



Model 95 Pow-R-Mark

Technical Brochure

Handheld Air Impact Markers General Use

For efficiency in production marking, the choice to move from individual hand stamps to a multi-character hand held air impact marker, or air powered “gang” stamp is easy. One easy mark powered with compressed air will make the mark of 4-8 characters, and the time savings is extensive for repeated marks.

The upgrade process involves a couple of decisions:

- 1) If the current marking process is hand stamping with individual hand stamps, then the ability to use a hammer to make the complete mark must be reviewed. This is a simple review of the force generated with a hammer and the force needed for the complete mark.
- 2) How often is the marking legend changed? Each mark or daily. The answer to this question will determine the selection of the type of holder.



Individual hand stamps can be the slowest point in a production process. “Gang” the mark into one operation with a CMT Hand Held Air Impact Marker.

Columbia Marking Tools offers a wide range of marking tools for production marking. CMT can assist with reviewing your special application and assist with upgrades and cost saving improvements to your production marking.

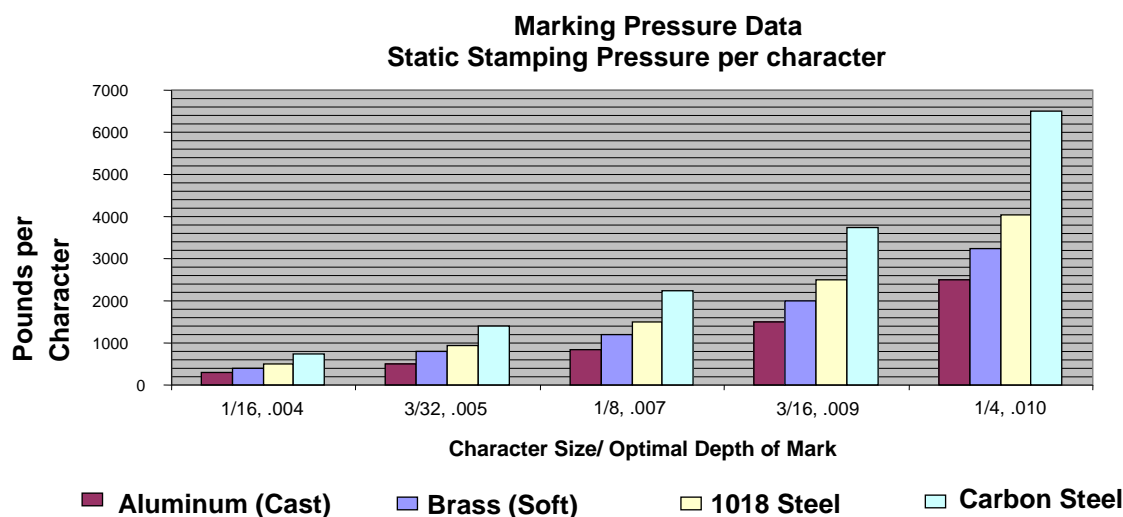


Marking Force Required

The marking force required is determined by the:

- Character Size
- Number of characters
- Material being marked

First, determine the force for each character by using the cart below, and the information about your mark including the character size and the material.



Second, multiply the force required for each character by the number of characters. The estimated force per hammer blow will determine the size of hammer required to mark the complete legend in a hand holder.

Force per Hammer Blow (in lbs)

Size of Hammer	Average machinist	Experienced Machinist	The "Big Guy"
3/4 lbs	3,000	4,000	5,000
1lbs	4,400	6,000	7,400
1 1/2lbs	6,000	8,000	10,000
2lbs	9,000	12,000	15,000
2 1/2 lbs	12,800	17,000	21,200
3lbs	22,400	30,000	37,400

Model 95 Pow-R-Mark

The model 95 is the most powerful air powered tool offered by Columbia Marking Tools. The extra length offers two hand precise location with an easy action lever to initiate the marking operation.

The Model 95 may be hung from a tool balancer for quick use in the marking operation. This handheld impact marker has both integrated stamp holders and external stamp holder options available. The external holder is quickly released with a

The Pow-R-Mark uses CMG standard groove type.





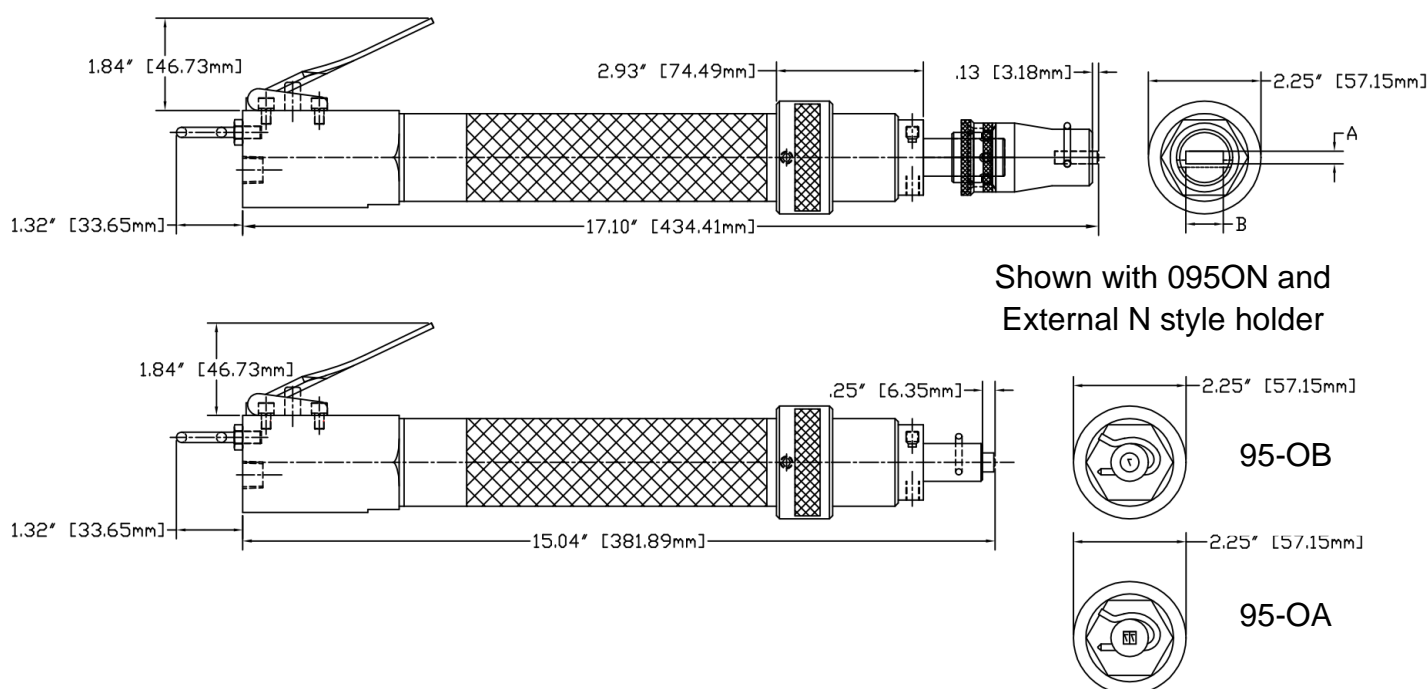
Features

- Up to 8,000 lbs of impact force
- Over 14" long for easy positioning and control
- Quick action level for easy operation
- Hook for use with tool balancer
- Filter to keep external debris from damaging internal working of air impact cylinder.
- Low weight
- Minimal recoil
- Multiple options for stamp configurations
 - Integrated holder in cylinder rod
 - External "No Tooling" required holder.



Specifications

- Weight – 8 lbs [3.6 Kg]
- Length – 17.10" [434.41mm] with external holder, 15.04" [381.89mm] with rod integrated holder
- Preload 1.88 lbs [.85Kg]
- Stroke .3125" [7.9mm]
- Recommended Air Hose - 3/8"
- Operating Pressure: 20 to 80 Psi [1.37 to 5.5 bar]
- Max Marking Pressure – 8,000 lbs at 80 psi [3630Kg at 5.5 bar]



Type Capacity

Catalog No.	Dimensions		CMG Style Type Capacity				
	"A"	"B"	1/16"	3/32"	1/8"	3/16"	1/4"
095-OB	n/a		(1) CM8X insert				
095-OA	1/4"	1/4"	4		2		
095-ON-NA50	1/4"	1/2"	8	5*	4		
095-ON-NA75	1/4"	3/4"	12	8	6		
095-ON NB75	5/16"	3/4"				4	
095-ON-NC50	3/8"	1/2"					2

*1/16" spacer required to fill out pocket

Part Number for Unit and Holder combo

Example Marks

Picture perfect deep mark of (6) 1/16" characters into steel.

While the model 95 has enough force to mark (12) 1/16" characters into steel, care must be taken with longer marking legends to be sure that the tool is held perpendicular to the marking surface. Any angle and a portion of the mark may not be visible.



Nice sample mark of (3) 1/8" characters into a steel barrel.

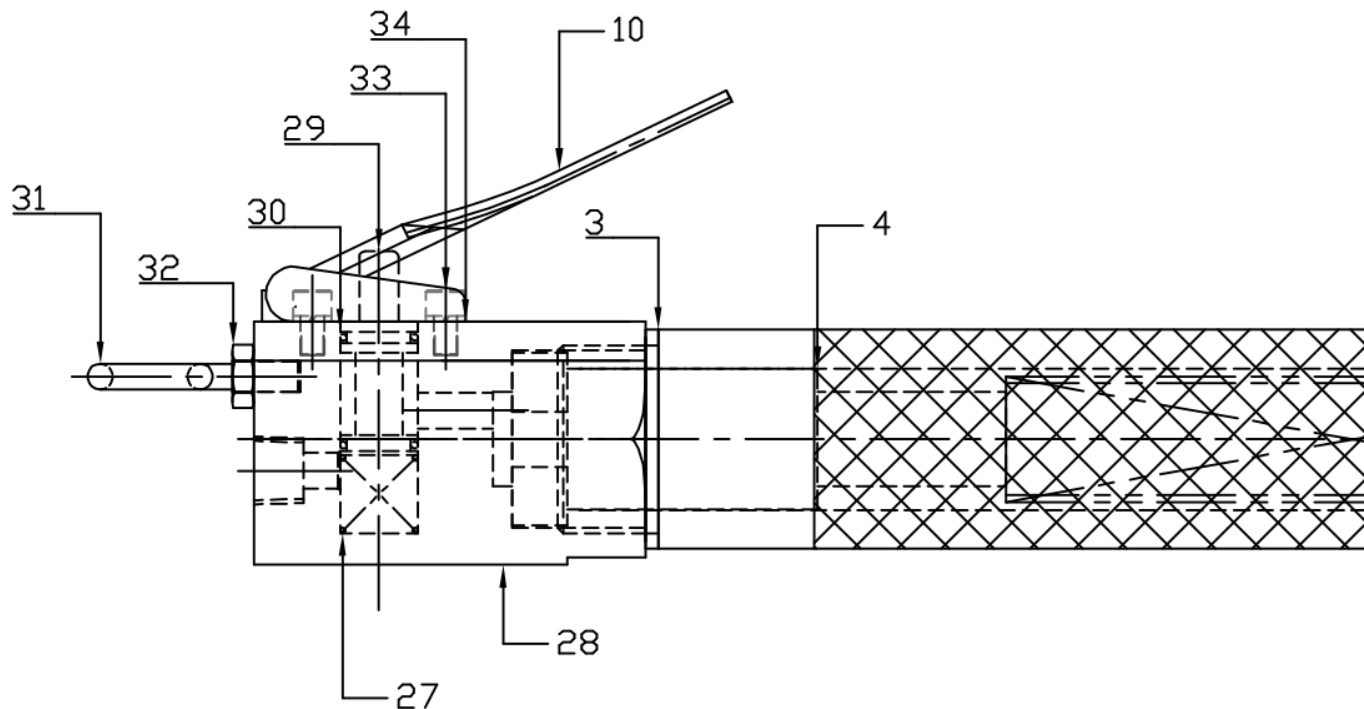
The force of the model 95 assures that these marks will be deep enough to be seen through a coating process completed after marking.

Is the type capacity for your application not shown?

Columbia Marking Tools can help find the right tool for your application.



Bill of Materials



2 – 88-8A

3 - Washer

4 - Hammer

5 - Sleeve

6 – Compression spring

7- Sub-assembly muffler

8 – Collar

10 – Lever

13 – Set screw

14 – Key

15 – "N" style ram – for use with holders

16 – Cover

17 – "O" Ring

18 – 3/16" steel ball

19 – Roll pin 7/32 Diam 1" lg

20 – "O" Ring

21 – Holder

22 – Clip – Small for integrated holder

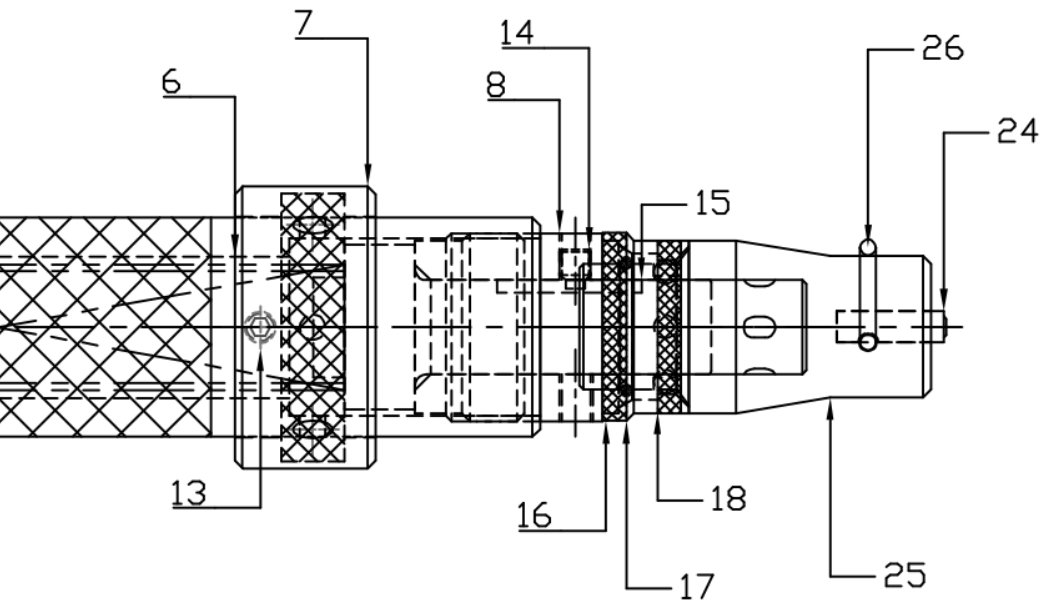
23 – Ram

24 – Standard CMG groove type

25 – "A" style Holder

26 – Clip – large for external holder

Shown with 095ON and
External N style holder



Shown with 095OA or 095OB Rod
with integrated stamp pocket

27 – Spring #LC-045H-2

28 – End Cap

29 – Plunger

30 – O Ring #568-014-N1090-85

31 – Eye bolt #Chu-07040

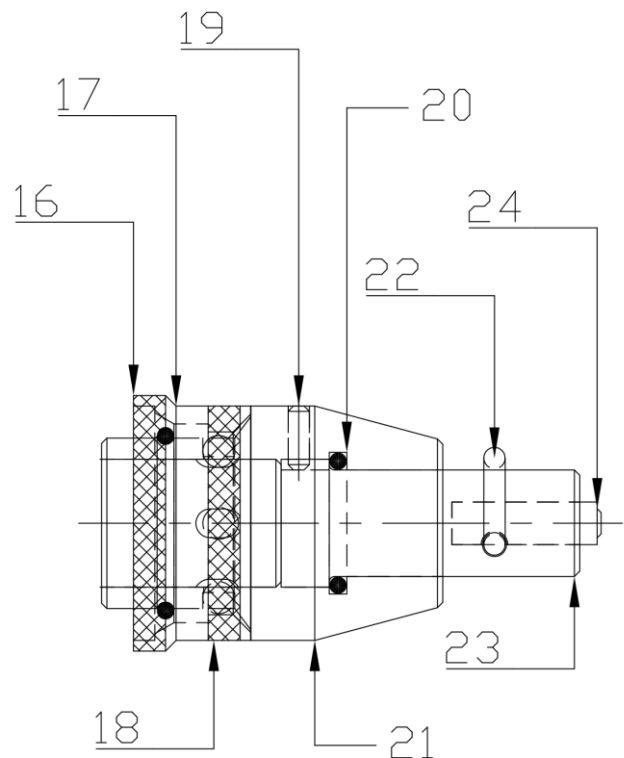
32 – Hex Nut $\frac{1}{4}$ -20

33 – SHCR $\frac{1}{2}$ -32 x $\frac{3}{8}$ lg

34 – Lock Washer #10

**35 – End cap sub-Assembly –
10,27,28,29,30,31,32,33, & 34**

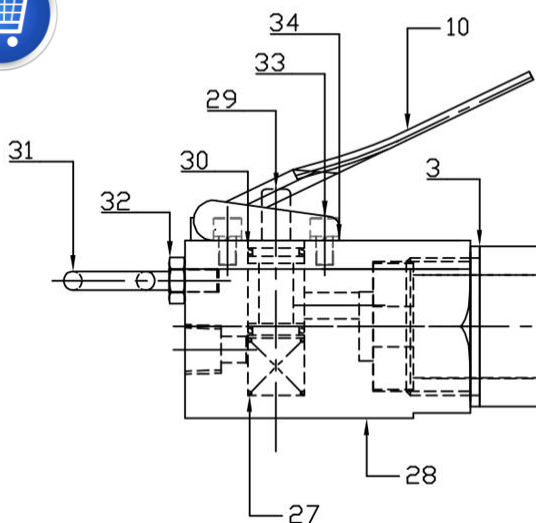
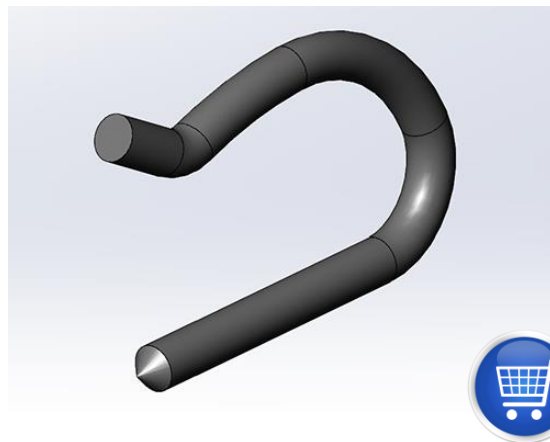
Suggested Spare parts shown red



Spare Parts and Accessories

1. Spring clip is required to hold the type in the pocket.

- 095-22 Small spring clip for use with integrated stamp pocket in rod- OA or OB
- 095-22 Large spring clip for use with external holder – 95N



2. Quick Action Level Sub-Assembly

- 95-35 Sub Assembly
- Consisting of: 95-10 – Lever, 95-27 – Spring, 95-28 - End cap, 95-29 – Plunger, 95-30 - O Rings, 95-31 - Eye bolt, 95-32 - Hex nut, 95-33 – Screws, SS, 95-34 - Lock washers

3. Repair Kit 095-RKSN Kit to include:

- 95-06 Compression Spring (1 piece)
- 95-14 Key (1 piece)
- 95-27 Spring (1 piece)
- 95-30 O-Ring (4 pieces)



4. A TYPEBOX is a great accessory for this tool.

- The storage system will help with quick setup of marking legends.
- Solid steel type box



5. CMG type is use int the Quick-Release Hand Holder.

- Individual type, punctuation, and symbols available.
- Reverse, and Dot Style characters available.

6. FRL Filter Regulator Lubricator

- Air preparation required for operation of Model 95.
- The air preparation kit includes many components all acting to provide safety, control and durability of the air powered tool.

