

Product: 2013 Kubota WSM U35-4 Excavator Service Repair Workshop Manual  
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# WSM

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## WORKSHOP MANUAL KUBOTA EXCAVATOR

# U35-4

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# Kubota

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### TO THE READER

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# TO THE READER

This Workshop Manual provides service personnel with information about the mechanisms, service and maintenance of the construction machine. The Manual is divided into three sections, General, Mechanisms and Service.

## ■ General

This section contains information such as engine and equipment ID numbers, general precautions, maintenance schedules, inspections and maintenance items.

## ■ Mechanisms

This section describes the structure of mechanisms and explains their functions. Be sure that you fully understand this Mechanisms section prior to performing any service work, such as troubleshooting or when performing any disassembly or assembly work.

## ■ Service

This section contains information and procedures for performing maintenance on the mini-excavator, such as troubleshooting, service specification tables, torque specifications, items to be inspected and adjusted, disassembly and assembly procedures, as well as precautions, maintenance standard values and usage limits.

All of the illustrations, specifications and other information in this manual were created based on the latest model at the time of publication.

Please be aware that changes to the content may be made without prior notice.

## ■ NOTE

### • Applicable Models

Model	Engine
U35-4	D1703-M-DI-E4-BH

## ■ IMPORTANT

### • Please refer to the "Workshop Manual" below for information about the engine.

Workshop manual title: Diesel engine D1703-M-DI-E4

WEB PDF code: 9Y111-07830

Booklet print code: 9Y121-07830

CD-ROM code: 9Y131-07830

March 2013

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# **I INFORMATION**

# INFORMATION

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# 1. SAFETY FIRST

## SAFETY FIRST

- This "Safety Alert Symbol" is used in this manual and on labels on equipment to indicate important issues and warn of the danger of personal injury. Read and follow these warnings carefully.
- It is important that you thoroughly read these instructions and safety rules prior to working on the equipment and that you always follow them.



### DANGER

- Indicates that failure to follow the warning will result in serious injury or death.



### WARNING

- Indicates that failure to follow the warning may result in serious injury or death.



### CAUTION

- Indicates that failure to follow the warning may result in injury.

### ■ IMPORTANT

- Indicates that failure to follow the warning may result in damage to or a breakdown of the equipment.

### ■ NOTE

- Indicates supplementary explanations that will be helpful when using the equipment.

### [NOTE]

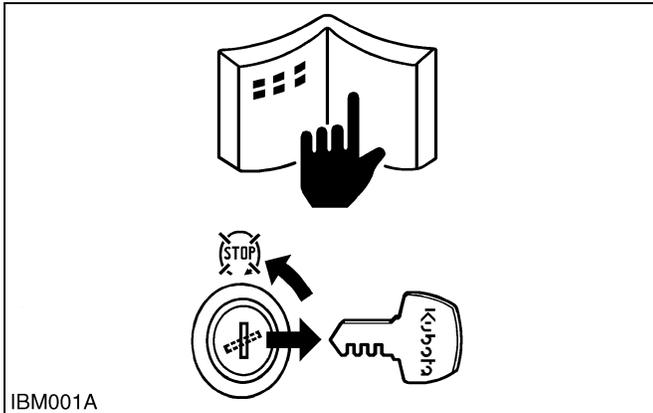
- Indicates other supplementary information to take note of.

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## 2. IN THE INTEREST OF WORK SAFETY

### [1] WORKING SAFELY WITH THE EQUIPMENT MEANS ALWAYS FOLLOWING THESE INSTRUCTIONS:

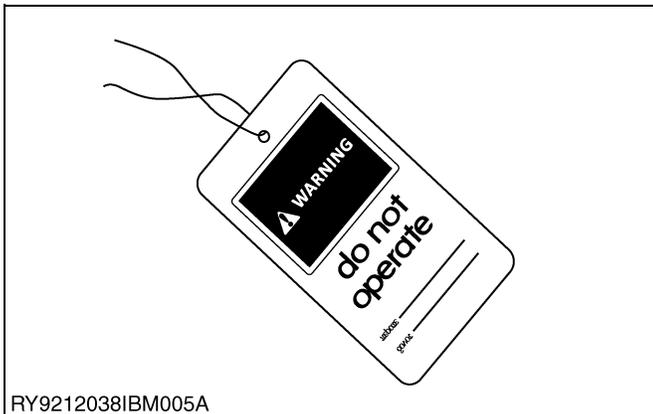
#### (1) Precautions Before Working on the Mini-Excavator



#### Before starting any service or maintenance work,

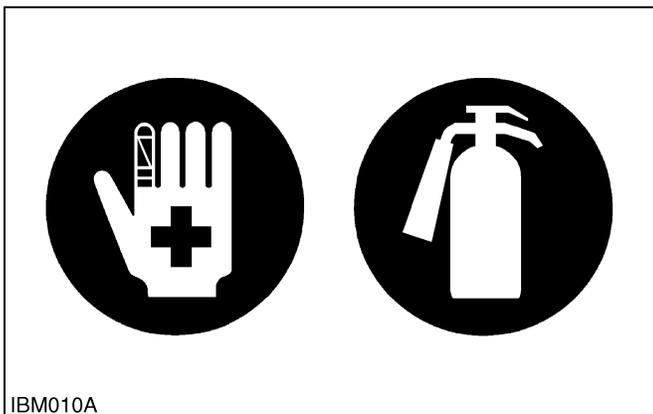
- Read all the general and safety instructions in this manual, as well as the decals on your equipment.
- Always stop the engine whenever you leave the driver's seat to inspect or clean the machine or its devices, or to inspect or adjust parts.
- Choose a safe spot for inspecting the equipment-on flat, hard ground.

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- When performing maintenance on the equipment, hang the DO NOT OPERATE sign where it will be obvious from and around the driver's seat.
- When performing maintenance or repairs, always lower attachments to the ground, stop the engine and set the brake.
- When performing maintenance on the equipment, always disconnect the negative battery cable.
- Before using tools, make sure you understand how to use them correctly and use tools in good condition and of the right size for the job.

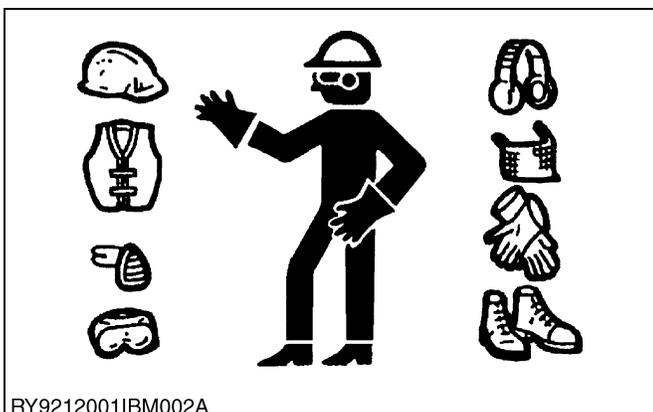
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#### Be Ready for an Emergency

- Keep a first-aid kit and fire extinguisher close at hand so you can use it when needed.
- Keep emergency contact information for doctors, hospitals and ERs handy.

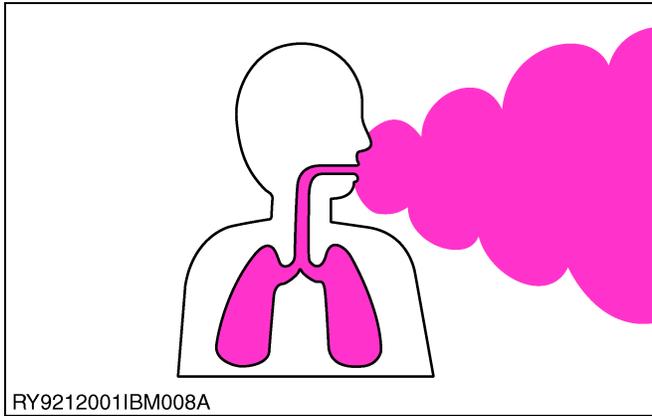
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- Wear clothes appropriate for working on equipment. Do not wear loose-fitting clothes as they may catch on the machine controls.
- When working on the equipment, use all safety gear, such as a helmet, safety glasses and shoes, that are required by law or regulation.
- Never perform maintenance while drowsy or under the influence of alcohol or drugs.

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## (2) Precautions Before Working on the Equipment



- Stop the machine on a hard and level location and make sure the area around the machine is free of obstacles and hazardous materials. When parking the machine indoors, select a spot that can be properly ventilated.
- When performing work such as with a hammer, fragments may go flying, so make sure only authorized persons are around the machine.
- Before servicing the machine, clean it off so there is no mud, debris, oil or the like sticking to it.

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- Before getting on/off of the machine, clean off around the steps so there is no mud on them. Always give yourself 3-point support when getting on/off the machine.

### CAUTION

- **3-point support means using both legs and one hand or both hands and one leg as you climb up/down.**

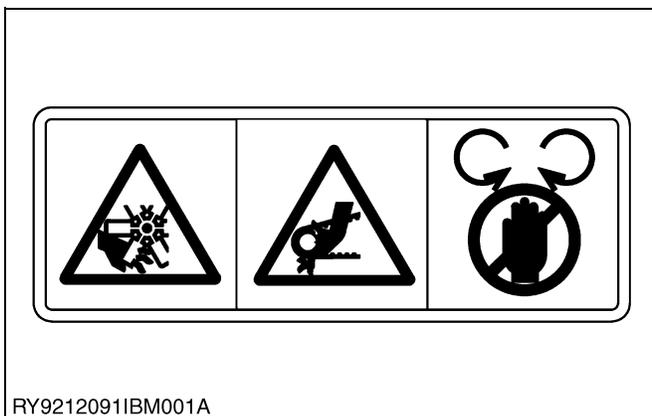
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### Starting the Machine Safely

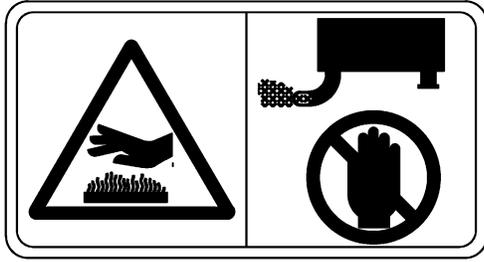
- Before starting the engine, always sit in the driver's seat and make sure the area is safe and clear.
- As it is dangerous, never start the engine from anywhere but the driver's seat.
- Always check and make sure control lever(s) are not engaged before starting the engine.
- Never start the engine by hot-wiring the starter circuit. This is not only dangerous, but may damage the machine.

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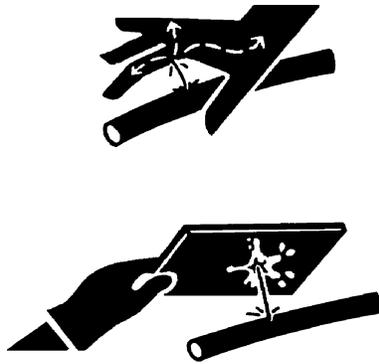


- Whenever it is necessary to open the engine covers or hood in order to service the machine, always prop them open.
- If it is absolutely necessary to run the engine while working on the machine, make sure you are clear of all rotating or moving parts. Also take care not to leave anything, such as tools or rags, near any moving parts.

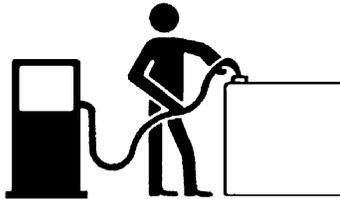
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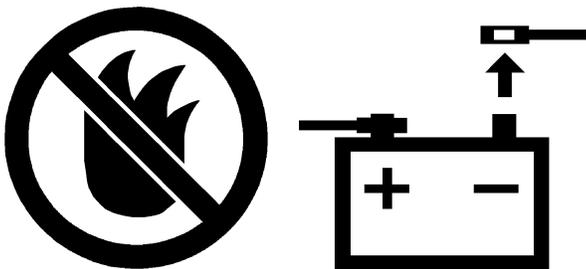
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IBM006A

- The engine, muffler, radiator, hydraulic line, etc., have parts that remain very hot even after the engine has been stopped. Be sure to avoid these parts, as touching them can result in burns. Radiator coolant, hydraulic fluid and oil also remain hot. Therefore, do not attempt to remove caps and plugs, etc., before these fluids have sufficiently cooled.
- Make sure the coolant temperature has dropped sufficiently before opening the radiator cap. Also, since the inside of the radiator is pressurized, when removing the cap, first loosen it to release the pressure before removing the cap completely.

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- The pressure in the hydraulic circuit stays at pressure even after the engine stops. Before removing parts, such as hydraulic devices from the machine, first release the pressure. Please note that when releasing residual pressure, the machine itself and/or implements may move without warning, so be very careful when releasing the pressure.
- Oil gushing out under pressure is extremely dangerous as it may pierce your skin or your eyes. Similarly, oil leaking out of pinholes is not visible. So when checking for oil leaks, always wear safety glasses and gloves and use a piece of cardboard or a wood block to shield yourself from oil.

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### **No Smoking or Open Flames while Fueling**

- Fuel is extremely flammable and dangerous. Never smoke near fuel. If fuel is spilled on the machine, its engine, or electrical parts, it may cause a fire. If fuel is spilled, wipe it all up immediately.
- Never smoke while filling the machine with fuel. And always tighten the fuel cap securely and wipe up any spilled fuel.

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- Always wear safety glasses and gloves when handling the battery.
- The gas generated by the battery is flammable. Never weld or use tools like a grinder near the battery. And never smoke near it.
- When disconnecting the battery, always disconnect the negative cable first. When connecting the battery, always connect the positive cable first.

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# 3. LABELS DISPLAYED TO PROMOTE WORK SAFETY

## [1] LOCATIONS

(1)



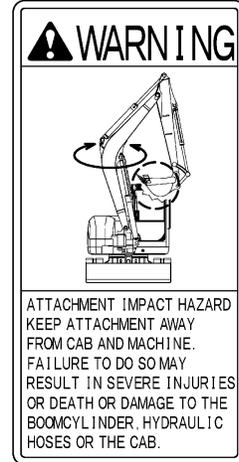
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(2)



1BAAAAQAP0800

(3)



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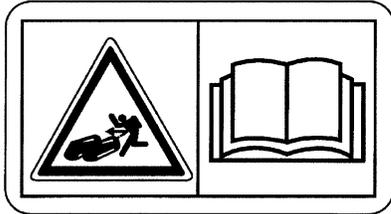
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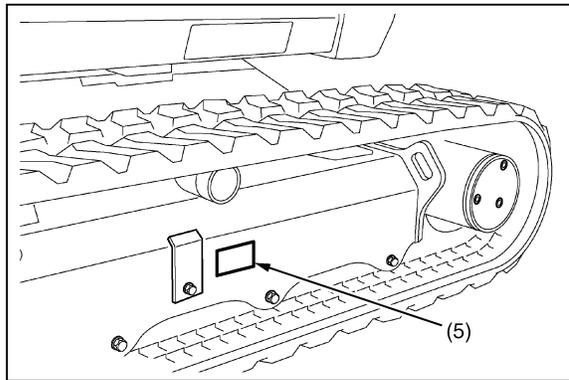
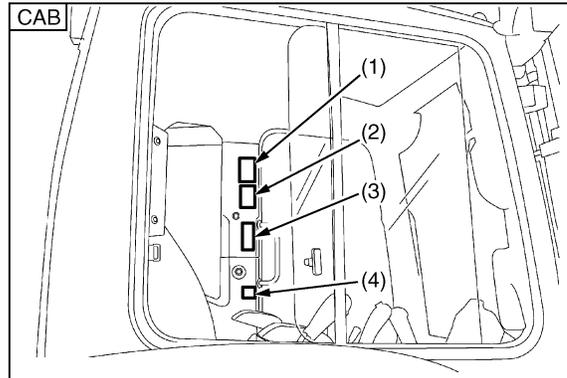
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(5)

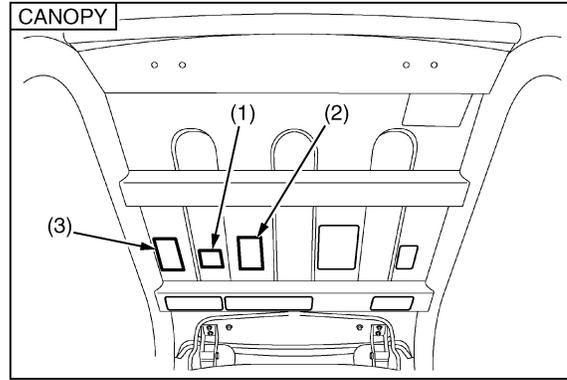
Do not loosen the grease nipple completely or too quickly.



1BAAABMAP0010



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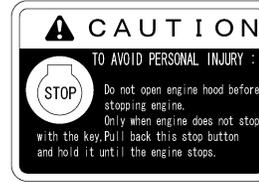
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(1)



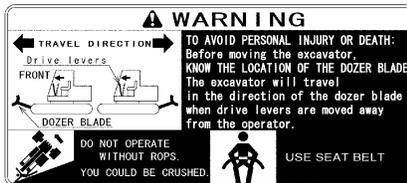
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(2)



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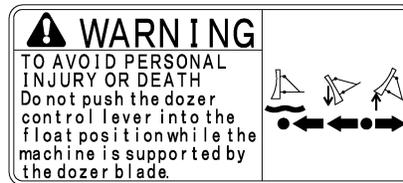
(3)



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(4)

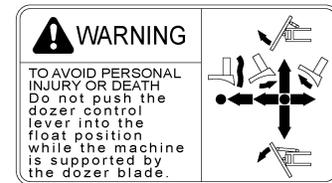
<Standard> (Normal blade type)



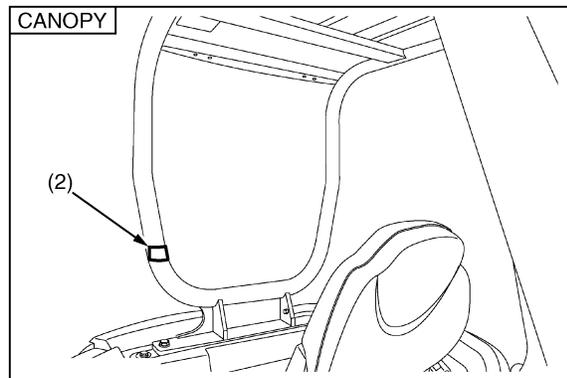
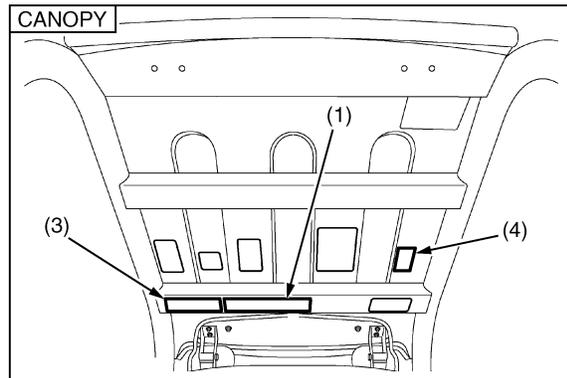
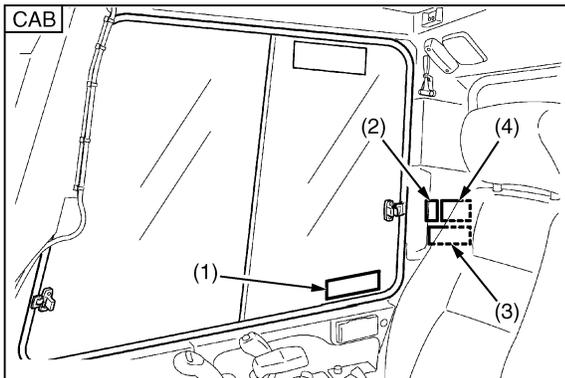
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(4)

(Angle blade type)



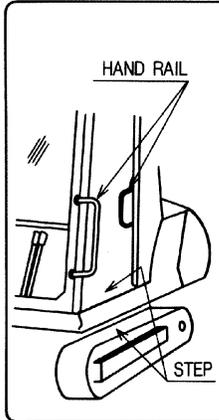
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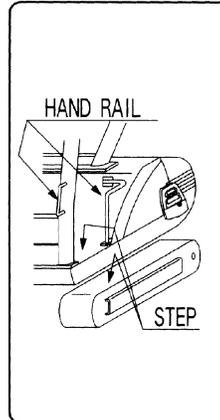
**CAUTION**

TO AVOID PERSONAL INJURY:  
MOUNT AND DISMOUNT SAFELY  
WHEN ENTERING OR LEAVING  
THE OPERATOR'S COMPARTMENT.

1. Maintain a three-point contact with the steps and handrails.
2. Face the machine.
3. Never jump on or off the machine.
4. Never attempt to mount or dismount a moving machine.
5. Never use control levers as handles.

1BAAGAAP0140

(1)



**CAUTION**

TO AVOID PERSONAL INJURY:  
MOUNT AND DISMOUNT SAFELY  
WHEN ENTERING OR LEAVING  
THE OPERATOR'S COMPARTMENT.

1. Maintain a three-point contact with the steps and handrails.
2. Face the machine.
3. Never jump on or off the machine.
4. Never attempt to mount or dismount a moving machine.
5. Never use control levers as handles.

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(2)

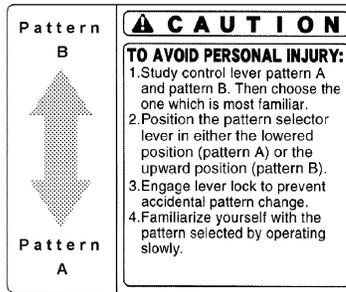


**CAUTION**

TO AVOID PERSONAL INJURY:  
Lock control lever before  
leaving compartment.

1BAAABYAP138E

(3)



**CAUTION**

TO AVOID PERSONAL INJURY:

1. Study control lever pattern A and pattern B. Then choose the one which is most familiar.
2. Position the pattern selector lever in either the lowered position (pattern A) or the upward position (pattern B).
3. Engage lever lock to prevent accidental pattern change.
4. Familiarize yourself with the pattern selected by operating slowly.

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(4)

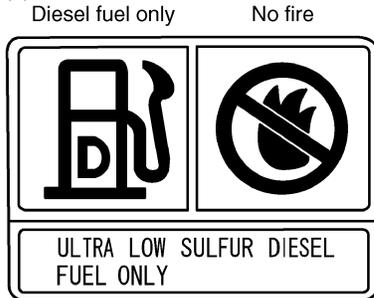


**CAUTION**

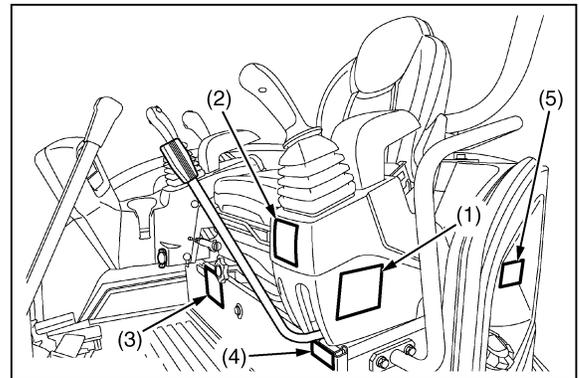
TO AVOID PERSONAL INJURY:  
Stop the engine and remove  
the key before tilting  
the seat.

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(5)



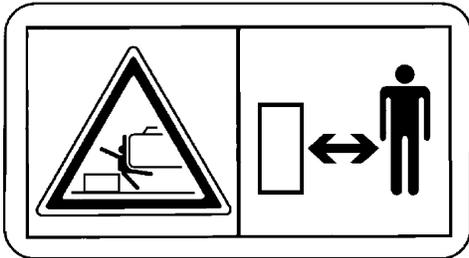
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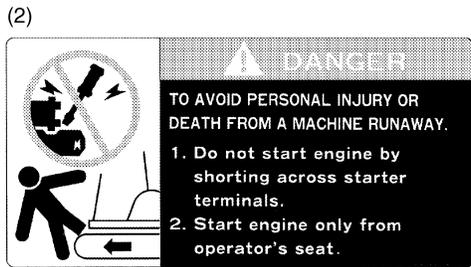
- (1) Do not allow any persons within the working range.



1BAAEAJP069A



1BAAGAAP0310



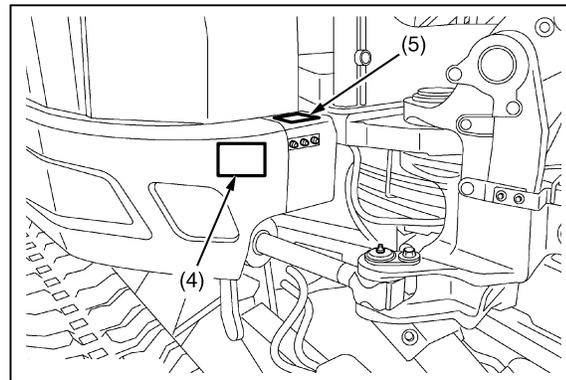
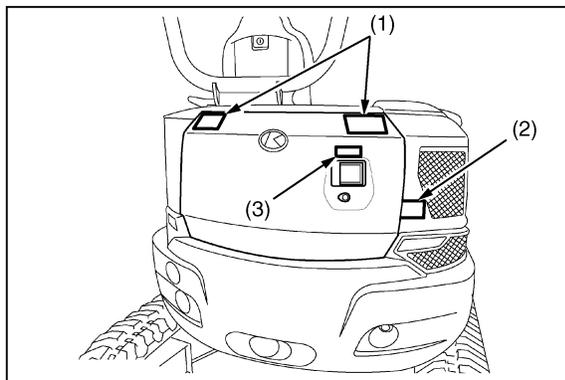
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(1) Do not touch hot parts such as exhaust etc.



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(2) Keep away from fan and fan belt.



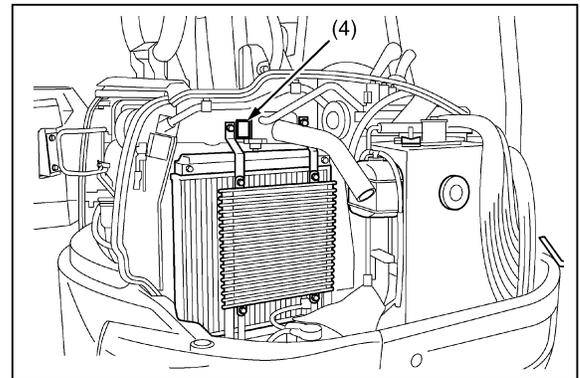
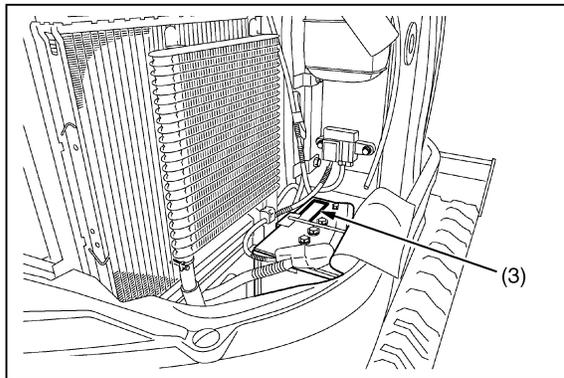
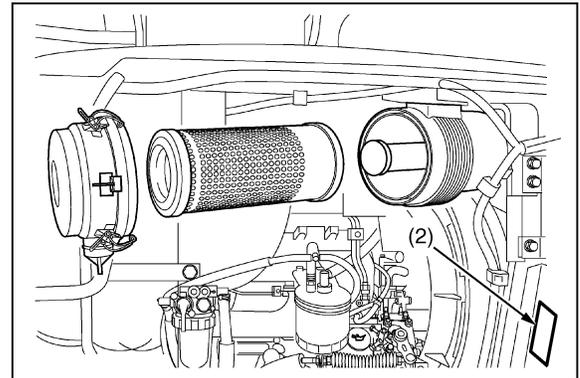
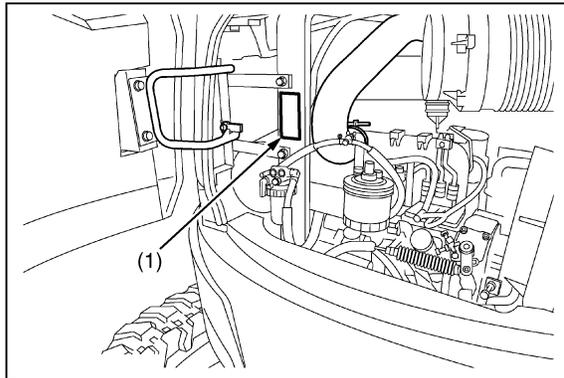
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(3) **DANGER EXPLOSIVE GASES**  
Cigarettes, flames or sparks could cause battery to explode. Always shield eyes and face from battery. Do not charge or use booster cables or adjust post connections without proper instruction and training.  
**KEEP VENT CAPS TIGHT AND LEVEL**  
**POISON CAUSES SEVERE BURNS**  
Contains sulfuric acid. Avoid contact with skin, eyes or clothing. In event of accident flush with water and call a physician immediately.  
**KEEP OUT OF REACH OF CHILDREN**

1BAAGAAP0360



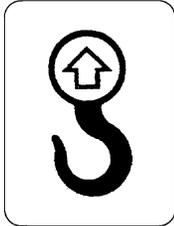
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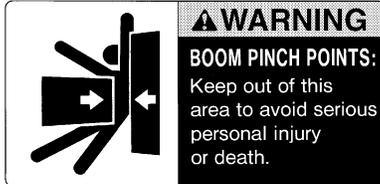
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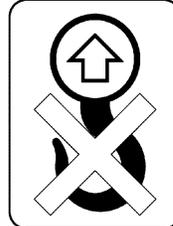
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(3)

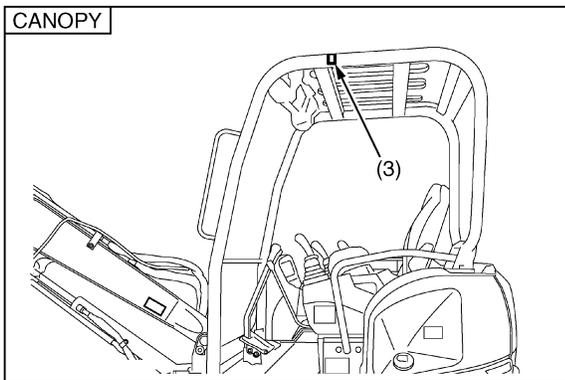
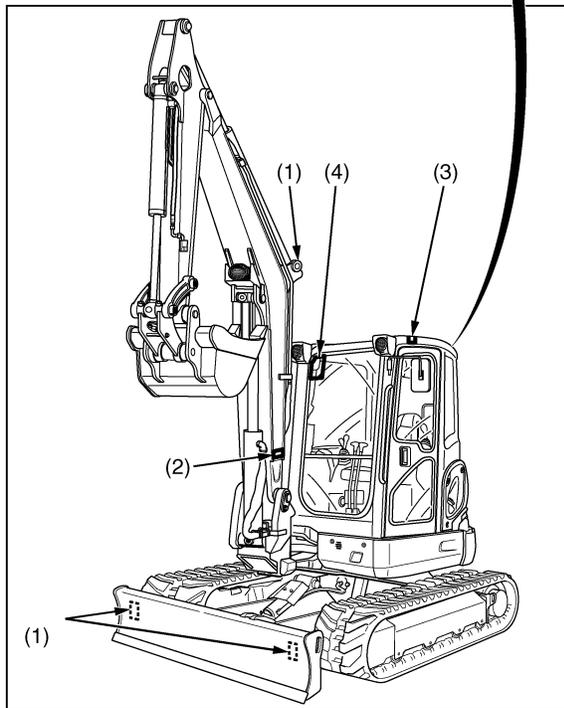
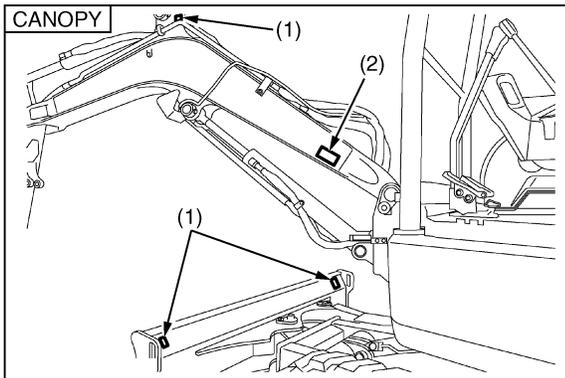
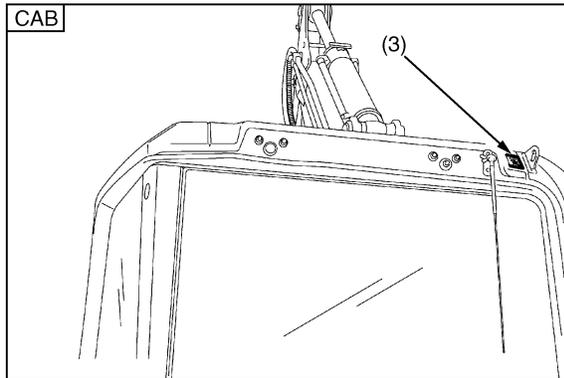


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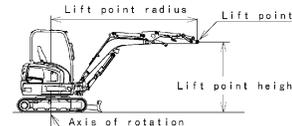
(1)

**⚠ WARNING**

**TO AVOID PERSONAL INJURY OR DEATH:**

- Do not move raised load over people.
- It is forbidden to lift loads greater than those values mentioned in the lifting capacity tables.
- The values mentioned in the table are valid only on even, hard grounds. When lifting on soft ground, the machine can tilt over due to the fact that the load is concentrated only on one side of the machine.
- The table values are calculated at the end of the arm without the bucket. In order to find the allowable loads for machines with bucket, the bucket weight must be subtracted from the values in the table.



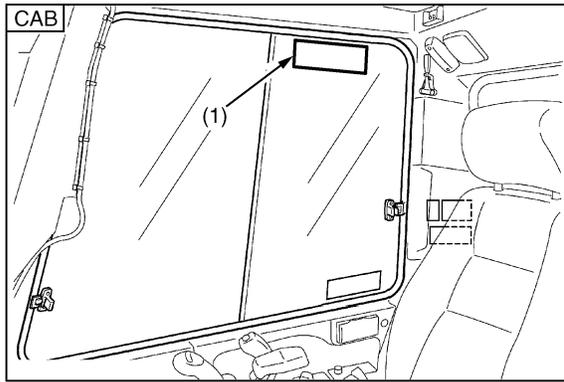


1. The lifting capacities are based on ISO 10567 and do not exceed 75% of the static tilt load of the machine or 87% of the hydraulic lifting capacity of the machine.
2. The strokes are as follows:
  - 1) The load point corresponds to the front bolt part of the arm
  - 2) The machine positions are i) over-front (Blade down), ii) over-front (Blade up), and iii) over-side.
  - 3) The operating cylinder is the boom cylinder.
3. The bucket of the excavator, the hook, the sling and other lifting accessories are taken into consideration for the loads.

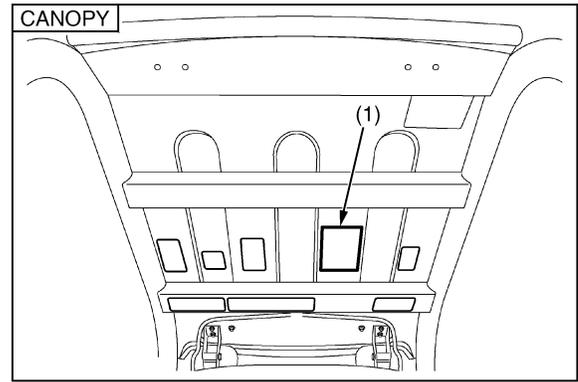
LIFT POINT HEIGHT (ft)	LIFTING CAPACITY OVER-FRONT BLADE DOWN Unit=1000 lbs.				LIFTING CAPACITY OVER-FRONT BLADE UP Unit=1000 lbs.				LIFTING CAPACITY OVER-SIDE Unit=1000 lbs.			
	LIFT POINT RADIUS (ft)				LIFT POINT RADIUS (ft)				LIFT POINT RADIUS (ft)			
	4	8	12	14	4	8	12	14	4	8	12	14
10			1.21				1.21				1.15	
8			1.24				1.24				1.14	
6		1.95	1.36	1.28		1.95	1.22	0.95		1.95	1.11	0.87
4		2.73	1.53	1.35		2.20	1.18	0.93		1.96	1.08	0.85
2		3.23	1.68	1.41		2.11	1.15	0.92		1.88	1.05	0.84
0		3.33	1.77	1.43		2.07	1.13	0.90		1.84	1.02	0.82
GL												
-2	2.71	3.20	1.75	1.43	2.71	2.06	1.11		2.71	1.83	1.01	
-4	4.16	2.86	1.54		4.16	2.07	1.12		4.16	1.84	1.02	
-6		2.22				2.09				1.86		

Machine with ROPS canopy and rubber crawler, without bucket

1BAAEAJAP080A



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## [2] LABEL MAINTENANCE

### Thoroughly Read, Understand and Follow Safety Precautions on Labels

- Always keep labels in a clean, undamaged state.
- If labels get dirty, wipe them off with soapy water and a soft cloth.  
If solvents such as paint thinner or engine oil are used, the text and or figures may fade away.
- When using a pressure washer to clean the equipment, do not spray any labels directly as doing so may make them peel off.
- If a label is damaged or lost, order a new one from your dealer and affix it as before.
- Before affixing a new label, completely wipe off any dirt or grime on the surface, allow it to dry and then affix in the same place.
- When replacing a part that has a label on it, replace the label at the same time.

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## 4. MAIN SPECIFICATIONS

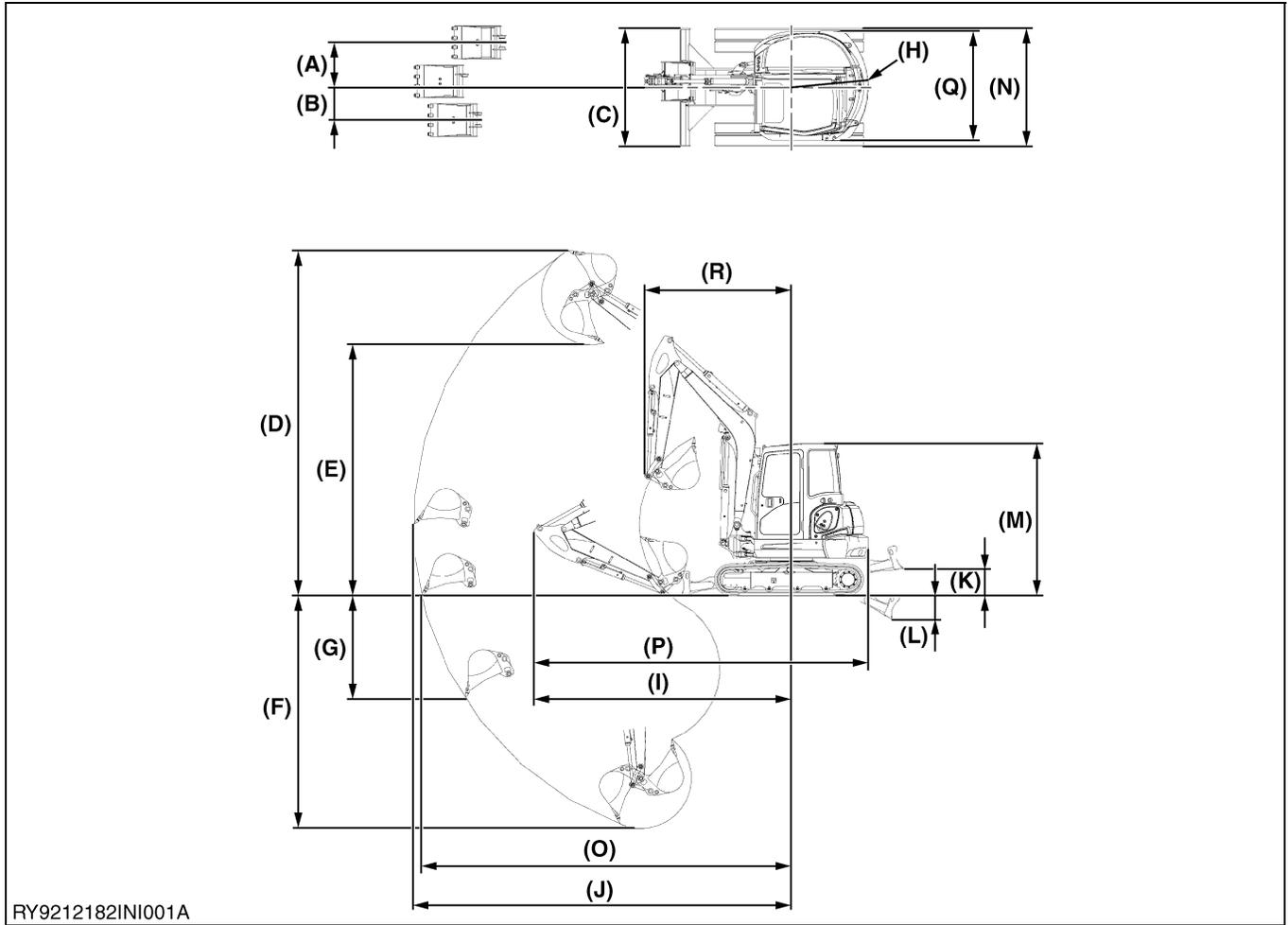
		KUBOTA EXCAVATOR			
Model name		U35-4			
Type		Canopy	CAB	Angle Blade Type	
				Canopy	CAB
Operating weight (including operator's)		3685 kg 8124 lbs	3835 kg 8455 lbs	3845 kg 8478 lbs	3990 kg 8800 lbs
Engine	Type	Water cooled 4 cycle diesel engine with 3 cylinder			
	Model name	D1703-M-DI-E4			
	Total displacement	1647 cc (100.5 cu.in)			
	Engine power SAE gross	18.5 kW (25 HP)			
	Rated speed	2200 rpm			
	Low idle speed	1300 to 1350 rpm			
Performance	Unit swing speed	8.9 rpm			
	Travel speed	Fast	4.6 km/h (2.9 mph)		
		Slow	3.0 km/h (1.9 mph)		
	Ground pressure (With operator)	33.7 kPa 0.34 kgf/cm <sup>2</sup> 4.8 psi	35.1 kPa 0.36 kgf/cm <sup>2</sup> 5.0 psi	35.2 kPa 0.36 kgf/cm <sup>2</sup> 5.1 psi	36.5 kPa 0.37 kgf/cm <sup>2</sup> 5.3 psi
	Climbing angle	58 % (30 deg)			
	Angle in case of crossing slope	27 % (15 deg)			
Blade	Width × Height	1700 × 343 mm 66.9 × 13.5 in.			
	Max. swing angle	Left	–	25 deg	
		Right	–	25 deg	
Boom swing angle	Left	1.22 rad (70 deg)			
	Right	0.87 rad (50 deg)			
Pressure connection for attachments	Max. displacement (Theoretical)	60.5 L/min (15.9 U.S.gals/min)			
	Max. pressure	17.2 MPa 175 kgf/cm <sup>2</sup> 2494 psi			
Fuel tank capacity		45.1 L (11.9 U.S.gals)			

### NOTE

- Above dimensions are based on the machine with rubber trucks.
- Specifications subject to change without notice.
- \* With unloaded digging bucket. (Q/C 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.

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# 5. DIMENSIONS



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	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)
U35-4	789 mm 31.1 in.	481 mm 18.9 in.	1700 mm 66.9 in.	4844 mm 190.7 in.	3397 mm 133.7 in.	3007 mm 118.4 in.	2013 mm 79.2 in.	900 mm 35.4 in.	3735 mm 147 in.	5281 mm 207.9 in.
	(K)	(L)	(M)		(N)	(O)	(P)	(Q)	(R)	
U35-4	371 mm 14.6 in.	369 mm 14.5 in.	2470 mm 97.2 in.	2480 mm 97.6 in.	1700 mm 66.9 in.	5165 mm 203.3 in.	4635 mm 182.5 in.	1479 mm 58.2 in.	2222 mm 87.5 in.	

\* Dimensions in parentheses: CANOPY type models

**NOTE**

- Above dimensions are based on the machine with KUBOTA original bucket.
- Above dimensions are based on the machine with rubber track.
- Specifications subject to change without notice.

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# **G GENERAL**

# GENERAL

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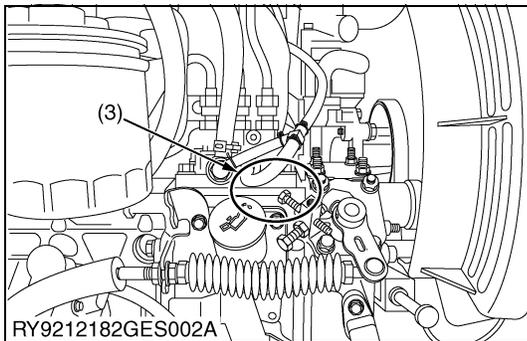
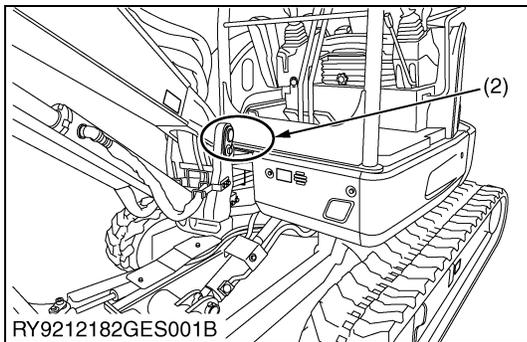
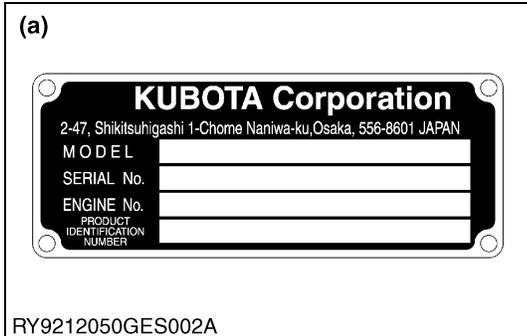
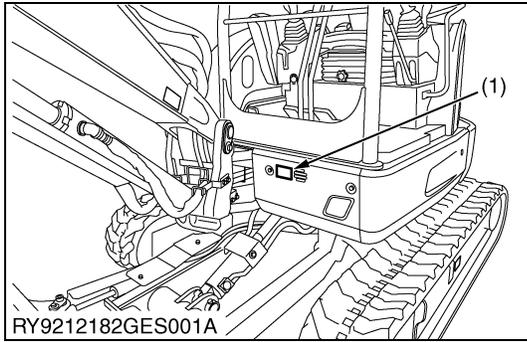
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# 1. CHECKING EXCAVATOR IDENTIFICATION

When consulting with your local KUBOTA dealer about this machine, please provide the model of the machine, its frame and engine numbers and the number of hours on the hour meter.

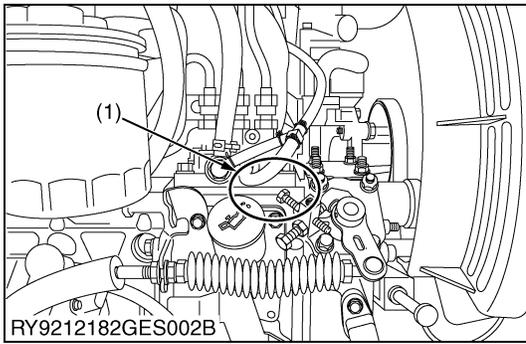
- (1) Machine Nameplate (Model, Frame Number, Engine Number)      (a) Model Nameplate
- (2) Frame Number
- (3) Engine Number

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## 2. ENGINE IDENTIFICATION

### [1] MODEL NAME AND SERIAL NUMBER



Be sure to check the engine nameplate and serial number when you wish to consult about the engine.

The model and serial number of the engine need to be checked prior to servicing the engine or replacing any of its parts.

■ **Engine Serial No.**

The engine serial number is the numerical ID of the engine and is printed after the engine's model number.

The year and month of manufacture are indicated as follows.

#### Engine Series

Number or Alphabet	Series	Number or Alphabet	Series
1	05 (include: WG)	6	GZ, OC, AC, EA, E
2	V3	7	03
3	08	8	07
4	SM (include: WG)	A	EA, RK
5	Air Cooled Gasoline	B	03 (KET Production)

#### Production Year

Alphabet or Number	Year	Alphabet or Number	Year
1	2001	F	2015
2	2002	G	2016
3	2003	H	2017
4	2004	J	2018
5	2005	K	2019
6	2006	L	2020
7	2007	M	2021
8	2008	N	2022
9	2009	P	2023
A	2010	R	2024
B	2011	S	2025
C	2012	T	2026
D	2013	V	2027
E	2014		

(1) Engine Model Name and Serial Number

**(To be continued)**

(Continued)

**Production Month and Lot Number**

<b>Month</b>	<b>Engine Lot Number</b>	
January	A0001 to A9999	from B0001
February	C0001 to C9999	from D0001
March	E0001 to E9999	from F0001
April	G0001 to G9999	from H0001
May	J0001 to J9999	from K0001
June	L0001 to L9999	from M0001
July	N0001 to N9999	from P0001
August	Q0001 to Q9999	from R0001
September	S0001 to S9999	from T0001
October	U0001 to U9999	from V0001
November	W0001 to W9999	from X0001
December	Y0001 to Y9999	from Z0001

\* Alphabetical letters "I" and "O" are not used.

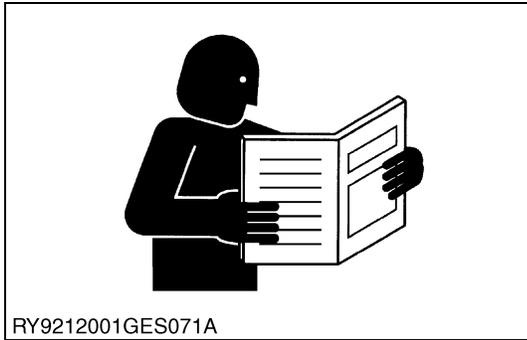
(a) (b)(c)(d) (e)  
e.g. D1703 - 7 C U 1237

- (a) **D1703**: Engine Model Name
- (b) **7**: Engine Series (03 series)
- (c) **C**: Production Year (2012)
- (d) **U**: Production Month (October)
- (e) 1237: Lot Number: (**0001 to 9999** or **A001 to Z999**)

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### 3. GENERAL PRECAUTIONS



Whenever performing maintenance on the machine, always read the Safety Precautions in this manual and the Operator's Manual carefully, become familiar with them and perform the work safely.

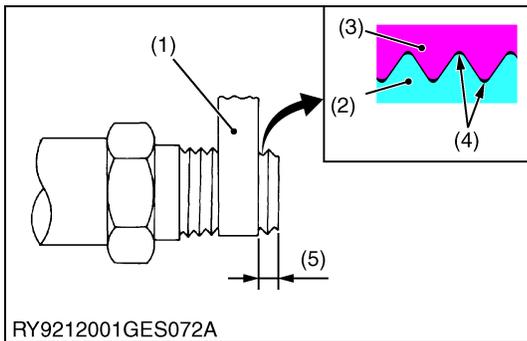
Before performing any maintenance on the machine, make sure it is sufficiently clean and choose a sufficiently clean location to perform any disassembly.

Before performing maintenance on the machine, always disconnect the negative battery cable first.

Whenever a special tool is required, use the special tool that KUBOTA recommends. Make any special tools that are not used very frequently according to the diagrams in this manual.

Always use genuine KUBOTA parts to maintain the performance and safety characteristics of the machine.

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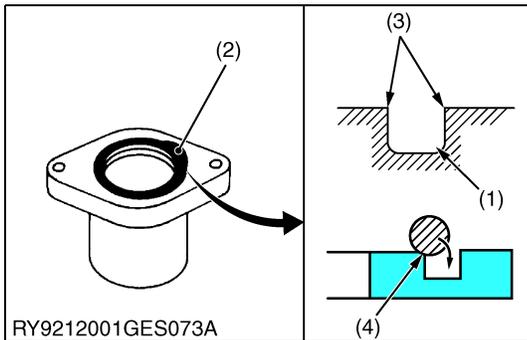


#### Plumber's Tape

- Wrap plumber's tape on the threads before tightening taper couplings. After wrapping (2 wraps) the plumber's tape, tighten to the specified torque. Once the coupling is tightened, do not loosen it as this will cause an oil leak.

- |                     |                          |
|---------------------|--------------------------|
| (1) Plumber's Tape  | (4) Gap                  |
| (2) External Thread | (5) Leave 1 to 2 Threads |
| (3) Internal Thread |                          |

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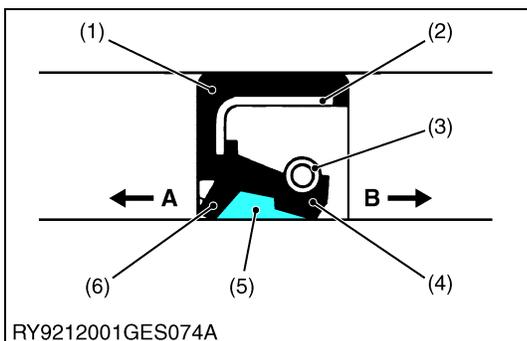


#### O-Ring

- Clean the groove the O-ring goes in and remove any burrs. Apply grease on the O-ring when inserting it in the groove. (Except floating seals)
- When putting the O-ring in the groove, be careful as it is easy at the very end to twist the O-ring against the inside of the groove. If it gets twisted, roll it gently with your fingertip to untwist it.

- |                     |                                                    |
|---------------------|----------------------------------------------------|
| (1) O-Ring Groove   | (4) If the Ring Touches This Corner, It Will Twist |
| (2) O-Ring          |                                                    |
| (3) Check for Burrs |                                                    |

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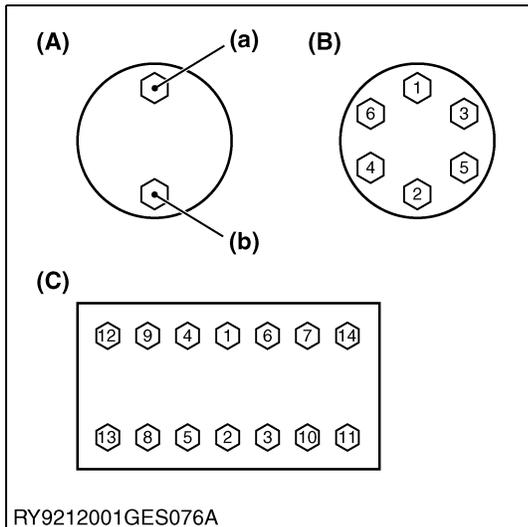
#### Oil Seal

- Do not face the lip of the oil seal in the wrong direction. Face the main lip toward the material to be sealed.
- After oil seals are replaced, apply grease to the moving parts around the lip to prevent the dry surfaces from wearing against each other when the engine is started. If the seal has a dust lip, fill the gap between the lips with grease.
- As a general rule, use a press to insert the oil seal in place. If that is not possible, use an appropriate tool to gently and evenly tap it into place, taking care that it does not go in at a slant. Press the seal all the way so it seats in the boss.

- |                |                                       |
|----------------|---------------------------------------|
| (1) Gasket     | <b>A : Air (Outside)</b>              |
| (2) Metal Ring | <b>B : Hydraulic Chamber (Inside)</b> |
| (3) Spring     |                                       |
| (4) Main Lip   |                                       |
| (5) Grease     |                                       |
| (6) Dust Lip   |                                       |

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**Tightening Bolts and Nuts**

- Tighten bolts and nuts to their specified torque.
- Tighten nuts and bolts alternately top/bottom **(a) (b)**, left/right so the torque is distributed evenly.

(A) Top/Bottom Alternately  
(B) Across Diagonally

(C) Diagonally Across the Center

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**Assembling Hydraulic Hoses**

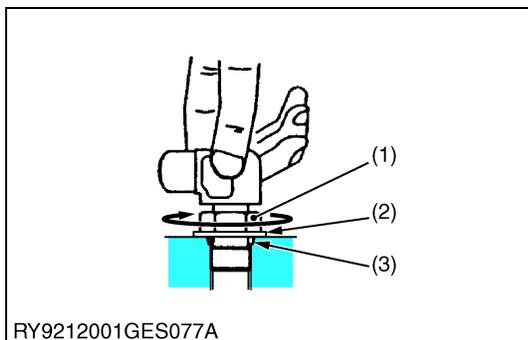
- Tighten to their specified torque.
- Before assembling, wipe the inside of metal fittings clean of any dirt.
- After assembly, put the fitting under normal pressure and check that it does not leak.

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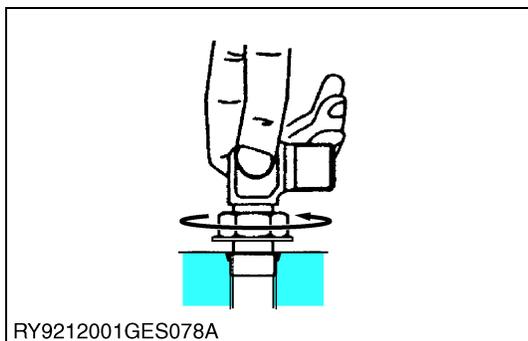
**Elbow with Male Seat Assembly Procedure**

When assembling an elbow with male seat, adhere to the following procedures to prevent deformation of O-rings and leaks.

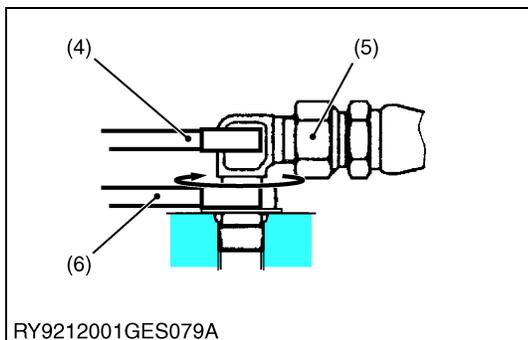
1. Connecting to Valves
  - Clean the blow with male seat and the surface of the seal opposite and mount with the lock-nut on top.
  - Finger tighten till it touches the washer.
2. Positioning
  - Turn the mouth of the elbow back so it faces the right direction. (not back over 1 turn)



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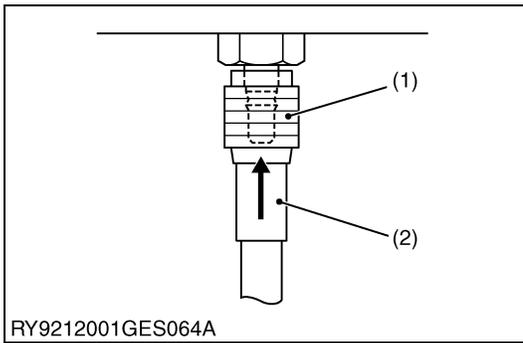


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3. Fasten
  - Tighten the lock-nut to the specified torque with a wrench.

- |                   |                                  |
|-------------------|----------------------------------|
| (1) Lock-Nut      | (4) Wrench for Holding           |
| (2) Washer        | (5) Hose                         |
| (3) Seal (O-Ring) | (6) Torque Wrench for Tightening |

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### **Installing and Removing Quick Couplings**

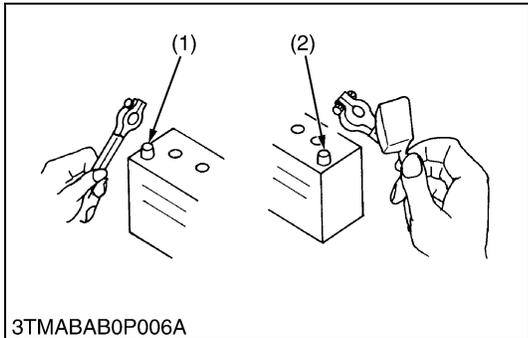
- To remove a quick hose coupling, push the fitting (2) in the direction of the arrow and pull on the plastic part (1) in the opposite direction.
- To attach a quick coupler, push it in firmly in the direction of the arrow. Then check that it will not pull off.

(1) Plastic Part

(2) Fitting

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# 4. HANDLING PRECAUTIONS FOR ELECTRICAL PARTS AND WIRING



Follow the precautions below for handling electrical parts and wiring to ensure safety and prevent damage to the machine and nearby equipment.

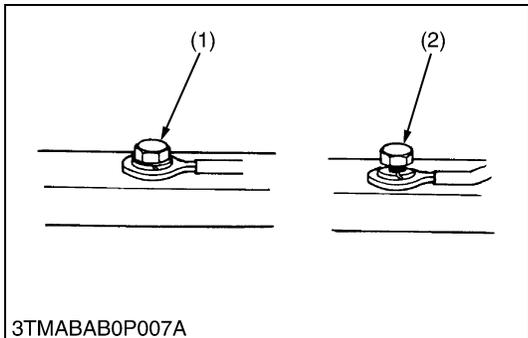
**■ IMPORTANT**

- **Inspect electrical wiring for damage and/or loose connections.**
- **Do not alter or rewire any electrical parts or wiring.**
- **Always remove the negative battery cable first when disconnecting the battery and attach the positive cable first when connecting it.**

(1) Battery Cable (-) Side                      (2) Battery Cable (+) Side

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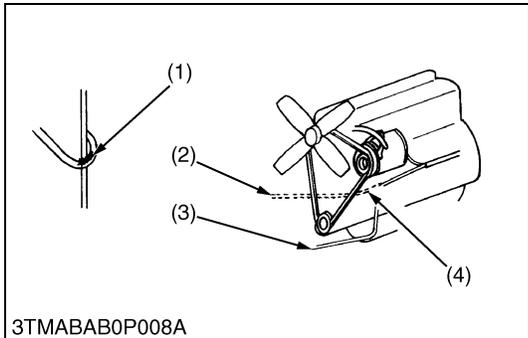
## [1] WIRING



- Tighten wiring terminals securely.

(1) Correct (Tightened Securely)              (2) Incorrect (Poor Contact if Loose)

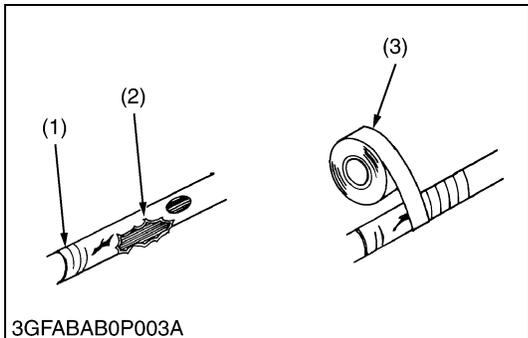
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- Keep wiring away from hazards.

(1) Hazardous Positioning                      (3) Wiring Position (Right)  
 (2) Wiring Position (Wrong)                  (4) Hazardous Position

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- Immediately repair or replace old or damaged wiring.

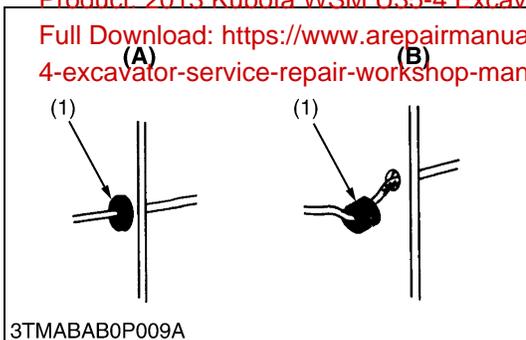
(1) Damaged                                              (3) Electrical Tape  
 (2) Torn

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Product: 2013 Kubota WSM U35-4 Excavator Service Repair Workshop Manual

Full Download: <https://www.aresairmanual.com/downloads/2013-kubota-wsm-u35-4-excavator-service-repair-workshop-manual/>

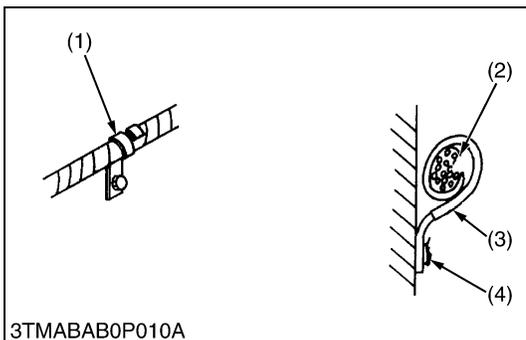
• Insert grommet securely.



(1) Grommet

(A) Correct  
(B) Incorrect

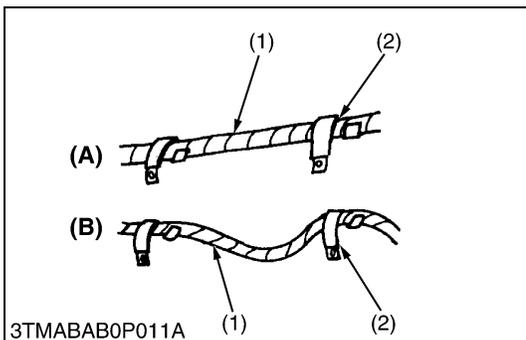
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• Clamp wiring securely but do not damage wires with the clamp.

(1) Clamp (Spiral Clamp Around Wire) (3) Clamp  
(2) Wire (4) Welding Mark

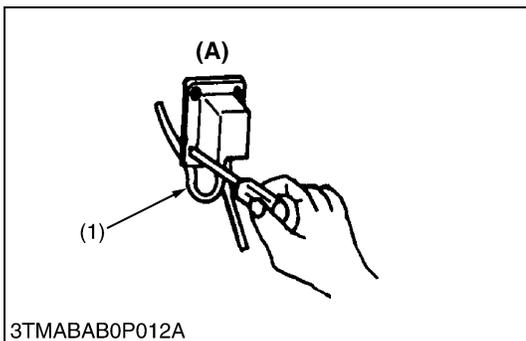
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• Clamp wiring so it is not twisted, pulled too tight or sag too much. However, moving parts may require play in the wiring.

(1) Wire (A) Correct  
(2) Clamp (B) Incorrect

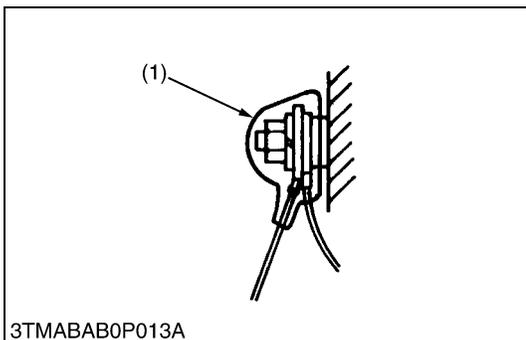
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• Do not pinch or bind wiring when installing parts.

(1) Wire (A) Incorrect

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• After wiring, double-check terminal protectors and clamps before connecting battery cables.

(1) Cover (Install Covers Securely)

RY9212001GEG0031US0

Sample of manual. Download All 514 pages at:

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