

## **PRESENTER'S GUIDE**

# **"BACKING BASICS AND STRAIGHT LINE, OFFSET AND PARALLEL PARKING... FOR CMV DRIVERS"**

*Part of MARCOM's Safety, Regulatory  
and Human Resources Library*

## **OUTLINE OF MAJOR PROGRAM POINTS**

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The following outline summarizes the major points of information presented in the program. The outline can be used to review the program before conducting a classroom session, as well as in preparing to lead a class discussion about the program.

- **Backing up a Commercial Motor Vehicle is one of the most difficult skills to learn as a driver... and an even harder one to master.**
  - That's not surprising. When you're backing up a CMV, you're unable to look directly behind you.
- **Even if you have a backup camera helping you, it has its limitations.**
  - Backup cameras can only display what is directly behind you, so you'll still have blind spots on the sides.
  - There's also the possibility that the camera could be obstructed by snow, mud, or debris...or become cracked or otherwise damaged.
  - And if you can't get a clear view, you are more likely to be involved in an accident.
- **Because backing can be so dangerous, the best way to prevent an accident is not to back up at all.**
  - Whenever possible, make sure that you can pull forward.
  - Don't travel in reverse if you don't have to.

- **That's because maneuvering a large vehicle in a limited amount of space while avoiding obstacles can be tricky.**
  - Additionally, traffic or pedestrians that are nearby are often unpredictable.
  - So if you're in an unfamiliar location you will need to familiarize yourself with your surroundings before you can back up safely.
- **Since you can't do this from the cab of your truck, you should “Get Out And Look” around you whenever you are unsure of your positioning.**
  - This is such an important part of the backing process that the trucking industry uses the acronym “GOAL” to remind you to check outside of your vehicle before you begin to back up.
- **Trucks can have massive blind spots, so you should inspect all six sides of the vehicle before you begin backing.**
  - The front and rear of the vehicle.
  - The left and right sides of the vehicle.
  - Above and below the vehicle.
  - If you're unsure how much room you have, using a tape measure can help you figure it out.
- **You should also note the location of potential obstacles around you, including...**
  - Overhead wires.
  - Tree limbs.
  - Overhead obstructions, such as roof awnings.
  - Other vehicles.
  - People.

- **Remember, your visibility will be limited when you're backing up.**
  - So taking that "mental picture" of the area and the placement of anything that could be in your way is very important.
  - If you need a reminder of what's around you at any point during your backing maneuver, use the "GOAL" process again.
- **Driving forward is always preferable.**
  - If driving in reverse is the only way that you can get where you're going, there are some general "safety rules" that you should follow.
- **First, make sure that your vehicle is in the best position to allow you to back up safely.**
  - This placement will vary depending on the type of backing that you need to do.
  - Try to set yourself up to make it as simple as possible.
- **As you begin to travel in reverse, you should back to the left (the "driver's side") whenever you can.**
  - Especially if you don't have a backup camera aiding you.
  - That way, you can watch the rear of your vehicle by looking out the side window.
- **Backing to the right, or "blind side" can be extremely dangerous, because it's much harder for you to see where you're going.**
  - So do everything you can to use driver's side backing.
  - Even if it means going around the block a few times to put yourself in position to do it, the added safety is worth it.

- **Whether you're backing to the left or the right, you should always use the mirrors on both sides of your vehicle to help to guide you.**
  - Watching both mirrors while in reverse will let you see if the back of your vehicle is going in the direction you want it to.
- **If you notice that you are "drifting" one way or another, you can get the truck back on course by turning the top of the steering wheel in the direction of the drift.**
  - If that doesn't set your truck up where you want it to be, you should do "pull-ups" to reposition it.
  - You can do this as often as you need to, so take your time and make sure that your vehicle is in the best possible position to continue backing up safely and accurately.
- **There are a number of backing techniques that you can use when you're driving a Commercial Motor Vehicle in reverse.**
  - And although all of them can be difficult to perform, some are easier to learn than others.
- **The most common backing technique, and the foundation for all other backing maneuvers, is "straight line backing".**
  - This is exactly what it sounds like... backing up in a straight line.
  - And even though it may sound straightforward, the size of your vehicle can actually make the process pretty tricky.
- **But by following a few simple steps, you can perform a "straight line" backing maneuver safely and accurately.**

- **First, position your vehicle so that you have as straight a path as possible.**
  - Make sure to use the “GOAL” process (“Get Out And Look”)... walking around your vehicle to ensure that you're set up correctly.
- **After you're in position, you can begin moving backward slowly.**
  - If you have a backup camera, at this point use that to check the area behind you.
  - But you won't always have one, so don't get in the habit of relying only on it.
- **While you're moving, remember to look at both mirrors to gauge your position.**
  - You should always be watching the sides of your truck so that you can see how you're doing.
  - Even if you have a backup camera, it will only show the view directly behind you.
  - If you see more of the truck's rear in one mirror than the other, it means you are "off course".
- **To correct a "drift", turn the wheel slightly towards that mirror until your vehicle is straightened out.**
  - However, sometimes you might "drift" so far that you have to re-start your backing maneuver altogether.
  - If this happens, pull forward and reposition your truck until you are able to back up in a straight line.
  - You can do this as many times as are necessary (it's better to take your time and be accurate than to get in an accident).

- **Once the back of your truck lines up in the mirrors, you can return the steering wheel to the center and back up in a straight line.**
- **When you're parking your truck, you are typically arriving at a parking lot or loading dock.**
  - But there are also situations where you're already parked in one space and need to move to another one.
  - In this case, you'll need to use an "offset" backing maneuver to get your truck to where it needs to be.
- **When you can, you want to back to your "driver's side".**
  - This will make it easier for you to see what you're doing in your mirrors.
- **Start by pulling forward out of the space you are in.**
  - You want to pull out as much as possible.
  - This will put you in the best position to move back into the new space.
- **If you need to move to the space that is to the left of the space you were in, cut your wheel to the right and start slowly backing up.**
  - This angles your vehicle to the left.
  - Be sure to use your side-view mirrors to watch for any obstacles, and keep an eye on your truck's course.
- **You can also use a backup camera, if your CMV is equipped with one, for a little extra security.**
  - But a camera is not a substitute for "physically" checking things.
  - You still need to use your mirrors, windows, and the "Get Out And Look" process to get the best view possible.



- **As you get closer to your new parking space, start cutting the wheel to the left to straighten your vehicle out.**
  - If you're driving a tractor-trailer, turn your wheel until your truck and trailer are aligned.
  - Take your time and do "pull ups" if you need to.
- **If you lose sight of your trailer or the back of your truck in your mirrors, you are probably "over-steering" and are "off-course".**
- **As the rear of your truck approaches your new space, this is another good time to use the "Get Out And Look" process.**
  - This will allow you to see how much room you have between the truck and the "mouth" of the space.
- **Then, keep straightening out.**
  - By the time the rear of your truck reaches the entry to the space's "mouth" you should be in a position to back straight into it.
- **Once you feel that you are fully backed up into your new parking space, you can use your mirrors again to check your position and make sure that you really are in straight.**
- **You want to avoid parking on your "blind side" as much as possible.**
  - Sometimes you'll have no choice but to move to the space to your right.
- **To use the offset backing maneuver to the right, follow the same steps you would use to back to the left, but in the reverse direction.**
  - Pull out of your current space, cut your wheel to the left, and back up.

- **Don't forget to use the GOAL process as many times as you want to check your position.**
  - It's always better to take the time that you need to do it right.
- **As a Commercial Motor Vehicle driver, you know how challenging it can be to perform backing maneuvers.**
  - Fortunately, the most difficult one is actually the one that you will probably use the least.
- **"Parallel parking" is only necessary in situations such as when you're in a city or another location where there are no parking lots and no dock to pull into.**
  - But even though you may rarely use this maneuver, it is important that you know how to do it safely.
- **Since you should always back up from the driver's side if possible, let's take a look at how you can parallel park along a curb that is on the left-hand side of your vehicle.**
- **For "straight-body" trucks, the process is very much like parallel parking a car.**
  - But because a truck is much larger, it can be more difficult for you to maneuver into a parking space.
- **To parallel park a "straight body" truck, you should use all of the standard rules and procedures for parallel parking smaller vehicles.**
  - But be sure to go slowly, and use the "GOAL" process ("Get Out And Look") as often as you need to check your position.

- **If you are parallel parking a tractor trailer to the "driver's side", the principles remain the same, but the technique that you will use is very different.**
- **First, pull up past the spot, leaving about three feet from the end of your trailer to the beginning of the space, with your truck and trailer straight.**
  - Next, use the “GOAL” process to look around your vehicle and check for any obstacles.
  - Make sure that the space is big enough for you to park in, and pay special attention to the position of any other vehicles that are parked in the area.
- **Then, get back in your truck and begin to back up while turning your steering wheel to the left.**
  - This will cause the trailer to swing to the right, allowing you to maneuver the back end of the trailer into the parking space.
- **If your CMV has a reliable backup camera, you will be able to see the space directly behind you.**
  - This can help you gauge what’s in the way.
- **But since even backup cameras have blind spots, when the back of the trailer is halfway into the parking space, it might be a good idea to stop and use the “GOAL” process again.**
  - This will help you remind yourself of what's around you, and to check where you are in relation to any potential obstacles... especially other vehicles.

- **After you have taken a "mental picture" of your surroundings, get back in your truck.**
  - Then, turn your steering wheel to the right and back up slowly until the entire trailer is in the parking space, parallel to the curb.
  - Finally, straighten the steering wheel and continue backing up until your truck and trailer are centered in the parking spot.
  - Pull forward to adjust your position, if necessary.
  
- **It's safer to do this maneuver on the driver's side, so try your best to find a space to the left of your vehicle.**
  - However, you might not be able to find many opportunities to park on the left-hand side of the street.
  - So if you have no other options, you will need to parallel park from your "blind side".
  
- **And it's called the "blind side" for a reason... your vision is severely limited.**
  - Unless you have a backup camera, you only have your mirrors to guide you.
  - But even with a camera you don't have a full view.
  - So basically, you're aiming to place the truck in a spot you can't totally see.
  
- **To parallel park on the "blind side", you can use all of the instructions for the driver's side and reverse the direction.**
  
- **Line up about three feet from the "head" of the space.**
  - Then, begin to back up while turning your steering wheel to the right.
  - This causes your trailer to swing to the left.
  - Make sure to use the "GOAL" process if you need to check your surroundings.

- **Get back in your truck and turn your steering wheel to the left while backing up slowly, until the trailer is in the parking space, parallel to the curb.**
  - Then, straighten the steering wheel and continue backing up until your truck and trailer are centered in the parking spot.
- **Remember, "blind side" backing should be a last resort.**
  - So before you do it make sure that you've done everything you can to use a space on the left hand side of the street.

### **\* \* \* SUMMARY \* \* \***

- You should always use the "GOAL" process ("Get Out And Look") to familiarize yourself with your surroundings before you begin backing.
- "Straight line" backing is the most common backing maneuver, and the simplest to do.
- "Offset" backing is used when you have to move from one parking space to another, typically the one next to you.
- Whenever possible you should back to the left (the driver's side) when you're angling to park.
- Parallel parking a CMV isn't done very often, but it's important that you know how to do it safely.
- While backup cameras can be helpful and are being installed in more vehicles, you can't rely on them alone. Not every vehicle will have a camera, and even when they do, it has limitations.
- No matter which maneuver you're using, if you take your time, have patience and go slowly, you can back and park your vehicle safely and accurately... every time!