M2K

KINERGO®



3301 W MacArthur Blvd
Santa Ana, CA 92704 USA

Tel: +1 (949) 333-3800
Fax: +1 (949) 333-3804
www.M2kinc.com

# EQUIPMENT SPARE PARTS CATALOGUE 2020

M2K

3301 W MacArthur Blvd
Santa Ana, CA 92704 USA

Tel: +1 (949) 333-3800
Fax: +1 (949) 333-3804
www.M2kinc.com

## ABOUT COMPANY

KINERGO®– This is a company-developer and manufacturer of highly efficient equipment and spare parts for the production and repair of automatic transmission torque converters, diagnostics of valve bodies, solenoids. Several directions of the group of companies work are combined under one brand: production and maintenance of equipment for repair of torque converters, diagnostics of valve bodies and solenoids, production and sale of spare parts for automatic transmissions.

Today, torque converter rebuilding equipment, valve body and solenoid diagnostics machines, other equipment and spare parts from KINERGO® are successfully operating in more than 70 countries around the world.

## TRAINING PROGRAM

Perhaps you are looking for an idea for a new business. Perhaps you are just starting the repair of torque converters, the diagnosis of valve bodies and are not sure of the qualifications of your employees. Then we recommend that you take a training course on the company's equipment in the KINERGO® technical center. During training, you (or your employees) will repeatedly perform the full repair cycle of various types of torque converters. Indeed, despite the fact that torque converters are designed on the same principle, the options for parts and internal components can vary significantly depending on the model.

## REPAIR TECHNOLOGIES

Over the long time that our KINERGO technical center has been operating, our experts have accumulated unique experience in diagnosing and repairing torque converters, valve units and solenoids. We have significantly optimized technological processes and achieved maximum efficiency for each operation.

## SERVICE SUPPORT AND WARRANTY

KINERGO® offers an international warranty and after-sales service support for the entire line of equipment.Timely support is provided: by our own production, spare parts warehouse, regular software updates, the development of new automatic transmission repair technologies. We advise our clients on the optimization of the production cycle, train staff, conduct start-up and commissioning, equipment maintenance. We save time and money for our customers.

## ONLINE CATALOG OF SPARE PARTS AND FRICTION LINING

KINERGO® manufactures all types of friction linings based on the most advanced materials. The available list of spare parts for the repair of torque converters and automatic transmissions is constantly expanding. The website www.kinergo.eu provides a complete list of spare parts manufactured by the company, friction linings for the repair of torque converters and automatic transmission units (CVT, robots, classic torque converter automatic transmissions).

KINERGO®



# CONTENTS

## Equipment for Torque Converters rebuilding


SV 20.002 Torque Converters welding machine with two welding torches 1
SV 10.005 Automated Torque Converters welding machine 1
SV 10.004 Torque Converters welding machine 2
SV 10.003 Torque Converters welding machine 2
NF 02.400 Infrared piston bonder 3
NF 03.400 Infrared piston bonder 3
NF 08.400 Piston bonder 3
TZ 03.800 End play gauge stand 4
SG 50.500 Air test stand for Torque Converters 4
VT 01.100 Vacuum-tester 4
IN 06.001 Loading mechanism preload tester for ZF6HP-type torque converters 5
INT 01-6 kit Tool kit 5
ZK 02.001 Hydropneumatic riveter for DP0 torque converters 5
PG 10.012 Hydraulic press 6
PP 01.002 Pneumatic press 6
KS 01.001 Alignment check stand 6
SB 02.350 Torque Converter balancer 7


## Valve Body and Solenoid Test machine


ST 01.100 Solenoid test machine STM-K 7
STM-K Solenoid adapters 8
GT 01.100 Valve body test machine VBTM-K 9
VBTM-K Test Plates 10


## Heavy duty Torque Converter rebuilding line


SV 30.002 Automated Torque Converters welding machine with two welding torches 11
TZ 10.450 End play gauge stand 11
SB 03.500 Torque Converter balancer 11


## Industrial Equipment


SV 50.001 Automatic Torque Converters industrial welding machine 12


## Universal machinery


LM 50.800 Lathe machine for special applications 12


## Tooling


NF 08.001 Adapter kit for piston bonder NF 08.400 13
PS 07.330 / PS 07.380 Tooling package for lathe 330 mm / 380 mm 13
OS 10.001 Tooling package for welding machines 13
SB 01.100 Pneumatic device for Torque Converter's internal parts fixation 13


## DSG repair KIT DSG 7.02


14


## Spare parts


15

M2K
3301 W MacArthur Blvd
Santa Ana, CA 92704 USA
Tel: +1 (949) 333-3800
Fax: +1 (949) 333-3804
www.M2kinc.com

SV 20.002




# TORQUE CONVERTERS WELDING MACHINE WITH TWO WELDING TORCHES

Also equipped with 250 A welding inverter.

This automated welding machine is equipped with two welding torches led automatically to the welded Torque Converter's body. The machine is also equipped with upper safety break which prevents the upper shaft from damaging the upper cover of the Torque Converter. The welding torches are put into position manually. After that they are being power-driven into position automatically. After the welding is done they are led back automatically as well. Using this machine you can speed up considerably the welding of Torque Converters of similar types.

| | |
|---|---|
| Max.consumed power, kW | 18,0 |
| Power supply voltage, V | 380 |
| Max.diameter of TC, mm | 450 |
| Max.height of TC, mm | 250 |
| Weight, kg | 480 |
| Dimensions (LxWxH), mm | 1750 x 800 x 1990 |

SV 10.005




# AUTOMATED TORQUE CONVERTERS WELDING MACHINE

Equipped with doubling control panel buttons, contact detector and robotized welding torch holders. Also equipped with 250 A welding inverter.

This machine is used for high-precision welding of two halves of the Torque Converter's body, taking into consideration the given hub run out and end play gauge. The rigid structure of the machine, high precision mechanic parts guarantees the maximum precision of Torque Converter rebuilding. The machine is being controlled with a sensor panel and a well-developed multy-language menu. Being aware of the particularities of welding of two halves of Torque Converters we preinstalled a special algorithm of so called point fixation of welded parts which prevents the balance distortion possible due to the welding tension. This machine also allows you to perform the replacement of the hub.

| | |
|---|---|
| Max.consumed power, kW | 9,7 |
| Power supply voltage, V | 380 |
| Max.diameter of TC, mm | 450 |
| Max.height of TC, mm | 250 |
| Weight, kg | 455 |
| Dimensions (LxWxH), mm | 1080 x 710 x 1990 |



## TORQUE CONVERTERS WELDING MACHINE

SV 10.004

Equipped with doubling control panel buttons, contact detector and 250 A welding inverter.

omparing with the SV 10.005 model this machine's power-driven torch holder was replaced with a different manual holder. It can move and fix the chosen 3-axed position and is really easy to use. This was made to simplify the process of choosing the optimum position of the welding torch against the welded Torque Converter's body. The machine is also equipped with additional buttons for welding cycle control and the positioning of the upper shaft, the one that holds the hub. The machine is also equipped with the safety break which stops it from damaging the Torque Converter's body.




| | |
|---|---|
| Max.consumed power, kW | 9,7 |
| Power supply voltage, V | 380 |
| Max.diameter of TC, mm | 450 |
| Max.height of TC, mm | 250 |
| Weight, kg | 430 |
| Dimensions (LxWxH), mm | 1050 x 670 x 1990 |

## TORQUE CONVERTERS WELDING MACHINE

SV 10.003

Not equipped with contact detector. Equipped with 250 A welding inverter

This model is a low cost version of the SV-series welder. Along with a very affordable price it guarantees the high performance and the quality of the Torque Converter's rebuilding. It allows you performing 250 - 300 Torque Converters a month working an 8-hour shift. Some options absent in this very welder could be installed in the future upon client's request if the rebuilding process should be needing some upgrades.




| | |
|---|---|
| Max.consumed power, kW | 9,7 |
| Power supply voltage, V | 380 |
| Max.diameter of TC, mm | 450 |
| Max.height of TC, mm | 250 |
| Weight, kg | 420 |
| Dimensions (LxWxH), mm | 1050 x 670 x 1990 |



NF 02.400



## INFRARED PISTON BONDER

Analog control panel. Adapters included.

Building this piston bonder we used the ability of infrared radiation to penetrate ferrous metals, which allows to avoid the issue with the uneven heat distribution within the glued details and makes the contact surface and pressure issues irrelevant. The even heating and the T-bar fixation guarantees the trust-worthy and high-quality adhesion of the friction lining which is among one of the key factors in Torque Converters rebuilding. The intensity of heating can be changed by just turning the knob on the control panel.

| | |
|---|---|
| Max.consumed power, kW | 6,1 |
| Power supply voltage, V | 220 |
| Air pressure, Bar | 8 |
| Weight, kg | 280 |
| Dimensions (LWH), mm | 1170 x 550 x 1850 |

NF 03.400



## INFRARED PISTON BONDER

Digital control panel. Adapters included.

This piston bonder was equipped with a digital control panel, which makes its operator's job even more comfortable. The intensity of the heating can be modified by pushing a couple buttons on the control panel. The rest of the piston bonder is quite similar to the NF 02.400 : same solutions with proved efficiency, such as: T-bar fixation, infrared radiation source guarantee the even heating and the trust-worthy and high-quality adhesion of the friction material. The intensity is easily controlled as well.

| | |
|---|---|
| Max.consumed power, kW | 6,1 |
| Power supply voltage, V | 220 |
| Air pressure, Bar | 8 |
| Weight, kg | 280 |
| Dimensions (LWH), mm | 1115 x 600 x 1800 |

NF 08.400



## PISTON BONDER

No adapters included.

This very piston bonder uses a different approach: it uses a direct application of thermal radiation from heating elements. Bonding process takes from 5 to 10 minutes: you have to select the right size of adapters to ensure the pressing of the friction lining against the plate; the pressing will be performed by the air pressure piston; the temperature and the pressure time can also be set from the main panel.

| | |
|---|---|
| Max.consumed power, kW | 7 |
| Power supply voltage, V | 220 |
| Air pressure, Bar | 8 |
| Weight, kg | 270 |
| Dimensions (LWH), mm | 1165 x 500 x 1670 |

## END PLAY GAUGE STAND

TZ 03.800




The functioning of all the parts of torque converter is done in the way that the thermal expansion is inevitable. To ensure the proper work of the rebuilt Torque Converter we must make sure that all the axial and thermal clearances were made within the proper limits.
This very stand allows it's precise measurement up to 0,01mm of precision.

| | |
|---|---|
| Measuring range of clearances, mm | 10 |
| Weight, kg | 17,5 |
| Dimensions (LWH), mm | 500 x 250 x 490 |

## AIR TEST STAND FOR TORQUE CONVERTERS

SG 50.500



This stand was designed to detect all the possible leaks of ATF. It is really simple to use: the torque converter is fixed on the stand by the hub and excessive air pressure is created. After that it is emerged in the water. The appearance of bubbles proves that some leaks are present and the TC needs additional work to be done. It is worth mentioning that the stand does not require electricity: all mechanisms are pneumatically operated by means of air compressor.

| | |
|---|---|
| Air pressure, Bar | 8 -12 |
| Weight, kg | 71 |
| Dimensions (LWH), mm | 978 x 530 x 1883 |

## VACUUM-TESTER

VT 01.100




VT 01.100 vacuum tester was designed to find leackages in Valve Bodies, which could be caused by channels wear or faulty solenoids installation. This tool is simple and effective and it can be used in any autotransmission repair workshop. The easiest way of fiding the faulty channels in the Valve Body and check if the repair was successfull.

Measuring plate is made of transparent glass. To test the leakproofness, the opening of measuring plates has to be aligned with tested opening. The values shown on Vacuum-tester indicate the level of leakproofness of the cavity. Values close to 0,8 mean that inner cavities are leakproof, small values point out leakages. The lower is the value the bigger is the leakage.

IN 06.001




## LOADING MECHANISM PRELOAD TESTER

for ZF6HP-type Torque Converters

The ZF6HP-generation of ZF torque converters are all equipped with sliding lockup mechanism with preloaded friction clutch. This was done in order to make the workshops quit rebuilding this generation of Torque Converters and make the clients buy new one from the producer. This very preload testing stand was developed by our engineers in order to make the rebuilding of new Torque Converter a reality. This stand allows you to measure and adjust the required pressure of the lockup clutch, which affects directly the gear shifting and transmission functioning.

| | |
|---|---|
| Air pressure, Bar | 8-12 |
| Weight, kg | 40 |
| Dimensions (LWH), mm | 450 x 635 x 1000 |

INT 01-6 kit



## TOOL KIT INT 01-6

for the loading mechanism preload tester IN 06.001

The tool kit INT 01-6 kit is a specially designed tool for the loading mechanism preload tester IN 06.001 (for each type of clutch). Tools allow you to rotate and adjust the preloaded disk for two handles. This is a real professional tool that allows you to work quickly and accurately and ensures the safety of technological operations, excluding the use of unregulated improvised means.

ZK 02.001




## HYDROPNEUMATIC RIVETER

for DP0/AL4 Torque Converters

KINERGO's engineers recommend this item to all service centers, which repair automatic transmissions made in France. The riveter recovers Torque Converter lockup mechanism of such transmissions, as AL4 and DP0. Riveted connections reliability will be provided at the level of manufacturer of such torque converters.



## HYDRAULIC PRESS

Designed to perform pressing in, pressing out, straightening and bending, cold unriveting by pressure. The press is used to replace bushings of torque converter and also hubs of turbine wheel, which is connected using rivets. Hydraulic station of the press is controlled by two pedals, which greatly simplify the work.

| | |
|---|---|
| Consumed power, kW | 2 |
| Power supply voltage, V | 380 |
| Tonnage | 10 |
| Working width, mm/height, mm | 460 / 555 |
| Piston-stroke, mm | 160 |
| Weight, kg | 70 |
| Dimensions, mm | 900 x 500 x 1900 |

PG 10.012




## PNEUMATIC PRESS

The pneumatic press PP 01.002 is used as an auxiliary device for disassembling and assembling the automatic transmission.
Indispensable for mounting and dismounting the pistons in the automatic transmission clutch.

| | |
|---|---|
| Constant working air pressure, Bar | 8-12 |
| Extension of the rod in the pneumatic cylinder, mm | 200 |
| Weight, not more then kg | 32 |
| Press dimensions, L x W x H, mm, not more | 670 x 450 x 990 |

PP 01.002



## ALIGNMENT CHECK STAND

Alignment check stand allows rapid and precise measuring of such parameters of the torque converter as its overall height, projecting part height of pump hub, hub run-out, pump wheel body run-out.

| | |
|---|---|
| Dimensions (LHW) mm | 390 x 390 x 670 |

KS 01.001





SB 02.350




## TORQUE CONVERTER BALANCER

Without adapters

KINERGO Torque Converter balancer allows checking and balancing any torque converter with guaranteed accuracy. And you are 100% sure that any vibration of a running car can be caused by anything, but unbalanced Torque Converter, that you have repaired. Adapters are not included in the set and have to be ordered separately.

| | |
|---|---|
| Maw. consumed power, kW | 0,4 |
| Power supply voltage, V | 220 |
| Balancing accuracy, g mm | 1,0 |
| Weight, kg | 145 |
| Dimensions, (LWH), mm | 710 x 498 x 1030 |
| with pneumatic device | 710 x 498 x 1950 |

ST 01.100




## SOLENOID TEST MACHINE STM-K

The Solenoid Test Machine was designed specially to test the condition of solenoids from different manufacturers. Kinergo has developed a number of different adapters to test the solenoids, that allows you to test most of popular brands on the market. The device is controlled by a controller, specially designed for testing Solenoids.

| | |
|---|---|
| Consumed power, kW | 5,5 |
| Power supply voltage, V | 380/220 |
| Weight, kg | 300 |
| Dimensions, (LWH), mm | 1360 x 700 x 1530 |





# SOLENOID ADAPTERS AND CABLES*

| Solenoid adapters for transmission | Adapter ref | Cable ref |
|---|---|---|
| JF015E, RE0F11A; JF016E | 60015.01 | 60015.01CH |
| JF010E, JF011E,JF015E, JF016E | 60015.02 | 60015.02CH |
| AW55-50SN (AF33, RE5F22A, AF33-5); AW55-51SN | 60114.01 | 60114.01CH |
| TF60-SN (09G), TF61-SN (09K), TF62-SN (09M), TR60-SN (09D) | 60119.01 | 60114.01CH |
| TF60SN (09G), TF61-SN (09K), TF62SN (09M), TR60-SN (09D), TF80-SC | 60119.02 | 60114.01CH |
| 722.6 | 60124.01 | 60124.01CH |
| 722.6 | 60124.02 | 60124.01CH |
| 722.6 | 60124.03 | 60124.03CH |
| 722.9, 722.8 | 60126.01 | 60126.01CH |
| TR-80SD (0C8, AA80E) | 60137.01 | 60114.01CH |
| 6HP19, 6HP21, 6HP26, 6HP26A, 6HP26X, 6HP28, 6R80W, 6R60, 6R75W | 60138.01 | 60015.02CH |
| 6HP19, 6HP21, 6HP26, 6HP26A, 6HP26X, 6HP28, 6R80W, 6R60, 6R75W | 60138.02 | 60015.02CH |
| DP0, AL4; DP2, AT8 | 60173.01 | 60173.01CH |
| DP0, AL4; DP2, AT8 | 60173.02 | 60173.01CH |
| A8TR1, A8LR1 | 60178.01 | 60178.01CH |
| RE5R05A, RE7R01A, RE7R01B, JF010E, JF011E | 60179.01 | 60015.02CH |
| 4L60E/65E/70E; 4T60E/65E/80E; 5L40E/50E; M11/78; TH700R4 | 60180.01 | 60180.01CH |
| 4L60E/65E | 60180.02 | 60192.01CH |
| 8HP45 (845RE), 8HP50, 8HP55AF, 8HP70, 8HP75, 8HP90, 6HP28, 6HP26, 6HP21; AL450 (0CM) | 60188.01 | 60015.02CH |
| 0AM, 0BM, 0CW (DQ200 DSG-7) | 60191.01 | ST01.100CH |
| 02E, 0B5, DQ500, DL501, 0BH1, 0BH2 | 60192.01 | 60192.01CH |
| M11, M78, 02E, DL501 | 60192.02 | 60192.01CH |
| U660E (TM-60LS), U760E | 60197.01 | 60197.01CH |
| U660E (TM-60LS), U760E; U250, U151, U150, U141 | 60197.02 | 60114.01CH |
| A750E, A760E, A761E/F ; A750E, A760E, A761E/F; A750E | 60239.01 | 60114.01CH |
| A6MF (6F24), A6LF, A6GF | 60241.01 | 60015.02CH |
| A6MF (6F24), A6LF, A6GF; A8LR1, A8TR1; A4CF1 | 60241.02 | 60015.02CH |
| 8HP45 (Al450, 0CM), 8HP50, 8HP70, 8HP75, 8HP90 | 60242.01 | 60015.02CH |
| ZF (all) Black, AL450 (0CM), A6MF (6F24), A6LF, A6GF, A8LR1, A8TR1 | 60242.02 | 60015.02CH |
| 6DCT450, 6DCT470 | 60246.01 | 60246.01CH |
| 6DCT450, 6DCT470 | 60246.02 | 60246.01CH |
| 6DCT450, 6DCT470, MPS6, SPS6 | 60246.03 | 60246.03CH |
| A4CF1, A4CF2 | 60705.01 | 60705.01CH |
| 01L, ZF5HP24A, 1V, ZF5PH19FL, ZF5PH19FLA SINCE 2002; 1V, ZF5PH19FL, ZF5HP24, ZF5PH19 SINCE 2002; ZF5PH19 UNTIL 2001 INCLUSIVE | 60131.01 | 60131.01CH |
| 01L, ZF5HP24A, 1V, ZF5PH19FL, ZF5PH19FLA SINCE 2002; 1V, ZF5PH19FL, ZF5HP24, ZF5PH19 SINCE 2002; ZF5PH19 UNTIL 2001 INCLUSIVE | 60131.02 | 60131.01CH |
| 1V, ZF5PH19FL, ZF5PH19FLA SINCE 2002; ZF5PH19 SINCE 2002 | 60131.03 | 60131.01CH |
| 01L, ZF5HP24A, 1V, ZF5PH19FL, ZF5PH19FLA UNTIL 2001 INCLUSIVE; ZF5HP24, ZF5PH19 UNTIL 2001 INCLUSIVE | 60133.01 | 60131.01CH |
| 6T30, 6T35, 6T40, 6T45, 6T50 | 60153.01 | 60015.02CH |
| 4T40E, 6T65E, 5L40E | 60165.01 | 60180.03CH |
| 0B5, DL501 | 60190.01 | 60192.01CH |
| 01J, 0AW | 60198.01 | 60198.01CH |
| ZF9HP28, ZF9HP48; 928TE, 948TE | 60334.01 | 60015.02CH |

* the list of adapters and cables is constantly updated

GT 01.100



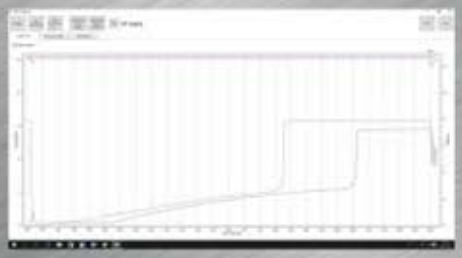

# VALVE BODY TEST MACHINE VBTM-K

The VBTM-K Valve Body test machine is the tool for diagnostics and testing of automatic gearboxes Valve Bodies. The machine uses an electronic controller to emulate the real-time work of the gearbox by redirecting the working pressure according to the preinstalled working scenarios and measuring the outcoming pressure on each channel. After that the graphic diagram is being created allowing you to compare it with the master diagram. The ATF is being heated to the working temperatures and different input pressures are used which allows us to eliminate the potential errors caused by different viscosity of ATF depending on it's temperature.

So called diagrams are already installed in the machine. You place the Valve body on the test plate, plug in the sensors to the output channels and you start the first test (the full gearbox working cycle). After that the test is performed multiple times on different pressures. After the test is done the diagram will appear on the screen.

The VBTM-K Valve Body test machine sends some algorithm for the Valve Body to perform. The machine can make some of the Valve Body parts to be working in the extreme mode, trying out their reliability and performance. Such practice is called "Stress Test". You install special pressure sensors on the Valve Body output channels, responsible for engaging and desengaging friction plates and other parts of automatic gearbox, and the pressure value is being measured in given time points. The information received after that is processed and presented on the screen in form of diagrams and tables, which can be compared to the initial test results performed on new Valve Bodies

| | |
|---|---|
| Peak power, kW | 7,2 |
| Continuous power, kW | 4 |
| Power supply voltage | 380 или 220 |
| Weight, kg | 380 |
| Dimensions (LWH), mm | 1250 x 850 x 1500 |








# ADAPTERS

| Transmission | Code | CABLES |
|---|---|---|
| AISIN WARNER | | |
| Adapter plate 55-50SN (AF33, RE5F22A) | 70114 | 70114CH |
| Adapter plate 55-50SN (AF33, RE5F22A) Sol | 70115 | 70114CH |
| Adapter plate TF-80SC (AF40-6, AW6A-EL, AM6) | 70116 | 70116CH |
| Adapter plate TF-81SC (AF21) | 70118 | 70118CH |
| Adapter plate TF-80SC, TF-81SC Sol | 70203 | 70118CH |
| Adapter plate TF-60SN (09G) | 70119 | 70119CH |
| Adapter plate TF-60SN (09G) Gen2 | 70121 | 70119CH |
| Adapter plate TF-60SN, TR-60SN Sol | 70204 | 70119CH |
| Adapter plate TR-60SN (09D) | 70120 | 70120CH |
| Adapter plate TR-80SD (0C8, AA80E, AA80F) | 70137 | 70137CH |
| MERCEDES | | |
| Adapter plate 722.6 | 70124 | 70124CH |
| Adapter plate 722.9 | 70126 | 70126CH |
| ZF | | |
| Adapter plate 5HP19 (01V, ZF5HP19FL, ZF5HP19FLA) | 70131 | 70131CH |
| Adapter plate 6HP19 (09L, ZF6HP19A) Gen1 | 70138 | 70138CH |
| Adapter plate 6HP21, 6HP28, 6HP34 Gen2 | 70188 | 70188CH |
| Adapter plate 8HP45(845RE, AL450, 0CM), 8HP55, 8HP70 | 70242 | 70242CH |
| VW | | |
| Adapter plate 02E (DD DQ250 DSG-6) | 70192 | 70192CH |
| FORD | | |
| Adapter plate MPS6 (WD 6DCT450) | 70246 | 70246CH |
| Adapter plate 6R60, 6R75W, 6R80W (09E, ZF6HP26) Gen1 | 70138 | 70138CH |
| GM | | |
| Adapter plate 6T40, 6T45 | 70153 | 70153CH |
| JATCO, NISSAN | | |
| Adapter plate JF010E, RE0F09A | 70010 | 70010CH |
| Adapter plate JF011E, RE0F10A | 70011 | 70011CH |
| Adapter plate JF015E, RE0F11A | 70015 | 70015CH |
| TOYOTA | | |
| Adapter plate U240E (91-40LS), U250E (95-50LS) | 70215 | 70215.01CH, 70215.02CH |
| Adapter plate U660E | 70197 | 70197CH |
| Adapter plate A750E, A760E, A761E | 70239 | 70239CH |
| MITSUBISHI, HYUNDAI, KIA | | |
| Adapter plate A6LF | 70177 | 70177CH |
| Adapter plate A6MF (6F24) | 70241 | 70177CH |
| Adapter plate A4CF1, A4CF2, F4A42 | 70705 | 70705CH |
| CHRYSLER | | |
| Adapter plate 62TE | 70238 | 70238CH |
| DP0 | | |
| Adapter plate DP0, AL4 | 70173 | 70173CH |
| Universal plate for solenoids testing | | |
| Adapter plate | 90000 | 90000CH |
| Adapter plate 0AM (DQ200 DSG-7) | 90100 | 90100CH, 60191CH |

* список адаптеров и кабелей регулярно обновляется

SV 30.002




## AUTOMATED TORQUE CONVERTERS WELDING MACHINE WITH TWO WELDING TORCHES

Equipped with 350 A welding inverte

This machine is equipped with two power-driven welding torches automatically led to the welded Torque Converter's body. the torches are placed into welding position manually. After that they are automatically power driven to the Torque Converter. After the welding is performed the torches are being returned to the initial position. This machine was designed to heavy-duty Torque Converters rebuilding but can be used for cars Torque Converters as well.

| | |
|---|---|
| Max. consumed power, kWt | 29 |
| Power supply Voltage, V | 380 |
| Max.diameter of TC, mm | 450 |
| Max.height of TC, mm | 300 |
| Weight, kg | 600 |
| Dimensions (LWH), mm | 650 x 1750 x 2065 |

TZ 10.450




## END PLAY GAUGE STAND

During the Torque Converter's work the heat extension of some of its parts is inevitable. There is a notion of so called "end play gauge" which allows to assure the performance of the Torque converter in working temperature range without loosing its efficiency. This stand allows to determine the internal end play gauge of different type of Torque converters after the repair with the accuracy up to 0.01 mm.

| | |
|---|---|
| Range of clearances, mm | 10 |
| Weight, kg | 65 |
| Dimensions (LWH), mm | 720 x 540 x 500 |

SB 03.500




## TORQUE CONVERTER BALANCER

No adapters included

The KINERGO Torque Converter Balancer allows you to perform the balance check and additional balancing after the rebuilding has been performed. This procedure will allow you to be 100 percent sure that the vibration in the gearbox (if any) was not caused by the Torque converter you have rebuilt.

| | |
|---|---|
| Max. consumed power, kWt | 5 |
| Power supply Voltage, V | 380 |
| Power supply Voltage, V | 3,0 |
| Weight, kg | 800 |
| Dimensions (LWH), mm | 1700 x 1385 x 990 |



## AUTOMATIC TORQUE CONVERTERS INDUSTRIAL WELDING MACHINE

This Fully Automated Dual Gun welding machine was designed especially for large factories, performing massive welding of Torque Converters of the same type. It can perform welding of Torque Converters converters with diameter as big as 450 mm and 300mm in height.
The machine is equipped with two power-driven automatic welding torches. They are put in the welding position and then they are power-driven to the welded Torque Converters body. After that the welding is performed automatically and after it is done the torches are power-driven back to the initial position. This machine has been designed for rebuilding heavy duty Torque Converters by large facilities. The massive welding of series of Torque Converters of the same type is it's main purpose. The individual welding algorithm (60 of them are preinstalled) allows you to boost your enterprise's efficiency

| | |
|---|---|
| Max. consumed power, kWt | 40 |
| Power supply voltage, V | 380 |
| Max.diameter of TC, mm | 530 |
| Max.height of TC, mm | 300 |
| Weight, kg | 1500 |
| Dimensions (LWH), mm | 980 x 2415 x 2286 |

SV 50.001



## LATHE MACHINE FOR SPECIAL APPLICATIONS

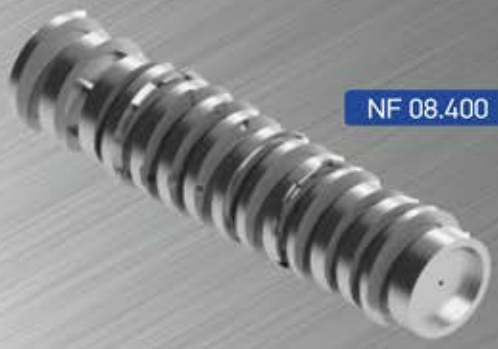
This very lathe machine was designed especially for Torque Converters rebuilding workshops. The TC is well fixed on the faceplate with a specially designed mechanism. This mechanism allows to align the Torque Converters with special adapters; but you also can use an ordinary turning cartridge. The cutting device holder allows the usage of standard burins of 25x20 and 25x25 mm dimensions. The cross feed can be made using the mechanical power or manually. The machine is also equipped with electronic measuring tool with display, which ensures the high precision of operations. Rotation speed can be modified without gear box. Easy and comfortable to use, compact, the rigid construction and a powerful engine - these are the qualities which will allow this lathe machine to become a valuable addition to your workshop.

| | |
|---|---|
| Max consumed power, kWt | 13 |
| Power supply voltage, V | 380 |
| Max.diameter of TC, mm | 500 |
| Max TC high, mm | 350 |
| Weight, kg | 1200 |
| Dimensions (LWH), mm | 1600 x 915 x 1690 |

LM 50.800





NF 08.400

## Adapter kit for piston bonder

Adapters are designed for use in NF 08.400 piston bonder. Set is universal and suitable for all torque converters.

PS 07.330
PS 07.380



## Tooling package for lathe machine

330 and 380 mm

The package is used for cutting of Torque Converter, refinement of its surfaces and diameters. Consists of a chuck and centering adapters for torque converter.

OS 10.001



## Tooling package for welders, including adapters for fixing pump hub during its replacement

Designed to fix the impeller hub when welding.

SB 01.100



## Pneumatic device for fixation of internal parts of the torque converter

including 1 splinted adapter, 2 blanc parts

This device was designed for the Torque Converters balancer SB 02.350 and is used to fix the internal parts of the Torque Converter while balancing.



# DSG REPAIR KIT DSG 7.02

## Takes care of the "P17BF problem", common for DSG 7 gearboxes

**Description:**

DSG 7.02 repair kit allows you to perform the repair of the DSG 7 gearbox, eliminating the most common "P17BF error", caused by cracks and / or plate cracks in the accumulator holding part.

- The wrench should be ordered separately;
- The screws for fixing the are already installed in the gearbox.

**Advantages:**

- quick & easy to install;
- no extra effort needed before installation;
- for some types of transmission the repair is possible without taking out the plate itself;
- allows you repairing the valve bodies with destroyed accumulator thread connection.

COMPATIBLE WITH ALL TYPES OF AUTOMATIC TRANSMISSIONS OF THE DSG 7 SERIES








Along with the traditional friction materials TAN and H.CARBON, KINERGO uses the new generation of materials FABOR (F1 carbon based) and VIPEX (V5).
Under conditions of high temperatures and high loads, the friction clutches from FABOR (F1) and VIPEX (V5) maintain a stable slip coefficient and do not degrade for a long time.

## Friction linings (any size)

| | | |
|---|---|---|
| TAN |  | 1.1 mm<br>1.7 mm |
| FABOR (F1)<br>kevlar based |  | 1.1 mm<br>1.7 mm |
| H.CARBON |  | 1.1 mm<br>1.7 mm |
| VIPEX (V5) |  | 1.0 mm |

## ZF friction linings

| | | |
|---|---|---|
| ZF01HF1,<br>ZF01LF1 |  | ZF6HP19,<br>ZF6HP26 |
| ZF03HF1,<br>ZF03LF1 |  | ZF6HP19 |
| ZF06HV5 |  | ZF5HP19<br>o.d. 241 i.d.207 |
| ZF08LF1 |  | ZF6HP26 |
| ZF09HF1,<br>ZF09LF1 |  | ZF6HP26,<br>ZF6HP28 |
| ZF13LF1 |  | ZF6HP21 |
| ZF14LF1 |  | ZF6HP26 |
| ZF15LF1 |  | ZF6HP32 |

## Clutch plates

| | | |
|---|---|---|
| FZF01LV5 |  | ZF6HP19,<br>ZF6HP26,<br>ref.# ZF-CP-1(4) |
| FZF02LV5 |  | ZF8HP45, ZF8HP55<br>ZF8HP70 (845RE,<br>0CM/AL450)<br>ref.# ZF-CP-8F |
| FZF03LV5 |  | ZF6HP19<br>ref.# FS-CP-7BW |
| FZF05LV5 |  | ZF5HP30<br>ref.# FS-CP-1 |
| FZF06LV5 |  | ZF5HP19<br>(Captive Clutch)<br>ref.# FS-CP-2 |
| FZF07LV5 |  | ZF5HP24<br>ref.# FS-CP-3 |
| FZF08LV5 |  | ZF6HP26 (09E, 6R60,<br>6R80W, 6R75W)<br>ref.# FS-CP-56BW |
| FZF09LV5 |  | ZF6HP28<br>ref.# ZF-CP-2(6) |
| FZF14LMV5 |  | ZF6HP26 (09E, 6R60,<br>6R80W, 6R75W)<br>ref.# ZF-CP-5 |
| STZF04 |  | ZF8HP45/55/70<br>ref.# ZF-CP-10S<br>Thickness 2,8 mm |
| STZF05 |  | ZF8HP45/55/70<br>ref.# ZF-CP-9S<br>Thickness 1,8 mm |

## MERCEDES friction plates

| | | |
|---|---|---|
| FMB04LV5<br>FMB04LV5-01<br>FMB04LV5-02 |  | 722.6, 722.9<br>ref.# MB-CP-7KBW |
| FMB13LF1 |  | 722.9 (AMG)<br>1-side<br>friction plate |
| FMB14LF1 |  | 722.9 (AMG)<br>1-side<br>friction plate |
| STMB01 |  | 722.6, 722.9<br>ref.# MB-CP-3KR |
| STMB08 |  | 722.9 (Late)<br>ref.# MB-CP-14S |
| STMB09 |  | 722.9 (Late),<br>Selective<br>Thickness 2,0 mm |

## AISIN & JATCO Friction plates

| | | |
|---|---|---|
| FAW01LA |  | TR-60SN (VW 09D)<br>ref.# AW-CP-6F |
| FJA01LA |  | RE5R05A<br>ref.# JA-CP-1 |
| FJA03LA |  | RE7R01A<br>ref.# JA-CP-4 |

## Radial Lip Seal

| | | |
|---|---|---|
| SLCH02 |  | A413, A404,<br>A604 (41TE),<br>A606 (42LE),<br>ref.# CH-O-9V |
| SLGM01 |  | 6F35, 6T30,<br>6T40, 6T45<br>ref.# GM-O-14V |
| SLMT02 |  | KM175, KM177,<br>F4A42, F4A43,<br>F4A51, F5A51<br>ref.# MT-O-5V |
| SLTO04 |  | 55-50SN, A750E,<br>A760E, A960E, U140E<br>ref.# TO-O-7V |
| SLVW01 |  | 01M, 01N, 01P,<br>095, 096, 097, 098<br>ref.# VW-O-2V |
| SLZF01 |  | ZF4HP16, ZF4HP18,<br>ZF4HP20, ZF5HP19<br>ZF6HP26 (09E, 6R60)<br>ref.# FS-O-27V |
| SLZF04 |  | ZF6HP26 (09E,<br>6R60, 6R80W,<br>6R75W) |

## Seal Ring

| | | |
|---|---|---|
| SRJA02 |  | RE5R05A<br>ref.# JA-O-9V |
| SRJA03 |  | RE5R05A<br>ref.# JA-O-8V |
| SRMB09 |  | 722.9 (Late)<br>ref.# MB-O-11V |
| SRMB10 |  | 722.9 (Late)<br>ref.# MB-O-12V |
| SRMB12 |  | 722.6, 722.9<br>ref.# MB-O-4V |
| SRMB13 |  | 722.6, 722.9,<br>722.9 (Late)<br>ref.# MB-O-5V |
| SRMB14 |  | 722.6, 722.9<br>ref.# MB-O-2V |
| SRMB16 |  | 722.6, 722.9<br>D = 115.6 mm<br>ref.# MB-O-6V |
| SRZF08 |  | ZF8HP45 (845RE,<br>AL450, 0CM),<br>ZF8HP50, ZF8HP70,<br>ZF8HP75, ZF8HP90 |

## O-Ring

| | | |
|---|---|---|
| ORCH02 |  | A518, 45RFE<br>ref.# CH-O-11V |

| | | |
|---|---|---|
| ORCH07 |  | ZF6HP19, A413, A470, A670, A604, A606<br>ref.# CH-O-6V |
| ORGM03 |  | 4L60E, 4T60E, 4T80E<br>ref.# GM-O-9V |
| ORGM16 |  | TH200C, 4L60, 3L30, 3T40, 4L80E, 4T60E<br>ref.# GM-O-21V |
| ORJA08 |  | JF402E |
| ORMT03 |  | 175-177, F4A22 F4A23<br>ref.# MT-O-4V |
| ORVW01 |  | 01M, 01N, 01P, 095, 096, 097, 098<br>ref.# VW-O-1V |
| ORZF01 |  | ZF5HP19, ZF5HP24, ZF6HP26, (09E , 6R60)<br>ref.# FS-O-2V |
| ORZF02 |  | ZF4HP20, ZF5HP19 (01V, ZF5PH19FL)<br>ref.# FS-O-3V |

## Thrust Bearing

| | | |
|---|---|---|
| BEAW03 |  | TR-60SN (VW 09D)<br>ref.# AW-N-3 |
| BECH01 |  | A500, A518, A618, A606, A727, A904, 45RFE, 6F50, 4L60E, A340H<br>ref.# CH-N-1 |
| BECH03 |  | 45RFE, 5-45RFE, 66RFE, 68RFE, 62TE<br>ref.# CH-N-2 |
| BEFD02 |  | 4R100, 5R110W<br>ref.# FD-N-6 |
| BEFD03 |  | 5R55N, 5R55S, 5R55W<br>ref.# FD-N-7 |
| BEFD08 |  | A4LD |

| | | |
|---|---|---|
| BEGM01 |  | 4T60E, 5L40E , 6L80, 6F35, 6R60, 4L60E, 4EAT-F, A727, A904<br>ref.# GM-N-11 |
| BEGM02 |  | 4L60E, 4L80-E<br>ref.# GM-N-18 |
| BEGM03 |  | 4L60E, 4L80E, 6L80, 6L90<br>ref.# GM-N-20 |
| BEGM04 |  | 3L80, 4L60E, 4L65E, 4L70E<br>ref.# GM-N-8HLT |
| BEGM09 |  | 4L80E<br>ref.# GM-N-17 |
| BEMB01 |  | 722.6, 722.9<br>ref.# MB-N-1 |
| BEMB02 |  | 722.6, 722.9<br>ref.# MB-N-2 |
| BEMB03 |  | 722.6, 722.9<br>ref.# MB-N-3 |
| BERE01 |  | DPO, AL4<br>ref.# RE-N-2 |
| BETO01 |  | A340H, A440L, A760E, A960E/F, U250E<br>ref.# TO-N-6 |
| BETO03 |  | A442F, A750E, U140E<br>ref.# TO-N-11 |
| BETO07 |  | A540E, A760E, A960E, U250E, A42, A44, F4A42, A440F |
| BEZF03 |  | 5HP19, 5HP24, 6HP19, 6HP26, 8HP45 (845RE, 0CM)<br>ref.# FS-N-4 |

## Stator caps

| | | |
|---|---|---|
| SCZF01 |  | ZF5HP19, ZF6HP26 (09E, 6R60, 6R75W)<br>ref.# FS-WA-10 |

| | | |
|---|---|---|
| SCZF02 |  | ZF5HP19 (01V, ZF5PH19FL) ref. FS-WA-11 |

## Impeller hubs

| | | |
|---|---|---|
| HBAW01 |  | TF-80SC (AF40-6, AM6, AW6A-EL) |
| HBHK02 |  | A6GF, A6LF, A6MF(6F24) ref.# HK-90-2G |
| HBJA11 |  | JF405E (SR410, SR412, Sr413) |
| HBJA12 |  | JF414E |
| HBRE02 |  | DPO, AL4 ref.# RE-90-1G |
| HBZF07 |  | ZF5HP19 (1V, ZF5HP19FL) ref.# FS-90-9G |

## Sprags

| | | |
|---|---|---|
| SGAW01 |  | TR-60SN (VW 09D) |
| SGBW01 |  | 55-50SN (AF33, RE5F22A) ref.# BW-SP-3 |
| SGBW02 |  | TF-80SC (AF40-6, AW6A-EL, AM6) ref.# BW-SP-2 |
| SGBW03 |  | ZF5HP19, ZF6HP19, ZF6HP26 (09E, 6R60) ref.# BW-SP-4 |
| SGBW04 |  | TF-60SN (VW 09G) 6T30, 6T40, 6T45 ref.# BW-SP-5 |
| SGBW05 |  | ZF5HP30 ref.# BW-SP-1 |
| SGFD01 |  | 4R44E, 4R55E, 5R55E |

| | | |
|---|---|---|
| SGGM01 |  | TH180, TH180C, 3L30, 03-72LE |
| SGGM02 |  | 4L60E, 4L65E, 4L70E |
| SGJA01 |  | JR404E (RE4R03A), 4L60E ref.# MI-SP-4 |
| SGJC01 |  | JCB 3CX Backhoe Loader Torque Converter |
| SGMT01 |  | U140E(AW90-40LS), F4A51, R4A51, F5A51, R5A51 |
| SGMZ01 |  | FN4A-EL |
| SGRE01 |  | DPO, AL4 ref.# RE-SP-1 |
| SGSY01 |  | Ssang Yong |
| SGTO01 |  | 450-34LE, JR403E (RG4R01A) ref.# TO-SP-1 |
| SGTO02 |  | A340H, RE4F04A |
| SGXX03 |  | Forklift ref.# MI-SP-3 |
| SGXX04 |  | Forklift Case, Caterpiller ref.# PS9080 |
| SGZF01 |  | 01M, 01N, 01P, 095, 096, 097, 098 |
| SGZF03 |  | ZF4HP22, ZF4HP24 01M, 01N, 01P, 095, 096, 097, 098 |

## DPO, AL4 rivets

| | | |
|---|---|---|
| RVRE01-100 |  | Bushing DPO, AL4 (100 pcs.) |
| RVRE01- 50 |  | Bushing DPO, AL4 (50 pcs.) |
| RVRE03-100 |  | (100 pcs.) |
| RVRE03 - 50 |  | DPO, AL4 (50 pcs.) |
| RVRE04 |  | Bushing DPO, AL4 (Late) (24 pcs.) |
| RVRE05 |  | DPO, AL4 (Late) (24 pcs., with cavity) |

## Mercedes 722.9 7G-Tronic

| | | |
|---|---|---|
| TLMB01<br>TLMB01 |  | Tooling for drilling |
| BUMB02T |  | Bushing |
| BUMB02 |  | Adapter for pressing |
| SHMB01K |  | Washers and screws |
| TPM6 |  | Tap M6x1 (tools) |
| TPH1 |  | Tap holder Type 1 |

## Bushing

| | | |
|---|---|---|
| BUMB01 |  | TRB Shaft pilot (5pcs.)<br>722.6<br>ref. # MB-B-1 |
| BUJA03 |  | JF011<br>ref.# JA-B-3 |

## Piston

| | | |
|---|---|---|
| PSMB01 |  | 722.9<br>ref.# 2112570041 |

## Spring

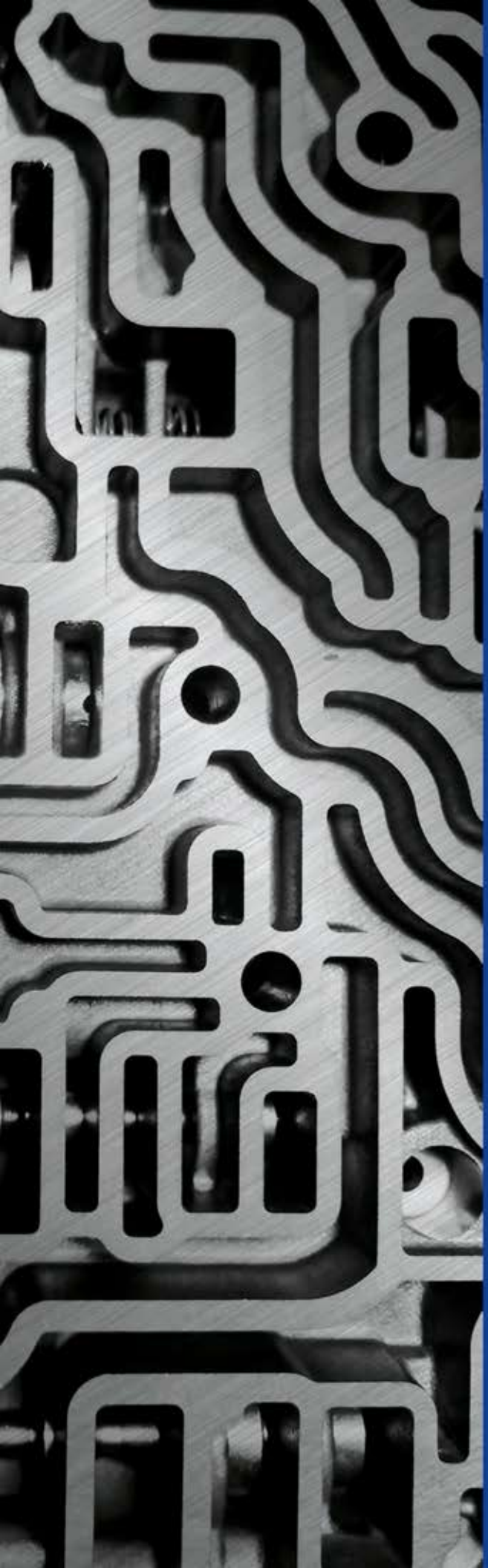
| | | |
|---|---|---|
| SPCH11 |  | A413, A404,<br>A470, A670<br>ref.# CH-SD-Y |
| SPFD05 |  | 6F35 |

## Accumulator for DSG 7

| | |
|---|---|
| DSG7.02 | Repair kit |







M2K

3301 W MacArthur Blvd
Santa Ana, CA 92704 USA

Tel: +1 (949) 333-3800
Fax: +1 (949) 333-3804
www.M2kinc.com

KINERGO®