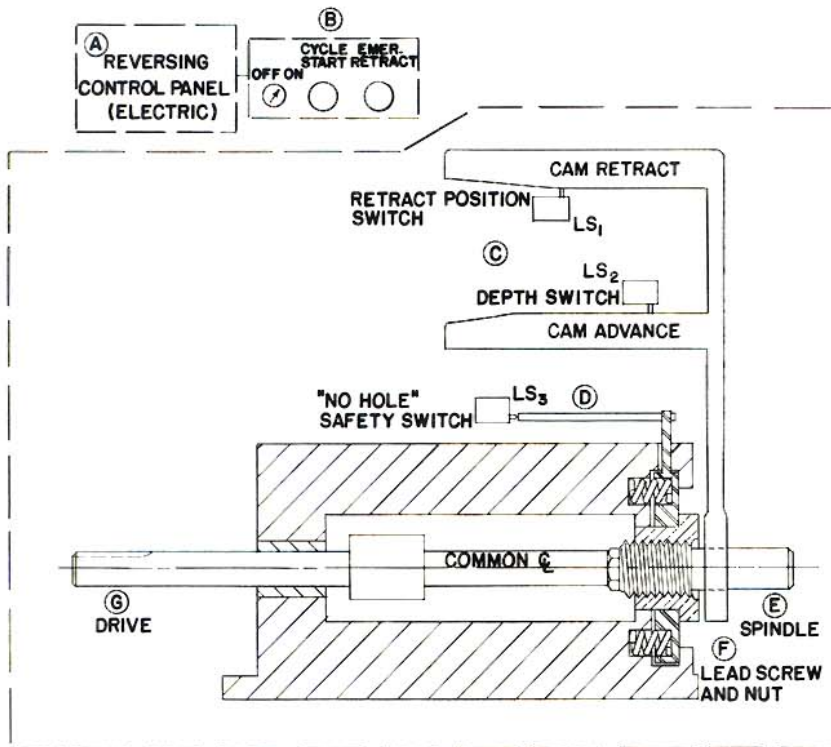




**HAUSE MACHINES**  
MONTPELIER, OHIO 43543

## SERIES A7 OPERATING PRINCIPLE

### Lead Screw Holomatic Power Feed Units Without Rapid Travel



### SEQUENCE OF OPERATION

Illustration shows Holomatic spindle at full retract. Electric circuit selector switch at (B) is ON.

Momentarily depress the Cycle Start button at (B) which energizes the motor, causing it to run forward and spindle (E) to advance (feed controlled by the lead screw and nut (F)). As spindle advances, LS<sub>1</sub> at (C) is released. When spindle advances to preset depth, LS<sub>2</sub> at (C) is released causing motor to reverse and spindle to retract. As spindle reaches preset retract position LS<sub>1</sub> is picked up plugging motor to stop and cycle is complete.

Depressing Emergency Retract button at (B) breaks the circuit, interrupting the cycle, which will cause the spindle to return to retracted position.

"No Hole" Safety Switch LS<sub>3</sub> at (D) is actuated if a "no hole" or an obstruction to the forward motion occurs. This automatically reverses motor and returns spindle to retracted position.

### COMPONENT FUNCTION

- (A) REVERSING CONTROL PANEL provides electric power in proper sequence for motor starting, reversing and plug stopping.
- (B) PUSH BUTTON STATION provides manual controls for cycle actuation and emergency retract.
- (C) STROKE CONTROL monitors position of Spindle.
  - LS<sub>1</sub> Cam Retract—plugs motor to stop at end of cycle.
  - LS<sub>2</sub> Cam Advance—adjusts thread depth.
- (D) SAFETY SWITCH LS<sub>3</sub> causes spindle to return to fully retract position when a "no hole" or obstruction to forward motion occurs.
- (E) SPINDLE moves with lead screw and mounts taps and dies.
- (F) LEAD SCREW and NUT develops spindle feed.
- (G) DRIVE incorporates a telescoping spline to transfer the rotational power of a motor to the spindle.