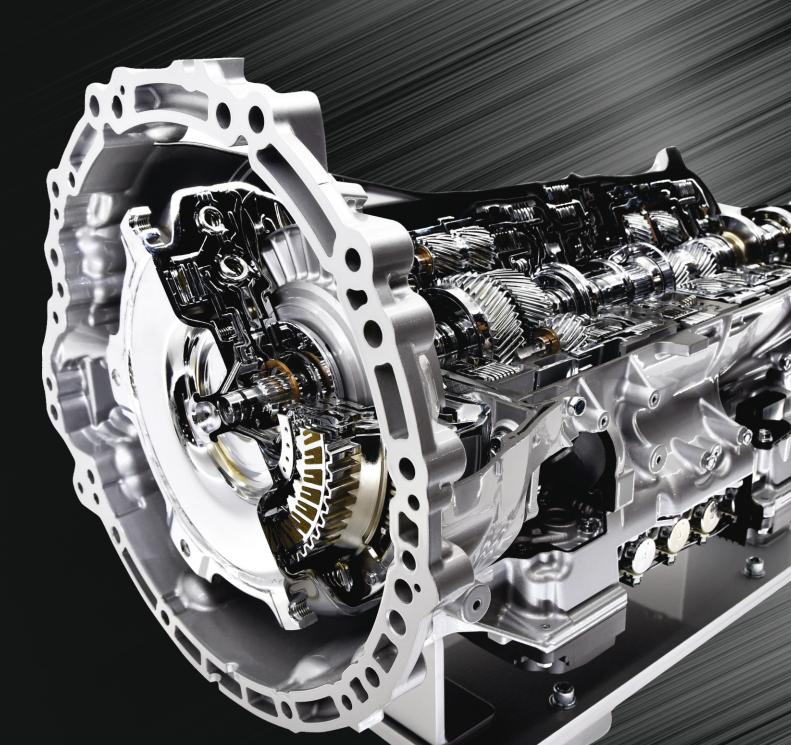
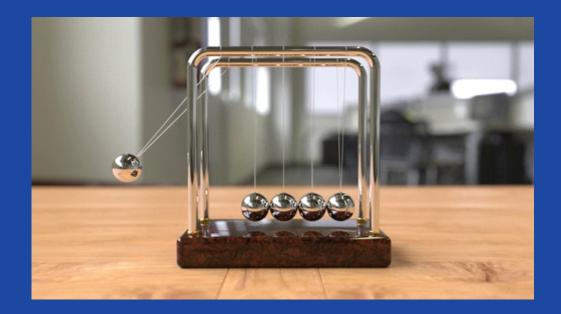


CATALOGUE 2024

Torque converter rebuilding equipment







At KINERGO[®], we strive to stay ahead of the competition by constantly generating new ideas and translating them into innovative products. Our team of experienced professionals is dedicated to developing and improving our technology to produce top-quality equipment, spare parts, and accessories for diagnosing, repairing, and restoring automatic transmissions.

- Shatkov A., CEO

KINERGO[®] is a fully integrated manufacturing company that prides itself in innovation, engineering, production and confidence. For 15 years, we have been developing, producing and distributing equipment and spare parts worldwide to facilitate professional repair and diagnostics of automatic transmissions.

We understand that starting a new business or expanding an existing one requires careful planning and technical expertise. Our extensive experience in repairing torque converters, as well as diagnosing valve bodies and solenoids, is at your disposal. We can guide you through the entire process, from logistics and equipment placement to repair techniques and volume estimation.

Moreover, we offer training courses for employees who want to improve their skills in using KINERGO[®]'s equipment. Our technical center provides hands-on training on diagnosing and repairing different types of torque converters, as well as troubleshooting valve bodies and solenoids.

At KINERGO[®], we are committed to providing the best products, as well as technical support and training, to help our clients achieve their business goals.

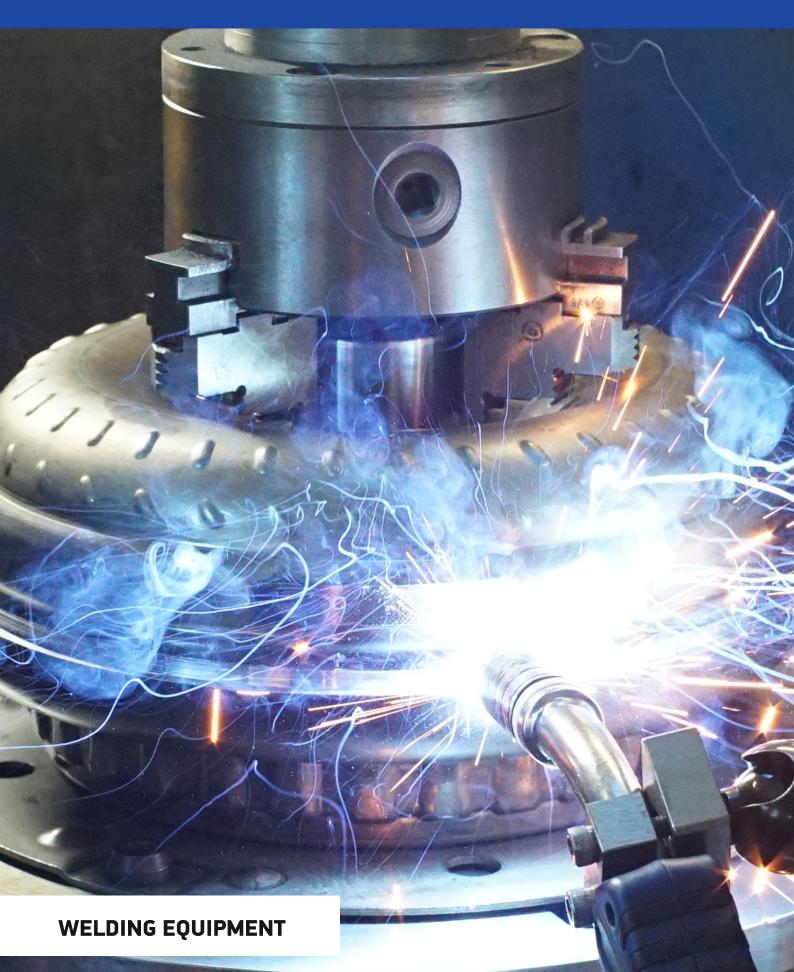


Equipment Set	
Standard	Standard+
PS 07.330 – Tool kit for lathe (330mm) for fixing the torque converter during its cutting and for processing its surfaces and diameters. Includes the faceplate with a diameter of 330 mm.	PS 07.380 – Tool kit for lathe (380mm) for fixing the torque converter during its cutting and for processing its surfaces and diameters. Includes the faceplate with a diameter of 380 mm.
NF 02.400 – Infrared piston bonder • Heating intensity adjustment. • Includes steel adapters. • With analog control panel.	 NF 03.400 - Infrared piston bonder Heating intensity adjustment. Digital temperature control. Timer with sound signal. Includes steel adapters. With analog control panel.
IN 06.001 – Lockup preload tester for ZF-type torque converters	
ZK 02.001 - Hydropneumatic riveter for DP0/AL4 torque converters	
SV 10.003 – Torque converter welding machine • touch panel • 3-axis bracket	SV 10.004 - Torque converter welding machine • touch panel • 3-axis bracket • additional doubling control panel buttons on the body
OS 10.001 – Tool kit for welding machines for centering and fixing of the torque converter elements and hubs replacing on the turntable faceplate.	OS 10.001 – Tool kit for welding machines for centering and fixing of the torque converter elements and hubs replacing on the turntable faceplate.
	PS 07.330 - Tool kit for lathe (330mm) for fixing the torque converter during its cutting and for processing its surfaces and diameters. Includes the faceplate with a diameter of 330 mm. NF 02.400 - Infrared piston bonder • Heating intensity adjustment. • Includes steel adapters. • With analog control panel. IN 06.001 - Lockup preload tester for ZF-type torque converters ZK 02.001 - Hydropneumatic riveter for DP0/AL4 torque converters SV 10.003 - Torque converter welding machine • touch panel • touch panel

Repair and restoration consist of several stages: cutting, disassembly, flaw detection, replacement of components, welding, control and verification of parameters. For each of the stages, the **KINERGO**® assortment includes specialized equipment. Request the right equipment for you, place an order and start doing business with us!

TZ 03.800 - Torque converter thermal clearance gauge

Control and parameters verification







TORQUE CONVERTER WELDING MACHINE | SV 10.003

The machine is used for precise welding of two parts of the torque converter with specified allowances for axial runout and internal thermal gap.

The device is controlled by a touch panel.

To ensure maximum alignment of the parts of the torque converter and to avoid thermal deformations, the device has an algorithm for preliminary spot fixing of parts, which prevents one-sided misalignment that occurs due to stresses of the welded joint.

The equipment is fitted with a built-in 3-coordinate bracket, which allows you to fix the position of the welding torch with a single clamp.

Weight

420 ka



Power

9.7 kW



Voltage

230/400 V





Dimensions (LxWxH) 1060x670x2000 mm

TORQUE CONVERTER WELDING MACHINE | SV 10.004

The machine is used for precise welding of two parts of the torque converter body with specified allowances for axial runout and internal thermal clearance.

The device is controlled by a touch panel, or with duplicate buttons for controlling the welding process on the body. The drives are controlled by using a controller that accurately positions torque converter parts relatively to each other.

To ensure maximum alignment of the torque converters parts and to avoid thermal deformations, the device has an algorithm for pre-spot parts fixing, which prevents onesided distortion that occurs due to stresses of the welded joint.

The equipment is filled with a built-in 3-coordinate bracket, which allows you to fix the position of the welding torch with a single clamp.



Power 9,7 kW



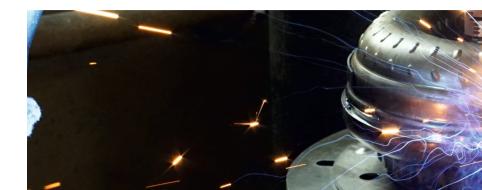
230/400 V

Weight

420 kg



Dimensions (LxWxH) 1060x670x2000 mm



AUTOMATED TORQUE CONVERTER WELDING MACHINE | SV 10.005

The machine is used for precise welding of two parts of the torque converter body with specified allowances for axial runout and internal thermal clearance.

The device is controlled by a touch panel, or with duplicate buttons for controlling the welding process on the body. The drives are controlled using a controller that is able to accurately position the parts of the torque converter relative to each other.

For ensuring maximum alignment of the torque converter parts and to avoid thermal deformations the device has an algorithm for preliminary point fixation of parts, which prevents one-sided misalignment that occurs due to stresses of the welded joint.

The machine has a mechanized supply of a welding torch, which is controlled by a joystick and allows you to use two manipulating speeds. At the same time, the reduced speed serves to accurately adjust the position of the burner relatively to the junction of the two halves of the torque converter body. Additionally, the automatic supply function is equipped with a memory of the last position of the burner during welding, which allows you to increase productivity and ensure a consistently high quality of same type torque converters welding.

The machine also allows you to replace the hub of torque converter pump wheel cover.

455 ka



9.7 kW

Powe



Voltage

230/400 V



Dimensions (LxWxH) 1080x710x2000 mm

TORQUE CONVERTER WELDING MACHINE WITH TWO WELDING TORCHES | SV 20.002

The machine is used for precise welding of two parts of the torque converter body with specified allowances for axial runout and internal thermal clearance. The device is controlled by a touch panel.

Taking into account the peculiarities of welding two parts of the torque converter body, the device is programmed with a special algorithm for preliminary point fixation of parts, which prevents one-sided misalignment arising from the stresses of the welded joint.

The machine has a mechanized supply of welding torches, which is controlled by a joystick. Two speeds are used: increased, for accelerated movement of the welding torch, and lowered, which allows you to accurately adjust the position of the burner relative to the junction of the two parts of the torgue converter housing. Additionally, the automatic supply function is equipped with a memory of the last position of the burner during welding, which allows increase productivity and ensure consistently high welding guality of a batch of the same type of torque converters.

The machine also allows you to replace the hub of the pump wheel cover torque converter.



Power

18 kW

Voltage

230/400 V



Weight

550 kg

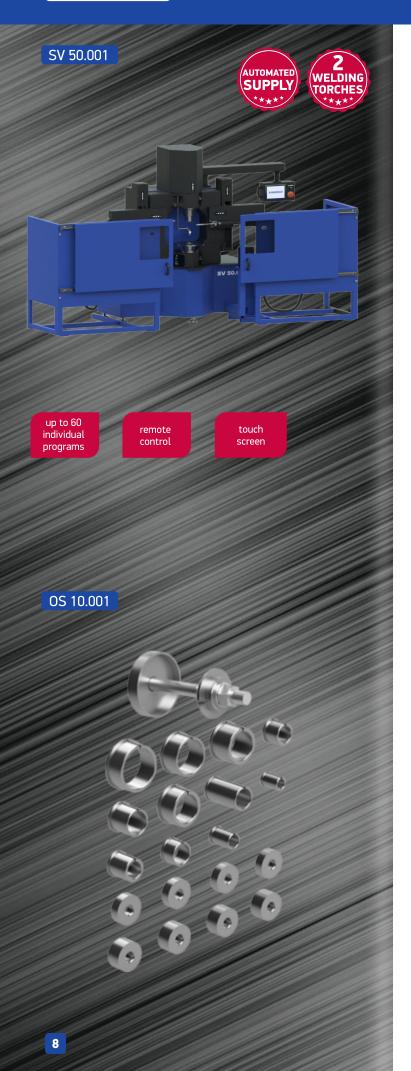












AUTOMATIC TORQUE CONVERTER WELDING MACHINE | SV 50.001

Suitable for companies that repair a large number of the one-type of torque converters.

The machine performs torque converters automatic welding up to 500 mm in diameter and up to 280 mm in height.

SV 50.001 is equipped with two collet cartridges and two welding torches with automatic supply to the welded torque converter. High-precision executive mechanics ensures compliance with the specified axial runout allowances.

The recording of parameters for each type of torque converter and the use of an individual program (up to 60 programs) in the machine memory automates production and increases work efficiency.

Both the large touch screen and remote control allow all service settings to be made and provide full control over every operation performed by the machine.



40 kW





Voltage 230/400 V

Weight 1500 kg

Dimensions (LxWxH) 2665x985x2360 mm

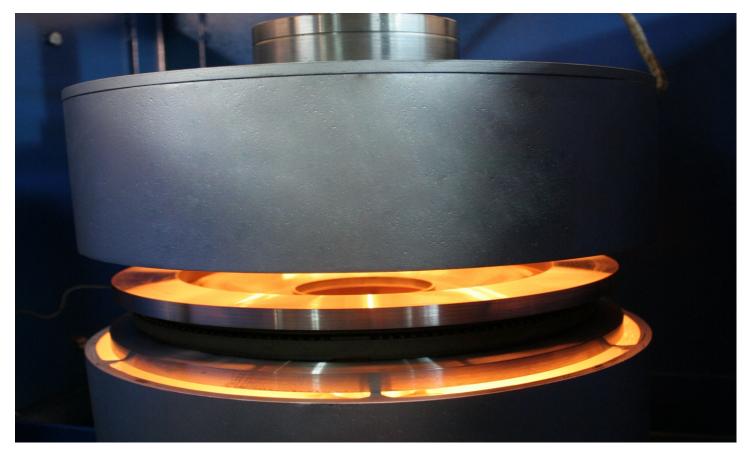
TOOL KIT FOR WELDING MACHINES | OS 10.001

A set of accessories for welding machines of the SV series is designed for centering and fixing the elements of the torque converter on the faceplate of the turntable, as well as for replacing the hubs of the impeller (hub).

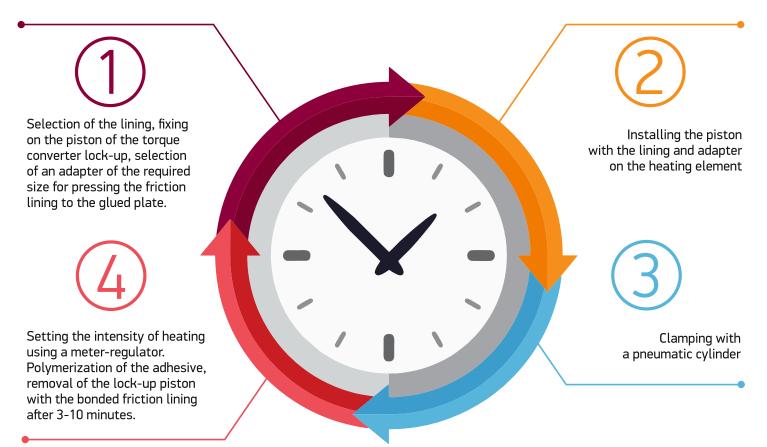
The set includes:

- Adapters for fixing the hub on the turbine wheel of the torque converter during welding.
- Fixing spacers for centering the pilot of the impeller on the faceplate of the turntable of the welding machine.
- A set of spacers for the pins of the torque converter body.

PISTON BONDERS



THE SEQUENCE OF WORK WITH THE DEVICE





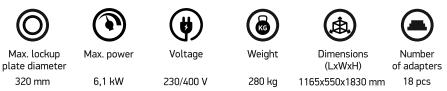


INFRARED PISTON BONDER | NF 02.400

The design of the infrared piston bonder with analog control panel uses the property of infrared thermal radiation to penetrate deep into ferrous metals, avoiding the problem of unequal heat transfer in the case of thermal energy transfer by contact method. This process depends on the equality of the clamping.

Equally heating and a hinged clamping circuit in the device ensures reliable and high-quality bonding of the friction material, which is one of the key factors in the torque converters repair.

By turning the potentiometer on the control panel, the heating intensity should be adjusted, which will be provided the best conditions for setting and polymerization of the glue.



INFRARED PISTON BONDER | NF 03.400

The design of the infrared piston bonder with digital control panel uses the property of infrared thermal radiation to penetrate deep into ferrous metals, avoiding the problem of uneven heat transfer in the case of thermal energy transfer by contact method. This process depends on the uniformity of the clamping.

Uniform heating and a hinged clamping circuit in the device ensure reliable and high-quality bonding of the friction material, which is one of the key factors in the torque converters repair.

By pressing the button on the control panel, the heating intensity should be adjusted, at which the best conditions for setting and polymerization of the glue will be provided.







Voltage

Weight

Number

6,1 kW 230/400 V

Dimensions

of adapters

280 kg

(LxWxH) 1165x620x1830 mm

18 pcs

PISTON BONDER | NF 08.400

plate diameter

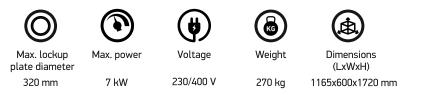
320 mm

The principle of operation is based on the transmission of thermal radiation through physical contact. The source of radiation is electric heater. Uniform heating and a hinged clamping scheme in the device ensure reliable and high-guality bonding of the friction material, which is one of the key factors in torque converters repair.

For adjusting the heating intensity, time, and temperature at which the best conditions for setting and polymerization of the glue will be provided, you should use the buttons on the control panel, guided by the manufacturer's recommendations.

NF 08.001 adapters should be used for the operation (not included in the package).

The device is also equipped with an audible alarm triggered by a timer.



ADAPTER KIT FOR PISTON BONDER NF 08.400 | NF 08.001

The adapter kit are designed for use on the NF 08.400 device with a convection type of heating for the friction pads sticking on the torque converter lockup plates or core steel plates. The kit is universal and suitable for all types of automatic transmissions torque converters (including CVT). It is made of aluminum. It is not suitable for NF 02.400 and NF 03.400.

TORQUE CONVERTER LEAKAGE TESTER | SG 50.500

The stand allows you to quickly and conveniently identify places of possible leaks through welded joints or other places of damage to the integrity of the torque converter body.

To detect leaks, the method of immersing of a torgue converter in water is used, inside the TC excess air pressure is created. The presence of bubbles indicates the places of possible leaks. The stand does not require electrical power, all mechanisms are driven by pneumatics powered by an air compressor.





Weight

Dimensions (LxWxH) Dimensions of

90 kg

bushings 1000x530x2030 mm from 25 to 57 mm

TORQUE CONVERTER THERMAL CLEARANCE GAUGE | TZ 03.800

The torque converter elements operate in modes that cause the inevitable thermal expansion of the body and internal parts. To ensure the correct functioning of the unit over the entire operating temperature range without loss of efficiency, an axial gap is embedded in its design, which must be maintained in a certain range.

The TZ 03.800 stand is used to control the axial clearance and allows up to 0.01 mm to determine its value in torque converters of various designs.



Weiaht 17,5 kg

Dimensions (LxWxH) 470x250x470 mm

Accuracy



TOOL KIT FOR LATHE | PS 07.330/PS 07.380

Tool kit for lathe (330mm) | PS 07.330 Tool kit for lathe (380mm) | PS 07.380

The snap-in kit consists of:

- Faceplate.
- Faceplate hub (installed on a lathe and designed to fix a torque converter).
- Axles (designed to press a torque converter).
- A set of adapters of various sizes (designed for centering various types of torque converters).





Number of adapters 7 pcs

Number of axles 5 pcs

SG 50.500

TZ 03.800





for DP0 (AL4)

LOCKUP PRELOAD TESTER FOR ZF-TYPE TORQUE CONVERTERS | IN 06.001

In the torque converter of the automatic transmission ZF series 6HP** the locking unit has a pre-preloaded clutch mechanism. The design of this unit is made non-disassembly, requiring its cutting on a lathe with subsequent connection of its elements by welding. So that many workshops prefer to offer the customer the purchase of a new torque converter, rather than engage in its repair.

The solution is a stand for controlled clamping of the locking clutch

Using this stand and the methodology developed by our specialists, you will be able to set and control the necessary clamping force of the locking clutch until the moment of welding. This force of pressing the friction disc to the body directly affects the correctness of the torque converter lockup operation.

To work at this stand, our engineers have developed a set of special devices INT 01-6 KIT.





Weight 40 kg Dimensions (LxWxH) 450x635x1000 mm

TOOL KIT FOR LOCKUP PRELOAD TESTER IN 06.001 | INT 01-06 kit

INT 01-6 KIT is specially designed for each type of torque converter of the ZF series 6HP** devices used during work with the lockup preload tester IN 06.001.

These devices make it easy to rotate the preloaded disk and set and control its clamping force.

HYDROPNEUMATIC RIVETER FOR DP0/AL4 TORQUE CONVERTERS | ZK 02.001

ZK 02.001 riveter from Kinergo is designed to restore the fastening of the lockup piston of torque converters of automatic transmissions of the DP0 (AL4) series, and can also be used for other types of work in your workshop when you need to connect sheet metal using rivets.

The hydropneumatic riveter ZK 02.001 is connected to the compressed air system, which is available at every service station; the system must be equipped with a water-oil separator and a pressure regulator.

The assembly of the lockup plate of the torque converter of the DPO (AL4) series occurs by connecting leaf springs with rivets to the friction plate and to the automatic transmission torque converter lockup piston.



TORQUE CONVERTER BALANCER | SB 02.350

The stand is designed to measure the imbalance of torque converters of automatic transmissions in dynamic mode and calculate the masses of corrective loads and their positions. Adapters are not included in the delivery package.



Power

0.4 kW

Voltage

230 V



converter diameter

400 mm



Weight

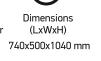
145 kg





Faceplate hub landing diameter

50 mm



TORQUE CONVERTER BALANCER | SB 02.450

The stand is designed to measure the imbalance of torque converters of automatic gearboxes of large diameters (up to 450 mm) in dynamic mode and calculate the masses of corrective weights and their position. It is equipped with a set of adapters (10 pieces).



Power









Faceplate hub landing diameter 70 mm

Dimensions (LxWxH)

0.6 kW

converter diameter 230 V 450 mm

170 kg



820x500x1040 mm

PNEUMATIC DEVICE FOR FIXATION OF INTERNAL PARTS OF TORQUE CONVERTERS | SB 01.100

The pneumatic device is designed specifically for the SB 02.350 torque converter balancer and serves to fix the internal moving parts of the torque converter during balancing.

ALIGNMENT CONTROL STAND | KS 01.001

The equipment allows you to quickly and accurately measure such parameters of the torque converter as:

- overall height;
- beating of the pump hub;
- the beating of the pump wheel housing relative to the plane of the torgue converter attachment.

The SB 01.100 package includes one slot adapter, three blanks and seven centering adapters.



Weight 42 kg







SB 02.350



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