DEPARTMENT OF THE ARMY TECHNICAL MANUAL

OPERATOR'S MANUAL

FIXTURE, LATHE, METAL CUTTING FOR 2 INCH DIAMETER ROUND OR 2 INCH SQUARE STOCK, 360 DEGREE INDEX RING, 12-1/2 HIGH, 5 WIDE, 3-7/8 VERTICAL TRAVEL (NUMERIC PRODUCTS COMPANY MODEL 312) (3465-022-8817)

Headquarters, Department of the Army, Washington, D. C.
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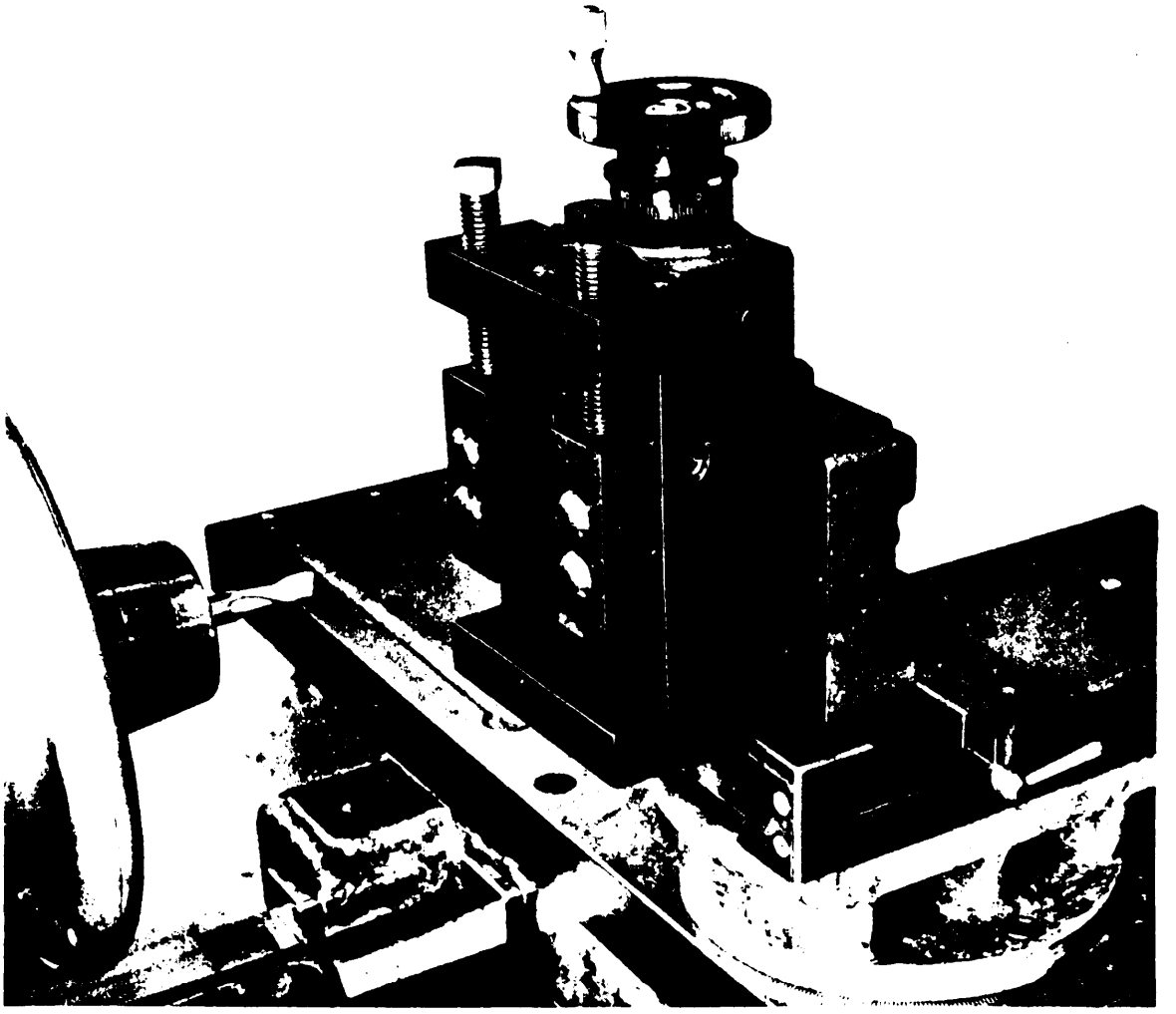
Model 312 - Milling Fixture



This manual illustrates some of the most common uses of this very versatile lathe attachment. It mounts quickly and firmly on the compound of an engine or a tool room lathe. It provides a convenient but rugged way of holding and locating different sizes and shapes of work pieces for machining. The machining is performed by cutting tools (i.e. end mills, drills etc.) held in and rotated by the spindle. The collets or chucks supplied with the lathe are normally used to hold these cutting tools.

In addition to holding the workpiece, the Model 312 Milling Fixture provides the means of moving the workpiece in a vertical direction. The amount of movement can be read on a calibrated collar and vernier assembly to one ten-thousandth of an inch (.0001). The cross-slide of the lathe is used for cross travel, and the carriage itself, together with the compound, is used to bring the workpiece to cutter and to set and measure the depth of cut.

Round workplaces as large as 2-1/16" in diameter may be rotated or indexed by a protractor unit supplied with the fixture. A vernier provides direct reading to one degree of arc.

m alphabetical sequence of items which are furnished with, and must be turned in with, the end item.

b. Items Troop Installed or Authorized List. Not applicable.

3. Explanation of Columns

The following provides an explanation of columns found in the tabular listings:

a. Federal Stock Number. Indicates the Federal stick number assigned to the item and will be used for requisitioning purposes,

b. Description. Indicates the Federal item name and a minimum description required to identify the item. The last line indicates the reference number followed by the applicable Federal Supply Code for Manufacturer (FSCM) in parentheses. The FSCM is used as an element in item identification to designate manufacturer or distributor or Government agency, etc., anti is identified in SB 708-42. Items that are included in kits and sets and listed below the name of the kit or set with quantity of each item in the kit or set indicated in front of the item name,

c. Unit of Measure (U/M). indicates the standard or basic quantity by which the listed item is used in performing the actual maintenance function. This measure is expressed by a two-character alphabetical abbreviation, e.g., ea, in., pr, etc., and is the basis used to indicate quantities. When the unit of measure differs from the unit of issue, the lowest unit of issue that will satisfy the required units of measure will be requisitioned.

d. Quantity Furnished with Equipment (Basic Issue Items Only). Indicates the quantity of the item furnished with the equipment.

e. *Quantity Authorized (Items Troop Installed or Authorized Only),* Indicates the quantity authorized to be used with the equipment.

f. Illustration (Basic Issue Items Only). This column is divided as follows:

(1) *Figure Number,* Indicates the figure number of the illustration. in which the item is shown.

(2) *Item Number.* Indicates the item number used to identify each item called out in the illustration.

Section II. BASIC ISSUE ITEMS

(1) Federal stock No.	(2) Description: Usable on Code	(3) Unit of meas	(4) Qty furn with equip	(5) Illustration	
				(a) Fig. No.	(b) Item No.
5120-240-5292	KEY, SOCKET HEAD SCREW: hex type, L-hdl, 1/8 across fl, 2-5/32 nom lg arm lg.	EA	1	A-1	7
5120-240-5300	KEY, SOCKET HEAD SCREW: hex type, L-hdl, 8/16 across fl, 2-21/32 nom lg arm lg.	EA	1	A-1	6
5120-240-5274	KEY, SOCKET HEAD SCREW: hex type, L-hdl, 5/16 across fl, 3-21/32 nom lg arm lg.	EA	1	A-1	5
5120-198-5390	KEY, SOCKET HEAD SCREW: hex type, L-hdl, 3/8 across fl, 4-11/32 nom lg arm lg.	EA	1	A-1	4