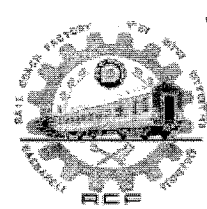


रेल डिब्बा कारखाना, रायबरेली  
RAIL COACH FACTORY, RAEBARELI



298

FORM NO: RCF/RBL/QMF 8001  
VERSION: 2012-01-01

**ROLLING STOCK CERTIFICATE**

Rolling Stock Certificate No.: MCF/RBL/QC/RSC

Date: 07/06/2016

SHELL No.	L	W	A	C	C	N	5	0	4	2	-	1	5	-	1	6	DATE DISPATCH	OF	1	7	0	3	2	0	1	6
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RLY	S	E	R	Type	L	W	A	C	C	N	Coach No.	1	5	8	1	3	2	/	c
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Railway Board's Order No. : 2015/M(C)/142/1 dtd 11.12.2015

- Tare Weight of Coach : 45.6 Tonnes
- Carrying Capacity : (a) Seating : 72 (b) Sleeping : 72 (c) Luggage : NIL

**3. SHELL LEADING DIMENSIONS:**

S NO	DESCRIPTION	DIMENSION (MM)
1.	Maximum length over body	23700
2.	Maximum width over body	3240
3.	Maximum height from Rail Level	4250
4.	CBC height/Buffer height from Rail level 1105 +0/-15	1) 1102(NPPE) 2) 1100(PPE)

**4. TRACEABILITY OF SHELL ITEMS:**

S NO	ITEM	MAKE/SUPPLIER	SERIAL NO			
1.	Buffers	N.A.				
2.	Centre Buffer Coupler	M/s ESCORTS	PP END	4389	NPP END	4457

**5. AIRBRAKE TEST REPORT:**

S NO	ITEM	DESCRIPTION	SPEC. VALUE	OBSERVED
1.	Full brake application	<ul style="list-style-type: none"> <li>➤ Reduce pressure of BP from 5.0 to 3.4 kg/cm<sup>2</sup>.</li> <li>➤ Max. pressure in BC</li> <li>➤ All Brake are applied</li> </ul>	6 – 10 sec. 3.0 ±0.15 kg/cm <sup>2</sup> . OK	8 Sec. 3.0 kg/cm <sup>2</sup> OK
2.	Insensitivity	<ul style="list-style-type: none"> <li>➤ Exhaust BP @ 0.3 kg/cm<sup>2</sup>/min.</li> </ul>	No brake application	OK
3.	Sensitivity	<ul style="list-style-type: none"> <li>➤ Exhaust BP @ 0.1 kg/cm<sup>2</sup>/Sec, after 02 Sec.</li> </ul>	Brake must apply	OK

**6. PAINTING DETAILS:**

S NO	DESCRIPTION	TYPE OF PAINT	MAKE	AVERAGE GLOSS VALUE
1.	Paint	P.U.	ADVANCE	91/89
2.	Insulation	Satisfactory		



आधुनिक रेल डिब्बा कारखाना रायबरेली  
MODERN COACH FACTORY RAEBARELI



FORM NO: RCF/RBL/QMF 8001  
VERSION: 2012-01-01

**ROLLING STOCK CERTIFICATE**

Rolling Stock Certificate No.: RCF/RBL/QC/RSC

SHELL No.	R	B	L	-	5	0	4	2	-	2	0	1	5	-	1	6	-	DATE OF DISPATCH	1	7	/	0	3	/	1	6
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RLY	S	E	R	Type	L	W	A	C	C	N	-	Coach No.	1	5	8	1	3	2	/	C	-
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**8. DETAIL OF BOGIES :**

ITEMS	PP Side				NPP Side			
Bogie No	150406 (MCF/RBL)				150405 (MCF/RBL)			
Bogie Type	FIAT				FIAT			
Frame no.	MCF/RBL/SCI-351				MCF/RBL/SCI-339			
Bolster no.	RBL-362				RBL-152			
Axle No	CHT 127842		CHT 51 RWF		CHT 126900		CHT 126661	
Wheel Dia	915.644	915.567	915.861	915.732	915.703	915.704	915.652	915.613
Wheel Disc No	6148-00049 15 VR	6148-00024 15 VR	6148-00115 15 VR	6196-00131 15 VR	06232-00124 15 VR	6212-00062 15 VR	6212-00040 15 VR	6219-00178 15 VR
R.B. Nos.	10-14-16661	02-15-30480	05-14-38608	05-14-38854	12-14-01241	02-15-31082	12-14-21691	02-15-31051
CT R B-Make	SKF		SKF		SKF		SKF	

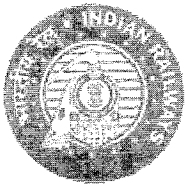
**9. SECONDARY SUSPENSION LOAD DEFLECTION VALUES**

DESCRIPTION	Bogie PP side				Bogie NPP side			
	Secondary 1		Secondary 2		Secondary 1		Secondary 2	
	Outer	Inner	Outer	Inner	Outer	Inner	Outer	Inner
Make & Nos.	CMAFJ 01-16-8836	RSK-029	CMAFJ 01-16-8836	RSK-027	CMAFJ 01-16-8836	RSK-893	CMAFJ 01-16-8836	RSK-362
Compressed Ht. at Tested Load	515	466	515	468	515	46	515	465
Alignment deviation (mm)	18	21	20	22	8	34	10	36

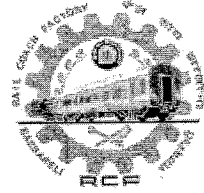
**10. TRACEABILITY OF BOGIE ITEMS:**

S. NO	ITEM	SERIAL NO.		MAKE
		PP SIDE	NPP SIDE	
1.	Primary outer Spring	RSK (473,279,093,465)	RSK (0078,322,137,66)	RSK
2.	Primary Inner Spring	CVFSK 12-15-7143(186,186-121,186-91,186-7)	CVFSK 12-15-7143-186(35,15,82,12)	CVFSK
3.	Primary Damper	2015-08 (27762,28116,27714,28097)	2015-08(27713,28099,28092,28107)	KONI
4.	Secondary Damper	36-2015 (6682,6603)	36-2015 (6676,6625)	KONI
5.	Lateral Damper	37-2015 3789	37-2015 3776	KONI
6.	Brake Cylinder	KBI 2094K29,2208K29,2161K29,2053K29	KBI 2897K29,2205K29,2207K29,2096K29	KBI
7.	Brake Caliper	2052-29,2163-29,2161-29,2053-29	2055-29,2160-29,2162-29,2054-29	KBI
8.	Brake Disc	FAV BSI 03-15-1493806,03-15-1493808, 6-14-1454779,9-14-1475509	FAV BSI 10-14-(1477297,1477299), 03-15(1495093,1495098)	FAV
9.	Ball Joint Control Arm			GMT
10.	Lateral Bump Stop			GMT
11.	Traction Centre make			EMSON
12.	Traction lever make			SARITA
13.	Traction lever make			GMT
14.	Ball joint traction lever			SGA
15.	Ball joint traction centre			TECSPAK
16.	Secondary Rubber Pad			GMT
17.	Rubber Spring			SARITA
18.	Anti roll bar make			SARITA/GMT
19.	Roll Link make			SARITA
19.	Fork make			SARITA

*Amay*  
SSE/RBL Bogie



# रेल डिब्बा कारखाना, रायबरेली RAIL COACH FACTORY, RAEBARELI



FORM NO: RCF/RBL/QMF 8001  
VERSION: 2012-01-01

## ROLLING STOCK CERTIFICATE

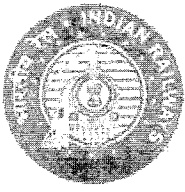
Rolling Stock Certificate No.: MCF/RBL/QC/RSC

Date: 07/06/2016

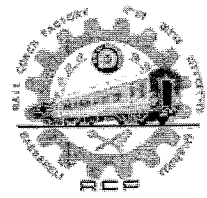
SHELL No.	L	W	A	C	C	N	5	0	4	2	-	1	5	-	1	6	DATE DISPATCH	OF	1	7	0	3	2	0	1	6	
RLY	S	E	R	Type	L	W	A	C	C	N	Coach No.	1	5	8	1	3	2	/	c								

### 11. TRACEABILITY OF FURNISHING ITEMS:

S NO	ITEM	MAKE/SUPPLIER	SERIAL NO
1.	Air Brake Module	M/s KBI ,Faridabad ,New Delhi	15E1026
2.	Pull box	M/s KBI ,Faridabad ,New Delhi	
3.	DV	M/s KBI ,Faridabad ,New Delhi	2015E1584
4.	PVC	M/s Premier Polyfilm Ltd. Sahibabad	
5.	UIC Vestibule (PPE)	M/s Fricmart,GZB/DLI	
6.	UIC Vestibule (NPPE)	M/s Fricmart,GZB/DLI	
7.	Foot Step	M/s Super Spark Pvt. Ltd. Faridabad	
8.	Decoupling arrangement	M/s Seco Industries, Mumbai	
9.	Body Side Window	M/s Rail Tech, Kapurthala	
10.	Emergency Window	M/s Aikon Technology Pvt.Ltd.Solan (H.P)	
11.	Lavatory Window	M/s Aikon Technology Pvt.Ltd.Solan (H.P)	
12.	Roof Ceiling	M/s KAE Sataraganj U.K.	
13.	Non-AC Area Ceiling	M/s Gandhi Enterprises, Jalandhar	
14.	Supply Air Duct	M/s Amirchand Engg. Works , Jalandhar	
15.	Body Side Doors	M/s JBM, Faridabad	
16.	Compartment Door (PPE)	M/s Rail Tech, Kapurthala	
17.	Compartment Door (NPPE)	M/s Rail Tech, Kapurthala	
18.	Vestibule Door(PPE)	M/s Kalsi Ludhiana	
19.	Vestibule Door(NPPE)	M/s Kalsi Ludhiana	
20.	Bio Tank	M/s Amit Engineers, Mohali PB	
21.	Auxiliary Water Tank	M/s Shivalik Fastener Mohali PB	
22.	Under Slung Water Tank(450 L)	M/s Amit Engineers, Mohali PB	
23.	Under Slung Water Tank( 2X685L)	M/s Amit Engineers, Mohali PB	
24.	Flexible Faucet	M/s Hindustan Fibre Ltd. Vadodra (Gujrat)	
25.	Lotah Filler Tap	M/s Metco Delhi	
26.	Lavatory Modoules	M/s Hindustan Fibre Ltd. Vadodra (Gujrat)	
27.	Lavatory Doors	M/s Hindustan Fibre Ltd. Vadodra (Gujrat)	
28.	Waste Bin Arrangement	M/s Hindustan Fibre Ltd. Vadodra (Gujrat)	
29.	Fire Extinguisher	M/s Exeee Fire, Lightex Fire	NPP 112 ,PP 4980
30.	Side Wall panel	M/s Hindustan Fibre Ltd. Vadodra (Gujrat)	
31.	Seat & Berth	M/s Savitri Engg. Products Pontasahib HP	
32.	Light Luggage Rack	M/s Verendra Steel Enterprises Chandigarh	
33.	Snack Table	M/s International Tractor's Limited,Hoshiarpur .	
34.	Yaw Damper	M/s KONI M/s KONI Supplier- M/s Pan India Consultant Pvt.Ltd 105 Phase -IVUdyog Vihar, Gurgaon-122015 Haryana	NPP-72895,72833 PP-72862,72832



रेल डिब्बा कारखाना, रायबरेली  
RAIL COACH FACTORY, RAEBARELI



FORM NO: RCF/RBL/QMF 8001  
VERSION: 2012-01-01

**ROLLING STOCK CERTIFICATE**

Rolling Stock Certificate No.: MCF/RBL/QC/RSC

Date: 07/06/2016

SHELL No.	L	W	A	C	C	N	5	0	4	2	-	1	5	-	1	6	DATE OF DISPATCH	1	7	0	3	2	0	1	6	
RLY	S	E	R	Type	L	W	A	C	C	N	Coach No.	1	5	8	1	3	2	/	c							

12. MODIFICATION (IF ANY) : NIL

13. DEVIATION (IF ANY) : NIL

14. ITEM FITTED ON THE COACH ON TRIAL : NIL


S NO	ITEM PARTICULARS	PURPOSE	REPORT	REFERENCE &
			Frequency	PERIOD OF TRIAL


**15. WARRANTY:**

S NO	COMPONENTS	WARRANTY
1	Brake blocks, wheels, push gravity cocks, flushing valves, moldings, window glasses, mirrors, roller blinds, curtain & bulbs etc. ( items which are consumable in nature)	NIL
2	Other coach furnishing sub assemblies(bought out items)	24 months date of dispatch of coach or 30 months from date of supply of material whichever is earlier.

**NOTE:**

- This warranty covers free supply of parts which wear out and fails within warranty period of normal service.
- This doesn't covers faults arising out of accident, non standard maintenance practices, abnormal use or mishandling, vandal activity, arson & deficient/pilferage etc.
- This doesn't cover any consequential liabilities or damages/loss incurred by anybody; furthermore, it shall in no case extend to repayment, return of the coach or replacement of complete coach.
- Whether a defective part is to be replaced or repaired shall be at the discretion of RCF/RBL.
- For any complain/ suggestion please mail at qualityrcfbl@gmail.com

  
DY CME  
उप म. वि. वि. / फर्नि.  
MCF/RBL  
DY CME/FURNISHING  
रेल कोच फैक्ट्री / रायबरेली / लालमंज  
RCF / RBL / LLJ

  
सहायक यंत्रिक अभियन्ता / गुणवत्ता  
Asst. Mechanical Engineer / Quality  
MCF/RBL  
रेल डिब्बा कारखाना  
Rail Coach Factory, Lalganj



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RCF/RBL/QEF8001  
VER. 10.08.2015  
PAGE 1 OF 5

**FOR ELECTRICAL ITEMS**

ROLLING STOCK CERTIFICATE OF LHB/EOG AC COACHES

ELECTRICAL TEST CERTIFICATE FOR LHB/EOG AC COACHES

TYPE COACH	LWACCN	SHELL/COACH NO	158132/C
RAILWAY	SE	DATE OF DESPATCH	
Sr no	Description of tests	Remarks	
1.0	REFERENCE SPECIFICATION : L 446		
1.1	AIR CONDITIONING TEST : ELPS/TP/AC 01.		
1.2	CODE OF PRACTICE OF WIRING : ELPS/SPEC/EOG/AC-01		
2.0	INSULATION RESISTANCE : Setting of insulation monitoring relay at 30K ohms as per TD 111 of M/s LHB.		
	Observed status : HEALTHY		
3.0	AIR DELIVERY MEASUREMENT	OBSERVED VALUE	OK
3.1	Fresh Air	29.61 Cub mtr/min	OK
3.2	Return Air	88.39 Cub mtr/min	OK
3.3	Exhaust Air	10.89 Cub mtr/min	OK
3.4	Conditioned Air	216.87 Cub mtr/min	OK
4.0	<b>PRE COOLING TEST: Max 01 hr.</b> Time taken to pre cool from 45 deg centigrade to 24/22 deg C during OFF LOAD condition  Not done due to ambient temp. below 22°C	OK	
5.0	<b>PULL DOWN TEST: Max 02 hrs.</b> Time taken to pull down from 45 deg C to 24/22 deg C during FULL LOAD condition.  Not done due to ambient temp. below 22°C	OK	

*(Signature)*  
Senior Section Engineer  
Quality control / Electrical  
RCF, Raebareli





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(RAIL COACH FACTORY-RAEBARELI)**



RCF/RBL/QEF8001  
VER. 10.08.2015  
PAGE 2 OF 5

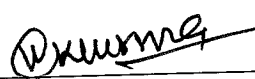
**FOR ELECTRICAL ITEMS**

ROLLING STOCK CERTIFICATE OF LHB/EOG AC COACHES

ELECTRICAL TEST CERTIFICATE FOR LHB EOG AC COACHES

Sr no	Description of test	Remarks
6.0	HUMIDITY CONTROL	OK
7.0	PUMP EQUIPMENTS	OK
8.0	WORKING OF EXHAUST FANS OVER LAVATORIES	OK
9.0	WORKING OF COMPOSITE PANTRY	OK
10.0	COMPARTMENT LIGHT	OK
11.0	PUBLIC ADDRESSING SYSTEM ( PAS )	OK
12.0	WHEEL SLIDE PROTECTION SYSTEM ( WSP )	OK
13.0	WORKING OF 60KVA TRANSFORMER	OK
14.0	WORKING OF REGULATED BATTERY CHARGER	OK
15.0	WORKING OF EMERGENCY BATTERY CHARGER	OK
16.0	SAFETY ITEMS	OK
16.1	THERMOSTAT :	OK
16.2	ROTARY 07 SET POINTS (NORMAL CONDITION)	OK
16.3	MID SET POINTS (SENSORS FAILED CONDITIONS)	OK
16.4	HYGROSTAT	OK
16.5	CONTROL CIRCUIT	OK
16.6	POWER CIRCUIT	OK
17.0	REFRIGERANT USED	OK

**R 407C**

  
**Senior Section Engineer**  
**Quality control / Electrical**  
**RCF, Raebareli**





**Govt. of India- Ministry of Railways  
(RAIL COACH FACTORY-RAEBARELI)**



RCF/RBL/QEF8001  
VER. 10.08.2015  
PAGE  
3 OF 5

**ROLLING STOCK CERTIFICATE OF LHB/EOG AC COACHES**

Sr no	Description	Drg/Spec no.	Quantity per Coach
01.	Roof mounted AC package unit for LHB AC coaches Make : <b>LEEL</b> Sr no of RMPU 1 (NPP side): <b>15.12.1270</b> Sr no of RMPU 2( PP side ) : <b>15.12.1281</b> Sr no of Microprocessor: <b>SA.15.08.095</b>	As per rdso/pe/spes/ac/0061/rev -1/2005	<b>02</b>
02.	Switch board cabinet Make : <b>AMIT</b> Sr no : <b>AE/SB/115/09/2015</b>	As per spec no . EDTS073,REV-D,AM-6	<b>01</b>
03.	Pump equipment with PLC controller & pump box Make : <b>DR AUTO</b> Sr no PA- <b>2015/09/016</b> Sr no.1- <b>1509013</b> Sr no.2- <b>1509041</b> Sr no.CPA- <b>2015-09-0070</b>	As per spec EDTS 186,Rev-a, Am- 2	<b>01</b>
04.	Double inlet centrifugal blower 415V/03Ph /50Hz /120W/450 cum mtr/hr discharge for exhausting air from lavatory & switch board cabinet Make : <b>INTEG</b>	EDTS331, TYPE-1 CORR.-1&2	<b>02</b>
05.	Vestibule Light Fitting Single	LW 76004,Alt-b	<b>07</b>
06.	Ceiling light fitting DOUBLE w/o diffuser.	LW 76011,Alt -c	<b>09</b>
07.	Ceiling light fitting with NL w/o diffuser w/o item 2&3	LW 76013,Alt -c	<b>09</b>
08.	Emergency light system for EOG type coaches (AEL)	EDTS 151,Rev -c Am-1 & 2	<b>04</b>
09.	Lavatory light fitting assly	LW 76001,Alt nil	<b>04</b>
10.	WC gauge signal light	LW 76006,Alt-c	<b>02</b>

*D. Kumar*  
**Senior Section Engineer  
Quality control / Electrical  
RCF, Raebareli**





**Govt. of India- Ministry of Railways  
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RCF/RBL/QEF8001  
VER. 10.08.2015  
PAGE 4 OF 5

**ROLLING STOCK CERTIFICATE OF LHB/EOG AC COACHES**

Sr no	Description	Drg/Spec no.	Quantity per Coach
11.	Passenger alarm coach indication light	LW 76005,Alt-e	<b>02</b>
12.	Fluorescent lamp 18W	RDSO/PE/SPEC/D/TL 0011-2000,Rev I, Sec- I , 07/2001	<b>34</b>
13.	Diffuser complete w/o item 1& 2.	LW 76012,Alt-a	<b>25</b>
14.	Razor socket for WC 110/240V.	EDML 047 ,Rev nil	<b>04</b>
15.	Terminal strip	EDML 034,Rev-a	<b>01</b>
16.	Terminal connector	EDML 037,Rev` a`	<b>04</b>
17.	Single switch 06A/250V/AC ONE WAY ,complete with steel plate & cover frame	EDML 047,Rev- C, Item 1.	<b>09</b>
18.	Single switch 06A/250V/AC ONE WAY complete with steel plate & cover frame	EDML 047,Rev-A, Item 2.	<b>09</b>
19.	Provision of switch socket combined 5PIN (06A, 250V AC) along with 1A glass fuse fitted powder coated steel plate & cover	As per cat no EL-243 (EL signature series ) of M/s SSK	<b>09</b>
20.	PA system for LHB coaches Make : <b>AHUJA</b>	EDTS 173,Rev- a Am- 1,2&3	<b>01 set</b>
21.	70AH/110V,54 Cells,02V each ,maintenance free pure lead acid tin monoblock ,battery set with 09 modules 12V each. , factory pre charged. Make : <b>HBL</b> Lug date : <b>06/2015</b>	EDTS 129,Rev nil	<b>01 set</b>
22.	Battery box for LHB coaches.	1 10113 0 76 700 005 w/o item 5, 22, 23, 26 & 27.	<b>01</b>

*(Signature)*

**Senior Section Engineer  
Quality control / Electrical  
RCF, Raebareli**







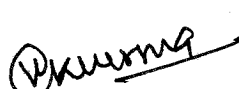
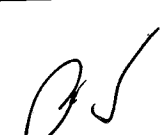
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(RAIL COACH FACTORY-RAEBARELI)



RCF/RBL/QEF8001  
VER. 10.08.2015  
PAGE 5 OF 5

ROLLING STOCK CERTIFICATE OF LHB/EOG AC COACHES

Sr no	Description	Drg/Spec no.	Quantity per Coach
23.	Battery fuse box +ve Make : <b>ABROL</b>	As per LW 71001,Alt-F	<b>01</b>
24.	Battery fuse box -ve Make : <b>ABROL</b>	As per LW 71002,Alt-F	<b>01</b>
25.	Regulated battery charger Make : <b>STESALITE</b> Sr no : <b>08/5503</b>	As per RDSO/pe/spec/ac/0129, Rev.-1 (2009)	<b>01</b>
26.	Emergency battery charger Make : <b>WAVES</b> Sr no : <b>WEBCG-151116</b>	EDTS 163,Rev `c` corg.-2&3	<b>01</b>
27.	60KVA transformer Make : <b>VIMAL</b> Sr no : <b>3115</b>	As per rdso/pe/spec/ac/0080/rev -0 (2007)/Am-1&2/Corr. 1,2&3	<b>01</b>
28.	ZS coupling 400A/750V/03Ph/50hz. Make : <b>MAA LAXMI INDUSTRIES</b>	As per spec No EDTS 105,Rev `e` Am-2	<b>02 sets</b>
29.	Feeder junction boxes. Make : <b>NEC</b>	EDML 020, Rev- I/EDTS-328 REV-C.	<b>02</b>
30.	Wheel set earthing equipment. Make : <b>DARSHAN ENTERPRISES</b>	EDTS101,REV-C,AM-1	<b>02</b>
31.	Wheel Slide Protection System (WSP) Make : <b>KNORR</b> & Sr no : <b>0114441411</b>	M/s : <b>KNORR</b>	<b>01 set</b>
32.	PANTRY EQUIPMENTS : Hot Case & Bottle cooler cum deep freezer Make : <b>VISHAL GAS SERVICE</b>	As per spec no EDTS 139, Rev- E , Sec II.	<b>01</b>

 <b>SSE/EL/QC</b>	 <b>DYCEE(P)/RCF/RBL</b>
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वरिष्ठ खण्ड अभियन्ता  
विद्युत उत्पादन-गुणवत्ता  
रेल कोच फैक्टरी / लालगंज / रायबरेली  
Sr. Section Engineer  
Electric Production - Quality  
RCF / RBL / LLJ

उप मुख्य विद्युत अभियन्ता (उत्पादन)  
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