

SECTION 6

MACHINE CONTROLS

ADDENDUM

This addendum provides information to update Section 6 of Operation, Safety and Maintenance Manual EM-289 for the 100 Series Hydraulic Shear equipped with Touch Screen PC control. For *SECTION 7, OPERATION* information, see Supplement Manual EM-521.

SHEAR CONTROL CENTER

The SHEAR CONTROL CENTER provides manual controls for various functions (see Figure 6-2).

CONTROL selector: This is a two-position key lock selector switch. In the OFF position, all ram and gage motion is prevented, but the main drive motor, optional lights and optional oil heater are active.

The CONTROL selector should be turned to the OFF position and the key removed any time ram motion is to be prevented. For example, always turn the CONTROL selector to the OFF position and remove the key before removing material from behind the machine.

The OFF position should also be used when performing maintenance functions that require the pump and motor to be running.

When the CONTROL selector is in the ON position, all operator controls are active.

CAUTION

Make sure everyone is clear of machine before turning the "CONTROL" selector to the "ON" position.

MAIN DRIVE "START" pushbutton/indicator: To start the main drive motor, press the START pushbutton. If the internal checks indicate that all components are functioning properly, the hydraulic pump motor will start, and the green indicator light will illuminate.

MAIN DRIVE "STOP" pushbutton: When the red STOP pushbutton is pressed, all power to the motor is turned OFF. The motor and hydraulic pump will stop.



FIGURE 6-2 - Shear Control Center

Note: Pressing the MAIN DRIVE STOP pushbutton will not turn off power to an optional conveyor.

MATERIAL THICKNESS adjustment knob: This control is replaced by the touch screen control for Material Thickness, described in EM-521.

MATERIAL LENGTH adjustment knob: This control is replaced by the touch screen control for Cut Length, described in EM-521.

MODE selector: This control is replaced by the touch screen Mode Selector toolbar button, described in EM-521.

READY light: This indicator is replaced by the Cycle Status indicator on the touch screen, described in EM-521.

GAGE CONTROL

GAGE POSITION counter: This control is replaced by the touch screen BACKGAGE DIMENSION / GAGING METHOD control, described in EM-521.

“DOWN / UP” selector: Turning the selector to the “DOWN” position will move the backgage to its normal active position. When the selector is turned to the “UP” position, the backgage angle will first move to the rear position and then the entire backgage will raise to the inactive position. In the UP position, the backgage is above the material passline, permitting the shear to cut back piece depths longer than the backgage range.

Note: The GAGE UP / DOWN selector applies only to the 375, 500 and 750 series shear.

“FORWARD FAST” pushbutton: The backgage will move forward (toward the knives) in fast speed while this button is held pressed. The operator must be careful to avoid moving the backgage into the lower knife. Fast speed is determined by a parameter on the Slave Parameters page of the Maintenance, Configuration window (see EM-521).

IMPORTANT: Backgage cannot be moved forward unless the main drive motor is running and the CONTROL selector is in the “ON” position.

“FORWARD SLOW” pushbutton: The backgage will move forward (toward the knives) in slow speed while this button is held pressed. Slow speed is determined by a parameter on the Slave Parameters page of the Maintenance, Configuration window (see EM-521).

“REVERSE FAST” pushbutton: The backgage will move away from the knives in fast speed while this button is held pressed. The gage will move back until it reaches a stop at the rear travel limit.

STROKE COUNTER: This control is replaced by the touch screen control for Counter Select, described in EM-521.

OPTIONAL CONTROLS

The following optional controls described in EM-289 are supported as touch screen functions (see EM-521).

OPERATION selector: When the shear is equipped with footswitches and probes, this selector is replaced by option buttons in the Operator Station dialog.

PROBE Switches and CONTACT Lights: When the shear is equipped with probes, these controls are replaced by touch screen button/indicators for each probe.

FOOTSWITCH selector: This control is replaced by checkboxes in the Operator Station dialog and icons on the Run/Edit screen.

MICROCOMPUTER GAGE CONTROL II and MULTI-AXIS GAGE CONTROL: The functions described in EM-289 for these options are replaced by equivalent touch screen functions.