



## Verifying the HUMAC2009 NORM Servo Settings

### 1. Introduction

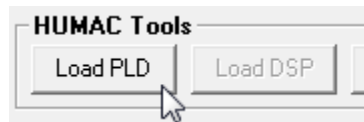
- 1.1. The NORM can be built with three different servo amplifiers. The DM-30 low torque servo, the DM-75 High Torque Servo and the Ultra3000 Digital High Torque Servo. This document describes the procedure to set the HUMAC program for the correct servo type.

### 2. Procedure

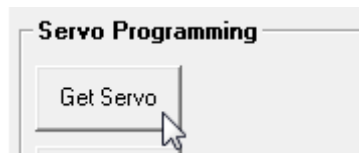
- 2.1. Exit out of the HUMAC program.
- 2.2. From the **Windows Task Bar**, select **Start, All Programs, HUMAC2009, Utilities, Diagnostics**.
- 2.3. From the **Startup Screen**, enter **CSMIDIAG** as the password and click the **Proceed with Caution** button. The HUMAC will display the **USB-DSP-PLD monitor** form.
- 2.4. The **USB-DSP-PLD monitor** form will display the current Machine, Servo and Motor settings. **Note:** *The Servo and Motor settings are only required when working with the NORM or 6000. If you are not on a NORM or 6000, click the Exit button to end this procedure.*

Machine: NORM  
Servo: UNKNOWN  
Motor: UNKNOWN

- 2.5. In the **HUMAC Tools** area, click the **Load PLD** button. The HUMAC will load the PLD. This takes about 10 seconds.



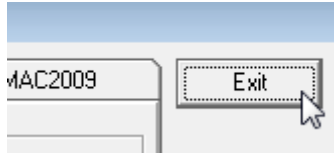
- 2.6. In the **Servo Programming** area, click the **Get Servo** button. This procedure will take about 10 seconds.



- 2.7. The HUMAC will display the current Machine, Servo and Motor settings. In this case the **NORM, DM30 and Rockwell**.

Machine: NORM  
Servo: DM30  
Motor: Rockwell

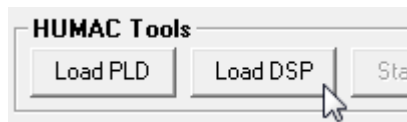
- 2.8. If the system displays **DM-30**, **DM-75** or **Ultra3000**, the procedure is completed. Click the **Exit** button to end the procedure.



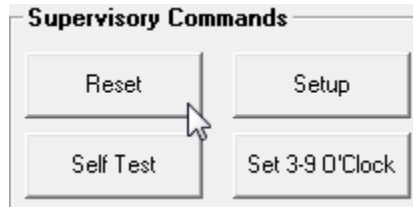
- 2.9. If the system displays "**UNKOWN**", repeat step 2.6 through 2.8 one more time. If the system still displays "**UNKOWN**", proceed to the section titled "**Manually Setting the Servo Amplifier**".

### 3. Manually Setting the Servo Amplifier

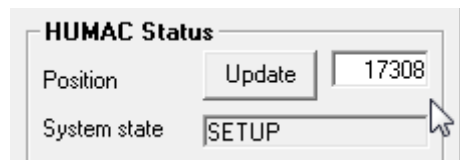
- 3.1. In the **HUMAC Tools** area, click the **Load DSP** button. This will take about 5 seconds.



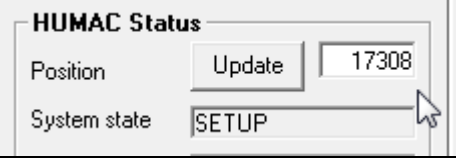
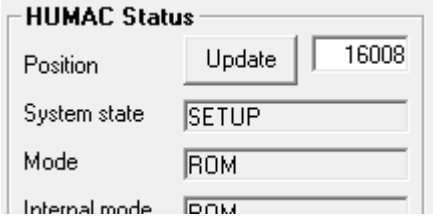
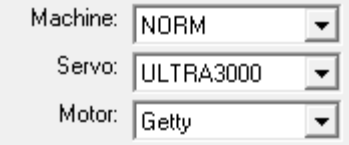
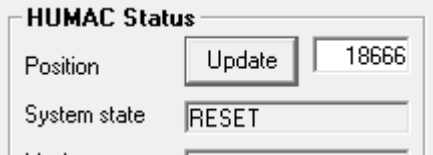
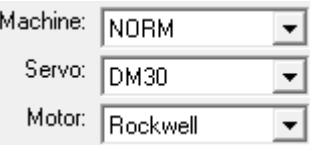
- 3.2. Click the **Start DSP** button.  
3.3. Click the **HUMAC Tool** button.  
3.4. Remove all input adapters from the NORM.  
3.5. Open both ROM stops.  
3.6. Position the input adapter with the arm at 6:00 (Straight Down).  
3.7. In the **Supervisory Commands** area, click the **Reset** button.



- 3.8. Wait 5 seconds and click the **Self Test** button.  
3.9. Rotate the dynamometer arm three complete revolutions in the clockwise direction, ending at the 6:00 position.  
3.10. Record the **Position** value displayed (17308 in this case).



- 3.11. Click the "**X**" in the Upper-Right-Hand corner to close the **HUMAC Tool**.  
3.12. On the right-hand side, you will see three pull-down lists. Set them as follows.

Recorded Position Value	Action Required
<p style="text-align: center;">Near 17300</p> 	<p>System is set correctly.</p>
<p style="text-align: center;">Near 16000</p> 	<p>System is using an ULTRA3000/Getty but is incorrectly set to.DM30 or DM 75 and Rockwell.</p> <ol style="list-style-type: none"> <li>1. Select the following options Ultra 3000 and Getty.  </li> <li>2. Repeat steps 3.3 thru 3.10 to confirm the position value is now near 17300.</li> </ol>
<p style="text-align: center;">Near 18888</p> 	<p>System is using a DM30 or DM 75 but is incorrectly set to ULTRA3000/Getty.</p> <ol style="list-style-type: none"> <li>1. Open the Servo Housing and determine if the NORM has a DM30 (4" wide) or DM75 (5-1/2" wide) installed.</li> <li>2. Select the correct servo and set the Motor to Rockwell.  </li> <li>3. Repeat steps 3.3 thru 3.10 to confirm the position value is now near 17300.</li> </ol>

3.13. If the value near 17300 is displayed, click the Exit button to end the procedure.

