# SERVICE

# TITLE: 2018~2020 NINJA H2<sup>™</sup> SX, SX SE & SX SE+ GEAR MISENGAGEMENT MAY CAUSE TRANSMISSION DAMAGE

# RECALL

#### THIS BULLETIN IS OF THE HIGHEST PRIORITY AND MUST BE ACTED UPON IMMEDIATELY TO ENSURE CUSTOMER SAFETY.

#### Eligibility

#### **Eligible Units**

Year	Model	Model Codes	
2018	NINJA H2 SX NINJA H2 SX NINJA H2 SX SE NINJA H2 SX SE	ZX1002AJFL ZX1002AJF ZX1002BJF ZX1002BJFL	
2019	NINJA H2 SX SE+ NINJA H2 SX SE+	ZX1002DKF ZX1002DKFL	
2020	NINJA H2 SX SE+ NINJA H2 SX SE+	ZX1002DLF ZX1002DLFL	

# Verify eligibility using VIP in K-Dealer before starting the repair.

Please check VIP (Vehicle Information Portal) in K-Dealer for other possible repair campaigns for eligible units.

#### Subject

On affected units, if the transmission gears are not properly engaged while shifting into 4th or 5th gear, high engine RPM can cause the output gears of 4th or 5th gear to fracture when the gears re-engage. The engine control program of the electronic control unit (ECU) doesn't have the capability to suppress high RPM during transmission gear misengagement, allowing this problem to occur. Jamming of broken gears can cause the engine to lock up, increasing the risk of a crash.

#### Kawasaki Action

#### Initiate Campaign:

Kawasaki has initiated a Recall campaign to repair all eligible units. The repair consists of reprogramming the ECU. Reprogramming will not affect vehicle performance or emission levels.

#### Notify Registered Owners:

Kawasaki is sending a Recall letter to all registered owners of eligible units. A copy of the letter is printed on page 17 of this bulletin.

#### **Dealer Action**

#### **Repair Eligible Units:**

Repair all eligible units including sold units in the field and unsold units in your dealership inventory prior to delivery to the retail purchaser. It is the obligation of authorized Kawasaki retail Dealers to repair eligible units in Dealer's possession prior to retail sale. Failure to comply with this obligation to repair all units eligible for Recall or FDM campaigns by the Dealer constitutes a breach of the Dealer Sales and Service Agreement. Refer to Service Policies bulletin SP 08-01. Refer to the Repair Procedure section of this bulletin for details.

#### **IMPORTANT NOTE:**

o It's the law! Under the U.S. National Highway Traffic Safety Administration (NHTSA), Federal Law 49 U.S.C. Section 30120(i) requires dealers to perform Recall repairs before delivering any vehicle affected by the Recall to a purchaser.

#### **Document Completed Repairs:**

Federal law requires manufacturers to maintain accurate follow-up records on repairs performed on eligible units. Dealers MUST submit a Warranty Claim for each repair. Refer to the Warranty Information section of this bulletin for details.

#### NOTE:

o If you fail to submit a Warranty Claim for a new unit that is subsequently sold and registered, the new owner will receive the Recall letter requesting the return of the vehicle to you for repair.



#### **Submit Product Registration:**

Submit the product registration to Kawasaki via K-Dealer immediately after retail sale of any eligible unit. Be sure to supply the correct customer name and mailing address. Kawasaki uses the product registration information for customer notification. Also, if you know that the customer has moved, please submit a Customer Update via K-Dealer.

#### **Parts Information**

This repair procedure does not require any repair kit parts.

#### **Special Tool Requirements**

This repair procedure requires the following special tools

- KVCS Kit
- Computer or lap top with Windows 8.1 or 10 installed
- Computer or laptop with KVCS installed
- Internet connection

#### ECU Reprogramming Sequence

Reprogramming consists of four main procedures. All steps must be completed to successfully reprogram the ECU:

#### 1. SAVE VEHICLE ECU DATA FROM VEHICLE TO KVCI DEVICE

- Connect KVCI device to vehicle
- Save ECU Data on the KVCI device
- Disconnect KVCI device from vehicle

#### 2. DOWNLOAD REPROGRAMMING DATA FROM SERVER TO KVCI DEVICE

- Start KVCS software
- Connect KVCI device to laptop or computer running KVCS
- Search available programming data
- Download reprogramming data
- Confirm download
- Remove KVCI device from laptop or computer

#### 3. WRITE NEW PROGRAMMING DATA TO VEHICLE ECU

- Connect KVCI device to vehicle
- Write new programming data to ECU
- Verify reprogramming
- Remove KVCI device from vehicle
- Start vehicle to verify that there are no error lamps illuminated

#### 4. REPORT REPROGRAMMING TO KAWASAKI SERVER

- Connect KVCI device to laptop or computer
- Report reprogramming to Kawasaki server
- Confirm "0 unreported items"
- Remove KVCI device from laptop or computer

#### **REPROGRAMMING COMPLETE**

### **ECU Reprogramming**

### ECU REPROGRAMMING VIDEO TUTORIAL:

- O PLEASE WATCH THIS VIDEO PRIOR TO REPROGRAMMING THE ECU.
- O OPEN THIS BULLETIN IN K-DEALER TO CLICK ON THE BUTTON TO VIEW THE VIDEO

## **IMPORTANT NOTES:**

- o The vehicle's battery voltage must be greater than 10.5 Volts to perform this procedure. Do not attempt to reprogram the ECU if the battery voltage is below 10.5 Volts. Charge the battery as required.
- o This procedure requires an internet connection and a computer with KVCS installed.

#### Save Vehicle ECU Data

Connect cable **57001-1843** to the KVCI device.

#### NOTE:

- o Only the KVCI device and the vehicle will be connected to each other while saving the vehicle ECU data.
- Confirm the **power switch** on the KVCI device is in the **OFF** position.



ECU

VIDEO TUTORIAL



• Remove the passenger seat and locate the KVCS connectors next to the fuse box.



• Remove the cover from the FI ECU connector. It is the six pin connector with the light blue wire.



- Connect KVCI device to vehicle's white, six pin FI ECU connector, using cable 57001-1843.
- Turn the **ignition switch ON** but do not start the vehicle.
- Wait 5 seconds.



- Slide the **power switch** on the KVCI device to the **ON** position.



- Wait 10 seconds for the KVCI device to power up and connect with the vehicle ECU. The flashing blue light under the motorcycle icon indicates the device is ready.
- Press the **A button** on the KVCI device.



- The Main Menu appears.
- Press the **A** button to select **Reflash**.

-The **Battery Terminal Voltage** screen will appear.

- ★ If the battery voltage is below 10.5 V, stop this procedure. Charge the battery and begin at step one again.
- ★ If the battery voltage is greater than 10.5 V, proceed to the next step.
- Press the A button to open the Menu.
- Press the **A** button again when the Menu screen appears with **Save vehicle ECU data** as the option.
- Verify that the message **Downloading Vehicle ECU Data** is displayed.
  - ★ If the "Downloading Vehicle ECU Data" screen does not appear shut down and start over.
- Confirm the downloaded vehicle ECU data on the **Completion of Vehicle ECU Data** screen.

ECU #	21175-XXXX
Cal ID	49245-XXXX
VIN	FRAME NUMBER

★ If the ECU VIN is different from the FRAME VIN, use the FRAME VIN in the warranty request.











• Slide the mode switch of KVCI device to the **OFF** position.



• Turn the ignition switch to the **OFF** position and wait ten seconds before proceeding to the next step,

#### NOTICE

Turn the ignition switch of the vehicle to the **OFF** position, wait for 10 seconds, and then release the connection between the KVCI device and the vehicle. If you release the connection while power is still being supplied the KVCI device may fail.

• Remove the KVCI device from the vehicle.

#### **Download Reprogramming Data**

• Connect KVCI device to your KVCS equipped computer with **USB cable 57001-1844**.

#### NOTE:

- o Only the KVCI device and the computer running KVCS will be connected to each other while downloading the reprogramming data from the server.
- Slide the power switch on the KVCI device to the **ON** position.
- Wait 10 seconds.







• Launch the **KVCS** program on the laptop or PC.

• Select ECU Reflash.



- Confirm ECU data in the "Vehicle ECU Data" field.
- WRITE DOWN THE VIN TO BE ENTERED LATER DURING THE PROCEDURE.
- Click on the **Search Reprogramming Data** button.

#### NOTE:

- o This may take several minutes depending on the speed of the internet connection.
- Select **United States** as the Region.
- Enter your KVCS Dealer Code and Password then click the **Login** button. (Call Kawasaki Dealer Care at (800) 854-3800 if you do not have your dealer code and password.)
- Verify the reprogramming data for the vehicle based on the following tables:

ZX1002A				
ECU P/N	CallD	Note		
21175-1343	49245-1859	USA		
21175-1340	49245-1857	L Model		

ZX1002B				
ECU P/N	CallD	Note		
21175-1351	49245-1867	USA		
21175-1346	49245-1862	L Model		

ZX1002D				
ECU P/N	CallD	Note		
21175-1476	49245-1877	USA		
21175-1471	49245-1873	L Model		

Click on the **DL** button to download the vehicle data.







	ECU Reflash					
Vehicle	ECU Data					
ECU P/I CallD 1 items of a	No. : 21175- <b>XX</b> : 49245- <b>XX</b> pplicable reprogramming	ØY Ø4 data found.	Model Year : X4880 Model name : X9890000413944			
	ECU P/No.	CallD	Remarks	Registration Date		
<u>\</u>	21175-30007	49245- <b>XXX</b>	DAJXXXA	XXXXXXXXXX		
Notes	This is an important to other ECU reprogram	ECU update for this vehi- ming.	cle. ECU must be updated before performing	🛃 DL		
Elig	ible ECU P/No.	21175-XXXX		1		

• When the download is complete, the **Confirm Download** screen will appear.



- Enter the **VIN** on the vehicle frame in the VIN field.
- Click on the **Continue** button.
- The **Proceed to VIN Verification** message will appear if the correct VIN is entered.
- Click on the **OK** button.
- Proceed to page 8 of this bulletin and resume at the **Activation Code** step.



# The following screens will only appear if the VIN was entered incorrectly or the wrong VIN was entered. Proceed to ACTIVATION CODE on page 8 if the VIN is correct.

★ If VIN is not entered or VIN format is incorrect, error message is displayed. Please enter VIN stamped on the vehicle frame and click **Continue** again.





★ If the VIN entered does not match with ECU VIN, an error message is displayed. If the entered VIN is incorrect, please enter the correct VIN stamped on the vehicle frame and click Verify again.



- ★ If VIN entered is correct, please click VIN entered is correct. Reprogramming can be done even if the VINs do not match.
- ★ If the message The VIN entered does not match the ECU VIN. Proceed to download the reprogramming data with the VIN entered? is displayed, click on the OK button.

#### **Activation Code**

- A new screen will appear that has a field to enter the **Activation Code**.
- Enter Activation Code DAJ430A then click on the Certification button. (Activation code DAJ430A is used for all vehicles for this step.)



₽ Verify again
₽ VIN entered is correct.

VIN

ECU Reflash				
Confirm Download				
ECU P/No. CallD Applicable ECU Part Number Remarks	21175-104897 49245-177898 21175-104897 DAJ889804 This is an important ECU update for this			
Notes	: vehicle. ECU must be updated before performing other ECU reprogramming.			
Registration Date	: X00000000X			
Activation Code	DAJ430A			
X Cance	1			

• A confirmation dialog box will appear asking if you would like to authenticate the Activation Code. Click on the **OK** button.

#### NOTE:

- o This may take several minutes depending on the speed of the internet connection.
- A checkmark Symbol will appear to the right of the activation code indicating that the correct code was used.
- Click on the **Download** button to initiate the download process.
- A confirmation dialog box will appear asking if you would like to download the program. Click on the **OK** button.

#### NOTE:

o Downloading may take several minutes depending on the speed of the internet connection.

Would you like to authenticate the Activation Code?

OK
Cancel

Message from webpage

Activation Code



P Certification

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• A progress bar will indicate the progress of the download. It may take a few seconds before the progress bar begins to display in green. If the progress bar does not appear, minimize then maximize KVCS to refresh.

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Kawasaki Let the good times roll	кисѕ		

- When the download is complete, the bar will disappear and information of reprogramming data will be displayed in the **Reprogramming Data** field.
- Click on the button next to the image of the KVCI device.



ECU Reflash				
Device Information	Reprogramming Data			
Kawasaki Smart VCI	ECU P/No : 21175- <b>1488X</b> CalID : 49245- <b>1360x</b> Applicable ECU P/No : 21175- <b>1499X</b>			
S/N : \$2003000000 Program Version : \$2000000 Firmware Version : \$20000	Applicable VIN : JK3800000000000000 Download Date : 2020000080303006 Activation Code : DAJ38000			
	Delete			

- Slide the power switch on the KVCI device to the **OFF** position.
- Disconnect the KVCI device from the PC.
- Close the KVCS software.



#### Write Reprogramming Data to ECU

• Connect cable 57001-1843 to the KVCI device.

### NOTE:

- o Only the KVCI device and the vehicle will be connected to each other while saving the vehicle ECU data.
- Verify the power switch on the KVCI device is in the OFF position.
- Connect KVCI device to vehicle's white, six pin FI ECU coupler, using cable 57001-1843.







• Turn the ignition switch **ON** but do not start the vehicle.



- Slide the power switch on the KVCI device to the ON position and wait approximately 10 seconds for the device to connect with vehicle ECU. The flashing blue light under the motorcycle icon indicates the device is ready
- Press the **A** button on the KVCI device.
- The Main Menu appears.
- Press the A button.
- The **Battery Terminal Voltage** screen will appear.
- Press the **A** button.







- The KVCI Menu is displayed.
- Use the down arrow key on the KVCI device to select **Reprogram Vehicle ECU**.
- Press the **A** button.



Data for Re

49245

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Kawasaki



Name	Description
ECU P/No	21175-XXXX
Cal ID	49245-XXXX
Remarks	Displayed reference information such as contents of program.
VIN	Frame Number

 During the reprogramming, the **Reprogamming in Progress** status is displayed as a percentage and the green light under the symbol on the KVCI device flashes.

#### NOTE:

o This may take several minutes depending on the speed of the internet connection.

#### NOTE:

o The ECU will not be recognized during reprogramming and the warning lamp will be blinking. It will return to its original display state when the reprogramming is complete.



#### **IMPORTANT NOTE:**

- WAIT FOR THE **Completion of Reprogramming** SCREEN TO APPEAR BEFORE TURNING OFF THE KVCI DEVICE OR THE VEHICLE IGNITION SWITCH. TURNING THE POWER OFF TOO SOON WILL RESULT IN INCOMPLETE REPROGRAMMING.
- When the reprogramming is complete, the **Completion of Reprogramming** window opens.
- DON'T PRESS ANY BUTTONS ON THE KVCI DEVICE.





★ If you receive a message on the KVCI device with the message "There is a possibility that the previous reprogramming did not finish properly. Would you like to run the recovery process?" you will need to perform the recovery process. Select YES then press the A button to perform the recovery process. Otherwise, proceed to the next step below.

#### **IMPORTANT NOTE:**

- o WAIT FOR THE **Completion of Reprogramming** SCREEN TO APPEAR BEFORE TURNING OFF THE KVCI DEVICE OR THE VEHICLE IGNITION SWITCH. TURNING THE POWER OFF TOO SOON WILL RESULT IN INCOMPLETE REPROGRAMMING.
- Slide the mode switch of Kawasaki Smart VCI to the OFF position only when the Completion of Reprogramming screen is displayed.





#### NOTICE

Turn the ignition switch of the vehicle to the **OFF** position, wait for around 10 seconds, and then release the connection betweenKawasaki Smart VCI and the vehicle. If you release the connection while power is still being supplied, Kawasaki Smart VCI may fail.

• Turn the ignition switch to the **OFF** position.

#### NOTE:

o The engine light will be flashing during reprogramming. This is normal.

- Remove Kawasaki Smart VCI from the vehicle.
- Start the vehicle and verify that the engine light is not flashing.
- Turn the ignition switch to the **OFF** position.



# Reporting the Vehicle ECU Reprogramming to the Server

• Launch the KVCS software.

#### NOTE:

- o Only the KVCI device and the computer running KVCS will be connected to each other while downloading the reprogramming data from the server.
- Select ECU Reflash.
- Connect the KVCI device to the computer with the USB cable.
- Slide the power KVCI device power switch to the **ON** position.
- Wait 10 seconds.
- On the KVCS software select **Report** on the **Reprogramming Completion Report** column.
  - ★ If the Unreported 0 Items is displayed on the Reprogramming Completion Report column, ECU reprogramming is not finished completely. Please perform the reprogramming process again. (Click on the Search History button to display all reported items.)
  - ★ If the Unreported 1 Items is displayed on the Reprogramming Completion Report column, ECU reprogramming is complete.
- Click on the **Report** button only if **Unreported 1 Items** is displayed.
- Enter **MC20-10** in the Remarks field.



• Click on the **OK** button on the **Would you** like to report the results? screen.







ECU Reflash		
Device Information	Reprogramming Data	
Kawasaki Smart VCI S/N : X0000000K Program Version : X00000 Firmware Version : X0007	ECU P/No :: N/A Call D :: N/A Applicable ECU P/No :: N/A Applicable V/N :: N/A Download Date :: N/A Activation Code :: N/A	
Vehicle ECU Data ECU PiNo : 21175 3808X Call D : 49245 3880X VIN : Jr38809895080006 Search Resognamming	Reprogramming Completion Report Unreported 1 items Report Report Search History	



Message from webpage	×	
? Would you like to report the results?		
ОК	Cancel	

Click on the 
 button at the bottom of the 
 page displaying "Reported to server".



- Confirm **Unreported 0 Items** is displayed on the **Reprogramming Completion Report** column.
- If Unreported 1 item is displayed on the Reprogramming Completion Report, Reporting is not finished completely. Please report the download vehicle ECU Data to the server again.

#### NOTE:

- o If there are unreported vehicle ECU data, you cannot download another reprogramming data. After reporting the downloaded vehicle ECU data to the server, please download other unit's reprograming data and write the reprograming data.
- Slide the mode switch of KVCI device to the **OFF** position.
- Remove KVCI device from the PC.

ECU Reflash	
Device Information	Reprogramming Data
Kawasaki Smart VCI	ECU PINo : N/A CallD : N/A Applicable ECU PINo : N/A
Program Version : XXBXX	Applicable VIN : N/A Download Date : N/A Activation Code : N/A
Vehicle ECU Data	Reprogramming Completion Report
ECU PINO : 21175-1487 Call D : 49245-1304 VIN : JKREDOROX08000028	Unreported 0 items
Q Search Reprogramming Data	Report Q Search History



#### ECU REPROGRAMMING IS NOW COMPLETE

#### Warranty Information

This is a safety Recall campaign. Repair is authorized regardless of ownership or warranty status.

Repairs MUST BE PERFORMED IMMEDIATELY ON ALL ELIGIBLE UNITS in the field and during initial assembly and preparation.

See the Warranty Policies and Procedures Manual (claim type 3 information) for detailed instructions when submitting the Warranty Claim.

	Reprogram ECU
Job Code	22532
Flat Rate Time	0.3
Claim Type	3
Part Number	99999-0788
Description	KIT
Quantity	0

### **Repair Verification**

• Make a white paint mark on the rear of the frame as shown to serve as repair verification.

#### NOTE:

 Repair verification is an essential part of the repair procedure. Along with the physical repair verification, check VIP (Vehicle Information Portal) in K-Dealer for other possible repair campaigns for eligible units.



# 2018~2020 NINJA H2™ SX, SX SE, SX SE+ GEAR MISENGAGEMENT MAY CAUSE TRANSMISSION DAMAGE

# IMPORTANT SAFETY RECALL NHTSA RECALL NO. 20V-676

Dear Kawasaki Motorcycle Owner:

This notice is sent to you in accordance with the National Traffic and Motor Vehicle Safety Act. Kawasaki Motors Corp., U.S.A., has decided that a defect which relates to motor vehicle safety exists in certain 2018~2020 NINJA H2 SX, SX SE, SX SE+ models.

#### The reason for this notice:

On affected units, if the transmission gears are not properly engaged while shifting into 4th or 5th gear, high engine RPM can cause the output gears of 4th or 5th gear to fracture when the gears re-engage. The engine control program of the electronic control unit (ECU) doesn't have the capability to suppress high RPM during transmission gear misengagement, allowing this problem to occur. Jamming of broken gears can cause the engine to lock up, increasing the risk of a crash. Our records indicate that you have purchased one of these units.

#### What Kawasaki and your dealer will do:

Kawasaki has authorized your dealer to reprogram the ECU on your motorcycle free of charge. Reprogramming will not affect vehicle performance or emission levels. The actual repair will take up to twenty minutes but may take longer due to scheduling at the dealership.

#### What should you do to ensure your safety?

Please call your Kawasaki dealer to schedule an appointment to have your motorcycle inspected and repaired as required. Please have your Vehicle Identification Number (VIN) ready when calling. To locate the nearest authorized Kawasaki motorcycle dealer, please visit www.kawasaki.com and click on the "LOCATE DEALER" link. If you are unable to transport your motorcycle to your nearest Kawasaki dealer, please contact Kawasaki Motors Corp., U.S.A. to make arrangements for the transportation and repair of your motorcycle. The transportation and repair will be conducted with no cost to you.

#### DO NOT RIDE YOUR MOTORCYCLE UNTIL THE REPAIR HAS BEEN COMPLETED.

#### If you need help:

If you have questions or concerns that your dealer is not able to resolve, please contact Kawasaki Customer Care at (866) 802-9381 (toll-free) between 7:00 a.m. and 4:00 p.m. PT Monday through Friday. Please have your Vehicle Identification Number ready when calling.

If your dealer fails or is unable to remedy this defect without charge within a reasonable amount of time (60 days after your first attempt to obtain remedy), you may submit a written complaint to the Administrator, National Highway Traffic Safety Administration, 1200 New Jersey Ave. S.E., Washington, D.C. 20590, or call the toll-free Vehicle Safety Hotline at 1(888) 327-4236 (TTY: 1-800-424-9153); or go to http://www.safercar.gov.

#### If you received this notice in error:

Our records indicate you are the current owner of the motorcycle described in this letter. If you no longer have the vehicle described in this letter, please help us to update our records at www.kawasaki.com by clicking on "OWNER CENTER => KAWASAKI SUPPORT => UPDATE OWNER INFO" or by calling Kawasaki toll free at (866) 802-9381. Federal regulation requires that any vehicle lessor receiving this recall notice must forward a copy of this notice to the lessee within ten days.

#### Reimbursement:

If you have experienced the failure described above prior to receiving this letter and have paid to have it corrected, you may be eligible for full or partial reimbursement for your documented cost of repair(s). To apply for reimbursement, please send copies of current owner and VIN information along with copies of repair orders and payment confirmation to the following address:

Kawasaki Motors Corp., U.S.A. ATTN: Customer Care P.O. Box 25252 Santa Ana, California 92799-5252

#### Please note the following conditions for reimbursement:

Claims may be excluded if proper documentation is not included. Current owner and VIN information along with copies of repair orders and payment confirmation must be provided.

We are sorry for any inconvenience this may cause, but we have taken this action in the interest of your safety and your continued satisfaction with your Kawasaki motorcycle.

Sincerely,

Kawasaki Motors Corp., U.S.A.