

## RRV Canola Disk Installation Instructions

1. Install the CCS tank nozzle inserts. This clip onto the manifolds inside the cleanout doors on the bottom of the CCS tanks. They are John Deere part number A73214
2. If you have stock John Deere mini-hoppers on Pro-Series or Pro-Series XP units install the RRV mini-hopper screen, part number RRV010114. These are not required if you have MaxEmerge 5 row units or E-Set mini-hoppers.
3. Install the seed tube inserts for directing the seed past the seed sensor eyes. These are John Deere part AA46912 for curved seed tubes and part AA36911 for straight seed tubes.
4. Install the knockout wheel inside your vacuum meter door. On MaxEmerge 2, MaxEmerge Plus and MaxEmerge XP these are held in place by a small Philips head or Torx screw. On MaxEmerge 5/5E and any replacement doors after 2015 they are clipped in with no tools required.
5. Prepare your RRV Canola Disk for installation. You **MUST** spray graphite lubricant on both sides of the RRV disk. This prevents static from building up on the disk which causes seed to stick to the flat part of the plate causing over-seeding.
6. Install your RRV Canola Disk wear strip. This is placed on the outer edge of the meter housing before the disk is installed. The tension of the disk holds it in place.
7. Install your RRV Canola Disk. Check for tension against wear strip by tapping on the disk. If there is any gap remove the disk, pop out the pin and tighten the hub, replace pin and re-install the disk. Disk is installed correctly when slight friction is felt between the disk and the wear strip. Without friction seed will leak from the bottom of the meter. This is a very important step. Once you fill your meters with seed you must check for leaks. You can lose a lot of seed very quickly if the seed is getting by the disk.
8. Choose your seeding rate. If you have a mechanical transmission on your planter we've included a rate chart. If you have hydraulic or electric drive you must enter a custom disk into your display. The RRV canola disk has 90 holes.
9. One note is your monitor will **NOT** accurately display population once you start planting. The seed tube insert directs small seed past the sensor eye so you will not get "row not planting" warnings but the volume of seed going past the eye and the small size of seed combined results in low population readout on your screen. Every planter is different but if you have a desired population of 250,000 seeds per acre, the display will often read anywhere from 80,000 to 150,000. That being said, if you have a row that consistently reads 100,000 and it starts reading 60,000 this could be an indication of a problem and the row should be checked.
10. Set your CCS pressure to 3 to 6 PSI on the gauge. This is lower than our previous recommendation. You may need higher pressure on wider planters. It does take some time to charge all the meters.
11. Use 20/80 graphite/talc seed lubricant. This helps reduce static along with the aerosol spray you should have applied to the disk before installation.
12. Vacuum should be set from 2 to 8 inches depending on seed size. The smaller the seed, the lower the vacuum.
13. Be aware that strong tailwinds can affect spacing.
14. Bigger seed generally works better than smaller. The bigger it is the better the sensors can detect it, the less likely it is to leak and the easier it is to set get perfect singulation.



### LOW RANGE INPUT SPROCKET COMBINATIONS

DRIVER	DRIVEN	SEED SPACING (INCHES)	SEEDS PER FOOT	15" ROWS	20" ROWS	22" ROWS	30" ROWS	36" ROWS	38" ROWS	40" ROWS
35	24	2	6.1	214,397	160,798	146,180	107,198	89,332	84,630	80,399
35	25	2	5.9	206,821	154,366	140,333	102,911	85,759	81,245	77,183
35	26	2 1/8	5.6	197,905	148,429	134,936	98,952	82,460	78,120	74,214
35	27	2 3/16	5.4	190,575	142,931	129,338	95,288	79,406	75,227	71,466
35	28	2 1/4	5.2	183,769	137,827	125,297	91,884	76,570	72,540	68,913
29	24	2 3/8	5.1	177,643	133,232	121,120	88,822	74,018	70,122	66,616
29	25	2 7/16	4.9	170,537	127,903	116,276	85,269	71,057	67,317	66,616
29	26	2 9/16	4.7	163,978	122,984	111,803	81,989	68,324	64,728	61,492
29	27	2 5/8	4.5	157,905	118,429	107,663	78,953	65,794	62,331	59,214
29	28	2 3/4	4.3	152,266	114,199	103,817	76,133	63,444	60,105	57,100
24	24	2 7/8	4.2	147,015	110,261	100,233	73,508	61,256	58,032	55,131
24	25	2 15/16	4	141,134	105,851	96,228	70,567	58,806	55,711	52,925
24	26	3 1/16	3.9	135,706	101,780	92,527	67,853	56,544	53,568	50,890
24	27	3 3/16	3.7	130,680	98,010	89,100	65,340	54,450	51,584	49,005
24	28	3 5/16	3.6	126,013	94,510	85,918	63,006	52,505	49,742	47,255
20	24	3 7/16	3.5	122,513	91,884	83,631	61,256	51,047	48,360	45,942
20	25	3 9/16	3.3	117,612	88,209	80,190	58,806	49,005	46,426	44,105
20	26	3 11/16	3.2	113,683	84,816	77,106	56,544	47,120	44,640	42,408
20	27	3 7/8	3.1	108,900	81,675	74,250	54,450	45,375	42,987	40,838
20	28	4	3	106,011	78,758	71,598	52,505	43,754	41,452	39,379
16	24	4 1/4	2.8	98,010	73,508	66,825	49,005	40,838	38,688	36,754
16	25	4 7/16	2.7	94,090	70,587	64,152	47,045	39,204	37,141	35,284
16	26	4 5/8	2.6	90,471	67,853	61,635	45,235	37,696	35,712	33,927
16	27	4 13/16	2.5	87,120	65,340	59,430	43,560	36,300	34,389	32,670
16	28	5	2.4	84,009	63,806	57,279	42,004	35,004	33,161	31,503

### HIGH RANGE INPUT SPROCKET COMBINATIONS

DRIVER	DRIVEN	SEED SPACING (INCHES)	SEEDS PER FOOT	15" ROWS	20" ROWS	22" ROWS	30" ROWS	36" ROWS	38" ROWS	40" ROWS
35	24	3/4	16.4	571,725	428,794	389,813	285,863	238,219	225,681	214,397
35	25	3/4	15.8	548,856	411,642	374,220	274,428	228,690	216,654	205,821
35	26	13/16	15.2	527,746	395,810	358,827	263,873	219,894	208,321	197,905
35	27	13/16	14.6	508,200	381,150	346,500	254,100	211,750	200,605	190,575
35	28	7/8	14.1	490,060	367,533	334,126	245,025	204,188	193,441	183,769
29	24	7/8	13.6	473,715	355,286	322,988	236,858	197,381	186,993	177,643
29	25	15/16	13	454,768	341,075	310,968	227,383	189,486	179,513	170,537
29	26	15/16	12.5	437,275	327,957	296,142	218,638	182,198	172,609	163,978
29	27	1	12.1	421,080	315,810	287,100	210,540	175,450	166,216	157,905
29	28	1	11.6	406,041	304,531	276,846	203,021	169,184	160,280	152,266
24	24	1 1/16	11.2	392,040	294,030	267,300	196,020	163,350	154,753	147,015
24	25	1 1/8	10.8	378,358	282,269	258,608	188,179	156,816	148,563	141,134
24	26	1 3/16	10.3	361,883	271,412	246,738	180,942	150,785	142,849	135,706
24	27	1 3/16	10	348,480	261,360	237,680	180,942	145,200	137,558	130,680
24	28	1 1/4	9.6	336,034	252,026	229,114	168,017	140,014	132,645	126,013
20	24	1 1/4	9.3	326,700	245,025	222,750	163,350	136,125	128,961	122,513
20	25	1 5/16	9	313,632	235,224	213,840	156,816	130,680	123,802	117,612
20	26	1 3/8	8.6	301,569	226,177	205,615	150,785	125,654	119,040	113,088
20	27	1 7/16	8.3	290,400	217,800	198,000	145,200	121,000	114,632	108,900
20	28	1 1/2	8	280,029	210,021	190,929	140,014	116,679	110,538	105,011
16	24	1 5/8	7.5	261,360	196,020	178,200	130,680	108,900	103,068	98,010
16	25	1 11/16	7.1	250,306	188,179	171,072	125,453	104,544	99,042	94,090
16	26	1 3/4	6.9	241,255	180,942	164,492	120,628	100,523	95,232	90,471
16	27	1 13/16	6.6	232,320	174,240	158,400	116,160	96,800	91,705	87,120
16	28	1 7/8	6.4	224,023	168,017	152,743	112,011	93,343	88,430	84,009