SI M34 02 15
Brakes

February 2018
Technical Service

VIBRATION WHEN BRAKING: DIAGNOSING AND REPAIRING

New information provided by this revision is preceded by this symbol UPDATE!.

This Service Information bulletin replaces SI B34 02 15 **dated May 2017**

What's New:

• Procedure, new attachment name

• 8 point measurement no longer required

• Warranty Information section has changed

MODEL

Brake Discs/Rotors (Non-Drilled)			

SITUATION

Pulsation of the brake pedal when applying the brakes

CAUSE

Excessive brake disc thickness variation

- Brake disc thickness variation is the result of lateral runout in the face of the brake disc.
- A brake disc with lateral runout while driving will slightly contact the brake pad once per revolution resulting in a thin spot on the brake disc.
- This consistent contact will eventually cause the brake disc to wear unevenly.

UPDATE! PROCEDURE

Refer to the attached troubleshooting tree. M34 02 15_Troubletree_2

UPDATE! CORRECTION

As determined by the results of following the M34 02 15 troubleshooting tree, the brakes discs (front, rear or both as applicable) are to be:

A. Resurfaced using a MINI approved* "on-car" brake lathe (Non-Drilled Disc/Rotors); for additional information on brake rotor resurfacing refer to SI M34 04 16 or

B. Replaced.

Including: Replacement of the corresponding brake pads and wear sensor(s).

Note: Brake discs which are replaced will be requested to be returned for inspection.

*For the list of MINI approved “on-car” brake lathes, refer to MINI Equipment Program (www.minicentersolutions.com).

PARTS INFORMATION

Correction A

Part Number	Description	Quantity
Refer to ETK	Front brake pads (Set)	1
Refer to ETK	Front brake pad wear sensor	1
Refer to ETK	Rear brake pads (Set)	1
Refer to ETK	Rear brake pad wear sensor	1
Refer to ETK	Brake pad paste	1 per axle

Also refer to ETK (EPC) and the repair instructions for information about onetime use fasteners, other screws/bolts, gaskets and seals that must also be replaced while performing this repair.

WARRANTY INFORMATION

Brake discs that can be resurfaced for excessive run-out are covered under the terms of the MINI New Passenger Car Limited Warranty.

Note: This procedure is not claimable in conjunction with performing and submitting claims under the MINI Maintenance Program or brake discs that are below the thickness requirement for resurfacing.

UPDATE! **Front Axle only**

Defect Code:	3411005700	Brake disc, front - Vibration
Labor Operation:	**Labor Allowance:**	**Description:**
34 11 000	Refer to KSD2	Removing and installing or replacing brake pads of both front discs brakes **(Main work)**
Or:		
34 11 505	Refer to KSD2	Removing and installing or replacing brake pads of both front disc brakes **(Plus work)**
Or:		
34 11 510	Refer to KSD2	Removing and installing or replacing brake pads of both front disc brakes **(Associated work – Wheels removed)**

And:		
34 11 667	Refer to KSD2	Fine grind both sides of both front brake discs **(Brake caliper removed)**
UPDATE! And, as needed:		
34 99 000	2 FRU	Associated work: Work time to perform an additional finish cut **(one or both front sides)** when required.
Or:		
34 11 613	Refer to KSD2	Removing and installing or replacing front brake discs **(Brake pads removed)**
Or:		
34 11 612	Refer to KSD2	Removing and installing or replacing front brake discs **(Brake caliper removed)**

Or, for the:

Rear Axle

Defect Code:	**3421005700**	**Brake disc, rear - Vibration**
Labor Operation:	**Labor Allowance:**	**Description:**
34 21 200	Refer to KSD2	Removing and installing or replacing brake pads of both rear disc brakes **(Main work)**
Or:		
34 21 739	Refer to KSD2	Removing and installing or replacing brake pads of both rear disc brakes **(Plus work)**
Or:		
34 21 740	Refer to KSD2	Removing and installing or replacing brake pads of both rear disc brakes **(Associated work – Wheels removed)**
And:		
34 21 947	Refer to KSD2	Fine grind both sides of both rear brake discs **(calipers removed)**
UPDATE! And, as needed:		
34 99 000	2 FRU	Associated work: Work time to perform an additional finish cut **(one or both rear sides)** when required.
Or:		

34 21 932	Refer to KSD2	Removing and installing or replacing rear brake discs **(Brake pads removed)**
Or:		
34 21 931	Refer to KSD2	Removing and installing or replacing rear brake discs **(Brake caliper removed)**

Or, for the:

Front and Rear Axles together

Defect Code:	**3411005700**	**Brake disc, front – Vibration**
Labor Operation:	**Labor Allowance:**	**Description:**
34 11 010	Refer to KSD2	Replacing brake pads of front and rear disc brakes **(Main work)**
Or:		
34 11 514	Refer to KSD2	Replacing brake pads of front and rear disc brakes **(Plus work)**
Or:		
34 11 515	Refer to KSD2	Replacing brake pads of front and rear disc brakes **(Associated work – Wheels removed)**
And:		
34 11 667	Refer to KSD2	Fine grind both sides of both front brake discs **(calipers removed)**
UPDATE! And, as needed:		
34 99 000	2 FRU	Associated work: Work time to perform an additional finish cut **(one or both front sides)** when required.
Or:		
34 11 613	Refer to KSD2	Removing and installing or replacing front brake discs **(Brake pads removed)**
Or:		
34 11 612	Refer to KSD2	Removing and installing or replacing front brake discs **(Brake caliper removed)**
And:		
34 21 947	Refer to KSD2	Fine grind both sides of both rear brake discs **(calipers removed)**
UPDATE! And, as needed:		

34 99 000	2 FRU	Associated work: Work time to perform an additional finish cut **(one or both rear sides)** when required.
Or:		
34 21 932	Refer to KSD2	Removing and installing or replacing rear brake discs **(Brake pads removed)**
Or:		
34 21 931	Refer to KSD2	Removing and installing or replacing rear brake discs **(Brake caliper removed)**

UPDATE! If you are using a Main labor code for another repair, use the Plus code or associated labor operation as applicable.

Refer to KSD2 for the corresponding flat rate unit (FRU) allowances.

Work time labor operation code 34 99 000 is not considered a Main labor operation. Also, since the “work time” FRU allowance to be claimed is specified, a separate punch time is not required.

When defect code 34 11 00 57 00 is used for repairing the front and brakes together, when applicable, claim labor operation 34 99 000 one time for either 2 or 4 FRU that applies to the scope of the repair performed.

The flat rate labor operations for replacing the brake pads (front, rear or both) includes replacing the corresponding brake pads, wear sensor(s) and measuring the minimum brake disc thickness.

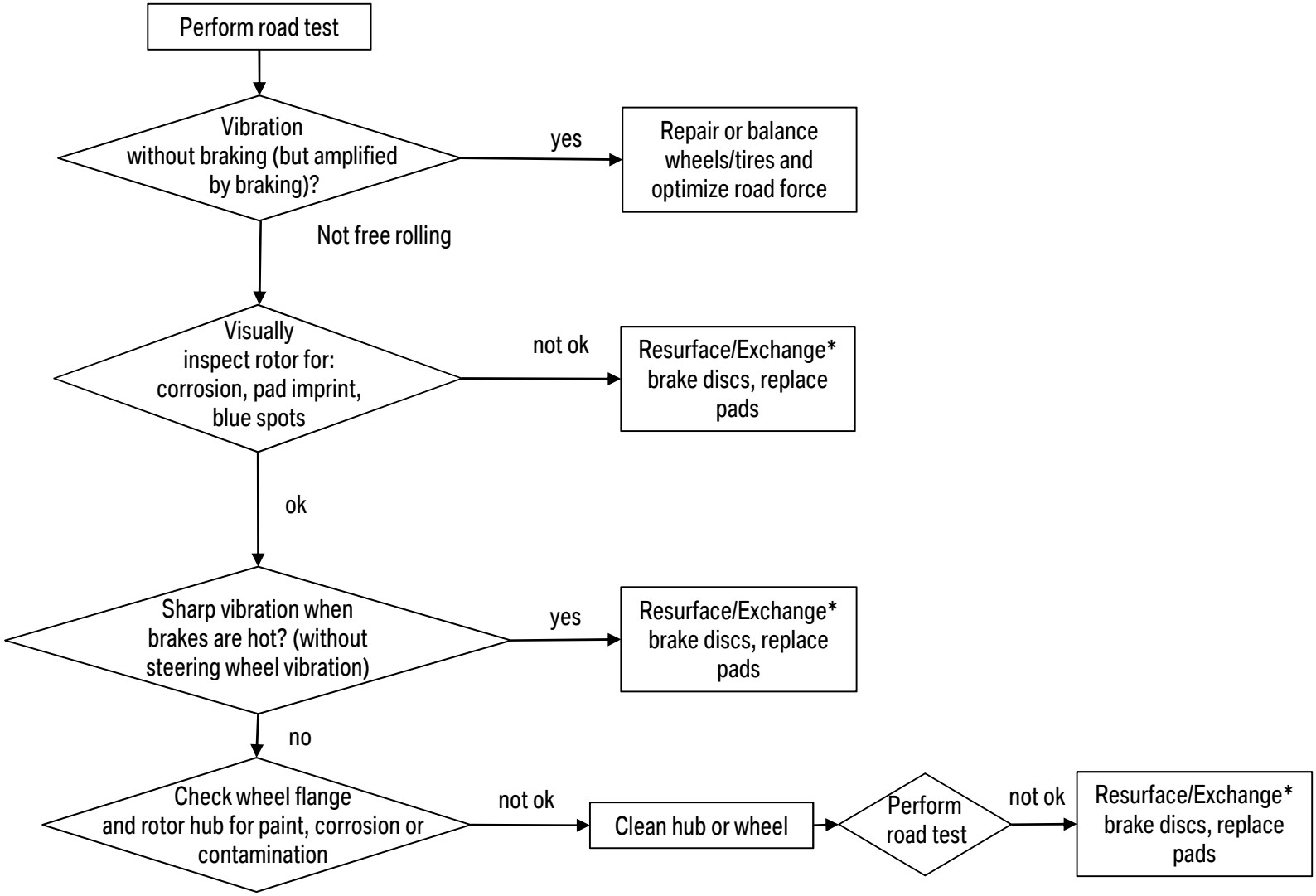
Posted: Thursday, February 8, 2018

ATTACHMENTS

View PDF attachment **M34 02 15_Troubletree_2**.

View PDF attachment **M340215 Attachment Categorization**.

DIAGNOSIS OF VIBRATION WHILE BRAKING.



CATEGORIZATION OF BRAKE DISC-CORROSION

CATEGORY 1 – NO CORROSION FOUND: OK TO USE NEW BRAKE PADS (RESURFACING NOT NEEDED)

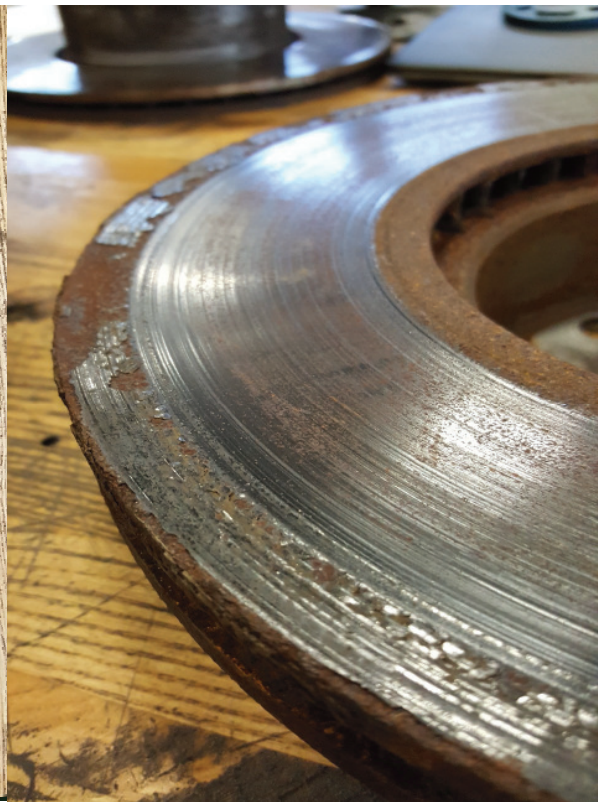
CATEGORIZATION OF BRAKE DISC-CORROSION

CATEGORY 2 –CORROSION: CANNOT BE USED WITH NEW PADS. OK TO RESURFACE*. AFTER CUTTING, USE NEW BRAKE PADS

*- IF MEASURED ROTOR THICKNESS IS ABOVE MINIMUM THICKNESS PLUS 0.5 MM

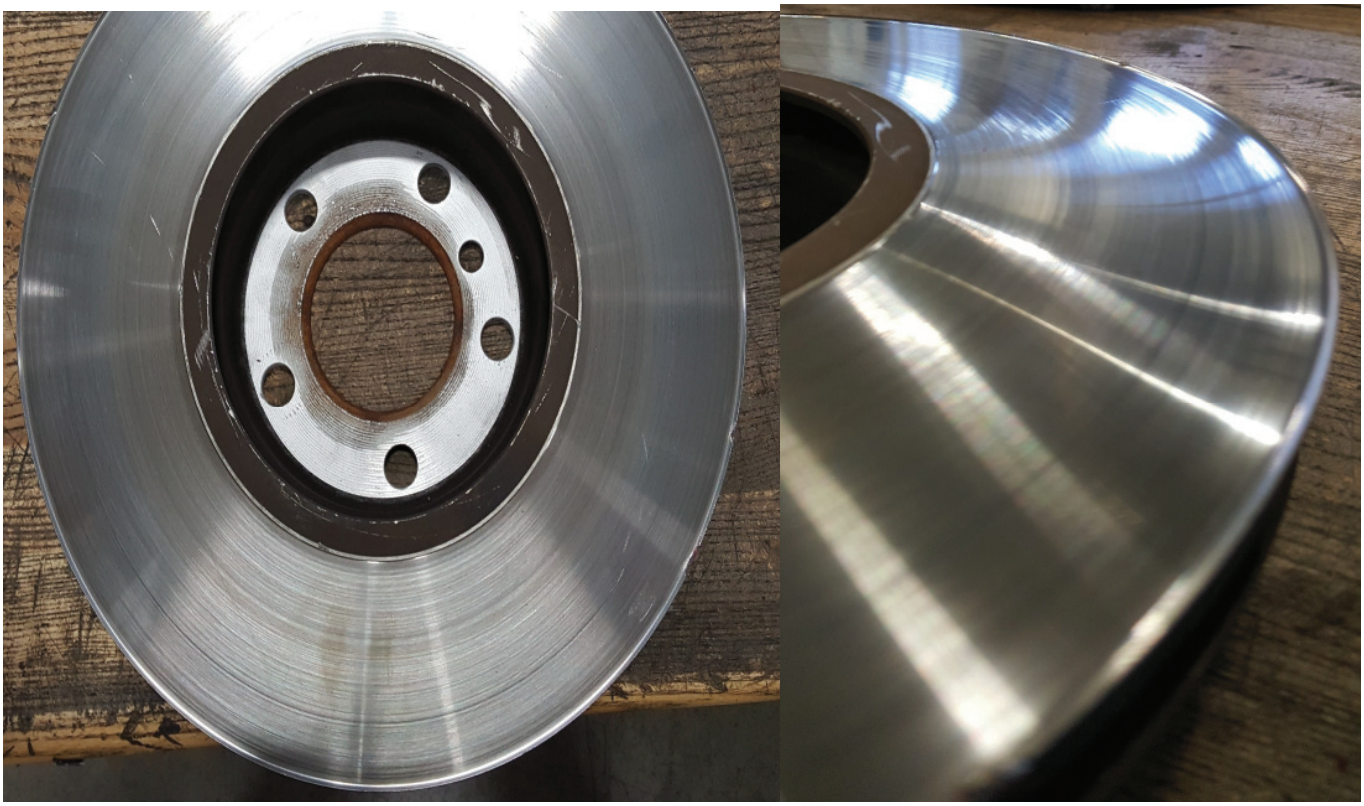
CATEGORIZATION OF BRAKE DISC-CORROSION

CATEGORY 3 – SEVERE CORROSION: RESURFACING NOT POSSIBLE. ROTORS MUST BE REPLACED



CATEGORIZATION OF BRAKE DISC-GROOVES

CATEGORY 1 – NO GROOVES: OK TO USE NEW BRAKE PADS. (RESURFACING NOT NEEDED)



CATEGORIZATION OF BRAKE DISC-GROOVES

CATEGORY 2 – GROOVES: CANNOT BE USED WITH NEW PADS. OK TO RESURFACE*. AFTER CUTTING, USE NEW BRAKE PADS

*- IF MEASURED ROTOR THICKNESS IS ABOVE MINIMUM THICKNESS PLUS 0.5 MM

CATEGORIZATION OF BRAKE DISC-GROOVES

CATEGORY 3 – DEEP GROOVES* : RESURFACING NOT POSSIBLE, ROTORS MUST BE REPLACED

*- IF MEASURED ROTOR THICKNESS IN THE DEEPEST GROVE IS BELOW MINIMUM THICKNESS PLUS 0.5 MM