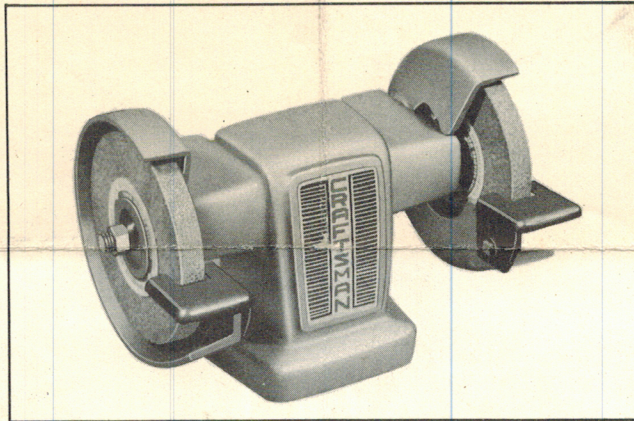


Instructions for Assembly and Operation of Ball Bearing Bench Grinder Cat. No. 99-6604

Fasten the Grinder securely to a bench or table with bolts or lag screws. Two $\frac{1}{2}$ inch wide openings have been provided for this purpose.

The Grinder may be driven either from behind or from below with the belt running through a hole cut in the bench below the base.

Assemble the tool rest as shown.



diameter, is 3450 R.P.M. The maximum safe speed for this 6 inch diameter wheel is 3820 R.P.M.

If wheels are used of other materials, hardness, or size than those originally furnished with the Grinder, be certain that the speed of the Grinder is in agreement with the

wheel manufacturer's recommendations.

Use only wheels which have a $\frac{1}{2}$ inch diameter bore.

LUBRICATION:

The precision ball bearing assemblies used on the grinder arbor have been lubricated and sealed at the factory. They will not require further lubrication for the life of the bearing assembly.

OPERATION:

Govern the feed pressure of the work by the cutting capacity of the wheel. Do not jam work into the wheel. If the wheel burns the work, it is an indication of too much pressure, likewise, too much feed pressure may cause glazing of the wheel which leads to overheating and breakage.

Keep the wheels properly dressed:

1. To maintain squareness of face and roundness of circumference.
2. To keep the wheel free of glaze which reduces the cutting efficiency and causes heating.

Grinding on the flat side of the wheel is not recommended.

If the wheel glazes under moderate feed pressure, it is an indication of too hard a wheel bond, or of too much speed for the material being cut. Loading of the wheel with the material being ground is also an indication of too hard a wheel bond, or possibly of too slow a speed for the material being cut.

TO INSTALL A BELT:

1. Loosen the pulley set screw.
2. Remove the nut, flange and spacer from the RIGHT END of the spindle only. Pull the spindle out far enough to slip a "V" belt over the pulley. Reinstall spindle through bearings.
3. Position pulley and tighten set screw, making sure it locks against the flat on the shaft.

When installing the wheels do not tighten the flange nuts excessively—you might crack the wheels. The nuts should be just tight enough to hold the wheels firmly.

CAUTION:

The Grinder spindle has left and right hand threads at opposite ends. For safe operation, the left hand thread must be on the left side of the Grinder when facing it.

The tool rests should be installed with not more than $\frac{1}{8}$ inch clearance between the edge of the tool rest and the wheel.

MOTOR:

A 1750 R.P.M.- $\frac{1}{4}$ Horsepower motor equipped with a 4 inch diameter pulley will provide sufficient speed and power. The Grinder pulley is designed for a $\frac{1}{2}$ inch A section standard V-belt.

DIRECTION OF ROTATION:

Direction of wheel rotation is indicated by arrows on inside of each guard.

SPEED:

The recommended speed for this grinder when equipped with vitrified bonded wheels—6 inch

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