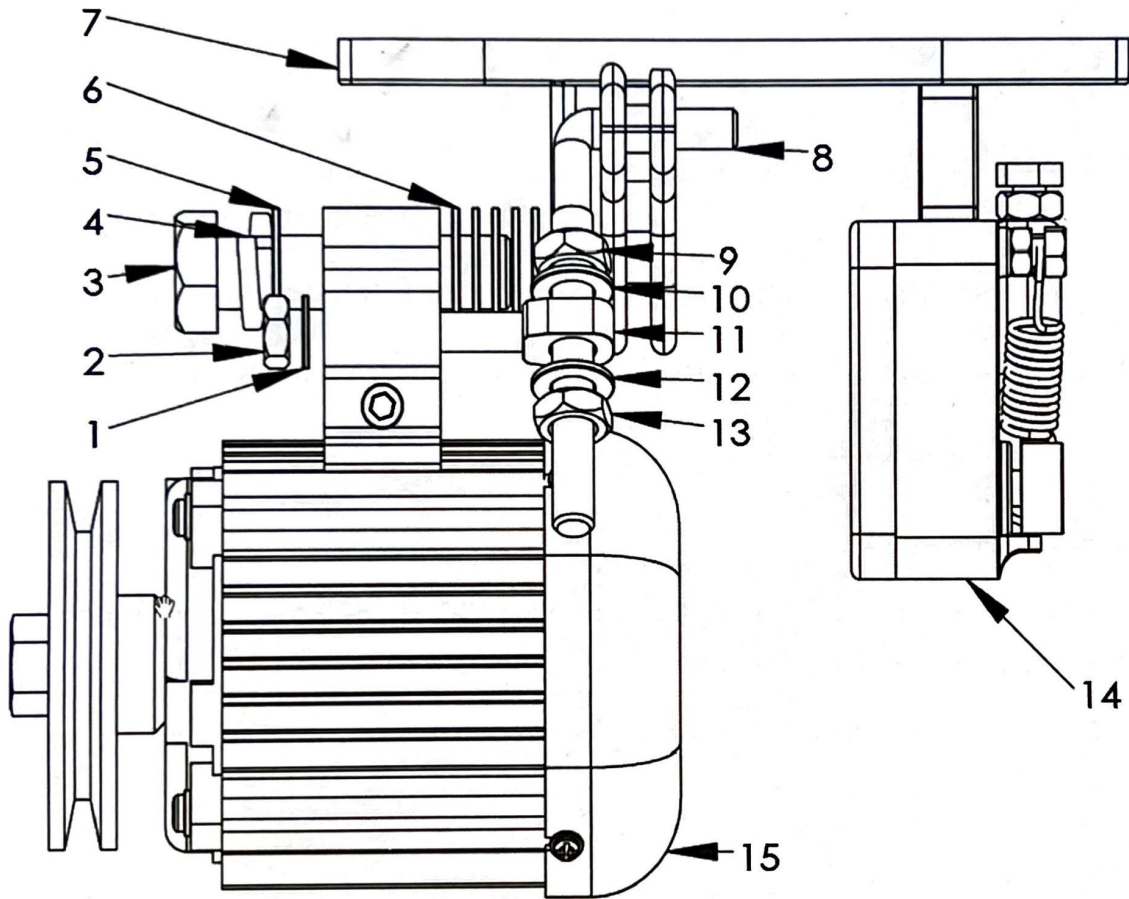


GBSM-34 BRUSHLESS SERVO-MOTOR

INSTRUCTION MANUAL

INSTALLATION SCHEMATIC



1 - FLAT GASKET

2 - NUT

3 - BOLT

4 - SPRING GASKET

5 - FLAT GASKET

6 - FLAT GASKET

7 - BRACKET

8 - BOLT

9 - NUT

10 - FLAT GASKET

11 - JOINT

12 - FLAT GASKET

13 - NUT

14 - CONTROL BOX

15 - MOTOR

SETTINGS & FEATURES:

1. **Speed Setting:** Speed is defined in Rotation per Minute (RPM) and appears on the screen when the motor is switched on. Press the **[+]** or **[-]** to increase or decrease the speed respectively. Release the button when your desired speed reaches on the screen, wait 1 second and the speed should be set. Seeing **OE** on the screen indicates that the speed has been set successfully.
2. **Rotation Direction Change Setting:** To change the direction of rotation of the motor, long press **[R]** to enter the U Menu. Release it when **U** appears on the screen. Press **[R]** again to select from U0 - U8. For rotation change, reach the U2 setting and change the value from **0** to **1** or vice versa by pressing **[+]** or **[-]**

0 = Clockwise rotation
1 = Anticlockwise rotation

Wait for **OE** to appear on the screen, then the parameter is set successfully.

3. **Needle Position Setting:** If a synchronizer is installed, you may set the Needle Position by pressing **[N]** once (single click); the screen should then display info on the position of the needle that's currently set:

UP = Needle stays in up position
DN = Needle stays in down position

Note: The synchronizer device must be attached to the controller in order to use this feature.

4. **Restore to Factory Settings:** Long press **[N]** for 5 seconds to reset the controller to factory settings. Release the button when **OE** appears on the screen, then the controller should be reset to factory settings.

COMMON PROBLEMS AND THEIR SOLUTIONS:

- **Err1:** This error appears on screen when the motor is having huge difficulty in rotation. Motor will not work. To fix it, restore to factory settings as shown above.

- **Err2:** This error occurs when there is high/low voltage or high/low flow of current through the circuit. Check your voltage and power source if high or low then restore to the factory settings.
- **Err4:** Happens when cords are not connected properly. Check if all wires are well connected. Another possibility, there may be a fault in the hall sensor device in the motor. Check all connections, secure the circuit and restore to the factory settings. If the problem still persists then please send it for repair. *Do NOT open the case of the servo-motor or reveal any live electric wires for any reason!*