

NanoArc / ACE Electronics Rework Kit BOM

Soldering/desoldering station kit - personal purchasing copy - CAD estimates before shipping/tax

Budget target	\$500-600 CAD	Notes
Total - Must	\$436.50	Station plus required solder and desoldering consumables.
Total - Must + Recommended	\$529.44	Preferred practical kit: adds fume extraction, fine solder, ESD strap, and mat.
Total - All Purchasable	\$568.43	Includes optional spare extractor filters, spare soldering tips, and parts trays.
Headroom vs \$600	\$31.57	Estimate only; shipping/tax may push optional items out.

Important: confirm SL-916D desoldering nozzle/filter compatibility before ordering consumables. Do not substitute plumbing solder, acid flux, or random nozzles.

Main BOM

#	Priority	Status	Vendor	Item / MPN	Qty	Unit	Ext	Notes
1	Must	Buy	A1 Electronic Parts	Solomon SL-916D	1	\$399.00	\$399.00	Core gift item. Confirm it is the 110/120 V version and ask whether tips/filters are in stock.
2	Must	Buy	Lee's Electronic Components	106879 / 0.6 mm Sn63/Pb37	1	\$8.50	\$8.50	Primary solder for ACE headers, DIP sockets, perfboard, and general electronics.
3	Recommended	Buy	Lee's Electronic Components	106876 / 0.3 mm Sn63/Pb37	1	\$8.00	\$8.00	Fine solder for SOIC adapters, small pins, bridges, and repair work.
4	Must	Verify/Buy	A1 / Lee's / GM Electronic	SL-916-MF or compatible	1	\$20.00	\$20.00	Compatibility-critical. Prefer buying from A1 if they stock it; otherwise ask them to confirm equivalent filters.
5	Must	Verify/Buy	Lee's Electronic Components	928-1.5T	2	\$4.50	\$9.00	Likely useful if SL-916D shares SL-928 gun/nozzle family; confirm with A1 before ordering.
6	Recommended	Buy	DigiKey Canada	AO486 / 2260-AO486-ND	1	\$66.74	\$66.74	Reliable vendor option. A cheaper Amazon carbon extractor can substitute if budget is tight.
7	Recommended	Buy	PiShop.ca	Silicone Soldering Mat	1	\$9.95	\$9.95	Protects desk; catches screws and parts. Cheap enough to include.
8	Recommended	Buy	DigiKey / Chip Quik	CQ-ESD-WRIST-1 or equivalent	1	\$8.25	\$8.25	Use only on unpowered low-voltage electronics; not for mains/PSUs/pulse-bank work.
9	Optional	Buy	Amazon CA / generic	13 cm x 13 cm carbon filter pack	1	\$18.99	\$18.99	Only buy if the chosen extractor uses this size/style.
10	Optional	Buy	ABRA / Lee's / A1	Solomon SL-62x tips	2	\$5.00	\$10.00	Lower priority than desoldering nozzles/filters. Confirm SL-916D handpiece compatibility.
11	Optional	Buy	Amazon CA / local	Small parts trays	1	\$10.00	\$10.00	Nice for salvage sessions; can be skipped if budget needs trimming.
12	Owned	Already owned	On hand	Flux pen	1	\$0.00	\$0.00	Do not duplicate in gift kit.
13	Owned	Already owned	On hand	Desoldering braid	1	\$0.00	\$0.00	Do not duplicate in gift kit.
14	Owned	Already owned	On hand	Sermech iron	1	\$0.00	\$0.00	SL-916D replaces this as the daily bench iron.

Vendor Checks

Vendor	Question / exact wording
A1 Electronic Parts	Is the Solomon SL-916D in stock as the 110/120 V version suitable for Canada?
A1 Electronic Parts	Do you stock replacement filters for the SL-916D desoldering gun? If so, what part number?
A1 Electronic Parts	Are SL-916 / SL-928 desoldering nozzles compatible with the SL-916D gun?
A1 Electronic Parts	Do you stock 1.2 mm and/or 1.5 mm desoldering nozzles for the SL-916D?
A1 Electronic Parts	Do you stock replacement glass filter tubes or equivalent consumables for the SL-916D?
A1 Electronic Parts	Which soldering iron tips fit the soldering handpiece included with the SL-916D?
Self-check	If consumables are not available in Canada, reconsider the station or plan an initial spare-parts buy.

Already Owned / Do Not Duplicate

Item	Status	Action
Flux pen	Already owned	Do not buy another unless running low.
Solder braid/wick	Already owned	Do not buy another unless running low.
Sermech iron	Already owned but finicky	Keep as backup; SL-916D becomes primary.
Half-mask respirator with OV/acid-gas cartridges	Already owned	Use as backup for resin/chemistry/nasty flux sessions; still use local fume extraction.
Portable AC / bedroom HEPA units	Already/coming	Good room-air support, but not a replacement for local fume capture.

Source Links

#	Item / MPN	Source URL
1	Solomon SL-916D	https://www.a1parts.ca/solomon/
2	106879 / 0.6 mm Sn63/Pb37	https://leeselectronic.com/en/product/106879-solder-leaded-rosin-core-06mm-47g-37-63.html
3	106876 / 0.3 mm Sn63/Pb37	https://leeselectronic.com/en/product/106876-106876SOLDERLEADEDROSINCORE03MM5.html
4	SL-916-MF or compatible	https://www.gmelectronic.com/v/1503546/solomon-sl-916-mf-metal-filter-for-desoldering-gun-sl-916-and-sl-928
5	928-1.5T	https://leeselectronic.com/en/product/105216-soldering-tips-928-15t-15mm-tips-for-sl-928.html
6	AO486 / 2260-AO486-ND	https://www.digikey.ca/en/products/detail/sra-soldering-products/AO486/10709947
7	Silicone Soldering Mat	https://www.pishop.ca/product/silicone-soldering-mat-heat-resistant-blue/
8	CQ-ESD-WRIST-1 or equivalent	https://www.digikey.ca/en/products/detail/chip-quik-inc/CQ-ESD-WRIST-1/22592577
9	13 cm x 13 cm carbon filter pack	https://www.amazon.ca/s?k=activated+carbon+filters+solder+fume+extractor+13cm
10	Solomon SL-62x tips	https://abra-electronics.com/solomon.html
11	Small parts trays	https://www.amazon.ca/s?k=small+parts+tray+electronics