13-1

Move illegal MAL.

- B is assigned twice
- ALU is configured differently
- A is asigned twice

---

ac := ac + mbr ; BAD: B = mbr but only A=MBR

ac := mbr + ac ; OK

{AMUX=1, ALU=0, C=AC, B=AC} → A is not assigned

=> ac := mbr + ac;

1	00	00	00	0	0	0	0	1	0001	0001	????	?x8

---

alu := (ac+ac); c := lshift(ac+ac); OK

mbr := ac; c := lshift(ac);

↳ {MBR=1, ALU=10, A=0001, SH=00}

BAD { ALU=10, A=0001, SH=10}

---

alu := ac; c := lshift(ac);

mar := ac; ac := AC+1;

BAD → B=AC → B=1

---

mar := ac; ac := 1+ac;

mar := ir; mbr := lshift(ac+ir); tir := bshift(ac+ir);

wr; if n then goto 22; alu := ac+ir;

OK: | 0 | 10 | 00 | 10 | 1 | 1 | 0 | 1 | 1 | 0100 | 0001 | 0011 | 0001 011