# RCMP501-A
## Selective Chime Mute Module
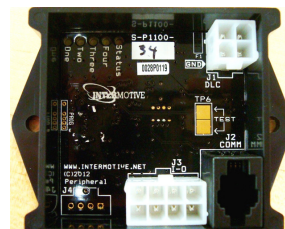### 2013-2015 Ford Police Interceptors (Sedan and Utility)

## Introduction

The RCMP501-A module aids in covert operations by selectively muting certain OEM vehicle chimes and disabling the daytime Running Lights (DRL). The following four vehicle chimes are muted:

**Safety Belt Warning Chime  -** Key switched to Run, driver seatbelt unbuckled.

**Key-in-Ignition Warning Chime -** Key in Off (or ACC), door opened.

**Headlamps On Warning Chime  -**  Headlights on, door opened (Key Off or removed).

**Door Ajar Warning Chime -**  Key in Run, Transmission in Park, Door opened/ajar.

It is the installer's responsibility to route and secure all wiring harnesses where they cannot be damaged by sharp objects, mechanical moving parts and high heat sources. Failure to do so could result in damage to the system or vehicle and create possible safety concerns for the operator and passengers.

It is important to avoid placing the module where it could encounter strong magnetic fields from high current cabling connected to motors, solenoids, etc.  Also avoid radio frequency energy from antenna's or inverters next to the module.  Finally, avoid high voltage spikes in vehicle wiring by always using diode clamped relays when installing upfitter circuits.

## Installation Instructions

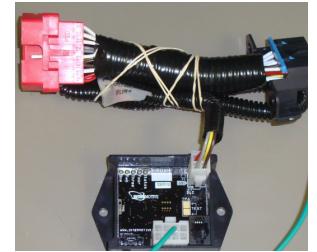### Disconnect vehicle battery before proceeding with installation

**WARNING**
Disconnect the battery to prevent setting a check engine light.

### RCMP501 Module

Remove the lower dash panel below the steering column area and find a suitable location to mount the RCMP501-A module. Choose a location in an area away from any external heat sources (engine heat, heater ducts, etc.).  Do not mount the module until all post installation testing is complete and wire harnesses are routed and secure.

---

InterMotive Inc.
13395 New Airport Road
Auburn, CA 95602

www.intermotive.net
products@intermotive.net
RCMP501-A-INS-100314

## Data Link T-Harness

1. Locate the vehicle's OBDII Data Link Connector. It will be mounted below the lower left dash panel.

2. Remove the OEM mounting screws for the OBDII connector. Plug the red connector from the RCMP501-A Data Link Harness into the vehicle's OBDII connector. Ensure the connection is fully seated and secure connectors together with the supplied wire tie.

3. Mount the black connector from the RCMP501-A Data Link Harness in the former location of the vehicle's OBDII connector.

4. Do **not** plug the white 4 pin connector into the RCMP501-A module at this time.

## Single Green Wire Connection

The RCMP501-A kit provides a second harness which consists of a white 8 pin connector with the 4' long Green wire.
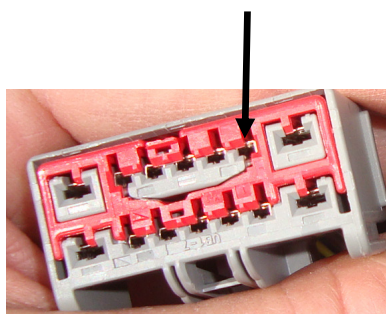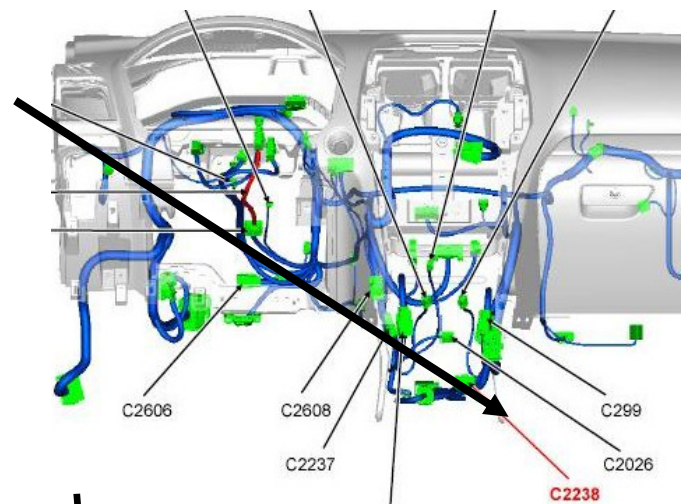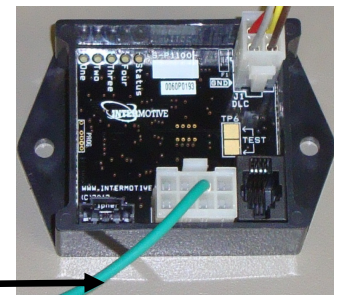
1. Plug the 8 pin connector into the RCMP501-A module.

2. Connect the Green wire to the vehicle as follows:

Note: There are two possible locations on the vehicle to make this connection.
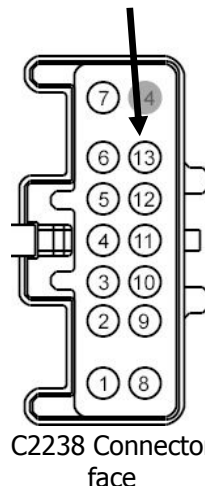
### To Upfitter Harness under the Dash Center Stack

It's easiest to connect the RCMP501-A to the upfitter wire provided by Ford near the bottom of the dashboard center stack area. See drawing. Ford provides a 14 pin connector C2238 and a mating upfitter blunt cut harness.

Locate the Green/Violet blunt cut wire coming out of pin 13 (be certain it is the Green/Violet wire in **pin 13**, as there are multiple Green/Violet wires in this harness). Attach the pin 13 wire to the RCMP501-A Green wire using solder and heat shrink.

C2606    C2608    C299

C2237    C2026

C2238

Upfitter Harness Connector

C2238 Connector face

OEM provided Upfitter Harness (in glove box) mates with C2238 Connector

InterMotive Inc.
13395 New Airport Road
Auburn, CA 95602

Phone: (530) 823-1048
Fax: (530) 823-1516
Page 2 of 6

www.intermotive.net
products@intermotive.net
RCMP501-A-INS-100314

## Alternate Location near Left Kick Panel

An **alternate** location to connect the Green Wire, pin 3 on the 8 pin connector at the RCMP501-A module is in a wire bundle behind the driver's side kick panel (See photo).



Locate the Green/Violet wire in the wire bundle (see photo below).  Strip a small amount of wire insulation from the Green/Violet wire (<u>do not cut this wire</u>) and attach the Green Wire, pin 3 on the 8 pin connector at the RCMP501-A module using solder and tape.

InterMotive Inc.
13395 New Airport Road
Auburn, CA 95602

Phone: (530) 823-1048
Fax: (530) 823-1516
Page 3 of 6

www.intermotive.net
products@intermotive.net
RCMP501-A-INS-100314

## Daytime Running Lights

This option will turn the daytime running lights Off.  Connect Pin 8 of the 8 Pin connector Orange wire to a switch that supplies a 12V signal (configurable) when the user desires the DRL's turned Off. The module will only activate/deactivate daytime running lights when transmission range not in PARK.

**Note:**  Toggling Daytime Running Lamps results in the radio clicking off momentarily as well as causing the headlights to briefly flash.

## DRL Post Installation Test

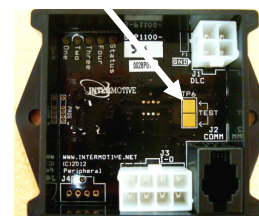With vehicle in Park, Parking Brake applied, and Key OFF:

1. Turn Key on and plug the 4 pin connector into the RCMP module. Verify that the LED's on the module are not scrolling.
2. Place Car in Neutral and verify DRL's  are ON.
3. Apply 12V signal to Pin 8 (Orange wire). Verify the DRL's are turned OFF.
4. Remove 12V signal from Pin 8 and  verify DRL's are turned back ON.
5. Place vehicle back in Park.

## Enabling/Disabling the DRL option

To toggle this function, perform the following procedure:

1. Short the two test pads together on the module to enter diagnostics mode. Verify the Status LED illuminates.
2. Apply the vehicle's Low headlight beams.
3. Apply the vehicle's High headlight beams.
4. Cycle the Service Brake 3 times within 5 seconds.  All LED's on the module will flash once for confirmation.
5. Cycle the key for the changes to take affect.

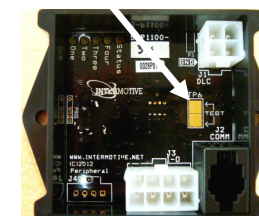Repeating this procedure will toggle this option On and Off.

## Headlight Configuration

The default setting is for a vehicle with Halogen headlights.  If the vehicle has HID headlights, perform the following:
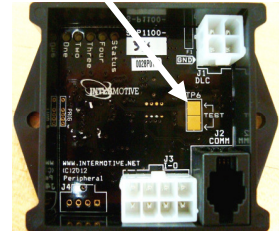
1. Short the two test pads together on the module to enter diagnostics mode. Verify the Status LED is illuminated.
2. Apply and hold the Service Brake.
3. Apply the Park Brake.
4. Cycle the Low beams 3 times within 5 seconds.  All LED's on the module will flash once for confirmation.
5. Cycle the key for the changes to take affect.

Repeating this procedure will toggle between Halogen and HID headlights.

InterMotive Inc.
13395 New Airport Road
Auburn, CA 95602

Phone: (530) 823-1048
Fax: (530) 823-1516
Page 4 of 6

www.intermotive.net
products@intermotive.net
RCMP501-A-INS-100314

## DRL Input Sense Active High or Active Low

The default input sense for the Orange wire, pin 8 on the RCMP module is active high.  If an active low input sense is desired, perform the following:

1. Short the two test pads together on the module to enter diagnostics mode. Verify the Status LED is illuminated.
2. Apply the vehicle's low beams.
3. Apply and hold the Service Brake.
4. Cycle the High Beams 3 times within 5 seconds.  All LED's will flash once for confirmation.
5. Cycle the key for the changes to take affect.

Repeating this procedure will toggle between an active high or low input sense.

## Diagnostics

Diagnostic mode is entered by momentarily grounding the Gold test pad labeled "Test" on the module. This can be done with a jumper wire by shorting the two "TEST" pads together, The module provides diagnostic LEDs which illuminate according to the following table. To exit this mode, cycle the key.

| LED # | Diagnostic Mode LED Descriptions |
|-------|----------------------------------|
| 1 | Headlight Status - Halogen if LED is On, HID if LED is Off |
| 2 | DRL Input Sense - Active High if LED is On, Active Low if LED is Off |
| 3 | DRL Inhibit - Active if LED is On, inactive if LED is Off |
| 4 | DRL Enabled - DRL option enabled if LED is On, DRL option disabled if LED is Off |

## Chimes Post Installation Test

With vehicle in Park, Park Brake applied, and Key OFF:

1. Turn Key to Run (do not start engine) and plug the 4 pin Data Link connector into the RCMP501-A module.  This allows the RCMP501-A to read the vehicles VIN to verify which vehicle it is plugged into.

2. Verify that the LED's on the module are not scrolling (VIN is acquired and recognized).

3. Verify the following chimes no longer sound:

**Key-in-Ignition Warning Chime -** Key in ignition (Off or ACC), door opened
**Headlamps On Warning Chime  -**  Key removed, Headlights on, door opened
**Door Ajar Warning Chime -**  Key in Run (engine on or off), Trans in Park, Door ajar (chime will sound if Transmission is out of Park).
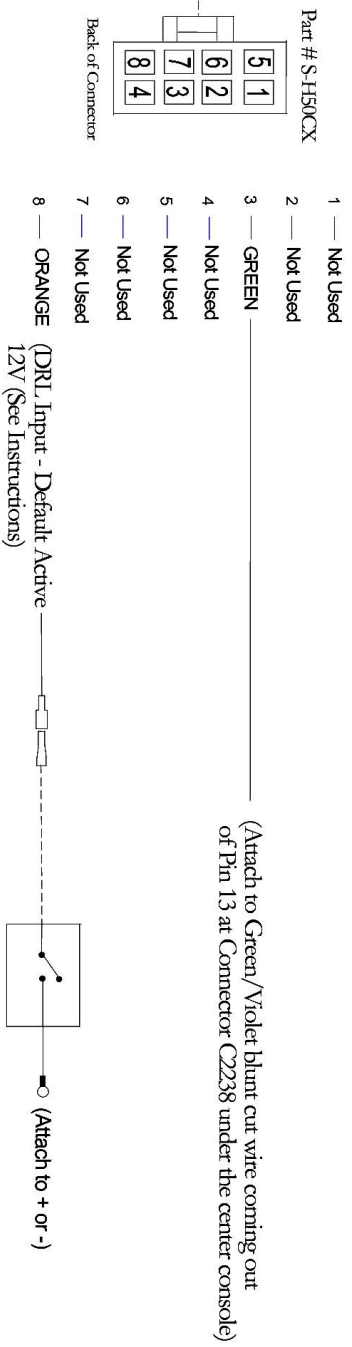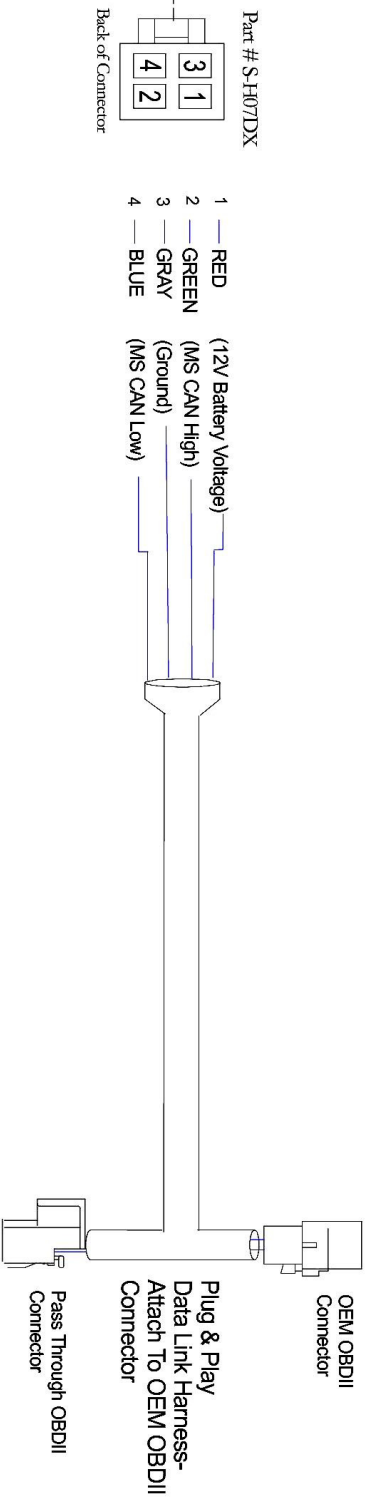**Safety Belt Warning Chime  -** Key switched to Run, driver seatbelt unbuckled. Note: this last chime may sound occasionally due to the electrical architecture of the vehicle.  This is normal behavior and cannot be avoided.

If the RCMP501-A fails any step in the Post Installation Test, call InterMotive Technical Support at (530) 823-1048.

## RCMP501-A Module Mounting
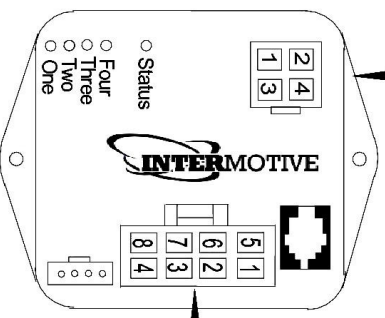
Ensure all harnesses are properly connected and routed, and are not hanging below the dash area. Mount the RCMP501-A module and secure using supplied screws or double sided tape.

## Reconnect vehicle battery

InterMotive Inc.
13395 New Airport Road
Auburn, CA 95602

Phone: (530) 823-1048
Fax: (530) 823-1516
Page 5 of 6

www.intermotive.net
products@intermotive.net
RCMP501-A-INS-100314

RCMP501
Part # S-M1100-53

Status
○ Four
○○○ Three
○○ Two
○ One

Part # S-H07DX

Back of Connector

1 — RED      (12V Battery Voltage)
2 — GREEN    (MS CAN High)
3 — GRAY     (Ground)
4 — BLUE     (MS CAN Low)

Part # S-H50CX

Back of Connector

1 — Not Used
2 — Not Used
3 — GREEN
4 — Not Used
5 — Not Used
6 — Not Used
7 — Not Used
8 — ORANGE

(Attach to Green/Violet blunt cut wire coming out of Pin 13 at Connector C2238 under the center console)

(DRL Input - Default Active 12V (See Instructions))

(Attach to + or -)

OEM OBDII Connector

Plug & Play Data Link Harness- Attach To OEM OBDII Connector

Pass Through OBDII Connector

**Submit product registration at www.intermotive.net**

If the RCMP501-A fails any step in the System Operation Test, review the installation instructions and check all connections.
If necessary, call InterMotive Technical Support at (530) 823-1048