



INDUSTRY-RAILWAY
SUPPLIERS, Inc.

Track Gauge User Manual

Green Level Board



P / N - IRS315

INDUSTRY-RAILWAY SUPPLIERS, INC.

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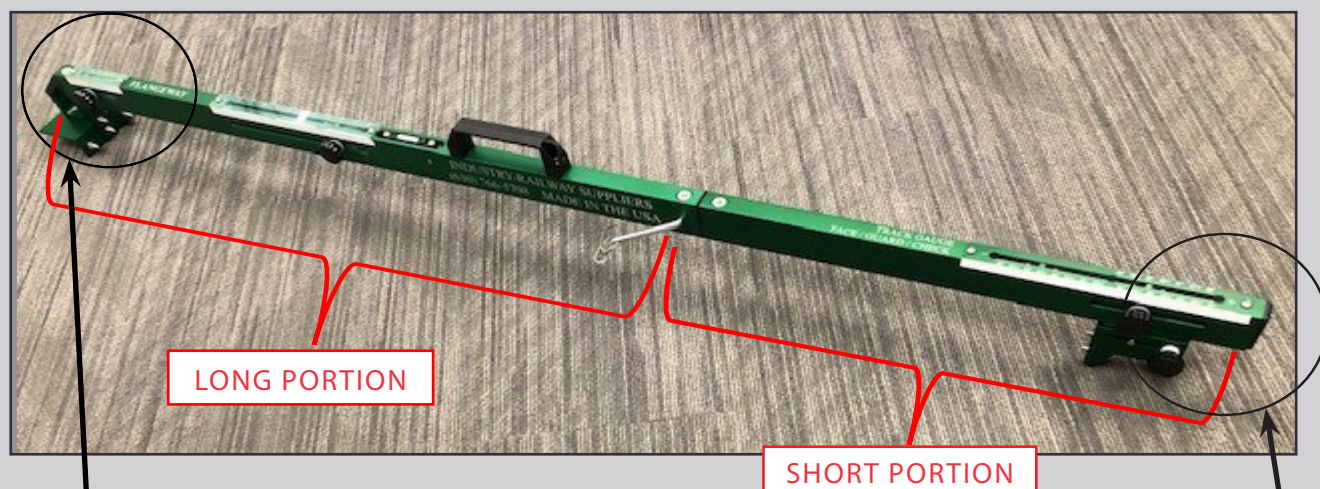
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CONTENTS

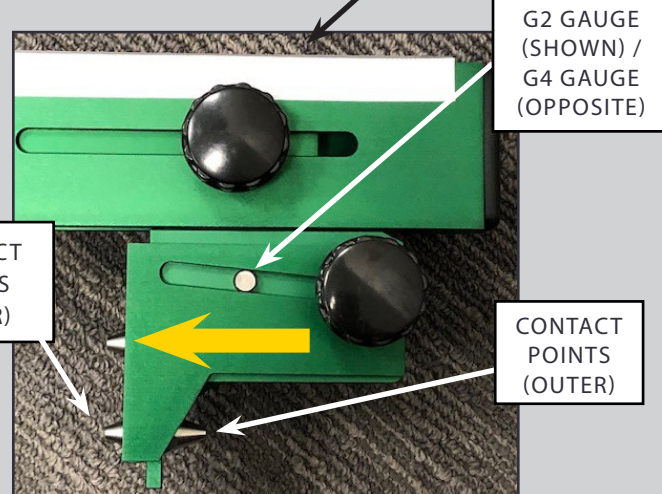
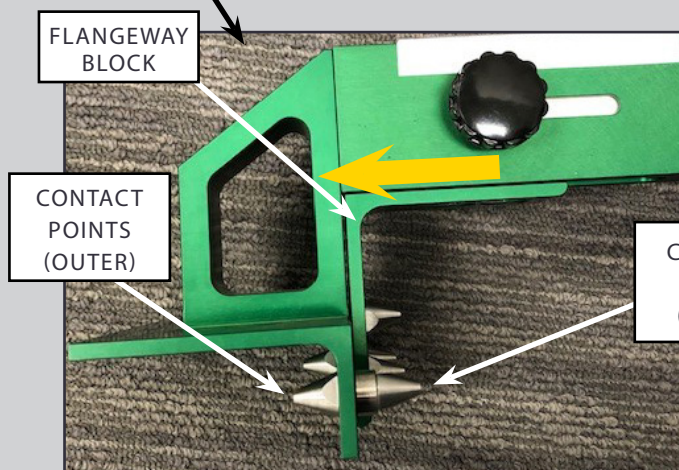
Nomenclature / General Notes.....	3
Assembly / Disassembly Instructions.....	4
Track Gage Measurement	5
Guard Check Gage Measurement	6
Guard Face Gage Measurement.....	7
Flangeway Measurement.....	8
Elevation Measurement	9
Switch Point Inspection – AAR 1B Wheel Contact Gauge (G2)	10
Switch Point Inspection – Switch Point Gauge Face Wear Angle Gauge (G4)	11
Calibration Instructions.....	12
Parts Diagram	13

Nomenclature / General Notes



WIDE (FIXED) END

NARROW (MOVEABLE) END

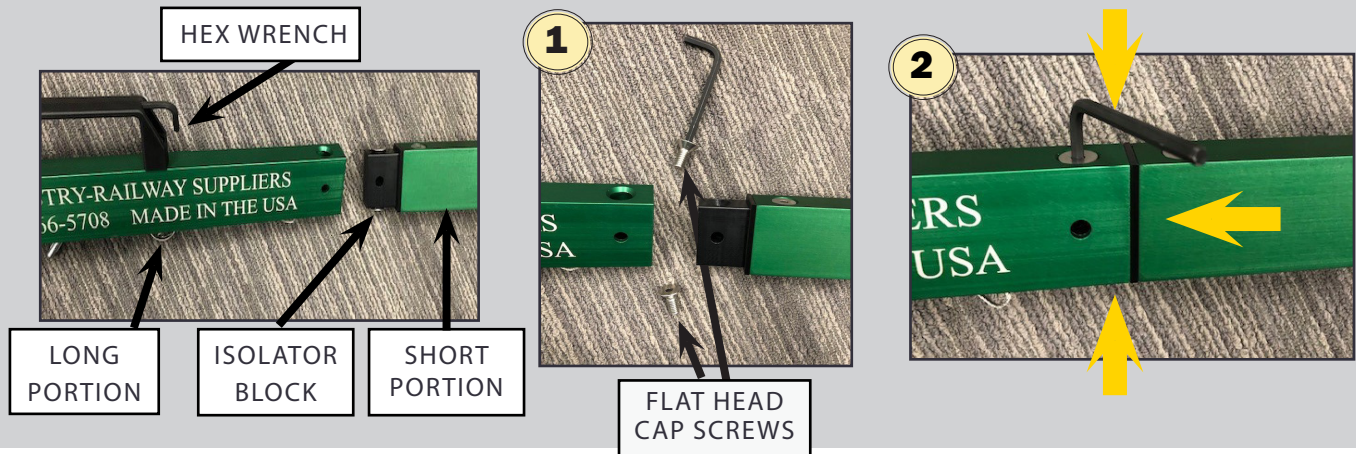


To prevent interference of the flangeway block and G2 / G4 gauges with contact points (which may result in erroneous readings), ensure that flangeway block and G2 / G4 gauges are in the retracted positions when not in use and that contact points are exposed.

Assembly Instructions

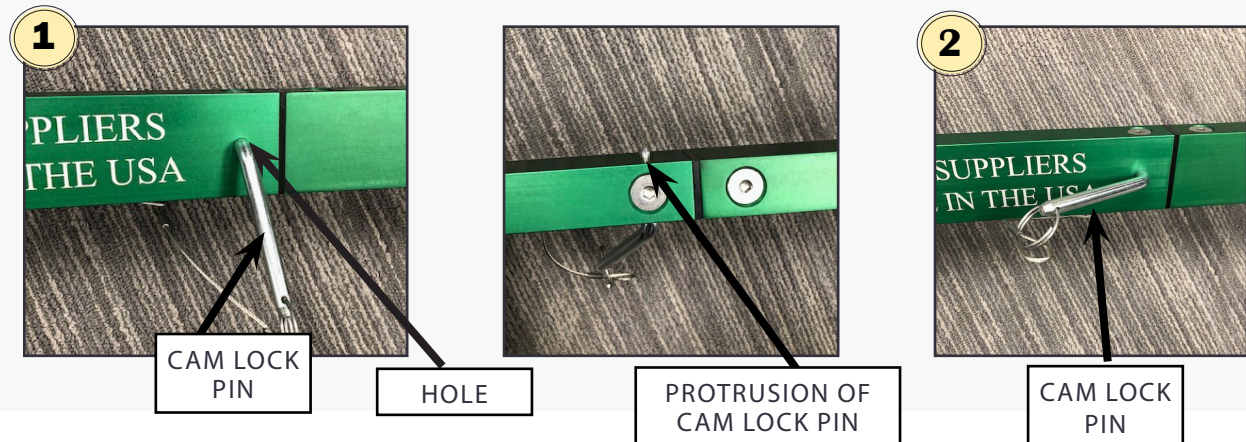
ONE or BOTH of the following options may be used to assemble the gauge.

OPTION 1 - ASSEMBLE THE GAUGE USING FLAT HEAD SCREWS



1. Remove the hex wrench from the handle and use it to remove the two flat head cap screws from the exposed end of the isolator block.
2. Insert the short portion into the long portion. Reinstall and tighten the flat head cap screws.

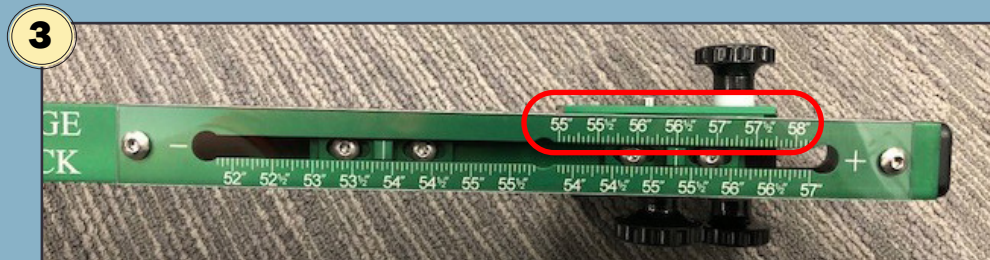
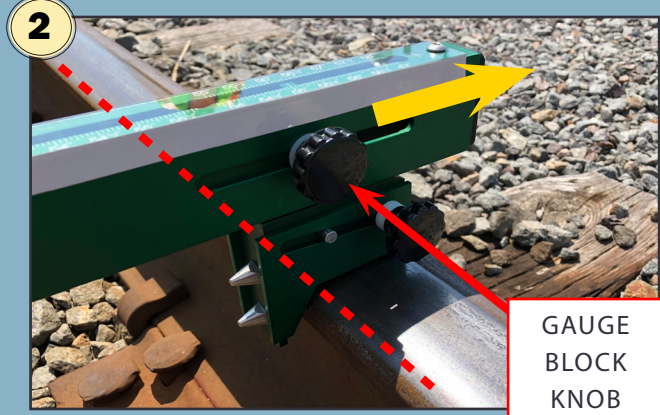
OPTION 2 - ASSEMBLE THE GAUGE USING THE CAM LOCK PIN



1. Orient the cam lock pin so that it is perpendicular to the main axis of the gauge and insert it into the hole in the front side of the gauge until it is protruding out the back side.
2. Rotate the cam lock pin approximately 90 degrees clockwise until firm resistance is felt.

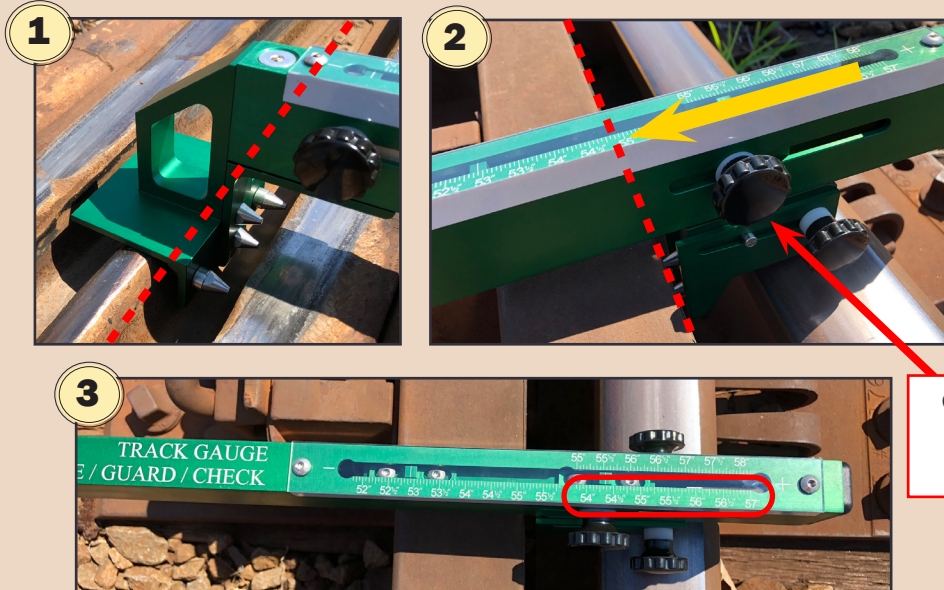
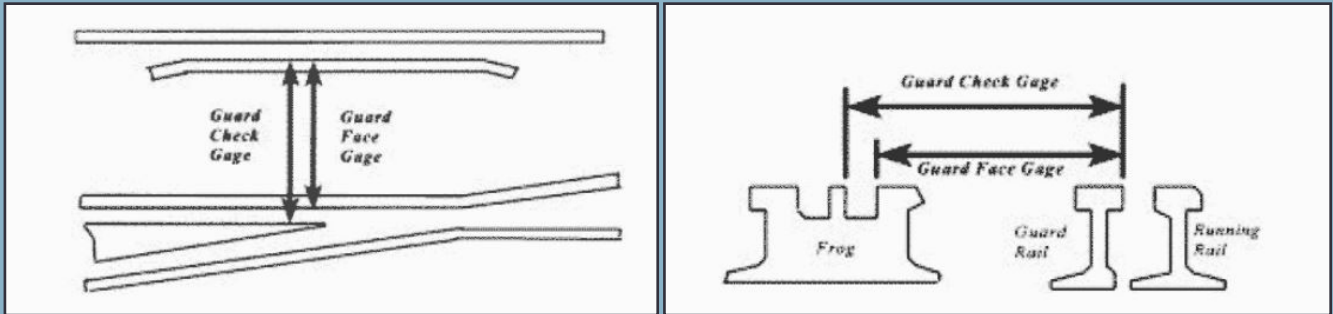
Reverse procedure/s for disassembly.

Track Gage Measurement



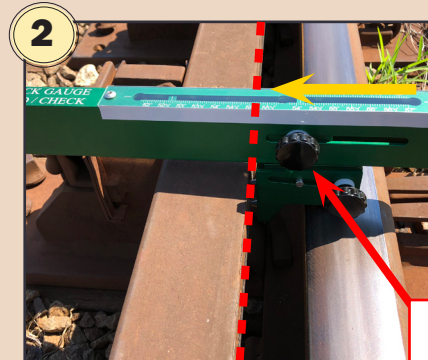
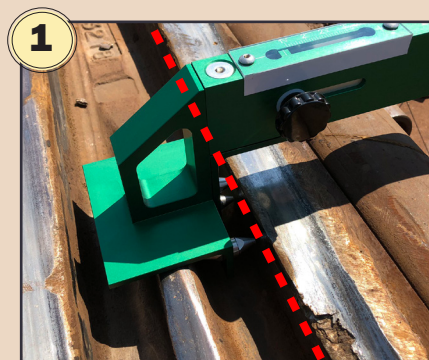
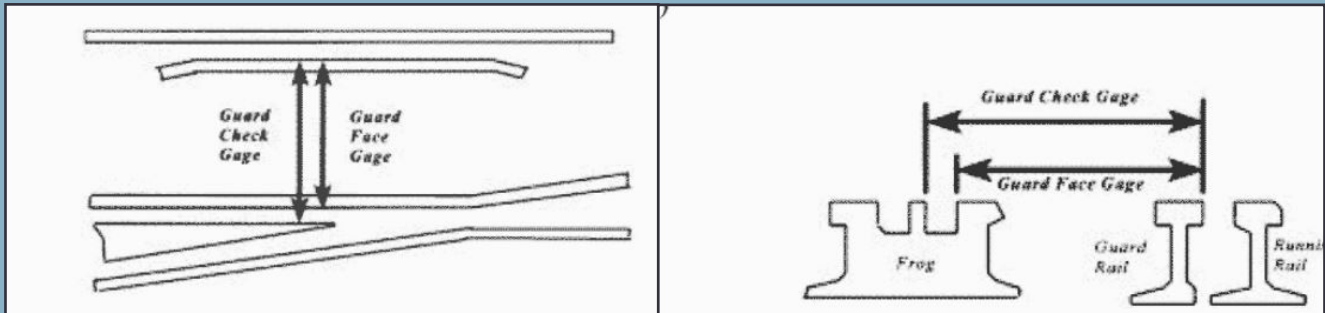
1. Hold handle and push outer contact points on wide fixed end of gauge into contact with inside head of first rail. Bottom surface of wide fixed end should sit on top of first rail. Maintain gentle force on handle to ensure that contact points remain in contact with first rail.
2. Lower gauge between rails, loosen gauge block knob and slide narrow moveable end until outer contact point contacts the second (opposite) rail. Bottom surface of narrow moveable end should sit on top of second (opposite) rail.
3. Tighten gauge block knob and read measurement on "Track Gage" scale.

Guard Check Gage Measurement

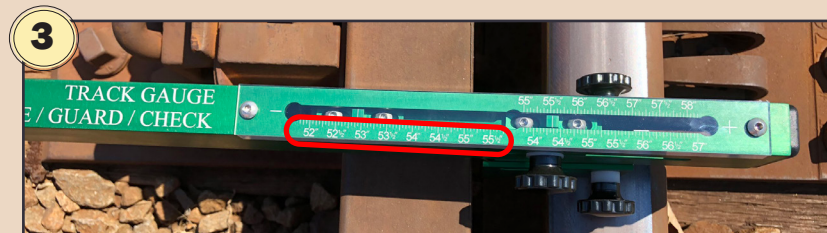


1. Hold handle and push outer contact points on fixed end of gauge into contact with frog gage line. Bottom surface of fixed end of track gauge should sit on top of frog. Maintain gentle force on handle to ensure that contact points remain in contact with frog gage line.
2. Lower moveable end between guard rail and running rail. Loosen gauge block knob and slide the moveable end until inner contact points contact the guard rail. Bottom surface of moveable end of track gauge should sit on top of guard rail.
3. Tighten gauge block knob and read measurement on "Guard check" scale.

Guard Face Gage Measurement

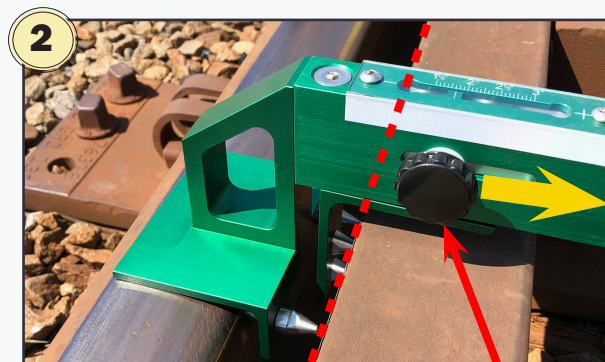
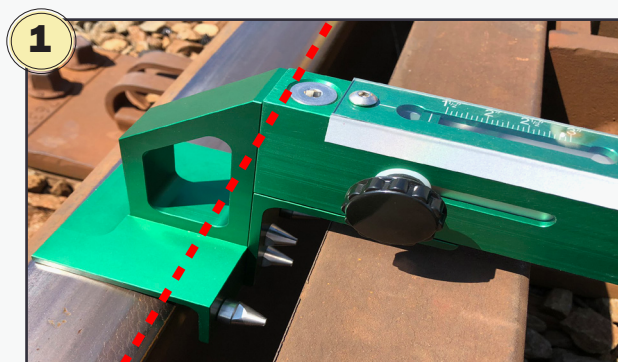
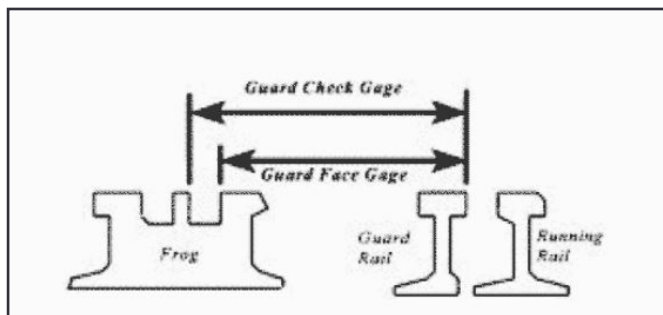
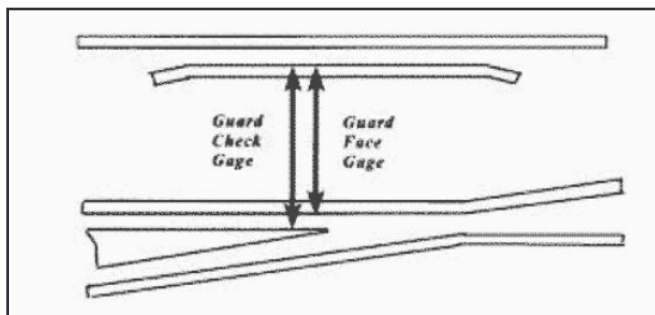


GAUGE
BLOCK
KNOB



1. Hold handle and pull inner contact points on fixed end of gauge into contact with frog field side flangeway. Bottom surface of fixed end of track gauge should sit on top of frog. Maintain gentle force on handle to ensure that contact points remain in contact with frog field side flangeway.
2. Lower moveable end between guard rail and running rail. Loosen gauge block knob and slide the moveable end until inner contact points contact the guard rail. Bottom surface of moveable end of track gauge should sit on top of guard rail.
3. Tighten gauge block knob and read measurement on "guard face" scale.

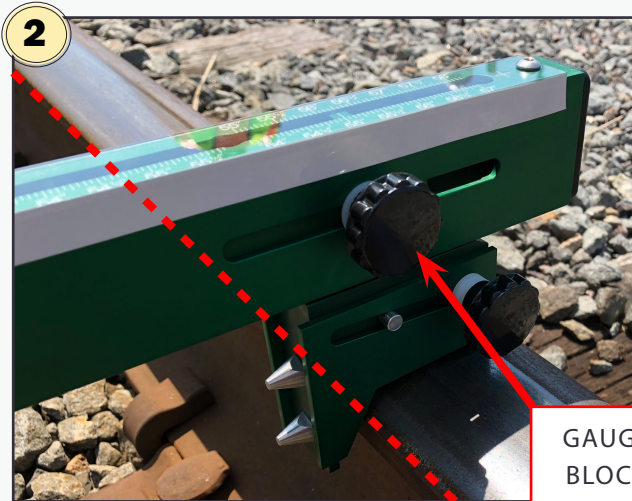
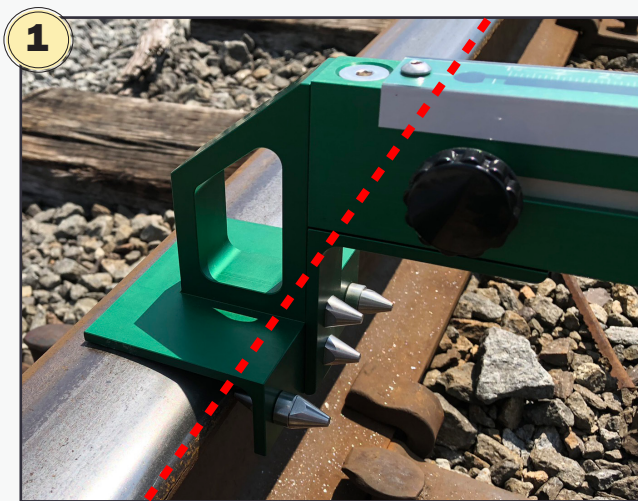
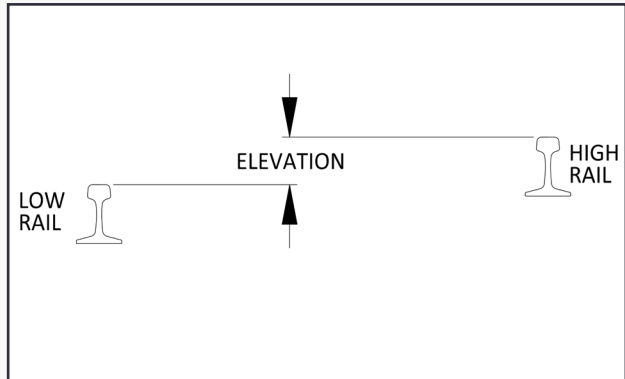
Flangeway Measurement



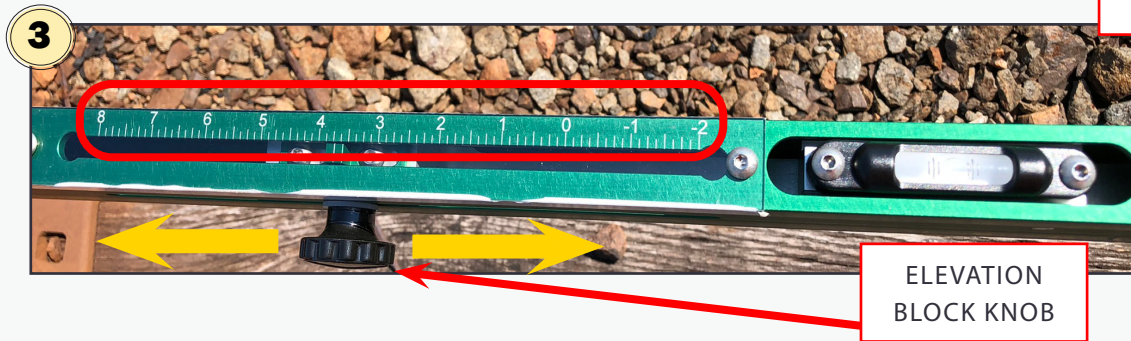
FLANGEWAY
BLOCK KNOB

1. Set fixed (wide) end of gauge on track between guard rail and running rail. Hold handle and push outer contact points on fixed end of gauge into contact with running rail. Bottom surface of fixed end should sit on top of running rail. Maintain gentle force on handle to ensure that contact points remain in contact with running rail.
2. Loosen flangeway block knob and slide flangeway block inward until inner contact points contact the guard rail.
3. Tighten flangeway block knob and read measurement on "Flangeway" scale.

Elevation Measurement



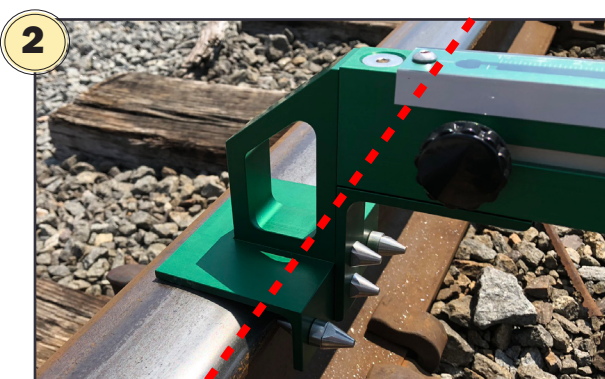
GAUGE
BLOCK
KNOB



ELEVATION
BLOCK KNOB

1. Hold handle and push out contact points on fixed (wide) end of gauge into contact with inside head of low side running rail. Bottom surface of fixed end should sit on top of low side running rail. Maintain gentle force on handle to ensure that contact points remain in contact with rail.
2. Lower gauge between rails, loosen gauge block knob and slide narrow moveable end until outer contact point contacts the second (opposite) rail. Bottom surface of narrow moveable end should sit on top of second (opposite) rail.
3. Loosen elevation block knob and side elevation block until bubble level indicates level. Read measurement on "elevation" scale.

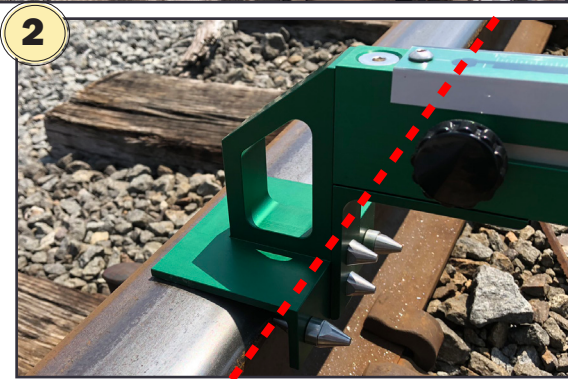
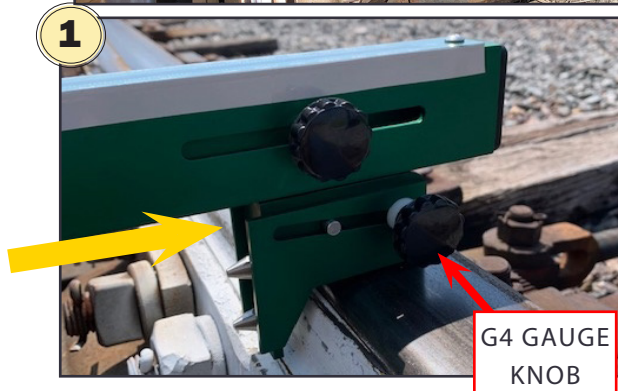
Switch Point Inspection – AAR 1B wheel contact gauge (G2)



G2 GAUGE
KNOB

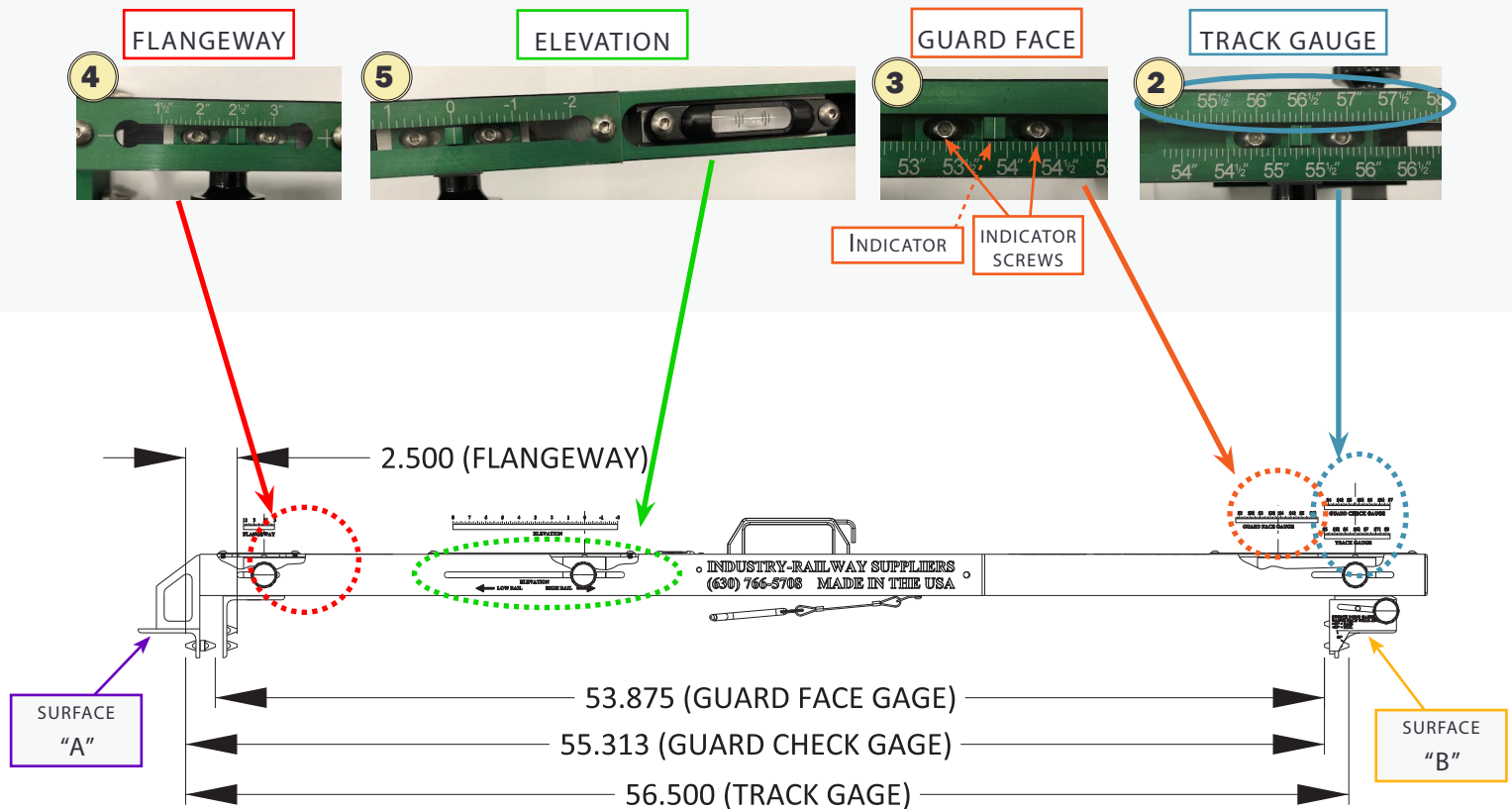
1. Loosen knob on AAR 1B wheel contact gauge (G2), slide it outward towards fully extended position and re-tighten knob.
2. Hold handle and push out contact points on fixed (wide) end of gage into contact with inside head of first rail, in accordance with Railroad's operations manual regarding regulation for distance from switch point tip. Bottom surface of fixed end should sit on top of first rail. Maintain gentle force on handle to ensure that contact points remain in contact with first rail.
3. Lower gauge between rails, loosen gauge block knob and slide gauge block towards field until AAR 1B wheel contact gauge (G2) is adjacent to switch point. Bottom surface of moveable end should sit on top of second (opposite) rail. Determine if switch point lies above (Pass) or below (Fail) mark on the gauge. Loosen knob on AAR 1B wheel contact gauge (G2), slide it back to fully retracted position and re-tighten knob.

Switch Point Inspection – Switch Point Gage Face Wear Angle Gauge (G4)



1. Loosen knob on Switch Point Gage Face Wear Angle Gauge (G4), slide it outward towards fully extended position and re-tighten knob.
2. Hold handle and push outer contact points on fixed (wide) end of gage into contact with inside head of first rail, in accordance with Railroad's operations manual regarding regulation for distance from switch point tip. Bottom surface of fixed end should sit on top of first rail. Maintain gentle force on handle to ensure that contact points remain in contact with first rail.
3. Lower gauge between rails, loosen gauge block knob and slide gauge block towards field until Switch Point Gage Face Wear Angle Gauge (G4) is adjacent to switch point. Bottom surface of moveable end should sit on top of second (opposite) rail. Determine if switch point angle is greater than (Pass) or less than (Fail) angle of gauge. Loosen knob on Switch Point Gage Face Wear Angle Gauge (G4), slide it back to fully retracted position and re-tighten knob.

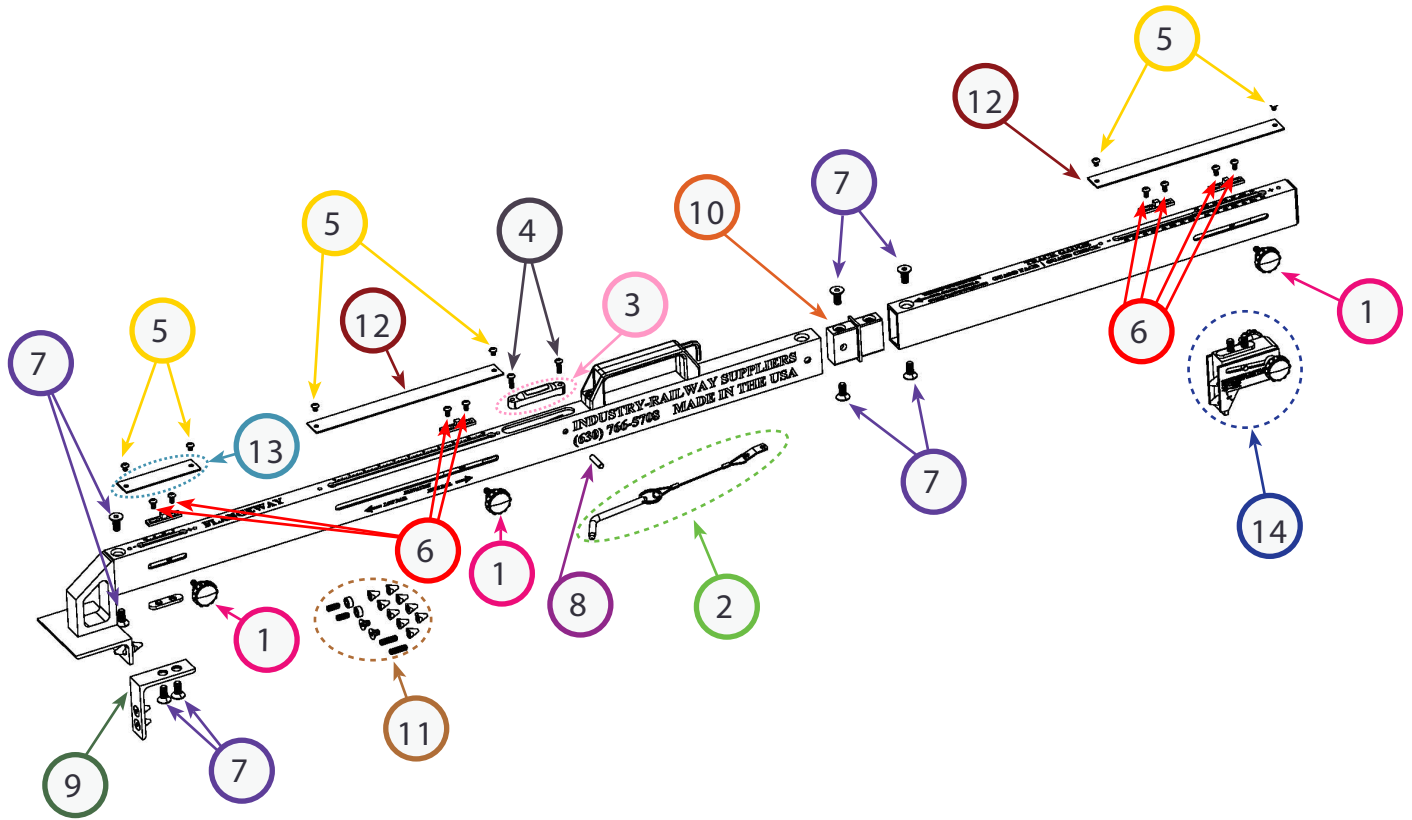
Calibration Instructions



Calibration is to be performed on a qualified fixture. Move G2 and G4 gauges and flangeway gauge (when flangeway is not being calibrated) to their retracted positions.

1. Remove lens screws and lenses.
2. Set "TRACK GAGE" point-to-point distance to 56.500". Loosen indicator screws and adjust "TRACK GAGE" indicator to 56 1/2". Tighten indicator screws.
3. Set "GUARD FACE GAGE" point-to-point distance to 53.875". Loosen indicator screws and adjust "GUARD FACE GAGE" indicator to 53 7/8". Tighten indicator screws
4. Set "FLANGEWAY" point-to-point distance to 2.500". Loosen indicator screws and adjust "FLANGEWAY" indicator to 2 1/2". Tighten indicator screws
5. Set "TRACK GAGE" point-to-point distance to 56.500". Ensure that calibration fixture is level to ground. Gauge should contact calibration fixture on surfaces "A" and "B". Slide elevation block until bubble level is level. Loosen indicator screws and adjust "ELEVATION" indicator to 0". Tighten indicator screws
6. Re-install lenses and lens screws.

Parts Diagram



Item	Reference	Description
1	IRS-315-01	Knob and Washer Kit
2	IRS-315-02	Clevis Pin and Lanyard Kit
3	IRS-315-03	Bubble Level
4	IRS-315-04	10-32 X 0.625" BHCS
5	IRS-315-05	10-32 X 0.25" BHCS
6	IRS-315-06	10-32 X 0.375" BHCS
7	IRS-315-07	5/16"-18 X 0.75" FHCS
8	IRS-315-08	Dowel pin, 1/4" Diameter X 1" Length
9	IRS-315-09	Angle, Flangeway
10	IRS-315-10	Block, Isolator
11	IRS-315-11	Contact Point Kit
12	IRS-315-12	Lens, Long
13	IRS-315-13	Lens, Short
14	IRS-315-14	Switch Point Subassembly