



QM-C-8.1/AB/0010/A
Inspection Plan(Check Sheet)

(For ESCORTS / ADEPL / GDR MAKE BMBS)

Item :Bogie Mounted Brake System (BMBS) for freight stock fitted with CASNUB Type Bogie

Specn. : WD-23-BMBS-2008 Rev1

Amd. : Amendment No. 01 of Sep-2016.

Drg. No. & Alt.:

1.Firm's Name:

2.Date /Period of inspection:

3. Contracts details:

a) Contract No.

b) Order placing authority

c) Specification no. (as mentioned in the contract)

d) Drawing No. (as mentioned in the contract)

4. Quantity on order:

5.Quantity offered for inspection:

6. Consignee:

RDSO Rep.
Name, Designation & Stamp

FIRM's Rep.
Name, Designation & Stamp

Revision-0



सत्यमेवजयते Manak Nagar, Lucknow-226011

Govt. of India
Ministry of Railways
Research Designs & Standards Organization

INSPECTION PLAN
(For ESCORTS / ADEPL / GDRMAKE BMBS)
SPECIFICATION NO.WD-23-BMBS-2008 Rev1, Amendment No. 01 of Sep-16 for
SECONDARY BRAKE BEAM ASSY. to Drg No. 3EB5522, Alt. 10

1. Acceptance Criteria:

Equipment Ready Yes/No
D.P. within due date Yes/No

2. Visual Check:

Name plate/S.N. punching/Any Loose Fitting OK/Not OK
Visual Defects Yes/No

3. Performance Tests & Dimensional Check:

Air / Hydraulic Pressure adequate Yes/No

CHECK SHEET

No. of Sets.

Qty. _____

Sr. No.	TEST DESCRIPTION	MODE	SAMPLE SIZE	SPECIFIED PARAMETERS	OBSERVED VALUES					REMARKS
					1	2	3	4	5	
1	Dimensional Checks	Measuring Tape	2% or Min. 2	900 ± 2						
2		Measuring tape/ Receiver Gauge		1762 +2/-0						
3		Measuring tape		2026 +2/-0						
4		Bevel protector		13.5° ±0.5°						
5		Vernier		Ø16±0.2						
6		Vernier		Ø25±0.5						
7		Vernier / Gauge		36 -0.12/-0.28						
8		Vernier		71.5±1						
Functional Test										
1	Deflection Measurement Test	Beam Test Setup	1% or Min. 2	Not more than 1.8 mm at 10.8 ton						
2	Set Test	Beam Test Setup		Not more than 0.25 mm at 16.2 ton						

4. Painting : Adequate Yes / No

Anti Corrosive treatment to exteriors given Yes / No

5. Packing : Packed adequately Yes / No

6. Calibration Status checked OK / Not OK

RDSO Rep.
Name, Designation & Stamp

FIRM's Rep.
Name, Designation & Stamp

Revision-0

Page 2 of 26

QM-C-8.1/AB/0010/A



सत्यमेव जयते Manak Nagar, Lucknow-226011

Govt. of India
Ministry of Railways
Research Designs & Standards Organization

INSPECTION PLAN
(For ESCORTS / ADEPL / GDR Make BMBS)
SPECIFICATION NO.WD-23-BMBS-2008 Rev1, Amendment No. 01 of Sep-16 for
PRIMARY BRAKE BEAM ASSY. to Drg No. 3EB5521, Alt. 11

1. Acceptance Criteria:

Equipment Ready Yes / No
D.P. within due date Yes / No

2. Visual Check:

Name plate/S.N. punching/Any Loose Fitting OK / Not OK
Visual Defects Yes / No

3. Performance Tests & Dimensional Check:

Air / Hydraulic Pressure adequate Yes / No

CHECK SHEET

No. of Sets.

Qty. _____

Sr. No.	TEST DESCRIPTION	MODE	SAMPLE SIZE	SPECIFIED PARAMETERS	OBSERVED VALUES					REMARKS
					1	2	3	4	5	
1	Dimensional Checks	Vernier / Gauge	2% or Min. 2	48±0.4						
2		Vernier / Gauge		93±0.4						
3		Vernier		122 +2/-0						
4		Measuring tape/ Receiver Gauge		1762±2/-0						
5		Measuring tape		2026±2/-0						
6		Bevel protector		13.5° ±0.5°						
7		Vernier		∅16±0.2						
8		Vernier / Gauge		36 -0.12/-0.28						
9		Vernier		71.5±1						
Functional Test										
1	Deflection Measurement Test	Beam Test Setup	1% or Min. 2	Not more than 1.8 mm at 10.8 ton						
2	Set Test	Beam Test Setup		Not more than 0.25 mm at 16.2 ton						

4. Painting : Adequate Yes / No
Anti Corrosive treatment to exteriors given Yes / No

5. Packing : Packed adequately Yes / No

6. Calibration Status checked OK / Not OK

RDSO Rep.
Name, Designation & Stamp

FIRM's Rep.
Name, Designation & Stamp

Revision-0

Page 3 of 26

QM-C-8.1/AB/0010/A



सत्यमेवजयते Manak Nagar, Lucknow-226011

Govt. of India
Ministry of Railways
Research Designs & Standards Organization

INSPECTION PLAN
(For ESCORTS / ADEPL / GDRMAKE BMBS)
SPECIFICATION NO.WD-23-BMBS-2008 Rev1, Amendment No. 01 of Sep-16 for
PUSH ROD ASSY. to Drg No. 3EB9790, Alt. 1

1. Acceptance Criteria:

Equipment Ready Yes / No
D.P. within due date Yes / No

2. Visual Check:

S.N. punching OK / Not OK
Visual Defects Yes / No

3. Performance Tests & Dimensional Check:

Air / Hydraulic Pressure adequate Yes / No

CHECK SHEET

No. of Sets.

Qty. _____

Sr. No.	TEST DESCRIPTION	MODE	SAMPLE SIZE	SPECIFIED PARAMETERS	OBSERVED VALUES					REMARKS
					1	2	3	4	5	
1	Dimensional Checks	Vernier	2% or Min. 2	25.4 ±0.15						
2		Vernier		25.4 ±0.15						
3		Vernier		25.5±0.5						
4		Measuring tape		809±1						
5.	Welding	D.P.T	1% or Min. 1	Hair line cracks shall not be Present.						

4. Painting : Adequate Yes / No
Anti Corrosive treatment to exteriors given Yes / No

5. Packing : Packed adequately Yes / No

6. Calibration Status checked OK / Not OK

RDSO Rep.
Name, Designation & Stamp

FIRM's Rep.
Name, Designation & Stamp

Revision-0

Page 4 of 26

QM-C-8.1/AB/0010/A



सत्यमेव जयते Manak Nagar, Lucknow-226011

Govt. of India
Ministry of Railways
Research Designs & Standards Organization

INSPECTION PLAN
(For ESCORTS / ADEPL / GDRMAKE BMBS)
SPECIFICATION NO.WD-23-BMBS-2008 Rev1, Amendment No. 01 of Sep-16 for
BELL CRANK LEVER –RH ASSY. to Drg No. 3EB9791, Alt. 1

1. Acceptance Criteria:

Equipment Ready
D.P. within due date

Yes / No
Yes / No

2. Visual Check:

S.N. punching
Visual Defects

OK / Not OK
Yes / No

3. Performance Tests & Dimensional Check:

Air / Hydraulic Pressure adequate

Yes / No

CHECK SHEET

No. of Sets.

Qty. _____

Sr. No.	TEST DESCRIPTION	MODE	SAMPLE SIZE	SPECIFIED PARAMETERS	OBSERVED VALUES					REMARKS
					1	2	3	4	5	
1	Dimensional Checks	Vernier	2% or Min. 2	25.4 ±0.15						
2		Vernier		122+0/-1						
3		Gauge/Coordinate Measuring Machine		235(Ref)						
4		Gauge/Coordinate Measuring Machine		276(Ref)						
5		Gauge/Coordinate Measuring Machine		377.8±2						

4. Painting : Adequate
Anti Corrosive treatment to exteriors given

Yes / No
Yes / No

5. Packing : Packed adequately

Yes / No

6. Calibration Status checked

OK / Not OK

RDSO Rep.
Name, Designation & Stamp

FIRM's Rep.
Name, Designation & Stamp

Revision-0

Page 5 of 26

QM-C-8.1/AB/0010/A



सत्यमेव जयते Manak Nagar, Lucknow-226011

Govt. of India
Ministry of Railways
Research Designs & Standards Organization

INSPECTION PLAN
(For ESCORTS / ADEPL / GDR MAKE BMBS)
SPECIFICATION NO.WD-23-BMBS-2008 Rev1, Amendment No. 01 of Sep-16 for
BELL CRANK LEVER –LH ASSY. to Drg No. 3EB9792, Alt.1

1. Acceptance Criteria:

Equipment Ready Yes / No
D.P. within due date Yes / No

2. Visual Check:

S.N. punching OK / Not OK
Visual Defects Yes / No

3. Performance Tests & Dimensional Check:

Air / Hydraulic Pressure adequate Yes / No

CHECK SHEET

No. of Sets.

Qty. _____

Sr. No.	TEST DESCRIPTION	MODE	SAMPLE SIZE	SPECIFIED PARAMETERS	OBSERVED VALUES					REMARKS
					1	2	3	4	5	
1	Dimensional Checks	Vernier	2% or Min. 2	25.4 ±0.15						
2		Vernier		122+0/-1						
3		Gauge/Coordinate Measuring Machine		235(Ref)						
4		Gauge/Coordinate Measuring Machine		276(Ref)						
5		Gauge/Coordinate Measuring Machine		377.8±2						

4. Painting : Adequate Yes / No
Anti Corrosive treatment to exteriors given Yes / No

5. Packing : Packed adequately Yes / No

6. Calibration Status checked OK / Not OK

RDSO Rep.
Name, Designation & Stamp

FIRM's Rep.
Name, Designation & Stamp

Revision-0



INSPECTION PLAN
(For ESCORTS / ADEPL / GDR MAKE BMBS)
SPECIFICATION NO.WD-23-BMBS-2008 Rev1, Amendment No. 01 of Sep-16 for
ERV (APM) installation to Drg No. 3EB7346, Alt. 08

1. Acceptance Criteria:Equipment Ready
D.P. within due dateYes / No
Yes / No**2. Visual Check:**Name plate/S.N. punching/Any Loose Fitting
Visual DefectsOK / Not OK
Yes / No**3. Performance Tests & Dimensional Check:**

Air / Hydraulic Pressure adequate

Yes / No

CHECK SHEET

No. of Sets.

Qty. _____

Sr. No.	TEST DESCRIPTION	MODE	SAMPLE SIZE	SPECIFIED PARAMETERS	OBSERVED VALUES					REMARKS
					1	2	3	4	5	
1	Dimensional Checks	Vernier	2% or Min. 2	156±1.2						
2		Vernier		44.5±0.8						
3		Vernier		3 HOLES - Ø13.5±0.5						
4		Vernier		76±0.8						
5		Vernier		70±0.4						
6		Vernier		60±0.8						
7		Vernier		18.5±0.5						
8	Leakage Test	Test rig	1% or Min. 1	As per performance check sheet Format No-1J10101019400-PCS-1						

4. Packing : Packed adequately

Yes / No

5. Calibration Status checked

OK / Not OK

RDSO Rep.
Name, Designation & StampFIRM's Rep.
Name, Designation & Stamp

Revision-0

Page 7 of 26

QM-C-8.1/AB/0010/A



सत्यमेव जयते Manak Nagar, Lucknow-226011

Govt. of India
Ministry of Railways
Research Designs & Standards Organization

Performance Check sheet
Format No- 1J10101019400-PCS-1
(For ESCORTS / ADEPL / GDR MAKE BMBS)

SAMPLE SIZE : 01 No. for 100 BMBS Sets or 01 no Minimum

S.No.	Descriptions	SPECIFIED PARAMETERS	Observation			
1	System Pressure					
1.1	Pressure in BP	5 ± 0.1 kg/ cm ²				
1.2	Pressure in AR	5± 0.1 kg/ cm ² (for single pipe)				
2	Leakage Test					
2.1	Loaded Condition (Place 1" high block between the adjusting screw. Check leakage at 3.8±0.1 Kg/ cm ²)	No Leakage				
2.2	Empty Condition (Remove 1" high block between the adjusting screw. Check leakage at 0.8±0.2 Kg/ cm ²)	No Leakage				
3	Full service application after charging:					
3.1	Brake cylinder filling time a) Empty (pressure rise from 0 to 2.1kg/ cm ²) b) Loaded (pressure rise from 0 to 3.6 kg/ cm ²)	18 to 30 sec. 18 to 30 sec.				
3.2	Maximum Brake Cylinder pressure a) Empty b) Loaded	2.2± 0.25 kg/ cm ² 3.8± 0.1 kg/ cm ²				
4	Release after full service application:					
4.1	Draining time a) Empty (pr. fall from 2.2±0.25 kg/cm ² to 0.4kg/cm ²) b) Loaded (pr. fall from 3.8± 0.1 kg/cm ² to 0.4kg/cm ²)	45 to 60 sec. 45 to 60 sec.				
5	Emergency Application:					
5.1	Brake cylinder filling time a) Empty (pressure rise from 0 to 2.1 kg/ cm ²) b) Loaded (pressure rise from 0 to 3.6 kg/ cm ²)	18 to 30 sec. 18 to 30 sec.				
5.2	Maximum brake cylinder pressure a) Empty b) Loaded	2.2± 0.25 kg/ cm ² 3.8± 0.1 kg/ cm ²				
6	Emergency Release:					
6.1	Draining time a) Empty (pr. fall from 2.2±0.25 kg/cm ² to 0.4kg/cm ²) b) Loaded (pr. fall from 3.8± 0.1 kg/cm ² to 0.4kg/cm ²)	45 to 60 sec. 45 to 60 sec.				
7	Indicator Actuation					
7.1	Observe whether Indicator is actuating or not at pressure of 2.2 kg/ cm ² & 3.8 kg/ cm ²	Should actuate				
8	Empty load changeover by APM device					
8.1	Unrestricted movement of lever arm APM device	Brake cylinder pr. 2.2± 0.25 kg/ cm ²				
8.2	Restrict the movement of lever arm of APM device by more than 25mm (by putting a block of 25.0mm thickness) from its initial position.	Brake cylinder pr. 3.8± 0.1 kg/ cm ²				

Calibration Status checked

OK / Not OK

RDSO Rep.
Name, Designation & Stamp

FIRM's Rep.
Name, Designation & Stamp

Revision-0

Page 8 of 26

QM-C-8.1/AB/0010/A



सत्यमेवजयते Manak Nagar, Lucknow-226011

Govt. of India
Ministry of Railways
Research Designs & Standards Organization

**INSPECTION PLAN
(For ESCORTS / ADEPL / GDR MAKE BMBS)**

SPECIFICATION NO.WD-23-BMBS-2008 Rev1, Amendment No. 01 of Sep-16 for
BRAKE CYLINDER 11" WITH DOUBLE ACTING SLACK ADJUSTER WITH HAND BRAKE CABLE to
Drg. No. 3EB7348, Alt. 09

1. Acceptance Criteria:

Equipment Ready Yes / No
D.P. within due date Yes / No

2. Visual Check:

Name plate/S.N. punching/Any Loose Fitting OK / Not OK
Visual Defects Yes / No

3. Performance Tests & Dimensional Check:

Air / Hydraulic Pressure adequate Yes / No

CHECK SHEET

No. of Sets.

Qty. _____

Sr. No.	TEST DESCRIPTION	MODE	SAMPLE SIZE	SPECIFIED PARAMETERS in mm	OBSERVED VALUES					REMARKS
					1	2	3	4	5	
1	Dimensional Checks	Measuring tape	2% or Min. 2	310±2						
2		Measuring tape / Vernier		330±2						
3		Measuring tape		885±10						
4		Measuring tape		1380±10						
5		Measuring tape		1670±30						
6		Measuring tape		1640±30						
7		Vernier		2 HOLES – Ø13±0.5						
8		Vernier		70±0.8						
9		Vernier		2 HOLES – Ø25±0.5						
10		Vernier		8±0.2						
11	Paint thickness	Plating thickness tester		50µm(Minimum)						
12	Performance test									
12 (a)	Open isolating cock for starting feeding of air pressure in test stand with keeping isolating cock for brake cylinder as closed	TestRig	1% or Min. 1	No leakage in 2 minutes						

RDSO Rep.
Name, Designation & Stamp

FIRM's Rep.
Name, Designation & Stamp

Revision-0

Page 9 of 26

QM-C-8.1/AB/0010/A



सत्यमेव जयते **Manak Nagar, Lucknow-226011**

12 (b)	At environment temp. of 21°C, apply 0.7 Kg/cm ² air pressure and wait for 05 minutes after application. Observe the leakage rate.	TestRig		0.03 Kg/cm ² in 10 minutes						
12 (c)	At environment temp. of 21°C, apply 3.8 Kg/cm ² air pressure and wait for 05 minutes after application. Observe the leakage rate.	TestRig		No leakage in 10 minutes						
12 (d)	Check the position of piston indicator	TestRig		Piston Indicator Is actuated and Red zone should be visible.						

4. Painting : Adequate
Anti Corrosive treatment to exteriors given

Yes / No
Yes / No
Yes / No

5. Packing : Packed adequately

6. Calibration Status checked

OK / Not OK

RDSO Rep.
Name, Designation & Stamp

FIRM's Rep.
Name, Designation & Stamp

Revision-0



**INSPECTION PLAN
(For ESCORTS / ADEPL / GDR MAKE BMBS)**

SPECIFICATION NO. WD-23-BMBS-2008 Rev1, Amendment No. 01 of Sep-16 for
BRAKE CYLINDER 11" WITH DOUBLE ACTING SLACK ADJUSTER WITHOUT HAND BRAKE CABLE
to Drg No. 3EB7347, Alt. 09

1. Acceptance Criteria:

Equipment Ready Yes / No
D.P. within due date Yes / No

2. Visual Check:

Name plate/S.N. punching/Any Loose Fitting OK / Not OK
Visual Defects Yes / No

3. Performance Tests & Dimensional Check:

Air / Hydraulic Pressure adequate Yes / No

CHECK SHEET

No. of Sets.

Qty. _____

Sr. No.	TEST DESCRIPTION	MODE	SAMPLE SIZE	SPECIFIED PARAMETERS in mm	OBSERVED VALUES					REMARKS
					1	2	3	4	5	
1	Dimensional Checks	Measuring tape	2% or Min. 2	310±2						
2		Measuring tape / Vernier		330±2						
3		Measuring tape		1380±10						
4		Measuring tape		885±10						
5		Vernier		2 HOLES - Ø13±0.5						
6		Vernier		70±0.8						
7		Vernier		2 HOLES - Ø25±0.5						
8		Vernier		8±0.2						
9		Paint thickness		Plating thickness tester		50 µm (Minimum)				
10	Performance Test									
10(a)	Open isolating cock for starting feeding of air pressure in test stand with keeping isolating cock for brake cylinder as closed	TestRig	1% or Min. 1	No leakage in 2 minutes						
10 (b)	At environment temp. of 21°C, apply 0.7 Kg/cm2	TestRig		0.03 Kg/cm2 in 10 minutes						

RDSO Rep.
Name, Designation & Stamp

FIRM's Rep.
Name, Designation & Stamp



सत्यमेव जयते **Manak Nagar, Lucknow-226011**

	air pressure and wait for 05 minutes after application. Observe the leakage rate.								
10 (c)	At environment temp. of 21°C, apply 3.8 Kg/cm ² air pressure and wait for 05 minutes after application. Observe the leakage rate.	TestRig		No leakage in 10 minutes					
10 (d)	Check the position of piston indicator	TestRig		Piston Indicator is actuated and Red zone should be visible.					

4. Painting : Adequate
Anti Corrosive treatment to exteriors given

Yes / No

5. Packing : Packed adequately

Yes / No

Yes / No

6. Calibration Status checked

OK / Not OK

RDSO Rep.
Name, Designation & Stamp

FIRM's Rep.
Name, Designation & Stamp

Revision-0



सत्यमेव जयते Manak Nagar, Lucknow-226011

Govt. of India
Ministry of Railways
Research Designs & Standards Organization

INSPECTION PLAN
(For ESCORTS / ADEPL / GDR MAKE BMBS)
SPECIFICATION NO. WD-23-BMBS-2008 Rev1, Amendment No. 01 of Sep-16 for
BRAKE HOSE FOR APM (ERV) to Drg No. 3EB9763, Alt. 03

1. Acceptance Criteria:

Equipment Ready Yes / No
D.P. within due date Yes / No

2. Visual Check:

Visual Defects Yes / No

3. Performance Tests & Dimensional Check:

Air / Hydraulic Pressure adequate Yes / No

CHECK SHEET

No. of Sets.

Qty. _____

Sr. No.	TEST DESCRIPTION	MODE	SAMPLE SIZE	SPECIFIED PARAMETERS in mm	OBSERVED VALUES					REMARKS
					1	2	3	4	5	
1	Dimensional Checks	Measuring tape	2% or Min. 2	860±10						
2		Vernier		10±0.2						
3		Vernier		49±0.2						
4	Leakage test	Pneumatic test stand	1% or Min. 1	10 Kg/Cm ²						

4. Packing : Packed adequately Yes / No

5. Calibration Status checked OK / Not OK

RDSO Rep.
Name, Designation & Stamp

FIRM's Rep.
Name, Designation & Stamp

Revision-0

Page 13 of 26

QM-C-8.1/AB/0010/A



सत्यमेव जयते Manak Nagar, Lucknow-226011

Govt. of India
Ministry of Railways
Research Designs & Standards Organization

INSPECTION PLAN
(For ESCORTS / ADEPL / GDR MAKE BMBS)
SPECIFICATION NO.WD-23-BMBS-2008 Rev1, Amendment No. 01 of Sep-16 for
BRAKE HOSE FOR BRAKE CYLINDER to Drg No. 3EB5536, Alt. 04

1. Acceptance Criteria:

Equipment Ready Yes / No
D.P. within due date Yes / No

2. Visual Check:

Visual Defects Yes / No

3. Performance Tests & Dimensional Check:

Air / Hydraulic Pressure adequate Yes / No

CHECK SHEET

No. of Sets.

Qty. _____

Sr. No.	TEST DESCRIPTION	MODE	SAMPLE SIZE	SPECIFIED PARAMETERS in mm	OBSERVED VALUES					REMARKS
					1	2	3	4	5	
1	Dimensional Checks	Measuring tape	2% or Min. 2	840±10						
2		Vernier		13.5±0.2						
3		Vernier		70±0.4						
4	Leakage test	Pneumatic test stand	1% or Min. 1	10 Kg/Cm2						

4. Packing : Packed adequately Yes / No

5. Calibration Status checked OK / Not OK

RDSO Rep.
Name, Designation & Stamp

FIRM's Rep.
Name, Designation & Stamp

Revision-0



सत्यमेव जयते Manak Nagar, Lucknow-226011

Govt. of India
Ministry of Railways
Research Designs & Standards Organization

INSPECTION PLAN
(For ESCORTS / ADEPL / GDR MAKE BMBS)
SPECIFICATION NO.WD-23-BMBS-2008 Rev1, Amendment No. 01 of Sep-16 for
AIR RESERVOIR (6.6 LTR.) to Drg No. WD-09048-S-01, Alt. 00

1. Acceptance Criteria:

Equipment Ready Yes / No
D.P. within due date Yes / No

2. Visual Check:

S.N. punching OK / Not OK
Visual Defects Yes / No

3. Performance Tests & Dimensional Check:

Air / Hydraulic Pressure adequate Yes / No

CHECK SHEET

No. of Sets.

Qty. _____

Sr. No.	TEST DESCRIPTION	MODE	SAMPLE SIZE	SPECIFIED PARAMETERS in mm	OBSERVED VALUES					REMARKS
					1	2	3	4	5	
1	Dimensional Checks	Vernier	2% or Min. 2	178 ± 1.5						
2		Vernier		13.5±0.5						
3		Vernier		257 ± 2.5						
4		Vernier		203 ± 2.5						
5		Vernier		49 ± 0.2						
6		Vernier		11±0.5						
7		TPG		2 - M8x1.0						
8	LEAKAGE TEST	Hydraulic test stand	1% or Min.1	10 Kg/Cm2						

4. Painting : Adequate Yes / No

Anti Corrosive treatment to exteriors given Yes / No

5. Packing : Packed adequately Yes / No

6. Calibration Status checked OK / Not OK

RDSO Rep.
Name, Designation & Stamp

FIRM's Rep.
Name, Designation & Stamp

Revision-0

Page 15 of 26

QM-C-8.1/AB/0010/A



सत्यमेवजयते Manak Nagar, Lucknow-226011

Govt. of India
Ministry of Railways
Research Designs & Standards Organization

INSPECTION PLAN
(For ESCORTS / ADEPL / GDRMAKE BMBS)
SPECIFICATION NO.WD-23-BMBS-2008 Rev1, Amendment No. 01 of Sep-16 for
PIN Ø24x70 to Drg No. 4EB10262, Alt. 02

1. Acceptance Criteria:

Equipment Ready Yes / No
D.P. within due date Yes / No

2. Visual Check:

Visual Defects Yes / No

3. Dimensional Check:

CHECK SHEET

No. of Sets.

Qty. _____

Sr. No.	TEST DESCRIPTION	MODE	SAMPLE SIZE	SPECIFIED PARAMETERS	OBSERVED VALUES					REMARKS
					1	2	3	4	5	
1	Dimensional Checks	Vernier	2% or Min. 2	Ø24+0.25/0						
2		Vernier		70±1						
3		Vernier		Ø6H12 (+0.12)						
4		Vernier		Ø40±1						
5		Vernier		8±0.5						
6		Vernier		78±1						
7	Plating Thickness	Plating thickness tester		8µ (Minimum)						
8	Hardness	Hardness tester	One / Lot	35-42 HRC						

4. Packing : Packed adequately Yes / No

5. Calibration Status checked OK / Not OK

RDSO Rep.
Name, Designation & Stamp

FIRM's Rep.
Name, Designation & Stamp

Revision-0

Page 16 of 26

QM-C-8.1/AB/0010/A



सत्यमेव जयते Manak Nagar, Lucknow-226011

Govt. of India
Ministry of Railways
Research Designs & Standards Organization

INSPECTION PLAN
(For ESCORTS / ADEPL / GDRMAKE BMBS)
SPECIFICATION NO. WD-23-BMBS-2008 Rev1, Amendment No. 01 of Sep-16 for
PIN Ø24x80 to Drg No. 4EB10263, Alt.02

1. Acceptance Criteria:

Equipment Ready Yes / No
D.P. within due date Yes / No

2. Visual Check:

Visual Defects Yes / No

3. Dimensional Check:

CHECK SHEET

No. of Sets.

Qty. _____

Sr. No.	TEST DESCRIPTION	MODE	SAMPLE SIZE	SPECIFIED PARAMETERS	OBSERVED VALUES					REMARKS
					1	2	3	4	5	
1	Dimensional Checks	Vernier	2% or Min. 2	Ø24+0.25/0						
2		Vernier		80±1						
3		Vernier		7±0.2						
4		Vernier		18±0.2						
5		Vernier		Ø40±1						
6		Vernier		5+0/-0.25						
7		Vernier		85±1						
8	Plating Thickness	Plating thickness tester	One / Lot	8µm (Minimum)						
9	Hardness	Hardness tester		35-42 HRC						

4. Packing : Packed adequately Yes / No

5. Calibration Status checked OK / Not OK

RDSO Rep.
Name, Designation & Stamp

FIRM's Rep.
Name, Designation & Stamp

Revision-0

Page 17 of 26

QM-C-8.1/AB/0010/A



सत्यमेव जयते Manak Nagar, Lucknow-226011

Govt. of India
Ministry of Railways
Research Designs & Standards Organization

INSPECTION PLAN
(For ESCORTS / ADEPL / GDR MAKE BMBS)
SPECIFICATION NO.WD-23-BMBS-2008 Rev1, Amendment No. 01 of Sep-16 for
PIN Ø24x120 to Drg No. 4EB10264, Alt. 02

1. Acceptance Criteria:

Equipment Ready
D.P. within due date

Yes / No
Yes / No

2. Visual Check:

Visual Defects

Yes / No

3. Dimensional Check:

CHECK SHEET

No. of Sets.

Qty. _____

Sr. No.	TEST DESCRIPTION	MODE	SAMPLE SIZE	SPECIFIED PARAMETERS	OBSERVED VALUES					REMARKS
					1	2	3	4	5	
1	Dimensional Checks	Vernier	2% or Min. 2	Ø24+0.25/0						
2		Vernier		120±1						
3		Vernier		7±0.2						
4		Vernier		18±0.2						
5		Vernier		Ø40±1						
6		Vernier		10±1						
7		Vernier		130±1						
8	Plating Thickness	Plating thickness tester		8µm(Minimum)						
9	Hardness	Hardness tester	One / Lot	35-42 HRC						

4. Packing : Packed adequately

Yes / No

5. Calibration Status checked

OK / Not OK

RDSO Rep.
Name, Designation & Stamp

FIRM's Rep.
Name, Designation & Stamp

Revision-0

Page 18 of 26

QM-C-8.1/AB/0010/A



सत्यमेव जयते Manak Nagar, Lucknow-226011

Govt. of India
Ministry of Railways
Research Designs & Standards Organization

INSPECTION PLAN
(For ESCORTS / ADEPL / GDRMAKEBMBS)
SPECIFICATION NO.WD-23-BMBS-2008 Rev1, Amendment No. 01 of Sep-16 for
SPRING DOWEL SLEEVE 6x35 to Drg No. 4EB10260, Alt.01

1. Acceptance Criteria:

Equipment Ready Yes / No
D.P. within due date Yes / No

2. Visual Check:

Visual Defects Yes / No

3. Dimensional Check:

CHECK SHEET

No. of Sets.

Qty. _____

Sr. No.	TEST DESCRIPTION	MODE	SAMPLE SIZE	SPECIFIED PARAMETERS	OBSERVED VALUES					REMARKS
					1	2	3	4	5	
1	Dimensional Checks	Vernier	2% or Min. 2	Ø6.4-6.7						
2		Vernier		35±1						
3	Hardness	External Lab	One / Lot	420-560 HV						
4	Material Test	External Lab	One / Lot	As per IS:5988/ISO:8752/EQ.						

4. Packing : Packed adequately Yes / No

5. Calibration Status checked OK / Not OK

RDSO Rep.
Name, Designation & Stamp

FIRM's Rep.
Name, Designation & Stamp

Revision-0

Page 19 of 26

QM-C-8.1/AB/0010/A



सत्यमेव जयते Manak Nagar, Lucknow-226011

Govt. of India
Ministry of Railways
Research Designs & Standards Organization

INSPECTION PLAN
(For ESCORTS / ADEPL / GDRMAKE BMBS)
SPECIFICATION NO.WD-23-BMBS-2008 Rev1, Amendment No. 01 of Sep-16 for
BUSH to Drg No. 4EB10261, Alt. 01

1. Acceptance Criteria:

Equipment Ready Yes / No
D.P. within due date Yes / No

2. Visual Check:

Visual Defects Yes / No

3. Dimensional Check:

CHECK SHEET

No. of Sets.

Qty. _____

Sr. No.	TEST DESCRIPTION	MODE	SAMPLE SIZE	SPECIFIED PARAMETERS	OBSERVED VALUES					REMARKS
					1	2	3	4	5	
1	Dimensional Checks	Vernier	2% or Min. 2	$\varnothing 35 \pm 0.5$						
2		Vernier		$\varnothing 24.5 + 0.5$						
3		Vernier		12 ± 0.2						
4		Vernier		$\varnothing 6H12 (+0.12)$						

4. Packing : Packed adequately Yes / No

5. Calibration Status checked OK / Not OK

RDSO Rep.
Name, Designation & Stamp

FIRM's Rep.
Name, Designation & Stamp

Revision-0

Page 20 of 26

QM-C-8.1/AB/0010/A



INSPECTION PLAN
(For ESCORTS / ADEPL / GDRMAKE BMBS)
SPECIFICATION NO.WD-23-BMBS-2008 Rev1, Amendment No. 01 of Sep-16 for
BULB COTTER WITH WASHER to Drg No. 4EB10271, Alt. 01

1. Acceptance Criteria:

Equipment Ready Yes / No
D.P. within due date Yes / No

2. Visual Check:

Visual Defects Yes / No

3. Dimensional Check:

CHECK SHEET

No. of Sets.

Qty. _____

Sr. No.	TEST DESCRIPTION	MODE	SAMPLE SIZE	SPECIFIED PARAMETERS	OBSERVED VALUES					REMARKS
					1	2	3	4	5	
1	Dimensional Checks	Vernier	2% or Min. 2	48±0.8						
2		Vernier		12±0.5						
3		Vernier		5±0.3						
4		Vernier		Ø25±0.5						
5		Vernier		4±0.3						

4. Packing : Packed adequately Yes / No

5. Calibration Status checked OK / Not OK

RDSO Rep.
Name, Designation & Stamp

FIRM's Rep.
Name, Designation & Stamp

Revision-0



सत्यमेव जयते Manak Nagar, Lucknow-226011

Govt. of India
Ministry of Railways
Research Designs & Standards Organization

INSPECTION PLAN
(For ESCORTS / ADEPL / GDRMAKE BMBS)
SPECIFICATION NO.WD-23-BMBS-2008 Rev1, Amendment No. 01 of Sep-16 for
BC HOLDING CHAIN to Drg No. 4EB10266, Alt. 02

1. Acceptance Criteria:

Equipment Ready Yes / No
D.P. within due date Yes / No

2. Visual Check:

Visual Defects Yes / No

3. Dimensional Check:

CHECK SHEET

No. of Sets.

Qty. _____

Sr. No.	TEST DESCRIPTION	MODE	SAMPLE SIZE	SPECIFIED PARAMETERS	OBSERVED VALUES					REMARKS
					1	2	3	4	5	
1	Dimensional Checks	Measuring Tape	2% or Min. 2	550+75						
2		Vernier		3-Ø17±0.5						
3		Vernier		8±0.5						
4		Vernier		Ø8±0.5						
5		Vernier		50±5						
6	Working Load	Load Test Fixture	One / Lot	325 Kg Approx.						

4. Packing : Packed adequately Yes / No

5. Calibration Status checked OK / Not OK

RDSO Rep.
Name, Designation & Stamp

FIRM's Rep.
Name, Designation & Stamp

Revision-0

Page 22 of 26

QM-C-8.1/AB/0010/A



INSPECTION PLAN

(For ESCORTS / ADEPL / GDRMAKE BMBS)

SPECIFICATION NO.WD-23-BMBS-2008 Rev1, Amendment No. 01 of Sep-16 for
BC CHAIN HOLDING BRACKET to Drg No. 4EB10268, Alt. 03

1. Acceptance Criteria:

Equipment Ready
D.P. within due date

Yes / No
Yes / No

2. Visual Check:

Visual Defects

Yes / No

3. Dimensional Check:

CHECK SHEET

No. of Sets.

Qty. _____

Sr. No.	TEST DESCRIPTION	MODE	SAMPLE SIZE	SPECIFIED PARAMETERS	OBSERVED VALUES					REMARKS
					1	2	3	4	5	
1	Dimensional Checks	Measuring Tape / Vernier	2% or Min. 2	173±2.5						
2		Vernier		150±2.5						
3		Vernier		Ø17±0.3						

4. Packing : Packed adequately

Yes / No

5. Calibration Status checked

OK / Not OK

RDSO Rep.
Name, Designation & Stamp

FIRM's Rep.
Name, Designation & Stamp

Revision-0



सत्यमेव जयते Manak Nagar, Lucknow-226011

Govt. of India
Ministry of Railways
Research Designs & Standards Organization

INSPECTION PLAN

(For ESCORTS / ADEPL / GDRMAKE BMBS)

SPECIFICATION NO.WD-23-BMBS-2008 Rev1, Amendment No. 01 of Sep-16 for
M16x90 BOLT WITH NUT & SPLIT PIN to Drg No. 4EB10272, Alt. 02

1. Acceptance Criteria:

Equipment Ready
D.P. within due date

Yes / No
Yes / No

2. Visual Check:

Visual Defects

Yes / No

3. Dimensional Check:

CHECK SHEET

No. of Sets.

Qty. _____

Sr. No.	TEST DESCRIPTION	MODE	SAMPLE SIZE	SPECIFIED PARAMETERS	OBSERVED VALUES					REMARKS
					1	2	3	4	5	
1	Dimensional Checks	Thread Plug Gauge	2% or Min. 2	M16x2.0 Pitch						
2		Vernier		88.25-91.75						
3		Vernier		52 Max.						
4		Vernier		Ø4 +0.3						
5		Vernier		78 +0/-0.5						

4. Packing : Packed adequately

Yes / No

5. Calibration Status checked

OK / Not OK

RDSO Rep.
Name, Designation & Stamp

FIRM's Rep.
Name, Designation & Stamp

Revision-0

Page 24 of 26

QM-C-8.1/AB/0010/A

**Check Sheet for Visual Inspection of Hardware/Std. items (Visual Inspection- 1%)****1. Acceptance Criteria:**

- Equipment Ready
- D.P. within due date

Yes / No

Yes / No

2. Visual Check:

- Name plate/S.N. punching/Any Loose Fitting (Wherever applicable)
- Visual Defects

OK/Not OK

Yes / No

S. No	Name of Item	Drawing No with latest alteration	Lot Size	Sample Size	Observation	Remarks
1.	BRAKE HEAD	3EB7375				
2.	BRAKE HEAD PIN	4EB9764				
3	T-HEAD BOLT M12x35	4EP5042				
4	HEX NYLOCK NUT M12	DIN982/EQV.				
5	SPRING WASHER B12	DIN127/EQV.				
6	ANTI PILFERAGE DEVICE	4EB8149				
7	ANTI PILFERAGE PLATE	4EB9573				
8	ANTI PILFERAGE PLATE	4EB9572				
9	SPLIT PIN 6.3x75	IS 549/EQV.				
10	ANTI PILFERAGE PLATE	4EB10265				
11	SPLIT PIN 5x32	IS 549/EQV.				
12	ANTI PILFERAGE DEVICE FOR APM	2EB8148				
13	EQUALIZER	As per different types of wagon drawings				
14	O-RING	4EB9786				
15	O-RING	4KB1889				
16	GASKET	4EB10043				
17	PIN FOR CABLE	4EB5567				
18	PIN FOR TIE ROD	4EB9975				
19	HEX HEAD BOLT M12x50	DIN931/EQV.				
20	HEX NUT M12	DIN934/ EQV.				

RDSO Rep.
Name, Designation & StampFIRM's Rep.
Name, Designation & Stamp

Revision-0

Page 25 of 26

QM-C-8.1/AB/0010/A



सत्यमेव जयते Manak Nagar, Lucknow-226011

21	HEX HEAD SCREW M12x30	DIN933/EQV				
22	SPRING WASHER B8	DIN127/EQV.				
23	HEX HEAD SCREW M8x30	IS 13726/EQV.				
24	HEX HEAD SCREW M8x25	DIN933/EQV.				
25	SPLIT PIN 6.3x50	IS 549/EQV.				
26	WASHER B20x30x3.15	IS 2016/EQV.				
27	SPLIT PIN 4x35	DIN 94/EQV.				
28	PUNCHED WASHER A30	IS 2016/EQV.				
29	PLAIN WASHER B6	DIN125/EQV.				

3. Painting : Adequate
Anti Corrosive treatment to exteriors given

Yes / No

4. Packing : Packed adequately

Yes / No

Yes / No

5. Calibration Status checked

OK / Not OK

RDSO Rep.
Name, Designation & Stamp

FIRM's Rep.
Name, Designation & Stamp

Revision-0