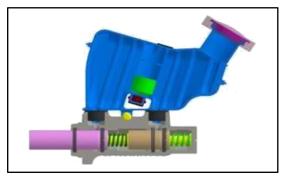
	GROUP	MODEL		
	Safety Recall Campaign	2020-2021MY Rio (SC)		
	NUMBER	DATE		
	SC223	January 2022		
SAFETY RECALL CAMPAIGN				

# SUBJECT: BRAKE MASTER CYLINDER REPLACEMENT (SC223)

This bulletin provides information to replace the brake master cylinder on certain 2020-2021MY Rio (SC) vehicles produced from September 29, 2020 through July 1, 2021. During production of the brake master cylinder, the master cylinder body may have been produced with sharp edges due to improper machining by the supplier. As a result, an oil seal in the master cylinder can become damaged during vehicle operation. A damaged oil seal can impair the vehicle's braking function, such that the driver may experience a spongy brake feel, longer brake pedal travel, and extended stopping distances, thereby increasing the risk of a crash. Follow the procedure outlined in this publication to replace the brake master cylinder. Before conducting the procedure, verify that the vehicle is included in the list of affected VINs.



Brake Master Cylinder Assembly

## 

There is no charge to the vehicle owner for this repair. Under applicable law, you may not sell or otherwise deliver any affected vehicle until it has been repaired pursuant to the procedures set forth in this bulletin.

## 

To assure complete customer satisfaction, always remember to refer to WebDCS Warranty Coverage (validation) Inquiry Screen (Service  $\rightarrow$  Warranty Coverage  $\rightarrow$  Warranty Coverage Inquiry) for a list of any additional campaigns that may need to be performed on the vehicle before returning it to the customer.

A printed copy is for reference only; publication information can be updated at any time. Always refer to KGIS for the latest information. After logging in kdealer.com, the newest technical publications are listed in 'Service Releases' and has the latest service information that has been released. SUBJECT:

## BRAKE MASTER CYLINDER REPLACEMENT (SC223)

#### Brake Master Cylinder Replacement Procedure:

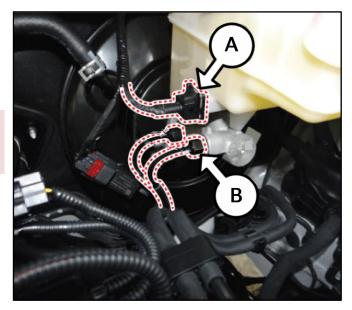
- Remove the battery and battery tray by referring to the "Engine Electrical System → Charging System
  → Battery → Repair procedures" chapter in the applicable Shop Manual on KGIS.
- 2. Remove the air cleaner assembly by referring to the "Engine Mechanical System → Intake and Exhaust System → Air Cleaner → Repair procedures" chapter in the applicable Shop Manual on KGIS.
- 3. Remove the brake fluid from the master cylinder reservoir with a syringe.

#### 

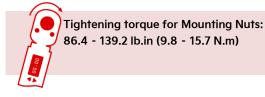
- Do <u>not</u> spill brake fluid on the vehicle as it may damage the paint. If brake fluid comes in contact with the paint, wash off immediately with water.
- Disconnect the brake fluid level switch connector (A) and disconnect the brake tube (B) from the master cylinder by loosening the tube flare nut.

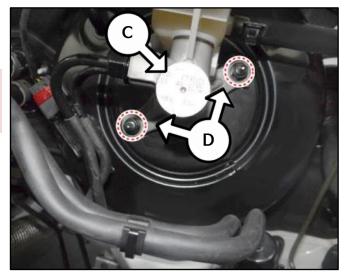


Tightening torque for Flare Nut: ABS: 10.1 - 12.3 lb.ft (13.7 - 16.7 N.m) ESC: 13.7 - 16.6 lb.ft (18.6 - 22.6 N.m)



5. Remove the master cylinder (C) from the brake booster after loosening the mounting nuts (D).





· O-ring

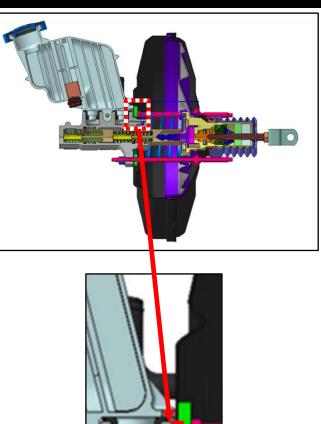
## BRAKE MASTER CYLINDER REPLACEMENT (SC223)

6. Install in reverse order of removal.

<u>Note</u>: Before assembling the brake master cylinder to the booster ensure O-ring is installed in the correct position.

## 

Reuse the original master cylinder O-ring. If damaged, use PN 58591 17000 to replace it.



 After installation, bleed the brake system. Refer to the next section, 'Brake System Bleeding Procedure'.

#### Brake System Bleeding Procedure:

1. Bleed the brake system by referring to the "Brake System  $\rightarrow$  Brake System  $\rightarrow$  Repair procedures" chapter in the applicable Shop Manual on KGIS.

## 

- Do <u>not</u> reuse the drained fluid.
- Always use genuine DOT4 brake fluid.
- Using a non-genuine DOT4 brake fluid can cause corrosion and decrease the life of the system.
- Make sure that no dirt or other foreign matter is allowed to contaminate the brake fluid.
- Do <u>not</u> spill brake fluid on the vehicle as it may damage the paint. If brake fluid comes in contact with the paint, wash off immediately with water.
- The reservoir on the master cylinder must be at the MAX (upper) level mark at the start of the bleeding procedure and checked after bleeding each brake caliper. Add fluid as required.

SUBJECT:

## BRAKE MASTER CYLINDER REPLACEMENT (SC223)

## AFFECTED VEHICLE RANGE:

Model	Production Date Range		
Rio (SC)	September 29, 2020 to July 1, 2021		

#### **REQUIRED PART:**

Part Name	Part Number	Part Number Figure	
Master Cylinder & Reservoir	58510 H9260QQK		1
Brake Fluid (DOT4)	UM010 CH043	Brake Fluid DOT 4	1 qt (Max.)

### WARRANTY INFORMATION:

#### N Code: N99 C Code: C99

Claim Type	Causal P/N	Qty.	Repair Description	Labor Op Code	Op Time	Replacement P/N	Qty.
R	58510 H9260	0	(SC223) R & R Brake Master Cylinder Assy	211M17R0	1.5 M/H	58510 H9260QQK	1

<u>Note</u>: Use sublet code 'X1' for reimbursement of Kia Brake Fluid (DOT 4, PN UM010 CH043) used for brake system bleeding and fluid adjustment (maximum allowance of \$9.00).

When necessary, manually enter sublet code 'X2' for reimbursement of one roundtrip rideshare expense or up to three (3) days of rental for Brake Master Cylinder replacement. **Refer to Warranty Bulletin 2022-02 for claim submission procedures.** 

#### 

VIN inquiry data for this repair is provided for tracking purposes only. Kia retailers should reference SC223 when accessing the WebDCS system.