



GROUP  
Engine

MODEL  
2011-2013MY  
Sorento (XMa)  
w/ 3.5 L MPI Engine

NUMBER  
140 (REV 1, 02/13/2014)

DATE  
February 2014

## TECHNICAL SERVICE BULLETIN

SUBJECT: 3.5 L MPI - COLD ENGINE START-UP CHATTER

### ★ NOTICE

This bulletin has been revised to include additional information. New/revised sections of this bulletin are indicated by a black bar in the margin area.

This bulletin provides information related to some 2011-2013MY Sorento (XMa) vehicles, equipped with the 3.5 L engine and produced from October 26, 2009 to July 14, 2012, which may exhibit a concern related to unusually loud engine chatter during initial start-up after sitting for several hours. To correct the condition described above, replace both intake CVVTs and camshafts with the new part numbers listed on pages 2 and 3. Prior to any repair, listen to the "before repair" and "after repair" sound files below to become familiar with the sound characteristics of the specific condition that this repair is intended to address. Confirm that the customer's concern matches the one in the "before repair" sound file.

It is important to note that the 3.5 L MPI engine may briefly emit some timing chain/valve train chatter during start-up after sitting for several hours. Some amount of chatter (audible in the "after repair" sound file) is a normal characteristic of the engine's design and the procedure in this bulletin is not intended to eliminate such noise; the repair procedure below is specifically designed to reduce unusually loud engine chatter as heard in the "before repair" sound file.

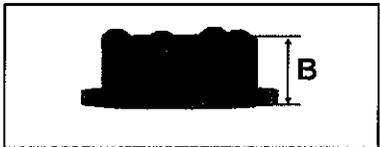


3.5 L MPI Engine Start-Up Chatter (Before Repair).mp3



3.5 L MPI Engine Start-Up Chatter (After Repair).mp3

### Intake CVVT

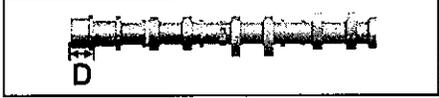
Old Design	New Design
	
A = 1.85" (47.1 mm),	B = 1.46" (37.1 mm)

### File Under: Engine

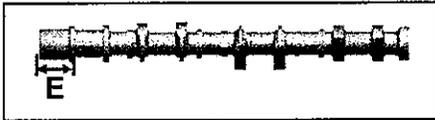
Circulate To:  General Manager  Service Manager  Parts Manager  
 Service Advisor(s)  Technician(s)  Body Shop Manager  Fleet Repair

**3.5 L MPI - COLD ENGINE START UP NOISE**

Intake Camshaft (left)

Old Design	New Design
	
C = 1.54" (39.2 mm)	D = 1.15" (29.2 mm)

Intake Camshaft (right)

Old Design	New Design
	
E = 1.51" (38.3 mm)	F = 1.11" (28.3 mm)

**CAUTION**

When replacing camshafts, valve lash should be checked and adjusted if out of specification. Failure to do so may result in poor performance or engine damage.

**PARTS INFORMATION:**

Intake CVVT

MODEL	PART NUMBER	
	OLD	NEW
Sorento (XMa)	24350 3CAB0/24350 3C110/ 24350 3C112	24350 3C113

Intake Camshaft (left)

MODEL	PART NUMBER	
	OLD	NEW
Sorento (XMa)	24100 3CBE1	24100 3CBE2

SUBJECT:

**3.5 L MPI - COLD ENGINE START UP NOISE**

Intake Camshaft (right)

MODEL	PART NUMBER	
	OLD	NEW
Sorento (XMa)	24900 3CBE1	24900 3CBE2

AFFECTED VEHICLE PRODUCTION RANGE:

Model	Production Date Range
Sorento (XMa)	From October 26, 2009 to July 14, 2012