

Technical BULLETIN

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SOME 2014~2016 FZ09E/F/G AND FJ09F/G MODELS Cam Chain Tensioner Noise



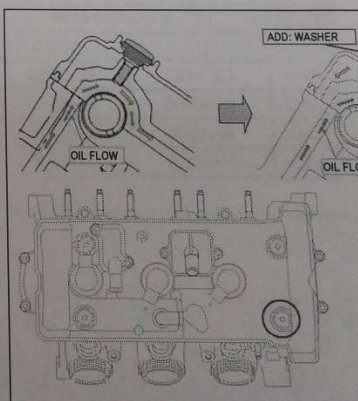
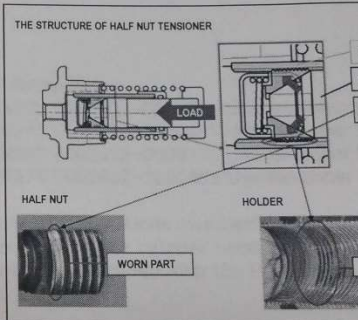
INTRODUCTION

Problem: Some customers may notice an abnormal clicking or rattling noise (e.g., from the right side of the engine in the area of the cam chain tensioner) during deceleration.

NOTICE: Prior to installing a new Tensioner Kit in a unit, verify that the noise is present and persistent from the cam chain tensioner as not all units will require the tensioner to be replaced.

Cause: The threaded portion of the half nut and holder can wear due to insufficient lubrication within the tensioner. This causes reduced friction which allows the half nut to slip. If this occurs, the tensioner cannot maintain constant tension on the cam chain, resulting in noise.

Remedy: The oil passage inside the new tensioner has been modified to increase lubrication within the tensioner body and to the half nut and holder. One head cover bolt has been changed to a new design incorporating an oil passage to feed oil to the tensioner from the camshaft cap.





DEALER ACTION SUMMARY

**Unsold /
Sold
Units:**

Modify ONLY those units that exhibit the described abnormal noise from the cam chain tensioner and in the applicable VIN range after checking unit status on YDS to be sure the modification hasn't already been performed. Follow the procedures listed in this bulletin to replace the necessary parts (if a noise is apparent from the cam chain tensioner).

Parts

Required: Yes, (refer to the *Parts Information* section for more details).

Warranty: Submit a Service-per-Bulletin (90 Code) Warranty Request for parts and labor reimbursement (refer to the *Warranty Information* section).



AFFECTED RANGE

Affected Units Range and Kit Parts Selection

FZ09 models

RN33E 0000002~0009968 Use tensioner Kit 1
RN33Y 0000011~0002842 Use tensioner Kit 1
RN33E 0009969~0010608 Use tensioner Kit 2
RN33Y 0002843~0003072 Use tensioner Kit 2

FJ09 models

RN37E 0000002~0003031 Use tensioner Kit 1
RN37Y 0000009~0000831 Use tensioner Kit 1
RN37E 0003032~0003116 Use tensioner Kit 2
RN37Y 0000832~0000865 Use tensioner Kit 2

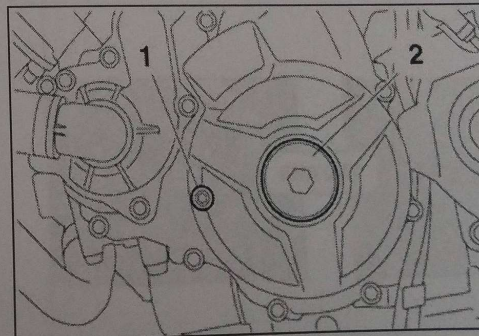
*Do NOT install either kit on units that are not listed in the PID ranges above. Units manufactured after these ranges utilize oil passages which were added internally to the crankcase and cylinder head to lubricate the tensioner. Installing the Tensioner Kit 1 or Tensioner Kit 2 into units manufactured after the PID ranges listed could potentially result in engine damage.

MODEL	PREFIX No.	90891-10272 (Kit 1)		90891-10274 (Kit 2)		SPEC
		FROM	TO	FROM	TO	
FZ09	RN33E	0000002	0009968	0009969	0010608	U49
	RN33Y	0000011	0002842	0002843	0003072	CAL
FJ09	RN37E	0000002	0003031	0003032	0003116	U49
	RN37Y	0000009	0000831	0000832	0000865	CAL



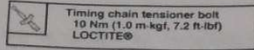
SERVICE PROCEDURES

Remove the timing mark access bolt "1" and crankshaft end cover "2" shown in the adjacent diagram.

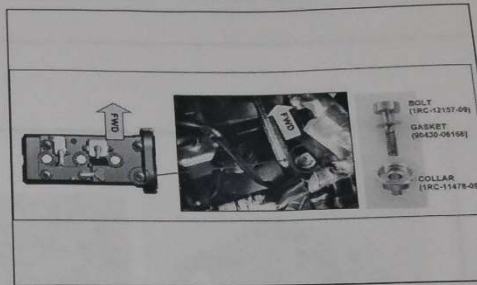


8. In some cases, installing the tensioner may be difficult due to individual tolerances. In this case, tighten each tensioner bolt one turn at a time until the tensioner contacts the crankcase surface.

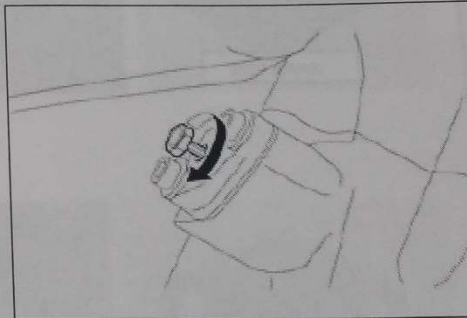
TIP:



9. Replace the lower right side cylinder head cover bolt (1RC-12157-09-00) with the collar supplied in the kit (90430-06166-00) and torque the bolt to 10Nm (see adjacent photo).



10. Screw the hexagon bolt by hand until the timing chain tensioner rod touches the timing chain guide, then tighten ¼ turn by tool.

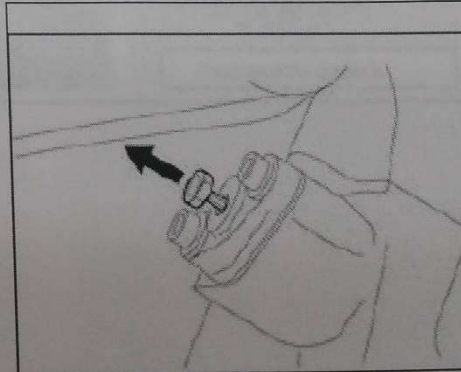


11. Remove the hexagon bolt.

12. Install the timing chain tensioner cap bolt and gasket, then tighten the timing chain tensioner cap bolt to the specified torque.

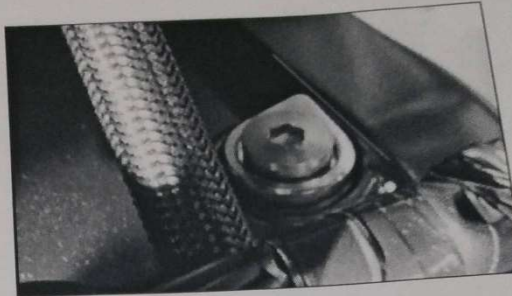


Timing chain tensioner cap bolt
7 Nm (0.7 m·kgf, 5.1 ft·lbf)



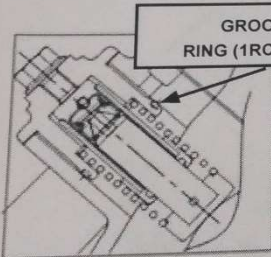
TIP: Degrease the gasket and collar before assembling. Also, before tightening the bolt, press the brim of the collar to the cylinder head cover as shown in the adjacent photo. If the collar is not positioned correctly, the collar will not feed engine oil to the new tensioner.

13. Once the tensioner kit installation is complete and before starting the engine, carefully turn the engine several turns in the counterclockwise direction and verify the engines timing has not jumped.

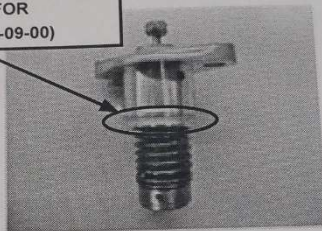


IDENTIFICATION PROCEDURE

1RC-12210-09-00 (TENSIONER KIT 1)



GROOVING FOR
RING (1RC-14533-09-00)

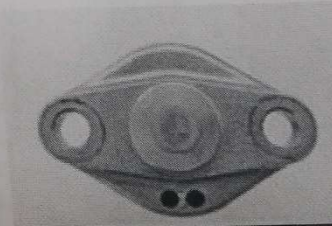


RED MARK

1RC-12210-08-00 (TENSIONER KIT 2)



NO GROOVING

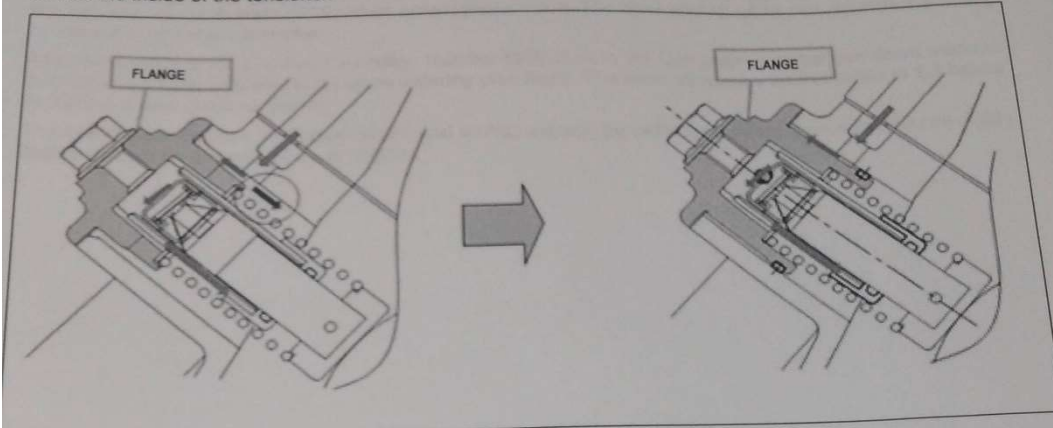


TWO BLACK MARKS



PARTS INFORMATION

To effectively lubricate the tensioner internally, the tensioner's inner flange size is increased to feed the engine oil into the inside of the tensioner.

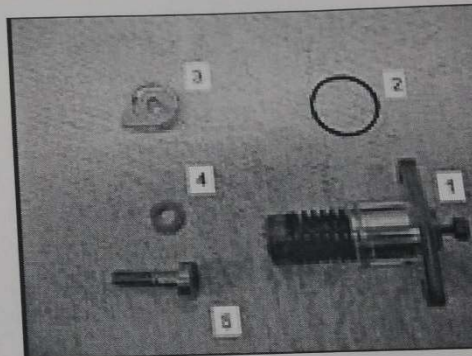


Due to a running change in crankcases during Oct.-2015, there are 2 types of tensioner kits available. Order the appropriate tensioner kit for the unit to avoid fitment issues.

TENSIONER KIT 1 (Part Number: 90891-10272-00)

No.	Part Name	Part Number	Qty.
1	TENSIONER ASSY	1RC-12210-09-00	1
2	RING	1RC-14633-09-00	1
	COLLAR	1RC-11478-09-00	1
	GASKET	90430-06166-00	1
	BOLT	1RC-12157-09-00	1

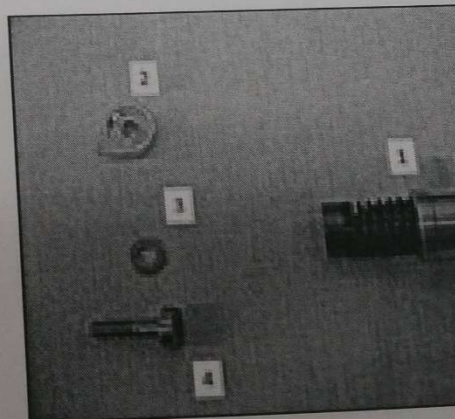
NOTE: A tensioner gasket (P/N: 1RC-12213-00-00) is not contained in the tensioner kit. Order a tension-gasket separately from a tensioner kit order.



TENSIONER KIT 2 (Part Number: 90891-10274-00)

Part Name	Part Number	Qty.
TENSIONER ASSY	1RC-12210-09-00	1
COLLAR	1RC-11478-09-00	1
GASKET	90430-06166-00	1
BOLT	1RC-12157-09-00	1

NOTE: A tensioner gasket (P/N: 1RC-12213-00-00) is not contained in the tensioner kit. Order a tension-gasket separately from a tensioner kit order.





WARRANTY INFORMATION

Service of all affected units is authorized regardless of warranty status.

After completion of Kit 1, select Campaign Number **090WY** from the Campaign Number pull-down menu in the Yamaha Dealer System (YDS) when entering your claim. The labor allowance for this repair is **1.3 hours** to replace a cam chain tensioner.

After completion of Kit 2, select Campaign Number **090WZ** from the Campaign Number pull-down menu in the Yamaha Dealer System (YDS) when entering your claim. The labor allowance for this repair is **1.3 hours** to replace a cam chain tensioner.

This Service-per-Bulletin 90 Codes (**90WY and 90WZ**) will only be **valid for 3 years** from date of issue of this Technical Bulletin and will expire 6/10/2019.