

**TADGER**  
GROUP  
INTERNATIONAL



**CUSTOM MADE FOR  
CLEANER AIR & LESS FUEL**

## Environmental Technology Demonstration

**Location: Mr. Sticker**

**Houston, TX**

**Dates: Sept. 26, 2007**



**The Fastest Way to Keep Your Air Clean**

## Summary

Tadger Group International and Speedemissions (Mr. Sticker) collaborated to demonstrate the Tadger in-line emission reduction technology. The testing program was performed according to the Texas Vehicle Inspection Program for light duty vehicles under ASM 2525 and 5015. The test vehicle was baseline tested, equipped with the Tadger technology and retested with the Tadger installed.

The ASM 2525 & 5015 test on a 1991 Mitsubishi 3000 GT indicated an average change in hydrocarbons of  $-133$  ppm, carbon monoxide of  $-0.04\%$  and oxides of nitrogen of  $-216$  ppm

# Definitions

HC.....	Hydrocarbons
CO.....	Carbon Monoxide
NO.....	Oxides of Nitrogen
PPM.....	Parts per million
ASM.....	Accelerated simulation mode

# Vehicle

1991 Mitsubishi 3000 GT

# Test Equipment

ESP systems emissions analyzer # ES214131



# Test Procedure

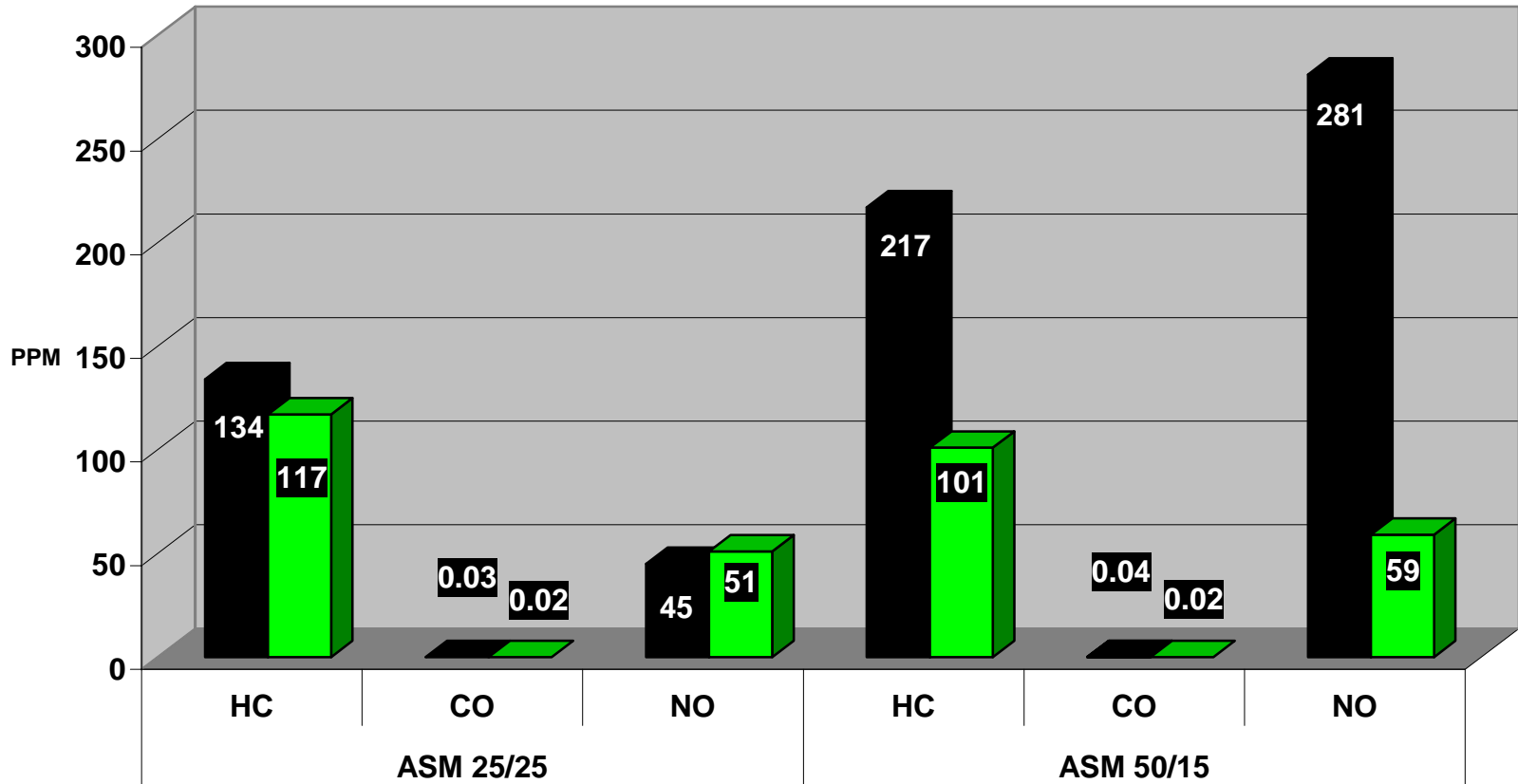
- 1) Warm up engine
- 2) Baseline emission test with no Tadger installed (90 sec.)
- 3) Install Tadger (10 min.)
- 4) Warm up engine (1km drive)
- 5) Emission test with Tadger installed (90 sec.)



# Results

The results have been documented and illustrated on the attached graphs. Additional test results for other municipalities, private industry and larger fleets is available on request or at [www.tadgergroup.com](http://www.tadgergroup.com)

**Mr. Sticker**  
**Emissions Test on**  
**1991 Mitsubishi 3000 GT**



■ No Tadger - 9.26.07  
■ With Tadger - 9.26.07

# Without Tadger – 9.26.07

## TEXAS VEHICLE INSPECTION REPORT

Required Emissions Only (Decal) Inspection\*\*\*\* Training Mode - VOID \*\*\*\*

### Vehicle Identification

Test Date/Time: 09/26/2007,11:16  
Test Type: Initial  
Test: ASM  
Version Number: 0702  
License Number:  
Vehicle ID Number: 1111111111111111  
Vehicle Make: MITS  
Vehicle Model: 3000 GT  
Vehicle Year: 1991  
Vehicle Type: Passenger Car  
Engine Size: 3000  
Cylinders/Ignition: 6 C  
Transmission/GVW: Automatic/4244  
Odometer/Fuel Type: 132093/Gasoline

### Station Identification

Station Name: MR STICKER  
Station Number: 2P37063  
Station Address: 1211 SPENCER HWY  
Station City: SOUTH HOUSTON  
Station Zip Code: 775870000  
Inspector First Name: JOHNNY  
Inspector Last Name: GUEVARA  
Analyzer Number: ES214131

Safety Inspection Fee: ----  
Safety Repair Costs: --  
Emissions Test Fee: 27.00  
Emissions Repair Costs: --  
-----  
Total Inspection Cost: 27.00

## Emissions Test Results

Pollutant	High Speed Emission Results (25 mph)			Low Speed Emission Results (15 mph)		
	Standard	RPM: 1296 Current Reading	Result	Standard	RPM: 1427 Current Reading	Result
HC(PPM)	117	134	FAIL	120	217	FAIL
CO (%)	0.65	0.03	PASS	0.67	0.04	PASS
CO2 (%)		15.0			15.0	
O2 (%)		0.0			0.1	
NOx(ppm)	821	45	PASS	907	281	PASS
DILUTION(%)	>6	15.0		>6	15.0	

Gas Cap Integrity: PASS

**Overall Result: FAIL**

# With Tadger – 9.26.07

## TEXAS VEHICLE INSPECTION REPORT

Required Emissions Only (Decal) Inspection\*\*\*\* Training Mode - VOID \*\*\*\*

### Vehicle Identification

Test Date/Time: 09/26/2007,12:07  
Test Type: Initial  
Test: ASM  
Version Number:  
License Number:  
Vehicle ID Number: 1111111111111111  
Vehicle Make: MITS  
Vehicle Model: 3000 GT  
Vehicle Year: 1991  
Vehicle Type: Passenger Car  
Engine Size: 3000  
Cylinders/Ignition: 6 C  
Transmission/GVW: Automatic/4243  
Odometer/Fuel Type: 13940/Gasoline

### Station Identification

Station Name: MR STICKER  
Station Number: 2P37063  
Station Address: 1211 SPENCER HWY  
Station City: SOUTH HOUSTON  
Station Zip Code: 775870000  
Inspector First Name: JOHNNY  
Inspector Last Name: GUEVARA  
Analyzer Number: ES214131

Safety Inspection Fee: ----  
Safety Repair Costs: ----  
Emissions Test Fee: 27.00  
Emissions Repair Costs: ----  
Total Inspection Cost: ----

### Emissions Test Results

Pollutant	High Speed Emission Results (25 mph)			Low Speed Emission Results (15 mph)		
	Standard	RPM: 1301 Current Reading	Result	Standard	RPM: 1313 Current Reading	Result
HC(PPM)	117	117	PASS	120	101	PASS
CO (%)	0.65	0.02	PASS	0.67	0.02	PASS
CO2 (%)		15.1			15.0	
O2 (%)		0.0			0.0	
NOx(ppm)	821	51	PASS	907	59	PASS
DILUTION(%)	>6	15.1		>6	15.0	

Gas Cap Integrity: PASS

**Overall Result: PASS**

# Discussion & Conclusion

The purpose of this test program was to demonstrate the product for its effect on vehicle exhaust emissions.

A total of 2 dynamometer exhaust emission tests were conducted on a single vehicle with and without the Tadger product installed.

The results of this dynamometer exhaust emission test program indicated that the Tadger is effective in reducing emissions at 25 and 15 mph.

