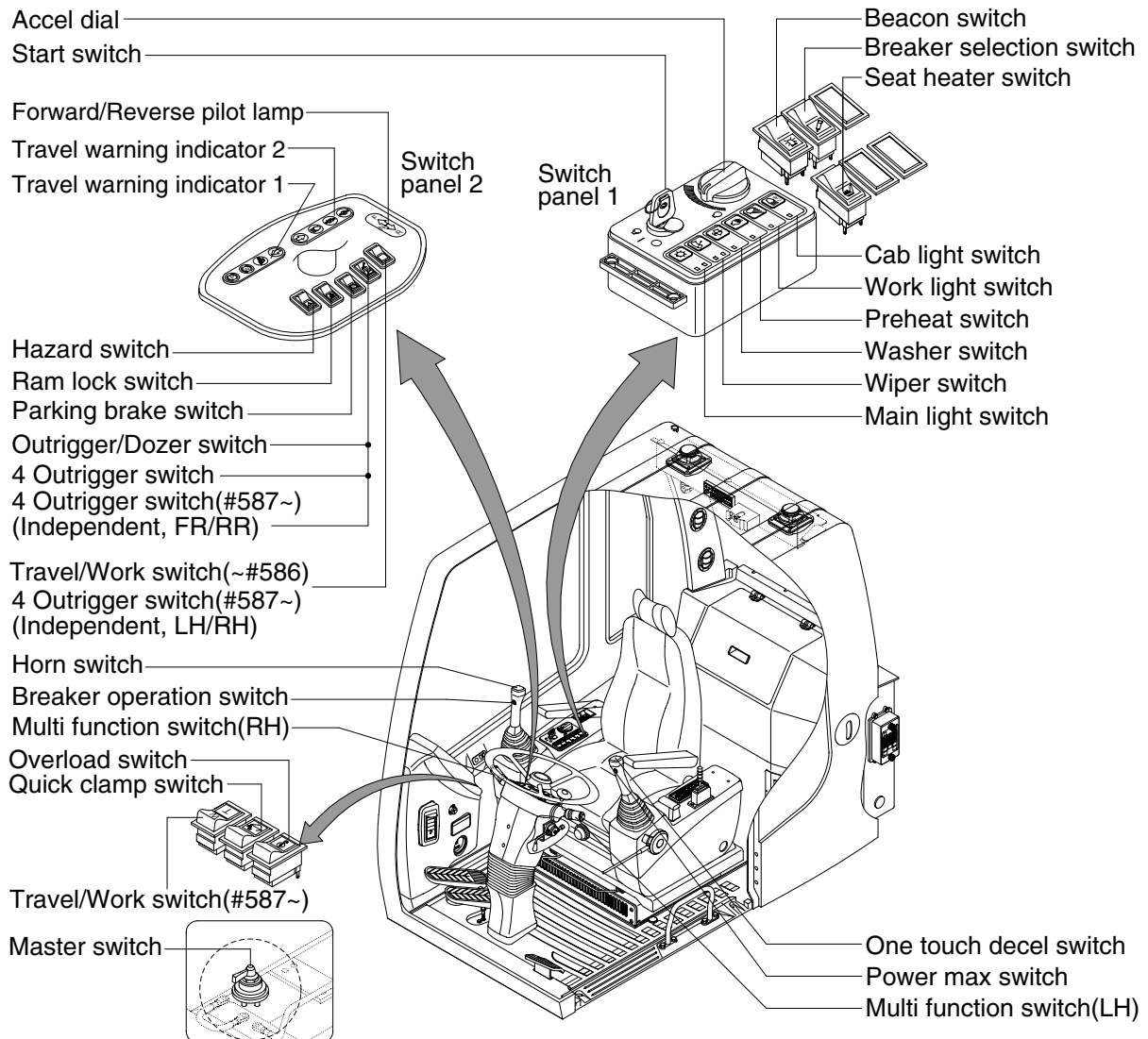
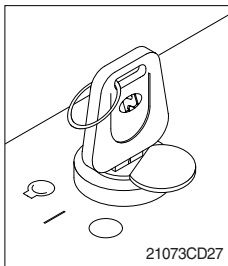


### 3. SWITCHES



20W73CD26A

#### 1) STARTING SWITCH



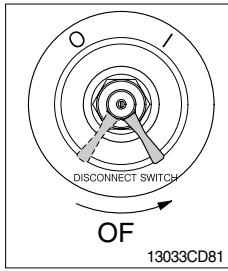
(1) There are three positions, OFF, ON and START.

- ○ (OFF) : None of electrical circuits activate.
- | (ON) : All the systems of machine operate.
- ◯ (START) : Use when starting the engine.

Release key immediately after starting.

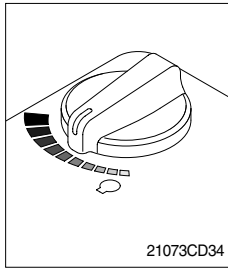
※ **Key must be in the ON position with engine running to maintain electrical and hydraulic function and prevent serious machine damage.**

## 2) MASTER SWITCH



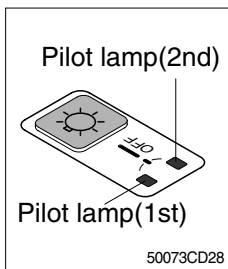
- (1) This switch is used to shut off the entire electrical system.
  - (2) I : The battery remains connected to the electrical system.  
O : The battery is disconnected to the electrical system.
- ※ **Never turn the master switch to O(OFF) with the engine running. It could result in engine and electrical system damage .**

## 3) ACCEL DIAL SWITCH



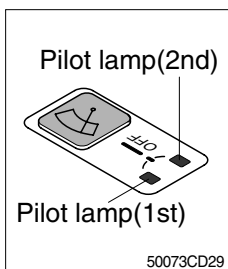
- (1) There are 10 dial setting.
- (2) Setting 1 is low idle and setting 10 is high idle.
  - By rotating the accel dial to right : Engine speed increases
  - By rotating the accel dial to left : Engine speed decreases

## 4) MAIN LIGHT SWITCH



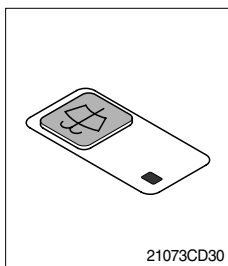
- (1) This switch used to operate the head light and clearance lamp.
  - Press the switch once to clearance lamp, number plate lamp comes ON.
  - Press the switch once more to head light comes ON.
  - Press the switch again, return to a first step position.
  - Press the switch more than one second to turn off lights.

## 5) WIPER SWITCH



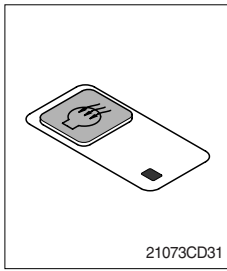
- (1) This switch used to operate wiper.
  - Press the switch once to intermittently operate wiper.
  - Press the switch once more to operate wiper low speed.
  - Press the switch again return to first step position.
  - Press the switch more than one second to turn off wiper.

## 6) WASHER SWITCH



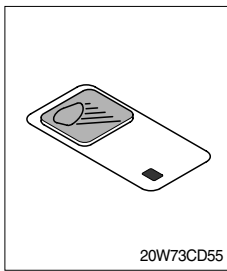
- (1) The washer liquid is sprayed and the wiper is operated only while pressing this switch.
- (2) The indicator lamp is turned ON when operating this switch.

## 7) PREHEAT SWITCH



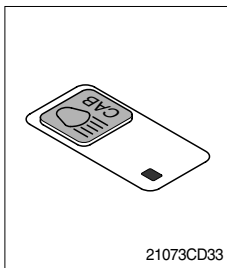
- (1) This switch is used for starting the engine in cold weather. If pressed, preheater is energized to get easier engine starting.
  - ※ **Never hold the push button switch in for more than 30 seconds, as this can damage the grid heater.**
- (2) The indicator lamp is turned ON when operating this switch.

## 8) WORK LIGHT SWITCH



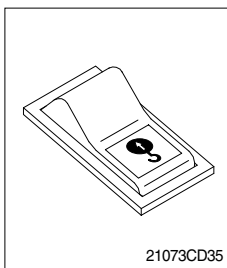
- (1) This switch is used to operate the work light.
- (2) The indicator lamp is turned ON when operating this switch.

## 9) CAB LIGHT SWITCH(Optional)



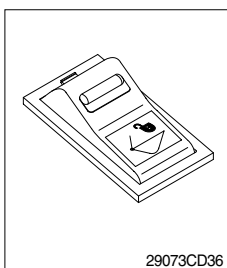
- (1) This switch is used to turn ON the cab light on the cab.

## 10) OVERLOAD SWITCH(Optional)



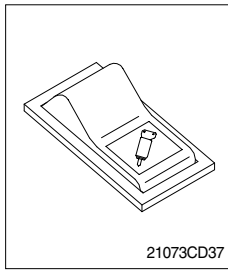
- (1) When this switch turned ON, buzzer makes sound and overload warning lamp comes ON in case that the machine is overloaded.
- (2) When it turned OFF, buzzer stops and warning lamp goes out.

## 11) QUICK CLAMP SWITCH(Optional)



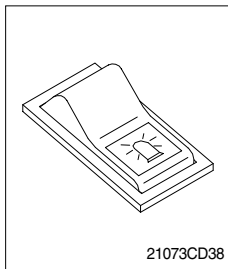
- (1) This switch is used to engage or disengage the moving hook on quick clamp.
  - ※ **Refer to the page 8-6 for details.**

## 12) BREAKER SELECTION SWITCH(Optional)



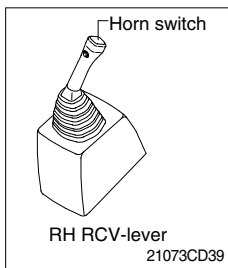
- (1) This switch is used to select breaker.
- ※ **The breaker operates only when this switch is selected.**

## 13) BEACON SWITCH(Optional)



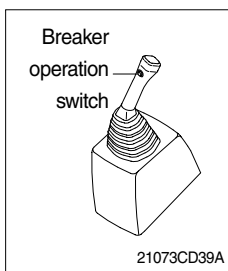
- (1) This switch turns ON the rotary light on the cab.
- (2) The below indicator lamp is turned ON when operating this switch.

## 14) HORN SWITCH



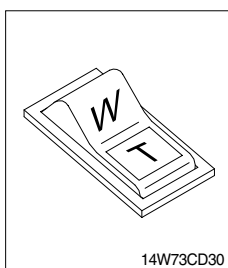
- (1) This switch is at the top of right side control lever.  
On pressing, the horn sounds.

## 15) BREAKER OPERATION SWITCH



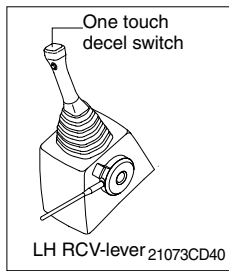
- (1) On pressing this switch, the breaker operates only when the breaker selection switch on the switch panel is selected.

## 15A) TRAVEL/WORKING SWITCH(Optional, #0587-)



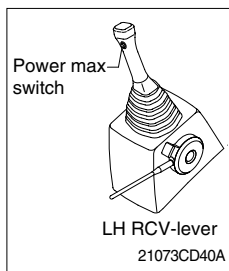
- (1) This switch is used to select mode between travel and work.
- (2) Travel (T)**
  - ① Only traveling is possible to operate.
  - ② The engine RPM and travel speed can be controlled by accel pedal.
- (3) Work (W)**
  - ① All the working functions including traveling are possible to operate.
  - ② Engine RPM and work & travel speed can be controlled by accel pedal.

## 16) ONE TOUCH DECEL SWITCH



- (1) This switch is used to actuate the deceleration function quickly.
- (2) The engine speed is increased to previous setting value by pressing the switch again.
- (3) One touch decel function is available only when the auto decel switch on the cluster OFF.

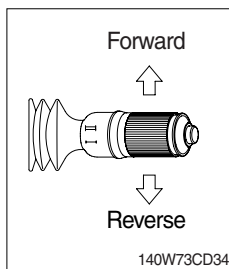
## 17) POWER MAX SWITCH



- (1) This switch activate power max function.  
When this switch is kept pressed, hydraulic power of work equipment will be increased upto 110 percent during 8 seconds.
  - (2) After 8 seconds, function is cancelled automatically even switch is keep pressed.
- ※ **Do not use for craning purposes.**

## 18) RH MULTI FUNCTION SWITCH

### (1) Forward or reverse lever



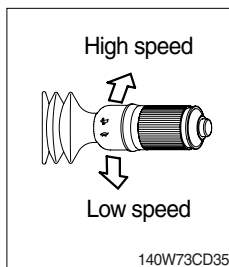
- ① This lever changes travel direction of machine.
  - Forward : Machine moves forward
  - Reverse : Machine moves backward

▲ **Travel direction will be reversed if lower structure is positioned with dozer in front.**
- ② The warning buzzer sounds when the lever is in the reverse position.

▲ **If this lever is not in the neutral position, engine does not started.**

▲ **Be sure to stop the machine when changing the direction forward or backward while traveling.**

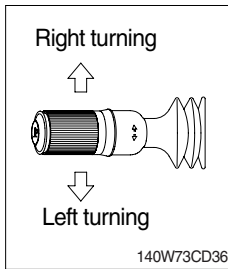
### (2) Travel speed switch



- ① This switch is for selecting travelling speed between high and low.
  - Low speed : 8.3km/hr(5.2mph)
  - High speed : 32km/hr(19.9mph)

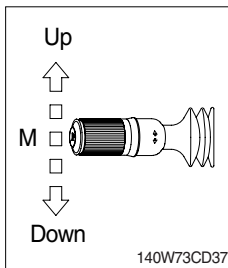
## 19) LH MULTI FUNCTION SWITCH

### (1) Direction indication lamp switch



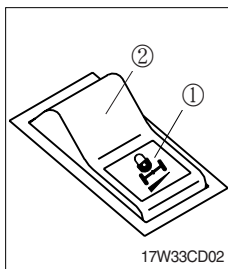
- ① This switch is used to warn or signal the turning direction of the machine to other machines or equipment.
- ② Push the lever to forward for turning right, pull the lever to backward for turning left.
- ③ The turning pilot lamp comes ON at the warning indicator and the horn sounds.

### (2) Dimmer switch



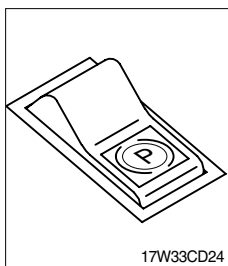
- ① This switch is used to turn the head lights direction.
- ② Switch positions.
  - Up : To flash for passing
  - Middle : Head lights low beam ON
  - Down : Head lights high beam ON
- ③ If you release the switch when it's in up position, the switch will return to middle.

## 20) RAM LOCK SWITCH



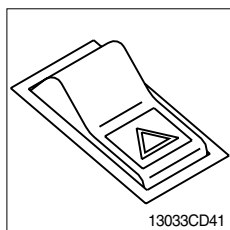
- (1) This switch activate front axle oscillation cylinder to locking position for increase of stability.
  - Push rear(①) : Set front axle to locking position for excavation work or travels even ground. Also, the ram lock warning lamp comes ON at the warning indicator.
  - Push front(②) : Front axle will be oscillate depend on ground condition when the machine travel uneven ground.

## 21) PARKING BRAKE SWITCH



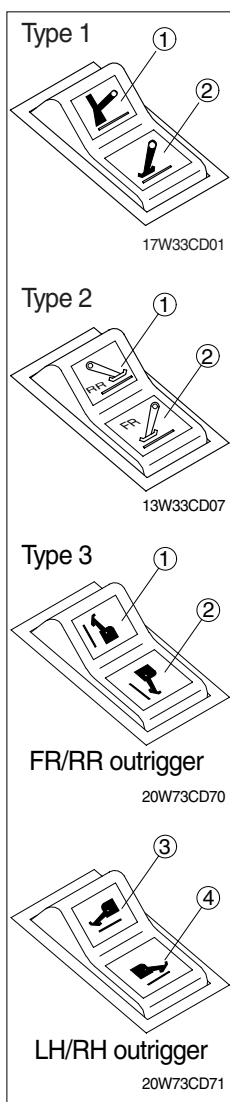
- (1) This switch is used to operate parking brake.
- (2) On pressing the switch, the below indicator lamp is turned ON and the pilot lamp comes ON at the warning indicator.

## 22) HAZARD SWITCH



- (1) Use for parking, or roading machine.
  - (2) LH and RH turn signal lamps come ON at the same time by this switch.
- ※ If the switch is left ON for a long time, the battery may be discharged.

## 23) OUTRIGGER OR DOZER SELECTOR SWITCH(Optional)



### (1) Simultaneous operation

| Switch position | Type 1                              | Type 2                  |                    |
|-----------------|-------------------------------------|-------------------------|--------------------|
|                 | Front outrigger<br>Rear dozer blade | 4 outrigger             |                    |
|                 |                                     | Front or rear operation | LH or RH operation |
| Forward(①)      | Rear dozer blade                    | Rear outrigger          | RH outrigger       |
| Backward(②)     | Front outrigger                     | Front outrigger         | LH outrigger       |

### (2) Independent operation

| Switch position | Type 3                         |
|-----------------|--------------------------------|
|                 | 4 outrigger                    |
| ①+③             | Front / LH outrigger operation |
| ①+④             | Front / RH outrigger operation |
| ②+③             | Rear / LH outrigger operation  |
| ②+④             | Rear / RH outrigger operation  |

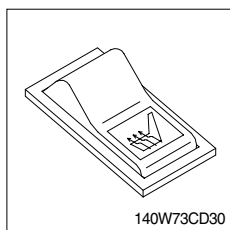
- (3) If the dozer and outrigger lever is moved forward position, the dozer blade or outrigger is downed, if the lever is moved backward, the dozer blade or outrigger moved upward.

Please refer to the dozer and outrigger lever at page 3-19.

- ※ You must change the piping connections for above operating selection.

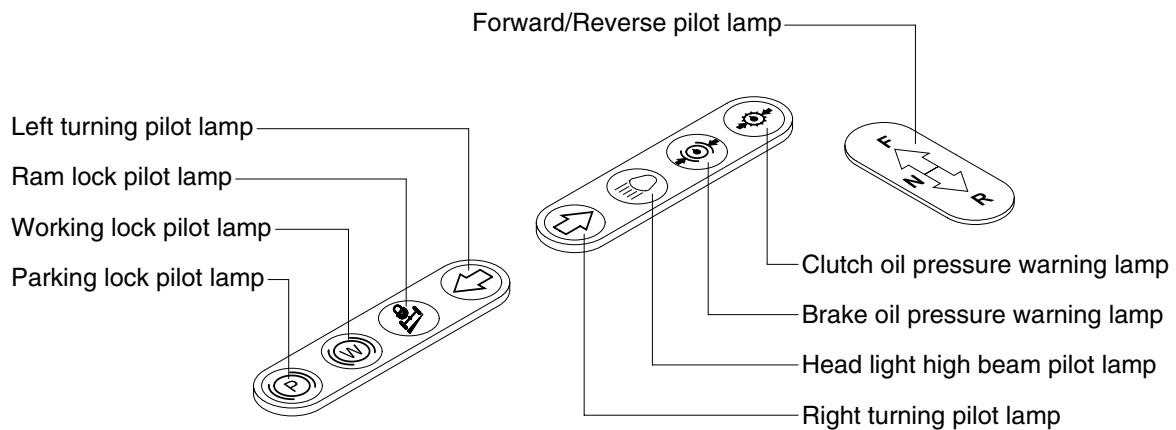
Please refer to pages 3400-3440 of parts manual.

## 23A) SEAT HEATER SWITCH(Optional)



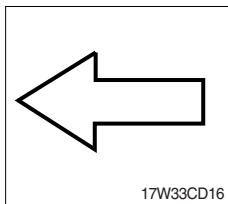
- (1) This switch is used to heating for seat.
- (2) On pressing the switch, the below indicator lamp is turned ON.
  - Heater operating temperature :  $28 \pm 3.5^{\circ}\text{C}$
  - Heater operating cancel temperature :  $37 \pm 3^{\circ}\text{C}$

## 24) TRAVEL WARNING INDICATOR



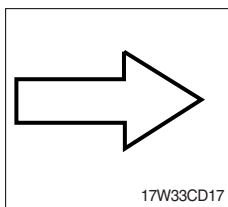
20W73CD32

### (1) Left turning pilot lamp



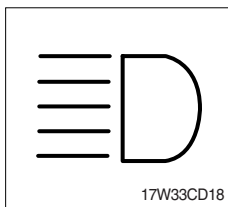
- ① This lamp flashes with sound when the RH multifunction switch is move to forward position.

### (2) Right turning pilot lamp



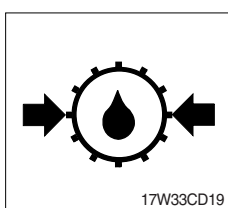
- ① This lamp flashes with sound when the RH multifunction switch is move to backward position.

### (3) Head light high beam pilot lamp



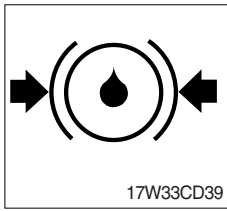
- ① This lamp is ON when the head light switch is high beam position or passing function.
- ② When passing other machines ahead, this lamp must be used for a few seconds to give other machines warning for a few seconds.

### (4) Clutch oil pressure warning lamp



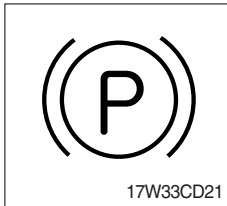
- ① The lamp lights ON when the oil pressure of the transmission drops.
- ② When the lamp is ON, stop the engine and check the transmission system.

#### (5) Brake oil pressure warning lamp



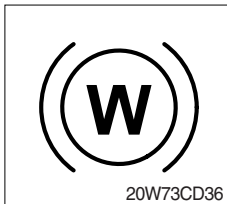
- ① The lamp lights ON when the oil pressure of service brake drops below the normal range.
  - ② When the lamp is ON, stop the engine and check for its cause.
- ※ **Do not operate until any problems are corrected.**

#### (6) Parking lock pilot lamp



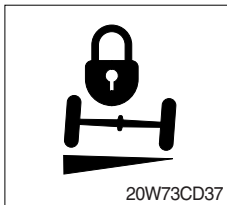
- ① When the parking brake is actuated, the lamp lights ON.
- ※ **Check the lamp is OFF before driving.**

#### (7) Working lock pilot lamp



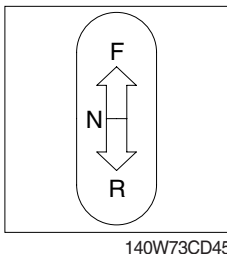
- ① This lamp lights ON when the service brake is applied.
- ② Refer to **service brake pedal** at page 3-16 for details.

#### (8) Ram lock pilot lamp



- ① This pilot lamp lights ON when ram lock switch is ON.

#### (9) Forward/Reverses pilot lamp



- ① This pilot lamp indicates the travel direction of machine.
  - F : Forward direction
  - N : Neutral position
  - R : Reverse direction

▲ **Travel direction will be reversed if low structure is positioned with dozer in front.**