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## Cooking Equipment for Motorcycle Camping

by  
Ryan William Cantrell

When considering cooking options for motorcycle camping, you must weigh convenience, weight, bulk, durability and cost. Cooking options run from the super convenient **Jetboil**, to the super cheap **penny stove**... and everything in between. In this segment, we'll review a few of the most commonly used cooking systems and explore their pros and cons.

We'll start with the most convenient of the systems – the **Jetboil**. The basic **Jetboil** system costs around \$100. It boils 2 cups of water in 2 minutes, and holds a total of 4 cups of fluid (though it's only recommended that you boil two cups at a time). The boil time of 2 minutes is impressive, considering the relatively low output of 4500 BTU. The key is in the design of the **Jetboil**, which captures all the heat and directs it to the contents inside the **Jetboil**. The **Jetboil** utilizes a propane/isobutane four-season blend. The propane provides higher vapor pressure for better performance in cold weather while the isobutane provides more constant pressure as the fuel level gets low. **Jetboil** claims that the small 100g fuel bottle will boil 12L of water, and from my experience that is accurate. The **Jetboil** is very efficient. Phil Sauter purchased a large fuel bottle for his Alaska trip, and he has been using the same bottle for 3 summers! The **Jetboil** is also quite light, weighing in at only 14 oz.

The downside of the **Jetboil** is its cost and bulk. It's also fragile and will bend/break if you land on it (if it's in your saddlebag and you lay your bike over on it). Because the **Jetboil** gets so hot, you cannot cook in it (for example, you would not put soup directly into the **Jetboil** because it will literally burn the soup to the bottom of the **Jetboil**). There are ways around this such as cooking food in a ziplock bag or buying a simmer ring for your pot. In summary, the **Jetboil** is ideal for boiling water, but can fall short in trying to simmer your dinner or cook multiple foods at once. You're almost certainly going to need to pack an extra pot or mug to eat more than one thing at a time.



**The Jetboil**

The \$60 **dual fuel stove** is a popular choice with long-distance dual sport riders, because the **dual fuel stove** can burn regular gasoline in a pinch, making it an ideal stove for those who travel far into the backcountry without coming out to re-supply. It's also ideal for those who do not want to pack additional fuel for their stove. The **dual fuel stove** functions best on clean fuels like white gas that does not leave a residue on your pots or pans and burns cleanly from the stove. Gasoline will leave a black film on your pots, and the soot from gasoline can clog the stove over time (requiring the owner to clean it, or replace parts). O-rings need replacement on **dual fuel stoves** every year or



two, which is simple and cheap maintenance. A \$7 gallon of white gas will last the average camper an entire summer of clean burning. At 24oz, the **dual fuel stove** puts out 7,500 BTUs (pending the fuel source) and will boil 2 cups of water in under 4 minutes. A full tank (12 oz) of fuel will last the average camper all weekend due to the efficiency of the stove. If you run out, you've got plenty of gasoline in your bike to get you by. Downsides are few, but include pumping the stove each time you want to use it (the user must pump the air into the stove to pressurize the system).



**The Dual Fuel Stove**

The **Pocket Rocket** is a popular choice among riders, due to its simplicity and small size/weight. It's hard to argue with the 3oz weight (excluding fuel) and sheer durability of the \$40 **Pocket Rocket**. Multiple fuels are compatible with it, and it'll generally boil a liter of water in about 4 minutes, while still having the adjustability of simmer to boil.



**The Pocket Rocket**

**Esbit Pocket Stoves** are extremely light (a couple ounces or so), small (the size of a credit card) and inexpensive (\$5 or so at your local Army/Navy store). Fuel for the **Pocket Stove** is also inexpensive. Downsides include extended cooking times due to the low BTU output of the tablets. Boiling water or cooking a meal often requires 2 or 3 tablets (each of which burn for roughly 7 minutes).



**The Esbit Pocket Stove**

**Propane burners** are an inexpensive, simple and durable option for many. For \$20, you can purchase a 1.5 lb burner (without the fuel) that'll put out 10,000 BTU with a 16.4oz propane bottle. The cons include weight and bulk. It's the heaviest and bulkiest of the options.



**The Propane Burner**



Heath converted me to using a **penny stove** two seasons ago. Upsides to the **penny stove** include being inexpensive, light, efficient and easy to replace. I used the same penny stove for all 14,500 miles of my 2010 season (roughly 50 nights outdoors). In that time, I only consumed about \$5 of fuel. I burn denatured alcohol due to its high output of 12,700 BTU, and zero soot output. I've tested my **penny stove** next to my **Jetboil**, and found that I can boil 2 cups of water in equal time to my **Jetboil** if I put extra fuel into the primer pan, thus forcing far more fuel through the burners than average. I've also been able to burn 14 minutes on just one ounce of fuel (if your goal is to simmer a meal). Downsides to the **penny stove** include the fact that it takes some time to get used to operating it – familiarizing yourself with the flash pan/primer pan and learning how much fuel to use can take a while. On cold mornings (25 degrees), it takes more effort to get a **penny stove** lit. Exceptionally windy conditions will also require the user to create a wind-block for the stove to operate it correctly. My stove fits in my pot, and the pot, stove, stand and spork (combination spoon and fork) all together weigh less than a pound. Fuel is carried in something like an MSR bottle, and weight varies on the duration of your ride (12 oz can last me a weekend).



*The Penny Stove*

In summary, there are many stoves available to dual sport riders. The goal should be to find the smallest, lightest stove that will meet your cooking needs. Start simple, and whatever you purchase

make sure you pack it in such a manner that a trail side drop will not crush your cooking equipment and leave you without a way to prepare your meals. When purchasing a cooking system, remember to balance weight, bulk, cost, durability and convenience....happy cooking while motorcycle camping!

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## ATGATT

by  
Paul Leadabrand

While some know the meaning of this mnemonic, others who don't will need to read this short article to find out...

Ed Hiatt, our beloved president, asked me to write a few words on this subject since we have a lot of new members (and new riders), because of the observations of our fellow riders on club rides, and because I still fall down a lot.

Have you fallen yet, "crashed and burned", or logged some unexpected airtime off a slick corner? Has your bike then re-joined you when the yard sale stops, by pinning you to the ground? I've experienced all this and more, and it nearly takes all the fun out of dual sport riding.

We have had great Saturday club tech days recently on preparing us for trailside flats, suspension issues, and camping from our bikes, etc. But have we forgotten to prepare ourselves (our bodies) for when that front tire blows at 45mph, we bounce sideways off a big rock over the embankment, or we catch a tree with our fully loaded panniers.

Some may have been boy scouts or grew up in the motocross community – so are usually prepared. But those new to dual sport riding perhaps just passed the STAR's course and spent the entire kitchen-pass budget on a new "farkled-out" bike



may have forgotten to prepare by protecting themselves with good riding clothing. I've seen it, and it makes me concerned for their safety.

I've polled a bunch of my motorcycling peers and mentors; they all have horror stories of why they added this or that piece to their protective gear, but here are their collective suggestions:

- Buy the best **Helmet** you can barely afford – you know you get what you pay for! I know “brain buckets” all look the same (egg-shaped with a chin strap), but they are not all equal. Save the cost of that pretty paint scheme, and put it toward plain white in a better brand. Read the high-end manufacturer's web sites (e.g. Arai & Shoei); the research and development they put into protecting your noggin is quite impressive. The government safety standards set a good baseline; but look for the manufacturers that offer a higher standard. Your brain is worth it. Even though you may find what you think is a screaming deal on e-bay – and you say, “it will still fit 'cause it's an extra large” (even though you take a large) – DON'T buy it. Always make sure it fits perfectly and DON'T buy used. Purchase a new full-face helmet that fits properly. I know helmets cost a lot, but still don't get too attached to them – prepare yourself to retire your helmet after only a few years, especially if they've been dropped, road-rash'ed, or in a crash.
- Are you still wearing sunglasses in your helmet? Have you ever taken a big black bumblebee at 45mph, or been roosted by your buddy? If you are wearing a full-face helmet without a face shield, go with a high-quality pair of lightly tinted **Goggles** with quick release straps. They work great in combination with the dual sport helmets. They protect more of your face, cut down on the dust irritation, reduce sun glare along with the visor, and the lenses are replaceable for different conditions.

- Going to the other end of your body (your feet and lower legs) you need high-quality **Boots** in combination with knee/shin guards. Here again you get what you pay for. The most important points of a boot are protecting your ankle (from twisting when the bike falls over with your foot under it) and protecting your toes (when you clip that big immovable boulder while cutting the corner). Also, if you want dry feet after you get your Challenge 2010 water-crossing photo, waterproofing is also an important consideration. First, educate yourself on the manufacturers web sites for how the boot is constructed and the protection offered. Secondly, go out to all the dealers and try them on for a comfortable fit. Someday you might be stranded a long distance from civilization and need to walk out for help in those boots. Those low-cut touring boots are comfortable and easy to use, but will not offer the protection required when you put your foot down for stabilization on the side of the trail, the ground isn't there, you lose your balance, and the bike falls over, torquing your ankle with the foot peg or kick stand, and your not even moving!

- For those unfamiliar with **Knee/shin guards** they velcro with elastic-strap to your calf and have hard impact-resistant plastic over the padding covering the knee & shin. The worst part about knee/shin guards is remembering to put them on after your knee socks, but before your riding pants, and then follow with your boots. The best thing about knee/shin guards is the comfort you'll feel when you kneel on rocky ground to fix your bike. After a few rides you won't even notice them anymore. Then when you don't wear them, you'll feel naked and unprotected.

- **Body armor** is just as important as a helmet and boots (especially when riding in the dirt), lasts about the same amount of years, costs a lot less, and again you get what you pay for. You may have noticed



Happy Trails doesn't seem to stock a lot of armor. It's not because they feel it isn't important. It's because there are so many brands, styles, sizes, and it must all fit like a glove to work right. The bulky, high-visibility, heated, pocketed, overcoats with the internal shoulder and elbow pads are, of course, convenient to use and protect you from the elements, but they don't protect your spine, chest, and forearms! Depending on the type of crash and how loose the jacket fits, the pads may not be in the right place when you need them. Most motorcycling jackets will go over the body armor if you remove the internal pads. Body armor (like knee/shin guards) has hard impact-resistant plastic over padding, then sewn onto a stretchy mesh fabric jacket with a zip front. Body armor protects your spine/back (if you're somersaulted over the bars), your chest (when a mirror shaft, handle bar, or tree branch tries to impale you), your shoulders, your humerus, your elbows, your forearms, and your kidneys.

I won't leave home on the bike,  
day or night,  
dirt or pavement,  
without the above 5 items ON!

Protection doesn't end with the big 5 above. There are **Gloves** (to protect your outstretched hand as you try to catch yourself), **wrist braces** (for the death grip on the bars in a sudden stop), **riding pants** with hip/thigh pads (guess what hits the ground first in a side fall?), and **neck braces** (a ritual for some) – all to further consider.

Being members in our club comes with some responsibility. You want to meet and make new riding friends; you want to look good on group rides; you want to have fun.

I know you put a lot of expense and effort into assuring your bike isn't the one to break down 30 miles from nowhere, holding up the entire group. So, if you reflect, why risk holding up the group by

getting hurt due to not wearing all the protective gear.  
Helmet, Goggles, Boots, Knee/Shin guards, & Body Armor

Please seriously consider this widely-used motto...

**All The Gear, ALL The Time**

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## Are You Protecting Your Hearing?

by  
Craig O. Olsen, M.D.

The riding motto ATGATT (**All The Gear All The Time**) should not only apply to protective body gear, but should also be extended to hearing protection. While motorcycles have been around since the latter part of the 19<sup>th</sup> century as a mode of transportation, it has only been since the mid 1970's that studies have demonstrated the relationship between hearing loss and wind noise in motorcyclists [1]. Despite this well-known relationship, many motorcyclists still do not take appropriate measures to protect their hearing.

Take it from Fred Rau, a writer for the motorcycle magazine Friction Zone, when he says, "If you ride a motorcycle without using hearing protection, you WILL, in time become at least partially, if not totally, deaf...I am currently learning the hard way [2]." He celebrated his 60<sup>th</sup> birthday with a new pair of hearing aids as a result of noise induced hearing loss from riding motorcycles for many years without appropriate hearing protection.

Dr. Mike Coley, an otolaryngologist (ears, nose and throat surgeon) who has been riding motorcycles since age 11 and remains an avid rider, having owned and ridden over 40 different motorcycles during his life, confirms that noise induced hearing loss from riding motorcycles without appropriate ear protection is not a "maybe will cause," but is a "it will cause" situation. How much damage and



how long it takes to show up is unpredictable with some individuals showing much more susceptibility than others when exposed to the same conditions [3].

Known as the silent killer, wind noise (not engine, exhaust or surrounding traffic noise) is the primary culprit causing hearing loss in motorcyclists. According to OSHA's regulation of industrial noise exposure, an average worker surrounded by noise levels around 85-90 decibels (dB) for an 8-hour day will not exceed the limits of exposure time during a 24 hour period that will cause hearing damage. As the sound level increases, the length of exposure before damage to hearing occurs significantly decreases as depicted in table 1 below [4,6].

Noise Level	Exposure Limit
90 dBA	8.0 hours
92 dBA	6.0 hours
95 dBA	4.0 hours
97 dBA	3.0 hours
100 dbA	2.0 hours
102 dBA	1.5 hours
105 dBA	1.0 hours
110 dBA	30 minutes
115 dBA	15 minutes

Table 1. OSHA's Permissible Noise Exposure Limits.

Wind noise around a helmet (even with the very best full-face helmets) still measures about 90 dB at 36 mph and about 110 dB at 96 mph. Many helmets actually resonate as they vibrate from the passage of wind around them, creating low-frequency sound waves that can't be heard by the human ear, but which can damage your hearing even more severely than the wind noise they are blocking out [2]. Without any helmet these noise levels are much higher. Neither the riding position nor the brand or style of motorcycle (faring, wind screen, etc.) makes significant difference in noise levels. Padding inside the helmet, open or closed vents, or added weather stripping on the helmet to alter flow patterns, does not significantly alter the noise level in a helmet. Long-term exposure to noise levels over 90dB can cause gradual hearing loss and regular exposure to 110 dB or greater for more than one minute can lead to noise induced

hearing loss that is permanent and can only be treated by the use of hearing aids [5].

For perspective normal conversation is rated at about 55 dB, heavy traffic is rated at 90-100 dB, and a rock concert or chainsaw is rated at 110-120 dB. The range of human hearing is from about 20 Hz or cycles per second (a very low tone) to about 20,000 Hz (a very high tone).

So what is the best form of hearing protection when riding a motorcycle? Gary Prickett at Motorcycle Consumer News recently reported the results of testing a wide variety of earplugs comparing custom versus universal fit and foam versus silicone to determine which was best [5].

Scientifically measuring noise attenuation, acoustic fidelity, comfort and value, the audiologists conducting this study concluded that Leight Laser Lite, Hearos, and the Leight Max Foam earplugs are a cut above the rest of the earplugs. They were effective and comfortable while also being inexpensive and disposable foam plugs. Of the silicone-based earplugs, the Alpine MotoSafe Professional Driver's Ear Plugs and Mack's moldable earplugs demonstrated a reasonable compromise between noise attenuation, audio fidelity, cost, quality, and comfort.

Most of these earplugs can be purchased off the Internet at the Ear Plug Superstore [<http://earplugstore.stores.yahoo.net/>], and some can also be found at most major drug stores.

Just as important as using proper hearing protection is how to properly insert earplugs. The only way to obtain the full benefit of any type of earplug is to assure that they are properly inserted into your ears. For this to occur, most or all of the plugs should fit within the ear canals. If half or a plug is projecting out of the ear canal, the benefits of the earplug are next to nothing. The technique for fitting formable foam earplugs is to: (1) Roll the foam between the thumb and forefinger of the hand on the same side of your body as the ear that is to receive the plug. The plug should be compressed into a small, smooth cylinder. (2) Reach over the



top of your head with the opposite hand, and pull back and up on the top of your ear thus straightening the ear canal so the plug can be fully inserted. (3) Insert the tightly rolled plug into the straightened ear canal pushing the earplug in and down toward your nose with your index finger. (4) Hold the plug in place for a few seconds as your hear and feel the plug expanding to fill your ear canal [5]. You may need to experiment with different sized earplugs to find the one that results in a tight seal. An excellent 3-4 minute video demonstrating this technique is found at the Ear Plug Superstore web site and is worthwhile for every rider to review

[[http://earplugstore.com/videos/how\\_to\\_fit\\_foam\\_earplugs.htm](http://earplugstore.com/videos/how_to_fit_foam_earplugs.htm)].

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