

tech

# Brass Tacks

**PART 8**

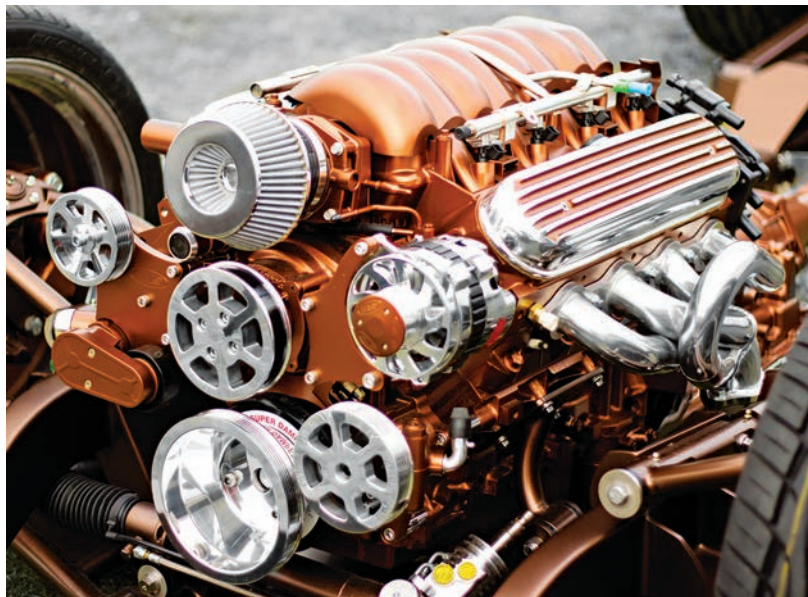
LS ENGINE DRESS UP WITH VINTAGE STYLING

**THE MOST NEGLECTED PART OF TRUCK BUILDS IS USUALLY WHAT'S UNDER THE HOOD.** Lots of little parts or expensive components are sacrificed for bigger wheels or paint. In other words, whatever is most visible tends to take precedence. But popping the hood at a show to reveal a stock engine that doesn't live up to the rest of the build can be a glaring negative mark on the build's overall appeal. Dressing up an engine doesn't have to be difficult, time consuming or overly expensive. Plenty of chrome, billet or painted parts exist to dress up small-block Chevy engines, including vintage speed-style components or more modern billet goodies. LS-based engines are a bit tougher. The powerful and reliable engines lend themselves well to a performance or industrial setup with carbon fiber and raw, mechanically-inspired parts and other items.

But when you have a classic, street rod-inspired build such as the Brass Tacks Blazer, a clean, classic, uncluttered engine bay is the way to go. Since the GM Performance Parts LS3 engine is the EROD package, the goal was to dress up the motor with superficial and exterior components that would not molest the emissions components of the engine package. The first step and the most drastic is smoothing and painting the transmission, heads, engine block and other components. Then Brass Tacks will be sprayed with BASF paints, with flat clear to accent the body color (more on that later).

The most visible and ugly parts on an LS engine are the coils. Many companies make covers to try and hide them and the wiring. We wanted these out of sight completely so that they wouldn't interfere with our vintage-style dress up on the modern engine. A set of cast and polished, finned valve covers from PML takes care of that, but we still need a new mounting point for the coils. Mast Motorsports offers a great kit that moves the coils to the rear of the heads, and supplies new spark plug wires as well for a clean look. With the firewall recess and the engine being moved back 2 inches from factory, they will nearly disappear. Coated headers and exhaust take care of the factory manifolds, leaving only the front of the engine to complete the job.

Eddie Motorsports has been making custom billet parts for cars, trucks and boats for years, and recently introduced





TEXT BY JASON MULLIGAN • PHOTOS BY JASON MULLIGAN AND STATUS

its SDrive accessory setup with an LS package. The kit is available in a variety of finishes from polished and machined to the company's own Fusioncoat. You can also run A/C, or not, as we elected to do. The billet pulley setup is backed with an Edelbrock high performance water pump with a reverse rotation. The Edelbrock pump moves the neck over so that the alternator and brackets have room to hug the engine. The "super cooling" water pump provides maximum flow in only one direction,

maximum pressure and equal distribution to both sides for high horsepower applications. The ATI Racing Super Damper is designed for high performance engines and is utilized with the polished pulley. A power steering pump with a remote reservoir finishes the system.

A Powermaster Performance high output alternator will power the upcoming pair of Kinetik power cells. The alternator is rated at 200 amps, which is necessary when one takes into account the

amount and type of electrical accessories that it will power in the future. From the Pioneer audio system to the pair of Viar compressors in addition to the usual truck operations, a higher output alternator will meet the demand head on, so it was an easy decision on the upgrade.

With all of the paint work, accessories and Eddie Motorsports SDrive installed, the modern LS3 engine has a clean, vintage look. Next up are the bodywork, paint and assembly on the rolling chassis. ■

**The GM Performance Parts EROD LS3 engine and B&M Racing & Performance, 4L60E transmission and accessories arrived perfectly packaged in crates.**



**With the motor and trans mocked up, the dress up begins. We were looking for some vintage styling to add to the modern motor, so we used a set of finned LS valve covers from PML. The cast and polished covers feature internal braces so that only two bolts are needed to mount them. The covers also feature optional breather baffles on the side of the valve covers for a clean look.**



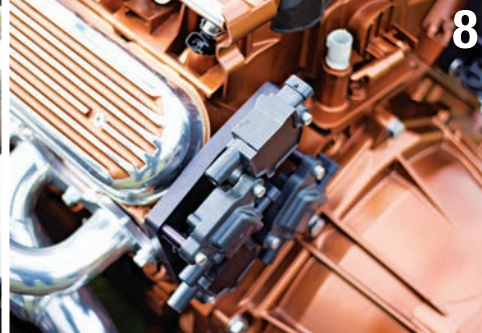
**With new valve covers, the coils will need to be relocated. Mast Motorsports produces a great kit that mounts the coils to the rear of the heads, out of the way, for a sleek look.**



**The coils are installed onto each of the mounts in an alternating pattern.**



**The Mast Motorsports mounts complete with coils are simply bolted to the back of each head.**





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Mast Motorsports supplies a set of spark plug wires that is the correct length for the newly relocated coils.

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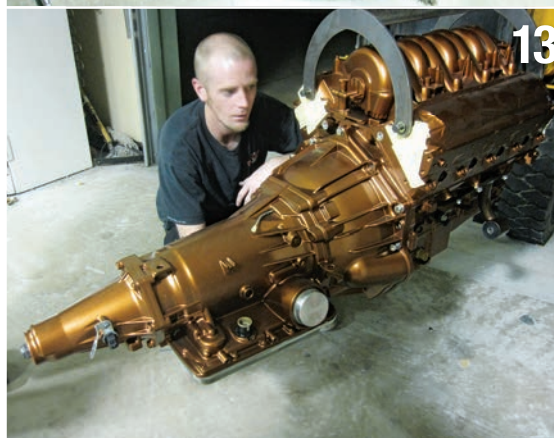
The B&M transmission and LS3 engine have been smoothed and prepped for paint. We will cover that next time, but take note of the masking on the valve cover area to ensure no areas are missed.

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The LS3 engine is filled with Royal Purple synthetic engine break-in oil, while the transmission will get a dose of Max ATF fluid also from Royal Purple, and then the two are mated.

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A billet reusable filter from PurePower! filters oil. It can be washed and reused time and time again.



## BRASS TACKS, PART 8



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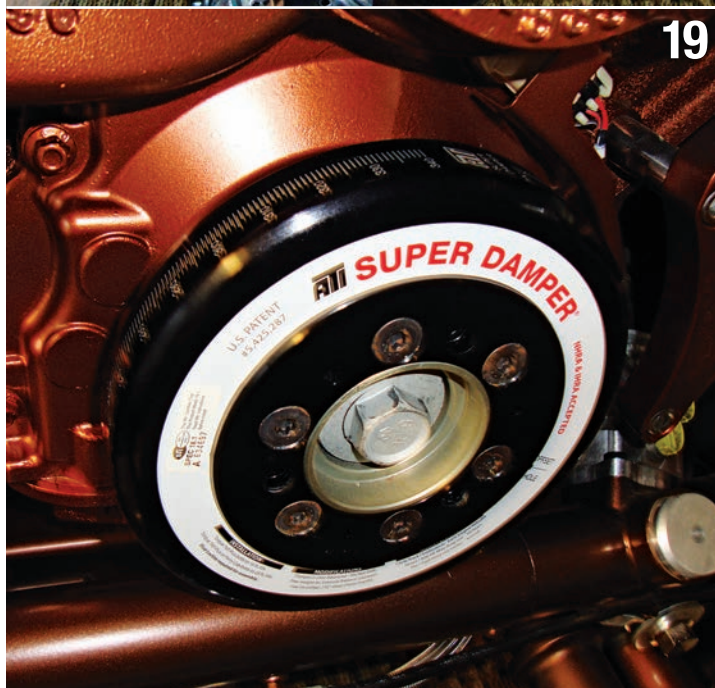
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The next step is the front drive accessory setup. Eddie Motorsports makes its SDrive setup featuring all of the brackets, pulleys and accessories needed for a variety of applications. We opted for its polished kit to offset the BASF Infiniti Copper Metallic flat paint on the engine.



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The ATI Racing Super Damper is installed with its bolt kit along with the power steering pump that features a remote reservoir.



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The Edelbrock high-performance water pump has been smoothed and painted to match, except for the contact areas, and installed. The pump maximizes and equalizes flow for high-performance cooling.

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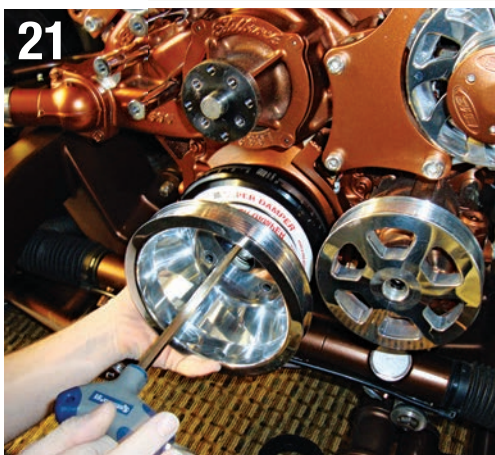


The brackets have been painted to match, and the idler pulley from Eddie Motorsports is installed with the bracket bolting to the Edelbrock water pump. This is the "No A/C" option. A Sanden compressor and bracket would be installed here if you chose that route.

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The Eddie Motorsports water pump pulley is bolted up.

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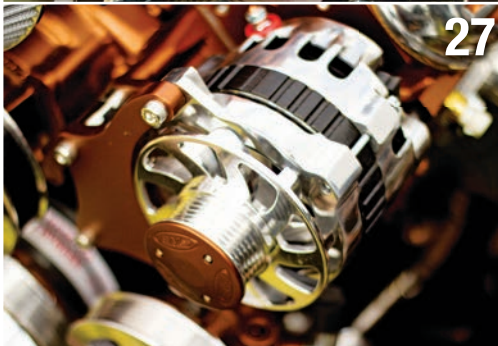
The Eddie Motorsports crank pulley is installed onto the ATI Racing Super Damper.

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The Powermaster Performance high-output alternator is next. The bracket is mounted and the 200-amp alternator is outfitted with the Eddie Motorsports pulley and pulley cover.

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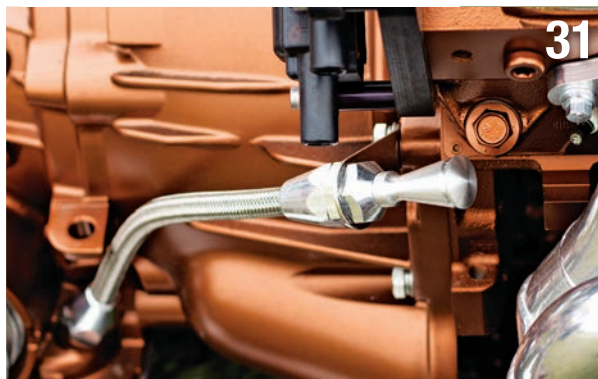


## BRASS TACKS, PART 8



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*Topping things off, a Spectre Performance air filter is mounted to the painted throttle body. A custom Pro Fab air intake system will be built once the body is on the chassis.*



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*A Lokar transmission dipstick is also used. It mounts off of the housing out of the way.*



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*The final item, before a belt, of course, is the tensioner. The cover has been painted to fit with the theme where only the polished pulleys stand out.*



32

*The polished PML valve covers saw some flat copper paint, as well. Merely masking off the polished areas is an easy trick that provides a great custom look. The Jet-Hot-coated Hedman headers also lend a great look.*



30

*For a clean and classic oil dipstick, a Lokar Anchor-Tight locking flexible dipstick was mounted off of one of the header bolts. These dipsticks have a locking mechanism similar to an air hose disconnect that holds vacuum better and is NHRA approved. They are available in several finishes.*

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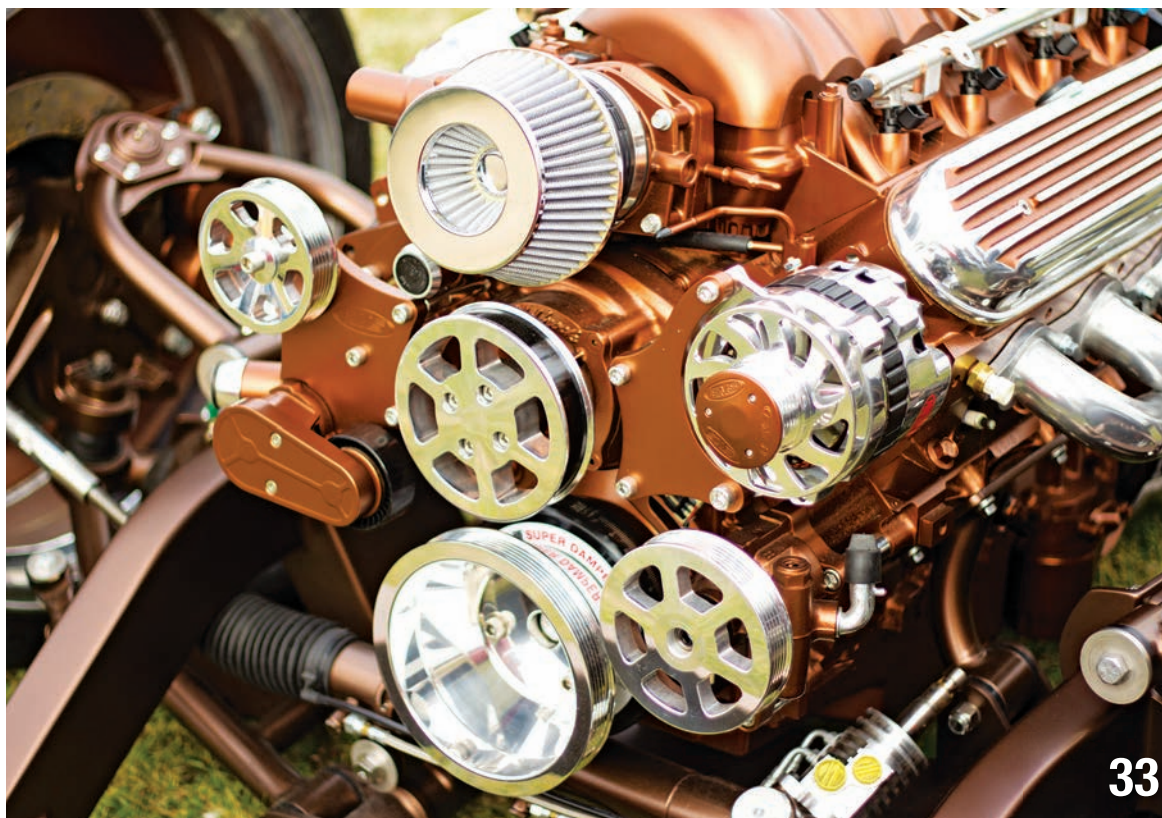
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*Here you have the complete front drive setup. Next time we will demonstrate the steps to smooth and paint the chassis, suspension, engine and accessories.*

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## Sources

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Rockwall, TX 75087  
972.772.0146  
Creatingrollingart.com

**ATI RACING**  
Atiracing.com

**BASF AUTOMOTIVE REFINISH**  
Basrefinish.com

**B&M RACING & PERFORMANCE**  
818.882.6422  
Bmracing.com

**EDDIE MOTORSPORTS**  
888.813.1293  
Eddiemotorsports.com

**EDELROCK**  
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**GM PERFORMANCE PARTS**  
Gmperformanceparts.com

**LOKAR**  
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Lokar.com

**MAST MOTORSPORTS**  
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**PML INC.**  
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**POWERMASTER PERFORMANCE**  
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Gopurepower.com

**ROYAL PURPLE**  
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