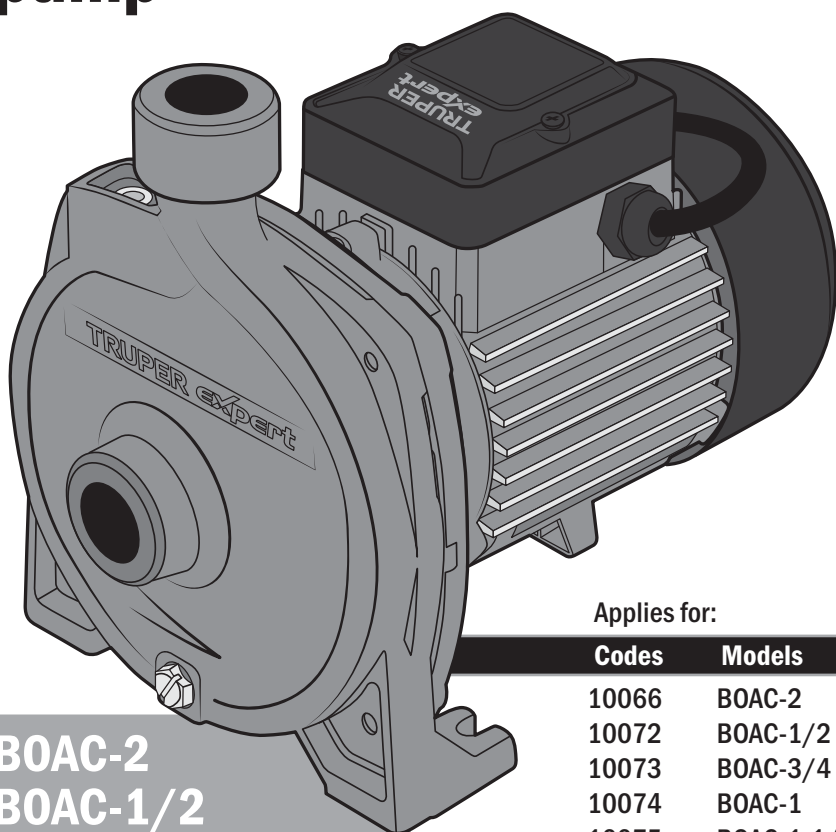


Manual

Centrifugal water pump



BOAC-2
BOAC-1/2
BOAC-3/4
BOAC-1
BOAC-1-1/2



Applies for:

Codes	Models
10066	BOAC-2
10072	BOAC-1/2
10073	BOAC-3/4
10074	BOAC-1
10075	BOAC-1-1/2



Read this manual thoroughly
before using the tool.



Technical data.....	3
Power requirements.....	3
 General safety warnings for powered tools.....	4
 Safety warnings for water pumps.....	5
Parts.....	5
Installation.....	6
Startup.....	8
Maintenance.....	8
Accessories and replacements.....	9
Troubleshooting.....	9
Notes.....	10
Authorized service centers.....	11
Warranty policy.....	12

CAUTION

To gain the best performance of the tool, prolong the duty life, make the Warranty valid if necessary, and to avoid hazards of fatal injuries please read and understand this Manual before using the tool.

Keep this manual for future references.

The illustrations in this manual are for reference only. They might be different from the real tool.

Use and care recommendations



RESPECT THE WORK CYCLES

50 min of work per 20 min of rest. Maximum 6 hours daily.



ALWAYS ensure the pump has a constant water supply.

Follow the installation instructions (page 6).



PURGE WITH WATER before turning on the pump for the first time, when used occasionally or during maintenance (page 8).



INSTALL a foot valve at the end of the suction pipe **TO PREVENT THE PUMP** from running dry and **GETTING DAMAGED**.



Perform regular **MAINTENANCE** on your machine (page 8).

	BOAC-2	BOAC-1/2	BOAC-3/4	BOAC-1	BOAC-1-1/2
Code •	10066	10072	10073	10074	10075
Description •	Centrifugal water pump				
Voltage •	127 V~				
Frequency •	60 Hz				
Speed •	3 450 RPM				
Current •	18.5 A	5 A	7.6 A	11 A	15 A
Power •	2 Hp(1491W)	1/2 Hp(373 W)	3/4 Hp(560 W)	1 Hp(746 W)	1 1/2 Hp(1 119 W)
Inlet diameter •	1 1/2 NPT	1 NPT			
Outlet diameter •	1 NPT				
Maximum suction depth •	26 ft				
Maximum total head •	137 ft	75 ft	91 ft	118 ft	137 ft
Maximum flow •	50 GPM	23 GPM	26 GPM	30 GPM	34 GPM
Maximum water temperature •	104 °F				
Conductors •	12 AWG	18 AWG	16 AWG	16 AWG	14 AWG
Work cycle •	50 min of work per 20 min of rest. Maximum 6 hours daily.				
Insulation •	Class I				
IP rating •	IPX4				

Power cord grips used in this product: Type "Y"
Build quality: Basic insulation
Thermal insulation on motor winding: Class F

⚠ WARNING If the power cord is damaged, it must be replaced by the manufacturer or a TRUPER Authorized Service Center to avoid the risk of electric shock or serious injury.
Splashes or spills during operation can compromise this tool's electrical insulation. Do not expose it to rain, liquids, or moisture.



⚠ WARNING Ensure all power circuits are disconnected before accessing the terminals.

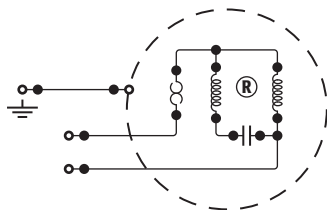
Power requirements

⚠ CAUTION The connection to the power source must be made by a professional electrician, following the electrical diagram on the right.

⚠ CAUTION Use a separate electrical circuit for the pump. This circuit must not have conductors smaller than 12 AWG and must be protected with a 20 A time-delay fuse. Before connecting the motor to the power line, ensure the voltage matches the value indicated on the motor's data plate. Operating at a lower voltage will damage the motor.

⚠ CAUTION The power cables are color-coded as follows:
Green and Yellow: Ground / **Black:** Neutral / **White:** Line

⚠ WARNING All wiring, electrical connections, and system grounding must comply with the **NORMA OFICIAL MEXICANA NOM-001- SEDE, INSTALACIONES ELÉCTRICAS (UTILIZACIÓN)** or with local codes and regulations. A qualified electrician must be employed. It is recommended that the pump be powered by a circuit that includes a residual current device with a rated current not exceeding 30 mA



General safety warnings for powered tools

⚠ WARNING! Read all safety warnings, instructions, and specifications provided with this power tool. Failure to follow all instructions listed below may result in electric shock, fire, and/or serious injury. Keep all warnings and instructions for future reference.

Work area

Keep your work area clean, organized, and well-lit.

Cluttered and dim areas can lead to accidents.



Do not operate the tool in explosive atmospheres, such as those containing flammable liquids, gas, or dust.



The electric tools produce sparks that can ignite flammable material.

Keep children and other individuals at a safe distance while using the equipment.



Distractions can cause loss of control and lead to accidents.

Do not exceed your range of motion. Keep both feet firmly planted on the ground and always maintain balance.

This allows better control of the tool in unexpected situations.

Dress appropriately. Do not wear loose clothing or jewelry. Keep your hair, clothing, and gloves away from moving parts.

Loose clothes, jewelry, or long hair may get caught in moving parts.



If dust extraction and collection devices are available for the tool, check their connections and use them correctly.

The use of these devices reduces risks associated with dust.

Electrical safety

The tool plug must match the outlet. Never modify a plug.

Do not use any adapter for grounded tool plugs.

Modified plugs and different outlets increase the risk of electrical shock.



Avoid body contact with grounded surfaces such as pipes, radiators, electric stoves, and refrigerators.

There is an increased risk of electrical shock if the body is grounded.

Do not expose the tool to rain or humid conditions.

Water entering the tool increases the risk of electrical shock.

Do not force the cable. Never use the cable to transport, lift, or disconnect the tool. Keep the cable away from heat, oil, sharp edges, or moving parts.

Damaged or tangled cables increase the risk of electrical shock.

Always use an extension cord designed for outdoor use when using a tool outdoors.

Using the right outdoor extension cord helps reduce the risk of electric shock.

If using the tool in a wet environment is unavoidable, use a power supply protected by a Ground Fault Circuit Interrupter (GFCI).

A GFCI reduces the risk of electric shock.

Tool use and care

Do not force the tool. Use the appropriate tool for the task at hand.

The right tool performs better and is safer when used at the intended pace.



Do not use the tool if the switch is not functioning.

Any power tool that cannot be turned on or off is dangerous and must be repaired before operation.

Unplug the tool from the power source and/or remove the battery before adjusting, changing accessories, or storing it.

This helps prevent the tool from being accidentally started.

Store the tools out of the reach of children and keep them from being handled by individuals unfamiliar with the tools or their instructions.



Power tools are dangerous in untrained hands.

Maintain the tool. Ensure that the moving parts are not misaligned or jammed and that no broken parts or other conditions may affect its operation. Repair any damage before using the tool.



Many accidents are caused by inadequate tool maintenance.

Keep cutting accessories sharp and clean.

Well-maintained cutting accessories are less likely to jam and easier to control.

Use the tool, components, and accessories according to these instructions and as intended for the type of tool in appropriate working conditions.

Using the tool for applications other than those for which it is designed could cause a hazardous situation.

Service

To ensure the tool's safety, have it repaired at a TRUPER Authorized Service Center

only genuine replacement parts.

The machine should not be used by children or individuals with limited physical, sensory, or mental abilities, nor by those who lack experience or knowledge of how to use it, unless they are supervised by a responsible person or have received proper instructions.

Children should always be supervised to ensure they do not use the machines as toys. Close supervision is required if children or individuals with disabilities use or are near any household appliance.



Personal Safety

Be alert, watch your actions, and use common sense when handling an electrical tool. Do not use it if you are tired or under the influence of drugs, alcohol, or medication.

A moment of distraction while using the tool can cause personal injury.

Use safety equipment. Always wear eye protection.

The use of safety equipment, such as safety glasses, dust masks, slip-resistant shoes, helmets, and ear protection, in appropriate conditions significantly reduces the risk of personal injury.



To avoid accidental starts, ensure the switch is in the "off" position before connecting to the power source and/or the battery or transporting the tool.

Carrying power tools with your finger on the switch or connecting power tools with the switch in the "on" position can cause accidents.

Remove any wrenches or adjusting tools before starting the power tool.

Wrenches or tools left on the rotating parts of the tool can cause personal injury.

Safety warnings



TRUPER
expert

Intended uses

• The pump is a stationary device designed to pump clean, neutral liquids without suspended abrasive solids at temperatures not exceeding 104 °F (40 °C). It is useful for orchard irrigation, pumping non-aggressive liquids, and increasing insufficient pressure in water supply networks.

• Peripheral pumps are suitable for agricultural applications in micro-sprinkler or aerial spraying irrigation systems, where higher pressure requirements are necessary due to the irrigation system's height and where the minimum pressure requirements for the proper operation of spray or misting nozzles are high. Centrifugal pumps are not recommended in these applications due to their lower output pressure.

• The device meets the most current safety requirements as long as it is used for the purpose for which it was designed. It may only be used under the permitted performance restrictions.

• It should not be used to pump explosives, flammable or aggressive materials, harmful substances to health, or wastewater.

• Improper use or modifications to the device or the use of components not tested and approved by the manufacturer may result in unforeseen damage to the device and operator, and release the manufacturer from legal responsibility.

⚠ WARNING • The pump must be connected through a residual current circuit breaker (RCCB) designed with a short-circuit current not exceeding 30 mA

⚠ WARNING • Before connecting, check that the power supply matches the pump's requirements.

⚠ CAUTION • Do not install the device outdoors or near wet areas.

⚠ WARNING • Do not install the device in areas where there is a risk of explosion or near flammable liquids or gases.

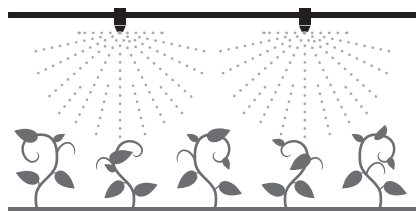
⚠ WARNING • Do not direct the water jet at the device or other electrical components. There is a risk of death due to electric shock.

⚠ CAUTION • Make sure the power cable does not come into contact with the water flowing near the device.

• Any repairs should only be performed by a TRUPER Authorized Service Center. Otherwise, you risk electric shock and void the warranty.

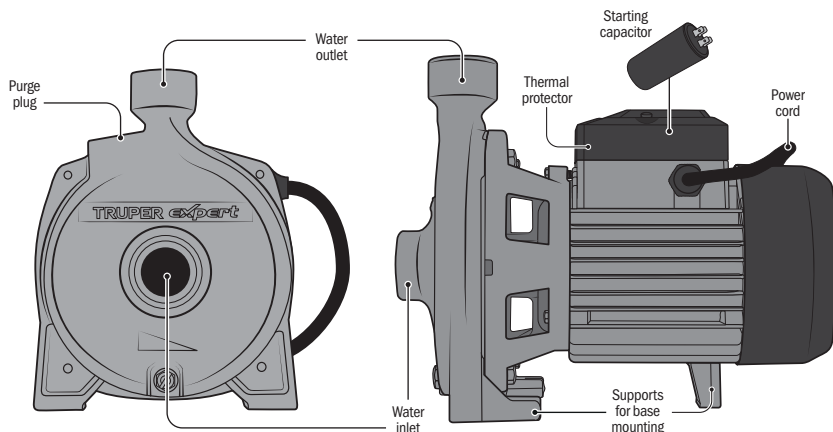
• The symbols attached to the device should not be removed or covered. Any information on the device that is no longer legible should be replaced immediately.

• Read and follow the operating instructions before installing and starting the equipment. Any damage caused by failure to follow the instructions in this manual may damage the equipment and void the warranty.



Recommended for aerial irrigation with misting or spraying devices

Parts



Mounting

- The pump must be installed in a dry place, protected from the elements, with proper airflow to ensure adequate ventilation **(A)**. The ambient temperature should not exceed 104 °F (40 °C).
- Use bolts to secure the pump to a concrete base to prevent vibration **(B)**. The pump must be installed horizontally to ensure proper operation.
- The suction and discharge pipes must be supported on the wall or floor to prevent stress from being transferred to the pump body **(C)**.
- Be careful not to damage the pump and/or piping due to over-tightening the connections.

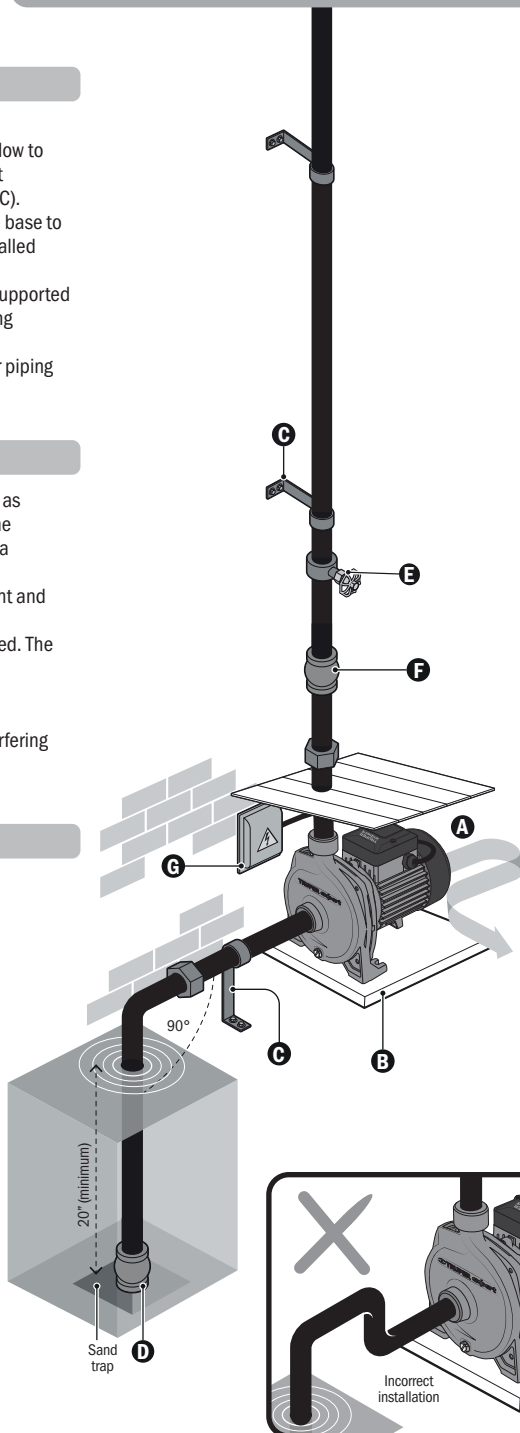
Suction line (inlet)

- The suction pipe diameter must be at least as large as the pump's water inlet diameter. If the suction height exceeds 13 ft, use a pipe with a larger diameter.
- The suction pipe must be completely airtight and submerged in the water for at least 20". It is recommended that a foot valve **(D)** be installed. The pipe must be perfectly vertical and bend 90° towards the pump's water inlet.

CAUTION If these instructions are not followed, air locks and bubbles will form, interfering with the pump's performance.

Discharge line (outlet)

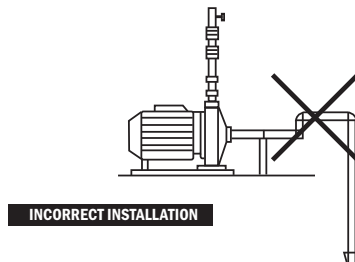
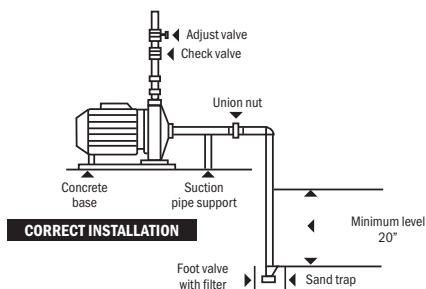
- A gate valve **(E)** should be fitted to the outlet pipe to adjust the required flow rate and pressure.
- It is recommended that a check valve **(F)** be installed between the pump's pressurized water outlet and the gate valve to prevent unexpected backflow of water columns exceeding 65 ft.



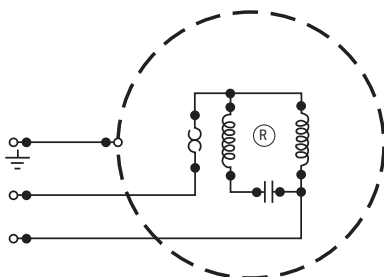
Electrical connection

- Consult a professional electrician to make the electrical connections to the power supply (**G**), in compliance with the applicable mandatory regulations.
- The fixed installation must include a device to ensure the disconnection of the power supply with an omnipolar disconnect.
- Ensure that the electrical requirements described in this manual and on the pump's plate match the capacity values of the power supply.
- Connect the pump to a circuit with proper grounding, and then connect the phases according to the electrical diagram on page 3 or the pump's plate.
- The pump has a single-phase motor, protected against overloads using a thermal protector (overcurrent cutoff) placed in the winding.

Installation diagram



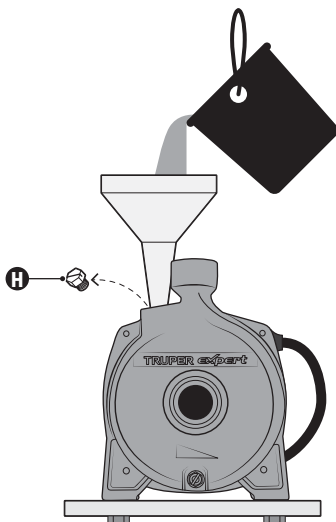
Wiring diagram



Purge

- Before starting the pump for the first time, after a long period of inactivity, or if air has entered the system, you must fill it with clean water before turning it on.
- Remove the purge plug (H) and fill with water until it reaches the level of the opening.
- Screw the plug back in and turn on the pump.

⚠ WARNING Never start the pump when it is empty. If this happens accidentally, turn off the pump immediately, wait for it to cool down, and then fill it with clean water.



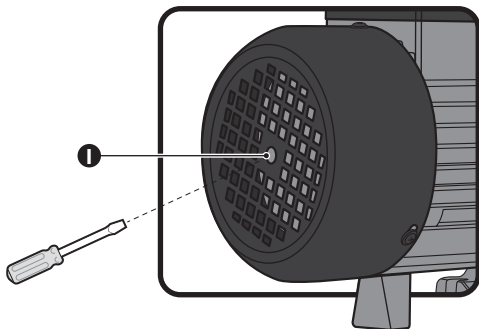
Maintenance






The pump does not require maintenance as long as the following precautions are taken:

- When there is a risk of freezing, completely drain the pump by removing the foot valve so the pipe can empty. Remember to purge the pump before starting it again.
- Periodically check the foot valve (not included) and clean it if necessary.
- If the pump will remain inactive for an extended period, it is recommended that it be drained completely, rinsed with clean water, and stored in a dry place.
- If the shaft does not turn freely, insert a screwdriver into the pump rear opening (I) to release it.

⚠ WARNING Disconnect the pump from the power supply before performing maintenance work.

- If the ambient temperature is below 39 °F or the pump will be out of use for a long time, drain the liquid from the piping to prevent freezing inside the pump. Do not operate the pump without water.



Replacement	Code	Item	Description
	101715	TORP-BOAPCJ	Discharge kit for pumps BOAC-1/4, 1/2, 3/4, 1, 1-1/2 and 2
	101751	PATA-BOACJ	Leveling foot for pumps BOAC-1/4 and 1/2
	101717	SOPN-GRUP02	Leveling block for pump BOAC-1
	101718	SOPN-GRUP03	Leveling block for pump BOAC-3/4
	101716	SOPN-GRUP01	Leveling block for pump BOAC-1-1/2 and 2

Troubleshooting

Problem

Cause

Solution

Motor does not start.

- There is no power.
- Impeller stuck.

- Check connections and voltage values.
- Refer to the maintenance section.

The motor rotates without pumping water.

- Filter clogged.
- Excessive suction height.
- Air in the inlet.

- Clean the filter.
- Decrease the length of the suction pipe.
- Check that the suction pipe is airtight.
- Ensure that the foot valve is submerged at least 20".
- It is necessary to purge the pump again.
- Check the suction height.

Insufficient flow rate.

- Suction height is at the limit.
- The filter is partially clogged.
- Impeller stuck.

- Decrease the length of the suction pipe.
- Clean the foot valve and the entire suction pipe if necessary.
- Release the impeller (See the maintenance section).

The thermal motor overload protector was activated.

- Motor overheated.
- Impeller stuck.

- Check voltage and ventilation.
- Release the impeller (See the maintenance section).

If the problem cannot be resolved, please visit a TRUPER Authorized Service Center.
Failure to follow the above precautions may damage the pump and void the warranty.



If you have any problems contacting a TRUPER Authorized Service Center, please consult our page WWW.TRUPER.COM where you will get an updated list, or call: 800 690 6990 or to 800-018-7873 where they will inform you which is the nearest service center.

AGUASCALIENTES **DE TODO PARA LA CONSTRUCCIÓN**
GRAL. BARRAGÁN #1201, COL. GREMIAL, C.P. 20030,
AGUASCALIENTES, AGS. TEL.: 449 994 0537

BAJA CALIFORNIA **SUCURSAL TIJUANA**
AV. LA ENCANTADA, LOTE #5, PARQUE INDUSTRIAL EL
FLORIDO II, C.P. 22244, TIJUANA, B.C.
TEL.: 664 969 5100

BAJA CALIFORNIA SUR **FIX FERRETERÍAS**
FELIPE ÁNGELES ESQ. RUIZ CORTÍNEZ S/N, COL. PUEBLO
NUEVO, C.P. 23670, CD. CONSTITUCIÓN, B.C.S.
TEL.: 613 132 1115

CAMPECHE **TORNILLERÍA Y FERRETERÍA AAA**
AV. ÁLVARO OBREGÓN #324, COL. ESPERANZA
C.P. 24080 CAMPECHE, CAMP. TEL.: 981 815 2808

CHIAPAS **FIX FERRETERÍAS**
AV. CENTRAL SUR #27, COL. CENTRO, C.P. 30700,
TAPACHULA, CHIS. TEL.: 962 118 4083

CHIHUAHUA **SUCURSAL CHIHUAHUA**
AV. SILVESTRE TERRAZAS #128-11, PARQUE INDUSTRIAL
BAFAR, CARRETERA MÉXICO CUAUHTÉMOC, C.P. 31415,
CHIHUAHUA, CHIH. TEL.: 614 434 0052

CIUDAD DE MÉXICO **FIX FERRETERÍAS**
EL MONSTRUO DE CORREGIDORA, CORREGIDORA # 35,
COL. CENTRO, C.P. 06060, CUAUHTÉMOC, CDMX.
TEL.: 55 5522 5031 / 5522 4861

COAHUILA **SUCURSAL TORREÓN**
CALLE METAL MECÁNICA #280, PARQUE INDUSTRIAL
ORIENTE, C.P. 27278, TORREÓN, COAH.
TEL.: 871 209 68 23

COLIMA **BOMBAS Y MOTORES BYMATESA DE MANZANILLO**
BLVD. MIGUEL DE LA MADRID #190, COL. 16 DE
SEPTIEMBRE, C.P. 28239, MANZANILLO, COL.
TEL.: 314 332 1986 / 332 8013

DURANGO **TORNILLOS ÁGUILA, S.A. DE C.V.**
MAZURIO #200, COL. LUIS ECHEVERRÍA, DURANGO,
DGO. TEL.: 618 817 1946 / 618 818 2844

ESTADO DE MÉXICO **SUCURSAL CENTRO JILOTEPEC**
PARQUE INDUSTRIAL # 1, COL. PARQUE INDUSTRIAL
JILOTEPEC, JILOTEPEC, EDO. DE MÉX. C.P. 54257
TEL.: 761 782 9101 EXT. 5728 Y 5102

GUANAJUATO **CÍA. FERRETERA NUEVO MUNDO S.A. DE C.V.**
AV. MÉXICO - JAPÓN #225, CD. INDUSTRIAL, C.P. 38010,
CELAYA, GTO. TEL.: 461 617 7578 / 79 / 80 / 88

GUERRERO **CENTRO DE SERVICIO ECLIPSE**
CALLE PRINCIPAL MZ. 1 LT. 1, COL. SANTA FE, C.P. 39010,
CHILPANCIINGO, GRO. TEL.: 747 478 5793

HIDALGO **FERREPRECIOS S.A. DE C.V.**
LIBERTAD ORIENTE #304 LOCAL 30, INTERIOR DE PASAJE
ROBLEDO, COL. CENTRO, C.P. 43600, TULANCINGO, HGO.
TEL.: 775 753 6615 / 775 753 6616

JALISCO **SUCURSAL GUADALAJARA**
AV. ADOLFO B. HORN # 6800, COL. SANTA CRUZ DEL
VALLE, C.P.: 45655, TLAJOMULCO DE ZUÑIGA, JAL.
TEL.: 33 3606 5285 AL 90

MICHOACÁN **FIX FERRETERÍAS**
AV. PASEO DE LA REPÚBLICA #3140-A, COL. EX-HACIENDA
DE LA HUERTA, C.P. 58050, MORELIA, MICH. TEL.: 443 334
6858

MORELOS **FIX FERRETERÍAS**
CAPITÁN ANZÚRES #95, ESQ. JOSÉ PERDIZ, COL.
CENTRO, C.P. 62740, CUAUTLA, MOR.
TEL.: 735 352 8931

NAYARIT **HERRAMIENTAS DE TEPIC**
MAZATLAN #117, COL. CENTRO, C.P. 63000, TEPIC, NAY.
TEL.: 311 258 0540

NUEVO LEÓN **SUCURSAL MONTERREY**
CARRETERA LAREDO #300, 1B MONTERREY PARKS,
COLONIA PUERTA DE ANÁHUAC, C.P. 66052, ESCOBEDO,
NUEVO LEÓN, TEL.: 81 8352 8791 / 81 8352 8790

OAXACA **FIX FERRETERÍAS**
AV. 20 DE NOVIEMBRE #910, COL. CENTRO, C.P. 68300,
TUXTEPEC, OAX. TEL.: 287 106 3092

PUEBLA **SUCURSAL PUEBLA**
AV. PERIFÉRICO #2-A, SAN LORENZO ALMECATLA,
C.P. 72710, CUAUTLACINGO, PUE.
TEL.: 222 282 8282 / 84 / 85 / 86

QUERÉTARO **ARU HERRAMIENTAS S.A. DE C.V.**
AV. PUERTO DE VERACRUZ #110, COL. RANCHO DE
ENMIDIO, C.P. 76842, SAN JUAN DEL RÍO, QRO.
TEL.: 427 268 4544

QUINTANA ROO **FIX FERRETERÍAS**
CARRETERA FEDERAL MZ. 46 LT. 3 LOCAL 2, COL. EJIDAL,
C.P. 77710 PLAYA DEL CARMEN, Q.R.
TEL.: 984 267 3140

SAN LUIS POTOSÍ **FIX FERRETERÍAS**
AV. UNIVERSIDAD #1850, COL. EL PASEO, C.P. 78320,
SAN LUIS POTOSÍ, S.L.P. TEL.: 444 822 4341

SINALOA **SUCURSAL CULIACÁN**
AV. JESÚS KUMATE SUR #4301, COL. HACIENDA DE LA
MORA, C.P. 80143, CULIACÁN, SIN.
TEL.: 667 173 9139 / 173 8400

SONORA **FIX FERRETERÍAS**
CALLE 5 DE FEBRERO #517, SUR LT. 25 MZ. 10, COL.
CENTRO, C.P. 85000, CD. OBREGÓN, SON.
TEL.: 644 413 2392

TABASCO **SUCURSAL VILLAHERMOSA**
CALLE HELIO LOTES 1, 2 Y 3 MZ. #1, COL. INDUSTRIAL,
2A ETAPA, C.P. 86010, VILLAHERMOSA, TAB.
TEL.: 993 353 7244

TAMAULIPAS **VM ORINGS Y REFACCIONES**
CALLE ROSITA #527 ENTRE 20 DE NOVIEMBRE Y GRAL.
RODRÍGUEZ, FRACC. REYNOSA, C.P. 88780, REYNOSA,
TAMS. TEL.: 899 926 7552

TLAXCALA **SERVICIOS Y HERRAMIENTAS INDUSTRIALES**
PABLO SIDAR #132, COL. BARRIO DE SAN BARTOLOMÉ,
C.P. 90970, SAN PABLO DEL MONTE, TLAX.
TEL.: 222 271 7502

VERACRUZ **LA CASA DISTRIBUIDORA TRUPER**
BLVD. PRIMAVERA, ESQ. HORTENSIA S/N, COL.
PRIMAVERA, C.P. 93308, POZA RICA, VER.
TEL.: 782 823 8100 / 826 8484

YUCATÁN **SUCURSAL MÉRIDA**
CALLE 33 #600 Y 602, LOCALIDAD ITZINCAB Y MULSA,
MPIO. UMAN, C.P. 97390, MÉRIDA, YUC.
TEL.: 999 912 2451

Model	Code	Brand
BOAC-2	10066	TRUPER® <i>expert</i>
BOAC-1/2	10072	
BOAC-3/4	10073	
BOAC-1	10074	
BOAC-1-1/2	10075	

Warranty. Duration: 5 years. Coverage: parts, components and workmanship against manufacturing or operating defects, except if used under conditions other than normal; when it was not operated in accordance with the instructive; was altered or repaired by personnel not authorized by TRUPER®. To make the warranty valid, only present the product in the establishment where you bought it or in Corregidora 35, Centro, Cuauhtémoc, CDMX, 06060, where you can also purchase parts, components, consumables and accessories. The costs of transportation of the product that derive from its fulfillment of its service network are included. The warranty includes transportation expenses resulting from service compliance within our service network. TRUPER will not require any proof of purchase to make the warranty effective. Phone number 800-018-7873. Made in China. Imported by TRUPER, S.A. de C.V. Parque Industrial 1, Parque Industrial Jilotepec, Jilotepec, Edo. de Méx. C.P. 54257, Phone number 761 782 9100.



Stamp of the business. Delivery date: