BELL SYSTEM PRACTICES
Outside Plant Construction and Maintenance

SECTION G85.126.3
Issue 1, March, 1957
AT&TCo Standard

C PNEUMATIC PRESSER

Contents **Page**

1. GENERAL

1.01 This section covers the C Pneumatic Presser used in splicing copper cable conductors by the punched sleeve method using E Splice Sleeves. This tool is similar to the superseded B Pneumatic Presser described in Section G85.126.2, except for the presser die and guard. **The C presser is equipped with a D Presser Die and a C Guard.**

1.02 The C presser, when equipped with the die and guard listed below, can be used in splicing aluminum cable conductors. The dies and guard are available as optional parts.

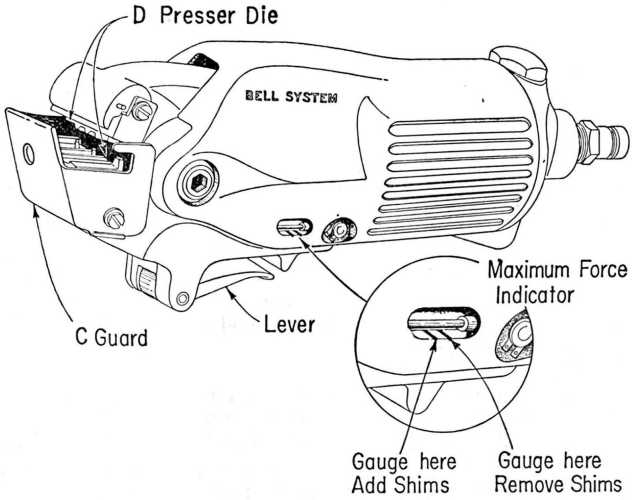
	Presser Die	Guard
Pressing C Splice Sleeves over aluminum twisted joints	B	None required
Punching D Splice Sleeves over aluminum conductors without removing insulation	C	B

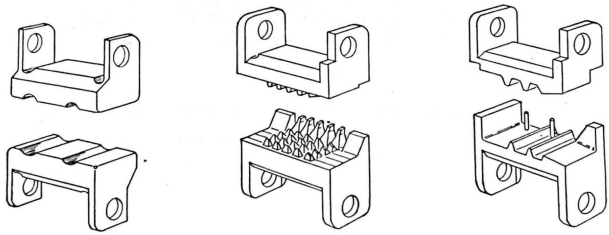
1.03 **The D Presser Dies are supplied in matched sets and should be so used.**

2. DESCRIPTION

2.01 The C Pneumatic Presser is illustrated in the following sketch. It is about 10 inches long 3-1/2 inches high and 2-1/4 inches wide. The presser is equipped with a D Presser Die and a C Guard, die shims, and 30 feet of 3/16-inch hose. The tool, without hose, weighs about 3-1/2 pounds. The left-hand side of the presser contains a device for indicating whether proper force is being applied to the joint being punched or pressed. The hose is for connecting the presser to a nitrogen

cylinder or air compressor, and the shims are for adjusting the die.



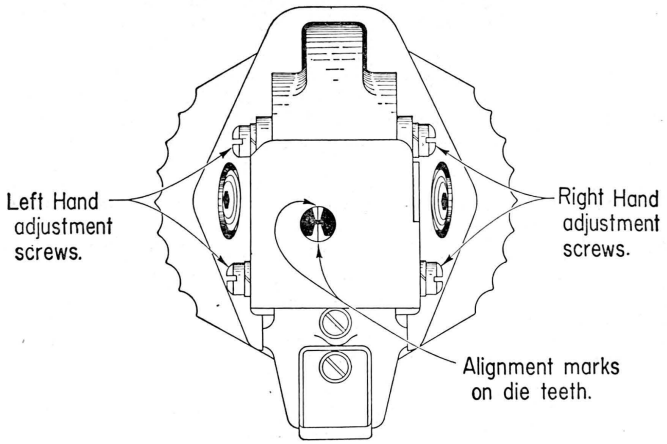


B Presser Die C Presser Die D Presser Die

2.02 Nitrogen gas obtained from a 224-cubic foot nitrogen gas cylinder or the B Nitrogen Cylinder at a line pressure of 90 pounds per square inch (psi) is used to operate the presser. The C Gas Regulator is employed to control the line pressure. About 3-1/2 cubic feet of gas are needed to punch 100 sleeves. The tool is operated by pressing the lever.

2.03 **Adjusting Presser for Punching Sleeves:** The presser should be equipped with a D Presser Die and C Guard for punching E Splice Sleeves, or a C Presser Die and B Guard for punching D Splice Sleeves. Connect the presser to a gas cylinder. Secure the hose to the strand, platform or cable to prevent the presser from accidentally falling. Set the regulator pressure (outlet side) to 90 psi. Check the delivery pressure occasionally.

2.04 **Alignment of D Presser Die:** The teeth of the D Presser Die should be checked for alignment, especially after dies have been changed. This can be determined by looking through the hole in the C Guard, as shown in the sketch. The line on the upper tooth should coincide with the line on the lower tooth. If the lines do not coincide, loosen the right hand adjustment screws, as viewed from the front, and tighten the left hand screws. Generally, this should bring the teeth into alignment. However, if for example, the line on the upper tooth is to the right, loosen the screws holding the upper half of the die, tighten the right hand screw and then the left hand screw, turning the screws only sufficiently to flatten the lock washers. If this does not align the teeth, loosen the screws on the lower half of the die, tighten the left hand screw first and then the right hand screw.



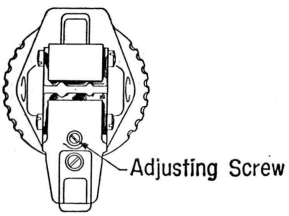
2.05 To test the presser for correct force on the die, prepare a joint of the type to be made and before punching the sleeve, push the gauge toward the back of the presser and then punch the sleeve. For maximum force the gauge should stop as near the center of the area between the lines of the force indicator as possible. To make sure the gauge is indicating correctly, push it toward the back of the presser while the die is closed on the sleeve. If the gauge reaches the forward line, it will be necessary to place shims under the lower die, if the gauge does not pass the rear line, it will be necessary to remove shims under the lower die.

2.06 To place or remove shims, turn the regulator adjusting screw counterclockwise until it turns freely and then disconnect the hose from the presser. Remove the guard and lower die and place or remove shims as required. Replace the die and guard and check alignment, as covered in Paragraph 2.04. Then make a test joint to ensure that the presser is functioning properly. The presser should be checked occasionally for proper operation and especially when a change is made in the size of wires or sleeves being punched.

2.07 After splicing, close the cylinder valve and disconnect the hose from the regulator. Unscrew the regulator adjusting screw sufficiently to relieve the pressure on the diaphragm.

2.08 The B Presser Die is available as an optional part for use with the C presser in splicing aluminum cable conductors by the pressed sleeve method.

2.09 **Adjusting Presser for Pressing Sleeves:** Remove the guard and replace the Presser Die with a B Presser Die. Before connecting the presser to a cylinder, turn the adjusting screw, shown in the sketch, closing the jaws until a small C Splice Sleeve can be conveniently placed in the small opening of the die (or a large sleeve in the large opening). This will limit the travel of the jaws and prevent placing a finger between the die.



2.10 **Optional Part:**

Die, Presser, (B or C), for C Pneumatic Presser
(Consists of a two-part die, 5 shims, 4 screws and 4 washers)

Guard, B, for C Pneumatic Presser

2.11 The **replacement parts** for the presser are listed below.

Guard, C, for C Pneumatic Presser

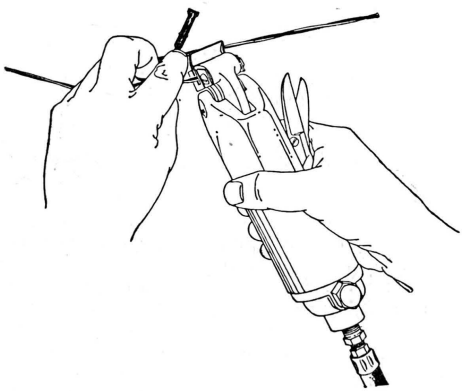
Hose, for C Pneumatic Presser
(Consists of 30 feet of 3/16-inch hose with connectors)

Die, Presser, D, for C Pneumatic Presser
(Consists of a two-part die, 5 shims, 4 screws and 4 washers)

Shims, Set of, for C Pneumatic Presser
(Consists of 5 shims, 4 screws and 4 washers in a container)

3. OPERATION

3.01 **Punching Sleeves:** The method of punching a sleeve is shown in the following sketch. With the joint properly positioned in the die, press the lever to close the jaws; then release the pressure on the lever to open the jaws. The sleeve should be punched only once. The work can be facilitated by preparing several joints and then punching the sleeves on the joints that have been prepared.



3.02 **Pressing Sleeves:** The method of pressing C Splice Sleeves over twisted joints in aluminum conductors using the C presser is illustrated below. With the joint in the proper opening and the die centered over the sleeve, press the lever to close the jaws; then release the pressure on the lever to open the jaws. Only one press is required on a sleeve. The work can be facilitated by twisting several joints, placing a C Splice Sleeve over each twist and then pressing the sleeves.