CEAM018708

Operation & Maintenance Manual

D51EX-22
D51PX-22

CRAWLER DOZER

SERIAL NUMBERS D51EX-22 B10001 and up
D51PX-22 B10001 and up

ENGINE 6D107E-1

June 2013

KOMATSU®

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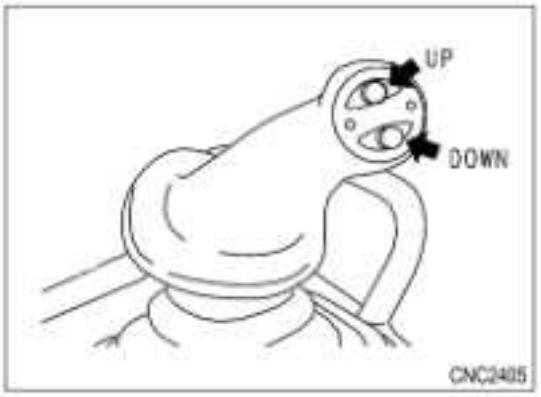
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QUICK SHIFT MODE

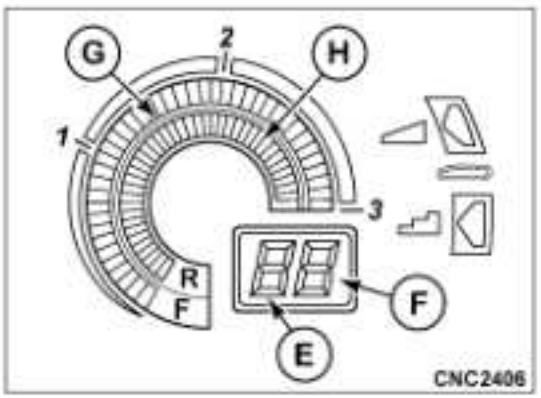
The travel speed is set to the travel speed that matches the general operating load. Operation is easy:

- Each time the UP switch on the travel lever is pressed, the speed switches 1st 2nd 3rd
- Each time the DOWN switch on the travel lever is pressed, the speed switches 3rd 2nd 1st.



The direction of travel (E) and speed range (F) are displayed in the speed range display at the bottom right.

- E
  - F: Forward
  - R: Reverse
  - N: Neutral
  - P: Parking brake lever is in LOCK position
- F
  - 1: 1st.
  - 2: 2nd.
  - 3: 3rd.



★ Example: F1 is displayed for FORWARD first.
- The outer bar graph (G) lights up to match the selector speed range when traveling forward.
- The inner bar graph (H) lights up to match the selected speed range when traveling in reverse.
- When the ignition switch is turned from OFF to ON, the speed range is set by default to 1st.

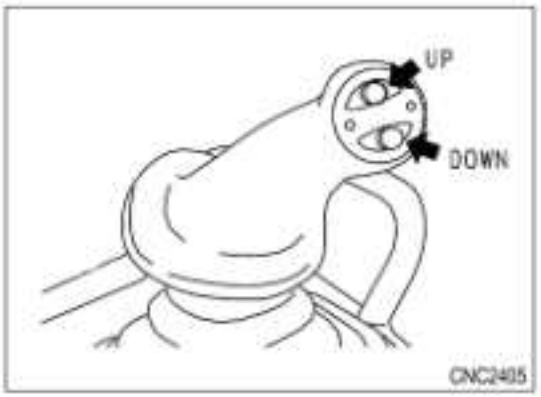
VARIABLE SHIFT MODE

The travel speed can be set in 20 stages from 0.8 km/h (0.5 MPH) to 9.0 km/h (5.6 MPH).

In particular, the minimum travel speed is set low so that work such as loading the machine onto a trailer or traveling over rough places on the road surface can be carried out more safely.

Furthermore, it is possible to adjust the optimum travel speed over a wider range for work such as plowing or winch operations.

- Each time the UP switch on the travel lever is pressed, two segments on the bar graph around the outside circumference light up and the set travel speed increases by approximately 0.4 km/h (0.2 MPH).



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INITIAL 500 HOURS SERVICE (ONLY AFTER THE FIRST 500 HOURS)

REPLACE MAIN FUEL FILTER CARTRIDGE

⚠ WARNING

After the engine has been operated, all parts are at high temperature, so do not replace the filter immediately. Wait for all parts to cool down before starting the operation.
High pressure is generated inside the engine fuel piping system when the engine is running. When replacing the filter, wait for at least 30 seconds after stopping the engine to let the internal pressure go down before replacing the filter.
Do not bring any fire or flame close.

Remark

Genuine Komatsu fuel filter cartridges use a special filter that has highly efficient filtering ability. When replacing the filter cartridge, always use a genuine Komatsu part.
The common rail fuel injection system used on this machine consists of more precise parts than the conventional injection pump and nozzle.
If any part other than a genuine Komatsu filter cartridge is used, dust or dirt may get in and cause problems with the injection system. Always avoid using substitute parts.
When carrying out inspection or maintenance of the fuel system, pay more attention than normal to the entry of dirt. If dirt is stuck to any part, use fuel to wash it off completely.

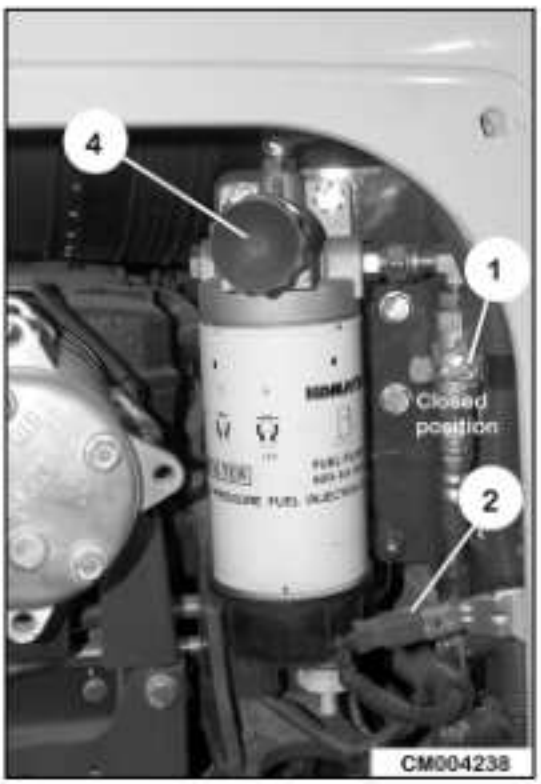
- Prepare a container to catch drain fuel.
- Prepare a filter wrench.

1. Open the grill at the front side of the machine.

⚠ WARNING

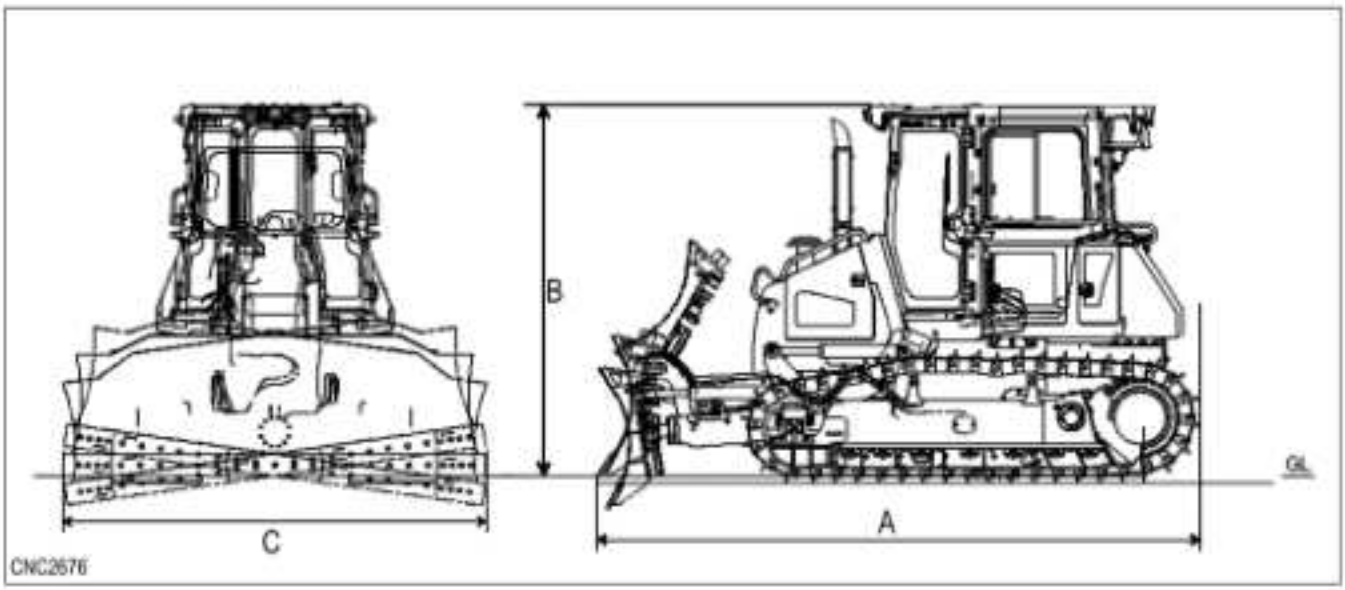
Do not operate the work equipment with the engine service doors in the open position, damage to the service doors or hood may result.

2. Set the container to catch the fuel under the filter cartridge and hose.
3. Close valve (1) before proceeding.
4. Remove connector (2). Wrap the removed connector in a vinyl bag to prevent water from getting on it.



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SPECIFICATIONS



	Item		Unit	D51EX-22	D51PX-22
	Machine weight		kg (lb.)	12,600 (27,558)	13,100 (28,881)
	Engine name		—	Komatsu SAA6D107E-1 Diesel engine	
	Engine horsepower		kW (HP)/rpm	97 (130)/2,200	
A	Overall length		mm (ft. in.)	48,00 (15.ft. 7.in.)	
B	Overall height	Including antenna	mm (in.)	3,177 (125.1)	
		Top of cab/ROPS		2,997 (118)	
C	Overall width		mm (in.)	3,045 (120) *	3,350 (132)
	Travel speed (Quick shift mode)	Forward: 1st/2nd/3rd	km/h (MPH)	3.4/5.6/9.0 (2.1/3.5/5.6)	
		Backward: 1st/2nd/3rd	km/h (MPH)	4.1/6.5/9.0 (2.5/4.0/5.6)	
	Travel speed (Variable shift mode)	Forward	km/h (MPH)	0.8 - 9.0 (0.5 - 5.6)	
		Backwards	km/h (MPH)	0.8 - 9.0 (0.5 - 5.6)	

* Machines equipped with narrow blade

OPERATING WEIGHT

(Approximate)

★ Tractor Weight:

Including rated capacity of lubricant, coolant, full fuel tank, operator, and standard equipment.

D51EX-22 . . . . . 11,100 kg (24,471 lb)

D51PX-22 . . . . . 11,500 kg (25,353 lb)

★ Operating weight:

Including power angle tilt dozer, ROPS cab, operator, standard equipment, rated capacity of lubricant, coolant, and full fuel tank.

D51EX-22 . . . . . 12,600 kg (27,778 lb)

D51PX-22 . . . . . 13,100 kg (28,881 lb)

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INSPECTION OF ADDITIONAL WATER SEPARATOR AND CLEANING OF CASING INTERIOR

(Only poor fuel arrangement specification machine)

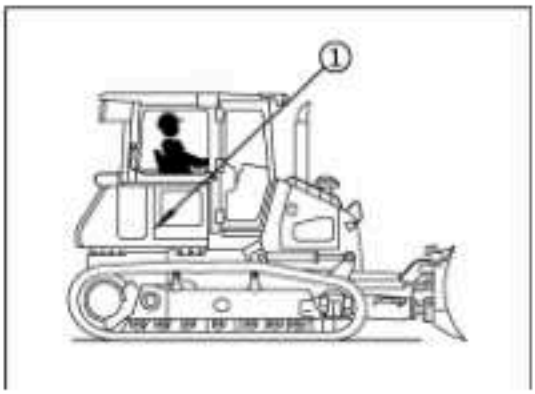
⚠ WARNING

- **When draining fuel from the water separator, prepare a container used for catching drained oil and take care not to spill fuel. Spilt fuel can cause fire, so wipe it off completely.**
- **Fuel can pose danger as it is flammable. Never bring fire near fuel.**

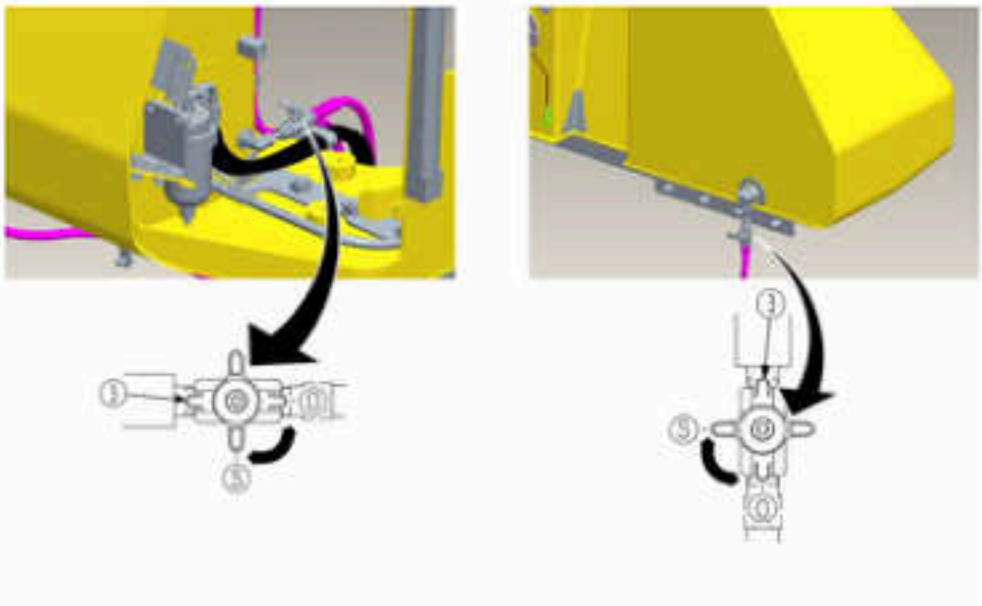
Remark

- *When carrying out inspection and maintenance of the fuel system, be particularly careful not to let any dirt or dust get in. If there is any dirt or dust around the fuel system, clean it off thoroughly with fuel before starting the operation.*
- *To prevent dirt or dust from getting into the fuel circuit, remove all dirt and dust from the surrounding area before starting the operation.*
- *Prepare a container to catch drained fuel.*

1. Open cover (1)



2. Put a container under drain hose (2) to catch drained oil.
3. Turn the fuel valve (3) to the "SHUTOFF" position (S).



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