

**EMPLOYEES'
GUIDE
TO
EQUIPMENT
TROUBLE**

**BUS TROUBLE
RADIO TROUBLE**

SUPERVISORS' COPY

METROPOLITAN



TRANSIT

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BUS TROUBLE

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FOREWORD

TO OPERATORS:

Part of your responsibility is to eliminate unnecessary road calls. Whenever you have equipment trouble, refer to this book and follow the instructions. If the trouble is not covered in the book, call the Radio Dispatcher for instructions.

Any time it is necessary to call the Radio Dispatcher and the bus is equipped with Monitor-CTA, use the bus-radio. Remember - the ignition must be "on" for the bus-radio to work; reception is best when the engine is running.

Make entries on the Sign In Sheet, Trip Sheet and Bus Defect Card as to the condition of all buses operated during the course of the day.

TO SUPERVISORS AND RADIO DISPATCHERS:

Part of your responsibility is to eliminate unnecessary road calls. Before calling for a repair car or replacement bus, be certain that you and the Operator have done everything you can to correct the trouble.

Printed in Red in this book are special instructions that you must follow and cautions that you must pass on to an Operator.

If the last item for Operators reads, "Call Radio Dispatcher for instructions" and there is no special information printed in Red, instructions to the Operator should be:

1. Put passengers on following bus.
2. Wait for repair car or replacement bus.

If the last item for Operators reads, "Call Radio Dispatcher at first opportunity," a repair car or replacement bus should be sent if it is necessary in the judgment of the Supervisor or Radio Dispatcher.

When allowing a bus with a defect to continue in service, use good judgment. Take into account such factors as the seriousness of the defect, the time of day, the weather conditions, the traffic conditions, and the ability of the Operator.

BUS TROUBLE

1. ACCELERATOR PEDAL CAN BE DEPRESSED BEFORE REAR DOORS CLOSE

- Make certain that door interlock switch is "on"
If accelerator pedal can still be depressed before rear doors close,
 1. Curb bus
 2. Call Radio Dispatcher for instructions

SUPERVISOR OR RADIO DISPATCHER:

1. Call for repair car or replacement bus
2. Instruct Operator to continue in service to meet repair car or replacement bus and to depress accelerator only when positive all doors are closed

2. ACCELERATOR PEDAL CANNOT BE DEPRESSED AFTER REAR DOORS ARE CLOSED

- Make certain that handbrake is fully released
- Make certain that door control lever is in neutral position
- Pull the red emergency knob down, then push it all the way up
- Make certain that doors have closed completely - pull doors closed

If accelerator pedal still cannot be depressed although rear doors are closed,

1. Curb bus
2. Call Radio Dispatcher for instructions

SUPERVISOR OR RADIO DISPATCHER:

1. Call for repair car or replacement bus
2. Instruct Operator to put passengers on following bus, turn off "butterfly" valve, and drive with caution to meet repair car or replacement bus

3. ACCELERATOR PEDAL STICKS

- Turn engine off and apply foot brake
- Attempt to work pedal loose manually

If pedal cannot be worked loose, call Radio Dispatcher for instructions

4. AIR PRESSURE HIGH

- Check whether safety valve is popping

If valve is popping,

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1. Continue in service
2. Call Radio Dispatcher at first opportunity

If valve is not popping,

1. Curb bus
2. Call Radio Dispatcher for instructions

5. AIR PRESSURE LOW

• Attempt to raise air pressure

1. Stop bus
2. Turn off windshield wipers and open butterfly valve
3. Put shift selector in neutral
4. Fast-idle engine (1/3 throttle or fast-idle switch)
5. Observe air pressure gauge or indicating light

If air pressure gauge reading builds up to 75 lbs. or if indicating light goes out, continue in service

If air pressure gauge reading remains below 75 lbs. or if indicating light remains on, call Radio Dispatcher for instructions

SUPERVISOR OR RADIO DISPATCHER:

1. Call for repair car or replacement bus
2. Instruct Operator to put passengers on following bus
3. If air pressure is between 50 and 75 lbs., instruct Operator to drive with caution to meet repair car or replacement bus
4. If air pressure is below 50 lbs., instruct Operator to wait for repair car or replacement bus

6. AIR SUSPENSION FAILS (BODY TILTS OR STRIKES FRAME OR TIRES)

1. Curb the bus
2. Place shift selector in neutral
3. Place door control handle in farthest forward position
4. Open butterfly valve
5. Fast-idle engine (1/3 throttle or use fast-idle switch)

If bus body levels off, close butterfly valve and continue in service

If bus body does not level off, call the Radio Dispatcher for instructions

RADIO DISPATCHER:

1. Call for repair car or replacement bus
2. Instruct Operator to put passengers on following bus and wait for repair car or replacement bus

SUPERVISOR ONLY:

1. Check that filter petcock is in closed position
2. If bus body is clear of tires, instruct Operator to drive with caution to meet repair car or replacement bus
3. If bus body is not clear of tires, instruct Operator to wait for repair car or replacement bus

7. BACKFIRING REPEATEDLY (PROPANE ONLY)

1. Curb bus
2. Call Radio Dispatcher for instructions

8. BATTERY DISCHARGING

- Check whether indicator light is defective or whether battery is really being discharged

1. Curb bus
2. Place shift selector in neutral
3. Turn "on" dome lights
4. Open butterfly valve
5. Fast-idle engine (1/3 throttle or use fast-idle switch)

If lights brighten, indicator light is defective and battery is being charged, continue in service

If lights do not brighten, generator or regulator is defective and battery is being discharged

1. Continue in service
2. Do not shut off engine (may not start again)
3. Call Radio Dispatcher at first opportunity

9. BELL RINGS OR BUZZER SOUNDS CONTINUOUSLY - AIR PRESSURE NORMAL, NO INDICATING LIGHTS LIT

- Make certain that passenger is not exerting pressure on push-type door before door is set to be opened

If bell or buzzer continues to sound,

1. Continue in service
2. Call Radio Dispatcher at first opportunity

10. BRAKE PEDAL STICKS

- Attempt to work pedal loose manually

If pedal cannot be worked loose, call Radio Dispatcher for instructions

11. COOLING, NONE OR "A/C STOP" TELL-TALE LIGHT COMES ON

1. Continue in service
2. Move "air cond-heat" switch to "off" position
3. Place "vent" switch in "vent" position
4. Call Radio Dispatcher at first opportunity

12. DEFROSTER NOT WORKING

(Propane bus - make certain that damper switch is in proper position to direct air to windows). If visibility is not bad or windshield can be cleared by wiping

1. Continue in service
2. Call Radio Dispatcher at first opportunity

If visibility is bad and windshield cannot be cleared by wiping,

1. Curb bus
2. Call Radio Dispatcher for instructions

13. DESTINATION SIGN WILL NOT TURN - DISPLAYS IMPROPER DESTINATION

If bus will be used by your relief

1. Continue in service
2. Call Radio Dispatcher at first opportunity
3. Announce destination to boarding passengers

If bus will pull in to station

1. Continue in service
2. Announce destination to boarding passengers

14. DIRECTIONAL SIGNALS NOT WORKING

1. Continue in service
2. Use hand signals when making turns, changing lanes, or pulling from curb
3. Call Radio Dispatcher at first opportunity

15. EMERGENCY DOOR TROUBLE

- Make certain that emergency door handle is pushed all the way down

If light remains on and alarm continues sounding

1. Continue in service
2. Call Radio Dispatcher at first opportunity

If horn switch is "on" and horn still will not sound

1. Continue in service
2. Call Radio Dispatcher at first opportunity

25. HORN WILL NOT STOP SOUNDING

1. Shut off horn switch, pull horn fuse if possible, or remove horn button
2. Continue in service
3. Call Radio Dispatcher at first opportunity

26. INTERIOR LIGHTS NOT WORKING

If interior lights are not required, continue in service

If interior lights are not required but you know that bus is scheduled to remain out after dark

1. Continue in service
2. Call Radio Dispatcher at first opportunity

If interior lights are required

1. Curb bus
2. Call Radio Dispatcher for instructions

SUPERVISOR OR RADIO DISPATCHER:

1. If lights are required, call for repair car or replacement bus
2. Instruct Operator to put passengers on following bus and drive with caution to meet repair car or replacement bus

27. MARKER LIGHTS NOT WORKING

1. Continue in service
2. Call Radio Dispatcher at first opportunity

28. MIRROR (SIDE VIEW OR REAR VIEW) IS BROKEN

1. Continue in service
2. Call Radio Dispatcher at first opportunity

29. MIRROR (OTHER THAN SIDE VIEW OR REAR VIEW) IS BROKEN

- Continue in service

30. OIL PRESSURE LOW

1. Curb bus
2. Open butterfly valve
3. Observe low oil pressure indicating light while advancing engine speed from "idle" to approximately 1/2 full throttle

If low oil indicating light remains lit,

(Continued next page)

1. Shut off engine
2. Call Radio Dispatcher for instructions

SUPERVISOR OR RADIO DISPATCHER:

1. Call for repair car or replacement bus
2. Instruct Operator to put passengers on following bus and wait for repair car or replacement bus.

31. PASSENGER'S SIGNAL BUZZER SOUNDS AND CONTINUES SOUNDING

- Attempt to release cord or button

If cord or button will not release,

1. Shut off passenger's buzzer switch
2. Continue in service, using mirrors to check for passengers who wish to alight at exit door
3. Make announcements that buzzer is out of order
4. Call Radio Dispatcher at first opportunity

32. REAR DOOR FAILS TO OPEN

- Make certain door control lever is in proper position
- Make certain master door control switch is "on"

If door still fails to open

1. Continue in service
2. Advise passengers to exit at the front door
3. Call Radio Dispatcher at first opportunity

33. SLOW PICK-UP

- Make certain that handbrake is fully released
- Fuel shut-off valve may be partly closed (Propane bus only)
 1. Close valve completely
 2. Wait one minute
 3. Turn valve slowly until completely open

If acceleration is still slow, keep bus in service

34. STOP LIGHTS NOT WORKING

1. Continue in service
2. Use hand signals
3. Call Radio Dispatcher at first opportunity

35. TAIL LIGHTS NOT WORKING

1. Continue in service
2. Call Radio Dispatcher at first opportunity

36. TRANSMISSION TROUBLE - STUCK IN GEAR

- Place shift selector in neutral
- Touch starter several times with ignition turned "off"

If bus remains stuck in gear, pump brake pedal until air pressure is below 5 lbs.

If bus comes out of gear, do not move until air pressure warning light goes out or air pressure gauge has reached 75 lbs.

If bus still remains stuck in gear,

1. Shut off ignition
2. Call Radio Dispatcher for instructions

37. TRANSMISSION TROUBLE - WON'T SHIFT INTO "HIGH"

- Make certain that engine control switch is in full "on" position
- Check air pressure gauge

If air pressure is below 75 lbs., take actions indicated in Item 5, "Air Pressure Low" . . .

If air pressure is not low and bus still will not shift into high gear

1. Continue in service
2. Call Radio Dispatcher at first opportunity

38. WINDOW BROKEN

If hole is small and there is little danger of injury to passengers

1. Continue in service
2. Call Radio Dispatcher at first opportunity

If there is danger of injury to passengers

1. Turn seat nearest window upside down to prevent use of seat
2. Attempt to clear aisle of broken glass
3. Continue in service
4. Call Radio Dispatcher at first opportunity

39. WINDSHIELD WIPERS NOT WORKING

- Try starting wiper by hand

If rain is light and visibility is not bad,

(Continued next page)

1. Continue in service
 2. Call Radio Dispatcher at first opportunity
- If rain is heavy and visibility is bad,
1. Curb bus
 2. Call Radio Dispatcher for instructions

RADIO TROUBLE

40. BLUE "TRANSMIT" LIGHT REMAINS ON

41. CONTINUOUS LOUD NOISE FROM HANDSET

1. Continue in service
2. Call Radio Dispatcher at first opportunity

RADIO DISPATCHER:

1. Check voice and data channels for interference
2. If radio is causing interference, call for replacement bus; instruct Operator to continue in service to meet replacement bus
3. If radio is not causing interference, instruct Operator to continue in service; notify garage of the defect

SUPERVISOR ONLY:

1. Check with Radio Dispatcher to determine if radio is causing interference
2. If radio is causing interference, instruct Operator to continue in service to meet replacement bus
3. If radio is not causing interference, instruct Operator to continue in service

42. HOT HANDSET CORD OR SMOKE FROM RADIO EQUIPMENT

1. Curb bus
2. Turn "master control" switch to the "stop" position
3. Call Radio Dispatcher on a public or CTA telephone for instructions

SUPERVISOR OR RADIO DISPATCHER:

1. Call for replacement bus
2. Instruct Operator to put passengers on following bus and wait for replacement bus

43. BLUE "TRANSMIT" LIGHT OUT WHEN TRANSMITTING

44. CHANNEL LIGHT(S) OUT WITH IGNITION ON

45. DAMAGED CONTROL HEAD ANTENNA

46. DAMAGED HANDSET

47. FALSE CALL SIGNALS

48. UNABLE TO CONTACT RADIO DISPATCHER OVER RADIO

1. Continue in service
2. Enter defect on Sign In Sheet, Trip Sheet and Bus Defect Card at station when run is completed

SUPERVISOR'S NOTE: WHEN RADIO DISPATCHER REPORTS THAT A RUN IS NOT REPLYING, CHECK THE FOLLOWING:

1. Does bus have a radio unit?
2. Was run number set correctly in control head?
3. Was handset resting properly in cradle?
4. Can you contact Radio Dispatcher over radio?

NOTIFY RADIO DISPATCHER OF YOUR FINDINGS

CHICAGO TRANSIT AUTHORITY
TRAINING AND PUBLIC SAFETY DEPARTMENT
REV. 8/73