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INSIDE: *Product Showcase: Ram Cummins 25th Anniversary Upfit Kit. See page 108.*

YOUR STORY

Feature Article on a Member Vehicle

WELCOME LITTLE BROTHER

by Robert Patton

Let's Order a New Truck

I just took delivery of a 2014 Ram 1500 EcoDiesel from my local dealer, Troncalli Ram, Cumming, Georgia. It was ordered in mid-March. Now I can take logging on to www.ramtrucks.com/vots to check the truck's order status out of my daily routine. As an aside, the truck spent more time in shipment (10 days) than it did in any other queue. (Logistically speaking, the Frame/Paint/Trim is only a two day process.) The vehicle order tracking (VOTS) is kinda hokey, but perhaps it is better than no information at all.

Hindsight has 20/20 vision. My truck order went extremely smooth. As mentioned, the order was placed on 3/14 and the truck was delivered five weeks later on 4/18. From what I observed on different "where is my truck" threads at internet forum web sites, I can only say I was very fortunate. The truck wasn't held up in some post-production inspection queue, nor did it suffer from railway to tractor/trailer delays. Atlanta, Georgia, is a major railway hub.

It has been quite some time since I ordered a vehicle from a factory. The two other times were a 2003 Turbo Diesel and a 1983 Buick Regal. Back in the day, the order-from-the-factory was something my dad enjoyed doing, so I guess I got the order-it gene from him.

Actually, not so much. If you'll recall, in last issue's editorial I talked tongue-in-cheek about the death wish/car count (DWCC). My DWCC number was .77. I average owning a different vehicle every nine months. Don't be too impressed; most are \$500 clunkers. The expensive cars/trucks hang around for a while. The point of this rambling: Aside from Turbo Diesels that have to be purchased for TDR story content, I rarely purchase new. I'll take a three/four year old vehicle with a little bit of remaining warranty, and a lot of initial depreciation, over the new-kid-in-town vehicle any day.

Enough rambling, Little Brother has arrived.

About the Truck

Being the frugal type (or, some would say, cheap), mine is a 1500 Tradesman. If you'll recall, my 2010 Turbo Diesel was also a Tradesman (then called an ST) and it was purchased off the dealer's lot with a steep discount. Considering it was in stock from March 2010 until August 2010 and we were in the midst of a bad recession, the steep discount was understandable. There weren't any steep discounts on this 2014 EcoDiesel. Officially it was on the dealer's lot for only four hours.



Here it is sitting on the dealer's back lot.

There were several quirks in my "how cheap can I be" order. First, I wanted air suspension with two-wheel drive and a 6'4" box. For some unexplainable reason, you can't get the air suspension in this combination. You can get it with a smaller 5'-7" box or you can get it if you go four-wheel drive and the 6'-4" box.

There were other quirks in the option pricing. The one that immediately caught my attention was the disparity in the price of the diesel engine option. Here were the numbers:

- With a 4x2, 5'7" box, the diesel option was \$4000
- With a 4x2, 6'4" box, the diesel option was \$2850
- With a 4x4, 6'4" box, the diesel option was \$2350

Okay, go explain the above logic. Bottom line, I wanted the air suspension and I wanted a 6'4" box, so I had to order a four-wheel drive truck. All quirks considered, the four-wheel drive version was \$3000 more than a comparable two-wheel drive truck.

Also, for this new-kid-in-town EcoDiesel I went all out. I ordered the Popular Equipment Group, \$645, which gave me carpet on the floor (along with several other items) instead of the rubber floor liner.

My efforts at frugality: a sticker price (destination included) of \$42,750.

Ouch. For comparison, my good 'ole 2010 two-wheel drive, 2500 truck had a sticker of \$40,820.

However, this comparison has a key flaw—how much more would the good 'ole 2010 truck have been were it four-wheel drive? In today's numbers (base price to base price) the difference is about \$3000. So, \$40,820 + \$3000 = \$43,820.

What do all these numbers mean? How about that today's 1500 is comparable in price to a "new" 2010, 2500 truck? How about it was an interesting exercise for me to do (I made it as apples-to-apples as I could), and it helped me justify the sticker shock of the 1500.

Moral of the story: I have no doubt you'll do the same analysis should you consider any kind of new or used vehicle in the future.

(I recall that TDR writer Dr. Mark Barnes wrote about the mental struggles with three kinds of financial analyses. I went to our web site and reread his article "The Fever," from Issue 48 that is found in his book *What Makes us Tick?*, page 42-43. Also, check our Barnes' "Tricks of the Trade," from Issue 78, pages 92-93 in his book, *What Makes us Tick?*)

Good luck in your endeavors. And, remember this little ditty: figures don't lie, but liars figure.

Yes, I Purchased a Tradesman Truck

You just read about the order process. Did it put you to sleep?

The real point of the above is that all of us do some kind of analysis to justify the purchase of a big ticket item.

Here is another analysis that I did. I asked the dealer, "Change the base vehicle from 'Tradesman' to 'Laramie Longhorn' and let's see what the base price difference would be?"

The answer: the base price went from \$35,800 to \$49,600.

Wow, I can purchase a lot of accessories for the difference in price of approximately \$14,000. Later in the story we will see how quickly I can spend the savings. (Sounds kinda like your wife's logic.) Up front I'll spend \$1500 to upgrade my wheels and tires to 20" and another \$1400 to get some Laramie leather seats from a used truck.

The difference is now \$11,100. How much more will I spend in pursuit of Laramie features?

Do I need the following:

Remote start	Heated steering wheel
Park view	LED interior lighting
Park sense	Uconnect 8 with 8.4" touch screen
Power pedals with memory	Amplified speakers and subwoofer
Security alarm	Two tone paint
Floor console	Chrome bumpers
Longhorn accents	Halogen headlamps
Leather steering wheel	Dual exhaust
Navigation	Premium tail lamps
Heated rear seats	

Over time, let's see how this comparison works out.

Initial Fuel Mileage

As tempting as it was to take the truck directly from the dealer's lot and install the new 20" SRT-type wheels and tires, I postponed the installation. I filled the truck to the top of the tank, drove 3 miles to the expressway and made a 240 mile trip to Charlotte, North Carolina, with the speed set at 75 mph. (Cruise control speed and total miles were verified with GPS.) Upon arrival in Charlotte I filled the truck. Miles per gallon: 23.85.

I putzed around Charlotte for the weekend. I filled up and made the return trip to Atlanta. The cruise was set/verified at 75mph. I went 242 miles using 9.9 gallons: 24.4mpg.

What does the 24.16mpg number tell us? At this early point, I'm afraid not much. The Atlanta to Charlotte to Atlanta route is rolling hills with no real total elevation change. There was traffic, there was a bit of wind. The truck is not yet broken in. Time will tell. Quick math, a 10% improvement would get the truck to 26mpg territory. Now we are talkin'!

Change the Gear Ratio

With a baseline mpg reading done I could now install the new wheels and tires. So, how does it look?



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The black 20" wheels and tires make a huge difference.

I feel I got a great deal on the 20" SRT-style wheels with Cooper 275 x 60 x 20 tires at www.performanceplus.com.

The diameter of the 20" tires is 33," a difference of 1.3" from the OEM tires which were 31.7." Effectively, I have changed the rear end ratio by 4% from 3.55 to 3.41. Should this 4% be a concern?

Indeed it should. Well, kinda. Not really.

Choose one of the above; all of the answers are correct. Here is the story.

A Long Conversation on Gearing, SAE J2807 and Tow Ratings

In several previous issues we have talked about the Society of Automotive Engineers towing and hauling testing known as SAE J2807. I'll save you from digging up the previous magazines; here is a quick refresher from last issue:

Quoting from Automotive News author Larry Vellequette:

The towing standard, called SAE J2807, tests vehicles under load in three categories: climbing, acceleration and launching.

The tests are pass-fail, and the load weight is up to the manufacturer. If a pickup passes all three tests with, say, a 10,000-pound load, the truck gets a 10,000-pound rating.

In the launch test, a pickup with a loaded trailer is put on a steep 12 percent grade—a rise of 12 feet over 100 feet of road. That's the equivalent of a 220-foot ascent in a half mile.

To pass the launch test, the pickup must travel up hill at least 16 feet from a standstill five times within five minutes, then do the same in reverse in another five minutes.

To pass the acceleration test, the vehicle and loaded trailer have 12 seconds to reach 30mph and 30 seconds to reach 60mph on level ground. The vehicle also must accelerate from 40mph to 60mph in less than 18 seconds on level ground.

Finally, the climbing test requires the vehicle and loaded trailer to ascend 3,000 feet over an 11.4-mile stretch without dropping below 40mph and with the air conditioning at maximum.

Now, we all remember the formula for horsepower: $HP = (\text{torque} \times \text{rpm})/5252$

How do you *make* more horsepower? Rev the engine higher.

Common sense (as well as the ratings that Ram can publish) tells us that the 3.92 will zing the engine higher and help tremendously in those J2807 acceleration tests. So, the higher numeric number = higher tow rating.

Gear it with a lower numeric number, in my case the order blank gave me a 3.55, and you get a lower tow rating.

Effectively change the gear ratio by adding bigger tires and I'm sure the truck would continue to drop in its tow rating.

*Effectively change the gear ratio by
adding bigger tires and I'm sure the truck
would continue to drop in its tow rating.*



Yes, total diameter of the tire changes the overall gear ratio. Even though the 20" wheel/tire combo is in the background, you can still see that it is taller than the stock wheel/tire combo.

So, what is the bottom line? There is a GCWR "number" that is associated with the truck. I'm not at all concerned by my truck's lower number. I know how to downshift and, from my old days as a product support representative at a Cummins distributor, I'm all-too-familiar with the "gear fast/run slow" theories of fuel economy. Unlike its Heavy Duty brothers and some of the available super-tow packages, my truck has the same brakes, same frame, same cooling system, etc., as the 1500 truck with the 3.92 differential. However, it isn't "rated" to tow as much on paper.

Pay Attention Heavy Duty Readers!

Concurrent with the changes to my truck's overall gear ratio by going to the larger tire size, there was an abundance of discussion at the TDR's web site when a TDR member asked, "What gear should I get in my new Heavy Duty truck I'm going to order?" The question was posted in the April timeframe.

For your entertainment I would encourage you to find the discussion thread at our web site.

However, from the preceding J2807 discussion I've given you some insight about how the tow "number" is determined. Keeping in mind the big rig motto for fuel economy "gear fast/run slow" and the choice of how to order a truck or how to evaluate the merits of the 4.10 versus a 3.something-or-other ratio becomes as subjective as the load that has to be transported.

Again, I vote to gear fast/run slow, downshift as necessary.

ACCESSORIES FOR LITTLE BROTHER

Okay guys and gals, we're all on the same team. How do I begin this story on accessories for a 2014 Ram 1500 EcoDiesel while keeping it relevant to the established Heavy Duty crowd?

Perhaps let's start with the definition of insanity: Doing the same thing over and over again, all the while expecting a different result.

So, you can call me insane—for this 2014 upfit I'll use the same accessories (over and over again) on this truck that I have used on the past three Heavy Duty Ram/Cummins trucks that I've owned. I won't go back to old truck number two, a '99 2500 (fiberglass side steps, anyone?), or number one, a '96 3500 (a wood-grain dash kit, anyone?), for much has changed in the past 20 years.

Or, has it?

If I go back to truck number three (a '03 2500) I find an established pattern of accessories that are as current today as they were 11 years ago.

Here are some examples of those tried-and-true accessories:

- AMP Research rear bumper bed step
- AMP Research fold-under side steps
- Finger touch oil drain plug
- Mag Hytec differential cover
- Quick grill release kit
- Condenser guard
- Block heater bumper plug
- FASS fuel pump/fuel filter
- MBRP exhaust tip
- Cabin filter kit
- Agri-Cover roll-up tonneau cover
- Gate Glide II tailgate up/down assist
- Mopar splash guards
- Covercraft seat covers
- Edge Insight CTS with back-up camera
- UltiMat dash cover
- Painless Wiring fuse block
- Rostra seat heater kit

And, I would list my favorite accessory, the Geno's Garage center console cup holder, but the factory guys at Ram incorporated this idea into the front seat center section effective with the 2013 year model truck.

Likewise, with Ram's recent (July 2013) release of the 1500 Black Express truck and the 2500/3500 series Black Package (April 2014) it is fun to say that the styling of my 2010 truck, Mr. Schwarz, was also incorporated by the factory folks. Notice I wrote "fun to say." I'd like to think the 'ole Geno's cup holder and Mr. Schwarz were influential in decisions made in Auburn Hills, but it is highly unlikely that is the case. ("Pssssss," the sound of my ego deflating.)

Let's Get Started

Now, with a list of the above parts at \$2800 to be added to a truck that has a sticker price of \$42,750 and a set of 20" wheels and tires that cost \$1500 and a set of "Laramie" leather front seats from an eBay auction (another \$1400) and... Well, perhaps this is insanity. Should I expect a different result?

You've already read about the first change to the truck, the addition of 20" wheels and tires, "Change the Gear Ratio." With the immediate improvement in the look of the truck, I was motivated to continue my efforts to improve the truck's appearance.

That's right, off came the bumpers.



I am really good at tearing things up.

I could take you through the step-by-step process, but the procedure is pretty simple. Under the hood you have an abundance of plastic air-flow shrouding that has to be removed before you can get to the front bumper. Lots of 10mm bolts and plastic push-tab pins, half of which will not be reused, were removed and set-aside. Then it is a straightforward job to unbolt the 18mm nuts and remove the bumper. The rear bumper has six 18mm nuts/bolts that hold it in place.

With both bumpers removed it was decision time. Do I have the Tradesman-trim, black bumpers painted professionally, or do I use the Line-X/Rhino-type bed liner spray and coat the bumpers with a textured finish?

As I did on my '07.5 and '10 Rams, I took the inexpensive route and went with the bed liner spray. I also like the way the textured surface washes and scuffs so that the bumpers are easily retouched. In the past I had used a product called U-POL that was purchased at the auto body and paint store. This time I used a product that was less expensive and I had UPS deliver it to my doorstep. I ordered the "Rock It" bed liner kit made by SEM Products. Summit Racing has the tintable kit for a little over \$100; the U-POL price had risen to almost \$150.

How do you like the bumpers?



With the new wheel/tires and the bumpers reinstalled the profile of the truck is starting to improve. (Notice, no chrome!)

The truck has air suspension and it is set in the entry/exit (lowest) height.

The bumpers and front grill were complete and I had some Rock It left over. I mentioned that the textured surface is easy to wash, so I got busy with the masking tape and lined-off the rocker panels just below the bottom trim line. I textured this area on my '10 truck and I don't have to worry about paint chips or scratches to rocker panels. The tintable liner blends with the existing paint.

If you elect to try a SEM or U-POL bed liner spray, let me issue a word of caution: This stuff will stick on anything and it is next to impossible to remove. Latex gloves, clothing that you don't care about and goggles to protect those expensive glasses that you wear: all are requirements for using the bed liner products. Also, cover the area of overspray with cardboard, unless you want colored or black spackles on your concrete.

Last, but not least, I like the fact that Ram spends an extra dollar or two to give us an underhood mat. However, to an old guy that can't see in the dark, the black mat absorbs light. You can sense where this is leading: yes, I removed the mat and gave the underside of the hood a coat of Rock It. Now, the white-on-white doesn't show up too well in a picture, so below is my 2010 Ram's black hood with a coat of silver/grey Rock It to brighten-up the engine compartment.



The silver/grey Rock It brightens the underhood compartment of my 2010 "Mr. Schwarz" Turbo Diesel.

DOUBLE CUP-CUPHOLDER

On the truck's next visit to the Editor's customization shop, what else could I do?

Earlier I mentioned that effective with 2013 trucks the Ram folks have incorporated the exclusive Geno's Garage cupholder into the center section of the fold down front seat. Their execution of the idea is spot-on, it is a very nice, three position, cupholder.

However (and you knew a "however" statement was coming), can their holder be improved?

Yes! Introducing the Ram Double Cup-Cupholder.



BEFORE



AFTER

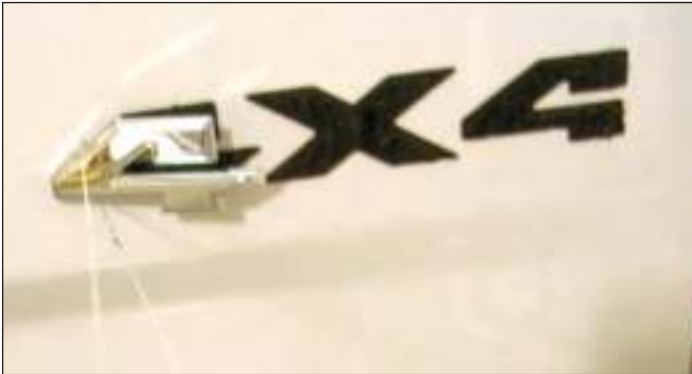
Now, before you blast the idea for being over-the-top, I want you to think about all of the cups and mugs; pencils and pens; cell phones and iPods; loose change and wallets; garage door and gate openers; glasses and sunglasses; tire pressure gauges; and flashlights that you have bumping around in your truck. Where better to keep these items than at your fingertips? Remember, folks, it is a truck and trucks get used. The Double Cup-Cupholder is a great accessory for all kinds of storage.

I really think the idea has merit. I took our first '94-'97 holder and cut the backside off. I trimmed the contour to fit the inner edge of the existing console. Some more trim here and there; four holes for some self tapping Phillips head screws and it was ready for testing. After using the Double Cup-Cupholder for a week you can forget about having to reach down to the floorboard/center hump to find your stuff, it is right at your fingertips. We have the Double Cup-Cupholder available exclusively at Geno's Garage.

Emblem Removal

Next up, remove the emblems.

When I removed the badges from the '10 truck, I forgot about the good 'ole fishing line trick. Back in 2010 I used a heat gun and it warped one of the badges. This go-round I parked the truck in the sun and later in the afternoon I "sawed" through the double-stick tape with some nylon fishing line. The magic eraser from the auto body and paint store was chucked into the drill and the sticky goo tape was removed from the door panels and the tailgate.



Off come the emblems.



The magic eraser is a great tool for removing sticky goo, old pinstriping or those dealer decals that are often found on the tailgate.



The editor has transformed his Tradesman-trim truck into a Sport-trim truck. Insanity?

Quick Release and Condenser Guard

One of the many reasons we purchased the 1500 truck was to develop and/or modify parts that the Geno's folks sell, and introduce these parts to a new marketplace.

I'm thinking a Cummins shift knob for a manual transmission (not available with a 1500 EcoDiesel) doesn't have a home on this new truck. However, I was hopeful that the 1500 audience could enjoy the benefits of the Geno's Garage Quick Grill Release Kit and the Condenser Guard parts that are so successful with the Heavy Duty trucks.

With great anticipation, I opened the hood to find 3.0-liters of engine in a V-6 configuration versus 6.7-liters of engine in an inline-6. The engine is way back from the front and there is a lot of area under the air shroud for the radiator.

With my handy V-claw trim tool I removed the six plastic fasteners that held the top shroud in place. Next, the grill was removed. (Remove four 10mm bolts that are in the vertical position on top, pull horizontally outward and four tab pins pop out of their holes.) With the grill removed, I came to two quick realizations. First, the radiator and other cooling heat exchangers are way, way back in the engine compartment. These coolers are so far back that they don't need a condenser guard. I did cut some nylon window screen and tie-wrapped it over the outermost heat exchangers to keep bugs and small grit from the fins.



Nylon screen mesh added to keep out bugs and grit.

Second, unlike the Heavy Duty trucks, where the metal bumper is directly below the grill, the 1500s have a flexible plastic fascia over a plastic support panel that is stair-stepped above the actual bumper. Is the plastic support panel sturdy enough to stand on? How do you stand on the plastic fascia without scratching it with shoe grime?

Oh, well, so much for the great functionality of the quick grill release kit for a 1500 truck. Since I already had everything apart (and lots of bugged-up plastic push-pin fasteners) I used the pins and tethers and made a 1500 kit anyway.

With the grill removed it is impressive to note the ducting Ram has used to direct the air to the coolers. These photos will show what I mean.



Post Script: Should you want a quick grill release kit, we added two more 1/4" detent-type, clevis pins to the kit that the Geno's folks sell for the Heavy Duty trucks. For underhood servicing it is nice to have the grill out of the way. (However, I'm still not sure about putting a lot of weight on the plastic fascia above the bumper.)

Mudflaps

What is the big deal about mudflaps?

In this case it is beneficial to have multiple parts in hand to compare and then formulate a quick bottom line.

For Fourth Generation mudflaps *without* fender flares, the Husky liners and Mopar liners are the same length. The Huskys are \$13 cheaper and they ship with 3M clear tape to protect the paint.

If you get the truck with fender flares, the Mopar mudflaps are heavy duty rubber and are 1.5" longer than the Husky plastic flaps. So, for the serious off-road types, the Mopars are worth the extra price.

Geez, that's about all the print that mudflaps warrant.

Access LiteRider Tonneau Cover

I have used this brand of cover since truck number two. Each year when I go to the SEMA show or each month when the Truck Times arrives in the mailbox, I make note to see if there is a better mouse trap in the crowded bed cover marketplace. I've found none better.

On my first truck in 1996, I tried the Roll-N-Lock, garage door-type cover. Cool concept, it was fun to show off the push-to-retract feature. However, over time (kinda like a garage door) the push to retract didn't cooperate so well. Also, over time I grew to regret the loss of header space that was taken up by the big box needed for the retractable cover. Over time it was bothersome that there was no flexibility when the cargo was "just one-inch" too high.

Throughout the years I've seen all of the panel type fold-ables, lift-ables, and other brand rollup-ables. For me, the Access LiteRider product still represents the best value in the marketplace. There is no real loss in header space; the cover rolls up to open/rolls back to close in a matter of seconds; the cover is flexible enough to go over slight cargo irregularities; and the cover latches securely when down. The only drawback: security-wise its thick vinyl cover is no match for a thief with a knife.



The Access Cover is a five-star item. Installation takes about 30 minutes. Should you have an interest in this cover the Geno's Garage folks documented the installation with a video that you can find at <http://www.youtube.com/watch?v=3-4UwOvCBaM>.

Painless Wiring

Long ago TDR writer Scott Dalglish introduced this product to the TDR audience. His comment, "This is the building block for the addition of electrical accessories in a professional manner," still holds true for me. And, with the complexity of today's electronics and switches that tie into interior control modules rather than direct circuits, the need (should I say requirement?) for a separate electrical system for your add-on goodies is paramount.

All right, we've established a need for this accessory, now where do you locate it? I went back to Issue 72 to review my installation in my 2010 truck behind the knee bolster panel. To remove the knee bolster panel, start underneath and remove the two Phillips head screws at the bottom of the panel. Now the only thing holding the panel in place are some plastic expansion clips. As you might imagine, I removed several of these clips to make future removal easier. To remove, pull the panel down at the top and horizontally out at the bottom.



The knee bolster panel has been removed and the Dremel tool will soon be cutting the tab where the Phillips head screws were located.

With the knee bolster out of the way there is plenty of room to add a Painless Wiring accessory fuse panel.



Seat Replacement

As you already know, I purchased a Tradesman truck and I had the bright idea to replace the driver's seat as I had done with my 2010 Mr. Schwarz truck. Sorry, gang, the factory's Tradesman, a non-adjustable, "embossed cloth," diesel gray-colored seat is not the hot ticket.

While my memory is not the best, I recall that the seat swap on my 2010 Mr. Schwarz truck was not easy. Short story: The entire seat is easily removed from the truck, two 15mm bolts in the front, two 18mm bolts in the rear. However, the seat is riveted onto its sliding frame and you can't easily grind off the rivet heads to remove the seat. Issue 76, page 50, has the details. I was determined not to repeat the "saws-all between the seams to cut the rivets" lesson.

The five weeks between ordering the truck and its delivery (yes, five weeks, I was very fortunate) gave me time to think about seat replacement, eBay presented an interesting option.

I think you can see where this is going. Log onto eBay motors and do a search in the parts and accessories category for "Ram 1500 front seats." It didn't take me long to find a front set of Laramie Longhorn, black leather seats. Power settings, lumbar, seat heat, seat cooling, memory settings, side curtain airbags: These seats had it all. I was hooked.

Maybe, I was hooked.

With today's electronics, how would I make all of the accessories work? Seat movement? Seat memory? I know the seat's heat and cooling are switched at the truck's center control area. How would the wiring interface work? The airbags... well, my truck's seat has the airbag modules, maybe this would be plug-n-go?

Unfortunately (fortunately), it isn't 1994 when most of your controls were hard-wired to a simple switch. Today we have wiring to the body control module (BCM) and the BCMs are configured/programmed at the factory. As an example, the Geno's folks could not help a customer "upgrade" his mirrors. He purchased a replacement set that had the puddle lamps. The new ones plug right in, but the lamps did not operate. A check of the wiring loom to the mirrors indicated it should be okay, but no success. The seat swap could be complicated.

Perhaps I paid too much for the seats, but remember, I've got 14K as the difference between the Tradesman and the Laramie Longhorn trim package. The seats were \$1400. They arrived as advertised, brand new, take-out seats from a railcar accident. As advertised, the side curtain air bag modules had been removed.

Time to go to work. Just how much of the seat's controls would plug-n-go? The factory seat was quickly removed and wiring connections unplugged. I loosely installed the new seat. I made a note that my seat had 5 pins; the new seat's harness has 12 pins. I made a note that the new seat has another harness with 20 pins and there is no wiring for this harness from my truck. I plugged the new seat in. For fun I hit the fore/aft, up/down, tilt/tilt controls on the new seat.

Nothing. This could be complicated

As I suspected, I would have to supply +12volts directly to the new seat's harness. I identified the +12volt seat wire and provided a +12 volt ignition off/always hot wire to the seat. The controls worked! The lumbar inflation worked!

Now it was time to sort out the seat's other features. Long story, short version:

- Investigation of the new seat-to-truck wiring harness revealed that the side curtain air bags were plug-n-go. This was confirmed when the air bag module was pulled out of the factory "embossed cloth" seat and installed into the Laramie Longhorn seat. The "check air bag system" note turned off.
- I direct-wired power to the seat's cooling fan. I installed an on/off switch. My switch was located on the seat's side panel.
- The new seat's memory settings buttons do not work. Oh, well, 4 out of 6 features, not bad!

Moral of the story: Be adventurous. I love the Laramie Longhorn seats.



The Laramie seats transform the interior.

Seat Surgery – Seat Heat

It seems like yesterday that I was fiddling around with seats from a Fourth Generation truck, removing the outside seat covers only to discover those pesky hog clips hold the very top of the seat covers in place. However, last go-round I was intent on adding seat heat with both element pads on the back, no element on the bottom. This time I have a different plan.

Experience has proven that using both elements to cover the back really did not accomplish much. For me it is lower back heat that makes the drive comfortable. Only one element is needed for this and the pesky hog clips that are located 5/8 of the way up the seat cover can be avoided.

For those that are extremely frugal and use only one heat element per seat, you can purchase only one kit. Do some creative wiring for element number two, and you've saved some money.

Enough of the penny-pinching lesson. What is the story?

You read about the addition of the Laramie Longhorn seats to the truck. I could not figure out how to make the seat's factory seat heating elements operate, so I added seat heating the old fashioned way: New elements under the factory seat covers and manual controls on the side of the seat.

In addition to the removal of the factory seat cover for seat heat, it was necessary to remove the seat's back cover to get access to the area where the seat's side cushion air bag is located. Electrically, the air bag was a plug-n-go item, the air bag module is held on the side of the seat with two 8mm nuts.



Time to transplant the air bag module.
(New Laramie seat is on the left.)

Yes, now that I have all of the hook-ups sorted out, I really like the Laramie Longhorn seats.

AMP Research Steps

Elsewhere I've warned you: time after time I tend to upfit a truck with accessories that are tried and true. Such is the story with my third use of AMP Research retractable cabin steps.

Now, if you consider that the three trucks prior to my discovery of the AMP steps were also power-down, power-up steps, then you could say I am six-for-six in the use of retractable steps. My first three trucks used a small 18" wide step (an 18" surface is really all you need), the Kodiak "Sidewinder." Unfortunately Kodiak went out of business in the mid-2000s. The steps (one for driver, one for passenger) could be done by the average shadetree mechanic and the price was about \$750 for the pair. Geno's Garage guy, Brandon Parks, still has a set of Kodiak steps on his 2003 truck.

So much for the Kodiak story, let's move on to the AMP steps. Rather than bore you with the how-to story, I thought I could find a chapter-and-verse in an old TDR magazine where one of our writers had taken you through the AMP step installation. The first mention of the AMP steps was back in August 2005, Issue 49, where writer Jerry Nielson talked about the steps. Jerry commented:

"While attending a SEMA show last year (November 2004) an innovative product caught my eye. Upon closer inspection, I realized I might have found the gem of the show. This product is a retractable step for the Ram truck. The step is unique in that it runs the entire length of the cab (both doors). But, perhaps the best feature is that it is *completely hidden* when not in use.

"I have had these steps for over two months. The eight-inch drop makes entry and exit from my four-wheel drive truck exceptionally

easy. Front and rear seat passengers no longer have to struggle to get 'up' into the truck. And, the wow-factor when the door is opened and the step descends is remarkable. The actuation time after the door starts to open is less than one second and it takes less than one second to retract. I've gotten the steps muddy and I've power washed them at the car wash. I've even shot a direct stream of high pressure water directly on the motor without a problem.

"We've all heard it said that 'you get what you pay for.' The AMP Research steps are \$1250 for the kit. This investment will give pause to those that are prone to making quick, emotional decisions. However, were someone to offer me my money back, I would decline. The steps are worth your due consideration."

Two years later, Jerry gave the AMP steps another favorable review. People were still impressed with the wow-factor as the opened door signals the step to go up or down. He mentioned that his 92 year old mother also liked the steps. That's important!

Next up, after Jerry's discovery of the AMP steps, I installed the steps on my '07.5 Mega Cab, Long Box truck. However, no long and boring how-to story, just a two year follow-up on my part: "These steps have been recommended by many TDR writers. I've used them for almost two years and they continue to be functional and flawless in quality and operation."

Now, the subjective: who has the best step/running board?; What is the best look? What is the best value/price? You can tell I've come to the conclusion the AMP step is the winner. Yet, since the first mention of these steps nine years ago, I can't believe that we've not bored you with a how-to story.

All right, "How to install an AMP Power Step."

Seriously, I'm not going to do that to you. You've already suffered through my lengthy sales pitch: Even though they are an expensive item, the wow-factor and the quality of the product make the steps worthy of your consideration. I will give you some highlights and lessons learned from installing these on both a Third and Fourth Generation truck.

First up: although AMP gives the installation a 4 out of 4 for the skill level required to install the steps, I have to disagree. I don't do engine rebuilds, I can't fabricate or weld. However, I can swap parts, and the installation is not complicated by time consuming "drill here, cut this, twist that" instructions. And, since AMP steps are a Mopar Accessory item, the majority of holes needed for the attachment of the steps to the truck's cabin were already drilled.

The exception to the pre-drilled factory holes: four 1/8" holes that you have to drill to allow a pop-rivet to go into place. The rivet holds a reinforcement plate behind a cut-out in the shell of the cabin. Truthfully speaking, fishing the reinforcement plate through the cut-out and cinching the expandable rivet nuts into place was the most difficult part of the installation.

Really, aside from lining up and fishing the reinforcement plates (there are four of them), the installation is very much by the book. And, credit to the AMP folks, their instruction book is straightforward and clear.

Now, truthfully speaking, who follows instructions anyway?

I mentioned that the AMP instructions are well written. However, I did uncover some lessons learned the hard way: Tips on installing the reinforcement plate; tips on relocating the emergency brake cable; tips on wiring; tips on step adjustment for opening and closing the steps. I had checked the internet and YouTube for installation videos. Yes, I'm old-school, you should be able to read instructions and get 'er done. But, pictures are often worth 1000 words. To that end, I could not find an AMP/YouTube video, so I did a video for the Geno's Garage folks that show you all of the above. Should you have an interest in these steps, check it out at <http://www.youtube.com/watch?v=t1gsIY2lrpY>.



The AMP steps await your entry. They're trick!

Seriously, I'm not going to do that to you. You've already suffered through my lengthy sales pitch: Even though they are an expensive item, the wow-factor and the quality of the product make the AMP Research steps worthy of your consideration.
