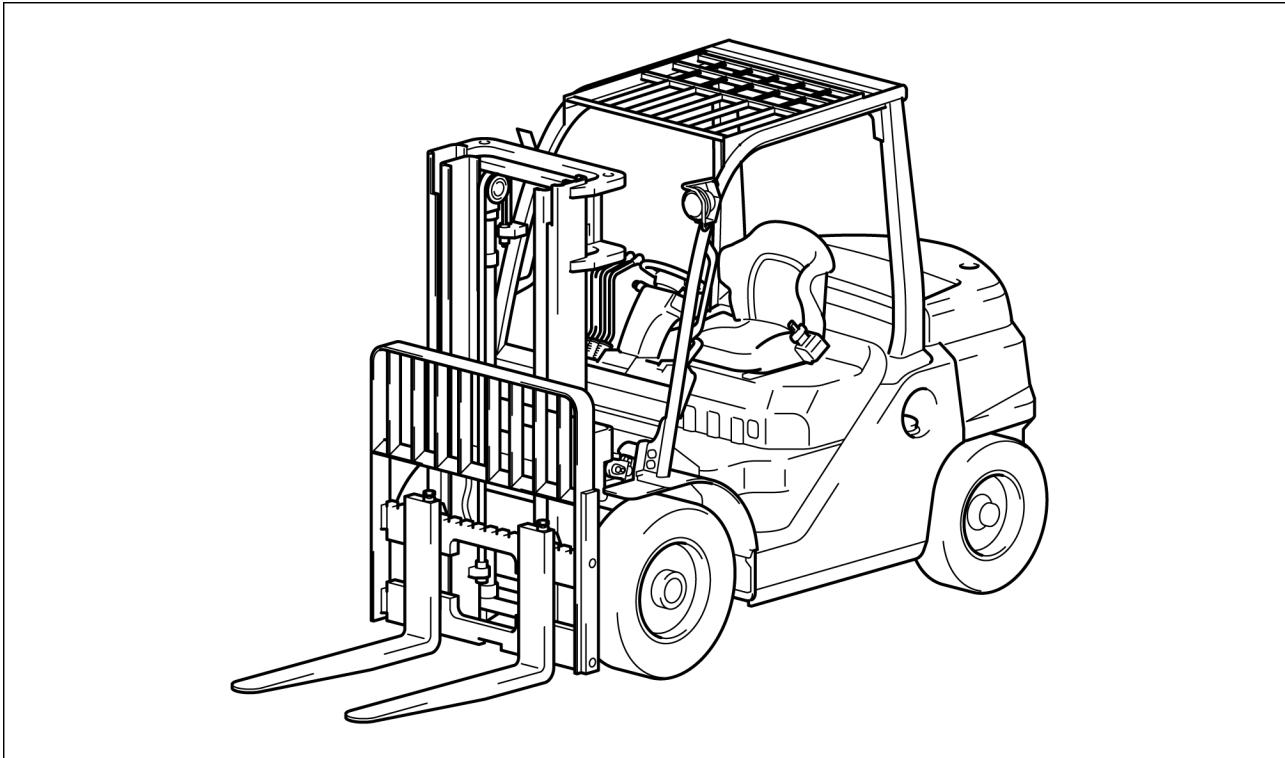

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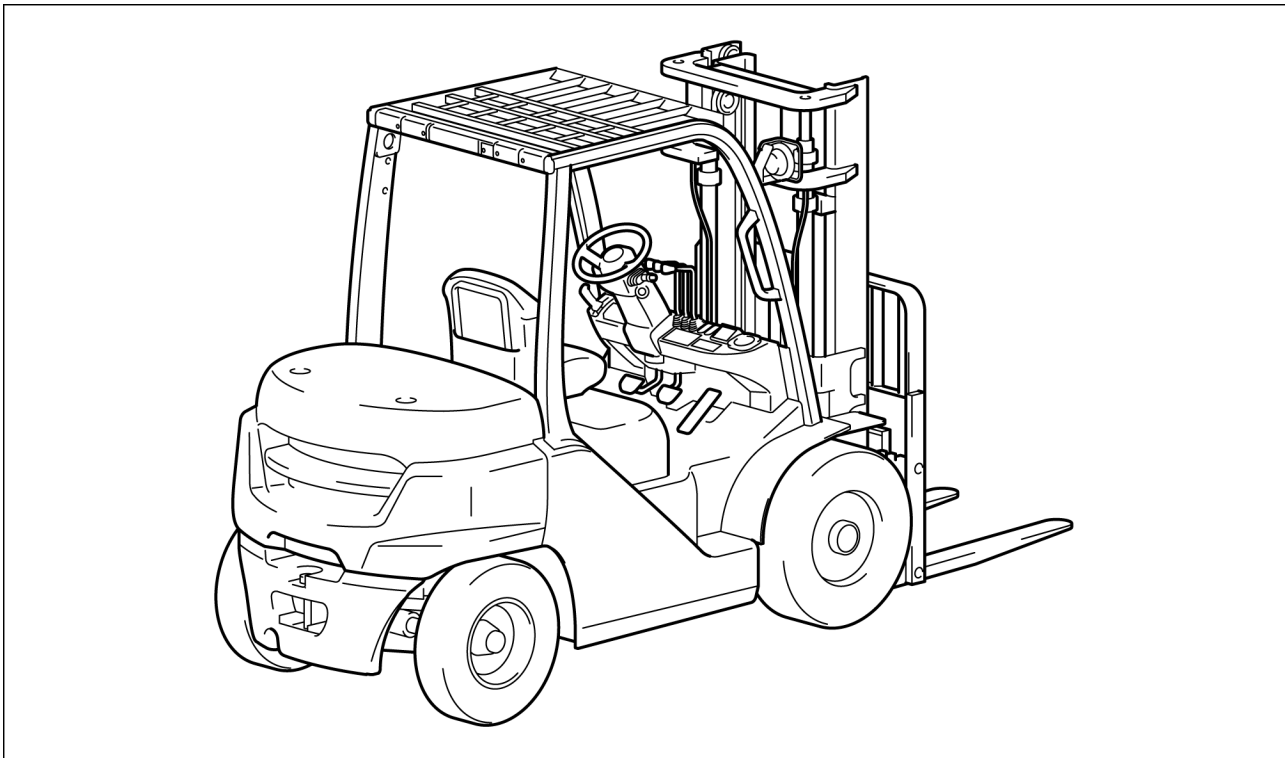
0 GENERAL

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0.1 EXTERIOR VIEWS



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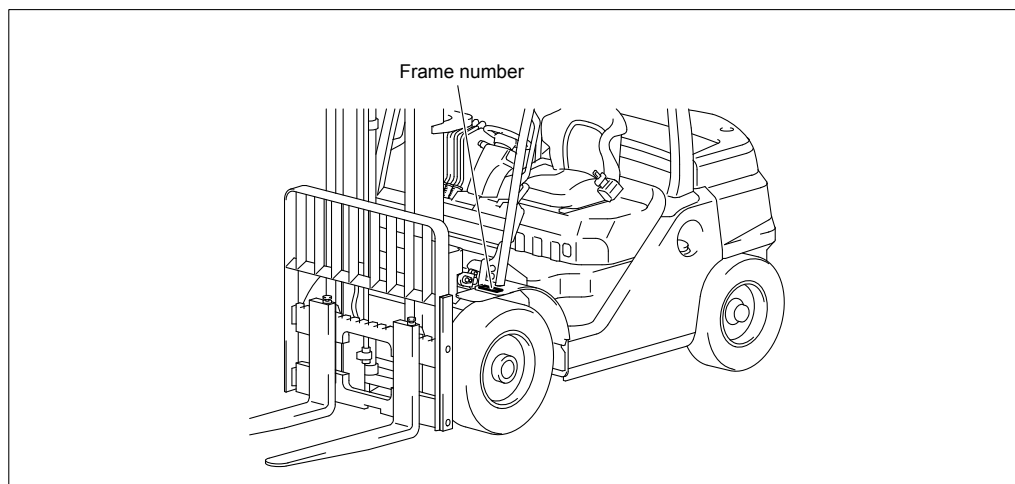
The full manual is available for immediate download.

<https://www.ebooklibonline.com>

0.2 VEHICLE MODEL

Classification	Model	Engine		Capacity (L.C. 500 mm) kgf
3.5 ton model	8FG35N	1FS	Gasoline	4000
	40-8FD35N	1KD	Diesel	
4.0 ton model	8FG40N	1FS	Gasoline	4500
	40-8FD40N	1KD	Diesel	
4.5 ton model	8FG45N	1FS	Gasoline	4990
	40-8FD45N	1KD	Diesel	
5.0 ton model	8FG50N	1FS	Gasoline	5000
	40-8FD50N	1KD	Diesel	
6.0 ton model	40-8FD60N	1KD	Diesel	6000 (L.C. 600 mm)
7.0 ton model	40-8FD70N	1KD	Diesel	7000 (L.C. 600 mm)
8.0 ton model	40-8FD80N	1KD	Diesel	8000 (L.C. 600 mm)

0.3 FRAME NUMBER



Classification	Engine	Vehicle model	Frame No. Stamping
3.5 / 4.0 ton model	1FS	8FG35N	8FG40N*10011
		8FG40N	
	1KD	40-8FD35N	40-8FD40N*10011
		40-8FD40N	
4.5 / 5.0 ton model	1FS	8FG45N	8FG50N*10011
		8FG50N	
	1KD	40-8FD45N	40-8FD50N*10011
		40-8FD50N	
6.0 to 8.0 ton model	1KD	40-8FD60N	40-8FD80N*10011
		40-8FD70N	
		40-8FD80N	

Detail of * ©

0.4 HOW TO USE THIS MANUAL

0

0.4.1 EXPLANATION METHOD

Operation procedure

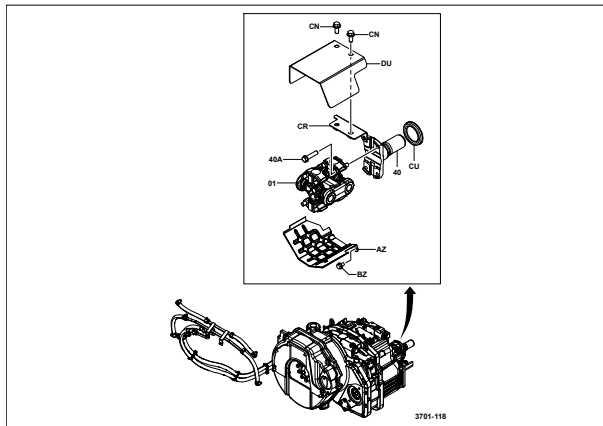
The operation procedure is described to explain each operation step with illustration which indicates the step number.

How to read components figures

The components figure uses the illustration in the parts catalog for the vehicle model. Please refer to the catalog for checking the part name.

The number in the illustration of each component figure indicates the Fig. number in the parts catalog.

(Example)



This manual omits description of the following jobs, but perform them in actual operation:

- Cleaning and washing of removed parts as required
- Visual inspection (partially described)

0.4.2 TERMINOLOGY

"CAUTION": Indicates a hazardous situation that, if not avoided, could result in minor or moderate injury, or property damage.

"NOTICE": Indicates information to be considered important, to do your job right and easier, and to keep your truck running well.

"Standard": Values showing allowable range in inspection and adjustment.

"Limit": Maximum or minimum allowable value in inspection or adjustment.

0.4.3 ABBREVIATIONS

Abbreviation (code)	Meaning	Abbreviation (code)	Meaning
ASSY	Assembly	SAE	Society of Automotive Engineers (USA)
LH	Left hand	RH	Right hand
LLC	Long life coolant	SST	Special service tool
STD	Standard	OPT	Option
O/S	Oversize	T=	Tightening torque
T/C	Torque converter & transmission	U/S	Undersize
SAS	System of active stability	OPS	Operator presence sensing
PS	Power steering	**T	Number of teeth (**)
NMR	No-load maximum revolution	W/	With
L/	Less		

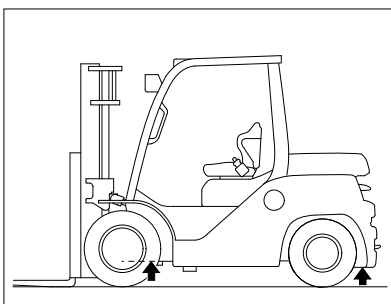
0.5 OPERATIONAL TIPS

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1. Safe operation
 - a) After jacking up, always support with wooden blocks or rigid stands.
 - b) When hoisting the vehicle or its heavy component, use wire rope(s) with a sufficient reserve in load capacity.
 - c) Always disconnect the battery terminal before the inspection or servicing of electrical parts.
 - d) Do not touch the high pressure hoses by bare hands when inspecting them.
2. Tactful operation
 - a) Prepare the mechanic tools, necessary measuring instruments (circuit tester, megger, oil pressure gauge, etc.) and SSTs before starting operation.
 - b) Before disconnecting wiring, always check the cable color and wiring state.
 - c) When overhauling functional parts, complicated portions or related mechanisms, arrange the parts neatly to prevent confusion.
 - d) When disassembling and inspecting such a precision part as the control valve, use clean tools and operate in a clean location.
 - e) Follow the described procedures for disassembly, inspection and reassembly.
 - f) Replace gaskets, packings and O-rings with new ones each time they are disassembled.
 - g) Use genuine Toyota parts for replacement.
 - h) Use specified bolts and nuts. Observe the specified tightening torque at the time of reassembly. Tighten to the center of the specified tightening torque range. If no tightening torque is specified, tighten the bolt or nut according to the standard tightening torque table.
3. Grasping the trouble state
 - a) When a trouble occurs, do not attempt immediate disassembly or replacement but first check if the trouble requires disassembly or replacement for remedying.
4. Disposal of waste fluid, etc.
 - a) When draining waste fluid from the vehicle, receive it in a container.

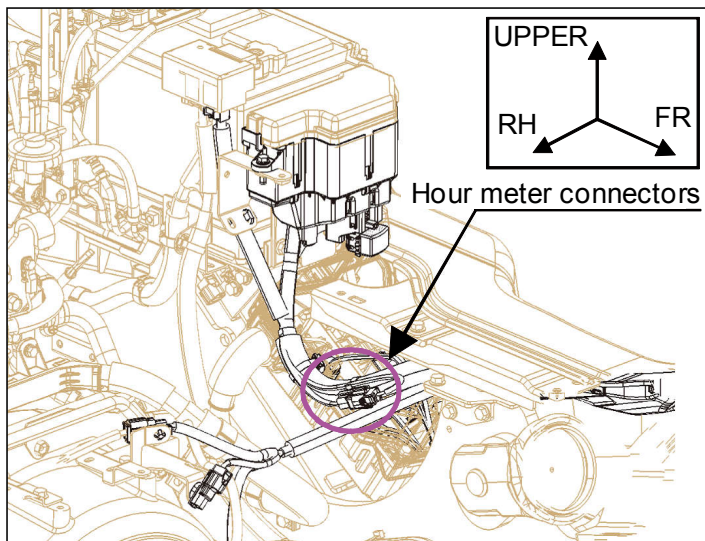
If any oil, fuel, coolant, oil filter, battery or other harmful substance is directly discharged or scrapped without permission, it will either adversely affect human health or destroy the environment.

Always sort waste fluids, etc. and treat them properly by requesting disposal by specialized companies.
5. Jack up points



Front side: Jack up the bottom edge of the front plate under the frame.
Rear side: Jack up the under the counterweight.

0.6 HOUR METER START



It is necessary to start the hour meter by connecting the connector which is located under the left of toe-board.

0.7 1KD TIMING BELT

1. When a SAS/OPS controller is replaced or swapped from another forklift, replace the timing belt, then do reset procedure.
NOTICE! If the analyzer is reset without replacing the timing belt, warning function does not work even if operating time exceeds 4000 hours.
2. When a meter is replaced or swapped from another forklift, replace the timing belt, then do reset procedure.
NOTICE! If the analyzer is reset without replacing the timing belt, warning function does not work even if operating time exceeds 4000 hours.
3. Hour meter
 If the timing belt is replaced after 58500 hours passing, the meter should be replaced because maximum cumulated value of the hour meter is 62500 hours.
4. Hour meter start
 If the procedure of hour meter start is not done by a dealer, this warning function does not work.
5. Maintenance interval
 The warning of maintenance interval will appear 1 hour faster at a maximum than 4000 hours.
6. Refer to 1KD engine repair manual for removal, inspection and installation.

0.8 PERIODIC MAINTENANCE

INSPECTION METHOD

I : Inspection. Repair or replacement if required.

M : Measurement. Repair or adjustment if required.

T : Retightening

C : Cleaning

L : Lubrication

*: Same as the left column

*1 : For new vehicle

*2 : Flaw detector

Item	Inspection Period	Every 6 weeks	Every 3 months	Every 6 months	Every 12 months
		Every 250 hours	Every 500 hours	Every 1000 hours	Every 2000 hours
ENGINE					
Main body	Proper starting and abnormal noise	I *1	I	*	*
	Rotating condition at idling	M *1	M	*	*
	Rotating condition during acceleration	M *1	M	*	*
	Exhaust gas condition	I *1	I	*	*
	Air cleaner element	C *1	C	*	*
	Valve clearance	M *1			M
	Muffler rubber mount				I
	Engine Ancillary drive belt tension, looseness and damage	I	*	*	*
PCV system	Clogging and damage in PCV valve and piping	I *1	I	*	*
Lubrication system	Oil leak	I *1	I	*	*
	Oil level	I *1	I	*	*
	Clogging and dirt of oil filter		I	*	*
Fuel system	Fuel leak	I *1	I	*	*
	Dirt and clogging of fuel filter and element		I	*	*
	Draining of sedimenter			I	*
Cooling system	Coolant level in radiator and leak	I *1	I	*	*
	Rubber hose degradation	I *1	I	*	*
	Radiator cap condition	I *1	I	*	*
	Fan belt tension, looseness and damage	I *1	I	*	*
	Radiator rubber mount				I
Exhaust emission control system (OPT : 3-way Catalytic Converter)	Exhaust system piping joint loosening and damage				T
	Hose and piping damage	I	*	*	*
	Sensor damage				I
	Injection cleaning and damage of 1FS				I
	Resistor damage of 1FS				I

Item	Inspection Period	Every 6 weeks	Every 3 months	Every 6 months	Every 12 months
		Every 250 hours	Every 500 hours	Every 1000 hours	Every 2000 hours
POWER TRANSMISSION SYSTEM					
Differential	Leak		I	*	*
	Oil level		I	*	*
	Bolt loosening				T
Planetary gear	Leak	I	*	*	*
	Oil level	I	*	*	*
	Bolt loosening				T
Torque con- verter & trans- mission	Leak		I	*	*
	Fluid level		I	*	*
	Operating mechanism function and looseness		I	*	*
	Control valve and clutch functions		I	*	*
	Inching valve function		I	*	*
	Stall and hydraulic pres- sure measurement			M	*
Propeller shaft and axle shaft	Loose joint		I	*	*
	Looseness at spline con- nections				I
	Looseness of universal joint				I
	Twisting and cracks of axle shaft				I
DRIVE SYSTEM					
Wheels	Tire inflation pressure		M	*	*
	Tire cuts, damage and un- even wearing		I	*	*
	Loose rim and hub nuts		T	*	*
	Tire groove depth	M *1	M	*	*
	Metal chips, pebbles and other foreign matter trap- ped in tire grooves	I *1	I	*	*
	Rim, side bearing and disc wheel damage	I *1	I	*	*
	Abnormal sound and looseness of front wheel bearing	I *1	I	*	*
	Abnormal sound and looseness of rear wheel bearing	I *1	I	*	*
Front axle	Cracks, damage and de- formation of housing				I
Rear axle	Cracks, damage and de- formation of beam				I
	Looseness of axle beam in vehicle longitudinal di- rection	M *1			M
STEERING SYSTEM					
Steering wheel	Play and looseness	I *1	I	*	*

Item	Inspection Period	Every 6 weeks	Every 3 months	Every 6 months	Every 12 months
		Every 250 hours	Every 500 hours	Every 1000 hours	Every 2000 hours
Steering valve	Function	I *1	I	*	*
	Oil leak	I *1	I	*	*
	Looseness of mounting	T *1	T	*	*
Power Steering	Oil leak		I	*	*
	Mounting and linkage looseness		I	*	*
	Damage of power steering hose				I
Knuckle	King pin looseness		I	*	*
	Cracks and deformation				I
BRAKING SYSTEM					
Brake pedal	Play and reserve		M	*	*
	Braking effect		I	*	*
Parking brake	Operating force		I	*	*
	Braking effect		I	*	*
	Rod and cable looseness and damage	I *1	I	*	*
Brake pipe	Leak, damage and mounting condition		I	*	*
Brake booster and wheel cylinder	Function, wear, damage, leak and mounting looseness				I
Brake drum and brake shoe	Clearance between drum and lining		M	*	*
	Wear of shoe sliding portion and lining				I
	Drum wear and damage				I
	Shoe operating condition				I
	Anchor pin rusting				I
	Return spring fatigue				M
	Automatic adjuster function				I
Backing plate	Deformation, cracks and damage				I
	Loose mounting				T
MATERIAL HANDLING SYSTEM					
Forks	Abnormality of fork and stopper pin		I	*	*
	Misalignment between left and right fork fingers		I	*	*
	Cracks at fork root and welded part				I *2
Mast and lift bracket	Deformation and damage of each part and crack at welded part		I	*	*
	Mast and lift bracket looseness		I	*	*
	Wear and damage of mast support bushing				I

Item	Inspection Period	Every 6 weeks	Every 3 months	Every 6 months	Every 12 months
		Every 250 hours	Every 500 hours	Every 1000 hours	Every 2000 hours
	Wear, damage and rotating condition of rollers		I	*	*
	Wear and damage of roller pins				I
	Wear and damage of mast trip		I	*	*
Chain and chain wheel	Tension, deformation and damage of chain	I *1	I	*	*
	Chain lubrication	I *1	I	*	*
	Elongation of chain				I
	Abnormality of chain anchor bolt		I	*	*
	Wear, damage and rotating condition of chain wheel		I	*	*
Various attachments	Abnormality and mounting condition of each part		I	*	*
HYDRAULIC SYSTEM					
Cylinder	Loosening and damage of cylinder mounting		T	*	*
	Deformation and damage of rod, rod screw and rod end		I	*	*
	Cylinder operation		I	*	*
	Natural drop and natural forward tilt (hydraulic drift)		M	*	*
	Oil leak and damage		I	*	*
	Wear and damage of pin and pin support		I	*	*
	Lifting speed		M	*	*
	Uneven movement		I	*	*
Oil pump	Oil leak and abnormal sound		I	*	*
Hydraulic oil tank	Oil level and contamination		I	*	*
	Tank and oil strainer			C	*
	Oil leak		I	*	*
Control lever	Loose linkage		I	*	*
	Operation		I	*	*
Oil control valve	Oil leak		I	*	*
	Relief pressure measurement				M
	Relief valve and tilt lock valve functions		I	*	*
Hydraulic piping	Oil leak		I	*	*
	Deformation and damage		I	*	*
	Loose joint		T	*	*
ELECTRICAL SYSTEM					

Item	Inspection Period	Every 6 weeks	Every 3 months	Every 6 months	Every 12 months
		Every 250 hours	Every 500 hours	Every 1000 hours	Every 2000 hours
Ignition timing	State of spark plug (carbon, soot)	I	*	*	*
Starting motor	Pinion gear meshing status		I	*	*
Battery	Battery fluid level		I	*	*
	Battery fluid specific gravity			M	*
Electrical wiring	Damage of wiring harness		I	*	*
	Fuses		I	*	*
Preheater	Open-circuit of glow plug			I	*
LPG DEVICE					
LPG Device	Gas leak from fuel lines and fittings	I	*	*	*
	Damage of fuel lines and fittings	I	*	*	*
	Tar removal from regulator	C	*	*	*
	Regulator adjustment status	I	*	*	*
	Regulator function		I	*	*
	Mixer		I	*	*
	Filter clogging		C	*	*
	Service valve function		I	*	*
	Leaks, damage, and cracks of the tank	I	*	*	*
	Loose or damaged tank bracket	I	*	*	*
	Damage to electrical wiring, loose terminals	I	*	*	*
	Rotation of liquid drain valve	I	*	*	*
	Gas leak from the regulator body	I	*	*	*
SAFETY DEVICES AND OTHERS					
Head guard	Cracks at welded portion		I	*	*
	Deformation and damage		I	*	*
Back-rest	Loosening of mounting		T	*	*
	Deformation, crack and damage		I	*	*
Lighting system	Function and mounting condition		I	*	*
Horn	Function and mounting condition		I	*	*
Direction indicator	Function and mounting condition		I	*	*
Instruments	Functions		I	*	*
Backup buzzer	Function and mounting condition		I	*	*

Item	Inspection Period	Every 6 weeks	Every 3 months	Every 6 months	Every 12 months
		Every 250 hours	Every 500 hours	Every 1000 hours	Every 2000 hours
Rear-view mirror	Dirt, damage		I	*	*
	Rear reflection status		I	*	*
Seat	Loosening and damage of mounting		I	*	*
	Seatbelt damage and function		I	*	*
Seat belt	Mounting looseness		I	*	*
	Webbing damage (cut, frayed straps, loose stitching)		I	*	*
	Plate damage		I	*	*
	Buckle and retractor damage		I	*	*
	Function (retract and locks)		I	*	*
Body	Damage and cracks of frame, cross members, etc.				I
	Bolt looseness				T
	Frame bolt (See the caution on FRAME BOLTS [P 15] section)				I
SAS	Functions		I	*	*
	Loosening and damage at sensor mounting portion		I	*	*
	Damage, deformation, oil leakage and loosening of the mounting of functional parts		I	*	*
	Loosening and damage of wire harnesses		I	*	*
	Lock cylinder accumulator performance				I
	Rusting and corrosion of load sensor				I
OPS	Functions	I *1	I	*	*
Others	Grease up		L	*	*

0.9 FRAME BOLTS

0

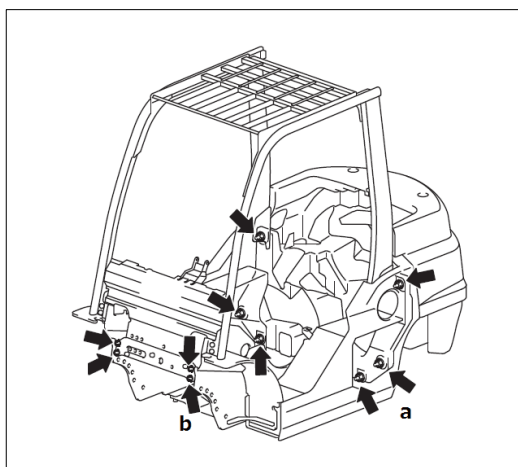
⚠ CAUTION

Do not loosen the frame bolts

The frame structure is bolts tightening method. These bolts are strictly prohibited to loosen. Heavy maintenance such as engine/torque converter disassembling/reassembling can be possible without loosening these bolts.

Match mark is painted on the rear frame bolt for each, then check them if they are not out of alignment on annual inspection maintenance.

If this match mark is faded, paint again.



a (6 bolts) : T = 610 to 830 N m (6220 to 8464 kgf-cm) [455.0 to 612.4 ft-lbf]

b (4 bolts) : T = 170 to 250 N m (1734 to 2549 kgf-cm) [125.5 to 184.4 ft-lbf]

0.10 CIRCUIT TESTER

Circuit testers are available in both the analog and digital types. They should be used selectively according to the purpose of measurement.

- Analog type:

This type is convenient for observing movement during operation, but the measured value should only be used for reference or rough judgement.

- Digital type:

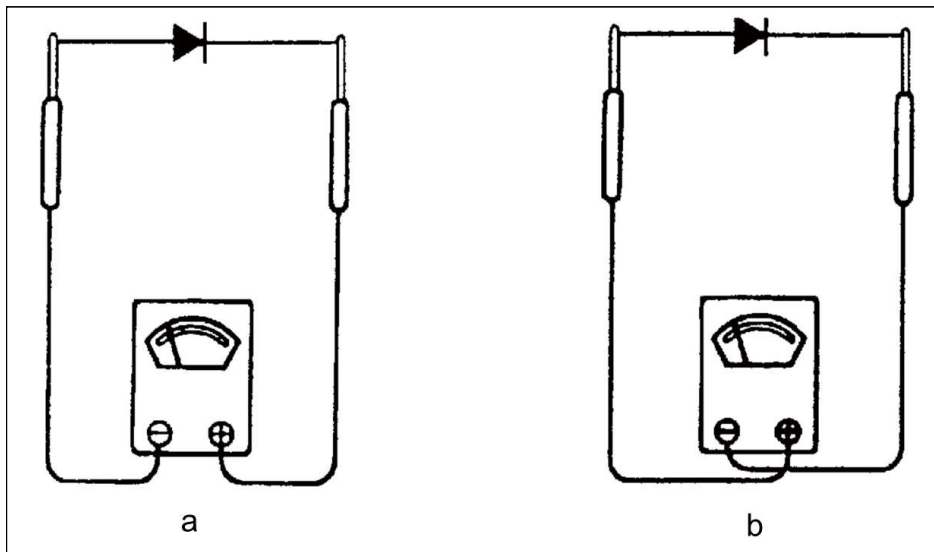
Fairly accurate reading is possible, but it is difficult to observe the variation or movement.

1. Difference in measurement results with the digital type and analog type

The result may be different between measurements with the analog type and digital type. Always use a circuit tester according to its operation manual.

Cautions when the polarities are different between the analog type and digital type are described below.

Analog circuit tester



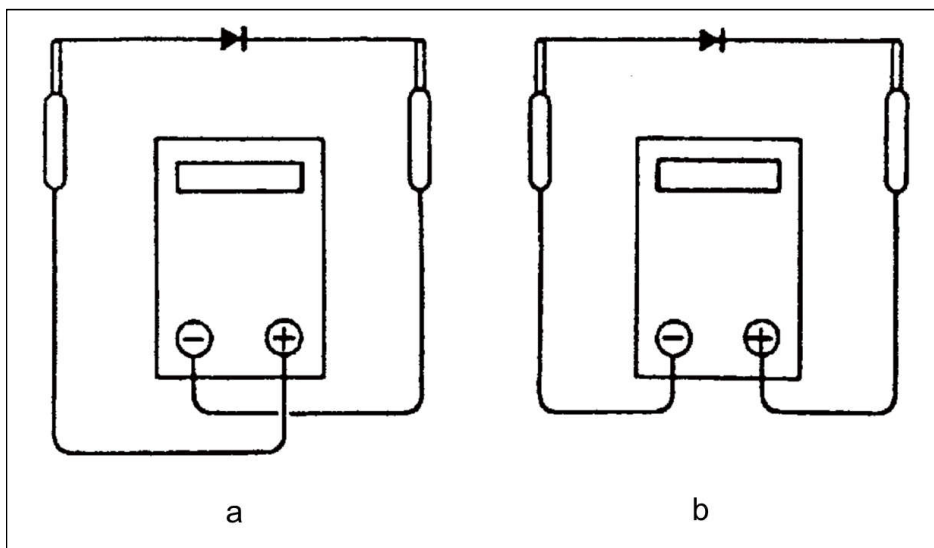
a Forward direction

b Reverse direction

Measurent result example

	Analog type (Tester range: kΩ range)
Forward	Continuity exists 11 kΩ
Reverse	No continuity ∞

Digital circuit tester



a Forward direction

b Reverse direction

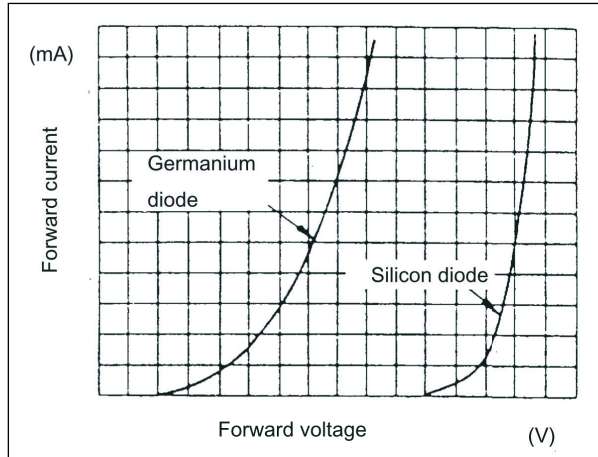
Measurement result example

	Digital type (Tester range: MΩ range)
Forward	Continuity exists 1

Reverse	Continuity exists
	2 MΩ

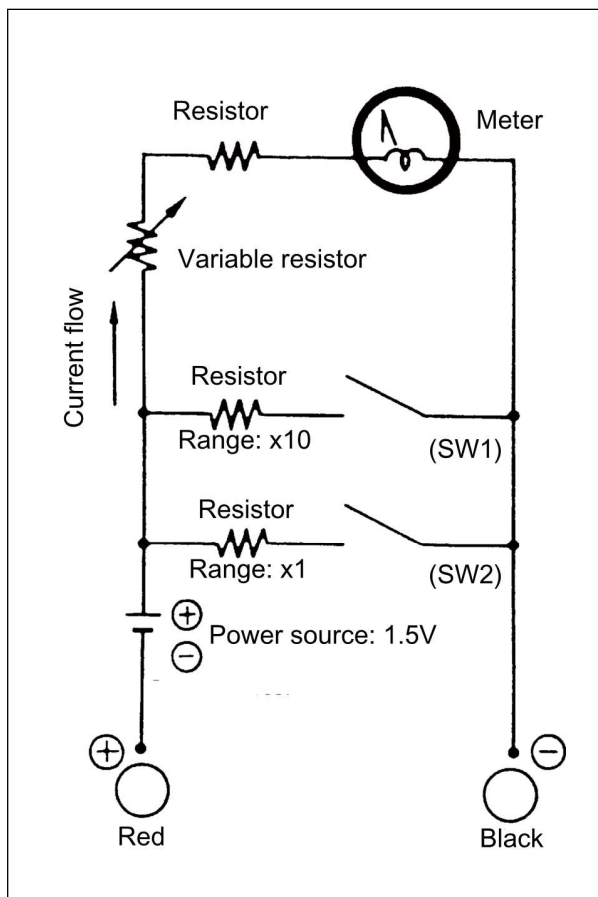
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2. Difference in result of measurement with circuit tester



The circuit tester power supply voltage depends on the tester type. 1.5 V, 3.0 V or 6.0 V is used. The resistance of a semiconductor such as a diode varies with the circuit tester power supply voltage. The diode characteristics are shown in the figure. The resistance values of the same semiconductor measured with two types of circuit testers having different power supply voltages are different. This manual describes the results of measurement with a circuit tester whose power supply voltage is 3.0 V.

3. Difference in measurement result by measurement range (analog type)



In the analog type circuit tester, changing the measurement range switches over the internal circuit to vary the circuit resistance. Even when the same diode is measured, the measurement result varies with the measurement range.

0.11 STANDARD BOLT & NUT TIGHTENING TORQUE








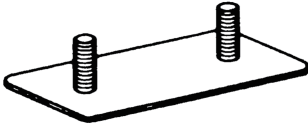
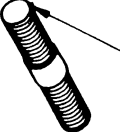

Standard bolt and tightening torques are not indicated.

Judge the standard tightening torque as shown below.

1. Find out the type of the bolt from the list below and then find the bolt tightening torque from the table.
2. The nut tightening torque can be judged from the mating bolt type.

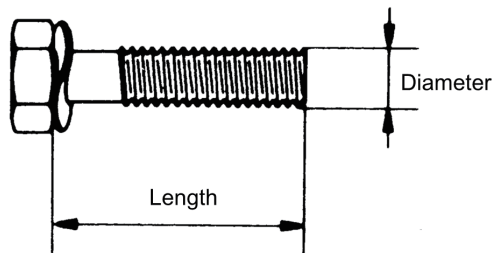
0.11.1 BOLT STRENGTH TYPE IDENTIFICATION METHOD

IDENTIFICATION BY BOLT SHAPE

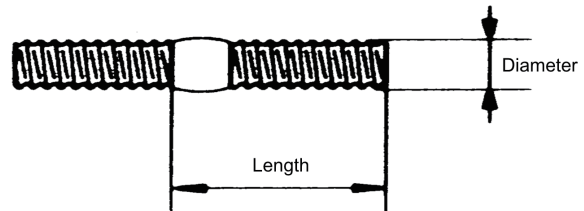
	Shape	Class
Hexagon head bolt		Bolt head No. 4 = 4T 5 = 5T 6 = 6T 7 = 7T 8 = 8T
		No mark 4T
Hexagon flange bolt		No mark 4T
Hexagon head bolt		Two protruding lines 5T
Hexagon flange bolt		Two protruding lines 6T
Hexagon head bolt		Three protruding lines 7T
Hexagon head bolt		Four protruding lines 8T
Welded bolt		4T
Stud bolt		No mark 4T
		Grooved 6T

IDENTIFICATION BY PART NO.



Hexagon head bolt



Stud bolt



0.11.2 TIGHTENING TORQUE TABLE

Class	Diameter mm	Pitch mm	Specified torque			Specified torque		
			Hexagon head bolt			Hexagon flange bolt		
								
			N m	kgf-cm	ft-lbf	N m	kgf-cm	ft-lbf
4T	6	1.0	5.4	55	48 in-lbf	5.9	60	52 in-lbf
	8	1.25	13	130	9	14	145	10
	10	1.25	25	260	19	28	290	21
	12	1.25	47	480	35	53	540	39
	14	1.5	75	760	55	83	850	61
	16	1.5	113	1150	83	-	-	-
5T	6	1.0	6.4	65	56 in-lbf	7.5	75	65 in-lbf
	8	1.25	16	160	12	18	175	13
	10	1.25	32	330	24	36	360	26
	12	1.25	59	600	43	65	670	48
	14	1.5	91	930	67	100	1050	76
	16	1.5	137	1400	101	157	1600	116
6T	6	1.0	7.8	80	69 in-lbf	8.8	90	78 in-lbf
	8	1.25	19	195	14	21	215	16
	10	1.25	38	400	29	43	440	32
	12	1.25	72	730	53	79	810	59
	14	1.5	110	1100	80	123	1250	90
	16	1.5	170	1750	127	191	1950	141
7T	6	1.0	11	110	8	12	120	9
	8	1.25	25	260	19	28	290	21
	10	1.25	52	530	38	58	590	43
	12	1.25	95	970	70	103	1050	76
	14	1.5	147	1500	108	167	1700	123
	16	1.5	226	2300	166	-	-	-
8T	6	1.0	12	125	9	14	145	9
	8	1.25	29	300	22	32	330	24
	10	1.25	61	620	45	68	690	50
	12	1.25	108	1100	80	123	1250	90
	14	1.5	172	1750	127	196	2000	145
	16	1.5	265	2700	195	299	3050	221

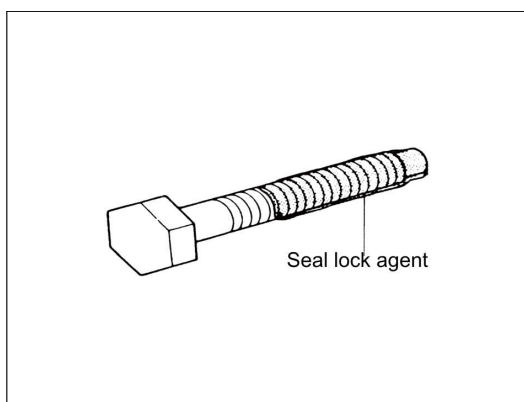
0.12 PRECOAT BOLTS

(Bolts with seal lock agent coating on threads)

- Do not use the precoat bolt as it is in either of the following cases:
 - After it is removed.
 - When the precoat bolt is moved (loosened or tightened) by tightness check, etc.

NOTICE

For torque check, use the lower limit of the allowable tightening torque range. If the bolt moves, re-tighten it according to the steps below.



2. Method for reuse of precoat bolts

- Wash the bolt and threaded hole. (The threaded hole must be washed even for replacement of the bolt.)
- Perfectly dry the washed parts by air blowing.
- Coat the specified seal lock agent to the threaded portion of the bolt.

0.13 HIGH PRESSURE HOSE FITTING TIGHTENING TORQUE

- When connecting a high pressure hose, wipe the hose fitting and mating nipple contact surfaces with clean cloth to remove foreign matters and dirt.
Also check no dent or other damage on the contact surfaces before installation.
- When connecting a high pressure hose, hold the hose to align the fitting with the nipple and tighten the fitting.
- The maximum tightening torque must not exceed twice the standard tightening torque.

Nominal diameter of screw	Standard tightening torque N m [ft-lbf]		Hose nominal size mm (in)
	Standard	Tightening range	
7/16 - 20UNF	25 [18.4]	24 to 26 [17.7 to 19.2]	6 (0.24)
9/16 - 18UNF	34 [25.1]	32 to 36 [23.6 to 26.6]	9 (0.35)
3/4 - 16UNF	59 [43.5]	56 to 62 [41.3 to 45.7]	12 (0.47)
7/8 - 14UNF	78 [57.5]	74 to 82 [54.6 to 60.5]	15 (0.59)
1 · 1/16 - 12UNF	118 [87.1]	112 to 123 [82.6 to 90.7]	19 (0.75)
1 · 5/16 - 12UNF	137 [101.1]	130 to 144 [95.9 to 106.2]	25 (0.98)
PF1/4	25 [18.4]	24 to 26 [17.7 to 19.2]	6 (0.24)
PF3/8	34 [25.1]	32 to 36 [23.6 to 26.6]	9 (0.35)
PF1/2	59 [43.5]	56 to 62 [41.3 to 45.7]	12 (0.47)
PF3/4	118 [87.1]	112 to 123 [82.6 to 90.7]	19 (0.75)
PF1	137 [101.1]	130 to 144 [95.9 to 106.2]	25 (0.98)



Suggest:

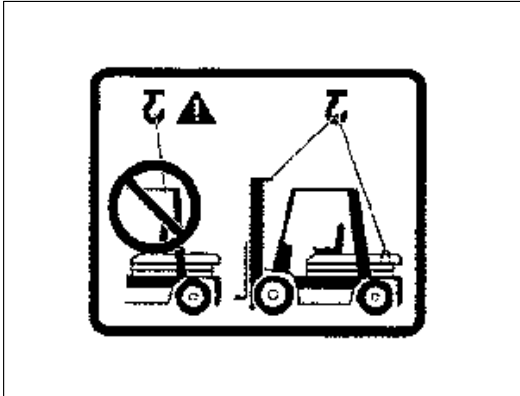
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Thank you so much for reading

0.14 HOISTING THE VEHICLE



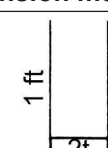

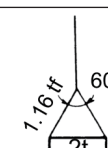
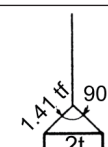
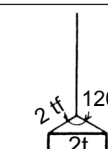
When hoisting the vehicle, sling with wire rope(s) at the mast hook holes and the counterweight hook holes.

0

CAUTION

Use wire ropes having sufficient strength.

0.15 WIRE ROPE SUSPENSION ANGLE LIST

Lifting angle	Tension	Compression	Suspension method
0°	1.00 time	0 time	
30°	1.04 time	0.27 time	
60°	1.16 time	0.58 time	
90°	1.41 time	1.00 time	
120°	2.00 time	1.73 time	

0.16 SAFE LOAD FOR EACH WIRE ROPE SUSPENSION ANGLE

Unit: N (tf) [lbf]

Rope diameter	Cutting load	Single-rope suspension	Two-rope suspension					Four-rope suspension			
			0°	0°	30°	60°	90°	0°	30°	60°	90°
6mm (0.24 in)	21380 (2.18) [4807]	3040 (0.31) [683.6]	6080 (0.62) [1367]	5880 (0.6) [1323]	5200 (0.53) [1169]	4310 (0.44) [970]	12160 (1.24) [2734]	11770 (1.2) [2646]	10400 (1.06) [2337]	8630 (0.88) [1940]	
8 mm (0.32 in)	31480 (3.21) [7078]	4410 (0.45) [992.3]	8830 (0.9) [1985]	8530 (0.87) [1918]	7650 (0.78) [1720]	6280 (0.64) [1411]	17650 (1.8) [3969]	17060 (1.74) [3937]	15300 (1.56) [3440]	12550 (1.28) [2322]	
10 mm (0.4 in)	49230 (5.02) [11.69]	6960 (0.71) [1565.6]	14020 (1.43) [3153]	13440 (1.37) [3021]	11770 (1.2) [2646]	9810 (1.0) [2205]	27460 (2.8) [6174]	26480 (2.7) [5954]	23540 (2.4) [5292]	19610 (2.0) [4410]	
12.5 mm (0.5 in)	76880 (7.84) [17387]	10980 (1.12) [2469.5]	21570 (2.2) [4851]	21280 (2.1) [4631]	18630 (1.9) [4190]	14710 (1.5) [3308]	43150 (4.4) [9702]	41190 (4.2) [9261]	37270 (3.8) [8379]	29420 (3.0) [6615]	
14 mm (0.56 in)	96400 (9.83) [21675]	13730 (1.4) [3087]	27460 (2.8) [6174]	26480 (2.7) [5954]	23540 (2.4) [5292]	18630 (1.9) [4190]	54920 (5.6) [12348]	52960 (5.4) [11907]	47070 (4.8) [10584]	37270 (3.8) [8379]	

0.17 COMPONENTS WEIGHT

Component		Weight kg (lb)
Engine	1FS	198 (437)
	1KD	225 (496)
Torque converter & transmission	3.5 to 5.0 ton model	209 (461)
	6.0 to 8.0 ton model	218 (480)
Counter weight	3.5 ton model	Approx. 1675 (3695)
	4.0 ton model	Approx. 2025 (4465)
	4.5 ton model	Approx. 2215 (4885)
	5.0 ton model	Approx. 2505 (5525)
	6.0 ton model	Approx. 2610 (5755)
	7.0 ton model	Approx. 3265 (7200)
	8.0 ton model	Approx. 4060 (8950)
V mast ASSY L/backrest and fork (with lift cylinder, max. lifting height: 3000 mm (118 in))	3.5 / 4.0 ton model	Approx. 850 (1870)
	4.5 ton model	Approx. 1000 (2210)
	5.0 ton model	Approx. 1110 (2450)
	6.0 / 7.0 ton model	Approx. 1360 (3000)
	8.0 ton model	Approx. 1440 (3180)

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