

vDrive[®] Insecticide

vDrive Insecticide Paddle Wheel Replacement

Precision Planting[®]

vDrive Insecticide Paddle Wheel Replacement

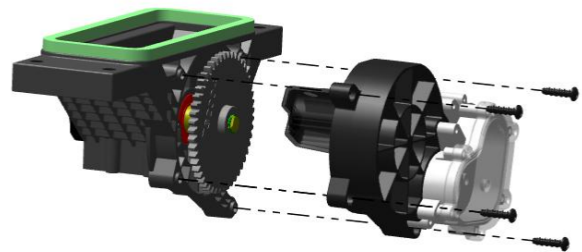
Parts Required: 732106 Paddle Wheel Service Kit

Tools Required: Phillips screwdriver, snap ring pliers, 1/8" punch, 3/32" punch, hammer, vise, pliers, 19mm socket, 10mm wrench

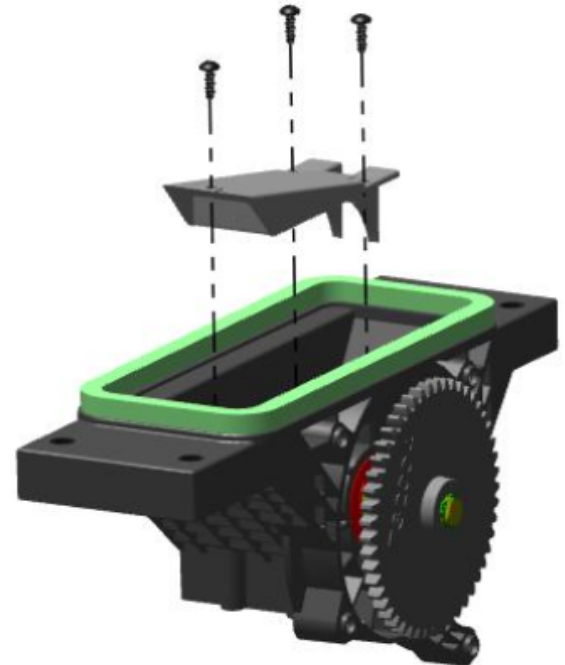
Disassembly:

1. Unattach the vDrive Insecticide meter from the hopper by removing the four hex head bolts (10mm) that secure the meter to the hopper.

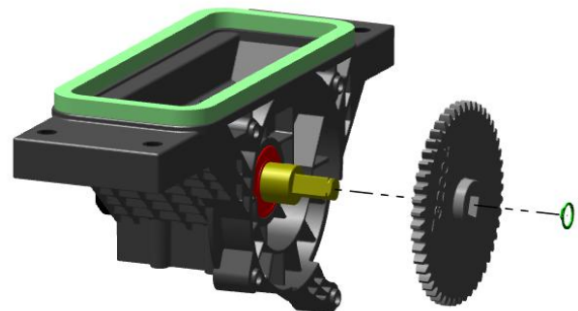
2. Remove vDrive motor assembly from meter by removing 4 screws (Phillips head screws).



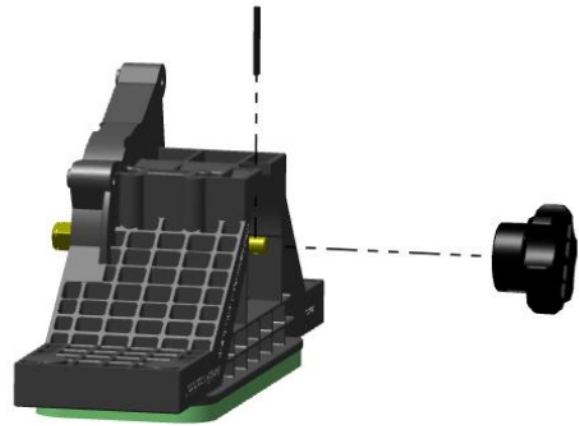
3. Remove meter cover by removing 3 screws (Phillips head screws).



4. Remove snap ring that secures the gear to the drive shaft using snap ring pliers. Remove the gear from the drive shaft by hand (fit may be snug but will slide off with pressure).



5. Turn meter over and lay it on a flat surface. Using a 3/32" punch, remove the roll pin securing the hand drive knob to the drive shaft.

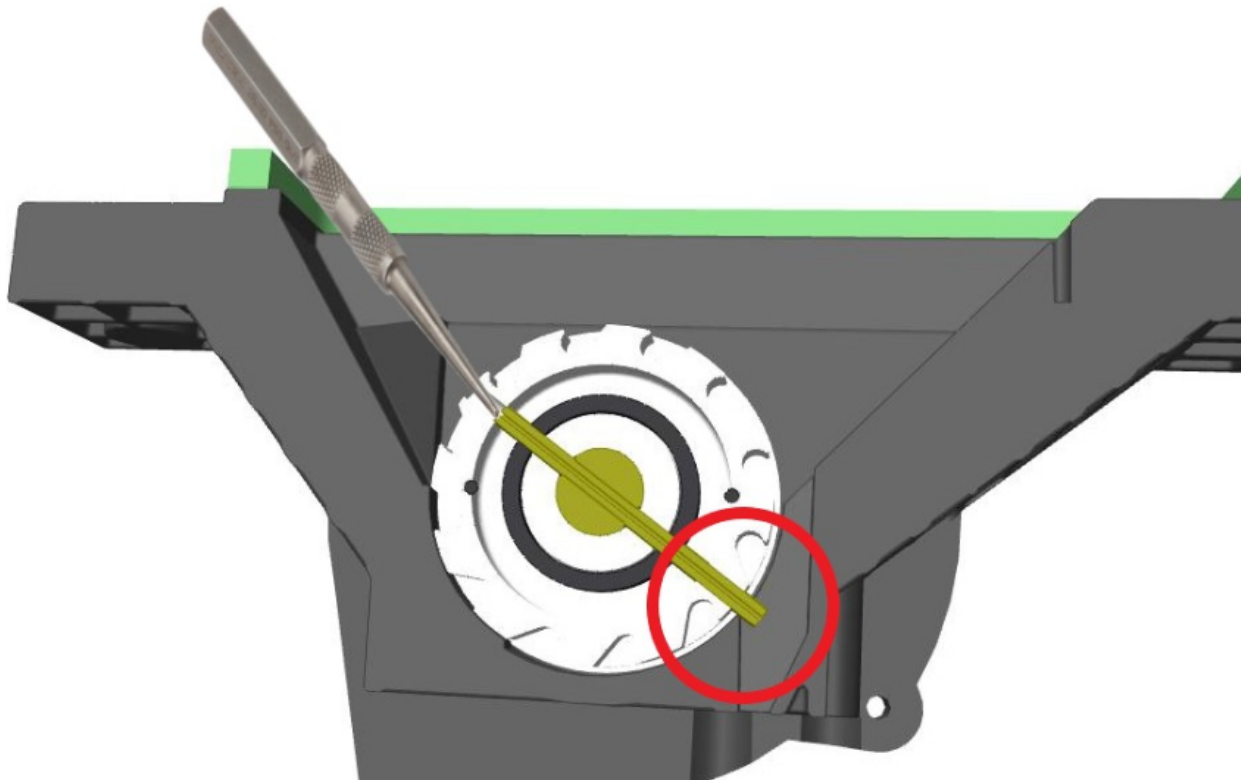


6. Mark an 1/8" punch 1/4 " from the tip (figure 3), this index mark will be used to assure the roll pin is not driven too far through the paddle wheel. Rotate paddle wheel until the roll pin on the paddle wheel is toward the pickup side of the meter. Place the drive shaft in a vise, taking care to not damage the meter housing (figure 4).

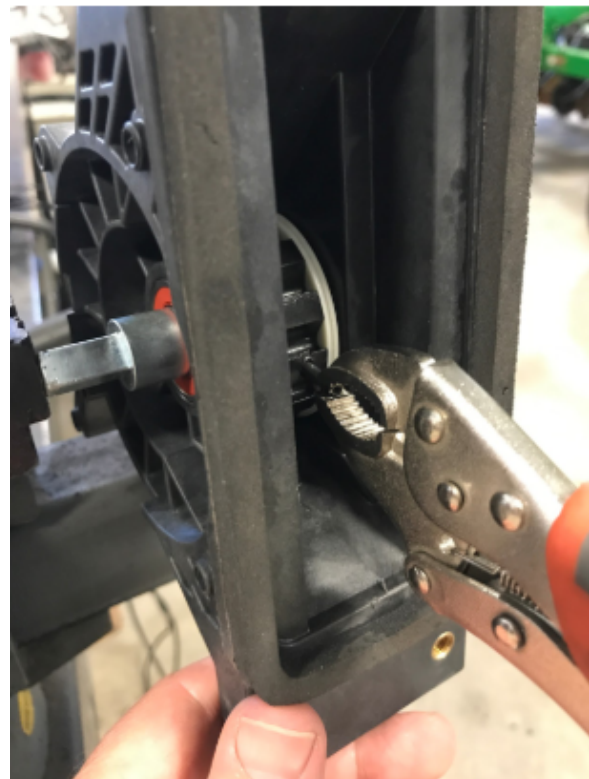


7. Using the 1/8" punch, gently tap the roll pin, stopping regularly to verify that the opposite end of the roll pin does not contact the meter housing, if the wheel is not rotated to correct position it will contact the bottom of the meter when protruding only 1/16" (see detail in figure below). Continue to tap roll pin until index mark on the punch is flush with surface of paddle wheel.

Note: For the roll pin to clear the meter housing, the paddle wheel will need to be turned to such a degree that the punch will not be fully aligned with the roll pin (note figure below).



8. Rotate paddle wheel until the protruding side of the roll pin is visible. Using pliers, remove the roll pin. Lubricant such as WD40 may be necessary to aid in the removal of the pin.



9. Using a 19 mm socket to back up the bearing on the gear side of the meter housing, drive the drive shaft out of the housing using sharp blows with a hammer.



Reassembly

1. Align the new paddle wheel, paying close attention to the orientation of the wheel (white side should be towards the hand drive knob) and the alignment of the roll pin hole on the wheel and the drive shaft..



2. Press the shaft into the bearings and paddle wheel using firm pressure, a vise or press may be used if necessary, in conjunction with a 19 mm socket backing up the bearing.

3. With the meter laying flat on a table or held in a vise as shown in figure 6, install the new roll pin into the paddle wheel, making sure that the hole in the shaft is aligned.

4. Reattach hand drive knob, drive gear, cover and vDrive motor.