

11.0 Maintenance

⚠ WARNING

Before any intervention on the machine, disconnect it from electrical supply by pulling out plug or switching off main switch. Failure to comply may cause serious injury.

11.1 Lubrication

The milling machine is equipped with an automatic lubrication system. The system lubricates the lead screws and ways. An oil cup and grease nipple on the mill head provide lubrication for the spindle bearings and back gear mechanism. Refer to Figures 23 and 24 for lubrication requirements and access points.

Key	Description	Recommended Lubricant	Action
A	Spindle bearing oil cup	Mobil DTE Oil Light, or equivalent	Service daily.
B	Automatic lube system	Mobil Vactra Oil #2, or equivalent	Check oil daily – add if required.
C	Knee leadscrew grease nipple	Mobilith AW2, or equivalent	Service once each week.
D	Back gear grease nipple	Mobilith AW1, or equivalent	Service weekly when operating in back gear mode.

Table 5: Lubrication Points

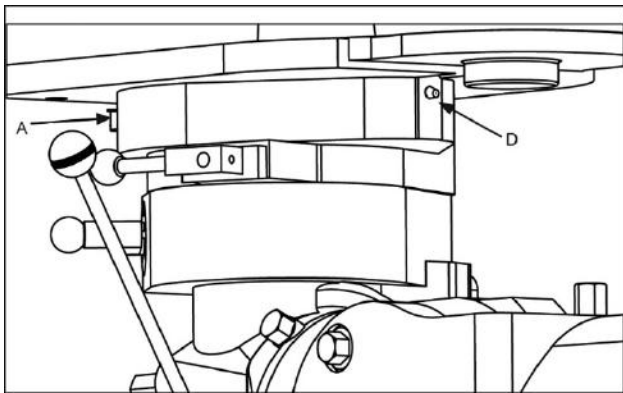


Figure 23

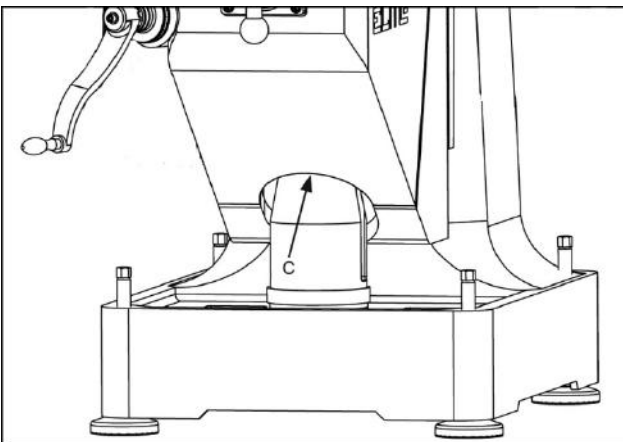


Figure 24

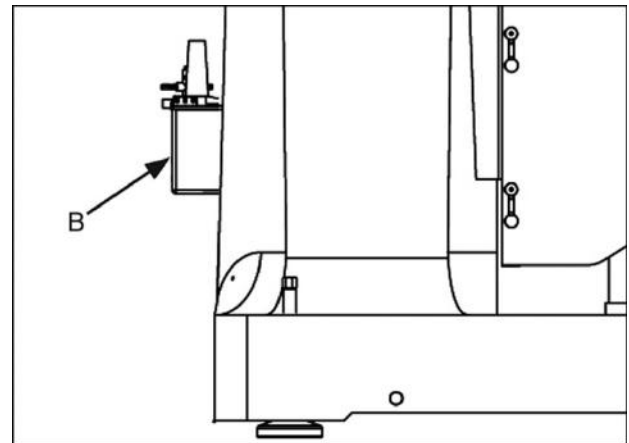


Figure 25

11.2 Periodic maintenance requirements

During operation, periodically vacuum and brush chips and debris from machine.

Periodically operate knee and table lead screws through full range of movement to evenly distribute lubricant (particularly when applied using the “one-shot” system).

Periodically apply light machine oil to work table and other exposed metal surfaces to prevent rust or corrosion.

Periodically remove vent panels to check pulleys and belts for unusual wear or grooving. *NOTE: Operators should vary speed occasionally to prevent formation of grooves on pulley surfaces.*

12.0 Recommended speed for mill and drill operations

Mill cutting speed recommended (mm/min)

$V = DN/1000$

V cutting speed (mm/min)		
<i>Material</i>	<i>Heavy cutting</i>	<i>Processing cutting</i>
Cast iron	30-40	45-90
Malleable iron	37-45	45-90
Steel (soft)	60-90	75-105
Steel (medium)	45-67	52-75
Steel (hard)	24-37	55-75
Cast steel	24-30	55-75
Aluminum	240-300	300-360
Brass	105-180	150-300
Bronze	52-75	75-90
Magnesium alloy	240-300	300-600
Zinc alloy	120-240	210-450
Drill speed (RPM) recommended		
5mm hole	1000-1500	
10mm hole	500-800	
13mm	300-500	
20mm	150-300	

Table 6

13.0 Replacement parts

Replacement parts are listed on the following pages. To order parts or reach our service department, call 1-800-274-6848 Monday through Friday, 8:00 a.m. to 5:00 p.m. CST. Having the Model Number and Serial Number of your machine available when you call will allow us to serve you quickly and accurately.

Non-proprietary parts, such as fasteners, can be found at local hardware stores, or may be ordered from JET. Some parts are shown for reference only, and may not be available individually.

Refer carefully to the section headings to verify that the parts list is for your specific model.