



SM17 NOVA FLEX Operator's Manual

www.seedmaster.ca

Date

SeedMaster unit Serial # Size / Spacing /

Primary Owner _____
Last First

Farm name / Corporation _____

Land Location

Mailing _____
City P.O. Box

Province / Territory / State Postal / Zip Code

Phone Cell Phone Fax

Email

Dealer purchased from _____

Dealers for part pick-up _____

Shipping method to be used for Factory Direct shipments:

Please include a description to your farm from nearest town:

I hereby accept the terms and conditions of the SeedMaster Warranty listed on page 12:

Signature Date

To ensure prompt and organized warranty service, fill out and please submit to: SeedMaster

#1 South Plains Road West, Emerald Park, SK S4L 1C6

E-MAIL: warranty@seedmaster.ca

CUSTOMER WARRANTY REGISTRATION COPY

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OFFICE WARRANTY REGISTRATION COPY

TABLE OF CONTENTS

INTRODUCTION	9
SAFETY	10
SEEDMASTER WARRANTY	12
TIRE TORQUE AND PSI SPECS.....	13
IN-CAB ELECTRICAL HOOKUP.....	14
FLEX BAR HOOKUP	15
Disconnect Nova from existing Drill.....	15
Connect Flex to Nova	15
Nova Setup – Meter Box.....	17
VIPER 4+ & ISO RCM SETUP	18
RECONFIGURE RCM FOR FLEX.....	18
RECONFIGURE VIPER 4+ FOR FLEX.....	22
FLEX OPERATION	26
1) Transport Position to Field Position (unfolding wings).....	26
2) Flex Field Operation.....	26
3) Field Position to Transport Position (fold wings).....	26
FLEX TROUBLE SHOOTING.....	27
1) WING UP/DOWN SPEED ADJUSTMENT	27
2) OUTER WINGS UNFOLD & ACTIVE WING DOWN PRESSURE.....	27
3) NOVE METER DRIVE PRESSURE	28
ZONE COMMAND AIR COMPRESSOR	29

INTRODUCTION

Thank you for purchasing a new SeedMaster unit. This manual will assist you in becoming a safe and efficient operator. The crops you grow as a result of the proper use of the unit will be your reward for spending some time studying this manual.

If you encounter any problems, contact your dealer for clarification or correction. It is important to us and to you that all SeedMaster units maintain a solid reputation.

We are building our company's reputation not only on a quality product, but also on providing quality advice and fast response to service requirements. Our objective is to keep a high resale value on used units, so the positive image you pass on to your neighbors is as important to you as it is to us in the long term.

Please refer to your specific Nova Operators Manual for information regarding the Operation of your Nova.



SAFETY

Please be SAFE! Carefully read and understand all safety alerts and warnings in this manual and all safety decals on the SeedMaster drill. Ensure that anyone who is going to use the SeedMaster drill reads and understands the Owner's Manual. We recommend that only mature and well-trained or experienced persons operate this product. We advise that periodic visual checks continue as a mandatory part of the implement operating procedure. Conduct regular maintenance checks on fasteners, hydraulic connections, etc. Always follow safety precautions. Serious INJURY or DEATH can result from improper operating practices

Safety notices are one of the primary ways to call attention to potential hazards.



This Safety Alert Symbol identifies important safety messages in this manual. When you see this symbol, carefully read the message that follows. Be alert to the possibility of personal injury or death.

- Read and understand the Operator's Manual and all safety signs before operation or maintenance.
- Do not allow riders on any part of the equipment.
- Install and properly secure all shields and guards before operating.
- Keep hands, feet, clothing, and hair away from moving and/or rotating parts.
- Beware of all power lines and other overhead obstructions. Know the transport height and width of your SeedMaster. Ensure that minimum safe working distances are maintained from any obstruction at all times.
- Before servicing, adjusting, repairing, refilling, or unplugging: stop the engine, remove the engine key, set the park brake, disengage the hydraulics and wait for all moving parts to stop.
- Ensure your Flex is properly marked as required by the local highway and transport authorities. Make sure the "Slow Moving Vehicle" sign, lights, and all reflectors are in place, clean, and visible to overtaking or oncoming traffic.
- Store a fully stocked first-aid kit in a visible, accessible place for use in case of an accident.
- Keep a fire extinguisher in an accessible location.
- Be sure that the area is clear of people before starting or moving your machine.
- Do not work around or under the raised wings.
- In the event that wheel and tire assemblies must be raised off the ground for maintenance, block the implement up securely.
- Use extreme caution when working around or with high-pressure hydraulic systems. Depressurize the system when connecting or disconnecting the hose couplers.
- Wear heavy gloves and eye protection when searching for suspected hydraulic leaks. If an injury occurs, seek immediate medical attention as infection and toxic reaction could develop. Use a piece of cardboard or wood (instead of hands) when searching for such leaks.
- Never wear baggy or frayed clothing, or hanging jewelry when working around Flex.

- Store and transfer gasoline, solvents, cleaners, or any flammable liquids only in safety standard (i.e. CSA) approved containers.
- Clean and inspect all components in the hydraulic system on a regular basis.
- Replace all worn, cut, abraded, flattened, damaged, or crimped hoses and metal lines. Do not repair hydraulic components with tape, clamps, or cements. The system operates under extremely high pressure; such repairs will fail and create hazardous and unsafe conditions.
- Before applying pressure to the hydraulic system, make sure all connections are tight. Ensure lines, hoses, and couplings are not damaged.
- Ensure that the Flex is properly and safely connected to the tractor.
- Transport according to local regulations for width and height.
- Follow all road safety regulations for your state or province.
- Store the Flex on a firm, level surface.
- Store with wings down.
- Have a qualified tire dealer or service person perform tire maintenance. Failure to follow proper procedures when mounting a tire on a wheel or rim can cause an explosion that may result in serious injury or death.
- Keep safety decals and signs clean and legible at all times. Replace safety decals and signs that are missing or have become illegible.
- Ensure proper use of wing lock-up chains in transport.
- Always use hitch safety chain.
- Do not transport at high speeds on loose gravel behind a truck or a tractor.
- Ensure proper hook-up of safety lights.
- Maneuver machine to ensure castors are moving freely before going onto roads.
- Do not transport at speeds higher than that recommended on tires (25 mph or 40 kph).
- Check all transport wheel nuts after 100 miles and periodically thereafter.
- Use proper tire inflation pressures (SEE TIRE TORQUE AND PSI SPECS)

TM

SEEDMASTER WARRANTY

This limited warranty supersedes all previous SeedMaster Manufacturing warranties and is exclusive with no other guaranties or warranties expressed or implied.

LIMITED Warranty – Subject to the terms and conditions below, SeedMaster Manufacturing Inc., Emerald Park Saskatchewan, warrants to its original retail purchaser that new SeedMaster equipment sold after the effective date of this limited warranty is free of defects in material and workmanship at the time it is shipped.

THIS WARRANTY IS EXPRESSLY IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS.

Within the warranty periods listed below, SeedMaster will repair or replace any warranted parts or components that fail due to such defects in material or workmanship.

SeedMaster shall honor warranty claims on warranted equipment listed below in the event of such a failure within the warranty time periods. All warranty time periods start on first of April, or the first of September of the first seeding season, after the original manufacturing date.

1. 2 Years parts replacement all components except tires. All hydraulic components. All electrical components. All fasteners.
2. 2 Year parts and labor on frame structural components
3. Tires are warranted separately by original manufacturers.

SeedMaster Limited Warranty shall not apply to:

1. Road or field hazard to tires
2. Hub over heating due to high transport speed or poor service maintenance
3. Damage due to under or over inflated tires
4. Damage due to transport at high speeds
5. Damage due to transporting with loaded product tanks
7. Wing wheel hubs and bearings when stored with wings up thru rain or snow events
8. Hubs and bearings when twine is allowed to build up on hub
9. Damage due to pulling out of stuck position
10. Damage due to improper hydraulic hook up

11. Equipment that has been modified by any party other than SeedMaster, or equipment that has been improperly installed, improperly operated or misused based on industry standards, or equipment which has not had reasonable and necessary maintenance, or equipment which has been used for operation outside of the specifications for the equipment.

12. Items furnished by SeedMaster, but manufactured by others, such as tires. These items are covered by the manufacturer's warranty.

SEEDMASTER PRODUCTS ARE INTENDED FOR PURCHASE AND USE BY FARMERS TRAINED AND EXPERIENCED IN THE USE AND MAINTENANCE OF SEEDING EQUIPMENT.

In the event of a warranty claim covered by this warranty, the exclusive remedies shall be, at SeedMaster's option: (1) repair; or (2) replacement; or, where authorized in writing by SeedMaster in appropriate cases, (3) the reasonable cost of repair or replacement at an authorized SeedMaster Dealer. SeedMaster's option of repair or replacement will be F.O.B. SeedMaster at Emerald Park Saskatchewan or F.O.B. at a SeedMaster Authorized SeedMaster Dealer as determined by SeedMaster. Therefore, no compensation or reimbursement for transportation costs of any kind will be allowed.

TO THE EXTENT PERMITTED BY LAW, THE REMEDIES PROVIDED HEREIN ARE THE SOLE AND EXCLUSIVE REMEDIES. IN NO EVENT SHALL SEEDMASTER BE LIABLE FOR DIRECT, INDIRECT, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES (INCLUDING LOSS OF PROFIT), WHETHER BASED ON CONTRACT, TORT OR ANY OTHER LEGAL THEORY.

ANY EXPRESS WARRANTY NOT PROVIDED HEREIN AND ANY IMPLIED WARRANTY, GUARANTEE OR REPRESENTATION AS TO PERFORMANCE, AND ANY REMEDY FOR BREACH OF CONTRACT TORT OR ANY OTHER LEGAL THEORY WHICH, BUT FOR THIS PROVISION, MIGHT ARISE BY IMPLICATION, OPERATION OF LAW, CUSTOM OF TRADE OR COURSE OF DEALING, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR PARTICULAR PURPOSE, WITH RESPECT TO ANY AND ALL EQUIPMENT FURNISHED BY SEEDMASTER IS EXCLUDED AND DISCLAIMED BY SEEDMASTER.

TIRE TORQUE AND PSI SPECS

TIRE SIZE	TORQUE REQUIREMENTS (FT. LBS.)	MAXIMUM PRESSURE RATING (PSI)
12.5L15 (12 PLY)	200	44
12.5L15 (Hwy)	200	90
380/55-16.5	200	72
750/65R26	450	35
800/65R32	450	35
15/55 - 17	200	90
Dual 710/70R38	750	23

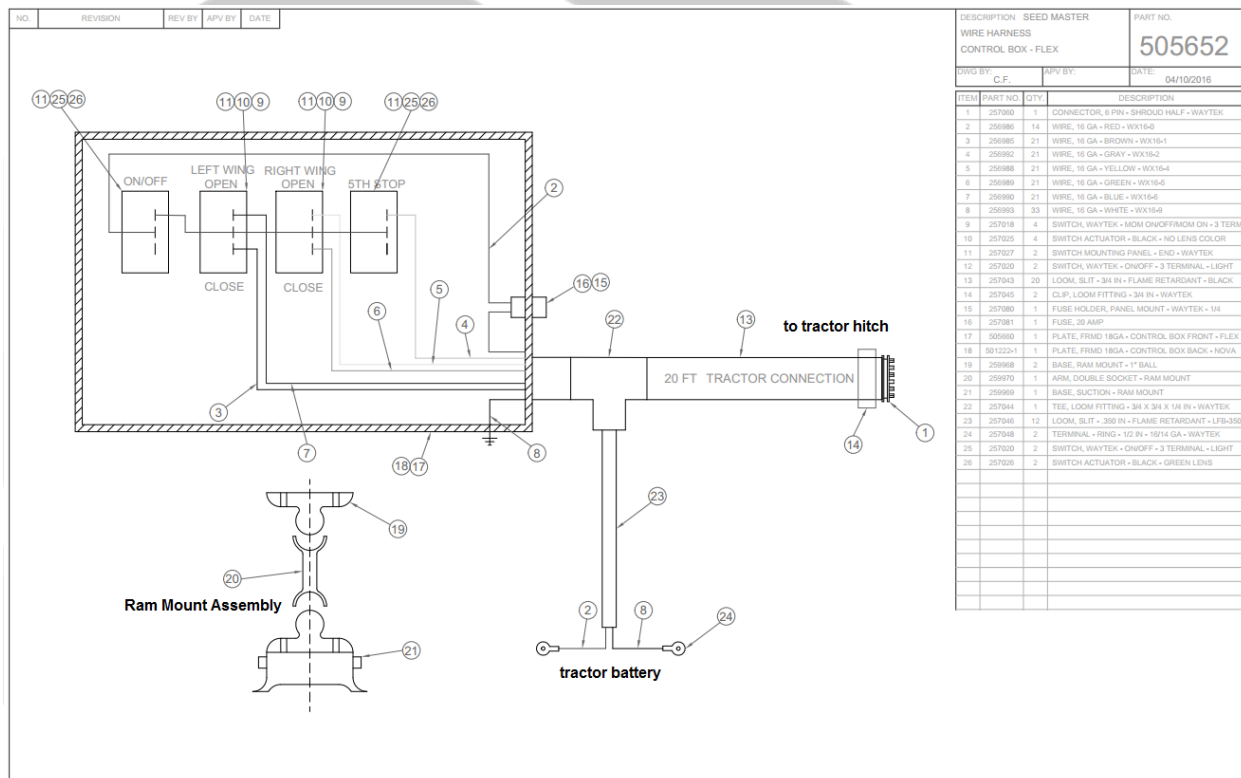


IN-CAB ELECTRICAL HOOKUP

1) Installation

Install supplied switch box inside tractor cab utilizing RAM Mount hardware supplied within kit. Install at a location that is easily accessible by the operator during field operation. The Ram Mount system works well when attaching to a glass window within the tractor cab.

Please refer to your SeedMaster Operators Manual for information relating to in-cab Nova metering control.



FLEX BAR HOOKUP

Disconnect Nova from existing Drill

- Ensure all hydraulic and electrical connections are clearly marked so that it can be successfully reconnected at a later time.

▲ Ensure all hydraulic pressure is relieved before any hydraulic connections are opened.

- Disconnect all electrical and hydraulic connections.
- Disconnect ½" zone command airline (Trailing Flex only).
- Ensure all 2 ½" primary hoses on Nova and on existing toolbar are clearly marked to indicate zone number (1 – 10). This is very important for when the toolbar is reconnected later to the Nova to ensure the zone command system can function properly and avoid any misses or skips in product application.
- Use 2 speed Nova jack (high or low) to raise height of Nova hitch so that that Pintle hitch can be opened. The Toolbar and Nova can now be separated.

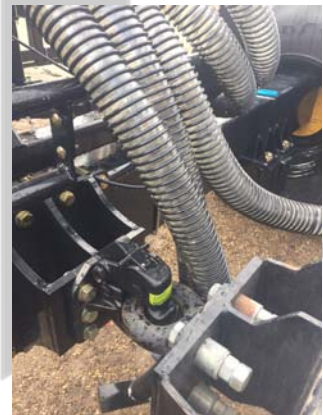
Toolbar Storage: It is recommended to keep the drill unfolded when stored for extended periods of time with all hydraulic pressure relieved. This will keep rain and snow from accumulating in the packer hub assemblies as well as help preserve hydraulic seals. Indoor storage, if available, is ideal. Hydraulic pressure on the opener cylinders should be relieved by floating tractor hydraulic remotes before disconnecting toolbar hydraulic connections.

Connect Flex to Nova

- Move Flex and Nova into position so Pintle hitch can be connected.
- Connect 2 ½" primary hoses on Nova to the Flex.

▲ Ensure primary hose zone number on Nova transition plate matches primary hose zone number on Flex. This is very important to ensure the zone command system is able to function properly and avoid any misses or skips in product application.

- Ensure 2 ½" primary hose lengths are not too long or damage may occur on cornering of Flex and Nova unit. It may be necessary to trim hose length on Flex after connecting Flex and Nova for the first time.
- It may be necessary to use a clamping device to press Flex quick connect plate to Nova transition piece so enough thread is showing to install nut. Insert bottom into location before using a clamping device.
- Connect ½" airline to supply compressed air to Nova for zone command function (Leading Flex only).



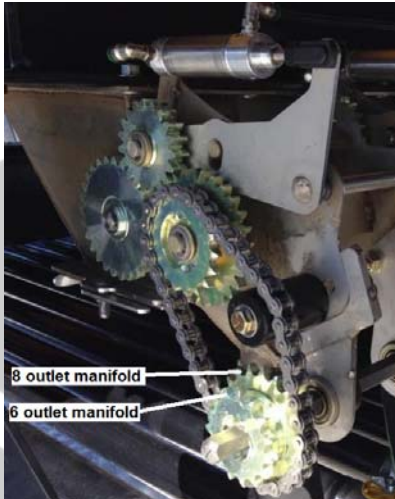
- Connect hydraulics as follows:

TRACTOR HITCH HYDRAULIC HOOKUP			
TRACTOR REMOTE	HOSE PAIR		HYDRAULIC FUNCTION
	PRESSURE	RETURN	
SCV 1 <small>SEEDMASTER</small>	1 RED ½" Line	2 RED ½" Line	Mid & Outer Wings
SCV 2 <small>SEEDMASTER</small>	1 GREEN ½" Line	2 GREEN ½" Line	Inner Wing Boom Height
SCV 3 <small>SEEDMASTER</small>	1 YELLOW ¾" LINE	2 YELLOW ¾" LINE	SEED FAN NOVA
SCV 4 <small>SEEDMASTER</small>	1 BLUE ¾" LINE	2 BLUE ¾" LINE	FERT FAN NOVA
SCV 5 <small>UNUSED</small>			
CASE DRAIN <small>SEEDMASTER</small>		½" CASE DRAIN LINE	

NOVA TO FLEX HOOKUP			
REMOTE	HOSE PAIR		HYDRAULIC
COLOR	PRESURE	RETURN	FUNCTION
YELLOW	1 YELLOW ¾" LINE	2 YELLOW ¾" LINE	SEED FAN NOVA
BLUE	1 BLUE ¾" LINE	1 BLUE ¾" LINE	FERT FAN NOVA
WHITE	1 WHITE 1/2" LINE	2 WHITE 1/2" LINE	METER DRIVE
CASE DRAIN		1/2" CASE DRAIN LINE	

Nova Setup – Meter Box

Each meter box is setup with a “sprocket selection” to ensure that the primary line receives the correct amount of product for that zone width on the toolbar (most SM toolbars utilize 6, or 8 outlet manifolds). Most Nova tanks will have a mix of “sprocket selections” across a single Nova tank (all 8 or 10 meter boxes per tank). In the below picture, the meter box is configured to supply product to an 8 outlet manifold.



⚠ All meter boxes need to utilize the same “sprocket selection” when utilizing the Flex

- All Flex's have equal product zone application widths so therefore require the same “sprocket selection” on all tanks being used to apply product. The user can choose any sprocket selection - as long as they are all the same across all zones on the tank being used.

⚠ All sprocket selections or changes should be completed prior to any meter calibrations.

- Always ensure sprocket selections are returned to the same configuration before using the Nova with the original toolbar.

VIPER 4+ & ISO RCM SETUP

If your SeedMaster Machine uses a Viper 4+ Monitor or ISOBUS VT, please follow the procedure below to reconfigure the ISOBUS VT or Viper 4+ for proper operation with the Nova Flex.

RECONFIGURE RCM FOR FLEX

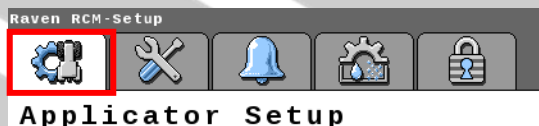
1. Touch the **RCM** working set button.



2. Touch the **Settings** soft key.



3. Touch the **Applicator Setup** tab.

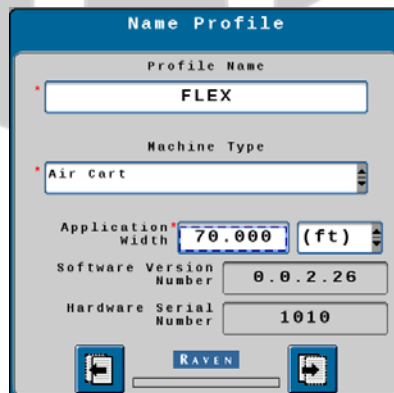


4. Touch the **Change/New** button, the setup wizard will begin.
5. Touch the drop down box and select **New** and then touch the **Check Mark**.



6. Enter a **Profile Name** (FLEX).
7. Touch the **Drop Down** Box for Machine Type and select **Air Cart**.

8. Enter an Application Width of **70 (ft)** then touch the **next** button.



9. Enter the number of Granular Product for the Nova Cart.
 - a. NOVA 520 = 2 Products
 - b. NOVA 630 = 3 Products
 - c. NOVA 780 = 3 Products
 - d. NOVA 820 = 4 Products
10. After entering the Number of Products touch the **next** button.
11. Touch the **drop down** box and choose **1** for the number fans installed, touch **next**.
12. Touch each **drop down** box and select **Granular Fertilizer** for each product, touch **next**.
13. Set the application type for each product by touching the **drop down** and selecting **Granular RPM Maintained** for the Application Mode. Do this for each product touch **next** after selecting the correct Application Mode.
14. The NOVA shares all the section drivers. Choose **YES** and then touch next.
15. The FLEX consists of 10 Zones. Enter **10** for the Number of Sections. The FLEX sections are Equal Width so leave the check mark on for this setting. The Master Clutch and Power to Apply will remain with NO check marks. Touch **Next**.

16. The section widths for each section will be displayed. Each section is 7 feet. Review and confirm then touch **next**.
17. Section Summary will display the products, sections, assigned driver and switch review and touch **next**. Note you may have two page for the summary.
18. Touch the **drop down** box for the Load Cells Setup and then select **Product Scale**. Place a check beside each Product Scale. After all check are installed touch **next**.

19. There are NO pressure sensors installed. Leave each pressure sensor defaulted to None and then touch **next**.
20. Enter 2 into the Fan RPM 1 Calibration Box. RPM 1 Low and High Limits will remain at 0. Touch **next**.
21. RPM 1 sensor assignments will be displayed. There should be a check mark defaulted for each product. Review and ensure that each product has a check mark. Touch **Next**.
22. The setup wizard will now setup through the product control setup for each product. Each product has 6 configuration pages. Each product will get the same settings inputted. Follow the steps below for product. Touch next on each page after entering the correct settings.
 - a. **SETUP CONTROL VALVE PAGE**
 - i. Control Type = PWM CLOSE
 - ii. Valve Response Rate = 50
 - iii. Control Deadband = 2
 - b. **SETUP PWM PAGE**
 - i. Coil Frequency = 125
 - ii. PWM High Limit = 90
 - iii. PWM Low Limit = 25
 - iv. PWM Startup = 0.0
 - c. **SETUP Rate Sensor PAGE**
 - i. Product Density = 1 (LEAVE AT 1 ALL THE TIME)
 - ii. Calibration Weight = 2.958 (CALIBRATION REQUIRED)
 - iii. Pluses / Revolution = 60.00
 - d. **SETUP Tank / Bin PAGE**
 - i. Tank Capacity = 0
 - ii. Low Tank Level = 0
 - iii. Low Bin Level Sensor = NO check Mark
 - e. **SETUP Rates PAGE**
 - i. Preset Rate Values: Rate 1 = 150, Rate 2 = 0, Rate 3 = 0
 - ii. Rate Bump = 10
 - iii. Rate Selection = Rate Bump Or Rx
 - iv. Rate Smoothing = YES check mark
 - v. Decimal Shift = 1
 - f. **SETUP Alarms PAGE**
 - i. Off Rate Alarm = 30 with check mark
 - ii. Shaft Sensor Alarm = NO check mark
23. The setup for the first product is complete. Repeat the settings above for each product until the setup wizard gets to the setup summary page. Please review the setup summary page then touch next.
24. The scales for each product will need to be calibrated. Touch the Scale Setup button to begin.
25. Touch the product scale on the top of the page then touch Scale Calibration.
26. Touch the Zero Button (Tanks Empty)
27. Put a known weight on the tank for the product being calibrated. Enter that known weight into the Calibration Weight box. Then touch the Truth Button.
28. It will now show the Current Scale Weight. If the Current Scale Weight is equal to the known weight the calibration is complete.

NOTE: If the FLEX is being controlled by an ISO Virtual Terminal the machine setup will need to be performed on the ISO VT. The measurements for the FLEX are noted below. Continue to the next section if the FLEX is being controlled by a Viper 4+.

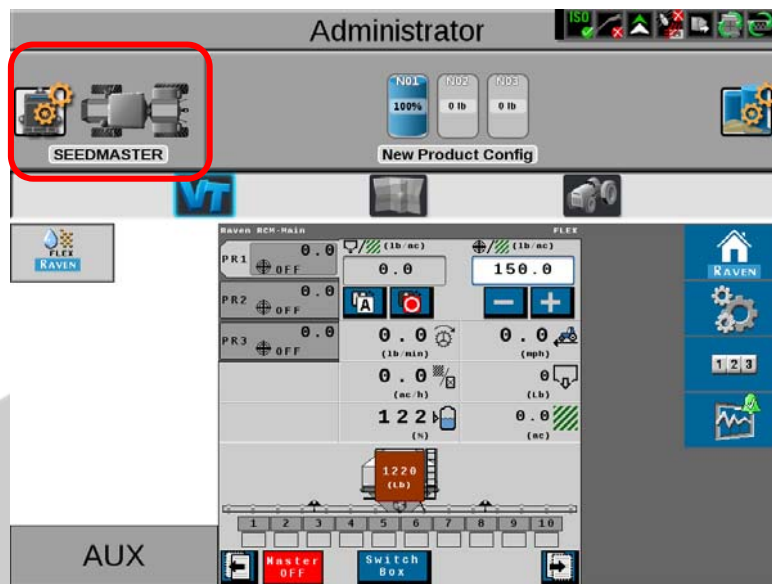
FLEX MEASUREMENTS: From the pivot point to the front hitch is 267 INCHES (22.25 FEET) and from the pivot point to the rear hitch is 17 INCHES (1.4 FEET).



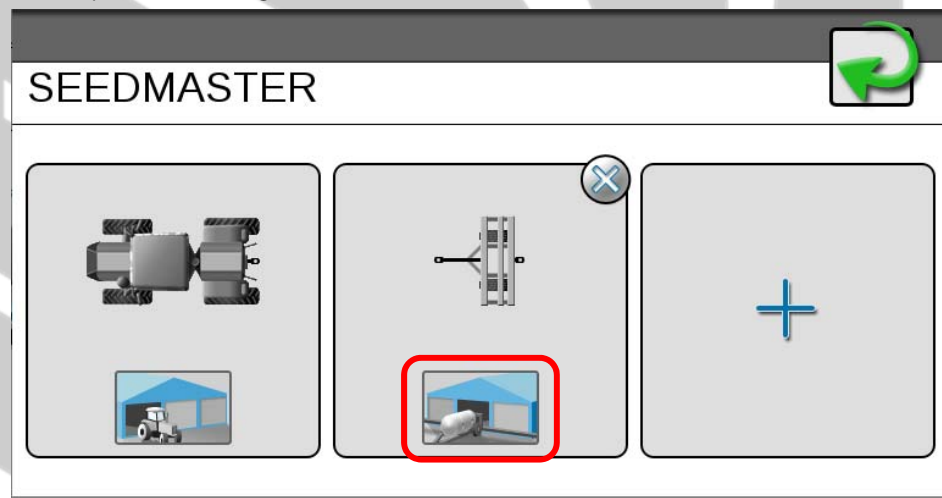
RECONFIGURE VIPER 4+ FOR FLEX

Please follow the procedure below to reconfigure the Viper 4+ for proper use with the NOVA Flex.

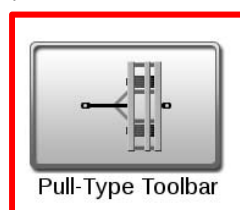
1. Touch one the Machine Panel



2. Touch the Pencil & Paper on the right side to edit the current Machine Setup.
3. Touch on the Implement Garage Button.



4. Touch on the Add configuration button on the right side.
5. Touch on **Pull-Type Toolbar** as the Implement



6. Enter the Toolbar Name as **FLEX** and touch the check mark.

7. Enter the Tongue and Hitch Length, then touch the Arrow to the right to continue the implement setup.

a. Tongue = 267

b. Hitch = 17

FLEX

Pull-Type Toolbar

Type

Sub-Type

Manufacturer

Model

Nickname FLEX

Tongue/Hitch Length

Tongue 267 in

Hitch 17 in

Diagram of the implement showing the tongue and hitch dimensions.

8. Touch the Add Section Group button in the middle of the screen.

9. Air Cart Section Group 1 will be added to the Implement automatically. Please review screen shot below. To finish the Implement setup touch the Green **Accept Button** 3 times to return to the home screen.

FLEX

Pull-Type Toolbar - Equipment

1. Name: Air Cart Section Group 1

Type: Dry Boom

S01 S02 S03 S04 S05 S06 S07 S08 S09 S10

Diagram of the implement showing the tongue and hitch dimensions.



10. From the home screen touch the CAN System Configuration button.



11. Touch the AccuBoom button to setup the Turn ON and Turn OFF Look Ahead Times.

12. Please refer to the image below to setup the correct AccuBoom Settings

- Ensure that AccuBoom Enabled, Corrected Coverage, and Apply to All products have check marks in them.

- Enter 30 sec for the On-override time

- Enter 99% for Turn-off Percent

- Select Time for the Look-ahead option

- Enter 4 sec for the Off look-ahead

- Enter 7 sec for the On look-ahead

NOTE: the ON & OFF Look-ahead times are recommended starting points for turn the products on and off automatically. It is recommended to configure these settings appropriately to avoid any skips or misses.



After confirming the AccuBoom Settings touch the green accept arrow.

AccuBoom Settings

- ☒ Accuboom Enabled
- ☒ Corrected Coverage ?
- ☒ Apply to all products
- On-override: 30 sec
- Turn-off Percent: 99 %
- Look-ahead Options**
 - ☒ Time ☐ Distance
- Off look-ahead: 4.0 sec
- On look-ahead: 7.0 sec

13. From the CAN System Configuration screen swipe the screen to the left twice or until the On-Screen Switch Box button appears.



14. Touch the On-Screen Switch Box button

15. The On-Screen Switch Box Summary will appear. This will need to be edited. Touch the Pencil and Paper button to edit the Switch Box.

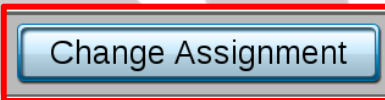


15. Change the Number of Switches to 1 and rename the Switch Label to ALL. To change the Label simply touch the label button below Label Switches and enter ALL then touch check mark.

16. Touch the Switch Box Assignment Tab.



17. Touch the Change Assignment button.



18. Touch each section so they are highlighted blue. See below.

19. After highlighting each section blue the green accept arrow 3 times to return to the home screen.

The setup is complete and the system will be ready for field use. Be sure to perform Applied Product Calibrations for each product being used. Also, remember to review all other settings before applying product in the field. Refer to your SM17 Operators Manual for more information on starting a Job and performing an Applied Product Calibration.

FLEX OPERATION

1) Transport Position to Field Position (unfolding wings)

- Turn control box ON/OFF switch to the ON position.
- Supply hydraulic pressure to green remote pair (pressure to single green tagged line). This remote stays engaged during field operation.
- Press and hold "Right Wing Down" button until right inner wing completely unfolds.
- Press and hold "Left Wing Down" button until left inner wing completely unfolds.
- Supply hydraulic pressure to red remote pair (pressure to single red tagged line) until both left and right middle wings and fifth fold wings unfold. This remote stays engaged for field operation.

2) Flex Field Operation

- Turn control box ON/OFF switch to ON position.
- Supply hydraulic pressure to green remote pair (pressure to single green tagged line). This remote stays engaged for field operation to provide motive force for left and right wing height control.
- Supply hydraulic pressure to red remote pair (pressure to single red tagged line). This remote stays engaged for field operation to provide wing down pressure on mid wings and fifth fold wings.
- Use "Left Wing Up/Down" switch to control left wing boom height.
- Use "Right Wing Up/Down" switch to control right wing boom height.
- Maintain a boom height so that wing gauge wheel is 1 – 6 feet off the ground.

⚠ Ensure wing gauge wheels stay off the ground always during field work or damage to wings will occur.

3) Field Position to Transport Position (fold wings)

- Turn control box ON/OFF switch to ON position.
- Turn on "Fifth Fold Wing Lock" switch.
- Reverse the supply of hydraulic pressure to red remote pair (pressure to double red tagged line).
- When left and right fifth fold wings are completely folded inward, turn off the "Fifth Fold Wing Lock" switch and the mid wings will fold inward. Turn off the supply of hydraulic pressure to the red remote pair when both right and left mid wings are completely folded inward.
- Supply hydraulic pressure to green remote pair (pressure to single green tagged line) (same as field operation).
- Press "Left Wing UP" switch until left inner wing is completely folded inward.
- Press "Right Wing UP" switch until right inner wing is completely folded inward. Turn off the supply of hydraulic pressure to the green remote pair when both inner wings are completely folded inward.
- Turn control box ON/OFF switch to OFF position.

FLEX TROUBLE SHOOTING

1) WING UP/DOWN SPEED ADJUSTMENT

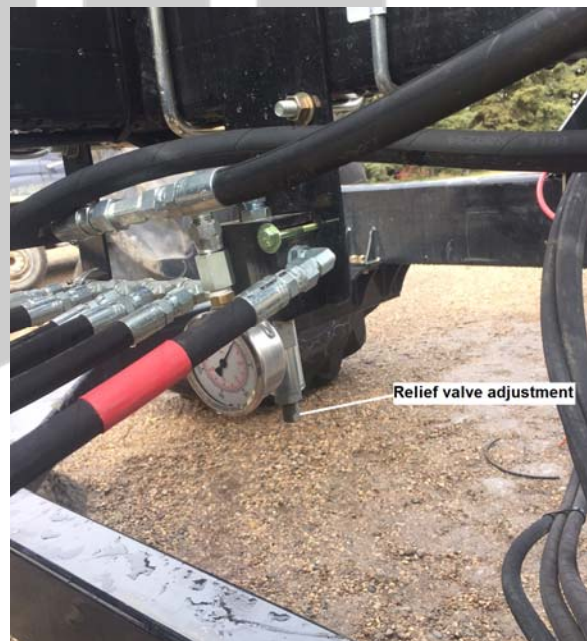
Loosen jam nut and turn relief valve clockwise to increase wing up / down speed. Turn relief valve counter clockwise to decrease wing up / down speed.



2) OUTER WINGS UNFOLD & ACTIVE WING DOWN PRESSURE

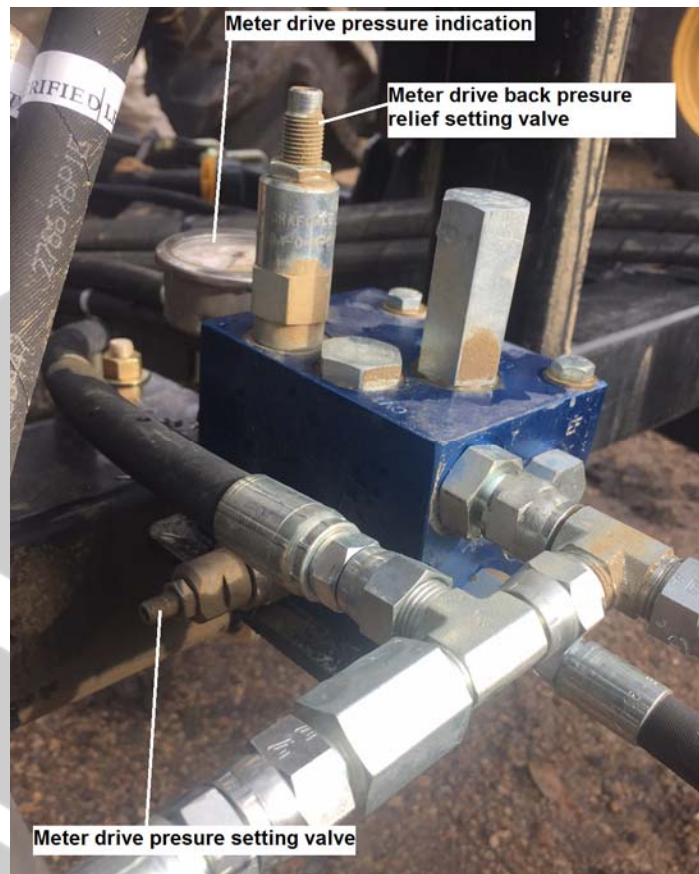
The relief valve is set to a pressure high enough to unfold outer wings. This pressure is high enough to maintain positive downward pressure to keep the wings ridged while traveling in the field.

⚠ Too high of relief valve setting will increase the likelihood of damaging the wings if they should accidentally contact the ground in field operation.



3) NOVE METER DRIVE PRESSURE

Nova meter drive pressure should be set at no higher than 2000psi. Meter drive tank relief valve protects the metering system from a damaging high back pressure condition by relieving pressure to ground if needed.



TM

ZONE COMMAND AIR COMPRESSOR

Zone Command is controlled pneumatically. Located on the drill is a compressor and air tank. The compressor is set to turn off when the pressure in the tank reaches 105 psi, and to turn on when the pressure falls below 85 psi. The regulator is used to reduce the tank pressure for the air cylinder. This regulator is factory set to 65 psi.

⚠ *Check and empty the water separator tank daily.*

⚠ *Check and clean or replace the air inlet filter on the compressor daily.*

Ensure that the air filter is dry and not excessively dirty, or damage to the compressor will result.



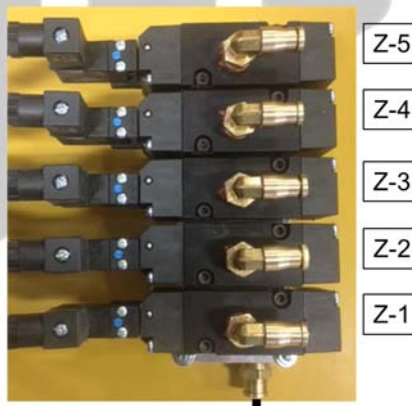
Zone Command Air Compressor

Air Regulator



Regulated Air Set to 65 PSI

Solenoid Air Bank



Zone Command Air Components

NOTES

