

CR100EK EARTHING KIT USER GUIDE

Part No: **CR100EK** - Earthing Kit to suit DAIA CR-100 – Remote Hydraulic Cutter Head

PLEASE NOTE: THIS IS A GUIDE ONLY-ALWAYS REFER TO YOUR LOCAL AUTHORITIES CABLE IDENTIFICATION & EARTHING REGULATIONS, STANDARDS, GUIDELINES AND PROCEDURES

PLEASE NOTE: ALWAYS ESTABLISH A SAFE WORK ZONE AROUND THE CUTTING AND EARTHING AREA

PLEASE NOTE: BEFORE DIGGING AND THE INSTALLATION OF THE EARTH STAKES INTO THE GROUND, IT IS ESSENTIAL TO CHECK ON THE LOCATION OF ANY UNDERGROUND SERVICES IN THE VICINITY



CONTENTS - CR100EK

- ✓ 4 EA 1.5 metre braided copper flat palm earthing straps
- ✓ 1 EA 3.0 metre 70mm² cu cables with lug and heat shrink each end
- ✓ 2 EA 1.2 metre 70mm² cu cables with lug and heat shrink each end
- ✓ 4 EA Earth clamps (CATU MT840/1)
- ✓ 3 EA 900mm long earth rods
- ✓ 1 EA Earth rod driving head
- ✓ 3 EA Roll springs
- ✓ 1 EA Nylon carry bag
- ✓ 1 EA 1m x 1m x 6mm Black EPDM Mat (+ 2 x Velcro straps)

ACCESSORIES TO BE INCLUDED WITH THE CR100 CUTTER

- ❖ 1 EA M12 x 20mm plated bolt
- ❖ 1 EA M12 x 30mm plated bolt

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PREPARING THE "DAIA" CUTTER HEAD (CR100)

When the Earthing Kit (CR100EK) is purchased with the Daia Cutting Head (CR100), the head is re-tapped where the carry handle is affixed to accept an M12 bolt and is supplied with 1 EA M12 x 20mm (rear bolt holding the carry handle) & 1 EA M12 x 30mm bolt. This is the Connection Point for the earth leads.

1. Remove the M12 bolt at the rear of the handle and loosen the 5mm Allen key head bolt at the front of the handle and turn the handle 90° and retighten (See Figure 1 Below).

The Cutting head is now ready to connect the copper earth lead or braid (See Figure 1 Below).

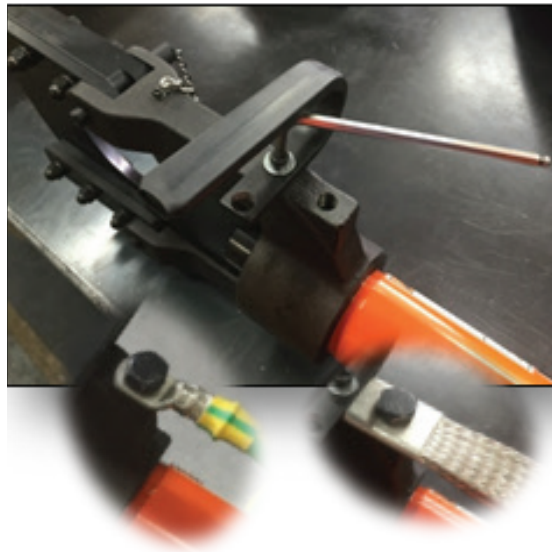


FIGURE 1

SETTING-UP THE EARTHING KIT

When preparing to cut a cable for the purpose of "Proving De-Energised", establish an Earthing Point to solidly connect the Cutting Head.

EARTHING CAN BE CARRIED OUT IN THE FOLLOWING MANNER:

- A. An established permanent HV Earth point (e.g.-cable pit or pole earth) at or near the worksite.

IMPORTANT NOTE:

DO NOT CONNECT TO A LV M.E.N. SYSTEM

DO NOT CONNECT TO A WATER SERVICE

- B. Exposed metal cable Sheath of the cable in question or the armour wire or exposed metal sheaths of adjacent cables
- C. A series of three driven earth stakes (please establish a safe work zone around the earth stakes)



SET-UP "A" - CONNECTION TO AN ESTABLISHED PERMANENT EARTH

1. Using the M12 x 20mm Bolt, connect one end of the 3.0m 70mm² cu cable to the Cutter Head and the Earth Clamp (CATU MT840/1) to the other (See Figure 2)
2. Connect the Earth Clamp (CATU MT840/1) to the "Established Permanent Earth" (See Figure 3)

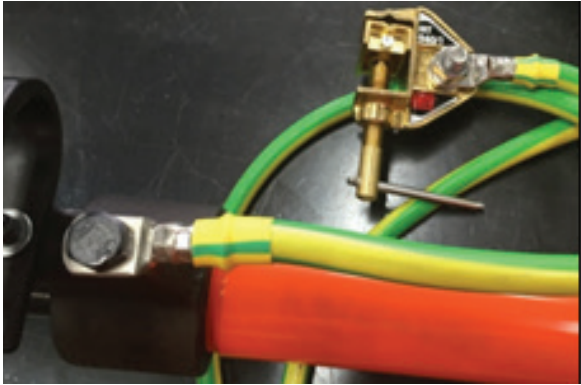


FIGURE 2



FIGURE 3

SET-UP "B" - CONNECTION TO EXPOSED METAL SHEATH OF THE CABLE IN QUESTIONS OR THE EXPOSED METAL SHEATH OR ARMOUR WIRE OF ADJACENT CABLES

1. Connect one end of the 1.5m braided Copper Lead (Hole End) to the Cutter Head and trap the other end under the Rolled spring, during installation on the cable (See Figure 4 & 5).



FIGURE 4



FIGURE 5

2. If you decide to connect more than one Braided Copper lead, select the M12 x 30mm bolt and connect two or three 1.5m Braided Copper Leads (Hole End) to the Cutter Head and trap the other end under the Rolled spring, during installation on the cables (See Figure 6).



FIGURE 6

SET-UP "C" - CONNECTION TO THREE DRIVEN EARTH STAKES

(please establish a safe work zone around the earth stakes)

PLEASE NOTE: BEFORE INSTALLING THE EARTH STAKES INTO THE GROUND, IT IS ESSENTIAL TO CHECK ON THE LOCATION OF ANY UNDERGROUND SERVICES IN THE VICINITY



1. Drive the three 900mm Earth stakes into the ground; using the Earth Rod Driving Head and a suitable hammer, to a depth of 600mm and spacing at least 600mm apart.

PLEASE NOTE: THE SPACING SHOULD BE NO LESS THAN THE DEPTH THEY ARE DRIVEN

2. Connect one end of the 3.0m 70mm² cu cable to the Cutter Head and the Earth Clamp (CATU MT840/1) to the other (See Figure 7)

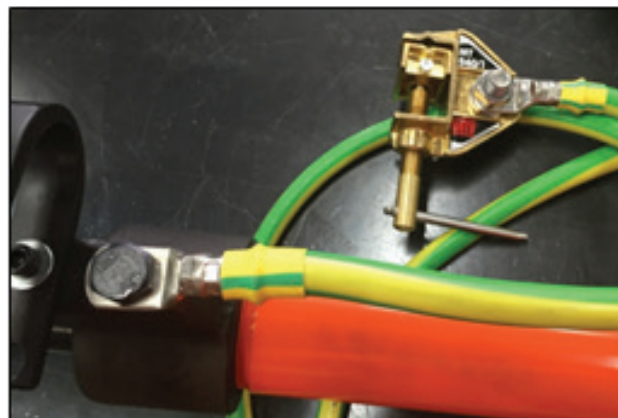


FIGURE 7



3. Connect the Earth Clamp (CATU MT840/1) to the first earth stake
4. Connect the Earth Clamp (CATU MT840/1) in series with the two remaining 1.2m 70mm² cu cables, (See Figure 8) As Follows; (Earth Clamp-Lead-Earth-Clamp-Lead-Earth Clamp)
5. Now connect the assembly to the first, second and third Earth Rods with the Earth Clamps (See Figure 8)

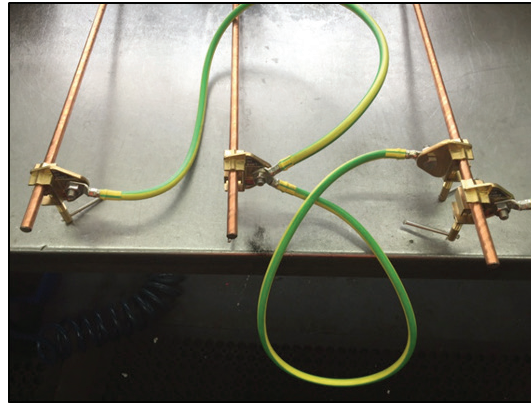
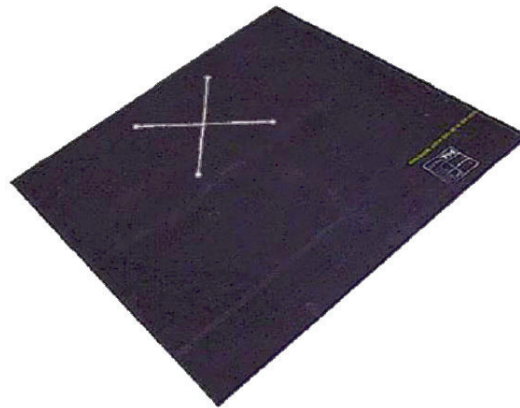


FIGURE 8

IMPORTANT: ONCE THE EARTHING KIT IS CONNECTED AND READY FOR OPERATION, COVER THE CUTTER HEAD (CR100) WITH THE BALMORAL BLACK EPDM MAT PROVIDED IN THIS KIT



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"THE BELOW PPE (PERSONAL PROTECTIVE EQUIPMENT) SHOULD BE WORN"

