SAC

Springfield Auto Care EXAMPLE SHOP

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TECHNICIAN WORKSHEET · 4.0L INLINE-SIX (POWERTECH)
RA-J40-123456-20261028

2001 Jeep Wrangler · TJ (1997–2006) · 4WD

1J4FA49S11P123456

ODOMETER IN: 125,000 | DOOR-JAMB BUILD (MM/YY): | RO #: | TECHNICIAN / DATE:

A · RECALLS AND CAMPAIGNS TO VERIFY (DEALER PRINTOUT OR NHTSA.GOV)

02V-104 · Debris can collect at the #3 cylinder between the manifolds (4.0L) ☐ Open ☐ Done ☐ N/A

02V-075 · Electrical · ignition switch ☐ Open ☐ Done ☐ N/A

04V-112 (Crankshaft sensor wiring insulation can crack (2004 Grand Cherokee 4.0L)): not listed by NHTSA for MY2001. Confirm on the dealer printout.

B · INSPECTION POINTS, IN PLAN ORDER

1. Debris at the #3 cylinder between the manifolds (fire risk, recall 02V-104)

Check now · Any mileage (2000–2001 Cherokee, 1999–2002 Grand Cherokee and 2000–2002 Wrangler with the 4.0L (recall 02V-104))

Check the VIN for 02V-104 ☐ OK ☐ Watch ☐ Fix

Look for the manifold shield and clear debris near cylinder #3 ☐ OK ☐ Watch ☐ Fix

Shield: present / missing

Parts (TJ): Ask your parts supplier for the OE part number for this VIN.

2. Cracked cylinder head (0331 casting): coolant in the oil

Check now · Inside the range (Mostly 2000–2001 engines with the 0331 head; about 80,000–150,000 miles per one estimate site)

Look under the oil cap and on the dipstick for milky oil ☐ OK ☐ Watch ☐ Fix

Pressure-test the cooling system ☐ OK ☐ Watch ☐ Fix

Block (combustion gas) test ☐ OK ☐ Watch ☐ Fix

Oil: clean / milky

Scan for: P0217

Parts (TJ): Ask your parts supplier for the OE part number for this VIN.

3. Cracked exhaust manifold and broken studs

Watch · Any mileage

Listen along the manifold on a cold start ☐ OK ☐ Watch ☐ Fix

Look for soot and broken studs ☐ OK ☐ Watch ☐ Fix

Manifold: tight / leaking / cracked

Parts (TJ): Ask your parts supplier for the OE part number for this VIN.

4. Crankshaft or camshaft sensor faults (stalling, no-start)

Watch · Any mileage (recall 04V-112 covers the 2004 Grand Cherokee 4.0L sensor wiring)

Scan for crank/cam sensor codes ☐ OK ☐ Watch ☐ Fix

Check the sensor wiring for cracked insulation ☐ OK ☐ Watch ☐ Fix

Scan for: P0335, P0339, P0340, P0344

Parts (TJ): Ask your parts supplier for the OE part number for this VIN.

5. Rear main seal and oil filter adapter leaks

Watch · Any mileage (Chrysler bulletin for 2000–2005 Wranglers)

Clean and dye-test the rear of the engine ☐ OK ☐ Watch ☐ Fix

Check the oil filter adapter for wet O-rings ☐ OK ☐ Watch ☐ Fix

Leak: none / adapter / rear main

Parts (TJ): Ask your parts supplier for the OE part number for this VIN.

FACTORY MAINTENANCE

Not on this report for this car. Check the service records and the maker's schedule (brake fluid, spark plugs, coolant, transmission fluid).

☐ Records checked ☐ Due ☐ Quoted

C · ALSO REPORTED FOR THE 4.0L INLINE-SIX (POWERTECH), QUICK CHECKS

- **Steering / brakes / air bags** (3635 complaints): Chassis and safety-equipment complaints (many covered by recalls); not engine faults.
- **Transmission** (543 complaints): Automatic and manual transmission complaints; not engine faults.
- **Stalling / loss of power** (444 complaints): Mixed causes in the complaint text: crank and cam sensors, fuel pumps and ignition parts; see the crank sensor item.

WHAT TO SAY AT THE COUNTER (ADVISOR)

1. Debris at the #3 cylinder between the manifolds (fire risk, recall 02V-104)
The intake and exhaust manifold design can let debris such as leaves collect at the #3 cylinder, next to the fuel injector and the hot exhaust manifold. Owners report it at all mileages, so it is worth a look at every visit. A recall or warranty extension may pay for it: we check the VIN.
Ask: have you noticed leaves or debris on top of the engine near the injectors, or burning smell after a drive?

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2. Cracked cylinder head (0331 casting): coolant in the oil
The 0331-casting cylinder head used on 2000–2001 engines can crack in the water jacket between cylinders 3 and 4. At 125,000 mi your car is in the mileage range where owners report it.
Ask: have you noticed coolant level dropping with no outside leak, or milky or light-brown oil?

Adjust after the inspection. The report is not a diagnosis or a guarantee, so say what the technician found, not what the report predicts.

NOTES FOR THE ADVISOR

Record findings here (OK / Watch / Fix and measurements); the advisor adjusts the quote before the handout is printed or sent.

Reference only. Follow Jeep repair procedures and your shop's judgment.