



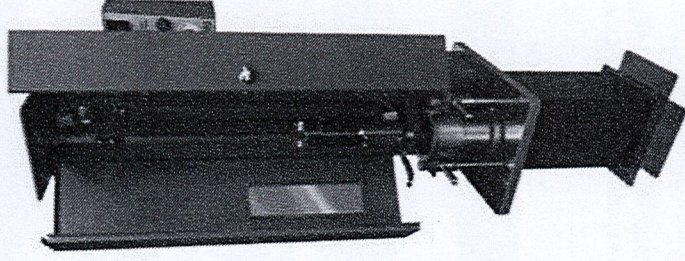
MATERIAL TESTING EQUIPMENT

Rev. 0 / 31 August 2015

UTC-4850.4860

UNIVERSAL SERVO CONTROLLED POWER PACK

UTAS-0082A.0084A
AUTOMATIC MARSHALL COMPACTOR



USER MANUAL



UTC-4850.4860

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NOTE: In order to increase product quality, machine technical specifications may be changed without telling beforehand. The photographs in the user manual are representative ones. So that they may not be as completely same as with your device.

1. DESCRIPTION

Automatic, Marshall Compactors are designed to provide a stable and rigid mechanism is used for preparation of bituminous specimens for Marshall Stability tests.

UTAS-0082A model compactor is for compaction of 4" dia. specimens and UTAS-0084A model compactor is for 6" dia. specimens.

Both models feature a heavy-duty design, which stands up well to the constant jarring caused by the compaction process. The Compactors are equipped with a mould fixing mechanism which also raises the hammer to provide easy removing of the mould. With this feature, the user can easily release the mould and raise the rammer simultaneously.

The conveniently positioned control panel comprises of start/stop button, emergency stop button and a direct reading counter used to set the required number of blows. The operator can keep track of the number of blows on an LCD display...

The apparatus stops automatically after the preset number of Blows.

The standard models can be supplied with a safety/noise reduction cabinet. The cabinet is lined internally with soundproofing material to reduce sound level conforming to CE directives.

2. INSTALLATION

Do not irrit to unpack, carry or move without proper equipment. It is essential that the machine is mounted on a solid concrete floor in a location allowing for adequate ventilation and sufficient space for safe operation. Since the rammer weight is free falling, the machine must be level after installation and in order to match perpendicular drop for the rammer turntable must be on level. Connect the machine to single phase 220V.


Safety

All moving parts have to be secured before attempting maintenance and do not remove any covers of the machine. Since the machine produces excessive noise, protect the user by some safety devices such as headphones. While not using the machine take the safety guide to inner part so that accidentally the rammer cannot drop.

Electrical Safety

Check that the power supply is compatible with the requirements stated on the label and connect in accordance with IEE regulations or to local requirements. Before removing any covers or performing maintenance repair and service, isolate from electrical supply by removing mains plug. Where mains supply is required during these activities, only competent persons should perform the work. Do not use machine with wet hands. The power cable is coded as it is shown in the following table.

Power Cable	
Brown wire	Live or Power (L)
Blue wire	Neutral (N)
Green/Yellow	Earth or Ground (E)

 This equipment must be correctly earthed.

3. OPERATION

- Power Button:** Powers on the machine
- Start Button (Green):** Starts the test
- Stop Button (Red):** Stops the test.
- Door switch:** Acts like pause key for safety reasons.
- Controller Box (White):** Displays the adjustment values during operation, *Picture 1*.
- Emergency Button (Red):** Used in order to stop the device immediately in case of emergency.

Test Procedure

Connect the mains cable to the socket on the rear of the blow counter and turn the switch near the socket to position 1. At the end of the test sequence the display will show the set number of blows. The display will show 0000 and use the 1 and 2 keys to increase the set value respectively.

Start Test

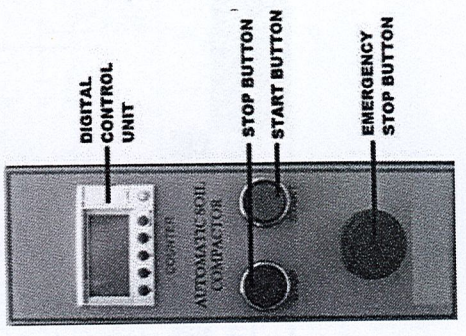
Press the START key (start led light up) to start the test, the display will show in real time the number of blows made until the pre-set number is reached; after this the machine will stop Automatically and the motor will turn off. During the functioning it is possible to interrupt the test by pressing and then quickly releasing the STOP key (stop led flashes). In this way the counter and the motor will stop, the display will show the number of blows made and the START led will remain off. During the pause it is possible to change the set number of blows without interfering with the number of blows of the current compaction phase. To reset the total number of blows press RESET button on the counter. To re-start the test press the START key for approximately 1 second, the counter will not zeroed and the test will begin with the previous number of blows shown on the display.

End of Compaction

Once the Set number of drops has been made, the compactor will stop and await further operator input.

Emergency Stop Button

If this button is pressed during a compaction cycle the machine will stop (mains supply is cut out). The emergency stop button can be released by turning it clockwise and the machine can start again. Opening of guard doors has the same effect as pressing the stop key, but all the commands are stopped until the doors are shut again. Attention: When closing the guard doors, the machine re-start immediately.



Picture 1: Control Panel

4. MAINTENANCE

There is danger for hands. The maintenance operations described here should only be done with the instrument completely switched off. We recommend that the following wearing parts are regularly cleaned and greased (approx. every 30 compactions) so as to ensure long working life:

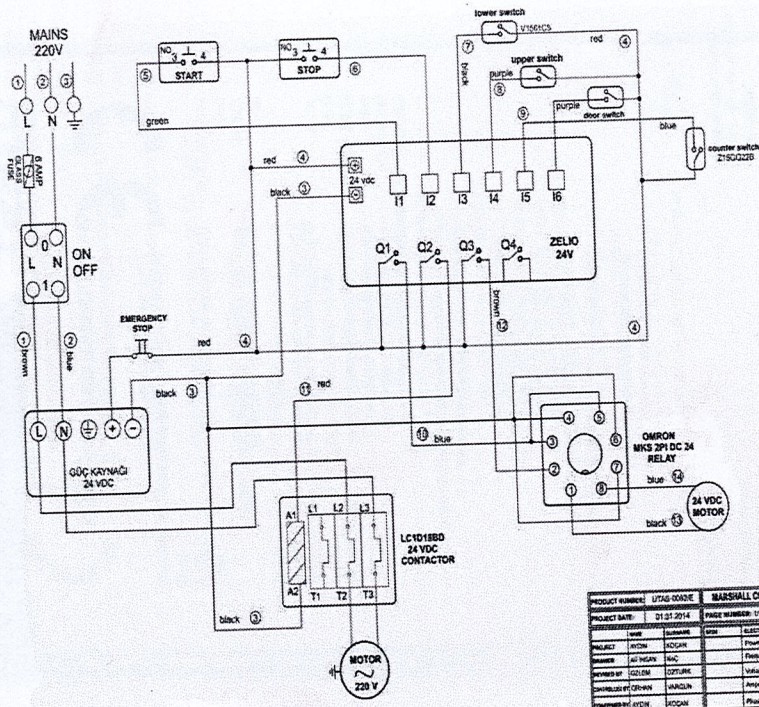
- ✓ CHAIN: Clean with a cloth damped in solvent and then grease all the links.
- ✓ HAMMER LIFTING and GUIDE SYSTEM: Clean with a cloth damped in solvent, paying particular attention at the catch/release cams found at the two ends of the rod, then well grease.

To ensure good greasing, make 5 or 6 drop cycles without the hammer or mould fitted, and then add more grease to the chain and lifting and guide system.

5. SPECIFICATIONS

Dimensions	UTAS-0082/A	UTAS-0084/A
Weight (approx.)	550x550x1950 mm	550x550x1950 mm
	135 kg	145kg

6. WIRING DIAGRAM



PRODUCT NUMBER	UTAS-0082/A	MARSHALL COMPACTOR	UTEST
PROJECT DATE	01/21/2014	PRICE NUMBER: UT	MATERIAL TESTING EQUIPMENT
NAME	SUMNER	SIZE	ELECTRICAL SPECIFICATIONS
MATERIAL	AC20K	ROCKWELL	400VAC
NUMBER	200	ROCKWELL	50/60 Hz
POWER SUPPLY	24VDC	ROCKWELL	20/30 Hz
MANUFACTURER	ROCKWELL	ROCKWELL	200/30 Hz
MANUFACTURER	ROCKWELL	ROCKWELL	200/30 Hz
MANUFACTURER	ROCKWELL	ROCKWELL	200/30 Hz

7. CERTIFICATION



**EC DECLARATION OF CONFORMITY
AT UYGUNLUK BEYANI**

Directive 2006/42/EC, Annex II (A)
Makine Emniyeti Yönetmeliği (2006/42/AT), Ek II (A)

MANUFACTURER : UTEST Matzame Test Chizari ve Makineleri Imakati ve Dis Ticaret A.Ş.
Üretici
ADDRESS : ASO 1. OSB Uval Cad. No: 18 Sancak / ANKARA / TURKEY
Adres

MODEL : Herewith Declares that the Machine
Model İş bu belge ile beyan edilmektedir ki aşağıdaki makine
: UTAS-0082A

SERIAL NUMBER : See Details on Product Identification Label
Seri No : Ürün Tanımlama Etiketine Bakınız
DESCRIPTION : AUTOMATIC MARSHALL COMPACTOR
Ürün Adı : OTOMATİK MARSHALL ÇEKİCİ

is in conformity with the provision of the following EC directives,
belirtilen AT Yönetmelikleri hükümleri ile uyumludur,

- Machinery Directive (2006/42/EC)
- Makine Emniyeti Yönetmeliği (2006/42/AT)
- Low Voltage Directive (2006/95/EC)
- Düşük Voltaj Yönetmeliği (2006/95/AT)
- Electromagnetic Compatibility Directive (2004/108/EC)
- Elektromanyetik Uyumluluk Yönetmeliği (2004/108/AT)

is in conformity with the following standards,
belirtilen standartlar ile uyumludur,

ASTM D 1539, D 8020, D 3581, AASHTO T245

Issue Date

Yayın Tarihi
12.12.2014



Signature
Product Safety Manager
Ürün Güvenlik Yöneticisi
Fuat İşim



**EC DECLARATION OF CONFORMITY
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ADDRESS : ASO 1. OSB Uval Cad. No: 18 Sancak / ANKARA / TURKEY
Adres

MODEL : Herewith Declares that the Machine
Model İş bu belge ile beyan edilmektedir ki aşağıdaki makine
: UTAS-0084A

SERIAL NUMBER : See Details on Product Identification Label
Seri No : Ürün Tanımlama Etiketine Bakınız
DESCRIPTION : AUTOMATIC MARSHALL COMPACTOR
Ürün Adı : OTOMATİK MARSHALL ÇEKİCİ

is in conformity with the provision of the following EC directives,
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8. CUSTOMER SUPPORT - WARRANTY

UTEST technical services group is available for your technical questions. The technical service engineers are well-trained and experienced on UTEST material testing equipment and should be able to answer your questions. It is recommended to reread the related test standard such as EN, ASTM etc. if your questions are related with test procedures.

The guarantee period of the machine is 1 year and the product end-of-life is 10 years. Product end-of-life is the time in which all parts of the machine has to be kept in the stock of the company. Also, the pictures used in this user manual are just for showing purpose. So that they may not be completely the identical to your apparatus.



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9. NOTES