

UNIVERSAL JOINT CONSTRUCTION MANUAL - INDEX

Issue 132

September 2023

This document is intended for use by personnel that have completed an approved training course, successfully passed the final examinations, is in possession or is able to produce a valid qualification certificate issued by an approved training facility. This document provides procedures and instructions that, along with generally accepted industry practices must be fully complied with for the safe and reliable construction of joints.

Section	Issue	Title	Date	Level of Change	Details
000	17	Safety Health and Environmental Responsibilities <i>UJC</i>	Sep-20		
001	32 29	An Introduction to the Universal Joint and Coupling Addendum 1 <i>UJC</i>	Mar-23 Dec-22		
002	39	STC NL Cable Preparation <i>Global Marine</i>	May-14		
003		Withdrawn			
003/1	27	SubCom SL21E Cable Core Preparation (Copper & PEEK Seal) <i>Global Marine</i>	Apr-12		
003/2	26	SubCom SL17L, SL17-A1 & SL17E Cable Core Preparation <i>SubCom</i>	Oct-23	Minor	Formatting and image improvement, additional notes
003/3	25	SubCom SL21L Cable Core Preparation (PEEK Seal) <i>SubCom</i>	Oct-23	Minor	Improved formatting
003/4	1	Fiber Routing Guidelines for High Fiber Count SL Cables (>24 fibers) <i>SubCom</i>	May-23		
004	43	Alcatel (Calais) S560 Cable Preparation <i>Global Marine</i>	Feb-14		
004/1		Withdrawn			
005	17	Universal Coupling Assembly Procedures for AT&T Branching Repeater (Trunk End) <i>SubCom</i>	Apr-19		
006	28	Assembly of the Universal Joint Housing (KIT09001) <i>Global Marine</i>	Sep-12		
006/1	62	Assembly of the Universal Joint Housing (KIT09002/KITH9002) for cables & couplings <i>Global Marine</i>	Jun-22		

UNIVERSAL JOINT CONSTRUCTION MANUAL - INDEX

Issue 132

September 2023

Section	Issue	Title	Date	Level of Change	Details
006/2	3	Assembly of the Universal Joint Housing (KIT09002/KITH9002) for Attenuators, Filters & Bridges <i>Global Marine</i>	Jun-21		
006/3	6	Assembly of the ASN Fiber Soft Seal - CSF2 Fibers <i>ASN</i>	Feb-22		
006/4	1	Assembly of the F-ATT for NEC Universal Design PSBU (OCC-SC370 having 32 fibers) <i>KCS</i>	May-19		
006/5	2	Assembly of the Universal Joint Housing for NEC Filter Deployment Kit 3 <i>KCS</i>	Mar-21		
006/6	1	Assembly of the Universal Joint Housing When Using KITH9002 with ASN Attenuators (from 25 to 32) <i>ASN</i>	May-21		
006/7	2	Assembly of the Universal Joint Housing using KIT294AA for NEC Filter Deployment Kit 4 <i>KCS</i>	Sep-23	Minor	Updated fiber counts (32 - 48)
006/8	2	Assembly of the Universal Joint Housing using KIT295AA for NEC Filter Deployment Kit 5 <i>KCS</i>	Sep-23	Minor	Updated fiber counts (32 - 48)
006/9	1	Assembly of the Universal Joint Housing using KIT296AA for TFF Adapters <i>KCS</i>	Jun-23		
007		Withdrawn			
008		Withdrawn			
009		Withdrawn			
010	16	ASN Screen Termination using Heatshrink Protection, with or without Sea Connection in the presence of H2S or not. <i>ASN</i>	Aug-14		
011	58	Examination of Polyethylene Joints and Couplings (Powered Systems) <i>Global Marine</i>	Jun-23		
012	12	Universal Coupling Assembly Procedures for AT&T SL Repeater (Armorless Cables) <i>SubCom</i>	Apr-19		

Dates in **BOLD TYPE** indicate new issue

UNIVERSAL JOINT CONSTRUCTION MANUAL - INDEX

Issue 132

September 2023

Section	Issue	Title	Date	Level of Change	Details
013	42	Assembly of the Universal Joint Protection Components <i>Global Marine</i>	Feb-23		
013/1	2	Assembly of the Universal Joint Protection Components for the SubCom SL17 H2S Protected SPA cables <i>SubCom</i>	Apr-19		
014		Withdrawn			
015	13	Couplings SL to Cable to SL Repeater Couplings Olive Fitting Mold/Manifold <i>SubCom</i>	Jul-20		
016		Withdrawn			
017	15	SubCom SL SPA and FPB Screen Termination <i>SubCom</i>	Apr-19		
017/1	9	SubCom SPA Heatshrink Screen Termination <i>SubCom</i>	Jun-17		
018	7	Looped Fiber End Seal Assembly (KIT09001) <i>Global Marine</i>	Sep-08		
018/1	9	Looped Fiber End Seal Assembly (KIT09002) <i>Global Marine</i>	May-23		
019		Withdrawn			
020	23	Armored Cable Preparation and Assembly for Joints <i>Global Marine</i>	Mar-23		
020/1	38	Rock Armor Cable Preparation <i>Global Marine</i>	Mar-23		
020/2	75	Double Armor Cable Preparation and OS DA Cutback Techniques <i>Global Marine</i>	Jun-23		
020/3	64	Single Armor Cable Preparation <i>Global Marine</i>	Jun-23		
020/4	69	Outer Armor Joint Protection Component Assembly <i>Global Marine</i>	Sep-23	Minor	Cable added to this specification
020/5	8	Outer Armor Joint Protection Component Assembly for NSW Minisub 16C <i>Global Marine</i>	Sep-08		

UNIVERSAL JOINT CONSTRUCTION MANUAL - INDEX

Issue 132

September 2023

Section	Issue	Title	Date	Level of Change	Details
020/6	10	GPT F7 Cable Outer Armored Joint Component Assembly <i>Global Marine</i>	Sep-08		
020/7	9	Ericsson GASLMLTV Cable Outer Armored Joint Component Assembly <i>Global Marine</i>	Dec-18		
020/8	8	OS LAP SAH and SAM Outer Armored Joint Component Assembly <i>Global Marine</i>	Feb-08		
020/9	7	Outer Armored Joint Component Assembly for SubCom SL17 and SL21 GP Armored Cables <i>SubCom</i>	Mar-08		
020/10	7	Cable Transitions for SubCom Armored Cables <i>SubCom</i>	Dec-22		
020/11	2	Cable Preparation & Outer Protection for SubCom Aramid Cables <i>SubCom</i>	Mar-08		
020/12	6	ASN OALC4 SPDA Reinstatement <i>Global Marine</i>	Jun-21		
020/13	1	Global Marine Internal Procedure			
020/14	1	Cable Transitions for SubCom Spare Tailed Repeaters and Spare Tailed Gain Equalization Joints. <i>SubCom</i>	Oct-07		
020/15	3	Cable Transitions for ASN Spare Tailed Submerged Equipment. <i>ASN</i>	Feb-11		
020/16	3	Cable Transitions for TE SubCom SL21L Armored Cables <i>SubCom</i>	Jun-12		
020/17	1	SubCom SL17 H2S Protected Cable Preparation <i>SubCom</i>	Jun-08		
020/18	1	Outer Armored Joint Component Assembly for SubCom SL17 H2S Protected Armored Cables <i>SubCom</i>	Jun-08		
020/19	1	Cable Transitions for SubCom SL21L GP Armor Spare Tailed Repeaters and Spare Tailed Gain Equalization <i>SubCom</i>	Jul-17		

UNIVERSAL JOINT CONSTRUCTION MANUAL - INDEX

Issue 132

September 2023

Section	Issue	Title	Date	Level of Change	Details
020/20		Reserved for SubCom <i>SubCom</i>			
021	11	DSC P2, DSC P1 16.8mm Cable Preparation <i>Global Marine</i>	May-13		
022		Withdrawn			
023	2	Universal Jointing SL Pigtail Re-Termination <i>SubCom</i>	Nov-94		
024	5	Universal Coupling Assembly Procedures for AT&T SL Repeater (Armored Cables) <i>SubCom</i>	Mar-18		
025	11 50 8 2 1	Fiber Splicing Procedure Addendum 1 Addendum 2 Addendum 3 Addendum 4 <i>KCS</i>	Dec-06 Sep-08 Feb-02 Apr-02 Nov-99		
026	27	OS Cable Preparation <i>Global Marine</i>	Sep-20		
026/1	8	OCC 12 Fiber OS Cable End Preparation <i>Global Marine</i>	Sep-20		
026/2	8	OS LAP SAH and SAM Cable End Preparation <i>Global Marine</i>	Nov-09		
026/3	38	OS, OS TUBE & OCC SC-100 Cable Preparation using Advanced Hydrogen Management Techniques <i>Global Marine</i>	Sep-20		
027	3	Screen Termination Procedures (TPC4 Only) <i>Global Marine</i>	Sep-99		
028	8	Screen Termination Procedures (APC, APCN, TPC5, RJK) <i>Global Marine</i>	Jan-03		
029		Withdrawn			
030	15	OS HT Cable Preparation <i>Global Marine</i>	Sep-20		

UNIVERSAL JOINT CONSTRUCTION MANUAL - INDEX

Issue 132

September 2023

Section	Issue	Title	Date	Level of Change	Details
031	16	Elastomer Removal Procedure <i>SubCom</i>	Aug-10		
031/1	1	UV Cured UFS for SubCom SL21 Cable <i>SubCom</i>	Dec-04		
032	16	ASN and Pirelli S280 Cable Preparation <i>Global Marine</i>	May-14		
033	4	Universal Coupling Polyethylene Overmolding Procedure <i>SubCom</i>	Aug-98		
034	55	Shipboard Automated Molding System (SAMS - CIMAC) for Screw Fitting Manifold <i>Global Marine</i>	Jun-21		
034-062 A1	22	Appendix 1: Cable Molding Data for SAMS & C-SAMS <i>Global Marine & SubCom</i>	Sep-23	Minor	Cable name updated,
035	8	Universal Coupling Assembly Procedures for OS Repeater (Armorless Cables) <i>SubCom</i>	Mar-07		
036	9	Universal Coupling Polyethylene Overmolding Procedure <i>SubCom</i>	Jul-09		
037		Withdrawn			
038		Withdrawn			
039	1	OS LAP Layer reinstatement for the UC Overmold <i>SubCom</i>	Feb-99		
040		Withdrawn			
041	17	GPT F7 Cable Preparation <i>Global Marine</i>	May-16		
042	4	Universal Jointing Polyethylene Overmolding Procedure NL (Non-EVA) Cable to SL Repeater Couplings SL Cable to SL Repeater Couplings Screw Fitting Mold/Manifold <i>SubCom</i>	Aug-03		
043	5	Universal Coupling Assembly Procedures for OS Repeater (Armored Cable) <i>SubCom</i>	Mar-07		

UNIVERSAL JOINT CONSTRUCTION MANUAL - INDEX

Issue 132

September 2023

Section	Issue	Title	Date	Level of Change	Details
044	29	Examination of Polyethylene Joints and Couplings (Unpowered Systems) <i>Global Marine</i>	Sep-23	Minor	Cable name updated,
045	13	SubCom SL21E Cable Core Preparation (Advanced Hydrogen Management) <i>Global Marine</i>	May-12		
046	1	Universal Coupling Assembly Procedure for the ASN Fiberglass Repeater (Armorless Cables) <i>SubCom</i>	Sep-00		
047	1	Universal Coupling Assembly Procedure for the ASN Fiberglass Housing (FGH) Repeater (Armored Cables) <i>SubCom</i>	Sep-00		
048	4	Universal Coupling Assembly Procedure for NL repeater (Armored Cable) <i>SubCom</i>	Sep-00		
049	4	Universal Coupling assembly Procedures for NL Repeater (Armorless Cable) <i>SubCom</i>	Sep-00		
050	3	Universal Coupling Assembly Procedures for SL Branching Repeater Armored Cable (Sea Ground End) <i>SubCom</i>	Mar-18		
051	25	Heatshrink Molding Procedure <i>Global Marine</i>	Sep-23	Minor	Added Cable to this specification
052	13	NSW Minisub 16C Cable End Preparation <i>Global Marine</i>	Sep-20		
053	10	Ericsson GASLMLTV Cable Preparation <i>Global Marine</i>	Dec-18		
054	33	ASN OALC4 Cable Preparation <i>Global Marine</i>	Sep-22		
055	21	Pirelli 14mm and 18.5 mm Cable Preparation <i>Global Marine</i>	Apr-12		
056	9	OS SS Cable Preparation <i>Global Marine</i>	Sep-20		

UNIVERSAL JOINT CONSTRUCTION MANUAL - INDEX

Issue 132

September 2023

Section	Issue	Title	Date	Level of Change	Details
057	1	OSRL Cable Preparation <i>Global Marine</i>	Jan-00		
058	20	ASN OALC6 Cable Preparation <i>Global Marine</i>	Dec-19		
059	6	LW /LWS Buffer Closing using KIT10012 <i>Global Marine</i>	Nov-10		
060	23	ASN URC3 Cable Preparation <i>Global Marine</i>	Sep-19		
061	1	Operating Procedure for the 20 Ton Ferrule Press (BD011L01) <i>Global Marine</i>	Feb-00		
062	30	C-SAMS Mold Control Unit Overmolding Procedure <i>SubCom</i>	Mar-22		
062-1	7	Computer Shipboard Automated Molding System using Ethernet (C SAMS-e) Operating Procedure <i>SubCom</i>	Mar-22		
063	16	ASN OALC 7 Cable Preparation <i>Global Marine</i>	Feb-19		
064		Withdrawn			
065	14	Fiber Splicing Procedure using Fusion Splicer UJS-S100 & UJS-S100R <i>KCS</i>	Dec-18		
065_	54	Addendum 1	Jun-23		
065/1	18	Addendum 2 <i>*(For UJC Use Only)</i>	Jun-23		
065/1	42	Addendum 3 <i>KCS</i>	Jun-23		
065/1	3	Fiber Splicing Procedure using Fusion Splicer UJS-S200 <i>KCS</i>	Sep-20		
066	2	Testing Advice to be Carried Out During Jointing <i>Global Marine</i>	Aug-18		
067	8	URC-1 (96 & 192 Fibers) <i>Global Marine</i>	May-22		
068	3	AKN-G6-10/125 Vyra-0403LV (Aden - Djibouti) Cable Preparation <i>Global Marine</i>	Nov-06		

UNIVERSAL JOINT CONSTRUCTION MANUAL - INDEX

Issue 132

September 2023

Section	Issue	Title	Date	Level of Change	Details
069	8	SubCom SL125 Cable Preparation <i>Global Marine</i>	Jan-16		
070	7	ASN OALC5 & URC2 Type 11 Cable Preparation <i>ASN</i>	Feb-19		
071	2	ASN URC4 Cable Preparation for Non-Molded Joints <i>ASN</i>	Jan-16		
072	1	ASN URC4 Cable Preparation for Molded Joints <i>ASN</i>	Mar-12		
073	10	NSW Minisub 36/48 Cable Preparation <i>Global Marine</i>	Jun-21		
074	6	Nexans ROC-1 Cable Preparation <i>Global Marine</i>	Aug-10		
075	29	OCC-SC300, SC350 & SC370 Cable Preparation <i>Global Marine</i>	Mar-23		
075/1	3	OCC-SC380 Cable Preparation <i>KCS</i>	Jun-23		
076	14	NSW MINISUB R (0.6) 15 & 17 (For Ferrule MD003D01) Cable Preparation <i>Global Marine</i>	Mar-19		
076/1	4	NSW MINISUB R (0.6) 15 & 17 (For ferrule GMS691D) Cable Preparation <i>Global Marine</i>	Dec-19		
076/2	6	NSW MINISUB R (1.5) & (1.8) 17 Cable Preparation <i>Global Marine</i>	Mar-21		
076/3	5	NSW MINISUB R (0.6) 17 deep water deployment specification <i>Global Marine</i>	Dec-19		
077	9	Ericsson GJMLTV & GJMMLTV Cable Preparation <i>Global Marine</i>	Sep-21		
077/1	3	Ericsson GJLTTM /GJMLTV 96 to 192 Fibers Cable Preparation <i>Global Marine</i>	Mar-22		
078	6	ZTT SOFC S17 Cable Preparation <i>Global Marine</i>	Jan-16		

UNIVERSAL JOINT CONSTRUCTION MANUAL - INDEX

Issue 132

September 2023

Section	Issue	Title	Date	Level of Change	Details
079	2	SubCom Extruder & Manifold Cleaning <i>SubCom</i>	May-12		
080	5	Nexans ROC-2 Cable Preparation <i>Global Marine</i>	Sep-16		
081	15	OCC-SC500/SC52X/SC53X & SC54X Cable Preparation <i>KCS</i>	Sep-22		
082		C-SAMS with Pressure Control Operating Procedure <i>SubCom</i>	On-Hold		
083	4	NSW MINISUB SAL 36 & SAL R 36 Cable Preparation <i>Global Marine</i>	Apr-13		
084	9	NSW MINISUB [8.0] 144/192/288 Cable Preparation <i>Global Marine</i>	Sep-23	Medium	Cable name updated, LW option and Modular HeatShrink option added
085	8	Nexans URC-1 (5.6mm) Cable Preparation <i>Global Marine</i>	Dec-21		
086	1	C-SAMS Extruder Pressure Testing <i>SubCom</i>	May-12		
087	3	CCSI RI-Sub XP Cable Preparation <i>Global Marine</i>	Jan-16		
088	15	Digital X-ray Radiography (powered) <i>Global Marine</i>	Jun-23		
089	13	Digital X-ray Radiography (un-powered) <i>Global Marine</i>	Sep-23	Minor	Cable name updated,
090	8	ASN DSC P3 Cable Preparation <i>Global Marine</i>	Oct-18		
091	5	ASN/Nexans URC-1 (3.7mm) Cable Preparation <i>Global Marine</i>	May-16		
092	7	Hengtong HORC-1 Cable Preparation <i>Global Marine</i>	May-22		
093	4	Nexans ROC-2L Cable Preparation <i>Global Marine</i>	Aug-23	Minor	Clarification on sequence
094	3	TongGuang GHR-18 Cable Preparation <i>Global Marine</i>	Feb-23		

UNIVERSAL JOINT CONSTRUCTION MANUAL - INDEX

Issue 132

September 2023

Section	Issue	Title	Date	Level of Change	Details
095	4	FiberHome FHOC-R Cable Preparation <i>Global Marine</i>	Feb-23		
096	4	Nexans ROC-2H Cable Preparation <i>Global Marine</i>	Aug-23	Minor	Typos corrected
097	5	Hengtong HORC-2 Cable Preparation <i>Global Marine</i>	Feb-23		
098	3	AKN (Guaymas-Santa Rosalia) Cable Preparation <i>Global Marine</i>	Mar-23		
099	1	TG GH (Guaymas-Santa Rosalia) Cable Preparation <i>Global Marine</i>	Jun-21		
100		Reserved for SubCom Screen Termination <i>SubCom</i>	TBC		
101	3	OCC SC63X Cable Preparation <i>KCS</i>	Mar-23		
102		Reserved for <i>Global Marine</i>	TBC		
103		Reserved for <i>Global Marine</i>	TBC		
104	1	Hengtong HORC-3 Cable Preparation <i>Global Marine</i>	Jun-23		
105	1	FiberHome FHOCR-48 Cable Preparation <i>Global Marine</i>	Jun-23		
106	4	SubCom SL17L-SDM Cable Preparation <i>SubCom</i>	Oct-23	Minor	Formatting and clarified instructions
111	1	Operating Manual for SubCom Fiber Color Scanner for SubCom (SL) High Fiber Count Cables <i>SubCom</i>	Jul-22		