

# **OPERATION MANUAL**



# RIDE-ON POWER TROWEL

# PERFORMANCE • EFFICIENT • RELIABLE

Your Model #	:	
Vour Sprial #		



BOMAX sincerely thanks you for selecting the Ride-on Power
Trowel. For your safety and proper operation, before you start to operate or carry out any maintenance on this equipment, YOU
MUST READ and STUDY this manual carefully. Be sure to always keep it ready for reference.



# DAILY PRE-OPERATION CHECKLIST

# NOTE Make copies of this checklist and use it on a daily basis.

1.	Engine Oil Level
2.	Gearbox Oil Level
3.	Engine Fuel Level
4.	Condition of Blades
5.	Blade Pitch Operation
6.	Safety Cut-Out Switch Operation
7.	Fasteners (Bolts & Nuts)

Comments:



#### **SAFETY ALERT & HAZARD SYMBOLS**

For your safety and the safety of <u>OTHERS!</u> Safety precautions should be followed at all times when operating this equipment. Failure to read and understand the Safety Messages and Operation could result in injury to yourself or others.

## **NOTE**

This Owner's Manual has been developed to provide complete instructions for the safe and efficient operation of BOMAX Walk-Behind Power Trowel. Please refer to the engine manufacturers instructions for related safe operation and maintenance of the engine.

Before using this equipment, ensure that the operator has read and fully understands all instructions in this manual.

#### SAFETY ALERT SYMBOLS

The following safety alert symbols will inform you about potential hazards that could injure you or others. They represent the level of exposure to the operator, and are preceded by one of three words: **DANGER**, **WARNING**, or **CAUTION**.



**DANGER:** You **WILL** be **KILLED** or SERIOUSLY injured if you **DO NOT** follow directions.



**WARNING:** You **CAN** be **KILLED** or SERIOUSLY injured if you **DO NOT** follow directions.



**CAUTION:** You **CAN** be injured if you **DO NOT** follow directions.

Potential hazards associated with Pro-Series Trowel operation will be referenced with "Hazard Symbols" which appear throughout this manual, and



will be referenced in conjunction with "Safety Alert Symbols".

#### HAZARD SYMBOLS



Lethal Exhaust Fumes



Engine exhaust fumes contain poisonous carbon monoxide. This fume is colorless and odorless, and can cause death if inhaled. **NEVER** operate this equipment in a confined area or enclosed structure that does not provide ample free flow air.



**Explosive Fuel** 



Gasoline is extremely flammable, and its vapors can cause an explosion if ignited. **DO NOT** start the engine near spilled fuel or combustible fluids. **DO NOT** fill the fuel tank while the engine is running or hot. **DO NOT** overfill tank, since spilled fuel could ignite if it comes into contact with hot engine parts or sparks from the ignition system. Store fuel in approved containers, in well ventilated areas and away from sparks and flames. **NEVER** use fuel as a cleaning agent.



**Burn Hazards** 



Engine components can generate extreme heat. To prevent burns, **DO NOT** touch these areas while the engine is running or immediately after operations. **NEVER** operate the engine with heat shields or heat guards removed.



**Rotating Parts** 



**NEVER** operate equipment with covers, or guards removed. Keep *fingers*, *hands*, *hair* and *clothing* away from all moving parts to prevent injury.





**Accidental Starting** 



**ALWAYS** place the engine ON/OFF switch in the "OFF" position when the equipment is not in use.



**Over Speed Conditions** 



**NEVER** tamper with the factory settings of the engine governor or settings. Personal injury and damage to the engine or equipment can result if operating in speed ranges above maximum allowable.

# <u>NOTE</u>

This **equipment**, other property, or the surrounding environment could be damaged if you do not follow instructions.



Respiratory Hazard



**ALWAYS** wear approved respiratory protection.



Sight and Hearing Hazard





**ALWAYS** wear approved eye and hearing protection.



**Equipment Damage Messages** 

Other important messages are provided throughout this manual to help prevent damage to your equipment, other property, or the surrounding environment.

#### **SAFETY MESSAGES**

#### **CAUTION:**



For your own personal safety and those around you, **YOU MUST READ** and ensure you **FULLY UNDERSTAND** the following safety information. It is the responsibility of the operator to ensure that he/she fully understands how to operate this equipment safely. In the event you are unsure about the safe and correct use of the Power Trowel, please consult your supervisor or nearest *ACE* dealer or *ACE*.

The following safety guidelines should always be used when operating the Walk-Behind Power Trowel.

#### **CAUTION:**



**IMPROPER** maintenance or use can be hazardous. **READ** and **FULLY UNDERSTAND** this section before you perform any maintenance, service or repairs.

- This equipment is to be used for its intended application only.
- This equipment must be operated only by well-trained personnel.
- The owner of this equipment must observe, and train the operator of the equipment to observe the effective Labor Protection Regulation in the country of application.



- Use a suitable lifting equipment to lift the equipment.
- Cordon off the work area and keep members of the public and unauthorized personnel at a safe distance, including animals.
- Keep FINGERS, HANDS, HAIR and CLOTHING away from moving parts.



- Never allow a person to act as a weight for this equipment.
- Personal Protective Equipment (PPE) must be worn by the operator whenever this equipment is being used.
- Make sure you know how to safely switch this equipment OFF before you switch it ON in case you get into difficulty.
- Always switch OFF the engine before servicing it.



 During use, the engine becomes very hot. Allow the engine to cool before touching it.



- Never leave the engine running and unattended.
- Never remove or tamper with any guards fitted, they are there for your protection. Always check guards for condition and security. If any are damaged or missing, DO NOT USE THE EQUIPMENT until the guard has been replaced or repaired.



 Do not operate the machine when you are ill, feeling tired, or when under the influence of alcohol or drugs.



• This equipment is designed to eliminate the possible risks arising from the use of it. However, risks DO reside, and these risks are not clearly foreseeable, and may cause personal injury or property damage, even possible death. If such unpredictable and unforeseeable risks become apparent, the equipment must be stopped immediately, and operator or his supervisor must take appropriate measures to eliminate such risks. It is sometimes necessary to inform the manufacturer of such event for future counter measuring.

# **WARNING:**



Fuel is highly flammable. It may cause injury, death or property damage. **SHUT DOWN** the engine, extinguish all open flames and **DO NOT** smoke while filling the fuel tank. **ALWAYS** wipe up any spilled fuel.

- Before refueling, switch off the engine and allow it to cool.
- When refueling, DO NOT smoke or allow naked flames in the area.



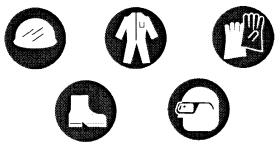
• When refueling, use proper funnel, and avoid spilling over the engine.



- Spilt fuel must be made safe immediately, using sand. If fuel is spilt on your clothes, change them.
- Store fuel in an approved, purpose made container away from heat and ignition source.

PPE (Personal Protective Equipment)

Suitable PPE must be worn when using this equipment i.e. Safety Goggles, Gloves, Ear Defenders, Dust Mask and Steel Toe capped footwear (with anti-slip soles for added protection). Wear clothing suitable for the work you are doing. Always protect skin from contact with concrete.



#### **FUEL**

Do not ingest fuel or inhale fuel vapors and avoid contact with your skin. Wash fuel splashes immediately. If you get fuel in your eyes, irrigate with copious amounts of water and seek medical attention as soon as possible.

#### **EXHAUST FUMES**

#### **WARNING:**



The exhaust fumes produced by the engine are **HIGHLY** toxic and **CAN KILL**!



Do not operate your Power Trowel indoors or in a confined space, make sure the work area is adequately ventilated.



# **GENERAL SAFETY GUIDELINES**

Failure to follow instructions in this manual may lead to serious injury or even death! This equipment is to be used by qualified and trained personnel only. This equipment should not be operated by persons under 18 years of age.

Always use proper heavy lifting techniques when moving equipment.

Always make sure that machine is kept in proper operating condition.

Always have throttle position at idle while starting engine.

Always check to make sure that operating area is clear before starting engine.

Always test safety equipment including the safety engine kill mechanisms before operating equipment.

Never place feet on or inside the guard ring while starting the engine.

Never operate this equipment without proper protective clothing including footwear.

Always keep clear of rotating parts when operating.

Never operate with belt guard or any other guards removed.

Never leave machine unattended while running.

Never refuel while engine is running or while engine is hot.

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

Never smoke while refueling.

Exhaust fumes are lethal! Operate machine in a well ventilated area, away from places where fumes can accumulate.

# **SAFETY INFORMATION**

## **FOLLOW ALL SAFETY INSTUCTION**

Read All safety instructions carefully. Safety instructions will be found throughout this manual and on the machine. Keep all safety information in good, readable condition. If needed, replacement safety information is available.

Proper machine operation includes training for operators. Operators should be versed on machine safety and operation. Never allow a person who is not properly trained to operate this equipment.

Keep this machine in proper working condition. This includes keeping all safety decals on the machine clean and visible.

Do not modify this machine. Doing so may cause improper operation and may not be safe. This may also reduce machine life. Modifying this machine in any way will void the warranty.

#### **OPERATE MACHINE SAFETY**

Always be aware of the operational area of your machine. Operators need to be careful to keep bystanders and nearby objects at a safe distance from the



machine. Never let someone who is untrained operate this machine.

Study the operational area carefully. Remove all dangerous objects from the finishing area. (i.e. protruding rebar or wood). Do not attempt to use the machine where operation appears to be dangerous.

Keep the machine properly maintained and in good working order. This mainly entails keeping the machine clean and serviced. This will allow the finisher to perform to it's fullest potential and provide the longest operational lifetime. Check the safety kill switch before and after every operation. It is good practice to stop the machine with the safety kill switch, to ensure it is operating properly. Always try to do most work during daylight hours or with sufficient artificial lighting. Visibility must be good for this machine to be used effectively.

Never operate machinery when tired or ill. Operators must be alert and always looking for possible signs of danger or misuse of machinery. Do not operate the machine in dangerous surroundings.

#### PERSONAL PROTECTIVE EQUIPMENT

Always wear proper clothing while operating this equipment. Protective clothing includes (but is not limited to): boots, long sleeve shirt, long pants, gloves, hearing protection and safety eyeglasses. Consult with the construction site foreman to determine what protective clothing is required on the construction site.

#### **HAZARDOUS MATERIALS**

Exposure and mishandling of hazardous material can cause personal injury or damage the environment. Potentially hazardous material used on this machine may include the following: lubricant, fuel, paints and adhesives.

Take care to handle hazardous material properly. MSDS information sheets are available upon request.

#### **MAINTENANCE SAFETY**

## Cautions! Disconnect spark plug wires before attempting service.

Before attempting maintenance on this machinery, know the procedure and have the correct tools. Always make sure that machine is stopped and the spark plug wires and battery are disconnected before attempting service.

Securely support any machine components that must be raised for service (i.e. trowel arms). Never lubricate the machine or attempt service on a running machine. Always allow the machine proper time to cool before servicing.

Keep machinery in proper running condition. Make sure that there is no buildup of concrete, grease, oil or debris. Keep all parts properly installed. Fix damage immediately and always replace worn or broken parts.



Dispose of potentially hazardous waste properly. Examples of potentially hazardous waste are: motor oil, fuel and filters. Use rigid containers for trapping these items. Do not use old food or beverage containers, someone may be mislead. Do not pour waste oil or fuel directly onto the ground, down a drain or into any water source.

Inquire what the proper disposal procedures are for waste fuel and oil in your local area.

# TROWEL FINISHER SERIES----INSTUCTIONS

# **Putting Into Service**

Before packing and shipping, this power Trowel was run and tested at the factory. If there are any problems, please let us know.

Before putting your new finisher into service, read all manuals and instructions carefully. Improper setup, use or maintenance of your equipment could result in personal injury or damage to equipment.

The purpose of this section of the manual is to explain the intend setup, use and maintenance of this equipment.

## **Assembly**

BM836 ride-on trowel are full assembly in the factory. No need to assembly anything by end user!

DO NOT LIFT THE MACHINE BY GUARD RINGS.

#### **Before Starting**

- 1. Read and follow the engine operation manual before running.
- 2. Add fuel and water into the tank. Yellow tank is for fuel, white tank is for water.





3. Connect the battery wire. Red wire is to positive, black is to negative





- 4. Add the oil to engine according to the engine manual. And check the gear-box oil level.
- 5. Check the stop panel working property.



6. Adjust the chair to the comfortable position for the operator



**Machine Operations** 

# **Starting**

1. put left feet on stop switch panel (left the foot will stop the engine)



# 2. turn on the fuel pump valve which locate in the back of machine



3. open the engine choke



Honda

- 4. Turn the key and starting the engine
- 5. After running 3 minutes with idle speed then close the engine choke
- 6. Trample the throttle with right feet operation the machine.

# Operation

- 1. Trample the engine throttle panel increasing the blade speed
- 2. Moving direction

Forward: push 2 control bars forward Reserve: push 2 control bars reserve

Right side: move 2 control bars to right side Left side: move 2 control bars to right side

Turning: right hand control bar forward, left hand bar reserve to turn

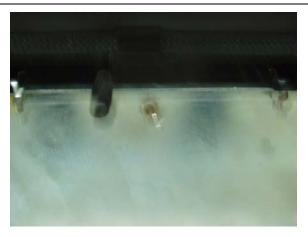
anticlockwise

Right hand control bar reserve, left hand bar forward to turn clockwise

# Always look behind you to avoid hazards before moving backwards.

light switch light switch locate under the chair





4. Water pump
Water pump install in the back side switch in on the left hand control bar





## Cleanup

NEVER allow concrete to harden on the power trowel.

Immediately after use, wash any concrete off your trowel with water. Be careful not to spray water on the engine. An old paintbrush or broom may help loosen any concrete that has started to burden.

Coat the blades and blade arms with diesel fuel after cleaning. This should help prevent rusting and allow for easier cleanup in the future.

Maintenance (service, Adjustment and repair)

NOTE: See the engine manual supplied with your machine for appropriate engine maintenance schedule.

There is a "Daily Preparation Check List" at the end of this manual. Please feel free to make copies of it and use it on a daily basis.



#### **Maintenance schedule**

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Daily (8-10 Hours)

Check the gearbox oil lever daily

Check the fluid levers in the engine and gearbox.

Check the connect link control for loosen





Weekly (50-60 Hours)

Relubricateion arms, thrust collar and clutch.

Replace the blades if necessary.

Check and clean or replace the engine air filter as necessary.

Monthly (100-200 Hours)

Remove, clean, reinstall and relubrication the arms, thrust collar and clutch...

Adjust the blade arms.

Yearly (200-2500 Hours)

Check and replace if necessary the arm bushings, thrust collar bushing, shaft seals and belt.

Check pitch control cable for wear.

#### SERVICE PROCEDURES

Checking Belt Tension

The first indication of belt wear is a reduced blade speed despite the engine running at full speed. Inspect belts often for signs of damage or excessive wear.

There is no method for manual adjustment of belt tension. Excessively worn belts must be replaced.

There are some things to look for when checking to see if adjustment is necessary. Is the machine wearing out blades unevenly (i.e. one blade is completely worn out while the others look new)? Does the machine have a perceptible rolling motion? Look at the machine while it is running, do the guard rings "rock up and down" relative to the ground? These are some indications that the blade pitch needs to be adjusted.



## Changing a Blade

We recommend that all the blades be changed at the same time. The machine may wobble or bounce if only some of the blades are changed at one time.

- Place the machine on a flat, level surface. Adjust the blade pitch control to make the blades as flat as possible. Note the blade orientation on the trowel arm.
- 2. Remove the bolts and lock washers on the trowel arm, then remove the blade.
- 3. 3. Scrape all concrete particles from the trowel arm,
- 4. 4. Install the new blade, maintaining the proper orientation for direction of rotation.
- 5. 5. Affix the bolts and lock washers.
- 6. Repeat steps 2-6 for all of the remaining blades.



#### **Float Discs**

We provide 2 models ride-on machine. One is pan machine, the other is overlap machine.

These round discs attach to the spider and allow the machine to "float" on "wet" concrete. The disc design allows early floating and easy movement from wet to dry areas. They are also quite effective in embedding large aggregates and surface hardeners.





#### **STORAGE**

#### **WARNING:**



Fuel is highly flammable. It may cause injury, death or property damage. **SHUT DOWN** the engine, extinguish all open flames and **DO NOT** smoke. **ALWAYS** wipe up any spilled fuel.





For long-term storage, empty the fuel in the carburetor by running the engine with the fuel tap being closed.

The chemical composition of the fuel will deteriorate after prolonged storage. When the Trowel needs to be stored for a long time, remove all the fuel from the fuel tank. Also remove the fuel from the float chamber of the carburetor by draining the fuel out from the drain plug.

Wash away cement/concrete accumulated on the Trowel. Clean the base and protection rings. Apply a light coat of oil to prevent rust formation. Cover the Trowel and store it in a dry place.

The Operation Handle can be disengaged for easy storage. Loosen the bolts on the connecting point on the base plate and release the Operation Handle from the slot.



#### WARRANTY

Your new *BOMAX* Walk-Behind Power Trowel is warranted to the original purchaser for a period of one year (12 months) from the original date of purchase.

The *BOMAX* warranty is against defects in design, materials and workmanship.

The following are not covered under the *BOMAX* warranty:

- Damage caused by abuse, misuse, dropping or other similar damage caused by or as a result of failure to follow assembly, operation or user maintenance instructions.
- 2. Alterations, additions or repairs carried out by persons other than *BOMAX* or their recognized agents.
- 3. Transportation or shipment costs to and from *BOMAX* or their recognized agents, for repair or assessment against a warranty claim, on any equipment.
- 4. Materials and/or labor costs to renew, repair or replace components due to fair wear and tear.
- 5. Engine.

BOMAX and/or their recognized agents, directors, employees or insurers will not be held liable for consequential or other damages, losses or expenses in connection with or by reason of or the inability to use the equipment for any purpose.

#### WARRANTY CLAIMS

All warranty claims should firstly be directed to the local dealer, either by telephone, by fax, by email, or in writing.

#### **USE ONLY GENUINE BOMAX PARTS AND ACCESSORIES**

For your own safety, the safety of others and the life of your equipment.



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