



*Logan*

**BACK GEARED  
SCREW CUTTING LATHE**

10" Swing; 24" Between Centers



**AC-241 LEVER TAILSTOCK  
ASSEMBLY**

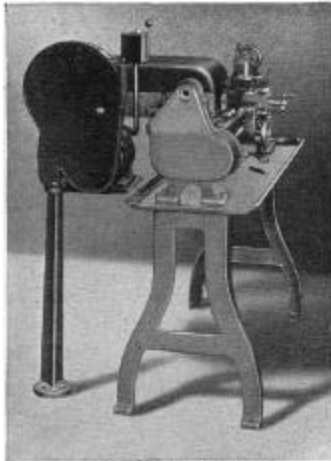
Will be furnished with the Floor model Lathe in place of the regular tailstock when specified. Lever stroke, 2 $\frac{3}{4}$ ". Hand wheel spindle travel, 2 $\frac{3}{4}$ ". Fitted for No. 2 Morse Taper Shank.

**No. 200** Complete As Shown, Less Motor, F.O.B. Chicago.

**No. 200-1** Complete with No. AC-241 Lever Tailstock Assembly Replacing Regular Tailstock, Less Motor, F.O.B. Chicago.

The No. 200 Logan Back Geared Screw Cutting Lathe is a fine production tool developed for the shop requiring a high speed lathe of sustained accuracy. Advanced design, sound engineering, expert workmanship and rigid inspection all contribute to its excellence. Its specifications include many superior features including: Pre-loaded, grease-sealed precision ball bearing headstock spindle; patented countershaft assembly with three point suspension and rubber mountings; precision ground ways—2 prismatic V-ways and 2 flat ways. Also furnished as a bench type, Model 210.

**LOGAN ENGINEERING CO. • CHICAGO 30, ILL.**



END VIEW SHOWING  
COUNTERSHAFT ASSEMBLY

### COUNTERSHAFT ASSEMBLY

The patented countershaft assembly used in this machine is carried on a three point suspension and is completely insulated by rubber at all points of contact to prevent vibration being transmitted to the lathe.

All pulleys and belts are completely guarded yet readily accessible. The entire unit is designed to appear as a streamlined part of the lathe.

### BALL BEARING HEADSTOCK

When the cone pulley guard is raised as shown at right, belt tension is automatically released for quick belt change.

The ball bearing spindle mounting is advanced design that is more expensive and produces finer results. New Departure grease sealed, preloaded bearings give greater accuracy, less friction, less wear and require no adjustment or lubrication.



HEADSTOCK AND COUNTERSHAFT  
WITH GUARD RAISED

Collet capacity  $\frac{3}{8}$ " with push type collets used in Logan No. AC-210 Production Collet Chuck or No. AC-201 Speed Collet Chuck.

Collet capacity  $\frac{1}{2}$ " with draw-in collets used in Logan AC-165 Production Collet Chuck or Logan No. AC-150 Draw-in Collet Chuck.

NOTE: Push type collets give greater capacity, have greater holding power and close concentrically on the work without pulling it away from the stop.

## SPECIFICATIONS

### CAPACITY OF LATHE

Swing over bed and saddle wings.  $10\frac{1}{2}$ "  
Swing over saddle cross slide.  $6\frac{1}{8}$ "  
Distance between centers.  $24$ "

### THREADS AND FEEDS

Reversible power longitudinal feed  
Reversible power cross feed  
Lead Screw diameter and threads per in.  $\frac{3}{4}$ "-8  
Threads—46 selections RH or LH.  $4$ -216 per in.  
Independent change gears—17 furnished (6 on Lathe and 11 extra)  
Width of face of change gears.  $\frac{7}{8}$ "

### BED

Width of bed across ways.  $6\frac{1}{8}$ "  
Bed length.  $43\frac{1}{8}$ "  
Precision ground ways; 2 prismatic "V" ways and 2 flat ways.

### HEADSTOCK AND SPINDLE

Front bearing—double row ball bearing.  
Rear bearing—single row ball bearing.  
Note: Sealed, pre-loaded New Departure Ball Bearings of the highest precision type are used.  
Back gear shaft bearings—self lubricating bronze bearings.  
Hole through spindle.  $\frac{3}{8}$ "  
Morse Taper with adaptor. No. 3 - No. 2  
Size of centers used, Morse Taper. No. 2  
Spindle nose diameter and threads per in.  $1\frac{1}{2}$ "-8  
Width of cone pulley steps for belt.  $1$ "  
Width of face of bull gear and back gears.  $\frac{5}{8}$ "  
Face plate diameter.  $6$ "  
Number of spindle speeds. 12

Spindle speeds, back gears engaged. 30, 56, 70, 104, 131, 244  
Spindle speeds, direct belt driven. 179, 334, 420, 620, 780, 1450

### CARRIAGE AND COMPOUND REST

Cross slide graduated in thousandths.  
Travel.  $6\frac{1}{4}$ "  
Cross feed screw mounted on self-lubricating bronze bearings.  
Compound rest top slide graduated in thousandths. Travel.  $2\frac{1}{4}$ "  
Top slide screw mounted on self-lubricating bronze bearings.  
Compound rest swivel—graduated  $90^\circ$  in both directions.  
Tool post opening for tool holder shank.  $\frac{3}{8}$ "x $\frac{3}{4}$ "  
Size of cutter bits used.  $\frac{1}{4}$ " sq.

### TAILSTOCK

Spindle travel.  $2\frac{3}{8}$ "  
Spindle graduations.  $\frac{1}{8}$ "  
Morse Taper center. No. 2  
Tailstock top will set over for taper turning.  $\frac{1}{16}$ "

### COUNTER SHAFT ASSEMBLY (Included in Price of Lathe)

2 Speed "V" Motor Pulley  $\frac{3}{8}$ " Bore.  $2\frac{3}{8}$ "-4"  
2 Speed countershaft flat pulley.  $8\frac{5}{8}$ "x $9\frac{7}{8}$ "  
40"x $\frac{1}{2}$ " V Belt used on flat of 2 step countershaft pulley. Width of step face.  $1$ "  
3 Step flat belt cone pulley mounted on countershaft. Width of step face.  $1$ "  
Countershaft mounted on self-lubricating bronze bearings.  
Adjustable motor mounting bracket furnished with countershaft assembly.  
Countershaft assembly independently supported on patented 3 point suspension.

Countershaft assembly completely insulated with rubber to prevent vibration being transmitted to lathe.  
Countershaft and all pulleys completely enclosed and guarded.  
Automatic belt tension release when guard for cone pulleys is raised to change belt steps.

### LATHE EQUIPMENT

#### (Included in Price of Lathe)

1 6" Face Plate	1 No. 3 - No. 2 Morse Taper Adaptor
2 60° Centers	1 Tool Post Holder and Wrench
17 Change Gears	1 Threading Chart
1 Threading Dial	1 Tailstock Wrench

Parts List and Instruction Book

### SELF LUBRICATING BRONZE BEARINGS

at 24 separate points in lathe where plain bearings are ordinarily furnished.

### OVERALL DIMENSION

#### (Including Countershaft Assembly)

Length.  $54$ "  
Width.  $30$ "  
Height.  $48\frac{1}{2}$ "

### MOTOR

Use  $\frac{1}{2}$  or  $\frac{1}{4}$  H.P. 1750 R.P.M. Motor  
If lathe is ordered without motor specify:  
1. Bore of motor pulley to be furnished with lathe.  
2. State whether 0636 or 0639 Drum Switch should be supplied. (See Accessory Circular for description of drum switch.)

### SHIPPING WEIGHT

No. 200 Logan Lathe with legs, chip pan, and countershaft assembly, less motor. 510 lbs.