A dielectric slab is half-way into a charged capacitor.

Find the direction of the force on the slab.

A) The direction of the forces is to left.

B) The forces is zero, thus its direction is undetermined.

C) The direction of the force is to right.
Going from no slab to the presence of a slab corresponds to going from a high potential energy to a low potential energy. The natural tendency is to have the slab moving toward filling the gap. In other words, there is an attractive force to the right.

Answer C.

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