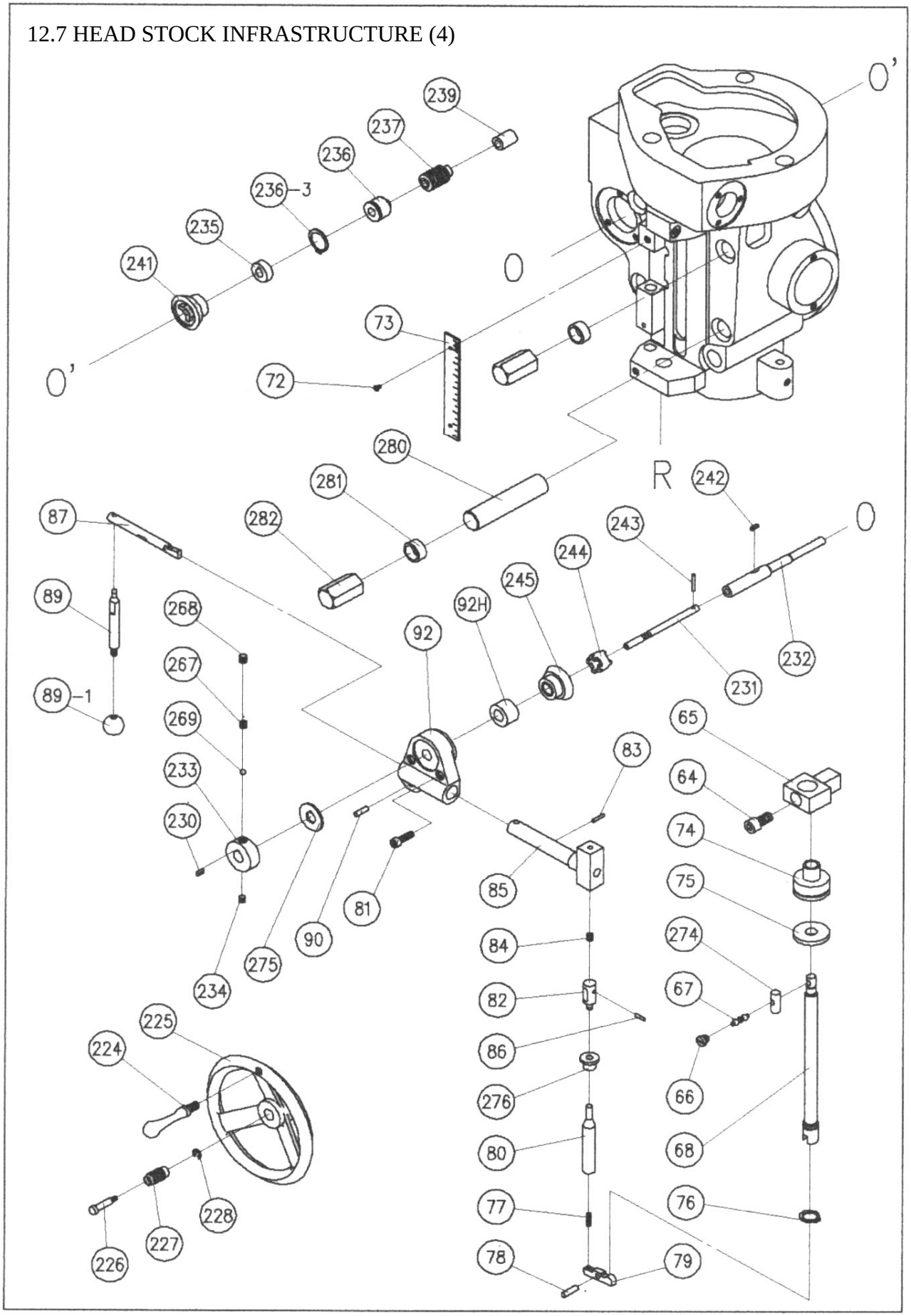12.7 HEAD STOCK INFRASTRUCTURE (4)