

## **QUALITY ACTION**

**Engine Crankshaft Inspection** 

Reference: PC704 Date: July 17, 2019

CAMPAIGN

BULLETIN

Attention: Dealer Principal, Sales, Service & Parts Managers

Affected Models/Years:	Affected Population:	Dealer Inventory:	SERVICE COMM Activation date:	Stop Sale In Effect
MY2019 Frontier	NA	186	July 17 2010	YES
MY2019 NV		83	July 17, 2019	

#### \*\*\*\*\*Dealer Announcement\*\*\*\*

Nissan is conducting a quality action on **186** specific MY 2019 Frontier and **83** NV vehicles identified in Service Comm, to remove and inspect the engine crankshaft counterweight surface for an impact mark.

Affected vehicles **are subject** to stop sale and are either currently in dealer inventory or assigned and in transit to the dealer.

#### \*\*\*\*\*What Dealers Should Do\*\*\*\*\*

#### PLEASE FOLLOW THE ATTACHED REPAIR INSTRUCTIONS:

- Verify if vehicles are affected by this quality action using Service Comm or DBS National Service History – Open Campaigns I.D. <u>PC704</u>
  - New vehicles in dealer inventory can also be identified using DBS (Sales-> Vehicle Inventory, and filter by Open Campaign).
    - Refer to NPSB 15-460 for additional information
  - <u>Please continue to check newly arriving inventory for campaign</u> <u>applicability.</u>
- 2. Please <u>do not drive, sell or trade</u> the specific vehicles in Dealer Inventory subject to this Quality Action.
- 3. Use the attached procedure to inspect the vehicle.
  - If an impact mark **is not** found on the counterweight machined surface, reassemble vehicle per the Electronic Service Manual (ESM).
    - File a claim for the inspection, and release the vehicle for sale
  - If an impact mark <u>is</u> located on machined surface area of the counterweight when the crankshaft pulley notches are in the indicated positions, provide the requested information via ASIST/Tech Support Info/Powertrain Call Center Pre-Call forms/New Engine Form as per the attached instructions and <u>HOLD</u> the vehicle.
    - Do not file a claim

The Powertrain Call Center (PCC) will review the pre-call (New Engine Form). PCC will advise dealer of outcome and, if engine replacement is

# advised, dealer should place an order for the long block assembly and required one-time use parts.

- Dealers should place a <u>stock order</u> if parts are available in their facing Parts Distribution Center (PDC)
- If parts are not available in dealer's facing PDC, dealers may escalate the order to a <u>Vehicle Off-Road (VOR) type</u> to allow parts to be procured from outside an individual dealer's referral matrix.
  - If needed, dealers may confirm the parts approved for this campaign activity by sending an email to: <u>nnafqasupport@nissan-usa.com</u>
    - When submitting a parts confirmation request, please include your VCAN number and a copy of the completed New Engine Form
    - Nissan Field Quality will respond within two (2) business days of email receipt

# **NOTE:** Nissan will not reimburse dealers for VOR charges when parts are available in your facing PDC.

#### \*\*\*\*\* Dealer Responsibility \*\*\*\*\*

It is the dealer's responsibility to check Service Comm or DBS National Service History – Open Campaign using the appropriate campaign I.D for the inspection status on each affected vehicle currently in new vehicle inventory.

#### Thank you for your prompt attention to this matter.

#### NISSAN NORTH AMERICA, INC.

Aftersales DIVISION

\*\*\*\*\* Inspection procedure begins on next page \*\*\*\*\*



## PC704 - 2019 - FRONTIER/NV ENGINE CRANKSHAFT INSPECTION



### **SERVICE PROCEDURE:**

1. Raise vehicle on lift (Figure 1)



Figure 1

- 2. Drain engine oil (Figure 2)
  - Remove engine oil drain plug
  - Discard copper drain washer

**WARNING:** To avoid the danger of being scalded, do not drain engine oil when engine is hot.

**NOTE:** When removing components such as hoses, tubes/lines, etc., cap or plug openings to prevent fluid from spilling.



Figure 2

3. Remove Air Spoiler Assembly

### (Frontier).

Using 10mm socket, remove the
 (6) bolts holding the Air Spoiler
 Assembly (Figure 3)



- 4. Remove Front Under Cover.
  - (Frontier) Using 10 mm socket, remove the (8) bolts holding the Front Under Cover (Figure 4)
  - (NV) Using 12mm socket, remove the (7) bolts holding the Front Under Cover (Figure 5)



Figure 4



Figure 5 (NV)

- 5. Locate and attach 19mm socket to crankshaft pulley bolt.
  - Maneuver ratchet with 19mm socket up to the front of the engine towards the crankshaft pulley bolt (Figure 6)



- 6. Adjust crankshaft pulley to 5 o'clock position.
  - Turn crankshaft pulley bolt clockwise until the two white

notches are in the 5 o' clock

**NOTE:** Engine pictured in (Figure 7) was removed from vehicle for visual purposes only. Engine removal is not required for inspection.





- Locate baffle plate and crankshaft
   #6 counterweight.
  - Locate baffle plate (Figure 10)
  - Locate round edge of baffle plate; the crankshaft counterweight surface will be located behind the baffle plate (Figure 11)
  - Continue to step 10 for inspection of crankshaft counterweight surface



- 10. Rotate crankshaft pulley clockwise to inspect counterweight machined surface
  - Verify the crankshaft pulley is at the 5 o' clock position and rotating to the 7 o' clock position (moving clockwise only) while inspecting the counterweight machined surface
  - **OK condition**-smooth machined surface with no impact marks (Figure 12) reassemble vehicle per the ESM and claim inspection operation code
  - NG condition- impact mark(s) located on machined surface area of counterweight when crankshaft pulley notches are between the 5 o' clock and 7 o' clock positions (Figure 13) continue to step 11

**NOTE:** Impact mark is generally within 2" of the end of the counterweight surface.



Figure 13 - **NG** 

- 11. If **NG condition**, create an engine pre-call form (New Engine Form) and contact the Powertrain Call Center (PCC).
  - Take a video moving from one item to the other in the following order:
    - Impact mark on surface of counterweight
    - Crankshaft pulley (to show notch position)
    - VIN certification label
  - Start engine pre-call form in ASIST/Tech Support Info/ Powertrain Call Center Pre-Call forms/ New Engine Form.
  - Attach video to engine pre-call form and contact PCC to review
  - **If engine replacement is approved by PCC**, follow ESM steps to replace long block assembly and claim inspect and replace engine operation code

PARTS INFORMATION: (Inspection only)						
Description	Part #	Quantity				
WASHER - DRAIN	11026-JA00A	1				
THREEBOND 1217H GASKET	999MP-1217HP	1				
GENUINE NISSAN 5W-30 OIL	999PK-05W30NN (Bottled) Or 999BK-05W30NW (Bulk)	6				
PARTS INFORMATION: (Engine replacement)						
Refer to the ESM and EPC for engine part number information						

## CLAIMS INFORMATION

Submit claim using the following claims coding:

### Work Order Line Type: "CM" Campaign

### Campaign: PC704

Claim Type:	СМ		Innovation that excites	
PNC:	PC704			
Symptom:	ZZ			
Diagnosis:	99			
Description:	Op Codes	Flat Rate Time	Parts Required on claim	Expense Code Required
Inspect crankshaft, no action needed (NV/Frontier)	PC7040	0.6 Hrs	YES	NO
Inspect and replace engine long block (Frontier 2WD)	PC7041	11.2 Hrs	YES	NO
Inspect and replace engine long block (Frontier 4WD)	PC7042	11.8 Hrs	YES	NO
Inspect and replace engine long block (NV)	PC7043	11.1 Hrs	YES	NO