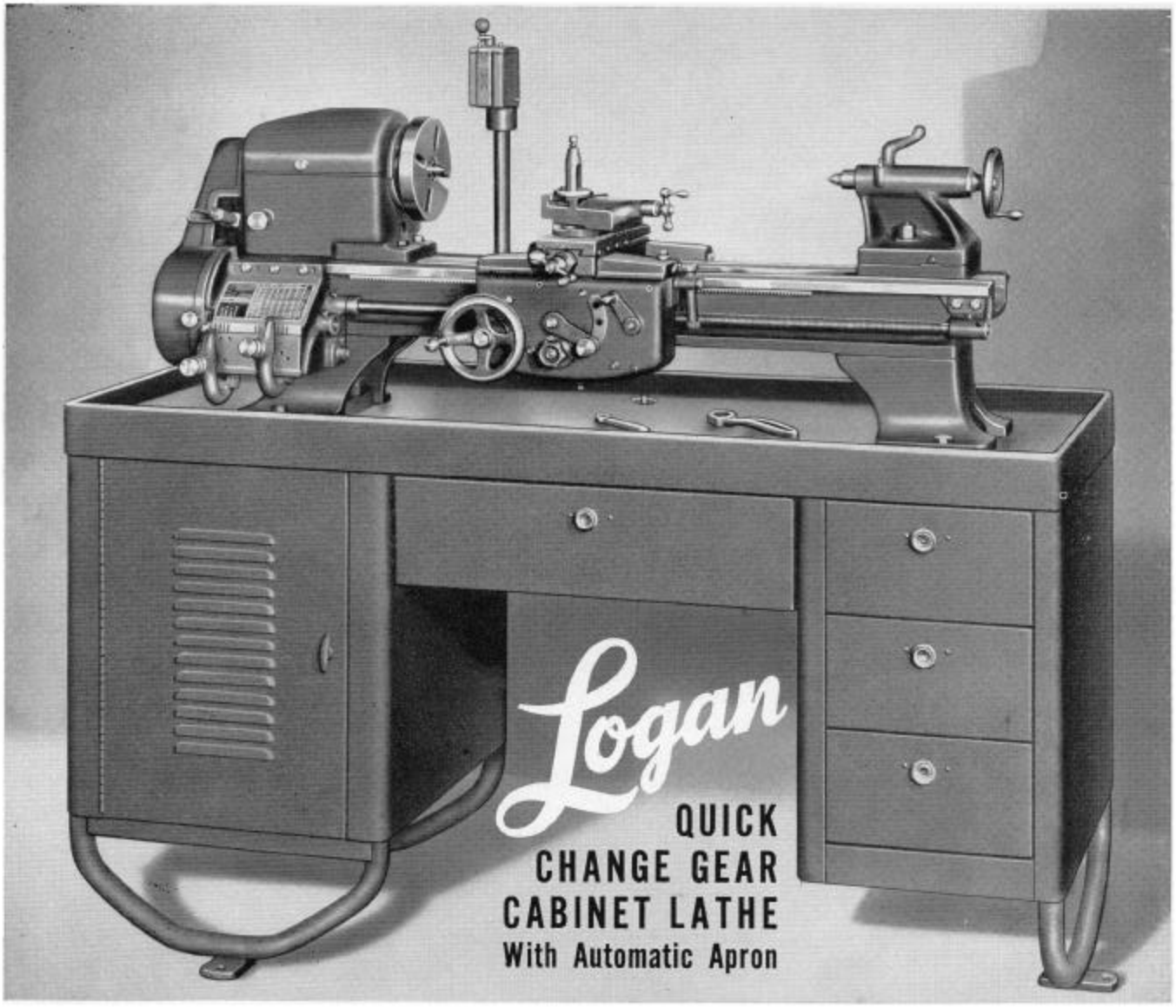
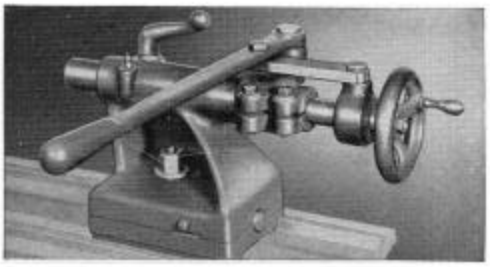
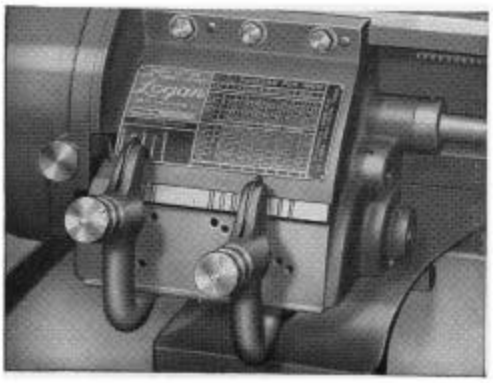
Logan Lathes

LOGAN ENGINEERING COMPANY • Chicago, Ill.
4901 W. LAWRENCE AVE.





AC-241 LEVER TAILSTOCK ASSEMBLY
Can be furnished with the Quick Change Gear Lathe in place of tailstock shown in above illustration of the lathe if specified in your order. Lever stroke, 2¾". Hand wheel spindle travel, 2⅜". Fitted for No. 2 Morse Taper Shank.



No. 825 Complete as shown, less motor, F.O.B. Chicago . . $495.00
No. 825-1 Complete with No. AC-241 Lever Tailstock Assembly replacing regular tailstock, less motor F.O.B. Chicago **$512.50**

The Logan Cabinet Lathe is particularly adaptable to tool room work, for maintenance, for training, or for production. The friction-feed automatic apron travels over a rugged, warp-free bed that is ground to within .0005" of absolute accuracy. The total run-out of its headstock spindle 12 inches from the bearing is less than .001". The lead screw is held to within .002" in 12 inches. The spindle turns on a double row of preloaded, grease sealed ball bearings, and at 40 other vital points throughout the lathe friction is minimized by self lubricating bronze bearings. Four large drawers in the strong tubular steel cabinet may be used for tool storage. Each drawer has an individual lock. Left hand compartment contains underneath motor drive and countershaft. The entire cabinet stands on a 3-point base, assuring a steady installation on any floor. All moving belts and gears are completely enclosed.

QUICK CHANGE GEAR BOX
The Logan Quick Change Gear Box provides 48 threads and feeds in either direction to the carriage of the lathe. By adjusting the two levers, screw threads from 8 to 224 per inch are quickly available and by changing the 24-tooth stud gear for the 48-tooth stud gear furnished with the lathe, additional threads from 4 to 7 per inch are available. Similarly, longitudinal power feeds from .0015" to .1000" per revolution of the spindle may be obtained. Power cross feeds are .25 times longitudinal feeds. Entire assembly is sturdy and accurate with precision cut steel gears and self-lubricating bearings.

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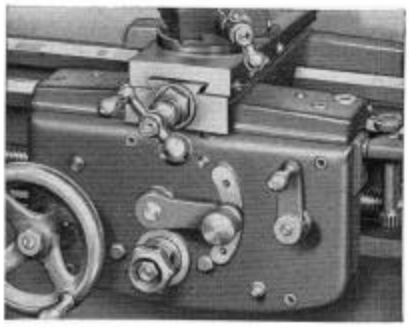
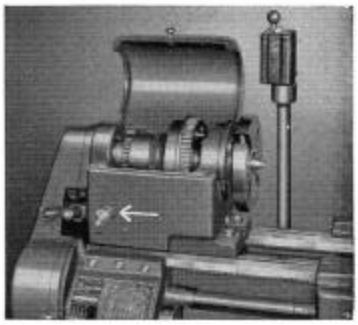


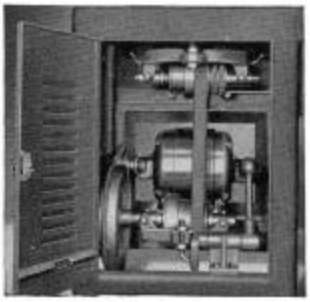
AUTOMATIC APRON

Operates from a spline in the lead screw through a worm drive and friction clutch for both longitudinal and cross feeds. For cutting threads an additional longitudinal drive operating from half nuts on the lead screw is used. It is impossible to engage both drives at the same time. Worm and gear operate in a bath of oil, assuring long life. Steel cut gears, sturdy construction and precision machining combine to make a rugged and accurate assembly.



UNDERNEATH DRIVE

The motor drive assembly of the Logan No. 825 Lathe is completely self contained and is enclosed in the left hand compartment of the cabinet. For easy, safe belt changing, the handy lever at the right of the drive compartment is pulled outward to release flat belt tension. Mechanisms for adjusting drive belt tension and flat belt tension are easily accessible. A Multiple V-Belt Drive transmits power from cone pulley to lathe spindle. All moving parts of the underneath drive are completely enclosed, yet easily reached. We recommend ordering electric motor with the lathe which permits us to ship with motor mounted and adjusted in position.



BALL BEARING HEADSTOCK

To assure sustained spindle accuracy, the Logan headstock is equipped with precision, "pre-loaded" New Departure Ball Bearings. The spindle turns with maximum freedom, with less friction, less wear, permits higher operating lathe speed and enables the user to take every advantage of modern high speed cutting methods. No lubrication of these bearings is ever needed. Fast, safe, easy back gear shifting is assured by placing control knob of patented Logan Back Gear Shifter Rack at operator's finger tips. (See arrow in illustration.)

Collet capacity 5/8" with push type collets used in Logan No. AC-210 Production Collet Chuck or No. AC-201 Speed Collet Chuck.

Collet capacity 1/2" with draw-in collets used in Logan AC-166 Production Collet Chuck or Logan No. AC-151 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 1/2"
- Swing over saddle cross slide ... 6 1/8"
- Distance between centers ..... 24"
- Collet capacity with push type collets ..... 5/8"
- Collet capacity with draw-in collets ..... 1/2"

THREADS AND FEEDS
- Quick change gear box and automatic apron.
- Worm drive from lead screw spline for power feeds.
- Friction clutch on power feeds.
- Longitudinal feed .0015" to .1000" per spindle revolution.
- Cross feed .25 times longitudinal feed.
- Half nut drive from lead screw thread for thread cutting.
- Threads—48 selections RH or LH 4 to 224 per inch.
- Lead screw diameter and threads per inch ..... 3/4"-8

BED
- Width of bed across ways ..... 6 1/16"
- Bed length ..... 43 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 ..... 25/32"
- Morse Taper with adaptor No. 3-No. 2
- Size of centers used, Morse Taper No. 2
- Spindle nose diameter and threads per inch ..... 1 1/2"-8
- Width of cone pulley steps for belt. 1"
- Width of face of bull gear and back gears ..... 5/8"
- Multiple V-Belt Drive carries power from cone pulley to lathe spindle.
- 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

CROSS SLIDE AND COMPOUND REST
- Cross slide graduated in thousandths. Travel ..... 6 1/4"
- Cross feed screw mounted on self lubricating bronze bearings
- Compound rest top slide graduated in thousandths. Travel ..... 2 1/4"
- Top slide screw mounted on self-lubricating bronze bearings
- Compound rest swivel—graduated 90° in both directions
- Tool post opening for tool holder shank ..... 3/8" x 3/4"
- Size of cutter bits used ..... 1/4" sq.

TAILSTOCK
- Spindle travel ..... 2 3/8"
- Spindle graduations ..... 1/16"
- Morse Taper center ..... No. 2
- Tailstock top will set over for taper turning ..... 11/16"

UNDERNEATH DRIVE
- 2 Speed "V" Motor Pulley 5/8" Bore ..... 2 3/8"-4"
- 2 Speed countershaft flat pulley ..... 8 5/8"-9 7/8"
- 40"x1/2" V Belt used on flat of 2 step countershaft pulley and in V of motor pulley
- 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.
- Lever operated belt tension release for changing belt steps.

CABINET STAND
- Tubular steel construction
- Left hand compartment contains underneath motor drive and countershaft
- Four drawers provided for tool storage
- Lugs provided for bolting to floor
- Oil pan has drain in center rear

LATHE EQUIPMENT (Included in Price of Lathe)
- 1 6" Face Plate
- 2 60° Centers
- 1 Threading Dial
- 1 Threading Chart
- 1 No. 3-No. 2 Morse Taper Adaptor
- 1 Tool Post Holder and Wrench
- 1 Tailstock Wrench
- Parts List and Instruction Book

SELF LUBRICATING BRONZE BEARINGS
- at 40 separate points in lathe where plain bearings are ordinarily furnished.

OVERALL DIMENSIONS (Including Countershaft Assembly)
- Length ..... 55 1/2"
- Width ..... 20 1/2"
- Height ..... 52"

MOTOR
- Use 1/3 or 1/2 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. 825 Cabinet Model Logan Lathe less motor ..... 625 lbs.

81544-15M

PRINTED IN U.S.A.

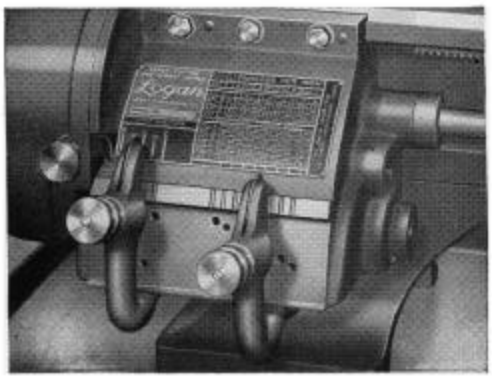
Logan

QUICK CHANGE GEAR LATHE

With Automatic Apron

AC-241 LEVER TAILSTOCK ASSEMBLY

Can be furnished with the Quick Change Gear Lathe in place of tailstock shown in above illustration of the lathe if specified in your order. Lever stroke, 2¾". Hand wheel spindle travel, 2⅛". Fitted for No. 2 Morse Taper Shank.



No. 820 Complete As Shown, Less Motor, F.O.B. Chicago.....$325.00

No. 820-1 Complete with No. AC-241 Lever Tailstock Assembly Replacing Regular Tailstock, Less Motor, F.O.B. Chicago.....$342.50

No. 815 Bench Model, same as No. 820, less pan and legs. F.O.B. Chicago....$300.00

No. 815-1 Bench Model, same as No. 820-1, less pan and legs. F.O.B. Chicago..$317.50

The Logan No. 820 Quick Change Gear Lathe with friction feed automatic apron has been built to more exacting requirements than heretofore has been considered possible in this field. Typical of the high standard of quality and accuracy are construction specifications such as—bed ways ground to within .001" of complete accuracy—total run out of headstock spindle 12 inches from the bearing less than .001"—lead screw held to within .002" in 12 inches—all moving parts protected by ball bearings or self-lubricating bronze bearings. Similar fine construction throughout the lathe assures a durable, dependable machine of exceptional performance.

QUICK CHANGE GEAR BOX

The Logan Quick Change Gear Box provides 48 threads and feeds in either direction to the carriage of the lathe. By adjusting the two levers, screw threads from 8 to 224 per inch are quickly available and by changing the 24 tooth stud gear for the 48 tooth stud gear furnished with the lathe, additional threads from 4 to 7 per inch are available. Similarly, longitudinal power feeds from .0015" to .1000" per revolution of the spindle may be obtained. Power cross feeds are .25 times longitudinal feeds. Entire assembly is sturdy and accurate with precision cut steel gears and self-lubricating bearings.

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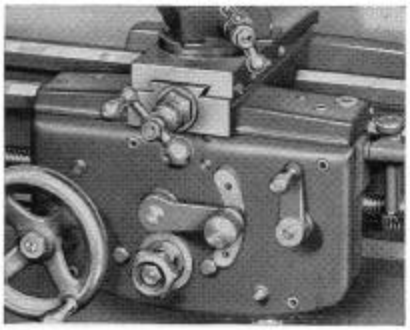


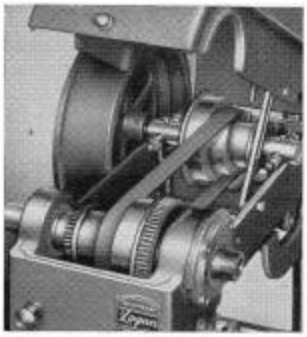
AUTOMATIC APRON

The Logan Automatic Apron operates from a spline in the lead screw through a worm drive and friction clutch for both longitudinal and cross feeds. For cutting threads an additional longitudinal drive operating from half nuts on the lead screw thread is used. A safety feature of design makes it impossible to engage both drives at the same time. The worm and gear operate in a bath of oil, assuring long life. Steel cut gears, sturdy construction and precision machining combine to make a rugged and accurate assembly.

COUNTERSHAFT ASSEMBLY

The patented countershaft assembly used in the No. 820 Logan Quick Change Gear Lathe 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. When guard is raised belt tension is automatically released. 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 left, belt tension is automatically released for quick belt change.

The ball bearing spindle mounting is advanced design. It is more expensive but produces finer results. Special New Departure precision bearings, grease sealed and pre-loaded give greater accuracy, less friction, and less wear. They require no adjustment or lubrication during their entire life.

Collet capacity 5/8" with push type collets used in Logan No. AC-210 Production Collet Chuck or No. AC-201 Speed Collet Chuck.

Collet capacity 1/2" with draw-in collets used in Logan AC-166 Production Collet Chuck or Logan No. AC-151 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 ..... 10½"
- Swing over saddle cross slide.. 6⅛"
- Distance between centers..... 24"

THREADS AND FEEDS

- Quick change gear box and automatic apron.
- Worm drive from lead screw spline for power feeds.
- Friction clutch on power feeds.
- Longitudinal feed .0015" to .1000" per spindle revolution.
- Cross feed .25 times longitudinal feed.
- Half nut drive from lead screw thread for thread cutting.
- Threads—48 selections RH or LH—4 to 224 per inch.
- Lead screw diameter and threads per inch, ¾"-8.

BED

- Width of bed across ways... 6 15/16"
- Bed length ..... 43⅛"
- 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..... 25/32"
- Morse Taper with adaptor. No. 3-No. 2
- Size of centers used, Morse Taper ..... No. 2
- Spindle nose diameter and threads per inch ..... 1½"-8
- Width of cone pulley steps for belt. 1"
- Width of face of bull gear and back gears ..... ⅝"
- 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

CROSS SLIDE AND COMPOUND REST

- Cross slide graduated in thousandths. Travel ..... 6¼"
- Cross feed screw mounted on self-lubricating bronze bearings.
- Compound rest top slide graduated in thousandths. Travel..... 2¼"
- Top slide screw mounted on self-lubricating bronze bearings.
- Compound rest swivel—graduated 90° in both directions.
- Tool post opening for tool holder shank ..... ⅜x¾"
- Size of cutter bits used..... ¼" sq.

TAILSTOCK

- Spindle travel ..... 2⅜"
- Spindle graduations ..... 1/16"
- Morse Taper center ..... No. 2
- Tailstock top will set over for taper turning ..... 1 1/16"

COUNTERSHAFT ASSEMBLY (Incl. in Price of Lathe)

- 2 Speed "V" Motor Pulley ⅝" Bore ..... 2⅜-4"
- 2 Speed countershaft flat pulley ..... 8⅝"x10"
- 51"x½" V Belt used on flat of 2 step countershaft pulley and in V of motor pulley.
- 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
- 2 60° Centers
- 1 Threading Dial
- 1 Threading Chart
- 1 No. 3-No. 2 Morse Taper Adaptor
- 1 Tool Post Holder and Wrench
- 1 Tailstock Wrench
- Parts List and Instruction Book

OVERALL DIMENSIONS (Including Countershaft Assembly)

- Length ..... 54"
- Width ..... 30"
- Height ..... 48½"

SELF LUBRICATING BRONZE BEARINGS

at 36 separate points in lathe where plain bearings are ordinarily furnished.

MOTOR

Use ⅓ or ½ 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. 820 Logan Lathe with legs, chip pan, and countershaft assembly, less motor ..... 560 lbs.

7544 15M

PRINTED IN U.S.A.

No. 830—Complete As Shown, Less Motor—F.O.B. Chicago $425.00

The Logan No. 830 Hand Screw Machine fills the specific need of industry for a small turret lathe to eliminate the necessity of tying up heavy equipment for turning out small parts. It is an accurate and durable tool designed for the severe requirements of present day, continuous production. The turret holes are bored from the headstock. The bed is precision ground and the precision pre-loaded ball bearing spindle mounting is the latest engineering development in design. Turret and cross slide are provided with adjustable gibs, to compensate for wear. The machine is built throughout to rigid and exacting specifications to give accurate results and trouble-free service.

COUNTERSHAFT ASSEMBLY

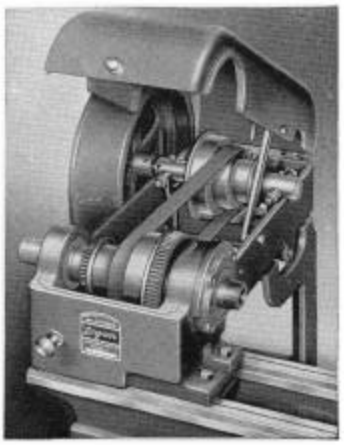
The patented countershaft assembly used in this machine is carried on a three point suspension and is completely insulated by rubber at all points of contact to prevent vibration being transmitted to the lathe.

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 precision bearings give greater accuracy, less friction, less wear and require no adjustment or lubrication.



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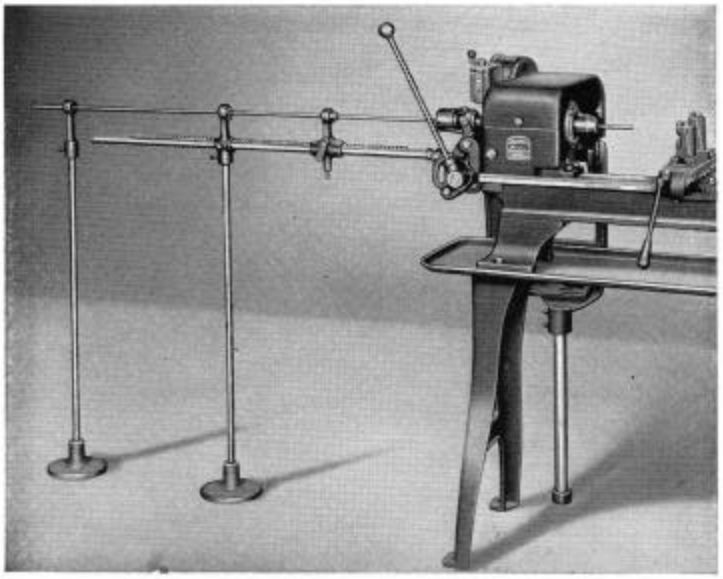
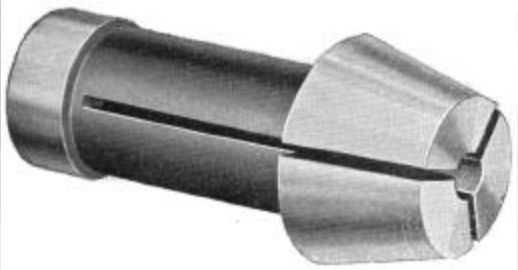


LOGAN BAR FEED

The Logan Bar Feed, with a maximum capacity of ⅝" round stock, is offered for use with the No. 830 Hand Screw Machine. It does not fit other models. No. AC-50 push type collets are used in sizes from 1/16" to ⅝" by 32nds. Maximum feed per stroke, 2". The patented cam action, which locks the collet and operates the bar feed, is so designed that there is no feed while bar is being locked and no locking action while bar is being fed. Feed and locking mechanism is protected by a shield, not shown in illustration. Easily attached or detached.

No. LA-32-34 Bar Feed—Shipping weight 45 lbs. $95.00



PUSH TYPE COLLET

Used with the Logan LA 32-34 Bar Feed shown at left. Also with Logan Collet Closers AC 210 and AC 201. A superior collet, made of alloy tool steel, correctly heat treated for maximum wear, precision ground inside and out. Sizes 1/16" to ⅝" round by 32nds. Work must be within .005" of collet size. Shipping weight, 6 oz. each.

No. AC 50—Push Type Collet **$4.50**

SPECIFICATIONS

CAPACITY OF LATHE

Swing over bed ..... 10½"
Swing over cross slide ..... 4½"

BED

Width of bed across ways ..... $6\frac{15}{16}$"
Bed length ..... 43⅛"
Precision ground ways — 2 prismatic "V" ways and 2 flat ways.

HEADSTOCK AND SPINDLE

Spindle mounted on matched, grease-sealed, pre-loaded New Departure Ball Bearings of highest precision type.
Back gear shaft bearings — self lubricating bronze bearings.
Hole through spindle ..... $\frac{25}{32}$"
Maximum collet capacity ..... ⅝"
Spindle nose diameter and threads per in. ..... 1½"-8
Width of cone pulley steps for belt .. 1"
Width of face of bull gear and back gears ..... ⅝"
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
Drum Type Motor Reversing Switch and Cord.

CROSS SLIDE

Maximum stroke of cross slide .... 3¼"
Adjustable double tool posts.
Tool posts equipped with adjustable wedges.
Tool post tool slots ..... $\frac{7}{16}$" x $1\frac{9}{16}$"

TURRET

Diameter of turret head ..... 5"
Six position with adjustable stops.
Turret holes, diameter ..... ⅝"
Turret holes bored from headstock of lathe.
Maximum stroke of turret ..... 4¼"

COUNTERSHAFT ASSEMBLY (Incl. in Price of Lathe)

2 Speed "V" Motor Pulley ⅝" Bore ..... 2⅜"-4"
2 Speed countershaft flat pulley ..... 8⅝"-10"
51" x ½" V Belt used on flat of 2 step countershaft pulley and in V of motor pulley.
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.

OVERALL DIMENSION (Including Countershaft Assembly)

Length ..... 54"
Width ..... 30"
Height ..... 50"

SELF LUBRICATING BRONZE BEARINGS

at 12 separate points in lathe where plain bearings are ordinarily furnished.

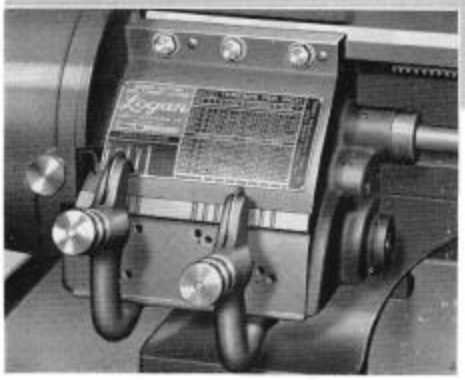
MOTOR

Use ⅓ or ½ 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. 830 Hand Screw Machine, less motor ..... 485 lbs.

PRINTED IN U.S.A.



QUICK CHANGE GEAR BOX

The Logan Quick Change Gear Box provides 48 threads and feeds in either direction to the carriage of the lathe. By adjusting the two levers, screw threads from 8 to 224 per inch are quickly available and by changing the 24 tooth stud gear for the 48 tooth stud gear furnished with the lathe, additional threads from 4 to 7 per inch are available. Similarly, longitudinal power feeds from .0015" to .1000" per revolution of the spindle may be obtained. Power cross feeds are .25 times longitudinal feeds. Entire assembly is sturdy and accurate with precision cut steel gears and self-lubricating bearings.

No. 840 Complete as shown, less motor. F.O.B. Chicago $525

This lathe combines turret lathe production with the advantages of a quick change gear box and automatic apron. It is versatile, accurate and fast, resulting in efficient, low cost production. Typical of its advanced Logan design are such features as Precision Preloaded Ball Bearing Spindle Mounting; Adjustable Gibs to compensate for wear of turret and cross slide; and Self Lubricating Bronze Bearings protecting all vital points. Guaranteeing accuracy are such construction specifications as bed ways ground to within .001" of absolute accuracy; total run out of headstock spindle 12 inches from the bearing less than .001"; lead screw held to within .002" in 12 inches; and turret holes bored from the headstock. Even greater versatility is obtained by ordering with the lathe the compound rest assembly and tailstock assembly shown on the next page.

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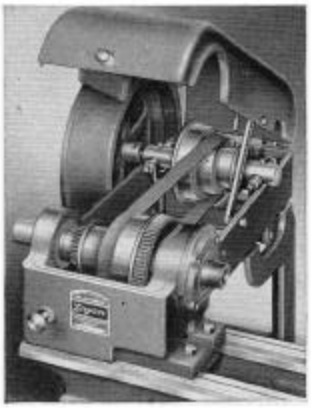


BALL BEARING HEADSTOCK

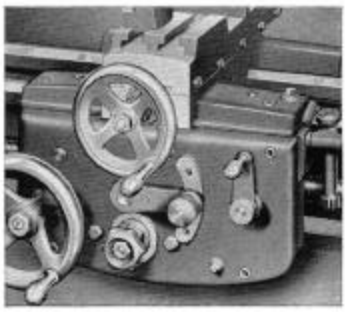
When the cone pulley guard is raised as shown at left, belt tension is automatically released for quick belt change.

The ball bearing spindle mounting is advanced design. Special New Departure precision bearings, grease sealed and pre-loaded give greater accuracy, less friction, and less wear. They require no adjustment or lubrication during their entire life.

LA-3 TAILSTOCK ASSEMBLY

The LA-3 Tailstock assembly is the same as furnished with the screw cutting lathes. This assembly when ordered with the No. 840 Lathe, will have the tailstock matched with headstock at factory. Furnished with wrench but less 60° center. When used with No. 840 Lathe, order LA-223 headstock adapter sleeve and 60° centers extra. Shipping weight, 24 lbs.

No. LA-3—Tailstock Assembly **$20.00**

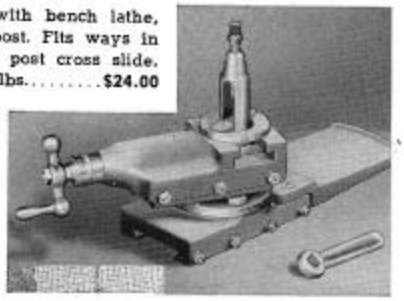


AUTOMATIC APRON

The Logan Automatic Apron operates from a spline in the lead screw through a worm drive and friction clutch for both longitudinal and cross feeds. For cutting threads an additional longitudinal drive operating from half nuts on the lead screw thread is used. It is impossible to engage both drives at the same time. Worm and gear operate in a bath of oil, assuring long life. Steel cut gears, sturdy construction and precision machining combine to make a rugged and accurate assembly.

LA-49-1 COMPOUND REST ASSEMBLY

Same as furnished with bench lathe, complete with tool post. Fits ways in place of double tool post cross slide. Shipping weight, 13 lbs.....**$24.00**



Collet capacity ⅜" with push type collets used in Logan No. AC-210 Production Collet Chuck or No. AC-201 Speed Collet Chuck.

Collet capacity ½" with draw-in collets used in Logan AC-166 Production Collet Chuck or Logan No. AC-151 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 .....10½"
Swing over saddle cross slide..4½"

THREADS AND FEEDS

Quick change gear box and automatic apron.
Worm drive from lead screw spline for power feeds.
Friction clutch on power feeds.
Longitudinal feed .0015" to .1000" per spindle revolution.
Cross feed .25 times longitudinal feed.
Half nut drive from lead screw thread for thread cutting.
Threads—48 selections RH or LH—4 to 224 per inch.
Lead screw diameter and threads per inch, ¾"-8.

BED

Width of bed across ways.....6 15/16"
Bed length .....43⅛"
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.....25/32"
Morse Taper with adaptor.No. 3-No. 2
Size of centers used, Morse Taper .....No. 2
Spindle nose diameter and threads per inch .....1½"-8
Width of cone pulley steps for belt.1"
Width of face of bull gear and back gears .....⅝"
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 CROSS SLIDE

Cross slide graduated in thousandths. Travel .....6"
Cross feed screw mounted on self-lubricating bronze bearings.
Adjustable Double Tool Posts.
Tool Posts equipped with adjustable wedges.
Tool post tool slots.....7/16" x 1 9/16"

TURRET

Diameter of turret head.....5"
Six position, self indexing, with adjustable stops.
Turret holes, diameter.....⅝"
Turret holes bored from headstock of lathe.
Maximum stroke of turret.....4¼"

COUNTERSHAFT ASSEMBLY (Incl. in Price of Lathe)

2 Speed "V" Motor Pulley ⅝" Bore .....2⅜-4"
2 Speed countershaft flat pulley .....9"-10"
51"x½" V Belt used on flat of 2 step countershaft pulley and in V of motor pulley.
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.

SELF LUBRICATING BRONZE BEARINGS

at 35 points in lathe where plain bearings are ordinarily furnished.

OVERALL DIMENSIONS (Including Countershaft Assembly)

Length .....54"
Width .....30"
Height .....48½"

MOTOR

Use ⅓ or ½ 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. 840 Logan Lathe with legs, chip pan, and countershaft assembly, less motor.....595 lbs.

No. 850 Complete As Shown, Less Motor, F. O. B. Chicago $450.00

The Logan No. 850 Manufacturing Turret Lathe is an accurate, durable tool developed for continuous production of small parts. Within its capacity its output will equal in quality and quantity that of larger, costlier machines, thereby releasing them for heavier work. Thus it fills the urgent needs of today. Built to rigid and exacting specifications it can be depended upon for accurate work and long service life. Features of its design include: precision ground bed, precision pre-loaded ball bearing spindle mounting, adjustable gibs to compensate for wear of turret and cross slide. The turret holes are bored from the headstock. Added versatility is obtained by ordering the LA-49-1 Compound Rest Assembly and the LA-3 Tail Stock Assembly described in Logan Accessory catalog.

COUNTERSHAFT ASSEMBLY

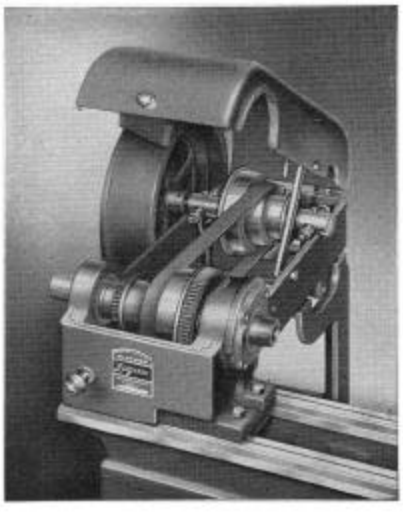
The patented countershaft assembly used in this machine is carried on a three point suspension and is completely insulated by rubber at all points of contact to prevent vibration being transmitted to the lathe.

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 precision bearings give greater accuracy, less friction, less wear and require no adjustment or lubrication.



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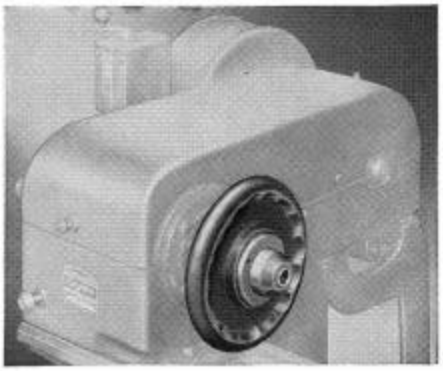


HAND WHEEL COLLET CHUCK

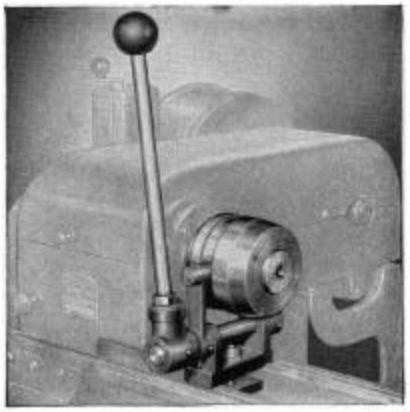
Fits No. 850 Manufacturing Lathe or others with 1½" x 8 thread spindle nose. Capacity: round work up to ⅝" diameter which may be fed through lathe spindle. Its positive grip closes concentrically on work without longitudinal movement of collet and with no slip or twist. Minimum overhang assures accuracy. Only three moving parts. No keys or wrenches. 7" diameter closing wheel, of specially processed plastic. Back plate included.

No. AC-201—Shipping wt., 6 lbs.....**$29.50**

PUSH TYPE COLLET

Used with Logan Collet Closers AC 210 and AC 201, and with the Logan LA 32-34 Bar Feed. A superior collet, alloy tool steel, heat treated for maximum wear, precision ground inside and out. Sizes 1/16" to ⅝" by 32nds.

No. AC-50—Shipping wt., 6 oz. each....**$4.50**



PRODUCTION COLLET ATTACHMENT

For Push Type Collets, ⅝" Capacity

Provides a quick acting collet closer which can be operated while lathe spindle is in motion. The control lever operates through two ball bearing rollers running in a groove on outside surface of the chuck body which actuates two hardened closing fingers, closing the collet concentrically. The work can be brought against a stop and locked in position without longitudinal movement. Chuck is attached to spindle by a back plate which must be fitted to the particular lathe on which the chuck is used, giving a high degree of accuracy. All parts of closing mechanism precision ground in place.

No. AC-210—Shipping wt., 25 lbs...**$49.50**

PRODUCTION COLLET ATTACHMENT

For Draw-In Collets Up to ½" Capacity

The Logan Production Collet Attachment for draw-in collets has ½" capacity and can be easily attached to Logan Lathes within a few minutes by any average mechanic. The attachment is lever operated, opens and closes while the lathe spindle is in motion. Easily adjustable to provide any desired collet tension. Order the No. AC 30 Draw-In Collet listed below for this attachment.

No. AC-166—For use with No. 815, 820, 825, 840 and 850 Logan Lathes **$39.50**

No. AC-165—For use with No. 200 and No. 210 Logan Lathes.....**$39.50**

DRAW-IN COLLET

Heat treated tool steel, ground inside and out to insure accuracy. One end of the collet is threaded for hollow draw bar and the other end fits taper in closing sleeve. Sizes for round work 1/16" to ½" diam. by 32nds.

No. AC-30—Shipping wt., ¼ lb. ea. **$3.75**

Collet capacity ⅝" with push type collets used in Logan No. AC-210 Production Collet Chuck or No. AC-201 Speed Collet Chuck.

Collet capacity ½" with draw-in collets used in Logan AC-166 Production Collet Chuck or Logan No. AC-151 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 .....10½"
Swing over cross slide.....4½"

THREADS AND FEEDS

Reversible power longitudinal feed.
Reversible power cross feed.
Lead Screw diameter and threads per in. .....¾"-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.. 7/16"

BED

Width of bed across ways....6 15/16"
Bed length .....43⅛"
Precision ground ways, 2 prismatic "V" ways and 2 flat ways.

HEADSTOCK AND SPINDLE

Spindle mounted on matched, grease-sealed, pre-loaded New Departure Ball Bearings of highest precision type.
Back gear shaft bearings — self lubricating bronze bearings.
Hole through spindle.....2 5/32"
Spindle nose diameter and threads per in. .....1½"-8
Width of cone pulley steps for belt..1"
Width of face of bull gear and back gears .....⅝"
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
Drum Type Motor Reversing Switch and Cord

CARRIAGE AND CROSS SLIDE

Cross slide graduated in thousandths. Travel .....6"
Cross feed screw mounted on self-lubricating bronze bearings.
Adjustable Double Tool Posts.
Tool Posts equipped with adjustable wedges.
Tool post tool slots..... 7/16" x 1 9/16"

TURRET

Diameter of turret head.....5"
Six position with adjustable stops.
Turret holes, diameter .....⅝"
Turret holes bored from headstock of lathe.
Maximum stroke of turret.....4¼"

COUNTERSHAFT ASSEMBLY (Incl. in Price of Lathe)

2 Speed "V" Motor Pulley ⅝" Bore .....2 3/8"-4"
2 Speed countershaft flat pulley .....8 5/8"-10"
51"x½" V Belt used on flat of 2 step countershaft pulley and in V of motor pulley.
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.

OVERALL DIMENSION (Including Countershaft Assembly)

Length .....54"
Width .....30"
Height .....50"

SELF LUBRICATING BRONZE BEARINGS

at 19 separate points in lathe where plain bearings are ordinarily furnished.

MOTOR

Use ⅓ or ½ 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. 850 Logan Manufacturing Turret Lathe, less motor.....535 lbs.

PRINTED IN U.S.A.

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, 2¾". Hand wheel spindle travel, 2⅜". Fitted for No. 2 Morse Taper Shank.

No. 200 Complete as Shown, Less Motor and Switch, F.O.B. Chicago **$225.00**

No. 200-1 Complete with No. AC-241 Lever Tailstock Assembly Replacing Regular Tailstock, Less Motor and Switch, F.O.B. Chicago **$242.50**

No. 0636 Drum Reversing Switch for 1 phase, 3 phase and DC Motors, (Not for capacitor types) **$5.00**

No. 0639 Drum Reversing Switch for capacitor type motors..... **$5.00**

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: Preloaded, 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.

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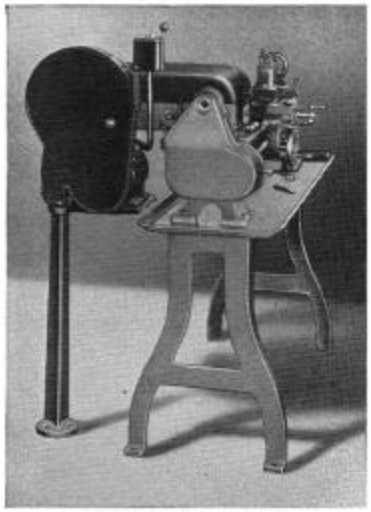


END VIEW SHOWING COUNTERSHAFT ASSEMBLY

COUNTERSHAFT ASSEMBLY

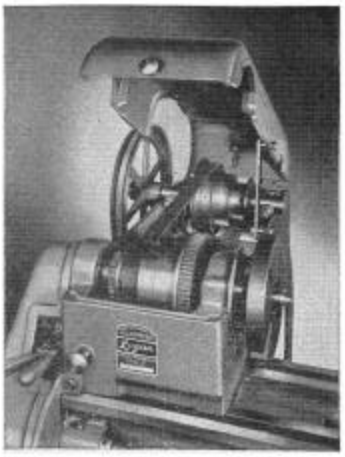
The patented countershaft assembly used in this machine is carried on a three point suspension and is completely insulated by rubber at all points of contact to prevent vibration being transmitted to the lathe.

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 5/8" with push type collets used in Logan No. AC-210 Production Collet Chuck or No. AC-201 Speed Collet Chuck.

Collet capacity 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..10½"
Swing over saddle cross slide.....6⅛"
Distance between centers.....24"

THREADS AND FEEDS

Reversible power longitudinal feed
Reversible power cross feed
Lead Screw diameter and threads per in. .....¾"-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.....7/16"

BED

Width of bed across ways.....6 13/16"
Bed length .....43⅛"
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.....25/32"
Morse Taper with adaptor..No. 3 - No. 2
Size of centers used, Morse Taper..No. 2
Spindle nose diameter and threads per in. .....1½"-8
Width of cone pulley steps for belt...1"
Width of face of bull gear and back gears .....⅝"
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 .....6¼"
Cross feed screw mounted on self-lubricating bronze bearings.
Compound rest top slide graduated in thousandths. Travel .....2¼"
Top slide screw mounted on self-lubricating bronze bearings.
Compound rest swivel—graduated 90° in both directions.
Tool post opening for tool holder shank .....⅜x¾"
Size of cutter bits used.....¼" sq.

TAILSTOCK

Spindle travel .....2⅜"
Spindle graduations .....1/16"
Morse Taper center.....No. 2
Tailstock top will set over for taper turning .....11/16"

COUNTER SHAFT ASSEMBLY (Included in Price of Lathe)

2 Speed "V" Motor Pulley ⅝" Bore .....2⅜"-4"
2 Speed countershaft flat pulley .....8⅝"x9⅞"
40"x½" 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		
17	Change Gears	1	Tool Post Holder and Wrench
1	Threading Dial		
1	Threading Chart	1	Tailstock Wrench

Parts List and Instruction Book

SELF LUBRICATING BRONZE BEARINGS

at 22 separate points in lathe where plain bearings are ordinarily furnished.

OVERALL DIMENSION (Including Countershaft Assembly)

Length .....54"
Width .....30"
Height .....48½"

MOTOR

Use ⅓ or ½ 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 .....520 lbs.

7844 15M

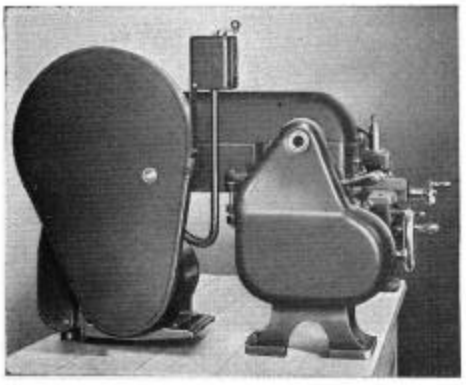
PRINTED IN U.S.A.

Logan

BACK GEARED SCREW CUTTING LATHE

AC-241 LEVER TAILSTOCK ASSEMBLY

Will be furnished with the bench lathe in place of the regular tailstock when specified. Lever stroke, 2¾". Hand wheel spindle travel, 2⅜". Fitted for No. 2 Morse Taper Shank.



END VIEW SHOWING COUNTERSHAFT ASSEMBLY

When cone pulley guard is raised, belt tension is automatically released for quick belt change.

10" Swing; 24" Between Centers

No. 210 Complete As Shown, Less Motor and Switch, F.O.B. Chicago **$200.00**

No. 210-1 Complete with No. AC-241 Lever Tailstock Assembly Replacing Regular Tailstock, Less Motor and Switch, F.O.B. Chicago **$217.50**

No. 0636 Drum Reversing Switch for 1 phase, 3 phase and DC Motors, (Not for capacitor types) **$5.00**

No. 0639 Drum Reversing Switch for capacitor type motors..... **$5.00**

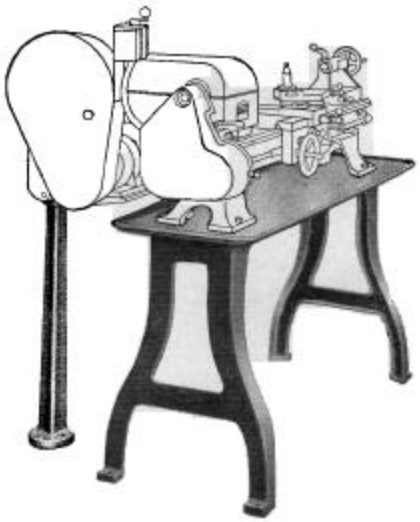
The No. 210 Logan Back Geared Screw Cutting Lathe is a fine production tool developed for the machine shop requiring a high speed lathe of sustained accuracy. Advanced design, sound engineering, expert workmanship and rigid inspection all contribute to its excellence. Its specifications include many 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 floor type, Model 200.

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.

LOGAN ENGINEERING CO. • CHICAGO 30, ILL.



PAN, LEGS AND PEDESTAL

EASILY CONVERTED INTO FLOOR MODEL

The Logan No. 210 Bench Model Lathe is quickly and easily converted into a floor model by simply mounting the lathe on the legs, pan and countershaft pedestal as shown in the illustration at left.

No. 415 Set.....**$25.00**

Consists of legs, shallow chip pan, 1" deep, and countershaft pedestal leg.

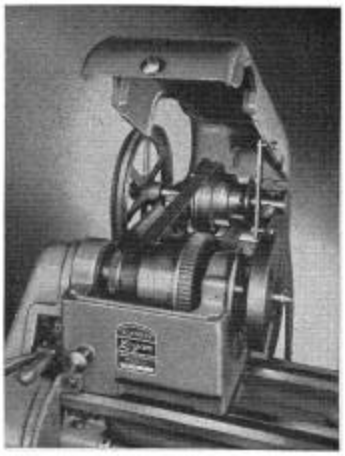
No. 418 Set.....**$28.00**

Consists of legs, drip pan 1½" deep, and countershaft pedestal leg.

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, pre-loaded bearings give greater accuracy, less friction, less wear and require no adjustment or lubrication.



HEADSTOCK AND COUNTERSHAFT WITH GUARD RAISED

Collet capacity ⅝" with push type collets used in Logan No. AC-210 Production Collet Chuck or No. AC-201 Speed Collet Chuck.

Collet capacity ½" 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.10½"
Swing over saddle cross slide.....6⅛"
Distance between centers.....24"

THREADS AND FEEDS

Reversible power longitudinal feed
Reversible power cross feed
Lead Screw diameter and threads per in. .....¾"-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.....$\frac{7}{16}$"

BED

Width of bed across ways.....6$\frac{5}{8}$"
Bed length .....43⅛"
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.....$\frac{3}{32}$"
Morse Taper with adaptor...No. 3-No. 2
Size of centers used, Morse Taper..No. 2
Spindle nose diameter and threads per in. .....1½"-8
Width of cone pulley steps for belt...1"
Width of face of bull gear and back gears .....⅝"
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 .....6¼"
Cross feed screw mounted on self-lubricating bronze bearings.
Compound rest top slide graduated in thousandths. Travel .....2¼"
Top slide screw mounted on self-lubricating bronze bearings.
Compound rest swivel — graduated 90° in both directions.
Tool post opening for tool holder shank .....⅜x¾"
Size of cutter bits used.....¼" sq.

TAILSTOCK

Spindle travel .....2⅜"
Spindle graduations .....$\frac{1}{16}$"
Morse Taper center.....No. 2
Tailstock top will set over for taper turning .....$\frac{11}{16}$"

COUNTERSHAFT ASSEMBLY (Included in Price of Lathe)

2 Speed "V" Motor Pulley ⅝" Bore .....2⅜"-4"
2 Speed countershaft flat pulley .....8⅝"x9⅞"
40"x½" V Belt used on flat of 2 step countershaft pulley and in V of motor pulley.
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		
17	Change Gears	1	Tool Post Holder and Wrench
1	Threading Dial		
1	Threading Chart	1	Tailstock Wrench

Parts List and Instruction Book

SELF LUBRICATING BRONZE BEARINGS

at 22 separate points in lathe where plain bearings are ordinarily furnished.

OVERALL DIMENSION (Including Countershaft Assembly)

Length .....54"
Width .....30"
Height .....21"

MOTOR

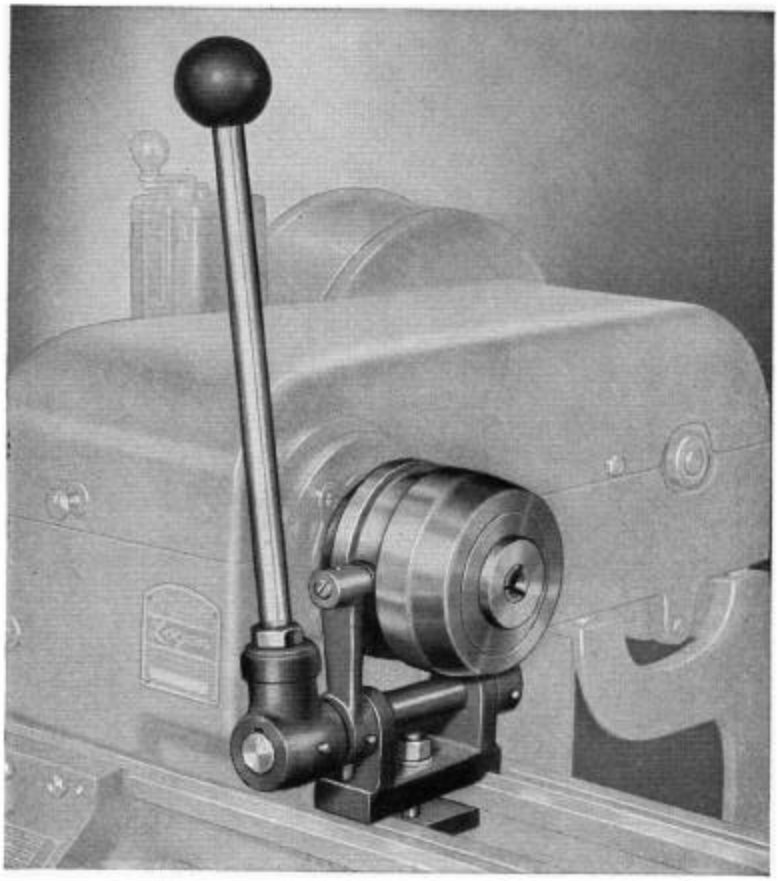
Use ⅓ or ½ H.P. 1750 R.P.M. Motor
If lathe is ordered without motor specify:
1. Bore of motor pulley to be furnished with lathe.
2. State whether 0636 or 0639 Drum Switch should be supplied. (See Accessory Circular for description of drum switch.)

SHIPPING WEIGHT

No. 210 Logan Lathe with countershaft assembly, less motor.....420 lbs.

PRINTED IN U.S.A.

ACCESSORIES FOR THE *Logan Lathe*



PRODUCTION COLLET ATTACHMENT

For Push Type Collets, ⅝" Capacity

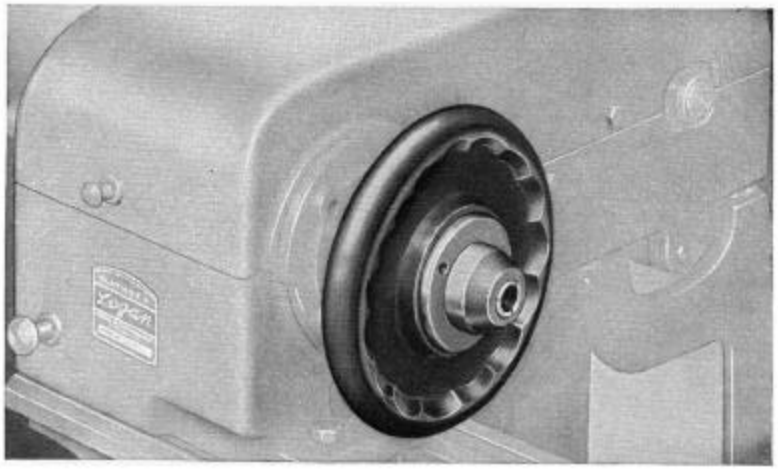
The Logan Production Collet Attachment shown at left provides a quick acting collet closer which can be operated while the lathe spindle is in motion. The control lever operates through two ball bearing rollers running in a groove on the outside surface of the chuck body which actuates two hardened closing fingers, closing the collet concentrically. The work can thus be brought against a stop and locked in position without longitudinal movement. The chuck is attached to the spindle by means of a back plate which must be fitted to the particular lathe on which the chuck is used, giving a high degree of accuracy. All parts of the closing mechanism are precision ground in place. The No. AC 50 Push Type Collet used is quickly and easily changed. Collets not furnished, but may be ordered in required size from 1/16" to ⅝" by 32nds, as listed below. Shipping weight, 25 lbs.

No. AC 210—Production Collet Attachment **$49.50**

PUSH TYPE COLLET

Used with Logan Collet Closers AC 210 (above) and AC 201 (at left). Also with the Logan LA 32-34 Bar Feed shown on page 3. A superior collet, made of alloy tool steel, correctly heat treated for maximum wear, precision ground inside and out. Sizes 1/16" to ⅝" round by 32nds. Work must be within .005" of collet size. Shipping weight, 6 oz. each.

No. AC 50—Push Type Collet..... **$4.50**



HAND WHEEL COLLET CHUCK

Fits Logan Lathe Spindles or other lathes with a 1½" x 8 thread spindle nose. Capacity: Round work up to ⅝" diameter which may be fed through lathe spindle. Its positive squeeze grip closes concentrically on work without longitudinal movement of collet and with no slip or twist. Minimum overhang assures accuracy. Only three moving parts. No keys or wrenches. Closing wheel is 7" in diameter of specially processed plastic and located within easy reach of operator. Uses No. AC 50 Push Type Collet shown at right above. Shipping weight, 6 lbs.

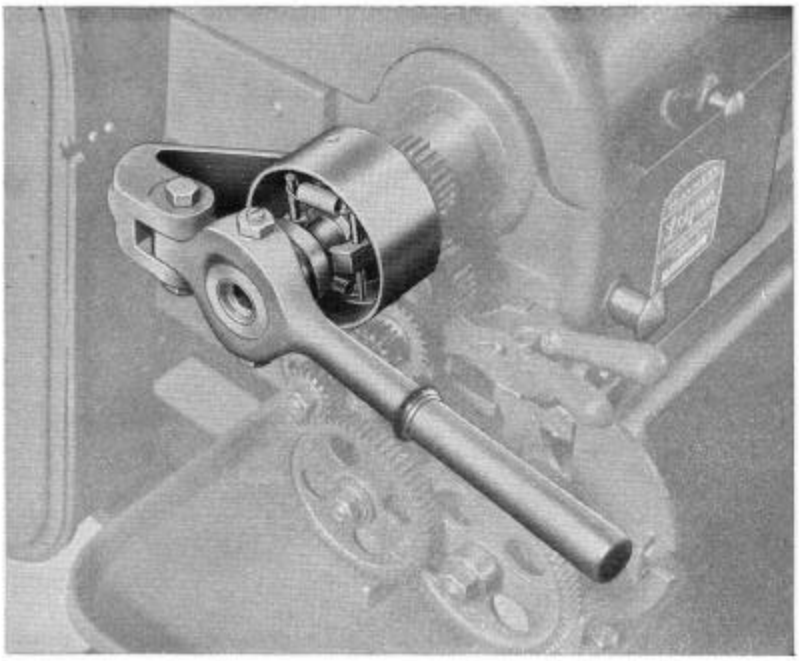
No. AC-201—Logan Speed Collet Chuck with back plate **$29.50**

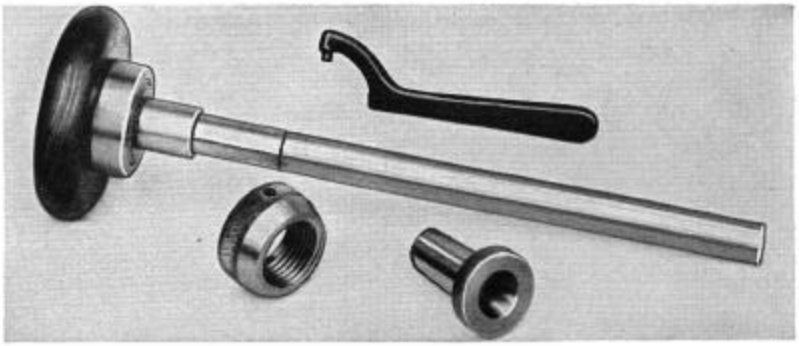
CHUCK BACK

For AC 201 and AC 210 Collet Chucks

Threaded to fit Logan 1½" 8-thread spindle. Face semi-finished. Same as furnished with AC 201 and AC 210 Chucks. To be fitted to chuck for use on one particular lathe, but cannot afterwards be used with accuracy on other lathes. Shipping weight, 4 lbs.

No. AC 221—Chuck Back **$3.25**





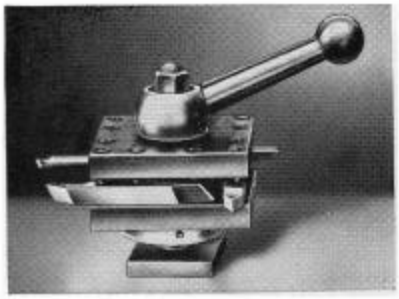
DRAW-IN COLLET CHUCK ATTACHMENT

Used to chuck work between $\frac{1}{16}$" and ½" diam. with extreme accuracy. Consists of hollow draw bar, tapered closing sleeve, spindle nose cap and spindle cap wrench. Draw bar extends through headstock spindle of lathe and is threaded at end to draw collet into accurately ground closing sleeve. The spindle nose cap, when unscrewed, withdraws closing sleeve. No. AC-30 collet listed at right. Shipping weight, 4 lbs.

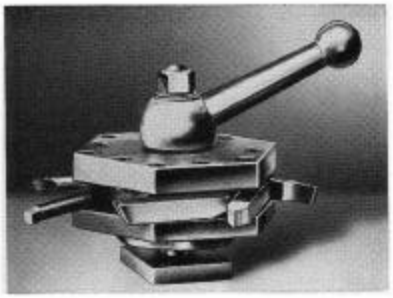
No. AC-150—Draw-in Collet Chuck Attachment for No. 200 and No. 210 Lathes up to Serial No. 24890 ..... **$21.00**

No. AC-150-1—For No. 200 and No. 210 Lathes, Serial No. 24891 and over... **$21.00**

No. AC-151—Draw-in Collet Chuck Attachment for No. 815, 820, 825, 840 and 850 Lathes **$21.00**



No. 513—FOUR TOOL, SQUARE



No. 515—SIX TOOL, HEX

TURRET TOOL POSTS

These versatile tool post turrets greatly speed up production and save time on runs of parts by eliminating many second operation jobs. Either turret mounts in the Tee slot of a compound rest. Both the square and hex turrets have twelve indexing positions available. Accommodates tools up to ⅜" and is easily set up. The self contained, indexing mechanism is accurate and positive. Case hardened construction insures long wear. Shipping weight, 4 lbs.

No. 513—Square Tool Post Turret (2½" square) for No. 200, No. 210, 815, 820 and 825 Lathes..... **$23.00**

No. 514—Same as No. 513 for No. 830, No. 840 or No. 850 Lathes..... **$23.00**

No. 515—Hexagon Tool Post Turret (3" hex.) for No. 200, No. 210, 815, No. 820 and 825 Lathes..... **$25.00**

No. 516—Same as No. 515 for No. 830, No. 840 or No. 850 Lathes..... **$25.00**

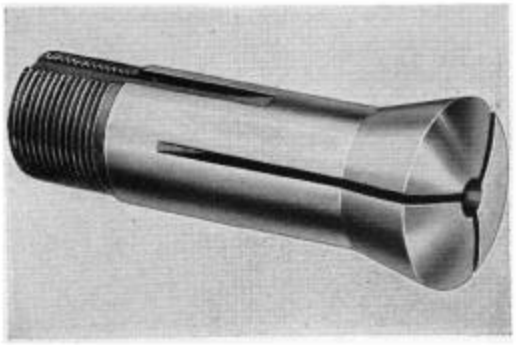
PRODUCTION COLLET ATTACHMENT

For Draw In Collets Up to ½" Capacity

The Logan Production Collet Attachment for draw-in collets has ½" capacity and can be easily attached to Logan Lathes within a few minutes by any average mechanic. The attachment is lever operated, opens and closes while lathe spindle is in motion. Easily adjustable to provide any desired collet tension. Order No. AC 30 Draw-In Collet shown below in required sizes. Shipping weight, 12 lbs.

No. AC 165—For Logan No. 200 and 210 Lathes **$39.50**

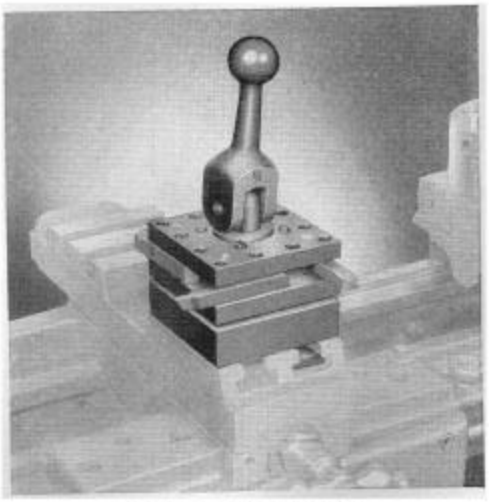
No. AC 166—For Logan No. 815, 820, 825, 840 and 850 Lathes..... **$39.50**



DRAW-IN COLLET

Heat-treated tool steel, ground inside and outside to insure accuracy. One end of the collet is threaded for hollow draw bar and the other end fits taper in closing sleeve. In sizes for round work $\frac{1}{16}$" to ½" diam. by 32nd's. For satisfactory results, stock should not be more than .005" larger or smaller than collet size. State size wanted. Shipping weight, ¼ lb. each.

No. AC-30—Split Holding Collet..... **$3.75**



TURRET TOOL POSTS

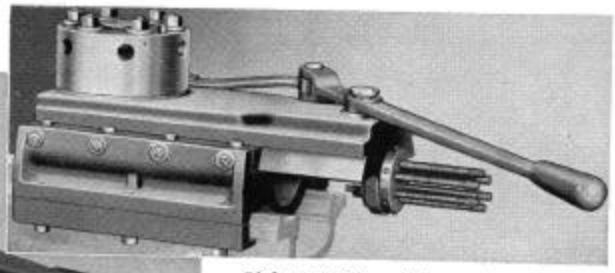
Automatically Indexed and Locked

Automatic, one-hand indexing and locking of these Turret Tool Posts leaves the other hand free for power cross slide movements or other simultaneous operations. 3½" square, they accommodate standard ⅜" tool bits. Fast acting, easily operated cam lever locks the turret in place for each of four positions, assuring accurate operation. Easily installed on the Logan No. 830 Hand Screw Machine and on the Logan No. 840 and No. 850 Turret Lathes. Simply mount solidly on the front of the cross slide and key in place. Shipping weight, 10 pounds.

No. 517 For Double Tool Post Cross Slide with *single* front slot..... **$57.50**

No. 518 For Double Tool Post Cross Slide with *double* front slot..... **$57.50**

TURRET ASSEMBLY



Right End View of Turret Assembly

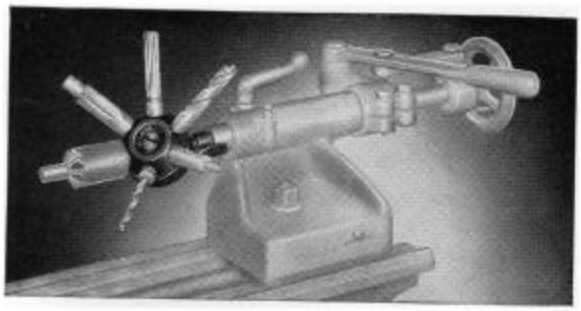
Six Position . . . Self Indexing . . . Improved Design . . . Accurate to Within .002" . . . Will Fit Bed of Any Logan Lathe

The Logan Turret Assembly is an improved design with heavy durable construction, fine materials and careful workmanship. Actual war production experience in hundreds of plants has proved its effectiveness in the machining of small parts. This Turret Assembly is identical to the turret furnished in Logan No. 830, 840 and 850 Turret Lathes. It can be fitted to the No. 200, 210, 815, 820 and 825 Logan Lathes; however, careful workmanship in fitting is required. When possible, we recommend purchasing a No. 830, 840 or 850 Turret Lathe as a complete unit to obtain maximum utility and accuracy.

BRIEF SPECIFICATIONS:

Diameter of turret head, 5". . . six positions with adjustable stops . . . self indexing . . . maximum stroke of turret, 4¼". . . furnished rough bored 9/16" and must be finished bored to ⅝" diameter by the purchaser while actually in position on the lathe on which it is to be used. Shipping weight, 75 lbs.

LA 40-51—Turret Assembly **$200.00**



TAILSTOCK TURRET

Finger tip control rotates tools in direct line with spindle. Compact, accurate, and durable. Body, which is 2½" in diameter, is made from close grained semi-steel castings. The six ⅝" bored holes are held to close tolerance. Operating lever has a positive, hardened taper pin which works in tapered index holes, thus preventing any side play. Tools shown are not included. Shipping weight 3 lbs.

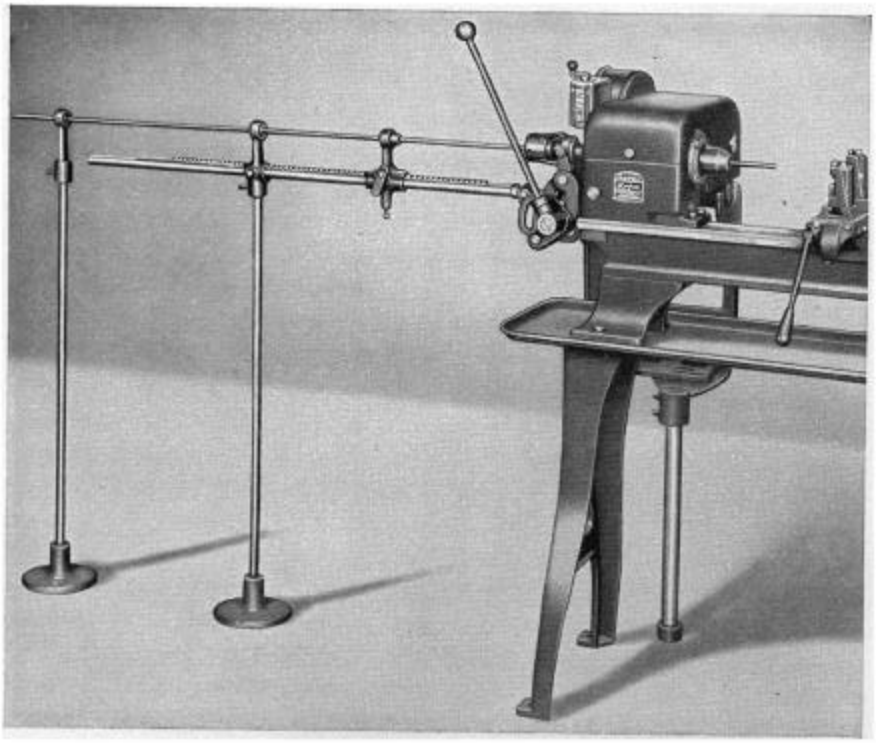
No. 519—Turret (No. 1 Morse Taper Shank)..... **$18.95**

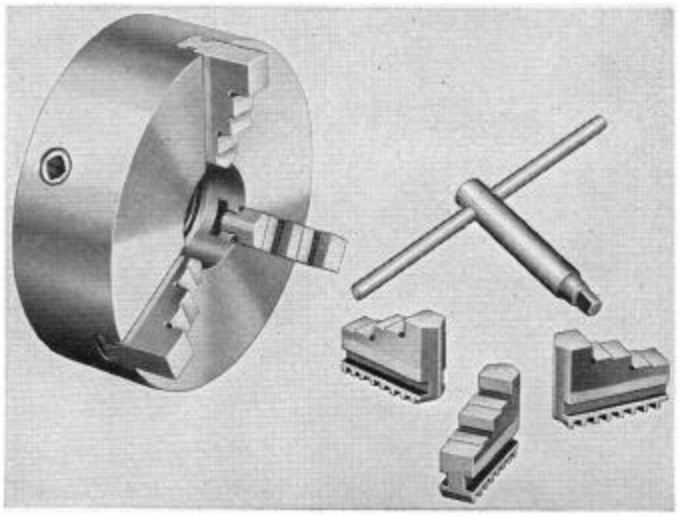
No. 521—Turret (No. 2 Morse Taper Shank)..... **18.95**

LOGAN BAR FEED

The Logan Bar Feed, with a maximum capacity of ⅝" round stock, is offered for use with the No. 830 Hand Screw Machine. It does not fit other models. When used in connection with No. 830, a highly efficient continuous production may be obtained. Maximum feed per stroke, 2". The patented cam action, which locks the collet and operates the bar feed, is so designed that there is no feed while bar is being locked and no locking action while bar is being fed. Feed and locking mechanism is protected by a shield, not shown in illustration. Easily attached or detached. Order No. AC-50 push type collets as shown on page one in sizes required. Shipping weight 45 lbs.

No. LA 32-34—Bar Feed..... **$95.00**





3-JAW, 5-INCH UNIVERSAL CHUCK

This new medium duty Universal Chuck is built on an entirely new principle, which makes it capable of heavier, better and more accurate work than heretofore obtainable in this price range. The main body of the chuck itself is threaded for 1½"-8 thread spindles, and requires no separate back plate. Due to its new and greatly improved design, it has less overhang, less vibration and gives heavier cut-off capacity without sacrifice of accuracy. It is precisely machined from highest quality materials. Complete with set of heat treated outside grip and inside grip jaws and wrench. Shipping weight, 12 lbs.

No. 439—5"—3-Jaw Universal Chuck.....**$24.50**

4-JAW INDEPENDENT CHUCK

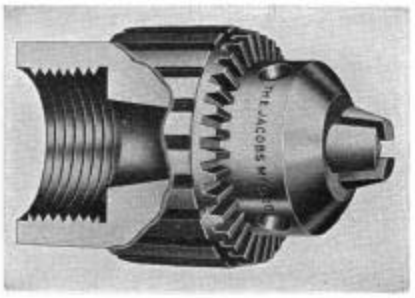
A strong and accurately built medium duty chuck. The body is a one-piece semi-steel casting with the outer edge and the entire face ground. Chuck has four reversible jaws with independent screw adjustments. For either round or irregular work. Jaws are heat-treated alloy steel with ground steps for firm inside or outside grip. Hardened alloy steel screws have socket head for wrench. Chuck body is fitted for 1½"—8-thread lathe spindle. Shipping weight, 13 lbs.

No. 444—6"—4-Jaw Independent Chuck with Wrench.....**$17.50**

COMMUTATOR KIT

A complete unit designed especially to hold armature shafts rigidly during reconditioning. It contains a Jacobs Armature Driving Chuck, ¼ to ¾" capacity, and a Center Rest Chuck also ¼ to ¾" capacity. Both chucks are equipped with No. 2 Morse Taper Arbors to fit the headstock and tailstock of the lathe respectively, replacing the centers. The kit is boxed complete as a set and includes mounting and operating instructions. Shipping weight, 9 lbs.

No. 459—Jacobs Commutator Kit.....**$18.00**

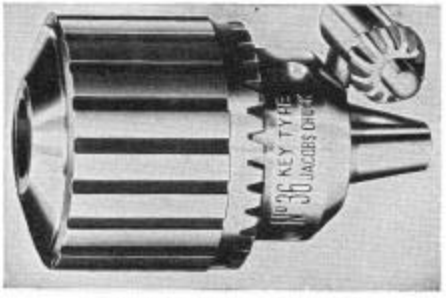


JACOBS HEADSTOCK CHUCK

Screws on to the 1½"—8-thread spindle of lathe. Has hollow body for holding small diameter work running through spindle. Shipping weights, 3½ and 4½ lbs.

No. 453—Headstock Chuck, ⅛ - ⅜"....**$13.50**

No. 454—Headstock Chuck, $\frac{3}{16}$ - ¾".... **16.25**

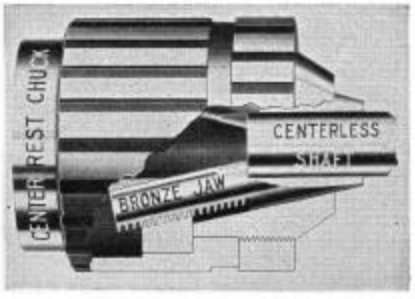


JACOBS DRILL CHUCK

A strong accurate drill chuck for either headstock or tailstock. Requires No. 2 M.T. Arbors shown below to mount in lathe. Shipping weights, 2½ and 3½ lbs.

No. 451—Drill Chuck, 0-½".....**$ 6.75**

No. 452—Drill Chuck, $\frac{3}{16}$-¾"..... **10.75**



JACOBS CENTER REST CHUCK

The Center Rest Chuck requires No. 2 Morse Taper Arbor below to mount in the tailstock of lathe for supporting centerless work such as armature shafts. Has three adjustable bronze jaws in which shaft rotates. Shipping weight, 3 lbs.

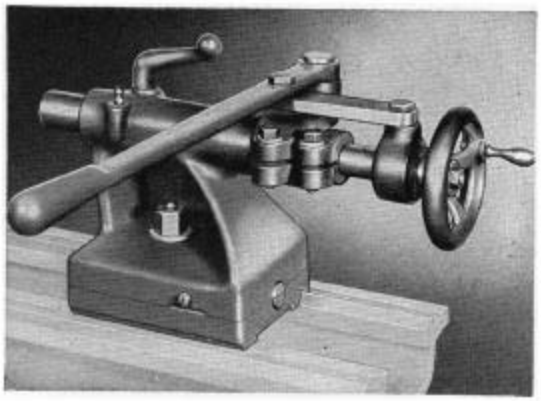
No. 455—Center Rest Chuck, ¼ - ¾"....**$9.00**

DRILL CHUCK ARBORS

Use to fit chucks to No. 2 Morse Taper in headstock or tailstock of lathe. Shipping weight, ¾ lbs.

No. 447—Arbor for 451 Chuck.....**$ .72**

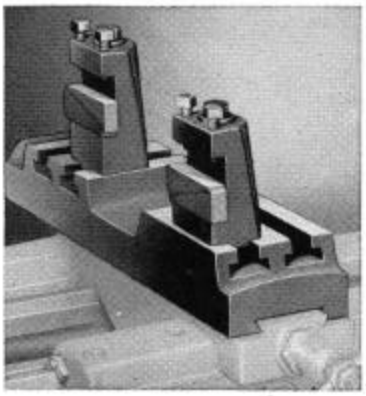
No. 448—Arbor for 452 and 455 Chuck.. **.72**



LEVER TAILSTOCK

Supplies the added advantages of a production tailstock and can be set to operate as a standard tailstock. Lever stroke, 2¾". Handwheel spindle travel 2⅜". Fitted for No. 2 Morse Taper. When ordered with lathe, it is factory fitted to lathe bed and matched to headstock. Furnished on lathe in place of LA-3 tailstock at extra charge of $17.50. Shipping weight, 30 lbs.

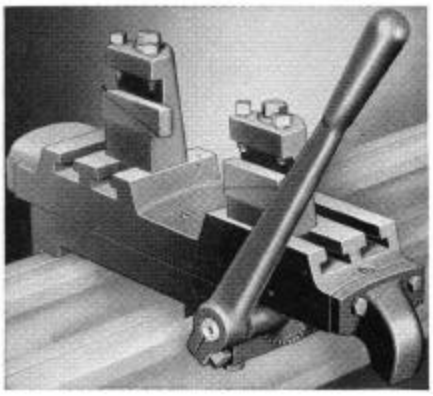
No. AC-241 ..... **$37.50**



DOUBLE TOOL POST CROSS SLIDE

Same as furnished with the No. 840 and No. 850 Turret Lathes. Fits cross slide on No. 200, 210, 815, 820 and 825 Lathes, replacing standard cross slide and compound rest. Manual feed by hand wheel or power cross feed. Adjustable tool post wedges included. Shipping weight, 18 lbs.

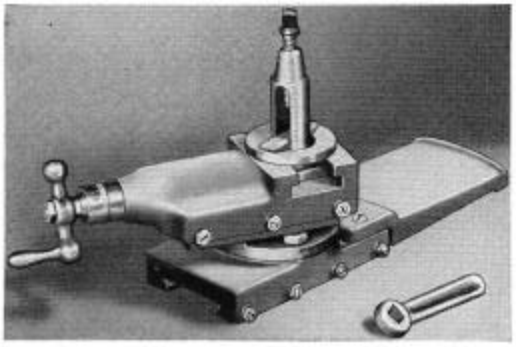
No. LA-29—Double Tool Post Cross Slide **$24.00**



DOUBLE TOOL POST CROSS SLIDE

Same as furnished with No. 830 Hand Screw Machine. Fits any Logan Lathe bed. Lever operated cross slide has adjustable stops with a maximum travel of 3". Adjustable wedges for tool holder slot included. Shipping weight, 30 lbs.

No. LA-25—Double Tool Post Cross Slide **$38.00**



COMPOUND REST ASSEMBLY

Same as furnished with No. 200, 210, 815, 820, and 825 Logan Lathes. Fits No. 840 or 850 Turret Lathes in place of double tool post cross slide. Complete with tool post and wrench, shipping wt., 13 lbs.

No. LA-49-1 ..... **$24.00**

TAILSTOCK ASSEMBLY

The LA-3 Tailstock assembly is the same as furnished with the screw cutting lathes. This assembly when ordered with the No. 840 or 850 Lathe, will have the tailstock matched with headstock at factory. Furnished with wrench but less 60° center. When used with No. 840 or 850 Lathe, order LA-223 headstock adapter sleeve and 60° centers extra. Shipping weight, 24 lbs.

No. LA-3—Tailstock Assembly..... **$20.00**

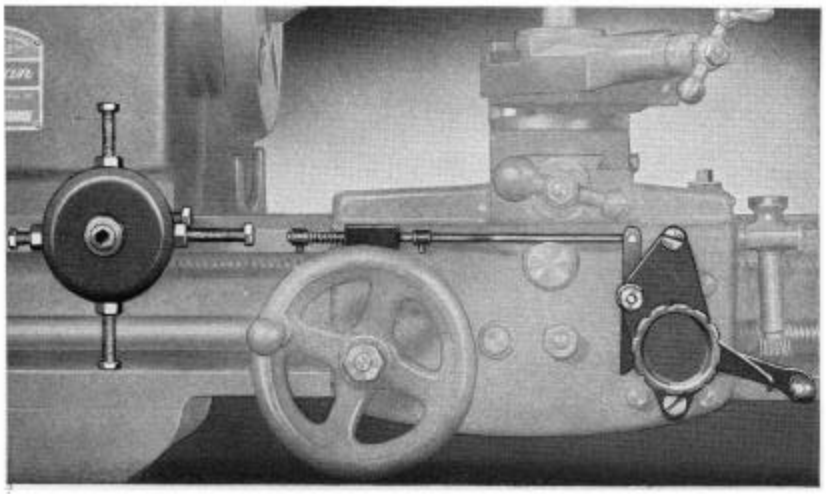
AUTOMATIC FEED CONTROL

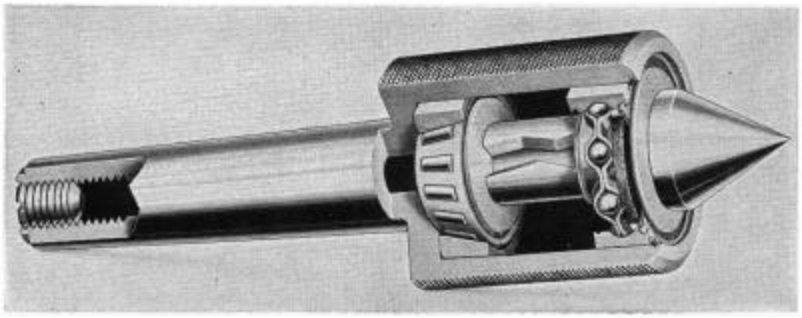
Easily Installed—Quickly Adjustable For Four Different Stop Settings

Fast and accurate in operation, this new Automatic Feed Control is easily installed on Logan No. 200 and No. 210 Back Geared Screw Cutting Lathes and on the No. 850 Manufacturing Turret Lathe. The device is quickly adjustable for four different stop settings, which stop the lathe carriage instantly at any pre-determined point by disengaging the half-nuts. The Automatic Feed Control does not interfere with other lathe controls, and, if desired, can be made inoperative in a minute or two. Pays for itself through speeded work, reduced spoilage, and conserved manpower. Shipping weight, 8 lbs.

No. 425—For lathes with serial numbers under 20324 ..... **$29.50**

No. 425-1—For lathes with serial numbers over 20324 ..... **29.50**

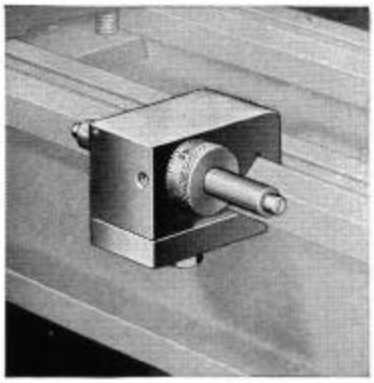




ANTI-FRICTION CENTER

The live center which turns with the work eliminates friction between work and centers, permitting faster turning, and deeper cuts on heavier work. Equipped with grease sealed, pre-loaded, precision bearings held in place by a one piece housing, hardened and ground to exacting tolerance. Thrust load is carried by a Timken Roller Bearing and the radial load by New Departure Ball Bearings. Bearing housing 1-11/16" diameter. No. 2 Morse Taper Shank. Centerpiece angle 60°. Shipping weight, 2 lbs.

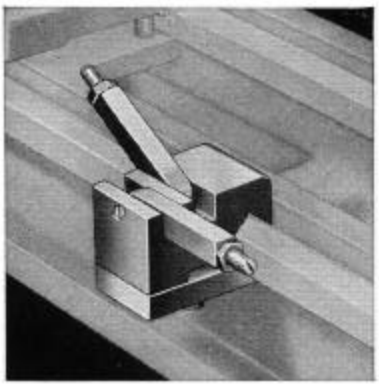
No. 595—Anti-Friction Center.....**$22.50**



MICROMETER CARRIAGE STOP

The Logan Micrometer Carriage Stop is used to locate the carriage position with accuracy on the lathe bed. The graduated micrometer collar is clearly marked in thousandths, easy to read. Setting may be locked for duplicate work. Shipping weight, 3 lbs.

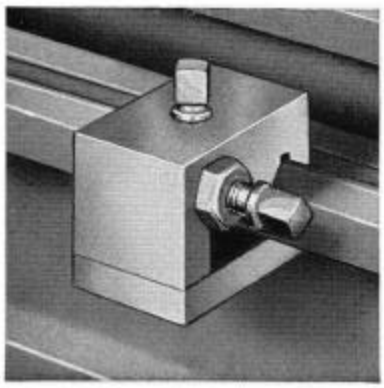
No. AC-234—Price.....**$11.50**



DOUBLE CARRIAGE STOP

With an adjustable screw in the end of each finger this Logan Double Carriage Stop can be accurately set for two desired positions. Either finger of stop can be quickly brought into position. The stop clamps to the lathe bed for use on either side of the carriage. Shipping weight, 3 lbs.

No. AC-226—Price **$5.50**



CARRIAGE STOP

Provides positive position stop for lathe carriage. May be used either to the right or left of carriage. Adjustment screw with locknut for accurate adjustment. Clamps, over front "V" Way on any Logan Lathe bed. Shipping weight, 2 lbs.

No. AC-225 .....**$3.00**

CENTER DRILL AND COUNTERSINK

Tool steel. Drills and countersinks proper bearing for lathe center.

No. 575—60° Countersink Drill, 1/16".**$ .30**

No. 575—60° Countersink Drill, 3/32". **.35**

No. 575—60° Countersink Drill, 1/8".. **.40**

60° CENTER

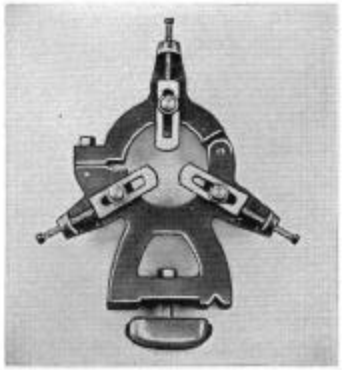
Hardened and ground tool steel No. 2 Morse Taper Shank. Shipping weight, ½ lb.

No. LA-187—60° Center.....**$2.00**

FOLLOWER REST

Mounts on carriage and follows cutting tool, supporting thin work. Adjustable machined jaws, cast-iron frame, with screws for attaching. Shipping weight, 5 lbs.

No. AC-196—Follower Rest.....**$4.25**



CENTER REST

Clamps to inner ways of lathe bed to support long pieces. Adjustable jaws. Top is hinged for easy inserting or removing of shafts. Cast-iron frame, machined cast-iron jaws. Shipping weight, 8 lbs.

No. AC-189—Center Rest.....**$6.25**

STRAIGHT TOOL HOLDER

RIGHT-HAND TOOL HOLDER

LEFT-HAND TOOL HOLDER

LATHE TOOL HOLDERS

Drop-forged, heat-treated and hardened steel tool holder. Heat-treated alloy steel set screw. Tool holder shank measures ⅜"x¾". Shipping weight, 1 lb.

No. 552—Tool Holder, Straight **$1.50**

No. 551—Tool Holder, Right-Hand ... **1.50**

No. 550—Tool Holder, Left-Hand **1.50**

BLANK CUTTER BITS

Unground blanks. Measures ¼"x¼"x2". High speed steel, heat-treated, ready to sharpen. Shipping weight, 1 lb.

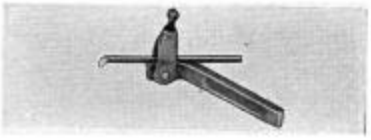
No. 560—Blank Cutter Bits, Set of 6...**$1.10**

KNURLING TOOL HOLDERS

Self-centering rollers form medium diamond knurl. Shipping weight, 1 lb.

No. 555—Knurling Tool **$3.50**

No. 565—Extra Knurls. Choice of fine, medium or coarse Diamond. Price per pair.....**$1.15**



BORING TOOL HOLDER

Reversible yoke for right- or left-hand work. Shipping weight, 1½ lbs.

No. 556—Boring Tool Holder, Complete **$3.50**

BORING BARS

High-speed steel tip welded on to carbon steel shank. Shipping weight, 2, 2, 3, 4 and 5 ounces.

No. 570-A—Boring Bar, ⅛x4" **40c**

No. 570-B—Boring Bar, $\frac{3}{16}$x4½" ...**55c**

No. 570-C—Boring Bar, ¼x5" **65c**

No. 570-D—Boring Bar, $\frac{5}{16}$x6" **75c**

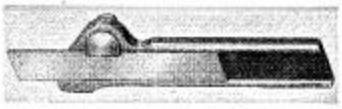
No. 570-E—Boring Bar, ⅜x7" **95c**

R.H. CUTTING-OFF TOOL

With ready ground high-speed steel blade. Hardened clamp locks blade rigidly. Shipping weight, 1 lb.

No. 554—Tool Holder, R.H. Cut-off **$1.85**

No. 564—Extra Cut-off Blade.... **.60**



STRAIGHT CUT-OFF TOOL HOLDER

With ready ground high-speed steel blade. Hardened clamp locks blade rigidly. Shipping weight, 1 lb.

No. 557 .....**$1.85**

THREADING TOOL HOLDERS

For cutting 60° V Threads. Resharpen by grinding top edge only. ⅜"x¾" shank. Shipping weight, 1 lb.

No. 553—Tool Holder, Threading.**$3.00**

No. 563—Extra Cutter only.....**$1.95**

STANDARD LATHE DOGS

Heavy drop-forged steel with square head alloy steel set screw.

No. 580—Lathe Dog, ½". Shipping weight, 4 oz...**60c**

No. 580—Lathe Dog, ¾". Shipping weight, 5 oz...**70c**

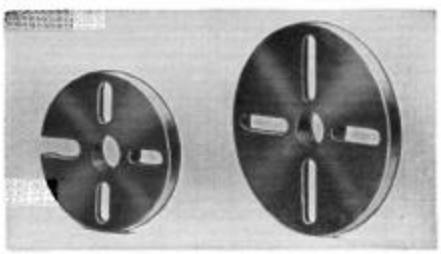
No. 580—Lathe Dog, 1". Shipping weight, 7 oz...**90c**

No. 580—Lathe Dog, 1½". Shipping weight, 10 oz..**1.00**

CLAMP TYPE LATHE DOG

Holds round, hexagonal or rectangular work. Made of heavy drop-forged steel machined and hardened. Shipping weight, ½ lb.

No. 585—Clamp Lathe Dog, 1¾" **$2.40**

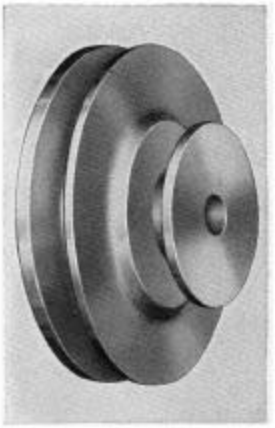


FACE PLATES

Accurately machined gray iron face plates fitted for 1½" — 8-thread lathe spindle nose. Shipping weight, 4 and 6 lbs.

No. LA-170—6" Face Plate **$2.25**

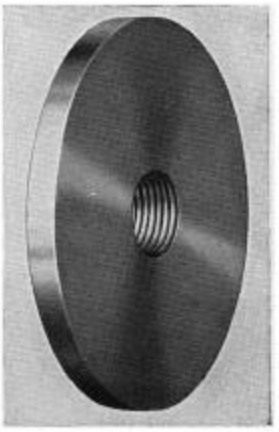
No. LA-344—8" Face Plate **3.75**



2 Step, V-Groove MOTOR PULLEY

This motor pulley is available with three separate bores, made for ½", ⅝", and ¾" shafts. Specify the size of bore required when ordering. Shipping weight, 3 lbs.

No. LA-349...$4.95



CHUCK BACK PLATE For 5" and 6" Chucks

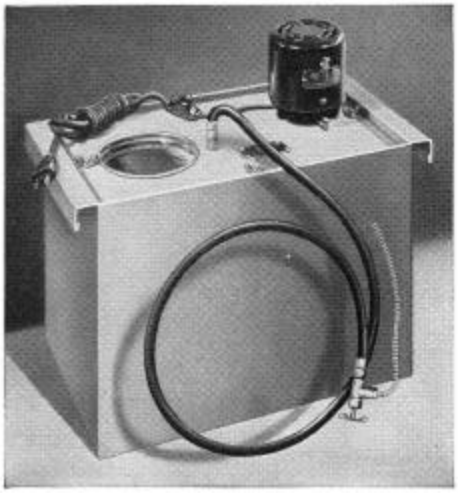
Threaded for Logan 1½", 8-thread spindles. Unfinished face allows for machining to assure accurate fit on chuck. Made in two sizes. 5" chuck size shipping weight is 3½ lbs. 6" chuck size has shipping weight of 7 lbs.

No. AC-101—For 5" Chuck **$3.00**

No. AC-104—For 6" Chuck **$4.50**

HEAVY DUTY COOLANT PUMP

High Pressure — Gear Type



Conserves the life of cutting tools and the time of the machine operator by automatically applying the coolant in the exact amount and to the exact spot needed. This light weight, portable coolant pump operates independently of the machine tool. Delivers coolant or cutting oil *to the cutting operation*—from a full stream to a few drops. Easy to install—easy to clean and maintain.

PUMP: Gear type, positive acting, precision-built. Hardened steel gears and pivot; high stress casting; replaceable OILITE bearing. Equipped with by-pass safety valve. All parts easily accessible.

MOTOR: 1/25 H.P. 115 V. AC 60 Cy. 1 phase; thrust protected type, with built-in fan. Equipped with 2 oil cups.

CONTAINER: 7½ gal. capacity; size 16"x9¼"x12" high. Equipped with 5" bowl screen strainer. Corrosion resistant finish.

EQUIPMENT: 4 ft. of ⅜" Neoprene hose with flow control pet cock and 12" of flexible feed spout. 5½ ft. of rubber-covered electric cord with plug and motor switch.

CAPACITY: 90 gallons per hour; pressure 20 lbs. (depending on the coolant viscosity).

SHIPPING WEIGHT: 38 lbs.

No. 525—Coolant Pump Complete.....**$57.00**

DRUM REVERSING SWITCH

Fits all Logan Lathes. Capacity, up to 1 HP and 550 Volts AC. May be used to replace toggle switch on Logan Lathes for heavier service. Shipping weight, 2 lbs.

No. 0636 — For use with 1 phase, 3 phase and DC motors. Not for capacitor types **$5.00**

No. 0639 — For use with capacitor type motors **$5.00**

ELECTRIC MOTORS

1/3 H.P. Single Phase 1750 RPM Capacitor Motor, 110 V 60 cycle, sleeve bearings, single end shaft. Shipping weight, 33 lbs.

No. 1100 Motor.**$20.95**

1/2 H.P. Single Phase 1750 RPM Capacitor Motor, 110-220V 60 cycle, sleeve bearings, single end shaft. Shipping weight, 49 lbs.

No. 1105—Motor **$26.95**

1/2 H.P. Three Phase 1750 RPM Motor, 220-440V 60 cycle, sleeve bearings, single end shaft. Shipping weight, 49 lbs.

No. 1110—Motor **$28.50**

All Prices F.O.B. Chicago

LOGAN ENGINEERING COMPANY

4901 LAWRENCE AVENUE, CHICAGO 30, ILLINOIS

Logan ***A NAME TO REMEMBER WHEN YOU THINK OF LATHES***

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