### COMPLETE BASIC UNIT SUB-ASSEMBLIES

#### Series A4 — "Balanced Air"

Ref.: Dwg. 21775-01, 4", 6", and 10" Strokes

#### GENERAL DESCRIPTION

The nine assemblies that compose a complete **basic unit** are shown detached with their relative positions indicated. Options are shown or listed on four assemblies. Selection of options is based on the application. 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. 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 2. 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 3. 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 5. 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 6. FRONT BRACKET ASSEMBLY

This bracket secures the spindle bearings in front and strokes the cam bars. An integral, short cylindrical pilot extension centralizes non-rotating quill attachments. (Bul. 21720-01.)

# CODE.7A. MANIFOLD ASSEMBLY — ADVANCE STROKE CONTROL ONLY

# CODE 7B. MANIFOLD ASSEMBLY — ADVANCE AND RETRACT STROKE CONTROL

A manifold mounted on top at the rear of the housing is the enclosure for the air flow control section of the unit. It contains the valves that regulate the flow of air to direct and regulate the spindle stroking motion. As the title implies, they are furnished for one-way and two-way control with one and two sets of valves. (Bul. 21103-00.)

### CODE 8A. CAM BAR ASSEMBLY — ADVANCE STROKE CONTROL ONLY

### CODE 8B. 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. They are furnished plain cylindrical and with spiral groove. A spiral cut bar engages the corresponding lever assembly to operate a plunger and produce valve action in the manifold. A plain cylindrical bar functions only as a guide. A pair of spiral cut bars and their adjusting knobs are required for advance and retract stroke control. (Bul. 21722-00.)

## CODE 9A. LEVER ASSEMBLY FOR ADVANCE STROKE CONTROL ONLY