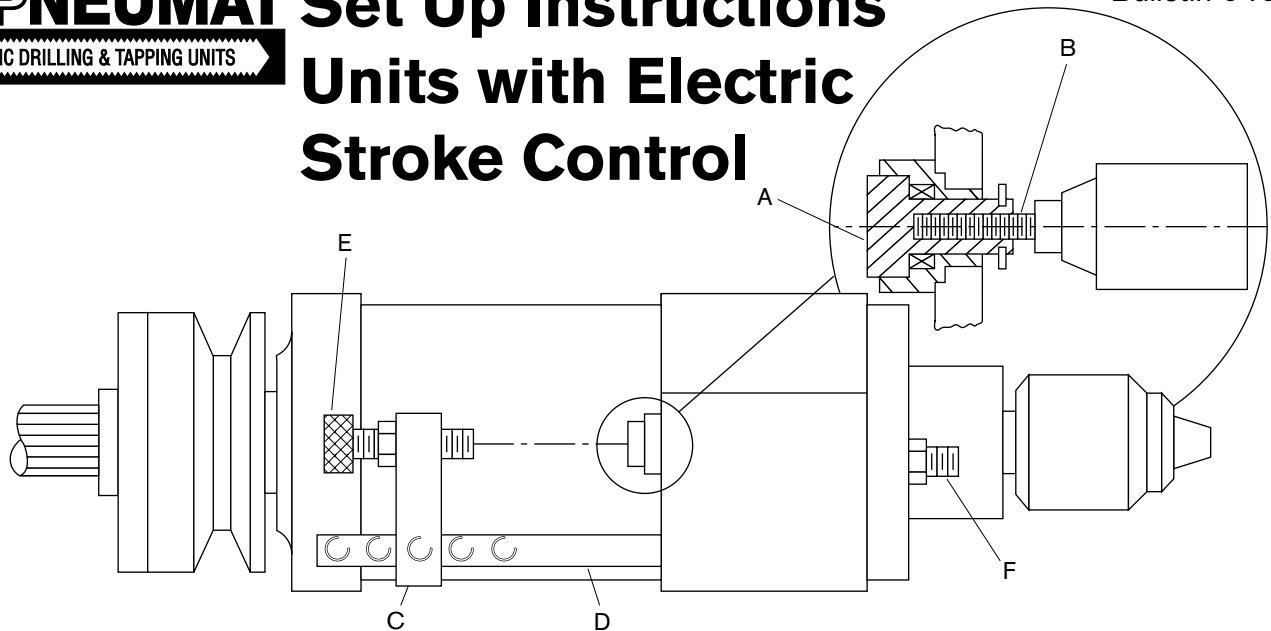


# HYPNEUMAT Set Up Instructions

## Units with Electric Stroke Control

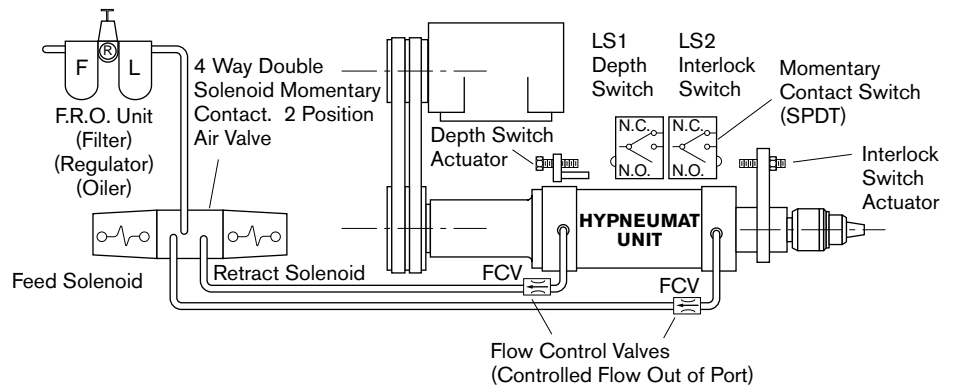
Bulletin 6401-99

AUTOMATIC DRILLING & TAPPING UNITS



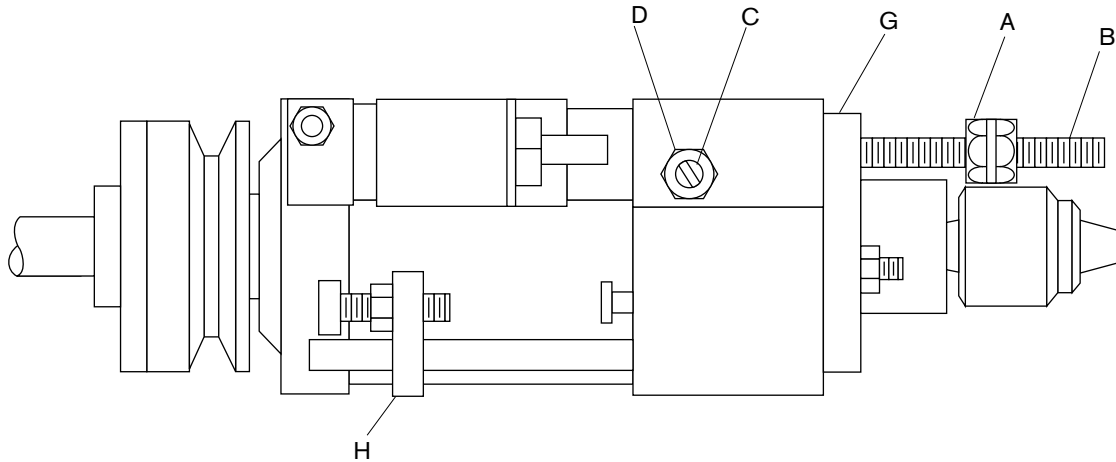
1. With Unit in Full Retract position, adjust Interlock Adjusting Screw ("F") to Actuate Interlock Switch.
2. Set Depth Switch – Move Depth Actuating Cam ("C") along Actuating Rod ("D") for approximate Stroke Length ("L") (Detents in Actuating Rod are on 1/2" centers). Lock Set Screw. Set Depth Adjusting Screw ("E") for Fine Depth Adjustment. Adjusting Screw is 28 pitch. (One turn equals .036").
3. Check for Switch Actuation – Push in Actuating Button ("A") to make sure Switches (Depth & Interlock) inside Switch Box actuate. If Switches do NOT actuate, adjustment is made by adjusting Set Screw ("B") with actuating Button ("A") pushed in. (Use 5/64 Allen Wrench.) NOTE: Switches must NOT remain actuated when Actuating Button ("A") is released. (NOTE: Step 3 NOT used on 200 series Hypneumat Unit Stroke Control set-up.)
4. **Overtravel Protection:**  
**200 Series Hypneumat Units** – A Stop Collar is provided on actuating rod. Set Stop Collar to bottom against stroke control base just after Depth Switch is actuated (Step2).  
**300, 400 & 500 Series Hypneumat Units** – Overtravel protection is built into Switch Actuation Assembly (see insert). Switches supplied are Single Pole-Double Throw. Double Pole-Double Throw Switches are available.

## Set Up Procedure For Drilling



1. Set Air Pressure Gauge for proper air pressure. Air pressure is obtained by dividing drill point thrust per drill by the figure listed below: (For drill point thrust, see Drill Thrust Chart in Hypneumat Catalog.)

200 Series Hypneumat Units ..... Divide by 2.3	SP-500 Series Hypneumat Units ..... Divide by 17.0
SP-300 Series Hypneumat Units ..... Divide by 6.0	DQ-500 Series Hypneumat Units ..... Divide by 16.5
DQ-300 & M-300 Units ..... Divide by 4.6	DQ-800 Series Hypneumat Units ..... Divide by 35.3
DQ-46 Hypneumat Units ..... Divide by 11.0	
2. Adjust feed flow control valves to allow the tool to approach the work reasonably fast without excessive dive into part. Adjust retract flow control valve for fast retract but slow enough to prevent excessive hammer type action. Speed of a retract also effects chip removal.
3. Hypneumat recommends that for most operations each unit be controlled by its own four-way air valve and regulator and that each system should be equipped with a filter and oiler. When using flow control valves, they should be mounted adjacent to the port of the Hypneumat unit with controlled flow out of the port.



The Hypneumat Hydra-Brake is a self contained hydraulic cylinder with an adjustable feed rate through a Needle Valve. The Hydra-Brake is mechanically actuated by the Quill Clamp ("G") of the Hypneumat Stroke Control Assembly. The forward stroke of the Hydra-Brake is controlled through the needle valve. The return stroke of the Hydra-Brake is not restricted.

1. Set Depth Cam ("H") for proper stroke length. (See 6401-99).
2. Set Adjusting Nuts ("A") on Actuating Rod ("B") for actuation by Quill Clamp ("G") at the desired point of stroke. Hydra-Brake is reset automatically by the Quill Clamp ("G") on the retract stroke of the Hypneumat unit. Actuating Rod ("B") is replaceable and can be cut off to suit.
3. The feed rate is determined by Needle Valve ("C"). (Slow Feed - Turn Clockwise) (Fast Feed - Turn Counter Clockwise)
4. Locknut ("D") secures Needle Valve setting.

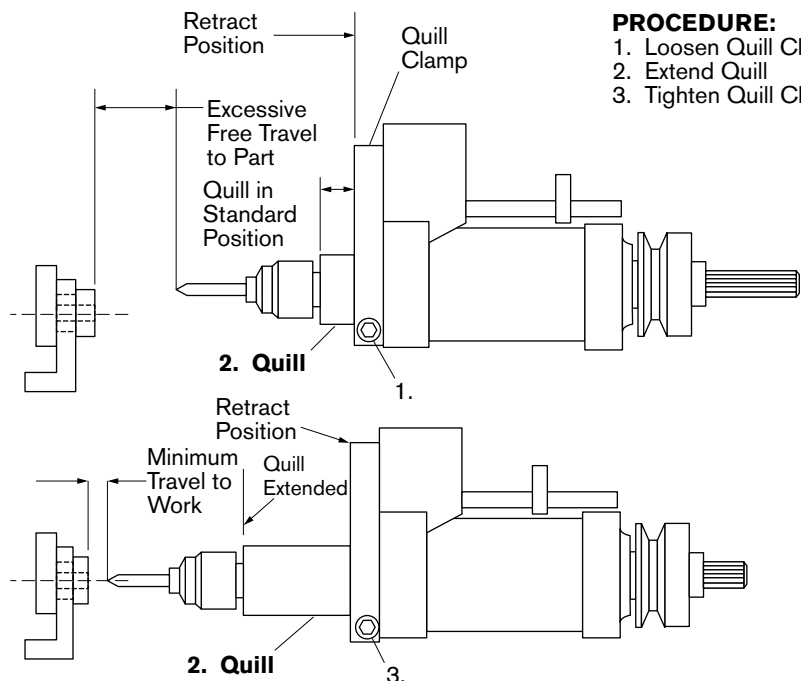
Maintenance consists of maintaining the oil level in Hydra-Brake. Refer to bulletin #6404-99.

## Quill Adjusting Instructions

To bring the drill or tap closer to the part without relocating unit, follow the steps outlined below. Extending the Quill eliminates excessive travel to the part being drilled or tapped. It also allows a closer radial grouping of several Hypneumat units.

**NOTE:** The distance the Quill is extended lessens the amount of usable stroke length of the unit.

**EXAMPLE:** Model 350 - 3 1/2" stroke unit - Quill extended forward 1", remaining stroke length is 2 1/2".



**PROCEDURE:**

1. Loosen Quill Clamp
2. Extend Quill
3. Tighten Quill Clamp