TEN00109-01

Operation & Maintenance Manual

Bulldozor

D31EX -21 D31PX -21
D37EX -21 D37PX -21
D39EX -21 D39PX -21

SERIAL NUMBERS

D31EX- 50501
D31PX- 50501
D37EX- 5501 and up
D37PX- 5501
D39EX- 1501
D39PX- 1501

WARNING

Unsafe use of this machine may cause serious injury or death. Operators and maintenance personnel must read this manual before operating or maintaining this machine. This manual should be kept near the machine for reference and periodically reviewed by all personnel who will come into contact with it.

NOTICE

Komatsu has Operation & Maintenance Manuals written in some other languages. If a foreign language manual is necessary, contact your local distributor for availability.

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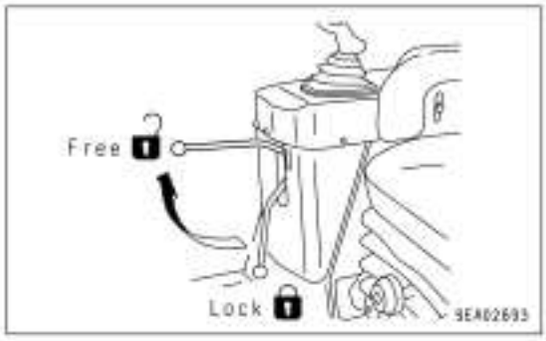
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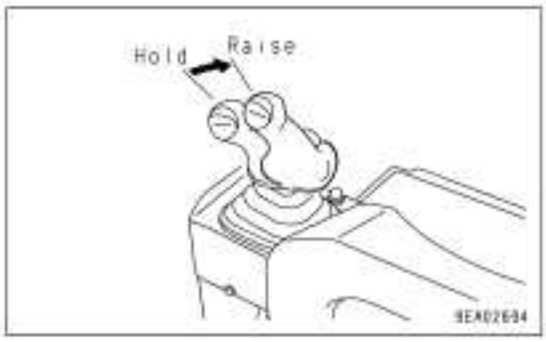
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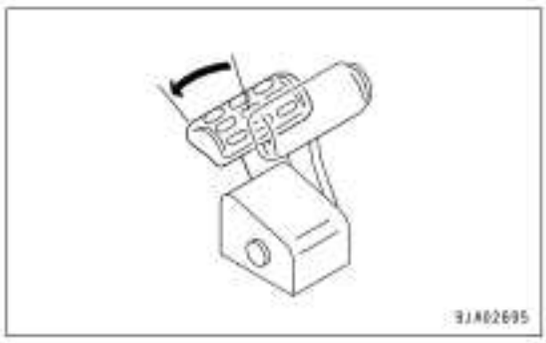
3. Set the work equipment lock lever (7) to the FREE position.



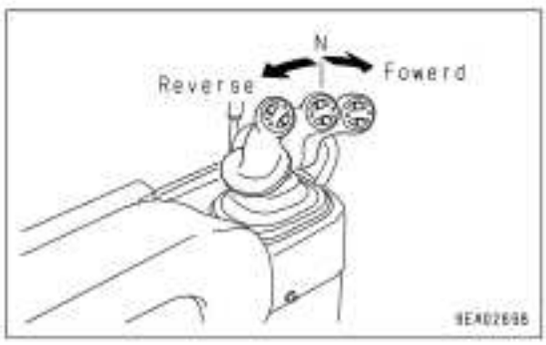
4. Put blade control lever (8) in the RAISE position to raise the blade 40 to 50 cm (15.8 to 19.7 in) off the ground.



5. Depress decelerator pedal (5).



6. Move steering, forward-reverse, gear shift lever (4) to the FORWARD or REVERSE position to move the machine off.



REMARK

- Check that the backup alarm sounds when steering, forward-reverse, gear shift lever is placed in REVERSE. If the alarm does not sound, please contact your Komatsu distributor.
- When the steering, forward-reverse, gear shift lever is placed in FORWARD or REVERSE, the machine may deviate slightly to the left or right, but this is caused by the actuation of the straight-travel compensation mechanism and does not indicate any problem.

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GREASE

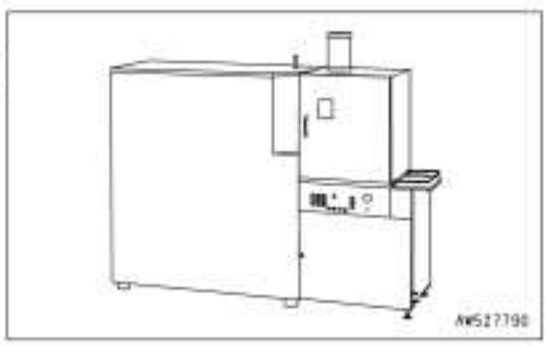
- Grease is used to prevent seizure and noises at the joints.
- Grease fittings not included in the maintenance section are grease fittings for overhaul, so they do not need grease.
  If any part becomes stiff after being used for long time, add grease.
- Always wipe off all of the old grease that is pushed out when greasing.
  Be particularly careful to wipe off the old grease in places where sand or dirt sticking in the grease would cause wear of the rotating parts.

CARRYING OUT KOWA (Komatsu Oil Wear Analysis)

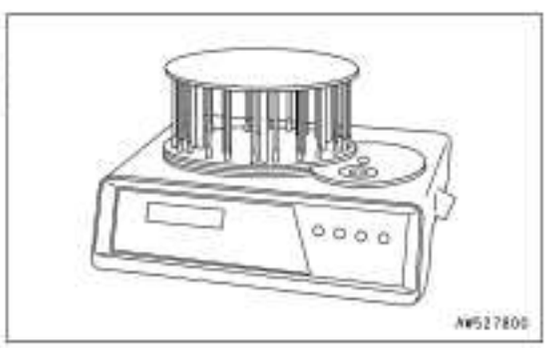
The oil clinic samples the oil periodically and analyzes it. This is a preventive maintenance service, which provides early discovery of abnormal parts and wear of the drive parts of the machine. This then makes it possible to ensure prevention of failures and reduction in downtime.
Komatsu's long years of experience and rich supply of accumulated data make it possible to accurately determine the condition of your machine. This enables us to locate the problems and to recommend suitable and timely repair methods.
The oil clinic charges the customer only the actual costs, and provides an immediate report of the results of the analysis and recommendations for action to take. This low-cost service can save you high costs and inconvenience in the future, so we strongly recommend you to avail yourself of this service.

KOWA ANALYSIS ITEMS

- Measurement of density of metal wear particles
  This uses an ICP (Inductively Coupled Plasma) analyzer to measure the density of iron, copper, and other metal wear particles in the oil.



- Measurement of quantity of particles
  This uses a PQI (Particle Quantifier Index) measurer to measure the quantity of iron particles of 5μm or more, enabling early detection of failures.



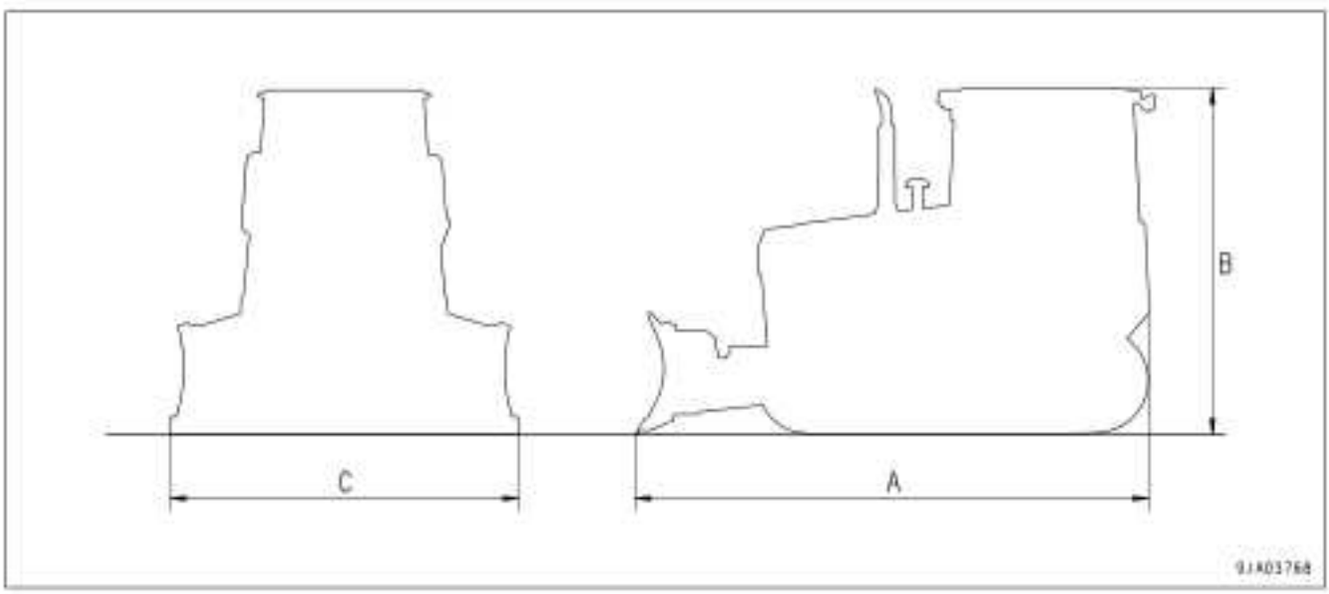
- Others
  Measurements are made of items such as the ratio of water in the oil, density of the antifreeze coolant, ratio of fuel in the oil, and dynamic viscosity, enabling a highly precise diagnosis of the machine's health.

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With power angle power tiltdozer and ROPS cab

	Item		Unit	D39EX-21	D39PX-21
	Machine weight		kg (lb)	8,820 (19,448)	9,200 (20,286)
	Name of engine		-	Komatsu SAA4D102E-2 diesel engine	
	Engine horsepower		kW (HP)/rpm	71 (95)/2,000	
A	Overall length		mm (ft in)	4,200 (13' 9")	4,200 (13' 9")
B	Overall height	(Not including antenna)	mm (ft in)	2,770 (9' 1")	2,770 (9' 1")
		(To tip of exhaust pipe)	mm (ft in)	2,720 (8' 11")	2,720 (8' 11")
C	Overall width		mm (ft in)	2,740 (8' 12")	3,330 (10' 11") *2,980 (9' 9")
	Travel speed (Quick shift mode)	Forward 1st/2nd/3rd	km/h (MPH)	3.4/5.6/8.5 (2.1/3.5/5.3)	
		Bckward 1st/2nd/3rd	km/h (MPH)	4.1/6.5/8.5 (2.5/4.0/5.3)	
	Travel speed (Variable shift mode)	Forward	km/h (MPH)	0.8 - 8.5 (0.5 - 5.3)	
		Backward	km/h (MPH)	0.8 - 8.5 (0.5 - 5.3)	

* Machines equipped with narrow blade



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