

## Warranty

Our products are designed to be used correctly and with care for the purpose for which they are intended. No liability is accepted by the Tool Connection for incorrect use of any of our products, and the Tool Connection cannot be held responsible for any damage to personnel, property or equipment when using the tools. Incorrect use will also invalidate the warranty.

This machine is covered under the standard 12 month Tool Connection warranty; this does not cover the maintenance tasks above, but covers for manufacturing defects or material failures. Abuse, wear and tear are also not covered.

It is our policy to continually improve our products and thus we reserve the right to alter specifications and components without prior notice. It is the responsibility of the user to ensure the suitability of the tools and information prior to their use.



**Safety First. Be Protected.**

*This coil spring compressor has been tested and inspected before despatch and any damage caused by incorrect handling when in transit to the consumer is not Tool Connection's responsibility.*

7252\_Instructions\_V3

## Guarantee

If this product fails through faulty materials or workmanship, contact our service department direct on: **+44 (0) 1926 818186**. Normal wear and tear are excluded as are consumable items and abuse.



Distributed by The Tool Connection Ltd

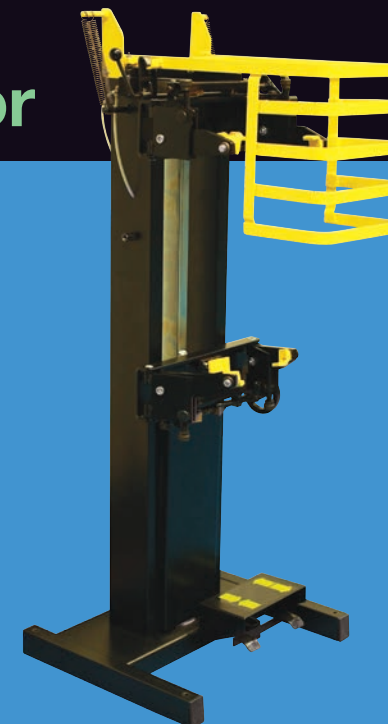
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# LASER<sup>®</sup>

7252

## Pneumatic Coil Spring Compressor



- Suitable for spring sizes 80mm<270mm maximum. Suitable for both left and right handed wound sprints and for all types of springs including Banana and LH wound springs.
- Fitted safety cage with safety valve restricts use when in the open position. Requires a filtered air supply between 6-10 Bar (90-150psi).
- Can be used on most types of strut assemblies without the need for costly accessories including Macpherson type coil over dampers, high compression springs, LH wound springs (fitted to Nissan Qashqai) plus aftermarket suspension modifications due to extra long stroke of 430mm.
- Adjustable spring clamps can be used directly on the spring or on top and bottom mounts. Triple spring clamp mechanisms are fitted for added safety.
- Machine specifications: Height 1440mm, Width 580mm, Weight 65kg, pressure fed seal with Teflon coated cylinder.
- Optional strut support available - Part No. 60496.

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## Pneumatic Coil Spring Compressor

Next generation pneumatic coil spring compressor with safety and operation improvements. Offers quick and safe compression of road springs on McPherson strut type suspension systems. A low-maintenance design with Teflon®-coated inner cylinder - no lubrication required.

Compressed-air operated unit with swing down safety cage. When cage is in up position, boost pressure is limited to allow adjustment and spring fitment only. When cage is lowered, full boost pressure is enabled to compress the coil spring (see Figure 1).

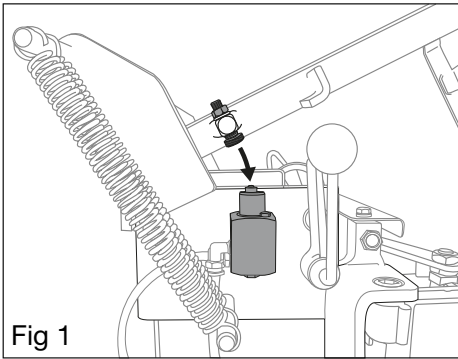


Fig 1

Fits a wide range of spring configurations and coil diameters including tapered, banana and left-hand wound springs. Added safety of three-point pick-up on both upper and lower coils. Optional strut support (part number 60496) is also available.

Can be used on most types of strut assemblies without the need for costly accessories:

- Mercedes type coil-over dampers (C-Class, E-Class, VW Toureg, etc).
- Left-hand wound springs (as found on Nissan Qashqai).
- High compression springs (as found on Toyota, Honda).
- Suitable for aftermarket suspension modifications - due to extra-long stroke of 430mm.
- Compression force of 1600kg, provides sufficient power to cover springs fitted to many standard production models of car and van.

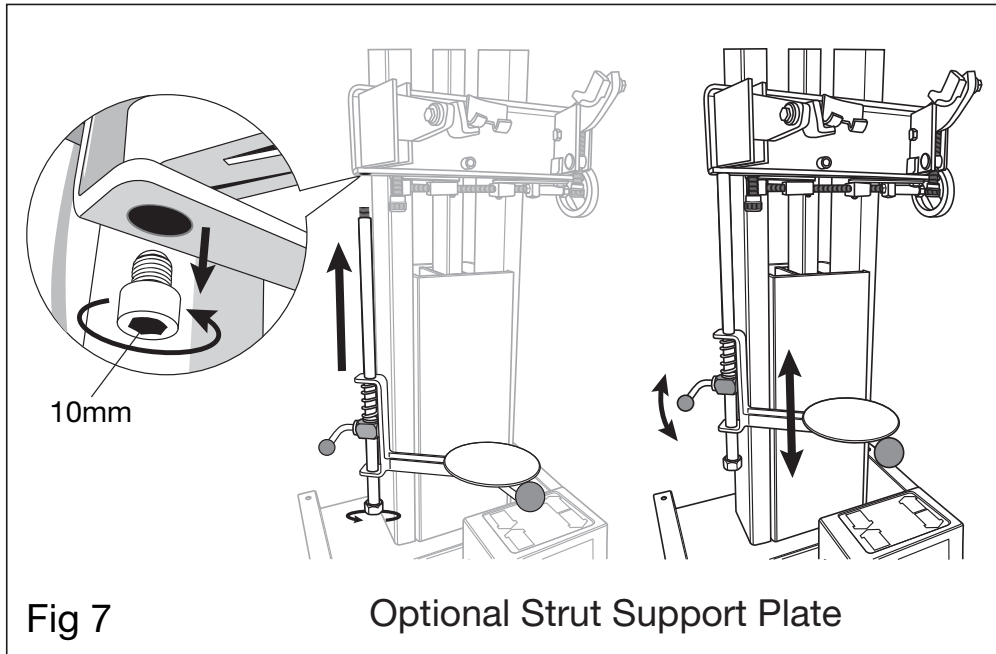
## Specifications

Ref	OEM
<b>Maximum Spring Diameter</b>	270mm
<b>Minimum spring diameter:</b>	80mm
<b>Maximum stroke:</b>	430mm
<b>Machine height:</b>	1440mm
<b>Machine width:</b>	580mm
<b>Machine depth:</b>	500mm
<b>Weight:</b>	68kg

## Troubleshooting

- If the machine has no pressure at all but air is passing through, locate the air leak, this could be the cylinder, bottom valve, top valve or pipework - contact Tool Connection Service department for parts.
- If the machine is low on power and loses pressure slowly, first ensure the black arms cannot touch and run the machine through its full travel at least 10 times. Then hold pressure at the top position to self-adjust the pressure fed seal.
- If any other parts need replacement please contact the Tool Connection Service department for parts. Parts will be supplied under warranty if covered; photo/video evidence is needed to determine this.
- If the machine has to be return to us for inspection it will need to be secured upright on a pallet for our courier to collect and return to us. There will be a charge on this if the fault is not considered to be under warranty.

## Optional strut support (Part No 60496)



## Maintenance

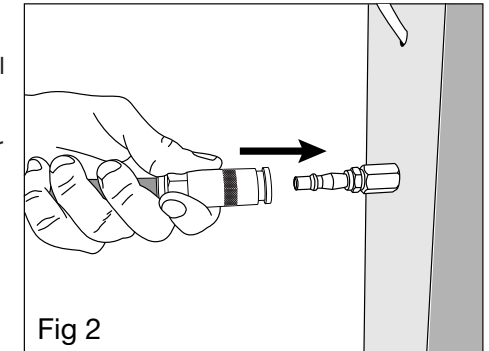
- The air supply needs to be moisture free to prolong valve life and prevent blockages. Recommend in-line water trap (Part No. 30974).
- Do not operate the compressor if parts are damaged or missing.
- Check all fixings are tight.
- Lubricate threaded parts.
- Lubricate sliding parts (centre shaft).
- Ensure the centre shaft alignment bolts are not gripping the centre shaft, or are too loose. 1mm play is correct throughout the travel of the machine.

To add safety and make the job easier, consider using these additional tools:

- 6270** (Clamp for Strut Insert Pistons)
- 5790** (Macpherson Strut Expander Tool Set)
- 5754** (Strut Nut Kit)
- 6182** (Shock Absorber Tool Kit)

## Before You Start

- Read and fully understand these instructions.
- Ensure that the unit is securely bolted to the workshop floor. Do not attempt to use the coil spring compressor if it is not securely bolted to the floor.
- Connect unit to the workshop compressed air supply (refer to Figure 2). Machine supplied with 1/4" BSP female fitting - PCL or similar male fitting (not supplied) needs to be fitted.
- Requires a filtered, moisture-free air supply between 6 and 10 Bar (90-150psi).



## Safety Precautions

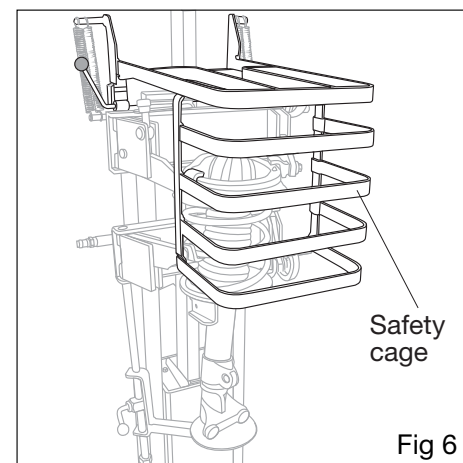
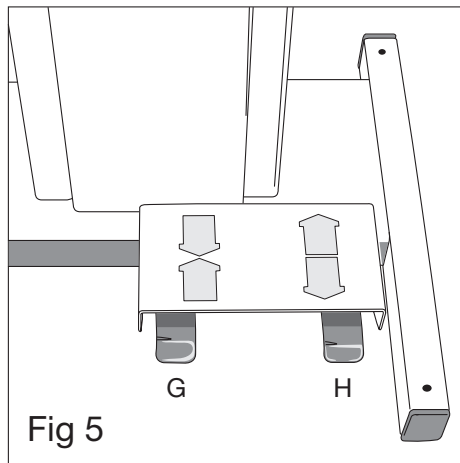
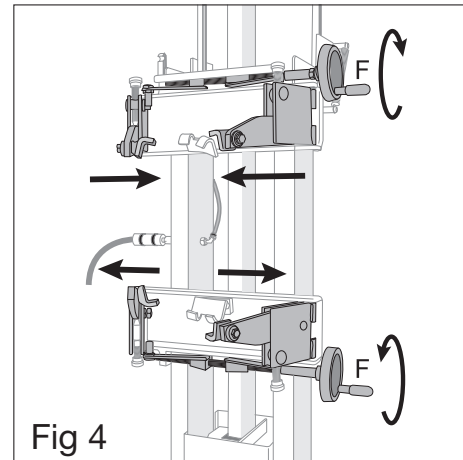
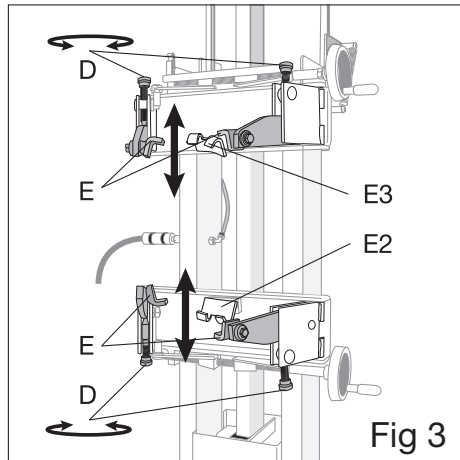


- Wear approved eye, hand and foot protection.
- Trapping danger: keep hands and fingers away from the locating hooks and spring coils when using the compressor.
- Ensure that ill-fitting clothing, ties or long hair (for example) cannot get caught up in the mechanism when using the compressor.
- Do not allow untrained persons to use the compressor.
- Do not operate the compressor if parts are damaged or missing.
- Do not attempt to fit and compress a spring larger than the maximum recommended diameter (see table).
- Stop compressing the spring before the coils touch.
- Prepare for the complete job - have all new parts ready to limit the time the spring is under tension.
- Leave the safety cage (refer to Fig 6) down when the spring is under tension.
- Ensure all the yellow hooks are in contact with the spring or spring mount the whole time the machine is applying pressure.
- Always insure that the safety cage is in place when dismantling the strut from the coil, and during reassembly.
- When the spring is compressed only just enough to release tension (no need to compress to the maximum), always try and undo the top mount using tools and extensions to enable you to work while the safety cage is down.
- If you don't have the optional extra strut support (Part No. 60496), make sure you are ready and hold the damper body before the top nut is released to avoid it dropping to the floor.
- Once compressed and the strut has been removed, release the tension on the spring. Release the compression slowly keeping your hands and fingers away from the spring assembly.
- If you are changing a spring, note where the yellow hooks were located, so when fitting the new spring they are in the same place and not in the way of mounts or platforms.
- **Do not leave the machine unattended with a spring under tension.**
- Do not leave a spring under tension for long periods, for example, overnight.

## Operation

### 1) Compressing a spring to enable strut removal:

- It is recommended before removing the strut from the vehicle that the upper strut locking plate nut is loosened by a quarter of a turn. *Do not loosen more than a quarter of a turn.*



- Refer to diagrams, Fig 3, 4 and 5. With the strut and spring assembly removed from the vehicle, pull down locking lever and move the spring compressor cage (refer to Fig 6), to the UP position, then offer up the strut/spring assembly and locate a lower coil of the spring on the lower rear spring securing hook (**E2** in Fig 3).
- With the guard in the UP position, the compressor will operate with reduced pressure that enables the operator to lift the assembly and set the coils of the spring in position. Press foot pedal control (**G** in Fig 5) and steadily bring up the lower spring securing hook platform until either the top plate, or an upper coil locates against the upper rear spring securing hook (**E3** in Fig 3).

- Then adjust the positions of both the upper and lower spring securing hooks (**E** in Fig 3), by turning the adjusting knobs (**D** in Fig 3) for vertical movement, and by turning the control wheels (**F** in Fig 4), for horizontal movement. Depending on the design of the strut, the upper securing hooks can be located against the top plate or the upper coils.
- Adjust the hooks (**E**) so that they are forward (towards the operator) of the centre line of the coil spring diameter. Ensure that the coil is placed tightly into the hooks to ensure that it will not break free under compression.
- Check to make sure that the coil spring is safely secured, then lower the spring compressor cage and ensure that locking lever is fully seated.
- Press foot pedal control (**G** in Fig 5) to start the compression. Once the spring is lightly compressed, stop the compression and once more **check that the coil spring is safely secured within the hooks.**
- Continue the compression; when the spring is sufficiently compressed and the strut is loose within the spring, unscrew the strut locking plate nut and remove the locking plate from the top of the strut.
- Gradually release the pressure from the spring by pressing foot pedal control (**H** in Fig 5). Take care to support the strut and spring assembly as it becomes loose. If you don't have the optional extra strut support (refer to Fig 7), make sure you are ready and hold the damper body before the top nut is released to avoid it dropping to the floor.
- When all pressure has been released, swing up the spring compressor guard and remove the strut and spring assembly.

### 2) Fitting a new strut coil spring:

- Position the new spring in a similar position as that of the old spring that has been removed. Position the lowest coil of the spring in the lower hooks and rotate the spring so that the coil is held as low as possible.
- If the upper hooks were located against the top plate when dismantling the strut assembly, then place the top plate into position.
- Position the upper hooks onto the top plate or uppermost available coil.
- Adjust the hooks (**E**) so that they are forward (towards the operator) of the centre line of the coil spring diameter. **Ensure that the coil is placed tightly into the hooks to ensure that it will not break free under compression.**
- Check to make sure that the coil spring is safely secured then lower the spring compressor cage.
- Press foot pedal control (**G** in Fig 5) to start the compression. Once the spring is lightly compressed, stop the compression and once more check that the coil spring is safely secured within the hooks.
- Continue the compression; when the spring is sufficiently compressed, insert the strut up inside the spring and fit the top locking plate to the strut. Secure in position with a new nut. It is not advisable to use air powered tools or an impact driver to tighten the nut — the damper rod should be held stationary while the nut is secured with a suitable spanner or go-through ratchet.
- Gradually and carefully release the pressure from the spring by pressing foot pedal control (**H** in Fig 5). Ensure the spring locates properly to the strut.
- Once the strut and spring assembly is refitted to the vehicle, fully tighten the locking plate nut to the manufacturer's specification.