

Operator's Instruction Manual

Concrete/Asphalt Saws

Electric, Gasoline and
Pneumatic Models

Manual - Portable



100 Thomas Johnson Drive, Frederick, MD 21702-4600 USA
Phone (301) 663-1600 • 1-800-638-3326
Fax (301) 663-1607 • 1-800-447-3326
Website: www.edcoinc.com
Email: sales@edcoinc.com

Printed in USA
©2007

READ AND UNDERSTAND THE OPERATORS INSTRUCTION MANUAL THOROUGHLY BEFORE ATTEMPTING TO OPERATE THIS EQUIPMENT. Death or serious injury could occur if this machine is used improperly.

SAFETY MESSAGES

• Safety instructions are preceded by a graphic alert symbol of DANGER, WARNING, or CAUTION.

DANGER

Indicates an imminent hazard which, if not avoided, will result in death or serious injury.

WARNING

Indicates an imminent hazard which, if not avoided, can result in death or serious injury.

CAUTION

Indicates hazards which, if not avoided, could result in serious injury and/or damage to the equipment.

GASOLINE/PROPANE POWERED EQUIPMENT

WARNING

• Engine exhaust from this product contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

X

• Gasoline is extremely flammable and poisonous. It should only be dispensed in well ventilated areas, and with a cool engine.

• Small gasoline engines produce high concentrations of carbon monoxide (CO) example: a 5 HP 4 cycle engine operation in an enclosed 100,000 cu. ft. area with only one change of air per hour is capable of providing deadly concentrations of CO in less than fifteen minutes. Five changes of air in the same area will produce noxious fumes in less than 30 minutes. Gasoline or propane powered equipment should not be used in enclosed or partially enclosed areas. Symptoms of CO poisoning include: headache, nausea, weakness, dizziness, visual problems and loss of consciousness. If symptoms occur - get into fresh air and seek medical attention immediately.

ELECTRICAL POWERED EQUIPMENT

WARNING

Extreme care must be taken when operating electric models with water present. Ensure power cord is properly grounded, is attached to a Ground-Fault-Interrupter (GFI) outlet, and is undamaged.

• Check all electrical cables - be sure connections are tight and cable is continuous and in good condition. Be sure cable is correctly rated for both the operating current and voltage of this equipment.

• Improper connection of the equipment-grounding conductor can result in a risk of electric shock. Check with qualified electrician or service person if there is any doubt as to whether the outlet is properly grounded. Adhere to all local codes and ordinances.

• NOTE: In the event of a malfunction or breakdown, grounding provides a path of least resistance for the electric current to dissipate. The motor is equipped with a grounded plug and must be connected to an outlet that is properly installed and properly grounded. DO NOT modify the plug provided on the motor. If the plug does not fit the outlet have a qualified electrician install the proper receptacle.

• Switch motor OFF before disconnecting power.

Printed in USA
©2007

Page 2

100 Thomas Johnson Drive, Frederick, MD 21702-4600 USA
Phone (301) 663-1600 • 1-800-638-3326
Fax (301) 663-1607 • 1-800-447-3326
Website: www.edcoinc.com
Email: sales@edcoinc.com

• Do not disconnect power by pulling cord. To disconnect, grasp the plug, not the cord.

• Unplug power cord at the machine when not in use and before servicing.

GENERAL INSTRUCTIONS

- Equipment should only be operated by trained personnel in good physical condition and mental health (not fatigued). The operator and maintenance personnel must be physically able to handle the bulk weight and power of this equipment.
- This is a one person tool. Maintain a safe operating distance to other personnel. It is the operators responsibility to keep other people (workers, pedestrians, bystanders, etc.) away during operation. Block off the work area in all directions with roping, safety netting, etc. for a safe distance. Failure to do so may result in others being injured by flying debris or exposing them to harmful dust and noise.
- This equipment is intended for commercial use only.
- For the operator's safety and the safety of others, always keep all guards in place during operation.
- Never let equipment run unattended.



• Personal Protection Equipment and proper safety attire must be worn when operating this machinery. The operator must wear approved safety equipment appropriate for the job such as hard hat and safety shoes when conditions require. Hearing protection MUST be used (operational noise levels of this equipment may exceed 90db). Eye protection MUST be worn at all times.

WARNING

Keep body parts and loose clothing away from moving parts. Failure to do so could result in dismemberment or death.

• Do not modify the machine.

• Stop motor/engine when adjusting or servicing this equipment.

• Maintain a safe operating distance from flammable materials. Sparks from the cutting-action of this machine can ignite flammable materials or vapors.

DUST WARNING

WARNING

Some dust created by power sanding, 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, and
- Crystalline silica from bricks and concrete and other masonry products.

Your risk of exposure to these chemicals varies depending on how often you do this type of work. To reduce your risk, work in a well ventilated area, use a dust control system, such as an industrial-style vacuum, and wear approved personal safety equipment, such as a dustparticulate respirator designed to filter out microscopic particles.

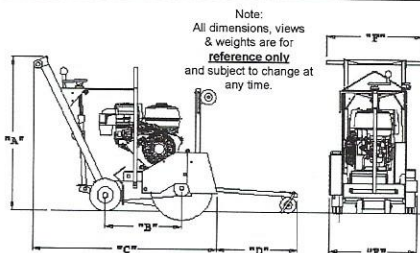


A Division of Equipment Development Company, Inc.

Operators Instruction Manual

Table of Contents

Section	Page Number
Operating Controls.....	4
Operating Instructions.....	5-7
Optional Accessories.....	7
Maintenance Instructions.....	8
Changing Blades.....	9
Lubrication Points.....	10
Maintenance Schedule.....	11
Limited Equipment Warranty.....	Back Page



Note:
All dimensions, views
& weights are for
reference only
and subject to change at
any time.

Figure 1

HOW TO ORDER REPAIR PARTS

To insure product safety and reliability, always use genuine EDCO replacement parts when making repairs to the equipment.

When ordering parts, please specify the MODEL and SERIAL NUMBER of the machine as given on the NAMEPLATE. In addition, give part number, description and quantity as listed on the parts list.

Please note: Due to improvements and changes in the equipment the illustrations shown may be different from the actual machine.

Toll Free: Phone 1-800-638-3326 • Fax 1-800-447-3326

Model #	DS-18	SK-14	SB-14	ASB-14	SK-10
"A"	39 3/8"	38"	37"	37"	35"
"B"	48 3/4"	16 1/2"	17 3/4"	17 3/4"	15"
"C"	---	48"	48 3/4"	48 3/4"	41"
"D"	20 1/2"	14 3/4"	14 1/2"	14 1/2"	N/A
"E"	---	22"	21 1/2"	21 1/2"	15 1/2"
"F"	254 lbs.	23 1/2"	23 1/2"	23 1/2"	17"
Weight		173 lbs.	180 lbs.	160 lbs.	153 lbs.



100 Thomas Johnson Drive, Frederick, MD 21702-4600 USA
Phone (301) 663-1600 • 1-800-638-3326
Fax (301) 663-1607 • 1-800-447-3326
Website: www.edcoinc.com
Email: sales@edcoinc.com

Printed in USA
©2007

Page 3

Operating Controls

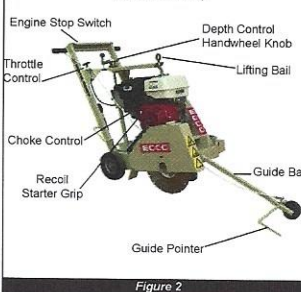
Gasoline Powered
(DS-18 SHOWN)

Figure 2

Pneumatic Saw
(ASB-14 SHOWN)

Figure 4

Please Note:

Controls shown are for the model indicated.
The location of these controls may vary on the different models.

Due to improvements and changes in the equipment, the illustration shown may be different from the actual machine.

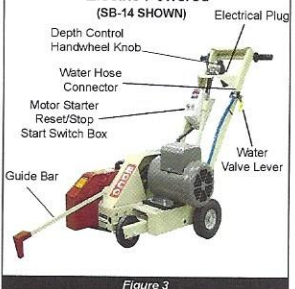
Electric Powered
(SB-14 SHOWN)

Figure 3

Printed in USA
©2007

Page 4

100 Thomas Johnson Drive, Frederick, MD 21702-4600 USA
Phone (301) 663-1600 • 1-800-638-3326
Fax (301) 663-1607 • 1-800-447-3326
Website: www.edcoinc.com
Email: sales@edcoinc.com



A Division of Equipment Development Company, Inc.

Operating Instructions

WARNING

- Read and understand all operating instructions before operating this equipment. Death or serious injury can result if this machine is used improperly.
- Concrete saws are designed to be used to cut flat horizontal concrete or asphalt slabs using diamond saw blades.
- The machines may be equipped with gasoline engines or electric motors.
- They are designed to be controlled by a single operator from a position at the rear of the saw.
- Maintain a safe distance from other personnel in the area.

Be sure to read the Rx for Concrete Saws supplied with your machine.

IMPORTANT: Perform Pre-Start Check.

- Visually inspect the equipment for wear or damage.
- Be sure all guards are in place and functioning properly. Do not operate unless blade guard is in place and secure.
- Perform all daily maintenance.
- Check to be sure water tubes are functioning properly if performing wet-cutting operations.
- Inspect blade - Be sure the correct blade is installed properly on the machine, including RPM, size, mounting arrangement and its intended use.
- Check blade for damage (see Figure 5 below).
- Inspect work area to determine the presence and location of deck inserts, pipes, columns and objects protruding from the slab surface so that they may be avoided during the cutting operation. Scribe a line to help guide the saw.

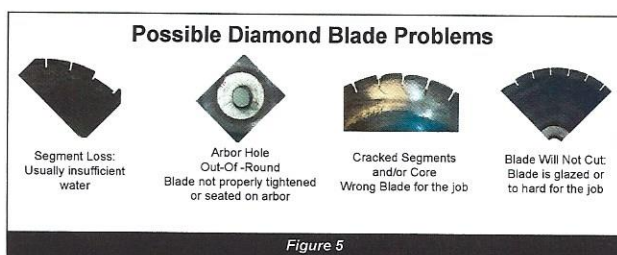


Figure 5



100 Thomas Johnson Drive, Frederick, MD 21702-4600 USA
Phone (301) 663-1600 • 1-800-636-3326
Fax (301) 663-1607 • 1-800-447-3326
Website: www.edcoinc.com
Email: sales@edcoinc.com

Printed in USA
©2007
Page 5

Operating Instructions

- **FOR WET CUTTING:** Attach the water supply. A flow rate of approximately 2 gallons per minute (minimum) is required. Attach the water hose to the coolant valve. Use the valve to control the flow of water.
- **FOR DRY CUTTING:** Provide a respirator and dust control system.
- **FOR ELECTRIC MODELS:** Be sure the "OFF" button is depressed. Hook up the electrical power source by plugging into the connector provided. If the cord does not mate with the connector, consult a qualified licensed electrician before continuing. Be sure that the equipment is properly grounded.
- **FOR GASOLINE MODELS:** Put the engine stop switch in the "RUN" position. Consult the engine manufacturers operating instructions and follow the directions for starting and breaking in the engine.
- **FOR PNEUMATIC MODELS:** Before connecting the air source, be sure the "WHIPCHECK" cable is properly installed and the flow control lever is in the "OFF" position. Adjust the air pressure to 90 psi (100 psi MAX.) using the air regulator valve (see Figure 4 on page 4). Open the flow control lever gradually to start and adjust the oil regulator knob as required for your application.

- **BEFORE STARTING THE ENGINE OR MOTOR:** Raise the saw blade clear of the working surface. The blade is raised using the depth control handwheel knob mounted on the upper handle assembly (Figure 6). Lift the knob to unlock and turn the handwheel clockwise until the blade is clearly off the ground.
- **START ENGINE AND ALLOW IT TO REACH OPERATING SPEED.** Position the saw over the cutting line. Bring the engine to full speed. Lower the blade into the slab surface by slowly turning the depth control handwheel knob. NOTE - the 14 inch blade has a maximum cutting depth of 4 3/4". Do not allow the arbor flanges to contact slab surface.

When the selected cutting depth is reached, lock the depth control handwheel knob and proceed to push the saw forward. The saw blade must remain straight, do not twist, and do not force blade, the engine or motor should not strain when cutting.



Figure 6

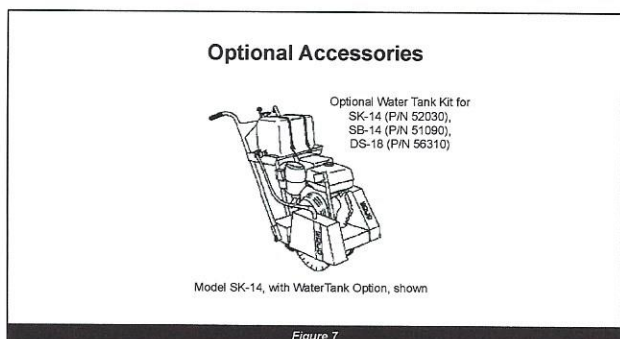
Printed in USA
©2007
Page 6

100 Thomas Johnson Drive, Frederick, MD 21702-4600 USA
Phone (301) 663-1600 • 1-800-636-3326
Fax (301) 663-1607 • 1-800-447-3326
Website: www.edcoinc.com
Email: sales@edcoinc.com



Operating Instructions

- **TO STOP THE MACHINE:** Stop forward motion. On gasoline models push the throttle to idle. Turn the depth control handwheel knob counter clockwise to raise the blade clear of the cut. Turn ignition or power switch off and let the engine come to a complete stop. Turn off the water supply.
- **WHEN MANEUVERING THE SAW:** Make sure the blade is raised high enough so it does not strike the slab surface. Damage to blade may occur with inadvertent contact with the slab or other object.
- **DO NOT FORCE BLADE WHILE CUTTING.**
- **IF THE POWER SOURCE STALLS IN THE CUT:** Raise the blade completely out of the cut. Disconnect the power source (i.e. the spark plug wire on a gasoline engine or disconnect an electric model at the machine). Inspect the blade flange nut/bolt to verify that they are still tight, and inspect the blade for damage. Replace damaged (or questionable) blades immediately.
- **WHEN TRANSPORTING THE SAW:** Be sure to remove the blade. Before removing the blade, disconnect the power source before lifting or removing any guard. See the directions for Changing Blades on (page 9).
- **WHEN HOISTING A CONCRETE SAW EQUIPPED WITH A LIFTING BAIL:** Always inspect frame and attaching hardware for damage before lifting. Use proper safe hoisting techniques and hardware.



Model SK-14, with Water Tank Option, shown

Figure 7



100 Thomas Johnson Drive, Frederick, MD 21702-4600 USA
Phone (301) 663-1600 • 1-800-636-3326
Fax (301) 663-1607 • 1-800-447-3326
Website: www.edcoinc.com
Email: sales@edcoinc.com

Printed in USA
©2007
Page 7

Maintenance Instructions



Disconnect the machine from the power source. Remove the spark plug lead on gasoline engine models or disconnect the supply voltage connector on electric models, before performing any maintenance. All maintenance to be performed regularly by qualified personnel.

- Never work under saw without first placing chocks on the wheels and support device under the saw to prevent it from moving or falling. Always work on a flat and level surface.
- Refer to the engine manual for maintenance information specific to the engine used. Be sure to check oil level before operation. Clean air filter element daily.
- Grease bearings after every 4 hours of use. Refer to (page 10) for lubrication points on available models.
- Perform a visual inspection of the entire machine before operation. Be sure all fasteners are tight and secure, check for signs of metal cracking or fatigue, inspect for damage to electrical wiring, damage to fuel lines, check bearings and inspect to be sure proper guards are in place and secure, etc...
- Inspect belts before operation. Check belt tension. On new equipment, belts should be re-tensioned after the first four hours of use. Damaged, stretched or excessively worn belts should be replaced with a new matched set.
- To tension belts, loosen motor mounting hardware slightly. Either push motor towards the rear of the saw (handle bar side) until the belts are tight or on the models with a belt tensioning adjustment bolt, use bolt to adjust the motor until the belts are tight. Re-torque the engine mounting hardware (see Figure 8 below).
- Proper belt tension must be maintained to transmit the engine power to the cutting blade. Slipping belts will over-heat, the blade life will be shortened and the cutting speed limited. Over tensioned belts will shorten the belt and bearing life.
- Check diamond blades for cracks, loose segments and oversize, worn, or out-of-round arbor holes (See Figure 5 on page 5). Do not use any questionable blade since serious injury and/or damage to property can result. Do not use warped, twisted, or out-of-balance blades. Unbalanced blades will wear excessively, vibrate and damage both arbor shaft and bearings. Do not use a blade without a drive pinhole (Figure 9).
- For safety reasons, EDCO does not recommend the use of any abrasive blades. Abrasive blades can break and cause serious personal injury to operator and/or bystanders. If abrasive blades are used by choice, use only reinforced abrasive blades. Inspect abrasive blades carefully.
- Be sure arbor shaft, backing plate and blade cap are clean and in good condition. Flanges should be free of nicks and burrs. Replace if out-of-round or worn.

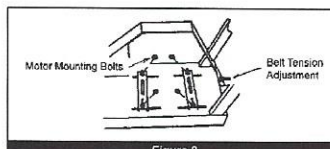


Figure 8

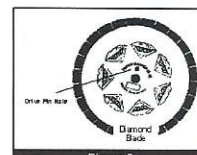


Figure 9

Printed in USA
©2007
Page 8

100 Thomas Johnson Drive, Frederick, MD 21702-4600 USA
Phone (301) 663-1600 • 1-800-636-3326
Fax (301) 663-1607 • 1-800-447-3326
Website: www.edcoinc.com
Email: sales@edcoinc.com



Changing Blades

(On EDCO saws listed in this manual)



Disconnect the machine from the power source before performing any work on the equipment (i.e. changing the blade). To disconnect the power source on gasoline engine models, remove the spark plug lead. On electric models, unplug the electrical power cord at the machine.

- Make sure you have the proper blade for the job. Determine the hardness and composition of the slab. Give your dealer complete information including whether re-bars are present, the desired depth of the cut, and the length of the cut. If in doubt, contact the blade manufacturer.



Inspect the blades before installing. Check diamond blades for cracks, loose segments and oversize, worn, or out-of-round arbor holes (Figure 5 on page 5). Do not use any questionable blade since serious personal injury and/or damage to property can result. Do not use warped, twisted, or out-of-balance blades. Unbalanced blades will wear excessively, vibrate and damage both arbor shaft and bearings. Do not use a blade without a drive pinhole (Figure 9).



For safety reasons, EDCO **does not** recommend the use of any abrasive blades. Abrasive blades can break and cause serious personal injury to operator and/or bystanders. If abrasive blades are used by choice, use only reinforced abrasive blades. Inspect abrasive blades carefully.



Never exceed the maximum operating speed of the blade. Be sure to match the blade speed rating with the arbor shaft speed on the machine. The standard models of the SK-14, SB-14, DS-18 have an arbor shaft speed (unloaded) of 3600 RPM and 3000 RPM under load.

- Do not remove or lift the blade guard unless machine is stopped and all power is disconnected. Be sure to reinstall blade guard before reconnecting the power source.
- Be sure the arbor shaft, backing plate, and blade cap are clean and in good condition. Make sure the threads are clean and undamaged. If any damage is detected, consult your EDCO dealer (or the EDCO factory).
- The backing plate and blade cap (Figure 10) should be the same diameter, do not use if they are different diameters. For abrasive blades and for all steel centered diamond blades, the backing plate and blade cap must be at least 1/4 the diameter of the blade.
- The drive pin should be tight in blade cap and long enough to fit through blade and into hole in backing plate.
- Place the blade on the arbor shaft and turn until the drive pinhole lines up with the backing plate.
- Place the blade cap on the arbor shaft so the drive pin goes through the holes in the blade and backing plate.
- Put on washer and arbor shaft nut and tighten arbor shaft nut.
- Secure the blade guard in the operating position before reconnecting the power supply or starting engine.

Optional:

CE models are equipped with electrical interlocks. Blade guards and/or arbor guards must be in place and secured before these engines can be started.

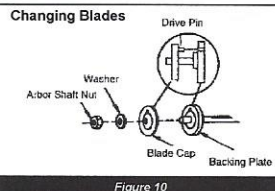


Figure 10



100 Thomas Johnson Drive, Frederick, MD 21702-4600 USA
Phone (301) 863-1600 • 1-800-638-3329
Fax (301) 863-1607 • 1-800-447-3329
Website: www.edcoinc.com
Email: sales@edcoinc.com

Printed in USA
©2007
Page 9