

SERIES 2305 – For John Deere 7000, 7100, 7200, 7300, 1700, 1710, 1720 & 1750 Planters

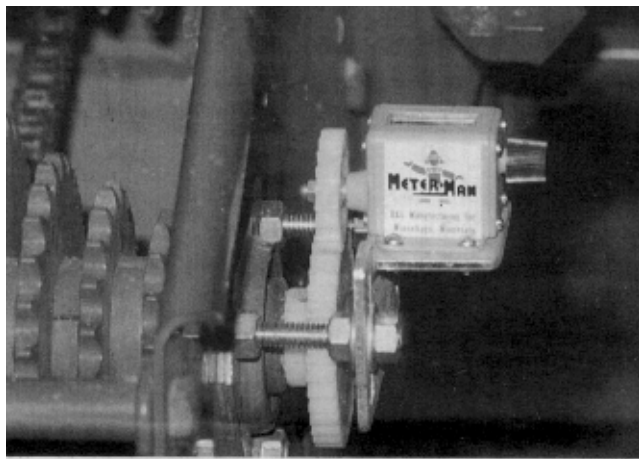
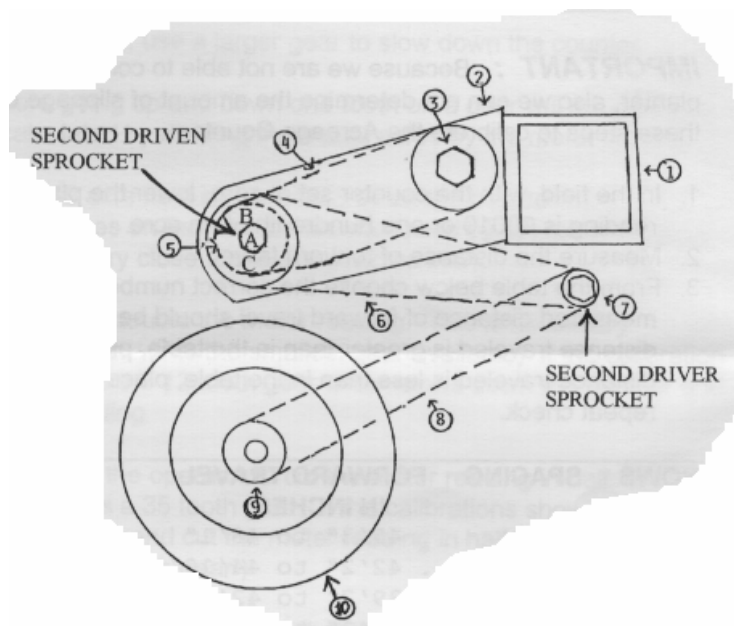
This series 2305 acre counter will fit most of the John Deere planters in the 7000, 7100, 7200 and 7300 series. (This mechanical counter will not fit 7240, 7340 or 1760 but we do recommend the Meter-Man EC400 JDR electronic acre counter for those planters). Planters set up for 28 inch rows do not have enough clearance for the mechanical counter but can use EC400 JDR.

The series 2305 is usually mounted on the hex shaft on the right side of the planter transmission as you stand behind the planter. If the right side of the hex shaft is used by a fertilizer pump, the acre counter can be mounted on the left side.

1. Remove the five digit counter from the box and install the correct white counter gear as indicated by the gear selection on page 2 for the 7200-7300 and page 4 for the 7000-7001. Press the gear on by hand. Do not use a vise or a press which could damage the counter.
2. Install the lock nut finger tight only. On the 7200 or 7300 you may have to change gears when you go from high range to low range.
3. Use the four small stove bolts to secure the counter to the bracket as shown in FIG 2, pg. 3.
4. Remove the cotter pin and washer from the 7/8 inch hex shaft and install 1 or 2 of the 1 inch round white plastic shims if you have side play of more than 1/4 inch. Side play of more than 1/4 inch may cause a misalignment of the gears, which will lead to undercounting of the acres. (Shims are rarely necessary on 7200 and 7300 planters).
5. Reinstall the washer over the hex shaft. Install the white 38-tooth gear on the hex shaft. Line up the hole in the shaft with the hole in the gear and insert the roll pin to secure the gear.
6. Remove two of the 5/16 inch by 3/4 inch bolts from the top of the bearing collar. Replace them with 5/16 inch x 2 3/4 inch threaded bolts.
7. Install the aluminum bracket on the threaded bolt as shown in FIG. 2. Put the nut and washer on both sides of the bracket.
8. Loosely mesh the counter gear with the 38 tooth driver gear. *****VERY IMPORTANT NOTE***** You must leave about 25/1000 of an inch (use a paper match a gauge) Clear between the teeth of the gears. Excess pressure on the counter bearing can cause wear which can allow dust to get into the counter. Check the clearance after the nuts are tightened.
9. Calibrate the counter by using the information on page 6.
10. See page 5 for tips if the counter is not accurately measuring acres.

TYPICAL JOHN DEERE 7200 OR 7300 DRIVE LINE

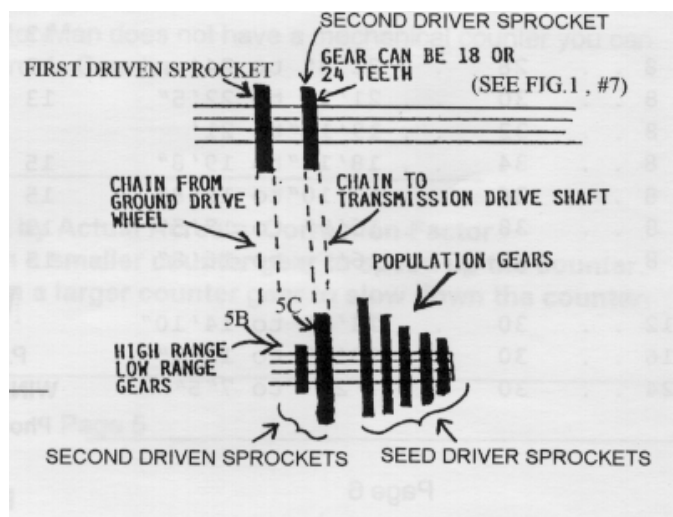
1. Frame
2. Transmission Mounting Frame
3. Seed Driven Sprockets, 5 Gears
4. Seed Drive Chain
5. Seed Driver Sprockets, 5 Gears
 - A. 7/8" Hex Shaft
 - B. Hi – Range Sprocket 18 or 24 Tooth
(2nd Driven Sprocket)
 - C. Low – Range Sprocket 48 or 64 Tooth
6. Secondary Drive Chain
7. First Driven Sprocket, Second Driver Sprocket
8. First Drive Chain
9. First Driver Sprocket
10. Ground Wheel



Note: Meter-Man Counter is mounted on the Right side of the transmission shaft (as You stand behind the planter).

Note: Changing seeding rate does not Change the speed of the Transmission Drive shaft. (See figure 1, #5 A).

Note: John Deere 7200 and 7300 Planters have seven possible gear combinations to turn the 7/8" hex shaft on which the Meter-Man counter is mounted. Check page 2 to find which gear to install on the counter. You may have to change gears when you go from high to low range.



7000 – 7100 GEAR SELECTION CHART

No of Rows	Row Spacing	Counter Gear
4.....	30.....	23
4.....	32.....	22
4.....	34.....	21
4.....	36.....	20
4.....	38.....	19
4.....	40.....	18
6.....	30.....	16
6.....	32.....	15
6.....	34.....	14
6.....	36.....	13
6.....	38.....	13
6.....	40.....	12
8.....	30.....	12
8.....	32.....	11
8.....	34.....	10
8.....	36.....	10
8.....	38.....	9
8.....	40.....	8
12.....	30.....	7

JOHN DEERE 7000-7100 EXTENDED SPROCKET LOW POPULATION GEAR

Refer to this chart when using John Deere’s 50 tooth extended drive sprocket in the planter’s transmission. When using the sprocket refer to the chart below to determine which counter gear and multiplier to use to obtain the correct acreage readout.

- 1) Select appropriate counter gear according to planter row spacing from the chart below.
- 2) To determine actual acreage readout, multiply the number shown on counter by the appropriate multiplier for your planter listed on the chart below.

Be sure to calibrate counter using calibration chart.

No of Rows	Row Spacing	Counter Gear	Multiplier
4.....	30.....	23.....	4
4.....	32.....	16.....	3
4.....	34.....	20.....	4
4.....	36.....	19.....	4
4.....	38.....	18.....	4
4.....	40.....	17.....	4
6.....	30.....	23.....	6
6.....	32.....	21.....	6
6.....	34.....	20.....	6
6.....	36.....	19.....	6
6.....	38.....	18.....	6
6.....	40.....	17.....	6
8.....	30.....	23.....	8
8.....	32.....	19.....	7
8.....	34.....	18.....	7
8.....	36.....	19.....	8
8.....	38.....	18.....	8
8.....	40.....	13.....	6
12.....	30.....	23.....	12

ACRE COUNTER TIP SHEET

- 1) If the meter shows fewer than actual acres, use a smaller gear to speed up the counter.
- 2) If the meter shows more than the actual acres, use a larger gear to slow down the counter.
- 3) Occasionally there will be a case where going up and down one tooth on a gear will not give an accurate reading. A factor can be calculated by dividing the actual acres by the meter reading
Example: A known 40 acre field shows 38 acres on the counter...40 divided by 38 is 1.052. If the acres on the counter are multiplied by the factor of 1.052; the answer is very close to the actual acres in the field.
- 4) On some installations the instructions say to double the meter reading. This is necessary because the required gear is less than 7 teeth. (7 is the smallest gear available). If the calibration shows a need for a 6 tooth gear you can use a 12 tooth gear which slows down the counter and makes it necessary to double the meter reading.
- 5) On some installations the instructions direct the operator to cut the meter reading in half. This is because the largest counter gear available is the 35 tooth gear. If the calibrations show a need for a 40 tooth gear you can use the 20 tooth gear and cut the meter reading in half. (the 20 tooth gear drives the meter twice as fast as the 40 tooth gear).
- 6) Counter gears are available from 7 teeth to 35 teeth; except that there is no 29 tooth gear.
- 7) General rule:
 - A. A smaller gear counter will speed up the counter.
 - B. A larger counter gear will slow down the counter.
 - C. As the width of the planter increases the correct counter gear decreases in size.
 - D. As the width of the planter decreases the correct counter gear increases in size.
 - E. For planters or drills that Meter-Man does not have a mechanical counter you can always use the EC400 Electronic Counter.

Counter Acres divided by Actual Acres = Correction Factor

If the Result is less than one put on a smaller counter gear to speed up the counter.

If the Result is more than one put on a larger counter gear to slow down the counter.

