# MP2 ADVANTAGE SYSTEMS THE FUTURE OF SNOW & ICE CONTROL MUNCIE CHASSIS NETWORK TECHNOLOGY-



## MP<sup>2</sup> ADVANTAGE SYSTEMS

THE FUTURE OF SNOW & ICE CONTROL



#### **CONTROL PANEL**

- One central control for spreader, cylinder and liquid functions.
- Basic push-button control of a dump hoist and power angling plow.
- A full featured groundspeed controlled spreader that can do basic manual control, too.
  - Spreader controls include Blast and Pause functions.
- User definable settings are adjustable through the panel controls and displays.
- Non-volatile memory backs up settings even when disconnected from the batteries.
- Bright numeric displays that are easily visible in daylight and night time operation.
- Includes control for either an electric or hydraulic driven pre-wetting.

#### **MOUNTING CONVENIENCE**

- The compact system controls and the simple two-wire connection to the truck means the controls can be placed at optimum driver convenience.
- A Plus there are no holes in the truck cab for cables, wire harnesses, hoses, etc.

#### **DIAGNOSTICS**

Shorted or open valve coils are reported with flashing displays and chirps that identify the specific circuit responsible.



#### TWO WIRE HOOK-UP

 Only a Power & Ground connection is needed for this Control Panel to fully operate.

## DUAL AXIS PROPORTIONAL JOYSTICK

- ▲ Deadman switch bumping the joystick will not cause operation.
- Operates up to three pieces of equipment by pushing buttons on the handle. The Control Panel illuminates a label for each selection.
  - Plug and play. The only connection required is to the Control Panel above.
  - Two internal operating mechanisms

     one backs-up the other.



An optional joystick allows for fully proportional control.

### SYSTEMS FOR PICK-UPS TO CLASS 8 TRUCKS

- Gear pumps or variable displacement pumps.
  - Inlet flows from 20 45 gpm.
  - Operate a spreader, dump hoist and plow.
  - Large system can include scrapers and wing plows.
- Any combination of single or double acting cylinders.
- High dump body flows.

#### **ENCLOSURES AVAILABLE**

- Systems are assembled in stainless or powder coated steel enclosures.
- Enclosures can include an integral tank assembly.

#### **BONUS FEATURES**

- Fully pressure compensated means consistent operation regardless of pressure.
- Priority flow to cylinder operations means plows and dump bodies always operate first during low flow conditions.
- Counter balance dump body control means the dump body cannot runaway due to gravity.
- Adjustable downside relief protection on plow and dump hoist cylinders.
- Zero leakage load holding on dump and plow raise functions means these functions will not drift down.
- 40 PSI pump unloading for gear pump operations means no heat and negligible power demand.

#### **ELECTRONIC MODULES**

- Connect these modules to 12 Volts and Ground and they will receive commands through the truck's electrical system from the Control Panel or Joystick and then operate the appropriate valves.
  - Current limited outputs will individually shut down if shorted.



#### THE PERFORMANCE AND CONVENIENCE OF CARTRIDGE VALVES

- Each function can be optimized.
- Compact packaging.
- Easily more serviceable than any other method of design.
  - Reduced opportunity for leaks.
  - Environmental sealed solenoids designed specifically for mobile applications.

All systems are load-sense but can operate with gear pumps as well as piston pumps!

A special multiplex connection system totally eliminates wires between the cab and valves!

All cartridge valve construction maximizes design performance and serviceability!

Priority flow division provides cylinder operations whenever the spreader is working.

No feedback sensors are needed for consistent and accurate spreader control.

Pressure compensated
circuits allow for
simultaneous operations
and prevent flows
changing under varying
pressure conditions.

## MP<sup>2</sup> ADVANTAGE SYSTEMS

THE FUTURE OF SNOW & ICE CONTROL





# WE ARE DEDICATED TO PROVIDING QUALITY PRODUCTS AND SERVICE

Systems are tested and assembled by an experienced team who take great pride in their work.

Documentation packages are sent with each system and backed-up for future retrieval at our facility.

We recognize the emergency nature of snow and ice control trucks and will always endeavor to sustain inventories on-hand to be available when you need them.

Circuit layouts, plumbing diagrams, electrical connections are made for every system built.

Many of our systems are built to specific needs and are designed to customer specifications.



#### **SNOW & ICE CONTROL SYSTEM ASSEMBLY AREA**

Our assembly team has years of experience in building quality systems.



#### **IN-HOUSE ELECTRONIC SERVICE**

We maintain complete service capability with our own technicians.

We still maintain parts and perform service on control products we sold more than two decades ago!



MP08-03 Printed in the U.S.A. © Muncie Power Products, Inc. 2008

Muncie Power Products, Inc. Member of the Interpump Hydraulics Group General Offices and Distribution Center ● P.O. Box 548 ● Muncie, IN 47308-0548 (765) 284-7721 ● FAX (765) 284-6991 ● E-mail info@munciepower.com Web site http://www.munciepower.com





