

# POLICE VEHICLE EVALUATION MODEL YEAR 2010



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**STATE OF MICHIGAN**  
**Department of State Police**  
**and**  
**Department of Management and Budget**

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**2010 Model Year**  
**Police Vehicle**  
**Evaluation Program**

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## PREFACE

The Michigan State Police Vehicle Test Team is pleased to announce the results of the 2010 model year Police Vehicle Evaluation. This year we tested eight vehicles in total, and five motorcycles. We appreciate your continued support and encouragement. The vehicles evaluated this year included the following:

### POLICE CATEGORY

Ford Police Interceptor (3.27:1)	4.6L
Ford Police Interceptor (3.55:1)	4.6L
Chevrolet Impala 9C1	3.9L
Chevrolet Impala 9C1 E85	3.9L
Chevrolet Tahoe PPV 2WD	5.3L
Chevrolet Tahoe PPV 2WD E85	5.3L
Dodge Charger	3.5L
Dodge Charger	5.7L

### MOTORCYCLES

Harley-Davidson Electra Glide FLHTP  
Harley-Davidson Road King FLHP  
BMW Motorrad USA R1200RTP  
Buell Ulysses  
BMW G650 GS-P

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## GENERAL INFORMATION

All of the cars were tested with a clean roof (no overhead light or lightbar) and without "A" pillar mount spotlights. We believe this is the best way to ensure all of the vehicles are tested on an equal basis. Remember that once overhead lights, spotlights, radio antennas, sirens, and other emergency equipment are installed, overall performance may be somewhat lower than we report.

Each vehicle was tested with the tires that are available as original equipment on the production model. Specific tire information for each vehicle is available in the Vehicle Description portion of this report. All vehicles listed in this report were equipped with electronic speed limiters.

Motorcycles were tested with equipment installed as provided by their respective manufacturer. Harley-Davidson chose to test their bikes with minimal equipment. BMW chose to test their bike with the majority of the equipment installed. We will continue to refine the testing procedures with the motorcycle manufacturers and their participation.

### Chrysler Proving Grounds - Acceleration, Top Speed, & Braking Tests

Saturday, September 19, 2009, we had a full line up of test vehicles and we would like to thank Mr. Craig Hageman for the assistance we got from him at the Chrysler Proving Grounds. We appreciate the support we received from General Motors, Ford, Chrysler, Harley-Davidson and BMW during testing. This also was the fourth year of motorcycle testing and we continue to get great feedback on this important component to the testing lineup. We expect other manufacturers that produce law enforcement motorcycles to participate in the future.

### Michigan State Police Precision Driving Unit- Motorcycle Dynamics

Sunday, September 20, 2009, we completed the motorcycle dynamics testing with moderate temperatures. This portion of the testing continues to grow. We had a large audience of observers who seemed to enjoy their interaction with the motorcycle manufacturers and the Vehicle Test Team.

### Grattan Raceway - Vehicle Dynamics (High Speed Handling) Test

Monday, September 21, 2009, rain delayed the start of testing. However, the Vehicle Test Team was able to complete this portion of the test by days end. The Chevrolet Impala 9 C1, E 85, experienced an ABS fault code during one of the test runs. The code was cleared by a General Motors technician and the car was sent back out on the track with no further problems. The vehicles were loaded up and returned to the Precision Driving Unit where they were made ready for the Ergonomics portion of the test.

We recommend you review the information contained in this report and then apply it to the needs of your agency. This report is not an endorsement of products, but a means of learning what's available for your officers so they can do their job effectively and safely. If anything in this report requires further explanation or clarification, please call or write.

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## ACKNOWLEDGEMENTS

We would like to thank the following contributors. We are grateful for their support and encouragement toward our ultimate goal: a safe, successful testing program that benefits the law enforcement community nationwide and beyond.

Colonel Peter C. Munoz, Director, Michigan Department of State Police  
Lt. Colonel Eddie Washington, Deputy Director, Field Services Bureau  
Lt. Colonel Kriste K. Etue, Deputy Director, Administrative Services Bureau  
Personnel from the Michigan Department of Management & Budget, Vehicle and Travel Services

The National Institute of Justice, The National Law Enforcement and Corrections Technology Center, Mr. Lance Miller, Mr. Alex Sundstrom, Lockheed Martin Aspen Systems

Mr. Craig Hageman and personnel from Chrysler Proving Grounds  
Mr. Sam Faasen and personnel from Grattan Raceway Park

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The Michigan State Police Rockford Post for their assistance at Grattan Raceway.

Special thanks to General Motors, Ford Motor Company, Chrysler Motors, Harley-Davidson Motorcycle and BMW Motorrad USA for their hard work in building and preparing the test cars and motorcycles. We are grateful for your dedication to law enforcement. Everyday law enforcement looks to these vehicles to do a list of duties varied and enduring.

Finally, thanks to all in the United States and Canada who represent law enforcement and purchasing agencies for your constant encouragement and support. We are proud to make a contribution to the law enforcement community.

Michigan State Police Vehicle Test Team:



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## TEST EQUIPMENT

The following test equipment is utilized during the acceleration, top speed, braking, and vehicle dynamics portions of the evaluation program.

**CORRSYS DATRON SENSOR SYSTEMS, INC., 40000 Grand River, Suite 503, Novi, MI 48375**

DLS Smart Sensor – Optical non-contact speed and distance sensor

Correxit L-350 1 Axis Optical Sensor

**Shoei Helmets, 3002 Dow Ave., Suite 128, Tustin, CA 92780**

Law Enforcement Helmet – Model RJ-Air LE

Motorcycle Helmet – Multi Tech

**AMB i.t. US INC., 1631 Phoenix Blvd., Suite 11, College Park, GA 30349**

AMB TranX extended loop decoder

Mains adapter 230 V AC/12 V DC

AMB TranX260 transponders

**AMMCO TOOLS, Inc., 2100 Commonwealth Ave., North Chicago, IL 60064**

Decelerometer, Model 7350