The Motor Service kit (MD #257149) is needed to replace the hydraulic motor on a MacDon R1 Series or R85 Rotary Disc Header. This document explains how to remove the existing hydraulic motor and replace it with the one in the kit. 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:** This document is currently available in English only.

#### **Installation Time**

This kit will take approximately 1 hour to install.

#### **Conventions**

The following conventions are used in this document:

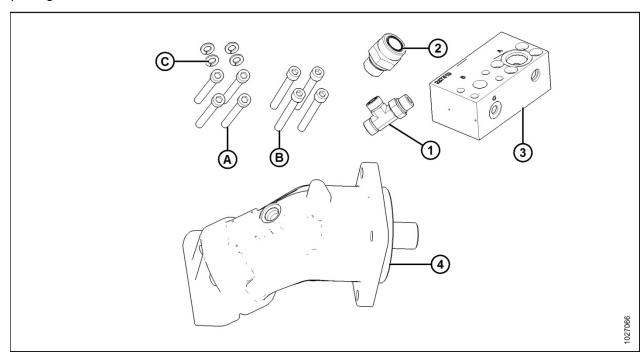
- Right and left are determined from the operator's position, facing forward with the windrower in cabforward position.
- Unless otherwise noted, use the standard torque values provided in the disc header operator's manual and technical manual.

### **Table of Contents**

Parts List	2
Installation Instructions	:
Removing Existing Motor from Header	
Preparing New Motor	4
Installing New Motor	

### **Parts List**

A parts list is provided in this instruction so that you can confirm that you have received all required parts before you begin installation.



	Part		
Ref	Number	Description	Quantity
1	136258	FITTING – TEE HYDRAULIC	1
2	135790	FITTING – ADAPTER	1
3	236634	MANIFOLD – RELIEF	1
4	198610	MOTOR – BOSCH	1
Α	136354	SCREW – HEX SOC HD ISO 4762 M10	4
В	136108	SCREW – HEX SOC HD M10 X 1.5 X 80 – 12.9-BO	4
С	30632	WASHER – LOCK SPRING M10	4

#### **Installation Instructions**

To install the Motor Service kit, follow these steps:



#### **DANGER**

To avoid bodily injury or death from the 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.

- 1. Lower the header to the ground. For instructions, refer to the header operator's manual.
- 2. Stop the engine, and remove the key from the ignition.

#### **Removing Existing Hydraulic Motor from Header**

- 1. Disconnect the following connections on the existing motor:
  - a. Pressure hose from male fitting (A)
  - b. Return hose from adapter fitting (B)
  - c. Case drain hose from elbow fitting (C)
  - d. Electrical harness from windrower electrical harness (D)
- 2. **IMPORTANT:** To prevent contamination of the hydraulic system, install caps and plugs on any open fittings and hoses.

**NOTE:** Take a photograph or make a diagram of the hydraulic hoses and their respective fittings. This will simplify attaching the hoses to the new hydraulic motor.

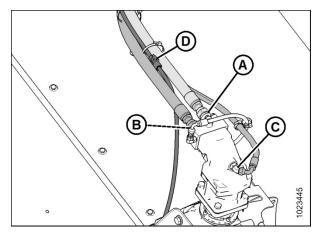


Figure 1: Existing Hydraulic Motor on Header

- 3. Remove and retain elbow fitting (A), drain hose with hydraulic fitting (B), and relief valve with adapter fitting (C).
- 4. Remove and discard four bolts and washers (D).
- 5. Remove and retain two half-split flanges (E) and male fitting (F).

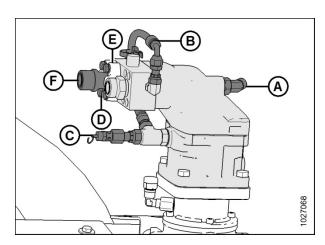


Figure 2: Fittings on Existing Hydraulic Motor

6. Attach one end of a sling to the motor and the other end to a lifting device.

**IMPORTANT:** Do **NOT** lift the motor by its hydraulic lines.

- 7. Remove and retain four bolts (A) securing motor (B) to gearbox (C).
- 8. Slowly lift the motor away from the header's gearbox. Discard the motor.

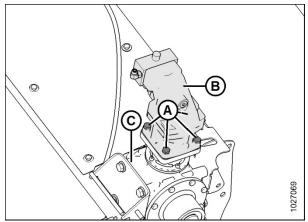


Figure 3: Existing Motor on Header

9. Cover gearbox opening (A) with a rag or with plastic.

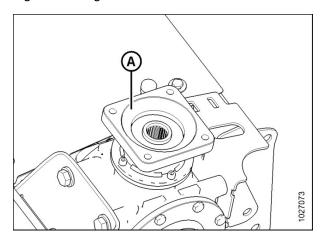
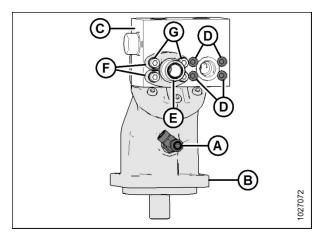


Figure 4: Gearbox

#### **Preparing New Motor**

- 1. Remove the caps from the motor ports on the new hydraulic motor (MD #198610).
- 2. Install new tee fitting (A) (MD #136258) on new motor (B) as shown.
- Position new relief manifold (C) (MD #236634) on the new motor as shown, and secure it with four screws (D) (MD #136108). Torque the screws to 50 Nm (37 lbf·ft).
- Position male fitting (E) as shown, and secure it with two half-split flanges (F), and four washers (MD #30632) and screws (G) (MD #136354) on the relief manifold. Torque the screws to 50 Nm (37 lbf·ft).



**Figure 5: New Motor Assembly** 

- 5. Install new adapter fitting (A) (MD #135790) on relief manifold (B).
- 6. Install retained elbow fitting (C) as shown on new motor (D).
- 7. Install retained relief valve with adapter fitting (E) onto tee fitting (F) as shown.
- 8. Attach retained drain hose with hydraulic fitting (G) on the top of relief manifold (B), and attach the other end of the drain hose onto tee fitting (F) as shown.
- 9. Attach one end of a sling to the motor and the other end to a lifting device.

**IMPORTANT:** Do **NOT** lift the motor by its hydraulic lines.

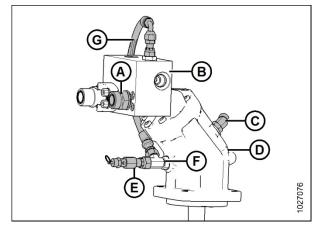


Figure 6: New Motor Assembly

### **Installing New Motor**

- 1. Remove the rag or plastic protecting the gearbox opening.
- 2. Lower new motor assembly (A) onto the gearbox opening.
- 3. Secure the motor on gearbox (B) using four retained bolts (C). Torque the bolts to 140 Nm (103 lbf·ft).
- 4. Remove the sling from the motor.

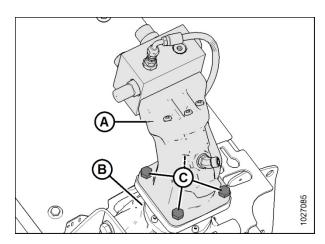


Figure 7: New Motor Assembly

### 5. Connect the following on the motor:

- a. Pressure hose (A) to male fitting (B)
- b. Return hose (C) to adapter fitting (D)
- c. Case drain hose (E) to elbow fitting (F)
- d. Electrical harness (G) to windrower electrical harness (H)

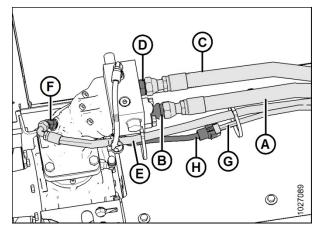


Figure 8: New Motor Installed

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