



12V **POWER PACK**

82361



IMPORTANT: Please read these instructions carefully to ensure the safe and effective use of this product and save these instructions for future reference. This manual has been compiled by Draper Tools and is an integrated part of the product with which it is enclosed and should be kept with it for future references.

This manual describes the purpose for which the product has been designed and contains all the necessary information to ensure its correct and safe use. We recommend that this manual is read before any operation or, before performing any kind of adjustment to the product and prior to any maintenance tasks. By following all the general safety instructions contained in this manual, it will ensure both product and operator safety, together with longer life of the product itself.

All photographs and drawings in this manual are supplied by Draper Tools to help illustrate the operation of the product. Whilst every effort has been made to ensure accuracy of information contained in this manual, the Draper Tools policy of continuous improvement determines the right to make modifications without prior warning.

1. TITLE PAGE

1.1 INTRODUCTION:

USER MANUAL FOR:

12V POWER PACK

Stock no. 82361 Part no. JS3200

1.2 REVISIONS:

Date first published July 2017	

As our user manuals are continually updated, users should make sure that they use the very latest version.

Downloads are available from: http://www.drapertools.com/manuals

DRAPER TOOLS LIMITED WEBSITE: drapertools.com
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1.3 UNDERSTANDING THIS MANUALS SAFETY CONTENT:

WARNING! Information that draws attention to the risk of injury or death.

CAUTION! Information that draws attention to the risk of damage to the product or

surroundings.

1.4 COPYRIGHT © NOTICE:

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3. GUARANTEE

3.1 GUARANTEE

Draper tools have been carefully tested and inspected before shipment and are guaranteed to be free from defective materials and workmanship.

Should the tool develop a fault, please return the complete tool to your nearest distributor or contact Draper Tools Limited, Chandler's Ford, Eastleigh, Hampshire, SO53 1YF. England.

Telephone Sales Desk: (023) 8049 4333 or Product Helpline (023) 8049 4344. A proof of purchase must be provided with the tool.

If upon inspection it is found that the fault occurring is due to defective materials or workmanship, repairs will be carried out free of charge. This guarantee period covering parts/labour is 12 months from the date of purchase except where tools are hired out when the guarantee period is 90 days from the date of purchase. This guarantee does not apply to normal wear and tear, nor does it cover any damage caused by misuse, careless or unsafe handling, alterations, accidents, or repairs attempted or made by any personnel other than the authorised Draper warranty repair agent.

Note: If the tool is found not to be within the terms of warranty, repairs and carriage charges will be quoted and made accordingly.

This guarantee applies in lieu of any other guarantee expressed or implied and variations of its terms are not authorised.

Your Draper guarantee is not effective unless you can produce upon request a dated receipt or invoice to verify your proof of purchase within the guarantee period.

Please note that this guarantee is an additional benefit and does not affect your statutory rights.

Draper Tools Limited.

4.1 SCOPE

This product is designed for the starting of petrol and diesel engines with flat batteries, it can also supply 12V DC to power your 12V electrical devices from it's inbuilt 12V DC output socket.

4.2 SPECIFICATION

Stock no. Part no.	82361
Part no	JS3200
Output:	
Voltage	12V
Amperage	1600A-3200A
Starting (CCA)	1600A
Peak	3200A
Integral battery:	
Туре	Lead acid sealed battery
Voltage	12Ý
Capacity	38Ah
Charger:	
Înput	
Voltage	230V~50Hz
Output	
Voltage	12V
Amperage	1500mA
Construction	Class II
Weight (machine only)	

4.3 HANDLING & STORAGE

Care must still be taken when handling and lifting. Dropping this machine will have an effect on its operation and may also result in personal injury. This machine is not a toy and must be respected.

The environment will have a negative result on its operation if you are not careful. If the machine is unprotected from dust and debris; components will become clogged: And if not cleaned and maintained correctly or regularly the machine will not perform at its best.

5. HEALTH & SAFETY INFORMATION

5.1 GENERAL SAFETY INSTRUCTIONS

WARNING: Please read the following instructions carefully, failure to do so could lead to serious personal injury.

IMPORTANT: Draper Tools Limited recommends that this machine should not be modified or used for any application other than that for which it was designed. If you are unsure of its relative applications do not hesitate to contact us in writing and we will advise you.

WARNING - RISK OF EXPLOSIVE GASES

WORKING IN THE VICINITY OF A LEAD-ACID BATTERY IS DANGEROUS, BATTERIES GENERATE EXPLOSIVE GASES DURING NORMAL BATTERY OPERATION. FOR THIS REASON, IT IS OF UTMOST IMPORTANCE, IF YOU HAVE ANY DOUBT, THAT EACH TIME BEFORE USING THE POWER PACK, YOU READ THIS MANUAL AND FOLLOW THE INSTRUCTIONS.

- To reduce risk of battery explosion, follow these instructions and those published by the battery manufacturer and manufacturer of any equipment you intend to use in the vicinity of the battery.
 Review warning marks on all these products and on the engine.
- When working near a lead-acid battery, someone should be within range of your voice, close enough to come to your aid.
- Have plenty of fresh water and soap nearby in case battery acid contacts skin, clothing or eyes.
- Wear complete eye, hand and clothing protection, Avoid touching eyes when working with batteries,
- If battery acid contacts skin or clothing, wash immediately with soap and water. If acid enters eyes, immediately flood eye with cool, clean running water for at least 15 minutes and get medical attention immediately.
- NEVER smoke or allow a spark or flame in vicinity of battery or engine.
- Be extra cautious to reduce risk of dropping a metal tool onto a battery. It could spark or short circuit the battery or, any other electrical part possibly causing an explosion.
- When working with a lead-acid battery, remove personal metallic items such as rings, bracelets, necklaces and watches. A lead-acid battery can produce a short-circuit current high enough to weld a ring, or the like to metal, which may cause severe burns.
- Use the battery charger for charging "lead-acid batteries only". Do not use for charging dry-cell or Ni-Cad batteries that are commonly used with home appliances. For example, radios, torches etc. These batteries may explode and cause injury to persons and damage to property.
- NEVER charge or boost a frozen battery.
- **NEVER** allow clamps to touch one another or to contact the same piece of metal to prevent arcing.
- Ensure the power pack is switched off prior to connecting/disconnecting of the vehicle battery.
- Do not use the charger in damp or wet conditions.
- Keep out of reach of children.
- Do not submerge in water.
- Do not operate near flammables such as petrol, paraffin, or thinners etc.
 If the charger receives a sharp blow or is otherwise damaged in any way, do not disassemble. Have it checked by a qualified service person. Return to source.
- The battery must be removed from the appliance before it is scrapped.
- The appliance must be disconnected from the supply mains when removing the battery.
- The battery must be disposed of safely.
- This appliance is for use on 12V circuits only.
- Do not use in high temperatures.
- Before connecting the power pack, ensure the main switch is in the 'off' position.
- If incorrect polarity is indicated, disconnect immediately and rectify.
- Prior to initial use charge for 24 hours.
- Do not use the power pack while charging.

5. HEALTH & SAFETY INFORMATION

5.2 RECHARGEABLE BATTERIES:

- The battery must be removed from the appliance before it is scrapped.
- The appliance must be disconnected from the supply mains when removing the battery.
- The battery must be disposed of safely
- Charge the battery using the specified charger under the charging conditions specified.
 Charging the battery under any other conditions may cause the battery to overheat, emit hydrogen gas, leak, ignite or burst.
- Do not place the battery near a device that may cause sparks (such as a switch or a fuse). The
 battery may generate flammable gas when charged, so remember to keep the battery away from fire
 to prevent sparks from igniting or causing explosion.
- Do not place or store the battery in a vehicle in hot weather, under direct sunlight, or near a source
 of heat. Use and storage of the battery in these conditions may cause battery leakage, fire or
 bursting.
- Damage and deterioration of battery characteristics may occur if the battery is dropped.
- Do not charge the battery in the inverted position.
- Do not carry the battery by hanging it from the terminal or the cable, as it may cause damage to the battery.
- Turn off the switch of the circuit when connecting the battery to a charger or load.
- Batteries tend to lose a part of their capacity due to self-discharge during shipment and storage, recharge the batteries before you use them and after purchase or long-term storage in order to restore their full capacity.
- Do not continue discharging to the point where the voltage drops below the recommended discharge cut-off voltage.
 - If a storage battery that was discharged below the recommended discharge cut-off voltage is recharged, the storage battery may generate heat which could deform it or cause condensation to form moisture from inside the battery.
 - Discharging below the recommended voltage may also accelerate the deterioration of the battery's performance characteristics.
- Avoid overdischarge, and charge the battery immediately after discharge.
- Unsatisfactory storage conditions may cause deterioration in battery performance, shorten service life and could cause rust to form on the terminals.
- Do not allow metallic objects to touch or bridge the terminals especially jewellery. Failure to observe the precautions may cause the battery to overheat, emit hydrogen gas, leak, ignite or burst.
- Do not throw the battery into fire or heat the battery. The battery may burst or generate a toxic gas if placed in contact with fire.
- Do not attempt to disassemble, remodel or destroy the battery, as it may cause the battery leakage, fire or bursting, and could also create sulphuric acid spills from the battery resulting in possible burns to personnel and damage to the immediate environment.
- Do not continue to charge the battery beyond the time specified in the instructions. If the battery is
 not fully charged even after being charged for a longer time than specified, discontinue charging and
 remove the battery from the charger. Charging for a longer time than specified may cause the
 battery to leak, ignite, or burst.
- Do not discharge the batteries beyond the maximum values indicated on the battery. If the battery is discharged beyond the maximum values, it may leak, ignite or burst.
- Keep the batteries beyond the reach of children.
- Wear gloves when handling batteries.

5. HEALTH & SAFETY INFORMATION

- Do not apply organic solvents such as paint thinner, petrol or liquid detergents to the battery. If these are brought into contact with the battery case, it may crack, causing leakage.
- The battery contains electrolyte (diluted sulphuric acid) a very toxic substance. If the battery leaks and the liquid inside spills on the skin or clothing, immediately wash it off with plenty of clean water. If the liquid splashes into eyes, immediately flush the eyes with plenty of clean water and consult a doctor. Sulphuric acid will burn skin and in the eyes may cause loss of eyesight.
- Store the battery in a stable position so as to keep the terminals of the battery away from any
 metallic or other conductive material (including items that may fall or drop onto the battery).
 Protect the battery from rain. If the terminals of the battery come into contact with water, they may
 corrode.

As a general rule, keep the battery in an upright position.

- When storing the battery, disconnect it from the charger and keep it in a place where the temperature is low. Do not store in direct sunlight or temperatures exceeding 60°C.
- If the battery is stored for a year or longer without being charged, its service life may be shortened. Store the battery after fully charging it, otherwise its service life may be shortened.
- Use/recharge the battery regularly. The battery gradually deteriorates during storage and consequently its decreased capacity may be irreversible even after recharging.

Used batteries are recyclable. When returning used batteries, insulate their terminals with adhesive tape if not the residual electricity in used batteries may cause fire or explosion. This battery is fully recyclable and should be accepted at any location that excepts common automotive batteries. Contact your national/local authority or municipal waste centre for details.

BATTERY CHARGERS:

- Before charging, read the instructions.
- For indoor use. Do not expose to rain.
- Disconnect the supply before making or breaking the connections to the battery.

WARNING: Explosive gases. Prevent flames and sparks. Provide adequate ventilation before charging.

- Do not charge non-rechargeable batteries.
- During charging the battery must be placed in a well ventilated area.

6. IDENTIFICATION



- (1) 12V DC output.
- (2) Test button.
- Battery charging status indicator light.
- Battery charge complete indicator light.
- (5) Clamp storage holsters.

- 6) Charging socket.
- 7) Case
- Insulated heavy duty cables.
- Heavy duty copper toothed clamps (+/-).
- (10) Carry handle.

7. UNPACKING AND CHECKING

7.1 PACKAGING

Carefully remove the product from the packaging and examine it for any sign of damage caused during shipping. Lay the contents out and check them. If any part is damaged or missing, do not attempt to use the tool and contact the Draper Helpline immediately (see back page for details).

Retain the packaging material at least during the guarantee period: in case the machine needs to be returned for repair.

Warning! Some of the packaging materials used may be harmful to children, keep them out of reach from children.

Disposed of any packaging correctly and according to local regulations.

7.2 WHAT'S IN THE BOX?

As well as the product; there are several parts not fitted or attached to it.



11) AC/DC transformer charger.

8. PREPARING THE 12V POWER PACK

8.1 CHARGING THE 12V POWER PACK (FIG.1)

NOTE: Battery must be charged for 24 hours prior to first use.

The Power pack was precharged during production. However, it is more beneficial to ensure that the battery is kept at full charge prior to each use. It is recommended that the power pack should be kept on charge until it is required for use.

The charging circuit is automatic and will not overcharge when connected to the charger leads. When all the battery charging status indicators (3) and the battery charged complete indicator light (4) are fully illuminated, the power pack is fully charged.

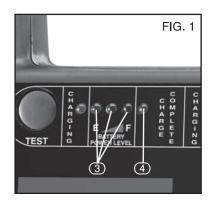
8.2 CHECKING POWER LEVEL (FIG.2)

To check the power level of your power pack, press the test button ② and the battery indicator lights will illuminate to show the current power level of the battery. The battery charged complete indicator light will illuminate when the test button is depressed and the power pack has a full charge.

8.3 RECHARGING THE 12V POWER

PACK

There are two methods in how to charge your power pack. The first is automatic charging using the AC/DC transformer charger (11) which is the preferred method. The second is through the 12V DC charger lead (12). This is not automatic and will require supervision as the power pack could be damaged through overcharging.





8. PREPARING THE 12V POWER PACK

NOTE: If your 12V Power Pack is completely discharged, it may take up to 30 hours to be fully recharged.

8.4 AC/DC TRANSFORMER CHARGER (FIG.3)

- a) Insert the AC/DC transformer charger into the charging socket ⑥ located on the front panel of the 12V Power Pack.
- b) Connect the AC/DC transformer charger into the AC outlet, the charging light will light on the front panel of the 12V Power Pack.
- Allow the 12V Power Pack to charge until the battery charged complete indicator light illuminates (you can monitor the progress by checking the three red battery charging status indicator lights).
- d) Once the 12V Power Pack has charged. Allow to charge for a further three to six hours (three hours is acceptable but to ensure maximum charge efficiency, six hours is preferred).

8.5 12V DC CHARGER LEAD CHARGING (FIG.4)

a) Start the vehicle engine, plug one end of the 12V DC charger lead into the 12V DC output ① port on the Power Pack and the other into the 12V outlet found inside the vehicle. Press the test button ② once every hour to check the battery power level (three red battery charging status indicator lights). When the battery charging status indicator lights are illuminated, charge the power pack for another 1 to 2 hours maximum to ensure complete recharge. **DO NOT OVERCHARGE.**

WARNING: As this is not an automatic method of charging the 12V Power Pack, it must be frequently monitored by pressing the TEST button ② to ensure that it is not overcharging. Overcharging will damage the 12V Power Pack.

NOTE: TEST button ② must be pressed to check battery power level and charging lights.





9. OPERATING INSTRUCTIONS

9.1 JUMP STARTING (FIG.5)

Refer to the General Safety Instructions for information regarding the handling of lead acid batteries etc.

For 'Maintenance' type lead acid batteries remove the cell caps to monitor the electrolyte levels prior to commencing. The level of the electrolyte should be up to the indicator on the battery (approx. 5 to 10mm above the top of the plates). This must be checked and adjusted.

NOTE: This is not applicable for 'Maintenance Free' type batteries.

When topping up the electrolyte use only distilled or de-ionised water. **DO NOT** use tap water. It is advisable to check the electrolyte density (specific gravity) to make certain the acid to water ratio is sufficient.

Clean the battery terminals to allow an optimum conductive connection between the battery and power pack.

It is advisable to measure the battery voltage for signs of deep discharge. Discharging the battery to 20% or less of it's full charge capacity is known as 'deep discharge'. Unless specifically designed for deep discharge cycles this practice will significantly reduce the life of the battery.

Do not attempt to use the power pack on a vehicle with a deep discharged battery.

The power pack shall not be used on large ampere-hour batteries as this may cause damage or injury.



Explosive gases. Prevent flames and sparks. Provide adequate ventilation during use. Refer to the appliance/vehicle manufacturer's literature for specific instructions on jump starting.

If it is necessary to disconnect the battery, some information (e.g. radio presets and security code) may require re-entry. Disconnecting the battery can also trigger the anti-theft alarm/immobiliser. Contact the manufacturer for detailed information.

All the power packs are equipped with an audible and visible polarity inversion warning. In the event the positive (+) and negative (-) connections are incorrectly made, e.g. power pack positive (+) red clamp to battery negative (-) terminal and power pack negative (-) black clamp to battery positive (+) terminal, this must be rectified immediately to avoid damage or possible injury.

Engine cranking requires a large amount of current. The engine that requires starting must be in a good mechanical condition as prolonged cranking is not possible. When attempting to crank vehicles equipped with larger capacity batteries or in severe climates it will be necessary to pre-charge the vehicle battery for approximately 15 minutes before attempting a jump start.

- NOTE: When starting diesel engines, to prevent damage to the glow plugs which would otherwise result, pre-heat the plugs before starting the engine.
- NOTE: This appliance will only help jump start a vehicle with a functioning engine and serviceable battery.
- WARNING: Due to the sensitive nature of vehicle electronics you MUST ensure that you refer
 to the vehicle manufacturers handbook BEFORE you use the product, as the jump start
 procedure can vary from vehicle to vehicle.



10. MAINTENANCE

Regular inspection and cleaning reduces the necessity for maintenance operations and will keep your tool in good working condition. The appliance must be correctly ventilated during tool operation.

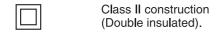
All servicing and maintenance not listed in this manual must be carried out by an approved Draper service agent (see back cover for contact details).

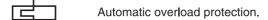
Stock No.	Description
85350	230V~/12V Transformer Charger
85461	Spare battery.

For more details please refer to your local Draper Stockist.

11. EXPLANATION OF SYMBOLS

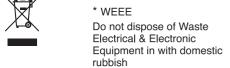
11.1 EXPLANATION OF SYMBOLS











* Waste Electrical & Electronic Equipment.

12. DISPOSAL

12.1 DISPOSAL

- The sealed lead-acid battery in this appliance has a normal working life of many years. When the battery expires, it should be removed from the appliance for recycling.
- Please contact your local solid waste authority for recycling information.

- CAUTION:

This appliance has a sealed lead acid battery that should be kept at full charge. Recharge when first received, immediately after each use, and every three months if not used. Immediately charge when the unit has been incorrectly overdischarged. Do not operate the unit while charging. Failure to do this may cause the battery life to be reduced greatly.

- At the end of the machine's working life, or when it can no longer be repaired, ensure that it is disposed of according to national regulations.
- Contact your local authority for details of collection schemes in your area.
 In all circumstances:
 - Do not dispose of power tools with domestic waste.
 - · Do not incinerate.
 - · Do not abandon in the environment.
 - Do not dispose of WEEE* as unsorted municipal waste.



* Waste Electrical & Electronic Equipment.

NOTES

CONTACT US

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General Enquiries: (023) 8026 6355

Service/Warranty Repair Agent:

For aftersales servicing or warranty repairs, please contact the Draper Tools Helpline for details of an agent in your local area.

YOUR DRAPER STOCKIST