

1360 Electrical

This section contains illustrated parts breakdowns for the following 6890 GC electrical components.

- AC Power Components
- AC Power Circuit Board
- Main Circuit Board, 6890A and 6890 Plus
- Main Circuit Board, 6890N
- Modular Input/Output (MIO) Components
- Pneumatics Circuit Boards
- Analog Input Board (G1556A Accessory)
- LAN Board, 6890N
- Chassis Fans
- ALS Interface Board (G2612A Accessory)

AC Power components

Description	Part no.	Qty.
1. Transformer, universal*	G1530-60970	1
2. Screw, MS M5 × 0.8 Torx, T25*	0515-1538	4
3. AC printed circuit board assembly** (See Figure 1360-2)	G1530-60050	1
4. Power cable assemblies:		1
– USA and Canada 120V	G1530-60870	
– Japan 200V	G1530-60920	
– USA 208V	8121-0075	
– Continental Europe, 220V single phase power	G1530-60885	
– Hong Kong, 220V, single phase	G1530-67505	
– China 220V	G1530-67506	
– China 220V, 10 amp slow ramp	G1530-61180	
– Israel 220V	G1530-67507	
– Switzerland/Denmark, 230V, 16A	G1530-67503	
– Switzerland power cable, 230V, 10A	G1530-67500	
– Denmark, 230V, 10A	G1530-67502	
– Continental Europe, 230V	G1530-60880	
– Australia, 240V	G1530-60910	
– South Africa/India, 240V	G1530-67501	
– United Kingdom/Ireland, 240V	G1530-60890	
– USA and Canada, 240V	G1530-60900	
– Australia, 240V	G1530-61170	
5. AC control cable	G1530-60760	1
6. On/Off rod	G1530-40010	1
7. Hex nut/lock washer	0535-0043	1
8. Hexbolt, M6 × 1 × 100 mm	0515-2667	1
9. Transformer, universal	G1530-60975	1
10. Transformer bracket	G1530-00730	1
11. Cable, pigtail, 6890N ALS power***	G1530-61590**	1**

* For GC 's with serial number <10225

** Order AC Printed Circuit Board replacement kit G1530-61350.
The kit contains one AC board one triac, and required hardware.
See Figure 1360-1.

*** Cable used only on early model 6890N GCs to patch sampler power from transformer into J7 on main board.

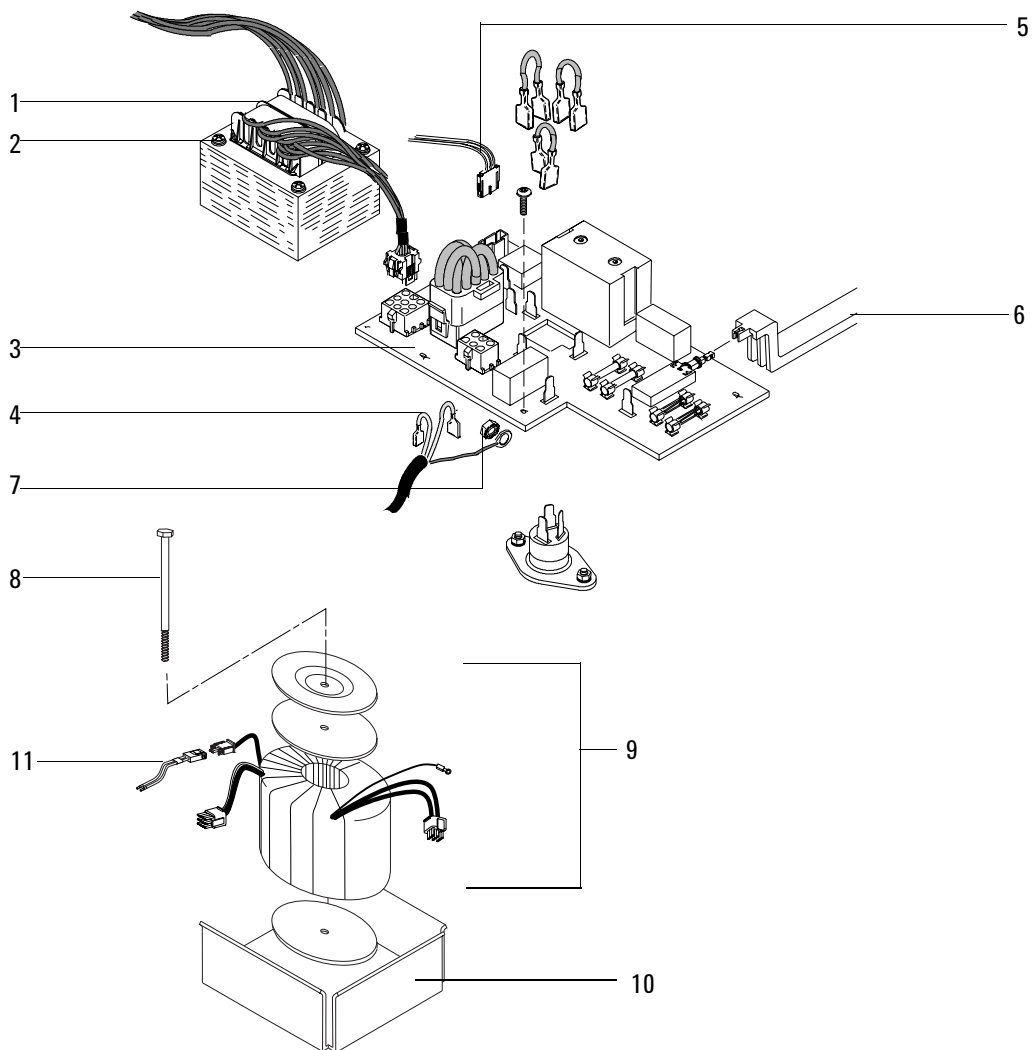


Figure 1360-1 AC Power components

AC Power circuit board

Description	Part no.	Qty.
1. AC Power board assembly*	G1530-60050	1
2. Triac cable assy (3 Jumpers)	G1530-60750	1
3. AC configuration plug		1
– USA and Canada 120V	G1530-60690	
– Japan 200V	G1530-60700	
– Continental Europe, 220V single phase power	G1530-60710	
– Hong Kong, 220V, single phase	G1530-60710	
– China 220V	G1530-60710	
– China 220V, 10 amp slow ramp	G1530-60710	
– Israel 220V	G1530-60710	
– Switzerland/Denmark, 230V, 16A	G1530-60720	
– Switzerland power cable, 230V, 10A	G1530-60720	
– Denmark, 230V, 10A	G1530-60720	
– Continental Europe, 230V	G1530-60720	
– Australia, 240V	G1530-60730	
– South Africa/India, 240V	G1530-60730	
– United Kingdom/Ireland, 240V	G1530-60730	
– USA and Canada, 240V	G1530-60730	
– Australia 240V, slow ramp	G1530-60730	
4. Mounting screw, M4 × 25 mm, Torx, T20	0515-2712	1
5. Fuses (not shown):		2
– Fuse 20A 250V (USA and Canada 120V)	2110-0098	
– Fuse 15 amp (Japan 200V)	2110-0054	
– Fuse 15 amp (Cont. Eur. 220V single phase)	2110-0054	
– Fuse 15 amp (Hong Kong 220V single phase)	2110-0054	
– Fuse 15 amp (China 220V)	2110-0054	
– Fuse 15 amp (China 220V slow ramp)	2110-0054	
– Fuse 15 amp (Israel 220V)	2110-0054	
– Fuse 15 amp (Switzerland 230V 10A single phase)	2110-0054	
– Fuse 15 amp (Denmark/Switzerland 230V 16A)	2110-0054	
– Fuse 15 amp (Denmark 10 amp)	2110-0054	
– Fuse 15 amp (Continental Europe 230V)	2110-0054	
– Fuse 15 amp (Australia 240V)	2110-0054	
– Fuse 15 amp (South Africa/India 240V)	2110-0054	
– Fuse 15 amp (United Kingdom/Ireland 240V)	2110-0054	
– Fuse 15 amp (USA and Canada 240V)	2110-0054	
– Fuse 15 amp (Australia 240V, slow ramp)	2110-0054	
6. Lock washer	2190-0321	3
7. Glass fuse, type F, 8A/250V	2110-0036	2

* Order AC Printed Circuit Board replacement kit G1530-61350. The kit contains one AC board, one triac, and required hardware. See Figure 1360-2.

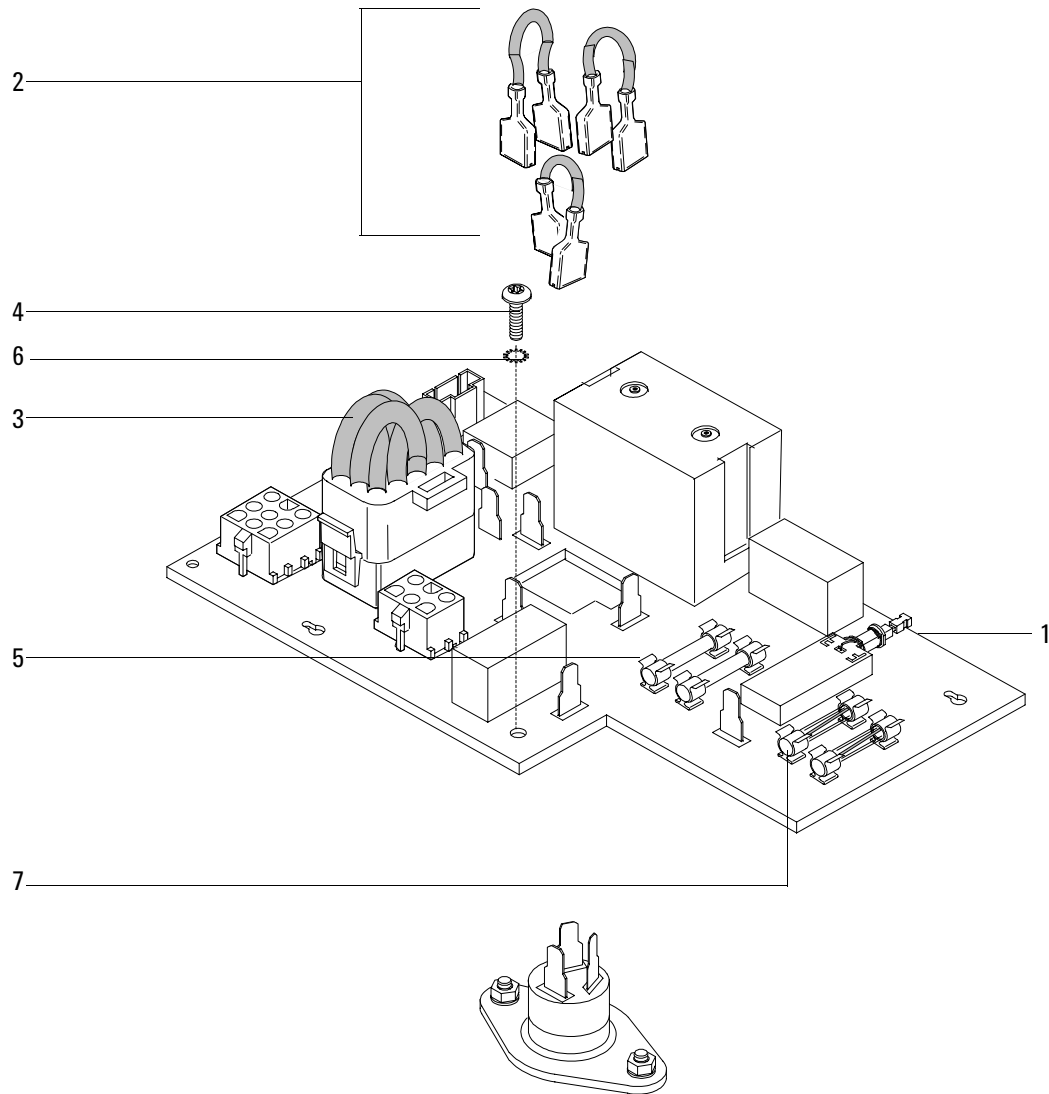


Figure 1360-2 AC Power circuit board

Main circuit board, 6890A and 6890 Plus

Description	Part no.	Qty.
1. Main board assembly	G1530-60011	1
2. Hex screw, self-tapping	0624-0665	3
3. Grounding screw, M4 × 25 mm, Torx, T20	0515-2712	2
4. Glass fuse, type F, 8A/250V	2110-0036	4
5. Battery, 3V	1420-0523	1
6. ROM kit, rev. A.03.08	G1530-61706	1
7. ROM puller (not shown)	8710-2303	–

Only ROM sockets 0 and 1 are used.

- ROM G1530-80906 Socket 0
- ROM G1530-80926 Socket 1

Main circuit board, 6890A and 6890 Plus

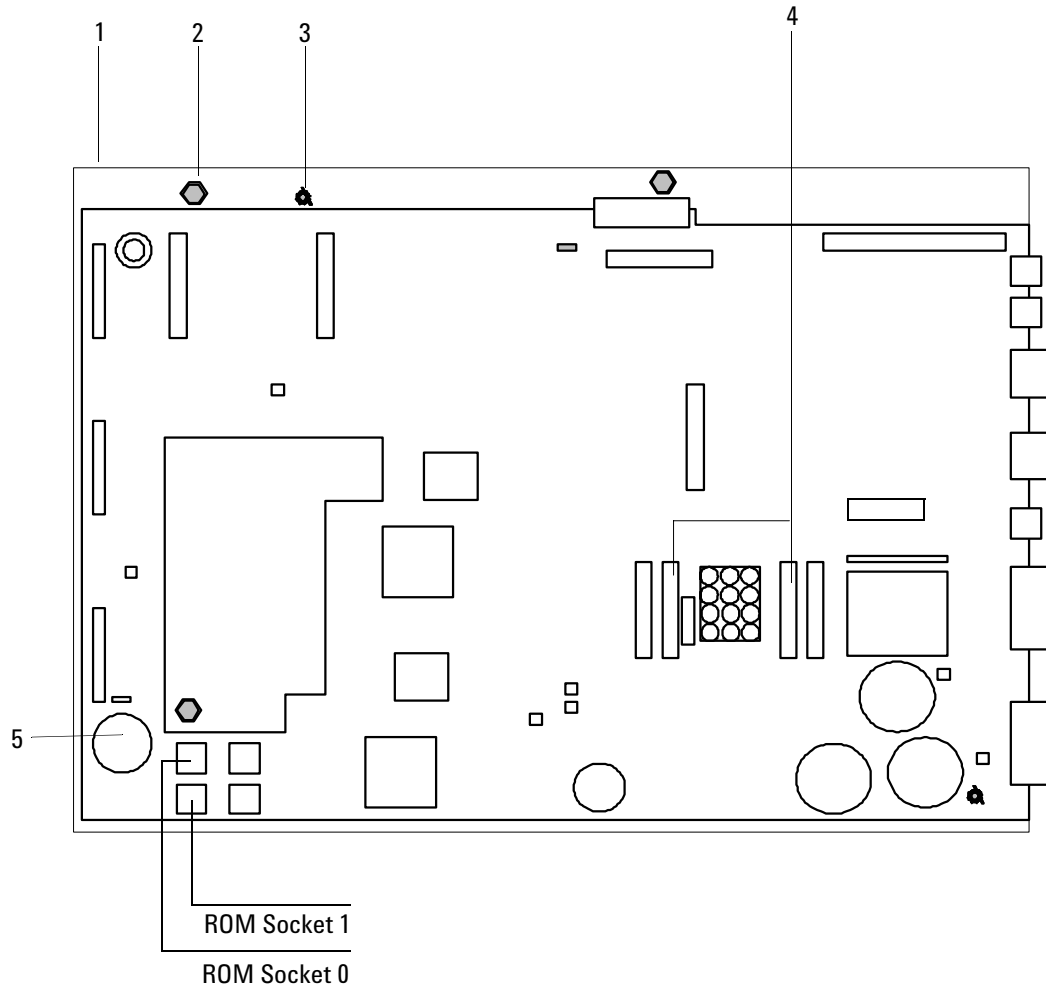


Figure 1360-3 Main circuit board, 6890A and 6890 Plus

Main circuit board, 6890N

Description	Part no.	Qty.
1. Main board assembly	G1530-62000	1
2. Hex screw, self-tapping	0624-0665	3
3. Grounding screw, M4 × 25 mm, Torx, T20	0515-2712	2
4. Glass fuse, type F, 8A/250V	2110-0036	2
5. Ceramic fuse, E 5A 250V F	2110-0709	1
6. Battery, 3V	1420-0523	1
NS Connector plate, 6890N	G1530-01320	1

Download firmware upgrades from www.agilent.com.

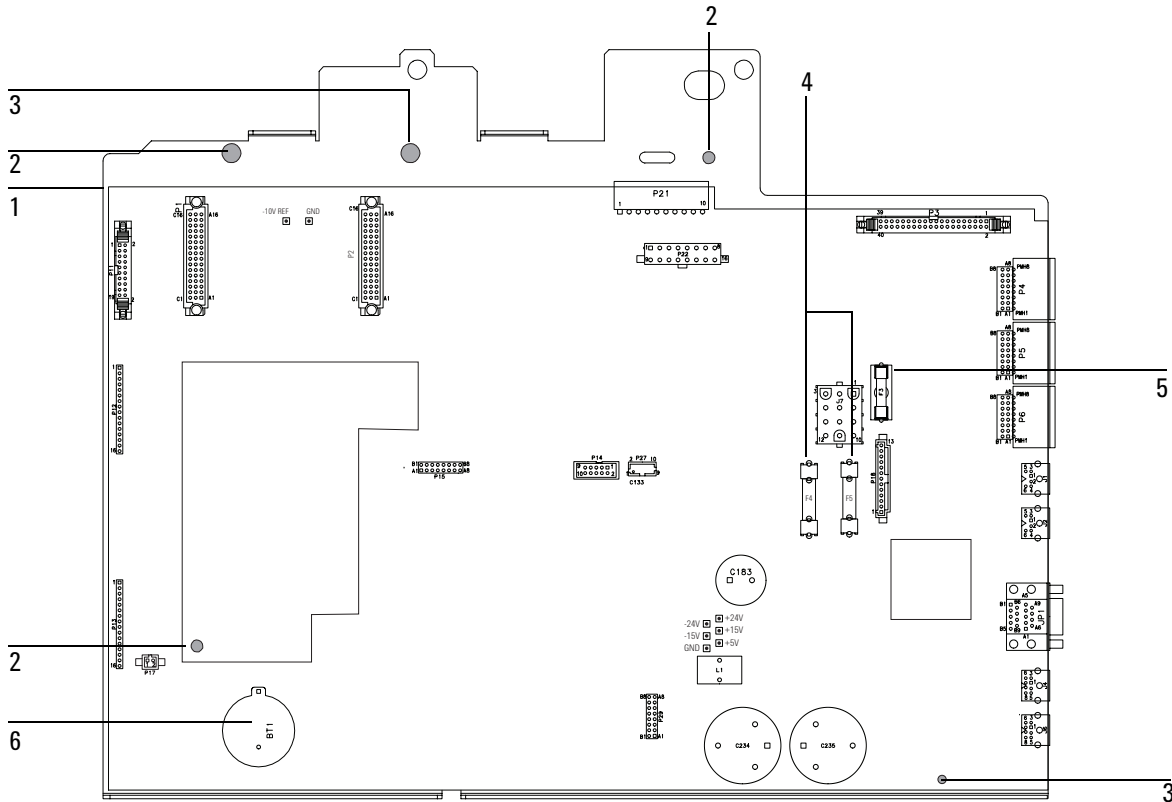


Figure 1360-4 Main circuit board, 6890N

Modular input/output (MIO) components (6890A and 6890 Plus)

Modular input/output (MIO) components (6890A and 6890 Plus)

INET components

Description	Part no.	Qty.
1. INET MIO card assy	G1553-60015	1
2. MIO support bracket	G1530-00320	1
3. MIO connector assy	G1553-60100	1
4. Support bracket standoff, M3 male/female	G1530-20570	1
5. Screw, Torx T10, M3 × 6 mm	0515-0680	1
6. Screw, Torx T20, M4 × 12 mm	0515-2496	3
7. 5 Meter HP-IL cable (not shown)	82167-60003	1
8. INET cover plate	G1530-00610	1

LAN components

Description	Part no.	Qty.
1A. LAN card assy (J2552B)	J2552-69013	1
2. MIO support bracket	G1550-00320	1
3. MIO connector assy	G1553-60100	1
4. Support bracket standoff, M3 male/female	G1530-20570	1
5. Screw, Torx T10, M3 × 6 mm	0515-0680	1
6. Screw, Torx T20, M4 × 12 mm	0515-2496	3
7A. 8 Meter thin LAN cable (not shown)	92227-60004	1
8. Loopback connector (not shown)	92227Q	1
9. Replacement LAN card (not shown)	J2552-69013	—
10. LAN cable, black crossover PC to 1 GC (not for use on hub) (Not shown)	5183-4649	

The JetDirect cards (LAN card assy), part no. J2552-69013, were modified to add additional capabilities in early 1998. New cards should have the new firmware; older cards should not be used. For a first-time installation into a 6890 GC, purchase G2335A to receive all necessary mounting hardware and GC firmware. The G1530A option #500 is the factory-installed version.

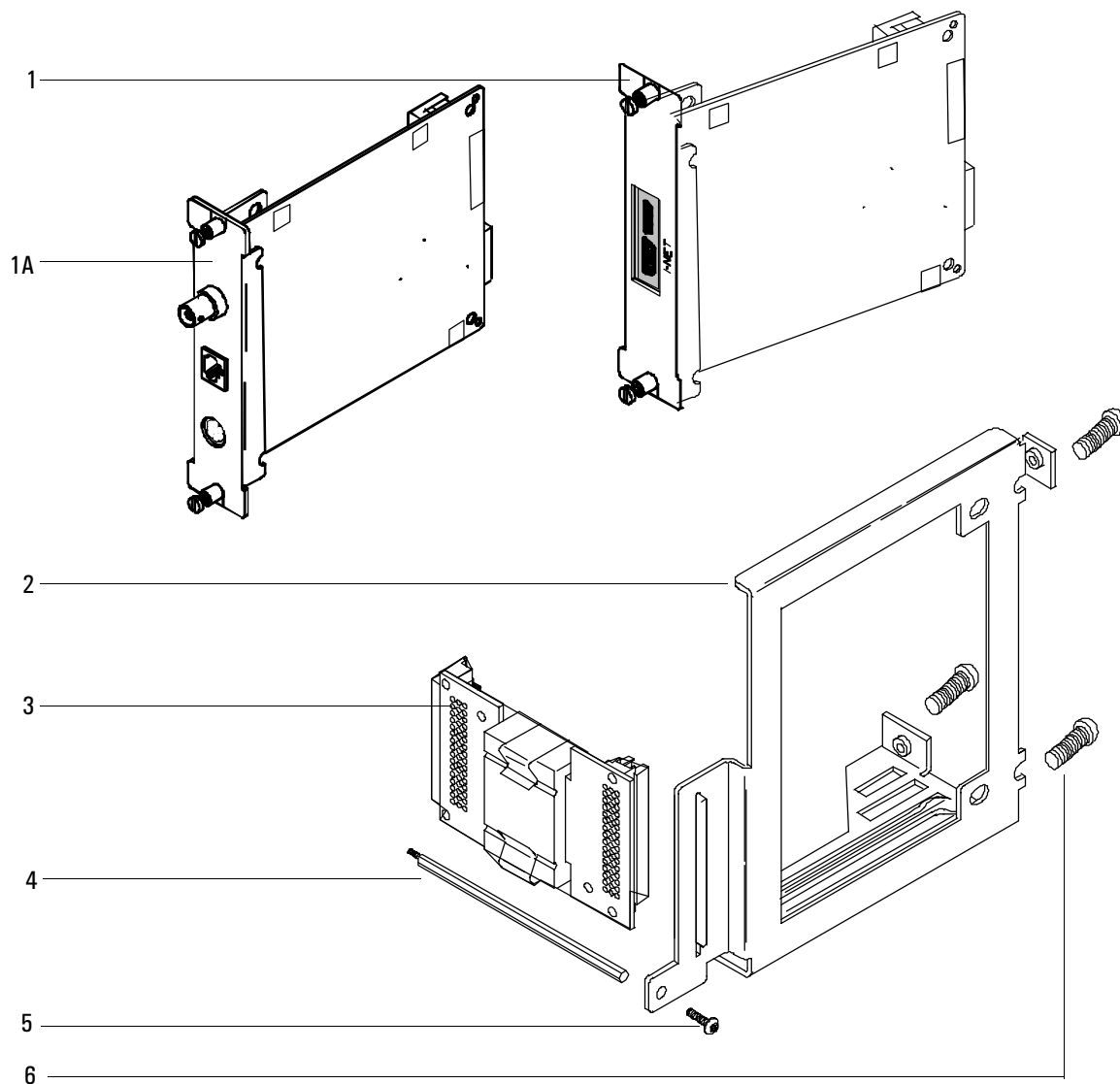


Figure 1360-5 Modular Input/Output (MIO) components

Pneumatics circuit boards

Description	Part no.	Qty.
1. EPC pneumatics board assembly for 6890A and 6890 Plus for 6890N	G1575-60010 G1530-60015	1
2. EPC pneumatics board metal carrier (included with replacement EPC board)	-----	1
3. Screw, Torx T20	0515-2496	3

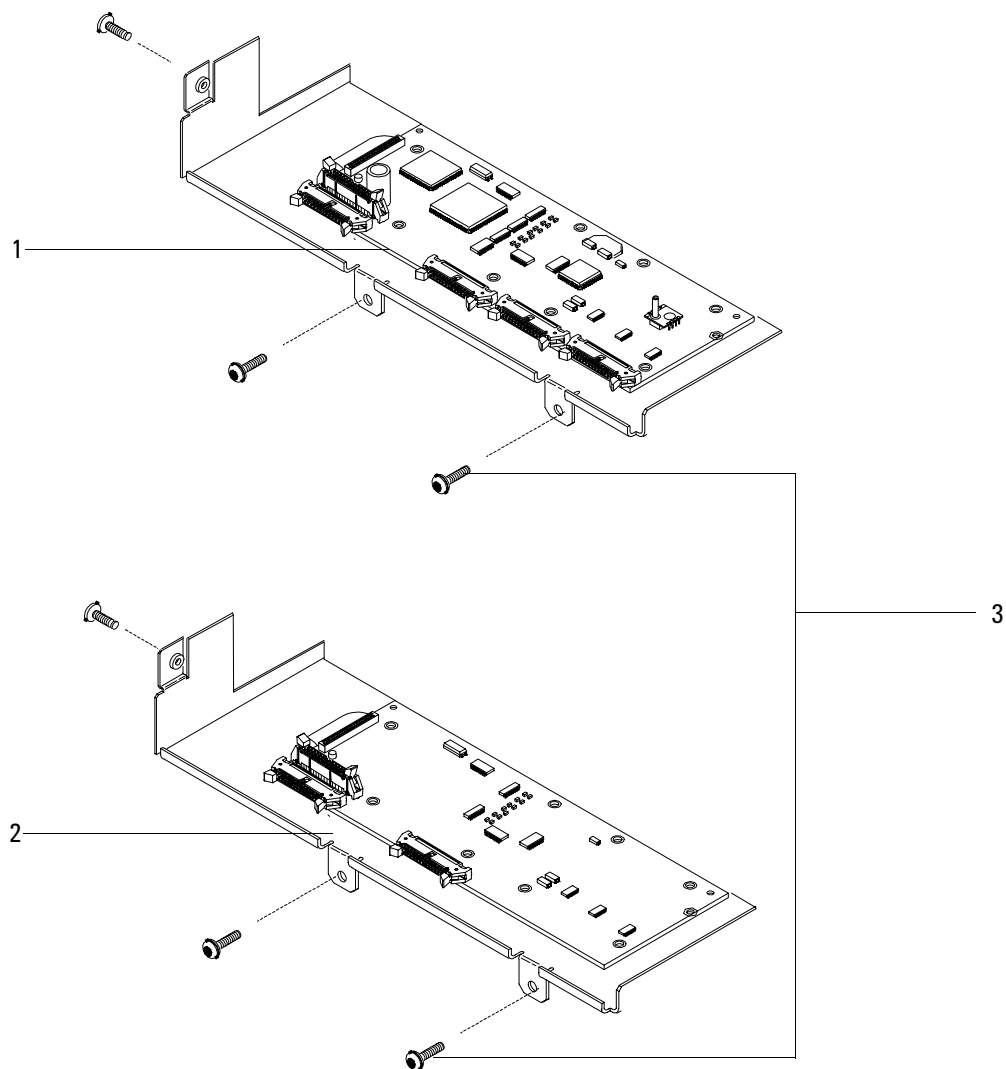
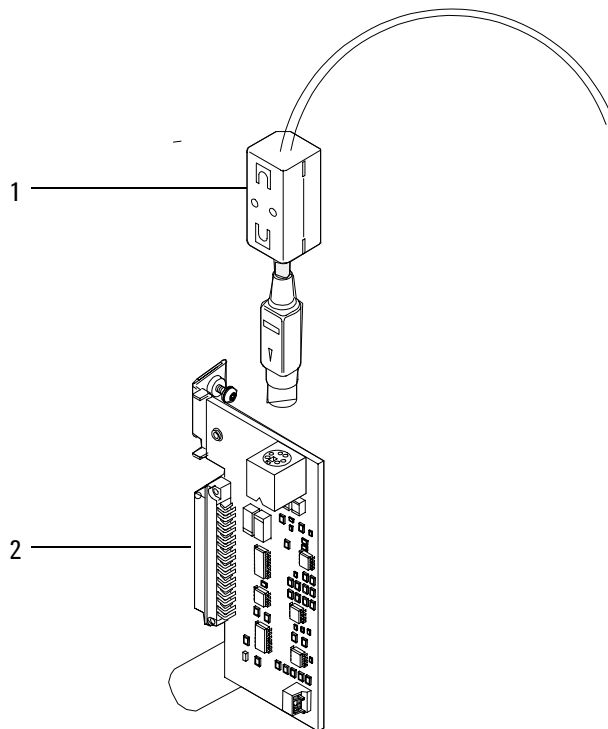


Figure 1360-6 Pneumatics circuit boards

Analog input board (G1556A accessory)

Description	Part no.	Qty.
1. Analog input PCB	G1556-60010	1
2. GP analog output cable assy	G1553-60560	1

**Figure 1360-7 Analog input board**

LAN board, 6890N

Description	Part no.	Qty.
1. LAN replacement kit, 6890N	G1530-62010	1
2. LAN patch cable	8121-0600	1
3. Connector, 10BASE-T LAN	1252-6152	1
4. Connector plate, 6890N	G1530-01320	1

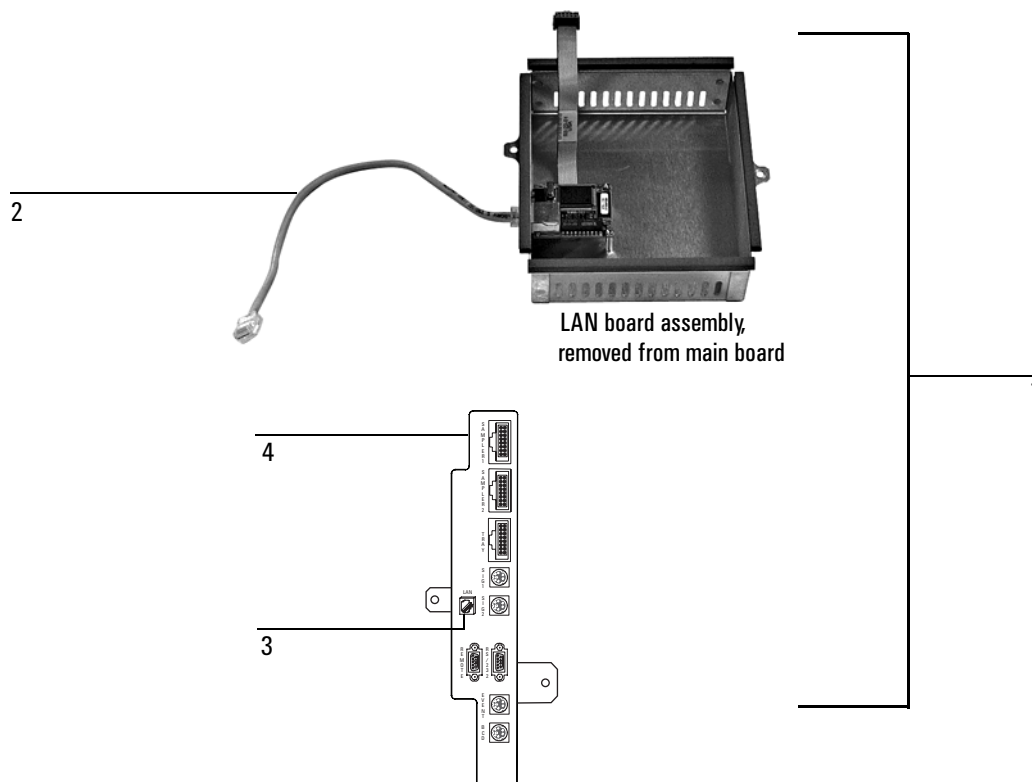


Figure 1360-8 LAN board, 6890N

Chassis fans

Chassis fans

Description	Part no.	Qty.
1. Replacement pneumatics area fan	G1530-60550	1
2. Inlet fan assembly	G1530-60510	1

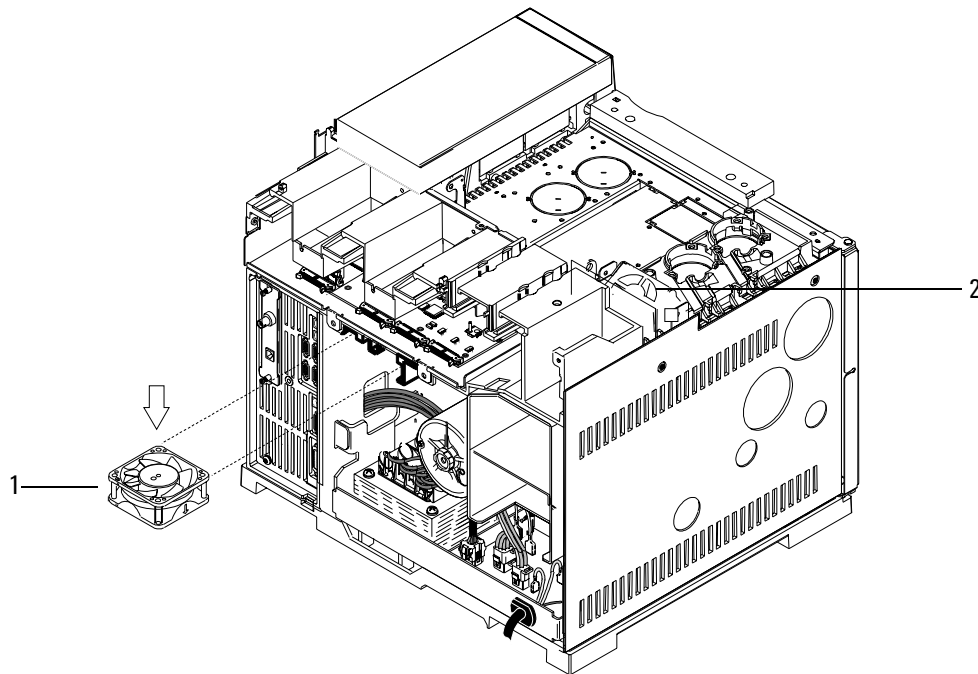
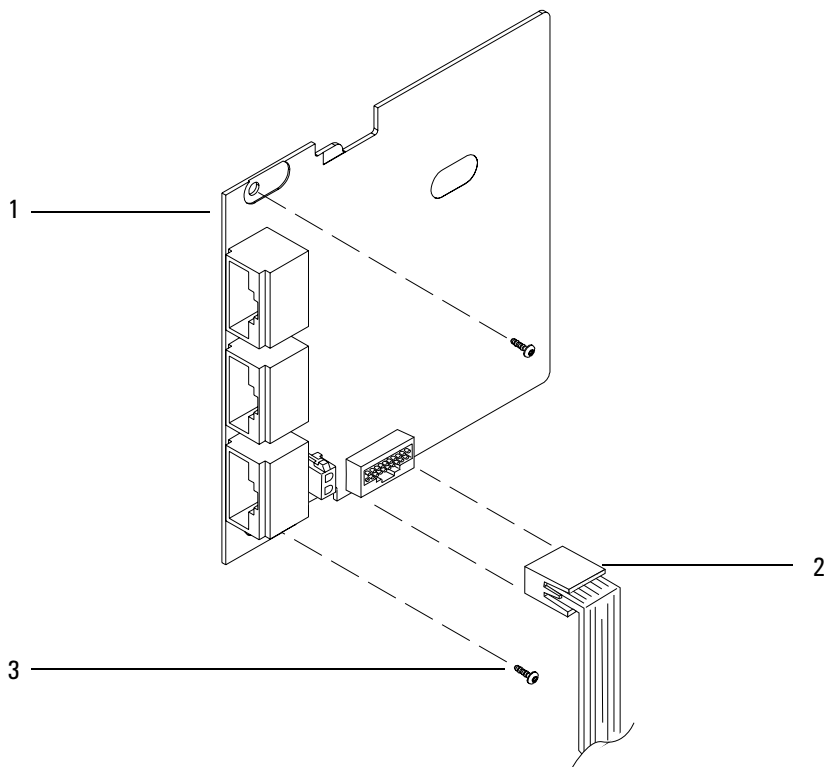


Figure 1360-9 Chassis fans

ALS interface board (G2612A accessory, 6890 Plus only)

Description	Part no.	Qty.
1. ALS interface board	G2612-60010	1
2. 6890 ALS controller bd cable	G2612-60510	1
3. Screw—Tpg 6-19	0624-0403	2
NS Installation instructions, G2612A	G2612-90195	—
NS Label, GC door	G2612-90700	1

**Figure 1360-10 ALS Interface board**