APS Small Seeds Box Assembly Instructions



For APS15 Series All Purpose Seeder (S/N 908756+)

Manual No. 313-775M

Before You Start



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!

IMPORTANT: Before you begin, read these instructions and check to be sure all parts and tools are accounted for. Please retain these installation instructions for future reference and parts ordering information.

These optional assembly instructions contain only information on assembling the attachment to the main unit. Please read these installation instructions and your All Purpose Seeder Operator's Manual thoroughly before beginning. Especially read information relating to safety concerns. Also included in the Operator's Manual is important information on operation, adjustment, troubleshooting, and maintenance for this attachment (some manual sections do not apply to all accessories).

A separate Parts Manual for replacement parts can be purchased from your dealer or available free of charge at www.landpride.com. Have model and serial numbers handy when placing an order.

Manual Part Numbers:

- Parts Manual 313-354P

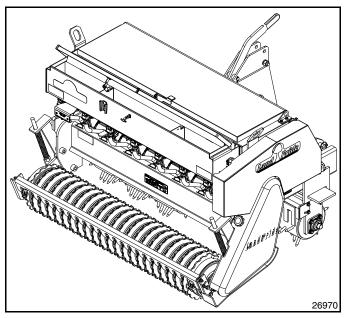
General Information

These assembly instructions apply to the optional **Small Seeds Attachments** listed below.

Starting on page 9 is a detailed listing of parts included in the kits listed below. Use the list on page 9 as a checklist to inventory parts received and to make sure you have purchased the correct kit for your All Purpose Seeder.

Small Seeds Attachments:

313-768A	APS1548 SMALL SEEDS ATTACHMENT
313-770A	APS1560 SMALL SEEDS ATTACHMENT
313-772A	APS1572 SMALL SEEDS ATTACHMENT
313-774A	APS1586 SMALL SEEDS ATTACHMENT



Small Seeds Box Attached to APS1560 Seeder Figure 1

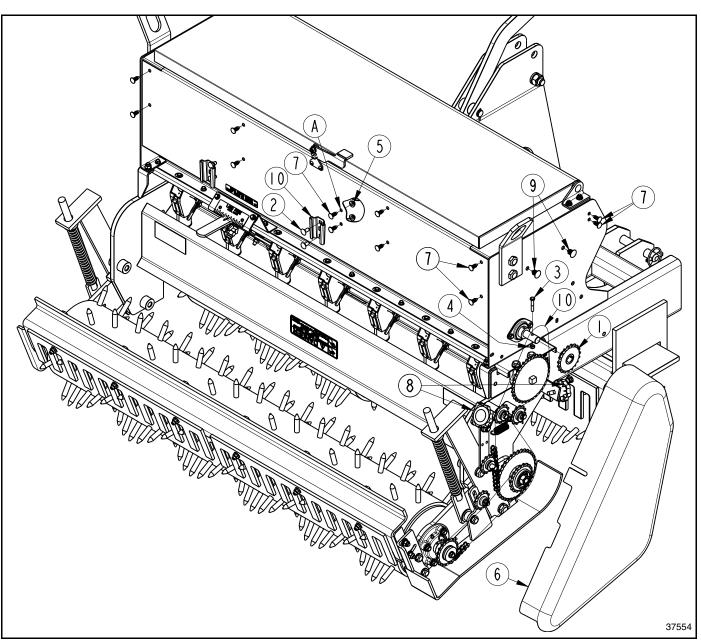
Further Assistance

Your dealer wants you to be satisfied with your new Small Seeds Box. The following actions are suggested if for any reason you do not understand any part of this manual or are not satisfied with the service received:

- 1. Discuss the matter with your dealership service manager making sure that person is aware of any problems you may have and has had the opportunity to assist you.
- 2. If you are still not satisfied, seek out the owner or general manager of the dealership, explain the problem, and request assistance.
- 3. For further assistance write to:

Land Pride Service Department 1525 East North Street P.O. Box 5060 Salina, Ks. 67402-5060

E-mail address lpservicedept@landpride.com



Disassembly of Back and Right-Hand Side of Main Seed Box Figure 2

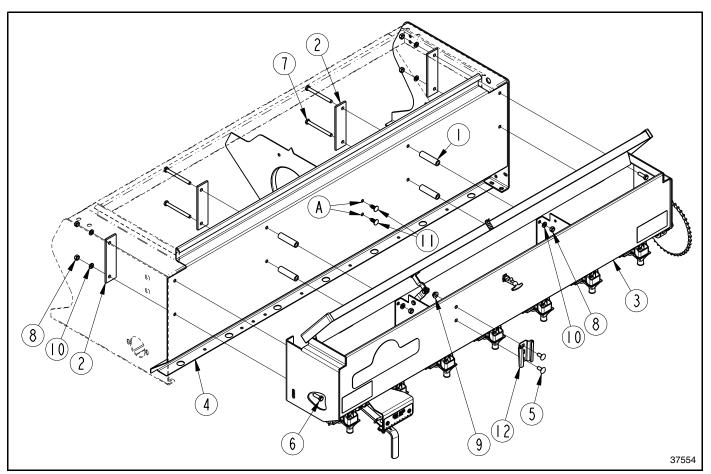
Assembly Instructions

Disassembly of Back & Right-Hand Side

Refer to Figure 2:

- Remove SMV mounting socket (#10) from back of main seed box. Save removed carriage bolts (#2), nuts (#5) and SMV mounting socket (#10) for reattachment to the back of the small seeds box.
- 2. Remove ten 5/16" nylon ratchet tree rivets (#7) from the main seed box by taping on them from inside the main seed box with a hammer.
- 3. Plug SMV mounting socket holes "A" in main seed box with two of the removed tree rivets (#7).

- 4. Remove remaining two 3/8" tree rivets (#9) from right-hand side of main seed box.
- 5. Loosen hand knobs (#8) and remove chain guard (#6). Discard existing chain guard.
- Remove roller chain (#10) from agitator sprocket (#1). Do not remove chain from any of the other sprockets.
- 7. Remove nut (#4), bolt (#3), and sprocket (#1) from end of agitator shaft. Save bolt and nut for installation of new double sprocket later.
- 8. Sprocket (#1) can be discarded.

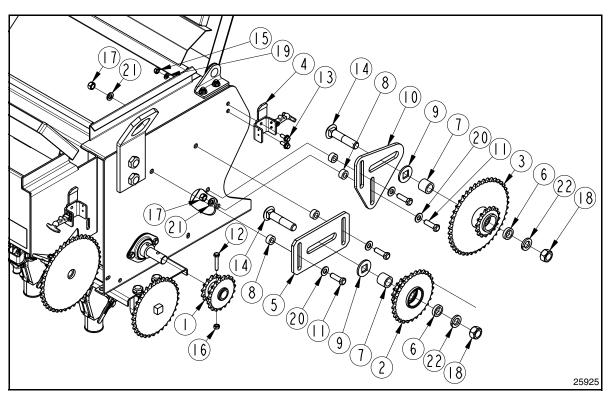


Small Seeds Box Mounting (APS1560 Shown) Figure 3

Small Seeds Box Mounting

Refer to Figure 3:

- 1. Verify holes "A" are plugged with existing 5/16" tree rivets (#11). If not, do so now.
- Attach small seeds box (#3) to main seed box (#4) by inserting 5/16"-18 x 3 1/2" GR5 bolts (#7) through backing plates (#2), back panel of main seed box (#4), spacer tubes (#1), front panel of small seeds box (#3), lock washers (#10) and hex nuts (#8). Draw hex nuts up snug.
- Insert 5/16"-18 x 1" GR5 bolts (#6) through front panel of small seeds box (#3), back panel of main seed box(#4), backing plates (#2), lock washers (#10), and hex nuts (#8).
- 4. Tighten all installed nuts (#8) to the correct torque.
- Attach existing SMV mounting bracket (#12) to back panel of small seeds box (#3) with existing 5/16"-18 x 3/4" GR5 carriage bolts (#5) and hex locknuts (#9). Tighten lock nuts to the correct torque.



Sprocket Assembly Figure 4

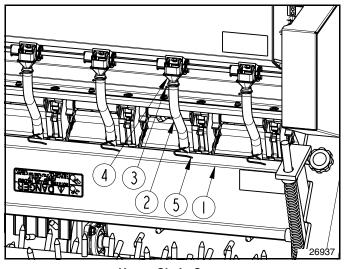
Sprocket Installation

Refer to Figure 4:

- Install chain guard mount stake (#4) using 1/4"-20 x 5/8" GR5 hex flange serrated bolts (#13), lock washers (#19) and hex nuts (#15). Tighten hex nuts to the correct torque.
- Assembly 14/19T sprocket (#1) on end of agitator shaft with 19T sprocket to the outside. Secure sprocket with existing 1/4"-20 x 1 1/2" GR5 bolt (#12) and lock nut (#16). Tighten lock nut to the correct torque.

NOTE: Draw all remaining nuts up snug. Do not tighten. Sprockets & idler plates will require readjusting during roller chain installation.

- Assemble 16/43T double sprocket (#3) to front idler plate (#10) with 5/8"-11 x 3" GR5 carriage bolt (#14), square hole flat washer (#9), 7/8" long spacer (#7), 1/4" long spacer (#6), lock washer (#22) and hex nut (#18) as shown.
- Assemble16/29T double sprocket (#2) to upper idler plate (#5) with 5/8"-11 x 3" GR5 carriage bolt (#14), square hole flat washer (#9), 7/8" long spacer (#7), 1/4" long spacer (#6), lock washer (#22) and hex nut (#18) as shown.
- 5. Attach sprocket assemblies (#2 & #3) to All Purpose Seeder using 3/8"-16 x 1 1/4" GR5 bolts (#11), flat washers (#20), 3/8" long spacers (#8), lock washers (#21) and hex nuts (#17).

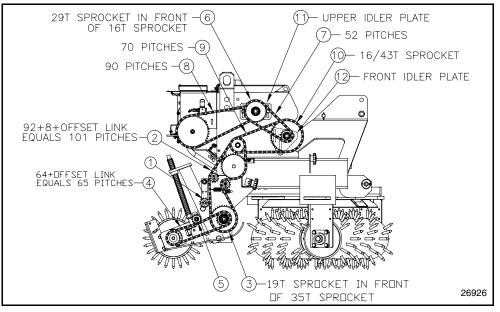


Upper Chain Cover Figure 5

Small Seeds Hose Installation

Refer to Figure 5:

- 1. Attach each small grass seed hose (#2) with clamp (#3) to each of the small seeds cups (#4).
- Locate small grass seed hoses directly behind main seed box seed cups and attach to seed drop plate (#1) with hose holder clamps (#5).





Sprocket and Chain Arrangement

The Small Seeds drive should turn at the same speed regardless of the main seed box high/low range setting. **Study the seeds charts in your All Purpose Seeder Operator's Manual 313-354M** and install sprockets and roller chains based on whether you are using high or low range seed charts.

High Range Set-Up

Refer to Figure 6:

The 19/35T Sprocket (#3) is arranged with 19T sprocket in front of 35T sprocket and 16/29T sprocket (#6) is arranged with 29T sprocket in front of 16T sprocket. All other sprockets remain unchanged.

Main Seeds Box Drive Arrangement

- 1. Loosen 3/8" nut securing drive tension sprocket (#5). Remove drive chain (#4) from sprocket (#3).
- 2. Pull idler sprocket (#1) away from roller chain (#2) and remove roller chain from sprocket (#3).
- 3. Remove 5/8" nut and flat washer from center of sprocket (#3).
- 4. Rearrange sprocket (#3) so that the 19T sprocket is in front of the 35T sprocket. Replace 5/8" flat washer and lock nut. Torque lock nut tight.
- 5. Drive chain (#4) should be 65 pitches long and driven chain (#2) 101 pitches long. If drive chain (#4) has 73 pitches, then remove 8 pitches from it and add those 8 pitches to driven chain (#2).
- 6. Install drive chain (#2) onto 35T sprocket (#3) and then driven chain (#4) onto 19T sprocket (#3).

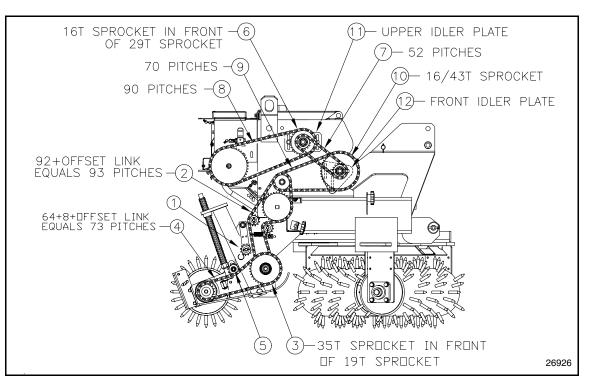
Small Seeds Box Drive Arrangement

1. Loosen 5/8" nuts located at the center of idler sprockets (#6 & #10).

- 2. Loosen 3/8" bolts securing idler slide plates (#11 & #12).
- 3. Remove roller chains (#7 & #8) from sprocket (#6).
- 4. Remove 5/8" nut, lock washer, and 1/4" long spacer tube from center of idler sprocket (#6).
- 5. Install sprocket (#11) so that the 29T sprocket is in front of 16T sprocket.
- Secure sprocket (#11) with 1/4" long spacer tube, lock washer, and 5/8" hex nut. Draw hex nut up snug. Do not tighten.
- 7. Install roller chain (#8) onto 16T sprocket (#6) and roller chain (#7) onto 29T sprocket (#6).

NOTE: The remaining steps are easier if completed by 2 people.

- 8. At the same time, reposition sprockets (#6 & #10) to remove excess slack in roller chains (#7 & #8).
- 9. Secure lower idler slide plate (#12) by drawing 3/8" bolts up snug. Maker sure bolts are loose enough to make final adjustments to the sprocket by tapping on idler plate (#12) with a hammer and punch.
- 10. Adjust upper idler plate (#11) to remove any remaining slack out of chains (#7 & #8). Secure idler plate by drawing 3/8" bolts up snug. Make sure bolts are loose enough to make final adjustments to sprocket (#6) by tapping on idler plate (#11) with a hammer and punch.
- 11. Tap on idler plates (#11 & #12) until chains (#7 & #8) have a small amount of slack. If necessary, slightly loosen 5/8" center nuts on sprockets (#6 & #10) to reposition sprockets on their idler plates.
- 12. Tighten 3/8" bolts on idler plates (#11 & #12) and 5/8" hex nuts securing sprockets (#6 & #10) to the correct torque.



Low Range Sprocket & Chain Arrangement

Figure 7

Low Range Set-Up

Refer to Figure 7:

The 19/35T Sprocket (#3) is arranged with 35T sprocket in front of 19T sprocket and 16/29T sprocket (#6) is arranged with 16T sprocket in front of 29T sprocket. All other sprockets remain unchanged.

Main Seeds Box Drive Arrangement

- 1. Loosen 3/8" nut securing drive tension sprocket (#5). Remove drive chain (#4) from sprocket (#3).
- 2. Pull idler sprocket (#1) away from roller chain (#2) and remove roller chain from sprocket (#3).
- 3. Remove 5/8" nut and flat washer from center of sprocket (#3).
- 4. Rearrange sprocket (#3) so that the 35T sprocket is in front of the 19T sprocket. Replace 5/8" flat washer and lock nut. Torque lock nut tight.
- 5. Drive chain (#4) should be 73 pitches long and driven chain (#2) 93 pitches long. If driven chain (#2) has 101 pitches, then remove 8 pitches from it and add those pitches to drive chain (#4).
- 6. Install drive chain (#2) onto 19T sprocket (#3) and then the driven chain (#4) onto 35T sprocket (#3).

Small Seeds Box Drive Arrangement

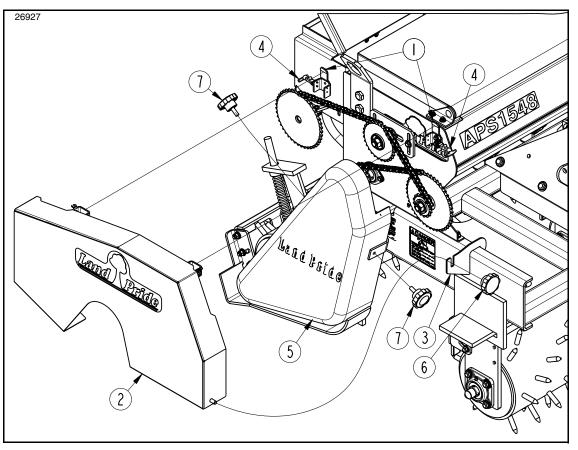
- 1. Loosen the 5/8" nuts located at the center of idler sprockets (#6 & #10).
- Loosen 3/8" bolts securing idler slide plates (#11 & #12).
- 3. Remove roller chains (#7 & #8) from sprocket (#6).

- 4. Remove 5/8" nut, lock washer and 1/4" long spacer tube from center of idler sprocket (#6).
- 5. Rearrange sprocket (#6) so that the 16T sprocket is in front of the 29T sprocket. Replace 1/4" long spacer tube, lock washer, and 5/8" hex nut. Draw hex nut up snug. Do not tighten.
- 6. Install roller chain (#8) onto 29T sprocket (#6) and roller chain (#7) onto 16T sprocket (#6).

NOTE: The remaining steps are easier if completed by 2 people.

- 7. At the same time, reposition sprockets (#6 & #10) to remove excess slack in roller chains (#7 & #8).
- Secure lower idler slide plate (#12) by drawing the 3/8" bolts up snug. Maker sure bolts are loose enough to make final adjustments to the sprockets by tapping on the idler plate with a hammer and punch.
- 9. Adjust upper idler plate (#11) to remove any remaining slack out of both chains (#7 & #8) and then secure the plate by drawing the 3/8" bolts up snug. Make sure bolts are loose enough to make final adjustments to the sprockets by tapping on the idler plate with a hammer and punch.
- 10. Tap on idler plates (#11 & #12) until chains (#7 & #8) have a small amount of slack. If necessary, slightly loosen 5/8" center sprocket nuts to reposition sprockets (#6 & #10) on their idler plates.
- 11. Tighten 3/8" bolts on idler plates (#11 & #12) and 5/8" nuts securing sprockets (#6 & #10) to the correct torque.

6

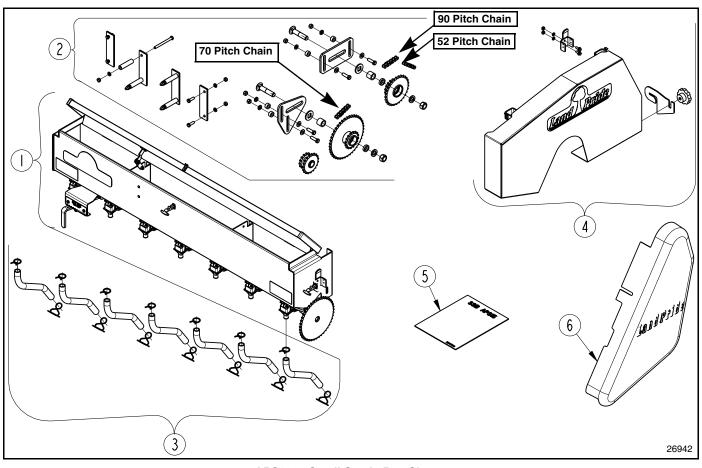


Chain Guard Installation Figure 8

Chain Guard Installation

Refer to Figure 8:

- 1. Attach chain cover (#5) to lower drive chain assembly with hand knobs (#7). Tighten knobs against chain cover.
- 2. Slide guard support (#3) over end of right side channel frame as shown.
- 3. Hook small seeds chain guard (#2) onto the two guard mount stakes (#1) and secure in place with rubber latches (#4).
- 4. Also secure chain guard (#2) to guard support (#3) with hand knob (#6). Tighten knob against guard support.



APS1560 Small Seeds Box Shown Illustration of Parts Figure 9

Illustration of Parts Shipped

Refer to Figure 9: This illustration identifies shipping packages from the factory by part number. See Land Pride's Parts Manual 313-473P for part

numbers of individual components.

313-465A **APS1548 SMALL SEEDS ATTACHMENT**

Your Kit Includes:

ltem	Qty.	Part No.	Part Description
------	------	----------	------------------

Refer to Figure 9 on page 8:			
1	1	308-239L	OS1548 SMALL SEEDS BOX ASSEMBLY
2	1	308-360L	OS SMALL SEEDS DRIVE BUNDLE
3	7	313-469L	SSB SEED HOSE W/CLIPS
4	1	313-470L	SSB APS CHAIN GUARD ASSEMBLY
5	1	313-473M	APS SMALL SEEDBOX MANUAL IN A PLASTIC BAG
6	1	816-840C	CHAIN COVER UPPER W/CUT OUT

APS1560 SMALL SEEDS ATTACHMENT 313-466A

Your Kit Includes:

Part No. **Part Description** Item Qty.

Refer to Figure 9 on page 8:			
1	1	313-478L	60 SMALL SEEDS BOX ASSEMBLY
2	1	308-360L	OS SMALL SEEDS DRIVE BUNDLE
3	8	313-469L	SSB SEED HOSE W/CLIPS
4	1	313-470L	SSB APS CHAIN GUARD ASSEMBLY
5	1	313-473M	APS SMALL SEEDBOX MANUAL IN A PLASTIC BAG
6	1	816-840C	CHAIN COVER UPPER W/CUT OUT

APS1572 SMALL SEEDS ATTACHMENT 313-467A

Your Kit Includes:

Part Description Item Qty. Part No.

Refer to Figure 9 on page 8:			
1	1	308-240L	OS1572 SMALL SEEDS BOX ASSEMBLY
2	1	308-360L	OS SMALL SEEDS DRIVE BUNDLE
3	10	313-469L	SSB SEED HOSE W/CLIPS
4	1	313-470L	SSB APS CHAIN GUARD ASSEMBLY
5	1	313-473M	APS SMALL SEEDBOX MANUAL IN A PLASTIC BAG
6	1	816-840C	CHAIN COVER UPPER W/CUT OUT

313-468A **APS1586 SMALL SEEDS ATTACHMENT**

Your Kit Includes:

Part Description Part No. Item Qty.

1	1	313-474L	APS1586 SMALL SEEDS BOX ASSEMBLY
2	1	313-477L	86" SSB DRIVE BUNDLE
3	12	313-469L	SSB SEED HOSE W/CLIPS
4	1	313-470L	SSB APS CHAIN GUARD ASSEMBLY
5	1	313-473M	APS SMALL SEEDBOX MANUAL IN A PLASTIC BAG
6	1	816-840C	CHAIN COVER UPPER W/CUT OUT



Corporate Office: P.O. Box 5060 Salina, Kansas 67402-5060 USA www.landpride.com