Mech-Line ABB ACH550 Simplified Startup

X	Check For and Correct as Necessary Before Powering Drive
	The drive is securely mounted
	Space above and below drive meets specifications for cooling (8 in. R1-R6 sizes 6 in. R7-R8 sizes)
	Motor and driven equipment are ready to start (ie. No mechanical obstructions)
	Proper grounding (Follow national and local codes)
	Input power voltage matches drive rating (Label is located on left side of unit)
	Input power connections are connected and are tight
	Input power branch circuit protection is in place (ie. Fuses or circuit breaker)
	Motor connections are connected and are tight
	Input power, motor and controls are each in separate conduit runs (Recommended)
	NO foreign objects, shavings or tools are left in the drive
	NO alternate power source for the motor (such as a bypass connection) is connected to the motor or is connected to the drive output section (ie. NO voltage is applied to the drive output!!!)

HVAC DEFAULT Macro (9902) Drive Only (NO Bypass)

 Jumpers Connected to Drive Control Board

Connect #10 24V to #16 DI4
Connect #11 GND to #12 DCOM

10	24V
11	GND
12	DCOM
13	DI1
14	DI2
15	DI3
16	DI4
17	DI5
18	DI6

2	AI1 +
3	AI1 -

E –CLIPSE BYPASS Macro (9902) Drive WITH Bypass

Jumpers Connected to RBCU-01 <u>Bypass Control Board</u>

JUMPERS ARE IN PLACE… THERE IS NO NEED TO ADD
ADDITIONAL JUMPERS AT THIS TIME

1	+24VDC
2	+24VDC
3	DIGITAL INPUT COMMON
4	GROUND
5	DI1 START/STOP
6	DI2 NOT USED
7	DI3 START ENABLE 1
8	DI4 NOT USED
9	DI5 NOT USED
10	DI6 SMOKE CONTROL

**The information below shows the welcome message that may be on the display
screen when the drive is initially powered up and how to remove it from the screen
permanently**.

Initial Startup for ACH550 with or without bypass

Initial screen is "Welcome to the ABB ACH550 Drive"   Press <u>"OK"</u> (Right Soft Key)

Screen is "Do you want to use the Start-up Assistant"   Press ↓ to Highlight <u>"NO"</u>
                                                        Press <u>"OK"</u> (Right Soft Key)

Screen is "Show Start-up Assistant on Next Boot"   Press ↓ to Highlight <u>"NO"</u>
                                                   Press <u>"OK"</u> (Right Soft

Basic Programming

This is to access programming. Right Soft Key will access all parameters and will make all changes. The key function however will change from screen to screen. Follow the steps listed below to make changes. They are as follows:

"**MENU**" will be above right soft key   (Note: all parameter changes will be made and/or entered using this key)

"**EXIT**" will be above left soft key

Press "**MENU**" (Right Soft Key)

Look for "**PARAMETERS**"

Press "**ENTER**" (Right Soft Key)

Look for the Parameter Group Number you wish to see by using ↑ or ↓ arrows

Press "**SEL**" (Right Soft Key)

Look for the Parameter you wish to change by using the ↑ or ↓ arrows

Press "**EDIT**" (Right Soft Key) The parameter will now take up the entire screen

Change the Parameter by using ↑ or ↓ arrows

Press "**SAVE**" (Right Soft Key) to accept the change that has been made

Press "**EXIT**" (Left Soft Key) to go back to the Parameter(s) list to choose a new Parameter to change

Repeat above procedures to continue to make changes as necessary

Press "**EXIT**" (Left Soft Key) repeatedly to return to main screen once all changes have been made and you wish to run the drive

Basic Parameter Settings   (Does NOT Include All Parameters)

The only parameters that will be listed below will be those that would be changed.

When using the default Macros such as HVAC Default or E- Bypass the Start/Stop and Safeties will be preset and should not need to be changed provided the proper digital closures are to be used for these.

When using the default Macros such as HVAC Default or E-Bypass the External Reference will be preset and should not need to be changed provided a voltage of 0-10 VDC or 4-20mA is to be used and is connected to AI1.

Parameter	Value
9901 Language	English (AM)
9902 Applic Macro	HVAC Default (Drive Only..Verify)
	E-Clipse (With Bypass..Verify)
9906 Motor Nom Curr	Set as required
9908 Motor NOM Speed	Set as required
9909 Motor Nom Power	Set as required
1301 Minimum AI1	20% (To be used for 4-20mA)
	0% (To be used for 0-10VDC)
2003 Max Current	Set as required
2007 Minimum Freq	15 Hz (To be used for fans)
	20 Hz (To be used for pumps and cooling towers using gearbox design fan)
2605 U/F Ratio	Linear
3002 Panel Comm Err	Last Speed
3005 Motor Therm Prot	Not Sel
3104 AR Overcurrent	Enable

This simplified start-up allows you to set the drive to run the process. If attempts by unauthorized personnel extend beyond these items, the result could be added time to the ABB Certified Startup if so requested and could result in added charges for additional time.

Motor Rotation Changes With a Drive and Bypass

Bypass Unit will display a Failt 3020 "PHASE SEQUENCE" Fault if input rotation is incorrect. The input phase wires would need to be swapped in order to correct this. Rotation should then be checked or rechecked. If the motor rotates correctly there will be no other changes needed. If the motor rotates in the wrong direction then the motor output wires would need to be swapped.