

Gyro Test Procedure - Figure 8

Parts required for this service:

- 2.5 - 5 mm hex key set
- Measuring tape
- Marking Tape (painters tape)
- Print out of Home Marker 10 (see end of document)

Procedure Summary:

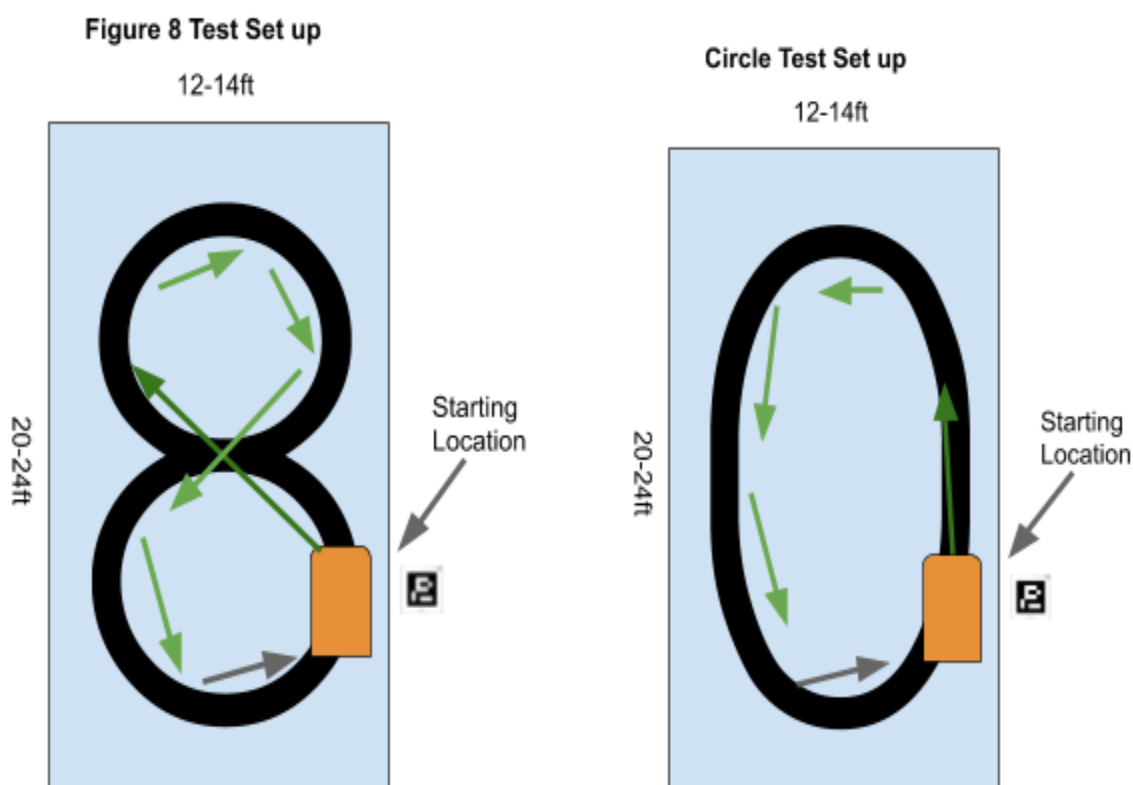
This test is to diagnose whether the gyro system on the BCM is functioning properly. The test will involve several driving procedures. The operator will conduct a series of tests of driving the machine in a circle and in a figure 8. In all stages the machine will be in "Teach Route" mode.

The test will be carried out in 3 stages.

- **Stage 1** - Test to be completed with the machine in an unmodified state
- **Stage 2** - Technician will remove the front cover of the machine & repeat test
- **Stage 3** - Technician will disconnect the cooling fan & repeat test

Setup: For this test to be completed as accurately as possible, we ask that the technician rope or mark off an area at least 12 feet by 20 feet (14x24 ft is recommended). Once the area has been marked off, the circle and the figure 8 need to be marked down to allow for consistent following of the path.

Once the area has been prepared, place the scrubber at the starting location as shown by the figure on the next page. Along with the printed home marker to the right of the machine so that when the machine is in “Teach Route” mode the camera is able to scan the printer home marker.



Stage 1: This will set up the “baseline” data for our diagnostics, we will record a route the length of 2-3 minutes for the figure 8 and the circle. We ask that the speed is kept as consistently as possible for the test and the circle is followed as closely as possible.

To start test Drive to the starting location, unlock the pin (1337), and select “Teach Route.” Once the machine scans the marker, select any of the open slots, and when the machine signals “I will learn as you drive” the test can be started.” Once the driving is complete, drive the to Scan code and select “save route”

NOTE: Once the machine saves, we will initiate upload of data from our side remotely, please wait until confirmation from us before proceeding.

Once both the figures are created we will ask to attempt to allow the machine to run the routes autonomously by going to “Run Route” and selecting the route we just trained.

Once completed we will ask for a moment to upload data again. Please wait before proceeding

Stage 2: Removal of the front cover:

The cover is fastened by 6 primary silver bolts and 6 secondary black bolts on the side and bottom of the front cover, for the second stage we will remove the cover and inspect the BCM.

At this stage we will be looking at the fan and the side cover, we want to note if the fan appears to be sitting loose or is wiggling in its spot, same observations to be noted for the side cover. Please let us know if anything appears out of place. Once the inspection is complete we will ask for the technician to proceed with the same tests as in Stage 1. Please attempt to follow the same speed and turning behavior that was done earlier.

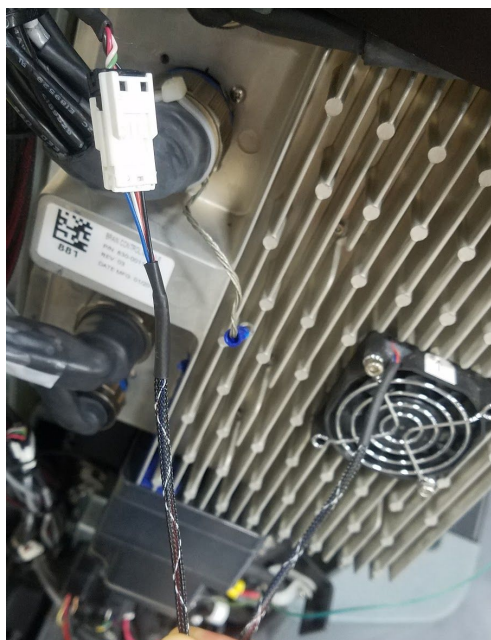
Once the same steps have been completed from Stage 1 we can move on to Stage 3.



Stage 3:

Disconnect the BCM cooling fan. (Before)

(After)



Once the fan has been disconnected we can proceed with the same tests as we have completed in stage 1 and 2.

Once all the testing is complete we will reassemble the machine back and place it back on the charge.

Thank you for your help.

