



		MODEL NO'S		
		3406	3606	
		4" STROKE	6" STROKE	
CODE	QUAN	PART NO'S	PART NO'S	DESCRIPTION
1	1	21725-01	21725-02	CYLINDER ASSEMBLY
2	1	21724-01	21724-02	HOUSING ASSEMBLY
3	1	21877-02	21877-03	LEVER ASSY FOR ADVANCE & RETRACT STROKE CONTROL
4	1	21873-02	21873-03	FRONT BRACKET ASSEMBLY
5	1	21871-02	21871-03	CAM BAR ASSY FOR ADVANCE & RETRACT STROKE CONTROL
6	2	20680-2	20680-3	CAM BAR COVER
7	1	21726-01	21726-02	DIRECTIONAL VALVE ASSEMBLY
8	1	21906-01	21906-01	MANIFOLD ASSEMBLY
9	1	21870-02	21870-02	SWITCH BOX CONTROL ASSY

HOLOMATIC LEAD SCREW  
 ASSY-BASIC UNIT-SERIES "A3"  
 HAUSE MACHINES INC  
 MONTPELIER, OHIO  
 OR PH CK SCALE DATE  
 REF NO FULL 11-14-59  
 21902-01

**COMPLETE BASIC UNIT SUB-ASSEMBLIES**  
**Series A3 - Holomatic Lead Screw (with Rapid Travel)**  
 Ref. Dwg. 21902-01, 4" and 6" Strokes

**GENERAL DESCRIPTION**

The nine assemblies that compose a complete basic unit are shown detached with their relative positions indicated. Their features and uses are described on separate bulletin sheets.

The spindle assembly, drive, belt housing, and motor are accessories and not part of the basic unit and, therefore, are omitted.

**CODE 1. CYLINDER ASSEMBLY**

The air cylinder surrounds the central quill section which carries the spindle assembly to and fro. It is inserted and removed from the housing in the cartridge form as shown. (Bul. 21725-00.)

**CODE 2. HOUSING ASSEMBLY**

This is the frame and enclosure. It supports all components and sub-assemblies of the basic unit. Belt housing assemblies are attached to the rear and spindle supports are attached to the front face. A stroke control actuator and a stroke adjustment assembly are removable and included in this assembly. (Bul. 21724-00.)

**CODE 3. LEVER ASSEMBLY FOR ADVANCE AND RETRACT STROKE CONTROL**

The block acts as a fulcrum and is mounted to a mating step on the housing. The forward end of the shaft mounts on a stud. The followers ride on the cam bars and a detachable lever at the rear of each operates a switch in the Code 9 switch box. (Bul. 21877-00.)

**CODE 4. FRONT BRACKET ASSEMBLY**

This assembly consists of a Lead Screw and Nut (any pitch), with an enclosure and the support members for the stroking spindle. Optional spindles are **not** included. Instructions for pitch change and disassembly are described. (Bul. 21873-00.)

**CODE 5. CAM BAR ASSEMBLY — ADVANCE AND RETRACT STROKE CONTROL**

Cam bars are mounted to the front bracket and guided thru corresponding holes in the forward

end of the housing. Each spiral cut bar engages the corresponding lever assembly to operate a switch. (Bul. 21871-00.)

**CODE 6. CAM BAR COVER**

This consists of two cylindrical enclosures for the cam bars and the operator's safety. They are mounted between the front of the manifold and the housing. (Bul. 20680-0.)

**CODE 7. DIRECTIONAL VALVE ASSEMBLY**

A four-way valve is mounted on the top central section of the housing between the front and manifold. It alternately supplies air to the metering valves in the manifold assembly for advance motion of the spindle and to an external port which may be connected to operate auxiliary equipment requiring air power. (Bul. 21726-00.)

**CODE 8. MANIFOLD ASSEMBLY**

A manifold mounted on top at the rear of the housing is the enclosure for air flow control. A needle valve assembly provides an adjustable orifice to regulate the advance rapid rate, which is sometimes desirable for smooth operation. An opposing check valve serves to speed up the retract motion. (Bul. 21906-01.)

**CODE 9. SWITCH BOX CONTROL ASSEMBLY**

This assembly consists of four micro switches with operating levers and sealed actuators and two solenoid pilot bleeder valves mounted on the switch box. The switches and solenoids are connected to terminal strips **within the box as shown on the wiring diagram**. (Switch box assembly Bul. 21870-00.) (Wiring diagram Bul. 21913-01/21914-01).

Yoke operated die heads and taps can also be operated by the addition of solenoid valves as required by the type of threading equipment to be used. Refer to drawing 21832-00 for yoke operating equipment.

**GENERAL MAINTENANCE**

The construction and arrangement of assemblies that make up a basic unit affords considerable freedom of choice in assembly and service work. Complete maintenance by the cartridge renewal method is within the capability of relatively inexperienced personnel.

A complete assembly job starting with Code 2 housing should begin by removal of the stroke control actuator, followed by installation of the Code 1 cylinder assembly. Then re-mount the actuator and check for freedom of movement with the stroke control and proper timing of the mating gear on the position indicator. Following this, the normal sequence would be Code Nos. 6, 8, 9, 7, 5, 4, 3.

In disassembly or service work, the following assemblies can be removed without interference in any sequence: Code Nos. 7, 4, 5, 3, 9. Remove the stroke control actuator before code 1 cylinder assembly.

For the remaining assemblies, Code 7 precedes Code 8 which precedes Code 6.

Complete sets of seals are available for users with adequate means and personnel who wish to do their own repair work. Generally, spare assemblies Code Nos. 1, 7, and 8 can be most convenient because of the ease and speed of replacement, and their repairs can be made at leisure.

Information in detail for this work is given in the individual sub-assembly bulletins.