REPAIR OBJECT Н6.17.06.08 ЕФ3.035.074

List of Repair Documentation

ШИБФ.460626.558 Д27

CONTENTS

This List of Repair Documentation (hereinafter referred to as the List) ШИБФ.460626.558 Д27 covers subunits Н6.17.06.08 ЕФ3.035.074 (hereinafter referred to as the repair object (RO)) from the set of article 91Н6Е.

This List ШИБФ.460626.558 Д27 is included in the set of repair documentation for replaceable components of communications electronic equipment for mobile repair/diagnostic complex RDC-1 ШИБФ.460806.007.

When checking the RO, in addition to this List ШИБФ.460626.558 Д27, one shall refer to the following:

– General Specifications for Reconditioning Repair ШИБФ.460606.001 ОВ;
– General Reconditioning Repair Manual ШИБФ.460606.001 ВО;
– “Subunit Н6.17.06.08 ЕФ3.035.074 Testing Program” ШИБФ.01838-01.

The following abbreviations are used in this ШИБФ.460626.558 Д27:

RRM – General Reconditioning Repair Manual;

RRS – General Specifications for Reconditioning Repair;

RO – Repair Objects;

RDC – Repair/Diagnostic Complex;

CDSA – Automatic Control and Diagnostics System.

1 REPAIR OBJECT Н6.17.06.08 ЕФ3.035.074. REPAIR DRAWING

1.1 During diagnostics and repair of repair object (hereinafter referred to as RO) Н6.17.06.08 ЕФ3.035.074, refer to the data of repair drawing shown in Figures 1.1, 1.2.

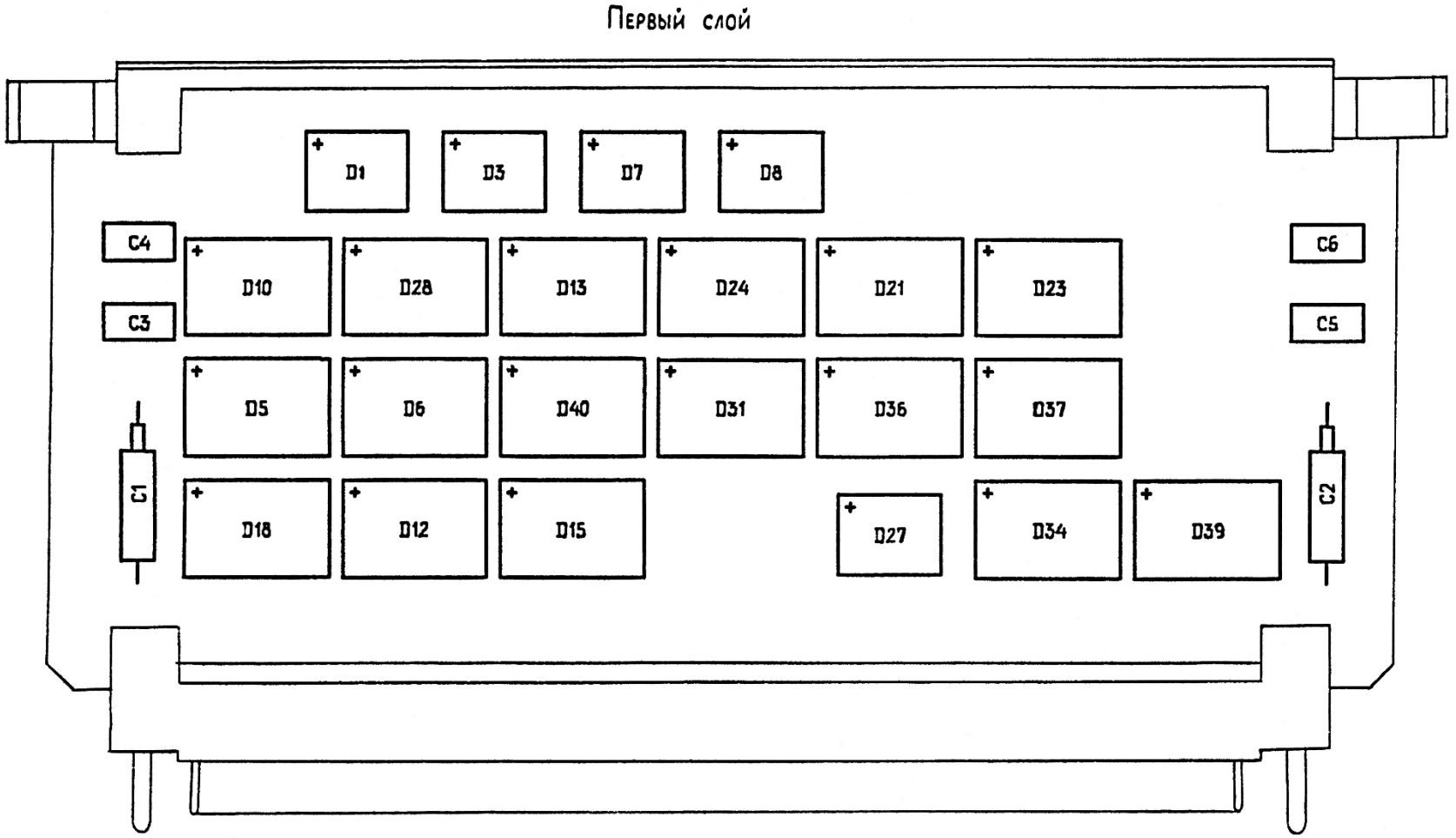

Figure 1.1 – Repair drawing of RO Н6.17.06.08 ЕФ3.035.074. First layer

Последний слой

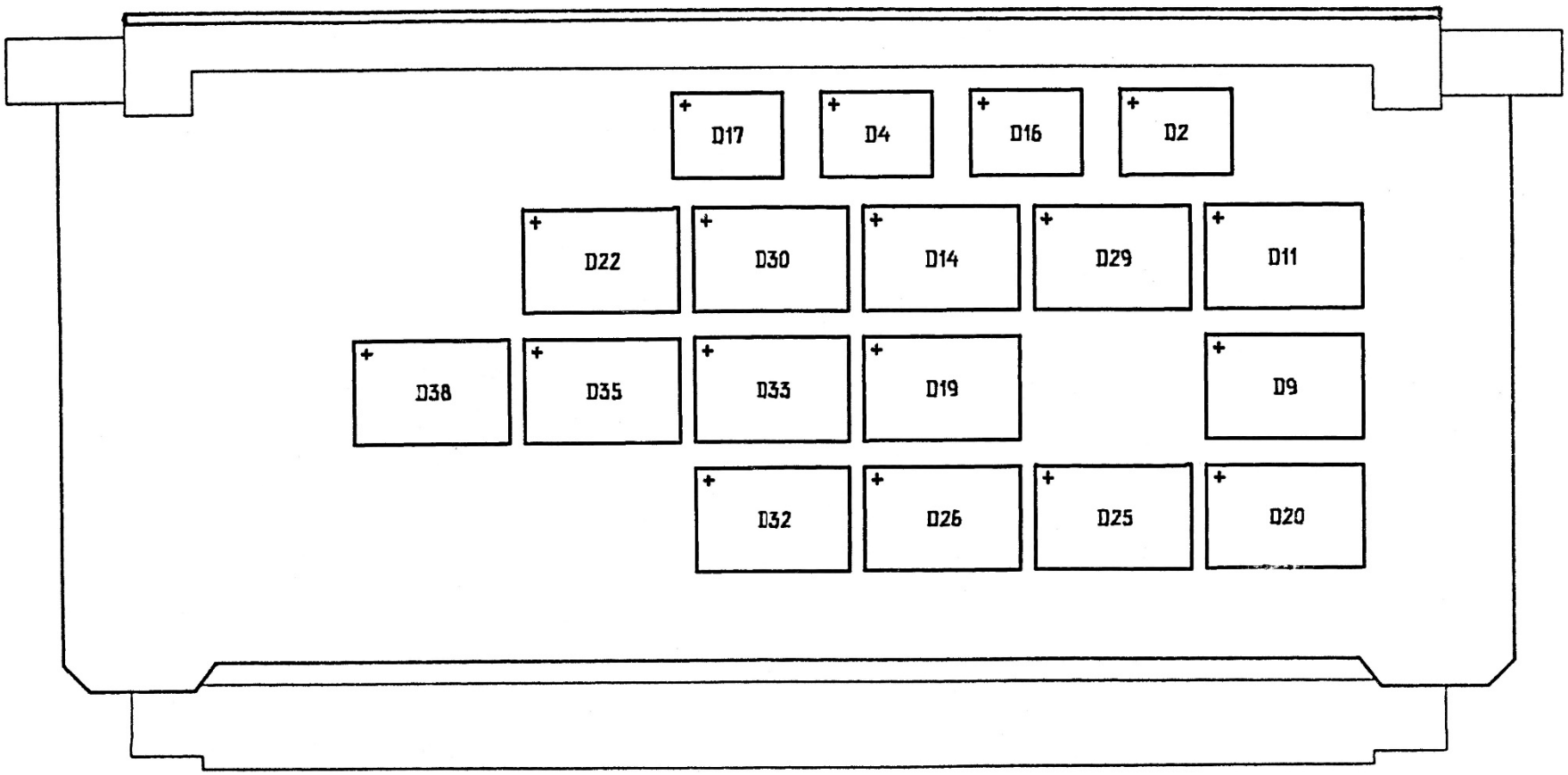

Figure 1.2 – Repair drawing of Н6.17.06.08 ЕФ3.035.074. Last layer

2 REPAIR OBJECT Н6.17.06.08 ЕФ3.035.074. ELECTRIC SCHEMATIC DIAGRAM

2.1 During diagnostics and repair of RO Н6.17.06.08 ЕФ3.035.074, refer to the electric schematic diagram shown in Figure 2.1.

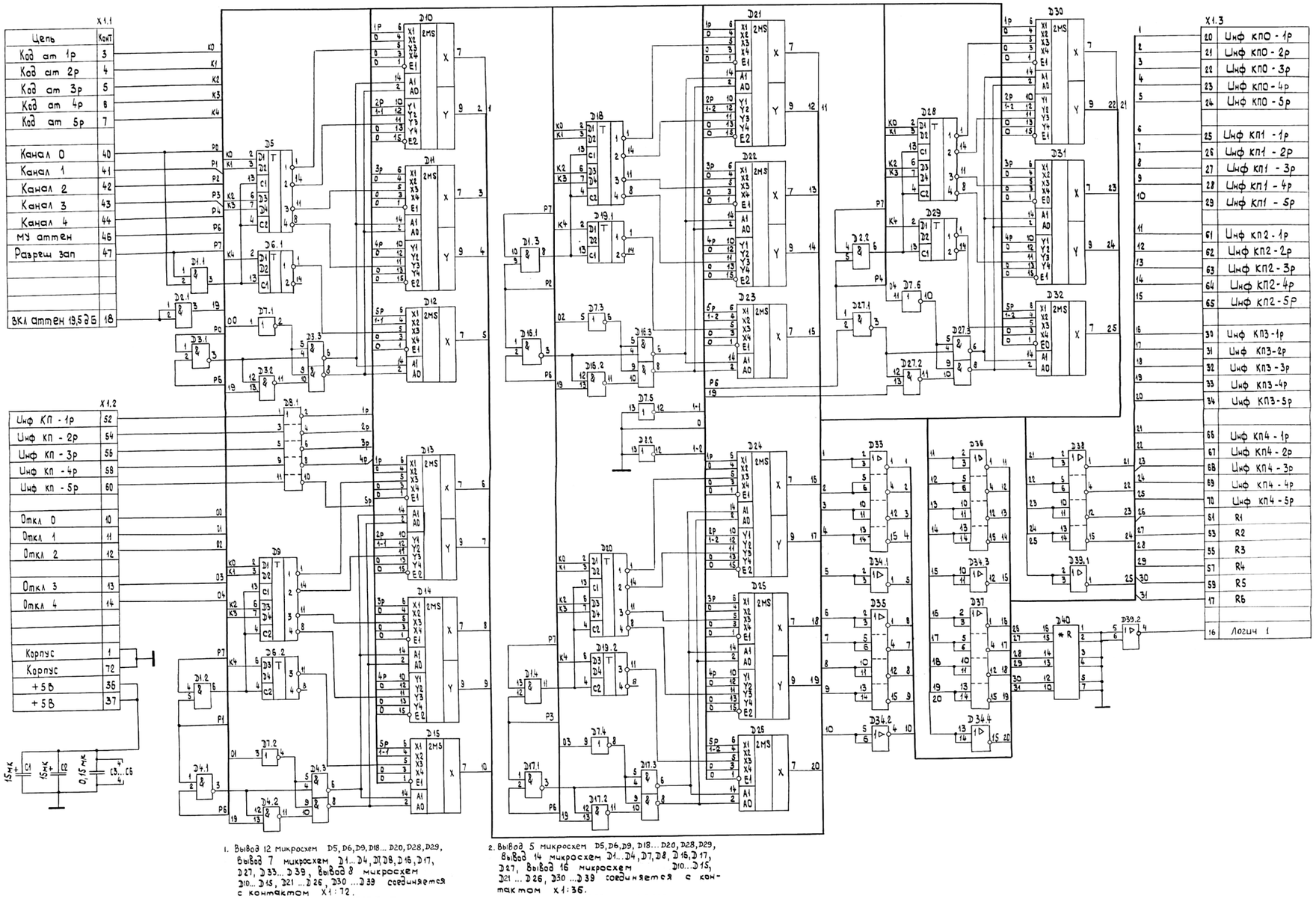

Figure 2.1 – Electric schematic diagram of RO Н6.17.06.08 ЕФ3.035.074

Note:

1 Output 12 of integrated circuits D5, D6, D9, D18…D20, D28, D29; output 7 of integrated circuits D1…D4, D7, D8, D16, D17, D27; output 8 of integrated circuits D10…D15, D21…D26, D30…D39 is connected to contacts 72 of connector X1.

2 Output 5 of integrated circuits D5, D6, D9, D18…D20, D28, D29; output 14 of integrated circuits D1…D4, D7, D8, D16, D17, D27; output 16 of integrated circuits D10…D15, D21…D26, D30…D39 is connected to contacts 36 of connector X1.

3 REPAIR OBJECT Н6.17.06.08 ЕФ3.035.074. LIST OF ELEMENTS

3.1 The List of Elements of RO Н6.17.06.08 ЕФ3.035.074 is given in Table 3.1.

Table 3.1

Pos. designation	Description	Qty	Note
	Capacitors		
C1…C2	К53-18-16В-15 мкФ ± 20%-В ОЖ0.464.136ТУ	2	
C3…C6	К10-17а-Н90-0,15 мкФ -В ОЖ0.460.107ТУ	4	
	Integrated circuit		
D1, D2	133ЛИ1 ЛЕ/И63.088.023ТУ21	2	
D3, D4, D16, D17, D27	533ЛА3 /Б/КО.347.141ТУ1	5	
D5, D6, D9, D18…D20, D28, D29	133ТМ7 И6/И63.088.023ТУ12	8	
D7, D8	533ЛН1 /Б/КО.347.141ТУ1	2	
D10…D15, D21…D26, D30…D32	533КП2 /Б/КО.347.141ТУ2	15	
D33…D39	133ЛЕ6А И63.088.023-53ТУ/02	7	
D40	Block Б19К-3-1-200 Ом ± 5% ОЖ0.206.018ТУ	1	
X1	Plug ГРПП-72ШМВЭ КЦАЯ.430.424.009ТУ	1	

4 EQUIPMENT AND ACCESSORIES FOR SERVICEABILITY CHECK AND DIAGNOSTICS OF REPAIR OBJECT Н6.17.06.08 ЕФ3.035.074

4.1 Equipment and accessories for serviceability check and diagnostics of repair object Н6.17.06.08 ЕФ3.035.074 are given in Table 4.1.

Table 4.1

Description and purpose	Designation	Basic characteristics	Description and designation of articles being repaired	Power consumption, kW	Remark
Automated control and diagnostics system CDSA-1 (hereinafter referred to as CDSA-1) comprising:	ШИБФ.468229.108	In accordance with ШИБФ.468229.108 РЭ	subunit Н6.17.06.08 ЕФ3.035.074	4, maximum	
Jumper “J”, 58 pcs – for connection of multi-adapter ШИБФ.468353.101 channels	MJ2-H	–	Ditto	–	
Jumper “P”, 2 pcs – for connection of the pins of RO edgeboard connector to circuits “Common” of multi-adapter ШИБФ.468353.101	ШИБФ.468363.011	–	-II-	–	
Harness ГРПП-72Г – for connection of RO to multi-adapter ШИБФ.468353.101	ШИБФ.685626.079	–	-II-	–	
Power cable “Cb”, 1pc. – for power supply to RO	ШИБФ.685612.018	–	-II-	–	
Subunit Н6.17.06.08 ЕФ3.035.074 testing program – for serviceability check and diagnostics of RO	ШИБФ.01838-01	–	-II-	–	

5 INSTALLATION OF SWITCHING ELEMENTS AND ACCESSORIES ON MULTI-ADAPTER ШИБФ.468353.101 FOR SERVICEABILITY CHECK AND DIAGNOSTICS OF REPAIR OBJECT Н6.17.06.08 ЕФ3.035.074

5.1 Cross-wiring of pins on patchboard КЦ.1 - A1 of interface panel ШИБФ.468364.095 subunit is given in Table 5.1.

Table 5.1

Contact No.	Connector type	Row designation				CO connector pin	Power source (Vcc)
		A (GND)	B (КЦ)	C (ОКД)	D (Vcc)		
1	P	●	–	●	–	1	
2	–	–	–	–	–	2	
3	J	–	●	●	–	3	
4	J	–	●	●	–	4	
5	J	–	●	●	–	5	
6	J	–	●	●	–	6	
7	J	–	●	●	–	7	
8	–	–	–	–	–	8	
9	–	–	–	–	–	9	
10	J	–	●	●	–	10	
11	J	–	●	●	–	11	
12	J	–	●	●	–	12	
13	J	–	●	●	–	13	
14	J	–	●	●	–	14	
15	–	–	–	–	–	15	
16	J	–	●	●	–	16	
17	J	–	●	●	–	17	
18	J	–	●	●	–	18	
19	–	–	–	–	–	19	
20	J	–	●	●	–	20	
21	J	–	●	●	–	21	
22	J	–	●	●	–	22	

*Table 5.1, continue d*ntact No.	Connector type	Row designation				CO connector pin	Power source (Vcc)
		A (GND)	B (КЦ)	C (ОКД)	D (Vcc)		
23	J	–	●	●	–	23	
24	J	–	●	●	–	24	
25	J	–	●	●	–	25	
26	J	–	●	●	–	26	
27	J	–	●	●	–	27	
28	J	–	●	●	–	28	
29	J	–	●	●	–	29	
30	J	–	●	●	–	30	

Notes
1 P – jumper ШИБФ.468363.011
2 J – jumper MJ2-H
3 ● – pin connection

5.2 Cross-wiring of pins on patchboard КЦ.1 - B1 of interface panel ШИБФ.468364.095 subunit is given in Table 5.2.

Table 5.2

Contact No.	Connector type	Row designation				RO connector pin	Power source (Vcc)
		A (GND)	B (КЦ)	C (ОКД)	D (Vcc)		
1	J	–	●	●	–	31	
2	J	–	●	●	–	32	
3	J	–	●	●	–	33	
4	J	–	●	●	–	34	
5	–	–	–	–	–	35	
6	J	–	–	●	●	36	B1(Vcc)/«+V1.1» (+5V) «-V1.9/10(GND)»
7	J	–	–	●	●	37	
8	–	–	–	–	–	38	
9	–	–	–	–	–	39	
10	J	–	●	●	–	40	
11	J	–	●	●	–	41	
12	J	–	●	●	–	42	
13	J	–	●	●	–	43	
14	J	–	●	●	–	44	
15	–	–	–	–	–	45	
16	J	–	●	●	–	46	
17	J	–	●	●	–	47	
18	–	–	–	–	–	48	
19	–	–	–	–	–	49	
20	–	–	–	–	–	50	
21	J	–	●	●	–	51	
22	J	–	●	●	–	52	
23	J	–	●	●	–	53	
24	J	–	●	●	–	54	
25	J	–	●	●	–	55	

Table 5.2, continued

Contact No.	Connector type	Row designation				RO connector pin	Power source (Vcc)
		A (GND)	B (КЦ)	C (ОКД)	D (Vcc)		
26	J	–	●	●	–	56	
27	J	–	●	●	–	57	
28	J	–	●	●	–	58	
29	J	–	●	●	–	59	
30	J	–	●	●	–	60	

Notes
1 J – jumper MJ2-H
2 ● – pin connection

ATTENTION
To connect power voltage of RO Н6.17.06.08 ЕФ3.035.074 to interface panel ШИБФ.468364.095 subunit,
1. Connect fields B.1(Vcc) and «+V1.1» using power cable Cb ШИБФ.685612.018.
2. Connect J – jumper MJ2-H «-V1.9 and 10(GND)».

5.3 Cross-wiring of pins on patchboard КЦ1 - С1 of interface panel ШИБФ.468364.095 subunit is given in Table 5.3.

Table 5.3

Contact No.	Connector type	Row designation				RO connector pin	Power source (Vcc)
		A (GND)	B (КЦ)	C (ОКД)	D (Vcc)		
1	J	–	●	●	–	61	
2	J	–	●	●	–	62	
3	J	–	●	●	–	63	
4	J	–	●	●	–	64	
5	J	–	●	●	–	65	
6	J	–	●	●	–	66	
7	J	–	●	●	–	67	
8	J	–	●	●	–	68	
9	J	–	●	●	–	69	
10	J	–	●	●	–	70	
11	–	–	–	–	–	71	
12	P	●	–	●	–	72	
13	–	–	–	–	–	73	
14	–	–	–	–	–	74	
15	–	–	–	–	–	75	
16	–	–	–	–	–	76	
17	–	–	–	–	–	77	
18	–	–	–	–	–	78	
19	–	–	–	–	–	79	
20	–	–	–	–	–	80	
21	–	–	–	–	–	81	
22	–	–	–	–	–	82	
23	–	–	–	–	–	83	
24	–	–	–	–	–	84	
25	–	–	–	–	–	85	
26	–	–	–	–	–	86	

Table 5.3, continued

Contact No.	Connector type	Row designation				RO connector pin	Power source (Vcc)
		A (GND)	B (КЦ)	C (ОКД)	D (Vcc)		
27	–	–	–	–	–	87	
28	–	–	–	–	–	88	
29	–	–	–	–	–	89	
30	–	–	–	–	–	90	
Notes 1 P – jumper ШИБФ.468363.011 2 J – jumper MJ2-H 3 ● – pin connection							

5.4 Cross-wiring of pins on patchboard КЦ.2 - A2 of interface panel ШИБФ.468364.095 subunit is given in Table 5.4.

Table 5.4

Contact No.	Connector type	Row designation				RO connector pin	Power source (Vcc)
		A (GND)	B (КЦ)	C (ОКД)	D (Vcc)		
1	–	–	–	–	–	91	
2	–	–	–	–	–	92	
3	–	–	–	–	–	93	
4	–	–	–	–	–	94	
5	–	–	–	–	–	95	
6	–	–	–	–	–	96	
7	–	–	–	–	–	97	
8	–	–	–	–	–	98	
9	–	–	–	–	–	99	
10	–	–	–	–	–	100	
11	–	–	–	–	–	101	
12	–	–	–	–	–	102	
13	–	–	–	–	–	103	
14	–	–	–	–	–	104	
15	–	–	–	–	–	105	
16	–	–	–	–	–	106	
17	–	–	–	–	–	107	
18	–	–	–	–	–	108	
19	–	–	–	–	–	109	
20	–	–	–	–	–	110	
21	–	–	–	–	–	111	
22	–	–	–	–	–	112	
23	–	–	–	–	–	113	
24	–	–	–	–	–	114	
25	–	–	–	–	–	115	
26	–	–	–	–	–	116	

Table 5.4, continued

Contact No.	Connector type	Row designation				RO connector pin	Power source (Vcc)
		A (GND)	B (КЦ)	C (ОКД)	D (Vcc)		
27	–	–	–	–	–	117	
28	–	–	–	–	–	118	
29	–	–	–	–	–	119	
30	–	–	–	–	–	120	

5.5 Cross-wiring of pins on patchboard КЦ.2 - В2 of interface panel ШИБФ.468364.095 subunit is given in Table 5.5.

Table 5.5

Contact No.	Connector type	Row designation				RO connector pin	Power source (Vcc)
		A (GND)	B (КЦ)	C (ОКД)	D (Vcc)		
1	–	–	–	–	–	121	
2	–	–	–	–	–	122	
3	–	–	–	–	–	123	
4	–	–	–	–	–	124	
5	–	–	–	–	–	125	
6	–	–	–	–	–	126	
7	–	–	–	–	–	127	
8	–	–	–	–	–	128	
9	–	–	–	–	–	129	
10	–	–	–	–	–	130	
11	–	–	–	–	–	131	
12	–	–	–	–	–	132	
13	–	–	–	–	–	133	
14	–	–	–	–	–	134	
15	–	–	–	–	–	135	
16	–	–	–	–	–	136	
17	–	–	–	–	–	137	
18	–	–	–	–	–	138	
19	–	–	–	–	–	139	
20	–	–	–	–	–	140	
21	–	–	–	–	–	141	
22	–	–	–	–	–	142	
23	–	–	–	–	–	143	
24	–	–	–	–	–	144	
25	–	–	–	–	–	145	
26	–	–	–	–	–	146	

Table 5.5, continued

Contact No.	Connector type	Row designation				RO connector pin	Power source (Vcc)
		A (GND)	B (КЦ)	C (ОКД)	D (Vcc)		
27	–	–	–	–	–	147	
28	–	–	–	–	–	148	
29	–	–	–	–	–	149	
30	–	–	–	–	–	150	

5.6 Cross-wiring of pins on patchboard КЦ.2 - С2 of interface panel ШИБФ.468364.095 subunit is given in Table 5.6.

Table 5.6

Contact No.	Connector type	Row designation				RO connector pin	Power source (Vcc)
		A (GND)	B (КЦ)	C (ОКД)	D (Vcc)		
1	–	–	–	–	–	151	
2	–	–	–	–	–	152	
3	–	–	–	–	–	153	
4	–	–	–	–	–	154	
5	–	–	–	–	–	155	
6	–	–	–	–	–	156	
7	–	–	–	–	–	157	
8	–	–	–	–	–	158	
9	–	–	–	–	–	159	
10	–	–	–	–	–	160	
11	–	–	–	–	–	161	
12	–	–	–	–	–	162	
13	–	–	–	–	–	163	
14	–	–	–	–	–	164	
15	–	–	–	–	–	165	
16	–	–	–	–	–	166	
17	–	–	–	–	–	167	
18	–	–	–	–	–	168	
19	–	–	–	–	–	169	
20	–	–	–	–	–	170	
21	–	–	–	–	–	171	
22	–	–	–	–	–	172	
23	–	–	–	–	–	173	
24	–	–	–	–	–	174	
25	–	–	–	–	–	175	
26	–	–	–	–	–	176	

Table 5.6, continued

Contact No.	Connector type	Row designation				RO connector pin	Power source (Vcc)
		A (GND)	B (КЦ)	C (ОКД)	D (Vcc)		
27	–	–	–	–	–	177	
28	–	–	–	–	–	178	
29	–	–	–	–	–	179	
30	–	–	–	–	–	180	

6 DIAGRAM OF REPAIR OBJECT Н6.17.06.08 ЕФ3.035.074 CONNECTION TO AUTOMATED CONTROL AND DIAGNOSTICS SYSTEM CDSA-1 ШИБФ.468229.108

6.1 The diagram of repair object connection to automated control and diagnostics system CDSA-1 is shown in Figure 6.1.

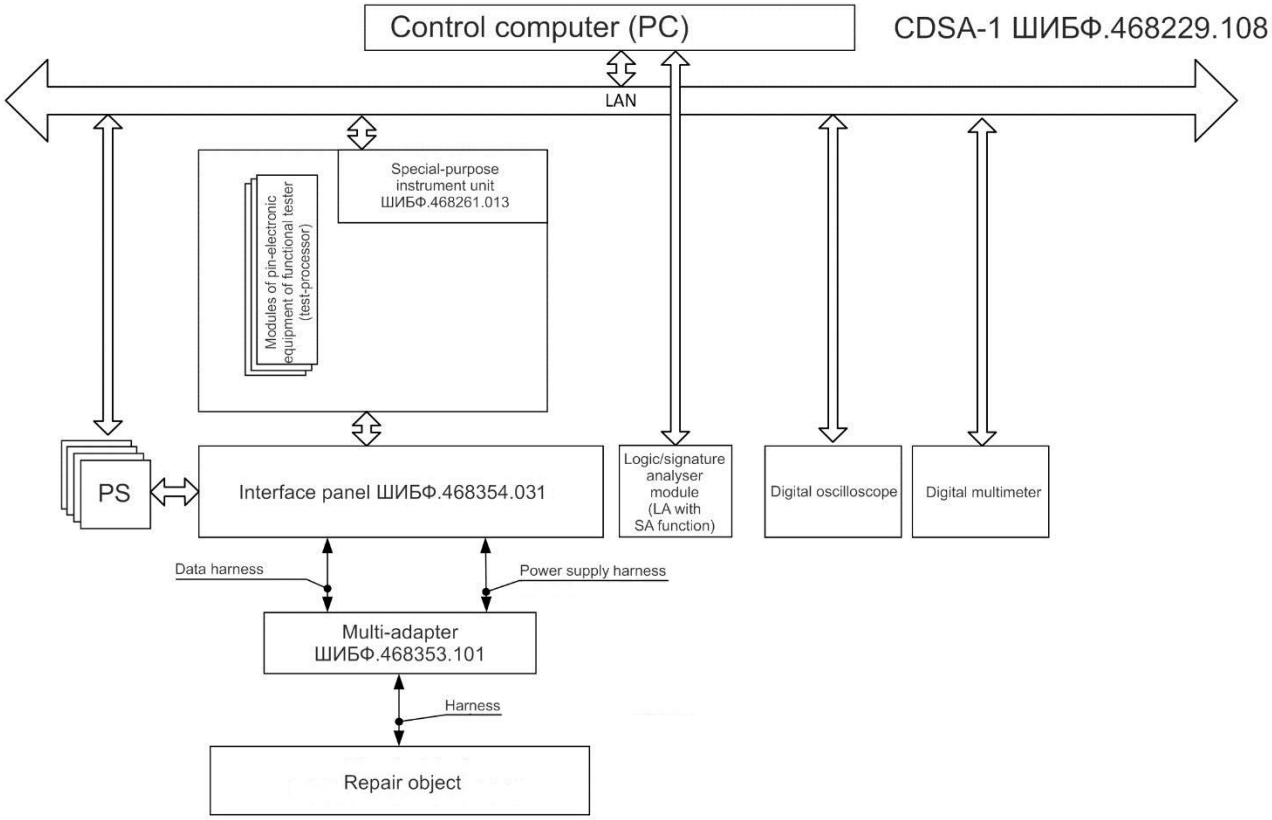

Figure 6.1 – Diagram of repair object Н6.17.06.08 ЕФ3.035.074 connection to automated control and diagnostics system CDSA-1 ШИБФ.468229.108

REVISION SHEET

Rev.	Sheet (page) numbers				Total sheets (pages) in document	Document No.	Registration No. of accompanying document and date	Signature	Date
	revised	superseded	added	deleted					