

GapVax[®]



MC SERIES Advanced

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INTRODUCTION



The GapVax MC Series Advanced features a new, unmatched digital operation control system unlike any other on the market. With updating our already superior design, we give you advanced technology unlike any other on the market today!

This system was designed to allow for easier operation and added interlocks for safeguarding operator and machine. Safety interlocks allow the system to monitor and control all engagement and dis-engagement procedures, increasing production and reducing downtime.

The full color displays offer the operator visual monitoring of all operating functions and one touch operations. There is a 4" screen inside the cab as well as a 7" screen inside the weather-tight control box located at the front hose reel. These full color display screens, designed around the operator, are unaffected by the sunlight.

The idea of this hardware configuration was to maximize the flexibility of the control system which will enable GapVax to customize and distinguish existing and future platforms.

Some of the added benefits include (but are not limited to) the following:

J1939 Engine Communication: Allowing for added safety and increased vehicle performance. Communication link from the GapVax systems to the engine.

Proportional Hydraulic Controls: Giving the operator complete control over the boom and front hose reel operation(s). Two separate joystick controls for the boom and front hose reel control allow for safe, easy operation without the confusion of selecting separate operation of one joystick.

Wireless Remote Control: Wireless and tethered control of all hydraulics, boom, body, and hose reel functions, lighting, engine speeds, as well as vacuum and water pressure control (all in one rugged controller).

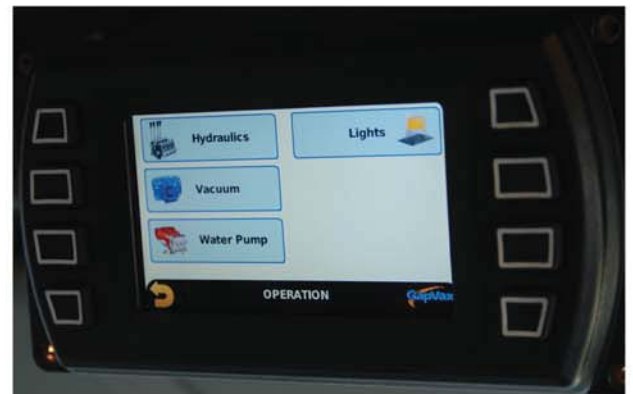


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INSIDE THE CAB



The Home Page allows you to choose
Operations
Diagnostics
Settings



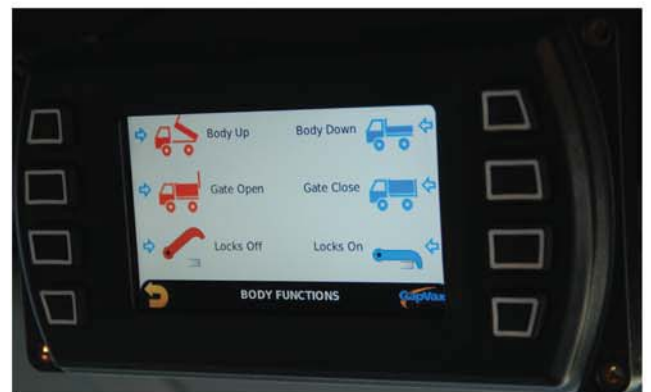
Operation (first selection on the right of your screen) takes you to this screen where you will choose which option you are going to utilize (i.e. hydraulics, water pump, etc)

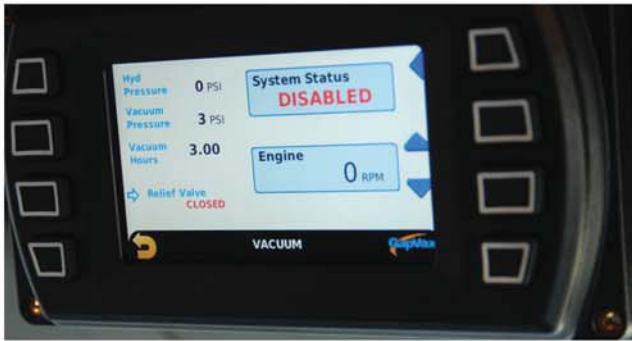


The **Hydraulics** option is interlocked with chassis air, parking brake, transmission in Neutral, and driveshaft speed for safe engagement. This also displays hydraulic pressure, temperature, and hours of use, engine RPM, range inhibit override and body functions. The system engages the transfer case and indicates to select “drive” or “D” with positive engagement and increases the RPM to 1,000 RPM.

Range Inhibit - monitors the body, boom, and tailgate position, interlocks to prohibit moving the vehicle without being in stowed position. The operator can override the range inhibit if needed.

The **Body Functions** screen (an option from the Hydraulics screen) allows the operator in-cab operation of all body functions.





The **Vacuum** option is interlocked with the chassis air, parking brake, engine RPM, driveshaft speed, and transmission in Neutral for safe engagement. This screen displays hydraulic pressure, vacuum pressure, vacuum hours, relief valve and engine RPM control. Engaging the blower or vacuum pump, automatically engages the transfer case and indicates when it is safe to go to select “Drive” also increasing the RPMs to 1,000 when properly engaged. The Vacuum pump engagement also automatically opens the vacuum relief valve.

The Water Pump screen allows operation of the water system. This option is interlocked with the parking brake and engine RPM. This screen displays water level, water pressure, and current valve positions. You also have control of engine RPM and recirculation mode. This is also equipped with an interlock prohibiting engagement over 800 RPM and automatic shutdown of the water pump with the low water warning.



The **Lighting options** screen allows the operator access to the listed light functions. The lights can be turned on and off from the cab screen as well as the control box screen. Lighting options depend on what you choose with your GapVax unit.



The **Diagnostics** screen monitors listed switch status, parking brake, relief button, and transfer case mode positions. This screen also allows the operator to see the on/off status of the wireless and tethered remotes.



The Settings screen gives the operator access to screen brightness, day/night mode, and language selection. Day/Night mode changes the screen brightness to allow the operator high visibility of the screens any time of the day.

INSIDE THE CONTROL BOX

The weather-tight, fully enclosed front control box.





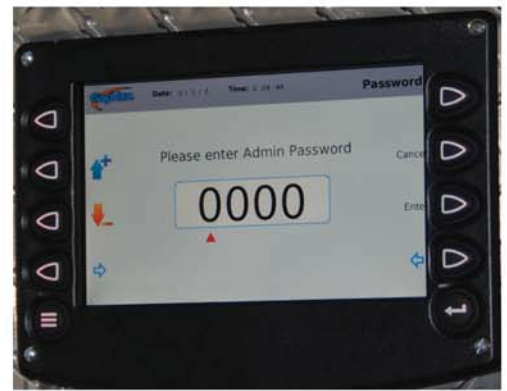
Adjust your screen for night/day



Units of Measure (U.S. or metric)



Screen brightness can be adjusted for better visibility. You have this option with both screens.



Set passwords for certain controls and changes to only be made by certain personnel



Choose the language you prefer. This can be done inside the cab or at the front control box screen.



Fault messages to assist in troubleshooting and getting you back up and running faster



Two joysticks are mounted in the front control box to give the operator FULLY PROPORTIONAL boom and hose reel control. The screen shows the operator current joystick signal status.



The Operation screen is similar to what you saw in the beginning of this literature for the screen inside the cab. From the control box screen, you can monitor hydraulics and vacuum pump. You can control the water pump and lighting from either inside the cab and/or the control box screen as well as monitor various functions. The front control box screen also allows you to keep track of your jobs with a job card.



The Job Card features allows you to keep track of all jobs and keep your business heading in the right direction



The Red SAFE MODE button inside the control box is the “relief” to stop vacuum and water pressure in case of an emergency



An example of what you will see as an operator while operating the water system.



Confirmation screen to ensure safety while operating



Step by step Air Out instructions

SYSTEM FEATURES



1. Full J1939 engine communication allowing access to SAE J1939 parameters broadcasted by the engine and transmission ECUs. Displays active and ECU stored faults with text descriptions for diagnosing equipment malfunctions.
2. Reduced downtime with built-in diagnostics and safe-guarding machine operation.
3. Reducing wiring by 60%.
4. Simple one step operation of engage and dis-engagement of equipment options.
5. Two separate proportional joysticks for boom operation and front hose reel operation.
6. Wireless controls include all boom functions, body functions, lighting, water and vacuum reliefs, and RPM control.
7. Boom and hose reel functions are proportional.
8. System alarms and interlocks allow for safe and efficient operation.
9. Data logging and system diagnostics give access to the system faults and hours of operation giving the operator the ability to troubleshoot system failures.

Just a few reasons why we offer the best CANbus package

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SYSTEM OPTIONS



HYDRAULICS

1. One step engagement and dis-engagement
2. Hydraulic temperature monitoring with display and system fault warnings with automatic shutdown processes.
3. Hydraulic pressure monitoring with display and system fault warnings with automatic shutdown processes.
4. Fully proportional wireless and manual operation of the boom and hose reel functions.
5. Wireless and manual operation of ALL body functions.
6. Built-in interlocks and information screens to safeguard equipment and simplify operation.

BLOWER

1. One step engagement and dis-engagement
2. Blower/Vacuum pump monitoring with display and system fault warnings; Control of vacuum relief valve to eliminate the chance of overheating.
3. Built-in interlocks and information screens to safeguard equipment and simplify operation.

WATER PUMP

1. One step engagement and dis-engagement
2. One step control of different function options.
3. Water pressure monitoring with display and system fault warnings with automatic shutdown processes.
4. Water temperature monitoring with display and system fault warnings with automatic shutdown processes.
5. Water level monitoring with display and low water level warning and shutdown process.
6. Front hose reel footage counter with display readout.
7. Proportional pressure control for system control of water pressure adjustment.
8. Front hose reel brake control.
9. Built-in interlocks and information screens to safeguard equipment and simplify operation.



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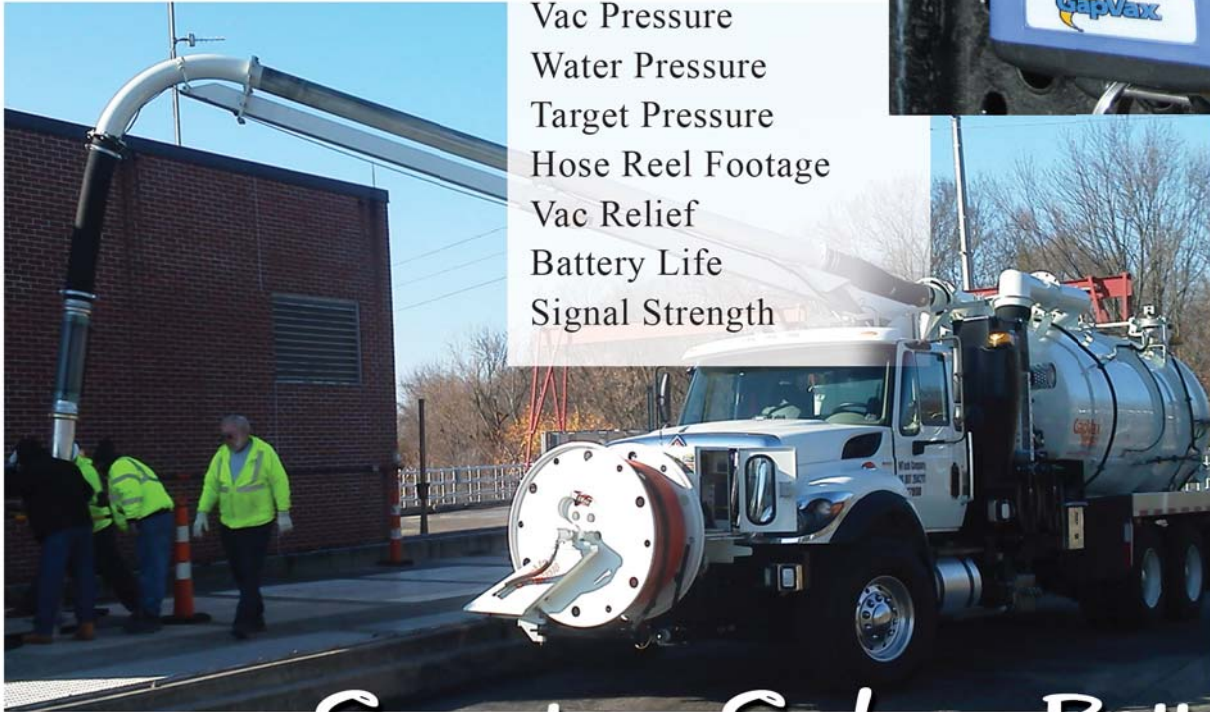
REMOTE FUNCTIONS

A new wireless that's sure to impress!

- Boom Up/Down
- Boom In/Out
- Boom Left/Right
- Hose Reel In/Out
- Throttle Increase/Decrease
- Vac Break Open/Close
- Water On/Off (Water Relief/breaks pressure)
- Body Up/Down
- Tailgate Open/Close
- Tailgate Locks Open/Close
- Sludge Pump On/Off
- Boom Lights On/Off
- Rear Worklights On/Off
- Beacon Light On/Off

Display Features Include:

- Engine RPM
- Vac Pressure
- Water Pressure
- Target Pressure
- Hose Reel Footage
- Vac Relief
- Battery Life
- Signal Strength



Smarter. Safer. Better.

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שנה טובה!



We are currently perfecting our
HV Series Advanced unit....



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