DIN Connectors and N Connectors

Installation Guidelines Using Manual Cable Prep Tools

NOTE: These installation instructions have been written for qualified, experienced personnel. Please read them thoroughly before starting assembly work. Superior Essex disclaims any liability or responsibility for the result of improper or unsafe installation practices.

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Installing Connectors for LHF-12D, LHF-12DR and HFAC-12DR Cables

CONNECTOR OPTIONS		
Connector Type	Compatible Cable	Connector Options
DIN Type	Compatible with LHF-12D Compatible with LHF-12DR	CLH-12DM CLH-12DF CLH-12DMR CLH-12DFR
N Type	Compatible with LHF-12D Compatible with LHF-12DR	CLH-12NM CLH-12NF CLH-12NMR CLH-12NFR
	Compatible with HFAC-12DR	CHFA12NM CHFA12NF CHFA12NMR CHFA12NMR

Recommended Installation Tools

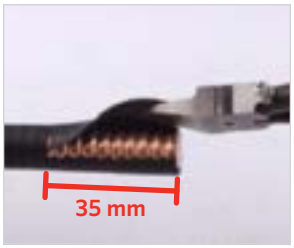
1. Open end wrenches: 21 mm and 19 mm
2. Knife
3. Cutting plier
4. Long-nose
5. Flat file
6. Screw driver
7. CT-12D trimming tool (optional)

Procedure

STEPS 1A – 9A:

Using Trimming Tool

1A. Using the knife and cutting plier, remove the cable jacket leaving about 35 mm of the outer conductor exposed.



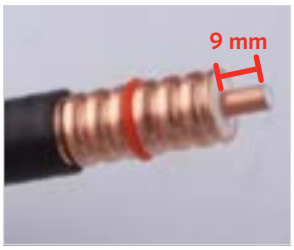
2A. Position the trimming tool (CT-12D) so that the fourth or fifth corrugation valley from the cable end fits into the corrugation guide.

3A. Lightly press the blade into the cable and rotate the tool clockwise 10 to 20 times. You may hear a snapping sound indicating the outer conductor is fully cut.

4A. Using the cutting plier, trim away the jacket along the pre-scored mark.

5A. Remove the outer conductor and the dielectric foam.

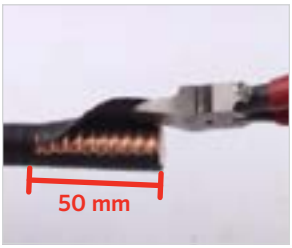
6A. After trimming the dielectric foam, insert the O-ring onto the outer conductor. Put grease on the outer conductor and under the O-ring.



STEPS 1B – 9B:

Manual Trimming

1B. Using the knife and cutting plier, remove the cable jacket leaving about 50 mm of the outer conductor exposed.



2B. Insert the O-ring onto the outer conductor. Place grease on the outer conductor and under the O-ring.

3B. Push the clamping nut onto the cable until it blocks against the jacket. Make sure that the slotted ferrule is seated within a valley of the corrugation.

4B. Using the cutting plier, remove the outer conductor.

5B. With the screw driver, flare the outer conductor.

6B. Using the knife, cut the dielectric. Be careful to score the inner conductor.

STEPS 1A – 9A:

Using Trimming Tool

7A. Push the clamping nut on the cable until it blocks against the jacket. Make sure the slotted ferrule is seated within a valley of the corrugation.

8A. Using the flat file, remove the burrs from the inner conductor and clean the cable end.

9A. Put the flare attachment of the tool (CT-12D) onto the cable and rotate the tool clockwise to prepare flared interface by flaring the end of the outer conductor.

STEPS 1B – 9B:

Manual Trimming

7B. Using the long-nose, remove the dielectric foam.

8B. Using the cutting plier, cut the inner conductor to a length of 9 mm.

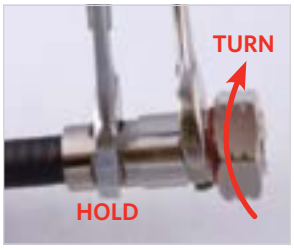
9B. Using the flat file, remove the burrs from the inner conductor and clean the cable end.

STEPS 10 – 12:

Completing the Installation

10. Assemble the connector body onto the clamping nut.

11. Tighten the connection with wrenches to the torque value of 15 lbs (20 N·m) maximum. Make sure that you hold the clamping nut and rotate only the outer body in a counter clockwise rotation.



12. Installation is complete.

Installing Connectors for LHF-12DP and HFAC-12DP Cables

CONNECTOR OPTIONS		
Connector Type	Compatible Cable	Connector Options
N Type	Compatible with LHF-12DP	CLHP-12NM CLHP-12NF CHLP12NMR CHLP12NFR
	Compatible with HFAC-12DP	CHFAP12NM CHFAP12NF CHFAP12NMR CHFAP12NFR

Recommended Installation Tools

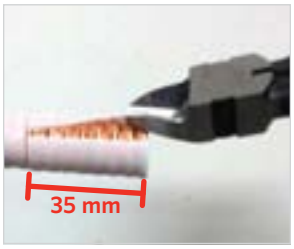
1. Open-end wrenches: 21 mm and 19 mm
2. Knife
3. Cutting plier
4. Long-nose
5. Flat file
6. Screwdriver
7. L-CT-12D-CMP trimming tool

Procedure

STEPS 1A – 9A:

Using Trimming Tool

1A. Using the knife and cutting plier, remove the cable jacket leaving about 35 mm of the outer conductor exposed.

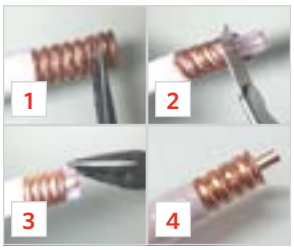


2A. Position the trimming tool (L-CT-12D-CMP) into the corrugation guide to cut 10 mm outer conductor from the cable end.

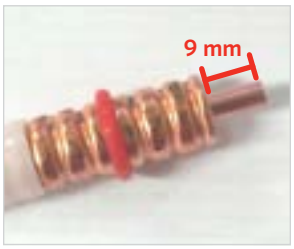
3A. Lightly press the blade into the cable and rotate the tool clockwise 10 to 20 times.

4A. Trim away the jacket with the cutting plier along the pre-scored mark.

5A. Using the long-nose and knife, remove the outer conductor and dielectric in the order shown. Make sure the length of the inner conductor is 9 mm.



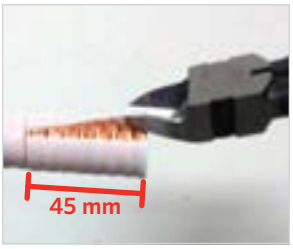
6A. Insert the O-ring onto the outer conductor. Put grease on the outer conductor and under the O-ring.



STEPS 1B – 9B:

Manual Trimming

1B. Using the knife and the cutting plier, remove the cable jacket leaving about 45 mm of the outer conductor exposed.



2B. After trimming the jacket, insert the O-ring onto the outer conductor. Put grease on the outer conductor and under the O-ring.

3B. Push the clamping nut fully onto the cable.

4B. Remove the outer conductor with the cutting plier.

5B. Using a screwdriver, flare the outer conductor

6B. Getting a blade scar, but not to damage inner conductor.

STEPS 1A – 9A:

Using Trimming Tool

7A. Push the clamping nut fully onto the cable.

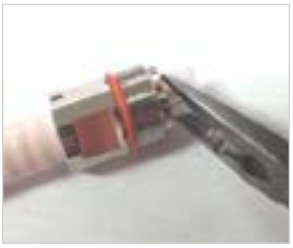
8A. Using a flat file, remove burrs from the inner conductor and clean the cable end.

9A. Slide the flare attachment of the tool (L-CT-12D-CMP) onto the cable and rotate it to prepare flared interface of outer conductor.

STEPS 1B – 9B:

Manual Trimming

7B. Using a long-nose, remove the dielectric foam.



8B. Using the cutting plier, cut the inner conductor to a length of 9 mm.

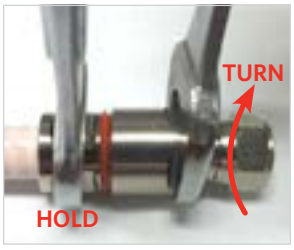
9B. Using a flat file, remove burrs from the inner conductor and clean the cable end.

STEPS 10 – 12:

Completing the Installation

10. Assemble the connector body onto the clamping nut.

11. Tighten the connection with wrenches. Make sure that you hold the clamping nut and rotate only the outer body in a clockwise rotation.

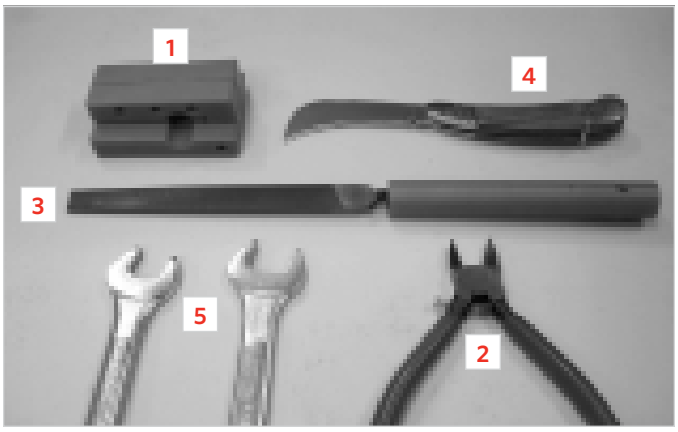


12. Installation is complete.

Installing Connectors for HFSC-12D and HFSC-12DR Cables

CONNECTOR OPTIONS		
Connector Type	Compatible Cable	Connector Options
DIN Type	Compatible with HFSC-12D Compatible with HFSC-12DR	CHFS12DM CHFS12DF CHFS12DMR CHFS12DFR
N Type	Compatible with HFSC-12D Compatible with HFSC-12DR	CHFS12NM CHFS12NF CHFS12NMR CHFS12NFR

Recommended Installation Tools



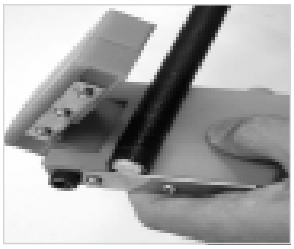
1. CT-12DS trimming tool (optional)
2. Cutting pliers
3. Flat file
4. Knife
5. Open end wrenches: 2 x 19 mm and 2 x 21 mm
6. Coupling Nut 32 mm

Procedure

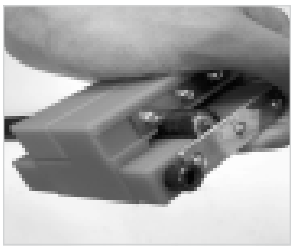
STEPS 1A – 6A:

Using Trimming Tool

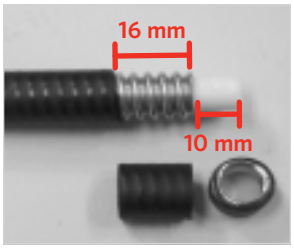
1A. Place the cable into the groove of the tool (CT-12DS).



2A. Lightly press the blade into the cable and rotate the tool clockwise 10 to 20 times. You may hear a snapping sound, indicating the outer conductor is fully cut.

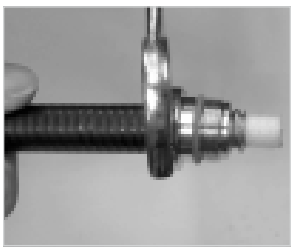


3A. Remove the cut portion of the outer conductor and jacket by twisting off the cable end. Using the knife, trim away the jacket along the pre-scored mark..



4A. Screw the threaded gasket close to the jacket. Make sure that the gasket threads are fully engaged. Apply supplied grease around the interface of the outer conductor and the gasket.

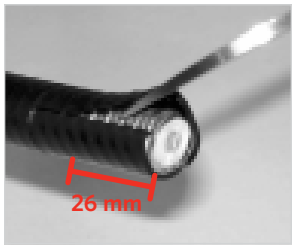
5A. Screw the threaded clamp onto the outer conductor until it blocks against the jacket.



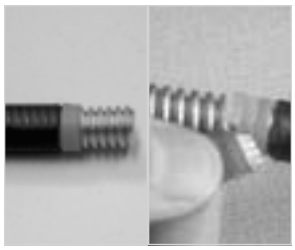
STEPS 1B – 6B:

Manual Trimming

1B. Using the knife, remove the cable jacket leaving about 26 mm of the outer conductor exposed.



2B. Screw the threaded gasket close to the jacket. Make sure that the gasket threads are fully engaged. Apply supplied grease around the interface of the outer conductor and the gasket.



3B. Screw the threaded clamp onto the outer conductor until it blocks against the jacket.

4B. Using the cutting pliers, grip the outer conductor and tear it to obtain a flared contact surface all around the cable.

5B. Skip ahead to step 7.

STEPS 1A – 6A:

Using Trimming Tool

6A. Using the cutting pliers, grip the outer conductor and tear it to obtain a flared contact surface all around the cable.

STEPS 1B – 6B:

Manual Trimming

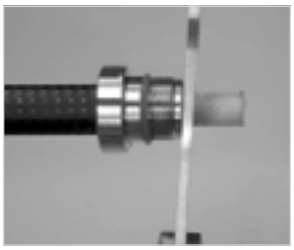
6B. Skip ahead to step 7.

STEPS 7 – 13:

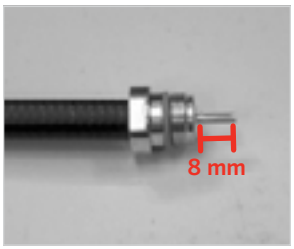
Completing the Installation

7. Ensure that the outer conductor is flared completely around the circumference of the threaded clamp.

8. Using the knife, cut the dielectric and completely scrape away the foam and adhesive particles from the inner conductor. Be careful not to score the inner conductor.



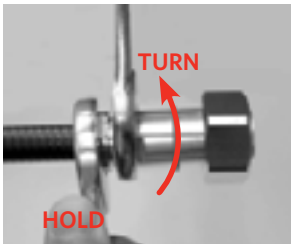
9. Using the cutting pliers, cut the inner conductor to a 8 mm length.



10. Use the flat file to chamfer the inner conductor and then clean it with a scouring pad.

11. Assemble the connector body onto the clamping nut.

12. Tighten the connection with wrenches to the torque value of 15 ft-lb (20 N·m) maximum. Make sure that you hold the clamping nut still and rotate only the outer body.

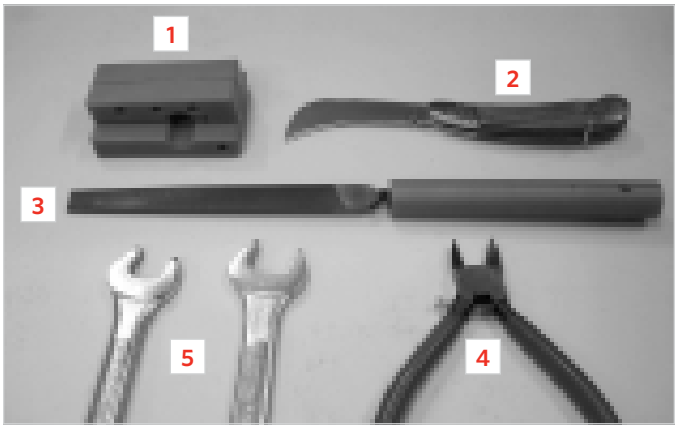


13. Installation is complete.

Installing Connectors for HFSC-12DP Cables

CONNECTOR OPTIONS		
Connector Type	Compatible Cable	Connector Options
N Type	Compatible with HFSC-12DP	CHFSP12NM CHFSP12NF CHFSP12NMR CHFSP12NFR

Recommended Installation Tools



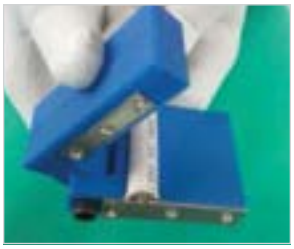
1. CT-12DS trimming tool (optional)
2. Knife
3. Flat file
4. Cutting pliers
5. Open end wrenches: 2 x 19 mm and 21 mm

Procedure

STEPS 1A – 6A:

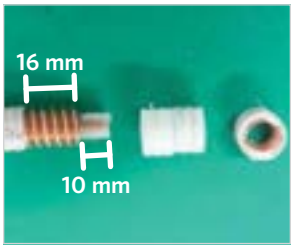
Using Trimming Tool

1A. Place the cable into the groove of the tool (CT-12DS).



2A. Lightly press the blade into the cable and rotate the tool clockwise 10 to 20 times. You may hear a snapping sound, indicating the outer conductor is fully cut.

3A. Remove the cut portion of the outer conductor and jacket by twisting off the cable end. Using the knife, trim away the jacket along the pre-scored mark..



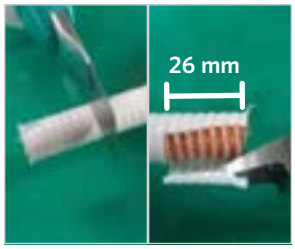
4A. Screw the threaded gasket close to the jacket. Make sure that the gasket threads are fully engaged. Apply supplied grease around the interface of the outer conductor and the gasket.

5A. Screw the threaded clamp onto the outer conductor until it blocks against the jacket.

STEPS 1B – 6B:

Manual Trimming

1B. Using the knife, remove the cable jacket leaving about 26 mm of the outer conductor exposed.

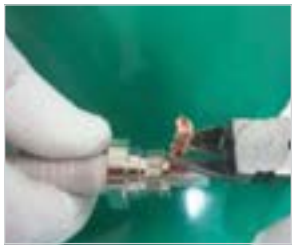


2B. Screw the threaded gasket close to the jacket. Make sure that the gasket threads are fully engaged. Apply supplied grease around the interface of the outer conductor and the gasket.

3B. Screw the threaded clamp onto the outer conductor until it blocks against the jacket.

4B. Screw the threaded clamp onto the outer conductor until it blocks against the jacket.

5B. Using the cutting pliers, grip the outer conductor and tear it to obtain a flared contact surface all around the cable.



STEPS 1A – 6A:

Using Trimming Tool

6A. Using the cutting pliers, grip the outer conductor and tear it to obtain a flared contact surface all around the cable.

STEPS 1B – 6B:

Manual Trimming

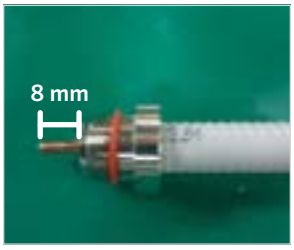
6B. Skip ahead to step 7.

STEPS 7 – 12:

Completing the Installation

7. Using the knife, cut the dielectric and completely scrape away any adhesive particles from the inner conductor. Be careful not to score the inner conductor.

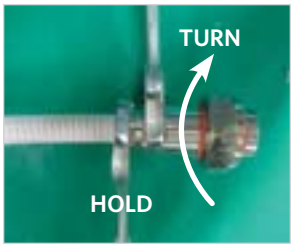
8. Using the cutting pliers, cut the inner conductor to a 8 mm length.



9. Use the flat file to chamfer the inner conductor and then clean it with a scouring pad.

10. Assemble the connector body onto the clamping nut.

11. Tighten the connection with wrenches to the torque value of 15 ft-lb (20 N·m) maximum. Make sure that you hold the clamping nut still and rotate only the outer body.



12. Installation is complete.

Installing Connectors for LHF-22D Cables

CONNECTOR OPTIONS		
Connector Type	Compatible Cable	Connector Options
DIN Type	Compatible with LHF-22D	CLH-22DM CLH-22DF
N Type	Compatible with LHF-22D	CLH-22NM CLH-22NF

Recommended Installation Tools

1. CT-22D trimming tool
2. Cutting plier
3. Hacksaw
4. Flat file
5. Knife
6. Brush
7. Screw driver
8. Wrenches

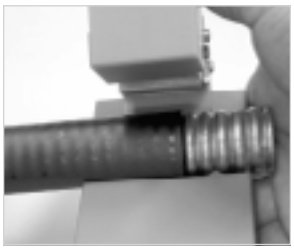
Procedure

STEPS 1A – 9A:

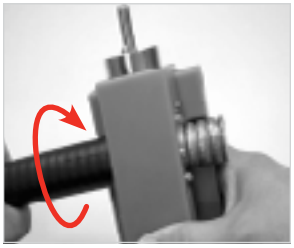
Using Trimming Tool

1A. Using the knife, remove the cable jacket leaving about 38 mm of the outer conductor exposed.

2A. Position the trimming tool (CT-22D) so that the fourth or fifth corrugation valley from the cable end fits into the corrugation guide.



3A. Lightly press the blade into the cable and rotate the tool clockwise 10 to 20 times. You may hear a snapping sound indicating the outer conductor is fully cut.



4A. Using the knife, trim away the jacket along the pre-scored mark.

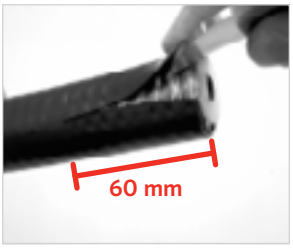
5A. Inspect the cable trim to ensure that it is 38 mm.

6A. Place the small O-ring on the outer conductor in the second valley from the edge of the jacket. Place a light film of grease around the surface of the O-ring.

STEPS 1B – 9B:

Manual Trimming

1B. Using the knife, remove the cable jacket leaving about 60 mm of the outer conductor exposed.



2B. Place the small O-ring in the second valley of the outer conductor from the edge of the jacket. Place a light film of grease around the surface of the O-ring.

3B. Push the clamping nut onto the cable until it blocks against the jacket. Make sure that the slotted ferrule is seated within a valley of the corrugation.

4B. Tightly grip the clamping nut and carefully cut off the cable with the hacksaw.

5B. After cutting, verify that the saw cut is flush with the end of the clamping nut. If the cable protrudes, file it with the clamping nut.

6B. Remove burrs from the inner contact with the knife.

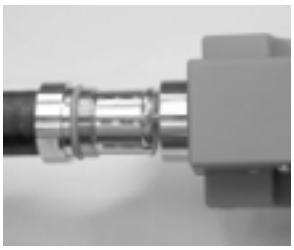
STEPS 1A – 9A:

Using Trimming Tool

7A. Push the clamping nut onto the cable until it blocks against the jacket. Make sure the slotted ferrule is seated within a valley of the corrugation.

8A. Remove burrs from the inner contact with the knife.

9A. Put the flare attachment of the tool (CT-22D) onto the cable and rotate the tool clockwise to prepare flared interface by flaring the end of the outer conductor. Remove all chips and clean the cable end with a brush.



STEPS 1B – 9B:

Manual Trimming

7B. Run the tip of the screw driver around the outer conductor to separate the foam and to create an outer conductor flare.

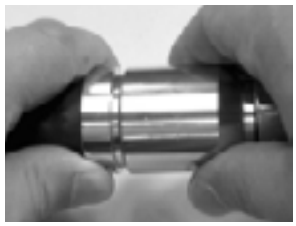
8B. Remove all the copper and foam particles with a brush.

9B. Skip ahead to step 10.

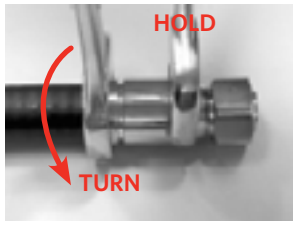
STEPS 10 – 12:

Completing the Installation

10. Assemble the connector body onto the clamping nut.



11. Tighten the connection with wrenches to the torque value of 35 N·m (256 lbs) maximum. Make sure that you hold the outer body still and rotate only the clamping nut.

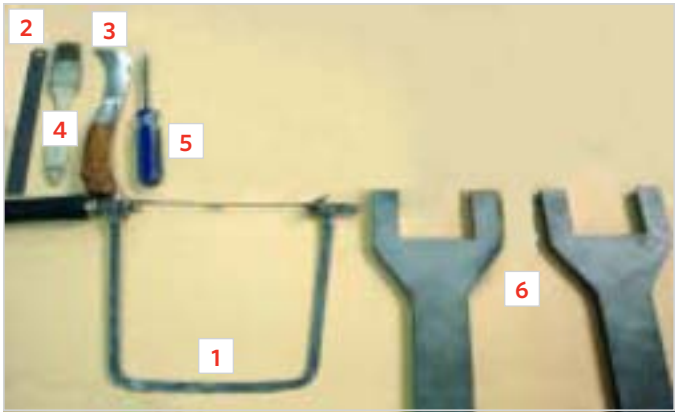


12. Installation is complete.

Installing Connectors for LHF-33D and LHF-42D Cables

CONNECTOR OPTIONS		
Connector Type	Compatible Cable	Connector Options
DIN Type	Compatible with LHF-33D	CLH-33DM CLH-33DF
	Compatible with LHF-42D	CLH-42DF CLH-42DM

Recommended Installation Tools



1. Hacksaw
2. Flat file
3. Knife
4. Brush
5. Screw driver
6. Wrenches (57 mm)

Procedure

STEPS 1 – 11:
Manual Trimming

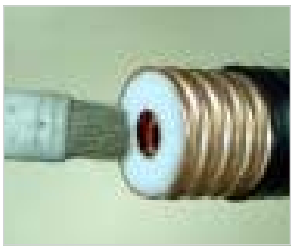
1. Using the knife, trim away the jacket, removing it from the outer conductor.

2. Using the hacksaw, trim the cable leaving about 38 mm of the outer conductor exposed.

3. Run the tip of the screw driver around the outer conductor to separate the foam and to create an outer conductor flare.

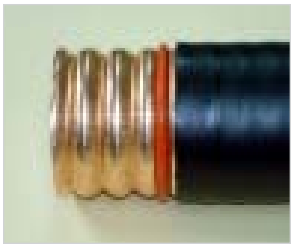
4. Remove burrs from the inner contact with the knife.

5. Remove all the copper and foam particles with a brush.



6. The flare diameter should be no more than 36.5 mm for CLH-33 or 47 mm for CLH-42.

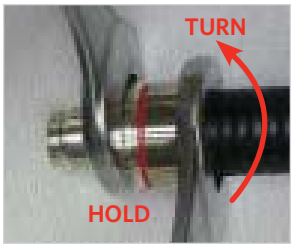
7. Place the small O-ring on the outer conductor in the first valley from the edge of the jacket. Place a light film of grease around the surface of the O-ring.



8. Push the clamping nut fully onto the cable unit until it blocks against the jacket. The outer conductor cutting line should also be aligned with the edge of the clamping nut.

9. Assemble the connector body onto the clamping nut.

10. Tighten the connection with wrenches to the torque value of 50 N·m maximum for CLH-33 or 55 N·m maximum for CLH-42. Make sure that you hold the outer body still and rotate only the clamping nut.



11. Installation is complete.