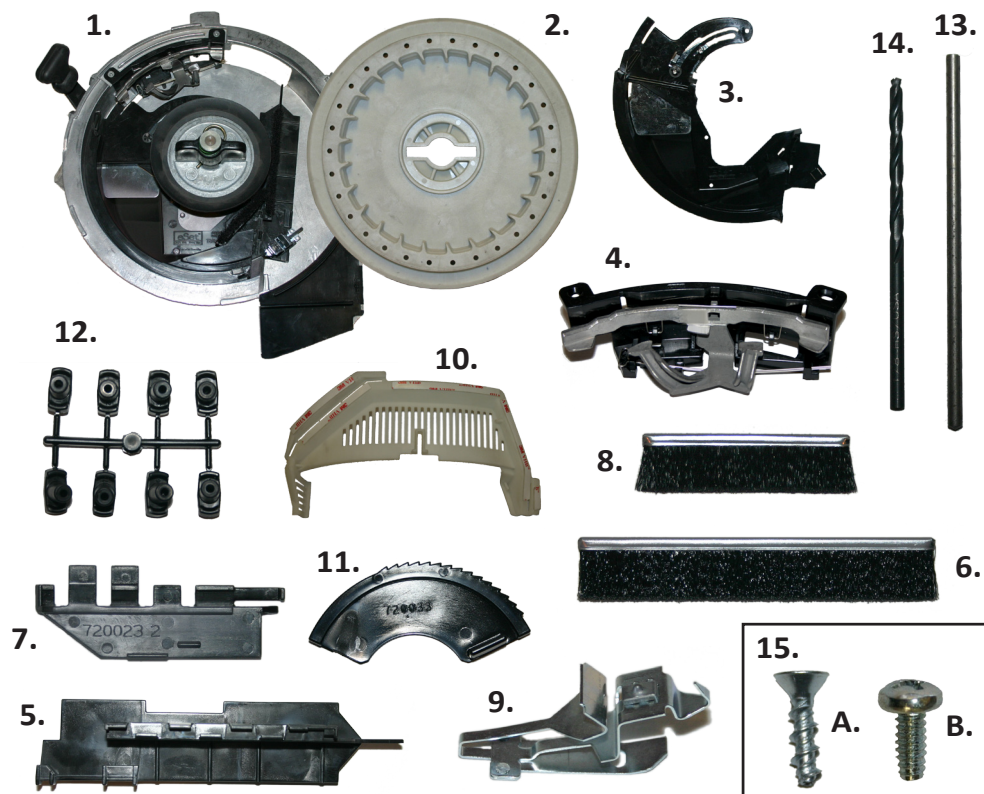


eSet® Standard Installation Instructions

Parts included:

1. Complete eSet Kit, (720134)
2. Disk, (1)
3. Liner, (1)
4. Singulator, (1)
5. Long Brush Holder, (1)
6. Long Brush, (1)
7. Short Brush Holder, (1)
8. Short Brush, (1)
9. Fragment Extractor, (1)
10. Vent, (1) (kit # 720242)
11. Wedge, (1)
12. T-shaped Retainers, (1)
13. 9/64 Punch, (1)
14. 1/8" Drill bit, (1)
15. Hardware Kit, (720200) (1)
 - A. Hi-Lo Screw, (2)
 - B. Pan Head Screw, (3)



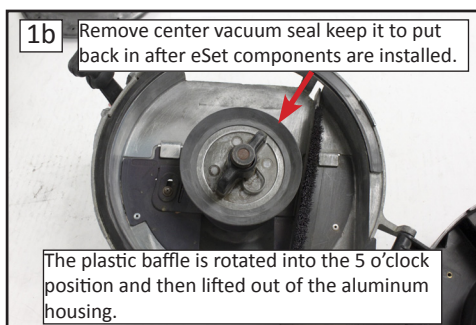
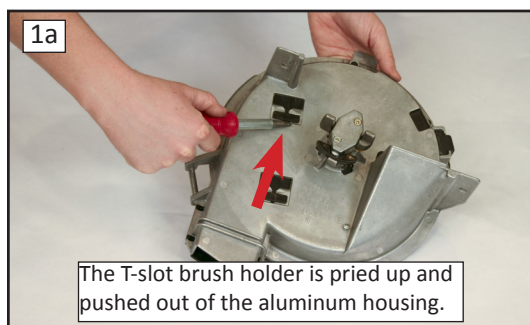
Do not discard any of your original JD parts. Keep the original parts so, when it's time to trade your planter, you can put the original components back into your old housings and keep your eSet system to install in your new planter.

The tools required for assembly include: 2 Screwdrivers (Flat and #2 Phillips), drill, and hammer.



Step 1: Housing Preparation

After the T-brush (fig 1a), baffle (fig 1b), and center vacuum seal have been removed, the bare aluminum housing (fig 1c) is ready to accept eSet® components.



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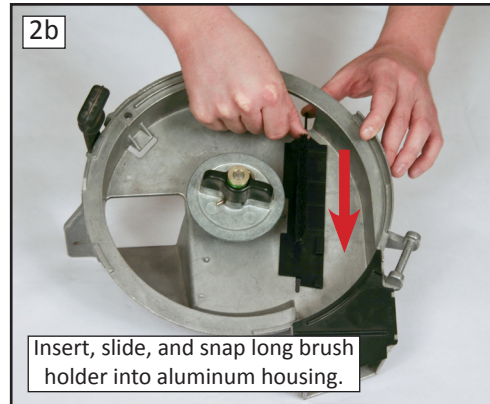
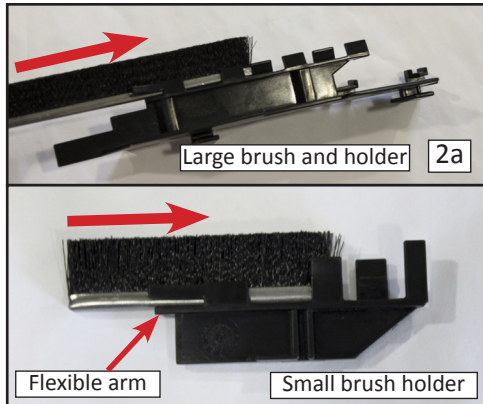
Precision®
PLANTING

eSet® Standard Installation Instructions (Continued)

Step 2: Brush Assembly and Installation

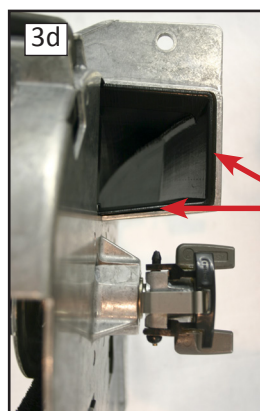
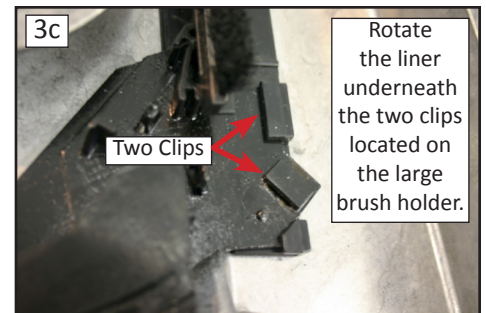
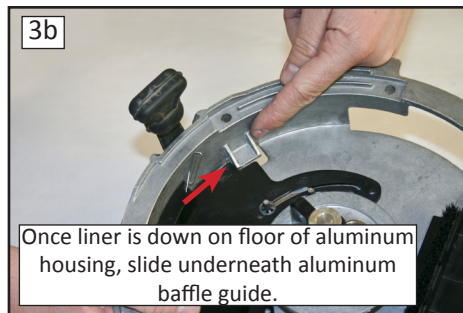
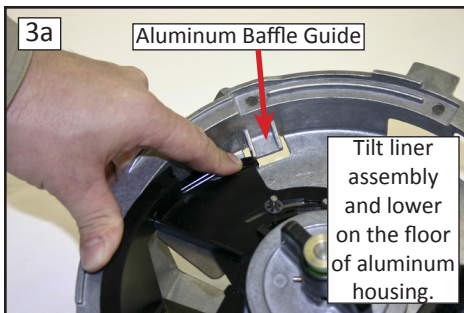
The small and large brushes each have a plastic holder into which they slide. The flexible arm (fig 2a) bends away to allow the brush to slide into the plastic arms.

Once the brushes are slid into their respective holders the large brush is slid into the T-slot (fig 2b) of the aluminum housing; the small brush is put aside until later.

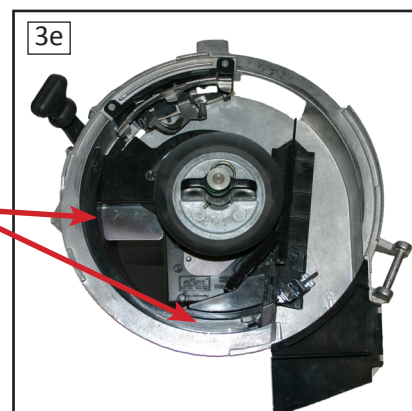


Step 3: Liner Installation

1. Tip the liner assembly to bridge the hub (fig 3a) with one end down in the hopper chute.
2. Rotate the liner clockwise and slide the liner underneath the aluminum baffle guide (fig 3b).
3. Rotate the liner counter-clockwise so that it fits underneath two clips located on the large brush holder (fig 3c).
4. Make sure that the liner is tight against the aluminum housing on the back where the seed chute begins (fig 3d) and at the side and bottom of the aluminum housing (fig 3e).



Before inserting the ratcheting wedge, the liner should be tight against the aluminum housing in three locations: the seed chute and the bottom and side of the aluminum housing.

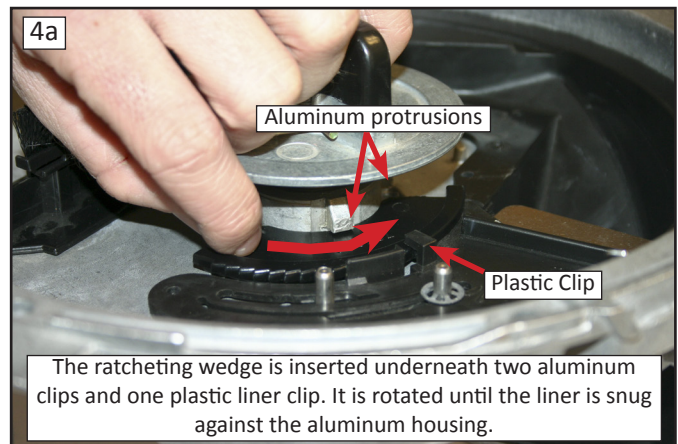


eSet® Standard Installation Instructions (Continued)

Step 4: Securing Liner to Housing

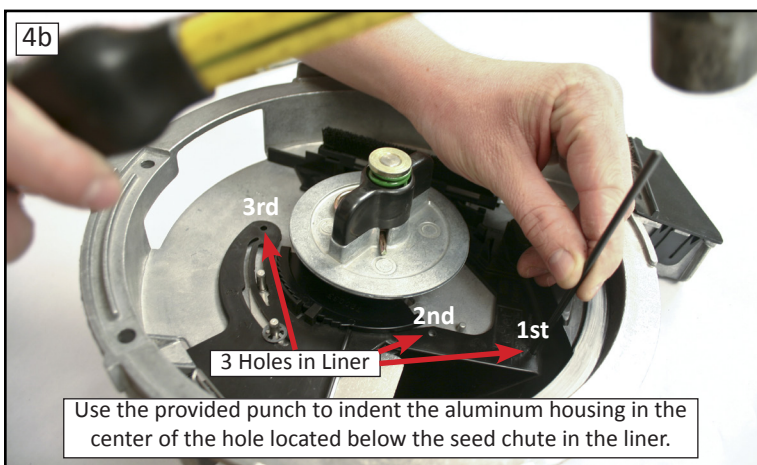
The liner is now ready to be secured to the housing and to be screwed down.

Insert the ratcheted center wedge around the center hub and along the inside of the liner. The cam-shaped wedge is rotated counter-clockwise under the aluminum protrusions and the plastic liner clips (fig 4a). The ratcheted rotation will squeeze the liner out against the aluminum housing. There is no need to force the wedge, it merely keeps the liner tight against the aluminum housing.

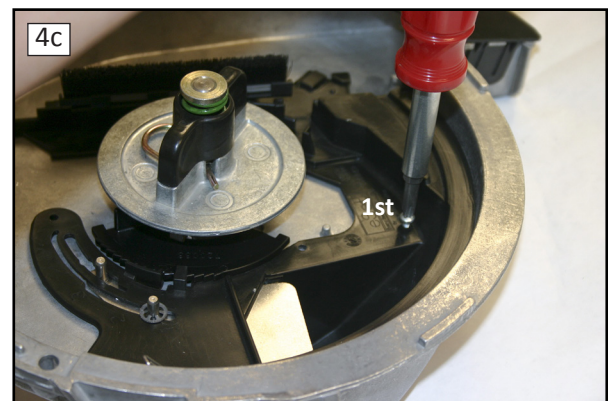


Check to see that the liner is tight against the seed chute, the bottom and side of the aluminum housing and securely tucked under the two clips on the brush holder (fig 3c, 3e & fig 3d on page 2).

Locate the 3 holes provided in the liner (fig 4b). Use the provided center punch and indent the aluminum housing in the center of the hole located below the seed chute in the liner. Then take the 1/8" drill bit and make a through-hole for the self-tapping pan head screw. Drill hole entirely through aluminum housing and tilt the housing to allow filings to fall out from underneath the plastic liner.



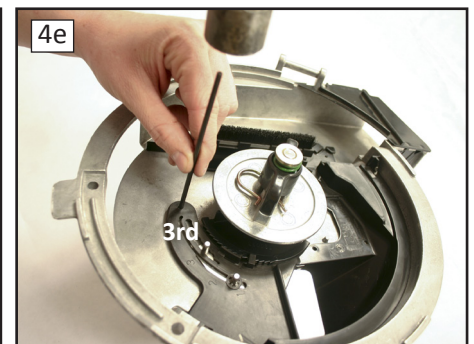
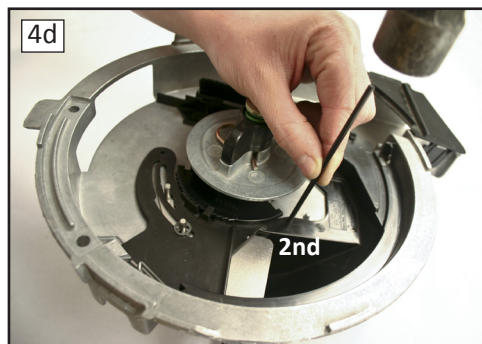
Use the self-tapping pan head screw to hold down the liner.



Take the 6-32 self-tapping pan head screw and screw the liner down tight against the aluminum housing (fig 4c). The screw should protrude a small amount through the back side.

After installing the first screw, check to see that the liner is still tight against the seed chute and the bottom and side of the aluminum housing (fig 3e & fig 3d on page 2).

Repeat the above process for the second (fig 4d) and third (fig 4e) in the liner.

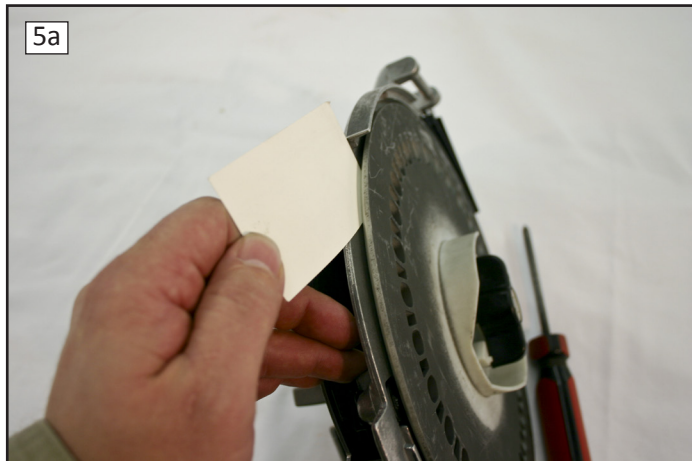


eSet® Standard Installation Instructions (Continued)

Step 5: Hub Height Adjustment

The eSet® disk has been designed to fit interchangeably with the John Deere soybean and specialty crop disks. Avoid too much housing/disk contact — or too little. Make sure the disk doesn't bind on the housing and make sure that seeds can't slip between the housing and disk. The proper adjustment of the hub will result in light contact between the disk and housing as the meter is rotated.

Begin by checking for proper adjustment of the hub with your eSet® disk. With the eSet® disk installed, rotate the disk while holding a business card between the disk and the housing. The disk should rub the business card at its tightest point, slightly pinching the card between the disk and the housing. To check to make sure that the gap is not too wide, use a 1/16" drill bit and make sure that it will not fit in the gap between the disk and the bottom of the housing. Rotate the disk by hand to ensure that at the widest point, the gap is smaller than the 1/16" drill bit. Before planting with other disks (such as JD specialty crop or soybean disks), follow the same procedure above and verify that the proper gap exists.

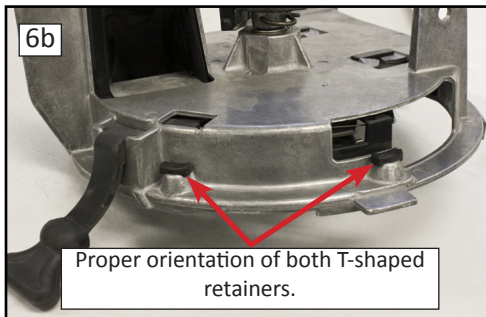
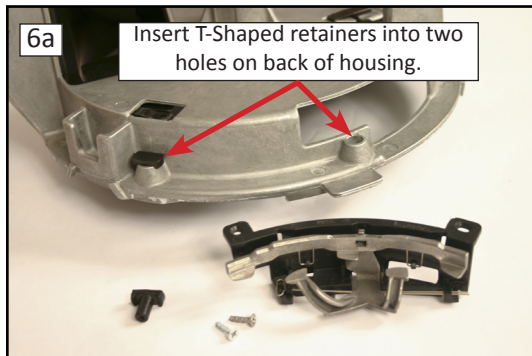


Once singulator is installed verify that the singulator assembly is riding securely on the disk. The last lobe of the singulator should remain in contact with the disk when the meter is under vacuum on the MeterMax® stand. If a gap larger than .015" is present, determine and resolve the source of the problem.

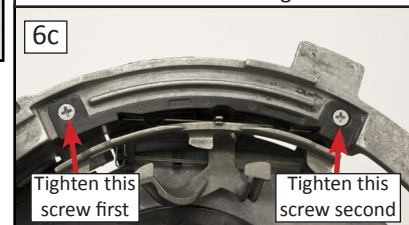
You may notice that all disks have a slight warp to them. The eSet® system has been specially designed to compensate for this in the design of the singulator. It is spring-loaded in order to ensure constant contact with the disk and compensate for any run-out in the disk. You may find that by removing the disk and rotating it 180 degrees relative to the hub, it will run more true. In this case, mark the position of the plate and the hub with a paint pen and number the disk to correspond to the row number of the meter it belongs to.

Step 6: Singulator Installation

Now that the liner is in place, the Singulator assembly can be mounted. Remove two of the T-shaped retainers from the tree of (8) pieces, and insert them into the two holes at the top of the meter. (fig 6a & 6b).



While holding the T-shaped retainers from the rear, insert hi-lo screws. There is no need to over tighten.



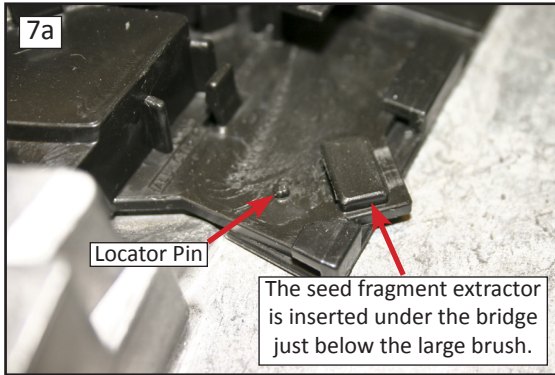
Then place the Singulator into location and screw each of two #6 Hi-Lo flat head screws (Fig 5c) into the T-shaped retainer. Do not over tighten; the plastic piece only needs to be slightly snug.



eSet® Standard Installation Instructions (Continued)

Step 7: Seed Fragment Extractor Installation

The Seed Fragment Extractor is inserted at the bottom right corner of the liner (Fig 7a). Slide the component underneath the plastic bridge and over the locator pin until it locks into place (Fig 7b).



Specialty Extractor



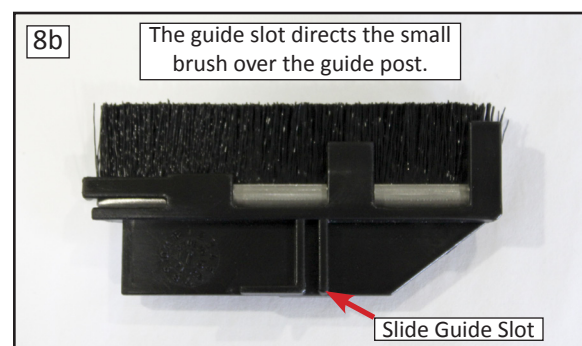
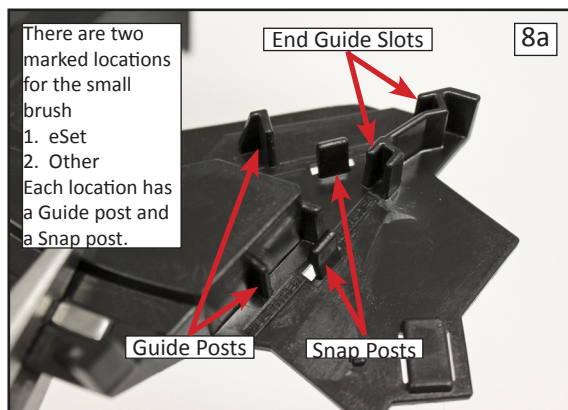
Standard Extractor

Note:

When using specialty eSet discs for specialty crops be sure to use the specialty extractor instead of the standard eSet extractor. The difference between the standard extractor and the specialty extractor is that the standard extractor has a pick located at the back and the specialty extractor does not have the pick.

Step 8: Small Brush Installation

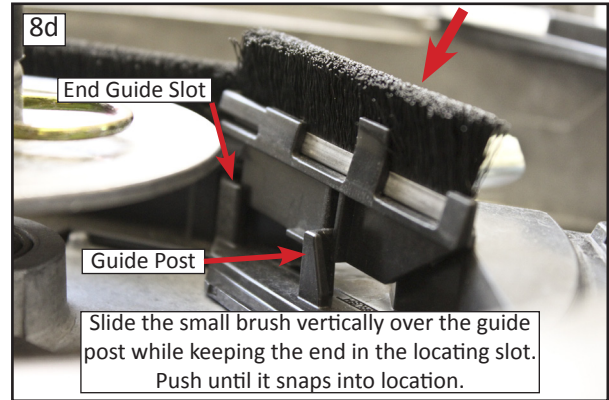
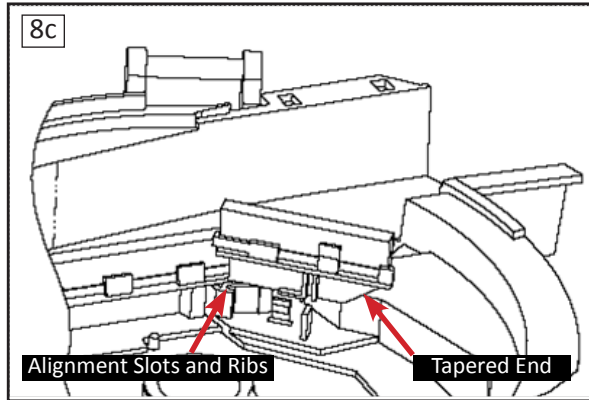
The small brush can be mounted into one of two different locations: one for planting with the eSet® disk and another for planting with all other standard vacuum plates. The locations are marked on the liner; each location has a guide slot, guide post, and snap post (Fig 8a). The small brush has a guide slot that will span the guide post in either location (Fig 8b).



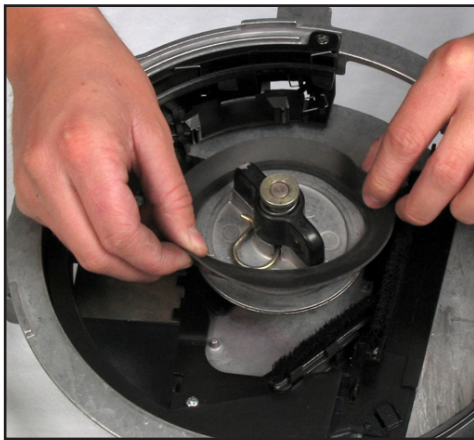
eSet® Standard Installation Instructions (Continued)

Slide the brush vertically (Fig 8c) downward into the provided grooves (Fig 8d):

1. Slide guide slot over the guide post, and the end of the brush into the end guide slot.
2. Snap into place.



Slide over the center vacuum seal; set the baffle position to the lowest position (1) for corn; install the eSet disk and vacuum cover.

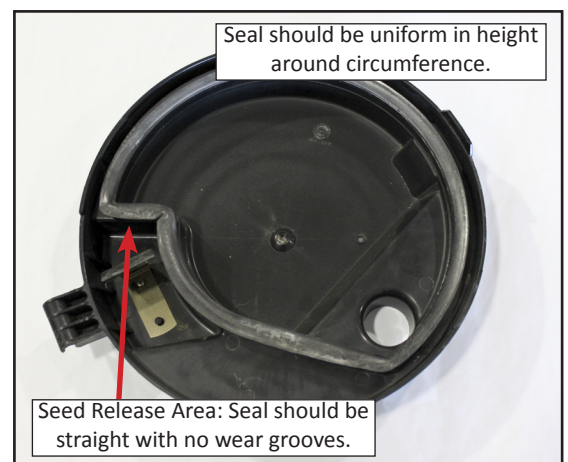


Step 9: Inspect Vacuum Seal

The seal should not have any wavy sections and the height of the seal should be very uniform around the entire circumference. The section of the seal where the seed is released should be free from wear grooves. If this area is grooved, replace the seal.

Note: John Deere made a design change to the seal in recent years that makes the seal more stiff. They recommend that the soft and stiff seals not be intermixed within the same planter to ensure uniform vacuum pressure from row to row.

Precision Planting has replacement seals available in a pack of 2 pcs (order part number 720076 for two outer seals and 720077 for two hub seals).



eSet® Standard Installation Instructions (Continued)

Step 10: Vent Installation for Universal Vent

1.6 Bushel Plastic hopper - Do not make any modifications.

1.6 Bushel Fiberglass hopper - Cut on the red lines indicated below.

3 Bushel Plastic hopper - Cut on the red lines indicated below.

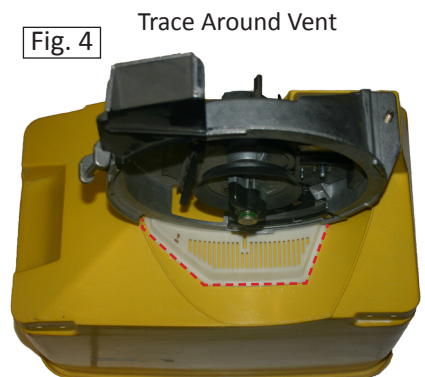
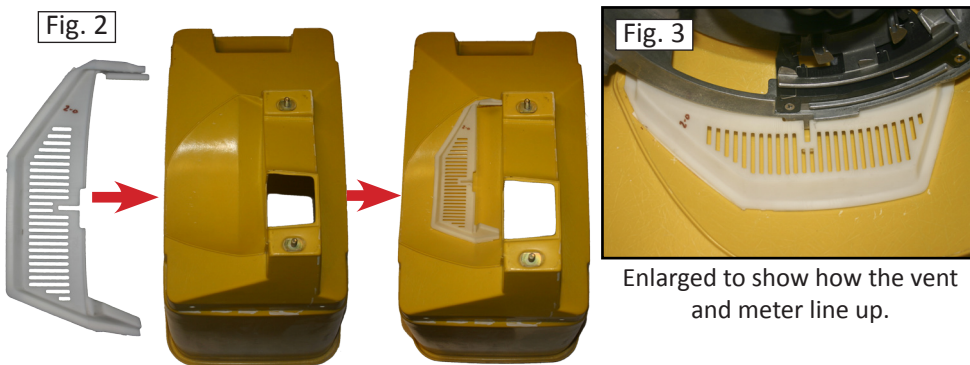
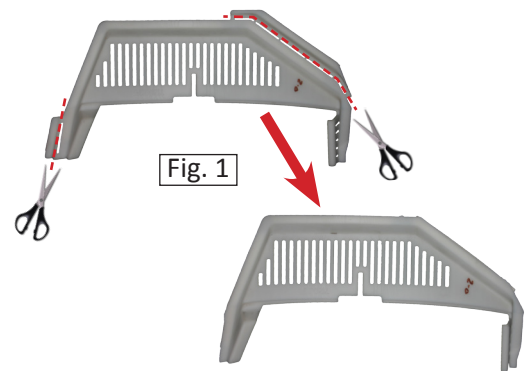
Vent Installation for 1.6 bu plastic hopper

1. Clean with water or degreaser and allow hopper to warm to 70°.
2. Test fit by placing vent onto hopper by lining up the vent with the guide on the hopper as shown below.
3. Adhere vent to hopper.
4. Keep hopper in area warmer than 70° for 24 hours for best adhesion.)



Vent Installation for 1.6 bu fiberglass and all 3 bu hoppers

1. Cut vent on dashed lines. (Fig. 1)
1. Place vent onto hopper like shown. (Fig. 2)
2. Place meter housing onto hopper as shown. (Fig. 3)
3. Adjust housing and vent until they are secure and line up.
4. Once in place, trace around vent with marker. (Fig. 4)
5. Remove meter and vent from hopper .
6. Peel off strips from adhesive on vent.
7. Line up the vent with the traced line and stick it to the hopper.
8. For best adhesion, keep hopper 70° or warmer for 24 hrs.



eSet® Standard Installation Instructions (Continued)

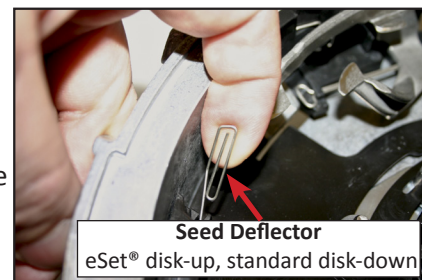
Switching from an eSet Disk to a JD disk.

Switchover to other disks:

There are three steps when changing from eSet to other disc.

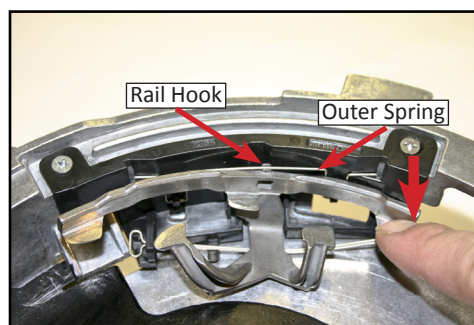
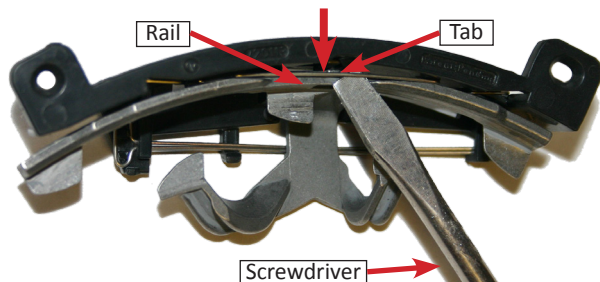
Step 1: Seed Deflector

Locate the seed deflector on the liner. For eSet the deflector must be in the up position (away from the base of the liner/housing). For other discs, pull up and to the right to release the deflector, and lower it so that it rests close to the liner/housing base.



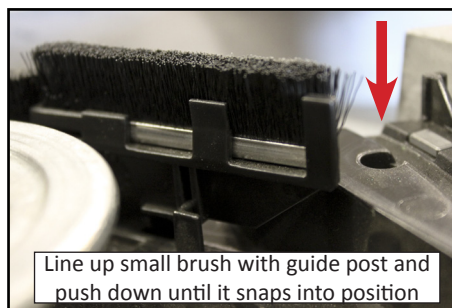
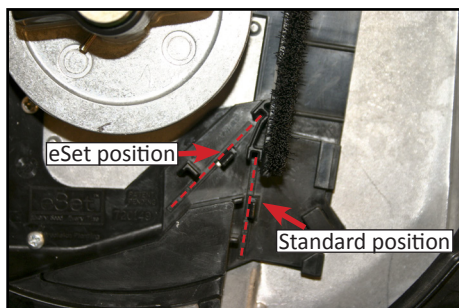
Step 2: Singulator Changes for Other Crops

The singulator needs to be locked into the lower position for any crop that uses a disk other than the eSet disk. Push the Singulator rail under the outer spring as shown below. The spring will click over the tab and snap into the locked position. To unlock, push down on the right lobe to release the rail from the spring.



Step 3: Short Brush

Remove the short brush from the eSet® position and locate it into the straight up and down position for standard JD disk. Reverse procedure to return back to eSet®.



Step 4: Baffle Position

The baffle should be in the number 1 position for corn and soybeans and most other crops.



Troubleshooting Guide

Problem	Solution
<i>Lots of Skips</i>	1. Increase vacuum. 2. Check to make sure singulator is floating and not locked down. 3. Check for debris caught in singulator. 4. Make sure singulator is centered and in correct position. Verify that 5th lobe does not cover more than 50% of hole.
<i>Seeing Doubles</i>	1. Check to make sure Singulator is in correct position and floating. 2. Check for damaged singulator.
<i>Inconsistent Spacing</i>	1. Check shafts for proper alignment, especially where planter flexes. 2. Check bearings of drive shaft. 3. Check for meter alignment over seed tube. 4. Check seed tube for debris or defects. 5. Use correct amount of eFlow or talc.
<i>Consistent Low or High Population</i>	1. Verify population settings are correct. 2. The JD population charts may not be compensating for wheel slippage or incorrect distance. 3. Check air pressure in drive tires.
<i>Cannot Maintain Vac Pressure</i>	1. Check vac lid style to make sure lid has 1992+ seal. 2. Check lid seals and vac hoses.

Always pay attention to your seed monitor, operating manual, and the amount of seed you are planting compared to your expectations.

Always Investigate Abnormalities!

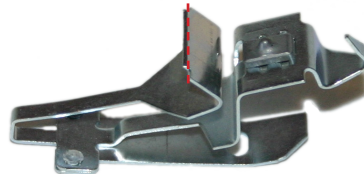
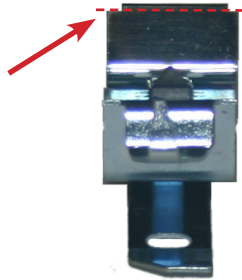


Annual Maintenance

eSet should be inspected and maintained annually.

1. Check fragment extractor for wear.
2. Inspect short & long brush for wear. (replace if necessary)
3. Check back side of disk to see if graphite is worn away. (Respray with graphite if gone)
4. Check vac seals for wear.
5. ***Test meters on MeterMax® Test Stand to insure Maximum performance.***

If wiper is worn below
this line replace.



***If singulator lobe #5 covers more than 50% of hole, tune or replace singulator.
See your MeterMax Rep for singulator inspection and tuning.***

Precision Planting Warranty & Liability Policy (Revision effective 7-1-10)

Warranties, Disclaimers, and Limitation of Remedies:

These terms and conditions represent the entire agreement between the parties hereto and there are no collateral, oral, or other agreements or understandings, unless expressly stipulated.

Precision Planting warrants that all Precision Planting products, equipment and merchandise are free from defects in material and workmanship. The term of the express warranty recited herein shall be limited to one (1) year from the date of sale by Precision Planting. This warranty shall only extend to the dealer if this warranty is properly presented to Customer. With respect to 20/20 SeedSense, AirForce and RowFlow, the express warranty recited herein shall only apply if such products are properly registered by the Customer.

These terms and conditions represent the entire agreement between the parties hereto and there are no collateral, oral, or other agreements or understandings, unless expressly stipulated.

The express warranty recited herein does not extend to any costs or damages other than one of the following, which Precision Planting shall elect at its sole discretion: replacement, repair, or refund of the purchase price. Precision Planting makes no other warranty of any kind whatsoever, express or implied.

ANY EXPRESS OR IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE ARE HEREBY DISCLAIMED BY PRECISION PLANTING. THERE ARE NO WARRANTIES THAT EXTEND BEYOND THE DESCRIPTION ON THE FACE HEREOF.

Precision Planting is NOT LIABLE FOR CONSEQUENTIAL DAMAGES of any nature whatsoever, including without limitation lost yield, replanting cost, supplies or other expenses. Precision Planting is NOT LIABLE FOR INCIDENTAL DAMAGES of any nature whatsoever, including without limitation diagnostic and installation expenses, travel expenses, and shipping expenses. The limitations of remedy recited herein apply to any action by the Customer whether or not such action is based in warranty.

Some states or jurisdictions do not allow the exclusion or limitation of implied warranties, incidental damages or consequential damages; so the above limitations or exclusions may not apply to you.

Liability:

Customer assumes all liability for damages from accidents caused by or incurred in the use of transportation of said equipment. Customer agrees to indemnify and hold harmless the said Precision Planting, its officers, agents, and employees from any and all damages and/or liability to any person whatsoever arising out of or resulting from the use, storage, or transportation of said equipment by the Customer or anyone else while the equipment is in the custody of the Customer. The Customer acknowledges receipt of the equipment in good working condition and repair. In the event of any accident involving said equipment, Customer shall promptly furnish to Precision Planting a complete report in writing, with names and addresses of witnesses and parties involved and Customer shall make all reports required by law. Customer agrees to review and follow any published safety instructions in the product manual.

Notice of Non-Waiver:

The failure by Precision Planting, at any one or more time, to insist upon the strict performance by the Customer of the covenants, conditions and/or terms of this agreement, shall not be construed as a waiver of Precision Planting's right to demand strict compliance with and performance of all covenants, conditions and/or terms hereof. Notice of demand for strict compliance is hereby waived by the Customer, and time is expressly made of the essence of this agreement.

Choice of Law:

Any dispute or claim arising from or related to this Policy, or related to a product governed by this Policy, shall be governed by the laws of the State of Illinois.

Questions? Visit www.precisionplanting.com or call us at 309-925-5050.

Precision®
PLANTING



PLEASE DETACH THIS FORM AND KEEP FOR QUICK REFERENCE

eSet® OPERATING GUIDELINES

Thank you for placing your confidence in Precision Planting's eSet®. While this revolutionary system offers unparalleled operating simplicity, there are some guidelines to keep in mind for optimum performance.

Vacuum Setting:

Seed Corn Bag Weight	Vacuum Level
Less than 60 lbs (>1350 seeds/lb)	18"+
Greater than 60 lbs (<1350 seeds/lb)	20-22"+

Baffle Position:

Crop	Baffle Position
Soybeans	1 or 2
Corn	1
Sweetcorn	2
Large specialty crops	2
JD celled disks	2

The baffle regulates the amount of seed entering the meter. Numbers molded to the left of the metal post designate the position.

Lubricant: As with all vacuum planters, eSet® works best with lubricated seed. Follow the general recommendation below and adjust as necessary to prevent excess accumulation of talc in the meter.

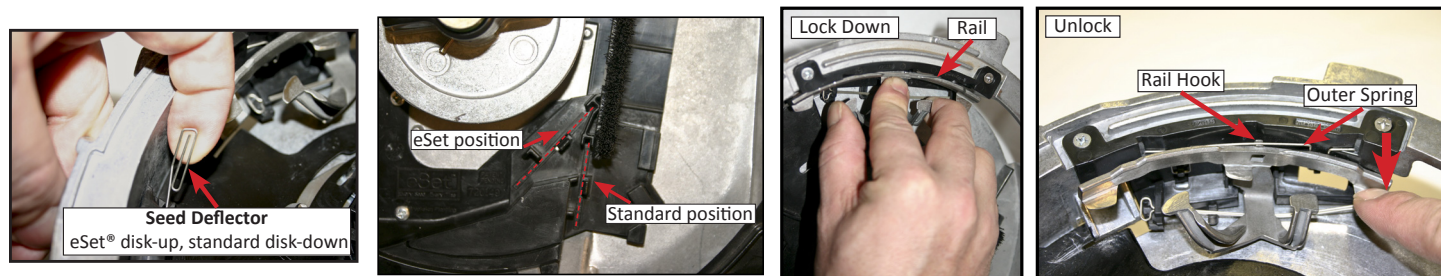
Seed corn characteristics	Application rate	Type of Lubricant
Less than 60 lbs (>1350 seeds/lb)	1/4 Cup per Unit	eFlow (80% Talc, 20% graphite)
Greater than 60 lbs (<1350 seeds/lb)	1/8 Cup per Unit	eFlow (80% Talc, 20% graphite)
Humid planting conditions	Increase rate as necessary	eFlow (80% Talc, 20% graphite)
Treated seed (Poncho/Cruiser)	Increase rate as necessary	eFlow (80% Talc, 20% graphite)

Other Crops: In addition to the eSet corn disc, Precision Planting has a range of discs for other crops. These crops include sweetcorn, popcorn, sunflowers, soybeans, cotton, sugar beets, sorghum, small edible beans and other crops not mentioned here. For more information or to test your specialty seed with eSet, contact your Precision Planting dealer or go to our website www.precisionplanting.com.

Changing to JD Discs: There are three parts that need to be adjusted when you are switching from the eSet® disk to a JD disk. The Short Brush, the Seed Deflector and the Singulator. All three are described below. When planting specialty crops or using celled disks, verify that seeds are not interfering with the singulator assembly and remove singulator assembly if necessary.

Warning: For some larger crops like edible beans or kidney beans you may need to remove the entire singulator to avoid interference.

Singulator: To lock the Singulator out of the way for other crops, push down while rotating back on the metal Singulator until the outer spring clicks over the tab on the rail. To return to the unlocked position for corn, push down on the right hand lobe of the Singulator and the tab will walk out from under the spring.



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