

# REPLACEMENT OF THE THROTTLE POSITION SENSOR

## AFFECTED MODEL: 2022 200 DUKE

## RESTRICTIONS: AFFECTED MODELS ARE LINKED BY VIN IN KTM DEALER.NET

### INITIAL INFORMATION:

Affected motorcycles can experience rough idling and erratic throttle response due to a faulty throttle position sensor. For this reason, the throttle position sensor must be replaced on the affected motorcycles that are linked to this bulletin by VIN in KTM Dealer.net.

Dealers must perform the throttle position sensor replacement on all affected motorcycles in their inventory prior to any customer delivery. Please contact all of your customers who own affected motorcycles to have the throttle position sensor replaced as soon as possible.

### PROCEDURE FOR REPAIR:

We shall not provide a description of general workshop methods. Likewise, safety rules that apply in a workshop are not specified here. It is assumed that the repair work will be performed by a fully trained mechanic who has completed training or has a corresponding qualification. In the event of uncertainty, the most recent repair manual must be consulted.

In the interest of clarity, some components may be shown disassembled or may not be shown at all. It is not always necessary to disassemble the component to perform the activity in question. Please follow the instructions in the text.

1. Protect the frame with suitable tape at positions 1 and 2 (see Fig.1).
2. Disconnect the plug-in connection of the throttle position sensor.
3. Release clamps A and B of the throttle body (see Fig. 2).
4. Rotate the throttle body to the right or left so that the throttle position sensor screws are easier to access (see Fig. 3).
5. Remove both screws of the throttle position sensor (see Fig. 4). Caution! Please use recommended tools (see information on page 4 – Fig. 5 & Fig. 6). Caution! Apply sufficient pressure to the screwdriver, otherwise the screws can become damaged when being unscrewed.
6. Remove the throttle position sensor from the throttle body.
7. Position and mount the new throttle position sensor (#90641002000).
8. Use new special screws M4X13 (#90141070001) to do so and tighten according to specifications (see Table 1).
9. Connect the plug-in connector of the throttle position sensor.
10. Re-align the throttle body properly.
11. Tighten clamps A and B of the throttle body according to specifications (see Fig. 2).
12. Connect the motorcycle to the diagnostics tool (see repair manual).
13. Check the throttle position sensor voltage values (see Table 2).

Note: The motorcycle does not need to be started to do so.

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14. Take the following measures if the displayed voltage value is outside of the tolerance range.  
Continue with a) through d).
  - a) Loosen the screw connection of throttle position sensor.
  - b) Rotate the throttle position sensor slightly.
  - c) Check the throttle position sensor voltage values (see Table 2).
  - d) Tighten the screw connection according to the specification (see Table 1)
15. Carry out initialization run (see repair manual).
16. Disconnect the motorcycle from the diagnostics tool.
17. Remove tape and remaining adhesive with a suitable cleaning agent.
18. Create a warranty claim.

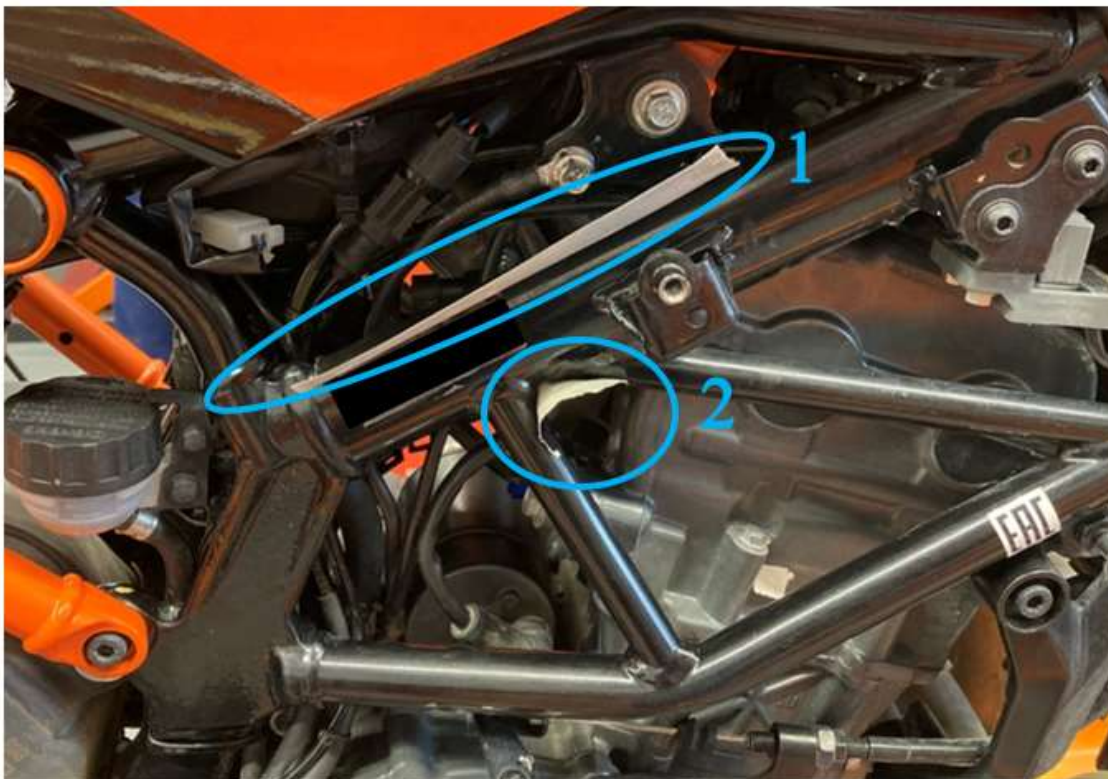


Fig. 1 – Tape placement

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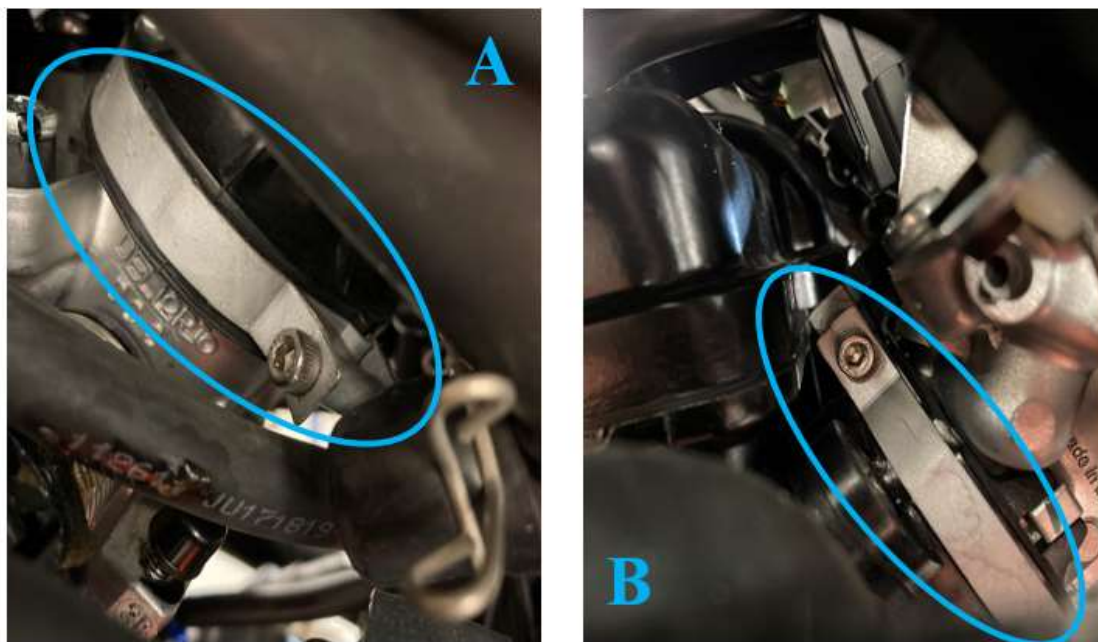


Fig. 2 – Clamp A and B on the throttle body

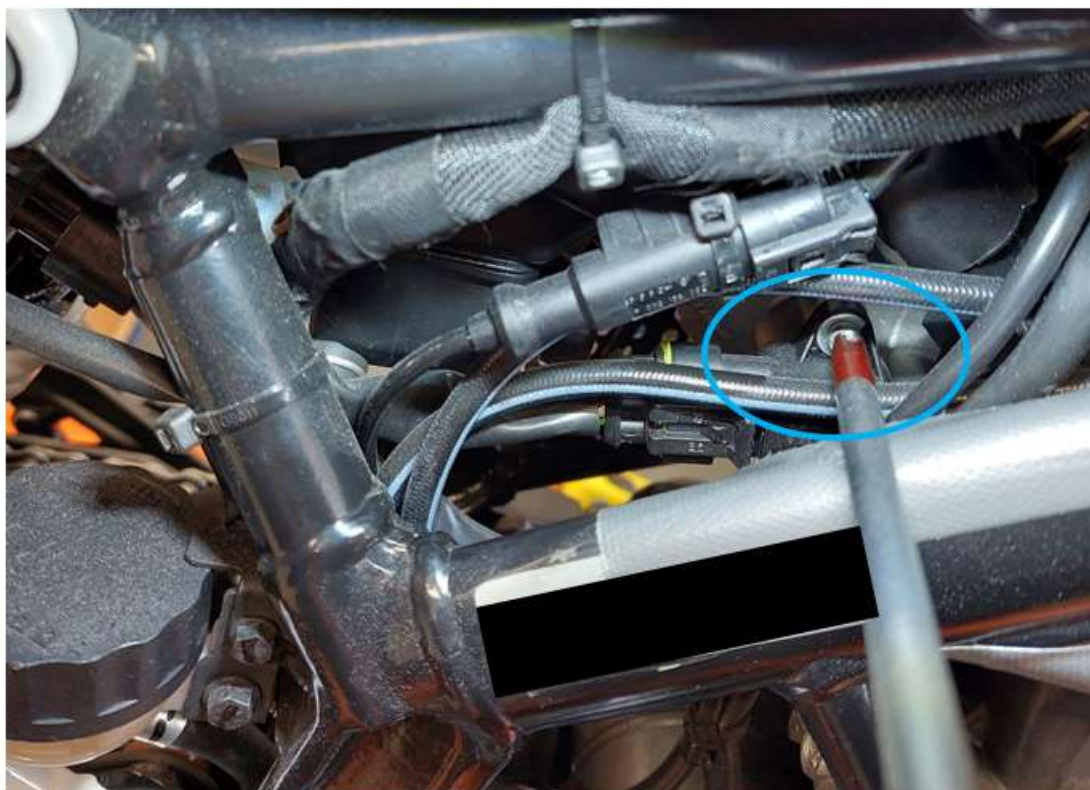


Fig. 3 – Throttle position sensor plug-in connection

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Fig. 4 – Removing the TPS screw connection

**Note:**

Tool recommendation for screwdriver PH2, 300 mm long, round:

- a) Hazet screwdriver trinamic cross slot PH · PH2 (Item no.: 803LG-PH2) (see Fig. 5)
- b) Würth Zebra screwdriver PH round, long SHRD RH-PH2X300 (Item no.: 06132622) (see Fig. 6)



Fig. 5 – Hazet Item no: 803LG-PH2

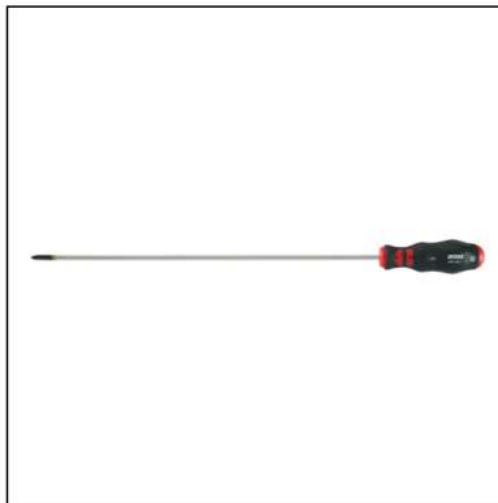


Fig. 6 – Würth Item no: 06132622

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**Table 1**

| Component                     | Screw | Torque     | Comment |
|-------------------------------|-------|------------|---------|
| Special screw<br>#90141070001 | M4X13 | 2 - 2.5 Nm |         |

**Table 2**

| Throttle position        | Voltage value |       |
|--------------------------|---------------|-------|
|                          | Min.          | Max.  |
| Throttle closed          | 0.3 V         | 0.7 V |
| Throttle completely open | 4.2 V         | 4.6 V |

**PARTS ORDERING:**

Please order the following for each affected motorcycle:

1 QTY. 90641002000 – throttle position sensor

2 QTY. 90141070001 – special screw M4X13



Fig. 7 – New throttle position sensor

Replaced throttle position sensors must be returned to the KTM Warranty Department at 1119 Milan Ave. Amherst, OH 44001. Warranty Claims will only be processed after the replaced parts have been received. Parts must be tagged and include a copy of the claim.

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**WARRANTY INPUT INFORMATION:**

**This Technical Bulletin only affects certain VIN numbers! Please check the VIN by performing a Motorcycle History search in KTM Dealer.net to determine if it's affected. If the motorcycle is affected, you will see a link to the bulletin and its repair status in the history results. KTM North America will not warranty motorcycles whose VIN numbers are not linked as this bulletin does not apply to them. It is the responsibility of the dealer to determine if the motorcycle requires this update by checking the vehicle history and understanding the instructions provided by this bulletin.**

To submit a TI claim click the orange arrow on the right side of the corresponding technical information message to start the claim process.

You can now choose the TI Number from the list. The TI number for this procedure is according to the repairs performed and listed in the warranty claim input information; click **Continue with selected action code**.

The Warranty Claim is automatically entered for you, including parts & labor. You must enter additional information in the required fields marked with an asterisk "\*" before submitting the claim to KTM. The flat rate time for this repair is based on the action performed and provided in minutes.

|                                                                                                                                                                                                                                     |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Warranty type:</b>                                                                                                                                                                                                               |
| TI warranty                                                                                                                                                                                                                         |
| <b>Component group:</b>                                                                                                                                                                                                             |
| 41 – THROTTLE VALVE / ROTARY ROLLER BODY                                                                                                                                                                                            |
| <b>Failure code:</b>                                                                                                                                                                                                                |
| 900 – TROUBLE-SHOOTING AT MANUFACTURER'S SITE                                                                                                                                                                                       |
| <b>Failure causing part:</b>                                                                                                                                                                                                        |
| 90141023005 – SPECIAL SCREW M5X12                                                                                                                                                                                                   |
| <b>Action code, parts, labor time:</b>                                                                                                                                                                                              |
| <b>Replacement of throttle position sensor</b><br>Action code: <b>41_2164046</b><br>Labor time: <b>60 minutes</b><br>Parts: <b>1 QTY. 90641002000 – throttle position sensor</b><br><b>2 QTY. 90141070001 – special screw M4X13</b> |
| <b>Are stock items affected:</b>                                                                                                                                                                                                    |
| <b>Yes.</b> Affected throttle position sensors #90641002000 still in stock must be returned to our Parts Center via RMA.                                                                                                            |

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