

## Dismantling and Assembly

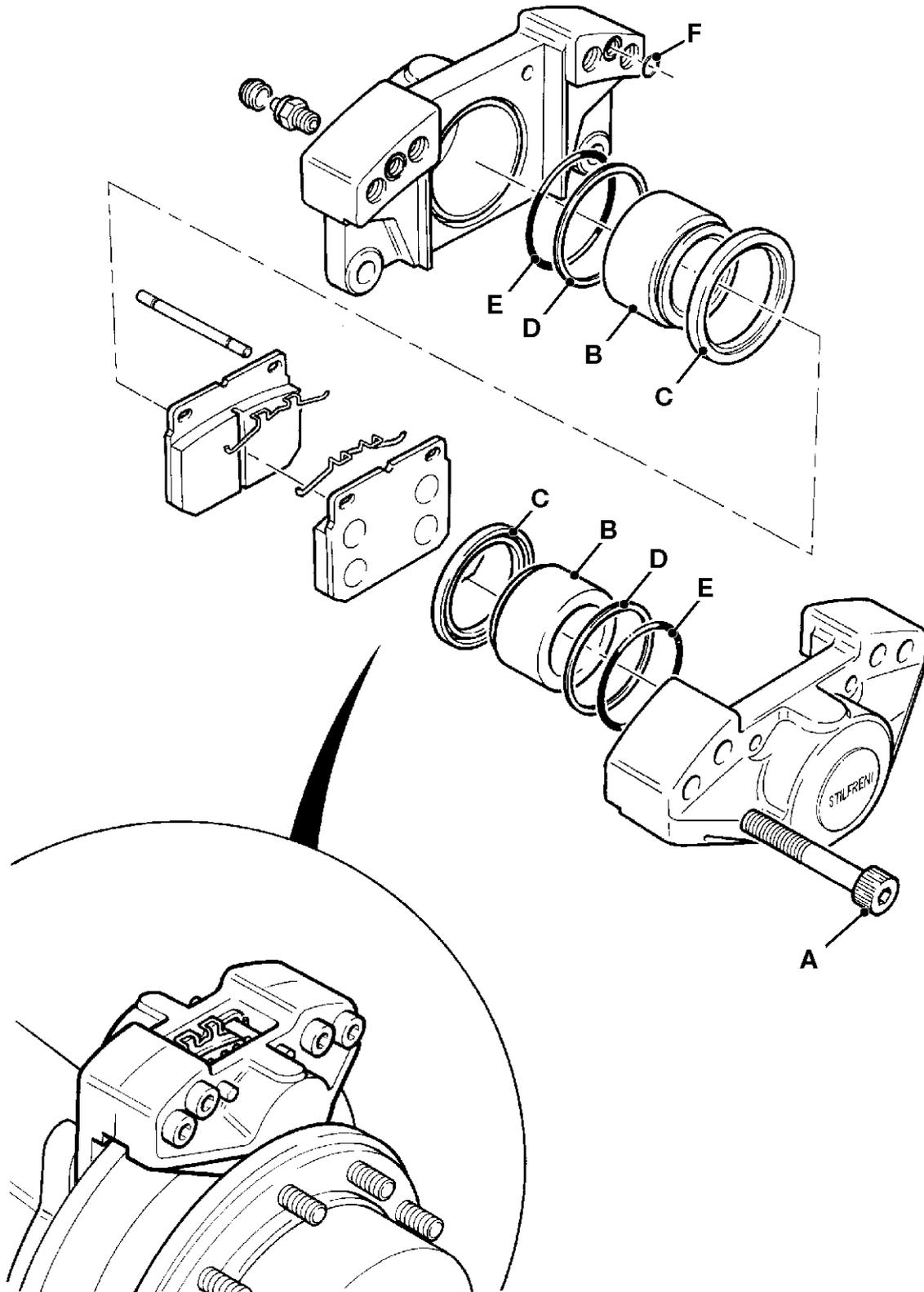


Fig 19.

### Dismantling

**Note:** Before dismantling, the calliper must be removed from the machine, ⇒ [Removal and Replacement \(G-20\)](#) and thoroughly cleaned. Take great care to prevent entry of dirt and grit.

#### WARNING

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

13-3-1-3

Remove the pads and retaining pins (see Checking and Renewing the Foot Brake Pads, Section 3).

Split the calliper by removing capscrews **A**.

Use compressed air applied through the hydraulic fluid ports to force out the pistons **B**.

Remove and discard dust seals **C**, anti-extrusion rings **D** and 'O' rings **E** and **F**.

Wash the piston bores with clean brake fluid and blow dry.

### Assembly

Ensure that the pistons and their bores are free from scoring and corrosion. If in doubt, renew the pistons or the complete calliper assembly as required.

Ensure that the mating faces of the calliper halves are perfectly clean.

Fit new 'O' rings and anti-extrusion rings, lubricated with clean brake fluid.

Fit new dust seals and reassemble the calliper halves ensuring that 'O' rings **F** remain in position.

Fit new capscrews **A**, tightened evenly to the torque settings below.

#### Capscrew Torque Settings

Item	Nm	kgf m	lbf ft
Front	235-255	24-26	173-188
Rear	157-176	16-18	116-130

# Parking Brake Calliper

## Removal and Replacement

### WARNING

Before checking the park brake, park on level ground. Put blocks each side of all four wheels. Ensure that all three air tank warning lights are out. Release the park brake, then 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.

13-3-1-4\_1

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13-3-1-3

### WARNING

The actuator contains a large spring which can exert a force of up to 1134 kgf (2500 lbf) and cause injury if suddenly released. When working on or near the actuator, carefully follow all service instructions.

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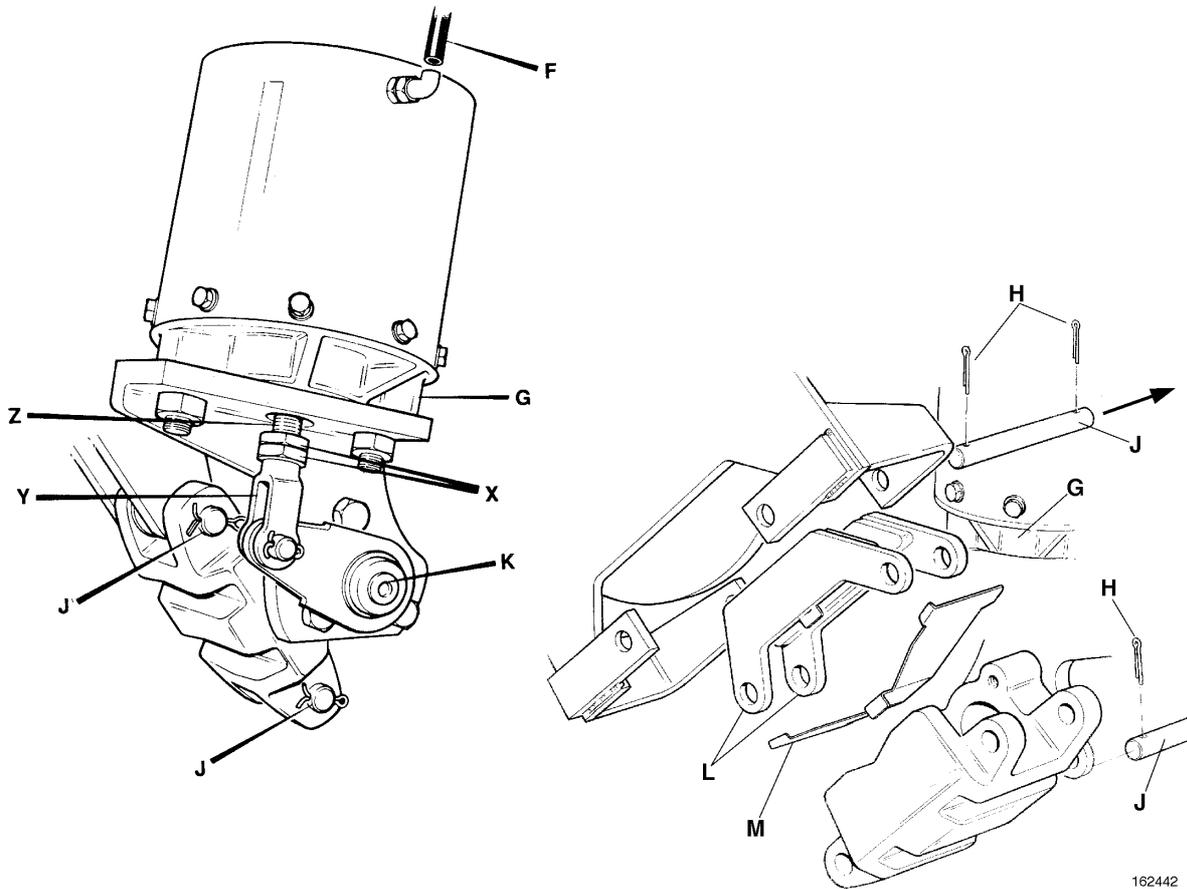


Fig 20.

### Removal

Slacken locknuts **X** and remove pin from clevis **Y**. Apply brake, causing rod **Z** to draw back into the actuator **G**. Turn clevis **Y** through 90°.

Disconnect the air feed by first pushing in the hose, pushing in the sleeve, then pulling out the hose **F**. Blank the open ports to prevent entry of dirt.

Remove plastic cap and insert a 1/4 in hexagon allen key at **K** and turn it clockwise to back the pads right away from

the disc. Do not turn the screw further than necessary to free the pads.

Supporting the calliper, remove split pins **H** and support pins **J** in direction of arrow. Withdraw the pads **L** as they become detached from the guide pins, followed by spring plate **M**.

Lower the complete brake assembly clear of the brake disc and remove.

**Note:** *If the surface of the disc is badly warped, pitted or showing signs of overheating, it must be renewed.*

### Replacement

Reverse the removal sequence.

Adjust the brake using the allen key. Support the weight of the brake with one hand and turn the allen key anti-clockwise until the pads are tight on the disc. From this position, turn the allen key half a turn clockwise.

**Important:** - ABS Machines: [⇒ Safety \(□ G-2\)](#)

Drive the machine for a short distance of 300-400m. If the brake disc is getting hot, turn the allen key clockwise slightly. The final adjustment should never be more than 3/4 of a turn from tight.