

A40DX and A40DX Grass Seed Auger Header

Reel Speed Control Kit (MD #B6604 and 318001)
Installation Instructions

214679 Revision B
Original Instruction

A40DX Grass Seed (GSS) Auger Header



1026025

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Introduction

The Auger Header Reel Speed Control kit (MD #B6604 or 318001) is required to provide the variable reel speed function on the A40DX and A40DX Grass Seed (GSS) Header. This document explains how to install the kit.

A list of parts included in this kit is provided in Chapter 2 *Parts List, page 5*.

Installation Time

This kit will take approximately 1 hour to install.

Conventions

The following conventions are used in this document:

- Right and left are determined from the operator's position. The front of the header is the side that faces the crop; the back of the header is the side that connects to the windrower.
- Unless otherwise noted, use the standard torque values provided in the auger 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 currently available in English only.

List of Revisions

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.

Summary of Change	Location
Added kit MD #318001.	<ul style="list-style-type: none">• Front cover• <i>Introduction, page i</i>• <i>3 Installation Instructions, page 7</i>
Identified steps that do not apply to Grass Seed headers. Revised procedure for installing reel speed harness.	<i>3 Installation Instructions, page 7</i>
Corrected software versions. Removed auger speed range.	<i>4 Operation, page 13</i>

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1 Safety

1.1 Signal Words

Three signal words, **DANGER**, **WARNING**, and **CAUTION**, are used to alert you to hazardous situations. Signal words are selected using the following guidelines:

DANGER

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

WARNING

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.

CAUTION

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.

1.2 General Safety

CAUTION

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

Protect yourself.

- When assembling, operating, and servicing machinery, wear all protective clothing and personal safety devices that could be necessary for 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
- 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

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

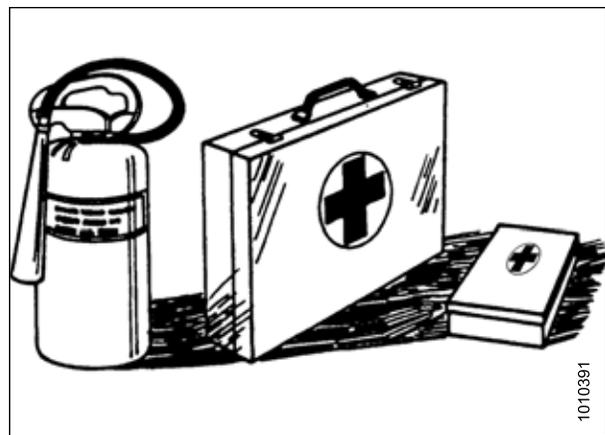


Figure 1.3: Safety Equipment

SAFETY

- 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 engine is running.
- Do **NOT** modify machine. Unauthorized modifications may impair machine function and/or safety. It may also shorten machine's life.
- To avoid bodily injury or death from unexpected startup of machine, **ALWAYS** stop the engine and remove the key from the ignition before leaving the operator's seat for any reason.

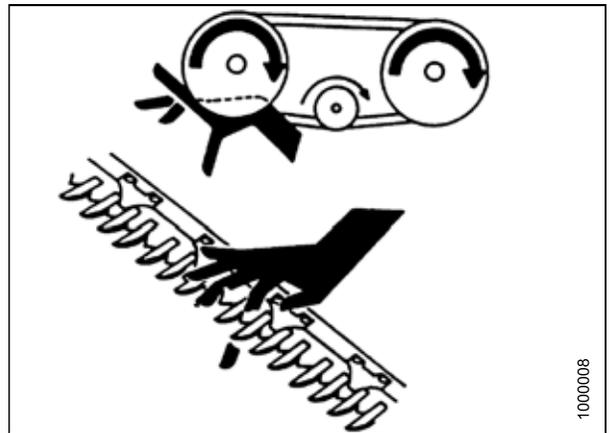


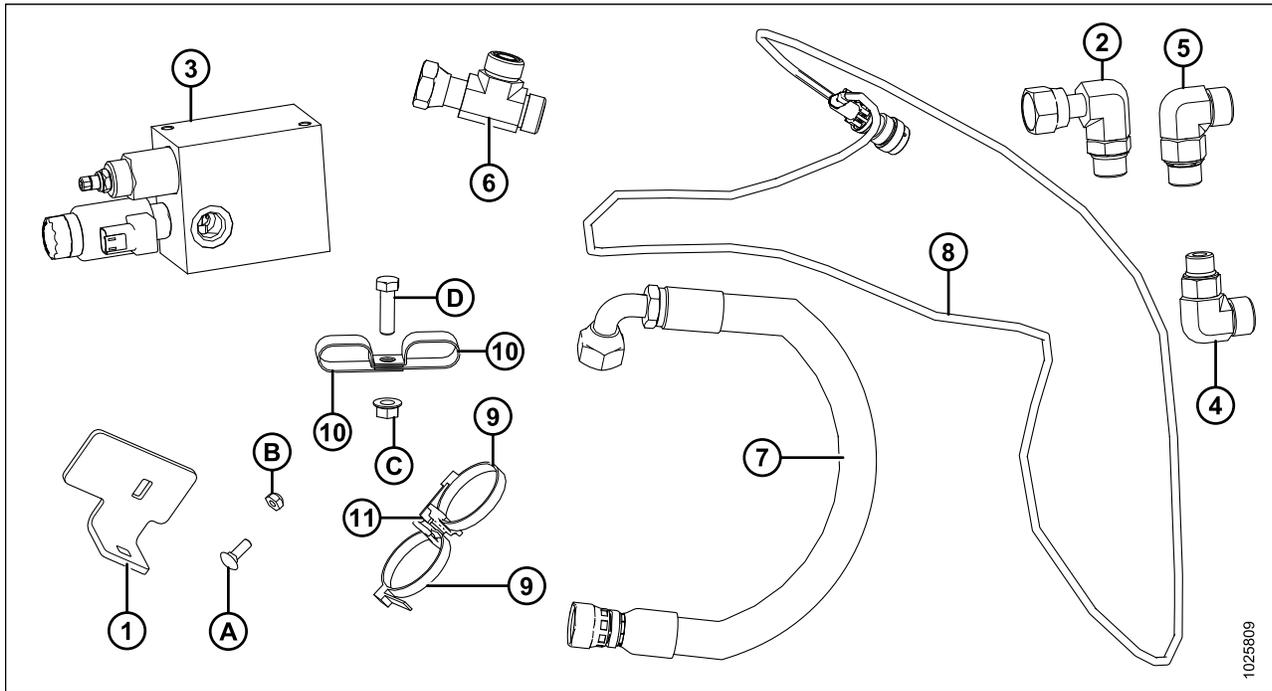
Figure 1.5: Safety around Equipment

- Keep service area clean and dry. Wet 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 is a fire hazard. 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

2 Parts List



Ref	Part Number	Description	Quantity
1	170974	BRACKET – BAR	1
2	252896	FITTING – ELBOW HYDRAULIC	1
3	170955	VALVE – FLOW CONTROL	1
4	135918	FITTING – ELBOW 90° HYDRAULIC	1
5	136089	FITTING – ELBOW 90° HYDRAULIC	1
6	135784	FITTING – TEE HYDRAULIC	1
7	170952	HOSE – HYDRAULIC	1
8	283709	HARNESS – AUGER HEADER REEL SPEED	1
9	30753	FASTENER – CABLE TIE, BLACK	9
10	135235	CLAMP – DOUBLE HOSE INSULATED	2
11	134442	SPACER – DUAL SWIVEL SADDLE	3
A	21476	BOLT – RHSN 1/4-20 X .75-GR5-ZP	1
B	18724	NUT – HEX LOCK DT 1/4-20 UNC ZP	1
C	30228	NUT – FLANGE DT SMOOTH FACE 0.375-16 UNC	1
D	21264	BOLT – HH 3/8 NC X 1.25 LG GR 5 ZP	1

3 Installation Instructions

To install the Reel Speed Control kit (MD #B6604 or 318001) on an A40DX or A40DX Grass Seed Auger Header, follow this procedure:

CAUTION

Ensure shield lock engages in the open position as shown at location (B) before letting go of shield.

1. Insert screwdriver or equivalent tool into opening (A) at base of endshield and push to release latch.
2. Pull bottom and lift endshield until shield support (B) engages bolt. Check that support (B) is engaged before releasing hold on shield.

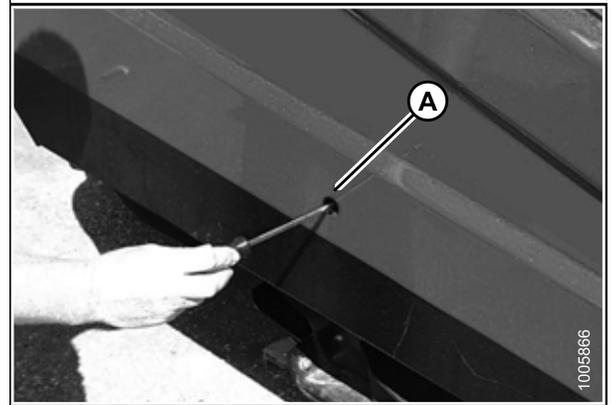
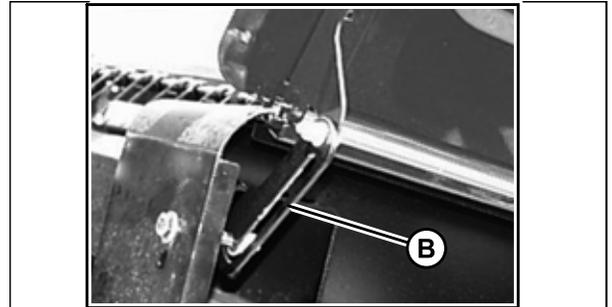


Figure 3.1: Opening Endshield

3. **Non-Grass Seed Headers only:** Disengage rubber latch (A).
4. **Non-Grass Seed Headers only:** Open shield (B).

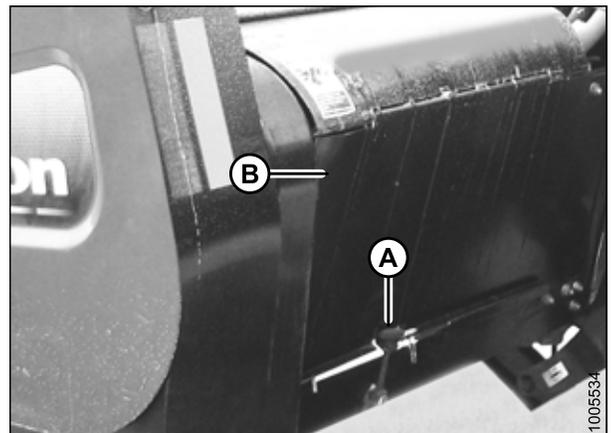


Figure 3.2: Opening Driveline Shield

INSTALLATION INSTRUCTIONS

Relocating knife guard straightening tool

5. Remove hair pin (A) securing knife guard straightening tool (B) in its storage position, then remove tool (B). Retain for reinstallation.
6. Remove bolt and nut securing wrench support plate (C) to the bar (D). Retain for reinstallation.

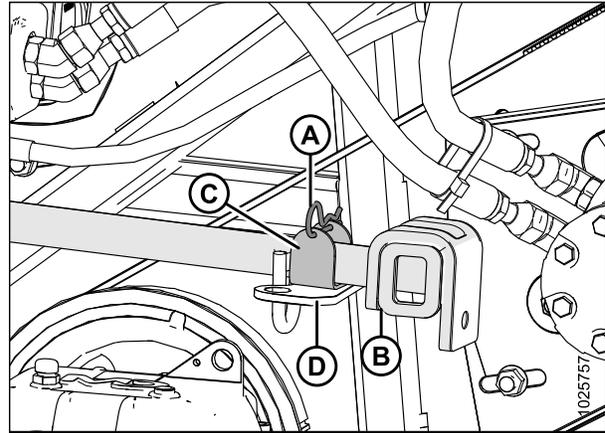


Figure 3.3: Knife Guard Straightening Tool in Storage Position (with Existing Bracket)

7. Assemble wrench support plate (A), removed in Step 6, [page 8](#), to bracket (B) (MD #170974) using bolt (C) (MD #21476) and nut (MD #18724).
8. Install the assembled part to bar (D) using bolt (E) and nut removed in Step 6, [page 8](#).

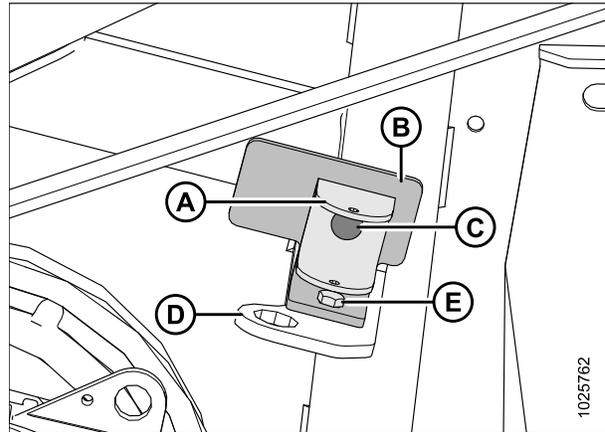


Figure 3.4: New Support Bracket

9. Position knife guard straightening tool (A) as shown and secure with hair pin (B).

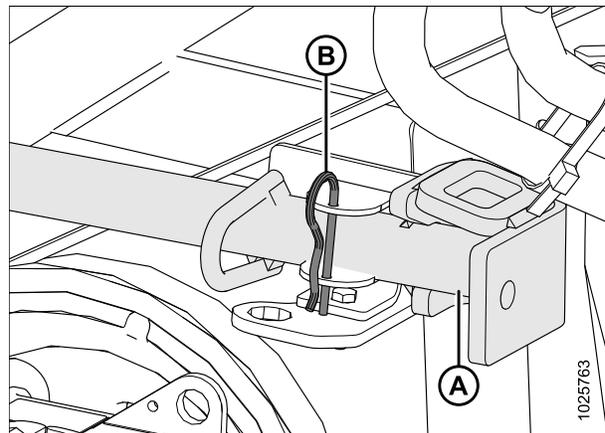


Figure 3.5: Knife Guard Straightening Tool in Storage Position (New Bracket)

INSTALLATION INSTRUCTIONS

Installation of reel speed hydraulic valve

10. Loosely install elbow fitting (B) (MD #252896) in port EF of flow control valve (C) (MD #170955).

IMPORTANT:

Orient the fittings on the valve as shown.

11. Loosely install 90-degree elbow fitting (A) (MD #136089) in port IN.

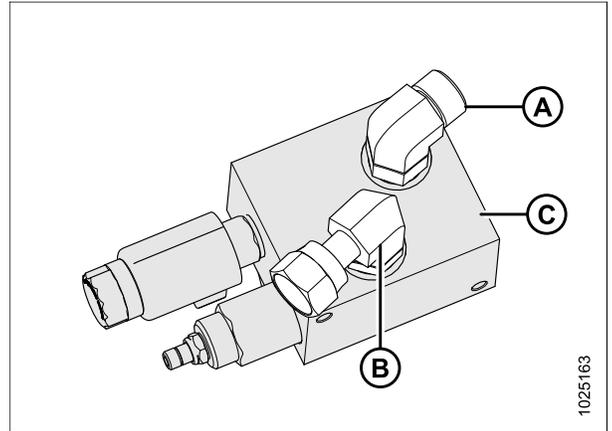


Figure 3.6: Flow Control Valve

12. Loosely install 90-degree elbow fitting (A) (MD #135918) in port CF of the flow control valve (B).

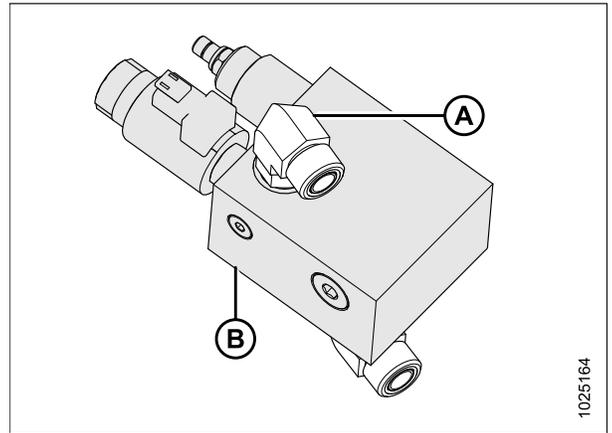


Figure 3.7: Flow Control Valve

13. Disconnect hydraulic hoses (A) and (B) from reel motor (C).

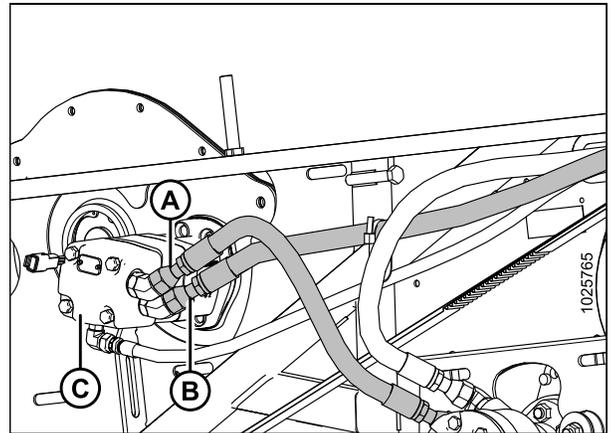


Figure 3.8: Reel Motor Hydraulics

INSTALLATION INSTRUCTIONS

14. Position flow control valve assembly (A) as shown.
15. Loosely connect elbow fitting (B) in port EF of flow control valve (A) to the elbow fitting (C) of reel motor (D).
16. Loosely connect the hydraulic hose (E) that is routed through the endshield to elbow fitting (F) in port IN of flow control valve (A).

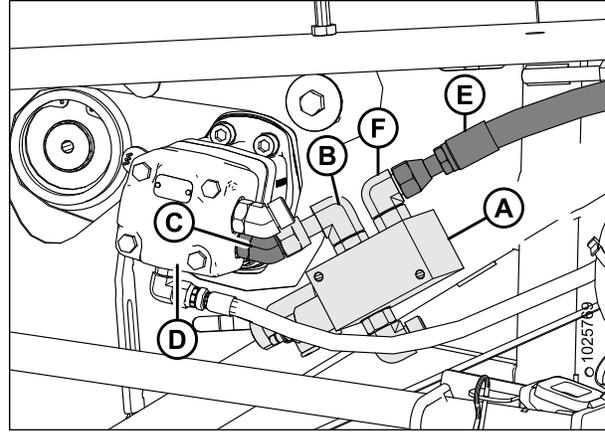


Figure 3.9: Installing Flow Control Valve

17. Connect tee fitting (A) (MD #135784) to elbow fitting (B) of reel motor (C) as shown.
18. Connect hose (D) coming from auger hydraulic motor to tee fitting (A) as shown.

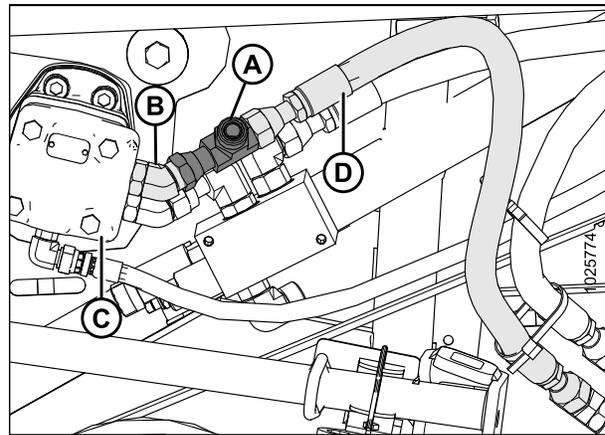


Figure 3.10: Installing Flow Control Valve

19. Connect hose (A) (MD #170952) to tee fitting (B) and to elbow fitting (C) in port CF of flow control valve (D).

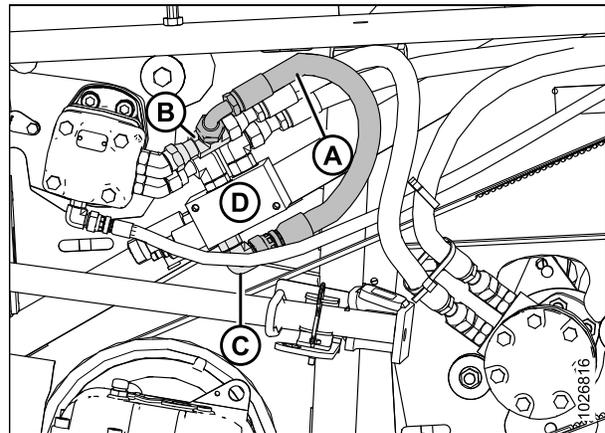


Figure 3.11: Installing Flow Control Valve

INSTALLATION INSTRUCTIONS

20. Secure the two hydraulic hoses (A) using two clamps (B) (MD #135235), bolt (C) (MD #21264), and nut (D) (MD #30228).
21. Tighten all fittings.

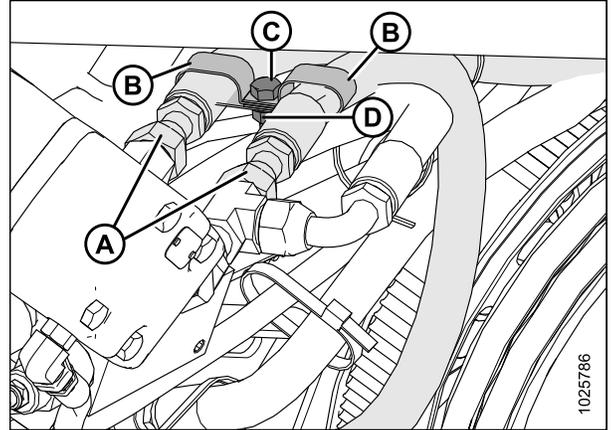


Figure 3.12: Securing Hoses with Clamps

22. Route reel speed harness (A) (MD #283709) along the main header harness using a dual swivel spacer (MD #134442) and two cable ties (MD #30753) as required to keep the harness secured.

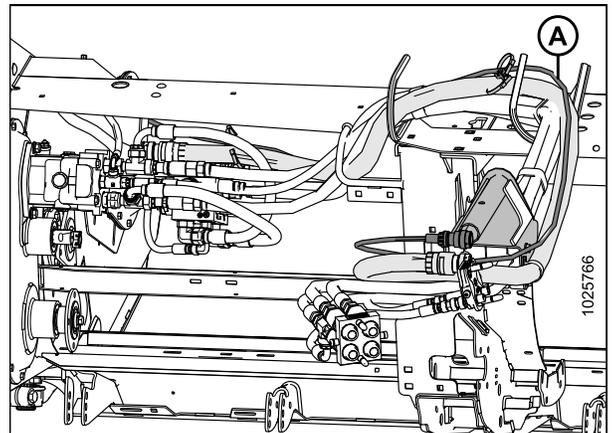


Figure 3.13: Reel Speed Harness Routing

23. Plug reel speed harness (D) into flow control valve (E).
24. Using a dual swivel spacer (A) (MD #134442) and two cable ties (B) (MD #30753), secure hydraulic hose (C) and reel speed harness (D) together as shown.
25. Secure excess harness above pump.

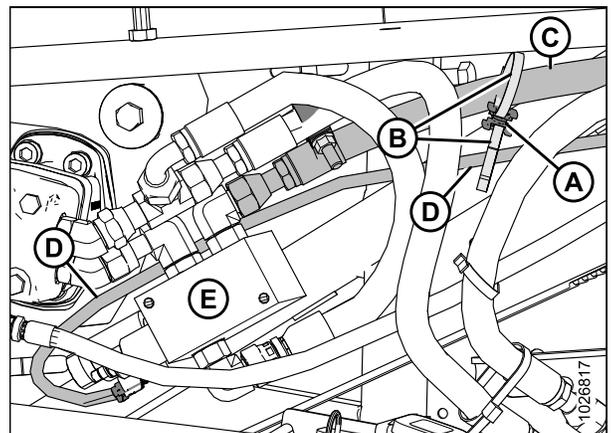


Figure 3.14: Securing Hoses

INSTALLATION INSTRUCTIONS

26. **Non-Grass Seed Headers only:** Lower shield (B).
27. **Non-Grass Seed Headers only:** Engage rubber latch (A).

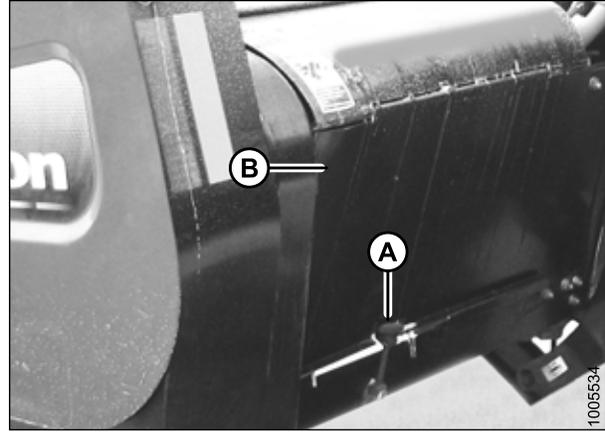


Figure 3.15: Closing Driveline Shield

28. Grasp endshield at top, push slightly, and move support (A) inboard to disengage.
29. Lower endshield to about 30 cm (1 ft.) from closed position.
30. Release endshield so that it drops to closed position. Shield will self-latch.

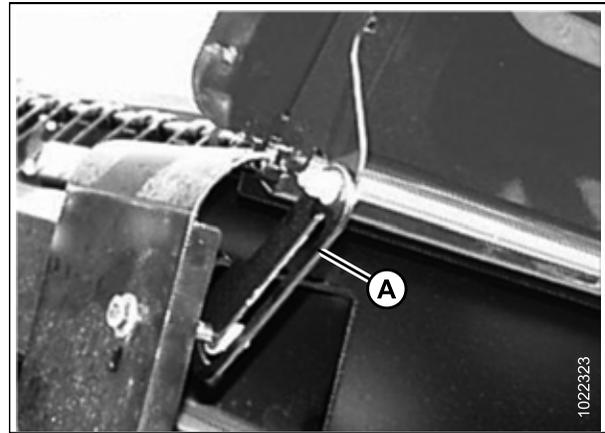


Figure 3.16: Closing Endshield

31. Attach auger header to windrower if not already attached. Refer to the windrower or header operator's manual for attaching header and connecting hydraulics procedures.
32. Connect the variable reel speed harness to the top electrical connector (A) under the left platform of the windrower.

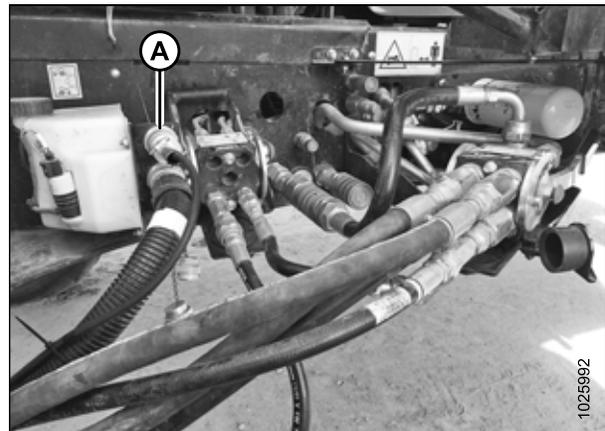


Figure 3.17: Reel Speed Harness Connection

4 Operation

Installation of this kit requires the following software versions installed in the windrower:

- Harvest Performance Tracker (HPT) software: Install_SPW_HPAH203586K_efs or newer
- Master Controller software: MCAH203587M.ida4 or newer

1. Turn ignition ON. HPT will display auger header (A) as attached.



Figure 4.1: HPT Screen Display

2. Press soft key 5 on the HPT to open the main menu (A), or press SHIFT and SELECT on the ground speed lever (GSL).
3. Using the HPT scroll knob, navigate to setup (B), then header setup (C). The HEADER SETUP page opens and displays a list of different headers.

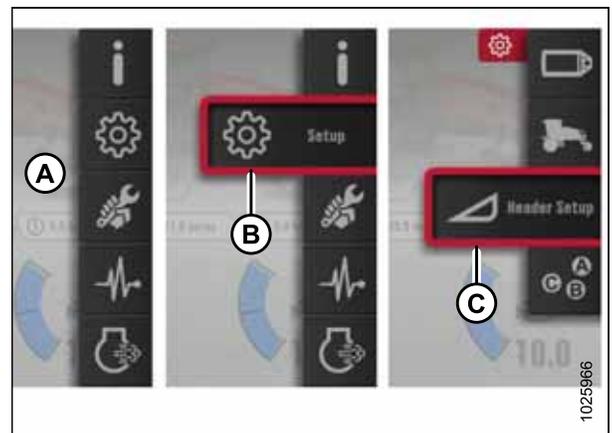


Figure 4.2: HPT Screen Display

4. Select the header type currently attached to the windrower: Auger or GSS Auger (A). A new page opens.

NOTE:

The attached header always appears first on the list.

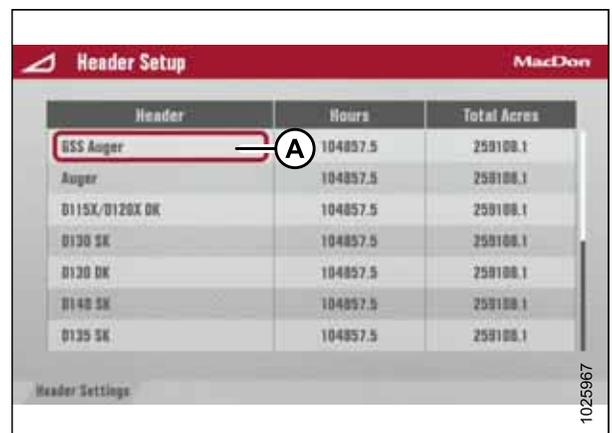


Figure 4.3: HPT Screen Display

OPERATION

- Using the HPT scroll knob, scroll and select ATTACHMENTS (A). A new page opens.

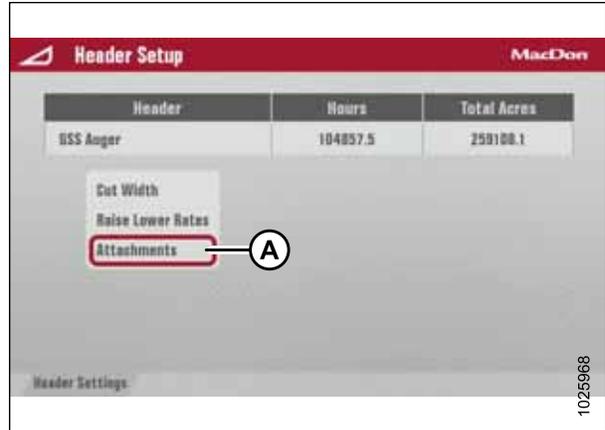


Figure 4.4: HPT Screen Display

- Select DIFFERENTIAL AUGER-REEL CONTROL (A). Once this is done, the auger speed can be controlled via the quick menus on RUN SCREEN 2.

NOTE:

This will enable the system to use the differential auger-reel control package.

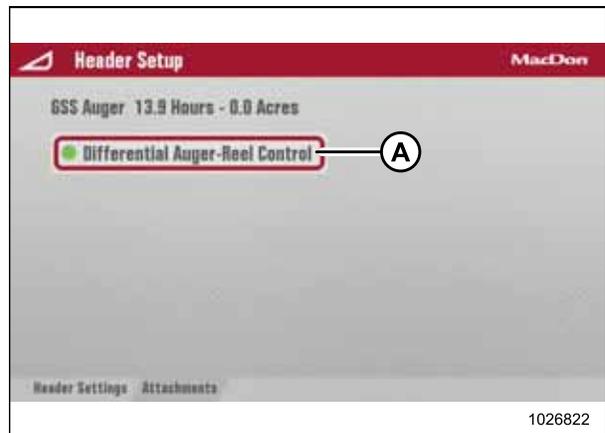


Figure 4.5: HPT Screen Display

- To adjust the auger speed, press soft key 2 on the HPT to display RUN SCREEN 2.



Figure 4.6: HPT Screen Display

OPERATION

- Press the scroll knob (A) on the HPT or the SELECT button (B) on the ground speed lever (GSL) to display the Quick Menu system.

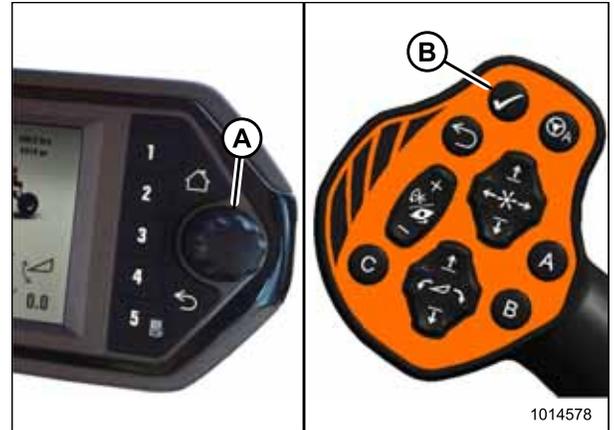


Figure 4.7: HPT Scroll Knob and GSL Select Button

- Scroll to the auger speed tile (A) and select it.



Figure 4.8: HPT Screen Display

- The auger speed (A) can now be adjusted.

IMPORTANT:

Reel speed is still adjusted the same way as it would be without the kit (using the reel speed button on the GSL), but it is important to know that the minimum/maximum reel speed is dependent on the auger speed, and in some cases, in order to have the reel run slower or faster, the Operator may have to decrease or increase the auger speed.



Figure 4.9: HPT Screen Display

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