# **GENERAL INFORMATION**

# SECTION 0B

# MAINTENANCE AND LUBRICATION

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#### **MAINTENANCE SCHEDULE**

When performing the checks on the following items, regular inspection items should also be checked. Abbreviations

I :Inspect, clean and correct or replace as necessary

A: Adjust

**R** : Replace or change

T: Tighten to specified torque

L: Lubricate

[V]: Variation (optional on some models).

[OPT] : Optional equipment. [SA] : For Smoother model only.

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

# Maintenance Schedule: 4JH1-TC Engine Model (Engine Oil that Meets or Exceeds ACEA B3 Specification)

SERVICE INTERVAL:								
(Use odometer reading or months	× 1,000 km	20	40	60	80	100	120	
Whichever comes first)	× 1,000 mile	12	24	36	48	60	72	
ENGINE	•							
*Engine oil		R	R	R	R	R	R	Or every 9 months
*Engine oil filter		R	R	R	R	R	R	Or every 9 months
Fuel filter		R	R	R	R	R	R	Or every 18 months
*Air cleaner element		I	I	R	I	I	R	Or every 36 months
Idling speed and accele	eration	_	I	_	I	_	I	Or every 18 months
Valve clearances		_	_	Α	_	_	Α	Or every 36 months
Fuel tank cap and fuel loose connections or da		_	_	I	_	_	I	Or every 36 months
Drive belt tension and	damage	I	I	I	I	I	I	Or every 9 months
Radiator coolant		_		R	_	_	R	Or every 36 months
*Exhaust pipes and mo		_	I	_	I	_	I	Or every 18 months
Cooling system for wat age	er leak-	_	I	_	I	_	I	Or every 18 months
Engine operation condi	tion	I	I	I	I	I	I	Or every 9 months
CLUTCH								
Clutch fluid		I	I	R	I	I	R	Or every 24 months
Clutch pedal travel and	free play	I	I	I	I	I	I	Or every 6 months
TRANSMISSION								
*Manual transmission of	oil	I	I	R	I	I	R	Or every 24 months
Gear control mechanis	m for	_	_	I	_	_	I	Or every 24 months
Gear control cables		_	Α	_	Α	_	Α	Or every 12 months
PROPELLER SHAFT								
*Universal joints and sl sleeve grease	iding	L	L	L	L	L	L	Or every 12 months

SERVICE INTERVAL:								
(Use odometer reading or months	× 1,000 km	20	40	60	80	100	120	
Whichever comes first)	× 1,000 mile	12	24	36	48	60	72	
Loose connections		I	I	I	I	I	I	Or every 6 months
Splines for excessive w	/ear	_	_	I	_	_	I	Or every 24 months
Bearings and related policy looseness	arts for	_	_	I	_	_	I	Or every 24 months
Center bearing		L	L	L	L	L	L	Or every 12 months
REAR AXLE								
*Differential gear oil		I	I	R	I	I	R	Or every 24 months
FRONT AXLE								
*Kingpins		L	L	L	L	L	L	Or every 9 months
STEERING								
Power steering system age	oil leak-	I	I	I	I	I	I	Or every 9 months
Power steering system looseness or damage	for	I	I	I	I	I	I	Or every 9 months
Power steering fluid		_	_	R	_	_	R	Or every 36 months
Power steering hoses					_	_	R	Or every 72 months
Fitting of knuckles and for looseness	front axle	I	I	I	I	I	I	Or every 9 months
Steering mechanism for ness or damage	r loose-	_	_	I	_	_	I	Or every 36 months
Ball joints for damage ( dent suspension mode		I	I	I	I	I	I	Or every 9 months
Ball joints for excessive (Independent suspensionly)		I	I	I	I	I	I	Or every 9 months
Relay lever shaft for explay (Independent susp model only)		I	I	I	I	I	I	Or every 9 months
Steering wheel play		I	I	I	I	I	I	Or every 9 months
Steering function		I	I	I	I	I	ļ	Or every 9 months
Wheel alignment				I			I	Or every 36 months
SERVICE BRAKES								
Brake fluid		I	I	R	I	I	R	Or every 36 months
Brake system for fluid I	eakage	ı	I	I	I	I	I	Or every 9 months
*Brake linings and drur wear	ns for	I	I	I	I	I	I	Or every 9 months
*Disc brake pads and discs for wear		I	I	I	I	I	1	Or every 9 months
Brake pedal travel and free play		I	I	I	I	I	I	Or every 9 months
Pipes and hoses for loose connections or damage		I	I	I	I	I	I	Or every 9 months
PARKING BRAKE								
			•	•		•		•

## 0B-4 MAINTENANCE AND LUBRICATION

SERVICE INTERVAL:								
(Use odometer	× 1,000	20	40	60	80	100	120	
reading or months Whichever comes	km							_
first)	× 1,000 mile	12	24	36	48	60	72	
Parking brake cables		I	I	I	I	I	I	Or every 9 months
Parking brake function		I	I	I	I	I	I	Or every 9 months
Parking brake lever tra	vel	I	I	I	I	I	I	Or every 9 months
Linings for wear		_	_	I	_	_	I	Or every 36 months
Drum for wear or dama	ige	_	_	I	_		I	Or every 36 months
Ratchet for wear or dar	mage	_	_	I	_		I	Or every 36 months
SUSPENSION								
Spring leaves for dama	ige	I	I	I	I	I	I	Or every 9 months
Torsion bar spring (Inde suspension model only		1	I	I	I	I	I	Or every 9 months
Ball joint boots for dam (Independent suspensionly)		I	I	I	I	I	I	Or every 9 months
Ball joints for excessive (Independent suspensionly)		I	_	I	_	_	I	Or every 36 months
Mounts for looseness of age	or dam-	I	I	I	I	I	I	Or every 9 months
Shock absorbers for oil	leakage	I	I	I	I	I	I	Or every 9 months
Shock absorbers mour looseness	it for	I	I	I	I	I	I	Or every 9 months
Upper links (Independe pension model only)	ent sus-	L	L	L	L	L	L	Or every 9 months
WHEELS								
Wheel pins and nuts		_	Т	_	Т	_	Т	Or every 18 months
Wheel discs for damag	е	_	I	_	I	_	I	Or every 18 months
Hub bearings grease		_	_	R	_	_	R	Or every 36 months
Tire pressures and dan	nage	I	I	I	I	I	I	Or every 9 months
ELECTRICAL EQUIPM	<b>MENT</b>							
Specific gravity of batte trolyte	ery elec-	I	I	I	I	I	I	Or every 9 months
OTHERS								
Lights, horn, windshield, wiper and washers		I	I	I	I	I	I	Or every 9 months
Bolts and nuts on chas body	sis and	_	_	I	_	_	I	Or every 36 months

<sup>(</sup>I): Inspect and correct or replace as necessary (A): Adjust (R): Replace or change (T): Tighten to specified torque (L): Lubricate

# Maintenance Schedule: 4JH1-TC Engine Model (ACEA B2 Specification Engine Oil)

SERVICE INTERVAL													
	(Use odometer	,	15	30	45	60	75	90	105	120	135	150	
*Engine oil   R   R   R   R   R   R   R   R   R			9	18	27	36	45	54	63	72	81	90	
*Engine oil filter	ENGINE	I.											
Fuel filter	*Engine oil		R	R	R	R	R	R	R	R	R	R	or every 9 months
*Air cleaner element	*Engine oil filter		R	R	R	R	R	R	R	R	R	R	or every 9 months
Idling speed and acceleration	Fuel filter		_	R	_	R	_	R	_	R	_	R	or every 18 months
Valve clearances         —	*Air cleaner element		I	I	I	R	I	I	I	R	I	I	or every 36 months
Fuel tank cap and fuel pipes for loose connections or damage	Idling speed and accele	eration	_	I	_	I	_	I	_	I	_	I	or every 18 months
Indicate connections or damage   C   C   C   C   C   C   C   C   C	Valve clearances		_	_	_	Α	_	_	_	Α	_	_	or every 36 months
Radiator coolant         —         —         —         R         —         —         R         —         —         P         —			_	_	_	I	_	_	_	I	_	_	or every 36 months
*Exhaust pipes and mountings for looseness or damage	Drive belt tension and o	damage	I	I	I	I	I	I	I	I	I	I	or every 9 months
The color of the	Radiator coolant		_	_	_	R	_	_	_	R	_	_	or every 36 months
age         Image: Second condition of the properties of the propertie			_	I	_	I	_	I	_	I	_	I	or every 18 months
CLUTCH         L <td></td> <td>er leak-</td> <td>_</td> <td>I</td> <td>_</td> <td>I</td> <td>_</td> <td>I</td> <td>_</td> <td>I</td> <td>_</td> <td>I</td> <td>or every 18 months</td>		er leak-	_	I	_	I	_	I	_	I	_	I	or every 18 months
Clutch fluid         I <t< td=""><td>Engine operation condi</td><td>tion</td><td>I</td><td>I</td><td>I</td><td>I</td><td>I</td><td>I</td><td>I</td><td>I</td><td>I</td><td>I</td><td>or every 9 months</td></t<>	Engine operation condi	tion	I	I	I	I	I	I	I	I	I	I	or every 9 months
Clutch pedal travel and free play  TRANSMISSION  *Manual transmission oil I I I R I R I I R I I R I I Or every 9 months  *Manual transmission oil I I R I R I I R I I R I I Or every 36 months  Gear control mechanism for looseness  Gear control cables  — A — A — A — A — A — A or every 18 months  PROPELLER SHAFT  *Universal joints and sliding sleeve grease  Loose connections  I I I I I I I I I I I I I I I I I I I	CLUTCH												
Play         1	Clutch fluid		I	I	I	R	I	I	I	R	I	I	or every 36 months
*Manual transmission oil I I I R I R I I R I I Or every 36 months  Gear control mechanism for looseness  Gear control cables — A — A — A — A — A — A or every 18 months  PROPELLER SHAFT  *Universal joints and sliding sleeve grease  Loose connections  I I I I I I I I I I I I I I I I I I I	-	free	I	I	I	I	I	I	I	I	I	I	or every 9 months
Gear control mechanism for looseness	TRANSMISSION												
Control cables	*Manual transmission of	oil	I	I	I	R	I	I	I	R	I	I	or every 36 months
PROPELLER SHAFT         L		m for	_	_	_	I	_	_	_	I	_	_	or every 36 months
*Universal joints and sliding sleeve grease	Gear control cables		_	Α	_	Α	_	Α	_	Α	_	Α	or every 18 months
Loose connections	PROPELLER SHAFT												
Splines for excessive wear         — </td <td></td> <td>iding</td> <td>_</td> <td>L</td> <td>_</td> <td>L</td> <td>_</td> <td>L</td> <td>_</td> <td>L</td> <td>_</td> <td>L</td> <td>or every 18 months</td>		iding	_	L	_	L	_	L	_	L	_	L	or every 18 months
Bearings and related parts for looseness         —	Loose connections		I	I	I	I	I	I	I	I	I	I	or every 9 months
Center bearing	Splines for excessive w	ear ear		_	_	I	_	_	_	I	_	_	or every 36 months
REAR AXLE         I		arts for	_	_	_	I	_	_	_	I	_	_	or every 36 months
*Differential gear oil I I I R I I R I I or every 36 months <b>FRONT AXLE</b> *Kingpins L L L L L L L L L C or every 9 months	Center bearing		_	L	_	L	_	L	_	L	_	L	or every 18 months
FRONT AXLE  *Kingpins  L L L L L L L L L or every 9 months	REAR AXLE												
*Kingpins L L L L L L L L or every 9 months	*Differential gear oil	*Differential gear oil		I	I	R	I	I	I	R	I	I	or every 36 months
	FRONT AXLE												
STEERING	*Kingpins		L	L	L	L	L	L	L	L	L	L	or every 9 months
	STEERING												

## 0B-6 MAINTENANCE AND LUBRICATION

SERVICE INTERVAL: (Use odometer reading or months	× 1,000 km	15	30	45	60	75	90	105	120	135	150	
Whichever comes first)	× 1,000 mile	9	18	27	36	45	54	63	72	81	90	
Power steering system age	oil leak-	I	I	I	I	I	ı	I	I	I	I	or every 9 months
Power steering system looseness or damage	for	Ļ	Ĺ	Į	Į	Ļ	Į	Ĺ	ļ	Į	Į	or every 9 months
Power steering fluid		_	_	_	R	_	_	_	R	_	_	or every 36 months
Power steering hoses		_	_	_	_	_	_	_	R	_	_	or every 72 months
Fitting of knuckles and axle for looseness	front	I	I	I	I	I	I	I	I	I	I	or every 9 months
Steering mechanism fo ness or damage	r loose-	_	_	_	I		_	_	I	_	_	or every 36 months
Ball joints for damage ( pendent suspension mo only)		ı	I	ı	I	I	ı	I	I	I	ı	or every 9 months
Ball joints for excessive (Independent suspension model only)		I	I	I	I	I	ı	I	I	I	I	or every 9 months
Relay lever shaft for ex play (Independent susp model only)		ı	ı	I	I	I	ı	I	I	I	I	or every 9 months
Steering wheel play		I	I	I	I	I	I	I	I	I	I	or every 9 months
Steering function		I	I	I	I	I	I	I	I	I	I	or every 9 months
Wheel alignment		_	_	_	I	_	_	_	I	_	_	or every 36 months
SERVICE BRAKES												
Brake fluid		I	I	I	R	I	I	I	R	I	I	or every 36 months
Brake system for fluid le	eakage	I	I	I	I	I	I	I	I	I	I	or every 9 months
*Brake linings and drun wear	ns for	I	I	I	I	I	I	I	I	I	I	or every 9 months
*Disc brake pads and d	liscs for	I	I	I	I	I	I	I	I	I	I	or every 9 months
Brake pedal travel and	free play	I	I	I	I	I	I	I	I	I	I	or every 9 months
Pipes and hoses for loc nections or damage	se con-	I	I	I	I	I	I	I	I	I	I	or every 9 months
PARKING BRAKE												
Parking brake cables		I	I	I	I	ı	I	I	I	I	I	or every 9 months
Parking brake function		I	I	I	I	ı	I	I	I	I	I	or every 9 months
Parking brake lever trav	vel	I	ı	I	I	I	I	I	I	I	I	or every 9 months
Linings for wear	gs for wear		_	_	I	_	_	_	I	_	_	or every 36 months
Drum for wear or dama	rum for wear or damage		_	_	I	_	_	_	I	_	_	or every 36 months
Ratchet for wear or dar	nage	_	_	_	I	_	_	_	I	_	_	or every 36 months
SUSPENSION												
Spring leaves for dama	ge	I	I	I	I	I	I	I	I	I	I	or every 9 months

	I				1	1	1	1			1	Т
SERVICE INTERVAL: (Use odometer reading or months	× 1,000 km		30	45	60	75	90	105	120	135	150	
Whichever comes first)	× 1,000 mile	9	18	27	36	45	54	63	72	81	90	
Torsion bar spring (Indedent suspension model		I	ı	I	I	I	I	ı	I	I	I	or every 9 months
Ball joint boots for dam (Independent suspension model only)		ı	ı	ı	I	ı	ı	ı	I	ı	ı	or every 9 months
Ball joints for excessive (Independent suspension model only)		_	_	_	I	_	_	_	I	_	_	or every 36 months
Mounts for looseness of age	or dam-	I	I	I	I	I	I	I	I	I	I	or every 9 months
Shock absorbers for oil	leakage	I	ı	I	I	I	I	I	ı	ı	I	or every 9 months
Shock absorbers moun looseness	t for	ļ	I	ļ	I	ļ	I	ļ	I	I	I	or every 9 months
Upper links (Independe pension model only)	ent sus-	L	L	L	L	L	L	L	L	L	L	or every 9 months
WHEELS												
Wheel pins and nuts		_	Т	_	Т	_	Т	_	Т	_	Т	or every 18 months
Wheel discs for damag	е	_	I	_	I	_	I	_	I	_	I	or every 18 months
Hub bearings grease		_	_	_	R	_	_	_	R	_	_	or every 36 months
Tire pressures and dan	nage	I	I	I	I	I	I	I	I	I	I	or every 9 months
ELECTRICAL EQUIPM	IENT											
Specific gravity of battery electrolyte		I	I	I	I	I	I	I	I	I	I	or every 9 months
OTHERS												
Lights, horn, windshield, wiper and washers		I	I	I	I	I	I	I	I	I	I	or every 9 months
Bolts and nuts on chassis and body		_	_	_	I		_	_	I	_	_	or every 36 months

<sup>(</sup>I): Inspect and correct or replace as necessary (A): Adjust (R): Replace or change (T): Tighten to specified torque (L): Lubricate

# Maintenance schedule: 4HK1-TC engine model

SERVICE INTERVAL: (Use odometer read-	km	11250	22500	33750	45000	56250	67500	78750	90000			
ing or months Which- ever comes first)	mile	7000	14000	21000	28000	35000	42000	49000	56000			
ENGINE												
*Engine oil			Chai	nge eve	ry 20,00	)0 km (1	2,000 n	niles)		or every 12 months		
*Engine oil filter			Chai		or every 12 months							
Fuel filter: Main fuel filte	r	_	R	_	R	_	R	_	R	or every 14 months		
[OPT] Main fuel filter an Sub fuel filter: with Sub filter		_	_	_	R	_	_	_	R	or every 28 months		
*Air cleaner element		I	I	I	R	I	I	I	R	or every 28 months		
Idling speed and accele tion	ra-	_	I	_	I	_	I	_	I	or every 14 months		
Valve clearances		_	_	_	Α	_	_	_	Α	or every 28 months		
Feed pump strainer			I	_	I	_	I	_	I	or every 14 months		
Fuel tank cap and fuel p for loose connections or damage		ı	_	_	I	_	_	_	I	or every 28 months		
Drive belt tension and d age	am-	I	I	I	I	I	I	I	I	or every 7 months		
Radiator coolant			_	_	R	_	_	_	R	or every 28 months		
*Exhaust pipes and mou ings for looseness or da age		_	I	_	I	_	I	_	I	or every 14 months		
Cooling system for water leakage	er	_	I	_	I	_	I	_	I	or every 14 months		
Engine operation condit	ion	I	I	I	I	I	I	I	I	or every 7 months		
CLUTCH												
Clutch fluid		I	I	I	R	I	I	I	R	or every 28 months		
Clutch pedal travel and play	free	I	I	I	I	I	I	I	I	or every 7 months		
TRANSMISSION												
*Manual transmission oi	il	I	I	I	R	I	I	I	R	or every 28 months		
[SA] Smoother clutch flu	ıid	I	I	I	R	I	I	I	R	or every 24 months		
Gear control mechanisn looseness	n for	_	_	_	I	_	_	_	I	or every 21 months		
Gear control cables			Α	_	Α	_	Α	_	Α	or every 14 months		
PROPELLER SHAFT												
*Universal joints and slid sleeve grease	ding	_	L	_	L	_	L	_	L	or every 14 months		
Loose connections		I	I	I	I	I	I	I	I	or every 7 months		
Splines for excessive we	ear	_		_	I	_	_	_	I	or every 28 months		
Bearings and related pa for looseness	rts	_	_	_	I	_	_	_	I	or every 28 months		
Center bearing		_	L	_	L	_	L	_	L	or every 14 months		

SERVICE INTERVAL:										
(Use odometer read- ing or months Which-	km	11250	22500	33750	45000	56250	67500	78750	90000	
ever comes first)	mile	7000	14000	21000	28000	35000	42000	49000	56000	
REAR AXLE										
*Differential gear oil		I	I	I	R	I	I	I	R	or every 28 months
FRONT AXLE										
*Kingpins		L	L	L	L	L	L	L	L	or every 7 months
STEERING										
Power steering system of leakage	oil	I	I	I	I	I	I	I	I	or every 7 months
Power steering system to looseness or damage	for	I	I	I	I	I	I	I	I	or every 7 months
Power steering fluid		_	_	_	R		_	_	R	or every 28 months
Power steering hoses				_	_			_	R	or every 56 months
Fitting of knuckles and f axle for looseness	ront	I	I	I	I	I	I	I	I	or every 7 months
Steering mechanism for looseness or damage		_	_	_	I	_	_	_	I	or every 28 months
Steering wheel play		I	I	ı	I	I	I	ı	I	or every 7 months
Steering function		I	I	I	I	I	I	I	I	or every 7 months
Wheel alignment		_	_	_	I	_	_	_	I	or every 28 months
SERVICE BRAKES										
Brake fluid		I	I	ı	R	I	I	I	R	or every 28 months
[V] Hydro booster fluid (	ATF)	I	I	I	R	ı	I	I	R	or every 28 months
Brake system for fluid le age	ak-	I	I	I	I	I	I	I	I	or every 7 months
*Brake linings and drum wear	s for	I	I	I	I	-	I	I	I	or every 7 months
*Disc brake pads and di for wear	scs	I	I	I	I	I	I	I	I	or every 7 months
Brake pedal travel and f play	ree	I	I	I	I	-	I	I	I	or every 7 months
Pipes and hoses for look connections or damage	se	I	I	I	I	I	I	I	I	or every 7 months
PARKING BRAKE										
Parking brake cables		I	I	I	I	I	I	I	I	or every 7 months
Parking brake function		I	I	I	I	I	I	I	I	or every 7 months
Parking brake lever trav	el	I	I	I	I	I	I	I	I	or every 7 months
Linings for wear		_	_	_	I	_	_	_	I	or every 28 months
Drum for wear or damag	ge				I	_			I	or every 28 months
Ratchet for wear or dam	nage	_	_	_	I	_	_	_	I	or every 28 months
SUSPENSION										
Spring leaves for damag	ge	I	I	I	I	I	I	I	I	or every 7 months
Mounts for looseness or damage	-	I	I	I	I	I	I	I	I	or every 7 months

## 0B-10 MAINTENANCE AND LUBRICATION

SERVICE INTERVAL: (Use odometer reading or months Which-	km	11250	22500	33750	45000	56250	67500	78750	90000	
ever comes first)	mile	7000	14000	21000	28000	35000	42000	49000	56000	
Shock absorbers for oil age	leak-	I	I	I	I	I	I	I	I	or every 7 months
Shock absorbers mount looseness	for	I	I	I	I	I	I	I	I	or every 7 months
WHEELS										
Wheel pins and nuts		Т	Т	T	T	Т	Т	T	T	or every 7 months
Wheel discs for damage	9	I	I	I	I	I	I	I	I	or every 7 months
Hub bearings grease		_	_	_	R	_	_	_	R	or every 28 months
Tire pressures and dam	age	I	I	I	I	I	I	I	I	or every 7 months
ELECTRICAL EQUIPM	ENT									
Specific gravity of batter electrolyte	ry	I	I	I	I	I	I	I	I	or every 7 months
OTHERS										
Lights, horn, windshield wiper and washers	,	I	I	I	I	I	I	I	I	or every 7 months
Bolts and nuts on chassis and body			_	_	I		_	_	I	or every 28 months

<sup>(</sup>I): Inspect and correct or replace as necessary (A): Adjust (R): Replace or change (T): Tighten to specified torque (L): Lubricate

#### **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 on salted roads

Item	Interval	Condition							
		Α	В	С	D	A+D			
Engine oil	Change every 5,000 km (3,000 miles)			0		О			
Engine oil filter	Replace every 5,000 km (3,000 miles)			О		О			
Air cleaner element	Replace every 20,000 km (12,000 miles)			0					
Exhaust pipes and mountings for looseness or damage	Inspect every 10,000 km (6,000 miles)	0	0		0				
Manual transmission oil and differential gear oil	Change every 20,000 km (12,000 miles)		0						
[SA] Smoother clutch fluid	Change every 20,000 km (12,000 miles)		О						
Universal joints and sliding sleeve grease	Lubricate every 10,000 km (6,000 miles)		0						
Kingpins	Lubricate every 5,000 km (3,000 miles)			0	О				
Steering system for looseness or damage	Inspect every 5,000 km (3,000 miles)		0						
Brake linings and drums for wear	Inspect every 5,000 km (3,000 miles)	О	О	О					
Disc brake pads and discs for wear	Inspect every 5,000 km (3,000 miles)	0	0	0					

# RECOMMENDED FLUIDS, LUBRICANTS AND DIESEL FUELS

#### **Recommended Fluids, Lubricants and Diesel Fuels**

In order to obtain maximum performance and longest service life from ISUZU vehicles, it is very important to select and use correctly best lubricants and diesel fuels.

When lubricating, be sure to use ISUZU genuine lubricants or recommended lubricants listed below, according to the maintenance schedule for each vehicle model.

The lubrication intervals in the maintenance schedule and the coverage and period of new vehicle warranty are based on the use of ISUZU genuine lubricants or recommended lubricants as given in the chart which will serve as a guide for selecting lubricants of proper brand name.

LUDDICATION	MAKED	DDAND/TVDE		GRADE	
LUBRICATION	MAKER	BRAND/TYPE	API	ACEA	JASO
	ISUZU GENUINE	BESCO MULTI-Z TYPE CF-4 (10W-30)	CF-4		
	ISUZU GENUINE	BESCO S-3 (10W, 20W, 30, 40)	CD		
	Caltex/Chevron	Delo CXJ (15W-40/20W-50/40)	CF		DH-1
		Delo 400 Multigrade (15W-40)	CE/CF/CI-4	E3/E5	DH-1
	Shell	Rimula X (15W-40)	CH-4	E3	DH-1
		Rimula D (15W-40/30/40)	CF		
Diesel engine crankcase	Elf	Perfo 3F (15W-40)	CF-4/CE	B2/E2	
Crankcase	Total	Rubia XT (15W-40)	CF-4	E2	
	Castrol	RX Super Plus (15W-40)	CH-4	E3	
		Tection J Plus (15W-40)	CH-4	E3/B3	DH-1
	BP	BP Vanellus C6 (15W-40)	CH-4	E3	
	ExxonMobil	Essolube XTJ (15W-40)	CF-4		DH-1
		Exxon/Essolube XD-3 (15W-40)	CI-4		
	ISUZU GENUINE	BESCO GEAR OIL SH (80W-90, 90, 140)	GL-5		
	Caltex	Thuban GL-5 EP (80W-90/85W-140)	GL-5		
	Shell	Spirax A (140)	GL-5		
	Elf	Tranself Type B (80W-90/85W-140)	GL-5		
	Total	Transmission TM (80W-90/85W-140)	GL-5		
Differential	Castrol	EPX 90 (90)	GL-5		
		Dynadrive (80W-90)	GL-5		
	BP	Energear Hypo (90)	GL-5		
		Energear EP (80W-90)	GL-5		
	ExxonMobil	Mobilube HD (80W-90)	GL-5		
		Esso Gear Oil GX (80W-90)	GL-5		

LUDDICATION	MAKED	MAKED	GRADE			
LUBRICATION	MAKER BRAND/TYPE	API	ACEA	JASO		
Differential (Limited slip differential)	ISUZU GENUINE	BESCO GEAR OIL LSD (140)	*GL-5			
	Caltex	Gear Oil LSD (90)	GL-5			
	Shell	Spirax A LS 90 (90)	GL-5			
	Elf	Tranself Type BLS (90)	GL-5			
	Total	Transmission DA (85W-90)	GL-5			
	Castrol	Hypoy LSX (90)	GL-5			
	ВР	Energear LS-M (90)	GL-5			
	ExxonMobil	Mobilube LS (85W-90)	GL-5			
		Esso Gear Oil LSA (85W-90)	GL-5			
	ISUZU GENUINE	BESCO GEAR OIL TRANSAXLE (5W-30)	SG			
	Caltex/Chevron	Delo 400 Multigrade (15W-40)	CD/CE/CF/CI-4	E3/E5	DH-1	
Manual trans-	Shell	Helix Plus (15W-50)	SJ/CF	A3/B3		
mission Transfer case	Elf	Super Sporti (15W-40)	SG/CD			
Transier Case	Total	Quartz 5000 (15W-40/20W-50)	SJ/CF	A2/B2		
	Castrol	RX Super Plus (15W-40)	CD/CE/CF			
	ВР	BP Vanellus C6 (15W-40)	CD/CE/CF			
	ISUZU GENUINE	BESCO ATF II, ATF III				
	Caltex/Texaco	Texamatic 1888 (Dexron III)				
Power steering	Shell	Donax TG (Dexron III)				
Hydro brake	Elf	ELFMATIC G3 (Dexron III)				
booster	Total	Total Fluid AT 42 (Dexron III)				
	Castrol	TQ Dexron III (Dexron III)				
	ВР	Autoran DX3 (Dexron III)				
Clutch	ISUZU GENUINE	BESCO ATF III				
(Smoother)		or equivalent to BESCO ATF III				
Center bearing King pin Upper links (Multi purpose grease)	ISUZU GENUINE	BESCO L-2 GREASE (No.2), L-3 GREASE (No.3)				
	Caltex/Texaco	Starplex-2 (No.2)				
	Shell	Retinax LX2 (No.2)				
	Total	Multis EP2/EP3 (No.2/No.3)				
	Castrol	LM Grease (No.2/No.3)				
	ВР	Energrease LS (No.2/No.3)				
Propeller shaft sliding yoke Universal joint (Multi purpose grease contain- ing molybde- num disulfide)	ISUZU GENUINE	ONE LUBER MO GREASE				
	Caltex	Molytex Grease EP2 (No.2)				
	Shell	Retinax HDX2 (No.2)				
	Total	Total Multis MS2 (No.2/No.3)				

## 0B-14 MAINTENANCE AND LUBRICATION

LUBRICATION	MAKER	BRAND/TYPE	GRADE		
			API	ACEA	JASO
	ISUZU GENUINE	BESCO LLC SUPER TYPE E			
Engine cooling system	Caltex/Texaco/ Chevron	Extended Life Coolant			
		Havoline XLC			
		Delo XLC			

<sup>\*</sup> If GL-5 Limited Slip Differential Lubricant is not available, use GL-5 Lubricant together with Limited Slip Differential Lubricant additive (Parts No. 8-01052-358-0) or equivalent.

FLUID	TYPE	
Clutch and brake fluid reservoir	Besco brake fluid SUPER Hydraulic brake fluid SAE J1703 FMVSS 116 DOT.3 grade	

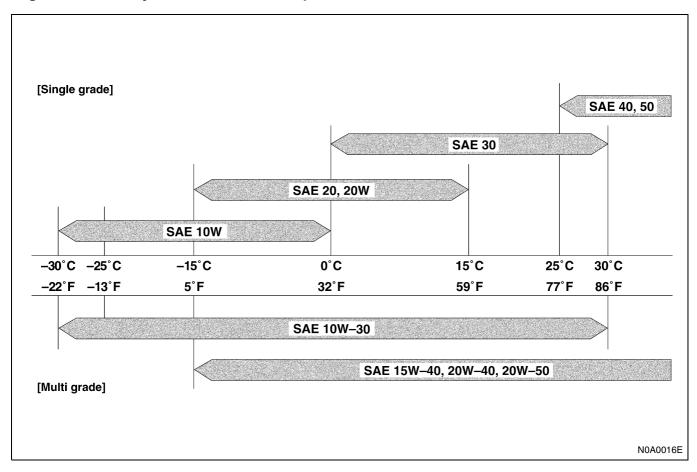
DIESEL FUEL/APPLICABLE STANDARD				
JIS (JAPANESE INDUSTRIAL STANDARD)	Based on K2204 GAS OIL			
DIN (DEUTSCHE INDUSTRIE NORMEN)	Based on EN590: 1997			
SAE (SOCIETY OF AUTOMOTIVE ENGINEERS)	Based on SAE J-313C			
BS (BRITISH STANDARD)	Based on BS EN590-1997			

#### Notice:

When the recommended lubricants are specified in this manual, follow them.

## **OIL VISCOSITY CHART**

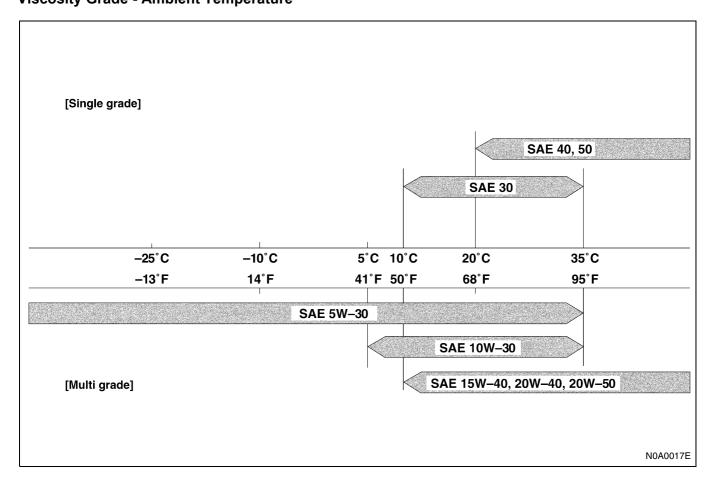
**Engine Oil Engine Oil Viscosity Grade - Ambient Temperature** 



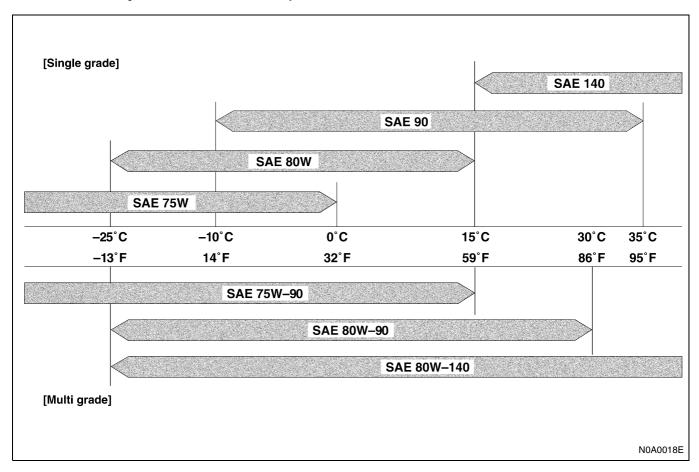
#### DO NOT USE SYNTHETIC OILS.

<sup>\*</sup> At ambient temperatures below  $-25^{\circ}$ C ( $-13^{\circ}$ F), starting aids (oil pan heater, block heater, etc.) are recommended to prevent hard starting and other engine problems.

# Manual Transmission and Transfer Case Oil (Engine Oil) Viscosity Grade - Ambient Temperature

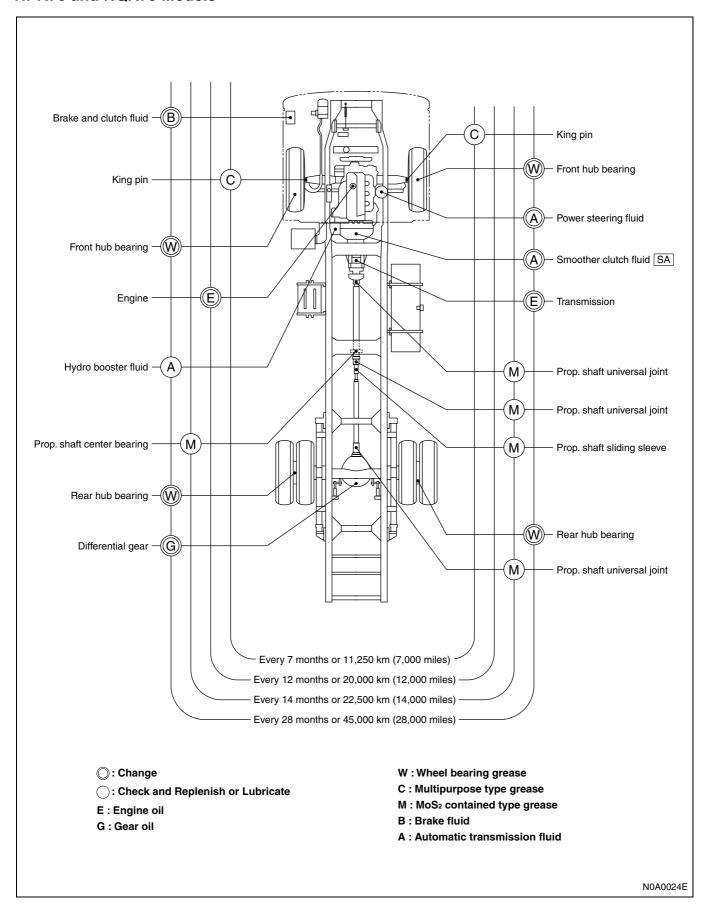


# Front Axle and Rear Axle Oil Gear Oil Viscosity Grade - Ambient Temperature

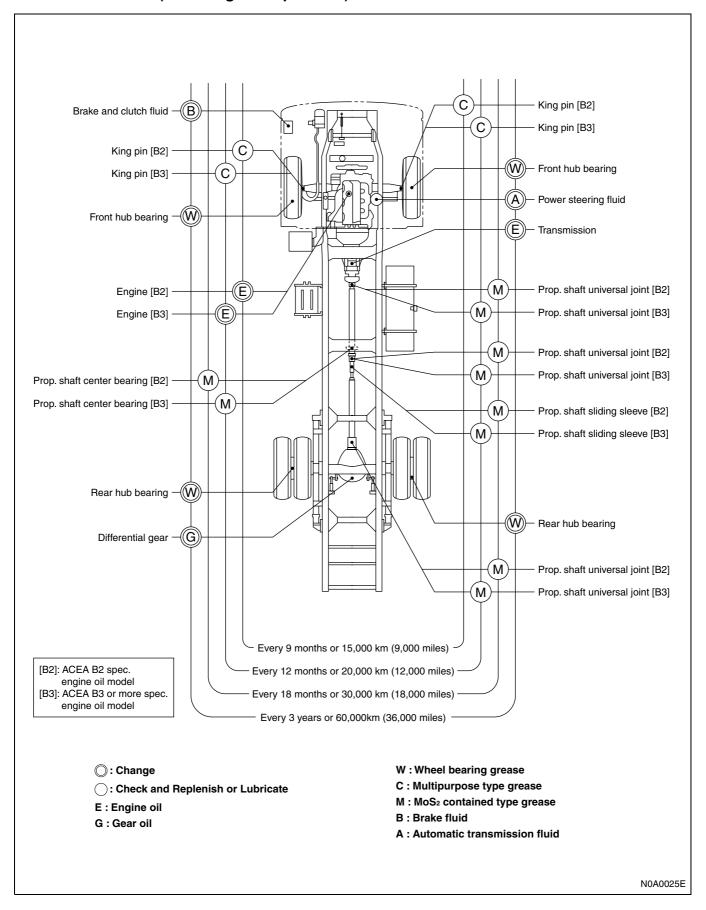


## **LUBRICATION CHART**

#### NPR75 and NQR75 Models



### NKR77 and NPR77 (Front Rigid Suspension) Models



#### NKR77 (Front Independent Suspension) Model

