# SERVICE/INSPECTION CHECKLIST

SUBJECT: Service/ Inspection Checklist - Access Boom - T65D [T4F]

PRODUCTS AFFECTED: T65D

TO BE CARRIED OUT: Information Only

**SAFETY NOTICE:** Instructions in Service Bulletins assume that the engineer has a sound knowledge of safety procedures and has been trained in the maintenance and repair of JCB products. If you are unsure or do not understand information contained in this or other bulletins, ask your supervisor or contact JCB Service for advice. REMEMBER SAFETY MUST COME FIRST.

Copyright © 2004 JCB SERVICE. All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any other means, electronic, mechanical, photocopying or otherwise, without prior permission from JCB SERVICE.

This communication and the information within is intended for the recipient only, for information purposes, is confidential and may not be communicated to any third party. Whilst the information is believed to be correct, no guarantee is given by JCB as to it's accuracy and it's use may not be attributed to JCB. This bulletin is issued for information only and does not constitute an instruction to carry out warranty repairs on JCB products.

## **Machine and Dealer Information**

Table 1.

Dealer Stamp (Below):	Machine Type:
	Serial Number:
	Distributor:
	Depot:
	Job Number:
	Hourmeter Reading:
	Date of Registration:
	Date of Service:
	Customer Name:
	Engineer Name:

#### Introduction

**WARNING** Maintenance must be done only by suitably qualified and competent persons.

Before doing any maintenance make sure the machine is safe, it must be correctly parked on firm, level ground.

To prevent anyone starting the engine, remove the ignition key. Disconnect the battery (by means of the battery isolator if installed) when you are not using electrical power. If you do not take these precautions you could be killed or injured.

**WARNING** All scheduled and routine maintenance/daily tasks should be conducted with the machine cool. Checking or servicing a hot machine could lead to injury.

A badly maintained machine is a danger to the operator and the people working around the operator. Make sure that the regular maintenance and lubrication tasks listed in the service schedules are done to keep the machine in a safe and efficient working condition.

To ensure the correct functioning of the engine and emissions control system all operation and maintenance must be conducted in accordance with the instructions in this manual. Incorrect operation, maintenance or repair of the engine and emissions control system may lead to reduced product life, loss of performance or malfunctions. It is the machine owner's responsibility to ensure maintenance is conducted properly in accordance with the requirements in this manual.

Apart from the daily tasks, the schedules are based on the machine running hours. Keep a regular check on the hourmeter readings to correctly gauge the service intervals. When there is no hourmeter installed, use the calendar equivalents to determine the service intervals.

Do not use a machine which is due for a service. Make sure any defects found during the regular maintenance checks are corrected immediately.

More frequent checks of engine components than the engine manufacturer recommends do not invalidate emissions warranty.

#### How to Use the Maintenance Schedule

The schedules show the service tasks which must be done and their intervals.

The services must be done at either the hourly interval or the calendar equivalent, whichever occurs first.

The intervals given in the schedules must not be exceeded. If the machine is operated under severe conditions (high temperature, dust, water, etc.) shorten the service intervals.

Table 2.

С	Service task can be completed by a competent operator. Details of how to complete the service task are given in the Operator's Manual.
	We recommend that a Service Engineer completes the service task. Details of how to complete the service task are given in the Service Manual.

## **Maintenance Intervals**

Table 3.

Interval ( h)	Calendar Equivalent	
10	Daily	
50	Weekly	
250	6 months	
500	Yearly	
1000	Two years	
2000	Two years	

## **Operator Maintenance Tasks**

Table 4.

Component	Task	Daily	Weekly
Engine Engine			
Engine compartment hose	Check	0	0
	condition/security		
Engine oil	Check (level)	0	0
Engine oil	Check (leaks)	0	0
Engine coolant	Check (level)	O	0
Engine coolant	Check (leaks)	0	0
Cooling pack	Check/clean	0	0
Front end drive belt	Check (condition)		0
Air filter	Check (condition)	0	0
Air filter dust valve	Check operation/Clean		0
Engine fuel	Check (leaks)	0	0
Water Separator/fuel filter	Clean/Drain	0	0
Fuel tank cap- vent	Check (condition)	0	0
Exhaust system	Check (condition)	0	0
Hydraulics			
Hydraulic hoses	Check (condition)	0	0
Hydraulic oil	Check (level)	0	0
Hydraulic oil	Check (leaks)	0	0
Boom			
Boom wire rope	Check (Condition)	0	0
Boom wire rope-Tension	Check	0	0
Cylindrical wear pad	Check	0	0
Electrics			
Hydraulic generator (If installed)	Check (operation)	0	0
Hydraulic generator- wiring and connectors (If installed)	Check	0	0
AC (Alternating Current) power to platform cables	Check (operation)	0	0
Batteries terminal	Clean	0	0
Battery leads	Check (condition)	0	0
All electrical cables and conductors	Check (condition)	0	0
Base controller		***	
Emergency stop	Check (operation)	0	0
Platform raise and lower functions	Check (operation)	0	0
Electric pump	Check (operation)	0	0
Ignition switch	Check (operation)	0	0
Ground control emergency override	Check (operation)	0	0
Engine start	Check (operation)	0	0
Engine speed (1500RPM)	Check (operation)	0	0
Horn	Check (operation)	0	0
Emergency override switch	Check (operation)	0	0
Platform controller		1	
Emergency stop	Check (operation)	0	O
Platform raise and lower functions	Check (operation)	0	0
Foot pedal switch	Check (operation)	0	0

Steering	Check (operation)	0	0
Drive and brake	Check (operation)	0	0
Worklight (if installed)	Check (operation)	0	0
Power to platform (if power tool installed)	Check (operation)	0	0
Horn	Check (operation)	0	0
Engine speed (1500RPM/22000RPM)	Check (operation)	0	0
Electric pump	Check (operation)	0	0
General			
Limited driving speed (with platform lifted and stowed)	Check (operation)	0	0
Tilt sensor	Check (operation)	0	0
Proximity, String pod, Boom raise and lower sensor	Check (operation)	0	0
Axle oscillation lock	Check (operation)	0	0
Platform levelling	Check (operation)	0	0
Travel alarm	Check (operation)	0	0
Platform secondary guarding system	Check (operation)	0	0
Miscellaneous			
Operator's Manual	Check (condition)	0	0
Canopy and latches	Check (condition)	0	0
Safety Labels	Check (condition)	0	0
Welds	Check (condition)	0	0
Machine damage, missing parts	Check (condition)	0	0
Fasteners	Check (condition)	0	0
Platform guard rail	Check (condition)	0	0
Tyres and wheels	Check (condition)	0	0
Wheel lug nuts <sup>(1)</sup>	Torque		0
Wheel lug nut marks	Check (alignment)	0	0

(1) First 50 hours only

# **Service Engineer Maintenance Tasks**

Table 5.

Component	Task	250 h	500 h	1000 h	2000 h
Engine					
Engine compartment	Check security				
Engine compartment hose	Check condition/security				
Engine oil	Check (level)				
Engine oil	Check (leaks)				
Engine oil	Replace				
Engine oil filter	Replace				
Engine coolant	Check (level)				
Engine coolant	Check (condition)				
CCV (Crankcase Ventilation) <sup>(7)</sup>	Replace				
Coolant (inorganic) <sup>(5)</sup>	Replace				
Coolant (OAT - organic acid technology) <sup>(4,</sup> 5)	Replace				
Engine coolant	Check (leaks)				
Engine radiator	Check (condition)				
Cooling pack	Check/clean				
Cooling hoses <sup>(3)</sup>	Replace				
Front end drive belt	Check (condition)				
Front end drive belt <sup>(3)</sup>	Replace				
Air filter	Check (condition)			0	
Air filter element (outer) <sup>(2)</sup>	Replace				
Air filter element (inner) <sup>(2)</sup>	Replace				
Air filter dust valve	Check operation/Clean		0		0
Intake manifold hose <sup>(3)</sup>	Replace				
Engine fuel	Check (leaks)				
Lubricity filter (if fitted)	Replace				
Water Separator/fuel filter	Clean/Drain				
Water Separator/fuel filter element	Replace				
Engine fuel filter element	Replace		0		
Fuel tank cap- vent	Check (condition)				
Exhaust system	Check (condition)				
Hydraulics					
Hydraulic hoses	Check (condition)				
Hydraulic oil	Check (level)				
Hydraulic oil	Check (leaks)		0		
Hydraulic oil	Replace				
Hydraulic return filter element	Replace			0	
Suction strainer	Replace				
Charge pump filter element	Replace				
High pressure filter element	Replace			а	
Vent filter - hydraulic tank	Replace				
Hydraulic system pressure	Check (settings)	0			

Hydraulia system functional tast	Chook (charation)				
Hydraulic system functional test	Check (operation)				
Boom Wire rose	Check (Condition)				
Boom wire rope					
Boom wire rope - Tension	Check/ Adjust				
Cylindrical wear pad	Check (condition)	-			-
Cylindrical wear pad	Grease				
Electrics					
Batteries terminal	Clean				-
All electrical cables and conductors	Check (condition)	0			
Hydraulic generator (If installed)	Check (operation)				
Hydraulic generator- wiring and connectors (If installed)	Check				
RCBO (Residual Current Breaker with Over-Current)	Check (operation)	0			
AC power to platform cables	Visual inspection				
AC power to platform cables	Check (operation)				
Battery leads	Check (condition)				
Ground controller					
Emergency stop	Check (operation)				
Platform raise and lower functions	Check (operation)				
Electric pump	Check (operation)				
Ignition switch	Check (operation)		0		
Ground control emergency override	Check (operation)			0	
Engine start	Check (operation)	0-			
Engine speed	Check (operation)				
Horn	Check (operation)	0			
Emergency override switch	Check (operation)	0			
Platform controller					
Emergency stop	Check (operation)				
Platform raise and lower functions	Check (operation)				
Foot pedal switch	Check (operation)				
Steering	Check (operation)				
Drive and brake	Check (operation)				
Worklight (if installed)	Check (operation)				
Power to platform (if power tool installed)	Check (operation)	0	0	0	
Horn	Check (operation)				
Engine speed	Check (operation)	<del>-</del>		-	
Electric pump	Check (operation)				
General	Check (operation)	<del>-</del>	_		
Limited driving speed (with platform lifted	Check (operation)				
and stowed)					
Tilt sensor	Check (operation)				
Proximity, String pod, Boom raise and lower sensor	Check (operation)				
Axle oscillation lock	Check (operation)				
Platform levelling	Check (operation)		0		
Overload System	Check (operation)				

Overload test	Check (operation)			
Engine speed selection	Check (operation)		0	
Travel alarm	Check (operation)			
Buzzers	Check (operation)			
Drive speed	Check		0	
Boom and slew speed	Check		0	
Platform secondary guarding system	Check (operation)		0	
Miscellaneous				
Operator's Manual	Check (condition)			0
Canopy and latches	Check (condition)			
Safety Labels	Check (condition)			
Welds	Check (condition)			
Machine damage, missing parts	Check (condition)			
Fasteners	Check (condition)			
Platform guard rail	Check (condition)			0
Steer pivots	Grease			
Tyres and wheels	Check (condition)			
Wheel lug nuts	Torque			
Hub oil	Check (level)			
Hub oil <sup>(1)</sup>	Replace			
Slew gearbox oil	Check (level)			
Slew gearbox oil <sup>(1)</sup>	Replace			
Slew bearing	Check (condition)			
Wire ropes (Tension) <sup>(8)</sup>	Check (condition)			
Wire ropes (Wear) <sup>(6)</sup>	Check (condition)			
Rotary actuator	Check (torque)			
Slew ring fastener	Check (torque)		0	
Counter weight	Check (torque)			

- (1) An initial hub oil replacement should be made after the first 50 hours and slew gearbox oil should be made at first 250 hours service and then at regular 1000 hour intervals.
- (2) The period of time that must elapse before checking the filter element depends on the environment in which the engine operates. The air filter must be cleaned and replaced more frequently under very dusty conditions.
- (3) At every 8,000h.
- (4) At every 4,000h or 4 years, whichever is first.
- (5) Check which coolant type is installed in the machine before topping up the coolant. Mixing of different coolant types is likely to impair corrosion inhibiting performance and may result in invalidation of the warranty offered by JCB. In the event of mixing or if the coolant type is to be changed, the coolant circuit should be completely drained and flushed with clean water before re-filling with fresh coolant.
- (6) Wire ropes must be inspected as per the guidelines defined in the service manual at every 7,000h / 12 Years and should be replaced if found damaged.
- (7) At every 1,500h.
- (8) At every 150h.

## **Paintwork Defects**



# Zoom

# Remarks/Action Implemented During the Machine Service

Figure 2.



## Zoom

**Outstanding Action Required** 

Figure 3.

Ø3			
	X 11 - 10 - 11 - 1		
	=		
	1000		
	14110		

Zoom

		i