




**SPECIFICATION FOR BRAKE CONTROL SYSTEM  
INCLUDING DRIVER'S VIGILANCE CONTROL DEVICE  
FOR WAG-9 & WAP-7 CLASS OF LOCOMOTIVES**

**SPECIFICATION NO.:- CLW/MS/3/001 Alt. 18**

**ISSUE DATE :- 26.07.1996**

**ISSUED BY :-**

Dy. Chief Electrical Engineer/D/Conv.  
Chittaranjan Locomotive Works,  
P.O. Chittaranjan-713331,  
Dist.- Paschim Bardhaman,  
West Bengal (India)

PREPARED BY		CHECKED BY		APPROVED BY	
Validity unknown					
 Digitally signed by MAHENDRA PAL Date: 2025.06.16 15:45:00 IST Reason: I REPS-CRIS Location: New Delhi	ARNAB MONDAL	 Digitally signed by BHARAT CHANDRA BAL Date: 2025.06.16 00:09:20 +05'30'	AMIT AGGARWAL	 Digitally signed by AMIT AGGARWAL Date: 2025.06.16 00:15:57 +05'30'	
	Digitally signed by ARNAB MONDAL Date: 2025.06.15 23:56:12 +05'30'				BHARAT CHANDRA BAL
	SSE/DRG.				
		AEE/D/Conv.		DY. CEE/D-III	

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SL. NO.	DESCRIPTION	REF. DRG. NO.	D&M DRG. NO.	ISSUE NO.	TYPE/ REF.	REMARKS/ CLW DRG. NO.
1	AIR HORN	REF.1- DRG. NO. SCHB 1684 PL1 (ISSUE 8)	FF 983	6	2	
2	AIR HORN	REF.2- „	FF 983	6	4	
3	SAFETY VALVE ¾”	REF.10- „	FF 4947	3	REF.13	
4	COMPRESSOR CHECK VALVE 1¼”	REF.11- „	AB224-OV6	-	6	
5	UNLOADER EXHAUST VALVE 1”	REF.12- „	V23-OV4	3	4	
6	LATCHED ISOLATING COCK 1¼” VENTED	REF.13- „	AB799-OV2	1	2	
7	ISOLATING COCK 1¼”	REF.14- „	AB649-OV1	4	1	
8	COMPRESSOR PRESSURE SWITCH	REF.35- „	FF 4922	13	BB	
9	COMPRESSOR PRESSURE SWITCH	REF.36- „	FF 4922	13	CC	
10	LOW MAIN RESERVOIR PRESSURE SWITCH	REF.37- „	FF 4922	13	DD	
11	SAFETY VALVE ¾”	REF.39- „	FF 4947	3	9	
12	CHOKE 3/16” BORE	REF.62 & 67- „	0017-13	3	-	
13	ISOLATING COCK ¾” VENTED	REF.63, 179 & 181- „	AB 669-OV1	-	1	
14	BRAKE CYLINDER PRESSURE SWITCH	REF.64- „	FF 4922	13	EE	
15	ANTI SPIN VALVE	REF.65- „	AB 58-OV5	-	5/AUJ	
16	DOUBLE CHECK VALVE ¾”	REF.66- „	AB 81-OV3	3	5	
17	FLEXIBLE HOSE 3/8”	REF.83- „	FF 2026/750	-	-	
18	HOSE	REF.104- „	FF 2025/750	-	-	
19	HOSE	REF.105- „	FF 1711/1050	-	-	
20	AIR LINE SIEVE 3/8”	REF.129 OF DRG.NO. SCHB 1684 PL1 ISSUE 8	Z 1350	2B	1	
21	OIL SEPARATOR/DRIP CUP WITH AUTO DRAIN VALVE	REF.87- „	ABB 153-OV14	1	14	
22	CHECK VALVE 1¼”	REF.91- „	AB 224-OV3	1	3	
23	LATCHED ISOLATING COCK 1¼”	REF.94- „	AB799-OV1	1	1	
24	HOSE & COUPLING 1” (MREP)	REF.95- „	AB129-OV33	3	33/AVA	

PREPARED BY	CHECKED BY	APPROVED BY
<b>ARNAB MONDAL</b> Digitally signed by ARNAB MONDAL Date: 2025.06.15 23:59:31 +05'30'	<b>BHARAT CHANDRA BAL</b> Digitally signed by BHARAT CHANDRA BAL Date: 2025.06.16 00:10:51 +05'30'	<b>AMIT AGGARWAL</b> Digitally signed by AMIT AGGARWAL Date: 2025.06.16 00:17:12 +05'30'
SSE/DRG.	AEE/D/Conv.	DY. CEE/D-III

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SL. NO.	DESCRIPTION	REF. DRG. NO.	D&M DRG. NO.	ISSUE NO.	TYPE/ REF.	REMARKS/ CLW DRG. NO.
25	HOSE & COUPLING 1"	REF.99-,,	AB129-OV33	3	33/AVB	
26	HOSE & COUPLING 1 1/4" L.H. FEED PIPE	REF.101-,,	AB129-OV36	5	36/720	
27	HOSE & COUPLING 1 1/4" R.H. BRAKE PIPE	REF.97-,,	AB129-OV35	4	35/625	
28	END COCK 1" R.H.	REF.96-,,	AB121-OV12	1	35	
29	END COCK 1" L.H.	REF.100-,,	AB121-OV12	1	36	
30	END COCK 1 1/4"	REF.98, 102-,,	0/2/65/386 ALT.6			
31	DRIVERS BRAKE CONTROLLER	REF.111-,,	AB489-OV6	-	10	
32	DRIVERS DIRECT BRAKE VALVE FD1	REF.112-,,	AB3-OV1	-	1/ABP	
33	ISOLATING COCK 1 1/4" (EMERGENCY)	REF.113-,,	AB649-OV2	-	2	
34	EMERGENCY EXHAUST VALVE 1 1/4"	REF.116-,,	V23-OV14	2	14	
35	ISOLATING COCK 3/8" VENTED	REF.120 & 130-,,	AB 667-OV1	1	1	
36	DUPLEX PR. GAUGE (F.P.-M.R.)	REF.121-,,	1209-18.306-223	-	7	
37	PRESSURE GAUGE - BRAKE PIPE	REF.122-,,	1209-18.306-225 ALT.1	-	4C	
38	2 WAY HORN VALVE	REF.123-,,	AB 441-OV2	-	2	
39	AUTO DRAIN VALVE	REF.124-,,	AB 140-OV7	3	12	
40	DUPLEX PR. GAUGE (BC1-BC2)	REF.131-,,	1209-18.306-224	-	1	
41	FLOW METER GAUGE	REF.132-,,	1209-18.306-226 ALT.1	-	1	
42	BRAKE FRAME INTERFACE MANIFOLD	REF.140-,,	AB759-OV93	1	93	
43	ISOLATING COCK VENTED 1 1/4"	REF.180 & 182-,,	AB721-OV2	-	2	
44	DUMMY COUPLING (TYPE-1+TYPE-2)	REF.183-,,	1209-02.329-24, 25 & IB 026-01040	-	8	
45	ISOLATING COCK 1 1/4"	REF.184-,,	AB 649-OV2	-	2h	
46	SANDER NOZZLE	REF.103-,,	FF 5738	-	-	

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<b>ARNAB MONDAL</b>	Digitally signed by ARNAB MONDAL Date: 2025.06.16 00:01:30 +05'30'	<b>BHARAT CHANDRA BAL</b>	Digitally signed by BHARAT CHANDRA BAL Date: 2025.06.16 00:11:12 +05'30'	<b>AMIT AGGARWAL</b>	Digitally signed by AMIT AGGARWAL Date: 2025.06.16 00:17:32 +05'30'
	SSE/DRG.		AEE/D/Conv.		DY. CEE/D-III



SL. NO.	DESCRIPTION	REF. DRG. NO.	D&M DRG. NO.	ISSUE NO.	TYPE/ REF.	REMARKS/ CLW DRG. NO.
47	BRAKE CONTROL EQUIPMENT RACK	REF.141-,,	AB759-OV94	3	94/ASG	BRAKE COMPONENTS FROM SL. NO. 47 TO 101 ARE MOUNTED ON BRAKE FRAME.
48	ISOLATING COCK 3/8" VENTED	REF. 5, 8, 134-,,				
49	SOLENOID VALVE (PANTOGRAPH)	REF.6-,,				
50	PRESSURE SWITCH (PANTOGRAPH)	REF.9-,,				
51	PANTOGRAPH RESERVOIR 5 LTS.	REF.22-,,				
52	SAFETY VALVE 1/4"	REF.23-,,				
53	COMPRESSOR CHECK VALVE 1/2"	REF.24-,,				
54	CHECK VALVE 1/2"	REF.25-,,				
55	AUXILIARY COMPRESSOR PR. SWITCH	REF.26-,,				
56	1/2" TEST POINT (VENTED PLUG)	REF.27,56, 61,75,76 & 107-,,				
57	E70 EQUIPMENT MANIFOLD ASSEMBLY	REF.29-,,				
58	LATCHED SOLENOID VALVE (PARKING BRAKE)	REF.30-,,				
59	CHOKE	REF.31,171-,,				
60	PARKING BRAKE PR. SWITCH	REF.32-,,				
61	E.P.VALVE UNLOADING	REF.33-,,				
62	BRAKE FEED PIPE PRESSURE SWITCH	REF.34-,,				
63	KABA KEY COCK	REF.38-,,	FREE ISSUE	--	--	
64	VENTURI VALVE	REF.42-,,		--	--	
65	FLOW METER GAUGE RELAY VALVE	REF.43-,,		--	--	
66	VENTURI VALVE PRESSURE SWITCH	REF.44-,,		--	--	
67	ELECTRONIC ENCLOSURE	REF.45-,,		--	--	
68	BRAKE AWAY PROTECTION VALVE	REF.46-,,		--	--	
69	TOWING COCK 3/8"	REF.47-,,		--	--	
70	CHECK VALVE WITH STRAINER 1/2"	REF.48-,,		--	--	
71	DISTRIBUTOR DMD 3	REF.49-,,		--	--	
72	BRAKE CUTOFF VALVE	REF.52-,,		--	--	

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<b>ARNAB MONDAL</b> Digitally signed by ARNAB MONDAL Date: 2025.06.16 00:01:59 +05'30' SSE/DRG.	<b>BHARAT CHANDRA BAL</b> Digitally signed by BHARAT CHANDRA BAL Date: 2025.06.16 00:11:33 +05'30' AEE/D/Conv.	<b>AMIT AGGARWAL</b> Digitally signed by AMIT AGGARWAL Date: 2025.06.16 00:17:50 +05'30' DY. CEE/D-III

SL. NO.	DESCRIPTION	REF. DRG. NO.	D&M DRG. NO.	ISSUE NO.	TYPE/ REF.	REMARKS/ CLW DRG. NO.
73	CAPACITY RESERVOIR 5 LTS.	REF.53- „		--	--	BRAKE COMPONENTS FROM SL. NO. 47 TO 101 ARE MOUNTED ON BRAKE FRAME.
74	DOUBLE CHECK VALVE ½”	REF.54- „		--	--	
75	EBC/5 BLENDING UNIT	REF.55- „		--	--	
76	D2 RELAY VALVE (AUTOMIC BRAKE)	REF.57- „		--	--	
77	D2 RELAY VALVE (DIRECT BRAKE)	REF.58- „		--	--	
78	VIGILANCE PRESSURE SWITCH	REF.60 OF DRG. NO. SCHB 1684 PL1 ISSUE 8		--	--	
79	ISOLATING COCK 3/8” (TRACTION CONVERTER 2)	REF.68- „		--	--	
80	E70 BRAKE PIPE ISOLATING COCK WITH SWITCH 1¼”	REF.70- „		--	--	
81	EMERGENCY EXHAUST VALVE	REF.71- „		--	--	
82	EMERGENCY E.P. VALVE	REF.72- „		--	--	
83	SANDING VALVE	REF.73- „		--	--	
84	EMERGENCY/VIGILANCE ISOLATING COCK WITH SWITCH 1¼”	REF.74- „		--	--	
85	PRESSURE REGULATOR ½”	REF.79,114- „		--	--	
86	CENTRIFUGAL STRAINER WITH DRAIN COCK ½”	REF.84- „		--	--	
87	PANTOGRAPH SELECTION SWITCH	REF.85- „		--	--	
88	ISOLATING COCK 3/8” (WHEEL FLANGE LUB)	REF.86- „		--	--	
89	ISOLATING COCK 3/8” (FILTER CUBICLE)	REF.88- „		--	--	
90	DUPLEX CHECK VALVE 1¼”	REF.92- „		--	--	
91	PRESSURE CONTROL VALVE	REF.93- „		--	--	
92	CHECK VALVE 1”	REF.106- „		--	--	
93	BRAKE PIPE PR. SWITCH B.P.G.	REF.69- „		--	--	
94	DIRECT BRAKE EXHAUST VALVE	REF.115- „		--	--	
95	ISOLATING COCK 3/8” (TRACTION CONVERTER-1)	REF.125- „		--	--	
96	ISOLATING COCK 1¼”	REF.136- „		--	--	
97	PRESSURE REDUCING VALVE	REF.137- „		--	--	

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<b>ARNAB MONDAL</b>	Digitally signed by ARNAB MONDAL Date: 2025.06.16 00:03:54 +05'30'	<b>BHARAT CHANDRA BAL</b>	Digitally signed by BHARAT CHANDRA BAL Date: 2025.06.16 00:11:55 +05'30'	<b>AMIT AGGARWAL</b>	Digitally signed by AMIT AGGARWAL Date: 2025.06.16 00:18:11 +05'30'
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SL. NO.	DESCRIPTION	REF. DRG. NO.	D&M DRG. NO.	ISSUE NO.	TYPE/ REF.	REMARKS/ CLW DRG. NO.
98	AIR LINE SIEVE 1" (IN LINE)	REF.138-,,		--	--	
99	CAPACITY RESERVOIR 5 LITRE	REF.170-,,		--	--	
100	VIGILANCE CONTROL EQUIPMENT	REF.176-,,		--	--	
101	DIRECT BRAKE PRESSURE SWITCH	REF.59-,,		--	--	
102	PRESSURE GAUGE (PARKING BRAKE)	CLW DRG.NO. 1209-18.306-205				
103	ANTI COMPOUND VALVE 3/8"	CLW DRG. NO. 1209-18.406-201				
104	HORN ISOLATING COCK WITH VENT 3/8" (LEGRIS TYPE)	CLW DRG. NO. 1209-18.306-195				
105	PRESSURE GAUGE (PANTO)	FF 6038, 0018-19, 0062-224, 29, 33 & 319				
106	LIMITING VALVE ASSLY. KIT COMPLETE (FOR ASV)	SWIL PART NO.790017201				
107	ISOLATING COCK 1/2"	1209-07.432-153 ALT. 1	--	--	--	

**NOTES :**

1. ALL STANDARD FASTENERS (SCREWS, BOLTS, NUTS ETC.) SHALL BE OF M/S. T.V.S., M/S. L.P.S., M/S. UNBREAKO MAKE ONLY. WASHERS (HELICAL SPRING ETC.) SHALL BE OF 'BBBB' BRAND OF M/S. FORBES MAKE ONLY.
2. ALL ISOLATING COCKS SHALL BE OF M/S. LEGRIS MAKE.

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<b>ARNAB MONDAL</b> Digitally signed by ARNAB MONDAL Date: 2025.06.16 00:04:13 +05'30'	<b>BHARAT CHANDRA BAL</b> Digitally signed by BHARAT CHANDRA BAL Date: 2025.06.16 00:12:15 +05'30'	<b>AMIT AGGARWAL</b> Digitally signed by AMIT AGGARWAL Date: 2025.06.16 00:18:31 +05'30'
SSE/DRG.	AEE/D/Conv.	DY. CEE/D-III