



**TECHNICAL  
SERVICE  
BULLETIN**

<i>Subject</i>	<b>Group</b>
	50 - CHASSIS
	<b>Number</b>
	97-50-007
	<b>Date</b>
	12-1997
<b>FRONT BRAKE DISC MACHINING RECOMMENDATIONS</b>	<b>Model</b>
	<i>Accent 1995-1998, Elantra 1992-1998, Excel 1986- 1994, Scoupe 1991-1995, Sonata 1989-1998 and Tiburon 1997-1998</i>

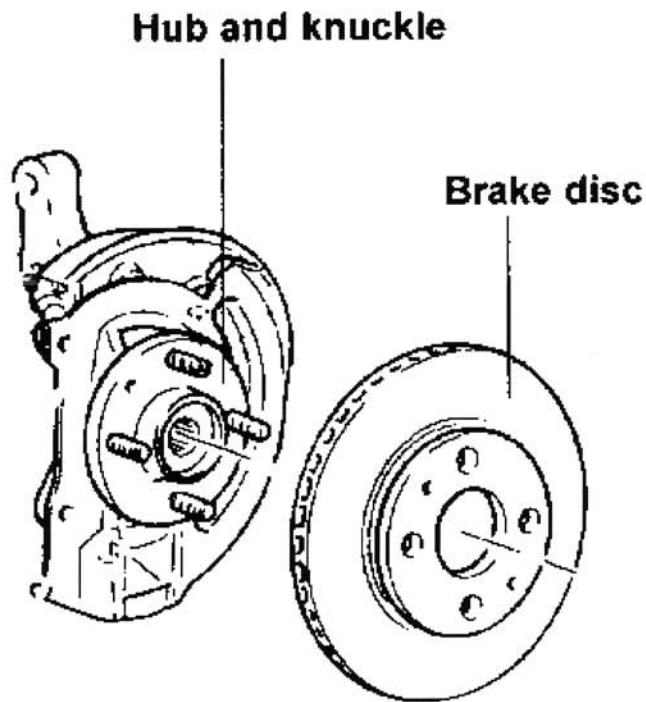
**PURPOSE:**

This service bulletin provides front brake disc machining recommendations and procedures to reduce the disc thickness variation that may cause brake pedal pulsation.

**DESCRIPTION:**

Hyundai vehicles use two methods of attaching front brake discs. On Excel, Scoupe, Accent, Elantra and Tiburon models, the disc is attached on the inside of the hub assembly making it less efficient to remove for machining (see illustration below). On Sonata models, the disc is attached on the outside of the hub assembly making it very easy to remove for machining (see illustration below).

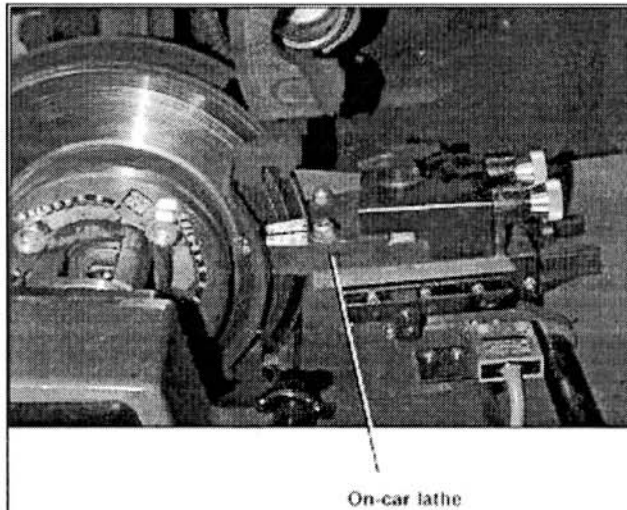
The following Service Procedures contain front brake disc machining recommendations and procedures for both types of disc attachment methods.



### "Outside of Hub" Disc (Sonata)

#### SERVICE PROCEDURE 1 (ALL MODELS):

Machining of brake discs using an "on-car lathe" is recommended for ALL Hyundai models. An "on-car lathe" provides efficiency and accuracy as it machines the disc true to the hub's center of rotation. Use an "on-car lathe" made by PRO-CUT (models CROS 700 or PFM 900) or equivalent, and always follow the lathe manufacturer's instructions for properly machining the brake disc.



#### SERVICE PROCEDURE 2:

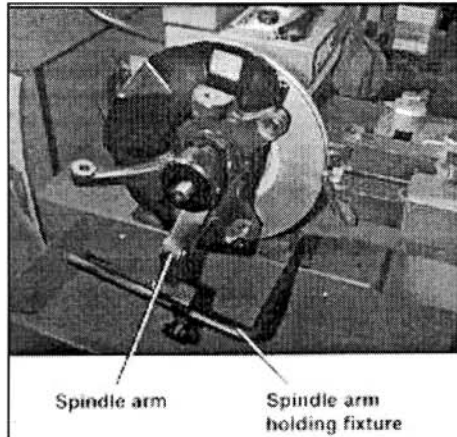
Service Procedure 2 is recommended only if Service Procedure 1 is not available.

- For the "Inside of Hub" disc attachment design (used on Excel, Scoupe, Accent, Elantra & Tiburon models), follow the steps outlined in Service Procedure 2A.
- For the "Outside of Hub" disc attachment design (used on Sonata model only), follow the steps outlined in Service Procedure 2B.

### **SERVICE PROCEDURE 2A (EXCEL, SCOUPE, ACCENT, ELANTRA & TIBURON):**

Use the following steps to machine an "Inside of Hub" disc attachment design:

1. Confirm that the "off-car lathe" has a spindle arm holding fixture similar to the one shown in the picture below.



#### **NOTE**

**If your "off-car lathe" doesn't have the spindle arm fixture, use Service Procedure 3 for machining the disc.**

2. Remove hub and knuckle assembly from the vehicle per procedure outlined in the appropriate Shop Manual.

#### **NOTE**

**Do not use a "slide hammer" to remove the hub assembly. This may damage the wheel bearings.**

3. Mount the knuckle assembly with the disc on the "off-car lathe" (see illustration above).
4. Machine the disc on the "off-car lathe" following the lathe manufacturer's (See appropriate Shop Manual for service limit specification.)
5. Reinstall the hub and knuckle assembly on the vehicle.
6. Repeat procedure for other side.

### **SERVICE PROCEDURE 2B (SONATA MODEL):**

Use the following steps to machine an "Outside of Hub" disc attachment design.

7. Remove the disc from the vehicle per procedure outlined in the appropriate Shop Manual.
8. Mount the disc on the "off-car lathe".
9. Machine the disc on the "off-car lathe" following the lathe manufacturer's (See appropriate Shop Manual for service limit specification.)
10. Reinstall the disc on the vehicle.
11. Repeat procedure for other side.

**SERVICE PROCEDURE 3 (EXCEL, SCOUPE, ACCENT, ELANTRA & TIBURON):**

**NOTE**

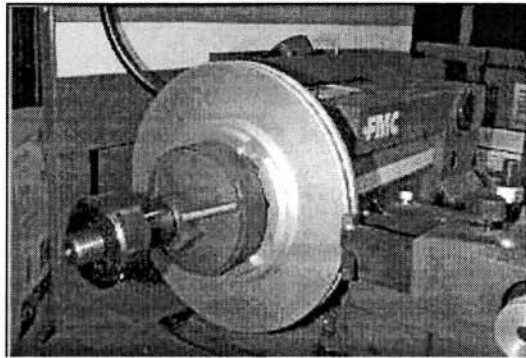
**Use Service Procedure 3 ONLY if Service Procedures 1 & 2A are not available.**

1. Remove hub and knuckle assembly from the vehicle per procedure outlined in the appropriate Shop Manual.
2. Separate disc from knuckle and hub assembly per procedure outlined in the appropriate Shop Manual.

**NOTE**

**Do not use a "slide hammer" to remove the hub assembly from the knuckle assembly. This procedure may damage the wheel bearings.**

3. Machine the disc on the "off-car lathe" following the lathe manufacturer's instructions.



4. Reinstall the disc on the hub and knuckle assembly.
5. Reinstall the hub and knuckle assembly on the vehicle.
6. Repeat procedure for other side.

**WARRANTY INFORMATION:**

Normal warranty operation codes and times apply.