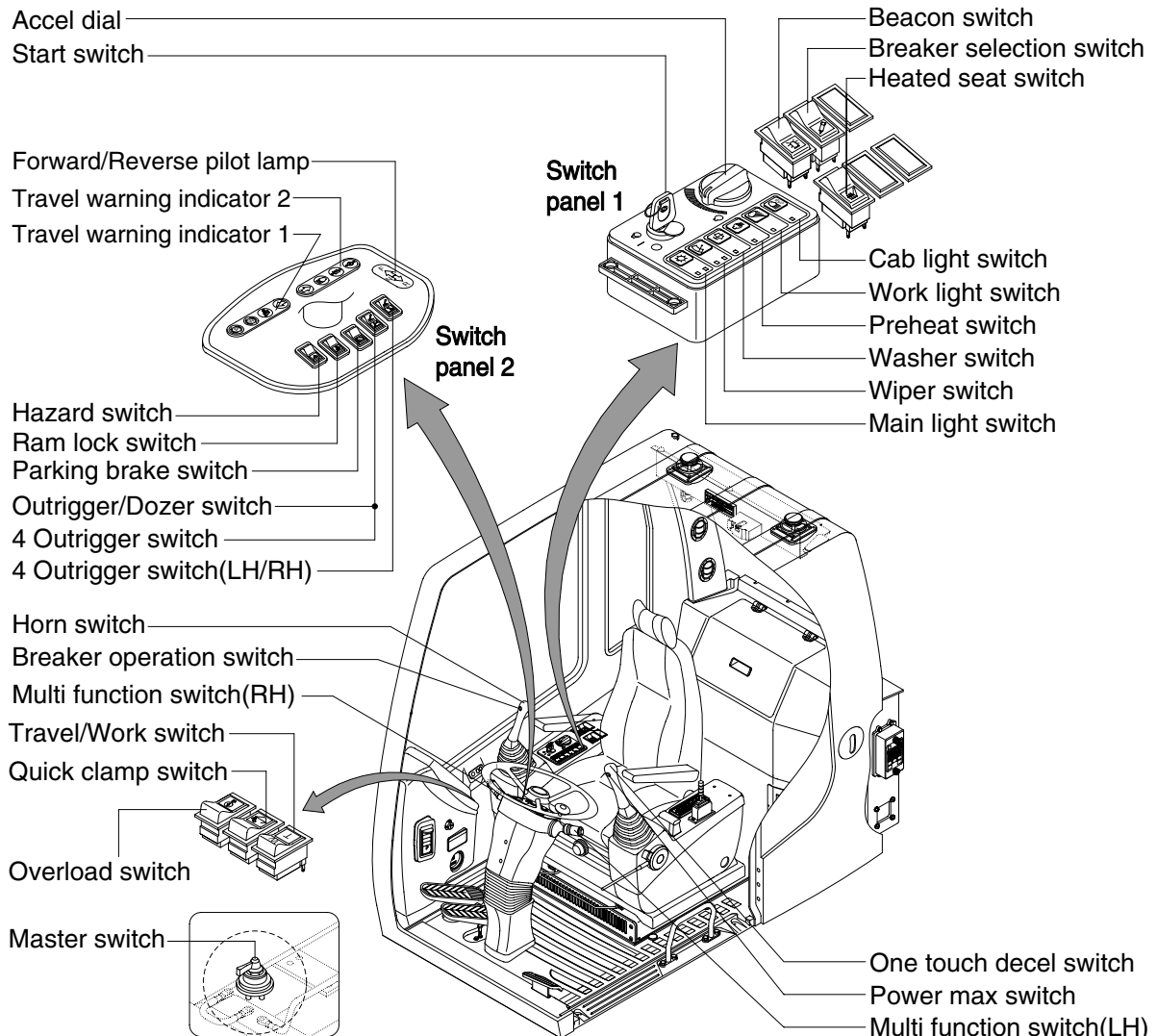
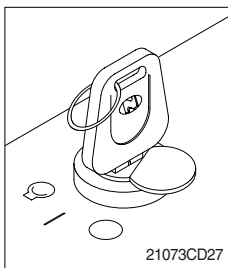


3. SWITCHES



17W7A3CD26

1) STARTING SWITCH



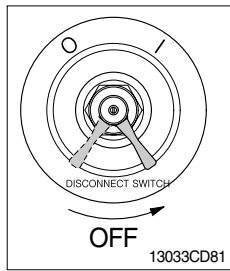
(1) There are three positions, OFF, ON and START.

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

Release key immediately after starting.

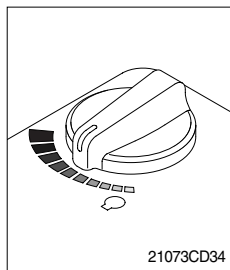
- ※ If you turn ON the starting switch in cold weather, the fuel warmer is automatically operated to heat the fuel by sensing the coolant temperature. Start the engine in 1~2 minutes after turning ON the starting switch. More time may take according to ambient temperature.
- ※ Key must be in the ON position with engine running to maintain electrical and hydraulic function and prevent serious machine damage.

2) MASTER SWITCH



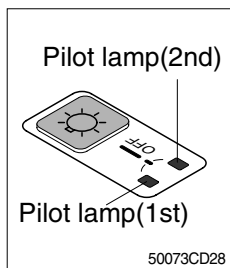
- (1) This switch is used to shut off the entire electrical system.
 - (2) I : The battery remains connected to the electrical system.
O : The battery is disconnected to the electrical system.
- ※ **Never turn the master switch to O(OFF) with the engine running. Engine and electrical system damage could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

3) ACCEL DIAL SWITCH



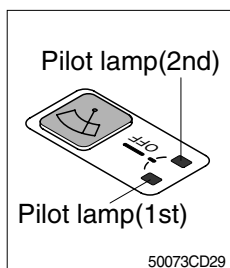
- (1) There are 10 dial setting.
- (2) Setting 1 is low idle and setting 10 is high idle.
 - By rotating the accel dial to right : Engine speed increases
 - By rotating the accel dial to left : Engine speed decreases

4) MAIN LIGHT SWITCH



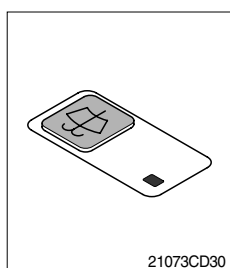
- (1) This switch used to operate the head light and work light.
 - Press the switch once to head light comes ON.
 - Press the switch once more to work light comes ON.
 - Press the switch again, return to a first step position.
 - Press the switch more than one second to turn off lights.

5) WIPER SWITCH



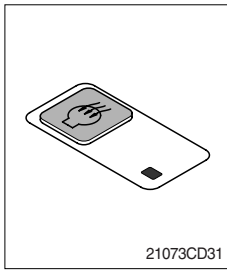
- (1) This switch used to operate wiper.
 - Press the switch once to intermittently operate wiper.
 - Press the switch once more to operate wiper low speed.
 - Press the switch again return to a first step position.
 - Press the switch more than one second to turn off wiper.

6) WASHER SWITCH



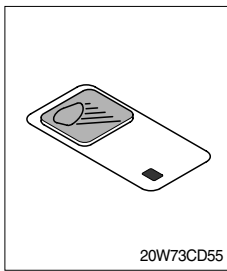
- (1) The washer liquid is sprayed and the wiper is operated only while pressing this switch.
- (2) The indicator lamp is turned ON when operating this switch.

7) PREHEAT SWITCH



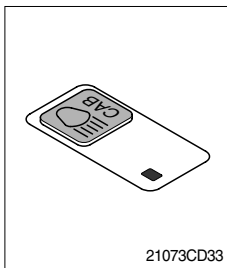
- (1) This switch is used for starting the engine in cold weather. If pressed, preheater is energized to get easier engine starting.
 - ※ **Never hold the push button switch for more than 30 seconds, as this can damage the electric valve solenoid.**
- (2) The indicator lamp is turned ON when operating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

8) WORK LIGHT SWITCH



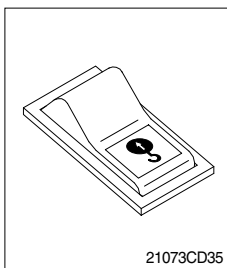
- (1) This switch is used to operate the work light.
- (2) This indicator lamp is turned ON when operating this switch.

9) CAB LIGHT SWITCH(Optional)



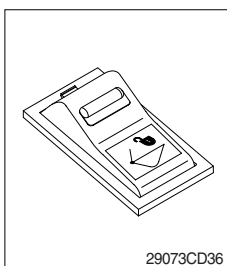
- (1) This switch turns ON the cab light on the cab.

10) OVERLOAD SWITCH(Optional)



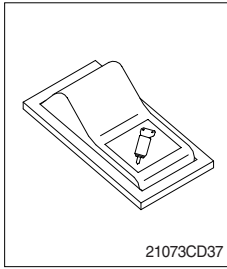
- (1) When this switch turned ON, buzzer makes sound and overload warning lamp comes ON in case that the machine is overload.
- (2) When it turned OFF, buzzer stops and warning lamp goes out.

11) QUICK CLAMP SWITCH(Optional)



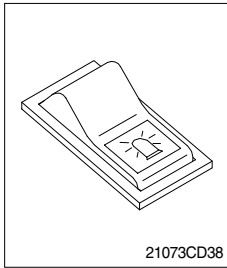
- (1) This switch is used to engage or disengage the moving hook on quick clamp.
 - ※ **Refer to the page 8-6 for details.**

12) BREAKER SELECTION SWITCH(Optional)



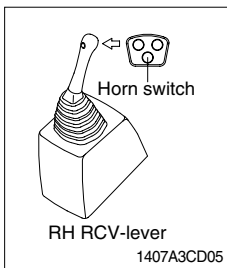
- (1) This switch is used to select breaker.
- ※ **The breaker operates only when this switch is selected.**

13) BEACON SWITCH(Optional)



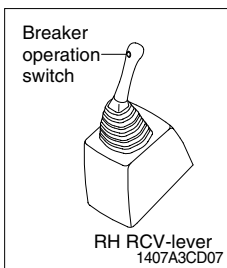
- (1) This switch turns ON the rotary light on the cab.
- (2) The below indicator lamp is turned ON when operating this switch.

14) HORN SWITCH



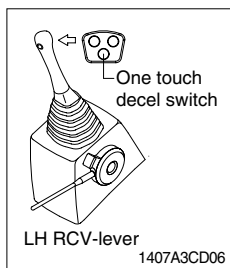
- (1) This switch is at the top of right side control lever.
- On pressing, the horn sounds.

15) BREAKER OPERATION SWITCH



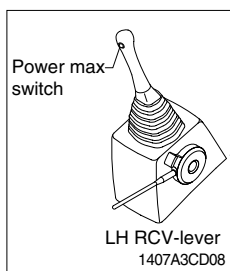
- (1) On pressing this switch, the breaker operates only when the breaker selection switch on the switch panel is selected.

16) ONE TOUCH DECEL SWITCH



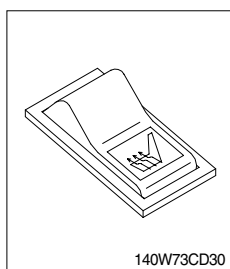
- (1) This switch is used to actuate the deceleration function quickly.
- (2) The engine speed is increased to previous setting value by pressing the switch again.

17) POWER MAX SWITCH



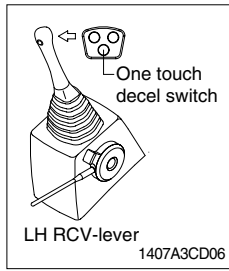
- (1) This switch activate power max function.
When this switch is kept pressed, hydraulic power of work equipment will increased approx 110 percent during 8 seconds.
 - (2) After 8 seconds, function is cancelled automatically even switch is keep pressed.
- ※ **Do not use for craning purposes.**

18) HEATED SEAT SWITCH(Option)



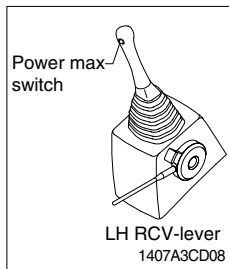
- (1) This switch is used to heat the seat.
- (2) On pressing the switch, the below indicator lamp is turned ON.
 - Heater operating temperature : $28 \pm 3.5^{\circ}\text{C}$
 - Heater operating cancel temperature : $37 \pm 3^{\circ}\text{C}$

16) ONE TOUCH DECEL SWITCH



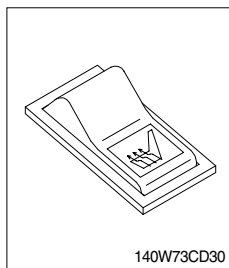
- (1) This switch is used to actuate the deceleration function quickly.
- (2) The engine speed is increased to previous setting value by pressing the switch again.

17) POWER MAX SWITCH



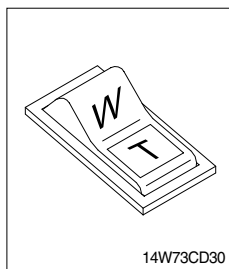
- (1) This switch activate power max function.
When this switch is kept pressed, hydraulic power of work equipment will increased approx 110 percent during 8 seconds.
 - (2) After 8 seconds, function is cancelled automatically even switch is keep pressed.
- ※ **Do not use for craning purposes.**

18) HEATED SEAT SWITCH(Option)



- (1) This switch is used to heat the 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 : $37 \pm 3^{\circ}\text{C}$

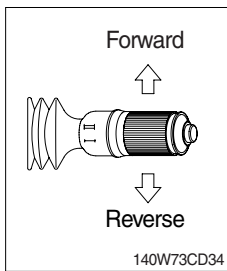
18A) TRAVEL/WORKING SWITCH(Option)



- (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.

19) 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

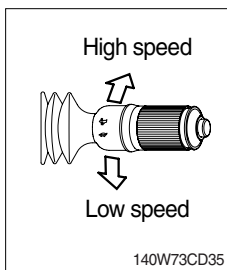
▲ Travel direction will be reversed if lower structure is positioned with dozer in front.

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

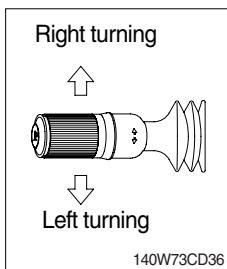


① This switch is for selecting travelling speed between high and low.

- Low speed : 9.5km/hr(5.9mph)
- High speed : 30km/hr(18.7mph)

20) LH MULTI FUNCTION SWITCH

(1) Direction indication lamp switch

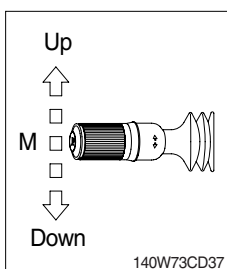


① This switch is used to warn or signal the turning direction of the machine to other machines or equipment.

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



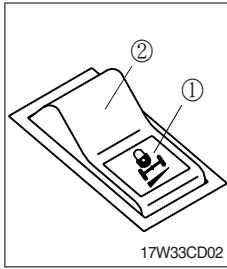
① This switch is used to turn the head lights direction.

② Switch positions.

- Up : To flash for passing
- Middle : Head lights low beam ON
- Down : Head lights high beam ON

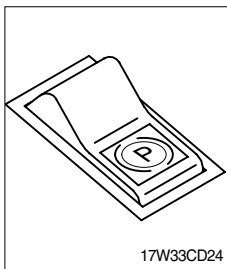
③ If you release the switch when it's in up position, the switch will return to middle.

21) RAM LOCK SWITCH



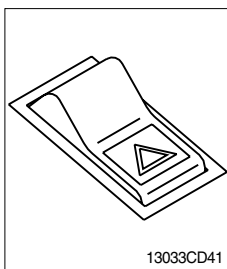
- (1) This switch activate front axle oscillation cylinder to locking position for increase of stability.
- Push rear(①) : Set front axle to locking position for excavation work or travels even ground. Also, the ram lock warning lamp comes ON at the warning indicator.
 - Push front(②) : Front axle will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

22) PARKING BRAKE SWITCH



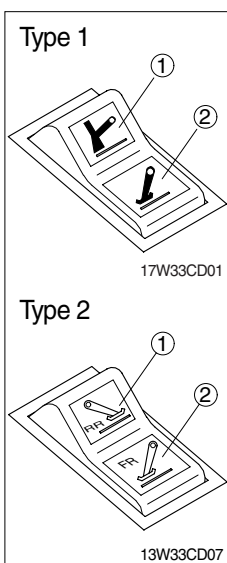
- (1) This switch is used to operate parking brake.
- (2) On pressing the switch, the below indicator lamp is turned ON and the pilot lamp comes ON at the warning indicator.

23) 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.

24) OUTRIGGER OR DOZER SELECTOR SWITCH(Optional)



- (1) This switch is used to operate dozer blade or outrigger.

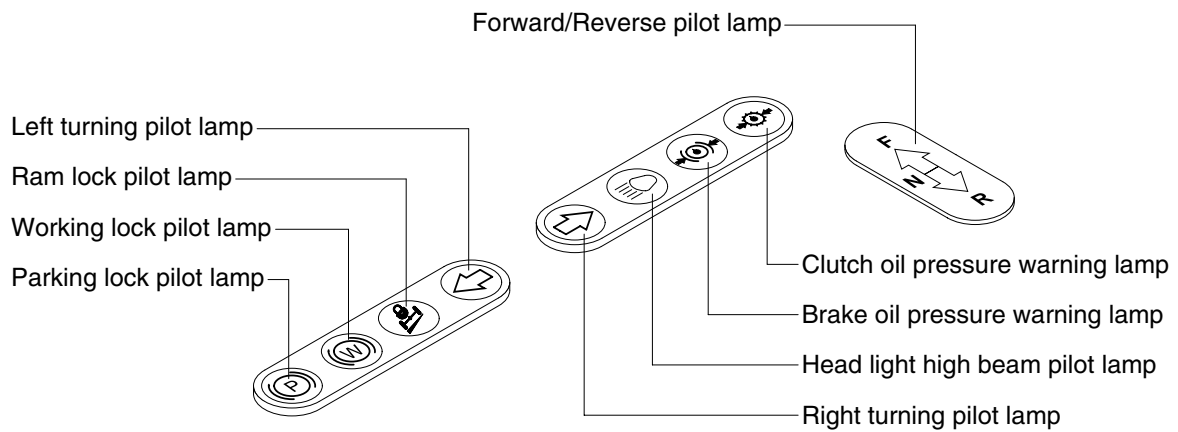
Switch position	Type 1	Type 2	
	Front outrigger Rear dozer blade	4 outrigger	
		Front or rear operation	LH or RH operation
Forward(①)	Rear dozer blade	Rear outrigger	RH outrigger
Backward(②)	Front outrigger	Front outrigger	LH outrigger

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

Please refer to pages 3400-3496 of parts manual.

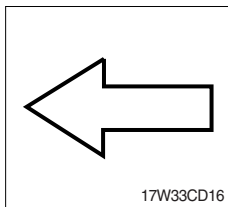
- (2) If the dozer and outrigger lever is moved forward position, the dozer blade or outrigger is downed, if the lever is moved backward, the dozer blade or outrigger moved upward.
- Please refer to the dozer and outrigger lever at page 3-19.

25) TRAVEL WARNING INDICATOR



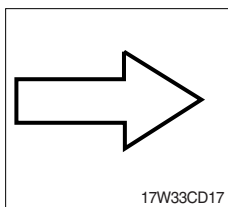
20W73CD32

(1) Left turning pilot lamp



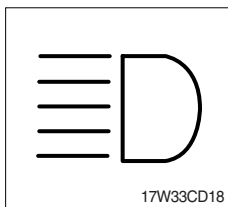
- ① This lamp flashes with sound when the RH multifunction switch is move to forward position.

(2) Right turning pilot lamp



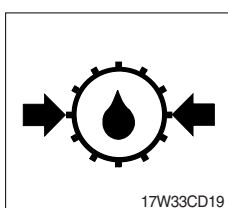
- ① This lamp flashes with sound when the RH multifunction switch is move to backward position.

(3) Head light high beam pilot lamp



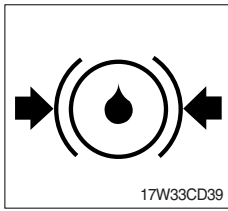
- ① This lamp is ON when the head light switch is high beam position or passing function.
- ② When passing other machines ahead, this lamp must be used for a few seconds to give other machines warning for a few seconds.

(4) Clutch oil pressure warning lamp



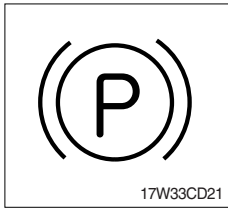
- ① The lamp lights ON when the oil pressure of the transmission drops.
- ② When the lamp is ON, stop the engine and check the transmission system.

(5) Brake oil pressure warning lamp



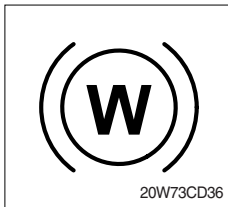
- ① The lamp lights ON when the oil pressure of service brake drops below the normal range.
 - ② When the lamp is ON, stop the engine and check for its cause.
- ※ **Do not operate until any problems are corrected.**

(6) Parking lock pilot lamp



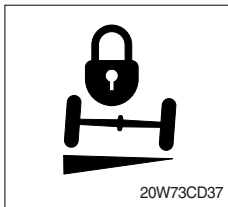
- ① When the parking brake is actuated, the lamp lights ON.
- ※ **Check the lamp is OFF before driving.**

(7) Working lock pilot lamp



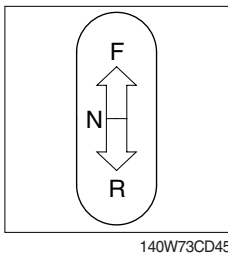
- ① This lamp lights ON when the service brake is applied.
- ② Refer to **service brake pedal** at page 3-24 for details.

(8) Ram lock pilot lamp



- ① This warning lamp lights ON when ram lock switch is rear position.
- ② Also, the warning lamp lights ON when the parking switch is ON or service brake is applied.

(9) Forward/Reveres 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.**