

# contents

Introduction

xxv

## VOLUME 7B – CHAPTER 1

### **Accuracy and Characteristics of 2012 Honda Event Data Recorders from Real-Time Replay of Controller Area Network (CAN) Traffic** 1

**Introduction** 3

**Literature Review** 3

**Methodology** 6

Data Collection 6

Nondeployment Event Generation 9

CAN Replay Experiments 11

**Results and Discussion** 12

CAN Identifier Maps 12

CAN Speed Accuracy Tests 15

2012 CR-V Normal Driving 15

Civic Steady State 16

CDR Reported Precrash and Crash Data 17

2012 CR-V Accuracy during Maximum ABS Braking 17

2012 Civic EDR Accuracy during Maximum ABS Braking 20

Timing between 0 and -0.5 Data Points in the Precrash Data 22

Dynamic Steering Maneuvers 23

**Conclusions** 25

Data Accuracy Testing Methodology 25

2012 CR-V Speed Data 25

2012 Civic Speed Data 25

Other SRS Reported Data 26

**Acknowledgments** 26

**Nomenclature** 26

**References** 26