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English (Australia)
Code No. RD358-8131-6

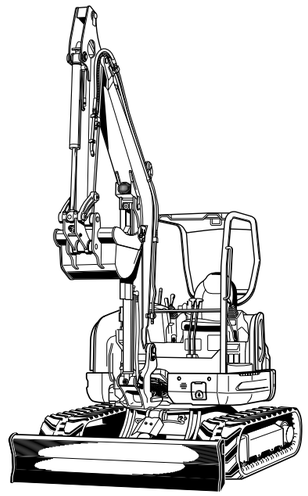
KX057-4 • U55-4

OPERATOR'S MANUAL

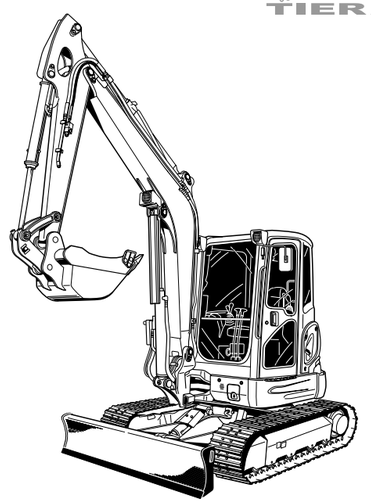
KUBOTA EXCAVATOR

MODELS KX057-4 • U55-4

Interim TIER 4



1BAAABYAP0860



1BAAABYAP0870

READ AND SAVE THIS MANUAL

PRINTED IN JAPAN

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Kubota

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⚠ SAFE OPERATION

Careful operation is your best insurance against an accident.

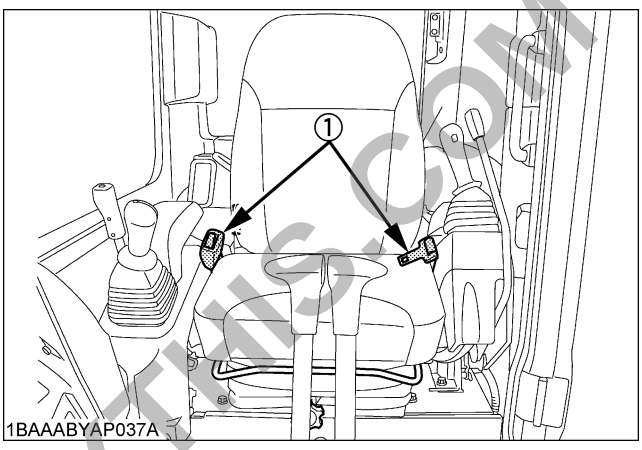
Read and understand this manual carefully, before operating the excavator.

Every user, however experienced, should carefully read and understand this manual and those of the attachments and accessories before operating the excavator. The owner is obliged to inform all operators of these instructions in detail.

Keep this manual in the storage location. (See "Where to keep Operator's Manual" in "MAINTENANCE" section.)

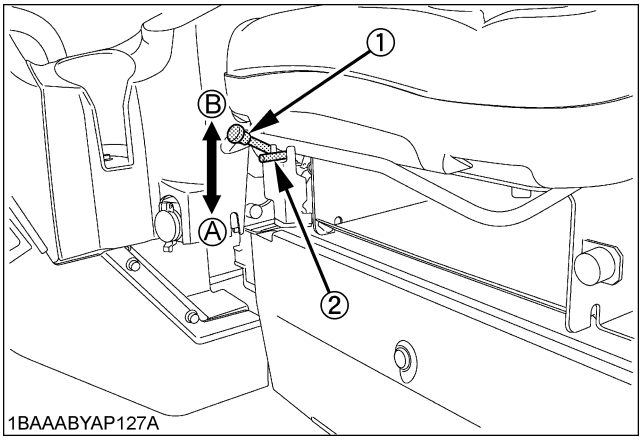
1. BEFORE OPERATION

1. Know your equipment and its limitations. Read and understand this entire manual before attempting to start and operate the excavator.
2. Obey the danger, warning and caution labels on the machine.
3. For your safety, a ROPS/FOPS (Roll-Over Protective Structure, Falling Objects Protective Structure.) with a seat belt is installed by KUBOTA. Always use the seat belt when the machine is equipped with a ROPS/FOPS as this combination will reduce the risk of serious injury or death, should the excavator be upset or falling objects occur.
   Do not modify any structural members of the ROPS/FOPS by welding, drilling, bending, grinding or cutting, as this may weaken the structure. If any component is damaged, replace it. Do not attempt repairs. If the ROPS/FOPS is loosened or removed for any reason, make sure all parts are reinstalled correctly. Tighten mounting bolts to proper torque.
4. ROPS/FOPS structure complies with ISO 3471, ISO 3449 and OSHA regulations.
5. The seat belt must be inspected regularly and replaced if frayed or damaged.



(1) Seat belt

6. Always sit in the operator's seat when starting engine or operating levers or controls.
7. Study control lever pattern A and pattern B. Then choose the one which is most familiar.
   Familiarize yourself with the pattern selected by operating the unit slowly and at low engine speed.
   - Engage the lever lock to prevent accidental pattern change.



(1) Pattern selector lever (Two Pattern Selection System:TPSS)
(2) Lever lock
(A) "Pattern A"
(B) "Pattern B"

8. Do not operate the excavator while under the influence of alcohol, medication, controlled substances or while fatigued.

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TECHNICAL DATA

				KUBOTA EXCAVATOR	
Model name				KX057-4	
Type				Canopy	CAB
Operating weight (including operator's)			kg	5510	5600
Engine	Type			Water cooled 4 cycle diesel engine with 4 cylinder	
	Model name			(No air conditioner type) V2607-DI-E3-BH-5 (Air conditioner type) V2607-DI-E3-BH-3	
	Total displacement		cc	2615	
	Engine power SAE J1955 gross		kW	35.5	
	Rated speed		rpm	2200	
	Low idling speed		rpm	1050 to 1200	
Performance	Unit swing speed		rpm	9.3	
	Travel speed	Fast	km/h	4.9	
		Slow	km/h	2.8	
	Ground pressure (With operator)		kPa (kgf/cm^2)	30.9 (0.315)	31.4 (0.320)
	Max. climbing angle		% (deg)	*36 (20)	
	Angle in case of crossing slope		% (deg)	*27 (15)	
Dozer	Width x Height		mm	1960 x 410 (77.16 x 16.2)	
Boom swing angle		Left	rad (deg)	1.20 (70)	
		Right	rad (deg)	0.96 (55)	
Pressure connection for attachments	Max. displacement		L / min	75 (AUX 1 port) 37 (AUX 2 port)	
	Max. pressure		MPa (kgf/cm^2)	[AUX 1 port] 17.2 (175)	[AUX 2] 17.2 (175)
Fuel tank capacity			L	75	

NOTE :
- Above dimensions are based on the machine with rubber track.
- Specifications subject to change without notice.

* With unloaded digging bucket. (JPN STD Bucket)
* Firm compacted soil.
* Operators must exercise extra caution and follow instructions in the operator's manual.
* Worse condition or heavier attachment to the above will decrease climbing angle.

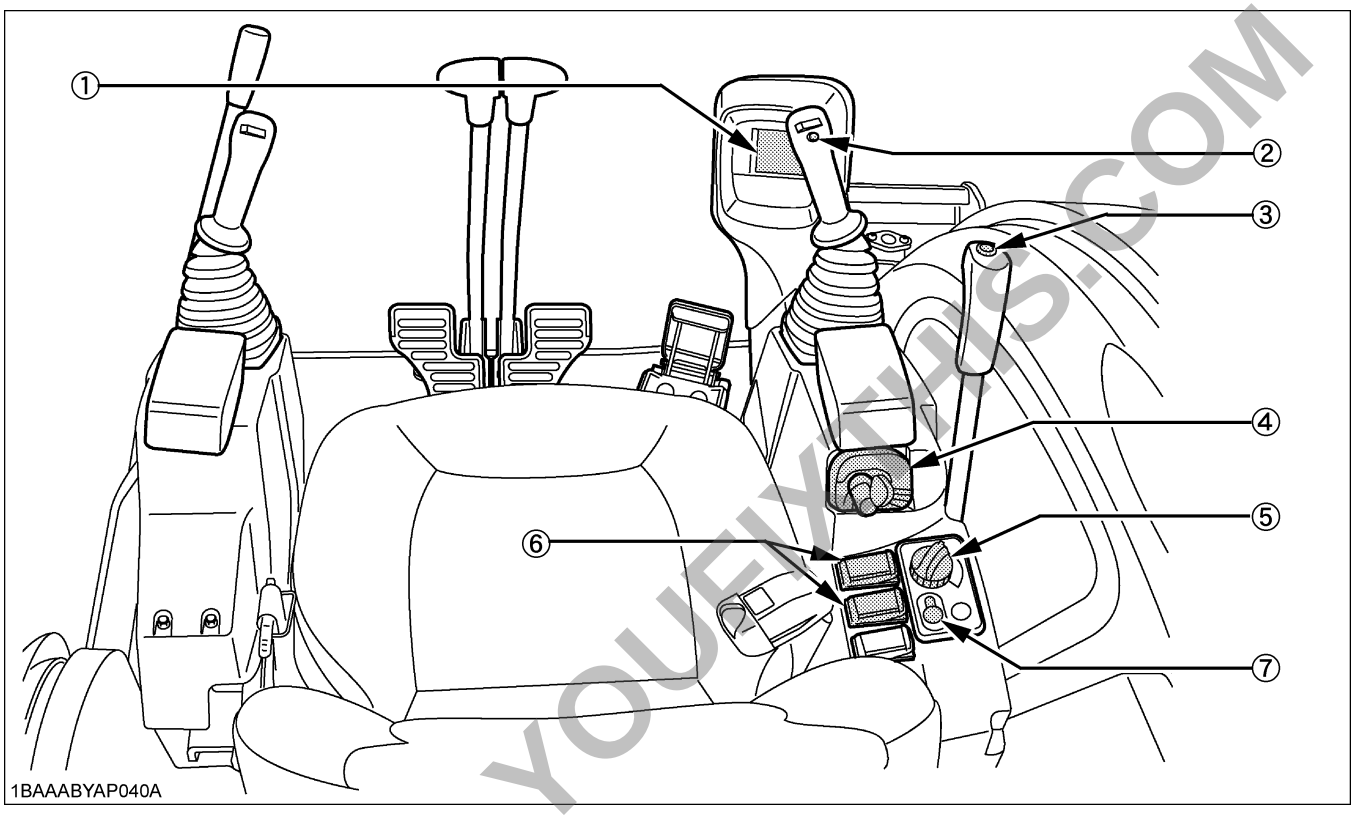
- ROPS/FORS structure complies with ISO 3471, ISO 3449 and OSHA regulations.

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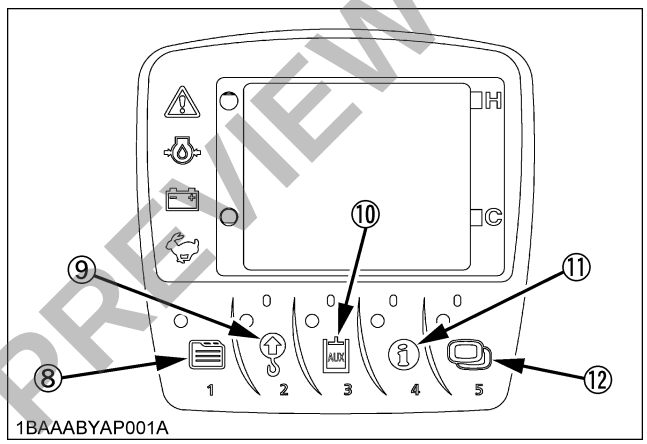
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INSTRUMENT PANEL AND CONTROL ELEMENTS

■ Instrument Panel, Switch



(1) LCD display
(2) Horn switch
(3) Travel speed switch
(4) Starter switch
(5) Throttle potentiometer
(6) Working light switch
(7) Auto idle control switch



(8) User setting switch (Switch 1)
(9) - (Switch 2)
(10) AUX port enable switch (Switch 3)
(11) Information switch (Switch 4)
(12) Display selector switch (Switch 5)

	Ref. page
Starter switch	7
LCD display	8
Fuel gauge	
Water temperature gauge	
Hour meter	
Engine tachometer	
Glow lamp	
User setting switch	
Overload warning switch	
AUX port enable switch	
Information switch	
Display selector switch	8
Warning lamp	11
Horn switch	18
Working light switch	18
Auto idle control switch	19
Throttle potentiometer	19
Travel speed switch	19

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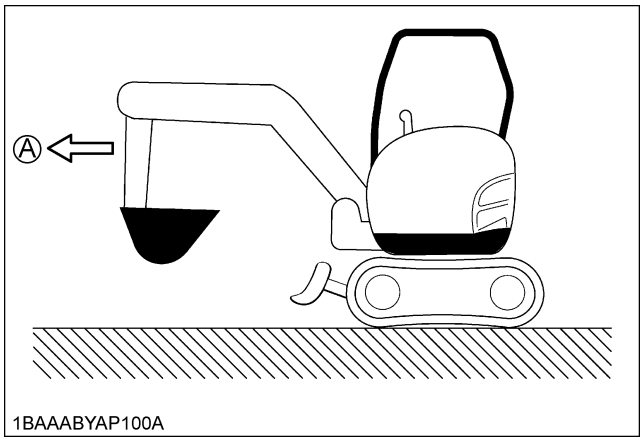
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DRIVING

WARNING

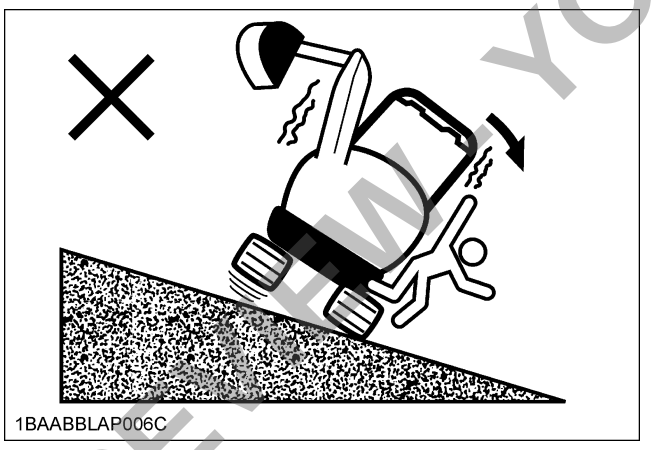
To avoid personal injury or death:

- **Before starting the engine, make sure that no one is near the excavator.**
- **Before operating the excavator, check the track direction. (Front idler and dozer blade to the front of the excavator).**

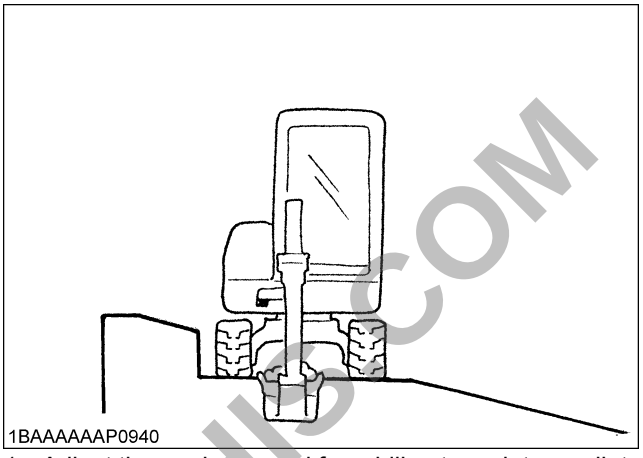


(A) "Front of the excavator"

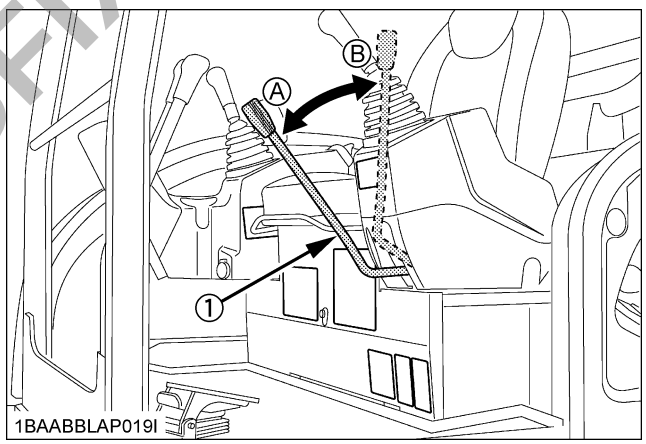
- **Use extra caution when traveling across a slope or working sideways on a slope.**



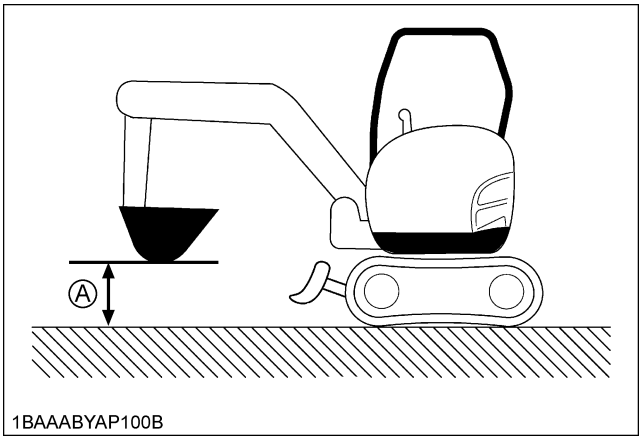
- **Recommended technique for working on a slope.**



1. Adjust the engine speed from idling to an intermediate speed.
2. Unlock the pilot control lock lever and pull in the bucket and hold the bucket about 20 to 40 cm above the ground.



(1) Pilot control lock lever (A) "Unlock" (B) "Locked"



(A) 20 to 40 cm

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MAINTENANCE

MAINTENANCE INTERVALS

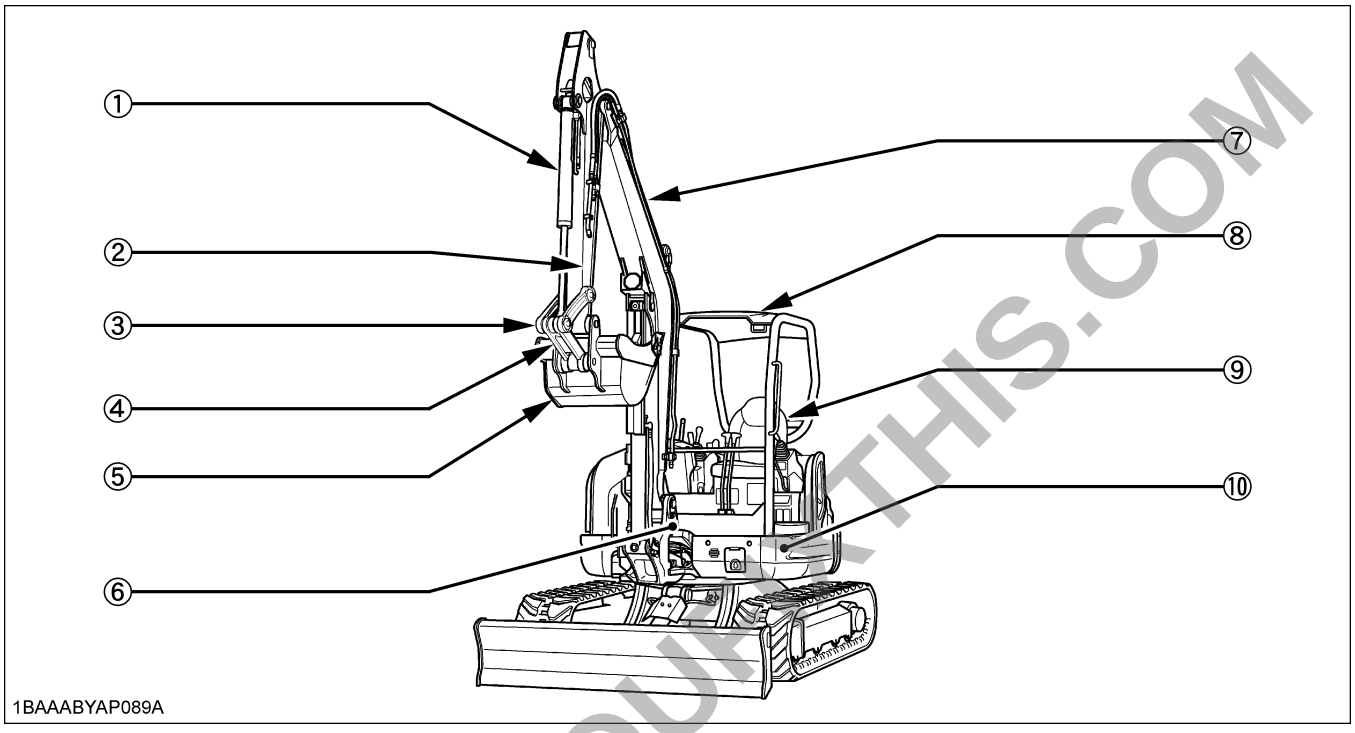
No.	Check points		Measures	Hour meter indicator									Interval	Ref. page		
				50	100	150	200	250	300	350	400	450				
1	Coolant		check	Daily check										58		
			change										every 2 years	77		
2	Fuel		check	Daily check										59		
3	Engine oil		check	Daily check										59		
			change	◉				○					every 250 hrs	71		
4	Hydraulic oil		check	Daily check										60		
			change										every 1000 hrs	74	*1	
5	Grease front attachments	Bucket and bucket link pin	-	Daily check										63		
		Boom swing fulcrum	-	Daily check										62		
		Others	-	Daily check										63		
6	Radiator and oil cooler		check	Daily check										61		
7	Washer liquid		check	Daily check										62		
8	Engine and electrical wiring		check	Daily check										62		
9	Pre-cleaner		clean	Daily check										62		
10	Fuel tank, Water separator		drain	○	○	○	○	○	○	○	○	○	every 50 hrs	64,64		
11	Battery condition		check	○	○	○	○	○	○	○	○	○	every 50 hrs	65		
12	Greasing swing bearing teeth		-	○	○	○	○	○	○	○	○	○	every 50 hrs	66		
13	V-belt tension		check	Daily check										60		
			adjust				○				○		every 200 hrs	67		
14	Radiator hoses and clamps		check				○				○		every 200 hrs	68		
			replace										every 2 years	77		
15	Air filter element	Outer element	clean				○				○		every 200 hrs	68	*2	@
			replace										every 1000 hrs	76	*2	
		Inner element	replace										every 1000 hrs	76	*2	
16	Greasing swing ball bearing		-				○				○		every 200 hrs	69		
17	Fuel filter cartridge		replace										every 500 hrs	73		@
18	Engine oil filter		replace					○					every 250 hrs	72		
19	Drive unit oil		change	◉									every 500 hrs	72		
20	Breather filter		replace										every 500 hrs	73		
21	Hydraulic return filter element		replace										every 1000 hrs	74		
22	Hydraulic suction filter element		replace										every 1000 hrs	74		
23	Filter in the pilot hydraulic system		replace										every 1000 hrs	73		
24	Fuel injection nozzle injection pressure		check										every 1500 hrs	76	*4	@
25	Front idler and track roller oil		change										every 2000 hrs	76		
26	Alternator and starter motor		check										every 2000 hrs	76		
27	Injection pump		check										every 3000 hrs	76	*4	@
28	Radiator system		rinse										every 2 years	77		
29	Fuel line and Intake air line		check				○				○		every 200 hrs	70		@
			replace										every 2 years	79	*3	

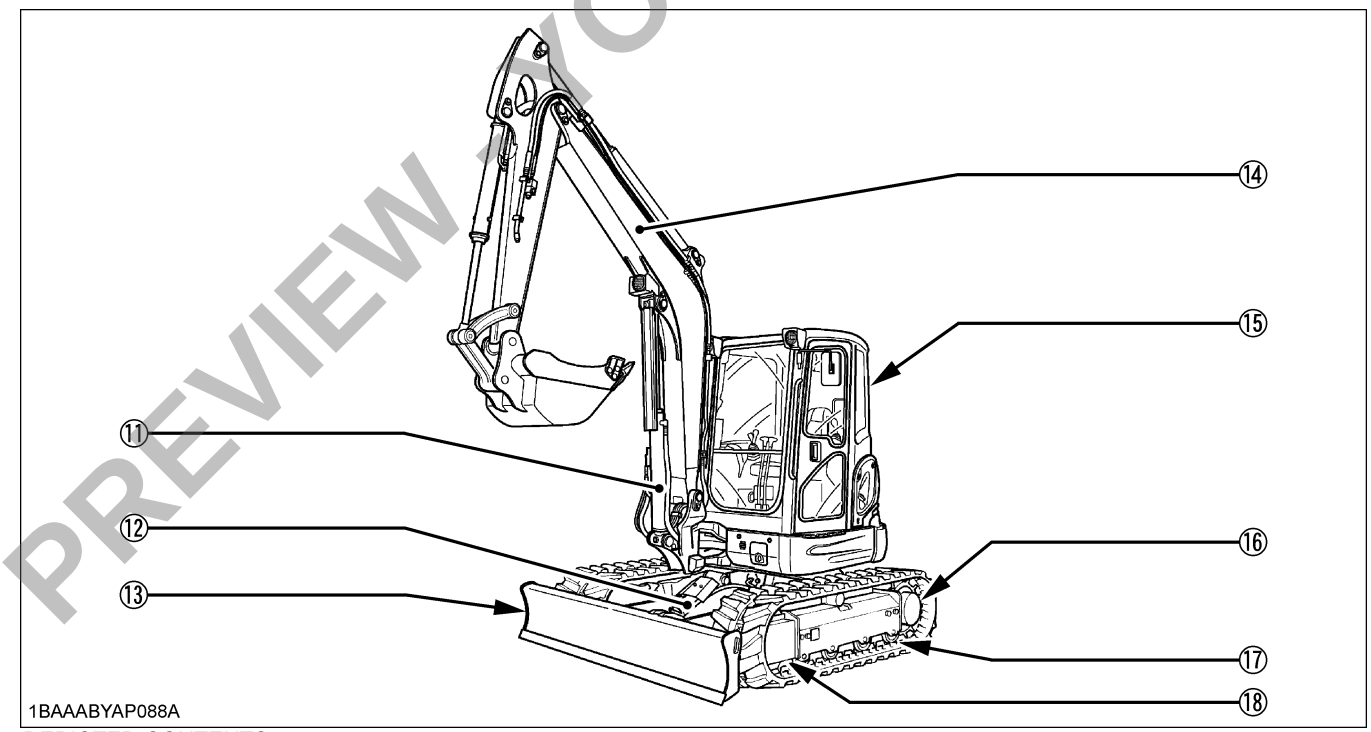
∗ 500 thru 1000 continued to the following table.

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DESCRIPTION OF MACHINE PARTS





DEPICTED CONTENTS

(1) Bucket cylinder
(2) Arm
(3) Bucket link 2 and 3
(4) Bucket link 1
(5) Bucket
(6) Swing bracket
(7) Arm cylinder
(8) Canopy
(9) Seat
(10) Swing frame
(11) Boom cylinder
(12) Dozer cylinder
(13) Dozer blade
(14) Boom
(15) Cab
(16) Drive sprocket
(17) Track roller
(18) Front idler

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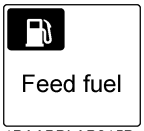
TROUBLESHOOTING

If the excavator does not show the desired performance, or when trouble arises, refer to the table below and undertake appropriate measures.

Trouble		Cause	Countermeasure
Engine	Starting difficulties	Lock levers in "UNLOCK" position	* Bring lock lever into "LOCK" position.
		Fuel is too viscous.	* Check fuel tank and filter. * Remove impurities and water. * If necessary, replace filter.
		Air or water in the fuel system	* Remove water from the fuel tank. * Check fuel pipe joint bolts and nuts for looseness. * Purging of the fuel system (for fuel filter and injection pump, see "PURGING OF THE FUEL SYSTEM" in the chapter. "OTHER ADJUSTMENTS AND REPLACEMENTS".)
		Oil viscosity is too high the engine runs sluggishly in winter.	* Pour hot water over the radiator.
		Battery is almost dead; insufficient compression.	* Recharge battery.
	Insufficient engine power	Low fuel level	* Check fuel and add if necessary.
		Clogged air cleaner	* Clean the air filter element.
	Engine suddenly stops.	Low fuel level	* Check fuel and add if necessary. * Purge the fuel system.
	Abnormal exhaust gas color	Poor fuel	* Use high quality fuel.
		Too much engine oil	* Drain engine oil to prescribed oil level.
	Water temperature in red zone (Overheating)	Defective seal of the water pump	* Replace.
		Worn or torn V-belt	* Adjust or replace.
		Thermostat is defect.	* Replace.
		Coolant level too low	* Fill to prescribed level.
		Radiator grill or fins are clogged.	* Clean.
		Coolant is contaminated with rust from the cylinder head or crank case.	* Replace coolant fluid and add anti-rust.
		Defective radiator cap (Evaporation)	* Replace.
		Corroded coolant pipes	* Clean.
		Continuous operation under full load	* Reduce load.

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No.	Message	Problem or failure (What happened)	Machine behavior (Provisional measure)	Correction
7	Not equipped with overload warning function  1BAAABYAP036A	This message appears if the overload warning switch is pressed on machines not equipped with overload warning system.	-	-
8	Out of fuel  1BAABBLAP215B	Fuel is running out.	-	Add fuel.
9	Fuel sensor error  1BAABBLAP139B	The fuel sensor system is in trouble.	The fuel level indicator does not appear on the meter.Press the display selector switch, and the normal display is switched back.The machine's other functions are still operative.	Immediately contact your local dealer.
10	Charging system error  1BAABBLAP136B	Charging system is in trouble. The battery is not changing.	The machine works until the battery goes dead.	Immediately contact your local dealer.
11	Engine oil pressure error  1BAABBLAP137B	The engine lubricating system oil pressure is too low. Stop the engine.	The engine may get burnt out. Immediately stop the engine.	Immediately contact your local dealer.
12	Overvoltage  1BAABBLAP138B	This message appears if a jumper cable is connected to a 24V battery or improper device to get the engine started or if the alternator is in trouble.	Immediately interrupt the engine if with a 24V battery. When the engine gets restarted and is running with no message appearing, it means there is no problem.	If this message still appears, immediately ask for repair.
13	Overheat advance warning Water temperature rising  1BAABBLAP140B	Water temperature is rising somewhat higher than specified.	Operate with the load a little lessened. Check the radiator and other components for clog. Immediately clean them up.	-

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TWO PATTERN SELECTION SYSTEM(TPSS)

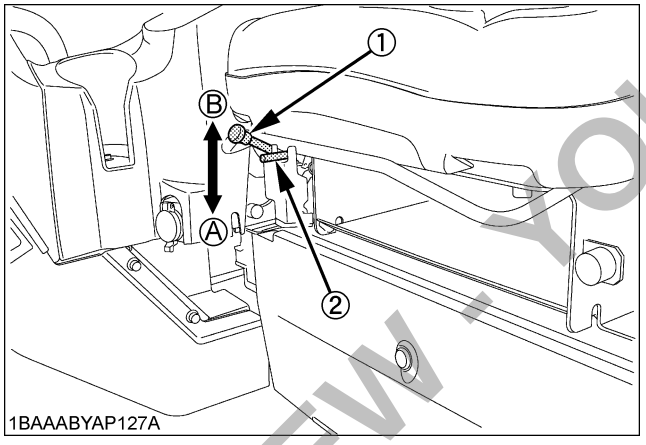
CAUTION

To avoid personal injury:

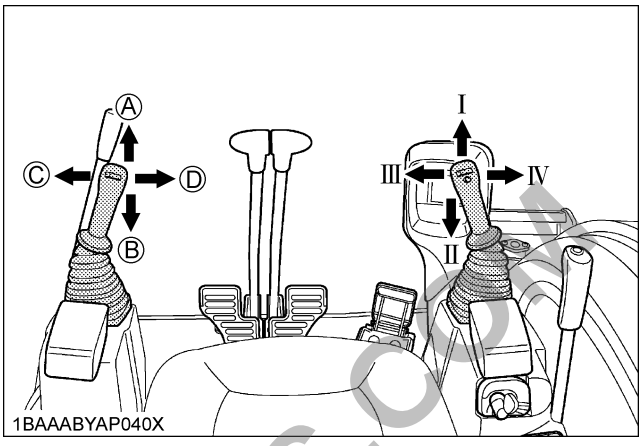
- **Study control lever pattern A and pattern B. Then choose the one which is most familiar.**
- **Position the pattern selector lever (located on the right side of operator's seat) in either the lower position (Pattern A) or the upper position (Pattern B).**
- **Engage the lever lock to prevent accidental pattern change.**
- **Familiarize yourself with the pattern selected by operating slowly.**

■Pattern Change

1. Disengage the lever lock to open the cover and position the pattern selector lever to the desired position.
2. Close the cover and engage the lever lock.



(1) Pattern selector lever (Two Pattern Selection System:TPSS)
(2) Lever lock
(A) "Pattern A"
(B) "Pattern B"



Lever Position		Pattern A	Pattern B
Attachment Control Lever (Left)	A	Boom down	Arm up
	B	Boom up	Arm crowd
	C	Swing left	Swing left
	D	Swing right	Swing right
Attachment Control Lever (Right)	Ⅰ	Arm up	Boom down
	Ⅱ	Arm crowd	Boom up
	Ⅲ	Bucket crowd	Bucket crowd
	Ⅳ	Bucket dump	Bucket dump

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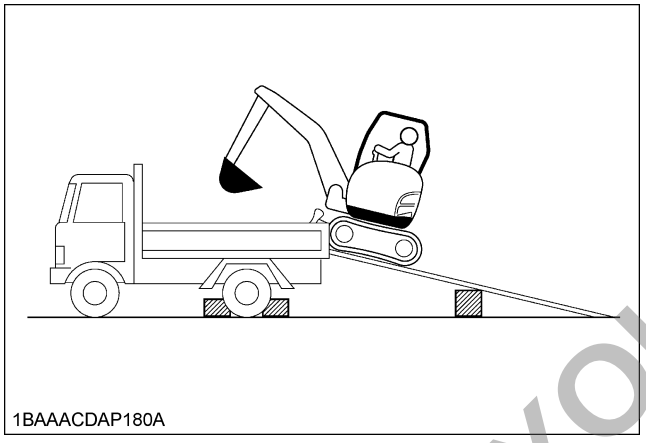
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TRANSPORTING THE EXCAVATOR ON A VEHICLE

DANGER

To avoid serious injury or death:

- **No directional changes should be made when the excavator is on the ramp. Should a change of direction be necessary, drive off the ramp completely and make the turn.**
- **When driving forwards or backwards onto the vehicle, or when swinging the upper body, make sure that neither the CAB or the gates of the vehicle will be damaged.**



1BAAACDAP180A

- **When the excavator reaches the point between the ramps and the bed, halt and then move very slowly until the excavator reaches the horizontal position.**
- **Move the excavator onto the vehicle only with the arm completely pulled in.**
- **Do not jack up the machine using its boom to load or unload the excavator from the vehicle. Doing this is dangerous. Otherwise the CAB of the vehicle could be damaged when swinging around the upper body.**
- **Make sure the ramps are of sufficient capacity and securely connected to the vehicle to safety support the machine throughout the loading / unloading operation.**

■ Transporting on a Truck

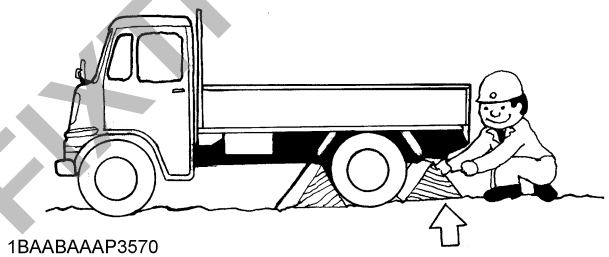
WARNING

To avoid personal injury or death:

- **After loading the machine on the truck, lower the bucket and dozer onto the truck bed.**

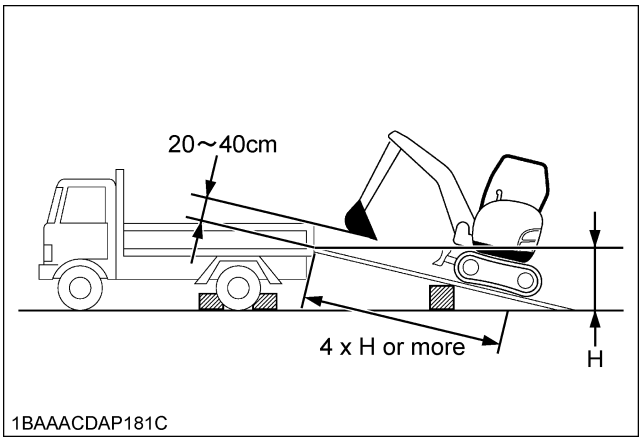
Prepare a platform to load or unload the excavator. Take following steps when using ramps.

1. Apply the parking brakes of the vehicle, and block the drive wheels from both sides.



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2. Use mounting brackets to secure the ramp properly. Connect the ramps directly with the bed.



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