# PART 1: INTRODUCTION

This manual contains useful information for the safe and efficient operation of your Peterbilt Model 387. It also provides information on maintaining your vehicle in the best condition, with an outline for performing safety checks and basic preventive maintenance inspections.

We have tried to present the information you'll need to learn about your vehicle's functions, controls, and operation—and to present it as clearly as possible. We hope you'll find this manual easy to use.

Please remember, though—this manual is not a training manual. It can't tell you everything you need to know about driving your Peterbilt vehicle. For that you need a good training program or truck driving school. If you have not been trained, get the proper training before you drive. Only qualified drivers should drive this vehicle.

There will be times when you need to take this manual out of your Peterbilt. When you do, please be sure to return it to the cab when you are finished using it. That way it will be there when you need it the next time or when you pass the vehicle on to the next user.

## How To Find What You Want

There are several tools built into this manual to help you find what you need quickly and easily.

First is the **Quick Table of Contents.** Located at the front of the manual, this lists the main subjects covered and gives page numbers where you can find these subjects. Use the Quick Table of Contents to find information on a large subject like "Maintenance."

Cross-referenced citations also help you get the information you need. If some other part of the manual contains further information on the subject you are reading about, we'll indicate that in a cross-reference like this: (See <u>"PART 6: DRIVER'S CHECKLIST"</u>). You won't have to go searching for more information.

Finally you'll find a helpful **Subject Index.** It's in the back of the manual and alphabetically lists the subjects covered. So if you want information on brakes, for example, just look under Brake in the Subject Index. You'll find all the pages listed where brakes or braking are discussed.

## **A Special Word About Repairs**

Your Peterbilt dealer's service center is the best place to have your vehicle repaired. You can find Peterbilt dealers all over the country with the equipment and trained personnel to get you back on the road quickly—and keep you there.

Your vehicle is a complex machine. Anyone attempting repairs on it needs good mechanical training and the proper tools. If you are sure you have these requirements, then you can probably perform some repairs yourself. However, all warranty repairs must be performed by an authorized Peterbilt service facility. If you aren't an experienced mechanic, or don't have the right equipment, please leave all repairs to an authorized service facility. They are the ones equipped to do the job safely and correctly.



WARNING! Attempting repair work without sufficient training, service manuals, and the proper tools can be dangerous. You could be injured or you could make your truck unsafe. Do only those tasks you are fully qualified to do. **Maintenance Manuals.** If you do decide to do any complex repair work, you'll need the Peterbilt Maintenance manuals. Order them from your authorized dealer. Please provide your Chassis Serial Number when you order, to be sure you get the correct manuals for your vehicle. Allow about four weeks for delivery. There will be a charge for these manuals.

**Final Chassis Bill of Material.** A complete, nonillustrated computer printout listing of the parts used to custom-build your Peterbilt vehicle is available through the Peterbilt dealer from whom your purchased your vehicle.



WARNING! Modifying your vehicle can make it unsafe. Some modifications can affect your truck's electrical system, stability, or other important functions. Before modifying your vehicle, check with your dealer to make sure it can be done safely.

# **Additional Sources of Information**

Operator's manuals are also supplied by the manufacturers of components such as the engine, seats, transmission, and radio in your Peterbilt. If you are missing any of these manuals, ask your Peterbilt dealer to supply them. Your Model 387's glove box also contains a copy of the *Truck Driver's Handbook,* published by the American Trucking Association. Refer to it for important information on driving your vehicle. Another place to learn more about trucking is a local truck driving school. Contact one near you to find out what kinds of instruction it offers.

Federal and state agencies also have information you can ask for. The Interstate Commerce Commission can give you information about regulations governing transportation across state lines. And various agencies in state governments are sources for regulations that differ from state to state.

# Warnings

We've put a number of warning messages in this manual. They are there for your protection and information. Please read them and follow them. They can help you to avoid injury to yourself and your passengers as well as to prevent costly damage to your vehicle. We've used certain symbols and "signal words" to indicate what kind of message is going to follow. When you see these symbols & words, you know that you need to pay special attention. Please don't ignore any of these signals.



WARNING! When you see this symbol & word, the message that follows is especially vital. This signals something that can cause serious injury or death. This message will tell you what the hazard is, what can happen if you don't heed the warning, and how to avoid it. For example:



WARNING! Attempting repair work without sufficient training, service manuals, and the proper tools can be dangerous. You could be injured or you could make your vehicle unsafe. Do only those tasks you are fully qualified to do.



CAUTION: This symbol & word signals something that could damage your vehicle. You might receive an injury, too. For example:



CAUTION: Continuing to operate a vehicle with insufficient oil pressure will cause serious engine damage.



NOTE: Gives you information we feel you'd like to have. It could have to do with care of your vehicle or with driving more efficiently:



NOTE: A cold compressor can cause refrigerant to liquefy and warp the valve plates or cause a hydraulic lock. Warm the engine before starting the air conditioner.

Please take the time to read these messages when you see them. And remember:

### WARNING! Something that could injure you seriously.

CAUTION: Something that could cause injury to you or your vehicle.

NOTE: Useful information.

# Vehicle Safety

Make sure your Peterbilt is in top working condition before heading out on the road—it is the *responsible* driver's duty to do so. Inspect the vehicle according to <u>"PART 6:</u> <u>DRIVER'S CHECKLIST"</u>.



WARNING! Do not drink and drive. Your reflexes, perceptions, and judgment can be affected by even a small amount of alcohol. You could have a serious—or even fatal accident—if you drive after drinking. Please do not drink and drive or ride with a driver who has been drinking.



WARNING! The use of alcohol, drugs, and certain medications will seriously impair perception, reactions, and driving ability. These circumstances can substantially increase the risk of an accident and personal injury.

Please remember, this manual is not a training manual. It cannot tell you everything you need to know about driving your Peterbilt vehicle. For that you need a good training program or truck driving school. If you have not been trained, get the proper training before you drive. Only qualified drivers should drive this vehicle.

Every new Peterbilt vehicle is designed to conform to all Federal Motor Vehicle Safety Standards applicable at the time of manufacture. However, even with these safety features, continued safe and reliable operation depends greatly upon regular vehicle maintenance. The vehicle must be operated within the range of its mechanical capabilities and the limits of its load ratings. (See the Tire and Rim Weight Ratings label on the driver's door edge.)

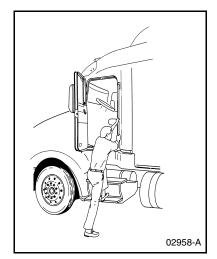
# PART 2: GETTING INTO & OUT OF THE CAB AND FRAME ACCESS

Be careful whenever you get into or out of your vehicle's cab. Always maintain at least three points of contact with your hands on the grab handles and your feet on the steps.

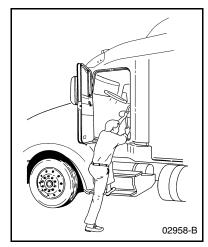


WARNING! Jumping out of the cab or getting into the cab without proper caution is dangerous. You could slip and fall, possibly suffering a serious injury. Keep steps clean. Clean any fuel, oil, or grease off of the steps before entering the cab. Use the steps and grab handles provided, and always keep at least three points of contact between your hands and feet and the truck. Look where you are going.

The illustrations that follow show the best ways to enter and exit a cab.



Vehicle With External Grab Handle



Vehicle Without External Grab Handle

# **Door Lock and Keys**

Doors can be locked from the inside by using the lock button. Close the door then push the button down to lock. Doors automatically unlock when you open them from inside, and can be locked from the outside with the key only.



WARNING! To lessen the chance and/or severity of personal injury in case of an accident, always lock the doors while driving. Along with using the lap/shoulder belts properly, locking the doors helps prevent occupants from being thrown from the vehicle.

To lock or unlock the doors from outside the cab, insert the key in the lock. Turn the key toward the rear to lock; forward to unlock.

## **Remote Keyless Entry (optional)**

This vehicle may be equipped with a Remote Keyless Entry (RKE) system that adds security and convenience to your vehicle. The system will lock or unlock the driver's door and passenger's door with the key fob and alert you with parking lights when the selected door's are locked or unlocked. The system includes two key fobs that provide secure rolling code technology that prevents someone from recording the entry signal.

### Operation

To Unlock The Driver's Door

Press the UNLOCK button once. The driver's door will unlock and the parking lights will come on for 40 seconds.

To Unlock The Passenger's Door

Press the UNLOCK button once and press again within 5 seconds. The passenger door will unlock.

### To Lock Both Doors

Press the LOCK button. The doors will lock and the parking lights will come on for 2 seconds. If the doors are open they will not lock. The range of the RKE system should be approximately 30 ft. This will be reduced if it is operated close to other RF sources such as TV/radio transmitters and cell towers.

### **Batteries**

The key fob uses one CR2032, 3V battery. Batteries should last approximately three years, depending on use. Consistently reduced range is an indicator that the battery needs replacement. Batteries are available at most discount, hardware and drug stores.

To Replace The Battery

1. Remove rear cover from key fob.

- 2. Remove the battery.
- 3. Install new battery.
- 4. Reinstall cover.
- 5. Synchronize the key fob.

### Synchronization

The key fob may need to be synchronized to the truck when the battery is replaced or when the key fob has not been used for an extended period time.

To Synchronize A Key Fob

1. Hold the key fob near the receiver.



NOTE: The receiver is located behind the Speedometer/Tachometer cluster assembly.

- 2. Press and hold both the Lock and Unlock buttons at the same time for approximately 7 seconds.
- 3. When the key fob is resynchronized, the doors will lock then immediately unlock.
- 4. If the fob fails to synchronize, it could be programmed to a different truck or could have failed. Contact your dealer to re-program your key fob.

## **Climbing Onto the Deck Plate**

When you are climbing onto and off the deck plate, maintain at least three points of contact with your hands on the grab handles and your feet on the steps.



#### WARNING!

- You can be hurt if you aren't careful climbing onto and off the deck plate. You can slip and fall, especially if the surfaces are wet or icy, or if you step in oil, fuel, or grease. Keep steps clean. Always maintain at least three points of contact between your hands and feet and the steps and deck plate.
- Do not climb onto and off the deckplate—use steps and grabhandle provided. If there is no deck plate, or if proper steps and grab handles aren't provided, don't climb onto the area behind the cab. Peterbilt did not intend for the area to be a step if handrails or proper steps are not provided.



WARNING! Do not step on vehicle components without antiskid surfaces or use components not designed for entry-and-exit use. You could fall and injure yourself if you step on a slippery surface. For example:

- You could fall and injure yourself if you step onto a fuel tank surface. A fuel tank is not a step. The tank surface can get very slippery, and you might not be able to prevent a fall. Don't step onto the surface of a fuel tank. Use only the steps and handholds provided, not chain hooks, quarter fenders, etc.
- Always reinstall steps before entering the cab or accessing the deck plate. Without steps, you could slip and fall, resulting in possible injury to yourself.



NOTE: Any alteration (adding bulkheads, headache racks, tool boxes, etc.) behind the cab or sleeper that affects the utilization of grab handles, deck plates, or frame access steps installed by Peterbilt must comply with FMCSR 399.

The pictures that follow show you the right way to get on and off the area behind your cab.



Hold handles as you step up



Three points of contact



Three points of contact as you reach the deck area



Three points of contact as you step to the deckplate

# PART 3: GETTING TO YOUR ENGINE

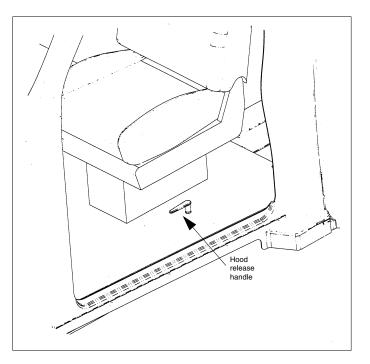
## **Hood Tilt**

Follow this procedure to tilt the hood.



WARNING! Before opening or closing the hood, be sure there are no people or objects in the way. A hood could hurt someone in the way of its opening or descent.

1. To open your hood, find the hood release handle on the cab floor beside the driver's seat.



2. Grasp the lever and turn it towards you. The hood will release and pop open to a neutral position, approximately 2" above the closed position.



WARNING! The hood uses hydraulic dampers to control movement during opening. Do not tilt the hood with these dampers disconnected. Replace damaged, worn, or leaking dampers as soon as possible. Tilting a hood with the dampers disconnected or defective may cause the hood to tilt too rapidly. You could be injured and the hood could be damaged.

3. Proceed to the front of the vehicle and face the hood. Grasp the hood ornament on the top of the crown molding. Pull forward and down until the hood is fully open and rotation stops.



WARNING! If the hood falls, anyone under it could be injured. Always ensure that a hood is fully tilted open any time anyone gets under a hood for any reason.

4. To close the hood, firmly push upward and rearward on the hood ornament to start the hood tilting backwards. Continue to push until the hood moves through its neutral position. The hood will continue to tilt backwards. Apply a firm push to the hood ornament to engage the hood latches located on both sides of the firewall.



WARNING! If the hood is not latched securely, it could open during operation and cause an accident. Be sure the hood is latched securely before moving the vehicle.

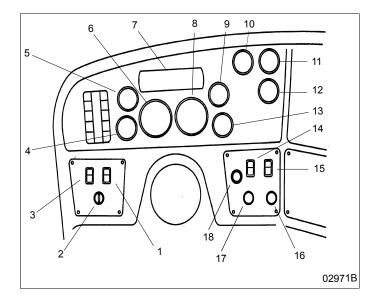
# PART 4: CONTROLS AND DISPLAYS

This part explains the location of the various features on your vehicle and describes their function. For information on using these features in driving, see the paragraphs below.

## Your Instrument Panel

Please remember that each Model 387 is custom-made. Your instrument panel may not look exactly like the one in the pictures that follow. We have tried to describe the most common features and controls available, so your vehicle may not have some of the ones that appear in this section. You can pick out the parts that apply to you and read them to be fully informed on how your particular vehicle operates.

## Typical Cab Instruments and Controls

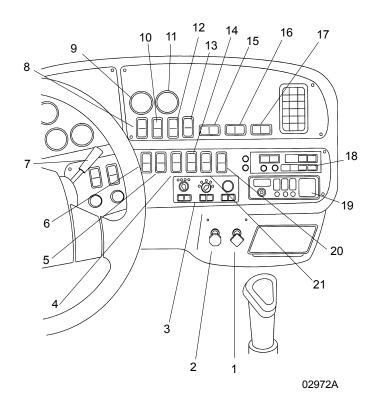


### LEFT SIDE

- 1. ID/Clearance Lamps Switch
- 2. Ignition Switch
- 3. Headlamps Switch
- 4. Voltmeter
- 5. Oil Pressure
- 6. Tachometer
- 7. Warning Light Bar
- 8. Speedometer-Message Center (SMC)
- 9. Water Temperature

- witch 10. Air Cleaner Restriction
  - 11. Primary Air Pressure
  - 12. Secondary Air Pressure
  - 13. Fuel
  - 14. SMC Select/Reset Switch
  - 15. Dome Light Switch
  - 16. Windshield Wiper/Washer
  - 17. Panel Dimmer
  - 18. Cigarette Lighter

#### PART 4: CONTROLS AND DISPLAYS

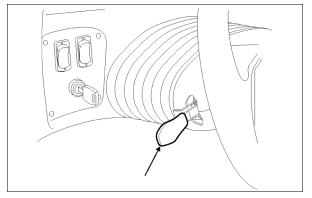


### RIGHT SIDE

- 1. Parking Brake Valve
- 2. Trailer Air Supply Valve
- 3. Heater/AC Control Panel
- 4. Fog Lights Switch
- 5. Engine Fan Switch
- 6. ID/Clearance Lamps Flash Switch
- 7. Trailer Brake Lever
- 8. Cruise Control Switch
- 9. Transmission Temperature
- 10. Cruise Control Switch
- 11. Pyrometer

- 12. Engine Brake
- 13. Engine Brake
- 14. Load Lights Switch
- 15. Interaxle Differential Lock Switch
- 16. 5th Wheel Lock Switch
- 17. Air Suspension Switch
- 18. Radio
- 19. CB Radio
- 20. Selected Option Switch
- 21. Mirror Heater Switch

# Steering Column-Mounted Controls Turn Signal and Indicator Lights



Turn Signal

Your turn signal lever is mounted on the left side of the steering column below the steering wheel. Green directional indicator lights appear on the instrument panel.



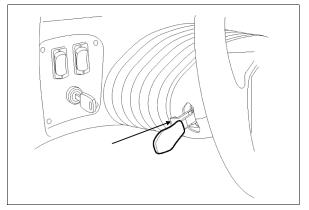
NOTE: The ignition key must be turned to ON for the signal/switch to operate.

To operate the signal, move the lever in the direction of the turn.



WARNING! After you complete a turn, shut the system off by returning the lever to the "OFF" (center) position. The switch's lever action is NOT self-canceling. Failure to shut off a turn signal could confuse other drivers and result in an injury accident. An indicator light in the instrument panel will flash until the turn signal is turned off.

### **Hazard Flasher**



### Hazard Flasher

The four-way Hazard Flasher switch is on the turn signal body, just underneath the turn signal lever. It will operate with the key switch in the ON or OFF position. Use your hazard flasher whenever you are off the road or on the side of the road, or in a potentially hazardous situation. Pull it out to activate the system. All turn signals will flash at once. To turn it off, move the turn signal lever up or down.

 $\triangle$ 

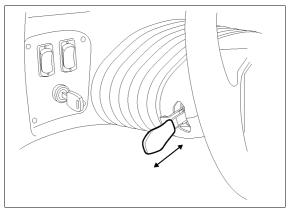
WARNING! Use your Hazard Flasher Warning System any time you have to stop off the road or on the side of the road, day or night. A hard-to-see vehicle can result in an injury accident. Another vehicle could run into you if you do not set your flashers. Always move the vehicle a safe distance off the road when stalled or stopped for repairs.

Of course, in normal stopping in traffic, such as at a stop light, you do not use your flashers.



WARNING! Your disabled vehicle can be dangerous for you and others. The hot exhaust system could ignite dry grass, spilled fuel, or other substances. Do not park or operate your vehicle where the exhaust system could contact dry grass, brush, spilled fuel, or any other material that could cause a fire.

## **High Beam Headlights**

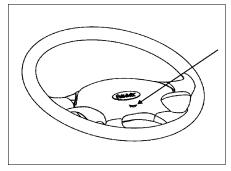


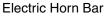
High Beam Headlight Switch

All Peterbilt vehicles come equipped with a combination turn signal and high beam/low beam switch. To switch your headlights lower or higher, gently pull the turn signal lever up, towards the steering wheel, until you hear the switch "click" and the beam changes.

## Electric Horn

Your Peterbilt has an electric horn. To sound the horn, press on the bar in the center of the steering wheel

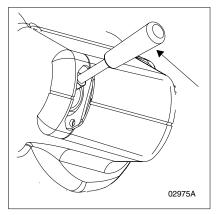




## Air Horn

Your Model 387 has an air horn in addition to an electric horn. Control the air horn by pulling on the lanyard extending from the overhead header panel.

### **Trailer Brake Hand Valve**



This hand valve provides air pressure to apply the trailer brakes only. It operates independently of the foot treadle valve.

NOTE: The trailer brake is not to be used as the main means of braking. To use this brake frequently instead of using the foot brake will wear out the trailer brake sooner. To operate the trailer brake hand valve: pull down on the lever under the right side of the steering wheel.

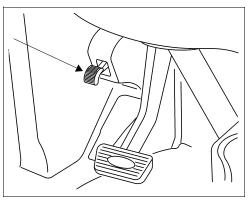
See the Index, under Brake Safety and Emergency for more complete information on when and how to use your trailer brake



### WARNING!

- It is dangerous to use air-applied trailer brakes for parking or holding a vehicle. Air system pressure can bleed down and release the brakes. You could have a vehicle roll-away resulting in an accident. You or others could be badly injured. Always apply the parking brakes for parking or holding your vehicle on grade.
- Grabbing the trailer brake hand lever instead of the BrakeSaver lever could lead to an accident. If you have these levers, they may be close together on your steering wheel column. Be sure you get the one you want. The BrakeSaver lever is bent, while the trailer parking brake lever is straight.

# **Tilt-Telescoping Steering Column**



Tilt-Telescope Lever

The telescoping feature of the steering wheel allows forward and rearward movement of the wheel. The tilting feature allows you to move the wheel up and down.



WARNING! Adjusting the Tilt-Telescoping Steering Wheel while the vehicle is in motion could cause loss of control. You would not be able to steer properly and could have an accident. Make all adjustments to the steering mechanism while the vehicle is stopped.

**To position the wheel:** Locate the Tilt-Telescope Lever on the floor, to the left of the steering column. Push this lever toward the floor. Move the steering wheel to the desired angle and height. Release the lever to lock in the correct position.

# **Dash-Mounted Features**

## **Keys and Locks**

The same key fits your ignition, doors, and sleeper luggage compartment. Frame-mounted tool box locks, locking fuel tank caps, and glove boxes each have individual keys.