



XJ range

DATE 09/04

XJ413-02

SERVICE

TECHNICAL BULLETIN

Multiple Warnings On Instrument Cluster – Poor Pin Connections – Check & Repair Pins

MODEL 2004 MY
XJ range

VIN G00001-G25490

Issue:

Some 2004 XJ range vehicles, within the above VIN range, may exhibit multiple warnings on the instrument cluster due to poor male/female electrical pin connections.

The following symptoms will result:

- All the warning lights are illuminated on the instrument cluster.
- Tachometer, speedometer and coolant temperature gauges all drop to zero.
- Transmission goes into limp home mode.
- Power steering defaults to the heavy setting.
- Air suspension goes to hard setting.
- All of the warning messages scroll through on the instrument cluster message center.

Note: The vehicle can still continue to be driven, however, if the condition still exists when the engine is switched off, it will not be possible to re-start the engine.

Action:

In case of a verified customer complaint of the above symptoms, follow the workshop procedure outlined below.

WORKSHOP PROCEDURE

1. Open driver door.
2. Power driver seat to the rear most position.
3. Disconnect battery (see Workshop Manual, section: 414-01).
4. Open hood and install fender protector covers.

NOTE: THE INFORMATION IN TECHNICAL BULLETINS IS INTENDED FOR USE BY TRAINED, PROFESSIONAL TECHNICIANS WITH THE KNOWLEDGE, TOOLS, AND EQUIPMENT TO DO THE JOB PROPERLY AND SAFELY. IT INFORMS THESE TECHNICIANS OF CONDITIONS THAT MAY OCCUR ON SOME VEHICLES, OR PROVIDES INFORMATION THAT COULD ASSIST IN PROPER VEHICLE SERVICE. THE PROCEDURES SHOULD NOT BE PERFORMED BY "DO-IT-YOURSELFERS." DO NOT ASSUME THAT A CONDITION DESCRIBED AFFECTS YOUR CAR. CONTACT A JAGUAR RETAILER TO DETERMINE WHETHER THE BULLETIN APPLIES TO YOUR VEHICLE.

ELECTRICAL CONNECTOR EC030 PINS 11 AND 15

5. Disconnect the Anti-lock Braking System (ABS)/Dynamic Stability Control (DSC) module electrical connector EC030 (black 47 way) (Illustration 1).

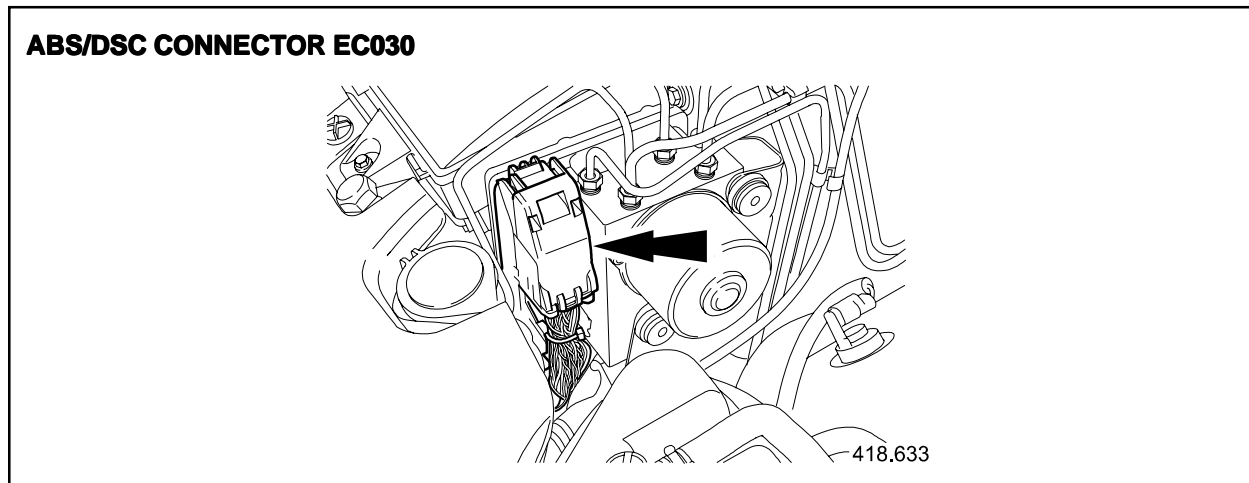


ILLUSTRATION 1

6. Use a male pin 418-411-47 from the harness repair kit, to check the integrity of pins 11 and 15 (Illustration 2).

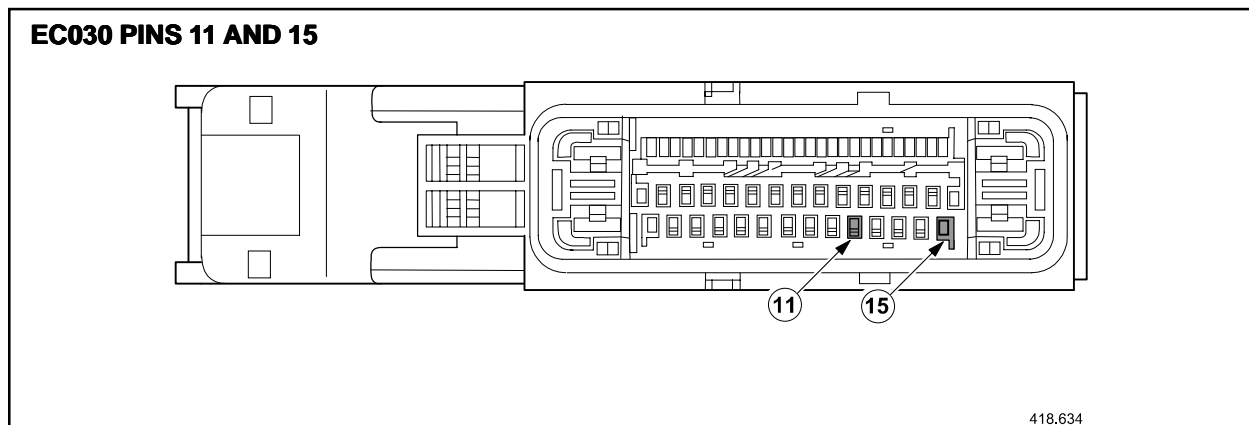


ILLUSTRATION 2

Note: The male to female electrical connection must be very firm, and be felt for the full length of the electrical connector. If there is initial resistance then the pin slips freely into the female pin, replace the female pin. If there is any doubt replace the female pin. Repeat this check with the new pin to verify a proper fit.

If pins are OK, continue with inspection of electrical connector IP055, if not, replace any faulty pin(s) using preterminated end **418-411-74** as follows:

REPLACING FAULTY PINS

1. Remove the front power distribution box securing bolts.
2. Disconnect the front power distribution box electrical connectors.
3. Remove the nut securing the main battery cable to the front power distribution box and reposition the main battery power cable.

4. Remove the nut securing the generator supply cable to the front power distribution box and reposition the generator supply cable.
5. Remove the front power distribution box from the vehicle.
6. Re-route the ABS/DSC harness for access.
7. Cut, remove and discard the cable tie securing the harness to the electrical connector.
8. Remove the anti-back-out device from the electrical connector.
9. Use the special tool 'A' from the harness repair kit to displace the affected pin(s) from the electrical connector.
10. Unwind the affected cable from the Controller Area Network (CAN) bus second cable.
11. Cut back affected cable to the required length to facilitate repair.
12. Strip back outer casing of the cut cable 6 to 7 mm.
13. Crimp butt-splice connector 418-107 from the harness repair kit to the prepared cable.
14. Strip back outer casing from the new pre-terminated end **418-411-74**.
15. Crimp the new pre-terminated end to the butt-splice connector.
16. Slide heat shrink tube 418-104 from the harness repair kit over the butt-splice connector.
17. Using a suitable heat source, shrink the tube over the butt-splice connector.
18. Insert the new pin(s) into the electrical connector.
19. Insert the anti-back-out device.
20. Secure the harness to the electrical connector with a cable tie.
21. Cut the protruding end of the cable tie and discard.
22. Re-route the ABS/DSC harness and connect the electrical connector.
23. Install the generator supply cable to the front power distribution box, install and tighten the generator supply cable securing nut.
24. Install the main battery power cable to the front power distribution box, install and tighten the main battery cable securing nut.
26. Install the front power distribution box electrical connectors.
27. Install and tighten the front power distribution box securing bolts.

ELECTRICAL CONNECTOR IP055 PINS 21 AND 22

1. Remove the right hand side scuff plate trim panel (see Workshop Manual, section: 501-05).
2. Remove the right hand side A-post lower trim pad.

3. Displace the intermediate connector IP055 (black 22 way) from the mounting tang (Illustration 3).

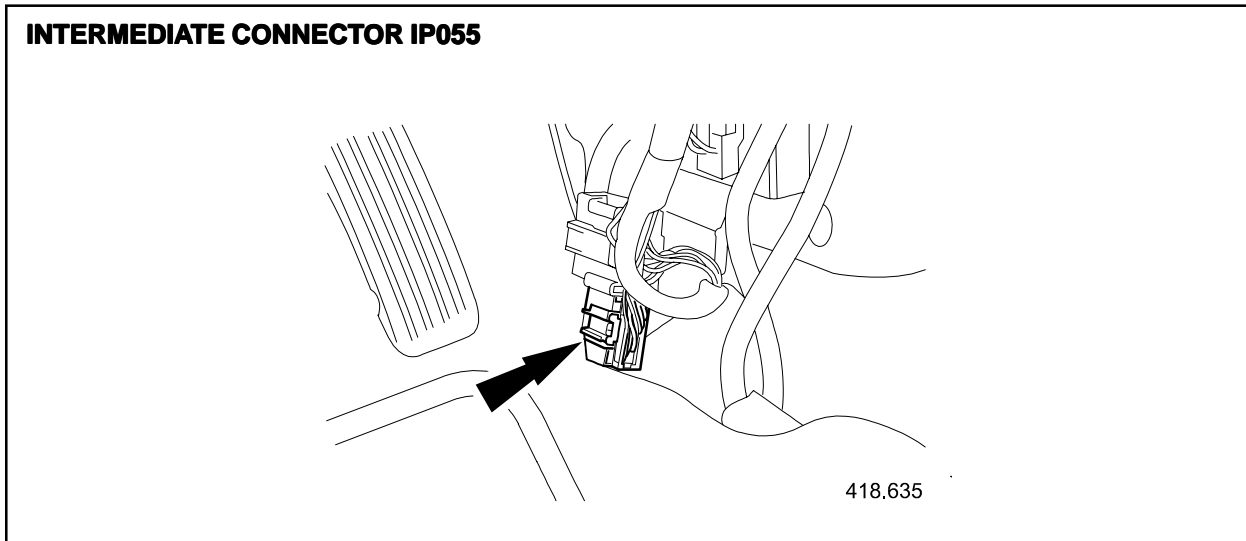


ILLUSTRATION 3

4. Disconnect the intermediate connector IP055.
5. Position harness for access.
6. Use a male pin 418-411-47 from the harness repair kit, check the integrity of pin 21 and 22 (Illustration 4).

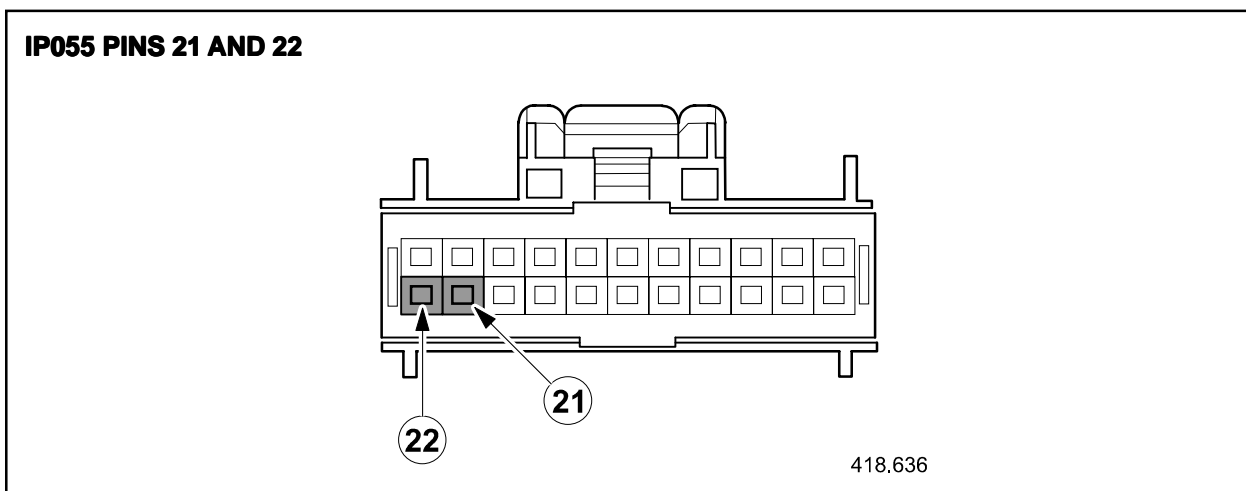


ILLUSTRATION 4

Note: The male to female electrical connection must be firm, and be felt for the full length of the electrical connector. If there is initial resistance, then the pin slips freely into the female pin, replace the female pin. If there is any doubt replace the female pin. Repeat this check with the new pin to verify a proper fit.

7. If pins require replacing, strip back the harness tape to adequate length to facilitate repair. If not, continue with step 20 of this procedure
8. Remove the anti-back-out device from the electrical connector.
9. Displace affected pin(s) from the electrical connector using special tool 'A' from the harness repair kit.
10. Unwind the affected cable from the Controller Area Network (CAN) bus second cable.
11. Cut back affected cable to the required length to facilitate repair.
12. Strip back outer casing of the cut cable 6 to 7 mm.
13. Crimp butt-splice connector 418-107 from the harness repair kit to the prepared cable.
14. Strip back outer casing from the new pre-terminated end **418-411-45**.
15. Crimp the new pre-terminated end to the butt-splice connector.
16. Slide heat shrink tube 418-104 from the harness repair kit over the butt-splice connector.
17. Using a suitable heat source, shrink the tube over the butt-splice connector.
18. Insert the new pin(s) into the electrical connector.
19. Insert the anti-back-out device.
20. Tape harness to original condition.
21. Connect intermediate connector IP055.
22. Install intermediate connector IP055 to the mounting tang.
23. Install right hand side A-post lower trim pad.
24. Install right hand side scuff plate trim panel (see Workshop Manual section: 501-05). Continue with inspection of connector CR120.

ELECTRICAL CONNECTOR CR120 PINS 3 AND 4

1. Remove securing scrivenets to remove lower instrument panel finisher.

2. Disconnect electrical connector CR120 (black 8 way) (Illustration 5).

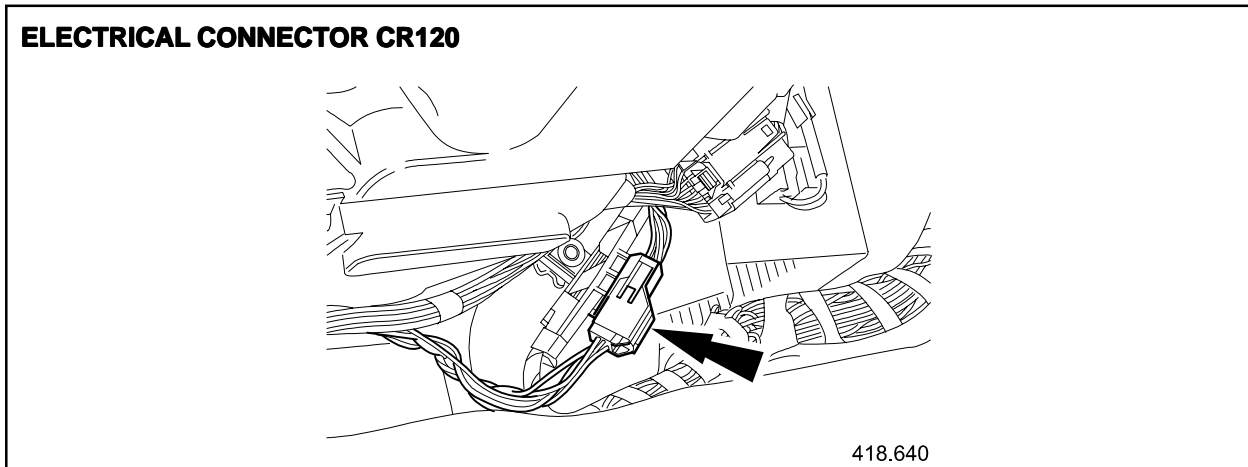


ILLUSTRATION 5

3. Use a male pin 418-411-47 from the harness repair kit to check the integrity of pin 3 and 4 (Illustration 6).

Note: The male to female electrical connection must be firm, and be felt for the full length of the electrical connector. If there is initial resistance, then the pin slips freely into the female pin, replace the female pin. If there is any doubt replace the female pin. Repeat this check with the new pin to verify a proper fit.

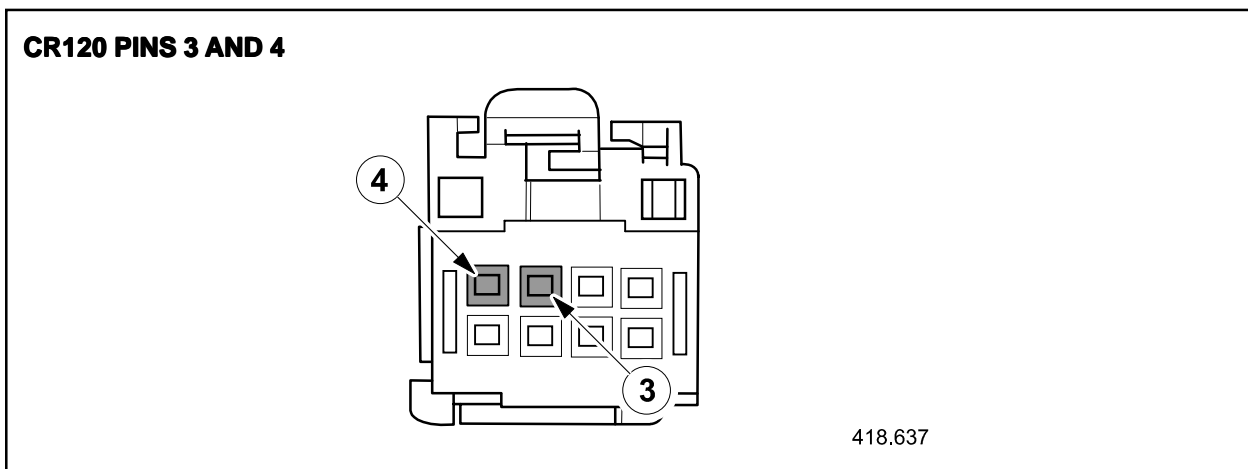


ILLUSTRATION 6

4. If pins require replacing, strip back the harness tape to adequate length to facilitate repair. If not, continue with step 17 of this procedure.
5. Remove the anti-back-out device from the electrical connector.
6. Displace affected pin(s) from the electrical connector using special tool 'A' from the harness repair kit.
7. Unwind the affected cable from the Controller Area Network (CAN) bus second cable.
8. Cut back affected cable to the required length to facilitate repair.

9. Strip back outer casing of the cut cable 6 to 7 mm.
10. Crimp butt-splice connector 418-107 from the harness repair kit to the prepared cable.
11. Strip back outer casing from the new pre-terminated end **418-411-45**.
12. Crimp the new pre-terminated end to the butt-splice connector.
13. Slide heat shrink tube 418-104 from the harness repair kit over the butt-splice connector.
14. Using a suitable heat source, shrink the tube over the butt-splice connector.
15. Insert the new pin(s) into the electrical connector.
16. Insert the anti-back-out device.
17. Tape harness to original condition.
18. Connect electrical connector CR120. Continue with inspection of connector CR119.

ELECTRICAL CONNECTOR CR119 PINS 6 AND 7

1. Disconnect electrical connector CR119 (gray 22 way) (Illustration 7).

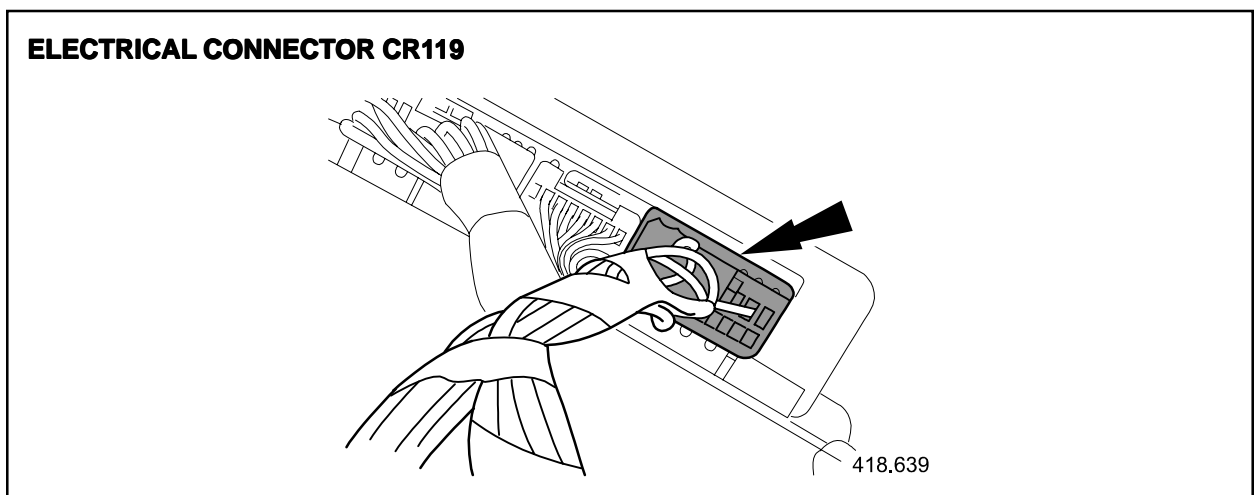


ILLUSTRATION 7

2. Displace electrical harness from mounting point.
3. Align harness for access to electrical connector.

- Using the male pin 418-411-47 from the harness repair kit, check the integrity of pin 6 and 7 (Illustration 8).

Note: The male to female electrical connection must be firm, and be felt for the full length of the electrical connector. If there is initial resistance then the pin slips freely into the female pin, replace the female pin. If there is any doubt replace the female pin. Repeat this check with the new pin to verify a proper fit.

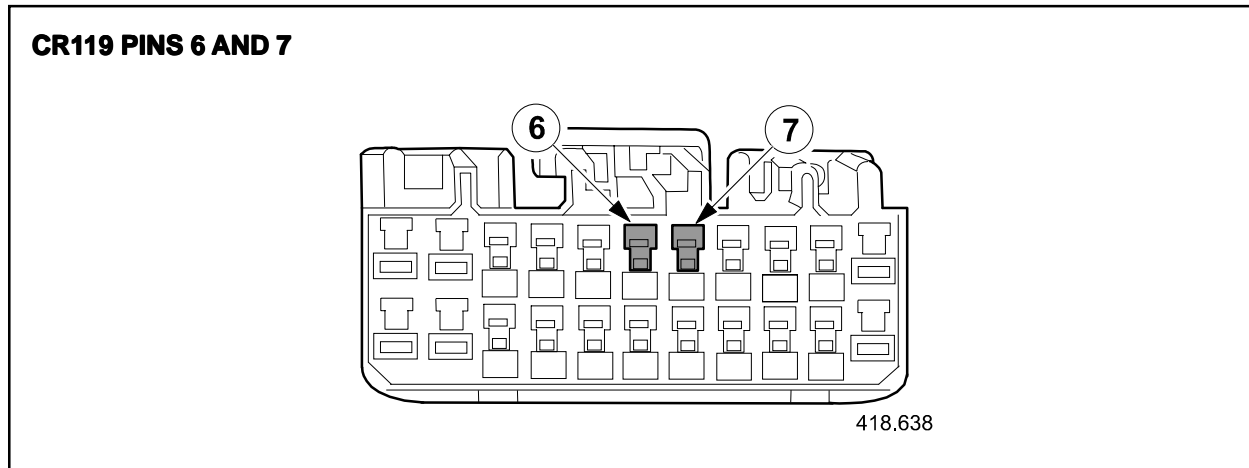


ILLUSTRATION 8

- If pins require replacing, displace anti-back-out device, strip back the harness tape to adequate length to facilitate repair. If not continue with step 18 of this procedure.
- Remove the anti-back-out device from the electrical connector.
- Displace affected pin(s) from the electrical connector using special tool 'A' from the harness repair kit.
- Unwind the affected cable from the Controller Area Network (CAN) bus second cable.
- Cut back affected cable to the required length to facilitate repair.
- Strip back outer casing of the cut cable 6 to 7 mm.
- Crimp butt-splice connector 418-107 from the harness repair kit to the prepared cable.
- Strip back outer casing from the new pre-terminated end **418-411-75**.
- Crimp the new pre-terminated end to the butt-splice connector.
- Slide heat shrink tube 418-104 from the harness repair kit over the butt-splice connector.
- Using a suitable heat source, shrink the tube over the butt-splice connector.
- Insert the new pin(s) into the electrical connector.
- Insert the anti-back-out device.
- Re-route harness to original position.
- Secure electrical harness to mounting point.

20. Connect electrical connector CR119.
21. Install driver side lower instrument panel finisher with the securing scrivenets.
22. Remove fender protector covers and close hood.
23. Connect battery (see Workshop Manual, section: 414-01).
24. Power driver seat to original position.
25. Close driver door.

Global Technical Reference (GTR) Workshop Manual Information:

Dealer access: <https://hub.franchise.jaguar.com>

Internet access: <http://www.jaguartechno.com>

Warranty Information:

Warranty claims should be submitted quoting the information found in the table below. This will result in payment of the stated time and, where applicable parts/miscellaneous expense codes as listed.

Description	SRO	Time	Causal Part Number
Multiple warnings on instrument cluster service fix	86.93.30	1.6 hrs	C2C 13290