

# SPIROL<sup>®</sup>

## COMPRESSION LIMITER INSTALLATION TECHNOLOGY

### Model CP Pneumatic Compression Limiter Installation Machine

The Model CP Pneumatic Compression Limiter Installation Machine provides an accurate and consistent method to install virtually any Compression Limiter into plastic applications requiring up to 4.5kN (1000 lbs). Install just one Compression Limiter into one assembly, or several Limiters across multiple assemblies simultaneously for increased productivity. The Model CP's quick-change tooling creates the flexibility to adapt the platform to a variety of products within seconds. The Model CP has a 230mm x 280mm (9"x11") work area and is built on a rigid steel frame with high-precision shafting and linear bearings resulting in smooth operation, precise positioning, repeatability, and durability.

#### Design Features/Benefits:

- Precise:**
- Individually adjustable tips for precise positioning
  - Doweled component location for repeatable alignment
  - Pneumatic operation to control insertion force and speed
  - Full stroke detection to validate fastener installation
- Built to Last:**
- Cushioned cylinder return stroke reduces noise while protecting components from shock
  - Rigid steel C-frame design accommodates high loads, and precise alignment
  - Hardened tool steel anvils for durability
- Versatile:**
- Quick-change tooling to easily adapt to a variety of applications
  - Installs Compression Limiters of various sizes and shapes
- Safe:**
- Dual opto-touch activation with safety relay and fixed guarding protects the operator from pinch points
  - Ergonomic part loading
- Easy to Use:**
- Multi-color LED fault Indicator for fast visual indication and problem resolution
  - Optional sensors verify part installation at all locations ensuring product quality



Custom  
alignment  
fixtures  
available

*The Model CP can install any number of  
Compression Limiters that fit within the work area.*

**Optional enhancements include:  
HMI, Vision Sensing, Fixture  
Identification, Force Monitoring,  
Machine Table, and more!**

### Application: Automotive Electrical Enclosure Cover

A leading manufacturer of plastic components for the automotive industry required a method to install (4) post-mold, oval Compression Limiters into electrical enclosure covers. Prior to SPIROL's involvement, the installation was done manually using a small arbor press.

### Solution:

SPIROL Engineers reviewed the application, and recommended the Model CP Pneumatic Compression Limiter Installation Machine. Given the available space of the Model CP's working area, SPIROL designed the installation machine to install Limiters into (2) different assemblies - at the same time.

As an added bonus, the Model CP is flexible such that SPIROL was able to provide fixturing and tooling to install various sized Compression Limiters into (10) different assemblies. The transition from one assembly to another is a simple tool change that the operators could easily do without the help of technicians or mechanics. All fixtures were equipped with part sensing to ensure that Compression Limiters were fully installed at all locations.

The Model CP Pneumatic Compression Limiter Installation Machine was quickly built and delivered along with SPIROL's unique performance warranty - taking the risk off the customer and assuring high quality assembly and reliable long-term attainment of production objectives.



SPIROL Series CL400 Split Seam  
Oval Compression Limiters

Custom fixture enables simultaneous  
installation into (2) different assemblies

**SPIROL offers complimentary Application Engineering support. We will assist on new designs as well as help resolve issues, and recommend cost savings on existing designs. Let us help by visiting Application Engineering Services on [SPIROL.com](http://SPIROL.com).**

**Americas** **SPIROL International Corporation**  
30 Rock Avenue  
Danielson, Connecticut 06239 U.S.A.  
Tel. +1 860 774 8571  
Fax. +1 860 774 2048

**SPIROL Shim Division**  
321 Remington Road  
Stow, Ohio 44224 U.S.A.  
Tel. +1 330 920 3655  
Fax. +1 330 920 3659

**SPIROL Canada**  
3103 St. Etienne Boulevard  
Windsor, Ontario N8W 5B1 Canada  
Tel. +1 519 974 3334  
Fax. +1 519 974 6550

**SPIROL Mexico**  
Avenida Avante #250  
Parque Industrial Avante Apodaca  
Apodaca, N.L. 66607 Mexico  
Tel. +52 81 8385 4390  
Fax. +52 81 8385 4391

**SPIROL Brazil**  
Rua Mafalda Barnabé Soliane, 134  
Comercial Vitória Martini, Distrito Industrial  
CEP 13347-610, Indaiatuba, SP, Brazil  
Tel. +55 19 3936 2701  
Fax. +55 19 3936 7121

**Europe** **SPIROL United Kingdom**  
17 Princewood Road  
Corby, Northants  
NN17 4ET United Kingdom  
Tel: +44 (0) 1536 444800  
Fax: +44 (0) 1536 203415

**SPIROL France**  
Cité de l'Automobile ZAC Croix Blandin  
18 Rue Léna Bernstein  
51100 Reims, France  
Tel: +33 (0) 3 26 36 31 42  
Fax: +33 (0) 3 26 09 19 76

**SPIROL Germany**  
Ottostr. 4  
80333 Munich, Germany  
Tel: +49 (0) 89 4 111 905 71  
Fax: +49 (0) 89 4 111 905 72

**SPIROL Spain**  
Plantes 3 i 4  
Gran Via de Carles III, 84  
08028, Barcelona, Spain  
Tel/Fax: +34 932 71 64 28

**SPIROL Czech Republic**  
Evropská 2588 / 33a  
160 00 Prague 6-Dejvice  
Czech Republic  
Tel: +420 226 218 935

**SPIROL Poland**  
ul. Solec 38 lok. 10  
00-394, Warsaw, Poland  
Tel. +48 510 039 345

**Asia Pacific** **SPIROL Asia Headquarters**  
1st Floor, Building 22, Plot D9, District D  
No. 122 HeDan Road  
Wai Gao Qiao Free Trade Zone  
Shanghai, China 200131  
Tel: +86 (0) 21 5046-1451  
Fax: +86 (0) 21 5046-1540

**SPIROL Korea**  
16th Floor, 396 Seocho-daero,  
Seocho-gu, Seoul, 06619, South Korea  
Tel: +82 (0) 10 9429 1451

e-mail: [info@spirol.com](mailto:info@spirol.com)

**SPIROL.com**