



Leaders In Vehicle Integration

TOYOTA LANDCRUISER LC70 SINGLE CAB 2016+

# Integrated Smart Compressor

TYLC7-012AK-CMP

## INSTALLATION GUIDE

Revision Date 19/03/24



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1. Introduction	2 - 3
1.1 Pre-installation Preparation	2
1.2 Tools and equipment	2
1.3 Safety Precautions	2
1.4 Integrated Compressor Kit	3
2. Installing Integrated Compressor	4 - 11
3. Supplement: 24MY+ LC70 AUTO – IGN harness connection to 12V source	12 - 13
4. Supplement: Pre 20MY LC70 – Switch Panel Insert	14

## 1. Introduction

### IMPORTANT

Please ensure that you read and review this guide in its entirety before attempting any modifications to vehicle.

#### 1.1 Pre-installation Preparation

For a full list of what is required, please refer to the Tools & Equipment section of this document. Make sure you check that you have all the equipment on hand prior to starting. Take a good look through the items in the kit and familiarise yourself with each item.

#### 1.2 Tools and Equipment

- 10mm Socket
- 12mm Socket
- 14mm Socket
- Electrical Tape
- Cable Ties
- Wire Puller (1500mm min)
- Plastic Panel Remover Tool
- Side Cutter
- Scissors
- P2 Phillips Head Screwdriver
- Pin Removal Tool
- Cable lubricant

#### 1.3 Safety Precautions

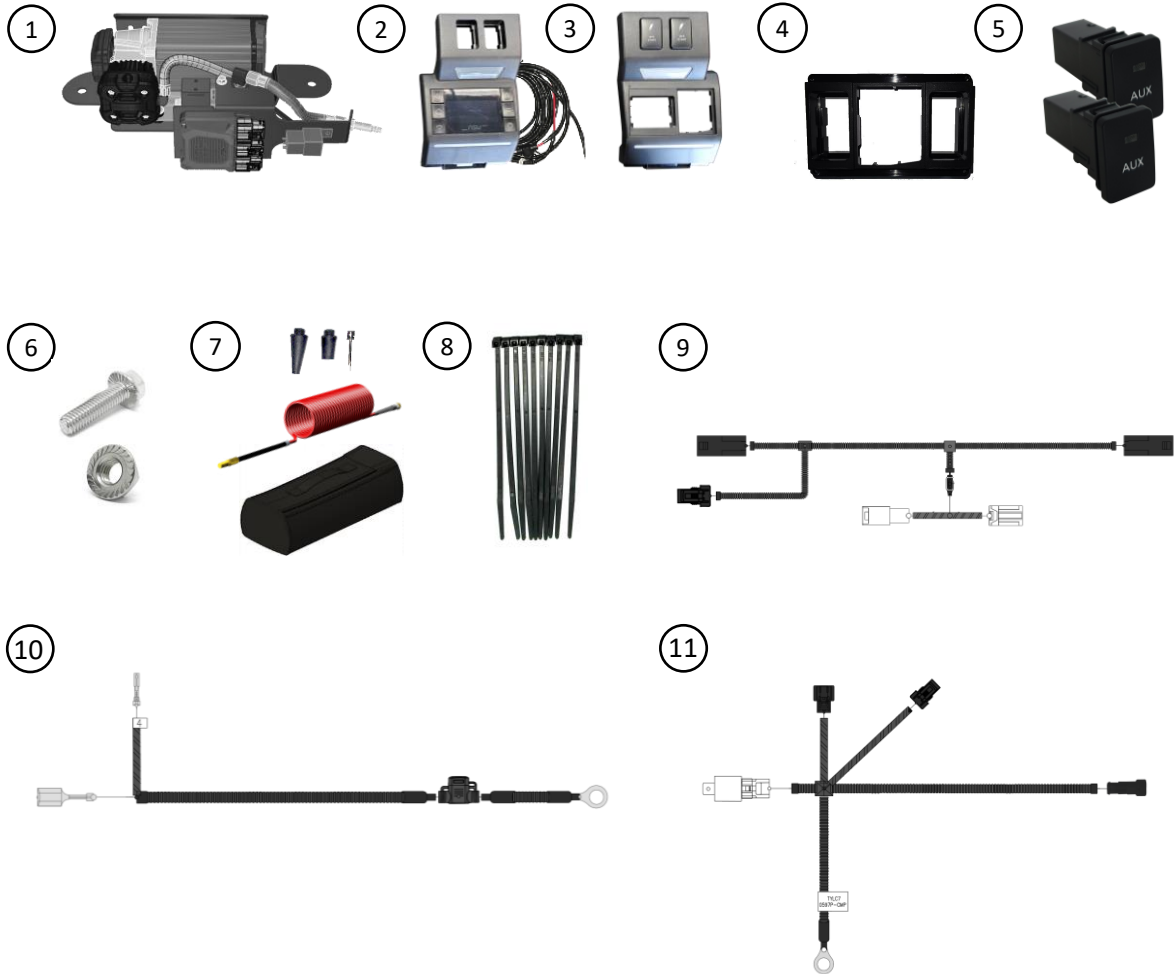
It is the responsibility of the installer to ensure all safety precautions are taken during the installation of this kit.

All tools and equipment must be in good working condition and appropriate for the intended task.

All appropriate Personal Protection Equipment (PPE) must be worn, including safety glasses and gloves if required.

If you are unsure at any stage of the installation, STOP WORK, make safe the immediate work area and seek assistance.

## 1.4 Integrated Compressor Kit



Item	Description
1	Compressor unit, ECU, main mounting bracket
2	LHS compressor control panel with display harness connector
3	RHS panel with mood light
4	Pre 20MY Drivers side switch panel insert
5	Passenger side AUX Switches x2
6	1x M5 Nut and Bolt
7	Inflation accessories and Air Hose storage bag
8	Cable ties
9	Display panel /IGN harness
10	Battery power harness
11	Main compressor harness

## 2. Installing Integrated Compressor Kit



1. Prepare interior for installation by completely removing passenger side front seat, glovebox, passenger and driver side dash trim pieces and cup holder/USB console. See steps 2-10 for detail.



2. Using a 14mm socket remove 4x seat mounting bolts. Rear seat mounting bolts are behind plastic covers. Carefully remove the front passenger seat from vehicle – take extra care not scratch plastic or painted surfaces.



3. Use a Phillips screwdriver to remove screws securing the door sill protector and a plastic tool to remove the protector. Remove the plastic nut securing the footwell kick plate.



4. Using a 10mm socket remove the bolt securing the lower plastic trim panel. Lower panel must be removed to allow removal of upper panel. Use a plastic tool to remove upper panel.



5. Remove glovebox by compressing the sides until glovebox hinges disengage. Glovebox can now be unclipped from the bottom and removed.



6. Use a 10mm socket to remove the bolt securing lower plastic panel. Use a plastic tool to remove the panel. **DO NOT** disconnect bonnet release cable.

## 2. Installing Integrated Compressor Kit



7. With the lower panel removed, use a plastic tool to remove the upper panel. Carefully disconnect connector from back side of panel.



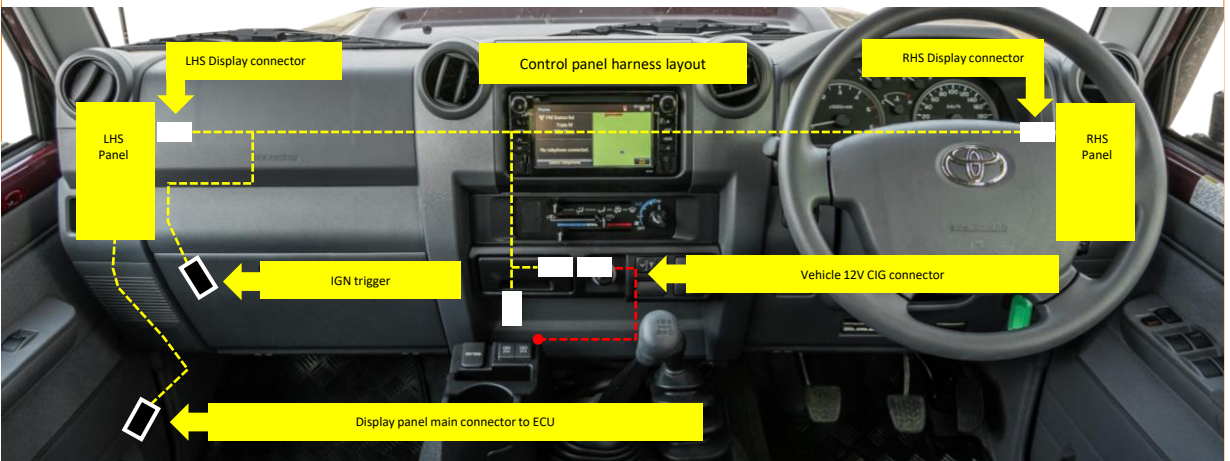
8. Use a 10mm socket to remove the two bolts securing the center console cup holder. **Note: For steps on installing IGN harness in 24MY+ automatic vehicles, see supplement pages 12-13 of this guide.**



9. Remove 2x Phillips screws at backside of console and plastic clip. Console can now be removed from mounting bracket. Remove 2x Phillips screws from bottom of console to access 12v connectors.



10. Dash/center console area is now prepped for display panel harness installation.

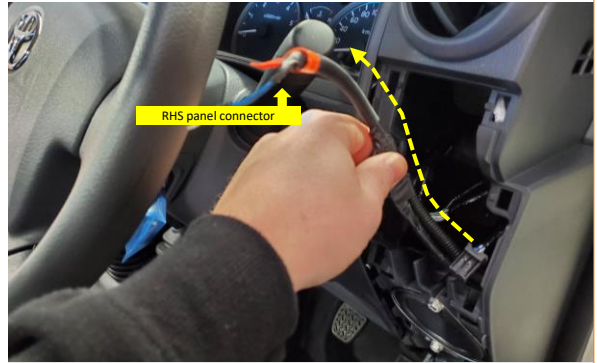


11. Please use the above diagram as reference for display panel and harness layout. See steps 12-18 for installation details. **Note: For 24MY+ Automatic, see supplement pages 12-13 of this guide.**

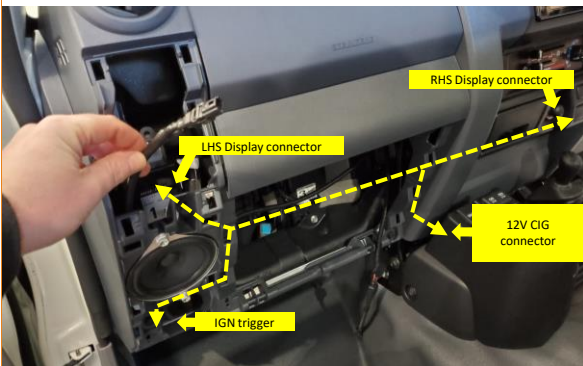
## 2. Installing Integrated Compressor Kit



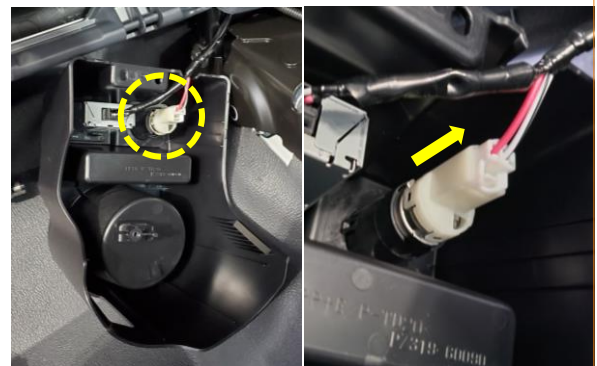
**12.** Attach RHS panel connector to wire puller and pull through center console and up into the RHS speaker cavity. Be careful to avoid pedal mechanisms and steering components.



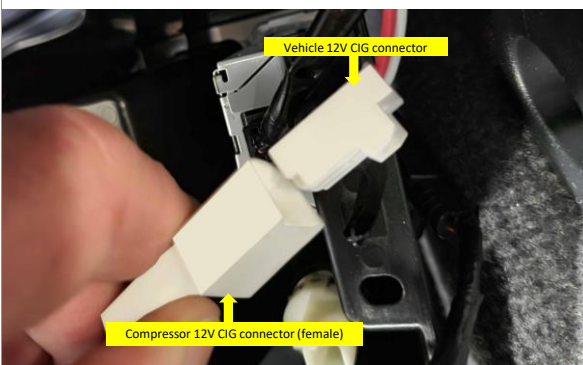
**13.** Pull passenger side panel connector through cavity.



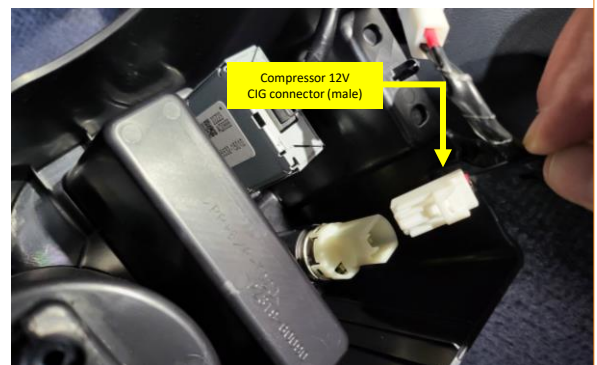
**14.** Route the LHS display connector to top of speaker cavity. Route the white IGN connector out of the bottom of glovebox towards footwell area. Route the 12V CIG connector towards center console cup holder.



**15.** Remove the factory connector from the back of the vehicle 12V accessory socket. **Note:** For steps on installing IGN harness in 24MY+ automatic vehicles, see supplement pages 12-13 of this guide.

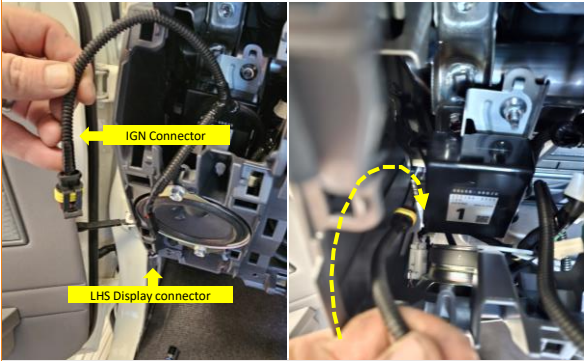


**16.** Connect the supplied T harness to the factory 12v connector.



**17.** Connect the control panel IGN connector to the vehicle 12V accessory socket.

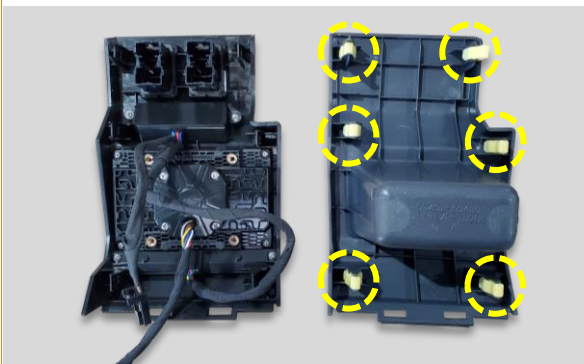
## 2. Installing Integrated Compressor Kit



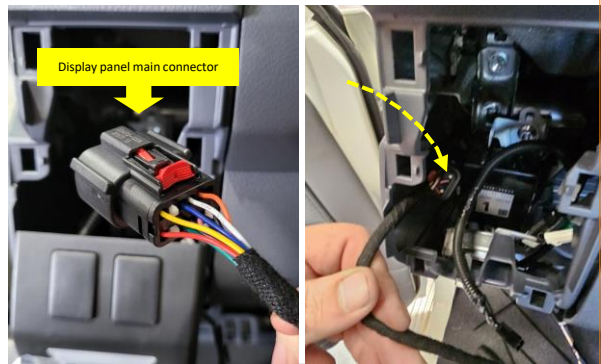
**18.** Route the IGN harness connector into the glove box, exiting below the glovebox in the front passenger footwell area.



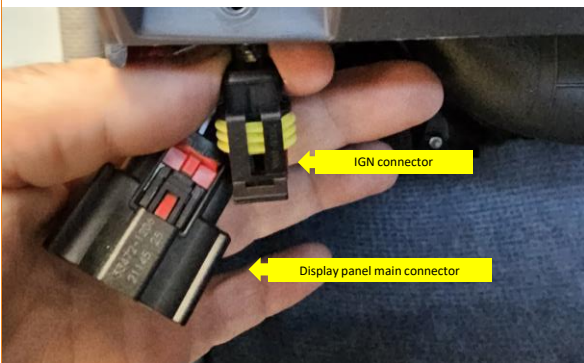
**19.** Remove and transfer existing factory switches to driver side panel. Install the provided AUX switches into the passenger side panel. **Note:** to adapt driver side switch insert to suit pre 20MY vehicles, see supplement page 14 of this guide.



**20.** Remove 6x yellow plastic clips from backside of LHS/RHS factory panels and attach supplied to compressor panels.



**21.** Route the LHS Display panel harness and connector into LHS cavity and down to the front passenger footwell area.



**22.** IGN and display panel connectors should now be accessible in front passenger footwell.



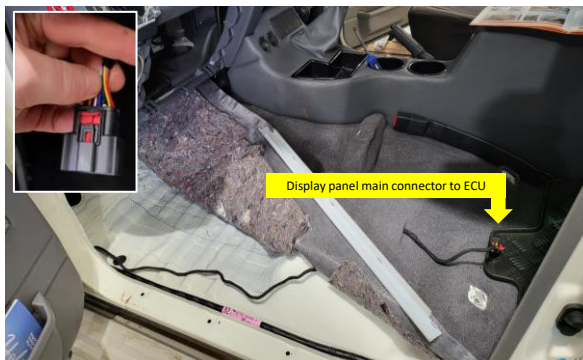
**23.** Connect the LHS display panel and RHS LED light panel connectors. Carefully clip the left and right-side panels into the dash.



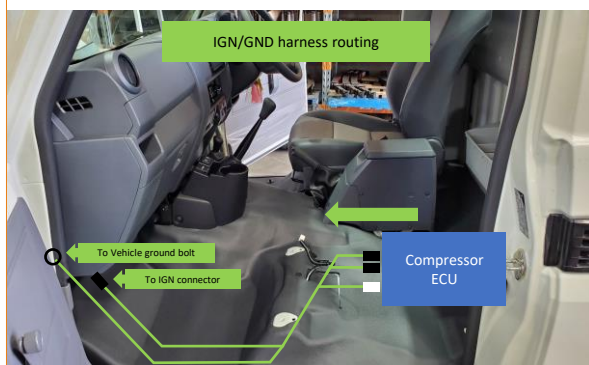
## 2. Installing Integrated Compressor Kit



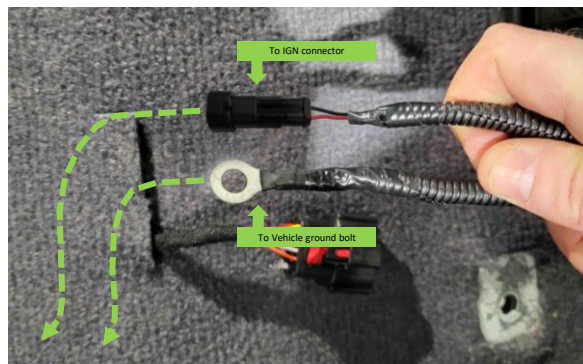
**24. For Vehicles with carpeted floor only.** To route the main display connector harness, and BATT, IGN and GND harnesses you will need to use a sharp blade and cut a 50-70mm hole in the carpet below the front passenger seat.



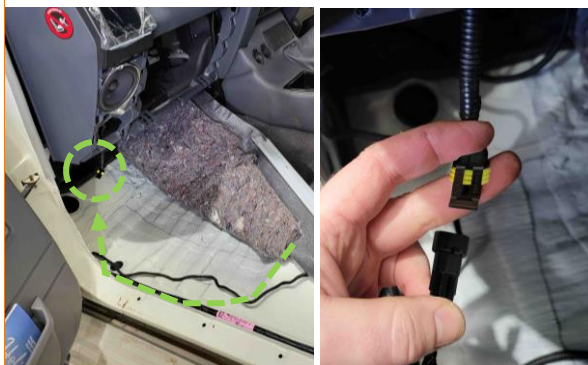
**25.** Route the main display connector along the door sill channel and across to the hole in the carpet/vinyl. Pull the connector through the hole and leave ready for connection to compressor ECU.



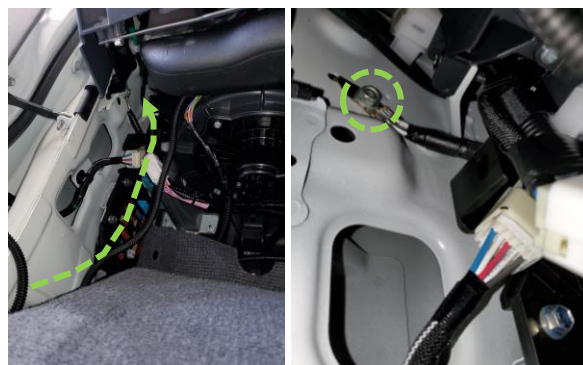
**26.** Route the IGN/GND harness from the cut hole, along the door sill channel towards the front passenger footwell.



**27.** Carefully insert the IGN/Power connector and ground terminal into the hole and route towards front passenger door sill.

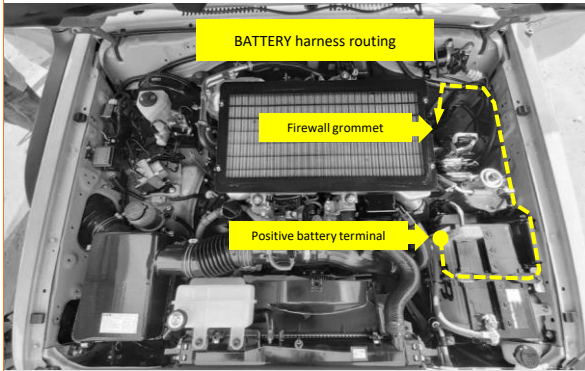


**28.** Connect the IGN connectors and secure the harness to existing vehicle harness behind glovebox using supplied cable ties.

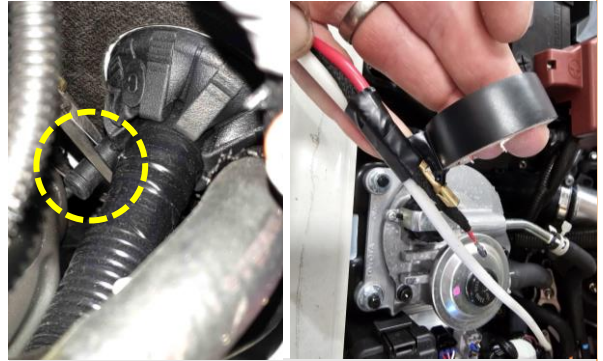


**29.** Route the ground wire up and into the passenger side footwell. Use a 10mm socket or spanner to remove the factory bolt. Mount the ground wire eyelet, return the factory bolt and tighten till secure.

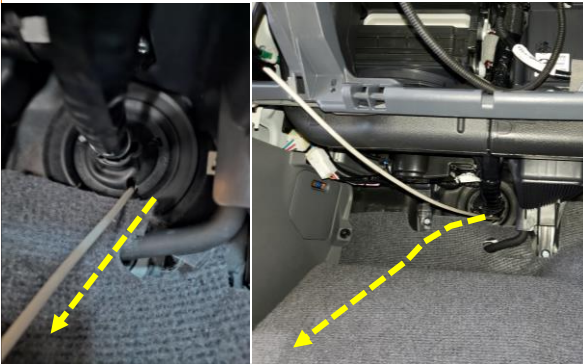
## 2. Installing Integrated Compressor Kit



**30.** The battery harness will be routed from the battery cradle, through the engine bay firewall and into the passenger side footwell. Apply cable lubricant as needed.



**31.** Locate the passenger side firewall grommet and use scissors or a sharp blade to remove the tip from the available nipple. Attach the battery harness to a wire puller and feed through the grommet nipple.



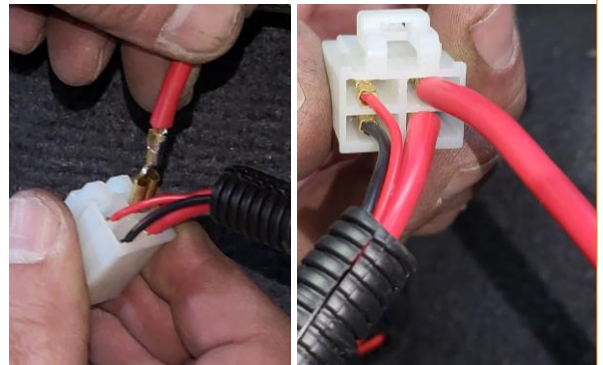
**32.** The wire puller will exit in the passenger side footwell, pull the battery harness through to the vehicle interior.



**33.** Route the battery harness along the door sill channel and across to the carpet cut. Pull the harness through the cut.

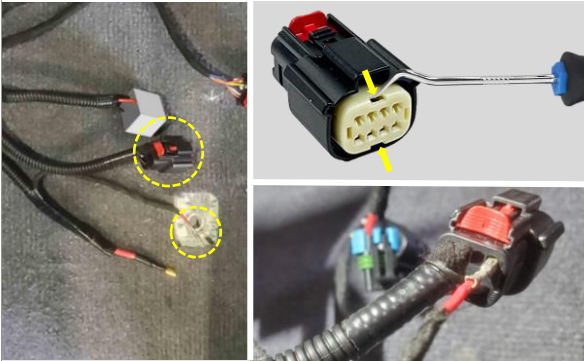


**34.** Use a sharp knife to cut a portion of the under carpet/vinyl plastic edge material as per picture. This will create a channel for the compressor harnesses to pass through.



**35.** Connect the large RED wire to the relay as per image, make sure the terminal is securely locked in place.

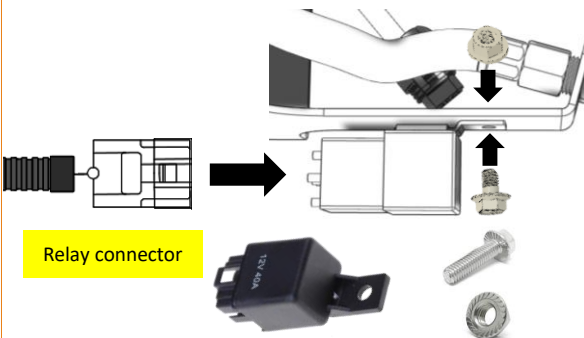
## 2. Installing Integrated Compressor Kit



**36.** Use a pick tool to prise the end cap partially off connector. Connect the small RED wire to the battery/power connector as per image, make sure the terminal is securely locked in place. Push the end cap back into position.



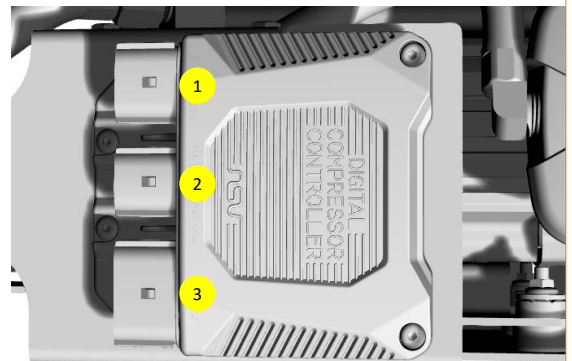
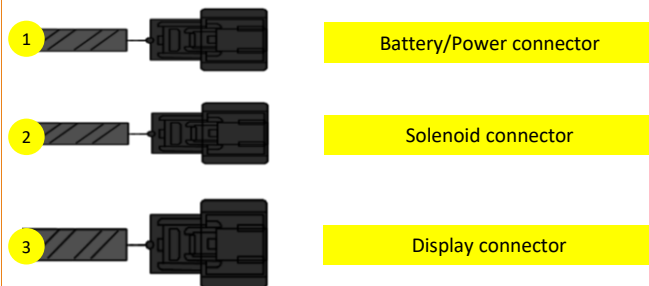
**37.** Carefully place the compressor unit into the installation area.



**38.** Use a 10mm socket and ring spanner to mount the relay to the compressor bracket using the supplied M5 flange bolt and nut. Once mounted connect the relay connector.



**39.** Connect power connector to compressor.



**40.** Connect Battery, Solenoid and Display connectors to the ECU. Make sure that locking clips are fully engaged and secure.

## 2. Installing Integrated Compressor Kit



**41.** Ensure compressor mounting bracket bolt holes are correctly aligned with factory seat bolt holes before returning passenger seat.



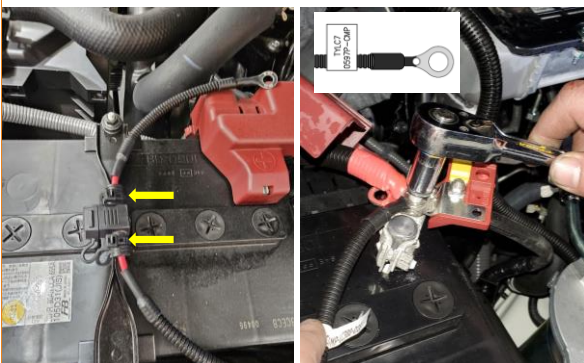
**42.** Passenger seat can now be reinstalled.



**43.** Take care not damage paint work or plastic trim parts. Reconnect under seat harness if present.



**44.** Using a 14mm socket reinstall 4x seat mounting bolts. Make sure to tighten securely in place. Replace door sill trim pieces.



**45.** Use a 12mm spanner or socket to mount the power harness eyelet to the POSITIVE terminal of the battery.



**46.** Connect airline to tire and use the digital pressure gauge to set tire pressure and start the system to begin inflation/deflation cycle.

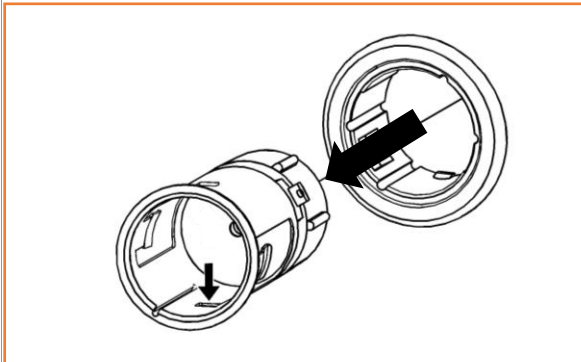
3. Supplement: 24MY LC70 AUTO – IGN harness connection to 12V source



1. Turn key to the ON position, press the brake pedal and shift the gear lever to D.



2. IGN T harness will be routed through the 12V socket and across to the glovebox area. Open the 12V socket cover to begin socket removal process.



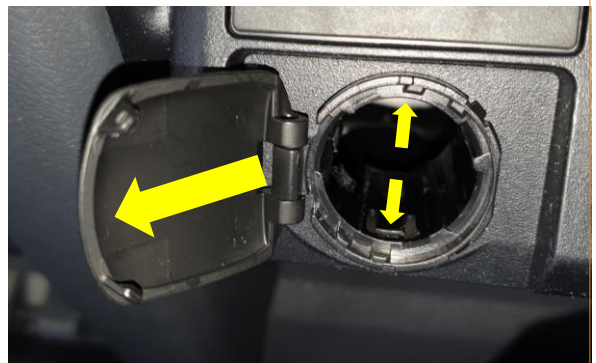
3. Use a pin removal tool to release the locking pin. The socket will unclick and slide out.



4. Reach through glove box opening and locate the back side of the 12V socket. Apply gentle pressure to the back of the socket as you release the interior retention clip. The socket will unclick and slide out.

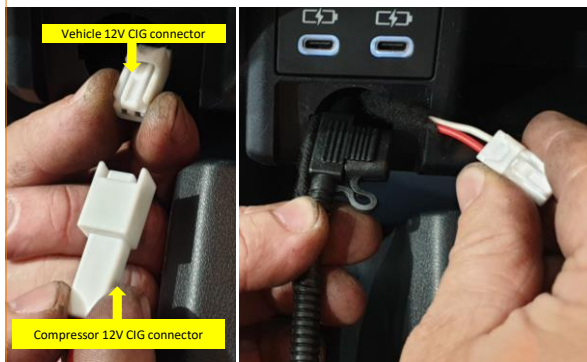


5. Use pin removal tool to release the connector lock and unplug socket from factory 12V harness.



6. Locate the two locking clips inside the socket lid unit. Gently lift each one up while pulling the complete unit with light pressure. The unit will unclick and slide out.

3. Supplement: 24MY LC70 AUTO – IGN harness connection to 12V source



7. Connect the supplied T harness to the factory 12V connector and route the complete harness through the socket hole. Pull it out from the glovebox opening while leaving the white male connector of the T harness hanging outside.



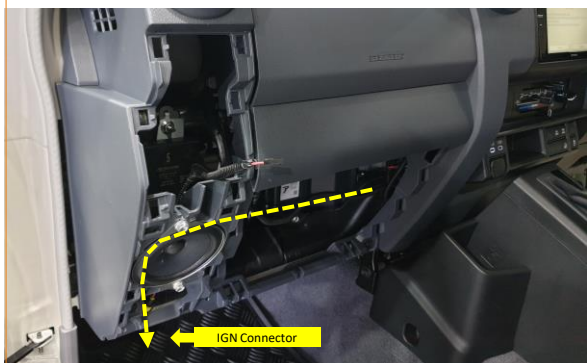
8. Reinstall the power socket lid unit back into its place and click lock it.



9. Connect the 12V power socket cylinder unit to the male white connector.



10. Insert the socket in its place and click lock it. Make sure the cutouts on the edges of the cylinder are aligned to the plastic tabs on the lid unit.

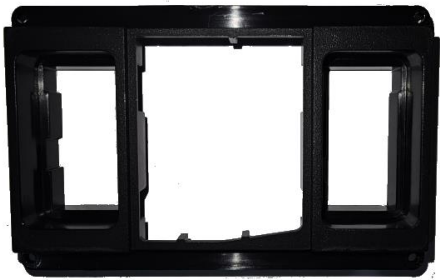


11. IGN harness connector should be routed behind the glovebox towards front passenger footwell area.

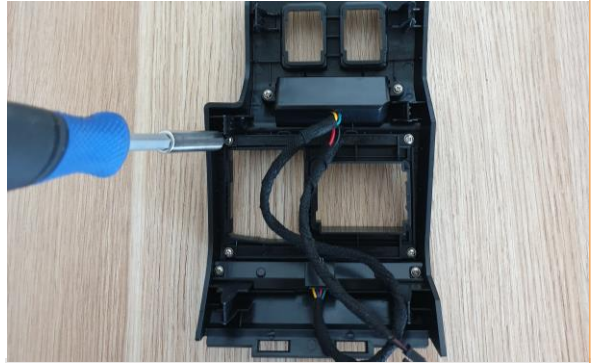


12. IGN T harness installation is complete.

#### 4. Supplement: Pre 20MY LC70 – Switch Panel Inserts



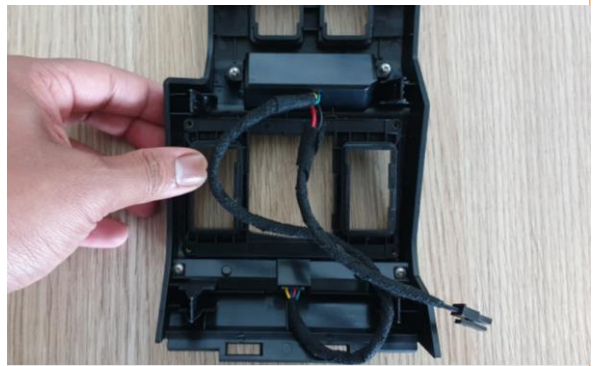
**1.** Your compressor kit is supplied with a replacement switch panel for pre 2020 models that feature a different switch cluster on the driver side.



**2.** To swap the panels use a Phillips screwdriver to remove the four Phillips screws securing the panel.



**3.** Remove the factory fitted switch panel.



**4.** Insert and align the pre 20MY switch panel.



**5.** Reinstall the four Phillips screws.



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