

KOMATSU

Procedimiento Mantenimiento de 250 Horas

X/V	Tareas	Observaciones
/	Sustituir pre-filtro del motor	
/	Sustituir filtro del motor	

Observación General:

- / El equipo no tiene cocombos de aceite.
- / Se deben girar buses de cadenas y engranajes apropiados.

Participantes:

Hora Inicio:

Hora Fin:

#	Nombre	Cargo	Nota
1	Don Andres Poma Tuma	Trabajo	
2			
3			
4			
5			
6			
7			

Supervisor: Andy G. Joro 4/

KOMATSU Service Report

SHOULDERS & DOZER SHOVELS

Report No.

Inspector Name: Debra L. Jones

Machine Model	Type	Serial No.	Engine Model	Serial No.	Machine Status	Machine In stock	Sw. Delivery	Delivered	1st Service	2nd Service	3rd Service	4th Service
DESFX	16	82889	SA6D114E-3	26880626	New	W30	W41P	W41N	W411	W412	W413	W414
Date of Service	SMR	Customer Name	Distributor Code	Distributor Name								
12-07-2023	6074	Comarcio Ruta 40		Komatsu Colombia								
Country Code	Location											
7754	Oficina Comarcio Ruta 40 Fusagasuga											
Attachment(s)												
Make	Model	Serial No.	Make	Model	Serial No.	Applications						

NOTE: Below are the items related to operation, maintenance and lubrication of this machine to be performed at Pre-Delivery, Delivery, Periodic and Add Service. The Operation & Maintenance Manual details all items to maximize machine availability. Some items may not apply to certain models.

X Item to be serviced G Good Condition B Bad Condition C Correction Made

SHOULDERS & DOZER SHOVELS

Item	Newest Delivery Pre-delivery					C
	S	G	B	C	D	
1 Visual Check (Covers, loose bolts, rust, leakage, wiring)	X	X	X	X	X	B
2 Lubrication or Service Chart installed	X	X				C
3 MARKS & PLATES INSTALLED (Safety, operation, lubricating, etc.)	X	X				C
4 Attachment(s) installed	X	X				C
5 Fluid Operation Check						
Fuel Tank	X	X	X	X	X	B
Battery Electrolyte	X	X	X	X	X	B
Radiator Coolant Level/Anti-freeze Protection	X	X	X	X	X	B
Engine Oil Pan(s)	X	X	X	X	X	B
Damper case	X	X	X	X	X	B
Power Train oil pan (incl. T/M, T/C and bevel gear case)	X	X	X	X	X	B
Final Drive Cases	X	X	X	X	X	B
Track Rollers and idlers	X	X	X	X	X	B
First Bracing of layer - if equipped	X	X	X	X	X	B
Main clutch, Air transfer case (power train unit)	X	X	X	X	X	B
Steering clutch case (power train unit)	X	X	X	X	X	B
Hydraulic Tank	X	X	X	X	X	B
6 Service						
Fuel Tank & Filter Element	X	X	X	X	X	B
Drive Belt Tension(s), Fan, Alternator, etc.	X	X	X	X	X	B
Air Cleaner Element(s) & Connections	X	X	X	X	X	B
Radiator Core & Cooling System Connections	X	X	X	X	X	B
Engine Oil Filter(s), Fuel Filter(s) & Breather	X	X	X	X	X	B
Hydraulic Oil Filter Element(s) & Tank Breather	X	X	X	X	X	B
Inspect Entire Machine for Broken Welds, Cracks and Distortions	X	X	X	X	X	B
Track Tensions	X	X	X	X	X	B
Wear of Undercarriage, Blade or Bucket Cutting Edge and/or Teeth & Ripper points	X	X	X	X	X	B
Undercarriage Tension - Shoes, Links, Sprockets, etc.	X	X	X	X	X	B
KOMTRAX/In-M/In Function - if applicable	X	X	X	X	X	B

Item	Newest Delivery Pre-delivery					C
	S	G	B	C	D	
7 Operation						
Multi Monitor (Every switches, Gauges, Lights, Indicators and level monitors)	X	X	X	X	X	B
Unusual Machine Noise	X	X	X	X	X	B
Warning Horn, Lights & Window Wipers	X	X	X	X	X	B
Backup Alarm	X	X	X	X	X	B
Brake & Decelerator Controls	X	X	X	X	X	B
Perking & Work equipment lock lever	X	X	X	X	X	B
FCCS Laver function - if equipped	X	X	X	X	X	B
Transmission neutral lock & shift control - if equipped	X	X	X	X	X	B
Blade or Bucket & Ripper - if equipped	X	X	X	X	X	B
Engine Low Idle RPM	Record	X	X	X	X	B
Engine High Idle RPM	Record	X	X	X	X	B
T/C Stall RPM	Record	X	X	X	X	B
Equip. Hyd. Relief Pressure	Record	X	X	X	X	B
Procedure for using multi-monitor and KOMTRAX	X	X	X	X	X	B
8 Guidance						
Safe Operation & Maintenance	X	X	X	X	X	B
Procedure for Starting & Stopping Engine	X	X	X	X	X	B
10, 50 & 100 Hour Maintenance Service	X	X	X	X	X	B
250 Hour Maintenance Service	X	X	X	X	X	B
500 Hour Maintenance Service	X	X	X	X	X	B
1000 Hour Maintenance Service	X	X	X	X	X	B
2000, 4000, 8000, 15000 Hour Maintenance Service	X	X	X	X	X	B
Warranty & Service Rules	X	X	X	X	X	B
Service Tools & Publications	X	X	X	X	X	B
Spare Parts Ordering Procedure	X	X	X	X	X	B
9 Other						
Operation & Maintenance Manual Review	X	X	X	X	X	B
Parts Book Review	X	X	X	X	X	B
Safety Manual Review	X	X	X	X	X	B
Spare Parts Ordering Procedure	X	X	X	X	X	B
ROPS installed condition - if applicable Serial No.	X	X	X	X	X	B

Machine Maintenance Programs

Offer and explain the programs listed below. List data is in "Specify" if the machine is already enrolled in a particular program.

Advantage Extended Coverage ☒ Specify ELP PM PRO ☐ Specify _____
Rapid and Maintenance Contract ☐ Specify _____ KOWA ☐ Specify _____

This machine has been serviced and is in satisfactory condition. Adequate information has been given on its operation, care and maintenance. The Operation & Maintenance Manual has been received. All literature and explanations that pertain to safe machine operation have been received and understood.

Customer Comments: _____

Inspector Comments: Notes: Motor 15W-40 8.6L, Hidraulica 46-46 15.6L, Servotransmission 46-46 15.6L, Filtros: Motor 40W, Hidraulica 46W, Servotransmission 46W. Alinea de la ins. del servotransmission del. Hidraulica 46W, escape 46W.

Customer Signature: Felix G. Toro Inspector Signature: Debra L. Jones

SEN05122-02

104 Testing and adjusting, Part 4
Pre-Clinic service

Pre-Clinic service

Model	Serial No.	Service meter
☐ D60EX-15 ☒ D60WX-15 ☐ D60PX-15	82889	6074 h

User name	Date of clinic	Serviceman
Rafael 40 TR-09	22 10/31/2023	Dubey Andres Perez

Specifications		
Blade	Attachment	Shoe width
☐ Sigma blade ☐ Angle blade ☐ Straight tilt blade ☐ Power angle power tilt blade	☐ Multi-shank ripper ☐ Towing winch ☐ Drawbar ☐ Long drawbar ☐ Counterweight	☐ 510 mm ☐ 560 mm ☐ 610 mm ☐ 660 mm ☐ 760 mm ☐ 840 mm ☐ 940 mm ☒ 915 mm

Operating conditions			
Quarry, mine	Construction	Type of soil (specific gravity)	Type of work
☐ Coal ☐ Gold ☐ Limestone ☐	☐ Construction, civil engineering ☒ Roads ☐ Tunnels ☐	☐ Rock ☒ Gravel ☒ Sand ☐ Clay	☒ Dozing, digging % ☐ Side cutting % ☐ Grading % ☐ Travel %

Existence of abnormalities	
Oil, water level check	
☒ Engine coolant level ☒ Engine oil level ☒ Hydraulic oil level	When necessary ☒ Power train ☒ Final drive ☐ Damper case ☐ ()

Ambient temperature	Height above sea level
Max. 40 °C Min. 30 °C	
Operator's opinion	

Visual check results
Señal de alarma de aceite, de agua, de aceite, de aceite, de aceite

Failure code history	
LCA 559 1 4454 h Content: Error precision bagu Control	LCA 559 1 4454 h Content: Error precision bagu Control
LCA 490 1 4455 h Content: Precision not bagu Control	LCA 224 1 4455 h Content: Precision not bagu Control

104 Testing and adjusting Part 4 In-Chain Service

Pre-clinic check sheet

Serial
number

☐ D65EX-16 #
☒ D65PX-16 # 82804
☐ D65WX-16 #

Work order

Date

Service meter

Serviceman

22 10312023

6074 h

Duben Purney

Check item	Measurement conditions	Unit	Standard value for new machine	Service limit value	Measurement results	Pass	Fail
HSS oil pressure	HSS LS oil pressure when relieved	MPa (kg/cm ²)	35.2 ~ 38.1 (359 ~ 389)	Min. 32.8 (Min. 335)			
	HSS oil pressure when relieved		37.1 ~ 40.1 (379 ~ 409)	Min. 34.8 (Min. 355)			
Brake	Brake actuating pressure	MPa (kg/cm ²)	2.55 ~ 2.94 (26 ~ 30)	Min. 2.55 (Min. 26.0)			
	Brake performance		Apply brake and run engine at high idle with transmission gear in P2. Machine must not move				

Performance		Measurement conditions		Unit	Standard value for new machine	Service limit value	Measurement results	Pass	Fail
Hydraulic system	Work equipment load sensing pressure	Set cylinder to stroke end	Engine at high idle	MPa (kg/cm ²)	27.4 ~ 30.9 (280 ~ 315)	Min. 26.4 (Min. 270)			
	HSS and work equipment pump	Ripper lift relief	Engine at low idle		Min. 28.4 (Min. 290)	Min. 27.4 (Min. 280)			
		Blade tilt relief			Min. 28.4 (Min. 290)	Min. 27.4 (Min. 280)	27.4		
		Ripper lift relief			25.4 ~ 32.9 (300 ~ 335)	Min. 26.4 (Min. 290)			
		Blade tilt relief	Engine at high idle		25.4 ~ 32.9 (300 ~ 335)	Min. 26.4 (Min. 290)	30.5	✓	
	PPC valve output pressure	Blade tilt relief			3.19 ~ 4.17 (32.5 ~ 42.5)	3.19 ~ 4.17 (32.5 ~ 42.5)			

Check item	Measurement conditions	Unit	Standard value for new machine	Service limit value	Measurement results	Pass	Fail
Work equipment speed	Blade RAISE	second	EX/WX: 2.2 ~ 2.8 (*1)/ 2.4 ~ 3.0 (*2)	Max. 3.1 (*1) / Max. 3.3 (*2)			
			PX: 2.1 ~ 2.7 (*3) / 2.3 ~ 2.9 (*4)	Max. 3.0 (*3) / Max. 3.2 (*4)	2.58		
	Power angle power tilt dozer		2.2 ~ 2.8	Max. 3.1	2.58		
	Straight tilt dozer		1.3 ~ 1.9	Max. 2.1	1.6		
	Power angle power tilt dozer		1.4 ~ 2.0	Max. 2.2	1.6		
	Angle (left → right)		3.5 ~ 4.5	Max. 5.0			
Ripper RAISE			1.0 ~ 2.0	Max. 2.5			

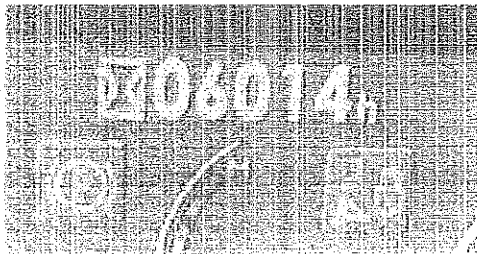
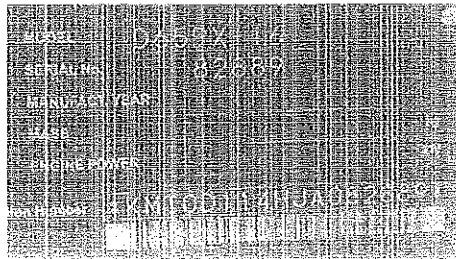
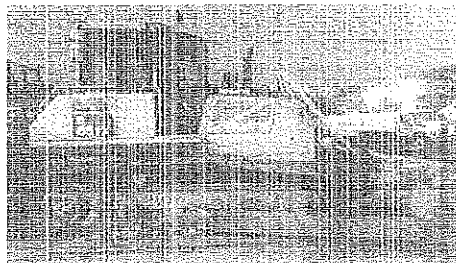
1. Serial No. 80001 to 83339
2. Serial No. 83340 and up
3. Serial No. 80001 to 83320
4. Serial No. 83321 and up

Check item	Measurement conditions	Unit	Standard value for new machine	Service limit value	Measurement results	Pass	Fail
Hydraulic oil	Hydraulic oil temperature	°C	45 ~ 55	—	58		
	Blade lift cylinder	mm/5 min.	Max. 35	Max. 35	20		
	Blade tilt cylinder	mm/5 min.	Max. 70	Max. 70	30		

KOMATSU	Procedimiento Mantenimiento de 2000 Horas	D65PX/EX-16
		FECHA: 18-03-2023

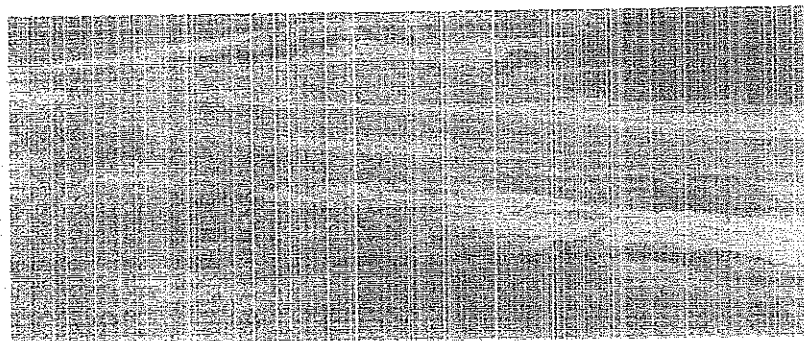
Modelo	D65PX-16
Número de Serie	32889
Numero Interno	70-04
Area	Planta Nilo
Horómetro	6014

NOTA: Este PM solo aplica para cliente Ruta 40

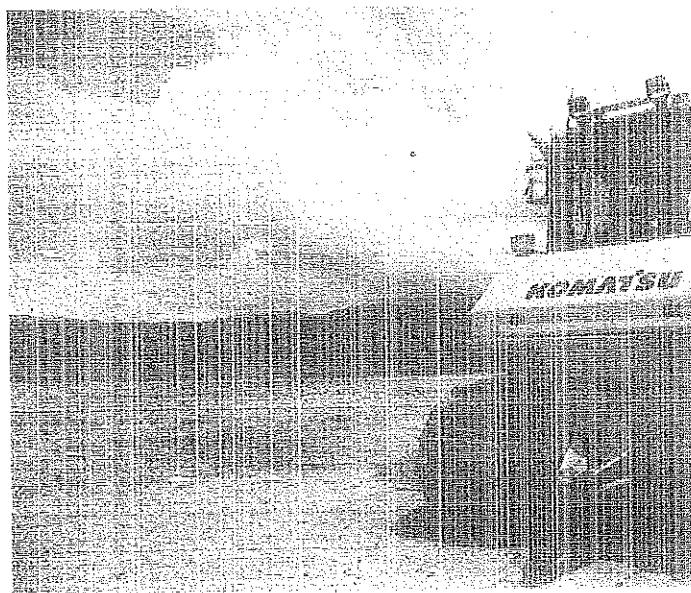
Datos del equipo	
	
HORÓMETRO	ID EQUIPO
	
ID MOTOR	EQUIPO

2.2. Información del sitio de trabajo de la máquina

Aplicación	Construcción de vías, rellenos, entre otros.
Material	Mixto
Condición del terreno	Árido, rocoso y abrasivo
Operación	Relleno de patios
Condición del sitio de trabajo	Normal para operación
Horas de trabajo (por día)	20 horas
Temperature ambiente	35°C



Material trabajado



Lugar de trabajo



Procedimiento Mantenimiento de 2000 Horas

D65PX/EX-16

FECHA:

18-03-2023

Modelo	D65PX-16
Número de Serie	82889
Numero Interno	IR-04
Area	Planta Nilo
Horómetro	6014

Lista de Repuestos

Item	Pieza No.	Nombre de la pieza	Ctd.
Aceite del motor	SY2Z-15W40	Aceite del motor	28.5 litros
Filtro del aceite del motor	6742-01-4540	Cartucho	1
Filtro Principal de combustible	600-319-3750	Cartucho (Con la tapa)	1
Pre-filtro de combustible	600-319-3610	Cartucho (With O-ring for clear ball)	1
Filtro de Aire	600-185-5100	Conjunto del elemento	1
Grasa			
Filtro del tren de potencia	714-07-28713 (07000-72110)	Elemento (Anillo O)	1
Filtro de aire Fresco	14X-911-7750	Filtro	2
Filtro de recirculación	17M-911-3530	Filtro	2
Filtro respiradero Hidráulico	421-60-35170	Elemento	1
Aceite de Transmisión	SY2Z-TO30-CN	Aceite	
Filtro de ECMV	569-15-51732	Filtro de última oportunidad	1
Aceite hidráulico	SY2Z-HO46-CN	Aceite	55 litros
Filtro de retorno de hidráulico	207-60-71182	Filtro	1
Aceite dampen	SY2Z-TO30-CN	Aceite	1.7 litros

Procedimiento

Nota: Este PM de 2000 solo aplica para el cliente RUTA 40

X: Pendiente

(X): Realizada con corrección

✓: Realizada

X/V	Tareas	Comentario
✓	Engrase del pasador lateral de la barra compensadora (p 4-58)	
✓	Engrase del pasador central de la barra compensadora (p 4-58)	
✓	Cambiar aceite en la caja del mando final, añadir aceite. (p 4-58)	
✓	Comprobar el nivel de aceite del tanque hidráulico, añadir aceite (p 4-59)	
✓	Comprobar el nivel del electrolito de la batería (p 4-60)	
✓	Compruebe y limpie el colador de combustible adicional y bomba de barido. (p 4-63)	
✓	Probando el rendimiento del freno. (p 4-64)	
✓	Cambiar los filtros de aire fresco/recirculado del aire acondicionado de aire (p 4-65)	