

**MODULAR PLUG BENCH TOP TERMINATOR**  
**Instruction Manual**  
**Order No. 62300-1400**  
**For Shielded Modular Plug 95043 Series**

- Description
- Operation
- Maintenance

## **WARNING**

- NEVER** USE THIS MACHINE WITHOUT THE GUARDS OR SAFETY DEVICES THAT ARE INTENDED TO PREVENT HANDS FROM REMAINING IN THE TERMINATION OR FEED AREAS. **RUNNING THIS MACHINE WITHOUT GUARDS, UNDER ANY CIRCUMSTANCES, CAN CAUSE SERIOUS INJURY.**
  
- NEVER** OPERATE, SERVICE, OR ADJUST THIS MACHINE WITHOUT PROPER INSTRUCTION AND WITHOUT FIRST READING AND UNDERSTANDING THE INSTRUCTIONS IN THIS MANUAL.
  
- NEVER** ADJUST OR SERVICE THIS MACHINE WHILE IT IS CONNECTED TO ANY ELECTRICAL POWER SOURCE. DISCONNECT POWER BY UNPLUGGING THE MACHINE FROM ITS POWER SOURCE.

## **WORK SAFELY AT ALL TIMES**

**For Service, Contact Your  
Local Molex Sales Office**

**Molex Application Tooling Group**  
2200 Wellington Court  
Lisle, Illinois 60532  
Tel: 630-969-4550  
Fax: 630-505-0049

## Table of Contents

### SECTION

1. General Description
2. Setting Up and Operation
3. Maintenance and Troubleshooting
4. Parts Lists, Assembly Drawings, and Schematics

## Section 1

### General Description

- 1.1. Description
- 1.2. Features
- 1.3. Technical Specifications
- 1.4. Delivery Check
- 1.5. Tools
- 1.6. Products

## General Description

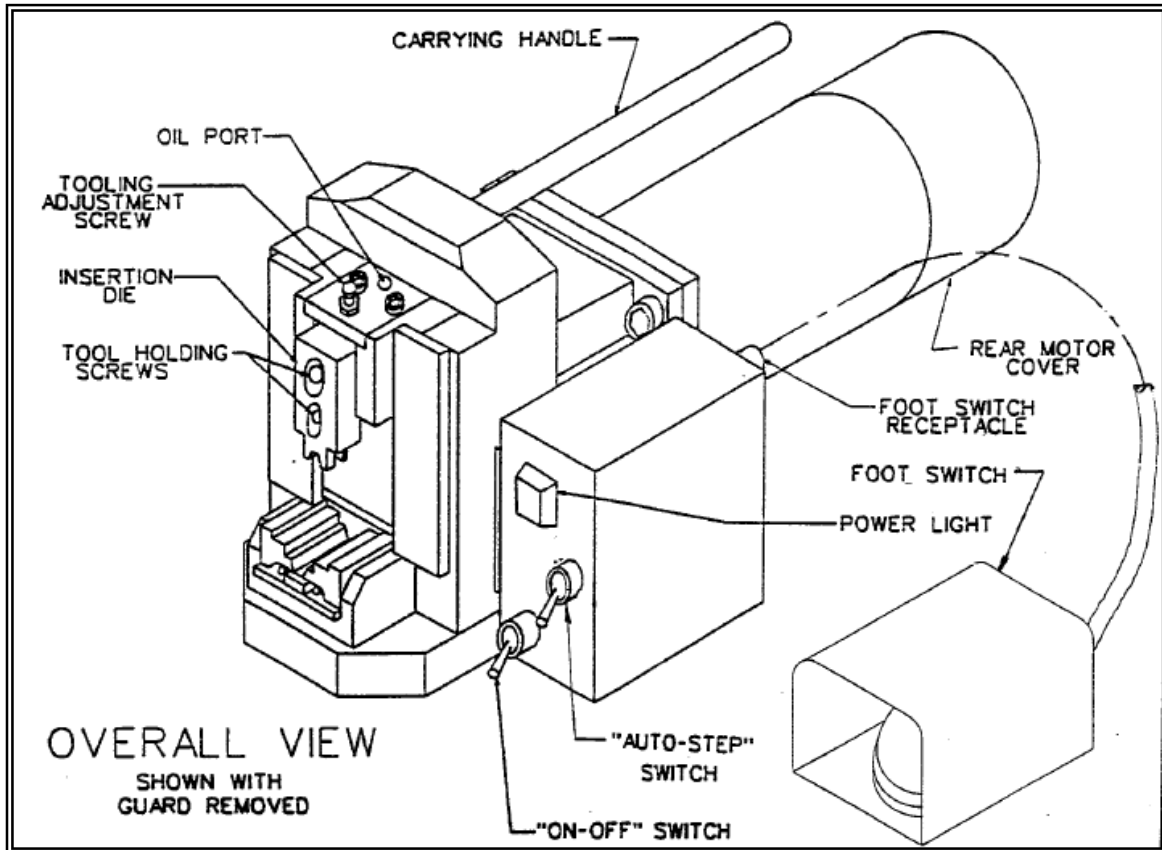


Figure 1-1

### 1.1 Description

The 62300-1400 Modular Plug Bench Top Terminator is designed to terminate pre-stripped, prepared cable to the 8 circuit Shielded Modular Plug (95043 series). The operator prepares the cable, slides on a ferrule, inserts the end into the plug, then inserts this assembly into the terminator. When the plug is in position, pressing the foot switch will activate the ram, pressing the wires into the terminals, and setting the strain relief.

### 1.2 Features

- All electrical, no shop air required.
- Small and light weight for easy relocation.
- Quiet operation.

- Simple design for low maintenance.

### 1.3 Technical Specifications

#### Dimensions

Width	150mm (5.91 in)
Depth	305mm (12.0 in)
Height	150mm (5.91 in)

Unpacked weight	10.5 kg (23.2lbs)
-----------------	-------------------

#### Power Requirements

Voltage:	110V AC 50/60Hz, 7A
----------	---------------------

**Rate**

This machine terminates up to 600 per hour, depending on operator skill and connector size.

**1.4 Delivery Check**

Carefully remove the terminator from its shipping container. Check to see that following items are included in this package:

<u>Decription:</u>	<u>Quantity</u>
62300-1400 Terminator	1
69002-5715 Foot Switch Assembly	1
ATS-623001400 Instruction Manual	1

**1.5 Tools**

The following tools are recommended for setup and adjustments to the this tool.

- ✓ Metric Hex Wrench Set
- ✓ Needle nose pliers
- ✓ Eye Loupe - 5X

**1.6 Products:**

Shielded Modular Plug, 8 position for Round Cable.

<b>95043 Series Number</b>				
95043-1881	95043-2806	95043-2895	95043-5893	95043-7882
95043-2800	95043-2807	95043-2896	95043-5894	95043-7883
95043-2801	95043-2881	95043-3981	95043-5895	95043-7884
95043-2802	95043-2891	95043-4881	95043-5896	95043-7885
95043-2803	95043-2892	95043-5881	95043-6891	95043-7886
95043-2804	95043-2893	95043-5891	95043-7880	95043-7887
95043-2805	95043-2894	95043-5892	95043-7881	95043-7897

## Section 2

### Setting Up And Operation

- 2.1. Installation
- 2.2. Setup
- 2.3. Operation

## 2.1 Installation (See Figure 1-1)

1. Set the terminator on a firm work surface. Be sure there is adequate room around the terminator to handle the harnesses.
2. Plug the power cord into a suitable power source.
3. Make sure there is adequate lighting.

**WARNING:** When servicing this machine, always disconnect the power cord.

## 2.2 Setup

### Termination Depth Adjustment

(See Figure 1-1)

The termination depth can be adjusted using the following steps.

1. Remove the four (4) socket head cap screws, two on each side, that hold the plastic guard plate in place and remove the guard plate.
2. Locate the two (2) tool holder screws in the center of the ram and loosen them.
3. There are three (3) SHCS; one has a lock nut on the top of the ram. This is the tooling adjusting screw. Loosen the lock nut and turn the adjusting screw (CW) clockwise to increase termination depth or (CCW) counterclockwise to decrease the depth.
4. Make sure tool holder is firmly up against the adjusting screw and tighten the two (2) holding screws.
5. Double check the termination depth and repeat steps 2, 3 and 4 as necessary. When satisfied that the wires are seated correctly, replace the guard.

### Brake Adjustment

1. Remove the two (2) screws that hold the rear motor cover.
2. Carefully remove the rear cover and slide it around on the wire out of the way.
3. Locate the three (3) brake shoe springs loading nuts. See Figure 2-1.

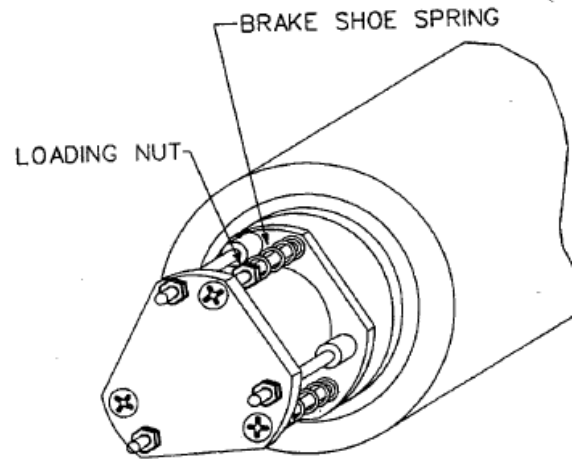


Figure 2-1

4. Increase the compression on the brake shoe springs by turning the loading nuts (CW) clockwise.

**NOTE:** Nuts should all be adjusted to the same distance from the plate.

5. Replace the rear cover but do not replace the screws at this time.
6. Turn the power on. If the ram still actuates, repeat step 2 through 5 until ram operates normally.
7. Replace the two (2) rear cover screws.

## 2.3 OPERATION

### Terminator Panel Buttons (See Figure 1-1)

1. "ON-OFF" This button turns on or off the power to the terminator.
2. "AUTO-STEP" This button sets the mode of operation - "AUTO" (Automatic) or "STEP" (Jog).
3. Power Light indicates power is on to the terminator.

### Operation

1. Slide a shield onto a length of pre-stripped cable then insert the cable into a modular connector. See Figure 2-2.
2. Slide the shield onto the connector.



3. Insert the connector assembly into the opening in the guard guiding it into the termination nest and up to the stop. See Figure 2-2.
4. When the connector is correctly seated in the nest, press the foot switch to terminate the connector and ferrule onto the cable.

**NOTE:** Depress the foot switch to cycle the press. If the foot switch is held down, the press will continue to cycle.

5. Push down on the cable and remove the harness. Repeat steps 1 through 4 for the other end if required.

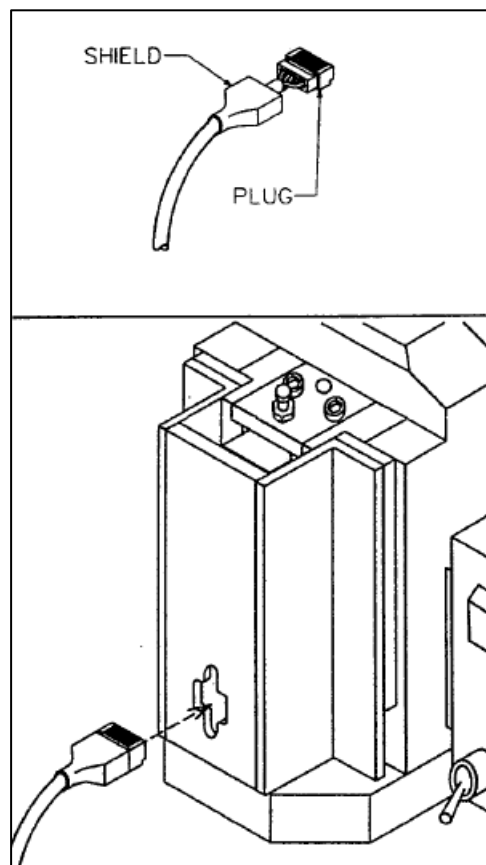


Figure 2-2

## Section 3

### Maintenance

- 3.1. Cleaning
- 3.2. Lubrication
- 3.3. Perishable Parts
- 3.4. Spare Parts
- 3.5. Troubleshooting

### 3.1 Cleaning

**WARNING:** Always disconnect the power cord from the power source during all maintenance operations.

For efficient operation, this Semiautomatic Modular Plug Terminator Machine should be cleaned daily with a soft bristle brush to remove any carrier strip debris and terminal plating dust from the tooling area. For continuous operation this may have to be done several times throughout the day.

See Chart 3.1 for recommended Preventive Maintenance Schedule.

When it is necessary to change tooling, care should be taken to remove any debris from tapped holes or mounting surfaces. Debris can prevent tooling from being properly locked into position.

**CAUTION:** Using compressed air to clean tooling is *not* recommended. Chips can wedge in the tooling and/or fly at an operator.

### 3.2 Lubrication

There is a covered port on the top of the ram. 3 - 4 drops of SAE 10W motor oil, or equivalent, should be put in this port approximately once a month. See Figure 1-1.

**WARNING:** Never use penetrates such as WD40 for any lubrication on the Termination machine.

An example of a maintenance chart is shown below. Copy and use this chart to track the maintenance of your Press or use this as a template to create your own schedule or use your company's standard chart, if applicable.

#### Preventive Maintenance Chart

**Daily:** Clean. See Section 3.1.

**Monthly:** Lubricate ram, See Section 3.2.

**CHECK SHEET**    MONTH \_\_\_\_\_ YEAR \_\_\_\_\_

Week	Monthly	Daily Clean	Days of the Week							Solution
			MON	TUE	WED	THU	FRI	SAT	SUN	
1										
2										
3										
4										
Lubricate	Yes									SAE 10 non-detergent oil
Cleaning		Yes								Soft Brush Industrial Degreaser
Inspect all tooling for wear		Yes								Replace if signs of wear.

Schedule should be adjusted up or down depending on usage. Molex recommends that a log of preventive maintenance be kept with the press.

### 3.3 Perishable Parts

Customers are responsible for maintaining the Modular Plug Terminator Machine. Perishable parts are those parts that come in contact with the product and will wear out over time. Molex recommends that all customers keep at least one set of the perishable tool kit in stock at all times. This will reduce the amount of production down time. These parts are identified in the parts list in Section 4.

### 3.4. Spare Parts

Customers are responsible for maintaining the Modular Plug Terminator Machine. Spare parts are moving and functioning parts that can be damaged or wear out over time and will require replacement. Molex recommends that the customer keep some or all of them in stock to reduce production down time. These parts are identified in the parts list in Section 4.

### 3.5 Troubleshooting

Symptom	Cause	Solution
Power cord properly plugged in but power will not come on	▪ Damage to power cord.	Repair or replace cord.
	▪ Fuse blown.	Replace blown fuse with proper size fuse.
Termination not deep enough and ferrule not adequately crimped	▪ Termination depth not set correctly.	Readjust the termination depth. See Section 2.1. <i>SETUP</i> , Termination Depth Adjustment.
Ram actuates when power is turned on	▪ Faulty foot switch.	Repair or replace as required.
	▪ Brake out of adjustment.	Reset the brake. See Section 2.1. <i>SETUP</i> , Brake Adjustment.
Ram runs in "Step" but not in "Auto"	▪ Ram not stopped at full up position.	Make sure when moving the ram in "Step" mode that the ram is stopped at the top of its stroke.
	▪ Ram position switch faulty	On the back of the motor mounting block is a miniature limit switch that indicates the position of the ram. If faulty, replace it.

## Section 4

- 4.1 Parts List and Assembly Drawings
- 4.2 Schematic Drawings

## 4.1 Parts List

62300-1400 Modular Plug Terminator				
Item	Order No	Description	RSP / PP Parts / Notes	Quantity
1	62300-1401	Guard, Front		1
2	62300-1402	Mount, Guard		1
3	62300-1403	Base, Nest		1
4	62300-1404	Nest	PP	1
5	62300-1405	Switch, Toggle		1
6	62300-1406	Switch, Toggle		1
7	62300-1407	Light, Red Indicator		1
8	62300-1408	Die, Upper	PP	1
9	62300-1409	Ram		1
10	62300-1410	Plate, Ram Top		1
11	62300-1411	Block, Cam Bearing		1
12	62300-1412	Pin, Cam		1
13	62300-1413	Cam		1
13	62300-1414	Box, Gear		1
14	62300-1415	Motor		1
15	62300-1416	Shaft, Rear Motor		1
16	62300-1417	Pin, Locking		1
17	62300-1418	Coupling, Brake		1
18	62300-1419	Plate, Front Brake		1
19	62300-1420	Pad, Brake		1
20	62300-1421	Disk, Clutch		1
21	62300-1422	Spring, Brake		3
22	62300-1423	Ring, Brake		1
23	62300-1424	Nut, Fixed		3
24	62300-1425	Base, Ring		1
25	62300-1426	Nut, Fixed		3
26	62300-1427	Assembly, Brake Electrical Control		1
27	62300-1428	Nut, Brake Spring Adjusting		3
28	62300-1429	Switch, Miniature		1
29	62300-1430	Switch, Miniature With Lever		1
30	62300-1431	Base, Machine		1
31	62300-1432	Plate, Base		1
32	69002-5717	Assembly, Foot Switch		1
33	62300-1450	Timer	(Not Shown)	1
34	62300-1498	Warning Label	(Not Shown)	1
35	11-41-0264	Molex Logo	(Not Shown)	1
RSP - Part is a Molex Recommended Spare Part.				
PP - Part is a Perishable Part.				
** Available from an industrial supply company such as MSC (1-800-645-7270).				

**Americas Headquarters**  
Lisle, Illinois 60532 U.S.A.  
1-800-78MOLEX  
amerinfo@molex.com

**Far East North Headquarters**  
Yamato, Kanagawa, Japan  
81-462-65-2324  
feninfo@molex.com

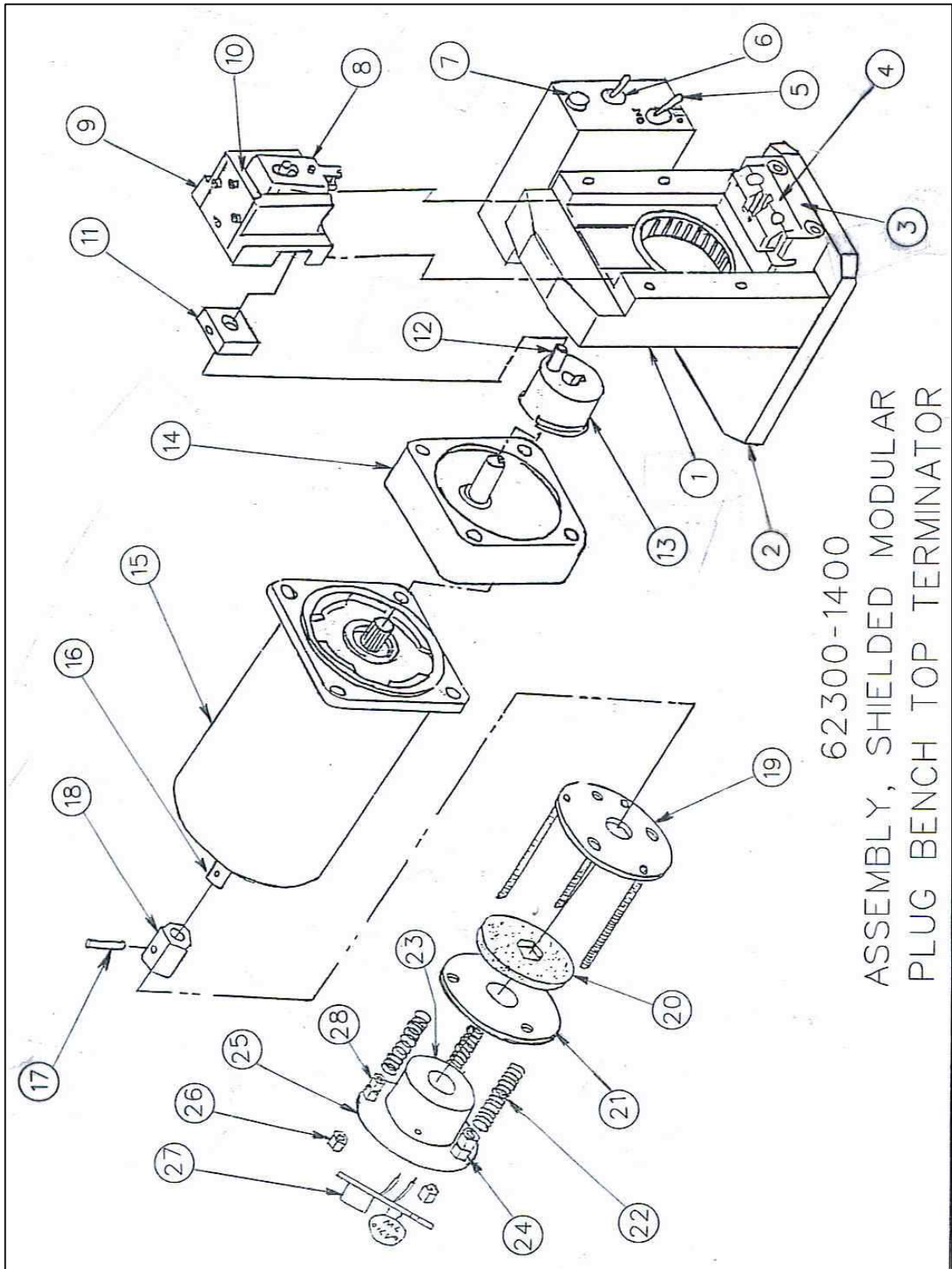
**Far East South Headquarters**  
Jurong, Singapore  
65-6-268-6868  
fesinfo@molex.com

**European Headquarters**  
Munich, Germany  
49-89-413092-0  
eurinfo@molex.com

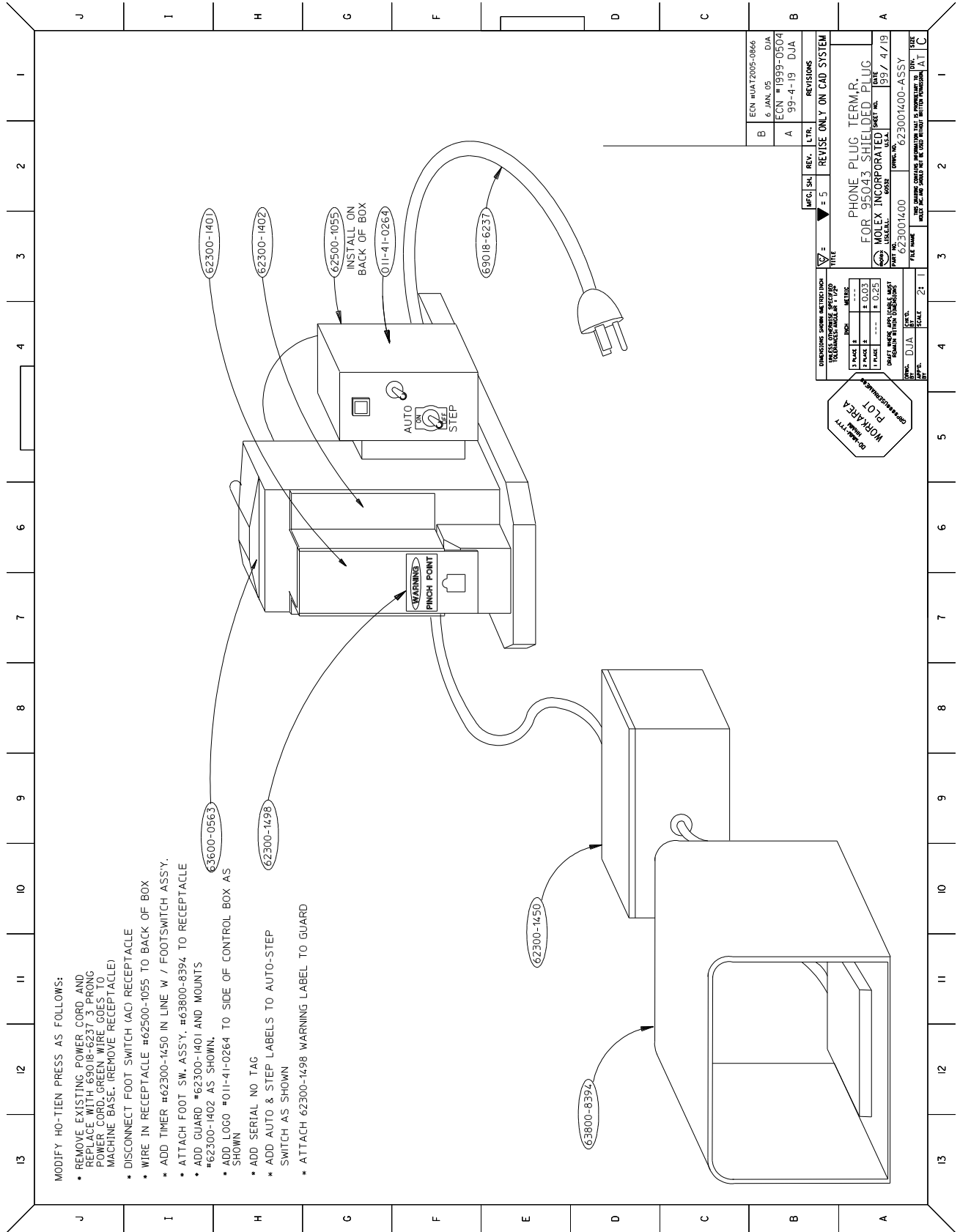
**Corporate Headquarters**  
2222 Wellington Ct.  
Lisle, IL 60532 U.S.A.  
630-969-4550  
Fax: 630-969-1352

Visit our Web site at <http://www.molex.com>

### 4.1 Assembly Drawings



### 4.1 Assembly Drawings



- MODIFY HO-TIEN PRESS AS FOLLOWS:
- \* REMOVE EXISTING POWER CORD AND REPLACE WITH 69018-6237 3 PRONG POWER CORD. GREEN WIRE GOES TO MACHINE BASE. (REMOVE RECEPTACLE)
  - \* DISCONNECT FOOT SWITCH (AC) RECEPTACLE
  - \* WIRE IN RECEPTACLE #62500-1055 TO BACK OF BOX
  - \* ADD TIMER #62300-1450 IN LINE W / FOOTSWITCH ASSY.
  - \* ATTACH GUARD #62300-1401 AND MOUNTS #62300-1402 AS SHOWN.
  - \* ADD LOGO #011-41-0264 TO SIDE OF CONTROL BOX AS SHOWN
  - \* ADD SERIAL NO TAG
  - \* ADD AUTO & STEP LABELS TO AUTO-STEP SWITCH AS SHOWN
  - \* ATTACH 62300-1498 WARNING LABEL TO GUARD

ECN #UAT2005-0866	DJA	6 JAN. 05
ECN #1999-0504	A	99-4-19 DJA
REV. LTR. REVISIONS		
PFC. S&L REV. = 5 REVISE ONLY ON CAD SYSTEM		
DIMENSIONS SHOWN METRIC UNLESS OTHERWISE SPECIFIED		
TOLERANCES UNLESS OTHERWISE SPECIFIED		
FRAME	± 0.03	MILLIS
PLATE	± 0.25	MILLIS
PART NUMBER AND LOGO MUST BE IDENTICAL TO ORIGINAL		
FILE NAME	623001400	
DATE	1997/4/19	
DESIGNED BY	ATC	
CHECKED BY	ATC	
DATE	1997/4/19	
THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INC. AND IS NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS WITHOUT WRITTEN PERMISSION FROM MOLEX INC.		

WORK AREA PLOT



### 4.2 Electrical Drawings

