# **EXCAVATOR OPERATION**

### RUNNING-IN OF THE NEW EXCAVATOR

The operation and care of the new excavator influences its life span. Your new excavator has been carefully checked and tested before leaving the factory. In spite of this, all movable components must run-in during the first 50 work hours. Do not work with full rpm's and full loads during this period. It is most important to run-in your excavator properly in order to achieve its full performance and longevity. During the running-in, the following points should be adhered to in all cases.

### ■Do not Work with Full Engine Rpm's or Full Loads during the First 50 Working Hours

- Let the engine warm up sufficiently in the cold season.
- Do not let the engine rev-up more than necessary.

### ■Oil Change in the Run-in Stage

The lubrication oil plays a specific and important role during the run-in phase of the excavator. The numerous movable parts are not yet run-in, so many fine metal particles are generated and cause damage and shorten the life of many components. Pay attention to the oil-change intervals and complete them sooner than later. See "REGULAR CHECKS AND MAINTENANCE WORK" section for more details on the oil-change intervals.

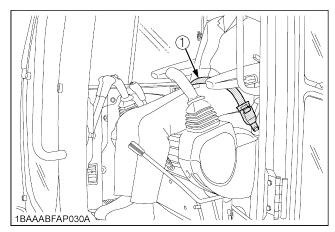
#### ■ Seat Belt



### **WARNING**

To avoid personal injury or death:

 Always use the seat belt with a ROPS/OPG (Top Guard Level I) protection structure. Adjust the seat to the optimal position and buckle up.



(1) Seat belt

### **STARTING**



### **CAUTION**

To avoid personal injury:

- No persons, other than those who have read and understand this manual and who are familiar with the excavator, should be allowed to use the excavator.
- Do not allow any person other than the operator to ride on the excavator.
- Do not operate the excavator while putting out the hands and the body from the windows.
- Do not touch the control levers and the pedals from outside the cab during the engine running.

### ■Adjusting the Operator's Seat



### CAUTION

To avoid personal injury:

• Make sure that the seat is completely secured after each adjustment.



- (1) Backrest tilt adjust lever
- (A) "UNLOCK"
- (2) Arm rest angle adjust knob (B) "TO INCREASE TENSION"
- (3) Weight adjust lever
- (C) "TO DECREASE TENSION"
- (4) Weight adjustment indicator (D) "TO INCREASE ANGLE"
- (5) Travel adjust lever
- (E) "TO DECREASE ANGLE"
- (6) Arm rest

#### Travel adjustment

Pull the travel adjust lever in the direction of [A] and slide the seat backward or forward, as required. The seat will lock in position when the lever is released.

#### Weight adjustment

Turn the weight adjust lever to achieve the optimum suspension setting.

#### Tilt adjustment

Pull the backrest tilt adjust lever in the direction of [A] and move the backrest to the desired angle.

#### Height adjustment

Lift the seat to the desired height of the three available positions. Adjust the seat to the desired position after lifting the seat to the highest position in the case of lowering the seat.

#### Arm rest

Arm rest may be set at upright position if desired.

### Arm rest angle adjustment

Turn the arm rest angle adjust knob to the desired angle.

### **■**Lock Lever



### CAUTION

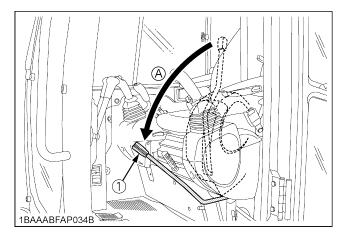
To avoid personal injury:

• To avoid injuries, check safety aspects all around the excavator.

• With the lever lock pulled down, the engine fails to start.

If you try to start the engine with the key with the lock lever down, the following message appears momentarily on the meter display.





(1) Lock lever (Unload lever)

(A) "Unlock"

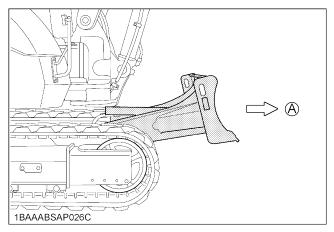
## **DRIVING**



### WARNING

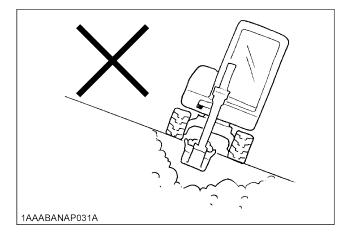
To avoid personal injury or death:

- 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).

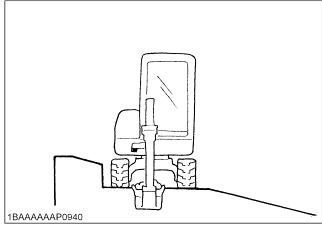


(A) "Front of the excavator"

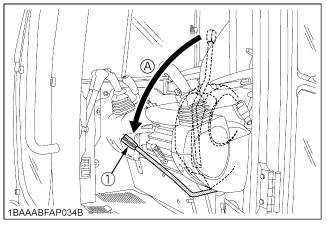
 Use extra caution when traveling across a slope or working sideways on a slope.



Recommended technique for working on a slope.

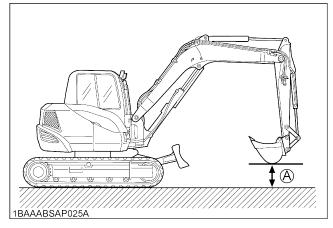


- 1. Adjust the engine speed from idling to an intermediate speed.
- 2. Unlock the lock levers and pull in the bucket and hold the bucket about 20 to 40 cm above the ground.



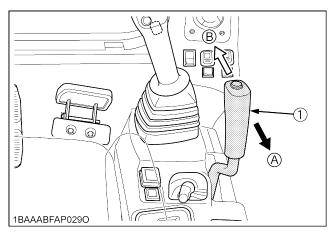
(1) Lock lever

(A) "Unlock"

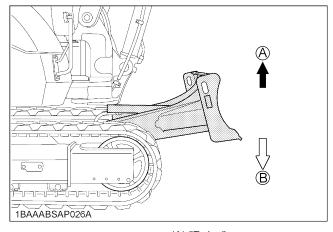


(A) 20 to 40 cm

3. Activate the dozer control lever to raise the dozer.



- (1) Dozer control lever
- (A) "Raise"
- (B) "Lower"



- (A) "Raise"
- (B) "Lower"

### **■**Drive Levers(Right,Left)

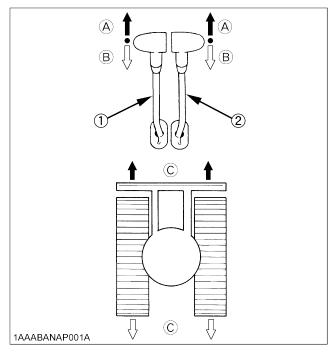


### **WARNING**

To avoid personal injury or death:

• If the swing frame has been turn 180 deg, i.e. the dozer in relation to the operator's seat is "behind", then the travel direction is opposite to the drive direction of the levers (when activating the drive lever forward, the machine, in relation to the operator's seat, will move backward).

Pushing the drive lever forwards, moves the excavator forwards, and vice-versa. The front of the excavator is the side where the dozer is located; the drive sprocket is in the rear of the excavator.



- (1) Drive lever (left)
- (2) Drive lever (right)
- (A) "Forward"
- (B) "Backward"
- (C) "Straight"