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The famous Howson's Theorem (1954) states that the intersection of two finitely generated subgroups of a free group is a finitely generated subgroup. Jones and Trotter (1989) showed that is not the case for any free inverse semigroup with more than one generator. In our work, we considered this problem in the important class of inverse semigroups which are semidirect products of semilattices by groups and showed that, for a group  $G$  acting on a semilattice  $E$  by means of a locally finite action, the semidirect product  $E * G$  satisfies the Howson property (with respect to inverse subsemigroups) if and only if so does  $G$  (with respect to subgroups) and that the equivalence fails for arbitrary actions. Some conclusions can also be drawn on the size of a minimal set of generators. (Received February 09, 2015)