

CX800B
Crawler excavator

Operator's Manual

Print No. Lep 84330681
2nd edition
English 05/2010 - Original Instructions
Replaces Lep 84156056



CLICK HERE TO **DOWNLOAD** THE COMPLETE MANUAL

- Thank you very much for reading the preview of the manual.
- You can download the complete manual from: www.heydownloads.com by clicking the link below



- Please note: If there is no response to CLICKING the link, please download this PDF first and then click on it.

CLICK HERE TO **DOWNLOAD** THE COMPLETE MANUAL

TABLE OF CONTENTS

Maintenance/Adjustments (continued)

| | |
|--|-------------|
| Fire extinguisher | 8-9 |
| Welding on the machine | 8-10 |
| Inspecting and cleaning the machine | 8-10 |
| Checking the machine settings | 8-10 |
| Checking for cylinder leakage | 8-11 |
| Plastic and resin parts | 8-11 |
| Tooth tip wear limits | 8-12 |
| Replacing a tooth tip | 8-12 |
| Replacing a backhoe bucket | 8-13 |
| Shimming the backhoe bucket | 8-14 |
| Air conditioning | 8-15 |
| Engine troubleshooting | 8-19 |
| Hardware torque inspection | 8-21 |
| SECTION 9 - ELECTRICAL SYSTEM | 9-1 |
| Fuses | 9-1 |
| Batteries | 9-3 |
| Alternator | 9-6 |
| Starter motor | 9-6 |
| Replacing a bulb | 9-7 |
| SECTION 10 - STORAGE | 10-1 |
| Storing the machine | 10-1 |
| SECTION 11 - SPECIFICATIONS | 11-1 |
| Engine | 11-1 |
| Hydraulic system | 11-1 |
| Undercarriage | 11-2 |
| Safety devices | 11-2 |
| Operator's compartment | 11-3 |
| Noise levels | 11-3 |
| Vibration level inside the cab | 11-3 |
| Cab | 11-3 |
| Transport | 11-4 |
| Weights | 11-4 |
| Standard attachment | 11-4 |
| Short attachment | 11-4 |
| Backhoe buckets | 11-4 |
| Machine overall dimensions | 11-5 |
| Overall dimensions and weight of the main machine components | 11-7 |
| Working range | 11-8 |
| SECTION 12 - ALPHABETICAL INDEX | 12-1 |

BEFORE USING THE MACHINE

1. Avoid loose fitting clothing, loose or uncovered long hair, jewellery or any other items which could get caught up in machinery.
2. Different types of job will require different types of protective equipment. Items such as hard hats, safety shoes, heavy gloves, reflector type jackets, respirators, ear protection and eye protection may be required. Before starting a job, determine what protective equipment will be necessary. Use this equipment at all times.
3. Do not attempt to operate this machine unless you have first read and perfectly understood the safety messages and instructions appearing in this manual.
4. Operating the machine requires full attention and care on the part of the operator can avoid accidents. Get to know the machine's possibilities and limitations and the working space required. There are areas of poor visibility in the working range of the machine. Have someone guide you for all areas where visibility is not perfect.
5. Grease, oil, mud or (in winter) ice on the steps and access handles can cause accidents. Make sure they are kept clean at all times.
6. Every day, inspect the machine to detect any signs of hydraulic fluid leakage. Tighten the connections or replace any defective components as necessary.
7. Remove any obstructions which hinder visibility. Keep the windshield, rear view mirror and windows clean at all times.
8. Make sure the windshield wiper works correctly.
9. Make sure you are perfectly familiar with hand signals in daily use on the worksite so as to be able to obtain help with tight manoeuvres or when carrying out operations where visibility is poor.
10. Before undertaking any travel or working operations during hours of darkness, make sure the lighting and signalling equipment is fully operative.
11. Before any travel operation, make sure that the doors and hoods are properly latched.
12. Check that no tools or other items have been left on the machine (be it on the undercarriage or the upperstructure) or in the operator's compartment.
13. The operator must be alone on the machine at all times. Do not allow anyone to stand on or around the machine.
14. To get in or out of the cab, it is imperative that the upperstructure frame is in line with the undercarriage.
15. When alighting from or getting into the operator's compartment, always face the machine and use the steps and access handles.
16. Be sure you know the position and function of each control. Incorrect operation of the controls can cause serious injuries.
17. Check all controls and safety devices in a safe, open area before starting work.
18. Keep away from dangerous areas such as ditches, overhangs, rocky areas, etc. Make a survey of the work-site and determine the possible dangers before using the machine.
19. Before parking the machine, make sure that the ground is stable. Plan the worksite so that the ground is flat, hard and level.
20. Before moving the machine to work in a new area, walk around to determine all possible causes of accidents there. Holes, obstacles, debris and other danger risks in the working area can cause serious injury.
21. Be ready to meet emergencies. Always carry a first aid kit and if possible, fire extinguisher (not supplied) within easy reach on board. Make sure the fire extinguisher is regularly serviced in conformance with the manufacturer's instructions.
22. Check the fastening of the main components: counterweight, turntable bearing and operator's compartment. In the event of problems, consult your CASE Dealer.
23. Make sure you understand the symbols used on the machine safety decals. Keep the decals clean so that they are perfectly legible at all times.

SECTION 3 - SAFETY/DECALS/HAND SIGNALS

FUNCTION OF THE LEVERS AND PEDALS

Part number:

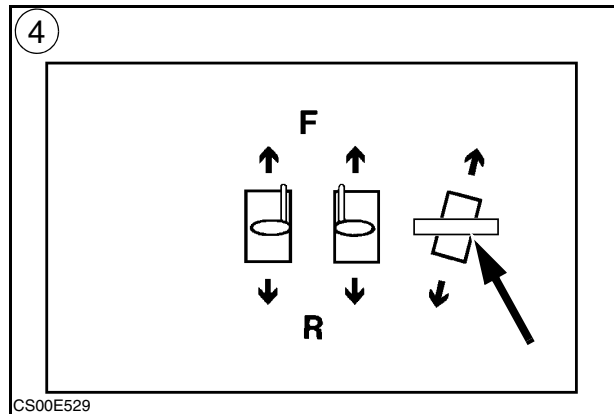
KHP1498 (standard)

KHP1484 (with right-hand option)

KHP1510 (with left-hand option)

KHP1511 (with right and left-hand options)

This decal shows the function of the travel control levers and pedals.

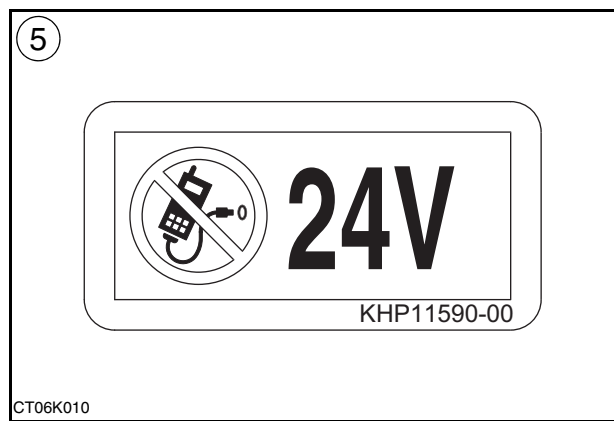


14

CIGARETTE LIGHTER SOCKET (24 volts)

Part number: KHP11590

This decal shows the location and the voltage of the cigarette lighter socket. It is strictly prohibited to connect devices of a different voltage.

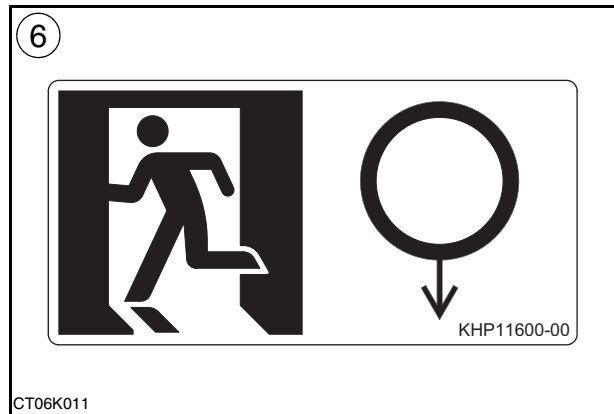


15

EMERGENCY EXIT

Part number: KHP11600

This decal shows the location and way how to use the emergency exit (rear window).



16

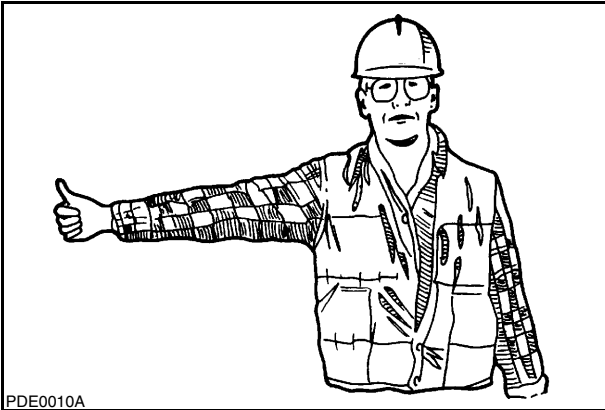
POCKET FOR MAXIMUM HANDLING LIMITS TABLE

7 Part number: G4647501

This pocket is provided for the table showing maximum handling limits corresponding to the attachment installed on the machine.

SECTION 3 - SAFETY/DECALS/HAND SIGNALS

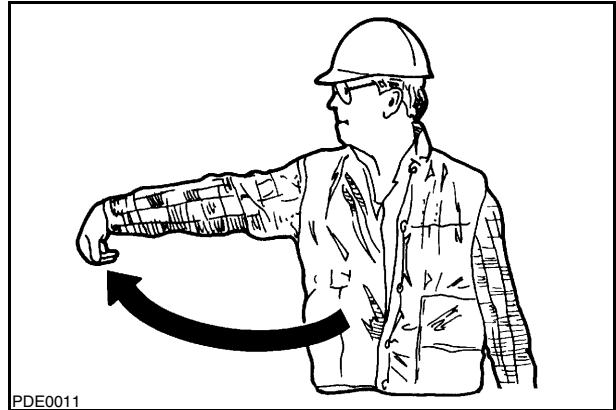
LIFT BOOM



PDE0010A

54

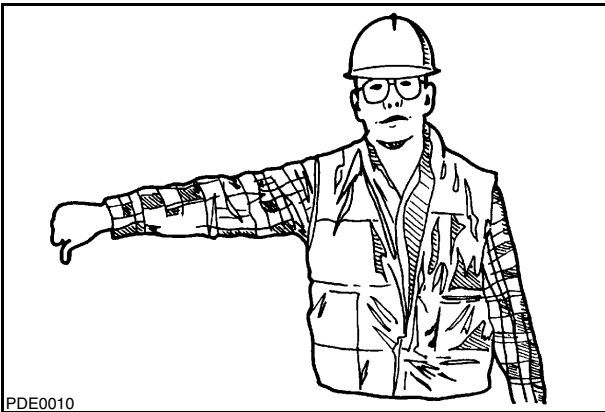
EXTEND DIPPER



PDE0011

57

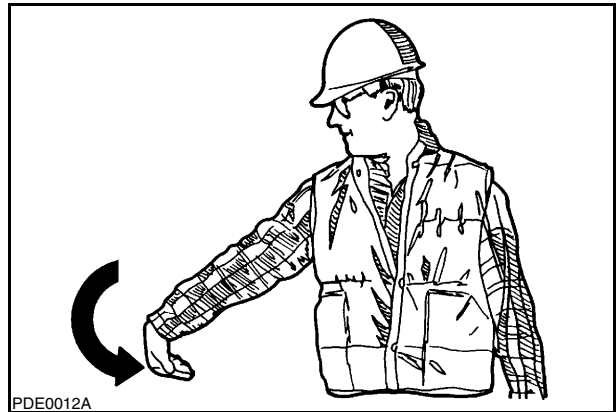
LOWER BOOM



PDE0010

55

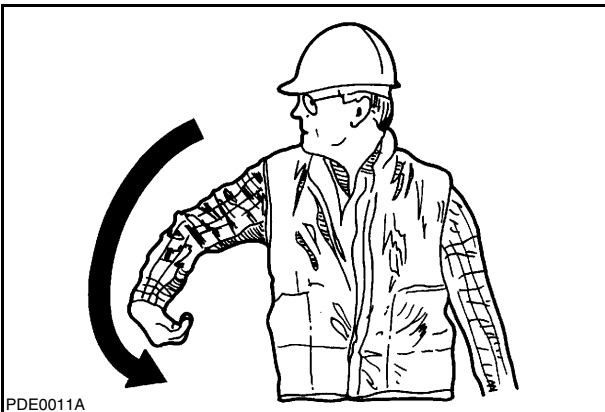
FILL TOOL



PDE0012A

58

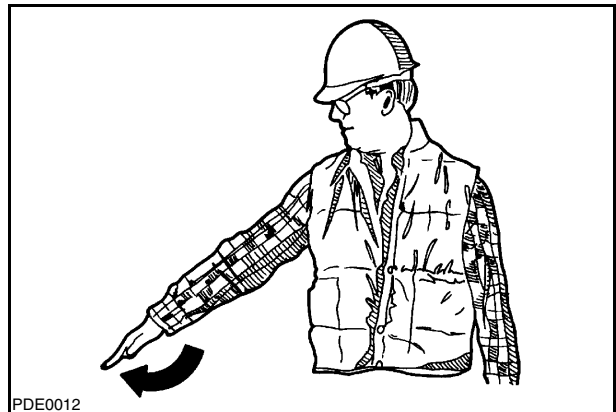
RETRACT DIPPER



PDE0011A

56

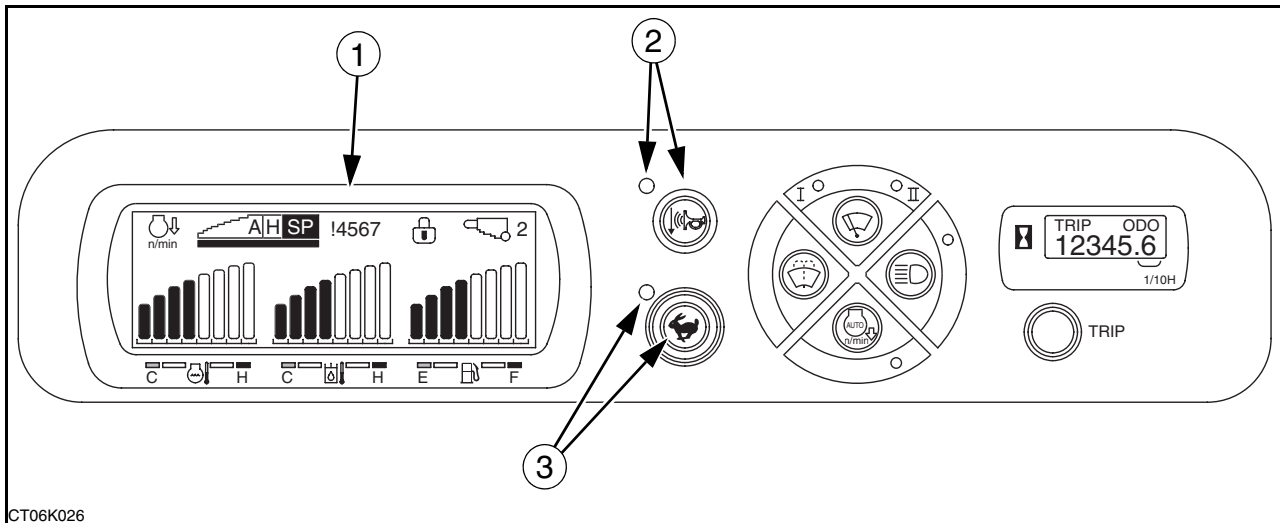
EMPTY TOOL



PDE0012

59

SYSTEMS DISPLAY AND FUNCTION CONTROL PANEL



CT06K026

11



WARNING

The display panel indicates the machine's condition and alerts the operator quickly of any abnormalities by means of lamps indicators or buzzers. It is not to be used for determining the time for maintenance operations. The display panel can be damaged by water. Take care that it doesn't get wet during rainy weather or when washing the machine.

NOTE: Wipe the display panel with a soft, dry cloth. Do not use solvents.

1. FUNCTION AND MESSAGE DISPLAY SCREEN
See "Function and message display screen".

2. HORN VOLUME CONTROL
Pressing this key toggles the horn alternately between normal volume and reduced volume. Pressing this key is accompanied by a short "beep".
In reduced volume, the green indicator lamp is on, in normal volume the indicator lamp is off.

NOTE: When the engine is restarted, the volume selected before shutting down the engine remains unchanged.

3. TRAVEL SPEED SELECTOR

This key is used to change from low speed (I) to high speed (II).
In high speed (II) the red indicator lamps is on, in low speed (I) the indicator lamp is off.

IMPORTANT: All changes in travel speed should be made while the machine is stationary, otherwise the direction of travel can be changed.

Low speed (I) (0 to 2.9 km/h), select this speed to travel on slopes, rough ground or soft terrain.
High speed (II) (0 to 4.2 km/h), select this speed to travel on hard, flat ground in good terrain conditions.

NOTE: When starting the engine, low speed is automatically selected.

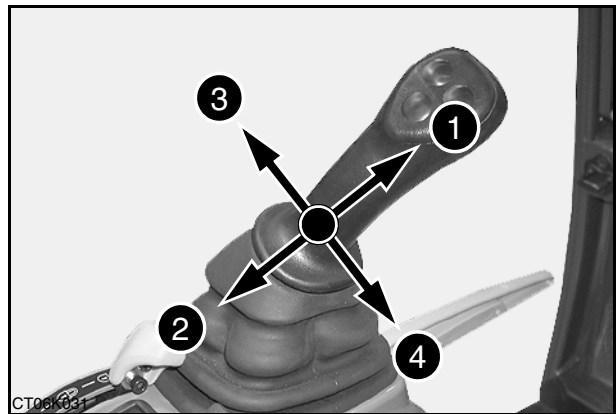
NOTE: When the hydraulic system is overloaded and the machine is in 2nd speed, the machine automatically changes down to 1st speed. The system automatically returns to 2nd speed as soon as the hydraulic system is no longer overloaded.

DIPPER AND UPPERSTRUCTURE SWING LEFT-HAND CONTROL LEVER

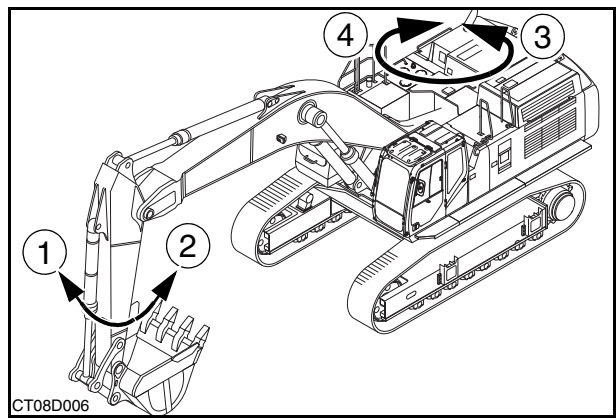
The speed of movement of the dipper or the upperstructure swing depends on the control lever tilt angle. In the intermediate position two movements can be obtained simultaneously.

IMPORTANT: When the upperstructure swing control is released, the upperstructure may continue to rotate due to the force of inertia. In this event, make allowance for the extra movement by releasing the control slightly earlier.

1. The dipper extends.
2. The dipper retracts.
3. The upperstructure turns to the left.
4. The upperstructure turns to the right.



28

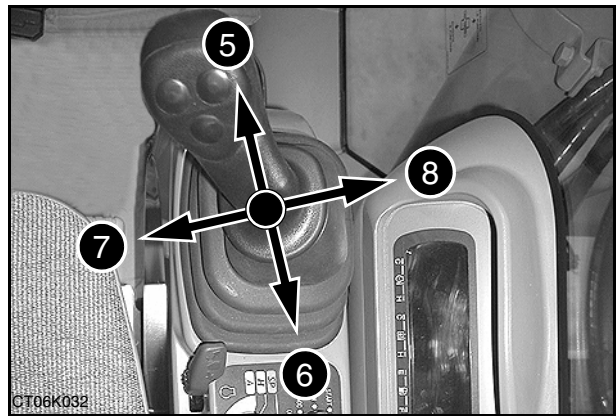


29

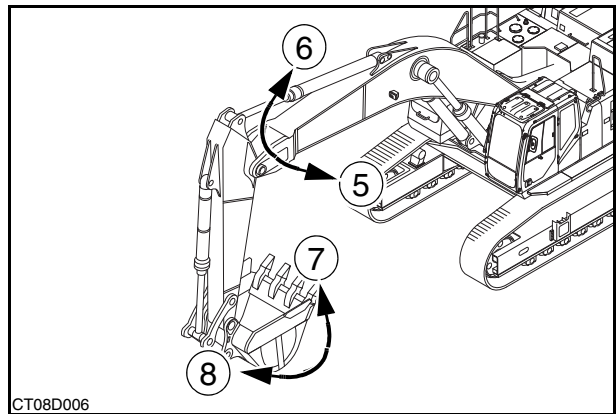
BOOM AND BUCKET RIGHT-HAND CONTROL LEVER

The speed of movement of the boom or the bucket depends on the control lever tilt angle. In the intermediate position two movements can be obtained simultaneously.

5. The boom lowers.
6. The boom raises.
7. The bucket retracts (filling).
8. The bucket extends (dumping).



30



31

SEAT BELT

Sit comfortably in the operator's seat, pull out a long section of belt and engage it in the fastening system (9).

NOTE: If the section of belt pulled out is not long enough, release it, so it rolls up and then pull it out again.

To release the seat belt, press down on the releasing lever (9).



Always fasten your safety belt before starting the engine. The safety belt will protect you effectively. The safety belt should not be too loose. It should not be twisted or caught in the operator's seat.

IMPORTANT: Inspect the seat belt. Make sure that it is not damaged, that the mounting screws are correctly tightened and replace any defective parts.

The seat belt must be kept clean. Use only soap and water to clean the belt, do not use bleach or dyes.



60

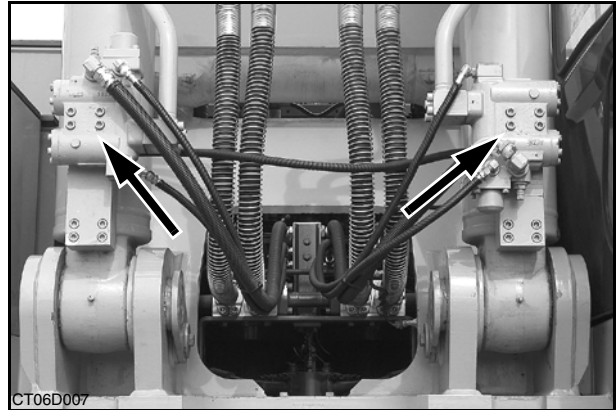
SAFETY VALVES (optional)

SERVICE SPECIFICATIONS

Check by your CASE Dealer.....Every 6 months

The role of the safety valve is to stop the attachment from dropping due to valve spool leakage in neutral position or in the event of a line or hose accidentally breaking. In the latter event, they also ensure that the attachment may be lowered gently to the ground.

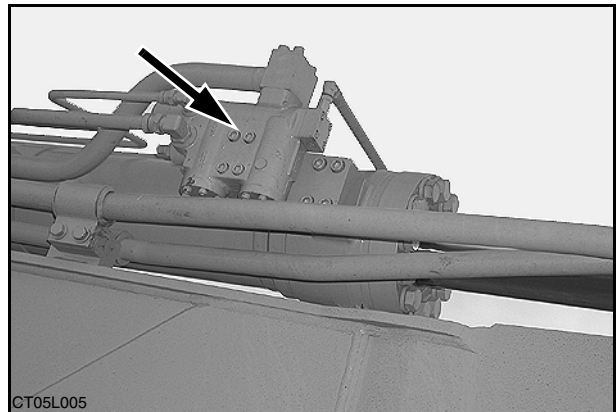
ON BOOM CYLINDERS



83

ON DIPPER CYLINDER

The role of the safety valve is to stop the attachment from dropping due to valve spool leakage in neutral position or in the event of a line or hose accidentally breaking. In the latter event, they also ensure that the attachment may be lowered gently to the ground. See "Load handling" in section 5.



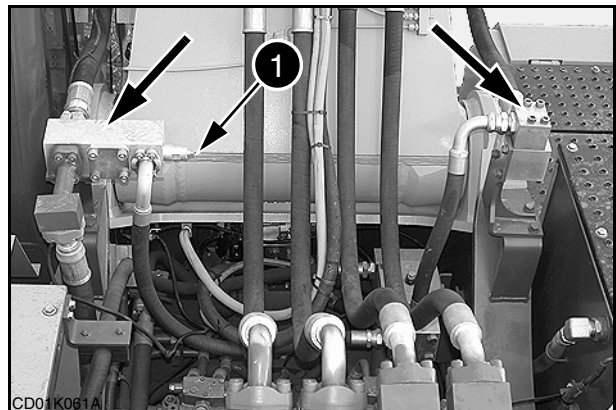
84

OPTIONAL TOOL FLOW SELECTOR BLOCKS (optional)

These blocks, located on the upperstructure at the bottom of the boom, make it possible to select the correct hydraulic circuit for the optional tool to be mounted. See "Hydraulic hammer or high flow circuits" in section 5.

IMPORTANT: Never alter the main relief valve (1) setting unless you first consult your CASE Dealer, otherwise you could damage the machine.

IMPORTANT: Consult your CASE Dealer before mounting optional tools.



85

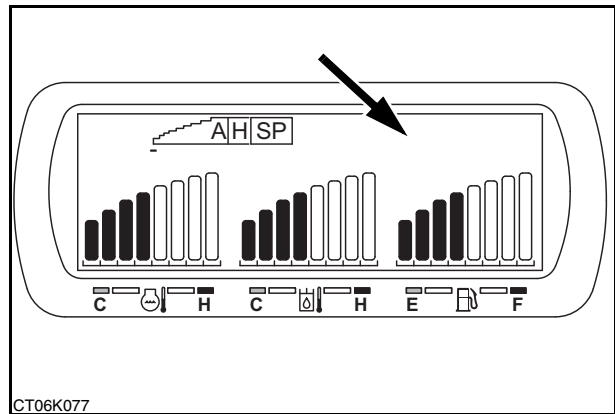
SECTION 5 - OPERATING INSTRUCTIONS

If the access code has been entered correctly, the icon of the anti-theft device and the "SECURITY ON" message will disappear from the screen and it will be possible to start the engine.

If the code is wrong or if the code is different from the one registered, the message "ERROR" is displayed, the operation has to be restarted.

Place the starter switch key in the "OFF" position and repeat Steps 1 to 3.

NOTE: *If the anti-theft device was activated the last time the engine was turned off, it will still be possible to start the machine without the access code, or with the wrong code, but the engine will run at idle speed, and will stop if the machine is handled.*

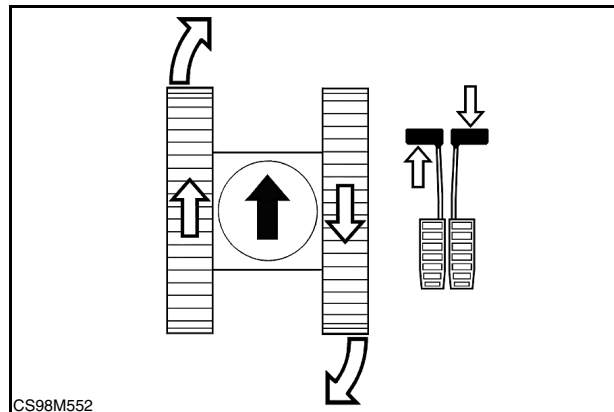


5

SECTION 5 - OPERATING INSTRUCTIONS

TURNING ON THE SPOT, TO THE RIGHT

Press the left-hand pedal or the left-hand lever forwards and at the same time press the right-hand pedal or the right-hand lever rearwards.

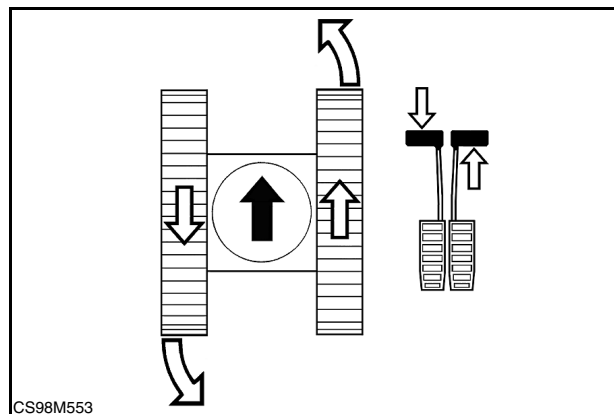


20

TURNING ON THE SPOT, TO THE LEFT

Press the right-hand pedal or the right-hand lever forwards and at the same time press the left-hand pedal or the left-hand lever rearwards.

IMPORTANT: *Turning on the spot cannot be done if high speed travel is selected.*



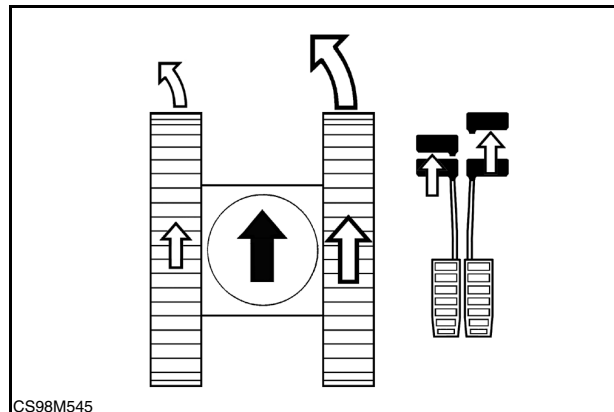
21

GRADUAL TURN ON THE MOVE

Press one of the pedals or one of the levers and, at the same time, press the other pedal or the other lever in the same direction, but slightly harder.

STOPPING TRAVEL

To come to a complete halt, simply release the levers or pedals and they will return to neutral.



22

CLICK HERE TO **DOWNLOAD** THE COMPLETE MANUAL

- Thank you very much for reading the preview of the manual.
- You can download the complete manual from: www.heydownloads.com by clicking the link below

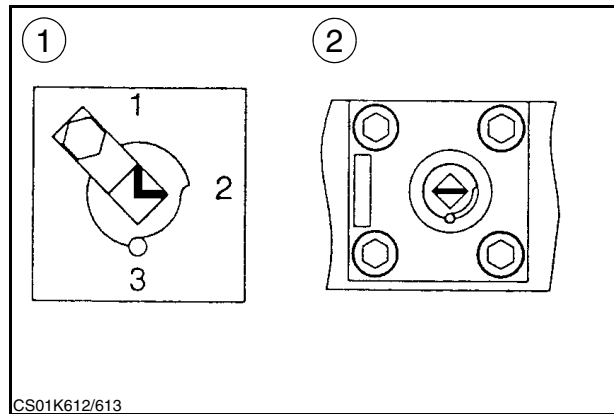


- Please note: If there is no response to CLICKING the link, please download this PDF first and then click on it.

CLICK HERE TO **DOWNLOAD** THE COMPLETE MANUAL

SECTION 5 - OPERATING INSTRUCTIONS

2. Move the selector blocks (1) and (2) located on the upperstructure to position them as shown opposite.

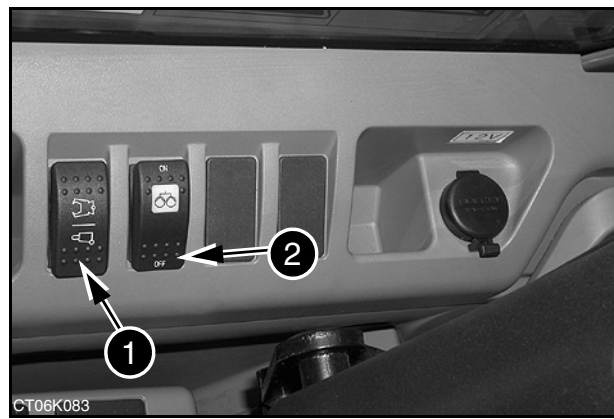


38

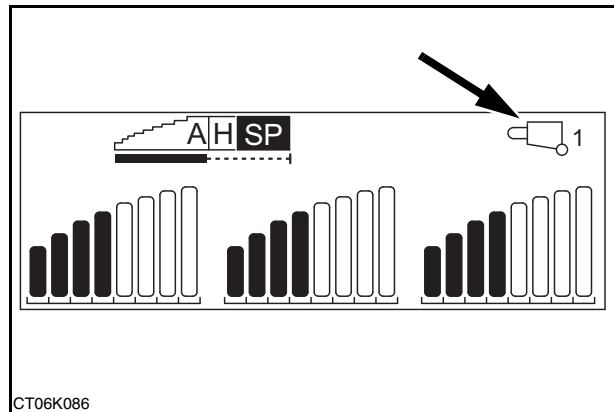
3. Toggle the switch (1) located on the RH console downwards, corresponding to the hydraulic breaker.
4. Make sure that the switch (2) is in the "OFF" position corresponding to a single flow hydraulic circuit.

NOTE: In normal working position (digging) the switch (2) must be in the "OFF" position.

5. Every time this switch (1) is pressed, one of the different types of flows recorded for the pump can be selected.
6. The icon of the accessory associated to each type of flow appears on the screen.

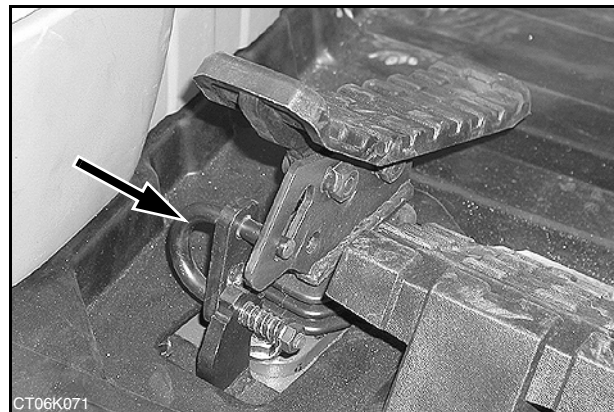


39



40

7. Unlock the pedal and engage the locking pin.



41

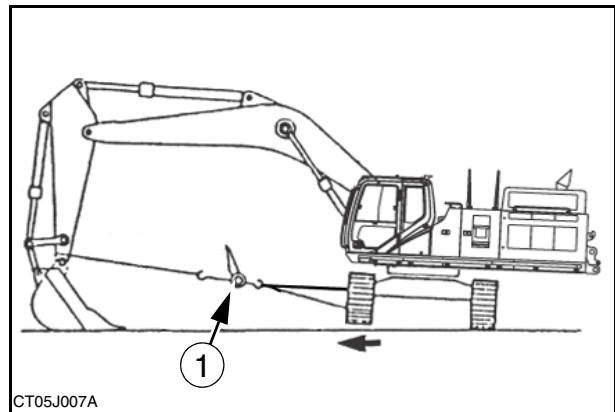
SECTION 5 - OPERATING INSTRUCTIONS

5. Sling as indicated in the diagram opposite and then use the attachment to raise the track from the ground.



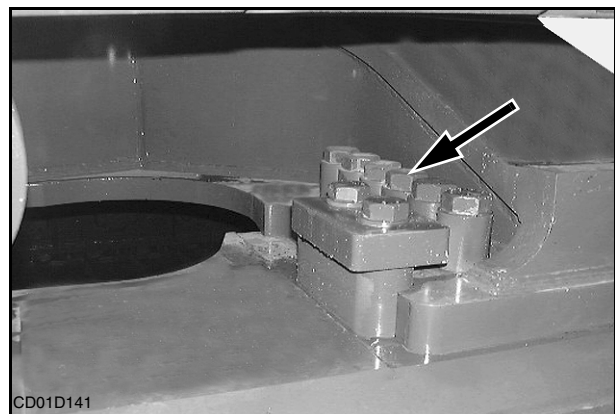
Only raise the track as little as necessary. Raising it too much can cause the machine to tip over.

6. Use a hand winch (1) to slide the track into position.

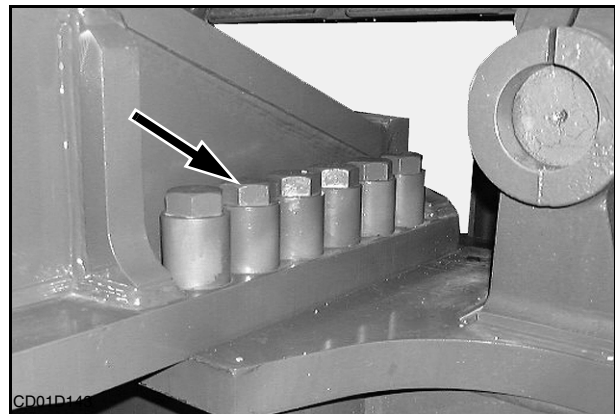


64

7. Install the 24 pieces of retaining hardware tightened to a torque of between 2550 to 2942 Nm.
8. Remove the hand winch (1) and slowly lower the track to the ground.



65



66

9. Repeat Steps 2 to 8 for the other track.

SECTION 7 - LUBRICATION/FILTERS/FLUIDS

ANTI-FREEZE/ANTI-CORROSION

Use anti-freeze in all seasons to protect the cooling system from corrosion and all risk of freezing.

CASE/AKCELA: PREMIUM ANTI-FREEZE (MS 1710)

For areas where the temperature goes down to -38°C, mix 50/50 with water.

IMPORTANT: Do not mix products of a different origin or brand.

The same product must be used when topping up the system.

ENVIRONMENT

Before carrying out any maintenance operation on this machine and before disposing of used fluids or lubricants, always think of the environment. Never throw oil or fluid on the ground and never place it in leaking receptacles.

Contact your local ecological recycling centre or your CASE Dealer to obtain information on the correct method of disposing of these lubricants.

FLUID AND LUBRICANT CAPACITIES AND SPECIFICATIONS

ENGINE

Type of oil "No. 1 ENGINE OIL"
Capacity (with filters change) 52 litres

COOLING SYSTEM

System capacity 108 litres

FUEL SYSTEM

Reservoir capacity 900 litres

HYDRAULIC SYSTEM

Type of fluid "HYDRAULIC EXCAVATOR FLUID"
Total system capacity 720 litres
Reservoir capacity 310 litres

TRAVEL REDUCTION GEARS

Type of oil "GEAR 135H EP" extreme pressure oil
Capacity (per reduction gear) 13.8 litres

SWING REDUCTION GEARS

Type of oil "GEAR 135H EP" extreme pressure oil
Capacity (per reduction gear) 4.7 litres
Type of grease "GREASE 251H EP"
Capacity (per reduction gear) 1.2 kg

TURNTABLE TEETH

Type of grease "GREASE 251H EP"
Capacity 57 kg

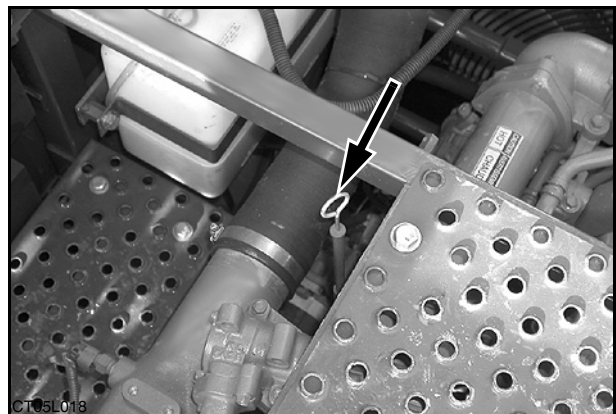
ENGINE

SERVICE SPECIFICATIONS

| | |
|-------------------------------|-----------------------------|
| Engine oil level check..... | Every 10 hours or every day |
| Oil change | Every 500 hours |
| Oil filters replacement | Every 500 hours |
| Oil type | See "Fluids and lubricants" |
| Oil capacity..... | 52 litres |

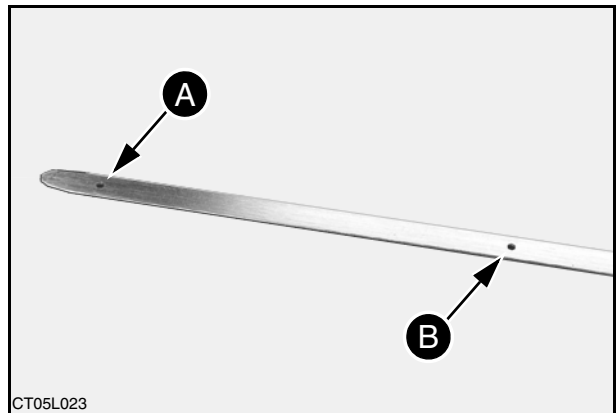
LEVEL

1. Park the machine on flat, horizontal ground. Stop the engine, remove the starter switch key.
2. When the engine has been stopped for fifteen minutes, raise and lock the engine hood, remove the dipstick, wipe it with a clean cloth and replace it in the guide tube as far as it will go. Then take it out again.



26

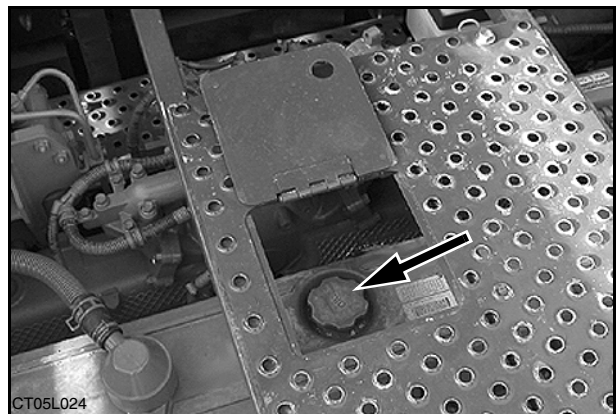
3. If the level is situated between the marks (A) and (B) on the dipstick, the level is correct..
4. If the oil level is at mark (A) (min) or below.



27

5. If the oil level is at mark (A) (min) or below, open the access hatch then remove the filling plug and add oil up to mark (B) (max) of the dipstick. Install the plug, close the access hatch.

NOTE: The level should not be higher than the mark (B) (maximum on the dipstick).

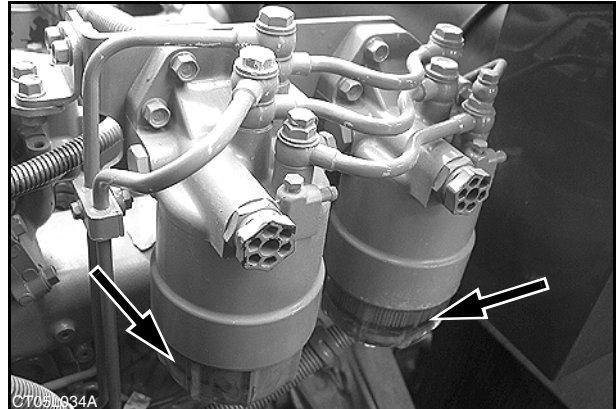


28

FILTER BLEEDING

Proceed in the same manner as for the pre-filter. See "Pre-filter bleeding".

Proceed in the same manner for the second filter.



46

REPLACING THE FILTER ELEMENT ON THE FILTERS

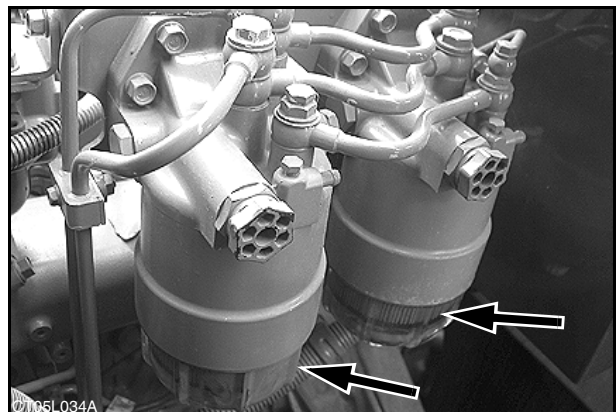


If a fuel filter other than a genuine CASE filter is used, the guarantee will not be applied to a fault caused by the use of a wrong filter.

Proceed in the same manner as for the pre-filter but do not fill the filter body with fuel. See "Changing the pre-filter element".

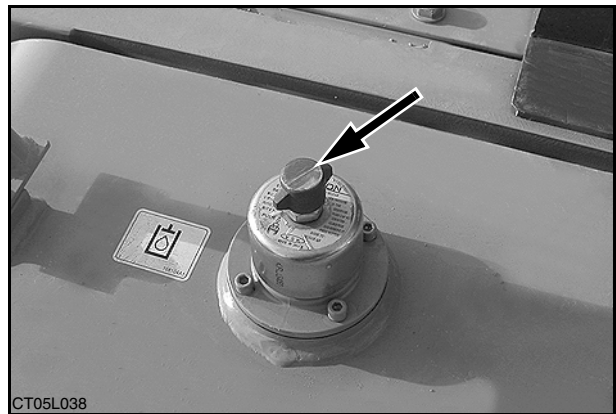
IMPORTANT: Do not fill the filter body with fuel before installing.

Proceed in the same manner for the second filter.



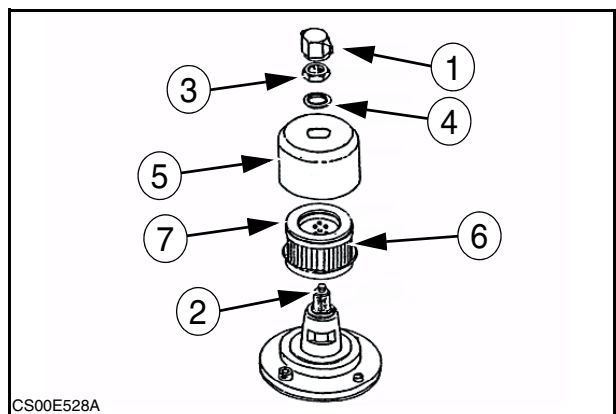
47

**REPLACING THE RESERVOIR BREATHER
FILTER ELEMENT**



67

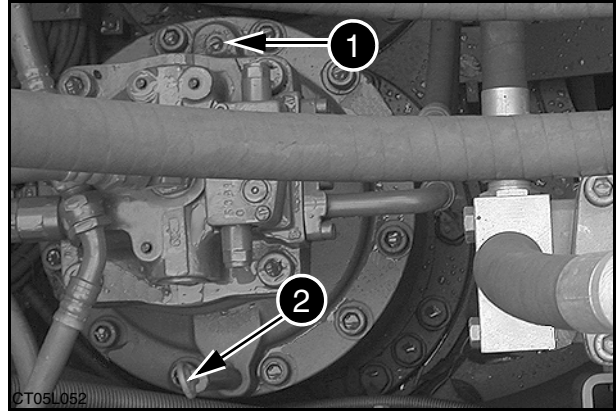
1. Remove the cap (1) then press the button (2) to release all pressure from the hydraulic reservoir.
2. Remove the nut (3), the seal (4) and the cover (5) from the breather.
3. Remove and discard the used filter element (6).
4. Install a new element (6), making sure the seal (7) is facing upwards.
5. Install the assembly in the reverse order.



68

DRAINING AND REFILLING

1. Park the machine on flat, horizontal ground. Stop the engine and remove the starter switch key.
2. Remove the dipstick (2) and the filler plug (1) from each reduction gear.

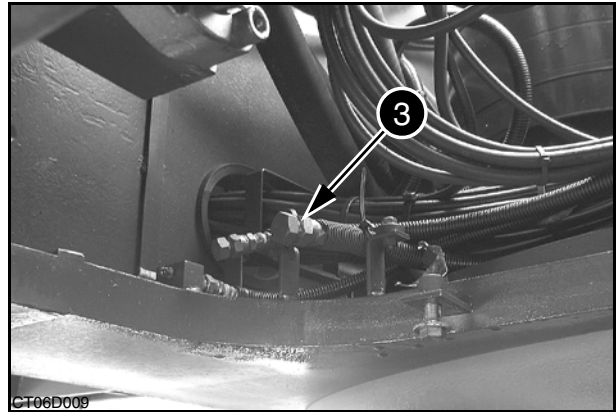


87

3. Place a receptacle of a suitable capacity under the upperstructure, remove the lower panel and remove the drain plugs (3).
4. Allow the oil to drain.

NOTE: The oil takes a relatively long time to drain.

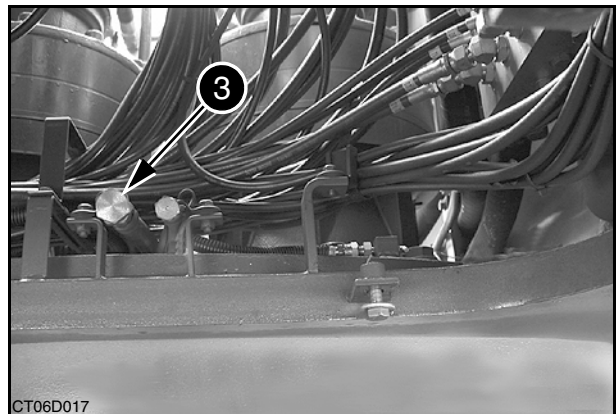
IMPORTANT: Check the condition of the drained oil. If it contains metal filings or foreign matter, consult your CASE Dealer.



88

5. Install the drain plugs (3) and the lower panel.
6. Add oil through the filler holes (1) until the level is correct.
7. Install the dipsticks (2) and the filler plugs (1).
8. Wait ten minutes and then use the dipsticks (2) to check the oil level again. If necessary, add more oil through the filler holes (1).

NOTE: When greasing the swing reduction gears, see "Greasing the swing reduction gears".



89

REPLACING THE BELTS

If the belts break, the "ALTERNATOR" message is displayed on the message display screen. Shut down the engine, remove the starter switch key and change the belts.

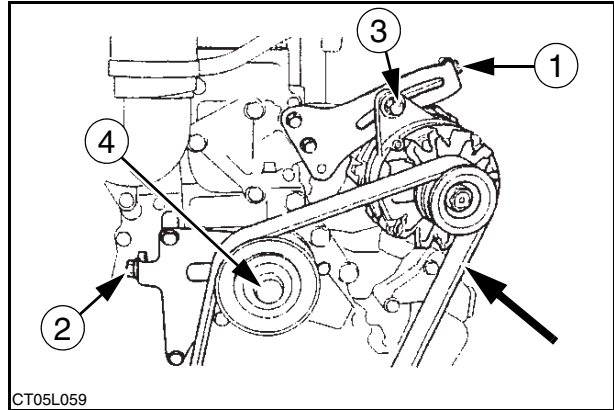
Loosen the retaining screw (3) and the pulley attachment (4). Use the adjustment screws (1) and (2) to push the alternator and the pulley inwards.

Remove the worn belts.

Install a new belts.

Adjust the belts tension, see "Tension adjustment"..

Run the engine for about an hour and then check the belts tension again.



17

ADJUSTMENT OF ENGINE VALVE ROCKER CLEARANCES

MAINTENANCE SPECIFICATION

Check Every 1000 hours

NOTE: Ask your CASE Dealer to check this.

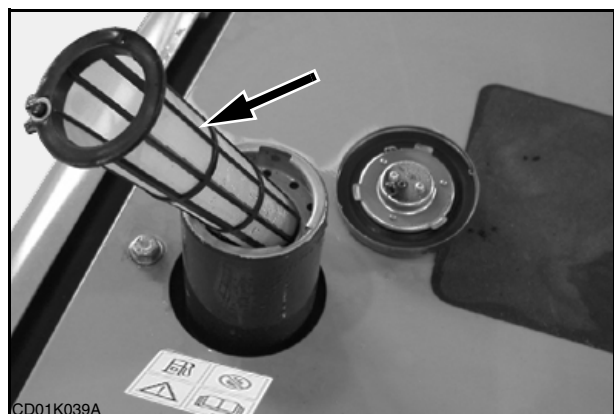
FUEL TANK FILTER

MAINTENANCE SPECIFICATION

Clean filter Periodically

Remove the filter and clean it in diesel oil.

NOTE: Use suitable fuel to refill the fuel tank, see "Fluids and lubricants" in section 7.



18

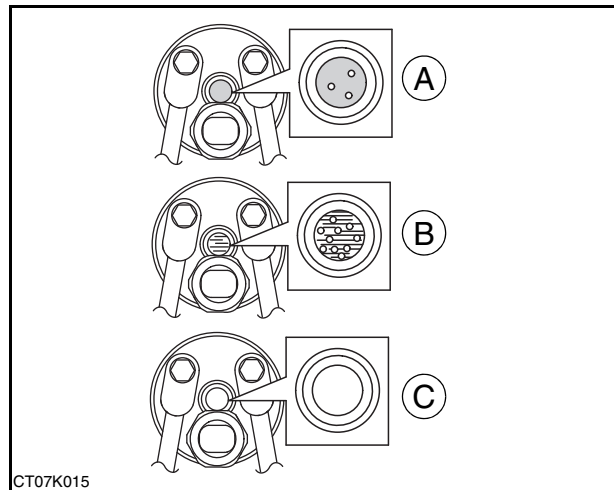
SECTION 8 - MAINTENANCE/ADJUSTMENTS

2. This check should be made approximately one minute after turning on the air conditioning.

(A) Very few bubbles observed, then transparent at first, then whitish: "Normal".

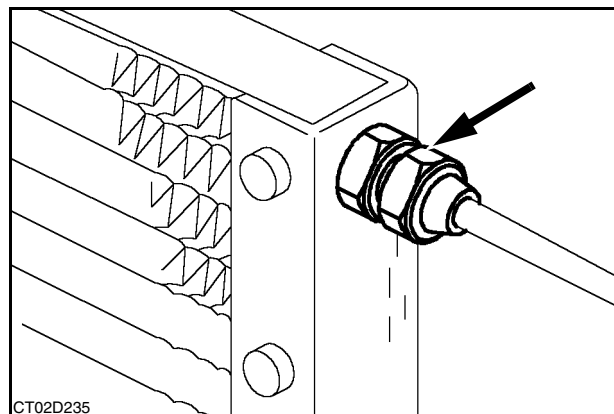
(B) The bubbles are numerous: check the unions and consult your CASE Dealer.

(C) No bubbles are visible: check the unions and consult your CASE Dealer.



34

3. Check if the hydraulic line and air-conditioning hose connectors are dirty or dusty and clean them if necessary.



35

ALTERNATOR

MAINTENANCE SPECIFICATION

Check Every 1000 hours

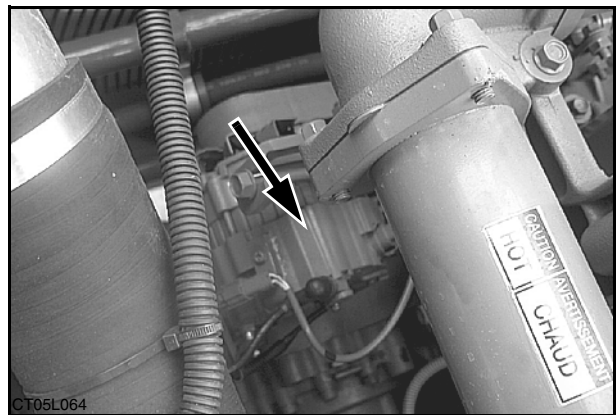


Whenever carrying out a welding operation on the machine (authorised by the manufacturer and in accordance with his instructions) or any repairs on the electrical system, disconnect the B+ and D+ wires from the alternator. When reconnecting, check the markings on the wires.

IMPORTANT: Do not use steam cleaning equipment or a cleaning solvent to clean the alternator.

Ask your CASE Dealer to check the alternator.

NOTE: Make sure that the terminal protectors are correctly installed.



8

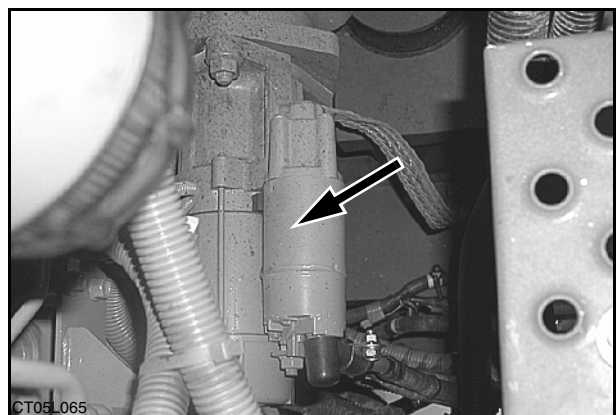
STARTER MOTOR

MAINTENANCE SPECIFICATION

Check Every 1000 hours

Ask your CASE Dealer to check the starter motor.

NOTE: Make sure that the terminal protectors are correctly installed.



9

SECTION 11 - SPECIFICATIONS

TRANSPORT

Reduction of the width of the undercarriage to 3.74 m (with 650 mm track pads).

This machine may be equipped (optionally) with a self-detaching counterweight. A system consisting of 3 hydraulic control cylinders allows quick removal, without requiring any special handling equipment.

WEIGHTS

STANDARD ATTACHMENT

With 8.40 m boom, 3.66 m dipper, 3300 l backhoe bucket (general purpose), 650 mm track pads,
operator and full fuel tank 80 300 kg

SHORT ATTACHMENT

With 7.25 m boom, 2.98 m dipper, 3900 l backhoe bucket (very heavy duty), 650 mm track pads,
operator and full fuel tank 80 400 kg

COUNTERWEIGHT

Weight 12 500 kg
Self detaching counterweight (optional)

STANDARD ATTACHMENT

Boom, length 8.40 m
Dipper, length 3.66 m
Dipper, length 4.44 m
Dipper, length 5.62 m

SHORT ATTACHMENT

Boom, length 7.25 m
Dipper, length 2.98 m

BACKHOE BUCKETS

GENERAL PURPOSE

| SAE capacity | 2400 l | 2780 l | 3300 l | 3700 l | 4100 l | 5000 l |
|--------------|---------|---------|---------|---------|---------|---------|
| Width | 1300 mm | 1450 mm | 1650 mm | 1800 mm | 1900 mm | 2300 mm |
| Weight | 2960 kg | 3110 kg | 3400 kg | 3540 kg | 3640 kg | 4120 kg |

HEAVY DUTY and VERY HEAVY DUTY

| SAE capacity | 2550 l | 2960 l | 3900 l | 4210 l | 5330 l |
|--------------|---------|---------|---------|---------|---------|
| Width | 1300 mm | 1450 mm | 1800 mm | 1900 mm | 2300 mm |
| Weight | 3570 kg | 3740 kg | 4290 kg | 4410 kg | 5020 kg |

QUARRY

| SAE capacity | 4100 l |
|--------------|---------|
| Width | 1800 mm |
| Weight | 4500 kg |

CLICK HERE TO **DOWNLOAD** THE COMPLETE MANUAL

- Thank you very much for reading the preview of the manual.
- You can download the complete manual from: www.heydownloads.com by clicking the link below



- Please note: If there is no response to CLICKING the link, please download this PDF first and then click on it.

CLICK HERE TO **DOWNLOAD** THE COMPLETE MANUAL