

XJ Pre-Trail Inspection Checklist

Twenty minutes in the driveway beats a long night on the trail. Work the list before every run.

UNDER THE JEEP

- ☐ **Track bar bolts tight** — axle bolt 74 ft-lb, frame ball stud nut 60 ft-lb. Slop here is where death wobble starts.
- ☐ **Ball joints** — jack under the axle, pry bar under the tire. Vertical play means replace before the trail, not after.
- ☐ **Front axle shaft u-joints** — no rust dust at the caps, no play at 12 and 6.
- ☐ **Driveshaft u-joints & slip yoke** — grab and twist both shafts. Any click is a no-go.
- ☐ **Tie rod ends & drag link** — boots intact, no movement on the 9-and-3 wiggle test.
- ☐ **Leaf spring shackles, bushings, hangers** — no cracks at the frame-side hanger welds.
- ☐ **Diff covers & pinion seals** — a damp film is fine; a drip is not. Pull fill plugs and check level.
- ☐ **Skid plate & crossmember hardware** — snug every bolt. Rocks find the loose ones.
- ☐ **Exhaust hangers & downpipe** — secure, no contact with the floor pan or fuel lines.

ENGINE BAY

- ☐ **Coolant level** — bottle between MIN and MAX cold, 50/50 mix, cap seal intact. The 4.0L runs hot on slow climbs.
- ☐ **Fan clutch** — spin the mechanical fan cold: light resistance is healthy, freewheeling is dead. Confirm the e-fan kicks on.
- ☐ **Serpentine belt** — no glazing, cracks, or missing ribs; tensioner moves with spring pressure.
- ☐ **Battery hold-down tight** — trail vibration breaks loose batteries and their terminals.
- ☐ **Hoses** — squeeze upper and lower radiator hoses; check heater hoses at the firewall for swelling or seep.
- ☐ **Steering box bolts** — torqued and the frame rail crack-free behind them. Known XJ weak point.

WHEELS & TIRES

- ☐ **Pressure set** — street pressure to the trailhead; aired-down target 15–18 psi (lower only with beadlocks).
- ☐ **Lug nuts torqued to 95 ft-lb**, star pattern, all five wheels — spare included.
- ☐ **Spare** — holds air, matches diameter close enough to run, and you can reach it loaded.
- ☐ **Jack reaches lifted height** — the factory jack won't on a lifted XJ. Bottle jack with a base plate, or Hi-Lift plus rated jack points.
- ☐ **Valve stems** — no cracking at the base, caps on, valve core tool in the kit.

RECOVERY & SAFETY

- ☐ **Recovery points bolted to the frame** — receiver shackle or frame-mounted hooks. Bumper sheet-metal hooks become projectiles.
- ☐ **Recovery strap & shackles** — 30 ft strap with loop ends (no metal hooks), two 3/4" shackles, WLL 4.75 ton.
- ☐ **First aid kit** — stocked, nothing expired, and you know where it rides.
- ☐ **Fire extinguisher** — charged, mounted, reachable from the driver's seat with the belt on.
- ☐ **Comms** — GMRS/ham/phone; know where coverage dies and agree on a trail channel.
- ☐ **Told someone** — where you're going and when you'll check in.
- ☐ **Function check** — lights, brake lights, horn; shift into 4-Lo in the driveway, not on the obstacle.

FLUIDS & SPARES

- ☐ **Engine oil at full** — plus a quart of 10W-30 in the kit.
- ☐ **ATF level hot** (AW4 takes Dexron) — plus a spare quart.
- ☐ **Spare u-joint** — Spicer 1310 fits the driveshafts; pack the strap kit and hardware with it.
- ☐ **Hose clamp assortment**, RTV, and self-fusing silicone tape.
- ☐ **Fuses & relays** — mini blade assortment plus a test light or multimeter.