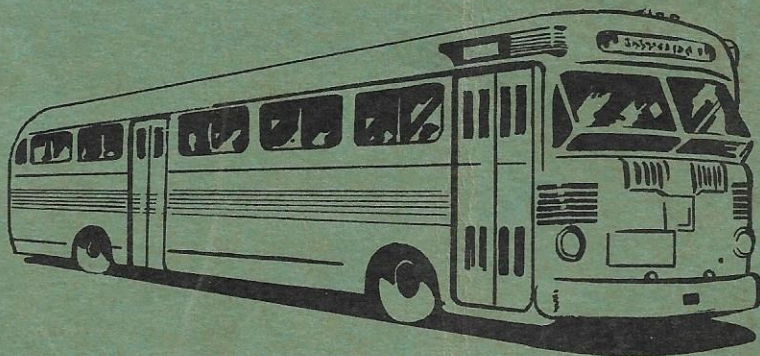


BUS OPERATOR'S MANUAL



The Chicago Transit Authority owns and operates many types of buses which vary in their construction and operation. Most stations operate two or more types of buses, and, for this reason, Bus Operators are required to qualify on several types.

The purpose of this manual is to explain the principles of bus operation and to describe the basic equipment which is similar on all types of buses. This manual will serve as a guide for Bus Operators during their initial training and as a reference throughout their employment with CTA.



CHICAGO TRANSIT AUTHORITY

THE OPERATOR

The Operator is an important member of the CTA organization, because he is responsible for providing safe and efficient service to hundreds of passengers each day.

To meet this responsibility, the Operator must possess the qualities of mental alertness and physical stamina. He should also have the ability to recognize and meet situations with quick thinking and coordinated use of his eyes, ears, hands, and feet. He must be aware that delaying the application of brakes for three quarters of a second means traveling an additional distance (22 feet at 20 M.P.H.; 33 feet at 30 M.P.H.; 44 feet at 40 M.P.H.; etc.). This additional distance is often the difference between a safe stop and an accident.



To attain proficiency in bus operation, the Operator must achieve two objectives. First, he must learn correct standard driving practices. Second, after he has learned these driving practices, he must apply them until they become habitual.

The Operator must also acquire a general knowledge of the principal parts of the bus, including their purpose and function. The Operator must have this knowledge to achieve a high degree of operating skill.

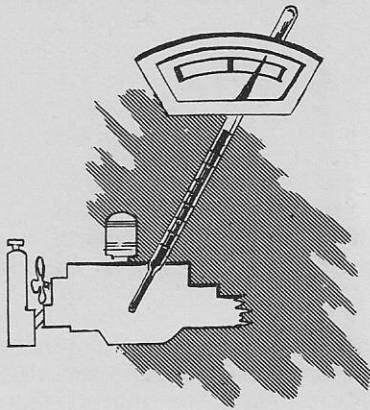
Regardless of the driving ability developed by the Operator, he must keep his mind on the job at all times for the safety of his passengers, of pedestrians, of other drivers, and of himself. The Operator is not like the average motorist who spends only a few hours a week driving. The motorist is strictly an amateur driver. The Operator, on the other hand, earns his livelihood driving a bus. He is an expert--a professional driver. He must assume far more responsibility than the amateur driver. He must not only avoid being the cause of an accident, but he must drive to prevent others from having accidents involving him.

THE EQUIPMENT

The buses operated by CTA have been built with many provisions for economical operation, ease of control, good performance, safety, dependability and long life. To obtain the best use of these provisions, the bus must be operated properly.

The Operator must have a knowledge of the functions of the various gauges on the instrument panel, as these gauges indicate if the vital parts of the bus are functioning properly.

The Water Temperature Gauge indicates the temperature of the liquid in the cooling system. Most buses are equipped with a water temperature gauge. Some gauges register the water temperature up to 212° , while others register the water temperature to 220° . Some buses are also equipped with a red indicator light and/or an audible alarm.

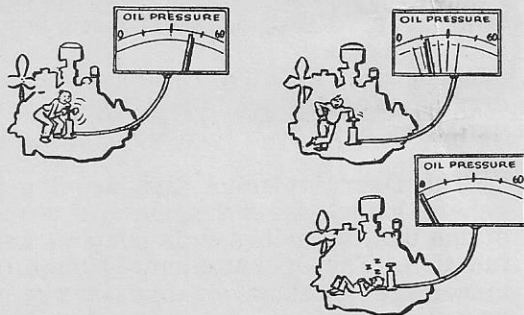


If the pointer of the gauge is on or above the maximum temperature reading of the gauge, (212° or 220°), or if the red indicator light stays "On" or the alarm sounds while the engine is running, it indicates that the engine is overheated. The Operator must stop the bus, place the gear shift lever or shift selector lever in neutral, and "fast idle" the engine for a short period of time. This causes the liquid in the cooling system to circulate more rapidly and become cool. If this action does not

reduce the temperature, the bus must be curbed and the engine shut off to prevent serious damage. The Operator must not add water to an engine under any circumstances. The Operator must transfer the passengers to another bus and call the Radio Dispatcher, giving his badge number, location, run number, direction, bus number, and the reason for curbing the bus.

The Oil Pressure Gauge indicates the pressure in the oil circulating system.

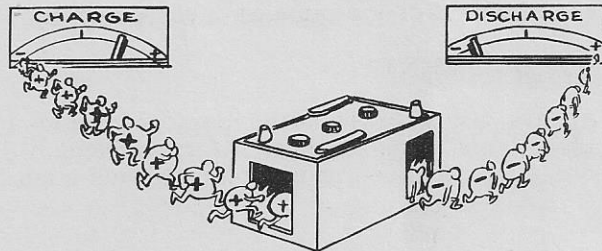
Most buses are equipped with an oil pressure gauge. Some are also equipped with a red indicator light and/or an audible alarm. If the pointer of the gauge drops below 5 pounds at idling speed or below 20 pounds at 20 M.P.H.



or faster, or if the red indicator light stays "On", or the alarm sounds while the engine is running at idling speed, it indicates oil pressure failure. The bus must be curbed, and the engine shut off to prevent serious damage. The Operator must transfer the passengers to another bus and call the Radio Dispatcher, giving his badge number, location, run number, direction, bus number, and the reason for curbing the bus.

The Ammeter Gauge indicates the amount of electricity flowing into and out of the battery.

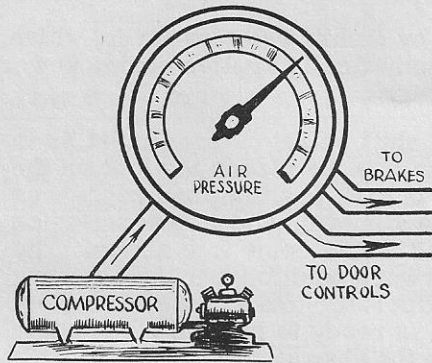
All buses are equipped with an ammeter gauge. Some are also equipped with either a red indicator light or a green indicator light. If the pointer of the gauge is on the plus (+) side of zero, or the red indicator light is "Off", or the green indicator light is "On", it indicates that the battery is being charged. If the pointer of the gauge is on the minus (-) side of the zero, or the red indicator light is "On", or the green indicator light is "Off", it indicates that the battery is being discharged.



If there is an indication that the battery is being constantly discharged while

the bus is operating at 20 M.P.H. or faster, the Operator must call the Radio Dispatcher, inform him of the situation, request a bus change, and stay in service until a bus change can be made.

The Air Pressure Gauge indicates the pressure of the air stored in the storage tank which supplies the air for the operation of the brakes, windshield wipers, doors, and other air controlled devices.



All buses are equipped with an air pressure gauge. Some are also equipped with a red indicator light and/or an audible alarm. The pointer of the gauge must indicate at least 75 pounds pressure before the bus is moved. If the pointer of the gauge registers below 75 pounds while the bus is in operation, the Operator must stop the bus, place the gear shift lever or shift selector handle in neutral, and "fast idle" the engine until the air pressure is built up. If the pointer of the gauge registers 120 pounds or above, or if the red indicator light stays "On", or the alarm sounds while the bus is in operation, it indicates a failure in the air compressor system. The bus

must be curbed and the engine shut off. The Operator must call the Radio Dispatcher, inform him of the situation, and ask for a decision on what action to take.

To operate safely and efficiently, the Operator must understand the functions of the various working parts of the bus.

The Brakes are operated by air pressure controlled by a foot pedal. When pressure is applied on this pedal, it allows air to flow into the brake chambers. The air in the chambers is converted into mechanical energy that produces brake shoe pressure and friction on the four brake drums, causing the bus to stop. The brake pedal must not be depressed too rapidly and with too much force, as this action will cause abrupt or "stone wall" stops.

The Hand Brake mechanism is connected to the drive shaft. It should be used to stop the bus in an emergency if the air brakes fail. The hand brake should also be applied whenever a bus is parked or left unattended.



WHEN THE HAND BRAKE IS SET, THE ACCELERATOR PEDAL IS DIFFICULT TO DEPRESS

Some handbrakes are interlocked with the accelerator pedal so that when the brake is set, the pedal is difficult to depress. This feature is a reminder for the Operator to release the hand brake fully before moving the bus.

The Mechanical Type Transmission is operated by the coordinated use of the gear shift lever and the clutch pedal. The gear shift lever is used to mesh the transmission gears, which provide the various speeds and power. The clutch pedal is used to disconnect the transmission gears, permitting the Operator to shift gears.

When the Operator starts the engine, the gear shift lever must be in the neutral position. When ready to move the bus, the Operator depresses the clutch pedal, sets the gear shift lever in the first forward position, and slowly releases the clutch pedal while depressing the accelerator pedal. The bus must attain a speed of five (5) miles per hour before the Operator shifts from first to second gear, and a speed of twenty (20) miles per hour before he shifts from second to third gear.

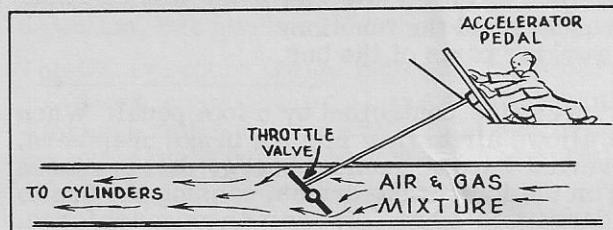
The Operator must always depress the clutch pedal before attempting to move the gear shift lever. If the Operator fails to do this, the transmission gears will be stripped.

All buses with mechanical type transmissions must be double clutched to prevent the clashing of gears. Double clutching consists of depressing the clutch pedal twice when shifting gears; once when shifting from one gear to neutral, and again when shifting from neutral to another gear.

The Automatic Type Transmission is operated by a shift selector lever, which, when set in the forward or reverse position, automatically applies engine power to the rear wheels while the bus is accelerating.

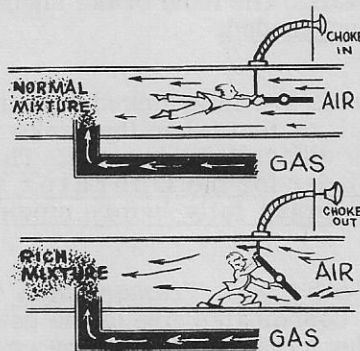
When the Operator starts the engine, the shift selector lever must be in the neutral position. When ready to move the bus, he places his foot on the brake, sets the shift selector lever in the forward (F) position, and depresses the accelerator pedal. The transmission is automatic, and a transmission governor determines when the other forward shifts come into action. The Operator leaves the shift selector lever in the forward position when proceeding in the forward direction. However, when the Operator makes a service stop, he must keep the brake pedal depressed until he is ready to move the bus again to keep the bus from "creeping" forward. When the Operator wants to move in the reverse direction, he moves the shift selector lever from neutral position slowly into the forward position, then into the reverse position.

The Accelerator Pedal is connected to the carburetor throttle which controls the amount of fuel-air mixture admitted to the engine. Depressing the



pedal opens the throttle valve which increases the amount of fuel-air mixture admitted to the engine; releasing the pedal closes the throttle valve which reduces the amount of fuel-air mixture admitted to the engine.

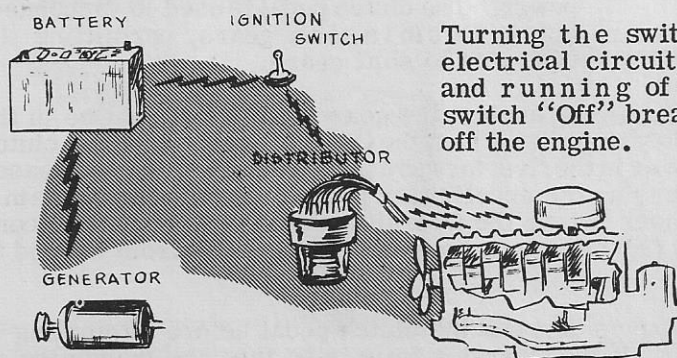
The Choke controls the amount of air entering the carburetor, which affects the content of the fuel-air mixture admitted to the engine. Depressing the choke button (or pulling out the choke lever) reduces the amount of air pulled into the carburetor and allows a richer fuel-air mixture to enter the engine.



In cold weather, or when the engine is cold, the choke must be used when starting the engine. If the engine is warm, the use of the choke is unnecessary.

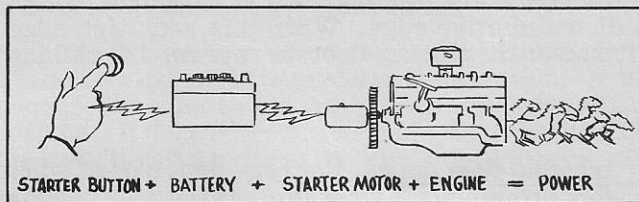
The Operator must not use the choke any longer than is necessary, as excessive use will flood the carburetor and dilute the oil in the engine.

The Ignition Switch opens and closes the circuit between the battery and the distributor.



Turning the switch "On" completes the electrical circuit, permitting the starting and running of the engine. Turning the switch "Off" breaks the circuit and shuts off the engine.

The Starter Button opens and closes the circuit between the battery and starter motor.



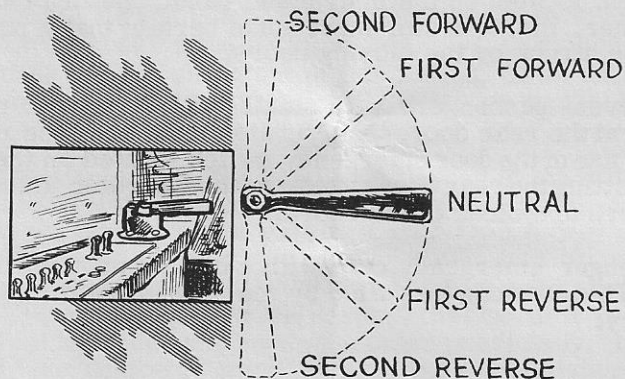
Depressing the button completes the circuit between the battery and starter motor. The rotation of the starter cranks the engine.

The Operator must not depress the starter button for more than 7 seconds at a time, and must allow an interval of at least 5 seconds between starting attempts. This interval prevents the starter motor from being damaged and the battery from being weakened.

The starter button must be released as soon as the engine starts to prevent the starter motor from being damaged.

Light Switches, located within easy reach of the Operator, control the headlights, destination sign lights, dome lights, dash lights, and turn indicator lights. There is also a foot-operated switch which raises and lowers the beam of the headlights.

The Door Control Lever permits the Operator to control the opening and closing of the front and rear doors of the bus. The lever has five positions which permit the following door operations:



Forward from neutral

- | | |
|----------------------|--|
| 1st forward position | Opens front door |
| 2nd forward position | Opens front door and permits rear door to be opened. |

Return to neutral from forward

- | | |
|----------------------|---------------------------------|
| 1st forward position | Prevents rear door from opening |
| Neutral position | Closes front door |

Reverse from neutral

- | | |
|----------------------|---|
| 1st reverse position | Permits rear door to be opened |
| 2nd reverse position | Opens front door and permits rear door to be opened |

Return to neutral from reverse

- | | |
|----------------------|---------------------------------|
| 1st reverse position | Closes front door |
| Neutral position | Prevents rear door from opening |

Bus Doors are equipped with rubber edges to protect passengers in case they are struck by the doors while the doors are closing. All rear doors, except push-type doors, are equipped with a sensitive edge. When this sensitive edge comes in contact with an object, it causes the closing door to reverse its closing movement.

On buses equipped with rear treadle-type doors, the rear doors open when a passenger steps on the treadle step, providing the Operator has the door control lever on a position which permits the rear door to be opened. The rear door closes automatically after the last alighting passenger has stepped off the treadle step. These buses have a rear door indicator light located on the dashboard. This light goes on when the door control lever is on a position which permits the rear door to be opened. An interlocking feature locks the accelerator pedal and prevents it from being depressed as long as the door control lever is on a position which permits the rear door to be opened. The door control lever must be placed in the neutral position to release the interlocking feature and permit the accelerator pedal to be depressed.

In the event passengers are keeping the rear door open by standing on the treadle step, the Operator must request the passengers to step off the treadle step so that the rear door will close and the bus can be moved. If the passengers do not move, the Operator may close the rear door by use of the treadle interrupter switch, located on the instrument panel. Before closing the rear door in this manner, the Operator must make certain that a passenger is not in a position to be struck by the closing doors.

In the event passengers with small children or with numerous packages are alighting at the rear door, the Operator must open the rear doors and hold them open by use of the door emergency switch located on the instrument panel. Before permitting the rear doors to close, the Operator must make certain that the passengers are clear of the doors.

A passenger emergency cord with a ball attachment is located above the rear door. This cord can be pulled by the passengers to open the rear door in an emergency.

On buses equipped with rear push-type doors, the rear doors open when a passenger pushes on them, providing the Operator has the door control lever on a position which permits the rear doors to be pushed open. The rear doors close automatically after they have been pushed open. These buses have a rear door indicator light, located on the dashboard, and a passengers' door signal light, located over each rear door. These lights go on when the rear doors are open or if the door control lever is on a position which permits the rear doors to be pushed open. An interlocking feature makes the accelerator pedal difficult to depress as long as the rear doors are open or are set to be pushed open. The Operator must place the door control lever in the neutral position to lock the rear doors before moving the bus.

A passenger emergency switch is located at the rear doors. Operating this switch unlocks the rear doors so that they may be pushed open by passengers in an emergency.

An Emergency Exit Door, located near the center of the left side of the bus, provides an additional exit for passengers in the event of an emergency.

The emergency door is equipped with a horizontal bar and an audible alarm. The horizontal bar is used to open the exit door. If the horizontal bar is moved slightly from the closed position, the audible alarm will sound.

Windshield Wipers are operated by air pressure and are controlled by means of valves located on the instrument panel.

The Operator must make certain that the air pressure is at least 75 pounds while the windshield wipers are in operation. If the air pressure falls below 75 pounds, the windshield wipers must be shut off until the air pressure is again built up. If the weather is so inclement that the Operator cannot safely operate the bus without the use of the windshield wipers, the Operator must stop the bus, place the gear shift lever or shift selector handle in neutral, and "fast idle" the engine until the air pressure is built up. Windshield wipers must also be shut off when the engine is not running, or is idling.

The Pressure Type Fire Extinguisher contains carbon tetrachloride liquid which is kept in the extinguisher tank under pressure. A gauge is located on the top of the extinguisher which registers the amount of pressure in the tank. The Operator is required to check the pressure on the extinguisher before pulling out of the station, and if the gauge shows below 100, the Operator must turn in the extinguisher to the shop mechanic and obtain another.

To operate the extinguisher, the handle on the top of the extinguisher is turned counter-clockwise. This allows the compressed air to escape into the cylinder where the fluid is stored. A hose is located near the top of the extinguisher. At the end of the hose is a nozzle with a lever-type valve. When the lever is compressed, it causes a stream of fluid to be ejected.

The Pump Type Fire Extinguisher also contains carbon tetrachloride liquid. As there is no gauge on the extinguisher, the Operator must determine whether it is full by weight or by shaking the extinguisher. The Operator is required to check the extinguisher before pulling out of the station. If an extinguisher is empty, the Operator must turn in the extinguisher to the shop mechanic and obtain another.

To operate the extinguisher, the handle on the top of the extinguisher is turned counter-clockwise, releasing the plunger. Pumping the plunger ejects a stream of fluid from the bottom of the extinguisher.

The Powder Type Fire Extinguisher contains dry chemical and a sealed cylinder of carbon dioxide. Before pulling out of the station, the Operator is required to check that the sealed cylinder has not been punctured previously. If a cylinder has been punctured, the Operator must turn in the extinguisher to the shop mechanic and obtain another.

To operate the extinguisher, the ring pin at the top of the extinguisher must be pulled out. The ball lever at the top of the extinguisher is then pushed down, which punctures the sealed cylinder of carbon dioxide. The Operator then opens the nozzle at the bottom of the extinguisher, permitting a stream of chemical powder to be ejected.

When fighting a fire with any type fire extinguisher, the Operator must aim the stream at the base of the fire. This permits the fluid or powder to cover the fire and prevents oxygen from reaching the flame, thus smothering the blaze.



An extinguisher which has been used must be reported and marked on the Sign-In Sheet for refill. If the extinguisher is emptied while the bus is in service, the Radio Dispatcher must be called and a request made for another extinguisher.

OPERATING THE BUS

A Pre-Pull Out Check is made by the Operator prior to pulling a bus out of the station. The Operator checks the interior and exterior of the bus and reports all items not in safe or proper condition to the mechanic or shop foreman.

The pre-pull out check is made to assure that

1. Tires are properly inflated
2. Exterior of the bus is free from marks, scratches, dents, and holes other than those already marked by the Shops Department
3. Fuel and water compartment doors are closed
4. Motor and battery doors are closed
5. Steps, floor, seats, and grab rails are clean and in good condition
6. Fire extinguisher is full or shows proper pressure
7. Fare box is in good operating condition
8. All necessary operating switches are in the "On" position

Upon completing the pre-pull out check, the Operator starts the engine, and then checks the safety features and control devices to make certain that they are in good operating condition. These features and devices include the windshield wipers, front and rear doors, interior and exterior lights, horn, heaters, buzzer, destination signs, and brakes. The gauges must be checked for proper indications.

When the check is complete, the Operator adjusts the Operator's seat and all the mirrors on the bus to the best positions for safety and comfort. When the air pressure gauge indicates air pressure of 75 pounds, the Operator may pull the bus out.

On The Road

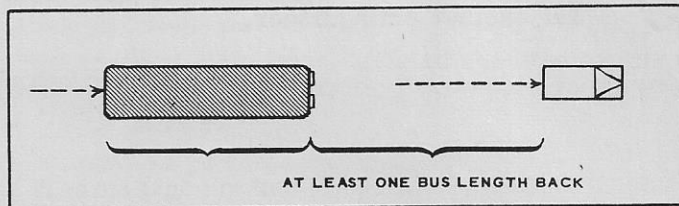
Once on the road, the Operator must keep mentally and physically alert. He must operate the bus in the right hand lane as much as possible. He should keep his hands diagonally opposite each other on the steering wheel. His eyes must be on the road ahead and to the left and right of him, and he must use his side view and rear view mirrors whenever necessary. The Operator should glance at the instrument panel occasionally to check the gauge readings.

When the Operator is not depressing the accelerator pedal, he must rest his foot lightly on the brake pedal. This permits the Operator to apply the brakes whenever necessary with a minimum of delay. He must not "ride" the brake pedal, however, as this action will cause the brake lining to wear out prematurely.

The Operator must also remember that if the bus engine misses, backfires repeatedly, or acts sluggish at any time, regardless of the indications displayed on the gauges, the bus must be curbed and the engine shut off. The Operator must transfer the passengers and call the Radio Dispatcher, giving his badge number, location, run number, direction, bus number, and reason for curbing the bus.

Following Vehicles

The Operator should not follow other vehicles too closely. The distance at which it is safe to follow another vehicle depends on the speed, the road, the traffic, and the weather conditions. The Operator should stay back at least one

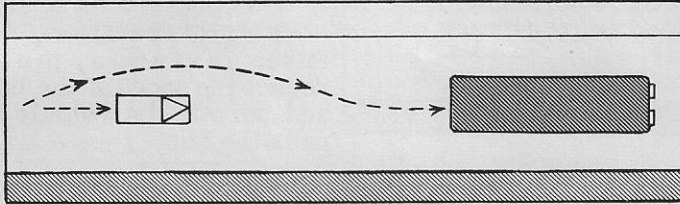


bus length for each 10 M.P.H. of speed. On wet or icy streets, the following distance must be considerably greater. In case the vehicle ahead comes to a sudden stop, the Operator must be able to stop his bus and avoid an accident. This stop must not be so

sudden, however, that standing passengers in the bus will be knocked off balance. Keeping a safe following distance and being constantly alert will avoid the necessity for emergency "stone wall" stops.

Overtaking and Passing Moving Vehicles

Before attempting to pass another vehicle, the Operator must be certain that he can pass safely. He must make certain that oncoming traffic will not interfere with his passing, and he must check his rear view and side view



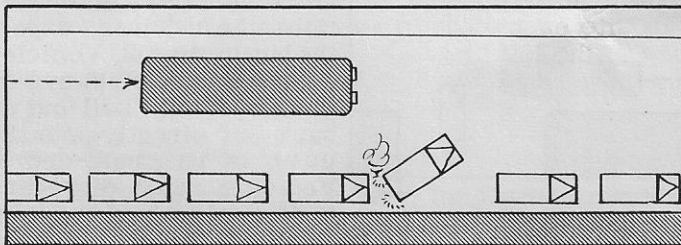
mirrors to make certain another vehicle is not attempting to pass the bus. The Operator must sound a warning of the horn to indicate his intention to pass.

While passing the vehicle, the Operator must make certain that he has sufficient clearance on both sides. He must also be prepared to slow down or stop if the driver of the other vehicle angles into the path of the bus. If the driver of the other vehicle attempts to race the bus, the Operator must reduce his speed and allow the other vehicle to proceed.

Upon passing the vehicle, the Operator must make certain, from observation in his rear view mirror, that the rear of the bus is clear of the vehicle being passed before angling back into the right-hand lane.

Passing Parked Vehicles

When passing parked vehicles, the Operator must operate with the expectation that a vehicle parked at the curb may pull directly into the path of the bus. Some indications of a vehicle about to leave the curb are that the front wheels are turned out, the headlights are on, the exhaust is visible, and the driver of the vehicle is in the driver's seat.

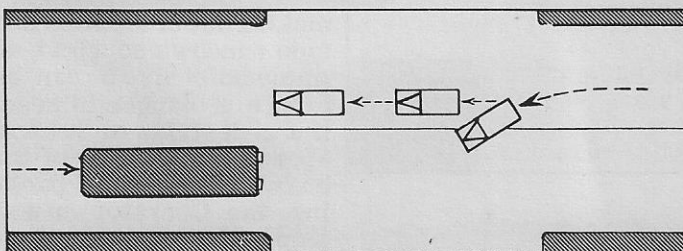


The Operator must make certain that there is sufficient clearance between the bus and the parked vehicles. If he is not positive of the clearance,

he must stop the bus, open the front doors, and observe the clearance between the bus and the parked vehicles.

Meeting and Passing Vehicles Approaching from Opposite Direction

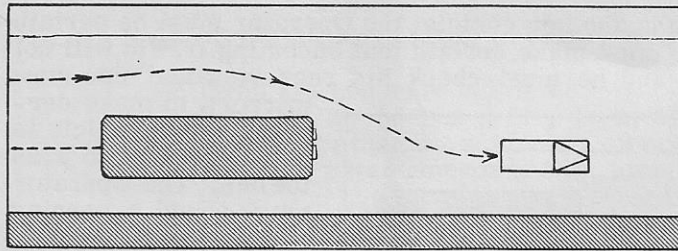
When meeting a vehicle approaching from the opposite direction, the Operator must remember that he cannot depend on the driver of the other vehicle to use only half the roadway. He must operate his bus with the realization that the following situations can occur: 1. An approaching vehicle may pull past the center line while passing another vehicle, and 2. An approaching vehicle may make a left turn into the path of the bus. The Operator should be certain that he is in his proper lane and should



be prepared to pull farther into the right hand lane, and slow down if necessary.

Being Overtaken and Passed by Another Vehicle

When being overtaken by another vehicle, the Operator usually receives certain indications that the driver intends to pass the bus. The Operator may have observed thru his rear view or side view mirror that the vehicle has approached at a fast rate of speed, or the driver may sound his horn to indicate his intention to pass the bus safely.

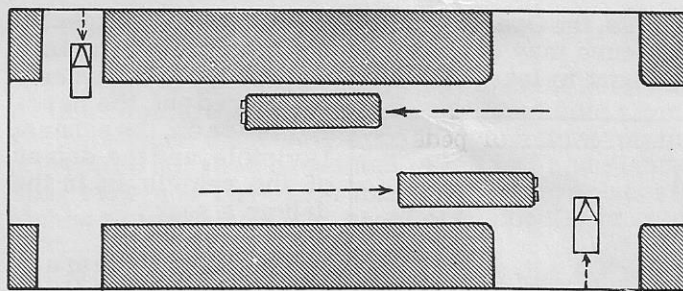


The Operator, in either instance, must reduce the speed of the bus and permit the vehicle to pass the bus.

When the vehicle is passing the bus, the Operator must operate with the realization that the following situations can occur: 1. The vehicle may make a right turn in front of the bus at an intersection, and 2. The vehicle may make a sharp turn into the path of the bus and stop rapidly. The Operator must make certain that he has complete control of the bus so that a complete stop can be made if either of these instances occur.

Meeting Vehicles Approaching at an Angle

While approaching intersections, alleys, and driveways, the Operator must proceed cautiously, especially where his view or the view of the other driver may be obstructed. He must operate his bus with the realization that the following situations can occur: 1.

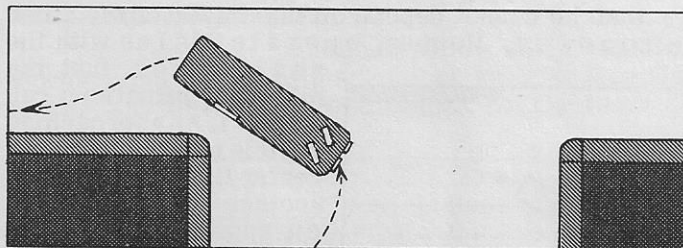


Vehicles on an intersecting street may pull directly into the path of the bus. This is especially common at "bus stop" intersections where drivers expect the bus to stop; 2. Vehicles operating on driveways or in alleys may pull out or back out directly into the path of the bus; and 3. Vehicles may disregard traffic signs or signals.

Having the right-of-way does not excuse the Bus Operator if an accident occurs.

Backing the Bus

Before backing the bus, the Operator must obtain a clear picture of the surroundings, and make certain that the rear of the bus is clear.



The Operator must back the bus slowly, making use of the rear and side windows so that an immediate stop can be made if danger is seen. If a pedestrian or vehicle approaches the rear of the bus while the bus is backing, the Operator must stop and allow the pedestrian or vehicle to move out of the way before continuing to back up. At night, the interior lights must be turned off. Illumination from these lights prevents the Operator from seeing out of the side and rear windows.

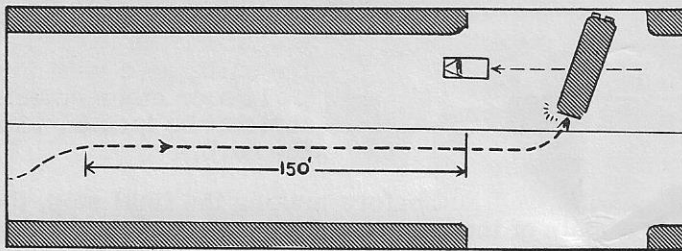
Before backing the bus around a corner, the Operator must align the bus parallel to the curb and back slowly until the rear door of the bus is even with the corner of the curb or any vehicle or object which must be cleared on the intersecting street. When the rear door is even with the curb or object, the Operator may begin making his turn.

The Operator must make the turn as near to a ninety-degree angle as possible, being careful to keep the rear and sides of the bus clear of signs, posts, or any other objects.

If the Operator is in doubt of the clearance, he will stop the bus, open the front or rear doors, and observe the clearance between the bus and the curb.

Making a Left Turn

Before making a left turn, the Operator must, if possible, be in the left or center lane at least 150 feet before the bus reaches the intersection. On buses equipped with a turn indicator signal, the signal must indicate a left turn at least

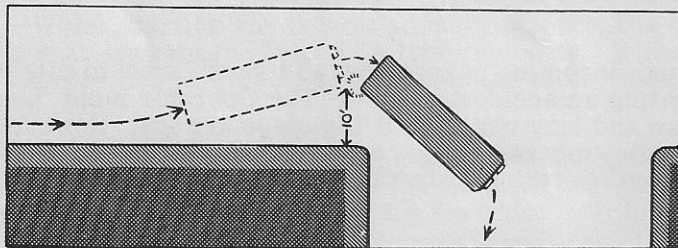


150 feet before the bus reaches the intersection. If the turn indicator signal is defective, or the bus is not equipped with a turn indicator signal, the Operator will display the correct hand signal at least 150 feet before the intersection.

Before turning, the Operator must allow traffic or pedestrians to clear. When the traffic is clear, he will turn slowly, being careful to avoid striking signs or other objects. The front and rear overhang must be watched while turning to avoid striking other vehicles or pedestrians.

Making a Right Turn

Before making a right turn, the Operator must, if possible, be in the right lane at least 150 feet before the bus reaches the intersection. On buses equipped with a turn indicator signal, the signal must indicate a right turn at least 150 feet



before the bus reaches the intersection. If the turn indicator signal is defective, or the bus is not equipped with a turn indicator signal, the Operator must display the correct hand signal at least 150 feet before the bus reaches the intersection.

When making a right turn from a loading zone, the Operator must pull away from the curb at an angle so that the front end of the bus is at least 10 feet from the curb. When the front wheels of the bus are past the corner of the curb or past any vehicle or object which must be cleared at the intersection, the Operator may begin making his turn.

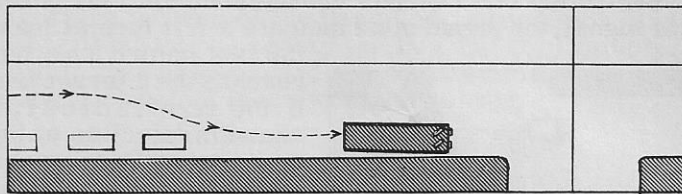
The Operator must allow pedestrians to clear before turning. When the pedestrians are clear, he must make the turn slowly. The front and rear overhang must be watched while turning to avoid striking other vehicles, pedestrians, or other objects.

Steering Column Guide Lines

At certain locations turning movements are difficult to make because of obstacles, such as pillars, poles, high curbs, and other fixed objects which reduce clearance for the bus. At many of these locations white, dashed guide lines have been painted on the street to guide the Operator around the obstacles. The Operator must align his steering column on the painted guide line and follow the guide line cautiously at a slow rate of speed until the obstacle has been cleared by the rear of the bus.

Pulling Bus Into Curb

When approaching a loading zone, the Operator should operate the bus a safe distance from the curb to prevent other vehicles from passing on the right.



When angling toward the curb, the Operator must check his clearance with any vehicles which may be parked at the curb, and with line poles or other objects that may be located near the curb.

After reaching the loading zone, and just before making the final stop, the Operator must angle the front wheels of the bus away from the curb, and bring the rear end of the bus as close to the curb as possible. This action permits passengers to alight from the bus at the curb, does not block the street, and places the bus in a position to be pulled from the curb with the least amount of effort by the Operator.

Boarding Passengers

When passengers are boarding the bus, the Operator must make certain that the passengers are clear before closing the doors. The Operator will request passengers entering the bus to step to the rear of the bus to prevent the front of the bus from becoming overcrowded. He will also make certain that the bus aisles are kept clear of such tripping hazards as packages or suitcases.

If snow is on the ground, incoming passengers will cause snow to pile up on steps and platforms, creating an accident hazard. The Operator must keep the steps and platforms clean and may use sand if the steps are icy. However, sand must not be used on treadle-operated steps, as sand will clog the mechanism, preventing the door from operating properly.

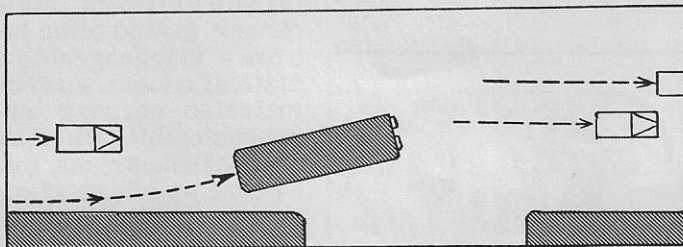
Alighting Passengers

When passengers are leaving the bus, the Operator must make certain that all passengers are clear before closing the doors. On buses equipped with rear treadle-type doors, the Operator must make certain that the rear doors remain open while passengers with packages or small children are getting off the bus. To accomplish this, the Operator uses the door emergency switch, which opens the rear door and holds the door open.

The Operator must also be alert for passengers who may cross in front of the bus after alighting.

Pulling Bus from Curb

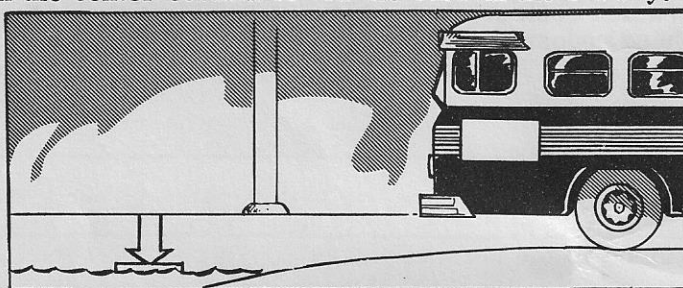
Before pulling the bus from the curb, the Operator must look ahead and to both left and right. He must check his rear view and side view mirrors to determine if there are vehicles approaching from the rear. He should wait for a gap in traffic before pulling from the curb.



The Operator must also be on the alert for vehicles and pedestrians who may cross in front of the bus. If vehicles or pedestrians have started to cross the intersection, they have the right to continue without interruption.

Flooded Subways

Before attempting to proceed through a flooded subway, the Operator must make certain that the water is not above the yellow "high water" mark painted on the center column or on the curb in the subway. If the water is not above the high water mark, the Operator will proceed with extreme caution and at a slow rate of speed through the subway.



If the water is above the "high water" mark or the "high water" mark cannot be seen, the Operator must call the Radio Dispatcher, inform him of the situation, and ask for a decision on what action to take.

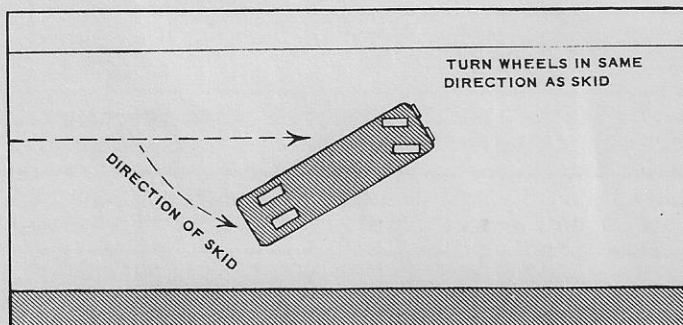
Winter Driving

When operating on streets that are covered with snow or ice, the Operator must increase the distance between his bus and the vehicles ahead. This additional distance provides a safety margin needed to avoid making fast stops which can result in slides or skids.

When streets are extremely icy, the Operator must keep his bus parallel with the curb to prevent sideslips and to afford better traction.

When starting the bus on slippery streets, the Operator must accelerate slowly to prevent the wheels from spinning. If the wheels spin and hit a dry spot on the pavement, serious damage to the clutch, transmission, and axle can result.

When stopping the bus on slippery streets, the Operator should "pump" the brake pedal gently. If the brake pedal is depressed with too much force, the rear wheels will lock, and the Operator will lose control of the bus.



If the bus goes into a skid, the Operator must turn the wheels in the same direction that the rear of the bus is skidding, and "pump" the brake pedal gently.

Safeguarding Pedestrians

The Operator must operate with special caution to safeguard pedestrians. There are many types of pedestrians who are unpredictable in what they are going to do next. The old folks often get confused; the young children have no



conception of what danger is and often become unmanageable at critical times; and intoxicated persons are unpredictable all of the time. Pedestrians may cross at intersections against the traffic signal, step off the curb into the path of the bus, cross the street in midblock, or move from behind or between parked vehicles. Pedestrians may also

have physical or mental defects which are not apparent. On rainy days some pedestrians use umbrellas which obstruct their view and some are uncomfortable from getting wet. These pedestrians take many unnecessary chances.

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There is no handwriting or other markings on the paper.

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