

Installation Instructions



1300 13' End Wheel Drill 1300 Fertilizer Assembly Upgrade

Used with:

- 1300 13' End Wheel Drill



When you see this symbol, the subsequent instructions and warnings are serious - follow without exception. Your life and the lives of others depend on it!

General Information

These instructions explain how to install the 1300 Fertilizer Assembly Upgrade. The Fertilizer Assembly Upgrade allows conversion of a standard seed box to fertilizer. These instructions apply to:

175-209A	1300 Fertilizer Upgrade 6
175-210A	1300 Fertilizer Upgrade 7 1/2
175-211A	1300 Fertilizer Upgrade 10

Before You Start

Page 10 is a detailed listing of parts included in the 1300 Fertilizer Assembly Upgrade. Use this list to inventory parts received.

Tools Required

- Basic Hand Tools

Assembly Instructions

Install Fertilizer

Refer to Figure 1

1. Replace gas spring (1) on all partitions. Remove ball stud (2) and lock nut (3) securing spring (1) to box lid and spring (1) to partition. Discard all pieces.
2. Attach new gas spring (1) provided in kit to box lid using new ball stud (2) and 5/16-18 lock nut (3). Complete installation by securing spring (1) to partition using new ball stud (2) and 5/16-18 lock nut (3).
3. Repeat steps 4 and 5 on remaining partitions.

Refer to Figure 2

4. Install a set of inner (6) and outer (3) divider clips on both sides of each box partition (1). Use 5/16-18 x 1 1/4 bolts (5) and 5/16-18 hex nuts (2) to secure clips (6 and 3) to partitions (1). Leave bolts loose.
5. Attach a divider angle bracket (4) to each side of each partition (1) using 5/16-18 x 1 1/4 bolts (5) and 5/16-18 hex nuts (2).

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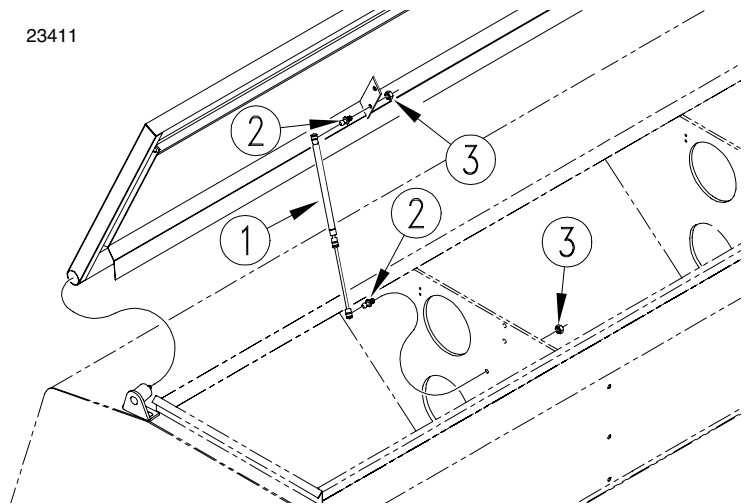


Figure 1
Gas Springs

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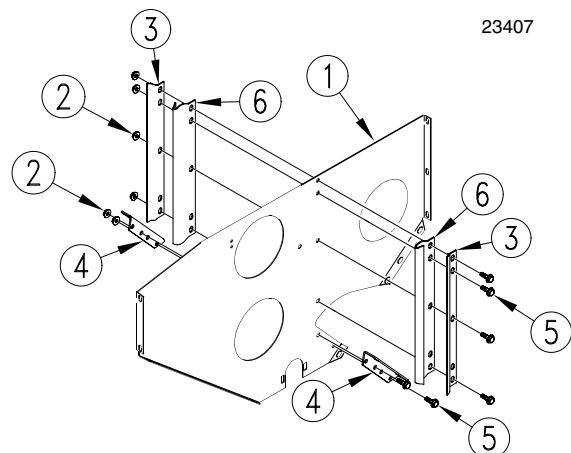


Figure 2
Box Partition

2 | 1300 Fertilizer Assembly Upgrade

Refer to Figure 3

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- Secure two end mounted divider clips (2) to each end of the box (4) using 5/16-18 x 3/4 bolts (3) and 5/16-18 hex nuts (1). Leave bolts loose.

Refer to Figure 4

- Attach knobs (3) and retaining clips (7) to bottom divider brackets (8, 9, and 2) using 1/4-20 x 1 bolts (5) and 1/4-20 hex lock nuts (6).
- Place left-hand bottom divider bracket (8) in box on left-hand side of drill. Secure divider bracket (8) to partition and box using 3/8-16 x 1 bolts (1) and 3/8-16 lock nuts (4).
- Place center bottom divider brackets (9) in box in center of drill. Secure divider brackets (9) to partitions using 3/8-16 x 1 bolts (1) and 3/8-16 lock nuts (4).
- Place right-hand bottom divider bracket (2) in box in center of drill. Secure divider bracket (2) to partition and box using 3/8-16 x 1 bolts (1) and 3/8-16 lock nuts (4).

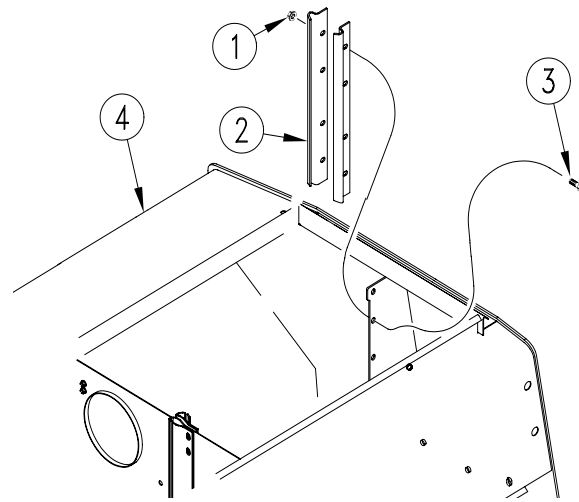
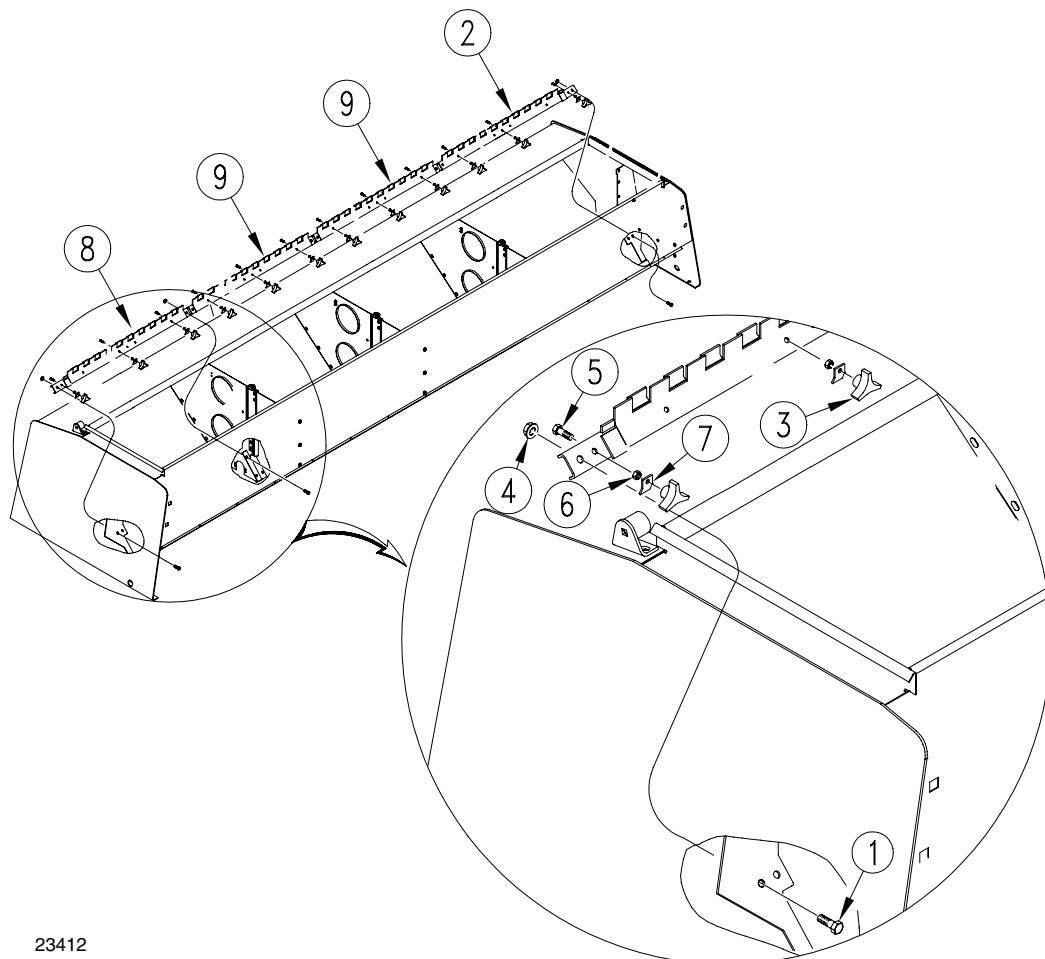


Figure 3
End Mounted Divider Clip



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Figure 4
Divider Brackets

11. Slide divider inserts into divider clips in between partitions.
12. Remove top two bolts from each partition divider clip.

Refer to Figure 5

13. Attach spill flap to box by securing one top bar partition brace to each box partition divider clip. Use bolts removed in step 12 to secure brace to partition divider clip.

NOTE: To complete installation of fertilizer upgrade, there will need to be two people working on the box. Someone will need to be underneath the box, while someone else will need to be inside the box.

14. Unscrew fertilizer cap plate from inside box. Remove 1/4-20 x 5/8 bolts and 1/4-20 hex lock nuts and 5/16-18 x 3/4 bolts and 5/16-18 hex flange nuts securing fertilizer cap plate to box and box partitions. Discard all pieces.

Refer to Figure 6

15. Insert seed/fertilizer flap (8) up through opening under box. Using retaining clips to hold flap up, insert rubber belting hinge (5) on flap between bottom of partitions (1) and channel (7).
16. Insert fertilizer tray (3) up through opening under box. Insert tray (3) between rubber belting hinge (5) under partitions (1) and channel (7).
17. From inside box secure partitions (1), rubber belting hinge (5), fertilizer tray (3), and channel (7) using 5/16-18 x 3/4 bolts (4) and 5/16-18 hex flange nuts (6) supplied in kit.
18. Place hinge clamp strips over top of rubber belting hinge. Secure hinge clamp strips, rubber belting hinge, fertilizer tray, and channel using 1/4-20 x 1 bolts and 1/4-20 hex lock nuts.
19. Attach opposite side of fertilizer tray (3) to box using 1/4-20 x 5/8 bolts (2) and 1/4-20 hex lock nuts.
20. Tighten all bolts.

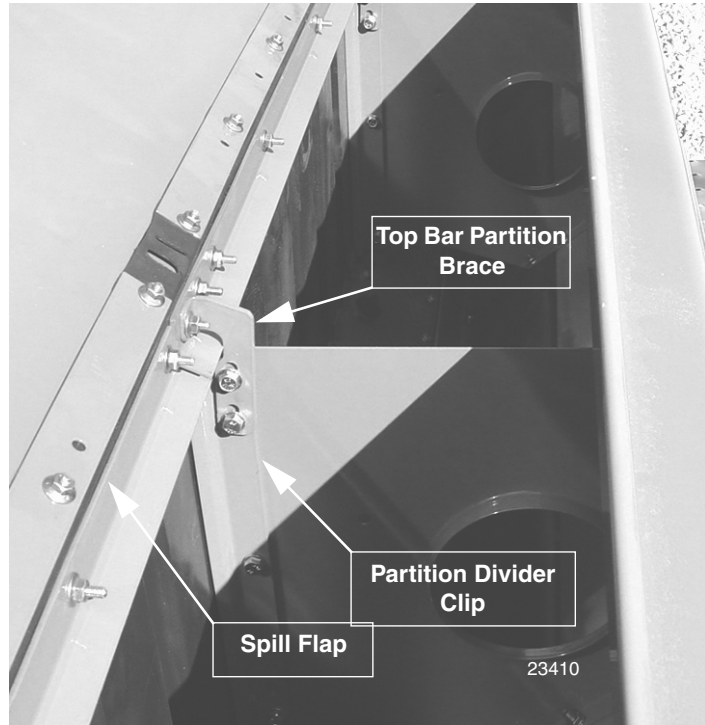


Figure 5
Top Bar Partition Brace

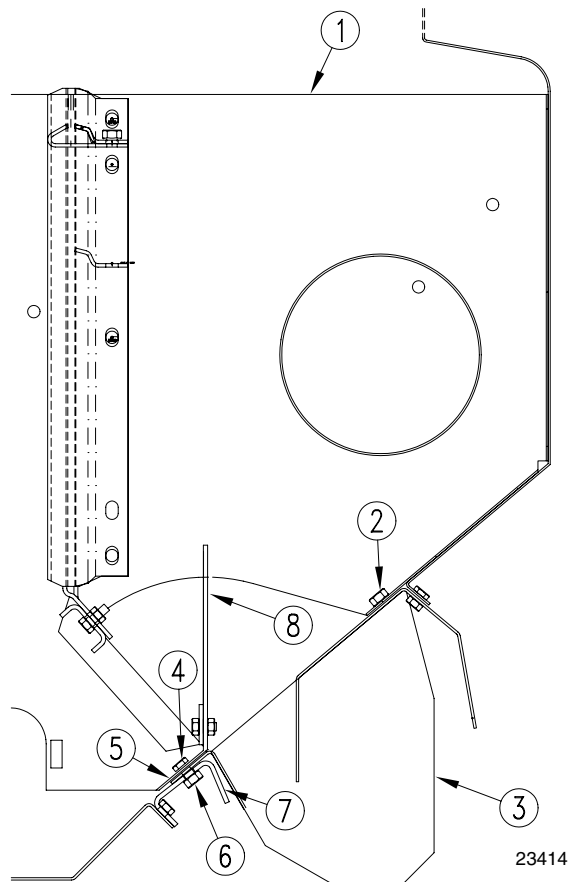
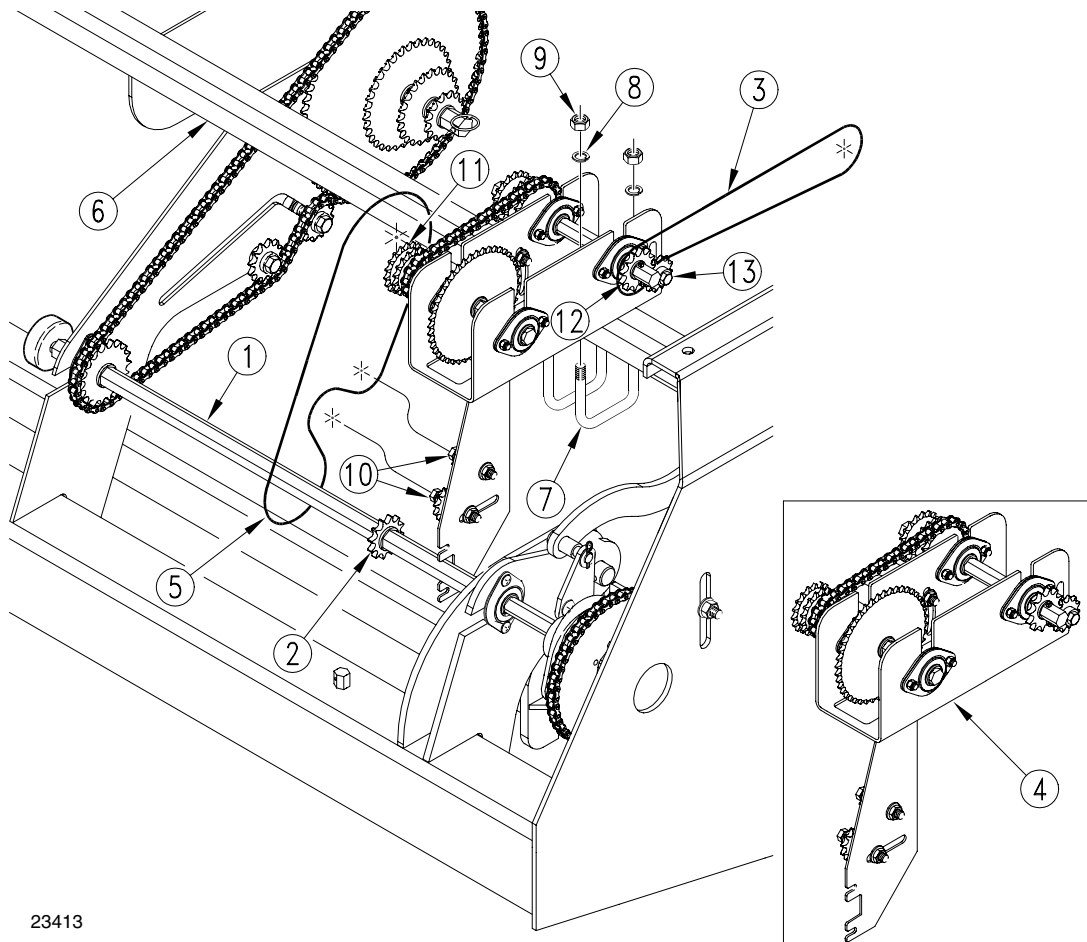


Figure 6
Fertilizer Tray Installation

4 | 1300 Fertilizer Assembly Upgrade

Install Fertilizer Drive Assembly*Refer to Figure 7*

1. Remove jackshaft (1) from left-hand side of drill.
NOTE: It may be necessary to remove other components so that jackshaft (1) may be removed. For proper reassembly, keep all pieces for reuse and note locations of all other pieces used.
2. Slide sprocket (2) and chain (90 pitches) (5) onto jackshaft (1). Replace jackshaft (1) and reassemble components.
3. Secure fertilizer drive box (4) to main frame (6) using two 1/2-13 x 2 x 3 u-bolts (7), 1/2 lock washers (8), and 1/2-13 hex nuts (9).
4. Attach chain (5) to sprocket (2), two 12T idler sprockets (10), and 18T sprocket (11). NOTE: Be sure to route the chain (5) as shown in the illustration.
5. Route chain (125 pitches) (3) along 12T sprocket (12) and 12T idler sprocket (13) as shown in the illustration. Attach chain (3) to sprocket located on the fertilizer tray.

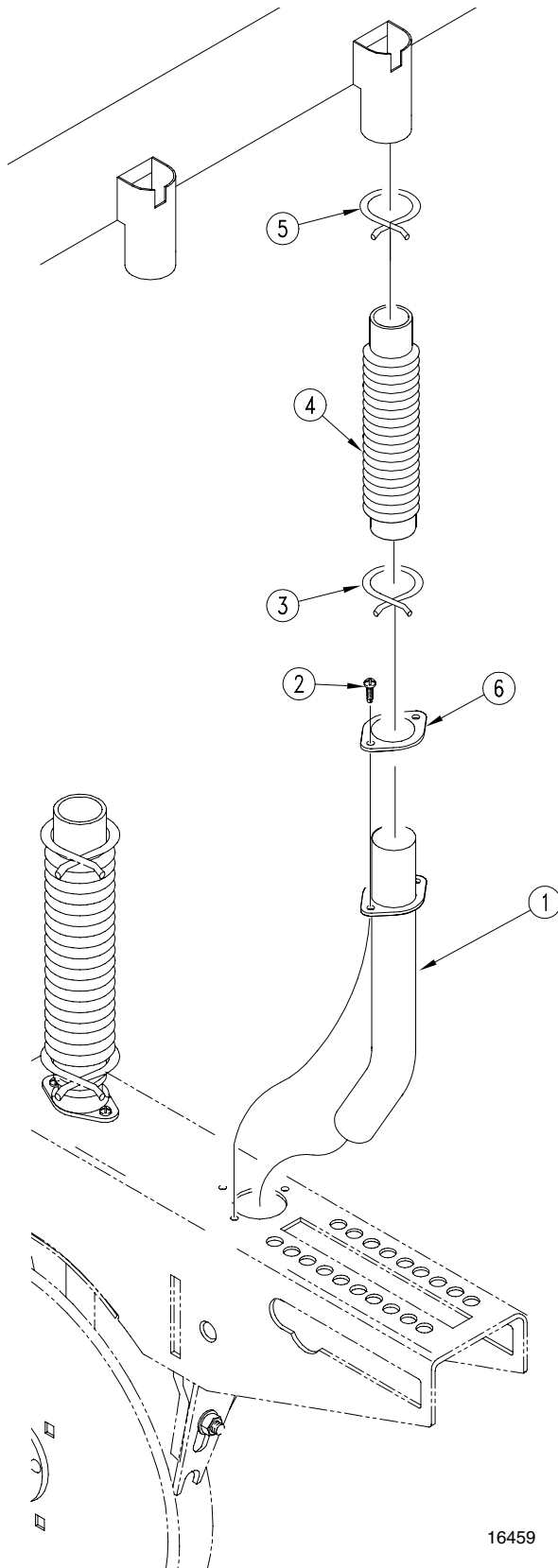


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Figure 7
Fertilizer Drive

Install Fertilizer Hose*Refer to Figure 8*

1. Secure plastic fertilizer hose (1) and small seeds reinforcement ring (6) to rear of opener using two hex screws (2).
2. Attach seed hose (4) using 1 1/2 hose clamp (3) to plastic fertilizer hose (1). Secure other end of seed hose (4) to fertilizer tray using 1 5/8 hose clamp (5).
3. Complete steps 1 and 2 on all openers.



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Figure 8
Fertilizer Hose

6 | 1300 Fertilizer Assembly Upgrade**175-209A 1300 13' Fertilizer Upgrade 6**

Your kit includes:

Qty.	Part No.	Part Description
1	175-186K	1300 FERT DRIVE SUB ASSEMBLY
1	175-187K	1300 FERT TRAY ASSEMBLY 6
1	175-190S	1300 SPILL FLAP SUB ASSEMBLY
1	175-191S	1300 SEED/FERT FLAP SUB ASSEMBLY
1	175-212L	1300 FERT UPGRADE BOX OF PARTS
1	175-213L	1300 FERT DROP TUBE BOX 6
2	175-327D	1300 HINGE CLAMP STRIP END
2	195-197D	HINGE CLAMP STRIP CTR
26	800-009C	CLAMP HOSE 1 5/8 NO. 26
26	816-007C	SEED HOSE X 59 RIBS 1.5 - 1.2
4	817-321C	DIVIDER INSERT 33 X NO OFFS
1	175-196M	MANUAL 1300 FERTILIZER ASSEMBLY UPGRADE

175-212L 1300 Fert Upgrade Box Of Parts

Your kit includes:

Qty.	Part No.	Part Description
4	195-194D	DIVIDER CLIP, END MOUNTED
6	195-205D	DIVIDER ANGLE BRACKET
6	195-206D	DIVIDER CLIP INNER
6	195-207D	DIVIDER CLIP OUTER
1	175-197B	1300 FERT COMMON BLT BAG
1	813-033C	BOX 16 1/2 X 16 1/2 X 5 1/2
1	818-837C	DECAL FERTILIZER RATE 13' EW
1	818-838C	DECAL FERT CHAIN ROUTE 13'
3	890-308C	9 1/4-15 x 70LB GAS SPRING
2	195-181H	DIVIDER BOTTOM BRACKET CTR
1	195-182H	DIVIDER BOTTOM BRACKET LH
1	195-183H	DIVIDER BOTTOM BRACKET RH
12	195-208D	RETAINER CLIP
1	890-179C	SILICON 35YR CLEAR 5.5OZ #22723

175-197B 1300 Fert Common BLT Bag

Your kit includes:

Qty.	Part No.	Part Description
1	136-031D	CHAIN RL #40 90 PITCHES
1	136-033D	CHAIN RL #40 125 PITCHES
12	802-005C	HHCS 1/4-20 X 1 GR5
8	802-017C	HHCS 3/8-16 X 1 GR5
19	802-196C	HFSS 1/4-20 X 5/8 GR5
22	802-375C	HFSS 1/4-20 X 1 GR5
12	802-387C	HFS 5/16-18 X 3/4 GR5
21	802-442C	HFSS 5/16-18 X 1 1/4
12	803-007C	NUT LOCK 1/4-20 PLT
6	803-011C	NUT LOCK 5/16-18 PLT
4	803-020C	NUT HEX 1/2-13 PLT
41	803-088C	NUT HEX LOCK 1/4-20 FLG
33	803-199C	NUT HEX FLANGE 5/16-18
8	803-209C	NUT FLANGE LOCK 3/8-16 PLT
4	804-015C	WASHER LOCK SPRING 1/2 PLT
2	806-005C	U-BOLT 1/2-13 X 2 X 3 GR5
1	808-143C	SPKT 40B12 7/8 HEX BORE
1	813-026C	8 X 12 WOVEN POLYPROPYLENE BAG
12	817-324C	KNOB 1/4-20 FEMALE THD

175-213L 1300 Fert Drop Tube Box 6

Your kit includes:

Qty.	Part No.	Part Description
26	133-065D	SML SDS TB REINFORCEMENT
26	800-008C	CLAMP HOSE 1 1/2 NO. 24
52	801-002C	SCREW HEX SLT 10-16 X 1/2P.TH D
1	813-033C	BOX 16 1/2 X 16 1/2 X 5 1/2
26	817-346C	PLASTIC FERTILIZER TUBE

8 | 1300 Fertilizer Assembly Upgrade**175-210A 1300 13' Fertilizer Upgrade 7 1/2**

Your kit includes:

Qty.	Part No.	Part Description
1	175-186K	1300 FERT DRIVE SUB ASSEMBLY
1	178-188K	1300 FERT TRAY ASSEMBLY 7 1/2
1	175-190S	1300 SPILL FLAP SUB ASSEMBLY
1	175-191S	1300 SEED/FERT FLAP SUB ASSEMBLY
1	175-212L	1300 FERT UPGRADE BOX OF PARTS
1	175-214L	1300 FERT DROP TUBE BOX 7 1/2
2	175-327D	1300 HINGE CLAMP STRIP END
2	195-197D	HINGE CLAMP STRIP CTR
21	800-009C	CLAMP HOSE 1 5/8 NO. 26
21	816-007C	SEED HOSE X 59 RIBS 1.5 -1.2
4	817-321C	DIVIDER INSERT 33 X NO OFFS
1	175-196M	MANUAL 1300 FERTILIZER ASSEMBLY UPGRADE

175-212L 1300 Fert Upgrade Box Of Parts

Your kit includes:

Qty.	Part No.	Part Description
4	195-194D	DIVIDER CLIP, END MOUNTED
6	195-205D	DIVIDER ANGLE BRACKET
6	195-206D	DIVIDER CLIP INNER
6	195-207D	DIVIDER CLIP OUTER
1	175-197B	1300 FERT COMMON BLT BAG
1	813-033C	BOX 16 1/2 X 16 1/2 X 5 1/2
1	818-837C	DECAL FERTILIZER RATE 13' EW
1	818-838C	DECAL FERT CHAIN ROUTE 13'
3	890-308C	9 1/4-15 x 70LB GAS SPRING
2	195-181H	DIVIDER BOTTOM BRACKET CTR
1	195-182H	DIVIDER BOTTOM BRACKET LH
1	195-183H	DIVIDER BOTTOM BRACKET RH
12	195-208D	RETAINER CLIP
1	890-179C	SILICON 35YR CLEAR 5.5OZ #22723

175-197B 1300 Fert Common BLT Bag

Your kit includes:

Qty.	Part No.	Part Description
1	136-031D	CHAIN RL #40 90 PITCHES
1	136-033D	CHAIN RL #40 125 PITCHES
12	802-005C	HHCS 1/4-20 X 1 GR5
8	802-017C	HHCS 3/8-16 X 1 GR5
19	802-196C	HFSS 1/4-20 X 5/8 GR5
22	802-375C	HFSS 1/4-20 X 1 GR5
12	802-387C	HFS 5/16-18 X 3/4 GR5
21	802-442C	HFSS 5/16-18 X 1 1/4
12	803-007C	NUT LOCK 1/4-20 PLT
6	803-011C	NUT LOCK 5/16-18 PLT
4	803-020C	NUT HEX 1/2-13 PLT
41	803-088C	NUT HEX LOCK 1/4-20 FLG
33	803-199C	NUT HEX FLANGE 5/16-18
8	803-209C	NUT FLANGE LOCK 3/8-16 PLT
4	804-015C	WASHER LOCK SPRING 1/2 PLT
2	806-005C	U-BOLT 1/2-13 X 2 X 3 GR5
1	808-143C	SPKT 40B12 7/8 HEX BORE
1	813-026C	8 X 12 WOVEN POLYPROPYLENE BAG
12	817-324C	KNOB 1/4-20 FEMALE THD

175-214L 1300 Fert Drop Tube Box 7 1/2

Your kit includes:

Qty.	Part No.	Part Description
21	133-065D	SML SDS TB REINFORCEMENT
21	800-008C	CLAMP HOSE 1 1/2 NO. 24
42	801-002C	SCREW HEX SLT 10-16 X 1/2P.THD
1	813-033C	BOX 16 1/2 X 16 1/2 X 5 1/2
21	817-346C	PLASTIC FERTILIZER TUBE

10 | 1300 Fertilizer Assembly Upgrade**175-211A 1300 13' Fertilizer Upgrade 10**

Your kit includes:

Qty.	Part No.	Part Description
1	175-186K	1300 FERT DRIVE SUB ASSEMBLY
1	175-189K	1300 FERT TRAY ASSEMBLY 10
1	175-190S	1300 SPILL FLAP SUB ASSEMBLY
1	175-191S	1300 SEED/FERT FLAP SUB ASSEMBLY
1	175-212L	1300 FERT UPGRADE BOX OF PARTS
1	175-215L	1300 FERT DROP TUBE BOX 10
2	175-327D	1300 HINGE CLAMP STRIP END
2	195-197D	HINGE CLAMP STRIP CTR
16	800-009C	CLAMP HOSE 1 5/8 NO. 26
16	816-007C	SEED HOSE X 59 RIBS 1.5 - 1.2
4	817-321C	DIVIDER INSERT 33 X NO OFFS
1	175-196M	MANUAL 1300 FERTILIZER ASSEMBLY UPGRADE

175-212L 1300 Fert Upgrade Box Of Parts

Your kit includes:

Qty.	Part No.	Part Description
4	195-194D	DIVIDER CLIP, END MOUNTED
6	195-205D	DIVIDER ANGLE BRACKET
6	195-206D	DIVIDER CLIP INNER
6	195-207D	DIVIDER CLIP OUTER
1	175-197B	1300 FERT COMMON BLT BAG
1	813-033C	BOX 16 1/2 X 16 1/2 X 5 1/2
1	818-837C	DECAL FERTILIZER RATE 13' EW
1	818-838C	DECAL FERT CHAIN ROUTE 13'
3	890-308C	9 1/4-15 x 70LB GAS SPRING
2	195-181H	DIVIDER BOTTOM BRACKET CTR
1	195-182H	DIVIDER BOTTOM BRACKET LH
1	195-183H	DIVIDER BOTTOM BRACKET RH
12	195-208D	RETAINER CLIP
1	890-179C	SILICON 35YR CLEAR 5.5OZ #22723

175-197B 1300 Fert Common BLT Bag

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Qty.	Part No.	Part Description
1	136-031D	CHAIN RL #40 90 PITCHES
1	136-033D	CHAIN RL #40 125 PITCHES
12	802-005C	HHCS 1/4-20 X 1 GR5
8	802-017C	HHCS 3/8-16 X 1 GR5
19	802-196C	HFSS 1/4-20 X 5/8 GR5
22	802-375C	HFSS 1/4-20 X 1 GR5
12	802-387C	HFS 5/16-18 X 3/4 GR5
21	802-442C	HFSS 5/16-18 X 1 1/4
12	803-007C	NUT LOCK 1/4-20 PLT
6	803-011C	NUT LOCK 5/16-18 PLT
4	803-020C	NUT HEX 1/2-13 PLT
41	803-088C	NUT HEX LOCK 1/4-20 FLG
33	803-199C	NUT HEX FLANGE 5/16-18
8	803-209C	NUT FLANGE LOCK 3/8-16 PLT
4	804-015C	WASHER LOCK SPRING 1/2 PLT
2	806-005C	U-BOLT 1/2-13 X 2 X 3 GR5
1	808-143C	SPKT 40B12 7/8 HEX BORE
1	813-026C	8 X 12 WOVEN POLYPROPYLENE BAG
12	817-324C	KNOB 1/4-20 FEMALE THD

175-215L 1300 Fert Drop Tube Box 10

Your kit includes:

Qty.	Part No.	Part Description
16	133-065D	SML SDS TB REINFORCEMENT
16	800-008C	CLAMP HOSE 1 1/2 NO. 24
32	801-002C	SCREW HEX SLT 10-16 X 1/2P.THD
1	813-033C	BOX 16 1/2 X 16 1/2 X 5 1/2
16	817-346C	PLASTIC FERTILIZER TUBE