

Reference	SSM73789
Models	XE / X760 XF / X260
Title	Whirring/Grinding noise during cranking, starter motor pinion and flywheel ring gear worn
Category	Electrical
Last modified	09-Mar-2018 00:00:00
Symptom	203000 Basic Electrical
Attachments	C11-Z21.pdf C1DC73DA.pdf Flywheel Gear1.pdf Starter Pinion1.pdf
Content	XE/XF – X760/X260 - AJ20D – Auto Transmission - 16MY - onwards

Issue

The customer may experience a whirring/grinding noise while cranking the engine. In some cases the vehicle will not crank
In addition, both the starter motor and the flywheel gear may be worn/damaged – see attached photos

Cause

The starter motor harness link wires are incorrectly positioned in the connector cavities – this could be in either connector C11-Z2 or C1DC73DA. This can cause the starter motor pinion to rotate before engaging the flywheel ring gear

Action:

Check the starter motor harness link wiring connectors are correctly populated, as follows:

C11-Z2 – Starter motor link harness to engine harness (See picture)

Cav Color

1 BN-WH
2 GY-BU

C1DC73DA – Starter motor (See Picture)

This connector is known on Topix as the following for XE and XF on specified model years

X260:

16MY: C1DC71EZ
17MY: C1DC74C
18MY: C1DC73DA

X760:

16MY: C1DC71EZ
17MY: C1DC73DA

18MY: C1DC73DA

Cav Color

1 BN-WH

2 GY-BU

If found to be incorrectly populated, reposition as necessary
Check flywheel ring gear and starter pinion for damage, as shown –
replace any damaged parts as necessary

Technicians - Please rate this SSM and provide comments so that
future communications can be improved.

1 = Poor – Basic information provided – The SSM does not help me
resolve the customer concern.

3 = Average – Adequate information provided – The SSM partially
helps me resolve the customer concern.

5 = Excellent – All required information provided to resolve the
customer concern.