



# Technical Service Bulletin

SUBJECT:			No: <b>TSB-18-13-003</b>
<b>ENGINE DOES NOT RESTART AND/OR FAILSAFE MODE OCCURS DUE TO FROZEN RELAYS</b>			DATE: <b>December 2018</b>
			MODEL: <b>See below</b>
<b>CIRCULATE TO:</b>	<input type="checkbox"/> GENERAL MANAGER	<input checked="" type="checkbox"/> PARTS MANAGER	<input checked="" type="checkbox"/> TECHNICIAN
<input checked="" type="checkbox"/> SERVICE ADVISOR	<input checked="" type="checkbox"/> SERVICE MANAGER	<input checked="" type="checkbox"/> WARRANTY PROCESSOR	<input type="checkbox"/> SALES MANAGER

## PURPOSE

In extremely cold conditions, the Check Engine light may illuminate and vehicle speed will not increase (failsafe mode), or the engine does not restart after driving a short distance and stopping the engine for a few minutes. This may be caused by relays in the fuse box not operating due to being frozen.

This TSB instructs dealers to confirm a list of specific DTCs are present along with the symptoms described above. Then once symptoms and DTCs are confirmed, dealers should replace the following relays with anti-freezing types: ETV, A/T (CVT), injector, and starter.

**NOTE: If all DTCs are NOT present, the root causes for the symptoms may not be frozen relays.**

## AFFECTED VEHICLES

- 2008 - 2017 Lancer
- 2008 - 2015 Lancer Evolution
- 2010 - 2014 Lancer Sportback
- 2014 - 2015, 2017 - 2019 Mirage
- 2017 - 2019 Mirage G4
- 2007 - 2019 Outlander
- 2011 - 2019 Outlander Sport

**NOTE: Vehicles for Canadian market are not affected as these vehicles are already equipped with anti-freezing type relays in production.**

## REPAIR PROCEDURE

1. Confirm the following symptoms are occurring in extremely cold conditions:
  - Check engine light illuminates
  - Vehicle speed will not increase and vehicle enters failsafe mode
  - After driving a short distance and turning engine off for a few minutes, engine will not restart.
2. Refer to the **"Applicable DTC & Relay Tables"** section in this TSB and confirm that **ALL DTCs** listed have set for the specific vehicle, and replace the relays listed for the specific vehicle.
3. If all DTCs listed do NOT appear for the vehicles as listed in the **"Applicable DTC & Relay Tables,"** the root causes may be different than frozen relays. In this case, perform troubleshooting per diagnostic procedures in the applicable Service Manual. **Do NOT replace the relays.**

## APPLICABLE DTC & RELAY TABLES

- **Lancer (2008-2017)**
- **Lancer Evolution (2008-2015)**
- **Lancer Sportback (2010-2014)**
- **Outlander (2007-2013)**
- **Outlander Sport (2011-2019)**

Confirm that ALL DTCs listed are present for each vehicle as noted below.

RELAY	DTC	SYSTEM	SYMPTOM
MAIN	U0100	ASC, CVT, ETACS, EPS	Engine does not start
	C1290	ASC	
	P1561	EPS	
ETV	U1417	ASC	Rough idling, no revolution up
	C121C		
	P0657	ENGINE	
A/T (CVT)	U0101	ASC, ETACS, ENGINE	No acceleration, no shifting
	C1290	ASC	
	P1590	ENGINE	

If ALL DTCs listed above are present for the systems and vehicles shown, replace the following relays with the anti-freezing type listed below.

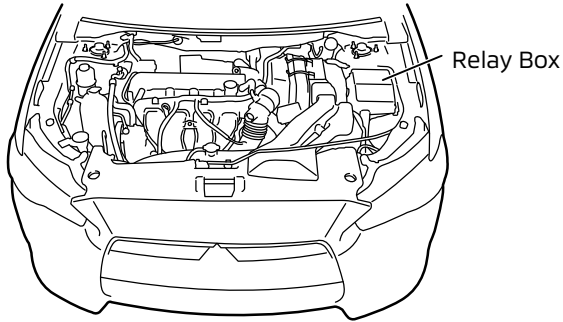
RELAYS TO REPLACE	PART NUMBER (anti-freezing type)	PART NAME	RELAY TYPE	QTY
MAIN	8627A050	RELAY, POWER	Mini ISO	1
ETV	8627A049		Micro ISO	1
A/T (CVT)*				1
INJECTOR				1
STARTER				1

\* When the following vehicles are equipped with transmission model F1CJC or W1CJC (CVT8), they do NOT have a CVT relay:

- 2016-2017 Lancer
- 2015-2019 Outlander Sport

**NOTE: Refer to the following illustrations for relay locations.**

Lancer, Lancer Sportback Relay Locations



Non-Turbo

Throttle actuator control motor relay (ETV)

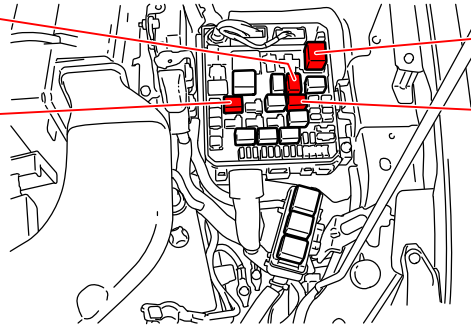
CVT control relay



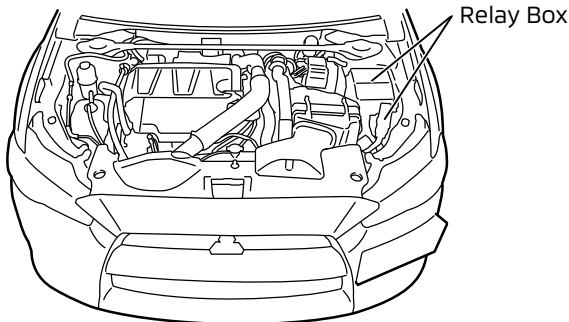
Turbo

Starter relay

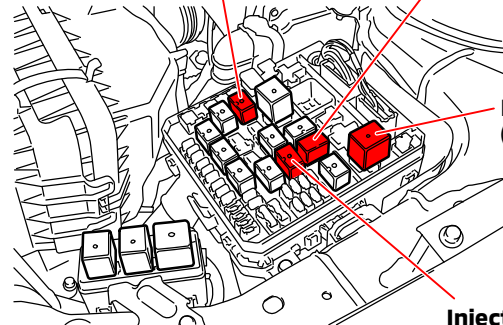
Throttle actuator control motor relay (ETV)



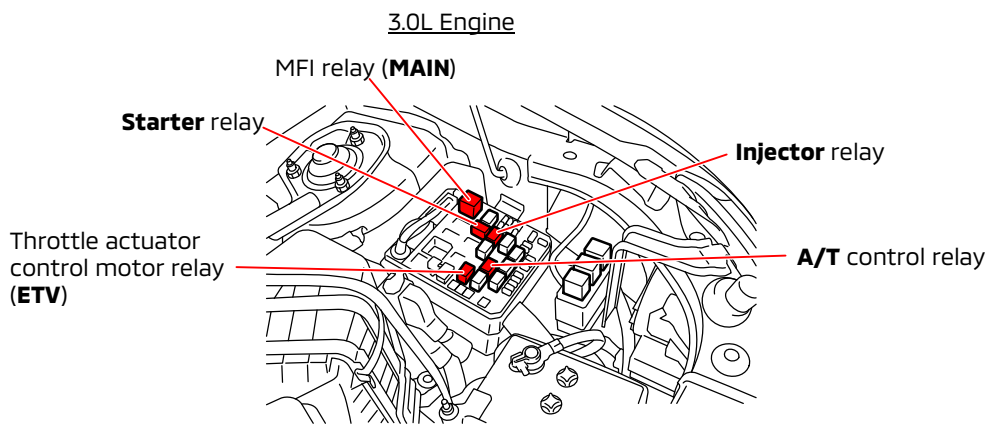
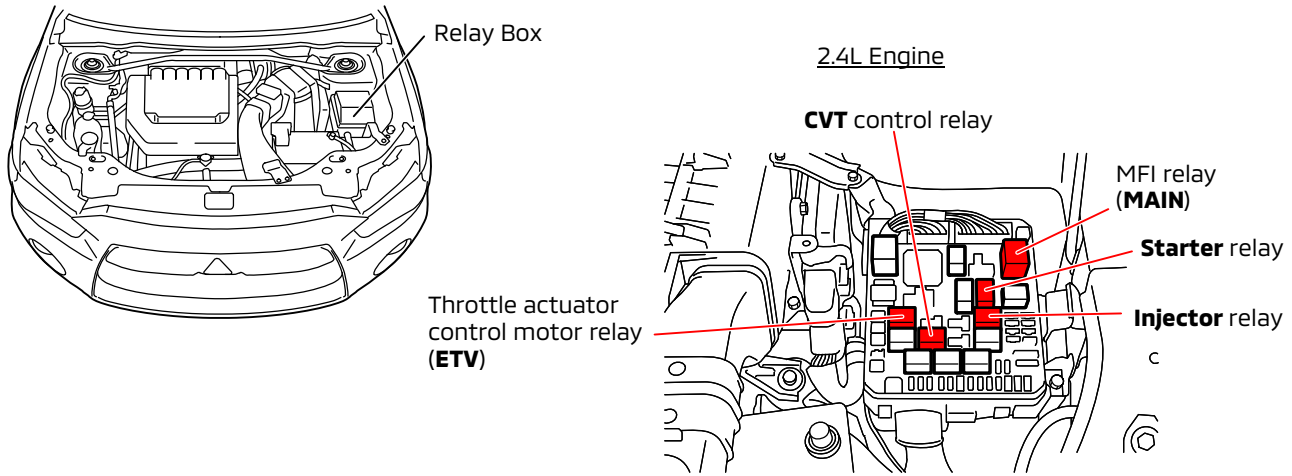
Lancer Evolution Relay Locations



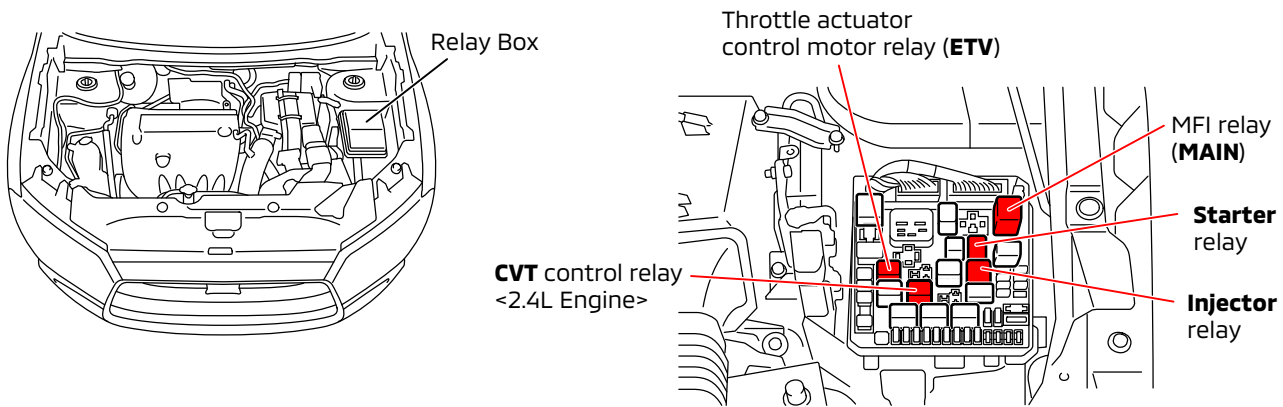
Throttle actuator control motor relay (ETV)



Outlander (2007-2013) Relay Locations



Outlander Sport Relay Locations



## APPLICABLE DTC & RELAY TABLES (continued)

- **Outlander (2014 - 2019)**

Confirm that ALL DTCs listed are present for each vehicle as noted below.

RELAY	DTC	SYSTEM	SYMPTOM
MAIN	U0100	ASC, CVT, ETACS, EPS, AWC	Engine does not start
	B1731*	ETACS	
	P1561	EPS	
	C1632	AWC	
	U15A4	OSS	
	U15A2		
ETV	C121C	ASC	Rough idling, no revolution up
	C1707		
	P0657	ENGINE	
A/T (CVT)	U0101	ASC, ETACS, ENGINE, AWC	No acceleration, no shifting
	P1590	ENGINE	
	C1633	AWC	

\* Equipped with KOS.

**If ALL DTCs listed above are present for the systems shown, replace the following relays with the anti-freezing type listed below.**

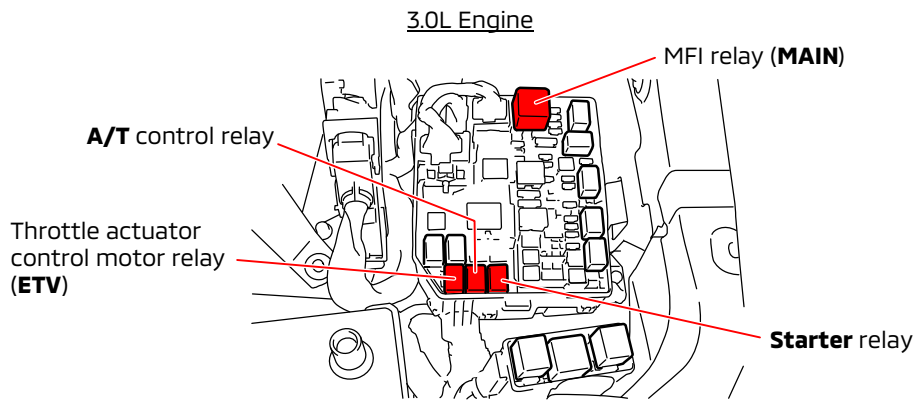
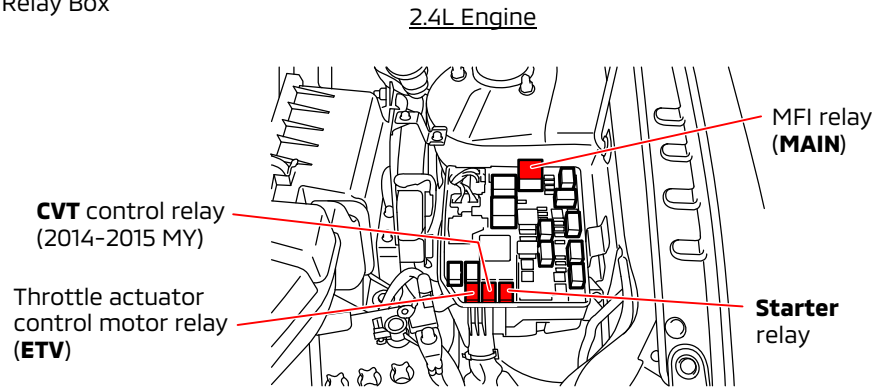
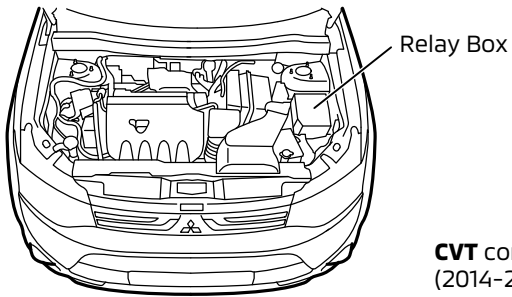
RELAYS TO REPLACE	PART NUMBER (anti-freezing type)	PART NAME	RELAY TYPE	QTY
MAIN	8627A050	RELAY, POWER	Mini ISO	1
ETV	8627A049		Micro ISO	1
A/T (CVT)*				1
STARTER				1

\* When the following vehicles are equipped with transmission model F1CJC or W1CJC (CVT8), they do NOT have a CVT relay:

- 2016 - 2019 Outlander

**NOTE: Refer to the following illustrations for relay locations.**

Outlander (2014-2019) Relay Locations



## APPLICABLE DTC & RELAY TABLES (continued)

- **Mirage (2014-2019)**
- **Mirage G4 (2017-2019)**

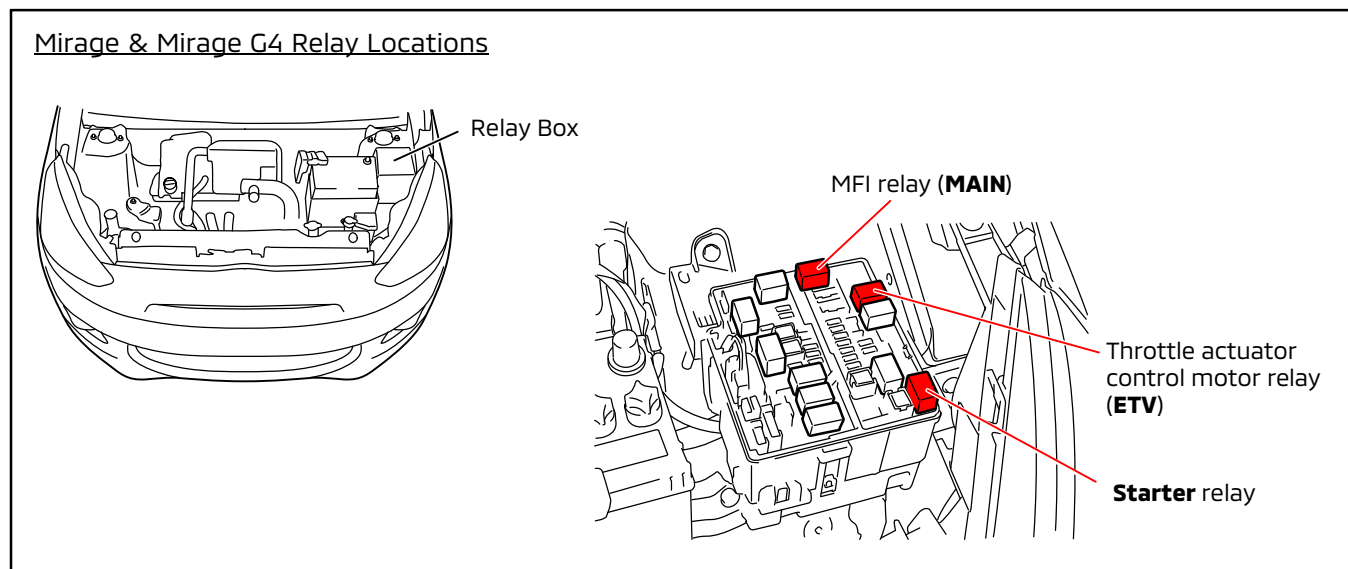
Confirm that ALL DTCs listed are present for each vehicle as noted below.

RELAY	DTC	SYSTEM	SYMPTOM
MAIN	U0100	CVT, EPS, KOS/OSS	Engine does not start
	U1100	ASC, ETACS	
	C1560	EPS	
	B1138	KOS/OSS	
	B1731		
ETV	C1396	ASC	Rough idling, no revolution up
	P0657	ENGINE	
STARTER	P1612	ENGINE	Engine does not start
	B1132	KOS/OSS	

If ALL DTCs listed above are present for the systems and vehicles shown, replace the following relays with the anti-freezing type listed below.

RELAYS TO REPLACE	PART NUMBER (anti-freezing type)	PART NAME	RELAY TYPE	QTY
MAIN	8627A050	RELAY, POWER	Mini ISO	1
ETV	8627A049		Micro ISO	1
STARTER			Micro ISO	1

**NOTE: Refer to illustrations below for relay locations.**



## PARTS INFORMATION

Order only the Genuine Mitsubishi Parts listed below.

Part Name	Part Number	Quantity
Relay, Power (Micro ISO)	8627A049	*
Relay, Power (Mini ISO)	8627A050	*

\* Please refer to the **"Applicable DTC & Relay Tables"** for the specific relays and quantities for each applicable vehicle.

## WARRANTY INFORMATION

This bulletin is supplied as technical information only and is not an authorization to repair. If an affected vehicle is reported with the described condition, diagnose the condition, repair as described in this bulletin and submit a normal warranty claim using the following information.

Labor Operation Code	Description	Nature Code	Cause Code	Time Allowance
13840110	Replace Relay(s)	045	590	0.3 hrs

Warranty Coverage: 5/60 Basic Coverage