

DIESEL CONTROLS LIMITED

TEST REPORT  
9704-S

Honda GX 390  
&  
DCL 7014-MV

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Report by : John Muter

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## **PURPOSE:**

The purpose of this test was to evaluate the performance of the DCL 7014-MV muffler/purifier installed on the Honda model GX 390 13 hp four stroke cycle engine. The test was performed at DCL using the DCL emission test equipment. Concentrations of CO and HC were of primary interest.

## **TEST EQUIPMENT:**

- Honda model GX 390 (Regular pump gasoline)
- Horiba Mexa-554GE Infra Red Exhaust Gas Analyser
- DCL 7014-MV muffler/purifier
- DCL Towed Dynamometer

## **PROCEDURE:**

The muffler/purifier was installed in place of the original Honda muffler. Ports for measuring emissions were installed on the muffler/purifier assembly. The engine was tested at idle (warm) and loaded conditions. For all tests the engine speed control lever was fully open. Exhaust emission concentrations were recorded once they reached stable levels.

### Test Conditions

- W.O.T. no load
- W.O.T. part load

Load was applied through the DCL towed dynamometer.

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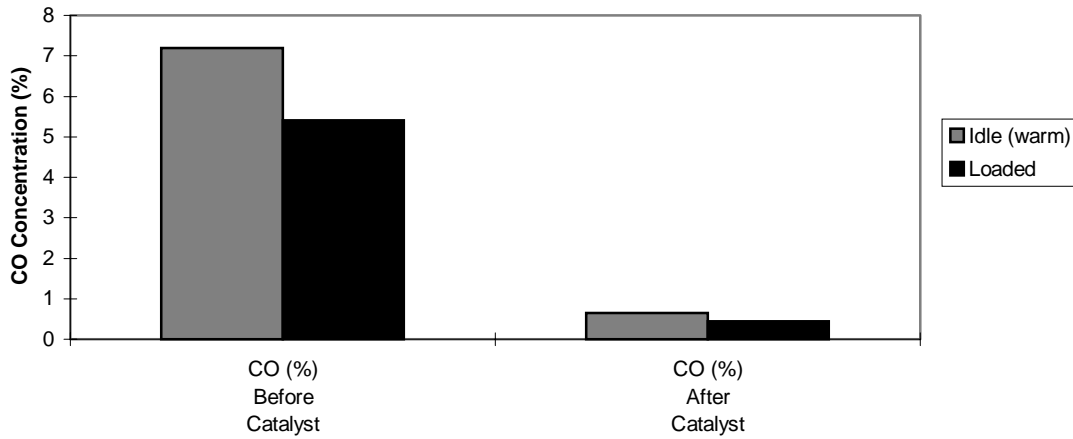
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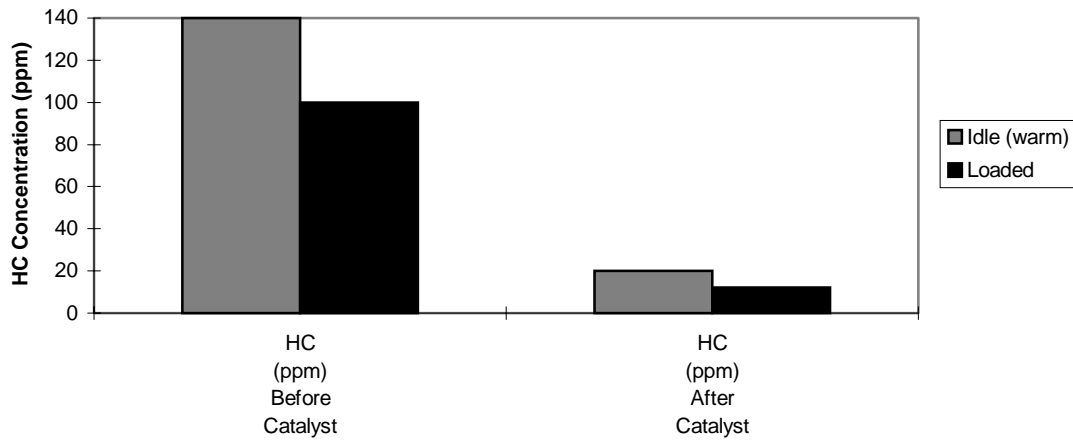
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## TEST RESULTS: Emission Concentrations

### Emissions Concentrations Honda GX 390 & DCL 7014 MV



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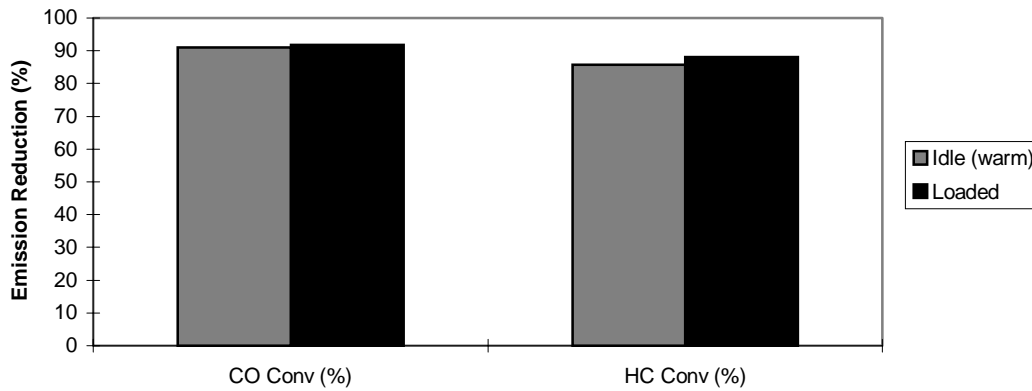
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## TEST RESULTS: Emission Reduction

**Emissions Reduction for Honda GX 390 & DCL 7014 MV**



## DISCUSSION / CONCLUSIONS:

The 7014-MV muffler/purifier significantly reduces the toxic emissions from the Honda GX 390 Engine to the atmosphere (HC 85 %, CO 90 % maximum conversion). The muffler/purifier continues to work even at idle after the engine has warmed up. This emissions control device is an excellent addition to the Honda GX 390.

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