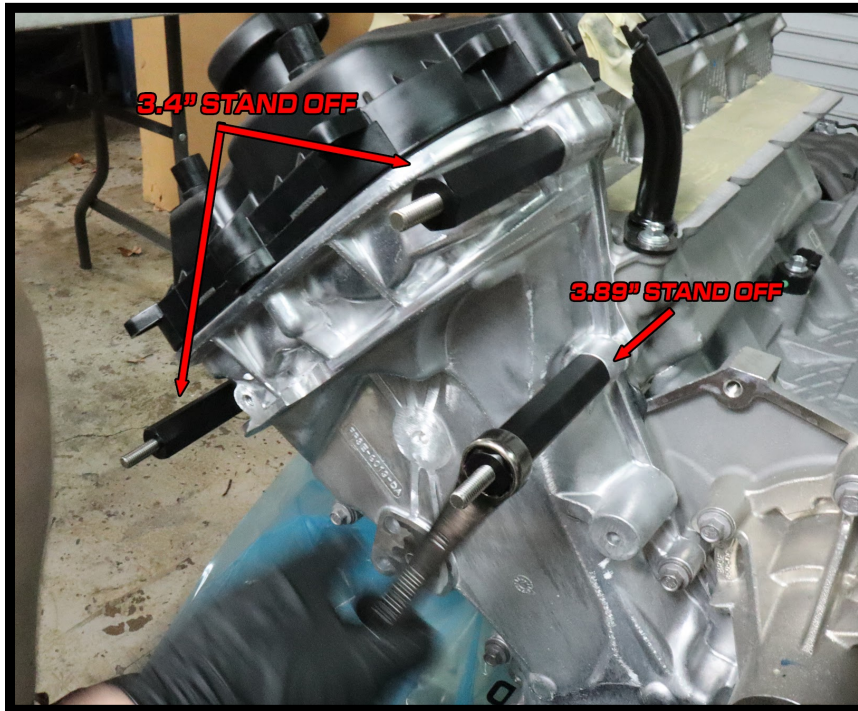
2. Cut a relief into the horizontal rib of the timing cover as illustrated below.
The center of the cut should be 1/4" deep.



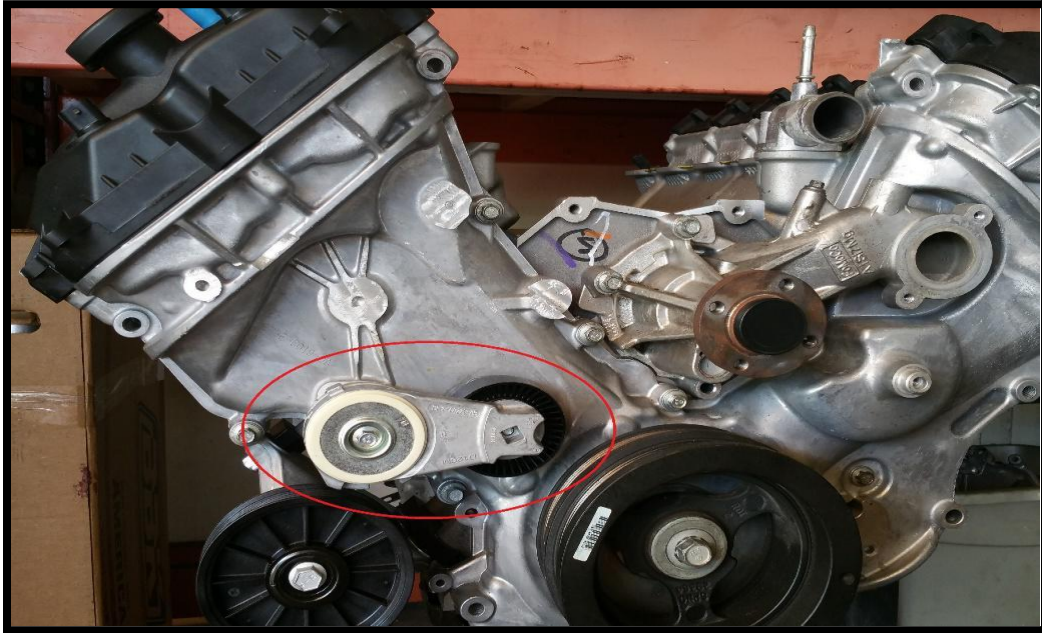
3. Remove the 3 timing cover bolts as illustrated below.



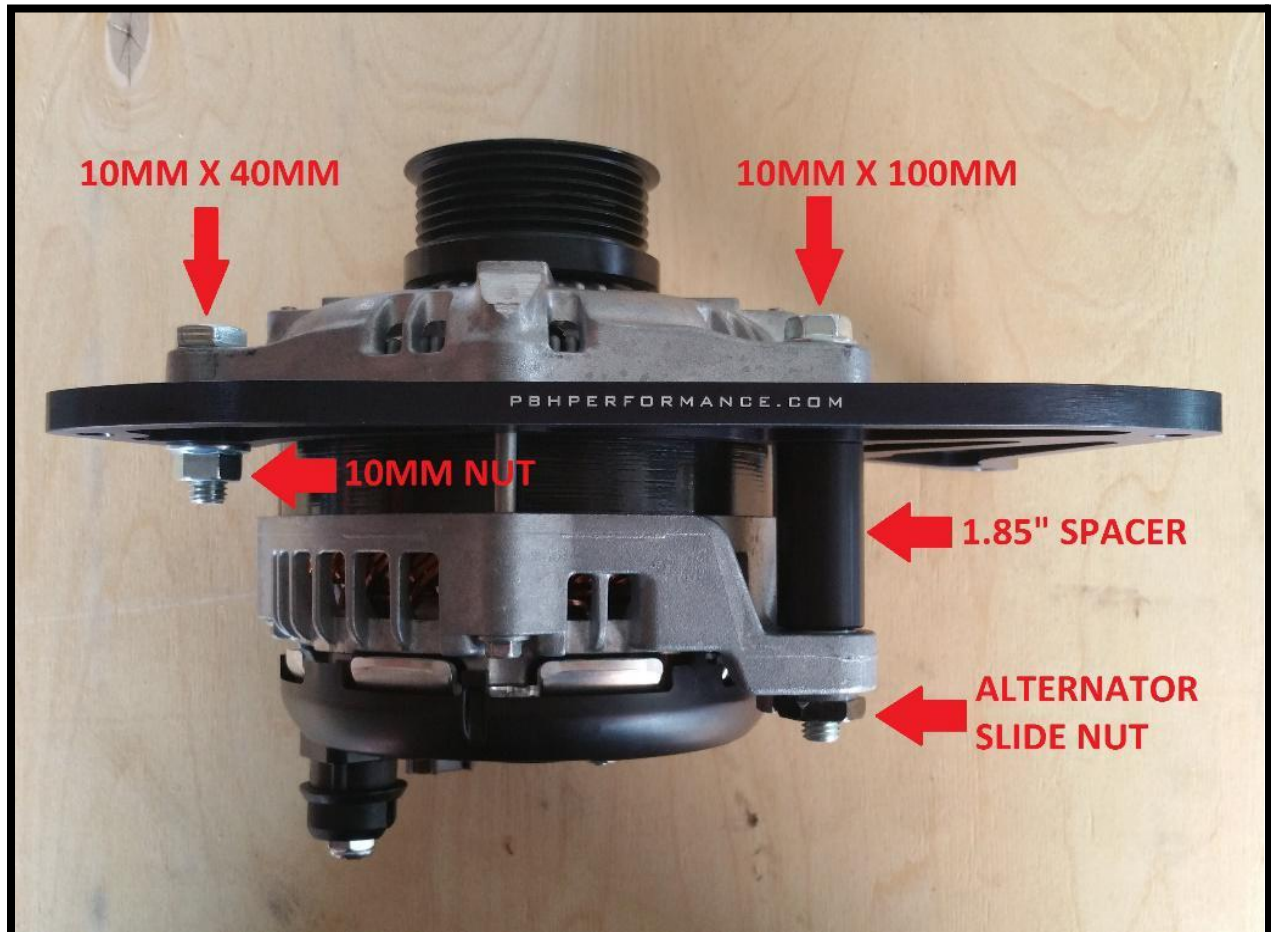
4. Install the three $\frac{3}{4}$ " hex stand-offs (supplied). The orientation is illustrated in the picture below.



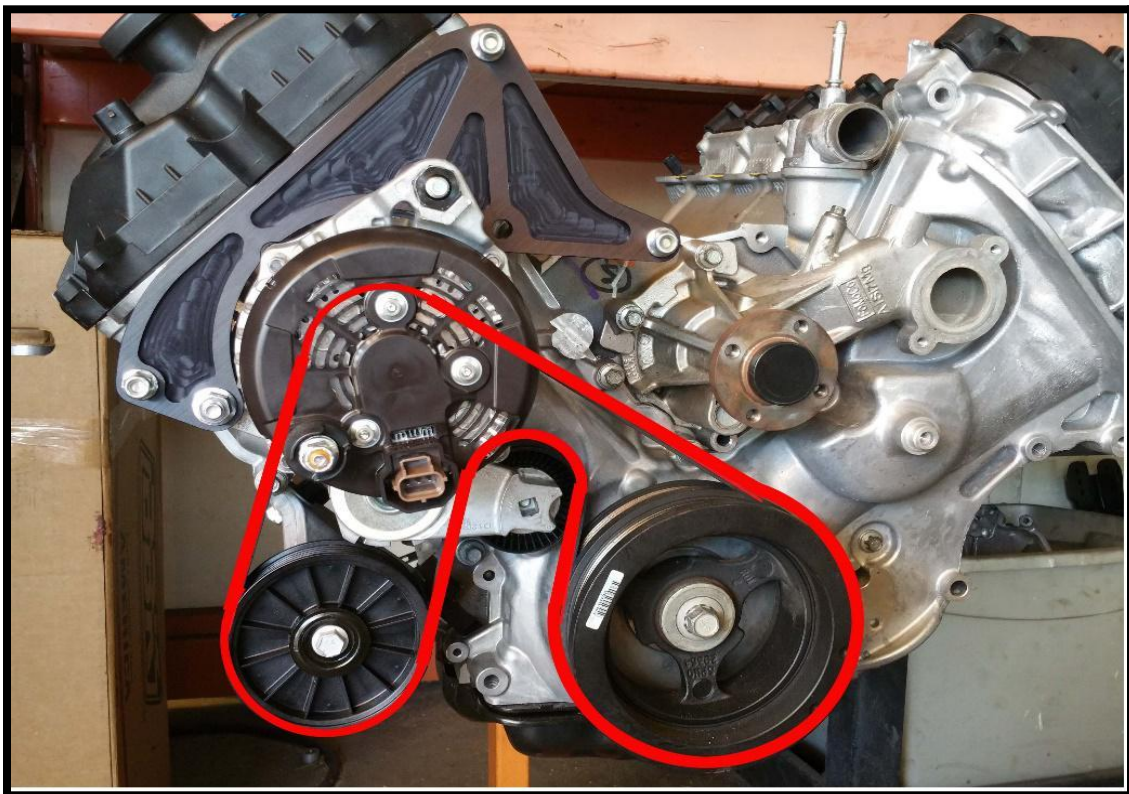
5. Install the driver side tensioner supplied in the kit. #SWAP-4000



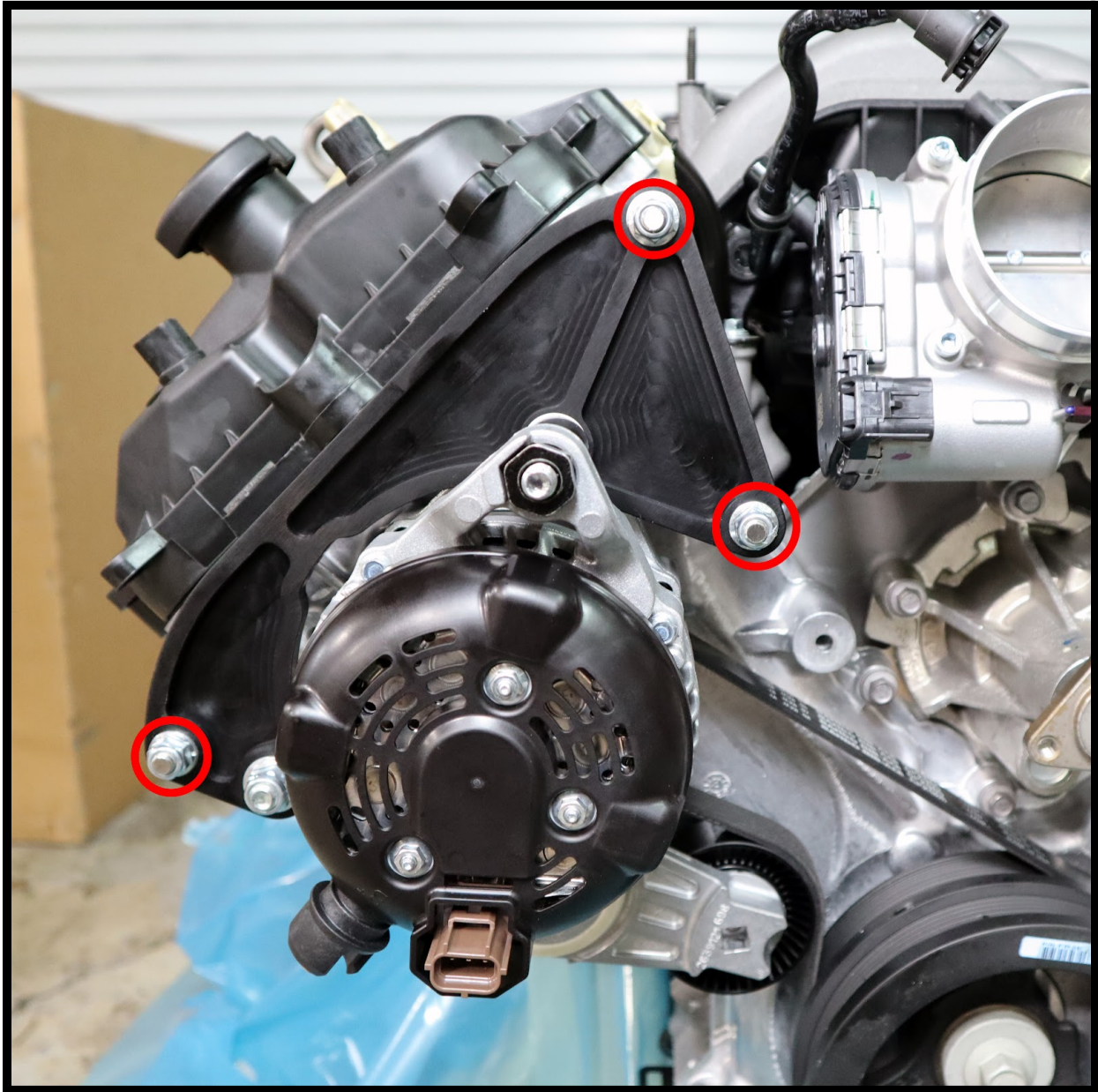
6. Assemble the alternator bracket(#SWAP-10 no01) by attaching the alternator, 1.85' spacer, and hardware as illustrated below. When inserting the 1.85" spacer it may be necessary to press the alternator slide nut out slightly to gain clearance.



7. Route the alternator belt (#SWAP-4209) while installing the assembled alternator bracket leaving the belt off of the A/C compressor pulley. Check clearance between alternator and timing cover. Clearance as necessary. If an AC compressor or delete pulley is not being used, refer to the next diagram.



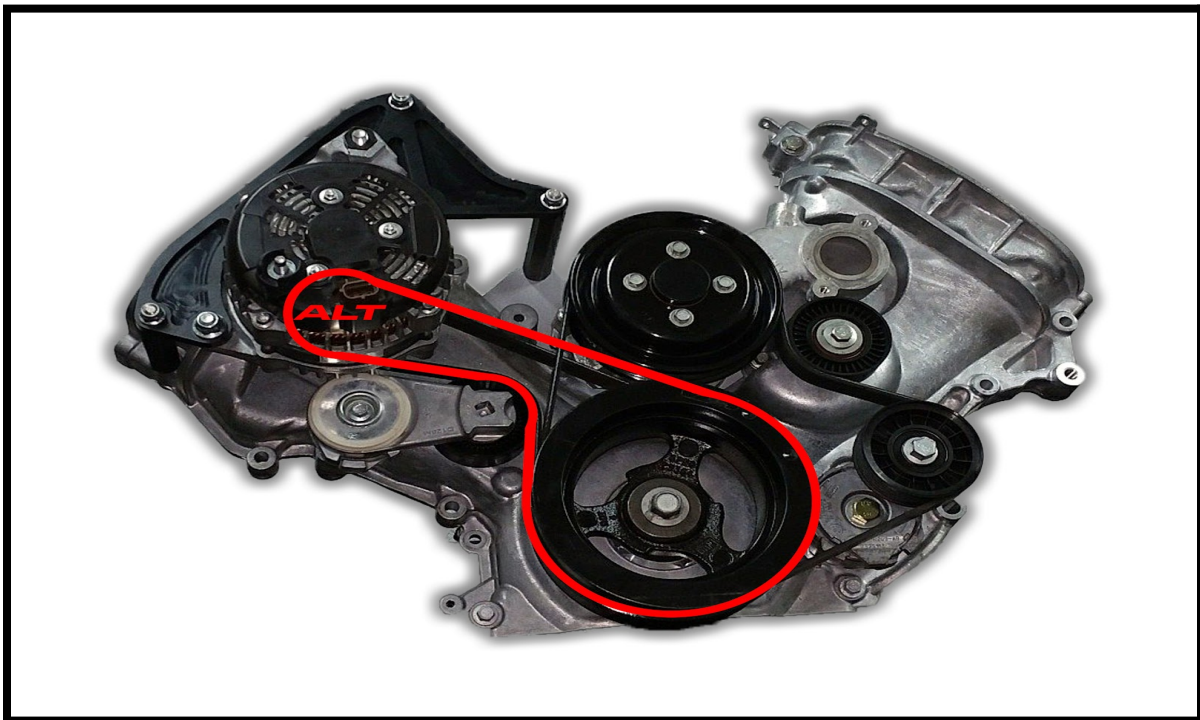
8. Install (3) 8MM flange nuts to secure the alternator bracket to the engine.



9. You can now route the belt around the A/C compressor pulley. Be sure the belt is fully engaged on all pulleys and check for clearance between the belt and any areas that are cut or modified.

NOTE: It may be necessary to cut or grind more material to make clearance for belt.

This belt routing diagram only applies to installations where the AC compressor is not being used. For 2011-14 clutchless alternator pulleys use #SWAP-4208 and for PBH/15-up clutchless alternator pulleys use #SWAP-4214.

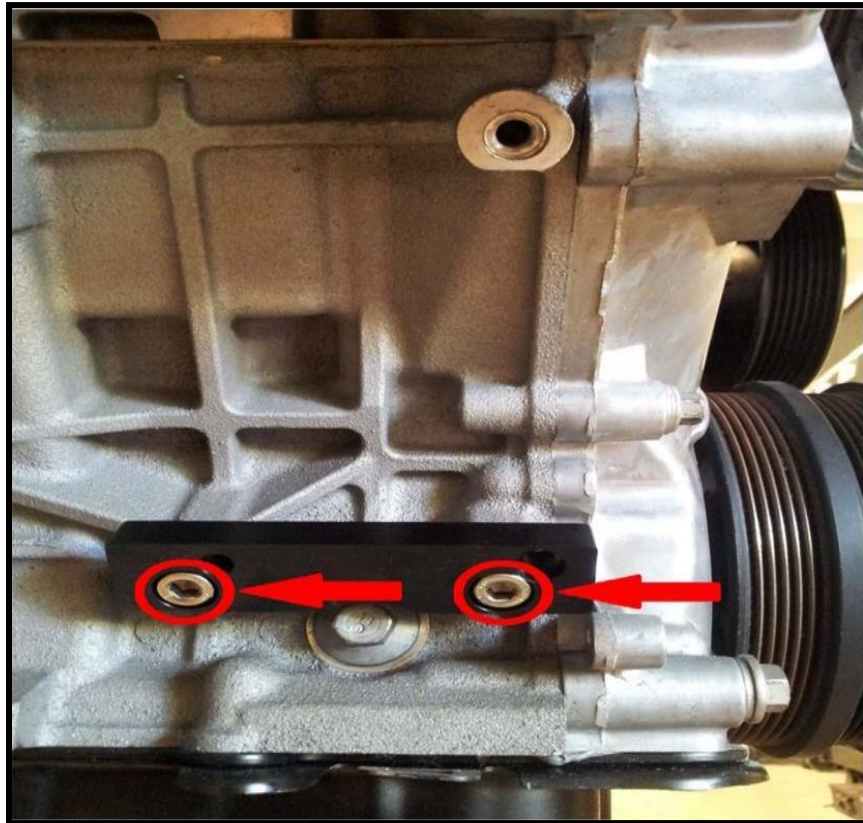


PBH-200 Modular Ford AC Compressor Bracket Installation Instructions

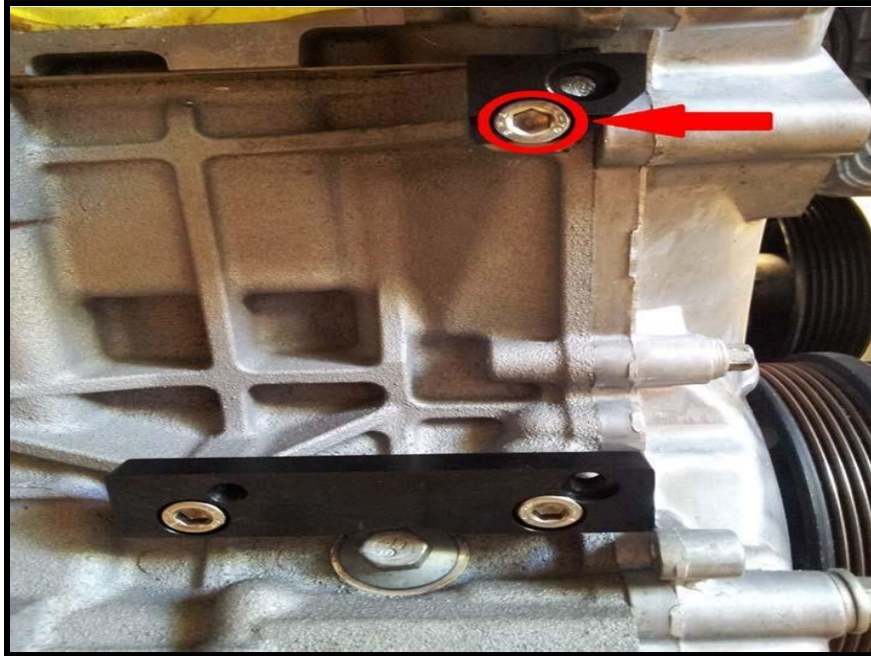
SWAP-2001	1	MOD COMP SHORT BRACKET	SWAP-2002	1	MOD COMP LONG BRACKET
HDW-1032	3	M8-1.25X95MM HEX BOLT	HDW-1033	3	M8-1.25X30MM HEX BOLT

Installing the A/C brackets

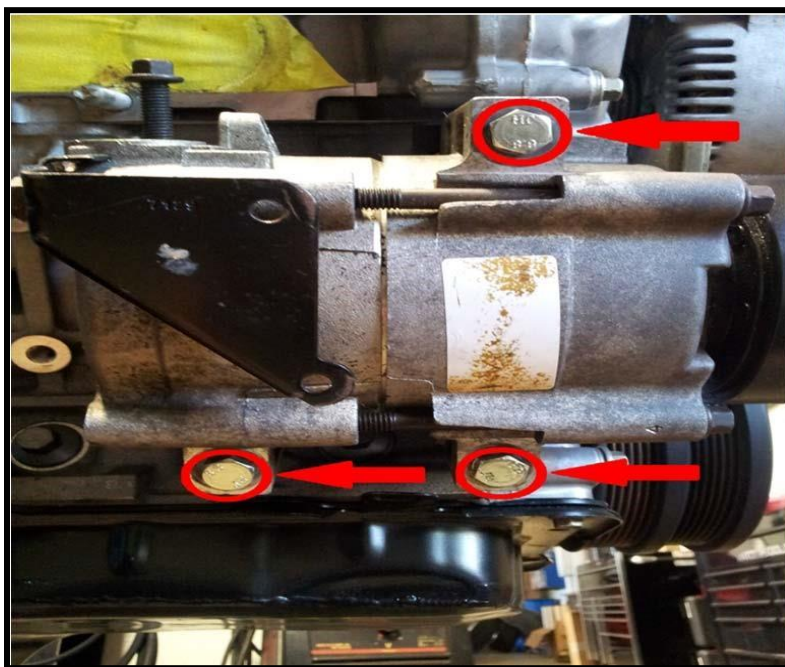
1. Install the lower A/C bracket this is the longer of the two brackets with (4) holes. Place the lower A/C bracket on the passenger side of the engine block over the original A/C mounting holes. With the larger holes of the bracket on the bottom install (2) #HDW-1033 8mm bolts to attach the bracket to the block.



2. Next install the upper A/C bracket. This is the shorter bracket with only two holes. Place the upper A/C bracket over the original A/C mounting hole. With the larger hole on the bottom install (1) #HDW-1033 8mm bolt to attach the bracket. This bracket will need to be squared up to the bottom bracket before tightening.



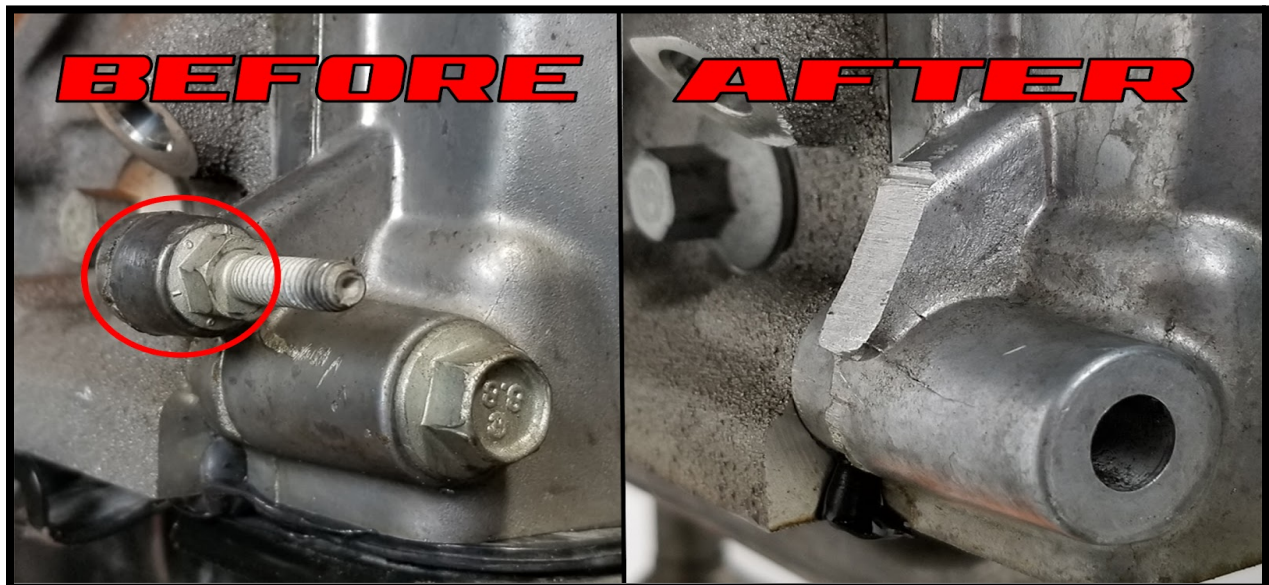
3. Now install the A/C compressor using the supplied (3) #HDW-1032 8mm x 95mm bolts.



PBH-201 Installation instructions for Sanden SD7 AC Compressor Bracket

SWAP-2003	1	SANDEN AC COMP UPPER BRACKET	SWAP-2004	1	SANDEN AC COMP LOWER BRACKET
HDW-1032	1	M8 95MM HEX BOLT	HDW-1043	1	M8 25MM FLANGE BOLT
HDW-1062	2	M8 25MM FLATHEAD BOLT	HDW-1031	2	M8 55MM FLANGED BOLT

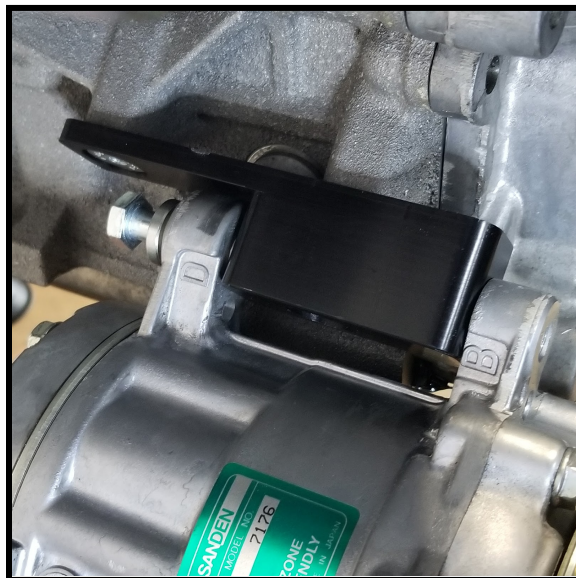
1. Locate the illustrated tab on the lower passenger side of the oem timing cover. With an air saw or grinder remove enough material from the tab to ensure the lower bracket will sit flat against the block when fastened. An angular cut is needed to allow the bracket to install properly.

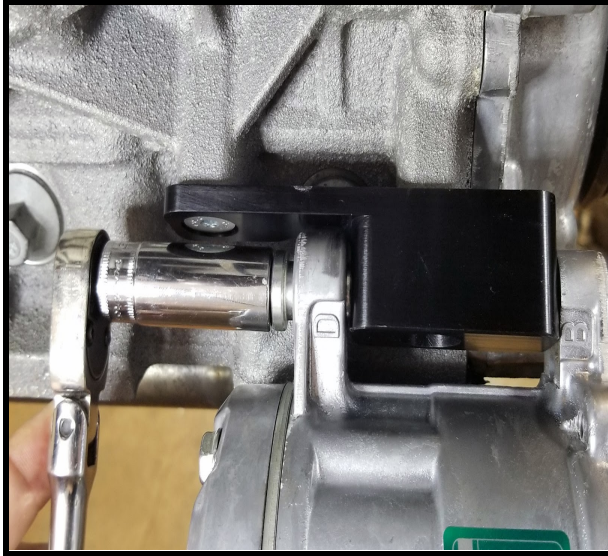


2. Place the lower bracket(SWAP-2004) up to the engine block over the two factory compressor mounting holes. The thicker end of the bracket faces the front of the engine. Use (2) of the M8 flathead bolts(HDW-1062) bolts to fasten the lower bracket to the block.

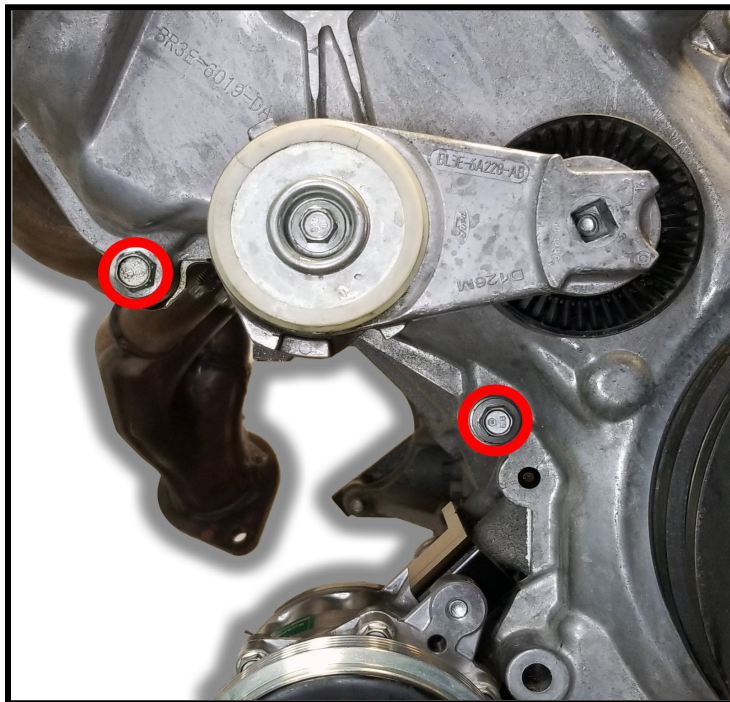


2. Position the AC compressor with the fittings facing upward and place over the lower bracket. The thick end of the bracket will fit in between the lower front and rear ears of the compressor. Insert the M8 95mm hex bolt(HDW-1032) through the rear ear of the compressor and fasten to the front ear of the compressor.





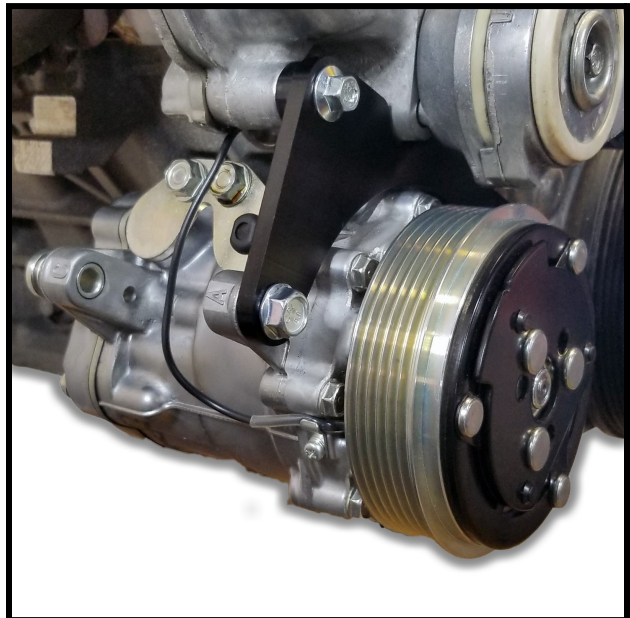
3. Remove the two timing cover bolts illustrated below.



4. With the two OE timing cover bolts removed, apply the PBH upper compressor bracket(SWAP-2003) and fasten to the timing cover with two M8 55mm flanged bolts(HDW-1031) provided in the kit.



5. Rotate the compressor upwards to align the threaded upper forward mounting ear on the unit with the outermost mounting point on the upper compressor bracket. Once aligned fasten with supplied M8 25mm flanged bolt(HDW-1043).



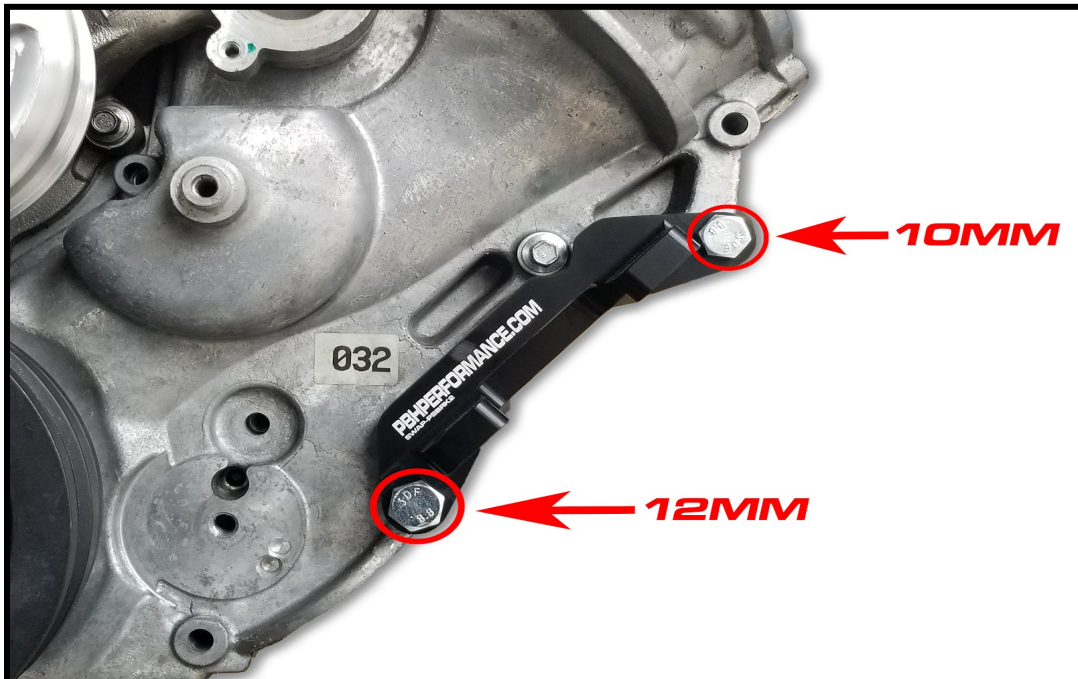
PBH-300 Installation Instructions for Standard Width PBH Modular Ford
Power Steering Pump Bracket

PARTS LIST FOR #PBH-300

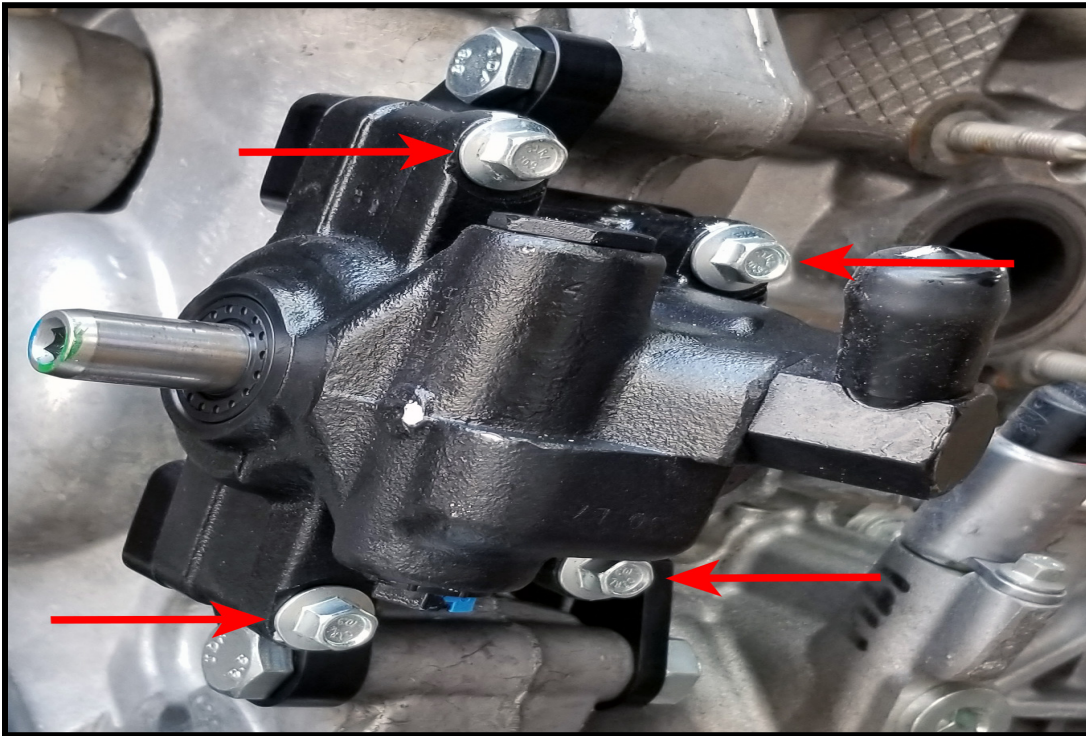
SWAP-3000	1	STANDARD PROFILE PS BRACKET	HDW-1031	4	M8-1.25X55MM FLANGED BOLT
HDW-1026	1	M10-1.5X30 HEX BOLT	HDW-1028	1	M12-1.75X90 HEX BOLT
HDW-1027	1	M10X20MM WASHER	HDW-1030	2	M12X25MM WASHER
HDW-1029	1	M12X1.75 HEX NUT			

INSTALLATION OF THE POWER STEERING PUMP BRACKET

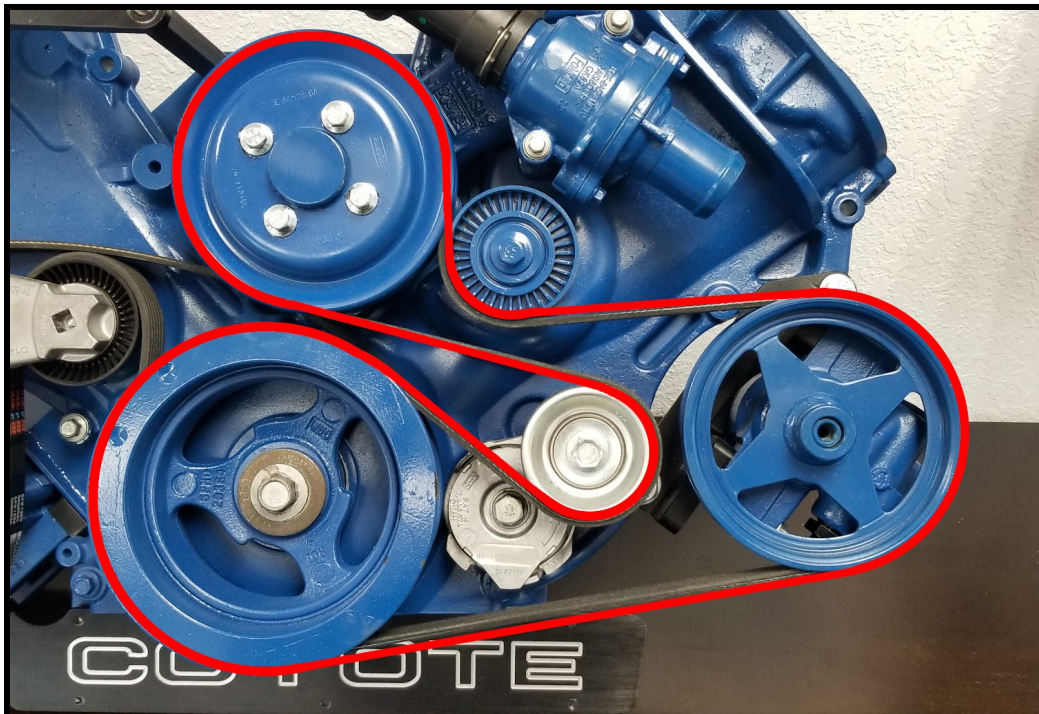
1. Install the power steering bracket using the hardware provided (1) #HDW-1026 10mmx30mm bolt with (1) #HDW-1027 10mmx20mm OD washer in the top hole, (1) #HDW-1028 M12x90mm bolt in the bottom hole and fasten with (1) #HDW-1029 M12 hex nut and (2) #HDW-1030 M12 washer on each end of the bolt.



- Now you can install the power steering pump using (4) #HDW-1031 8mm x 60mm bolts.



- Route the supplied belt as seen in the diagram below.

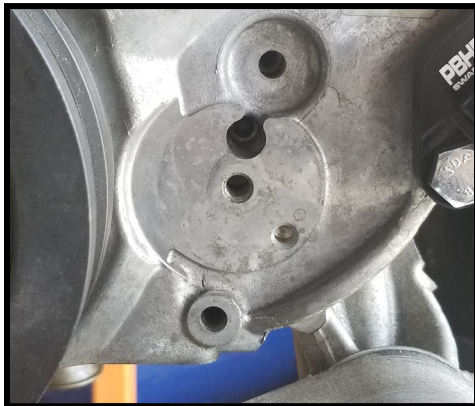


PBH-301 Installation instructions for Low Profile PBH Speed Drive Modular Ford Power Steering pump bracket

PBH-301 LOW PROFILE POWER STEERING BRACKET

SWAP-3001	1	PS LOW PROFILE	HDW-1031	4	BOLT M8X60MM FLANGED
HDW-1029	1	PS M12-1.75 HEX NUT	HDW-1030	2	M12X24MM OD WASHER
HDW-1027	1	PS M10X20MM WASHER	HDW-1026	1	PS BOLT M10-1.5X30MM
HDW-1028	1	PS BOLT M12-1.75X90MM HEX	SWAP-3200		TENSIONER CLOCKING TOOL

PBH TENSIONER CLOCKING INSTRUCTIONS



1. Before installing the driver side tensioner, locate the mounting location on the timing cover.



2. Locate the supplied PBH tensioner clocking tool supplied in our Low Profile Power Steering Bracket kit.



3. Align the clocking tool dowel with the factory hole in the timing cover. Using the supplied Power Steering bracket bolt #HDW-1026 M10x30mm, bolt the clocking tool to the timing cover.



4. Once fastened, use a center punch to mark the center of the hole and proceed to drill the timing cover with a $17/64$ " drill bit. Drill $3/8$ " (.375) deep into the timing cover. There is over 1" of material in this area so if you go deeper it will not damage the cover.

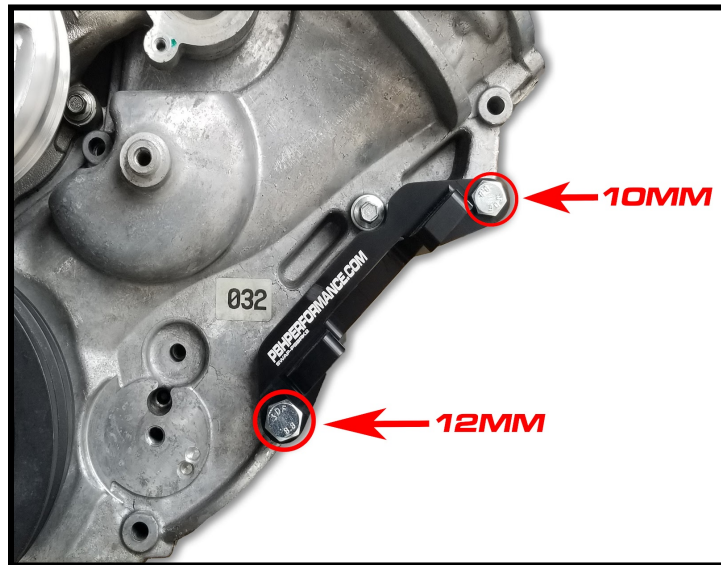


5. Remove the locking tool. Do not discard the bolt as it will be used to mount the power steering pump bracket. Now with the new guide hole drilled, you are ready to install the tensioner.

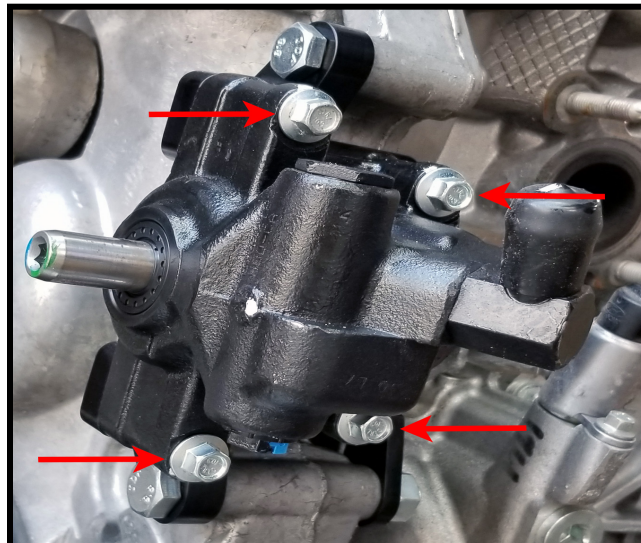


6. Align the supplied tensioner with the new guide hole and fasten to the timing cover.

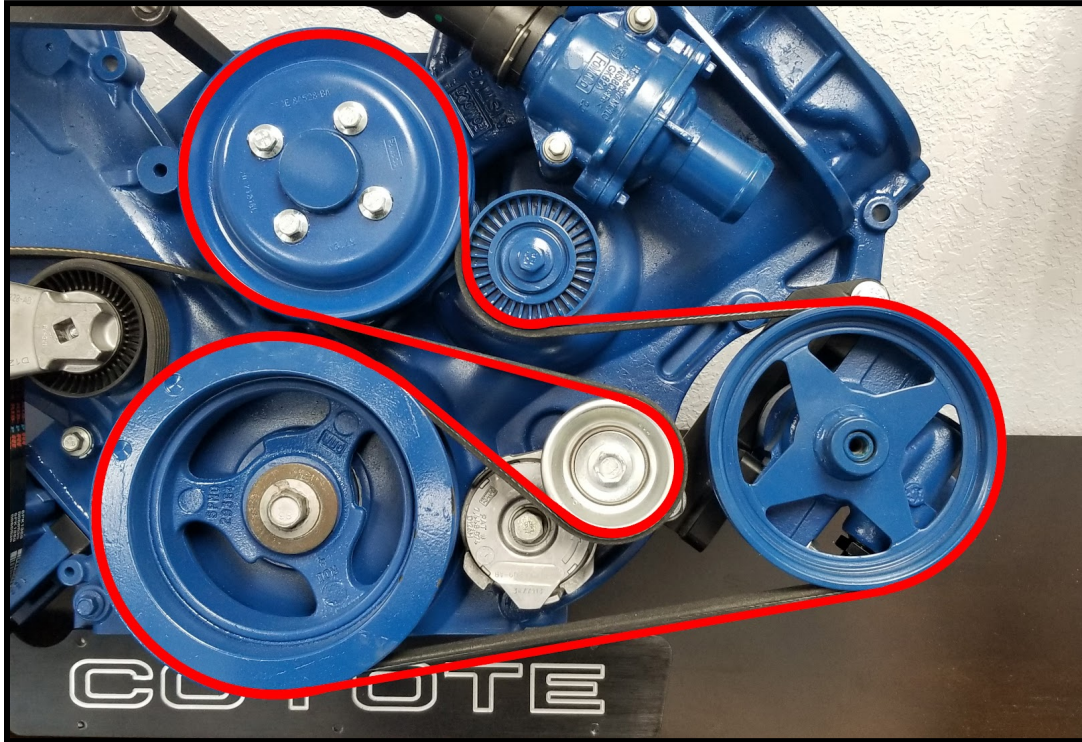
7. Install the power steering bracket using the hardware provided (1) #HDW-1026 10mmx30mm bolt with (1) #HDW-1027 10mmx20mm OD washer in the top hole, (1) #HDW-1028 M12x90mm bolt in the bottom hole and fasten with (1) #HDW-1029 M12 hex nut and (2) #HDW-1030 M12 washer on each end of the bolt.



8. Now you can install the power steering pump using (4) #HDW-1031 8mm x 60mm bolts.



9. Route the supplied belt as seen in the diagram below.



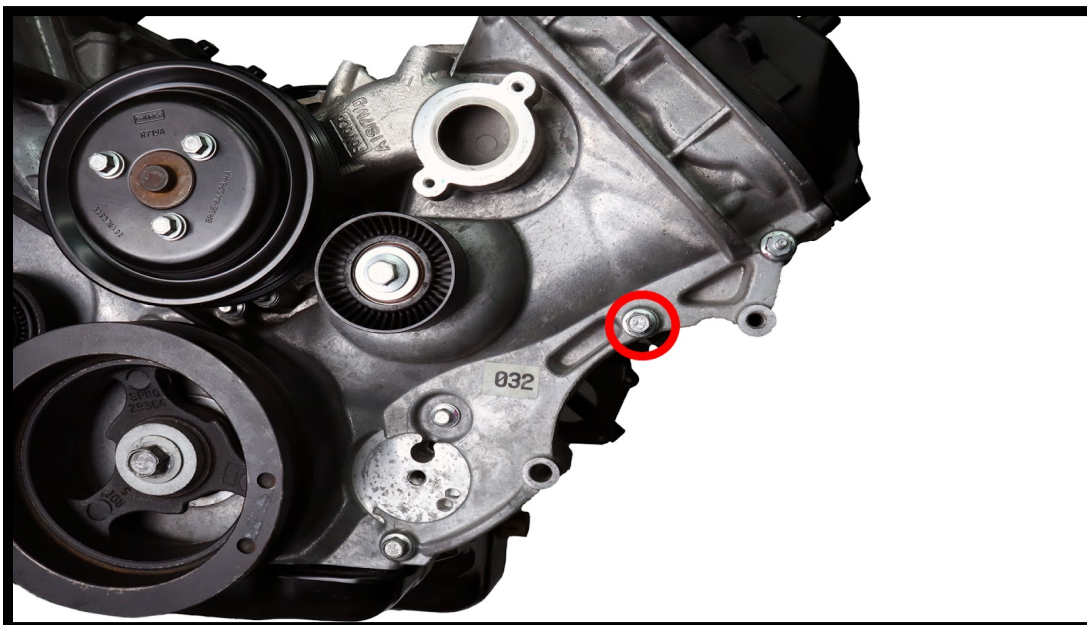
PBH-304 REVOLVER GM TYPE II POWER STEERING PUMP BRACKET

SWAP-3002	1	REVOLVER BRACKET	HDW-1024	2	M8X1.25 FLANGED LOCK NUT
HDW-1026	1	M10X1.5 HEX BOLT	HDW-1027	1	M10X20MM WASHER
HDW-1028	1	M12X1.75 HEX BOLT	HDW-1029	1	M12X1.75 HEX NUT
HDW-1030	2	M12X25MM WASHER	HDW-1092	3	M8X80MM FLANGED BOLT

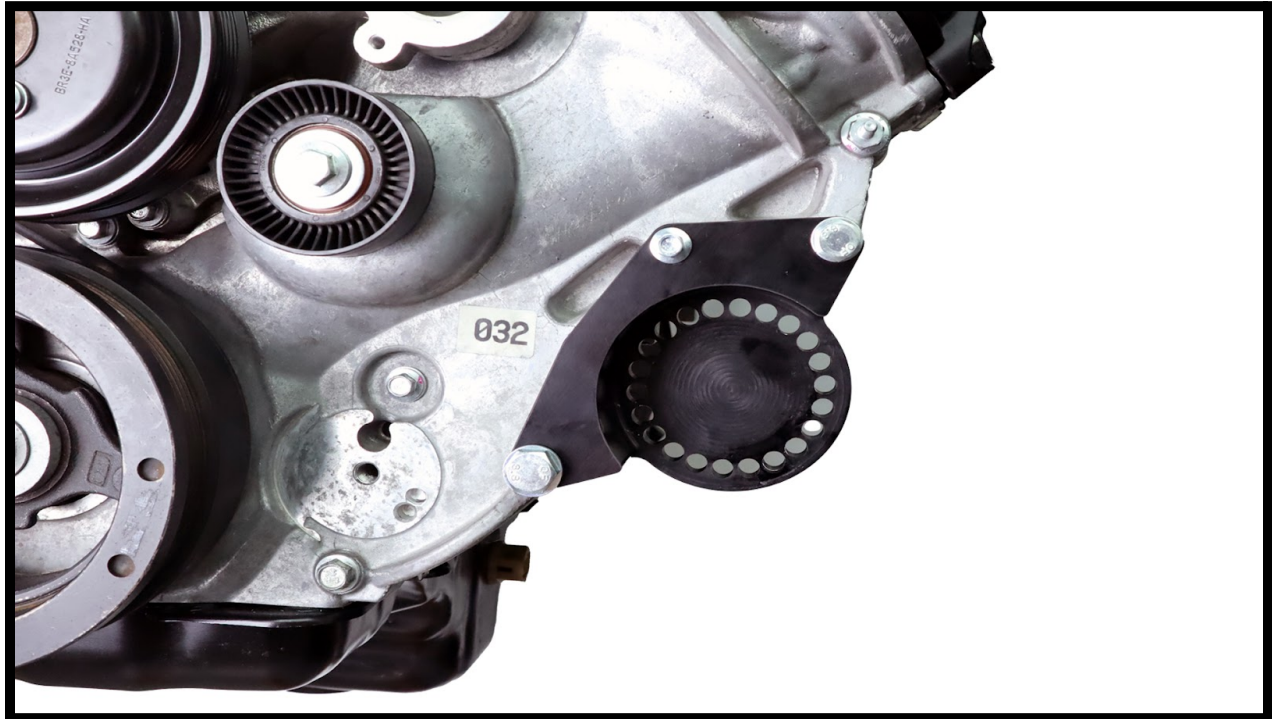
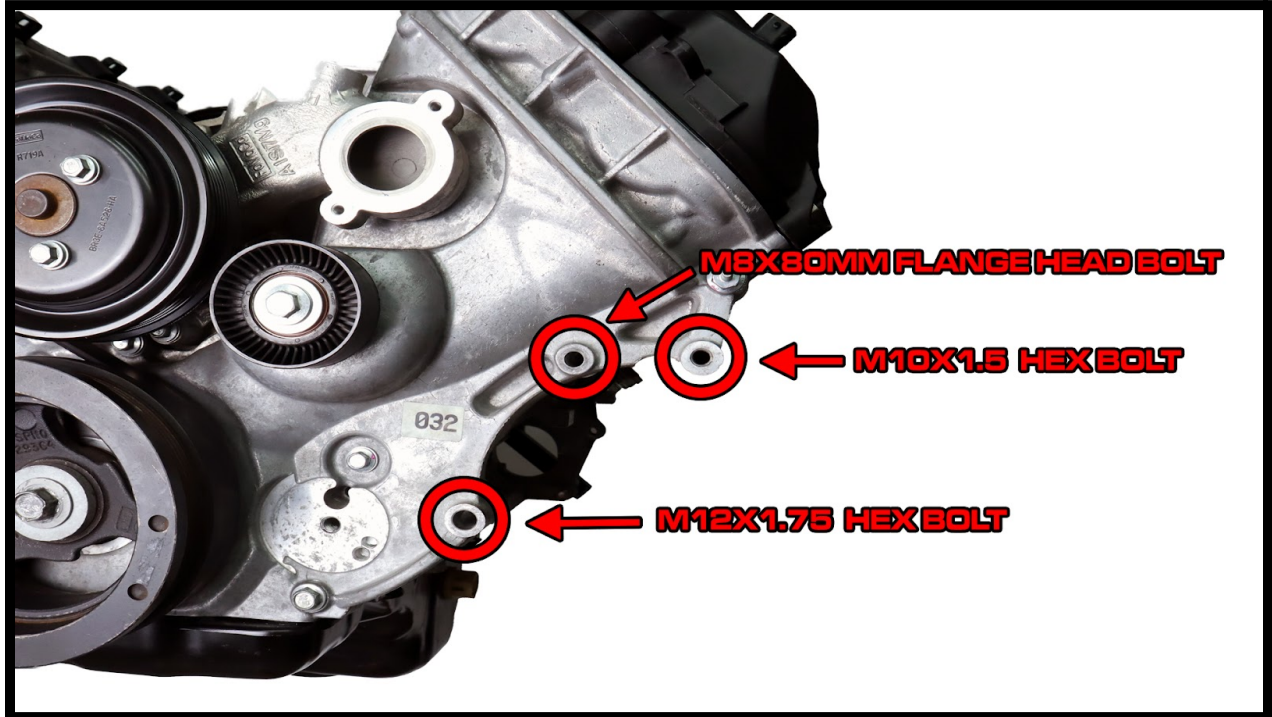
BEFORE INSTALLATION, REVIEW PARTS CONTENTS OF KIT.

THE INSTALLATION OF THIS POWER STEERING BRACKET IS DONE IN PLACE OF THE OEM ALTERNATOR ON A 5.0L COYOTE ENGINE. TO BEGIN, REMOVE THE ALTERNATOR AND CORRESPONDING HARDWARE. ONCE THAT IS COMPLETED, BEGIN AT STEP ONE OF THIS MODULE.

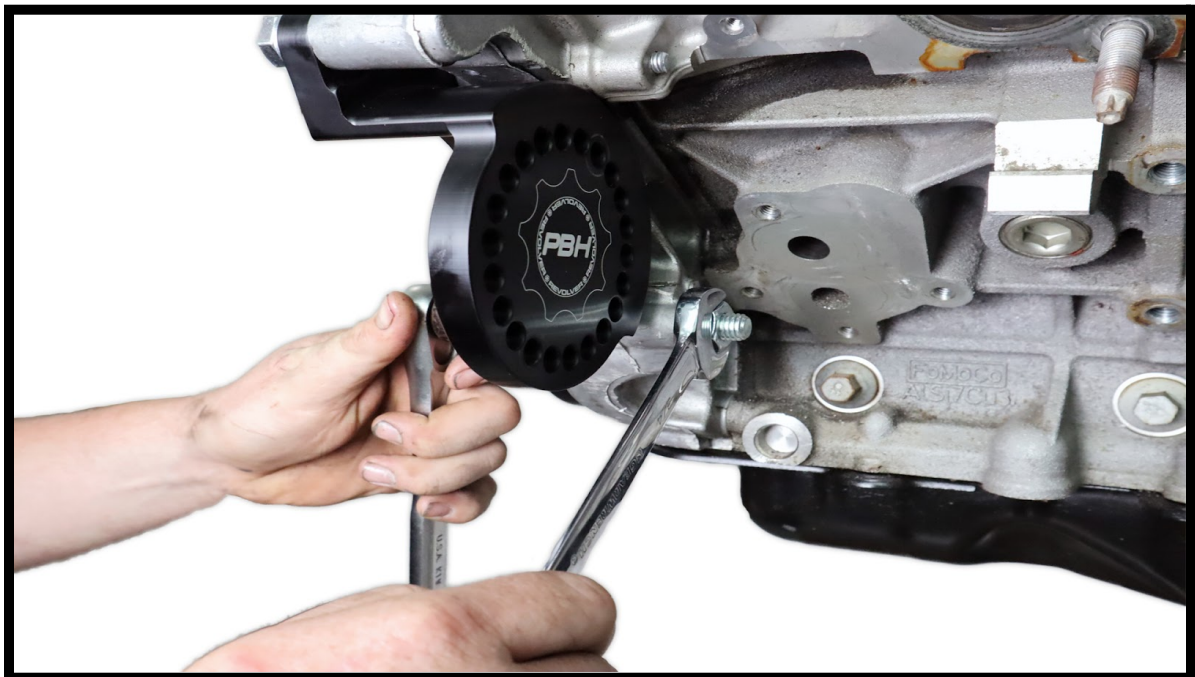
1. Remove the timing cover bolt outlined in the photo below



2. Locate the hardware outlined below from the kit and mount the bracket onto the engine. You will use supplied washers on both the M10 and M12 hardware.



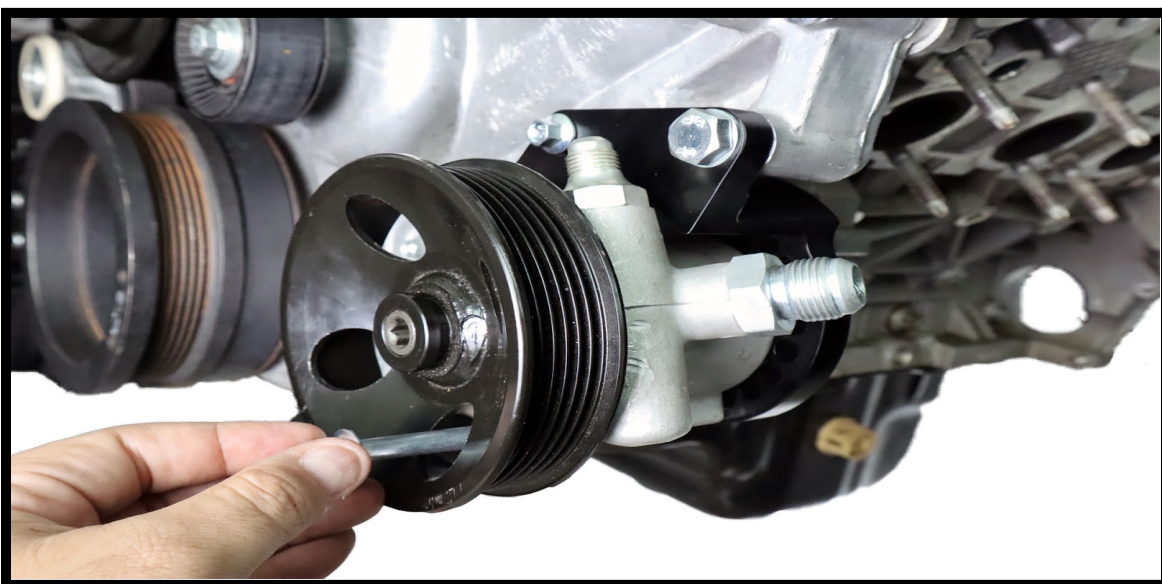
3. Fasten the bracket to the timing cover. The larger M12 hardware is a through bolt and requires tightening of the nut with a combination of wrench and socket. Make sure to install an M12 washer with a nut.



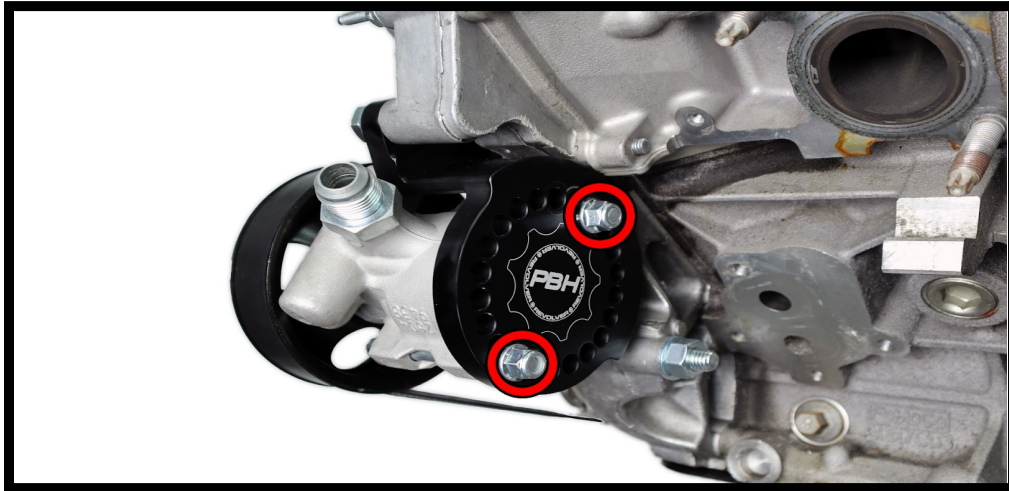
4. With the bracket installed it is time to determine the mounting position of the pump. The Revolver bracket allows the pump to be clocked in many positions. When choosing yours make sure that the pump is centered on the bracket. A quick way to determine this is to count **10** open holes between each 8mm bolt.



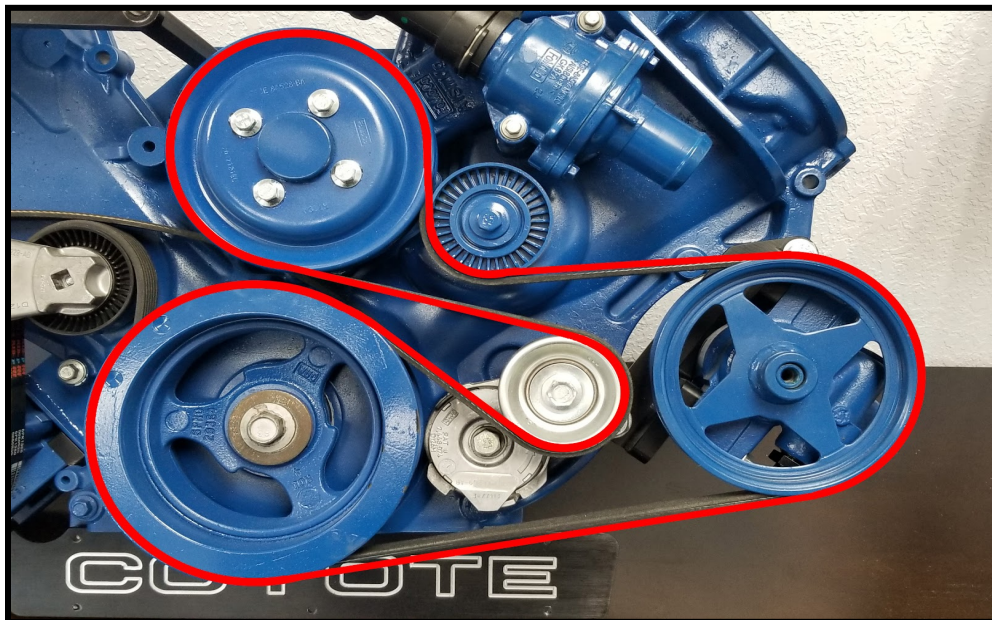
5. Once the mounting position is chosen, fasten the pump to the bracket using the two M8 flanged bolts. The bolt will go through the non threaded mounting ears on the pump and through the bracket.



6. Fasten the pump to the bracket by installing the two M8 Flanged lock nuts onto the M8 bolts.



7. The pump is now installed. Proceed to mount the driver side belt tensioner to the timing cover and route the belt as indicated on the last page of the instructions.



*BELT ROUTING REPRESENTATION, COMPONENTS MAY LOOK DIFFERENT.

BELTS OFFERED IN ALL NA SPEED DRIVE SYSTEMS

SWAP-4206	72"	STANDARD PROFILE MODULAR FORD POWER STEERING BELT
SWAP-4208	37.4"	AC DELETE BELT WITH SMALL DIAMETER ALT PULLEY
SWAP-4209	53.5"	ALTERNATOR BELT FOR USE WITH MODULAR FORD AC COMPRESSOR
SWAP-4210	68.7"	LOW PROFILE MODULAR FORD POWER STEERING PUMP BELT
SWAP-4214	38"	AC DELETE BELT WITH PBH ALTERNATOR PULLEY; ALT RELOCATION WATER PUMP BELT
SWAP-4217	52.5"	ALTERNATOR BELT FOR USE WITH SANDEN SD7 AC COMPRESSOR
SWAP-4227	70"	GM TYPE II POWER STEERING BELT