

**385801SP**



## **Heavy Duty Pneumatic Suspension Workstation**

## 1. USAGE

The 385801SP is a device for assembling and dissassembling the shock absorbers fitted to cars. Any different use is considered improper and dangerous. Sykes-Pickavant will not assume responsibility for possible damage caused by non-compliance with instructions.

## 2. TECHNICAL DATA

|                                       |                                 |
|---------------------------------------|---------------------------------|
| <b>Air Pressure:</b>                  | Min 6 bar Max 10 bar            |
| <b>Power:</b>                         | 10 bar = 2.452 Kg               |
| <b>Cylinder Stroke:</b>               | 330 mm                          |
| <b>Dimensions:</b>                    | 800 x 550 x 1600 cm (assembled) |
| <b>Machine weight without clamps:</b> | 76.0 Kg                         |
| <b>Vice Weight:</b>                   | 3.7 Kg                          |

## 3. INSTRUCTIONS AND WARNINGS

Take particular care and attention when using 385801SP, as compressed springs can be potentially dangerous.

Note: This device must always be used with its safety cage gates mounted correctly on the frame and closed.

### 3.1.1 Safety Measures

When using 385801SP we recommend using the following:

- Safety gloves
- Safety shoes
- Protective glasses
- Instruction Manual

### 3.1.2 Safety Signs

Before using the device please be aware of the safety signs / warnings. In case of loss, deterioration or illegibility, order new replacement signs from your supplier immediately. Always replace the signs in the same place where they were removed.

## 4. CARRIAGE - HANDLING & PACKAGING

The machine weighs 72.0Kg. Handle with care as it may be necessary to use a trolley for handling and carriage. On the package there are arrows indicating how to handle the box. Lay down the package in order to unpack the device.

Carefully remove the metal clips on the box and unpack the device taking care when removing this from the box.

**Please be aware that there are device components and accessories in the box. Pay attention not to discard of these.**

## 5. PLACING & INSTALLATION

The 385801SP can be placed in any location where it can be safely connected to the compressed air system.

Do not use the device in an are of low light / poor visibility.

The device is recommended to be fixed to the floor.

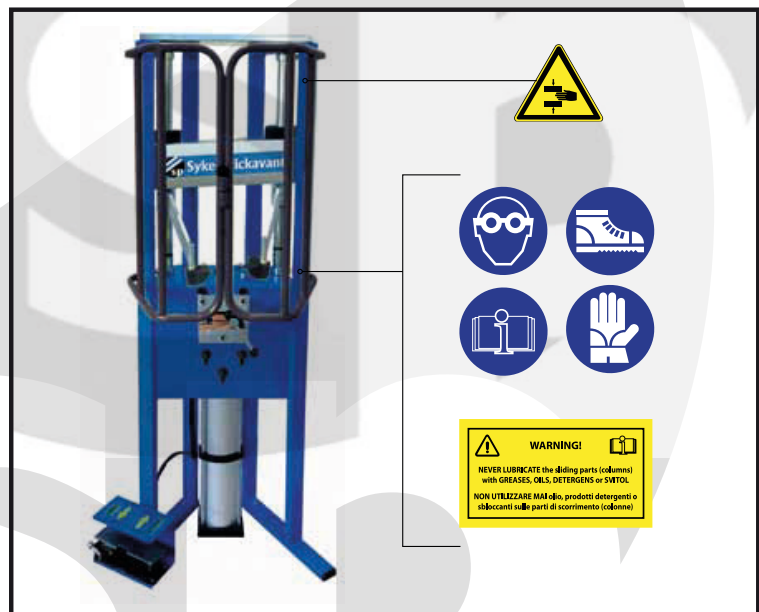
## 6. CONNECTIONS

Connect the device to the air compressed system.

Recommended air pressure 8 bar (max). If the pressure supplied is lower, then poor performance may be noticed. The device has been designed only to work with the cage closed, so when using 38581SP, always ensure that the safety cage is closed and locked.

## 7. CONTROLS

Output of compressed air is between 6 and 8 bar. Check that the connection parts and/or the pneumatic devices have no leaks of air (in case of leaks, contact the authorised dealer).



## 8. FUNCTIONING AND USAGE

**NEVER LUBRICATE** the sliding parts (columns) with GREASE or OILS, BUT ENSURE THEY ARE ALWAYS CLEAN TO MOVE FREELY.

After 60 days or every 200 working cycles remove any gathered dirt and dust from the sliding parts with a dry cloth.

### 9.1 Disassembling

It is advisable to loosen the nut of the shock absorber cap before using the workstation.

Some automotive manufacturers require the unlocking of the clamp nuts of the caps before dismounting the shock absorbers from the car.

Position the shock absorbers on the lower bracket in the first coil (see fig. 1). Rotate the shock absorber and lock it in the bracket at the end of the coil spring (fig. 2).

Put the small arms near the spring and insert the upper vices in the first coil available (fig. 3).

After locating the correct position of the spring on the vice and after having adjusted the upper vices, block the adjustable arms (fig.4) locking the screws behind the case with the key supplied. Close and lock safety cage.

Compress the spring using the foot control lever only to release the pressure that the spring exerts on the cap.

Do not compress the spring completely.

Remove the blocking cup from the shock absorber unscrewing the nut. Release the compression of the spring and replace the old shaft with the new one.

### 9.2 Assembling

Carry out component assembly in reverse sequence to disassembly.

Mount the new spring in the compressor in the same position where the old one was. Press the foot control lever in order to make the spring stick to the blocking cap. Lock the spring cap to the strut of the shock absorber using the correct nut/s.

Now the shock absorber is mounted, use the foot control lever to completely release the spring, then move the arms away and remove the complete shock absorber.

## 10. OPERATION PROBLEMS

### Operation - Troubleshooting

#### The device does not work

Check the connection to the compressed air system. Connect the device to the workshop pneumatic system through the quick connection and check that the safety cage is closed and locked.

#### The two arms do not run properly along the columns

The two arms may gather dust and become dirty, so clean all the moving parts and the the columns sliding parts with a dry rag whenever possible to remove deposits.

**Do not lubricate these components - this can attract dust and cause wear issues.**

#### After compressing a spring, the piston shaft does not keep position and goes back up

There could be water ingress, check water trap and empty, or there could be an air leak in the cylinder. Contact Customer Services to seek advice

### 11. DEVICE UNUSED FOR A LONG PERIOD

- Disconnect the pneumatic feeding hose.
- Discharge the air inside the cylinder.
- Put pneumatic oil in the cylinder via the connecting nozzle

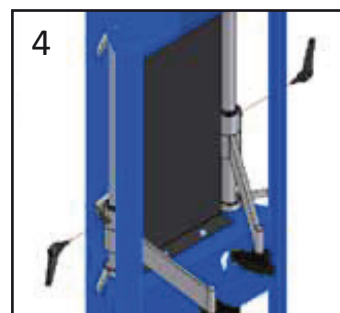
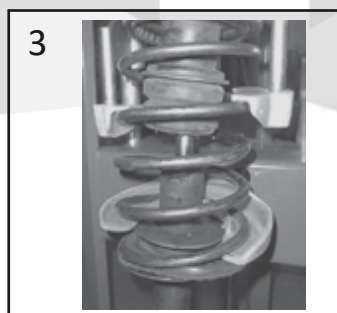
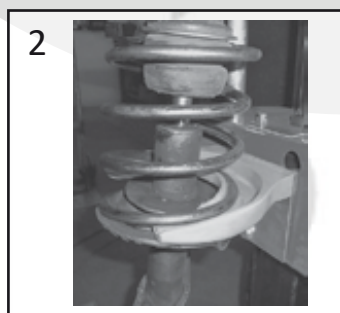
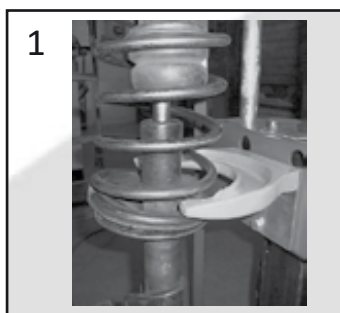
### 12. GENERAL MAINTENANCE

Periodically (every 2 months or each 200 working cycles) remove any dirt & dust from the columns.

**NEVER LUBRICATE the sliding parts (columns) with GREASES, OILS, DETERGENTS or SVITOL.**

### 13. WORKSTATION SUPPORT

For any other issues such as repair work or sourcing spare parts, please contact your distributor.



#### 14.1 Disassembling using 38480900 - Vice



It is advisable to loosen the top nuts of shock absorber caps before using the device in order to ease working operations.

Some automotive manufacturers recommend the loosening of the top nut/s before removal of the shock absorber from the car.

Lock the strut in the vice in order to centre it on the machine (fig. 5). Put the small arms near the spring and insert the upper vices in to the first coil available.

After locating the correct position of the spring on the vice and after having adjusted the upper jaws, lock the adjustable arms (fig.4) locking the leavers behind the machine. Close and lock safety cage.

Compress the spring using the foot control lever only to release the pressure that the spring exerts on the cap.

Remove the top mount from the shock absorber unscrewing the nut. Release the compression of the spring and replace the old strut with the new one.

#### 16. GUARANTEE

The Pneumatic Coil Spring Compressor Workstation - 385801SP is guaranteed for 12 months from the date of purchase against any defect or manufacturing fault. Please contact your distributor / Sykes-Pickavant. Sykes-Pickavant accessories and consumable parts are covered by the legally enforced guarantee.

This guarantee does not cover the following cases: normal wear and tear, non compliance of instructions of use and safety guidelines, non-conventional or abusive use of the tool, tool overloading, lack of servicing or maintenance, intrusion of foreign bodies, tools which have been disassembled or modified, or featuring traces of shock, use with poor quality or non compatible accessories.

#### 17. ASSEMBLY SPECIFICATIONS

- Assemble left and right feet (ref. A) using the screws provided and hexagonal wrench 6mm. The left foot includes the foot control pedal.
- Assemble the protection cage (ref. D) inserting into the holding brackets, then fix them with the 4 screws provided.
- **DO NOT ATTEMPT TO USE THE DEVICE WITHOUT FOLLOWING THE ABOVE**

#### 14.2 Assembling using 38480900 - Vice

The assembly process is the reverse of the above process. Mount the new spring in the compressor in the same position where the old one was. Press the foot control lever to position the jaws onto the speing. Lock the top mount to the strut of the shock absorber using the correct nut/s. Close and lock safety cage.

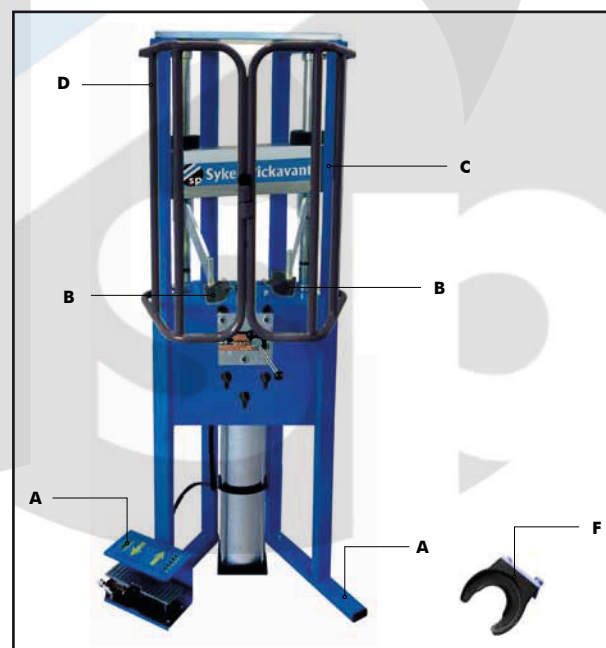
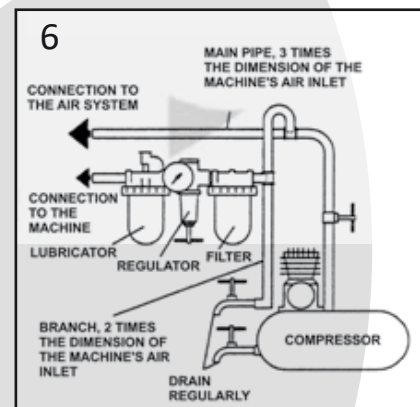
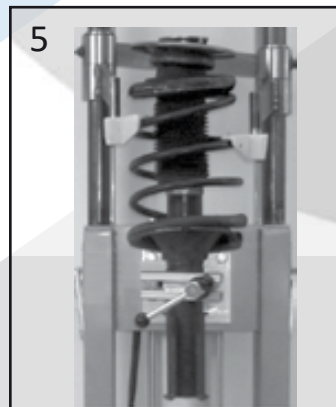
Now the shock absorber is mounted, use the foot control lever to release the spring, then move the arms away and remove the complete shock absorber.

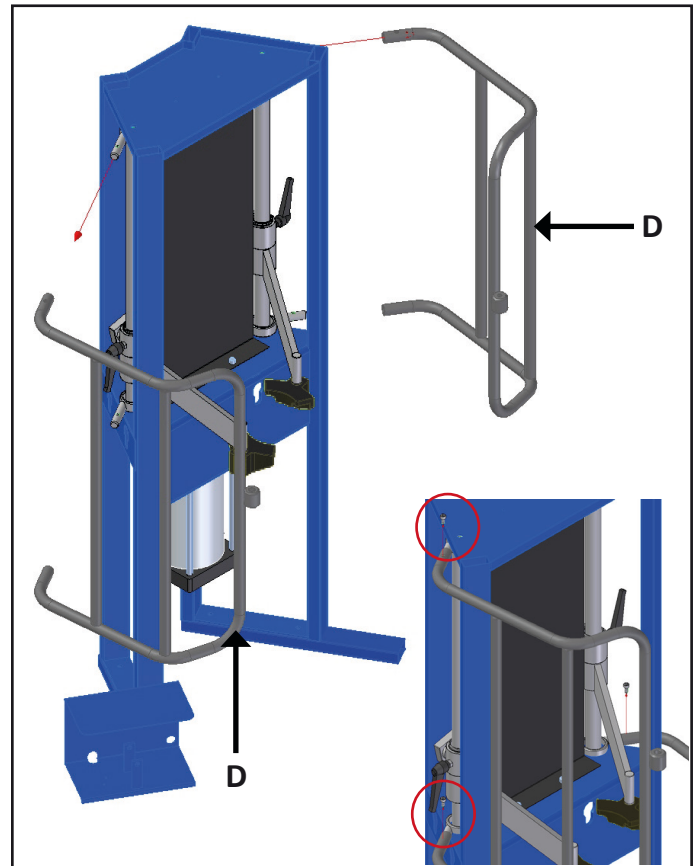
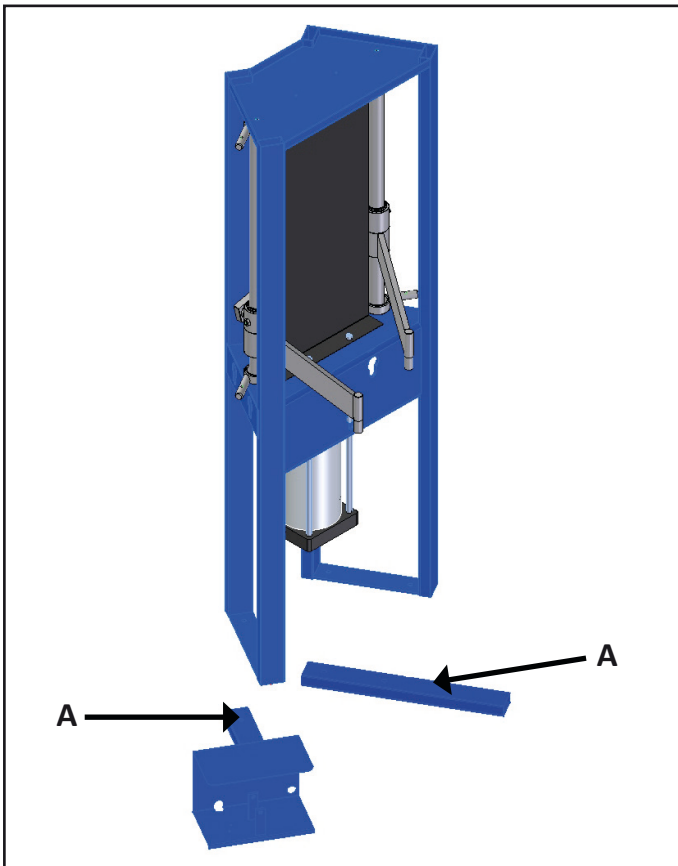
#### 14.3 Side Loader / Banana Springs

When working on these type of springs, always turn the springs so the biase of the shape faces away from the operator

#### 15. Lubrication of the device

**Always use an air line lubricator with this tool (fig. 6)**





### 18. Air System Connection

**Note:** The tube marked in the photo with numbers 1 (brown) and 2 (red) are connected together, as well as the tubes with numbers 3 (grey/silver) and 4 (yellow).

- 1) Connect tube 1 (brown) to the fitting of the ball valve.
- 2) Connect tube 2 (red) to the cross fitting.
- 3) Connect tube 3 (silver/grey) to the fitting of the upper stop valve of the cylinder.
- 4) Connect tube 4 (yellow) to the fitting of the lower stop valve of the cylinder.



