

Recovering from a VEII Non-Clearable Injection Drag Limit Alarm

Title of Document	Recovering from a VEII Non-Clearable Injection Drag Limit Alarm		
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Machine Type	VEII		
Controller Type			
Tags/Keywords:	Injection, Drag, Alarm, Zhafir, VEII		
Prepared By: John Machutas	Approved By:	Revision Date:	Revision #:

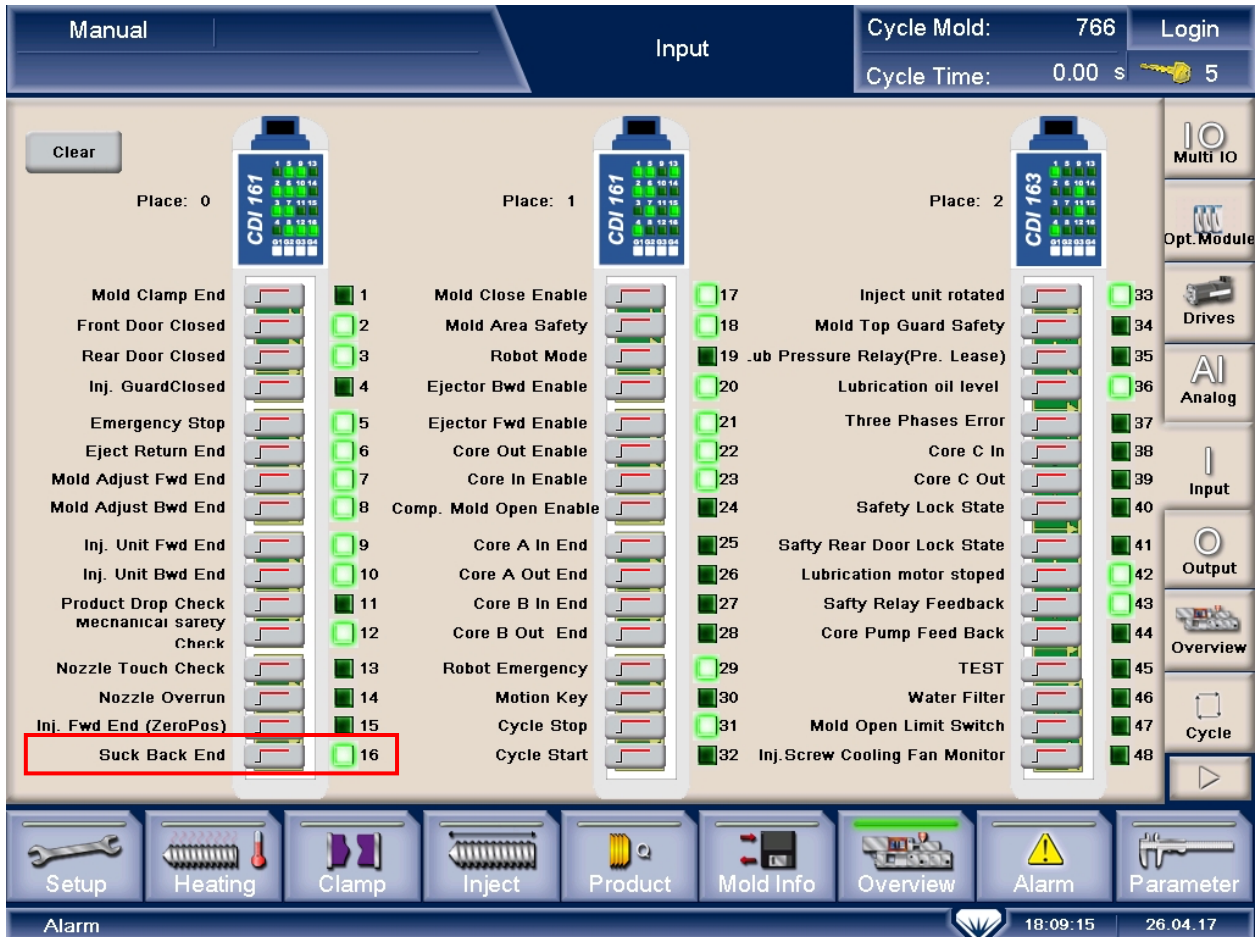
Purpose: To instruct on how to clear an Injection Drag Limit Alarm when the positive stop is hit in the pullback position and the Suck Back End (SE7) switch is being made.

Scope: Field service, training, customer

Procedure: Begin by turning the Motors OFF and clearing any active alarms. Then enter into Access Level 5.

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- 1) Navigate to the OVERVIEW>INPUT page and verify that SE7 is being made. The green light for Suck Back End will be on when the input is active.



Manual | Input | Cycle Mold: 766 | Login | Cycle Time: 0.00 s | 5

Clear | Place: 0 | CDI 161 | Place: 1 | CDI 161 | Place: 2 | CDI 163

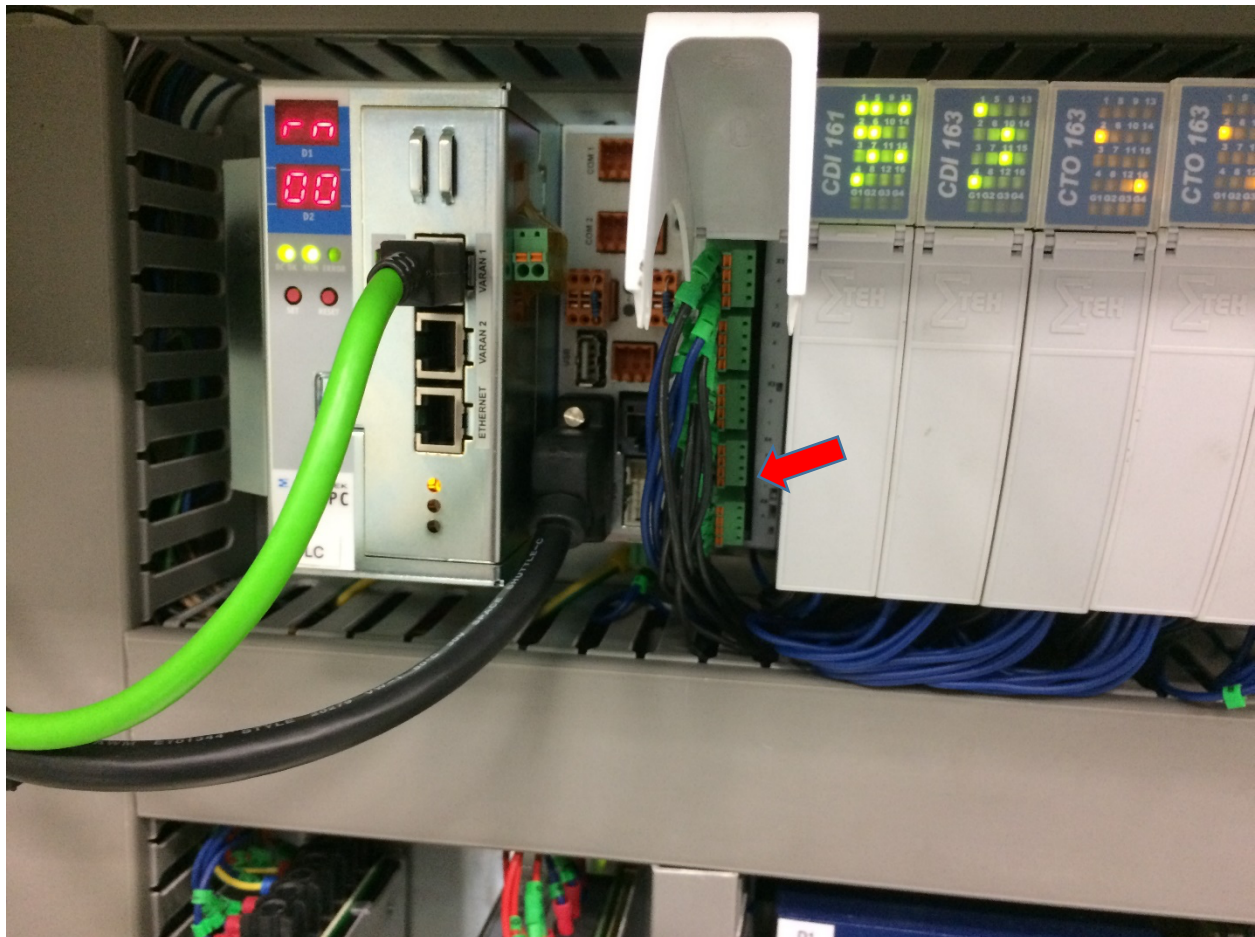
Place: 0	Place: 1	Place: 2
Mold Clamp End	Mold Close Enable	Inject unit rotated
Front Door Closed	Mold Area Safety	Mold Top Guard Safety
Rear Door Closed	Robot Mode	Lub Pressure Relay(Pre. Lease)
Inj. GuardClosed	Ejector Bwd Enable	Lubrication oil level
Emergency Stop	Ejector Fwd Enable	Three Phases Error
Eject Return End	Core Out Enable	Core C In
Mold Adjust Fwd End	Core In Enable	Core C Out
Mold Adjust Bwd End	Comp. Mold Open Enable	Safety Lock State
Inj. Unit Fwd End	Core A In End	Safety Rear Door Lock State
Inj. Unit Bwd End	Core A Out End	Lubrication motor stoped
Product Drop Check	Core B In End	Safety Relay Feedback
Mechanical safety Check	Core B Out End	Core Pump Feed Back
Nozzle Touch Check	Robot Emergency	TEST
Nozzle Overrun	Motion Key	Water Filter
Inj. Fwd End (ZeroPos)	Cycle Stop	Mold Open Limit Switch
Suck Back End	Cycle Start	Inj.Screw Cooling Fan Monitor

Bottom Bar: Setup | Heating | Clamp | Inject | Product | Mold Info | Overview | Alarm | Parameter

Alarm | 18:09:15 | 26.04.17

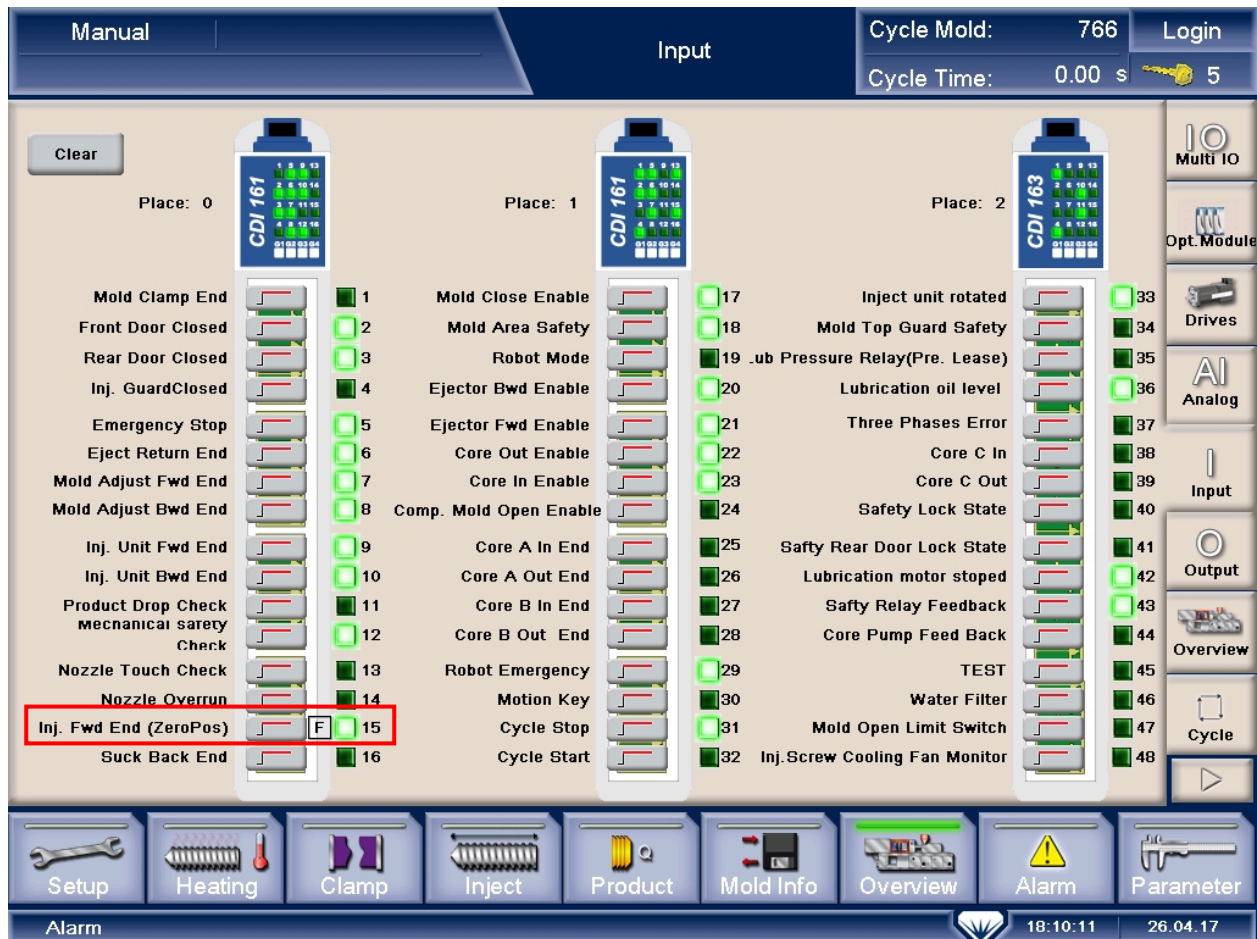
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- 2) Remove the Suck Back End input (B116) located on pin 16 of the first CDI-161 SigmaTEK module located inside the low voltage cabinet.



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- 3) MASK ON the Inj. Fwd End (ZeroPos) SE6 input on the OVERVIEW>INPUT page.



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4) Go to the PARAMETER>ZERO SET page and activate the Zero Status.

Manual
Zero Setting
Cycle Mold: 766
Login
Move Reference
Cycle Time: 0.00 s
5

Zero Setup
Zero Status ☒ On
Speed 5.0 % Force 30.0 %

Servo Axis	Zero Confirm	Encoder Value	Position
Injection Axis	Zero End	514383136	0.000 inch
Mold Axis	Zero End	709456860	0.109 inch
Ejector Axis	Zero End	-777507338	0.000 inch
Mold Adjust Axis	Zero End	-69324	9.930 inch

load cell zero offset allowed positive value 0.70 V
load cell zero offset allowed negative value -0.70 V
Dias Bus
Bus Statistic 82

Screw Parameter
Screw Diameter 1.575 inch
Max Injection Force 203.7 KN 8.14 V
Max Holding Force 163.5 KN 6.54 V
Standard Load Cell Calibration(10V) 250.0 KN
Load Cell Current Voltage 0.00 V -0.1 KN
Load Cell Zero Offset -0.11 V
Injection Pressure -11 PSI
Act Charge Axis Torque 0.00 Nm 0.0 %
Act Clamp Axis Torque 0.00 Nm 0.0 %
Act Eject Axis Torque 0.00 Nm 0.0 %
Act Inject Axis Torque 0.00 Nm 0.0 %

Setting 1
Setting 2
Source 1
Source 2
Monitor
Zero Set
Printer
Para1

Setup Heating Clamp Inject Product Mold Info Overview Alarm Parameter

Alarm
18:12:12
26.04.17

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5) Press the ZERO END button for three seconds on the Injection Axis.

Manual
Move Reference
Zero Setting
Cycle Mold: 766
Login
Cycle Time: 0.00 s
5

Zero Setup
Zero Status: On ☒
Speed: 5.0 % Force: 30.0 %

Servo Axis	Zero Confirm	Encoder Value	Position
Injection Axis	Zero End	514383136	0.000 inch
Mold Axis	Zero End	709456860	0.109 inch
Ejector Axis	Zero End	-777507338	0.000 inch
Mold Adjust Axis	Zero End	-69324	9.930 inch

load cell zero offset allowed positive value: 0.70 V
load cell zero offset allowed negative value: -0.70 V
Dias Bus
Bus Statistic: 82

Screw Parameter
Screw Diameter: 1.575 inch
Max Injection Force: 203.7 KN 8.14 V
Max Holding Force: 163.5 KN 6.54 V
Standard Load Cell Calibration(10V): 250.0 KN
Load Cell Current Voltage: 0.00 V -0.1 KN
Load Cell Zero Offset: -0.11 V
Injection Pressure: -11 PSI
Act Charge Axis Torque: 0.00 Nm 0.0 %
Act Clamp Axis Torque: 0.00 Nm 0.0 %
Act Eject Axis Torque: 0.00 Nm 0.0 %
Act Inject Axis Torque: 0.00 Nm 0.0 %

Setting 1
Setting 2
Source 1
Source 2
Monitor
Zero Set
Printer
Para1

Setup Heating Clamp Inject Product Mold Info Overview Alarm Parameter

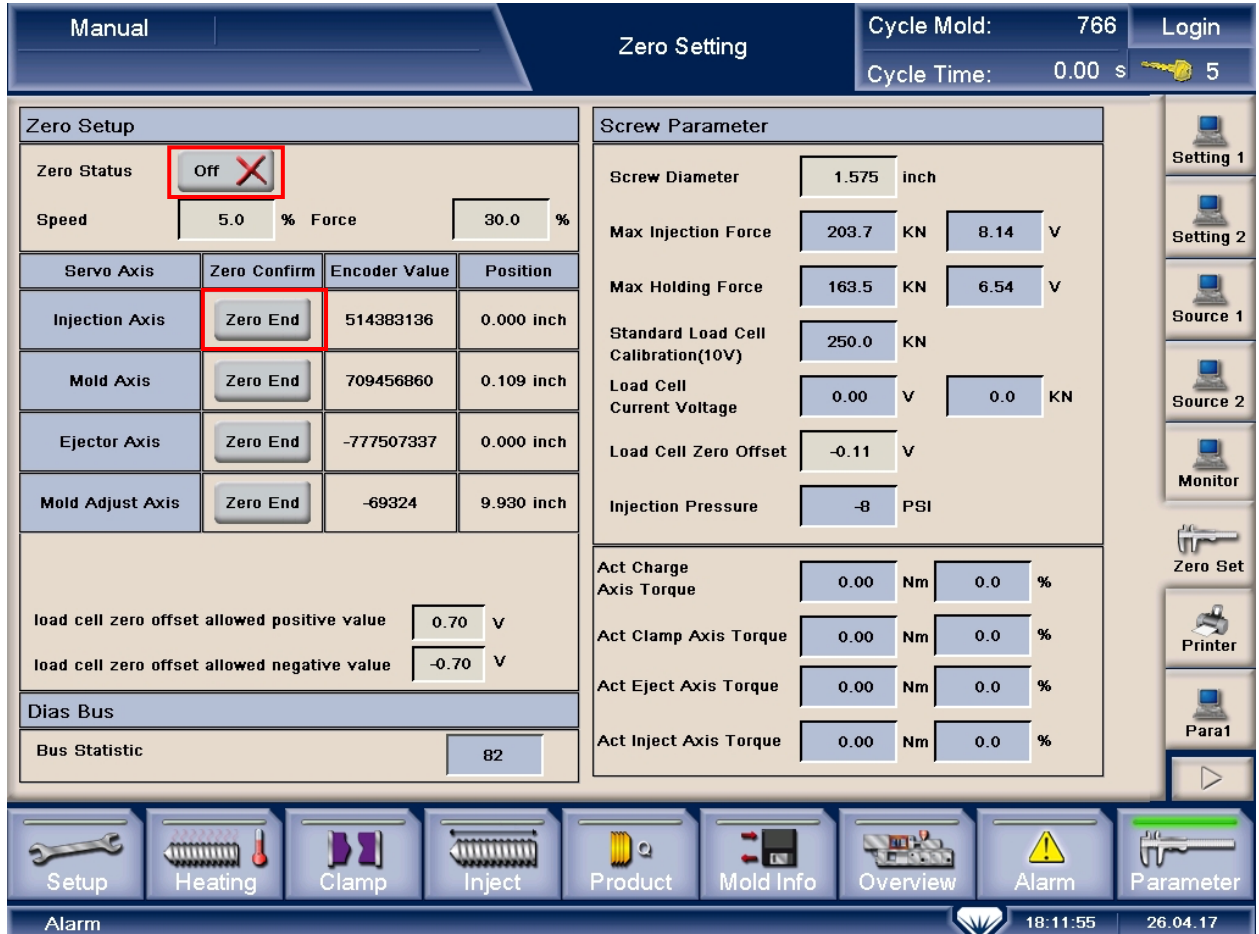
Alarm
18:12:12
26.04.17

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- 6) Turn the MOTORS ON and move the Injection Axis in the forward direction until it is visibly off the SE7 Suck Back End switch. It will move very slowly.
- 7) Return wire B116 previously removed from pin 16 of the first CDI-161 module.
- 8) Remove the MASK ON function used for the Inj. Fwd End (ZeroPos) SE6 input that was set in step 3.
- 9) Move the Injection Axis in the forward direction until it comes to a complete stop. Again, it will move very slowly.
- 10) Return to the Input page (OVERVIEW>INPUT) and confirm that the Inj. Fwd End (ZeroPos) SE6 input is on.

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- 11) Return to the Zero Setting page (PARAMETER>ZERO SET) and press the Zero End button for the Injection Axis for 3 seconds. Then turn off the Zero Status.



The screenshot displays the 'Zero Setting' page of the HAITIAN ABSOLUTE control system. The 'Zero Status' is set to 'Off', and the 'Zero End' button for the 'Injection Axis' is highlighted with a red box. The interface includes various parameter settings for the injection molding machine.

Servo Axis	Zero Confirm	Encoder Value	Position
Injection Axis	Zero End	514383136	0.000 inch
Mold Axis	Zero End	709456860	0.109 inch
Ejector Axis	Zero End	-777507337	0.000 inch
Mold Adjust Axis	Zero End	-69324	9.930 inch

load cell zero offset allowed positive value: 0.70 V
load cell zero offset allowed negative value: -0.70 V

Bus Statistic: 82

Screw Parameter:

Screw Diameter	1.575 inch
Max Injection Force	203.7 KN 8.14 V
Max Holding Force	163.5 KN 6.54 V
Standard Load Cell Calibration(10V)	250.0 KN
Load Cell Current Voltage	0.00 V 0.0 KN
Load Cell Zero Offset	-0.11 V
Injection Pressure	-8 PSI
Act Charge Axis Torque	0.00 Nm 0.0 %
Act Clamp Axis Torque	0.00 Nm 0.0 %
Act Eject Axis Torque	0.00 Nm 0.0 %
Act Inject Axis Torque	0.00 Nm 0.0 %

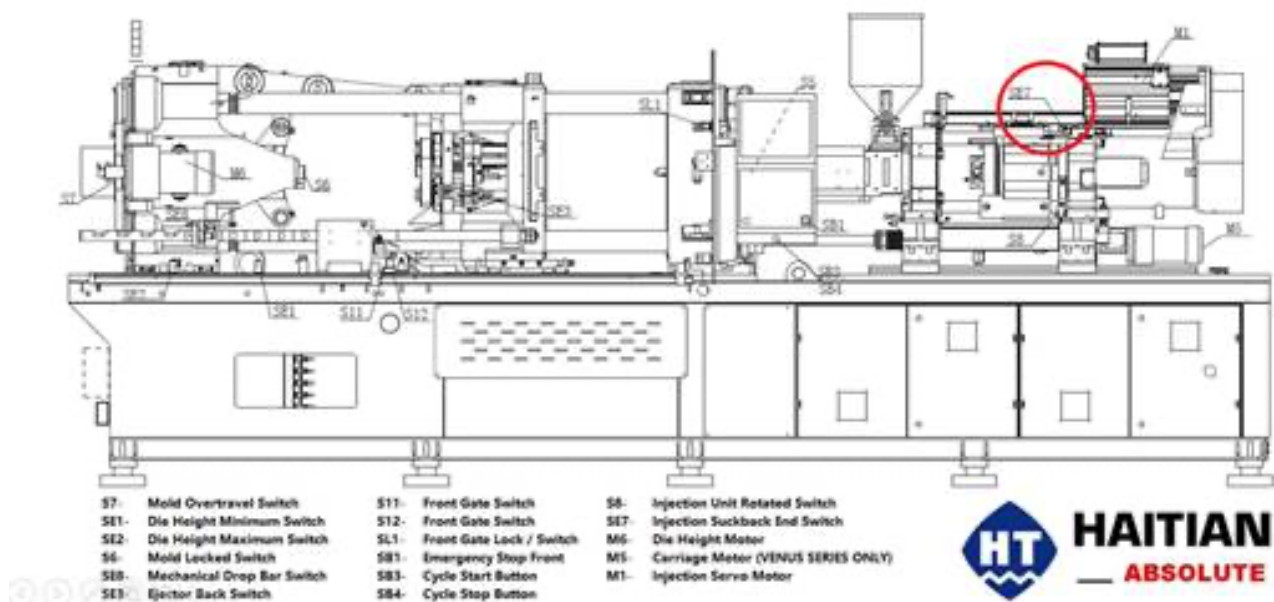
Top Bar: Manual | Zero Setting | Cycle Mold: 766 | Login | Cycle Time: 0.00 s | 5

Bottom Bar: Setup | Heating | Clamp | Inject | Product | Mold Info | Overview | Alarm | Parameter | 18:11:55 | 26.04.17

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12) Test the operation of the Injection Axis in Setup mode.

Switch and Motor Identification: Front



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References:

[Other Procedures, Documents, Etc.]

List any documents, images, etc. that are required or are referenced to complete this procedure. Include the document title, location and Doc.# number, if known.

Forms/Records/Applications/Other Procedures:

Required by Policy and/or Procedure		
Doc. #	Document Title	Location
Other Forms/Records		

Revision History:

Revision	Date	Description of changes	Prepared By
0.0	[Date]	Initial Release	