

BSU2 EXTENSION KIT

FITTING
INSTRUCTIONS



KIT CONTENTS

- 1.5M EXTENSION LEADS
- 50A ANDERSON CONNECTOR AND CRIMP TERMINALS
- 6.3A ANTISURGE FUSE

CONTENT

- DISCONNECTION
- MEASURING LEADS
- CUTTING EXISTING LEADS
- STRIPPING EXISTING LEADS
- FITTING TERMINALS
- FITTING HOUSING
- ATTACHING EXTENSION LEADSET
- CHECK FUSE RATING
- CONTACT US

- DISCONNECTING BSU2

DISCONNECTION

ENSURE BSU2 UNIT IS DISCONNECTED
FROM MAINS SUPPLY BEFORE
COMMENCING PROCEDURE



- MEASURE LEADS

MEASURING LEADS

MEASURE EXISTING LEADS TO 1.5M FROM BASE OF UNIT.

USING SUITABLE CABLE CUTTERS, CUT CABLE ENSURING COPPER CORE IS CUT CLEANLY.

NOTE: ENSURE CABLE LENGTHS ARE ACCURATE AS EXCESSIVE CABLE LENGTH WILL AFFECT POWER OUTPUT.



- **CUTTING LEADS**

CUTTING LEADS

USING SUITABLE CABLE CUTTERS, CUT CABLE ENSURING COPPER CORE IS CUT CLEANLY.

NOTE: ENSURE CABLE LENGTHS ARE ACCURATE AS EXCESSIVE CABLE LENGTH WILL AFFECT POWER OUTPUT.



- STRIPPING LEADS

STRIPPING EXISTING LEADS

USE A SUITABLE STRIPPING TOOL OR BLADE TO REMOVE APPROXIMATELY 10mm OF CABLE INSULATION TAKING CARE NOT TO DAMAGE COPPER CORE.



- **CRIMPED CABLE**

FITTING TERMINALS

USE SUITABLE CRIMPING TOOL OR SOLDERING IRON TO FIT TERMINALS TO LEADS. IF USING A SOLDERING IRON IT IS RECOMMENDED TO TIN ENDS OF CABLE FIRST IN ORDER TO ENSURE A CLEAN JOINT.

INSULATION SHOULD FIT SNUGLY TO END OF CRIMP.

CHECK TO ENSURE CRIMP TERMINAL IS SECURELY CONNECTED AS LOOSE FITMENT MAY CAUSE ARCING.



- **FITTED HOUSING**

FITTING HOUSING

THE CRIMP TERMINAL HAS A SELF-LOCKING MECHANISM TO ENSURE A SECURE FIT IN THE HOUSING.

ENSURE RED LEAD IS INSERTED IN + SIDE AND BLACK LEAD INTO – SIDE.

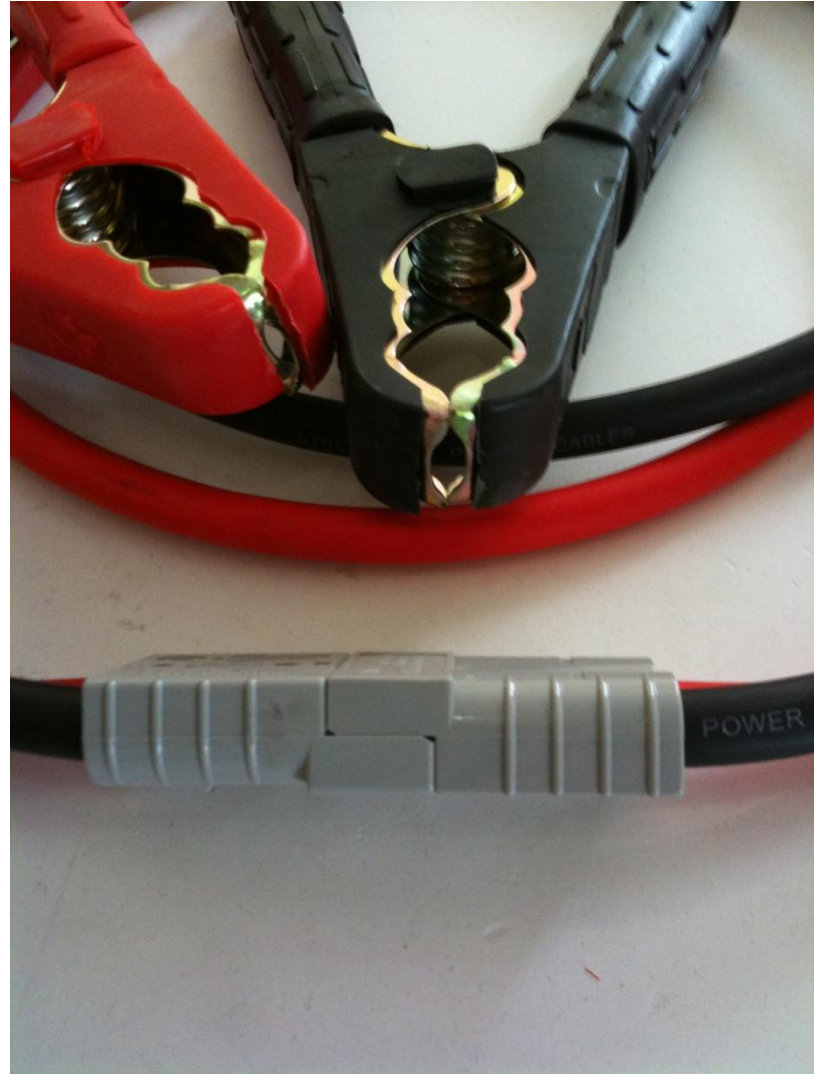
THE CRIMP TERMINAL LATCHES ON A CLIP MOULDED INTO THE HOUSING. IT MAY BE NECESSARY TO EXERT SOME FORCE ON THE TERMINAL TO FORCE IT TO ENGAGE. TAKE CARE NOT TO DAMAGE INSULATION WHILE DOING THIS.



ATTACHING EXTENSION LEADSET

WHEN HOUSING IS ATTACHED
CORRECTLY SIMPLY CONNECT
SUPPLIED LEADSET.

FINISHED LENGTH SHOULD BE
APPROXIMATELY 3M.



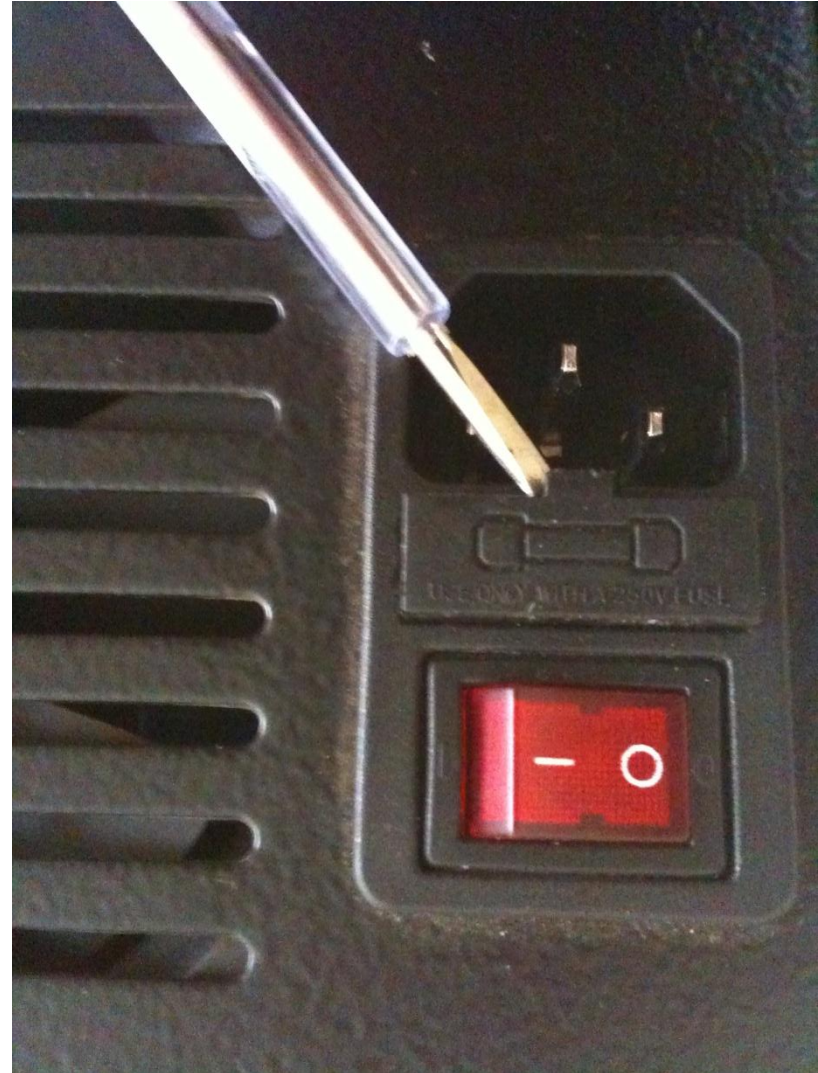
- **OPENING FUSE DRAWER**

CHECK FUSE RATING

USING A SMALL FLAT BLADED SCREWDRIVER GENTLY PRISE OPEN THE DRAWER ON THE MAINS INLET CONNECTOR.

CHECK THAT FUSE IS RATED AT 6.3A

IF FUSE IS RATED AT 3.15A THEN REPLACE IT WITH THE FUSE SUPPLIED IN EXTENSION KIT.





BSU1 – 25A Battery Support Unit



DIAGNOSTICS, RE-PROGRAMMING, ABS BRAKE BLEEDING

The **BSU1** provides a constant voltage to prevent loss of data and possible damage to control units during software updates and module reprogramming as well as diagnostic processes when in a Key On, Engine Off state.

During diagnostic or programming operations, the vehicle's systems are operating solely from the battery. Maintaining battery charge during this process is critical.

The status of **BSU1** is indicated simply by three LED's – POWER, POLARITY, DEMAND. When all 3 are illuminated, **BSU1** is supporting the battery.

The output voltage of **BSU1** has been designed so that overcharging the battery is impossible no matter how long it is connected for.



FEATURES

BSU1 provides a stable voltage and up to 25 amps of fully regulated power to prevent loss of charge and damage to the battery

BSU1 can be used with any 12V automotive battery.

When the battery is charged **BSU1** is a regulated power supply to sustain accessory loads and offset parasitic drain.

BSU1 can be used in the showroom to maintain the battery charge while power consuming accessories are being demonstrated without fear of power loss.

Unique moulded case with no sharp edges is safe to use around the vehicle, can be wall or tool chest mounted, or used under the bonnet.

Reverse polarity protection

Detachable 3m leads for easy replacement.

Supplied with 5M IEC mains lead.

Approved by Ford for use with IDS.

Approved by Volvo UK

SPECIFICATION

Input	100VAC – 240VAC
Output	12.7V up to 25A continuous
Weight	1.2 Kg
Size	250 x 170 x 130 mm



MPL2 – Combined 10A Charger and 25A BSU



Combining all the positive elements of the highly successful MPL1 and BSU1 the MPL2 provides a lightweight, portable charging and battery support solution.

Incorporating Tractions patented desulphation recovery process the MPL2 offers all the facilities of the MPL1 12/10 charger approved by many OEM's in a new portable form. Simply use the selector switch to choose between conventional or calcium technology and let MPL2 do the rest. As an added benefit we have included all the functionality of the BSU1 allowing the MPL2 to be used as a 25A Battery Support Unit simply by selecting the correct switch position.

Auto-Switching option allows MPL2 to switch to Battery Support Mode at end of charging cycle instead of float mode.

SPECIFICATION

Input	100VAC – 240VAC
Weight	3 Kg
Size	250 x 170 x 130 mm

FEATURES

- Patented Sulphation Recovery Program
- Short Circuit shutdown without blown fuse
- Reverse Polarity Protection
- Soft start current control
- 3-stage charging: CI-CV-Float
- Constant voltage float/standby
- Proportional timing – minimal gas emission
- Auto-Switching option available
- Independent overrun timer
- Accurate zero-crossing voltage sensing
- Stable DC supply to 25A
- Can be used with any 12V automotive battery
- Moulded case with no sharp edges is safe to use in showroom or workshop
- Can be mounted on wall, tool chest, or under bonnet
- Detachable 3M leads for easy replacement
- Supplied with 5M mains lead

BSU Approved by Ford for use with IDS.

BSU Approved by Volvo UK

BSU APPLICATION LIST

Battery Support Units are designed to support the battery during certain service procedures. In accordance with Manufacturer guidelines it is your responsibility to ensure the vehicle battery is in a good state of charge before commencing any service procedure requiring the ignition to be on for any length of time.

Battery Support Units should be used for the for the following procedures: Module reprogramming, Key coding, Fault code reading, Brake Pad replacement (electronic callipers), Sound system testing, Key on engine off work, Showroom demonstration, Routine servicing , ABS brake bleeding.

BSU1 (12.7V 25A)

The BSU1 is suitable for ABS Brake Bleeding, Fault Code Reading and Showroom Demonstration on ALL makes and models of vehicles listed (including those listed for BSU2 and BSU3).

OEM approvals

- Ford
- Nissan
- Volvo UK

Other Manufacturers

Alfa Romeo all models
Audi A6 to 2008, A2 A3 A4 models
Chrysler all models
Citroen all models
Daihatsu all models
Dodge all models
Fiat all models
Ford all models
Honda all models
Hyundai all models
Isuzu all models
Kia all models

Nissan all models
Peugeot all models
Proton all models
Renault all models
Rover all models
Saab all models
Seat all models
Skoda all models
Subaru al models
Suzuki all models
Toyota all except Lexus
Lotus all models
Mazda all models
Mitsubishi all models
MG all models
Opel all models
Vauxhall all models
Volvo all models pre 2009
VW all except Phaeton

Used for: Module Reprogramming, Key coding, Fault Code Reading, Brake Pad Replacement (electronic callipers), Sound System Testing, Key On – Engine Off work, Showroom Demonstration, Routine servicing , ABS brake bleeding.



MPL12/10 – 12V 10A Battery Charger



The MPL charger is available in several sizes including 12V/10A, 12V/20A, 24V/10A and 24V/20A to meet the charging requirements of most battery types. The MPL is used by some of the world's leading vehicle and battery manufacturers and it features our own Patented Sulphation Recovery System. Although featuring sophisticated charging methods it is very simple and safe to use, batteries can be left connected indefinitely at the end of charging. This MPL12/10 is also available as a wall/ramp mount version – MPL1+.

FEATURES

- **Patented Sulphation Recovery Program**
- **Short Circuit shutdown without blown fuse**
- **Reverse Polarity Protection**
- **Soft start current control**
- **Fast constant current bulk charge**
- **3-stage charging: CI-CV-Float**
- **Constant voltage float/standby**
- **Proportional timing – minimal gas emission**
- **LED ladder ammeter – no moving parts to jam**
- **Independent overrun timer**
- **Accurate zero-crossing voltage sensing**
- **Flexibility – to match battery specification**
- **Available in UK and Euro versions**

SPECIFICATION

Input	100VAC – 240VAC
Output	12.7 – 14.8V up to 70A continuous
Weight	2.1 Kg
Size	298 x 148 x 115 mm

CONTACT US

- SERVICE & WARRANTY +44 (0)XXX XXXXXXXX
- TECHNICAL ADVICE +44 (0)XXX XXXXXXXX
- SALES +44(0)1327 303400
sales@servicesolutions.spx.com
www.spertools-shop.com