M.I.T. Pre-Run Inspection Check List & Spare Parts Recommendations

Typical spare parts list:

- Driveshaft u-joint
- Driveshaft hardware
- Axle u-joint
- Locking hub (if applicable)
- Engine belts & hoses
- Fluids
- Electrical kit: wire, crimps, fuses, tape & zip ties
- Tire plug kit (ARB makes a nice one)
- Misc. suspension bolts ie: trac bar bolt & control arm bolt
- H.D. ratchet straps

Pre-run visual inspection all vehicles check:

- fluid leaks
- engine & transmission mounts for cracks in rubber
- belts & hoses including rubber fuel lines along frame rails & brake hoses for pinching & abrasion from contact with suspension or tires
- play/slop in u-joint or output yokes
- wiring or hoses run too close to heat sources on moving parts
- with aftermarket steering linkage check for loose jam nuts
- play @ wheel bearings
- shocks & steering stabilizer for damage or leaks

CJ/YJ additional pre-run inspection check:

- frame cracks, especially at suspension mounts, engine mounts, steering box & welds
- torque on all spring hangers, shackle bolts, u-bolts, steering box bolts and pitman arm nut
- leaf springs for cracks & bushing condition
- CJ 76-86 common failure is crack at front & rear shackle hangers where they bolt to the frame
- YJ 87-95 common failure crack at front shackle hangers where they are welded to the frame

TJ, XJ, ZJ, WJ, JK additional pre-run inspection check:

- Torque on all control arm bolts, trac bar bolts, & jam nuts on adjustable versions
- Bushings & pivot joints
- Cracks where suspension mounts weld to frame and to axle tubes
- Vehicles with sway bar disconnects check all components as they are generally prone to failure. Their design makes them weaker than the factory parts they replace
- 97-06 TJ's common failure is rear upper control arm/track bar mount will crack at
 welds to top of the LH axle tube. These brackets are under increased stress
 because of the leverage added by extension brackets that are common to most
 lifts. (we add a gusset to prevent this)
- TJ, XJ, ZJ, WY common failure is control arm mounts bending or cracking where welded to front axle housing. The best fix is to replace with HD aftermarket brackets.

Annual vehicle inspection & preventative maintenance should include:

- Oil level of transfer case, transmission, front & rear differentials
- Steering linkage for play in tie rod ends
- Tie rod & drag link ends check torque & replace cotter pins
- Grease zerks & spray lube heim joints with penetrating oil
- Ball joints for wear
- Brake condition & flush fluid
- Hydraulic clutch system for leaks (master cylinder will leak on the inside of firewall above pedals)
- Lug nut torque & tire condition including the <u>age</u> of the tires. Tires have a finite lifespan regardless of mileage. Discount Tire has an informative web site to help you determine condition and age usefulness of your tire. This is especially important on "mostly" trail rigs, motor homes, trucks & trailers that don't see many miles each year. From personal experience a tire can look perfectly good on the outside but will be coming apart internally. When is fails @ freeway speed it can be your worst nightmare, for you and your vehicle. This is just as important for spare tires too!

If you have any questions on parts needed stop by and we can get you numbers based on your specific application. We also offer driveline checkups and annual inspections.