

INTENDED FOR USE BY QUALIFIED SERVICE PERSONNEL

SERVICE MANUAL



**READ AND UNDERSTAND BEFORE
SERVICING APPLICABLE EQUIPMENT**



908 W. Main • P.O. Box 368

Laurel, MT USA 59044

(1) 800-548-7341

(1) 406-628-8231

www.wpg.com

**AC- OR DC-VOLTAGE
POWER SYSTEM
WITH DUAL VACUUM SYSTEM
AND INTELLI-GRIP® TECHNOLOGY**
(SOFTWARE VERSION 10.0 AND LATER)

Stock number: 36106

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BEFORE SERVICING LIFTER



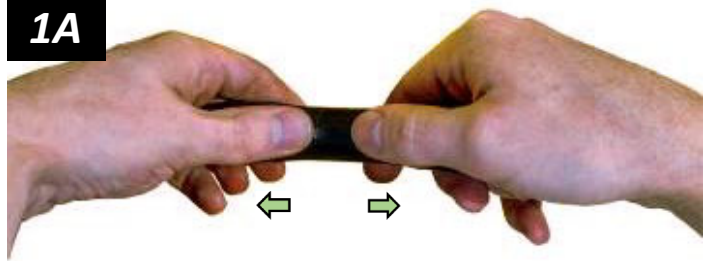
Disconnect power source when necessary to prevent electrical shock or other risks.

When necessary, disconnect the electrical connectors for the power source (figs. 1A-C).

Service personnel must read and understand the lifter's *OPERATING INSTRUCTIONS* – especially the “INSPECTIONS AND TESTS” and “MAINTENANCE” sections – before servicing the vacuum lifter. Many of the following discussions assume knowledge of the *OPERATING INSTRUCTIONS*.

Note: The final section of the lifter's OPERATING INSTRUCTIONS may contain wiring and/or hose-routing diagrams for reference when servicing or troubleshooting the lifter.

1A



1B



1C



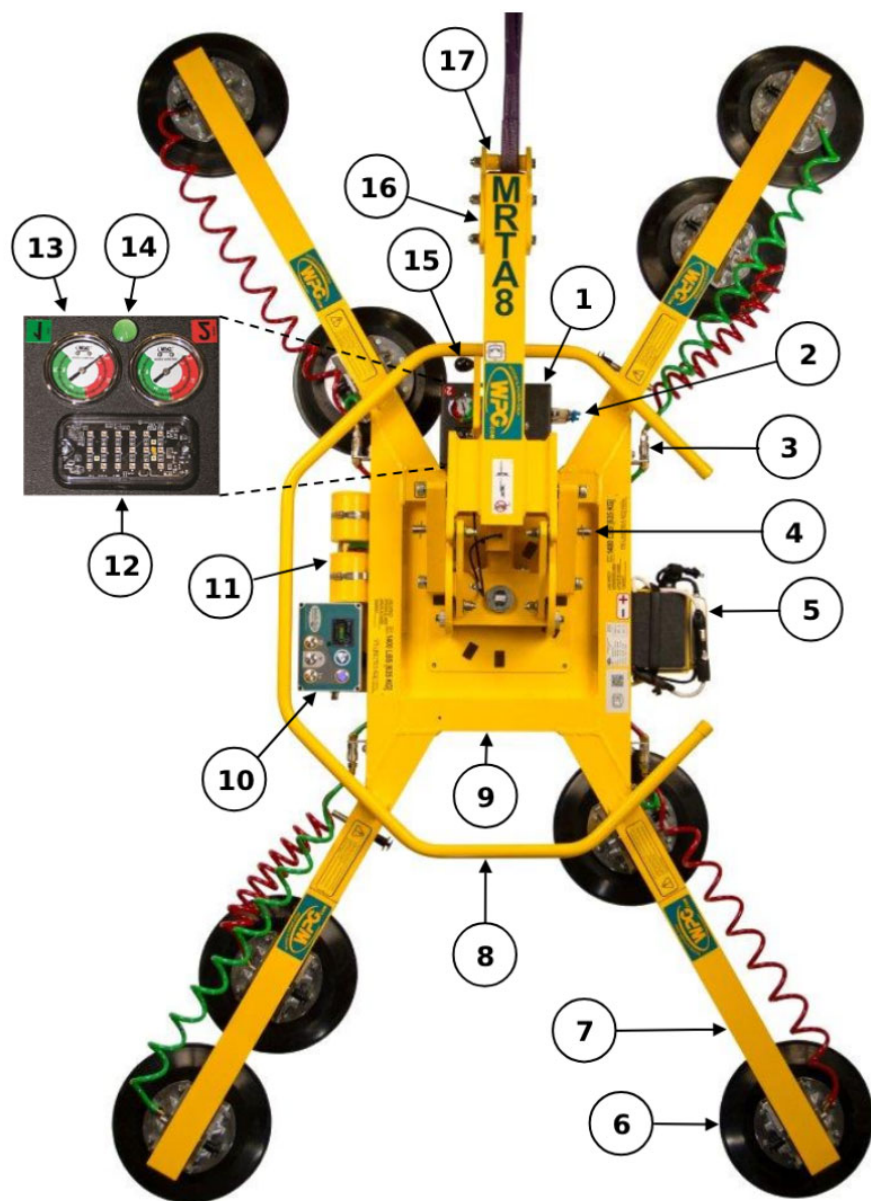
SERVICE SCHEDULE

Service must be performed whenever a deficiency is indicated by routine inspections or tests. Follow the “INSPECTIONS AND TESTS” section of the *OPERATING INSTRUCTIONS*. Any service warranted must be performed before resuming normal operation of the lifter.

SERVICE FEATURES

LIFTER FEATURES

Components shown here are underlined on their first appearance in each section to follow.¹



- 1 Cover for VACUUM PUMP and VACUUM SENSORS
- 2 AIR FILTER
- 3 QUICK CONNECTOR
- 4 TILT LOCK
- 5 BATTERY and BATTERY CHARGER
- 6 VACUUM PAD with MOVABLE PAD MOUNT
- 7 EXTENSION ARM
- 8 CONTROL HANDLE
- 9 PAD FRAME
- 10 INTELLI-GRIP® CONTROL UNIT
- 11 VACUUM RESERVE TANK
- 12 STROBE LIGHT
- 13 VACUUM GAUGE
- 14 VACUUM LIFT LIGHT
- 15 ROTATION RELEASE LEVER
- 16 LIFT BAR
- 17 LIFT POINT

Note: A standard MTA811LDC3 is shown. Component locations vary among models.

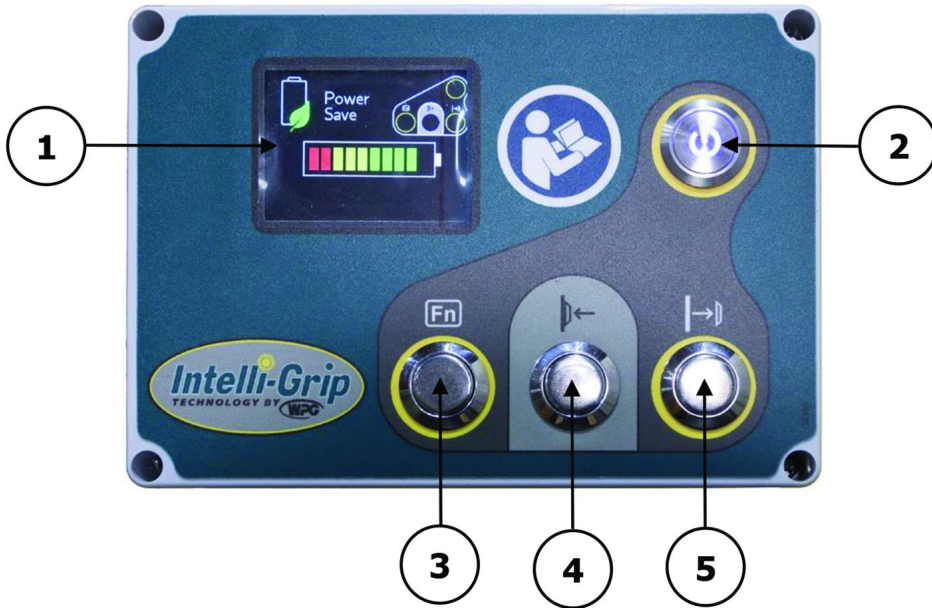
Note: AC3 lifters use an AC-to-DC Power Converter instead of a battery.

For information about specific parts, see “[REPLACEMENT PARTS](#)” in this manual, in the lifter’s *OPERATING INSTRUCTIONS*, and/or in any separate instructions for Product Options.

¹..... Some components may not be applicable, depending on the lifter in question.

SERVICE FEATURES

INTELLI-GRIP® CONTROL UNIT FEATURES



- 1 LCD SCREEN WITH BATTERY GAUGE
- 2 "POWER" BUTTON
- 3 "FUNCTION" BUTTON
- 4 "ATTACH" BUTTON
- 5 "RELEASE" BUTTON

TROUBLESHOOTING LIFTER FAULTS

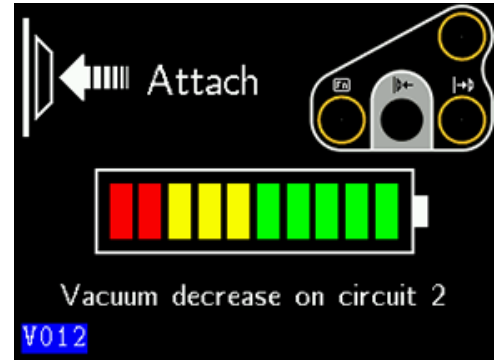
Note: When applicable, consult the Troubleshooting Guide [TST-021_DC3](#).

TO TROUBLESHOOT USING DIAGNOSTIC CODES

Generally, one or more diagnostic codes will show in the bottom-left corner of the lifter's LCD screen, accompanied by a corresponding message below the battery gauge or AC power indicator, whenever the lifter has a problem.¹

The example at right shows code V012, which indicates vacuum in one of the circuits decreased at faster rate than expected.

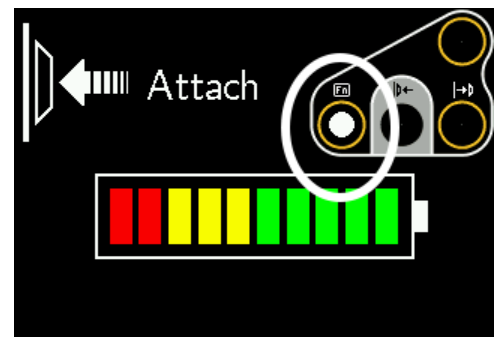
Once a code shows, locate the code under “**INTELLI-GRIP®** **DIAGNOSTIC CODES**” and follow directions for the code.



TO TROUBLESHOOT USING OTHER ON-SCREEN INFORMATION

The LCD screen example at right displays other helpful information for troubleshooting:

- **Button activity (top-right corner).** To test, press each button and make sure its corresponding indicator on the LCD screen lights up (circled).²
- **“Attach”, “Release” or “Power Save” modes (top-left corner).** The mode should reflect the lifter activity prompted by the user. Otherwise, a lifter problem likely exists. For example, the LCD screen should not show “Attach” mode as you attempt to release a load.
- **Battery gauge (center).**³ This gauge shows the battery's current energy level. For more information, see the lifter's *OPERATING INSTRUCTIONS*. Additionally, see “**BATTERY CHARGER TEST**” in this manual.



1..... In most cases, a diagnostic code stays on screen only as long as the software detects a problem. Before releasing a load, make sure to record the information showing on the screen.

2..... If the lifter has a Remote Control System, test the radio transmitter's buttons similarly.

3..... The LCD screen on AC-powered lifters displays an AC-to-DC power conversion icon instead of a battery gauge. The converted voltage reading is unlikely to change significantly during lifter operation unless there is a power failure or electrical system failure (see “In Case of a Power Failure” in the lifter's *OPERATING INSTRUCTIONS*).

← TROUBLESHOOTING LIFTER FAULTS →

To SUBMIT LIFTER DATA TO WPG

You can send lifter data is to WPG by submitting digital photo files via email, including:

- A screenshot of the LCD screen taken during lifter startup, as shown in the example at right.

*Tip: Press **and hold** the “power” button when starting the lifter. This action displays the startup screen as long as needed for you to capture the image.*

Note: If you are not able to access the startup screen, submit a photo file of the serial tag instead.



- Screenshots of “Live Stats” screens, as shown in the examples at right.¹ To show these screens, press the power button 5 times quickly to show the first “Live Stats” screen. After that, each press of the power button will show a different screen until it returns to the normal operation screen.

Live Stats - Vacuum		
Vacuum	19.10	18.60 inHg
Leak rate	0.0	0.0 %/5
Leak rate	0.00	0.00 inHg/5

◀ V012 ▶ 100%

Live Stats - 12V Battery		
Battery	13.14V	100%
Resting	13.14V	100%
Minimum	12.76V	100%
Full load	13.95V	100%
Health	good	100%
+12V Sense	-0.94V	bad

◀ V012 ▶ 100%

- Other descriptive photos files, as problems occur.

To SUBMIT VIDEO TO WPG

Even if you have submitted screenshots, you should include video that depicts the lifter problem clearly whenever possible. Describe what the lifter did and what you expected it to do.

Note: Videos may be too large to submit via email. Alternatively, you can upload them to OneDrive, DropBox or a similar file-hosting service and provide a link to WPG.

¹..... The example shown at far-right displays only on DC-powered lifters.

INTELLI-GRIP® DIAGNOSTIC CODES

Refer to the following table whenever a diagnostic code appears on the LCD screen. Codes are listed in alphanumeric order. If the Operator Explanations/Directions do not resolve the issue, follow the Service Personnel Directions, replacing parts as necessary (see “REPLACEMENT PARTS”).

*Note: This table contains many codes that are **not** relevant to AC-powered lifters. If such codes display on your AC-powered lifter, contact WPG for more information.*

Code	On-Screen Message	Buzzer Pattern	Strobe Light Activity	Operator Explanations/Directions	Service Personnel Directions
B00	“Low 12V Battery (#)”	1 chirp every 2 seconds	(none)	<p>Condition: <u>Battery gauge</u> displays 0% energy.</p> <p>Solution: Charge 12V <u>battery</u> completely, as directed in lifter’s <i>OPERATING INSTRUCTIONS</i>. Otherwise, perform diagnostics as directed for Code B02.</p>	Check for faulty 12V <u>battery</u> or malfunctioning charging system.
B01	“Lockout (low 12V battery) (#)”	continuous	(none)	<p>Condition: Insufficient energy in the 12V <u>battery</u> is preventing “attach” and “release” functions from working.</p> <p>Solution: Charge battery completely, as directed in lifter’s <i>OPERATING INSTRUCTIONS</i>.</p>	Check for faulty 12V <u>battery</u> or malfunctioning charging system.
B02	“Replace 12V battery?”	1 chirp per minute	(none)	<p>Condition: Lifter failed voltage test when powered up.</p> <p>Solution: Perform the following diagnostics:</p> <ul style="list-style-type: none"> Is <u>battery charger</u> connected to AC power source? If so, power down lifter, disconnect charger from power source and power up again. Does <u>battery gauge</u> show diminished energy? If so, charge 12V <u>battery</u> completely, as directed in lifter’s <i>OPERATING INSTRUCTIONS</i>. <i>Note: Replace battery when indicated by battery charger.</i> Is battery cold? (See Operating Temperatures in lifter’s <i>OPERATING INSTRUCTIONS</i>). If so, power down lifter, warm battery and power up again. 	<p>Continue diagnostics:</p> <ul style="list-style-type: none"> Does <u>vacuum pump</u> run upon powering up lifter? <ul style="list-style-type: none"> If not, do “Live Stats” show “Battery” voltage >11V? (see “To Submit Lifter Data to WPG”). <ul style="list-style-type: none"> If so, replace pump. If not, replace 12V <u>battery</u>. Is wiring faulty between 12V battery and <u>Intelli-Grip® control unit</u>? If so, repair or replace wiring as necessary. <p>If none of the above applies, the battery is likely to need replacement soon.</p>
B03	“Charge 12V battery soon”	1 chirp per minute	(none)	<p>Condition: 12V <u>battery</u> has ≤ 20% energy remaining.</p> <p>Solution: Charge battery completely, as directed in lifter’s <i>OPERATING INSTRUCTIONS</i>.</p>	N/A

INTELLI-GRIP® DIAGNOSTIC CODES

Code	On-Screen Message	Buzzer Pattern	Strobe Light Activity	Operator Explanations/Directions	Service Personnel Directions
B09	"Replace 9V battery?"	1 chirp per minute	(none)	Condition: 9V battery for <u>notification buzzer</u> is expended or missing. Solution: Replace battery, as directed in lifter's <i>OPERATING INSTRUCTIONS</i> .	Check 9V battery voltage with multi-meter. If battery is OK, check for bad connection in battery holder or associated wiring.
C00	"Fail-safe on module"	continuous	on	Condition: Fail-safe mode has been activated, to prevent potential injury. Solution: See Service Personnel Directions.	Disconnect 12V <u>battery</u> and replace <u>Intelli-Grip® control unit</u> .
E00 E01 E02 E03 E04	"EEPROM error, cell #"	occasional chirp	(none)	Condition: Failure detected in memory hardware. Solution: See Service Personnel Directions.	Disconnect 12V <u>battery</u> and replace <u>Intelli-Grip® control unit</u> .
I000	"I2C error (#)"	single chirp	(none)	Condition: Communication error detected within control system. Solution: Power down lifter and power up again.	Disconnect 12V <u>battery</u> and replace <u>Intelli-Grip® control unit</u> .
N00	"Automatic attach"	(none)	(none)	Condition: System activated "attach" mode as precaution because significant vacuum was detected, even though no one initiated "attach" function. Solution: <i>None required.</i> However, when appropriate, qualified service personnel can adjust sensitivity of vacuum detection.	Adjust sensitivity of vacuum detection, when appropriate (see " To CHANGE THE VACUUM DETECTION THRESHOLD ").
N01	"Automatic attach"	(none)	(none)	Condition: System activated "attach" mode as precaution because load did not release completely. Solution: <i>None required.</i> However, when appropriate, qualified service personnel can adjust sensitivity of vacuum detection.	Adjust sensitivity of vacuum detection, when appropriate (see " To CHANGE THE VACUUM DETECTION THRESHOLD ").
N02	"Automatic attach"	(none)	(none)	Condition: System activated "attach" mode as precaution when lifter was powered up, because power was previously lost while load was attached. Solution: <i>None required.</i>	N/A

INTELLI-GRIP® DIAGNOSTIC CODES

Code	On-Screen Message	Buzzer Pattern	Strobe Light Activity	Operator Explanations/Directions	Service Personnel Directions
N04	"Failed to turn controls power off"	1 chirp every 2 seconds	(none)	<p>Condition: Power could not be turned off at Intelli-Grip® control unit.</p> <p>Solution:</p> <ul style="list-style-type: none"> a) Remove 9V battery. b) Disconnect 12V <u>battery</u> from vacuum generating system. c) Charge battery completely, as directed in lifter's <i>OPERATING INSTRUCTIONS</i>. d) Reconnect battery and try to power down again. 	Do "Live Stats" show "Battery" voltage > 11V? If so, disconnect 12V <u>battery</u> and replace <u>Intelli-Grip® control unit</u> .
N07	"Auto power-down disabled"	(none)	(none)	<p>Condition: Automatic power-down is prevented.</p> <p>Solution: Power down lifter and power up again.</p>	Check for other Diagnostic Codes and perform service as directed.
N08	"Powering down in # seconds"	1 chirp per minute	(none)	<p>Condition: Lifter will automatically power down in number of seconds shown.</p> <p>Solution: <i>None required.</i> Press any button to cancel action.</p>	N/A
N10	"App-support hardware fault"	(none)	(none)	<p>Condition: Fault is detected in hardware that enables communication with mobile app.</p> <p>Solution: Power down lifter and power up again.</p>	Disconnect 12V <u>battery</u> and replace <u>Intelli-Grip® control unit</u> .
U00	"WARNING! Is load attached?"	fast chirp	on	<p>Condition: Attempt was made to power down lifter while load was still detected.</p> <p>Solution: Lower load onto stable support and release load <i>before</i> powering down.</p>	N/A
U01	"Also hold [Fn] to power down"	(none)	(none)	<p>Condition: Only "<u>power</u>" button was used.</p> <p>Solution: Hold "power" button AND "<u>function</u>" button at same time to power down lifter.</p>	N/A
U02	"Turn off? Let go of buttons"	(none)	(possible)	<p>Condition: Incorrect combination of buttons was used in apparent attempt to power down lifter.</p> <p>Solution: Hold only "<u>power</u>" button AND "<u>function</u>" button at same time to power down.</p>	N/A
U03	"Timed release: # seconds"	1 chirp per button press	on	<p>Condition: Timed release function has been activated for number of seconds shown (see lifter's <i>OPERATING INSTRUCTIONS</i>).</p> <p>Solution: <i>None required.</i> Press "<u>function</u>" button to cancel action or press "<u>attach</u>" button to override.</p>	N/A

INTELLI-GRIP® DIAGNOSTIC CODES

Code	On-Screen Message	Buzzer Pattern	Strobe Light Activity	Operator Explanations/Directions	Service Personnel Directions
U04	"Also hold [Fn] to release"	(none)	(none)	Condition: Only <u>"release" button</u> was used. Solution: Hold <u>"release" button</u> AND <u>"function" button</u> at same time to release load.	N/A
U06	"Let go of [Fn] and Release"	(none)	on	Condition: <u>"Function" button</u> or <u>"release" button</u> was used in combination with <u>"attach" button</u> . Solution: Use only <u>"attach" button</u> to attach load.	N/A
U08	"Menu not available in Attach"	(none)	(none)	Condition: Attempt to access Operator Menus was made while lifter was attached to a load. Solution: Access Operator Menus when lifter is not attached.	N/A
U09	"Counterweight not retracted"	continuous	on	Condition: "Release" function is prevented because counterweight is not positioned correctly. Solution: Reposition counterweight as directed in Counter-Balancer's <i>OPERATING INSTRUCTIONS</i> and try again.	N/A
U10	"Use POWER button for Live Stats"	(none)	(none)	Condition: <u>"Function" button</u> was used in apparent attempt to access Live Stats. Solution: Use <u>"Power" button</u> to access Live Stats.	N/A
U11	"Testing battery - wait to attach"	(none)	(none)	Condition: "Attach" function is prevented because <u>battery</u> test is in progress. Solution: Wait until <u>vacuum pump</u> stops running and try again.	N/A
V000	"INSUFFICIENT VACUUM!"	continuous	on	REQUIRED ACTION: <i>Immediately lower load onto stable support until sufficient vacuum can be obtained.</i> Condition: Vacuum level is insufficient for lifting. Solution: Check load and <u>vacuum pads</u> for damage, as directed in lifter's <i>OPERATING INSTRUCTIONS</i> .	Troubleshoot leak(s) in vacuum system.

INTELLI-GRIP® DIAGNOSTIC CODES

Code	On-Screen Message	Buzzer Pattern	Strobe Light Activity	Operator Explanations/Directions	Service Personnel Directions
V001 V002 V003 V004	"INSUFFICIENT VACUUM #!" (# indicates relevant vacuum circuit)	continuous	on	<p>REQUIRED ACTION: <i>Immediately lower load onto stable support until sufficient vacuum can be obtained.</i></p> <p>Condition: Vacuum level in circuit indicated is insufficient for lifting.</p> <p>Solution: Check load and <u>vacuum pads</u> for damage, as directed in lifter's <i>OPERATING INSTRUCTIONS</i>.</p> <p><i>Note: These codes can also be activated in connection with Code N00.</i></p>	Troubleshoot leak(s) in relevant vacuum circuit.
V011 V012 V013 V014 V015	"Vacuum decrease on circuit #" (# indicates relevant vacuum circuit)	3 chirps	(none)	<p>Condition: Vacuum decreased at faster rate than expected in circuit(s) indicated.</p> <p>Solution: Check for likely causes, including:</p> <ul style="list-style-type: none"> • bouncing or landing load; • use on rough or porous loads; • other sources of vacuum leaks. <p>Eliminate leaks when possible, as directed in lifter's <i>OPERATING INSTRUCTIONS</i>.</p>	Determine whether reduction in vacuum level is due to leaks or other circumstances. Repair any leak(s) found in relevant vacuum circuit(s). The sensitivity to vacuum level changes can also be adjusted, when appropriate (see "TO CHANGE THE LEAK RATE THRESHOLD").
V020	"Vacuum not increasing normally"	1 chirp every 2 seconds	on	<p>Condition: After lifter began to attach, vacuum level did not increase at normal rate.</p> <p>Solution: Make sure all <u>vacuum pads</u> seal securely, as directed in lifter's <i>OPERATING INSTRUCTIONS</i>.</p> <p><i>Note: This Code can be activated by use at high elevation. If so, contact WPG for directions.</i></p>	Check for fault(s) in vacuum system.
V03A V03B	"Pump running excessively"	1 chirp every 2 seconds	(none)	<p>Condition: <u>Vacuum pump</u> is running more often than normal.</p> <p>Solution: Likely causes/solutions include:</p> <ul style="list-style-type: none"> • significant vacuum leak: Check for fault(s) in vacuum system (see lifter's <i>OPERATING INSTRUCTIONS</i>). • high elevation prevents lifter from achieving minimum vacuum level: Contact WPG for directions. 	Check for fault(s) in relevant <u>vacuum pump</u> (see "VACUUM PUMP MAINTENANCE – MODEL 1034204") or in vacuum system.
V04	"Lockout (vacuum sensor error)"	continuous	(none)	<p>Condition: A <u>vacuum sensor</u> malfunction prevents "attach" and "release" functions from working, once "Power Save" mode has been activated.</p> <p>Solution: Make sure sensor connectors are attached correctly.</p>	Check for fault(s) in <u>vacuum sensor</u> , wiring or connectors.

INTELLI-GRIP® DIAGNOSTIC CODES

Code	On-Screen Message	Buzzer Pattern	Strobe Light Activity	Operator Explanations/Directions	Service Personnel Directions
V05	"DANGER! INSUFFICIENT VACUUM!"	continuous	on	REQUIRED ACTION: <i>Keep everyone away from suspended load until it can be safely lowered onto stable support.</i> Condition: Vacuum levels in BOTH circuits are insufficient for lifting. Solution: Service is required.	Troubleshoot leak(s) in both vacuum circuits. Do not place lifter back into service until problem is resolved.
V081 V082 V083 V084	"Sensor # error, (low)" (# indicates relevant vacuum circuit)	continuous in "attach" mode; 1 chirp every minute in "Power Save" mode	(none)	Condition: <u>Vacuum sensor</u> malfunction in vacuum circuit indicated. Solution: Make sure sensor connector is attached correctly.	Check for fault(s) in <u>vacuum sensor</u> , wiring or connector.
V091 V092 V093 V094	"Sensor # error, (high)" (# indicates relevant vacuum circuit)	continuous in "attach" mode; 1 chirp every minute in "Power Save" mode	(none)	Condition: <u>Vacuum sensor</u> malfunction in vacuum circuit indicated. Solution: Make sure sensor connector is attached correctly.	Check for fault(s) in <u>vacuum sensor</u> , wiring or connector.

INTELLI-GRIP® OPERATOR MENUS

The Intelli-Grip® Control Unit features several menus that allow the operator to view more detailed information on the LCD screen and change various settings.

TO ACCESS AND NAVIGATE THE OPERATOR MENUS

Note: Some operator menus can only be accessed when the lifter is in “Power Save” mode.

To access the main Operator Menu, hold the “function” button (Fn) for 5 seconds.



To scroll down, press the “release” button (↵).



To scroll up, press the “attach” button (↵).



To select an item, press the “function” button (Fn).



When you are finished, scroll to **“Exit Menu”** and press the “function” button (Fn).

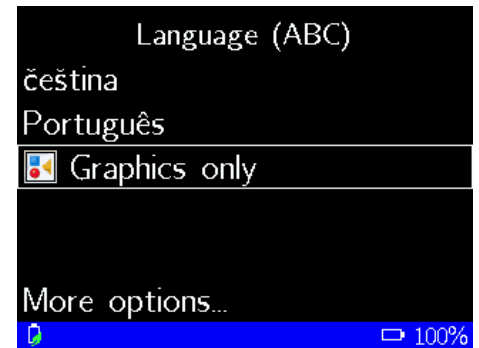
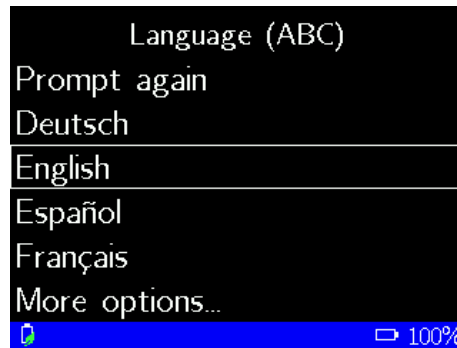
To exit all menus, press the “power” button (⏻).

Note: A similar process is used to navigate all operator menus.



INTELLI-GRIP® OPERATOR MENUS

TO CHANGE THE SCREEN LANGUAGE

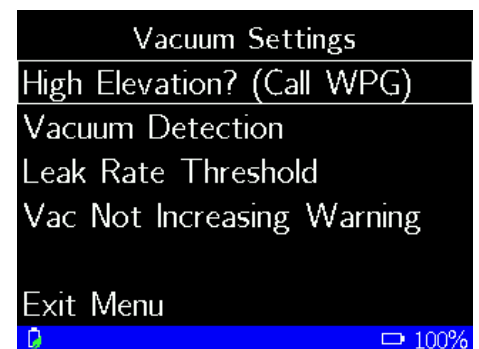


- 1) Access the Operator Menu and select **“Language (ABC)”**.
- 2) In the Language (ABC) menu, select your preferred language or **“More options”** to see additional choices.

*Note: If you select **“Graphics only”**, no words of any language are displayed on the LCD screen during typical operation, but English is displayed in the menus.*

TO USE THE LIFTER AT HIGH ELEVATION

Using the lifter at high elevation may prevent the vacuum generating system from attaining the minimum vacuum level for lifting (see Operating Elevation under “SPECIFICATIONS” in lifter’s *OPERATING INSTRUCTIONS*).



- 1) Access the Operator Menu and select **“Lifter Settings”**.
- 2) In the Lifter Settings menu, select **“Vacuum Settings”**.
- 3) As indicated in the Vacuum Settings menu, you must call Wood’s Powr-Grip to learn more about using the lifter at high elevation.

Note: WPG's phone numbers are on the cover page of this SERVICE MANUAL.

INTELLI-GRIP® OPERATOR MENUS

TO CHANGE THE VACUUM DETECTION THRESHOLD

As a precaution, the lifter will activate the “attach” mode if vacuum is detected under unusual conditions (see Codes N00, N01 and N02 under “[INTELLI-GRIP® DIAGNOSTIC CODES](#)”). If desired, the sensitivity of this feature can be adjusted by following these steps:

1) Access “**Vacuum Settings**”, as previously directed.

2) In the Vacuum Settings menu, select “**Vacuum Detection**”.

3) In the Vacuum Detection Threshold menu, select the desired sensitivity threshold.

Vacuum Settings	Vacuum Detection Threshold
High Elevation? (Call WPG)	1.0 inHg (default)
Vacuum Detection	2.0 inHg (less sensitive)
Leak Rate Threshold	
Vac Not Increasing Warning	
Exit Menu	

*Note: This setting can only be changed using this menu. It will **not** reset automatically when the lifter is powered down.*

TO CHANGE THE LEAK RATE THRESHOLD

The lifter will alert the operator if vacuum decreases more quickly than expected (see Codes V011, V012, V013, V014 and V015 under “[INTELLI-GRIP® DIAGNOSTIC CODES](#)”). With rough or porous loads, this can result in frequent or constant alarms. To adjust the sensitivity of this feature, follow these steps:

1) Access “**Vacuum Settings**”, as previously directed.

2) In the Vacuum Settings menu, select “**Leak Rate Threshold**”.

3) In the Leak Rate Threshold menu, select the desired sensitivity threshold or disable the alarm.

Vacuum Settings	Leak Rate Threshold
High Elevation? (Call WPG)	25% / 5 minutes
Vacuum Detection	50% / 5 minutes (default)
Leak Rate Threshold	75% / 5 minutes
Vac Not Increasing Warning	100% / 5 minutes
Exit Menu	Disabled

*Note: This setting can only be changed using this menu. It will **not** reset automatically when the lifter is powered down.*

INTELLI-GRIP® OPERATOR MENUS

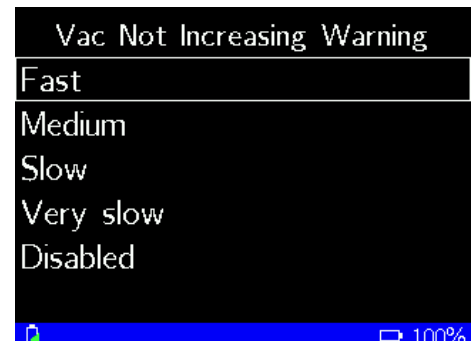
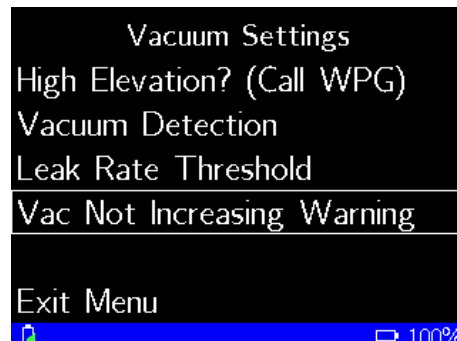
TO CHANGE THE NOTIFICATION SPEED OF CODE V020

The lifter will notify the operator if vacuum does not increase normally after vacuum pads begin attaching to a load (see Code V020 under “[INTELLI-GRIP® DIAGNOSTIC CODES](#)”). Because specific conditions can affect the speed at which vacuum increases, qualified service personnel can accordingly adjust the speed at which Intelli-Grip® generates Code V020. To change the notification speed, follow these steps:

1) Access “**Vacuum Settings**”, as previously directed.

2) In the Vacuum Settings menu, select “**Vac Not Increasing Warning**”.

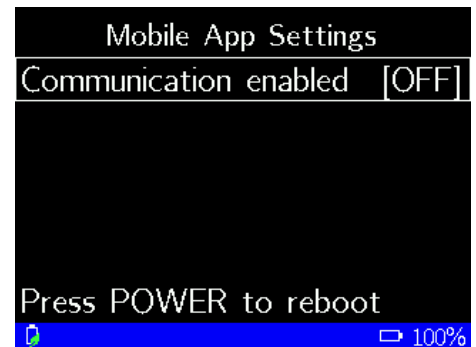
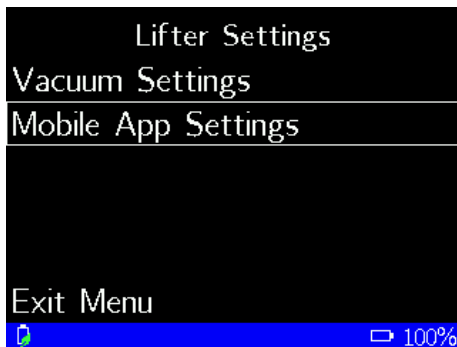
3) In the Vac Not Increasing Warning menu, select the desired speed or disable the notification.



*Note: This setting can only be changed using this menu. It will **not** reset automatically when the lifter is powered down.*

TO CHANGE MOBILE APP SETTINGS

To make use of WPG's Mobile App, you must enable communication from the lifter to your mobile device, as follows:



1) Access “**Lifter Settings**”, as previously directed.

2) In the Lifter Settings menu, select “**Mobile App Settings**”.

3) In the Mobile App Settings menu, select “Communication enabled” to enable communication “[ON]”. Select “Communication enabled” again to disable communication “[OFF]”.

INTELLI-GRIP® OPERATOR MENUS

- 4) Press the “power” button (⏻) to complete the change.



Note: If the mobile app notifies you that a software update is available, tap the notification and follow the in-app instructions to update the lifter software.

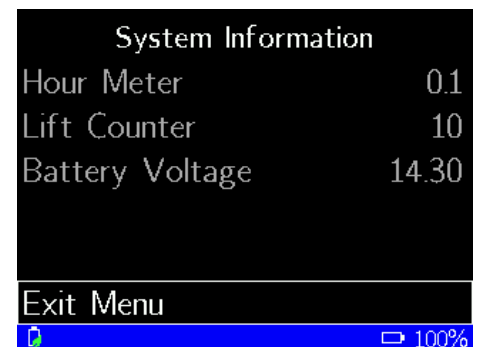
TO VIEW SYSTEM INFORMATION

The lifter keeps a record of the following information:

- Total hours of lifter operation (“Hour Meter”).
- Total number of lifting cycles completed (“Lift Counter”).
- Present voltage of the 12-volt battery (“Battery Voltage”).¹

To review this information, follow these steps:

- 1) Access the Operator Menu and select **“System Information”**, as previously directed.
- 2) In the System Information menu, find the desired information.

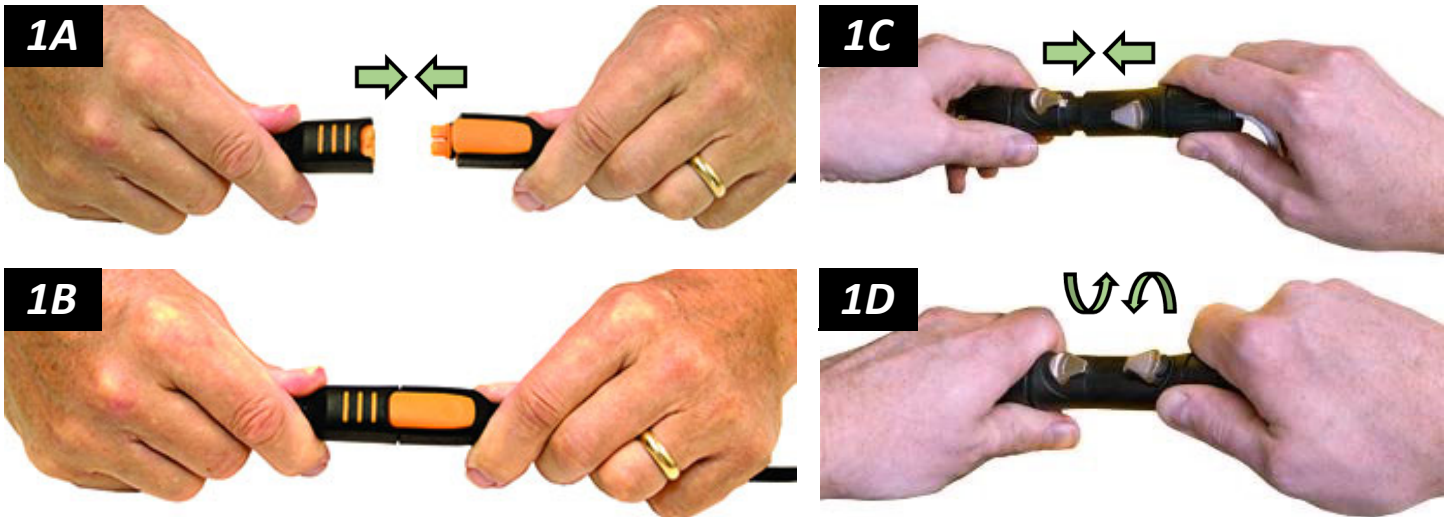


¹..... The “Battery Voltage” line will also appear on AC-powered lifters with Intelli-Grip, but the information shown is invalid and inconsequential. Please disregard.

BATTERY CHARGER TEST


Note: The battery charger test is not applicable to AC-powered lifters.

The battery charger should function as described in “MAINTENANCE: 12-VOLT BATTERY RECHARGE” in the lifter's *OPERATING INSTRUCTIONS*. If not, the following test allows you to determine whether to replace the charger. Perform this test **only** when the battery is **not** fully charged (see “OPERATION: BEFORE USING THE LIFTER: Checking the 12-Volt Battery” in *OPERATING INSTRUCTIONS*).



1) If electrical connectors for the battery or charger were previously disconnected, reconnect them (figs. 1A-B and figs. 1C-D).

2) Make sure the battery charger is **not** plugged into an AC power source. Then access the “Battery Voltage” reading on the LCD screen, as previously directed (see “[TO VIEW SYSTEM INFORMATION](#)”).¹

System Information	
Hour Meter	0.1
Lift Counter	10
Battery Voltage	14.30
Exit Menu	
 100%	

3) Now plug the battery charger into an appropriate AC power source, as directed in the lifter's *OPERATING INSTRUCTIONS*.

If the charger is functioning correctly, the voltage reading on the LCD screen should begin to increase when the charger is plugged in.

If the charger is **not** functioning correctly, replace it and repeat the test (see “[REPLACEMENT PARTS](#)”).

¹..... If the battery is completely discharged, the LCD screen will not display anything. In this case, a voltmeter may be used to determine battery voltage in this test.

SERVICE PROCEDURES

AIR FILTER MAINTENANCE – 0.1 OZ BOWL SIZE



Inspect each air filter regularly, and service when necessary.

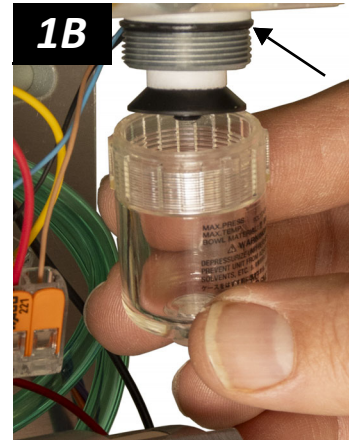
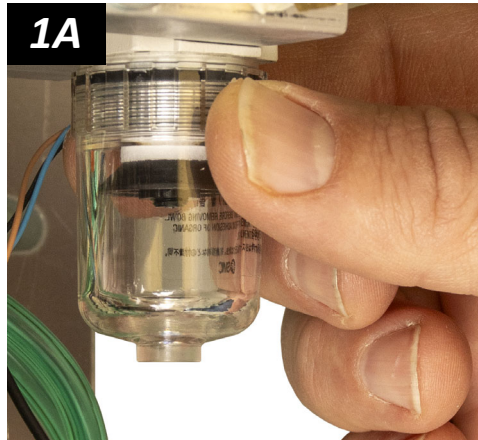
Immediately remove liquid or other contaminants found inside the filter bowl, to prevent contact with the filter element (see “Filter Service Procedure” below).

Replace the filter element whenever:

- It has an overall dirty appearance.
- There is a noticeable increase in the time required for the lifter to attain full vacuum.

Filter Service Procedure

- 1) Unscrew the bowl from the body of the air filter (fig. 1A-B).



- 2) Carefully remove the bowl seal (see arrow in fig. 1B) from the body and clean the seal with mild soap and water. Make sure the seal is not damaged.
- 3) Lubricate the bowl seal, using a mineral-based oil or grease, and reinstall the seal in its original position within the body.

Note: Do not use synthetic oils, such as esters, and do not use silicones.

- 4) Use an air hose or other suitable means to remove any liquid or other contaminants found inside the bowl and body of the filter.
- 5) Determine whether the filter element needs to be replaced (see above).
 - *If so, proceed to step 6.*
 - *If not, skip to step 8.4.*

SERVICE PROCEDURES

6) Unscrew the element holder from the filter body (fig. 6A).



7) Unscrew the cap that secures the element in the element holder (figs. 7A-B). Remove the element from the holder's center screw (fig. 7C). Then dispose of the old element.



8) Reassemble the air filter:

8.1) Slide the new filter element (**#16107AM**) over the holder's center screw.

8.2) Reinstall the cap, to secure the filter element in the holder.

8.3) Reinstall the element holder in the filter body, tightening gently — finger-tight.

8.4) Reinstall the filter bowl. Hand-tighten only.

9) Perform the "Vacuum Test" to be certain the air filter does not leak (see "INSPECTIONS AND TESTS: TESTING" in lifter's *OPERATING INSTRUCTIONS*).

Note: Repeat this procedure with the other filter.

SERVICE PROCEDURES

VACUUM PUMP MAINTENANCE – MODEL 1034204



**Disconnect power source
before proceeding.**

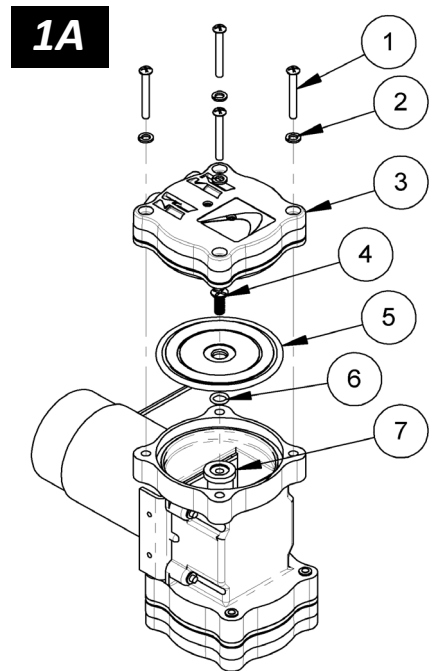


If the vacuum pump takes too long to attain full vacuum, replace the diaphragm or the head assemblies as necessary to obtain acceptable pump performance (fig. 1A). Perform the following maintenance on both heads of the pump. Then perform the “Vacuum Test” (see “INSPECTIONS AND TESTS: TESTING” in the lifter’s *OPERATING INSTRUCTIONS*).

Caution: Do not overtighten head screws, because this may damage the threads in the pump body.

Replacing the Diaphragm

- 1) Remove the four head screws (item 1 in fig. 1A) and lock washers (item 2), and remove the head assembly (item 3).
- 2) Remove the diaphragm retaining screw (item 4), diaphragm (item 5), rubber O-ring (item 6) and flat washer (item 7). Be sure to note the diaphragm orientation for reassembly.
- 3) Replace the flat washer, rubber O-ring, diaphragm and diaphragm retaining screw.
- 4) Reverse the steps above to reassemble.



- 1 HEAD SCREW
- 2 LOCK WASHER
- 3 HEAD ASSEMBLY (#66197AA)
- 4 DIAPHRAGM RETAINING SCREW
- 5 DIAPHRAGM (#66197AM)
- 6 RUBBER O-RING
- 7 FLAT WASHER

Replacing the Head Assembly¹

- 1) Remove the hose fittings from the head assembly, and carefully clean the threads. Be sure to note the fitting locations for reassembly.
- 2) Remove the four head screws (item 1 in fig. 1A), lock washers (item 2) and head assembly (item 3).
- 3) Replace the head assembly (reverse *step 2*).
- 4) Reinstall the hose fittings, using an appropriate thread sealant.

1..... **Caution:** Depending on the product, the head assembly (item 3 in fig. 1A) may be rotated to an orientation different from the one shown. When removing the head assembly, always take note of its orientation and install it the same way during reassembly.

REPLACEMENT PARTS

Stock No.	Description	Applicable Lifters ^{1,2}	Qty.
66469	Rotation Latch Assembly — Lever Style	MR4-AC3 MRPT-AC3	1
66197AM	Pump Diaphragm Kit		2 / 4
66197AA	Pump Dual-Head Assembly		2 / 4
66136	Vacuum Pump— Diaphragm Type – 2.5 SCFM – 12 V DC		1
65211	Check Valve – 1/8 NPT		2
64834	LED Indicator – 12 V DC – Green (aka vacuum lift light)		1
64752A	Audio Alarm – 5-15 V DC – Panel Mount		1
64713	Battery Charger – 7 Amp – 220 / 240 V AC – Australian Type	MRTALP4/8-DC3 MTEX-DC3	1
64716	Battery Charger – 0.8 Amp – 240 V AC – Australian Type	Other DC3 lifters	1
64712	Battery Charger – 7 Amp – 100 / 115 V AC	MRTALP4/8-DC3 MTEX-DC3	1
64714	Battery Charger – 0.8 Amp – 100 / 120 V AC	Other DC3 lifters	1
64711	Battery Charger – 7 Amp – 220 / 240 V AC	MRTALP4/8-DC3 MTEX-DC3	1
64715	Battery Charger – 0.8 Amp – 240 V AC	Other DC3 lifters	1
64665	Battery – 12 V DC – 18 Amp-Hours	FLEXR-DC3 MRTALP-DC3 MTEX-DC3	1
64664	Battery – 12 V DC – 9 Amp-Hours	Other DC3 lifters	1
64460	Circuit Breaker – 15 A		1
65254MM	Solenoid Valve – 12 V DC – 4 W		2
59916BN	14-Pin Cord Assembly – Long	FLEXR-AC3 MR4-AC3 MRT4-DC3 MRTA8-DC3 MRTALP4/8-DC3 MTEX-DC3	1
59916BM	14-Pin Cord Assembly – Short	MRTALPCH6-DC3 P1-DC3	1
59908BB	Filter & Valve Manifold Assembly (including vacuum sensors)	MRTALPCH6-DC3 P1-DC3	1
59908AB	Filter & Valve Manifold Assembly (including vacuum sensors)	MR4-AC3 MRPT-AC3 MRT4-DC3 MRTA8-DC3 MRTALP4/8-DC3	1
59906	Remote Control System Retrofit Kit		1
59901CB	Intelli-Grip® Control Unit	MR4-AC3 MRTALPCH6-DC3 P1-DC3	1
59901AB	Intelli-Grip® Control Unit	Other AC3 and DC3 lifters	1
59900SB	Strobe Light – 12 V DC – Amber		1

1. If a lifter is indicated, the listing describes a lifter type, style or series that could include multiple lifter models.

2. If a lifter is not indicated, the part is universal to all AC3 and/or DC3 lifters that use this type of part.

Continued on next page

REPLACEMENT PARTS

Stock No.	Description	Applicable Lifters ^{1,2}	Qty.
59900BB	Battery Holder – 9 V DC (for notification buzzer)		1
59092NC	Power Lead	FLEXR-AC3 FLEXR-DC3 MTEX-DC3	1
59086NC	Battery Connector – Twin Lead		1
54390NC	Power Lead – approx 21" Long	P1-DC3	1
54384NC	Power Lead – approx 51" Long	MRTALP4/8-DC3	1
54382NC	Power Lead – approx 35" Long	MRT4-DC3 MRTA8-DC3 MRTALPCH6-DC3	1
16107AM	Element for Air Filter – 0.1 oz Bowl Size		2
15921AM	Vacuum Gauge – 1/8 NPT – CBM Type – w/Panel Mount Bracket – 18" Hg [-60 kPa]	MRTALPCH6-DC3	2
15920	Vacuum Gauge – 1/8 NPT – CBM Type – w/Panel Mount Bracket – 16" Hg [-54 kPa]	Other AC3 and DC3 lifters	2
15651	360° Rotating Union – 1/4 NPT	MR4-AC3 MRPT-AC3	1

1. If a lifter is indicated, the listing describes a lifter type, style or series that could include multiple lifter models.

2. If a lifter is not indicated, the part is universal to all AC3 and/or DC3 lifters that use this type of part.

*See lifter's **OPERATING INSTRUCTIONS** for additional parts.*

**SERVICE ONLY WITH IDENTICAL REPLACEMENT PARTS,
AVAILABLE AT WPG.COM OR THROUGH AN AUTHORIZED WPG DEALER**

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