

Government of India
(Ministry of Railways)
Research Designs & Standards Organisation
Manak Nagar, Lucknow-226 011

No. EL/3.2.61

Dated: 31.01.2001

SPECIAL MAINTENANCE INSTRUCTIONS
NO.RDSO/ELRS/SMI/0223-2001 (Rev.'0')

1.0 Title:

Replacement Overhauling Kit for Double bottle vacuum circuit breaker type 20CB Alstom make during AOH, IOH and POH.

2.0 Brief History:

Replacement kit for vacuum circuit breaker type 20CB of M/s. Alstom was circulated to Railways vide RDSO letter No.EL/3.2.61 dated 28/29.09.1999. After discussions with user Railways and manufacturer, a need has been felt to revise the same. This SMI lists the components/parts in the form of 'kits' required as maintenance spares for replacement during AOH, IOH and POH of the breaker type 20CB.

3.0 Application:

Electric Locos and EMUs fitted with VCB type 20CB of M/s. Alstom.

4.0 Object:

To standardise the list of components/parts required to be replaced during annual overhaul (AOH), intermediate overhaul (IOH) and periodical overhaul (POH) for vacuum circuit breaker type 20CB of M/s. Alstom make.

5.0 Instructions:

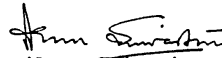
Components identified for replacement in "Kit Form" for AOH, IOH & POH schedules are enclosed as Annexure. Reference drawings, part numbers and quantity per VCB of these components have also been indicated. Railways are required to procure these items in "Kit Form" and replace them in respective overhauling schedules. While ordering AOH, IOH & POH replacement 'kits', Railways should mention the assigned code numbers for these 'kits'. These 'kits' are available with M/s. Alstom, Naini.

6.0 Instruction Drawing: Nil

7.0 Agency of Implementation:

All electric loco sheds, EMU car sheds and POH workshops.

8.0 Distribution: As per list enclosed:-


(Arun Srivastava)

Encl: Annexure

for Director General (Elect.)

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ANNEXURE

REPLACEMENT KIT FOR TWIN BOTTLE VCB TYPE 20CB - ALSTOM MAKE

1. ANNUAL OVERHAULING (AOH)

Sl No.	Title/Description	Drg. No.	Part No.	Qty/VCB
1	AOH Replacement kit (Code No.5110610) consisting of :	--	--	--
a.	Sealing strip for cradle and cover	--	5380750	3 Mts
b.	O-ring Air Valve Assembly	LSC:58/4	5150070	1
c.	O-ring for Air Valve Assembly	LSC:58/3	5150080	3
d.	PTFE Valve Discs. for Air Valve Assly.	LSC:99	5150020	2
e.	O-ring for magnet valve & manifold	LSC:58/5	5260700	5
f.	O-ring for Magnet Valve Assembly	LSC:58/6	5260800	2
g.	Valve (fluted) for Magnet Valve	LSC:127	5260600	2
h.	O-ring for Reservoir Assembly	LSC:58/2	5142040	1
i.	Molygraf-44 Grease	--	86700233	1Tube
j.	Diaphragm Assly for pressure regulator	--	3410-55	1
k.	Replacement kit for air filter consisting of one O-ring, two gaskets & one stud	--	5110600	1Set

2. INTERMEDIATE OVERHAULING (IOH)

Sl No.	Title/Description	Drg. No.	Part No.	Qty/VCB
1	IOH Replacement kit (Code No.5110620) consisting of :	--	--	--
a.	AOH Replacement kit	--	5110610	1 kit
b.	Control air pipe with grommet, ferrule & nut	LSB:89/1	5110110	1
c.	Main air pipe with grommet, ferrule & nut	LSB:89/2	5110100	1
d.	Repair kit for Pressure Regulator consisting of one number each, slip ring, valve, valve seat, gasket seat & valve spring	--	5110442	1 kit
e.	Molecular sieves for air dryer	--	5390090	4 kg

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3. PERIODIC OVERHAULING (POH)

Sl No.	Title/Description	Drg. No.	Part No.	Qty/VCB
1	POH Replacement kit (Code No. 5110630) consisting of :	--	--	--
a.	IOH replacement kit	--	5110620	1 kit
b.	Piston washer (ring)	LSC:76	5120100	2
c.	Damping washer	LSC:81/1	5120030	2
d.	Insulation tube	LSC:74	5120050	6
e.	Insulation washer	LSC:81/2	5120040	12
f.	Air pipe (Filter to Regulator)	LSC:88/4	5110210	1
g.	Air pipe (Regulator to Reservoir)	LSC:88/3	5110060	1
h.	Air pipe (Reservoir to unequal-cross)	LSB:93/5	5110050	1
i.	Air pipe (Pressure switch)	LSC:88/2	5110080	1
j.	Air pipe (Manifold to unequal-cross)	LSC:88/1	5110070	1.
k.	Poppet valve for air valve assembly	LSC:101	5150010	1
l.	Operating rod assembly	LSC:62	5160000	1
m.	Auxiliary switch assembly (6-way)	LSC:255	5203200	1
n.	Surge suppressor for magnet valve	LSC:169	5350100	1
o.	Sealing strip for bottom cover	LSC:104	5290020	2.5 Mts
p.	O-ring for Reservoir Assembly	LSC:58/1	5140020	2

Notes :- 1. Consumables like RTV-1080 Silicone Rubber sealant and adhesive for sealing strip shall be required during overhauling. These consumables are not considered as part of kit.

2. All air pipes from serial numbers 1.f to 1.j are supplied with ferrules and nuts.

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