This procedure tells you how to replace the membrane-type keypad on the control pendant.
Prerequisites

Tools Required:
- Electrostatic Discharge (ESD) strap
- Tongue and groove pliers

Parts Required:
- Keypad Membrane Type (P/N 93-0636)

Keypad - Membrane-Type - Removal

STEP 1

Press [POWER OFF] and Lockout/Tag Out the machine.

⚠️ Caution: Wear an electrostatic discharge (ESD) strap connected to unpainted bare metal on the chassis.

STEP 2

Remove all of the screws that attach the rear panel to the control pendant enclosure.

Remove the rear panel.

⚠️ Note: The pendant rear panel design may be different from the one shown.
STEP 3

Disconnect the (4) electrical wire lugs from the back of the jog handle. Remove the (3) nuts that attach the jog handle assembly to the control pendant enclosure.

Remove the jog handle assembly.

Note: Be sure to identify each wire connection correctly. Use adhesive tape and a marker to record the locations of the connections.

STEP 4

Disconnect the (2) electrical wire lugs from the back of the spindle load meter.

Remove the (4) nuts that attach the spindle load meter to the control pendant enclosure.

Remove the spindle load meter.

STEP 5

You must remove the button assemblies from the pedant enclosure before you remove the front panel and the membrane keypad.

These assemblies have three parts, the electrical switch [1], the plastic locking nut [2], and the button [3].
STEP 6

Remove all of the switches and buttons as follows:

- Push the locking tab clockwise [1] until it snaps into the unlock position.
- Once the tab is unlocked, pull the electrical connector [2] off the button [3].

⚠️ **Note:** Make a mark on each connector to record its location.

⚠️ **Note:** It is not necessary to disconnect the wiring attached to the electrical switches.

STEP 7

Use tongue and groove pliers to loosen the locking nut [1].
Manually remove the locking nut from the button.
Push on the back of the button [2] and remove it through the front of the pendant enclosure.

STEP 8

Remove the front panel.

⚠️ **Note:** The front panel design may be different from the one shown.
STEP 9

Carefully disconnect the keypad’s 24-pin ribbon cable from the keyboard interface PCB.

Note: Be careful when you remove the ribbon cable connector from the connector of the keypad interface PCB. Be sure not to bend the pins.

STEP 10

The membrane keypad is glued to the enclosure.

Use a putty knife or a small flat screwdriver and work all around the edges to pry the keypad away from the enclosure.

STEP 11

Carefully pull out the 24-pin ribbon cable through the front opening of the control pendant panel as you remove the keypad.
## Keypad - Membrane-Type - Installation

### STEP 1

![Caution: Use an electrostatic discharge (ESD) strap connected to unpainted bare metal on the chassis.](image)

### STEP 2

To install the keypad, insert the 24-pin ribbon cable through the front opening of the control pendant panel.

### STEP 3

Connect the 24-pin ribbon cable into the keypad interface PCB.

*Note:* Be careful when you insert the ribbon cable connector into the connector of the keypad interface PCB. Be sure not to bend the pins.
### STEP 4

- Press [POWER ON].
- Make sure the keypad works.
- Press [POWER OFF].

![Image of keypad being pressed](image)

### STEP 5

- Remove the cover of the adhesive strip on the back of the keypad.
- Use the upper right corner to align the keypad on the control pendant enclosure.
- Press the keypad in place.

![Image of keypad being aligned](image)

### STEP 6

- Attach the jog handle assembly to the control pendant enclosure with (3) nuts.
- Connect the (4) electrical wire lugs to the back of the jog handle.

![Image of jog handle assembly](image)
STEP 7

Attach the spindle load meter to the control pendant enclosure with (4) nuts.

Connect the (2) electrical wire lugs to the back of the spindle load meter.

STEP 8

Install the switches and buttons for the [POWER ON], [POWER OFF], [FEED HOLD], [CYCLE START], and [EMERGENCY STOP] as follows:

- Install the button on the control enclosure.
- Use tongue and groove pliers to tighten the locknut.

STEP 9

Insert the switch [1] into the button [2] and push the tab [3] to lock it in place.

Repeat this procedure for all switches.
STEP 10

Install the rear and front panels.

STEP 11

Press [POWER ON].

Make sure the keypad works. If it does not work, contact your Haas Factory Outlet.