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If applicable, the applications database and any instructional information provided has been designed to offer general guidance for a particular tool's use and while all attention is given to the accuracy of the data no project should be attempted without referring first to the manufacturer's technical documentation (workshop or instruction manual) or the use of a recognised authority such as Autodata.

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.

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.



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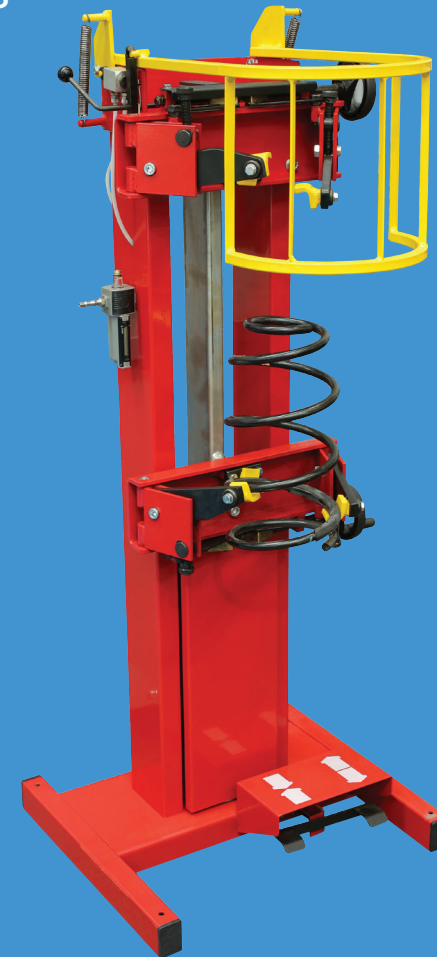


6050

LASER[®]

Coil Spring Compressor

Instructions



www.lasertools.co.uk

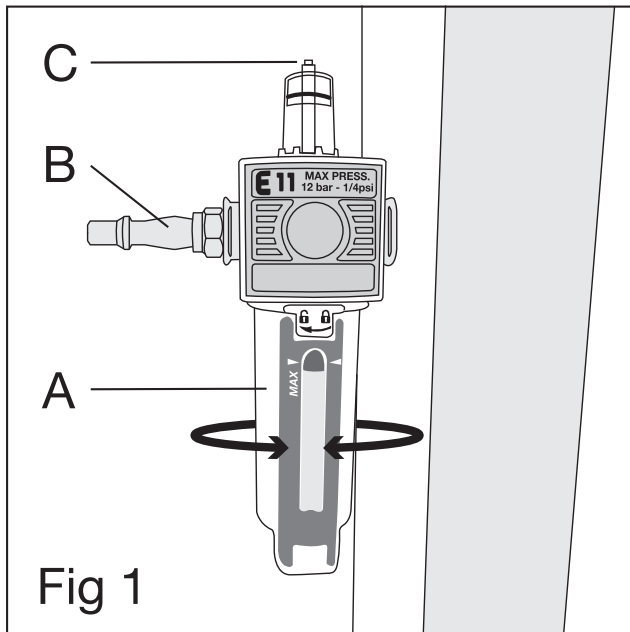
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Pneumatic Coil Spring Compressor

Quick and safe compression of road springs. Air operated unit with swing down safety guard. When guard is in up position, boost pressure is limited to allow adjustment and spring fitment only. When guard is lowered, full boost pressure is enabled to compress the coil spring.

Fits a wide range of spring configurations and coil diameters. Automatically lubricated. Added safety of three-point pick-up on both upper and lower coils.

Before You Start



Check the oil level of the air lubricator (refer to **Fig 1**). The oil level can be seen through the clear portion of the oil reservoir (**A**).

If oil has to be added, first disconnect the air supply at the air inlet (**B**). Remove the reservoir by twisting to the left. Fill to the required level with good quality hydraulic oil. When replacing the reservoir, make sure it is located correctly onto the lubricator body and then twist to the right to lock it in place.

During use, if required, the amount of oil being introduced into the system can be regulated by turning the adjustment screw (**C**). Rotate the screw clockwise to decrease the flow of lubricant.

Precautions:

- Do not operate the compressor if parts are damaged or missing.
- Before starting, make a visual inspection of the machine to ensure that the hook, levers, etc, are secure and there is no sign of wear or fatigue.
- Check the oil level of the air lubricator (refer to **Fig 1**). The oil level can be seen through the clear portion of the oil reservoir (**A**).
- Keep all threaded and moving components lubricated.

Safety Precautions

- Wear approved hand and eye 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.
- Stop compressing the spring before the coils touch.
- Always insure that the safety guard (**I** in **Fig 5**), is in place when dismantling the strut from the coil, and during reassembly.
- Do not attempt to fit and compress a spring larger than the maximum recommended diameter (see table).
- Once compressed and the strut has been removed, release the tension on the spring. 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.
- Make sure workshop compressed air supply is connected at the air inlet (B in Fig 1).

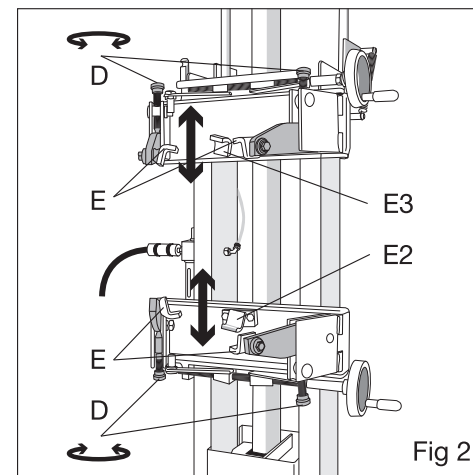


Fig 2

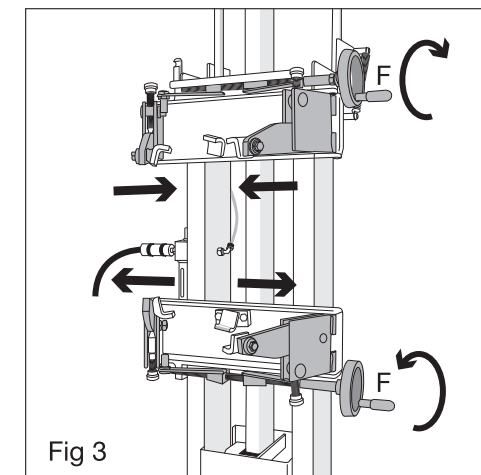


Fig 3

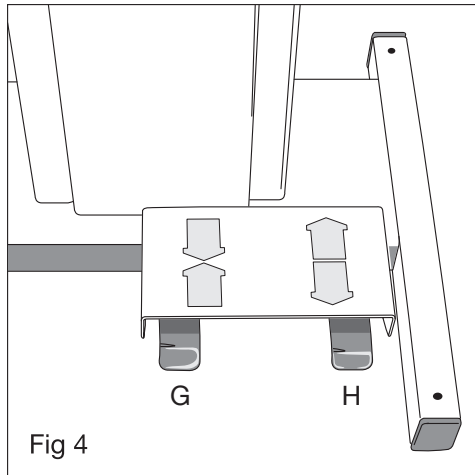


Fig 4

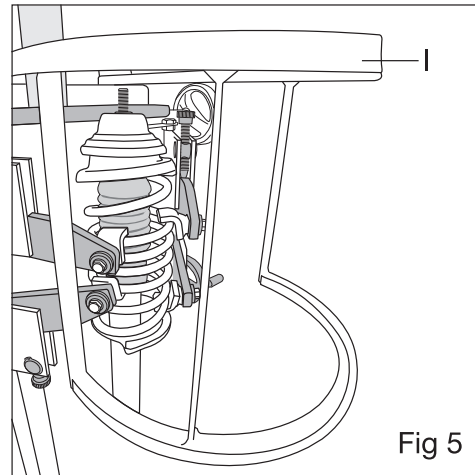


Fig 5

- Refer to diagrams, **Figs 2, 3, 4** and **5**. With the strut and spring assembly removed from the vehicle, pull down locking lever and move the spring compressor guard (**I** in **Fig 5**), 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 2**).
- 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 4**) 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 2**).
- Then adjust the positions of both the upper and lower spring securing hooks (**E** in **Fig 2**), by turning the adjusting knobs (**D** in **Fig 2**) for vertical movement, and by turning the control wheels (**F** in **Fig 3**), 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 guard (**I**) and ensure that locking lever is fully seated.
- Press foot pedal control (**G** in **Fig 4**) 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 4**). Take care to support the strut and spring assembly as it becomes loose. 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 guard (**I**).
- Press foot pedal control (**G** in **Fig 4**) 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 4**). 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.

Description	Specification
Maximum spring diameter:	310mm
Minimum spring diameter:	80mm
Maximum stroke:	440mm
Machine height:	1400mm
Machine width:	580mm
Machine depth:	500mm
Weight:	68kg