

TECHNICAL MANUAL

OPERATOR'S, ORGANIZATIONAL, DIRECT SUPPORT  
AND GENERAL SUPPORT MAINTENANCE  
MANUAL INCLUDING REPAIR PARTS LIST

FOR

UNDERCUTTER ARMATURE  
MODEL #7  
NSN 4940-00-270-1594  
HULLHORST TOOLS



TECHNICAL MANUAL

No. 9-4940-409-14&P



HEADQUARTERS  
DEPARTMENT OF THE ARMY  
WASHINGTON, DC, 6 August 1981

**OPERATOR'S ORGANIZATIONAL, DIRECT SUPPORT  
AND GENERAL SUPPORT MAINTENANCE MANUAL  
INCLUDING REPAIR PARTS LIST**

**FOR**

**UNDERCUTTER ARMATURE**

**REPORTING ERRORS AND RECOMMENDING IMPROVEMENTS**

You can help improve this manual. If you find any mistakes or if you know of a way to improve the procedures, please let us know. Mail your letter, DA Form 2028 (Recommended Changes to Publications and Blank Forms), or DA Form 2028-2, located in the back of this manual direct to: Commander, US Army Armament Materiel Readiness Command, ATTN: DRSAR-MAS, Rock Island, IL 61299. A reply will be furnished directly to you.

**NOTE**

This manual is published for the purpose of identifying an authorized commercial manual for the use of the personnel to whom this equipment is issued.

Manufactured by: Hullhorst Tools  
227 Wamba Avenue, PO Box 3344, Station C  
Toledo, OH 43607

Procured under Contract No. DAAA09-77-C-6131

This technical manual is an authentication of the manufacturers' commercial literature and does not conform with the format and content specified in AR 310-3, Military Publications. This technical manual does, however, contain available information that is essential to the operation and maintenance of the equipment.

INSTRUCTIONS FOR REQUISITIONING PARTS

NOT IDENTIFIED BY NSN

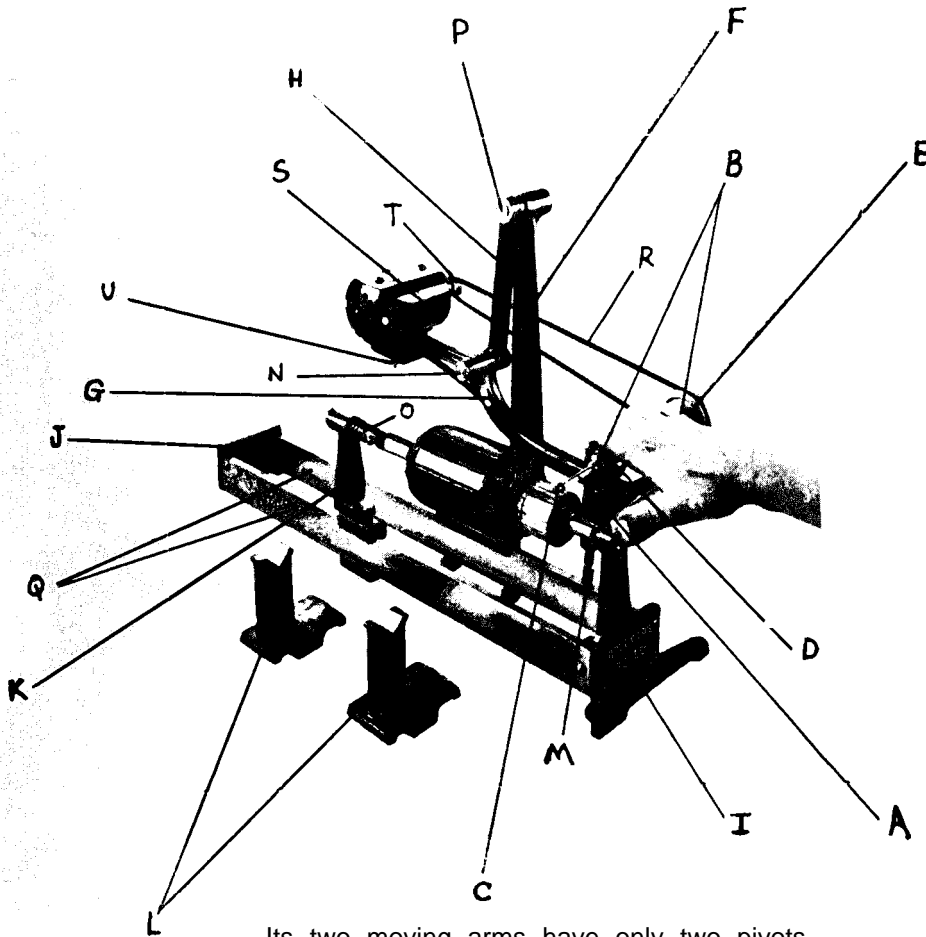
When requisitioning parts not identified by National Stock Number, it is mandatory that the following information be furnished the supply officer.

- 1 - Manufacturer's Federal Supply Code Number - 29695
- 2 - Manufacturer's Part Number exactly as listed herein.
- 3 - Nomenclature exactly as listed herein, including dimensions, if necessary.
- 4 - Manufacturer's Model Number - 7
- 5 - Manufacturer's Serial Number (End Item)
- 6 - Any other information such as Type, Frame Number, and Electrical Characteristics, if applicable.
- 7 - If DD Form 1348 is used, fill in all blocks except 4, 5, 6, and Remarks field in accordance with AR 725-50.

Complete Form as Follows:

- (a) In blocks 4, 5, 6, list manufacturer's Federal Supply Code Number - followed by a colon and manufacturer's Part Number for the repair part.
- (b) Complete Remarks field as follows:  
Noun: (nomenclature of repair part)  
For: NSN: 4940-00-270-1594  
Manufacturer: Hullhorst Tools, 227 Wamba Ave., PO Box 3344, Sta. C  
Toledo, OH 43607  
Model: #7  
Serial: (of end item)  
  
Any other pertinent information such as Frame Number, Type, Dimensions, etc.

## MICA UNDERCUTTER No. 7



Its two moving arms have only two pivots, making operation exceedingly easy. Sturdy one piece cutter-spindle, rotated with one belt to motor.

In addition to centers, provided with pair of V blocks (that set on bed) to hold armatures having no centers in shafts.

Undercuts all auto, bus and truck armatures, or other small armatures. Average commutator is undercut in one or two minutes. No. 7 is used by more service shops than any other undercutter.

Adjustable stop-gauge controls depth of undercut. Spring center on rear bracket. Rigid bed has 3-point suspension legs and rests firmly on bench.

**TM 9-4910-409-14&P**

TO OPERATE NO. 7 UNDERCUTTING MACHINE

- 1st. Place armature between the centers with commutator toward you.
- 2nd. Slide the upright (F) to a position so that the cutter is normally about midway between the two ends of the commutator.
- 3rd. Adjust depth guide screw (M).
- 4th. Sink the cutter into the mica next to the rise and draw it forward. The thumb and Index finger afford enough grip directly above the depth guide screw. (As shown on illustration). Avoid twisting the motor arm.

TO ASSEMBLE NO. 7 UNDERCUTTING MACHINE

- 1st. Place the upright assembly (Includes F & H) upon the base assembly (includes I, J and both Q's)
- 2nd. Attach motor arm assembly (includes G, S, T & U) where light brown tag is tied, to upright assembly. When doing this, press the two parts firmly together with one hand and tighten set screw with the other.
- 3rd. Insert complete spindle. When the cutter on the spindle is in alignment with the centers on the machine, the pulley will clear the upright at the top about  $1/16$  inch.
- 4th. Put on the belt.

## NO. 7 UNDERCUTTER

## PARTS LIST

KEY NO.	PART NO.	DESCRIPTION
A.	7-1	SPINDLE SHAFT
B.	7-1	SPINDLE BUSHINGS (TWO)
C.	7-3	SPINDLE SCREW
D.	7-4	SPINDLE QUILL
E.	7-5	SPINDLE PULLEY
	7-1S5	SPINDLE COMPLETE (CONSISTS OF A-B-C-D-E)
F.	7-6	UPRIGHT CASTING
G.	7-7	MOTOR ARM CASTING
H.	7-8	LINK CASTING
I.	7-9	FRONT CENTER BRACKET CASTING
J.	7-10	REAR BASE CASTING
K.	7-11	SLIDING CENTER CASTING
L.	7-12	V-BLOCK CASTINGS (PER PAIR)
M.	7-13	DEPTH GUIDE SCREW
N.	7-14	PIVOT STUD
O.	7-15	SPRING CENTER WITH SPRING
P.	7-16	SHOULDER CENTER
Q.	7-17	BED BARS (TWO)
R.	7-18	V BELT
S.	7-19	MOTOR (DAYTON)
T.	7-20	MOTOR PULLEY
U.	7-21	SWITCH
V.	7-22	CORD & PLUG (NOT SHOWN ON ILLUSTRATION)





By Order of the Secretary of the Army:

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