

From all over the World...

"I just wanted you to know how pleased I am after six months of using The American Facetor. The versatility that has been built into such a precise, compact machine is great. It's not often these days that you can buy a quality product for such a moderate price."

Morris I. Feinstein, D.D.S.,
Philadelphia, PA

"The American Facetor has great potential. It does everything that the literature promised it would do. We believe that your Programmed Index Gears represent a tremendous advance in faceting. We found the alignment to be so accurate that we found it unnecessary to use the cheater."

Faye L. Klug, Pittsburgh, PA

"The (American Facetor) machine has exceeded my expectation and with a little more use and familiarization, I feel we will get along real well. I have finished one large emerald cut smokey quartz and have half finished the very delightful tri-polar from Lapidary Journal."

R. E. H. Ryan, Malanda
Queensland, Australia

congratulations and thanks...

It is impossible to put into words how I feel about your facetor. It is everything you claimed and I'm very happy I chose yours... I looked over every machine you can think of and chose yours through your ads and your letters. I had never seen one, so you might say I trusted you—glad I did too. I have cut several stones—all perfect too and have not goofed up any so far.

Muzon D. Morgan
Van Nuys, California

for the most significant
Faceting development in 100 years...

The American FacetorTM

The story of the American Facetor

A Precision Precedent

The American Standard Corporation, which is an engineering and precision manufacturing Company, has been developing and researching ideas for over 50 years.

The facetor program was initiated by Alois Tlush, Vice President of Quality Engineering and a faceter in his own right. Al discovered Earl Montgomery, who was developing a new facetor, and was so intrigued with this machine and its potential to simplify the art of faceting, that he suggested that Earl associate himself with American Standard. Frank Tlush, Vice President of American Standard, gave the go-ahead to explore this idea. Charles Tlush, Product Development Engineer, was put in charge of developing initial production prototypes. Charley is of the "old school" who believe that any job worth doing is worth doing right.

The patent searches extended as far back as 1900 and until the advent of THE AMERICAN FACETOR, no new unique advancements or developments in this state of the art were made. The granting of this important paper is conclusive evidence that THE AMERICAN FACETOR stands alone in being the most advanced faceting system today.

To further support the logic of this facetor, Earl Montgomery, the inventor, is a professional engineer, a skilled professional faceter of over 20 years, a gemologist, a teacher of faceting, a writer and also a prolific inventor whose ideas we all will be hearing more of.

A Fresh Look at Faceting

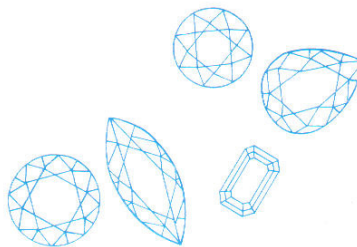
Why was THE AMERICAN FACETOR invented?

THE AMERICAN FACETOR was invented because of the problems associated with the large, heavy, complicated, difficult to operate machines. Amateurs found them generally too difficult to operate and understand. Earl Montgomery realized this in trying to teach beginners. With this in mind, and with his engineering and faceting experienced background, THE AMERICAN FACETOR evolved. Size, weight, stability and simplicity were the real problems and Earl eliminated these by simply removing the column and its related heavy, unbalanced, overhanging members. These major and critical changes then allowed THE AMERICAN FACETOR to be compacted and, with inventive manufacturing engineer-

ing, it became a small, light, rigid machine that provided greater degrees of capabilities than the large, conventional machines. This compactness also provided inherent precision and repeatability requirements which are so desirable when faceting. Rotary adjust or cheater requirements are seldom required because of this built-in alignment and is only used for certain special cuts. The pivoting principal of the arm allows the facetor to self-adjust for any size stone to 75 mm.

Another Breakthrough

Prototypes were put into the hands of known, experienced faceters for evaluation, followed by actual use by students in beginners classes for faceting. This proving ground was the source of other developments. Students, for instance, tired of cutting only rounds but, as any faceter knows, cutting ovals, hearts, etc., can be a problem and a frustration. So Earl put on his "thinking cap" and—back to the drawing board! The surprise: the amazing and fantastic PROGRAMMED INDEX PLATES—no numbers, just index notches—now all effort could be directed to concentration on cutting; no more record keeping, and forget the cheater; the elimination of collets and long overhangs; the Dop Index Plate Assembly, which becomes a unit that can be interchanged and removed at any time with no loss of reference or adjustments; Stainless Steel Dops for better control and heat concentration—no more burnt fingers; continuous reading protractor; and, the elimination of the right angle adapter, sub-plates for additional capacities, outboard quill supports, etc. For a sensitive feel in cutting, the head is counterbalanced for feel and lightness. The features and performance are a revelation and, as one uses and adjusts to this facetor, it becomes a continuous source of surprises.



American Facetor™



Standard Equipment and Specifications

SPLASH PAN

1/10 H.P. BALL BEARING MOTOR—SIX (6) FOOT
POWER CORD

CONSTANT HIGH TORQUE, ELECTRONIC
VARIABLE SPEED—0-1000 R.P.M.

TRANSFER FIXTURE

HIGH ANGLE REFERENCE POINTER

ONE (1) 64 INDEX PLATE

SIX (6) STANDARD PRECISION STAINLESS
STEEL DOPS (3-1/8" DIA. DOPS, 3-1/4" DIA.
DOPS)

PLASTIC DRAIN HOSE

OPERATOR INSTRUCTION BOOKLET

AMERICAN STANDARD warrants the AMERICAN
FACETOR against defects in material and workman-
ship for a period of one year from date of purchase.

A truly portable full-size facetor. Only 12" long, 8" wide, 10" operating height and weighs only 12 lbs., yet has excellent rigidity.

New programmed index plates simplify your cutting operation on other than round stones.

No quill—allows you freedom at will to cut mixed shapes and repetitive stones.

No column—eliminates overhang, twisting and costly, needless equipment.

No additional adapters are required to cut table of stone at 0°.

Because of its revolutionary design, this machine cuts a 3" stone on its 6" lap.

Protractor setting is always constant when working.

Rotary fine adjust 16°, vertical fine adjust 8°.

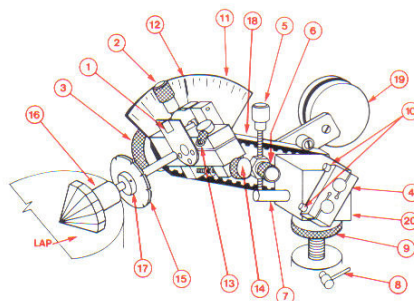
Power 115V 1.5 amps.

Use 6" cast or 1/16" laps with backup plate.

Spindle diameter 1/2".

VIEW 1 Terminology Faceting Mode

1. Index plate locking pawl
2. Pawl clamp screw
3. Head clamp knob
4. Girdle block
5. Stop adjust screw
6. Stop lock screw
7. Depth stop
8. Vertical adj. lock lever
9. Vertical adj. knob (cheater)
10. Lock set screw girdle
11. Protractor
12. Pointer
13. Rotary adj. lock
14. Rotary adjust knob (cheater)
15. Index plate
16. Dop
17. Index plate lock screw
18. Pivot arm
19. Counter balance
20. Pivot block



Notice how this dop index plate combination unit eliminates the conventional quill design and the problem associated with staying with a cut until it's finished, with never a loss of reference.

By using several dop index plate units you can grind stones in a production sequence, or grind various mixed cuts, whatever you wish. This design eliminates expensive and unnecessary equipment!

To grind a round brilliant, follow these 10 easy steps.

Grind a preform, lap the table to a smooth flat and mount it on a round dop with dop wax.

Using a 64 space index plate (item 15) slip it over the free end of the dop with the numbered side facing the preform.

Allow about 1-1/2" of the dop to extend from the index plate to the end of the dopped stone.

Tighten the set screw (item 17) to lock the index plate to the dop.

Insert the free end of the dop in the head base (See view 1).

Retract the index plate locking pawl (item 1) by turning the pawl clamp screw (item 2) counter-clockwise.

Seat the pawl in the index plate notch which represents the main facet just above the set screw (item 17) position 64.

Clamp the rotary adjust lock (item 13).

Set the required angles by loosening head clamp knob (item 3).

Vertical cheater is regulated by (item 9), stop by (item 5) and rotary cheater adjustment by (item 14).

This same procedure is used for all shapes just by using the programmed index plate.

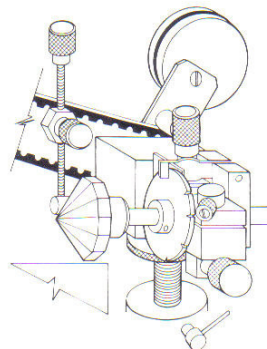
VIEW 2 Girdle Grinding Mode

Remove complete head with dop index plate assembly by removing head clamp knob (item 3).

Insert spindle of head assembly into girdle block (item 4). Position and lock.

Set stone on lap. Dop should be approximately parallel to lap. Lock assembly.

Continue grinding sequence.

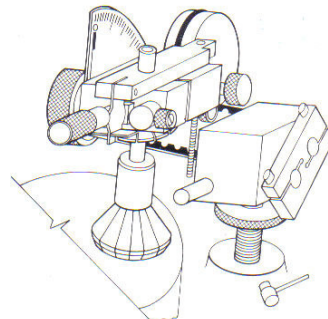


VIEW 3 Table Grinding Mode

Loosen head clamp knob (item 3).

Rotate head assembly, with dop index plate assembly into a zero position and lock.

Continue grinding sequence.



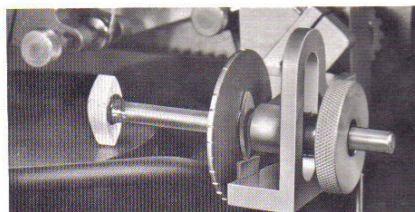
The American Facetor™

Accessory Equipment

Linear Preformer

Part No. 1035

The AMERICAN FACETOR Linear Preformer is a unique device which easily mounts in the girdle block of THE AMERICAN FACETOR. It works off templates and nine (9) are included as a set for preforming all the popular shapes. From preform to faceting is a smooth continuous operation without loss of reference.



The Preformer will produce a precise preform without the tedious hand skills that are now required. Not only will it preform, but will have the added feature of shaping the pavilion and also forming cabachons.

Preformer Templates (all included)

MARQUIS

Medium 8 x 16 mm
Large 9 x 21 mm

OVAL

Small 11 x 13 mm
Medium 13 x 18 mm
Large 18 x 25 mm

PEAR

Small 8 x 11 mm
Large 9 x 14 mm

HEART

Small 9 x 10 mm
Large 14 x 14 mm

Above listed Templates are basic and allow preforming of an unlimited range of sizes, from the smallest stone to the largest. Shipping weight—packaged: 1 lb.

Transfer Fixture

Part No. 1026

We have had many requests from owners of other types of faceting machines regarding our transfer fixture. Our fixture is very versatile and easier to work with than the conventional fixtures offered by others. It comes as standard equipment with THE AMERICAN FACETOR.

Water Tank

Part No. 1024

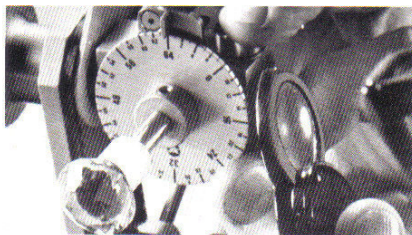
Non-corrosive all plastic Water Tank and Valves
Shipping Weight: 2 lbs.

"Gem Cutting With The AMERICAN FACETOR"

Part No. 1046

This book is easy to read, understand, and is primarily a basic lesson in faceting.

Index Plates



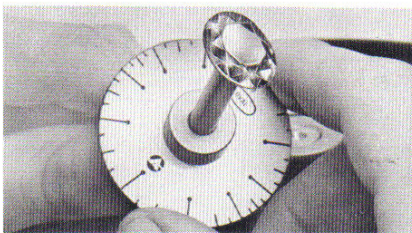
Standard Index Plates

64	Part No. 17101	96	Part No. 17103
72	17102	120	17104

"Computerized" Programmed Index Plates

8 Main Oval	Part No. 17109
10 Main Oval	17105
Marquis	17107
Heart	17108
Pear	17106
Emerald	171010

Instruction Booklet—"How to Use Programmed Index Plates" Included.



Stainless Steel Dops

1/8" Set (Flat-Cone-"V")

Part No. 141-3

3/16" Set (Flat-Cone-"V")

Part No. 147

1/4" Set (Flat-Cone-"V")

144-6

Combination Aluminum and Stainless Steel Dops

3/8" Set (Flat-Cone-"V")

Part No. 148

1/2" Set (Flat-Cone-"V")

149

5/8" Set (Flat-Cone-"V")

1410

3/4" Set (Flat-Cone-"V")

1420

The advantages of the stainless steel dops over the conventional aluminum or brass is its rigidity and low heat conductivity. Very little heating time is required and all the heat remains at the dopping point. No overheated stones or burnt fingers.

Transformer

Part No. 1044

Step down Transformer (for Overseas Application)

Input 230 V, 50-60 HZ.

Output 115V

Shipping Weight: 6.5 lbs.

Our Transformers are heavy duty and well made and are intended for overseas use where 115 V current is not available.

Extensive life tests have been conducted with this unit under varying electrical conditions and no noticeable performance characteristics developed.

As a rule, Transformers are generally available in most countries.

Laps and Polishing Materials

THE AMERICAN FACETOR now makes available all the necessary laps, polishing wheels and compounds that you will require to cut most materials. We offer two choices of price range.

Kit Number 1 is the more expensive and includes metal plated diamond laps in 260 mesh and 1200 mesh grades. The advantages of these laps are fast cutting, they are clean and ready to use, long lasting, and cannot be contaminated.

Kit Number 2 provides copper coated discs which must be charged with diamond powder. These laps, when properly processed (we tell you how in "Gem Cutting With The American Facetor"), will do an ex-

cellent job and, the beauty of it is, they can be used over and over by simply charging or adding more diamond into the copper as it is depleted.

Both kits require polishing laps. Acrylic (plastic) or Phenolic laps with cerium oxide as the abrasive are used to polish quartz, beryl, etc. Tin or zinc polishing laps with Linde 'A', an alumina oxide, as the abrasive is used for polishing synthetics. Dop wax is another required item and is used as a cement to hold the stone on the dop.

We suggest that you read up on the subject of cutting and there are many good books available. Our own book, "Gem Cutting With The American Facetor", will give you an excellent basic background.

The secret in cutting is to understand how to use your laps and what to expect of them. With your mastery of the laps, getting to know the various minerals, and with the convenience and simplicity of operation of your AMERICAN FACETOR (the finest and easiest of all facetors to work with and understand), you will be on the way to becoming an accomplished facetor.

There is no secret to faceting, it is all just plain common sense, requiring some reading, experimenting and practice.

Lap and Polish Kit No. 1 (6" Diameter x 1/2" Bore)

	Part No. 1040
1 1200 Mesh Diamond Metal Bond	1040-11
1 260 Mesh Diamond Metal Bond	1040-10
1 Phenolic (Polishing Plate-Plastic)	1040-12
1 Tin Polishing Plate	1040-13
1 Container Cerium Oxide	1040-7
1 Vial Linde 'A'	1040-8
1 Dopping Wax	1040-9

Lap and Polish Kit No. 2

(6" Diameter x 1/2 Bore)

	Part No. 1041
4 Copper Clad Discs (sets of 4 only)	1041-1
1 Acrylic Disc	1041-4
1 Master Back Up Plate (for Acrylic Disc and Copper Laps)	1041-2
1 Container Cerium Oxide	1040-7
1 Polishing Compound Kit (1 Syringe each—325, 1200, 3000,	

14000 Mesh Diamond, Linde 'A', Extender)	1041-6
1 Zinc Lap	1041-3
1 Dopping Wax	1040-9
1 Roller	1041-8

If Kits are ordered with the AMERICAN FACETOR, see "General Terms".

Shipping Instructions for Kits Nos. 1 and 2

All shipments are F.O.B. Trevoze, Pennsylvania

Shipping Weight—7 lbs.

Shipped U.P.S. where available.

Shipped Domestic where U.P.S. is not available.

Air Parcel Post available at additional cost.

General Terms

All prices are F.O.B. Trevoze, Pennsylvania, U.S.A.

All shipping via U.P.S. (where allowed).

Shipped domestic where U.P.S. is not available.

Air Parcel Post available at additional cost.

Shipping Weight of basic standard equipped machine is 20 lbs.

Shipping Weight of basic standard equipped machine, plus Lapping Kit is 27 lbs.

Pennsylvania residents—add 6% sales tax (including shipping charges)

Terms: Net Cash With Order—No C.O.D. or Credit Cards

Overseas Shipments

It has been our experience that shipping by air freight (we recommend Emery Air Freight) has proven to be economical, safe and quick. Very little additional packaging is required and weight is kept to our standard shipping weight. Surface shipping requires costly extra packaging which could also double the standard weight. Brokers fees are required and transit time could be up to 12 weeks or more, depending on shipping. Air freight takes 3 days to Europe and 10 days to any other part of the world. We will advise costs, surface or air.

"Last year Dr. L. Miller imported one of your fine facetors for a local mineralogical show in Cape Town. I was fortunate enough to be able to purchase this from him, and, as a rank beginner in the field, was able to turn out really perfect stones in most standard cuts. As you can imagine, there is little time in a busy schedule to devote to this hobby. But, because of the compact nature of the apparatus, I can stand it on the back of my desk in my study and, merely by pulling it forward in amongst the clutter of medical journals, spend a profitable hour completing a stone. I must compliment you on a very fine, accurate, and versatile machine."

E. J. Immelman, Senior Surgeon
University of Cape Town
Department of Surgery
Cape Town, South Africa

"Your fine machine (The American Facetor) is a pleasant experience which makes it easy to be enthusiastic in selling."

W. Victor Forbes, Cocoa Beach, FL

A cut above the rest

"The American Facetor unit is very compact and exceptionally clean in use and I hope to have many hours of pleasure with it. I can really appreciate your unit after having used several other highly touted units now on the market."

William H. Trench, Bricktown, NJ

I have indeed enjoyed my new American Facetor, with no lessons whatsoever—just reading directions—I can facet and polish what seem to me to be reasonably good "brilliants."

Howard E. Skipper
Birmingham, Ala.

"I honestly feel The American Facetor is one of the best and most precise machines on the market. I sell and personally own a Lee and also a Graves; yours is a far better machine than either of these."

Ken Sheldon, Thomaston, CT

The American FacetorTM

The American Standard Corporation, P.O. Box 126, 4151 Street Road, Trevose, Pa. 19047 Phone (215) 639-3500