

# VISAGAGE II

## LIQUID FLOW MONITORS



**SMPT-OSA4 with SMSS4**

### PROPER APPLICATION = INCREASED YIELDS

- With the John Blue VisaGage II you will know immediately if an outlet is plugged, thus causing possible variations in your application rates.
- So easy! See the balls in line and know your rate is uniform.
- When the ball is lower you know there is a restriction at the outlet, hose or opener supplied by that flow monitor.
- A ball higher than the others is an indication that hoses or fittings supplied by that specific flow monitor is broken or has a leak.
- Standard Liquid VisaGage Units are manufactured with chemical resistant polypropylene adapters, Viton® o-rings and clear PVC bodies with an additive for UV protection.

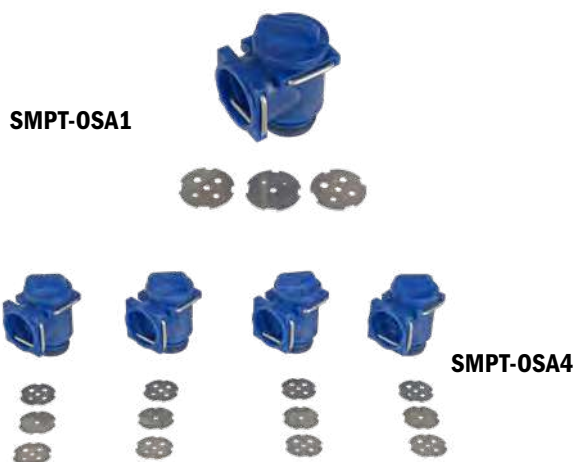
### CUSTOMIZE YOUR VISUAL FLOW MONITOR SYSTEM

- Get the exact number of flow monitors for spraying or fertilizer applications by simply banking single columns or sets of 4 Flow Monitors or any combination you choose. Clasp them together with the stainless steel clips and Viton® O-rings and go.
- The VisaGage II allows the use of common stainless steel orifice plates.
- Ports are standard NPT. Use our barb or convenient push connect fittings for simple installation.
- Most parts are interchangeable with other brands.

### VISAGAGE ORIFICE SELECTOR

- Turn your John Blue VisaGage II into a self-contained orifice changing system.
- This patented system is the first of its kind on the market today.
- Simply select from one of four orifice settings on each disc. Four discs provide for sixteen different options.
- No more getting wet from fertilizers or chemicals when changing orifices.
- Adjustment is quick, no need to travel to each row unit and work with plumbing near the ground.
- PATENT #9433144

VisaGage Orifice Selector*	
Part Number	Description
SMPT-OSA1	Single orifice selector kit.
SMPT-OSA4	Set of 4 orifice selector kit.





**For Use with Sprayers**

Part Number*	Description
SMSS1	Single Flow Monitor Assembly - Spray Type includes single body, 3/8" NPT female inlet and outlet, (5) 1/2" diameter balls, end cap, Viton® O-rings and stainless steel retainer clips.
SMSS4	Set of 4 Flow Monitor Assembly - Spray Type includes 4 bodies, 1/2" NPT female inlet, 3/8" NPT female outlet, (20) 1/2" diameter balls, end cap, Viton® O-rings and stainless steel retainer clips.
SMSS1-PE14	Spray Single - 1/4 Elbow Push out, NPT in
SMSS1-PE38	Spray Single - 3/8 Elbow Push out, NPT in
SMSS1-PE56	Spray Single - 5/16 Elbow Push out, NPT in
SMSS4-PE14	Spray Set 4 - 1/4 Elbow Push out, NPT in
SMSS4-PE38	Spray Set 4 - 3/8 Elbow Push out, NPT in
SMSS4-PE56	Spray Set 4 - 5/16 Elbow Push out, NPT in

**For Use with Flow Dividers or Squeeze Tube Pumps**

Part Number*	Description
SMFD1	Single Flow Monitor Assembly - Flow Divider Type includes single flow divider monitor body, 3/8" NPT female inlet and outlet, (5) 1/2" diameter balls, end cap, Viton® O-rings and stainless steel retainer clips.
SMFD4	Set of 4 Flow Monitor Assembly - Flow Divider Type includes 4 bodies, 3/8" NPT female inlet and outlet, (20) 1/2" diameter balls, end cap, Viton® O-rings and stainless steel retainer clips.
SMFD1-PE14	FD Single - Elbow 1/4 Push in/Out
SMFD1-PE38	FD Single - Elbow 3/8 Push in/Out
SMFD1-PE56	FD Single - Elbow 5/16 Push in/Out
SMFD4-PE14	FD Set of 4 - Elbow 1/4 Push in/Out
SMFD4-PE38	FD Set of 4 - Elbow 3/8 Push in/Out
SMFD4-PE56	FD Set of 4 - Elbow 5/16 Push In/Out

**Miscellaneous Components**

Part Number	Description
SMPT-0007	O-ring
SMPT-0009	Ball storage unit - optional - holds up to 40 balls (use one per set of 8 bodies). Lid can be locked.
SMPT-0014	Tee - optional - for spray type use with typically 8 total bodies, 1" NPT female inlet port and 1/4" female NPT port for gauge.
SMPT-0021	7/16" Stainless Steel Ball - optional - for use with extra high flow rates.
SMPT-0034	#112 Viton® O-ring - optional - used to seal orifice plates, install plate in recess of the 3/8" NPT port adapters and then install the O-ring to retain and seal orifice plate.
SMPT-0049	Flanged Tee - optional - for spray type use with typically 8 total bodies, 100 series flange with o-rings and 1/4" female NPT port for gauge.
SMPT-0050	Yellow Ball - optional - 13% heavier than the blue plastic ball and lighter than the glass ball that comes standard with the VisaGage II.
SMPT-0051	1/4" Tube Push Connect Elbow Adapter, use existing VisaGage o-ring.
SMPT-0052	5/16" Tube Push Connect Elbow Adapter, use existing VisaGage o-ring.
SMPT-0053	3/8" Tube Push Connect Elbow Adapter, use existing VisaGage o-ring.
SMPT-0061	1/2" NPT End Cap Adapter



# LIQUID BLOCKAGE MONITOR SYSTEM

## LIQUID BLOCKAGE MONITOR SYSTEM (LBMS)

DETECTS LOW-FLOW AND BLOCKED LINES FOR BOTH LIQUID FERTILIZER AND NH<sub>3</sub>.



Now you can know your liquid and NH<sub>3</sub> application flow from the cab of your tractor.



### NEW LBMS ENHANCEMENTS

NEW AND IMPROVED FEATURES FOR LIQUID BLOCKAGE MONITOR SYSTEM!

Improved interface visibility

Improved row blockage visibility

“NEW” GPS coordinates will be logged at the time of blockage if tablet has GPS capability

Smoother flow rate transitions

Easy to read sensor settings

User-friendly tool pane

Durable Construction

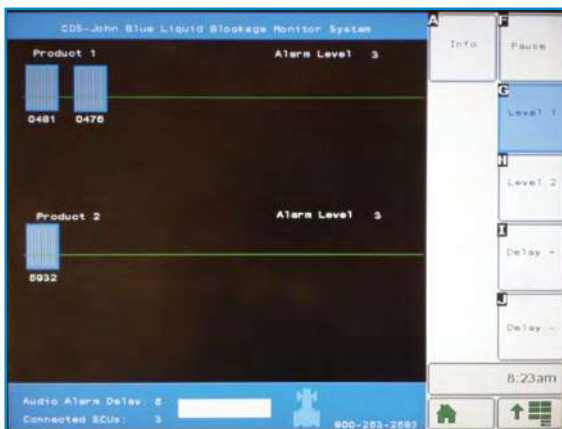
“NEW” calibration log for more detailed record keeping



### FEATURES OF LBMS:

- Magnetic sensing technology mounted behind Liquid or NH<sub>3</sub> VisaGage II Flow Monitors.
- Can be mounted to existing liquid VisaGage II units, new magnetic balls are supplied.
- Identifies where magnetic balls are floating in each row during application.
- Shows both low and no-flow, plus premium systems show high flow for broken lines.
- See a visual display and hear an audible alarm on the control panel from your tractor cab. Can be used with cloudy or dark liquids and NH<sub>3</sub>, LED is visible to the sides of the columns.
- Each row with a problem, will be highlighted by a flashing LED light at the row. No need to remember or search for the blocked row when you come to a stop.
- Alarm will reset automatically when the blockage has been corrected.
- Can “Pause” the system to capture problem rows for investigation later when you are able to stop.
- Our patented LBMS is available in five user-friendly options: standard wired control panel, iPad, Android or Amazon Kindle wireless system, and ISOBUS.
- LBMS app is free and available from Apple App Store, Google Play, and Amazon.
- Wireless apps and ISOBUS sections can be defined and rows can be numbered.

VISAGAGE II UNITS ARE AVAILABLE ON PAGE 26-27 FOR LIQUID AND PAGE 73 FOR NH<sub>3</sub>/ANHYDROUS AMMONIA.



ISOBUS Compatible LBMS*	
Part Number	Description
BM-08ISO (Universal Kit)	ISOBUS 8 Row Kit Includes: A. Main Computer Harness B. Job Computer C. Tap Harness -universal or brand-specific (i.e. John Deere®) D. Tee harness E. Two - 15 ft. Extension Harness F. Two Standard Sensor Kits G. Two Terminator Plugs. For use with GS2/GS3 only.
BM-08ISO-JD (John Deere® Kit)	
BMPT-001	4 Row Sensor Expansion Kit for adding to BM-08ISO and BM-08ISO-JD - includes standard sensor, tee harness, 12 magnetic balls & hardware.
BMPT-036	Universal ISOBUS for converting from BMi-08 to ISOBUS.
BMPT-036-JD	John Deere® ISOBUS for converting from BMi-08 to ISOBUS. For use with GS2/GS3 only.

NOTE: Liquid VisaGage II Flow Monitors are ordered separately: SMSS4 set of 4 Flow Monitor Spray Type and SMFD4 set of 4 Flow Monitor Divider Type, see page 26-27. NH<sub>3</sub> VisaGage II ordered separately: SMFD2-NH<sub>3</sub> (2 row) and SMFD4-NH<sub>3</sub> (4 row), see pg. 72.

**Notice of Operation:**  
 Be aware a minimum of 0.126 gallons per minute per row based on 11lb./gallon liquid fertilizer is required in order monitor flow of product successfully. Less than 0.126 gallons per minute per row based on 11lb./gallon of liquid fertilizer is not recommended by the John Blue Company in order to effectively monitor flow using a Liquid Blockage Monitor System.

## HOW TO ORDER:

1. Purchase an ISOBUS 8 Row Liquid Blockage Monitor Kit, #BM-08ISO(-xx):

### Components Included in BM-08ISO, BM-08ISO-JD, etc.:

- Main Computer Harness
- Job Computer
- Tap Harness (universal or brand-specific (i.e. Deere)
- Tee Harness
- 15ft Extension harness (qty = 2)
- Standard Sensor Kit (qty = 2)  
(includes standard sensor, tee harness, 12 magnet balls, & hardware)
- Terminator Plug (qty = 2)

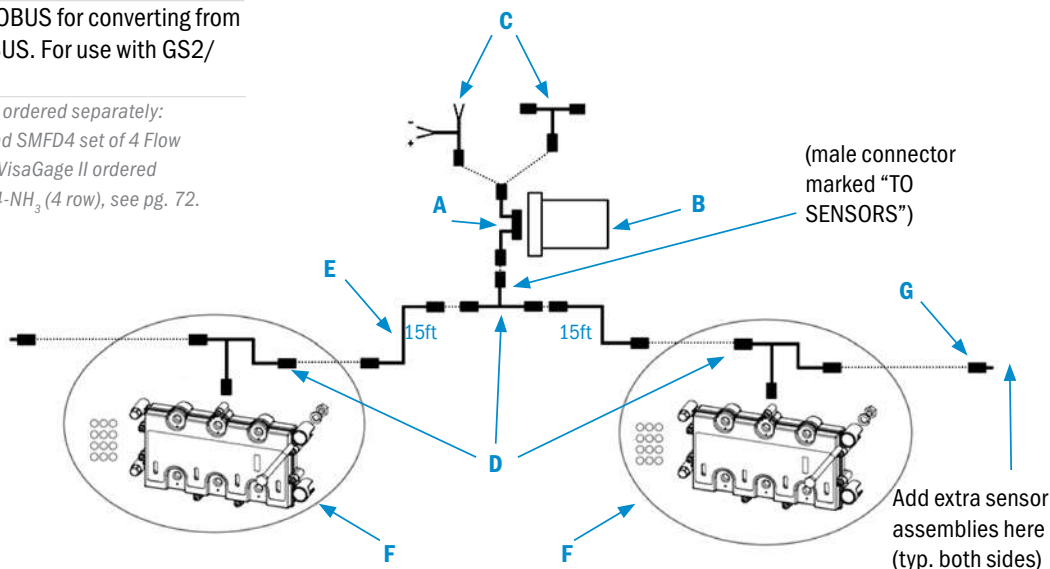
2. If the harness lengths supplied are not long enough for your machine measurements, you can order more of these harnesses and add them anywhere in the circuit:

- **BMPT-012:** 28FT Extension harness
- **BMPT-013:** 15FT Extension harness
- **BMPT-014:** 7FT Extension harness

3. Purchase the required number of 4-Row Sensor Expansion Kits (#BMPT-001) to cover the number of rows on your machine (extra rows are ok). The location of the individual sensors does not matter, and they do not have to be evenly split.

4. Order the required number of Visagage II assemblies for your machine, and at installation you will replace the standard balls with the appropriate magnet ball for your specific row flow rate.

5. Verify that your virtual terminal has the correct software in order to run ISOBUS programs.





# PREMIUM LBMS SYSTEM

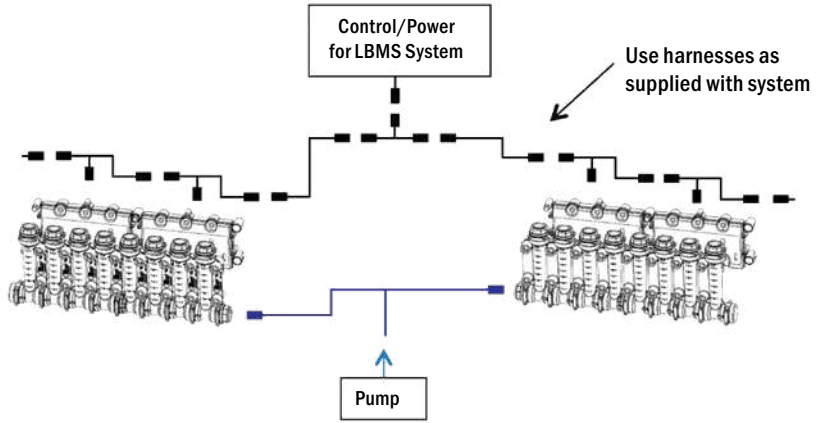


**NEW LBMS ENHANCEMENTS**  
 New and improved features for Liquid Blockage Monitor System (LBMS)!

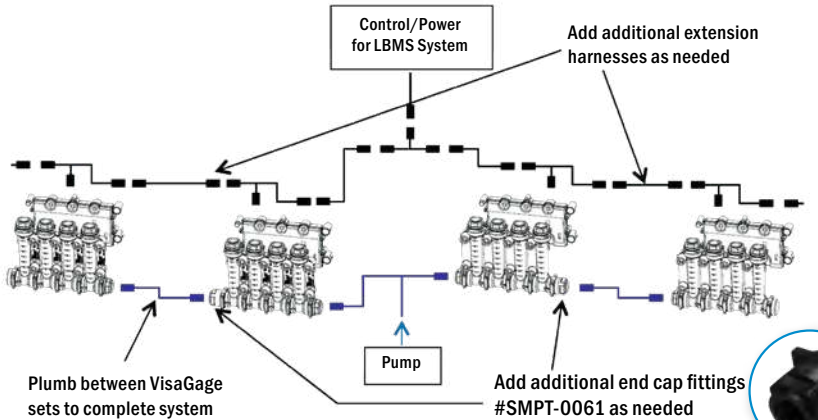
See Page.....28

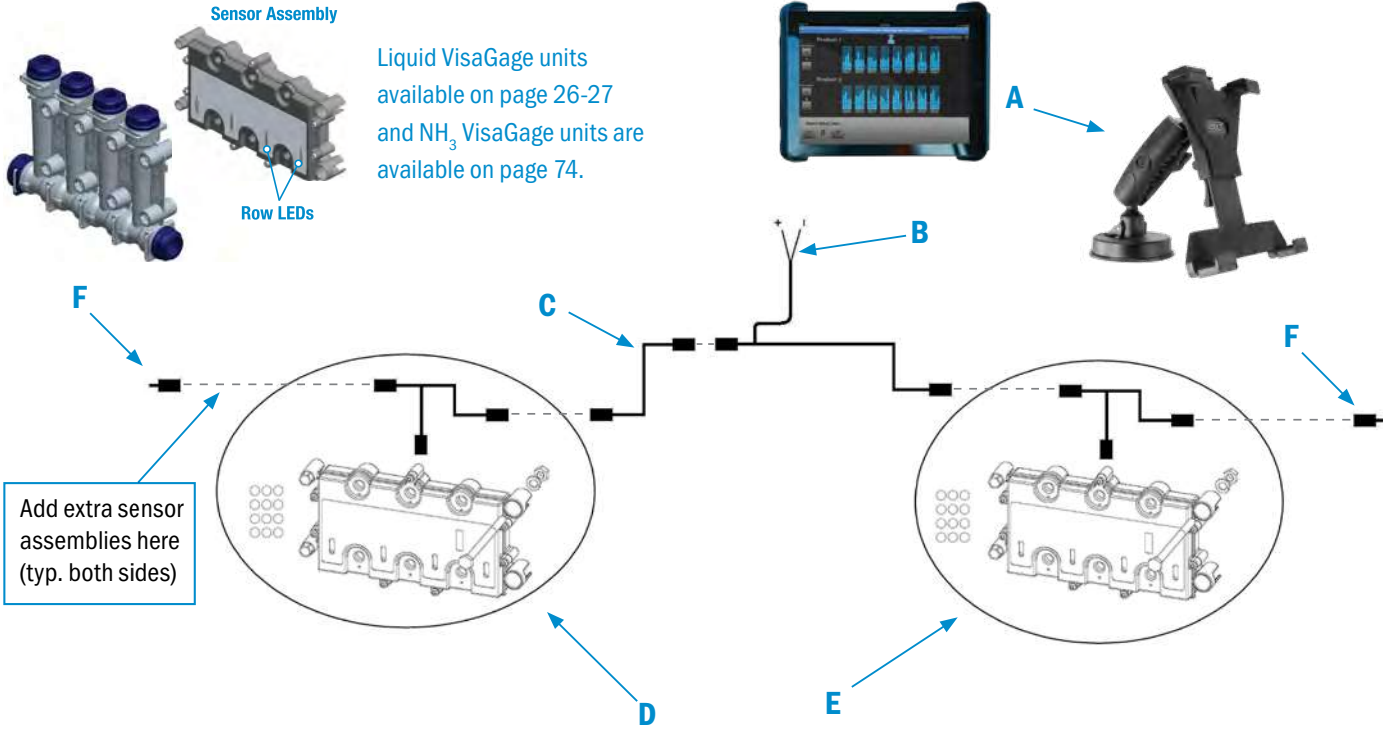
## INSTALLATION OPTIONS FOR SMSS STYLE VISAGAGE II FLOW MONITORS

EXAMPLE OF TRADITIONAL "GROUPED" VISAGAGES



EXAMPLE OF OPTIONAL "SPACED" SETS OF VISAGAGES: FOR USE WITH A LOG TYPE MANIFOLD SYSTEM OR WHEN A SHORTER LINE LENGTH TO EACH ROW IS DESIRED





Liquid VisaGage units available on page 26-27 and NH<sub>3</sub> VisaGage units are available on page 74.

Add extra sensor assemblies here (typ. both sides)



The LBMS app is free and available from the Apple App store, Google Play, and Amazon.

**HOW TO ORDER:**

1. Purchase a Premium 8 Row Blockage Monitor Kit, #BMI-08
2. If the harness lengths supplied are not long enough for your machine measurements, additional harnesses can be ordered and added anywhere in the circuit:
  - BMPT-012: 28FT Extension harness
  - BMPT-013: 15FT Extension harness
  - BMPT-014: 7FT Extension harness
3. Purchase the required number of 4-Row Sensor Expansion Kits (#BMPT-001, item E) to cover the number of rows on your machine (extra rows are ok). The location of the individual sensors does not matter and they do not have to be evenly split.
4. Order the required number of VisaGage II assemblies for your machine. At installation replace the standard balls with the appropriate magnet ball for your specific row flow rate for liquid only. NH<sub>3</sub> VisaGage units come standard with magnetic balls.
5. Purchase an iPad 2 or newer display running the latest iOS or a quality 7" or larger Android tablet running at least Android 4.0.

Premium System*	
Part Number	Description
BMI-08	Premium 8 Row Kit Includes: A. iPad mounting bracket B. Input harness C. 28 ft. extension harness D. Wireless sensor kit E. Standard sensor kit F. Two terminator plugs
BMPT-001	4 Row Sensor Expansion Kit for adding to BMI-08 Includes: standard sensor, tee harness, magnet balls and hardware.

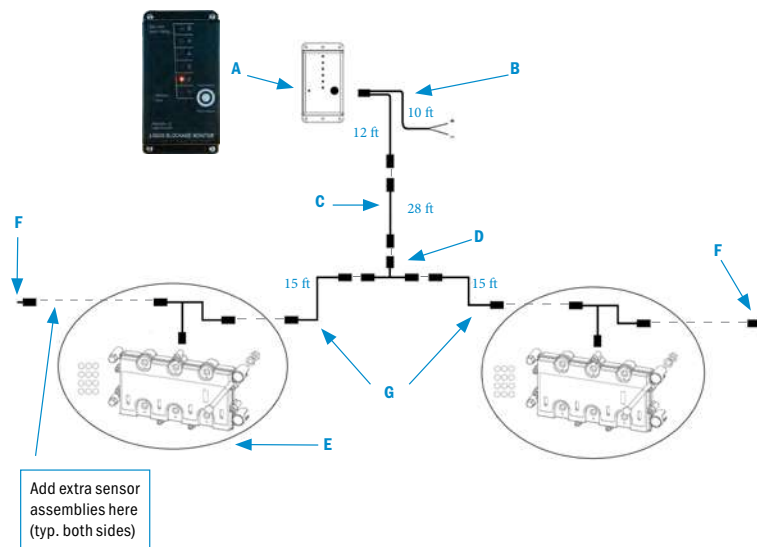
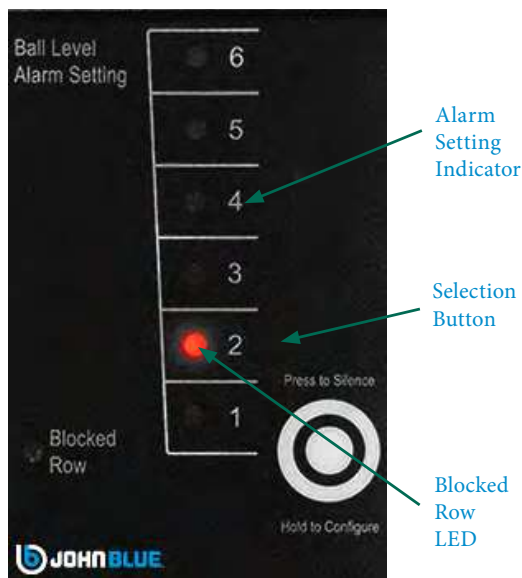
\*Liquid VisaGage II Flow Monitors are ordered separately: SMSS4 set of 4 Flow Monitor Spray Type and SMFD4 set of 4 Flow Monitor Divider Type, see page 26-27. NH<sub>3</sub> VisaGage II ordered separately: SMFD2-NH<sub>3</sub> (2 row) and SMFD4-NH<sub>3</sub> (4 row), see page 74.

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# STANDARD LBMS SYSTEM

## STANDARD CONTROL PANEL (WIRED)\*



### HOW TO ORDER:

1. Purchase one of the Standard 8 Row Blockage Monitor Kits, BM-08AP or BM-08PL, which differ by item(s) "G". See the following:
2. If the harness lengths supplied are not long enough for your machine measurements, additional harnesses can be ordered and added anywhere in the circuit:
  - **BMPT-012:** 28FT Extension harness
  - **BMPT-013:** 15FT Extension harness
  - **BMPT-014:** 7FT Extension harness
3. Purchase the required number of 4-Row Sensor Expansion Kits (#BMPT-001, item E) to cover the number of rows on your machine (extra rows are ok). The location of the individual sensors does not matter and they do not have to be evenly split.
4. Order the required number of VisaGage II assemblies for your machine. At installation replace the standard balls with the appropriate magnet ball for your specific row flow rate for liquid only. NH<sub>3</sub> VisaGage LMBS come standard with magnetic balls.

Standard Control System *	
Part Number	Description
BM-08AP	Applicator 8 Row Kit Includes: A. Control panel with mount bracket B. Input harness C. 28 ft. extension harness D. Tee harness E. Two standard sensor kits F. Two terminator plugs
BM-08PL	Planter 8 Row Kit Includes: A. Control panel mounting bracket B. Input harness C. 28 ft. extension harness D. Tee harness E. Two standard sensor kits F. Two terminator plugs G. Two 15 ft. extension harnesses
BMPT-001	4-Row Sensor Expansion Kit for adding to BM-08AP and BM-08PL - includes: standard sensor, tee harness, magnet balls and hardware.

\*Liquid VisaGage II Flow Monitors are ordered separately: SMSS4 set of 4 Flow Monitor Spray Type and SMFD4 set of 4 Flow Monitor Divider Type, see page 27. NH<sub>3</sub> VisaGage II ordered separately: SMFD2-NH<sub>3</sub> (2 row) and SMFD4-NH<sub>3</sub> (4 row), see page 74.



Liquid VisaGage units are available on page 26-27 and NH<sub>3</sub> VisaGage units are available on page 74.

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UPDATE YOUR JOHN DEERE® EQUIPMENT WITH THE LATEST TECHNOLOGY FROM JOHN BLUE COMPANY

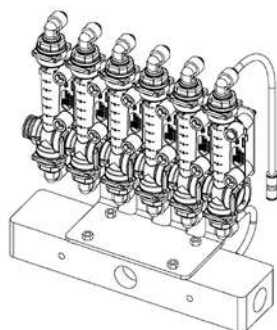
JOHN BLUE COMPANY HAS DEVELOPED THE FOLLOWING KITS TO MAKE IT EASIER TO USE JOHN BLUE PRODUCTS ON YOUR JOHN DEERE® PLANTER.



**Kits for converting the 1770NT John Deere® Port Manifold System to the John Blue Flow Divider (for planters built 2012 and after).**

Part Number	Description
116098 (16 row)	Kit includes 16 outlet Flow Divider, (16) 1 PSI Check Valves and all necessary plumbing.
116099 (12 row)	Kit includes 12 outlet Flow Divider, (12) 1 PSI Check Valves and all necessary plumbing.

\*VisaGage II's are available, see pages 26-27.



**VisaGage II Kits when just adding flow monitors to your 1770NT John Deere® Planter (planters built 2012 and after). Kits will bolt directly to your manifold.**

Part Number	Description
116150 (24 row)	Kit includes (6) sets of 4 Flow Monitor Assemblies, backing plate, mounting bracket, tubing and all necessary plumbing.
116107 (16 row)	Kit includes (4) Sets of 4 Flow Monitor Assemblies, backing plates, mounting brackets, tubing and all necessary plumbing.
116108 (12 row)	Kit includes (3) Sets of 4 Flow Monitor Assemblies, backing plates, mounting brackets, tubing and all necessary plumbing.
116151 (8 row)	Kit includes (2) sets of 4 Flow Monitor Assemblies, backing plate, mounting bracket, tubing and all necessary plumbing.



**Variable Rate Hydraulic (VRH) Drive Kits for John Deere® Planters**

Part Number	Description
VRH-JD-10	VRH Kit for John Deere® CANbus Planters Using GreenStar™ GS2 and GS3. Kit includes: mounting bracket, chain, sprockets, hydraulic motor, PWM flow control manifold, custom adaptor harness and setup instructions with parts listing for obtaining off-the-shelf components to complete installation. Other applications may work, but CANbus wiring must be present.
VRH-JD-15	Multi-Section VRH Drive Kit for John Deere® CANbus Planters using GreenStar™ GS2 and GS3. Kit includes same as above except for harness to control up to 7 section valves. Other applications may work, but CANbus wiring must be present.



**ISOBUS Compatible Liquid Blockage Monitor System (LBMS)**

Part Number	Description
BM-08ISO-JD	8 row kit for John Deere® Planters with ISOBUS, splice harness supplied for quick connection. For use with GS2/GS3 only.
BMPT-036-JD	John Deere® ISOBUS for converting from BMi-08 to ISOBUS.