



Always One Step Ahead



R.A.SH Tronics Ltd
Department of R&D

4/3/2020

HONDA ODYSSEY 2020 INSTALLATION MANUAL

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R.A.SH TRONICS LTD

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TO OUR VALUED CUSTOMER

It is our intention to provide our valued customers with the best documentation possible to ensure successful use of our products. We will continue to improve our publications to better suit your needs. Our publications will be refined and enhanced, as new volumes and updates introduced. If you have any questions or comments regarding this publication, please contact us.

We welcome your feedback.

CUSTOMER CARE CENTER

For additional application assistance, we urge you to consult with our experienced staff in our Customer Care Center. Our Technical and Engineering staff has extensive test, research and development capabilities, and have assisted many customers in solving unique design and application problems with standard and customized products.

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ABSTRACT

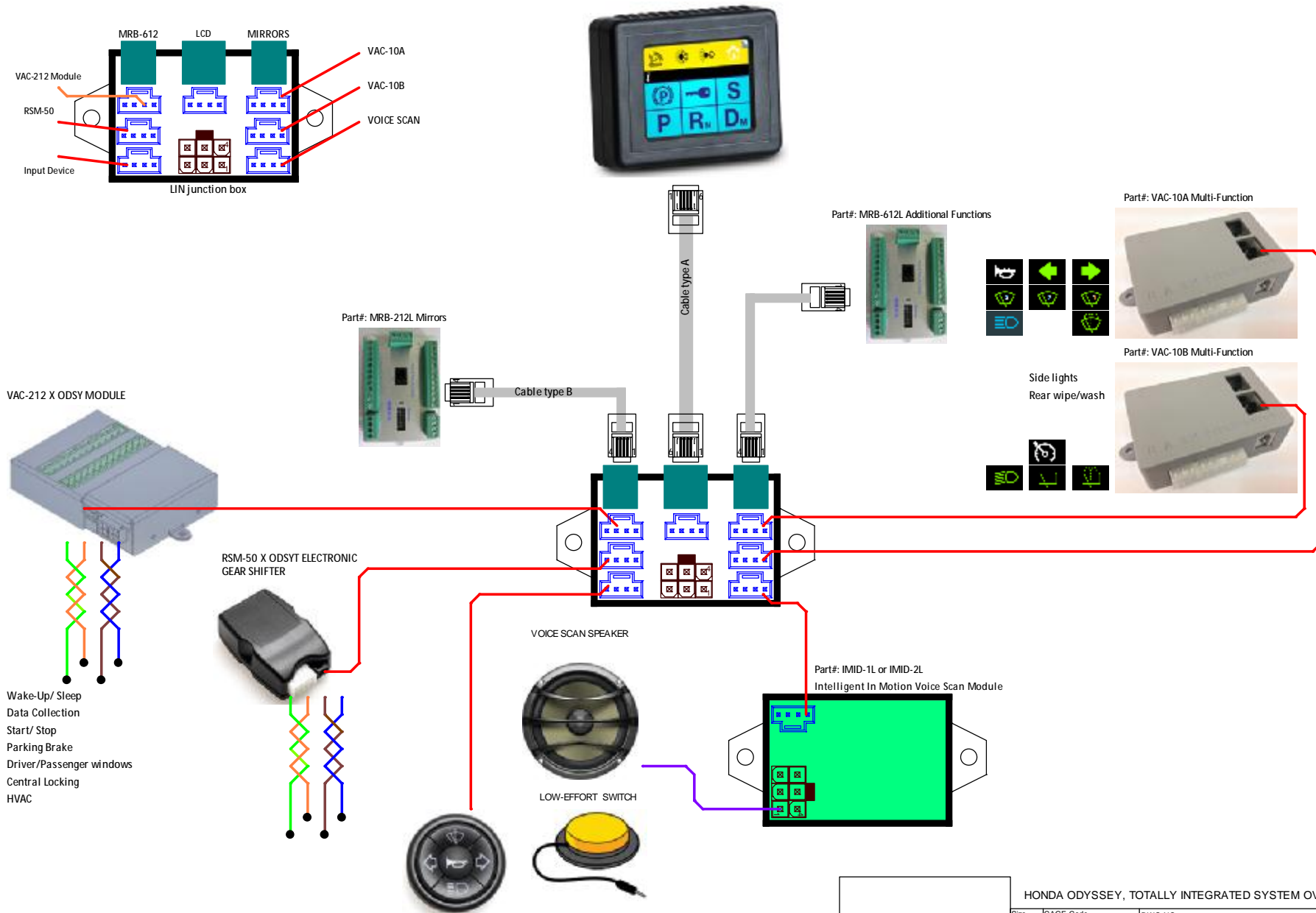
This guide explains how to install the modules in the vehicle.

- ✓ The information provided in the wiring diagrams is vehicle specific. It should be applied only to the vehicle indicated. Depending on the system you are installing, you may not install every harness.
- ✓ Read modules placement first, it is very important to understand where to connect and fit the CAN-Bus based components to avoid future problems.
- ✓ This manual becomes an integral part of the vehicle the system-installed in. You should therefore always keep it in the vehicle and pass on to the new owner, to safely use the systems.
- ✓ R.A.SH Tronics Ltd reserve the right to make changes in product specifications at any time and without prior notice. The information in this manual is believed to be accurate and reliable. However, R.A.SH Tronics Ltd assume no responsibility for its use.

USEFUL HINTS

- ✓ The electronic control board is an electrostatic sensitive device. Connect to a proper ground.
- ✓ Use care when making electrical connections. Disconnect battery power prior to servicing.
- ✓ When installing, check for any obstructions such as Gas tank, Gas lines, Wires, etc. before drilling or routing power cable.
- ✓ For continued protection against fire hazard, replace only with the same type and rating of fuse.
- ✓ Only allow R.A.SH Tronics factory trained technicians to install or service your system. If wear is observed on any part in the system, contact our US support.

SYSTEM OVERVIEW



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HONDA ODYSSEY, TOTALLY INTEGRATED SYSTEM OVERVIEW			
Size	CAGE Code	DWG NO	Rev
A3	059-957-746-ODSY	STA-035xxxx	A
Scale		Sheet	2 of 3

GENERAL INFORMATION

This kit supports extreme low power mode (XLP) on all modules, to identify this feature, every module is labeled by a part number and the letter "X". When the vehicle communication network stopped all activity, the CAN gateway detects this, and issue Go to sleep command to all modules. After the screen stopes counting down, all modules enter deep sleep and wakes up on any CAN activity in the car.

The list below summaries every module power consumption during sleep mode.

1. LCD touch module power consumption in sleep mode is **14 micro Amp**.
2. Vehicle Interface module (CANbus gateway) **140 micro Amps**.
3. CANbus electronic gear shifter **90 micro Amps**.
4. Docking station module **14 micro Amps**, this module supports all additional function like sliding doors and so.
5. All other modules like multi-function and mirrors are powered by Ignition. Even if these modules are powered from Battery, they are supporting XLP and consumes about **50 micro Amps** all three modules.

SUMMARY OF SUPPORTED FUNCTIONS

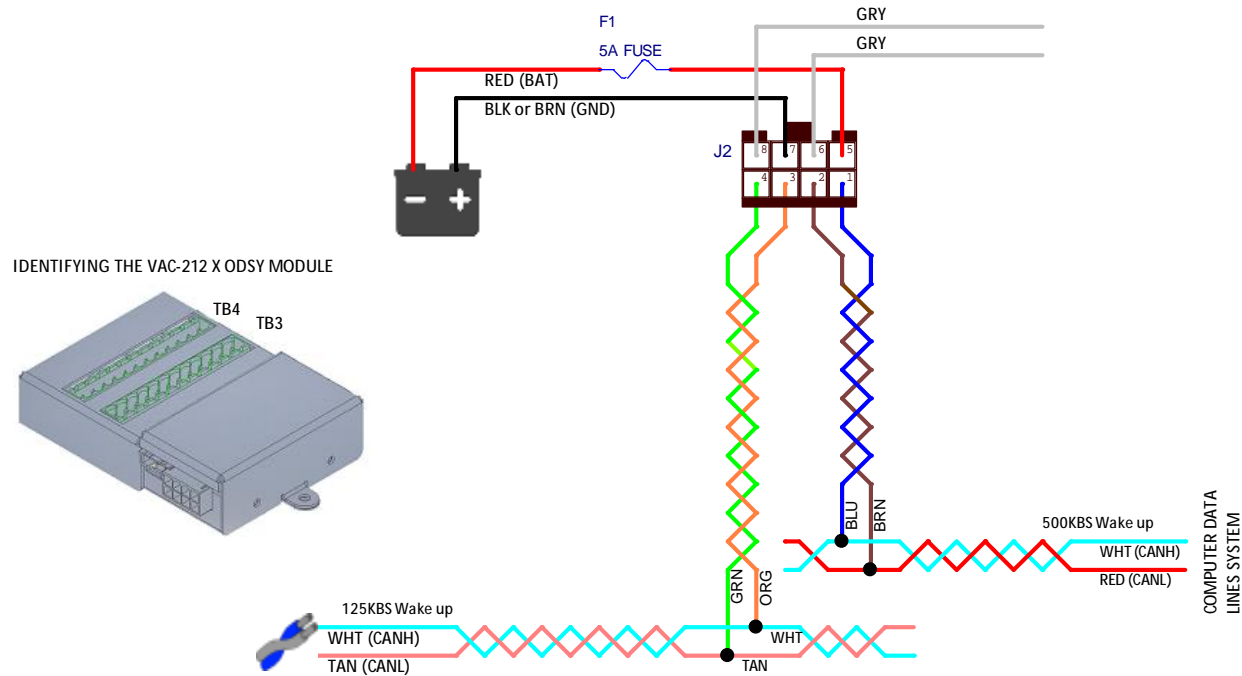
Supported functions using CANbus, no physical wiring required

Wake Up & Sleep	Electronic Gear Shifting				
Front power windows	Driver open/close	Passenger open/close			
All doors lock/ unlock					
HVAC or Climate control	Temperature Hot/ Cold	Fan speed all range			Sync or Dual
AC on/ off	AUTO				
Air flow	Front	Front Floor	Floor	Floor Front defrost	Front defrost
Turn signals automatic canceling according to the steering position					

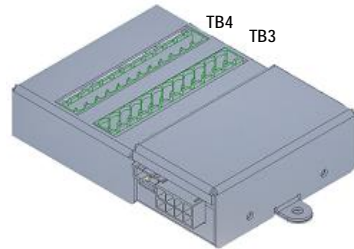
Supported functions using relays

Steering stalks	Turn signals	Horn	Front wipers & wash		Rear wipers & was
Cruise control	Automatically turned on	SET/ DEC			
Sliding doors	Left sliding door	Right sliding door			
Hazards					
Pushbutton start	Electronic Parking Brake	Power Mirrors			

VEHICLE INTERFACE MODULE VAC-212 X ODYSY



IDENTIFYING THE VAC-212 X ODYSY MODULE



SUPPORTED FUNCTIONS on LS-CAN

- Wake Up/Sleep
- Data Collection
- A) Driver window Up/Down.
- B) Passenger window Up/Down.
- C) Central locking Lock/Unlock
- HVAC
- 1: Temp Hot/Cold
- 2: Fan speed Up/Down
- 3: Air flow 4 directions
- 4: AC On/Off & Auto
- 5: SYNC

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 Monday, August 03, 2020

HONDA ODYSSEY 2020 CANbus MODULE WIRING

Size A4	CAGE Code 059-957-746	DWG NO VAC-212 X01 ODYSY	Rev A
Scale	Sheet 2	of 3	

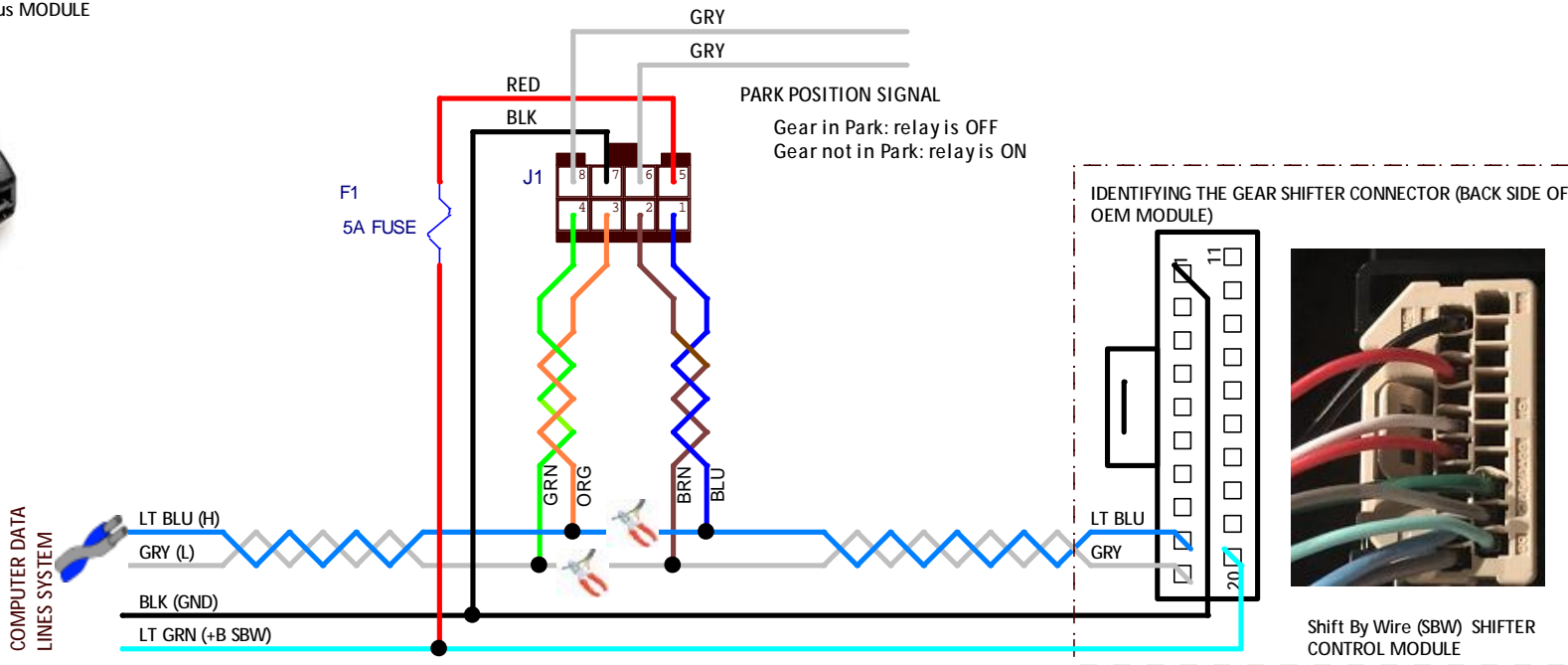
Last Updated: 19-Aug-20

SHIFT BY WIRE MODULE WIRING

IDENTIFYING THE RSM- 50 CANbus MODULE



Control board bottom side
MDL: Shorted



STA-035 LCD Touch Input Device



Applicable Vehicles:
HONDA ODYSSEY 2019, 2020

IDENTIFYING GEAR SELECTOR SWITCH



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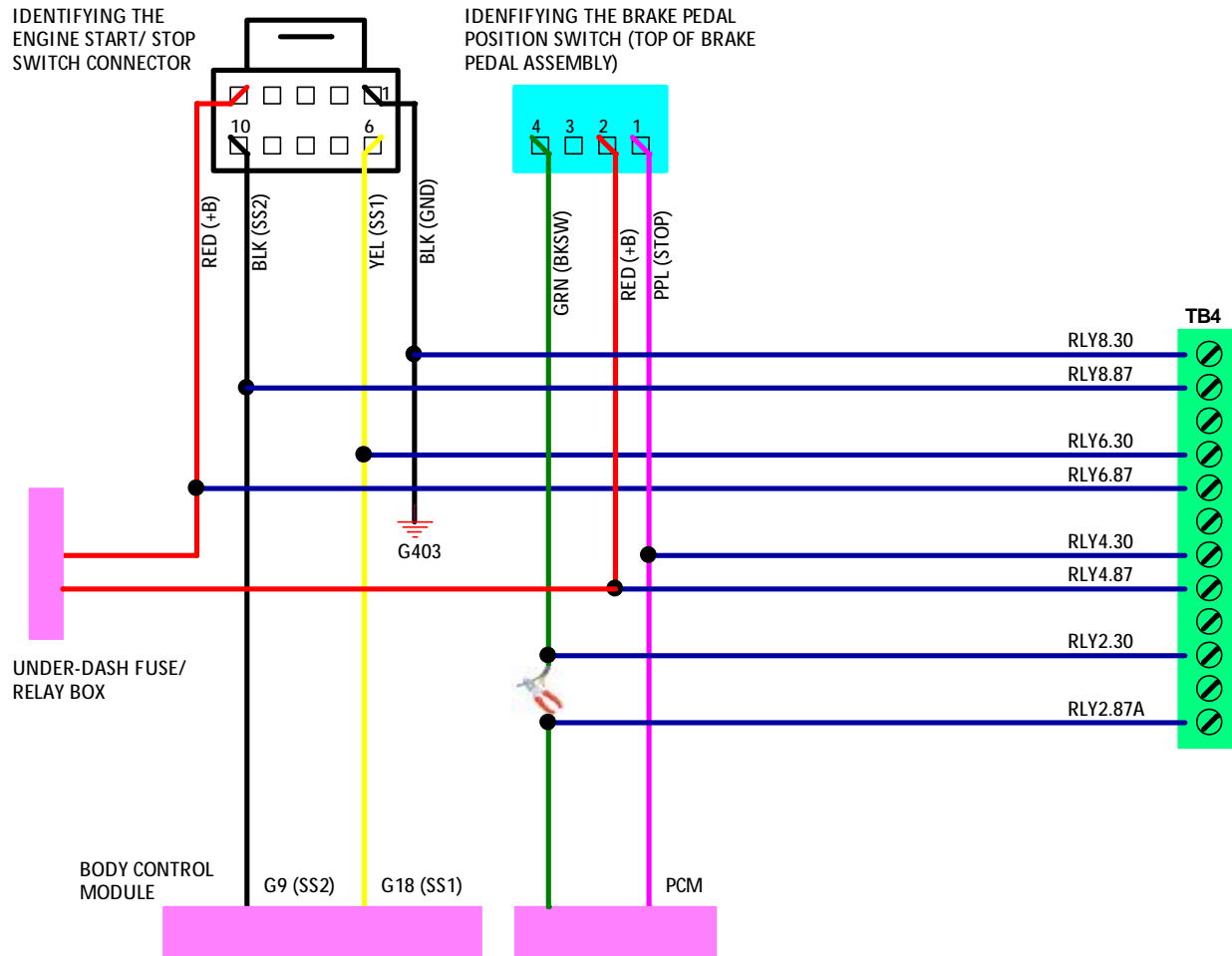
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HONDA ODYSSEY, SBW CAN-bus Gear Selector

Size	CAGE Code	DWG NO	Rev
A4	059-957-746	RSM-50 ODSYT	A
Scale		Sheet 2 of 3	

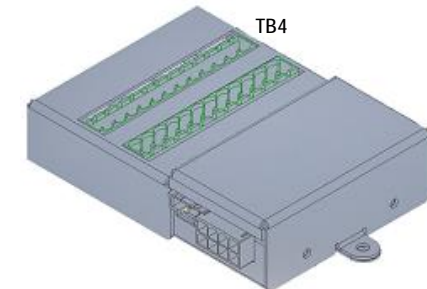
STARTING & STOPPING WIRING



IDENTIFYING THE ENGINE START/ STOP SWITCH



IDENTIFYING THE VAC-212 CANbus MODULE



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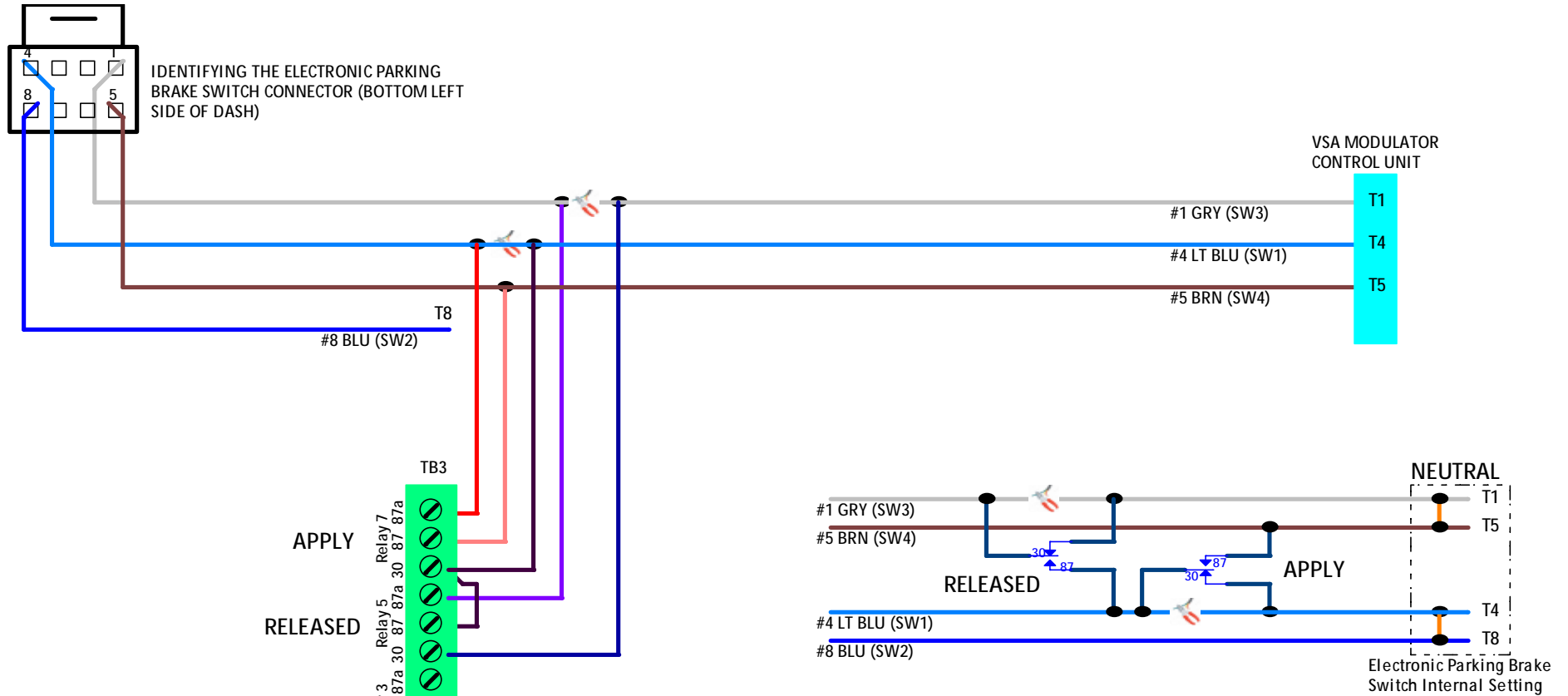
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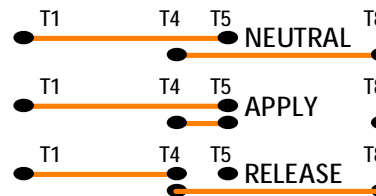
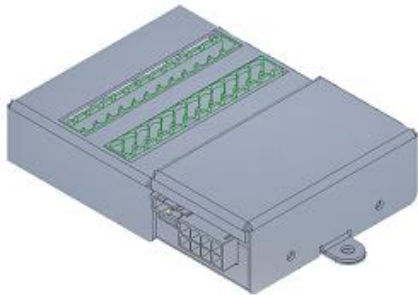
HONDA ODYSSEY 2020 ENGINE START/ STOP WIRING

Size A4	CAGE Code 059-957-746	DWG NO VAC-212 X ODSY	Rev A
Scale	Sheet 2 of 3		

ELECTRONIC PARKING BRAKE WIRING



IDENTIFYING THE VAC-212 CANbus MODULE



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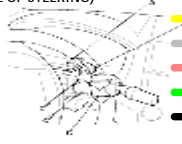
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HONDA ODYSSEY Electronic Parking Brake Wiring

Size A4	CAGE Code 059-957-746	DWG NO VAC-212 X ODSY	Rev A
Scale	Sheet 2 of 3		

MULTI-FUNCTION WIRING

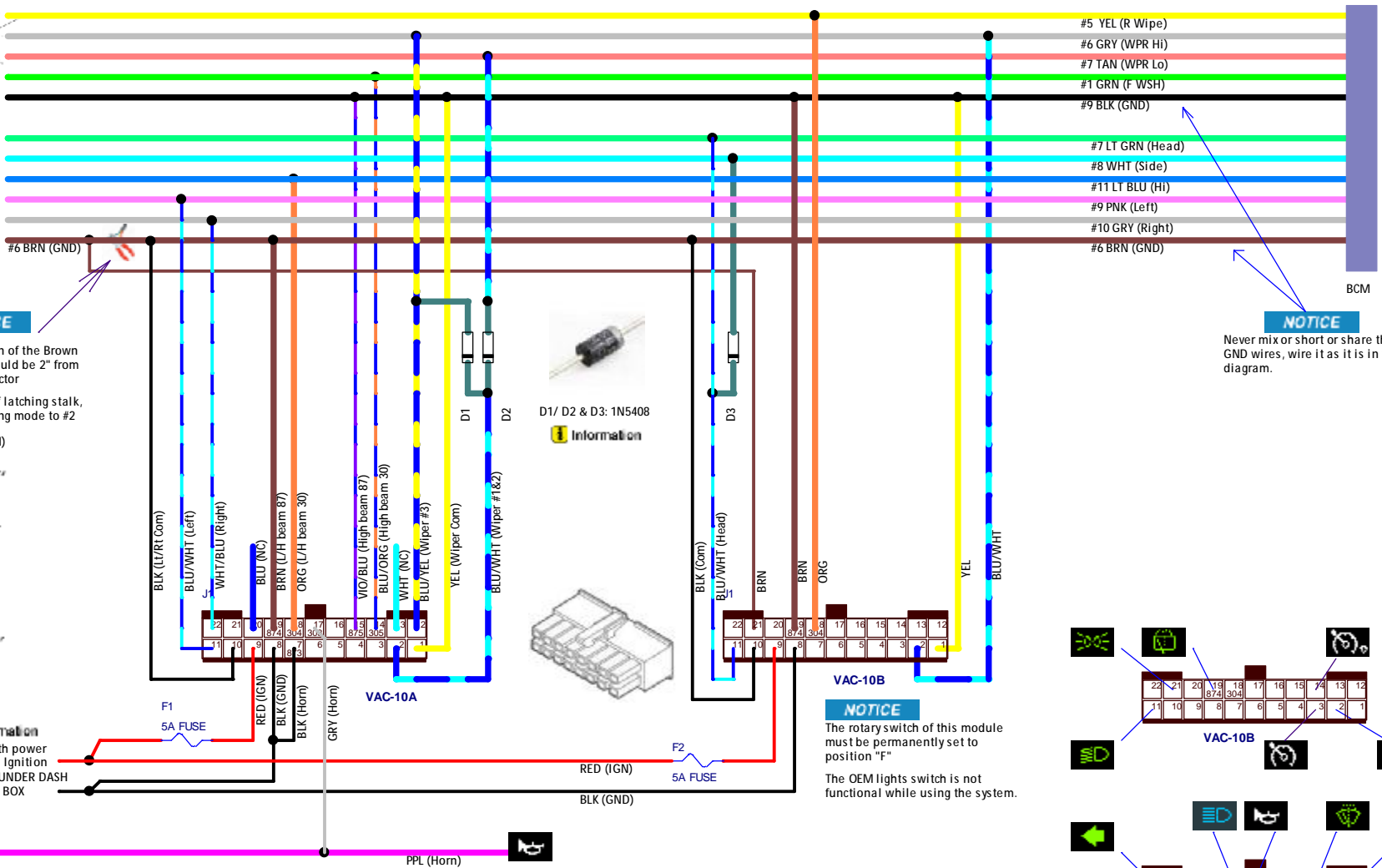
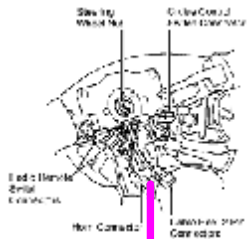
IDENTIFYING THE WIPER/ WASHER SWITCH (TOP RIGHT SIDE OF STEERING)



IDENTIFYING THE COMBINATION LIGHTS SWITCH (TOP LEFT SIDE OF STEERING)



CABLE REEL (IN STEERING COLUMN)



NOTICE

The cut location of the Brown wire pin# 6 should be 2" from the OEM connector
High beam self latching stalk, must set working mode to #2

NOTICE

Never mix or short or share these two GND wires, wire it as it is in this diagram.

Information

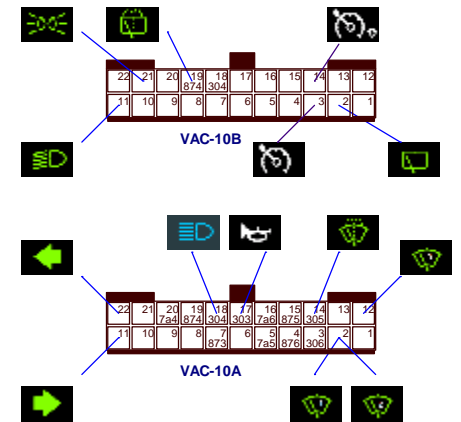
Connect both power lines to the Ignition line to the UNDER DASH FUSE/RELAY BOX

NOTICE

The rotary switch of this module must be permanently set to position "F"
The OEM lights switch is not functional while using the system.

Information

These two modules VAC-10 A & B are programmed with vehicle specific software, never change the rotary switches.
Only VAC-10B rotary switch must be set to position "F"



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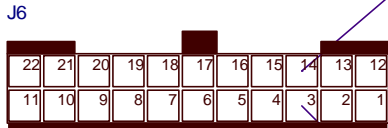
HONDA ODYSSEY 2020 MULTI-FUNCTION WIRING DIAGRAM

Size	A3	CAGE Code	059-957-746	DWG NO	VAC-212 CPMF_1	Rev	A
Scale		Sheet	2	of	3		

CRUISE CONTROL WIRING



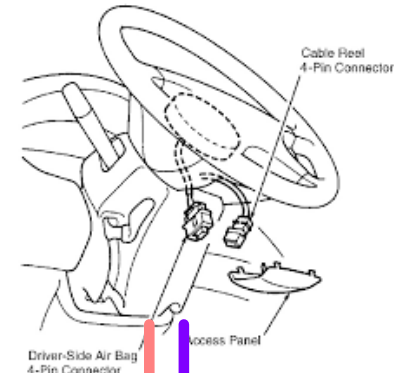
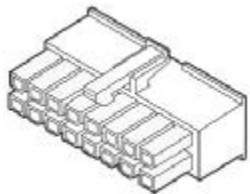
Cruise SET/DEC



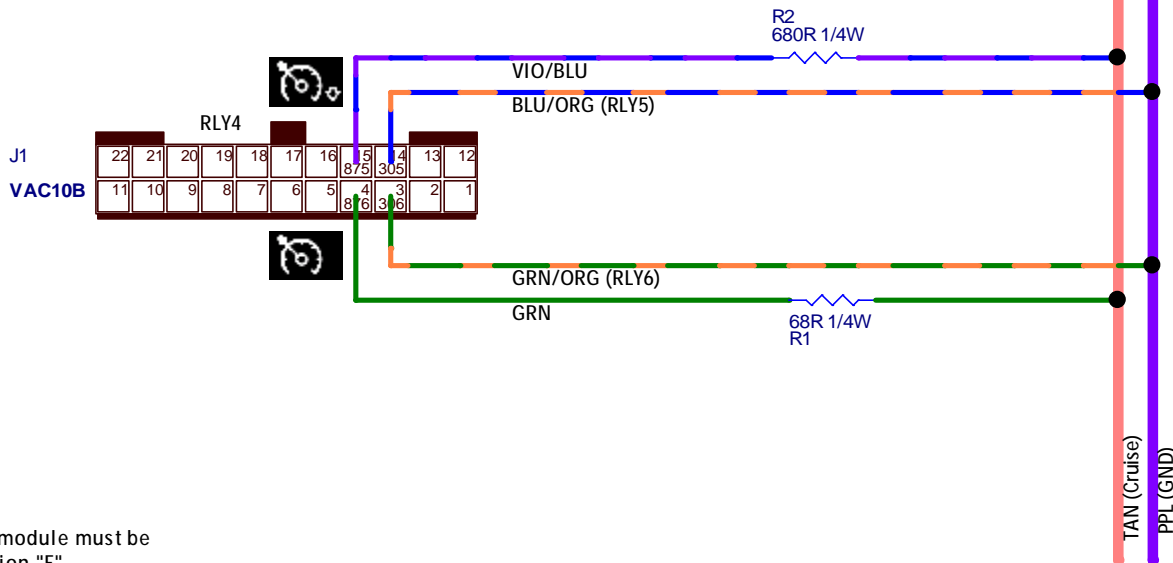
VAC-10B



Cruise MAIN



IDENTIFYING THE ACC COMBINATION SWITCH & CABLE REEL



Information

CHECK YOURSELF

- TAN 4.4V no button is pressed
- TAN 0.84V MAIN pressed
- TAN 3V SET/DEC pressed
- TAN 3.7V SET/ACC pressed

NOTICE

The rotary switch of this module must be permanently set to position "F"

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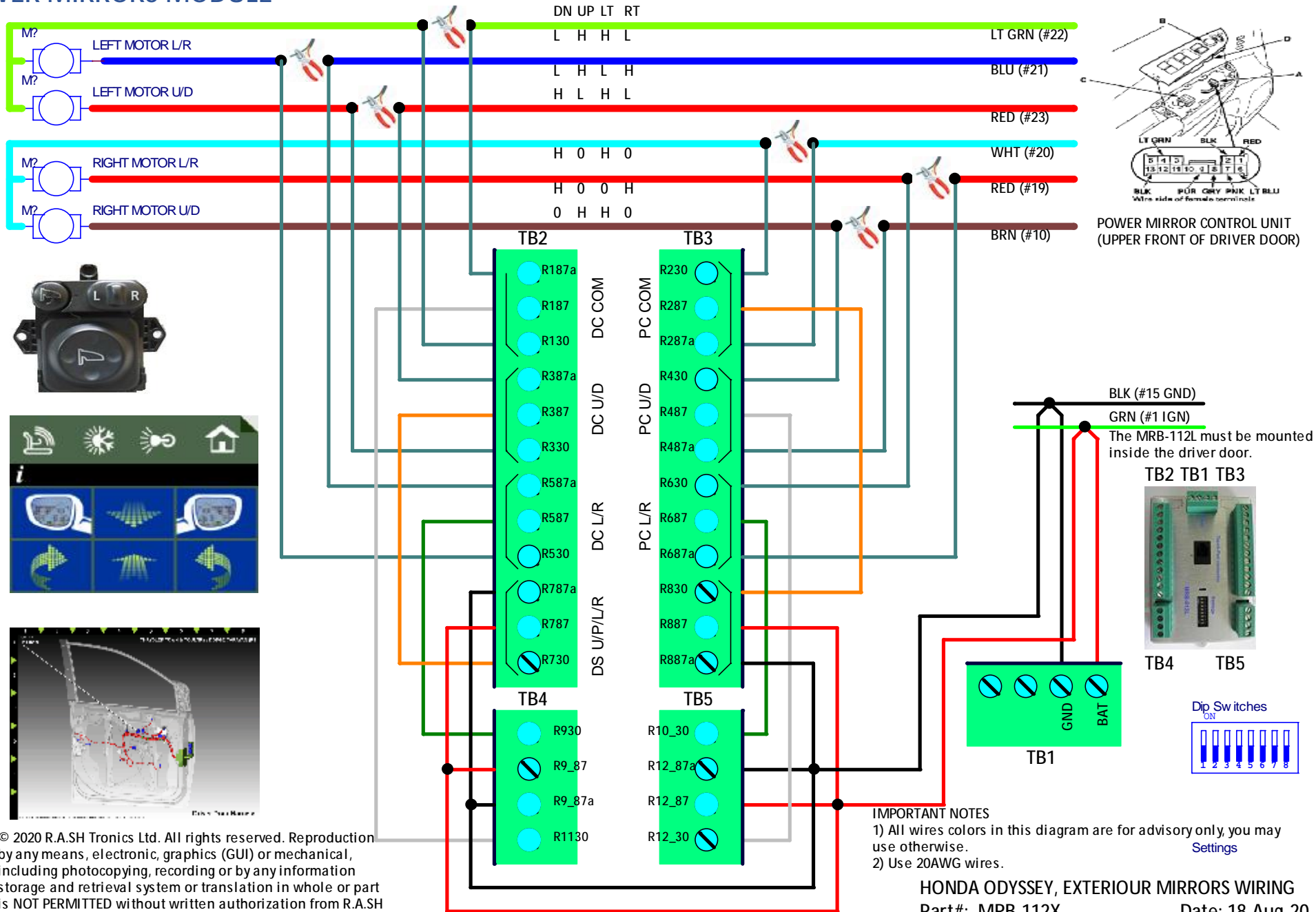
HONDA ODYSSEY 2020 Cruise Control Wiring

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Size	CAGE Code	DWG NO	Rev
A4	059-957-746	VAC-10B	A
Scale	Sheet 2 of 3		


POWER MIRRORS MODULE



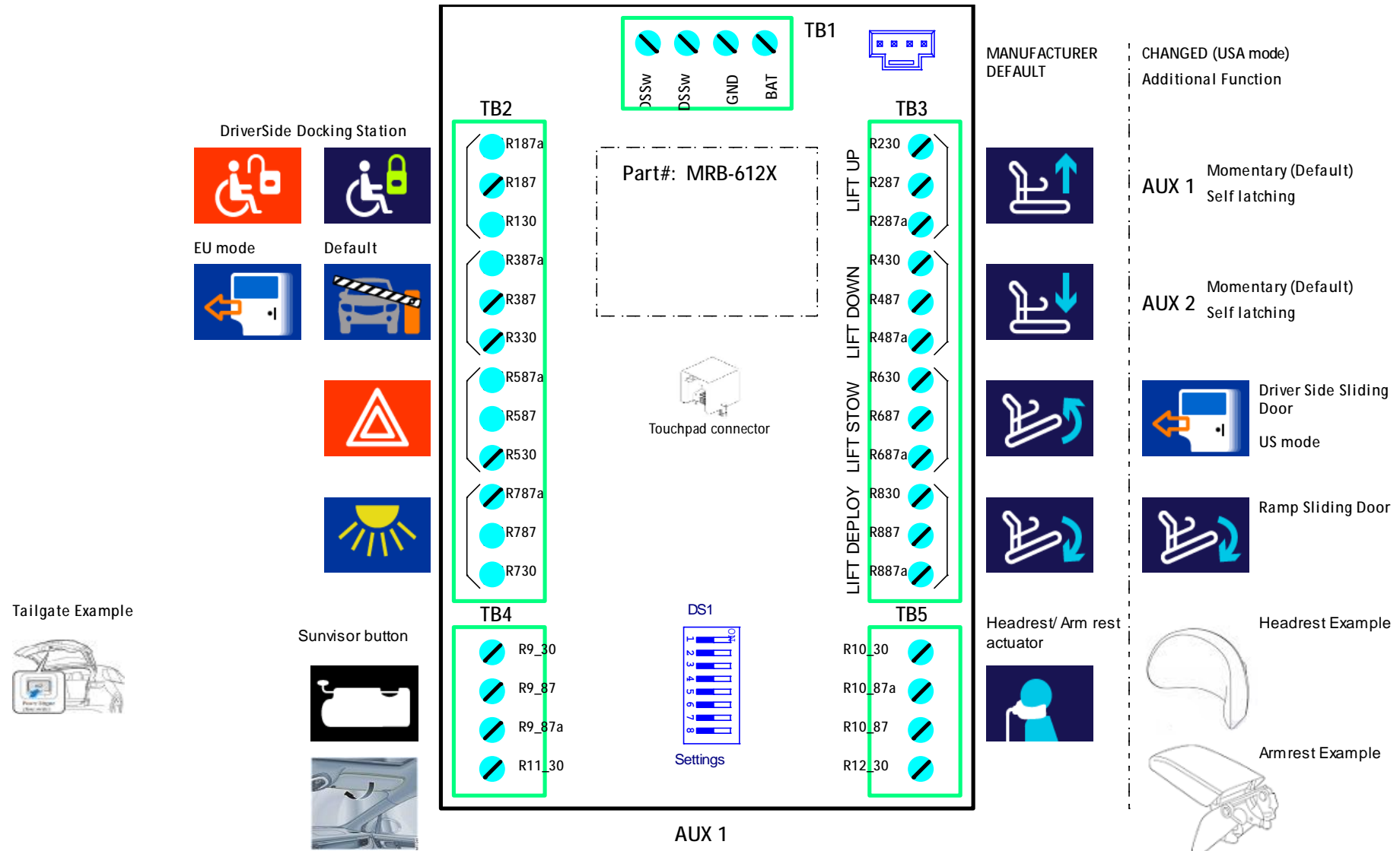
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Heating Ventilation & Airconditioning Module Wiring



Press and Hold this symbol  for activate the  or DUAL function.

MRB-612X Multi-Relay Module



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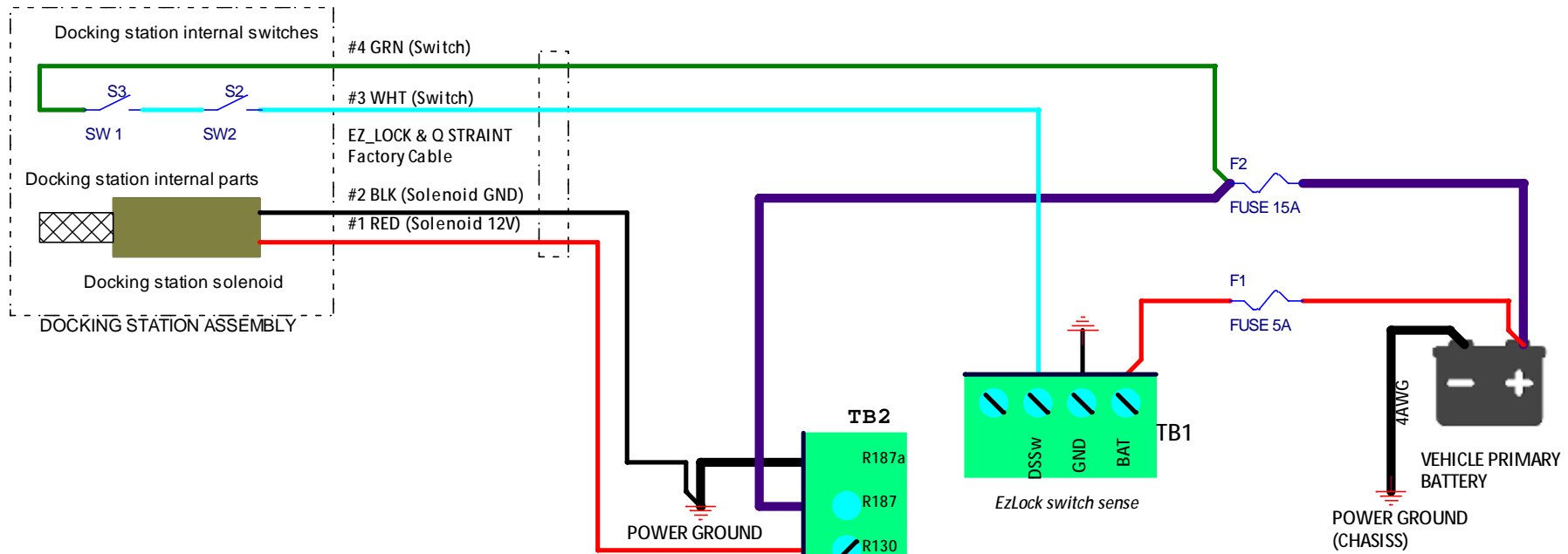
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Universal Multi-Function module, 12 high current relays

Size A4	CAGE Code 059-957-746	DWG NO	Rev A
Scale		Part#: MRB-612 X	
Sheet 1 of 3			

MRB-612X Docking Station Wiring



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- TB2**
- R187a
 - R187
 - R130
 - R387a
 - R387
 - R330
 - R587a
 - R587
 - R530
 - R787a
 - R787
 - R730



Docking station secured, touch button/ symbol



Docking station not secured, touch button/ symbol



Docking station not secured, Muted till the next Ignition, touch button/ symbol

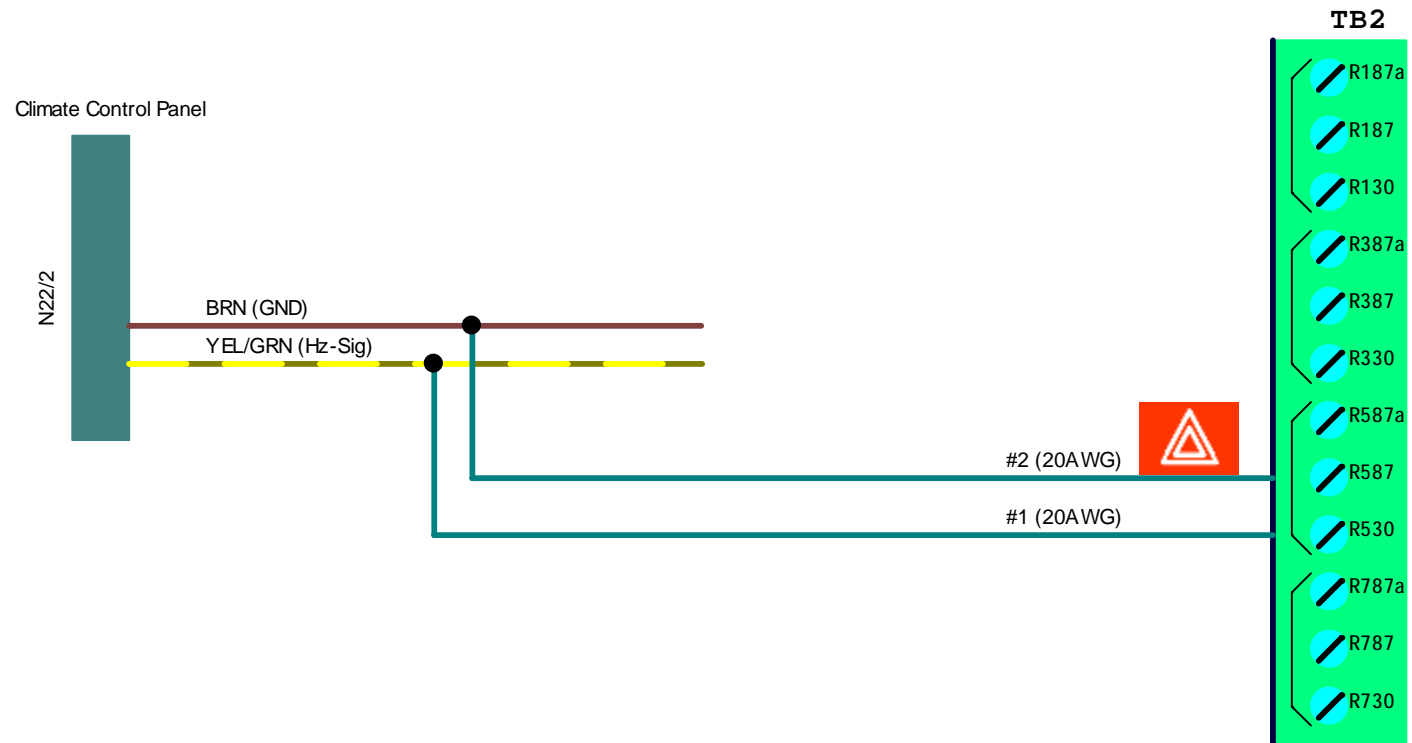
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Ez-Lock Docking Station Wiring

Size	CAGE Code	DWG NO	Part#: MRB-612 X01	Rev
A4	059-957-746			A
Scale		Sheet	1	of 3

MRB-612X Hazards Warning Lights Wiring



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MRB-612X Hazards Wiring Sprinter 907

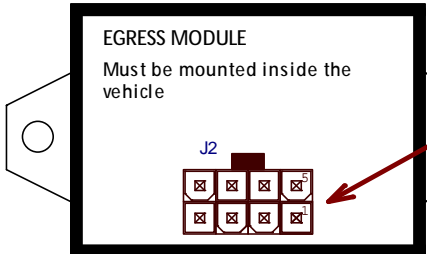
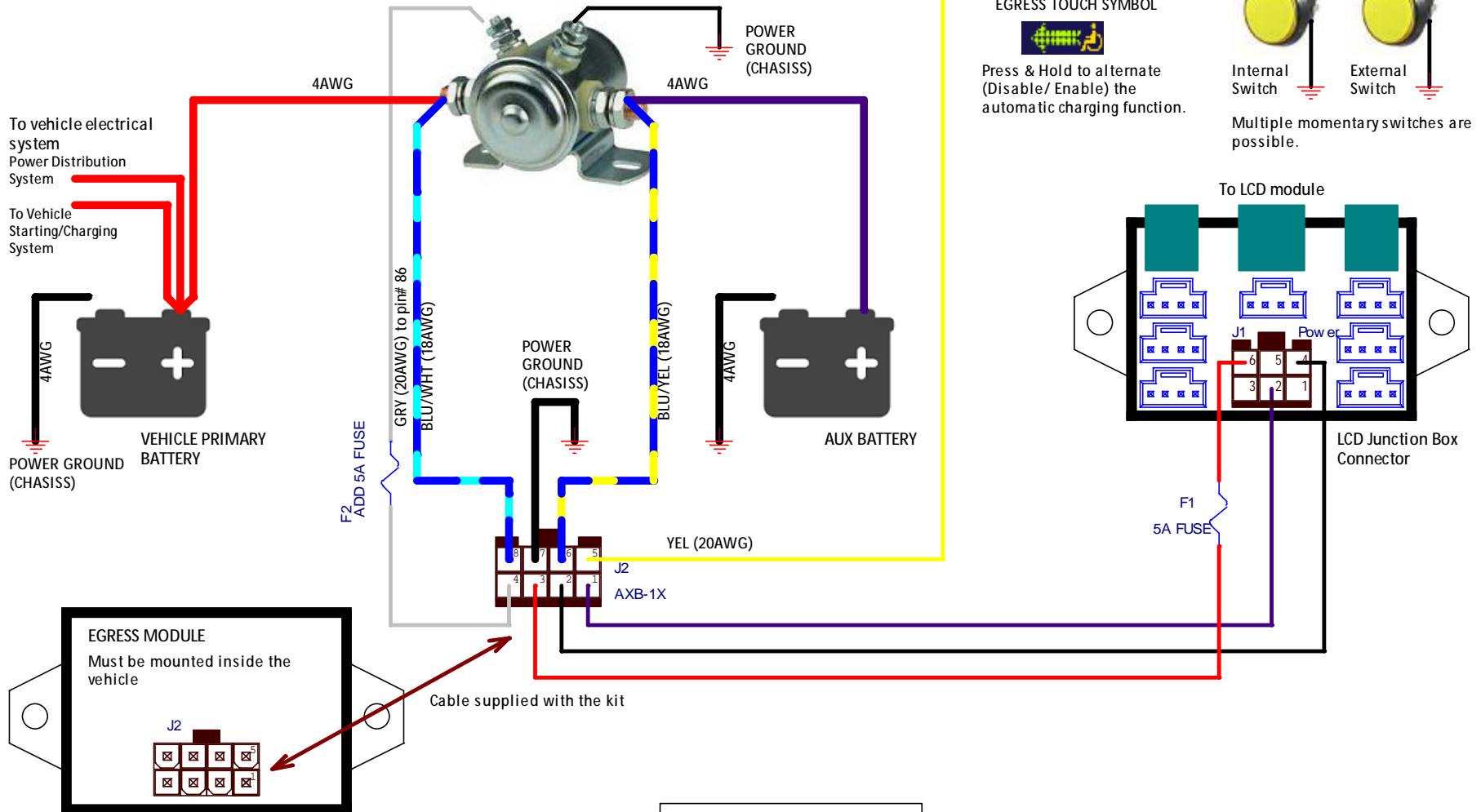
Size	CAGE Code	DWG NO	Rev
A4	059-957-746	Part#: MRB-612X	A
Scale	Sheet 1 of 3		

Power and Back-Up Battery Wiring

USE COPPER CABLE LUGS



100A Solenoid (Must be mounted as close as possible to the AUX battery)



IDENTIFYING THE AUX BATTERY MODULE

4 Gauge AWG Battery Cable has an amperage capacity of 100 amps at a cable length of 9.4 feet. Don't even think to over lengthen the cable. It is recommended to shorten the battery cables as much as possible.

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AXB-1X, EGRESS Module Connections

Size	CAGE Code	DWG NO	Rev
A4	059-957-746		A
Scale		Sheet	1 of 3

RSM-50 X01 ODSYT Gear shifter for touch screen only, can't be used as stand alone.

VAC-212 X01 HOYT Module with 9 relays, data collection, cruise control (future replaced with VAC-1000, 12 relays dual CAN/LIN gateway)

1. Cruise control
2. Start/Stop
3. Electronic Parking brake
4. Data collection
 - a. Head lights and high beam status
 - b. V Speed
 - c. Foot brake
 - d. Park indication
 - e. Current gear position
 - f.

HVAC module using relays and some CANbus functions

RSM-50 X01 HOY Stand-alone electronic gear shifter.