



ROLLING STOCK INSPECTION

Use **MARRS Form 3, Bad Order Car Report**, to record problems with Rolling Stock
Refer to “*Helping Your Rolling Stock Behave Properly*” for best practices

BODY & CHASSIS

INSPECTION

- Inspect visually; test manually
- Use care when testing so as not to loosen or break off parts
- Tools: magnifying glass, small scale, flashlight, foam car cradle

STANDARDS

- No loose parts (doors, etc.)
- Check for any missing parts or details
- Secured removable loads that do not shift or fall off during operation
- Weight should be balanced in order to maintain the lowest possible center of gravity as appropriate to the length and type of car. Supplementary weight added to bring the car to optimum standards should be kept as low as possible. Refer to NMRA RP 20.1 for further guidance.

COUPLERS

INSPECTION

- Test manually
- Use powdered graphite to lubricate parts as needed
- Tools: coupler gauge, small screwdrivers, needle-nose pliers, trip pin (J-pin) pliers, inspection track (minimum length: room for 2 cars & coupler gauge)

STANDARDS

- Alignment must conform to NMRA, Kadee®, or other commercially available coupler gauge
- Centering springs must work freely; coupler must return to center position
- Knuckle springs must work freely; knuckle must return to closed position
- Trip pin (J-pin) must clear step on gauge
- When coupled, no more 20% mismatch in knuckle height is allowable

WHEELS & FLANGES

INSPECTION

- Inspect visually
- Check wheel gauge, tread width, & flange depth against NMRA standards gauge
- Clean wheel treads as necessary
- Elevate one end of a 25"-long test track by ½" - car must start rolling without being pushed
- Tools: NMRA Standards gauge, cleaning solution & applicators, test track (suggested length: minimum 25")

STANDARDS

- Must conform to NMRA Standards Gauge
- Wheels treads must be clean
- Wheels must be square to axles
- Car must roll freely down a 2% grade

Trucks

INSPECTION

- Inspect visually, test manually
- Ensure the truck bolster is not twisted; check truck bolster and body for flash
- Tighten all truck mounting screws all the way down, then loosen by ¼ to ½ turn so that one truck turns freely without wobbling, while the other truck turns freely and can rock slightly from side-to-side
- Ensure weight is centered over trucks
- Tools: NMRA Standards gauge, small screwdrivers, test track (suggested length: minimum 25")

STANDARDS

- Trucks must swivel freely
- Car must not rock excessively
- Trucks must be equalized (all wheels touch rail at once)

NMRA: National Model Railroad Association - **RP:** Recommended Practices
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