



2023

NEW DEVELOPMENT

TEMPORARY RAIL JUMPER KIT



Accepted for
use on Network Rail
controlled 25kV
OLE infrastructure.

Part Number
EFT-19319

PADS Number
0006/120053



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Temporary Rail Jumper Kit

The PBwel Portable Full Current Jumper Kit allows faulty equipment such as switches to be by-passed, in order to maintain the network until repairs can be made to return the asset to service. The kit is suitable to by-pass a continual traction load of 600A even upon heavily weathered overhead conductors.

Each kit comprises of three 120mm² clear Aluflex lead assemblies with heavy duty terminations fitted to special S9B Line End clamps.

Continuous Current Rating- 600A

Short Circuit Rating- 54kA/1sec

The Portable Full Current Jumper kit utilises the original P&B (PBwel) S9B Line End clamp, which has been used by Network Rail/ Railtrack/ British Rail for many decades and has a proven record for reliability and performance. The clamps are lightweight and compatible with standard operating poles. The addition of a serrated jaw has proven to ensure good contact with dirty/weathered conductors and provides sufficient capacity to carry full traction current over an extended period.



Portable Full Current Jumper Kit in use upon network



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Order of Application and Removal

Site rules and PPE requirements should be fully understood and adhered to when using this kit. Possession and de-energisation should be sought according to procedures and an Authorised Person should also determine where the kit should be safely applied. The conductor should be tested for absence of Line Voltage prior to fitting the kit.

Each lead should be applied in turn, with two Overhead Line Engineers raising and applying both S9B clamps at the same time, using two operating poles. Care should be taken to ensure that both clamps are securely fitted onto the conductor/ armour rods. Failure to do this could result in a poor current path or (under severe circumstances) several hanging leads, which if subjected to a fault could pose a risk of serious danger.



PB120T terminations are employed to suit the application, which allows the kit to be distinguished from standard earths.



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Application and Removal of the S9B Clamp

The operating screw of the S9B Line End clamp should be firmly inserted into the operating socket until the spring action of the socket holds the clamp in place, this is a bayonet style fitting and the cross-pin of the operating screw should be correctly located. The clamp should then be raised towards the conductor or arm our rod and hooked over, so that the conductor/armour rod sits between the jaw and the body of the S9B. The clamp should then be firmly tightened onto the conductor/armour rod by rotating the operating pole in a clockwise direction. At this point, the pole can be removed by firmly lifting the pole and rotating it in an anti-clockwise direction, before slowly lowering the pole to dis-engage the clamp from the socket. The pole should then be carefully lowered to the ground making sure all staff are clear of the area intended for 'landing'.

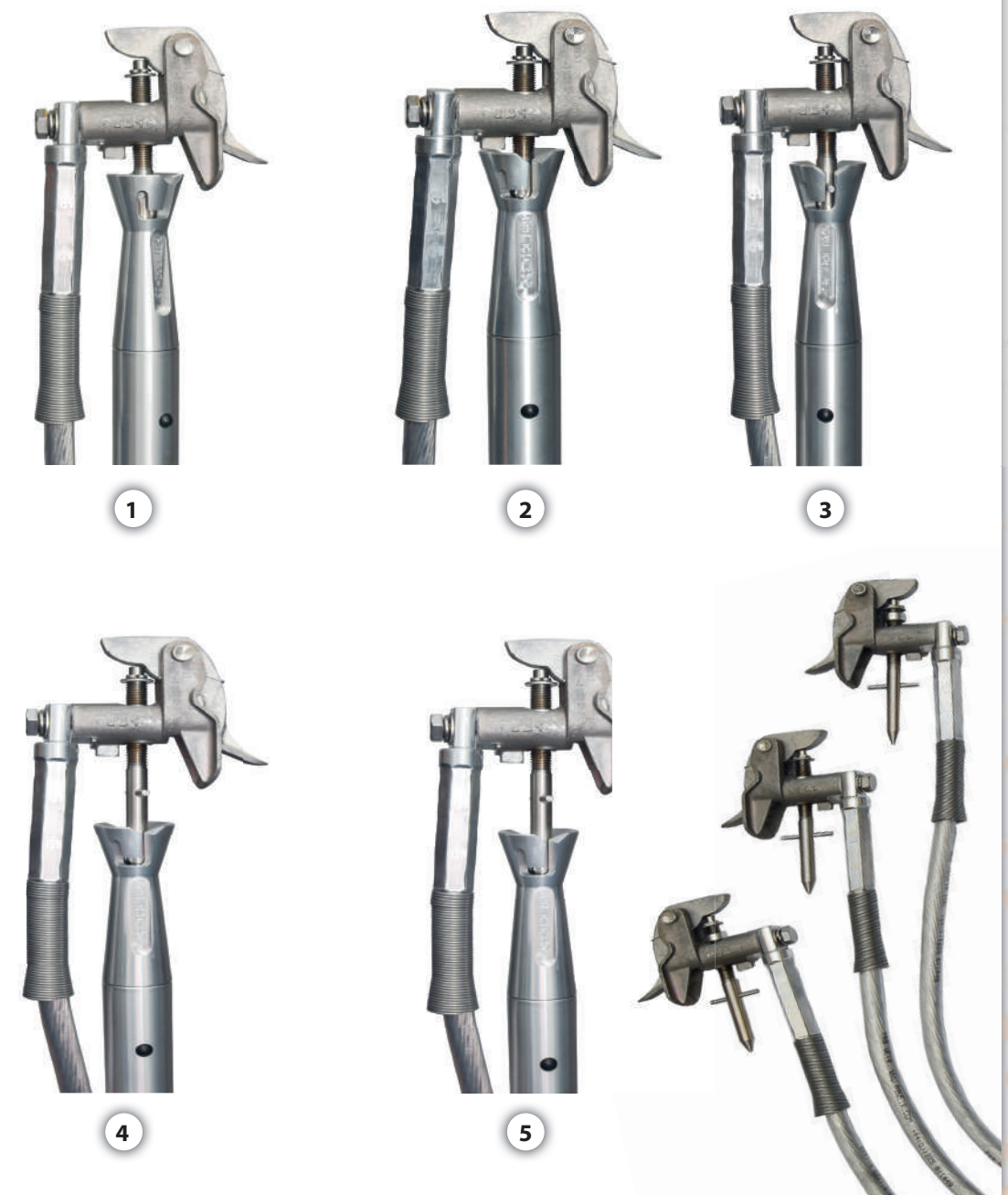
Application



Temporary Rail Jumper Kit

When removing the clamp, the pole should be carefully raised and the operating screw of the clamp inserted into the centre of the socket. The pole should be firmly pressed in an upward direction as the pole will freely lift a small amount. Once engaged the pole may be rotated anti-clockwise to loosen the clamp from the conductor. Once sufficiently loose (it is recommended the clamp is fully opened and 'pinched' tight, to aid control) the pole may be lifted to raise the clamp off of the conductor before carefully lowering to the ground.

Removal



The origins of P&B Weir Electrical Ltd. (PBwel) go back to 1932 when Mr Price and Mr Belsham established P&B Engineering. With its roots firmly established as an engineering company, the business has gone through many changes and passed many milestones over the years.



With a heritage spanning over 80 years, P&B Weir Electrical Limited (PBwel) is recognised globally as a Designer, Manufacturer and Supplier of temporary portable earthing, voltage detectors, Buchholz Relays and electrical safety equipment.

PBwel has developed extensive experience in designing tailored solutions to meet the needs and requirements of our end users working within the Electrical Supply Industry and Rail sectors in the UK and our products have been proven and tested around the world. We have worked closely with some of the UK's biggest household names such as National Grid, Network Rail and all of the DNOs such as Scottish Power.



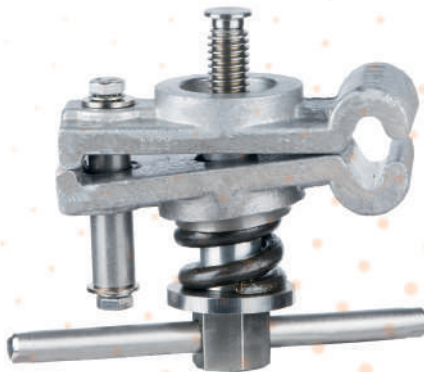
Our design capability is supported by our manufacturing facility in Corsham where we use cutting-edge technology and highly skilled engineers to ensure all of our products are of the highest quality to provide absolute safety for our customers.

The latest exciting development for PBwel occurred in April 2018 when the business was acquired by the Novarc Group and joined their Electrical Safety Products division (ESP). With values aligned to those of Novarc/ESP, they saw a great opportunity to put PBwel on a new and dynamic growth path by being able to bring a broader product range to the UK market.



Our products have been proven and tested worldwide with an excellent track record and performance across many sectors and industries.

Market Segments



Product Range



Solutions for Safety and Performance





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