

TECHNICIAN TRAINING
BY DORMAN PRODUCTS

DORMAN®

Training Center
Presents:
"Pressure Transducers"

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DORMAN® **Aftermarket Innovators**

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Your Instructor For This Webinar

"G" Jerry Truglia

gtruglia@dormanproducts.com

- National Trainer, ASE World Class, Master Auto, Truck, School Bus, L1, L3, CNG and...
- **ATTP Master Instructor, New York State, CT and New Jersey**
- STS (Service Technician Society) 2003 President
- **TST (Technicians Service Training) Founder and President**
- Author / Co Author/ Technical adviser on 25 plus books including OBD II and Mode 6, and Understanding and Diagnosing Hybrid Vehicles
- **Published articles for multiple newsletters, and magazines**
- Picked as one of the Top Instructors in the country by EPA & SAE
- **Numerous Radio, TV, Internet, and SAE Video appearances**
- PTEN, MotorAge and TST Webcast Instructor - Dorman Training Director
- **Motor Magazine Top 20 award winner**
- Provider of OBD II Training for 14 states, Ontario Canada and the US EPA
- **Guest speaker at SAE Congress, IM Solutions and Clean Air Conference**



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Your Instructor For This Webinar

Joshua Weaver

jweaver2@dormanproducts.com

- Associate Degree in Applied Science for Automotive Technology
- **Collage was affiliated with General Motors and Chrysler, and I interned for Ford allowing me to learn all 3 domestic Brands**
- Worked for A Kia Dealer ship for 10 years and achieved A.S.E and Kia Master Tech Certification
- **Lead tech at dealership allowing me to see the most difficult customer concerns**
- Pennsylvania State inspection Emissions tech with waiver license
- **Holds A.S.E. L1 Advance Engine Performance**
- Holds A.S.E. L3 Light Duty Hybrid Specialist
- E.P.A. 609
- Manager of A 6 bay repair shop which also had a 6 bay body shop, allowing me to see a wide variety of electrical, drivability issue and module programing



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What Will Be Covered:

• **This webinar explores different types of transducers and their uses. These helpful tools are also affordable for anyone new to the labscope.** A live on-vehicle demonstration will explore different sensor brands and a variety of tests, including cranking vacuum, tailpipe transducer and if time allows in-cylinder transducer placement for misfires.

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Pressure Transducers



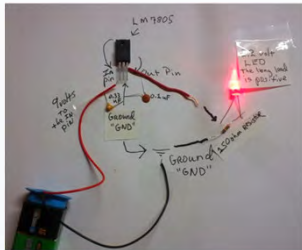
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Pressure Transducers



How to make a vacuum pressure transducer

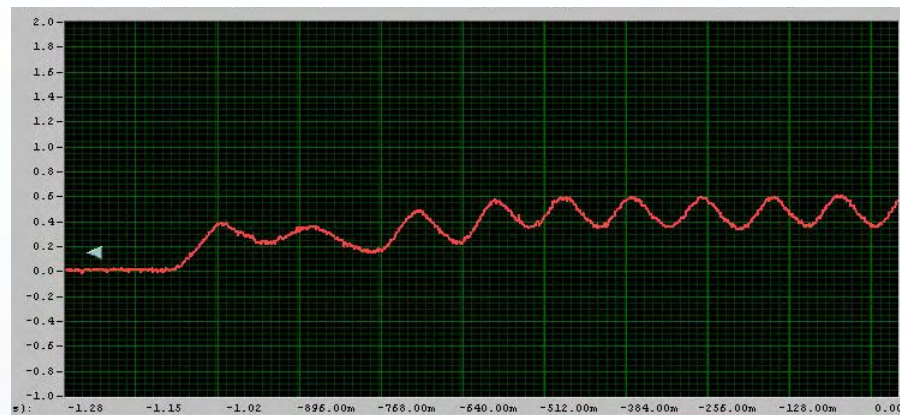
1. General Purpose Black Chassis Box, 4.7" x 2.6" x 1.4" \$5.49
2. 1 - LM7805 voltage regulator
3. 1 - Capacitor with the value of 0.33uF
4. 1 - Capacitor with the value of 0.1uF
5. 1 - 9 volt battery and wire connector
6. 1 - 2.2 volt Red LED (you can use a different colored LED)
7. 1 - 150 ohm resistor
8. Toggle Switch
9. GM MAP sensor
10. Vacuum hose



<https://www.instructables.com/Change-9-volts-to-5-volts/>

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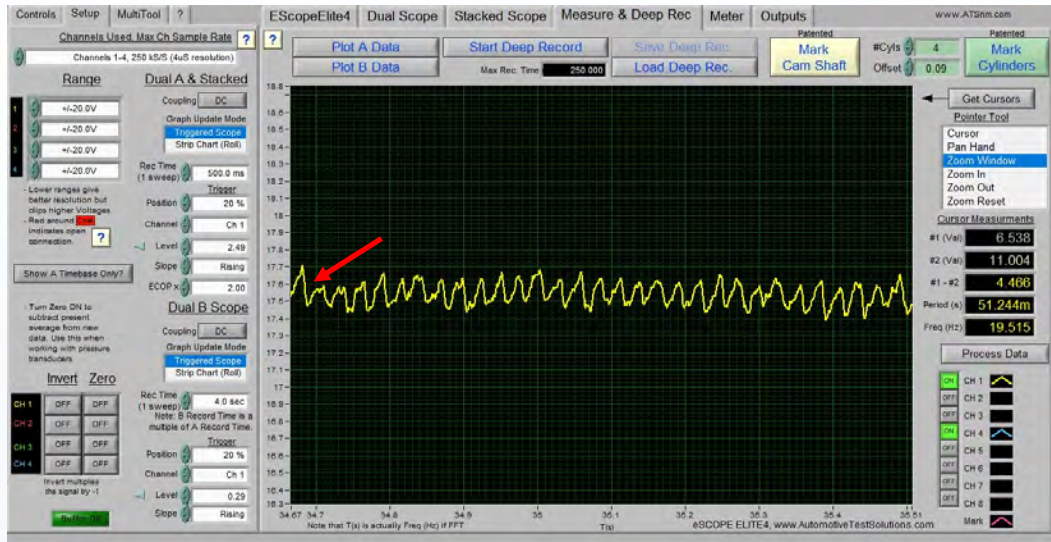
Pressure Transducers



The scope above is displaying a cranking vacuum waveform. The ramping waveform are pressure pulses from inside the intake manifold. The waves have a consistent general shape and amplitude, indicating good cranking vacuum on a good engine.

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Honda 3.5L Running Vacuum Before Valve Adjustment

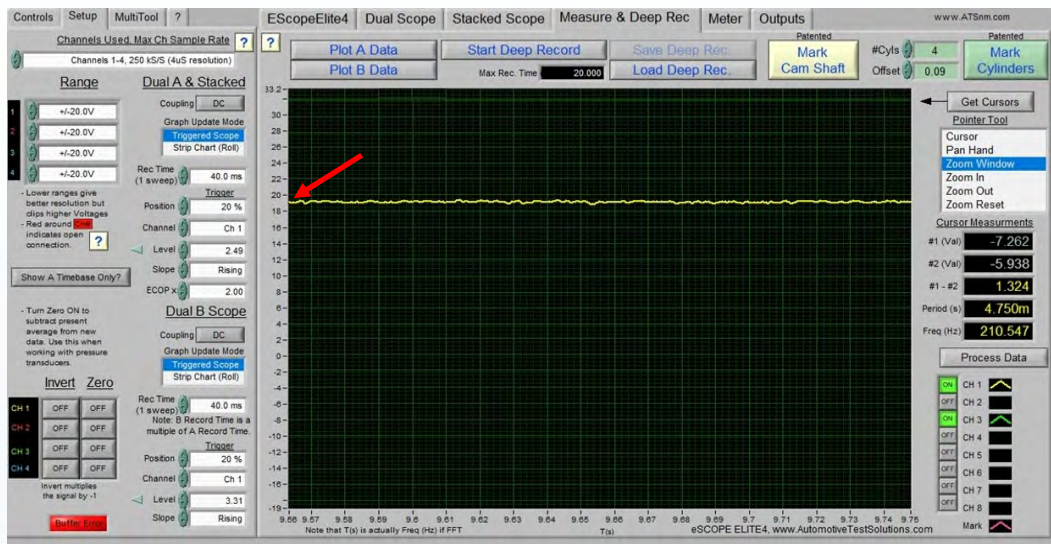


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Honda 3.5L Running Vacuum After Valve Adjustment

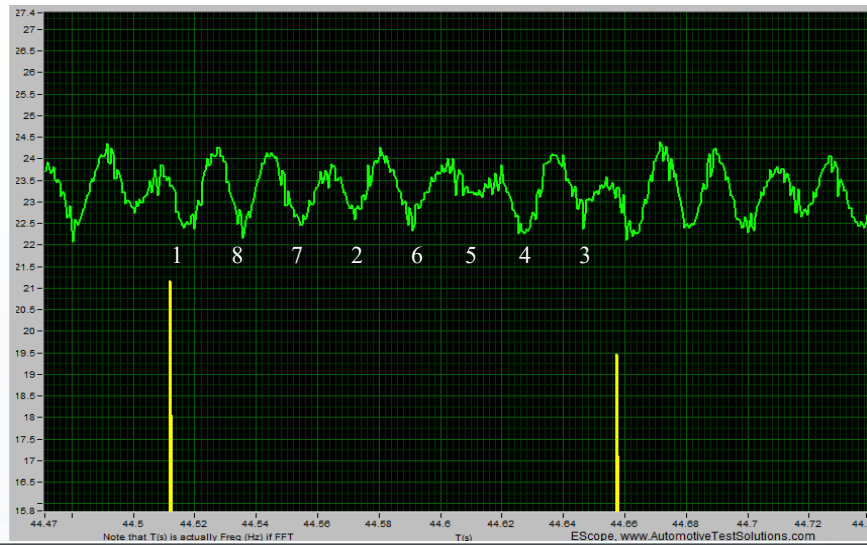


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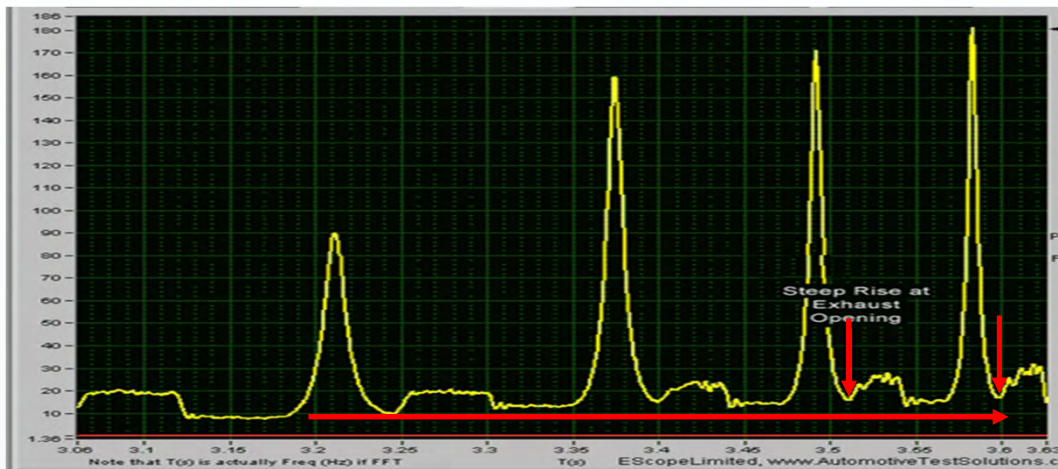
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Pressure Transducer Injector Flow Test



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Exhaust Backpressure The Easy Way



Take a look at the step rise in the exhaust valve opening that confirms a backpressure problem. This is all done without removing an O2, AF sensor or EGR valve.

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Jeep Grand Cherokee 3.6L / 24 V - 87671 Misfire Cyl 6

This Jeep was at another shop that was not sure what was causing the misfire on number 6 cylinder. They thought that it was ignition at first and then told the Jeep owner it may be a camshaft issue. The owner of the vehicle was not confident with the shop and called Repair Pal back for another shop recommendation. We got the vehicle in and check it out by first a visual inspection followed by a vehicle scan and a cylinder pressure transducer test. The results of the testing indicated a problem with the valves.

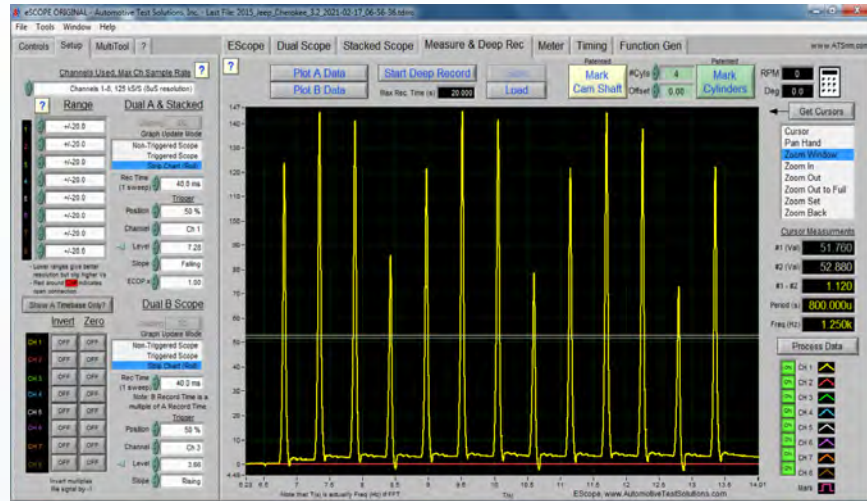


Jeep Grand Cherokee 3.6L / 24 V - 87671 Misfire Cyl 6



We were curious since a compression test both dry and wet did not show a problem. Next, we performed a cylinder leak down test that passed.

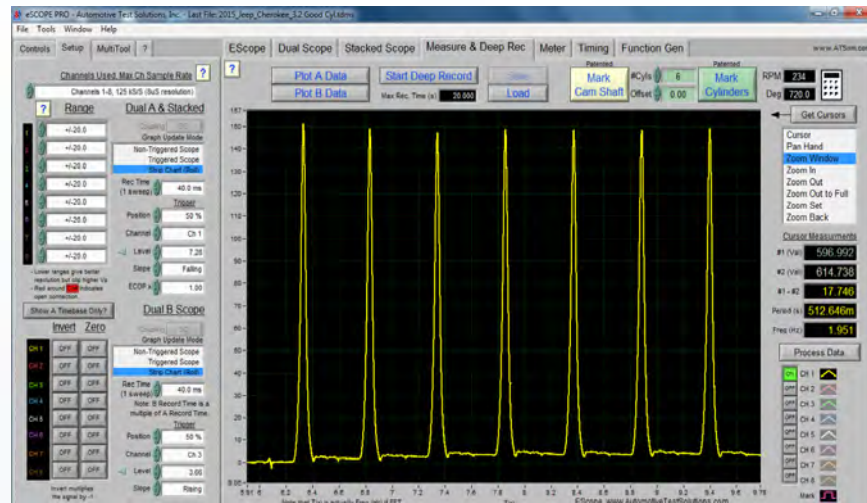
Jeep Grand Cherokee 3.6L / 24 V - 87671 Misfire Cyl 6



Cranking Compression

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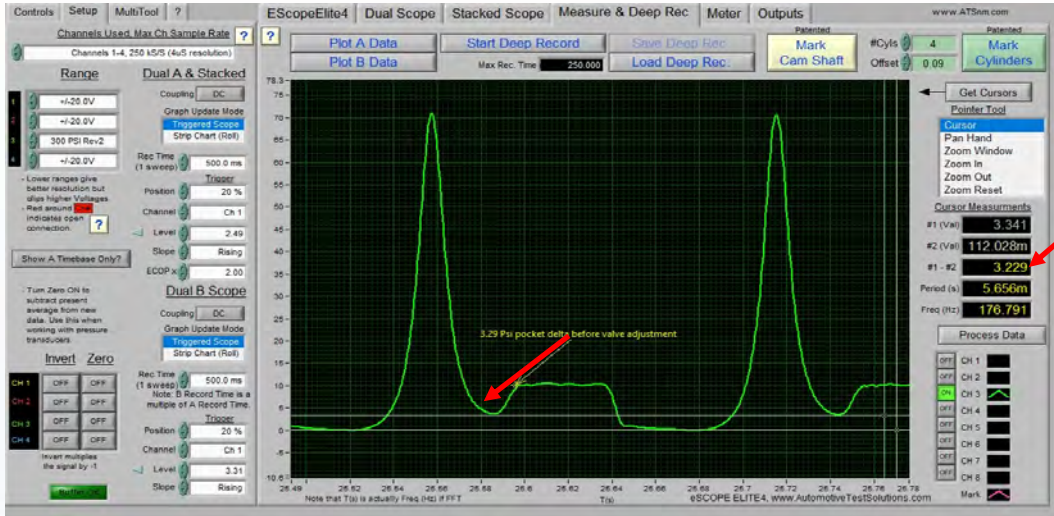
Jeep Grand Cherokee 3.6L / 24 V - 87671 Misfire Cyl 6 Fixed



Cranking Compression

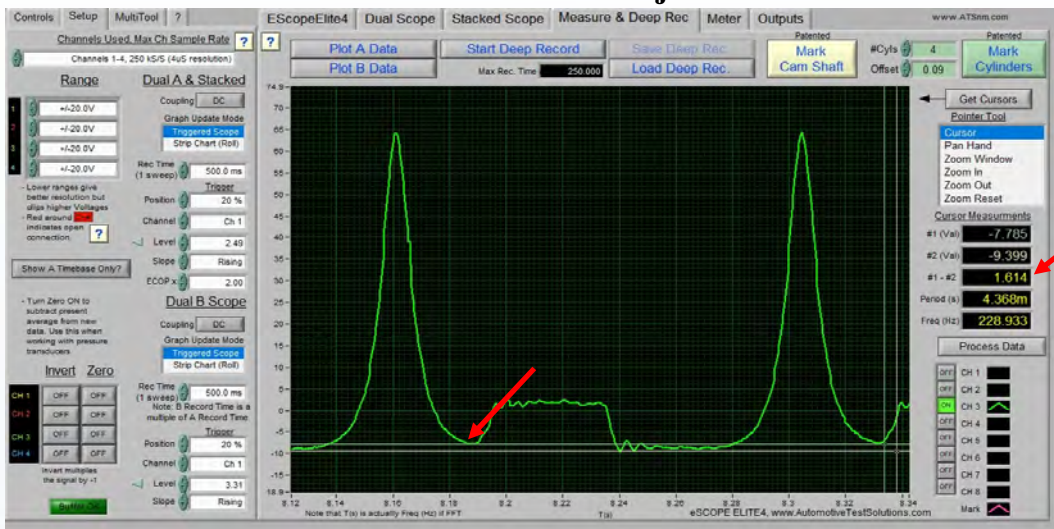
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In Cylinder Pressure Transducer Honda 3.5L Pockets Before Valve Adjustment



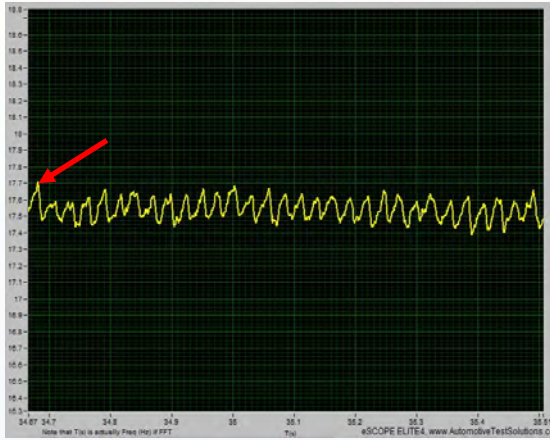
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In Cylinder Pressure Transducer Honda 3.5L Pockets After Valve Adjustment



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Honda 3.5L Running Vacuum Before & After Valve Adjustment



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LIVE ON VEHICLE

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TST Webinar Wednesday July 25th 2024

Round Table FREE...

Discuss What's On Your Mind



Canadian Classes

Advanced Driveability Diagnostics - In-Person Class

Price: \$275.00 CAD*

**Tuesday, July 30th
Hilton Garden Inn
3201 Highway 7 West
Vaughan, ON L4K 5Z7**

**Wednesday, July 31st
Hilton Garden Inn
500 Beck Crescent
Ajax ON L1Z 1C9**

**Thursday, August 1st
Delta Hotels
3670 Hurontario Street
Mississauga, ON L5B 1P3**



Wednesday, July 10th TONIGHT 2024

6 pm to 8 pm

Cost \$40.00

Ignitions Systems Old and New - Live Webinar

Spark is the star of the show in this webinar. All electric ignitions systems from the old to the new will be covered. Receive descriptions, diagnostic information, and repair tips regarding common ignition system problems.

Instructor: Josh Weaver



Thursday July 24th, 2024 "Mode 6 For Driveability Concerns"

6 pm to 8 pm

Cost \$40.00

This webinar covers the capabilities of Mode 6, including an overview of Mode 6's role within the ten modes of OBD II. Technicians will learn how to confidently use it in their diagnostic investigations. This course also includes explanations of vehicle screenshots using aftermarket and OE scan tools, case studies and successful diagnostic strategies.

Instructor: "G" Truglia



Critical Thinking Diagnostic Strategies - In-Person Class

Tue, Jul 30, 2024, - Thu, Aug 1, 2024,
Florida (map)

Dinner: 5:30 p.m. | Training: 6:00 p.m.—10:00 p.m. EST

Success in diagnosing today's high-tech systems requires a similarly high-tech approach. This popular course covers the tools you need to cope with modern troubleshooting challenges.

Offered three days at three locations across Florida.

[View Event →](#)



Automotive Electronics for Today's Vehicles - In-Person Class

Tue, Jul 30, 2024, - Thu, Aug 1, 2024,
Texas (map)

Dinner: 5:30 p.m. | Training: 6:00 p.m.—10:00 p.m. CST

In this course, build useful electronic skills for diagnosing and repairing late-model vehicles.

Offered three days at three locations across Texas

[View Event →](#)



Thursday July 17th, 2024

Spanish - Lunch & Learn 12:00pm to 1:00pm ET

"J2534 para reprogramar vehículos" Instructor: Ricardo Mucharraz

Thursday July TBA 2024

Heavy Duty Lunch & Learn 12:00pm to 1:00pm ET

"TBA" Instructor: Swede Oun



Understanding and Diagnosing Air Conditioning

This course goes beyond minimum certification requirements for recovery, evacuating, recharging, and recycling by offering actual hands-on training in diagnosing and repairing A/C electrical, computer / BCMs, Climate control and electronic components. Many of today's trucks & vehicles come equipped with electronically controlled A/C systems.

Includes books, safety glasses & MACS Certification in R134a and R1234yf

Class Limit 18 technicians

Safety Glasses MUST be worn during the hands on vehicle training

2 Days / 16 hours - \$695.00

Book, Safety Glasses and Lunch Included

Instructors: Swede Oun & "G" Jerry Truglia

Dates: August 27th & 28th, 2024

Time: 8:00 AM to 4:30 PM

Location: O&K Truck Repairs Ltd.
350 Grand Island Blvd.
Tonawanda, NY 14150

Technicians MUST Register & Pre Pay
www.dormantrainingcenter.com
Phone: 845 628-1062 or 716.874.5450
drestucci@dormanproducts.com



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Dorman Second Annual "Mastering the Technology"

All Day LIVE Training Event & Trade Show

When: Saturday, September 21st 2024

Time: 7 am to 6 pm

Where: ATC Automotive Training Center 900 Johnsville Boulevard, Warminster, PA 18974

Instructors: Pete Meier - Ken Zanders & "G" Jerry Truglia each teaching a different class - over 8 hours of training

What's Included: food and full color digital handout

Cost: Special Introductory Price : \$49.99 Until July 31st 2024



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We offer greater freedom to fix cars and trucks
by engineering exclusive, labor-saving
and cost-effective repair solutions.



Thank You !

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