BOV (Bug Out Vehicle) Basics

There are three schools of thought or approaches to BOVs:

The first school is the traditional BOV, a pre-1980 4x4 pickup or SUV, this school of thought advocates these earlier vehicles primarily for their supposed resistance to the effects of EMP (Electromagnetic Pulse) from a nuclear weapon or other source. The theory is that older vehicles that have less electronics on them will survive EMP better than newer vehicles. Another side consideration is the lack of tracking systems such as Onstar and immunity from new devices that would allow the police (or someone else) to turn the vehicle off by using some sort of directed energy weapon (these are real although in the early stages and may not be in use anywhere).

The newer vehicle school of thought says that the likelyhood of a detonation of a nuclear bomb that will produce EMP happening is slim to none, and there is no hard evidence that older vehicles will not be affected or that newer vehicles will be affected by EMP, so you might as well use a modern 4x4. This school also points out that modern vehicles have better fuel economy than older vehicles, and they're a lot nicer to be in on long trips.

The third school of thought is the use whatever you have school. This school of thought realizes that not everyone can afford a dedicated BOV or that they can not afford to buy another vehicle. For options in this area see my blog article on Bug Out / Evacuation Cargo Carrying Options and Blackstar's blog article on Survival Transportation - Small & Midsize cars.

I am going to deal with what a BOV should be in an ideal situation. This will apply to the first two schools of thought and I will not advocate one or the other. There is information below, tools and spare parts, that will apply to all BOVs.

A BOV should be or have the following features:

- 4x4
- large enough to fit your family, pets and your core gear
- have a trailer hitch - receiver style (a front mounted hitch receiver is also a good idea)
- have at least one winch, two would be better (front and back)
- be in good repair and running condition
- have upgraded shocks or springs (better towing and cargo capabilities)
- have a brush guard
- have at least one full size spare
- a cargo basket or roof racks on the top (increased gear storage)
- have driving and fog lights
- largest tires possible
- skid plates (front minimum - transfer case and drive line advisable)
- gas tank protection (skid plate)
- have a good CB and antenna (full size steel whip antenna with spring at base)

For some people the BOV of choice will be a full size pickup, a full size SUV, a small/midsize pickup or a small/midsize SUV. This will depend on a lot of factors including the size of their family, their budget and their needs. There are lots of options out there to meet the "minimum" requirements listed above. The upgraded shocks or springs are a simple and fairly inexpensive upgrade that can be done by the owner or a mechanic. Brush guards are also fairly inexpensive and can be installed by the owner or a mechanic and allow the mounting of a winch and the driving and fog lights. A rear mounted hitch could require the addition of a custom bumper, although there are commercial bumpers available for some vehicles, plus there is the option of mounting the winch to a custom 2 inch receiver tongue. Some people in the 4x4 community carry tubes

for their tires in case a hole is too large to patch or plug on the trail, some pre-mount the tube inside the tire so all they have to do is pump it up.

You want to make sure that your fan shroud is in good condition as it is one of the most important items under the hood. This piece of plastic serves two major functions, the first is the guiding of air through the radiator to provide sufficient cooling (very important when hauling a full load) by limiting turbulence around the fan. The second is that it keeps the spray of water over the engine and electrical systems reducing the chances of stalling the engine out due to excess water spraying the ignition system.

For those looking to buy an older fullsize pickup or SUV they can often be found in good mechanical and body condition for $2000 or less. If you are not mechanically inclined you will want to take it to your mechanic to have it looked at and get any marginal parts replaced. It is better to be sure than to break down halfway to your destination. You don't need a monster truck, you need a basic 4x4 truck that will get you to where you are going.

Even if you are not mechanically inclined there are a number of basic repairs that any person can do as long as you have the repair manuals and some basic tools. Not only will you get to know your vehicle better but you will save yourself some money by doing the routine things. When buying repair manuals I always get both the Chilton's and the Haynes manuals.

Your BOV should always have the following items in it:

- repair manuals
- basic mechanics tool set
    - standard and metric socket set
    - standard and metric wrench set
    - ball peen hammer
    - torque wrench
    - channel lock pliers
    - locking pliers
    - linesmans pliers
    - needlenose pliers
    - adjustable wrenches (6, 10 & 15 inch)
    - screwdrivers (3 flat head & 3 phillps)
    - torx set
    - allen wrench set
    - spark plug socket and setting tool
    - distributor wrench
    - wire stripper/crimper
    - electrical connectors and wire
    - basic voltmeter or circuit tester
    - electrical tape, shrink tubing, cloth friction tape
    - WD-40 or other spray lubricant
    - duct tape
    - flashlight
    - breaker bar
    - RTV sealant and/or gasket maker
    - tarp
    - super glue and paper clips
    - JB Weld
    - starter fluid
    - degreaser
    - can of contact cement
    - Knipex pliers (for gripping rounded nut or bolt)
    - nylon zip ties
    - jack stands
    - assorted nuts, bolts and washers for your vehicle
    - other specialty tools required for your vechicle (usually on Fords)
- spare set of fuses
- spare set of all bulbs

- spare hoses
- spare spark plugs
- spare spark plug wires
- spare wiper blades
- fluids (oil, transmission fluid, power steering fluid, coolant/antifreeze, etc)
- tire repair kit including fix-a-flat or "slime"
- lug wrench/tire iron
- flares or reflective triangle
- jack (Hi-Lift or bottle)
- "come-a-long", 2 ton (manual hand winch type tool)
- snatch block
- jumper cables (quality all copper 4 or 6 guage)
- air compressor
- rags
- waterless hand cleaner
- snow brush
- squeegee
- tow chain
- snow chains (good for mud too)
- traction aids (carpet, sand, board, etc)
- distilled water (for battery)
- stop leak for radiator, oil, etc
- HEAT/Dry Gas
- octane boost/gas treatment
- at least one 5 gallon gas can
- drinking water
- leather work gloves
- change of clothes
- spare boots/shoes
- first aid kit
- baby wipes
- toilet paper
- some freeze dried/dehydrated food
- blanket
- coat
- poncho
- rope
- multi-tool (Leatherman / Gerber)
- maps of city, state and country
- candles or fake fireplace log
- matches or disposable lighter
- trash bags
- cooler (to keep food and water in)
- water purifier (Katadyn or Berkey) or purification tablets
- seasonal items (clothing, etc)
- oil filter

In addition to the spare parts listed above you may want to carry some of the more common and easy to replace parts below:
- ignition coil
- alternator
- thermostat
- complete distributor or at least cap, rotor and points (for older vehicles)
- starter
- U-joints
- voltage regulator (older vehicles)
- fuel pump

- starter solenoid/relay
- fuel filter

These parts are the ones that need replacing the most and can generally be replaced by anyone on the side of the road with the basic mechanics tools listed above. Some people, especially in the 4x4 community, will choose to carry drive shafts and axles as well but these take longer to replace and require more skill. The optional spare parts listed here can generally be replaced in under an hour. You would be well advised to have a long length of steel pipe, rebar or a very strong screwdriver for leveraging and tightening your alternator.

See Basic Survival Tools for additional items that should also be kept in or on your BOV. Ideally your BOV should have most of the same items as your BOB (Bug Out Bag) in it at all times, so you are never without those items.

If your BOV is dedicated to being a BOV and is not your daily driver you can keep your BOB and other gear that is not affected by temperature loaded in your BOV and ready to go with a moments notice.

NOTES: