

# MOTOR REPAIR HAND TOOLS

Chamfering Tools | Tamping Tools | Hammers & Mallets | Hand Grinders | Wire Slot Cleaning Brushes Wire Strippers | Slotting Files | Wedge Drivers | Wedge Removers | And Many More



1375 Hird Avenue Cleveland, OH 44107<u>-3008</u>

sales@martindaleco.com

T 216.521.8567 800.435.5800 USA & Canada F 216.521.9476 Local & Overseas 800.344.9191 USA & Canada

www.martindaleco.com



# OVER 100 YEARS OF SERVICE.

Founded in 1913, Martindale has been able to field test many hand tools over the years for undercutting, chamfering, slot cleaning, winding, wire stripping, and many other motor applications. We bring to the Electric Motor Repair Industry only those tools our customers rated as SUITED BEST and USED MOST universally.

Martindale carries the largest variety of hand tools available for electric motor repair. Chamfering tools, coil tamping tools, hammers, mallets, hand grinders, wire brushes, wire strippers, slotting files, wedge drivers, wedge removers, and many more.

The following pages contain Hand Tools most needed in the industry. Martindale is carefully adding only those tools which bring years of both practical and reliable use to help you, our valued customer.

E-mail us quantities and catalog numbers at sales@martindaleco.com for a prompt quotation of your needs. We appreciate the opportunity to be of service and look forward to meeting all of your electric motor repair tool requirements.





1375 Hird Avenue Cleveland, OH 44107-3008



216.521.8567 800.435.5800 USA & Cana

# MOTOR REPAIR HAND TOOLS

AIR FILTER / LUBRICATOR 12
AIR GAP GAUGE, ARMATURE 7
AIR GRINDER 12
ARMATURE AIR GAP GAUGE 7
ARMATURE WEDGE REMOVER 6
BEARING TOOL SETS 10
BRUSHES, SLOT CLEANING 7
BUR KIT, CARBIDE 12
CARBIDE BUR KIT 12
CHAMFERING TOOLS 4
COIL TAMPING PLIERS 6
COIL TAMPING TOOLS 6
COIL TAMPERS 6
COMMUTATOR SLOT SHAVER 4
COMMUTATOR SLOT SHAVER II 4
E-Z CHAMFERS 4
ELECTRICIAN'S KNIVES 5
FILES, SLOTTING 5
FILTER / LUBRICATOR, AIR 12
GAUGE, AIR GAP, ARMATURE 7
GRINDER, HAND, AIR/ELECTRIC 12
HAMMERS AND MALLETS
DEAD BLOW 11
NYLON AND RAWHIDE FACED 11
HAND GRINDER, AIR/ELECTRIC 12
HAND MICA SAW 5
HORN, WINDER'S 8
INTERNAL COIL TAMPERS 6
INSULATION TRIMMERS, HAND 7
KNIVES, ELECTRICIAN'S 5
KNURLING TOOL 10
LACING HOOK 8
LAMINATION TOOTH STRAIGHTENER 8

	11
MINI-BAR MICA HAND SAW	5
ORANGE STICKS	5
PAPER INSULATION TRIMMERS	7
SAW, MICA HAND, MINI-BAR	5
SCRAPER, SLOT, ADJUSTABLE	4
SHAVER II, SLOT, COMMUTATOR	
SHEARS, WINDER'S	
SLOT CLEANING BRUSHES	
SLOT SCRAPER, ADJUSTABLE	4
SLOT SHAVER, COMMUTATOR	
SLOT SHAVER II, COMMUTATOR	
SLOTTING FILES	
STETHOSCOPE	
STICKS, ORANGE	5
STRAIGHTENER, LAMINATION TOOTH	8
STRIPPERS, WIRE	
MOTOR DRIVEN	
MANUAL	9
MANUAL TAMPERS, COIL	9
MANUAL	9
MANUAL TAMPERS, COIL	9 6 6
MANUAL TAMPERS, COIL TAMPING TOOLS, COIL TRIMMER, INSULATION, HAND TOOTH STRAIGHTENER, LAMINATION	9 6 6 7
MANUAL TAMPERS, COIL TAMPING TOOLS, COIL TRIMMER, INSULATION, HAND TOOTH STRAIGHTENER, LAMINATION WEDGE DRIVERS, ARMATURE	9 6 6 7
MANUAL TAMPERS, COIL TAMPING TOOLS, COIL TRIMMER, INSULATION, HAND TOOTH STRAIGHTENER, LAMINATION WEDGE DRIVERS, ARMATURE WEDGE REMOVER, ARMATURE	9 6 7 8 6 6
MANUAL TAMPERS, COIL TAMPING TOOLS, COIL TRIMMER, INSULATION, HAND TOOTH STRAIGHTENER, LAMINATION WEDGE DRIVERS, ARMATURE WEDGE REMOVER, ARMATURE WINDER'S HORN	9 6 7 8 6 6 8
MANUAL TAMPERS, COIL TAMPING TOOLS, COIL TRIMMER, INSULATION, HAND TOOTH STRAIGHTENER, LAMINATION WEDGE DRIVERS, ARMATURE WEDGE REMOVER, ARMATURE WINDER'S HORN WINDER'S LACING HOOK	9 6 7 8 6 6 8 8
MANUAL TAMPERS, COIL TAMPING TOOLS, COIL TRIMMER, INSULATION, HAND TOOTH STRAIGHTENER, LAMINATION WEDGE DRIVERS, ARMATURE WEDGE REMOVER, ARMATURE WINDER'S HORN	9 6 7 8 6 6 8 8
MANUAL TAMPERS, COIL TAMPING TOOLS, COIL TRIMMER, INSULATION, HAND TOOTH STRAIGHTENER, LAMINATION WEDGE DRIVERS, ARMATURE WEDGE REMOVER, ARMATURE WINDER'S HORN WINDER'S LACING HOOK	9 6 7 8 6 6 8 8
MANUAL TAMPERS, COIL TAMPING TOOLS, COIL TRIMMER, INSULATION, HAND TOOTH STRAIGHTENER, LAMINATION WEDGE DRIVERS, ARMATURE WEDGE REMOVER, ARMATURE WINDER'S HORN WINDER'S LACING HOOK WINDER'S SHEARS WIRE SKINNER AND STRAIGHTENER WIRE STRIPPERS	9 6 7 8 6 8 8 7 9
MANUAL TAMPERS, COIL TAMPING TOOLS, COIL TRIMMER, INSULATION, HAND TOOTH STRAIGHTENER, LAMINATION WEDGE DRIVERS, ARMATURE WEDGE REMOVER, ARMATURE WINDER'S HORN WINDER'S LACING HOOK WINDER'S SHEARS WIRE SKINNER AND STRAIGHTENER WIRE STRIPPERS MOTOR DRIVEN 888	9 6 7 8 6 8 8 7 9 9
MANUAL TAMPERS, COIL TAMPING TOOLS, COIL TRIMMER, INSULATION, HAND TOOTH STRAIGHTENER, LAMINATION WEDGE DRIVERS, ARMATURE WEDGE REMOVER, ARMATURE WINDER'S HORN WINDER'S LACING HOOK WINDER'S SHEARS WIRE SKINNER AND STRAIGHTENER WIRE STRIPPERS	9 6 7 8 6 8 8 7 9 9

### **CHAMFERING TOOLS**

#### **COMMUTATOR SLOT SHAVER II**



DESCRIPTION	CATALOG NUMBER
Slot Shaver II, complete with .020" thick HSS Insert	SLSC2020
Slot Shaver II, complete with .040" thick HSS Insert	SLSC2040
Slot Shaver II, complete with .060" thick HSS Insert	SLSC2060

Net Weight 2.5 oz., Shipping Weight 1 lb.

#### **COMMUTATOR SLOT SHAVER**



The Commutator Slot Shaver is a simple little hand tool to lightly chamfer the edges of commutator bars after undercutting. Pull it along the copper, shaving off the burs — flip it over and do the other edge.

Made of hardened high-speed steel; it can be quickly resharpened on a grinding wheel.

A new twist on an old design, this tool lightly chamfers commutator bar edges after undercutting. Pull it along the copper, shaving off the burs, then flip it over and do the edge of an adjacent bar.

The holder is designed for comfort, important when many bars need to be chamfered by one person! Made of high speed steel, the inexpensive & easily replaceable 45° inserts are available in .020", .040", & .060" thicknesses.

DESCRIPTION	CATALOG NUMBER
Insert Only, H.S.S., .020" thick; For Slot Shaver II	SLSC2B020
Insert Only, H.S.S., .040" thick; For Slot Shaver II	SLSC2B040
Insert Only, H.S.S., .060" thick; For Slot Shaver II	SLSC2B060

Net Weight 1 oz., Shipping Weight 1 lb.

DESCRIPTION	CATALOG NUMBER
Slot Shaver	SLSC73

Net Weight 3 oz., Shipping Weight 6 oz.

#### E-Z CHAMFER 90°



Specially ground 4 cornered carbide insert chamfers copper on both sides of commutator slots after undercutting. Flat sides of the insert can be used for scraping, deburring and chamfering corners on many parts. When insert is dull on all cutting edges, it is easily replaced.

DESCRIPTION	CATALOG NUMBER
E-Z Chamfer 90° complete with carbide insert	SLSC74
Replacement Carbide Insert only (90°)	SLSC745

Net Weight 4 oz., Shipping Weight 8 oz.



Special ground, 3 cornered insert, chamfers copper on both sides of commutator slots after undercutting. Tool is originally supplied with a H.S.S. insert. An optional Carbide replacement insert is available.

The offset blade holder provides knuckle clearance when deburring. This holder can be retracted into the handle along with extra inserts, for easier storage when not in use. The insert is easily replaced when it becomes dull on all three corners.

DESCRIPTION	CATALOG NUMBER
E-Z Chamfer 60° complete with H.S.S. Insert	SLSC74PT
Replacement Carbide Insert only (60°)	SLSC745PT

Net Weight 4 oz., Shipping Weight 6 oz.

- T 216.521.8567 800.435.5800 USA & Canada
- F 216.521.9476 Local & Overseas 800.344.9191 USA & Canada



#### **ADJUSTABLE SLOT SCRAPER**



For removing fins of mica and burs of copper from the edges of commutator bars after undercutting with a U-shaped saw.

Do not use for undercutting mica because any tool that rakes out the mica may injure the insulation by tearing out mica slivers and thus permitting dirt to work down into the insulation.

DESCRIPTION	CATALOG NUMBER
Slot Scraper	SLSC69
Extra Blade	SLSC694

Net Weight 8 oz., Shipping Weight 12 oz.

#### COMMUTATOR **SLOTTING FILES**

If you have only a few motors, undercut your mica with handy Commutator Slotting Files. They do the work rapidly, are easy to use and leave a 60° V-shaped slot. They are made in the two styles shown in the following:



DESCRIPTION	CATALOG NUMBER
8", Double End, Curved	SLFL08
Single End, with handle	SLFL01

#### **ELECTRICIAN'S KNIFE**

No. 1 Knife — Handmade from very highest quality steel. Hand ground. Screwdriver blade locks to prevent closing when in use.



6-1/2" long open. Net Weight 5 oz.

This is not an ordinary pocket knife. It is a guality tool guaranteed to satisfy the exacting demands of workmen accustomed to rugged and dependable performance.

DESCRIPTION	CATALOG NUMBER
No. 1 Electrician's Knife	ELKN01

#### MINI-BAR MICA HAND SAW

This hand-held undercutting saw is a handy way of accurately undercutting those small commutators where the use of a powered undercutter is too awkward or cannot be justified.

This tool uses replaceable blades which are ground to specific thicknesses so that the proper width undercut can be made. The blade is reversible so can be used for either a or a "Draw" cut.

Replaceable blades are a in thicknesses of .015", .0 .026", .030", .035", .040 .043".



o that it "Push"	DESCRIPTION	CATALOG NUMBER
available	Mini-Bar Mica Hand Saw, complete with tool holder and one blade (specify thickness)	SLSC (Plus Thickness)
020", )", and	Replacement Blade (Specify Thickness)	SLSCB (Plus Thickness)

#### **ORANGE STICKS**



Approximately 3/16" x 7"

Orange Sticks (called so because they were originally made from orange wood) can be used for forming, shaping and positioning fine magnet wire where fingers can't reach or work comfortably.

Also used for opening and holding open, contacts on relays and the such. These hardwood, non conductive, sticks have tapered ends for prying open contacts and can be trimmed and/or sharpened with a knife.

DESCRIPTION	CATALOG NUMBER
Orange Sticks, Package of 12	MARTOS

Net Weight 1 oz. (Pkg. of 12)

#### **WEDGE DRIVERS**

A Heavy-duty Wedge Driver is available in addition to the Standard model.

The large steel head of the Heavy-duty tool allows it to be used as a slide hammer, or to drive it with the palm of the hand.

Outer shells of both are made of brass to avoid rust; driving pins are made of steel.

Price schedule below shows sizes available.

Standard Model:
Shell length 6"
Overall length 7-3/8"
Avg. Net Weight 12 oz.



Overall length 10" Overall length 12-1/2" Avg. Net Weight 1 lb. 12 oz.



#### Two Models: Standard & Heavy-Duty

STANDARD MODEL				
SIZE	CATALOG NUMBER		SIZE	CATALOG NUMBER
1/32" x 3/8"	WGDR70S22		1/8" x 5/8"	WGDR70S27
1/16" x 3/8"	WGDR70S23		1/8" x 7/8"	WGDR70S28
1/16" x 5/8"	WGDR70S24		3/16" x 3/8"	WGDR70S30
3/32" x 5/8"	WGDR70S25		3/16" x 5/8"	WGDR70S29

HEAVY-DUTY MODEL					
SIZE	CATALOG NUMBER		SIZE	CATALOG NUMBER	
1/32" x 3/8"	WGDR70H22		1/8" x 1/2"	WGDR70H26	
1/16" x 3/8"	WGDR70H23		1/8" x 5/8"	WGDR70H27	
1/16" x 5/8"	WGDR70H24		1/8" x 7/8"	WGDR70H28	
3/32" x 5/8"	WGDR70H25		3/16" x 5/8"	WGDR70H29	

#### **COIL TAMPING TOOLS**



SIZE	CATALOG NUMBER
3/16" x 7/8"	CTTLD584
5/16" x 1-1/4"	CTTLD585
3/8" x 2"	CTTLD586
3/8" x 4"	CTTLD587

#### HANDLE-TYPE COIL TAMPERS

These Coil Tampers have the same tamping faces as the Coil Tamping Tools above but are mounted on 12" handles. The coils can be either pried or hammered into place. They are particularly advantageous on small stators.

The end of the handle is formed into a spoon shape for pressing the ends of the coils into place.

DESCRIPTION	CATALOG NUMBER
No. 1 Handle-Type Coil Tamper, 3/16" x 7/8" face	CTTL664
No. 2 Handle-Type Coil Tamper, 5/16" x 1-1/4" face	CTTL665
No. 3 Handle-Type Coil Tamper, 3/8" x 2" face	CTTL666

E sales@martindaleco.com

#### **COIL TAMPING TOOLS**



No more struggling with stator or armature windings that cannot be tamped with conventional tamping tools. Designed to tamp the windings in long bore or small bore stators where restricted space does not allow the use of conventional tamping tools.

A set consists of the pliers and 5 different jaws machined from steel bar stock. The jaws are easily changed to fit your special needs and may be purchased as a set or individually.

DESCRIPTION	CATALOG NUMBER
Tamping Pliers and Jaws (Set of 5)	ICTTPJ15
Tamping Pliers only	ICTTP
Jaws (Set of 5) 5/32" to 3/8"	ICTTPJ
#1 Jaws 5/32" width	ICTTPJ01
#2 Jaws 3/16" width	ICTTPJ02
#3 Jaws 1/4" width	ICTTPJ03
#4 Jaws 5/16" width	ICTTPJ04
#5 Jaws 3/8" width	ICTTPJ05

T 216.521.8567 800.435.5800 USA & Canada



#### ARMATURE WEDGE REMOVER



Net Weight 11 oz.

#### **INTERNAL COIL TAMPERS**

When using these internal Coil Tampers the operator does not put his hand inside the stator, as the Tamper uses the leverage principle and does away with most of the hammering. They are about 9" long and made of tough, hardened, high-grade steel.



**Bent Handle Type** — Similar straight handle type available for assembled coils.

DESCRIPTION	CATALOG NUMBER
Internal Coil Tamper, Bent Handle	CTTLB
Internal Coil Tamper, Straight Handle	CTTLS

Net Weight 8 oz.

#### **SLOT CLEANING BRUSHES**

Especially handy for cleaning burnout and chemical stripping residue in rotors and stators.

	4000000000
Õ	
$\bigcirc$	
Õ	here we have a second

Carbon steel wire brush (.006 dia. wire) is stiff enough to clean stubborn residue, but soft enough not to remove iron.

Long enough to reach those hard to get to places.

and a state of the state of the

No.	Brush Dia. / Length	<b>Overall Length</b>	Catalog Number
2510	1/4" x 2"	10"	SCLB2510
3110	5/16" x 2-1/2"	10"	SCLB3110
3812	3/8" x 2-1/2"	12"	SCLB3812
5012	1/2" x 2-1/2"	12"	SCLB5012
5018	1/2" x 2-1/2"	18"	SCLB5018
5024	1/2" x 2-1/2"	24"	SCLB5024
5034	1/2" x 2-1/2"	34"	SCLB5034
6220	5/8" x 3"	20"	SCLB6220
6230	5/8" x 3"	30"	SCLB6230

#### WINDER'S SHEARS

These high quality shears are made by Clauss Cutlery. All three are hot hammer-forged of high carbon cutlery steel.

Double plated chrome over nickel, with stainless steel tension adjusting screw, for maximum protection from rust.



No. 925 Multi-purpose compact cutting tool for wire splicing or electronic work. Cuts all medium gauge wires, insulation materials, etc. Overall length is 5" and cutting length is 1-3/4".



**No. 4248 & 4268** Similar to No. 925 but larger and for heavier duty. Overall length approximately 8" and cutting length No. 4248 is 2" & Model 4268 is 2-3/4".



No. TC-4-1/2

These insulation shears are perfect for cutting cloths of glass, cambric, etc. After starting a cut into the insulation, these shears can be easily "pushed" into the material to quickly form the shape needed. Overall length is 4-1/2" and cutting length is 1-1/4".

DESCRIPTION	CATALOG NUMBER
No. 925 Winder's Shears	WISH925
No. 4248 Winder's Shears	WISH4248
No. 4268 Winder's Shears	WISH4268
No. TC-4-1/2 Winder's Shears	WISHTC4

#### **INSULATION TRIMMERS**

Martindale Paper & Insulation Trimmers will cut Mylar, Nomex, and other paper insulation clean and parallel to the stator.

Available in three lengths to suit various size stators. They are available individually or in a set of all three.

These trimmers can be sent to Martindale for quality resharpening, saving you time and money.

DESCRIPTION	CATALOG NUMBER
Trimmers Set of (3), Insulation, Paper	SLSCPITO
Trimmer #1, Insulation, Paper, (11.5" O.A.L. x 3/8" W.)	SLSCPIT1
Trimmer #2, Insulation, Paper, (11.5" O.A.L. x 1/2" W.)	SLSCPIT2
Trimmer #3, Insulation, Paper, (20" O.A.L. x 1/2" W.)	SLSCPIT3

#### **ARMATURE AIR GAP GAUGE**

Longer lengths available upon request.

Four different sets available, including 24" and 36" long sets.



above makes cutting smooth and easy.

Will cut Mylar, Nomex, & other paper insulation.

The Model 16-U is naturally still our most popular model but we've had so many requests for still longer gauge sets, we have decided to make this gauge available in 24" and 36" long sets.

These gauges are universal in that their blades used singly or in combination, allow almost any size air gap to be measured.

The Model 16-D is designed for use on smaller diameter motors or where access is otherwise limited. Its narrower blades allow it access in smaller radii or where the inspection opening is restricted.

NO.	NO. OF BLADES	BLADE WIDTH	BLADE LENGTH	BLADE THICKNESSES (IN THOUSANDTHS)	CATALOG NUMBER
16-U	13	1/2"	16"	3, 4, 5, 6	AGGG16U
24-U	13	1/2"	24"	8, 10, 12, 15	AGGG24U
36-U	13	1/2"	36"	25, 32, 40, 50, 62	AGGG36U
16-D	9	1/4"	16"	2, 3, 4, 5, 6, 8, 10, 15, 25	AGGG16D

#### LAMINATION TOOTH STRAIGHTENERS



Overall Length: 8", 9" and 10" respectively.

- Designed with square end to permit use of socket or box end wrench to apply torque.
- Teardrop shaped blade adds strength and minimizes flexing when using full length of tool.
- Superior strength and leverage to any similar tools on the market.
- Available in three sizes to fit stator slots up to 150 h.p.

BLADE HEIGHT	WRENCH FITTING	CATALOG NUMBER
1/2"	3/8" Sq.	ICTTLTS1
5/8"	1/2" Sq.	ICTTLTS2
3/4"	3/4" Sq.	ICTTLTS3
Comple	ICTTLTS	



CATALOG NUMBER

MARTLH

#### WINDER'S HORN

This "winder's friend" is especially helpful for forming and shaping the ends of stator coils and armature windings.

The tool is made of a synthetic fiber material which will not damage the insulating film on magnet wire. Approximately 12" long and a 1/2" thick.

DESCRIPTION CATALOG NUMBER Winder's Horn MARTWH

Net Weight 2 oz.

#### HAND HELD WIRE STRIPPER



Complete Units - AFST1, 3 or 5





Replacement Heads AFSTMK1, 3 or 5



A transformer is required for use, and available in either 115V or 230V.	
The drive in the Abisofix® instrument is a series wound motor of 16-42V.	
It provides neat stripping of round magnetic copper wires in a variety of applications.	

WINDER'S LACING HOOK

An economical, time saving

magnet wire coils.

tool which speeds up the time

consuming job of securing soft

The pencil size handle gives the

winder better control of the tool

procedure. Practically pays for itself

the first time it's used. An absolute

must for each winders toolbox.

(compared to a small curved lacing needle) thereby speeding up the tedious tying/lacing, taping

COMPLETE UNITS	CATALOG NUMBER
Wire Stripper, For Wire .0078703149" or AWG 32-20	MAWSAFST1
Wire Stripper, For Wire .024007870" or AWG 22-12	MAWSAFST3
Wire Stripper, For Wire .0472015750" or AWG 16-5	MAWSAFST5

Abisofix<sup>®</sup> is a portable electric wire stripping machine that is handy and lightweight.

DESCRIPTION

Net Weight 1 lb.

Winder's Lacing Hook

Net Weight: 1 lb. 4 oz.

REPLACEMENT HEADS			CATALOG NUMBER
Head Only, For AFST1	MAWSAFSTMK1	(REQUIRED)	
Head Only, For AFST3	MAWSAFSTMK3	115V	MAWSAFTRAF0115
	MAWSAFSTMK5	230V	MAWSAFTRAF0230
Head Only, For AFST5	MAWSAFSTMKS	Not Woight: A lbs	

Net Weight: 1 lb.

Net Weight: 4 lbs.

#### MARTINDALE AUTOMATIC WIRE STRIPPER

#### Makes Wire Stripping Fast and Easy



Martindale Automatic Wire Strippers are always ready for use. They require no "cocking" or setting.

Their triple action of clamping the wire, cutting the insulation, and stripping it, is automatically timed and performed with one squeeze on the handles. Length of strip is regulated by amount of wire extending beyond the blades. Maximum strip is 7/8"; for longer, just repeat process. Wire size is shown beneath each stripping hole.

After the stripping action, a partial release of pressure on the handles opens jaws and wire is removed. Full release of pressure returns the tool to the starting position, ready for next strip.

		CATALO	S NUMBER
MODEL	SIZES	STRIPPERS	EXTRA BLADE SETS
No. 0-01	16 to 26 gauge, 6 stripping holes	MAWS001	MAWS001B
No. 02	10 to 22 gauge, 6 stripping holes	MAWS02	MAWS02B
No. 1-2	10 to 18 gauge, 4 stripping holes	MAWS12	MAWS12B
No. 3	8 to 12 gauge, 3 stripping holes	MAWS3	MAWS3B

Net Weight 13 oz., Shipping Weight 2 lb.

Blades are interchangeable and replaceable.

#### MARTINDALE HANDY WIRE STRIPPER

This Stripper is the answer to suggestions made by Electricians who use such a tool for long periods. It is large enough to fit the hand and the rounded edges reduce fatigue and irritation.

It is made of the best grade spring steel and the cutting edges are easily resharpened.

DESCRIPTION Handy Wire Stripper

Net Weight 4 oz.



WRST72

# With the second straightenerImage: second straightenerMarket StraightenerStraightenerMarket StraightenerStraightener

Extra Blades (Set) (Net Weight 1 oz.)

**HAND KNURLING TOOL** For shaft diameters from approximately 1/8" to 1-1/8"

Knurling expands the diameter of a shaft from approximately .001" to .010", to allow for a tighter press fit of a bearings inner race. The self-centering design of this three knurling wheel tool distributes the pressure evenly. It's portable in nature and can be taken out into the field, saving tear-down time and expense returning equipment to the shop to perform this operation on a lathe.

DESCRIPTION	CATALOG NUMBER
Hand Knurling Tool	MARTHKT
	10 000000

Net Weight 1 lb. 8 ozs., Shipping Weight 2 lbs.



WSST01B

#### **REPAIRMAN'S STETHOSCOPE**



This tool provides a low cost method of locating and identifying worn motor and equipment bearings and bushings, worn gears, and other trouble spots which can be traced by sound. The 2-piece probe reaches 11-3/4".

DESCRIPTION	CATALOG NUMBER
Repairman's Stethoscope	MARTRS
Not Woight 6 are Shippin	x Waight 1 lb

Net Weight 6 ozs., Shipping Weight 1 lb.



#### **RAWHIDE AND NYLON-FACED HAMMERS**

Jaw-Head Hammers With Rawhide Faces	Replacement handles available	Jaw-Head Hammers With Nylon Faces

JAW-HEAD HAMMERS			HEAD HAMMERS CATALOG NUMBER		
No.	Diam.	Net Wt.	With Rawhide Faces	With Nylon Faces	
J-1	1-1/4"	1-1/2 lbs.	HAMMJ1R	HAMMJ1N	
J-2	1-1/2"	2 lbs.	HAMMJ2R	HAMMJ2N	
J-3	1-3/4"	2-3/4 lbs.	HAMMJ3R	HAMMJ3N	
J-4	2"	4 lbs.	HAMMJ4R	HAMMJ4N	
J-5	2-3/4"	6-1/2 lbs.	HAMMJ5R	HAMMJ5N	

EXTRA FACES		CATALOG NUMBER	
NO.	DIAM.	WITH RAWHIDE FACES	WITH NYLON FACES
1	1-1/4"	HAMMJ1RF	HAMMJ1NF
2	1-1/2"	HAMMJ2RF	HAMMJ2NF
3	1-3/4"	HAMMJ3RF	HAMMJ3NF
4	2"	HAMMJ4RF	HAMMJ4NF
5	2-3/4"	HAMMJ5RF	HAMMJ5NF

Rawhide or Nylon Faced Hammers are a necessity for any electrical repair shop or machine shop.

Carefully balanced, they permit striking a controlled and powerful blow. Hammers can be purchased with either Rawhide or Nylon Faces in malleable iron heads. Handles are high-grade hickory.

**Rawhide Faces** — Made of top-grade water-buffalo hide, unsurpassed for resiliency and ability to transmit hard effective blows without damage to delicate surfaces; will not chip or shear, are non-sparking, and stand up under severe conditions.

**Nylon Faces** — The long-wearing tough qualities of Nylon make these faces very practical where an allaround soft-faced hammer is needed. They will not chip or mushroom, are resistant to oil, gasoline, etc., and are virtually indestructible.

Anyone can change the faces of these Hammers in a matter of seconds. It is necessary only to loosen the large nut under the head, slide the bottom half of the head down, and the faces are easily removed and replaced. When the nut is tightened, the jaws hold the faces in a vise-like grip.

Note: Diameters shown for Nylon Faces are the cavities into which the Faces fit. Striking surfaces are 1/4" larger.

#### **RAWHIDE MALLETS**



Rawhide Mallets are designed for lighter duty work than the Hammers shown above. They are available in two types: Regular and Loaded.

**Regular Mallets** — are lightweight, perfect for gentle tapping or sharp light blows on precision operations.

Loaded Mallets — are weighted with strip lead between the rawhide layers in the center of the head where it is never seen or used as a striking surface. The Loaded Mallet weighs about twice the Regular Mallet at little extra cost.

	REGULAR RAWHIDE MALLETS						
NO.	DIAM.	LENGTH	NET WEIGHT	CATALOG NUMBER			
0	1"	2"	1/8 lbs.	HAMM00			
1	1-1/4"	2-1/2"	1/4 lbs.	HAMM01			
2	1-1/2"	3"	3/8 lbs.	HAMM02			
3	1-3/4"	3-3/8"	1/2 lbs.	HAMM03			
4	2"	3-1/2"	3/4 lbs.	HAMM04			
5	2-3/4"	4-1/2"	1-3/8 lbs.	HAMM05			
6	2-3/4"	4-3/4"	1-1/2 lbs.	HAMM06			

LOADED RAWHIDE MALLETS						
NO.	DIAM.	LENGTH	NET WEIGHT	CATALOG NUMBER		
7	1-1/4"	2-1/2"	1/2 lbs.	HAMM07		
8	1-1/2"	3"	3/4 lbs.	HAMM08		
9	1-3/4"	3-3/8"	1 lbs.	HAMM09		
10	2"	3-1/2"	1-1/4 lbs.	HAMM10		
11	2-3/4"	4-1/4"	2-1/2 lbs.	HAMM11		

www.martindaleco.com

#### **TRUCOTHANE™ DEAD BLOW HAMMERS**

The original is back and it's better than ever. From the same people who developed and introduced the original soft faced, one piece hot cast hammer with dead blow heads.

The shot filled head provides dead blow action for sustained impact, maximum power and striking force. The one piece construction has no exposed metal on the head or handle.



These high quality custom formulated hot cast polyurethane hammers will not mark or spark and outlast other rawhide, rubber, nylon, and other plastic type heads many times over.

	MODEL NO.	FACE DIAMETER	HEAD LENGTH	OVERALL LENGTH	NET WEIGHT	CATALOG NUMBER
	0	1-1/4"	3-1/8"	10"	10 oz.	HAMMTO
	1	1-5/8"	3-3/4"	11"	1-1/8 lb.	HAMMT1
STANDARD MODELS	2	2"	4-1/8"	12-3/4"	1-1/3 lb.	HAMMT2
	3	2-1/4"	4-5/8"	14"	2-5/8 lb.	HAMMT3
	4	2-5/8"	5-3/8"	15-1/4"	3-1/4 lb.	HAMMT4
	SO	7/8"	3-1/8"	10"	6 oz.	HAMMTSO
SLIMLINE	S1	1-1/4"	4-1/4"	10-1/2"	14 oz.	HAMMTS1
MODELS	S2	1-1/2"	4-1/4"	12"	1-1/8 lb.	HAMMTS2
	S3	1-5/8"	5-1/4"	13"	1-3/8 lb.	HAMMTS3
	7	2-3/4"	7"	20"	5-1/2 lb.	HAMMT7
SLEDGE MODELS	12	3-1/4"	8"	30"	10-1/2 lb.	HAMMT12
	14	3-1/4"	8"	36"	12 lb.	HAMMT14

#### **MARTINDALE PRODUCTION AIR GRINDER**

Model M-12 air grinder is designed for hard usage such as encountered in foundries, etc. It will stand up to steady production work with rotary burs and with mounted grinding wheels or points up to 1-1/2" diameter. Turns 18,000 r.p.m., 1/2 h.p. at 90 PSI air pressure. Uses approximately 18-22 CFM.

This hand-held air grinder has a built-in speed regulator, specially designed nose piece for firm easy grip, 1/4" female N.P.T.F. air inlet, 1/4" collet, and the necessary wrenches as standard equipment.

Air exhaust is at the front of the air grinder around the spindle, where it effectively blows grinding dusts away from the work and operator. OPTIONAL EQUIPMENT: 1/8" reducer can be substituted for 1/4" collet at no extra charge.



DESCRIPTION	CATALOG NUMBER
Model M-12 Air Grinder, complete with 1/4" collet and wrenches	AGRD1814
1/8" Reducer (Optional Equipment)	AGRDC18
Automatic Air Filter-Lubricator (See Description Below)	FILL01



#### **NO. 38-A CARBIDE ROTARY BUR KIT**

The No. 38-A Kit includes a high-speed precision manufactured air grinder with 1/4" collet. This grinder is similar to the one above except it's operating speed is 21,000 r.p.m. to accommodate the 5 solid carbide 1/4" diameter rotary burs included with the kit.

Burs included are RB4, RC4, RD4, RH4, and RJ4; all are 1/4" diameter cutting surface and shank, of five different shapes. All are "double-cut" making them suitable for use on either extremely hard or relatively soft materials. Burs can be re-ordered by number and are listed on page 30.

The high quality grinder is manufactured for Martindale by ARO<sup>®</sup> and is a compact 5-3/4" long; lightweight 1 lb., 6 oz.; and high speed 21,000 r.p.m. Recommended air pressure is 70-90 PSI, air inlet is 1/4" female N.P.T.F.

DESCRIPTION	CATALOG NUMBER
Carbide Rotary Bur Kit No. 38-A, Complete in storage box	CABU38A
Automatic Air Filter-Lubricator (See Description Below)	FILL01

Net Weight 2 lbs. 6 ozs., Shipping Weight 4 lbs.



#### AUTOMATIC AIR FILTER-LUBRICATOR



Highly recommended for use with any air powered tools. This Fog Type Filter-Lubricator is designed to remove dirt, pipe scale, and most liquid aerosols which cause wear and premature failure. It also will deliver the right amount of lubrication to extend the service life of your air tools.

Consists of 2 die cast bowls with transparent nylon sight gauges, a 40 micron filter element, and a connecting nipple.

DESCRIPTION	CATALOG NUMBER
Automatic Air Filter-Lubricator	FILL01
Air Hose, 10 ft. long; complete with quick connector	AIRH10

#### MARTINDALE HAND GRINDER built by DUMORE



Model 10Model 10 is ideal for full-shift<br/>duty in the tool room or in<br/>production bench grinding,<br/>de-burring, etc. It is forced-<br/>air cooled, and two precision<br/>bearings in steel seats assure<br/>positive rigidity. Model 10 uses<br/>high-speed steel or carbide burs<br/>up to 3/8" diam., or mounted<br/>wheels up to 1" diam. Has 1/4"<br/>collet and 1/8" reducing sleeve.

Model 10 is U/L approved and sold with our guarantee of satisfaction.

DESCRIPTION	CATALOG NUMBER
Model 10 Grinder with 1/4" collet and 1/8" reducing sleeve	DUMG10

Net Weight 3-1/2 lbs., Shipping Weight 5 lbs.



#### www.martindaleco.com

1375 Hird Avenue Cleveland, OH 44107-3008

E sales@martindaleco.com

T 216.521.8567 800.435.5800 USA & Canada F 216.521.9476 Local & Overseas 800.344.9191 USA & Canada

Martindale Motor Repair Hand Tools catalog rev. 1 / Feb. 2019