

# Hunter Alignment

Hunter offers entry and intermediate level alignment courses throughout the county. The combination of discussion and hands-on lab/shop activities melds theory with reality.

This alignment education series also helps prepare technicians for the ASE A4 Certification.

**GOODYEAR**  
LEARNING CENTER

**HUNTER**  
Engineering Company

## Registration Information for Hunter Alignment classes

To register in a Hunter Alignment Fundamentals, Intermediate or Combo class, go to the Hunter Alignment training schedule page at [www.hunter.com/training/sched.cfm](http://www.hunter.com/training/sched.cfm).

Select your class from the schedule. To register, enter the following information on the registration page:

- Select **Goodyear (Independent)** as Company type
- Goodyear Learning Center User ID
- Goodyear nonsig #
- Billing address
- Contact Person
- Phone #
- Email address.

*If you do not have a Goodyear Learning Center User ID, fill out the Sign Up form at [www.thegoodyearlearningcenter.com](http://www.thegoodyearlearningcenter.com).*



# Alignment Fundamentals Level I

This course is designed for new/less experienced technicians, or those who have a desire to learn fundamental four-wheel alignment. This course prepares the technician for the ASE A4 test by covering alignment theory, equipment operation, common OEM adjustment methods found on light duty vehicles and basic tire/wheel balancing theory. It also includes an overview of suspension and steering systems with detailed instruction in performing proper inspection procedures. Course consists of a combination of classroom lectures and hands-on shop training. Hands-on/Lab modules are structured to provide the student in-depth skills relating to alignment equipment operation in combination with additional opportunities to perform actual vehicle alignment processes. The amount of actual vehicle alignments will vary with each class.



## By the end of the course, the participant will be able to:

- Describe camber, caster, toe, and thrust angle and the related effects these angles have on tire wear and vehicle handling.
- Perform proper pre-alignment inspection of the suspension and steering systems.
- Set-up the aligner and accurately measure the adjustable angles.
- Perform a four-wheel alignment using the most common OEM adjustment methods found on today's vehicles using SLA and strut suspension systems.
- Describe balancing terms and procedures used by automotive wheel balancers.



### ENROLL

See directions page 32.



### COST

\$425



### AUDIENCE

New or inexperienced technicians



### DURATION

3 days

# Intermediate Alignment Level II



This two-day course is designed for the less experienced alignment technician or the alignment technician wanting to be updated on the latest alignment technology. Topics covered include a more in-depth study of the alignment angles, aftermarket adjustments and modified vehicles. Emphasis will be placed on OEM and aftermarket vehicle adjustment procedures found on today's passenger cars, light trucks and SUVs using SLA and strut suspensions including Twin I-Beam suspensions and "altered height" vehicles. Course consists of a combination of classroom lectures and hands-on shop training. Hands-on/Lab modules are structured to provide the student in-depth skills relating to alignment equipment operation in combination with additional opportunities to perform actual vehicle alignment processes. The amount of actual vehicle alignments will vary with each class.

## By the end of the course, the participant will be able to:

- Describe in-depth principles of camber, caster, toe and thrust angle.
- Describe the basic principles related to spindle leverage, center of gravity, roll center, frame angle and scrub radius.
- Perform a four-wheel alignment using the OEM adjustment methods found on today's vehicles using SLA, strut suspension systems including Twin I-Beam suspensions.
- Identify potential alignment related problems from equipment printouts using Hunter equipment.
- Perform alignment procedures and formulate solutions when aligning "altered suspension height" vehicles using Hunter alignment equipment.
- Be able to modify or create and save "specialized" alignment specifications using Hunter equipment.
- Describe the influence of ride height alteration, wheel offset, weight distribution and spring rating.
- Describe the influence of "stability" and "collision avoidance" systems on alignment procedures.
- Describe steering and suspension system related problems.
- Review specialized OEM adjustment procedures.



### ENROLL

See directions page 32



### COST

\$365



### AUDIENCE

At least one year of "hands on" alignment experience using Hunter equipment or the successful completion of the Hunter Alignment Level I Course.



### DURATION

2 days

# Combo Alignment Fundamentals Level I and Intermediate Alignment Level II

This course is a combination of Fundamental Alignment Level I and Intermediate Alignment Level II. This combination course provides a reduced rate as they are registering for both classes at the same time and delivered during the same week.



## ENROLL

See directions page 32.



## COST

\$725



## AUDIENCE

New or inexperienced technicians



## DURATION

5 days

# Heavy-Duty Wheel Alignment Course

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This 4-day course is designed to instruct the heavy-duty alignment technician in alignment theory and alignment equipment operation relevant to class 3 through class 8 single and multi-axle road tractors and trailers. Hunter's WinAlign software operation is covered in-depth, which includes alignment diagnostic angles, Automatic Bushing Calculator and CAMMs program. Additional information covered includes vehicle inspection and tire/wheel vibration diagnostics. This course serves to prepare the technician for over 70% of the material covered on the ASE T5 exam and includes a combination of classroom lectures and hands-on shop training. The hands-on training gives the student an opportunity to use current Hunter alignment equipment to perform wheel alignments on vehicles in the shop. The quantity of vehicle alignments may vary with each class.

## Course Objectives

**By the end of the course, the participant will be able to:**

- Have knowledge of how camber, caster, toe, thrust angle and tandem scrub angle effect tire wear and vehicle handling.
- Recognize HD suspension and steering systems and identify adjustment methods.
- Determine and select the correct alignment specifications.
- Setup the aligner and accurately measure the primary alignment angles.
- Perform the alignment procedures necessary to properly align single or multi-axle tractors and trailers.
- Understand the alignment printouts and be able to convey the results to others
- Measure and adjust a semi-trailer.
- Accurately measure all alignment angles including the available diagnostic angles.
- Interpret alignment measurements and printouts to determine the cause of pulls, drifts, wander, darting, tire wear, dog tracking, improper steering wheel position.
- Use advanced alignment angles and determine bent or damaged components: Steering Axis Inclination, Included Angle, Turning angle, Setback and Maximum Steering angle.
- Effectively use WinAlign's automatic bushing calculator and control arm movement monitor to adjust camber and caster on Twin I-Beam and SLA suspensions.
- Determine the cause of tire/wheel assembly vibration problems related to balance.



### ENROLL

See directions page 32.



### COST

\$900



### AUDIENCE

Medium and Heavy-Duty service technicians.  
Prerequisite of heavy-duty truck and trailer experience.



### DURATION

4 days