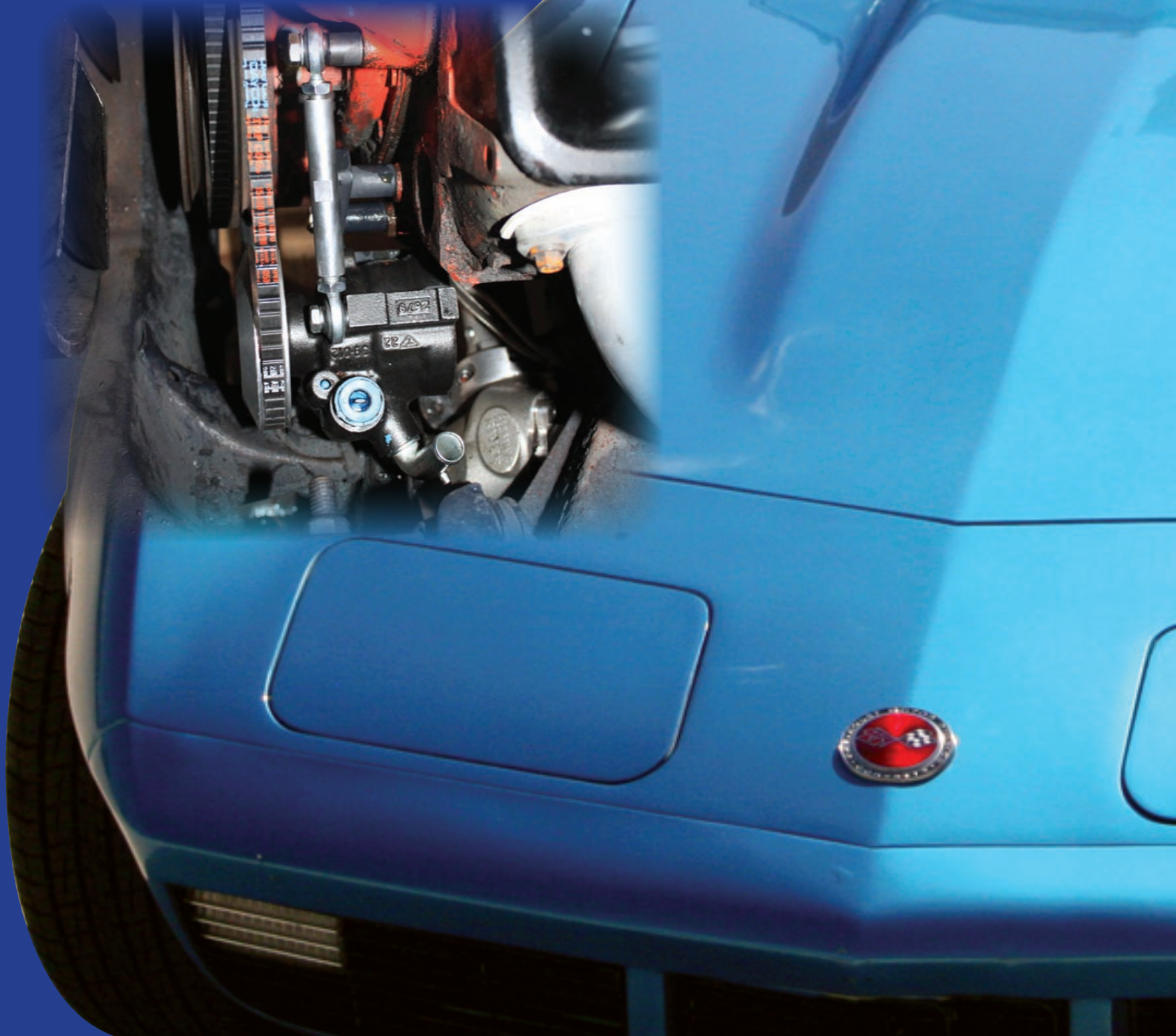


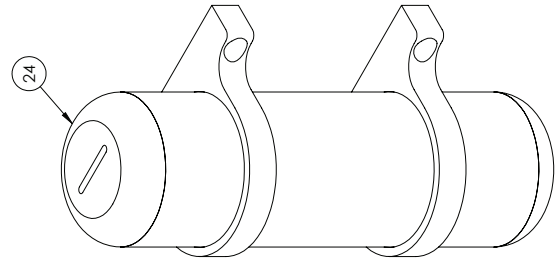
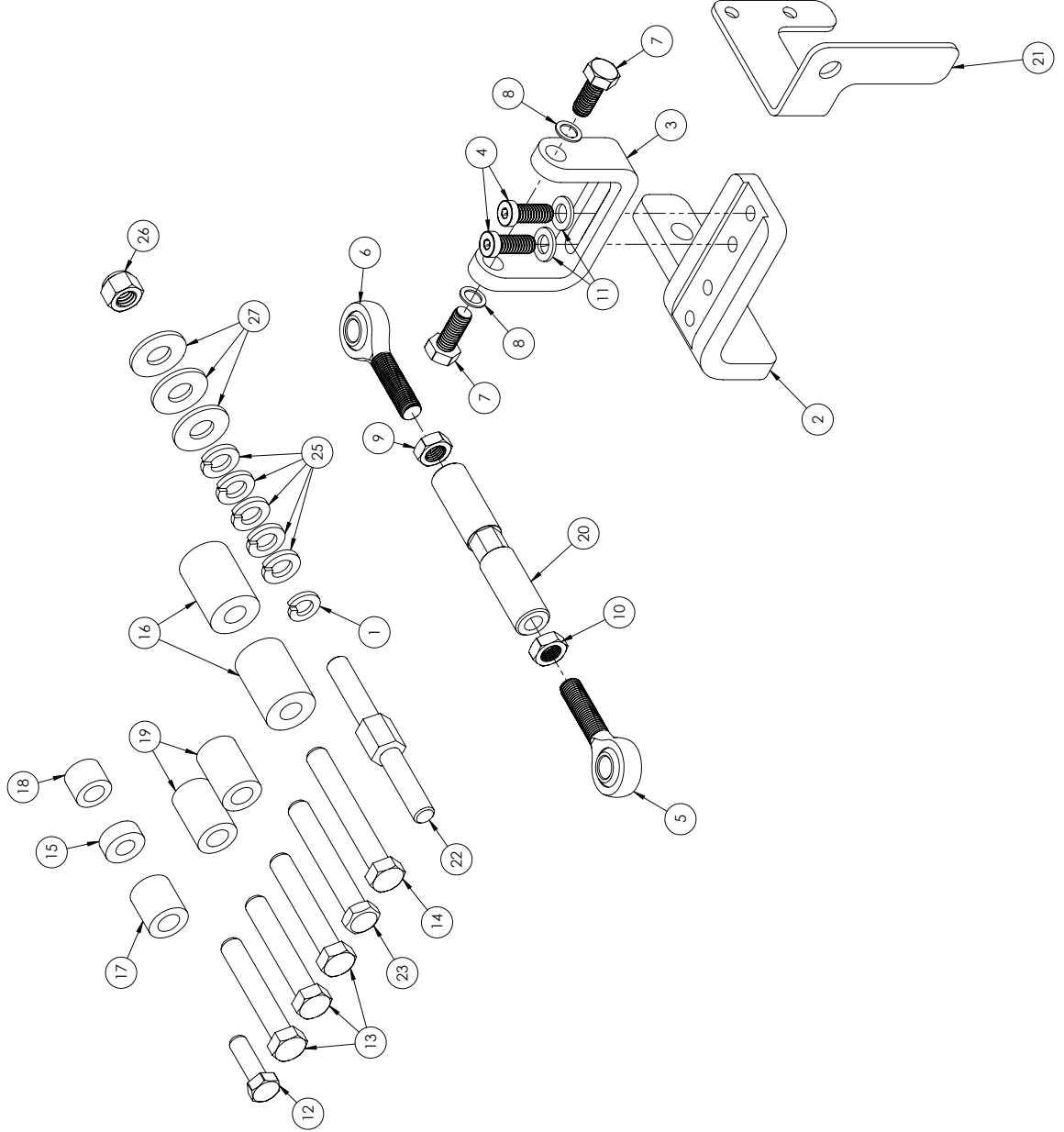


***FR312PK***

***Power Steering Pump Installation Kit***



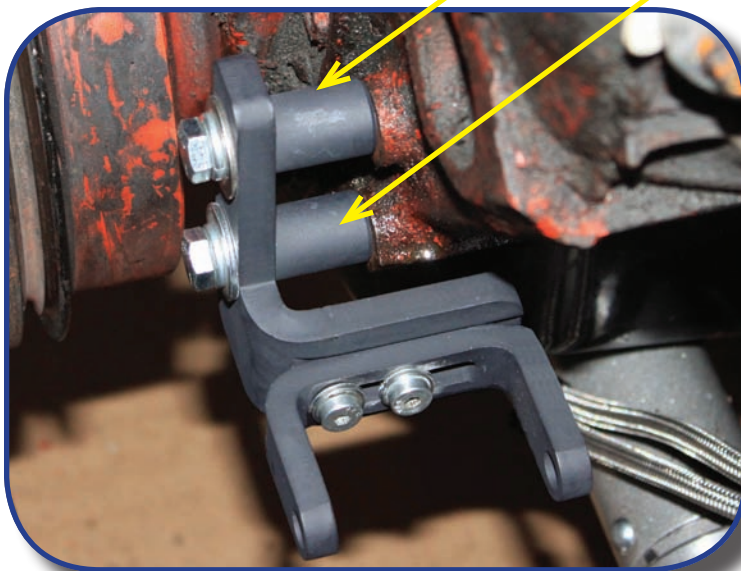
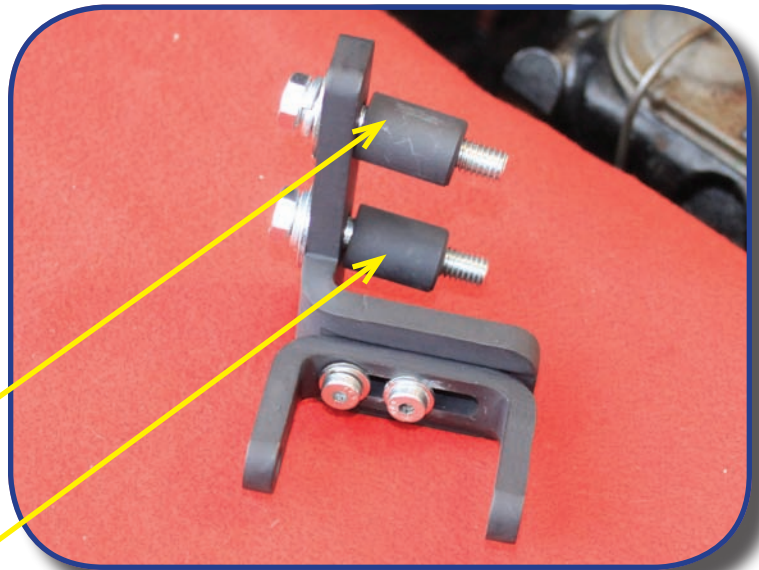
ITEM NO.	QTY.	PART NO.	DESCRIPTION
1	1	100524	WASHER, LOCK 5/16
2	1	100632	BRACKET, MOUNT PUMP-MOTOR, SB
3	1	100633	BRACKET, MOUNT PUMP FS
4	2	100634	SCREW, 5/16-18 X .75 SOC HD LOW PROFILE
5	1	100667	HEIM JOINT, END ROD 3/8-24 RH
6	1	100668	HEIM JOINT, END ROD 3/8-24 LH
7	2	100724	BOLT, M8X1.25 X 20 HEX HD GR10.9
8	2	100725	WASHER, FLAT Ø.32 X Ø.47 X .04
9	1	100728	NUT, 3/8-24 JAM LH
10	1	100729	NUT, 3/8-24 JAM RH
11	2	100730	WASHER, FLAT Ø.32 X Ø.57 X .06
12	1	100881	SCREW, 5/16-18 X 1.00 HEX HD GR8
13	3	100882	SCREW, 3/8-16 X 2.25 HEX HD GR8
14	1	100883	SCREW, 3/8-16 X 2.75 HEX HD GR8
15	1	100884	SPACER, Ø.35 X Ø.75 X .28
16	2	100885	SPACER, Ø.40 X Ø.90 X 1.28
17	1	100886	SPACER, Ø.40 X Ø.75 X .775
18	1	100887	SPACER, Ø.38 X Ø.643 X .50
19	2	100888	SPACER, Ø.40 X Ø.75 X 1.057
20	1	100889	SPACER, ADJ Ø.62 X 3.50 W/ 3/8-24 RH-LH
21	1	100893	BRKT, MTG RESERVOIR
22	1	100894	STUD, MTG PUMP WATER 3/8-16 X 3.63
23	1	BOLT-3/8-16X2.5	SCREW, 3/8-16 X 2.50 HEX HD
24	1	FRT 1614	KIT, RESERVOIR POWER STEERING
25	5	LOCKWASH-3/8"	WASHER, LOCK SPLIT 3/8
26	1	NUT-3/8-16	NYLOCK LOCK NUT 3/8-16
27	3	WASH-3/8"	3/8 FLAT WASHER GRADE 8 EQU
28	1	FRT 1610	HOSE KIT
29	1	FRPMSB-V	PUMP W/ V-BELT PULLEY ON





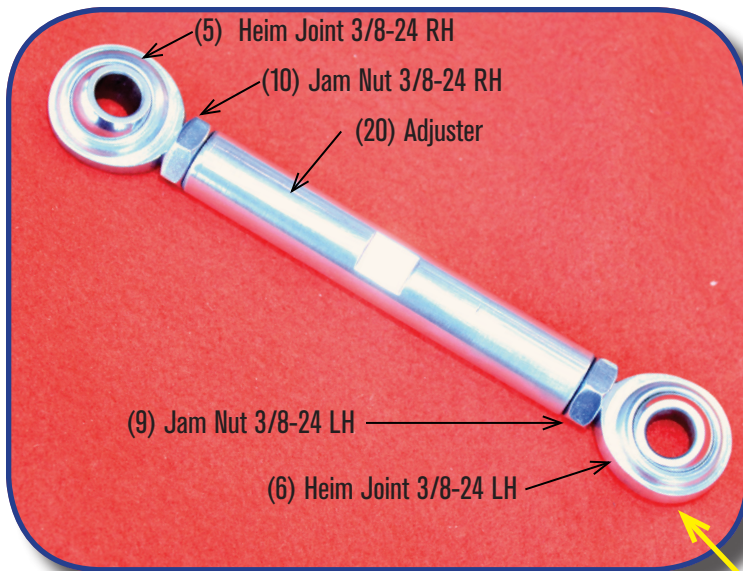
1) Remove all belts from around the pulleys. Remove the alternator mounting bracket, power steering pump (if equipped with factory power steering) and the power steering pump bracket. (Note: If vehicle is equipped with a 3 groove water pump pulley, remove the outer pulley from the water pump for power steering belt clearance.)

2) Using the two 3/8"-16x2.25 (13) mounting bolts, lock washers (24), flat washers (26) and spacers (19), assemble the new Flaming River power steering pump bracket as shown.



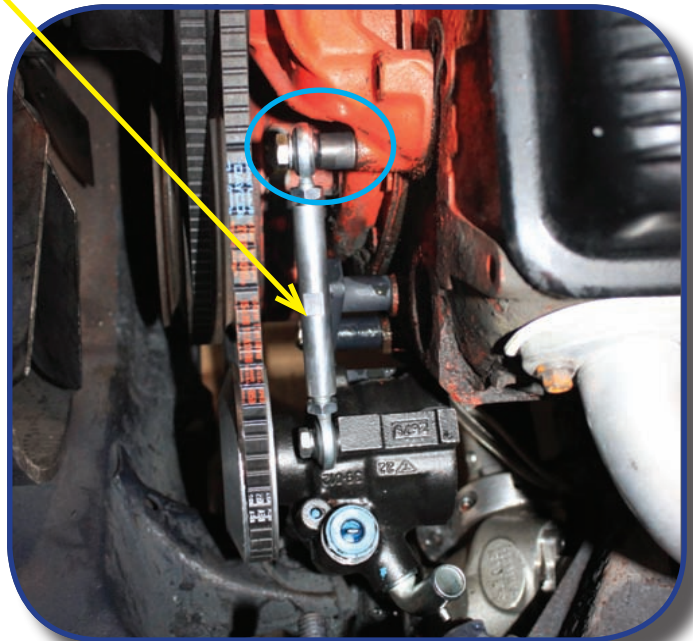
3) Bolt the power steering pump bracket to the engine block on the lower driver's side as shown.

4) Mount the power steering pump to the bracket using two M8x1.5 (7) bolts and washers (8).



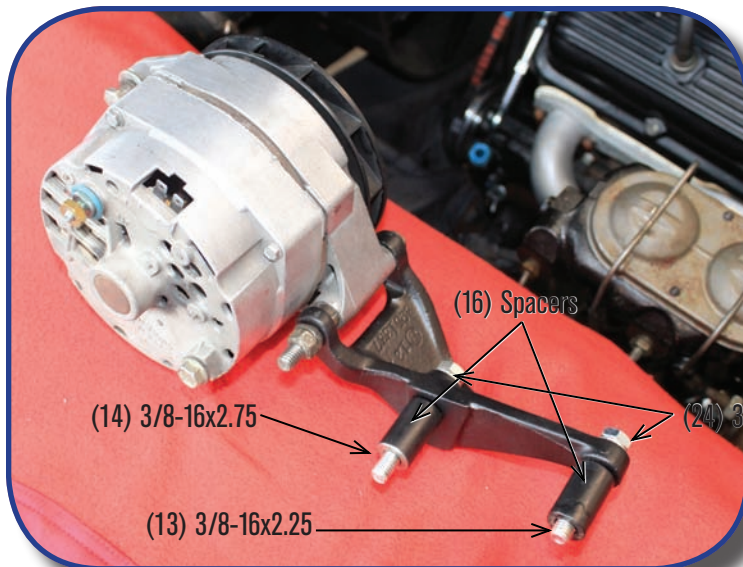
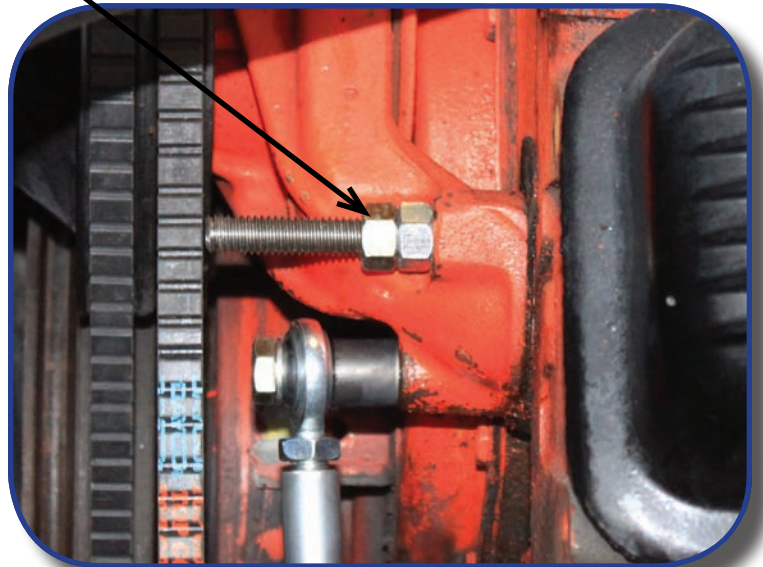
5) Assemble the power steering pump adjuster as shown.

6) Mount the power steering pump adjuster to the top of the power steering pump and then using the 3/8-16x2.5 (13) bolt, washer (26) and spacer (18) provided to the lower water pump mounting bolt.





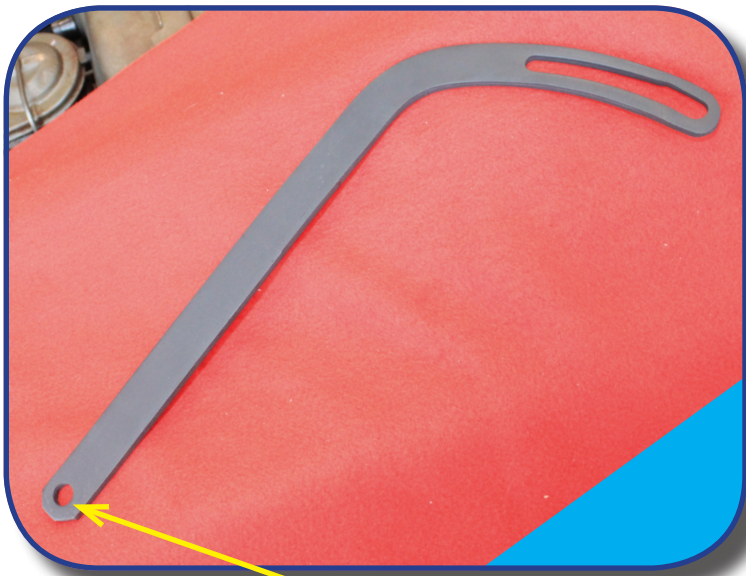
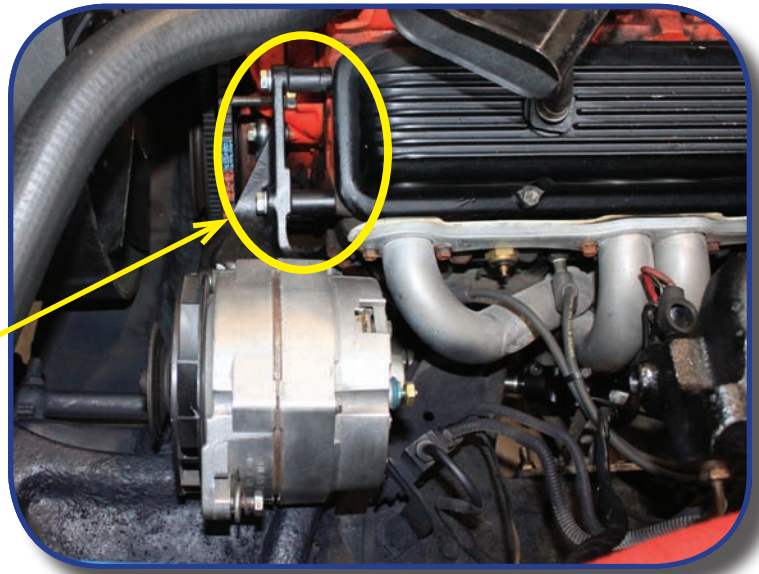
7) Install the double water pump stud (22) (shown left) into the top mounting hole on the water pump.



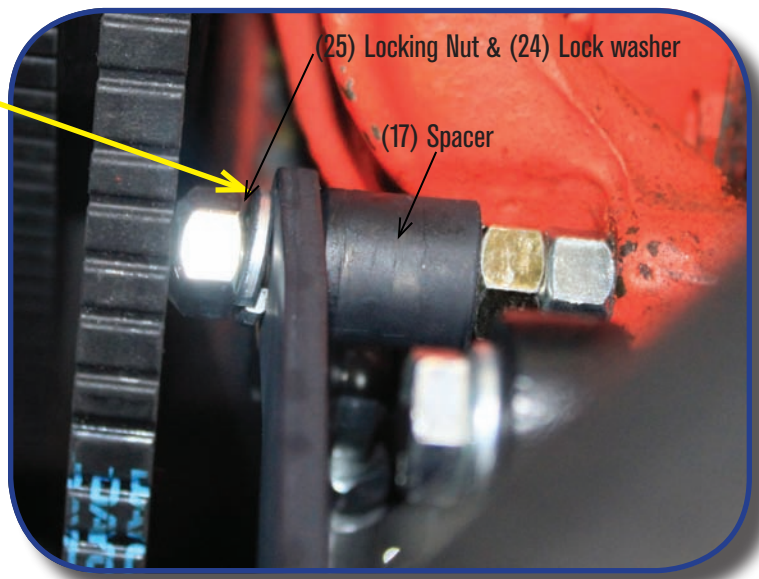
8) Install the alternator onto the alternator mounting bracket. Place the bolts and new mounting spacers onto the alternator mounting bracket as shown.

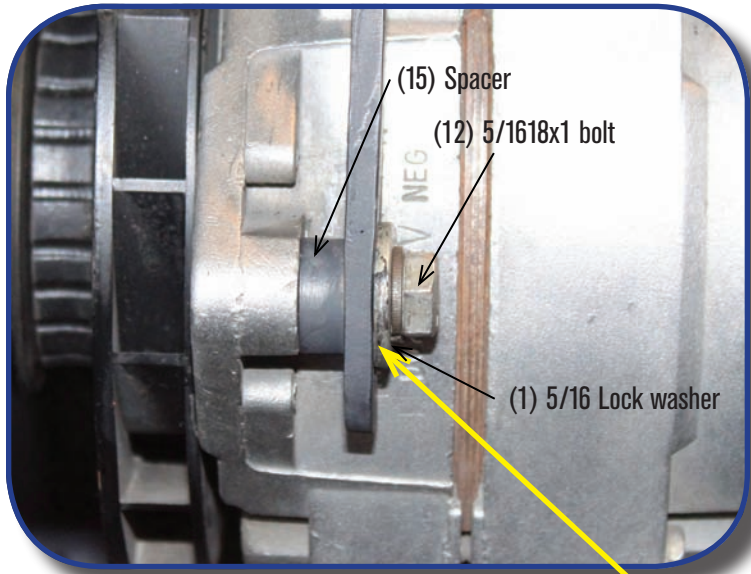
9) Install the alternator and bracket assembly onto the front of the driver's side cylinder head as shown.

Spacers and bolts installed in step 8



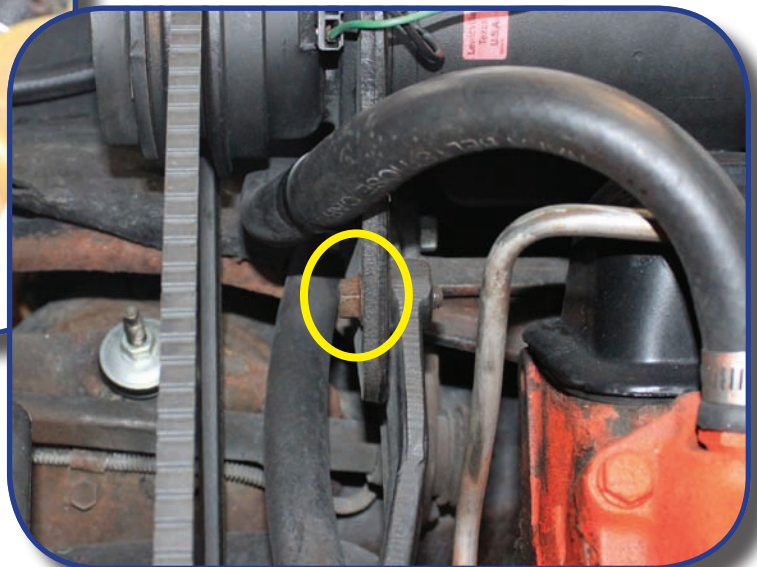
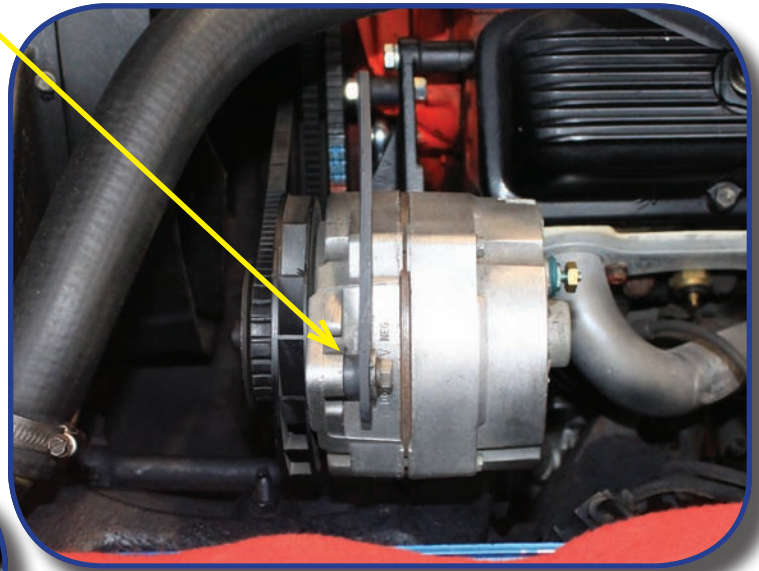
10) Install the factory alternator adjuster bracket (shown left) from the stud in the water pump (installed in step 7) using the spacer provided. (shown below)





11) Using the spacer (15) provided attach the alternator adjust-  
ing bracket to the alternator using the 5/16-18x1 (12) and 5/16  
lock washer (1). (installed picture shown below)

12) Re-install and adjust tension on all belts making sure to  
tighten the adjustment bolts shown in the pictures.





13) Mount the power steering reservoir mounting bracket (21) to the studs that hold the brake master cylinder to the brake booster. Then mount the power steering reservoir (23) to the bracket. (Note: Hardware not included. Reservoir can be mounted in any desired location.)



Flaming River recommends the use of FR41001 Synthetic Power Steering Fluid for best performance.



## Power Steering Bleeding Procedure

- 1) Raise the front wheels off the ground and support the vehicle on jack stands.
- 2) Turn the steering wheel to the left lock and fill the reservoir and let the vehicle sit for 2 minutes.
- 3) WITH THE ENGINE OFF - Rotate the steering wheel lock to lock 20-25 times, while rotating the wheel have someone monitor the fluid level and fill as necessary.
- 4) Top off fluid
- 5) WITH THE ENGINE RUNNING - Rotate the steering wheel lock to lock 20-25 times, while rotating the wheel have someone monitor the fluid level and fill as necessary.
- 6) Lower the vehicle
- 7) Top off fluid
- 8) WITH THE ENGINE RUNNING - Rotate the steering wheel lock to lock 20-25 times, while rotating the wheel have someone monitor the fluid level and fill as necessary.



**Install your power steering lines to the correct pressure or return ports.**

**If using a stainless steel line kit, follow the instructions provided with your kit.**

**Note: If using the original power steering pump, you must first flush the pump of any power steering fluid. Contaminated power steering fluid may cause damage to the new rack and pinion.**

**Note: If the power steering fluid is foamy, let the vehicle sit for 10 minutes and then repeat the bleeding procedure.**

**Note: Trapped air in the system will cause a milky appearance in the fluid. Trapped air will also cause the fluid level to rise in the reservoir when the engine is not running.**