

# ATO Doors

## Objective:

Given a train approaching a station, trainee shall demonstrate the procedures to berth at the proper location, complete door cycle, and depart station.

Criteria: Train berthed at the proper location, opened and closed doors and ensured all passengers entered and exited the train safely, proper announcements made, and the train departed with proper lookback.

## Prerequisites

- Operating the train in ATO
- Identifying arriving station
- Operating the communication panel

## References:

TOM 215, 304, 310, 318, 402, 420, 901, 904  
OR&P 5603

## Practice:

ATO Doors Jeopardy Cards

## Performance Exams:

ML PE 1, ML PE 2, Mainline Checkout

## Examinations:

Exam 3

## Introduction:

Every day on every train at every station, BART passengers board and off board trains. It is your responsibility to ensure the safety of all the passengers on your train and all of the passengers waiting to board your train.

This lesson will describe the procedures you will follow when entering and exiting the station in automatic mode and the proper procedures for observing the passengers boarding and off boarding the train. We will also discuss public address announcements. On mainline, you will operate the train into stations, make PA announcements, watch doors, and depart the station properly.

You will be expected to perform normal ATO door operations during performance exams before going on OJT and again during the mainline portion of the final checkout.

## Prior to Arrival

Prior to the station arrival, you will make a station arrival announcement. This should be made at least 1000 feet prior to the station. <sup>TOM 901c</sup> There are Station Arrival signs but your announcement should be completed by the time you reach the sign. This announcement may be made as soon as you see the station to give you plenty of time to prepare for the station arrival. If the station is less than 1000 feet away (ie between 19th and 12th Street, or between Embarcadero and Montgomery stations), then make it as soon as you depart the station. <sup>TOM 901d</sup> An example of the announcement: is

*"The next station is Concord,  
Concord Station."*

State the announcement slowly and clearly.



Station Arrival Sign

## Arrival

As you approach the station platform, position your hands: left for the horn and the right over the stop button. You can see the trackway and station platform before you enter and make sure they are clear. When arriving at the station, sound the horn. **TOM 304b** Once you have sounded the horn, keep your hand near the Door Close Bar in case the train stops short. Your right hand should be over stop button in case you need to quickly stop the train. As you enter the platform, watch the edge of the platform for patrons too close and the trackway for any hazards or obstructions.

Check that the platform destination sign is displaying the correct destination. **TOM 904** If it states "Train Won't Stop", be prepared to stop the train yourself. **D car: your first green bracket should appear when the train enters the platform.** If it states the wrong destination, be prepared to make additional ADA announcements while doors are open to allow for correct passenger boarding.

Ensure that train comes to a stop at the platform. **TOM 402a** If train does not appear to be stopping, depress the stop button. (We'll talk about how the train gives clues when it won't stop in the station later in the Program Stop Failure lesson)

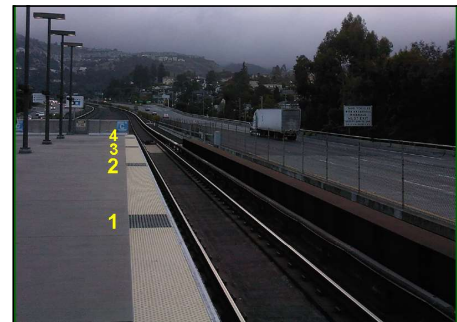
As the train is stopping at the station platform you will want to verify it is stopping at the proper berthing location. **TOM 402b** **D car: as the train enters the platform, the Distance to Stop: annunciator will begin to count down from 700 feet, Your trailing green bracket will appear when the trailing Program Stop antenna is within the platform.** The train normally stops at the programmed position that corresponds to the length loaded with the Train Length Selector Switch, **Train Length: annunciator and the Train Configuration.**

**Note: Door Markers on station platforms are being removed, except for the last door marker. Proper berthing will be discussed further as that situation changes.**

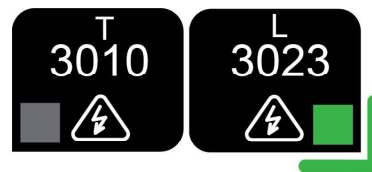
How do you know you are stopped at the correct position? Count the door markers on the platform remaining in front of the train. The number of door markers in front of the train depend on the length of your train as follows:



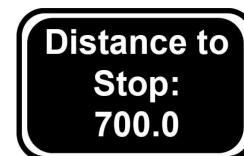
Hands over Stop Button and Horn



4 door markers ahead--good for a 6 or 7 car train  
Note: door markers are being removed



Bracket shows lead car in platform





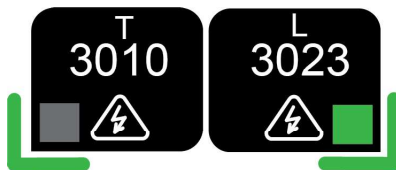
Door Open present--now make ADA announcement

- 8-9 car train has 2 markers in front
- 6-7 car train has 4 markers in front
- 3-5 car train has 6 markers in front

If the train has not stopped at the proper position, *i.e.* it stopped short of the proper position, you will have to reposition the train to the 10 car marker and the end of the platform. (*More on this procedure in the Stop Short & Reposition lesson.*) If the train has stopped too far but is still in the platform, the doors will still open automatically.

### Door Cycle TOM 310

When the train has stopped at the proper position, watch for the **DOOR OPEN** annunciation to appear. **D car: the Train Berthed annunciator will turn green, and the Door Open Left of Right, depending on the platform. The Modified by: indicator will show DOOR OPEN, and Door Transm: annunciator will show OPEN.** Once the **DOOR OPEN** annunciator is present, make the ADA announcement. This is a two part announcement and must be said in this order: the current station name, and the final destination of the train. TOM 901e This must be stated once the train doors are open. Examples of an ADA announcement:



Brackets show train in platform



D car Door Open Annunciators



Modified by: Indicator



Door Transmission Indicator

- "This is a Daly City station. The final destination is Millbrae."
- "This is Orinda station. This is an SFO bound train."

This announcement is for passengers standing on the platform and those boarding. If the destination sign is malfunctioning or displaying wrong information, you will continue to broadcast this ADA announcement until you close the doors.

Now that the doors are open, go to the platform side window and observe passengers exiting and entering train. Look out through the open window on the platform side and check passengers have safely entered or exited train. Ensure that you allow time for wheelchair and/or handicapped patrons to board or off board safely. Check that the safety zone is clear. Watch the platform and passenger during the entire door dwell. The door dwell is the time between when the doors are open and the signal to close the doors. Generally this is about fifteen seconds, but can be more if your train is running ahead of schedule or less if you are behind schedule.

So how do you know when to close the doors? When the computer sends a door release (the dwell is up), the train will receive a door chime. This is a beeping sound coming from inside the console. The door control console will also light up amber. If the train does not receive a release within 60 seconds, contact Central. <sup>TOM 310d</sup> Example of call:

*“Central, train 365, Colma-2, standing by for a release.”*

### Lookback

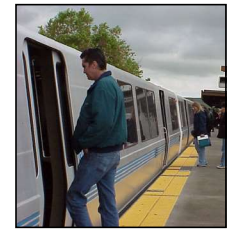
Now that you have a release, you will close the doors using the Door Close Button at the platform side. Before closing the doors, ensure the platform is clear and that all passengers have boarded and off boarded safely. Check the trackway and platform in front of the train is clear. Once the side of the train is clear, close the doors by depressing the Door Close Button on the platform side while watching the platform. <sup>TOM 310a4</sup> Watch that the amber trouble lights, **or the red door light on a D/E cars**, go out. *(If one or more stay on, you may have a Door Open problem—we’ll cover that later).* Keep your hand over stop button in case you need to stop the train in a hurry.

Watch the platform as train begins to move. Ensure all passengers are still clear of the doors and side of the train. <sup>TOM 310a4</sup> Check in front of train again for obstacles or unusual conditions. Check back along side of train again before bringing head inside and returning to your seat. **Note: This is the only time Operator’s head is extended out the cab window while the train is in motion.** <sup>TOM 215</sup> Now return to your seat to watch the trackway ahead.

It will be unsettling at first to have the train move while you are not in your seat. However, it is very important to be watching the side of the train as it begins to move. There is no defined time to have your head out watching, or distance of the train moves on the platform. You need to keep it out long enough to ensure that no one is being dragged by the train. It is possible for thin items to be stuck in the doors and not cause a **DOOR OPEN** annunciator to light. The train can then move and drag whatever is stuck. There have been a few occurrences of train operators dragging a patron down the platform. Don’t be one of them! Also, if you see anyone waving forcefully on the platform while you are doing your lookback, stop the train. <sup>OR&P 5603</sup>



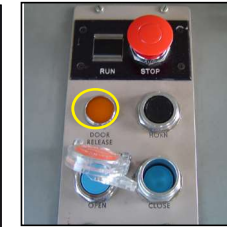
Lookback



Passengers boarding



Lookback checking platform is clear



Door Release Light



Door Close Button

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Now that you are in your seat again and heading toward the next station, think about the name of that station and whether it is a transfer station. Also think about what interlockings you may encounter between the stations and the routings through the interlocking. That way you know where you are at all times and even if you stop short of the gate sign, you'll be able to describe to Central where you are.

**Entering crowded platform** TOM 420

When approaching a station platform that is crowded you need to use extra caution. Sound the horn a few extra beeps. If necessary, stop the train short of the station and contact Central for road manual instructions to enter the station.

**At the end of the line** (last station)

When you are approaching the last station on your run, announce that it is the last stop and tell whether the train will remain in service and return or be out of service and everyone must off board. Keep the radio power on until ready to key off. This will ensure the door chime is heard within the train. The door chime sounds in the cars as a warning that the doors are about to close. TOM 310f At the end of the door cycle, go MCSS off, key off, turn off communication power, close the windows and door, and take all of your belongings. Sweep the train if you are out of service. TOM 318

**New Vocabulary from this Lesson:**

Berthing position	Door Release
Door Chime	Lookback
Door Dwell	Release
Door Markers	Safety Zone

# Performance Standard

## ATO Doors

- Make arrival announcement 1000 ft before station

Console Readiness ( describe as required ):Horn ( when entering the platform )

- Right hand over stop button
- Left hand near Horn (Door Close Bar)

Observation of Platform ( describe as required ):

- Check platform & trackway for passengers or obstructions/hazards
- Check the Destination sign reads correctly
- Feel the train is stopping
- **Lead car green bracket appears**
- **Distance to Stop: begins count down**
- Train stopped at the correct berthing (the correct number of door markers in front of train)
- **Trail car green bracket appears**
- Doors have opened (DOOR OPEN/ **Door Open Left of Right** annunciator is lit)
- Make ADA announcement

When doors are open at station platform ( describe as required ):

- Observe passengers entering and exiting train
- Watch for passengers with disabilities
- Listen for the release
- Check the trackway and platform ahead of train

Closing Doors ( describe as needed ):

- Passengers are clear of doors
- Platform and track way clear in front of train
- Amber/**Red** lights go out when doors are closed

Lookback ( describe as required ):

- Hand is over the stop button
- Observe the passengers are clear of doors
- Observe the passengers are away from the side of the train
- Platform and trackway are clear in front of the train
- Think about what the last station was and think of what the next station will be.