

## 2001 XJ RANGE - General Information - 100-00

Before disassembly, clean the surrounding area as thoroughly as possible. When components have been removed, blank off any exposed openings using grease-proof paper and masking tape. Immediately seal fuel, oil and hydraulic lines when separated, using plastic caps or plugs, to prevent loss of fluid and the entry of dirt. Close the open ends of oilways, exposed by component removal, with tapered hardwood plugs or readily visible plastic plugs. Immediately a component is removed, place it in a suitable container; use a separate container for each component and its associated parts. Before dismantling a component, clean it thoroughly with a recommended cleaning agent; check that the agent will not damage any of the materials within the component. Clean the bench and obtain marking materials, labels, containers and locking wire before dismantling a component.

### Dismantling

Observe scrupulous cleanliness when dismantling components, particularly when parts of the brake, fuel or hydraulic systems are being worked on. A particle of dirt or a fragment of cloth could cause a dangerous malfunction if trapped in these systems. Clean all tapped holes, crevices, oilways and fluid passages with compressed air. Do not permit compressed air to enter an open wound. Always use eye protection when using compressed air.

Ensure that any O-rings used for sealing are correctly refitted or renewed if disturbed. Mark mating parts to ensure that they are replaced as dismantled. Whenever possible use marking materials which avoid the possibilities of causing distortion or the initiation of cracks, which could occur if a center punch or scriber were used. Wire together mating parts where necessary to prevent accidental interchange (e.g roller bearing components). Tie labels on to all parts to be renewed and to parts requiring further inspection before being passed for reassembly. Place labelled parts and other parts for rebuild in separate containers. Do not discard a part which is due for renewal until it has been compared with the new part, to ensure that the correct part has been obtained.

### Inspection

Before inspecting a component for wear or performing a dimensional check, ensure that it is absolutely clean; a slight smear of grease can conceal an incipient failure. When a component is to be checked dimensionally against figures quoted for it, use the correct equipment (surface plates, micrometers, dial gauges etc.) in serviceable condition. The use of makeshift equipment can be dangerous. Reject a component if its dimensions are outside the limits quoted, or if damage is apparent. A part may be refitted if its critical dimension is exactly to the limit size and it is otherwise satisfactory. Use Plastigauge 12 Type PG-1 for checking bearing surface clearance, e.g. big end bearing shell to crank journal. Instructions for the use of Plastigauge and a scale giving bearing clearances in steps of 0.0025 mm (0.0001 in) are supplied with the package.

### Safety Precautions



#### **WARNING:**

**WORKING ON THE FUEL SYSTEM RESULTS IN FUEL AND FUEL VAPOUR BEING PRESENT IN THE ATMOSPHERE. FUEL VAPOUR IS EXTREMELY FLAMMABLE, HENCE GREAT CARE MUST BE TAKEN WHILST WORKING ON THE FUEL SYSTEM. ADHERE STRICTLY TO THE FOLLOWING PRECAUTIONS:**

- **DO NOT SMOKE IN THE WORK AREA.**
- **DISPLAY 'NO SMOKING' SIGNS AROUND THE AREA.**
- **DISCONNECT THE BATTERY BEFORE WORKING ON THE FUEL SYSTEM.**
- **DO NOT CONNECT/DISCONNECT ELECTRICAL CIRCUITS, USE ELECTRICAL EQUIPMENT OR OTHER TOOLS OR ENGAGE IN WORKING PRACTICES WHICH IN ANY WAY MAY RESULT IN THE PRODUCTION OF SPARKS.**
- **ENSURE THAT A CO2 FIRE EXTINGUISHER IS CLOSE AT HAND.**
- **ENSURE THAT DRY SAND IS AVAILABLE TO SOAK UP ANY FUEL SPILLAGE.**
- **EMPTY FUEL USING SUITABLE FIRE PROOF EQUIPMENT INTO AN AUTHORIZED EXPLOSION**

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### PROOF CONTAINER.

- DO NOT EMPTY FUEL WHILE WORKING IN A WORKSHOP OR A PIT.
- ENSURE THAT WORKING AREA IS WELL VENTILATED.
- ENSURE THAT ANY WORK ON THE FUEL SYSTEM IS ONLY CARRIED OUT BY EXPERIENCED AND WELL QUALIFIED MAINTENANCE PERSONNEL.
- ENSURE THAT FUME EXTRACTION EQUIPMENT IS USED WHERE APPROPRIATE.



### WARNING:

**FUME EXTRACTION EQUIPMENT MUST BE IN OPERATION WHEN SOLVENTS ARE USED E.G. TRICHLOROETHANE, WHITE SPIRIT, SBP3, METHYLENE CHLORIDE, PERCHLORETHYLENE. DO NOT SMOKE IN THE VICINITY OF VOLATILE DEGREASING AGENTS.**

### General workshop practices:

- Disconnect the grounded terminal of the vehicle battery.
- Do not apply heat in an attempt to free seized nuts or fittings; as well as causing damage to protective coatings, there is a risk of damage from stray heat to electronic equipment and brake lines.
- Keep oils and solvents away from naked flames and other sources of ignition.
- Adhere strictly to handling and safety instructions given on containers and labels.
- Ensure that a suitable form of fire extinguisher is conveniently located.
- When using electrical tools and equipment, inspect the power lead for damage and check that it is properly earthed.
- Do not leave tools, equipment, spilt oil etc. around the work area.

### Working beneath a vehicle:

- Whenever possible, use a ramp or pit in preference to jacking.
- Position chocks at the wheels as well as applying the parking brake.
- Never rely on a jack alone to support a vehicle; use axle stands, or blocks carefully placed at the jacking points, to provide a rigid location.
- Check that any lifting equipment used has adequate capacity and is fully serviceable.

### Working on air conditioning systems:

- Do not disconnect any pipes of the refrigeration system unless you are trained and instructed to do so; a refrigerant is used which can cause blindness if allowed to come into contact with the eyes.

## Health Protection

Prolonged and repeated contact with mineral oil will result in the removal of natural oils from the skin, leading to dryness, irritation and dermatitis. In addition, used engine oil contains potentially harmful contaminants which may cause skin cancer. Washing facilities and adequate means of skin protection should be provided.

### Observe these recommendations:

- Wear protective clothing and impervious gloves when necessary.
- Do not put oily rags in pockets. Avoid contaminating clothes, particularly underwear, with oil.
- Overalls must be cleaned regularly; discard oil impregnated clothing and footwear which cannot be washed or cleaned.
- First Aid treatment should be obtained immediately for open cuts or wounds.