

**14th Year**

**REGISTER NOW!**



**Lindertech is recognized as an  
INDUSTRY LEADER  
in high quality current advanced automotive training.  
It's the "REAL WORLD" training technicians need  
to repair today's complex vehicles**

**Fall 2019 - 4 Day Lindertech Training Event**

Wednesday	October 2, 2019	Cochrane Shop	73 Chauncey Ave. Toronto
Thursday	October 3, 2019	Cochrane Shop	73 Chauncey Ave. Toronto
Friday	October 4, 2019	Cochrane Shop	73 Chauncey Ave. Toronto
Saturday	October 5, 2019	Hilton Garden Inn	1870 Matheson Blvd. Mississauga ON L5W 0B3

**1 Day Wed. Oct. 2, 2019      8:00am - 4:30pm      Cochrane Shop**

**Instructor: Rick White      180 BIZ**

**Topic: Service Advisor A to Z Master Class**

**Your advisors are at it all day long but are they as effective as they could be?  
Are your sales what they could be?**

180BIZ and Lindertech have teamed up to provide a powerful, unique learning experience designed for, and offered exclusively to Shop Owners and Service Advisors. This class goes beyond selling on the front counter by deep diving into the few things that make a HUGE difference in their performance and your sales. Your advisor will learn:

- The importance of the first impression and how to precisely manage it.
- How to really connect with the customer to build a relationship and be there to help.
- How to take a price conversation and turn it into a value conversation.
- The phone skills necessary to positively engage the customer and get the appointment.
- How to deal with price shoppers and sell diagnostic testing profitably.
- How to take advantage of the opportunities in delivering the vehicle and setting the next visit.

This is going to be a full day of interactive content and lively conversation that will move your advisor to the next level. This is specifically designed for YOU – don't miss out on this opportunity!

**1 Day Thur. Oct. 3, 2019      8:00am to 4:30pm      Cochrane Shop**

**AM: Instructor: John Shewbridge - Trainer for Hunter Engineering**

**Topic: Modern Alignment Techniques**

Areas to cover are:

- Changes in Mechanical repair
- How the many safety systems affect repair
- ADAS and its ramifications to repairs
- Alignment in the collision industry
- Liability and repair as per manufacturers' requirements
- What technology is available to aftermarket and collision shops to address these new technologies

**Thur. Oct. 3, 2019 cont'd**

**8:00am to 4:30pm**

**Cochrane Shop**

**PM: Instructor: Niel Speetjens - Technical Training Manager ZF Group**  
**Topic: Modern Chassis Technologies**

The foundations of chassis dynamics, specifically different chassis angles, will be thoroughly examined, presenting details about the different chassis angles and their impact on different settings. To conclude, the theoretical foundation of Kamm's circle will be covered. Popular front chassis systems will be introduced discussing their advantages and disadvantages. The latest system is the multi-link system and will be reviewed in-depth. The influence of low friction ball joints to this modern chassis systems will be discussed. Electro-mechanical steering solutions will be summarized. The main focus is on the most popular electro-mechanical steering racks, namely axial parallel actuation (APA) and dual pinon type (DP). Explanations about the functions, diagnostics and the sensors will be covered. The initialization and activation procedure will be discussed.

After completing this training, the participant will be able to:

- Describe all geometric chassis angles
- Describe Kamm's circle
- Differentiate between popular chassis systems
- Describe multi-link suspension system
- Differentiate between electro-mechanical steering rack types
- Explain function of steering torque sensor
- Explain functions of the electro-mechanical-steering rack and its sensors
- Discuss the commonality of active return and wheel caster
- State the importance of straight line stability of steering systems

**1 Day Fri. Oct. 4, 2019**

**8:00am to 4:30pm**

**Cochrane Shop**

**Instructor: Scot Manna**

**Topic: BMW Valvetrain Systems & Driveability Diagnostics**

This 8hr class will cover BMW vehicles and their unique engine control platforms. The morning session will be devoted to covering the design, operation and testing of both Valvetronic variable valve lift systems and VANOS cam timing control systems. Normal scan tool data values as well as labscope testing will be discussed.

The afternoon will be devoted to using crankcase pressure measuring in testing and then a number of challenging case study diagnostics will be covered with an emphasis on using scan data and scopes to diagnose the root cause of the problems. This class will give any driveability technician more confidence in dealing with problems on these often misunderstood vehicles.

**1 Day Sat. Oct. 5, 2019**

**8:00am to 4:30pm**

**Hilton Garden Inn**

**Instructor: John Thornton**

**AM Topic: Push Button Ignition**

Push Button Ignition is very common on today's vehicles. These systems can be broken down into 3 broad categories: Immobilizer, Steering Lock and ACC/Run/Crank Relay Control. This class will assist technicians in developing a diagnostic routine for handling the common complaint of "I press the button and nothing happens".

The instructor will emphasize system understanding, and scan data interpretation. Tools used to check for Low Frequency and Radio Frequency wireless transmissions will also be discussed. Discussion Topics include the following vehicles: 2011 Nissan Maxima; 2012 Toyota Camry; 2018 Ford Edge; 2006 VW Passat; 2015 Ford Mustang. A detailed handout will be provided.

**PM Topic: Gasoline Direct Injection Update: Operation & Diagnostics**

GDI vehicles are common in today's service bays. This class will focus on the high pressure fuel system. Using a case study format, the two primary areas which will be covered are the high pressure fuel pump and the high pressure fuel injectors. A strong emphasis will be placed on scan data interpretation. Scope data will also be used to support scan tool data.

Discussion topics include the following: Gasoline Direct Injection Overview

High Pressure Pump Operation

2009 Buick Enclave 3.6L HP Pump Diagnosis

2012 Hyundai Sonata 2.4L HP Pump Diagnosis

2012 VW CC 2.0L HP Pump Diagnosis

2015 Ford Fusion 1.5L HP Pump Diagnosis

High Pressure Fuel Injector Operation

2013 Ford Escape 1.6L GDI Lean Misfire

2013 Chevy Caprice PPV 3.6L Misfire

2013 Ford Fusion Ecoboost 2.0L No Start

A detailed handout will be provided.

# Lindertech Training Registration

## Hosted by: Cochrane Automotive

### 4 Days...Wed. Oct. 2 to Sat. Oct. 5, 2019 8am to 4:30pm

#### Training Line: 416-236-1763

#### Wed-Thur-Fri Classes

Cochrane Automotive Shop  
73 Chauncey Ave.  
Etobicoke, ON M8Z 2Z2  
Shop: 416 236-1703

#### Sat. Class

Hilton Garden Inn  
1870 Matheson Blvd.  
Mississauga, ON L5W 0B3  
T 905-361-6300

**Hotel Rooms:** We have negotiated a special room rate of \$129.00 + tax. **To get this rate call Leah Cochrane by Sept. 18 2019.** Booking is under "Cochrane Automotive Lindertech". **FREE PARKING.** For those who are flying in, the hotel provides a free shuttle, but you have to call the Front Desk at 905-361-6300 to book your pick up and drop off **24 hours prior to arrival.**

**Contact Info: Leah Cochrane at 416-236-1763 or email: headoffice@cochraneauto.ca**

Business Name \_\_\_\_\_ Business Owner \_\_\_\_\_

Business Address \_\_\_\_\_ City \_\_\_\_\_ Prov. \_\_\_\_\_

Postal\Zip Code \_\_\_\_\_ Bus. Email \_\_\_\_\_

Bus Tel. (\_\_\_\_\_) \_\_\_\_\_ Parts Jobber \_\_\_\_\_

**Pick the day(s) you like. Discount available if a student attends multiple days.**

If registering more than 3 students please print an additional registration form.

√ Wed	√ Thur	√ Fri.	√ Sat.	First Name	Last Name	Technician Email (If you want to be advised of training)	# Nights of hotel needed
						<b>PRINT CLEARLY</b>	

Vegetarian Lunch: Name: \_\_\_\_\_ Vegetarian Lunch: Name: \_\_\_\_\_

#### Three ways to register and pay

1. Mail registration with a cheque payable to:  
Cochrane Automotive  
73 Chauncey Ave. Toronto, Ont. M8Z 2Z2
2. Email Leah Cochrane at: headoffice@cochraneauto.ca  
with credit card information
3. Fax to: 416-236-1764 with credit card information

**Refund Policy: No refund after Sept. 25, 2019**

Payment: **CHEQUE**  **VISA**  **M/C**

My signature below authorizes a charge to my credit card  
in the amount of: \$ \_\_\_\_\_

**Signature:** \_\_\_\_\_

Name on card (Print) \_\_\_\_\_

Card #

Expiry \_\_\_\_\_ (mm / yy) 3 digit Security Code

#### Conference Cost includes 3 Coffee Breaks, Lunch and a detailed manual

Date	# Students	Cost	Total
<b>1 Day</b>		\$ 350	
<b>2 days</b> same student (\$ 50 saving)		\$ 650	
<b>3 days</b> same student (\$100 saving)		\$ 950	
<b>4 days</b> same student (\$200 saving)		\$1250	
Sub total			
13% HST			
<b>Total</b>			

**Government Grant Info for Application HST #102684610**