

YOU CAN DO IT EASY UPGRADES

by Randy Irwin

1955-72 SERPENTINE BELT & PULLEY SYSTEM



Randy Irwin - Technical Writer

Randy has been involved in the Chevy parts business for over 25 years. He is a wizard at creating, making and modifying custom parts for Chevys.

With so many serpentine belt systems on the market, choosing one can be complicated and confusing. If you don't order every single accessory from the same manufacturer, it is likely the kit will not work. Many systems are over-engineered with two or three idlers, a belt that is long enough to wrap around your entire car and require more tools to install it than it takes to work on the space shuttle! The new Concept One Victory system is a work of art and is designed with simplicity, ease of installation and function in mind. The kit is available in polished or natural (unpolished) aluminum finish and with or without power steering. The system bolts to the front of the engine block itself and does not require cylinder head bolt holes like other systems. This awesome kit is the perfect way to update your small block or big block with a super-simple yet attractive single belt drive system.

Tools Needed:

1/2" Pull (Breaker) Bar & Extension	5/16" Allen Wrench
5/32" Allen Wrench	9/16" Wrench
3/16" Allen Wrench	5/8" Wrench
1/4" Allen Wrench	Air Impact Wrench

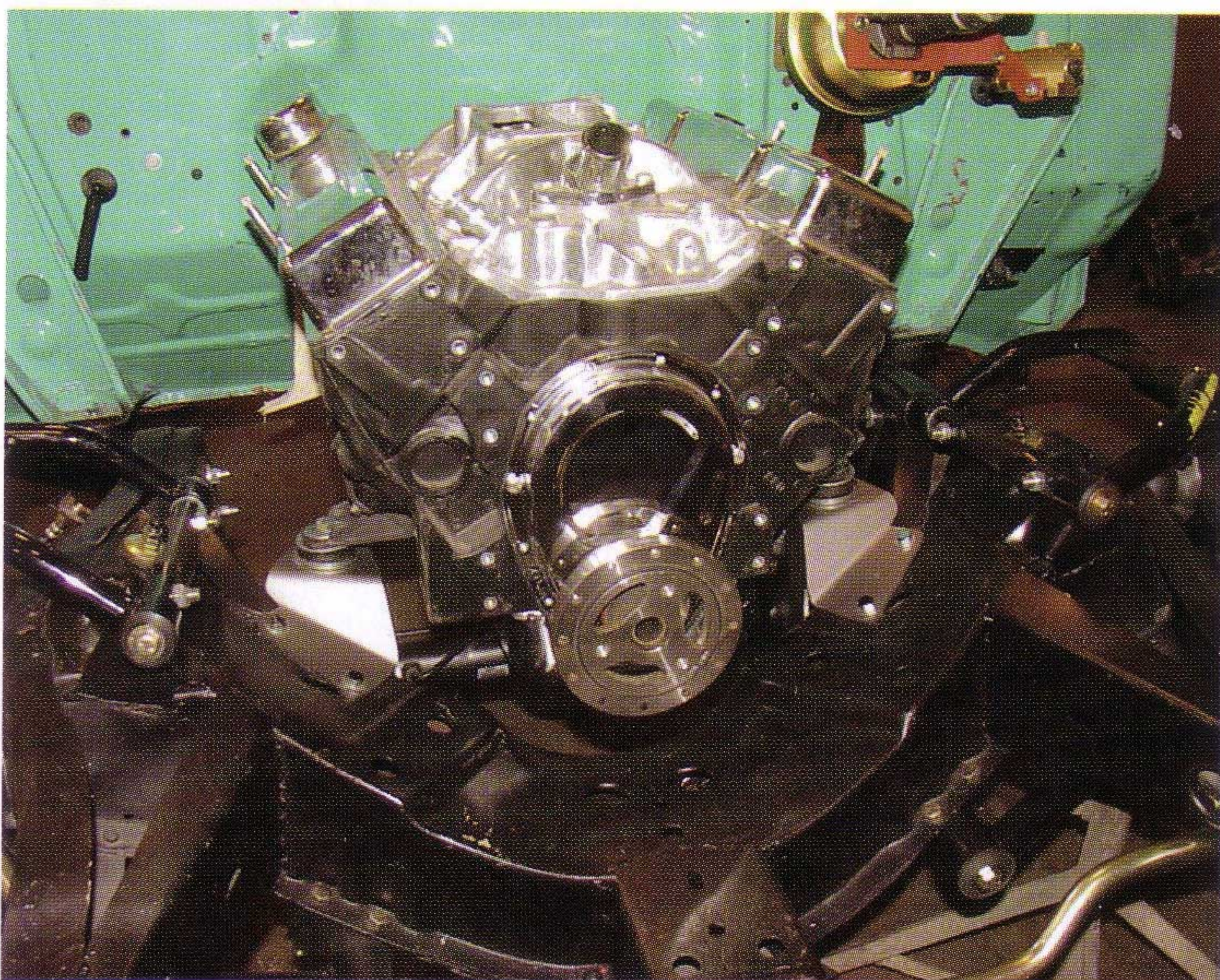
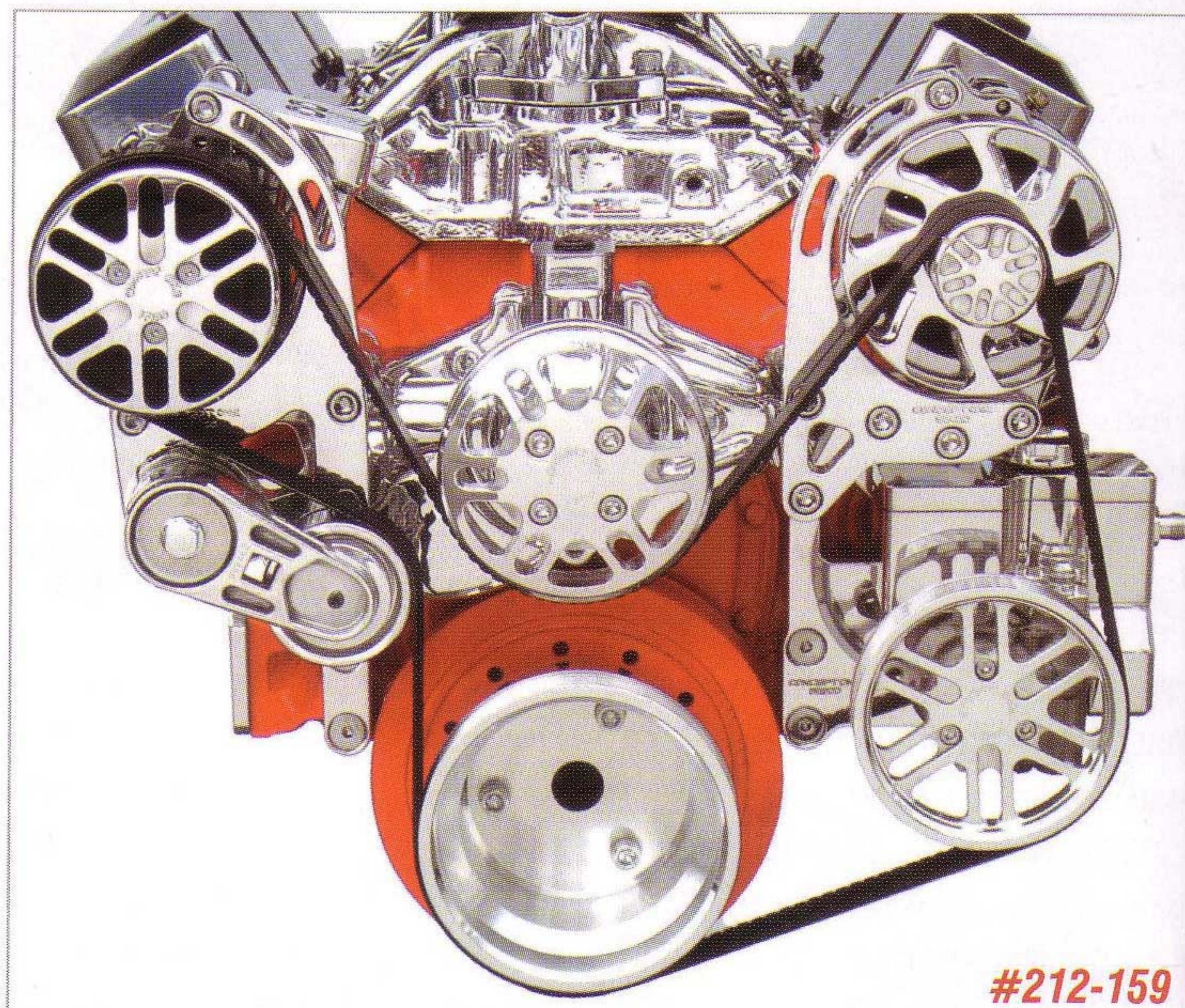


Photo #1: The engine must be side mounted using kit P/N 18-02 (small block) or P/N 18-271 (big block) in order to install the serpentine system. The engine cannot be front mounted.



#212-159

Parts List:

212-160 Small Block Unpolished w/PS	▲
212-162 Small Block Unpolished w/o PS	▲
212-159 Small Block Polished w/PS	▲
212-161 Small Block Polished w/o PS	▲
212-164 Big Block Unpolished w/PS	▲
212-166 Big Block Unpolished w/o PS	▲
212-163 Big Block Polished w/PS	▲
212-165 Big Block Polished w/o PS	▲

Time Frame:

3 hours



Photos #2a, 2b & 2c: The new billet crankshaft pulley included in the kit has a collar on the back side that will center on the harmonic balancer. The harmonic balancer may have coarse or fine thread bolt holes. Three socket head bolts of each type are included to bolt the pulley to the balancer. Using a couple of drops of thread locker on the bolts, bolt the crankshaft pulley to the harmonic balancer.

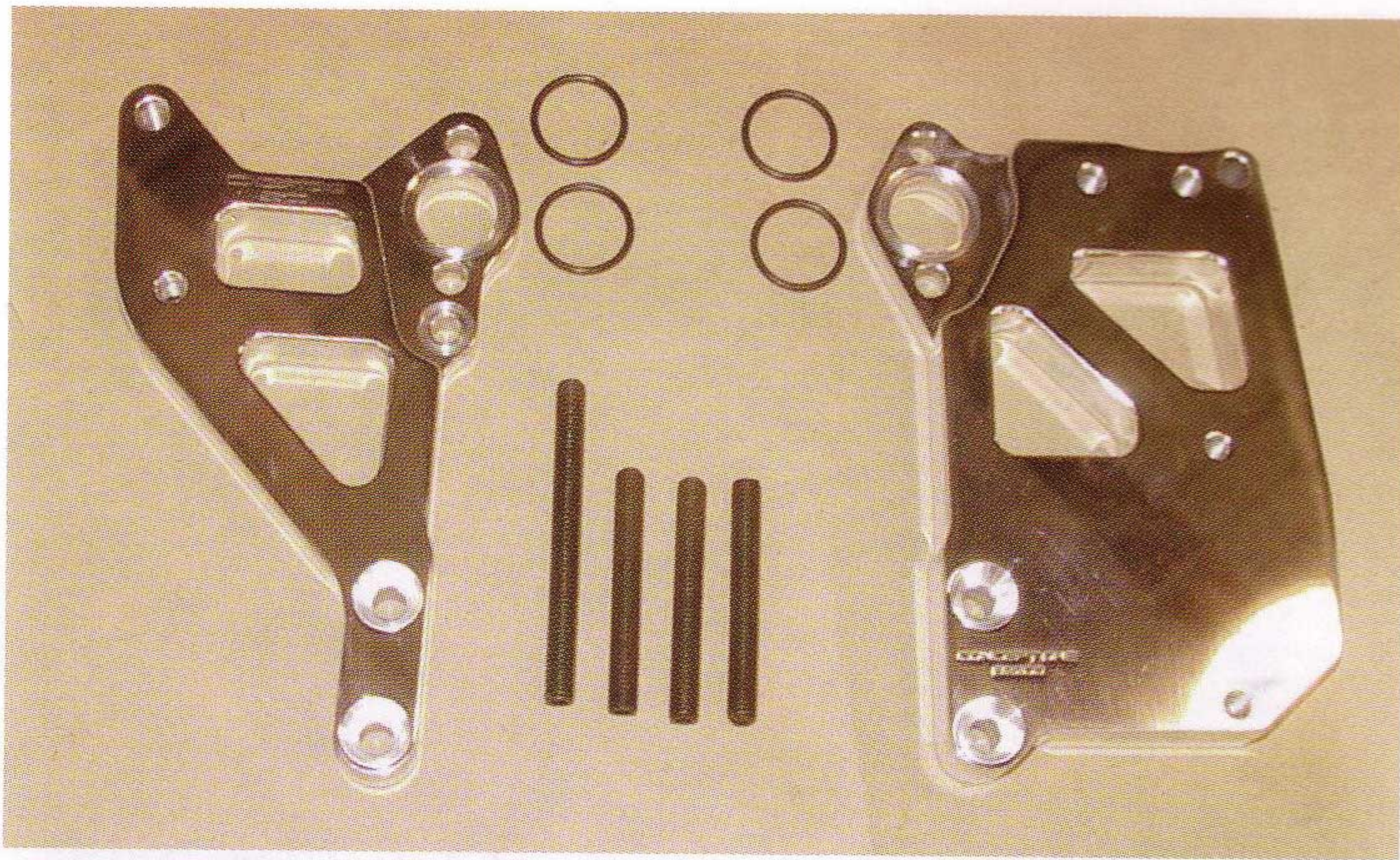
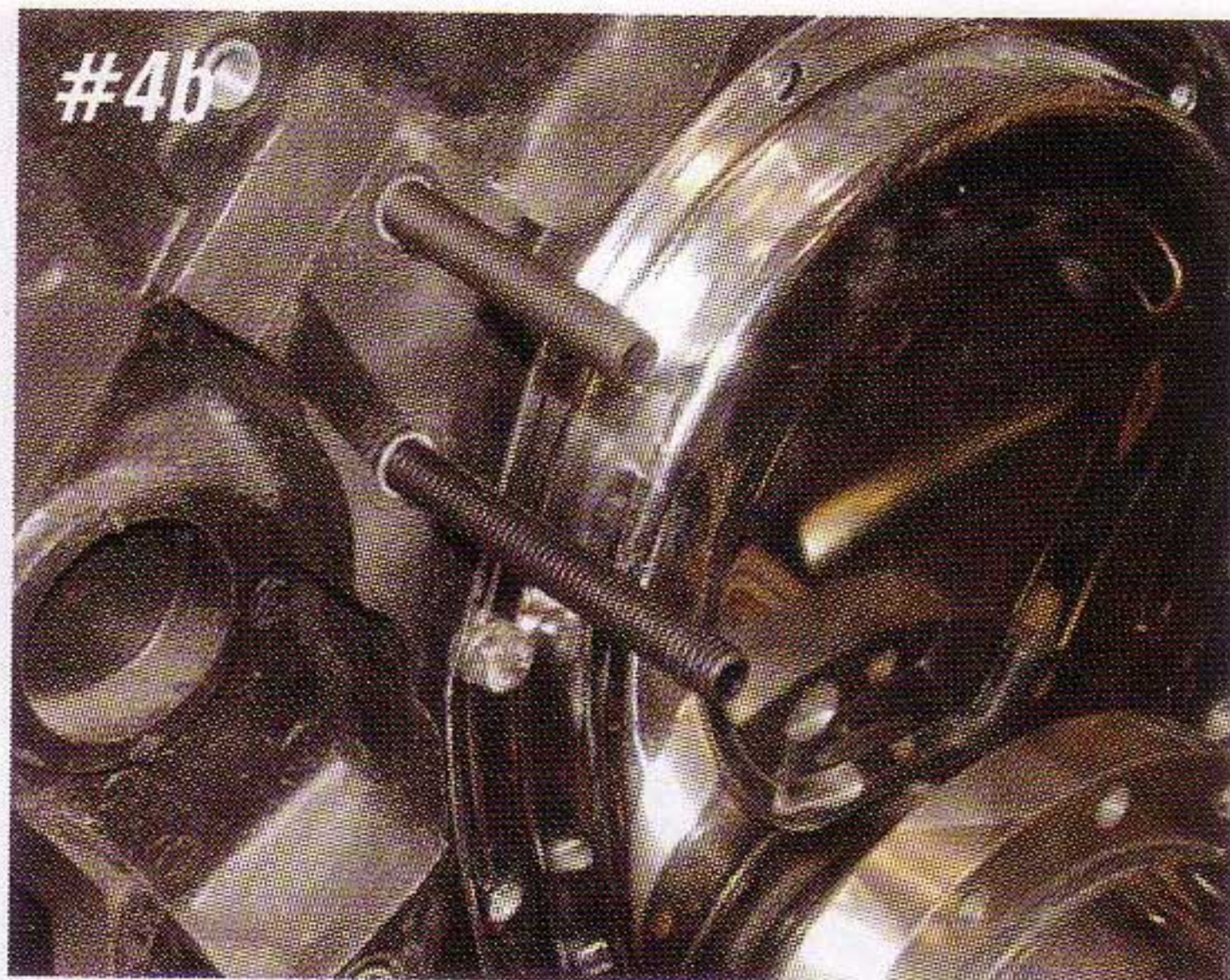
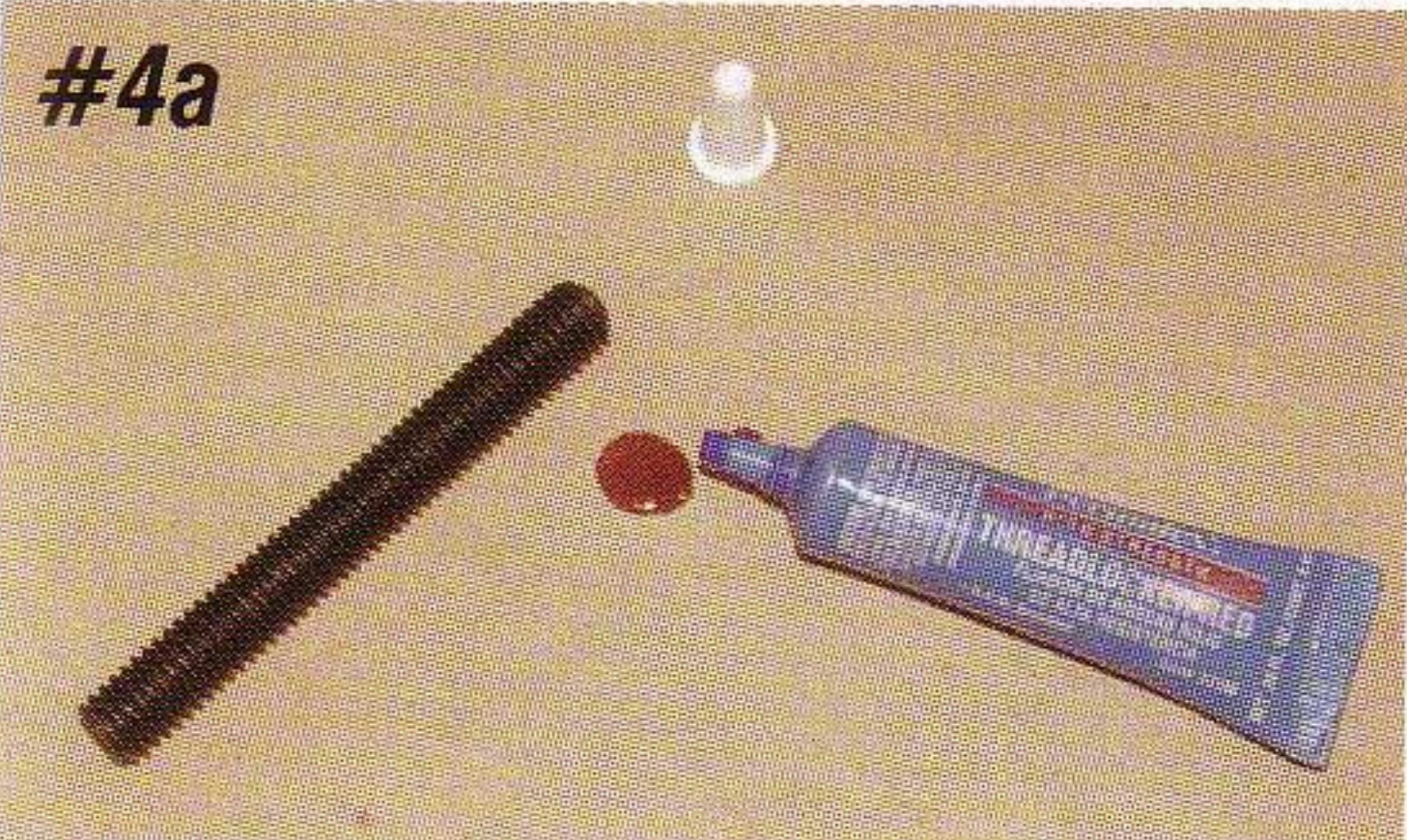
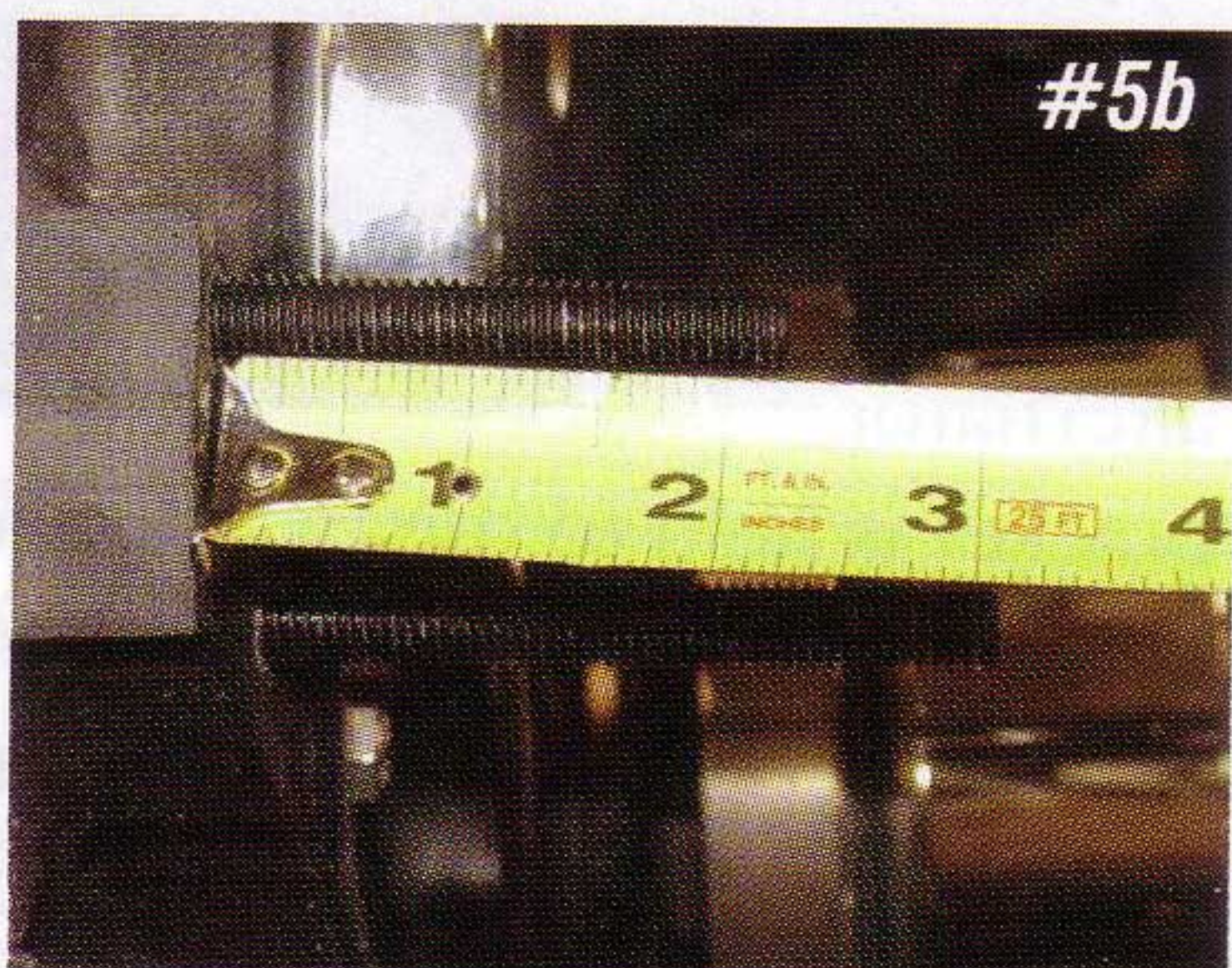
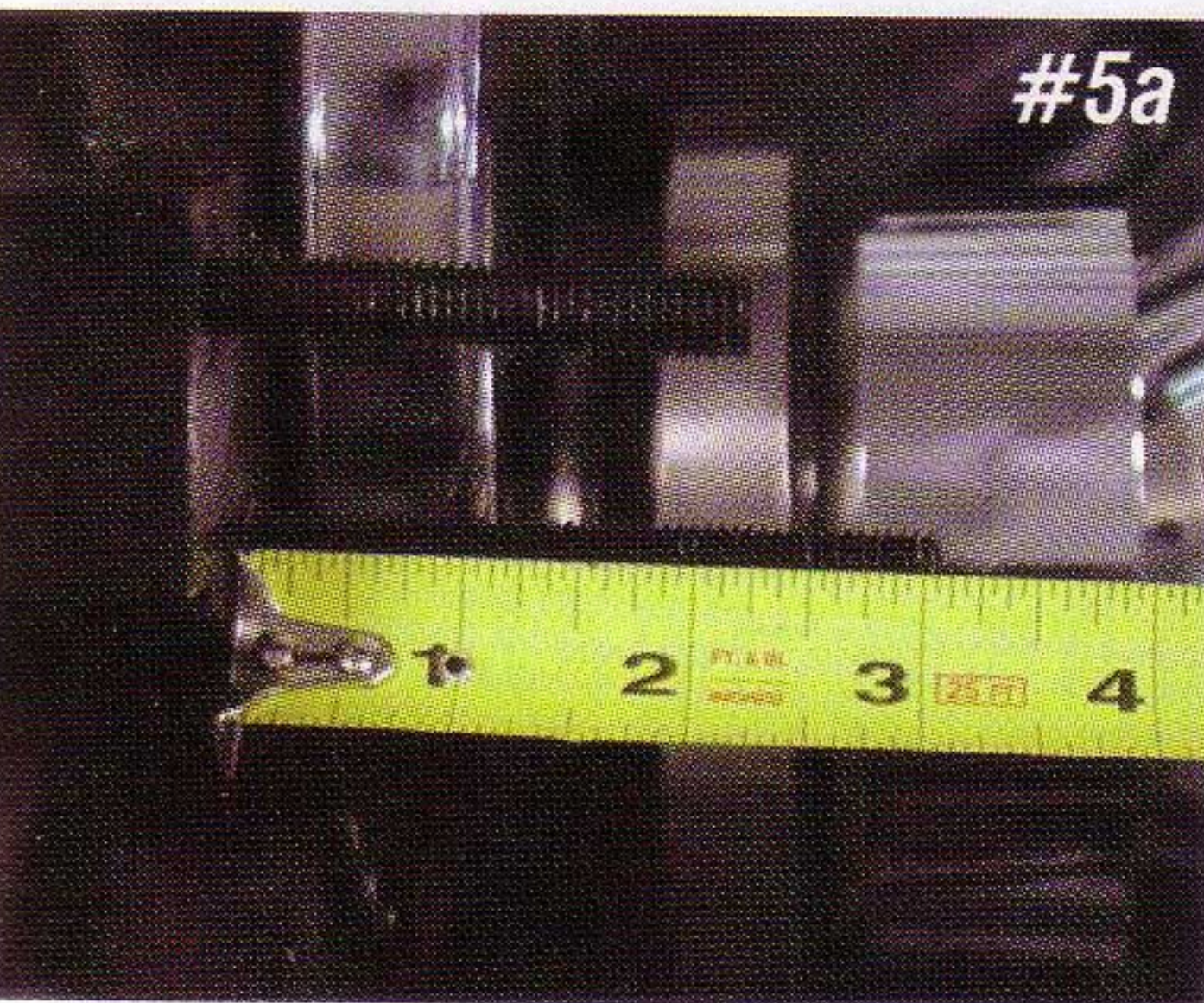
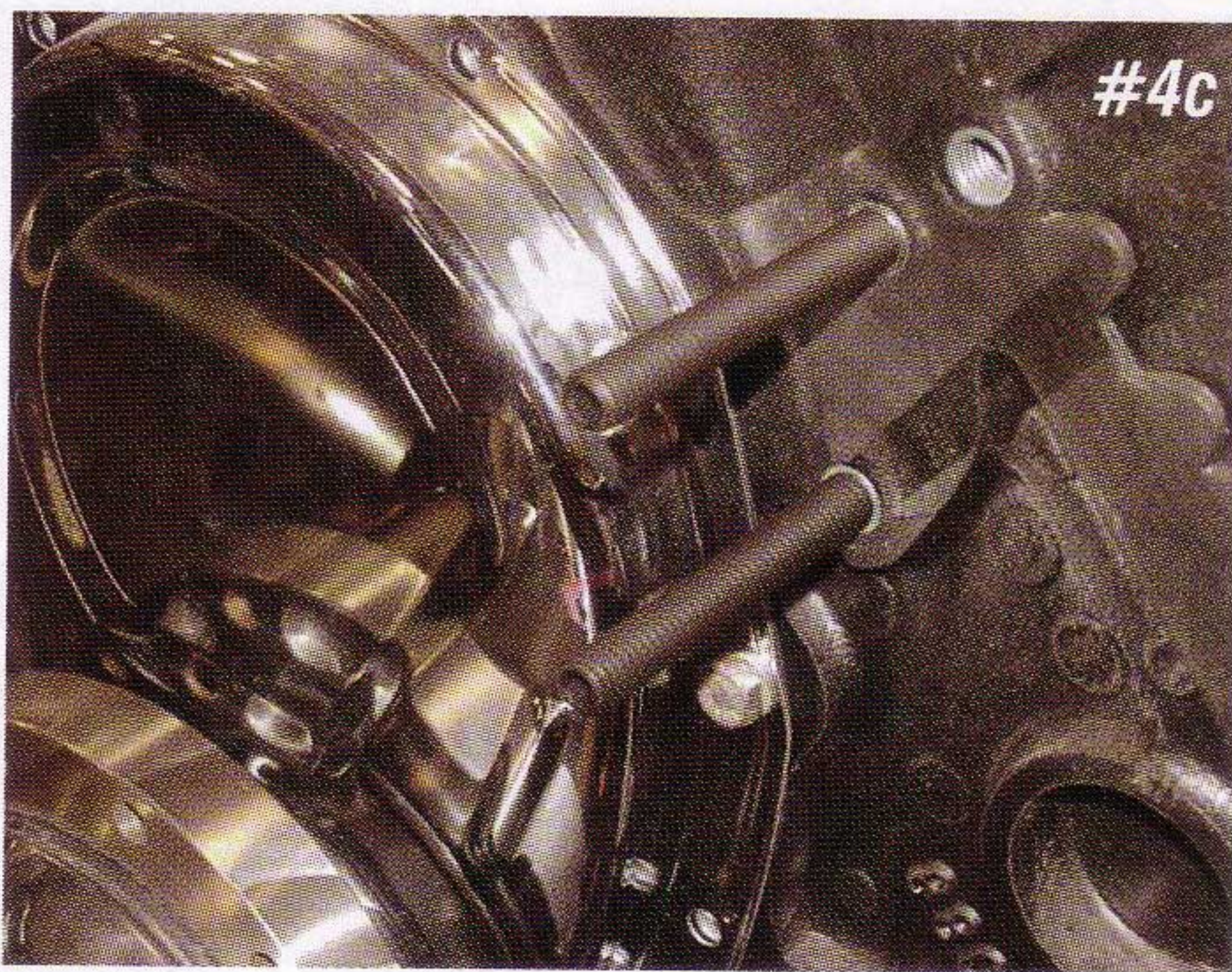


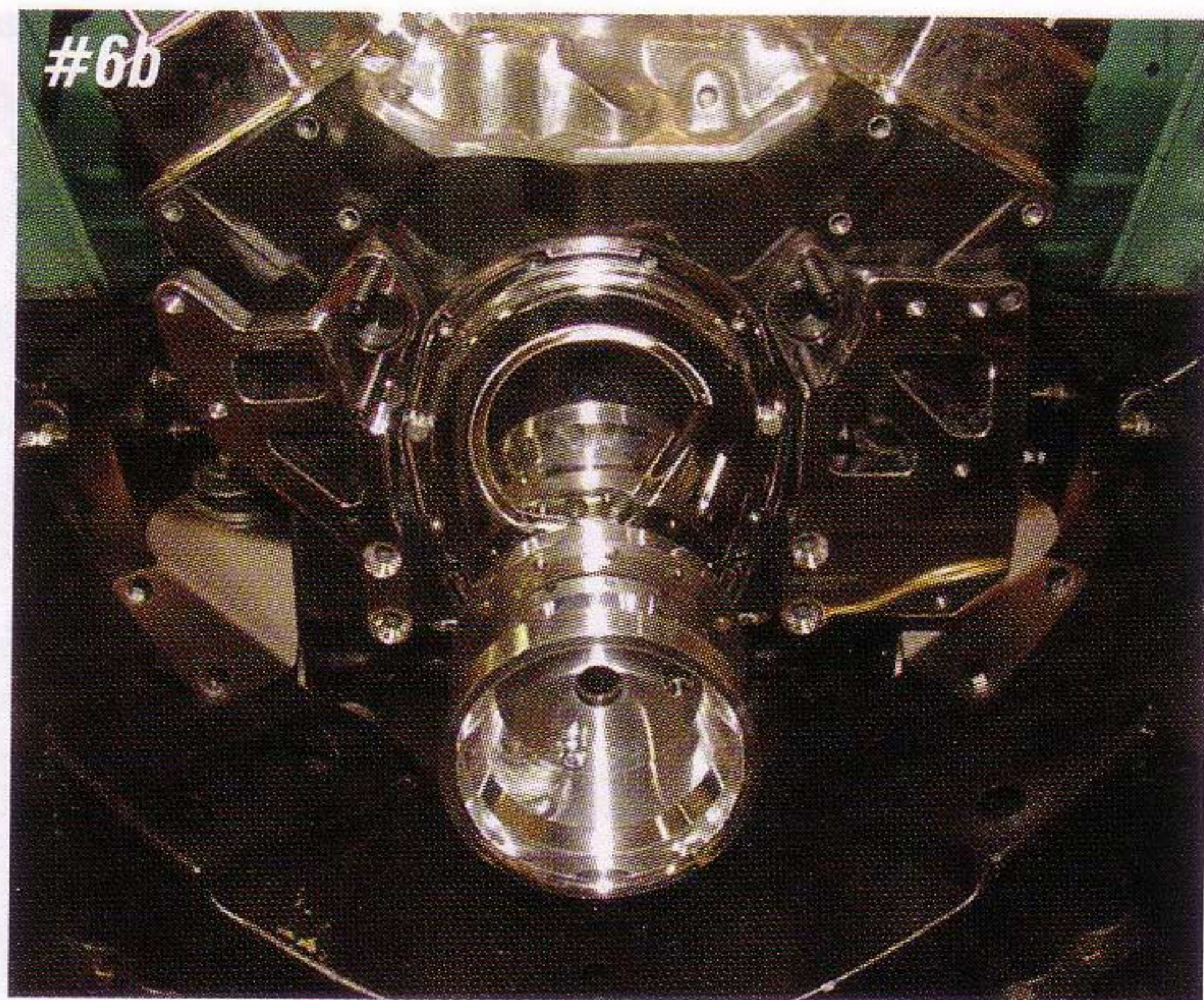
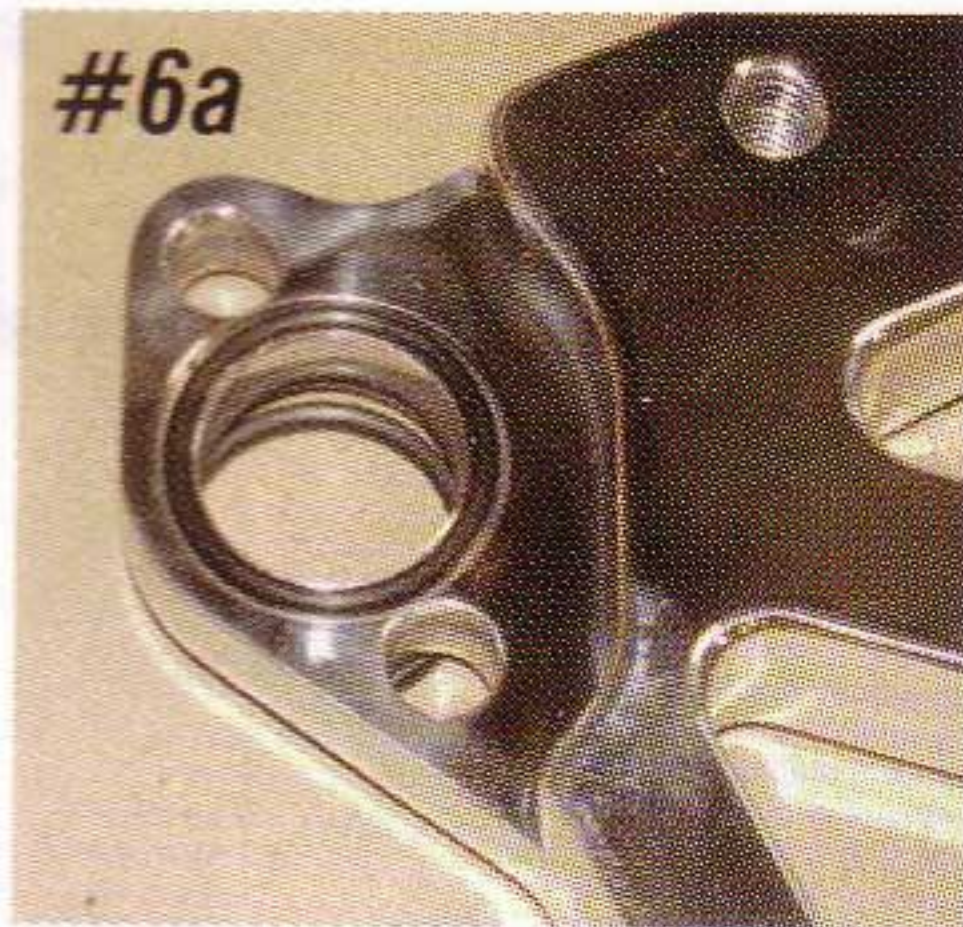
Photo #3: There are left and right billet mounting plates that bolt to the front of the engine. All hardware and accessories bolt to these mounting plates is included. Since the mounting plates bolt to the engine block and not to the cylinder heads, the kit may be used with early model heads with no accessory holes.



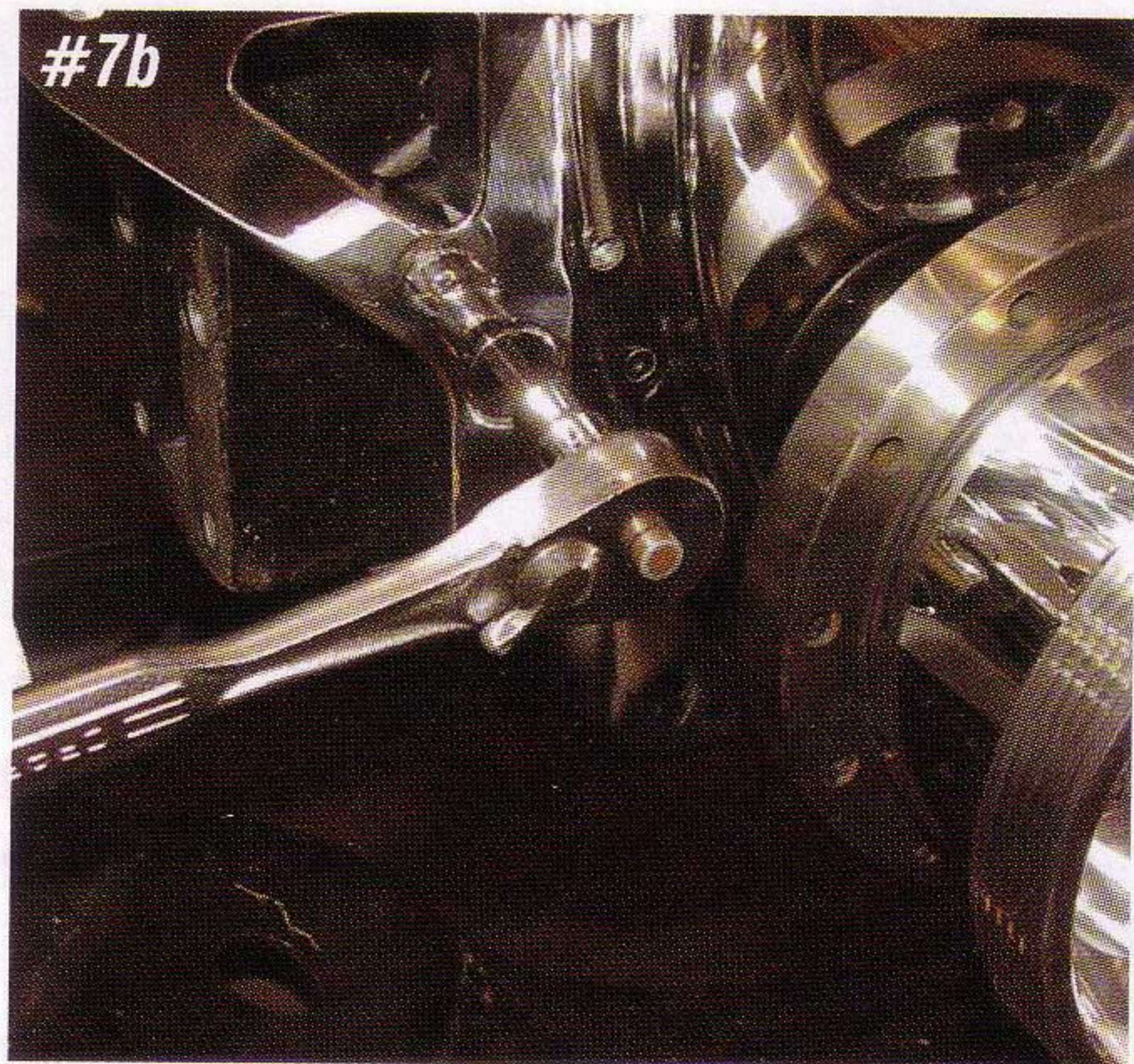
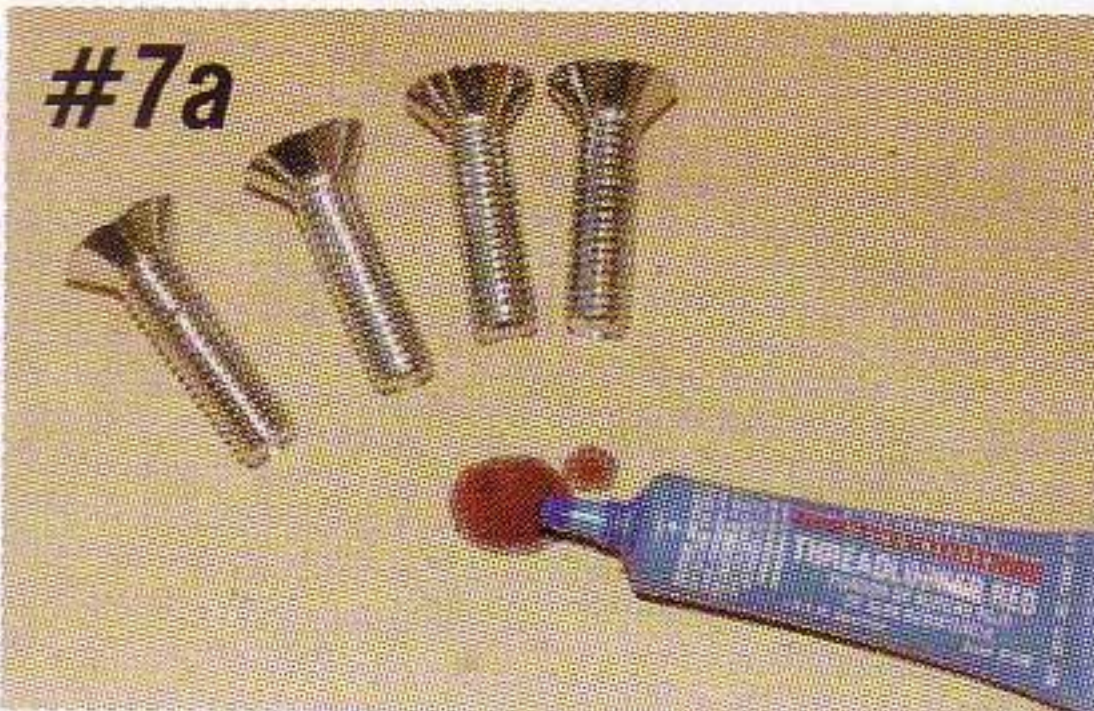
Photos #4a, 4b & 4c: Four 3/8" studs are supplied to hold the mounting plates in place at the water pump holes. Three studs are 2-1/2" long and one is 3-1/2" long. The driver's side of the engine uses two 2-1/2" long studs for the upper and lower water pump mounting points, while the passenger side will use the 2-1/2" stud for the upper water pump mount and the 3-1/2" stud for the lower water pump mount. When installing the studs and all remaining mounting hardware in this kit, use a small amount of thread locker.



Photos #5a & 5b: With the studs installed, 2-1/4" of the shorter studs should remain protruding out of the front of the engine block with 3" of the longer stud protruding.



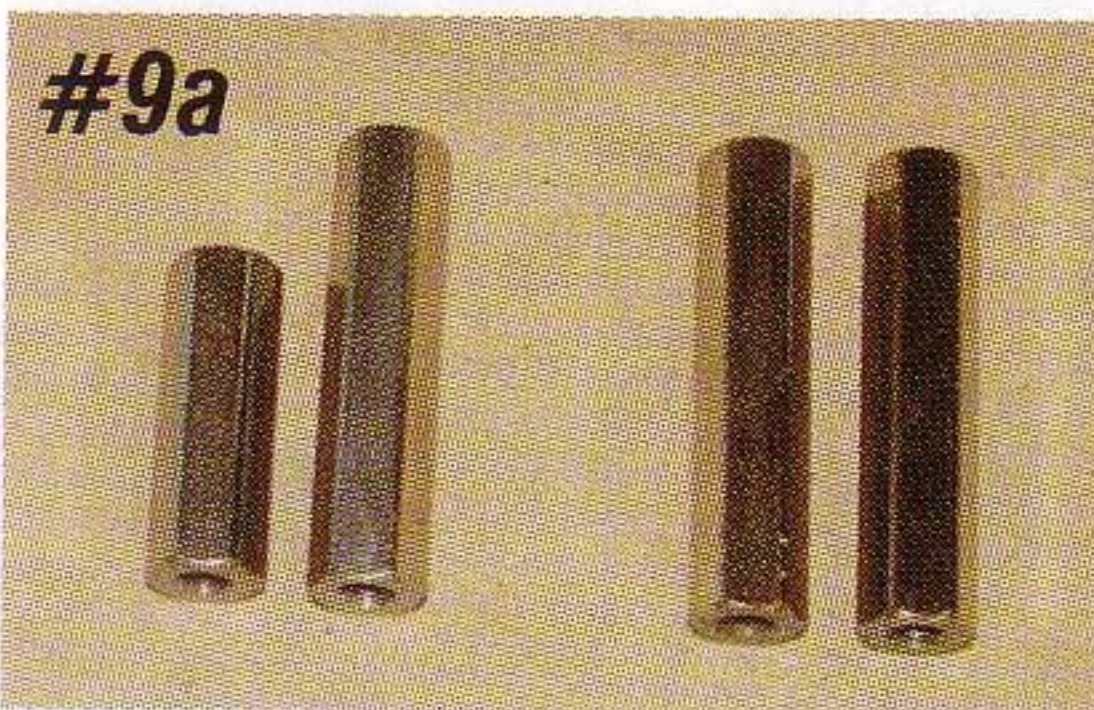
Photos #6a & 6b: There is an O-ring on the front and rear faces of the left and right mounting plates. Lubricate the O-rings with a small amount of Vaseline prior to installation. The water pump studs pass through the 3/8" holes above and below the water pump holes on the plates.



Photos #7a & 7b: Four 3/8" x 1-1/2" countersunk Allen head bolts hold the bottom of the mounting plates to the front of the engine block.



Photo #8: Next install the Edelbrock high flow water pump included in the kit onto the four studs. The studs should protrude out the front of the water pump housing 1/2".



Photos #9a & 9b: There are four tall nuts that hold the water pump to the engine block. The two 3" long tall nuts are used on the driver's side of the engine. The 2-3/4" tall nut is for the upper passenger side stud and the 2" tall nut is for the lower stud on the passenger side.

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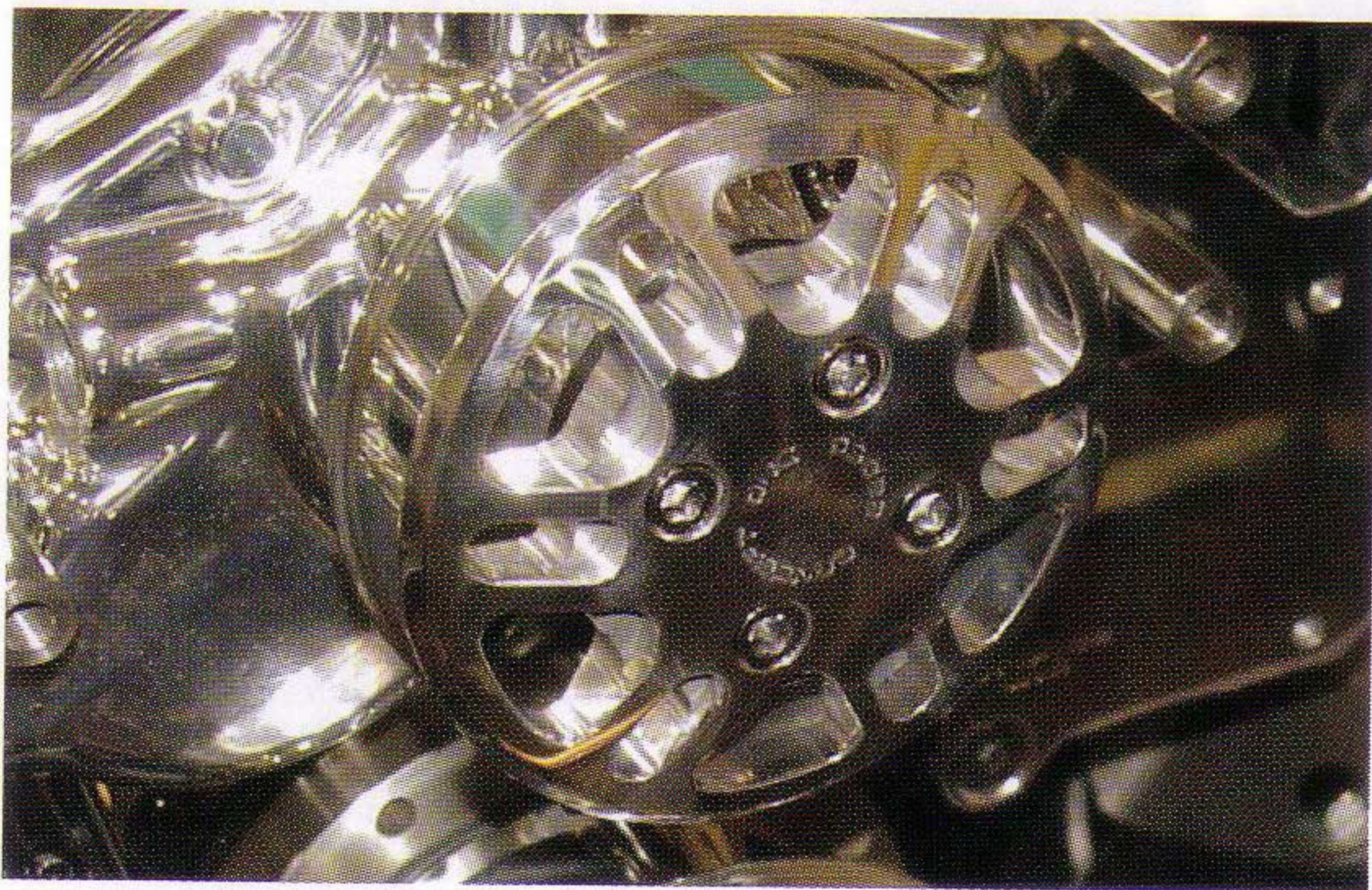
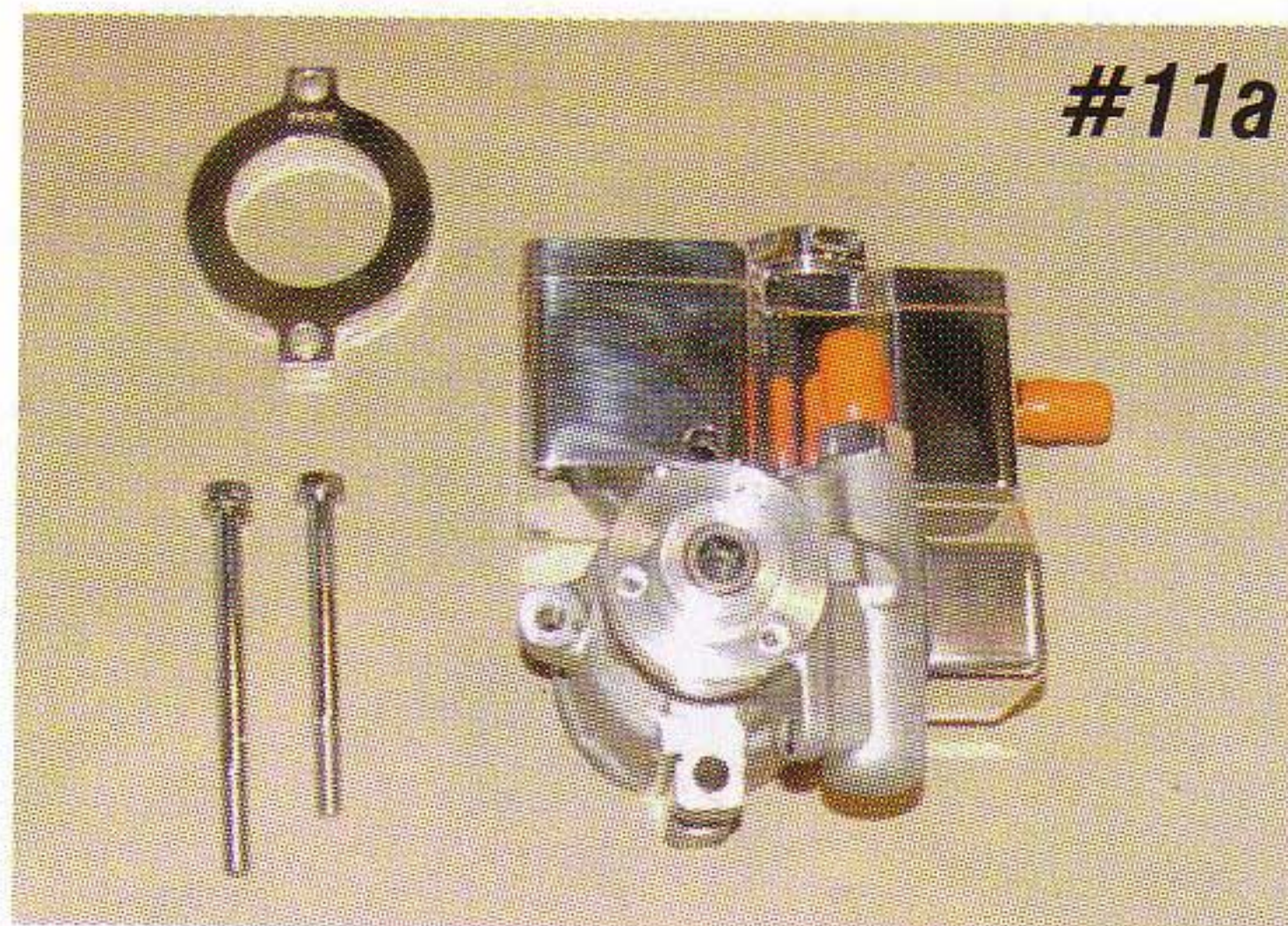
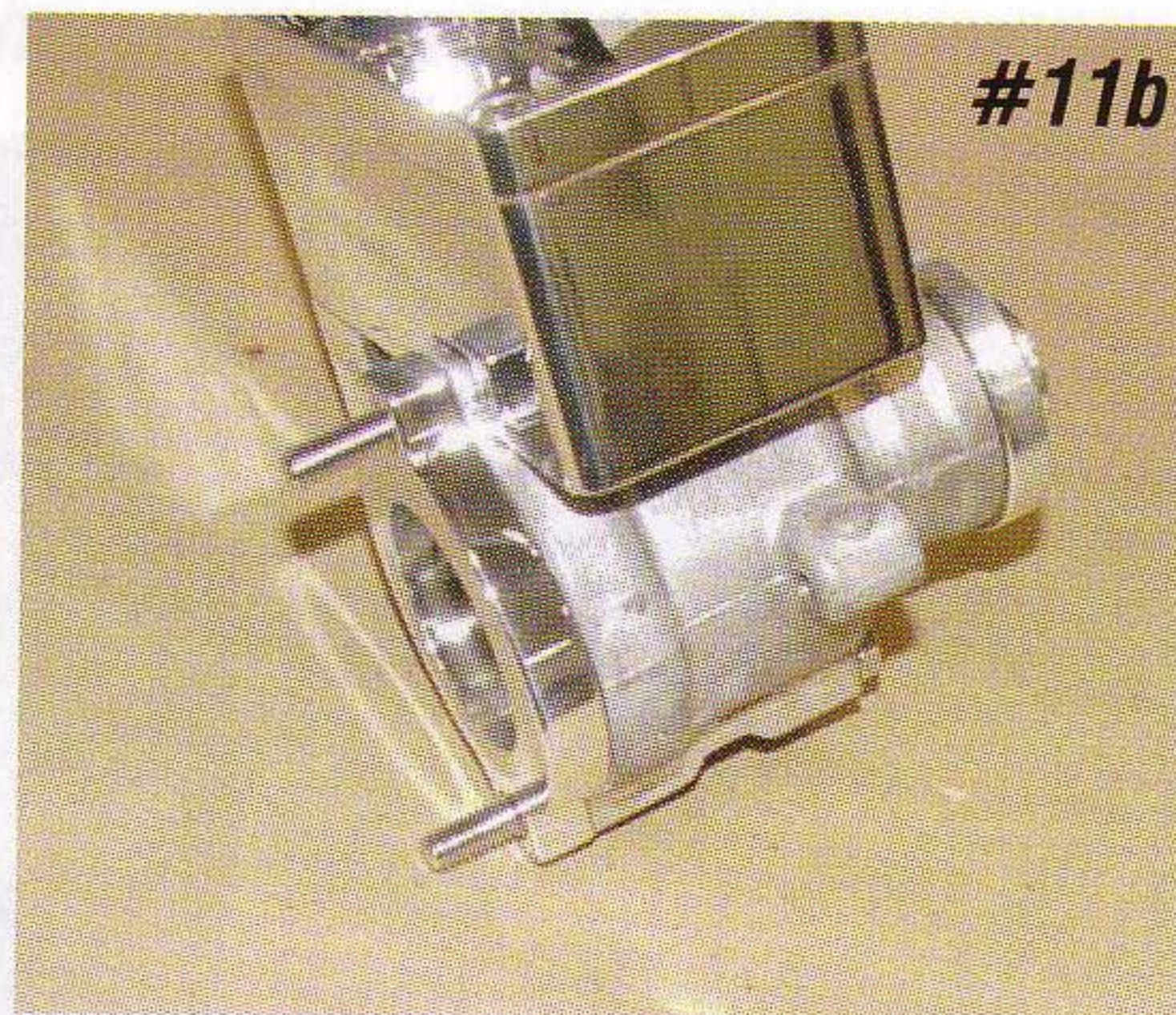


Photo #10:

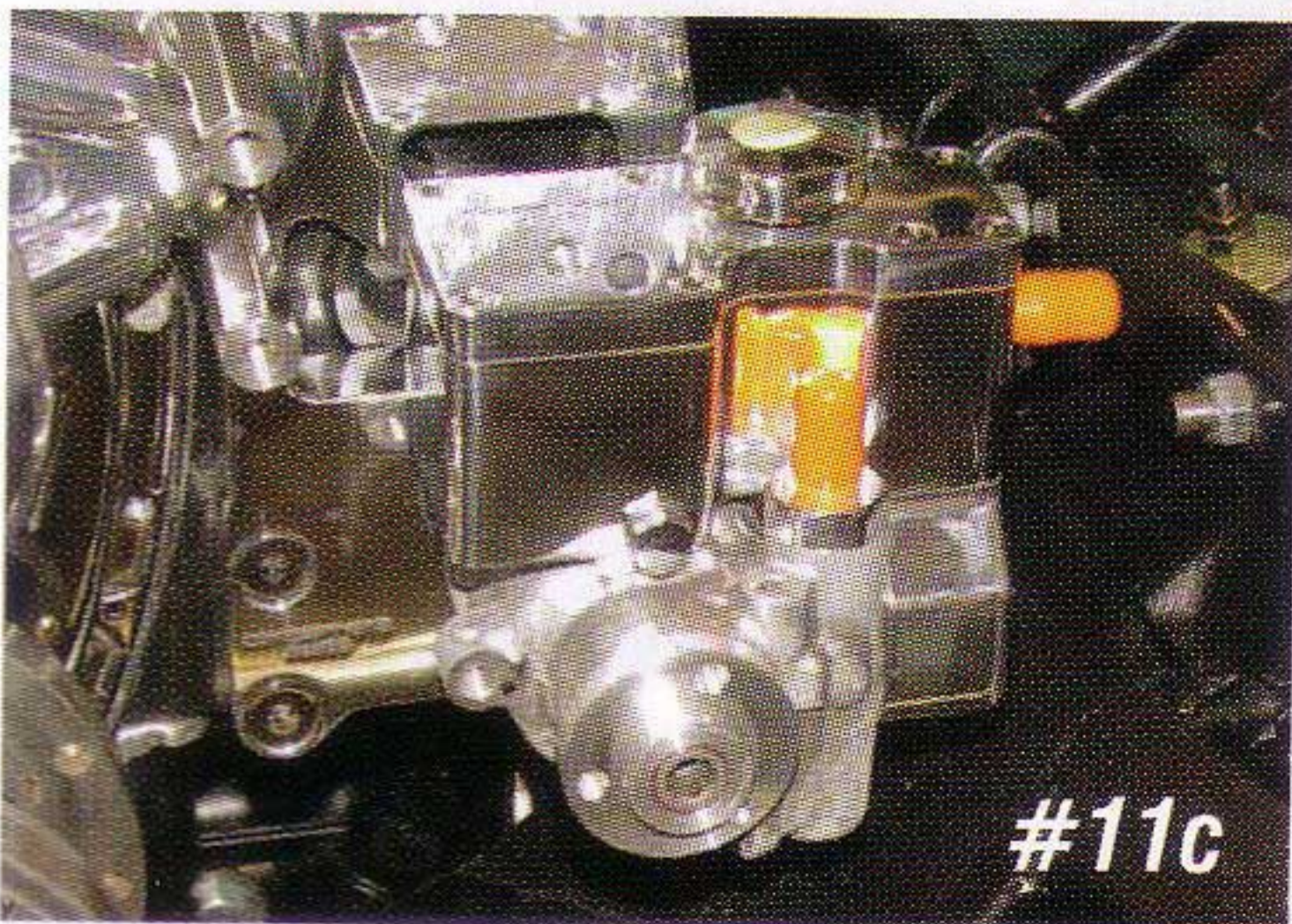
The water pump pulley is held to the water pump hub with four 5/16" x 1" Allen head bolts.



#11a



#11b



#11c



#11d

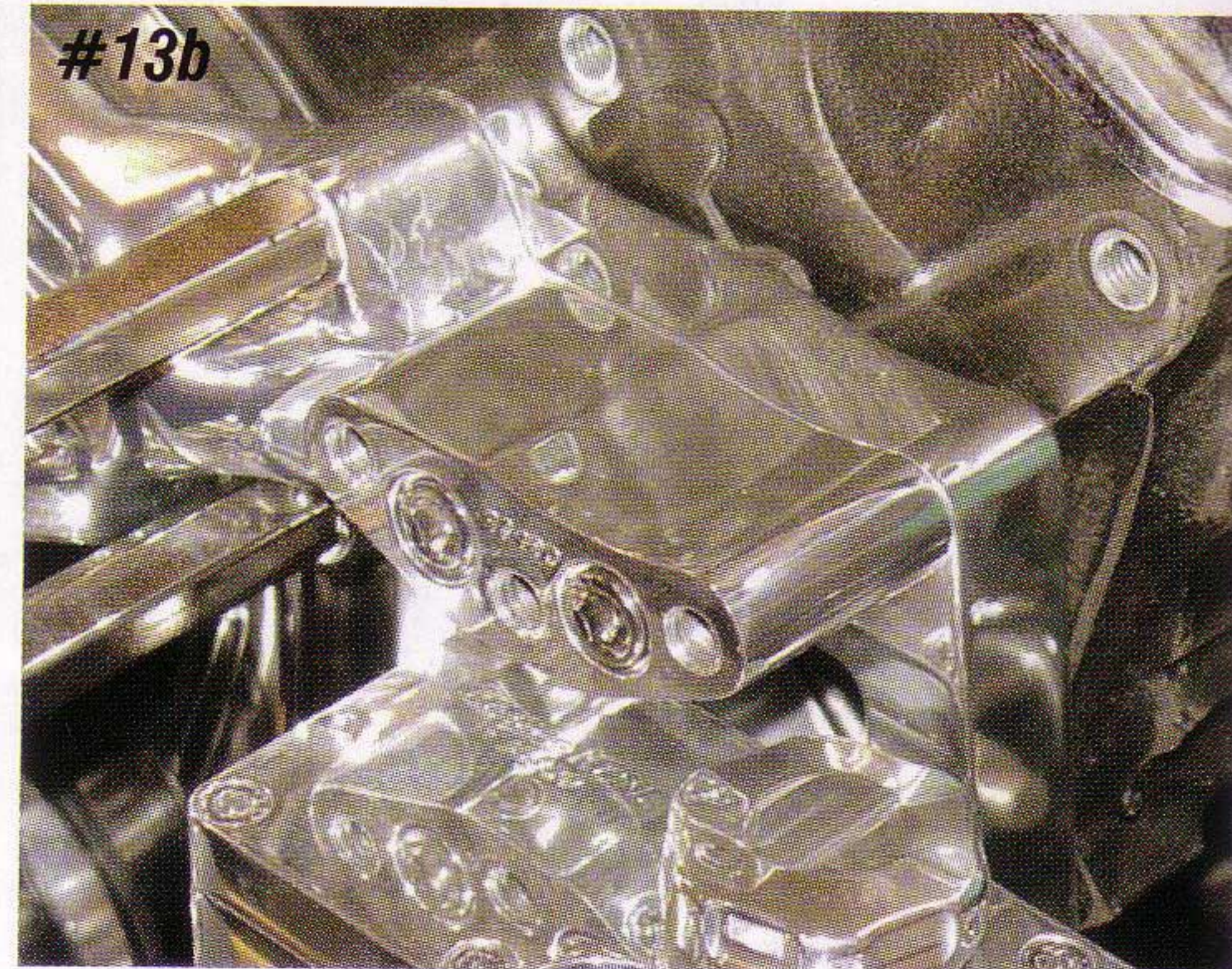
Photos #11a, 11b, 11c & 11d:

If a kit with power steering is being installed, the pulley system includes a GM Type-II pump, which is compatible with a 605, 670 (500) power steering box or the CCI rack and pinion kit. The pump has a billet reservoir and #6 pressure and return fittings. The pump and pump spacer are mounted to the driver's side mounting plate and are held in place with a 5/16" x 4" upper bolt and a 5/16" x 3-1/2" lower bolt.

Photo #12: The power steering pump pulley is held to the pump with three 1/2" x 3/4" Allen head bolts.



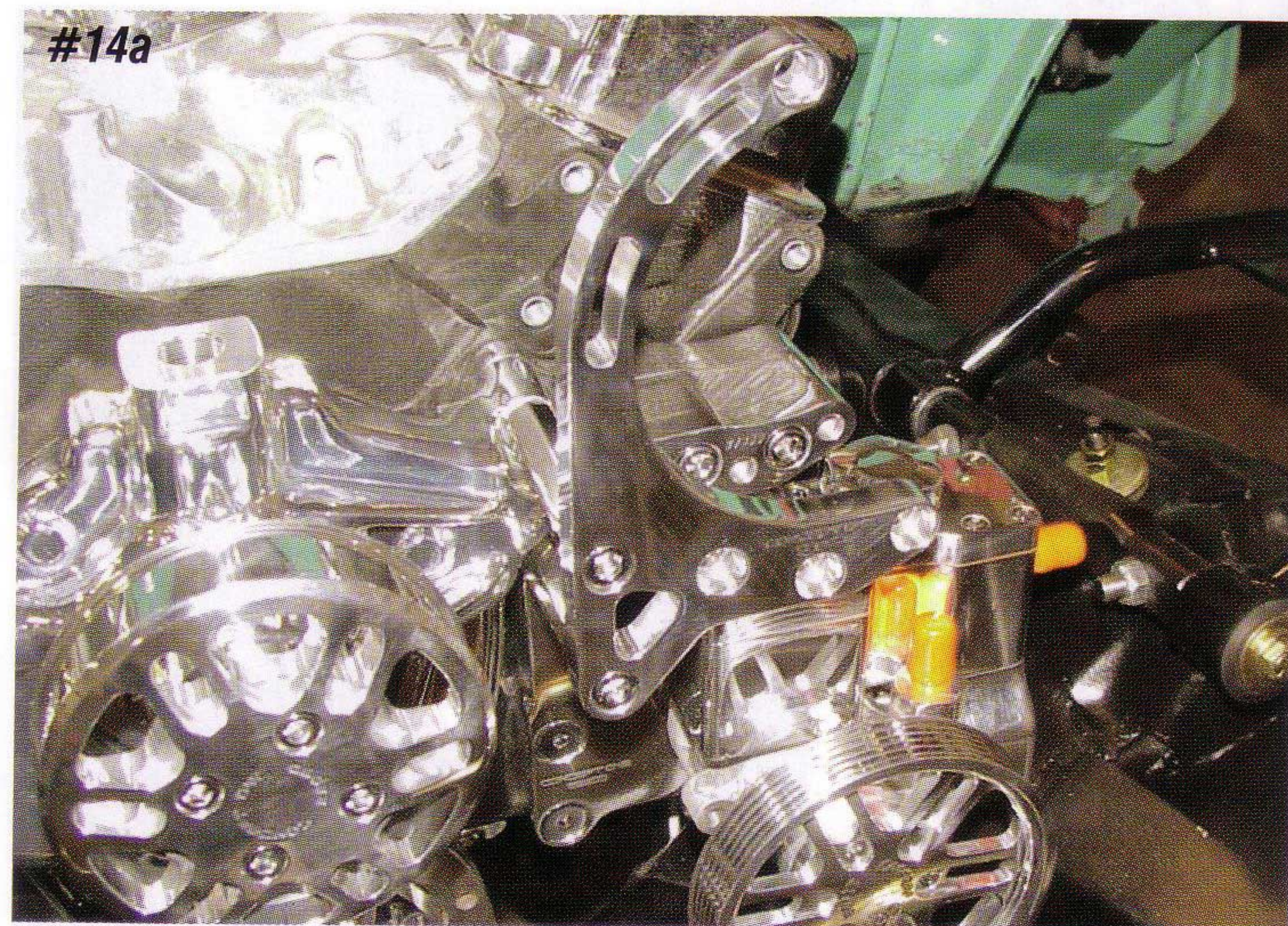
#13a



#13b

Photos #13a & 13b:

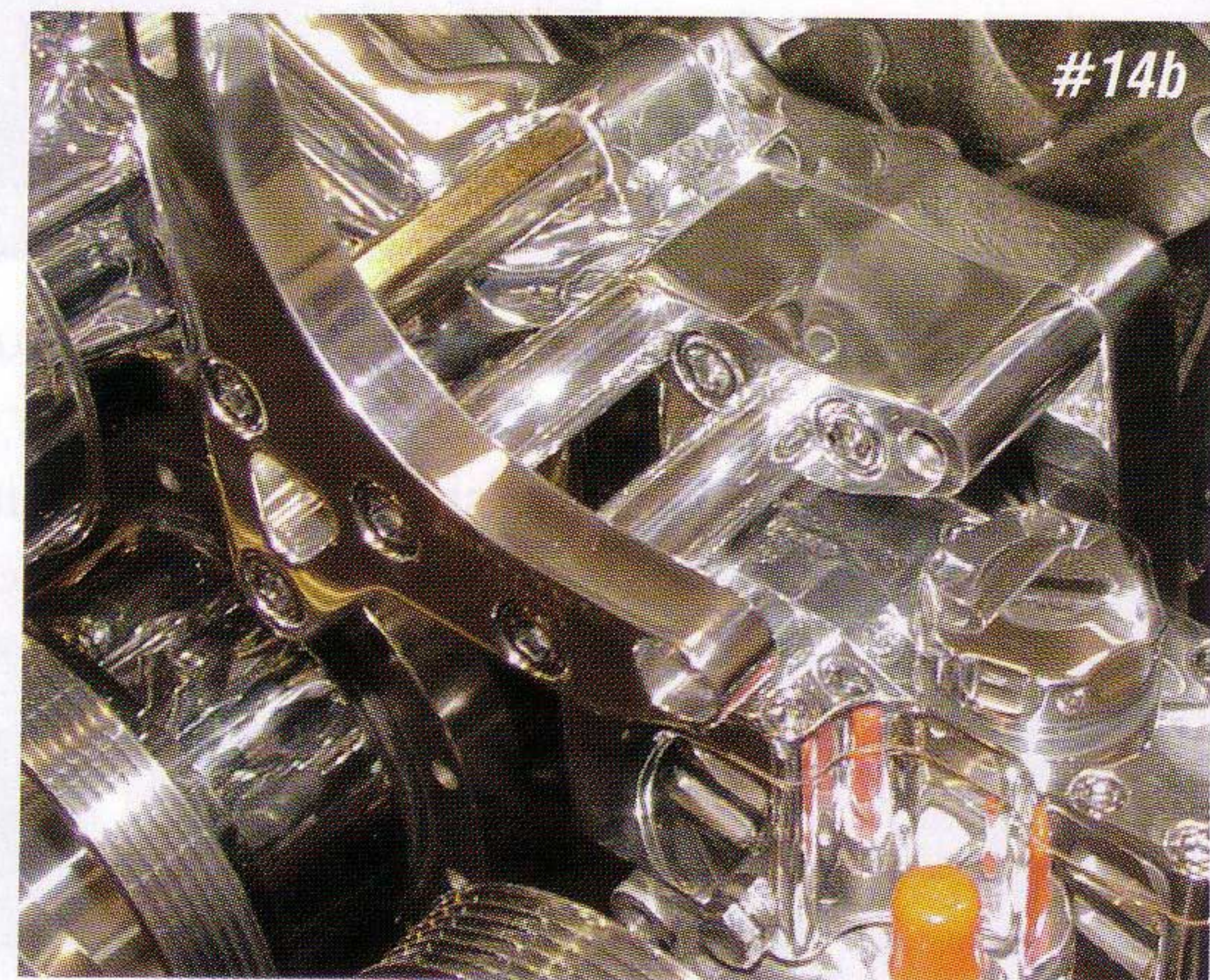
The banana shaped bracket is for the alternator and mounts to the driver's side mounting plate just above the power steering pump. The bracket is held to the mounting plate with two 3/8" x 1-3/4" Allen head bolts.



#14a

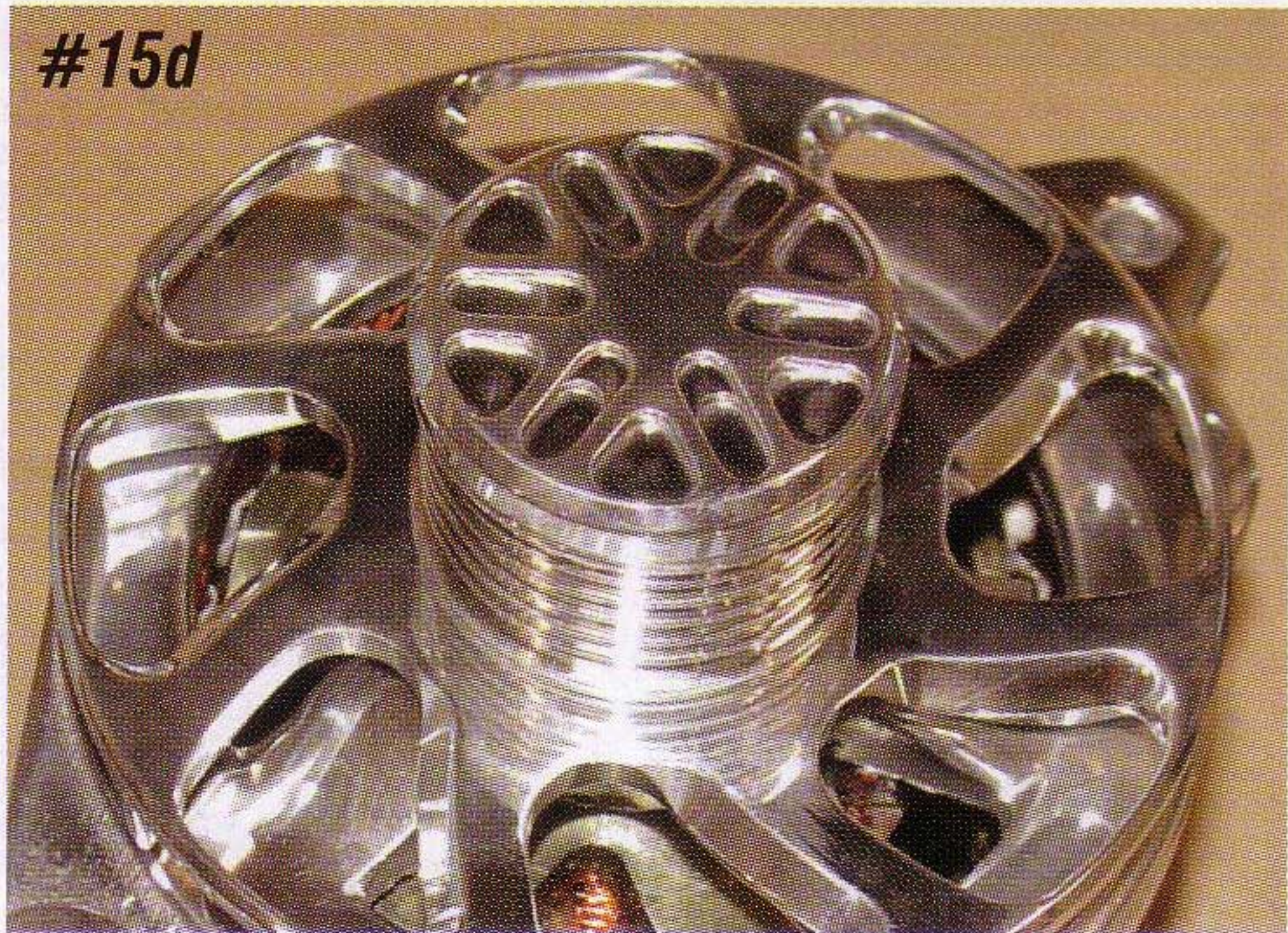
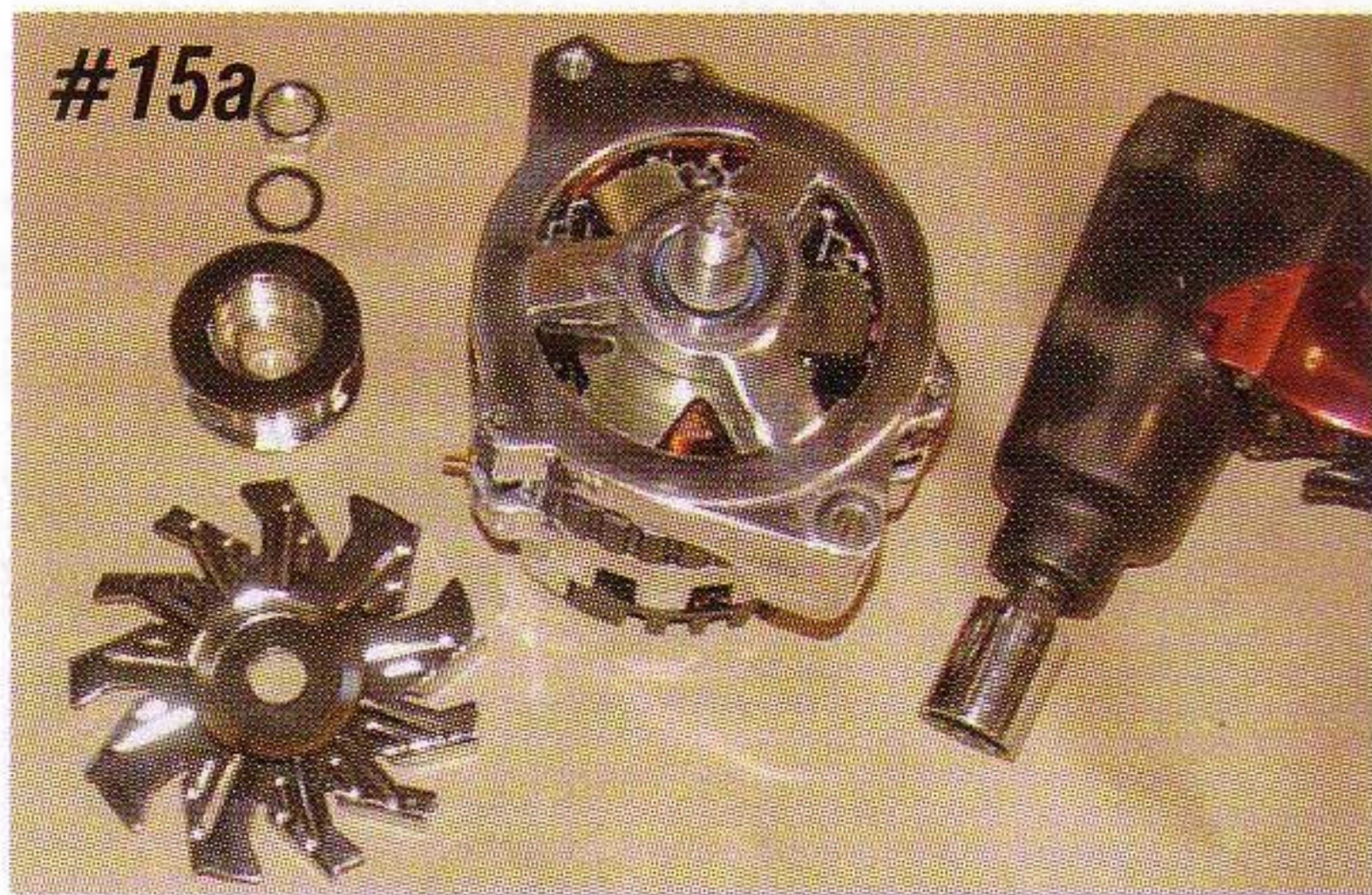
Photos #14a & 14b:

Next install the main alternator bracket. This bracket bolts to the two tall nuts on the driver's side and to the banana bracket. The main alternator

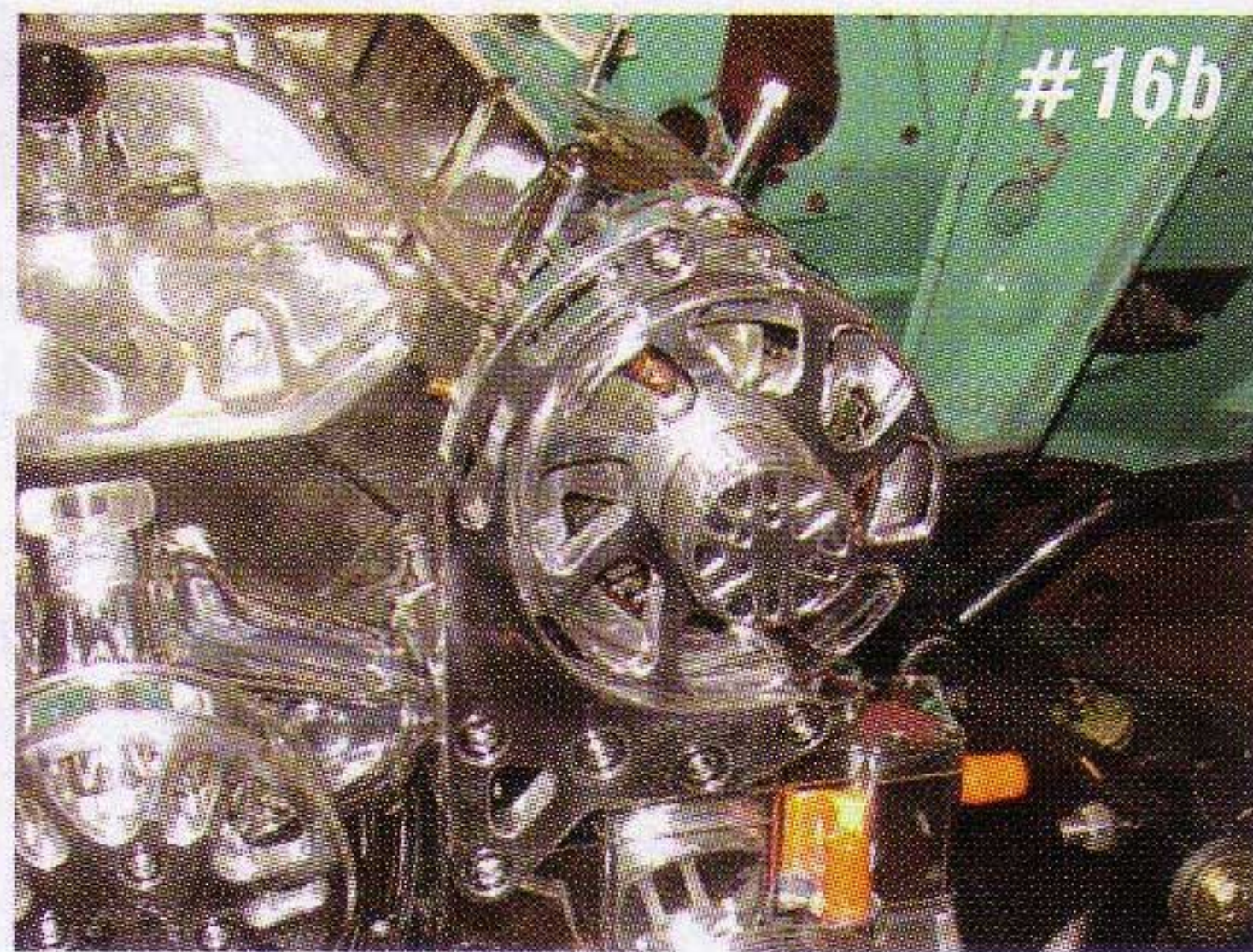
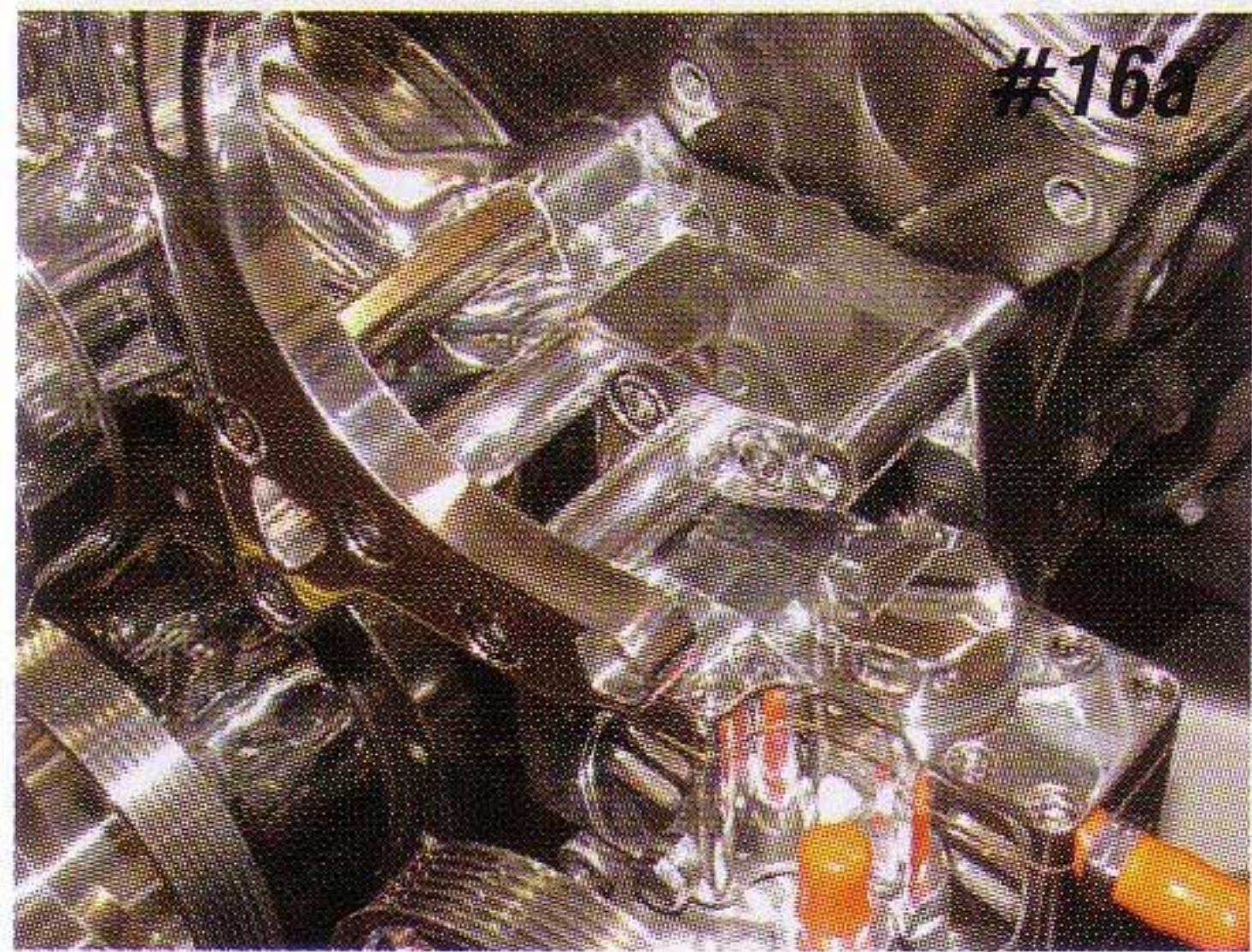


#14b

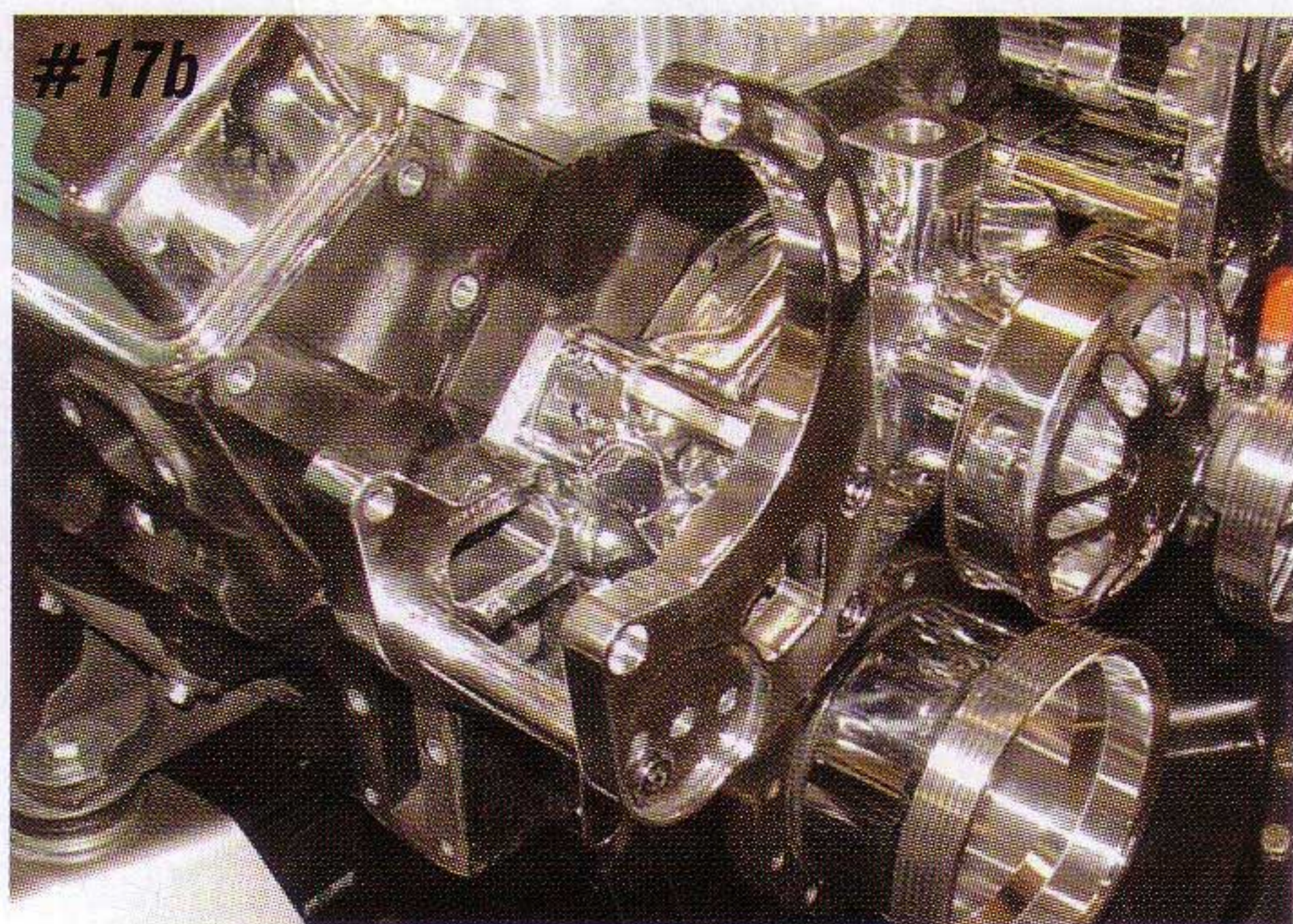
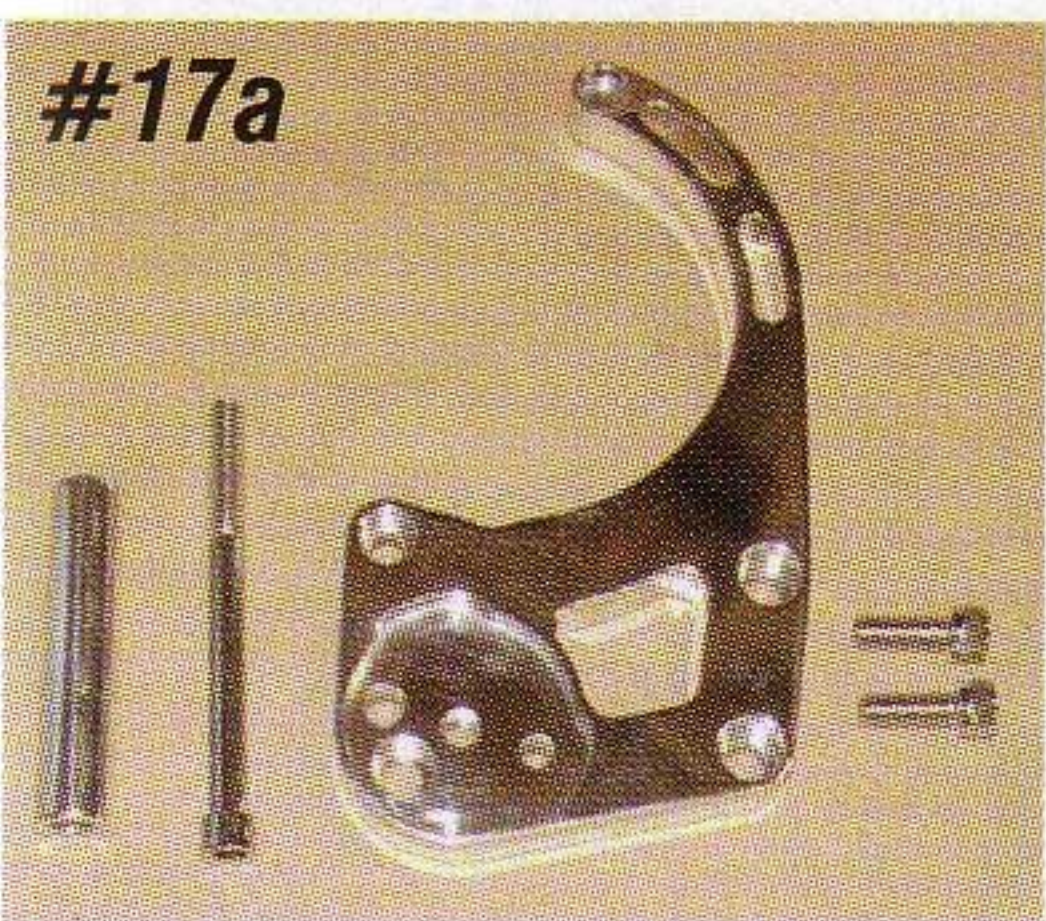
bracket is held to the two tall nuts with two 3/8" x 1" Allen head bolts. Leave these bolts loose at this time. There are two 2" long spacers that fit between the main alternator bracket and the banana bracket. Two 3/8" x 3" Allen head bolts pass through the main alternator bracket, the two 2" spacers and bolt to the banana bracket. Also leave these bolts loose at this time.



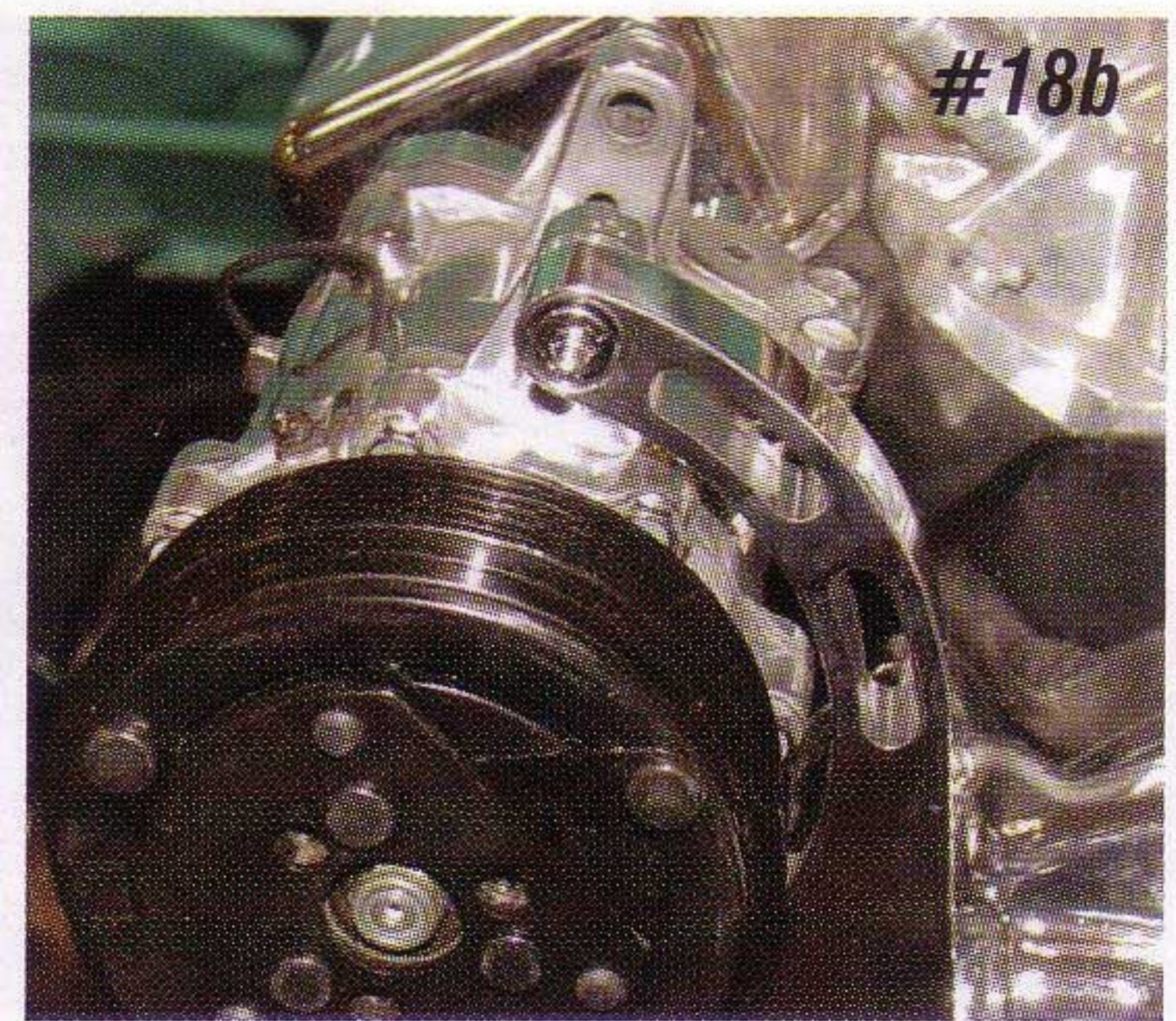
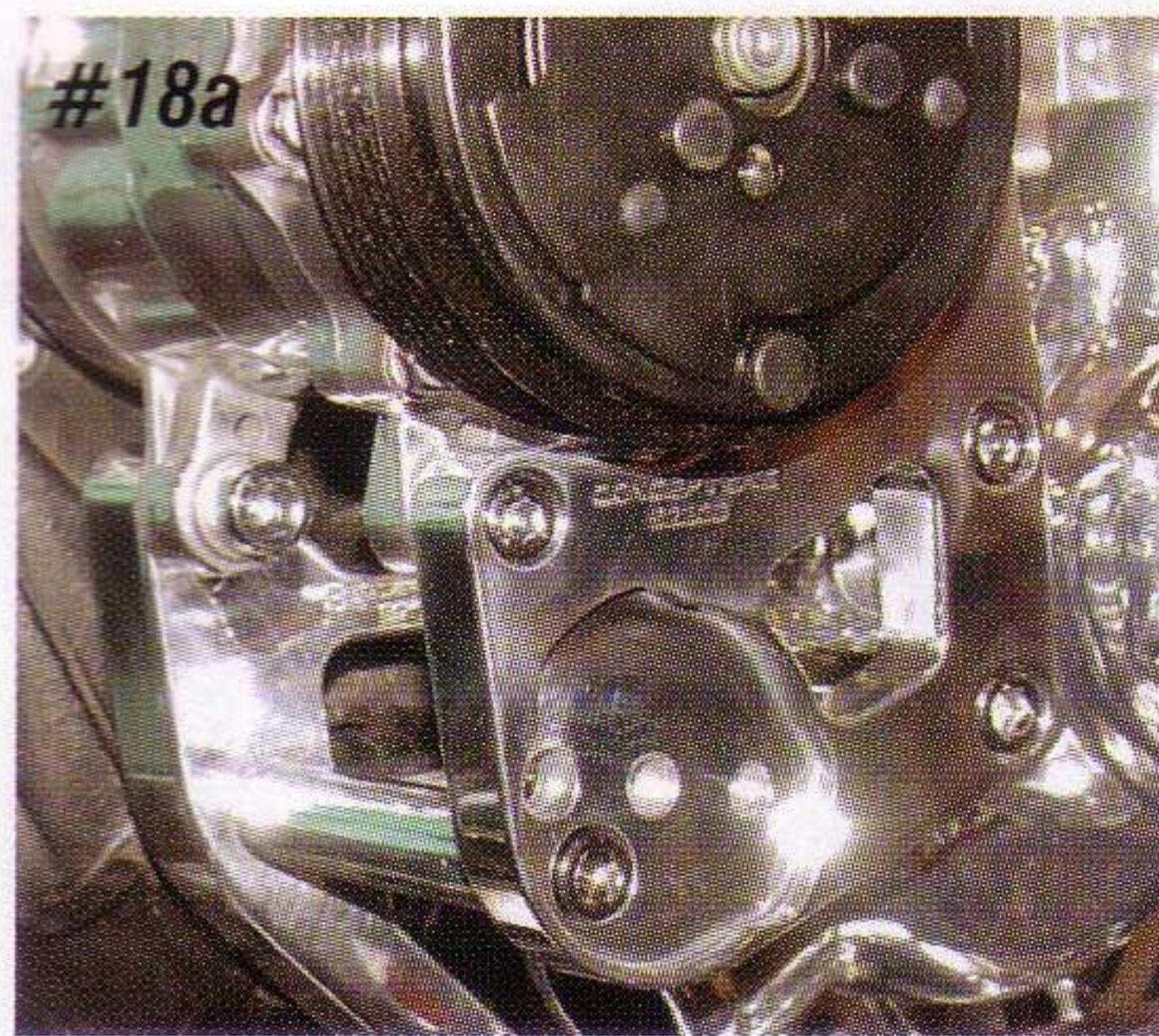
Photos #15a, 15b, 15c & 15d: The serpentine pulley kit includes a new billet alternator pulley, cover and fan for the Tuff Stuff 100 amp alternator included with the kit. Using an air impact wrench, remove the chrome pulley and fan and replace them with the new billet parts. The pulley cover is held in place with an O-ring.



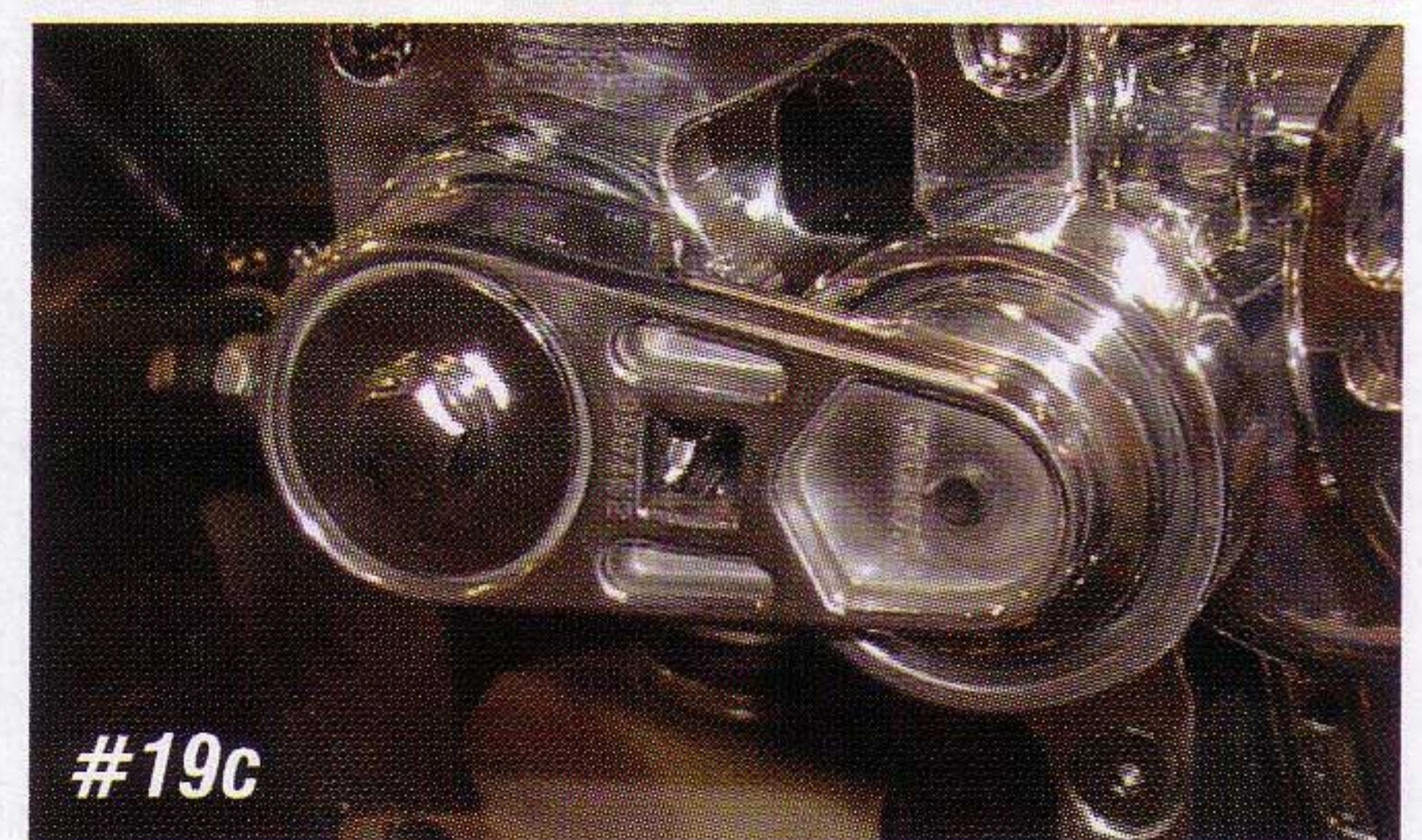
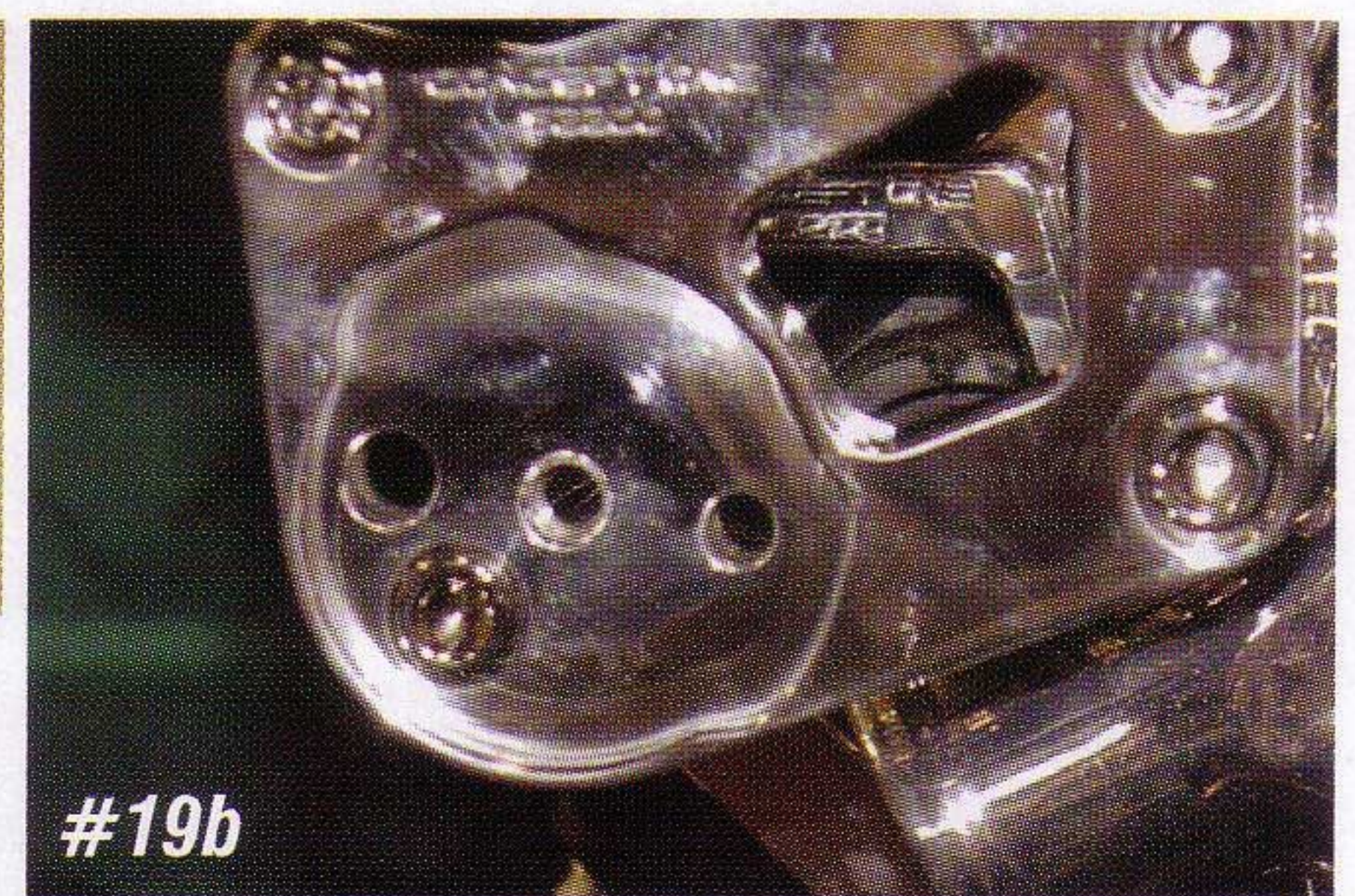
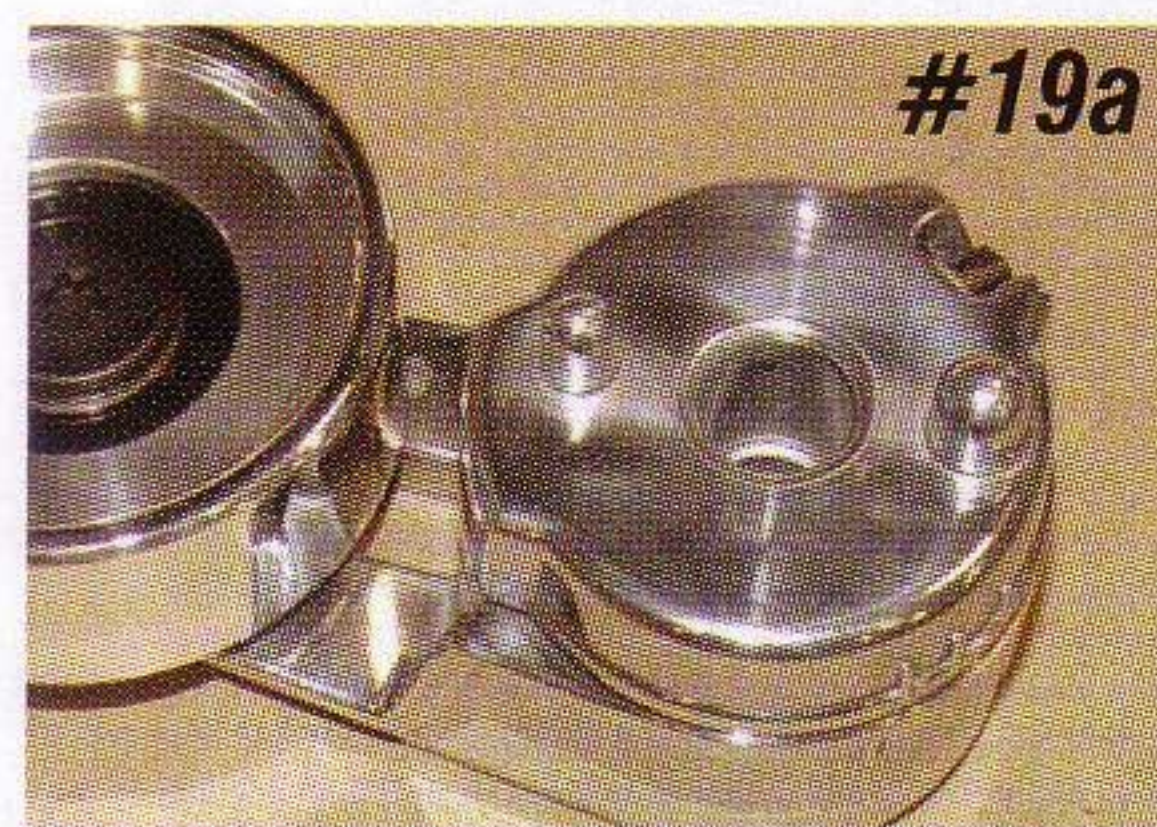
Photos #16a & 16b: The alternator is trapped between the main alternator bracket and the banana bracket. A 3/8" x 3" Allen head bolt is used at the bottom of the alternator and an 8mm Allen head bolt at the top. With the alternator in place, tighten all mounting bolts.



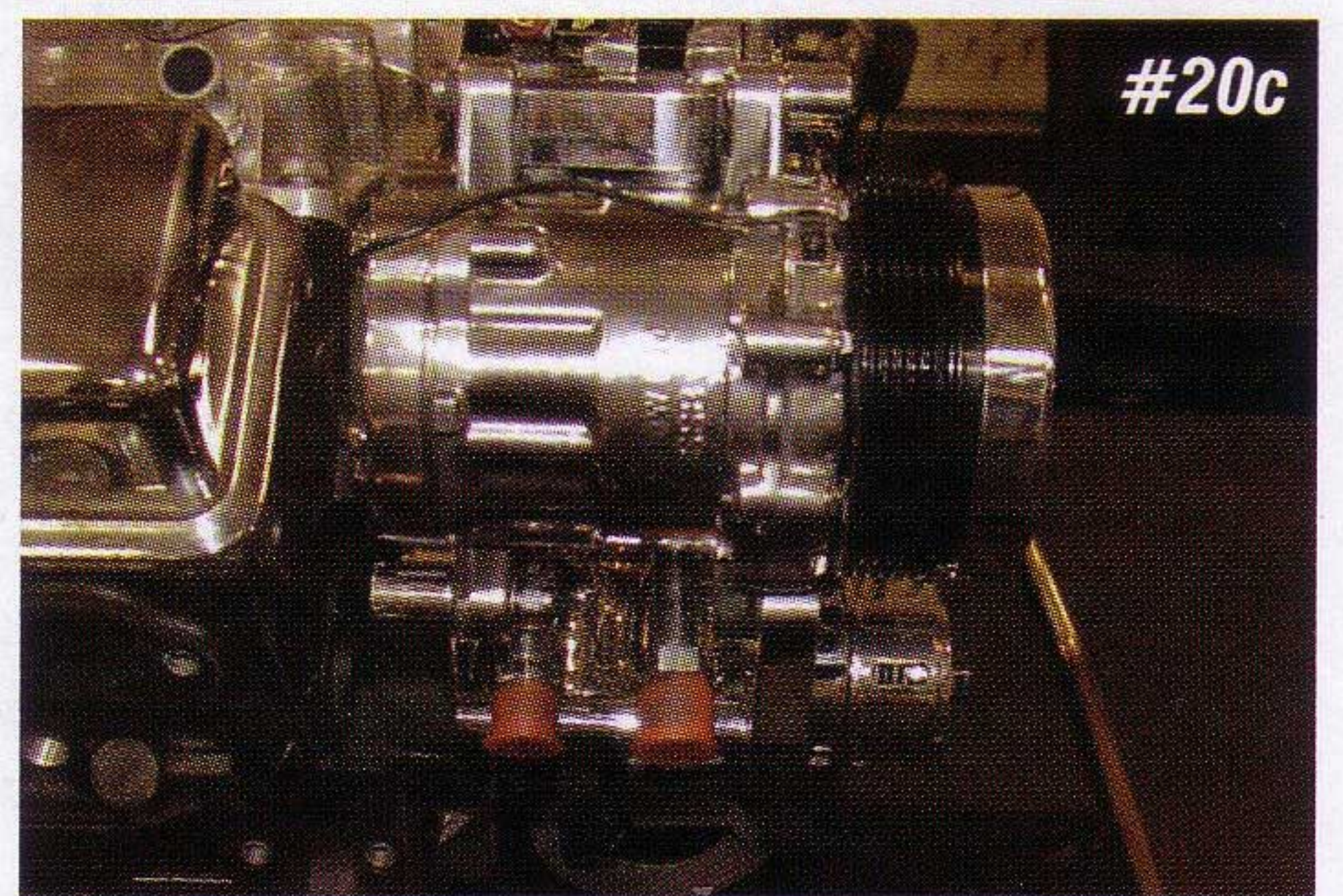
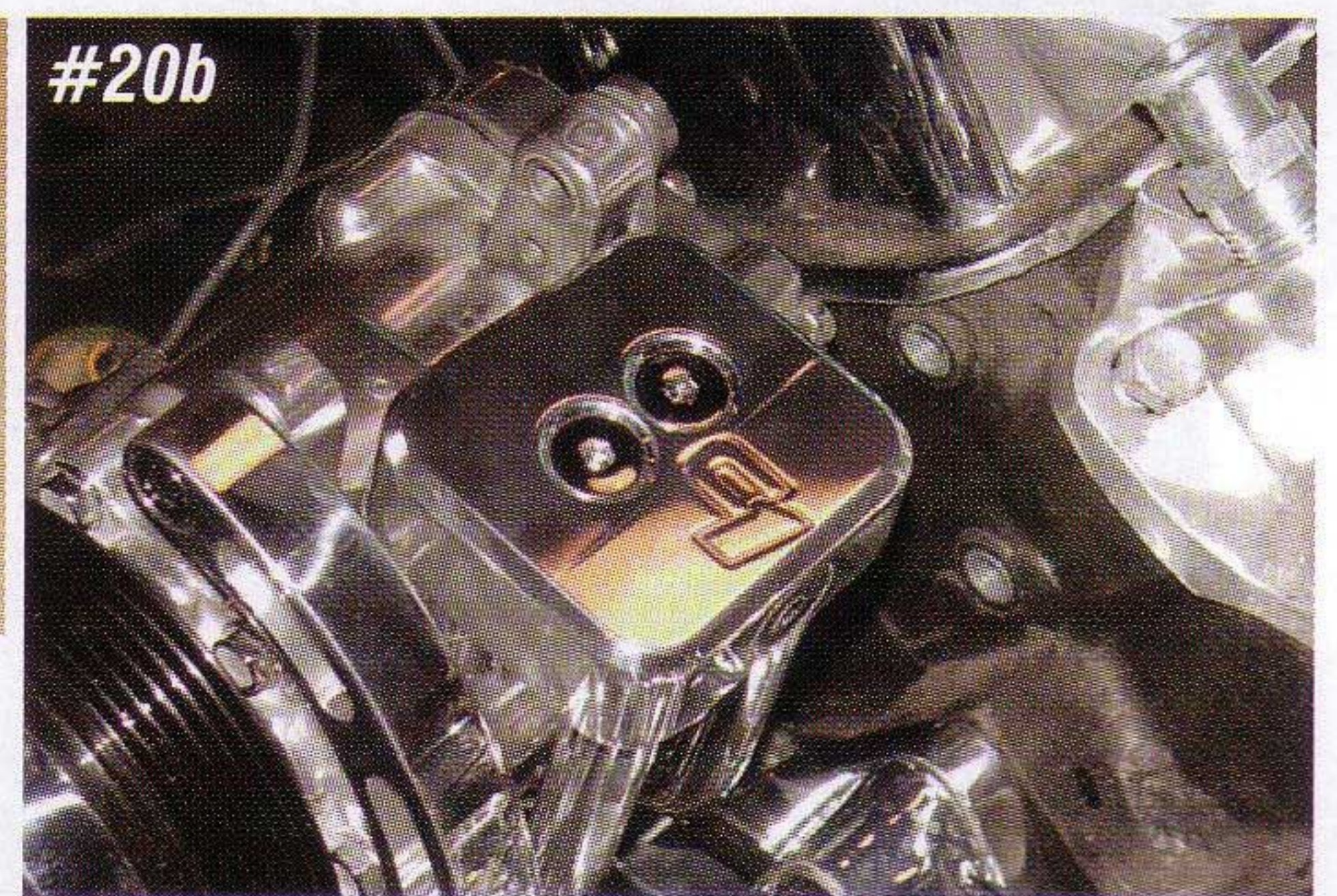
Photos #17a & 17b: The air conditioning compressor mounts on the passenger side of the engine. The main A/C bracket bolts to the two tall nuts and the mounting plate. Two 3/8" x 1" Allen head bolts hold the bracket to the tall nuts. Leave these bolts loose at this time. A 3-1/2" spacer fits between the main A/C bracket and the mounting plate. A 3/8" x 4-1/2" Allen head bolt passes through the main A/C bracket, through the spacer and into the mounting plate. Leave this bolt loose also.



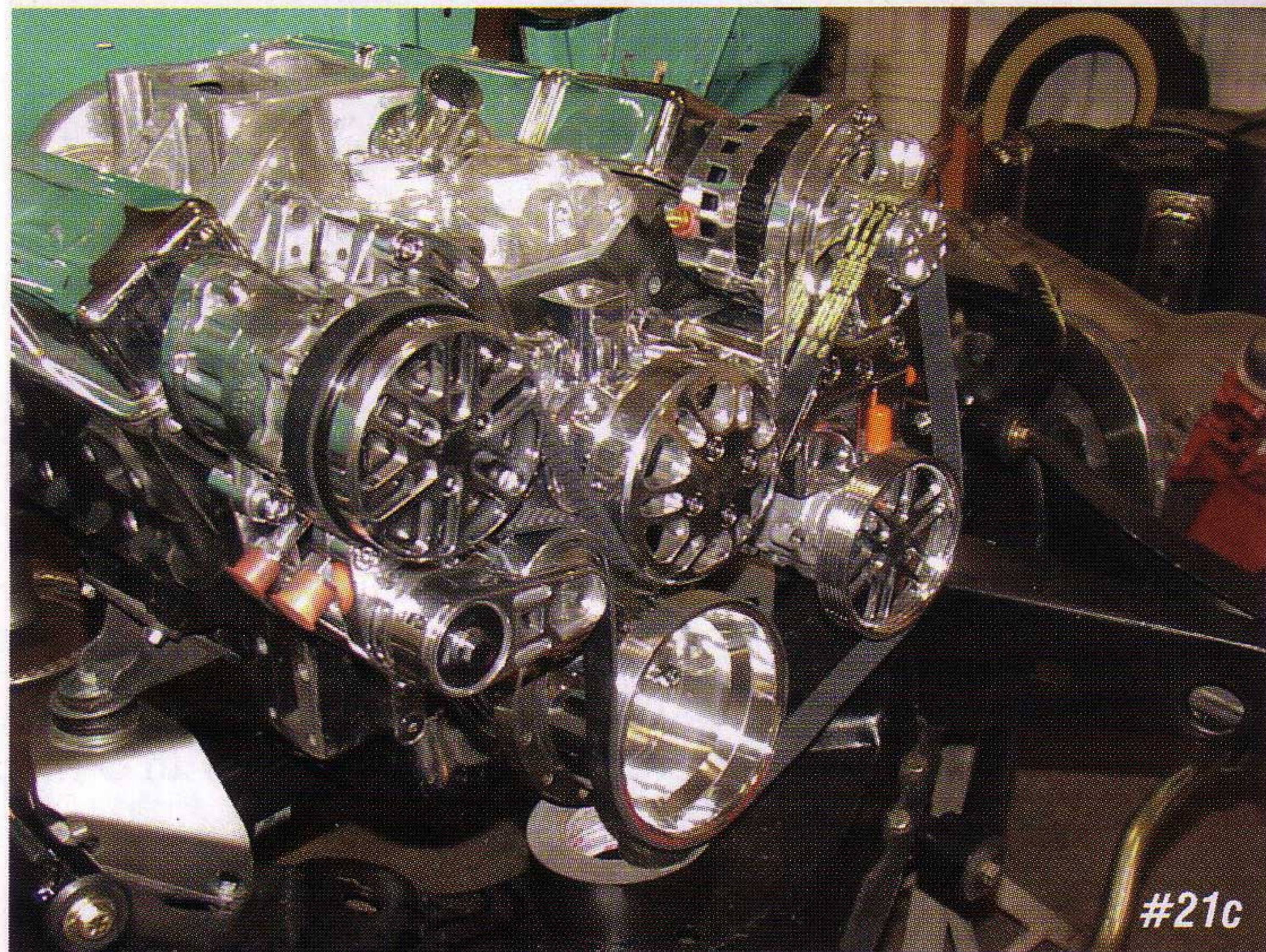
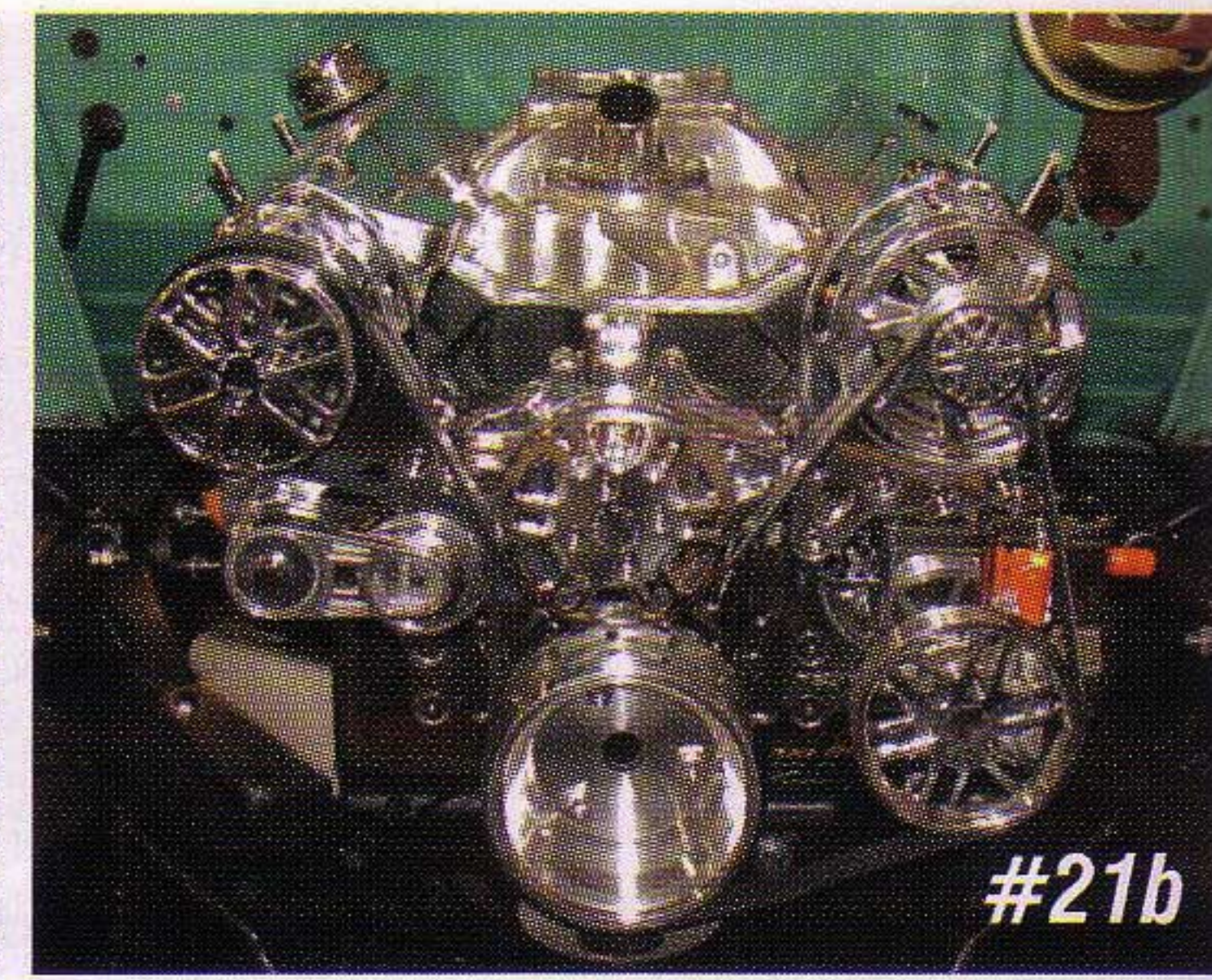
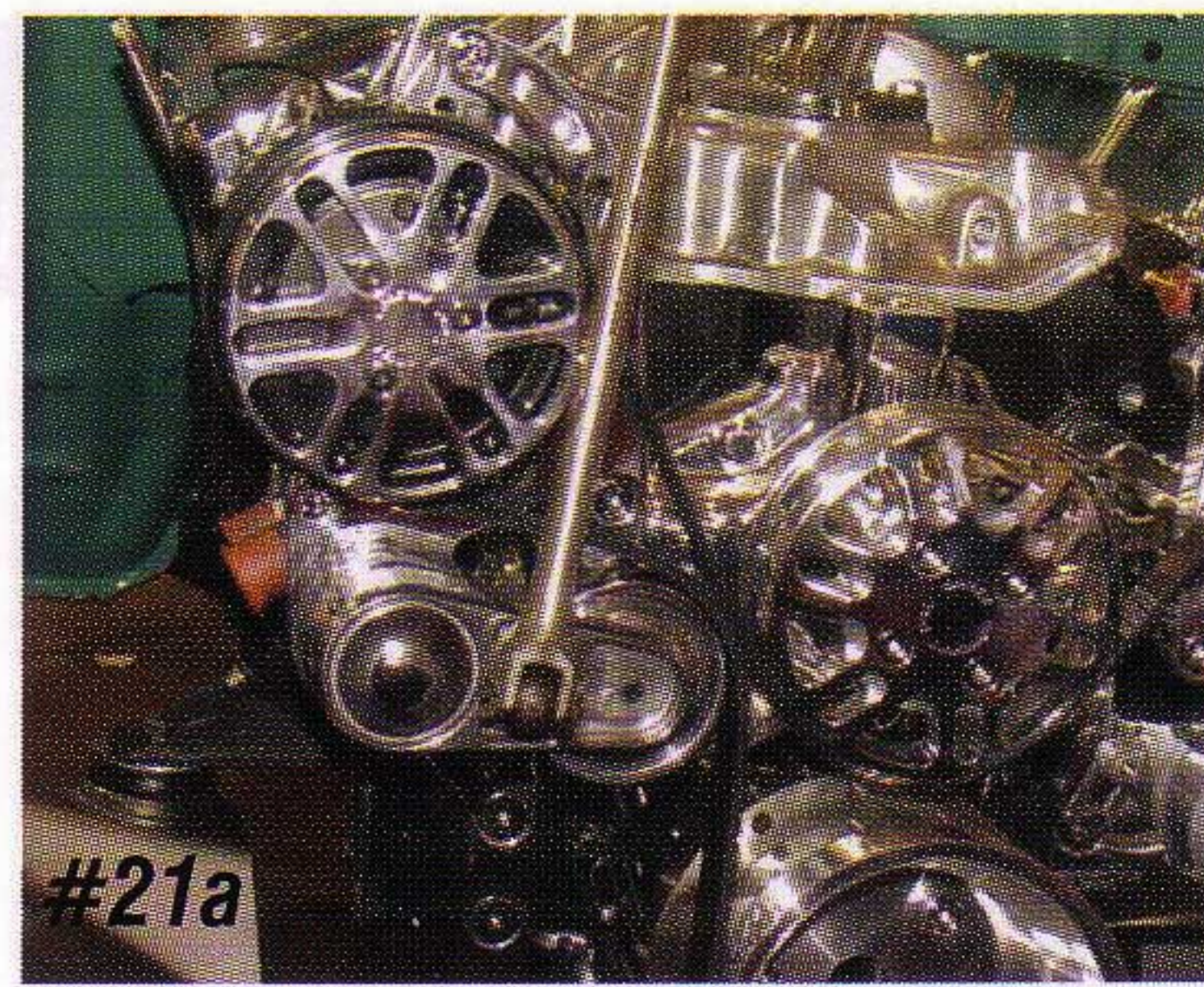
Photos #18a & 18b: A 7/16" x 1-1/2" bolt holds the lower rear ear of the compressor to the mounting plate and an 8mm x 1-1/2" bolt holds the lower front ear of the compressor to the main A/C bracket. The upper mounting ear of the compressor is bolted to the main bracket with an 8mm X 1-1/2" Allen head bolt, with this bolted installed all the bolts can be tightened.



Photos #19a, 19b & 19c: The spring loaded idler for the serpentine belt bolts to the front of the A/C compressor bracket. There are two alignment pins that key into the front of the A/C bracket. The idler is held to the bracket with a 3/8" x 2-1/2" bolt.



Photos #20a, 20b & 20c: The A/C compressor includes a hard line manifold that routes the lines up under the compressor to the outside for a cleaner look. These fittings are #8 & #10 like most aftermarket A/C kits.



Photos #21a, 21b & 21c: Using a 1/2" extension and a pull bar, pull down on the idler and feed the serpentine belt around the pulleys.

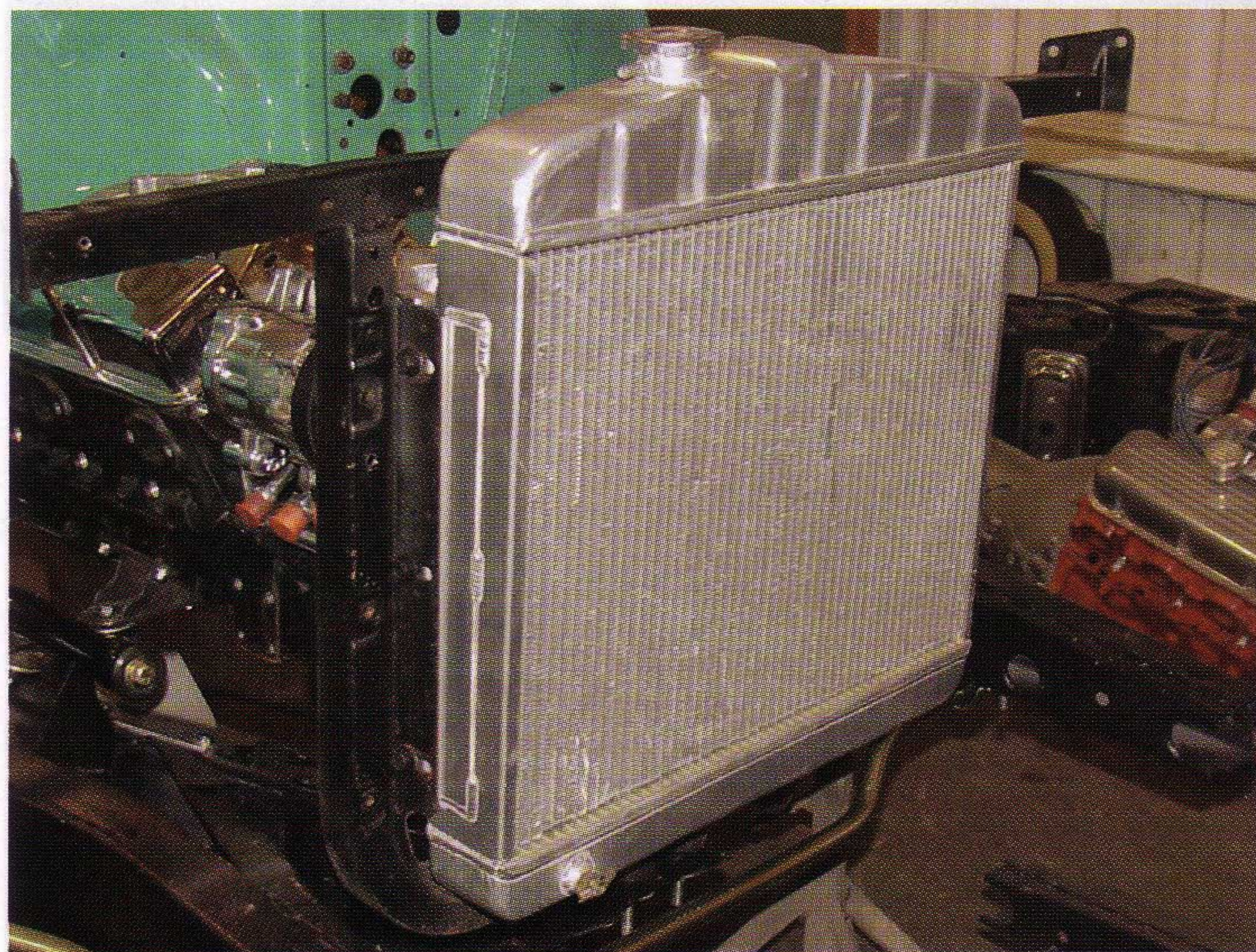


Photo #22: When using the serpentine system the radiator must be located in the 6-cylinder position in front of the core support. If you currently have a V8 radiator and V8 core support, you can easily move it to the 6-cylinder position using relocation kit P/N 18-44. With the radiator in the 6-cylinder position there is plenty of room for either a fan blade or an electric fan system. The serpentine systems also work well with our Griffin cross-flow radiators. Good Luck! 