

4K cart

8K cart

no change
 (A) \emptyset at ^{4K} card edge (always)
 +
 \emptyset at override switch
 =
 4K cart placed at 0K boundary
 (first 1/2 of 8K space) ✓

no change
 (A) \emptyset at ^{4K} card edge (first half Rom) ^{requesting}
 +
 \emptyset at override switch
 =
 8K cart, using first half of memory
 so address for 4K bank is at \emptyset
 (no override function) ✓

intended change:
 use upper half
 (B) \emptyset at ^{4K} card edge (always)
 +
 1 at override switch
 =
 4K cart placed at +4K boundary
 (second 1/2 of 8K space) ✓

no change
 (C) 1 at ^{4K} card edge (second half) ^{requesting}
 +
 \emptyset at override switch
 =
 1 at address line, for 4K bank

~~no-harm error~~
 (C) 1 at ^{4K} card edge =
 impossible on 4K cart.
 ("out of range" program.)
 +
 \emptyset at ~~override~~ override
 =
 impossible-to-happen error

~~no-harm error~~
 (B) \emptyset at 4K card edge
 +
 1 at override switch
 =
 error: misaligned memory banks
 harm done, won't work.
 thinks its a 4K cart.
 cannot access lower half of Rom chip

~~no change~~
 (D) 1 at ^{4K} card edge =
 impossible, so
 +
 1 at override =
 impossible +
 irrelevant

no change
 (P) 1 at ^{4K} card edge
 +
 1 at override switch
 =
~~error~~ no change happened
 (error, but harmless
 at this point.)