

A Guide to Rate Charts for Pull Type Spreaders

Basic information required to correctly set the spreader for pounds per acre (lb/ac)

Drive Wheel: 4.8—Ground tire has no effect when drive wheel is present

Density of your product material to be spread in pounds per cubic foot (lb/cu ft)

Product: Fertilizer, Lime, Litter, Compost

Desired Swath: 40 ft, 45 ft, 50 ft, 60 ft, etc

Sprocket Ratio: sprocket sizes; standard, half rate kit, third rate kit—Starting at drive wheel go through combinations to end at rear roller

Conveyor Width: 16 in or 24 in, or other size

Motor RPM's for swath

Chute Scale—delivering material to chute: set by testing

NCI keeps records for each spreader or sprayer manufactured. These records are stored by serial number and will have complete information on your equipment as built. Your equipment manual contains this information. It will not reflect any changes made by the purchaser or other alterations. There may be differences in replacement part numbers due to technical improvements or changes in vendors / vendor supplies.

CHUTE SETTINGS		
SET CHUTE SCALE TO MATCH POUNDS PER ACRE		
¼" STAINLESS AND ALL CARBON BLADES	STANDARD STAINLESS BLADES	POUNDS PER ACRE
5	4	120
5	4	140
4.75	3.75	160
4.75	3.75	180
4.75	3.75	200
4.5	3.5	220
4.5	3.5	240
4.5	3.5	260
4.5	3.5	280
4.5	3.5	300
4.25	3.25	320
4.25	3.25	340
4.25	3.25	360
4	3	380
4	3	400
4	3	420
4	3	440
3.75	2.75	480
3.75	2.75	520
3.5	2.5	560
3.5	2.5	640
3.25	2.25	760
3	2	860
3	2	970
2.5	1.5	1080

ALL CHUTE SETTINGS MUST BE CHECKED BY SPREAD PATTERN TESTING
THIS CHART DOES NOT APPLY TO EXTENDED RANGE EQUIPMENT
NCI-OC CHUTE SETTING



If you call NCI for technical assistance, you need the serial number from your equipment located on the left side rail on the left of the unit.

If your charts are missing or illegible, call 800-241-1350 to order new charts. You will need the serial number from the left side of the spreader. Two charts are available: decal and computer (price varies)

Danger!

Before adjusting spreader, **turn off power /lockout supply to unit**



Gate Screw

Chute Screw

Your spreader has a rate chart decal. Newer units also have a chute setting decal on the back of the hopper.



Chute Decal

Rate Chart Decal

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IMPORTANT!

Chute settings vary with different types of blades! What is on your unit?

! CAUTION: BEFORE ADJUSTING SPREADER TURN OFF POWER SUPPLY
NEWTON CROUCH INC. GRIFFIN, GA. PHONE 770-227-1234
PULL TYPE-24 INCH BED CHAIN

FERTILIZER

- (1) 4.8X8 DRIVE WHEEL
 - (2) 65 POUNDS PER CUBIC FOOT FERTILIZER MATERIAL WEIGHT
 - (3) 12DW TO 54JS-12JS TO 36RR SPROCKET RATIO
 - (4) 45 FOOT SWATH
 - (5) HALF RATE 12DW TO 24JSA-12JSA TO 54JS-12JS TO 36RR
- 1 THRU 4 EQUALS 203 POUNDS PER ACRE, PER ONE INCH OF GATE. SEE NOTE*

GATE SETTING	CHUTE SETTING	POUNDS PER ACRE (3)	GATE SETTING	CHUTE SETTING	POUNDS PER ACRE HALF RATE ON (5)
1 1/2"	4 1/2"	304	1 1/2"	5"	152
1 3/4"	4 1/4"	355	1 3/4"	4 3/4"	177
2"	4"	405	2"	4 3/4"	202
2 1/4"	4"	455	2 1/4"	4 3/4"	228
2 1/2"	3 3/4"	506	2 1/2"	4 3/4"	253
2 3/4"	3 1/2"	557	2 3/4"	4 3/4"	278
3"	3 1/2"	607	3"	4 1/4"	304
3 1/4"	3 1/4"	658	3 1/4"	4 1/4"	329
4"	3"	810	4"	4"	405

24PT190-50/1.30-55-1.18-60/1.08-70/93-75/87(X GATE SETTING)

LIME

- (1) 4.8X8 DRIVE WHEEL
 - (2) 85 POUNDS PER CUBIC FOOT LIME MATERIAL WEIGHT
 - (3) 12DW TO 24JS-12JS TO 36RR SPROCKET RATIO
 - (4) 40 FOOT SWATH
 - (5) 12DW TO 54JS-12JS TO 36RR SPROCKET RATIO
- 1 THRU 4 EQUALS 670 POUNDS PER ACRE, PER ONE INCH OF GATE. SEE NOTE*

GATE SETTING	POUNDS PER ACRE ON (3)	POUNDS PER ACRE ON (5)
3	2010	896
4	2680	1195
6	4020	1794
8		2392

FOR LIME APPLICATIONS ADJUST TO ONE ON SCALE.
 *ANY CHANGES IN 1 THRU 5 CHANGES GATE, CHUTE AND POUNDS PER ACRE SETTING. CHUTE SETTINGS MUST BE CHECKED FOR EACH MATERIAL BY TESTING SPREAD PATTERN. **DO NOT SET GATE BELOW 1-1/2 INCHES.**

NC-DC57245445

Older rate charts require operator to calculate pounds per acre for various product densities using the formulas found at the bottom of the chart

Explanation of (5): DW is Drive Wheel / JSA is Alternate Jack Shaft / JS is Jack Shaft / RR is Rear Roller

NEWTON CROUCH INC. P.O. BOX 17 GRIFFIN, GA. PHONE 770-227-1234
CAUTION!: BEFORE ADJUSTING SPREADER TURN OFF POWER SUPPLY
PULL TYPE SPREADER - DRY

FERTILIZER

1. 4.80 - 8 NHS DRIVE WHEEL
2. 65 POUNDS PER CUBIC FOOT FERTILIZER MATERIAL WEIGHT.
3. 12 TO 54 - 12 TO 36 SPROCKET RATIO.
4. 45 FOOT SWATH.
- 1 THRU 4 EQUALS 139 POUNDS PER ACRE PER ONE INCH OF GATE (see notes *)
5. DESIGNED TO OPERATE AT 4 TO 6 MPH
DO NOT OPERATE ABOVE 6 MPH!

GATE SETTING	CHUTE SETTING	POUNDS PER ACRE	GATE SETTING	CHUTE SETTING	POUNDS PER ACRE
1 1/4"	5"	174	3 1/4"	4"	452
1 1/2"	4 3/4"	209	3 1/2"	3 3/4"	487
1 3/4"	4 3/4"	243	3 3/4"	3 3/4"	521
2"	4 1/2"	278	4"	3 1/2"	556
2 1/4"	4 1/2"	313	4 1/2"	3"	626
2 1/2"	4 1/4"	348	5"	2 1/2"	695
2 3/4"	4 1/4"	382	5 1/2"	2"	765
3"	4"	417	6"	1 1/2"	834

LIME

1. 4.80 - 8 NHS DRIVE WHEEL
2. 85 POUNDS PER CUBIC FOOT LIME MATERIAL WEIGHT.
3. 12 TO 24 - 12 TO 36 SPROCKET RATIO.
4. 40 FOOT SWATH.
- 1 THRU 4 EQUALS 464 POUNDS PER ACRE, PER ONE INCH OF GATE - SEE NOTE*

GATE SETTING	POUNDS PER ACRE
4 1/4"	1972
6 1/2"	3016
8"	3712

FOR LIME APPLICATIONS ADJUST TO ONE ON SCALE

*ANY CHANGE IN 1 THRU 4 CHANGES GATE, CHUTE AND POUNDS PER ACRE SETTING.

*CHUTE SETTINGS MUST BE CHECKED FOR EACH MATERIAL BY TESTING SPREAD PATTERN.

NC-DC57165445
Rev 2/93

(45/54) - (50/1.30) - (58/1.12) - (60/1.08) - (70/.93) - (75/.87) = (Material Weight/Factor)
 For change in Material weight, multiply gate setting by factor to get new gate setting.
 Have complete understanding of all safety precautions before operating unit. Be sure Grade 9 bolts, clevis, and collar found on hitch are in good condition. Replace any worn hitch parts or loose bolts before using. This unit is for field applications.

★ IMPORTANT!

Chute settings vary with different types of blades! What is on your unit?

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DANGER: BEFORE ADJUSTING SPREADER TURN OFF POWER SUPPLY
PULL TYPE - 24 INCH BED CHAIN

Fertilizer

45 Foot Swath with 4.8 Drive Wheel
12 Jack Shaft to 36 Rear Roller Sprocket Ratio

Use for 12DW to 54JS Sprocket Use for Third Rate-12DW to 36JSA-12JSA to 54JS Sprocket

Gate (in)	Pounds per Acre at various densities				
1.5	231	279	313	327	361
1.75	269	326	365	382	421
2	308	372	417	436	481
2.25	346	419	469	491	541
2.5	385	465	521	545	601
2.75	423	512	573	600	662
3	462	558	626	654	722
3.25	500	605	678	709	782
4	616	744	834	873	962
5	770	930	1043	1091	1203
Gate (in)	48	58	65	68	75
	Density (lbs/cu.ft)				

Lime

40 Foot Swath with 4.8 Drive Wheel
12 Jack Shaft to 36 Rear Roller Sprocket Ratio

Use for 2 to 1 Ratio: (22DW to 44JSA) Sprocket Use for: 12DW to 54JS Sprocket Ratio

Gate (in)	Pounds per Acre at various densities		
3	1705	2071	2192
4	2274	2761	2923
5	2842	3451	3654
6	3410	4141	4385
8	4547		
Gate (in)	70	85	90
	Density (lbs/cu.ft)		

For Lime applications, adjust to one on the scale.
Note: Any changes in swath, drive wheel, sprocket ratio, or material weight will change the pounds per acre setting and chute setting.

For **SETTING CHUTE** (see separate chute label): find the pounds per acre then match the corresponding number found on chute scale to the front edge of chute bracket. All chute settings must be checked for each material by testing spread pattern. **DO NOT SET GATE BELOW 1 1/2 INCHES.**
Read NCI Parts Book for further instructions and sprocket alignment

Part Number:
NC-DCPULLTYPE2400
1-20-2005



New rate charts have the pounds per acre with various product densities in the bottom line of your chart.

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DANGER: BEFORE ADJUSTING SPREADER TURN OFF POWER SUPPLY

Set Gate Height: Verify Constants 1-4 below; select density to be spread, find desired Lbs/Ac, then move to left for Gate Setting

Fertilizer

1 Drive Wheel - 4.80 - 8
2 Swath - 45 Foot
3 Conveyor - 16 Inch
4 Sprocket Ratio - 12 to 80 (Drive Wheel to Jack Shaft)
12 to 36 (Jackshaft to Rear Roller)

Gate (in)	Pounds per Acre at Various Densities						
1.5	104	119	125	129	140	147	162
1.75	121	138	146	151	164	171	189
2	138	158	167	173	187	196	216
2.25	155	178	188	194	210	220	243
2.5	173	198	208	216	234	244	270
2.75	190	217	229	237	257	269	296
3	207	237	250	259	280	293	323
3.25	224	257	271	280	304	318	350
3.5	242	277	292	302	327	342	377
4	278	316	334	345	374	391	431
5	345	395	417	431	467	489	539
6	414	474	500	518	561	587	647
Gate (in)	48	55	58	60	65	68	75
	Density (lbs/cu.ft)						

Lime

1 Drive Wheel - 4.80-8
2 Swath - 40 Foot
3 Conveyor - 16 inch
4 Sprocket Ratio - 12 to 24 (1 to 2 Ratio) (DW to JS)
12 to 36 (JS to RR)

Gate (in)	Pounds per Acre at Various Densities		
3	1137	1380	1462
4	1516	1840	1949
5	1895	2301	2436
6	2274	2761	2923
8	3031	3681	3897
9	3410	4141	4385
	70	85	90
	Density (lbs/cu.ft)		

For Lime Application, adjust to one on the scale.

NOTE:

- Any changes 1-4 or stated density will change the pounds per acre settings and chute settings
- For best results: chute settings, swath, blade, material and spinner speed must be checked by spread pattern

For **SETTING CHUTE** (see separate chute label): **SELECT BLADE STYLE**. Find the pounds per acre then match the corresponding number found on chute scale to the front edge of chute bracket. **DO NOT SET GATE BELOW 1 1/2 INCHES.** Check conveyor daily and adjust as needed. Be sure grade B bolts, clevis, and parts found on hitch are in good condition. Replace any worn parts before using. This unit is for field application. Read NCI Parts Books for further instructions. Remove transport devices.

Part No:
NC-DC49168045