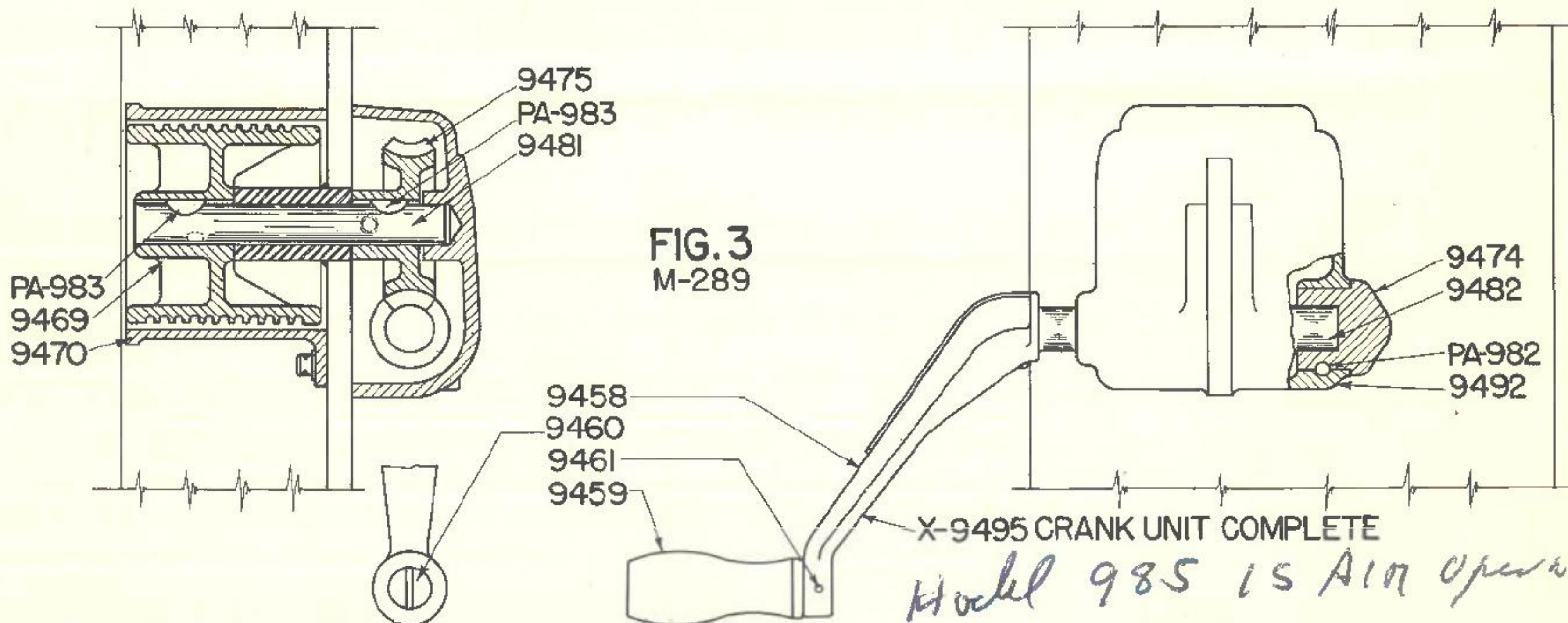


PARTS LIST AND INSTRUCTIONS FOR MHP-60 HYDRAULIC PRESS

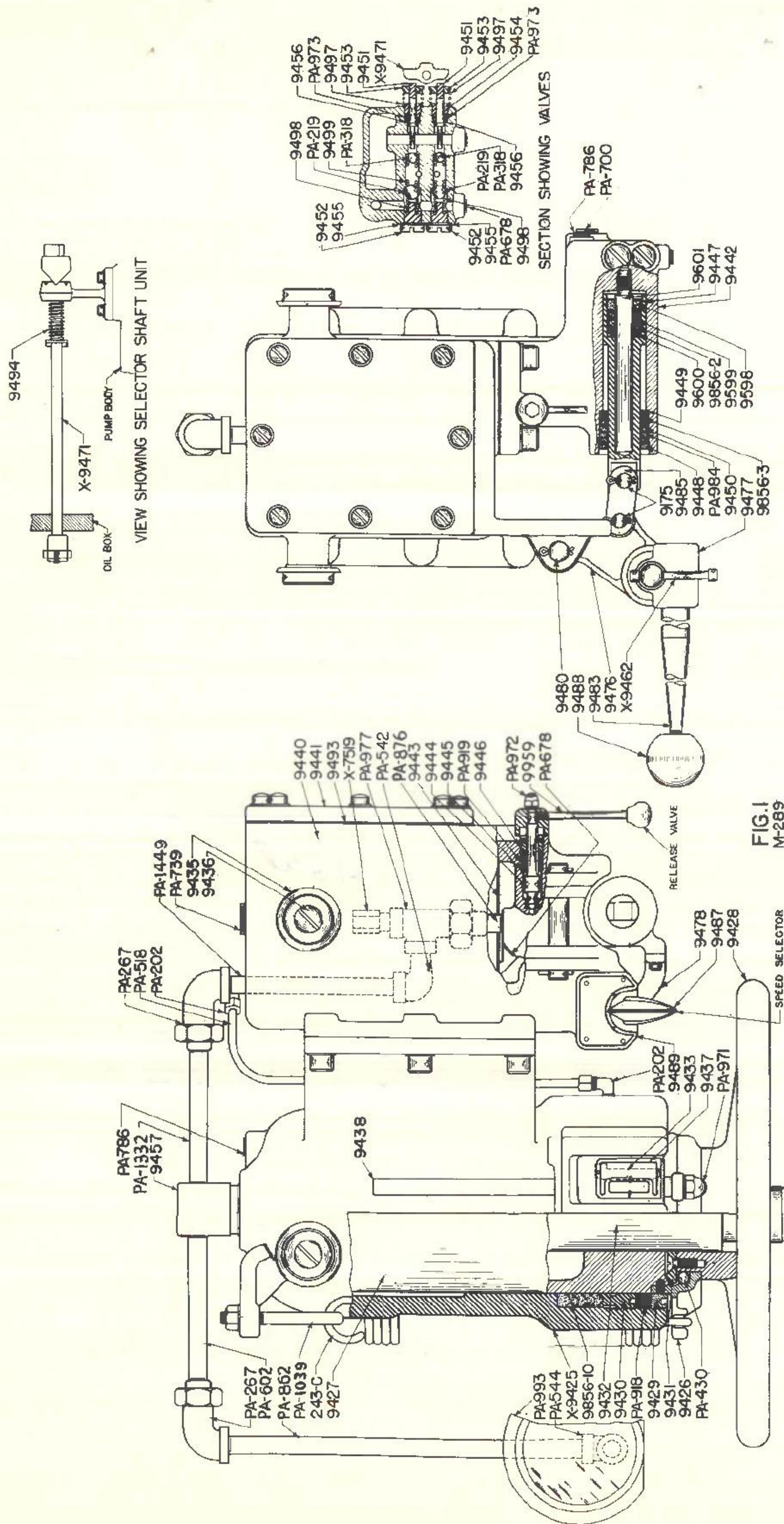
To Fill Press with Oil—Remove filler plug PA-739, Fig. 1, and put in approximately 5 quarts S. A. E. No. 20 oil and replace plug. Prime the pump by giving pump about 10 to 15 strokes with the release valve open. Remove plug PA-786 at top of cylinder until the air is forced out of cylinder and oil shows in the opening.

How to Operate—Raise or lower the winch operated table to suit the work. Insert table pins X-9415, Fig. 2. Place the work under the screw and spin the ball bearing hand wheel until the screw nose rests on the work. Close the release valve 9959, Fig. 1, and set the speed selector 9487, Fig. 1, for the type work to be done. For light work set at 20-ton fast, for medium work set at 30-ton medium and for heavy work set at 60-ton slow. Operate the pump until the desired pressure is obtained. To retract ram, open release valve 9959, Fig. 1, and the ram will return to its highest position. Then spin hand wheel to return screw to its highest position. **Caution**—Before using press, always put the protecting cap 412-C on the end of screw so as not to burr its end. The table cables are intended for raising and lowering the table only. Do not apply pressure on work until table pins have been inserted. **Packing**—Press is equipped with chevron type packing. **Do Not Draw Adjusting Nut Tight.** To adjust: Remove adjustable packing nut Part No. 9429 (Fig. 1), and wiper ring Part No. PA-918 (Fig. 1). Draw packing nut Part No. 9430 (Fig. 1) tight and then back off one turn. Replace the wiper ring and packing nut Part No. 9429 (Fig. 1), and draw tight.



PARTS LIST FOR MHP-60 HYDRAULIC PRESS—MODELS No. P-894 AND P-921

Part No.	No. Req'd	Description	Part No.	No. Req'd	Description
X-9401	1	Frame Assembly Complete Consisting of the following:	PA-202	2	Rt. Angle Ball Fastener $\frac{1}{8}$ " P.T. $\frac{1}{4}$ "
X-9402	1	Front Top Channel Unit Complete (10" x 4'-4" lg.)	PA-219	2	O.D. Copper Tubing
X-9406	1	Rear Top Channel Unit Complete (10" x 4'-4" lg.)	PA-267	2	Steel Ball (Hardened)— $\frac{1}{8}$ "
X-9412	1	R. H. End Channel Unit Complete (8" x 3 $\frac{1}{2}$ " x 6'-2" lg.)	PA-318	2	Ex. Heavy Fem. Union Ell— $\frac{1}{4}$ "
X-9415	6	Table Pin Unit Complete	PA-430	33	Steel Ball (Hardened)— $\frac{3}{8}$ "
X-9418	2	Spring Hook Unit Complete	PA-383	1	Pc. Copper Tubing $\frac{1}{4}$ " O.D. x 13 $\frac{3}{4}$ " lg.
9409	2	Table Channel (12" x 4'-3" lg.)	PA-542	1	Ex. Heavy Banded Street Ell— $\frac{1}{4}$ "
9411	1	L. H. End Channel (8" x 3 $\frac{1}{2}$ " x 6'-2" lg.)	PA-544	1	Ex. Heavy Banded Ell— $\frac{1}{4}$ "
9419	2	Pipe Spacer— $\frac{3}{4}$ " Std. Pipe x 8 $\frac{1}{8}$ " lg.	PA-1449	1	Ex. Heavy Nipple $\frac{1}{4}$ " x 5 $\frac{3}{4}$ "
9421	2	Base Angle 3 $\frac{1}{2}$ " x 2 $\frac{1}{2}$ " x $\frac{1}{4}$ " (3'-0" lg.)	PA-678	3	Pipe Plug— $\frac{1}{8}$ "
9422	2	Base Tie Angle 2" x 2" x $\frac{1}{4}$ " (4'-2 $\frac{3}{4}$ " lg.)	PA-700	1	Pipe Plug— $\frac{3}{8}$ "
X-9400	1	Hydraulic Unit Complete Consisting of the following:	PA-739	1	Pipe Plug— $\frac{3}{4}$ "
X-9425	1	Fabricated Cylinder	PA-786	2	Pipe Plug— $\frac{1}{4}$ "
9426	1	Pull Back Yoke	PA-918	1	Compression Packing Ring 5" I.D. x $\frac{1}{2}$ " thick
9427	1	Ram	PA-919	3	Ring Packing $\frac{3}{8}$ " I.D. x $\frac{1}{8}$ " thick
9428	1	Hand Wheel	PA-971	1	Acorn Nut— $\frac{1}{8}$ "
9856-2	1	Set Chevrons $\frac{5}{8}$ " I.D. 5-Solid Rings.	PA-972	1	Acorn Nut— $\frac{1}{4}$ "
9856-3	1	Set Chevrons 1" I.D. 3-Solid Rings with Bottom Adapter Ring	PA-973	4	Ring Packing $\frac{1}{4}$ " I.D. x $\frac{1}{8}$ " thick
9856-10	1	Set Chevrons 5" I. D. 5 Solid Rings with Bottom Adapter Ring	PA-977	1	Ex. Heavy Fem. Union Tee— $\frac{1}{4}$ "
			PA-876	1	Ex. Heavy Nipple— $\frac{1}{4}$ " x 2 $\frac{3}{4}$ "
			PA-602	1	Ex. Heavy Nipple— $\frac{1}{4}$ " x 6"
			PA-862	1	Ex. Heavy Nipple— $\frac{1}{4}$ " x 12 $\frac{1}{4}$ "
			PA-1332	1	Ex. Heavy Nipple $\frac{1}{4}$ " x 5"
			X-10202	1	L. H. End Channel Unit
			X-10204	1	R. H. End Channel Assem.



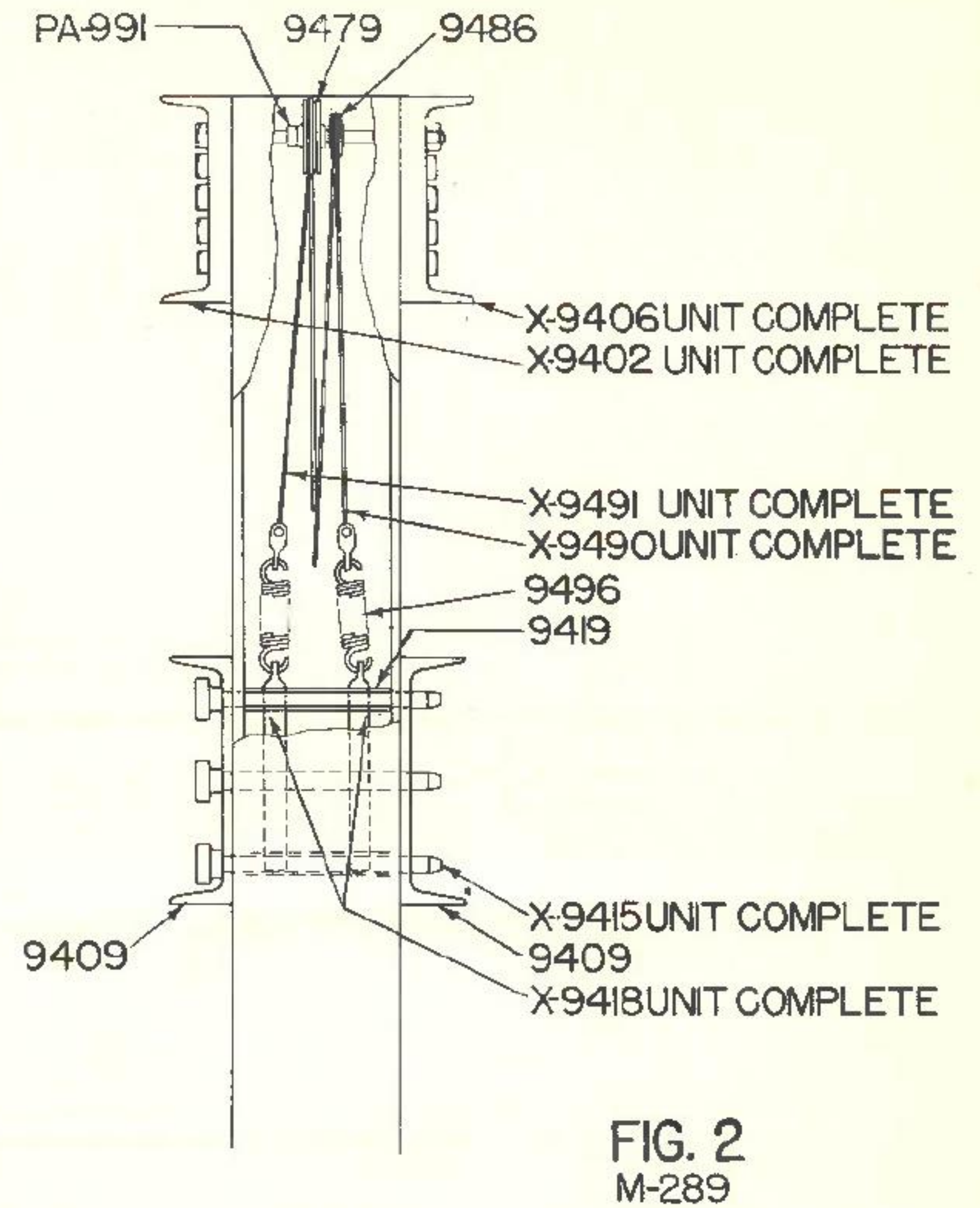
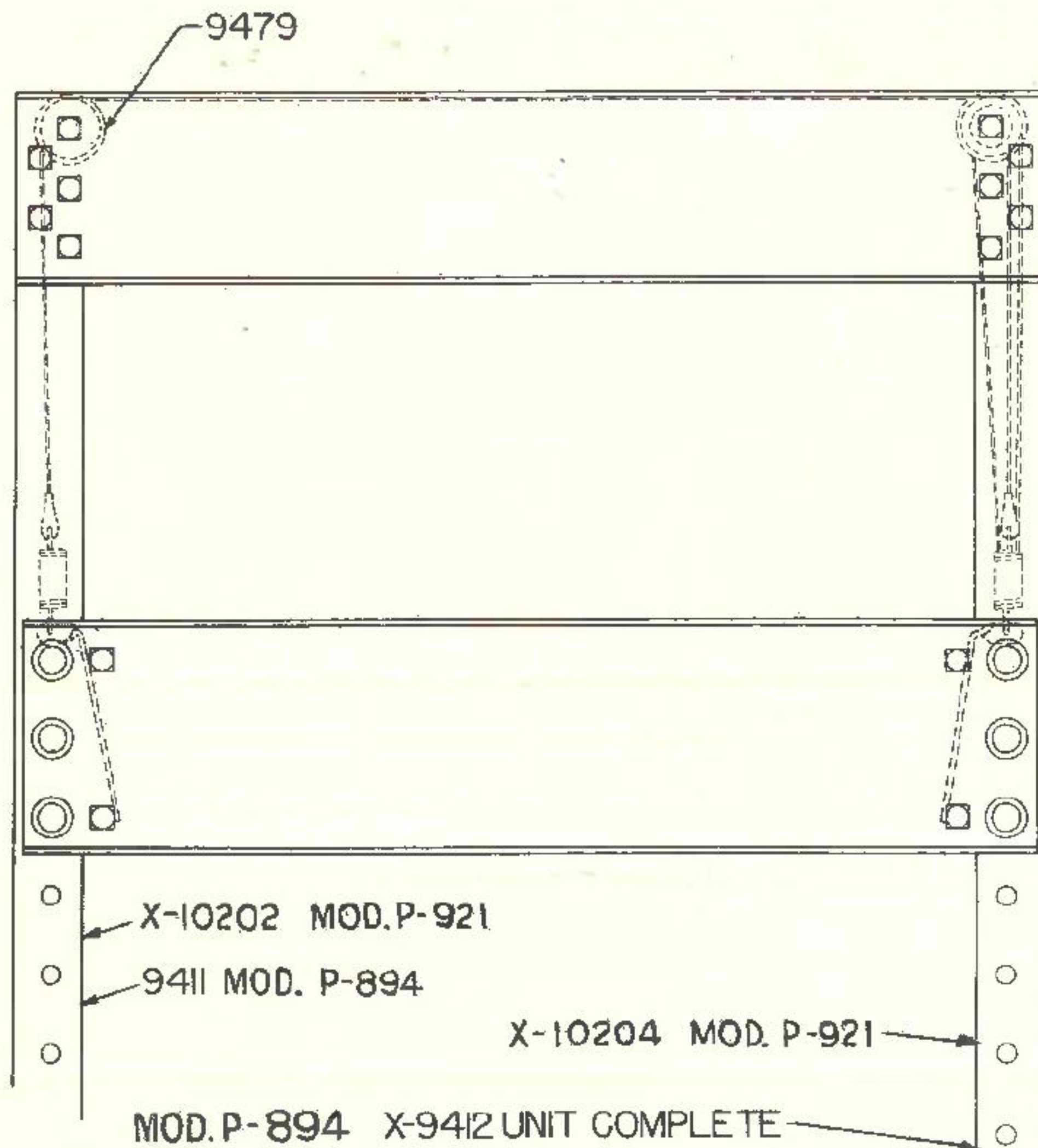


FIG. 2
M-289

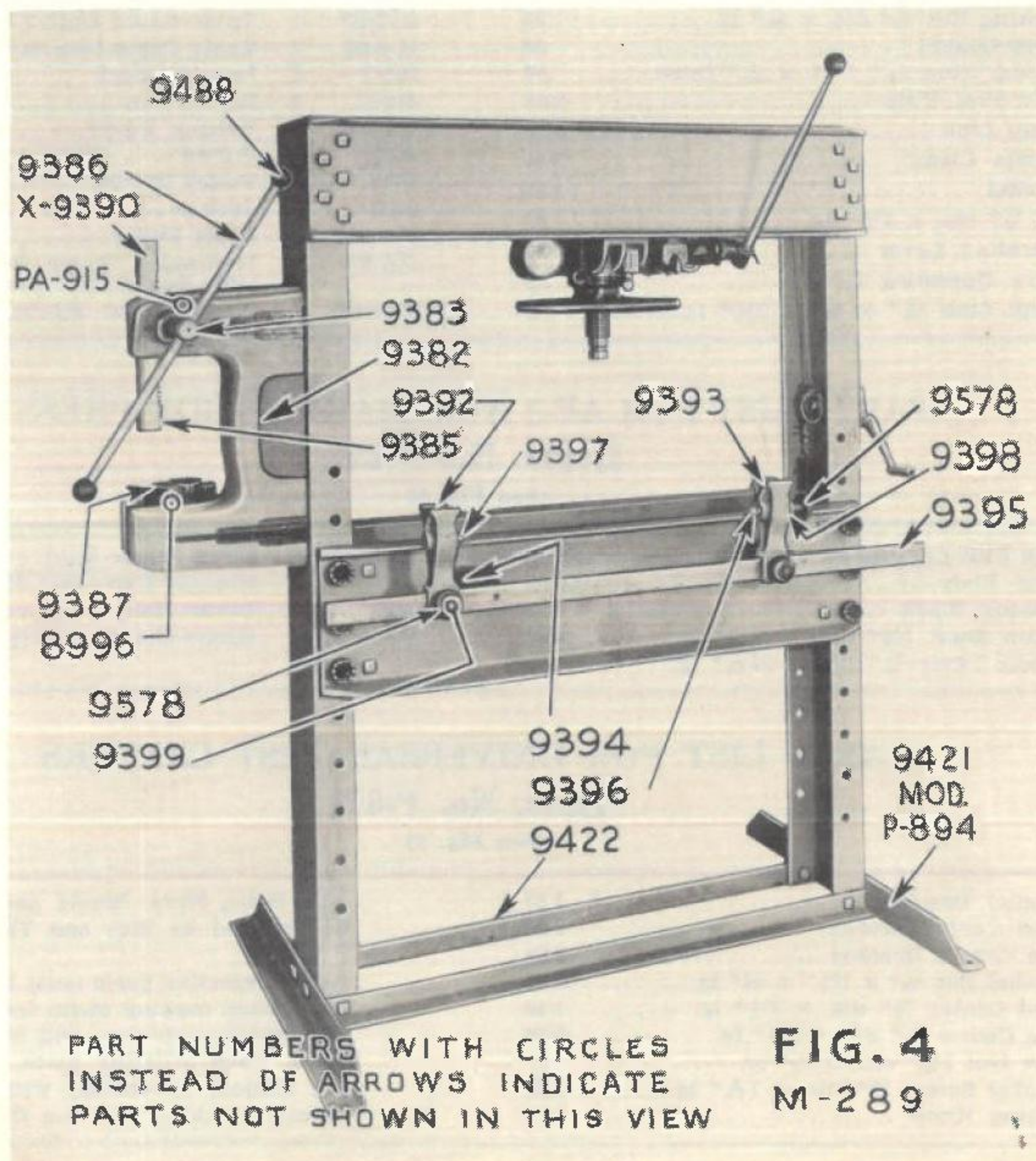


FIG. 4
M-289

PARTS LIST FOR MHP-60 HYDRAULIC PRESS

MODELS No. P-894 AND P-921

Part No.	No. Req'd	Description	Price Each	Part No.	No. Req'd	Description
PA-984	2	Packing Ring 1" I.D. x $\frac{1}{8}$ " thick.....	\$.44	9487	1	Selector Knob
PA-1039	2	Eye Bolt	.04	9488	1	Lever Ball
X-7519	1	Safety Valve Unit Complete	1.64	9489	1	Selector Plate
X-9462	1	Clamp Screw Unit Complete	1.64	9493	1	Oil Box Gasket
X-9471	1	Selector Arm Unit Complete	1.72	9494	1	Compression Spring
243-C	2	Tension Spring	1.84	9497	2	Tension Spring
9175	2	Pin $\frac{1}{2}$ " dia. x $1\frac{1}{2}$ " lg.....	.88	9498	2	Tension Spring
9429	1	Packing Nut 6" O.D. x $\frac{1}{2}$ " thick	6.20	9499	2	Tension Spring
9430	1	Packing Ring 6" O.D. x $1\frac{3}{8}$ " lg.....	10.72	9598	1	Packing Nut $1\frac{1}{4}$ " dia. x $\frac{1}{8}$ " lg.....
9431	1	Collar $4\frac{3}{8}$ " O.D. x $\frac{3}{8}$ " thick	5.48	9599	1	Male Packing Adapter $1\frac{1}{4}$ " dia. x $\frac{1}{8}$ " th.
9432	1	Screw $2\frac{3}{8}$ " dia. x $13\frac{1}{8}$ " lg.	11.36	9600	1	Female Packing Adapter $1\frac{1}{8}$ " dia. x $\frac{1}{8}$ " th.
9433	1	Key $\frac{1}{8}$ " x $\frac{1}{2}$ " x 2" lg.	.92	9601	1	Power Plunger $\frac{5}{8}$ " dia. x $5\frac{1}{8}$ " lg.....
9435	4	Roller 2" dia. x $\frac{1}{2}$ " lg.	1.12	X-9408	1	Table Raising Unit Complete Consisting of the following:
9436	4	Screw $\frac{7}{8}$ " dia. x $1\frac{1}{2}$ " lg.	.48	X-9495	1	Crank Unit Complete Consisting of the following:
9437	1	Depth Gauge Plate	.24	9458	1	Table Crank
9438	1	Depth Gauge $\frac{1}{2}$ " x $9\frac{7}{8}$ " lg.	1.68	9459	1	Crank Handle
9440	1	Oil Box	38.68	9460	1	Spindle $\frac{5}{8}$ " dia. x $3\frac{1}{4}$ " lg.....
9441	1	Oil Box Lid	3.44	9461	1	Pin $\frac{3}{8}$ " dia. x 1" lg.
9442	1	Pump Body	28.56	9469	1	Drum
9443	1	Pump Body Gasket	.08	9470	1	Drum Cover
9444	1	Release Valve Stem $\frac{5}{8}$ " x $3\frac{1}{8}$ " lg.....	.72	9474	1	Cap
9445	1	Bottom Ring $\frac{5}{8}$ " dia. x $\frac{1}{8}$ " thick	.44	9475	1	Worm Wheel
9446	1	Packing Nut $\frac{3}{4}$ " dia. x $\frac{1}{2}$ " lg.	.80	9492	1	Housing
9447	1	Plunger $1\frac{3}{8}$ " dia. x $6\frac{1}{4}$ " lg.	14.24	9481	1	Drum Shaft $\frac{5}{8}$ " dia. x $4\frac{1}{4}$ " lg.
9448	1	Packing Nut $1\frac{5}{8}$ " dia. x $\frac{3}{8}$ " lg.....	1.32	9482	1	Worm $1\frac{1}{4}$ " dia. x $5\frac{1}{8}$ " lg.
9449	1	Bottom Ring $1\frac{5}{8}$ " dia. x $\frac{3}{8}$ " lg.....	.88	PA-983	2	Woodruff Key No. 5
9450	1	Top Packing Ring— $1\frac{5}{8}$ " dia. x $\frac{1}{8}$ " lg..	.44	PA-982	1	Groov-Pin $\frac{1}{4}$ " dia. x $1\frac{1}{2}$ " lg.
9451	2	Valve Stem $\frac{1}{8}$ " dia. x $2\frac{1}{2}$ " lg.	1.40	X-9490	1	Table Cable Unit 7'-7 $\frac{5}{8}$ " lg.
9452	2	Valve Plug $\frac{3}{4}$ " dia. x $\frac{1}{8}$ " lg.	.80	X-9491	1	Table Cable Unit 11'-8 $\frac{1}{2}$ " lg.
9453	2	Spring Seat $\frac{1}{8}$ " dia. x $\frac{1}{2}$ " lg.	2.72	264-J	2	Low V-Block
9454	2	Packing Nut $\frac{1}{2}$ " dia. x $\frac{1}{8}$ " lg.	.76	412-C	1	Screw Cap
9455	2	Valve Gasket	.36	704-C	2	Raising Block
9456	2	Bottom Ring $\frac{7}{8}$ " O.D. x $\frac{1}{2}$ " thick.....	.40	9479	2	Pulley
9457	1	Spec. Pipe Plug	2.68	9486	1	Pulley 2" dia.
9476	1	Pump Link	3.20	9496	2	Spring
9477	1	Handle Clamp	2.44	PA-991	1	Shaft Collar
9478	1	Bracket	1.56	PA-993	1	Hydraulic Gauge—3 $\frac{1}{2}$ " dial 70 Ton—5" Ram
9480	1	Pin $\frac{5}{8}$ " dia. x $3\frac{5}{8}$ " lg.	.80	X-10495	1	Packing Nut Wrench
9483	1	Operating Lever	4.92			
9959	1	Valve Operating Lever	.28			
9485	2	Pump Link $\frac{1}{4}$ " x $\frac{7}{8}$ " x $2\frac{1}{8}$ " lg.....	.40			

PARTS LIST FOR AP-3 AUXILIARY ARBOR PRESS

MODEL No. P-892

(See Fig. 4)

X-9390	1	Rack Unit Complete	\$ 15.44	8996	1	Spec. Drive Stud
9382	1	Press Body	65.92	9385	1	Plunger Cap— $1\frac{5}{8}$ " dia. x $1\frac{3}{4}$ " lg.
9387	1	Pressing Block	4.72	9488	2	Lever Ball
9383	1	Pinion Shaft $1\frac{3}{4}$ " dia. x $12\frac{1}{8}$ " lg.....	8.88	PA-915	1	Groov-Pin $\frac{3}{8}$ " x $2\frac{1}{2}$ " lg.
9386	1	Handle Lever $\frac{7}{8}$ " dia. x $27\frac{1}{8}$ " lg.....	4.52			

PARTS LIST FOR UNIVERSAL TEST CENTERS

MODEL No. P-891

(See Fig. 4)

9394	2	Parallel Bracket	\$ 3.20	(All Bolts, Nuts, Rivets and Washers Must be Ordered by Size and Thread.)		
9392	1	Dead Center Bracket	5.12	Note: Defective parts must be returned pre-paid when making claim for credit. Always give catalog number and model number of Press when ordering parts. Prices on parts are subject to change without notice. No invoice rendered for less than 50 cents.		
9393	1	Live Center Bracket	5.64			
9395	1	Parallel Bar $\frac{5}{8}$ " x $1\frac{3}{4}$ " x 54" lg.	5.64			
9397	1	Dead Center $\frac{7}{8}$ " dia. x $2\frac{1}{2}$ " lg.	1.48			
9396	1	Live Center $\frac{7}{8}$ " dia. x $5\frac{3}{8}$ " lg.	2.96			
9398	1	Lock Nut $1\frac{1}{2}$ " dia. x $\frac{1}{2}$ " lg.	1.00			
9399	2	Bracket Screw $\frac{1}{2}$ " dia. x $1\frac{1}{8}$ " lg.....	1.04			
9578	3	Bracket Knob	.24			