



# Service Manual

ROBOT 160, 170, 180T

PUBLISHED BY THE
TECHNICAL PUBLICATIONS DEPARTMENT
OF JCB SERVICE; ©
WATERLOO PARK, UTTOXETER,
STAFFORDSHIRE, ST14 5PA, ENGLAND
Tel. ROCESTER (01889) 590312
PRINTED IN ENGLAND

Publication No. 9803/8520 Iss 14

Copyright 6:3004 JCB SERVICE All rights reserved. No part of this publication may be reproduced, shared in a retrieval system, or instantial in any form or by any other means, electratic, mechanical, philosopying or otherwise, without prior permission

General Information	1
Care & Safety	2
Routine Maintenance	3
Attachments	A
Body & Framework	В
Electrics	C
Controls	D
Hydraulics	E
Transmission	F
Brakes	G
Tracks	J
Engine	K

Moving a Disabled Machine

#### General

Do not tow a machine unless there is no alternative. Remember that more damage might be caused to the machine by towing it. If at all possible repair the machine where it stands.

Note: It is not possible to tow-start a machine fitted with JCB Powersplit.

Make sure you will be obeying all pertinent laws and regulations before towing the machine on public roads.

## A DANGER

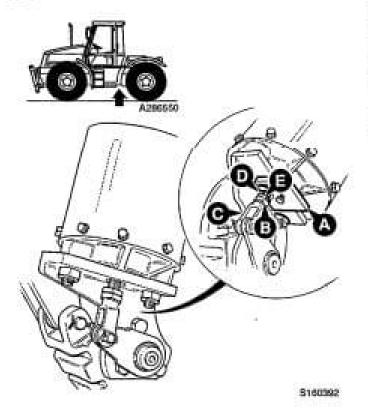
If the engine is not running, there will not be enough air to apply the service brakes or release the parking brake. Carefully follow the precautions in this section before moving the machine or there may be a serious accident.

## A CAUTION

Towing a machine too far or too fast can damage the transmission. Do not tow the machine further than one mile. Use a trailer for greater distances. When towing do not travel faster than 25 km/h (15 mph).

Use a rigid drawbar. It you must use towing chains, then use two towing vehicles. One towing vehicle should be coupled to the front of the disabled machine. The other towing vehicle should be coupled to the rear of the disabled machine, to provide braking power.

The towing vehicle(s) must have enough pulling and braking power to move and stop the machine.



## Preparation for Towing

#### Connect the towing vehicle.

- Apply the parking brakes on the towing vehicle and securely chock the wheels on the Fastrac.
- b Fit the drawbar between towing vehicle and Fastrac.

### 2 Prepare the machine.

- Make sure that the range and speed gearboxes are both in neutral.
- b If the gearbox has failed, disconnect both propahalts (see Section F).
- If an axle has failed, remove the sun gears (see Section F).

#### 3 Release the Fastrac parking brake.

If there is not enough air pressure to release the brake, start the engine to charge up the air system. If the engine cannot be run but the brake air system is serviceable, charge the system to 120 psi (8 bar) through Schrader valve X. This job must be done by a qualified mechanic, using the correct equipment.

## A DANGER

Ensure that the chocks and towing vehicle will prevent the Fastrac from moving as it is necessary to work under the machine to release the parking brake. When the parking brake has been manually released as described below, it will be impossible to apply the brake until plate A has been removed.

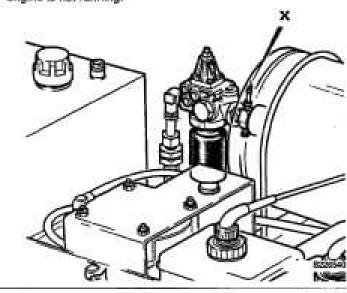
13-2-2-11

Alternatively, position plate A (if provided with the machine) as shown. Keeping nut B tight against clevis C, turn nut D against the plate so that rod E is drawn out of the actuator body and the parking brake is released.

Note: If the parking brake cannot be released, remove both propshafts (see Section F).

The machine is now ready for towing. If you will be steering the Fastrac, make sure you understand what the towing driver will be doing. Obey his instructions and all relevant regulations.

Remember that the steering will be much heavier if the engine is not running.



Greasing

#### General

Read and understand Lubricants - Health and Safety, before greasing. You must grease the machine regularly to keep it working efficiently. Regular greasing will also lengthen the machine's working life. Refer to the Service Schedules for the recommended frequencies.

Note: The machine must always be greased after pressurewashing or steam cleaning. Extra care must be taken to ensure that proposalt universal joints and oplines are greased regularly.

Greasing should be done with a grease gun. Normally, two strokes of the gun should be anough. Stop greasing when tresh grease appears at the joint. Use only JCB HP Grease or equivalent.

In the following illustrations the grease points are numbered. Count them off as you grease them.

Refit the grease point dust caps after greasing.

## Propshafts and PTO Drive Shafts

## A WARNING

Make the machine safe before getting beneath it. Do the following: Park on level ground. Engage the parking brake. Lower any mounted implements to the ground. Stop the engine, remove the starter key, disconnect the battery. Chock the wheels.

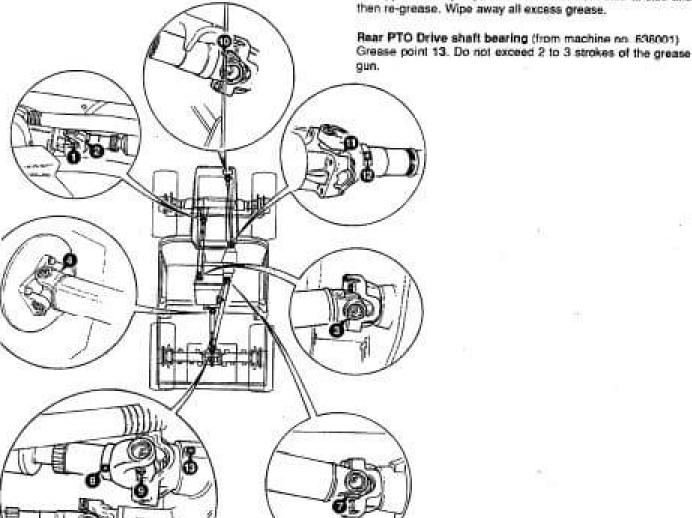
Front axle propshaft Grease points 1 to 3.

Rear axie propahaft Grease points 4 to 6.

Rear PTO drive shaft Grease points 7 to 9.

Front PTO drive shalt (optional) Grease points 10 to 12.

Note: When greasing the universal joints, you must ensure that grease appears at all four bearing caps. If grease does not appear at any cap, move the shaft from side to side and then re-grease. Wipe away all excess grease.



5160422



Thank you very much for your reading.

Please click here to get more information.