## **LUBRICATION AND MAINTENANCE**

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ENGINE OIL—DIESEL ENGINES  Use only Diesel Engine Oil meeting standard MIL- 2104C or API Classification CD or higher or CCML D4, D5.	CAUTION: Vehicle may be equipped with long life coolant. Extended life coolant is identified by an orange color. Normal coolant is identified by a greenish color. It is recommended that the two types of coolant not be mixed.					
SAE VISCOSITY GRADE  CAUTION: Low viscosity oils must have the proper API quality or the CCMC G5 designation.  To assure of properly formulated engine oils, it is recommended that SAE Grade 15W-40 engine oils	3.1L					
that meet Chrysler material standard MS-6395, be used. European Grade 10W-40 oils are also accept-	AUTOMATIC TRANSMISSION  Dry fill capacity. *					
able. Oils of the SAE 5W-40 or 8W-80 grade number are preferred when minimum temperatures consistently fall below -12°C.	42RE       9.1-9.5L (19-20 pts.)         44RE       7.57 L (16.0 pts.)         45RFE       13.33 L (28.0 pts.)					
FLUID CAPACITIES	* Depending on type and size of internal cooler, length and inside diameter of cooler lines, or use of					
FUEL TANK	an auxiliary cooler, these figures may vary. Refer to Group 21, Transmission for proper fluid fill procedure.					
All	TRANSFER CASE					
3.1L	242 NVG					

4.7L . . . . . . . . . . . . . . 5.7 L (6.0 qts.)

## **SPECIFICATIONS (Continued)**

## FRONT AXLE

186 FBI	1.18 L (2.5 pts.)
186FBI‡	1.19L (2.51 pts.)

‡If the vehicle is equipped with VARI-LOK, include 0.07L (0.15 pts.) of friction modifier.

## **REAR AXLE**

198 RBI*	. 1.6 L (3.5 pts.)
198RBI ‡	1.78L (3.76 pts.)
226 RBA*	2.24 L (4.75 pts.)
226RBA ‡‡	2.25L (4.75 pts.)

- \* If the vehicle is equipped with TRAC-LOK, include 0.11 L (0.25 pts.) of friction modifier.
- ‡ If the vehicle is equipped with a VARI-LOK, include 0.09L (0.19 pts.) of friction modifier.

‡‡ If the vehicle is equipped with a VARI-LOK, include 0.12L (0.25 pts.) of friction modifier.

NOTE: Vehicles with trailer tow, must use a synthetic lubricant. Refer to Group 3, Differential and Driveline for service procedures.

## **POWER STEERING**

Power steering fluid capacities are dependent on engine/chassis options as well as steering gear/cooler options. Depending on type and size of internal cooler, length and inside diameter of cooler lines, or use of an auxiliary cooler, these capacities may vary. Refer to Section 19 of the service manual for proper fill and bleed procedures.

## MAINTENANCE SCHEDULES

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## **DESCRIPTION AND OPERATION**

## MAINTENANCE SCHEDULE—DIESEL ENGINE

## **DESCRIPTION**

The following are engine related Maintenance items which are unique to Diesel engine-equipped vehicles. Refer to the 2000 WJ Service Manual for gasoline engine and non-engine related Maintenance Schedules

The service intervals are based on odometer readings in kilometers. There are two maintenance schedules that show proper service intervals. Use the schedule that best describes the conditions the vehicle is operated under. **Schedule-A** lists all the scheduled maintenance to be performed under normal operating conditions. **Schedule-B** is the schedule for vehicles that are operated under one or more of the following conditions:

- Day and night temperatures are below freezing.
- Stop and go driving.
- Long periods of engine idling.
- Driving in dusty conditions.
- Short trips of less than 8 kilometers (5 miles).
- Operation at sustained high speeds during hot weather above 32°C (90°F).
  - Taxi, police or delivery service.
  - Trailer towing.

# AT EACH STOP FOR FUEL OR SCHEDULED SERVICE STOP

- Check engine oil level.
- Check engine coolant level.
- Inspect drive belt.
- Visually inspect intercooler for obstruction. Clean as necessary.
- Visually inspect radiator for obstruction. Clean as necessary.
  - Inspect for fuel, oil or coolant leaks.
- Inspect battery cable connection and excessive corrosion.
- Inspect for presence of water in fuel filter/water separator, drain if necessary.

## **SPECIFICATIONS**

## SCHEDULE—A

## 1 000 KM

- · Change engine oil.
- Change engine oil filter.
- · Check all fluid levels.
- Check correct torque, intake manifold mounting nuts.
- Check correct torque, exhaust manifold mounting nuts.
- Check correct torque, turbocharger mounting nuts.
  - Check correct torque, water manifold bolts.

#### 10 000 KM

- Change engine oil.
- Change engine oil filter.

## 20 000 KM

- Change engine oil.
- Change engine oil filter.
- Replace air filter element.
- Drive belt visual inspection.

#### 30 000 KM

- Change engine oil.
- Change engine oil filter.

#### 40 000 KM

- Change engine oil.
- Change engine oil filter.
- Replace air filter element.
- Drive belt visual inspection.
- Replace fuel filter/water separator element.\*\*

## 50 000 KM

- Change engine oil.
- Change engine oil filter.

#### 60 000 KM

- Change engine oil.
- Change engine oil filter.

## SPECIFICATIONS (Continued)

- Replace air filter element.
- Replace drive belt.
- Check engine smoke.
- Replace engine coolant.

#### 70 000 KM

- Change engine oil.
- Change engine oil filter.

## 80 000 KM

- Change engine oil.
- Change engine oil filter.
- Replace air filter element.
- Drive belt visual inspection.
- Replace fuel filter/water separator element.\*\*

## 90 000 KM

- · Change engine oil.
- Change engine oil filter.

## 100 000 KM

- Change engine oil.
- Change engine oil filter.
- Replace air filter element.
- Drive belt visual inspection.
- · Check glow plug operation.

## **EVERY 40 000 KM AFTER 80 000 KM**

- Replace fuel filter/water separator element.\*\*
- \*\*The fuel filter/water separator element should be replaced once a year if the vehicle is driven less than 40 000 km annually or if power loss from fuel starvation is detected.

## EVERY 10 000 KM AFTER 100 000 KM

- Change engine oil.
- · Change engine oil filter.

#### EVERY 20 000 KM AFTER 100 000 KM

- Change engine oil.
- Change engine oil filter.
- Replace air filter element.
- Drive belt visual inspection.
- Check glow plug operation.

## SCHEDULE—B

## 500 KM

- Check correct torque, intake manifold mounting nuts.
- Check correct torque, exhaust manifold mounting nuts.
- Check correct torque, turbocharger mounting nuts.
  - Check correct torque, water manifold bolts.

#### 1 000 KM

- Change engine oil.
- Change engine oil filter.
- Check all fluid levels.

#### 5 000 KM

- · Change engine oil.
- Change engine oil filter.

#### 10 000 KM

- · Change engine oil.
- Change engine oil filter.
- Replace air filter element.
- Drive belt visual inspection.

## 15 000 KM

- Change engine oil.
- Change engine oil filter.

## 20 000 KM

- Change engine oil.
- Change engine oil filter.
- Replace air filter element.
- Drive belt visual inspection.

## 25 000 KM

- Change engine oil.
- Change engine oil filter.

## 30 000 KM

- Change engine oil.
- · Change engine oil filter.
- Replace air filter element.
- Replace drive belt.
- · Check engine smoke.
- Replace engine coolant.

## 35 000 KM

- Change engine oil.
- Change engine oil filter.

#### 40 000 KM

- Change engine oil.
- Change engine oil filter.
- Replace air filter element.
- Drive belt visual inspection.
- Replace fuel filter/water separator element.

#### 45 000 KM

- Change engine oil.
- Change engine oil filter.

#### 50 000 KM

- Change engine oil.
- Change engine oil filter.
- Replace air filter element.
- Drive belt visual inspection.

## SPECIFICATIONS (Continued)

#### 55 000 KM

- Change engine oil.
- Change engine oil filter.

#### 60 000 KM

- Change engine oil.
- Change engine oil filter.
- Replace air filter element.
- Drive belt visual inspection.
- Replace fuel filter/water separator element.

#### 65 000 KM

- Change engine oil.
- Change engine oil filter.

#### 70 000 KM

- Change engine oil.
- Change engine oil filter.
- Replace air filter element.
- Drive belt visual inspection.

## 75 000 KM

- Change engine oil.
- Change engine oil filter.

## 80 000 KM

- · Change engine oil.
- Change engine oil filter.
- Replace air filter element.
- Replace drive belt.
- Check engine smoke.
- Replace engine coolant.

## 85 000 KM

- Change engine oil.
- Change engine oil filter.

#### 90 000 KM

- Change engine oil.
- Change engine oil filter.
- Replace air filter element.
- Drive belt visual inspection.

#### 95 000 KM

- Change engine oil.
- Change engine oil filter.

#### 100 000 KM

- Change engine oil.
- Change engine oil filter.
- Replace air filter element.
- Drive belt visual inspection.
- Check glow plug operation.
- Replace fuel filter/water separator element.

## **EVERY 5 000 KM AFTER 100 000 KM**

- Change engine oil.
- Change engine oil filter.

#### EVERY 10 000 KM AFTER 100 000 KM

- Change engine oil.
- Change engine oil filter.
- Replace air filter element.
- Drive belt visual inspection.
- Check glow plug operation.

## **EVERY 20 000 KM AFTER 100 000 KM**

• Replace fuel filter/water separator element.