

Label	Criteria
A	Dimension – Maximum 14mm Radii to remain smooth
B	Dimension – Maximum 52mm Radii to remain smooth
C	Dimension – Maximum 43mm
D	Wear must not extend into pivot blocks
E	Dimension – Minimum 14mm
	Any failure to achieve conditions state A to E in this table will require replacement of Female Pivot Plate.
R	And wear or Damage impinging of Radii (R) shall be referred to the Customer Engineer for acceptance/rejection decision

Menu Work: Replace with New (Note will require Jig Assembly complete with Coupler Aperture and Pivot Plate Structural Members).

3.2.4 Coupler Female Pivot Plate Structural Members:

Menu Work: Replace with New (Note will require Jig Assembly complete with Coupler Aperture and Female Pivot Plate).

3.2.5 Buffers

Core work: Remove and Refit Buffers with overhauled Item

Bill of Materials

Description	Quantity (Per Wagon)	LU Cat No.	Supplier No.
Buffer	4	82/9901	Oleo

3.2.6 Air Pipework:

Core Work: Check Air pipework for damage.

Arising Work: Repair or replace any damaged air pipework to pattern.

3.2.7 Electrical Conduit & Cabling:

Core work: Remove redundant “through” Cabling and Terminal Boxes.

3.2.8 Earth Bonds:

Core Work: Replace any Earth bond with fraying greater than 10% width.

3.2.9 Centre Pivot Pin:

Core work: Check centre pivot pin for wear and damage.
Check centre pivot pins Retaining/cotter pin for damage.

Measure the Diameter of the Centre Pivot pin, the maximum differential in Diameter is 3mm, minimum diameter to be 54.15 at any position. Straightness to be within 1mm.

Arising Work: If damaged or worn outside of specified limits, manufacture replacement to pattern using S275 Material.

3.2.10 Centre Casting (Wagon Mounted)

Core Work: Inspect the wagon mounted centre casting for damage and wear

Arising Work: Damage greater than 3mm to be rectified by weld build up and dressing back to match observed surface finish.

Bill of Materials

Description	Quantity (Per Wagon)	LU Cat No.	Drawing Number	Location	Supplier No.
Decal	(see drawing)	(see drawing)	89697C	IPL 27-02-01	TBA
Side Bearer Pads	4	421/9919	100446B item 9	Underframe	TBA
Side Bearer	4	16/9954	100446B item 1	Underframe	TBA
Centre Pivot upper casting	2	TBA	Not Available	IPL 16-03-01 Item 2	N/A
Centre Pivot Pin	2	TBA	Not Available	IPL 16-03-01 Item 1	N/A
Centre Pivot Pin Retainer	2	343/1815	67578B item2	IPL 16-03-01	TBA
Earth Bonds	8	TBA	89626A	IPL 21-03-01 Items 6,7,8 & 9	TBA
Female Pivot Plate	2	184/9910	Not Available	IPL 15-05-02	200011

3.3 Inter-Vehicle Connections

3.3.1 Main Line and Train Line Air Hoses:

Core work: Replace Main Line and Train Line Hose assemblies with New items.

3.3.2 Main Line and Train Line Cocks:

Core work: Replace Main Line and Train Line Cocks with New items.

3.3.3 Emergency Valves:

Core work: Replace Emergency Valves with New items (handles to be retained for re-use on new valve)

Bill of Materials

Description	Quantity (Per Wagon)	LU Cat No.	Drawing	Location	Supplier No.
Train Line Hose	2	743/9915	TBA	IPL 19-03-01	Pirtek
Main Line Hose	2	743/9914	TBA	IPL 19-03-01	Pirtek
Cocks Mainline/ Trainline	4	136/864	N/A	IPL 19-06-01 Item 2	KBRS B80390/8
Cocks Emergency LEGRIS 4902-25-34	4	638/9913	N/A	IPL 19-06-01 Item 6	Activ Air
Emergency Cock Handle	4	270/9907	Not Available	IPL 19-06-01 Item 6	TBA

3.4 Bogies

Bogie Components

Once wheel sets are removed from the bogie, the bogie should be assessed for damage and measured as below.

3.4.1 Dis-Assemble Bogie

Core work:

- a) Steam Clean Bogie assembly.
- b) Remove wheelsets from bogie assembly.
- c) Remove bogie brake rigging and components (discard all brake pins).
- d) Remove bogie side frames from bolster.
- e) Remove/Discard Primary and Ride Control Springs.
- f) Remove Friction Wedges.
- g) Remove/ Discard Centre Pivot Liner and Dust Seal.

3.4.2 Inspect Bogie Frame

Core work: Inspect Side Frames:

Visually check for condition, indications of cracks are to be investigated by removing paint from affected area and establish the presence and extent of crack by Dye Penetrant or similar non-destructive testing process.

- a) Inspect the two Friction plates from each side-frame.
- b) Inspect the brake beam guides from the side frames.
- c) Inspect axle box apertures:

Inspect side-frame axle box pads for wear and measure aperture dimension.

Aperture dimension should be $11 \frac{5}{16}'' + \frac{1}{8}''$, - 0.

Arising work: If dimensions are outside of specified limits repair to agreed repair procedure, See 3.4.4

- d) Inspect side-frame bolster Gib pads:

Inspect the side-frame bolster Gib pads (four per side-frame) for wear and damage.

Arising work: If dimensions are outside of specified limits repair to agreed repair procedure, see 3.4.4

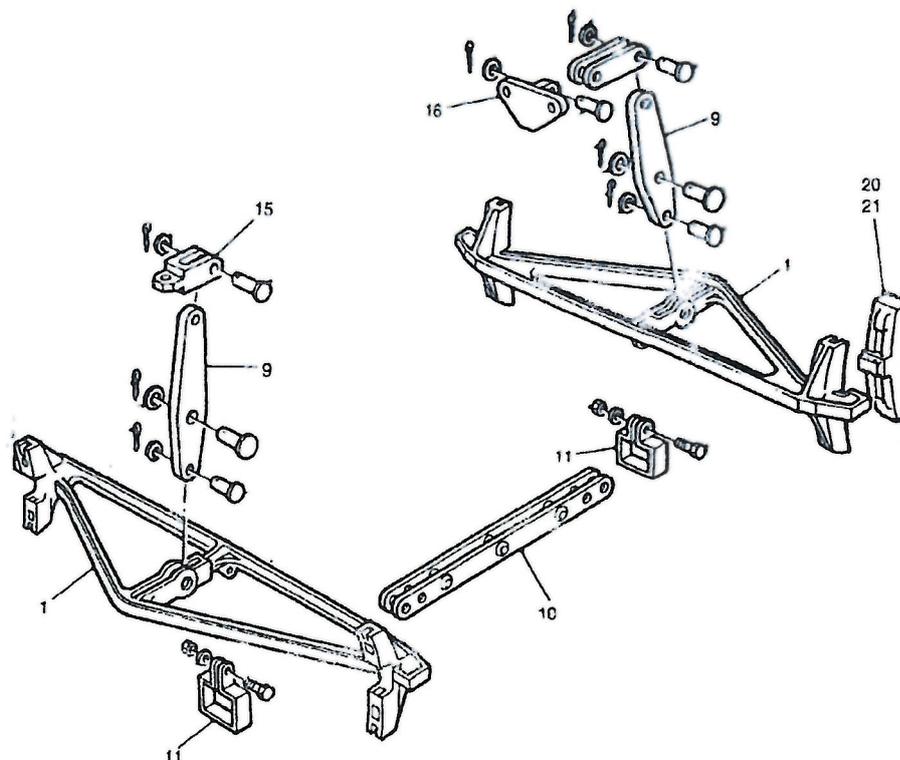
Core work: Inspect Bolster:

Visually check for condition, indications of cracks are to be investigated by removing paint from affected area and establish the presence and extent of crack by Dye Penetrant or similar non-destructive testing process.

- e) Examine Friction Wedges.
- f) Inspect Centre Pivot for wear and damage.
- g) Inspect side bearers for wear and damage.
- h) Inspect Bolster Gib's for wear and damage
- i) Inspect friction wedge guides

Arising work: If damaged or worn outside of specified limits, repair to agreed repair procedure, see 3.4.4

3.4.3 Inspect Bogie Brake Equipment:



BOGIE BRAKE RIGGING (Reference -IPL 10-05-02)

- a) Check the Brake Beams for wear
- Core work: Inspect brake beams (IPL 10-05-02 item 1):
Visually check for wear, damage and fractures.
- Arising Work: If worn outside of permissible wear limits, Observed Cracks to be repaired by grinding out and Welding, dressing back and NDT.
- Any frame Distortion to be corrected by manipulation with the limited use of heat to prevent worsening of the distortion.
- b) Check the Palm Ends for wear.
- Core work: Inspect the Palm Ends:
Visually check for wear, damage and distortion.
- Arising Work: Measure the Palm Ends to establish the extent of wear, differential measurements greater than 3 mm are to be corrected by localised build-up of Weld and dressing back to ensure surface finish is maintained
- c) Inspect Brake Fulcrum Levers for wear.
- Core work: Inspect the Brake Fulcrum Levers (IPL 10-05-02 item 9)
Visually check for wear, damage and distortion.
Inspect Pin Holes for Wear.
- Arising work: Observed Cracks to be repaired by grinding out and Welding, dressing back and NDT.
- Any Distortion to be corrected by manipulation with the limited use of heat to prevent worsening of the distortion.
- Holes with greater than 3mm wear in relation to Pin are to be repaired by either welding and re-drilling of bush lining ensuring industry standards related to minimum wall thickness and interference fit are utilised.
- d) Inspect Brake Fulcrum Bracket for wear.
- Core work: Inspect the Brake Fulcrum Bracket (IPL 10-05-02 item 16):
Inspect Pin Holes for Wear.
Visually check for wear, damage and distortion.
- Arising work: Observed Cracks to be repaired by grinding out and Welding, dressing back and NDT.
- Any Distortion to be corrected by manipulation with the limited use of heat to prevent worsening of the distortion.
- Holes with greater than 3mm wear in relation to Pin are to be repaired by either welding and re-drilling of bush lining ensuring industry standards related to minimum wall thickness and interference fit are utilised.
- Ensure bracket is secure on bolster.
- e) Inspect Connecting Link for wear.
- Core work: Inspect the Connecting Link (IPL 10-05-02 item 10):
Visually check for wear, damage and distortion.
Inspect Pin Holes for Wear.