

# **Module 4 Tab Goes Here**

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# Brake System Safety Standards for Freight

Subpart D - Periodic Maintenance and Testing Requirements

Module 4

## Module Objectives

- List the events that would trigger a Single Car Test
- Differentiate between major repair and minor repair

## Subpart D

- Scope – 232.301
- General requirements – 232.303
- Single car air brake tests – 232.305
- Modification of the single car air brake test procedures – 232.307
- Equipment and devices used to perform single car air brake tests – 232.309

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## General requirements

### Major repair vs. minor repair

Major repair means repair work requiring more than four person-hours to accomplish or would involve the use of specialized tools and equipment.

Examples include,

- Coupler replacement
- Draft gear repair.
- Wheel change out, (excludes intermodal facilities).

Minor repair means, other than major repairs and can be accomplished in a short period of time with limited tools and equipment.

Examples include,

- Straitening bent safety appliances.
- Air hose replacement.
- Knuckle or knuckle pin replacement.

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## General requirements

### Shop or repair track

- Shop or repair track is:
  - A fixed repair facility or track designated by the railroad as a shop or repair track.
  - A fixed repair facility or track which is regularly and consistently used to perform major repairs.
  - Track which is used at a location to regularly and consistently perform both minor and major repairs where the railroad has not designated a certain portion of that trackage as a repair track.

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## General requirements

### Shop or repair track - continued

- A track designated by a railroad as a track where minor repairs will be conducted or used by a railroad to regularly and consistently perform minor repairs during the period when the track is used to conduct major repairs; however, such trackage is considered a shop or repair track only for each car receiving major repairs on such trackage and not for a car receiving only minor repairs.
- The facilities and tracks identified above and on the previous slide shall be considered shop or repair tracks regardless of whether a mobile repair vehicle is used to conduct the repairs.

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# General Requirements

## Translation

- Railroads that place cars in need of minor repairs on a shop or repair track where major repairs are consistently performed will subject the car to periodic brake maintenance, (i.e., PT adjustment, brake components properly secured, etc.)
- Conversely, railroads that place cars in need of major repairs on a “expediter track” a track that is consistently used for minor repairs will not affect the “expediter track” status of that track, meaning only cars in need of major repairs will be subject to periodic brake maintenance, cars in need of minor repairs will not be subject to periodic brake maintenance.

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# Single car air brake tests

## Discussion

Refer to matrix

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## Alternative to SCT Special approval procedure

Railroads can petition FRA under §232.17 to depart from conventional methods of single car testing. The alternative SCT must provide an equivalent level of safety and contain all the elements discussed in Module 1.

## Modification of SCT procedures

Simply put, this section is the mechanism by which railroads can petition FRA to change any step or procedure within existing SCT procedures.

## SCT devices

- Retains previous testing intervals:
  - Daily test each day device is used.
  - Calibration once every 92 days of gauges, flow meters, orifices etc., on mechanical devices.
  - Electronic devices require calibration once every 365 days.
  - Clock starts once device is placed in service, but devices have no more than one year of shelf life.
  - All devices require disassembly and cleaning no less than 365 days after being placed in service.

## SCT Movement Provision §232.303(e)

- Permits movement of car to **next forward** location for cars in need of SCT following certain repairs to the air brake system (see matrix), or replacement of wheel set due to certain wheel defects (see matrix).
- Inability to perform a SCT does not constitute an inability to make the necessary repairs.
- Contains tagging requirements similar to §232.15

Note: Cars overdue SCT are moved under the provisions of §232.15 to the **nearest location** where SCT can be performed.

# End of Module 4