

Robson Forensic

Engineers, Architects, Scientists & Fire Investigators

STEVEN J. BECKER Vehicle Expert

PROFESSIONAL EXPERIENCE

2009 to present **Robson Forensic, Inc.**
Associate

Provide technical investigations, analysis, reports and testimony towards the resolution of commercial and personal injury litigation involving vehicle collisions, vehicle design issues, mechanical defects and malfunctions, and vehicle repair issues for passenger cars, light trucks, SUV's and medium trucks.

Experienced in automotive design/engineering, automotive repair, development of repair methods, service protocols, technical training, and manufacturer-dealer technical support.

Experienced in vehicle diagnostics, service and repair, proper use of service repair tools and equipment, repair procedures and shop operations.

Automotive Repair: Diagnosis and repair of engine, transmission, transfer case, differential and final drive, suspension and steering systems, conventional and antilock brake systems, stability/traction control, fuel system, emissions systems, climate control, entertainment, video, navigation, network, multiplexing, primary and supplemental restraint systems, lighting/electrical, interior/exterior components and systems.

2009 to present **Fournier, Robson & Associates, LLC**
Consulting Engineer

Provide acoustic and vibration monitoring and problem diagnosis consulting.

1997 to 2009 **Magna Powertrain – New Process Gear Division**
Engineering Test Services Manager

1999-2009

- An active project engineer and manager for three worldwide manufacturing and two engineering sites' noise and vibration activities; project approval, purchasing, timing, and methodology.
- Coordinated the activities of several engineers in product development.
- Product design and development engineering for gears, sprockets, and chains.
- Negotiation of customer product specifications relating to noise and durability with BMW, Chrysler, Ford, GM, Honda, Nissan, Toyota, Volkswagen.
- Responsible for new product launch from design to problem resolution.
- Design of the machine, quality and test plan for all products' end of line test.
- Developed the capability for electrodynamic shaker durability testing, HALT.
- Performed vehicle dynamics testing and durability development for traction control systems.

Robson Forensic

Engineers, Architects, Scientists & Fire Investigators

STEVEN J. BECKER Vehicle Expert

- Used problem solving techniques; Six Sigma, Shainin, Taguchi, Root Cause.
- Publisher and editor of the corporate automotive newsletter.

Quality Engineer

1997-1999

- Implemented the quality process for assembly line First Time Capability improvement, and defect repair.
- Designed methods of noise analysis for production inspection and repair of manual transaxels, gears sets, power take-off units, and transfer cases.
- Performed process audits and verification of all design changes throughout production that affect noise (FMEA, APQP).
- Designed test apparatus including; motors, controls, shafting, and fixtures.

1994 to **Chrysler Corporation**

1996 *Sci Lab Engineer from Modern Engineering*

- Program development for Chrysler vehicles including; sound package design, design and development of engine mount systems, induction resonators, vibration dampers, and various structural components.
- Responsible for the stiffness of structural components and joints of the vehicle body.
- Provided technical support for Viper, Sebring, Neon, PT cruiser, Grand Cherokee.
- Coordinated shift assignments for engineers, mechanics and technicians.

1993 to **New Venture Gear**

1994 *Product Engineer from CDI Corporation*

- Designed geared systems for automotive transmissions.
Established a method of experimentation for NVH and computer simulation.
- Performed acoustic and vibration analysis of gears, bearings, shift actuators.

PROFESSIONAL CREDENTIALS

Certified Inspection Mechanic, Class 1 (passenger car / light truck): Commonwealth of Pennsylvania

Six Sigma Yellow Belt, 2006

Shainin Red X Apprentice Certification, 2001

Robson Forensic

Engineers, Architects, Scientists & Fire Investigators

STEVEN J. BECKER Vehicle Expert

EDUCATION

M.B.A., Marketing Concentration, Syracuse University, Syracuse, NY, 2007

B. S., Mechanical Engineering (with Aerospace), Worcester Polytechnic Institute,
Worcester, MA, 1992

Continuing Education:

Traffic Crash Reconstruction 1, Northwest University Center for Public Safety, 2010

Polytec Non-contact Laser Doppler Vibrometry, 2008

Bruel & Kjaer Operational Deflection Shapes Analysis, 2006

OSHA Compliance, 2003

LMS Modal Testing, 2003

Labview Systems Engineering, 2002

New Venture Gear Off Road Driving Techniques, 1999

Small Engine Maintenance and Repair, 1999

Emergency Responder and Hazardous Substances, 1997

Chrysler Performance Driving Techniques, 1996

Dale Carnegie-Effective Communication & Human Relations, 1996

PROFESSIONAL MEMBERSHIPS

Society of Automotive Engineers (SAE)

PUBLICATIONS

The NP244 Transference Chain Noise Reduction Using a Gemini HyVo Chain
System, SAE, 2005-01-2298

1st Order Boom Noise Relationship to Driveline Imbalance, SAE, 2005-01-2299

Measurement of Transference Imbalance, SAE, 2005-01-2297

Gear Noise Rating Prediction Based on Objective Measurements, SAE, 1999-01-
1721

Objective Rating of Gear Whine, SAE, 1999-01-1720

OTHER

Twisted Axles 4WD Club – Founding member, 1999-2004

Whitewater Kayaking

Kayaker, 1993-present

Instructor - teaching safety, self-rescue, and swift water rescue, 2001-present

Mountaineering and technical rock climber, 1990-present