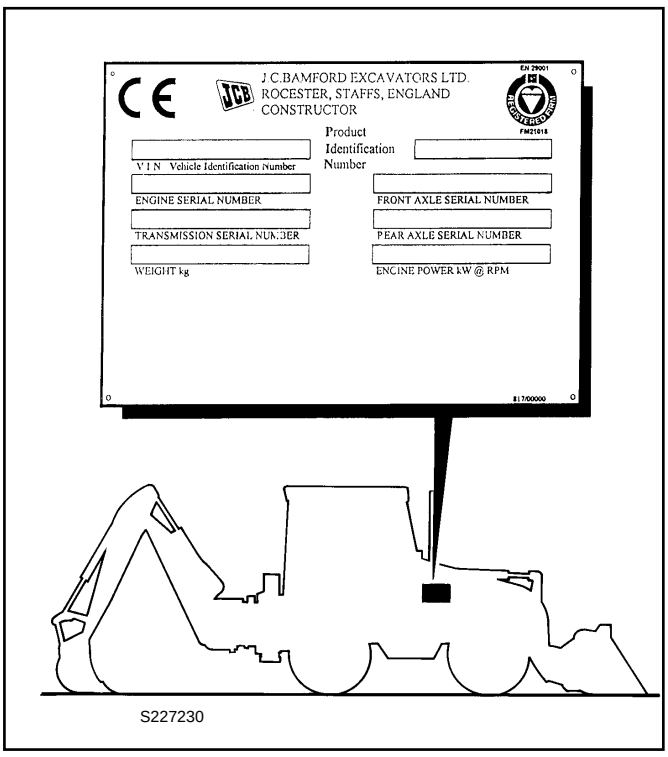
Machine Identification Plate

Your machine has an identification plate mounted on the right hand side of the machine just below the driver's cab door. The serial numbers of the machine and its major units are stamped on the plate.

The serial number of each major unit is also stamped on the unit itself. If a major unit is replaced by a new one, the serial number on the identification plate will be wrong. Either stamp the new number of the unit on the identification plate, or simply stamp out the old number. This will prevent the wrong unit number being quoted when replacement parts are ordered.

The machine and engine serial numbers can help identify exactly the type of equipment you have.



Typical Machine Identification Number

SLP 2CX T S R E 123456
A B C D E F G

A World Manufacturer Identification

B Machine Model

C Steer Type (T= 2WS, F=4WS)

D Build Type (S=Sideshift, C=Centremount, L=Loader)

E Year of Manufacture:
1 = 2001
2 = 2002
3 = 2003
4 = 2004
5 = 2005
6 = 2006
7 = 2007

F Manufacturer Location (E = England)

G Machine Serial Number:

Typical Engine Identification Number

AB 50262 U 500405 P
A B C D E

A Engine Type
AB = 4 cylinder turbo

B Build Number

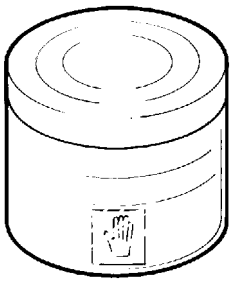
C Country of Origin

D Engine Sequence Number

E Year of Manufacture

Service Tools

Section B - Body & Framework



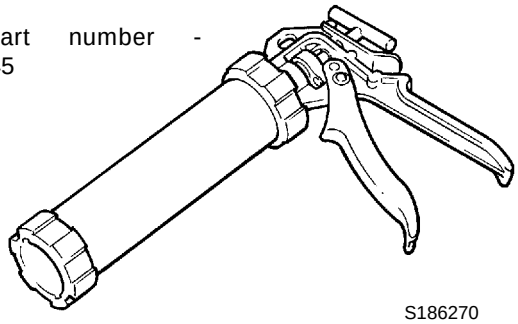
Hand Cleaner - special blend for the removal of polyurethane adhesives.

JCB part number - 4104/1310
(454g; 1 lb tub)

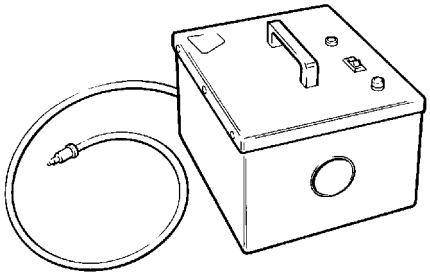
S186240

Cartridge Gun - hand operated - essential for the application of sealants, polyurethane materials etc.

JCB part number - 892/00845



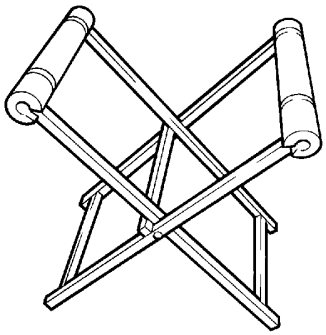
S186270



12V Mobile Oven - 1 cartridge capacity - required to pre-heat adhesive prior to use. It is fitted with a male plug (703/23201) which fits into a female socket (715/04300).

JCB part number - 992/12300

S186250



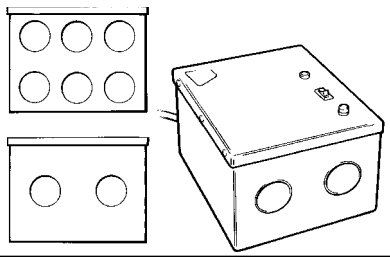
Folding Stand for Holding Glass - essential for preparing new glass prior to installation.

JCB part number - 892/00843

S186280

240V Static Oven - available with 2 or 6 cartridge capacity - required to pre-heat adhesive prior to use. No plug supplied. Note: 110V models available upon request - contact JCB Technical Service.

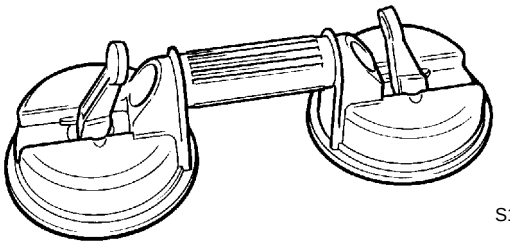
JCB part number:
992/12400 - 2 Cartridge x 240V
992/12600 - 6 Cartridge x 240V



S186260

Glass Lifter - minimum 2 off - essential for glass installation, 2 required to handle large panes of glass. Ensure suction cups are protected from damage during storage.

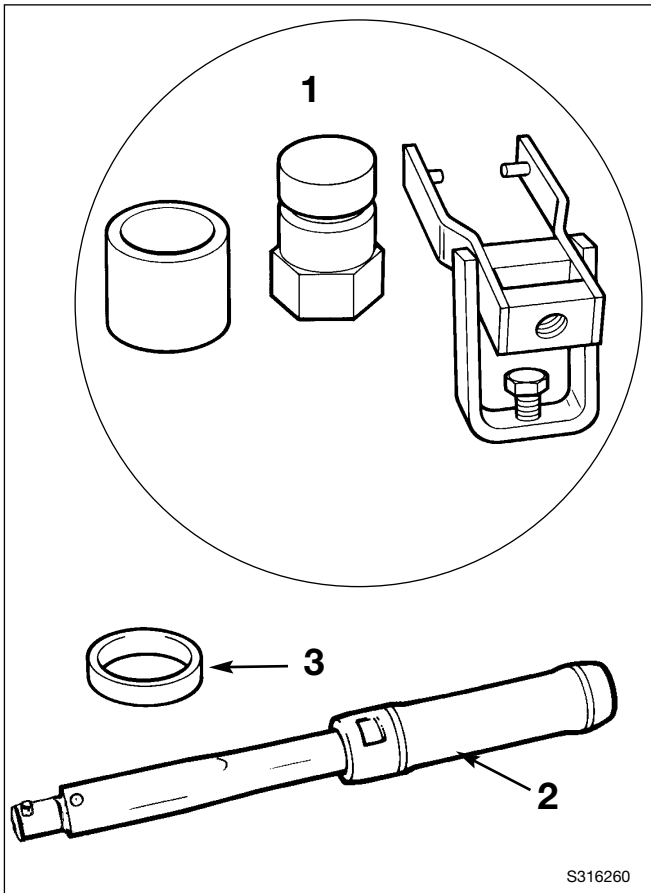
JCB part number - 892/00842



S186300

Service Tools (cont'd)

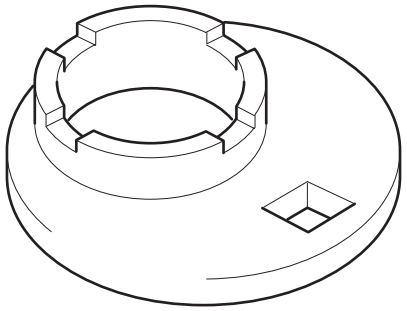
Section F - Transmission



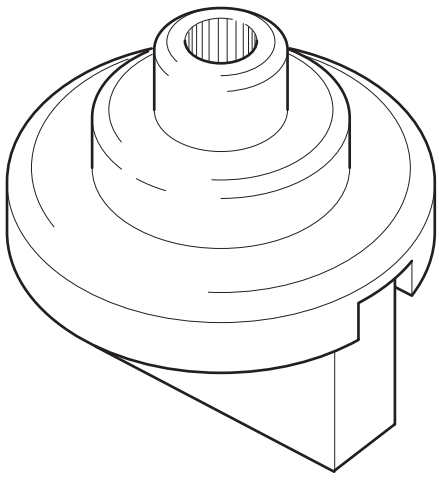
Solid Spacer Setting Kit

1	892/00918	Setting Tool Kit
2	993/70111	Breakback Torque Wrench
3	921/52600	Spacer Kit
	921/52627	Spacer 14.20 Service use
	Comprises of:	
	921/52601	Spacer 12.75
	921/52602	Spacer 12.80
	921/52603	Spacer 12.85
	921/52604	Spacer 12.90
	921/52605	Spacer 12.95
	921/52606	Spacer 13.00
	921/52607	Spacer 13.05
	921/52608	Spacer 13.10
	921/52609	Spacer 13.15
	921/52610	Spacer 13.20
	921/52611	Spacer 13.25
	921/52612	Spacer 13.30
	921/52613	Spacer 13.35
	921/52614	Spacer 13.40
	921/52615	Spacer 13.45
	921/52616	Spacer 13.50
	921/52617	Spacer 13.55
	921/52618	Spacer 13.60
	921/52619	Spacer 13.65
	921/52620	Spacer 13.70
	921/52621	Spacer 13.75
	921/52622	Spacer 13.80
	921/52623	Spacer 13.85
	921/52624	Spacer 13.90
	921/52625	Spacer 13.95
	921/52626	Spacer 14.00

892/01064 Adaptor Spanner for reverser unit stake nut.



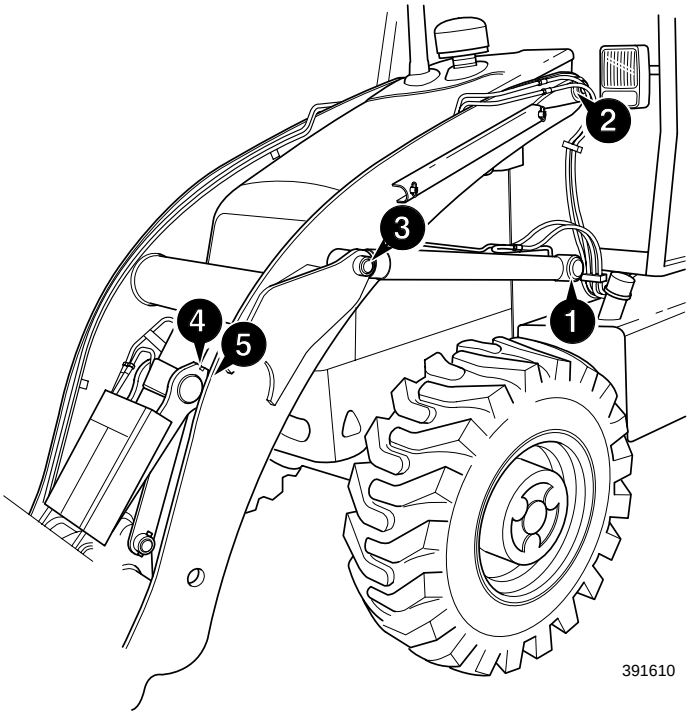
892/01065 Holding Fixture for reverser unit dismantling/assembly.



Loader Arms - Standard

For each grease point shown there is another on the other side of the machine.

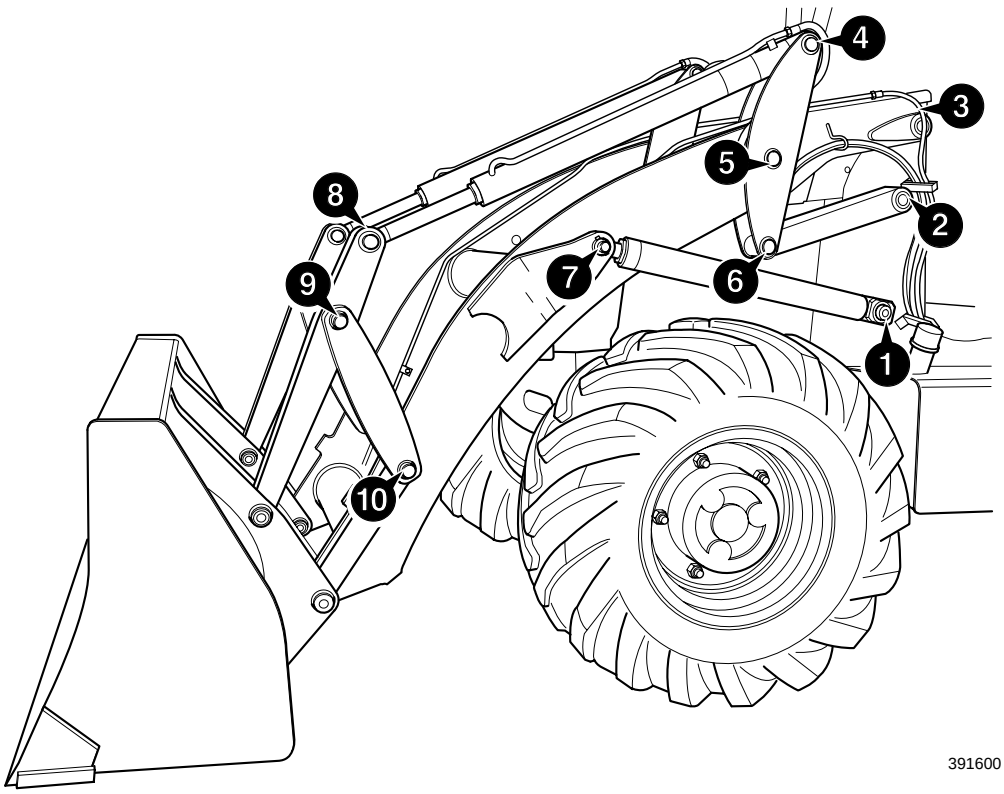
Total 10 grease points



Loader Arms - High Specification

For each grease point shown there is another on the other side of the machine.

Total 20 grease points



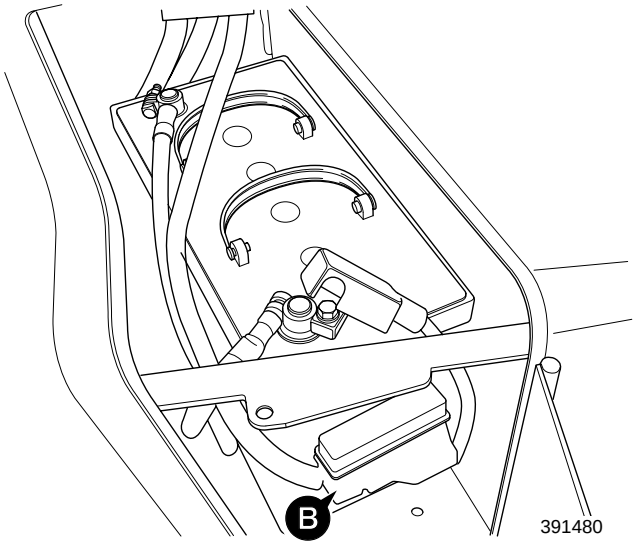
Link Box Fuses

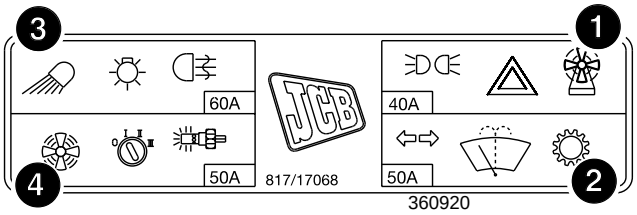
To further protect the machine wiring harnesses and electrical circuits, a fuse link box is fitted to the battery, as shown at **B**. Remember to check the main circuit fuses as well as the link box fuses shown on this page.

1	Hazard warning lights, Side lights, Face level fan	40 Amp
2	Wash/Wipe, Transmission, Indicators	50 Amp
3	Work lights, Fog Lights, Road lights	60 Amp
4	Ignition, Heater, Thermostart	50 Amp

Bulbs

Bulbs	Rating (Watts)
Headlights - main	45 W
Headlights - dip	37.5 W
Indicators	21 W (front & rear)
Instruments	1.2 W
Work lights	55 W Halogen (front & rear)
Number plate light	2 x 5 W
Side/tail lights	5W (front & rear)
Interior lights	10 W
Stop lights	21 W (rear)
Beacon	70 W Halogen
Inspection lamp (where fitted)	55 W (floodlight pattern)
Rear fog	21 W
Warning lights	3 W





Care and Safety

It is expected that users will employ safe working practices and will observe any related legal requirements when operating or overhauling this machine. The following notes augment instructions given elsewhere in this publication and they are intended as a guide to the safe use of this machine and its associated compressed air supply under normal working conditions.

General Safety

- ⚠ Use only certified pressure vessels of adequate working pressure as air receivers. OTHERS COULD EXPLODE.
- ⚠ Never operate a compressed air system, for example compressor pipework or pneumatic appliance, at a higher pressure than that for which it has been designed or rated.
- ⚠ Shut off the air cock at the compressor and release air pressure before disconnecting a hose or line unless there is an automatic valve to give protection at the upstream joint being separated.

Operating Safety

BEFORE STARTING THE COMPRESSOR ENSURE:

- ⚠ The machine is level and with brakes applied.
- ⚠ Plant is clean internally.
- ⚠ All air pressure is released from machine.
- ⚠ All hoses and tubing in good condition, secure and not rubbing.
- ⚠ No fluid leaks.
- ⚠ All fasteners tight.
- ⚠ Fluid levels correct. Top up only with specified oils/coolants. Filler caps must be tight.
- ⚠ All electrical leads secure and in good order.
- ⚠ Fan belt tension correct.
- ⚠ All guards in place and secure.
- ⚠ Start and stop procedures are clearly understood. Before starting close air discharge cocks. Refer to the operating instructions.
- ⚠ Refer also to 'Using the Compressor and Site Safety' on the next page.

Maintenance Safety

BEFORE STARTING ANY WORK ON THE PLANT:

- ⚠ Park the machine on firm level ground. Engage the parking brake and set the transmission to neutral. Stop the engine and remove the starter key.
- ⚠ Disconnect battery to ensure that machine cannot be started inadvertently.
- ⚠ Ensure that all air pressure is completely released from the system.

WHEN WORKING ON THE PLANT:

- ⚠ Use proper lifting gear of adequate capacity.
- ⚠ Examine condition of lifting equipment before lifting plant by it.
- ⚠ Use the correct tools for the job.
- ⚠ When using a chemical or solvent cleaner, follow the manufacturer’s instructions.
- ⚠ Do not weld or perform any operation involving heat near the oil system. Oil tanks must be completely purged, e.g. by steam cleaning, before such operations.
- ⚠ Do not weld or in any way modify any pressure vessel.
- ⚠ Before clearing the machine for use, check test that operating pressures, temperatures and speed are correct and that the controls and shut-down devices work correctly.

Suction Unloader

Dismantling

1 Unscrew the six screws **11** and remove the diaphragm body assembly **10** from the unloader body **4**. Withdraw the valve and spring **7** from the piston **8**.

2 Secure the diaphragm body in a vice with the end cover **15** uppermost. Remove the four bolts **16** and then the end cover. Withdraw the piston/diaphragm assembly and spring **6.**

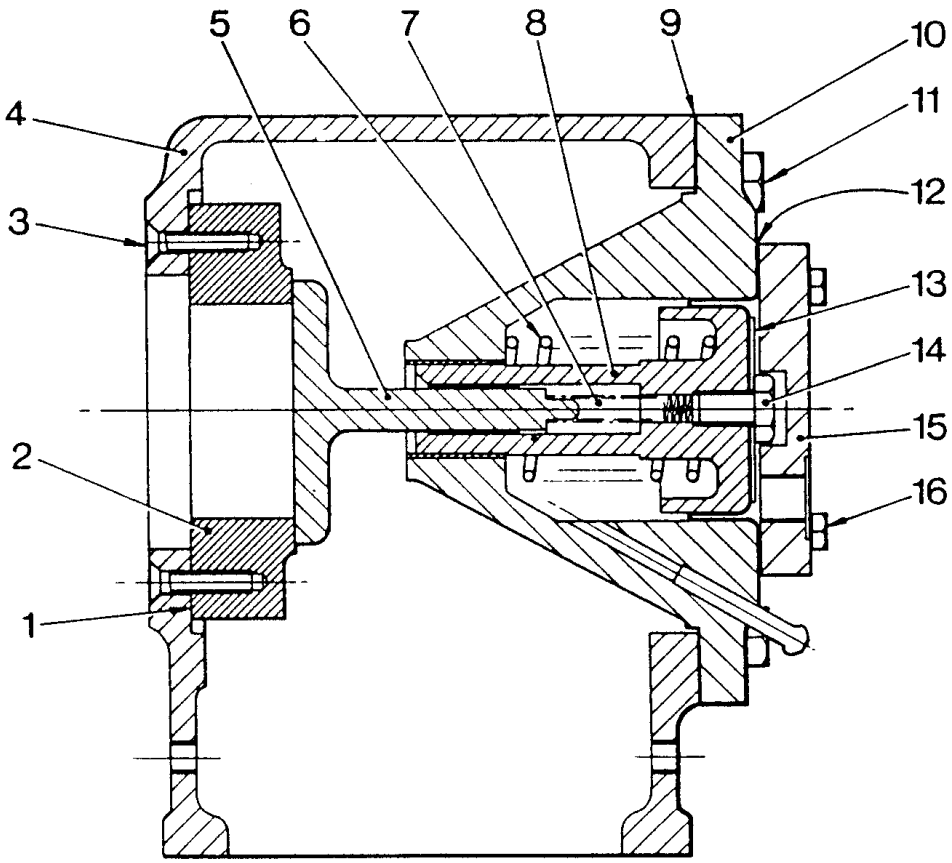
3 Remove the diaphragm body from the vice, then position the piston in the vice with the diaphragm uppermost.

⚠ CAUTION

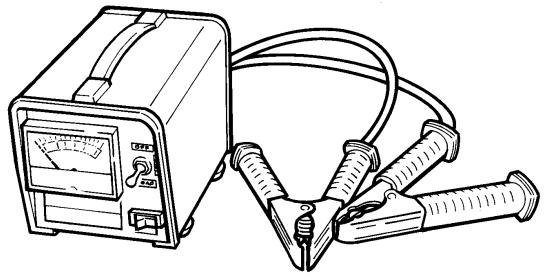
Ensure the machined diameters of the piston are not damaged. Hold in a split bushing for convenience.

4 Remove bolt **14**, plate **13** and diaphragm **12**.

5 Unscrew the countersunk screws **3** and remove the valve seat **2** and joint **1**.

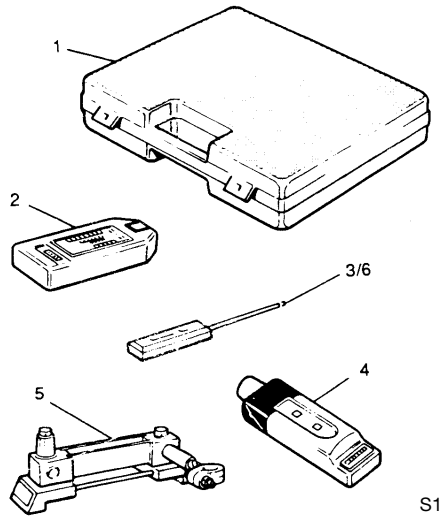


993/85700 Battery Tester



Wiring Harness Repair Tools

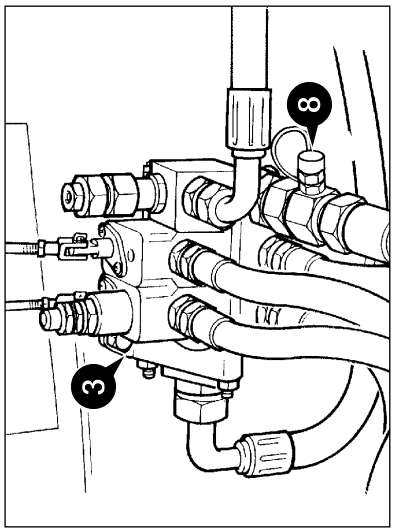
1	892/00350	Butane Heater Assembly
2	892/00349	Crimp Tool
3	892/00351	Splice 0.5 - 1.5mm (Red)
4	892/00352	Splice 1.5 - 2.5mm (Blue)
5	892/00353	Splice 3.0 - 6.0mm (Yellow)

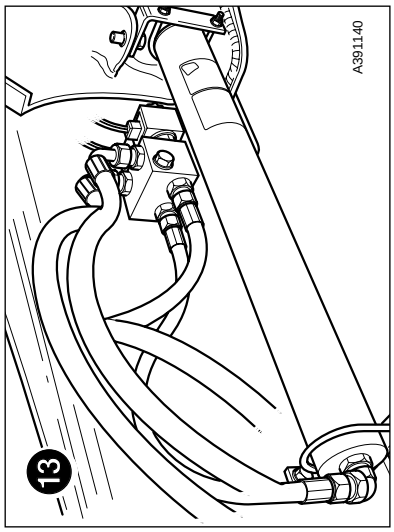


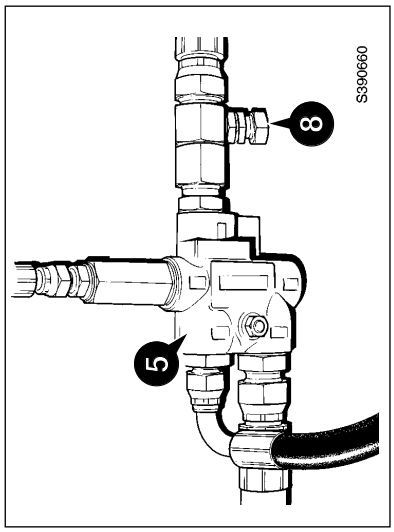
S188230

AVO Test Kit

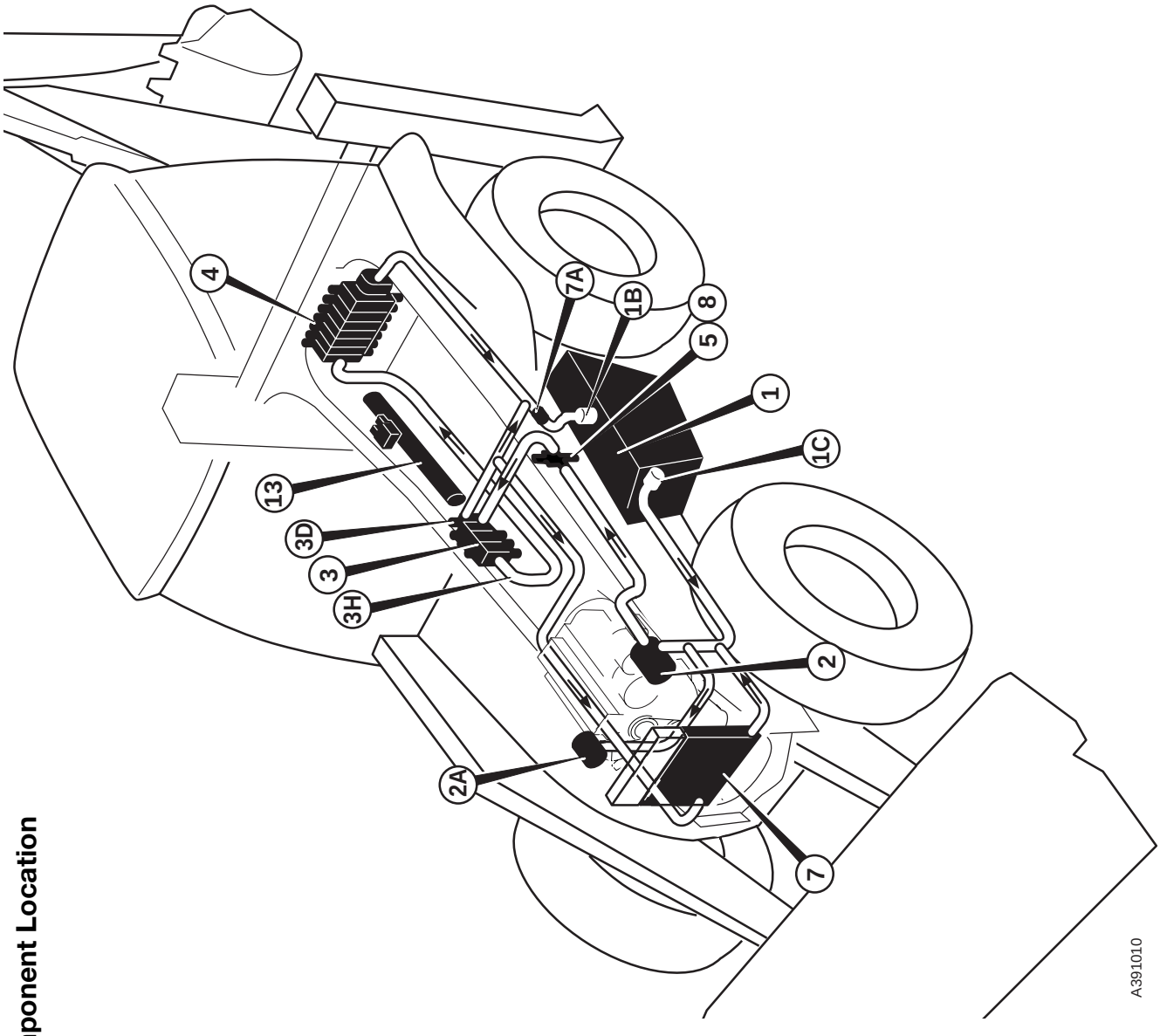
1	892/00283	Tool Kit Case
2	892/00298	Fluke Meter 85
3	892/00286	Surface Temperature Probe
4	892/00284	Venture Microtach Digital Tachometer
5	892/00282	100 amp Shunt - open type
6	892/00285	Hydraulic Temperature Probe

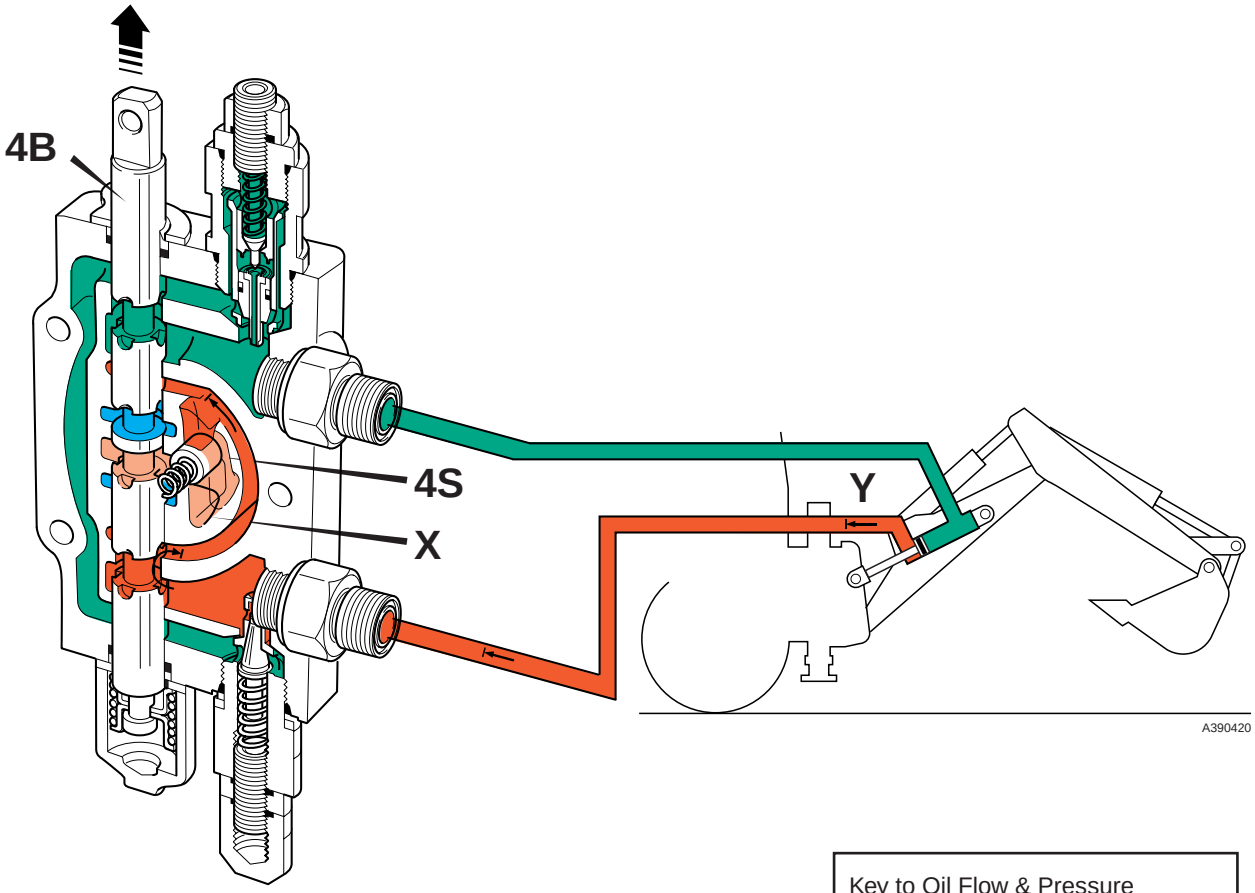


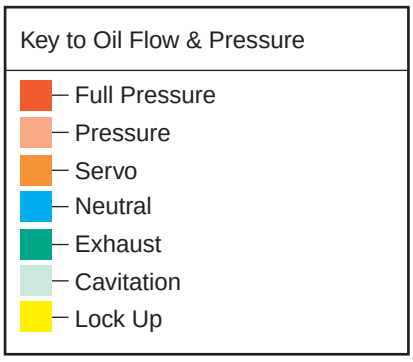


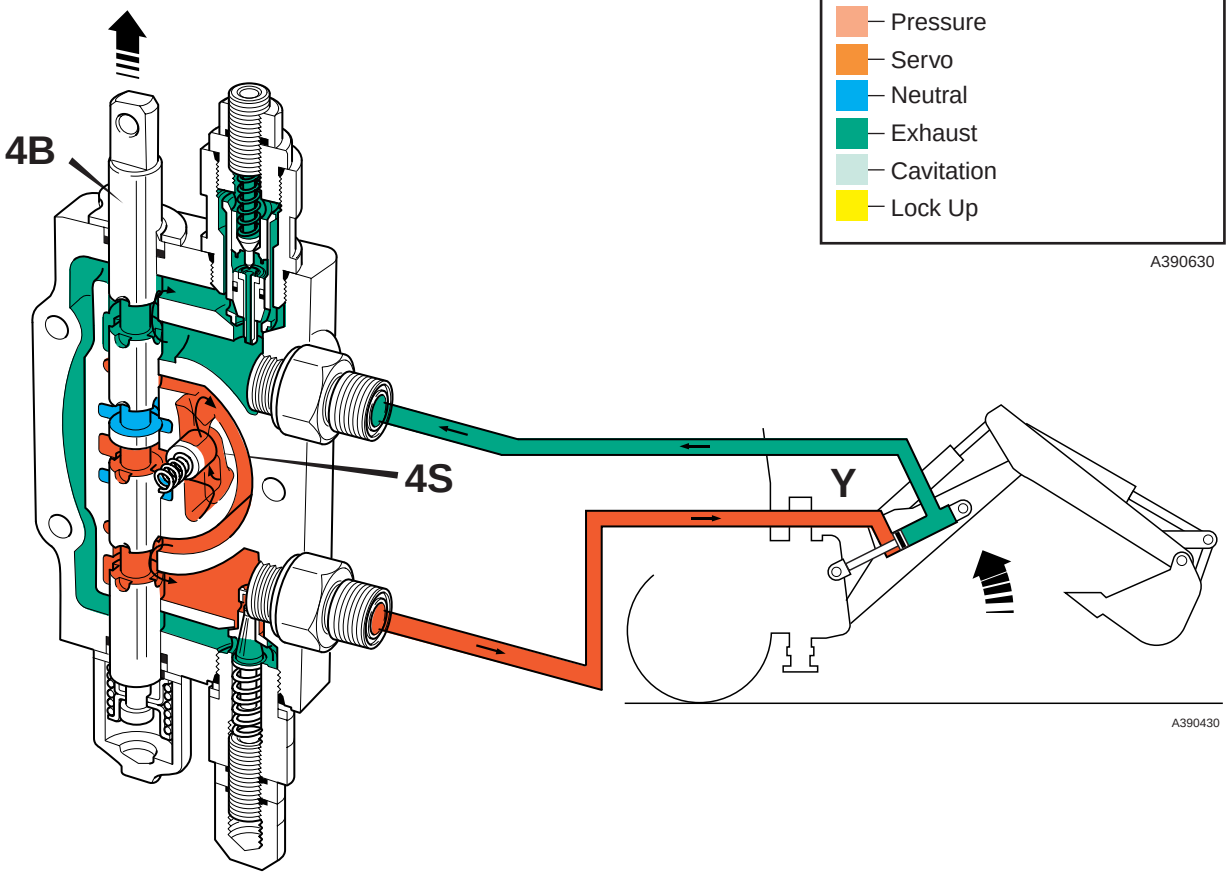


Component Location




4B
4S
X
Y
A390420


Key to Oil Flow & Pressure
Full Pressure
Pressure
Servo
Neutral
Exhaust
Cavitation
Lock Up
A390630


4B
4S
Y
A390430

Removal and Replacement

Before removing and dismantling the pump, check flow and pressure. If either of these are low and cannot be corrected at the relief valve, the pump must be renewed completely. Renewal of components such as gears, bearings and housing will not effect a permanent cure. If the pump output is satisfactory but there is external leakage, the pump should be removed and dismantled for re-sealing only.

Removal

⚠ WARNING

Raised loader arms can drop suddenly and cause serious injury. Before working under raised loader arms, fit the loader arm safety strut.

GEN 3-2

1 Raise the loader arms and fit the loader arm safety strut. If hydraulic pressure is not available, select 'lift arms raise' on control lever whilst lifting arms with a suitable hoist.

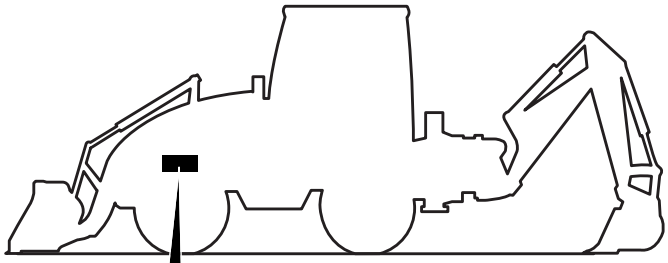
2 Disconnect the battery.

3 Open the left hand side engine panel.

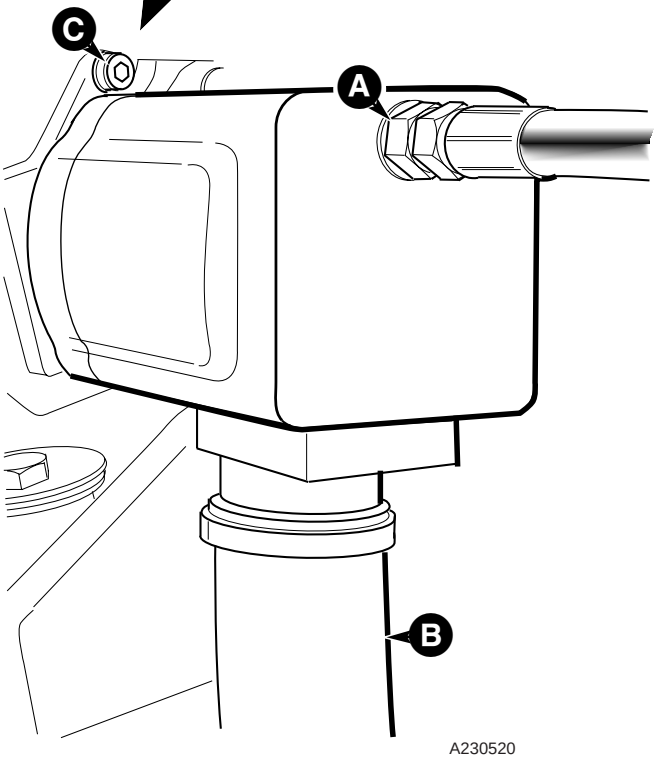
⚠ WARNING

Make the machine safe before getting beneath it. Ensure that any fitments on the machine are secure; engage the parking brake, remove the starter key, disconnect the battery.

INT-3-3-8



A395100



A230520

4 Operate the controls to vent residual pressure.

5 Disconnect and plug outlet hose **A**.

6 Disconnect and plug inlet hose **B**.

7 Undo bolts **C**, remove pump from machine.

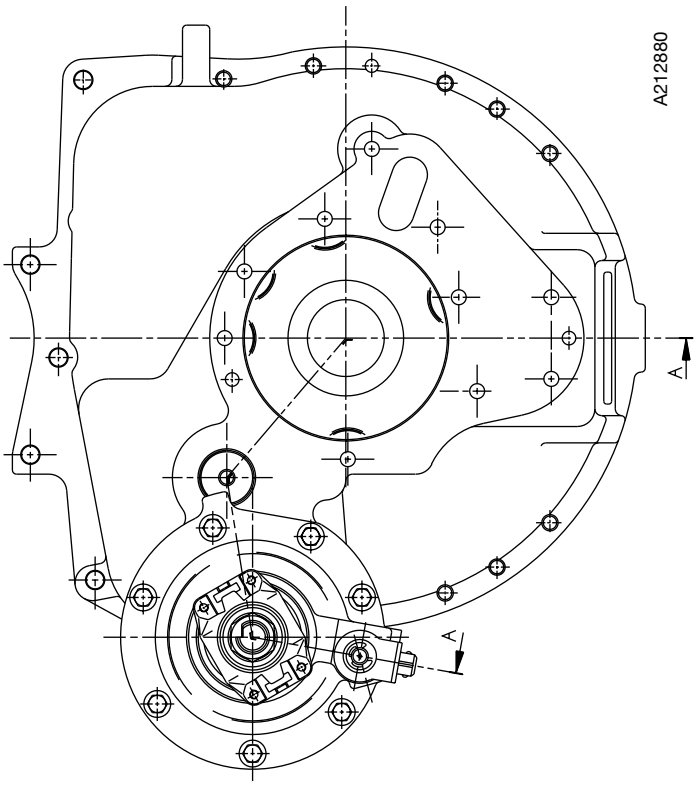
Replacement

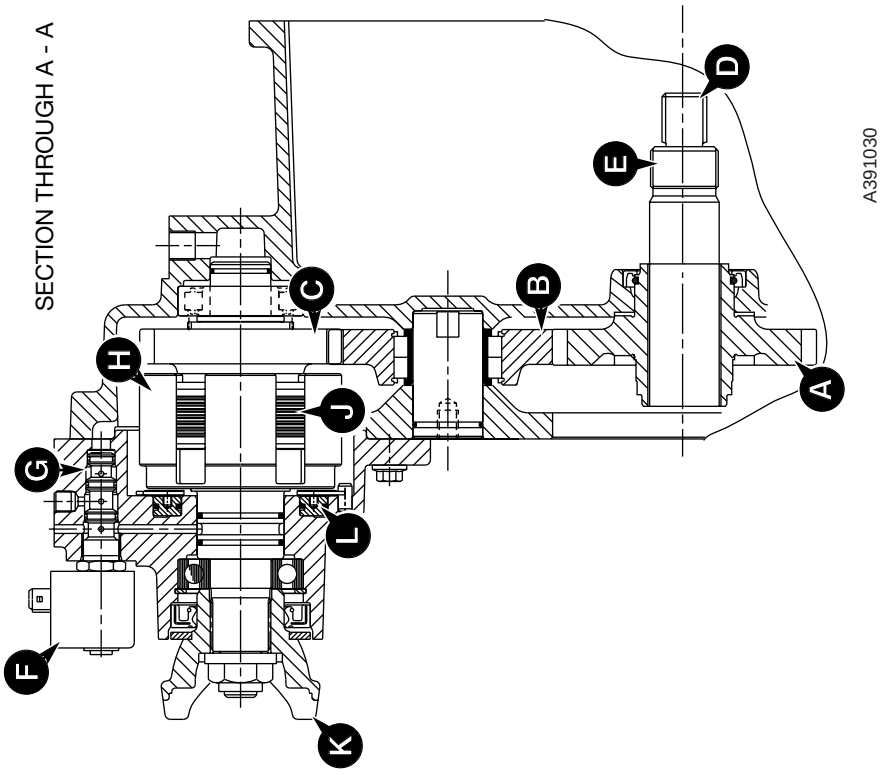
Replacement is a reversal of the removal procedure.

1 Use a new gasket between pump and engine.

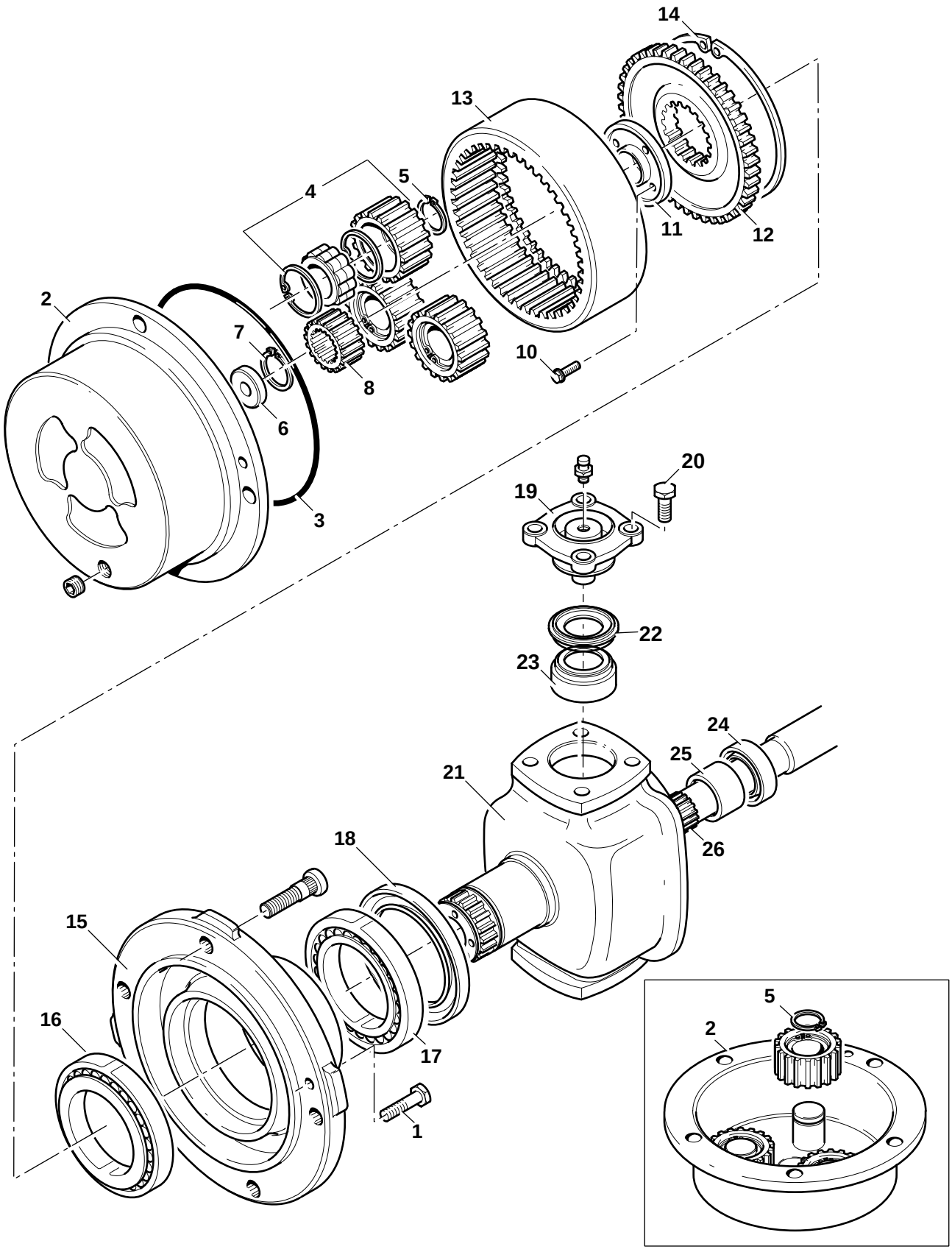
2 After fitting a new or serviced pump and before starting the engine screw the MRV out 4 full turns, and carry out the MRV setting procedure, refer to **Service Procedures, Pressure Testing - MRV**.

For dismantling and assembly procedure refer to **Main Pump - Dismantling and Assembly**.





Syncro Shuttle Gearbox - Power Take Off



A313631

Brakes

Assembly

1 Remove all traces of old sealant from the mating faces of the drive head and the brake piston housing.

2 Fit new seals **17** and **16**. Make sure they seat squarely in their grooves.

3 Carefully press the piston **15** all the way into its housing **7**. Make sure the brake back off holes in the piston and housing align.

4 Apply JCB Threadlocker and Sealer to threads of back off pins **12**. Screw the back off pins **12** into the brake piston and fit the springs **14** over the back off pins.

5 Place the tension bush **13** over the back off pin **12**. Using a suitable tool (steel tube) drive the tension bush onto the back off pin using a soft face hammer until the circlip **11** can just be fitted.

6 Apply JCB Multigasket to the drive head mating face, then fit the brake piston housing assembly. Ensure that the match marks made during dismantling are aligned.

7 Fit capscrews **9** and torque tighten to 56 Nm (42 lbf ft, 5.7 kgf m).

8 Remove the differential support.

9 Assemble the five friction plates and six counterplates **2** onto the brake carrier **3**. If the original brake pack is being re-used, return the plates to their original positions, refer to **Dismantling**. Soak new friction plates in JCB Special Gear Oil before assembly. Fit circlip **4**.

Note: On assembly of the brake packs, the oil flow holes **B** must be aligned with each other when being fitted to the brake plate carrier.

10 Locate the three reaction pins **5** into their grooves, securing them with grease. Push the pins fully into their location holes in the housing.

11 Install one counterplate **2** into the housing, then the brake pack, then the other counterplate. Return re-used counterplates to their original positions. Push the brake pack fully home.

12 Apply JCB Multigasket to the mating face of the drive head, and JCB Threadlocker and Sealer to the threads of bolts **1**. Locate the axle arm onto the drivehead, with the embossed word 'TOP' on the axle arm uppermost.

13 Fit bolts **1** and torque tighten to 98Nm (72lbf ft, 10 kgf m).

Parking Brake - Renewing the Brake Pads

⚠ WARNING

This is a safety critical installation. Do not attempt to do this procedure unless you are skilled and competent to do so.

Installation and mounting of the parking brake calliper requires tightening of the mounting bolts to a specific torque figure. Do not attempt to do this job unless you have the correct tools available.

0010

⚠ WARNING

Before working on the parking brake, park on level ground and put chocks each side of all four wheels. Stop the engine and disconnect the battery so that the engine cannot be started. If you do not take these precautions the machine could run over you.

BRAK 8-8

⚠ WARNING

Brake pads generate dust which if inhaled, may endanger health. Wash off the calliper before commencing work. Clean hands thoroughly after work.

13-3-1-3

Pad Removal

1 Remove the parking brake calliper from the transmission mounting bracket, refer to **Parking Brake - Calliper Removal and Replacement**.

2 Press carrier side pad **1** into housing **15** and remove. Ensure any residual silicone used for pad retention during assembly is removed.

3 Carefully lever pad **2** from the rotor inside the housing using a flat blade screwdriver. Take care to prevent damage to the plastic clip in the centre of the rotor **9** (there is no need to remove the rotor from the calliper).

Pad Inspection

⚠ WARNING

Oil on the brake disc will reduce brake effectiveness. Keep oil away from the brake disc. Remove any oil from the disc with a suitable solvent. Read and understand the solvent manufacturer's safety instructions. If the pads are oily, new ones must be fitted.

2-3-2-3/3

1 The minimum thickness of the friction material on either pad is 1mm (0.04 in), but it is recommended new pads are fitted as pads worn to this limit may not be able to be adjusted.

2 Check the condition of the disc surface. Renew the disc if badly warped, pitted or worn. For brake disc removal, refer to **Section F**, **Syncro Shuttle Gearbox - Dismantling and Assembly**

3 Renew the cable if worn or damaged.

Pad Replacement

1 Fit the pad **2** to the lever side of the calliper. Position the pad inside housing **15**. Locate the plastic clip in the centre of the rotor **9** into the hole **X**, and press the pad into place.

2 Fit the pad **1** to the carrier sde of the calliper. Add a small amount of silicon sealant to the back outer edge of the backing plate to hold the pad in place within the housing.

3 Replace the calliper, refer to **Parking Brake - Calliper Removal and Replacement**.

Note: If there is insufficient adjustment after fitting new pads change the brake cable.