

BURROUGHS 220

A Summary of Operations in Alphabetic Order

| Instruction Format | OPERATION | |
|--------------------|-----------|---|
| ± 1234 56 7890 | ABR | NAME |
| + 1110 12 aaaa | ADD | ADD |
| + 1111 12 aaaa | ADA | ADD ABSOLUTE |
| + 1111 19 aaaa | ADL | ADD TO LOCATION |
| + 1110 35 aaaa | ECE | BRANCH, COMPARISON EQUAL |
| + 1110 34 aaaa | ECH | BRANCH, COMPARISON HIGH |
| + 1111 34 aaaa | ECL | BRANCH, COMPARISON LOW |
| + 1111 35 aaaa | ECU | BRANCH, COMPARISON UNEQUAL |
| + 1111 38 aaaa | BCS | BRANCH CONTROL SWITCH |
| + sLnn 36 aaaa | BFA | BRANCH FIELD A |
| + sLnn 37 aaaa | BFR | BRANCH FIELD R |
| + 1111 31 aaaa | BOF | BRANCH OVERFLOW |
| + 1111 32 aaaa | BRP | BRANCH REPEAT |
| + 111n 33 aaaa | BSA | BRANCH SIGN A |
| + 1111 30 aaaa | BUN | BRANCH UNCONDITIONALLY |
| + ulvr 60 aaaa | CRD | CARD READ |
| + ulif 62 aaaa | CRP | CARD READ, FORMAT LOAD |
| + ulif 64 aaaa | CRI | CARD READ INTERROGATE, BRANCH |
| + ulif 61 aaaa | CWR | CARD WRITE |
| + ulif 63 aaaa | CWP | CARD WRITE, FORMAT LOAD |
| + ulif 65 aaaa | CWI | CARD WRITE INTERROGATE, BRANCH |
| + 1111 45 1111 | CLA | CLEAR A |
| + 1115 45 1111 | CAB | CLEAR A, B |
| + 1110 10 aaaa | CAD | CLEAR ADD |
| + 1111 10 aaaa | CAA | CLEAR, ADD ABSOLUTE |
| + 1113 45 1111 | CAR | CLEAR A, R |
| + 1117 45 1111 | CLT | CLEAR A, R, B |
| + 1114 45 1111 | CLB | CLEAR B |
| + 1111 46 aaaa | CLL | CLEAR LOCATION |
| + 1112 45 1111 | CLR | CLEAR R |
| + 1116 45 1111 | CRB | CLEAR R, B |
| + 1110 11 aaaa | GSU | CLEAR, SUBTRACT |
| + 1111 11 aaaa | CSA | CLEAR, SUBTRACT ABSOLUTE |
| + sL70 18 aaaa | CFA | COMPARE FIELD A |
| + sL71 18 aaaa | CFR | COMPARE FIELD R |
| + nnnn 21 aaaa | DBB | DECREASE B BRANCH |
| + sLnn 27 aaaa | DPL | DECREASE FIELD LOCATION |
| + sLnn 28 aaaa | DLB | DECREASE FIELD LOCATION, LOAD B |
| + 1111 15 aaaa | DIV | DIVIDE |
| + 1111 17 aaaa | EXT | EXTRACT |
| + nh0 22 aaaa | FAD | FLOATING ADD |
| + nh1 22 aaaa | FAA | FLOATING ADD ABSOLUTE |
| + 1111 25 aaaa | FDV | FLOATING DIVIDE |
| + 1111 24 aaaa | FMU | FLOATING MULTIPLY |
| + nh0 23 aaaa | FSU | FLOATING SUBTRACT |
| + nh1 23 aaaa | FSA | FLOATING SUBTRACT ABSOLUTE |
| + 1111 00 1111 | HLT | HALT |
| + nnnn 20 aaaa | IBB | INCREASE B BRANCH |
| + sLnn 26 aaaa | IPL | INCREASE FIELD LOCATION |
| + 1111 08 1111 | KAD | KEYBOARD ADD |
| + 1110 42 aaaa | LDB | LOAD B |
| + 1111 42 aaaa | LBC | LOAD B COMPLEMENT |
| + 1111 41 aaaa | LDR | LOAD R |
| + 111n 43 1111 | LSA | LOAD SIGN A |
| 4 uhkk 51 aaaa | MFC | MAGNETIC-TAPE FIELD SCAN |
| 4 uhkk 52 aaaa | MFS | MAGNETIC-TAPE FIELD SEARCH |
| + unkk 54 aaaa | MTW | MAGNETIC-TAPE INITIAL WRITE |
| + un11 55 aaaa | MIR | MAGNETIC-TAPE INITIAL WRITE, RECORD |
| + ul10 59 aaaa | MIB | MAGNETIC-TAPE INTERROGATE, BRANCH |
| + ul11 59 aaaa | MIE | MAGNETIC-TAPE INTERROGATE END OF TAPE, BRANCH |
| + uhb4 50 1111 | MLS | MAGNETIC-TAPE LANE SELECT |
| + unkk 56 aaaa | MOW | MAGNETIC-TAPE OVERWRITE |
| + un11 57 aaaa | MOR | MAGNETIC-TAPE OVERWRITE, RECORD |
| + ul12 58 1111 | MPE | MAGNETIC-TAPE POSITION AT END OF INFORMATION |
| + un11 58 1111 | MPB | MAGNETIC-TAPE POSITION BACKWARD |
| + ul10 58 1111 | MPF | MAGNETIC-TAPE POSITION FORWARD |
| + un11 52 aaaa | MRD | MAGNETIC-TAPE READ |
| + un1v 53 aaaa | MRW | MAGNETIC-TAPE READ, RECORD |
| + uhb8 50 1111 | MRR | MAGNETIC-TAPE REWIND |
| + uhb9 50 1111 | MDC | MAGNETIC-TAPE REWIND, DE-ACTIVATE |
| 0 uhkk 51 aaaa | MTC | MAGNETIC-TAPE SCAN |
| 0 uhb0 50 aaaa | MUS | MAGNETIC-TAPE SEARCH |
| + 1111 14 aaaa | MUL | MULTIPLY |
| + 1111 01 1111 | NOP | NO OPERATION |
| + unnv 03 aaaa | PRD | PAPER-TAPE READ |
| + ul1v 04 aaaa | PRB | PAPER-TAPE READ, BRANCH |
| + unnv 05 aaaa | PRI | PAPER-TAPE READ, INVERSE FORMAT |
| + unn1 06 aaaa | PWR | PAPER-TAPE WRITE |
| + ul11 07 aaaa | PWI | PAPER-TAPE WRITE INTERROGATE, BRANCH |
| + inn1 29 aaaa | RTP | RECORD TRANSFER |
| + 1111 16 1111 | RND | ROUND |
| + 1110 49 11nn | SLA | SHIFT LEFT A |
| + 1111 49 11nn | SLT | SHIFT LEFT A AND R |
| + 1112 49 11nn | SLS | SHIFT LEFT A WITH SIGN |
| + 1110 48 11nn | SRA | SHIFT RIGHT A |
| + 1111 48 11nn | SRD | SHIFT RIGHT A AND R |
| + 1112 48 11nn | SRS | SHIFT RIGHT A WITH SIGN |
| + sL10 40 aaaa | STA | STORE A |
| + sL12 40 aaaa | STB | STORE B |
| + 1111 44 aaaa | STP | STORE P |
| + sL11 40 aaaa | STR | STORE R |
| + 1110 13 aaaa | SUB | SUBTRACT |
| + 1111 13 aaaa | SUA | SUBTRACT ABSOLUTE |
| + dnnv 09 aaaa | SPO | SUPERVISORY PRINT-OUT |

BURROUGHS 220 Alphanumeric codes

| SYMBOL | | CODE | | | | | | | Punched Card | |
|-----------------|-------------|----------------------------|------------|---|-------|---|---|---------|--------------|---------|
| Burroughs | 046 | Computer and Magnetic Tape | Paper Tape | | | | | (Blank) | | |
| | | | X | 0 | Check | 8 | 4 | | | 2 |
| (Space) | (Space) | 00 | | | ✓ | | | | | (Blank) |
| . | . | 03 | X | 0 | | 8 | | 2 | 1 | 12 8-3 |
| H | h | 04 | X | 0 | ✓ | 8 | 4 | | | 12 8-4 |
| & | & | 10 | X | 0 | ✓ | | | | | 12 |
| \$ | \$ | 13 | X | | ✓ | 8 | | 2 | 1 | 11 8-3 |
| * | * | 14 | X | | ✓ | 8 | 4 | | | 11 8-4 |
| — | — | 20 | X | | | | | | | 11 |
| / | / | 21 | | 0 | ✓ | | | | 1 | 0 1 |
| . | . | 23 | | 0 | ✓ | 8 | | 2 | 1 | 0 8-3 |
| % | % | 24 | | 0 | ✓ | 8 | 4 | | | 0 8-4 |
| ≡ | ≡ | 33 | | | ✓ | 8 | | 2 | 1 | 8-3 |
| ∩ | ∩ | 34 | | | ✓ | 8 | 4 | | | 8-4 |
| A | A | 41 | X | 0 | | | | | 1 | 12 1 |
| B | B | 42 | X | 0 | | | | 2 | | 12 2 |
| C | C | 43 | X | 0 | ✓ | | | 2 | 1 | 12 3 |
| D | D | 44 | X | 0 | | | 4 | | | 12 4 |
| E | E | 45 | X | 0 | ✓ | | 4 | | 1 | 12 5 |
| F | F | 46 | X | 0 | ✓ | | 4 | 2 | | 12 6 |
| G | G | 47 | X | 0 | | | 4 | 2 | 1 | 12 7 |
| H | H | 48 | X | 0 | | 8 | | | | 12 8 |
| I | I | 49 | X | 0 | ✓ | 8 | | | 1 | 12 9 |
| J | J | 51 | X | | | | | | 1 | 11 1 |
| K | K | 52 | X | | ✓ | | | 2 | | 11 2 |
| L | L | 53 | X | | | | | 2 | 1 | 11 3 |
| M | M | 54 | X | ✓ | | | 4 | | | 11 4 |
| N | N | 55 | X | | | | 4 | | 1 | 11 5 |
| O | O | 56 | X | | | | 4 | 2 | | 11 6 |
| P | P | 57 | X | ✓ | | | 4 | 2 | 1 | 11 7 |
| Q | Q | 58 | X | ✓ | | 8 | | | | 11 8 |
| R | R | 59 | X | | ✓ | 8 | | | 1 | 11 9 |
| S | S | 62 | | 0 | ✓ | | | | 2 | 0 2 |
| T | T | 63 | | 0 | | | | 2 | 1 | 0 3 |
| U | U | 64 | | 0 | ✓ | | 4 | | | 0 4 |
| V | V | 65 | | 0 | | | 4 | | 1 | 0 5 |
| W | W | 66 | | 0 | | | 4 | 2 | | 0 6 |
| X | X | 67 | | 0 | ✓ | | 4 | 2 | 1 | 0 7 |
| Y | Y | 68 | | 0 | ✓ | 8 | | | | 0 8 |
| Z | Z | 69 | | 0 | | 8 | | | 1 | 0 9 |
| 0 (Zero) | 0 (Zero) | 80 | | 0 | | | | | | 0 |
| 1 | 1 | 81 | | | | | | | 1 | 1 |
| 2 | 2 | 82 | | | | | | 2 | | 2 |
| 3 | 3 | 83 | | | ✓ | | | 2 | 1 | 3 |
| 4 | 4 | 84 | | | | | 4 | | | 4 |
| 5 | 5 | 85 | | | ✓ | | 4 | | 1 | 5 |
| 6 | 6 | 85 | | | ✓ | | 4 | 2 | | 6 |
| 7 | 7 | 87 | | | | | 4 | 2 | 1 | 7 |
| 8 | 8 | 88 | | | | 8 | | | | 8 |
| 9 | 9 | 89 | | | ✓ | 8 | | | 1 | 9 |
| TAB | SKIP | 26 | | 0 | ✓ | 8 | 4 | 2 | | 0 8-6 |
| CARRIAGE RETURN | CR | 16 | X | ✓ | ✓ | 8 | 4 | 2 | | 11 8-6 |
| FORM OUT | PI 6 | 15 | X | ✓ | ✓ | 8 | 4 | | 1 | 11 8-5 |
| END-OF-WORD | PI 7 | 35 | | | ✓ | 8 | 4 | | 1 | 8-5 |
| BLANK | SP 1 | 02 | X | 0 | ✓ | 8 | | 2 | | 12 8-2 |
| TAPE FEED | TAPE FEED | " | X | 0 | ✓ | 8 | 4 | 2 | 1 | 12 8-7 |
| | END CARD 1 | 36 | | | | 8 | 4 | 2 | | 8-6 |
| | END CARD 2 | 27 | | 0 | | 8 | 4 | 2 | 1 | 0 8-7 |
| | CORRECT TAB | 37 | | | ✓ | 8 | 4 | 2 | 1 | 8-7 |
| | ERROR | 17 | X | | ✓ | 8 | 4 | 2 | 1 | 11 8-7 |
| | PI 1 | 32 | | | ✓ | 8 | | 2 | | 8-2 |
| | PI 2 | 12 | X | | ✓ | 8 | | | | 11 8-2 |
| | PI 3 | 22 | | 0 | ✓ | 8 | | 2 | | 0 8-2 |
| | PI 4 | 25 | | 0 | ✓ | 8 | 4 | | 1 | 0 8-5 |
| | PI 5 | 05 | X | 0 | ✓ | 8 | 4 | | 1 | 12 8-5 |
| | SP 2 | 06 | X | 0 | ✓ | 8 | 4 | 2 | | 12 8-6 |

*Not represented.