TT467: HAND CONTROL DIAGNOSTIC BEST PRACTICES

2019-09-27

Electrical

APPLIES TO	SYMPTOMS
All CAN operated hand controls	• Hand Controls

Purpose for Technical Tip Bulletin

As Harley-Davidson vehicles become more complex, there are several settings and configurations that should be taken into consideration when a customer expresses concern over hand control operation. Depending on what the customer concern is, other related systems on the vehicle should be inspected prior to replacing a hand control.

NOTE

The electronic diagnostic manual has been updated to include a new diagnostic procedure for testing hand control operation.

The best practices should be performed when diagnosing customer concerns especially if no DTCs (Diagnostic Trouble Codes) are present. Refer to Resolution.

Markets Affected

All markets are affected.

Issue

Misdiagnoses of hand controls.

Resolution

Vehicle Does Not Start In Gear

Trike:

- To start a Trike in gear the clutch lever needs to be pulled in, and one of the brakes needs to be applied.

All Others:

- Check clutch lever for modifications, or if it has an aftermarket lever. These may affect clutch switch engagement position and prevent a bike from starting in gear.
- Use DT II (Digital Technician II) to view live data of the LHCM (Left Hand Control Module) and verify when operating clutch the switch value changes between:
  - Pulled In
  - Released

Trip Switch Inoperative

- Check for modified or aftermarket gauges.
- Check for modified or aftermarket switch caps.
- Remove switch cap and inspect for debris or mechanical binding.

Cruise Control Issues

- Use radio service menu to check button operation.
- Use DT II to check for Cruise/PTT (Push To Talk) button swap.

Radio Control Issues

- Verify software version, and update to latest version if necessary.
- Button pushed is not correlating to action performed.
  - Use radio service menu to check button operation.
  - Remove switch caps to inspect for debris, or binding.
  - **GT Radio:** Check if Classic Mode is enabled.

Cannot Tune Radio Stations

- Check categories in radio menu and clear all.
- Use radio service menu to check button operation.

Cannot Skip Tracks During Media Playback

- Check menu in media and select “seek”.

Volume Control Inoperative (With WHIM Installed)

- Check rider headset volume menu and uncheck “Volume Controls Wireless Headset”.
- Use radio service menu to check button operation.

All Switches

- Remove the hand control covers, and use DT II (Live Data View) to test operation of each switch on the hand control.
  - Only file a warranty claim if a switch does not show activation on the Live Data View screen.
- Confirm no debris are preventing switches from operating properly.