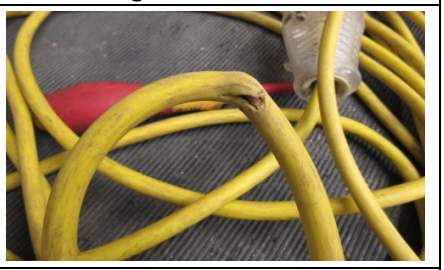
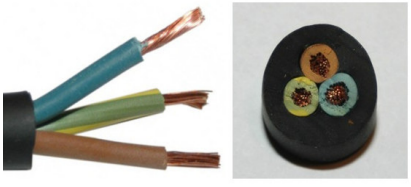
Technical Bulletin No: 41-2019

Title:	**Power Cable Inspection**
Priority	Red – Major Non-Conformance
Legislation:	PUWER / Electricity at Work Regulations / HSE Guidance Note HSG107 / HAE CoP
Brief Description:	Power cable damage and suitability is the most common issue raised on product review during SafeHire audits – this bulletin provides guidance on what is acceptable
Equipment Affected:	All electrical hire fleet and work equipment

The most common issue identified during SafeHire audits is damage to power cables or cables that are unsuitable for the task

- As per all work equipment, cable should be suitable for the task and the environment it will be used in, this includes the length, classification, condition and structure
- Cable should be free of wear, damage and heavy abrasions, cable may have some scuffing but this should not affect the cables diameter / insulation thickness
- Cable length should be suitable for the job, HAE / EHA Records include a box to record cable length, this is helpful when recorded from new
- Where cable is replaced, it should be with cable of an equal or better specification than that used by the manufacturer / original cable e.g. if its H05 from new, H05 or H07 should be used

1 – Cable Damaged Obvious damage to cable sheath	**2 – Cable Worn - Sanding** Insulation Thickness Affected / Poor Repair – Heat-shrink Non-Standard Cable used – should be as per new machine	**3 – Cable Cut – Door Trapping** Very common extension lead damage, snagged or trapped in door during use / full extension lead length should be checked
		
4 – Cable Damaged As per image 3, reels can hide damage and cable needs cleaning / inspecting	**5 – Cable Damaged** Obvious wear to extension cable	**6 – Cable Profile** Thickness of insulation is critical for cable performance – wear to sheath will affect its performance
		

Recommended Actions:	• Review hire fleet and work equipment as per this bulletin and related HAE Technical Bulletins including Bulletin 1, 8, 19 and 30 • All cables should be fully inspected every hire for hire fleet equipment. Cables should be pre-use checked for work equipment by the end user • Ensure power supply is isolated / plug disconnected before cables are inspected
Circulation:	Management / Workshop Teams