INSTALLATION INSTRUCTIONS FOR FIBRE OPTIC CABLE THROUGH AND LOCAL JOINT

GENERAL

The incoming main and local cables (26) shall have been laid and stage 1 tested, leaving at least 4.5 metres of cable above the gland plates (20) for terminating.

The gland plate (20) shall be fitted into the cabinet 609D (1) using bolts with nuts & washers (21).

The outer sheath shall be stripped to a sufficient length to allow the gland with earth tag & locknuts (22) to be fitted to the gland plate. Markers shall be attached to the cable, showing Motorway number and destination. As defined in NDX1061–00 sheet 3.

A 6 Sq mm earth wire with crimped lugs at either end (23) shall be fitted between the gland earth tags and the cabinet earth bolt (24).

The cable inner sheath shall be stripped back to allow the heatshrink glands (18) to be fitted. NOTE DETAIL 'A' sheet 3.

The four enclosures (3a) & (12) shall be fitted to the backboard using bolts, nuts & washers (17), the heatshrink gland secured, the glands & flexible conduit (28 & 29), the conduit nipple (30), bushes (31) and washers (32) fitted.

Having separated the copper pairs the glands (9) shall be fitted to the fibre protection sheath and the excess sheath removed.

TERMINATION OF FIBRES

The HA Engineer shall specify his requirements as to the fibres that shall be spliced from the local to through cable.

The cassette assembly (4) shall be riveted to the backplate (3) and fitted within the upper enclosure together with the self adhesive saddles (5).

The steel strength member shall be cut off 50mm above the gland and insulated.

All through cable fibres shall be taken one and one quarter of a turn around the enclosure before removing the hard tubes.

The fibres shall then be sleeved with PTFE tubing (7a) of the same colour, ensuring it extends 50–100mm inside the hard tube. The PTFE tubed fibre shall make three–quarters turns around the through enclosure and enter the cassette.

Local cable fibres that require splicing to the through longitudinal cable shall be routed through the flexible conduit. They shall make one half turn around the through enclosure before removing the hard tubes.
The fibres shall then be sleeved with 0.7mm PTFE tubing of the same colour, ensuring that it extends 50–100mm inside the hard tube and make a further three–quarter turn before entering the required cassette. All fibres shall be secured by saddles.
Where there is a requirement to splice fibres of different colours, the splice protector shall be of the same colour as the main longitudinal cable fibre.

All unused local fibres shall be left with the hard tubes on and coiled within the local enclosure.

A fibre marker (7b) and rubber sleeve (8) are fitted onto the PTFE tubing at the cassette entry. The PTFE tube shall extend into the cassette by 25mm. The sleeve shall be secured to both the PTFE and the cassette using Cyanoacrylate adhesive.

NOTE: A rubber sleeve of suitable dimensions is not commercially available. It may be made using R–S test lead with the conductor removed.

A conventional fusion splice shall be made and a protector (6) fitted the same colour as the fibre tube and secured to the cassette with a flexible silicone sealant. The surplus primary coated fibre shall be stored within the cassette. Fibre No. 1 shall be the outermost cassette.

All unspliced through cable fibres shall be stored within their respective cassettes.

After all splicing, jointing and terminating has been completed, a desiccant pack (27) shall be placed in each enclosure and the lids fitted. A laser warning symbol to BS 4803 (3c) shall be attached to the upper enclosure lid.

ISSUE	AMENDMENTS	APPD/DATE
A	FOR CONSTRUCTION	BD 09/02/03
I	FIRST ISSUE	BD 19/07/02

SCOTTISH EXECUTIVE

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TITLE OF CABLE CASSETTE TERMINATION THROUGH ARRANGEMENT IN HA TYPE 609 CABINET – NOTES

ORIGINAL DRAWING SIZE: 297 x 420
ALL DIMENSIONS ARE IN MM
TOLERANCE ±1 UNLESS OTHERWISE STATED
THIRD ANGLE PROJECTION DO NOT SCALE

DRN C.S.G. CHKD B.D.
DATE 15.07.02 DATE 19.07.02

DRG. NO. NDX1034-02dt

SCALE N.T.S.

SHT. NO. 5 of 6