

## 0B-4 MAINTENANCE AND LUBRICATION

### DIESEL ENGINE MODEL

I: Inspect and correct or replace as necessary      A: Adjust  
 R: Replace or change      T: Tighten to specified torque      L: Lubricate

SERVICE INTERVAL:	x 1,000 km	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100
(Use odometer reading	x 1,000 miles	3	6	9	12	15	18	21	24	27	30	33	36	39	42	45	48	51	54	57	60
or months whichever comes first) or months		6	12	18	24	30	36	42	48	54	60	66	72	78	84	90	96	102	108	114	120
<b>DIESEL ENGINE</b>																					
* Engine oil		-	R	-	R	-	R	-	R	-	R	-	R	-	R	-	R	-	R	-	R
* Engine oil filter		-	R	-	R	-	R	-	R	-	R	-	R	-	R	-	R	-	R	-	R
Oil leakage and contamination		-	I	-	I	-	I	-	I	-	I	-	I	-	I	-	I	-	I	-	I
Idling speed and acceleration		-	I	-	I	-	I	-	I	-	I	-	I	-	I	-	I	-	I	-	I
Fan belt tension and damage		-	I	-	I	-	I	-	I	-	I	-	I	-	I	-	I	-	I	-	I
Timing belt																					
Exhaust system		-	I	-	I	-	I	-	I	-	I	-	I	-	I	-	I	-	I	-	I
All hoses and pipes in engine compartment for clog or damage		-	I	-	I	-	I	-	I	-	I	-	I	-	I	-	I	-	I	-	I
Valve clearance		-	-	-	A	-	-	-	-	-	A	-	-	-	-	-	A	-	-	-	-
* Air cleaner element		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	R	-	-	-	-
Fuel filter		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	R	-	-	-	-
Radiator coolant concentration		-	I	-	I	-	I	-	I	-	I	-	I	-	I	-	I	-	I	-	I
Cooling system for water leakage		-	I	-	I	-	I	-	I	-	I	-	I	-	I	-	I	-	I	-	I
<b>CLUTCH</b>																					
Clutch fluid		-	I	-	I	-	I	-	I	-	I	-	I	-	I	-	I	-	I	-	I
Clutch pedal travel and free play		-	I	-	I	-	I	-	I	-	I	-	I	-	I	-	I	-	I	-	I
<b>TRANSMISSION OR TRANSMISSION WITH TRANSFER CASE</b>																					
* Manual transmission with transfer case oil		-	R	-	I	-	-	-	R	-	-	-	I	-	-	-	R	-	-	-	I
* <input type="checkbox"/> Automatic transmission fluid		-	-	-	I	-	-	-	I	-	-	-	I	-	-	-	I	-	-	-	I
* <input type="checkbox"/> Transfer case oil		-	R	-	I	-	-	-	R	-	-	-	I	-	-	-	R	-	-	-	I
<b>PROPELLER SHAFT</b>																					
Loose connections		-	I	-	I	-	I	-	I	-	I	-	I	-	I	-	I	-	I	-	I
* Universal joints and splines for wear		-	I	-	I	-	I	-	I	-	I	-	I	-	I	-	I	-	I	-	I
Universal joints and sliding sleeve (front and rear)		-	L	-	L	-	L	-	L	-	L	-	L	-	L	-	L	-	L	-	L
<b>FRONT AND REAR AXLE</b>																					
* Differential gear oil (Front and rear)		-	R	-	I	-	-	-	R	-	-	-	I	-	-	-	R	-	-	-	I
Shift on the fly system gear oil		-	-	-	I	-	-	-	I	-	-	-	I	-	-	-	I	-	-	-	I
Front axle shaft rubber boot for damage		-	-	-	I	-	-	-	I	-	-	-	I	-	-	-	I	-	-	-	I
Axle case for distortion or damage		-	-	-	I	-	-	-	I	-	-	-	I	-	-	-	I	-	-	-	I
Axle shafts for distortion or damage		-	-	-	I	-	-	-	I	-	-	-	I	-	-	-	I	-	-	-	I
<b>STEERING</b>																					
* Power steering fluid		-	I	-	I	-	I	-	R	-	I	-	I	-	I	-	R	-	I	-	I
Oil leakage		-	I	-	I	-	I	-	I	-	I	-	I	-	I	-	I	-	I	-	I
* Steering system for looseness or damage		-	I	-	I	-	I	-	I	-	I	-	I	-	I	-	I	-	I	-	I
Power steering hose		-	I	-	I	-	I	-	I	-	I	-	I	-	R	-	I	-	I	-	I
Steering wheel play		-	I	-	I	-	I	-	I	-	I	-	I	-	I	-	I	-	I	-	I
Steering function		-	I	-	I	-	I	-	I	-	I	-	I	-	I	-	I	-	I	-	I
Right and left turning radius		-	-	-	I	-	-	-	I	-	-	-	I	-	-	-	I	-	-	-	I
Wheel alignment		-	-	-	I	-	-	-	I	-	-	-	I	-	-	-	I	-	-	-	I
Joint ball for oil leakage or damage		-	I	-	I	-	I	-	I	-	I	-	I	-	I	-	I	-	I	-	I
Joint ball rubber boot for damage		-	I	-	I	-	I	-	I	-	I	-	I	-	I	-	I	-	I	-	I
<b>SERVICE BRAKES</b>																					
Brake fluid		-	-	-	I	-	-	-	R	-	-	-	I	-	-	-	R	-	-	-	I
Brake system for fluid leakage		-	I	-	I	-	I	-	I	-	I	-	I	-	I	-	I	-	I	-	I
Brake function		-	I	-	I	-	I	-	I	-	I	-	I	-	I	-	I	-	I	-	I
* Disc brake pads and discs wear		-	I	-	I	-	I	-	I	-	I	-	I	-	I	-	I	-	I	-	I
Brake pedal travel and free play		-	I	-	I	-	I	-	I	-	I	-	I	-	I	-	I	-	I	-	I
Pipes and hoses for loose connections or damage		-	I	-	I	-	I	-	I	-	I	-	I	-	I	-	I	-	I	-	I

NOTE: In the 4JXI-TC diesel engine, there is provided sub (2nd) oil filter for fuel injection at the upper part of crank case on the left side of the engine. This oil filter maintenance-free and does not need a periodic replacement. See reverse side the (back) cover for installation location of the sub (2nd) oil filter.

\*Marks: Under severe driving conditions, additional maintenance is required.  
 Refer to "Maintenance schedule under severe driving conditions".

## MAINTENANCE AND LUBRICATION 0B-5

### DIESEL ENGINE MODEL

I: Inspect and correct or replace as necessary      A: Adjust  
 R: Replace or change      T: Tighten to specified torque      L: Lubricate

SERVICE INTERVAL:	x 1,000 km	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100
(Use odometer reading	x 1,000 miles	3	6	9	12	15	18	21	24	27	30	33	36	39	42	45	48	51	54	57	60
or months whichever comes first)	or months	6	12	18	24	30	36	42	48	54	60	66	72	78	84	90	96	102	108	114	120
<b>PARKING BRAKE</b>																					
Parking brake function		-	-	-		-	-	-		-	-	-		-	-	-		-	-	-	
Parking brake lever travel		-	-	-		-	-	-		-	-	-		-	-	-		-	-	-	
Cables for looseness or damage and guide for damage		-	-	-		-	-	-		-	-	-		-	-	-		-	-	-	
Ratchet for wear or damage		-	-	-		-	-	-		-	-	-		-	-	-		-	-	-	
<b>SUSPENSION</b>																					
Spring leaves for damage		-		-		-		-		-		-		-		-		-		-	
Mount for looseness or damage		-		-		-		-		-		-		-		-		-		-	
Shock absorbers for oil leakage		-		-		-		-		-		-		-		-		-		-	
Shock absorbers mount for looseness		-		-		-		-		-		-		-		-		-		-	
Rubber bushes of suspension wear or damage		-		-		-		-		-		-		-		-		-		-	
Spring action for loss of balance due to weakening		-	-	-		-	-	-		-	-	-		-	-	-		-	-	-	
Joint ball rubber boot for damage		-		-		-		-		-		-		-		-		-		-	
<b>WHEELS</b>																					
Wheel pins		-	T	-	T	-	T	-	T	-	T	-	T	-	T	-	T	-	T	-	T
Wheel disc for damage		-		-		-		-		-		-		-		-		-		-	
Hub bearing grease		-	-	-	-	-	R	-	-	-	-	-	R	-	-	-	-	-	R	-	-
Front and rear hub bearings for looseness		-		-		-		-		-		-		-		-		-		-	
Tire pressure and damage		-		-		-		-		-		-		-		-		-		-	
Tire rotation		(Rotate as required)																			
<b>OTHERS</b>																					
Bolts and nuts on chassis and body		-		-		-		-		-		-		-		-		-		-	
Lube front free-wheeling hubs		-	-	-	-	-	L	-	-	-	-	-	L	-	-	-	-	-	L	-	-

\*Marks: Under severe driving conditions, additional maintenance is required.  
 Refer to "Maintenance schedule under severe driving conditions".

## 0B-6 MAINTENANCE AND LUBRICATION

### MAINTENANCE SCHEDULE UNDER SEVERE DRIVING CONDITIONS

Severe driving conditions

- A: Repeated short trips
- B: Driving on rough roads
- C: Driving on dusty roads
- D: Driving in extremely cold weather and/or salted roads

Item	Interval	Condition				
		A	B	C	D	A+D
Engine oil	<input type="checkbox"/> G : Change every 5,000 km (3,000 miles)			●		●
	<input type="checkbox"/> D : Change every 5,000 km (3,000 miles)					
Engine oil filter	<input type="checkbox"/> G : Replace every 10,000 km (6,000 miles)			●		●
	<input type="checkbox"/> D : Replace every 5,000 km (3,000 miles)					
Air cleaner element	<input type="checkbox"/> G : Replace every 20,000 km (12,000 miles)			●		
	<input type="checkbox"/> D : Replace every 40,000 km (25,000 miles)					
Power steering fluid	Replace every 50,000 km (30,000 miles)		●	●		
Steering system for looseness or damage	Inspect every 5,000 km (3,000 miles)		●			
Universal joints and sleeves	Inspect for wear and lubricate every 7,500 km (4,500 miles)		●	●		
Transmission with transfer case oil	<input type="checkbox"/> MT : Change every 20,000 km (12,000 miles) after changing at initial 10,000 km (6,000 miles)		●			
	<input type="checkbox"/> AT : Transmission : Change every 32,000 km (20,000 miles)	●	●	●		●
	<input type="checkbox"/> TF : Transfer: Change every 20,000 km (12,000 miles) after changing at initial 10,000 km (6,000 miles)		●			
Differential oil	Change every 20,000 km (12,000 miles) after changing at initial 5,000 km (3,000 miles)		●			
Disc brake pads and discs	Inspect every 5,000 km (3,000 miles)	●	●	●		
Timing belt	<input type="checkbox"/> G : Replace every 120,000 km (75,000 miles)			●		●

### EXPLANATION OF COMPLETE VEHICLE MAINTENANCE SCHEDULE

Explanations of the services listed in the preceding Maintenance Scheduled are presented in "Service Information" section of each manual.

Replace all questionable parts and note any necessary repairs as you perform these maintenance procedures.