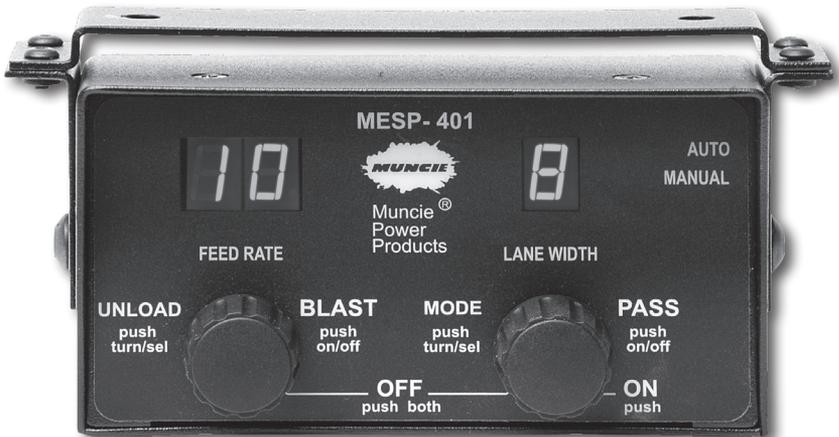




MESP-401A

INSTALLATION INSTRUCTIONS AND OWNER'S MANUAL

FEATURES • INSTALLATION • OPERATION • PROGRAMMING • SERVICE



MESP-401A

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MESP-401A FEATURES & DESCRIPTION

- Nine programmable levels of Feed Rate control with true LBS./mile calibration
- Nine programmable levels of Lane Width control, with zero MPH shut on/off
- Auto or Manual operation, six different configurations, including manual lock out
- Blast with adjustable auto-cancel timer, push on/off control, remote switch option
- Pass feature with instant push on/off control, remote switch option
- Unload selection (full conveyor output) with vehicle speeds up to 5 mph
- Four granular products, operator selectable
- Internal audible beeper, verifies certain functions for the operator
- MPH ratio change for two speed rear ends
- Optional remote power-down switch

The MESP-401A spreader controller provides both manual and automatic spreader operation. In automatic spreader mode the MESP-401A accurately maintains constant pounds per mile output as the vehicle's speed varies. The MESP-401A will control two electro-hydraulic proportional flow control valves; conveyor (auger) and spinner. The MESP-401A's proportional valve control is fully adjustable with both minimum and maximum trim settings and adjustable PWM frequency for compatibility with virtually any valve design.

The MESP-401A's front panel incorporates two rotary controls for the operator's Feed Rate (auger/conveyor) and Lane Width (spinner) adjustments. The Feed and Lane settings are reported to the operator from a digital display located directly above each rotary switch. Both rotary controls are detented with bi-directional endless rotation and incorporate an integral push-button switch. This combination control allows the operator to change the Feed Rate and Lane Width with fast digital precision. For Pass and Blast simply push each control. Special selections are accomplished with a push-n-turn action.

M.E.S.P. 402E-CAL SPECIFICATIONS

OPERATING VOLTAGE

11 - 15 VDC, standard 12 volt mobile vehicle electrical system, (neg) ground.

OUTPUTS

Three (3) current controlled PWM valve drivers, 2.5 amps each, overload sensing/protected

INPUTS

Four (4) MPH sensor types, AC (vrm), DC sink, DC source and Coupled types. Two (2) auxiliary inputs for current sinking devices, i.e. remote switches

FRONT PANEL

Back lighted, non-glare, detented rotary controls, alpha-numeric display

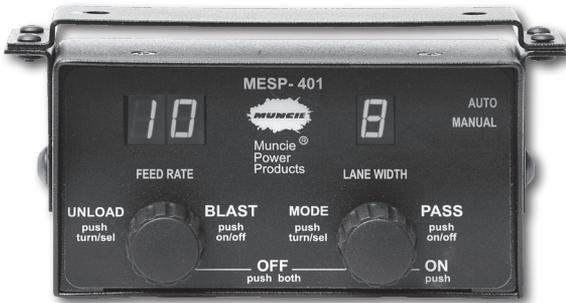
ENCLOSURE

Steel with universal bracket for under, over and back panel mounting

CALIBRATION

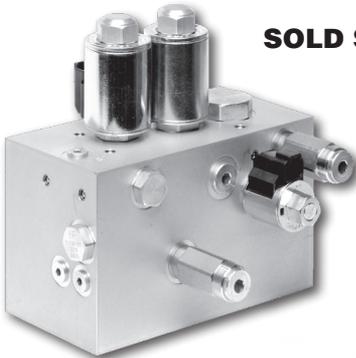
All calibrations are set via the front panel, no tools required, pass code protected.

SPREADER SYSTEM COMPONENTS



MESP-401A

SOLD SEPARATELY



MESP-202H

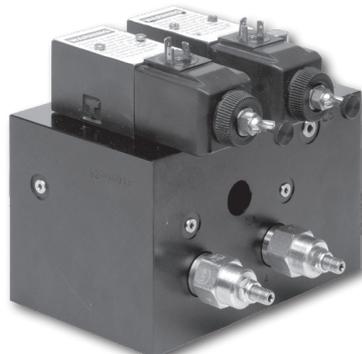


MESP-401 CBL

NO LONGER AVAILABLE



MESP-200 AX



MESP-202B

COMPLETE SPREADER PACKAGES

NO ENCLOSURE

MESP-2514E

Includes the following:

- MESP-202H Open Center
- MESP-401A
- MESP-401CBL

MESP-2515E

Includes the following:

- MESP-202H Load Sense
- MESP-401A
- MESP-401CBL

WITH NEMA ENCLOSURE

MESP-2514E ASM

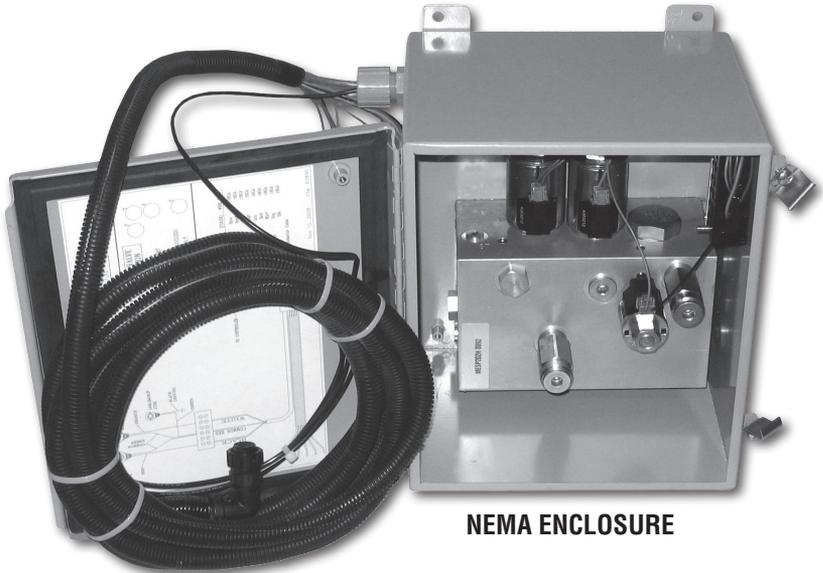
Includes the following:

- MESP-202H Open Center
- MESP-401A
- MESP-401CBL
- Plus Nema Enclosure

MESP-2515E ASM

Includes the following:

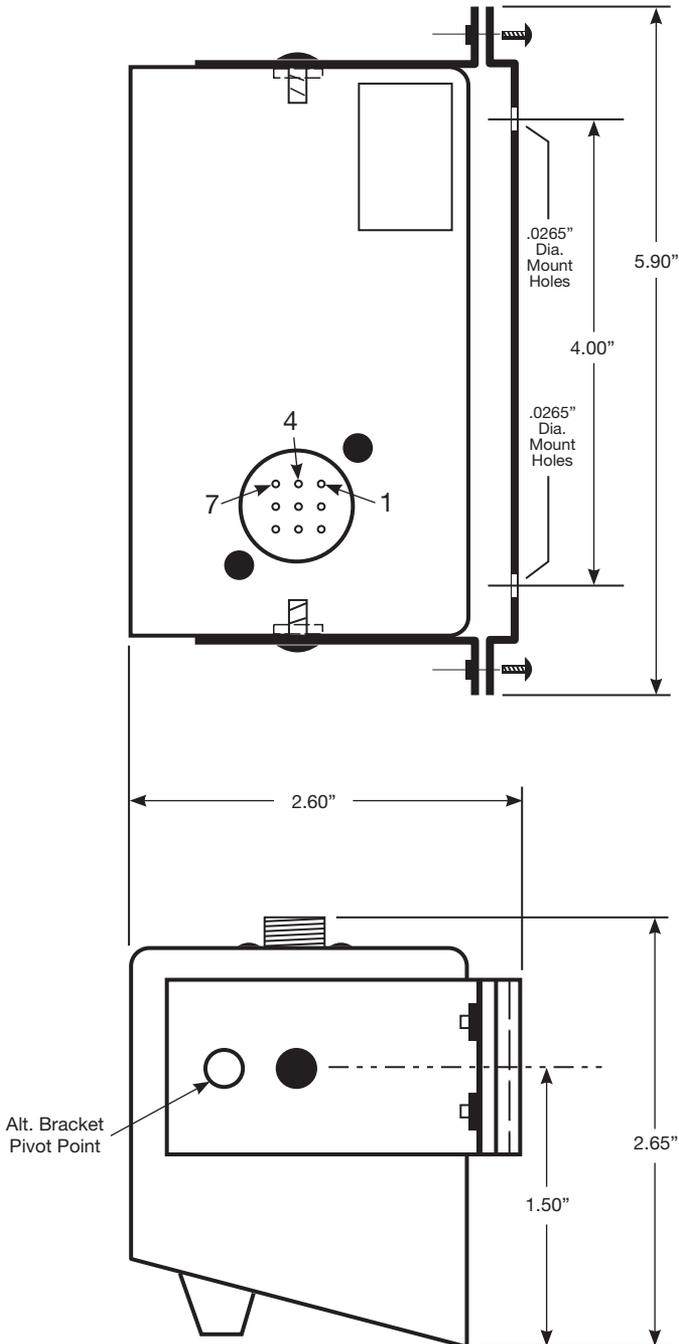
- MESP-202H Load Sense
- MESP-401A
- MESP-401CBL
- Plus Nema Enclosure



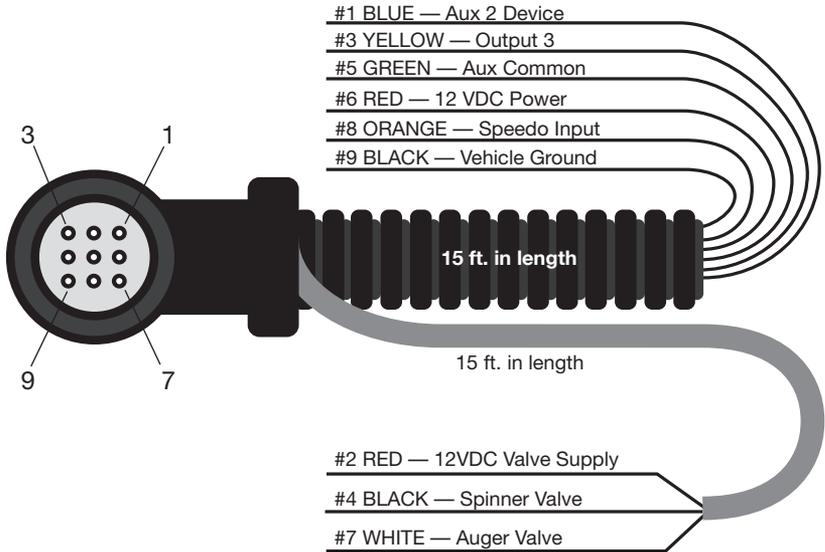
NEMA ENCLOSURE

MESP 401A DIMENSIONS

(Dimensional drawing rotated 90° CW for spacing.)



MESP 401A WIRE HARNESS



CORRUGATED LOOM (6 WIRE) CABLE

PIN	COLOR	FUNCTION	CONNECT TO
1	BLUE	Aux 2	See Below
3	YELLOW	Output 3	Not Used
5	GREEN	Aux 1	See Below
6	RED	12vdc (power)	Keyed Ign. 12V-10A
8	ORANGE	Speedo input	Speedo Signal
9	BLACK	Ground	Negative Side of battery

PVC JACKETED (3 WIRE) CABLE

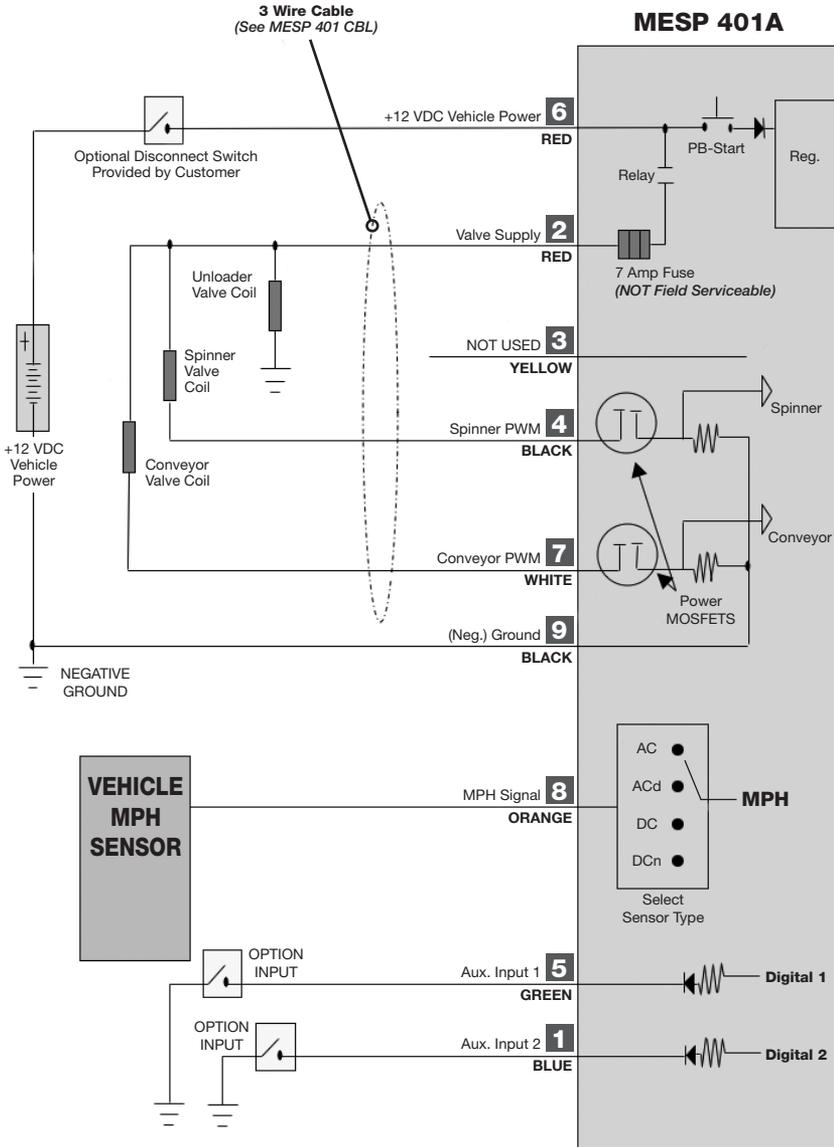
PIN	COLOR	FUNCTION	CONNECT TO
2	RED	Valve Power Supply 12VDC	Common Supply to Spinner and Auger Valves
4	BLACK	Spinner Control	Spinner Valve
7	WHITE	Auger Control	Auger Valve

AUXILIARY INPUT OPTIONS

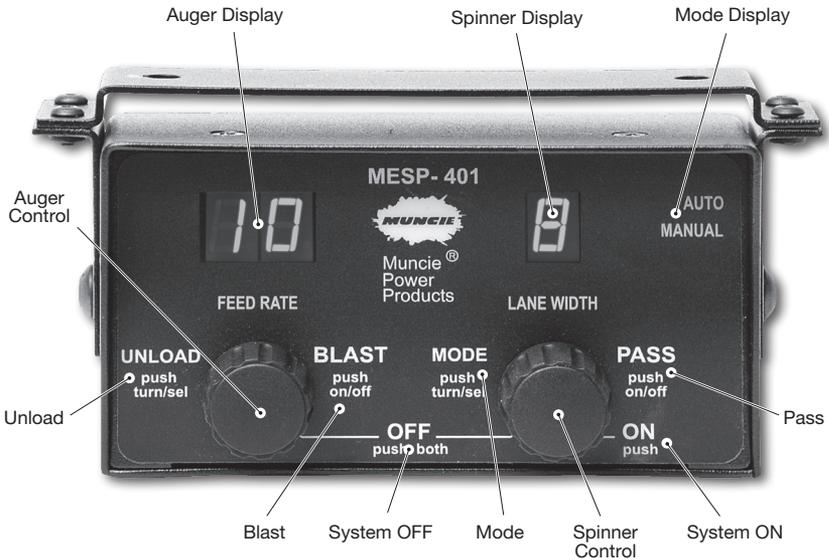
- Remote pushbutton switch to ground for PASS
- Remote pushbutton switch to ground for BLAST
- Remote PSI switch to ground for sensing an Auger/Conveyor stall
- Hi/Lo selector switch for a two speed rear axle
- Remote pushbutton switch to ground that shuts off MESP 401A

*** When installing an auxiliary input switch, select the function type through the programming mode. (Lines 11 and 12)

ELECTRICAL BLOCK DIAGRAM



MESP-401A CONTROLS AND DISPLAYS



OPERATION INSTRUCTIONS — CONTROLS

LEFT HAND KNOB FUNCTIONS

FEED RATE

Turn to control the Auger/Conveyor.

BLAST

Push and release to increase the Auger/Conveyor to max speed.
(BL will show on display.)
(Timed interval 0-30 seconds, programming variable)

UNLOAD

Push and turn CCW – UL will show on display.
(Provides max Auger/Conveyor speed for unloading material.)
***Truck must be at 0-5 MPH for Unload to function.

RIGHT HAND KNOB FUNCTIONS

LANE WIDTH

Turn to control the speed of the spinner.

PASS

Push and release to pause the operation of the Auger/Conveyor and Spinner. Push and release again to resume operation at the original settings. **PA S** will show on the display.

OPERATION INSTRUCTIONS

RIGHT HAND KNOB FUNCTIONS *CONTINUED*

MODE

Push and turn two detents CW to select manual operation or two detents CCW to select Auto operation (Auto and Manual labels in top right corner). These will light up to indicate selected operating mode.

PRODUCT SELECT

Push and turn CW six detents until the display shows Pr 1 to 4; continue turning for desired product number and release button to store result.

The selected product number has a decimal point preceding it when scrolling thru the four number selections.

SYSTEM ON

Push and release the Lane-Width knob to turn the system on.

SYSTEM OFF

Push both knobs simultaneously to turn the system off.

OPERATION INSTRUCTIONS — DISPLAYS

AUTO/MANUAL LABELS

Indicates mode of spreader operation.

*** In Auto Mode the label and numerical displays will flash at 0 MPH. If Auto display continues to flash with the truck moving, this indicates no speedo input to MESP-401A, and the auger/conveyor will not operate.

FEED RATE

Manual Operation, (10) Settings are displayed (0-9)

Auto Operations, (10) Settings are displayed (0-9)

***Initially Auger Output displayed (Lb. /mile) ***multiply by 10 for actual output.*

LANE WIDTH

(10) settings of spinner control (0-9)

OPERATION INSTRUCTIONS

OPERATION DISPLAYS

B	L	<input type="checkbox"/>	BLAST	P	R	<input type="checkbox"/>	PRODUCT
P	A	S	PASS	O	R	<input type="checkbox"/>	OVERRUN-MPH TOO HIGH
U	L	<input type="checkbox"/>	UNLOAD	P	S	i	CONVEYOR STALL

AUTO MODE OPERATION

In Auto mode the truck speed (MPH) is used to automatically increase/decrease the Auger/Conveyor speed to keep the Feed Rate (Lbs. /Mile) constant.

- The operator has (9) increments of Feed Rate. As the feed rate knob is turned in Auto mode, the display will show a two digit number that multiplied by 10 equals the application rate in pounds per mile. After a selection is made the display will revert to a reference number (1-9)
- In Auto, the Auger/Conveyor will automatically halt at 0 MPH. The auto label, feed rate, and lane width displays will continuously flash at 0 MPH – Or – Loss of a speedometer input if truck is moving.
- Auto Mode does not control the Spinner–Lane Width. This is set by the operator and remains constant at all MPH speeds.

MANUAL MODE OPERATION

In Manual mode the Feed Rate adjustment has (10) settings. (0-9) [0=off]

- Each increment changes the Auger/Conveyor speed by approximately 10%, each setting will produce a constant Auger/Conveyor speed at all MPH. Therefore as MPH increases for any given Feed Rate, the actual pounds per mile will decrease; also, unlike Auto, the system will not automatically turn off the spreader output when the truck comes to a stop. The operator must use the pass function or turn the Feed Rate to 0 to stop the spreader.

MESP PROGRAMMING/SETTINGS

VIEWING THE PROGRAMMING MENU SETTINGS

1. With the MESP-401A powered-off, press and hold both control knobs for 4-5 seconds. Release the control knobs when SH O is displayed.
2. It is now possible to step thru the menu lines to view the settings. To select a menu line, press and hold the Lane Width Control and turn the Feed Rate Control to the desired menu line number. Release the Lane Width Control to view the setting.
3. It is not possible to alter the menu line variables in this viewing mode.
4. To exit this mode, press and hold both controls until the display shows 888. Release the controls to return to the normal operating mode.

ACCESSING AND ADJUSTING THE PROGRAMMING MENU SETTINGS

1. With the MESP-401A powered-off, press and hold both control knobs for 4-5 seconds. Release the control knobs when SH O is displayed.
2. Press and hold the Feed Rate Control and turn the Lane Width Control to enter the Pass Code in the display. Release the Feed Rate Control and Pr g will be displayed if the correct Pass Code was entered. (See the Quick Reference Programming Guide – Menu # 1 for your Pass Code).
3. You may step thru the menu lines by pressing and holding the Lane Width Control and turning the Feed Rate Control to any menu line number. Release the Lane Width Control to view the setting for that menu line.
4. To adjust the variable on any menu line, press and hold the Feed Rate Control and turn the Lane Width Control to the desired setting for that menu line. When you leave that menu line, the last setting will be stored in memory.
5. To exit this mode, press and hold both control knobs until 888 is displayed. Release the control knobs to return to the normal operating mode.

SELECTING THE OPERATING PARAMETERS FOR THE MESP-401A

There are many options available for setting-up the operation of this spreader control system to meet your specific needs. These are contained in the Programming Menus which can be accessed and adjusted with the control knobs and displays on the front. No special hardware or computer connections are required.

Programming Menus can be categorized as: (1) optional control selections, (2) setting the operator controls (options & limits) and (3) calibrations critical to accuracy. These are discussed in detail on the next page.

MESP PROGRAMMING/SETTINGS

OPTIONAL CONTROL SELECTIONS

AUX INPUTS 1 & 2 – MENUS 11 & 12

Two (optional) input wires are provided in the wiring harness. Connection via a switch to ground on each input wire will activate a response according to the selections made on Menus 11 & 12.

SELECTIONS FOR MENUS 11 & 12

SELECTIONS	OPTION
0	No Action – Input not used
1	Auger Jam – Requires PSI switch in motor circuit
2	Remote Pass – Requires a pushbutton switch
3	Remote Blast – Requires a pushbutton switch
4	2-Speed Axle Input for internal speedometer adjust
5*	Remote Shutdown – Requires a pushbutton switch

**Note: Selection (5) is only available on Menu 11 for Aux Input 1*

AUGER JAM OPTION

A pressure switch connected to ground and Aux Inputs 1 or 2 will stop the spreader operation if the pressure switch closes. The MESP-401A will show the operator an error code (07 E) and beep to show a potentially jammed auger.

REMOTE PASS OR BLAST OPTION

Connecting the Aux Input wires to a momentary push-button switch will activate these functions while the switch is depressed. Releasing it resumes normal operation. Pass will stop both spreader motors. Blast will increase the auger output to a preset level. Handles for cable controlled plow valves are available with these switches and provide a convenient control option for operators.

2-SPEED AXLE OPTION

If the truck is equipped with a 2-speed axle, connect one of these Aux Inputs to the Hi-Lo axle selector. This is required for the MESP-401A to stay in sync with the speedometer function.

REMOTE SHUTDOWN OPTION

A momentary push-button switch connected to Aux Input 1 can provide an emergency shutdown of the MESP-401A from anywhere on the truck. Pushing the switch will immediately power-off the MESP-401A. It cannot be used to power-on the controller.

MESP PROGRAMMING/SETTINGS

SETTING OPERATOR CONTROLS (OPTIONS & LIMITS)

(MENUS 3-4, 9-10, 21-29, 31-41)

AUTO & MANUAL MODE LOCKOUTS – MENU 3

To force the operator to use the Auto operation, select option (3) on this Menu. This will lockout the Manual operation except when the truck is at 0 MPH or if the Auto mode fails. To lockout Auto, select option 1. To allow either mode to be used, select option 2.

SPINNER MODES – MENU 4

To turn the spinner function completely off, select option (0) on this menu. You may select option (2) to have the spinner automatically pause when the truck comes to a stop or choose option (1) to allow standard operation of the spinner whereby it will continue to run when the truck is stopped.

BLAST OPERATION – MENU 9 & 10

The operator can press the Feed Rate Control to activate a Blast operation. This will momentarily increase the auger output. Blast will then time-out and the auger will return to its original setting.

- On Menu 9, set the time-out range from 0-30 seconds for how quickly the auger will return to the original settings after the operator releases the blast.
- On Menu 10, set the auger speed response to blast operation.
- RTE = Blast output is same as Auger rate set on Menu 29.
- TRI = Blast output is same as Auger Max on Menu 17.
- *Note: Blast does not affect the spinner operation.*

AUTO AUGER OUTPUT SELECTIONS – MENU 21 TO 29

The MESP-401A allows up to (9) outputs. It is possible to set each operator selection for a specific output in terms of pounds-per-mile. For example, to have only (4) settings available to the operator, set the outputs of positions 5-9 for the same value as position 4.

It is possible to set these (4) positions for virtually any desired value. The values do not need to be equal increments. For example, they could be 100, 240, 330 and 600 pounds-per-mile.

Note: In Manual Mode the (9) auger rate increments are fixed and cannot be altered.

SPINNER OUTPUT LIMIT– MENU 31

There can be up to (9) increments of spinner control. In this menu, it is possible to select a smaller number of control increments. For example, you might only want (2); one for single lane and another for dual lanes.

SPINNER SPEEDS – MENU 32 TO 38

In these menu lines it is possible to adjust the spinner speed for each of the control settings you have selected above. Normally, the higher control rates of most systems produce spinner speeds that are too fast

MESP PROGRAMMING/SETTINGS

to be practical. This allows finer resolution in the total operator range if you choose.

POWER-UP OPERATING MODE DEFAULT – MENU 39

It is possible to set this menu option to cause the system to power-up in either Auto or Manual mode. (AUT=Auto, ANU=Manual)

POWER-UP FEED RATE SETTING – MENU 40

It is possible to preset an auger speed immediately upon powering-up the MESP-401A. It is strongly recommended that this be set to (0) = off.

POWER-UP LANE WIDTH SETTING – MENU 41

It is possible to preset a spinner speed immediately upon powering-up the MESP-401A. It is strongly recommended that this be set to (0) = off.

CALIBRATIONS CRITICAL TO ACCURACY

(MENUS 5-8, 13-20)

SPEEDOMETER INPUT & SYNCHRONIZING – MENU 5, 6 & 7

Truck speedometer systems can have a variety of signal types. Menu 6 allows selecting four different input variations. Most Allison equipped trucks provide a speedometer output at the VIM (Vehicle Interface Module) or TCM (Transmission Control Module). The (dC) selection on Menu 6 is usually correct for this type. Some IHC chassis provide a connection at the ECU (Engine Control Unit). These can require using the (dCn) selection on Menu 6. For standard transmissions the speedometer connection is commonly made to the speedometer sensor on the tailshaft area of the transmission. These types of sensors produce an AC voltage, therefore the (AC) selection on Menu 6 would be selected.

Finally, on Menu 6 a fourth option is available which is the (ACd) selection. This might be used if the (AC) does not work. Selecting the wrong option will not damage the MESP-401A or the speedometer system. You can quickly test the results of any selection by exiting the Programming Mode and returning to the normal operation of the MESP-401A. If the MESP-401A is on the correct selection and is receiving a usable speedometer signal the AUTO label on the front will quit flashing and go steady when the truck is moving. This will happen almost immediately after the truck begins to move.

After establishing a usable speedometer signal the next step is to synchronize the MESP-401A's measure of MPH to agree with the truck speedometer. There are a couple of methods of doing this. First, if the pulse count-per-mile is known for the truck speedometer system, then it can be directly entered on Menu 6. The second method is to go to Menu 7 and adjust the displayed number to agree with the truck speedometer. This method requires somebody to drive the truck at a constant speed while another person makes the adjustment on the display at Menu 7.

MESP PROGRAMMING/SETTINGS

CALIBRATIONS CRITICAL TO ACCURACY CONTINUED

The accuracy of the Auto mode operation depends upon this being done with reasonable accuracy (1-2 mph error is okay)

Note: *If using the second option to match the MESP-401A to the truck speedometer, it is advised that you return to Menu 6 and record the Cts/Mile that was recorded by the MESP-401A. This can be used to calibrate any other like trucks with a MESP-401A and it can used to recalibrate this truck in the future if a MESP-401A has to be exchanged for service.*

TWO-SPEED AXLE OPTION – MENU 8

If the truck is equipped with a two-speed axle, the Hi/Lo axle switch needs to be connected to Aux Input 1 or 2 of the MESP-401A (See Installation instructions in this booklet).

On Menu 8, you need to insert the axle ratio for Lo-to-Hi or Hi-to-Lo. This depends upon whether you were in Lo or Hi axle when you did the speedometer matching in the step above. The MESP-401A will use this ratio to recalculate the speedometer speed when the axle is shifted.

PWM FREQUENCY – MENU 13

The MESP-401A uses voltage pulses to control the current flow in the spreader valves. It varies the “on” and “off” time division of each pulse to change the current and thereby the valve’s hydraulic flow. The pulses are sent at a frequency that can be set on this menu line from 30 to 300 pulses-per-second. This pulse frequency helps to “vibrate” the valve and keep it responsive to quick changes of position requirements.

Valve manufacturers have different recommendations for the optimum frequency. Muncie’s valves operate best from 80-120 pulses-per-second (Hz). This technique of current control is called Pulse-Width-Modulation (PWM).

AUGER & SPINNER OUTPUT CONTROL (CURRENT OR VOLTAGE) MENUS 14 & 15

Two types of electrical control of the valves are available on these menu lines. One choice is Current and the other is Voltage.

Current Control is strongly recommended. This allows the MESP-401A to continuously self adjust for voltage changes and the affects of temperatures on valve coil resistance. This will produce the most consistent and accurate results. This keeps the spreader motor speeds stable and predictable.

AUGER MIN & MAX TRIM – MENUS 16 & 17

These settings determine the minimum and maximum current to the auger valve. The minimum current setting is very critical to the accurate operation of the spreader system. All valves have a threshold (minimum) current that must be met before the valve will begin to generate hydraulic flow. By accurately setting the minimum on Menu 16 the MESP-401A will always start its control output at this level and not at a lower value that would result in no spreading at low mph. The proper setting on Menu 16 should cause the auger to begin turning.

MESP PROGRAMMING/SETTINGS

WARNING! When you press the Feed Rate Control while on this menu, the auger operation is live.

Menu 17 sets the maximum auger speed available to operator and the system. It should not be set for a value higher than 90 for the best performance.

WARNING! When you press the Feed Rate Control while on this menu, the auger operation is live.

SPINNER MIN & MAX TRIM – MENUS 18 & 19

These settings determine the minimum and maximum current to the spinner valve. The minimum current setting will establish the speed of the spinner in Position 1 on the Lane Width Control. Keep in mind line 18 will be the slowest speed available to the operator.

WARNING! When you press the Feed Rate Control to change this setting the spinner will be live.

On Menu 19, you may set the highest spinner speed. This will be the speed available to the operator at the highest rate selection that is set in Menu 31.

WARNING! When you press the Feed Rate Control to change this setting the spinner will be live.

WEIGHED-DUMP CALIBRATION – MENU 20

This menu line is a very important reference for the MESP-401A to operate accurately. It tells the MESP-401A the potential of the truck spreader at full speed in terms of pounds-per-minute. The MESP-401A then relates its auger valve output current to material discharge weights. It can therefore use the MPH value of the truck and this relationship of electrical current to material discharge weight to correctly vary the auger valve. The resulting figure after performing a “weighed-dump calibration” should be input on this menu line.

To perform this operation, please see the description of the procedure at the end of this section.

ALTERNATE PRODUCTS 2, 3 & 4 CALIBRATION RATIOS

MENUS 42 , 43 & 44

When using more than one granular product, the MESP-401A allows for calibrating the weight/volume of any additional products as a ratio to Product 1, which is the default product that was used to determine the pounds-per-minute setting on Menu 20.

To find the ratio of a second product, weigh a bucket of the first product and then refill the bucket with the second product and weigh it.

Divide the weight of Product 2 by the weight of Product 1 and this will be the ratio. Install that ratio number on Menu 42. Repeat this process for a Product 3 if desired and install that ratio on Menu 43. A fourth product ratio can be installed on Menu 44.

MESP PROGRAMMING/SETTINGS

The operator can select these products by pressing and turning the Lane Width Control until the display shows the product number that corresponds to the material loaded in the truck. This is important to the overall accuracy of the system.

If you do not want any or some of the alternate product numbers to come up for the operator's selection then leave the ratio numbers on the Menus 42, 43 & 44 set for (1) as desired. (Ex. If Menu 43 & 44 are set for (1), then only Prod 1 & 2 will appear for the operator to select).

WEIGHED-DUMP CALIBRATION PROCEDURE

(RESULTS GO TO MENU 20)

The purpose of this procedure is to measure the discharged material weight of the spreader and measure the time of the discharge. The MESP-401A's internal micro controller can measure and control the electric current to the auger valve but it needs to have a reference for calculating electric current versus pounds-per-minute of material discharge.

You will need a means to weigh material. This can be handled a couple of ways. (1) Load the truck with material and weigh the truck. Then re-weigh the truck again after doing the material discharge. (2) Capture the discharged material and weigh it. You should discharge several hundred pounds of material to get an accurate measure of the spreader system. If you elect to weigh the discharged material, you may have to weigh the pile in manageable accurate segments by shoveling it into a container size that does not exceed the maximum weight limit of the scales, and make multiple weighs.

THE PROCESS:

1. Fill the truck with material. (Weigh the truck loaded if this is the method you are using to determine discharge weight.)
2. Position the truck for a stationary operation of the spreader.
3. Set the engine speed for 1500 RPM. This is so the pump is producing adequate flow to generate maximum speed for the spreader operation.
4. If your truck is equipped with a tailgate spreader, raise the dump body to fill the auger.
5. If your truck is equipped with a conveyor spreader, set the gate height for normal operations.
6. Turn on the MESP-401A and select Manual Operation.
7. Observe a second hand on a clock or watch and then turn the Feed Rate Control to (9) to begin the material discharge.
8. Time the material discharge for 1-2 minutes if you are collecting it to weigh. If you are going to re-weigh the truck you should let the discharge run for 5-10 minutes to get enough weight off for the truck scales to detect.
9. Shut off the MESP-401A after the discharge of material is complete.

MESP PROGRAMMING/SETTINGS

Once the weight of the discharged material is determined, divide the weight by the number of minutes of operation. This will tell you the Pounds-Per Minute. Input the Pounds-Per-Minute number on Menu 20.

TYPICAL SPREADER DISCHARGE RATES

- Tailgate auger style spreaders will typically discharge 700 – 1000 Pounds-Per-Minute.
- Slide-in V-box spreaders will typically discharge 250 – 500 Pounds-Per-Minute at 2-4 inches of gate height.
- Frame mounted & Muni-body spreaders will typically discharge 400 – 900 Pounds-Per-Minute at 2-4 inches of gate height.

MESP-401A TROUBLESHOOTING

SYMPTOM	POSSIBLE CAUSE
MESP-401A will not turn on.	<ul style="list-style-type: none">• Blown internal fuse-requires factory service.
No Auto Mode Function.	<ul style="list-style-type: none">• If auto mode blinks when truck is moving, then no speedo input.• Program menu 3 is set for (1) = Auto Lockout.• Program menu 7 display does not match truck Speedometer.
Auto Mode does not perform at low MPH.	<ul style="list-style-type: none">• Program menu 7 display does not match truck.• Speedo program menu 17 is not set correctly.• Program menu 20 and weighted dump calibration are in error.
Manual Mode does not work with truck moving	<ul style="list-style-type: none">• Program menu 3 is set for (3) = Auto only.
Auger and Spinner Valves inoperative	<ul style="list-style-type: none">• Common voltage supply is open-check wire continuity and connections.• Open control side wires or connections. See <i>Cable Drawings</i>
Auger or Spinner Valve does not turn off at (0) on Rate Control	<ul style="list-style-type: none">• Control side of valve wire shorted to ground, check wire continuity and cable drawings.
No Auger or Spinner operation at low rates.	<ul style="list-style-type: none">• Program menu 16 is set too low for Auger.• Program menu 18 is set too low for Spinner.

MESP TROUBLESHOOTING

MESP-401A ERROR CODES

ERROR	DESCRIPTION
01E	<ul style="list-style-type: none">• Shorted Auger valve coil or voltage supply• Shorted to Auger control wire
02E	<ul style="list-style-type: none">• Open Auger valve coil or open Auger control wire
03E	<ul style="list-style-type: none">• Shorted Spinner valve coil or voltage supply• Shorted Spinner control wire
04E	<ul style="list-style-type: none">• Open Spinner valve coil or open Spinner control wire
05E	<ul style="list-style-type: none">• Internal Fuse Blown – Factory Service Required
06E	<ul style="list-style-type: none">• Low Voltage to MESP 401A (Below 10.5V) measure voltage on Red wire to MESP 401A when valves are “ON”
07E	<ul style="list-style-type: none">• Hi PSI Switch in Auger Line closed to ground, check Auger pressure, switch, and wire connection.
08E	<ul style="list-style-type: none">• Output 3 – Not Used- (Yellow) shorted to ground
09E	<ul style="list-style-type: none">• Output 3 – Not Used- (Yellow) open



**Muncie[®]
Power
Products**

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