

HAYVAN manufactured by AG-MEIER INDUSTRIES

NO TILL DRILL



OPERATOR'S MANUAL

The Offset Disc Approach To NoTill

5/18/15

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SAFETY INSTRUCTIONS



- Keep hands and clothing away from chains and sprockets while in operation.
- Never ride or permit others to ride on the unit when in motion.
- The walkboard is to be used for loading the hopper only.
- Leave drill in lowered position when not in use.
- Reduce speed when transporting or using on rough or uneven ground.
- Do not turn drive unit by hand to check seeders.
- Do not attempt to pull material from any part of the drill while it is in operation.
- Do not begin to use the drill until you are sure that everyone is clear of the machine and no tools are lying on or in the machine.
- Always place cylinder stops on cylinders when working on or adjusting drill in its raised position.



SAFETY FIRST

MAINTENANCE

Prior to Initial Use:

1. Prepare tractor for a 3-Point Category 2 hook-up, if necessary.
2. Lubricate grease fittings on all footpieces. (page 2)
3. Check all drive chains for proper adjustment.

After Initial 1 to 2 Hours of Use & Periodically Thereafter:

1. Tighten all bolts. Do not over tighten angle strap bolts.
2. Check drive chains for tightness.
3. Lubricate grease fittings daily.

SETTINGS

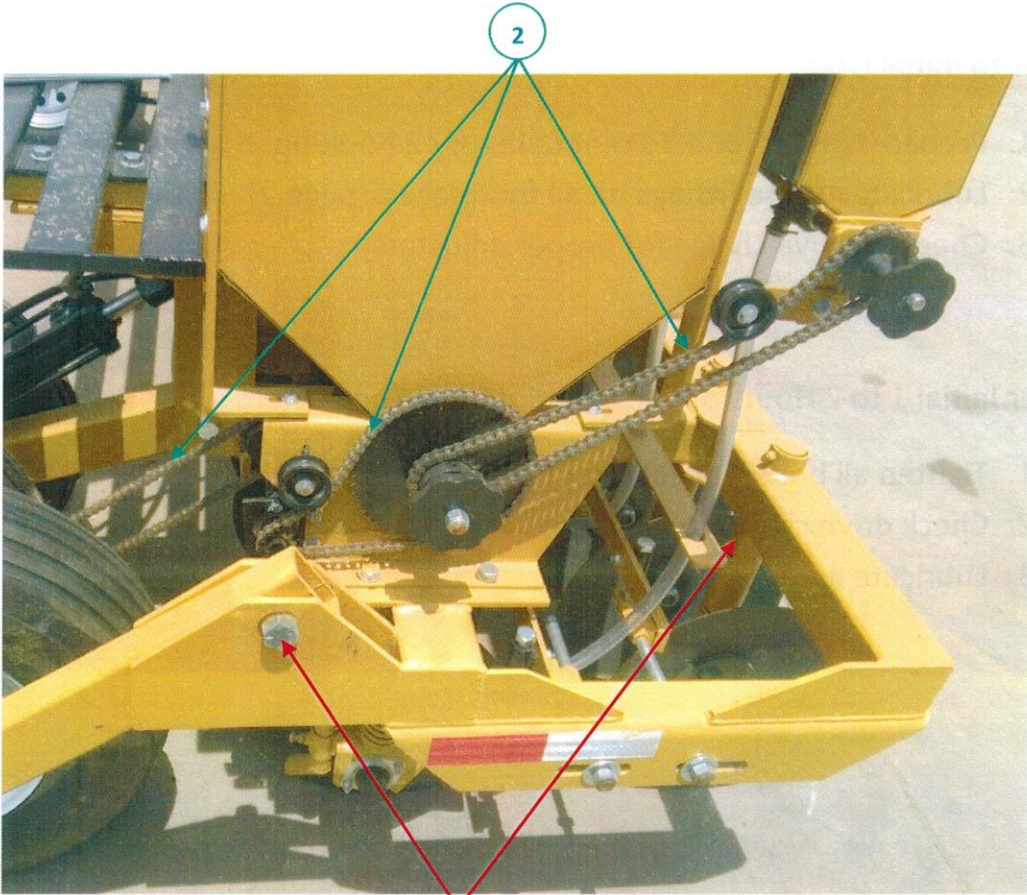
Drill

1. Adjust third (top) link to level drill.
2. Adjust disc angle for desired furrow width and depth. (page 3)
3. Set gauge wheels to control depth. (page 4)

Seed Box

1. Set seed flow adjustment by reference to seed charts (page 10 & 11) in seed box.
2. Check that all seed tubes and clamps are in proper placement.

LUBRICATION



1

1 – Lubrication Points

2 – Drive Chain



2

Controlling Furrow Width & Depth

Planting depth is controlled by two different adjustments: gauge wheels, and disc angle. When both gangs of discs are set in a straight line position the narrowest furrow is obtained (approx 1 inch), dependent upon soil conditions. To increase furrow width, but not depth, increase angle of disc and lower gauge wheels. Settings will vary and are dependent upon soil conditions. Maximum furrow width is 4 inches.

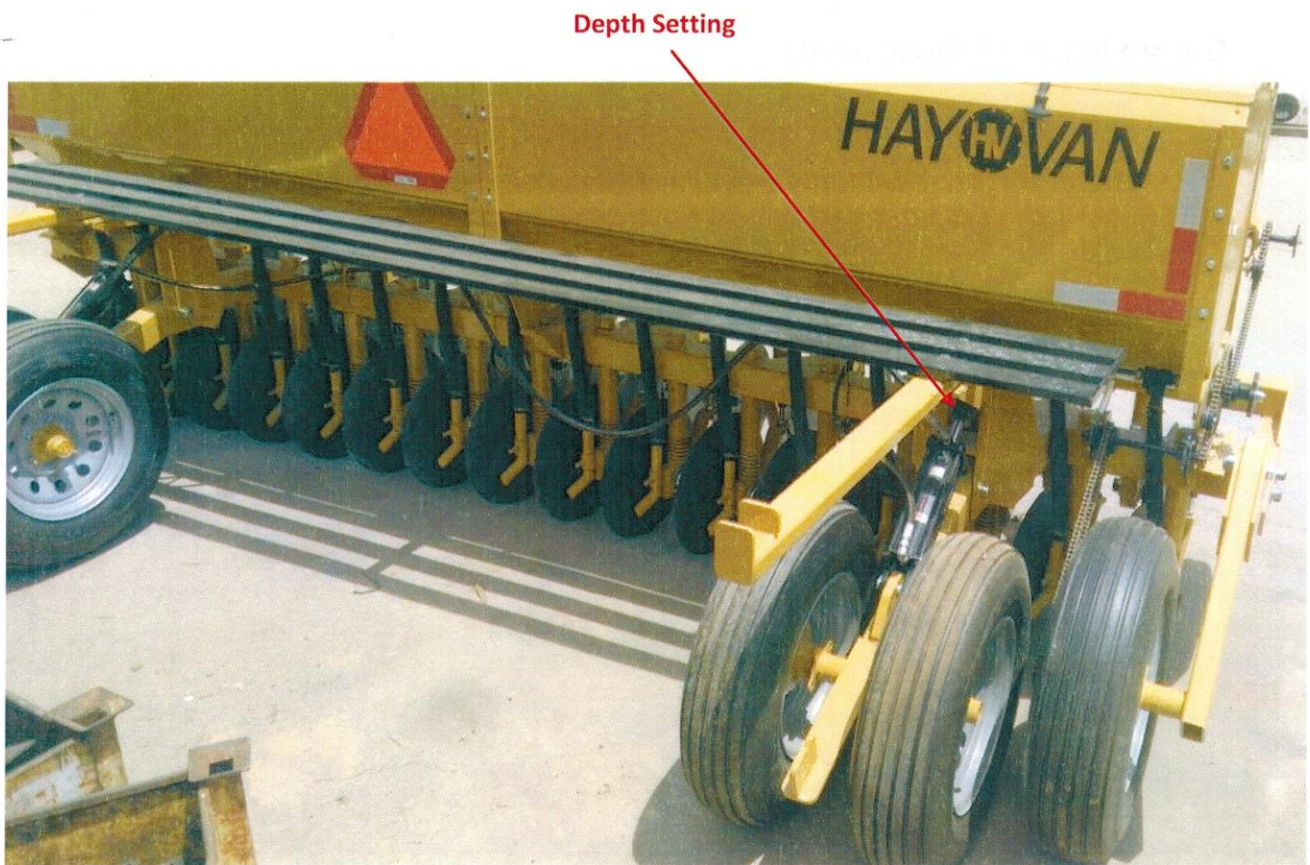
Changing Disc Angle:

Disc angle is adjusted one gang at a time. First, loosen inside locknuts on each end of the disc adjusting rod. To increase the disc angle, loosen the disc adjusting rod bolt on the left end of the disc gang. Change the disc angle by turning the rod adjustment on the right side clockwise. When the required pitch is obtained, tighten locknuts on both ends.

Gauge Wheel Adjustment:

Spin adjusting nut on right side cylinder. The right side cylinder drives the other, so it will only travel as far as the right side cylinder allows.

CHANGING DISC ANGLE



Setting Seed Rates

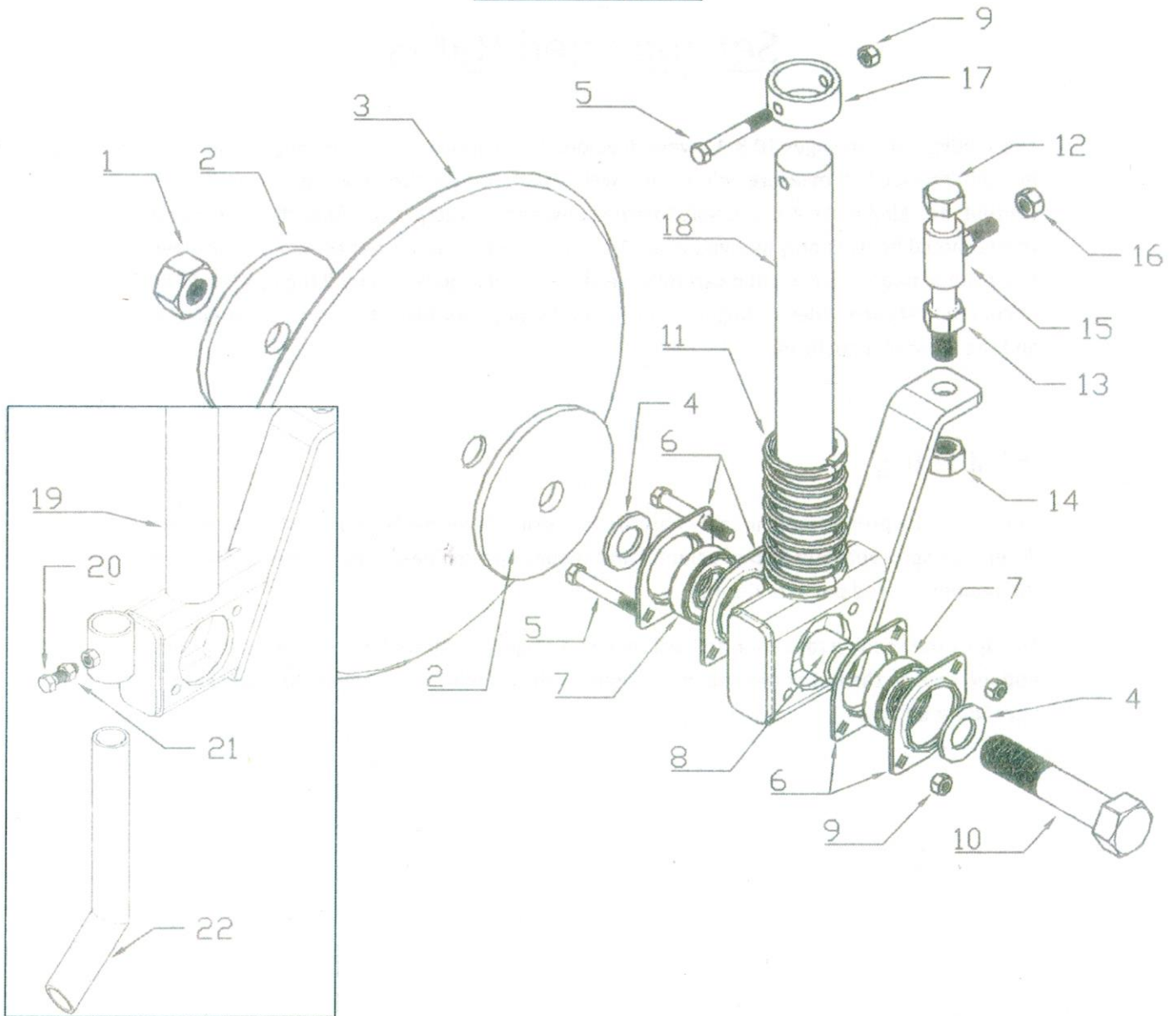
The seeding rate on pages 10 & 11 were developed for various seeds in pounds per acre. The fact that the seeders measure volume, net weight, variation in size, type, variety, moisture content, and kind make it impossible to predict exact seed rates. Therefore, the seeding rate charts should be used only as a guideline. To achieve exact pounds per acre fill the box level full, plant a measured acre, and carefully weigh the seed required to refill the box level full. Then, readjust the seeder setting to compensate for any variations between the rate desired and the amount actually planted.

Initial Setting

Determine the proper seeding rate chart for your drill. Under the type of seed to be planted determine sprocket ratio (top of column) and seeder opening (left margin) corresponding to the pounds of seed per acre desired.

To adjust the seeding rate your drill will require a single adjustment on the right end of the hopper. Loosen the nut at the end of the seeding shaft and turn the adjustment wheel to alter the seed flow.

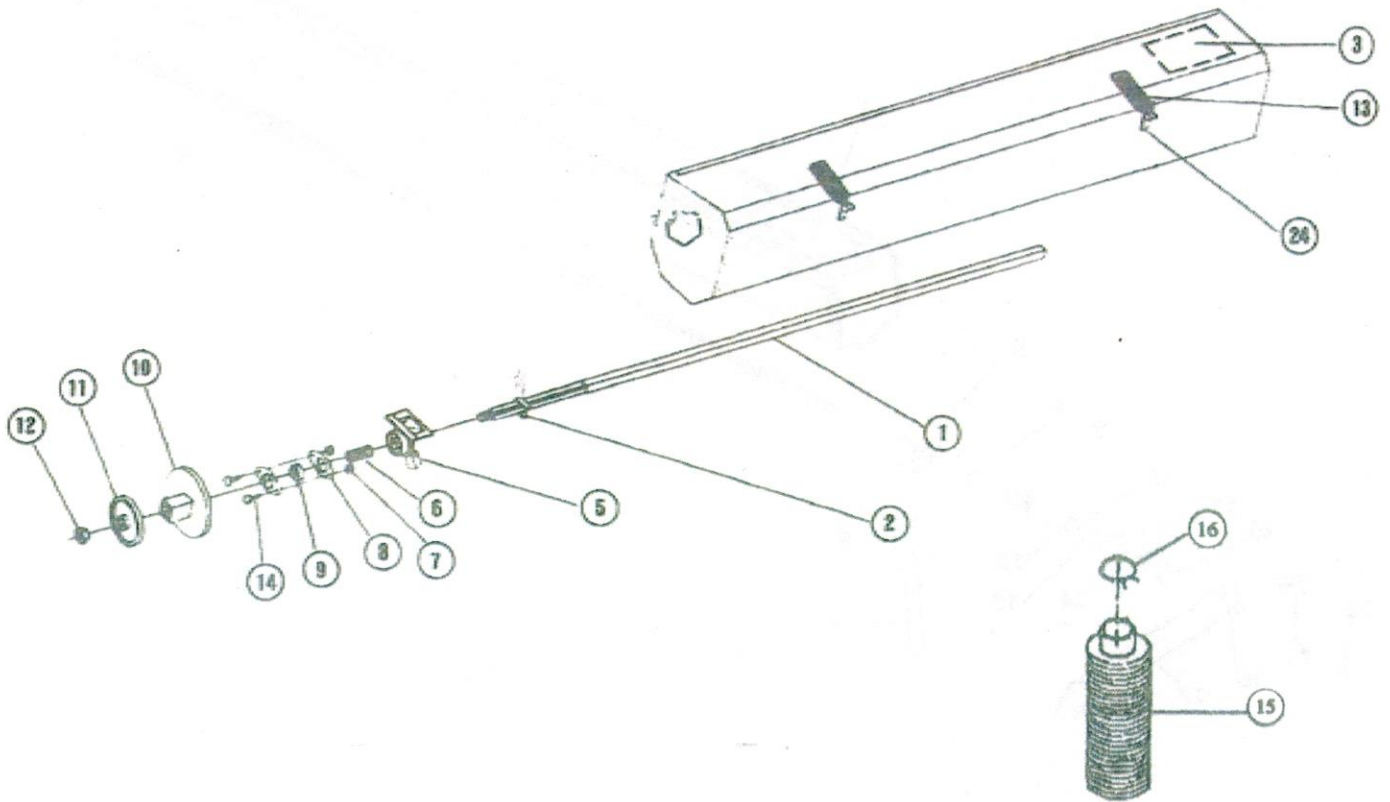
FOOT PIECE



REF	Part #	Description
1	10200068	1-1/8" Lock Nut
2	32000117	Backup Plate
3	200-040	18" Disc
4	10200304	Machine Washer
5	10100276	Bolt 3/8" x 3" Grade 5
6	200-070	Bearing Flange 1-1/8"
7	200-060	Sealed Bearing 1-1/8"
8	32000130	Spacer
9	30019	3/8" Lock Nut
10	10100814	Bolt 1-1/8" x 5-1/2"
11	200-090	Spring 5" x 2"

REF	Part #	Description
12	32517	Bolt 3/4" x 6"
13	30028	Hex Nut 3/4"
14	32098	Lock Nut 3/4"
15	32000132	Bushing w/ Welded Bolt
16	10200063	Lock Nut 1/2"
17	32000118	Foot Piece Collar
18	32000133	Foot Piece, Front
19	32000134	Foot Piece, Rear
20	30053	Bolt 3/8" x 1"
21	30018	Hex Nut 3/8"
22	32000131	Seed Drop Pipe

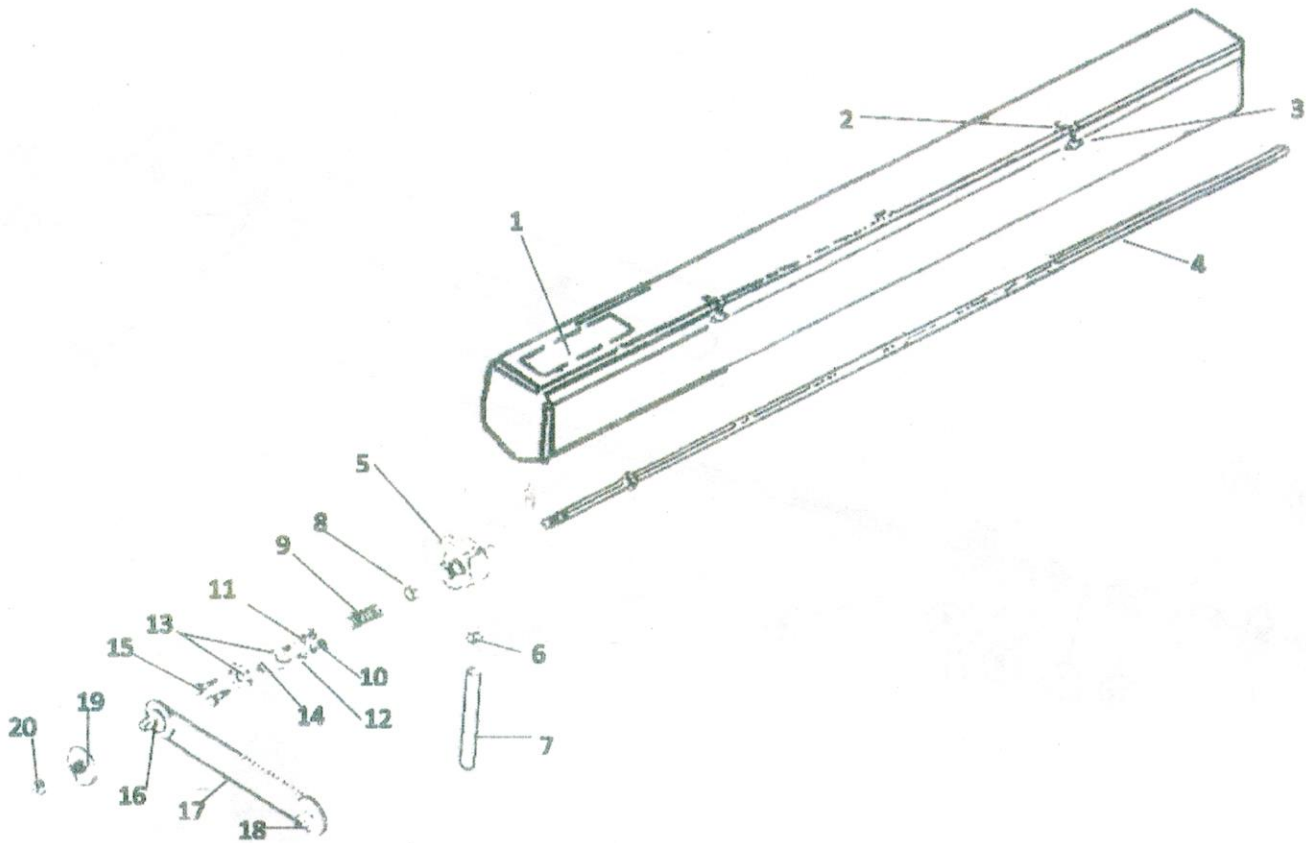
MAIN HOPPER



REF	Part #	Description
1	400-010	Seeder Shaft 80" Drill
	400-011	Seeder Shaft 120" Drill
	400-012	Seeder Shaft 160" Drill
2	500-100	7/8" Seeder Lock Collar
3	400-014	Seed Rate Decal
5	400-015	Complete Seeder Assembly
6	400-016	Return Spring
7	30019	3/8" Nylon Lock Nut
8	400-018	Bearing Flange

REF	Part #	Description
9	400-019	3/4" Bore Bearing
10	400-020	54 Tooth Sprocket
11	400-021	Adjusting Hand Wheel
12	32343	5/8" Nylon Lock Nut
13	400-023	Rubber Snubber
14	30054	3/8" x 1-1/4" Grade 5 Bolt
24	400-025	Rubber Snubber Catch
15	400-026	Rubber Seed Tube
16	400-027	Hose Clamp

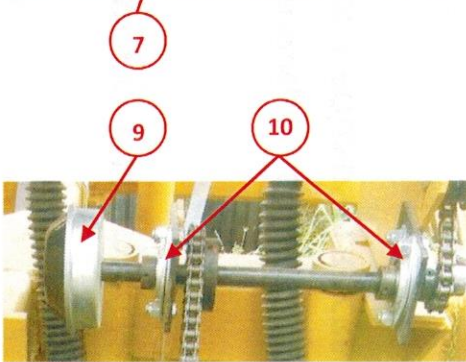
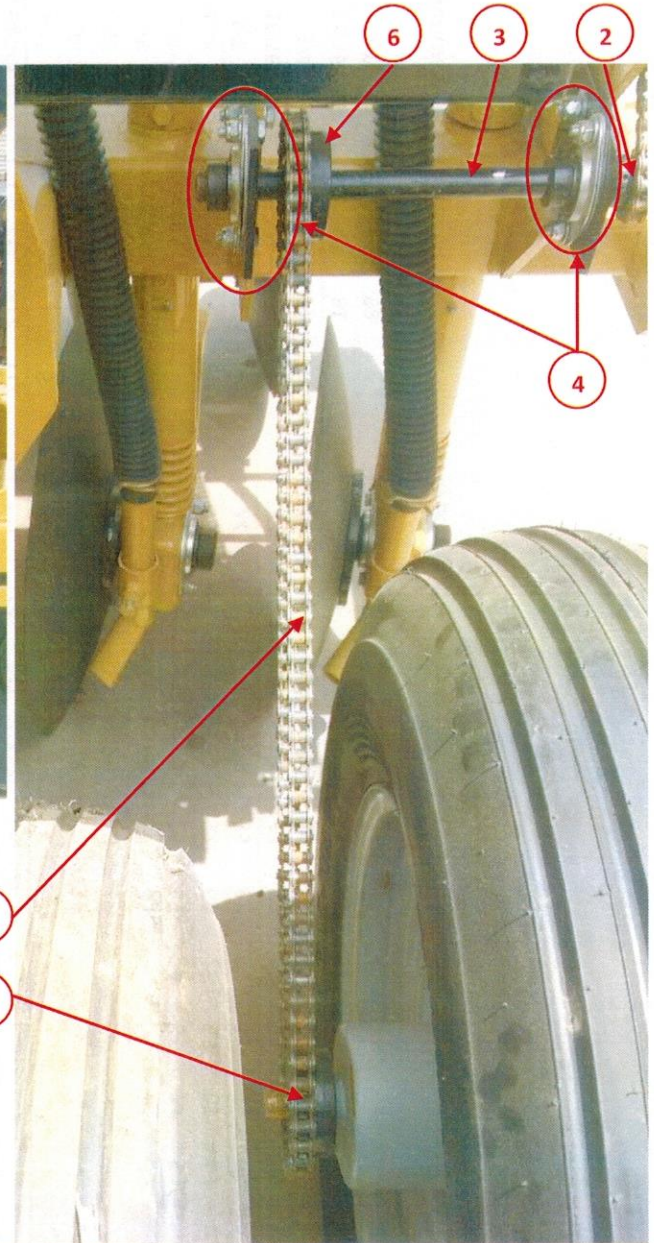
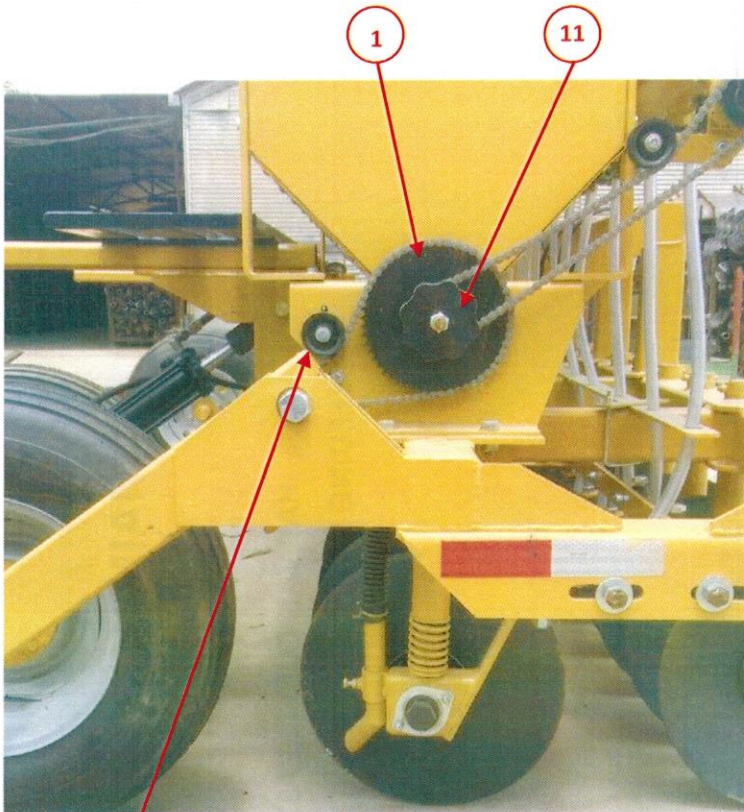
LEGUME HOPPER



REF	Part #	Description
1	500-010	Seed Chart
2	400-023	Rubber Snubber
3	400-025	Rubber Snubber Catch
4	500-040	Seeder Shaft 80" & 120"
	500-041	Seeder Shaft 160"
5	500-055	Metering Unit
6	500-070	Seed Tube Clamp
7	400-026	Seed Tube
8	400-013	9/16" Seeder Shaft Collar
9	500-110	Spring
10	30015	Hex Nut 1/4"

REF	Part #	Description
11	30133	Flat Washer 1/4"
12		Shim
13	500-150	Flange
14	500-160	Bearing, 1/2" Bore
15	30040	Hex Head Bolt 1/4" x 1/2"
16	500-200	20 Tooth Sprocket
17	600-080	#40 Roller Chain
18	500-180	20 Tooth Sprocket (top)
19	500-210	Hand Wheel
20	30018	3/8" Nut

DRIVE ASSEMBLY



REF	Part #	Description
1	400-020	54 Tooth Sprocket
2	600-020	10 Tooth Sprocket
3	600-040	Jackshaft – 80" & 120" Drills Jackshaft – 160" Drills
4	600-050	Jackshaft Bearing Assembly
5	500-180	20 Tooth Sprocket

REF	Part #	Description
6	500-200	20 Tooth Sprocket
7	600-090	Idler Pulley
8	600-080	#40 Roller Chain (all chains)
9	653-003	Acreage Counter
10	500-150	Flange
11	500-210	Hand Wheel

MAIN HOPPER SEED CHART

HAY VAN CURRIE PASTUR-NO TILL DRILL SEEDING RATE CHART – RATES IN POUNDS PER ACRE

SPROCKET RATIO	COTTON		SOYBEANS		MILO		SAFFLOWER		WHEAT & RYE		BARLEY		OATS		RICE		ALFALFA*	FLAX*	FESQUE	
	1:2	1:1	2:1	1:2	1:1	1:2	1:1	1:2	1:1	1:2	1:1	1:2	1:1	1:2	1:1	1:2	1:2	1:2	1:2	1:1
3/16	-	-	-	-	5	10	-	-	3	7	-	-	-	-	-	-	12	7	1	3
1/4	-	-	-	-	12	24	7	10	10	18	7	12	-	-	-	-	18	12	3	7
5/16	-	-	-	-	18	34	9	18	14	29	10	19	-	-	-	-	21	18	9	14
3/8	-	-	-	-	-	-	10	21	19	40	18	35	-	-	-	-	24	21	10	19
1/2	16	31	-	-	-	-	18	35	33	65	26	53	24	45	24	53	27	21	14	25
9/16	21	45	-	-	-	-	21	42	36	77	31	60	27	53	31	63	33	23	16	29
5/8	24	51	31	60	-	-	24	49	40	88	35	67	31	57	35	70	35	25	19	35
11/16	30	57	34	69	-	-	27	56	45	93	42	77	33	67	38	80	38	27	21	38
3/4	33	69	38	77	-	-	35	70	47	106	45	86	38	70	42	89	-	-	23	42
13/16	38	79	47	91	-	-	38	73	60	117	51	91	41	84	45	98	-	-	25	45
7/8	41	82	49	98	-	-	42	80	63	124	54	93	45	91	49	104	-	-	27	49

CAUTION: Rates are approximate. Operator should verify actual output. Refer to operator's manual before using this chart.

LEGUME BOX SEED CHART (OPTIONAL ATTACHMENT)

HAY VAN CURRIE PASTUR-NO TILL DRILL

SEEDING RATE CHART – RATES IN POUNDS PER ACRE

FOR HAY VAN GRASS SEED ATTACHMENT – 10 INCH SPACED – SMALL HOPPER

NOTE: (1) 1:2 ? will produce 1/2 rate shown – 2:1 ratio will produce x2 rate shown.

- (2) The rates shown on this chart are based on seeds of average weight per bushel. Increase opening for lighter seeds; reduce opening for heavier seeds. The operator should verify actual output.
- (3) When drilling seeds not shown on the chart compare weight and size of seeds with those shown and use same settings.

SEEDER OPENING (INCHES)	BIRDSFOOT TREFOIL SERICEA & LESPEDEZA HULLED CRINSON CLOVER	ALFALFA, RED, ALSIKE & LADINO CLOVERS	RED TOP, TIMOTHY, SAND & LOVE GRASS	REED CANARY GRASS, KENTUCKY BLUEGRASS	LESPEDEZA UNHULLED	BROOM CORN, HOG MILLET	MILLET	SUDAN GRASS	BERNUDA, CANARY GRASS	RYE GRASS ALTA FESCUE	CRESTED WHEAT, ORCHARD GRASS
1-1/8	1:1	1:1	1:1	1:1	1:1	1:1	1:1	1:1	1:1	1:1	1:1
1/16	2	1½	1½	½	½	1½	1½	-	1	-	-
1/8	4	3½	3	1	1	3½	3½	1	1½	-	-
3/16	8	5	4	2	1½	5	5	5	3	½	1
3/8	10	8½	6	3½	3	10	6½	6½	4½	1½	1½
5/8	14	12	9	4½	5	14	12	10	6	2½	3½
7/8	19	15½	12	5	8½	19½	15½	13½	8½	3½	4½
1-1/8	24	19	15½	7½	8½	25½	19½	19	10½	5	5

CAUTION: Rates are approximate. Operator should verify actual output. Refer to operator's manual before using this chart.

OPERATING TIPS

PROBLEM	SOLUTION
Planting too shallow	Raise gauge wheels and/or increase furrow width.
Planting too deep	Lower gauge wheels. If desired, decrease furrow width.
Drive wheel not turning	Lower gauge wheels to make contact with ground. If wheels are in the air drive chain will not turn.
Gangs penetrating different depths	Adjust third (top) link to level drill.
Chain running off	Pivot bolt on drive wheel too loose. Check chain alignment and tension.