

Building A Taco

iPad Mini Install

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On The Cover: Dustin Offret's Taco Tron







FROM THE EDITOR

Wow, this is the fourth issue that I have been a part of. Where did that year go? Oh that's right, up the trail, down the road, and all around the southwest! I have had the privilege of meeting so many amazing people out there. These coming months are looking even busier than last year. There are a lot of awesome events on our calendar already and I'm sure there will be more to add.

You will see us at:

- Tacos on the Beach, A-Basin ski resort, Colorado
- Cruise Moab, Moab, Utah
- Overland Expo, outside of Flagstaff, Arizona
- Rock Therapy, Moab, Utah
- FJ Summit (it's not just for FJ's anymore), Ouray, Colorado
- Thrill on the Hill, Cloudcroft, New Mexico
- We hope very much to see you at these events!

Also, some really sweet projects lined up for the trucks this year ... Stay tuned to keep up with what we are testing! And I can't wait to see what all of you are up to.

If you have something for us to cover or attend tell us about it! If you have any suggestions, requests, questions, or concerns please drop us an email or PM. We hope that you will be willing to keep sharing your thoughts and pics with us for the magazine, facebook, and the website. Without you, our readers, making this magazine wouldn't be so rewarding!

Until next time tread lightly, stay the trail, and get out there and enjoy our world!

-Jim Akers

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An Autonation Buying Experience

Editorial by Publisher Shane Williams

It all started when daddy wouldn't take me to the circus...wait..wrong story. Let's try again.

As some of you may know my lovely wife and I are expecting our second child this July, which prompted the events that led to this article. My daily driver has been our amazing 2007 FJ Cruiser TRD Special Edition since late 2007, and my wife has had a variety of vehicles over the years. When Brenden was born we ended up with a Honda Pilot as our child hauler, but that didn't last long since both Angie & I are 'drivers'. Angie's new car, a 2010 Infiniti FX-50S, is not exactly baby friendly. It works well for Brenden since he's now 3, but while it's possible to use the Infiniti with an infant seat, it's less than desirable.

So we decided in December that we needed a new 'family' car, and the search was on. Angle is keeping the FX for work, and I'm keeping the FJC for work (grin) and play. While we liked the Pilot, it was just too expensive for what it was: a single use 'grocery getter' vehicle. With our interest in overland camping growing, I wanted something that would at the very least enable us to take the family car on easy dirt roads. I also wanted something from the Toyota family if at all possible. The final criteria was third row seating. While we won't use it every day, we did want the option for when family is in town so we don't have to take multiple vehicles to dinner.

After looking at a few models of our two final options: A 5th Generation 4Runner or a Lexus GX 470, we decided the GX would fit our needs the best. The 4Runner is an amazing vehicle, but it leans a little more 'trail' than we need. The GX, on the other hand, features a powerful V8, plenty of 'family car' features, and removable 3rd row for maximum cargo capacity. The GX is the US version of the LandCruiser Prado found overseas, so it's a pretty robust platform that's very similar to the FJ (they use the same frame). It was also a little less expensive than a similarly equipped 2010 4Runner, so I began scouring the internet for our perfect GX. For the 2007 model year I was looking for a very specific model: I wanted a GX Sport package that includes KDSS and black colored wood for the interior.

As luck would have it, on Dec 23rd I found the exact

GX I wanted at a Go Honda (an AutoNation dealer) in Westminster, Colorado, about 1.5 hours north of our house. This truck is perfect: 52,000 miles; GX Sport package, clean paint, wheels, engine, this would be our new family car! So we loaded up Brenden and our visiting family and headed north.

Our salesman Daniel was very nice on the phone in answering our questions about the truck, and we had a purchase price agreed upon before we left the house. When we buy a vehicle out of our town (which is almost always), we always get the specifics nailed down before leaving. We're not big fans of wasting an entire day at a car dealer negotiating prices. We arrived in the early afternoon and headed out for a test drive.



The truck drove very well and there were no major issues with it. We noticed the sunroof made a grinding noise when it opened all the way, so we noted that immediately. Daniel quickly noted that all GO vehicles include a 60 day "Bumper to Bumper" warranty so the sunroof would be able to be fixed at no charge. We were very satisfied with the truck other than that issue, so we headed back to the dealer to get the paperwork done. During that process we once again noted the sunroof, and read that the warranty was a 'limited' 60 day warranty that covered basically everything except wearable parts. The very, very fine print of covered items included the 'sunroof motor' so we were confident that it would be covered, especially when Daniel reassured us that it would be.

nance on a Lexus vehicle, we were told to contact GO Toyota in Arapahoe, Colorado to have any maintenance items taken care of during the 60 day period. At about 45 days in, we decided to drop the GX off to get the sunroof taken care of. We dropped it off on Saturday and Monday morning got a call from GO Toyota with the sad news that the Autonation Warranty would not cover the sunroof. Apparently the 'sunroof motor' was fine, but the 'sunroof cable' needed to be replaced.

Obviously that was very sore news, so I politely reminded our service manager that we were assured on more than one occasion that this bumper to bumper warranty would cover the sunroof issue. It was one of the main reasons we purchased the vehicle despite the obvious maintenance issue. At this point the waiting game began as GO

Toyota attempted to work with GO Honda and the Autonation Warranty system to resolve this problem.

To their credit, the GO Honda team did a good job of taking care of this issue. It took nearly three weeks for the various bits of coordination, approvals, and maintenance to happen, but at the end Tim Murphy of GO Honda in Westminster managed to get our GX fixed with no out of pocket cost from us. This was despite multiple disapprovals from the Autonation warranty system, apparently GO Honda felt it was necessary to give the customer what was promised, despite Autonations misleading tactics.

The moral of this story is: please read all the fine print when purchasing a used vehicle (especially from an Autonation dealer) and make sure you get any postpurchase repairs in writing before you leave. That could have saved us at least two weeks of hassel.

-Shane

GO HONDA 104th

Since the Honda dealer doesn't do mainte-



performance I mods I events I news



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New & Noteworthy

Manley ORV Trailer

The newest name in the off road trailer world comes to us from easy to spell Cuyahoga Falls, Ohio: Manly ORV Trailers. Josh Manley has been in the steelworking business for over 10 years, and like many of us was very frustrated when he could not find a quality, reasonably priced off road trailer. Josh changed that though with his line of well-built trailers. Manley ORV offers three models of trailer in two different 'finishes'. The Economy finish is a quality built trailer that's assembled with foreign-sourced tubs and frames, while the Elite finish is 100% Made in the USA. Those wanting an ALL American built trailer can opt for the



Elite model at about a \$1,500 price increase over the budget-friendly Economy model.

We just received our Elite Manley Explore model as we're writing this, so look for it on a trail near you soon, and in the pages of both this publication and FJC Magazine.

Source: Manley ORV Trailers, from \$2,995. http://www.ManleyORV.com



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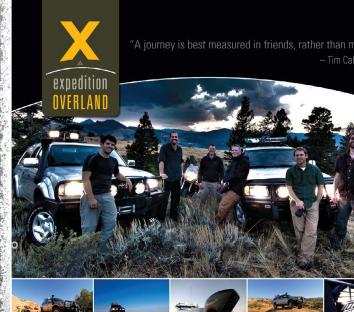
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A/T Overland Equipment DIY Hotbox



Adventure Trailers Overland Equipment has a new spin on their classic forced-air furnace for tents. They're new DIY "Hotbox" is a kit you can assemble in about 4 hours that will give you a great forcedair propane furnace suitable for any RTT. The furnace includes a thermostat and fan to help keep your tent as cozy as possible, no matter what the weather is outside. The HS2000 Propex heater puts out up to 6500 BTU, more than enough for most RTTs whether on your truck or on your trailer.

Source: A/T Overland Equipment, \$1,231 http://store.adventuretrailers.com



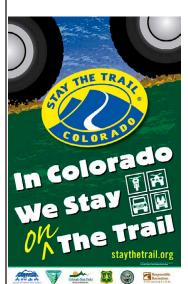




AVENZA PDF MAPS FOR TRAIL INFO

If you're a long time reader of this magazine or our sister publication, FJC Magazine, you know we're always on a quest for the best trail information we can find. We've installed GPS units, Nav systems, and most recently the iPad Mini (Page 10) in our truck so we can ensure we stay found when on the trail.

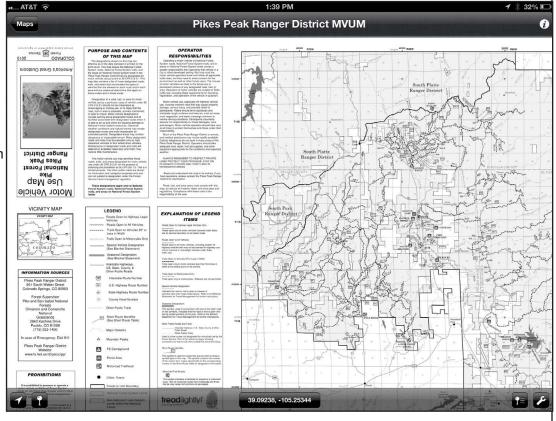
For years we've been using various types of mapping programs to keep us on the right track. We've downloaded GPX files to our computers, uploaded them to our tablets, and it works out really well. If you need the most detailed trail information, we can't recommend FunTreks data cards enough.



However, if you're in an area of Colorado (so far) that's not covered by other publications, or you always want to make sure you have a backup map and want to know exactly where you are on the official maps, Stay The Trail has something new in store! They've partnered with a great application called Avenza PDF Maps to bring the USFS MVUMs (Motor vehicle Use Maps) to tablet devices!

Stay The Trail has had PDF maps of MVUMs for years, which is great if you have a laptop in your truck, but since many people are moving to tablets, this is an ideal solution to keeping on the right track. An MVUM is the legal document that lets you know which trails are legal for your type of vehicle, so knowing where you are exactly on that map is a huge advantage in Treading Lightly and Staying the Trail.

No one will ever accuse an MVUM of being user friendly, it definitely is not, but it is a no-cost map that will keep you safe (and legal), and should be a part of any navigation kit. While the electronic versions have been modified from the original



USFS version, Stay The Trail keeps their versions up to date so you'll always have the correct information when in the back country.

We haven't had a chance to play with these maps in the field yet, but we'll be checking them out soon so check in on our Facebook Page or on Tacoma-World.com for the latest updates.

ALONE AT THE TOP OF THE MOUNTAIN.

OYOTA RACING DEVELOPMENT

R



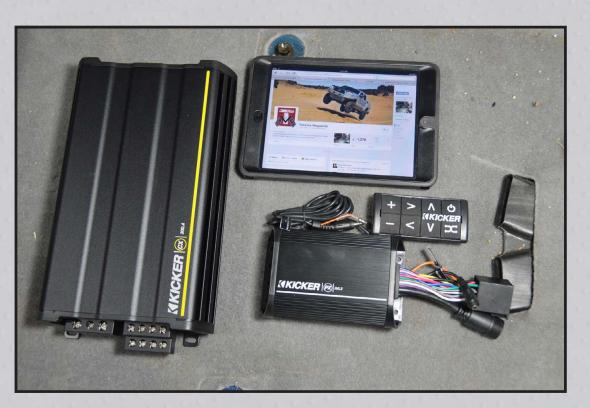


Page Min Tacoma Install By Jim Akers

o, I finally made my first mod that is primarily for fun. With quite a bit of help from and a huge thank you to Otter Box, Kicker, and FJC Magazine, we switched out the Taco's previous aftermarket head unit for an iPad mini.

Not knowing exactly how I would run the wires or where I would hide all of the pieces, I may have gone just a little overboard on the preparation for this install. You may have figured that out if you follow us on Facebook. I took out all of the seats, the console, and even the storage behind the back seats trying to make my life a little easier so I wouldn't have to work around everything. The one thing I should have done was to take the dash apart! Wiring has to be one of the most difficult projects for me since I'm red/green color blind. It makes telling orange from red a little tough. Due to the tight spaces in the dash, my recommendation is to get a flexible fish tape. Don't forget to map out what you intend to do before you start, mentally or on paper.

I may have gone just a little overboard on the preparation for this install.







Otter Box sent over their iPad mini Defender Series Case which turns out to make а really sweet mounting platform. The Defender Series is a full enclosure case with a clip on cover. After a little modification, I turned the cover piece into the mounting platform. I took the head unit out, reused the DIN bracket, fabricated an attachment from a RAM mount to the Otter Box cover piece, and-wallah I had "a solid mount."



Kicker was also kind enough to send over some necessities to make this install a reality. Their PXi50.2 control unit was originally intended for powersports users, but it really is a perfect interface for your iOS device. It even includes a wired remote so you can change volume and tracks directly while keeping your eyes on the road. Due to the fact that an iPad does not have the power to run a speaker, an amp is much needed, so Kicker sent their CX300A. Turns out that the amp fit quite well under the passenger front seat, and the control unit fit in the dash where the head unit used to be. These placements made running the wires quite convenient. We ran the wires from under the passenger's front seat, under the console, and up through the dash.

After a little modification, I turned the cover piece into the mounting platform.

The PXi50.2 control unit really is a perfect interface for your iOS device. This sound system is pretty sweet now

for sure!



Now, we did have a couple problems during the install. We blew a fuse and of course whoever wired the previous head unit jacked up the wiring pattern. I found out that the sub was wired in place of the back door speakers. Once we upgraded the fuse and figured out the speaker pattern, we got sound. Okay, this truck may look pretty nice but wait until you hear it. This sound system is pretty sweet now for sure!

I am now looking forward to checking out apps that will work with an iPad being used in this scenario—navigation, music, tech, you name it! Not to mention, better access to Tacoma Magazine's Facebook page on trail!





Thank you to FJC Magazine for help with the install! Thank you to Otter Box for the iPad mini Defender Series Case! Thank you to Kicker for the control unit, the amp, and for making sure we are "Livin' Loud!"

Dreaming of your next adventure?

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The Toyota Land Cruiser Association is a club dedicated to bringing Toyota 4-Wheel Drive enthusiasts together. Visit us at www.tlca.org to learn more.



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Source: Kicker at http://www.kicker.com/ Otterbox at http://www.otterbox.com RAM at http://www.rammount.com/



Airflow America Snorkel

By Bob Holliday



The installation process between the common snorkel kits for the Toyota Tacoma is very similar. They all require a disregard for the well-being of the truck body and/or some liquid courage to help you get over the idea of drilling into your prized possession. The main variations lie in the plumbing running from the snorkel to the factory airbox. Installation will take normally 3-6 hours, depending on the amount of liquid courage you decide to have and any unforeseen delays. Here are some tools needed and highlights of the installation process of the Airflow snorkel on a 2006 Toyota Tacoma. Tools needed:

- Masking tape
- Round and flat files
- Hammer and center punch
- Primer and/or touch up paint
- Screw drivers
- Additional fender clips maybe needed
- 105mm hole saw
- Assorted drill set
- Wet/dry sand paper
- Saw or cut-off wheel
- Liquid courage (age dependent)

After laying out the provided parts from Airflow to ensure all parts are present, take the provided template and cut out any excess material to make alignment easier.



Secure the template on to the truck's body, using the body lines to matchup with the template. Using a center punch, mark where indicated on the template. These holes will be the mounting points of the snorkel as well as the hole used for the intake coming from the snorkel into the fender. When all hole centers are marked, remove the template and make sure you are up to date on your liquid courage.



With a small drill bit, you can start pilot holes where you had marked with the center punch. Using masking tape, cover the areas that will be drilled into to help prevent chipping of the paint. With the pilot holes as your guide, finish off the mounting holes with a 10mm (or equivalent) drill bit. The 105mm hole saw will then be used to make the hole for the snorkel intake tube. Round files can be used to clean up the edges on the holes. To prevent rusting on the bare metal now exposed, use either a zinc rich primer or touch up paint along the edges.



With the mounting and intake holes drilled, cleaned up and painted, you can use the snorkel assembly to mock up for any fine tuning adjustments with the mounting holes. During this process, the A pillar bracket positioning can be mocked up and mounting holes created. Once again, these holes should be cleaned up and painted to prevent rusting in the future.

The Airflow kit allows full use of the factory intake, however, installation does require slight modification to the end of the intake tube. With your preferred cutting device, chop off the cup at the end of the factory intake tube.



With the factory intake modified to fit the connecting plumbing from the snorkel, the snorkel plumbing can be routed from the snorkel intake through the fender where it will be joined to the factory intake in the factory intake hole in the fender (removal of the fender liner is necessary to gain access to the snorkel intake). Using ample amounts of silicone sealant, connect the snorkel intake to the provided tubing and secure with the provided hose clamps. A flexible hose is used within the fender to connect the snorkel to the factory intake with rigid elbows at both ends.







In this installation, a 4" rubber coupling was used to join the snorkel plumbing to the factory intake. This is not necessary, as the factory intake will fit directly in the provided plumbing. Make sure with all plumbing connections to use a sealant.



Once all the plumbing is sealed and secured, attention can be turned to securing the snorkel assembly to the body. Ensure that all fasteners have washers fitted and do not over tighten the nuts in this process.

With the snorkel firmly attached to the body and the A pillar, the air ram can be attached to the top of snorkel and secured using the provided hose clamp. As an added measure of security, Airflow provides a self tapping screw to secure the air ram in a forward facing direction. (Airflow warns that at speeds above 15mph, a vacuum may be generated causing engine damage if the air ram were turned around.)



Final step, get out and ENJOY!



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Photos: Exploring Four Corners (Barry Andrews, Four Wheel Campers) and aerial shot of Overland Expo 2012 (Rob Martinson).

TACOMA BUILD RETROSPECTIVE

Part 1: Background, Planning, Suspension, Protection

By Kurt Williams | CruiserOutfitters

Background

My Tacoma story started over a decade ago; it was the year 2000 when my father purchased a gently used 1996 V6 ExtraCab. He enjoyed the Tacoma but, as fate would have it, I ended up buying the truck from him a few years later and was instantly addicted to the platform. It was originally intended as a daily-driver/parts-runner, though it soon became a trusted transport into the back country as well. The factory rear springs had the typical sag and eventually cracked under the loads I had in store for them, thus an OME suspension was one of the first modifications my father and I installed on the truck.

From there it was a slow build—an ARB front bumper and winch, sliders and a rear bumper. Accessories such as a snorkel, communications, and on-board-air followed suit. For five years the truck would haul me all over the west, commuting to school every day, hauling a bed full of Land Cruiser axles back from California or engine blocks to the machine shop. I put nearly 150,000 miles on the truck before passing it along to a good friend who has made it right at home with regular doses of abuse and the less-than-occasional car wash.

Rather than a continuous build article, I've choosen to retrospectively look back at the truck, the modifications done, and the repairs I've made over the last 4 years. I'm not going to detail my reasoning or install choice for each and every mod, but rather just highlight and briefly touch on a few aspects. If there is something that warrants more detail ask away, I'll gladly offer my thoughts.

Acquisition

In the early months of 2007 my needs had morphed. My wife and I had brought home Jada, our now 100+ lb. German Shepherd traveling companion, and the Extra-Cab just wouldn't work for us—we needed something with 4 doors. Not only was I looking for a double-cab, but I wanted something a few years newer and 100% stock with much lower miles. Keep in mind this truck was intended to be comfortable on the road, including highway speeds and economy at full-load, as well as capable in a wide variety of off-road terrain. Basically I wanted to start over and recreate my previous truck, but on a low mileage 4-door chassis.

At the time, the difference between the resale value of a low-mileage 1st-generation 4-door and the purchase price of the newer 2nd generation 4-door was nearly a wash. I had some experience modifying the newer 2nd generation Tacomas, but there were a few things about them that kept me searching for the older albeit harderto-find 1st generation Tacoma. I searched all the usual avenues (classifieds, internet, and dealer websites) and found myself going to look at dozens of different trucks.

I found a couple of clean double cab lease returns at Tony Divino Toyota in Ogden, Utah and decided I would take the hour drive up there for a closer look. While they had two trucks that fit my needs (I was picky, searching only for white, red or silver double-cabs, grey interior, etc.), there was a truck being traded in while I was on the lot—a red 2004 double cab. They hadn't even cleaned the truck, and it still had a smattering of the previous owner's effects in the cab. I popped the hood and spotted the payday, a TRD super-charger. Eureka!

The supercharger hadn't been a deal maker for me but it sure made the deal far more palatable. The price was right in line with the non-SC'd trucks they had on their lot and it had about the same miles I was searching for, under 50k. I did some background checking on the truck and found a clean VIN and the SC had been dealer-installed when the truck was brand-new by a tech I happened to know, so I was confident with the install. The previous owner's paperwork backed up the religious service the truck had seen, making me feel even more comfortable with the purchase. The next day my wife and I trekked back up to the dealership to finalize the deal, and an hour later we were driving it home and it was mine. Time to start the build.



Initial Planning

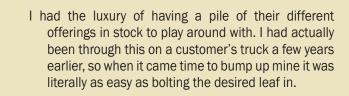
With the truck in hand I wanted to knock-out the bigger parts of the build as soon as possible. To streamline the process I collected all the parts on a shelf so that I could have it all ready to go. In one long weekend, we tackled the Old Man Emu suspension installation, front ARB winchbar, winch, lights, and the Safari Snorkel. Additional upgrades would take place over the next two years of ownership and in fact I guess I'm still adding little tidbits here and there, tailoring the truck to my needs as they arise.



Suspension/Axles Basic Specifications

- OME 882 front coils w/10mm poly spacers & 10mm aluminum top-out spacers
- OME Nitrocharger Sport Struts/Shocks
- Dakar Springs w/AAL
- Maxxis 32" Bighorns on steel wheels
- OEM E-locker in rear axle
- Energy Suspension Poly Rack & Swaybar Bushings
- **Notes:** I had been thoroughly pleased with the Old Man Emu (OME) kit on my previous Tacoma, so when the time came to set up this suspension it was somewhat of a no-brainer. However, I did switch up a few things from my previous setup. As the front axle weight of this truck had greatly increased, I needed to bring up the front a bit. We experimented with about five different spring/coil/spacer combos until I found the current setup which has seemingly solved my woes. I've since installed similar setups on other 'heavy' front Tacomas and 4Runners and found it to be a rather satisfactory setup.

The rear axle weight was also much higher on this truck with the addition of the RTT and Bakkie Rack setup, weighing ~200 lbs. of constant weight. To combat the added weight I added an additional OME leaf to the spring pack. Old Man Emu did not initially have an AAL application for this model but



In the last couple years I have been using a hitchmount dirt-bike hauler to move around my 300 lb. dirt-bike. The suspension squats a bit under its weight and leverage but really holds its own even when fully loaded for a trip, perfect!

There are higher-performance (adjustable & remote reservoir) front suspension components available for the Tacoma, but for my needs the Old Man Emu components strike the perfect balance between performance and longevity, with an attractive price to boot. Many of the upgraded adjustable coil-overs don't fare well in Utah's harsh and salty winters or caustic desert environs. Having to rebuild a coil-over regularly or deal with a blown assembly in the middle of nowhere wouldn't work for me, thus cementing the OME option. It has rarely left me wanting and given my uses for this platform I would absolutely repeat that choice. (Update: OME now offers the OME D6XL additional leaf for the CSO46R leaf springs. If I find my springs apart in the future I might swap them out with the AAL I've been using but this is far from a priority as it's working fine as-is)

I've dabbled with a variety of different tires on my 4x4s over the years, but the last set of tires I put on my previous Tacoma had really proven themselves to me—the Maxxis Bighorns. While I don't feel they get the longevity of other similar mud-terrain offerings, they work well in various off-road conditions and have stalwart sidewalls. I've now had four sets of the Bighorns on my Tacomas and, knock on wood, I've never had a failure of the tire—in fact I've had just a couple of leaks caused by sharp rocks or nails/screws. It's far from conclusive but it has won my repeat business.



As with any TRD-package Tacoma of this generation, the truck is equipped with the factory electronic rear locking 8-inch differential. This feature wasn't a deal breaker

for me when purchasing the truck, as I'm a big fan of the non-locked 8.4-inch differential upgraded with an ARB Air Locker, but having the e-locker meant one less thing I had to install. To boot, the Toyota e-locker is a fantastic design, and when needed is there at the push of a button.

Protection/Bumpers Basic Specifications

- ARB Winchbar (XD9000) w/ End Cap Mod
- Custom Sliders welded direct to frame
- Bud-Built Skid Plate System
- All-Pro rear bumper (modified for towing abilities)
- **Notes:** When I installed the ARB bumper and winch on my first Tacoma the end cap mod hadn't yet become the 'to-do' mod it is today. In fact, I had never even heard of a failure at that time. In several years of winch use the frame end caps did crack, one side completely separating from the frame. The fix was easy, but it was a hassle to remove the bumper. I also noticed less bumper vibration and flex following the end-cap modification.

With this Tacoma the end cap mod was done right off the bat, and I consider it a mandatory modification for all bumper/winch installs on the 1st gen Tacoma, regardless of bumper brand or design. The added weight of the bumper, particularly those with winches, is just too much for the near sheet-metal cap on the factory frame. It adds approximately an hour to the install time and a welder is required, but it really is critical for any Tacomas that are going to see repeated winch use or a heavy bumper install.



While the rear bumper was the same basic All-Pro design that my last Tacoma sported, I opted to modify this one a bit for heavier towing capability. I moved the hitch receiver from the bottom of the bumper to the center line (horizontally), and added reinforcement straps from the back of the receiver to the Tacoma's frame.

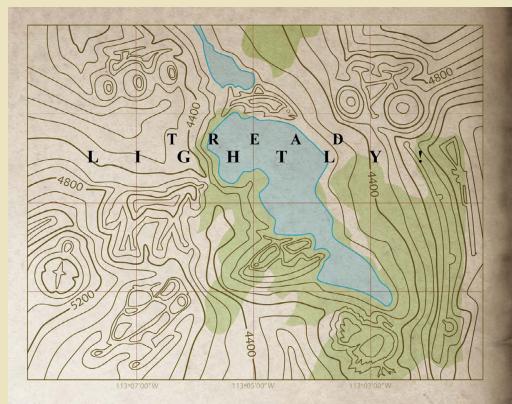
This mod does require the license plate to be removed while towing which is a bit of a pain but using a set of plastic screws and wing nuts I can have it on or off in a minute or two. I just toss the license plate in the rear window and call it good. If I towed enough I would look into an alternate mounting for the plate, possibly mounted in some fashion to the tailgate. I haven't used it to tow anything too extreme, but it has handled the dirt-bike carrier, my Trail-Trailer, and even an empty flatbed car-hauler trailer without any flex or tweaking.

The Bud-Built skid plates are stalwart, and do a great job protecting the vulnerable radiator, steering rack, and oil pans. My only complaints are that the oil drain hole is too small and the rest of the plates don't have any holes, so mud really cakes up on top and it's nearly impossible for it to drain out. It would get bad enough to create a mud 'cushion' between my t-case and skid plate, making a pronounced 'thud' when the mud dried up and the drivetrain flexed. I had them off for one of my steering rack replacements and decided to change that. I drilled a couple of dozen holes in the bottoms of the skids-they are small enough that the effectiveness of the skids are not diminished for my uses, yet large enough that most of the snow, mud, sand, etc drains out, and if not it is easily pressured washed out. It has worked wonders for keeping the caked-up mud out from under my truck, and I would recommend it to anyone with skid systems—Bud Built or otherwise—that see lots of miles down muddy roads.



In the next issue I'll continue this build retrospective with details on how I solved storage, electrical, and communications issues. Make sure you check it out in the June 2013 issue of Tacoma Magazine!

Kurt Williams has been a Land Cruiser owner since he was 15 and a Tacoma enthusiast for over 10 years. His strong love of 4x4s combined with business management skills has made Cruiser Outfitters a strong competitor in the four wheel drive retail industry.



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DISCOUNT TIRE DIRECT: TIRE INSTALL UPDATE BY JIM AKERS

I am more than impressed with Discount Tire Direct and the Discount Tire store in our neighborhood. We have had a very interesting first six months with our evaluation. From a tire damaged in a parking lot due to a contractor's lost debris to getting hit by a Jeep and ruining 3 tires and rims. We have been to the top of 15 mountains. We have put on 10,000 miles. But best of all, we have made a lot of great memories. And we look forward to the memories we have yet to make!



Now for the technical stuff! I have never driven Cooper Tires or even MB wheels before and I am liking what I see and feel so far. Being such an aggressive tread pattern on these Cooper DISCOVERER ATP's the ride is smooth, comfortable, and much quieter than I would have ever guessed. With all of the highway miles that I have put on already, the tread wear is even and very durable. Off road, they are just as reliable. You want to talk about grip. I have climbed up some steps and waterfalls that I really shouldn't have tried. However, I didn't slip a grip. Even in the snow, these tires are absolutely amazing. It's so nice to know that when you want to go, you can go. The MB Wheels are a great match for the Cooper tires and my Tacoma. I just love the look of this combination.





The service of Discount Tire Direct has been amazing. I had the pleasure of working with Travis Comfort and Dan Meadows, however, I am quite sure that the rest of their staff are just as good. When we ordered up the tires and rims on line, the process was easier than ordering fast food. You literally select your vehicle, pick a size, and then pick your tire. The same process goes for the rims as well. They are even able to show you your options on your style of vehicle to make the ordering easy for us "Visual" guys.



I was fortunate enough to be forced into meeting the great guys at a local shop here in Colorado Springs on Garden of the Gods Rd. These guys are just amazing as well. They had me in and out with the repairs made in what seemed like a couple of minutes. With the wild fires in our area, there is structural reconstruction all over town. That being said I picked up a bolt from a glass door knob in a tire while driving down the street.

I have to send a huge Thank You to the group at Discount Tire Direct! They made the entire experience so easy for me to recommend them to literally anyone and everyone. And I do!

The one recommendation that I keep telling everyone is to get the road hazard warranty!



SOURCE: Disount Tire Direct http://www.discounttiredirect.com



We have been talking about building up Tacoma's yet keeping a little of that stock look. We got an email from Brian and Justin over at UHWMS (Undercover Hidden Winch Mount System) with a couple of

pictures of their product installed on Tacomas, 4Runners, and FJ Cruisers. With their setup you get an aftermarket sub-bumper that has a mount position built it for a winch while using your existing bumper skin. I have to say I was more than a little intrigued. So I got a hold of Brian, figured out what I wanted to pick, had it shipped, and now we get to install.

UNDERCOVER HIDDEN WINCH MOUNT SYSTEM BY JIM AKERS



couple of brackets to drill a whole so you can reuse them with your new UHWMS. Now it's time to install your UHWMS. Bolt it to the lower and main frame supports reusing the factory nuts and bolts. You do need to add the 7/16" washers provided. If you are using the solenoid mount bracket provided

in the kit, locate the unused hole on the passenger side of the upper radiator support. You will use the solenoid mount to this with the nut and bolt provided. You will now need to dry fit the skin to verify where your receptacle will come out between the slots. Now you can

tighten up the brackets, run the wires for your solenoid, and test your winch.

Tools needed: • Hacksaw Blade

- Hacksaw Blade
- Dremel
- Electric Drill
- Standard hand tools

This is a pretty straight forward install. First things first, take the grill, the skin, and the factory subbumper off. Be careful with the skin!



The next step is to bolt your winch to the UHWMS subbumper. Now, there will be a few little steps that I am skimming over. There will be some minor modifications to make depending on your model truck. There are a



If you are using the optional D-rings you will have to measure out and use a template to find the precise location to cut for them to extend through the bumper skin.

There is a lot of measuring and trimming involved. You really don't want to over-cut. If it takes several trims to get that snug fit for the D-rings and fairlead, great! Once you get that nice fit then it's time to button up the bumper. Lastly, verify that everything is tightened to the factory torque specifications.

When you are installing your own, take a lot of pictures and send them to Brian and post some on our FB page!

Priced at \$450 -Winch not included



Now for a little background on UHWMS.

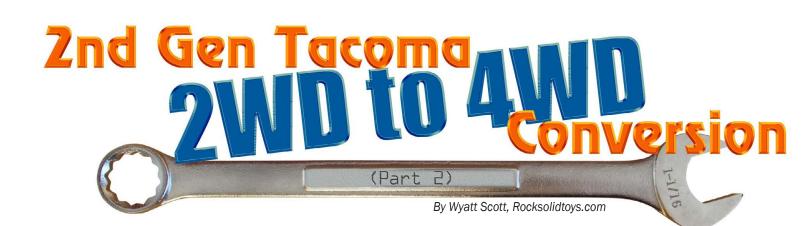
The owners are Brian and Justin. They have been into off roading and 4x4's for what seems like their whole lives. They got their first taste of fab when Brian's dad loaned him \$1600 for a 1972 Ford Bronco. Yes, we all noticed that it wasn't a Toyota . . . My first abused set of wheels was a 1979 Jeep CJ5. Obviously this Bronco wasn't going to hold up very well to a couple of 17 year old Nebraska boys with off roading on their brain. Brian and Justin took matters into their own hands and started teaching themselves how

> to fabricate, weld, and improve upon what they had in hand. Then one dav Brian buried that old Bronco to the doors in the local river. Justin's Scout and countless others could not get to Brian's Bronco. A few days later they found someone with a winch and pulled it out. Of course, the light bulb went



on. After many years of using and abusing vehicle after off road vehicle and exploring from western Nebraska to Moab, they had great new ideas and some serious fab skills. They were building roll cages, sliders, and bumpers for anyone they new that needed something made. Now, many years later, Brian has a 2008 Tacoma and was wanting a super strong, yet lightweight winch mount that wouldn't be abused by dirt or gravel roads, much less road salt. Many attempts later they, and I, feel that they might have come up with a really sweet solution. Now they are having the pieces professionally burnt out on a high definition plasma table and then they are welded and gusseted to create a lightweight and super strong hidden winch mount for your 2005+ Tacoma, 2007+ FJ Cruiser, and the 2010+ 4Runner.

For more on Undercover Hidden Winch Mount Systems visit them at www.undercoverHWMS.com" or Email Brian at bjimmy12@hotmail. com"



n the last issue we have gone as far as getting all the parts together and installing the front differential and hubs. We have also installed the wiring to activate the ADD actuator on the front differential. Lets continue where we left off with installing the new transmission. Because the transmission cross member on the Prerunner is an inch further back than the 4wd version, we had to make a custom cross member. We took the 2wd cross member and cut the ends off.



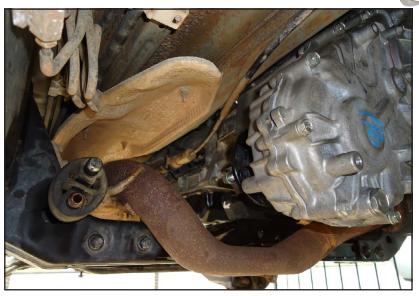


With the transmission in place we ran into our first problem. You would think that Toyota would use the same frame for both the Prerunner and the 4wd Tacoma, for the most part they do. However, the cross members are not the same design and they are not in the same place on the frame. The Prerunner cross member is an inch further back on the frame versus the 4wd Tacoma. We then took the center section of the 4wd cross member off so we could use it again in our custom cross member.



This picture is from a 4Runner we did the same conversion on but I wanted you to see how it looked without the crawler installed. It's a simple bolt in.

Love it.



Once we the t-case in place we set our focus on the drive shafts. Because we had a crawler, it meant making the front drive shaft longer and the rear drive shaft shorter because the crawler box

> moves the t-case back 8.5". When you don't have a crawler you won't have to do anything to the front driveshaft but you will to the rear drive shaft. This is where we ran into another difference between the frames of the 4wd and the Prerunner. The cross member for the carrier bearing on the rear drive shaft is back 2.5" more on the 4wd version versus the Prerunner. This requires modifying both sections of the rear drive shaft. The front section of the drive shaft has to be shortened by 2.5" and the rear portion has to be lengthened 2.5". You cannot use the prerunner driveshaft as it does not have a flange section on the front of it.

Here you can see that when you place the drive shafts so that they will bolt to the rear axle the carrier bearing is now in a different spot between the two.



We then got some 1" x 3" square tubing and made our custom cross member.



The cross member is now installed with the transmission sitting on it. This install included a Marlin Crawler "Taco Box", that's the pretty red thing in between the transmission and the transfer case. We will skip the install of the Crawler in this issue since we are focusing on the 4wd conversion.

Next, install the Transfer case. We used the FJ Cruiser transfer case for this swap since we wanted it to be rugged and simple. The FJ case is a direct bolt in, with the exception of the shifter.

If you use a crawler box then you can go a different route and use a one-piece drive shaft. Which in my opinion is better anyway, especially if you're going to be doing any modifications to the rear springs or adding larger tires.



At the back of the transfer case and at the rear diff we used triple drilled flanges, so that if need be, the owner can swap in just about any Toyota drive shaft (as long as it's long enough) to get him/her back home.





Now that everything is finished down below it was time to put our attention on the interior and finish this build.

Using the FJ case means having to install a shift lever into the cabin. In this case we had a crawler box and twin sticks for the FJ case to install. (For information on the twin stick FJ case see earlier articles)

First we had to take out the console and arm rest. Then, put some holes in the floor where the shifters were going to come up. Here is the one for the Crawler. The one for the t-case will be 9 inches back behind this one.



With the shifters made and installed the only thing left to do is put it all back together again. We wanted to make it so that it looked like it came from the factory that way, so we use leather shift boots for both sets of shifters. The crawler comes up in the slot next to the transmission shifter and the t-case shifters come up in the cup holder.



Last but not least, hook up some indicators to let you know your in 4hi or 4lo. The Prerunner comes with the indicators in the dash already. All you need to do is find the wires that go to each one and hook them up from the T case sensors and your good to go. With everything all put together it was time to check and see if everything worked as planned. We took it for a test drive and everything worked perfect. You push the switch for the ADD and it engages, then you put the t-case into 4wd and the light comes on in the dash letting you know your in 4wd. Shift the t-case into lo and the indicator comes on as well. Perfection. The way Toyota should have made the Tacoma. With a manual T case.

This swap is not for everyone. It's neither cheap nor easy to accomplish but for some it is well worth it.

Since this swap the owner of this Tacoma has added larger wheels and tires and has wheeled some pretty good trails with his Tacoma that he would have never been able to wheel while it was 2wd. He can and still drives the truck to work every day showing off his new creation.

For further information on this swap you can contact RockSolidToys at www.RockSolidToys.com























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