



Overland Expo East 2017

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Choosing The Right Vehicle For Your Adventure



Let's Plan An Adventure!

Answer these three important questions 



Try to answer each question not only as it relates to planning your trip in general, but how it will factor in choosing the right vehicle.





Destination Where To?

Items To Consider

- Is the journey to a familiar or unfamiliar location?
- What is the political situation? Personal security, vehicle security, driving etiquette all might be factors.
- First World or Third World?
- Is the trip largely a rugged survival 4x4 based journey or is it primarily over the road commuting?
- What is the climate? Hot or cold, wet or dry, what season is it?
- What is the expectation for accessibility of supplies? These will include; food, water, fuel, spare parts, batteries, medicine, communication, lodging, familiar comfort items

Answer each question as it relates to your potential vehicle choice. Remember, there is no perfect vehicle. You need to prioritize each question and determine what is more important to you.





Time How Long?

Is the vehicle to be used for weekend getaways or long extended adventures?

Shorter trips often require less supplies and therefore less weight carried.

Comfort may be more important in longer trips but never underestimate the benefits of creature comforts even on a weekend away with your vehicle. It might be the difference between a great adventure and not really enjoying your self.



Adventure Is In The Eye Of The Traveler



Everyone has a different dream, different standards, different motivations and different thresholds.

- Why are you going?
- Who are you traveling with?
- What experience are you looking for?
- What is the balance of driving to down time?
- How remote are you looking for?
- Is it about the culture, the scenery, the joy of driving, the truck, the adrenaline, some or all of the above?



Choosing The Right Vehicle

8 Important Factors To Consider

- 1 Vehicle Size
- 2 Fuel Type
- 3 Old Vs. New
- 4 Add On Gadgets
- 5 Suspension
- 6 Trailer Options
- 7 Sleeping Set Up
- 8 Brand Loyalty

There are certainly other things to consider but I feel these 8 are the big ones.



VEHICLE SIZE

Important factors to consider:

- **Weight:** may be a factor in shipping, ability to cross some bridges, ease of recovery by another vehicle, ferry crossing, jacking equipment needed, tire size and rating required for the vehicle & costs associated with all of the above.
- **Length:** maneuverability in tight area of cities, trails or parking areas. Shipping, ferry crossing tariffs, visibility in traffic.
- **Height:** Clearance under obstacles such as tree branches, bridges, drive thru, container shipping, ferry crossings.
- **Carrying Capacity:** This may be especially important for certain circumstances. Length of trip and number of non replaceable supplies able to be carried. Spare parts needed. Liquid supplies (fuel, water, oils). Occupants on board. Roof top weight such as tents, cargo boxes, sand ladders, jerry cans etc.
- Other items to consider in vehicle size are wheelbase length, towing capacity (maybe the weight is in a trailer), weight distribution both front /rear and low/high.
- Is the vehicle primarily used for carrying passengers from point A to B or is it a complete home away from home.



FUEL TYPE

Diesel or Gasoline powered engine?



VS



Factors to consider:

- **Availability of fuel in target destination**

- Particular attention here needs to be focused not so much on the fuel type but the quality of the product. While both gasoline and diesel are pretty much available throughout the world, certain regions do not have a high quality of gasoline in remote areas. This is not an issue if your selected engine is tuned for lower octane or an older carburetor engine version.

- **Cost of operating with selected fuel**

- Fuel prices fluctuate wildly between destinations. In many cases price is subject to a variety of non-traditional factors (politics, tax, subsidy, refinery location etc.) By no means a rule, generally diesel is cheaper than gasoline to purchase and a similar size diesel power plant is generally more efficient than a gasoline one.

- **Cost associated with maintenance of chosen engine**

- Once again a generalization but most diesel power plants require less maintenance. Much of this is because diesel has far less electronic components.



FUEL TYPE

Diesel or Gasoline powered engine?



VS



Other Items To Consider

- **Vehicle acquisition cost** and availability of vehicle with chosen power plant
- **Performance of engine** in the task you are asking it to do
 - Horse power & torque are usually better with diesel. Speed & acceleration might be a gasoline advantage.
- **Reliability**
 - Diesel generally means a stronger engine, longer lasting cylinder heads, cranks and pistons to survive the higher compression engine and heat. The exhaust is also less corrosive than gasoline equivalents contributing to longer life parts.
- **Range of vehicle**
 - Diesel generally has better fuel mileage therefore an equivalent tank size will yield a longer range
- **Fire and safety risk**
 - Carrying back up cans of diesel is far safer from a fire risk than gasoline.

FUEL TYPE



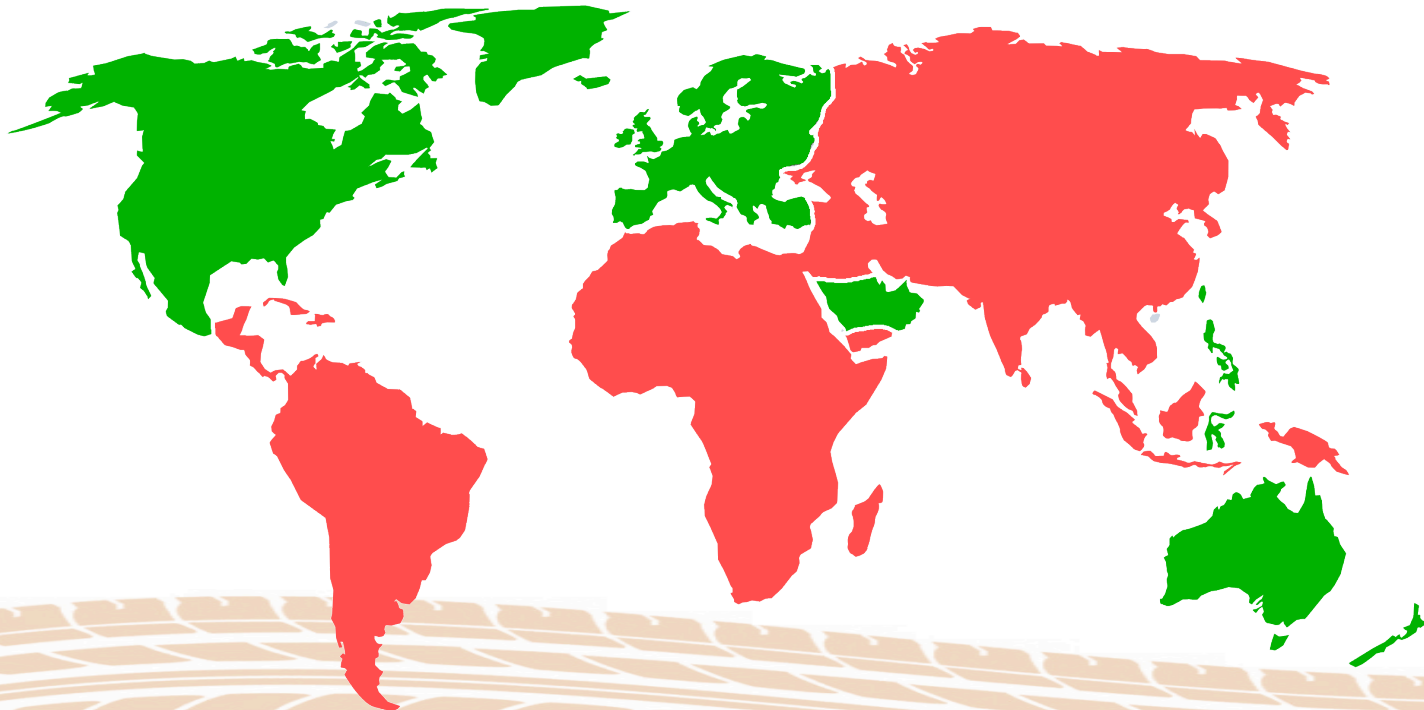
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Map below shows very generally what I have found.

RED represents locations that diesel is prevalent and where gasoline is of a lower grade than most modern “Western spec” vehicles can operate with.

GREEN represents locations where gasoline is generally available in a high enough quality for modern vehicles. Diesel is also generally available, although particularly in the USA at less stations than gasoline.

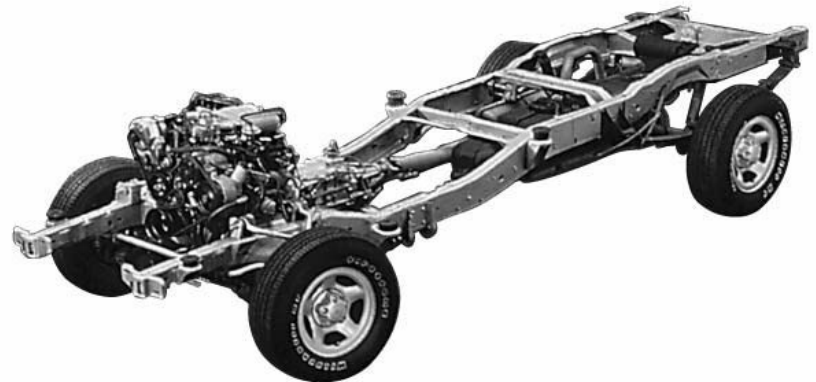


Old Tech Versus New Tech

Technology continues to evolve and often it makes our lives better and simpler. Sometimes the old way just works though. Consider the following things when looking at vehicles designs.

- Ignition components
- Computerization
- Theft deterrents
- Carburation or fuel injection
- Body on frame or unibody construction

Consider your skill level with repair and your access to repairs in the field. What tools might be needed and where they will be carried and how heavy will they be.



Gadgets Or The Simple Life?

What is important to your goals? The following come in the form of modifications to the vehicle or items that will be carried (also known as more weight). This section largely is about your lifestyle or the tasks the truck has in your adventure plan. Remember, less is often more and weight should always be considered when evaluating and gadget or addition to the vehicle.

- Winch
- Solar panels and back up systems
- Power generation
- Refrigeration
- Water purification and supply
- Hot water shower systems
- Navigation equipment
- Built in cooking systems



Suspension Options



I have created a separate category for suspension as I have found this choice to be critical, particularly if your travels involve a fair amount of time off of asphalt.

The two most common types are coil sprung and leaf sprung suspensions. In addition to the suspension choice is how the two interact with your terrain, the size of your vehicle and specifically the wheelbase of your vehicle and the weight that is planned to be carried.

Factors To Consider:

- **Weight:** Leaf springs weigh more generally. Remember weight is always the enemy. This might be the one case where heavy is better if you intend to use the vehicle for more extreme off road situations as the weight helps to keep the tires in contact with the ground.
- **Approach & Departure Angles:** Coil springs win out here. There is far less to get stuck on objects beneath the vehicle.
- **Flex:** Coils generally have more movement range, keeping the tires in contact with the ground over difficult uneven terrain.
- **Lifespan, Failures & Maintenance:** Leaf springs are simpler, have less parts and joints to break. Generally coils last longer though and are slightly less prone to sudden failures.
- **Load Capacity And Ride Comfort:** Leafs have more load capacity and can be added on to. Coils tend to ride nicer but are almost always more expensive to replace.



Solo Truck or Trailer Truck Combo?

Pulling an anchor?

- Always consider the weight. Is a trailer just going to tempt you to bring more?

Off-road capability

- In extreme off road situations a trailer will generally limit you.

Space to relax

- Does your trip entail needing a home away from home? A trailer will give you more space to relax.

Mobility once in camp

- Roll in to camp & set up. Now what? Do you want to be mobile to leave camp for supplies, short explorations etc.



Building a trailer might be an option

Set Up Time

- Some trailers may significantly reduce your camp set up time.



Sleeping Arrangements

In the vehicle

- May be cramped or ventilated poorly. Might be quick to set up and easy in a pinch. Requires less weight.

In a trailer

- Could be similar to in a vehicle, or may be much more spacious as it is dedicated to sleeping. Also could be roof top of trailer giving you more flexibility to leave set up in place when doing errands.

Roof Top Tent

- Fairly quick set up but still a set up and makes short camp excursions tough. Also weight up high is generally a negative. Many options available and comfort is generally good.

On the Ground

- Can be uncomfortable, longer set up, less safe from animals. I don't recommend.



Brand Consideration

Cost

- Initial cost to buy both new & used. Ongoing cost to maintain, insure & upgrade.

Reliability

- Historical track record in the field over the years of service of a particular model.

Durability

- The ability of the vehicle to travel loaded to the gills over a period of time without failure.

Capacity

- Primarily the payload statistics and potentially the towing ability of the vehicle.

Parts Availability

- Worldwide availability or regional availability based on factors like dealer networks, parts suppliers, number of vehicles produced, total vehicle models in service.

Theft History

- Some makes and models are more attractive to thieves.

Personal Loyalty

- I call this the X factor. What do you like?



Some Important Brands & Their Models



TOYOTA

Land Cruiser 100 & 80 ,
Tacoma, 4Runner



Xterra



Defender, Discovery, Range
Rover, Series 3



Vitara



Wrangler JK



Fuso, Pajero



Mercedes-Benz

G500, Unimog, 1428



E-350 Sportsmobile



Summary & My Thoughts

Need versus Wants

- A Man Kat 8x8 is REALLY COOL but do I really need a vehicle that has a 10 ton payload?

Stay As Stock As Possible (Buy the vehicle that best suits your style of travel)

- Modifications are often a want. Always consider the unintended results of any change. I once put a 3 inch lift on a Defender 90 only to realize I had to reconfigure the drive shafts & sway arms. Then I needed to adjust the differential angle. Next it was drive train vibration and so on...

Weight Is More Important Than Anything

- Repeat after me. WEIGHT MATTERS MORE THAN ANYTHING!

Tank Range

- More is better in this department. The farther you can travel on the supplies that you carry the better. It is the basis for self sufficiency. Fuel is the most important of your resources as far as the vehicle is concerned.

Electronics

- Once again less is more. Expect the worst and hope for the best. Fixing a suspension component can be accomplished with duct tape, fixing electronic components that control your engine is a whole other problem.



Summary & My Thoughts

Less Is More

- I am back to that again. Everything creates weight. Weight becomes wear on the vehicle. Wear becomes broken parts. Broken parts become a bad day.

There Is No Perfect Vehicle

- My current vehicle set up is a 1979 Mercedes Unimog with a matching camp trailer. I chose this set up largely through trial & error using & testing many other vehicles. Important to me & my adventures were the following:
 - Large enough to carry 2 people and equipment to be reasonably comfortable on 3 week to 3 month trips.
 - Diesel power plant to me equals less maintenance, better fuel economy, more availability in remote places that I go, safer to store.
 - Trailer set up, I like to have the flexibility to leave camp and explore without take down of tent etc. Better weight distribution, higher level of comfort.
 - Old enough to fix. No electronics, simple marine engine, everything bolts on.
 - Weight- It can carry it. I like gadgets and creature comforts while on the road and don't mind the slower top speed that comes with the truck.
- Your experiences may be different. Your goals may be different. I am always learning & listening. What do you think is the perfect vehicle & why?

