KEEP FOR FUTURE REFERENCE

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SERVICE MANUAL

STOCK NUMBER 36105

2.5 SCFM NOMINAL AIRFLOW PUMP(S)
DUAL VACUUM SYSTEM
DC-VOLTAGE POWER SYSTEM
WITH INTELLI-GRIP® TECHNOLOGY
(SOFTWARE VERSION 6.0)

READ ALL INSTRUCTIONS AND SAFETY RULES
BEFORE SERVICING THIS LIFTER

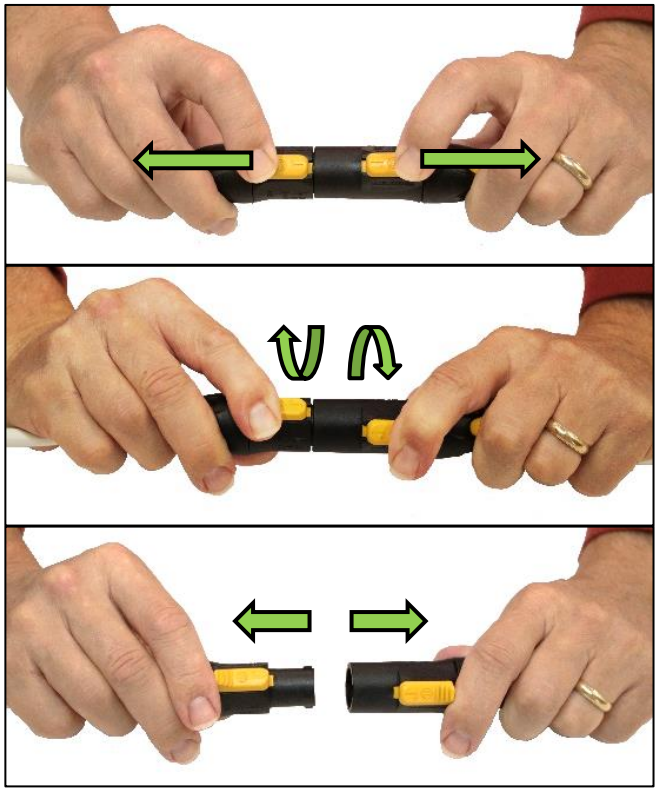
DESIGNED FOR THE TECHNICAL SERVICE PROFESSIONAL

TABLE OF CONTENTS

BEFORE SERVICING LIFTER

Make sure battery is disconnected before servicing lifter.

Disconnect the electrical connectors for the battery, as shown.



- Service personnel must read and understand the *OPERATING INSTRUCTIONS* (especially the MAINTENANCE section) before attempting to service the vacuum lifter.
- Many of the following discussions assume knowledge of the *OPERATING INSTRUCTIONS* or access to them.

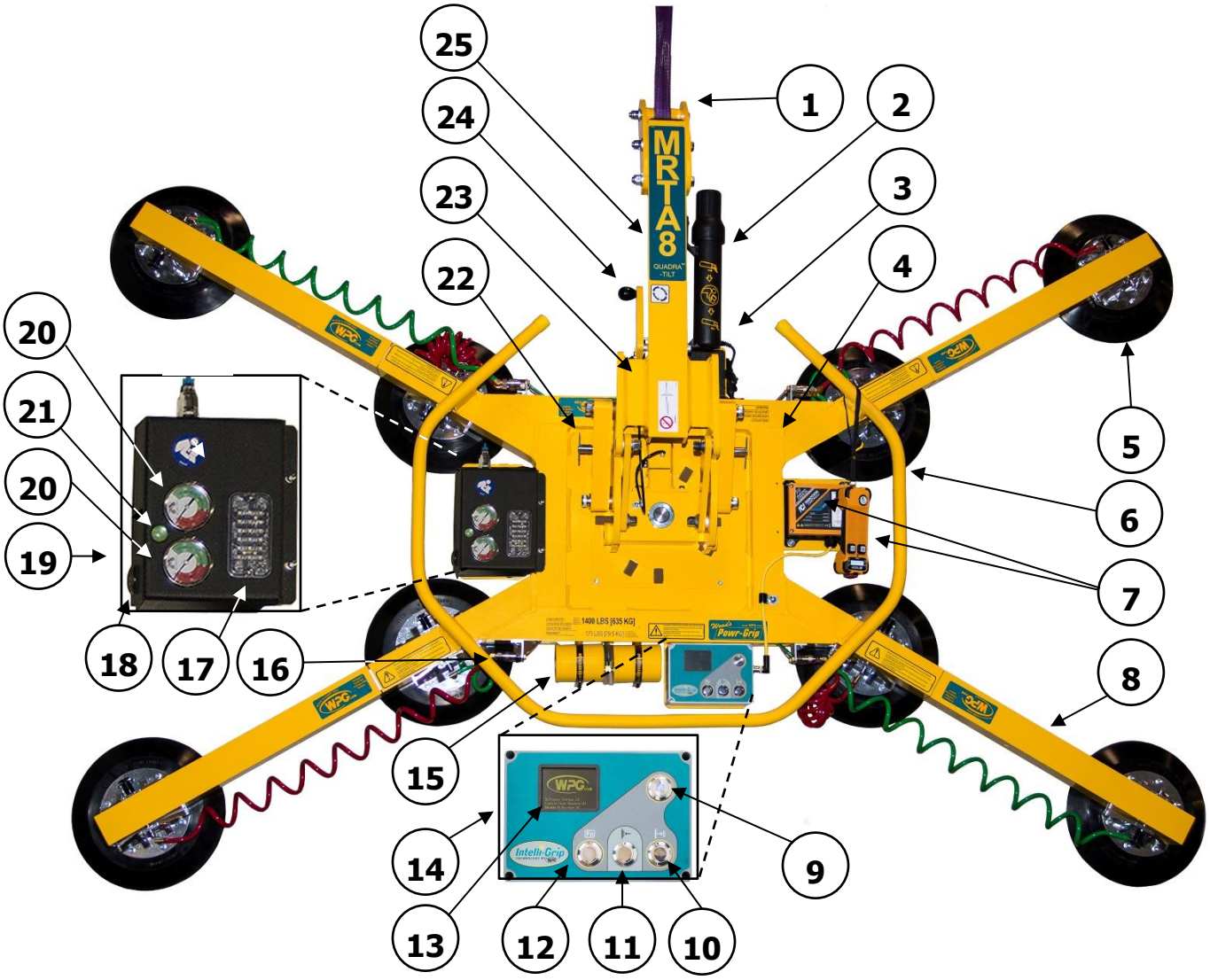
Note: Wiring and/or hose routing diagrams are provided in the final section of this *SERVICE MANUAL* for reference when servicing the lifter or trouble-shooting a deficiency. If necessary, consult the *OPERATING INSTRUCTIONS* to determine which diagrams are applicable to your specific lifter model and any associated options.

SERVICE SCHEDULE

Service must be performed whenever a deficiency is indicated by routine inspections or tests. Follow the Inspection Schedule and Testing Schedule as directed in the MAINTENANCE section of the *OPERATING INSTRUCTIONS*. Any service warranted must be performed before resuming normal operation of the lifter.

SERVICE FEATURES

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



MRTA811LDC3 shown (*parts vary between models*)

1 LIFT SPOOL
2 INSTRUCTIONS CANISTER
3 BATTERY CHARGER
4 PAD FRAME
5 VACUUM PAD with MOVABLE PAD MOUNT
6 CONTROL HANDLE
7 RADIO RECEIVER and RADIO TRANSMITTER (optional)
8 EXTENSION ARM
9 "POWER BUTTON"
10 "RELEASE" BUTTON
11 "ATTACH" BUTTON
12 "FUNCTION" BUTTON
13 LCD SCREEN with BATTERY GAUGE
14 INTELLI-GRIP® CONTROL UNIT
15 VACUUM RESERVE TANK
16 QUICK CONNECTOR
17 STROBE LIGHT
18 WARNING BUZZER
19 Cover for VACUUM PUMP, AIR FILTERS, and VACUUM SENSORS
20 VACUUM GAUGES
21 VACUUM LIFT LIGHT
22 TILT LOCK
23 BATTERY (hidden by **25**)
24 ROTATION RELEASE LEVER
25 LIFT BAR

INTELLI-GRIP® DIAGNOSTIC CODES

Code	On-Screen Message	Buzzer Pattern	Strobe Light Activity	Operator Directions	Service Personnel Directions
B00	"Low Battery (#)"	1 chirp every 2 seconds	(none)	Charge lifter battery or, if necessary, replace it (see MAINTENANCE: Battery Recharge in lifter's *OPERATING INSTRUCTIONS*). A cold battery may need to be warmed or charged more often. Refer fault(s) to qualified service personnel when necessary.	Check for faulty 12V battery or malfunctioning charging system. Replace parts as needed.
B01	"Lockout (battery) (#)"	continuous	(none)	Charge lifter battery before proceeding with another lift (see MAINTENANCE: Battery Recharge in lifter's *OPERATING INSTRUCTIONS*). Refer fault(s) to qualified service personnel when necessary.	Check for faulty 12V battery or malfunctioning charging system. Replace parts as needed.
B02	"Replace 12V battery?"	1 chirp per minute	(none)	Check condition of lifter battery (see MAINTENANCE: Battery Test and Battery Recharge in lifter's *OPERATING INSTRUCTIONS*). Since a cold battery may prematurely activate this notification, warm battery and retest when appropriate. Replace battery as needed. Note: This notification can be activated erroneously if battery charger is plugged into power source while lifter is powered up. If so, power down lifter, disconnect charger from power source, and power up lifter. If code persists, check battery condition as directed above. Refer fault(s) to qualified service personnel when necessary.	Check for fault(s) with 12V battery or charging system. Replace parts as needed.
B03	"Charge 12V battery soon"	1 chirp per minute	(none)	Charge battery (see MAINTENANCE: Battery Recharge in lifter's *OPERATING INSTRUCTIONS*)	N/A
B09	"Replace 9V battery?"	1 chirp per minute	(none)	Replace warning buzzer battery (see MAINTENANCE: Warning Buzzer Battery Test in lifter's *OPERATING INSTRUCTIONS*).	Check warning 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	Refer fault to qualified service personnel for resolution.	Check for fault(s) in module connecting cable. Replace cables or module as needed.
C011	"Communication failure, module 1"	fast chirp	(none)	Temporary code should self-correct. If code persists, refer fault to qualified service personnel for resolution.	Check for fault(s) in module connecting cable. Replace cables, module, or control enclosure as needed.
C021	"Internal error, module 1"	continuous	(none)	Temporary code should self-correct. If code persists, refer fault to qualified service personnel for resolution.	If code persists, replace module.

Code	On-Screen Message	Buzzer Pattern	Strobe Light Activity	Operator Directions	Service Personnel Directions
C03	"Firmware updater detected (#)"	N/A	(none)	A service tool is connected and should be removed before returning lifter to service. Please contact WPG.	N/A
C04	"Module revision not compatible"	1 chirp every 2 seconds	N/A	Make sure lifter is being used within Operating Temperatures (see SPECIFICATIONS in lifter's *OPERATING INSTRUCTIONS*). Then power lifter down and up again. If code persists, refer fault to qualified service personnel for resolution.	Replace module as needed.
E00 E01 E02 E03 E04	"EEPROM error, cell #"	occasional chirp	(none)	Refer fault to qualified service personnel for resolution.	Impact of memory error can vary. Replace control enclosure to resolve.
I000	"I2C error (#)	single chirp	(none)	Temporary code should self-correct. If code persists, refer fault to qualified service personnel for resolution.	Check for fault(s) in module connecting cable. Replace cables, module, or control enclosure as needed.
N00	"Automatic attach (vacuum)"	N/A	(none)	Informative message indicates that significant vacuum was detected even though no one initiated "attach" function, so system activated "attach" mode as a precaution. No corrective action necessary.	N/A
N01	"Automatic attach (release)"	N/A	(none)	Informative message indicates that operator failed to release load completely, so system activated "attach" mode as a precaution. No corrective action necessary.	N/A
N02	"Automatic attach (power)"	N/A	(none)	When the lifter is powered up, informative message indicates that power was previously lost while load was attached, so system activated "attach" mode as a precaution. No corrective action necessary.	N/A
N03	"Unable to turn module power off"	1 chirp every 2 seconds	(none)	Disconnect connector between lifter battery and vacuum generating system. Charge battery completely (see MAINTENANCE: Battery Recharge in lifter's *OPERATING INSTRUCTIONS*). Then reconnect battery and try to power down again. If code persists, disconnect connector and refer fault to qualified service personnel for resolution.	Check for fault(s) in module connecting cable. Replace cables or module as needed.

Code	On-Screen Message	Buzzer Pattern	Strobe Light Activity	Operator Directions	Service Personnel Directions
N04	"Failed to turn controls power off"	1 chirp every 2 seconds	(none)	Disconnect connector between lifter battery and vacuum generating system. Charge battery completely (see MAINTENANCE: Battery Recharge in lifter's *OPERATING INSTRUCTIONS*). Then reconnect battery and try to power down again. If code persists, disconnect connector and refer fault to qualified service personnel for resolution.	Replace control head as needed.
U00	"Check for attached load!"	fast chirp	on	Attempt was made to power down lifter while a load was still detected: Set down load securely and release load *before* powering down lifter.	N/A
U01	"Also hold [Fn] to power down"	N/A	(none)	Hold both "function" button and "power" button to power down lifter.	N/A
U02	"Turn off? Let go of buttons"	N/A	(possible)	Use only "function" button and "power" button to power down lifter. Lifter cannot be powered down while any other button combination is pressed.	N/A
U03	"Timed release: # seconds"	1 chirp per button press	on	Informative message indicates that timed release has been initiated for the number of seconds indicated (see OPERATION: TO RELEASE THE PADS FROM THE LOAD in lifter's *OPERATING INSTRUCTIONS*). Press "function" button only to cancel this action, or press "attach" button to override. No corrective action necessary.	N/A
U04	"Also hold [Fn] to release"	N/A	(none)	Hold both "release" button and "function" button to release the pads from the load.	N/A
U06	"Let go of [Fn] and release"	N/A	on	Use only "attach" button to attach load. While "attach" button is pressed, lifter does not respond to pressing any other button. Release all buttons and press buttons again to activate a different function.	N/A
U08	"Menu not available in Attach"	N/A	N/A	Informative message indicates that Operator Menu cannot be accessed while lifter is attached to load.	N/A
U09	"Counterbalancer not forward"	continuous	on	"Release" function is prevented because Counter-Balancer carriage is not positioned correctly. Move carriage to forward position and completely secure load before attempting to release it (see *OPERATING INSTRUCTIONS*).	N/A
U10	"Use POWER button for Live Stats"	N/A	(none)	The "power" button (not "function" button) is now used to access Live Stats. No corrective action necessary.	N/A

Code	On-Screen Message	Buzzer Pattern	Strobe Light Activity	Operator Directions	Service Personnel Directions
U11	"Testing battery – wait to attach"	N/A	(none)	"Attach" function is prevented because battery test is currently in process. Wait until pump stops running and try again.	N/A
V000	"LOW VACUUM! Secure load!"	continuous	on	Immediately set down load until adequate vacuum can be obtained. Check load and vacuum pads for damage. Consult relevant ASSEMBLY, OPERATION and MAINTENANCE topics in lifter's *OPERATING INSTRUCTIONS*. Refer fault(s) to qualified service personnel when necessary.	Check for leak(s) in vacuum system. Replace parts as needed.
V001 V002 V003 V004	"LOW VACUUM #! Secure load!" (# indicates relevant vacuum circuit)	continuous	on	Immediately set down load until adequate vacuum can be obtained in vacuum circuit indicated. This warning may have been activated because significant vacuum was detected, causing system to activate "attach" mode. Check load and vacuum pads for damage. Consult relevant ASSEMBLY, OPERATION and MAINTENANCE topics in lifter's *OPERATING INSTRUCTIONS*.	Check for leak(s) in relevant vacuum circuit. Replace parts as needed.
V011 V012 V013 V014	"High leak rate on circuit #" (# indicates relevant vacuum circuit)	3 chirps	(none)	Indicates issue(s) affecting lifter's ability to maintain vacuum in circuit indicated. Check load and vacuum pads for damage that may activate code. Consult relevant ASSEMBLY, OPERATION and MAINTENANCE topics in lifter's *OPERATING INSTRUCTIONS*. Refer fault(s) to qualified service personnel when necessary.	Check for leak(s) in the relevant vacuum circuit. Replace parts as needed.
V020	"Vacuum not increasing normally"	1 chirp every 2 seconds	on	Indicates issue(s) that affect "attach" mode. Consult relevant ASSEMBLY, OPERATION and MAINTENANCE topics in lifter's *OPERATING INSTRUCTIONS*. Refer fault(s) to qualified service personnel when necessary.	Check for fault(s) in vacuum system. Replace parts as needed.

Code	On-Screen Message	Buzzer Pattern	Strobe Light Activity	Operator Directions	Service Personnel Directions
V03A V03B	"Pump A running excessively" "Pump B running excessively"	1 chirp every 2 seconds	(none)	Vacuum pump A or B (respectively) is unable to maintain vacuum efficiently. Likely causes include a significant vacuum leak or difficulty achieving minimum vacuum level resulting from use at high elevations. In case of suspected leak, check for fault(s) in vacuum system (see relevant ASSEMBLY, OPERATION and MAINTENANCE topics in lifter's *OPERATING INSTRUCTIONS*). In case of high elevation, contact WPG for directions. Refer fault(s) to qualified service personnel when necessary.	Check for fault(s) in relevant vacuum pump (see PUMP SERVICE) or vacuum system. Replace parts as needed.
V040	"Lockout (vacuum sensor error)"	continuous	(none)	"Attach" function is prevented because a vacuum sensor is not functioning correctly. Make sure vacuum sensors are properly plugged into module. Refer fault(s) to qualified service personnel when necessary.	Vacuum sensor malfunction in vacuum circuit. Check wiring and connector for vacuum sensor. Temporarily swap with working sensor to determine whether to replace sensor or module.
V081 V082 V083 V084	"Sensor #_error, (low)" (# indicates relevant vacuum circuit)	continuous in "attach" mode; 1 chirp every minute in "power save" mode	(none)	Make sure vacuum sensor is properly plugged into module. Refer fault(s) to qualified service personnel when necessary.	Vacuum sensor malfunction in vacuum circuit. Check wiring and connector for vacuum sensor. Temporarily swap with working sensor to determine whether to replace sensor or module.
V091 V092 V093 V094	"Sensor #_error, (high)" (# indicates relevant vacuum circuit)	continuous in "attach" mode; 1 chirp every minute in "power save" mode	(none)	Make sure vacuum sensor is properly plugged into module. Refer fault(s) to qualified service personnel when necessary.	Vacuum sensor malfunction in vacuum circuit. Check wiring and connector for vacuum sensor. Temporarily swap with working sensor to determine whether to replace sensor or module.

INTELLI-GRIP® OPERATOR SETTINGS

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

TO ACCESS AND NAVIGATE THE OPERATOR MENU

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

Note: The Operator Menu cannot be accessed when the lifter is attaching or attached to a load.

The Operator Settings menu is displayed.

To move down through the list, press the "release" button (|→▯).

To move up through the list, press the "attach" button (▯←).

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

When finished, use the "attach" or "release" buttons to navigate to the "**Exit Menu**" item and press the "function" button (Fn).

You can also press the power button to exit a menu.

TO CHANGE THE DEFAULT LANGUAGE

1) Access the Operator Menu and select the "**Language (ABC)**" item, using the guidelines previously given.

2) The Language (ABC) menu opens. Navigate the menu and select the appropriate language.
The language has now been set according to the selection just made.

Note: In the "Graphics only" option, *no words* of any language will be displayed on the LCD screen during typical operation. English will be displayed for the menus.

TO USE LIFTER IN HIGH ELEVATIONS

1) Access the Operator Menu and select the "**Lifter Settings**" item, using the guidelines previously given.

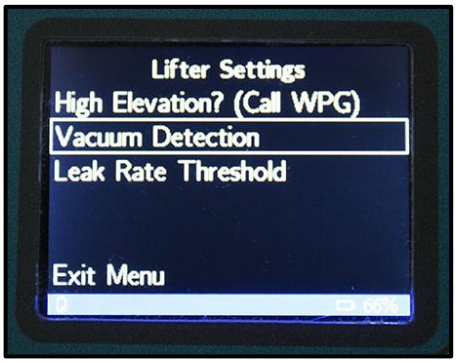
2) The Lifter Settings menu opens. As indicated on the screen, you must call Wood's Powr-Grip to learn more about using the lifter in high elevations (see lifter specifications for allowable elevations of operation under normal circumstances).

Note: The phone number can be found on the cover page of this *SERVICE MANUAL*.

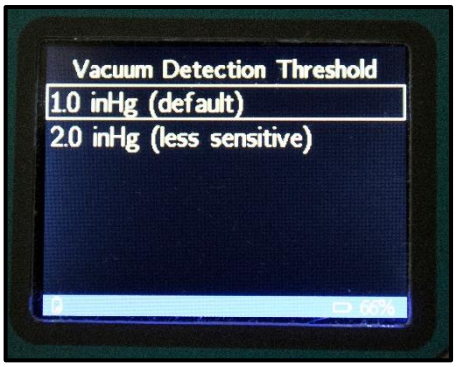
TO CHANGE THE VACUUM DETECTION THRESHOLD

The Intelli-Grip® Control Unit is designed to reattach if a partial vacuum is detected. To adjust the sensitivity of this feature, follow the steps below:

1) Access the Operator Menu and select the "**Lifter Settings**" item, using the guidelines previously given.



2) The Lifter Settings menu opens. Navigate the menu and select the "**Vacuum Detection**" item.



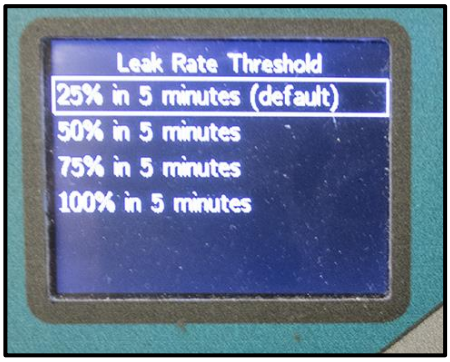
3) Navigate the menu and select the correct vacuum detection threshold.
The vacuum detection threshold has now been set according to the selection just made. The setting will remain unchanged when power is cycled.
This setting can only be changed using this menu.

TO CHANGE THE LEAK RATE THRESHOLD

The Intelli-Grip® Control Unit will alert the operator if a significant vacuum leak is detected. Sometimes, as with porous material, this can result in frequent or constant alarms. To adjust the sensitivity of this feature, follow the steps below:

1) Access the Operator Menu and select the "**Lifter Settings**" item, using the guidelines previously given.

2) The Lifter Settings menu opens. Navigate the menu and select the "**Leak Rate Threshold**" item.

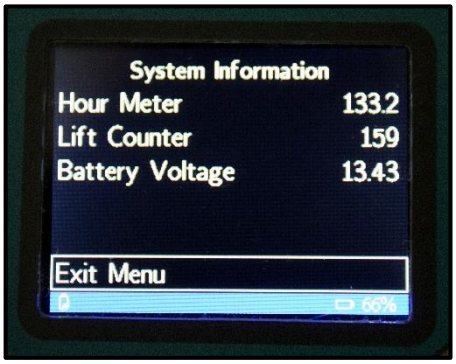


3) Navigate the menu and select the correct leak rate threshold.
The leak rate threshold has now be set according to the selection just made.

Note: This setting will automatically reset to default each time the lifter is powered down.

TO VIEW SYSTEM INFORMATION

1) Access the Operator Menu and select the "**System Information**" item, using the guidelines previously given.

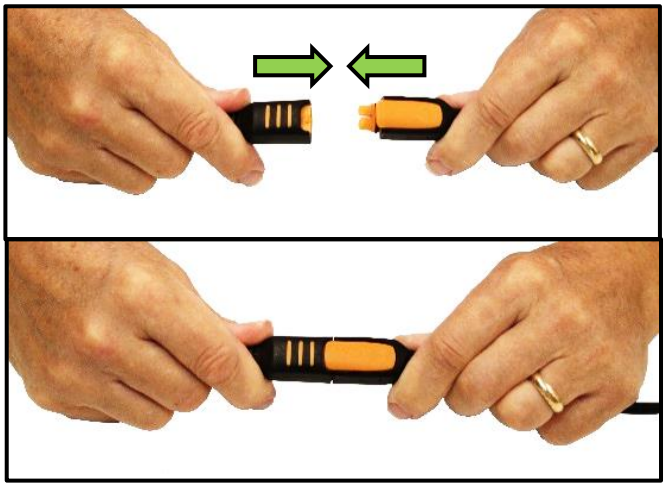


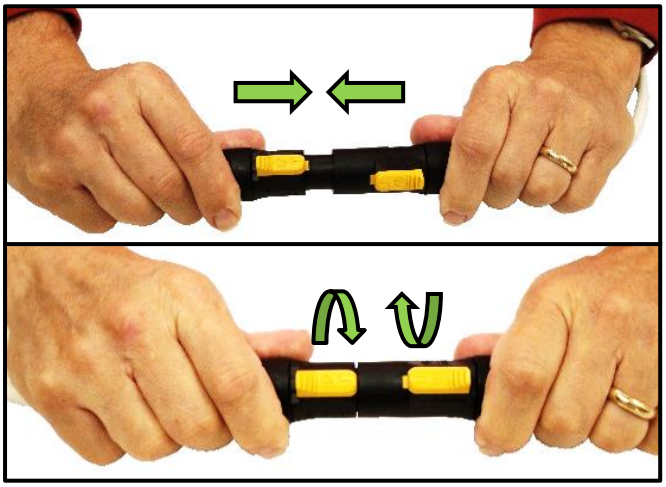
2) The lifter's system information is displayed. Information includes the total number of hours the lifter has been operated, how many lift cycles it has completed, and the current battery voltage.

BATTERY CHARGER TEST

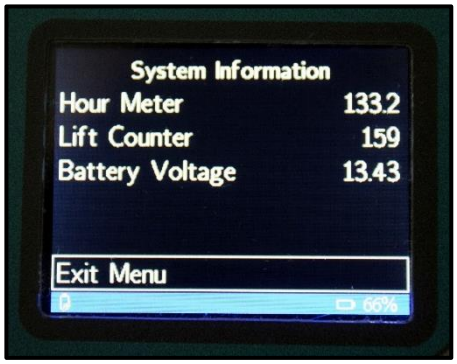
The battery charger should function as described in the MAINTENANCE: BATTERY RECHARGE section of the lifter's *OPERATING INSTRUCTIONS*. If not, the following test allows you to determine whether to replace the charger. Perform this test ***only*** when the battery is ***not*** fully charged (see in MAINTENANCE: BATTERY ASSESSMENT in *OPERATING INSTRUCTIONS*).

1) If electrical connectors for the battery or charger were previously disconnected, reconnect them as shown.





2) Make sure that the battery charger is ***not*** plugged into any AC power source. Then access the "Battery Voltage" reading on the LCD screen as previously directed (see INTELLI-GRIP® OPERATOR SETTINGS: TO VIEW SYSTEM INFORMATION).[1]



3) Now plug the battery charger into an appropriate AC power source, as directed in the lifter's *OPERATING INSTRUCTIONS*. Access the "Battery Voltage" reading on the LCD screen a second time.

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

   If the charger is ***not*** functioning correctly, replace it according to the wiring diagram provided, and then repeat this test.

Always disconnect lifter from battery and disconnect charger from any AC power source before working on electrical components.

4) Turn the power off and disconnect the battery (see BEFORE SERVICING LIFTER).

[1] If the battery is completely discharged, the LCD screen will not display anything. In this case, a volt meter or multi-meter may be used to determine battery voltage in this test.

DYNAFLO DV1034204 PUMP SERVICE

CONDITIONS REQUIRING SERVICE

Before performing any service, disconnect power source.

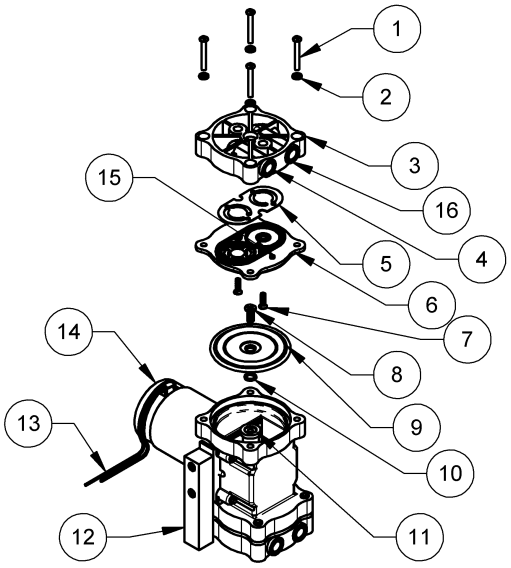
If the vacuum pump takes too long to attain full vacuum, it may require service. Replace the diaphragms, gaskets/flap valves or (when preferable) the entire head assemblies[2], as necessary to obtain acceptable pump performance (see REPLACEMENT PARTS LIST). Perform the following service on both heads of the pump.

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

REPLACING A DIAPHRAGM

1) Remove the four head screws (1) and lock washers (2), and remove the head assembly (3—7).
2) Remove the diaphragm retaining screw (8), diaphragm (9) and rubber O-ring (10).

   Note: Be sure to save the flat washer located between the O-ring and the connecting rod (11). Also take note of the diaphragm orientation for reassembly.
3) Replace the diaphragm, rubber O-ring and diaphragm retaining screw. Reinstall the flat washer in its original position.
4) Reverse the steps above for reassembly, as shown in the illustration.



1	HEAD SCREW	5	GASKET/FLAP VALVES	9	DIAPHRAGM	13	WIRES
2	LOCK WASHER	6	VALVE PLATE	10	RUBBER O-RING	14	MOTOR
3	HEAD	7	VALVE PLATE SCREW	11	CONNECTING ROD	15	ALIGNMENT PIN
4	INTAKE PORT (VACUUM)	8	DIAPHRAGM RETAINING SCREW	12	MOUNTING FOOT	16	EXHAUST PORT (PRESSURE)

REPLACING A GASKET/FLAP VALVES

1) Remove the four head screws (1) and lock washers (2), and remove the head assembly (3—7).
2) Invert the head and remove the two valve plate screws (7). Remove the valve plate (6) to access the gasket/flap valves.
3) Replace the gasket/flap valves (5) and reverse the steps above for reassembly, as shown in the illustration. Use the alignment pin (15) to ensure proper fit between the head and valve plate.

REPLACING A HEAD ASSEMBLY

1) Remove the four head screws (1), lock washers (2) and head assembly (3—7).
2) Replace the head assembly, and reverse the steps above for reassembly, as shown in the illustration.

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[2] ***Caution:*** Depending on the product, the head assembly (3—7) 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.

AIR FILTER MAINTENANCE – 0.1 OZ

(for 0.1 oz [3 mL] bowl size filters)

FILTER FUNCTION AND CONDITIONS REQUIRING SERVICE

Each air filter prevents solid particles from contaminating the vacuum system.

Caution: Examine air filter regularly and empty when necessary.

Liquid must not contact any portion of the filter element; remove trapped liquid regularly. Replace the element if it has an overall dirty appearance, or if there is a noticeable increase in the time required to attain full vacuum. (Refer to REPLACEMENT PARTS LIST for filter element kit.)

FILTER SERVICE PROCEDURES

Follow the procedures below, as illustrated:

1) Unscrew the bowl from the base. Examine the sealing ring in the base to make sure it is not damaged.

2) Unscrew and remove the black cap that secures the filter element.

3) Remove the filter element. Use an air hose or other suitable means to remove any liquid or other contaminants found inside the bowl or on the base of the filter assembly.

4) Determine whether the filter element needs to be replaced (see Conditions Requiring Service above). *If so*, discard the old filter and get out a new one.

5) Reassemble the air filter:
   - Slide the filter element over the center screw.
   - Replace the black cap to secure the filter element in place.
   - Screw the bowl back into the base.
   - Make sure the blue tip of the filter assembly is tightened securely.

Make sure the blue tip is screwed in securely, or the filter assembly will leak.

Note: ***Never*** disturb drain plugs, as contaminants could lodge in the drain seal and cause a vacuum leak.

6) Repeat Steps 1-5 for the other filter assembly.
7) Test the vacuum system, to make sure the air filters do not leak (see MAINTENANCE: VACUUM TEST section of lifter's OPERATING INSTRUCTIONS).

AIR FILTER MAINTENANCE – 1 OZ

(for 1 oz [30 ml] bowl size filters)

FILTER FUNCTION AND CONDITIONS REQUIRING SERVICE

Each air filter prevents solid particles and liquid from contaminating components in the vacuum system.

CAUTION: Examine air filter regularly and empty when necessary.

Liquid must not contact any portion of the filter element; remove trapped liquid regularly. Replace the element if it has an overall dirty appearance, or if there is a noticeable increase in the time required to attain full vacuum. (Refer to REPLACEMENT PARTS LIST for filter element kit.)

FILTER SERVICE PROCEDURES

Follow the procedures below, as illustrated:

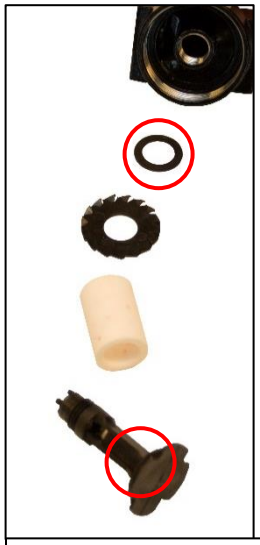
1) Unscrew the plastic bowl from the base of the filter.

Note: Hold the base while twisting the bowl to protect the vacuum line fittings from damage.

2) Examine the filter element. Any element that is dirty, discolored, or wet should be replaced:
   - *If* the element needs a replacement, proceed to the next step.
   - *If not*, remove any liquid or contaminates from the bowl; clean the seal between the bowl and the base with a damp rag; and skip to step 7.

3) Carefully unscrew the element holder.

   Be prepared for the internal assembly to completely come apart at this point.



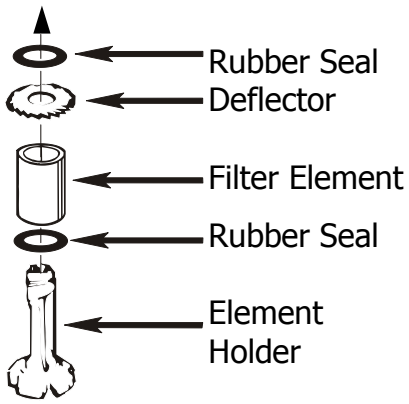
4) Dispose of the element and get a new one. Check the element gaskets (circled) and determine whether they need to be cleaned or replaced.

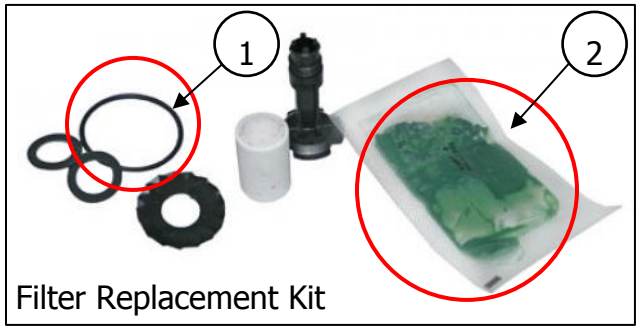
5) Clean all other internal parts and the bowl, using water and a cleaner no stronger than mild soap.

Note: *Do not* use any other cleaning agents.

6) Place the new **Filter Element** and any new **Rubber Seals**, along with the old **Deflector**, on the **Element Holder**, and screw the assembly back into the filter body, in the order shown on the right.

Note: Tighten gently – finger tight.





Filter Replacement Kit

7) If applicable, lubricate the new or cleaned bowl seal {1}, using a mineral-based oil or grease {2}, as provided in the filter replacement kit (see REPLACEMENT PARTS LIST). Then place the seal back around the open rim of the bowl.

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

8) Screw the bowl back into the base. Hand-tighten only.

Note: *Do not* get lubricant from the bowl seal onto the filter element.

9) Repeat Steps 1-8 for the other filter assembly.

10) Test the vacuum system to be certain the air filter does not leak (see MAINTENANCE: VACUUM TEST section of lifter's OPERATING INSTRUCTIONS).

Make sure that the black drain plugs (circled) are screwed in securely, or the filter assemblies will leak.

Note: ***Never*** disturb drain plugs, as contaminants could lodge in the drain seal and cause a vacuum leak.

REPLACEMENT PARTS LIST

Stock No.	Description	Qty.
66197BM	Dynaflo Pump Gasket & Flap Valves	2/4
66197AM	Dynaflo Pump Diaphragm Kit	2/4
66197AA	Dynaflo Pump Dual-Head Assembly	2/4
66136	Vacuum Pump – Diaphragm Type – 2.5-SCFM [71 liters/minute] – 12 V DC (for 2-pump lifters)	2
65254AM	Solenoid Valve – 12 V DC – 4 W (for 2-pump lifters)	2
65251L	Solenoid Valve – 12 V DC – 4 W – Latching (for vacuum tanks on 2-pump lifters)	2
65211	Check Valve – 1/8 NPT	2
64834	LED Indicator – 12 V DC – Green (aka, vacuum lift light for 2-pump lifters)	1
64752A	Audio Alarm – 5-15 V DC – Panel Mount	1
64716	Battery Charger – 0.8 Amp – 240 V AC – Australian Type	1
64715	Battery Charger – 0.8 Amp – 240 V AC	1
64714	Battery Charger – 0.8 Amp – 100 / 120 V AC	1
64713AU	Battery Charger – 7 Amp – 220 / 240 V AC – Australian Type	1
64712US	Battery Charger – 7 Amp – 100 / 115 V AC	1
64711EU	Battery Charger – 7 Amp – 220 / 240 V AC	1
64670	Battery – 12 V DC – 35 Amp-Hours	1
64665	Battery – 12 V DC – 18 Amp-Hours	1
64664	Battery – 12 V DC – 7 Amp-Hours	1
64460	Circuit Breaker – 15 A	1
64457B1	Module Circuit Board – Populated	1
59900CM	Remote Control System Retrofit Kit (optional for MTCL-DC3)	1
59906BM	Remote Control System Retrofit Kit (optional for MRT4-DC3)	1
59906AM	Remote Control System Retrofit Kit (optional for MRTA8-DC3 & MRTALP4/8-DC3)	1
59901BM	Intelli-Grip® Control Unit (for 2-pump lifters)	1
59901AM	Intelli-Grip® Control Unit	1
59900VA	Solenoid Valve	2
59900TA	Vacuum Sensor – Digital	2
59900SA	Strobe Light – 12 V DC – Amber	1
59900PA	Vacuum Pump – Diaphragm Type – 2.5-SCFM [71 liters/minute] – 12 V DC (Dynaflo)	1
59900LA	Strobe Light – 12 V DC – Amber (for 2-pump lifters)	1
59900GA	LED Indicator – 12 V DC – Green (aka, vacuum lift light)	1
59900BA	Battery Holder – 9 V DC (for warning buzzer)	1
59086NC	Battery Connector – Twin Lead	1
54390NC	Power Lead – approx 21" Long	1
54384NC	Power Lead – approx 51" Long	1
54382NC	Power Lead – approx 35" Long	1
16134	Element for Air Filter – for 1 oz [30 ml] bowl size filters (for 2-pump lifters)	2
16102AM	Element for Air Filter – for 0.1 oz [3 ml] bowl size filters	2
15920	Vacuum Gauge – 1/8 NPT – CBM Type – w/Panel Mount Bracket	2

See ***OPERATING INSTRUCTIONS*** for additional parts.

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

LIMITED WARRANTY

Powr-Grip products are carefully constructed, thoroughly inspected at various stages of production, and individually tested. They are warranted to be free from defects in workmanship and materials for a period of one year from the date of purchase.

If a problem develops during the warranty period, follow the instructions hereafter to obtain warranty service. If inspection shows that the problem is due to defective workmanship or materials, Powr-Grip will repair the product without charge.

WARRANTY DOES NOT APPLY WHEN:

Modifications have been made to the product after leaving the factory.

Rubber portions have been cut or scratched during use.

Repairs are required due to abnormal wear and tear.

The product has been damaged, misused, or neglected.

If a problem is not covered under warranty, Powr-Grip will notify the customer of costs prior to repair. If the customer agrees to pay all repair costs and to receive the repaired product on a C.O.D. basis, Powr-Grip then will proceed with repairs.

TO OBTAIN REPAIRS OR WARRANTY SERVICE

For purchases in *North America*:

Contact the Technical Service Department at Wood's Powr-Grip Co. When factory service is required, ship the complete product–prepaid–along with your name, address and phone number to the street address hereafter.

For purchases in *all other localities*:

Contact your dealer or the Technical Service Department at Wood's Powr-Grip Co. for assistance.

Wood's Powr-Grip Co., Inc.
908 West Main St. / P.O. Box 368
Laurel, MT USA 59044

phone 800-548-7341
phone 406-628-8231
fax 406-628-8354

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Software Name: Tiva Peripheral Driver Library
License Type: BSD-3-Clause

TB:R08

WIRE LEGEND: CONTROLLED BY WIRING SYMBOLS DRAWING EXCEPT AS NOTED AND BELOW. LINE STYLES AND WIDTHS FOR WIRE UNLESS NOTED OTHERWISE. 18 AWG / 16 AWG — N/A / N/A	TYPE: STANDARD	FILE DIRECTORY: 714 FILE [SHEET]: 714-W01 [W01]						
PRODUCT MANAGER: NATHAN G. / DATE: 10/21/2009 CHECKED: CR / 01-19-15 APPROVED: / 2-11-15	THIS DRAWING IS THE PROPERTY OF WOOD'S POWR-GRIP CO., INC. IT IS LOANED WITH THE UNDERSTANDING THAT NEITHER IT NOR ANY INFORMATION CONTAINED THEREIN WILL BE COPIED, PUBLISHED OR TRANSMITTED TO OTHERS WITHOUT EXPRESS WRITTEN PERMISSION. LAUREL, MONTANA U.S.A.							
	3 SCFM DC POWER UNIT N/A BATTERY CHARGER WIRING DIAGRAM D714-W01 [W01]							
	SIZE: A	SCALE: NONE	REVISION: 01.A	ECN NUMBER: 3623	ECN DATE: 01/07/2015	ECN BY: LER	EST. WEIGHT: 0 LBS