Libert High-Speed Shear Parts List & Instructions

Model No.

Serial No.

Libert Machine Corp.
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OPERATING INSTRUCTIONS

Before Operating Read These Instructions Carefully

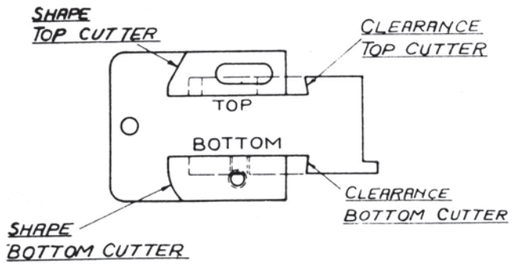


Fig. 1

Grinding And Adjusting Cutters

1. Use grinding gauge to grind upper and lower cutters for general work as shown in Fig. 1. Cutters are shown in four positions used to determine shape and clearance.

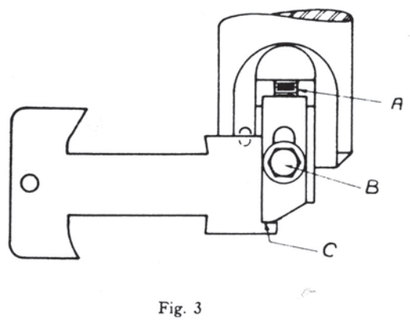


Fig. 3

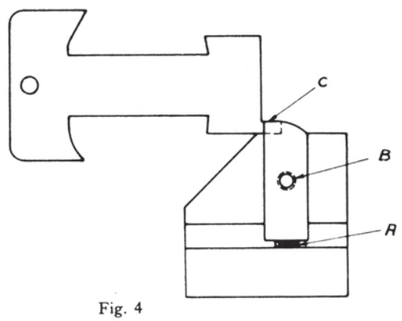


Fig. 4

2. The upper cutter is in the proper position when the gauge is placed with hook against C and top of gauge is flush with line ⊖. Refer to Fig. 3. To adjust, remove bolt B, move Allen set screw A up or down until cutter is in proper position, then replace bolt B drawing up tight. Be sure cutter is against set screw A.

3. The lower cutter is in the proper position, when the gauge is placed with the hook flush with top of cutter at C, as shown in Fig. 4. Adjust same as upper cutter.

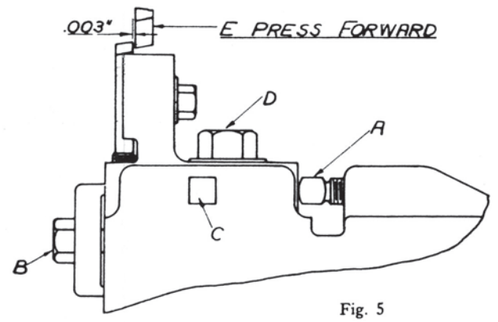


Fig. 5

4. The clearance, or the distance between the bottom cutter and the top cutter, as shown in Fig. 5, should be determined with a .003" feeler gauge.

To adjust the clearance between the cutters, loosen D and C slightly and move lower tool holder backward or forward with cap screw B and set screw A until .003 feeler gauge drags when pulled from between the cutters.

When dragging feeler gauge, it is important that upper cutter is pressed forward as indicated by arrow E. Tighten D and C.

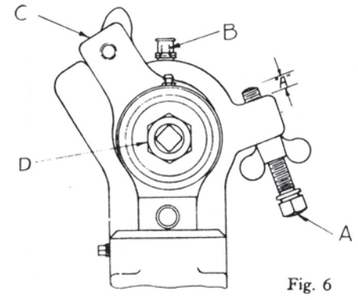


Fig. 6

Setting Stroke And Depth of Penetration

1. The length of stroke is determined by the gauge or thickness of material being cut. Refer to Fig. 6, loosen lock nut D, turn dial indicator until gauge number desired is opposite the mark and lock nut D.

2. Adjusting the position of travel or depth of penetration is done while the shear is running. Try sample cuts each time increasing length "A" of screw A until a continuous cut can no longer be maintained when material is fed rapidly to the cutters. The cutters at this point will cut a series of button holes. Back screw A down only far enough to make a continuous cut. When the above adjustment is made properly, the top cutter remains in the metal at the top of the stroke and passes the bottom cutter at bottom of stroke about 1/64".

Circle Cutting With Attachment

Replace standard lower cutter with special circle cutter. See Fig. 7. Fasten circle arm to frame of machine with sliding block pin toward cutters.

Adjust stroke and depth of penetration same as for regular shearing. A standard lower cutter may be ground for circle cutting as shown in Fig. 7.

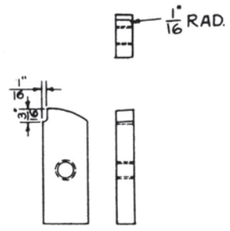


Fig. 7

LUBRICATION

Lubricate your Libert Hi-Speed Shear regularly, using oil equivalent to the Texas Company's Aleph oil and grease equivalent to the Texas Company's Starfax No. 2.

Keep pocket at top of ram bearing full of oil at all times.

Use grease on all Alemite fittings. When greasing fitting B, fig. 6, be sure that eccentric drive shaft housing "C" is in position shown, otherwise grease will not get through to bearings.

Oil all oil cups, all joints in foot pedal mechanism, and motor bearings at regular intervals.

Libert High-Speed Shear Parts List

Sheet No. 1

P-1 cap screw
P-2 washer
P-3 clamp
P-4 cap screw
P-5 set screw
P-6 bottom cutter adjusting screw
P-6A top cutter adjusting screw
P-7 bottom cutter holder
P-8 bottom cutter
P-9 top cutter
P-10 washer
P-11 top cutter clamping screw
P-12 ram
P-13 pivot pin
P-14 nut
P-15 top cutter holder
P-16 set screw
P-17 washer
P-18 bottom cutter clamping screw
P-19 spring
P-20 adjusting screw
P-21 piston ring
P-22 ram bearing
P-23 (2 req.) ram bearing cap shim
P-24 ram bearing cap
P-25 (2 req.) cap screw
P-26 connecting pin
P-27 connecting rod bushing
P-28 eccentric drive shaft
P-29 lock nut
P-30 dial collar
P-31 fibre washer
P-32 eccentric adjusting sleeve
P-33 connecting rod
P-34 Alemite fitting
P-35 spacer
P-36 connecting rod bearing retainer
P-37 connecting rod bearing
P-37A eccentric housing front bearing
P-38 eccentric housing
P-39 lock nut
P-40 eccentric housing rear bearing retainer
P-41 eccentric housing rear bearing
P-42 Alemite fitting
P-43 oil cup
P-44 (2 req.) front hose coupling bolt and nut
P-45 (4 req.) front hose coupling clamp
P-46 (1 req.) front hose coupling
P-47 intermediate drive shaft
P-48 adjusting screw
P-49 wing nut
P-50 cap screw
P-51 connecting link
P-52 pin
P-53 front arm
P-54 shaft
P-55 pipe plug
P-56 main frame
P-57 (2 req.) cap screw
P-116 cutter grinding gauge

Sheet No. 2

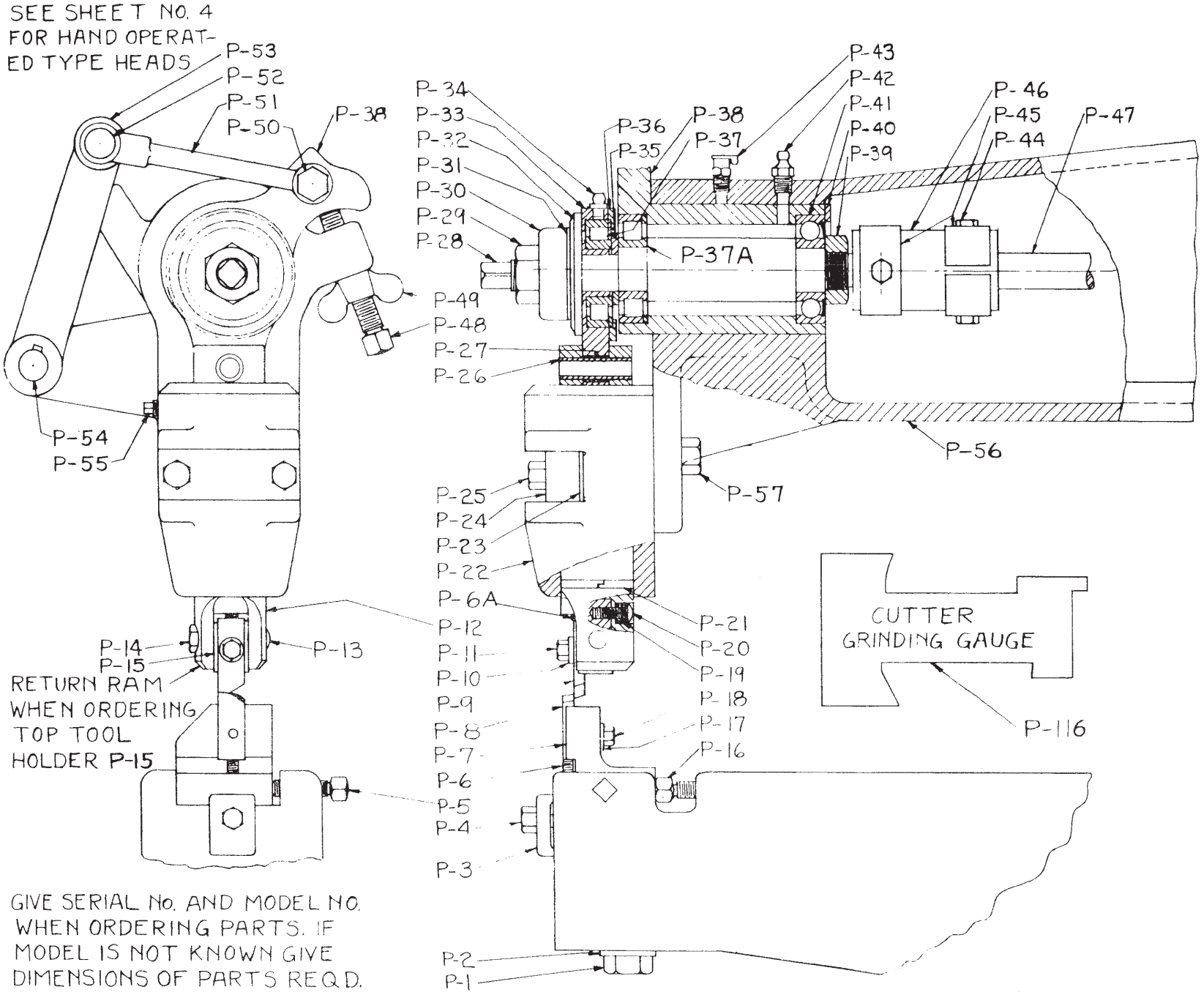
P-43 (2 req.) rear hose coupling bolt & nut
P-45 (4 req.) rear hose coupling clamp
P-46 (1 req.) rear hose coupling
P-52 (2 req.) pin
P-54 shaft
P-58 motor coupling
P-59 set screw
P-60 motor base
P-61 (2 req.) cap screw
P-62 rear arm
P-63 (2 req.) yoke
P-64 (2 req.) lock nut
P-65 vertical shaft
P-66 set screw
P-68 long connecting lever
P-69 spring
P-70 spring lever
P-71 tension spring
P-72 cap screw
P-73 shaft and collar
P-74 base shaft
P-75 coupling
P-76 foot pedal
P-77 taper pin
P-115 eccentric housing locating block

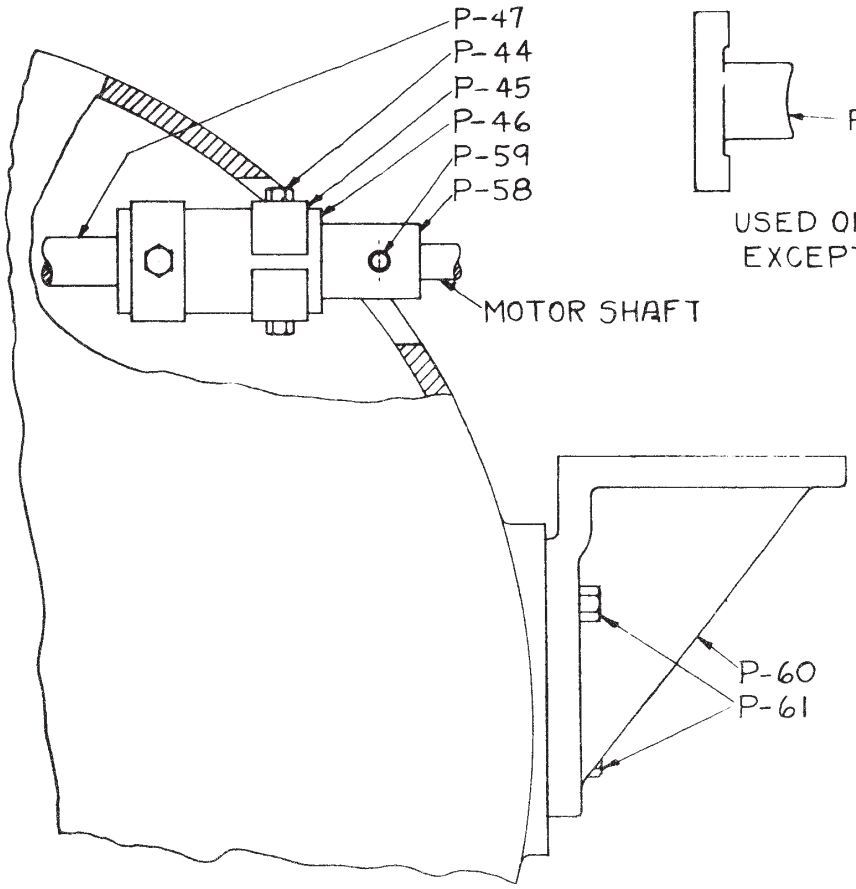
Sheet No. 3

P-79 cam lever
P-80 housing
P-81 cam lever pin
P-82 shaft
P-83 plunger
P-84 spring
P-85 cap screw
P-86 plunger guide
P-87 type B center pin
P-88 center screw
P-89 lock nut
P-90 cap screw
P-91 centering block
P-92 nut
P-93 type B center pin
P-94 cap screw
P-95 centering block
P-96 nut
P-97 ram bearing with extra bored hub to accommodate type B clamping arm
P-98 center pin
P-98A centering block
P-99 circle attachment body
P-100 centering block (right)
P-101 (2 req.) center pin
P-102 (2 req.) nut
P-103 type A circle attachment body
P-104 centering block (left)
P-105 (2 req.) cap screw

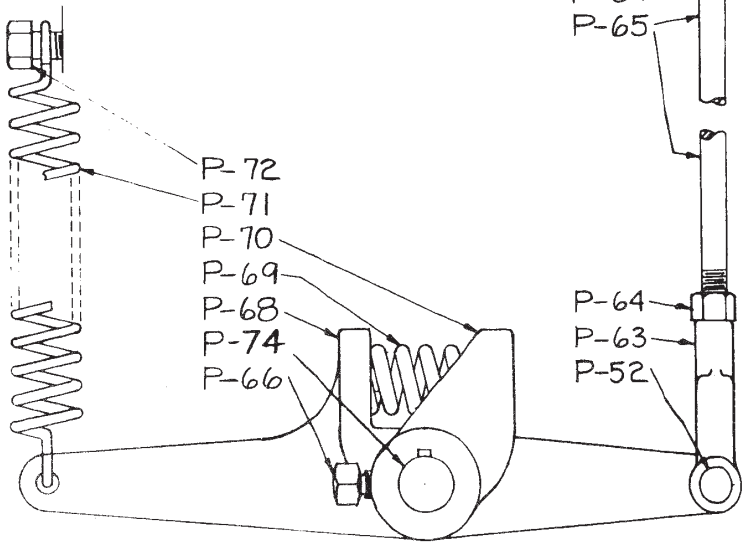
Sheet No. 4

P-106 steel ball
P-107 spring
P-108 hand lever
P-109 notched segment
P-110 eccentric housing, old style
P-111 eccentric housing, new style
P-112 hand lever
P-113 friction block
P-114 plain segment

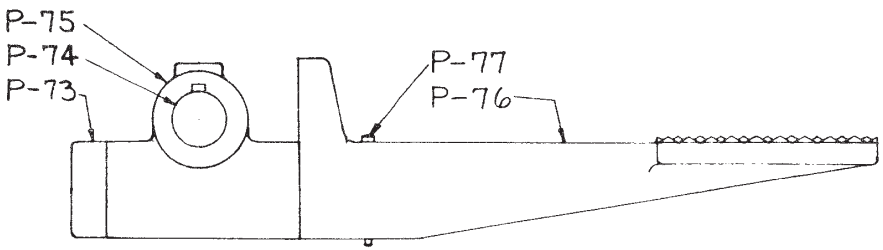

SEE SHEET NO. 4
FOR HAND OPERATED TYPE HEADS
P-53
P-52
P-51
P-50
P-38
P-34
P-33
P-32
P-31
P-30
P-29
P-28
P-36
P-35
P-38
P-37
P-43
P-42
P-41
P-40
P-39
P-46
P-45
P-44
P-47
P-37A
P-49
P-48
P-27
P-26
P-54
P-55
P-56
P-57
P-25
P-24
P-23
P-22
P-6A
P-12
P-11
P-10
P-9
P-8
P-7
P-6
P-5
P-4
P-3
P-21
P-20
P-19
P-18
P-17
P-16
CUTTER GRINDING GAUGE
P-116
P-14
P-15
P-13
RETURN RAM WHEN ORDERING TOP TOOL HOLDER P-15
P-2
P-1
GIVE SERIAL No. AND MODEL NO. WHEN ORDERING PARTS. IF MODEL IS NOT KNOWN GIVE DIMENSIONS OF PARTS REQ.D.



USED ON ALL MODELS
EXCEPT 1430



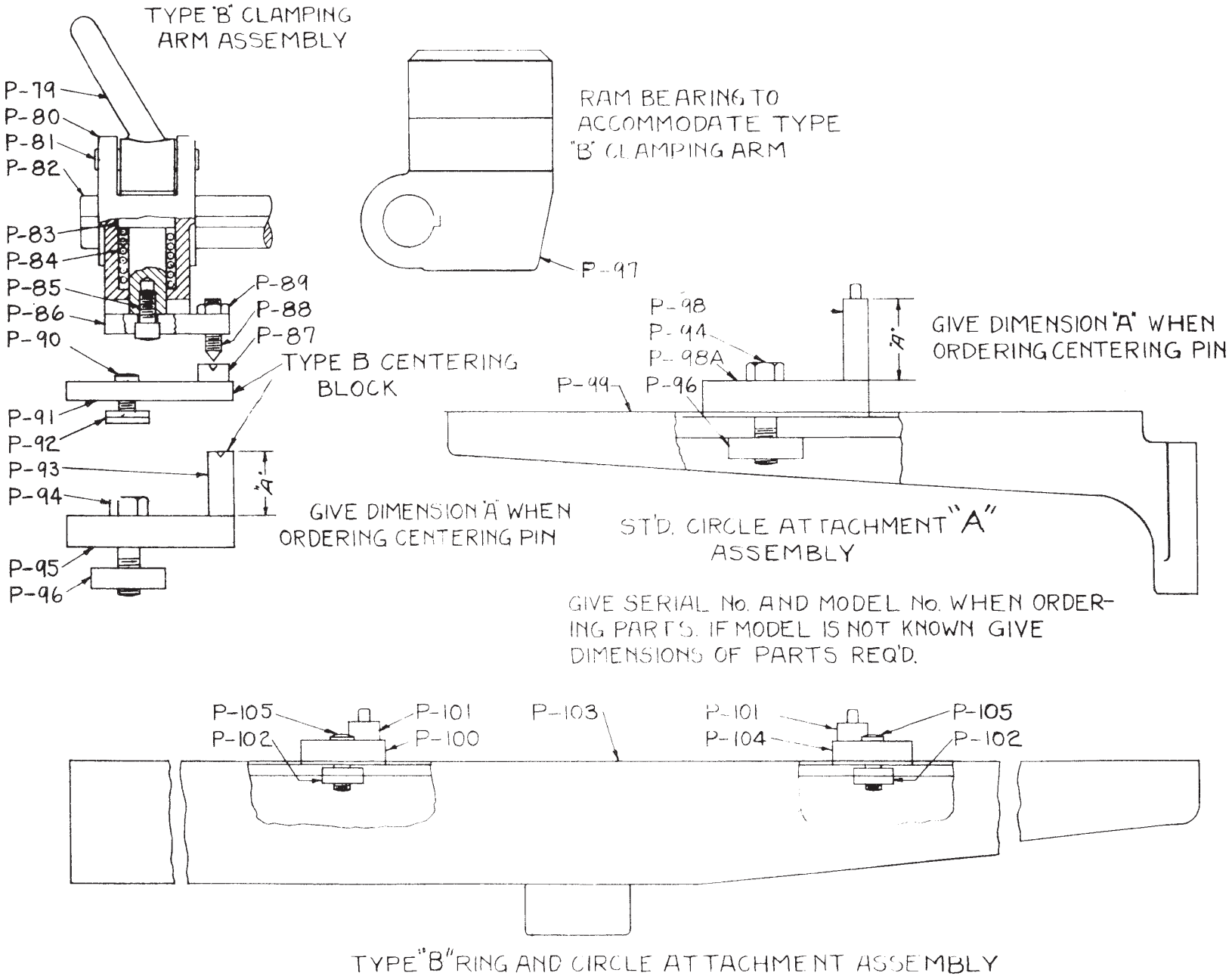
FOOT PEDAL ASSEMBLY (REAR)
SERIAL No. A288 AND UP

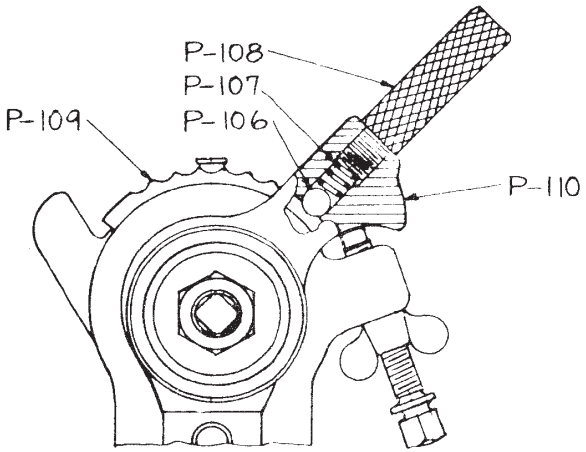


FOOT PEDAL ASSEMBLY (FRONT)
SERIAL No. A288 AND UP

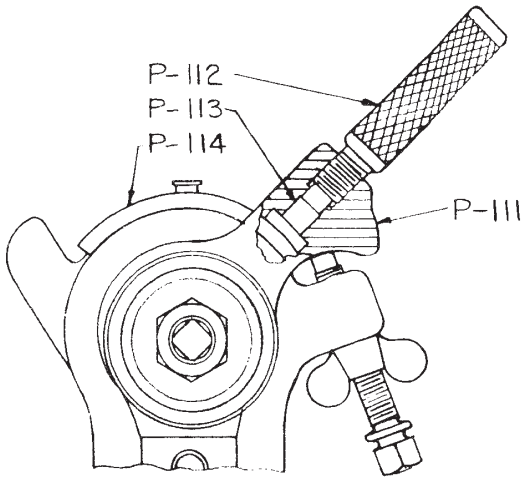
P69 AND 70 NOT USED ON
MODEL 1036 AFTER SER #A8805
" 1060 " SER#A7026
" 836 " SER#A903

GIVE SERIAL No. AND MODEL No.
WHEN ORDERING PARTS IF MODEL
IS NOT KNOW GIVE DIMENSIONS
OF PARTS REQ'D.


TYPE "B" CLAMPING ARM ASSEMBLY
P-79
P-80
P-81
P-82
P-83
P-84
P-85
P-86
P-90
P-91
P-92
P-93
P-94
P-95
P-96
P-89
P-88
P-87
TYPE B CENTERING BLOCK
"A"
GIVE DIMENSION "A" WHEN ORDERING CENTERING PIN
RAM BEARING TO ACCOMMODATE TYPE "B" CLAMPING ARM
P-97
P-98
P-94
P-98A
P-99
P-96
"A"
GIVE DIMENSION "A" WHEN ORDERING CENTERING PIN
ST'D. CIRCLE ATTACHMENT "A" ASSEMBLY
GIVE SERIAL No. AND MODEL No. WHEN ORDERING PARTS. IF MODEL IS NOT KNOWN GIVE DIMENSIONS OF PARTS REQ'D.
P-105
P-102
P-101
P-100
P-103
P-101
P-104
P-105
P-102
TYPE "B" RING AND CIRCLE ATTACHMENT ASSEMBLY



HAND CONTROL (OLD STYLE)



HAND CONTROL (NEW STYLE)

USED ON MACHINES PRIOR TO SERIAL A-288

GIVE SERIAL No. AND MODEL No. WHEN ORDERING PARTS. IF MODEL IS NOT KNOWN GIVE DIMENSIONS OF PARTS REQUIRED.