

# Service Manual

# Dumpster TD7, TD10

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Sample of manual. Download All 105 pages at:

<https://www.arepairmanual.com/downloads/jcb-td7td10-tracked-dumpster-service-repair-manual/>

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## Introduction

This publication is designed for the benefit of JCB Distributor Service Engineers who are receiving, or have received, training by JCB Technical Training Department.

These personnel should have a sound knowledge of workshop practice, safety procedures, and general techniques associated with the maintenance and repair of hydraulic earthmoving equipment.

Renewal of oil seals, gaskets, etc., and any component showing obvious signs of wear or damage is expected as a matter of course. It is expected that components will be cleaned and lubricated where appropriate, and that any opened hose or pipe connections will be blanked to prevent excessive loss of hydraulic fluid and ingress of dirt. Finally, please remember above all else **SAFETY MUST COME FIRST!**

The manual is compiled in sections, the first three are numbered and contain information as follows:

- 1 = General Information** - includes machine operating procedures.
- 2 = Care & Safety** - includes warnings and cautions pertinent to aspects of workshop procedures etc.
- 3 = Routine Maintenance** - includes service schedules, procedures, torque settings and recommended lubricants.

The remaining sections are alphabetically coded and deal with Dismantling, Overhaul etc. of specific components, for example:

- A = Attachments**
- B = Body & Framework** ...etc

The page numbering in each alphabetically coded section is not continuous. This allows for the insertion of new items in later issues of the manual.

Section contents, technical data, circuit descriptions, operation descriptions etc. are inserted at the beginning of each alphabetically coded section.

All sections are listed on the front cover; tabbed divider cards align directly with individual sections on the front cover for rapid reference.

Where a torque setting is given as a single figure it may be varied by plus or minus 3%. Torque figures indicated are for dry threads, hence for lubricated threads may be reduced by one third.

'Left Hand' and 'Right Hand' are as viewed from the rear of the machine facing forwards.

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This chapter is arranged to guide you step-by-step through the task of learning how to use the machine. Read it through from beginning to end. By the end of the chapter you should have a good understanding of the machine and how to operate it.

Pay particular attention to all safety messages. They are there to warn you of possible hazards. Do not just read them - think about what they mean. Understand the hazards and how to avoid them.

If there is anything you do not understand, ask your JCB dealer, he will be pleased to advise you.

When you have learned where the driving controls are and what they do, practise using them. Practise driving the machine in a safe, open space clear of other people.

Get to know the "feel" of the machine and its driving controls.

Move on to the attachment controls only when you can drive the machine confidently and safely.

Take great care when practising with the attachment controls. Practise in an open space, keep people clear. Do not jerk the controls: operate them slowly until you understand the effect they have on the machine.

Finally, do not rush the job of learning. Take your time and take it safely.

**Remember**      **BE CAREFUL**  
**BE ALERT**  
**BE SAFE**

---

## Walk Round Inspection

The following checks should be made each time you return to the machine after leaving it for any period of time. We advise you also to stop the machine occasionally during long work sessions and do the checks again.

All these checks concern the serviceability of the machine. Some concern your safety. Get your service engineer to check and correct any defects.

### Machine Walk Round Inspection

#### 1 Check for cleanliness:

- a Remove dirt and debris, especially from around the engine, skip rams and tracks.
- b Make sure the footplate and handrails are clean and dry.

#### 2 Check for damage:

- a Inspect the machine generally for damaged and missing parts.
- b Check for oil and fuel leakages beneath the machine.

### WARNING

**You could be killed or injured with damaged tracks. Do not use the machine with damaged or excessively worn tracks.**

HOP27

#### 3 Check the Tracks (Rubber)

Check for cut rubber and penetration by sharp objects. Do not use a machine with damaged tracks.

#### 4 Check the fuel filler cap

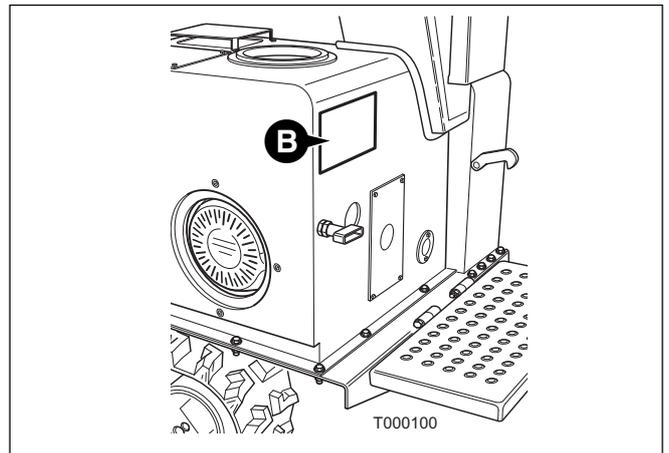
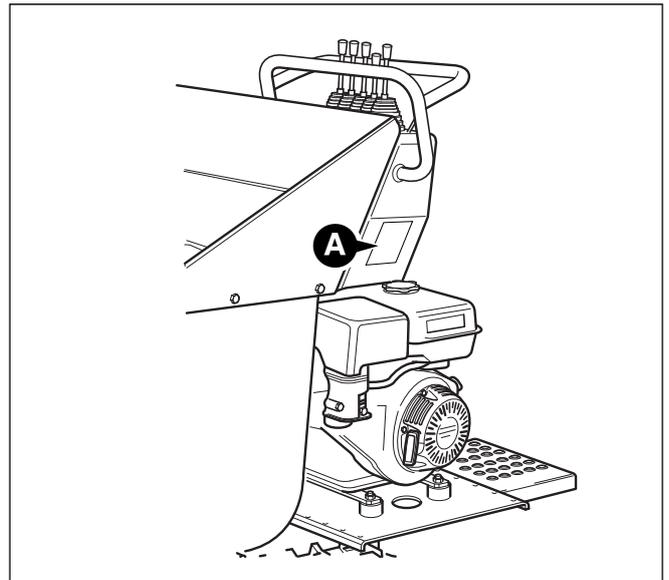
Make sure the fuel filler cap is tightly closed.

The machine has a Data Plate **A** attached to the left hand face of the machine, above the engine.

\* On TD10 machines from serial no. 1011234 the Data Plate is fitted to the rear face of the engine cover, as shown at **B**.

The serial numbers of the machine are stamped on this plate.

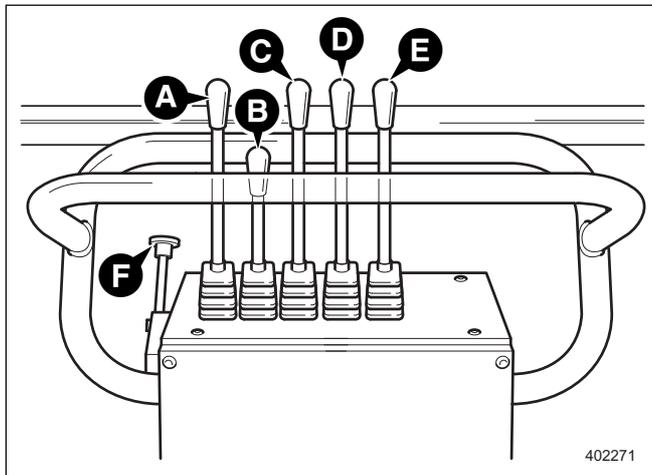
The engine serial number is stamped on the engine.



		<b>J C BAMFORD EXCAVATORS LTD</b> ROCESTER, STAFFS	 OSEN ISO9001 FM 14063
ENGINE SERIALNUMBER	LH TRACK GEARBOX SERIAL	RH TRACK GEARBOX SERIAL	ENGINE POWER kW @ RPM
WEIGHT kg	YEAR OF MANUFACTURE	H04344	

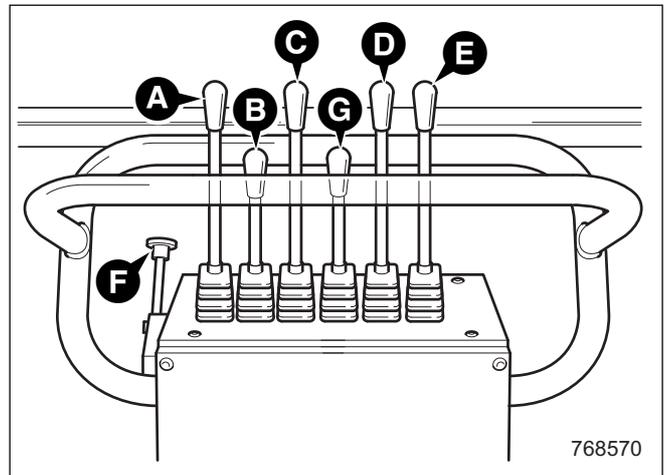
**Controls**

**\* Standard undercarriage**



- A Left track control lever
- B Skip control lever
- C Right track control lever
- D 2 speed control lever
- E Accessory hydraulic control lever
- F Remote throttle lever

**\* Variable width undercarriage**



- A Left track control lever
- B Skip control lever
- C Right track control lever
- D 2 speed control lever
- E Accessory hydraulic control lever
- F Remote throttle lever
- G Track extension

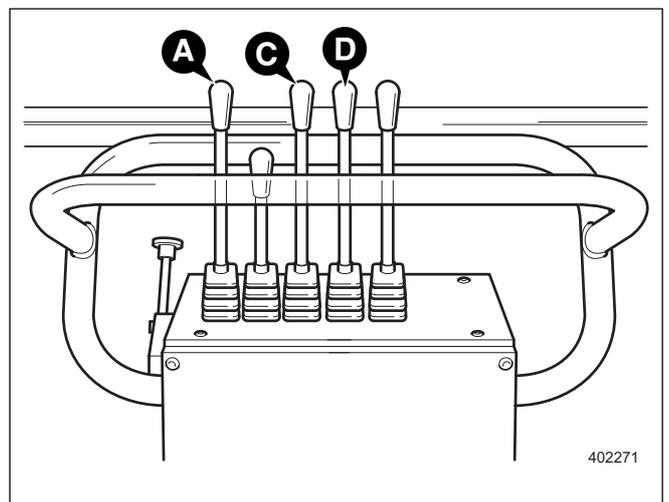
**Track Controls**

The two tracks are controlled by a pair of control levers **A** and **C**. Each lever controls one track and is spring loaded to the central position. In this position the track does not operate. The left side lever controls the left track. The right side lever controls the right track. The two levers can be operated individually or together as necessary to move the machine as required.

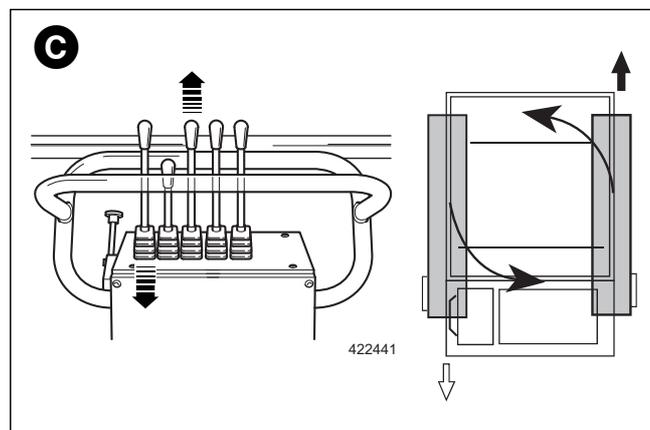
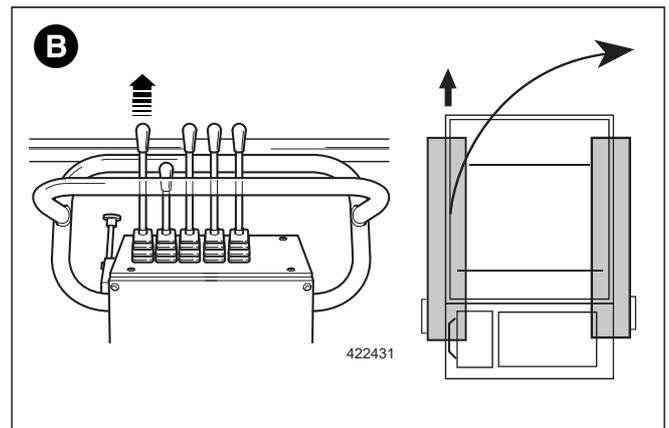
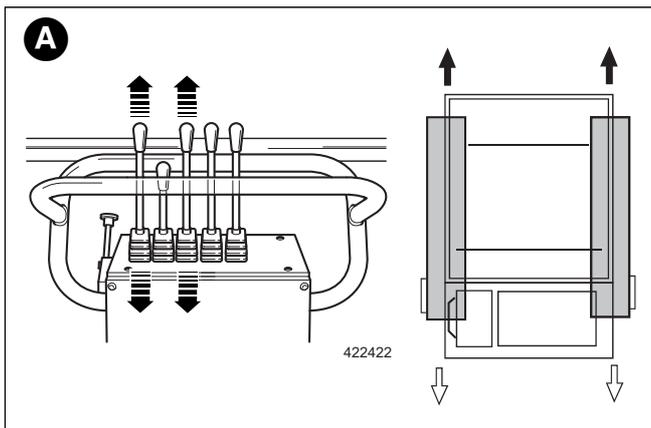
An increase in speed can be achieved by operating the two speed tracking lever **D**. Use this higher speed only on smooth level ground.

**⚠ WARNING**

**Do not operate the controls from the side of the machine. When operating the machine, stand behind the controls at all times.**



\* **Note:** Illustration shows standard undercarriage controls.



\* **WARNING**  
Do not operate the controls from the side of the machine, when operating the machine, stand behind the controls at all times.

**WARNING**  
Make sure that all persons are clear before moving.

**WARNING**  
Low speed must always be selected when unloading the machine from a vehicle or tracking down steep slopes. The machine will stop/start more abruptly when the levers are operated if high speed is selected.

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\* **WARNING**  
**Ear Defenders**  
In continuous 8-hour operation the average operator noise exposure from this machine can exceed 85 dB(A). In these circumstances ear plugs or noise defenders must be worn. If you do not wear ear plugs or noise defenders your hearing may be permanently damaged. The 8-hour averaged threshold of 85 dB(A) might not be reached if use of the machine is less than 8-hours and the noise exposure from other sources in the remaining period is less than 85 dB(A). An assessment of daily noise exposure should be undertaken to determine if hearing protection is required.

**Forward (A)**  
To move the machine forward, push both levers forward. Release the levers to stop. The slower the track controls are moved to full travel, the more progressive the starting of the machine movement will be. Always stop the machine and drop the engine speed to idle before changing from forward to reverse or from reverse to forward.

**Reverse (A)**  
To move the machine backward, pull both levers backward. Release the levers to stop.

**Turn (B)**  
To turn the machine whilst travelling, move the lever back towards the central position on the side towards which you want to go e.g. move the left lever back to turn left. This causes the left track to move slower than the other. The faster moving right track will push the machine around.

**Spin (C)**  
To spin the machine around through 360°, without moving it, operate one lever in a forward position and the other in a reverse position. This will cause the tracks to drive in opposite directions and hence push the machine around. It is recommended that low speed is selected when spin turning.

**Before starting the engine**

**⚠ CAUTION**

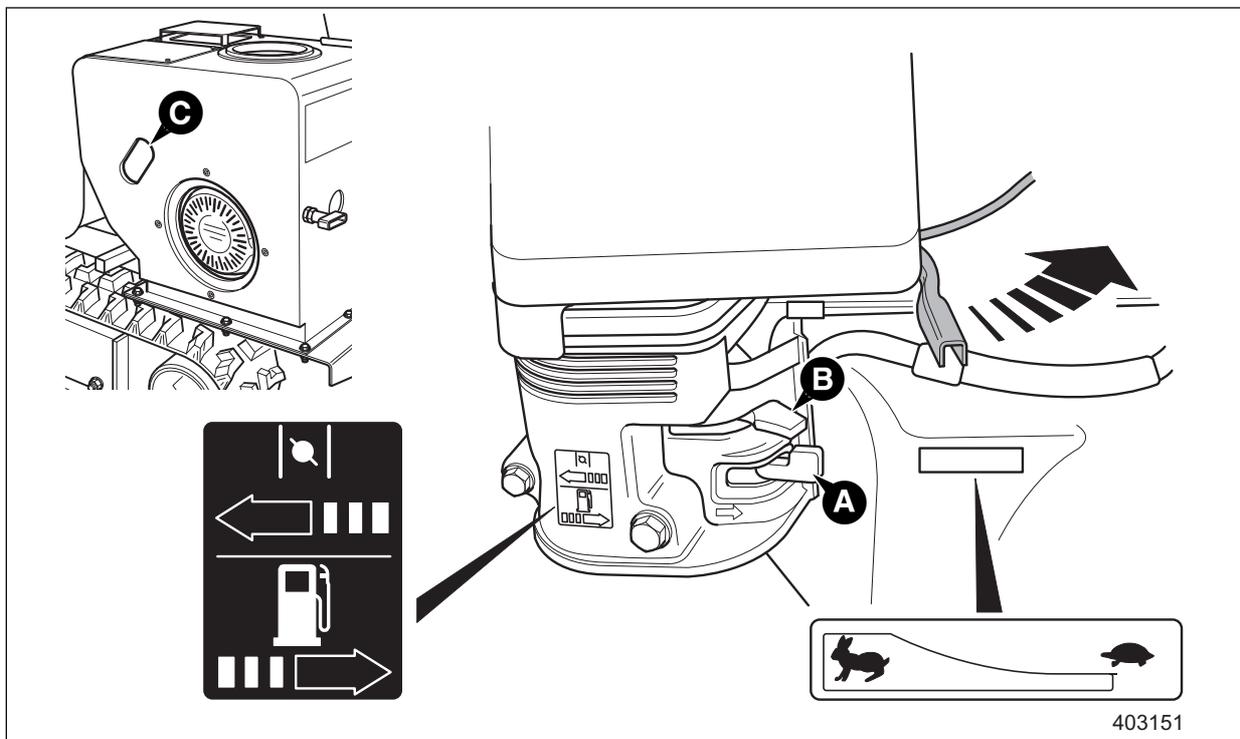
Always carry out an inspection before starting the engine. This could prevent an accident or equipment damage.

To prevent fire hazards and to provide adequate ventilation, the engine should be 1 metre away from buildings and other equipment.

Do not place flammable items such as petrol, matches etc. close to the engine when it is running.

Refuel in a well ventilated area with the engine stopped. Petrol is highly flammable and explosive under certain conditions. Do not overfill the fuel tank. There should be no fuel in the filler neck. Make sure the filler cap is tightly closed.

Exhaust gases contain carbon monoxide. Avoid inhalation of exhaust gases. Never run the engine in a close, confined area.



## Engine

### Starting procedure - Electric start model

- 1 Turn the fuel valve **A** to the ON position.
- 2 Move the choke lever **B** to the CLOSED position.

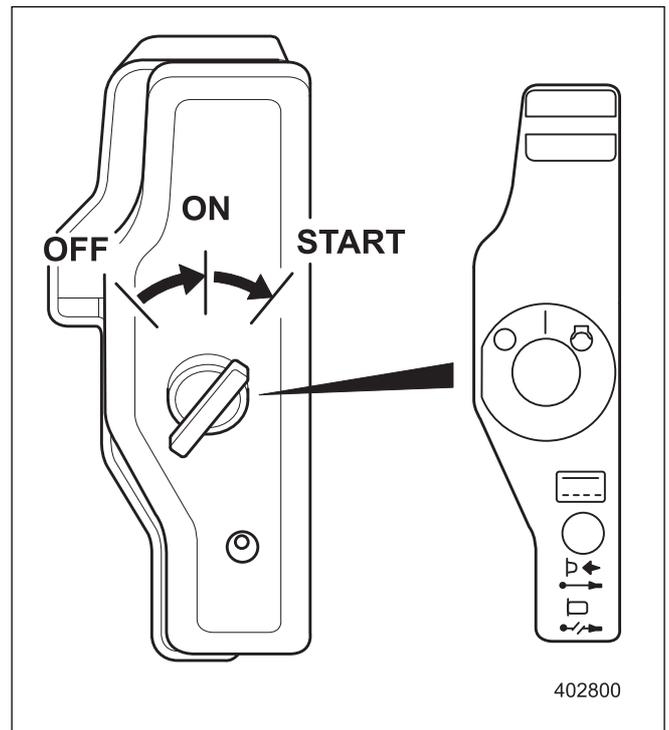
**Note:** It may not be necessary to use the choke if the engine is warm or the air temperature is high. Move the choke lever to a position to suit the prevailing conditions.

- 3 Open the remote throttle lever slightly.
- 4 Turn the ignition switch to the START position and hold until the engine starts.

**Note:** Do not hold the ignition switch in the START position for more than 5 seconds. If the engine fails to start, release the switch and wait 10 seconds before operating the starter again.

- 5 When the engine starts, return the switch to the ON (middle) position.
- 6 As the engine warms up, gradually move the choke control to the fully OPEN position for normal working.

\* **Note:** On TD10 machines from serial no. 1011234 access to the fuel valve and choke is through aperture **C** in the engine cover.



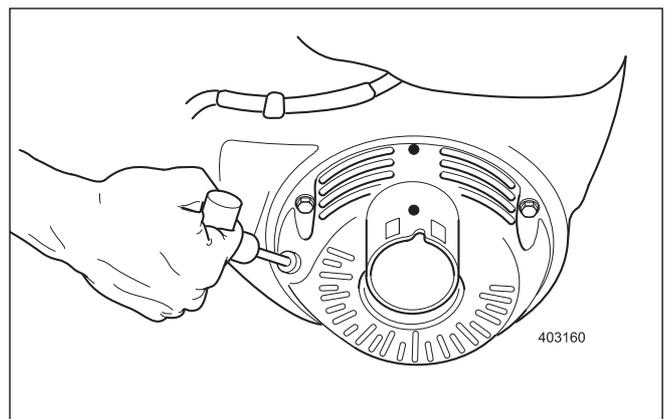
## Engine

### Starting procedure - Manual start model.

- 1 Turn the fuel valve **A** to the ON position.
- 2 Move the throttle lever **B** to the CLOSED position.

**Note:** It may not be necessary to use the choke if the engine is warm or the air temperature is high. Move the choke lever to a position to suit the prevailing conditions.

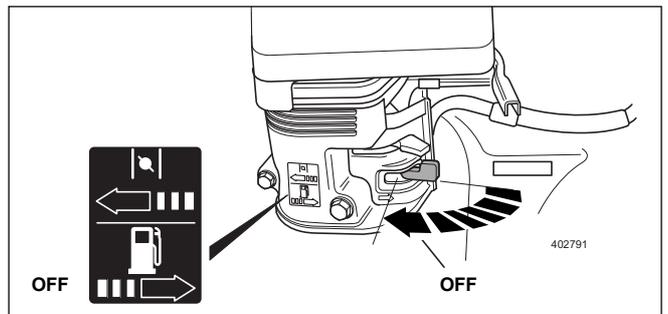
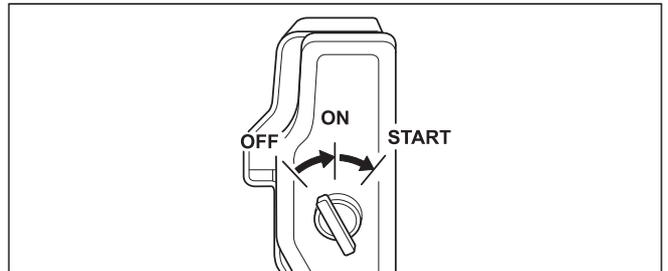
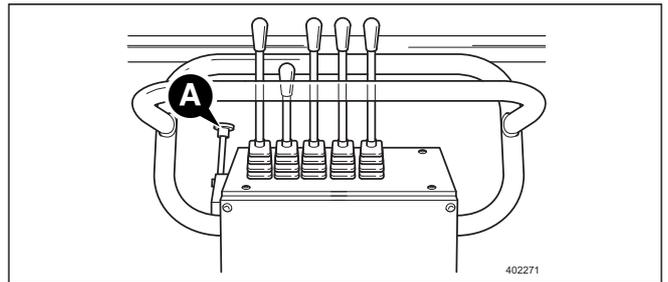
- 3 Open the remote throttle slightly.
- 4 Pull the starter grip lightly until you feel resistance, then pull briskly. Return the starter grip gently.
- 5 As the engine warms up, gradually move the choke control to the fully OPEN position for normal working.



**Stopping the engine**

**Electric start model**

- 1 Move the remote throttle lever **A** back to the idle position.
- 2 Turn the ignition switch to the OFF position.
- 3 Move the fuel valve to the OFF position.



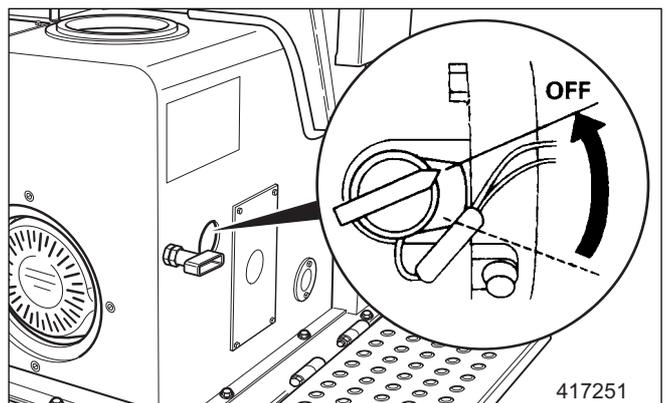
**Emergency engine stop**

To stop the engine quickly, turn the ignition switch to OFF.

**Stopping the engine**

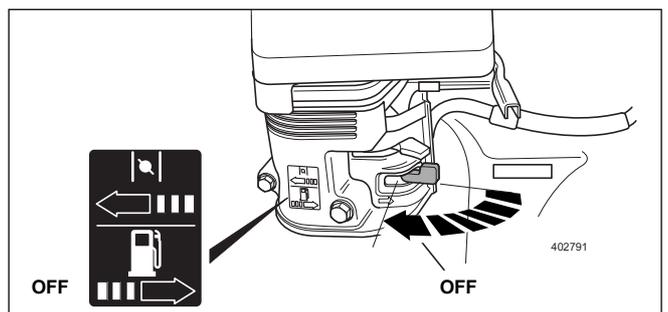
**Manual start model**

- 1 Move the remote throttle lever **A** back to the idle position.
- 2 Turn the switch to the OFF position.
- 3 Move the fuel valve to the OFF position.



**Emergency engine stop**

To stop the engine quickly, turn the fuel valve to OFF.



Before refuelling the machine, make sure you use the correct fuel for the engine. Use unleaded petrol with an octane rating of 86 or higher.

** WARNING**

**Petrol is extremely flammable and is explosive under certain conditions.**

**Refuel in a well ventilated area with the engine stopped.**

**Do not smoke or allow flames or sparks in the area of refuelling.**

**Do not overfill the fuel tank. There should be no fuel in the filler neck.**

**Make sure that the filler cap is correctly and securely fitted.**

**Be careful not to spill fuel when refuelling. Spilled fuel or fuel vapour may ignite. If any fuel is spilt, make sure the area is dry before starting the engine.**

- 1** Remove the fuel filler cap.
- 2** Carefully fill with fuel to below the filler neck.
- 3** Refit the fuel filler cap and ensure that the cap vent is clear.

This section explains some techniques for efficient and safe use of the machine and its attachments. Attention is also drawn to the various safety aspects of operating on site. Read and understand this section before you start working with the machine. Practice using the attachments until you are completely familiar with the controls and what they do.

Before you start using the machine, tell your workmates what you will be doing and where you will be working.

Remember that your machine is mobile. Whenever possible, manoeuvre your machine into a position which combines safety with efficiency. If you have to choose remember that

### **SAFETY MUST COME FIRST!**

#### **⚠ WARNING** General site safety

**Before you start using this machine, inspect the job site. You could be killed or injured if the ground gives way under your machine or if piled material collapses onto it. Check for potholes and hidden debris, logs, ironwork etc. Any of these could cause you to lose control of your machine.**

HOP52

#### **⚠ CAUTION** Legal liability

**You and/or your company could be legally liable for any damage you cause to public utilities. Make sure that you know the locations of all public utility cables or pipes on the site which could be damaged by your machine.**

HOP53

#### **⚠ WARNING**

**If you will be working with a labourer, make sure that you both understand what each other will be doing. Learn and use the recognised signalling procedures. Do not rely on shouting; he will not hear you!**

HOP58

#### **⚠ WARNING** Reworking old sites

**There could be hazardous materials such as asbestos, poisonous chemicals or other harmful substances buried on the site. If you uncover any containers or if you see any signs of toxic waste, stop the machine and inform the site manager immediately.**

#### **⚠ WARNING**

**Do not use the machine on platforms, scaffolding or ramps. The machine must not be operated on scaffolding/temporary structures or platforms. Do not use the machine on make-shift ramps.**

## Working on Slopes

### ⚠️ WARNING

Failure to observe these precautions may cause the machine to become unstable and in extreme circumstances will overturn with potential serious injury to the operator.

HOP64

### ⚠️ WARNING Hill sides

Operating on hillsides can be hazardous, especially moving across a slope. If the slope is too steep, your machine could roll over. Remember that loose surface material and mud will change the ground conditions. In any event do not drive across a slope of greater than 15°.

HOP60-1

### ⚠️ WARNING

Do not ride on the footplate when moving on a slope, as it will change the centre of gravity and increase the possibility of the machine tipping over.

Try to avoid moving across slopes. Even on slopes of less than 10° there is a greater danger of the machine sliding if the ground surface is loose or wet.

### ⚠️ WARNING

A dumper skip full of material will raise the machines centre of gravity and increase the possibility of the machine tipping over on a slope.

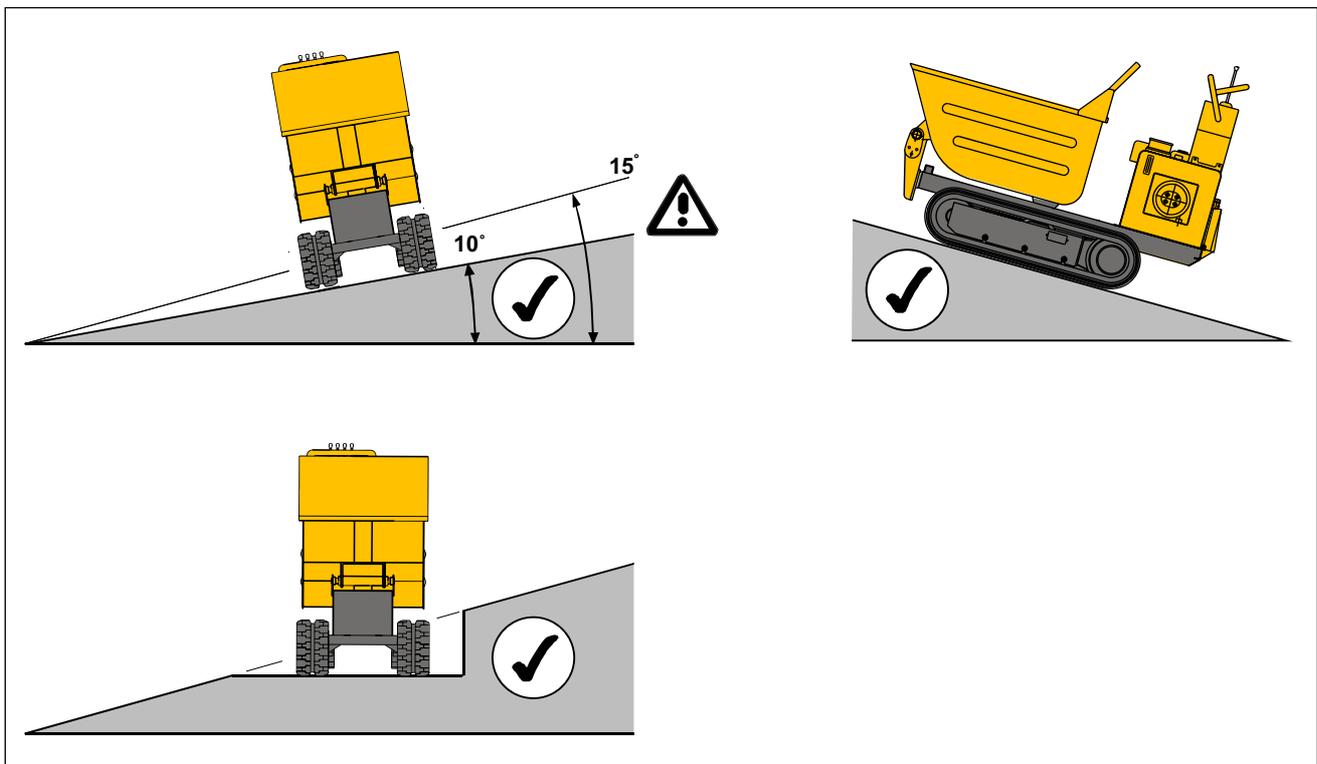
If repeated journeys across a slope are unavoidable, cut a level platform for the machine to travel on to increase stability.

Do not attempt climb up a slope greater than 15°.

Before attempting to travel up a slope make sure that the engine and hydraulic fluid have reached working temperature.

Do not make sudden direction changes when moving up a slope. Always chock the rear of the tracks if you stop on a slope, even for a short while.

When travelling down a slope, engage low speed gear only.



After you have warmed up the engine, move off as described below. Read the following Operating Warnings first.

**⚠ WARNING**

**Do not stand on the footplate without an onboard attachment secured to the machine. This will unbalance the machine and could result in the machine tipping backwards.**

\* **⚠ WARNING**

**Do not operate the controls from the side of the machine, when operating the machine, stand behind the controls at all times.**

The machine does not have gears. Do not overwork the engine unnecessarily. Operate at an engine speed suitable for the duty being carried out.

When moving the machine, keep it under control at all times. Stay alert for obstructions and possible hazards. Approach soft or muddy ground slowly.

**⚠ WARNING**

**You and others could be killed or injured if you reverse direction on the move, because the change in direction will be sudden and without warning to others.**

**When working in confined spaces, be aware of crush potential to the operator and others.**

**Always stop the machine and drop engine speed to idle before changing from forward to reverse or vice versa.**

HOP51

\* **⚠ WARNING**

**Ear Defenders**

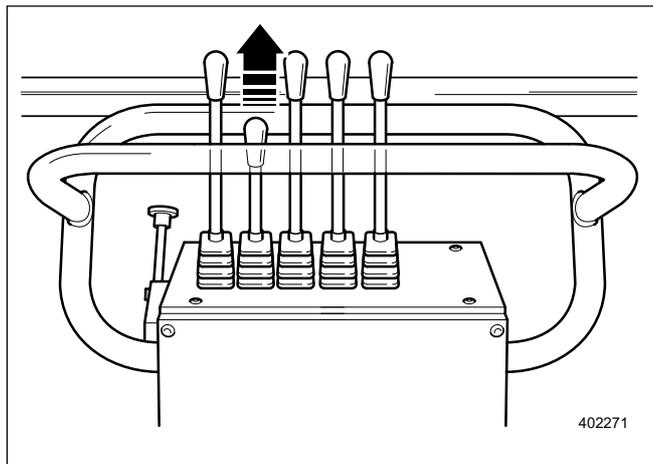
**In continuous 8-hour operation the average operator noise exposure from this machine can exceed 85 dB(A). In these circumstances ear plugs or noise defenders must be worn. If you do not wear ear plugs or noise defenders your hearing may be permanently damaged.**

**The 8-hour averaged threshold of 85 dB(A) might not be reached if use of the machine is less than 8-hours and the noise exposure from other sources in the remaining period is less than 85 dB(A). An assessment of daily noise exposure should be undertaken to determine if hearing protection is required.**

### Operating the hydraulic skip

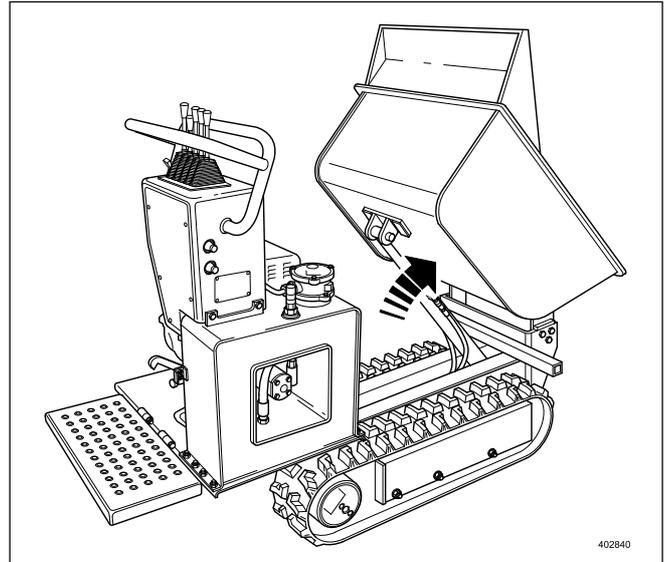
Moving the tipping lever forwards hydraulically raises the rear of the skip to release the load. Controlled dumping can be achieved by progressively moving the lever forward a little and returning it to the neutral position.

Moving the tipping lever back returns the skip to the horizontal (rest) position ready for loading.



### **⚠ WARNING**

**When working on the machine under a raised skip, make sure that the tipper control lever cannot be operated and that a ram strut is in place.**

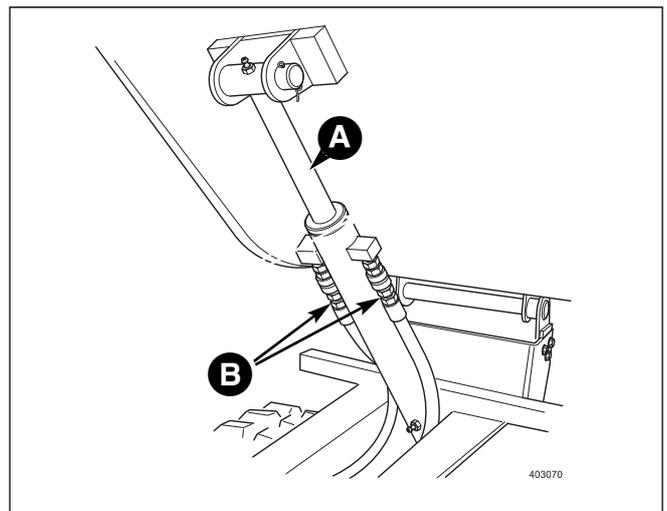


## Disconnecting the skip

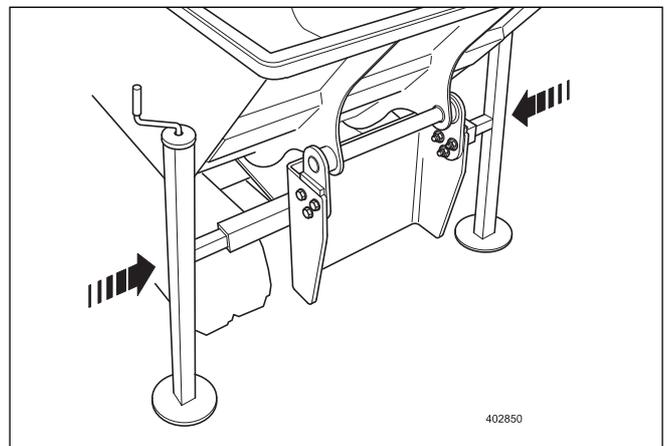
Raise the skip to the tip position and fit a ram stay at **A**.

Stop the engine

Disconnect the hydraulic hoses from the skip using the quick connections **B** on the hydraulic ram.



Fit the two supports into the special slots making sure they do not foul the release system.

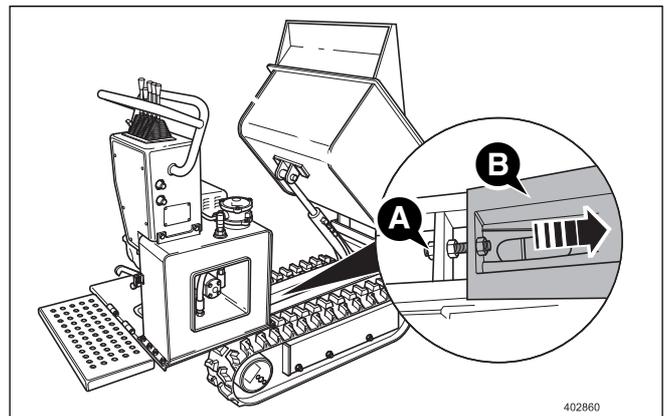


Unscrew bolt **A** and drive the machine slowly backwards from the quick release system **B** until support **C** can be installed.

### **⚠ WARNING**

Do not stand on the footplate without an onboard attachment secured to the machine. This will unbalance the machine and result in the machine tipping backwards.

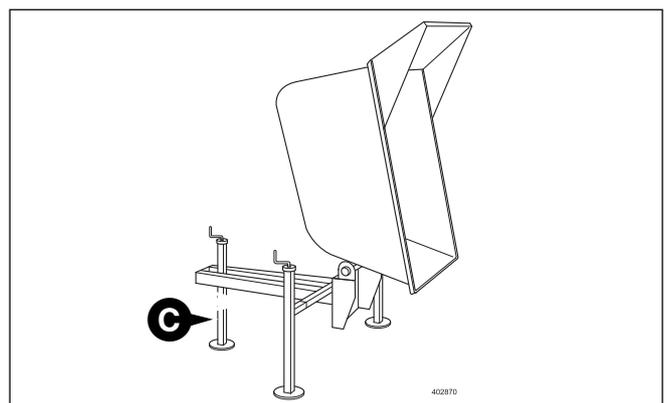
Do not stand on the footplate when a load is being tipped as this will change the centre of gravity and unbalance the machine.



### \* **⚠ WARNING**

Do not operate the controls from the side of the machine, when operating the machine, stand behind the controls at all times.

When all three supports are in place, reverse the machine clear of the skip.



## Installing the skip

### **⚠ WARNING**

Do not stand on the footplate without an onboard attachment secured to the machine. This will unbalance the machine and result in the machine tipping backwards.

### \* **⚠ WARNING**

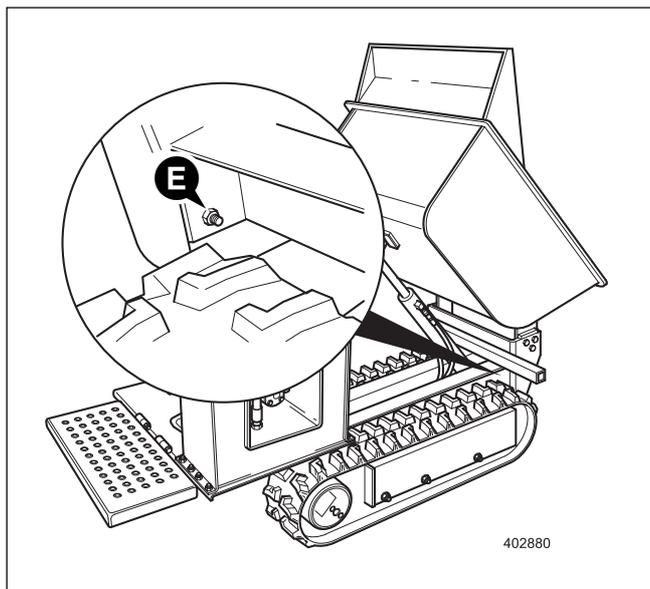
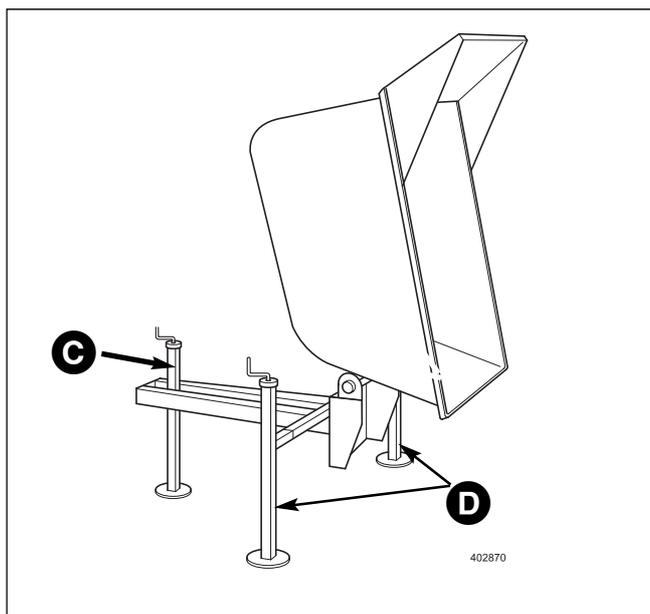
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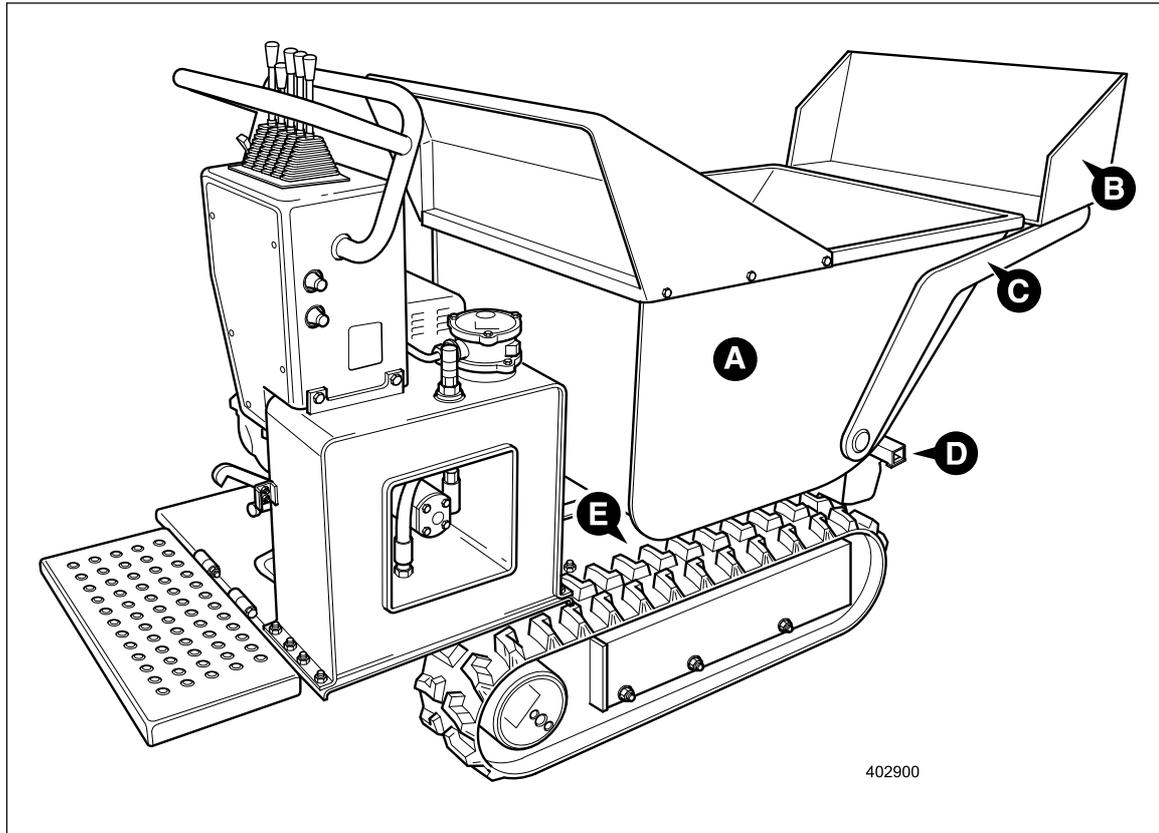
Position the skip on firm level ground on its three supports. Slowly drive the machine into the quick release slides until support **C** can be removed. Continue forward until the skip can be secured to the machine with bolt **A**.

Connect the hydraulic hoses to the quick connections and remove the ram strut.

Lower the skip and remove front supports **D**

The kit has two fixed reference pins **E** to ensure correct and easy fixing to the undercarriage.





402900

- A Skip
- B Shovel
- C Shovel arm
- D Storage stand slots
- E Shovel rams

### Installing the shovel loader

**⚠ WARNING**

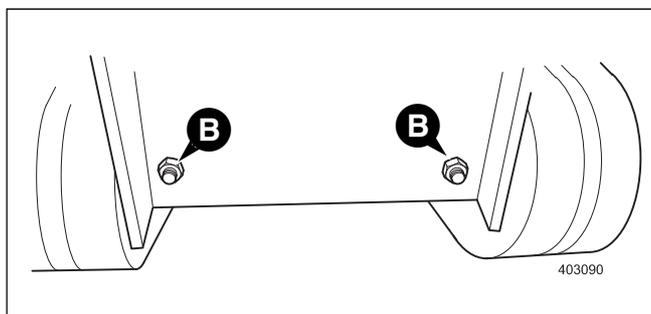
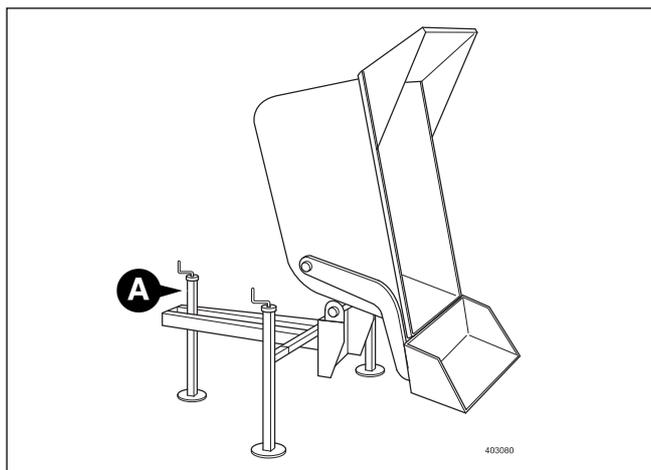
Do not stand on the footplate without an onboard attachment secured to the machine. This will unbalance the machine and result in the machine tipping backwards.

**\* ⚠ WARNING**

Do not operate the controls from the side of the machine, when operating the machine, stand behind the controls at all times.

Swing and secure the footplate in the upright position. Start the engine and slowly move the machine forward behind the skip and into the quick release guides, until support **A** can be removed.

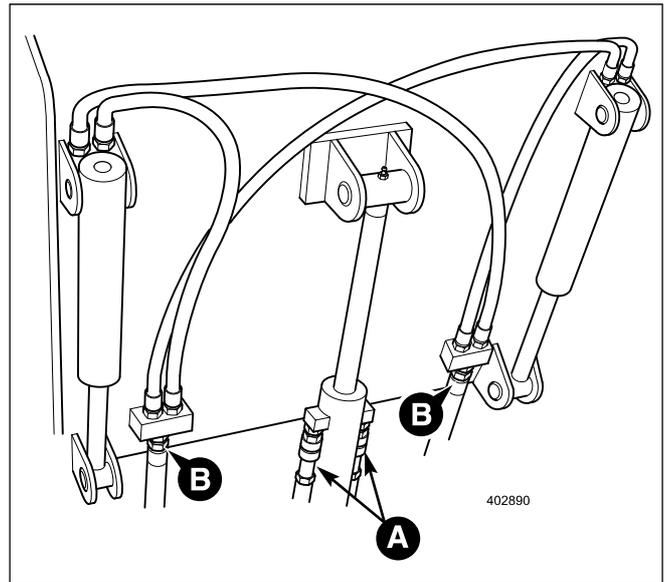
Continue forward to the end of the guides and secure the skip/shovel loader to the machine with the nuts **B**.



### Connecting the shovel loader to the hydraulic system

Connect the hydraulic hoses to the skip ram **A**.

Connect the hydraulic hoses from the shovel loader **B** to the accessory system control lever.



### Using the skip shovel

When moving the machine forward with the shovel loader fitted, it is advisable to raise the shovel so that the leading edge of the shovel can just be seen over the rim of the skip. This will enable you to gauge distances better.

Approach the material that is to be loaded into the skip.

Depending on the height and shape and type of material to be moved, lower the shovel to obtain a reasonable load. Move the machine forward so that the shovel enters the pile of material and stop forward motion.

Activate the lever to raise the shovel which will arc up and over the skip and deposit the load. Reverse the machine a short distance and repeat the process until the skip is almost full and before maximum load weight is achieved.

Occasionally make a visual inspection of the material pile on foot. It may be necessary to move large pieces of material that may have rolled forward from the pile and which could damage the rubber tracks. Lower the shovel to ground level when approaching the pile to clear a path for the machine.

## Using the high lift

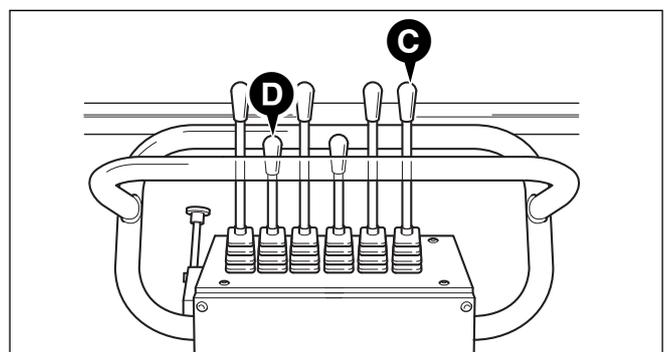
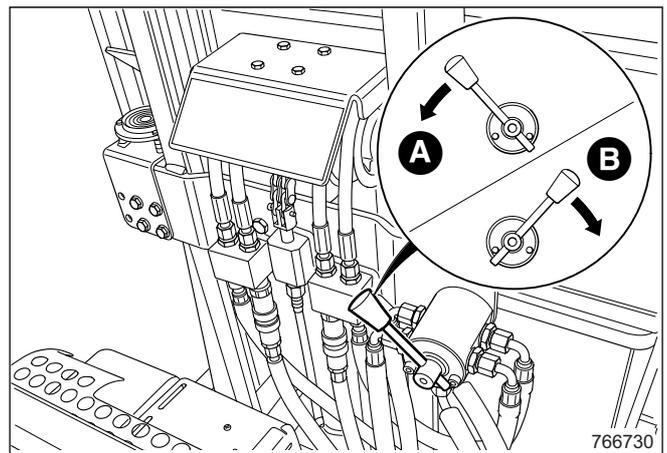
The high lift is a device to lift the dumpster skip up to a position where the load can be tipped into a truck or a builder's skip.

To lift the skip move the changeover valve from the deselected position **A** to the selected position **B**. This transfers the flow from the self loading shovel to the raise and lower mechanism of the mast.

Before lifting the skip refer to **Using the high lift level warning device** and **Extending the undercarriage**.

Move the loaded skip up the mast by pushing the lever **C** forwards, to move the skip down pull the lever backwards. When the skip has reached the correct height the skip may be tilted forward by pushing lever **D** forwards.

Do not dump the material in one sudden movement. Roll the skip forward in stages until it is empty. Use the lever **D** to rock the skip back and forth to loosen any sticky material.



## Using the high lift level warning device.

When using the high lift device it is important the load is stable, the undercarriage is extended and the machine is on level ground.

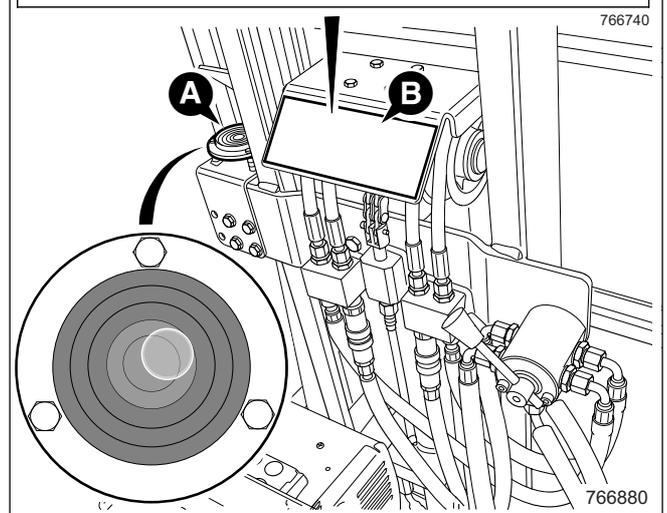
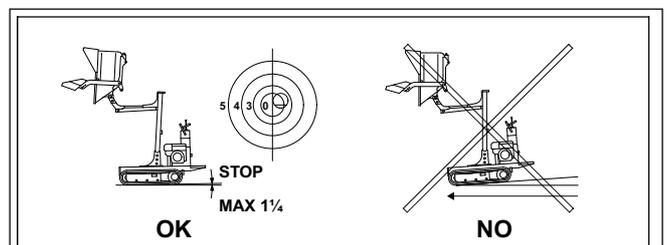
The TD10 high lift machine is fitted with a level warning gauge **A**. The skip of the TD10 must not be raised or tipped if the air bubble in the inner green area moves into the outer red area on the gauge (gradient of 1°). Refer to decal **B**.

### **⚠ DANGER**

Never conduct a lifting operation with the machine inclined greater than 1°. The machine may become unstable and tip over. You or others could be seriously injured or killed.

### **⚠ DANGER**

Do not travel with the skip in the raised position, the machine's centre of gravity will be altered. The machine may become unstable and tip over. You or others could be seriously injured or killed.

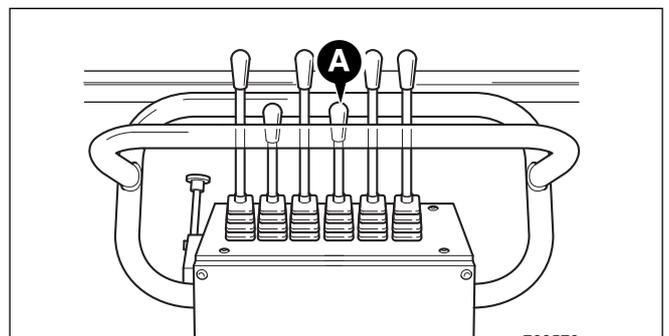
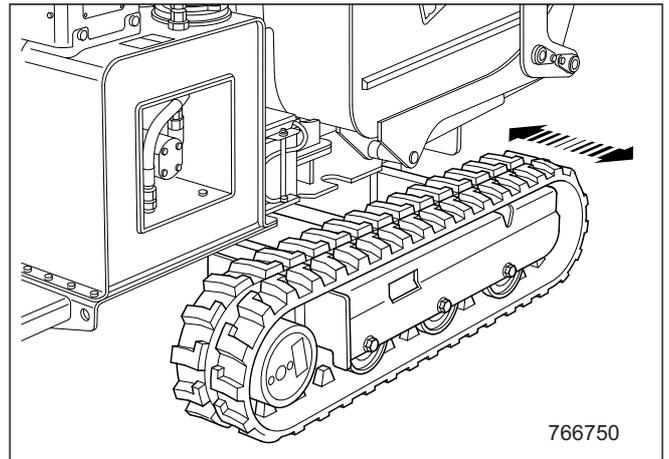


**Extending the undercarriage**

When using the high lift device it is important the undercarriage is extended to increase machine stability.

To extend the undercarriage push lever **A** forward. To retract the undercarriage pull the lever backwards.

**Note:** It may be necessary to drive the machine forwards whilst operating the lever to allow the track to extend or retract.



### Before using the trailer

#### **⚠ WARNING**

Before moving the machine onto the trailer, make sure that the trailer and ramp are free from oil, grease and ice. Remove oil, grease and ice from the machine tracks. Make sure the machine will not foul on the ramp angle.

HOP69

- 1 Remove any dirt or debris from the trailer.
- 2 Check the operation of the trailer parking brake.
- 3 Check the trailer bodywork for signs of damage.
- 4 Check the tyre pressures are correct.
- 5 Check the lights are working and are the correct voltage for the towing vehicle.
- 6 Check the breakaway cable is serviceable.

#### **⚠ WARNING**

The safe transit of the load is the responsibility of the transport contractor and driver. Any machine, attachment or parts that may move during transit must be adequately secured.

5-2-5-3

### Loading onto a trailer

- 1 Line up the tracks of the machine with the ramps.

**Note:** If you are loading the machine with the shovel loader attachment, raise the shovel so that it does not contact the ramps.

- 2 Move the machine slowly forward making sure that the tracks align with the ramps.
- 3 If the machine is moving off the ramps, do not attempt to change direction using the track control levers. Carefully reverse the machine back to the ground and adjust the direction of the machine.
- 4 When loading or unloading, be prepared for the sudden movement when the machine tips from/to the difference in the trailer and ramp angles.

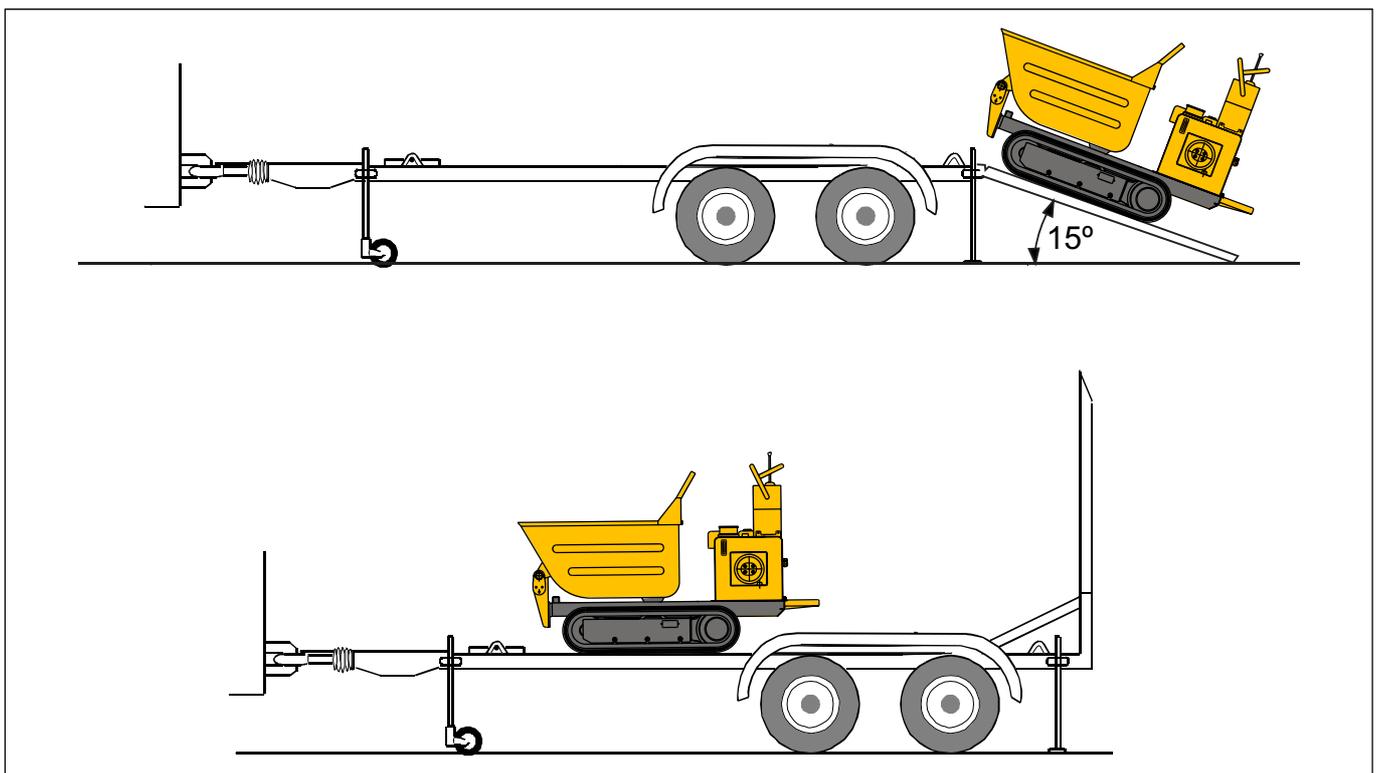
#### **⚠ WARNING**

Make sure that the loading and unloading operations are carried out on firm and level ground.

Make sure that the ramps are strong enough to support the weight of the machine. The ramps must be long enough to provide an incline of no more than 15°.

#### **⚠ WARNING**

DO NOT attempt to load the machine without the skip or other attachment mounted on the machine. Without an attachment the machine will be back heavy and could tip over backwards when climbing the ramp.



## Securing the machine

### **WARNING**

**The machine must be securely tied down to the trailer to prevent any movement. Failure to do so could cause injury to yourself or others.**

- 1 Place skid blocks under each track at front and rear to prevent movement of the machine in the fore-and-aft direction.
- 2 Position a wire rope of suitable breaking strain through the undercarriage front and rear and secure to the trailer shackles to prevent lateral movement of the machine.
- 3 Place chocks in front and behind each track to prevent lateral movement of the machine during transportation.

### **CAUTION**

**Do not secure the wire ropes over the tracks. This will cut the rubber tracks and lead to instability on the transporter.**

### Preparation for Storage

The operations to place a machine into storage (-15°C to 44°C) are given below.

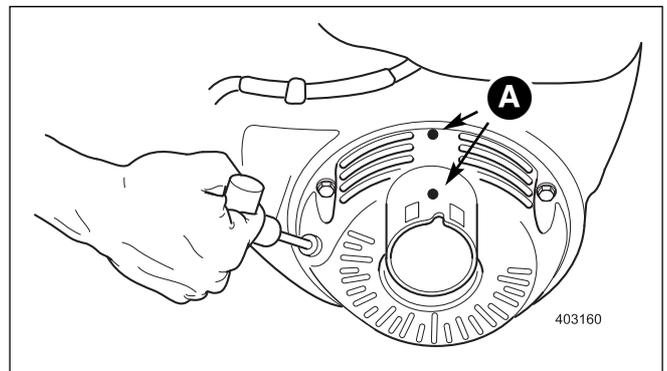
**Note:** It is important to clean the undercarriage after working on muddy ground to prevent the build up of solidified mud.

- 1 Park the machine safely in an outbuilding or cover with a tarpaulin after switching off the engine.

If the machine is to be stored for an extended period, do the following:

- 1 Drain the fuel system - see 'Draining the fuel system'.
- 2 Change the engine oil.
- 3 Remove the spark plug and pour a tablespoon of clean engine oil into the cylinder head. Crank the engine a few revolutions to disperse the oil in the cylinder and refit the spark plug.

- 4 Pull the starter cord slowly until resistance is felt. Continue pulling until the notch on the starter pulley aligns with the hole on the recoil starter **A**. At this point, the inlet and exhaust valves are closed as a safeguard against internal corrosion.
- 5 Ensure hydraulic tank is filled to maximum.
- 6 Spray exposed ram rods with Waxoyl.
- 7 Slacken off rubber tracks until no visible spring tension exists.



### Preparation after Storage

The operations to remove a machine from storage (-15°C to 44°C) and prepare it for use are given below.

- 1 Remove the fuel filler cap and pour clean fuel into the petrol tank.
- 2 Check the oil and adjust to correct level as necessary.
- 5 Start the engine - see 'Starting the Engine'.
- 6 Adjust track tensions.
- 7 Grease all lubrication points.

**Engine does not start**

Is there fuel in the tank?  
Is there sufficient oil in the engine?  
Check the spark plug.

**Machine does not run properly**

Hydraulic movements are too slow:

Cold oil  
Wrong grade of oil  
Slow running engine  
Broken pump

Run engine to normal working temperature.  
Change oil.  
Investigate cause and rectify.  
Investigate cause and rectify.

**Oil temperature too high**

Incorrect oil  
Filter clogged  
Broken pump  
Defective discharge valve  
Contaminated oil

Change oil.  
Replace filter.  
Investigate cause and rectify.  
Investigate cause and rectify.  
Change oil.

**Oil generates foam**

Air is aspirated from the tank to the pump  
Wrong oil  
Water in the oil  
Oil level too high/low

Investigate cause and rectify.  
Change oil.  
Change oil.  
Drain/top up oil to correct level.

**Oil pressure low/no pressure**

Wrong oil  
No hydraulic oil  
Defective discharge valve

Change to the correct oil.  
Fill with the correct oil.  
Investigate cause and rectify.

**Oil pump not working**

Broken hydraulic pump  
No oil  
Damaged aspiration line

Investigate cause and rectify.  
Add correct oil.  
Repair.

**Movement are underpowered**

Defective pump  
Discharge pressure low  
Hydraulic oil level low

Investigate cause and rectify.  
Investigate cause and rectify.  
Top up with oil.

**Control levers not working**

Defective discharge valve  
Damaged hoses or connections  
Loose connections  
Defective hydraulic pump

Investigate cause and rectify.  
Repair or replace.  
Tighten.  
Investigate cause and rectify.

**One control lever does not work**

Damaged hoses or connections  
Loose connections

Repair or replace.  
Tighten.

**Reduction gear does not work**

Damaged reduction gear  
Damaged hydraulic circuit

Investigate cause and rectify.  
Repair or replace.

**Drive movements are uneven**

Track tension too tight/loose  
Decreased pump performance  
Decreased engine performance  
Undercarriage damaged  
Stones/debris in tracks  
Control valve does not function properly

Adjust tension.  
Investigate cause and rectify.  
Investigate cause and rectify.  
Repair.  
Remove.  
Investigate cause and rectify.

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## Safety Notices

In this manual and on the machine there are safety notices. Each notice starts with a signal word. The signal word meanings are given below.

### **DANGER**

Denotes an extreme hazard exists. If proper precautions are not taken it is highly probable that the operator (or others) could be killed or seriously injured.

INT-1-2-1

### **WARNING**

Denotes a hazard exists. If proper precautions are not taken, the operator (or others) could be killed or seriously injured.

INT-1-2-2

### **CAUTION**

Denotes a reminder of safety practices. Failure to follow these safety practices could result in injury to the operator (or others) and possible damage to the machine.

INT-1-2-3

All construction and agricultural equipment can be hazardous. When a JCB Dumpster is correctly operated and properly maintained it is a safe machine to work with. But when it is carelessly operated or poorly maintained it can become a danger to you (the operator) and others.

Do not work with the machine until you are sure that you can control it.

Do not start any job until you are sure that you and those around you will be safe.

If you are unsure of anything, about the machine or the job, ask someone who knows. Do not assume anything.

Remember

**BE CAREFUL**  
**BE ALERT**  
**BE SAFE**

GEN-1-6

As well as the warnings in the following pages, specific warnings are given throughout the manual. This section is designed to give a safety code for use of the machine generally and for operation and maintenance practices.

**Note:** This section includes a certain amount of operating safety information. But remember that whenever you drive the machine or operate its controls you are, in effect, a machine operator. Therefore, you should read and understand the information given in the Operator Handbook before driving the machine or operating its controls.

## Operating Safety

### **WARNING** Boarding/Leaving

Always face the machine when boarding and leaving the machine. Use the step and handrail. Make sure the step, handrail and your boot soles are clean and dry. Do not jump from the machine. Do not use the machine controls as handholds, use the handrail.

INT-2-1-7/1

### **WARNING** Machine Limits

Operating the machine beyond its design limits can damage the machine, it can also be dangerous. Do not operate the machine outside its limits. Do not try to upgrade the machine performance with unapproved modifications.

INT-2-1-4

### **WARNING** Exhaust Gases

Breathing the machine exhaust gases can harm and possibly kill you. Do not operate the machine in closed spaces without making sure there is good ventilation. If possible, fit an exhaust extension. If you begin to feel drowsy, stop the machine at once. Get out into fresh air.

INT-2-1-10

### **WARNING** Hazardous Atmospheres

This machine is designed for use in normal outdoor atmospheric conditions. It should not be used in an enclosed area without adequate ventilation. Do not use the machine in a potentially explosive atmosphere, i.e. combustible vapours, gas or dust, without first consulting your JCB dealer.

INT-2-1-14

### **WARNING** Ramps and Trailers

Water, mud, ice, grease and oil on ramps or trailers can cause serious accidents. Make sure ramps and trailers are clean before driving onto them. Use extreme caution when driving onto ramps and trailers.

INT-2-2-6

### **WARNING** Communications

Bad communications can cause accidents. Keep people around you informed of what you will be doing. If you will be working with other people, make sure any hand signals that may be used are understood by everybody. Work sites can be noisy, do not rely on spoken commands.

INT-2-2-3

### **WARNING** Sparks

Explosions and fire can be caused by sparks from the exhaust or the electrical system. Do not use the machine in closed areas where there is flammable material, vapour or dust.

INT-2-2-10

### **WARNING** Controls

Keep the machine controls clean and dry. Your hands and feet could slide off slippery controls. If that happens you will lose control of the machine.

2-2-3-6

### **WARNING**

\* Do not operate the controls from the side of the machine, when operating the machine, stand behind the controls at all times.

### **WARNING** Ear Defenders

\* In continuous 8-hour operation the average operator noise exposure from this machine can exceed 85 dB(A). In these circumstances ear plugs or noise defenders must be worn. If you do not wear ear plugs or noise defenders your hearing may be permanently damaged.

The 8-hour averaged threshold of 85 dB(A) might not be reached if use of the machine is less than 8-hours and the noise exposure from other sources in the remaining period is less than 85 dB(A). An assessment of daily noise exposure should be undertaken to determine if hearing protection is required.