INJECTOR RETURN FUEL QUANTITY MEASUREMENT METHOD

1. Park the vehicle on level ground.
2. Run the engine for 2 minutes and then shut the engine off for 1 minute.
3. Remove Injector Fuel Return Line (FRL) from fuel injector.
4. Put measuring flasks to injectors through tubes (as shown in the image below)

   Each injector measuring flask setup on Engine as per below figure.

5. Make stopwatch ready before starting engine.

   <u>At Low Idle:</u>

6. Start engine, start the stopwatch, Let the engine run at low idle speed (700 rpm) for one minute.

   NOTE: The measurement time starts once the back-flow fuel starts collecting in the measuring bottles.

7. Monitor and confirm the injector return fuel is getting accumulated in the measuring bottles.

8. Stop engine after one minute. Measure the fuel quantity accumulated in measuring bottles. Refer the table for specified values. Connect FRL back to fuel injectors.

9. Repeat this procedure for 2 or 3 times as above for confirmation of injector return fuel quantity.

   <u>At Cranking</u> (with start-ability issue): For conducting this test, disconnect the Speed sensor connector.

10. Crank the Engine for 3 times with each crank of 5 secs time duration with interval /gap of 5 secs between the cranks.
11. Measure the fuel quantity accumulated in the measuring bottles.

12. Refer the table for specified valves.

Engine condition	Backflow (ml / minute)
Running at low idle	Max. 15
	Min. 5
Only cranking (during start-ability issue)	Max. 3.5
	Min. 1