

Core Operation (optional)

Individual Pump System

With the *core selector* switch in the ON position and the *mode selector* switch in the JOG position, core movement is possible while the platen is the up position. The *Core In Manual* selector switch may be activated. This is a spring return to center selector switch. Any time the selector switch is released the switch returns to the center position. When activated, the core cylinder will extend and remain extended as long as the selector switch is held. Releasing the selector switch stops the core cylinder (the operator must retract cylinder). *Note: high pressure is exerted on the core cylinder when in the Jog mode.* Limit switches must be installed for the core to operate. The *Core Out* indicator will light when the core cylinder is clear of the die. The *Core In* indicator will light when the core cylinder is extended into the die area to its proper stroke. A press cycle cannot be actuated until the core cylinder is retracted and the core out limit switch is engaged.

Note: For proper operation, die protection and operator safety, a core in and core out limit switch must be installed on each cylinder. All core systems are provided with a stack style RV and are factory set at 1000 psi. These settings can be adjusted as required.

When the *Mode Selector* switch is in the AUTO or SEMI-AUTO (with Robot option) position and the *Core Selector* switch is in the ON position, the core cylinder will function automatically. Activating the clamp down switches will allow the press to close. When the unload preset (P3) is activated, the cylinder holds pressure as the core cylinders extend until the *Core In* limit switch is activated. During this time, the press and core cylinders are under full tonnage. When the *Core In* limit switch is activated, the core cylinders reverse direction until the *Core Out* limit switch is activated. After the *Core Out* limit switch is activated, the ram will reduce pressure, and return to the up-stop position (P4) or optional mid die stop (P6). Releasing one or both clamp down switches will return the platen to the top of the stroke (P4).

Note: When the core cylinders are activated in SEMI AUTO mode, the operator may NOT release the clamp down switches until the core cycle is complete. Releasing the clamp down switches will stop the core cylinders in either the in or out movement and drop all pressure to the trim and core system. To restart the core movement and complete the cycle, both clamp down switches must be reinitiated. The press will stay under tonnage until the core cycle is complete and core cylinders are fully retracted.

Sequence of operation: Engage both the clamp down switches. Press will close in high speed, decelerate, trim part, and activate the core cycle. The core cylinders will extend. When core cylinders are extended (and core limit switches are activated) the core cylinders will automatically reverse. When the core cylinders are fully retracted, the Core Out limit indicator lamp will light and the trim and core pressure will automatically reduce (*Note: Both clamp down switches must remain engaged throughout this entire sequence*). The clamp down switches can then be released and the moving platen will return to the top of the stroke (P4) or optional mid die stop (P6) before resetting for the next cycle.

WARNING: Upon releasing the clamp down switches, the operator must keep hands and objects away from the press, as the press will return automatically when the core out limits are engaged.

Automatic Shutdown

This trim press is programmed with an automatic motor shutdown. If no platen movement is sensed for 15 minutes (via the P4 switch), the motor will shut down.

WARNING: When the motor shuts down the power will stay on!

Note: In order to restart the motor the power must be reset.

Sequence to reset power after Automatic Shutdown:

1. Push the *Motor Start* switch in.
2. Push the *Power ON/ Emergency OFF* switch in (this disconnects power to the PLC).
3. Wait 5 seconds.
4. Pull *Power ON/ Emergency OFF* switch out (this reactivates the PLC).
5. Wait three seconds (this will allow the PLC to load its program).
6. On larger machines wait until the air pressure is at 20 p.s.i.
7. Pull *Motor Start* switch out (this will restart the motor).