contents

SPOTLIGHT: TOYOTAS

- 08 TLC'S FJ142
 - FZJ80+FJ62=Best of both worlds
- 40 THE MALTEC 80-SERIES
 Super-modern expedition vehicles
- 62 BIRDMAN'S FJ CRUISER
 Not an average build or owner

FEATURES

- 16 THE TIRE MULE
 Put your spare tire to good use
- 18 WHEELER'S OFFROAD SPRINGS
 High quality suspension for Toyotas
- 22 AFRICA EXPEDITION, PART II Here's where the fun begins
- 30 COOL TOOL The 911 Vise
- 31 TIRE TECH
 Unscientific tire wear chalk test
- 32 GRILLCRAFT FEATURE
 Spice up the front of your Toyota
- 36 RUN COOL HOOD LOUVERS Cool down your engine bay!
- 44 HELLFIRE FABRICATION KNUCKLES
 One of the burliest knuckle upgrades available
- 52 MOOG STEERING UPGRADES
 Freshen your truck's steering with MOOG
- 56 IDLER ARM UPGRADE 4Crawler and Blazeland beef it up
- 58 THE NAPIER SPORTZ TENT Attaches to the bed of your pickup/SUV

DEPARTMENTS

- **04 STEERING COLUMN**
- 05 BURKE'S BOX
- **06 LOW RANGE**
- **29 ADVERTISER INDEX**
- 70 CITIUS. ALTIUS. FORTIUS.
- **72 YOUR YOTAS**
- **74 CARNAGE**

FOLLOW US ON TWITTER! http://www.twitter.com/4wdtoyotaowner Facebook: www.facebook.com/groups/27902517612
MySpace: www.myspace.com/4wdtoyotaownermagazine

VOLUME NINE NUMBER THREE MAY/JUNE 2013











On The Cover: Joel Moranton scores yet another cover with this shot of Martin "Birdman" Bickford's awesomely built FJ Cruiser doing Pritchett Canyon. The fact that Birdman is in a wheelchair makes it even cooler. Next is the bizarre yet awesome Maltec-built FZJ80 expeditioner, and Joel's own 1996 Tacoma finally gets to flex thanks to Wheeler's Offroad's springs. Photos: Hans J. Wieland, Joel Moranton.

WARNING: Much of the action depicted in this magazine is potentially dangerous. DO NOT attempt to duplicate any stunts that are beyond your own capabilities! 4WD Toyota Owner magazine, the publisher, editors, and contributing writers are in no way responsible for damage to your vehicle or personal injury/death that may occur while driving on or off-road. 4WD Toyota Owner Magazine contains tips and techniques for modifying your vehicle. Certain upgrades and/or driving techniques may void your factory warranty. 4WD Toyota Owner and its writers in no way guarantee results from modification articles and features. All text is suggestions only. We recommend a professional mechanic perform all installations.

NOTE: "TOYOTA", "LAND CRUISER", "TACOMA", "TUNDRA", "T100", "SEQUOIA", "FJ CRUISER", "HILUX" and "4RUNNER" are registered trademarks of Toyota Motor Corporation. TOYOTA is used in the title of this magazine solely to identify the subject of interest to the Magazine. Toyota Motor Corporation, Toyota Motor Sales, U.S.A., Inc. and their affiliated companies are not responsible in any way for the contents of the Magazine, which are solely the responsibility of the publisher. The contents of the Magazine do not reflect the policy or opinions of Toyota Motor Corporation, Toyota Motor Sales, U.S.A., Inc. or any of Toyota's affiliated companies. The Magazine is not affiliated with, or endorsed, sponsored, or supported by, Toyota Motor Corporation, Toyota Motor Sales, U.S.A., Inc. or any of Toyota's affiliated companies. All trademarks are property of their respective owners.



RUN COOL HOOD LOUVERS

Get the heat out of your engine bay

By Joel Moranton

the 4WD Toyota world, we are in the business of going slow! First gear and 4-wheel drive Low Range are our domains, all while crawling over rocks and crazy obstacles. But there are a few issues with driving at 0.5 mph at 2500 rpm in a rig that was designed to go 65-70 mph at 2500 rpm. One of the biggest issues is the lack of cooling air coming into the engine compartment, causing the engine and components to overheat. But with the help of Run Cool's hood louvers, you can give air a way to circulate through the engine compartment, thus cooling the engine.



Based in Vacaville, California and wheeling all over Southern California, Nevada, Utah. New Mexico and Arizona, a set of Run Cool hood louvers is an excellent addition to our 1996 Tacoma. They install in a few hours and help reduce enginekilling heat levels by allowing the hot air to rise up and out. Plus, they look really cool.

Hot rod guys have been taking off their hoods and punching hood louvers into sheet metal for years. The classic Toyota FJ40 came out of the factory with hood louvers to vent heat out of the engine compartment. Run Cool Hood Louvers has taken this smart idea and made a product to put hood louvers on any vehicle. Run

FEATURE >>> RUN COOL HOOD LOUVERS

Cool makes aluminum and stainless steel hood louvers in a variety of shapes and sizes to fit the look and feel of your rig. This is an inexpensive way to increase the efficiency of your radiator and make your rig stand out from the rest.

On our 1996 Tacoma we installed a slightly smaller radiator to allow us to be more creative with the front skid plate. This is why we decided to call up Run Cool and order a set of their medium powder-coated black Hi-Flow hood louvers for \$179 a pair. These measure 9"x14" and come with stainless steel

pop rivets and matching drill bit. The install took us about hour and a half and the hardest part was cutting through the hood and not cutting the hood bracing. Remember when starting this project you will be cutting metal and throwing hot sparks around, so know where your fire extinguisher is and know that is works. Also wear protective evewear and gloves. To order your set of hood louvers from Run Cool, or for more information. check out their web site at www.hoodlouvers.com/tv or call them at (804) 355-1758.



10. After the paint dries, rivet the hood louvers down. Start with the corner holes, then move to the center holes to allow the louver to match the hood curves. You're done!



11. The Run Cool Hood Louvers give an aggressive look to our Tacoma, but far more importantly, they help massively reduce the heat levels in your engine bay. Heat rises, and having a 9x14 louver on each side of your hood is a lot of real estate to let that hot air escape up and out. If you live or wheel in hot climates, have a 350 V8 equipped Land Cruiser (known for heating issues) or just want a "cool" look, the Run Cool hood louvers can do the trick. V





1. The first thing you will need to do is open your hood and see what kinds of bracing your hood has, and examine where your alternator and distributor are. This will help you decide where on your hood to put the louvers. Also it is important to put some kind of painting cloth or towels over the engine, so you do not get metal shavings everywhere. We also suggest putting a thin piece of wood or something hard under the area where you are going to cut the holes, so you do not drill into something you should not.



2. Place the Run Cool hood louvers on top of your hood about where you want them. Then measure from the sides of your hood to make sure they are positioned evenly on both sides. Really, take your time with this, because if you rivet them in crooked or uneven there is no redoing them.



3 & 4. After you have the louvers where you want them, put a piece of masking tape around all four sides of each of the louvers to mark the locations. Then remove the louvers and put another strip of 1" masking tape around the inside edge of the tape that marked the edge of the louvers. This will mark out the lines you need to cut on.



5. This is the most important step. Cover your windshield with a thick cloth. If this is not done you will end up with lots of little metal shavings melted into your glass. To start the surgery on the hood it is wise to use a hole saw on the four corners of each section you are going to cut out. This will give you a nice rounded corner that will be more rigid than a square corner.



6. Time to cut the two large sections of out the hood. There are many different tools you can use to do this. Most will find it easiest to use a grinder with a cut off wheel. The biggest thing to remember when choosing your weapon of choice is that you do not want to cut through the hood bracing. This is why we decided to use a skill saw with a metal cutting blade. Using the skill saw allowed us to set the depth of the cut so it only cut the top layer of sheet metal. If you do not want to scratch the paint on the hood you might not want to use a skill saw. Our project Tacoma is going to be painted soon so it was not a concern for us.



7. Remove the inner row tape and put the hood louvers back into place. Securely tape the louvers onto your hood so you can start drilling the hole for the pop rivets. Using the provided drill bit, start drilling out the holes. Use some nails or screws to put into the holes to help hold the louver in place as you drill the rest of the holes.



8. Place a pop rivet down into each hole to confirm that all the holes line up and are the correct size.



9. Mask off the rest of your hood because it is time to paint the exposed metal around the sides of the holes you just made.