



LS-1 Alternator Only Serpentine Kit

Kit # 20020

LS-1 Alternator & Power Steering Only Serpentine Kit

Kit # 20025

20021 Alternator Bracket				
1-20021-A	Main Alternator Bracket			
1-740-A	Idler Pulley			
1-302-A	ldler Cap			
3-S022	8-32" x 3/8" SHCS			
1-S321	3/8" x 1-3/4" Hex Bolt			
3-S547	M8 x 140mm SHCS			
1-S551	M8 x 25mm SHCS			
1-S568	M10 x 140mm SHCS			
1-S666	3/8" Washer			
3-TP3-2.150	Tube Spacer (non p/s only)			
1-TP7-2.560	Tube Spacer			

Pulleys	
1-6361-A	Crank Pulley
1-6362-A	Water Pump Pulley
1-650-A	P/S pulley ( <b>20025 only</b> )
1-306-A	Alternator Cap
1-221-A	Alternator Fan
1-206-A	Alternator Pulley
3-S028	8-32" x 1" SHCS
3-S144	5/16" x 7/8 SHCS ( <b>20025</b> )
4-S186	5/16" x 7/8" SHCS (Fine)
3-S248	3/8" x 1" SHCS
1-S685	Lock Washer

20022 Power Steering Bracket (20025 only)				
1-20022-A	Main Mounting Bracket			
1-20019-A	Rear Support Bracket			
2-S550	M8-1.25 x 20mm SCHS			
3-TP3-1.580	Tube Spacer 1.580"			
2-TP7900	Tube Spacer .900"			
1-AC3500	Tube Spacer .500"			
2-S590	M10-1.5 x 45mm SCHC			
1-S543	M8-1.25 x 40mm Hex Bolt			
1-S660	5/8"x 3/4" washer			

20029 Tensioner Bracket			
ioner Bracket			
80mm SHCS			
x 100mm SHCS			
spacer .150"			

Accessories	
1-P116	.LS Water Pump
1-P344	.P/S pump w/Hub ( <b>20025</b> )
1-P576	.Alternator
1-P752	.Belt Tensioner

\*NOTE: Inspect all items for any imperfections or shortages of items. If any of those instances do come up, please call our tech line that's listed below. If you prefer a color copy of these instructions, please refer to our website listed below and click the instructions tab on your products web page. Some pulleys might have powdercoat build up and it may be necessary to remove with light grit sandpaper. These pulleys include alternator inner hole, and any pulley with a pilot shaft or locator hole.

# SHCS = socket head cap screw



Install required hub adapter (354, 355, 358 ect.) to factory balancer. Remove stock 16mm bolt, and place adapter onto balancer. Apply loc-tite to supplied 16mm x 130mm bolt (S569) and install with new 11/16" (S686) washer and tighten down to secure hub. The recommended torque is 74 ft lbs.

\*NOTE: Hub adapters must be purchased separately based off your engines factory balancer. Bolt and washer are included in hub adapter, NOT in the serpentine kit.

# Photo-2

Install the P116 water pump and gasket on the passenger side first, using three (S554)M8-1.25 x 80mm SHCS as shown. Leave slightly loose until driver side is secured.

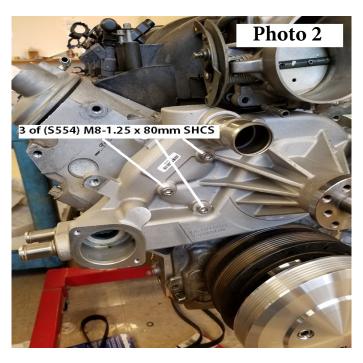
# Photo-3 Non power steering

For the non power steering kits start by inserting gasket between water pump and block and installing alternator bracket 20021-A with three (TP3-2.150) spacers between water pump and bracket. Secure with three (S547)M8 x 140mm SHCS. Leave slightly loose for now and move to photo 7.

# Photo 3 With power steering

Start by inserting gasket between water pump and block and installing alternator bracket 20021-A and stacking bracket 20022-A behind the alternator bracket. Use three (TP3-1.580) spacer tubes between the power steering bracket and the water pump. Secure with three M8 x 140mm SHCS (S547). Leave slightly loose for now.

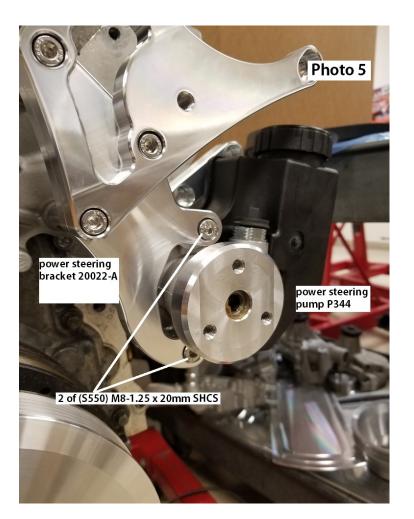








# Photo 5 Mount the power steering pump (P344) to the power steering bracket. Use two M8 x 20mm SHCS (S550).

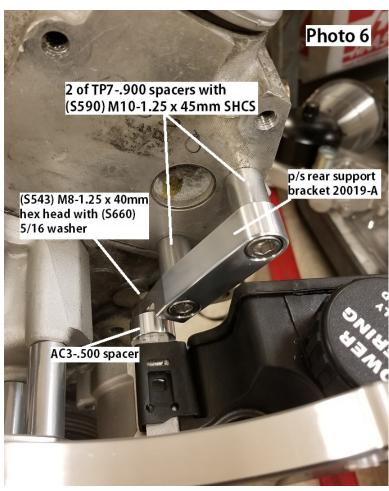


## Photo 4

Install a AC3-.500 spacer in between 20019-A rear support bracket and backside of power steering pump with a (S543) M8-1.25 x 40mm hex head bolt and (S660) 5/16 washer. Leave bolt loose enough so bracket can pivot.

## Photo 6

Install rear support bracket (20019-A) to cylinder head with two (S590) M10-1.5 x 45MM SHCS and two TP7-.900 tube spacers in between bracket and cylinder head.



To mount the alternator (P576) to the main bracket, In the upper bracket hole use a (S551) M8 x 25mm SHCS. In the outer bolt hole use the provided (S568) M10 x 140mm long SHCS. Between the head and the rear of the alternator use the (TP7-2.560) tube spacer. Slide the bolt through the main bracket, alternator and spacer tube then thread into the outer tapped hole of the head. Now Install the alternator fan 221-A and alternator pulley 206-A with (S685) lock washer then alternator nut. Torque to 70 ft lbs. Now install the alternator nose cover 306-A with three (S028) 8-32" x 1" SHCS as shown. Next install the 740-A idler pulley to the alternator bracket using the provided (S321)3/8 x 1-3/4" hex bolt and also a 3/8" washer (S666). Install 302-A nose cover to idler with three (S022) 8-32 x 3/8" SHCS. Now secure all the mounting bolts that secure water pump to the block from steps photo 2 & 3. Also secure the (S543)hex bolt from photo 4



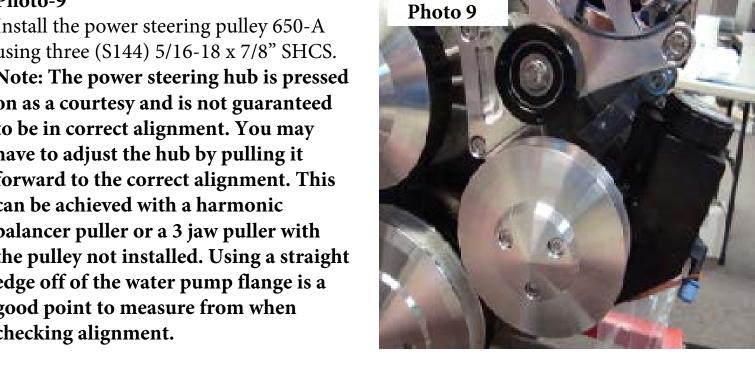


# Photo-8

Install the crank pulley 6361-A onto the hub with three (S248) 3/8" x 1" SHCS.



Install the power steering pulley 650-A using three (S144) 5/16-18 x 7/8" SHCS. Note: The power steering hub is pressed on as a courtesy and is not guaranteed to be in correct alignment. You may have to adjust the hub by pulling it forward to the correct alignment. This can be achieved with a harmonic balancer puller or a 3 jaw puller with the pulley not installed. Using a straight edge off of the water pump flange is a good point to measure from when checking alignment.



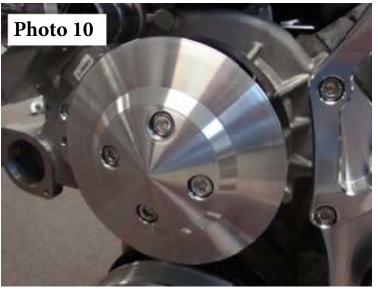
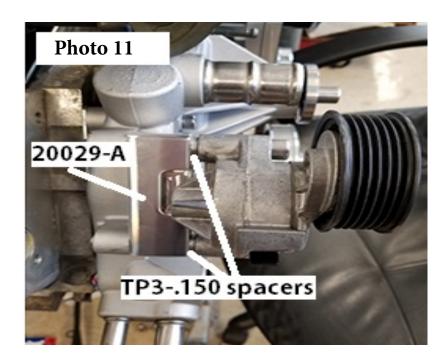


Photo-10 Install the water pump pulley 6362-A with four (S186) 5/16" x 7/8" SHCS.

# Photo-11

On passenger side of water pump install the provided belt tensioning unit (P752) to the casted threaded accessory holes. Between the water pump and tensioner use the provided bracket (20029-A) bracket and two of (TP3-.150) spacers and then secure with (S574) M10 x 100mm SHCS as shown.



For kit <u>20025</u> install the **69**" **Dayco (5060690)** belt, by using the tensioner's 15mm bolt, pulling up **clockwise** on tensioner and route belt according to picture.

\*NOTE: Due to belt variations in manufacturing it may be necessary to get belts that are either larger or smaller than we recommend. We recommend using Dayco manufactured belts.





For kit <u>20020</u> install the 64-1/2" **Dayco** (5060645) belt, by using the tensioner's 15mm bolt, pulling up **clockwise** on tensioner and route belt according to picture.

\*NOTE: Due to belt variations in manufacturing it may be necessary to get belts that are either larger or smaller than we recommend. We recommend using Dayco manufactured belts.





#### MARCH PERFORMANCE, INC. • 16160 PERFORMANCE WAY • NAPLES, FLORIDA 34110 LIMITED WARRANTY

March Performance warrants to the original retail purchaser that for a period of ninety (90) days from the date of purchase, March Performance will repair or replace, at their option, any Product, which is found to be defective in material or workmanship.

### **Exclusions from Warranty Coverage**

March Performance does not warrant any Product that is damaged from abuse, misuse or misapplication or not used for its intended purposes.

This Limited Warranty does not cover or apply to any damage or loss sustained to the engine or any other parts which may have been caused by the defective Product and does not cover or apply to any personal injury, labor charges or any other incidental costs for damages caused by the defective Product, THIS IS THE ONLY EXPRESS WARRANTY GIVEN WITH RESPECT TO YOUR PRODUCT, ALL OTHER EXPRESS WARRANTIES. GUARANTEES, OR STATEMENTS REGARDING THE PRODUCT, WHETHER WRITTEN OR VERBAL, ARE HEREBY DEEMED NULL AND VOID AND OF NO EFFECT.

Normal wear and tear and damage to the Product not caused by March Performance are also excluded from this Warranty.

#### DISCLAIMER OF OTHER WARRANTIES

EXCEPT TO THE EXTENT PROHIBITED BY APPLICABLE LAW, ANY IMPLIED WARRANTY WHETHER OF MERCHANTABILITY, FIT-NESS FOR A PARTICULAR PURPOSE, OR WARRANTY, SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY WILL LAST SO THAT THE PRECEDING LIMITATION MAY NOT APPLY TO YOU.

#### **Limitation on Remedies**

REPAIR OR REPLACEMENT AS PROVIDED IN THIS WARRANTY IS YOUR EXCLUSIVE REMEDY. MARCH PERFORMANCE SHALL NOT BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGE FOR BREACH OF ANY EXPRESS OR IMPLIED WARRANTY ON THE PRODUCT. SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OF CONSEQUESTIAL DAMAGES SO THE PROCEEDING LIMITATIO OR EXCLUSIONS MAY NOT APPLY TO YOU. YOU HAVE NO RECOURSE OR REMEDY FOR DAMAGE OR DEFECT CAUSED BY MISUSE, ABUSE OR NEGLIGENCE.

THIS WARRANTY GIVES YOU SPECIFIC RIGHTS AND YOU MAY ALSO HAVE OTHER RIGHTS, WHICH MAY VARY FROM STATE TO STATE.

#### **Your Responsibilities:**

- 1. Use and install the Product only for its intended purpose.
- 2. To avail yourself of this Limited Warranty, return the Product with a copy of the paid receipt, postage paid to:

MARCH PERFORMANCE 16160 PERFORMANCE WAY

- NAPLES, FL 34110
- 3. When returning the Product, you must follow the directions set forth on the Warranty/Return Form on the reverse side of this Limited Warranty. If you no longer have the Warranty/Return Form, one may be obtained by contacting March Performance during normal business hours at: (888) 729-9070.
- 4. Shipping and/or transportation costs returning the Product to March Performance and any damage caused during shipping are your responsibility. March Performance will pay for shipping and/or transportation costs incurred in returning the Product to you.

#### LIMITED WARRANTY WARRANTY/RETURNS FORM

No product mounted is considered for credit unless it is a manufacturer defect.

All products returned for any reason must reference an authorization number (RGA). The RGA number is obtained by calling place of purchase during normal business hours. Any product returned without the RGA# written on the return package next to the return shipping label will be refused.

All returns must ship via UPS and be properly packaged in the original carton. Return freight charges are the responsibility of the customer unless the product was shipped in error.

March product returned after (1) year from date of purchase will not be accepted unless it is found to be a manufacturer defect. The customer must include a written statement describing the alleged product defect. The complete Limited Warranty is set forth on the reverse side.

100% credit issued on manufacturer defects

20% return fee on all reshelvable product

30% return fee on all repairable product

#### NO CREDIT WILL BE ISSUED ON RETURNED PRODUCT BEYOND REPAIR

March Performance thoroughly inspects all returns. It is the sole discretion of March Performance in determining the condition of all returned merchandise.

To receive replacements at no charge the original product must first be received and inspected by March Performance for determination. Immediate replacements may be purchased and later credited upon inspection determination.

Please Complete the Information below, detach and include with returned product.

RGA#	_ CT#	_Issued by:	Date
Purchaser's Name		Phone_	
Address			
Purchased Directly Through		Invoice#	
Product ID		Invoice Date	
Reason_			