



TRI TOOL INC.

TRI TOOL INTERNATIONAL INC.

3806 Security Park Dr., Rancho Cordova, CA 95742-6990 U.S.A. 916-351-0144 800-345-5015 Fax 916-351-0372 ttcustserv@aol.com www.tritool.com

TRI TOOL INC. TECHNICAL SPECIFICATION Model 301 TUBE FACING AND SQUARING TOOL JANUARY, 2001

MODEL 301 TUBE FACING AND SQUARING TOOL

The Model 301 Tube Squaring Tool is designed specifically to prepare tubes for autogenous welding. The 301 will face (square) .125" (3.2mm) to 1.102" (28.0mm) outside diameter tubing with a wall thickness up to .125" (3.2mm). Speed control is provided with a variable speed electric drive, or a pneumatic drive motor. Feed is provided by a cam actuated feed handle at right angles to the cutter head. The 301 uses OD clamping Collets which hold and round the tubing and provide torque acceptance of the Tool. The clamping collets on the standard system are retained by a collet nut. A Quick Lock clamping system is available for increased productivity with the 301 Tube Squaring Tool.

The Model 301 System comes complete with:

- A. Model 301 Sub Assembly
- B. 110V (Milwaukee) Motor Assembly
- C. Shipping Kit
- D. Carrying Case
- E. Operator's Manual

Optional Accessories:

- 110 VAC (Bosch) Motor Assembly
- 110 VAC (Milwaukee) Motor Assembly
- 220 VAC (Bosch) Motor Assembly
- 14.4 VDC Cordless Motor Assembly
- Pneumatic Motor Assembly
- Air Caddy, FRL
- Quick Clamp Kit
- Bench Stand Assembly
- Electric Foot Pedal
- Variable Speed Transformer Control (20 VAC to 140 VAC Output)

Copyright© proprietary property of TRI TOOL Inc. No reproduction, use or duplication of the information hereon is permitted without the express written consent of TRI TOOL Inc.

Design and Operating Features:

1. The 301 accepts it's own torque through the Collet Clamping System.
2. The Cutting Head accepts Squaring, J-Beveling, Beveling or ID Deburring Tool Bits.
3. All required wrenches for operating the Model 301 are supplied with the machine.
4. The Model 301 is lightweight and easy to handle.

Specifications

1. Reference Envelope:

Drawing No. 77-0694 (Pneumatic Drive)
Drawing No. 77-0931 (Milwaukee Electric Drive)
Drawing No. 77-1566 (Bosch Electric Drive, 110VAC and 220VAC)
Drawing No. 77-1567 (Cordless Drive)
Drawing No. 77-1576 (301E-QL Milwaukee, 110 VAC)

2. Pipe cutting capacities:

- a. Basic pipe sizes:

1/8" All schedules
1/4" All schedules
3/8" All schedules
1/2" Schedules 5 through schedule 40
3/4" Schedules 5 through schedule 40

- b. Basic tube sizes:

.125" (3.2mm) through 1.102" (28.0mm) with wall thickness up to .125" (3.2mm).

- c. Outside diameter mounting range:

100 Series Collets: .125" (3.2mm) to 1.102" (2.8mm) OD.

3. Material cutting capabilities:

Copyright© proprietary property of TRI TOOL Inc. No reproduction, use or duplication of the information hereon is permitted without the express written consent of TRI TOOL Inc.

- a. Mild steels, chrome steels (Rc 35 max), stainless steel, copper-nickel and aluminum without limitations other than size and wall thickness as specified in Paragraph 2.
 - b. Inconel and some other high-temperature alloys may require special procedures as a function of wall thickness and type of end preparation. Contact Tri Tool's Engineering Department for details.
4. Clearances and dimensions: (301 Milwaukee Electric Drive)
- a. Length of the Motor: 15.50" (393.7mm)
 - b. Maximum width over feed handle: 6.63" (168.3mm)
 - c. Maximum depth: 8.00" (203.2mm)
 - d. Collet Nut Diameter: 3.00" (76.2mm)
 - e. Available feed travel .200" (5.1mm)
5. Drive system:
- a. A variable speed Electric Drive Motor
 - Head speed:
 - Free speed 600 rpm
 - Normal working speed range 15-60 rpm
 - b. A variable speed Pneumatic Drive Motor
 - Head Speed:
 - Free speed 150 rpm
 - Normal working speed range 15-60 rpm
6. Power Supply:
- a. Power requirements: 115 VAC, 50/60 Hz, 5.5 amp.
 - b. Power requirements: 220 VAC, 50/60 Hz, 5.2 amp.
 - c. Power requirements: 14.4 VDC, Battery Power Pack
 - d. Power requirements: 22 cfm at 90 psi (10 lt/sec at 621 KPa)

Note: Air supply must have a filter/regulator/lubricator (FRL) system to protect warranty on air motor.

- 7. Speed control:

- a. Variable speed Electric Drive Motor.
 - b. On/Off trigger and twist-type air flow control valve.
8. Mounting:
- a. Manually actuated Collets using a collet nut and wrench.
 - b. A Quick Lock clamping system using a lever actuated clamp.
9. Feed:
- a. Manual – A cam actuated feed handle is mounted at right angles to the cutting head and provides .200” (5.1mm) of travel.

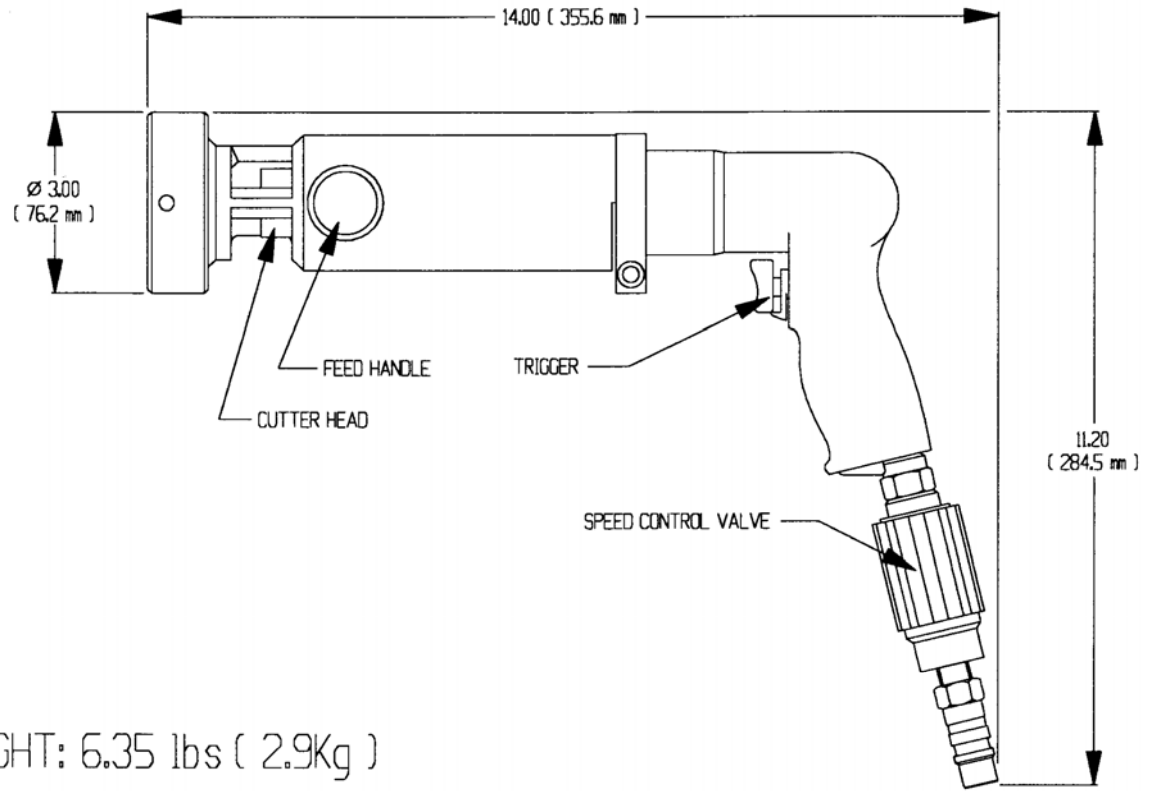
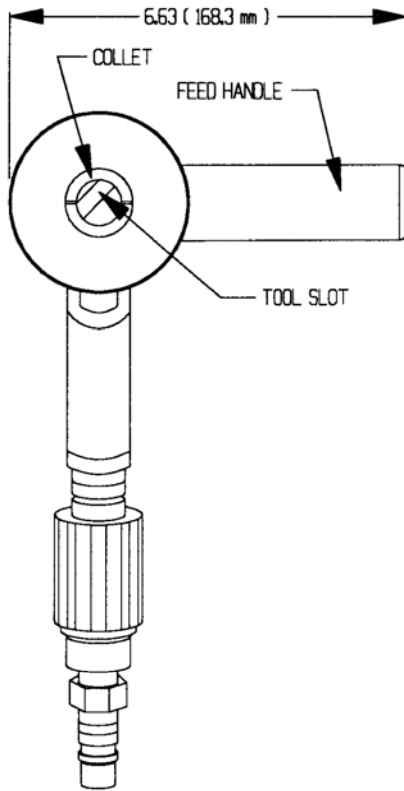
Spare parts and standard tool bits are available from stock.

Engineering design services for custom tool bits and special function modifications are available from the factory.

All TRI TOOL Inc. and allied equipment products are subject to design improvements and specification changes at any time with no obligation to units already sold.

Warranty (limited), parts and/or equipment are warranted against defects in material and workmanship for a period of one year from date of purchase. Full details supplied on request and/or with tools.

Filter, regulator, lubricator (FRL) required to protect warranty on air powered tools.



WEIGHT: 6.35 lbs (2.9Kg)

COMPANY CONFIDENTIAL
 PROPRIETARY PROPERTY OF TRI TOOL INC.
 NO REPRODUCTION, USE, OR DUPLICATION OF THE
 DESIGNS SHOWN HEREON IS PERMITTED WITHOUT
 EXPRESS WRITTEN CONSENT FROM TRI TOOL INC.
 3806 SECURITY PARK DRIVE, RANCHO CORDOVA, CA 95742
 COPYRIGHT TRI TOOL INC.

CONTRACT NO.	
APPROVALS	DATE
DRAWN R MORGAN	5/29/97
CHECKED	
ISSUED	
DO NOT SCALE DRAWING	

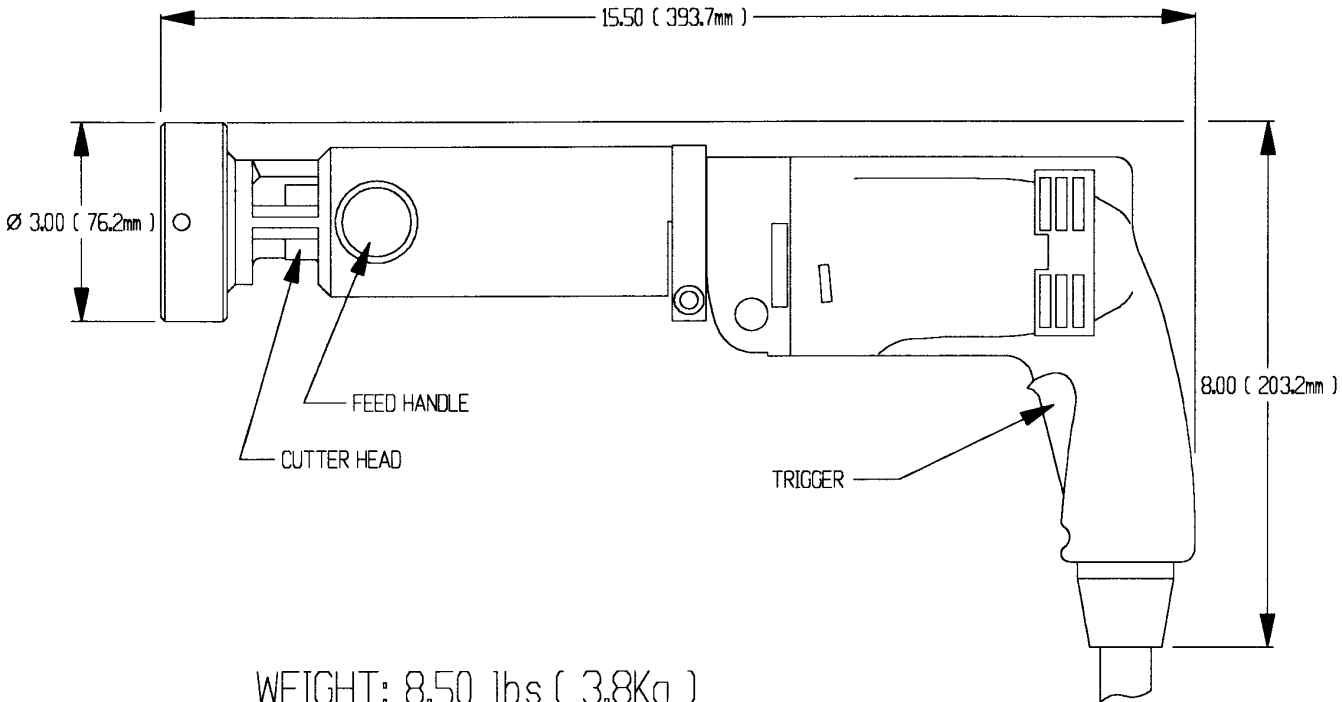
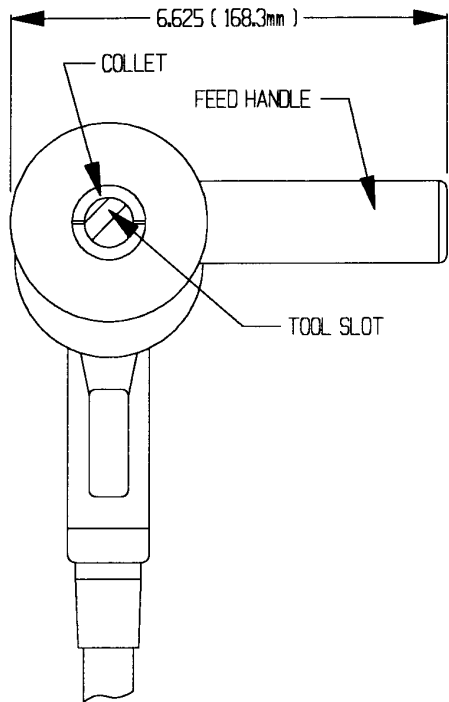


TRI TOOL INC.

3806 SECURITY PARK DRIVE, RANCHO CORDOVA, CA 95742

ENVELOPE DRAWING
 MODEL 301A

SIZE A	CAD AVAILABLE	DWG. NO. 77-0694	REV.
SCALE NONE		SHEET 1 OF 1	



WEIGHT: 8.50 lbs (3.8Kg)

110 VAC

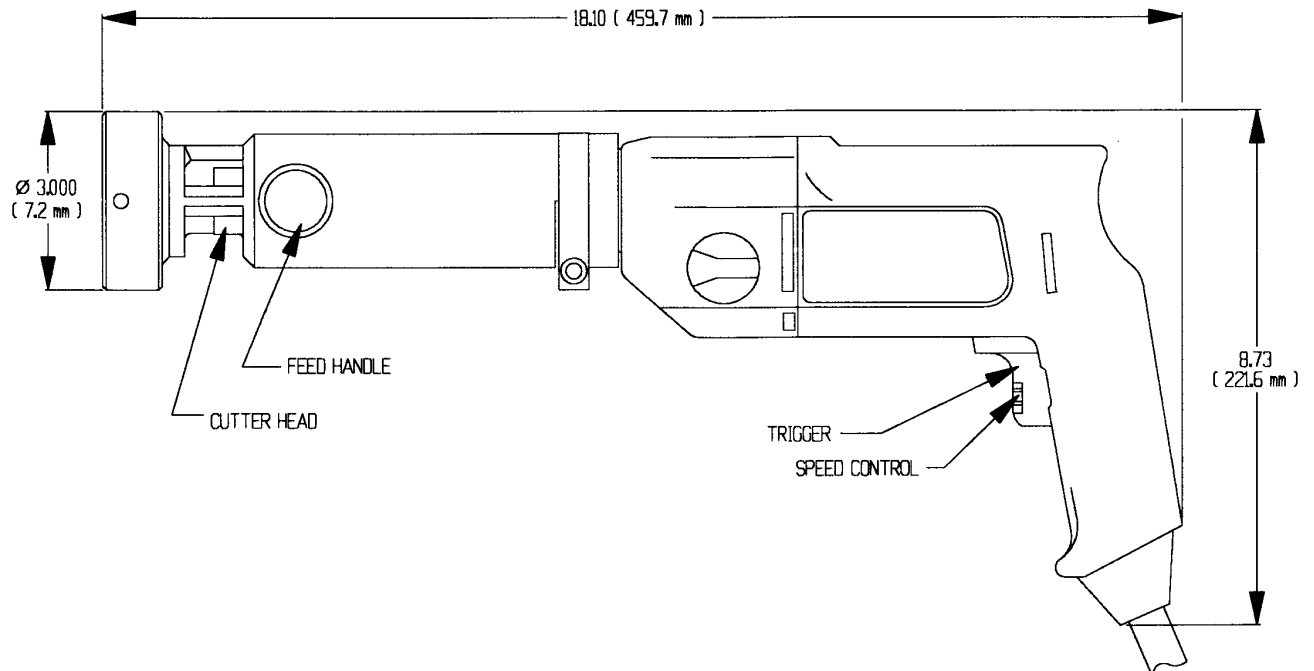
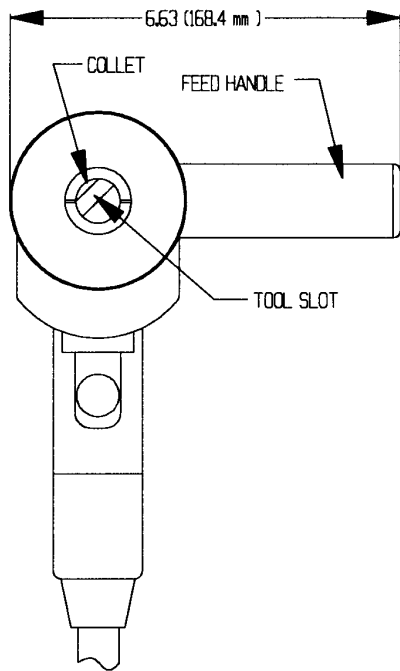
COMPANY CONFIDENTIAL
 PROPRIETARY PROPERTY OF TRI TOOL INC.
 NO REPRODUCTION, USE, OR DUPLICATION OF THE
 DESIGNS SHOWN HEREON IS PERMITTED WITHOUT
 EXPRESS WRITTEN CONSENT FROM TRI TOOL INC.
 3806 SECURITY PARK DRIVE, RANCHO CORDOVA, CA 95742
 COPYRIGHT TRI TOOL INC.

CONTRACT NO.	
APPROVALS	DATE
DRAWN R MORGAN	5/28/97
CHECKED	
ISSUED	

 **TRI TOOL INC.**
 3806 SECURITY PARK DRIVE, RANCHO CORDOVA, CA 95742

ENVELOPE DRAWING
 MODEL 301E (MILWAUKEE)

SIZE A	CAD AVAILABLE	DWG. NO. 77-0931	REV.
SCALE NONE		SHEET 1 OF 1	



WEIGHT: 8.70 lbs (3.9Kg)

COMPANY CONFIDENTIAL
 PROPRIETARY PROPERTY OF TRI TOOL INC.
 NO REPRODUCTION, USE, OR DUPLICATION OF THE
 DESIGNS SHOWN HEREON IS PERMITTED WITHOUT
 EXPRESS WRITTEN CONSENT FROM TRI TOOL INC.
 3806 SECURITY PARK DRIVE, RANCHO CORDOVA, CA 95742
 COPYRIGHT TRI TOOL INC.

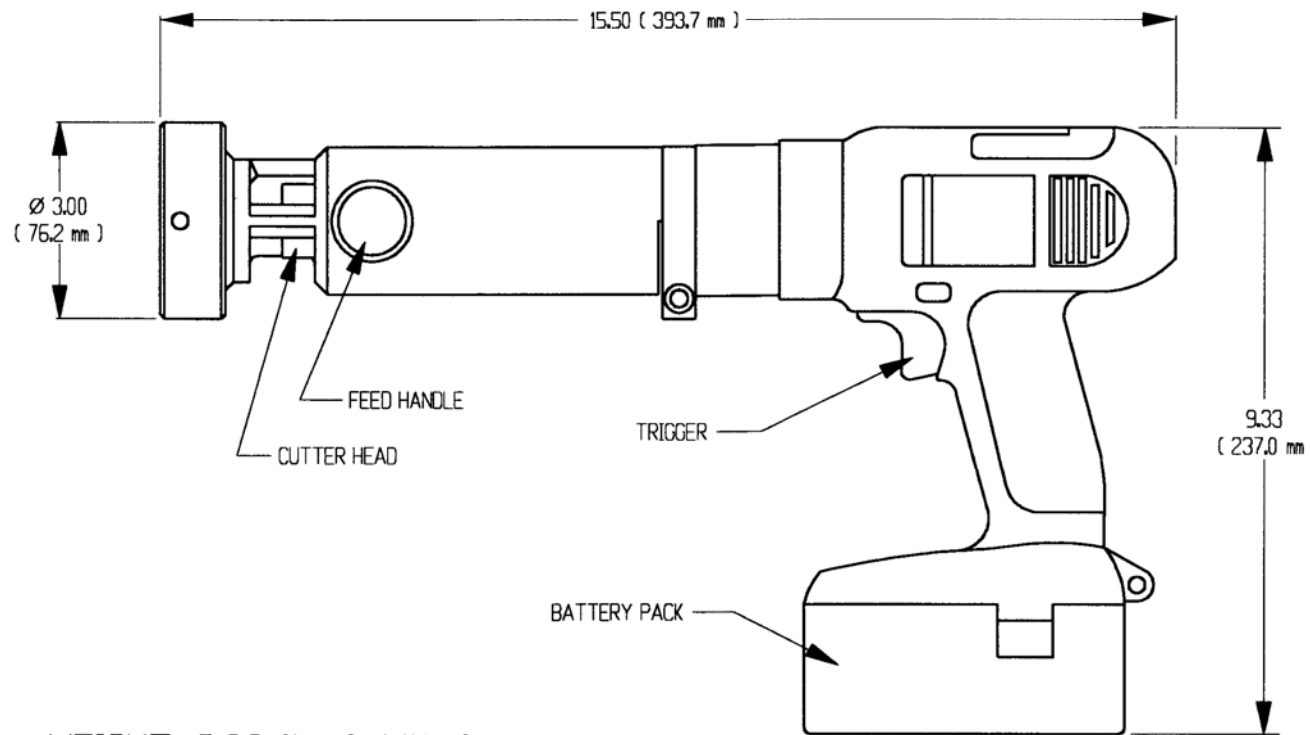
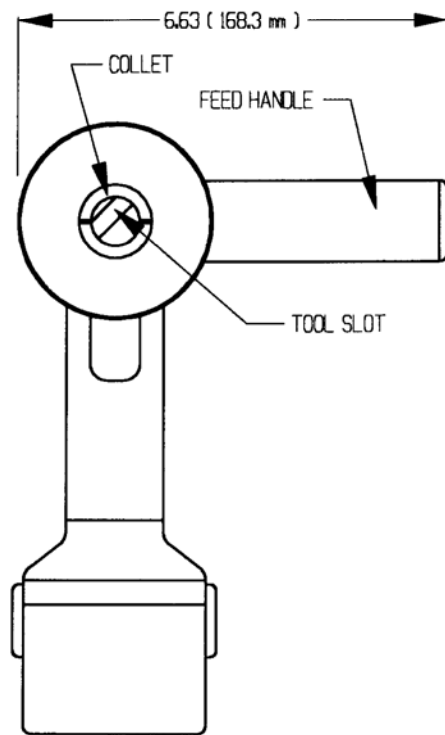
CONTRACT NO.	
APPROVALS	DATE
DRAWN R MORGAN	5/29/97
CHECKED	
ISSUED	



TRI TOOL INC.

3806 SECURITY PARK DRIVE, RANCHO CORDOVA, CA 95742

ENVELOPE DRAWING			
MODEL 301E (BOSCH) 110V & 220V			
SIZE	CAD	DWG. NO.	REV.
A	AVAILABLE	77-1566	
SCALE NONE		SHEET 1 OF 1	



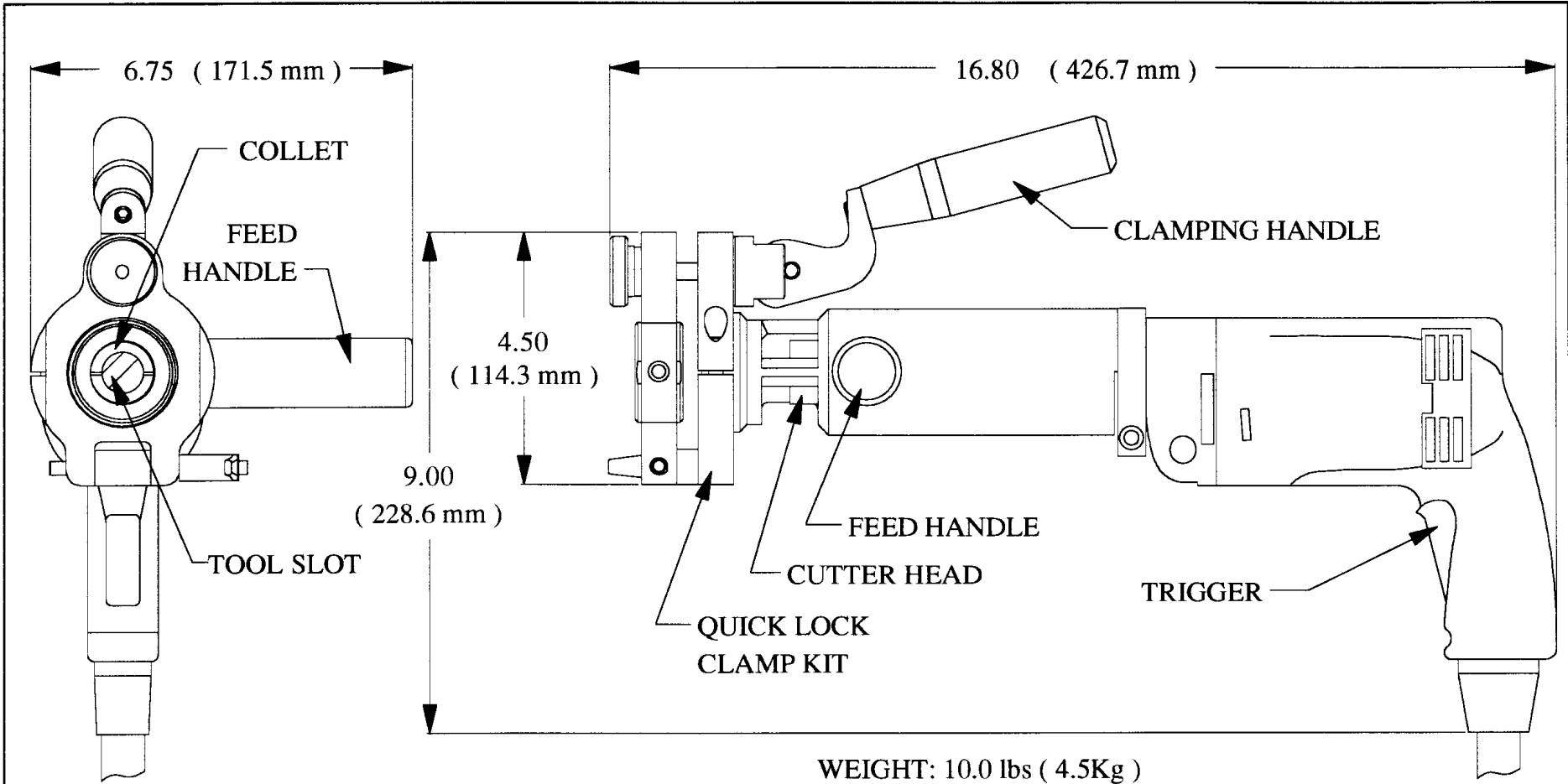
WEIGHT: 9.00 lbs (4.1Kg)

COMPANY CONFIDENTIAL
 PROPRIETARY PROPERTY OF TRI TOOL INC.
 NO REPRODUCTION, USE, OR DUPLICATION OF THE
 DESIGNS SHOWN HEREON IS PERMITTED WITHOUT
 EXPRESS WRITTEN CONSENT FROM TRI TOOL INC.
 3806 SECURITY PARK DRIVE, RANCHO CORDOVA, CA 95742
 COPYRIGHT TRI TOOL INC.

CONTRACT NO.	
APPROVALS	DATE
DRAWN R MORGAN	5/29/97
CHECKED	
ISSUED	

TRI TOOL INC.
 3806 SECURITY PARK DRIVE, RANCHO CORDOVA, CA 95742

ENVELOPE DRAWING			
MODEL 301 CORDLESS (14.4V)			
SIZE A	CAD AVAILABLE	DWG. NO. 77-1567	REV.
SCALE NONE		SHEET 1 OF 1	



WEIGHT: 10.0 lbs (4.5Kg)

COMPANY CONFIDENTIAL
 PROPRIETARY PROPERTY OF TRI TOOL INC.
 NO REPRODUCTION, USE, OR DUPLICATION OF THE
 DESIGNS SHOWN HEREON IS PERMITTED WITHOUT
 EXPRESS WRITTEN CONSENT FROM TRI TOOL INC.
 3806 SECURITY PARK DRIVE, RANCHO CORDOVA, CA 95742
 COPYRIGHT TRI TOOL INC.

CONTRACT NO.	
APPROVALS	DATE
DRAWN R MORGAN	5/28/97
CHECKED	
ISSUED	

 **TRI TOOL INC.**
 3806 SECURITY PARK DRIVE, RANCHO CORDOVA, CA 95742

ENVELOPE DRAWING
 MODEL 301E - QL (MILWAUKEE) 110 VAC.

SIZE A	CAD AVAILABLE	DWG. NO. 77-1576	REV.
SCALE NONE		SHEET 1 OF 1	