

TERMINATOR	TOOLING KIT (Included with Terminator)	MODULAR PLUG TYPE
354711-1	--	--
354711-2	354714-1	Line Plug
354711-3	354714-2	8 Positions
354711-4	354714-3	Handset
354711-5	354714-4	Long Body
354711-6	354714-5	10 Positions
354711-7	354714-6	6-Position Offset
354711-8	354714-7	High Performance (Category 5)

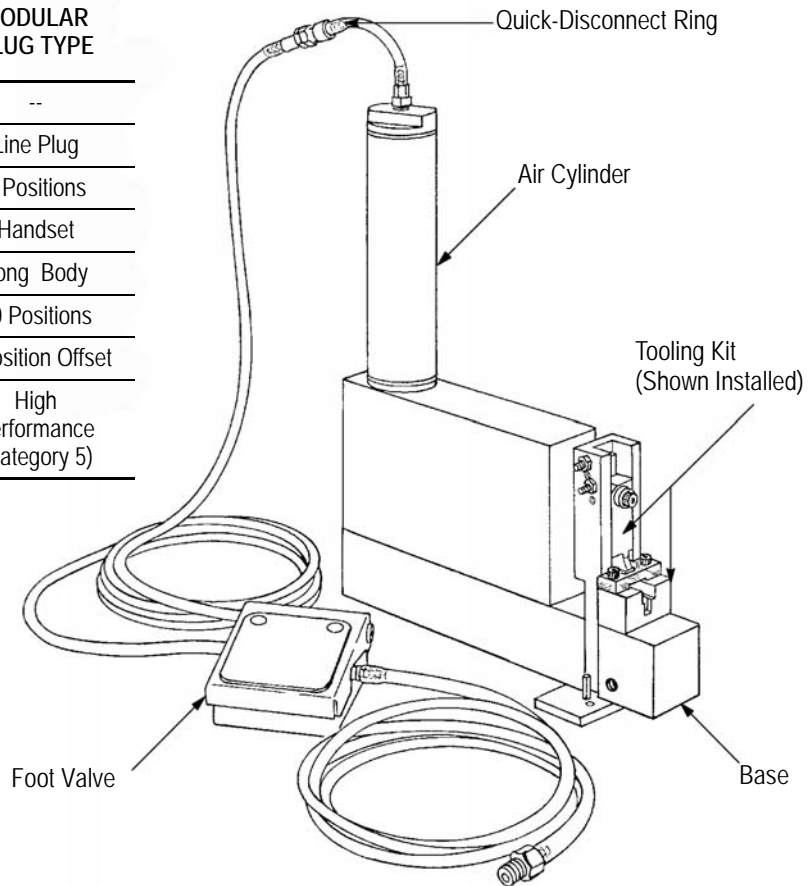


Figure 1

1. INTRODUCTION

Modular Plug Single Terminators 354711-[] and Tooling Kits 354714-[] are used to terminate modular plug connectors. A specific tooling kit is included with each modular plug single terminator. See Figure 1.

i **NOTE**
Modular Plug Single Terminator 354711-1 does not include a tooling kit.

Tooling kits consisting of a contact inserter, strain relief stuffer, and a nest with a cover, may be purchased separately to terminate other modular plug types and sizes or to replace worn or damaged parts.

i **NOTE**
All numerical values in this instruction sheet are in metric units [with U.S. customary units in brackets]. Dimensions are in millimeters [and inches]. Figures are not drawn to scale.

Reasons for reissue of this instruction sheet are provided in Section 12, REVISION SUMMARY.

2. DESCRIPTION

The terminator is a pneumatically powered, bench-mounted tool controlled by a foot valve. This terminator operates with a noise level of < 80 dBA. An air cylinder is mounted vertically and operates a lever that pulls the ram tooling down into the nest to terminate the plug. Precise adjustments to crimp height can be made by turning an adjusting screw for the contact inserter. The contact inserter and strain relief stuffer are held in the ram by a screw. The nest is mounted on the front of the base, partially beneath the ram, with one screw. Each terminator is designed to terminate only one plug type. Refer to Figure 2 for the pneumatic schematic diagram.

3. SAFETY PRECAUTIONS AND ICONS



SAFETY PRECAUTIONS AVOID INJURY

Safeguards are designed into this application equipment to protect operators and maintenance personnel from most hazards during equipment operation. However, certain safety precautions must be taken by the operator and repair personnel to avoid personal injury, as well as damage to the equipment. For best results, application equipment must be operated in a dry, dust-free environment. Do not operate equipment in a gaseous or hazardous environment.

- Carefully observe the following safety precautions before and during operation of the equipment:
- ALWAYS wear appropriate ear protection.
- ALWAYS wear approved eye protection when operating powered equipment.
- ALWAYS keep guard(s) in place during normal operation.
- ALWAYS insert power plug into a properly grounded receptacle to avoid electrical shock.
- ALWAYS turn off the main power switch and disconnect electrical cord from the power source when performing maintenance on the equipment.
- NEVER wear loose clothing or jewelry that may catch in moving parts of the application equipment.
- NEVER insert hands into installed application equipment.
- NEVER alter, modify, or misuse the application equipment.

TOOLING ASSISTANCE CENTER

CALL TOLL FREE 1-800-722-1111 (CONTINENTAL UNITED STATES AND PUERTO RICO ONLY)

The **Tooling Assistance Center** offers a means of providing technical assistance when required.

In addition, Field Service Specialists are available to provide assistance in the adjustment or repair of the application equipment when problems arise which your maintenance personnel are unable to correct.

INFORMATION REQUIRED WHEN CONTACTING THE TOOLING ASSISTANCE CENTER

When calling the Tooling Assistance Center regarding service to equipment, it is suggested that a person familiar with the device be present with a copy of the manual (and drawings) to receive instructions. Many difficulties can be avoided in this manner.

When calling the Tooling Assistance Center, be ready with the following information:

1. Customer name
2. Customer address
3. Person to contact (name, title, telephone number, and extension)
4. Person calling
5. Equipment number (and serial number if applicable)
6. Product part number (and serial number if applicable)
7. Urgency of request
8. Nature of problem
9. Description of inoperative component(s)
10. Additional information/comments that may be helpful



Always wear approved eye protection while operating the equipment.



Always wear approved hearing protection while using the equipment.



Do NOT operate the equipment if the guard is removed.



Read and understand the instructions before using the equipment.



Moving parts can crush and cut. Do not operate the equipment without guards in place.



Always disconnect the air and "lockout" the tool when not in use, when performing maintenance on the tool, or when clearing a jammed tool.



DANGER

Denotes an imminent hazard which may result in moderate or severe injury.



CAUTION

Denotes a condition which may result in product damage.



NOTE

Highlights special or important information.



DANGER

There is a risk of whipping if a hose is not properly installed.



DANGER

If not using quick-disconnect fittings to connect the tool to the air supply, provide operators other means to easily disconnect the tool from the air supply.



DANGER

Stored gas or fluid may be a danger.

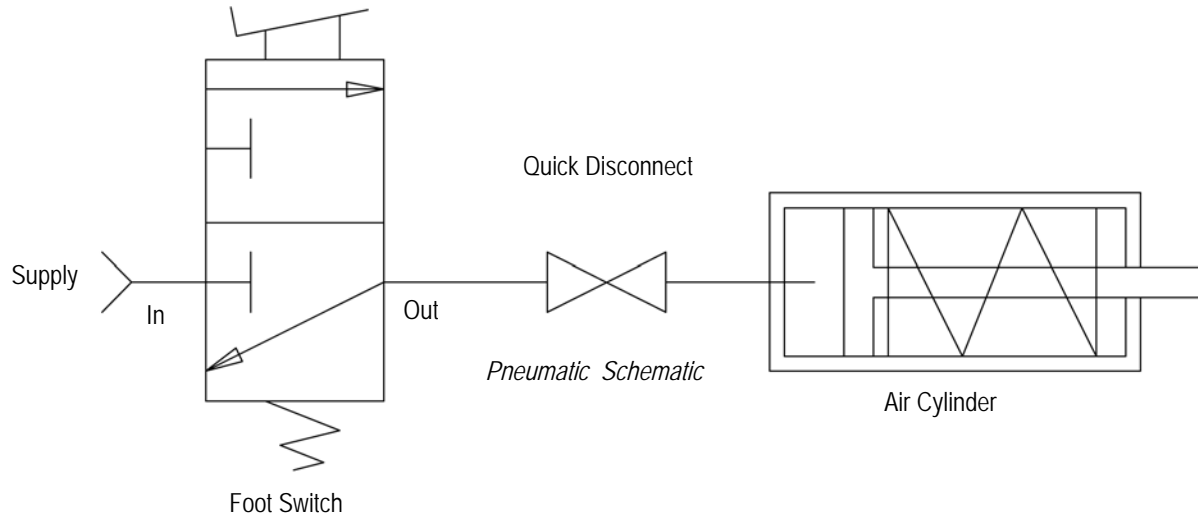


Figure 2

4. INSTALLATION

The terminator requires a regulated air supply pressure range of 551 kPa [80 psi] to 689 kPa [100 psi] at .35 liter/sec [.75 scfm] to properly terminate all modular plugs. A .125 inch NPT fitting is included on the end of the terminator supply line to be installed into the air supply.

Select an appropriate location for the machine. The location should be well lighted, and should have convenient and adequate air and power supplies.

1. Secure the machine to the bench with two M4 or 8-32 bolts or lag screws.
2. Blow air through the air hose to remove any foreign particles before attaching supply hose to the back of the machine.

3. Install air line filter, air pressure regulator, and lubricator (supplied by the customer) between the air supply and hose, as shown in Figure 3. The assembly must be as close as possible to the machine. Fill the air line lubricator with a good grade air line lubricant (as recommended by the filter manufacturer). When machine is not in use, the air supply should be turned "OFF."

4. It is also recommended that quick-disconnect fittings are used to connect the tool to the air supply. If not using quick-disconnect fittings, provide a pneumatic lock-out on the air line that bleeds air after it is turned off.

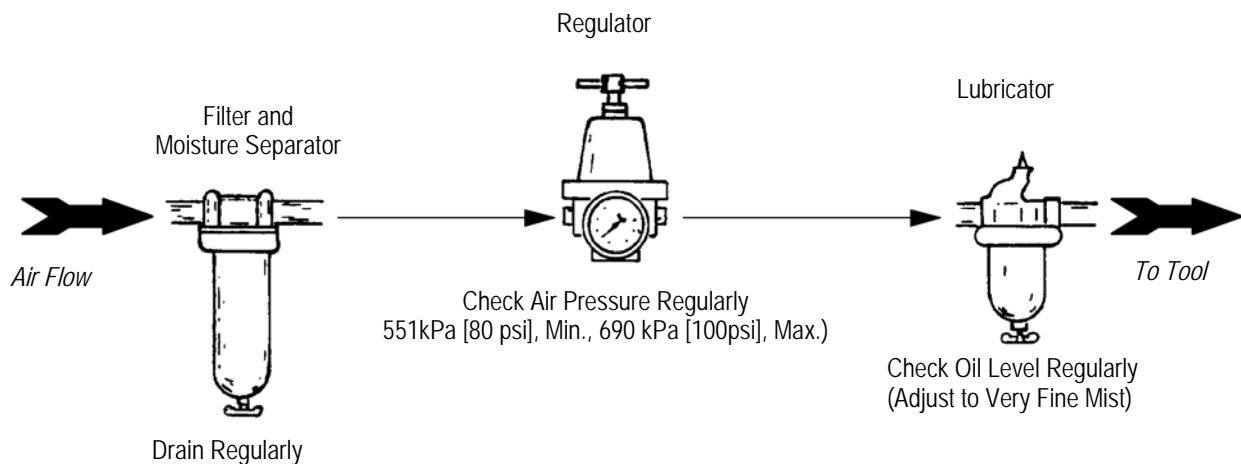


Figure 3

5. TOOLING KIT REMOVAL AND INSTALLATION



DANGER

To avoid injury, DISCONNECT AIR SUPPLY before attempting to install or remove tooling. A quick-disconnect fitting is provided in the air line near the air cylinder. See Figure 1.



DANGER

To avoid injury, the terminator should not be operated without a connector in place.

To terminate a different modular plug type, remove the current tooling kit and install the tooling kit for the desired plug type. Refer to Figure 1.

5.1. Removal

1. DISCONNECT THE AIR SUPPLY by sliding the release ring to separate the halves of the quick-disconnect fitting.
2. Loosen the locking setscrews for the contact inserter and strain relief stuffer. Remove the locking screw that secures both stuffers.
3. Loosen the locknuts, back out the adjusting screws, and slide inserter out of the ram.
4. Remove the nest by removing the securing screw.

5.2. Installation

1. DISCONNECT THE AIR SUPPLY by sliding the release ring to separate the halves of the quick-disconnect fitting.
2. Secure the nest and cover with the screw in the center nest.
3. Place contact inserter, then strain relief stuffer, into ram. Locate the chamfered corner on the stuffers to the same side as the adjusting screws.
4. Begin threading, but DO NOT tighten, the locking screw that retains both stuffers. Both the contact inserter and strain relief stuffer should slide freely in place.
5. Turn the adjusting screws in the ram (clockwise) for both stuffers so that they overlap the edge of the stuffer by approximately 1.52 mm [.060 in.].
6. Lift the stuffers and hold them against the adjusting screws while tightening the locking setscrews. DO NOT overtighten the locking setscrews. The setscrews should be tight enough to hold the stuffers in place yet loose enough to allow the stuffers to slide with resistance when adjusting screws are turned.
7. Turn the adjusting screws several turns until they begin sliding the stuffers against the locking setscrews.
8. Securely tighten the stuffer locking screws.

9. Adjust the tooling for correct strain relief operation and contact crimp height. See Section 5.

6. TOOLING ADJUSTMENT

Adjusting screws in the ram allow the stuffers to be precisely adjusted downward. Stuffers should be adjusted one at a time. Adjust the screws as follows:



NOTE

The tooling kit must be installed as described in Paragraph 4.2, Installation, or adjustments may slip during use.



DANGER

To avoid injury, DISCONNECT AIR SUPPLY before attempting to adjust tooling kits. A quick-disconnect fitting is provided in the air line near the air cylinder.



DANGER

To avoid injury, the terminator should not be operated without a connector in place.

1. DISCONNECT THE AIR SUPPLY by sliding the release ring to separate the halves of the quick-disconnect fitting.
2. Loosen, but do not remove, the locking screw. See Figure 4.
3. Turn the adjusting screws clockwise to lower the stuffer. One full turn clockwise on the adjusting screw will lower the stuffer approximately 0.20 mm [.008 in.].
4. Set the setscrews in the ram to allow the stuffer to move when adjusted, but provide resistance to keep pressure on the adjusting screw.
5. After the stuffer is lowered, tighten the locking screw securely, and run samples to inspect the termination.
6. Continue this process until the crimps are satisfactory, then tighten the locknuts on the adjusting screws. If adjustments are made beyond the desired point, loosen the locking bolt and stuffer setscrew; and turn the adjusting screws counterclockwise several turns. Then reset and adjust the tooling as described in Sections 4 and 5.

7. TERMINATION



DANGER

To avoid injury, the terminator should not be operated without a connector in place.

1. Strip the cable according to Application Specification 114-6016 for standard and small conductor modular plugs and 114-6053 for high performance modular plugs (Category 5). DO NOT strip the insulation from individual conductors.

2. Place the modular plug onto the cable.
3. Insert the modular plug (with cable) with the contacts facing UP into the nest until the modular plug is firmly bottomed. *Hold the cable in place through the termination.*

i **NOTE**
The modular plug must be inserted with the contacts facing UP.

4. Depress and hold the foot valve until the ram bottoms.

i **NOTE**
Failure to bottom the ram could result in unacceptable crimp heights or open conductors.

5. Remove the terminated modular plug after the ram has returned to its uppermost position.
6. Inspect the terminated modular plug for proper contact insertion, strain relief latching, and wire location according to the following.

i **NOTE**
Refer to the applicable Application Specification for further modular plug inspection requirements.

— Contact crimp height meets the dimension given in Figure 5 in order to meet Federal Communications Commission (FCC) regulations.

— The primary strain relief is in the latched position without apparent damage or cutting the cable insulation.

— Wires are inserted into the correct cavities to within the dimensions given in Figure 5 to ensure that the contacts have pierced a sufficient wire area.

8. MAINTENANCE AND INSPECTION

It is recommended that each terminator be inspected immediately upon arrival to ensure that the terminator has not been damaged during shipping and handling and at regularly scheduled intervals.

8.1. Daily Maintenance

It is recommended that each operator of the terminator be aware of and responsible for the following steps of daily maintenance:

1. At the end of each use, clean foreign particles from the terminator using a soft, clean, lint-free cloth or brush. Make sure contact stuffers and strain relief stuffers are secured in place. Check the area under the baseplate for foreign matter and debris.

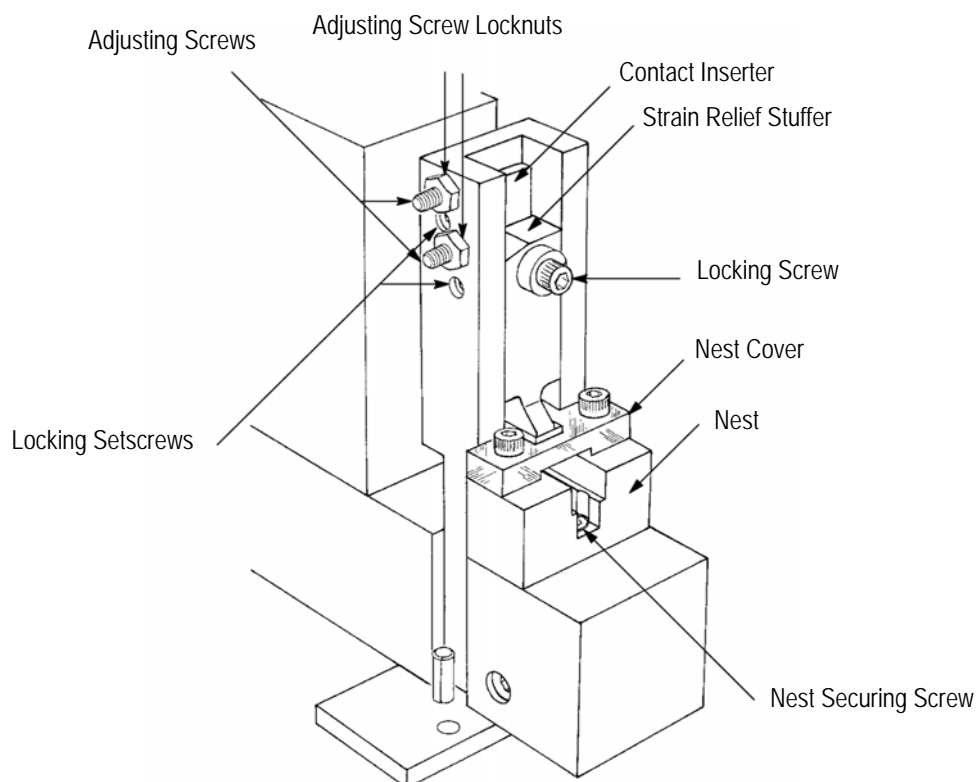


Figure 4

2. Lubricate the ram if necessary with a THIN coat of high-pressure grease. DO NOT lubricate excessively. Store in a clean, dry area.



CAUTION

Be sure to keep the termination areas of the stuffers and nest areas especially clean. DO NOT oil or grease the termination areas of the stuffers.

8.2. Periodic Inspection

Personnel responsible for the terminator should perform regular inspections, record the results, and keep a record of inspections with the terminator.

It is recommended that inspection procedures be performed at least once a month. Work environment, company standards, or amount of terminator use may dictate more frequent inspections.



CAUTION

Failure to perform periodic inspection and daily maintenance can cause the terminator to make defective terminations leading to discontinuities on individual wire circuits.

9. REPLACEMENT AND REPAIR

Order replacement parts through your representative, or call 1-800-526-5142, or send a facsimile of your purchase order to 717-986-7605, or write to:

CUSTOMER SERVICE (038-035)
 TYCO ELECTRONICS CORPORATION
 PO BOX 3608
 HARRISBURG PA 17105-3608

For customer repair service, call 1-800-526-5136.

10. STORAGE

If the tool is not used, it must be stored by taking the following precautions:

1. Store the tool indoors.
2. Grease unpainted parts.
3. Protect this tool from knocks or stresses.
4. Protect this tool from high levels of humidity and from big temperature changes.
5. Prevent the tool from coming into contact with corrosive substances.

11. DECOMMISSIONING

In compliance with the regulations in force in the country where the tool is used, the user must make sure that waste produced during operation is correctly disposed of. Disposal of lubricants and parts removed must be carried out in compliance with the standards in force in the country where the tool is used.

12. REVISION SUMMARY

Since the previous release of this document , the document format was revised and the software was translated.

MODULAR PLUG TYPE	DIM. A (Wire Insertion Depth)
Standard and Small Conductor	0.00-0.64 [.000-.025]
High Performance (Category 5)	0.00-0.25 [.000-.10]

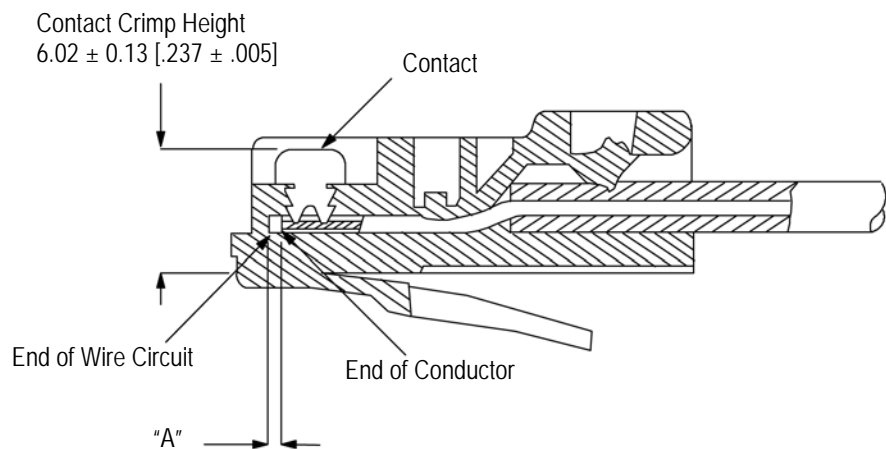


Figure 5