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100% Effective Natural Hormone Treatment
Menopause, Andropause And Other Hormone Imbalances
Impair Healthy Healing In People Over The Age Of 30!

Over Weight and Over Heating

By Byron Moore

Over Weight and Over Heating

Vehicle weight is a major issue that many Four Wheel Drive owners are often unaware of or just ignore. This is not only a performance issue but also a safety issue and not just for the vehicle owner but also for other road users. At Berrima Diesel Service (

www.berrimadiesel.com.au

) they usually see

half a dozen 4WDs in their workshop every day for tuning, performance problems or turbo charging. During the process of their work they weigh the vehicles as part of the job. They do this as they have most vehicles coming in for a power gain. It might end up with the power gain at the wheels, but it may not push the vehicle as thought. This is where the weighing process comes in, sometimes with surprising results. They utilise a modern electronic weighbridge that is accurate to within 10kg.

Considering that the average 4WD wagon only has a payload capacity of just over half a tonne, it doesn't take long to swallow that up with 2 or 4 occupants, oils in the engine, diffs, gearbox, fuel in the tank/s, the normal accessories like bull bar, towbar, heavier suspension (big springs and shocks are literally heavier). Even different tyres can weigh substantially more than standard. Generally, the big wagons have a maximum GVM (max loaded weight) of 2.9 tonne to 3.1 tonne. Berrima Diesel see the average ones weighing 2.9 tonne to 3 tonnes and they are certainly not loaded for a trip. When they get the accessorised big wagons in they start to reach towards 3.2 tonnes and they have seen the odd 100 series Landcruiser in their workshop, obviously with a lack of power problem, weighing in at 3.5 tonnes. When you talk troopies, they regularly weigh over their GVM as they are stacked up with all the heavy gear needed for the trip. Large steel fuel tanks not only carry a lot more fuel (weight) but weigh in surprisingly more than the factory poly or tin tank. One recent GU Patrol went over 3 tonne and the vehicle wasn't what you would call heavily modified, just the usual 'steel gear'.

A big problem arising from the ever increasing weight of 4WD's is fuel consumption. A standard 4WD diesel can start off with a happy consumption figure of around 10-12 litres/100km only to have it blow

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out to 16ltres/100km once modified.

Tyre blowouts are common on a lot of trips and this is an area that weight can have a huge effect. Standard tyres are designed to work within the working parameters of the vehicle but once it is overweighted the standard tyres are often working very close to their maximum weight limit. Throw in an extremely hot road and the working weight of the tyre gets lower. When considering loading up next time, check the loaded weight of the vehicle and check the combined load rating of the tyres. Make sure you have a good percentage of difference between the tyres and the weight of the 4WD they are carrying. Eg. probably 20% to 30% less weight of the vehicle than the maximum tyre carrying load. Wheel bearings are another thing to consider. Make sure that they are greased if you are carrying weight.

Overweight vehicles are the main reason for performance problems. Not only that but they are often illegally overweight. Ask the people how much they think their 4WD weighs and the general answer is 2.2 tonne or 2.4 tonne. When Berrima Diesel explain that it weighs in at 3 tonne or more they have trouble believing it!! Add to this the 2 tonne trailer and you have, for example, a 3 litre Nissan trying to move a combined weight of 4.5 to 5 tonnes!!

Overweight vehicles can also become an insurance issue in the case of an accident. A listed weight, initiated by the accessory manufacturer on accessories, would be of a great benefit to people.

Some other areas to consider that can effect vehicle weight areas steel refrigerators, larger tyres, upgraded suspension also lends itself to more weight as well as thicker springs, storage drawers, roof racks, dual batteries, different seats, HF radios. People usually need these for trips but at least an awareness of where the weight is coming from can help with controlling it.

Find a reputable weigh bridge or just turn into an RTA truck weigh bridge for free and get ready for a possible shock!

Radiators and Air flow:

* Consider a larger radiator. Some Factory radiators are a 2 core and can be increased to a 3 core radiator.

* Please... resist fly screens where possible.

* Consider the size and positioning of driving lights, winch, number plates and particularly bull bar air flow.

* Check to make sure air conditioning condenser fins are clean!!

* If an Intercooler is mounted in front this can add considerably to hot air flow over the radiator and restricting air flow to the radiator.

* Consider installing a few small bonnet vents on the left and right of the rear region of the bonnet.

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This has proven to be a popular addition and has huge effects on under bonnet temperatures. Considering how tight most engine bays are after a few accessories are added, this venting addition can reduce heat stress on a variety of products under the bonnet.

Engine set-up:

- * Over fuelling is usually the major cause of high combustion temperatures.
- * Make sure the fuel injection system has been thoroughly checked and setup correctly.
- * If the vehicle is fitted with a turbo or super charger, over fuelling may be the cause. It is very easy to over fuel a diesel once plenty of air is available as possibly no smoke under load may be visible. Visible smoke under load can be a warning of over fuelling!

This article and the technical advice was taken from an interview with Andrew Leimroth of Berrima Diesel Service. Andrew is one of The Diesel Experts who have been working exclusively on diesels since 1965. His wealth of knowledge and skill with problem diesels is well known in the automotive industry.

Byron Moore is a freelance journalist who has put together a number of articles on diesel automotive matters through interview and discussion with The Diesel Experts (see

<http://www.thedieselexperts.com>

) He has had a number of articles published in various automotive

magazines and also via the web.

Floor Heating

By Graeme Ramsey

There is nothing quite like being able to walk around in the middle of winter, barefoot and warm.

Under floor heating provides warmth that keeps you comfortable from your toes to the top of your head. By having warm feet the whole body feels warmer.

As the warmth from the floor rises, it heats the whole of the house in a mild manner without the noise and drafts of fans or the smell of open fires or gas heaters.

Under floor heating is best installed when the house is being constructed, as it needs to be under the flooring whether it is carpet or tiles.

To install under floor heating into a finished house would require the lifting of the flooring and the

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installation of the floor heating mats.

With tiles, this would require the breaking of the old tiles and the additional costs of laying new tiles.

This might rule out under floor heating as a cost effective alternative for older houses.

When the cost of lifting the old tiles, added to the purchase and laying of the new tiles is calculated, it might prove excessive compared to other sources of heating such as a heat pump.

The running costs of under floor heating can also be quite expensive if left to run continuously. For this reason many houses are fitted with timers that turn the flooring on early in the morning before the occupants of the house rise and turn the floor heating off during the day when everyone is out of the house and at work.

Many consumer sites on the internet offer comparisons between the costs of installation and the running costs of the various different types of home heating systems, however many people are happy to pay a little more for the added luxury of the silent warmth of under floor heating.

Graeme Ramsey offers home owners advice on Home Heating

<http://www.radiant-floor-information.info>



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