HYUNDAI NEW THINKING. NEW POSSIBILITIES.	GROUP	NUMBER
Technical Service Bulletin	**CAMPAIGN**	**14-01-032-1**
	DATE	MODEL(S)
	AUGUST, 2014	**2011 SONATA (YF)**

SUBJECT: SONATA (YF) BRAKE TUBE REPLACEMENT (RECALL CAMPAIGN 122)

THIS TSB SUPERSEDES TSB 14-01-032 TO INCLUDE INFORMATION ON HOW TO IDENTIFY PRIMARY AND SECONDARY BRAKE TUBE ASSEMBLIES.

*** IMPORTANT**

***** RETAIL VEHICLES ONLY *****

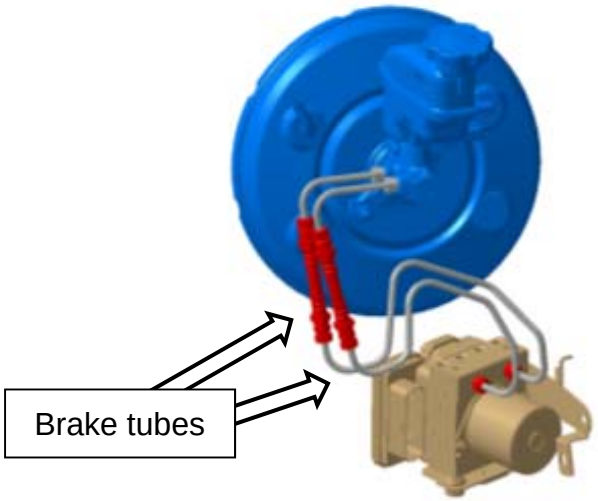
Dealers must perform this Recall Campaign whenever an affected vehicle is in the shop for any maintenance or repair.

When a vehicle arrives at the Service Department, access Hyundai Motor America's "Warranty Vehicle Information" screen via WEBDCS to identify open Campaigns.

Description: This bulletin describes the procedure to replace the brake tubes for certain 2011MY Sonata (YF) vehicles. The two brake lines connecting the brake system's master cylinder to the Hydraulic Electronic Control Unit (HECU) may develop a leak over time due to an insufficient seal between the inner brake hose and metal brake line fitting.

Two symptoms can result from this condition. As the brake fluid leaks, there may be a gradual depletion of fluid in the brake fluid reservoir over time resulting in complaints of a brake fluid leak. If the leak continues unnoticed, the brake warning lamp in the instrument cluster will illuminate. Additionally, a fluid leak between the hose's inner and outer layers may restrict brake fluid flow between the master cylinder and the circuit's brake caliper(s). This may be accompanied by illumination of the Electronic Stability Control (ESC) warning lamp in the instrument cluster.

If the brake tubes leak sufficient brake fluid, the brake warning lamp in the instrument cluster will illuminate and longer stopping distance will be required, increasing the risk of a vehicle crash.



Circulate To: General Manager, Service Manager, Parts Manager, Warranty Manager, Service Advisors, Technicians, Body Shop Manager, Fleet Repair

SUBJECT: SONATA (YF) BRAKE TUBE REPLACEMENT (RECALL CAMPAIGN 122)

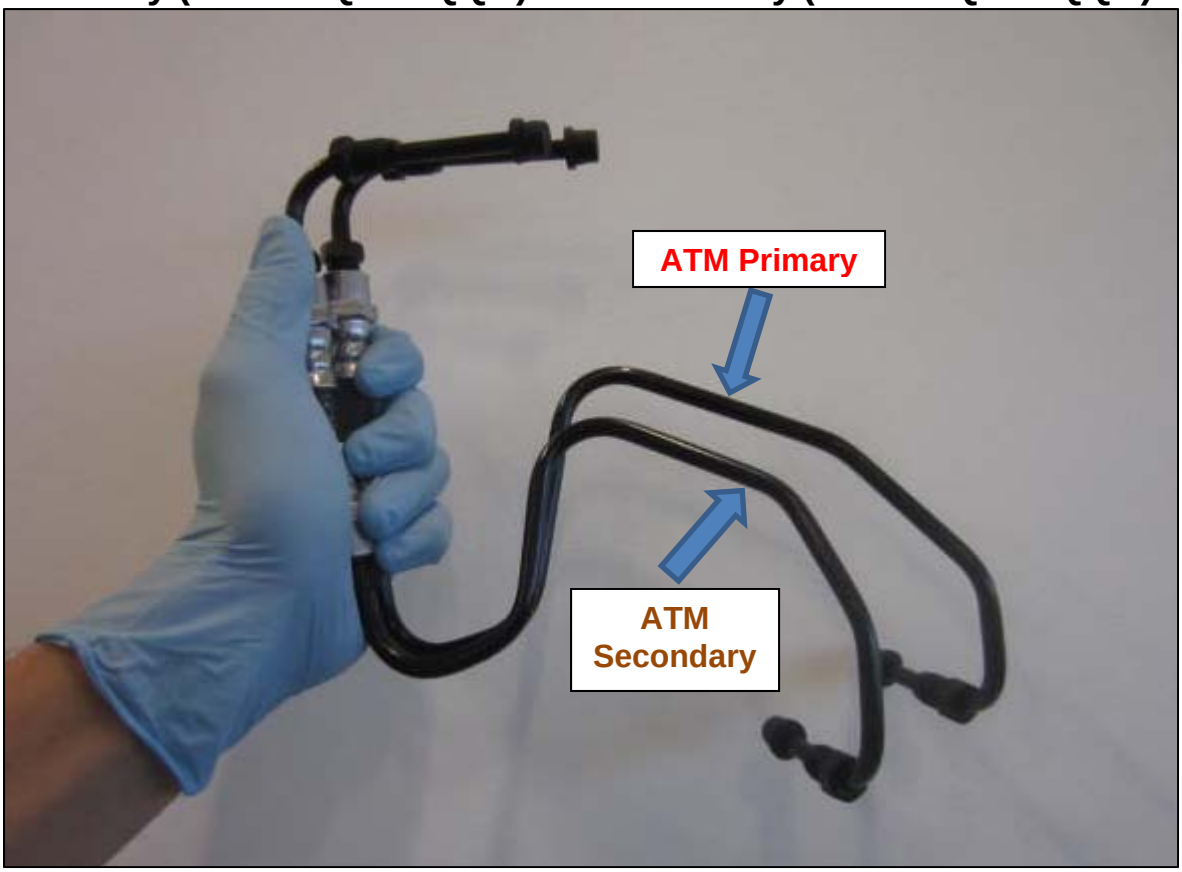
Applicable Vehicles: 2011 Sonata (YF) vehicles manufactured on December 11, 2009 through September 1, 2010.

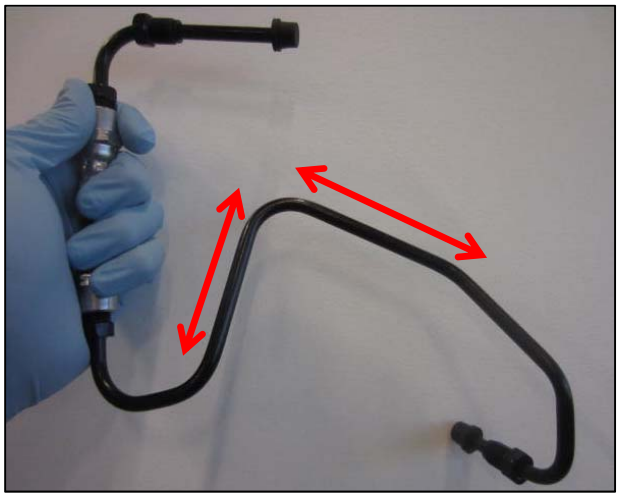
Parts Information:

Trim	Part Name	Part Number	Qty.
Auto Trans	Brake tube assembly – Primary	58722-3Q001-QQH	1
	Brake tube assembly – Secondary	58718-3Q001-QQH	1
Manual Trans	Brake tube assembly – Primary	58722-3Q451-QQH	1
	Brake tube assembly – Secondary	58718-3Q451-QQH	1
All	DOT 3 Brake Fluid	00232-19033	Approximately two 12 fluid ounce bottles are required per vehicle.

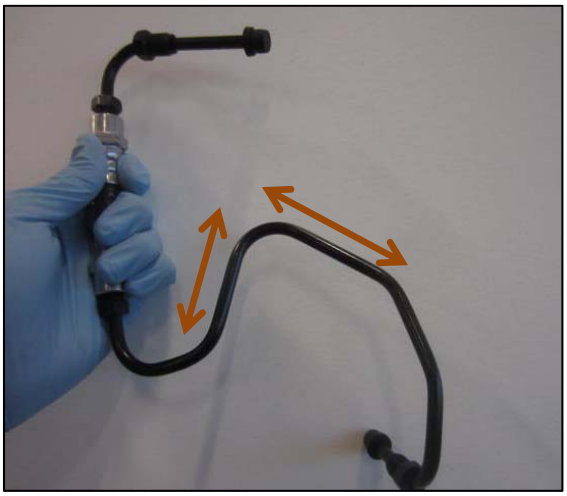
Parts Images:

YF Brake Tube Assembly <u>Automatic Trans (ATM)</u>:
Primary (58722-3Q001-QQH) vs. Secondary (58718-3Q001-QQH)



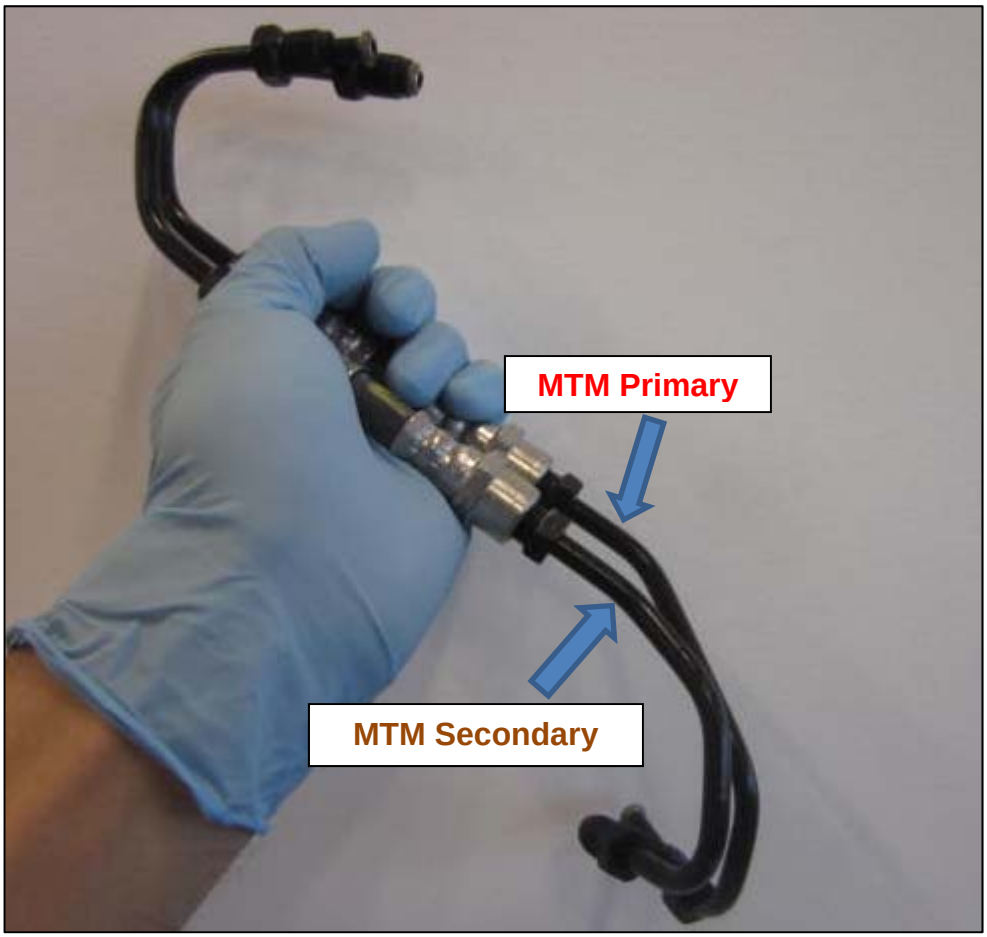


ATM Primary tube has longer lines.



ATM Secondary tube has shorter lines.

YF Brake Tube Assembly <u>Manual Trans (MTM)</u>: Primary (58722-3Q451-QQH) vs. Secondary (58718-3Q451-QQH)



MTM Primary tube has a longer line.

MTM Secondary tube has a shorter line.

Warranty Information:

Op. Code	Operation	Op. Time
40C029R0	Brake tube replacement	0.9 M/H

NOTE: Submit Claim on Campaign Claim Entry Screen
NOTE: Part number 00232-19033 will be reimbursed along with appropriate dealer parts allowance in the replaced parts field.

Service Procedure:

⚠ CAUTION

To prevent ESC activation during this procedure, DO NOT turn the ignition ON, and DO NOT DRIVE the vehicle. If the ignition is turned ON, or if the vehicle is driven, the system calibration tests may occur, which may require additional brake fluid bleeding procedures.

1. Disconnect negative battery terminal.

NOTICE

Record the AM/FM/XM radio station presets prior to removing negative battery terminal.

2. Remove the engine cover and air cleaner assembly following the appropriate service manual procedures to gain access to the brake tube assemblies.

3. Place a container or shop rag under the master cylinder to catch any brake fluid.

   Loosen the two flare nuts at the master cylinder.

NOTICE

Tightening torque:
10.1 ~ 12.3 lb-ft (1.4 ~ 1.7 kgf.m, 13.7 ~ 16.7 Nm)

NOTICE

If any fluid is spilled on the vehicle, immediately clean the spill by generously flushing water over the area and wiping clean with a clean rag.

NOTICE

DO NOT reuse the drained brake fluid.

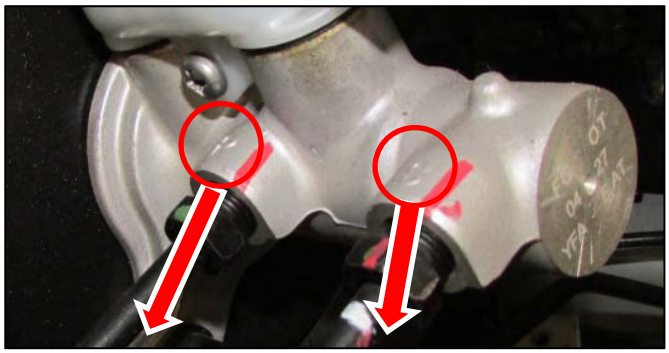
4. Loosen the two flare nuts at the HECU module. Leave the tube assemblies in place.

NOTICE

Tightening torque:
10.1 ~ 12.3 lb-ft (1.4 ~ 1.7 kgf.m, 13.7 ~ 16.7 Nm)

5. Note on the master cylinder the **PRIMARY** port is marked with a "**P**." At the HECU module, the **PRIMARY** circuit port is marked with an "**MC1**."

The **SECONDARY** circuit is marked with an "**S**" on the master cylinder, and an "**MC2**" at the HECU module.

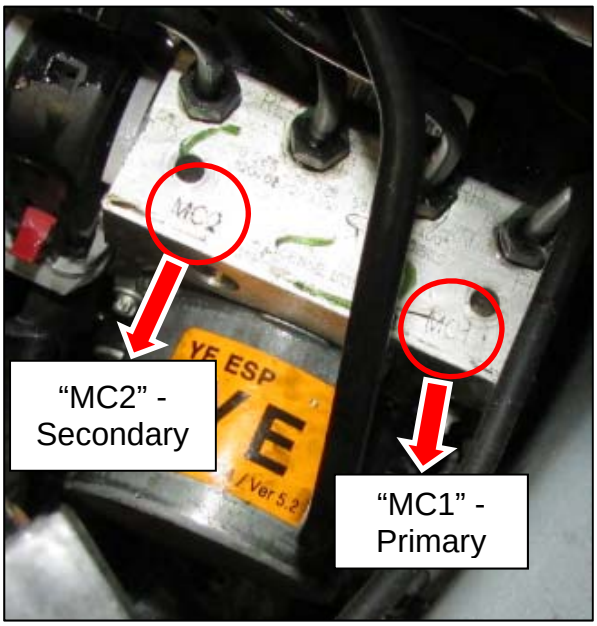


"P" - Primary

"S" - Secondary

NOTICE

Tightening torque:
10.1 ~ 12.3 lb-ft (1.4 ~ 1.7 kgf.m, 13.7 ~ 16.7 Nm)



6. Remove the PRIMARY tube assembly only. Compare the original part with the replacement part to verify they are identical.

   Install the replacement primary brake tube assembly.

   NOTICE

   Tightening torque:
   10.1 ~ 12.3 lb-ft (1.4 ~ 1.7 kgf.m, 13.7 ~ 16.7 Nm)

ATM Primary

MTM Primary

7. Remove the SECONDARY tube assembly. Compare the original part with the replacement part to verify they are identical.

   Install the replacement secondary brake tube assembly.

   NOTICE

   Tightening torque:
   10.1 ~ 12.3 lb-ft (1.4 ~ 1.7 kgf.m, 13.7 ~ 16.7 Nm)

ATM Secondary

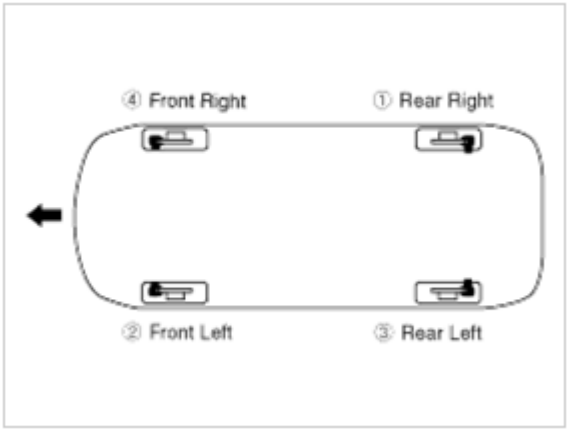
MTM Secondary

8. Ensure the brake fluid level is at “MAX” in the reservoir, then perform the brake air bleeding procedure according to the applicable service manual.

   Refill the reservoir to “MAX” after bleeding is complete.

   NOTICE

   If any fluid is spilled on the vehicle, immediately clean the spill by generously flushing water over the area and wiping clean with a clean rag.



Brake air bleeding sequence

9. Reinstall the air cleaner assembly, engine cover, and negative battery terminal. Reset all radio presets.

10. Test drive to confirm proper brake operation.