

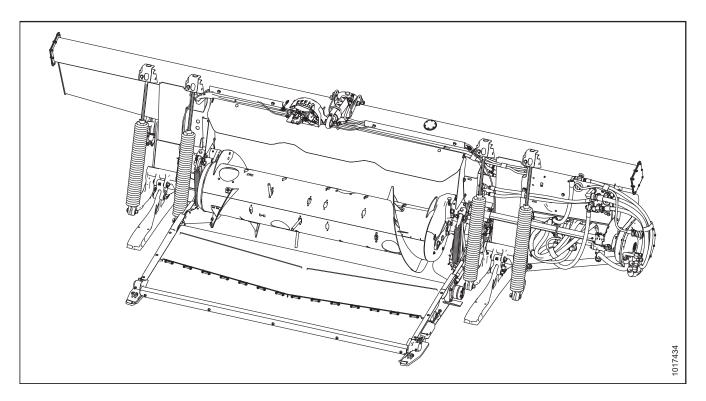
FM100 Float Module

Auger Flighting Kits (MD #B6400, 287031, and 287032) Installation Instructions

214002 Revision J Original Instruction

The Harvesting Specialists.

FM100 Float Module



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Introduction

MacDon FM100 Float Module augers can be reconfigured for various combine models and crop conditions; five configurations are available. When converting the auger from one configuration to another, additional flightings may be required. These flightings are available in the Wear-Resistant Medium Flighting kit (MD #287031¹), and the Wear-Resistant Long Flighting kit (MD #B6400 or MD #287032²).

This document explains how to install the flighting kits. A list of parts included in the kits is provided in Chapter 2 Parts Lists, page 5.

For information about which kit(s) are required for each auger flighting configuration, refer to 3.1 Auger Flighting Configuration Table, page 7. For more information about the various auger configurations, refer to 3.2 Auger Configurations, page 9.

NOTE:

Reconfiguring the auger may also require adding or removing auger fingers. Fingers are not supplied in this kit. For more information, refer to 3.9 Installing Feed Auger Fingers, page 41 or 3.10 Removing Feed Auger Fingers, page 44.

Installation Time

Installation time for the flighting kits will vary depending on the auger configuration selected. In most cases, installation time will be approximately 1.5 hours.

Conventions

The following conventions are used in this document:

- Right and left are determined from the operator's position. The front of the float module is the side that faces the crop; the back of the float module is the side that connects to the combine.
- Unless otherwise noted, use the standard torque values provided in the header operator's manual and technical manual.

NOTE:

Keep your MacDon publications up-to-date. The most current version of this instruction can be downloaded from our Dealer-only site (*https://portal.macdon.com*) (login required).

NOTE:

This document is available in English only.

^{1.} MD #287031 is available from MacDon Parts.

^{2.} MD #B6400 is available through Whole Goods. MD #287032 is available from MacDon Parts. They contain the same parts.

Summary of Changes

At MacDon, we're continuously making improvements, and occasionally these improvements affect product documentation. The following list provides an account of major changes from the previous version of this document.

Section	Summary of Change	Internal Use Only
2.1 Parts List – Wear-Resistant Medium Flighting Kit (MD #287031), page 5	Updated description of MD #136178.	ECN 57100
2.1 Parts List – Wear-Resistant Medium Flighting Kit (MD #287031), page 5	Updated description of MD #135799.	ECN 55173
2.1 Parts List – Wear-Resistant Medium Flighting Kit (MD #287031), page 5	Updated description of MD #252703.	ECN 55542
2.2 Parts List – Wear-Resistant Long Flighting Kit (MD #B6400/287032), page 6	Updated description of MD #135799	ECN 55173
2.2 Parts List – Wear-Resistant Long Flighting Kit (MD #B6400/287032), page 6	Updated description of MD #252703	ECN 55542
2.2 Parts List – Wear-Resistant Long Flighting Kit (MD #B6400/287032), page 6	Updated description of MD #135723.	ECN 57085
2.2 Parts List – Wear-Resistant Long Flighting Kit (MD #B6400/287032), page 6	Updated description of MD #152655.	ECN 57068
2.2 Parts List – Wear-Resistant Long Flighting Kit (MD #B6400/287032), page 6	Updated description of MD #136178.	ECN 57100
All auger configuration conversion procedures	Added introductory DANGER and the first three safety steps.	Tech Pubs
All auger configuration conversion procedures	Revised entire procedure because feed augers are factory equipped with magnetic reverser shields.	ECN 59094 ECN 59123
3.9 Installing Feed Auger Fingers, page 41	Added information about solid fingers throughout procedure.	ECN 59724 ECN 59854
3.10 Removing Feed Auger Fingers, page 44	Added information about solid fingers to procedure.	ECN 59724 ECN 59854

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Chapter 1: Safety

1.1 Signal Words

Three signal words, **DANGER**, **WARNING**, and **CAUTION**, are used to alert you to hazardous situations. Two signal words, **IMPORTANT** and **NOTE**, identify non-safety related information.

Signal words are selected using the following guidelines:

Indicates an imminently hazardous situation that, if not avoided, will result in death or serious injury.

Indicates a potentially hazardous situation that, if not avoided, could result in death or serious injury. It may also be used to alert against unsafe practices.

Indicates a potentially hazardous situation that, if not avoided, may result in minor or moderate injury. It may be used to alert against unsafe practices.

IMPORTANT:

Indicates a situation that, if not avoided, could result in a malfunction or damage to the machine.

NOTE:

Provides additional information or advice.

1.2 General Safety

Protect yourself when assembling, operating, and servicing machinery.

The following general farm safety precautions should be part of your operating procedure for all types of machinery.

Wear all protective clothing and personal safety devices that could be necessary for the job at hand. Do **NOT** take chances. You may need the following:

- Hard hat
- Protective footwear with slip-resistant soles
- Protective glasses or goggles
- Heavy gloves
- Wet weather gear
- Respirator or filter mask

In addition, take the following precautions:

• Be aware that exposure to loud noises can cause hearing impairment or loss. Wear suitable hearing protection devices such as earmuffs or earplugs to help protect against loud noises.

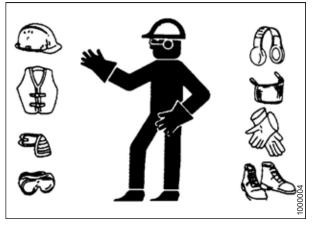


Figure 1.1: Safety Equipment



Figure 1.2: Safety Equipment

Figure 1.3: Safety Equipment

- Provide a first aid kit in case of emergencies.
- Keep a properly maintained fire extinguisher on the machine. Be familiar with its proper use.
- Keep young children away from machinery at all times.
- Be aware that accidents often happen when the Operator is tired or in a hurry. Take time to consider the safest way.
 NEVER ignore warning signs of fatigue.

- Wear close-fitting clothing and cover long hair. **NEVER** wear dangling items such as scarves or bracelets.
- Keep all shields in place. **NEVER** alter or remove safety equipment. Make sure driveline guards can rotate independently of shaft and can telescope freely.
- Use only service and repair parts made or approved by equipment manufacturer. Substituted parts may not meet strength, design, or safety requirements.



Figure 1.4: Safety around Equipment

- Keep hands, feet, clothing, and hair away from moving parts.
 NEVER attempt to clear obstructions or objects from a machine while the engine is running.
- Do **NOT** modify the machine. Unauthorized modifications may impair machine function and/or safety. It may also shorten the machine's life.
- To avoid injury or death from unexpected startup of the machine, **ALWAYS** stop the engine and remove the key from the ignition before leaving the operator's seat for any reason.

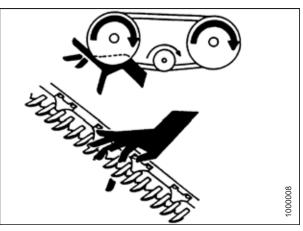


Figure 1.5: Safety around Equipment

- Keep service area clean and dry. Wet and/or oily floors are slippery. Wet spots can be dangerous when working with electrical equipment. Be sure all electrical outlets and tools are properly grounded.
- Keep work area well lit.
- Keep machinery clean. Straw and chaff on a hot engine are fire hazards. Do **NOT** allow oil or grease to accumulate on service platforms, ladders, or controls. Clean machines before storage.
- **NEVER** use gasoline, naphtha, or any volatile material for cleaning purposes. These materials may be toxic and/or flammable.
- When storing machinery, cover sharp or extending components to prevent injury from accidental contact.



Figure 1.6: Safety around Equipment

Chapter 2: Parts Lists

2.1 Parts List – Wear-Resistant Medium Flighting Kit (MD #287031)

The following parts are included in this kit.

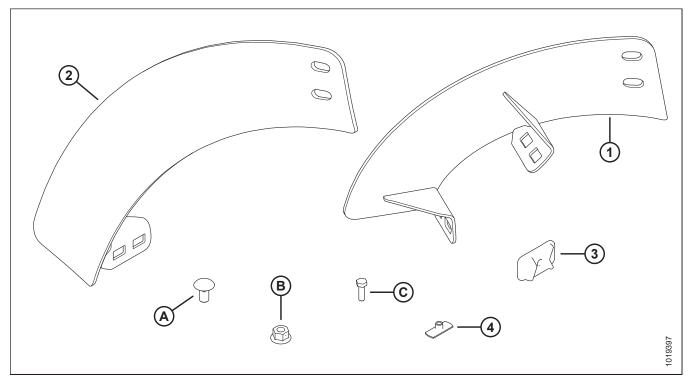


Figure 2.1: Parts Included in FM100 Wear-Resistant Medium Flighting Kit

Ref	Part Number	Description	Quantity
1	287887	FLIGHTING, RTD – RH, MED HIWEAR	1
2	287888	FLIGHTING, RTD – LH, MED HIWEAR	1
3	213084	PLUG – FLIGHTING SLOT	2
4	197263	NUT – TEE M6 X 1	2
А	136178	BOLT – RHSN M10 X 1.5 X 20 8.8 AA1J	12
В	135799	NUT – HEX FLG CTR LOC M10 X 1.5 10	12
С	252703	BOLT – HEX HD TFL M6 X 1 X 20 X SPCL 12.9 AFOC	2

PARTS LISTS

2.2 Parts List – Wear-Resistant Long Flighting Kit (MD #B6400/287032)

The following parts are included in this kit:

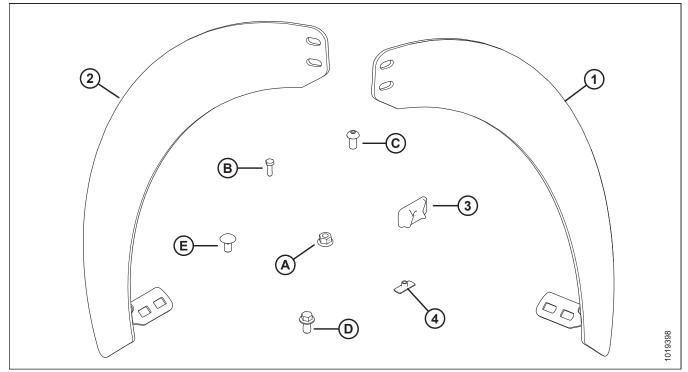


Figure 2.2: Parts Included in FM100 Wear-Resistant Long Flighting Kit

Ref	Part Number	Description	Quantity
1	287890	FLIGHTING, RTD – RH LNG HIWEAR	1
2	287889	FLIGHTING, RTD – LH LNG HIWEAR	1
3	213084	PLUG – FLIGHTING SLOT	2
4	197263	NUT – TEE, M6 X 1	2
А	135799	NUT – HEX FLG CTR LOC M10 X 1.5 10	12
В	252703	BOLT – HEX HD TFL M6 X 1 X 20 X SPCL 12.9 AFOC	2
С	135723	SCREW – HEX SOC BTN HD M10 X 1.5 X 20 10.9 AA1J	4
D	152655	BOLT – HEX FLG HD M10 X 1.5 X 20 8.8 AA1J	8
E	136178	BOLT – RHSN M10 X 1.5 X 20 8.8 AA1J	12

Chapter 3: Installation Instructions

- 1. To improve access and ease installation, before you start reconfiguring the auger, remove the float module from the combine. For instructions, refer to the header operator's manual.
- 2. To determine the current configuration of the auger and the desired configuration, refer to 3.2 Auger Configurations, page 9.
- 3. For instructions on converting the auger from one configuration to another, refer to the relevant procedure:
 - 3.3 Converting from Ultra Narrow Configuration or Narrow Configuration to Medium Configuration, page 11
 - 3.4 Converting from Wide Configuration to Medium Configuration, page 16
 - 3.5 Converting from Medium Configuration or Wide Configuration to Narrow Configuration, page 19
 - 3.6 Converting from Ultra Narrow or Narrow Configuration to Wide Configuration, page 24
 - 3.7 Converting from Medium Configuration or Wide Configuration to Ultra Narrow Configuration, page 30
 - 3.8 Converting from Narrow Configuration to Ultra Narrow Configuration, page 38

NOTE:

Procedures are not provided in this document for converting from Medium configuration to Wide configuration, from Ultra Narrow configuration to Narrow configuration, or for converting from any configuration to Ultra Wide configuration as these conversions do not require the installation of additional auger flightings.

3.1 Auger Flighting Configuration Table

The following table describes the kits required when reconfiguring the flighting on an FM100 feed auger.

NOTE:

Reconfiguring the auger may require adding or removing auger fingers. Fingers are not supplied in this kit. For more information, refer to 3.9 Installing Feed Auger Fingers, page 41 or 3.10 Removing Feed Auger Fingers, page 44.

		Cor	Converting to this Configuration	uo	
Converting from this Configuration	Narrow 18 fingers	Medium 22 fingers	Wide 30 fingers	Ultra Narrow 18 fingers ³	Ultra Wide 30 fingers
Narrow 18 fingers	I	2 x 287031 medium flighting kits (install 4 fingers)	1 x 287031 medium flighting kit (install 12 fingers)	2 x B6400/287032 long flighting kits	Remove all bolt-on flighting (install 12 fingers)
Medium 22 fingers	2 x B6400/287032 long flighting kits (remove 4 fingers)	I	Remove one set of flighting (install 8 fingers)	4 x B6400/287032 long filghting kits (remove 4 fingers)	Remove all bolt-on flighting (install 8 fingers)
Wide 30 fingers	2 x B6400/287032 long flighting kits (remove 12 fingers)	1 x 287031 medium flighting kit (remove 8 fingers)	I	4 x B6400/287032 long flighting kits (remove 12 fingers)	Remove all bolt-on flighting
Ultra Narrow 18 fingers	Ι	2 x 287031 Medium Flighting Kits (install 4 fingers)	1 x 287031 Medium Flighting Kit (install 12 fingers)	I	Remove all bolt-on flighting (install 12 fingers)
Ultra Wide 30 fingers	2 x B6400/287032 long flighting kits (remove 12 fingers)	2 x 287031 medium flighting kits (remove 8 fingers)	1 x 287031 medium flighting kit	4 x B6400/287032 long flighting kits (remove 12 fingers)	I

Eighteen fingers is the recommended starting point for the Ultra Narrow configuration; adjust as needed for best performance. ς. Έ

INSTALLATION INSTRUCTIONS

Table 3.1 Auger Flighting Configuration Table

3.2 Auger Configurations

The FM100 feed auger can be configured to suit various needs; there are five configurations available.

NOTE:

Dimensions (A) and (B) are the same for both ends of the auger. They should be within 15 mm (9/16 in.) of the numbers given.

Narrow configuration is a standard configuration for the following combines:

- AGCO IDEAL[™] Series
- Gleaner R6/75, R6/76, S6/77, S6/7/88, S96/7/8
- New Holland CR 920/940/960, 9020/40/60/65, 6090/7090, 8060/8070/8080

Narrow configuration uses 4 long bolt-on flightings (2 on the left and 2 on the right) and 18 feed auger fingers are recommended.

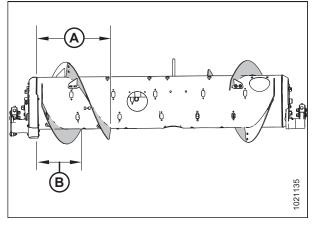


 Figure 3.1: Narrow Configuration – Rear View

 A - 514 mm (20 1/4 in.)
 B - 356 mm (14 in.)

NOTE:

Dimensions (A) and (B) are the same for both ends of the auger. They should be within 15 mm (9/16 in.) of the numbers given.

Medium configuration is a standard configuration for the following combines:

- Case IH 2300/2500 Series
- Case IH 5/6/7088, 7/8010, 7/8/9120, 5/6/7130, 7/8/9230, 5/6/7140, 7/8/9240, 5/6/7150, 7/8/9250
- Challenger 66/67/680B, 54/560C, 54/560E
- CLAAS 56/57/58/590R, 57/58/595R, 62/63/64/65/66/670, 73/74/75/76/77/780, 7000/8000, Tucano
- John Deere 95/96/97/9860, 95/96/97/9870, S65/66/67/68/690, T670, S76/77/78/790
- Massey Ferguson 96/97/9895, 9520/40/60, 9545/65, 9380
- New Holland CR 970/980, 9070/9080, 8090/9090, X.90, X.80, 10.80/10.90
- New Holland CX 8X0, 80X0, 8.X0, 8080/8090
- Rostselmash Torum 760/780
- Versatile RT490

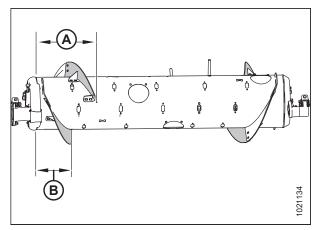


 Figure 3.2: Medium Configuration – Rear View

 A - 410 mm (16 1/8 in.)
 B - 260 mm (10 1/4 in.)

NOTE:

Dimensions (A) and (B) are the same for both ends of the auger. They should be within 15 mm (9/16 in.) of the numbers given.

Wide configuration is an optional configuration for the following combines:

- Challenger 670B/680B, 540C/560C, 540E/560E
- CLAAS 590R/595R, 660/670, 760/770/780, 8000
- John Deere T670
- Massey Ferguson 9895, 9540, 9560, 9545, 9565, 9380
- New Holland CX 8X0, 80X0, 8.X0

Wide configuration uses 2 short bolt-on flightings (1 on the left and 1 on the right) and 30 feed auger fingers are recommended.

NOTE:

This configuration may increase combine capacity on wide feeder house combines in certain crop conditions.

NOTE:

Dimensions (A) and (B) are the same for both ends of the auger. They should be within 15 mm (9/16 in.) of the numbers given.

Ultra Narrow configuration is an optional configuration that may improve feeding performance on combines with narrow feeder houses. It may also be helpful when harvesting rice.

Ultra Narrow configuration uses 8 long bolt-on flightings (4 on the left and 4 on the right) and 18 auger fingers are recommended.

NOTE:

You will need to drill holes in the flighting and in the drum to install the extra flighting.

Ultra Wide configuration is an optional configuration for the following combines:

• CLAAS 590R/595R, 660/670, 760/770/780/7000/8000

The Ultra Wide configuration uses no bolt on flighting; only the factory-welded flighting (A) is responsible for conveying the crop.

NOTE:

This configuration may improve feeding for wide feeder house combines.

A total of 30 auger fingers are recommended for this configuration.

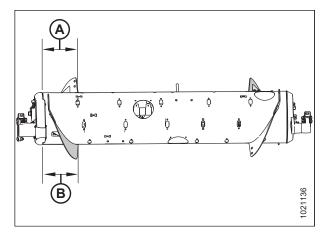


 Figure 3.3: Wide Configuration – Rear View

 A - 257 mm (10 1/8 in.)
 B - 257 mm (10 1/8 in.)

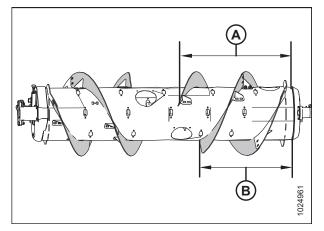


 Figure 3.4: Ultra Narrow Configuration – Rear View

 A - 760 mm (29 15/16 in.)
 B - 602 mm (23 11/16 in.)

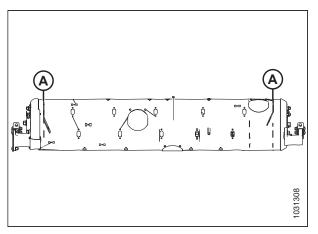


Figure 3.5: Ultra Wide Configuration – Rear View

3.3 Converting from Ultra Narrow Configuration or Narrow Configuration to Medium Configuration

Two flighting kits (MD #287031) are required to convert to this configuration.

To avoid bodily injury or death from unexpected start-up or fall of a raised machine, always stop engine and remove key before leaving the operator's seat, and always engage safety props before going under the machine for any reason.

Ultra Narrow, Narrow, and Medium auger configurations are shown at right. When converting from Ultra Narrow configuration or Narrow configuration to Medium configuration, you will need to replace long flightings (A) with short flightings (B).

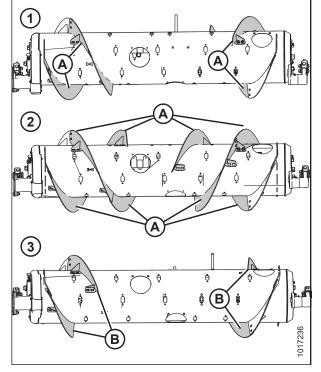


 Figure 3.6: Auger Configurations – Rear View

 1 - Narrow Configuration
 2 - Ultra Narrow Configuration

 3 - Medium Configuration
 3 - Medium Configuration

To convert from Narrow configuration to Medium configuration, follow these steps:

NOTE:

All illustrations show the feed auger separated from the float module for clarity. The procedure can be performed with the feed auger installed in the float module. The illustrations show model year 2021 feed augers. Other model years are similar.

- 1. Raise the reel fully.
- 2. Shut down the engine, and remove the key from the ignition.
- 3. Engage the reel safety props.

4. Remove bolts (A) and access cover (B) from both sides of the auger. Retain for reassembly.

NOTE:

If necessary, remove multiple access covers.

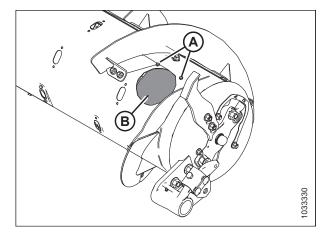


Figure 3.7: Narrow Configuration – Right Side

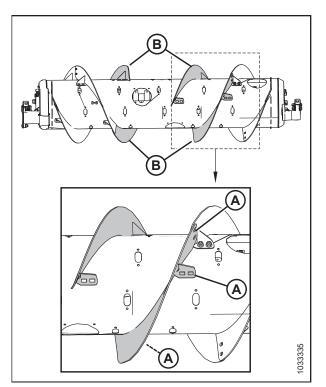


Figure 3.8: Ultra Narrow Configuration

6. **Converting from Ultra Narrow Configuration:** Remove hardware (A) from the four most inboard flightings (B).

7. Augers built in model year 2020 or later, or augers from model year 2019 and earlier that have had a reverser shield kit installed: On the RIGHT side of the auger, remove bolt and nut from locations (A) and (B). Remove bolt-on flightings (C). Leave hardware installed at location (D) to keep the magnetic reverser shield (E) secured to the drum. Remove the one flighting slot plug from location (F).

NOTE:

On the **RIGHT** side of the auger, a bolt and nut at locations (B) and (D) attach magnetic reverser shield (E) to the drum and flighting. Keep bolts and nuts from locations (B) and (D) separate from the rest of the retained hardware because these bolts are slightly longer. Whenever modifying or servicing the auger, keep at least one side of the reverser shield attached to the drum. A completely detached reverser shield is more difficult to install because the shield is magnetically attracted to the drum. There is only one magnetic reverser shield in the drum.

Augers from model year 2019 and earlier that do NOT have a reverser shield kit installed: Remove bolt and nut from locations (A) and (B). Remove bolt-on flightings (C). A flighting slot plug is used at location (D) instead of a bolt. Remove flighting slot plugs from locations (D) and (F).

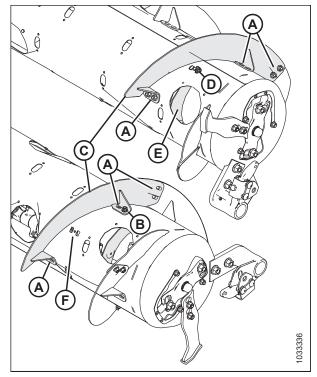


Figure 3.9: Narrow Configuration – Right Side

 Augers built in model year 2020 or later, or augers from model year 2019 and earlier that have a reverser shield kit installed: On the RIGHT side of the auger, note the position of auger pivot (A) to distinguish between flightings (B) and (C).

NOTE:

On the **RIGHT** side of the auger, a bolt and nut at locations (D) and (E) attach magnetic reverser shield (F) to the drum and flightings.

Install flighting (B) (MD #287887) using bolts (MD #136178) and nuts (MD #135799) at locations (G). Install the longer bolt (retained) and nut (MD #135799) at location (D) to secure magnetic reverser shield (F) to the drum and flighting.

IMPORTANT:

Flighting bolt heads must be installed on the inside of the auger to prevent damaging internal components.

Remove longer bolt and nut from location (E). This bolt and nut attach the other side of the magnetic reverser shield to the drum.

Install flighting (C) (MD #287887) using bolts (MD #136178) and nuts (MD #135799) at locations (H).

Install longer bolt (retained) and nut (MD #135799) at location (E).

Augers from model year 2019 and earlier that do NOT have a reverser shield kit installed: Install

flightings (B) and (C) (MD #287887) using (MD #136178) and nuts (MD #135799) at locations (D), (G), (H), and (E).

IMPORTANT:

Flighting bolt heads must be installed on the inside of the auger to prevent damaging internal components.

 Torque all nuts and bolts attaching the flighting and the magnetic reverser shield (if equipped) to 47 Nm (35 lbf·ft) to eliminate deflection on the flighting, then retorque them to 61 Nm (45 lbf·ft).

NOTE:

Flighting performs best when no gaps are present. If desired, use silicone sealant to fill the gaps.

 Install flighting slot plugs (MD #213084) at locations (J) and secure with M6 bolts (MD #252703) and tee nuts (MD #197263). Torque to 9 Nm (80 lbf·in).

NOTE:

If plug bolts are **NOT** new, coat bolts with medium-strength threadlocker (Loctite[®] 243 or equivalent) prior to installation.

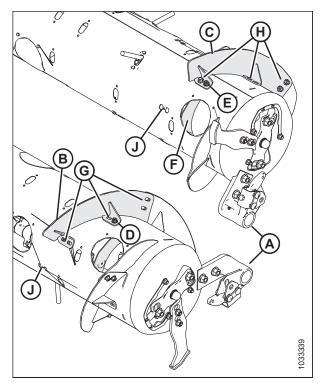


Figure 3.10: Medium Configuration – Right Side

11. On the **LEFT** side of the auger, remove bolt and nut from locations (A). Remove two bolt-on flightings (B). Remove flighting slot plugs from locations (C).

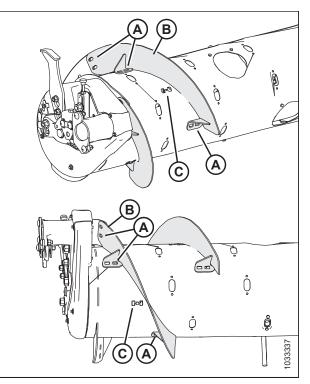


Figure 3.11: Narrow Configuration – Left Side

 On the LEFT side of the auger, install flightings (B) (MD #287888) using bolts (MD #136178) and nuts (MD #135799) at locations (A).

IMPORTANT:

Flighting bolt heads must be installed on the inside of the auger to prevent damaging internal components.

Torque all nuts and bolts attaching the flighting to 47 Nm (35 lbf·ft) to eliminate deflection on the flighting, then retorque them to 61 Nm (45 lbf·ft).

NOTE:

Flighting performs best when no gaps are present. If desired, use silicone sealant to fill the gaps.

 Install flighting slot plugs (MD #213084) at locations (C) and secure with M6 bolts (MD #252703) and tee nuts (MD #197263). Torque to 9 Nm (80 lbf·in).

NOTE:

If plug bolts are **NOT** new, coat bolts with medium-strength threadlocker (Loctite[®] 243 or equivalent) prior to installation.

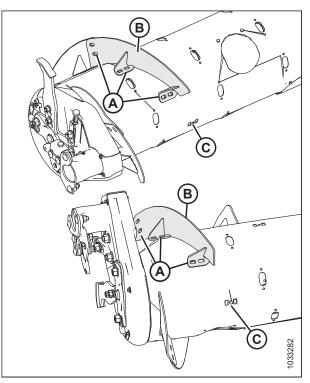


Figure 3.12: Medium Configuration – Left Side

15. Install additional auger fingers. A total of 22 auger fingers is recommended for this configuration. For instructions, refer to *3.9 Installing Feed Auger Fingers, page 41*.

3.4 Converting from Wide Configuration to Medium Configuration

One flighting kit (MD #287031) is required to convert the feed auger from Wide configuration to Medium configuration.

To avoid bodily injury or death from unexpected start-up or fall of a raised machine, always stop engine and remove key before leaving the operator's seat, and always engage safety props before going under the machine for any reason.

Wide and Medium auger configurations are shown at right. When converting from Wide configuration to Medium configuration, you will need to install new flightings (A).

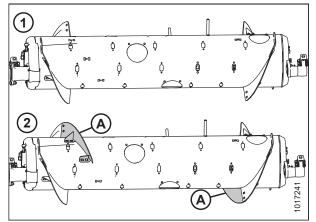


Figure 3.13: Auger Configurations – Rear View 1 - Wide Configuration 2 - Medium Configuration

To convert from Wide configuration to Medium configuration, follow these steps:

NOTE:

All illustrations show the feed auger separated from the float module for clarity. The procedure can be performed with the feed auger installed in the float module. The illustrations show model year 2021 feed augers. Other model years are similar.

- 1. Raise the reel fully.
- 2. Shut down the engine, and remove the key from the ignition.
- 3. Engage the reel safety props.
- 4. Remove bolts (A) and remove access cover (B) from the right and left sides of the auger. Retain for reassembly.

NOTE:

On the right side of the auger, remove the access cover closest to the end of flighting (C) that does **NOT** have bolton flighting attached to it.

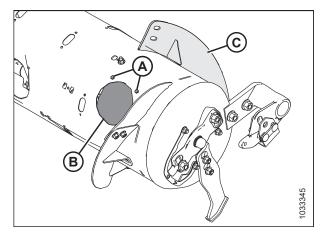


Figure 3.14: Wide Configuration – Right Side

5. Augers built in model year 2020 or later, or augers from model year 2019 and earlier that have a reverser shield kit installed: On the RIGHT side of the auger, remove bolt and nut from location (A) that secures magnetic reverser shield (B) to the drum. Remove flighting slot plug from location (C).

NOTE:

Keep bolt and nut from location (A) separate from other hardware used to attach flightings because this bolt is slightly longer.

Augers from model year 2019 and earlier that do NOT have a reverser shield kit installed: There is a flighting slot plug instead of a bolt at location (A). Remove flighting slot plugs from locations (A) and (C).

6. Augers built in model year 2020 or later, or augers from model year 2019 and earlier that have a reverser shield kit installed: On the RIGHT side of the auger, install flighting (A) (MD #287887) using five bolts (MD #136178) and nuts (MD #135799) at locations (B). Install the retained longer bolt and new nut (MD #135799) at location (C) to secures magnetic reverser shield (D) to the drum and flighting.

Augers from model year 2019 and earlier that do NOT have a reverser shield kit installed: Install flighting (A) (MD #287887) using six bolts (MD #136178) and nuts (MD #135799) locations (B) and (C).

 Torque all nuts and bolts at locations (B) and (C) attaching the flighting and the magnetic reverser shield (if equipped) to 47 Nm (35 lbf·ft) to eliminate deflection on the flighting, then retorque them to 61 Nm (45 lbf·ft).

NOTE:

Flighting performs best when no gaps are present. If desired, use silicone sealant to fill the gaps.

8. On the **LEFT** side of the auger, remove two flighting slot plugs from locations (A).

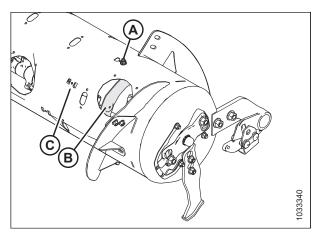


Figure 3.15: Wide Configuration – Right Side

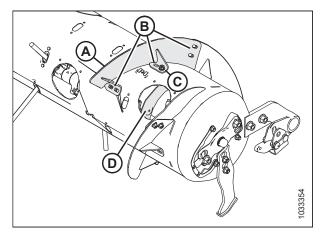


Figure 3.16: Medium Configuration – Right Side

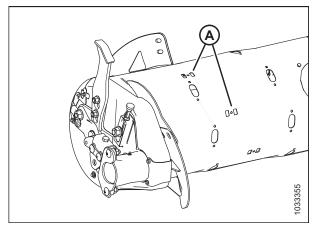


Figure 3.17: Wide Configuration – Left Side

 On the LEFT side of the auger, install bolt-on flighting (A) (MD #287888) using six bolts (MD #136178) and nuts (MD #135799) at locations (B).

IMPORTANT:

Bolt heads must be installed on the inside of the auger to prevent damaging internal components.

 Torque all nuts and bolts at locations (B) to 47 Nm (35 lbf·ft) to eliminate deflection on flighting, then torque them to 61 Nm (45 lbf·ft).

NOTE:

Flighting performs best when no gaps are present. If desired, use silicone sealant to fill the gaps.

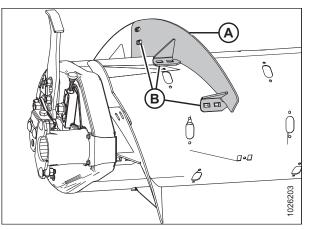


Figure 3.18: Medium Configuration – Left Side

11. Remove extra auger fingers. A total of 22 fingers are recommended for this configuration. For instructions, refer to *3.10 Removing Feed Auger Fingers, page 44*.

3.5 Converting from Medium Configuration or Wide Configuration to Narrow Configuration

Two flighting kits (MD #287032 or B6400⁴) are required to convert to this configuration. Extra hardware is included in these kits. Be sure to use the correct hardware in the correct location to prevent damage and to maximize performance.

To avoid bodily injury or death from unexpected start-up or fall of a raised machine, always stop engine and remove key before leaving the operator's seat, and always engage safety props before going under the machine for any reason.

Medium, Wide, and Narrow auger configurations are shown at right. When converting from Medium or Wide configuration to Narrow configuration, you will need to replace existing flightings (A) with flightings (B).

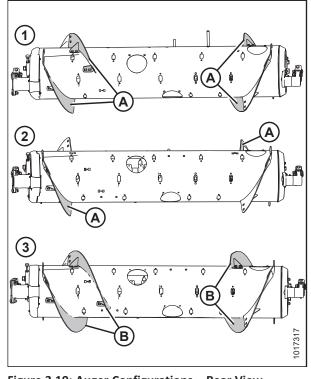


Figure 3.19: Auger Configurations – Rear View 1 - Medium Configuration 2 - Wide Configuration 3 - Narrow Configuration

To convert from Medium or Wide configuration to Narrow configuration, follow these steps:

NOTE:

All illustrations show the feed auger separated from the float module for clarity. The procedure can be performed with the feed auger installed in the float module. The illustrations show model year 2021 feed augers. Other model years are similar.

- 1. Raise the reel fully.
- 2. Shut down the engine, and remove the key from the ignition.
- 3. Engage the reel safety props.

^{4.} MD #287032 is available only through MacDon Parts. B6400 is available only through Whole Goods. Both kits contain wear-resistant flightings.

4. Remove bolts (A) and access cover (B) from both sides of the auger. Retain for reassembly.

NOTE:

If necessary, remove multiple access covers.

5. Converting from Medium configuration – Augers built in model year 2020 or later, or augers from model year 2019 and earlier that have a reverser shield kit installed:

On the **RIGHT** side of the auger, note the position of auger pivot (A) to distinguish between flightings (F) and (H).

NOTE:

On the **RIGHT** side of the auger, a bolt and nut at locations (B) and (C) attach magnetic reverser shield (D) to the drum and flightings. Keep bolts and nuts from locations (B) and (C) separate from the rest of the retained hardware because these bolts are slightly longer. Whenever modifying or servicing the auger, keep at least one side of the reverser shield attached to the drum if possible. A completely detached reverser shield is more difficult to install because the shield is magnetically attracted to the drum.

Remove bolts and nuts from locations (B) and (E) from flighting (F). Remove flighting.

Resecure magnetic shield (D) using bolt and nut at location (B).

Remove bolt and nut from locations (C) and (G). Remove flighting (H).

Converting from Medium configuration – Auger from model year 2019 and earlier that do NOT have a reverser shield kit installed: Remove bolt and nuts from locations (B), (E), (C), and (G) that attach flightings (F) and (H) to the right side of the auger.

6. **Converting from Medium configuration:** Remove flighting slot plugs from locations (J) close to the ends of the flightings.

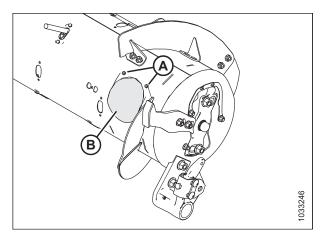


Figure 3.20: Medium Configuration – Right Side

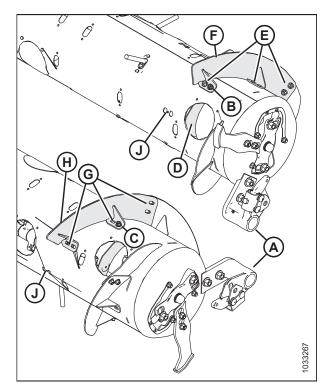


Figure 3.21: Medium Configuration – Right Side

- 7. **Converting from Medium configuration:** On the **LEFT** side of the auger, remove bolts and nuts from locations (A) that attach flightings (B) to the auger. Remove flightings.
- 8. **Converting from Medium configuration:** Remove flighting slot plugs from locations (C) close to the ends of the flightings.

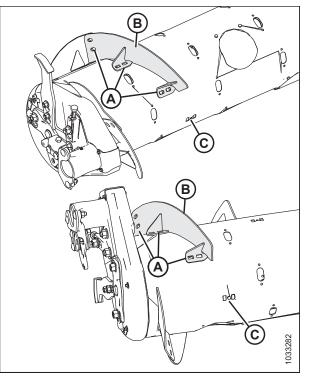


Figure 3.22: Medium Configuration – Left Side

9. Converting from Wide configuration – Augers built in model year 2020 or later, or augers from model year 2019 and earlier that have a reverser shield kit installed:

NOTE:

On the **RIGHT** side of the auger, a bolt and nut at locations (A) and (E) attach magnetic reverser shield (D) to the drum and flightings. Keep bolts and nuts from locations (A) and (E) separate from the rest of the retained hardware because these bolts are slightly longer. Whenever modifying or servicing the auger, keep at least one side of the reverser shield attached to the drum. A completely detached reverser shield is more difficult to install because the shield is magnetically attracted to the drum.

Remove bolts and nuts from locations (A) and (B) from flighting (C). Remove flighting. Resecure magnetic shield (D) using bolt and nut at location (A).

Remove bolt and nut from location (E).

Converting from Wide configuration – Auger from model year 2019 and earlier that do NOT have a reverser shield kit installed: Remove bolts and nuts from locations (A) and (B) that attach flighting (C) the right side of the auger. There is a flighting slot plug instead of a bolt

10. **Converting from Wide configuration:** Remove flighting slot plugs from locations (F) from the right side of the auger.

at location (E). Remove the plug from location (E).

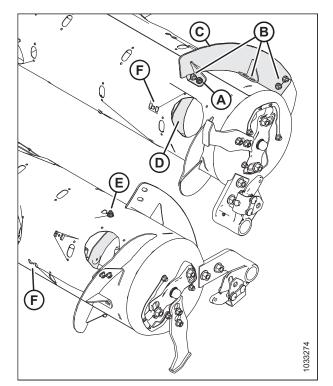
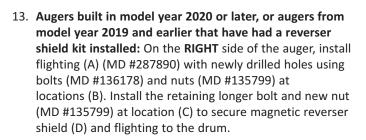


Figure 3.23: Wide Configuration – Right Side

- 11. **Converting from Wide configuration:** Remove bolts and nuts from locations (A) that attach flighting (B) to the left side of the auger. Remove flighting.
- 12. **Converting from Wide configuration:** Remove flighting slot plugs from locations (C) close to the ends of the flightings.



IMPORTANT:

Bolt heads must be installed on the inside of the auger to prevent damaging internal components.

NOTE:

Bolt and nut at location (E) secure the other end of the reverser shield.

Augers from model year 2019 and earlier that do NOT have a reverser shield kit installed: On the RIGHT side of the auger, install flighting (A) (MD #287890) with newly drilled holes using bolts (MD #136178) and nuts (MD #135799) at locations (B) and (C). A flighting slot plug is used at location (E) instead of a bolt.

IMPORTANT:

Bolt heads must be installed on the inside of the auger to prevent damaging internal components.

14. **Converting from Medium configuration:** Install flighting slot plug (MD #213084) at location (F) and secure with M6

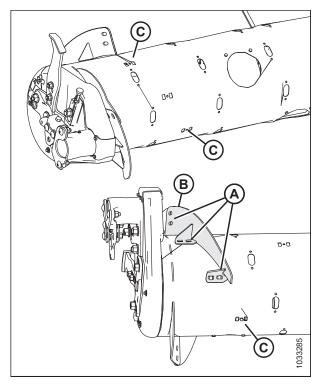


Figure 3.24: Wide Configuration – Left Side

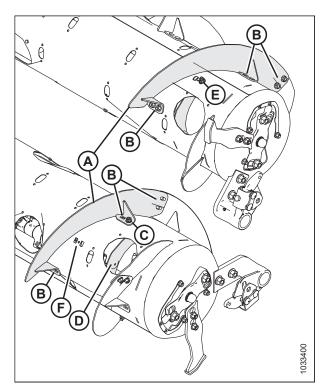


Figure 3.25: Right Side of Auger

bolts (MD #252703) and tee nuts (MD #197263). Torque to 9 Nm (80 lbf·in).

NOTE:

If plug bolts are **NOT** new, coat bolts with medium-strength threadlocker (Loctite[®] 243 or equivalent) prior to installation.

15. On the **LEFT** side of the auger, install two bolt-on flightings (A) (MD #287889) as shown, and secure each flighting with six carriage head bolts (MD #136178) and nuts (MD #135799) at locations (B).

IMPORTANT:

Bolt heads must be installed on the inside of the auger to prevent damaging internal components.

- 16. Install flighting slot plugs (MD #213084) at the locations listed below and secure with M6 bolts (MD #252703) and tee nuts (MD #197263). Torque to 9 Nm (80 lbf·in).
 - Converting from Medium configuration: Install plugs at locations (C) and (D).
 - **Converting from Wide configuration:** Install plug at location (D). There should already be a plug at location (C).

NOTE:

If plug bolts are **NOT** new, coat bolts with medium-strength threadlocker (Loctite[®] 243 or equivalent) prior to installation.

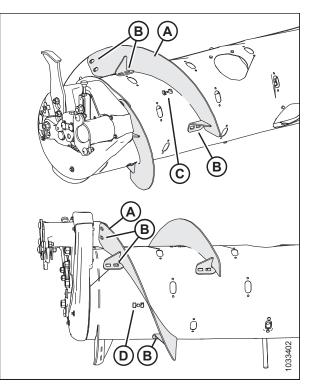


Figure 3.26: Narrow Configuration – Left Side of Auger

17. Torque all nuts and bolts attaching the flighting and the magnetic reverser shield (if equipped) to 47 Nm (35 lbf·ft) to eliminate deflection on the flighting, then retorque them to 61 Nm (45 lbf·ft).

NOTE:

Flighting performs best when no gaps are present. If desired, use silicone sealant to fill the gaps.

18. Remove extra auger fingers. A total of 18 fingers is recommended for this configuration. For instructions, refer to 3.10 *Removing Feed Auger Fingers, page 44.*

3.6 Converting from Ultra Narrow or Narrow Configuration to Wide Configuration

One flighting kit (MD #287031) is required to convert to this configuration.

To avoid bodily injury or death from unexpected start-up or fall of a raised machine, always stop engine and remove key before leaving the operator's seat, and always engage safety props before going under the machine for any reason.

The Narrow, Ultra Narrow, and Wide auger configurations are shown at right. When converting from Narrow or Ultra Narrow configuration to Wide configuration, you will need to replace existing bolt-on flightings (A).

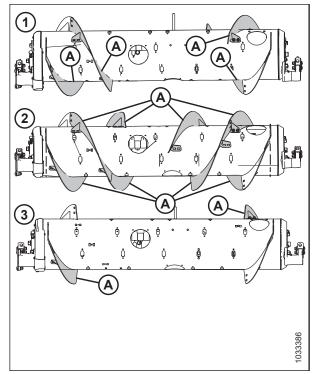


Figure 3.27: Auger Configurations – Rear View 1 - Narrow Configuration 3 - Wide Configuration

To convert from the Narrow configuration to the Wide configuration, follow these steps:

NOTE:

All illustrations show the feed auger separated from the float module for clarity. The procedure can be performed with the feed auger installed in the float module. The illustrations show model year 2021 feed augers. Other model years are similar.

- 1. Raise the reel fully.
- 2. Shut down the engine, and remove the key from the ignition.
- 3. Engage the reel safety props.

4. Remove bolts (A) and access cover (B) from both sides of the auger. Retain for reassembly.

NOTE:

If necessary, remove multiple access covers.

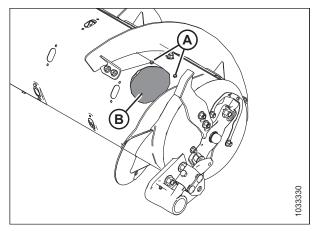


Figure 3.28: Narrow Configuration – Right Side

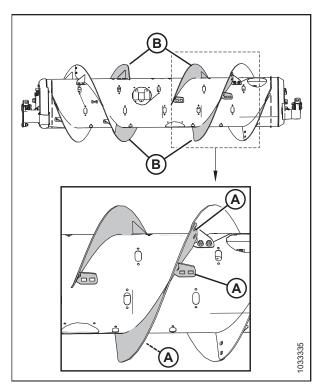


Figure 3.29: Ultra Narrow Configuration

5. **Converting from Ultra Narrow Configuration:** Remove hardware (A) from the four most inboard flightings (B).

 Augers built in model year 2020 or later, or augers from model year 2019 and earlier that have had a reverser shield kit installed: On the RIGHT side of the auger, remove bolts and nuts from locations (C) and (B).

NOTE:

On the **RIGHT** side of the auger, a bolt and nut at locations (C) and (E) attach magnetic reverser shield (D) to the drum and flightings. Keep bolts and nuts from locations (C) and (E) separate from the rest of the retained hardware because these bolts are slightly longer. Whenever modifying or servicing the auger, keep at least one side of the reverser shield attached to the drum. A completely detached reverser shield is more difficult to install because the shield is magnetically attracted to the drum.

Remove flightings (A).

Reinstall longer bolt and nut at location (C) to resecure magnetic shield (D).

Remove longer bolt and nut from location (E).

Augers from model year 2019 and earlier that do NOT have a reverser shield kit installed: Remove bolts and nuts from locations (C) and (B). Remove flightings (A). A flighting slot plug is used at location (E) instead of a bolt. Remove plug from location (E).

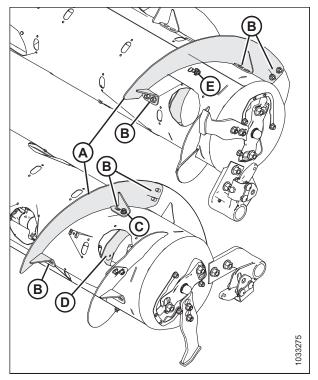


Figure 3.30: Narrow Configuration – Right Side of Auger

 Augers built in model year 2020 or later, or augers from model year 2019 and earlier that have a reverser shield kit installed: On the RIGHT side of the auger, install flighting (C) (MD #287887) using bolts (MD #136178) and nuts (MD #135799) at locations (B).

Install the retained longer bolt and new nut (MD #135799) at location (A) to resecure magnetic shield (D) to the drum and flighting.

Torque nuts and bolts at locations (A), (B), and (E) to 47 Nm (35 lbf·ft) to eliminate deflection on the flighting, then retorque them to 61 Nm (45 lbf·ft).

IMPORTANT:

Flighting bolt heads must be installed on the inside of the auger to prevent damaging internal components.

NOTE:

Flighting performs best when no gaps are present. If desired, use silicone sealant to fill the gaps.

Auger from model year 2019 and earlier that do NOT have

a reverser shield kit installed: Install flighting (C) (MD #287887) using bolts (MD #136178) and nuts (MD #135799) locations (A) and (B). Torque nuts and bolts at locations (A) and (B)a to 47 Nm (35 lbf·ft) to eliminate deflection on the flighting, then retorque them to 61 Nm (45 lbf·ft).

IMPORTANT:

Flighting bolt heads must be installed on the inside of the auger to prevent damaging internal components.

NOTE:

Flighting performs best when no gaps are present. If desired, use silicone sealant to fill the gaps.

 Augers built in model year 2020 or later, or augers from model year 2019 and earlier that have a reverser shield kit installed: Install flighting slot plugs (MD #213084) at locations (F) and secure with M6 bolts (MD #252703) and tee nuts (MD #197263). Torque to 9 Nm (80 lbf·in).

NOTE:

If plug bolts are **NOT** new, coat bolts with medium-strength threadlocker (Loctite[®] 243 or equivalent) prior to installation.

Auger from model year 2019 and earlier that do NOT have a reverser shield kit installed: Install flighting slot plugs (MD #213084) at locations (E) and (F) and secure with M6 bolts (MD #252703) and tee nuts (MD #197263). Torque to 9 Nm (80 lbf·in).

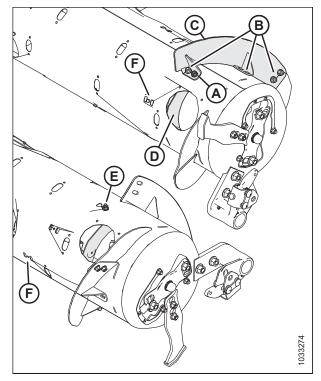


Figure 3.31: Wide Configuration – Right Side

NOTE:

If plug bolts are **NOT** new, coat bolts with medium-strength threadlocker (Loctite[®] 243 or equivalent) prior to installation.

9. On the **LEFT** side of the auger, remove bolts and nuts from locations (A). Remove two bolt-on flightings (B). Remove flighting slot plug from location (C).

 On the LEFT side of the auger, install flighting (A) (MD #287888) using six bolts (MD #136178) and nuts (MD #135799) at locations (B). Torque all nuts and bolts attaching the flighting to 47 Nm (35 lbf·ft) to eliminate deflection on the flighting, then retorque them to 61 Nm (45 lbf·ft).

IMPORTANT:

Flighting bolt heads must be installed on the inside of the auger to prevent damaging internal components.

NOTE:

Flighting performs best when no gaps are present. If desired, use silicone sealant to fill the gaps.

 On the LEFT side of the auger, install flighting slot plugs (MD #213084) at locations (C) and secure with M6 bolts (MD #252703) and tee nuts (MD #197263). Torque to 9 Nm (80 lbf·in).

NOTE:

If plug bolts are **NOT** new, coat bolts with medium-strength threadlocker (Loctite[®] 243 or equivalent) prior to installation.

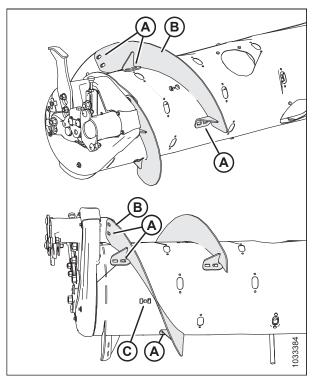


Figure 3.32: Left Side of Auger

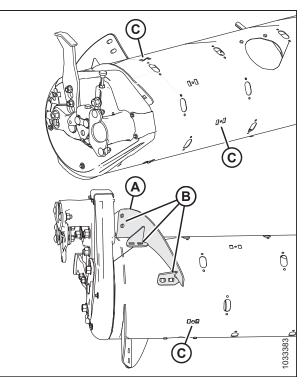


Figure 3.33: Wide Configuration – Left Side

INSTALLATION INSTRUCTIONS

12. Install additional auger fingers. There should be a total of 30 fingers in this configuration. Auger fingers and all required parts are included in kit. For instructions, refer to 3.9 Installing Feed Auger Fingers, page 41.

3.7 Converting from Medium Configuration or Wide Configuration to Ultra Narrow Configuration

Four flighting kits (MD #287032 or B6400) and some hole-drilling are required to convert to Ultra Narrow configuration. Extra hardware is included in these kits. Be sure to use the correct hardware in the correct location to prevent damage and to maximize performance.

To avoid bodily injury or death from unexpected start-up or fall of a raised machine, always stop engine and remove key before leaving the operator's seat, and always engage safety props before going under the machine for any reason.

Medium, Wide, and Ultra Narrow auger configurations are shown at right. When converting to Ultra Narrow configuration, existing flightings (A) are removed and new flightings (B) are installed.

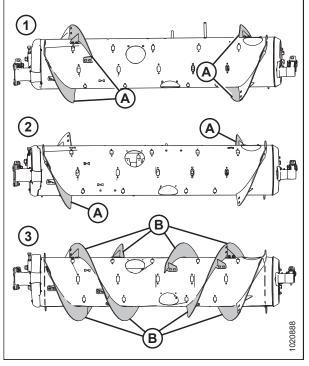


Figure 3.34: Auger Configurations – Rear View 1 - Medium Configuration 2 - Wide Configuration 3 - Ultra Narrow Configuration

To convert from Medium or Wide configuration to Ultra Narrow configuration, follow these steps:

NOTE:

All illustrations show the feed auger separated from the float module for clarity. The procedure can be performed with the feed auger installed in the float module. The illustrations show model year 2021 feed augers. Other model years are similar.

- 1. Raise the reel fully.
- 2. Shut down the engine, and remove the key from the ignition.
- 3. Engage the reel safety props.

4. Remove bolts (A) and access cover (B) from both sides of the auger. Retain for reassembly.

NOTE:

If necessary, remove multiple access covers.

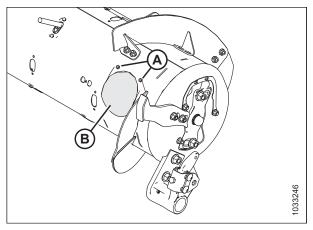


Figure 3.35: Medium Configuration – Right Side

5. Converting from Medium configuration – Augers built in model year 2020 or later, or augers from model year 2019 and earlier that have a reverser shield kit installed:

On the **RIGHT** side of the auger, note the position of auger pivot (A) to distinguish between flightings (F) and (H).

NOTE:

On the **RIGHT** side of the auger, a bolt and nut at locations (B) and (C) attach magnetic reverser shield (D) to the drum and flightings. Keep bolts and nuts from locations (B) and (C) separate from the rest of the retained hardware because these bolts are slightly longer. Whenever modifying or servicing the auger, keep at least one side of the reverser shield attached to the drum. A completely detached reverser shield is more difficult to install because the shield is magnetically attracted to the drum.

Remove bolts and nuts from locations (B) and (E) from flighting (F). Remove flighting.

Resecure magnetic shield (D) using bolt and nut at location (B).

Remove bolt and nut from locations (C) and (G). Remove flighting (H).

Converting from Medium configuration – Auger from model year 2019 and earlier that do NOT have a reverser shield kit installed: Remove bolt and nuts from locations (B), (E), (C), and (G) that attach flightings (F) and (H) to the right side of the auger.

6. **Converting from Medium configuration:** Remove flighting slot plugs from locations (J) close to the ends of the flightings.

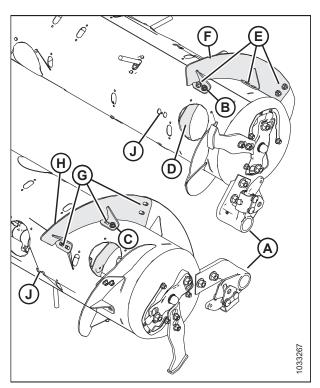
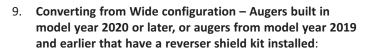


Figure 3.36: Medium Configuration – Right Side

- 7. **Converting from Medium configuration:** On the **LEFT** side of the auger, remove bolts and nuts from locations (A) that attach flightings (B) to the auger. Remove flightings.
- Converting from Medium configuration: Remove flighting slot plugs from locations (C) close to the ends of the flightings.



NOTE:

On the **RIGHT** side of the auger, a bolt and nut at locations (A) and (E) attach magnetic reverser shield (D) to the drum and flightings. Keep bolts and nuts from locations (A) and (E) separate from the rest of the retained hardware because these bolts are slightly longer. Whenever modifying or servicing the auger, keep at least one side of the reverser shield attached to the drum. A completely detached reverser shield is more difficult to install because the shield is magnetically attracted to the drum.

Remove bolts and nuts from locations (A) and (B) from flighting (C). Remove flighting. Resecure magnetic shield (D) using bolt and nut at location (A).

Remove bolt and nut from location (E).

Converting from Wide configuration – Auger from model year 2019 and earlier that do NOT have a reverser shield kit installed: Remove bolts and nuts from

locations (A) and (B) that attach flighting (C) the right side of the auger. There is a flighting slot plug instead of a bolt at location (E). Remove the plug from location (E).

10. **Converting from Wide configuration:** Remove flighting slot plugs from locations (F) from the right side of the auger.

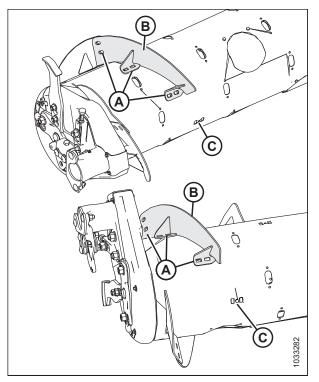


Figure 3.37: Medium Configuration – Left Side

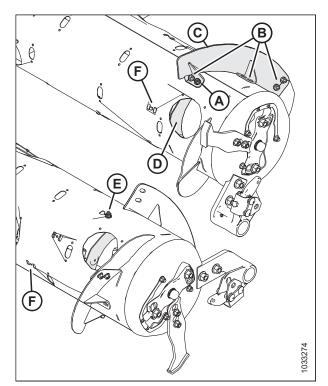


Figure 3.38: Wide Configuration – Right Side

- 11. **Converting from Wide configuration:** Remove bolts and nuts from locations (A) that attach flighting (B) to the left side of the auger. Remove flighting.
- 12. **Converting from Wide configuration:** Remove flighting slot plugs from locations (C) close to the ends of the flightings.

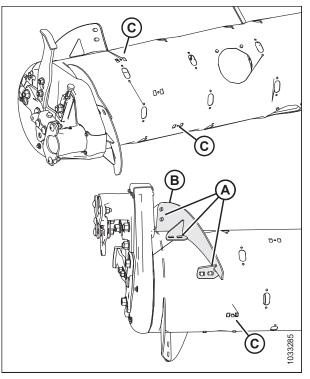


Figure 3.39: Wide Configuration – Left Side

13. Augers built in model year 2020 or later, or augers from model year 2019 and earlier that have had a reverser shield kit installed: Position two bolt-on flightings (A) (MD #287890) on the right side, as shown. Temporarily secure flightings with carriage head bolts (MD #136178) and nuts (MD #135799) at locations (B). Temporarily secure flighting and magnetic reverser shield (D) with retained longer bolt and nut at location (C).

Augers from model year 2019 and earlier that do NOT have a reverser shield kit installed: Position two bolt-on flightings (A) (MD #287890) on the right side, as shown. Temporarily secure flightings with carriage head bolts (MD #136178) and nuts (MD #135799) at locations (B) and (C).

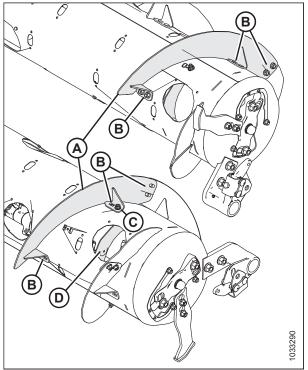


Figure 3.40: Right Side of Auger

- Position another bolt-on flighting (A) (MD #287890) outboard of the temporarily installed bolt-on flighting (B). Mark hole locations (C) of the bolt-on flighting onto the temporarily installed bolt-on flighting (B).
- 15. Remove temporarily installed bolt-on flighting (B) from the auger and drill two 11 mm (7/16 in.) holes at the marked locations.

16. Augers built in model year 2020 or later, or augers from model year 2019 and earlier that have had a reverser shield kit installed: Install flighting (A) (MD #287890) with newly drilled holes using bolts (MD #136178) and nuts (MD #135799) at locations (B). Install longer bolt and nut at location (C) to secure magnetic reverser shield (D) and flighting to the drum.

IMPORTANT:

Bolt heads must be installed on the inside of the auger to prevent damaging internal components.

Augers from model year 2019 and earlier that do NOT have a reverser shield kit installed: Install flighting (A) (MD #287890) with newly drilled holes using bolts (MD #136178) and nuts (MD #135799) at locations (B) and (C). A flighting slot plug is used at location (E) instead of a bolt.

IMPORTANT:

Bolt heads must be installed on the inside of the auger to prevent damaging internal components.

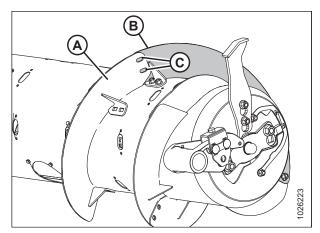


Figure 3.41: Right Side of Auger

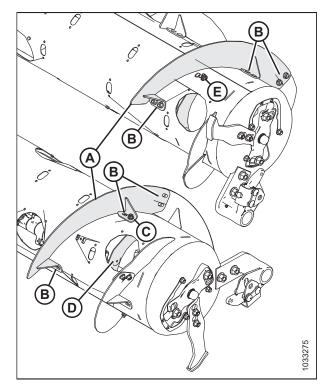


Figure 3.42: Right Side of Auger

 Position two bolt-on flightings (A) (MD #287889) on the left side of the auger as shown. Temporarily secure flightings with two carriage head (MD #136178) and nuts (MD #135799) at each location (B).

- Position another bolt-on flighting (A) (MD #287889) outboard of the temporarily installed flighting (B). Mark hole locations (C) of bolt-on flighting (A) onto the temporarily installed bolt-on flighting (B).
- 19. Remove temporarily installed bolt-on flighting (B) from the auger and drill two 11 mm (7/16 in.) holes at the marked locations.
- 20. Install bolt-on flighting (B) (MD #287889) with newly drilled holes using six carriage head bolts (MD #136178) and nuts (MD #135799).

IMPORTANT:

Carriage bolt heads must be installed on the inside of the auger to prevent damaging internal components.

- 21. Repeat Step *18, page 35* to Step *20, page 35* with the remaining bolt-on flighting on the left side of the auger.
- 22. Place bolt-on flighting (A) outboard of other flighting (B) on the left side of the auger, as shown.
- 23. Temporarily secure bolt-on flighting (A) with two button head bolts (MD #135723) and nuts (MD #135799) at location (C).

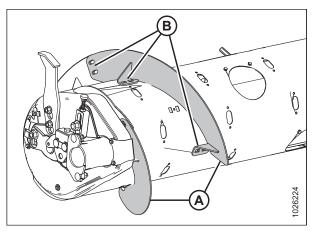


Figure 3.43: Left Side of Auger

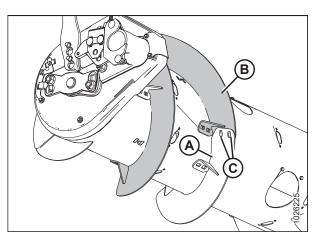


Figure 3.44: Left Side of Auger

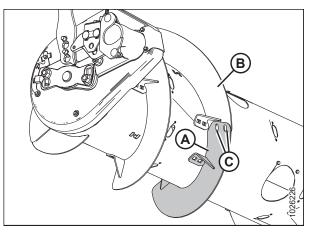


Figure 3.45: Left Side of Auger

24. Stretch flighting (A) to fit auger tube as shown. Use slotted holes on flighting to get the best fit around the auger tube.

- 25. With flighting in the desired position, mark hole locations (A) on auger tube.
- 26. Remove flighting (B) from auger, and drill 11 mm (7/16 in.) holes at marked locations (A) on auger tube.
- 27. Remove nearest access cover(s). Retain for reinstallation.
- Install bolt-on flighting (B) (MD #287889) using two button head bolts (MD #135723) and nuts (MD #135799) at location (C), and four flange head bolts (MD #152655) and nuts (MD #135799) at locations (A).

IMPORTANT:

Ensure bolt heads at location (C) are on the inboard (crop side) and nuts are on the outboard side of the flighting.

- 29. Repeat Step *22, page 35* to Step *28, page 36* for the remaining flighting on the left side of the auger.
- 30. Place bolt-on flighting (A) (MD #287890) outboard of other flighting (B) on the right side of the auger as shown.
- 31. Temporarily secure bolt-on flighting (A) with two button head bolts (MD #135723) and nuts (MD #135799) at location (C).
- 32. Repeat Step *24, page 36* to Step *28, page 36* for both pieces of flighting (MD #287890) on the right side of the auger.
- 33. Install flighting slot plugs (MD #213084) in the holes previously used to mount flightings on the left and right sides of the auger, and secure with M6 bolts (MD #252703) and tee nuts (MD #197263). Torque to 9 Nm (80 lbf·in).

NOTE:

If plug bolts are **NOT** new, coat bolts with medium-strength threadlocker (Loctite[®] 243 or equivalent) prior to installation.

Figure 3.46: Flighting Stretched Axially

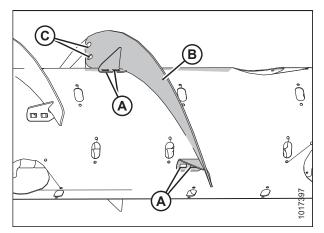


Figure 3.47: Left Side of Auger

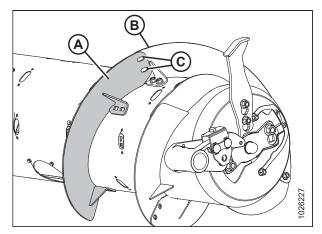


Figure 3.48: Right Side of Auger

34. Torque all nuts and bolts attaching the flighting and the magnetic reverser shield (if equipped) to 47 Nm (35 lbf·ft) to eliminate deflection on the flighting, then retorque them to 61 Nm (45 lbf·ft).

INSTALLATION INSTRUCTIONS

NOTE:

Flighting performs best when no gaps are present. If desired, use silicone sealant to fill the gaps.

- 35. Add or remove auger fingers to optimize feeding for your combine and crop conditions. For instructions, refer to *3.9 Installing Feed Auger Fingers, page 41* or *3.10 Removing Feed Auger Fingers, page 44*.
- 36. If not adding or removing auger fingers, reinstall all access covers and secure with bolts. Coat bolts with mediumstrength threadlocker (Loctite[®] 243 or equivalent) and torque to 9 Nm (80 lbf·in).

3.8 Converting from Narrow Configuration to Ultra Narrow Configuration

Two flighting kits (MD #287032 or B6400⁵) and some hole-drilling are required to convert to this configuration. Extra hardware is included in these kits. Be sure to use the correct hardware at the correct location to prevent damage and to maximize performance.

DANGER

To avoid bodily injury or death from unexpected start-up or fall of a raised machine, always stop engine and remove key before leaving the operator's seat, and always engage safety props before going under the machine for any reason.

NOTE:

Additional holes on the auger are needed before these flightings (A) can be installed.

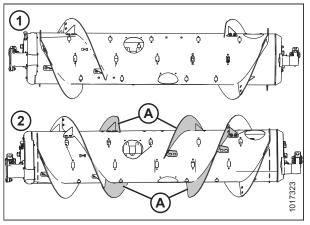


 Figure 3.49: Auger Configurations – Rear View

 1 - Narrow Configuration
 2 - Ultra Narrow Configuration

To convert from Narrow configuration to Ultra Narrow configuration, follow these steps:

NOTE:

All illustrations show the feed auger separated from the float module for clarity. The procedure can be performed with the feed auger installed in the float module. The illustrations show model year 2021 feed augers. Other model years are similar.

- 1. Raise the reel fully.
- 2. Shut down the engine, and remove the key from the ignition.
- 3. Engage the reel safety props.
- 4. Place new bolt-on flighting (A) (MD # 287889) outboard of existing flighting (B) on the left side of the auger, as shown.
- 5. Mark hole locations (C) of new bolt-on flighting (A) onto existing bolt-on flighting (B).
- 6. Remove nearest access cover to existing bolt-on flighting (B). Retain hardware for reassembly.
- 7. Remove existing bolt-on flighting (B) from the auger. Retain hardware for reassembly.
- 8. Drill two 11 mm (7/16 in.) holes at the marked locations of existing bolt-on flighting (B).
- 9. Reinstall existing bolt-on flighting (B) on the auger.

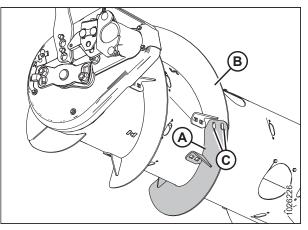


Figure 3.50: Left Side of Auger

^{5.} MD #287032 is available only through MacDon Parts. B6400 is available only through Whole Goods.

IMPORTANT:

Ensure carriage bolt heads are on the inside of the auger to prevent damage to internal components.

- 10. Place new bolt-on flighting (A) (MD # 287889) outboard of existing flighting (B) on the left side of the auger, as shown.
- 11. Secure with two button head bolts (MD #135723) and nuts (MD #135799) at locations (C).

IMPORTANT:

Ensure bolt heads are on the inboard (crop side) and nuts are on the outboard side of the flighting.

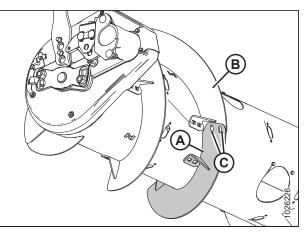


Figure 3.51: Left Side of Auger

12. Stretch flighting (A) to fit auger tube as shown. Use slotted holes on flighting to get the best fit around the auger tube.

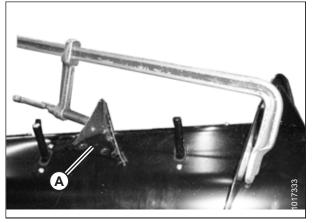


Figure 3.52: Flighting Stretched Axially

Figure 3.53: Flighting on Left Side of Auger

- 13. With flighting in desired position, mark hole locations (A) and drill 11 mm (7/16 in.) holes in auger tube.
- 14. Remove nearest access cover(s). Retain for reinstallation.
- 15. Secure bolt-on flighting on newly drilled holes (A) using four flange head bolts (MD #152655) and nuts (MD #135799) at locations (A).
- 16. Repeat Step *10, page 39* to Step *15, page 39* for the other flighting on the left side of the auger.

17. Place flighting (A) (MD #287890) outboard of existing flighting (B) on the right side of the auger, as shown.

18. Repeat Step 5, page 38 to Step 15, page 39 for both

Augers built in model year 2020 or later, or augers from model year 2019 and earlier that have had a reverser shield kit installed: On the RIGHT side of the auger, bolt and nut at location (A) attach magnetic shield (B) to the

auger drum and flighting (C). When removing flighting (C), keep bolt and nut (A) separate from the rest of the feed auger hardware because this bolt is slightly longer.

flightings on the right side of the auger.

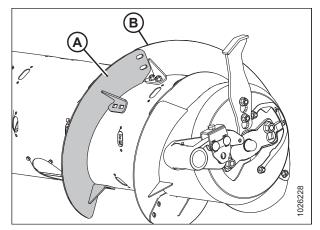


Figure 3.54: Flighting on Right Side of Auger

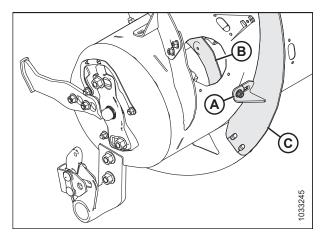


Figure 3.55: Reverser Shield on Right Side of Auger

19. On both sides of the auger, install flighting slot plugs (MD #213084) in the flighting mounting locations and secure with M6 bolts (MD #252703) and tee nuts (MD #197263).

NOTE:

NOTE:

If plug bolts are **NOT** new, coat bolts with medium-strength threadlocker (Loctite[®] 243 or equivalent) prior to installation.

20. Torque all flighting nuts and bolts to 47 Nm (35 lbf·ft) to eliminate deflection on flighting, then torque nuts and bolts again to 61 Nm (45 lbf·ft).

NOTE:

Flighting performs best when no gaps are present. If desired, use silicone sealant to fill the gaps.

- 21. Add or remove auger fingers as necessary to optimize feeding for your combine and crop conditions. For instructions, refer to 3.9 Installing Feed Auger Fingers, page 41 or 3.10 Removing Feed Auger Fingers, page 44.
- 22. If not adding or removing auger fingers, reinstall all access covers and secure with bolts. Coat bolts with medium-strength threadlocker (Loctite[®] 243 or equivalent) and torque to 9 Nm (80 lbf·in).

3.9 Installing Feed Auger Fingers

Using the correct number of feed auger fingers optimizes feed auger performance.

DANGER

To avoid bodily injury or death from unexpected start-up or fall of a raised machine, always stop engine and remove key before leaving the operator's seat, and always engage safety props before going under the machine for any reason.

IMPORTANT:

When installing additional fingers, install an equal number on each side of the auger.

NOTE:

All steps below show **SOLID** fingers (A). **HOLLOW** fingers (B) are similar in appearance but are no longer available for sale. It is acceptable to use hollow fingers while quantities last. Replace hollow fingers and hollow finger guides with solid fingers and solid finger guides. The following kits supply solid fingers for the feed auger and are intended for the following applications:

- Kit MD #337152 supplies one solid feed auger finger and finger guide. Use this kit to replace individual damaged solid fingers.
- Kit MD #337507 supplies 31 solid fingers and finger guides. Use this kit to convert all the hollow fingers on a feed auger configured to operate as a wide or ultra-wide feeding system.
- Kit MD #337508 supplies 23 solid fingers and finger guides. Use this kit to convert all the hollow fingers on a feed auger configured to operate as an ultra-narrow, narrow, or medium feeding system.

Feed augers from model year 2021 and later are factory equipped with solid fingers.

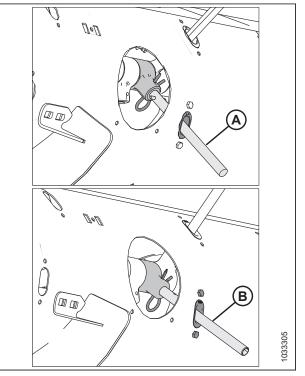


Figure 3.56: Solid Finger and Hollow Finger

NOTE:

This kit does **NOT** supply the parts required for this procedure. Order the parts from your MacDon Dealer. For service parts, refer to Table *3.2, page 41*.

Part Number	Description	Quantity Required to Install ONE Finger
MD #123180	PIN – HAIR	1
MD #197263	NUT – TEE M6 X 1	2
MD #252703	BOLT – HEX HD TFL M6 X 1 X 20 X SPCL-12.9-AF0C	2
MD #337152	KIT – FINGER (includes one solid finger and one solid finger guide)	1

Table 3.2 Feed Auger Finger Conversion Parts

To install auger fingers, follow these steps:

- 1. Raise the reel fully.
- 2. Shut down the engine, and remove the key from the ignition.
- 3. Engage the reel safety props.
- 4. Remove bolts (A) and access cover (B) closest to the finger you are removing. Retain parts for reinstallation.

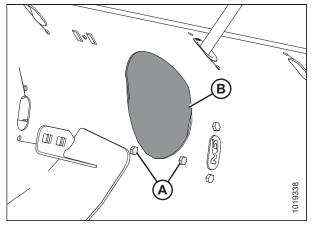


Figure 3.57: Auger Access Hole Cover

101305

Figure 3.58: Auger Finger Hole

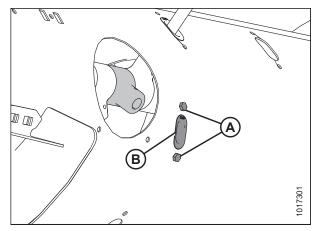


Figure 3.59: Auger Finger Hole

5. Remove two bolts (B), tee nuts (not shown), and plug (A).

6. Install guide (B) (included in kit MD #337152) as follows:

NOTE:

Bolts (A) (MD #252703) come with a threadlocker patch that will wear off if the bolts are removed. If reinstalling bolts (A), apply medium-strength threadlocker (Loctite[®] 243 or equivalent) before installation.

Insert guide (B) from inside the auger and secure it with bolts (A) (MD #252703) and tee nuts (MD #197263) (not shown).

IMPORTANT:

Always install a new guide when replacing a solid finger.

7. Torque bolts (A) to 9 Nm (80 lbf·in).

- 8. Place solid finger (A) (included in kit MD #337152) inside the drum. Insert solid finger (A) up through the bottom of guide (B) and insert other end of finger into holder (C).
- 9. Secure the finger by inserting hairpin (D) (MD #123180) into the holder. Make sure the round end (S-shaped side) of the hairpin faces the chain drive side of the auger. Make sure the closed end of the hairpin points in the direction of auger-forward rotation.

NOTE:

Position the hairpin as described in this step to prevent the hairpin from falling out during operation. If fingers are lost, the header might not be able to feed crop into the combine properly. Fingers that fall into the drum might damage internal components.

10. Install access cover (B) as follows:

NOTE:

Bolts (A) come with a threadlocker patch that will wear off if the bolts are removed. If reinstalling bolts (A), apply medium-strength threadlocker (Loctite[®] 243 or equivalent) before installation.

Secure access cover (B) in place with bolts (A). Torque bolts to 9 Nm (80 lbf·in).

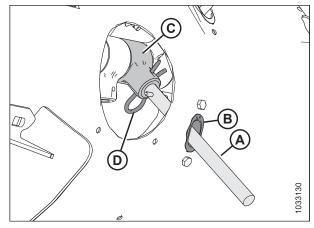


Figure 3.60: Auger Finger – Solid Finger Shown, Hollow Finger is Similar

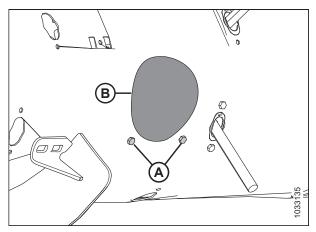


Figure 3.61: Auger Access Hole Cover – Solid Finger Shown, Hollow Finger is Similar

3.10 Removing Feed Auger Fingers

Using the correct number of feed auger fingers optimizes feed auger performance.

To avoid bodily injury or death from unexpected start-up or fall of a raised machine, always stop engine and remove key before leaving the operator's seat, and always engage safety props before going under the machine for any reason.

IMPORTANT:

When removing auger fingers, work from the outboard ends towards the center of the auger. Make sure there is an equal number of fingers on both sides of the auger when complete.

NOTE:

All steps below show **SOLID** fingers (A). **HOLLOW** fingers (B) are similar in appearance but are no longer available for sale. It is acceptable to use hollow fingers while quantities last. Replace hollow fingers and hollow finger guides with solid fingers and solid finger guides. The following kits supply solid fingers for the feed auger and are intended for the following applications:

- Kit MD #337152 supplies one solid feed auger finger and finger guide. Use this kit to replace individual damaged solid fingers.
- Kit MD #337507 supplies 31 solid fingers and finger guides. Use this kit to convert all the hollow fingers on a feed auger configured to operate as a wide or ultra-wide feeding system.
- Kit MD #337508 supplies 23 solid fingers and finger guides. Use this kit to convert all the hollow fingers on a feed auger configured to operate as an ultra-narrow, narrow, or medium feeding system.

Feed augers from model year 2021 and later are factory equipped with solid fingers.

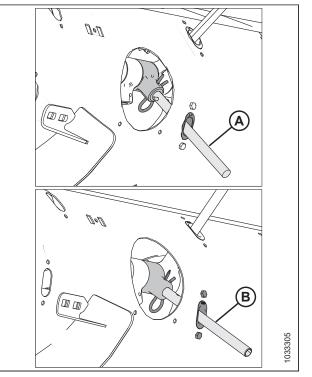


Figure 3.62: Solid Finger and Hollow Finger

To remove feed auger fingers, follow these steps:

- 1. Raise the reel fully.
- 2. Shut down the engine, and remove the key from the ignition.
- 3. Engage the reel safety props.

4. Remove bolts (A) and access cover (B) closest to the finger you are removing. Retain parts for reinstallation.

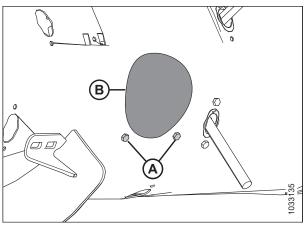


Figure 3.63: Auger Access Hole Cover – Solid Finger Shown, Hollow Finger is Similar

Figure 3.64: Auger Finger – Solid Finger Shown, Hollow Finger is Similar

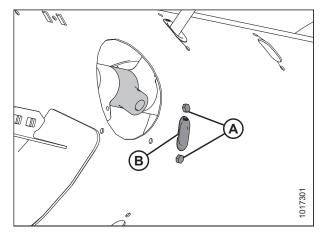


Figure 3.65: Auger Finger Hole

5. Remove hairpin (A). Pull finger (B) out of finger holder (C).

Solid fingers: Push finger (B) through guide (D) and into the drum. Pull the finger out of the drum access hole.

Hollow fingers: Pull finger (B) out of guide (D).

If the finger broke, remove any remnants from holder (C) and from inside the drum.

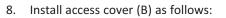
6. Remove and retain two bolts (A) and tee nuts (not shown) securing finger guide (B) to the auger. Remove guide (B).

7. Install plug (A) as follows:

NOTE:

Bolts (B) come with a threadlocker patch that will wear off if the bolts are removed. If reinstalling bolts (B), apply medium-strength threadlocker (Loctite[®] 243 or equivalent) before installation.

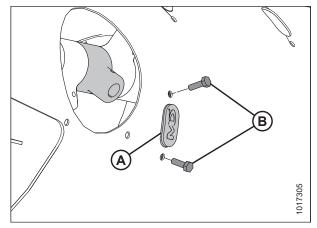
Position plug (A) (MD #187137) into the hole from inside the auger. Secure with two M6 hex head bolts (B) (MD #252703) and tee nuts (MD #197263). Torque to 9 Nm (80 lbf·in).



NOTE:

Bolts (A) come with a threadlocker patch that will wear off if the bolts are removed. If reinstalling bolts (A), apply medium-strength threadlocker (Loctite[®] 243 or equivalent) before installation.

Secure access cover (B) in place with bolts (A). Torque bolts to 9 Nm (80 lbf \cdot in).





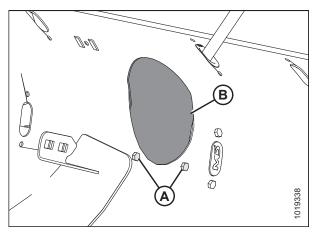


Figure 3.67: Auger Access Hole Cover

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