

Engrave-A-Crete

***MONGOOSE* AIR** Pneumatic Motor **Operating Manual**



Patents Pending

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Mongoose AIR™

Patents Pending!



Cut beautiful patterns and designs with little effort.

Cut faster and straighter.

Cut with great accuracy and do perfect circles, too!

Now, a precision, compact decorative concrete engraving saw with a powerful high RPM pneumatic motor.

Over Speed Protected

Reduced Noise

Motor Brake

Soft Start



Mongoose AIR is precision milled from solid blocks of 6061 aluminum.

Features include:

- ◆ Spring loaded head. Press down to cut. Let up and the blade pops out of the cut.
- ◆ Vacuum port makes dust-less cutting a pleasure. Connects to most standard shop vacs.
- ◆ Precision front pointer flips up out of the way to cut closer to walls.
- ◆ Powerful 13,000 RPM.
- ◆ Cutting depth is adjustable on the fly with a turn of the screw.
- ◆ 3.100" x .125" Premium made in USA diamond blade is included.

Wear Respiratory Protection

Wear Eye Protection

Wear Hearing Protection

Wear personal protective equipment appropriate to the tool and the material worked.

WARNING

General Product Safety Information

Read and understand this manual before operating this product. It is your responsibility to make this safety information is available to others that will operate this product.

Failure to observe the following warnings could result in injury.

SAVE THESE INSTRUCTIONS

WARNING:

MISUSE or failure to follow the safety rules stated in this instruction manual may cause serious personal injury.

Always install, operate, inspect and maintain this product in accordance with all applicable standards and regulations (local, state, country, federal, etc.).

Always use clean, dry air at 90 psig (6.2 bar/620 kPa) maximum air pressure at the inlet. Higher pressure may result in hazardous situations including excessive speed, rupture, or incorrect output torque or force.

Be sure all hoses and fittings are the correct size and are tightly secured.

Ensure an accessible emergency shut off valve has been installed in the air supply line, and make others aware of its location.

Install a properly sized Safety Air Fuse upstream of hose and use an anti-whip device across any hose coupling without internal shut-off, to prevent hose whipping if a hose fails or coupling disconnects.

Do not use damaged, frayed or deteriorated air hoses and fittings.

Keep clear of whipping air hoses. Shut off the compressed air before approaching a whipping hose.

Always turn off the air supply, bleed the air pressure and disconnect the air supply hose before, storing, installing, removing or making adjustments, or before performing any maintenance on this tool.

Do not lubricate tools with flammable or volatile liquids such as kerosene, diesel or jet fuel. Use only recommended lubricants.

Keep work area clean, uncluttered, ventilated and illuminated.

Do not remove any labels. Replace any damaged label.

Product Safety Information

When Using the Tool:

Always wear eye protection when operating or performing maintenance.

Always wear hearing protection when operating this tool.

Always use personal protective equipment appropriate to the tool and the material worked. This may include dust mask or other breathing apparatus, safety glasses, ear plugs, gloves, apron, safety shoes, hard hat and other equipment.

When wearing gloves always be sure that the gloves will not prevent the throttle mechanism from being released.

Product Safety Information, continued

Prevent exposure and breathing of harmful dust and particles created by power tool use. Some dust created by cutting, sawing, grinding, drilling, and other construction activities contains chemicals known to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are: lead from lead based paints, crystalline silica from bricks and cement and other masonry products, and arsenic and chromium from chemically treated lumber. Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: work in a well ventilated area, and work with approved safety equipment, such as those dust masks that are specially designed to filter out microscopic particles.

Keep others (bystanders, children and visitors) a safe distance from your work area, or ensure they use appropriate Personal Protective Equipment.

This tool is not designed for working in explosive environments, including those caused by fumes and dust, or near flammable materials.

This tool is not insulated against electric shock.

Be aware of buried, hidden or other hazards in your work environment. Do not contact or damage cords, conduits, pipes or hoses that may contain electrical wires, explosive gases or harmful liquids.

Keep hands away from cutting area and the blade. Keep all loose clothing, long hair and jewelry away from the tool.

Power tools can vibrate in use. Vibration, repetitive motions or uncomfortable positions may be harmful to your hands and arms. Stop using any tool if discomfort, tingling feeling or pain occurs. Seek medical advice before resuming use.

Keep your body stance balanced and firm. Do not overreach when operating this tool.

Maintain a firm grip with both hands on the saw and position your body and arm to allow you to resist KICKBACK forces

Anticipate and be alert for sudden changes in motion, reaction torques, or forces during start up and operation.

The blade may briefly continue rotating after the throttle is released.

Allow the blade to come to a complete stop before picking up the tool.

To avoid accidental starting - ensure tool is in "off" position before applying air pressure.

Avoid the throttle lever when carrying, and release throttle with loss of air.

Do not carry or drag the tool by the hose.

Do not use power tools when tired, or under the influence of medication, drugs, or alcohol.

Never use a damaged or malfunctioning tool or accessory.

Do not modify the tool, safety devices, or accessories.

Do not use this tool for purposes other than those recommended.

Do not use this tool if the actual free speed exceeds the rated rpm. Check the free speed of the motor before mounting a blade, after all tool repairs, before each job and after every 8 hours of use. Check speed with a calibrated tachometer, without the blade installed.

Do not use any blade whose maximum operating speed, as defined by its manufacturer, is less than the rated speed of the tool.

Inspect all diamond blades for chips or cracks prior to mounting. Do not use a blade that is chipped, cracked or otherwise damaged.

Inspect the arbor, threads & hub nuts for damage & wear prior to mounting a blade.

Make certain the diamond blade properly fits the spindle.. Do not use reducing bushings to adapt a blade to any arbor unless such bushings are supplied by and recommended by the blade manufacturer.

Ensure that the blade is correctly mounted and tightened before use.

Before starting this tool, the operator shall make sure that no one is in the plane of rotation.

Wear Personal Protective Equipment and remove flammable objects

Product Safety Information, continued

from the work area to ensure that sparks and debris do not create a hazard when using this tool.

After mounting a diamond cutting blade, place the tool securely on its wheels on concrete or similar hard surface in a protected enclosure, run the motor at gradually increasing speeds, for at least 90 seconds. Make certain no one is in front of or in line with the blade. Be aware that a blade may fail at this or any other time if it is defective, improperly mounted or the wrong size and speed. Stop immediately if considerable vibration or other defects are detected. Shut off the air supply and determine the cause.

Do not use this tool on materials whose dust or fumes can cause a potentially explosive environment.

Make smooth blade contact with the surface and avoid any bumping action or excessive sudden pressure.

If the tool is dropped or bumped, turn off the air supply and carefully examine the diamond blade. Discard it if damaged, chipped or cracked. Before reuse, run the tool in a protected enclosure following the same precautions used after first mounting the blade.

Before the tool air is picked up off the surface, the throttle shall be released and the blade shall come to a stop.

Do not use the tool without the blade guards and covers in place.

Blade guard opening must face toward the pavement and away from the operator.

Do not use other types of grinding wheels. Do not use wire wheels, cut-off wheels, composite or non-metallic-grinding wheels on this tool.

Always use blades with correct size and shape arbor holes. Blades that do not match the mounting hardware of the saw will run eccentrically causing loss of control.

Do not attempt to disassemble the internal Speed Controller. It is available only as a unit.

The use of other than original manufacturers replacement parts may result in safety hazards, decreased tool performance and increased maintenance, and may invalidate all warranties.

Tool repairs and service should be performed only by qualified authorized trained personnel.

Only Mongoose AIR can be operated wet or dry

See dust control water whip installation on page 25.

The diamond blades used with all Engrave-A-Crete Engravers are made to run dry.

All blades supplied by Engrave-A-Crete have segments that are laser welded to the core.

Blades of unknown origin may have soldered on segments and are very dangerous to use when cutting dry.

Cutting dry has many advantages and has little effect on blade life.

Operate with a shop vacuum as a dust collector. (5 to 6 1/2 hp shop-vacs work well)

Tip: Make operations easier by adding on extra sections of vacuum hose. 12 to 20 feet or more is really nice. Also, install a Gortex[®] Clean Stream filter on the vacuum for better operation.

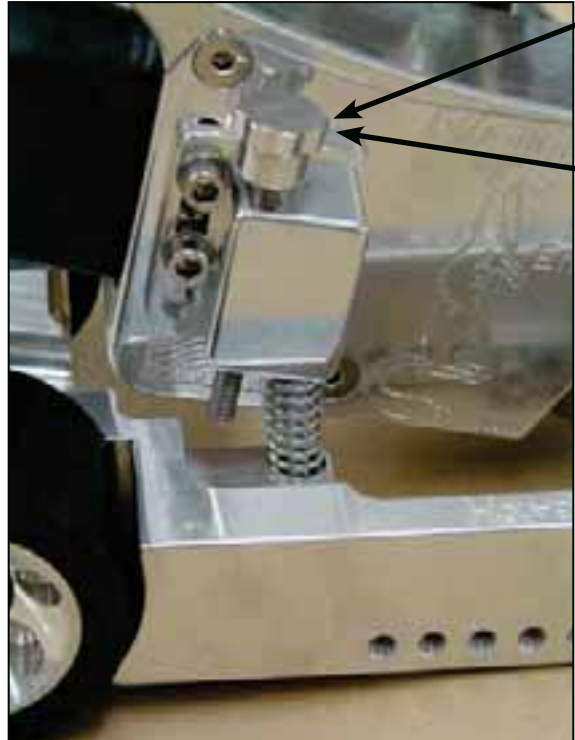
Mongoose AIR Operating Adjustments



Adjusting the depth of cut

Turn the depth limiting screw in or out depending on whether more or less depth of cut is desired. If the depth limit screw turns too freely causing changes in the depth of cut, apply a very small amount of low strength thread locker (Loctite) to the threads

Fig. 1



Turn the depth limiting screw clockwise to reduce cut depth.

Turn the depth limiting screw counter-clockwise to increase cut depth.

The depth limiting screw has 20 threads per inch.

5 Revolutions = 1/4 inch = 0.250"

2 1/2 Revolutions = 1/8th inch = 0.125"

1 1/4 Revolutions = 1/16th inch = 0.0625"

1 Revolution = 1/20th inch = 0.050"

Fig. 2

Adjusting the Pointers and Guides to Align with the Blade



Fig. 3

Remove the front line-guide from the chassis.

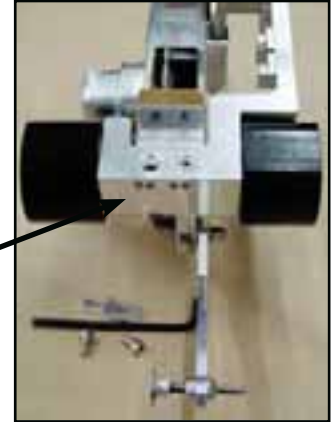


Fig. 4



Fig. 5

Remove one or both front wheels as needed to accommodate a combination square. Note which hole the axle is removed from.



Fig. 6



Fig. 7

Hold the body of a combination square firmly to the chassis with the ruled-blade on the centerline of the diamond blade. Mark the bottom of the chassis with pen, pencil or scribe.



Fig. 8

While holding the square firmly to the chassis, adjust the flip-pointer disc to align with the square's ruled-blade.

Reinstall the line-guide in alignment with the scribed mark.

Also see pages 16-17 when changing to a different blade width.

Aligning the Rear Line-Guide with the Blade.



Fig. 9

Remove one or both rear wheels as needed.



Fig. 10

Hold the body of a combination square firmly against the rear of the chassis with the ruled-blade on the center of the diamond blade and scribe a mark.

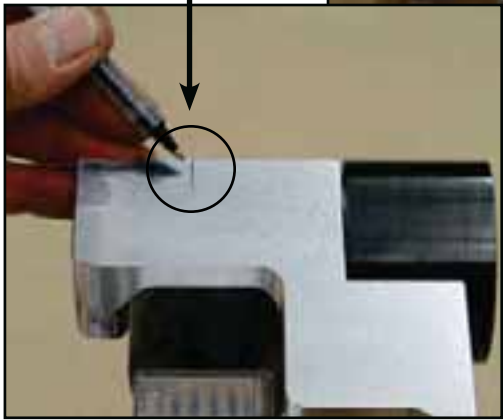


Fig. 11

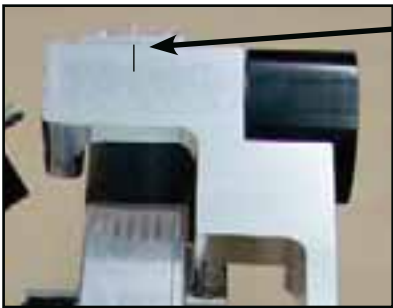


Fig. 11a

Align the rear line-guide with the scribed mark.



Fig. 12

Reinstall the wheels.

Depth Limiting Assembly (also see depth limiting screw, page 8)

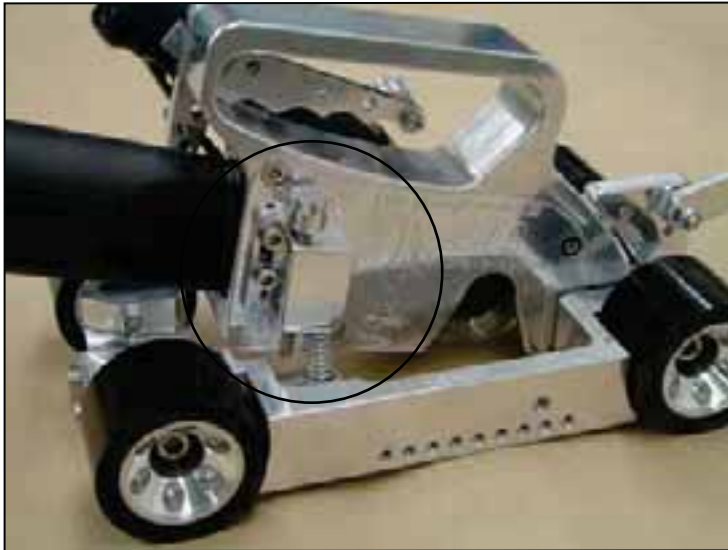


Fig. 13

The depth limiting assembly should cause the blade to “hover” about 1/4th inch above the surface.

Adjustments are needed if the blade does not spring out of the cut properly or if it is difficult to hold the blade down in the cut

If an adjustment is required,

1. Disconnect the air supply hose before making repairs or adjustments
2. Make reference marks to indicate the current depth stop assembly location.
3. Slightly loosen the two screws holding the assembly
4. Slide the assembly up or down as required.
5. Re-tighten the screws.
6. Be sure the blade completely disengages from the concrete when downward pressure is released.

Depth Limiting Assembly adjustment may be needed when installing a new blade.

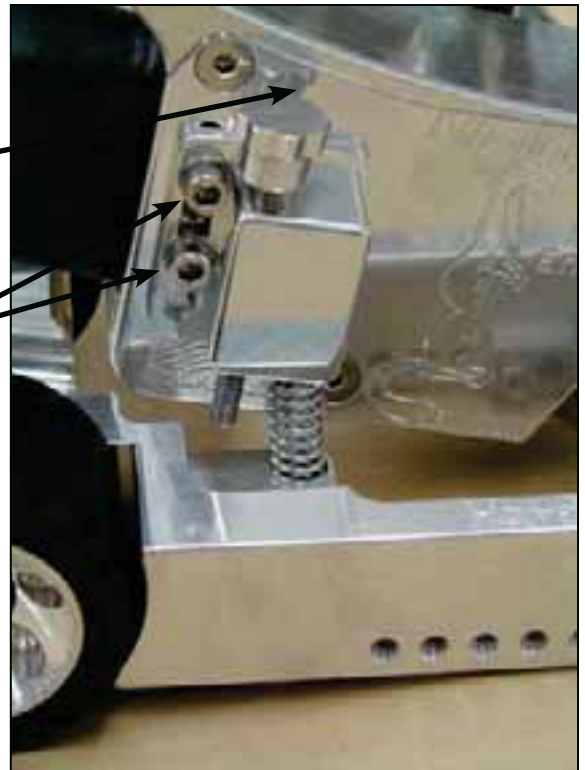


Fig. 14

Check for Lateral Head Play:

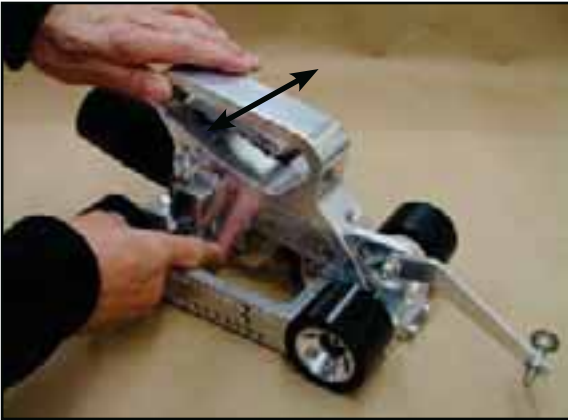


Fig. 15

Disconnect the air supply hose.

Feel for head play while pushing back and forth, sideways on handle

Adjusting for Lateral Head Play:

Should the ball bearing pivot hinge between the chassis and the blade guard assembly need tightening:

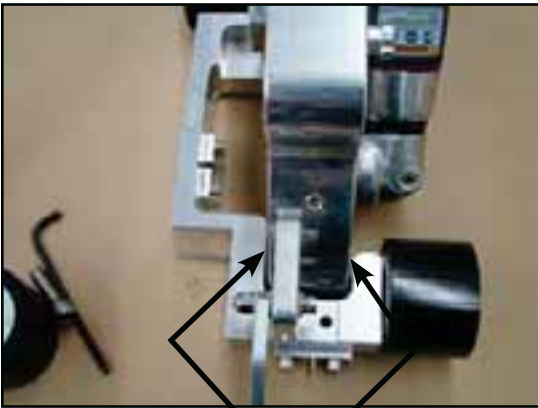


Fig. 15a

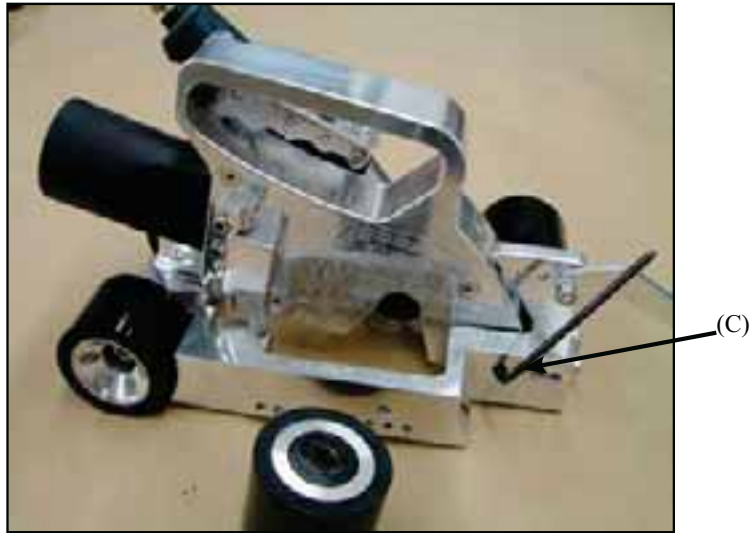


Fig. 15b

Figure 15a:

1. Visually determine that the guard assembly is centered between the mounting points on the chassis.

Figure 15b:

2. If a gap difference is noted, remove the wheel on the side with the least gap.
3. Using a 3/16th inch hex key, tighten the screw (C) enough to remove the lateral play.
4. Note: The screws are assembled using blue Locktite so they will resist turning.
5. Reinstall the wheels.
6. Check that the blade hovers properly and the pivot hinge operates smoothly.

Chassis clearance adjustment.

The wheels may need to be elevated or lowered to:

- Keep the chassis from dragging on a rough surface.
- Adjustment to get complete blade life.
- Elevate the blade hover clearance.

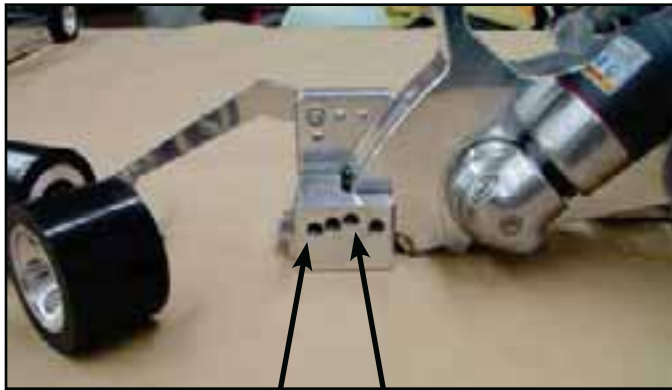


Fig. 18

Choose holes (A) to lower the front.
Choose holes (C) to lift the front.
Choose holes (B) to if you can't decide.
Each pair of holes changes the height 0.100 inch. (1/8th = 0.125)

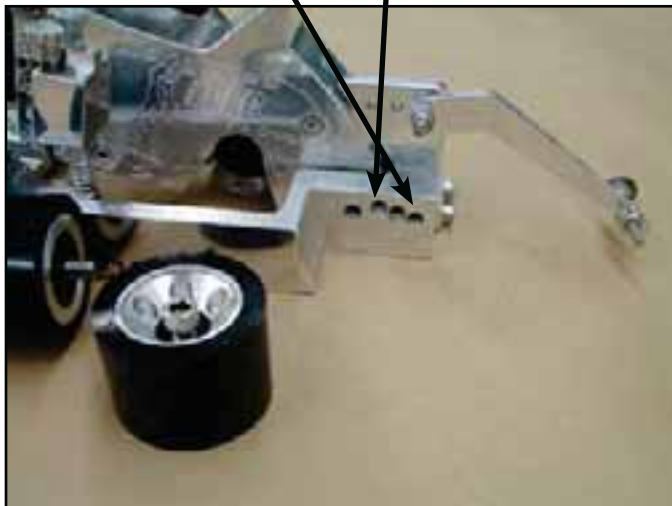


Fig. 19

Changing Blades



Fig. 20

Diamond blades for the Mongoose Air are designed specifically for their power, arbor size, shield restrictions and particular type of material being cut.

Disconnect the air supply hose. Place on a level surface.

Remove three screws holding the blade cover in place.

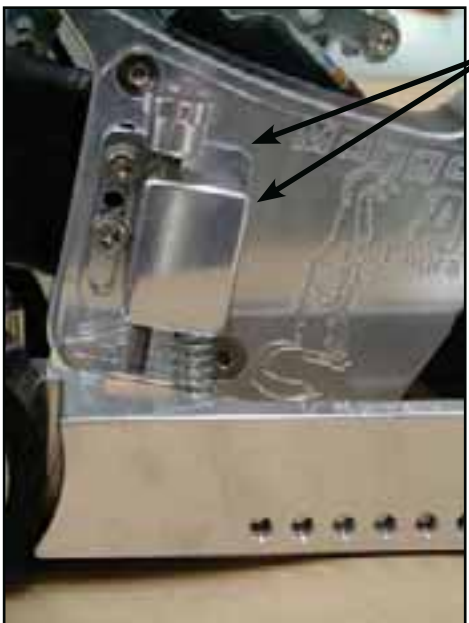


Fig. 21

If necessary, remove the Depth Stop Assembly, but first scribe a position reference mark so it is easier to reinstall the Depth Stop Assembly.

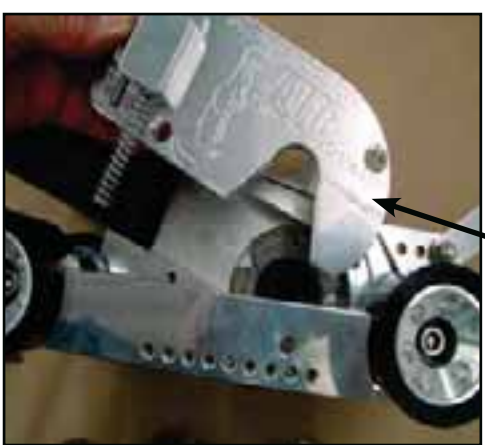


Fig. 22

Lift the blade cover. Vacuum out any accumulated dust.

Continued on next page

Changing blades, continued:

Remove the blade using the supplied flat spanner wrench and the hub nut wrench.



Fig. 23



Fig. 24

When installing a new blade note the rotation indicating arrow on the blade. When the arrow is at the bottom of the rotation it should point forward.

Tighten the hub nuts securely. Check to be sure the hub nuts are seated on the blade. If a blade spins between the hub nuts, it could ruin both the blade and the hub nuts.

Reassemble the components.

Place the Mongoose AIR back on its wheels and check that the blade hovers comfortably above the surface.

If you have changed to a different blade width, proceed to the next page.



Fig. 25

When changing to a different blade width, the flip pointer and the front and rear line-guides will need adjusting.



Fig. 26

In fig. 26, a 3/8th inch wide blade is replacing a 1/8th blade.

Place a mark on the centerline of the diamond blade.



Fig. 27

Hold the body of a combination square firmly against the chassis with the ruled-blade on the centerline mark. Scribe a mark on the chassis to indicate the new centerline.



Fig. 28

Notice the difference in the old and new centerline locations. The change in the centerline location is caused by the difference in core thickness of the old and new blades.



Fig. 29



Fig. 30

Loosen the nuts on the flip guide.

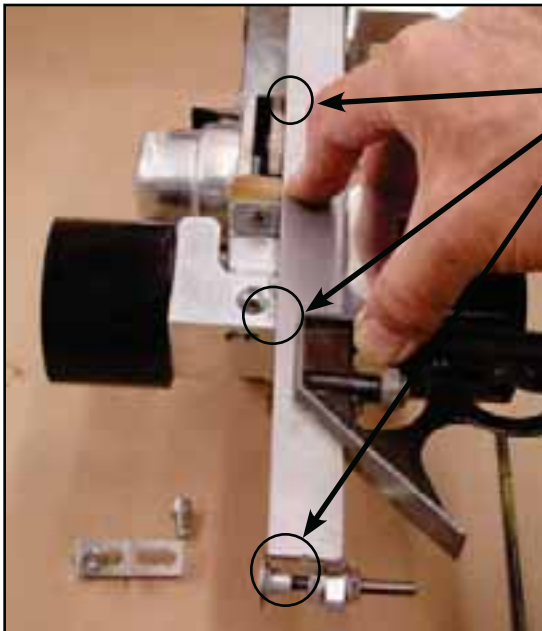


Fig. 31

Hold the body of a combination square firmly to the chassis with the ruled-blade on the centerline of the diamond blade, adjust the flip-pointer disc to align with the square's ruled-blade.

Adjust the front line-guide to align with the newly scribed mark.

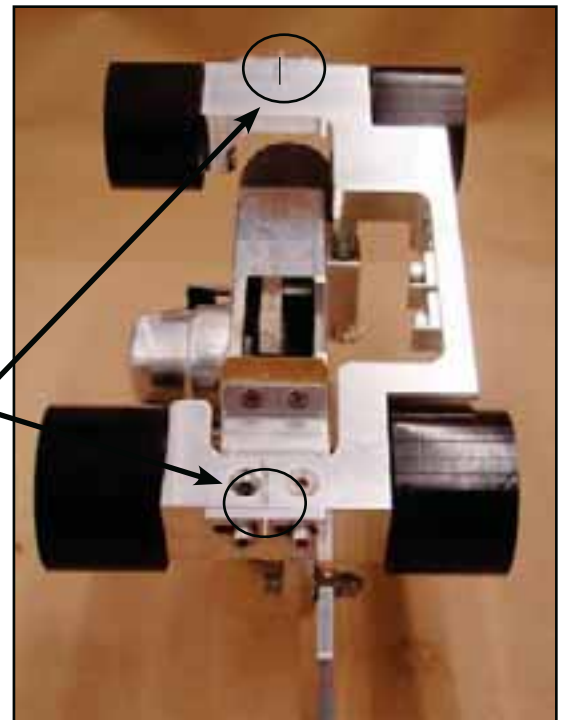


Fig. 32

Aligning the Rear Line-Guide with the Blade. Also see the pictorial instructions on page 10.

1. Remove one or both rear wheels as needed.
2. Hold the body of a combination square firmly against the rear of the chassis with the ruled-blade on the centerline of the diamond blade and scribe a mark.
3. Align the rear line-guide with the newly scribed mark.

Straight Line Cutting

Align the flip pointer plus the front and rear line-guides with the snap line.

The vacuum hose and nozzle may obscure the view of the rear line-guide. Until gaining familiarity with line-guides, it may be helpful to briefly detach the vac hose.



Fig. 33



Fig. 34



Fig. 35

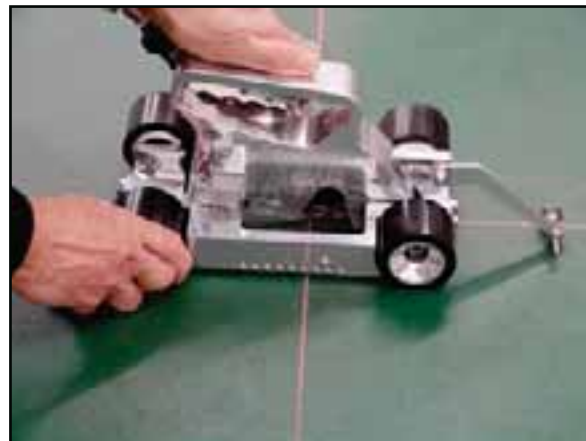


Fig. 35a

1. Grasp a wheel to prevent a sudden reverse movement when initially engaging the blade with the surface.
2. Gently actuate the throttle lever.
3. Hold the throttle at the desired RPM.
4. Press down on the handle to cut.

Intersections: Coming and Going, Starting and Stopping.

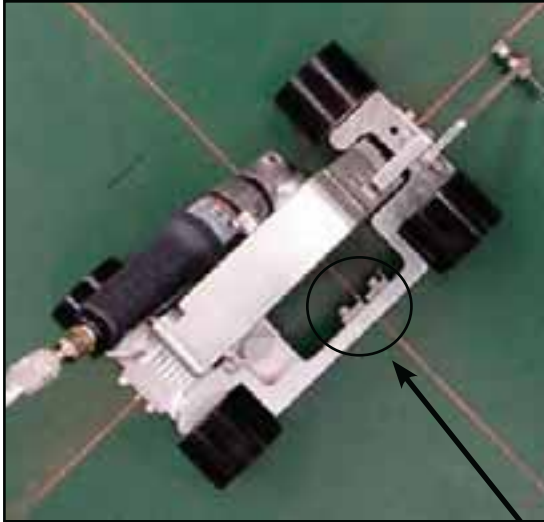


Fig. 36

The ability to quickly connect intersecting cuts without overcutting is indicative of a talented craftsman. The Mongoose AIR has features to make the process nearly effortless.

The blade's front and aft cutting edges can be viewed thru the port in the blade guard. An operator can visually complete intersecting cuts or make accurate stops at designated points. When cutting the vertex of angles or cutting to an intersecting arc or circle, using the viewing port may be most expedient. See Figure 38.

When cutting to an intersection at a right angle line it is always faster to use the side mounted line-guides.



Fig. 37

The line-guides, attached to the inside of the chassis, indicate the rear and front cutting edges of the blade as it enters and exits the cut.

Line-guide positioning may be inaccurate if:

- Cutting a kerf deeper than the lines-guides were set for
- Cutting a shallower kerf than the lines-guides were set for
- Blade diameter has reduced due to wear.
- A new blade is installed without side line-guide adjustments

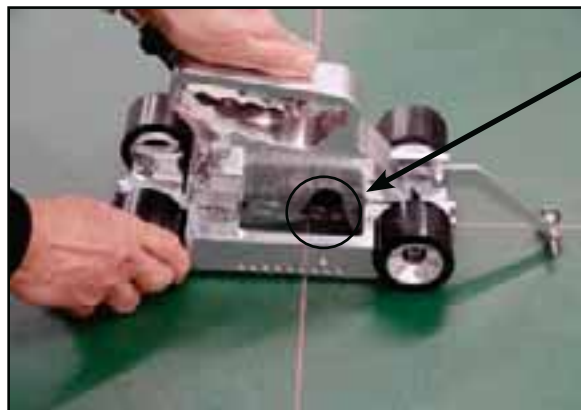


Fig. 38

Viewing port.

Tip: Make operations easier by adding on extra sections of vacuum hose. 12 to 20 feet or more is really nice. Also, install a Gortex[®] Clean Stream filter on the vacuum for better operation.

Geometry: Names of Angles

As the angle increases the name changes

- Acute Angle: an angle that is less than 90 degrees
- Right Angle: an angle that is 90 degrees exactly
- Obtuse Angle: an angle that is greater than 90 degrees but less than 180 degrees
- Reflex Angle: an angle that is greater than 180 degrees

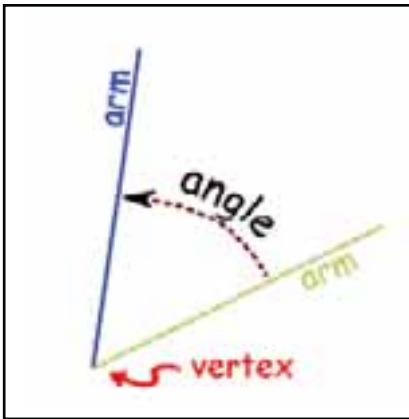


Fig. 39

Parts of an Angle

- The corner point of an angle is called the vertex
- The two straight sides are called arms
- The angle is the amount of turn between each arm.

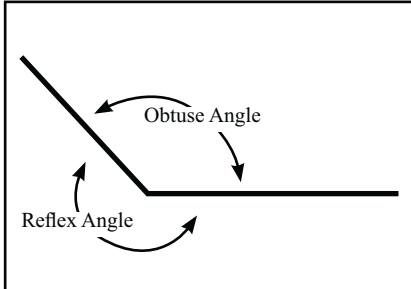


Fig. 39a

Cutting Circles and Arcs

Assemble the connecting tube to the chassis using the upper hole.

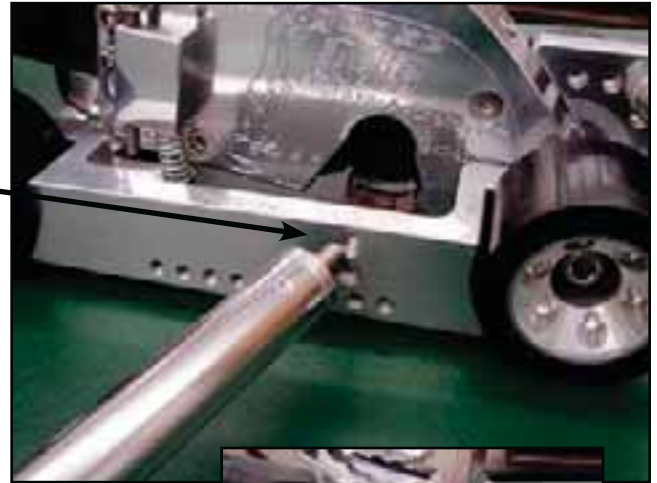


Fig. 40



Fig. 41

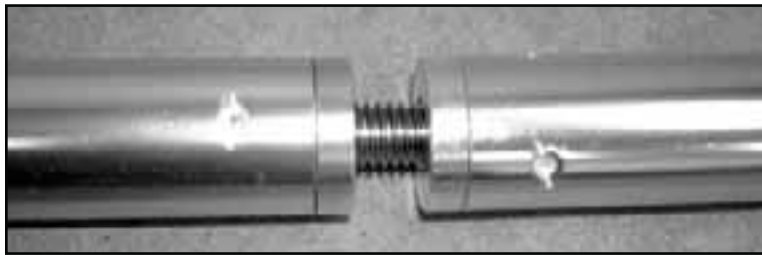


Fig. 42

Assemble connecting tubes for the desired radius.



Fig. 43

Slide the connecting tube into the center pivot.

Securely hand tighten the knobs. Slippage of this connection during cutting will result in an ugly circle.

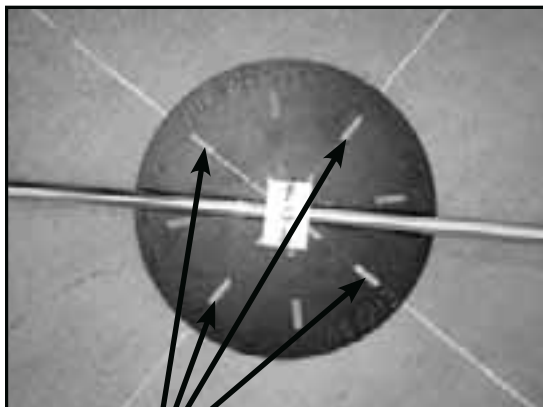


Fig. 44

View the chalk lines through these slots to align the pivot.



Fig. 45

For larger circles have someone stand on the base or screw it in place as shown on the next page.

A lone operator can stand on the center pivot base and cut small circles.



Fig. 46



Fig. 47

When cutting circles close to the pivot, try using talc (Cheap baby power, scented if you like) to break the grip between the high traction tires and the surface.

Anchoring a Center Pivot in Place



Fig. 48

Screw It Down

For large circles or arcs, large number of concentric circles, or anytime the circle may need to be re-cut at a later date, use concrete screws to anchor the pivot in place.

The Concrete Anchoring Kit (Part # ME-301) available from Engrave-A-Crete makes this quick and easy work

Through the hole in the base, drill the concrete.



Slide the screw driver sleeve over the drill bit and insert the screw.

Concrete Anchoring Kit from Engrave-A-Crete (Part # ME-301)



Fig. 49

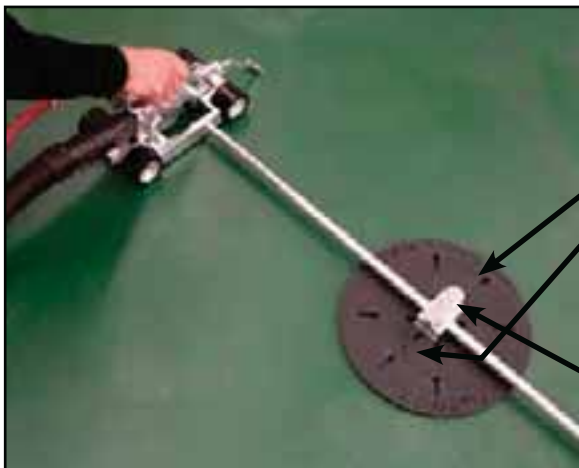


Fig. 50

Use two screws to anchor the base.

If it will be necessary to chase the cut later, scratch a directional mark on the base for exact relocation.

Reattach the pivot using the same base holes with the directional mark pointing in the correct direction.

Securely hand tighten the pivot knobs. Slippage of this connection during cutting will result in an ugly circle.

Grease the Gear Head



Fig. 51



Fig. 52

Using a grease needle nozzle, apply one squirt of lithium or multi-purpose grease per each 8 to 16 hours of operation. Note: Too much grease is not good. Over greasing slows the tool because the gears must push the excess away to turn. Too much grease creates heat and friction. Too much grease may also ooze from the motor and may cause a mess.

AIR Tool Oil

If your compressor is not equipped with an in-line lubricator, at minimum, place 10 drops of oil per hour in the air hose where it connects to the compressor. If you find splatters of oil blowing out the motor exhaust decrease the amount of oil.

Water Feed Dust Control Installation



Fig. 53

Remove the plug.



Fig. 54

Install the female quick connect.



Fig. 55

Secure the needle valve with wire ties or velcro ties.



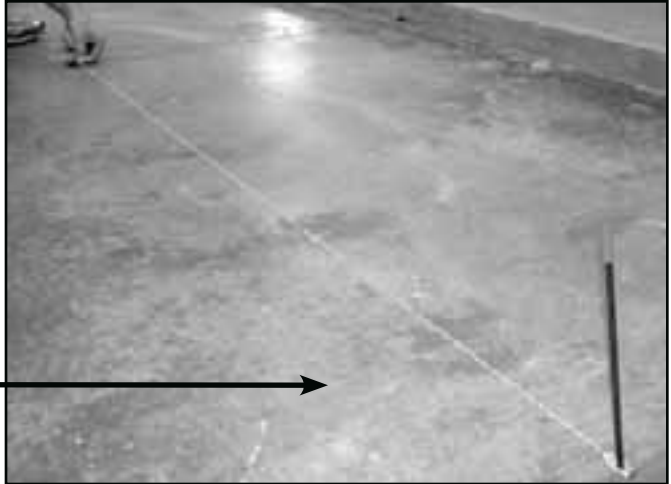
Fig. 56

When Cutting, open the needle valve only enough to knock down the dust.

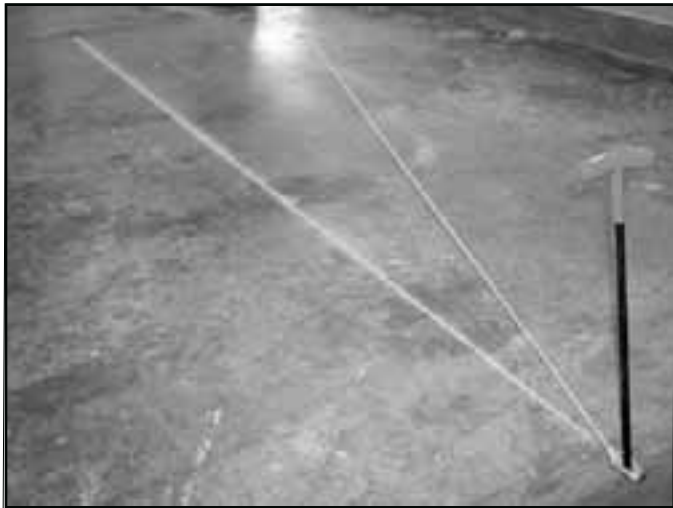
Snapping Chalk Lines Single Handed



For border layout, measure and mark the corners of the borders then drill a hole at the point of the intersecting sides.



Hook the end of the chalk line with a nail or the 3/16" hex T-handle in the hole and snap a line.



Chalk lines often disappear when applying differing colors side by side. Drilled corner holes are helpful in relocating the lines.

Note: Drilled holes can be filled with a crack filler or simply left open



Tips, Tricks, & Troubleshooting

- Tip:** Make operations easier by adding on extra sections of vacuum hose. 12 to 20 feet or more is really nice. Also, install a Gortex[®] Clean Stream filter on the vacuum for better operation.
- Tip:** The pointers and line-guides should be checked if:
It's the first cut of the day.
The tool was accidentally kicked or bumped.
The blades were changed.
- Tip:** Drilled anchor holes in the concrete can be filled with a crack filler, concrete patch material or just left.
- Tip:** It is a good idea to snap all lines prior to cutting. This allows you to check that the layout is visually pleasing.
- Tip:** When doing free form curves start on a straight cut that leads into a curve. It makes alignment much easier.
- Tip:** To draw a line parallel to the edge of a slab, a handy tool is the edge parallel marker produced by Engrave-A-Crete.
- Tip:** When mounting a center pivot, if a screw will not seat to the base plate then:
The hole is not deep enough.
Debris is remaining in the hole, or.
The drill bit is worn from drilling many holes.
- Tip:** Mark the center pivot base with an arrow pointing to a screw hole. Always anchor the center pivot starting with that hole first. Also, keep a mental or written note of the direction this arrow is pointing. This will allow you to exactly reposition the center pivot if it is necessary to remove it before the engraving operations are completed.
- Tip:** Hoses and cords dragging behind will make it difficult to maintain straight cuts. When cutting straight lines, have a helper control the vacuum hose and extension cords. If assistance is not available, place vacuum hose and extension cord over your shoulder.
- Tip:** Smile at those who pass by your jobsite! They may be your next customer!



Diamond Blade MSDS

MATERIAL SAFETY DATA SHEET Diamond Blade MSDS

SECTION I

Product Identification and General Information

Product Name: Metal Bond for Diamond Segments
Product Class: Diamond Segmented Saw Blades
HMIS Codes: Health: 0
Flammability: 0
Reactivity: 0

Date Prepared: 1/20/2011
24 Hour Emergency Assistance
Chemtrec: 1-800-424-9300

SECTION II

<u>Hazardous Ingredients</u>	<u>CAS#</u>	<u>OSHA PEL</u>	<u>ACGIH TLV</u>
Cobalt 50-100%	7440-48-4	0.1	0.1
Copper/Tin (Bronze) 50-100%	7440-50-8	1	1
Chromium 5-15%	7440-47-3	1	0.5
Manganese -1%	7439-96-5	C5	C5
Molybdenum 5-20%	7439-98-7	15	10
Nickel 5-25%	7440-02-0	1	1
Tungsten 10-30%	7440-33-7	-	5,S10

SECTION III

Physical Data

Boiling Point: N/A Solubility in Water: 0
Vapor Pressure N/A Evaporation Rate: 0
Vapor Density: N/A Appearance: Grey or gold appearance (solid metal)
Specific Gravity: Varies 6-14G/CM³ Odor: 0
Percent Volatiles: 0 Melting Point: 800° C
Solubility in Other Solvent: Will dissolve in strong acids

SECTION IV

Fire and Explosion Hazard Data

Flash Point: N/A
Flammable Limits: N/A
LEL: N/A
UEL: N/A
Extinguishing media: Non-Flammable.
Hazardous Combustion Products: N/A
Special Fire Fighting Procedures: N/A
Breathing N/A
Fire and Explosion Hazards: N/A.



SECTION V

Reactivity Data

Stability: Highly Stable

Hazardous Polymerization: Will not occur

Incompatibility: No known "conditions or materials to avoid".

SECTION VI

Health Hazard Data

Primary Route of Entry: During cutting

Eye Contact: Dust may irritate eyes.

Skin Contact: Some may experience skin irritation from dust

Inhalation: Active: Coughing, shortness of breath Chronic: Affects breathing capacity

Ingestion: No evidence of adverse effects.

Chronic Overexposure: Cutting may create elevated sound levels which may affect hearing

SECTION VII

First Aid

Eyes: Flush eyes with water. Obtain medical assistance.

Skin: Wash skin with soap and water.

Ingestion: No known adverse effects but ingestion not recommended.

Inhalation: Remove to fresh air. Artificial respiration as needed.

SECTION VIII

Special Protection Information

Respiratory Protection: As needed, approved dust respirators. See OSHA 29CFR1910.134

Ventilation: General mechanical room ventilation is adequate.

Eye Protection: Use safety glasses. See OSHA 29CFR1910.133

SECTION IX

Spill or Leak Procedures: N/A

SECTION X

Shipping Data

D.O.T. Shipping Name: Diamond Segmented Saw Blade

Technical Shipping Name Diamond Segmented Saw Blade

D.O.T. Hazard Class: Not Regulated

UN/NA Number: N/A

Reportable Quantity: None

D.O.T. Labels Required: None

N/A = Not Applicable, N/E = Not Established, N/D = No Data, N/R = Not Required

Glossary of Terms

Arcuate- a cut that bends or curves like a bow or an arch.

Groove- a long, narrow cut, kerf or indentation in a surface formed there by some means.

Long cut- a continuous cut or groove. May be arcuate, straight, serpentine or any combination.

Short cut- any cut or groove beginning and/or ending between long cuts.

Engraving- 1: the art of forming designs by cutting.
2. a series of cuts, grooves, and kerfs forming a pattern.
3. to chase letters, designs, etc. on a hard surface.

RAC stains- an acronym formed from the first letters of Reactive Acid Chemical concrete stain. RAC decreases some confusion when discussing concrete colorants.

Clear blocking- any process of applying clear sealer thereby preventing RAC stain from affecting an area. Usually done decoratively.

Bagging- a method using plastic bags to create variegated or mottling in RAC stained surfaces.

Ragging- a method using rags to create variegated or mottling in RAC stained surfaces.

Hot dam- a method using hot dam compound to separate RAC stains from one another.

Embossed Pattern- 1: to raise or represent surface designs in relief.
2: to remove cured concrete from around an area to represent a raised design or pattern.

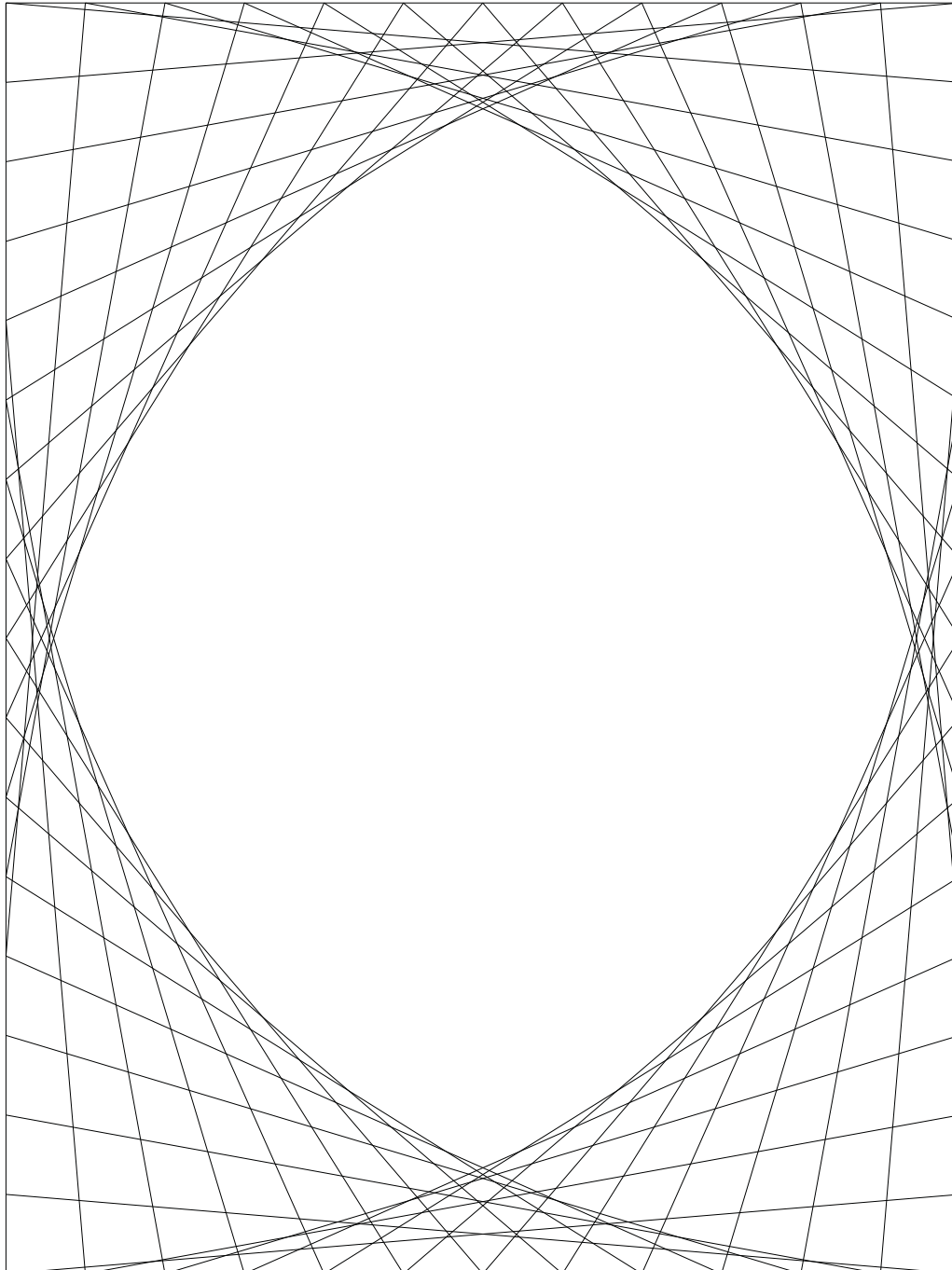
Tracked cutting- a method of mechanically controlling a concrete cutting device to produce patterns in a concrete surface.

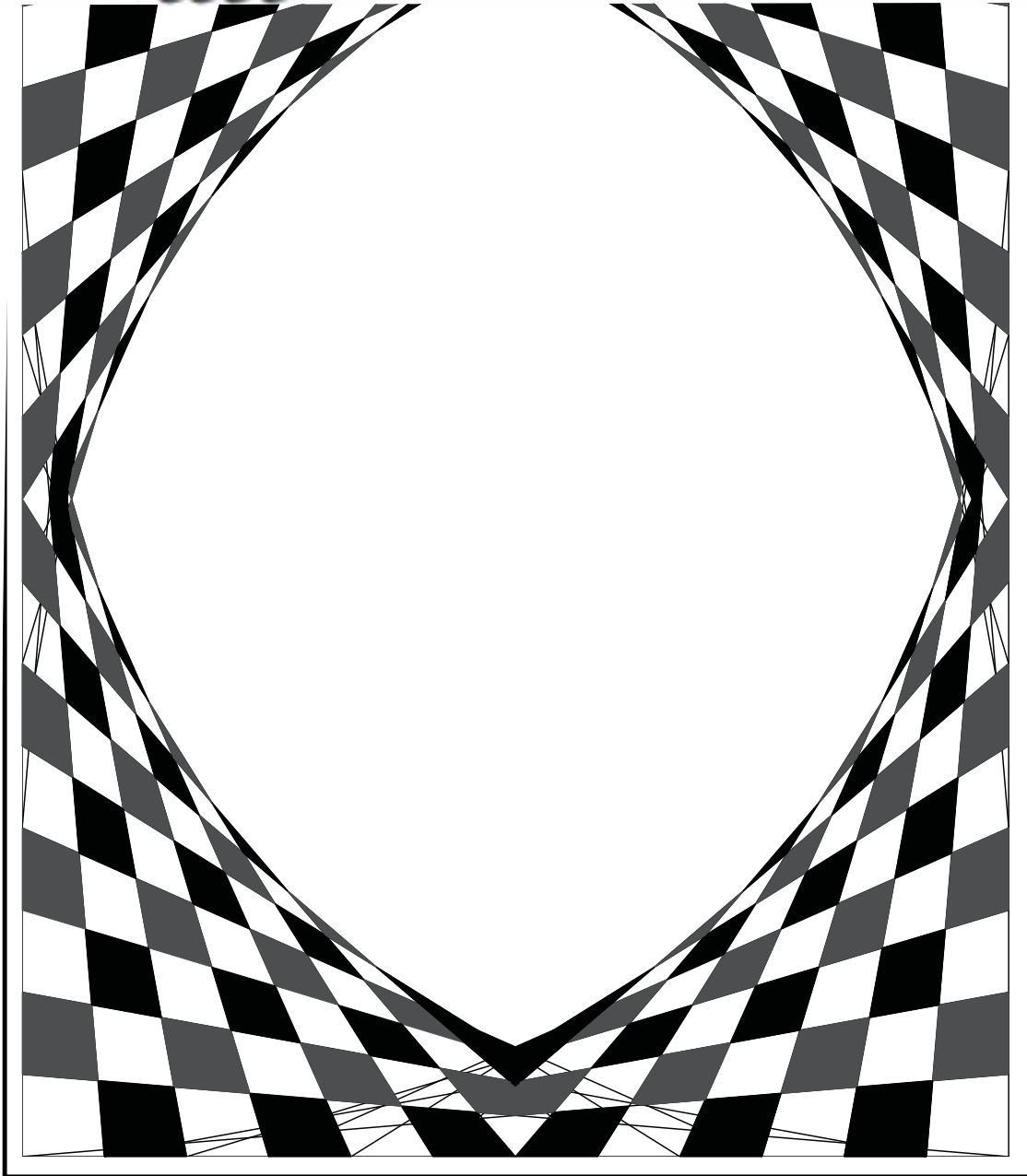
Track free cutting- a method of manually controlling a concrete cutting device to produce patterns in a concrete surface

Free hand cutting- a method using cutting tools like grinders to produce patterns or designs in a concrete surface.

Engrave-A-Crete System- generally described as a process producing standard building product (brick, tile, cobblestone) patterns in cured concrete using diamond saw blades with or without tracking devices.

Sample Design Ideas





Note: This pattern is constructed of all straight lines.

