

# TAK Enterprises, Inc.



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## #4H PNEUMATIC CUT OFF SYSTEM QUILL ON QUILL CUTTER

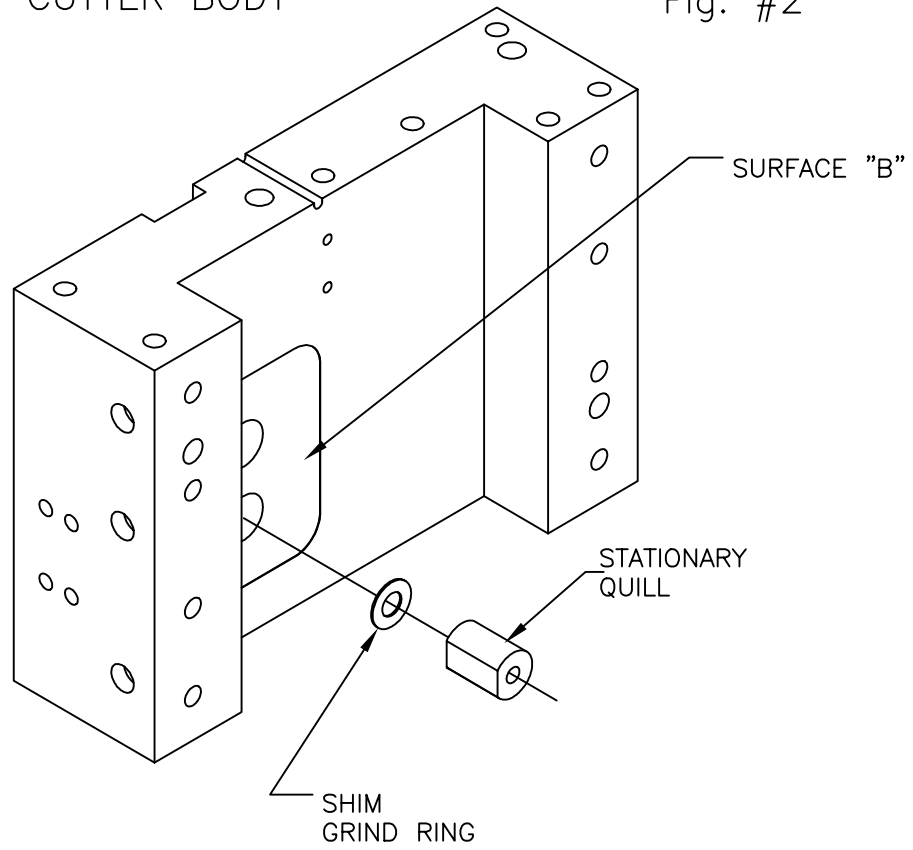


70 Enterprise Drive • Bristol, CT 06010-7400  
(860) 583-0517 • (860) 585-0479

E-mail: [tak@takenterprises.com](mailto:tak@takenterprises.com) • [www.takenterprises.com](http://www.takenterprises.com)

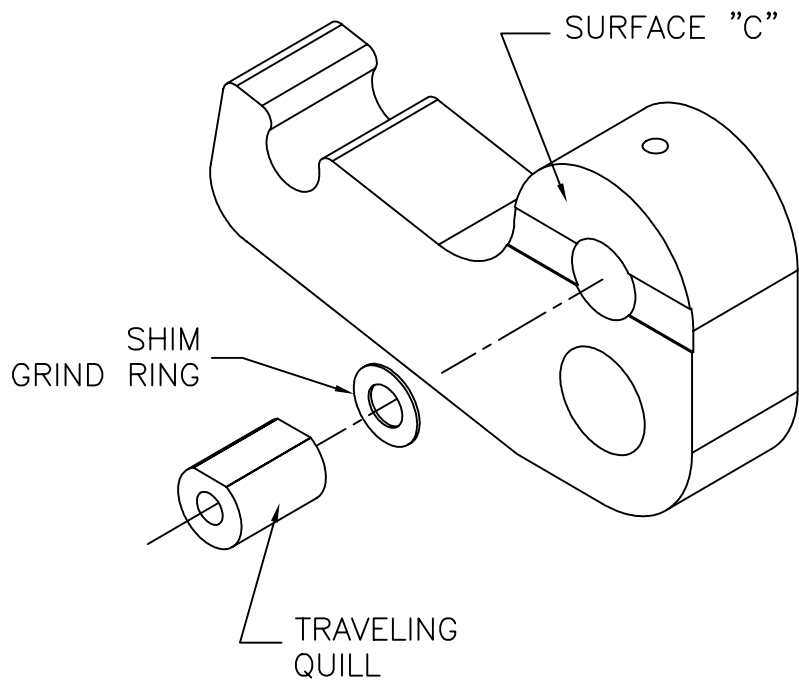
#4H CUTTER BODY

Fig. #2



#4H CUTTER ARM

Fig. #3





**SHARPENING & SETTING PROCEDURES  
FOR  
QUILL ON QUILL  
Straighten, Feed & Cut Off Machine**

**NOTE:** Wire hole cutting edge, and any surface leading to wire hole cutting edge should be free of all tool marks and/or grinding lines. (Figures 1, 2 )

**Step 1:** *Grind Traveling Quill(#49)*

Grind end (A) of Quill (opposite wire lead side) flat and perpendicular to body (B) within .0002. Remove enough material to clean and acquire sharp edge for the full diameter of the wire hole. See Fig #1

**NOTE:** After grinding, surface (A) must be lapped to ensure longevity. (Step 3)

**Step 2:** *Grind Stationary Quill(#47)*

Grind end (A) of quill (opposite wire exit side) flat and perpendicular to body (B) within .0002. Remove enough material to clean and acquire sharp edge for the full diameter of the wire hole. See Fig #1

**Step 3:** *Lapping Procedure*

- a. Use diamond lapping compound to remove all grinding lines.
- b. Radius break the wire hole cutting edge approx. .002 **for hard wire only.**

# Quill on Quill Setting Procedure

## **Step 1:** *Stationary Quill (#47)*

Set *stationary quill* (#47) with surface (A) (Fig 1) flush to surface (B). (Fig 2) Do not extend above surface (B). Use appropriate shim grind rings to set surface (A) of the *stationary quill* (#47) flush to surface (B) of the *cutter body* (#45).

## **Step 2:** *Traveling Quill (#49)*

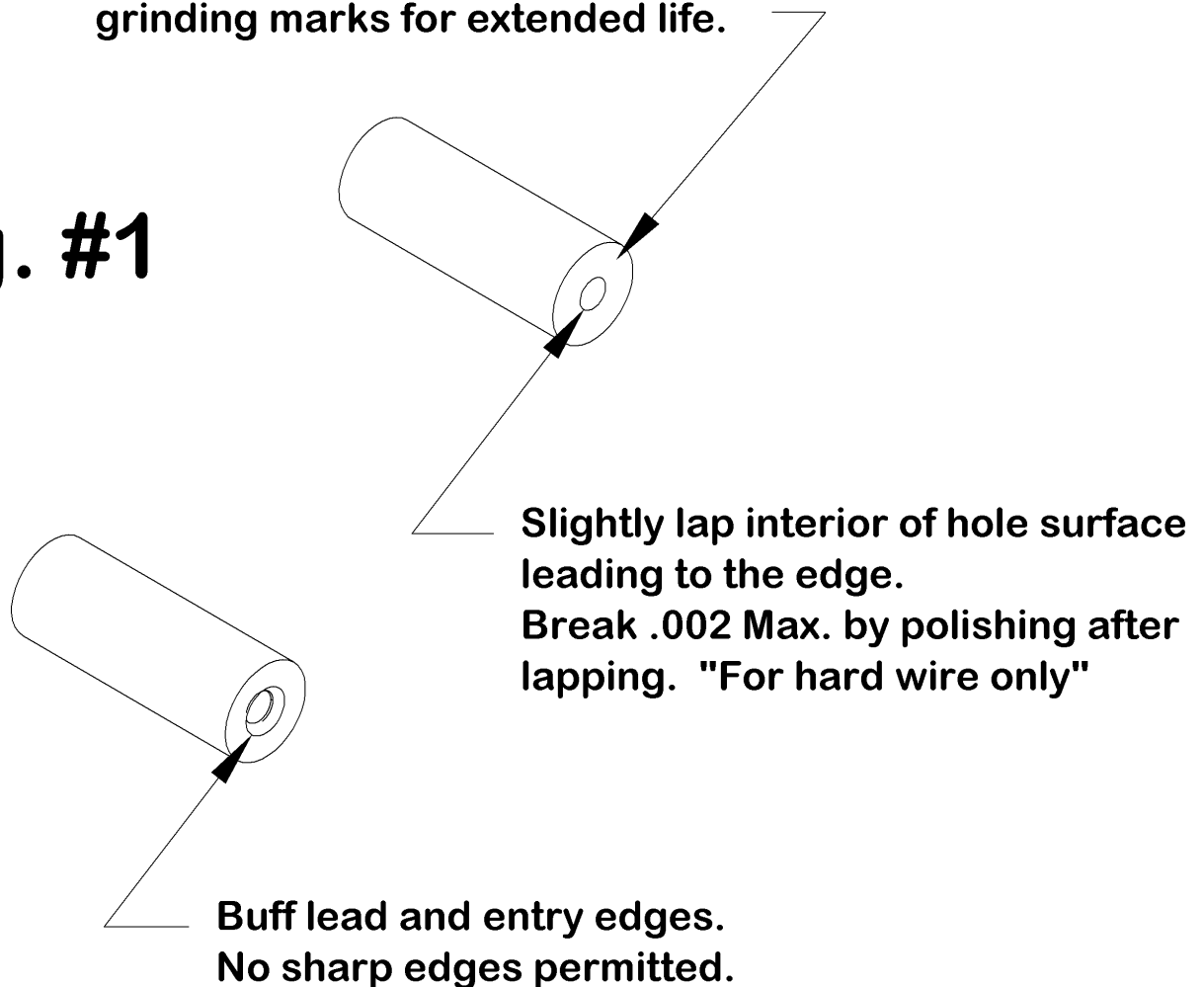
Set *traveling quill* (#49) with surface (A) (Fig 1) flush or below the *cutter arm* (#52) surface (C) (Fig 3) do not extend out from surface (C). Use appropriate shim grind rings to set surface (A) of the *travelling quill* (#49) flush or below surface (C) of the *cutter arm* (#52).

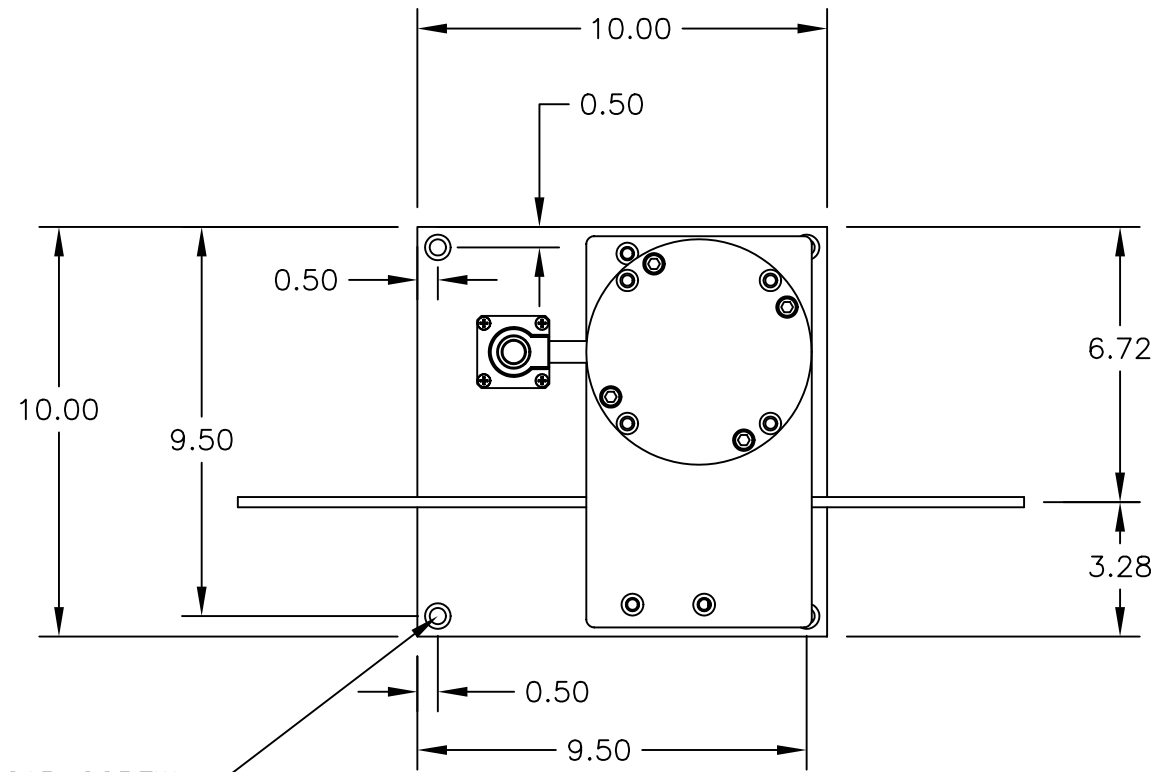
**NOTE:** Properly set quills should have clearance between surface (A) on *stationary quill* (#47) and surface (A) on *traveling quill* (#49) dependent on the wire type and hardness.

# Illustration:

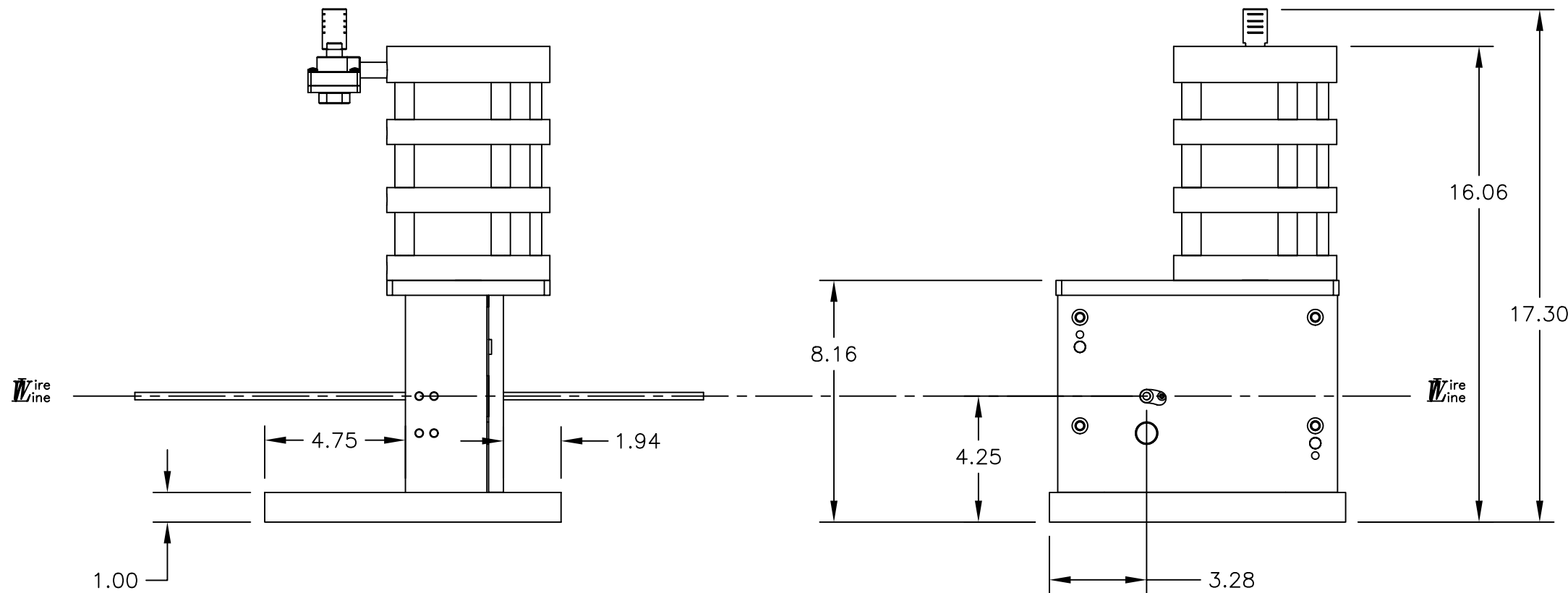
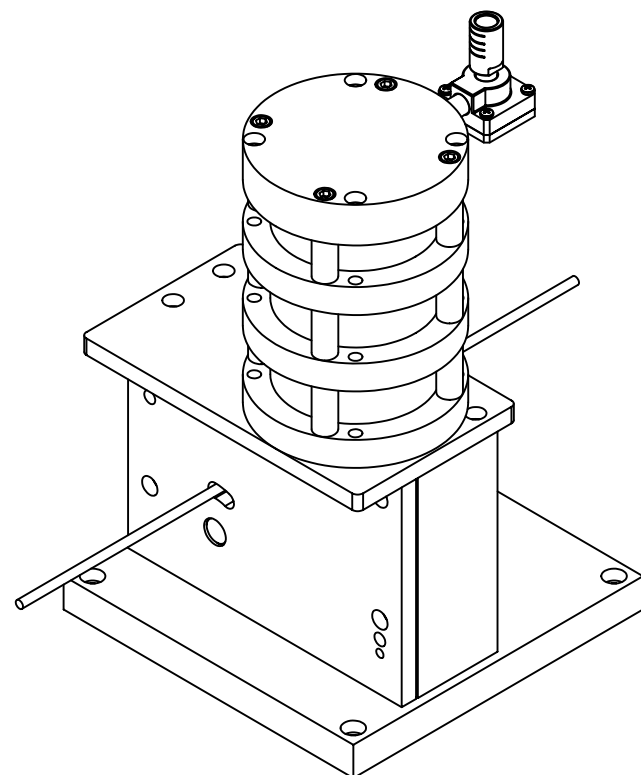
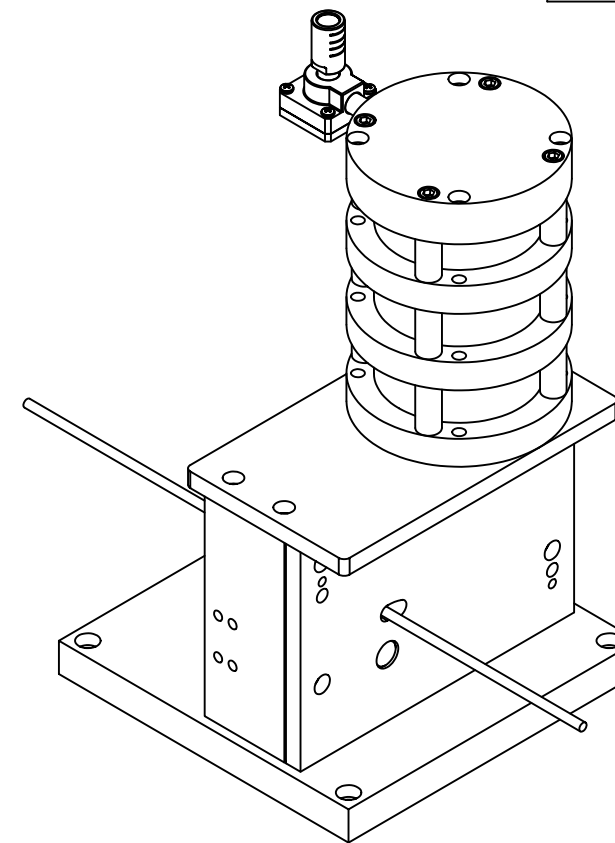
**Cut-off quill cutting face.  
Lap smooth to remove any  
grinding marks for extended life.**

**Fig. #1**





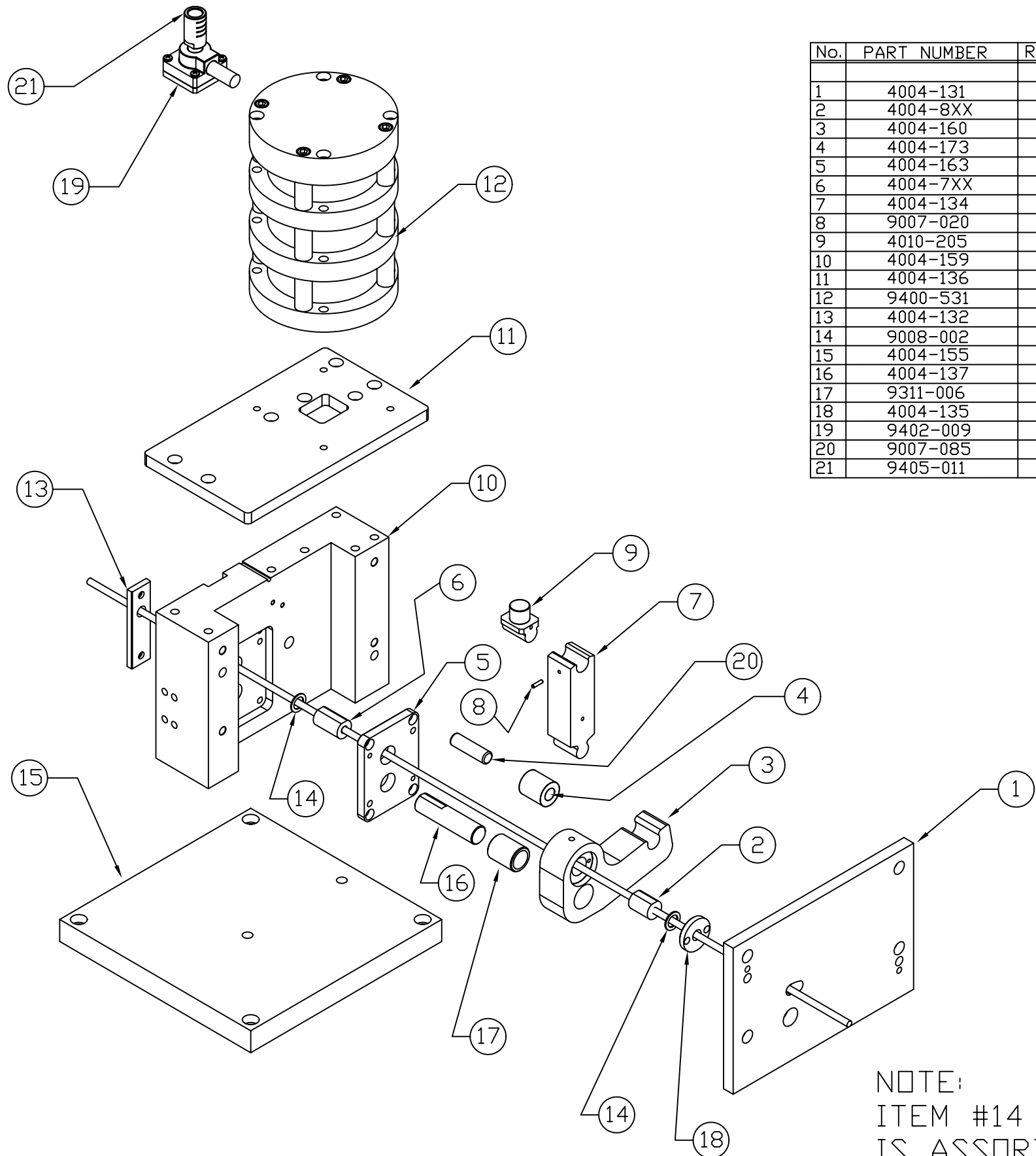
3/8" SOCKET CAP SCREW  
C'BORE Ø0.625 X .450 DP.  
(4) PLCS.



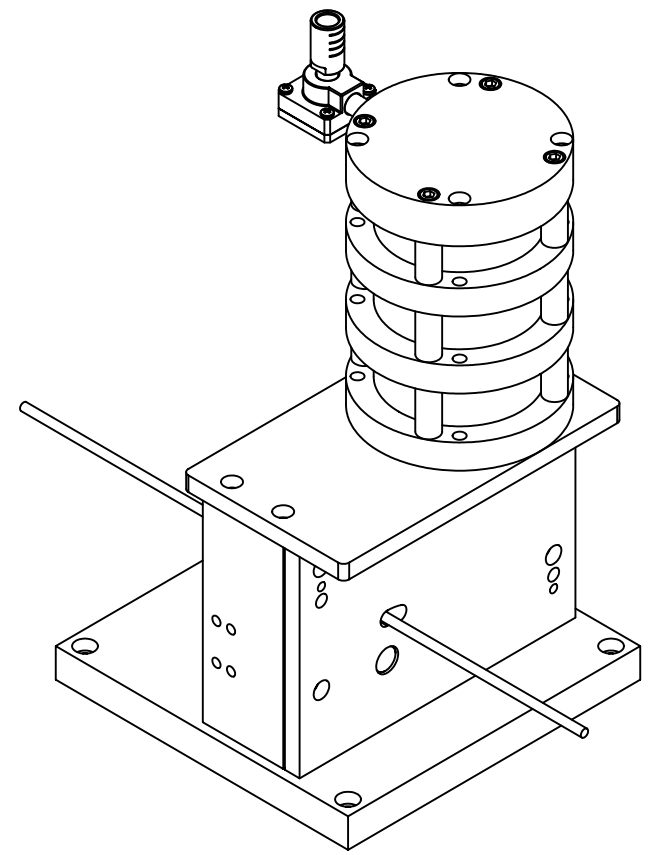
REV	ECN	CHG BY	DATE



TOLERANCE UNLESS OTHERWISE STATED		CAD	DRAWING / PART NO.
± 3'	FRACT +/- 1/16	DWN KPL	4004-05HA
± 0.0003	.X ± .032	CHK	PART NAME
± 0.0002	.XX ± .015	SCALE	STAND ALONE CUTTER HEAD DIMS
± 0.0005	.XXX ± .005	DATE	CUSTOMER
± 0.0005	.XXXX ± .0005	1/27/03	



No.	PART NUMBER	REV.#		QTY
1	4004-131	A	CUTTER ARM COVER	1
2	4004-8XX		TRAVELING QUILL	1
3	4004-160		CUTTER ARM	1
4	4004-173	A	SLEEVE	1
5	4004-163		CUTTER ARM BACKER	1
6	4004-7XX		STATIONARY QUILL	1
7	4004-134	E	CUTTER ARM LINK	1
8	9007-020		Ø0.125 X .50 LG DOWEL PIN	1
9	4010-205	C	CYLINDER PIVOT	1
10	4004-159	A	CUTTER BODY	1
11	4004-136		CYLINDER ADAPTER PLATE	1
12	9400-531		BIMBA TRIPLE ACTING	1
13	4004-132		QUILL BACKER BLOCK	1
14	9008-002		ADJUSTMENT SHIM (AS REQ. PACKAGE)	2
15	4004-155	A	MOUNTING BASE PLATE	1
16	4004-137		CUTTER ARM PIVOT SHAFT	1
17	9311-006		DILITE BUSHING	1
18	4004-135	B	CUTTER ARM QUILL BACKER CAP	1
19	9402-009		DUMP VALVE ASSY	1
20	9007-085		Ø0.500 DOWEL	1
21	9405-011		SILENCER	1



NOTE:  
 ITEM #14 - ORDERED IN A PACKAGE THAT  
 IS ASSORTED AND SIZES TO BE DETERMINED  
 @ ASSY. FOR CORRECT SPACING.

REV	ECN	CHG BY	DATE



TOLERANCE UNLESS OTHERWISE STATED	CAD	DRAWING / PART NO.
± 3°	DWN KPL	4004-05H
± 0.0003	CHK	PART NAME
± 0.0002	SCALE	STAND ALONE CUTTER HEAD
± 0.0005	DATE 1/27/03	CUSTOMER
± 0.0005		EXPLODED VIEW

## **Maintenance:**

Always keep the *Cut System* moving components clean and lightly oiled. Keep the *traveling cutter arm* (#52) greased. And if you have a *Precision Wire Straightener*, please keep all moving parts clean and lightly oiled.

## **Troubleshooting:**

1. Check for power at the machine.
2. Check air supply and pressure.

**IF ALL OF THE ABOVE TESTS FAIL PLEASE CALL TAK SUPPORT:**

**(860) 583-0517**

**TAK ENTERPRISES INC. ASSUMES NO RESPONSIBILITY FOR NEITHER INJURY OF PERSON OR PRODUCT OR ANY LIABILITY RESULTING FROM THE PURCHASE OF PRODUCTS SOLD WITH THE INTENTION OF MODIFYING OR ATTACHING TO EXISTING EQUIPMENT. ANY EQUIPMENT MODIFIED FROM THE ORIGINAL CONFIGURATION STATED ON THE PURCHASE ORDER OR CONSIDERED AS MODIFIED CONFIGURATION BY TAK, WILL NOT BE COVERED BY ANY GUARANTY OF OPERATION OR FUNCTION. ANY SUPPORT FOR THE MODIFIED EQUIPMENT WILL BE DETERMINED BY TAK ON AN INDIVIDUAL INCIDENT BASIS.**



## **WARNING**

The operator of the equipment offered herein must not be in or near the point-of-operation of any such machine or operating parts of any equipment installed on a machine, or bodily injury could result. The EMPLOYER must conspicuously display adequate warning signs on the machine with proper warnings for the machine and the specific application to which the machine and equipment are being applied.

OSHA Sections 1910.147, 1910.211, 1910.212 and 1910.217 contain installation information on the required distance between danger points and point-of-operation guards and devices. No specific references have been made to which paragraph of OSHA 1910.147, 1910.211, 1910.211, 1910.217 or any other applicable sections because the paragraphs may change with each edition of the publications of OSHA provisions.

All equipment manufactured by TAK Enterprises is designed to meet the construction standards of OSHA in effect at the time of sale, however, the EMPLOYER ultimately installs the equipment and is therefore responsible for installation, use, application, training and maintenance, as well as ensuring that adequate warning signs are visible on the machine onto which the equipment will be installed.

OSHA states that the EMPLOYER must ensure that safe operating methods designed to control or eliminate hazards to operating personnel are developed and employed, and that operators are trained in safe operation of the equipment.

It shall be the responsibility of the EMPLOYER to establish and follow a program of periodic and regular inspections and maintenance of machinery to insure that all their parts, auxiliary equipment and safeguards are in a safe operating condition and adjustment. Each machine should be inspected and tested no less than weekly to determine and confirm that the operating condition of the machine meets safety standards. Necessary maintenance or repairs to machinery, auxiliary equipment and safeguards shall be performed and completed before the machine is operated. The EMPLOYER shall maintain accurate records of these inspections and maintenance work performed.

It is not the responsibility of TAK Enterprises to provide notification to the user of this equipment concerning future changes in State or Federal laws, or construction standards.

## **SAFETY PROGRAM**

Accident free operation will result from a well developed, management sponsored and enforced safety program.

Of vital importance to the success of a safety program is the proper selection of guards and devices. However, there is no safety device that will insure "automatic" or "fool proof" safety to your operation.

Of equal importance to the proper selection of machine guards and devices is effective training of operating personnel. Each individual must be trained in the proper operation in accordance with established standards developed for the guards or safety devices employed, with emphasis on why specific guards and safety devices have been provided on the equipment. Rules for safe operation should be in writing, available to company personnel and enforced at all times.

An effective safety program must include regularly scheduled inspections and maintenance of all equipment, with accurate records to reflect the successful completion of inspections and maintenance.

To ensure that a safe working environment is maintained at all times, management, supervisors, safety engineers and all production employees must assume their proper share of responsibility to establish and maintain an effective safety program. All members of the company community should be involved so that an accurate view of the specific areas within the facility that require attention are addressed.

To assist you in the development of and maintenance of an effective safety program, many trade groups and safety related organizations provide guidelines and recommendations that are available to you. However, you must know when and how to apply these guidelines. The equipment manufacturers provide information to assist you in properly adjusting and maintaining your equipment. It is recommended that the employer comply with these guidelines at all times.