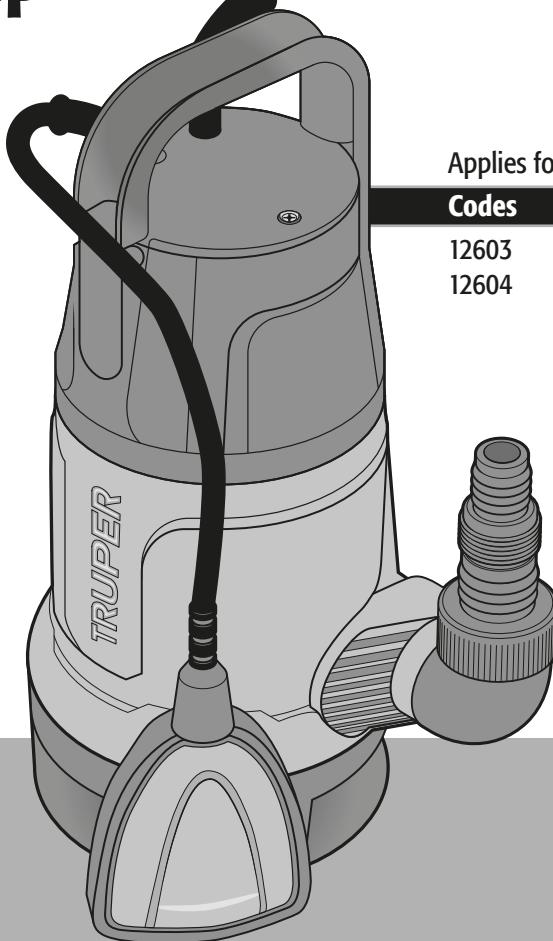


Manual

Submersible Pump

For DIRTY
Water



Applies for:

Codes	Models
12603	BOS-1SP
12604	BOS-1-1/2SP



Read the user's manual thoroughly
before operating this tool.



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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 maintenance recommendations



RESPECT THE DUTY CYCLES.

50 min of work and 20 min of rest. Daily maximum 6 hours.



NEVER use the cord to hold, carry, lift, or disconnect the tool.



Perform periodic **MAINTENANCE** to your machine (page 8).

	BOS-1SP	BOS-1-1/2SP
Code	12603	12604
Description	Submersible pump for dirty water	
Voltage and frequency	127 V~ 60 Hz	
Power	1 Hp	1 1/2 Hp
Current	6 A	7 A
Speed	3 450 RPM	
Flow rate	57.2 gal/min	61.6 gal/min
Maximum depth	16.4'	
Maximum height / maximum Value of total gauged height	27.8'	29.5'
Power cable	26.2'	
Allows particles up to	1 5/16"	
IP grade	IPX8	
Conductors	18 AWG x 3 C with 221 °F insulating temperature	
Insulation	Class I	

Power cord grips used in this product: Type "Y".

Build quality: Basic insulation

Thermal insulation on motor winding: Class F

WARNING Avoid the risk of electric shock or severe injury. When the power cable gets damaged it should only be replaced by the manufacturer or at a TRUPER Authorized Service Center.

The build quality of the electric insulation is altered if spills or liquid gets into the tool while in use.

Do not expose to rain, liquids and/or dampness.

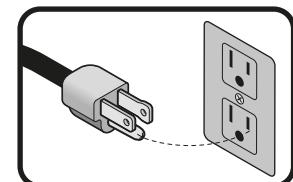
WARNING Before gaining access to the terminals all power sources should be disconnected.



Power requirements

WARNING In the event of faults or breakdown ground connection supplies a minimum resistance trajectory for the power supply, thus reducing the risk of electric shock. This tool is equipped with a power cable, adapter and ground connection sockets. Ground shall be connected into an outlet installed and grounded following all the local codes.

WARNING Do not modify the socket supplied. If the socket is not fit for the outlet, have a certified electrician to install the appropriate outlet.



CAUTION When using an extension cable, verify the gauge is enough for the power that your product needs. A lower gauge cable will cause voltage drop in the line, resulting in power loss and overheating. The following table shows the right size to use depending on cable's length and the ampere capability shown in the tool's nameplate. When in doubt use the next higher gauge.

Ampere Capacity	Number of Conductors	Extension Gauge	
		From 6 ft to 49 ft	Higher than 49 ft
From 0 A and up to 10 A		18 AWG	16 AWG
From 10 A and up to 13 A		16 AWG	14 AWG
From 13 A and up to 15 A	3 (one grounded)	14 AWG	12 AWG
From 15 A and up to 20 A		8 AWG	6 AWG

* It is safe to use only if the extensions have a built-in artifact for over current protection. AWG = American Wire Gauge. Reference: NMX-J-195-ANCE

WARNING When operating power tools outdoors, use a VOLTECK grounded extension cable labeled "For Outdoors Use". These extensions are especially designed for operating outdoors and reduce the risk of electric shock.



WARNING All the cabling, power connections and the ground connection of the system shall be in compliance with the Mexican Official Standard NORMA OFICIAL MEXICANA NOM-001-SEDE, INSTALACIONES ELÉCTRICAS (UTILIZACIÓN) or with the local codes and municipal by-laws.



⚠️ WARNING! Read carefully all safety warnings and instruction listed below. Failure to comply with any of these warnings may result in electric shock, fire and / or severe damage. **Save all warnings and instructions for future references.**

Work area

Keep your work area clean, and well lit.

Cluttered and dark areas may cause accidents.



Never use the tool in explosive atmospheres, such as in the presence of flammable liquids, gases or dust.

Sparks generated by power tools may ignite the flammable material.



Keep children and bystanders at a safe distance while operating the tool.

Distractions may cause loss of control.



Electrical Safety

The tool plug must match the power outlet. Never modify the plug in any way. Do not use any adapter plugs with grounded power tools.



Modified plugs and different power outlets increase the risk of electric shock.

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

The risk of electric shock increases if your body is grounded.

Do not expose the tool to rain or wet conditions.

Water entering into the tool increases the risk of electric shock.

Do not force the cord. Never use the cord to carry, lift or unplug the tool. Keep the cord away from heat, oil, sharp edges or moving parts.

Damaged or entangled cords increase the risk of electric shock.

When operating a tool outdoors, use an extension cord suitable for outdoor use.

Using an adequate outdoor extension cord reduces the risk of electric shock.

If operating the tool in a damp location cannot be avoided, use a ground fault circuit interrupter (GFCI) protected supply.

Using a GFCI reduces the risk of electric shock.

Personal safety

Stay alert, watch what you are doing and use common sense when operating a tool. Do not use a power tool while you are tired or under the influence of drugs, alcohol or medication.

A moment of distraction while operating the tool may result in personal injury.

Use personal protective equipment. Always wear eye protection.

Protective equipment such as safety glasses, anti-dust mask, non-skid shoes, hard hats and hearing protection used in the right conditions significantly reduce personal injury.



Prevent unintentional starting up. Ensure the switch is in the "OFF" position before connecting into the power source and / or battery as well as when carrying the tool.

Transporting power tools with the finger on the switch or connecting power tools with the switch in the "ON" position may cause accidents.

Remove any wrench or vice before turning the power tool on.

Wrenches or vices left attached to rotating parts of the tool may result in personal injury.

Do not overreach. Keep proper footing and balance at all times. This enables a better control on the tool during unexpected situations.

Dress properly. Do not wear loose clothing or jewelry. Keep hair, clothes and gloves away from the moving parts.

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



If you have dust extraction and recollection devices connected to the tool, inspect their connections and use them correctly.

Using these devices reduce dust-related risks.

Power Tools Use and Care

Do not force the tool. Use the adequate tool for your application.



The correct tool delivers a better and safer job at the rate for which it was designed.

Do not use the tool if the switch is not working properly.

Any power tool that cannot be turned ON or OFF is dangerous and should be repaired before operating.

Disconnect the tool from the power source and / or battery before making any adjustments, changing accessories or storing.

These measures reduce the risk of accidentally starting the tool.

Store tools out of the reach of children. Do not allow persons that are not familiar with the tool or its instructions to operate the tool.



Power tools are dangerous in the hands of untrained users.

Service the tool. Check the mobile parts are not misaligned or stuck. There should not be broken parts or other conditions that may affect its operation. Repair any damage before using the tool.



Most accidents are caused due to poor maintenance to the tools.

Keep the cutting accessories sharp and clean.

Cutting accessories in good working conditions are less likely to bind and are easier to control.

Use the tool, components and accessories in accordance with these instructions and the projected way to use it for the type of tool when in adequate working conditions.

Using the tool for applications different from those it was designed for, could result in a hazardous situation.

Service

Repair the tool in a TRUPER Authorized Service Center using only identical spare parts.

This will ensure that the safety of the power tool is maintained.



This tool is in compliance with
the Official Mexican Standard
(NOM - Norma Oficial Mexicana).

Appropriate use of the pump

• Submersible pumps are intended for household and garden use. They are primarily used for draining floods, transferring liquids, emptying containers, extracting water from wells or mines, draining boats and yachts, as well as oxygenating and circulating water for short periods. They can handle water containing solids of up to 1.3 inches (34 mm).

⚠ CAUTION • To prevent blockages, do not operate the pump with waters containing larger particles.

⚠ WARNING • Do not pump corrosive, combustible or explosive substances (gasoline, petroleum, thinner nitrate) grease, oil, salt and sewer water.

⚠ CAUTION • The pump is not designed to operate continuously. Cannot be used replacing continuous use fixed pumps. The useful life of the pump will be shorter in relation to the use.

⚠ CAUTION • The pump is not adequate for commercial use, nor for permanent circulation and filtering systems, or to be used with liquids containing abrasive materials, or soil, sand, mud, or clay mixes. Any of those uses is considered inadequate and can damage the pump.

- The temperature of the liquids shall not exceed 95 °F, nor as cold as there is the possibility of freezing.

⚠ CAUTION • Prevent the pump from running dry.

⚠ WARNING • Do not use the pump in the nearness of areas where explosives, flammable liquids or gases are kept.

⚠ CAUTION • Any change or modification to the pump and the use of non-approved spare parts could damage the equipment and cause accidents.

⚠ WARNING • To prevent accidents, it is forbidden to wash things, swim or bathe into the water container where the pump is running.

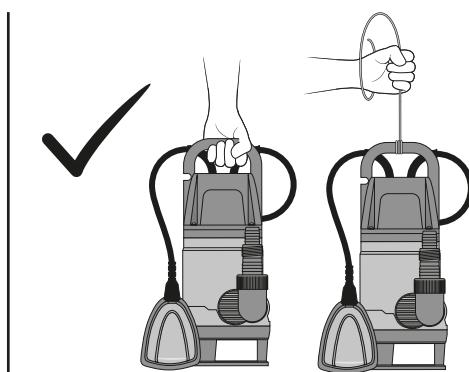
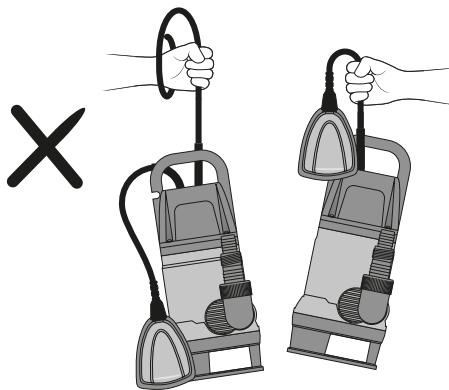
⚠ CAUTION • Always verify the pump before each use, (especially the power cable and its plug). A damaged pump shall not be used. Go to a TRUPER Authorized Service Center to have it fixed.

⚠ CAUTION • Any type of repairs shall be carried out by a certified technician. If repairs are carried out in a faulty manner there is danger of liquid entering into the electric components.

⚠ WARNING • It is not advisable that people (including children), with reduced physical, sensorial or mental capacities, as well as people with no experience or knowledge, use the pump except if they are supervised by people responsible for their safety or having received previous instructions for the pump's use.

⚠ CAUTION • Children shall be supervised to ascertain they do not play with the pump. Strict supervision is required when people with reduced capacities or children use any power device or are close to them.

⚠ WARNING • Do not touch the power plug with wet hands. Always disconnect the plug and do not pull off the power cable. Do not use the power cable to lift, carry or hold the pump in any way. Do not use the cable for uses different to the specified use. Do not pull the cable while the pump is running. It can get damaged and cause an electric shock.





CAUTION • The connection source shall come from properly installed and tested grounded outlets. Power from the power supply and fuse shall match the pump's technical data.

CAUTION • The pump shall be connected through an RCCB (residual current breaker) with short circuit current design not lower to 30 mA

CAUTION • Before connecting double check the power supply matches the pump's requirements.

CAUTION • The pump shall be used only within the rated voltage, potency and rotation speed (see the manufacturer's nameplate).

WARNING • Do not entangle, tighten or run-over the power cable. Protect it from sharp edges, oil or heat.

CAUTION • Do not use extension cables with a lower gauge than the power cable gauge.

WARNING • In the event the power cable is damaged, disconnect the pump from the power supply immediately! Never run a pump if the power cable is damaged.

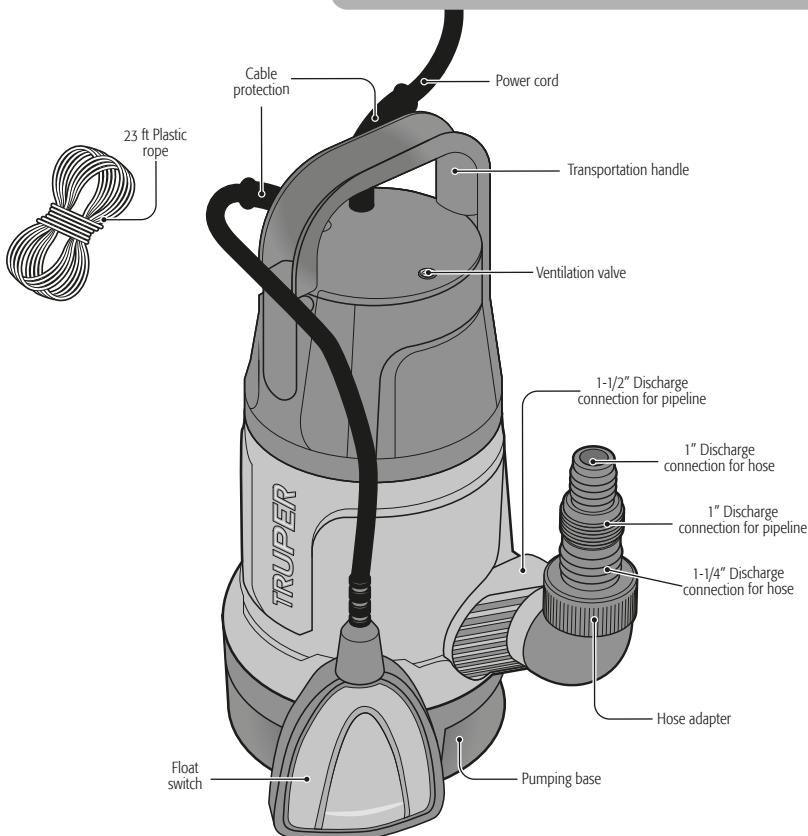
WARNING • Disconnect the plug from the power supply before removing the pump from the water or when servicing.

CAUTION • Disconnect the pump when not in use. **CAUTION** • Before connecting the pump to the power supply double check the float switch is set in the OFF position (A).

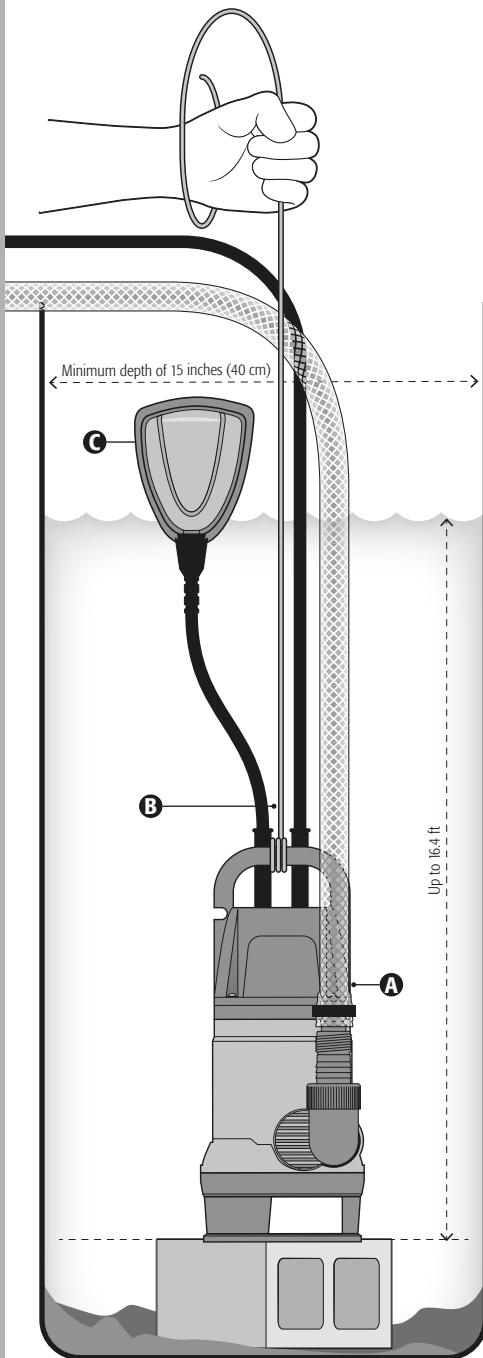
CAUTION • Before disconnecting the pump, the float switch shall be set in the OFF position (A).

WARNING • Do not install nor connect the pump if there are people or animals in the liquids to be pumped.

Parts



(A) OFF position for the float Switch



⚠ CAUTION • Before installing double check the pump, cable and plug are not showing any damage due to transportation and storage.

- Connect the hose to the hose into the connection most suitable for the needs **(A)**. Use a clamp to fasten the soft hoses and a soldered flange for steel hoses.
- To submerge the pump, tie one end of rope "included" onto the transportation handle **(B)**.
- ⚠ CAUTION** • Never use the power cable or the float switch to carry or hang the pump.
- Tie the other end of the rope to some fixed point to support the pump not deeper than 16.4 ft under the water surface. Make sure the suction base openings are not partially or totally obstructed. Setting the pump onto a brick is recommended.
- Double check there are no obstacles so that the float switch can move freely **(C)**.

NOTE The minimum diameter where the pump is set shall be 15.7" so that the float switch can move freely.

Float switch

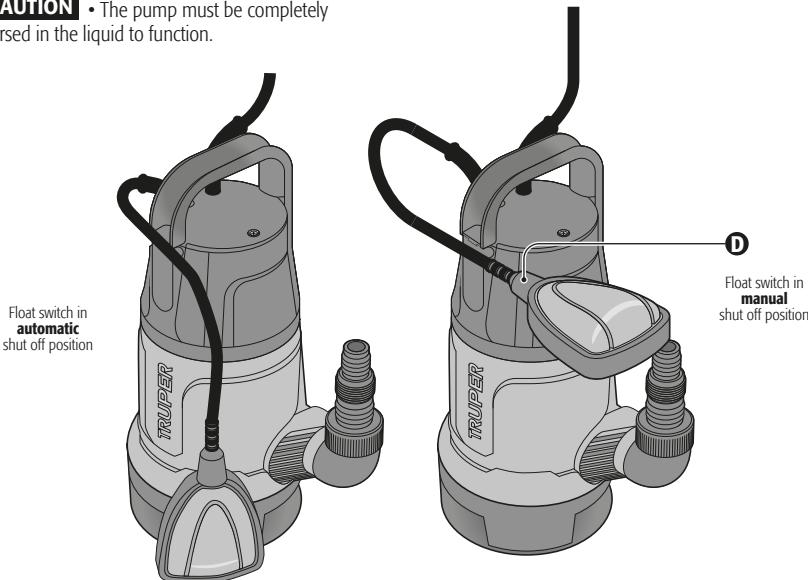
- The float switch goes On and OFF **automatically** depending on the water level height. When the float switch is placed into the same height as the transport handle, the pump starts; and when it goes down to approximately 4", it turns it off.
- To control the float switch **manually** and prevent the pump to automatically shut off, you may set the switch cable through the transport handle (D) so that the float cannot plunge down and shut off the pump.

CAUTION • When controlling the float switch manually keep on supervising the pump's functioning and prevent the water level to be so low it will make the pump operating dry.

CAUTION • The pump must be completely immersed in the liquid to function.

WARNING • Avoid the pump operating dry, otherwise it can break down. When the water stops flowing, disconnect the pump immediately.

- The motor thermal protector shuts off the pump automatically in the event of overheating. Once the motor has cooled down, it will start again automatically.
- After pumping chlorinated water from a swimming pool or another liquid with residues, you need to rinse the pump with clear water.
- The submersible pump is equipped with a ventilation valve to prevent pressure leaks in the pump. Water entering through the valve can happen but is not a defect.



Maintenance

Cleaning and care

- Inspect regularly all the mounting screws and double check the screws are correctly tightened. In the event one of the screws is loose, tighten immediately.

Turbine cleaning

- In case there is contamination inside the pump, the suction base can be removed unscrewing the pan head screw fixing it to the pump's body. This way you can clean the turbine. For safety reasons a damaged turbine can only be replaced in a TRUPER Authorized Service Center.

Storage

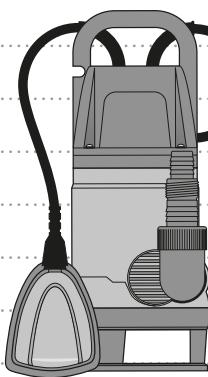
- If frost is expected, store the pump in a dry place protected against frost. Otherwise the pump may be damaged.

Service

- Servicing tools can only be carried out in a TRUPER Authorized Service Center. Maintenance service carried out by people with no certification can turn dangerous and cause personal injury. Also, it makes the Warranty void.

Problem	Cause	Solution
The pump cannot be turned on or it suddenly stops while operating.	<ul style="list-style-type: none">• No power.• The float is not changing its position.• The thermal switch shuts off the pump due to over-heating.• There are dirt particles into the suction base.	<ul style="list-style-type: none">• Check the cable, plug and fuse.• Set the pump correctly into the pool, well, etc.• Disconnect the plug and clean the turbine. Double check the water maximum temperature is 95 °F• Disconnect the plug and clean the suction base.
There is no flow.	<ul style="list-style-type: none">• The suction orifice is clogged.• The pressure hose is bent.• Air is enclosed into the suction base.• When starting the pump, the water height drops below the minimum water level.	<ul style="list-style-type: none">• Clean the water suction orifice.• Set the hose correctly.• Wait one minute at the most, until the pump degasifies automatically through the ventilation valve. If necessary, turn it off and start again.• Submerge the pump deeper.
The pump does not turn off.	<ul style="list-style-type: none">• The float cannot sink in.	<ul style="list-style-type: none">• Set the pump adequately into the bottom of the pool, well, etc.
Insufficient flow.	<ul style="list-style-type: none">• The suction base is clogged.• The pumping capacity can be reduced due to abrasive and dirty water.	<ul style="list-style-type: none">• Clean the water suction orifice.• Take the pump to a TRUPER Authorized Service Center.
The pump shuts off after a short period working.	<ul style="list-style-type: none">• The pump has thermal cut offs due to dirty water.• Water is too hot. Thermal cut offs shut down the pump.	<ul style="list-style-type: none">• Disconnect the main plug. Clean the pump and the axis.• Verify water temperature is not over 95 °F• Make sure the pump is fully submerged in the water.

If problems persist despite carrying out the corrective actions recommended, contact your TRUPER Authorized Service Center.



In the event of any problem contacting a Service Center, please see our webpage WWW.TRUPER.COM to get an updated list, or call our toll-free numbers 800 690-6990 or 800 018-7873 to get information about the nearest TRUPER Authorized Service Center.

AGUASCALIENTES	DE TODO PARA LA CONSTRUCCIÓN GRAL. BARRAGÁN #1201, COL. GREMIAL, C.P. 20030, AGUASCALIENTES, AGS. TEL.: 449 994 0557	MORELOS	FIX FERRETERÍAS CAPITAN ANZURES #95, ESQ. JOSÉ PERDIZ, COL. CENTRO, C.P. 62740, CUAUTLA, MOR. TEL.: 735 352 8931
BAJA CALIFORNIA	SUCRASAL TIJUANA AV. LA ENCANTADA, LOTE #5, PARQUE INDUSTRIAL EL FLORIDO II, C.P. 22244, TIJUANA, B.C. TEL.: 664 969 5100	NAYARIT	HERRAMIENTAS DE TEPIC MAZATLÁN #117, COL. CENTRO, C.P. 63000, TEPIC, NAY. TEL.: 311 258 0540
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	NUEVO LEÓN	SUCRASAL MONTERREY CARRETERA LAREDO #300, 1B MONTERREY PARKS, COLONIA PUERTA DE ANÁHUAC, C.P. 66052, ESCOBEDO, NUEVO LEÓN, TEL.: 81 8352 8791 / 81 8352 8790
CAMPECHE	TORNILLERÍA Y FERRETERÍA AAA AV. ALVARO OBREGÓN #324, COL. ESPERANZA C.P. 24080 CAMPECHE, CAMP. TEL.: 981 815 2808	OAXACA	FIX FERRETERÍAS AV. 20 DE NOVIEMBRE #910, COL. CENTRO, C.P. 68300, TUTXEPÉC, OAX. TEL.: 287 106 5092
CHIAPAS	FIX FERRETERÍAS AV. CENTRAL SUR #27, COL. CENTRO, C.P. 30700, TAPACHULA, CHIS. TEL.: 962 118 4083	PUEBLA	SUCRASAL PUEBLA AV. PERIFÉRICO #2-A, SAN LORENZO ALMECATLA, C.P. 72710, CUATLACINGO, PUE. TEL.: 222 282 8282 / 84 / 85 / 86
CHIHUAHUA	SUCRASAL CHIHUAHUA AV. SILVESTRE TERRAZAS #12-111, PARQUE INDUSTRIAL BAFAR, CARRETERA MÉXICO CUÁHTÉMOC, C.P. 31415, CHIHUAHUA, CHIH. TEL. 614 434 0052	QUERÉTARO	ARU HERRAMIENTAS S.A DE C.V. AV. PUERTO DE VERACRUZ #110, COL. RANCHO DE ENMEDIO, C.P. 76842, SAN JUAN DEL RÍO, QRO. TEL.: 427 268 4544
MEXICO CITY	FIX FERRETERÍAS EL MONSTRUO DE CORREGIDORA, CORREGIDORA # 35, COL. CENTRO, C.P. 06060, CUAUHTÉMOC, CDMX. TEL: 55 5522 5031 / 5522 4861	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
COAHUILA	SUCRASAL TORREÓN CALLE METAL MECÁNICA #280, PARQUE INDUSTRIAL ORIENTE, C.P. 27278, TORREÓN, COAH. TEL.: 871 209 6823	SAN LUIS POTOSÍ	FIX FERRETERÍAS AV. UNIVERSIDAD #1850, COL. EL PASEO, C.P. 78320, SAN LUIS POTOSÍ, S.L.P. TEL.: 444 822 4341
COLIMA	BOMBAS Y MOTORES BYMTESA DE MANZANILLO BLVD. MIGUEL DE LA MADRID #190, COL. 16 DE SEPTIEMBRE, C.P. 28239, MANZANILLO, COL. TEL.: 314 332 1986 / 332 8013	SINALOA	SUCRASAL CULIACÁN AV. JESÚS KUMATE SUR #4301, COL. HACIENDA DE LA MORA, C.P. 80143, CULIACÁN, SIN. TEL.: 667 173 9139 / 173 8400
DURANGO	TORNILLOS ÁGUILA, S.A. DE C.V. MAZURIÓ #200, COL. LUIS ECHEVERRÍA, DURANGO, DGO. TEL.: 618 817 1946 / 618 818 2844	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
ESTADO DE MÉXICO	SUCRASAL CENTRO JILOTEPEC PARQUE INDUSTRIAL # 1, COL. PARQUE INDUSTRIAL JILOTEPEC, JILOTEPEC, EDO. DE MÉX. C.P. 54257 TEL: 761 782 9101 EXT. 5728 Y 5102	TABASCO	SUCRASAL VILLAHERMOSA CALLE HELIO LOTES 1, 2 Y 3 MZ. #1, COL. INDUSTRIAL, 2A ETAPA, C.P. 88610, VILLAHERMOSA, TAB. TEL.: 993 353 7244
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	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
GUERRERO	CENTRO DE SERVICIO CLIPSE CALLE PRINCIPAL MZ.1 LT. 1, COL. SANTA FE, C.P. 39010, CHILPANCINGO, GRO. TEL: 747 478 5793	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
HIDALGO	FERREPRESOS S.A. DE C.V. LIBERTAD ORIENTE #504 LOCAL 30, INTERIOR DE PASAJE ROBLEDO, COL. CENTRO, C.P. 43600, TULANCINGO, HGO. TEL.: 775 753 6615 / 775 753 6616	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
JALISCO	SUCRASAL GUADALAJARA AV. ADOLFO B. HORN # 6800, COL. SANTA CRUZ DEL VALLE, C.P. 45655, TLAJOMULCO DE ZUÑIGA, JAL. TEL.: 33 3606 5285 AL 90	YUCATÁN	SUCRASAL MÉRIDA CALLE 33 #600 Y 602, LOCALIDAD ITZINCAB Y MULSAY, MPIO. UMÁN, C.P. 97390, MÉRIDA, YUC. TEL.: 999 912 2451
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		

Code	Models	Brand
12603	BOS-1SP	TRUPER
12604	BOS-1-1/2SP	

Warranty. Duration: 1 year. 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, present the product, stamped policy or invoice or receipt or voucher, 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. It includes the costs of transportation of the product that derive from its fulfillment of its service network. 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: