

# STREET SAW

BSS18H39W OWNER'S MANUAL





LOBAL

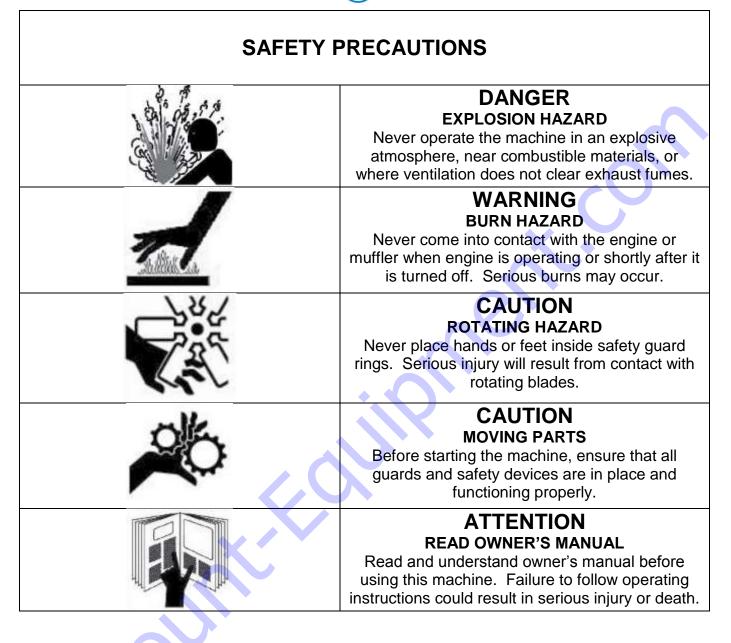
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# WARRANTY INFORMATION – BSS18H39W

All products sold by Bartell Morrison Inc. and Bartell Morrison (USA) LLC (the "Company") are warranted against defects in materials and/or workmanship for a period of 12 months; excluding the normal wear on wearing components and components covered by a separate original manufacturer's warranty. The warranty is to the original end user purchaser provided that certain conditions have been met. Conditions:

- 1. The equipment serial number has been registered with the Company or its approved dealers, distributors, and representatives or agents.
- 2. The equipment has been operated in an appropriate manner by qualified individuals.
- 3. The equipment has been properly maintained as per the instructions included in the Owner's Manual.
- 4. All claims for warranty must be filed on proper forms and include the serial number of the equipment along with proof of purchase.

Any evidence of failure to meet these conditions may result in a denial of the warranty claim.

Consideration of warranty claims will be at the sole discretion of the Company, or its authorized dealers, distributors, representatives or agents.

The Company may, at its discretion, request that the equipment to be considered for warranty be returned at the owner's expense to an authorized repair facility for inspection.

Under this warranty we may, at our discretion, replace the defective portion of the equipment and a reasonable (as determined by the Company) amount of labour to conduct the repair or replacement.

Under no circumstances shall the Company be liable for any additional or exceptional costs beyond the cost to repair or replace the defective portion of the equipment. The Company shall not be held accountable for; costs associated with travel to inspect or repair defective equipment, cost for transporting equipment at any facility other than one authorized by the Company or ancillary damage caused by or as a result of defective equipment.

Under no circumstances shall equipment be returned to the Company or its authorized dealers, distributors, representatives, or agents without the approval of the Company as evidence by a Returned Goods Number. To obtain a Returned Goods Number contact the factory or your authorized dealer, distributor, representative or agent.

This warranty is for the sole benefit of the original end user purchaser and is not transferrable to any other company or person.



# **SAFETY INFORMATION – BSS18H39W**

#### Safety Precautions:

Before using this equipment, study the entire owner's manual to become familiar with its operation. Do not allow untrained or unauthorized personnel, especially children, to operate this equipment. Use only factory authorized parts for service.

This manual contains warnings which must be followed to reduce the possibility of personal injury, damage to the equipment, or improper service.

Obey all safety messages that follow to avoid possible injury or death. "Danger" indicates a hazardous situation which, if not avoided, will result in death or serious injury. "Warning" indicates a hazardous situation which, if not avoided, could result in death or serious injury. "Caution" indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.

## **Operating Safety**

Failure to follow instructions in this manual may lead to serious injury or even death! This equipment is to be operated by trained and qualified personnel only. This equipment is for industrial use only. The following safety guidelines should always be used when operating this concrete saw:

Do not operate or service this equipment before reading the entire manual. This equipment should not be operated by persons under 18 years of age.

Never operate this equipment without proper protective clothing, shatterproof glasses, steeltoed boots and other protective devices required by the job. Under certain conditions sparks may fly, so wearing non-flammable clothing is suggested.

Never use accessories or attachments, which are not recommended by Bartell Morrison for this equipment. Damage to the equipment and/or injury to user may result. The manufacturer does not assume responsibility for any accident due to equipment modifications.

Whenever necessary, replace nameplate, operation and safety decals when they become difficult to read.

All guards must be securely in place before starting.

Never touch the hot exhaust manifold, muffler or cylinder. Allow these parts to cool before servicing engine or saw.

Allow the engine to cool before adding fuel or performing service and maintenance functions. Contact with hot components can cause serious burns.



### **Operating Safety continued:**

The engine section of this saw requires an adequate free flow of cooling air. Never operate the saw in any enclosed or narrow area where free flow of the air is restricted. If the air flow is restricted it will cause serious damage to the saw or engine and may cause injury.

Remember the saw's engine gives off deadly carbon monoxide gas. Us only in well ventilated area.

Always refuel in a well-ventilated area, away from sparks and open flames.

Always use extreme caution when working with flammable liquids. When refueling, stop the engine and allow it to cool. Do not smoke around or near the machine. Fire or explosion could result from fuel vapors, or if fuel is spilled on a hot engine.

Topping-off to the fuel filler port is dangerous, as it tends to spill. Never use fuel as a cleaning agent.

Always be sure to operator is familiar with proper safety precautions and operating techniques before using the saw. Know how to stop the saw in case of emergency.

Keep both hands on the handle while using the saw. Stop the engine when leaving the saw unattended.

Block the wheels when leaving or when using on a slope.

Maintain this equipment in a safe operating condition at all times. Ensure all fasteners are tight

Never run engine without air filter. Severe engine damage may occur. Always service air cleaner frequently to prevent carburetor malfunction.

Always store equipment properly when it is not being used. Equipment should be stored in a clean, dry location out of the reach of children.

Never operate this saw in areas that contain combustible material or fumes. Fire and/or explosions may result from errant sparks from the equipment.



## Blade Safety

Use appropriate reinforced abrasive blades or steel centered diamond blades manufactured for use on concrete saws. Do not use conventional abrasive blades with water.

Always inspect diamond blades before each use. The blade should exhibit no cracks, damage, or flaws in the steel centered core and/or rim. Center (arbor) hole must be. Examine blade flanges for damage, excessive wear and cleanliness before mounting blade. Blade should fit tightly on the shaft and against the inside/outside blade flanges.

Ensure that the blade is marked with an operating speed greater than the blade shaft speed of the saw.

Only cut the material that is specified by the diamond blade. Read the specifications of the diamond blade to ensure the proper tool has been matched to the material being cut. Use only dry cutting diamond blades with the optional water tank kit for dust suppression.

Always keep blade guards in place. Exposure of the diamond blade must not exceed 180 degrees.

Ensure that the diamond blade does not come into contact with ground or surface during transportation. Do not drop the diamond blade on ground or surface.

The engine governor is designed to permit maximum engine speed in a no-load condition. Speeds that exceed this limit may cause the diamond blade to exceed the maximum safe allowable speed.

Ensure that the blade is mounted for proper operating direction.

## **Transportation Safety**

Use the lifting bail and appropriate lifting equipment to ensure the safe movement of the saw.

Do not use the handle bars and/or front pointer as lifting points.

Never tow the saw behind a vehicle.

Ensure that both pointer bars are positioned appropriately to minimize their exposure during transportation.

Engines tipped to extreme angles may cause oil to flow into the cylinder head making the engine difficult to start.



### Service Safety

Never lubricate components or attempt service on a running machine.

Do not operate the machine if there is a fuel leak. Repair fuel leaks first.

Always allow the machine a proper amount of time to cool before servicing.

Keep the machinery in proper running condition.

Fix damage to the machine immediately and always replace broken or worn parts.

Dispose of hazardous waste properly. Examples of potentially hazardous waste are used motor oil, fuel and fuel filters.



# **Operation – BSS18H39W**

# Assembly

Install and raise the handle to the desired height and secure in place with provided fasteners

Be certain to check engine oil level and service before using. Refer to engine manual for detailed information.

# **General Instructions**

- 1. Be certain you have the correct diamond or abrasive blade. Contact your authorized servicing dealer for the correct specification. Getting the correct blade will make a tremendous difference in your blade costs and performance.
- 2. The blade shaft flange and arbor must be inspected for damage and cleaned before mounting blade. If damaged replace bad parts. Inspect blade for damage to arbor hole and flange area before attempting to mount blade.
- 3. Mount the blade solidly and firmly on blade shaft arbor using the wrench provided. Make sure the arrow on both the blade and the blade guard are pointing in the same direction of rotation. The lock pin in the outer blade flange must go completely through the blade and into the matching hole in the inside blade flange. Tighten blade flange nut very securely. (Approximately 50 ftlb.). Note that the blade shaft nut on the right hand side has a left handed thread which tightens by turning counter-clockwise. Some models the blade shaft nut on the left hand side has right hand threads which tightens by turning clockwise.
- 4. Do not operate without proper blade guard in place. Do not operate with front of blade guard raised. Blade exposure cannot exceed 180 degrees when cutting.
- 5. The front pointer must be checked for alignment with blade. It must be in line with a blade mounted on the blade shaft. Use a chalk line or long straight edge to verify alignment.
- 6. Do not use conventional (wet) diamond blades without water! You must have from 2.5 to 5 gallons of water per minute flowing over the blade for proper cooling and to get maximum blade life. For wet sawing be sure the spray holes in the blade guard water tubes are open and that each side of the blade has an adequate supply of water. Test your water supply for pressure and quantity (flow) before starting to saw.
- 7. Saw in a straight line. Mark the cutting line clearly so the saw operator can follow the line without difficulty .The saw should not be twisted from side to side trying to force the blade back on line.



8. Saw only as deep as the specifications and job conditions require. This will save blade life and reduce sawing costs. Sawing excessively deep should be avoided. Step cut in increments of two inches for best results.

# To Start Saw Engine

- 1. Fill the fuel tank and check the engine oil level. Refer to the engine manual for details
- 2. Start engine. Follow procedure in engine manual
- 3. Let engine warm up at half throttle.
- 4. All sawing is done at full throttle. Governor is factory set for correct engine speed.

# To Maneuver Saw

Raise blade as high as possible so blade will not strike pavement when maneuvering by using the height adjustment crank. The locking tab can be used to hold the crank from vibrating down.

# To Start Sawing

Follow all the instructions outlined above.

Align blade with cut. For wet sawing open water valve full open. Check water to verify full flow then adjust for proper amount of water on blade before you lower the blade. If water supply is interrupted stop cutting immediately.

Lower the blade into the cut (never deeper than required) by using the height adjustment crank. The locking tab can be used to hold the crank from vibrating down.

During cutting do not exert excessive side pressure on handles to steer. Use only enough pressure to follow the previously marked line.

Use proper forward speed allowing the blade to cut but not stall.

If the saw should stall for any reason raise the blade completely out of the cut before starting engine again.

When lowering the blade into a partially-made cut use extreme care to be certain the blade is perfectly aligned within the cut before starting to saw again. Do not force blade into material by lowering the blade too fast or by pushing too fast while sawing.



# Finish of Cut

- 1. Bring the blade out of the cut by method explained under "To Maneuver Saw". Raise blade high enough to clear the pavement when maneuvering the saw.
- 2. Turn off water valve.
- 3. Close engine throttle to idle position. Stop the engine.
- 4. Do not leave the saw until the blade and saw has completely stopped.



# MAINTENANCE INSTRUCTIONS – BSS18H39W

Lubricate blade shaft bearings daily! Note: When cutting dry grease blade shaft bearings two or three times daily. Grease provides an added protective seal for the bearings. Use only premium lithium-based grease conforming to NLGI No.2 consistency.

Every 40 hours of operation grease front axle pivot bearings and grease depth control adjustment shaft.

Check engine oil daily. Keep oil clean and at proper level. Since the engine often operates at an angle check the oil level (with engine horizontal) frequently to ensure that the oil level never falls below the lower mark in the dipstick. Follow engine manufacturer's recommendation on changing oil.

Clean engine air filter. When cutting dry clean air cleaner two or three times a day. See engine manufactures manual for proper care and maintenance.

For engine care please consult the engine manual.

Blade shaft V-belts tension: This model concrete saw is equipped with premium V-belts. These belts are properly tensioned at the factory. Severe damage or even breakage of the crankshaft might occur if the belts are tensioned too tight. Check belt tension as set on the new saw and never set belts beyond original factory tension. Not enough tension will result in poor saw performance and short belt life. Belts should never be allowed to slip. After two hours of use, retension the belts to make up for initial stretch.

## To re-tension the belts:

- 1. Turn engine off.
- 2. Loosen the four bolts holding the engine.
- 3. Turn the horizontal tensioning bolt on the left rear of the saw frame clockwise until the belts are tight.
- 4. Re-tighten the four bolts on the engine.

Continue to check the belt tension on a regular basis and re-tighten as necessary. To obtain accurate V-belt setting a V-belt tension tester should be used. Check the setting on a single belt of a matched set of V-belts. Apply load at the center of the belt span. Deflection should be 3/16" with a 5 to 6 lb. load.

Tighten fasteners regularly. Nuts and bolts may become loose particularly after the first few hours of operation. On some models care must be taken to select the proper tools and fasteners (Metric or English). Most are Metric however a few items use English or Inch fasteners. Damage to the threaded fasteners could occur if incorrect tools or fasteners are used.



# **Optional Items – BSS18H39W**

### Water Tank Kit

Use only for dry cutting. The water tank is designed only to suppress airborne concrete dust.

Do not use conventional (wet) diamond blades with the water tank as the water source because there is not sufficient water flow available to properly cool the blades

Cutting Depths			
Blade Size	Maximum Depth		
10 Inches (250 mm)	2 – 5/8 (65 mm)		
12 Inches (300 mm)	3 – 5/8 (90 mm)		
14 Inches (350 mm)	4 – 5/8 (115 mm)		
16 Inches (400 mm)	5 – 5/8 (140 mm)		
18 Inches (450 mm)	6 – 5/8 (165mm)		

## Maximum blade capacity for BSS18H39W is 18" (450mm).

## **Governor Speeds**

It is critical that the governor and throttle on all internal combustion engines are adjusted properly. Engine speed is preset at factory for proper sawing speed. It is not normally necessary to change this setting. It should be periodically verified after saw is placed into service. To change governor sets, refer to the engine manual.

Warning: Over speeding the engine and blade shaft can cause serious damage to the blade resulting in personal injury to the operator and bystanders. To assure the proper governor adjustments, do not exceed the following speeds:

## Maximum No Load Blade Shaft RPM (3250) Maximum No Load Engine RPM (3900)

