

25 LB Parts			
Part #	Part Name & Description	Serial #	Price
NOTE	*Please note Castings may have porosity (voids) and irregularities that are normal*		
H2	Ram or Head for Old Style	1-4650	501.00
H02	Ram or Head for Transitional Style: Not Available. Use H2 Ram w/ H19 & H20	4651-5999	
H002	Ram or Head for New Style	6000 & Up	510.00
H3	Ram Guide—Wrap Around Design for Old Style	1-4628	405.00
H003	Ram Guide—Side Gib Design for New Style: Indicate Left or Right	6000 & Up	182.00 ea.
H3B	Brass Angle for Relining H3 Ram Guide	1-4628	34.00
H4	Crank Plate or Flywheel	1-5999	NA
H04	Crank Plate or Flywheel	6000 & Up	NA
H4K	Flywheel Key (CALL WITH DIMENSIONS)	All	24.00
H5B	Bronze Pulley Bushings (2 per Set) (CALL WITH DIMENSIONS)	Later models	59.00 per Set
H06	Friction Spider: Inner Portion of Clutch Assembly: (Wood Block Style)	Varies	348.00
H6K	Spider Key: Center Clutch (CALL WITH DIMENSIONS)		24.00
H06K	Spider Key: Rear Clutch (CALL WITH DIMENSIONS)		24.00
H7 - F	Upper Die—Flat Oversize: Die Height: 3” Work Face 2” x 3”	All	158.00
H7 - D	Upper Die—Drawing Oversize: Die Height: 3” Work Face 2” x 3”	All	162.00
H7 - C	Upper Combination Die, ½ Flat and ½ Drawing. Die Height: 3” Work Face 2” x 4”	All	172.00
H7- Knife	Upper Knife Die, ½ Flat and ½ Tapered. Die Height: 3” Work Face 2” x 4.5”	All	190.00
H8 - F	Lower Die—Flat: Die Height: 3” Work Face 2” x 3”	All	195.00
H8 - D	Lower Die—Drawing: Die Height: 3” Work Face 2” x 3”	All	206.00
H8 - C	Lower Combination Die, ½ Flat and ½ Drawing. Die Height: 3” Work Face 2” x 4”	All	208.00
H8- Knife	Lower Knife Die, ½ Flat and ½ tapered. Die Height: 3” Work Face 2” x 5.5”	All	224.00
HDS - Base	Base for 2 Part Die System. Base Half Remains Installed, Top Half Is Interchangeable, Secured with Socket Head Cap Screws, Upper or Lower; (Must Specify)	All	118.00
HDS - FL	Flat Die Top for 2 Part Die System (Upper or Lower)	All	104.00
HDS - DR	Drawing Die Top for 2 Part Die System (Upper or Lower)	All	128.00
HDS - FC	Full Collar Die Top for 2 Part Die System (Lower)	All	121.00
HDS - HC	Half Collar Die Top for 2 Part Die System (Lower)	All	141.00
HDS - HR	Half Round Die Top for 2 Part Die System (Lower)	All	132.00
HDS - RC	Rail Cap Die Top for 2 Part Die System (Lower)	All	132.00
HDS - TX	Texturing Die Top for 2 Part Die System: Use Upper and Lower in Pairs for Heavy Texturing	All	136.00 ea.
HDS - C	Combination Die Top; ½ flat, ½ drawing. Recommended in pairs	All	140.00 ea.
H9-C	Crank Shaft: Center Clutch (Clutch Between Bearing Stanchions) *NOTE; Drill into mainshaft through grease hole of spider after assembly*	Varies	192.00
H9-M	Crank Shaft: Rear Clutch (Clutch Behind Rear Bearing) *NOTE; Drill into mainshaft through grease hole of spider after assembly*	Varies	210.00
H10B	Clutch Blocks: Maple, 2 per Set	Varies	38.00/Set
H10 Bolt	Bolts for Clutch Blocks: 4 Bolts with Nuts & Washers		2.50/Set
H10L	Clutch Lining: Fibrous Belting, 3/16” thick, 6” wide	Varies	19.45 per Ft.
H10R	Brass Machine Screw for Installing Clutch Lining: with Nut & Washer		.80 each
H11	Clutch Collar with Bolts, Washers and Nuts	All	84.00
H12	Toggle Arm for Old Style	1-4096	182.00
H120L	Left Toggle Arm for Transitional Style Not Available. Use H12 w/ H19,H20 & H21	4097-5999	
H121R	Right Toggle Arm for Transitional Style Not Available. Use H12 w/ H19,H20 & H21	4097-5999	
H012L	Left Toggle Arm for New Style	6000 & Up	194.00
H012R	Right Toggle Arm for New Style	6000 & Up	198.00

25 LB Parts			
H13	Bronze Crank Box & Pitman	1-4853	Use H013 Modified
H013 Modified	Steel Crank Box & Pitman—Will Replace H13 Bronze Pitman with Some Modifications. Must Use with H013B Special Bushing.	1-5999	148.50
H013B Special	Bronze Bushing for H013 Modified Pitman		32.00
H013B	Bronze Bushing for H013 Pitman	4854 & Up	32.00
H013W	Pitman Washer	4854 & Up	24.00
H14	Crosshead	All	121.00
H15	Tension Spring: 4 3/8" Long (+ or – 1/8")	All	70.00
H16	Crank Pin for Old Style (CALL WITH DIMENSIONS)	1-4853	68.00
H016	Crank Pin for Transitional & New Style (CALL WITH DIMENSIONS)	4854 & Up	68.00
H17	Upper Toggle Pin: Standard .500 Diameter	All	11.00
H18	Lower Toggle Pin: Standard .625 Diameter	All	12.00
H19	Toggle Link: Non-Adjustable Eye & Tee (Can Be Made Adjustable Using H20 & H21)	1-4650	76.00
H19TE	Threaded Eye Toggle Link: used for transition ram when H120& H121 arms are not usable and you replace arms with H12's	Varies	75.00
H019	Toggle Link: Double Eye for New Style. Uses 2 H019B Bushings.	4651 & Up	83.50
H019B	Bronze Bushing for H019 Toggle Link. 2 per Link.	4651 & Up	10.00 each
H20	Toggle Link: Threaded Tee	1-4650	74.00
H20N	Hex Nut and Jam Nut for H19TE or H20 Link	1-4650	1.80
H21	Tension Adjusting Knuckle	1-4650	44.00
H22	Foot Tread	All	98.00
H23	Tread Pivot Pin: Oversize-15/16	All	30.00
H24	Clutch Fork Bolt: Oversize-13/16 & 7/8	All	26.00
H25	Tread Rod: With 2 Clevis. (CALL WITH LENGTH)	All	53.00
H25C	3/8" Clevis with pin for building Tread Rod	All	11.00 ea.
H27	Box Cap, Front		88.00
H28	Box Cap, Rear		55.00
H29	Clutch Fork		145.00
H30	Tread Spring only: Replacement for Spring on Clutch Fork.	All	26.00
H30Assy	Tread Spring with all mounting hardware	All	52.00
H31	Die Block, Sow Block or Anvil Block	4258-5999	460.00
H031	Die Block, Sow Block or Anvil Block: Solid, Not Hollow	6000 & Up	575.00
H32	Upper Die Key	All	26.00
H32US	Under Size Upper Die Key (CALL WITH DIMENSIONS)		36.00
H33 Old	Lower Die Key: 1° Old Style	1-4257	28.00
H33New	Lower Die Key: 2° New Style	4258-Up	28.00
H34	Die Block Key	4258-Up	28.00
H35	Tension Adjusting Screw: for Use with H012R Arm	4097 & Up	16.00
H35N	Nut for Tension Adjusting Screw	4097 & Up	1.00
H36	Tension Adjusting Washer: Spring Cap	4097 & Up	49.00
H38	Ram Guide Bolt for New Style: 3 Required	4629 & Up	28.00/ea.
H38W	Thick Hardened Washer for Ram Guide Bolt: 2 per Bolt	6000 & Up	2.40/ea.
H38N	Nut for Ram Guide Bolt: 2 per Bolt	6000 & Up	.45/ea.
H39	Ram Guide Adjusting Screw & Nut (Set of 2 Bolts and 2 Nuts)	6000 & Up	4.00
H40	Ram Pin for New Style	6000 & Up	12.00/ea.
H40S	Ram Pin Set Screw & Nut	6000 & Up	1.00
HBS	Main Bearing Shim Pack: 32 Assorted Thickness Gasket Material	All	28.00
HRS	Ram Guide Shim Pack: 16 Assorted Thickness Gasket Material	1-4628	26.00
Motor Mount	Motor Mount Kit: Mounts High on Side of Frame, 3 Way Adjustment	All	160.00

50 LB Parts			
Part #	Part Name & Description	Serial #	Price
NOTE	*Please note Castings may have porosity (voids) and irregularities that are normal*		
K2	Ram or Head for Old Style	500-5572	727.00
K02	Ram or Head for Transitional Style: Not Available. Use K2 Ram w/ K19 & 20	5573-5999	
K002	Ram or Head for New Style	6000 & Up	692.00
K3	Ram Guide—Wrap Around Design for Old Style	500-5544	462.00
K3B	Brass Angle for Lining Ram Guide	500-5544	40.00
K003	Ram Guide—Side Gib Design for New Style: Indicate Left or Right	6000 & Up	218.00
K4K	Flywheel Key (CALL WITH DIMENSIONS)	All	24.00
K5B	Bronze Pulley Bushings (2 per Set) (CALL WITH DIMENSIONS)	Later models	145.00 per Set
K06	Friction Spider: Inner Portion of Clutch Assembly: (Wood Block Style)	Varies	374.00
K6K	Spider Key: Center Clutch (CALL WITH DIMENSIONS)		24.00
K06K	Spider Key: Rear Clutch (CALL WITH DIMENSIONS)		24.00
K7F-OS	Upper Die—Flat Oversize: Die Height: 3-1/2" Work Face 2 1/2" x 4"	All	182.50
K7D-OS	Upper Die—Drawing Oversize: Die Height: 3-1/2" Work Face 2 1/2" x 4"	All	198.50
K8-F	Lower Die—Flat: Die Height: 3-1/2" Work Face 2 1/2" x 4" (Square Shoulders & Divots)	All	227.00
K8-D	Lower Die—Drawing: Die Height: 3-1/2" Work Face 2 1/2" x 4" (Square Shoulders & Divots)	All	242.00
K7-C	Upr. Combo Die, 1/2 Flat and 1/2 Drawing. Die Height: 3-1/2" Work Face 2-1/2" x 5"	All	206.00
K8-C	Lwr. Combo Die, 1/2 Flat and 1/2 Drawing; Die Height: 3-1/2" Work Face 2-1/2" x 5"	All	246.50
KDS Base	Base for 2 Part Die System. Base Half Remains Installed, Top Half Is Interchangeable, Secured with Socket Head Cap Screws, Upper or Lower; (Must Specify)	All	155.00
KDS-FL	Flat Die Top for 2 Part Die System (Upper or Lower)	All	134.00
KDS-DR	Drawing Die Top for 2 Part Die System (Upper or Lower)	All	149.00
KDS Combo	Combination Die Tops, 1/2 Flat, 1/2 Drawing. Work Face Size 2 1/2"x 4" Recommended in pairs!	All	174.00 ea.
HDS-FC	Full Collar Die Top for 2 Part Die System (Lower)	All	136.00
HDS-HC	Half Collar Die Top for 2 Part Die System (Lower)	All	141.00
HDS-HR	Half Round Die Top for 2 Part Die System (Lower)	All	132.00
HDS-RC	Rail Cap Die Top for 2 Part Die System (Lower)	All	132.00
HDS-TX	Texturing Die Top for 2 Part Die System: Upper & Lower Used in Pairs for Heavy Texturing		136.00 ea
K9-C	Crank Shaft: Center Clutch (Clutch Between Bearing Stanchions) *NOTE; Drill into mainshaft through grease hole of spider after assembly*	Varies	205.00
K9-M	Crank Shaft: Rear Clutch (Clutch Behind Rear Bearing) *NOTE; Drill into mainshaft through grease hole of spider after assembly*	Varies	204.00
K10B	Clutch Blocks: Maple, 2 per Set	Varies	42.00/Set
K10 Bolt	Bolts for Clutch Blocks: 4 Bolts with Nuts & Washers		3.50/Set
K10L	Clutch Lining: Fibrous Belting, 3/16" thick, 6" wide	Varies	19.45 per Ft.
K10R	Brass Machine Screw for Installing Clutch Lining: with Nut & Washer		.80 each
K11	Clutch Collar with Bolts, Washers and Nuts	All	112.00
K12	Toggle Arm for Old Style	500-5096	241.00
K120L	Left Toggle Arm for Transitional Style: Not Available. Use K12 w/ K19,K20 &K21	5097-5999	
K121R	Right Toggle Arm for Transitional Style: Not Available. Use K12 w/ K19,K20 &K21	5097-5999	
K012L	Left Toggle Arm for New Style	6000 & Up	228.00
K012R	Right Toggle Arm for New Style	6000 & Up	238.00

100LB Parts			
Part #	Part Name & Description	Serial #	Price
NOTE	*Please note Castings may have porosity (voids) and irregularities that are normal*		
P3	Ram Guide—Wrap Around Design for Old Style *(MADE TO ORDER)* (CALL WITH DIMENSIONS)	1-999	620.00
P003	Ram Guide—Side Gibb Design for New Style	1000 & Up	320.00
P5B	Bronze Pulley Bushings (2 per Set) (CALL WITH DIMENSIONS)	Later models	162.00 per Set
P6K	Spider Key: Center Clutch (CALL WITH DIMENSIONS)		46.00
P06K	Spider Key: Rear Clutch (CALL WITH DIMENSIONS)		46.00
P7 Flat	Upper Die—Flat: Die Height: 4” Work Face : 3” x 6”	All	333.00
P7 Draw	Upper Die—Drawing: Die Height: 4” Work Face : 3” x 6”	All	373.00
P7 XL Flat	Upper Die---Flat: Die Height: 4” Work Face: 3” x 8”	All	366.50
P8 Flat	Lower Die—Flat: Die Height: 4” Work Face : 3” x 6”	All	333.00
P8 Draw	Lower Die—Drawing: Die Height: 4” Work Face 3” x 6”	All	373.00
P8 XL Flat	Lower Die---Flat: Die Height: 4” Work Face 3” x 8”		366.50
P7 XL Combo	Upper Die---Combo ½ Flat and ½ Drawing. Die Height: 4” Work Face Size 3” x 8”	All	396.50
P8 XL Combo	Lower Die---Combo ½ Flat and ½ Drawing. Die Height: 4” Work Face Size 3” x 8”	All	396.50
P9-C	Crank Shaft: Center Clutch (Clutch Between Bearing Stanchions) *NOTE; Drill into mainshaft through grease hole of spider after assembly*	Varies	328.00
P9-M	Crank Shaft: Rear Clutch (Clutch Behind Rear Bearing) *NOTE; Drill into mainshaft through grease hole of spider after assembly*	Varies	316.00
P10B	Clutch Blocks: Maple, 3 per Set	Varies	96.00/Set
P10B O.S.	Same as P10B but taller, for Spiders as required!		96.00/Set
P10 Bolt	Bolts for Clutch Blocks: 6 Bolts with Nuts & Washers		5.25/Set
P10L	Clutch Lining: Fibrous Belting, 3/16” thick, 6” wide	Varies	19.45 per Ft.
P10R	Brass Machine Screw for Installing Clutch Lining: with Nut & Washer		.80 each
P11	Clutch Collar With Bolts	All	131.00
P012L	Left Toggle Arm for New Style	1000 & Up	405.00
P012R	Right Toggle Arm for New Style	1000 & Up	401.00
P13	Bronze Crank Box & Pitman: Not Available. Use P013 Modified.	1-999	
P013 Modified	Steel Crank Box & Pitman—Will Replace P13 Bronze Pitman with Some Modifications. Must Use with P013B Special Bushing.	1-999	370.00
P013B	Bronze Bushing for P013 Pitman or P013 Modified Pitman		48.00
P014	Crosshead	1000 & Up	336.00
P15	Tension Spring for Old Style: 7 ½” Long (+ or – 1/8”)	1-999	240.00
P015	Tension Spring for New Style: 8” Long (+ or – 1/8”)	1000 & Up	240.00
P16	Crank Pin for Old Style: Can be made upon request. Call for price.	1-999	
P016	Crank Pin for New Style: Can be made upon request. Call for price.	1000 & Up	
P17 Early	Upper Toggle Pin	1-999	28.00/ea
P17 Late	Upper Toggle Pin	1000 & Up	28.00/ea
P18 Early	Upper Toggle Pin	1-999	30.00/ea.
P18 Late	Lower Toggle Pin	1000 & Up	30.00/ea.
P19	Toggle Link: Non-Adjustable Eye & Tee for Old Style. (Can Be Made Adjustable Using P20 & P21)	1-999	170.50
P019	Toggle Link: Double Eye for New Style. Uses 2 P019B Bushings.	1000 & Up	190.00
P019B	Bronze Bushing for P019 Toggle Link. 2 per Link.	1000 & Up	32.00 each
P20	Toggle Link: Threaded Tee for Old Style	1-999	148.00
P20N	Hex Nut and Jam Nut for P20 Link	1-999	6.00
P21	Tension Adjusting Knuckle	1-999	78.00
P23	Tread Pivot Pin: 1/16” Oversize	All	76.00
P24	Clutch Fork Bolt: 1/16”Oversize	All	58.00
P25C	7/16” Clevis for Building Tread Rod	All	13.00 each
P30	Tread Spring: Replacement for Spring on Clutch Fork. Install on Tread	All	26.00
P031	Die Block, Sow Block or Anvil Block for New Style	1000 & Up	902.00

P32	Upper Die Key	All	46.00
P33	Lower Die Key	All	64.00
P34	Die Block Key	All	64.00
P35	Tension Adjusting Screw: for Use with P012R Arm	821 & Up	36.00
P35N	Nut for Tension Adjusting Screw	821 & Up	2.00
P36	Tension Adjusting Washer: Spring Cap	821 & Up	82.00
P38	Ram Guide Bolt for New Style: 3 Required	1000 & Up	46.00 each
P38W	Extra Thick Washer for Ram Guide Bolt: 2 per Bolt	1000 & Up	3.50 each
P38N	Nut for Ram Guide Bolt: 2 per Bolt	1000 & Up	1.50 each
P39	Ram Guide Adjusting Screw & Nut	1000 & Up	5.00
P40	Ram Pin for New Style	1000 & Up	28.00each
PBS Early	Main Bearing Shim Pack: 32 Assorted Thickness Gasket Material	1-999	52.50
PBS Late	Main Bearing Shim Pack: 32 Assorted Thickness Gasket Material	1000-1574	68.75
PRS	Ram Guide Shim Pack, 16 Assorted Thickness Gasket Material	1-999	50.00
Motor Mount	Motor Mount Kit: Mounts High on Side of Frame, 3 Way Adjustment	All	262.00
250 LB Parts			
Part #	Part Name & Description	Serial #	Price
S7 Flat	Upper Die—Flat Die height : 5” WorkFace : 3-1/2” x 8”	All	495.00
S7 Draw	Upper Die---Drawing Die height : 5” WorkFace : 4” x 8”	All	511.00
S8 Flat	Lower Die—Flat Die height : 5” WorkFace : 3-1/2” x 8”	All	495.00
S8 Draw	Lower Die---Drawing Die height : 5” WorkFace : 4” x 8”	All	511.00
S10B	Wooden Clutch Blocks (set of 3)	Varies	132.00
S10L	Clutch Lining: 3/16” thick, 6” wide.	Varies	19.45per Ft.
S14	Crosshead		
S15	Tension Spring (12 1/2” long) (+ or - 1/8”)	All	564.00
S32	Upper Die Key	All	76.00
S33	Lower Die Key	All	80.00
S36	Tension Adjusting Washer; Spring Cap		105.00
	We have some miscellaneous parts for 250 LB Little Giants, and can make some new ones upon request. Call for price and availability.		
500 LB Parts			
	We have some miscellaneous parts for 500 LB Little Giants, and can make some new ones upon request. Call for price and availability.		

Little Giant Easy Helve Hammer Parts

Candian Giant/ Jardine

Kerrihard Spring

Tension Spring.....\$78.00
Yoke Connection Sleeve.....\$53.67

25# / Threaded Eye\$75.00

90.00

Parts for Mayer Brothers Power Hammers

(made in Kaukauna & Antigo, Wisconsin; also known as Murray, Murco or Moloch brand)

Part	25 LB	50 LB	100 LB
Tension Spring (measure spring boss)	69.00	86.00	144.00
Upper Die--Flat	140.00	162.00	348.00
Upper Die--Draw	151.00	177.00	388.00
Upper Die--Combo	163.00	173.00	
Lower Die--Flat	173.00	201.00	348.00
Lower Die--Draw	182.00	222.00	388.00
Lower Die--Combo	205.00	215.00	
Die Base for Use w. Little Giant Die System; Upper or Lower **Upper Base can't be used in Murco / Moloch machines without modification**	119.00	155.00	250.00
Die Key: Upper or Lower	28.00	32.00	52.00
Threaded Tee link	94.00	110.00	168.00
Threaded Eye link	75.00		

Other 100 LB dies can be made upon request. Little Giant die system tops will work with these die system bases. Some Little Giant parts will interchange with Wisconsin hammer parts.

Little Giant Rebuilding DVD

3 ½ hours of professionally filmed and edited footage of Sid rebuilding a 25 LB Little Giant, step by step. Repairs of individual components are covered, as well as rebabbiting, assembling and adjusting.

2 DVD Set.....\$95.00

Babbiting Supplies

Babbitt (Per Pound).....8.20/LB.

Babbitrite Damming Compound (2 LB)....48.50

Babbiting Mandrel for 25 LB Little Giant (dummy shaft with 4 collars).....64.00

Babbiting Mandrel for 50 LB Little Giant (dummy shaft with 4 collars).....118.00

Collar for 25 LB Mandrel.....9.00 each

Collar for 50 LB Mandrel.....15.50 each

Approximate amount of babbitt needed:

Parts being rebabbitied:	25 LB Little Giant	50 LB Little Giant	100LB Little Giant
Main bearings, using old babbitt	9#	13.5#	18#
Main bearings, using all new babbitt	18#	22.5#	27#
Pulley bearing, using old babbitt	9#	13.5#	18#
Pulley bearing, using all new babbitt	13.5#	18#	22.5#

T-Shirts

\$16 for M, L, XL \$18 for 2XL, 3XL

(GO TO WEBSITE FOR COLORS AND AVAILABLE SIZES)

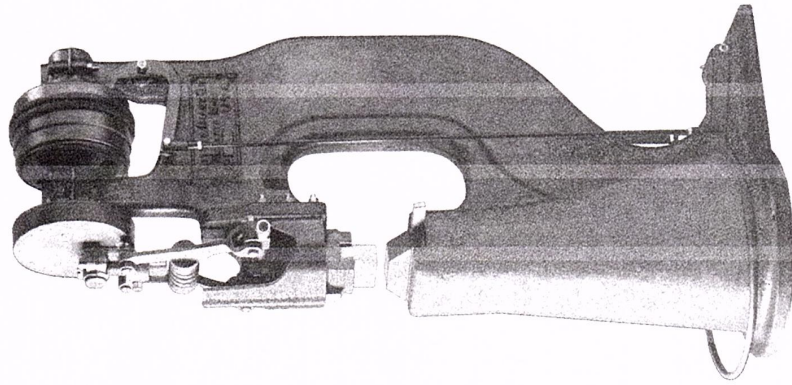
Repair Services

Prices May Vary Depending on Extent of Repair

Other Repairs Available; Call For Estimate.

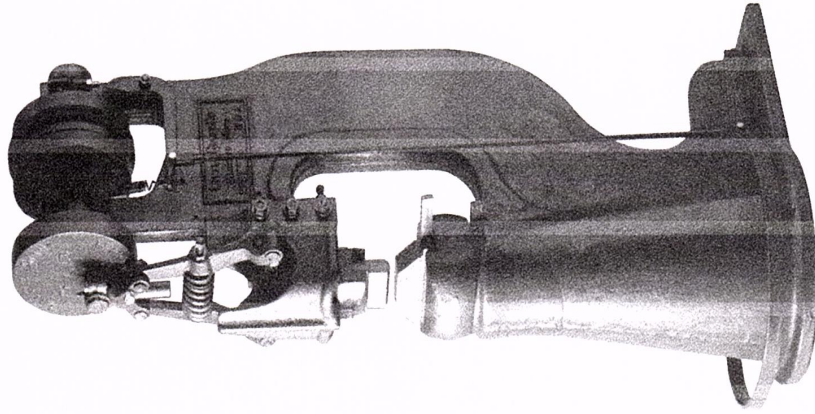
<u>Part</u>	<u>Repair</u>	<u>Price 25 LB</u>	<u>Price 50 LB</u>
Frame (machine must be in our shop)	Labor to Saw Frame & Machine New Dovetail on Old Style Machine to Install Die Block	\$600 Plus Die Block & Key	\$780 Plus Die Block & Key
Ram	Weld & Machine Toggle Link Area (Old Style)	\$176	\$206
Ram Guide	Line Old Style Guide with Brass (includes brass angle iron)	\$92	\$128
Clutch Pulley	Pour & Bore Babbitt Bearing & Turn Clutch Surface	\$154	\$192.50
Clutch Pulley	Repair Clutch Collar Groove	Call For Price	Call For Price
Arm	Weld, Drill & Ream Pin Holes to Standard (per arm)	\$70	\$76
Crosshead	Weld, Drill & Ream Pin Holes to Standard	\$65	\$78

EVOLUTION OF A GIANT



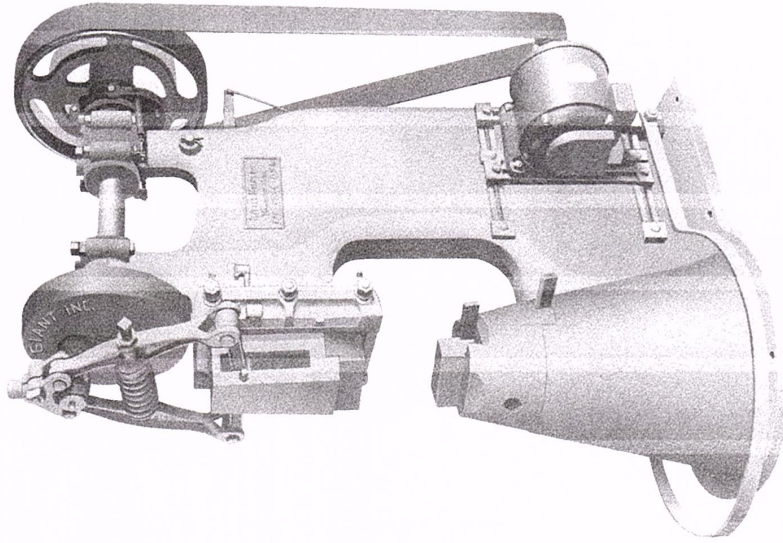
Old Style

- 25 LB.....#1-4258 (1908-29)
- 50 LB*.....#788-4999 (1905-1926)
- 100 LB.....#1-820 (1905-28)
- 250 LB.....#1-246 (1916-25)
- one piece, wraparound ram guide
- lower die installed directly in frame
- spring adjustment at right toggle link
- pitman points down
- *50 LB machines #1-787 (1895-1904) have many variations in frame and front end components, and may not be marked.



Transitional

- 25 LB.....#4259-5999 (1929-41)
- 50 LB.....#5000-5999 (1926-41)
- 100LB.....#821- 999 (1928-37)
- some machines have variations in frame, ram, arm, link & guide configurations
- lower die installed in removable die block
- spring adjustment bolt is through right arm
- pitman points down
- *25lb # 4629 is the start of the threw bolt frame and cast iron ram guide.



New Style

- 25 LB.....#6000-8876 (1941-81)
- 50 LB.....#6000-7363 (1941-84)
- 100 LB.....#1000-1583 (1938-80)
- 250 LB.....#301-585 (1925-79)
- 500 LB.....#501-566 (1918-79)
- 2 piece gib style ram guides
- lower die installed in removable die block
- Spring adjustment bolt is through right arm
- pitman points up