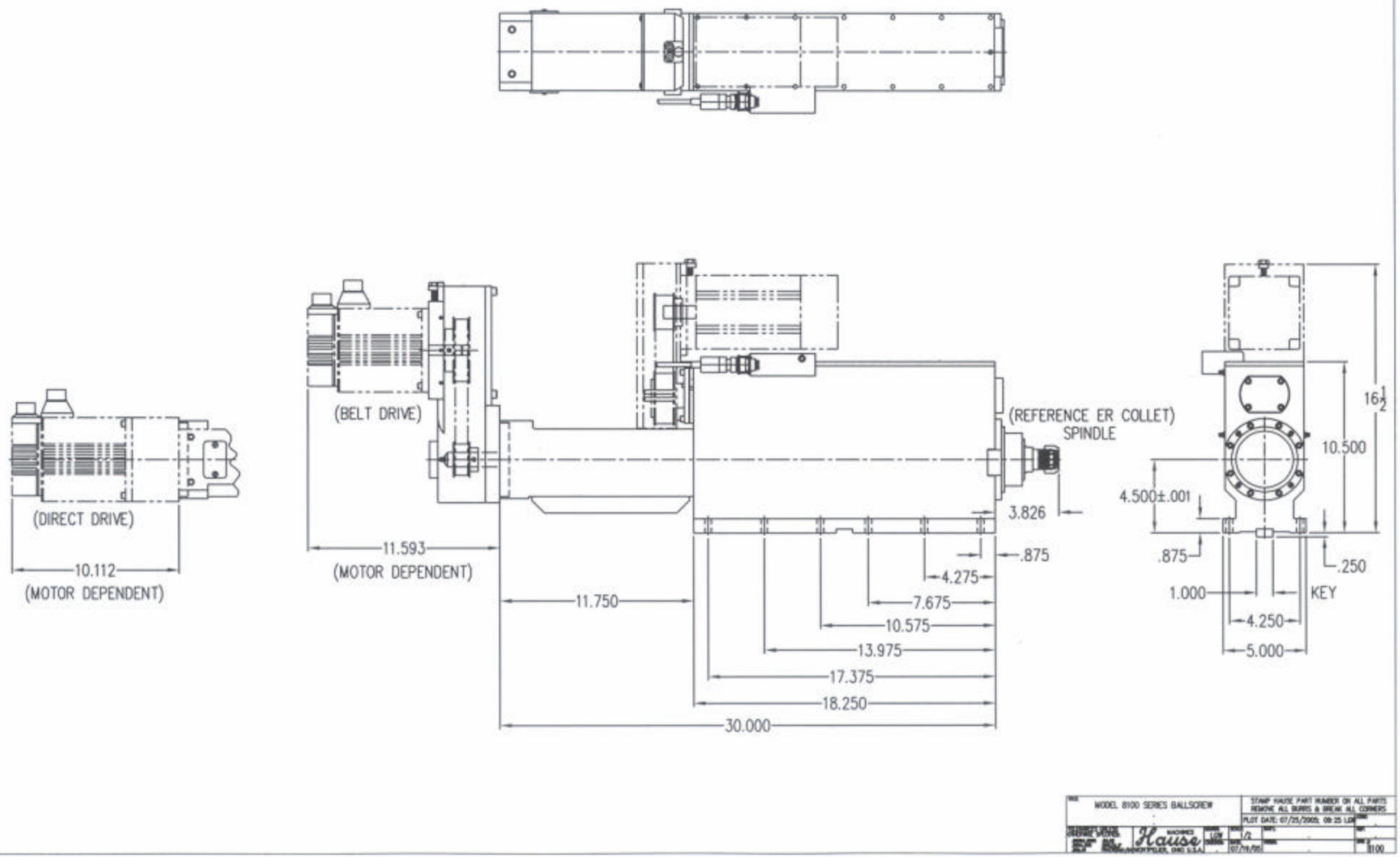8100 SERIES BASIC LAYOUT