

Esch 5605 Calibration Procedures

1. Determine which seed hopper you are using. The large hopper is suitable for a broader range of seeds, places the seeds deeper into the soil, and can sow at a greater seeding rate. The smaller hopper is for smaller seeds, sows the seeds closer to the surface, and at a reduced seeding rate. Look at the grids on the lid of each hopper to help determine.
2. Now that you know which hopper you are using, look at the grid to determine the gear setting.
 - a. If you are using the large hopper (Figure A), determine if you are in high or low range, and adjust the gears if needed (Figure B). High range sows at a greater seeding rate than low-range.
 - b. Determine the appropriate gear setting for the seeding rate, and adjust the setting using the knob on the front of the drill (Figure C).
 - c. If you are using the small hopper (Figure D), adjust the setting using the knob on the back of the drill (Figure E).
3. Be aware that the charts may not be accurate. Different seed lots vary by cleanliness and variety, which can impact seeding rate. If you want to calibrate the drill to ensure the rate is accurate, or if you are using a mixture of seeds, follow these steps:
 - a. Place some of your seed into the hopper.
 - b. Remove the tarp from the side of the drill (Figure F) and place the tarp under the drill to collect the seeds.
 - c. Turn the drive wheel (Figure G) 130x to represent 1/10 of an acre (you can also turn it 13x to represent 1/100 of an acre, but it may not be as accurate).
 - d. Weigh the seeds that you collected, and multiply by 10 to calculate the rate for an acre. If it is more than you want, adjust the drill down a gear setting. Repeat steps A-C, if necessary.
4. Once you have the seeding rate calibrated, you are just about ready to go! However, you may need to make some adjustments in the field.
 - a. You can adjust the seeding depth by adjusting the packing wheel. Pull up the silver T shaped pin (Figure H) to adjust the wheel to one of the 5 settings.
 - b. You can also adjust the tension of the arm by removing the pin underneath the silver spring, but there are only two settings available.
5. Please contact the Outreach Coordinator if you have any questions! We are here to help.

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Instructions For Drill Calibration - Model 5605

1372 turns of drive wheel = 1 acre 137 turns of drive wheel = 1/10 acre

Step 1: Put plastic, or anything to collect seed, under drill
 Step 2: Turn drive wheel 130 turns, which = 1/10 acre

This should give 1/10 of the LBS. per acre, you want to sow

EXAMPLE: If you want to sow 20 LBS per acre you should get 2 LBS of seed, per 130 turns of drive wheel
 or if you want to sow 35 LBS. per acre, you should get 3.5 LBS per 130 turns of drive wheel

*Recommended Seeding Rate

GEARBOX SETTING	4	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40
BARLEY	48.3	56.7	65.1	75.9	86.5	96.1	106.8	119.6	131.6	143.6	156.8	170.9	184.6	198.8	215.4	231.6	247.8	266.0	285.0
HAKARI BROME	24.2	28.5	32.7	38.1	43.4	48.3	53.6	60.1	66.1	72.1	78.8	85.8	92.7	99.8	108.1	116.3	124.5	133.6	143.1
TALL FESCUE	*32.7	38.4	44.1	51.4	58.6	65.1	72.4	81.0	89.2	97.3	106.2	115.8	125.0	134.7	145.9	156.9	167.9	180.2	193.1
PERUM FESTULOLIUM	34.0	*39.9	45.9	53.5	60.9	67.7	75.3	84.3	92.7	101.1	110.5	120.4	130.0	140.0	151.7	163.2	174.6	187.4	200.8
EVERLEAF FORAGE OATS	45.5	53.4	61.3	71.5	81.5	90.6	100.6	112.7	124.0	135.3	147.7	161.0	173.9	187.3	202.9	218.2	233.5	250.5	268.5
ORCHARD GRASS	20.9	24.6	28.2	32.9	37.5	41.7	46.3	51.9	57.1	62.2	68.0	74.1	80.0	86.2	93.4	100.4	107.4	115.3	123.6
RYE	75.2	88.3	101.5	118.2	134.8	149.8	166.4	184.4	203.1	223.7	244.3	266.3	287.6	309.7	335.5	360.8	386.1	414.4	444.1
TETRAPLOID ITALIAN RYEGRASS	37.9	44.5	51.2	59.6	68.0	75.5	83.9	94.0	103.4	112.8	123.2	134.3	145.1	156.2	169.2	182.0	194.7	209.0	224.0
DIPLOID ITALIAN RYEGRASS	29.0	34.0	39.1	45.5	51.9	57.7	64.1	71.8	78.9	86.1	94.0	102.5	110.7	119.2	129.2	138.9	148.6	159.5	170.9
SORGHUM SADAN	70.6	82.9	95.3	111.0	126.5	140.7	156.3	175.1	192.6	210.1	229.3	250.1	270.1	290.9	315.1	338.9	362.6	389.1	417.0
SOYBEANS	62.6	73.5	84.5	98.4	112.2	124.7	138.6	155.2	170.7	186.2	203.4	221.7	239.5	257.9	289.4	300.4	321.5	345.0	369.2
TRITICAL	63.1	74.0	85.0	99.1	113.0	125.6	139.5	156.3	171.9	187.5	204.8	223.2	241.1	259.6	281.3	302.5	323.7	347.3	372.2
WHEAT	85.7	100.5	115.5	134.8	153.4	170.6	189.5	212.2	233.5	254.7	278.2	303.2	327.5	352.6	382.0	410.8	439.6	471.8	505.6
ALFAMATE MIX	25.2	29.5	33.9	39.5	45.1	50.1	55.7	62.4	68.6	74.8	81.7	89.1	96.2	103.6	112.2	120.7	129.2	138.6	148.5
KINGS HILLSIDE MIX	28.1	33.0	37.9	44.2	50.6	56.0	62.2	69.7	76.7	83.6	91.4	99.6	107.5	115.8	125.5	134.9	144.4	154.9	166.0
KINGS MIX	25.7	*30.2	34.7	40.4	46.1	51.2	56.9	63.8	70.1	76.5	83.6	91.1	98.4	105.9	114.8	123.4	132.1	141.7	151.9
KINGS OATS PLUS	45.6	53.5	61.5	71.6	81.6	90.7	100.8	112.9	124.2	135.5	148.0	161.3	174.2	187.6	203.3	218.6	233.9	251.0	269.0
KINGS SUPREME MIX	27.5	*32.2	37.1	43.2	49.2	54.7	60.8	68.1	74.9	81.7	89.2	97.3	105.0	113.3	122.3	131.0	141.0	151.3	162.2
KINGS TRITICAL PLUS	55.1	64.6	74.3	86.6	98.7	109.7	121.9	136.5	150.1	163.8	178.9	195.0	210.6	226.8	245.7	264.2	282.7	303.4	325.1

LBS PER ACRE

High Range

Figure A - Grid on large hopper

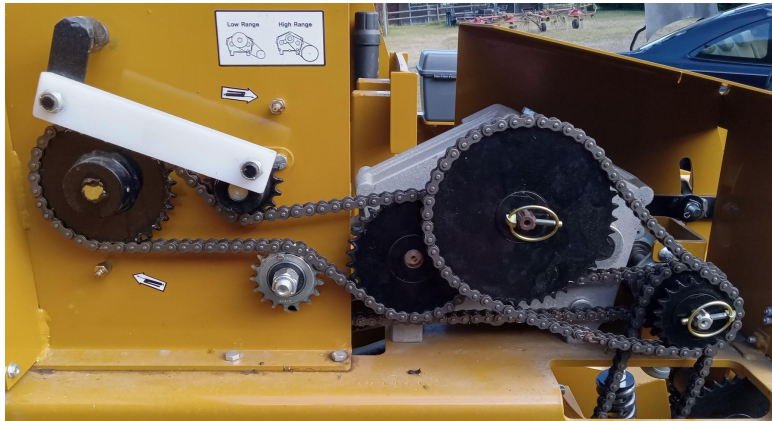


Figure B - Hi/Low gear setting



Figure C - Knob to adjust gear setting

SEED BOX SETTING	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
ALFALFA COATED	2.4	4.7	7.1	9.5	11.8	14.2	16.6	18.9	21.3	23.7	26.1	28.4	30.8	33.2	35.5	37.9
ALFALFA UNCOATED	1.6	3.2	4.8	6.4	8.1	9.7	11.3	12.9	14.5	16.1	17.7	19.3	20.9	22.5	24.2	25.8
RED CLOVER COATED	2.5	4.9	7.4	9.8	12.3	14.7	17.2	19.6	22.1	24.5	27.0	29.4	31.9	34.3	36.8	39.2
TIMOTHY	1.2	2.4	3.6	4.8	6.0	7.2	8.5	9.7	10.9	12.1	13.3	14.5	15.7	16.9	18.1	19.3
TEFF GRASS	1.7	3.4	5.1	6.8	8.4	10.1	11.8	13.5	15.2	16.9	18.6	20.3	22.0	23.7	25.3	27.0

LBS PER ACRE

Figure D - Seeding rate grid on small hopper

Figure E - Knob to adjust seeding rate for small hopper



Figure F - Tarp for calibration

Figure G - Drive wheel. 130 turns = 1/10 acre



Figure H - Pins to adjust tension and seed depth