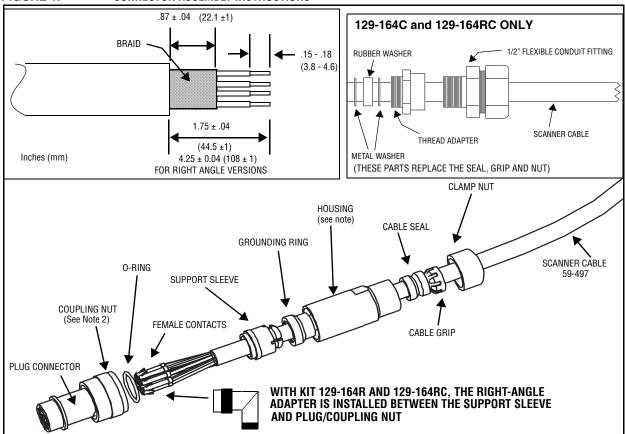


INSTRUCTION SHEET

InSight Cable Connector

P/N 129-164, 129-164R, 129-164C, 129-164RC

FIGURE 1. CONNECTOR ASSEMBLY INSTRUCTIONS



CONNECTOR ASSEMBLY STEPS

- 1. Select 59-497 cable end with the wire color orientation as shown in Figure 2.
- 2. Slide items along the cable as shown, including coupling nut and O-ring.
- **3.** Remove and discard the black thread protector from the Plug Connector. Leave the orange grommet installed (see photo, page 2).
- **4.** Strip cable (connector end) in accordance with Figure 1. Slide braid back and forth to loosen, then fold braid back over cable jacket. Cut and discard foil tape. Solder wires to contacts.

Note 1: To ease contact insertion, you may first pierce the orange grommet's membrane with a small pin tool.

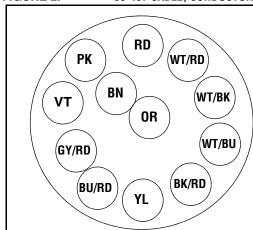
- Slide contacts through orange grommet and into plug connector, per Figure 3 wiring table, until contacts lock in place.
- **6.** Slide coupling nut up to plug connector and slide O-ring into groove on plug connector.
- 7. Slide support sleeve back over braid and drain wire then place braid over spring elements of support sleeve. Clamp braid and drain wire by snapping on the metal grounding ring. Screw housing onto the plug connector. Torque to 27 lb-in ± .25 lb-in, (3.05N-m ± 0.03 N-m).
- **8.** Assemble cable seal and cable grip to the housing, screw clamp nut onto housing and tighten to 27 lb-in ± .25 lb-in, (3.05N-m ± 0.03 N-m). "C" and "RC" Kits: Slide the Rubber and Metal Washers into the Housing and secure with the Thread Adapter. Install the Flexible Conduit Fitting.

Note 2: Class 1 Division II Hazardous Area requirements for InSight scanners with electrical connectors (non-CG models):

- 1. It is necessary to either use the "C" or "RC" model cable assemblies or cable connector kits and install the cable in flexible conduit, or use the 61-6944 Wiring Harness.
- 2. The connector coupling nut setscrew must be tightened after mating the cable to the scanner.
- 3. The red warning label must be adhered to the connector housing.



FIGURE 2. 59-497 CABLE, CONDUCTOR ORIENTATION



COLOR CODE:

BK = BLACK

RD = RED

WT = WHITE

PK = PINK

VT = VIOLET

GY = GREY

..

BU = BLUE YL = YELLOW

BN = BROWN

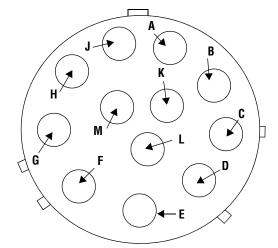
OR = ORANGE

For ease of assembly, install the 129-164 connector on the 59-497 cable end where the 3 white wires are clockwise to the red wire, as shown.

FIGURE 3. WIRING TABLE AND PLUG CONNECTOR PIN LOCATION

WIRE	PIN
BLACK/RED, #18 AWG	А
WHITE/BLUE, #18 AWG	В
WHITE/BLACK, #18 AWG	С
WHITE/RED, #18 AWG	D
RED, #18 AWG	Е
PINK, #18 AWG	F
VIOLET, #22 AWG	G
GREY/RED, #22 AWG	Н
BLUE/RED, #22 AWG	J
YELLOW, #22 AWG	K
BROWN, #22 AWG TWISTED	L
ORANGE, #22 AWG TWISTED	М

PLUG CONNECTOR PIN LOCATION (VIEWED FROM ORANGE GROMMET / PIN INSERTION SIDE)



ORDERING INFORMATION

PART NUMBER	STRAIGHT CONNECTOR	90-DEGREE Connector	1/2" FLEXIBLE Conduit Adapter
129-164	X		
129-164R		Х	
129-164C	Х		Х
129-164RC		Х	Х

PLUG CONNECTOR ORANGE GROMMET INSTALLED



