



Car Repair Notes



Basic Tools:

- Kadee - Height Gauge P/N 205, Kadee - Pliers P/N 237
- Kadee - Grease-em P/N 231
- Kadee Washer Spacers - P/N 208 = 0.015" (Red), P/N 209 = 0.010" (Black)
- NMRA Standards Gauge HO
- Micro Mark - Truck Tuner P/N 82838
- Postal Scale
- NWV Weight Card - Based on NMRA HO Weight Standards
- Small Screw Driver Set - Phillips & Flat Blade
- A-Line Bulls Eye - P/N 11000 or 11003 Drill, Trap & Screws

Inspection / Repair Process

Floor - Replace If Needed

- Check Floor - Must Be Flat & Level

Weight

- Check Weight Against NMRA Standards - Use NWV Weight Card
- Add Weight As Needed to Achieve Minimum Weight

Trucks - Replace Failing Trucks / Wheel Sets as Needed

- Check Swivel - Need Smooth Horizontal & Vertical Play
- Check Wheel Tread Width - Use NMRA Standards Gauge
- Check Gauge For Each Wheels Set - Use NMRA Standard Gauge
- On Each Truck: Check All Four Wheels Are On A Single Plane
- Check that All Axles Are Free Rolling - Use Micro Mark Tool To Remove Binding

Couplers - Replace / Remount Failing Couplers as Needed

- Use Kadee Metal Couplers - For Highest Reliability
- Check That Coupler Is Securely Mounted To Car - A-line Bulls Eye Tool
 - Screw Mounts Are Preferred Over Glued or Snap On Coupler Boxes
- Check Coupler Height - Use Kadee Gauge - Add Kadee Spacers as Needed
- Check That Air Hose Is Not Too Low - Adjust With Kadee Pliers
- Check That Knuckle Spring Is In Place & Working - Replace If Needed
- Check Coupler Side to Side Swing - Apply Grease-em To Coupler Box End

Test Completed Car - Finished Car Should Be De-Railment Free

- Roll Car Along Track By Hand
- Push Car With Loco thru Turnouts & Up Hill