MAINTENANCE SCHEDULE

If the machine is equipped with a hydraulic breaker, the maintenance schedule for some parts will be different. For details, see "MAINTENANCE INTERVAL FOR HYDRAULIC BREAKER (PAGE 4-15)" to confirm the correct maintenance schedule when carrying out maintenance.

MAINTENANCE SCHEDULE CHART

INITIAL 250 HOURS MAINTENANCE (ONLY AFTER THE FIRST 250 HOURS)
Replace Fuel Filter Cartridge ---- 4- 59
Change Oil In Engine Oil Pan, Replace Engine Oil Filter Cartridge ---- 4- 60

WHEN REQUIRED
Check, clean and replace air cleaner element ---- 4- 17
Clean inside of cooling system ---- 4- 21
Replace water separator element ---- 4- 23
Clean fuel tank ---- 4- 24
Check and tighten track shoe bolts ---- 4- 25
Check and adjust track tension ---- 4- 26
Check road liners or rubber shoes ---- 4- 28
Check and adjust rubber shoe tension ---- 4- 30
Replace road liners ---- 4- 31
Replace rubber shoes ---- 4- 32
Change steel shoes or road liner to rubber shoes ---- 4- 34
Replace bucket teeth (vertical pin type) ---- 4- 35
Replace bucket teeth (horizontal pin type) ---- 4- 38
Adjust bucket clearance ---- 4- 39
Check window washer fluid level, add fluid ---- 4- 40
Check and adjust air conditioner ---- 4- 41
Check, clean and lubricate cab slide door rail and roller ---- 4- 42
Replace breaker circuit additional oil filter element ---- 4- 43
Wash washable floor ---- 4- 44
Bleeding air from hydraulic system ---- 4- 45

CHECKS BEFORE STARTING

EVERY 50 HOURS MAINTENANCE
Drain Water From Fuel Tank ---- 4- 49

EVERY 100 HOURS MAINTENANCE
Lubricating ---- 4- 50

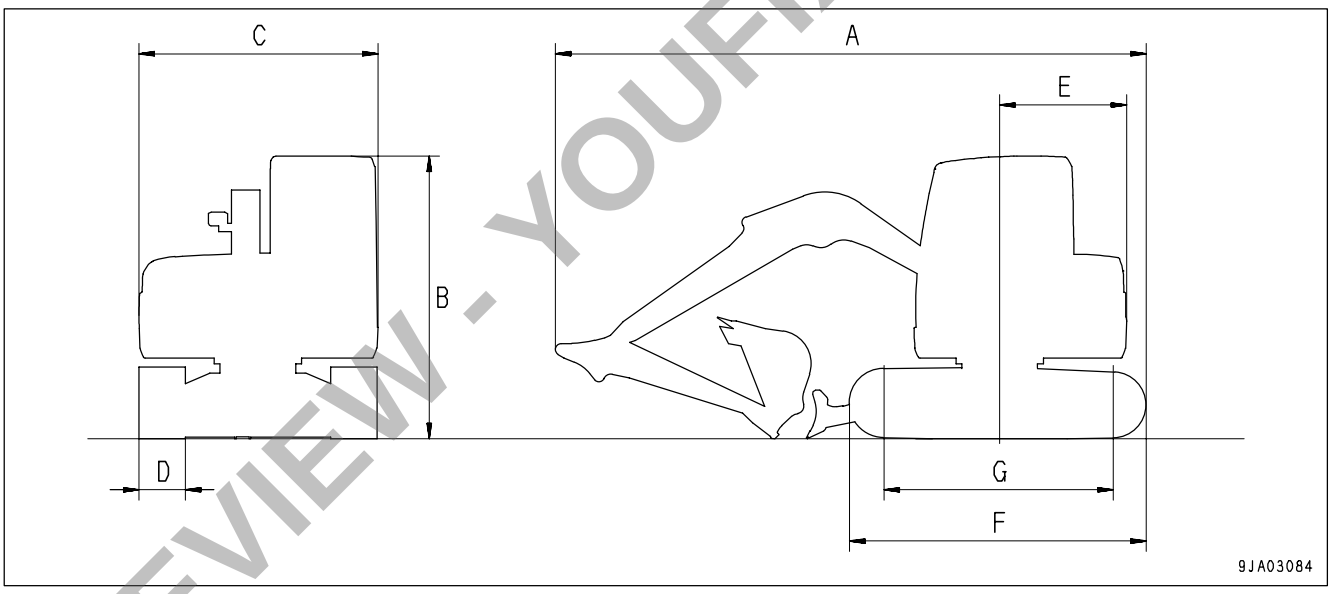
EVERY 250 HOURS MAINTENANCE
Lubricating ---- 4- 51
Check Oil Level In Final Drive Case, Add Oil ---- 4- 53
Check Level Of Battery Electrolyte ---- 4- 54
Check And Adjust Cooling Fan Belt Tension ---- 4- 56
Check Air Conditioner Compressor Belt Tension, Adjust ---- 4- 58

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

SPECIFICATIONS

	Item	Unit	Steel shoe specified	Road linre speicified
	Operating weight	kg (lb)	7,190 (15,854)	7,220 (15,920)
	Bucket capacity	m^3 (cu/yd)	0.28 (0.37)	
	Name of engine	-	Komatsu 4D95LE-3-A diesel engine	
	Engine horsepower	kW (HP)/rpm	40.5 (54.0)/1,850	
A	Overall length	mm (ft in)	5,770 (18’ 11")	5,770 (18’ 11")
B	Overall height	mm (ft in)	2,730 (8’ 11")	2,750 (9 ’0")
C	Overall width	mm (ft in)	2,330 (7’ 8")	2,330 (7’ 8")
D	Track width	mm (ft in)	450 (1’ 6")	450 (1’ 6")
E	Radius of upper structure	mm (ft in)	1,240 (4’ 1")	1,240 (4’ 1")
F	Length of track	mm (ft in)	2,840 (9’ 4")	2,900 (9’ 6")
G	Tumbler canter distance	mm (ft in)	2,235 (7’ 4")	2,235 (7’ 4")
	Min. ground clearance	mm (ft in)	360 (1’ 2")	400 (1’ 4")
	Travel speed (Low/High)	km/h (MPH)	3.0/4.5 (1.9/2.8)	
	Continuous swing speed	rpm	10.0	



PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

STARTING ENGINE

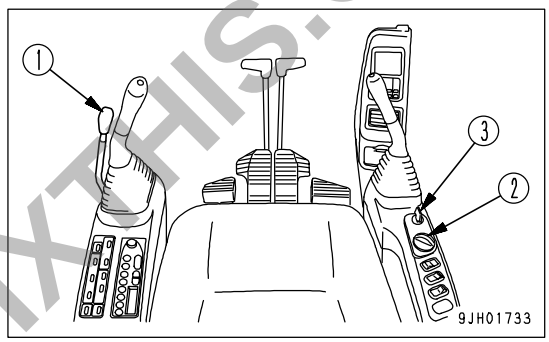
Normal Starting

⚠ WARNING

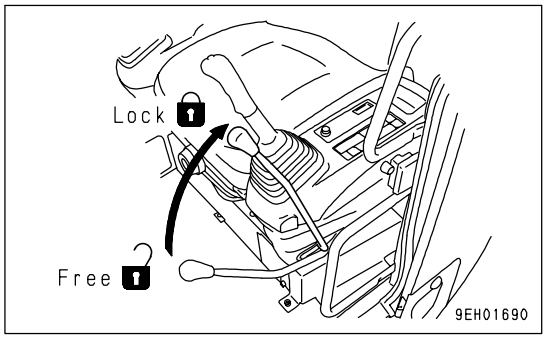
- **Start the engine only after sitting down in the operator's seat.**
- **Do not attempt to start the engine by short-circuiting the engine starting circuit. Such an act may cause a serious bodily injury or fire.**
- **Check that there are no persons or obstacles in the surrounding area, then sound the horn and start the engine.**
- **Exhaust gas is toxic. When starting the engine in confined spaces, be particularly careful to ensure good ventilation.**

NOTICE

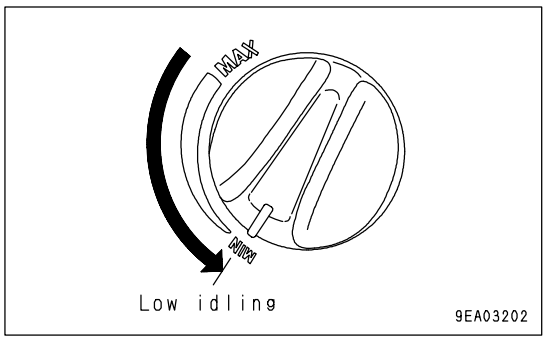
- **Do not try to start the engine with the fuel adjustment dial set near the full engine rotation. Otherwise the engine parts may be damaged.**
- **Do not keep the starting motor rotating continuously for more than 20 seconds.**
  If the engine will not start, wait for at least 2 minutes before trying to start the engine again.



1. Check the safety lock lever (1) is at the LOCK position. If the safety lock lever is in the FREE position, the engine does not start.



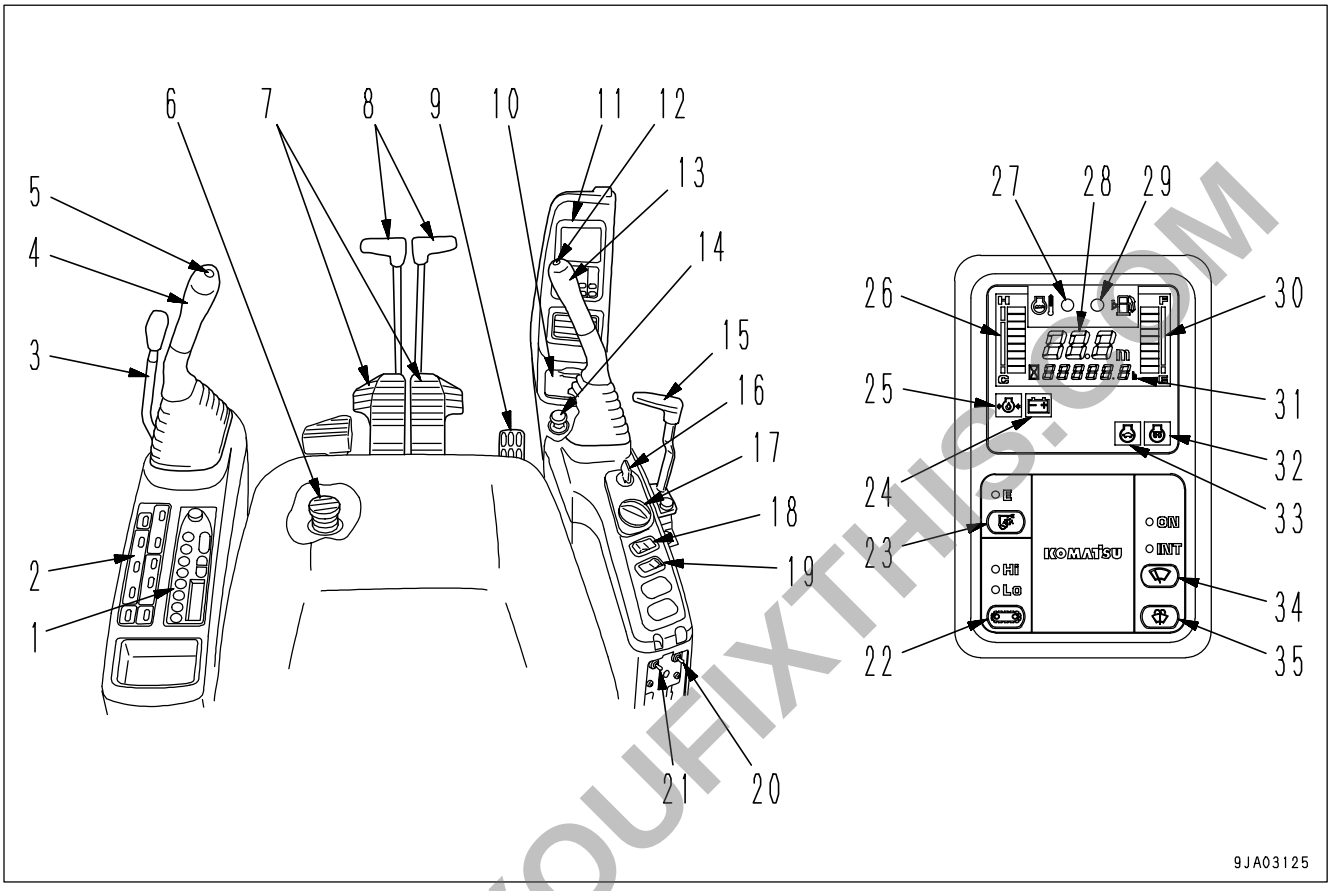
2. Set fuel control dial (2) at the low idling position.



PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

CONTROLS AND GAUGES



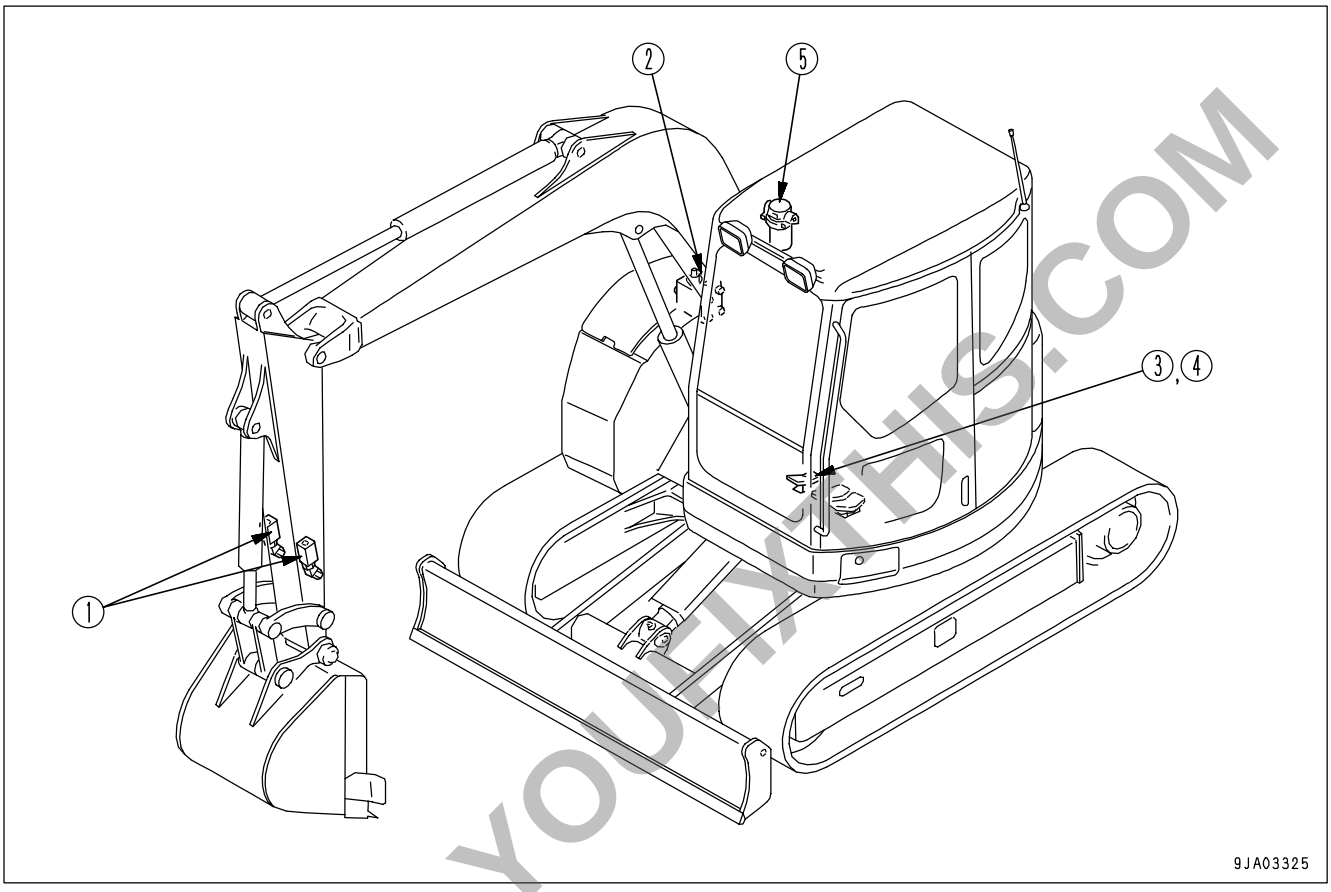
(1) Car radio
(2) Heater control panel
(3) Safety lock lever
(4) Left work equipment control lever
(5) Swift deceleration switch
(6) Traveling accelerator pedal
(7) Travel pedals
(8) Travel levers
(9) Attachment control pedal (if equipped)
(10) Ashtray
(11) Machine monitor
(12) Horn button
(13) Right work equipment control lever
(14) Cigarette lighter
(15) Blade control lever
(16) Starting switch
(17) Fuel control dial
(18) Lamp switch
(19) Alarm buzzer stop switch
(20) Emergency pump drive switch
(21) Swing brake cancel switch
(22) Travel speed selector switch
(23) Working mode selector switch
(24) Charge level monitor
(25) Engine oil pressure monitor
(26) Engine coolant temperature gauge
(27) Engine coolant temperature monitor
(28) Display (for failure display)
(29) Fuel level monitor
(30) Fuel gauge
(31) Service meter
(32) Pre-heating monitor
(33) Swift deceleration pilot lamp
(34) Wiper switch
(35) Window washer switch

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

MACHINE READY FOR ATTACHMENT

LOCATIONS

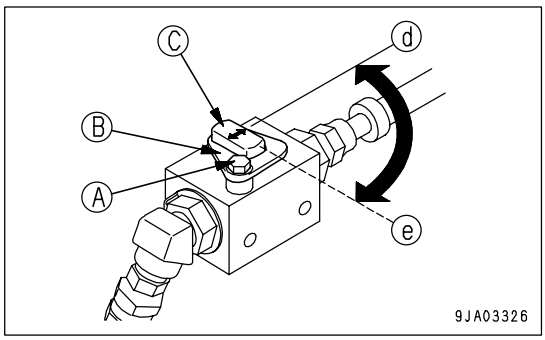


(1) Stop valve
(2) Selector valve
(3) Attachment control pedal
(4) Lock pin
(5) Breaker circuit additional oil filter

Stop Valve

This valve (1) stops the flow of the hydraulic oil.

1. Loosen bolt (A) and then detach stopper (B).
2. Turn spool (C) to open and close the valve.
   (d) FREE: Hydraulic oil flows.
   (e) LOCK: Hydraulic oil stops to flow.
   Turn this valve to the LOCK position when mounting or dismantling the attachments.
3. Install stopper (B) after reversing to prevent spool (C) from turning.



PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

TRANSPORTATION

When transporting the machine, observe all related laws and regulations, and be careful to assure safety.

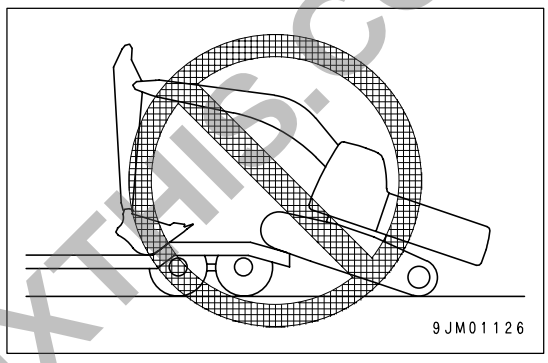
TRANSPORTATION PROCEDURE

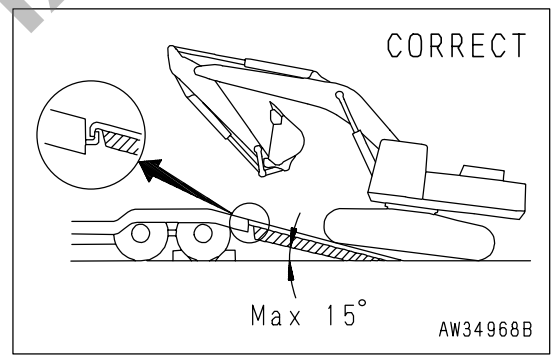
As a basic rule, transport the machine by trailer.
Select the trailer to match the weight and dimensions given in "SPECIFICATIONS (PAGE 5-2)".
Note that the value for the weight and transportation dimensions given in SPECIFICATIONS may differ according to the type of shoe or type of arm or other attachments.

LOADING AND UNLOADING WITH TRAILER

⚠ WARNING

- **When loading a machine to a trailer or unloading from it, be sure to travel the machine at low speed. Never attempt to change the speed or depress the accelerator.**
- **Run the engine at low idling, set to low speed, and operate the machine slowly when loading or unloading.**
- **Select firm, level ground when loading or unloading the machine. Maintain a safe distance from the edge of the road.**
- **Use ramps with ample width, length, thickness, and strength and install them at a maximum slope of 15°. When using piled soil, compact the piled soil fully and take action to prevent the slope face from collapsing.**
- **Remove all mud and dirt from the machine tracks before starting in order to prevent the machine from slipping on the ramps. Be sure that the ramp surface is clean and free of water, snow, ice, grease, or oil.**
- **Never correct your steering on the ramps. There is danger that the machine may turn over. If necessary, drive off the ramps, correct the direction, then enter the ramps again.**
- **Do not use the work equipment for loading and unloading operations. It is dangerous.**
- **When on the ramps, do not operate any lever except the travel lever.**
- **The center of gravity of the machine will change suddenly at the joint between the ramps and the track or trailer, and there is danger of the machine losing its balance. Travel slowly over this point.**
- **When swinging the upper structure on the trailer, the trailer is unstable, so pull in the work equipment and swing slowly.**
- **If the sliding door of the cab is closed or open, always check that it is locked in position. The operating effort when opening or closing the door suddenly changes when the machine is on a ramp or platform, so never open or close the door in such conditions.**





When loading or unloading, always use ramps or a platform and carry out the operation as follows.

PREVIEW - YOUFIXTHIS.COM
Download full manual at youfixthis.com

WHEN REQUIRED

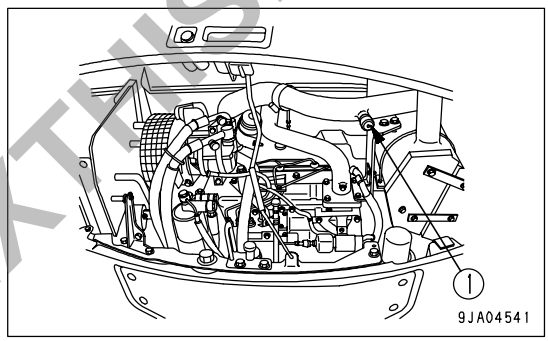
CHECK, CLEAN AND REPLACE AIR CLEANER ELEMENT

⚠ WARNING

- **If inspection, cleaning, or maintenance is carried out with the engine running, dirt will get into the engine and the engine will suffer damage. Always stop the engine before carrying out these operations.**
- **When using compressed air, there is danger that dirt may be blown around and cause serious injury. Always use safety glasses, dust mask, and other protective equipment.**

Checking

Whenever the red piston in dust indicator (1) appears, clean the air cleaner element.

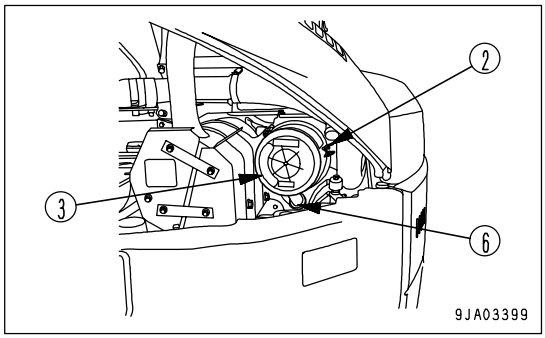


NOTICE

Do not clean the air cleaner element before the dust indicator becomes red. If the element is cleaned frequently before the dust indicator becomes red, the performamce of the aie cleaner is not used perfectly and the cleaning effect is lowered. In addition, dust sticking to the element falls into the inner element each time the element is cleaned.

Cleaning or replacing outer element

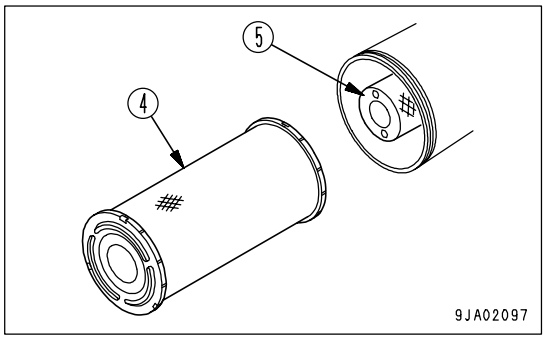
1. Open up the engine hood cover, then release clips (2) at three points and detach cover (3).



NOTICE

Never remove inner element (5). If it is removed, dust will enter and cause an engine trouble.

2. Remove outer element (4).



3. Clean the interior of the air cleaner body, cover (3) and vacuater valve (6).

PREVIEW - YOUFIXTHIS.COM

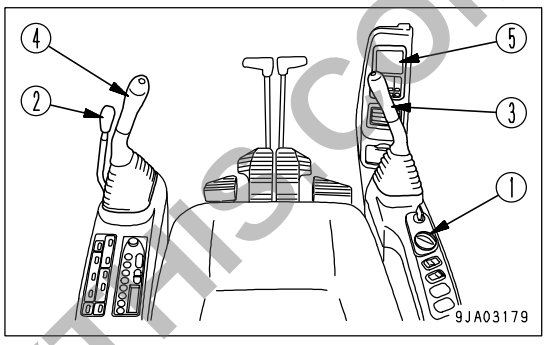
Download full manual at youfixthis.com

Warming-Up Operation

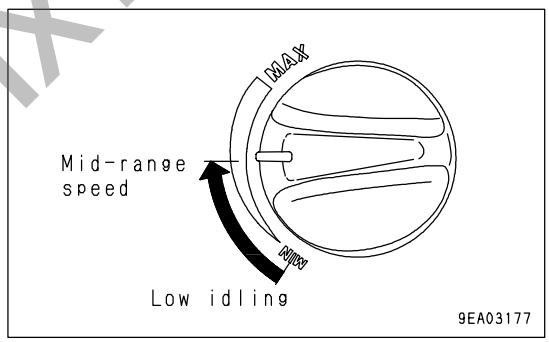
NOTICE

- **When the hydraulic oil is at a low temperature, do not carry out operations or move the lever suddenly. Always carry out the warming-up operation. This will help to extend the machine life.**
- **Do not suddenly accelerate the engine before the warming-up operation is completed.**
  Do not run the engine at low idling or high idling continuously for more than 20 minutes. (Oil down) If it is necessary to run the engine at idling, apply a load from time to time or run the engine at a mid-range speed.

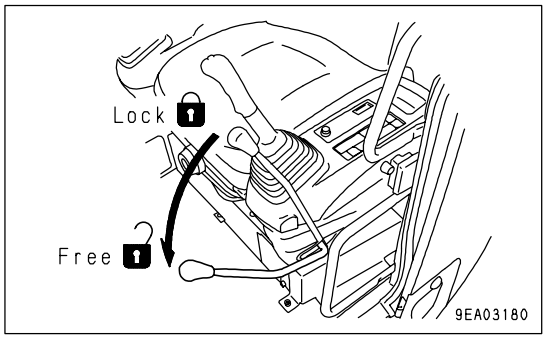
After starting the engine, do not immediately start operations. First, carry out the following operations and checks.



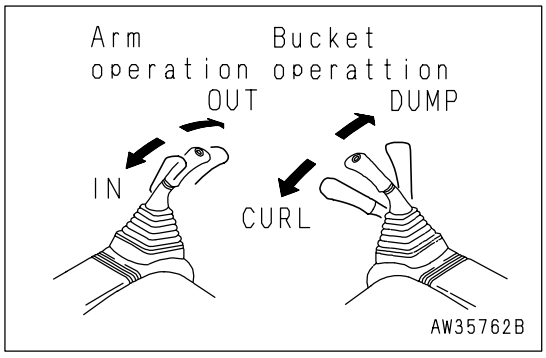
1. Turn fuel control dial (1) to the center position between LOW IDLING and HIGH IDLING and run the engine at medium speed for about 5 minutes with no load.



2. Set safety lock lever (2) to the FREE position, and raise the bucket from the ground.



3. Operate bucket control lever (3) and arm control lever (4) slowly to move the bucket cylinder and arm cylinder to the end of the stroke.
4. Operate the bucket for 30 seconds and the arm for 30 seconds in turn fully for 5 minutes.



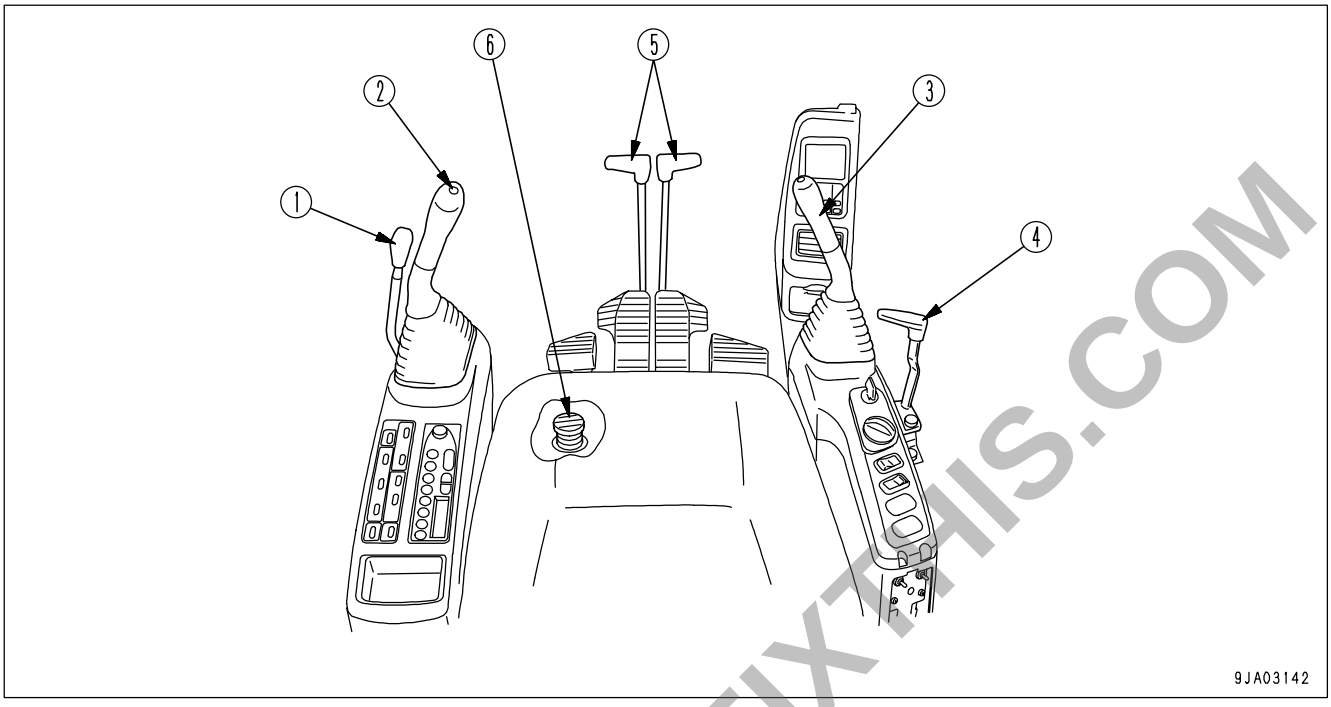
NOTICE

When the work equipment is retracted, take care that it does not interfere with the machine body or ground.

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

CONTROL LEVERS AND PEDALS



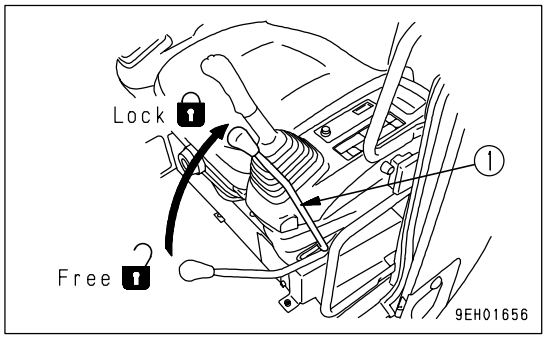
(1) Safety lock lever
(2) Left work equipment control lever
(3) Right work equipment control lever
(4) Blade control lever
(5) Travel levers (machines with travel pedals)
(6) Traveling accelerator pedal

Safety Lock Lever

WARNING

- **When leaving the operator's cab, be sure to move the safety lock lever to the LOCK position. If the safety lock lever is not in the LOCK position and a control lever is touched accidentally, that may cause a serious bodily injury.**
- **If the safety lock lever is not secured in the LOCK position, it may cause a serious bodily injury. Check that the lever is in the illustrated position.**
- **Be careful not to accidentally touch the work equipment control lever while pulling up the safety lock lever.**
- **Be careful not to accidentally touch the work equipment control lever while pushing down the safety lock lever.**

This lever (1) is a locking device for locking operation of the work equipment and attachments, swing and travel.
The lever is put to the LOCK position, when it is pulled up.
This safety lock lever is of a hydraulic locking type. Even if it is put to the LOCK position, the work equipment control lever and travel control lever can be moved, but neither machine nor the work equipment moves.



REMARK
The engine does not start, if the safety lock lever is not in the LOCK position. Make sure first that the safety lock lever is in the LOCK position, and then turn the engine starting switch.

PREVIEW - YOUFIXTHIS.COM
Download full manual at youfixthis.com

ATTACHMENT OPERATIONS

⚠ WARNING

Do not put your foot on the pedal except when operating the pedal. If rest your foot on the pedal during operations, and it is depressed by accident, the attachment may move sudden and cause serious damage or injury.

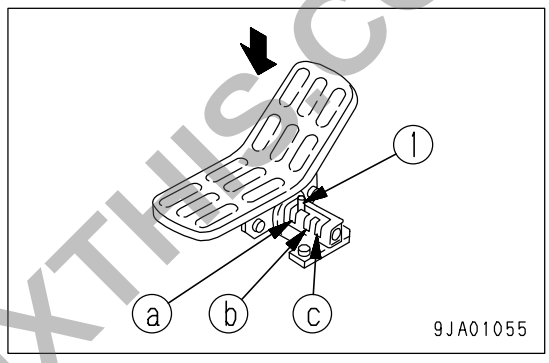
Operate the attachment as follows.

When Using Breaker

NOTICE

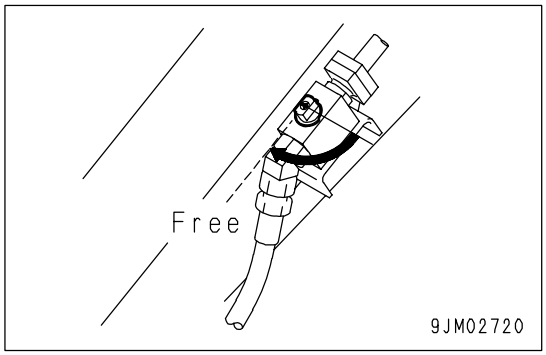
Never attempt to use the breaker with lock pin (1) set at the full stroke position (c). That will likely cause damage to the hydraulic equipment and engine overheating.

1. If the pedal is depressed forward with lock pin (1) set at the half stroke position (b), the breaker begins to work.
2. After the work is finished, return the lock pin to the LOCK position (a) to lock the pedal.

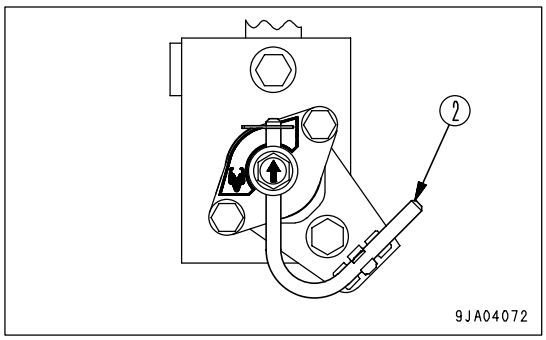


Precautions When Using

- Check that the stopper valve is in the FREE position.



- Check that the selector valve is in the position for using the breaker.
- Check that selector valve locking bar (2) is properly installed at the position for breaker application.



- For details of pther precautions when handling the breaker, read and use correctly the instruction manual provided by the breaker manufacturer.
- When breaker is used, the hydraulic oil degrades faster than in normal operation. Shorten the maintenance interval of the hydraulic oil and filter element.
  See "MAINTENANCE INTERVAL FOR HYDRAULIC BREAKER (PAGE 4-15)".

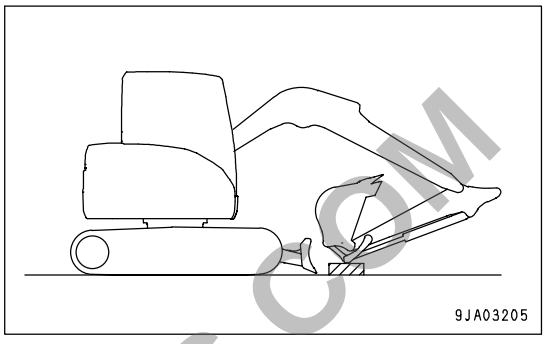
PREVIEW - YOUFIXTHIS.COM
Download full manual at youfixthis.com

Securing Machine

After placing the machine on the specified position of the trailer, secure it according to the following procedure.

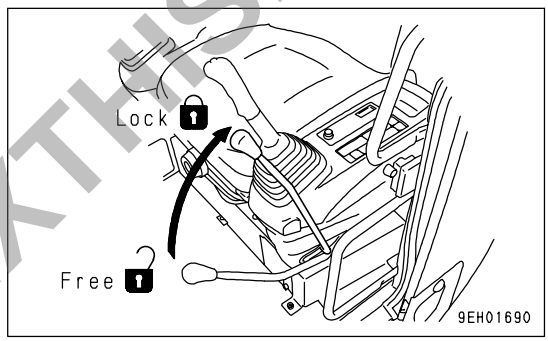
NOTICE

To prevent damage to the bucket cylinder during transportation, fit a wooden block at one end of the bucket cylinder to prevent it from touching the floor.

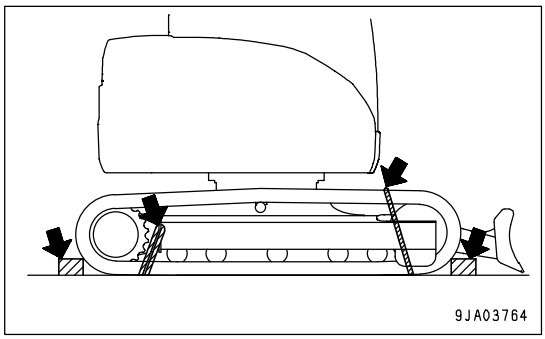


1. Lower the blade.
2. Extend the bucket and arm cylinders fully, then lower the boom slowly.
3. Stop the engine, then remove the key from the starting switch.

4. Lock each control lever with the safety lock lever securely.



5. Lock the sliding door (cab specification) and covers with locks.
6. Put blocks under both ends of the tracks to prevent the machine from moving during transportation, and tie the machine down securely with chains or wire rope of suitable strength.
   Be particularly careful to fix the machine in position securely so that it does not slip to the side.



PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

CONTENTS

FOREWORD ---- 1- 1
FOREWORD ---- 1- 2
SAFETY INFORMATION ---- 1- 5
INTRODUCTION ---- 1- 7
DIRECTIONS OF MACHINE ---- 1- 7
PRODUCT INFORMATION ---- 1- 8
MACHINE SERIAL NUMBER PLATE AND ITS LOCATION ---- 1- 8
ENGINE SERIAL NUMBER PLATE AND ITS LOCATION ---- 1- 8
EMISSION CONTROL INFORMATION LABEL AND ITS LOCATION ---- 1- 9
SERVICE METER LOCATION ---- 1- 9
YOUR MACHINE SERIAL NUMBERS AND DISTRIBUTOR ---- 1- 10
SAFETY ---- 2- 1
SAFETY INFORMATION ---- 2- 2
SAFETY LABELS ---- 2- 4
LOCATION OF SAFETY LABELS ---- 2- 5
SAFETY LABELS ---- 2- 6
SAFETY INFORMATION ---- 2- 12
SAFETY MACHINE OPERATION ---- 2- 20
STARTING ENGINE ---- 2- 20
OPERATION ---- 2- 22
TRANSPORTATION ---- 2- 28
BATTERY ---- 2- 29
TOWING ---- 2- 31
LIFTING OBJECTS WITH BUCKET ---- 2- 32
SAFETY MAINTENANCE INFORMATION ---- 2- 33
OPERATION ---- 3- 1
MACHINE VIEW ILLUSTRATIONS ---- 3- 2
OVERALL MACHINE VIEW ---- 3- 2
CONTROLS AND GAUGES ---- 3- 3
DETAILED CONTROLS AND GAUGES ---- 3- 4
MONITORING SYSTEM ---- 3- 4
SWITCHES ---- 3- 15
CONTROL LEVERS AND PEDALS ---- 3- 20
SUN ROOF ---- 3- 24
WINDSHIELD ---- 3- 25
SLIDING DOOR ---- 3- 30
EMERGENCY ESCAPE HAMMER ---- 3- 30
CAP WITH LOCK ---- 3- 32
ENGINE HOOD ---- 3- 33
MUD COVER ---- 3- 34
BATTERY INSPECTION COVER ---- 3- 35
FUSE ---- 3- 36
FUSIBLELINK ---- 3- 37
AUXILIARY ELECTRIC POWER ---- 3- 37
CONTROLLERS ---- 3- 37
HEATER AND DEFROSTER CONTROLS ---- 3- 38
AIR CONDITIONER CONTROLS ---- 3- 43
RADIO ---- 3- 49

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

PREVIEW ONLY

You're viewing 12 of 289 pages

The full manual includes:

- All 289 pages, complete
- Searchable PDF (find any keyword)
- No watermarks
- Instant download
- Print-ready quality

GET FULL MANUAL NOW

Komatsu PC78US-6 Operation & Maintenance Manual

Scan or click anywhere
youfixthis.com

Click anywhere on this page to get the full manual