

**M1 Windrower
Steering Rod Kit (MD #306271)
INSTALLATION INSTRUCTIONS**

This kit is used to replace a failed steering link on M1 Series Windrowers.

A list of parts included in the kit is provided.

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: These instructions are currently available in English only.

Installation Time

Approximately 2 hours

Conventions

The following conventions are used in this document:

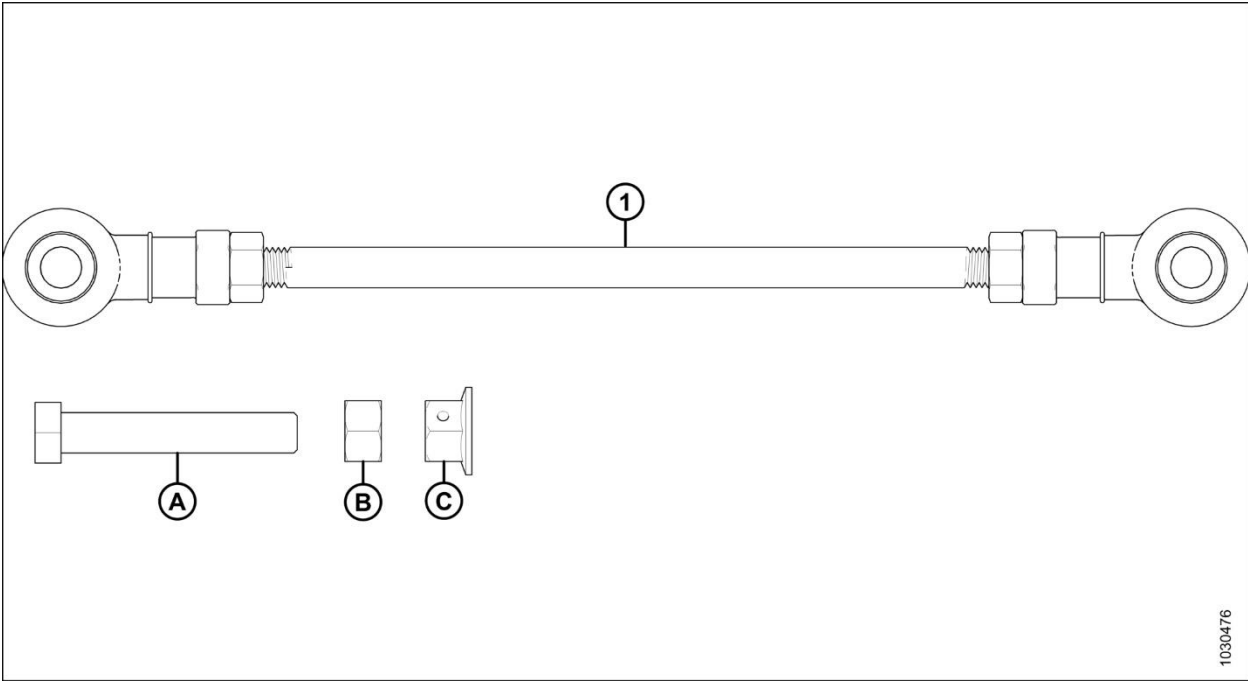
- Right and left are determined from the operator's position, facing forward with the windrower in cab-forward position.
- Unless otherwise noted, use the standard torque values provided in the M1 windrower operator's manual and technical manual.

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Parts List

This kit includes the following parts:

Figure 1: Parts Included MD #306271



Ref	Part Number	Description	Qty
1	306267	ROD – STEERING LINK	1
A	184675	BOLT – HEX HD M12X1.75X70-8.8-AA1J	2
B	184694	NUT – HEX M12X1.75-8-AA1J	2
C	136431	NUT – HEX FLG CTR LOC M12X1.75-10	2

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Installation Instructions

To install the Steering Rod kit, follow these steps:



WARNING

To avoid injury or death from unexpected start-up of machine, always stop the engine and remove the key from the ignition before leaving the operator's seat for any reason.

NOTE: Some parts have been removed from the following illustrations for clarity.

Removing the Steering Link

1. Shut down the engine, and remove the key from the ignition.
2. If autopilot™ is installed, remove U-bolts (A) from cylinder end support (B).

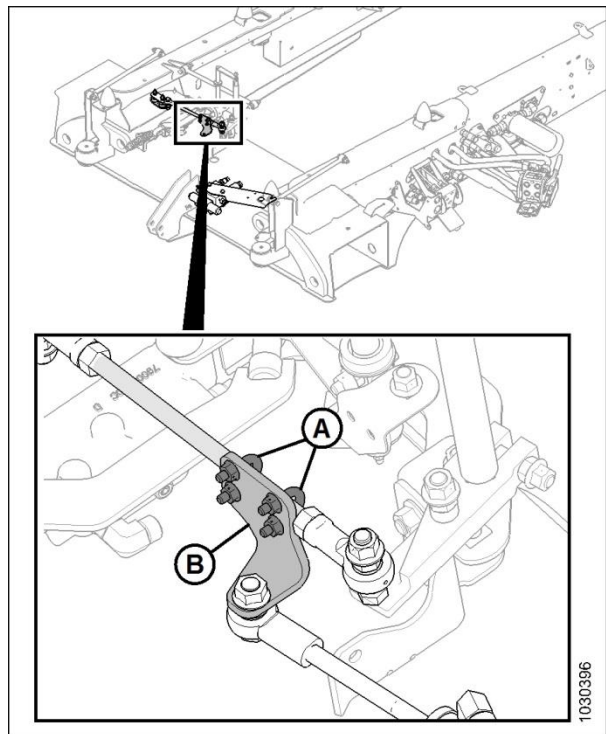


Figure 2: Autopilot™ Support

M1 Windrower
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INSTALLATION INSTRUCTIONS

3. Remove two nuts (A) and (B) on either end of the steering link.
4. Remove two bolts (C).
5. Remove steering link rod (D).

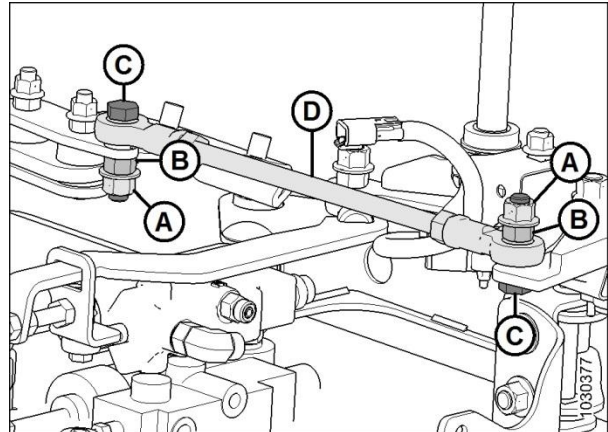


Figure 3: Steering Link

NOTE: Steering angle sensor bracket (B) may or may not be present on your windrower depending on model year. If steering angle sensor bracket (B) is in place proceed with steps 6 and 7, otherwise skip to step 8.

6. Loosen nut (A) on steering angle sensor bracket (B).
7. Position the sensor bracket out of the way.
8. Remove cotter pin (C).

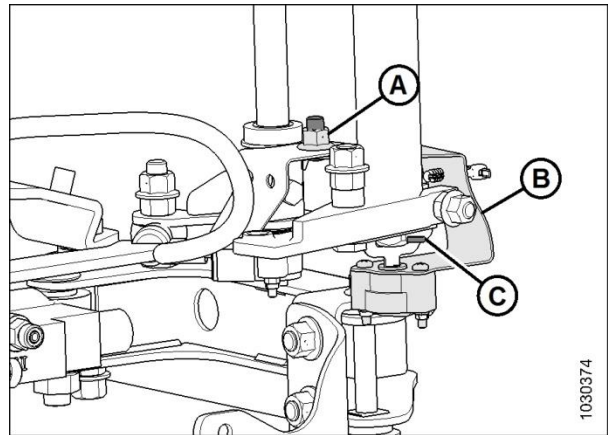


Figure 4: Steering Angle Sensor Bracket

9. Loosen nuts (A) and (B).
10. Slide steering arm (C) down enough that bolt (D) can be installed through the steering arm from the top.

NOTE: Bolt (D) shown for reference.

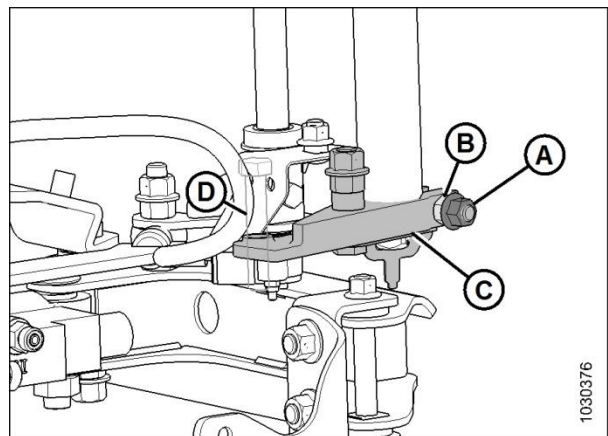


Figure 5: Steering Arm

M1 Windrower
Steering Rod Kit (MD #306271)
INSTALLATION INSTRUCTIONS

Installing the Steering Link

1. Install new steering link rod (D) (MD #306267) with two new hex head bolts (C) (MD #184675).

NOTE: Bolts are installed from the top of steering link rod.

2. Install two new nuts (B) (MD #184694) and tighten until snug, then use a wrench and tighten the nut another 60° to 90°.
3. Install two new lock nuts (A) (MD #136431).
4. Hold nut (B) with a wrench and tighten lock nut (A) to 70 Nm (52 lbf·ft).

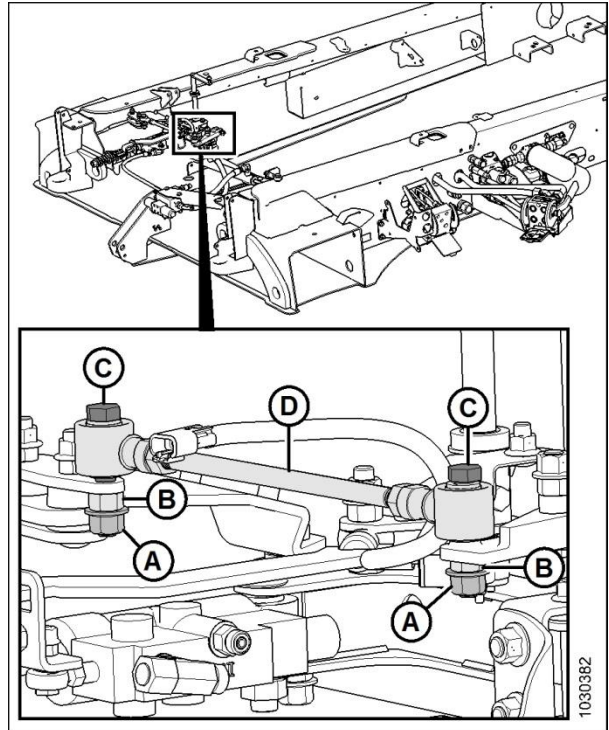


Figure 6: Steering Link

5. Slide steering arm (D) up until it is snug against the shoulder of the steering shaft.
6. Install nut (B) until snug, and then use a wrench and tighten the nut another 60° to 90°.
7. Install lock nut (A).
8. Hold nut (B) with a wrench and tighten lock nut (A) to 70 Nm (52 lbf·ft).
9. Install cotter pin (C).

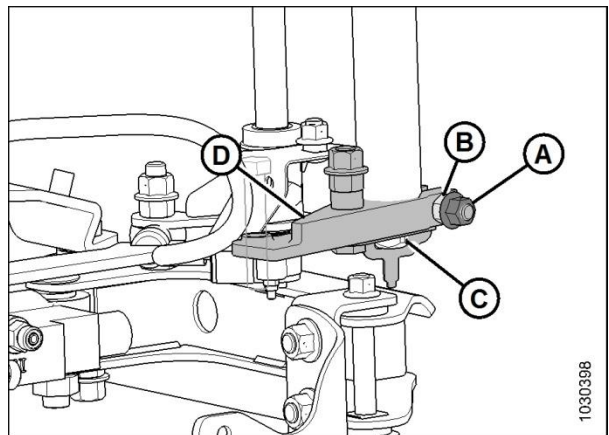


Figure 7: Steering Arm

M1 Windrower Steering Rod Kit (MD #306271) INSTALLATION INSTRUCTIONS

NOTE: Steering angle sensor bracket (B) may or may not be present on your windrower depending on model year. If steering angle sensor bracket (B) is in place proceed with steps 10–13.

10. Line up the sensor slot with sensor adapter tab (C).
11. Slide sensor subassembly up, until sensor fully engages on adapter tab. The sensor is spring loaded.
12. Rotate sensor assembly (B) toward bolt (A), and line it up under the ground speed lever (GSL) position bracket (D).
13. Tighten nut (A).

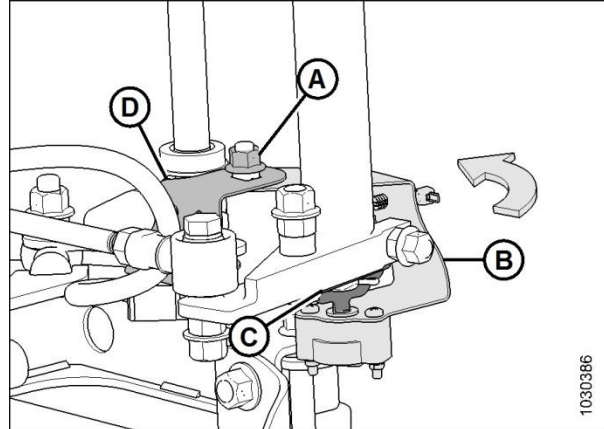


Figure 8: Sensor Assembly

If autopilot™ is installed;

14. Position cylinder end support (B) against jam nut (C) on the left end of the steering rod, with the bottom edge of bracket aligned horizontally and pointed toward the front.
15. Check that the steering link is centered between the ball joints.
16. Tighten both U-bolts (A) evenly until cylinder end support (B) clamps onto the steering link, and then continue to tighten one full turn.

NOTE: A recalibration of the sensor will be required through the Trimble system.

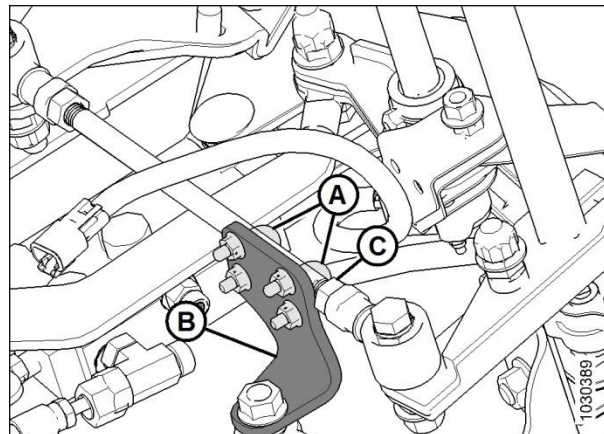


Figure 9: Autopilot™ Support

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