Technical BULLETIN

SAFETY RECALL

This modification has top priority. This bulletin must be performed immediately to ensure customer safety.

NOTE: Bulletins that announce a recall will have an "R" at the end of the bulletin number.

CERTAIN 2016~2020-MODEL FJR1300A, FJR1300AE, AND FJR1300PA MOTORCYCLES

FACTORY MODIFICATION CAMPAIGN – Second Gear Failure

INTRODUCTION

Yamaha Motor Corporation, U.S.A. has decided that a defect that relates to motor vehicle safety exists in 2016~2020-model FJR1300A, FJR1300AE, and FJR1300PA motorcycles.

In affected motorcycles, the side of second gear may not be strong enough to handle high speed loads. As a result, cracks may occur due to constant stress applied during repeated gear shift operation and, eventually, the gear could break. If this happens, the transmission and, in turn, the rear wheel, could lock, increasing the risk of loss of control and a crash with injury or death.

To correct this defect, Yamaha is initiating a Factory Modification Campaign. Affected units must have the main axle and drive axle assemblies replaced with the stronger parts and the Engine Control Unit (ECU) reprogrammed to prevent excessive rpm leading to second gear damage.

NOTE: This modification does not affect the emissions compliance of this product.

Yamaha is notifying all registered owners of affected motorcycles by mail. A copy of this letter is included in this bulletin. The customer should take this letter along with the affected motorcycle to an authorized Yamaha dealer for modification.

If your dealership was invoiced for one or more affected units, a computer report listing all affected motorcycles invoiced to your dealership is included with a mailed copy of this bulletin. Use the list to help ensure all motorcycles are modified. All sold motorcycles that have been registered with Yamaha will show the customer's name and address.

Your dealership must notify the owner of any affected motorcycle that was actually sold but listed as "unsold" in the report. You must modify all affected motorcycles in your inventory as well as all customer-owned motorcycles brought to you for this service. Any affected motorcycle that you purchase from Yamaha in the future may also require modification. If you purchase a motorcycle from another dealer or Yamaha, check to see if the procedures in this bulletin have already been performed before you sell the motorcycle.

Motorcycles that are affected should not be operated until they are modified. It is a violation of Yamaha policy for your dealership to deliver any affected motorcycle to customers until the procedures in this bulletin are performed.

NOTE: Also check to see if the unit you are modifying is also affected by the Brake Switch Factory Modification Campaign announced in Technical Bulletin M2021-001R. Perform both procedures at the same time for customer convenience and shop efficiency.

When the modification on each motorcycle is performed, follow the Warranty Information section of this bulletin to receive reimbursement. Be sure to use the Factory Modification Campaign procedures in Chapter 7 of the Warranty and Y.E.S. Handbook (LIT-11760-00-16).

DEALER ACTION SUMMARY

Unsold & Sold: Use YDS Unit Status to check to be sure the unit is affected and that it is not already modified; confirm by checking the motorcycle according to the Identification Procedure section of this bulletin. If the unit is affected, replace the main axle and drive axle assemblies, and reprogram the ECU, as instructed in this bulletin.

IMPORTANT: Customers with unauthorized, aftermarket ECU modifications may experience issues once the ECU reprograming required by this recall is performed. Yamaha cannot participate in accommodating any unauthorized ECU changes. Therefore, damage resulting to an ECU during recall reprogramming because of previous unauthorized modification is the customer's responsibility.

Parts Required: Yes. Order the appropriate Transmission Kit and Transmission Add Kit (two kits needed for each model). See the *Parts Information* section of this bulletin for more information.

Warranty: Factory Modification Campaign. See the *Warranty Information* section of this bulletin. This modification applies to all affected units regardless of ownership or warranty status.

Notify Customers: Yes, you must immediately contact any customer whose motorcycle shows as unregistered on the enclosed report. Yamaha has sent letters to customers whose motorcycles were registered with Yamaha as of 1/19/2021.

AFFECTED RANGE

Check Unit Status on YDS to make sure the Primary ID (PID) is in the Affected Range and is eligible for this repair. The affected unit ranges for this issue are:

Year	Model	Primary ID		
		Prefix	From	To
2016 ~ 2019	FJR1300A	RP29E	0000002	0000822
2016 ~ 2019	FJR1300A	RP29Y	0000002	0000151
2016 ~ 2020	FJR1300AE	RP30E	0000001	0001009
2016 ~ 2020	FJR1300AE	RP30Y	0000006	0000221
2018, 2020	FJR1300PA	RP31Y	0000003	0000092

IMPORTANT: Affected Primary IDs may not be consecutive. ***Always*** *check YDS Unit Status before starting any repair*.

SERVICE PROCEDURES

Refer to the FJR1300 Service Manual (P/N: LIT-11616-29-61) as needed for these procedures. Also, for police models, refer to the supplemental Service Manual (P/N: LIT-11616-31-59).

There is also a helpful video with tips and precautions available at: ***https://youtu.be/_GErePFGmhA***

PREPARATION FOR TRANSMISSION REPLACEMENT

Refer to the Service Manual for the following procedures:

1. Drain the engine oil and remove the oil filter (Chapter 3).
2. Remove the passenger and rider seats (Chapter 4).
3. Remove the front fender and side body panels (cowlings), being sure to protect them from scratches or other damage (Chapter 4).
4. Remove the fuel tank, protecting it from scratches or other damage (Chapter 7).
5. Remove the throttle body assembly with the air filter case (Chapter 7).
6. Drain the coolant (Chapter 3).
7. Remove the radiator (Chapter 6).
8. Remove the exhaust system (Chapter 3)
9. Remove the side stand and footrest (Chapter 4).
10. Remove the universal joint (Chapter 4).
11. Disconnect the lead wiring from the engine (Chapter 5).
12. Remove the engine (Chapter 5).

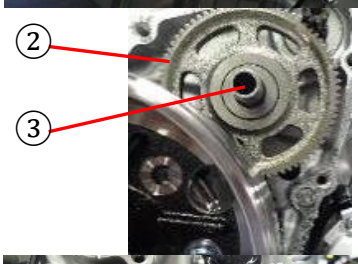
DISASSEMBLE THE ENGINE

1. Set the engine on a flat surface using and engine stand or wood block so that the engine is in the upright position.

2. Remove the generator cover ①.

TIP:
- Be careful not to lose the dowel pins (2 locations).
- Be aware of the generator's magnetic force.
- When assembling, replace gasket with a new part in the countermeasure parts.

3. Remove the starter clutch idle gear ② and the shaft ③ .

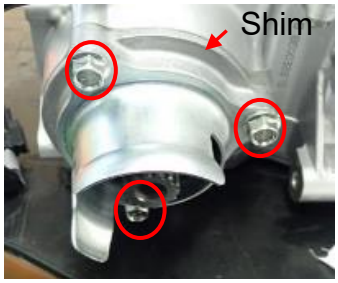


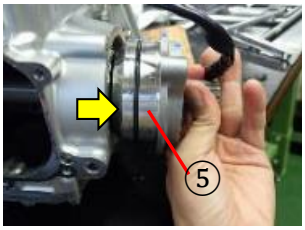
4. Remove the middle gear case cover ④.

TIP:
- Be careful not to lose the dowel pins (2 locations).
- When assembling, replace gasket with a new part in the countermeasure parts.

5. Remove the middle driven shaft assembly ⑤.

TIP:
- Be careful not to drop the two shims (2 locations).
- When assembling, replace O-ring with a new part in the countermeasure parts.



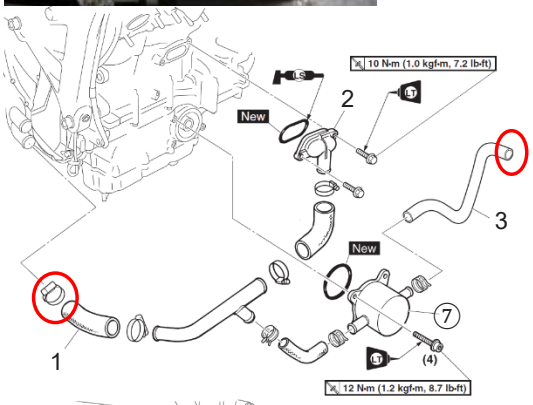


6. Remove the pick-up rotor cover ⑥.

TIP:

- Be careful not to lose the dowel pins (2 locations).
- Record the mounting positions of the guides

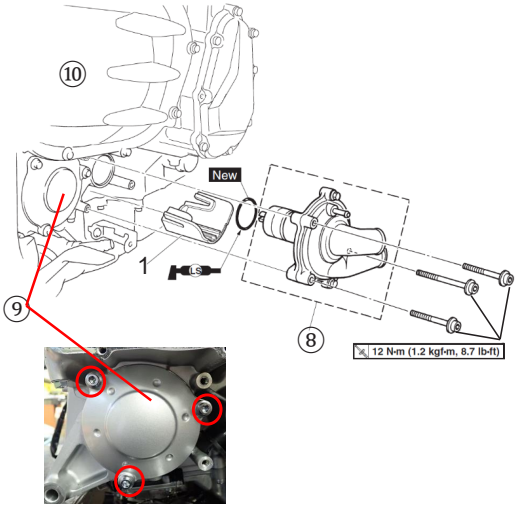
7. Remove the oil cooler ⑦.
   Remove the following parts:
   - Water hose outlet hose 1
   - Water jacket joint 2
   - Oil cooler outlet hose 3



TIP:

When assembling, replace bolts and O-rings replace with a new part in the countermeasure parts.

8. Remove the water pump.



TIP:

Remove tray 1 as well.

9. Remove the Middle Drive Shaft Bearing Housing ⑨.

TIP:

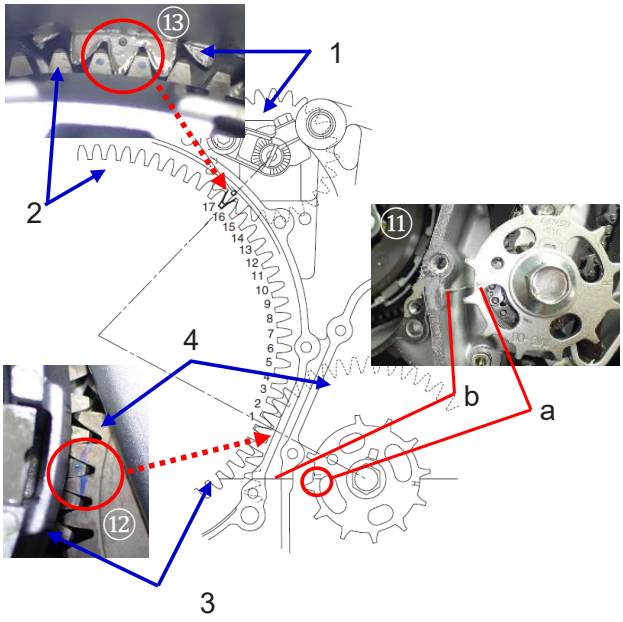
- When assembling, replace O-ring with a new part in the countermeasure parts.

10. Remove the clutch cover ⑩.

TIP:

- Be careful not to lose the dowel pins (2 locations).
- When assembling, replace gasket with a new one.

11. Mark the phase positions of the Balancer gear 1 and the large reduction gear (primary driven gear) 2.



TIP:

- Turn the crankshaft clockwise.
- When piston #1 at the TDC on the compression stroke, align the “T” mark “a” on the pickup rotor with the crankcase mating surface “b” ⑪.
- Make sure and mark that the reduction gear 3 teeth and the reduction gear 4 teeth mesh correctly ⑫.
- Make sure and mark that the reduction gear 2 that meshes with balancer gear 1 mating mark ⑬.

12. Remove the Clutch Assembly.
    - Oil guide plate 1

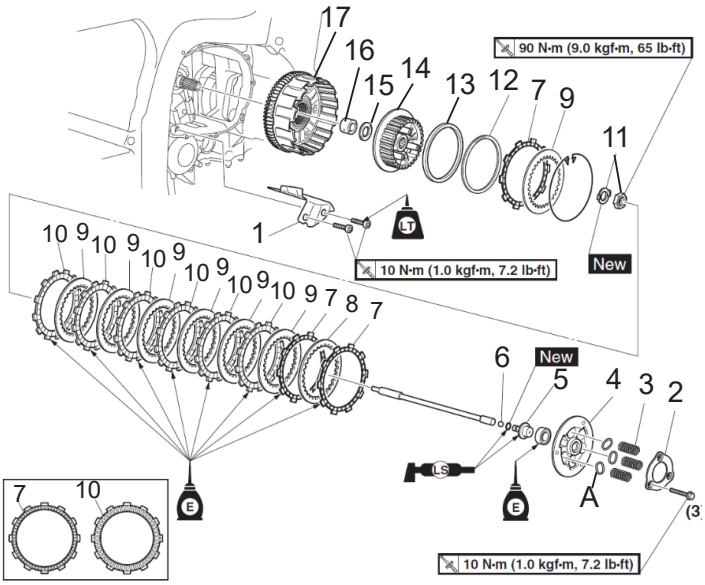
TIP:

When assembling, replace the bolts with new parts in the countermeasure parts kit.

- Pressure plate (1) 2
- Clutch Spring 3

TIP:

Be careful not to drop off the plate sheet “a”.

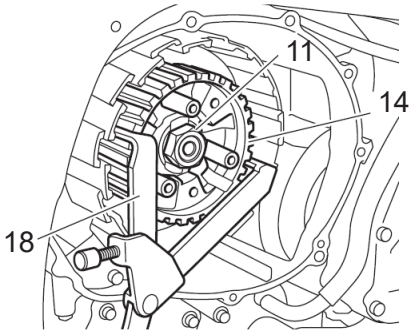


- Pressure plate (2) 4
- Short-circuit clutch push rod 5
- Ball 6
- Friction plate (1) 7
- Clutch Plates (2) 8
- Clutch Plate (1) 9
- Friction plate (2) 10
- Lock washer/boss nut 11
- Clutch Damper Spring 12
- Clutch Damper Spring Seat 13
- Clutch boss 14

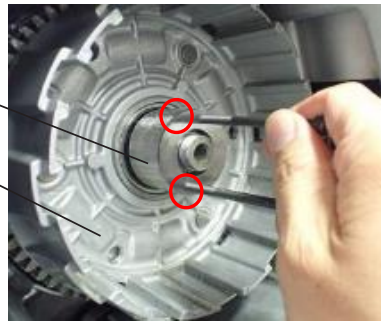
	Universal clutch holder 90890-04086 Universal clutch holder YM-91042

TIP:

While holding the clutch boss “14” with the clutch holder 18, loosen the clutch boss nut 11.



• Thrust washer 15
• Spacer 16

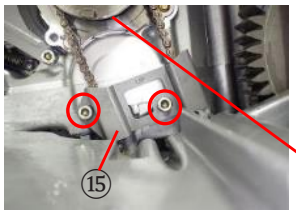


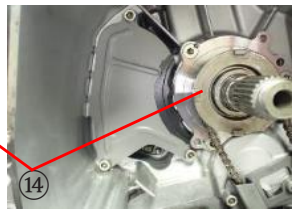
TIP:

Insert two 5mm bolts into the spacer 16 And then remove the spacer by pulling on the bolts.

• Clutch housing 17

13. Remove the oil pump drive sprocket ⑭.



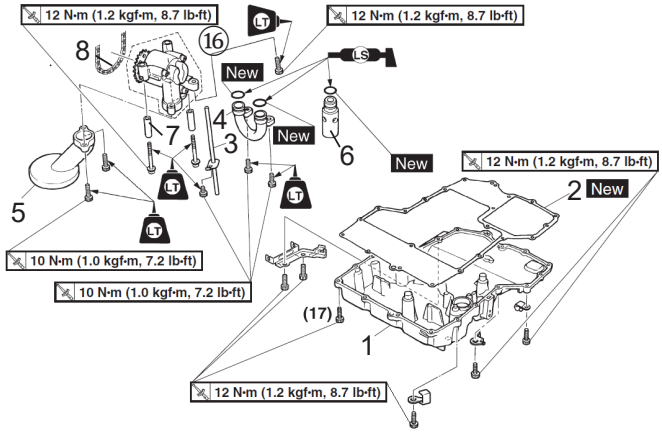


TIP:

• Remove the oil pump drive chain guide ⑮.
• When assembling, replace the bolts with new parts in the countermeasure parts kit.

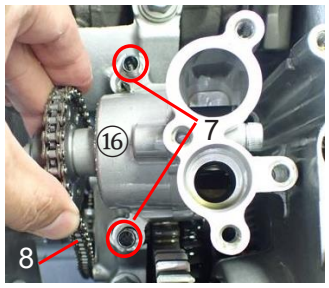
14. Rotate the engine upside down and stand it on a flat surface by using an engine stand or wood block.

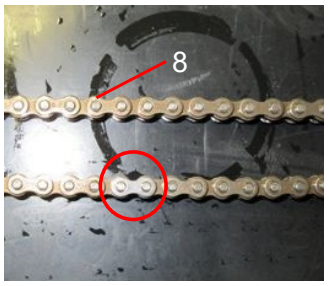
15. Remove the oil pump ⑯.
• Oil pan 1, oil pan gasket 2
• Oil delivery pipe (2) 3
• Oil delivery pipe (3) 4
• Oil Strainer 5
• Relief valve 6
• Dowel pin 7
• Oil Pump Drive Chain 8
• Oil pump ⑯



TIP:

• When assembling, replace the gasket, O-ring and bolt with the new parts in the countermeasure parts kit.
* It is necessary to use Loctite on the bolt.
• Remove the Oil Pump Drive Chain 8 by pulling out the dowel pin 7 and shifting the oil pump ⑯.
• The oil pump drive chain “8” has a plate with a different color. Remember which direction the different color plate is facing (inside or outside of engine) and have it noted. During reassembly the oil pump drive chain 8 will need to face the same direction.





16. Remove the middle gear Comp.
    - Middle drive pinion gear nut 1
    - Lock washer 2

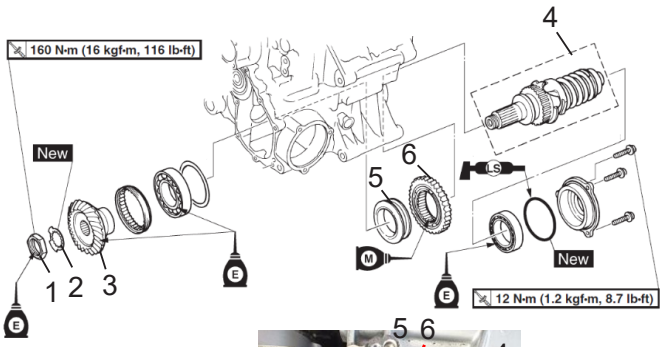
TIP:

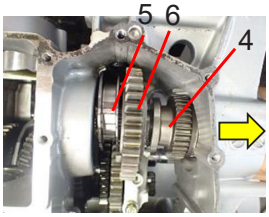
When assembling, replace the lock washer with a new part in the countermeasure parts.

    - Middle drive pinion gear 3
    - Middle Drive Shaft Assembly 4
    - Spacer 5
    - Middle driven gear 6

TIP:

Pull out the middle drive shaft assembly 4
*When pulling out, be careful not to drop 5 and 6.

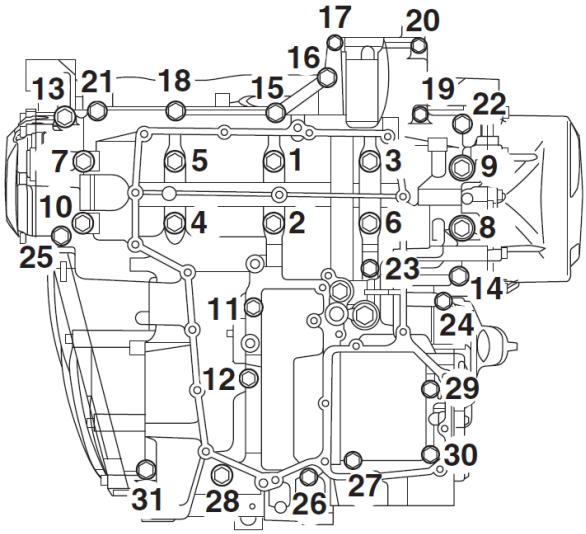




17. Disassemble the crankcase as follows:
    - Remove the crankcase bolts. (1 through 31 as shown).

TIP:

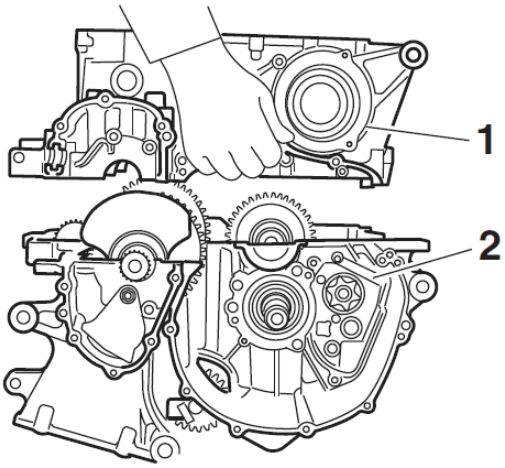
    - Loosen each bolt ¼ of a turn a time, in stages and in a crisscross pattern.
      *Loosen the bolts in decreasing numerical order (refer to the numbers in the figure.)
    - The numbers embossed on the crankcase indicate the crankcase tightening sequence.



18. Remove the lower crank case 1 from the upper crank case 2.

TIP:

    - Tap one side (thick part) of the crankcase with a plastic hammer.
    - Only hit the reinforced part of the crankcase.
    - Work carefully and make sure the crankcase is completely disassembled.
    - Be careful not to lose the dowel pins (2 locations)



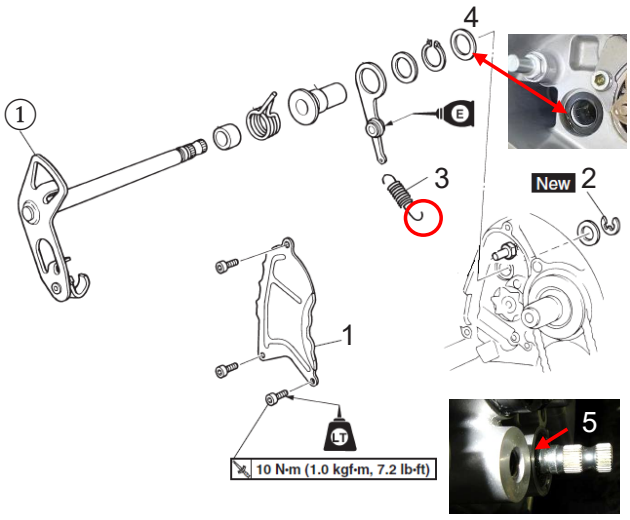
REPLACE THE TRANSMISSION

1. Remove the shaft assembly ① as follows
   • Oil baffle plate 1
   • Circlip 2

TIP:

When assembling, replace the circlip with a new part in the countermeasure parts kit.

• Stopper lever spring 3



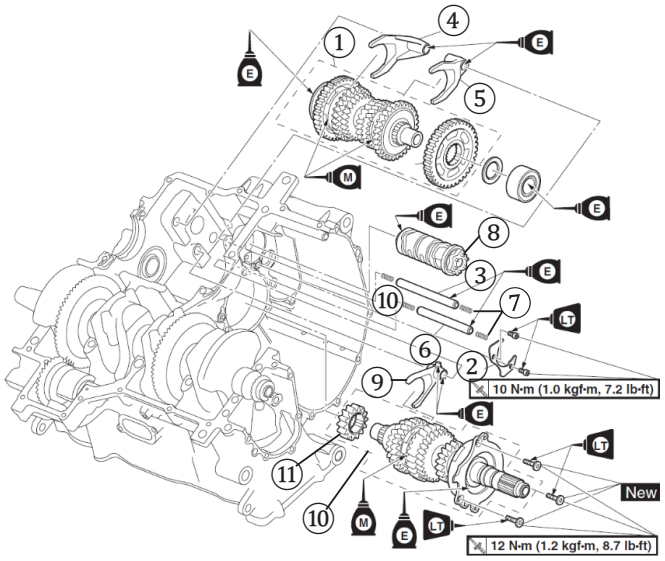
TIP:

• Washer 4 may remain in place. Be sure to remove it.
• Don't remove the oil seal 5 on the shaft

2. Remove the drive axle Assy ①.
3. Remove shift drum retainer ②, and pull out the long shift fork guide bar ③.
   Also remove the shift fork L ④ and the shift fork R ⑤.

TIP:

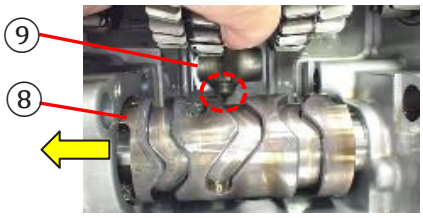
Remove the spring with the fork guide bar and ensure that the spring ⑦ does not get lost.



4. Remove the shift cam ⑧ and pull out the short shift fork guide bar ⑥.

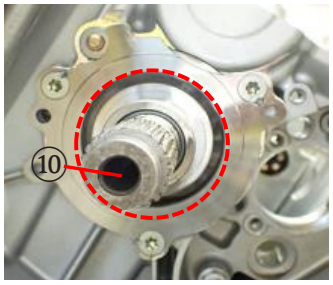
TIP:

Remove the engagement between the fork and the shift cam, and pull out the shift cam.



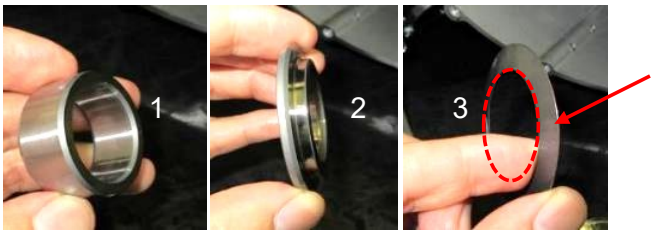
5. Remove shift fork C ⑨.

6. Remove the main axle assembly ⑩.

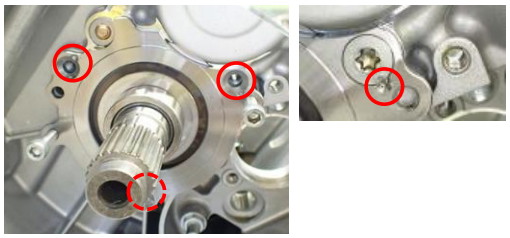


TIP:

Remove the oil pump sprocket collar 1, the collar 2 and the conical washer 3 from main axle.
*The conical washer “3” has a lip on the small-diameter side that will face the outside of the engine during reassembly.

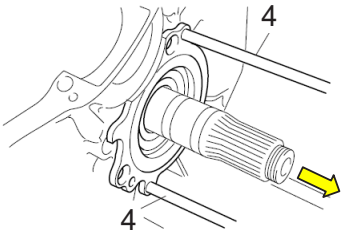


- Remove the three Torx bolts.
  There is a crimp on the bolt seat, so the Torx bolts will need to be loosened carefully.

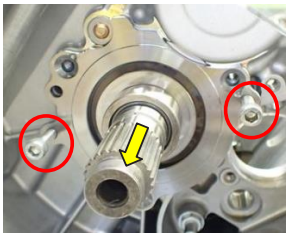


- Remove the main axle assembly with the slide hammer bolts “4” and weight.

Slide hammer bolt 90890-01083 Slide hammer bolt 6 mm YU-01083-1 Weight 90890-01084 Weight YU-01083-3



- If a slide hammer is not available, using two 25mm M6 x 1.0 bolts will pull the main axle out ¼ turn at a time after the bolts have been seated.

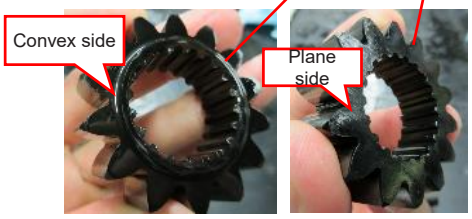


NOTE:

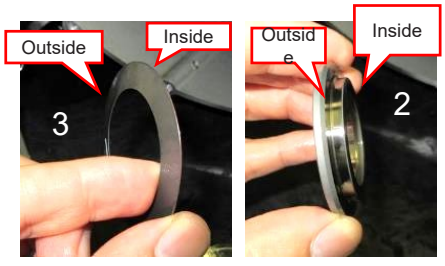
- The main axle will fall into the crankcase when the press fit is released.
- The 1st pinion gear (11) is not a press-fit gear and will fall when the main axle is tilted.

7. Clean the Crankcase
   Clean thoroughly any residual gasket or oil on the crankcase mating surface.
8. Install the transmission in the opposite order of removal.
   8-1. Assembling the main axle assembly ⑩
   *Replace with the countermeasure parts.

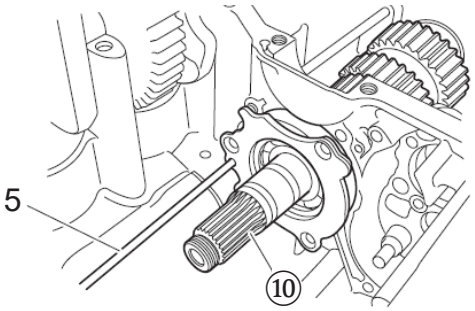
- Lubricate each gear, the shaft and bearing with engine oil.
- Lubricate the entire outer surface of the main axle bearing housing with engine oil and install it into the crankcase.
- The 1st pinion gear ⑪ is not press-fitted, so, if it falls off, the convex side is on the inside and the plane side is on the outside.



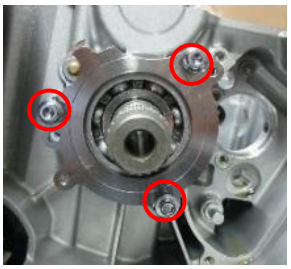
- Install the conical washer 3, the collar 2, and the oil pump sprocket collar 1.”



- When installing the main axle assembly ⑩, use a pin “5” to align the bearing housing hole with the corresponding hole in the upper crankcase.

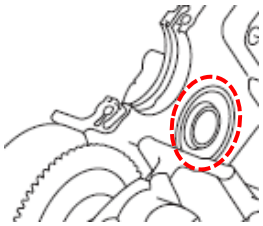


- To install the bearing housing (which is press-fit), insert the three M6 25mm bolts or the old retaining Torx bolts.
- Tighten each bolt 1/4 turn diagonally until the bearing housing touches the crankcase surfaces. Check that the main axle rotates smoothly.



- Next, remove the M6 25mm bolts or Torx used to install the bearing housing. Apply Loctite to the new bolts and tighten them to the specified torque.

12 Nm (1.2 m·kgf, 8.7 ft·lbf)

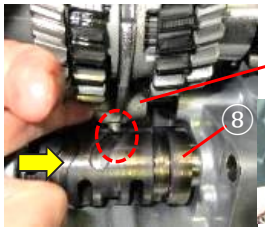


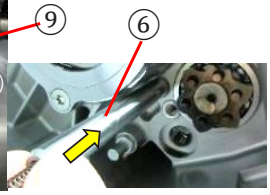
- Check again to be sure the main axle rotates smoothly. If it does not rotate smoothly, remove the main axle and reinstall to ensure the bearing housing is completely installed into the crankcase assembly. **When the main axle is installed correctly, use a punch to recrimp (stake) the Torx bolts into place.**

8-2. Assembling the shift fork/shift cam

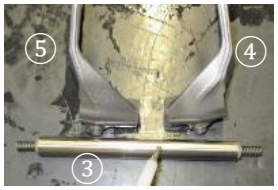
- Lubricate the shift dog clutch and shift fork fittings using molybdenum oil while turning the main axle by hand.
- Lubricate the tip of the claw of shift fork C ⑨ using molybdenum oil.

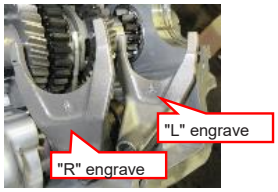
- Install the shift fork C ⑨ onto the main axle with the claw facing up.



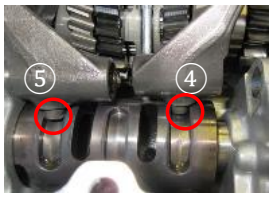


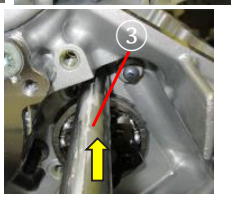
- Lubricate the shift cam and its crankcase mating surfaces as well as the short shift fork bar ⑥ with engine oil.
- Install the shift cam ⑧ and align the shift fork C ⑨ with its appropriate groove on the shift cam. Install the short shift fork bar ⑥. Make sure that the bar has both springs installed and goes through the shift fork C.





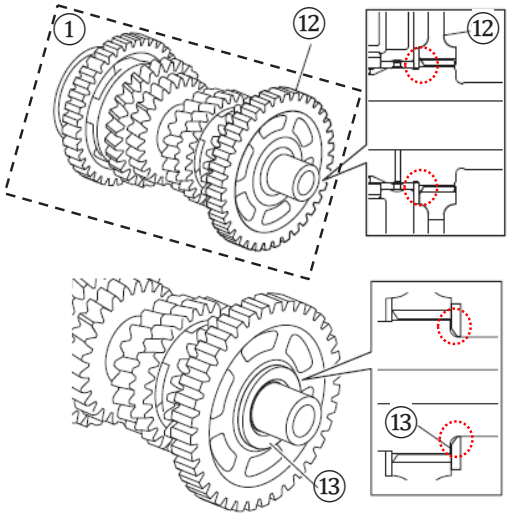
- Lubricate the tip of the claw on the shift fork R⑤/L④ and the remaining long shift fork bar ③.
- Align the projection of the shift fork with the groove of the shift cam, and when the position is decided, assemble the long shift fork bar ③.





8-3. Replace the Middle Drive Gear

- Remove the middle drive gear ⑫ and the washer ⑬ from original drive axle assembly ① and assemble the drive axle assembly of countermeasure parts.



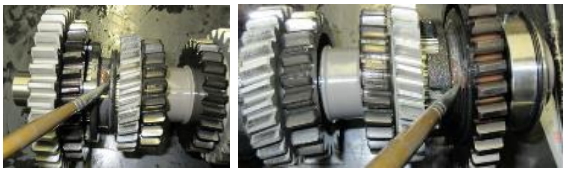
TIP:

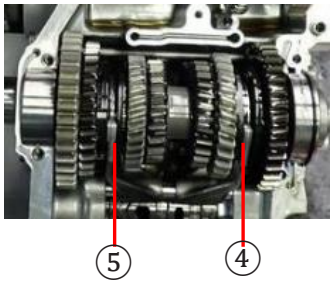
- Install the middle drive gear ⑫ with its chamfered side facing inward as shown in the figure on the right.
- Install the washer ⑬ with its chamfered side facing towards the drive axle assembly as shown.

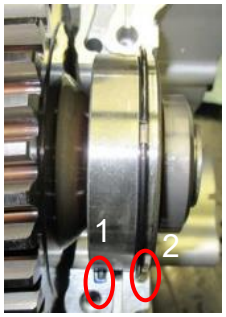
8-4. Assembling the Drive Axle Assembly

Lubricate the shift-dog clutch and shift fork fittings using molybdenum oil.

- Install the shift fork R⑤/L④ on the drive axle assembly and the shift cam in their appropriate grooves.
- The right bearing has an alignment pin 1. Align the pin 1 and the clip 2 of the bearing with the positions as shown in the figure.

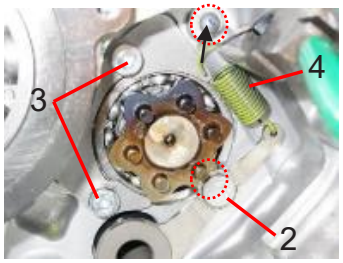






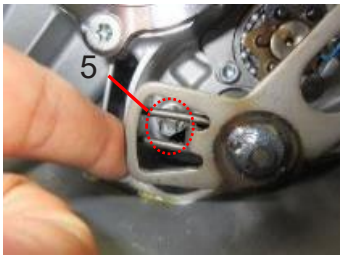
8-5. Assemble the Shift Shaft Assembly

Assemble the shaft assembly (1) in the reverse order of disassembly.



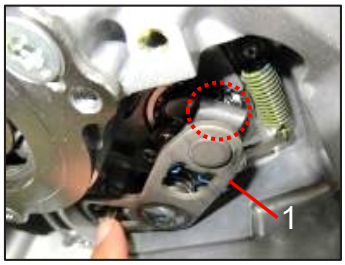
TIP:

- Align the stopper lever bearing 2 with the shift cam segment.
- Replace the shift drum retainer fixing bolt 3 with a new one in the countermeasure parts.
  * Apply Loctite to the screws.
- Hang the stopper lever spring 4 on the hook.
- Assemble the torsion spring 5 so that the stopper is sandwiched between them.
- Assemble the pawl (1) so that it will grasp the projection of the shift cam segment



NOTE:

Before assembling the crankcase, turn the shift drum assembly over and check that the transmission gears are shifting correctly.



ASSEMBLE THE ENGINE

Assemble the crankcase parts by reversing the disassembly procedures.

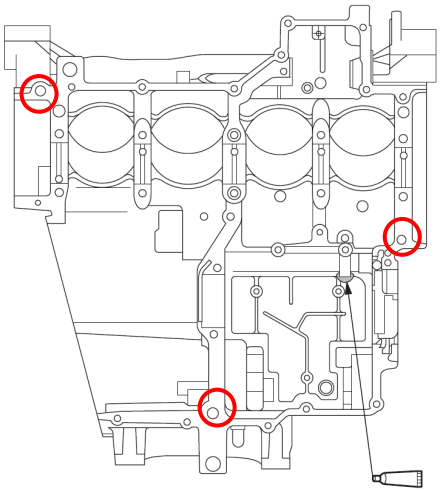
1. Assemble the Crankcase

1-1. Lubricate the inside of the crankshaft journal bearing using engine oil.

1-2. Apply sealant (Yamabond 4 Motorsports) to the crankcase mating surface.

TIP:

- Do not apply sealant to the crankshaft journal bearing or the oil passages.
- Do not apply sealant within the crankshaft journal bearing or within a 2 to 3mm range of the bearing journal.

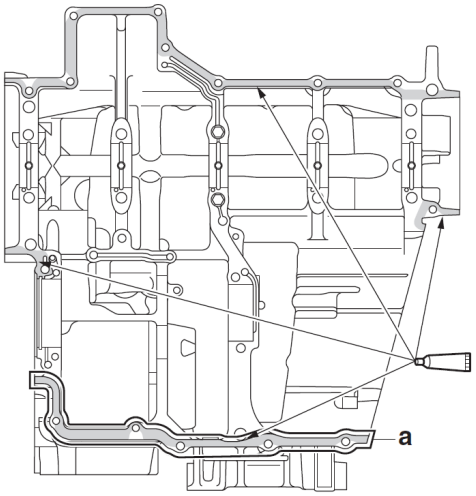


Upper Crankcase

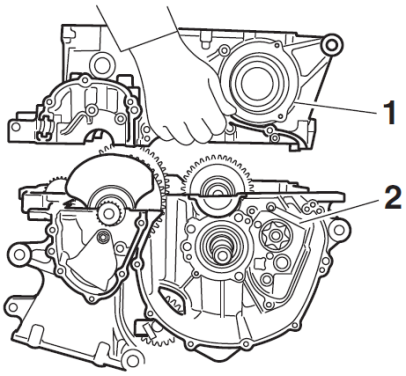
1-3. Set the dowl pins (shown circled).

1-4. Move the shift drum assembly and the transmission gear to the neutral position.

1-5. Install the lower crankcase 1 onto the upper crankcase 2.

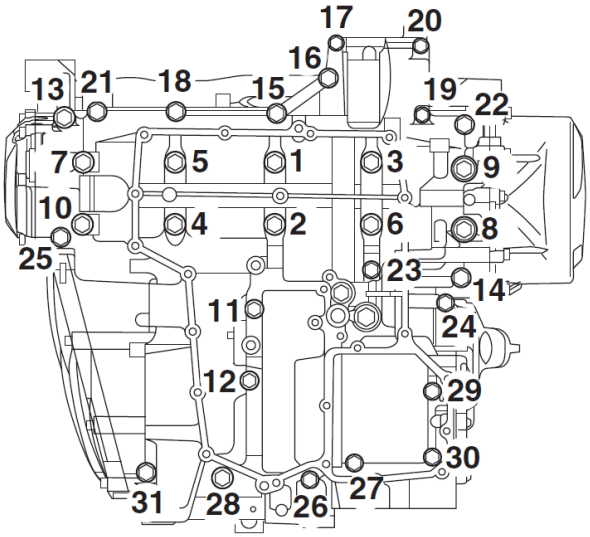


Lower Crankcase



1-6. Replace the crankcase bolts with the new ones in the countermeasure parts kit.

Tighten the bolts to the specified torque in the order shown in the figure below.
(the number stamped on the crankcase).



TIP:

- Lubricate the bolts 1-10 thread and washers with engine oil
- Replace the bolts with new parts in the countermeasure parts kit.
- Lubricate the bolt 11-31 thread portion and mating surface with the engine oil (except bolt 16).
- Apply Loctite to the threaded portion of the new bolt 16 in the countermeasure parts kit.
- Tighten the crankcase bolts with fingers.

1) Tighten the crankcase bolts in the proper tightening sequence as shown.
2) Loosen and retighten the crankcase bolts in the proper tightening sequence as shown.

NOTICE: Loosen one bolt and retighten individually then repeat with the next bolt. Do not loosen all bolts at the same time.

3) Tighten the crankcase bolts further to reach the specified angle 115 - 125 ° in the proper tightening sequence as shown.

NOTICE: If the bolt is tightened more than the specified angle, do not loosen the bolt and then retighten it. Instead, replace the bolt with a new one and perform the procedure again.

TIP:

Do not use a torque wrench to tighten the bolt to the specified angle.
On a hexagonal bolt, note that the angle angle from one corner to another is 60°.

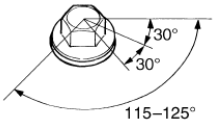
4) Tighten the crankcase bolts in the proper tightening sequence as shown (11 – 31).

Crankcase bolt "1" –"10"
1st
20 Nm (2.0 m·kgf, 14 ft·lbf)

Crankcase bolt "1" –"10"
2nd
20 Nm (2.0 m·kgf, 14 ft·lbf)

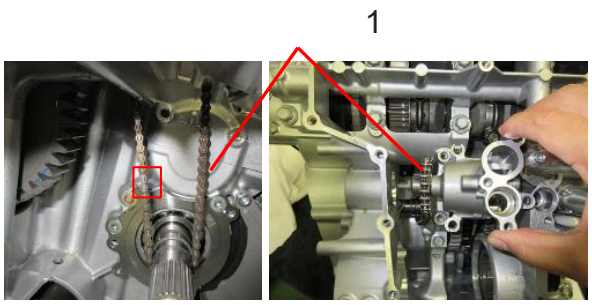
Crankcase bolt "1" –"10"
Final
Specified angle 115–125°

・ Bolt 1-10
M9×115mm
⇒ Replace with new washer bolt
・ Bolt 11
M8×65mm
・ Bolt 12
M8×50mm
・ Bolt 23、25
M6×80mm
・ Bolt 13,14
M 6×65 mm shoulder bolt
・ Bolt 19,22,24,26
M6×66mm
・ Bolt 15-18,20,21,27-30
M6×55mm
⇒ 16: Replace with new bolts and Lubricate thread locking agent
・ Bolt 31
M6×45mm

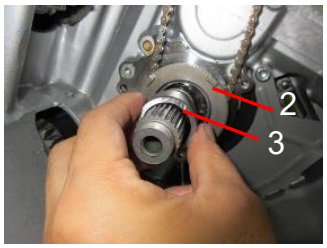


Crankcase bolt "11", "12"
24 Nm (2.4 m·kgf, 17 ft·lbf)
Crankcase bolt "13", "14"
12 Nm (1.2 m·kgf, 8.7 ft·lbf)
Crankcase bolt "15"–"31"
10 Nm (1.0 m·kgf, 7.2 ft·lbf)

2. Assemble the Oil Pump
Assemble the following parts in reverse order of disassembly.
- Relief valve
- Oil delivery pipe (2)
- Oil pump drive chain 1/oil pump

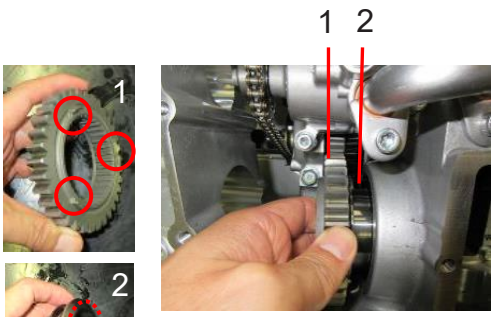


TIP:
- Set the oil pump drive chain to the main axle and pull it up to the lower crank case side.
- Align the front and back of the chain with the direction same as disassembly.



- Oil pump drive sprocket 2/collar 3
- Oil pump drive chain guide
- Dowel pin
- Oil delivery pipe (3)
- Oil strainer

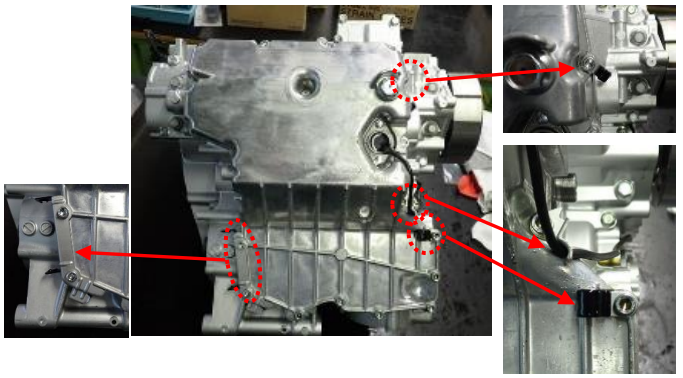
3. Assemble the Middle Gear



TIP:
- Assemble the middle driven gear 1 with the three claws facing the inside of the engine
- Assemble the spacer 2 with the tapered flange side facing the inside of the engine.
- Insert the middle driven gear 1 and spacer 2 onto the middle drive shaft assembly.

4. Assemble the oil pan

TIP:
- Put the guides in the original position.
- Replace the oil pan gasket with the new one in the countermeasure parts kit.
- There are no dowel pins.

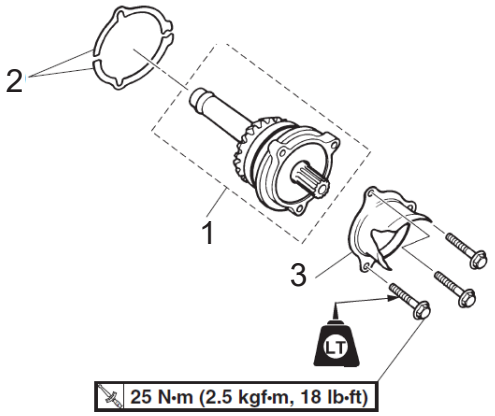


5. Rotate the engine right side up and stand it on a flat surface using an engine stand or a wood block.

6. Assemble the Middle Driven Shaft Assembly

TIP:

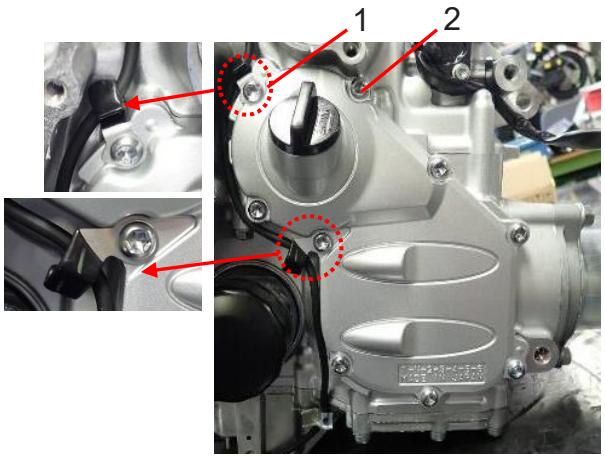
The Shim 2 enters between the crankcase and the middle driven shaft 1
*Pay attention to the direction
- Align hole position of the middle driven shaft end cover 3, and tighten the bolts to the specified torque.
- Replace the bolts with new ones from the countermeasure parts kit.
  *Apply Loctite to the bolt threads.



7. Assemble the Middle Gear Case Cover

TIP:

- Assemble the guides to their original positions.
- There are two dowel pins required.
- Replace the bolts 1 and 2 with new parts in the countermeasure parts kit.
  * Apply the LOCTITE to the thread bolt

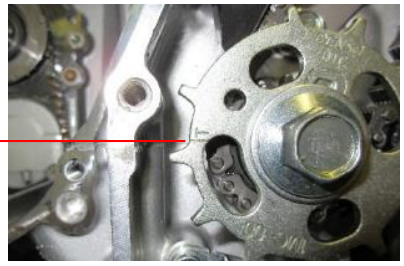


8. Assemble the generator cover

TIP:

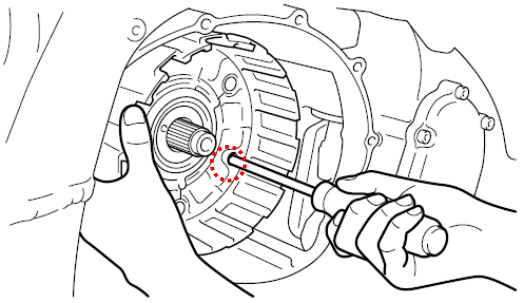
- Assemble the guides to their original positions.

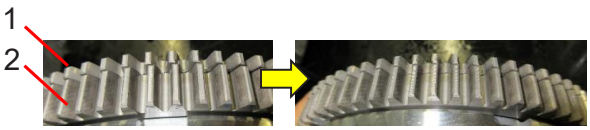
9. Assemble the Clutch Assembly
Assemble the primary driven gear to align with the balancer.



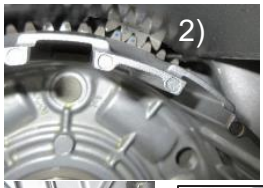
• When piston #1 is at the TDC on the compression stroke, align the T mark on the pickup rotor with the crankcase mating surface.

Insert a cross-headed screwdriver into one of the holes of the clutch housing and primary driven gear, match the phase of the scissors gear 1 and the primary drive gear 2.



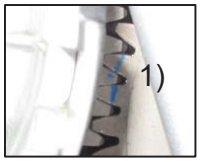


• Temporary assemble the primary driven gear to match the position when marked in the disassembly process.

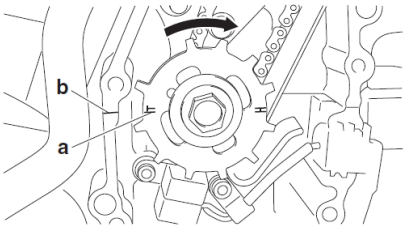


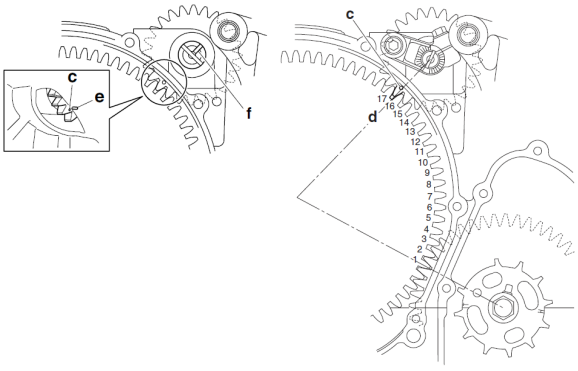
TIP:

• There are three positions where alignment is critical.
1) The primary driven gear and the drive gear
2) The balancer gear and the primary driven gear
3) The oil pump gear convex part and the primary driven gear concave * This can be adjusted later



• If it is not marked during disassembly, adjust the phase in the method described below.
① Piston #1 is at TDC on the compression stroke. Align the “T” mark “a” on the pickup rotor with the crankcase mating surface “b” .
② Align the punch mark “c” of the balancer gear to the position “d” of the primary driven gear as shown in the illustration.
③ Make sure the punch mark “c” matches the punch mark “e” of the upper crankcase.

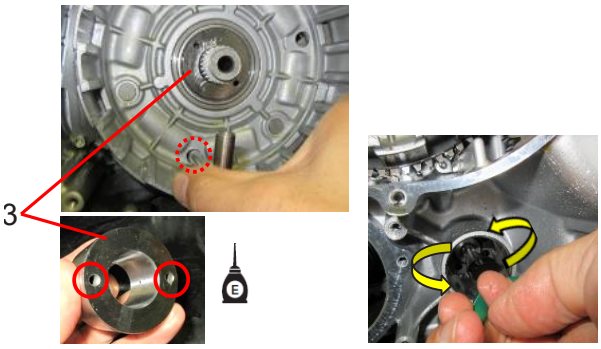




• Lubricate the outer surface of spacer 3 and install it

TIP:

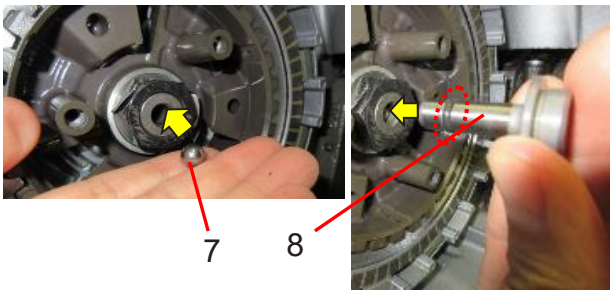
Assemble the spacer 3 so that a screw hole is on the outside of the engine.



- Remove the a cross-headed screwdriver in the hole in the primary driven gear
- If the clutch assembly does not align with the convex part of the oil pump gear, rotate the oil pump to find the correct position and then push the clutch assembly onto it.
- Install the clutch boss, lock washer 5 and the clutch boss nut 6 onto the main axle.

TIP:

- Tighten the clutch boss nut 6 to the specified torque.
- Fold the tab of the lock washer 5.
- Replace the lock washer 5 with a new one in the countermeasure parts kit.



- Place ball 7 in the hole in the main axle.
- Install the short clutch push rod 8.

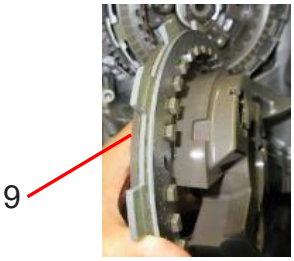
TIP:

Replace the O-ring with a new one from the countermeasure parts kit.

- Install the clutch plates and friction plates in reverse order of disassembly.

TIP:

- Lubricate the front and back of each plate with engine oil.
- Assemble in the same direction and combination as when disassembling.
- Put the friction plate which diameter is large on the clutch housing side.

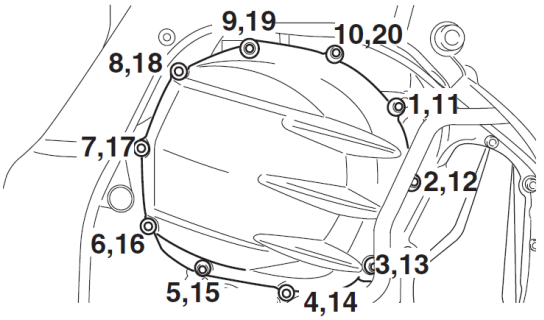


- Assemble the friction plate and the clutch plate one by one on pressure plate 9.
- Align the pressure plate 9 and the cam shape on the clutch boss side, and assemble the convex part of the friction plate to the clutch housing.

- Assemble the clutch spring, the pressure plate and bolts in reverse order of disassembly.
- Assemble the clutch cover in reverse order of disassembly.

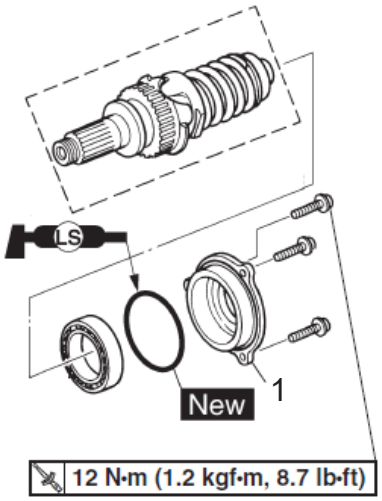
TIP:

- Tighten the clutch cover bolt in proper tightening sequence as shown.
- Tighten the bolts to the specified torque.



	Clutch cover bolt 12 Nm (1.2 m·kgf, 8.7 ft·lbf)

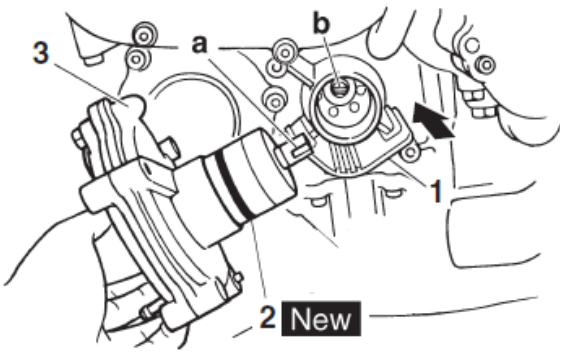
10. Assemble the Middle Drive Shaft Bearing Housing 1
    Assemble in reverse order of disassembly.



11. Assemble the Water Pump Assembly
    Assemble in reverse order of disassembly.

TIP:

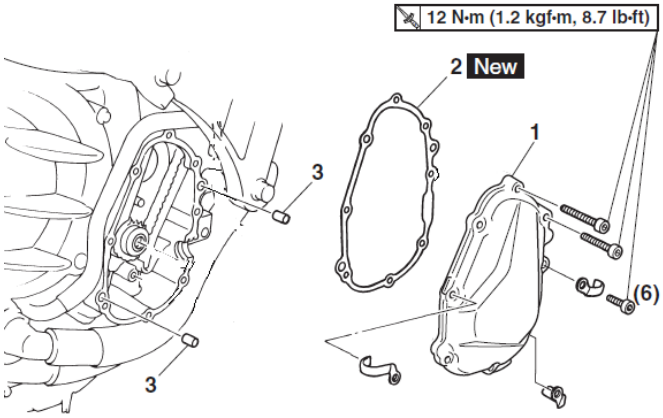
- Attach the water pump tray 1 to the crankcase.
- Align the impeller shaft groove “a” and the protrusion “b” on the oil pump driven sprocket.
- Replace the O-ring 2 with a new part in the countermeasure part kit.
  *Apply a thin layer of the Yamaha grease B.



12. Assemble the Oil Cooler Assembly
    Assemble in reverse order of disassembly.
13. Assemble the Pickup Rotor Cover 1

TIP:

- Assemble the guides to their original positions.
- There are two dowel pins 3 required.
- Replace the gasket 2 with a new part in the countermeasure parts kit.



REINSTALL THE ENGINE

1. Referring to the Service Manual, reinstall the engine, reversing the disassembly steps.
2. Replace the engine oil, referring to the Yamalube viscosity and grade specifications in the Service Manual (Chapter 3) for the operating conditions.
3. Add the recommended coolant per the Service Manual (Chapter 3).
4. Start the engine, warm it up for a several minutes, and then stop it.
5. Check for oil and coolant leaks. Check oil and coolant levels and adjust as necessary.
6. Perform a test run and confirm that the shift up/down operation can be performed smoothly from 1st to 6th.
7. Reset the clock on the meter.

REPROGRAM THE ECU

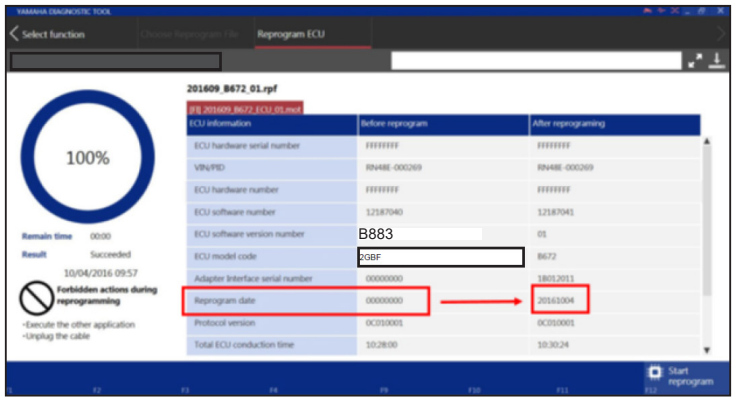
Follow the standard procedures for reprogramming the ECU using the Yamaha Diagnostic Tool (YDT) 3.1 or later. Use Technical Bulletin M2018-009 for reference.

NOTICE:

- **Make sure the battery is well-charged or connect a battery charger if necessary. Otherwise the reprogramming process may be halted and not completed.**
- **An ECU, once reprogrammed, cannot be returned to the original programming.**

IMPORTANT: Customers with unauthorized, aftermarket ECU modifications may experience issues after the ECU reprograming required by this recall is performed. Yamaha cannot participate in accommodating any unauthorized ECU changes. Therefore, damage resulting to an ECU during recall reprogramming because of previous unauthorized modification is the customer's responsibility.

Once the "reprogramming completed" message displays, confirm the reprogram date changed from "00…" to the actual date (formatted YYYYMMDD) on the before/after reprograming chart.



NOTE:

After finishing the reprogramming, error code P0606 will remain in the ECU malfunction history. There is no trouble on the unit; therefore, please erase the malfunction code using YDT.

IDENTIFICATION PROCEDURE

After completing the procedure, make sure to properly record and submit the warranty claim for this campaign to ensure correct reimbursement and to update the unit's repair history in Yamaha's database.

PARTS INFORMATION

KITS

Order one Transmission Kit and one Transmission Add Kit per affected unit

PART NUMBER		DESCRIPTION	AFFECTED MODEL		DEALER COST
			FJR1300A	FJR1300P	
TRANSMISSION KIT	90891-10304-00	TRANSMISSION KIT, FJR1300	O	-	$432.67
	90891-10309-00	TRANSMISSION KIT, FJR1300P	-	O	$433.69
TRANSMISSION ADD KIT	90891-10314-00	TRANSMISSION ADD KIT, FJR1300	O	-	$0.69
		TRANSMISSION ADD KIT, FJR1300P	-	O	$0.96

KIT CONTENTS

FJR1300A, FJR1300AE

KIT PART NAME	PART NUMBER	APPLICABLE MODELS
TRANSMISSION KIT, FJR1300	90891-10304-00	• FJR1300A • FJR1300AE

KIT PART CONTENTS

No.	PART NUMBER	PART NUMBER PART NAME	QTY
1	93210-33133	O-RING	1
2	93210-47675	O-RING	1
3	95022-06020	BOLT, FLG.	2
4	90110-06166	BOLT, HEX. SOCKET	2
5	91312-06025	BOLT, HEX. SOCKET	1
6	91312-06020	BOLT, HEX. SOCKET	2
7	5JW-13473-00	O-RING	1
8	90110-06163	BOLT, HEX. SOCKET	4

No.	PART NUMBER	PART NUMBER PART NAME	QTY
9	5GH-13440-61	OIL CLEANER ASSY.	1
10	93210-15566	O-RING	1
11	5JW-13414-01	GASKET, STRAINER	1
12	21411-19801	GASKET	1
13	91312-06012	BOLT, HEX. SOCKET	8
14	93210-14003	O-RING	2
15	91312-06016	BOLT, HEX. SOCKET	2
16	4FM-14613-00	GSKT., EXT. 1	4
17	3XW-14714-00	GSKT., MUFF. JT.	2
18	90119-09001	BOLT, HEX.	10
19	95812-06055	BOLT, FLG.	1
20	5JW-15451-11	GSKT., CRANKCASE COVER 1	1
21	5JW-15461-11	GSKT., CRANKCASE COVER 2	1
22	93210-27194	O-RING	1
23	5JW-15462-11	GSKT., CRANKCASE COVER 3	1
24	90149-06149	SCREW	2
25	5JW-15456-11	GSKT.,1	1
26	90215-25218	WASHER, TONGUED	1
27	93210-06632	O-RING	1
28	B88-17410-09	MAIN AXLE ASSY.,1	1
29	90149-06085	SCREW	3

No.	PART NUMBER	PART NUMBER PART NAME	QTY
30	B88-17420-09	DRIVE AXLE ASSY.	1
31	90215-27003	WASHER, TONGUED	1
32	93210-84724	O-RING	1
33	93210-76546	O-RING	1
34	95822-08035	BOLT, FLG.	3
35	99002-10600	CIRCLIP (E)	1
36	90119-05059	BOLT, HEX. W/WASHER	2
37	5PW-2411J-01	DAMPER, SIDE COVER	2
38	91312-05012	BOLT, HEX. SOCKET	2
39	90465-10098	CLAMP	2
40	90109-10058	BOLT	2
41	90149-10001	SCREW	1
42	1UA-82591-00	BAND	1
43	90464-30011	CLAMP	2
44	90110-08097	BOLT, HEX. SOCKET	2

KIT PART NAME	PART NUMBER	APPLICABLE MODELS
TRANSMISSION ADD KIT, FJR1300	90891-10314-00	• FJR1300A • FJR1300AE

KIT PART CONTENTS

No.	PART NUMBER	PART NUMBER PART NAME	QTY
51	90430-06014	GASKET	1
52	93210-18417	O-RING	2
53	5JW-14452-00	SEAL	1
54	91312-06012	BOLT, HEX. SOCKET	2

FJR1300P

KIT PART NAME	PART NUMBER	APPLICABLE MODELS
TRANSMISSION KIT, FJR1300P	90891-10309	• FJR1300P

KIT PART CONTENTS

No.	PART NUMBER	PART NUMBER PART NAME	QTY
1~43	**Same as 90891-10304-00**		1
46	90269-05005	RIVET	6
47	95604-06200	NUT, S/L FLG.	2
48	92014-06040	BOLT, BUTTON HEAD	2
49	90464-16061	CLAMP	4
50	90464-65001	CLAMP	1

FJR1300P

KIT PART NAME	PART NUMBER	APPLICABLE MODELS
TRANSMISSION ADD KIT, FJR1300P	90891-10313	• FJR1300P

KIT PART CONTENTS

No.	PART NUMBER	PART NUMBER PART NAME	QTY
51	90430-06014	GASKET	1
52	93210-18417	O-RING	2
53	5JW-14452-00	SEAL	1
54	91312-06012	BOLT, HEX. SOCKET	2
55	90110-08097	BOLT, HEX. SOCKET	2

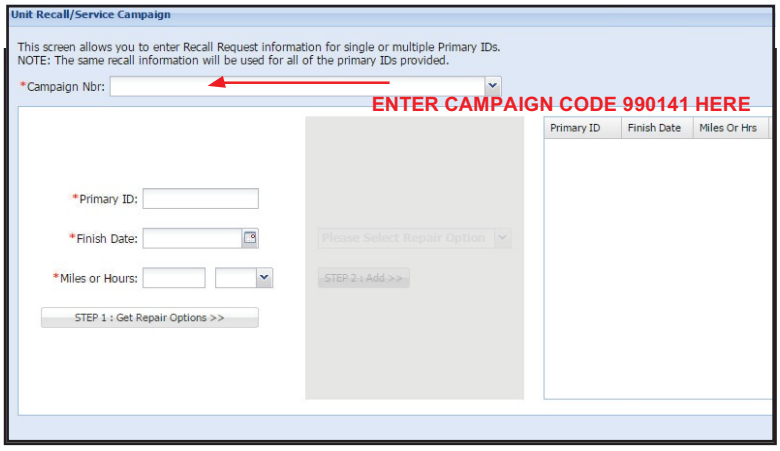
WARRANTY INFORMATION

The owner of each registered motorcycle will receive a letter announcing this campaign. The customer's letter includes the Vehicle Identification Number and Recall Number.

The modification is authorized for all affected motorcycles, both sold and unsold, regardless of ownership or warranty status. You do not need the customer's letter to perform the modification or to file for reimbursement.

Submit a Recall Claim as described below using Campaign Number **990141**. The labor allowance for FJR13A/E is **14.0 hours**. The labor allowance for FJR13P is **14.6 hours.** Your claim will also be credited for 5 quarts of engine oil and 3 quarts of coolant.

To submit your Recall Claim on YDS, go to *Service* > *Warranty Claims/Authorization* > *Claims/Authorization* > *New*. Then, from the menu, select *Recall / Service per Bulletin Claim (90 code)*.



If you have any questions about proper procedures for Factory Modification Campaigns, see Chapter 7 in your Warranty and Y.E.S. Handbook (LIT-11760-00-16).

YAMAHA MOTOR CORPORATION, U.S.A. 6555 Katella Avenue, Cypress, CA 90630-5101 800-962-7926

IMPORTANT SAFETY RECALL NOTICE

This notice applies to your motorcycle, VIN xxxxxxxxxxxxxxxxx Model:

January 20, 2021
990141

Dear Yamaha Owner:

Yamaha Motor Corporation, U.S.A. has decided that a defect that relates to motor vehicle safety exists in 2016~2020-Model FJR1300A, FJR1300AE, and FJR1300PA motorcycles. Our records show that you own the affected motorcycle shown above.

The reason for this recall: In affected motorcycles, the side of second gear may not be strong enough to handle high speed loads. As a result, cracks may occur due to constant stress applied during repeated gear shift operation and, eventually, the gear could break. If this happens, the transmission and, in turn, the rear wheel, could lock, increasing the risk of loss of control and a crash with injury or death.

What Yamaha and your dealer will do: Your authorized Yamaha dealer will inspect your motorcycle's second gear and replace the main axle and drive axle assembly and reprogram the Engine Control Unit (ECU) to change the performance characteristics for second gear operation. The procedure takes about 14 hours to perform, so your dealer will need to keep your motorcycle for several days. **There will be no charge to you for this procedure.**

What you should do now: Please call your Yamaha dealer to make a service appointment to have this procedure performed. At that same time, you can find out how long they expect to keep your motorcycle for this service. Remember to take this letter with you when you take in your motorcycle.

You may also get a notice regarding a Brake Switch Recall. When you take in your motorcycle for this procedure, also ask your dealer to confirm if the modification of the brake switch needs to be performed as well.

You should not operate your affected motorcycle shown above until modification is performed.

IMPORTANT NOTE: Some customers with unauthorized, aftermarket ECU modifications may experience issues once the ECU reprograming required by this recall is performed. Yamaha cannot participate in accommodating any unauthorized ECU changes. Therefore, damage resulting to an ECU during recall reprogramming because of previous unauthorized modification is the customer's responsibility.

If you are unable to return to the Yamaha dealer who sold you the motorcycle, this service will be performed by any authorized Yamaha Motorcycle dealer. For the name of a dealer near you, call 1-800-88-YAMAHA or visit the Yamaha web site at *www.yamaha-motor.com*.

If you have had this repair performed before you received this letter, you may be entitled to receive reimbursement for the cost of obtaining a pre-notification remedy of the problem associated with this repair. For more information, contact Yamaha Customer Relations at 1-800-962-7926.

Federal regulations require that any vehicle lessor receiving this recall notice must forward a copy of this notice to the lessee within 10 days.

If you need help: If, after contacting your dealership, you have questions or concerns which the dealership is unable to answer, please write to:

Yamaha Motor Corporation, U.S.A.
Customer Relations Department
P.O. Box 6555 Cypress, CA 90630
Or call: 1-800-962-7926

If, after contacting Yamaha Customer Relations, you are still not satisfied that we have done our best to remedy the situation without charge and within a reasonable time, you may submit a written complaint to the Administrator, National Highway Traffic Safety Administration, 1200 New Jersey Avenue, SE., Washington, DC 20590; or call the Auto Safety Hotline at 1-888-327-4236 (TTY: 1-800- 424-9153); or go to *http://www.safercar.gov*. Refer to NHTSA recall number 20V813.

If you no longer own this Yamaha: If you have sold your motorcycle to another party, please call us toll-free at 1-800-962-7926 with the name and address of the new owner, along with Vehicle Identification Number shown above your name on this letter.

We're sorry to cause you any inconvenience, but we are sincerely concerned about your safety and continued satisfaction with our products. Thank you for giving your attention to this important matter.

Sincerely,
Motorsports Service Support
Yamaha Motor Corporation, U.S.A