

# Graham's DAILY TRIP CHECKS



WORDS BY STEVE COLLINS, PHOTOGRAPHY BY DAVE WOLTSCHENKO →

See Graham's everyday tricks that guarantee Shorty never breaks down in the bush



**"30 YEARS OF 4WDING, AND I'VE NEVER BEEN TOWED OUT OF THE BUSH! - Graham"**

**A** lot of people think because they're not mechanics, they can't prevent breakdowns in the bush. But you know what? Checking your 4WD over yourself is easier than you think. And the truth is, even old scrubbers like Graham are able to spot problems coming before they cause real issues.

"I've been 4WDing for 30 years and I've fortunately never been towed out of the bush," Graham says. "Shorty's spent most of her life off-road, travelled to every corner of the country and done it all without breaking down, and that's

largely because I'm crawling over, under and inside her every day to ensure any problems that do crop up are caught and fixed before I leave camp, and before they develop into trip-ending issues."

To show you just how easy it is, Graham's going to walk us through his own daily bush-proofing checklist. The things he checks, how he spots the early warnings signs and the various ways he ensures Shorty goes the distance in the bush.

## UNDER THE BONNET



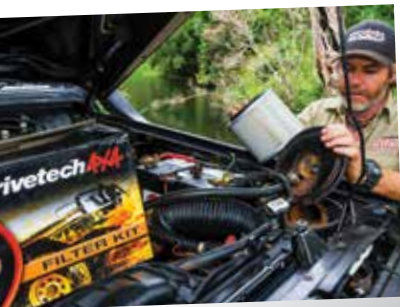
“Start by wiping all the messy bits down with a rag while checking for rubbed through wires, cracked brackets and missing nuts and bolts. Check your engine oil and make sure it’s sitting at the full (or high) mark. Black oil is normal for a diesel. A caramel milkshake, however, indicates coolant or water is in the oil and will require urgent attention.”



◀ “Visually check for things like white stains around coolant hoses, low coolant levels, mud blocking the radiator and loose hose clamps. Also run your hand over all of the wiring and fuel lines, checking for chafing, loose connections, corrosion or leaks. Coolant hoses should be soft and pliable. I replace mine every 18 months.”



◀ “Check your belts for cracks and correct tension; there should be 10mm of deflection at the longest straight section of belt. On average, belts last around 80,000km, or less if they sit covered in mud during the week. I do my belts at the same time as the hoses.”



◀ “I do all my filters every 10,000km, because when you do the maths; it works out a lot cheaper than having to rebuild your engine or injector pump prematurely. Check ‘em every day and spend the time to clean out any debris from the air box and drain water from your fuel filter. And while we’re on this topic folks, spend the bucks on quality filters because they are the only thing keeping the bush out of your engine.”



◀ “Don’t forget your brake and clutch fluid, particularly if you’ve done a heap of water crossings. Make sure it’s not cloudy (which again indicates moisture), and if it has a black discolouration, there’s a chance the master cylinder seals are on their way out, so monitor the pedal feel and flush it when you get home. Also check the power steering fluid is on the high level, bright in colour and clear.”

## UNDERNEATH



▲ “Checking the gearbox, diff and transfer case oils is generally straightforward, just pop the top filler plug out and make sure they’re filled to the bottom edge of the filler plug. Use a cable tie as a dip stick to check oil condition, and if it’s milky, full of metallic shavings or it’s half empty, you’re best off addressing it before you leave camp. While you’re down there, pull the breather hoses off and make sure they’re not blocked, or they could blow oil out past your seals.”



“Run a spanner or socket wrench over every nut and bolt you can find to ensure nothing’s wriggled loose. I don’t know how many times I’ve come across a nut or bolt slowly working its way loose.”



◀ “Check for excessive play in your uni joints. Grab a hold of each drive shaft and rotate it back and forth. If you notice any play or it feels notchy, you’ll need to have the uni joints replaced. If you’ve got a grease gun, make sure you keep them lubed, particularly if you’ve been playing in the mud.”



“Keep an eye out for damage to the shock bodies, cracks around spring and shock mounts and leaking from the shock’s shaft. Look for cracks and stress marks in suspension bushes, and replace them if you’ve got spares in the boot. Most bushes will do 100,000km or more, at least they should if you use quality rubber bushes like the Drivetech 4x4 bush kit we installed in Shorty.”



“Check for free play in the wheel bearings, steering linkages and ball joints. Jack up the front of the truck and hold the tyre at the north and south positions and rock the wheel back and forth. If there is free play or clunking noises, your wheel bearings need to be nipped up. Then grab the tyre at the east and west positions and rock it from side to side; any play there may indicate a steering issue such as worn ball joints, steering rack or tie-rod ends. Your steering is obviously a critical part of safety when it comes to 4WDing, which is why I only use Drivetech 4x4 parts - I know they’ll keep me safe and go the distance.”



## TYRES AND BRAKES



▲ “Mud is the most common cause of brake issues in the bush, particularly slipping hand brakes, noisy drums and seized calliper slides. If you’ve been through particularly muddy terrain, rip the wheels off one at a time and clean as much of it from your brakes, callipers and handbrake as possible before you set off for the day. Again, your brakes are such an important part of safety out on the tracks. I use Drivetech 4x4 parts as they’re manufactured to the same high standards as OEM parts.



“Inspect all tyres for signs of damage, scrubbing, bulges in the sidewalls and tread depth. It’s fairly easy to stake a tyre in the bush, and most often, it’s the ones on the inside of the tyre that’ll catch you out (because they’re not easily visible.)”



◀ “Once you’ve checked everything over, grab your wheel brace and check your wheel nuts are tight. It’s not uncommon for them to work their way loose, particularly on the left hand side. In fact, some manufacturers (like Ford) used to install left hand threads on the left hand side of the vehicle, to prevent them unwinding as you drive.”

## ELECTRICAL



▲ “Mud will take its toll on your alternator, too. With the engine off, the battery should sit between 12.6-12.8V, and it should be between 13.5V-14.5V with the engine running. If the voltage flickers all over the place with the engine running, there’s a good chance the alternator is on its way out.”



▲ “Dirty connections and relays are the cause of dull or faulty lights. Check earths are clean and free of corrosion, and tightly secured to the body or chassis. And finally, go through and remove relays one by one, checking they’re free from mud and corrosion, then give ‘em a spray with WD.”



## CHOOSING QUALITY PARTS

Nothing’s worse than having to do the same job twice, but that’s exactly what you’ll be doing unless you use quality, OEM spec parts and accessories.

Graham uses Drivetech 4x4 parts on Shorty because they’ve proven they go the distance. They’re made by the same companies that make the original manufacturer’s genuine parts. They’re backed by a nation wide warranty, just like genuine parts. They’ve got a huge range and their parts kits come with everything you need. Plus, they’re only a fraction of the cost. It’s a bit of a no brainer when you think about it.

## CONTACTS

Drivetech 4x4 are a leading developer and distributor of quality 4WD replacement parts and accessories across Australia and New Zealand, with a huge range of parts for most popular 4WDs. To find out more or find the details of your nearest stockist visit [www.drivetech4x4.com.au](http://www.drivetech4x4.com.au).