

WEDGE SERVICE DIAGNOSTICS

The WEDGE controller provides a diagnostic capability that allows various internal parameters to be viewed on the 4-digit LED display. These can be accessed with the machine stopped or while it is operating. If the machine is stopped, the “Service Air” switch on the control panel is used to toggle through the list of parameters. If the machine is operating, the “Start” position of the key switch is used. To view the parameters, toggle the switch or key and a number (2-15) will appear on the LED display. After 3 seconds, it will extinguish and the parameter will be displayed. The toggle only works in the ascending order direction, but it will wrap around and start over.

Display	Parameter	Remarks
2	RPM	From Engine Flywheel Sensor
3	Engine RPM	Filtered RPM Value
4	Reg. Sys. Pressure	PSI
5	Sep. Tank Pressure	PSI
6	Discharge Temperature	Deg F
7	Sep. Tank Temperature	Deg F
8	Engine Target RPM	Wedge Signal to Engine
9	Machine Type	*
10	Engine Coolant Temp.	From CAN, Deg F
11	Engine Oil Temp.	From CAN, Deg F
12	Engine Oil Pressure	From CAN, PSI
13	Intake Manifold Temp.	From CAN, Deg F
14	RPM	From CAN
15	Fault Code List	Codes
16	Throttle Position	
17	Boost Pressure	
18	Engine Hours	
19	Load at Speed	Percent
20	Set Machine ID	

ENTERING MACHINE ID FOR WEDGE CONTROL SYSTEMS with V1.60 or Greater Software

For machines with the WEDGE controller mounted inside the control panel/instrument panel box, the "Service Air" switch is used to enter the machine ID. Disconnect the fuel level gauge (located in the fuel tank) before starting the process and reconnect once the process is completed.

For machines with the WEDGE controller mounted in the engine compartment, the rocker switch beside the WEDGE is used to enter the machine ID.

For the instructions below, the "Service Air" or rocker switch will be referred to as the "data input switch".

1. Examine the machine data plate to confirm the machine model.
Using the machine model and the machine models list on page 2 of this document, locate the proper machine ID.
2. Turn power to the "ON" position. Machine must not be operating.
3. Toggle the data input switch twice and the number "2" will appear on the WEDGE 4-digit LED display. Continue to toggle the switch until the number "9" is reached. Read the machine ID on the display, if it matches the proper machine ID in Step 1, stop. If not, proceed to step 4.
4. Continue to toggle the switch until number "19" is reached. Push and hold the data input switch and the number "20" will appear. Continue to hold the switch. After 1 second, the current machine ID will appear in the display. Continue to hold for 9 more seconds and a blinking "-" will appear. Release the switch.
5. Toggle the data input switch, the display will show "0". Toggle the data input switch until the proper machine ID appears on the display, then stop the toggle sequence.
6. Wait until the controller performs a reset function (or power up) (approximately 10 seconds). At reset, the controller display first goes blank, then all 10 annunciator LED's light, the 4-digit LED display shows all 8's, the display then shows the installed software version and finally the display goes blank and the engine oil pressure and alternator LED begin flashing. At this point the controller has stored the machine ID selected in step 5.
7. Using the data input switch, toggle to service diagnostic number "9".
The number "9" will appear for 1 second and then the machine ID will appear. The ID should be the same as the one entered in steps 4-6. If not, go back to step 4 and enter the ID again.

ESA Models/Wedge Machine ID

<u>Models</u>	<u>Machine ID</u>
7/120,9/110. 10/105, 14/85	7
7/170. 10/125.14/115	8
9/230,9/270,9/300. 12/235	5
17/235,21/215	6

MSA Models/Wedge Machine ID

<u>Models</u>	<u>Machine ID</u>
P425AWIR, XP375AWIR, HP375WIR VHP300AWIR	7
P600WIR, HP450WIR, VHP400WIR	8
XP1060WCU, HP935WCU, MHP825WCU VHP750WCU	5
XHP750WCU	6
MHP825WCAT, VHP750WCAT XP1060HACAT,XP950HACAT	2
SHP825WCAT, XHP750WCAT. XHP650WCAT	3
HP1300CWCU,HP1600CWCU	0
XHP1170WCU 1	
XHP1070AWCAT, XHP1170WCAT. XHP1170SCAT	4
HP1600WCAT	9

SIRC Models/Wedge Machine ID

<u>Models</u>	<u>Machine ID</u>
P1060WCAT, XP950WCAT, HP935WCAT MHP825WCAT .VHP750WCAT	2
XHP750WCAT	3