

- **Bad gas flow:** Empty gas bottle, faulty pressure regulator or flow meter, leakage at gas hose or gas valve; ⇒ repair or replace. The bottle or regulator is frozen, ⇒ *heat up* it by hot water or gas heater.
- **Irregular wire feed:** Worn or deformed input guide, roll or its groove, loose wire reel; ⇒ *locate fault* and repair it. Bad pressure on the roll; ⇒ set *correct* pressure. Faulty control unit; ⇒ contact service.
- **Bad quality of weld:** Bad gas flow, incorrect wire speed, contaminated surface, improper quality of wire or gas, bad welding parameters, worn parts of machine ⇒ use *good quality* products for welding, *maintain* the machine regularly.

It is very important that the welding parameters would be set *properly* for the welding task:

- **Welding current:** can be regulated by the wire feed speed, via the melting output.
- **Arc voltage:** weld with a *short* arc if it is possible; width, depth and surface of the seam depend also on this.
- **Sticking out:** it is recommended to be *short*; it influences the melting output, gas shielding, spatter loss.
- **Polarity:** the reverse polarity can be used *only* for piling welding.
- **Nozzle-to-work distance:** be *short* because of gas shielding, but the gas nozzle must be protected from *heat*.
- **Leading of the torch:** usually *pulling*; the *pushing* welding can be used for *root welding* because of the wide and flat seam.

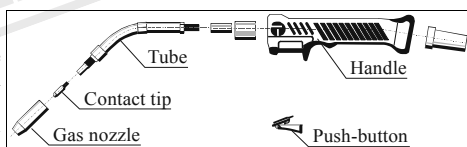
7. Maintenance

All electrical repair's must be carried out by a Licensed Technician,

The machine must be disconnected from the electrical supply before any repairs are made to the machine.

If the fault of the equipment remains or is caused by an unknown reason, contact the service division!

- **Torch:** During the welding work apply anti-adhesive fluid (silicon spray) to the *gas nozzle* to prevent melted droplets adhering to it. The *contact tip* is a consumable part to be changed regularly depending on its wear (burning, erosion). The *torch liner* should only be cleaned by compressed air.



- **Cables and hoses:** Check *gas hose* and *input/output cables* for flaws, replace if necessary.
- **Wire feeder:** This must be checked and maintained regularly at the *drive roll* and the *guiding spiral*.
- **High-current unit:** *Remove* dust from inside the equipment using compressed air. *Check* and - if necessary - *tighten* screw at connections.

8. Parts list

Accessories:

Nº	Part	Code	Nº	Part	Code
1.	Feeding roll Ø40/22, for Ø0.6-0.8V	2342240647	2.	Earth cable 35 mm ² , 10 m	2343630015
3.	Output plug CX-21 (on earth cable)	2142240154	4.	Earth clamp 350A	2142240072
5.	Gas hose Ø9/5, 10 m	2357320078	6.	1/4" flare nut (on gas hose's end)	900000-002
7.	Protective hose 10 cm×10 m	2167320021	8.	Welding cable 35 mm ² , 10 m	2343630052
9.	Output plug CX-21 (to the PS)	2142240154	10.	Output plug CX-41 (to the WF)	2142240156
11.	Control cable 5×1.0 mm ² , 10 m	2343630071	12.	6+1-pin plug T3104 (to the PS)	2143730091
13.	6+1-pin plug T3105 (to the WF)	2143730089			

Power Source:

N ^o	Part	qty	Code	N ^o	Part	qty	Code
1.	Plastic handle (half)	2	2142240230	2.	Fan holder Ø250	1	28422410
3.	Safety grid for fan Ø250	1	2142240232	4.	Fan blade Ø250	1	2142240175
5.	Cable fixing clamp (<i>mains cable</i>)	1	2342240567	6.	Gas hose Ø9/5 (<i>to the gas bottle</i>)	1	2357320008
7.	1/4" gas connector (<i>to Wire F.</i>)	1	900000-001	8.	3/8" flare nut (<i>on gas hose's end</i>)	1	900000-117
9.	Mains cable 3×4 mm ² , 5 m	1	2343630020	10.	Fuse holder PTF-35 (250V)	2	2343730015
11.	Fuse B20/5.2, 1A <i>FI</i>	2	2343730016	12.	Screw terminal K2.5B	1	2343730009
13.	Contacteur LC1 D32, 42V~ <i>KI</i>	1	2142320096	14.	Filter unit EMC-2	1	28040622
15.	Fan motor VNT 16-25, 230V <i>MI</i>	1	2142240583	16.	Switch GN 25-6985 (0-3) <i>QI</i>	1	2142330093
17.	Switch GN 25-8009 (1-7) <i>Q2</i>	1	2142330092	18.	Auxiliary transformer <i>T2</i>	1	29081127
19.	Main transformer <i>TI</i>	1	29080289	20.	Rectifier bridge CF 250R <i>VI</i>	1	2142240234
21.	Capacitor 10 mF 63V <i>CI</i>	12	2344720411	22.	Resistor 27Ω 16W <i>RI</i>	2	2344720323
23.	DC choke <i>LI</i>	1	29090234	24.	Output socket CX-31	3	2142240068
25.	Fuse B20/5.2, 3.15A (<i>feeder</i>) <i>F2</i>	2	2343730049	26.	Lamp holder 18×18, LJ 243 <i>HI</i>	1	2342340064
27.	Bulb T4.5, 48V	1	2345210001	28.	6+1-pin socket T3107 <i>X2-I</i>	1	2143730087

Wire Feeder:

N ^o	Part	qty	Code	N ^o	Part	qty	Code
1.	Plastic handle (half)	2	2142240230	2.	Wheel Ø160	2	2132750052
3.	Swivel wheel Ø65	2	2132750047	4.	Swivel plate	1	2142240110
5.	Wire reel holder	1	2142240076	6.	Feeding mechanism 2445L-402D	1	2142241559
7.	Feeding roll Ø40/22, Ø0.9-1.2V	1	2342240737	8.	Plastic plug for wheel's axle	2	2342240173
9.	Standard central adaptor	1	2142240095	10.	Output socket CX-12	1	2142240155
11.	6+1-pin socket T3106 <i>X2-2</i>	1	2143730088	12.	Auxiliary transformer <i>TI</i>	1	29081120
13.	Solenoid valve 42V~ <i>YI</i>	1	2142241101	14.	Feeding motor 24V 45W <i>MI</i>	1	2142241559
15.	Electronic unit MHT 3.0 <i>AI</i>	1	2142241056	16.	11-pin PCB connector	1	2342240179
17.	Turning knob FF-25 (<i>P4</i>)	1	2342240017	18.	Turning knob FF-16 (<i>K,P7,P8</i>)	3	2342240015

Parts of the machine

