# INNOVA

Abm International,Inc.
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SCREEN VER. TOUCH_B
PLC VER. TOUCH_2

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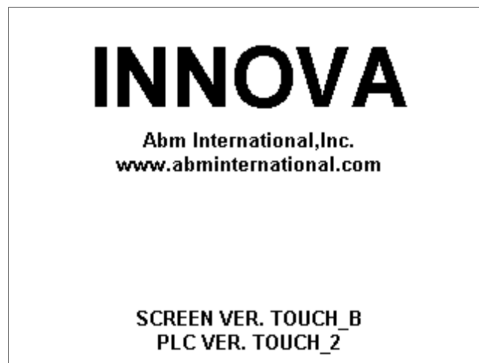**ABM INTERNATIONAL, INC.**

Figure 1.0 – Startup screen

When the Innova main power switch is turned on, the touch screen displays the startup screen. The startup screen informs the user of the screen and plc software versions. After a few seconds the screen will automatically switch to the sew screen (Figure 1.1).
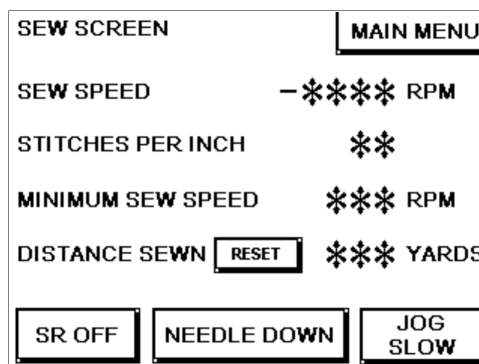


Figure 1.1 – Sew screen

The sew screen allows the user to adjust a number of variables. The sewing speed is adjusted (in manual mode only) by touching the number to the right of sew speed. When the number is pressed, a keypad will appear (Figure 1.2) that allows the user to enter a number between 75 and 3000. Enter the desired number and press ENT (enter) when finished. If a mistake is made when entering a value, press ESC (escape) to exit out of the entry and try again.

Stitches per inch are also adjustable from 3 to 15. To adjust SPI, touch the number to the right of stitches per inch. A keypad will appear that allows the user to enter a value between 3 and 15.

The user may also adjust the minimum sew speed. The minimum sew speed is only used when stitch regulation (SR) is on. The minimum sew speed keeps the machine from coming to a complete stop when sewing in SR mode. The user may set the minimum sew speed to 0 or any number between 75 and 500 RPM. Setting the minimum sew speed to 0

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will allow the machine to come to a complete stop when sewing in stitch regulated mode. Any value other than 0 will keep the machine sewing at that set speed when the machine is standing still or moving very slowly in stitch regulated mode. Setting the minimum sew speed to anything other than 0 will effect the stitches per inch at slow speeds.
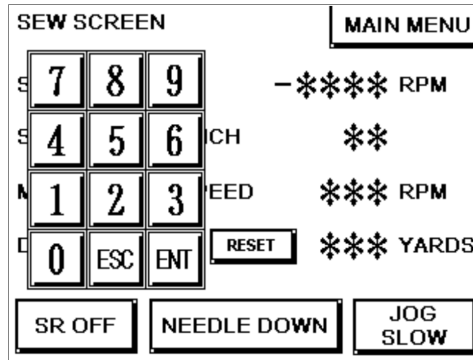


Figure 1.2 – Sew screen with keypad

Stitch regulation can be turned ON and OFF from the sew screen. Pressing the button in the lower left corner of the screen toggles the button between "SR ON" and "SR OFF". The button text will display the machines current state.

Needle stopping position (up or down) can be set by touching the center button at the bottom of the screen. Needle down will cause the machine to stop needle down and needle up will make the machine stop in the up position when sewing is finished.

Pressing the MAIN MENU button in the upper right corner will change the screen to the main menu (Figure 1.3).

The sew screen provides two new abilities that are available only on Innova touch screens.

The "JOG SLOW" button rotates the sewing head slowly so operators do not have to use the mechanical hand wheel mounted on the top beam of the machine.

"DISTANCE SEWN" displays the amount of bobbin thread used during stitch regulated sewing. The distance sewn is automatically reset every time the machine is powered OFF. Additionally, the operator may manually reset the distance sewn by pressing the "RESET" button. The operator should reset the distance sewn every time a new bobbin is placed into the machine.

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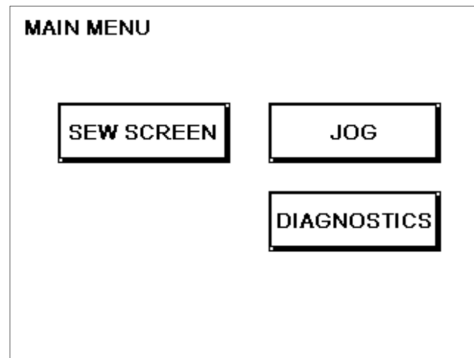**ABM INTERNATIONAL, INC.**

Figure 1.3 – Main menu

The main menu allows the operator to navigate between the sew screen, the jog screen and the diagnostics menu. Pressing any of the buttons will change the screen to the corresponding menu.

Pressing the JOG button will bring up the JOG screen. In this screen, the operator can jog the machine slow, medium or fast. This ability is provided for troubleshooting and ease of maintenance when timing and adjusting the mechanical components of the machine.
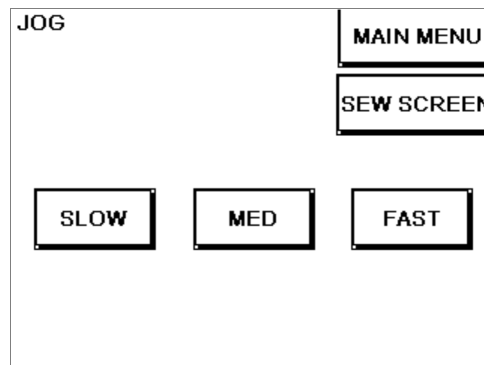


Figure 1.4 – Jog screen

Pressing the main menu will bring the operator back to the MAIN MENU. Pressing the sew screen button will change the screen back to the initial sew screen.

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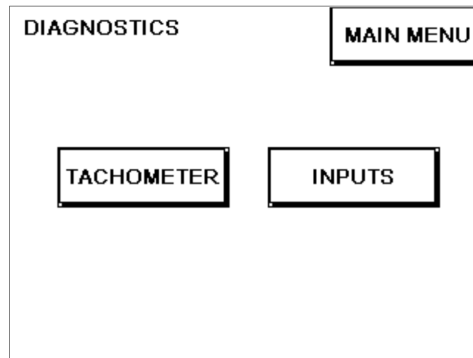**ABM INTERNATIONAL, INC.**

Figure 1.5 – Diagnostics menu

Pressing the diagnostics button on the main menu (Figure 1.3) will take the operator to diagnostics (Figure 1.5). From this menu, the operator may enter the tachometer screen or the input screen.
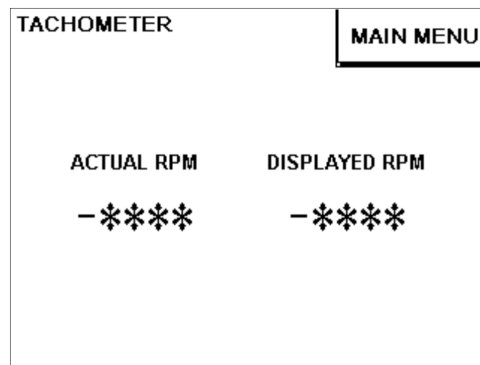


Figure 1.6 – Tachometer screen

The tachometer screen (Figure 1.6) displays the actual motor rpm and the displayed rpm for reference. The input screen (Figure 1.7) displays the various inputs of the machine. As an input is turned on, the circle to the left of the text will darken. As an input turns off, the circle will lighten. Many of the inputs are extremely high speed and it may take careful observation to confirm the input is in fact turning ON and OFF.
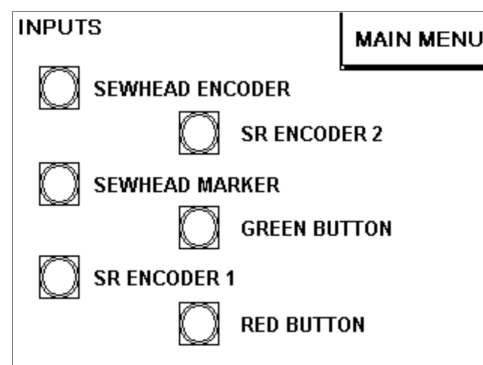


Figure 1.7 – Inputs screen