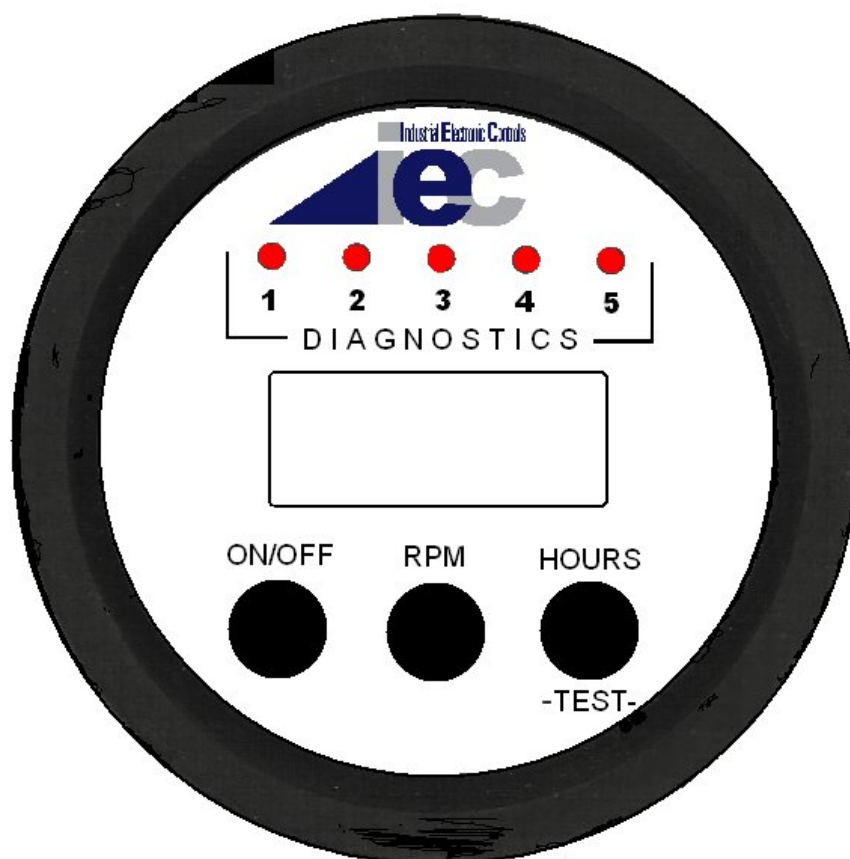


Intelli-Feed™ Controller User's Manual

Intelli-Feed™ Digital Tachometer and Hourmeter For Bandit Chippers



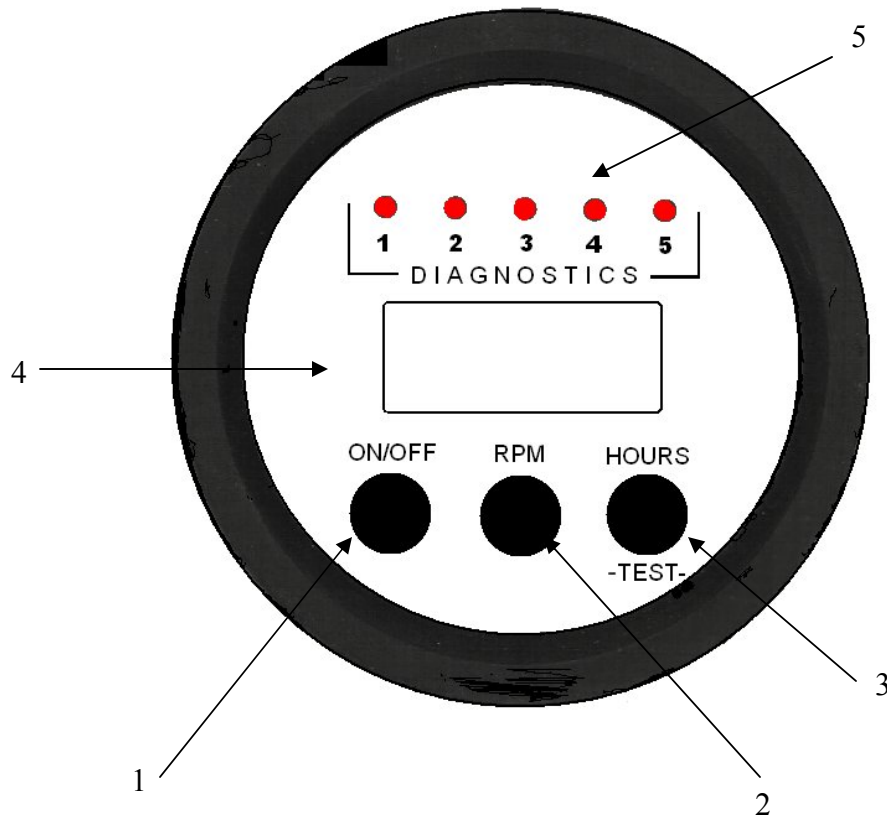
Revision 10, 13-February-2012

Part #: 9047

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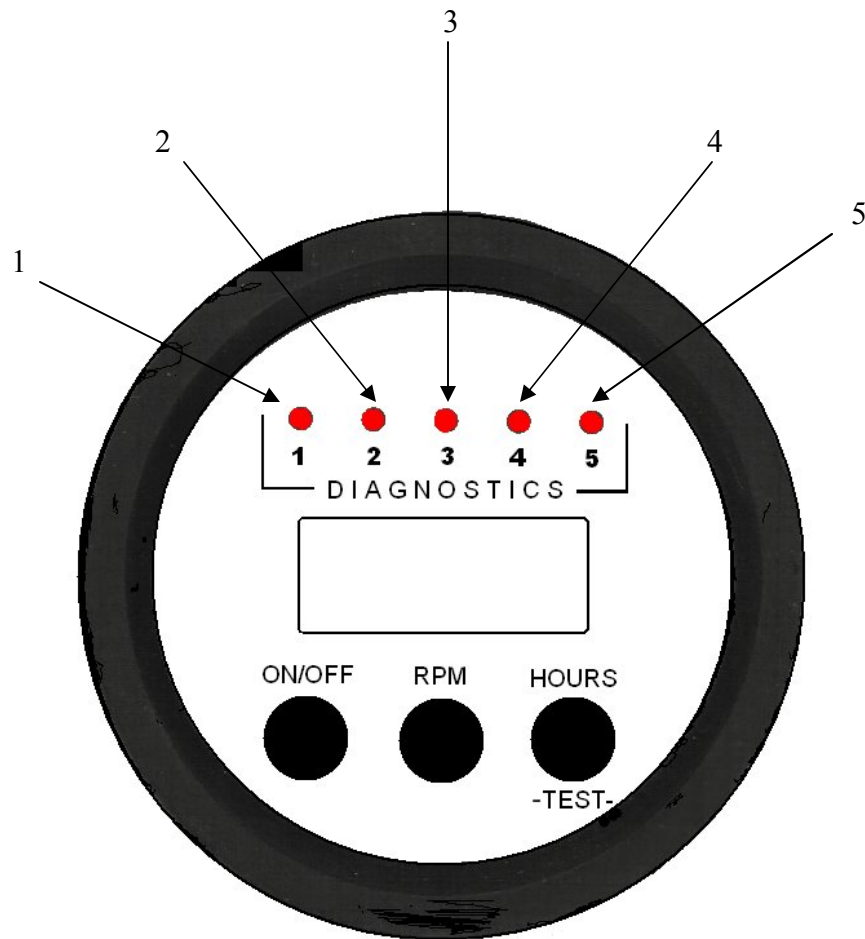
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Intelli-Feed™ User Interface:



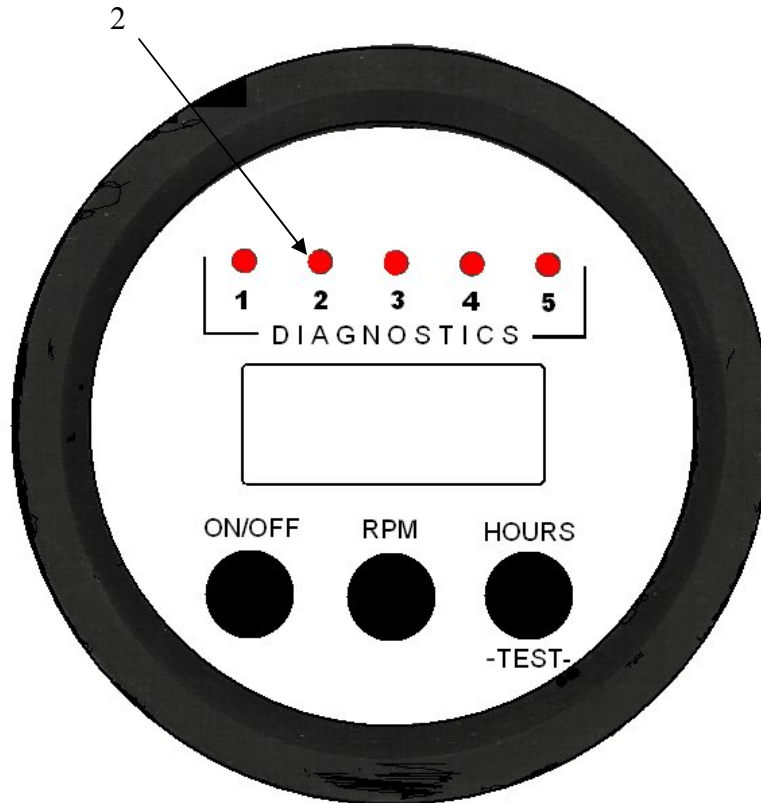
1. ON/OFF Button: - Turns Intelli-Feed™ feed roller valve operation on or off. (It does not affect RPM or Hours function. The chipper can still operate when the Intelli-Feed™ is off.
2. RPM Button: - Places Intelli-Feed™ in RPM mode, which displays the engine RPM on the display.
3. HOURS / TEST Button: - Places Intelli-Feed™ in Hours or Test mode, which displays the equipment run hours when in the HOURS mode, or the equipment parameters, when in the test mode. The HOURS mode is used when the Intelli-Feed™ is operating. The TEST mode must be initiated from a key-off position.
4. Display: - Displays RPM, Hours, and Messages regarding Intelli-Feed™ operation.
5. Diagnostic lights: - Provide status of customer connections to the Intelli-Feed™.

Equipment Diagnostic Indicators:



1. – Power On Indicator: When illuminated indicates that the Intelli-Feed™ controller is receiving power.
2. – Forward Valve or dump Indicator: When illuminated indicates that the primary control output is in operation.
3. – Reverse Valve Indicator: When illuminated indicates that the secondary control output is in operation.
4. – Alternator Charging Indicator: Normally off. Flashes to indicate potential problem with battery, alternator, or charging system.
5. – Input Pulses Indicator: When illuminated indicates speed signal is being received from magnetic pick-up, alternator or other input source. The Intelli-Feed also is capable of receiving an input speed signal from J-1939 sources (CAN-BUS).

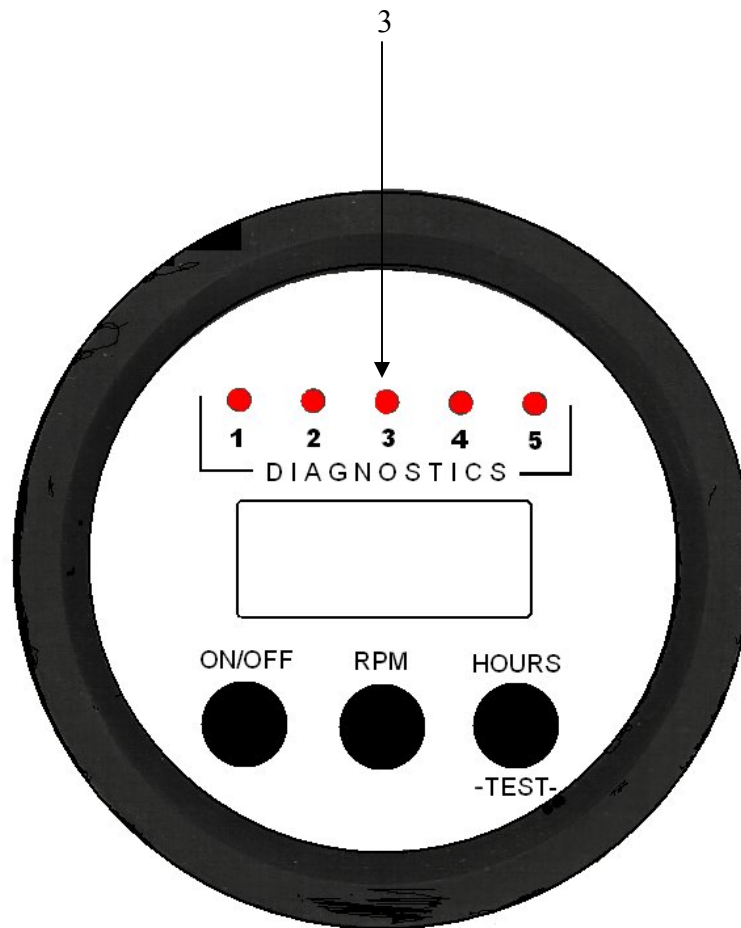
Equipment Diagnostic Indicators (cont):



2 Light– Forward Valve or Dump Indicator: When illuminated indicates that the primary control output is in operation.

- a. Dump indication for Type 0 valve systems. At idle this light will be illuminated. The hydraulic system is dumping; the feed wheels are not in motion. Any motion of the feed wheels is caused by residual oil with minimal pressure. At the appropriate engine RPM (the High set point) this light is off and the feed wheels are showing a forward motion toward the teeth of the chipper.
- b. Forward indication for Type 1 valve systems. At idle this light will be off. The feed wheels are not in motion. Any motion of the feed wheels is caused by residual oil with minimal pressure. At the appropriate engine RPM (the High set point) this light will be illuminated and the feed wheels are showing a forward motion toward the teeth of the chipper.

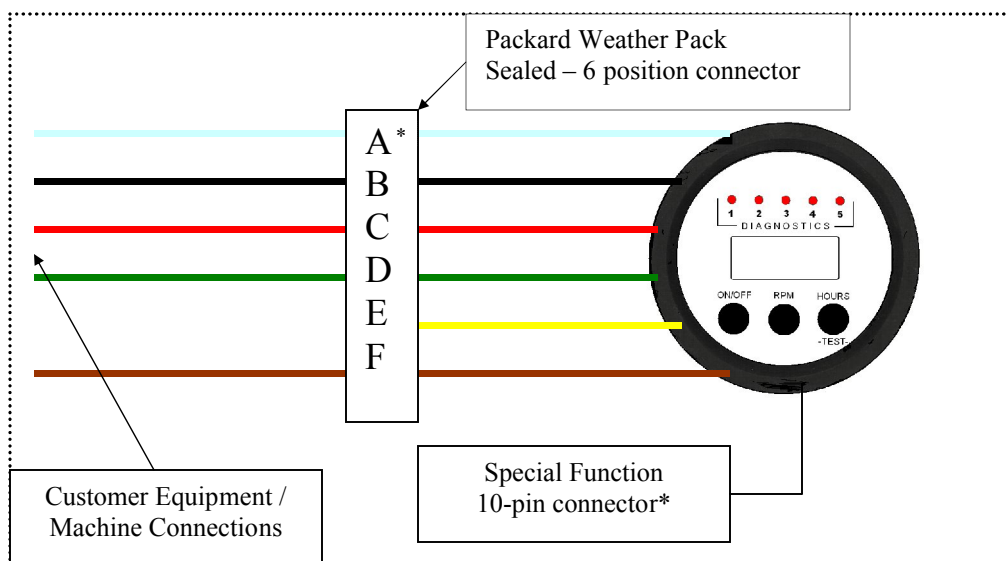
Equipment Diagnostic Indicators (cont):



3 Light– Reverse Valve Indicator: When illuminated indicates that the secondary control output is in operation. Reverse valve operation in both the Type 0, (if equipped with this option;) and Type 1 systems.

- a. If a reversing valve is installed on the machine, when this light is illuminated the feed wheels are reversing, showing a motion away from the teeth; for the time this light is illuminated. The default time for this reversing operation is about 1/3 of one second.

Machine Electrical Connections:



- A. – Speed/Signal Wire (white): Connect to Magnetic Pickup, Alternator, or other pulse input source.
- B. – Ground Wire (black): Connect this wire to the equipment ground.
- C. – Power Wire (red): Connect this wire to the equipments power source (12 to 24VDC).
- D. – Primary Control Wire (green): Connect this wire to the negative (-) of the primary valve or device under control.
- E. – Auxiliary Control Wire (yellow): Currently not configured (Do not use).
- F. – Secondary Control Wire (brown): Connect this wire to the negative (-) of the secondary valve or device under control.

* If J-1939 is used as an input source, connections are made in the 10-pin special function connector as follows:

Signal	10 Pin Connector Location
CAN(+)	Pin F
CAN(-)	Pin D

Operation and Diagnostics:

The Intelli-Feed™ is designed for ease of operation. Diagnostic lights tell of critical operations or malfunctions.

ON/OFF Operation:

When the key switch is turned on, the Intelli-Feed™ powers-up controlling the feed-roller valves.

To disable the feed-roller valve operation, press the ON/OFF button once.

RPM will continue to be displayed, and hours will continue to be counted. To return to feed roller valve operation, press the ON/OFF button once more.

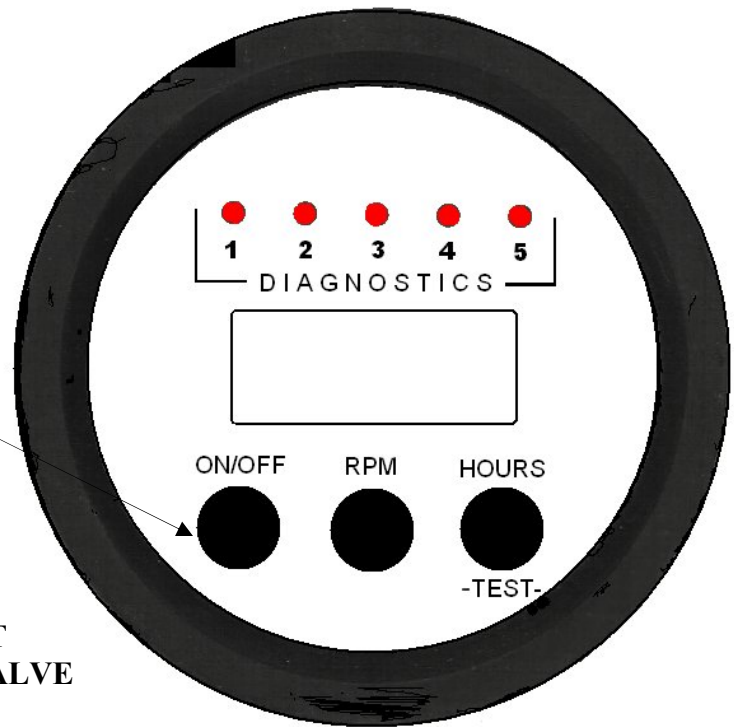
NOTE: THE ENGINE RPM MUST BE INCREASED ABOVE THE HIGH RPM SET POINT ONCE, TO RESTART NORMAL VALVE OPERATION.

Hour Meter Operation:

To display equipment total hours of use, press and release the HOURS button. Whole hours, as well as tenths of hours will now display, and remain displayed, until the RPM button is pressed and released; returning the unit to RPM mode, displaying engine RPM.

There may be a slight time delay to return to reading RPM.

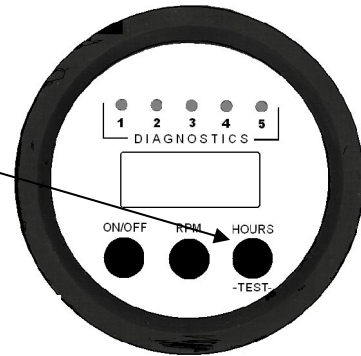
If the key is left in the on position and the engine is not operating (0000 RPM) additional hours will NOT accumulate on the Intelli-Feed™ hour counter.



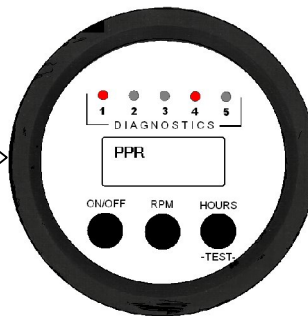
Self-Diagnostics (Self Test):

The Intelli-Feed™ is designed for troubleshooting ease. It will also help you determine that the program installed is for the correct equipment type. Contact your dealer for the proper calibration settings for your engine.

With the key switch OFF,
Hold down HOURS / TEST button,
then turn the equipment key to on.
Release HOURS / TEST button when
the word “TEST” is displayed.



Display indicates
“PPR”
and pulses per
revolution will be
displayed.



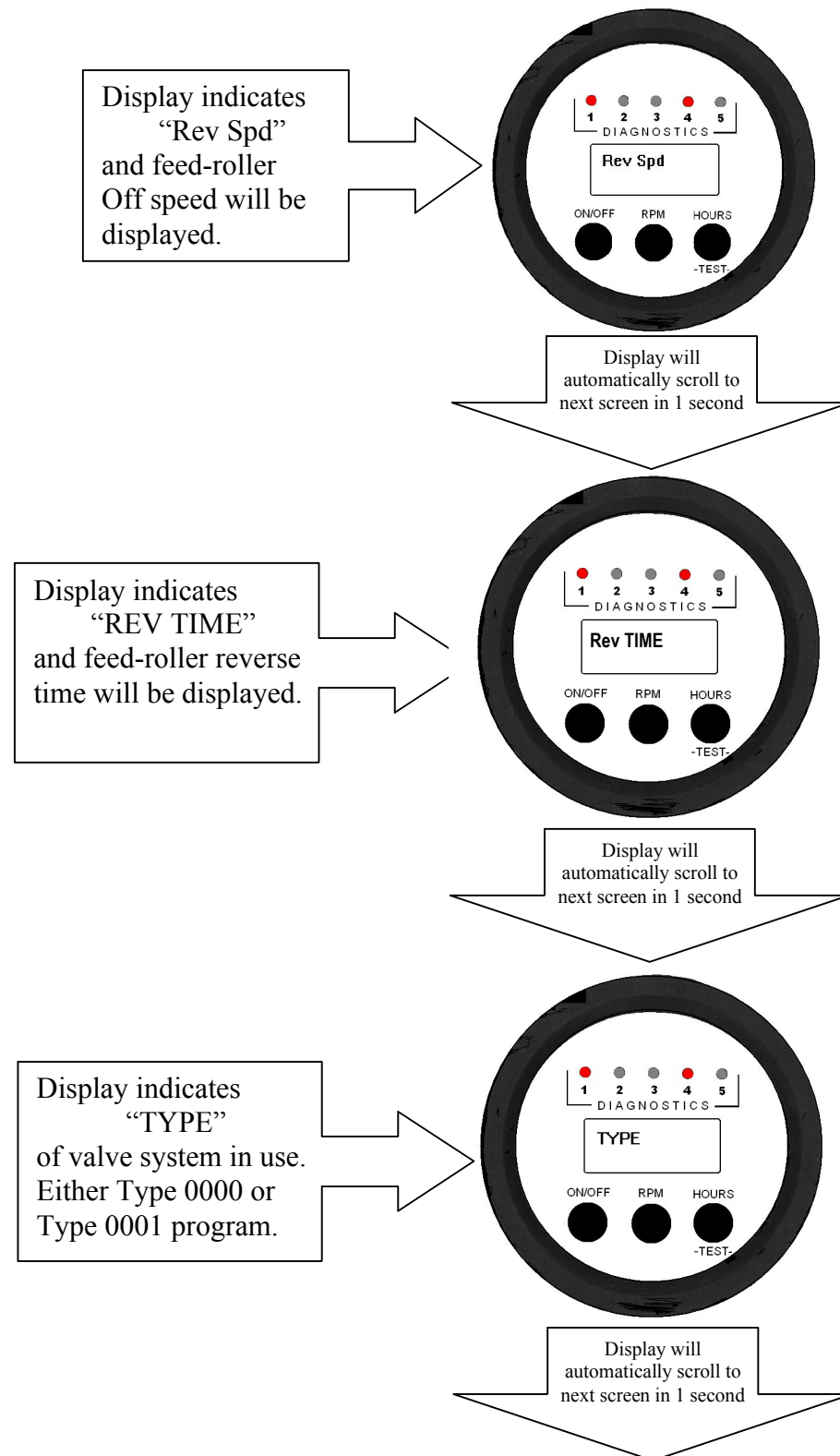
Display will
automatically scroll to
next screen in 1 second

Display indicates
“Fwd Spd”
and feed-roller
On speed will be
displayed.

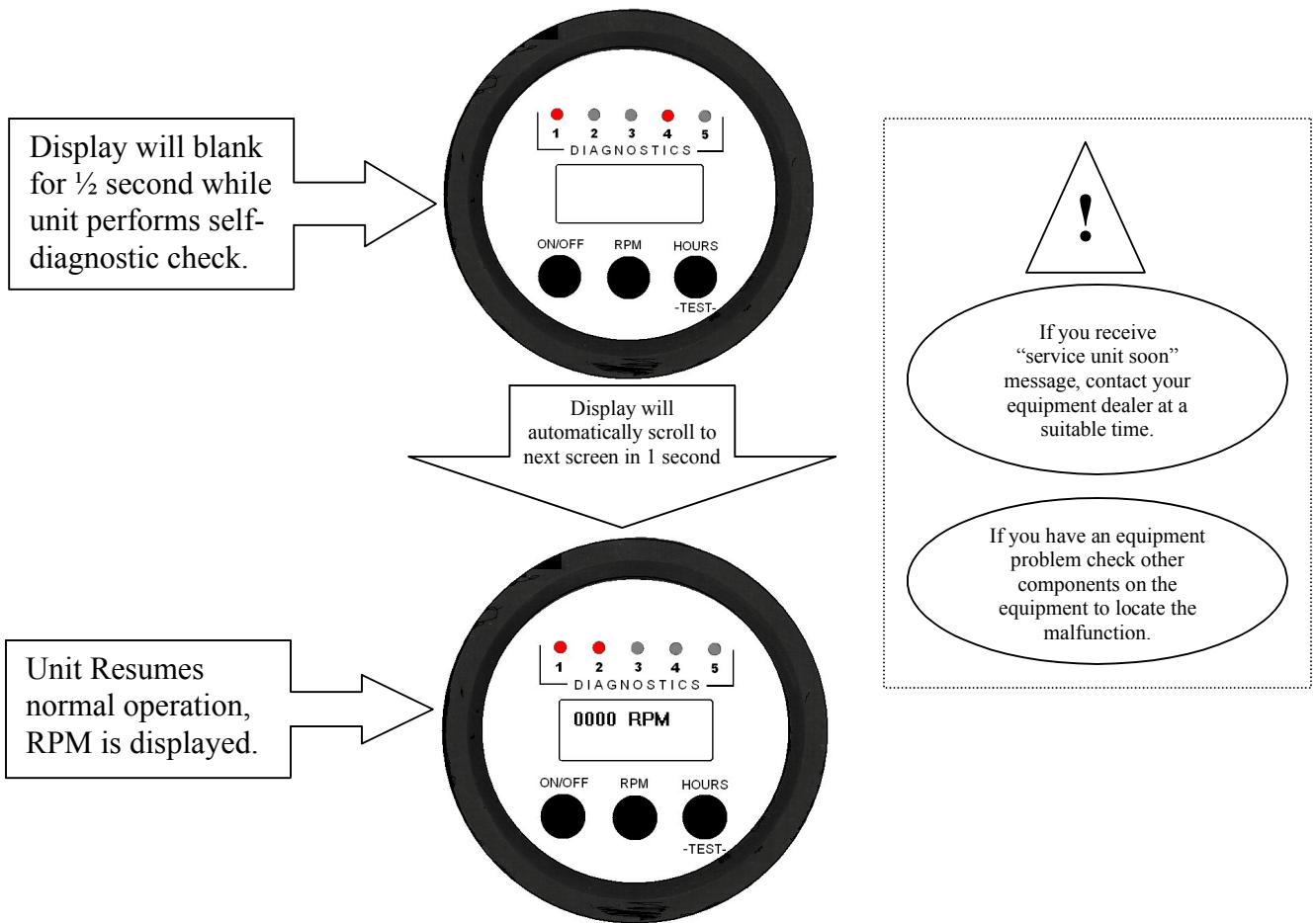


Display will
automatically scroll to
next screen in 1 second

Self-Diagnostics (cont):



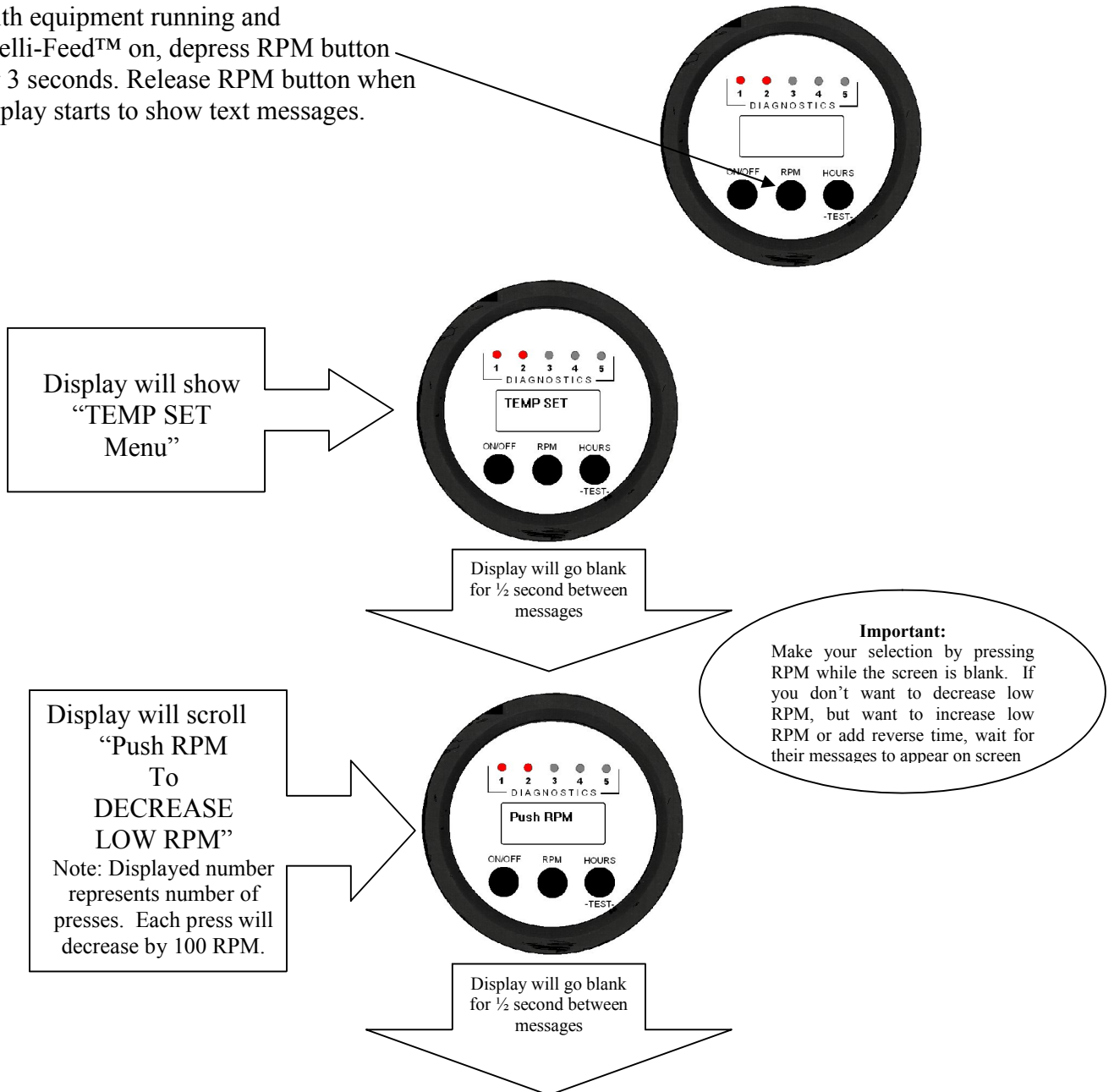
Self-Diagnostics (cont):



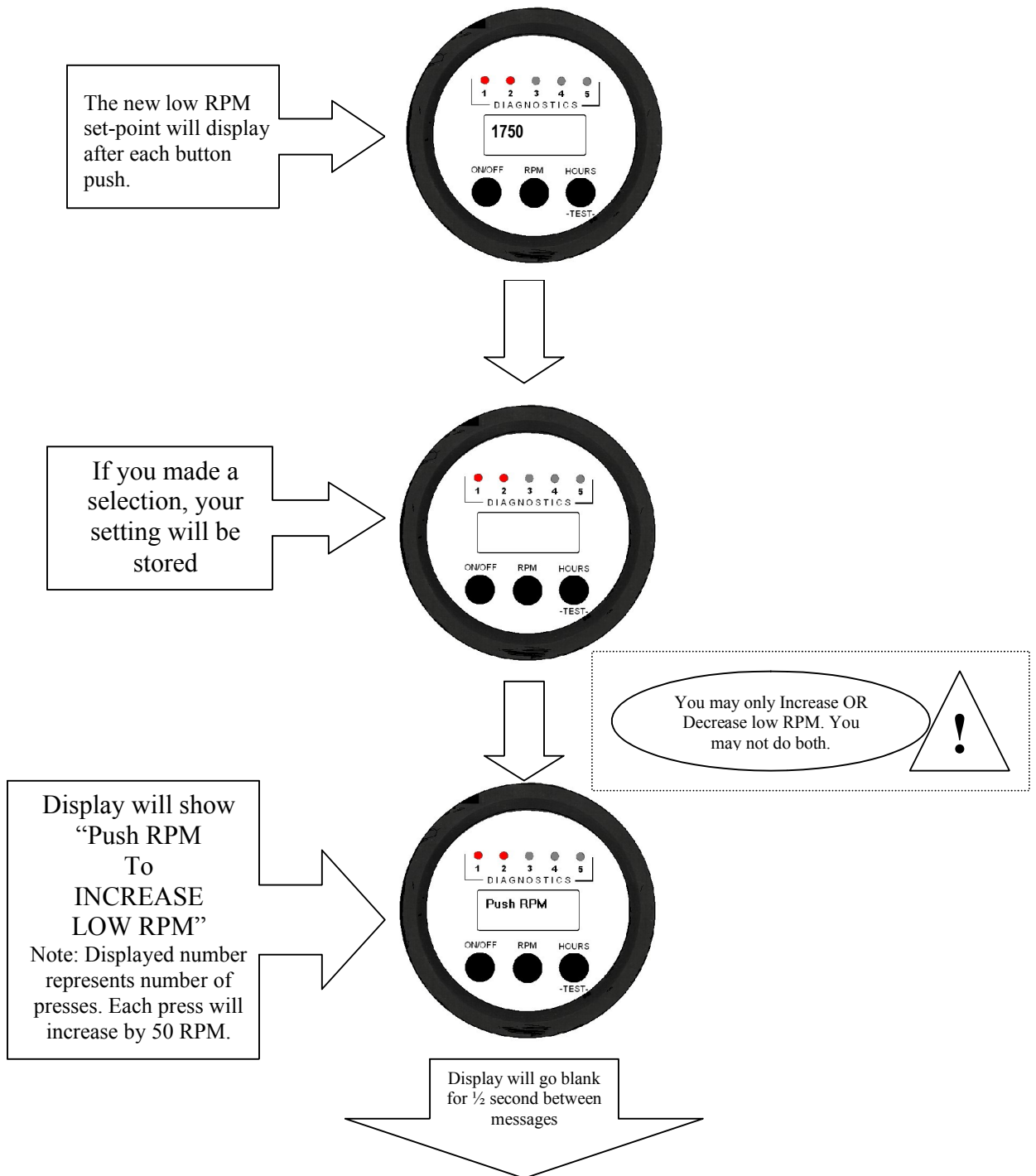
Temporary Settings Menu (Temp Set):

If special conditions are encountered that require different settings, the Intelli-Feed™ is designed to accommodate this need. The guidelines for when to do a temporary setting or which way to adjust the settings refer to your dealer. You can Increase or Decrease the Low RPM setting, or Add reverse time by simply following the instructions that display on the display screen. The display screen directions are the same as the ones below:

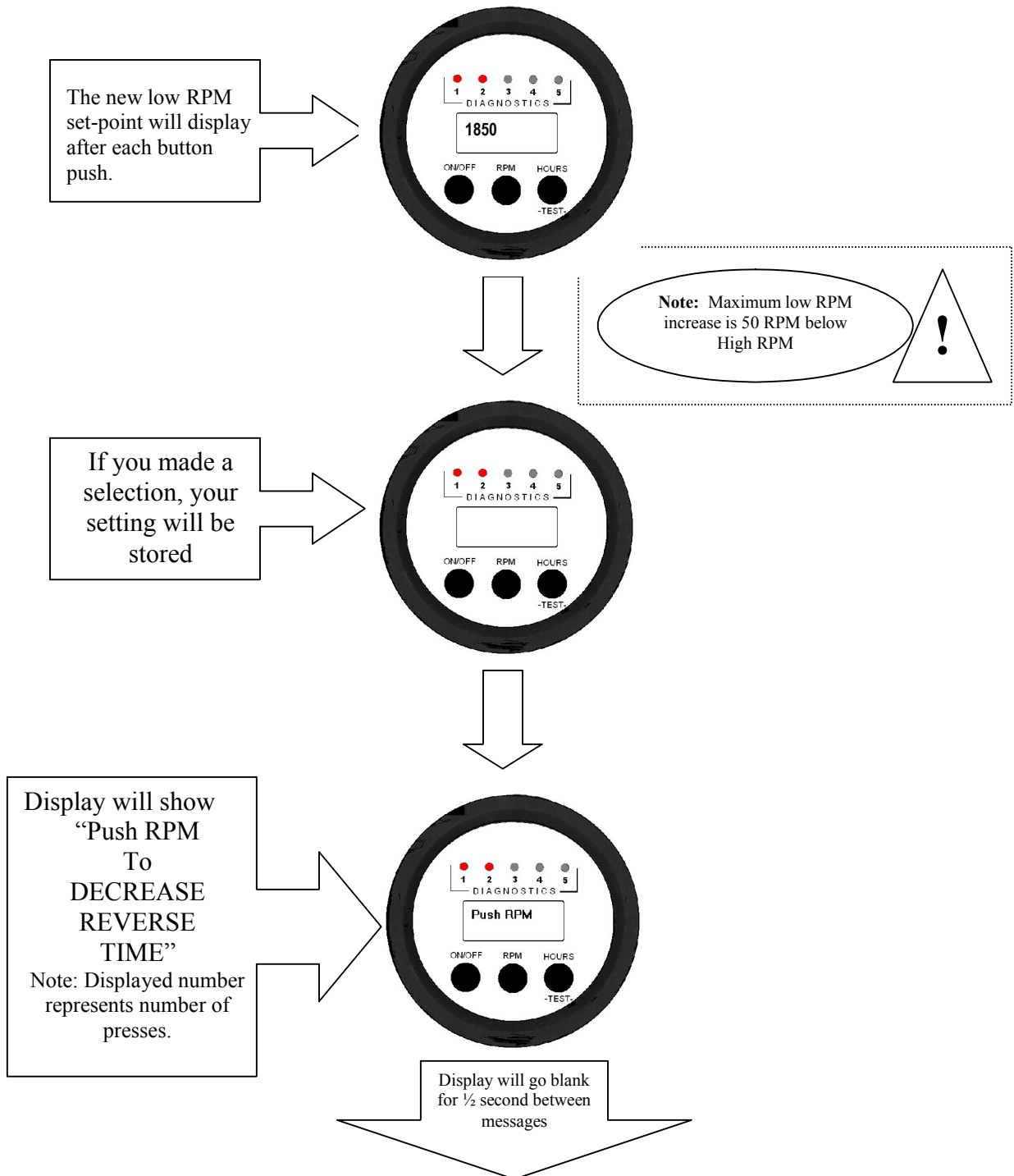
With equipment running and Intelli-Feed™ on, depress RPM button for 3 seconds. Release RPM button when display starts to show text messages.



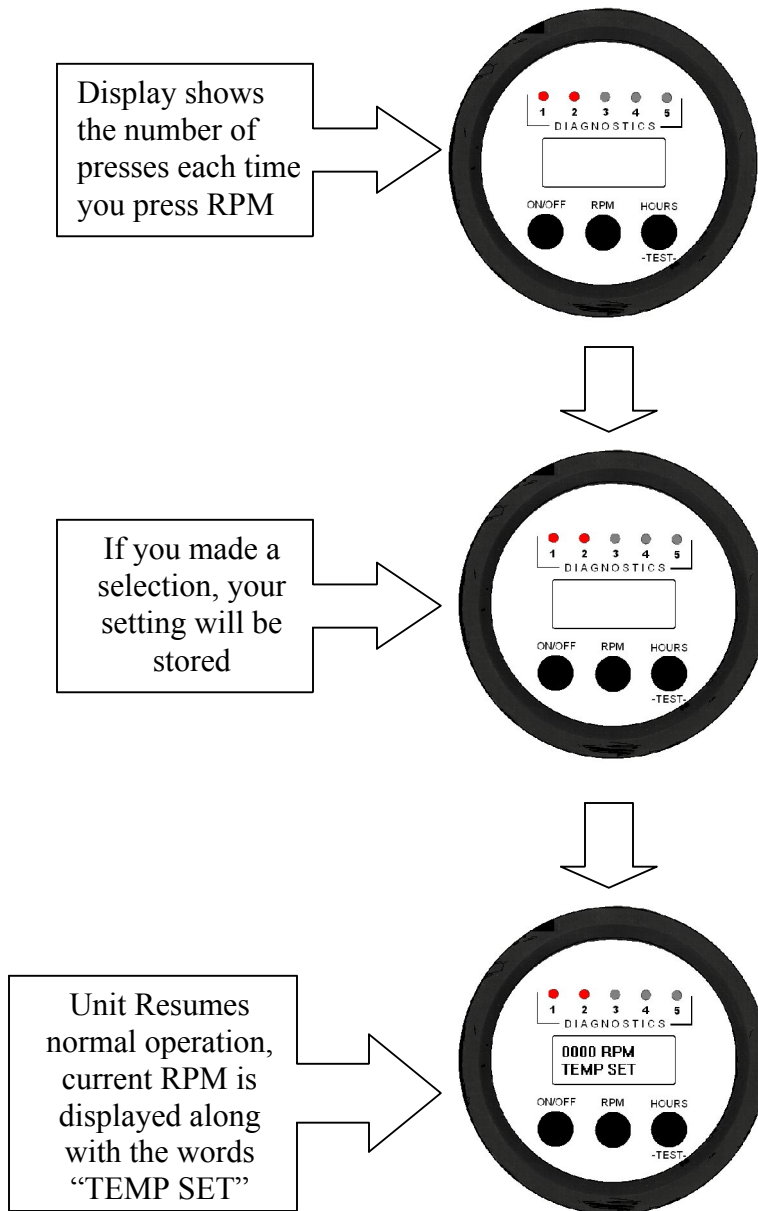
Temporary Settings Menu (cont):



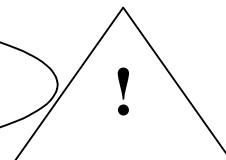
Temporary Settings Menu (cont):



Temporary Settings Menu (cont):



CAUTION: All Temporary settings will be lost when equipment is turned off. Upon turning Intelli-Feed™ on again default (not temporary) settings will be restored



Troubleshooting:

What to do if there is:

1.	No readout on the display Is power on light illuminated? (Diagnostics light #1)	Check for Power on light	
		Yes Contact Service Dealer	No Check fuse Check wiring Check grounds Check battery Check key switch Check connections
2.	Readout displays “STARTING” continuously or at times other than startup	Contact IEC to change the unit to the new style.	
3.	There is readout on display but valves do not function	Push ON/OFF button. Decrease speed below low RPM and then increase speed above High RPM. Repeat if necessary. OR Key equipment off and restart equipment. Intelli-Feed™ automatically initializes in the operational state. OR This could also be a sticky valve solenoid(s) or a faulty valve. OR This could be faulty valve wiring.	
4.	Intelli-Feed™ light(s) for forward or reverse display but valve does not function Are Intelli-Feed™ and valve cable light(s) on. (diagnostic light # 2 or # 3)	If valve has a cable equipped with a light, verify that the light on the cable comes on when the diagnostic light on the Intelli-Feed™ comes on.	
		Yes Check the: equipment valve(s)	No Check the: valve cables
5.	Intelli-Feed™ Charge Indicator Light is flashing on for ½ and off for ½ second, (#4 diagnostic light)	Check equipment battery, alternator, and charging system.	

6.	Speed signal indicator is not illuminated (#5 diagnostic light)	Check for possible damaged or defective speed signal source or wiring. Specifically a damaged or defective magnetic pick-up, or loose or broken wiring. A lack of a speed signal at start-up will not allow the STARTING phase to end.
7.	When pressing from Hours to RPM mode, it doesn't change	Press RPM button and release, and then wait three seconds for the switch from Hours to RPM.
8.	The display reads 457	Check for possible damage to, or defective speed signal source or wiring. The program PPR and speed source (magnetic pick-up) do not match. Call IEC or Bandit for assistance and/or a replacement.

Technical Assistance:

Please feel free to call us at Industrial Electronic Controls Company for technical assistance at (815) 985-0383 or e-mail us at larry@indelecon.com we are available to you with extended service hours to help solve your Intelli-FeedTM problem.