Chrysler / Dodge Minivan

Service Manual

2008-2010 Model Year

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CHRYSLER / DODGE MINIVAN 2008-2010 MODEL YEAR

SERVICE MANUAL

#08028-013
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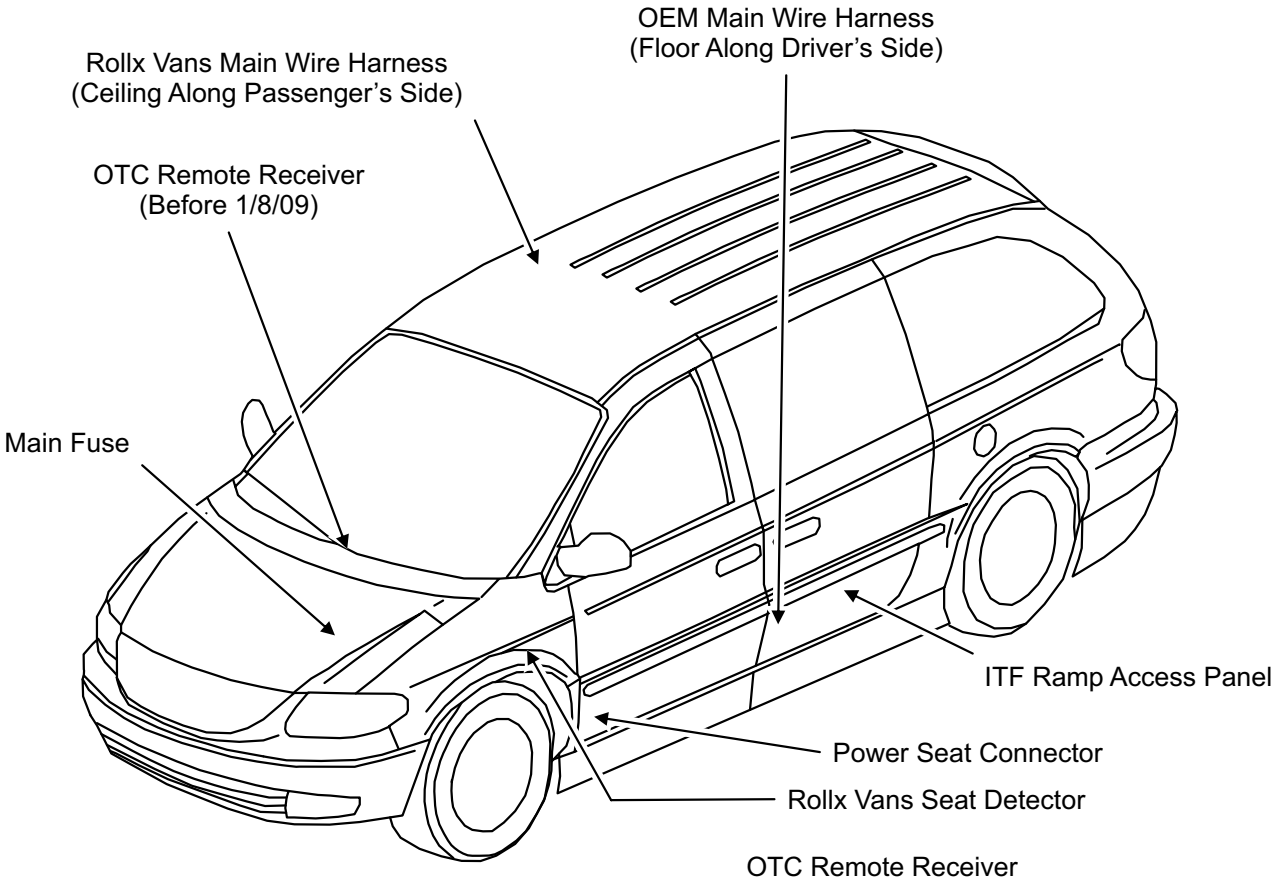
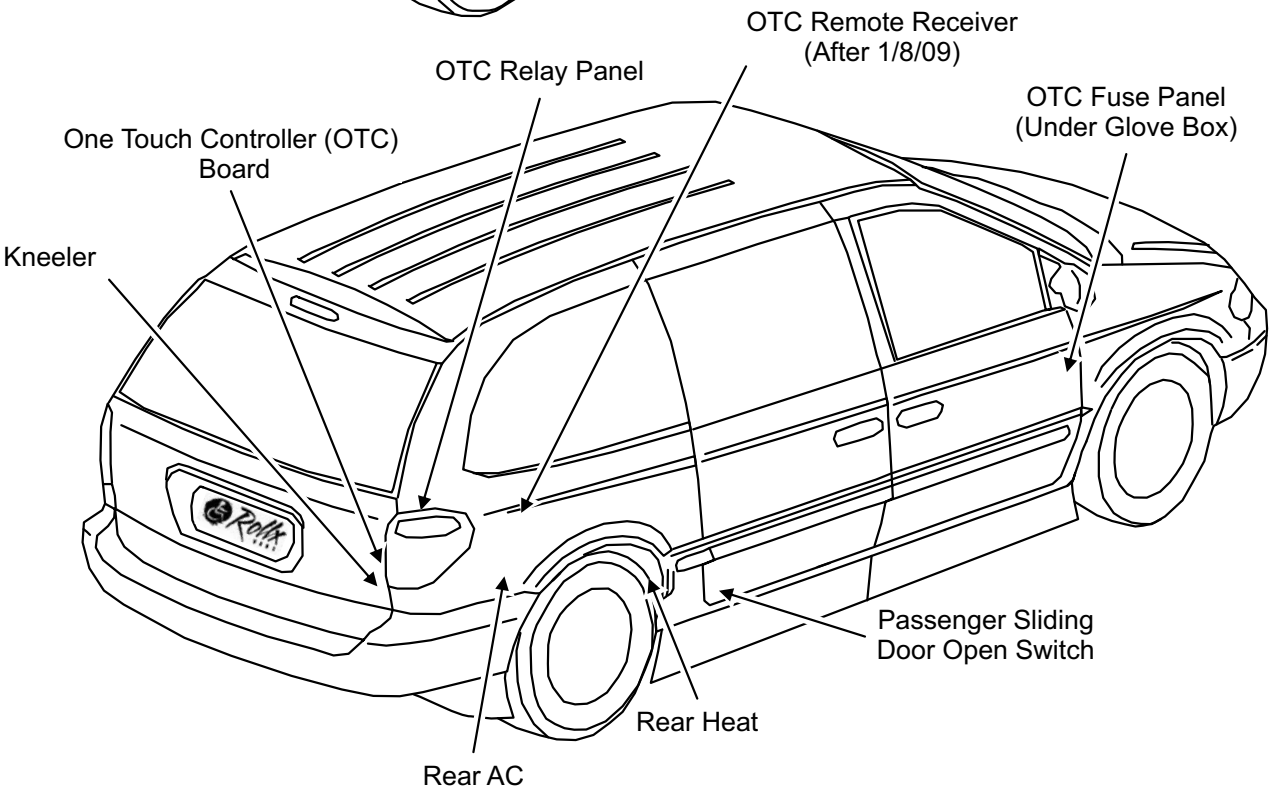
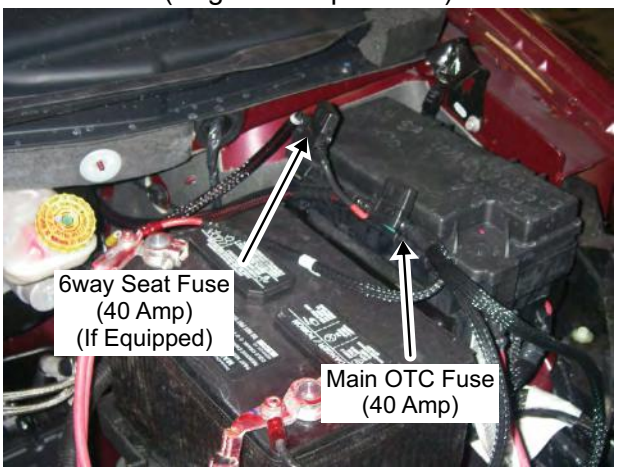

OEM Main Wire Harness
(Floor Along Driver's Side)
Rollx Vans Main Wire Harness
(Ceiling Along Passenger's Side)
OTC Remote Receiver
(Before 1/8/09)
Main Fuse
ITF Ramp Access Panel
Power Seat Connector
Rollx Vans Seat Detector


OTC Remote Receiver
(After 1/8/09)
OTC Relay Panel
OTC Fuse Panel
(Under Glove Box)
One Touch Controller (OTC)
Board
Kneeler
Passenger Sliding
Door Open Switch
Rear Heat
Rear AC

Main Fuse
(Engine Compartment)

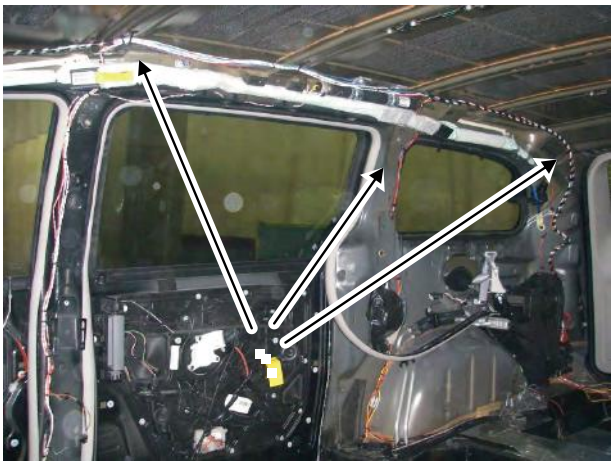


OTC Remote Receiver (Before 1/8/2009)
(Center Dash)

OTC Remote Receiver (After 1/8/2009)
(Rear Passenger Quarter Panel)

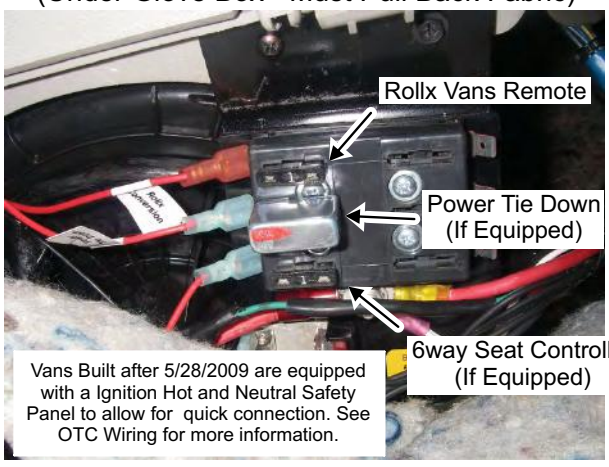
OEM Wire Harness

Rollx Vans Main Wire Harness



Passenger Sliding Door Open Switch

OTC Fuse Panel
(Under Glove Box - Must Pull Back Fabric)



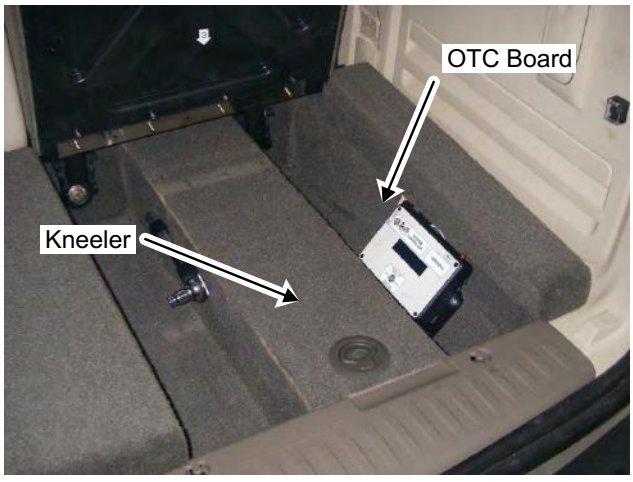
ITF Ramp Access Plate

OTC Relay Board
(Behind Rear Passenger Quarter Panel)

Rear AC
(Behind Rear Right Tire)

Rear Heat
(Front of Rear Right Tire)

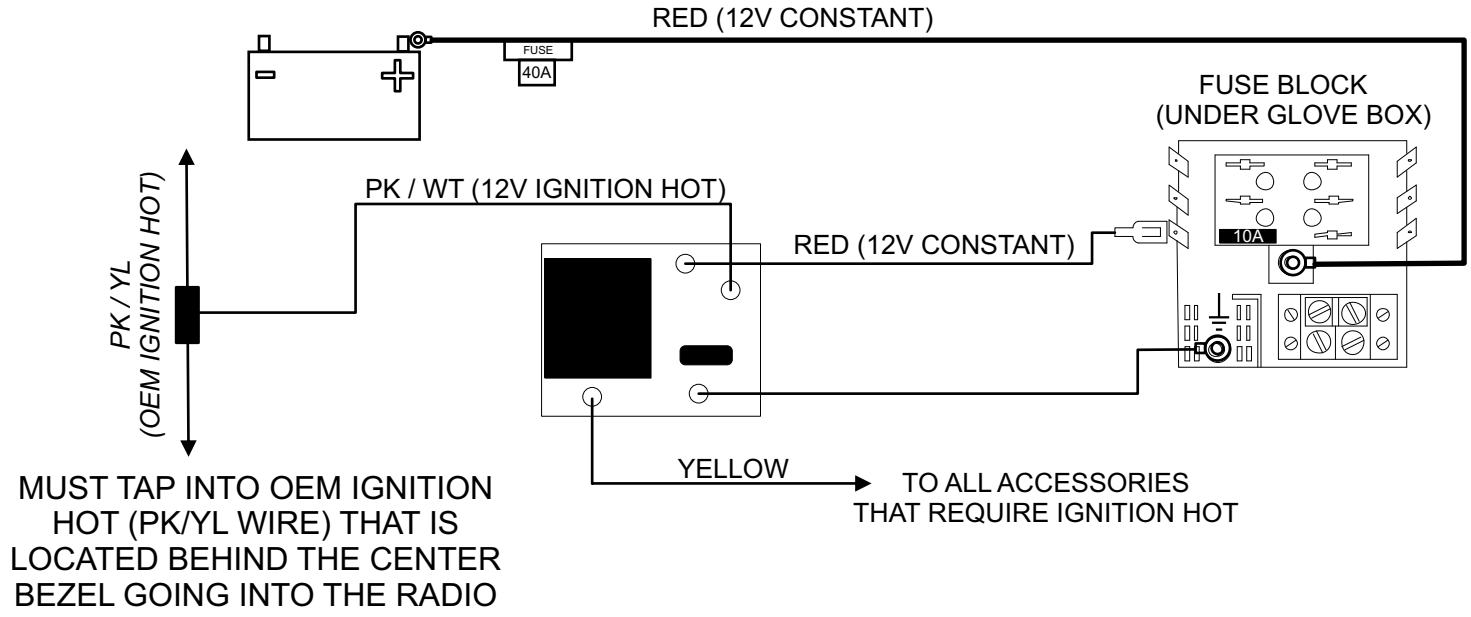
Kneeler and One Touch Controller Board



Power Seat Connector

Ignition Hot For Vans Built Before 5/28/2009

Due to constraints on Chrysler's OEM Ignition Hot circuit, Rollx Vans installs the Rollx Vans Ignition Hot Box #IGNITION HOT if certain high current accessories are to be added such as a Dual Battery System. Power Tiedown can use the OEM Ignition Hot as long as the one below is used. The Ignition Hot Circuit is located near the Rollx Vans Fuse Panel under the glove box.



Ignition Hot For Vans Built After 5/28/2009

Ignition Hot and Neutral Safety Panel were added to the OTC Fuse Panel located behind the glove box for all 2008-2009 Chrysler Vans. This is now where Accessories and OTC Board will get required signals.

Power Folding Rear Sofa

If the van is equipped with a Power Folding Rear Sofa, Rollx Vans disables the FOLD/TAILGATE SWITCH MUX that would allow the seat to be stowed into the floor. Rollx Vans cuts the LG/TN Wire at the switch.

Measuring current draw from a battery means we are going to measure the number of Electrons flowing out of the Negative Terminal of the battery and returning to the Positive Terminal. (Yes, it's true, electrons flow from the negative to positive terminal of a battery.) Electron Flow is known as Current and is measured in Amperes often referred to as Amp(s). One Amp is 18.628×10^{18} electrons. We will use the term Amp(s) and Milli-amps in this procedure. One Milli-amp is a thousandth of an Amp. As an example 125 Milli-amps is .125 of an Amp.

The Vans we use have the Negative Terminal of the Battery attached to the frame. Current is "Drawn" from the battery by one or more loads. The Radio is a load. Each Microcomputer in the Van is a load. The OTC Controller is a load. The Ramp Motor is a load. A 6-Way Seat is a load. A Power Tie Down is a load. The Dome-light is a load, etc. Each load draws some amount of current determined by its design. The total current taken from the battery is the sum of all the loads currently running. If as an example, you turn the radio on, you add its current load to what ever is the draw currently being taken from the battery. The current flows out the Negative Terminal, splits up in to branches as it flows through each load, and then merges back together and flows back into the Positive Terminal. The total current flowing back into the Positive Terminal always equals the total current flowing out of the Negative Terminal. You can measure the total draw (current flow) at either terminal of the battery. Always use the Negative Terminal, its safer!

The Electronic System found in Chrysler Vans is made up of a number of small Microcontrollers, each monitoring and controlling one or more functions in the vehicle. The Rollx Vans OTC Microcontroller is similar. One characteristic they share is the ability to put themselves into a "Sleep Mode". While in sleep mode the load they take from the battery is greatly reduced. The Rollx Vans OTC goes to sleep in about ten seconds of non-use. When a Van is shutdown, the engine turned off, the key removed and the doors shut, the Chrysler Microcontrollers start to shut themselves down. They go to sleep in stages. You can see this happen by placing a meter capable of measuring current "in series" with the Negative (Black) Terminal of the battery. Over the course of several minutes the current will drop in stages from a number of Amps to a few Milli-amps.

Chrysler spec's the current draw for a Van in "Sleep Mode" as between 40 and 70 Milli-amps (.040 - .070 Amps) depending on version and features. The Rollx Vans OTC Microcontroller is spec at 8 to 10 Milli-amps (.008-.010 Amps). The Rollx Vans Remote Keyless Entry (RKE) Receiver draws 10-12 Milli-amps (.010-.012 Amps). Add the min and max numbers of each together and you should expect a Van to draw from 58 to 92 Milli-amps (.058-.092 Amps) normally. Note: This is with no other Rollx Vans options installed. As you add options you add their load to the total.

To help you better understand battery draw here are common definition of terms used to rate batteries:

> **Amp-Hour Rating: AHR (or A/H) is a commonly used rating of a battery capacity to supply current over a period of time. The Amp-hour rating of battery capacity is calculated by multiplying the current (in amperes) by discharge time (in hours). Amp-hour battery rating is commonly used when describing sealed lead acid batteries.**
>
> ***For example*: a battery which delivers 2 amperes for 20 hours would have a 40 amp-hour battery rating (2 * 20= 40). A 40 AHR battery can supply 40 amps for 1 hour, 1 amp for 40 hours or any mathematical factor of load and time.**
>
> **Cold Cranking Amperage rating: CCA is the short-term discharge load in amps which a battery can sustain for 30 seconds at 0 degrees F. and not fall below 1.2 volts per cell (7.2V on 12V battery). This rating measures a burst of current that a car needs to start on a cold morning. This rating is used mainly for rating batteries for engine starting capacity.**

Reserve Capacity rating: RC is the number of minutes a new, fully charged battery at 80 degrees F. will sustain a discharge load of 25 amps to a cut-off voltage of 1.75 volts per cell (10.5V on 12V battery). This rating measures a continuous load on the battery. Note: As the charge of a battery is used up the battery voltage drops. Generally speaking, at 10.5 volts a battery is considered discharged.

CCA and RC ratings aren't meaningful for determining the maximum current draw a battery can sustain over a period of time. The AHR is best used for this. In the vehicle world, CCA is the most common rating found for a battery, and the AHR is often not readily available.

The Electronic Department is currently running a series of tests to determine the AHR and max load (for Sleep Mode), for a standard Van battery as well as a high capacity, deep discharge battery (for use with Vans with a large number of accessories). When these tests are complete we will publish the results and get them to you.

Some notes on extending battery life:

The Van must be "put to sleep" when not in use. This means the user must shut off all accessories and close all the windows and doors. If the doors are not completely shut, the Van will stay awake.

The Rollx Vans Ramp and Kneel system should not be deployed! When it is, both the Chrysler Computer System and the Rollx Vans OTC System are awake and drawing high current. This will run the battery down very rapidly.

The Van should be started and run for at least fifteen minutes daily to allow the battery to be charged.

The following procedure should be used to test the current draw from any battery used in our Vans.

1) **Insure the battery is fully charged.**

2) **Remove the key from the ignition switch.**

3) **Close all the doors including the Sliding doors and the Rear Tailgate.**

4) **Close all the windows including the Rear Vent Windows.**

5) **Remove the Negative (Black) cable from the battery and move it to a safe location away from both the Positive (Red) and Negative Terminals of the battery.**

6) **Acquire a Digital Multimeter with a 20 Amp current range function. NOTE: A standard Van can draw between 15 and 17 amps of current when it is first powered up (When the battery is reconnected). You must use a Multimeter with a 20-amp range. Using a Multimeter with a lower current range function will damage the meter if it does not have an internal fuse. If it has an internal fuse, it will be blown.**

   NOTE: DO NOT RUN THE ROLLX VANS OTC OR TRY TO START THE VAN WHEN YOU HAVE THE METER CONNECTED! YOU WILL DAMAGE THE METER!

7) **Place the Function switch of the Multimeter in the 20 Amp Current Measurement position.**

8) **Connect the Negative (Black) Probe (wire lead) to the Black Jack on the Multimeter.**

9) **Most Multimeters have more then one Red Jack for the Positive (Red) Probe. They usually have one Jack for measuring AC & DC Voltage and Resistance, along with a second Jack for measuring AC & DC Current. Some Multimeters have more then one Red Jack for measuring current (three Red Jacks total). As an example a meter might have two Red Jacks, one rated for 200 Milli-amps and a second for 20 amps. You should use the 20-amp plug (or the one with the largest rating).**

10) **Acquire two Test Jumpers with Alligator Clips (Radio Shack # 278-002). Attach one Jumper to the Positive (Red) Probe and the other to the Negative (Black) Probe.**

11) **Turn the Multimeter on.**

12) **Attach the other end of the Jumper clipped on the Positive (Red) meter probe to the disconnected Battery cable.**

   NOTE: Polarity does not matter much when measuring current. A positive current is the same as negative current. Disregard the polarity indicator on the Multimeter during these tests.

13) **Attach the Jumper on the Negative (Black) meter probe to the Negative Terminal of the battery.**

   NOTE: YOU MAY GET A SPARK WHEN YOU ATTACH THE JUMPER. THIS IS NORMAL. ALL THE CURRENT BEING USED BY THE VAN IS NOW RUNNING THROUGH THE METER. AS MUCH AS 15-17 AMPS).

14) The Multimeter should now show a reading. Keep you eye on the meter and watch the draw. A typical Van can have from 18 to 28 Computer modules in it. They are all woke up when power was applied to the Van by attaching your meter probes. As you watch the current reading you will note that it will start to fall. This happens as the computers in the Van decide they are not needed and put themselves to sleep. Chrysler says it can take up to thirty minutes for everything to go into Sleep Mode.

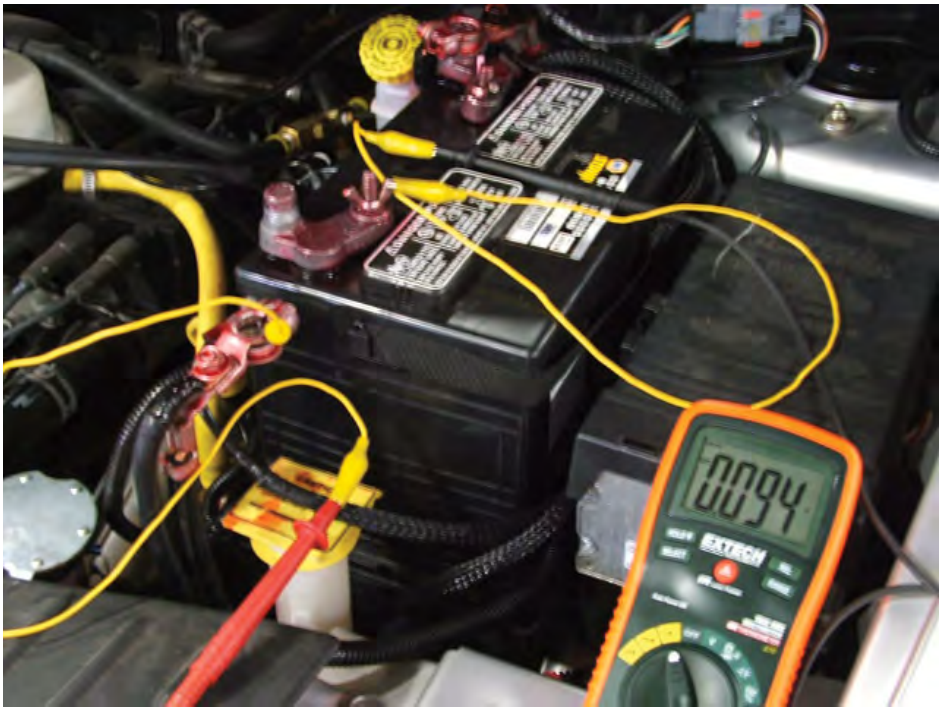
    The current should drop in stages similar to the sequence below:
    a. The reading will start as high as 15-17 amps for a short period of time.
    b. It then falls to 6-8 amps for a short time.
    c. Then 1 to 1.5 amps for a period of time.
    d. It will then settle on around .800 amps (800 Milli-amps) for a while.
    e. Then it may drop to .100 to .200 amps (100 to 200 Milli-amps) for period of time.
    f. Finally it will drop all the way into Sleep mode, .040 to .100 amps (40 to 100 Milli-amps) and will stay there until the van is woke up.
    g. Note: The values you will see will vary from Van to Van, from Van type to type and by the number and type of accessories installed on the Van. The important thing is that it drops to a value less the 100 Milli-amps (.100 Amps) for a standard Van when it goes into Sleep Mode.

15) You can wake the van simply by opening the Drivers Side Door for a few seconds, then closing it.

16) Watch the meter again to see the Van go into sleep mode again. You should repeat this test until you are satisfied the Van's "Sleep Mode" is functioning correctly.

Continued on next page.

This picture shows a complete setup for a Draw Test:



Note the Black Probe attached to the Negative Terminal and the Red Probe attached to the Negative Battery Cable.

This picture shows a typical Multimeter. Note the Current Range Switch settings and current Probe Jack markings are all in yellow for uA (Micro-Amps), mA (Milli-amps and A (Amps).

Also note that the meter has two Jacks for current measurement, "20A" and "uA/mA". On this meter, for our Draw Test, we would place the Function Switch in the "A" (for Amps) position and plug the Red Probe into the "20A" Jack. The Black Probe always goes in the Black Jack.

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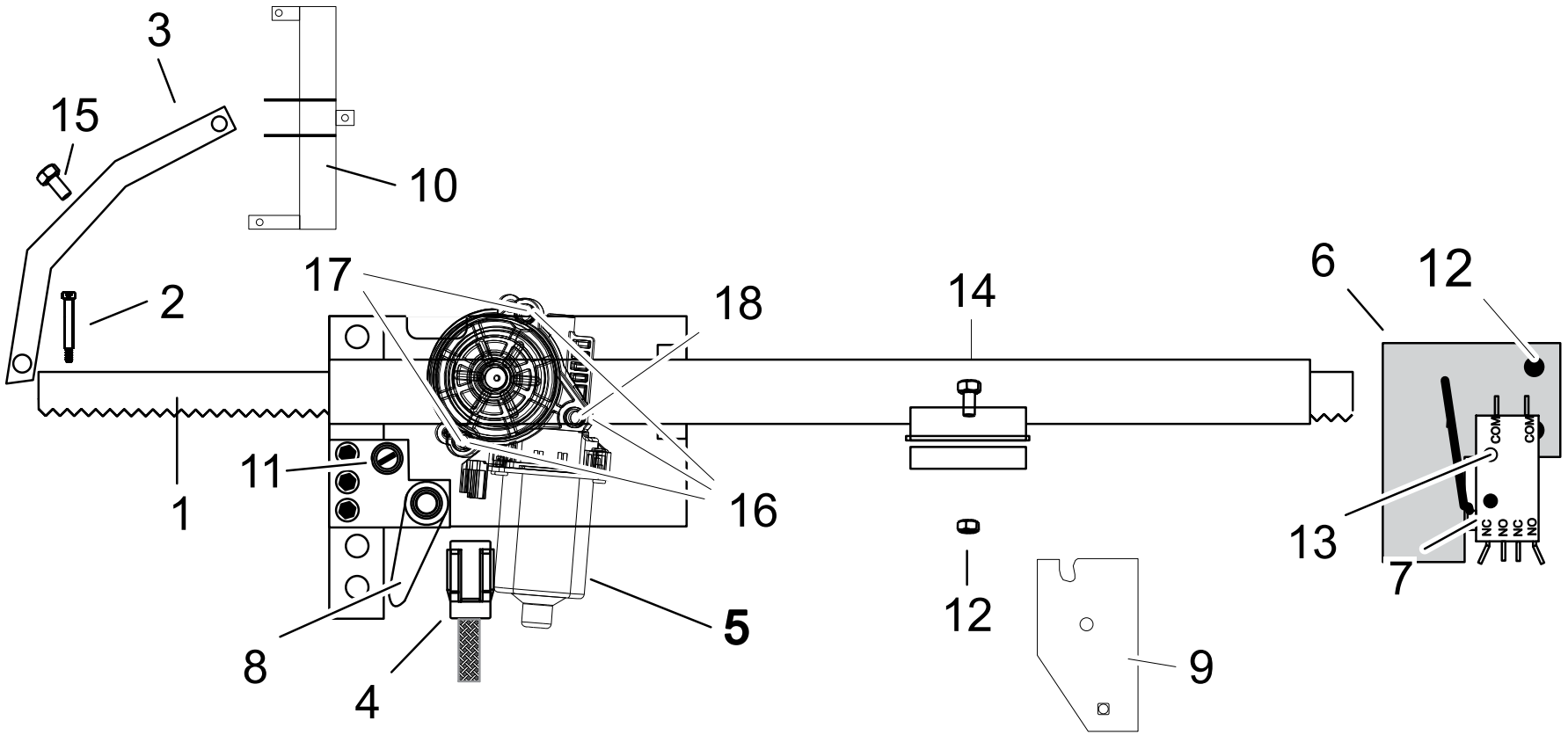
Symptom	Possible Cause	Remedy
Door does not operate.	Front passenger door is locked.	Unlock front passenger door.
	Switch is stuck.	Make sure all user switches are not stuck.
	Blown fuse.	Replace 30 or 15 amp blade fuse located underneath hood near battery.
	Manual release handle is not engaged.	Turn handle all the way counter-clockwise.
Door will open, but ramp will not deploy.	Door open limit switch needs adjustment.	Adjust the door open limit swtich (#7 on next page). The switch can be accessed by the passenger side rear speaker area (remove the speaker first).
Door will open, but not close or door will “jump” closed.	Ramp up limit switch is not engaged.	Adjust the cam for up limit.
Door “ratchets” when operating (make sure kneeler is off).	Gear on motor is stripped.	Replace motor.
	Gear on bar is stripped.	Replace gear rack (bar).

Rollx Vans Power Door For 2008 Chrysler Exploded View



Item	Qty.	Description	Part #
	1	DOOR BAR ASM (INCLUDES THE 3 FOLLOWING)	10026ASM
	1	MTR BAR DOOR OPENER (RACK AND ASSEMBLY)	10026
	1	WIRE HARNESS 5.5" FOR	310-1059
	1	MTR 12V 10NM 10MM DOUBLE	210-1011
1	1	GEAR RACK (ONLY RACK)	10026-4
2	1	3/8 X 1 STRIP	1126318
3	1	ARM BAR (FOR MOTOR BAR) - MODIFIED VERSION OF 2005 PART	10026-22-08
4	1	WIRE HARNESS 5.5" FOR	310-1059
5	1	MOTOR ONLY W/GEAR ASM (INCLUDES WIRE HARNESS AND SHIMS)	10026-15ASM
6	1	BRKT MTR BAR LIMIT SWITCH, 2008	MB1006-08
7	1	SWITCH DPDT (CHERRY)	E19-50H

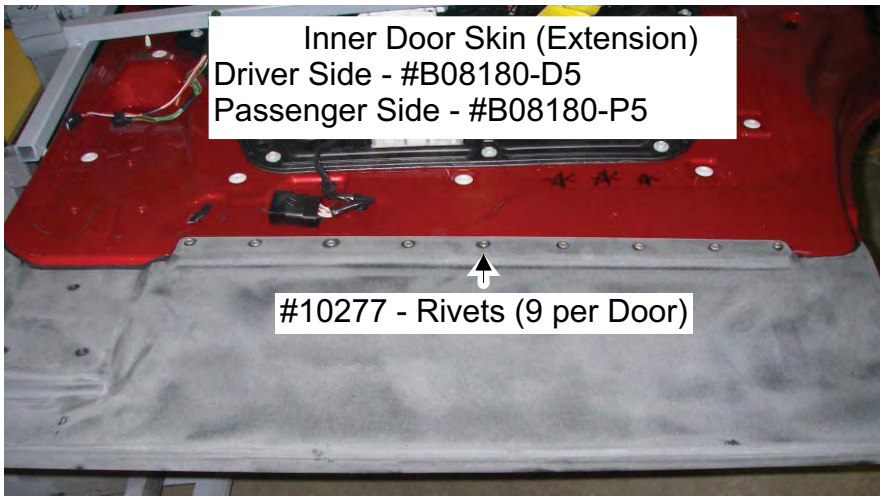
Item	Qty.	Description	Part #
8	1	HANDLE CHROME INSIDE	6022
9	1	SEATBELT MOUNT BRACKET, 2008	MB08001
10	1	DOOR ARM PLATE, 2008	MB08002
11	N/A	MANUAL RELEASE TENSION ADJUSTMENT	NA
12	3	1/4-20 YZ NE NYLOCK	1137183
13	2	6-32 NYLOCK NM Z	1137010
14	1	HCS 1/4-20X1 1/4 YZ8QP	0115007
15	1	HCS 3/8-16 X 1YZ8 QPA (ADJUSTMENT)	0115105
16	1	SHIM KIT FOR DOOR OPENERS (INCLUDES ALL 3 - VARYING SIZES)	10026-12
17	2	#10-32X2 HEX HEAD (5/32) PARTIALLY THREADED SCREW	SHOP SUPPLY
18	1	#10-32X2-1/2 HEX HEAD (5/32) PARTIALLY THREADED SCREW (NUT ON BACK)	SHOP SUPPLY

Note: In order to disable the OEM door from closing when the ramp is out, Rollx Vans interupts Chrysler's CAN BUS to prevent the door from getting any signal to close. The StarScan Tool will record a "No Communication with Right Rear Door Module" everytime the Rollx Vans system deploys the ramp and simply overwrite itself each cycle thereafter. This is a normal trouble code and is to be expected.

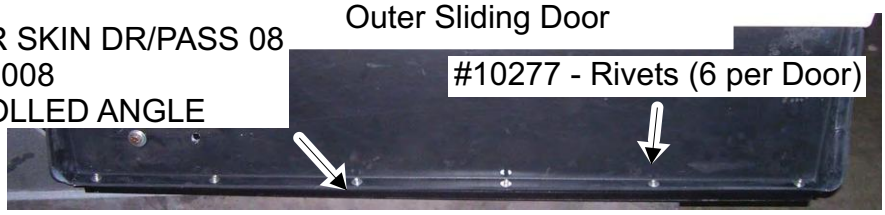
Symptom	Possible Cause	Remedy
Passenger sliding door does NOT OPEN with interior Rollx Vans user button.	Van is NOT in park.	Place van into park.
	Overhead on/off switch is turned to the OFF position.	Turn switch to ON position.
	OTC program failure.	Press OTC reset button.
	OTC reads low voltage.	Start van's engine and press OTC reset button. If door still does not open review OTC board display and contact customer service.
	Bad OTC board.	Press the OTC reset button and while in Idle Mode press a user button and watch the LED. Notice if OTC appears to be working properly. Review error codes stored and call customer service.
	Main OTC fuse (40 amp) is blown.	Replace fuse under hood by battery.
Ramp sliding door does NOT OPEN with interior OEM push buttons after pressing OTC reset button.	OEM overhead ON / OFF switch is OFF.	Turn switch to ON position. This switch enables / disables the OEM buttons located on the B pillars that Rollx Vans uses to trigger the sliding door to open or close.
	Defective OEM door opener.	Operate door manually and contact customer service.
Ramp sliding door does NOT attempt to CLOSE after ramp stows.	Ramp up limit switch is not being activated properly.	Close door manually, press OTC reset button, and press Rollx Vans user button to operate system again. If door still does not attempt to close after ramp is stowed, review OTC board display and contact customer service.
Ramp sliding door attempts to close (door motor runs) after ramp stows, but door does not move.	Defective door open bracket.	Adjust the bracket and contact customer service.
	Defective OEM door opener.	Press OTC reset button, press interior OEM push button to see if door will close automatically. If door still does not respond, review OTC board display and contact customer service.
Ramp sliding door kicks back when opening or closing.	Obstruction.	Check door track for any debris and remove.
	Ramp needs adjustment (Foldout only).	Adjust folding ramp to stow more.
	OEM door sensitivity set low.	Contact local Chrysler Dealership.
Ramp sliding door opens and van kneels, but when door is all the way open, van unkneels and cycle ends.	OEM Door Ajar Pin Switch (Rollx Vans Door Close signal) is never deactivated when door begins to open.	If the OTC thinks the door is open and closed it will end the cycle. Examine switch / wiring.
Ramp sliding door does not seal when almost closed.	Ramp needs adjustment (Foldout only).	Adjust folding ramp to stow more.
	Defective OEM cinch motor.	Operate door manually and contact customer service.
Ramp sliding door does NOT OPEN manually.	Door is locked.	Unlock door. When pulling door handle, pull handle out and then slide door to open.
Ramp sliding door does NOT OPEN manually from interior handle, but does from exterior handle.	Child safety lock is activated.	See OEM owner manual to deactivate child safety lock.
Ramp sliding door closes half way and then moves back and forth.	Stuck door open limit switch.	Adjust swtich located in rear of lower door track.
Ramp sliding door will NOT CLOSE manually.	Door handle is not releasing.	Pull handle to disengage latch and slide to close.
	Obstruction.	Check door track for any debris and remove.

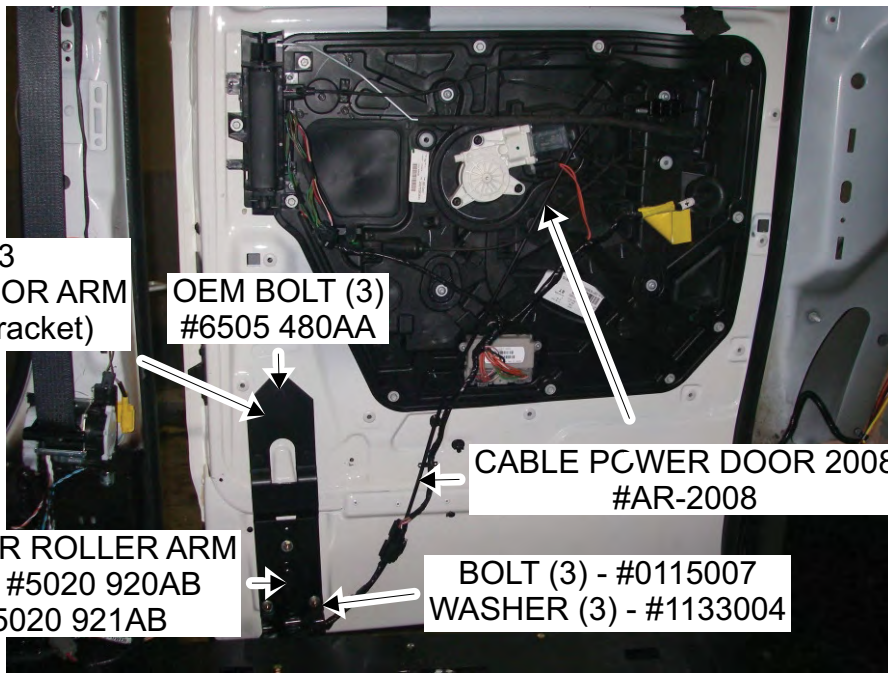
Door extension kits part numbers and descriptions

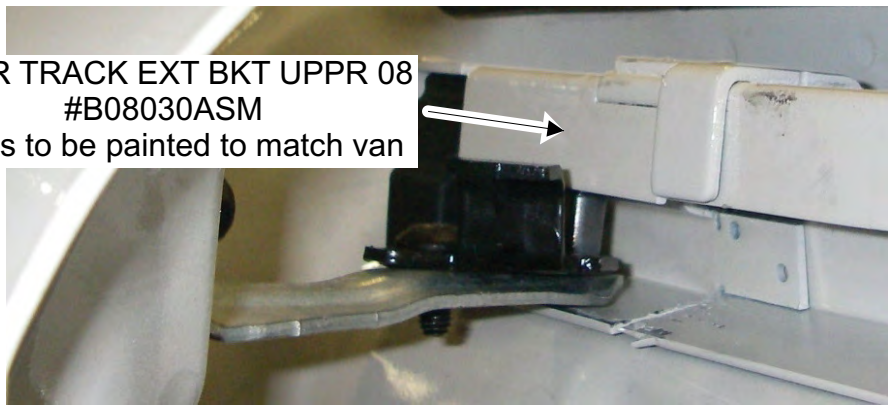
B08180-D5-KIT-ITF
-Door skin svc kit itf dr
B08180-d5-kit-fo
-door skin svc kit fo dr
B08180-p5-kit-itf
-Door skin svs kit itf pass
B08180-p5-kit-fo
-Door skin svs kit fo pass

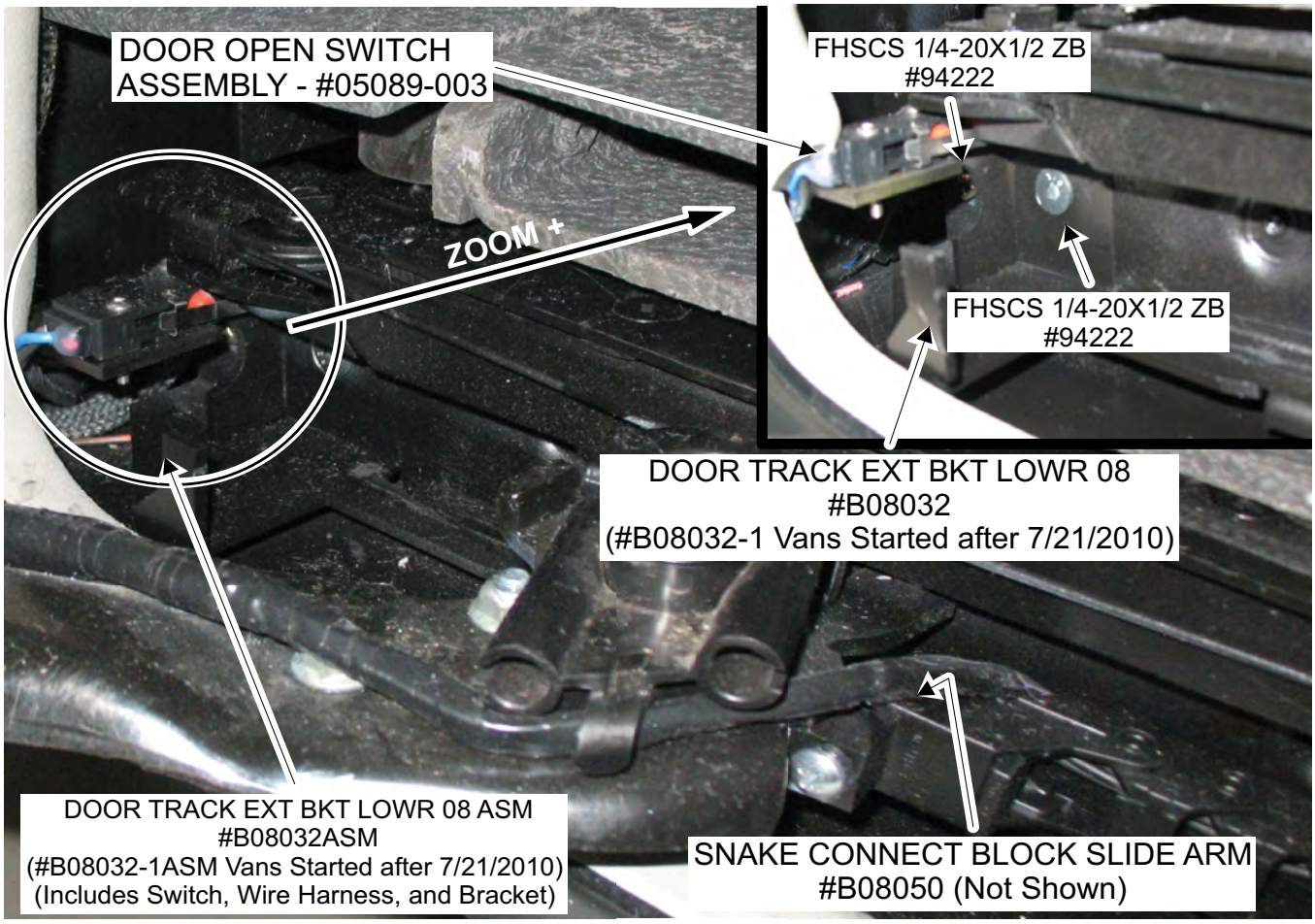


Current
#B08180-DP6 - L BRKT DOOR SKIN DR/PASS 08
Before 10/20/2008
#10503 - 1"X 1" 14GA ROLLED ANGLE

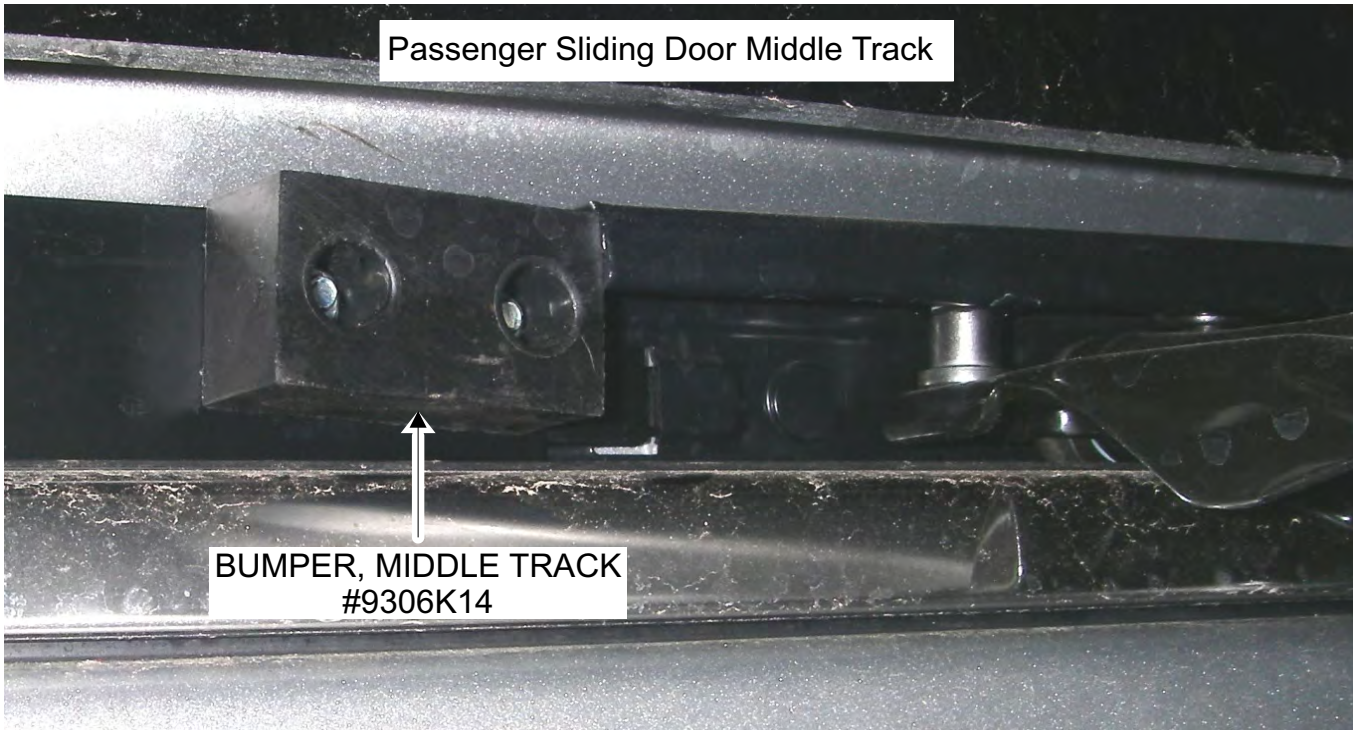


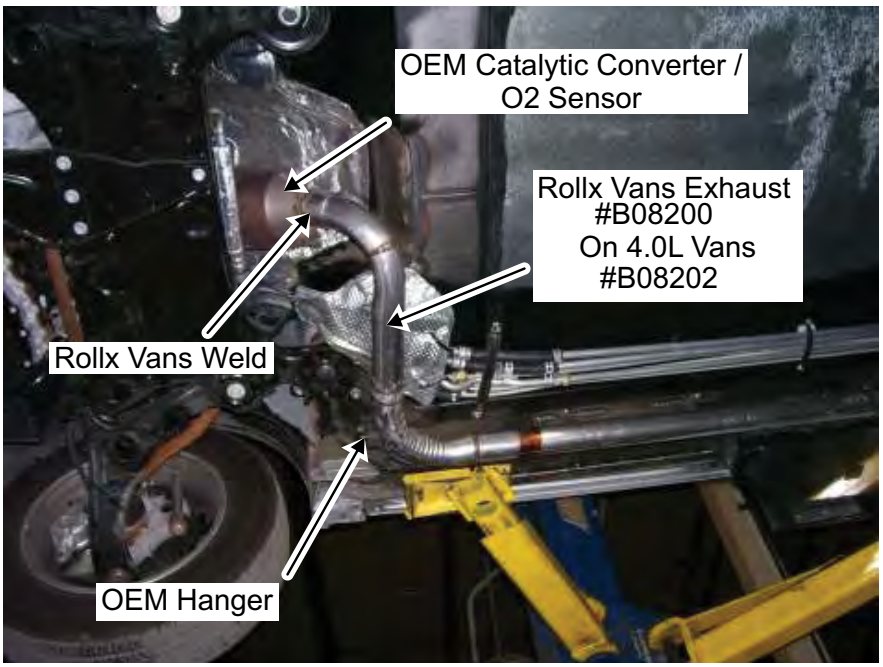






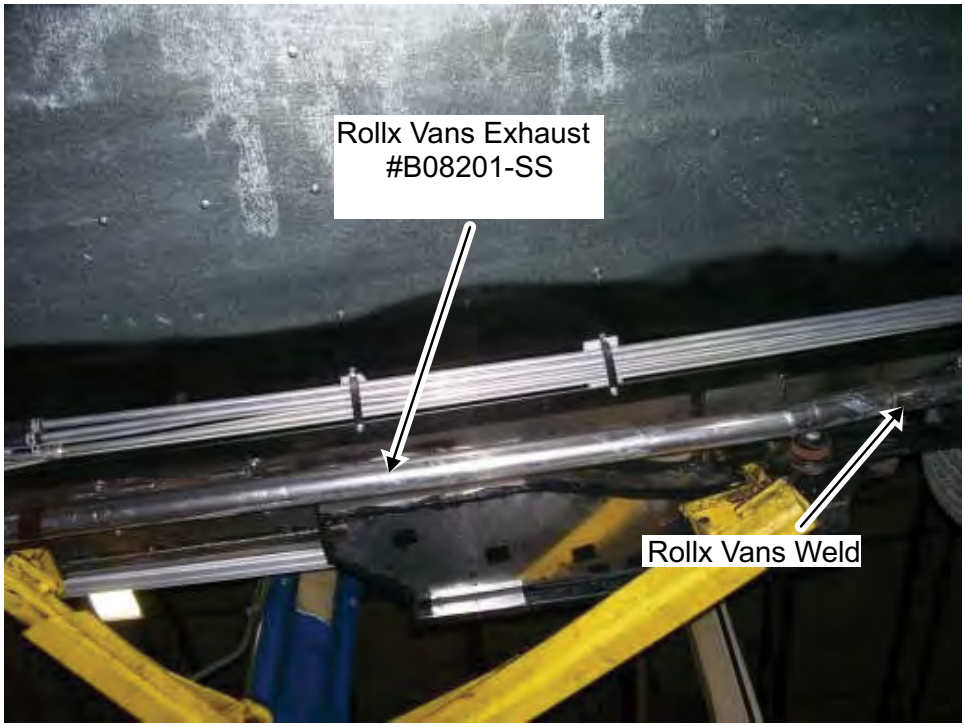
Door track kits and descriptionsincludes oem track and door open switch bracket
B08059asm-dr - Door track asm 08-09 dr
B08059asm-dr-2010 - Door track asm 10-12 dr
B08059asm-ps - Door track asm 08-09 ps
B08059asm-ps-2010 - Door track asm 10-12 ps

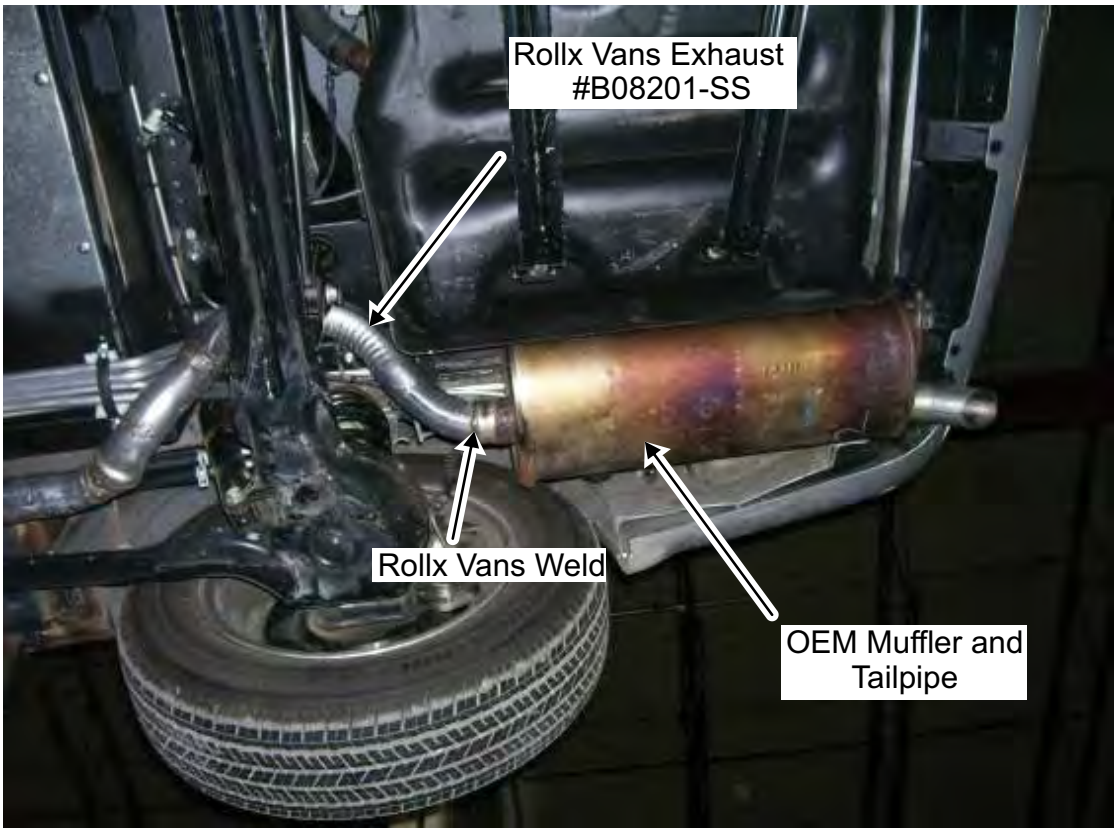




Rollx Vans begins their exhaust from the OEM Catalytic Converter (Rollx Vans does not modify the OE Catalytic Converter or OEM 02 Sensor). Rollx Vans Exhaust is welded to the OEM Catalytic Converte and runs down the passenger side of the van.

Rollx Vans reuses the OEM Hangers to support the exhaust. Rollx Vans Exhaust pipe is 2-1/4 inch dia aluminized tubing and replaces the OEM 2-1/2 inch tubing.





Rollx Vans Exhaust continues over the rear axle and is welded to the OEM Muffler and Tailpipe.

Rollx Vans eliminates the OEM Resonator.

#B08180-P = Passenger Side
#B08180-D = Driver Side

(Chrysler Vans Only)
#B08180-P4
#B08180-D4

(Dodge Vans Only)
#B08180-P4D
#B08180-D4D

(Before 12/2/08)
#B08180-P3
#B08180-D3

(After 12/2/08)
#B08180-P3.2
#B08180-D3.2

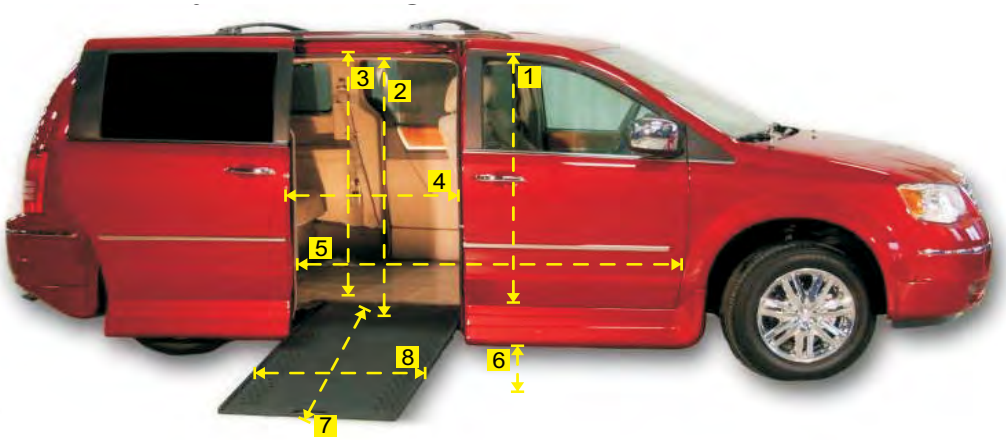
(Before 12/2/08)
#B08180-P2
#B08180-D2

(After 12/2/08)
#B08180-P2.2
#B08180-D2.2

#B08180-P1
#B08180-D1

When replacing either of these ground effects on a 2008 Chrysler van built before 12/2/08. order as follows:

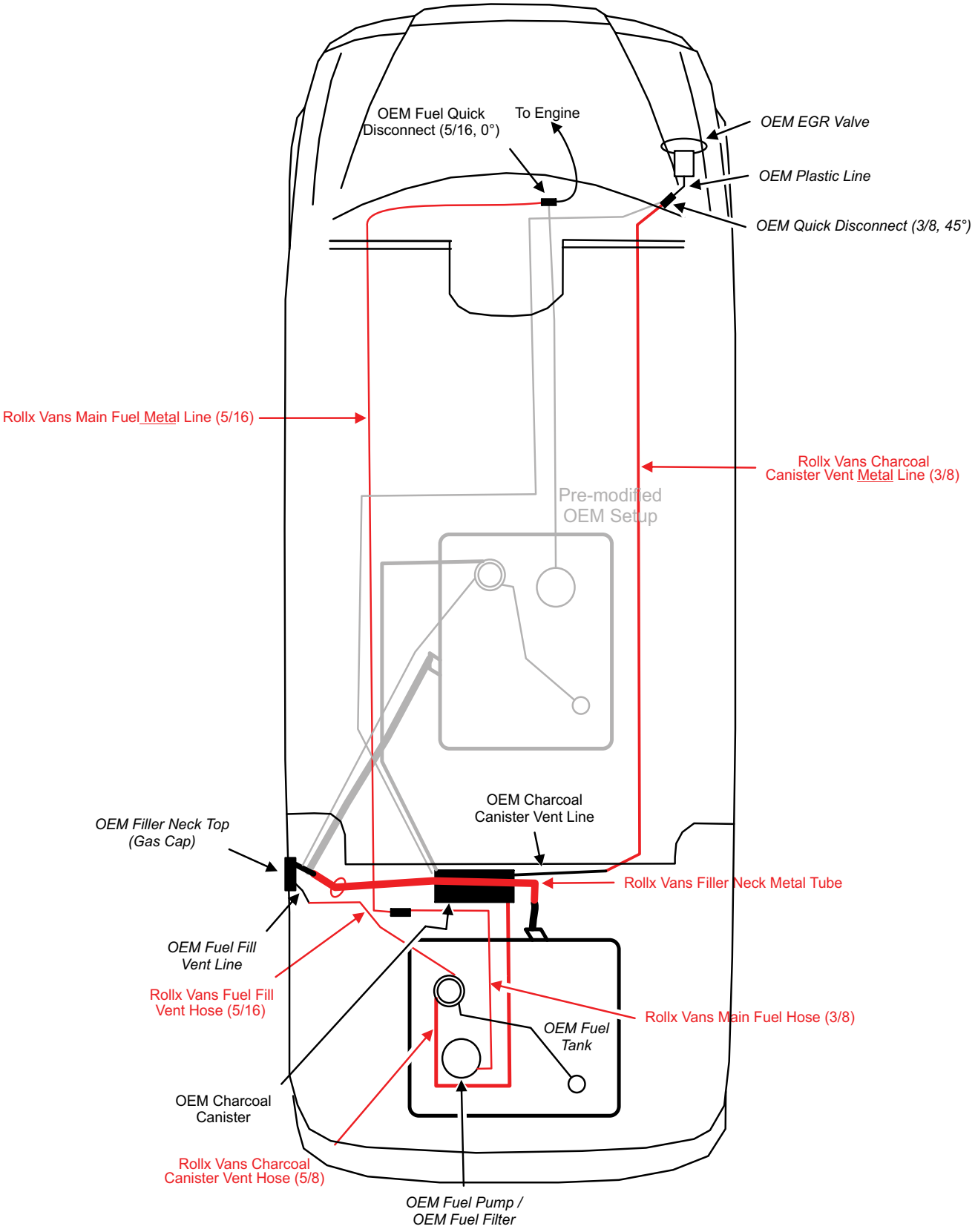
- D3 or P3 = it is necessary to replace both the D2 and D3 with the new D2.2 and D3.2 (same for passenger side).
- D2 or P2 = we have about 20 in stock of each so just replace that required piece until out of stock, then follow above rule.

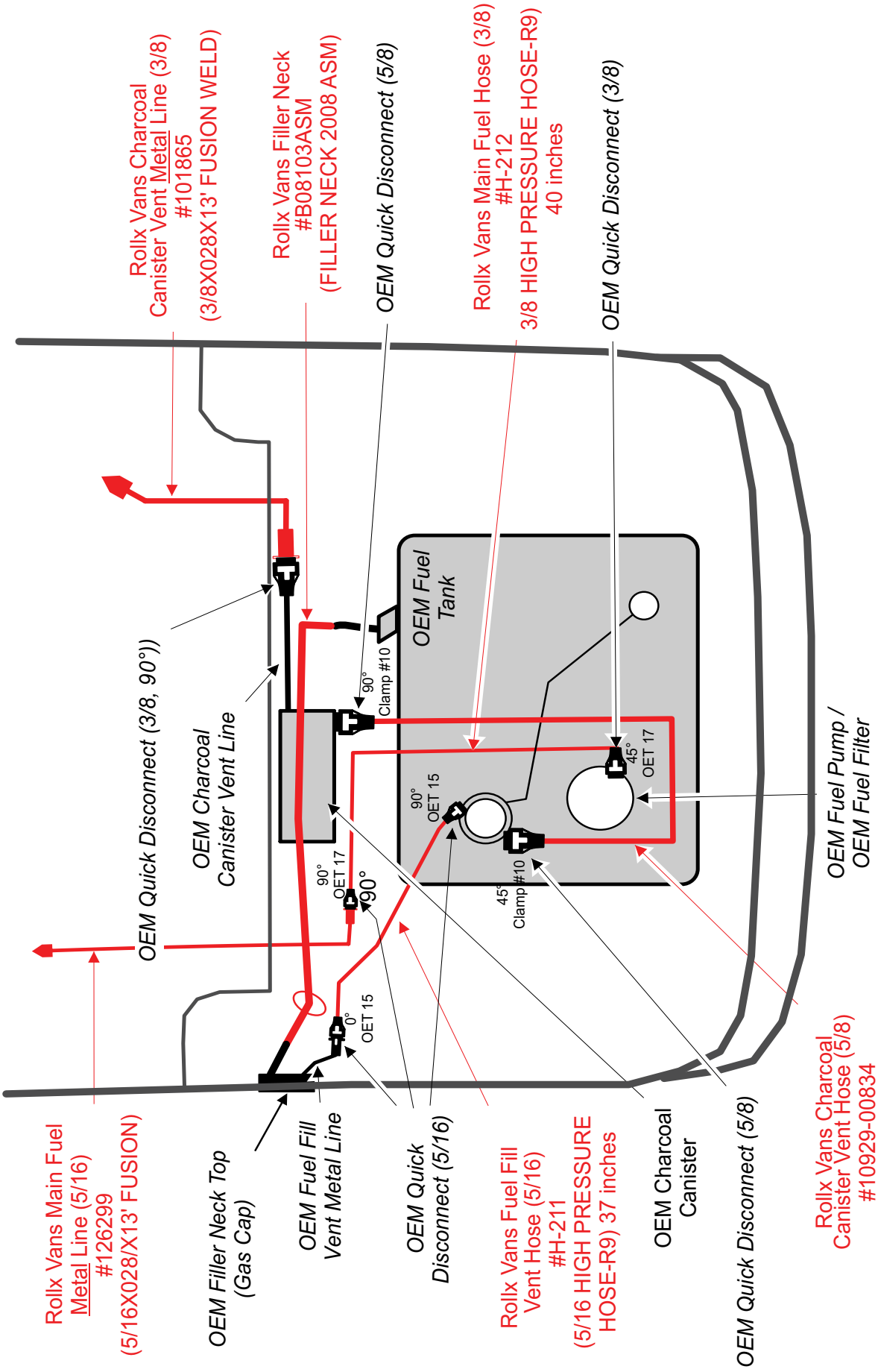


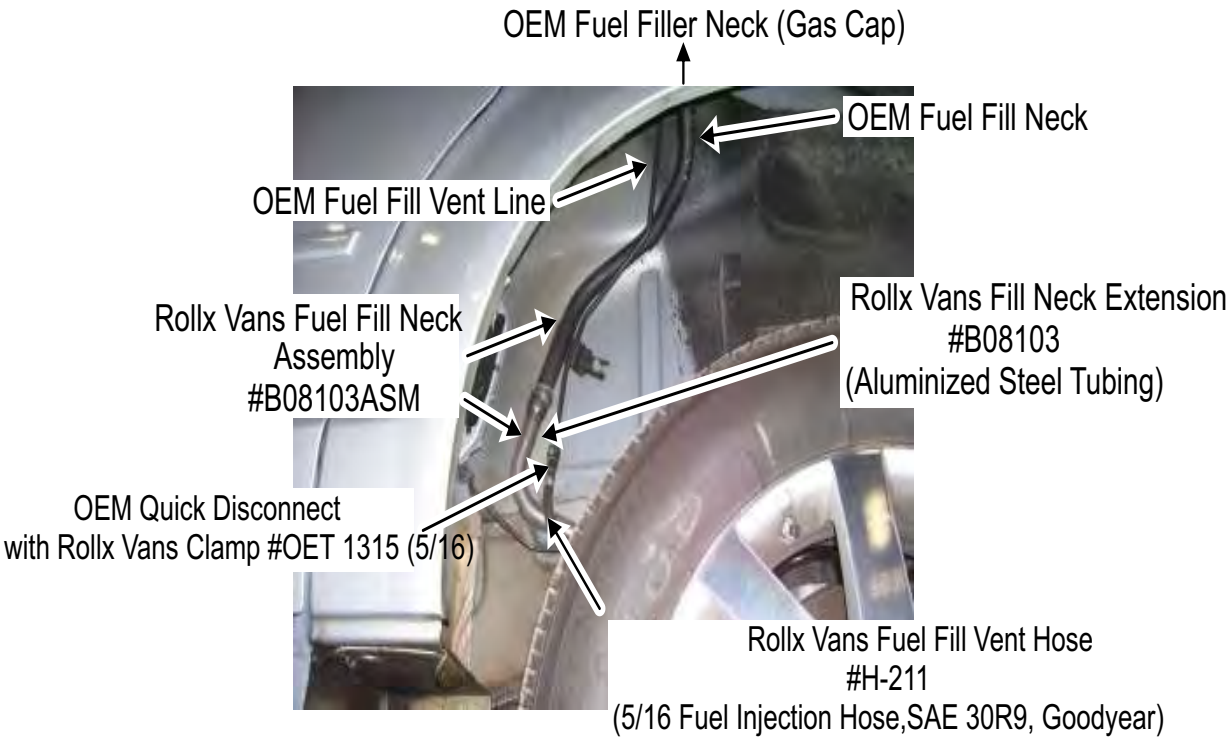
Measurement	Description	Rollx Vans Chrysler/Dodge In The Floor Ramp 11 Inch Drop	Rollx Vans Chrysler/Dodge Folding Ramp 11 Inch Drop
1	Floor to Ceiling Height	58	58
2	Passenger Sliding Door Opening Height	54.5	54
3	Floor to Overhead Console	57	57
4	Passenger Sliding Door Opening Width	31.5	31.5
5	Cargo Area Length (Rear "z" to Firewall Along Floor)	84	84
6	Ground Clearance - Ground Effect	7	7
7	Ramp Length	50	55.5
8	Ramp Width (Inside Wall to Inside Wall)	30	29
	Cargo Area Width When Closed (Door to Door / Door to Ramp)	66.5	61.5
	Ground Clearance - Lowest Point (Exhaust)	5.5	5.5
	Cargo Area Length (Rear Sofa to Clip-in Base)	54.5	54.5

* All measurements are subject to change depending on various van configurations and should be used as approximations.

2008-2009 Chrysler Town & Country / Dodge Grand Caravan (3.3L, 3.8L & 4.0L)
Rollx Vans Fuel / Emission System Overview
(V5)

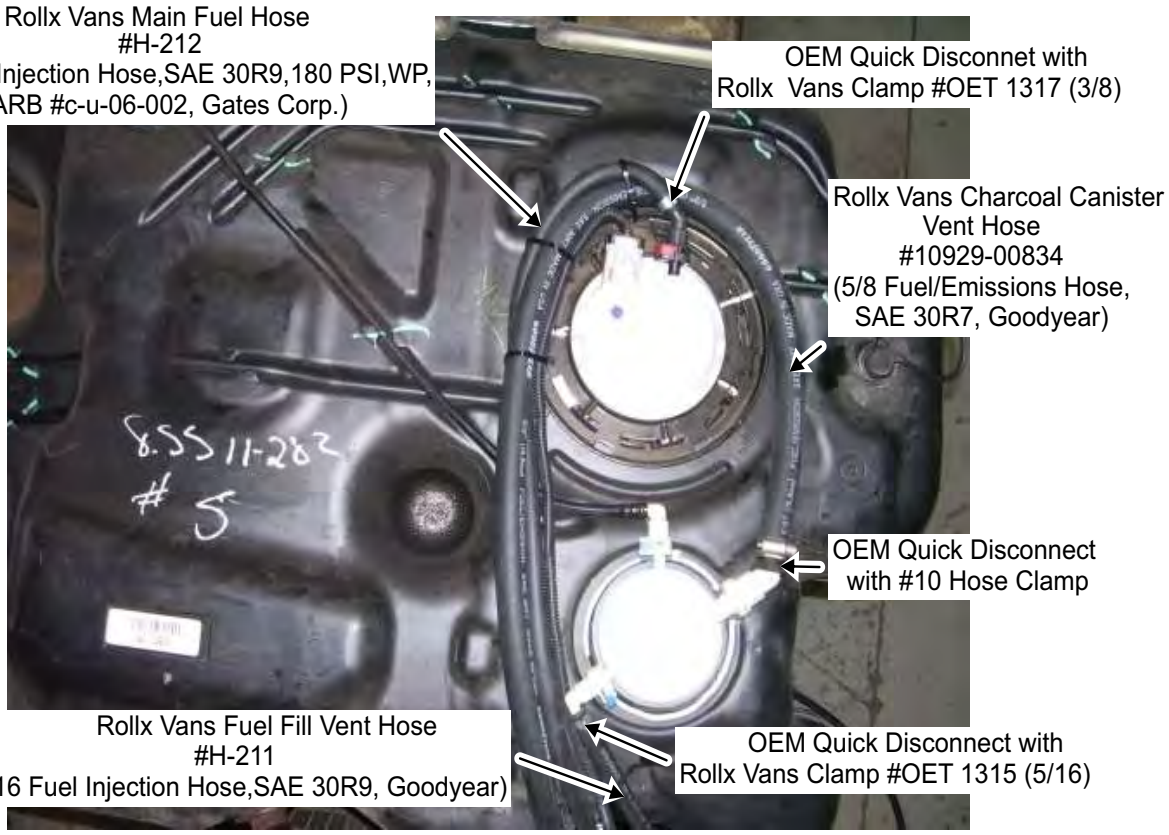



Rollx Vans Charcoal Canister Vent Metal Line (3/8) #101865 (3/8X028X13' FUSION WELD)
Rollx Vans Filler Neck #B08103ASM (FILLER NECK 2008 ASM)
OEM Quick Disconnect (5/8)
Rollx Vans Main Fuel Hose (3/8) #H-212 3/8 HIGH PRESSURE HOSE-R9) 40 inches
OEM Quick Disconnect (3/8)
OEM Quick Disconnect (3/8, 90°))
OEM Charcoal Canister Vent Line
OEM Fuel Tank
90° Clamp #10
90° OET 17
90°
90° OET 15
45° Clamp #10
45° OET 17
0° OET 15
OEM Fuel Pump / OEM Fuel Filter
Rollx Vans Main Fuel Metal Line (5/16) #126299 (5/16X028/X13' FUSION)
OEM Filler Neck Top (Gas Cap)
OEM Fuel Fill Vent Metal Line
OEM Quick Disconnect (5/16)
Rollx Vans Fuel Fill Vent Hose (5/16) #H-211 (5/16 HIGH PRESSURE HOSE-R9) 37 inches
OEM Charcoal Canister
OEM Quick Disconnect (5/8)
Rollx Vans Charcoal Canister Vent Hose (5/8) #10929-00834 (FUEL LINE 5/8-R7) 53 inches



Rollx Vans welds a Fill Neck Extension onto OEM Fuel Fill Neck to extend the OEM Fuel Fill Neck to the OEM Fill Neck Hose that attaches to the tank. The completed assembly is #B08103ASM that includes the OEM Fuel Fill Neck welded to the Rollx Vans Fill Neck Extension. The modified filler neck Is smoke tested for possible pin hole leaks.

Rollx Vans attaches a Fuel Fill Vent Hose that begins at the gas tank to the OEM Fuel Fill Vent Line with a 9/16 clamp. This hose and the filler neck tube are routed underneath the frame.

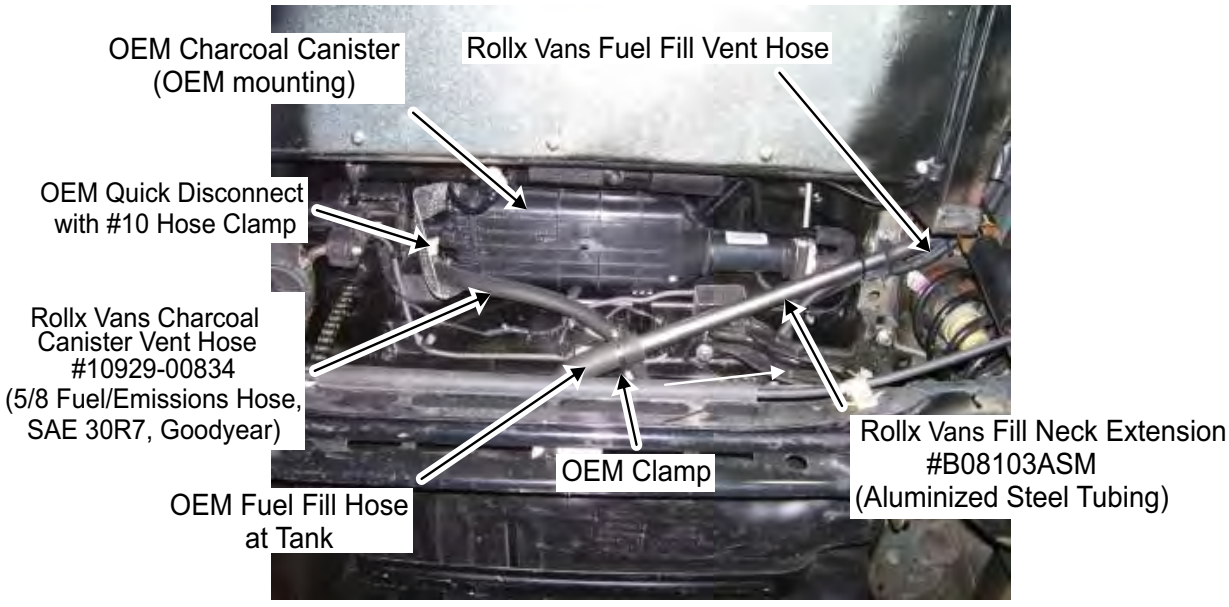


Rollx Vans reuses the OEM Gas Tank.

Rollx Vans replaces OEM Fuel Fill Vent Hose with Rollx Vans Fuel Fill Vent Hose that runs to OEM Fuel Vent Line near Filler Neck top (Gas Cap).

Rollx Vans replaces OEM Charcoal Canister Vent Hose with Rollx Vans Charcoal Canister Vent Hose that runs to OEM Charcoal Canister. Rollx Vans does not modify the OEM Charcoal Canister or its mounting.

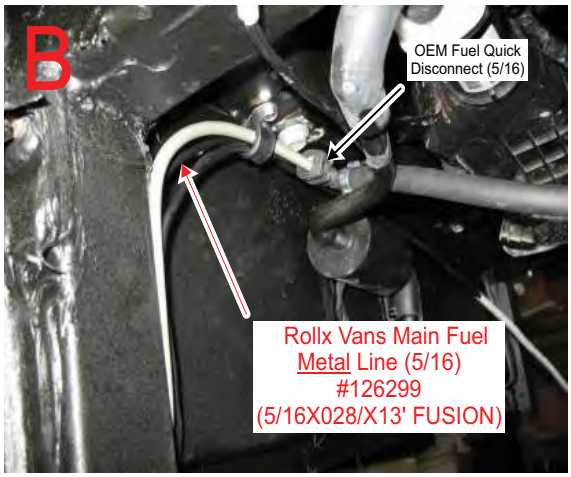
Rollx Vans replaces OEM Main Fuel Hose with Rollx Vans Main Fuel Hose that runs to Rollx Vans Main Fuel Metal Line where it is attached to the flared metal line with the OEM Quick Disconnect.

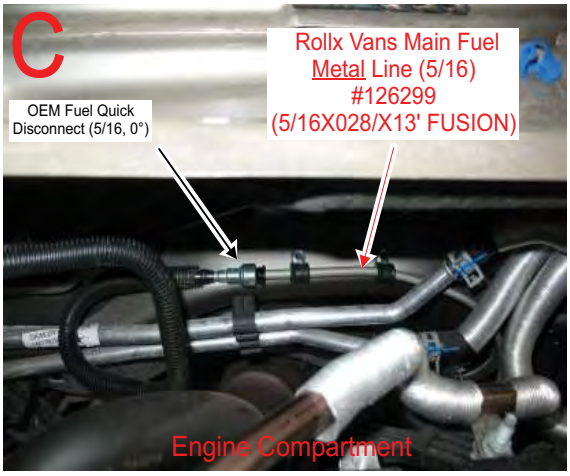


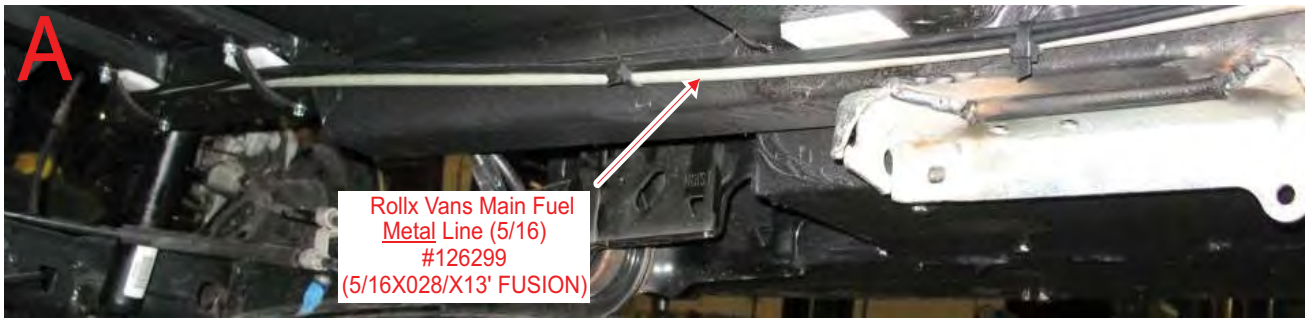
A) Rollx Vans runs the Rollx Vans Main Fuel Metal Line (5/16) under the driver side of the van using P-Clamps to secure.

B) The Rollx Vans Main Fuel Metal Line (5/16) is routed up the rear z, flared and attached to OEM Quick Disconnect.

C) The Rollx Vans Main Fuel Metal Line (5/16) is routed up under the engine compartment, flared and attached to OEM Quick Disconnect.



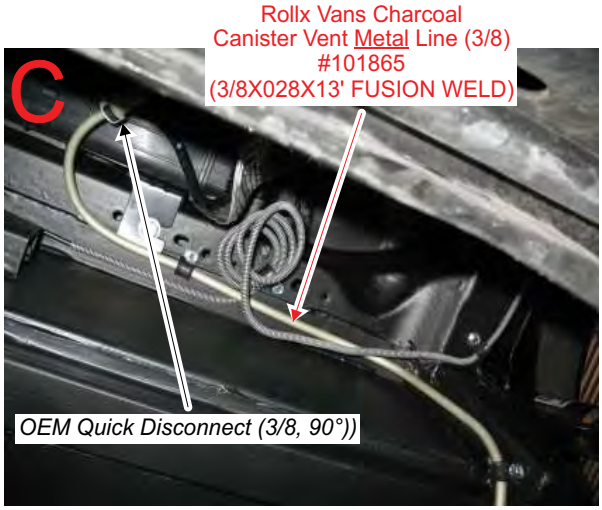


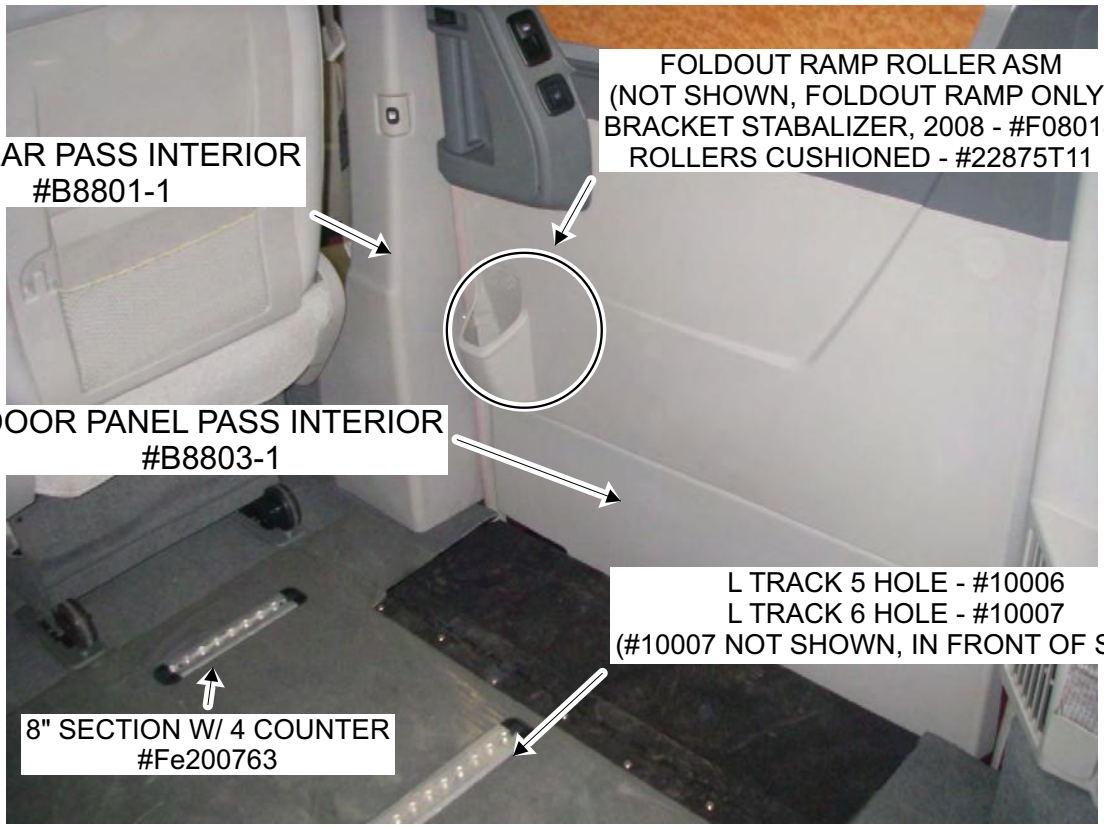


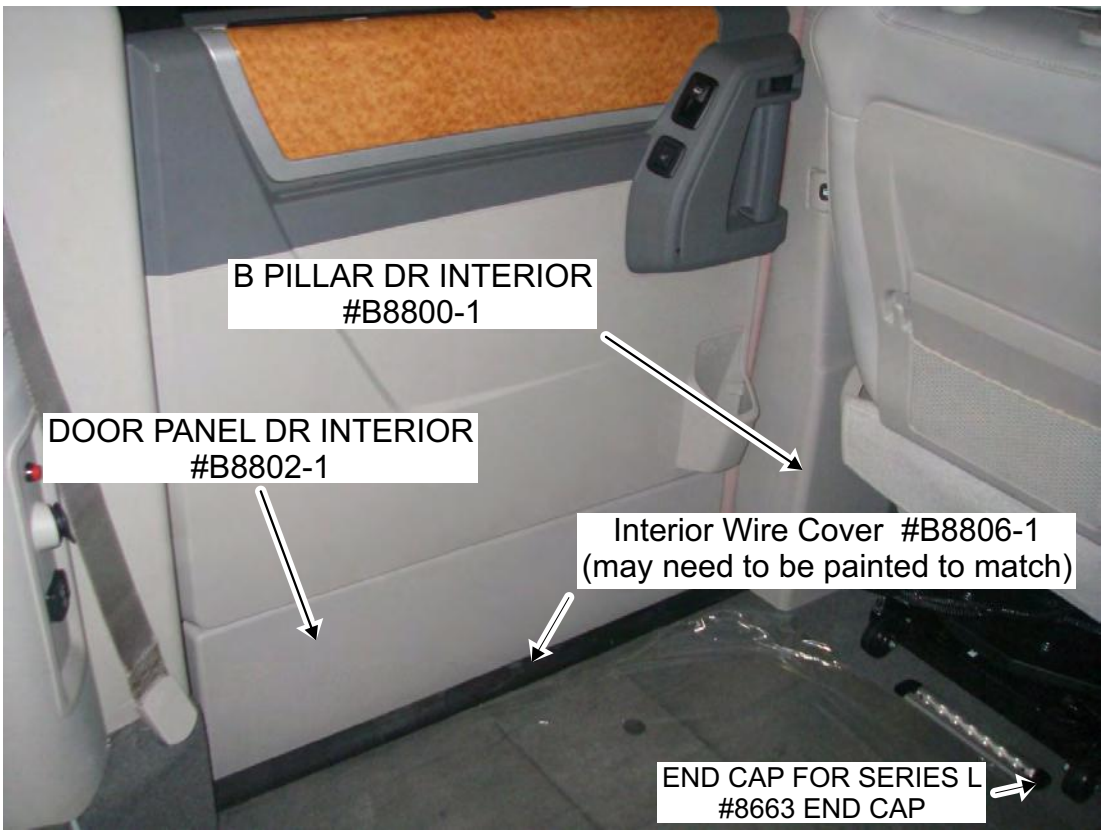
A) Rollx Vans runs the Rollx Vans Canister Vent Metal Line (3/8) under the passenger side of the van using P-Clamps to secure.

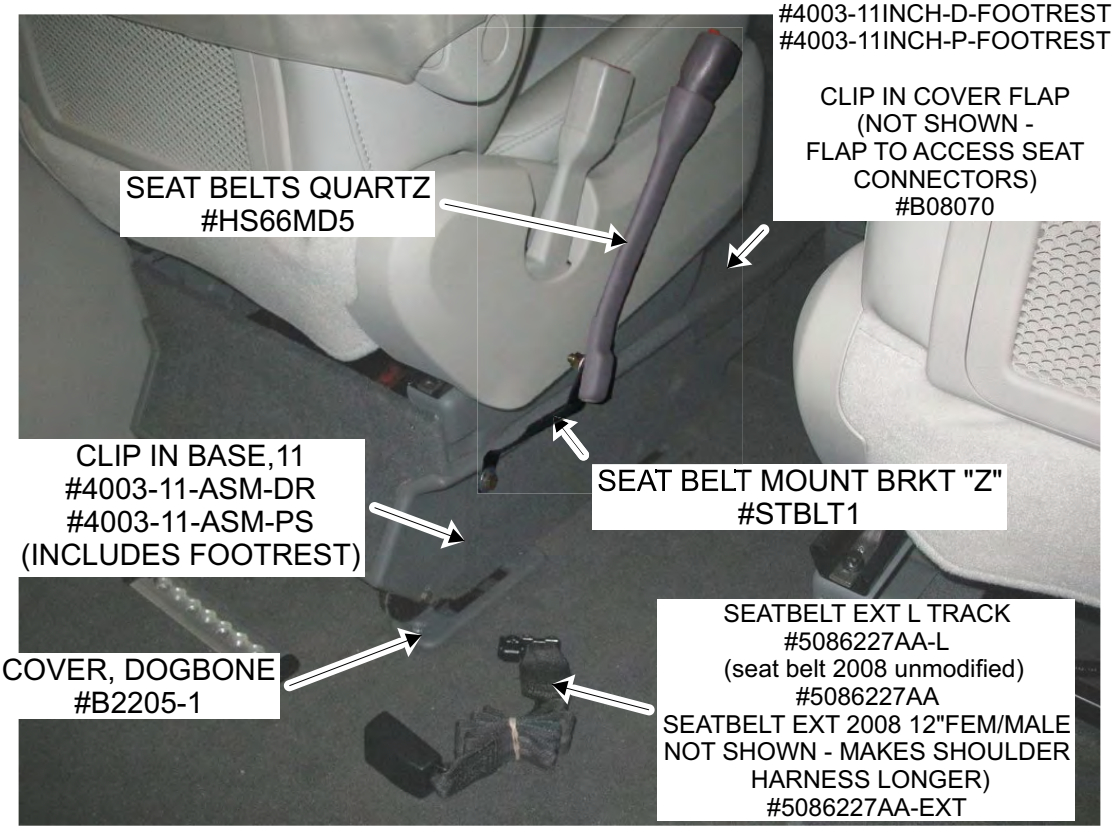
B) The Rollx Vans Canister Vent Metal Line (3/8) is routed up under the engine compartment, flared and attached to OEM Quick Disconne

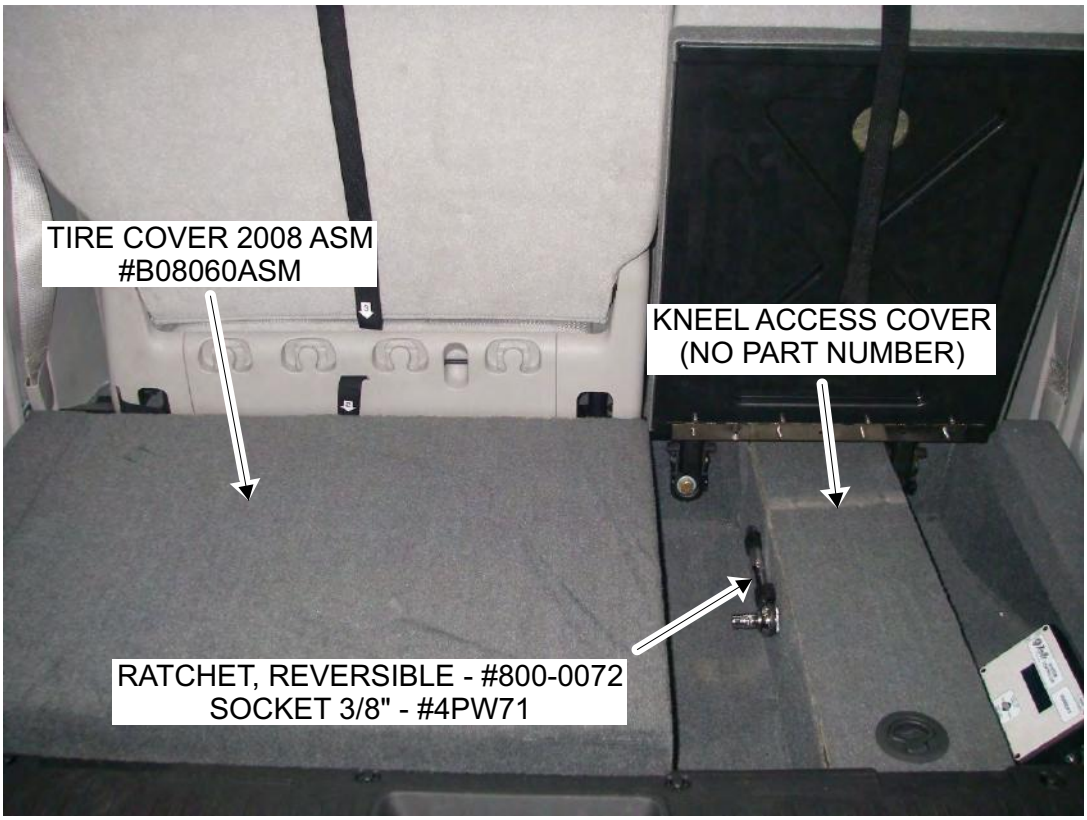
C) The Rollx Vans Canister Vent Metal Line (3/8) is routed up the rear z, flared and attached to OEM Quick Disconnect.



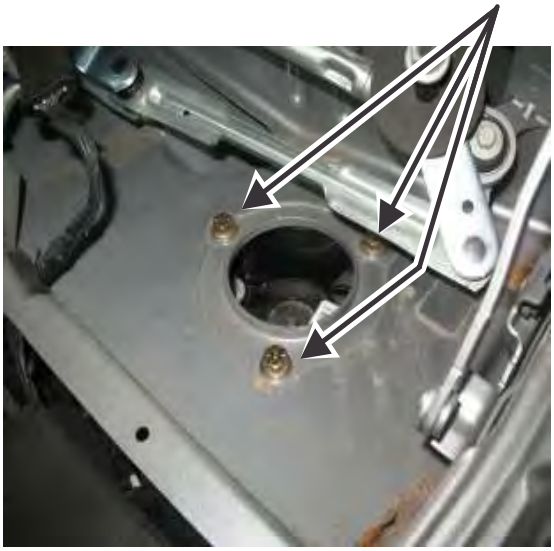

FOLDOUT RAMP ROLLER ASM
(NOT SHOWN, FOLDOUT RAMP ONLY)
BRACKET STABALIZER, 2008 - #F08018
ROLLERS CUSHIONED - #22875T11
B PILLAR PASS INTERIOR
#B8801-1
DOOR PANEL PASS INTERIOR
#B8803-1
L TRACK 5 HOLE - #10006
L TRACK 6 HOLE - #10007
(#10007 NOT SHOWN, IN FRONT OF SOFA)
8" SECTION W/ 4 COUNTER
#Fe200763


B PILLAR DR INTERIOR
#B8800-1
DOOR PANEL DR INTERIOR
#B8802-1
Interior Wire Cover #B8806-1
(may need to be painted to match)
END CAP FOR SERIES L
#8663 END CAP


CLIP IN FOOTREST11 IN.,DR
#4003-11INCH-D-FOOTREST
#4003-11INCH-P-FOOTREST
CLIP IN COVER FLAP
(NOT SHOWN -
FLAP TO ACCESS SEAT
CONNECTORS)
#B08070
SEAT BELTS QUARTZ
#HS66MD5
CLIP IN BASE,11
#4003-11-ASM-DR
#4003-11-ASM-PS
(INCLUDES FOOTREST)
SEAT BELT MOUNT BRKT "Z"
#STBLT1
COVER, DOGBONE
#B2205-1
SEATBELT EXT L TRACK
#5086227AA-L
(seat belt 2008 unmodified)
#5086227AA
SEATBELT EXT 2008 12"FEM/MALE
NOT SHOWN - MAKES SHOULDER
HARNESS LONGER)
#5086227AA-EXT


TIRE COVER 2008 ASM
#B08060ASM
KNEEL ACCESS COVER
(NO PART NUMBER)
RATCHET, REVERSIBLE - #800-0072
SOCKET 3/8" - #4PW71

Front Strut Mounting Bolts #B08001ASM



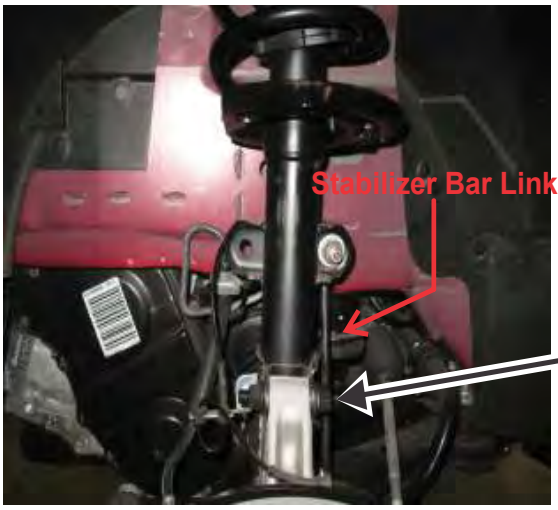
BOLTS:
5/16" -18 x 1" (QTY 6)
#0115055

WASHERS:
1/4" ZINC FLAT(QTY 6)
#1133004

LOCK WASHERS:
5/16" (QTY 6)
#1133892

Strut Collar Assembly #B08001ASM

*Reuse OEM strut collar nuts to fasten collar to strut.

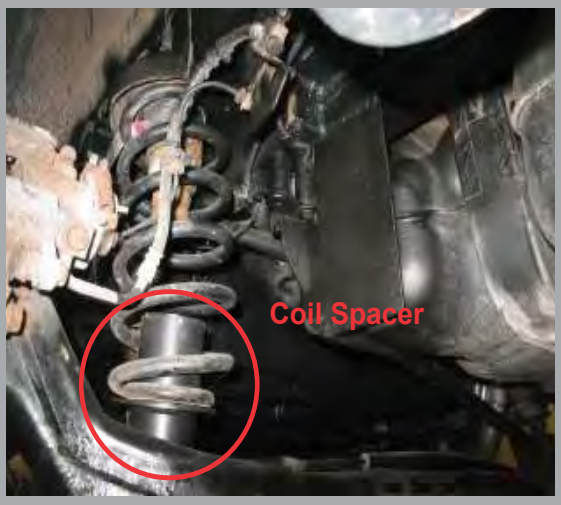


Adjustable Camber Bolt #41-214

Vans Built Prior to 1-2-2013

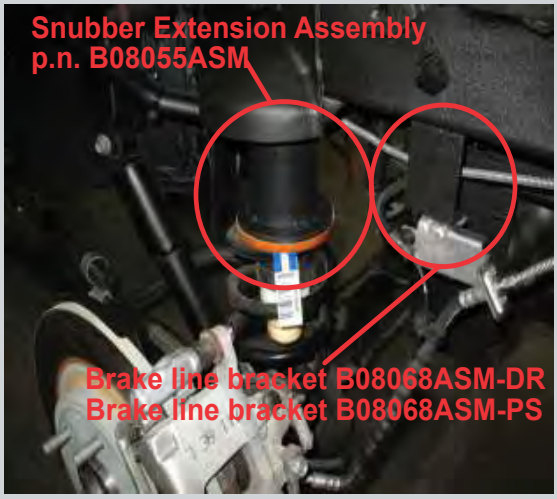
COIL SPACER ON BOTTOM

SERVICE KIT #R0046



Vans Built After 1-2-2013

SNUBBER EXTENSION ON TOP

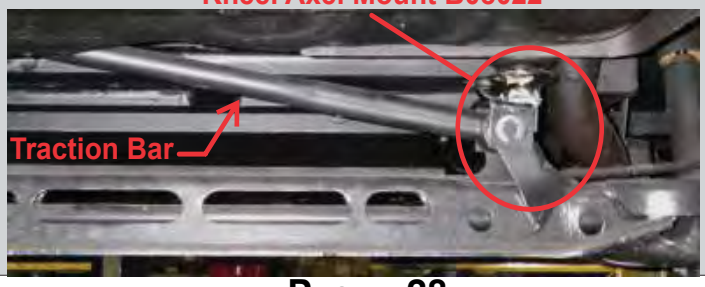


Traction Bar Spacers B08065

BOLTS: (QTY 4)
M10-1.50 x 100mm
#0153998

WASHERS: (QTY 4)
1/2" ZINC FLAT
#1133012

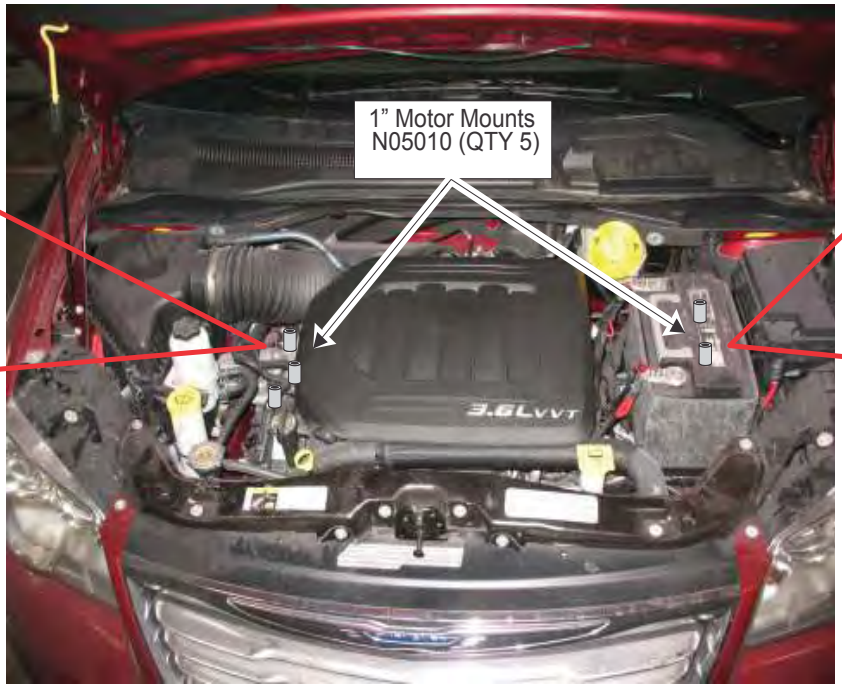
Kneel Axel Mount B08022



BOLTS:
M10-1.50 x 70mm (QTY 3)
#0153994

WASHERS:
3/8" ZINC FLAT(QTY 3)
#1133008

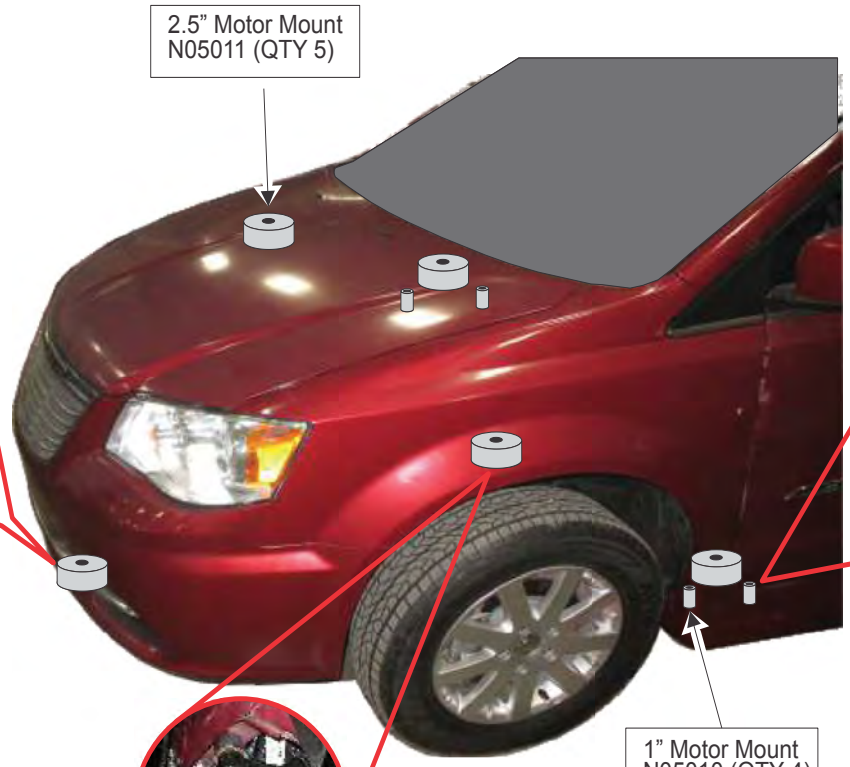
Right Side Engine Mount



BOLTS:
M12-1.50 x 70mm (QTY 2)
#38503

WASHERS:
1/2" ZINC FLAT(QTY 2)
#1133012

Left Side Engine Mount



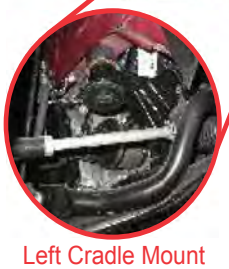
Front Engine Mount

OEM Isolator bolt
#4721 746AB (QTY 1)

Left Crossmember Bracket
(Right side same)

BOLTS:
M12-1.75 x 50mm (QTY 4)
#0154004

WASHERS:
3/8" ZINC FLAT(QTY 4)
#1133012



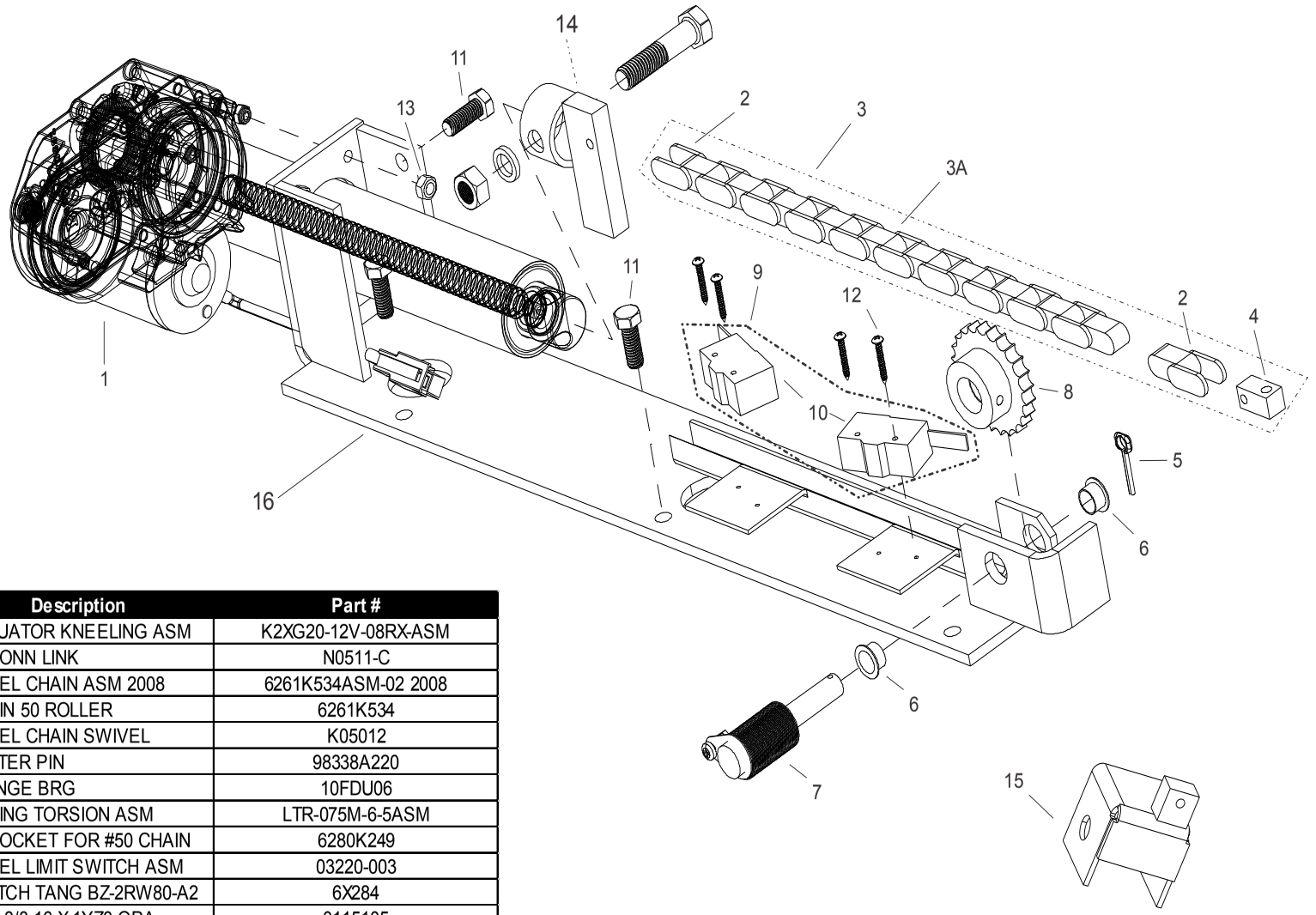
Left Cradle Mount
(Right side same)

BOLTS:
M14-2.0 x 190mm (QTY 4)
#0122055

WASHERS:
3/8" ZINC FLAT(QTY 4)
#1133012

	Torque Specifications	
Location	**Item**	**Torque**
Front Suspension	Wheel nuts	100 Ft. Lbs.
	Camber Bolts	116 Ft. Lbs.
	Stabilizer Bar Link Nuts	65 Ft. Lbs.
	Strut Collar-to-Body	21 Ft. Lbs.
	Strut Collar-to-Strut	21 Ft. Lbs.
Rear Suspension	Wheel nuts	100 Ft. Lbs.
	Trailing Arm Bracket-to Body Bolts	40 Ft. Lbs.
	Trailing Arm Pivot Thru-Bolts	129 Ft. Lbs.
	Traction Bar To Axle Bolts	60 Ft. Lbs.
	Shock Absorber Upper Mounting Bolts	55 Ft. Lbs.
	Shock Absorber Lower Mounting Bolts	55 Ft. Lbs.
Engine & Cradle	Front Engine Mount	83 Ft. Lbs.
Mounting	Right Side Engine Mount	40 Ft. Lbs.
	Left Side Engine Mount	70 Ft. Lbs.
	Left & Right Cradle Mounts	120 Ft. Lbs.
	Left & Right Cross Member Brackets (M14 Bolts)	120 Ft. Lbs.
	Left & Right Cross Member Brackets (M12 Bolts)	40 Ft. Lbs.

Symptom	Possible Cause	Remedy
Van does NOT LOWER to ground while door is opening after Rollx Vans user button is pressed.	Kneel on / off switch is turned OFF.	Turn kneel switch to the ON position.
	Kneel motor.	Review display board. Turn kneel switch to the OFF position and press OTC reset button. Temporarily operate sytem without kneel option enabled. Contact customer service.
	Kneel chain is broken.	
After van is lowered to ground the kneeler makes a loud ratcheting sound.	Kneel down limit switch was not activated.	Adjust kneel down limit switch. Replace if broken. Contact customer service.
Van will NOT RAISE when ramp is stowed.	Kneel on / off switch is turned OFF.	Turn kneel switch to the ON position.
	Kneel motor.	Review display board. Manually un-kneel van, turn kneel switch to the OFF position and press OTC reset button. Contact customer service.
	Kneel up limit switch is activated incorrectly.	Adjust kneel up limit switch. Replace if broken. Contact customer service.
Van raises and while door closing the kneeler ratchets.	Kneel up limit switch is not activated.	Once door is closed and van is at normal height, turn kneeling switch to the OFF position and contact customer service.



Item	Qty.	Description	Part #
1	1	ACTUATOR KNEELING ASM	K2XG20-12V-08RX-ASM
2	2	50 CONN LINK	N0511-C
3	1	KNEEL CHAIN ASM 2008	6261K534ASM-02 2008
3A	1.5	CHAIN 50 ROLLER	6261K534
4	1	KNEEL CHAIN SWIVEL	K05012
5	1	COTTER PIN	98338A220
6	2	FLANGE BRG	10FDU06
7	1	SPRING TORSION ASM	LTR-075M-6-5ASM
8	1	SPROCKET FOR #50 CHAIN	6280K249
9	1	KNEEL LIMIT SWITCH ASM	03220-003
10	2	SWITCH TANG BZ-2RW80-A2	6X284
11	3	HCS 3/8-16 X 1YZ8 QPA	0115105
12	4	PPH MS 6-32 X 1 1/2Z	1128838
13	4	10-32 NYLOCK NMZ	1137015
14	1	ACTUATOR GUIDE ASM	K05006ASM
		Parts on Van	
15	1	KNEEL AXLE MOUNT	B08022
	1	RATCHET REVERSIBLE	800-0072*
	1	SOCKET 3/8"	4PW71*
	1	BOOT BLK "2005" KNEELACT	152303*
16	1	KNEEL ASSEMBLY BASE PLATE	K05100BKT-ASM
			* Not Shown

#KNEEL 2008 SNG OT-01 - KNEEL 2008 OTC SNG COMPLETE ASM

Important: If OTC Board is removed, the OEM System will not operate normally unless the CAN Bus Shunt is installed. The shunt is attached to the wire harness behind the OTC board. See OTC Wiring Diagram for more information.

Symptom	Remedy
No power to One Touch Controller (OTC).	Check that OTC ON/OFF switch is on. The power toggle switch is on the actual OTC board itself.
	Ensure the connections on the back of the OTC board are tight.
	Check the OTC main fuse (40 amp) located near the vehicles main battery.
	Reset the OTC.The reset is located on the dash by the drivers left knee and on the OTC board (red button).
	Check battery voltage.
OTC beeps 4 times when the user tries to run a normal open/close cycle.	Battery is low. Turn off the OTC and charge battery. Note: The alarm will sound when the battery voltage is below 11.4 VDC. This is to prevent the OTC system from draining the battery far enough as to prevent the vehicle from starting. This level is adjustable in the boards setup menu.
The van's battery is dead.	Van has been sitting for an extended period of time. Charge the battery.
	Check the current draw by placing an ampeter in series with the negative terminal on the battery with all doors closed and engine off. The draw varies, but awake, the system should be less than .850 amps and when sleeping, less than .050 amps. Additional equipment installed will also vary these numbers. See Battery section for more information.
The OTC display is garbled	Reset the OTC. The reset is located on the dash by the drivers left knee and on the OTC board (red button).

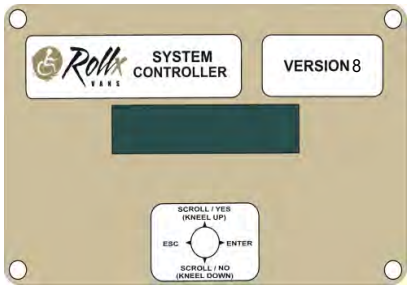
The Rollx Vans One Touch Controller, known as the OTC, is a Single Board Computer specifically designed for the Rollx Vans system.

The OTC system was designed to be independent to the operation of the Chrysler computer system. When power is removed from the OTC, it has no effect on the operation of the Chrysler system as long as the OTC Shunt Plug is installed into the OTC Main Harness on all 2008 Chrysler Vans due to the CAN BUS system (see OTC Wiring Diagram for more information).

The OTC is a low power system. When the OTC is in Sleep Mode with the Display disabled, it typically draws less then 10ma of current from the battery. When awake in Idle Mode (not running a cycle) with the Display enabled, it typically draws less than 200ma of current from the battery.

The current state of the OTC can be determined by viewing the Display. During open or close operation the progress of the system can be tracked by watching the Display.

OTC V8.0



Sequence of Operation

Open Cycle

1) The OTC is activated by any Rollx Vans User Switch or Remote being pressed.
2) Door unlock command sent (1 sec.) To Front Passenger Door Control Module to unlock all doors.
3) Door open command sent to OEM B-Pillar Door Open/Close Button to open the passenger sliding door.
4) Door starts to open.
5) Kneeler motor is turned on and starts to lower van.
   *If door fails to open within 2 seconds of User Switch being pressed, cycle stops (van unkneels and cycle is ended)
6) Door reaches open position and activates Rollx Vans Door Open Limit Switch.
7) Passenger sliding door is disabled by OTC interrupting the CAN Bus signal with built in relay.
8) Ramp motor is turned on and starts to deploy.
9) Kneeler stops lowering when Kneel Down Limit Switch is activated.
10) Ramp stops deploying when Ramp Down Limit Switch is activated.
11) OTC enters Idle Mode.
12) OTC enters Sleep Mode.

Close Cycle

1) The OTC is activated by any Rollx Vans User Switch or Remote being pressed.
2) Ramp motor is turned on and starts to stow.
3) After a few seconds (ramp is off the ground and begun to slide into van) kneeler motor is turned on and starts to raise the van.
4) Kneeler stops raising when Kneel Up Limit Switch is activated.
5) Ramp stops stowing when Ramp Up Limit Switch is activated.
6) Passenger sliding door is enabled by OTC reconnecting the CAN Bus signal with built in relay.
7) Door close command sent to OEM B-Pillar Door Open/Close Button to close the passenger sliding door.
8) OTC receives signal from OEM Door Ajar Pin Switch that door is closed.
9) OTC enters Idle Mode.
10) OTC enters Sleep Mode.

Note: There are “Watch Dogs” programmed in the OTC software that act as timers to end a function if the function does not complete within a certain amount of expected and very reasonable time.

INPUTS

KNEEL DISABLE SWITCH (Violet wire) Allows the user to enable (the "I" position) or disable (the "O" position) the kneeling system. There is no display for this input.

USER SWITCH INPUT (Blue wire) Active while any Rollx Vans user button or Rollx Vans remote is pressed.

IGNITION INPUT (Pink/White wire) Indicates the status of the van ignition switch. When active, it indicates the ignition switch is off and the OTC will go into sleep mode when not in use. When not active it indicates the van ignition switch is on and the OTC will not go into sleep mode.

NEUTRAL INPUT (Green wire) Indicates the status of the gear shifter. When active, the van is either in neutral or park. The OTC system will not run a operational cycle unless the van is in neutral or park.

DOOR CLOSE LIMIT INPUT (Violet/Yellow wire) Active when the right side sliding door is fully shut.

DOOR OPEN LIMIT INPUT (Orange/Red wire) Active when the right side sliding door is fully open.

RAMP DOWN LIMIT INPUT (Red/White wire) Active when the ramp is in the down position.

RAMP UP LIMIT INPUT (Red/Green wire) Active when the ramp in the up position.

KNEEL DOWN LIMIT INPUT (Yellow/Green wire) Active when the kneeler is in the down position.

KNEEL UP LIMIT INPUT (Yellow/White wire) Active when the kneeler is in the up position.

OUTPUTS

System Status: Indicates if the system is ready to except a command. It is off when the OTC is in sleep mode.
V6.0 & V8.0 Display will show Rollx Vans: Idle.

RAMP DOWN MOTOR OUTPUT (Red wire) Active when the OTC is driving the ramp down (V6.0 & V8.0 OTC boards have obstacle detection monitoring this output).

RAMP UP MOTOR OUTPUT (Red/Black wire) Active when the OTC is driving the ramp up (V6.0 & V8.0 OTC boards have obstacle detection monitoring this output).

RAMP DISABLE OUTPUT (Red/Blue wire) Active anytime when the OTC is driving the ramp up or down. It indicates the ramp manual mode is disabled.

KNEEL UP MOTOR OUTPUT (Yellow/Red wire) Active when the OTC is driving the kneeler up.

KNEEL DOWN MOTOR OUTPUT (Yellow/Black wire) Active when the OTC is driving the kneeler up.

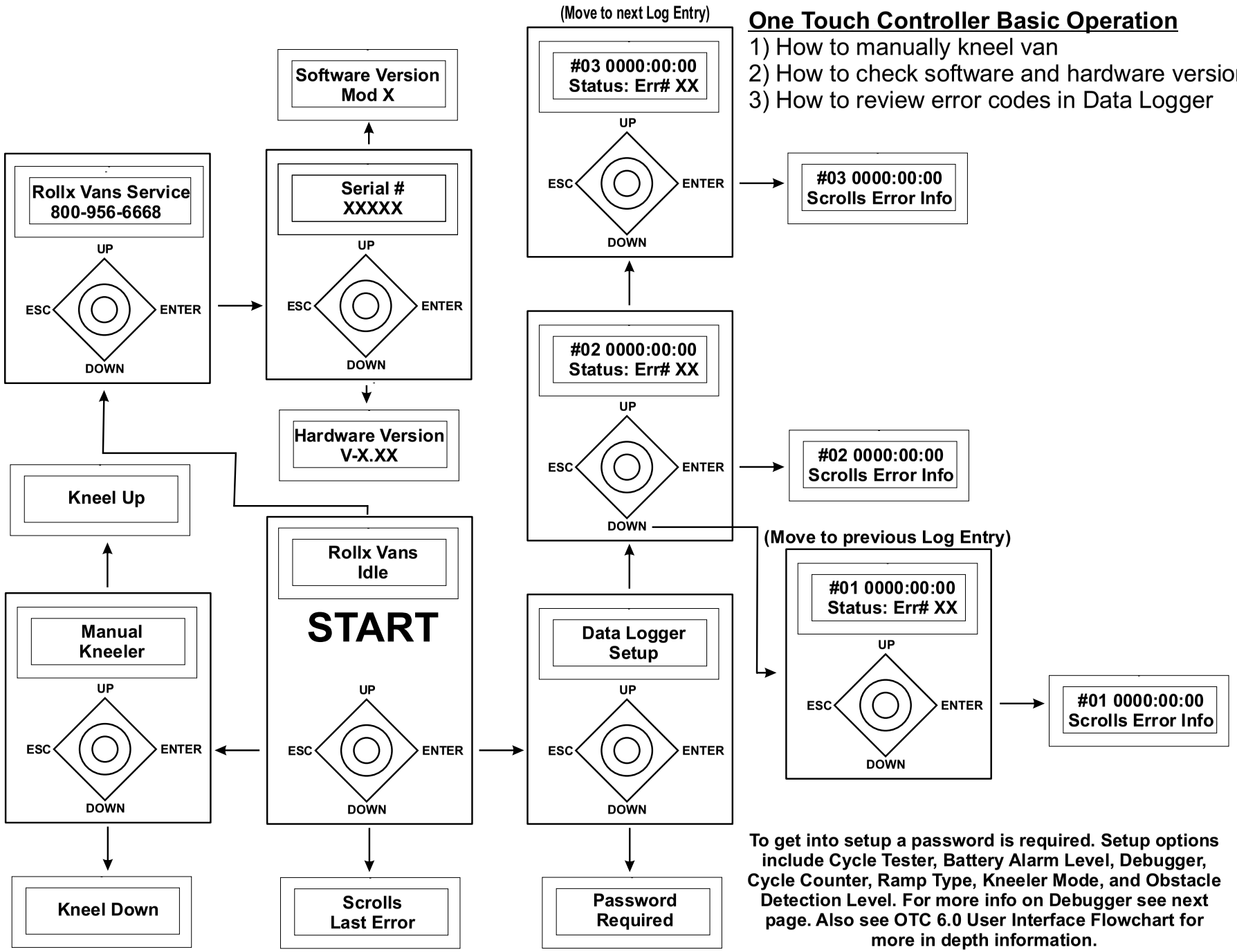
DOOR DISABLE OUTPUT (Orange/Blue) Used by the OTC to disable the Chrysler right side door controller anytime it wants to open the ramp. This prevents the right side door controller from banging the right side sliding door against the ramp.

DOOR CONTROL OUTPUT (Orange) OTC sends a command to the Chrysler system to open or close the right side sliding door.

DOOR UNLOCK OUTPUT (Yellow/Brown) OTC sends a command to the Chrysler system to unlock the doors at the beginning of an open cycle.

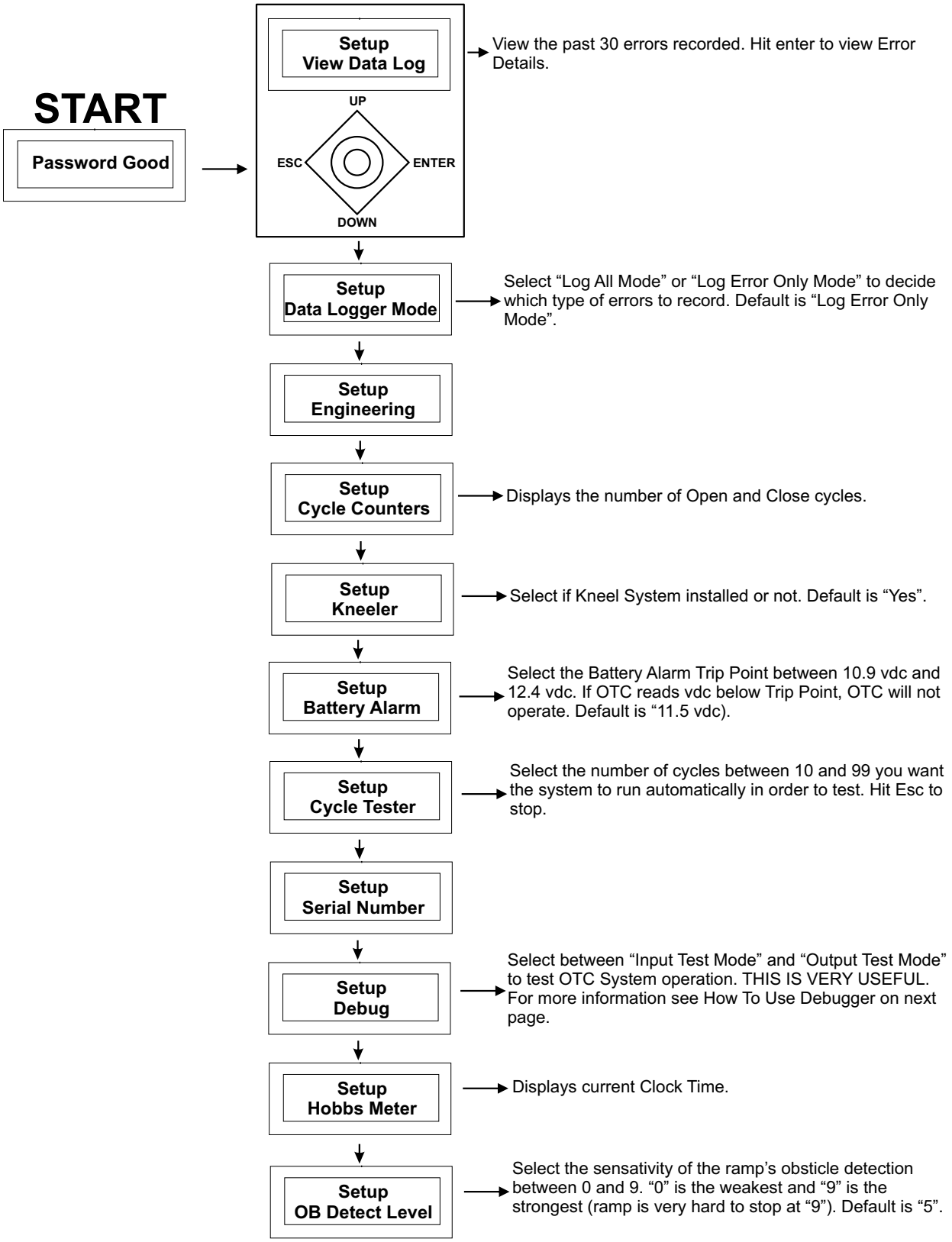
One Touch Controller Basic Operation

1) How to manually kneel van
2) How to check software and hardware versions
3) How to review error codes in Data Logger



To get into setup a password is required. Setup options include Cycle Tester, Battery Alarm Level, Debugger, Cycle Counter, Ramp Type, Kneeler Mode, and Obstacle Detection Level. For more info on Debugger see next page. Also see OTC 6.0 User Interface Flowchart for more in depth information.

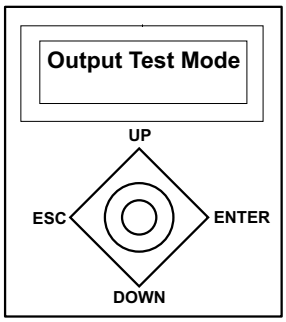
Options within Setup



How to Use Debugger
(Output Test Mode)

Use extreme caution when using the Output Test Mode. The Output Test Modes sends the signal directly to the OTC Relay Board which results in power going to the called motor. No safeties are in place (ie. The Ramp Down will operate the ramp regardless if the door is open or closed.

START

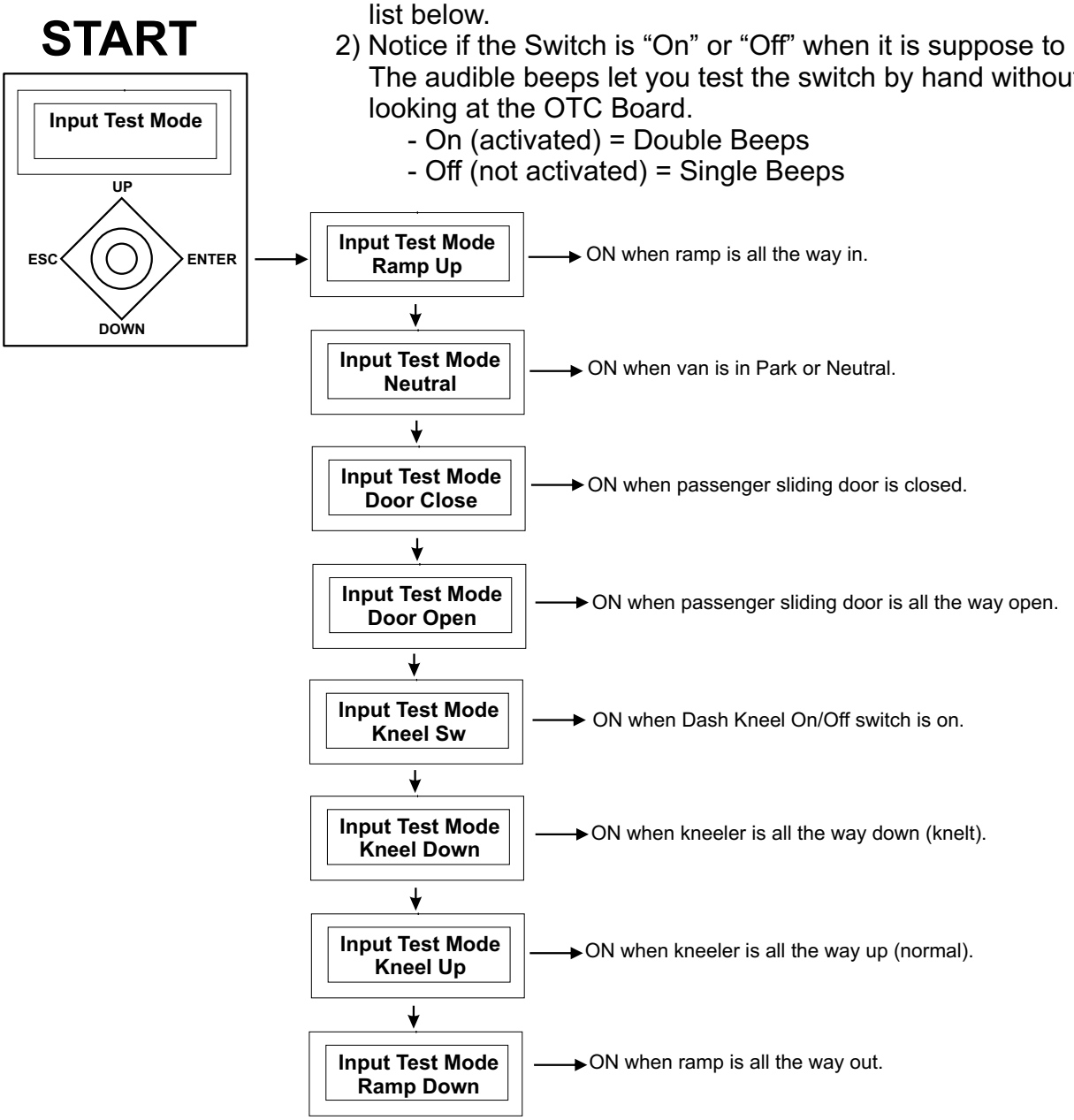


- **Output Test Mode Ramp Down** → Relay should click and ramp should go out.
- **Output Test Mode Door Unlock** → All OEM Doors should unlock.
- **Output Test Mode Door Close** → Closes the passenger sliding door.
- **Output Test Mode Door Open** → Opens the passenger sliding door.
- **Output Test Mode Kneel Down** → Press and hold to operate the kneeler and lower the van. Relay should click.
- **Output Test Mode Kneel Up** → Press and hold to operate the kneeler and raise the van. Relay should click.
- **Output Test Mode Ramp Enable** → Relay should click.
- **Output Test Mode Ramp Up** → Relay should click and ramp should go out.

How to Use Debugger (Input Test Mode)

The Input Test mode is very useful for testing the various limit switches the systems requires. To operate:

1) Select a Limit Switch (Input) you would like to test from the list below.
2) Notice if the Switch is “On” or “Off” when it is suppose to be. The audible beeps let you test the switch by hand without looking at the OTC Board.
   - On (activated) = Double Beeps
   - Off (not activated) = Single Beeps



For information about OTC Interface and how to use the Debugger, please refer to 'One Touch System - v8.0 Advanced Interace' section. Remember, in Input Test Mode, double beeps indicate the switch is on or activated and single beeps indicate that it is not. Also refer to the 'One Touch System - Relay Board Troubleshooting' for more information about the Relay Board, its Overide Switches and LED Indicator Lights.

Code	Description - What Caused the Code
Error 1 - Battery Low Error	Everytime before the OTC cycles, it checks the Main Battery's voltage. If reading is below the value set in the OTC Setup, the OTC will continue to operate, but will indicate a low battery warning. The default value is 11.5 volts.
Diagnostic Tests	**More Information**
Perform a Draw Test Follow instuctions in 'Battery Information - Draw Test Procedure' Section	Rollx Vans recommends starting your van every 4-5 days, allow it to run 15-20 minutes to keep the battery at a sufficient state of charge.
	A timer is included on the OTC that will shut it off after 5 minutes UNLESS in Setup Mode. Update OTC if needed.

Code	Description - What Caused the Code
Error 11 - Door Control Error	Door Control Output failure (The OTC did not successfully control the door to open or close). The OTC did not receive the signal that the door came off the OEM Door Ajar Switch when opening or did not receive the signal that the door came off the Rollx Vans Door Open Switch when closing. Once the OTC sends the signal to open the door, it waits about 2 seconds to see if the Door Ajar Switch is not activated. If the Door Ajar Switch is still active, this message will appear.
Diagnostic Tests	**More Information**
Output Test Place OTC in Debug - Output Test Mode to verify OTC operates the door correctly by sending signal to OEM B-Pillar Switch and/or OEM Front Passenger Door Unlock Switch. 1) Check Door Open. 2) Check Door Close. 3) Check Door Unlock. 4) Check Ramp Enable. This closes a relay on the OTC Relay Board that enables the ramp to run (prevents the ramp from running if the door is not open, door open enables ramp enable).	**OEM B-Pillar Switch / Door On/Off** If off, the OEM Overhead Power Sliding Door On/Off Switch will prevent the door from operating from the OEM B-Pillar Switch. The OTC uses this switch to open or close the door. When off, the OTC can not control the door. Make sure the switch is on and try hitting the OEM B-Pillar switch. If the door still does not work, likely an OEM issue. If OEM function works, but OTC does not check wiring.
Input Test Place OTC in Debug - Input Test Mode to verify limits operate correctly. 1) Check Door Open (Rollx Vans Door Open Switch), by opening door all the way in Door Open. 2) Check Door Close (OEM Door Ajar Switch), by close door all the way in Door Close. Rollx Vans taps into OEM Door Ajar Switch in Lower B-Pillar (See OTC Wiring for more information).	**Door Unlock Switch** Door must be unlocked to open. First try OEM Unlock Switch in Passenger Front Door. The OTC uses this switch to unlock all the doors before an Door Open Command is sent. If OEM Switch does not unlock doors, likely an OEM issue. If OEM functions, but OTC does not check wiring. **Door Ajar Switch** If the OEM Door Ajar Switch is not deactivated within 2 seconds of the start of the cycle, Door Control Error will be returned.

Code	Description - What Caused the Code
Error 18 - Ramp Obstacle Detection Error	OTC detected that the ramp may have hit an obstruction on the in or out cycle. The OTC detects an obstruction by measuring the current generated from the ramp motor. The obstruction could be something in the way or a Ramp Limit is not recognized. If this current exceeds the set limit in the OTC Setup (default is 5, scale is 1-10 with 1 being the most sensative)
Diagnostic Tests	**More Information**
Check Error Log for multiple Obstactle Detection Errors. If there are many, raise the level in Setup.	Setup - OB Detect Level (default is 5, scale is 1-10 with 1 being the most sensative)
Input Test Place OTC in Debug - Input Test Mode to verify limits operate correctly. 1) Check Ramp Up [Limit Switch] by operating the ramp with Power Overide Switch (ITF Ramp) or manually raising (Folding Ramp). 2) Check Ramp Down [Limit Switch] by operating the ramp with Power Overide Switch (ITF Ramp) or manually raising (Folding Ramp).	If a Ramp Limit Switch fails, the Obstacle Detection should activate and cause an error. If the Obstacle Detection does not activate, the Ramp Watchdog Timer should. This will also cause an error (Error 27) and end the cycle.

Code	Description - What Caused the Code
Error 23 - Neutral Status Error	Everytime before the OTC cycles, it checks to make sure the van is in Park. This is for safety and can not be changed.
Diagnostic Tests	**More Information**
Input Test Place OTC in Debug - Input Test Mode to verify OTC recognizes if the van is in Park correctly 1) Check Neutral by placing the van in and out of Park and listening for the double beeps from the debugger.	Refer to Important Item Information or OTC Wiring Diagram for more information about where Rollx Vans gets this signal.

Code	Description - What Caused the Code
Error 25 - Emergency Stop Error	Anytime a Rollx Vans User or Remote Button is pressed during an open or close cycle, the system will stop immediately. If a Hard Wired User Button is held down long enough, the OTC will think it has been pressed twice and thus, cause an error.
Diagnostic Tests	**More Information**
Operate User Button to verify working correctly.	This is a safety feature and can not be changed.

Code	Description - What Caused the Code
Error 27 - Ramp Watchdog Error	Once the OTC sends the signal to start running the ramp motor in or out, a timer starts. If enough time passes before the proper limit switch is activated at the end of the cycle, the OTC will return this error. This is a safety feature to limit power to the motor in case of mulitple failures.
Diagnostic Tests	**More Information**
Operate the In-The-Floor ramp with Power Overide to help determine if motor and ramp are functioning correctly.	Not available on Folding Ramps.
Output Test Place OTC in Debug - Output Test Mode to verify OTC operates the ramp motor correctly. 1) Check Ramp Open. 2) Check Ramp Close.	Several factors such as low battery, cold weather or debris can prevent the motor from operating correctly. If low battery, very cold or a bad motor, the motor may run too slow causing this watchdog to activate. Debris can also prevent the motor or ramp operating at correct speed, also causing this error.
Input Test Place OTC in Debug - Input Test Mode to verify limits operate correctly. 1) Check Ramp Up [Limit Switch] by operating the ramp with Power Overide Switch (ITF Ramp) or manually raising (Folding Ramp). 2) Check Ramp Down [Limit Switch] by operating the ramp with Power Overide Switch (ITF Ramp) or manually raising (Folding Ramp).	If a Ramp Limit Switch fails, the Obstacle Detection should activate and cause an error (Error 18). If the Obstacle Detection does not activate, the Ramp Watchdog Timer should. This will also cause an error. If OTC Debug Output Test does not activate the motor being tested, try the overides located on the OTC Relay Board. This will inidicate a communication problem between the One Touch Controller and One Touch Relay Board.

Code	Description - What Caused the Code
Error 28 - Door Watchdog Error	Once the OTC sends the signal to operate the OEM Door, a timer starts. If enough time passes before the proper limit switch is activated at the end of the cycle, the OTC will return this error.
Diagnostic Tests	**More Information**
Operate the OEM Door with the OEM B-Pillar Switch to determine of OEM Door is functioning properly.	If OEM B-Pillar Switch is not working, try the OEM Overhead Door Switch and make sure the OEM Overhead Door On/Off Switch is on.
Input Test Place OTC in Debug - Input Test Mode to verify limits operate correctly. 1) Check Door Open (Rollx Vans Door Open Switch), by opening door all the way in Door Open. 2) Check Door Close (OEM Door Ajar Switch), by close door all the way in Door Close. Rollx Vans taps into OEM Door Ajar Switch in Lower B-Pillar (See OTC Wiring for more information).	If Door Limits function correctly and door cycles open and close okay, the issue is with the door taking too long to open or close. Check alignment or motor.
Output Test Place OTC in Debug - Output Test Mode to verify OTC operates the door correctly by sending signal to OEM B-Pillar Switch and/or OEM Front Passenger Door Unlock Switch. 1) Check Door Open. 2) Check Door Close.	If an Output is an issue, the Door Control Error (Error 11) will likely display.

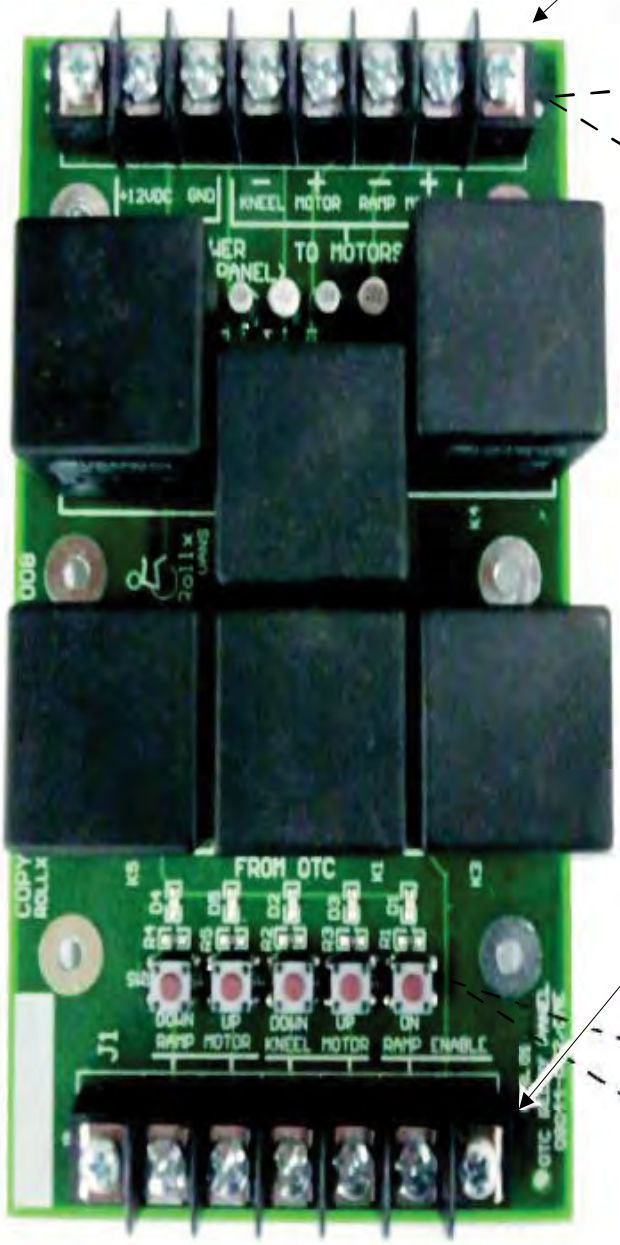
Code	Description - What Caused the Code
Error 29 - Kneeler Watchdog Error	Once the OTC sends the signal to operate the Kneeler, a timer starts. If enough time passes before the proper limit switch is activated at the end of the cycle, the OTC will return this error.
Diagnostic Tests	**More Information**
Operate the Kneeler with Power Overide to help determine if motor is functioning correctly.	Reset - Esc - Kneel Up/Kneel Down
Input Test Place OTC in Debug - Input Test Mode to verify limits operate correctly. 1) Check Kneel Up [Limit Switch], by raising Kneeler until switch is activated or activate switch by hand. 2) Check Kneel Down [Limit Switch], by Lowering Kneeler until switch is activated or activate switch by hand.	Testing with Power Overide is preferreed since it will incidicate if Limit Switch is being properly activated by Actuator's Guide. When Kneel Actuator reaches its run limit, it will begin to ratchet making a terrible sound. This is simply the motor's clutch mechanism, is not damaging but should try and be minimized.
Output Test Place OTC in Debug - Output Test Mode to verify OTC operates the Kneeler correctly. 1) Check Kneel Up. 2) Check Kneel Down.	If OTC Debug Output Test does not activate the motor being tested, try the overides located on the OTC Relay Board. This will inidicate a communication problem between the One Touch Controller and One Touch Relay Board. Also a low battery, bad motor or cold weather causing the motor to run very slowly can return this error.

Code	Description - What Caused the Code
Error 33 - Door Ajar Error	The OTC will not run a Cycle if the door is Ajar (Not fully opened or closed). If Ramp deployed, open door fully. If ramp stowed, fully close and latch door.
Diagnostic Tests	**More Information**
Operate the OEM Door with the OEM B-Pillar Switch to determine of OEM Door is functioning properly.	If OEM B-Pillar Switch is not working, try the OEM Overhead Door Switch and make sure the OEM Overhead Door On/Off Switch is on.
Input Test Place OTC in Debug - Input Test Mode to verify limits operate correctly. 1) Check Door Open (Rollx Vans Door Open Switch), by opening door all the way in Door Open. 2) Check Door Close (OEM Door Ajar Switch), by close door all the way in Door Close. Rollx Vans taps into OEM Door Ajar Switch in Lower B-Pillar (See OTC Wiring for more information).	

RELAY BD OTC VERSION 2
P.N. 08044-003
ORDER #OTCV8 RELAY BD

OUTPUTS

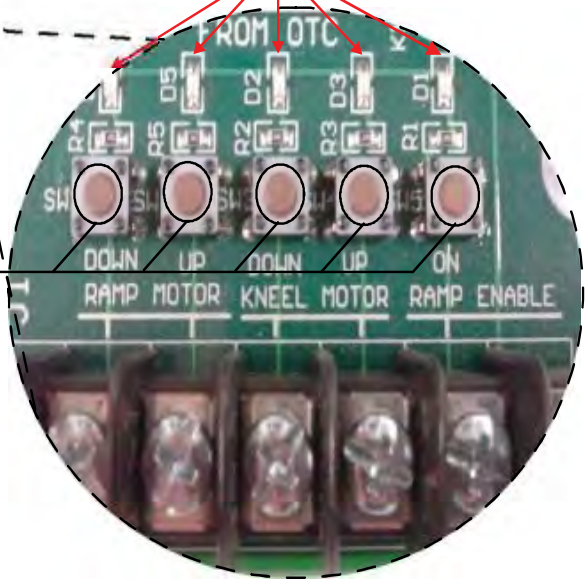
Run to the Kneeler and Ramp Motors



INPUTS

Run from the OTC Control Board

LED Indicator Lights

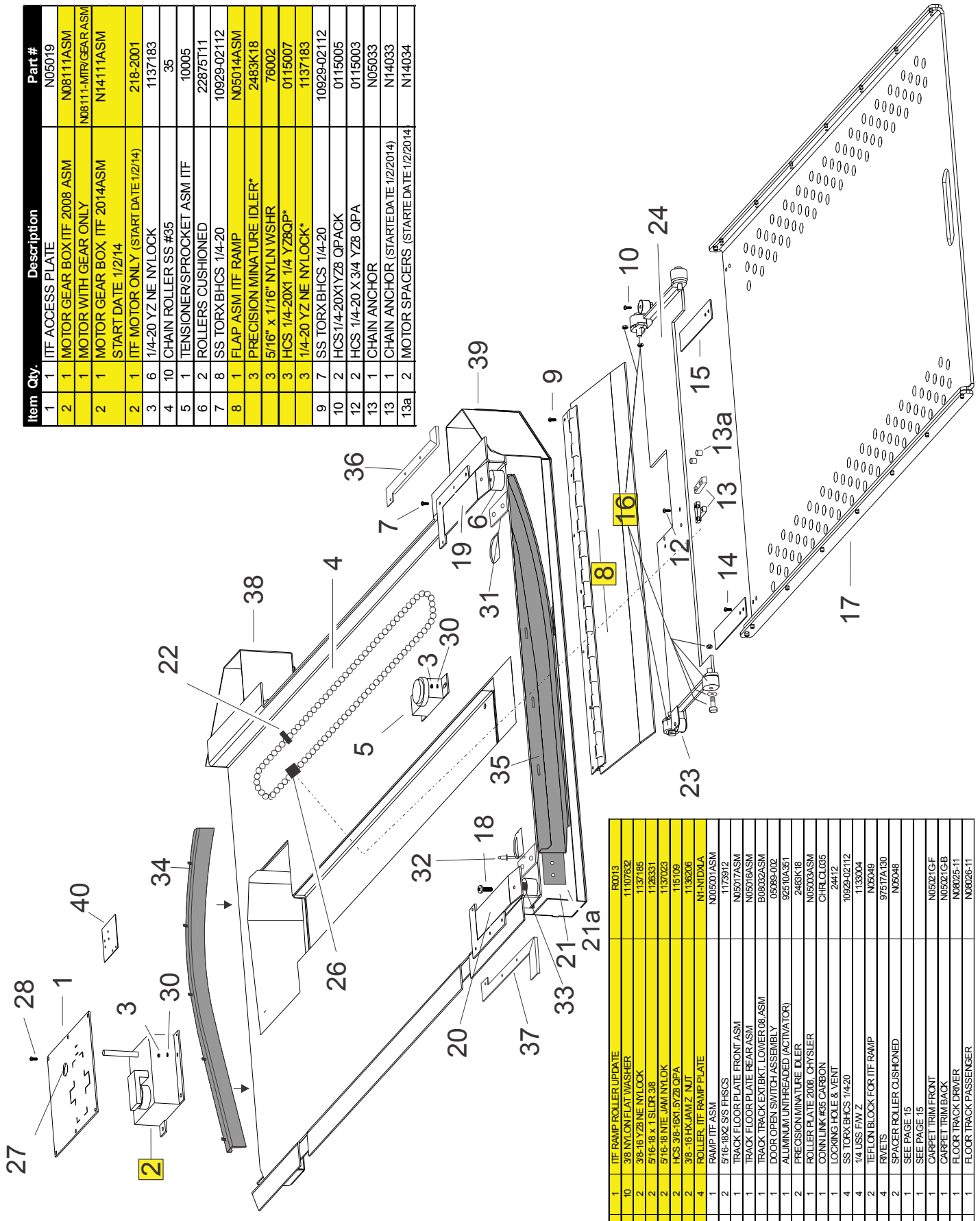


Manual push button test switches

*Pressing the switches should operate each function as shown on the board as long as the board is working properly. Remember, to run the ramp, the Ramp Enable must also be pressed at the same time. Pressing a switch is the same as sending a ground to the terminal.

Symptom	Possible Cause	Remedy
Ramp will NOT DEPLOY after door opens automatically.	Door open limit switch is not being activated.	When a Open Cycle starts, the OTC will send a command to the Chrysler System to unlock the doors. It then sends a second command to the Chrysler System to open the Right Side Sliding Door. The OTC Computer then waits two seconds and checks the Door Closed Limit Switch. If it finds it still indicates the door is closed, it assumes that a person (or and obstacle) stopped the door opening sequence. It then ends the open cycle and goes back into Idle Mode. After ten to fifteen seconds it goes back into Sleep Mode. This is the sequence of events you will see if the Door Closed Limit Switch malfunctions (sticks closed). This switch is located towards the rear of the lower door track.
	Ramp motor not engaged.	Engage ramp motor. Refer to the "Manual Operation" section of this manual.
	Ramp down limit switch needs adjustment to deactivate.	Press Rollx Vans user button again to unkneel van and close door. Review display on OTC board and contact customer service.
	Ramp motor.	Review display on OTC board and contact customer service.
Ramp will NOT STOW automatically.	OTC program failure.	Press OTC reset button.
	Ramp motor not engaged.	Engage ramp motor. Refer to the "Manual Operation" section of this manual.
	Ramp motor.	Review display on OTC board and contact customer service.
	Low voltage from the battery.	Start vehicle. Press OTC reset button and press Rollx Vans user button again.
Ramp will deploy before door is all the way open.	Door open limit switch is shorted to ground or malfuctioning.	Examine door open limit switch, connections, and wiring.
Ramp will STOP AND REVERSE mid-cycle.	Obstacle is detected.	Clear obstruction and press Rollx Vans user button.
		Review display on OTC board and contact customer service.
Ramp will start to deploy or stow then stop functioning.	Pressure on cover plate.	Ensure that there are no objects on top of cover plate.

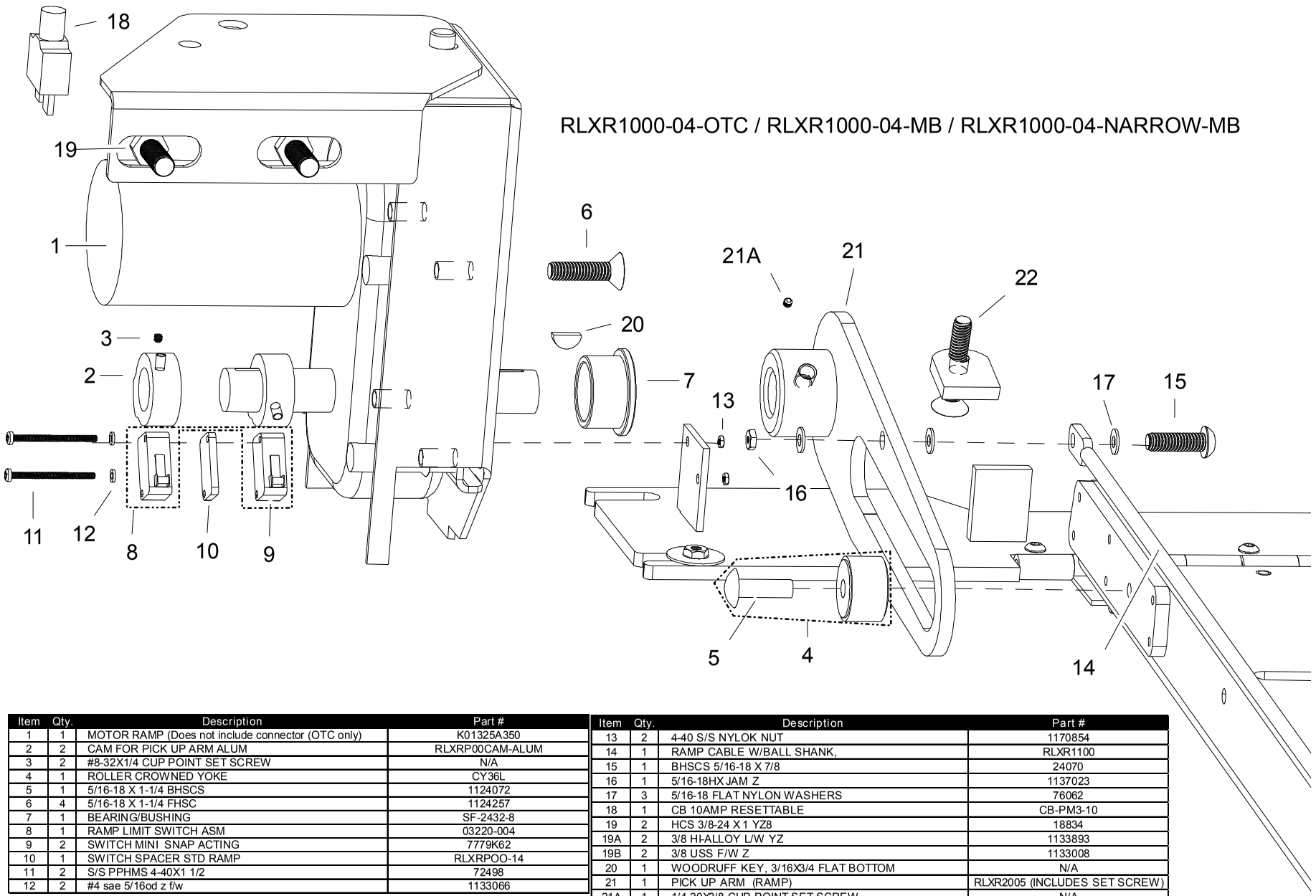
Item	Qty.	Description	Part #
1	1	ITF ACCESS PLATE	N05019
2	1	MOTOR GEAR BOX ITF 2008 ASM	N08111ASM
	1	MOTOR WITH GEAR ONLY	N08111-MTR/GEAR ASM
2	1	MOTOR GEAR BOX, ITF 2014ASM START DATE 1/2/14	N14111ASM
2	1	ITF MOTOR ONLY (START DATE 1/2/14)	218-2001
3	6	1/4-20 YZ NE NYLOCK	1137183
4	10	CHAIN ROLLER SS #35	35
5	1	TENSIONER/SPROCKET ASM ITF	10005
6	2	ROLLERS CUSHIONED	22875T11
7	8	SS TORX BHCS 1/4-20	10929-02112
8	1	FLAP ASM ITF RAMP	N05014ASM
	3	PRECISION MINATURE IDLER*	2483K18
	3	5/16" x 1/16" NYLN WSHR	76002
	3	HCS 1/4-20X1 1/4 YZ8QP*	0115007
	3	1/4-20 YZ NE NYLOCK*	1137183
9	7	SS TORX BHCS 1/4-20	10929-02112
10	2	HCS1/4-20X1YZ8 QPACK	0115005
12	2	HCS 1/4-20 X 3/4 YZ8 QPA	0115003
13	1	CHAIN ANCHOR	N05033
13	1	CHAIN ANCHOR (START DATE 1/2/2014)	N14033
13a	2	MOTOR SPACERS (START DATE 1/2/2014	N14034



16	1	ITF RAMP ROLLER UPDATE	R0013
	10	3/8 NYLON FLAT WASHER	11107632
	2	3/8-16 YZ8 NE NYLOCK	1137185
	2	5/16-18 x 1 SLDR 3/8	1126331
	2	5/16-18 NTE JAM NYLOK	1137023
	2	HCS 3/8-16X1.5YZ8 QPA	115109
	2	3/8 -16 HX JAM Z NUT	1136206
	4	ROLLER, ITF RAMP PLATE	N1-N1DXA
17	1	RAMP ITF ASM	N05001ASM
18	2	5/16-18X2 S/S FHSCS	1173912
19	1	TRACK FLOOR PLATE FRONT ASM	N05017ASM
20	1	TRACK FLOOR PLATE REAR ASM	N05016ASM
21	1	TRACK TRACK EXT BKT, LOWER 08 ASM	B08032ASM
21a	1	DOOR OPEN SWITCH ASSEMBLY	05089-002
22	1	ALUMINUM UNTHREADED (ACTIVATOR)	92510A351
23	2	PRECISION MINATURE IDLER	2483K18
24	1	ROLLER PLATE 2008, CHYSLER	N05003ASM
26	1	CONN LINK #35 CARBON	CHR.CL035
27	1	LOCKING HOLE & VENT	24412
28	4	SS TORX BHCS 1/4-20	10929-02112
30	4	1/4 USS F/W Z	1133004
31	2	TEFLON BLOCK FOR ITF RAMP	N05049
32	4	RIVETS	97517A130
33	2	SPACER ROLLER CUSHONED	N05048
34	1	SEE PAGE 15	
35	1	SEE PAGE 15	
36	1	CARPET TRIM FRONT	N05021G-F
37	1	CARPET TRIM BACK	N05021G-B
38	1	FLOOR TRACK DRIVER	N08025-11
39	1	FLOOR TRACK PASSENGER	N08026-11

Symptom	Possible Cause	Remedy
Ramp will NOT DEPLOY after door opens automatically.	Ramp fuse or circuit breaker is blown.	Press Rollx Vans user button again to unkneel van and close door. Reset circuit breaker or check ramp fuse and replace if needed with 15 amp glass fuse located in glove box.
	Door open limit switch is not being activated.	When a Open Cycle starts, the OTC will send a command to the Chrysler System to unlock the doors. It then sends a second command to the Chrysler System to open the Right Side Sliding Door. The OTC Computer then waits two seconds and checks the Door Closed Limit Switch. If it finds it still indicates the door is closed, it assumes that a person (or and obstacle) stopped the door opening sequence. It then ends the open cycle and goes back into Idle Mode. After ten to fifteen seconds it goes back into Sleep Mode. This is the sequence of events you will see if the Door Closed Limit Switch malfunctions (sticks closed). This switch is located in the Right Side Sliding Door Latch Assembly.
	Ramp down limit switch needs adjustment to deactivate.	Press Rollx Vans user button again to unkneel van and close door. Review display on OTC board and contact customer service.
	Ramp motor.	Press Rollx Vans user button again to unkneel van and close door. Review display on OTC board and contact customer service.
Ramp will NOT STOW automatically.	OTC program failure.	Press OTC reset button.
	Ramp fuse or circuit breaker is blown.	Press Rollx Vans user button again to unkneel van and close door. Reset circuit breaker or check ramp fuse and replace if needed with 15 amp glass fuse located in glove box.
	Ramp motor.	Review display on OTC board and contact customer service.
Ramp will deploy before door is all the way open.	Door open limit switch is shorted to ground or malfuctioning.	Examine door open limit switch, connections, and wiring.
Ramp will STOP AND REVERSE mid-cycle.	Obstacle is detected.	Clear obstruction and press Rollx Vans user button.
		Review display on OTC board and contact customer service.

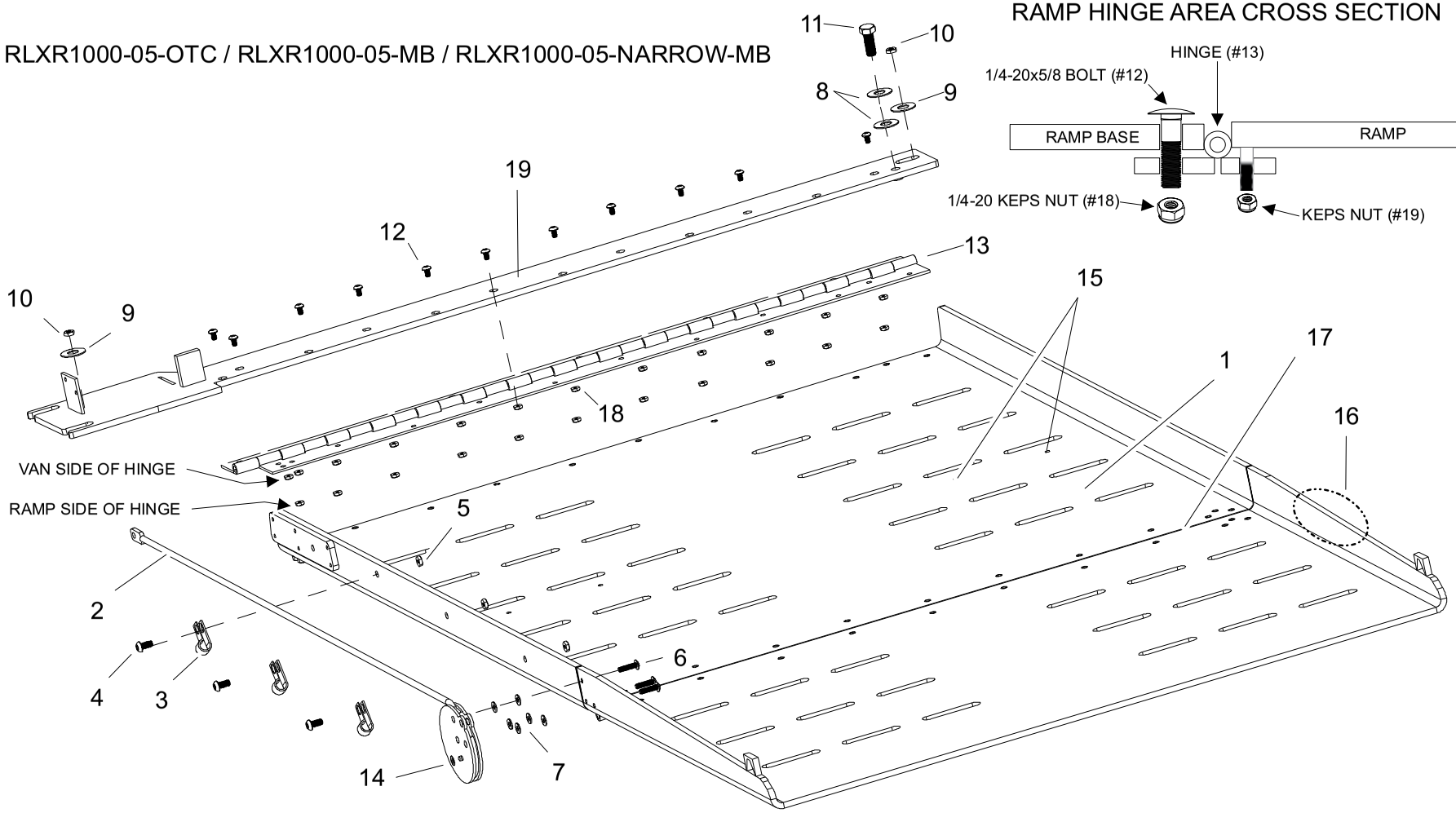
RLXR1000-04-OTC / RLXR1000-04-MB / RLXR1000-04-NARROW-MB



Item	Qty.	Description	Part #
1	1	MOTOR RAMP (Does not include connector (OTC only)	K01325A350
2	2	CAM FOR PICK UP ARM ALUM	RLXRP00CAM-ALUM
3	2	#8-32X1/4 CUP POINT SET SCREW	N/A
4	1	ROLLER CROWNED YOKE	CY36L
5	1	5/16-18 X 1-1/4 BHSCS	1124072
6	4	5/16-18 X 1-1/4 FHSC	1124257
7	1	BEARING/BUSHING	SF-2432-8
8	1	RAMP LIMIT SWITCH ASM	03220-004
9	2	SWITCH MINI SNAP ACTING	7779K62
10	1	SWITCH SPACER STD RAMP	RLXRPOO-14
11	2	S/S PPHMS 4-40X1 1/2	72498
12	2	#4 sae 5/16od z f/w	1133066

Item	Qty.	Description	Part #
13	2	4-40 S/S NYLOK NUT	1170854
14	1	RAMP CABLE W/BALL SHANK,	RLXR1100
15	1	BHSCS 5/16-18 X 7/8	24070
16	1	5/16-18HX JAM Z	1137023
17	3	5/16-18 FLAT NYLON WASHERS	76062
18	1	CB 10AMP RESETTABLE	CB-PM3-10
19	2	HCS 3/8-24 X 1 YZ8	18834
19A	2	3/8 HI-ALLOY L/W YZ	1133893
19B	2	3/8 USS F/W Z	1133008
20	1	WOODRUFF KEY, 3/16X3/4 FLAT BOTTOM	N/A
21	1	PICK UP ARM (RAMP)	RLXR2005 (INCLUDES SET SCREW)
21A	1	1/4-20X3/8 CUP POINT SET SCREW	N/A
22	1	5/16-18X1 3/4 FHSCS	1124259
22	1	5/16-18X1 3/4 FHSCS*	1124259
23	1	5/16-18HX JAM Z	1136204
		COVER RAMP NEW GENERATION	10068
			* For motor bar ramps only

RLXR1000-05-OTC / RLXR1000-05-MB / RLXR1000-05-NARROW-MB



RAMP HINGE AREA CROSS SECTION

Item	Qty.	Description	Part #
1	1	RAMP STANDARD (RAMP NARROW)	RLXR4000 (RLXR4000N)
2	1	RAMP CABLE W/BALL SHANK,	RLXR1100
3	3	CLAMP INSULATED 3/8"	8863T13
4	3	1/4-20 X 1/2 BHSCS	1124049
5	3	1/4-20 NTE JAM NYLOK	1137020
6	3	10-32 X 3/4 BHSCS	1124042
7	6	#10 SAE F/W Z	1133074
8	2	1/4 HI-ALLOY L/W YZ	1133891
9	2	3/8 USS F/W Z	1133008
10	2	3/8-16 YZ8 NE NYLOCK	1137185

Item	Qty.	Description	Part #
11	1	HCS 1/4-20X1/2 YZ8 QPA	0115001
12	12	1/4-20X5/8 SS BUTTON HEAD CAP SCREW	10929-02786
13	1	HINGE, RAMP FOLDING W BOLTS	RLRX4006
14	1	CABLE GUIDE (ROUND DISC)	RLXR1025
15	4	RIVETS*	97517A130
15	4	#4 sae 5/16od z f/w	1133066
15	1	RUBBER BULB SEAL BACK FOAM*	NX504B1
16	0.4	ANTI-RATTLE RUBBER URETH FOR (Motor Bar Only)*	27036
17	1	HINGE UPPER RAMP FO PAINTED	RLXR1007
18	12	1/4-20 KEPS NUT	1137410
19	1	Ramp Base Weldment Assembly	RLXR4003
			* Not Shown

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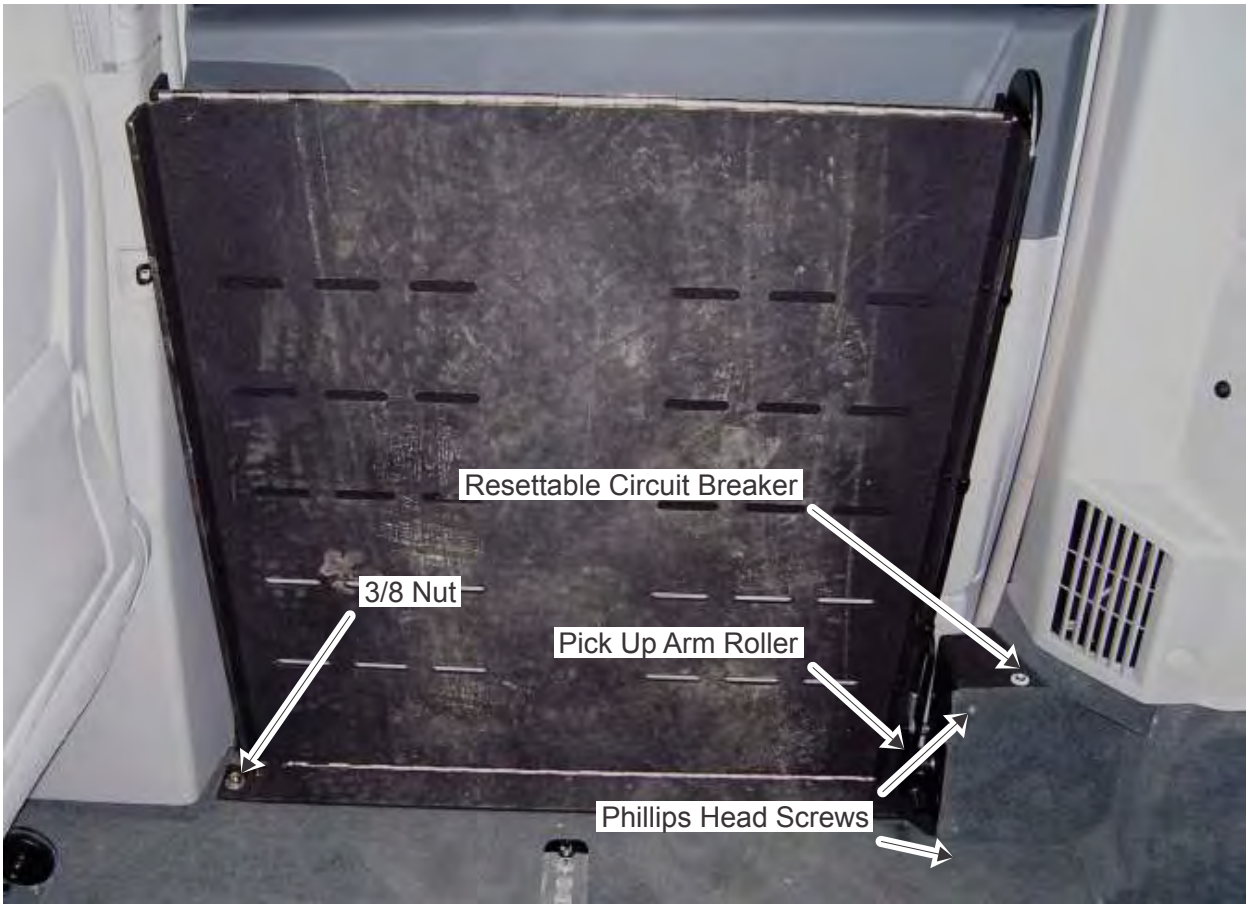
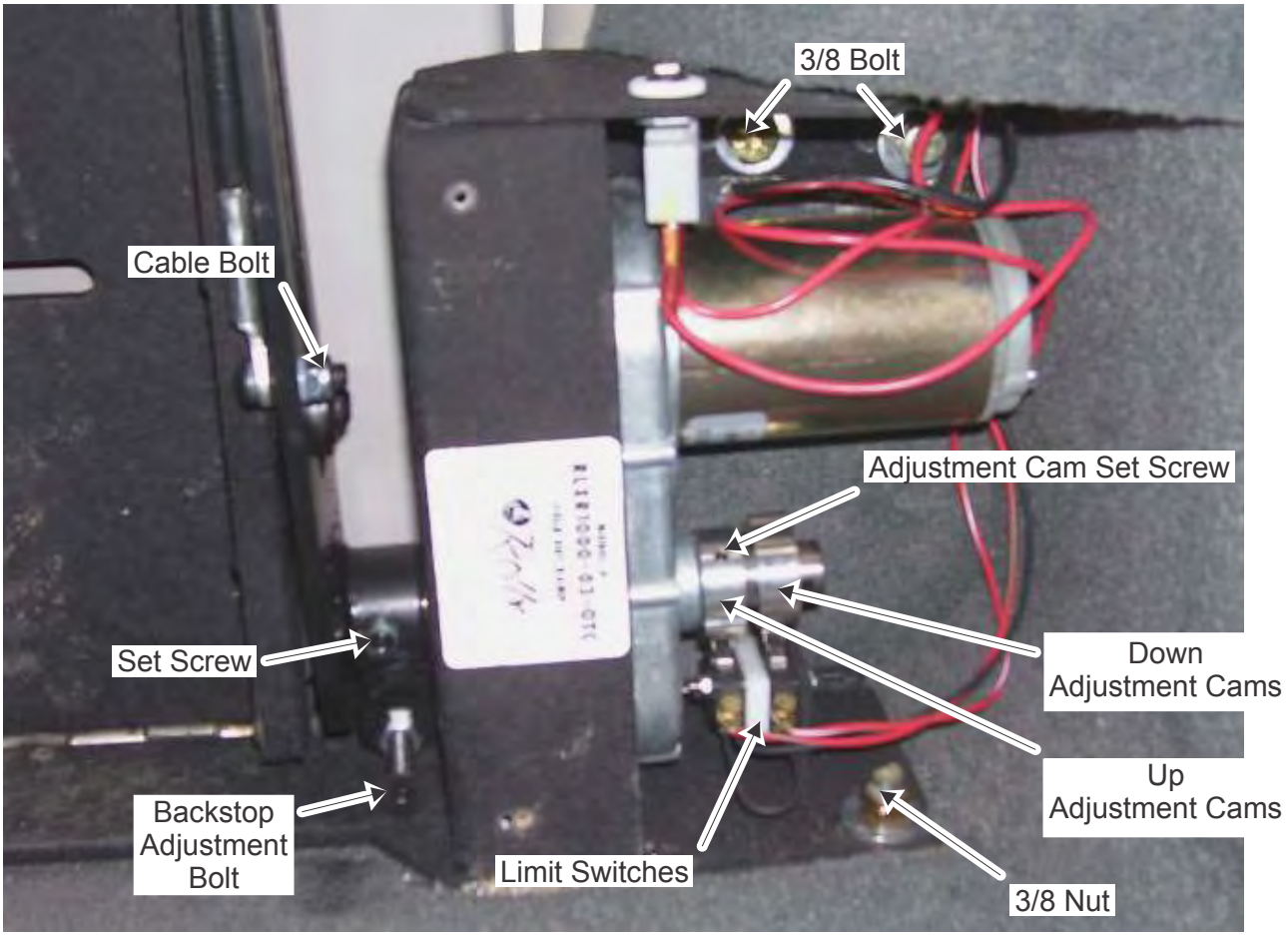
Folding Ramp Motor Install (steps 1-19)
Ramp Removal Instructions (steps 1-4 + 15-19)

1. Remove carpeted motor panel. This is held on by two Phillip head screws.
2. Disconnect wires going to limit switches and motor.
3. Unbolt ramp. There are two bolts (3/8) that go into the side of the van above ramp motor and two nuts (3/8) on the floor of the van-one nut is by the motor and one nut is by b-pillar.
4. Remove ramp from van.
5. Extend ramp so it is laying flat.
6. Remove roller from pick up arm. Also, remove cable bolt.
7. Remove set screw from pick up arm. Then insert 5/16 bolt into pick up arm to pull pick up arm off of motor shaft. If this does not work, cut motor shaft with a saw and punch out scrap piece from pick up arm.
8. Remove limit switches off of ramp.
9. Take out the four Allen head bolts (3/16) holding ramp motor. Remove motor.
10. Insert new motor. Reinstall the four Allen head screws with lock tight.
11. Reinstall limit switches.
12. Remove cams off of old motor and install on the new ramp motor. You will need to adjust these cams at step 16.
13. Reinstall pick up arm. Line up pick up arm and key way. Ensure Woodruff key is all the way inserted into the pick up arm.
14. Reinstall set screw (3/16) with lock tight.
15. Reinstall ramp in the van. Secure ramp with original hardware.
16. Install wiring for limit switches and motor.
17. Adjust ramp cams. Refer to Ramp Adjustment Instructions.
18. Test ramp for proper limit switch adjustment.
19. Reinstall carpeted motor cover.

Folding Ramp Adjustment Process

1. Bring folding ramp into the stow position so it resting in the van where you want it.
2. Remove carpeted motor panel. This is held on by two Phillip head screws.
3. Locate Adjustment Cam Set Screws and loosen.
4. Rotate the Up Limit Cam until it activates the Up Limit Switch and tighten set screw.
5. Push ramp out slowly and rest on something that is 6 inches off the ground as shown below.
6. Rotate Down Limit Cam until it activates the Down Limit Switch and tighten set screw.
7. Test ramp for proper limit switch adjustment and reinstall carpeted motor cover.


Resettable Circuit Breaker
3/8 Nut
Pick Up Arm Roller
Phillips Head Screws


3/8 Bolt
Cable Bolt
Adjustment Cam Set Screw
Set Screw
Down
Adjustment Cams
Up
Adjustment Cams
Backstop
Adjustment
Bolt
Limit Switches
3/8 Nut

If the heat lines need to ship with the Rollx Vans Hose & Clamp extensions you will need to order the following:

705-1012 (QTY 12)
770-1162 (QTY 2)
770-1157 (QTY 10)
10220 (QTY 1)
H-153 (QTY 4)
1131823 (QTY 13)
1137183 (QTY 13)

#B2100 - REAR HEAT LINE 5/8 (2 PER)

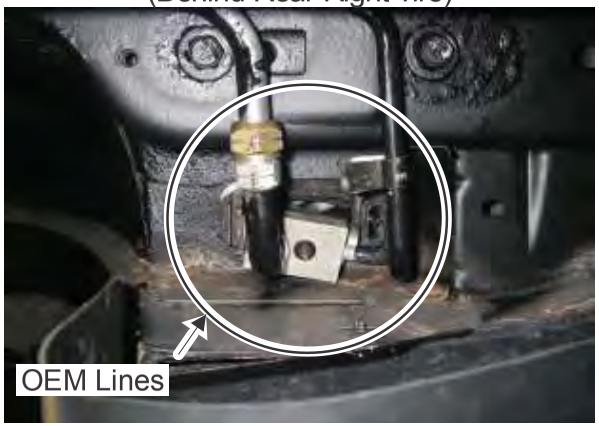
Model Year 08 - 11 #B08100-RASM - REAR AC LINE 3/8 includes o-rings
#Mt0250 - O'RING #8 AC after market (2)
Model Year 12 #B01200-RASM - Rear AC Line 3/8 includes o-rings
#68125530AA - O'RING 5/16
Model Year 08-11 #B08101-RASM - REAR AC LINE 5/8 includes o-rings
#Mt0258 - O RING #10 AC after market (2)
Model Year 2012 #B01201-RASM REAR AC LINE 5/8 includes o-rings
#68030834AA - O'RING 1/2

O-RINGS FOR H-BLOCK

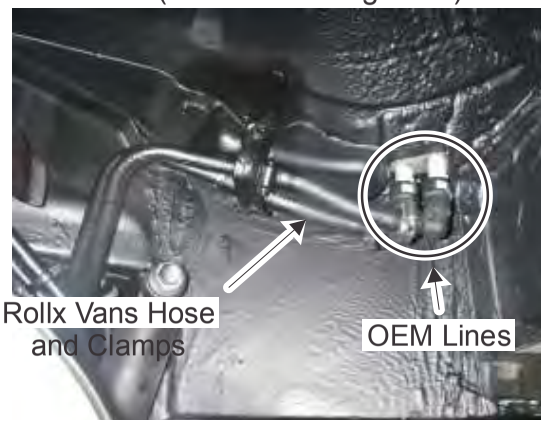
HIGH PRESSURE
#5136091AA - O RING 3/8" (1)

LOW PRESSURE
#4882136 - O RING AC 5/8" (1)

Rear AC
(Behind Rear Right Tire)



Rear Heat
(Front of Rear Right Tire)

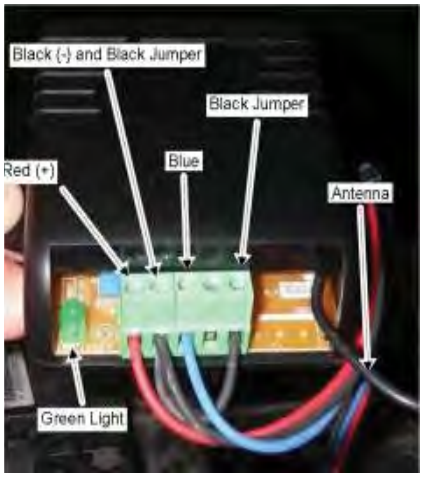


* If remote does not work first try to operate door and ramp from any interior Rollx Vans user button. If interior Rollx Vans user button operates normally, see below for remote system troubleshooting		
Symptom	**Possible Cause**	**Remedy**
Door does not open when One Touch remote is pressed.	Receiver out of range.	Try remote within 10 feet of van.
	Overhead on/off switch is turned to the OFF position.	Turn switch to ON position.
	Remote batteries are dead.	Remove case by loosening screw on back and prying open. Replace batteries with battery type CR2016. Use second remote or Rollx Vans user button.
Neither One Touch remote works.	Blown fuse.	Locate fuse box under glove box and check / replace fuse.
	Receiver malfunction.	Review display on OTC board and contact customer service.

OTC Remote Receiver
(Before 1/8/2009)

OTC Remote Receiver
(After 1/8/2009)

OTC Remote Receiver
(Rear View)



OTC Remote Transmitter Opened

Each Rollx Vans Transmitter has a unique code. These codes are applied to the transmitter either by a trace cutting method or a DIP switch programming method. This is done at the Rollx Vans Factory. In order to program the transmitter(s) to the receiver the following process must be done!

Learning a New Button Code (channel 1)

1. Press mode switch #1 for three seconds. The green LED will start to flash quickly. If no green LED lights, ensure power is getting to the unit through the 1 Amp fuse in the Rollx Vans Fuse Panel.

2. While the green LED is flashing quickly, press a button on a compatible transmitter. The green LED will flash once and then turn off to show that button was learned.

3. Repeat steps 1 and 2 to learn more buttons into channel 1.

NOTE — The green LED will flash a maximum of 15 seconds. If no transmitter button is pressed during this time, the receiver will exit the code-learning mode, and the green LED will turn off.

Note Regarding Code Learning

1. The receiver will only learn the code of a particular button once. Once a button's code is learned, if you try to code-learn that button again, whether it is for the same channel or not, the receiver will exit code learning mode.

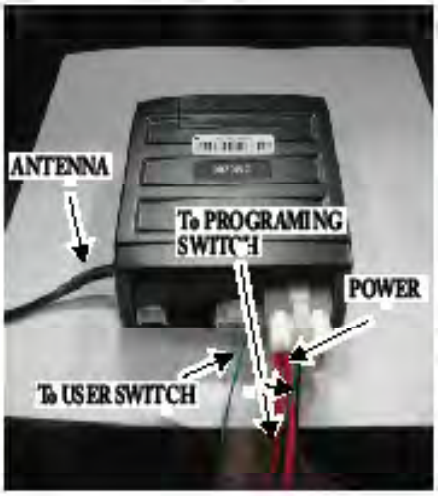
2. Each channel can learn the codes of a maximum of 15 transmitter buttons. If you attempt to learn a sixteenth button, the earliest code learned will be deleted.

3. To clear all codes — Press the appropriate mode switch (#1 or #2) for three seconds. When the LED starts flashing, press that switch again for three seconds. The LED flashes twice to indicate that all codes associated with that channel are now deleted.

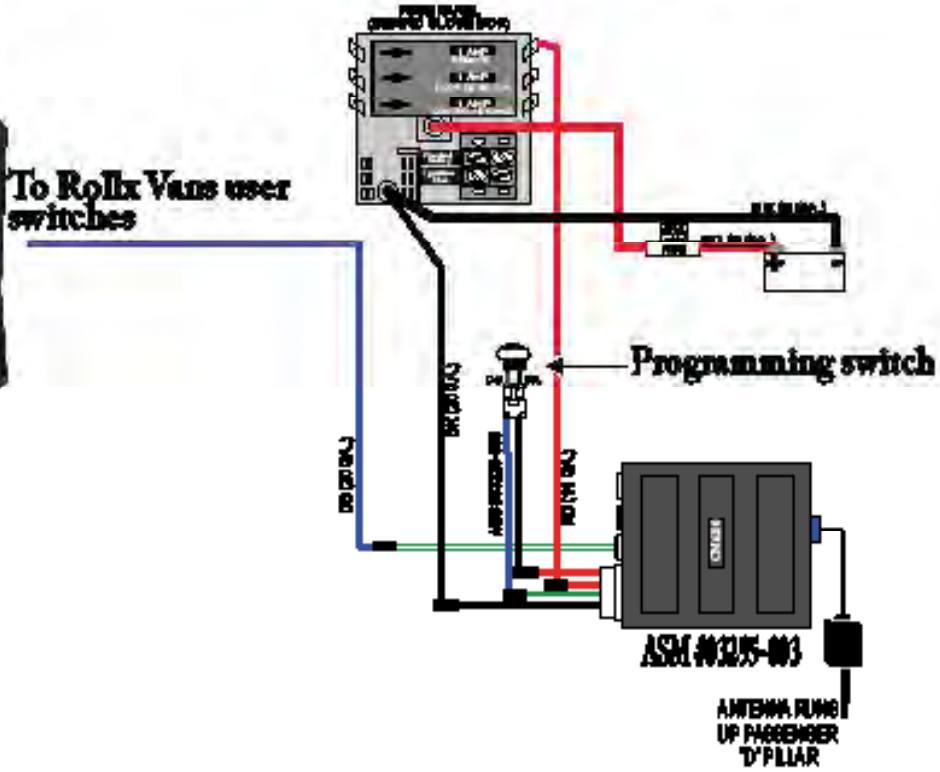
*From SECO-LARM Manual

OTC Remote Receiver (Behind Rear Passenger Quarter Panel Above Rear Heat Unit)

OTC Remote Receiver (Rear View)



OTC Remote Transmitter

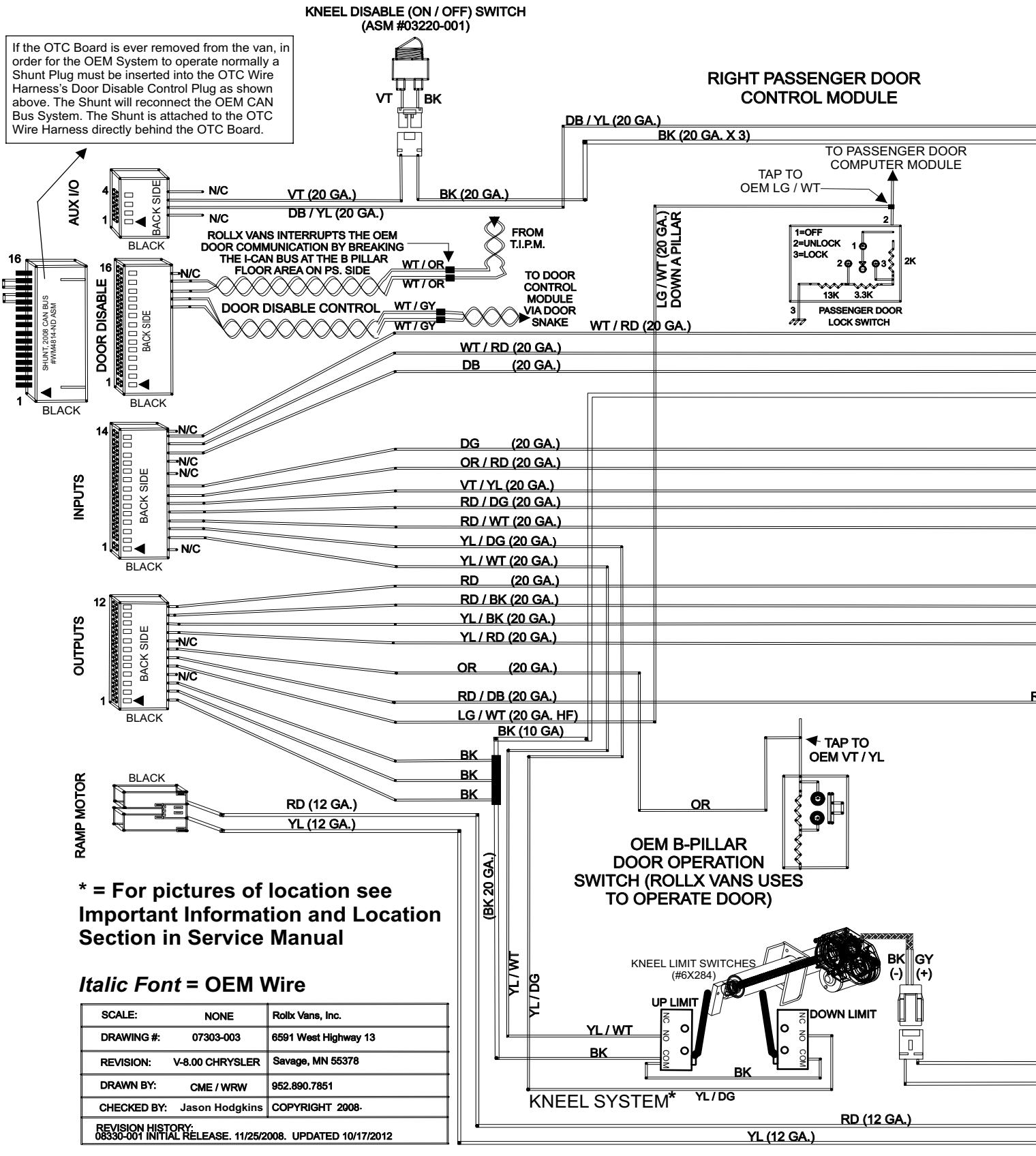


Programming the Rollx Vans OTC Remote

- Activate the programming mode by pushing the button on the left side of the OTC controller (PROGRAMMING SWITCH) 5 times within 7 seconds.
- Within 2 seconds after pushing the button 5 times, press the single remote button for .5 $seconds. Wait 30 seconds and press the remote to operate the system.
- Repeat the sequence if programming an additional remote.

ROLLX VANS ONE TOUCH
OTC VERSION 8.00 (20

PRODUCTION START DATE: 5/28/2009

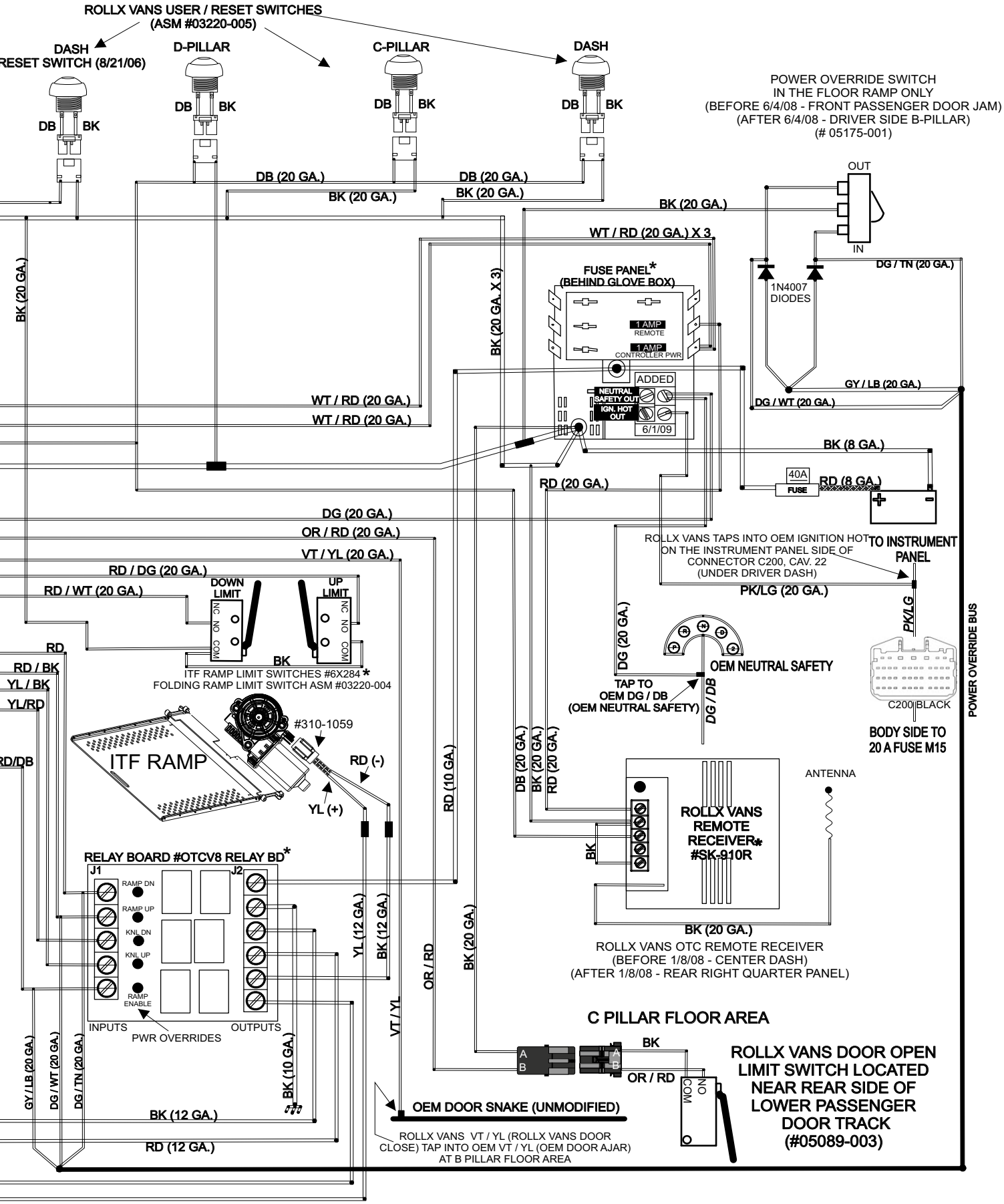


*** = For pictures of location see Important Information and Location Section in Service Manual**

***Italic Font* = OEM Wire**

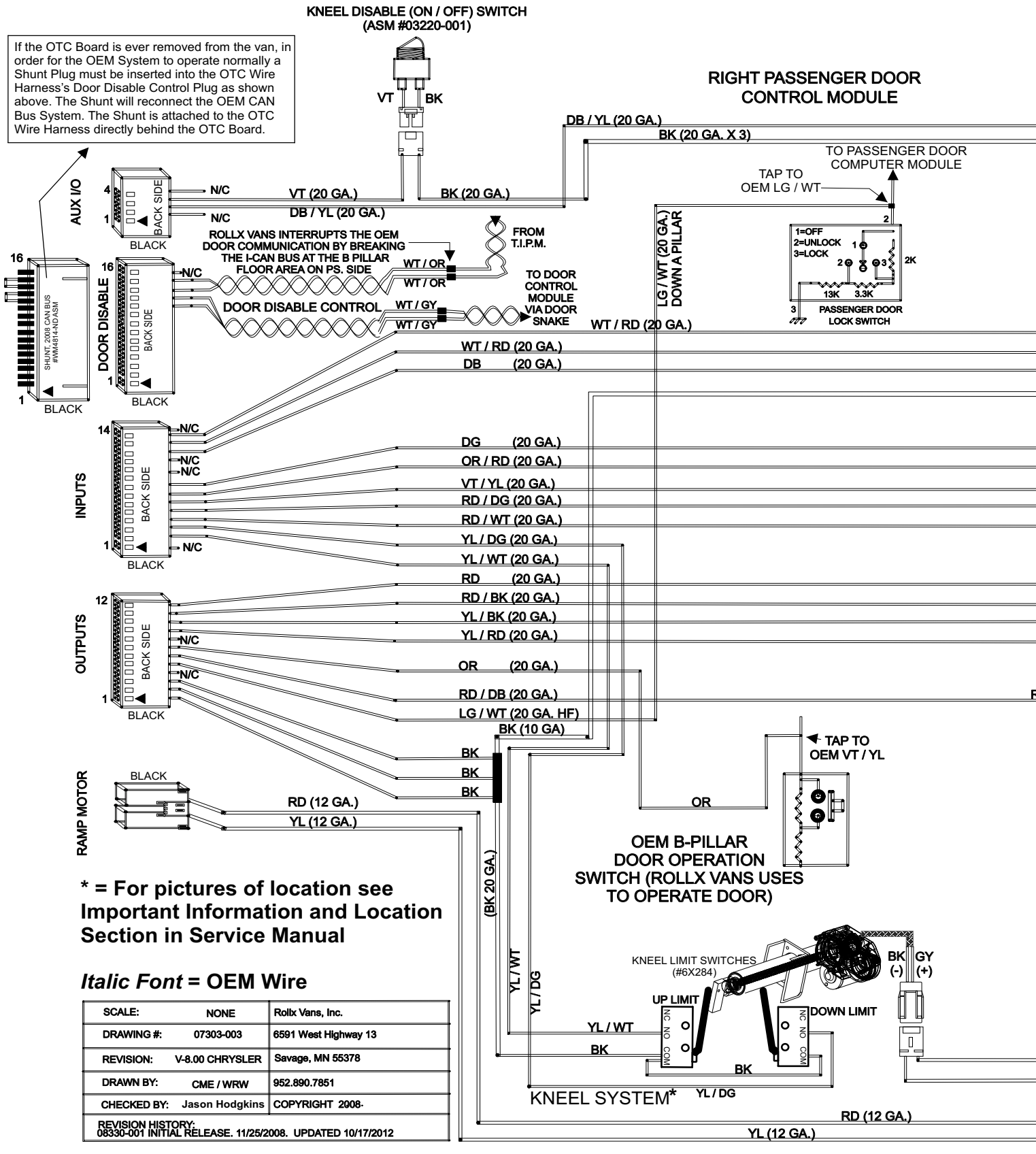
SCALE:	NONE	Rollx Vans, Inc.
DRAWING #:	07303-003	6591 West Highway 13
REVISION:	V-8.00 CHRYSLER	Savage, MN 55378
DRAWN BY:	CME / WRW	952.890.7851
CHECKED BY:	Jason Hodgkins	COPYRIGHT 2008-
REVISION HISTORY: 08330-001 INITIAL RELEASE. 11/25/2008. UPDATED 10/17/2012		

CONTROLLER WIRING DIAGRAM
008- 2010 Chyrsler Model Year)



ROLLX VANS ONE TOUCH
OTC VERSION 8.00 (2

PRODUCTION START DATE: 3/6/2012



*** = For pictures of location see Important Information and Location Section in Service Manual**

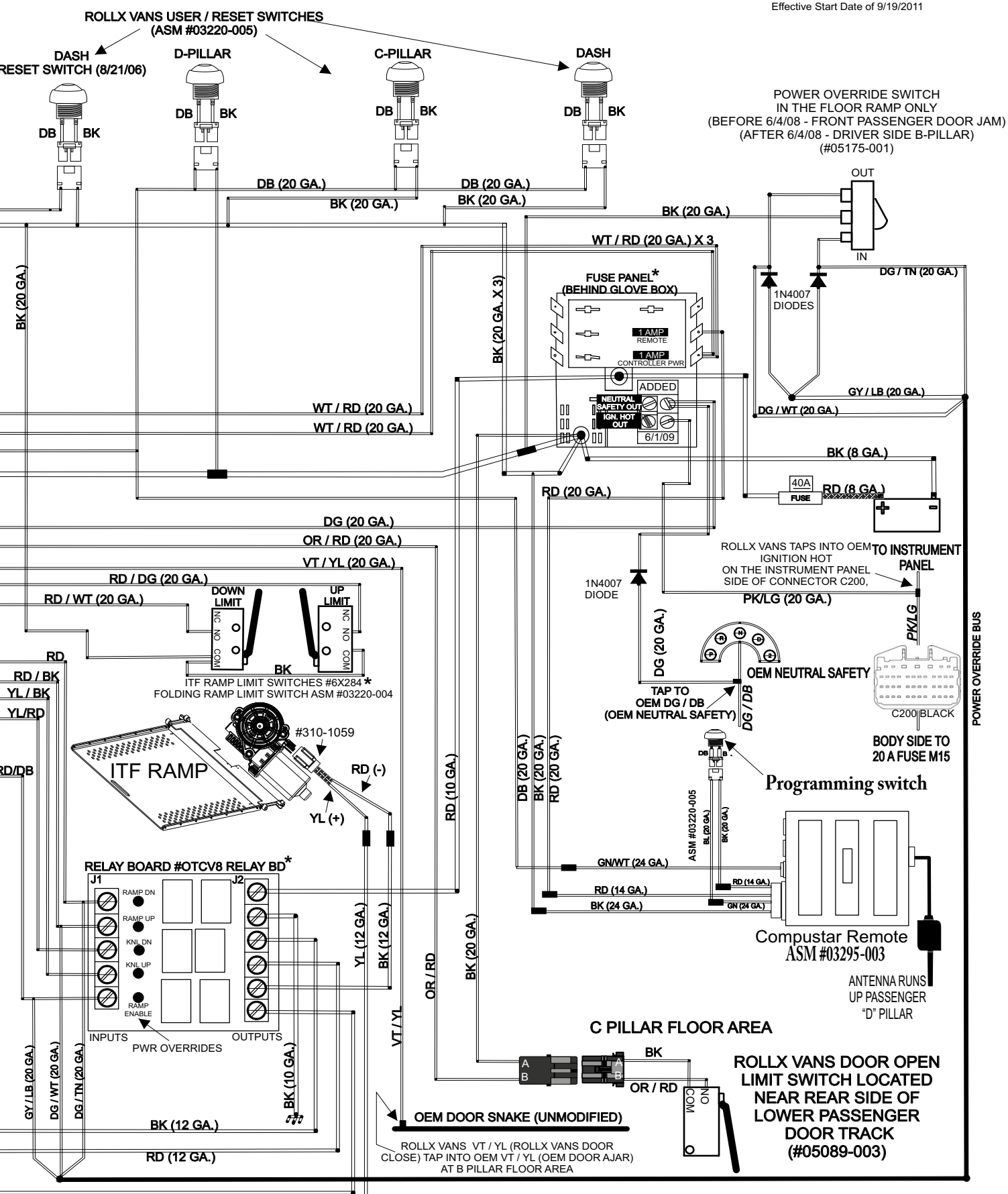
***Italic Font* = OEM Wire**

SCALE:	NONE	Rollx Vans, Inc.
DRAWING #:	07303-003	6591 West Highway 13
REVISION:	V-8.00 CHRYSLER	Savage, MN 55378
DRAWN BY:	CME / WRW	952.890.7851
CHECKED BY:	Jason Hodgkins	COPYRIGHT 2008-
REVISION HISTORY: 08330-001 INITIAL RELEASE. 11/25/2008. UPDATED 10/17/2012		

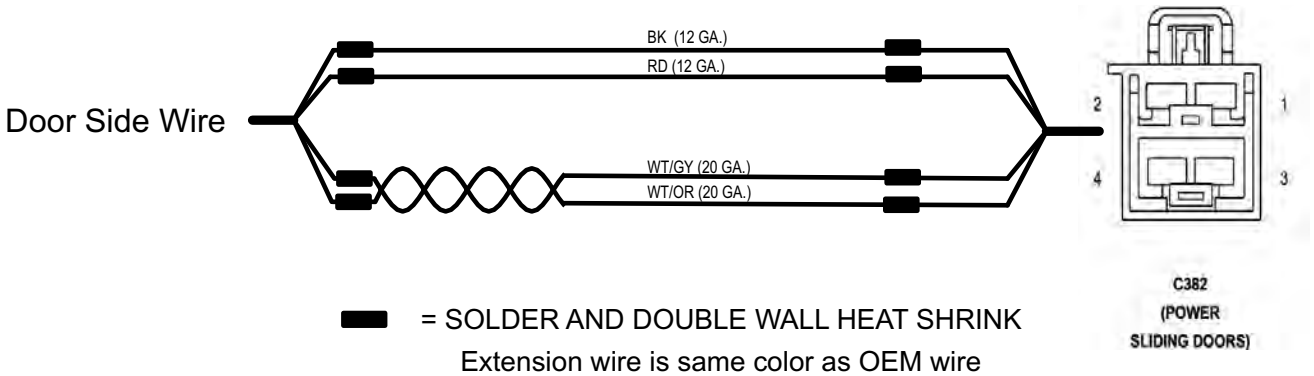
CONTROLLER WIRING DIAGRAM
008-2010 Chyrsler Model Year)

Compustar Remote

Effective Start Date of 9/19/2011

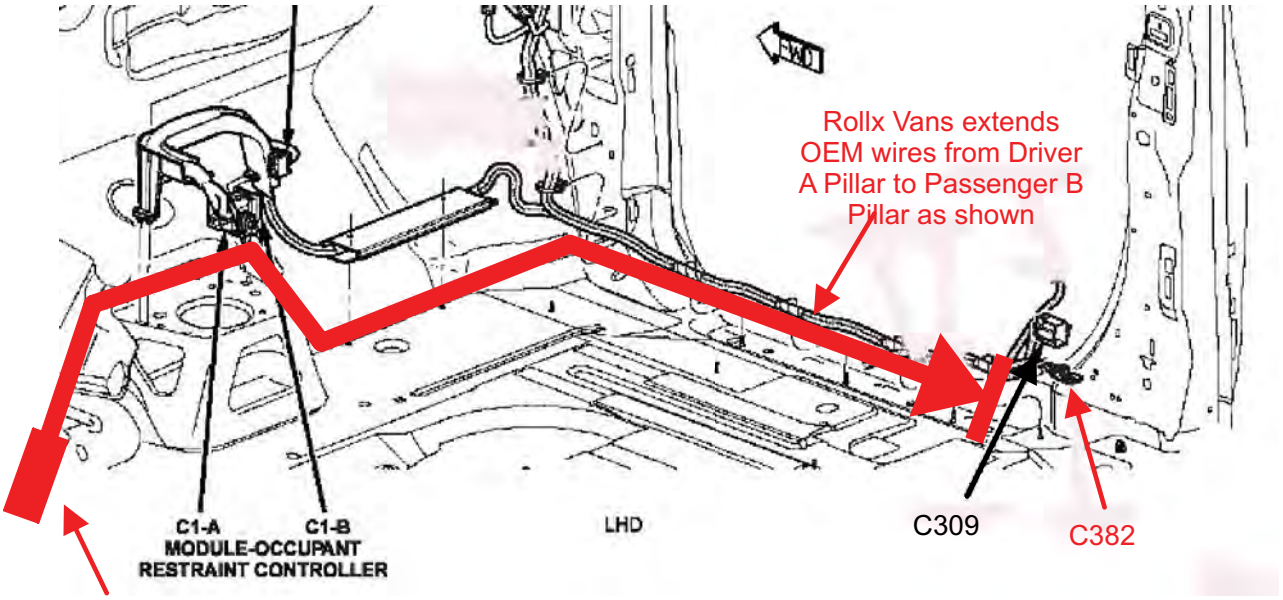


C382



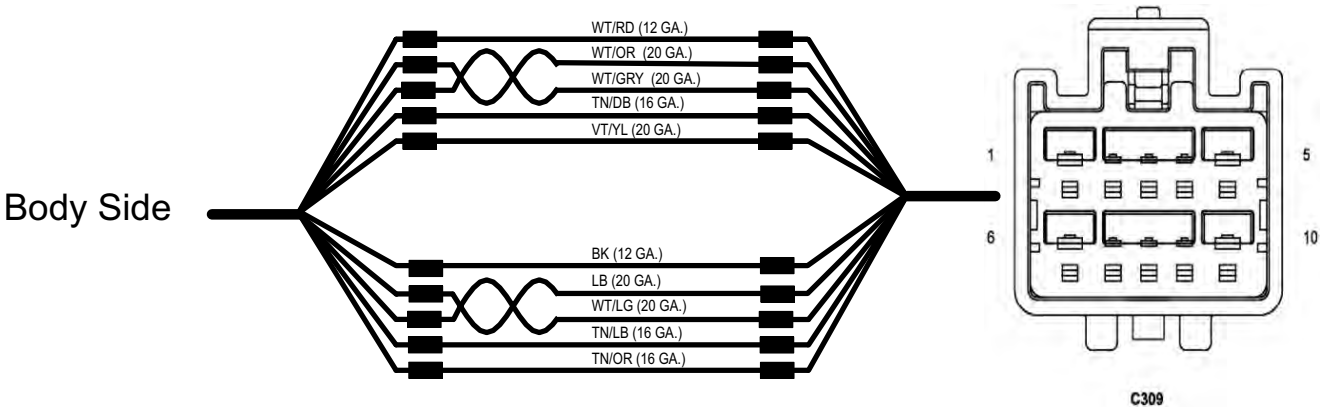
= SOLDER AND DOUBLE WALL HEAT SHRINK
Extension wire is same color as OEM wire

C382 POWER SLIDING DOOR EXTENSION				
OEM CAV	**COLOR**	**PART #**	**EXT. (FT.)**	**FUNCTION**
1	WT/OR (20 GA.)	TWISTED	10	CAN INTERIOR BUS (-)
2	WT/GY (20 GA.)	3036	10	CAN INTERIOR BUS (+)
3	RD (12 GA.)	3012	10	FUSED B(+)
4	BK (12 GA.)	3006	10	GROUND



Rollx Vans extends
OEM wires from Driver
A Pillar to Passenger B
Pillar as shown

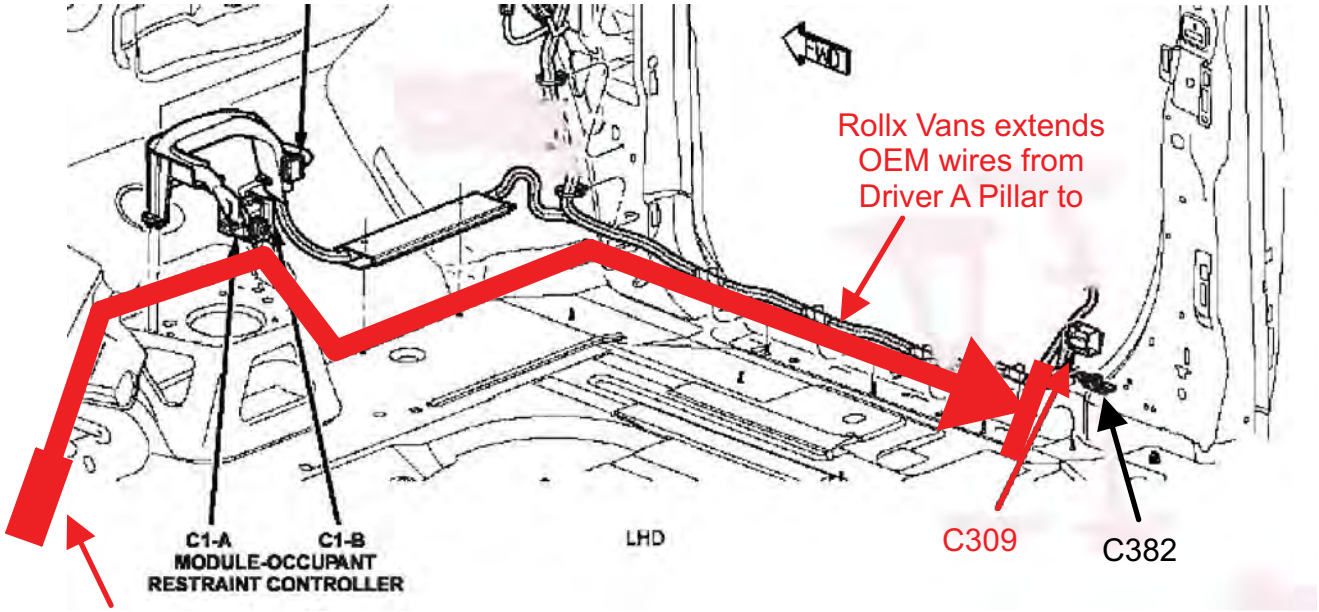
C309



= SOLDER AND DOUBLE WALL HEAT SHRINK

Extension wire is same color as OEM wire

C309 POWER SIDIING DOOR EXTENSION				
OEM CAV	COLOR	PART #	EXT. (FT.)	FUNCTION
1	WT/RD (12 GA)	2005	10	FUSED B(+)
2	WHT/ORG (20 GA)	TWISTED	10	CAN INTERIOR BUS (-)
10	WHT/GRY (20 GA)	3036		CAN INTERIOR BUS (+)
3	TN/DB (16 GA)	2071	10	RIGHT REAR DOOR LOCK DRIVER
4	VT/YL (20 GA)	2040	10	RIGHT SLIDING DOOR AJAR SWITCH SENSE
5	BK (12 GA)	3006	10	GROUND
7	LB (20 GA)	TWISTED	10	RIGHT SIDE IMPACT SENSOR 2 SIGNAL
8	WT/LG (20 GA)	3040		RIGHT SIDE IMPACT SENSOR 2 GROUND
9	TN/LB (16 GA)	2069	10	RIGHT REAR DOOR UNLOCK DRIVER



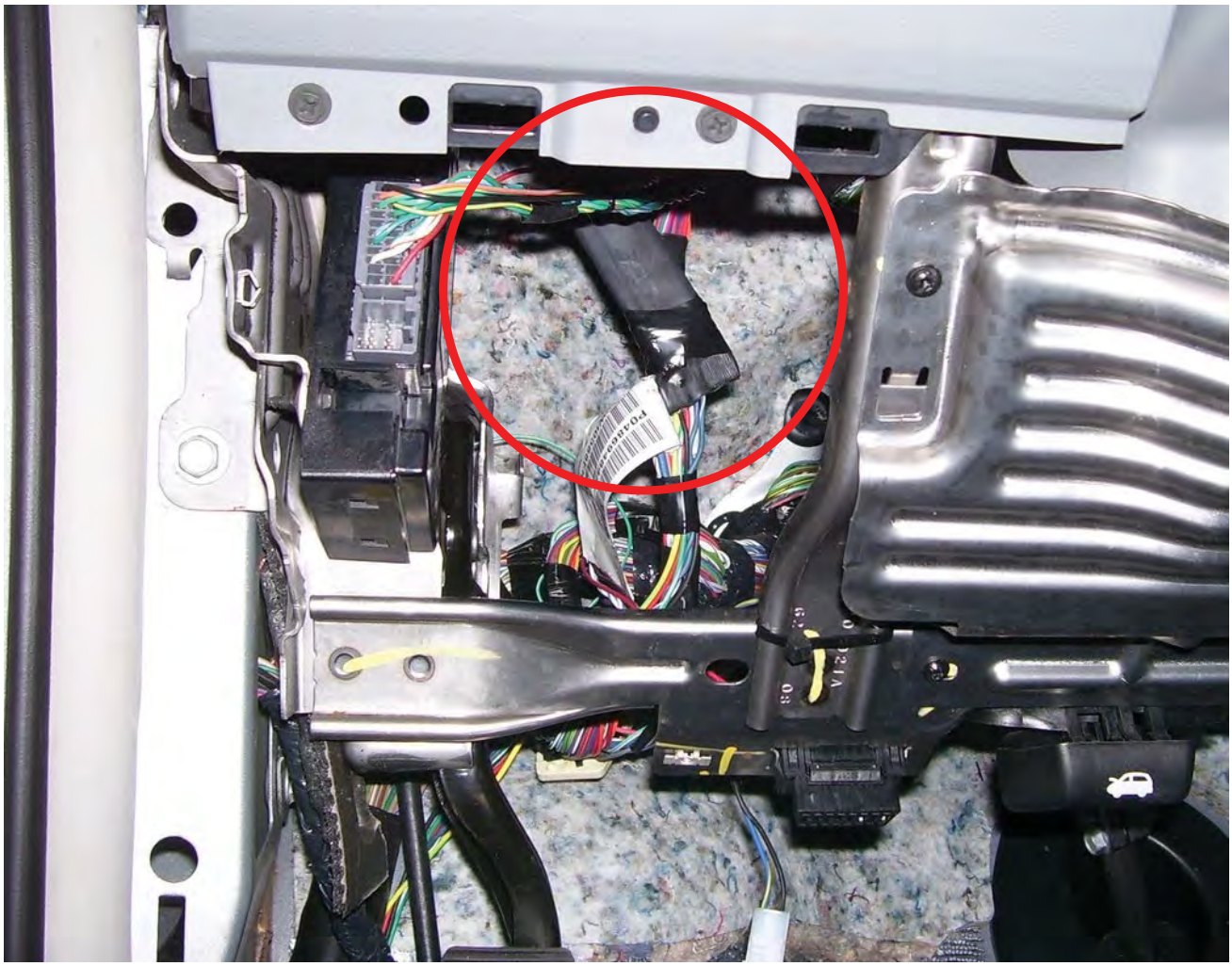

RollX
VANS

The Rollx Vans Seat Detector eliminates the need for resistors on OEM Seat Functionality (Seat Position for Airbags and Seatbelt Switch for Seatbelt Light). It also eliminates the need for a Seat Shunt being installed if seat with memory was ever removed.

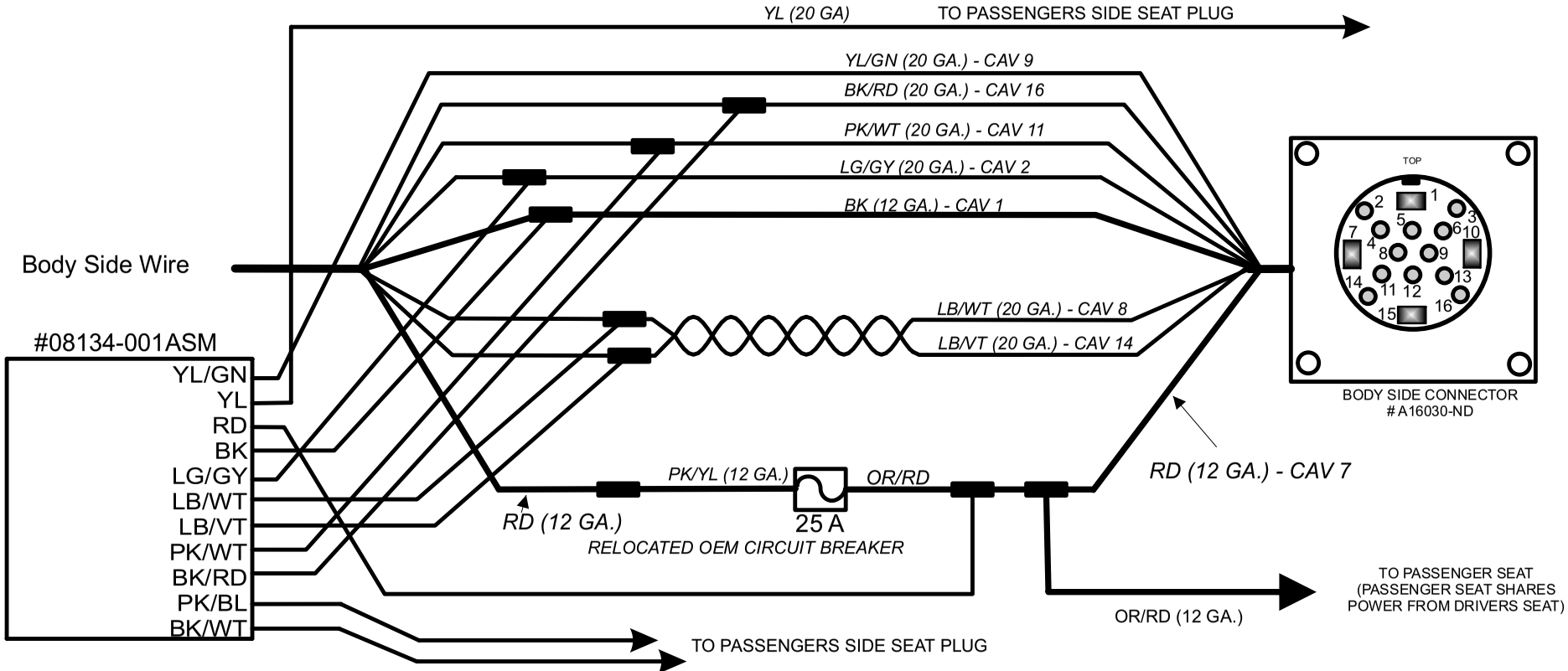
The seat detector started being installed 8/6/2008.

#08134-001ASM - SEAT DETECTOR 2008 ASM

Seat Detector is located under dash behind driver's knee bolster as shown. It is attached to the OEM main wire harness bundle with electrical tape.

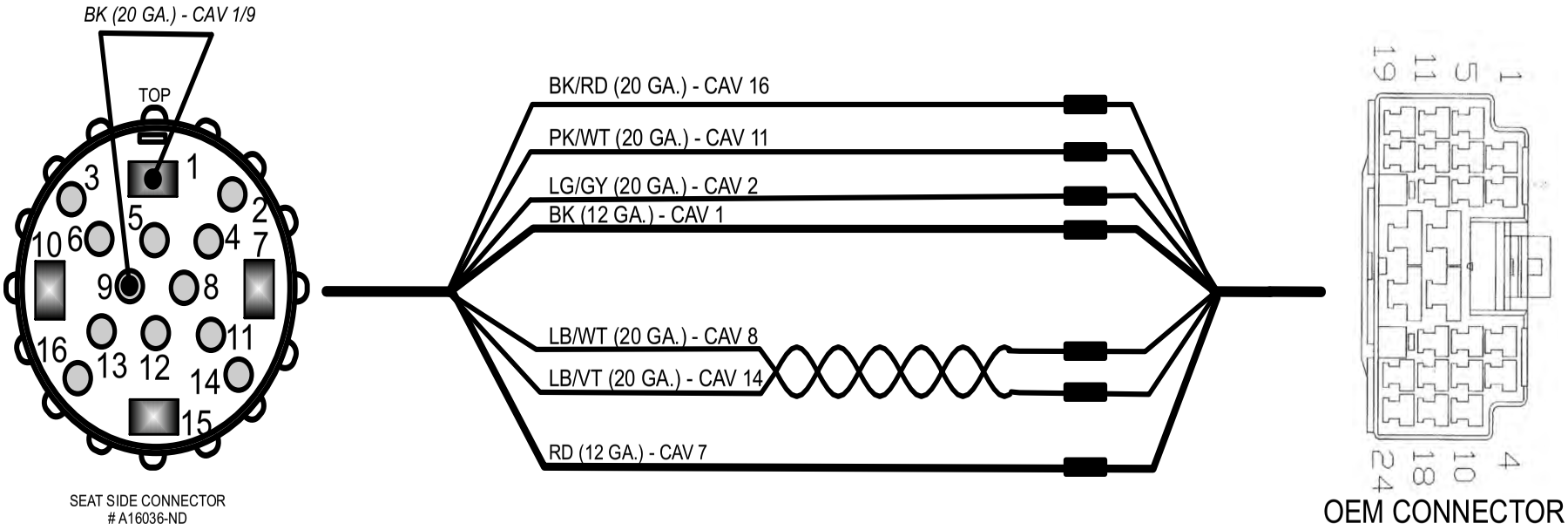


2010 Chrysler Minivan
C376 Driver Seat with Power Only - With Seat Detector
Body Side



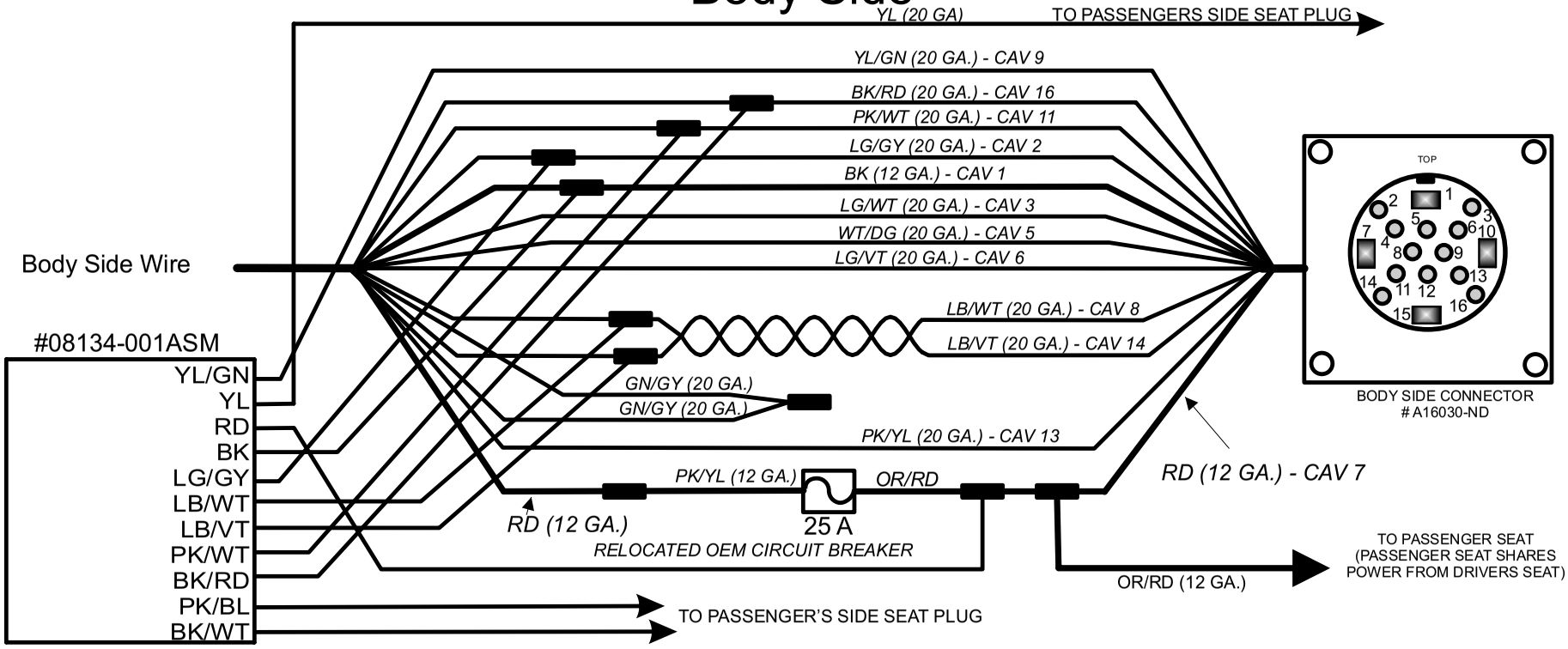
C376 Driver Power Only - Body Side						
CAV	OEM CAV	COLOR	PART #	EXT. (FT.)	FUNCTION	PIN PART #
Seat Detector		YL/GN (20 GA.)	#3027	3.5	GROUND FOR DETECTING DRIVER'S SEAT	A1648-ND
		YL (20GA)	#2047	3.5	GROUND FOR DETECTING PASSENGER'S SEAT	
		RD (20 GA.)	#3013	3.5	POWER	
		BK (20GA.)	#2009	3.5	GROUND	
		LG/GY(18 GA.)	#2022	3.5	TAPS TO DRIVERS SEAT BELT SWITCH SENSE	
		LB/WT (20GA.)	TWISTED	3.5	TAPS TO DRIVERS SEAT POSITION SENSOR DATA	
		LB/VT (20 GA.)	# 3037	3.5	TAPS TO DRIVERS SEAT POSITION SENSOR VOLTAGE	
		PK/WT (20GA)	#3018	3.5	DRIVER HEAD REST IN	
		BK/RD (20GA)	#3048	3.5	DRIVER HEAD REST OUT	
		PK/BL (20GA)	#3085	3.5	PASSENGER HEAD REST IN	
		BK/WT (20GA)	#2016	3.5	PASSENGER HEAD REST OUT	
2	8	LG/GY (20 GA.)	#2022		DRIVERS SEAT BELT SWITCH SENSE	A1648-ND
1	15	BK (12 GA.)	#3006		GROUND	A25032-ND
8	16	LB/WT (20 GA.)	TWISTED		DRIVERS SEAT POSITION SENSOR DATA	A1648-ND
14	17	LB/VT (20 GA.)	#3037		DRIVERS SEAT POSITION SENSOR VOLTAGE	A1648-ND
7	21	RD (12 GA.)	#3012		FUSED B (+)	A25032-ND
16	12	BK/RD (20 GA.)	#3048		HEAD REST OUT	A1648-ND
11	11	PK/WT (20 GA.)	#3018		HEAD REST IN	A1648-ND

2010 Chrysler Minivan
C376 Driver Seat with Power Only - With Seat Detector
Seat Side



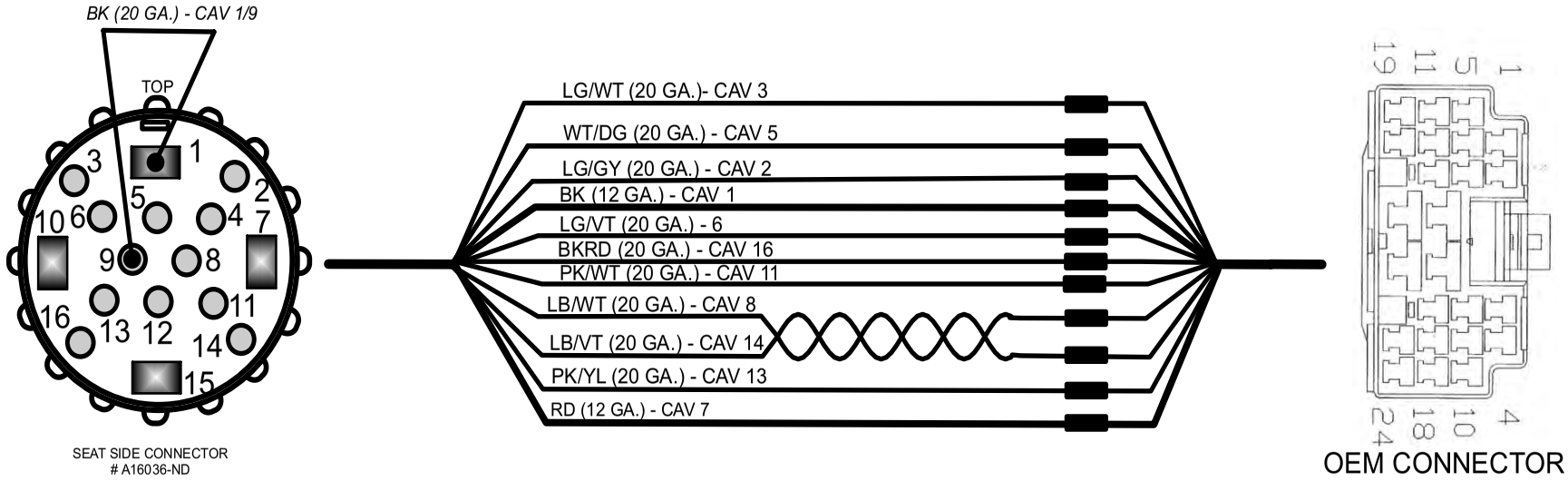
C376 Driver Power Only - Seat Side #10010-000-SD (C376 OEM CONNECTOR NOT INCLUDED)						
CAV	OEM CAV	COLOR	PART #	EXT. (FT.)	FUNCTION	SOCKET PART #
2	8	LG/GY (20 GA.)	2022	9	DRIVERS SEAT BELT SWITCH SENSE	A1661-ND
1	15	BK (12 GA.)	3006	9	GROUND	A25033-ND
8	16	LB/WT (20 GA.)	TWISTED	9	DRIVERS SEAT POSITION SENSOR DATA	A1661-ND
14	17	LB/VT (20 GA.)	# 3037		DRIVERS SEAT POSITION SENSOR VOLTAGE	A1661-ND
7	21	RD (12 GA.)	3012	9	FUSED B (+)	A25033-ND
1/9		BK (20 GA.)	2009	0.25	GROUND FOR DETECTING SEAT	A1661-ND / A25033-ND
16	12	BK/RD (20 GA.)	3048	9	GROUND	A1661-ND
11	11	PK/WT (20 GA,)	3018	9	SEAT BELT PRETENSIONER IR (-) PASS	A1661-ND

2010 Chrysler Minivan
C376 Driver Seat with Power and Heat - With Seat Detector
Body Side



C376 Driver Power and Heat - Body Side						
CAV	OEM CAV	COLOR	PART #	EXT. (FT.)	FUNCTION	PIN PART #
Seat Detector		YL/GN (20 GA.)	#3027	3.5	GROUND FOR DETECTING DRIVER'S SEAT	A1648-ND
		YL (20 GA.)	#2047	3.5	GROUND FOR DETECTING PASSENGER'S SEAT	
		RD (20 GA.)	#3013	3.5	POWER	
		BK (20GA.)	#2009	3.5	GROUND	
		LG/GY(20 GA.)	#2022	3.5	TAPS TO DRIVERS SEAT BELT SWITCH SENSE	
		LB/WT (20GA.)	TWISTED	3	TAPS TO DRIVERS SEAT POSITION SENSOR DATA	
		LB/VT (20 GA.)	#3037		TAPS TO DRIVERS SEAT POSITION SENSOR VOLTAGE	
		PK/WT (20GA)	#3018	3.5	DRIVER HEAD REST IN	
		BK/RD (20GA)	#3048	3.5	DRIVER HEAD REST OUT	
		PK/BL (20GA)	#3085	3.5	PASSENGER HEAD REST IN	
		BK/WT (20GA)	#2016	3.5	PASSENGER HEAD REST OUT	
3	1	LG/WT (20 GA.)	#2075		FUSED RUN REALY OUTPUT	A1648-ND
5	7	WT/DG (20 GA.)	#2042		LIN BUS	A1648-ND
2	8	LG/GY (20 GA.)	#2022		DRIVERS SEAT BELT SWITCH SENSE	A1648-ND
1	15	BK (12 GA.)	#3006		GROUND	A25032-ND
6	23	LG/VT (20 GA.)	#2076		RIGHT SEAT HEATER B(+) DRIVER	A1648-ND
8	16	LB/WT (20 GA.)	TWISTED		DRIVERS SEAT POSITION SENSOR DATA	A1648-ND
14	17	LB/VT (20 GA.)	PAIR		DRIVERS SEAT POSITION SENSOR VOLTAGE	A1648-ND
	4	LG/GY(18 GA.)			LEFT REAR HEATER B(+) DRIVER	SOLDER
	19	LG/GY(18 GA.)	Not used		RIGHT REAR HEATER B(+) DRIVER	TOGETHER
13	2	PK/YL (20 GA.)	#2077		FUSED RUN RELAY OUTPUT	A1648-ND
7	21	RD (12 GA.)	#3012		FUSED B(+)	A25032-ND
16	12	BKRD (20 GA.)	#3048		GROUND	A1648-ND
11	11	PK/WT (20 GA.)	#3018		SEAT BELT PRETENSIONER IR (-) PASS	A1648-ND

2010 Chrysler Minivan
C376 Driver Seat with Power and Heat - With Seat Detector
Seat Side



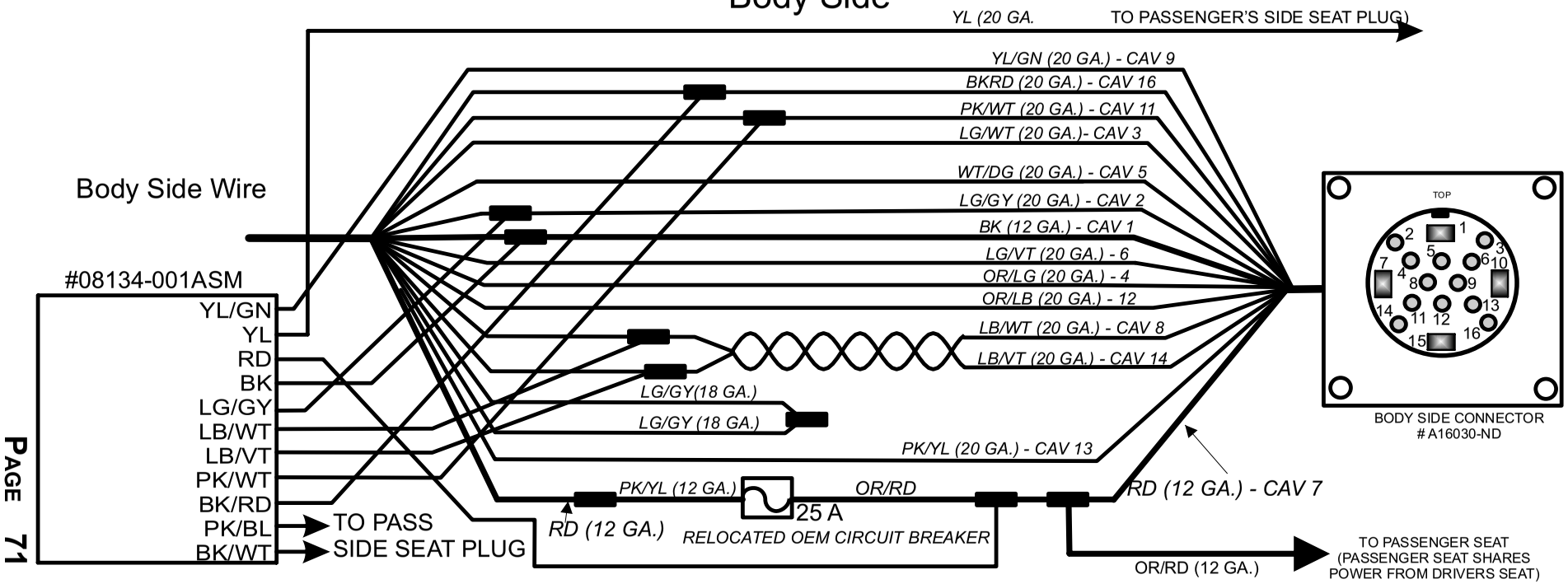
CAV	OEM CAV	COLOR	PART #	EXT. (FT.)	FUNCTION	SOCKET PART #
3	1	LG/WT (20 GA.)	2075	9	FUSED RUN REALY OUTPUT	A1661-ND
5	7	WT/DG (20 GA.)	2042	9	LIN BUS	A1661-ND
2	8	LG/GY (20 GA.)	2022	9	DRIVERS SEAT BELT SWITCH SENSE	A1661-ND
1	15	BK (12 GA.)	3006	9	GROUND	A25033-ND
6	23	LG/VT (18 GA.)	2076	9	RIGHT SEAT HEATER B(+) DRIVER	A1341-ND
8	16	LB/WT (20 GA.)	TWISTED	9	DRIVERS SEAT POSITION SENSOR DATA	A1661-ND
14	17	LB/VT (20 GA.)	# 3037		DRIVERS SEAT POSITION SENSOR VOLTAGE	A1661-ND
	4	LG/GY(18 GA.)	NOT		LEFT REAR HEATER B(+) DRIVER	
	19	LG/GY (18 GA.)	USED		RIGHT REAR HEATER B(+) DRIVER	
13	2	PK/YL (16 GA.)	2077	9	FUSED RUN RELAY OUTPUT	A1341-ND
7	21	RD (12 GA.)	3012	9	FUSED B (+)	A25033-ND
1/9		BK (20 GA.)	2009	0.25	GROUND FOR DETECTING SEAT	A1661-ND / A25033-ND
16	12	BKRD (20 GA.)	3048	9	GROUND	A1661-ND
11	11	PK/WT (20 GA,)	3018	9	SEAT BELT PRETENSIONER IR (-) PASS	A1661-ND

2010 Chrysler Minivan

10/30/2012

C376 Driver Seat with Power, Heat and Memory - With Seat Detector

Body Side

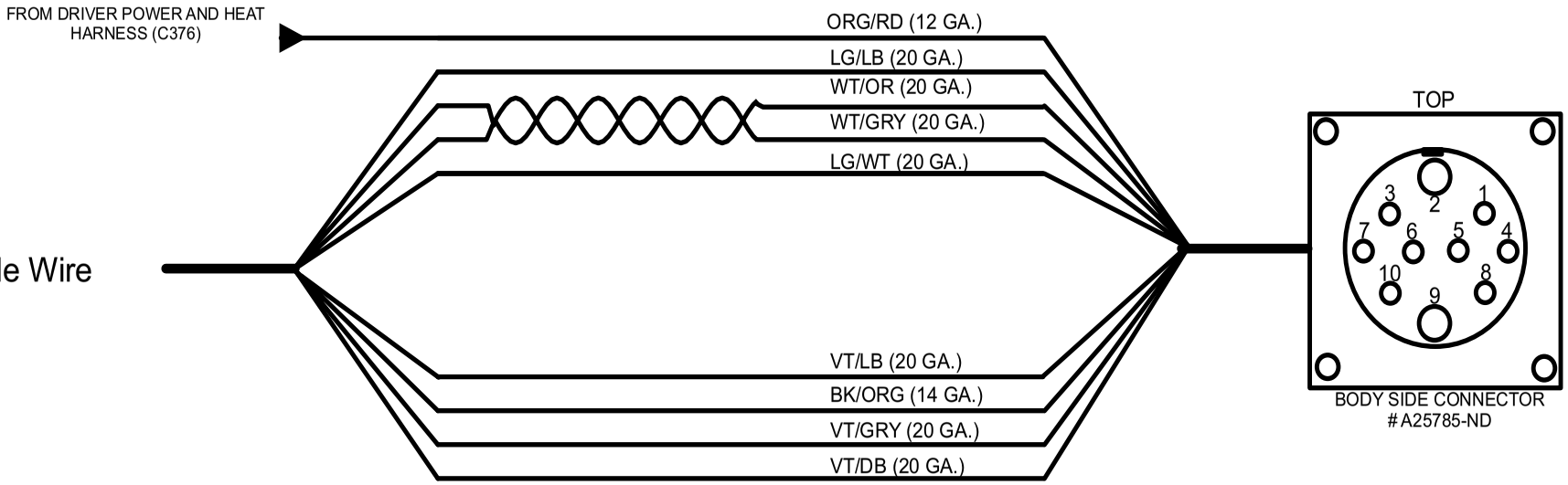


C376 Driver Power, Heat and Memory- Body Side						
CAV	OEM CAV	COLOR	PART #	EXT. (FT.)	FUNCTION	PIN PART #
Seat Detector #08134-001ASM		YL/GN (20 GA.)	#3027	3.5	GROUND FOR DETECTING SEAT	A1648-ND
		RD (20 GA.)	#3013	3.5	POWER	
		BK (20GA.)	#2009	3.5	GROUND	
		LB/WT (20GA.)	TWISTED	3	TAPS TO DRIVERS SEAT POSITION SENSOR DATA	
		LB/VT (20 GA.)	#3037		TAPS TO DRIVERS SEAT POSITION SENSOR VOLTAGE	
		LG/GY(18 GA.)	#2022	3.5	TAPS TO DRIVERS SEAT BELT SWITCH SENSE	
3	1	LG/WT (20 GA.)	#2075		FUSED RUN REALY OUTPUT	A1648-ND
5	7	WT/DG (20 GA.)	#2042		LIN BUS	A1648-ND
2	8	LG/GY (20 GA.)	#2022		DRIVERS SEAT BELT SWITCH SENSE	A1648-ND
1	15	BK (12 GA.)	#3006		GROUND	A25032-ND
6	23	LG/VT (20 GA.)	2076		RIGHT SEAT HEATER B(+) DRIVER	A1648-ND
8	16	LB/WT (20 GA.)	TWISTED		DRIVERS SEAT POSITION SENSOR DATA	A1648-ND
14	17	LB/VT (20 GA.)	PAIR		DRIVERS SEAT POSITION SENSOR VOLTAGE	A1648-ND
	4	LG/GY(18 GA.)			LEFT REAR HEATER B(+) DRIVER	SOLDER
	19	LG/GY (18 GA.)			RIGHT REAR HEATER B(+) DRIVER	TOGETHER
13	2	PK/YL (20 GA.)	#2077		FUSED RUN RELAY OUTPUT	A1648-ND
7	21	RD (12 GA.)	#3012		FUSED B (+)	A25032-ND
4	9	ORG/LG (20 GA.)	#2079		ADJUSTABLE PEDALS SWITCH REARWARD	A1648-ND
12	6	ORG/LB (20 GA.)	#2078		ADJUSTABLE PEDALS SWITCH FORWARD	A1648-ND
16	12	BK/RD (20 GA.)	#3048		GROUND	A1648-ND
11	11	PK/WT (20 GA,)	#3018		SEAT BELT PRETENSIONER IR (-) PASS	A1648-ND

2010 Chrysler Minivan
C1 Driver Seat with Memory

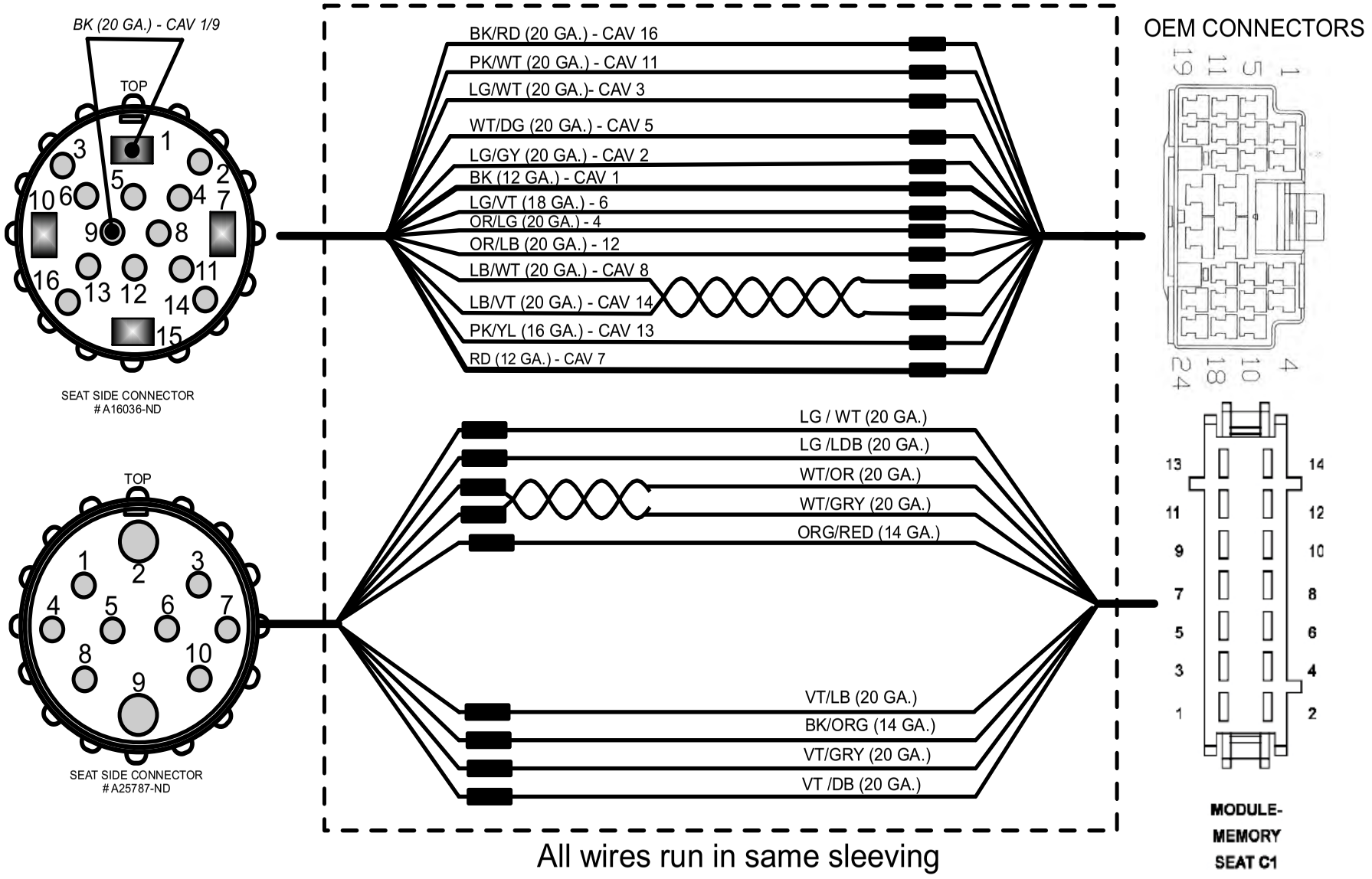
(If vehicle drivers seat with memory, drivers seat also has power and heat and passenger seat has power and heat)

Body Side - Memory Plug



C1 Driver Memory Seat - Body Side						
CAV	OEM CAV	COLOR	PART #	EXT. (FT.)	FUNCTION	SOCKET PART #
1	1	LG / WT (20 GA.)	#2075		ADJUSTABLE PEDALS MOTOR FORWARD	A1661-ND
3	2	LG/LB (20 GA.)	#2023		ADJUSTABLE PEDALS MOTOR READWARD	A1661-ND
4	5	WT/OR (20 GA.)	TWISTED		CAN INTERIOR BUS (-)	A1661-ND
5	7	WT/GRY (20 GA.)	#3037		CAN INTERIOR BUS (+)	A1661-ND
3	8	ORG/RED (14 GA.)	#2063		FUSED B (+)	A25069-ND
6	9	VT/LB (20 GA.)	#2070		ADJUSTABLE PEDALS SENSOR SUPPLY	A1661-ND
2	10	BK/ORG (14 GA.)	#10609		GROUND	A25069-ND
7	12	VT/GRY (20 GA.)	#2073		ADJUSTABLE PEDALSSENSOR RETURN	A1661-ND
8	14	VT /DB (20 GA.)	#2072		ADJUSTABLE PEDALS SENSOR SIGNAL	A1661-ND

2010 Chrysler Minivan
Driver Seat with Power, Heat and Memory - With Seat Detector
Seat Side



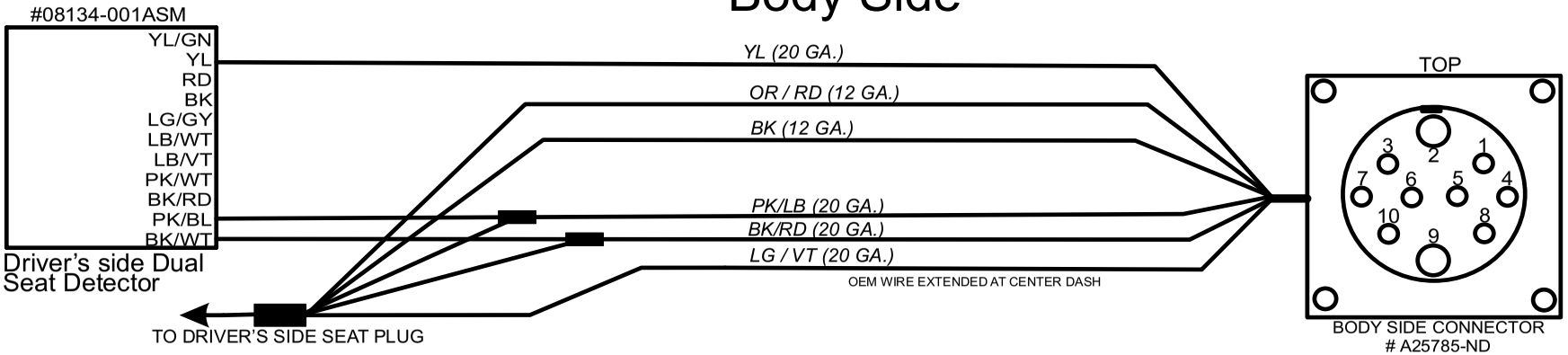
2010 Chrysler Minivan
Driver Seat with Power, Heat and Memory - With Seat Detector
Seat Side (Continued)

C376 Driver Power, Heat and Memory - Seat Side #10010-007-SD (C376 OEM CONNECTOR NOT INCLUDED)						
CAV	OEM CAV	COLOR	PART #	EXT. (FT.)	FUNCTION	SOCKET PART #
3	1	LG/WT (20 GA.)	2075	9	FUSED RUN REALY OUTPUT	A1661-ND
5	7	WT/DG (20 GA.)	2042	9	LIN BUS	A1661-ND
2	8	LG/GY (20 GA.)	2022	9	DRIVERS SEAT BELT SWITCH SENSE	A1661-ND
1	15	BK (12 GA.)	3006	9	GROUND	A25033-ND
6	23	LG/VT (18 GA.)	2076	9	RIGHT SEAT HEATER B(+) DRIVER	A1341-ND
8	16	LB/WT (20 GA.)	TWISTED	9	DRIVERS SEAT POSITION SENSOR DATA	A1661-ND
14	17	LB/VT (20 GA.)	# 3037		DRIVERS SEAT POSITION SENSOR VOLTAGE	A1661-ND
	4	LG/GY(18 GA.)	NOT		LEFT REAR HEATER B(+) DRIVER	
	19	LG/GY (18 GA.)	USED		RIGHT REAR HEATER B(+) DRIVER	
13	2	PK/YL (16 GA.)	2077	9	FUSED RUN RELAY OUTPUT	A1341-ND
7	21	RD (12 GA.)	3012	9	FUSED B (+)	A25033-ND
1/9		BK (20 GA.)	2009	0.25	GROUND FOR DETECTING SEAT	A1661-ND / A25033-ND
4	9	ORG/LG (20 GA.)	2079	9	ADJUSTABLE PEDALS SWITCH REARWARD	A1648-ND
12	6	ORG/LB (20 GA.)	2078	9	ADJUSTABLE PEDALS SWITCH FORWARD	A1648-ND
16	12	BK/RD (20 GA.)	3048	9	GROUND	A1661-ND
11	11	PK/WT (20 GA,)	3018	9	SEAT BELT PRETENSIONER IR (-) PASS	A1661-ND

C1 Driver Memory Seat - Seat Side #10010-007 (C1 OEM CONNECTOR NOT INCLUDED)						
CAV	OEM CAV	COLOR	PART #	EXT. (FT.)	FUNCTION	PIN PART #
1	1	LG / WT (20 GA.)	2075	9	ADJUSTABLE PEDALS MOTOR FORWARD	A1648-ND
3	2	LG/LB (20 GA.)	2023	9	ADJUSTABLE PEDALS MOTOR READWARD	A1648-ND
4	5	WT/OR (20 GA.)	TWISTED	9	CAN INTERIOR BUS (-)	A1648-ND
5	7	WT/GRY (20 GA.)	3036	9	CAN INTERIOR BUS (+)	A1648-ND
9	8	ORG/RED (14 GA.)	2063	9	FUSED B (+)	A25068-ND
6	9	VT/LB (20 GA.)	2070	9	ADJUSTABLE PEDALS SENSOR SUPPLY	A1648-ND
2	10	BK/ORG (14 GA.)	10609	9	GROUND	A25068-ND
7	12	VT/GRY (20 GA.)	2073	9	ADJUSTABLE PEDALSSENSOR RETURN	A1648-ND
8	14	VT /DB (20 GA.)	2072	9	ADJUSTABLE PEDALS SENSOR SIGNAL	A1648-ND

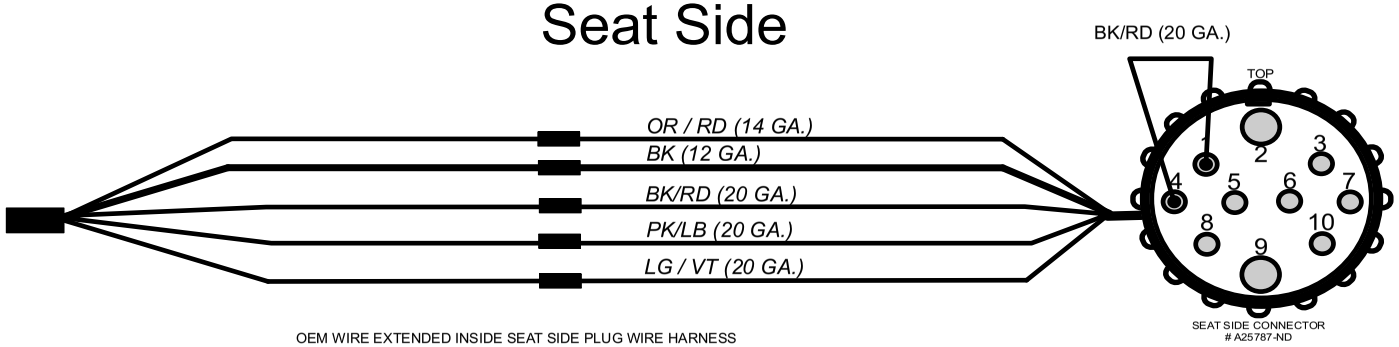
All wires run in same sleeving and are ALL part of #10010-007

2010 Chrysler Minivan
C378 Passenger Seat with Power and Heat
Body Side



C 378 Passenger Power and Heat - Body Side						
CAV	OEM CAV	COLOR			FUNCTION	SOCKET PART #
9	1	OR/RD (14 GA.)			FUSED B(+)	A25069-ND
2	5	BK (16GA.)			GROUND	A25069-ND
6	10	LG/VT (18 GA.)			RIGHT SEAT HEATER B(+) DRIVER	A1661-ND
1	8	BK/RD (20 GA.)			GROUND	A1661-ND
3	7	PK/LB (20 GA,)			SEAT BELT PRETENSIONER IR (-) PASS	A1661-ND

Seat Side

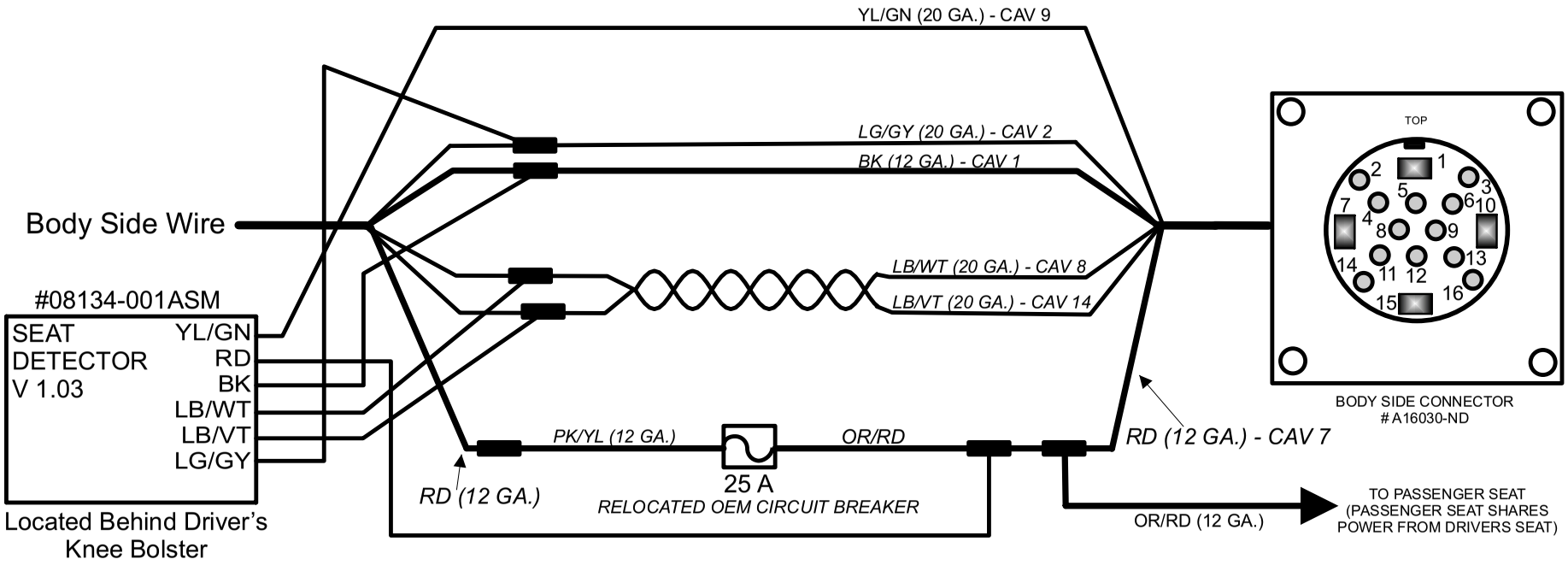


OEM WIRE EXTENDED INSIDE SEAT SIDE PLUG WIRE HARNESS

C378 Passenger Power and Heat - Seat Side #10010-004 (C378 OEM CONNECTOR NOT INCLUDED)						
CAV	OEM CAV	COLOR	PART #	EXT. (FT.)	FUNCTION	PIN PART #
9	1	OR/RD (14 GA.)	2063	9	FUSED B(+)	A25068-ND
2	5	BK (16GA.)	10592	9	GROUND	A25068-ND
6	10	LG/VT (18 GA.)	3066	9	RIGHT SEAT HEATER B(+) DRIVER	A1650-ND
1	8	BK/RD (20 GA.)	3048	9	GROUND	A1648-ND
3	7	PK/LB (20 GA,)	3085	9	SEAT BELT PRETENSIONER IR (-) PASS	A1648-ND
4		BK (20GA.)	2009	0.25	GROUND FOR DETECTING SEAT	A1648-ND

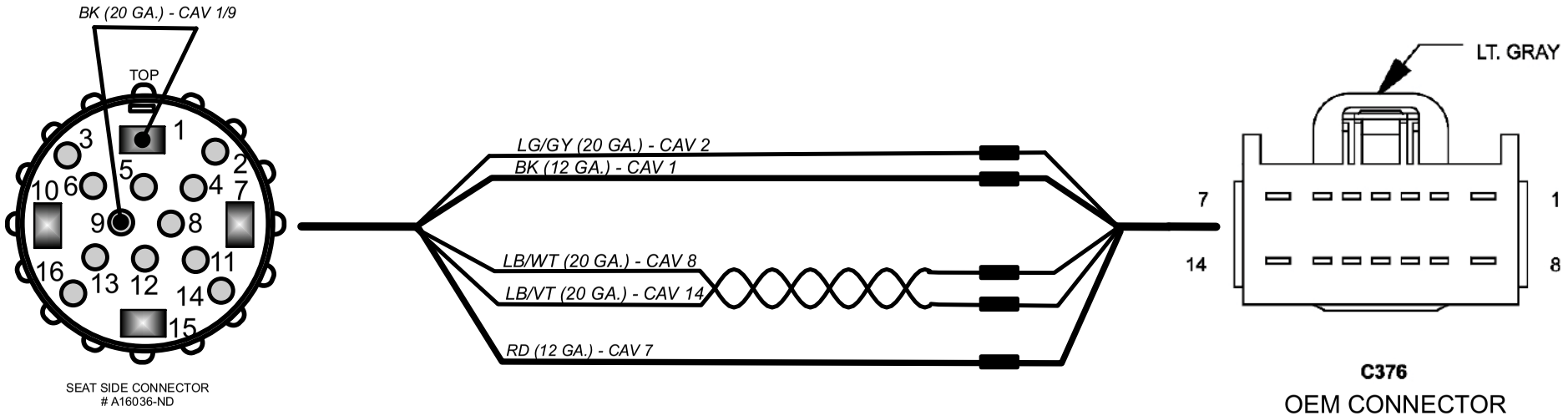

Rollx
VANS

2008-2009 Chrysler Minivan
C376 Driver Seat with Power Only - With Seat Detector
Body Side



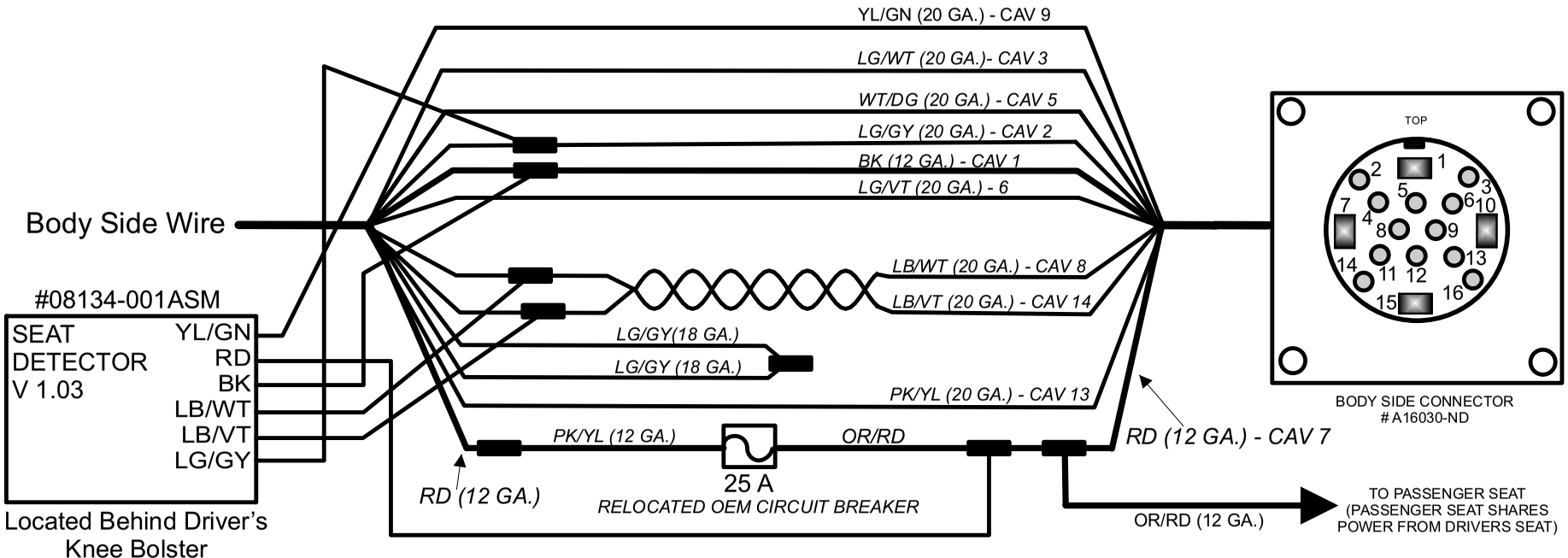
C376 Driver Power Only - Body Side						
CAV	OEM CAV	COLOR	PART #	EXT. (FT.)	FUNCTION	PIN PART #
Seat Detector #08134-001ASM		YL/GN (20 GA.)	3027	3.5	GROUND FOR DETECTING SEAT	A1648-ND
		RD (20 GA.)	3013	3.5	POWER	
		BK (20GA.)	2009	3.5	GROUND	
		LB/WT (20GA.)	TWISTED	3	TAPS TO DRIVER'S SEAT POSITION SENSOR DATA	
		LB/VT (20 GA.)	# 3037		TAPS TO DRIVER'S SEAT POSITION SENSOR VOLTAGE	
		LG/GY(18 GA.)	2022	3.5	TAPS TO DRIVER'S SEAT BELT SWITCH SENSE	
2	2	LG/GY (20 GA.)			DRIVER'S SEAT BELT SWITCH SENSE	A1648-ND
1	7	BK (12 GA.)			GROUND	A25032-ND
8	9	LB/WT (20 GA.)	TWISTED PAIR		DRIVER'S SEAT POSITION SENSOR DATA	A1648-ND
14	10	LB/VT (20 GA.)			DRIVER'S SEAT POSITION SENSOR VOLTAGE	A1648-ND
7	8	RD (12 GA.)			FUSED B (+)	A25032-ND

2008-2009 Chrysler Minivan
C376 Driver Seat with Power Only - With Seat Detector
Seat Side



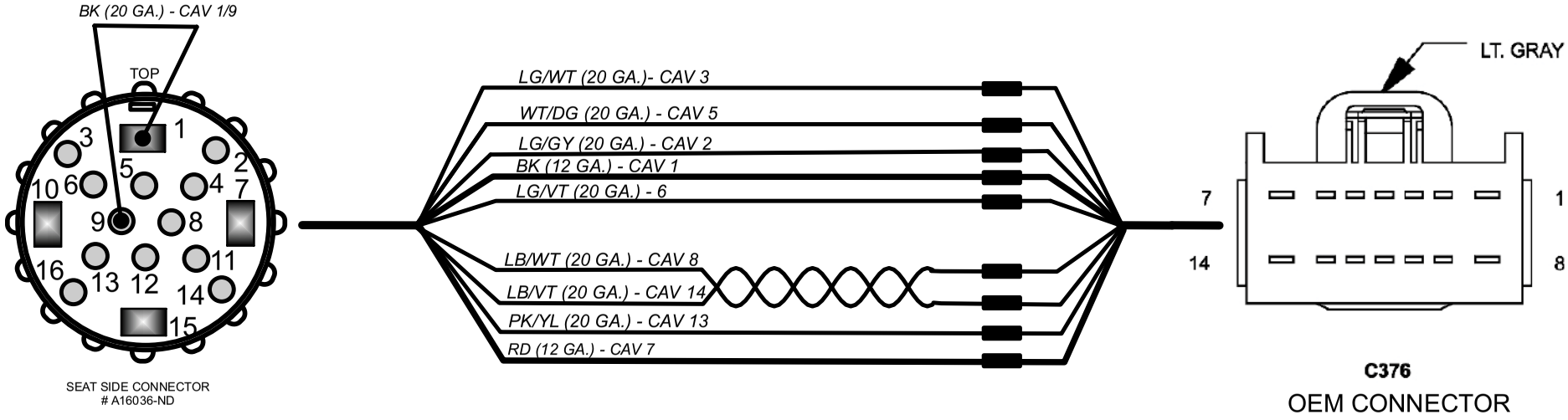
C376 Driver Power Only - Seat Side #08010-000-SD (C376 OEM CONNECTOR NOT INCLUDED)						
CAV	**OEM CAV**	**COLOR**	**PART #**	**EXT. (FT.)**	**FUNCTION**	**SOCKET PART #**
2	2	LG/GY (20 GA.)	2022	3 or 9	DRIVER'S SEAT BELT SWITCH SENSE	A1661-ND
1	7	BK (12 GA.)	3006	3 or 9	GROUND	A25033-ND
8	9	LB/WT (20 GA.)	TWISTED	3 or 9	DRIVER'S SEAT POSITION SENSOR DATA	A1661-ND
14	10	LB/VT (20 GA.)	# 3037		DRIVER'S SEAT POSITION SENSOR VOLTAGE	A1661-ND
7	8	RD (12 GA.)	3012	3 or 9	FUSED B (+)	A25033-ND
1/9		BK (20 GA.)	2009	0.25	GROUND FOR DETECTING SEAT	A1661-ND / A25033-ND

2008-2009 Chrysler Minivan
C376 Driver Seat with Power and Heat - With Seat Detector
Body Side



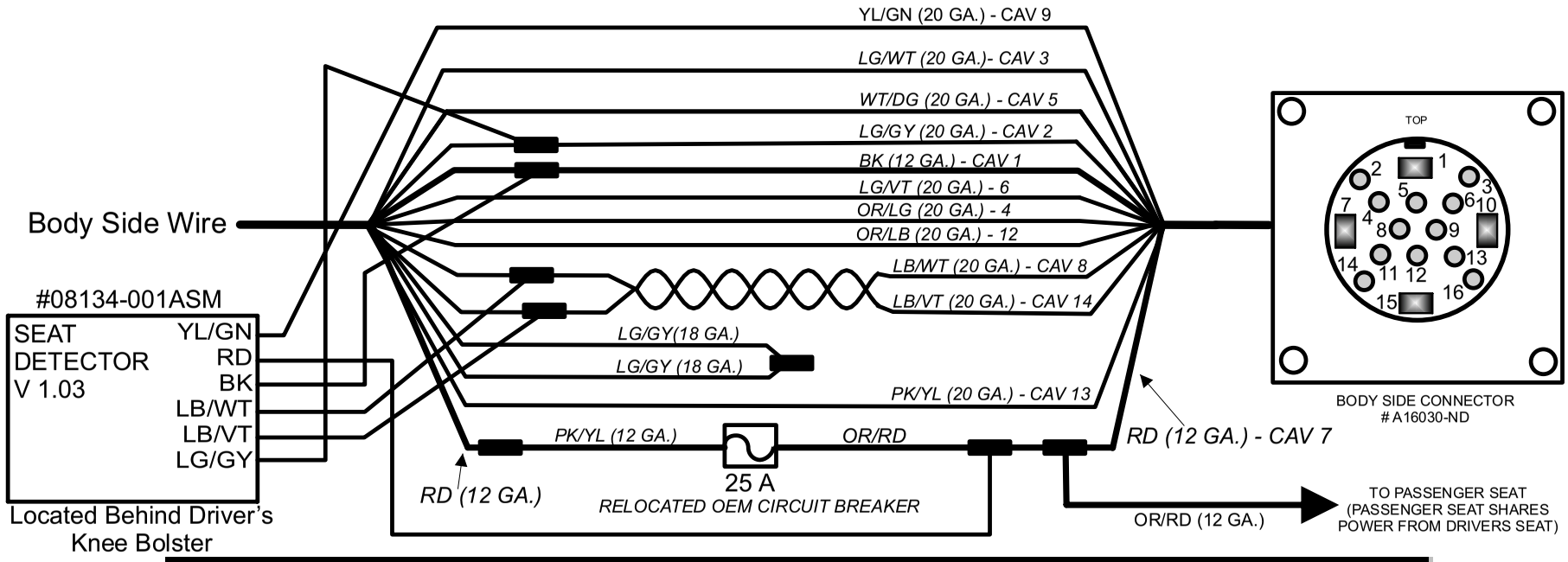
C376 Driver Power and Heat - Body Side						
CAV	OEM CAV	COLOR	PART #	EXT. (FT.)	FUNCTION	PIN PART #
Seat Detector #08134-001ASM		YL/GN (20 GA.)	3027	3.5	GROUND FOR DETECTING SEAT	A1648-ND
		RD (20 GA.)	3013	3.5	POWER	
		BK (20GA.)	2009	3.5	GROUND	
		LB/WT (20GA.)	TWISTED	3	TAPS TO DRIVER'S SEAT POSITION SENSOR DATA	
		LB/VT (20 GA.)	# 3037		TAPS TO DRIVER'S SEAT POSITION SENSOR VOLTAGE	
		LG/GY(18 GA.)	2022	3.5	TAPS TO DRIVER'S SEAT BELT SWITCH SENSE	
3	4	LG/WT (20 GA.)			FUSED RUN REALY OUTPUT	A1648-ND
5	5	WT/DG (20 GA.)			LIN BUS	A1648-ND
2	2	LG/GY (20 GA.)			DRIVER'S SEAT BELT SWITCH SENSE	A1648-ND
1	7	BK (12 GA.)			GROUND	A25032-ND
6	6	LG/VT (20 GA.)			RIGHT SEAT HEATER B(+) DRIVER	A1648-ND
8	9	LB/WT (20 GA.)	TWISTED PAIR		DRIVER'S SEAT POSITION SENSOR DATA	A1648-ND
14	10	LB/VT (20 GA.)			DRIVER'S SEAT POSITION SENSOR VOLTAGE	A1648-ND
	11	LG/GY(18 GA.)			LEFT REAR HEATER B(+) DRIVER	SOLDER
	12	LG/GY (18 GA.)			RIGHT REAR HEATER B(+) DRIVER	TOGETHER
13	14	PK/YL (20 GA.)			FUSED RUN RELAY OUTPUT	A1648-ND
7	8	RD (12 GA.)			FUSED B (+)	A25032-ND

2008-2009 Chrysler Minivan
C376 Driver Seat with Power and Heat - With Seat Detector
Seat Side



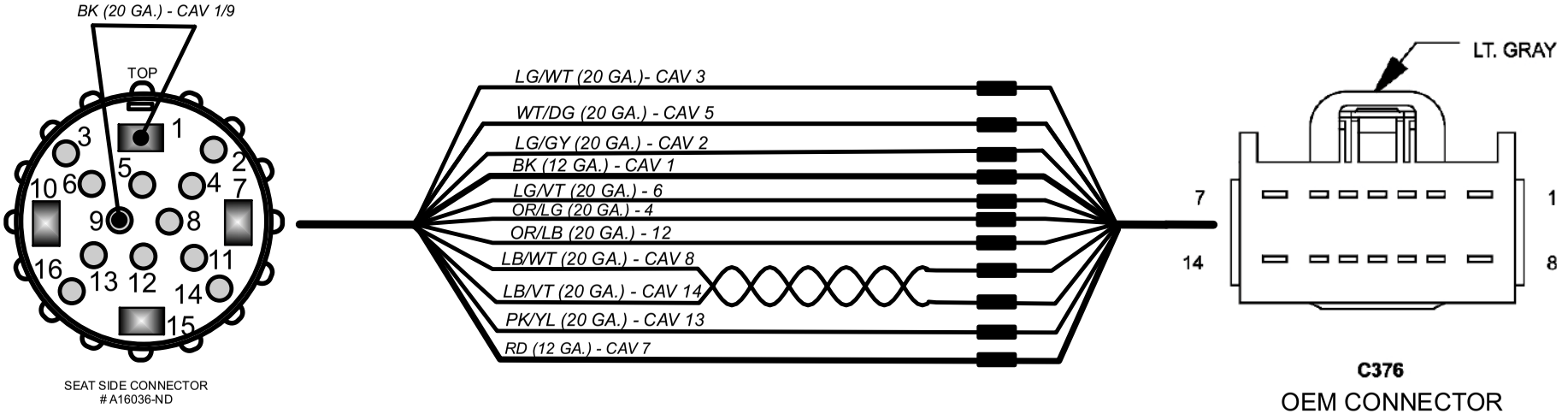
C376 Driver Power and Heat - Seat Side #08010-001-SD (C376 OEM CONNECTOR NOT INCLUDED)						
CAV	**OEM CAV**	**COLOR**	**PART #**	**EXT. (FT.)**	**FUNCTION**	**SOCKET PART #**
3	4	LG/WT (20 GA.)	2075	3 or 9	FUSED RUN REALY OUTPUT	A1661-ND
5	5	WT/DG (20 GA.)	2042	3 or 9	LIN BUS	A1661-ND
2	2	LG/GY (20 GA.)	2022	3 or 9	DRIVER'S SEAT BELT SWITCH SENSE	A1661-ND
1	7	BK (12 GA.)	3006	3 or 9	GROUND	A25033-ND
6	6	LG/VT (20 GA.)	2076	3 or 9	RIGHT SEAT HEATER B(+) DRIVER	A1661-ND
8	9	LB/WT (20 GA.)	TWISTED	3 or 9	DRIVER'S SEAT POSITION SENSOR DATA	A1661-ND
14	10	LB/VT (20 GA.)	# 3037		DRIVER'S SEAT POSITION SENSOR VOLTAGE	A1661-ND
	11	LG/GY(18 GA.)	NOT		LEFT REAR HEATER B(+) DRIVER	
	12	LG/GY (18 GA.)	USED		RIGHT REAR HEATER B(+) DRIVER	
13	14	PK/YL (20 GA.)	2077	3 or 9	FUSED RUN RELAY OUTPUT	A1661-ND
7	8	RD (12 GA.)	3012	3 or 9	FUSED B (+)	A25033-ND
1/9		BK (20 GA.)	2009	0.25	GROUND FOR DETECTING SEAT	A1661-ND / A25033-ND

2008-2009 Chrysler Minivan
C376 Driver Seat with Power, Heat and Memory - With Seat Detector
Body Side



C376 Driver Power, Heat and Memory- Body Side						
CAV	OEM CAV	COLOR	PART #	EXT. (FT.)	FUNCTION	PIN PART #
Seat Detector #08134-001ASM		YL/GN (20 GA.)	3027	3.5	GROUND FOR DETECTING SEAT	A1648-ND
		RD (20 GA.)	3013	3.5	POWER	
		BK (20GA.)	2009	3.5	GROUND	
		LB/WT (20GA.)	TWISTED	3	TAPS TO DRIVER'S SEAT POSITION SENSOR DATA	
		LB/VT (20 GA.)	# 3037		TAPS TO DRIVER'S SEAT POSITION SENSOR VOLTAGE	
		LG/GY(18 GA.)	2022	3.5	TAPS TO DRIVER'S SEAT BELT SWITCH SENSE	
3	4	LG/WT (20 GA.)			FUSED RUN REALY OUTPUT	A1648-ND
5	5	WT/DG (20 GA.)			LIN BUS	A1648-ND
2	2	LG/GY (20 GA.)			DRIVER'S SEAT BELT SWITCH SENSE	A1648-ND
1	7	BK (12 GA.)			GROUND	A25032-ND
6	6	LG/VT (20 GA.)			RIGHT SEAT HEATER B(+) DRIVER	A1648-ND
8	9	LB/WT (20 GA.)	TWISTED		DRIVER'S SEAT POSITION SENSOR DATA	A1648-ND
14	10	LB/VT (20 GA.)	PAIR		DRIVER'S SEAT POSITION SENSOR VOLTAGE	A1648-ND
	11	LG/GY(18 GA.)			LEFT REAR HEATER B(+) DRIVER	SOLDER
	12	LG/GY (18 GA.)			RIGHT REAR HEATER B(+) DRIVER	TOGETHER
13	14	PK/YL (20 GA.)			FUSED RUN RELAY OUTPUT	A1648-ND
7	8	RD (12 GA.)			FUSED B (+)	A25032-ND
4	3	ORG/LG (20 GA.)			ADJUSTABLE PEDALS SWITCH REARWARD	A1648-ND
12	13	ORG/LB (20 GA.)			ADJUSTABLE PEDALS SWITCH FORWARD	A1648-ND

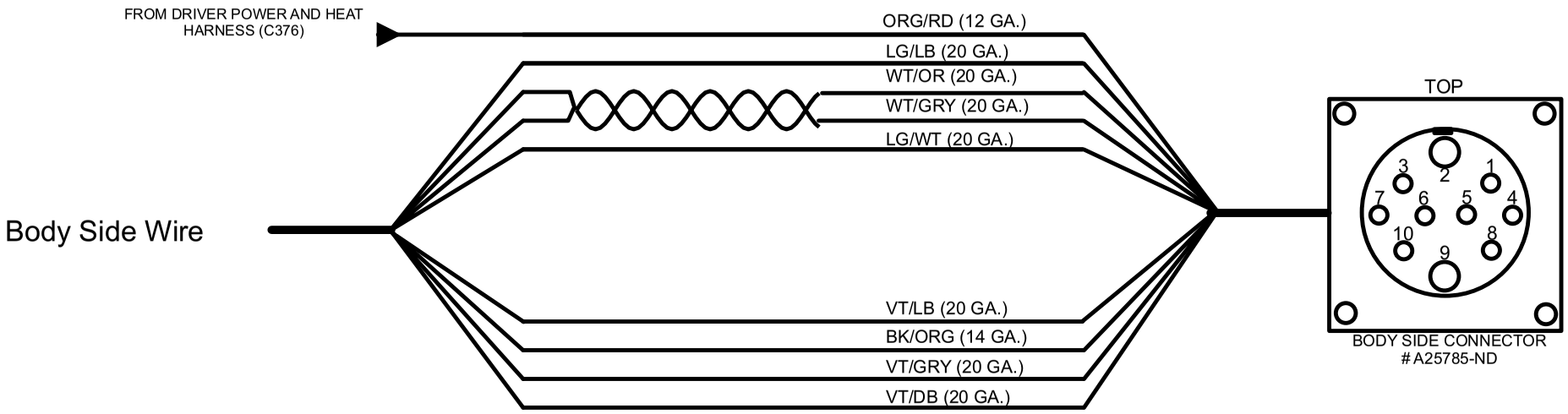
2008-2009 Chrysler Minivan
C376 Driver Seat with Power, Heat and Memory - With Seat Detector
Seat Side



C376 Driver Power, Heat and Memory - Seat Side #08010-002-SD or #08180-007-SD after 9/9/2009* (C376 OEM CON NOT INCLUDED)						
CAV	**OEM CAV**	**COLOR**	**PART #**	**EXT. (FT.)**	**FUNCTION**	**SOCKET PART #**
3	4	LG/WT (20 GA.)	2075	3 or 9	FUSED RUN REALY OUTPUT	A1661-ND
5	5	WT/DG (20 GA.)	2042	3 or 9	LIN BUS	A1661-ND
2	2	LG/GY (20 GA.)	2022	3 or 9	DRIVER'S SEAT BELT SWITCH SENSE	A1661-ND
1	7	BK (12 GA.)	3006	3 or 9	GROUND	A25033-ND
6	6	LG/VT (20 GA.)	2076	3 or 9	RIGHT SEAT HEATER B(+) DRIVER	A1661-ND
8	9	LB/WT (20 GA.)	TWISTED	3 or 9	DRIVER'S SEAT POSITION SENSOR DATA	A1661-ND
14	10	LB/VT (20 GA.)	# 3037		DRIVER'S SEAT POSITION SENSOR VOLTAGE	A1661-ND
	11	LG/GY(18 GA.)	NOT		LEFT REAR HEATER B(+) DRIVER	
	12	LG/GY (18 GA.)	USED		RIGHT REAR HEATER B(+) DRIVER	
13	14	PK/YL (20 GA.)	2077	3 or 9	FUSED RUN RELAY OUTPUT	A1661-ND
7	8	RD (12 GA.)	3012	3 or 9	FUSED B (+)	A25033-ND
1/9		BK (20 GA.)	2009	0.25	GROUND FOR DETECTING SEAT	A1661-ND / A25033-ND
4	3	ORG/LG (20 GA.)	2079	3 or 9	ADJUSTABLE PEDALS SWITCH REARWARD	A1648-ND
12	13	ORG/LB (20 GA.)	2078	3 or 9	ADJUSTABLE PEDALS SWITCH FORWARD	A1648-ND

*After 9/9/2009, Rollx Vans changed seat wire harnesses to a longer harness with woven covering. This change allowed all vans to have a six-way seat installed without modifying the seat wire harness. When a six-way seat is not installed, the excess wire will be stored under the OEM Seat. If Memory Function is present, the added harness shares the same loom as the harness for power and heat. This part is #08180-007-SD.

2008-2009 Chrysler Minivan
C1 Driver Seat with Memory
(If vehicle drivers seat with memory, drivers seat also has power and heat and passenger seat has power and heat)
Body Side - Memory Plug

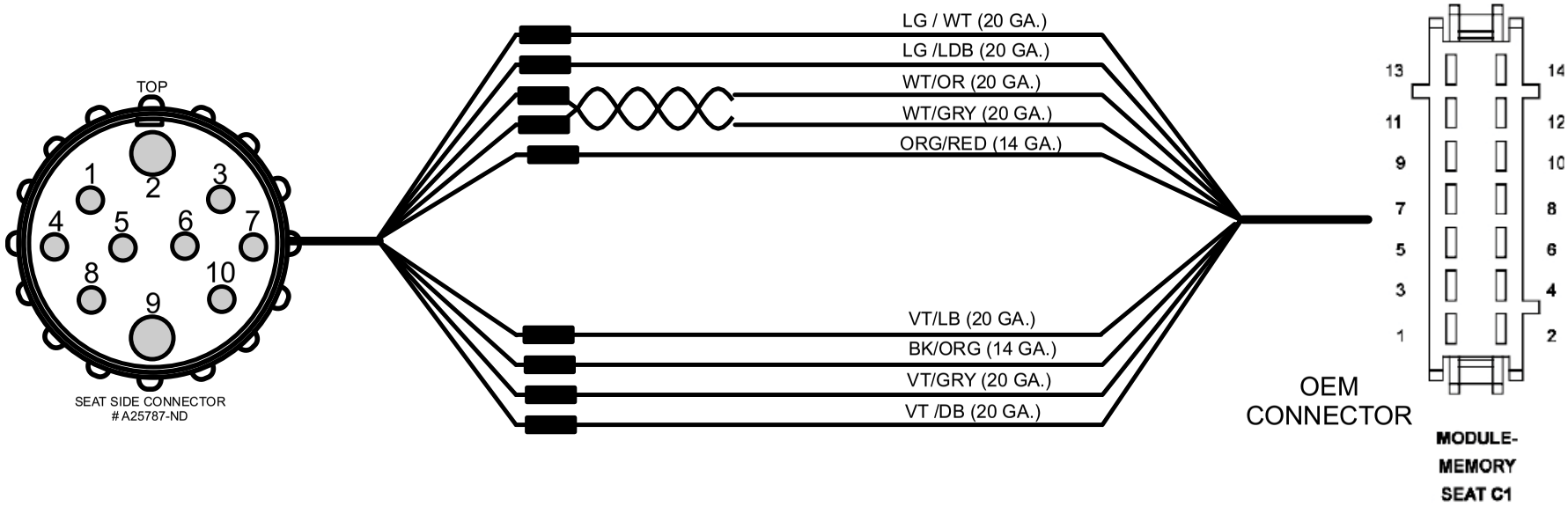


C1 Driver Memory Seat - Body Side						
CAV	OEM CAV	COLOR	PART #	EXT. (FT.)	FUNCTION	SOCKET PART #
1	1	LG / WT (20 GA.)			ADJUSTABLE PEDALS MOTOR FORWARD	A1661-ND
3	2	LG/LB (20 GA.)			ADJUSTABLE PEDALS MOTOR READWARD	A1661-ND
4	5	WT/OR (20 GA.)			CAN INTERIOR BUS (-)	A1661-ND
5	7	WT/GRY (20 GA.)			CAN INTERIOR BUS (+)	A1661-ND
3	8	ORG/RED (14 GA.)			FUSED B (+)	A25069-ND
6	9	VT/LB (20 GA.)			ADJUSTABLE PEDALS SENSOR SUPPLY	A1661-ND
2	10	BK/ORG (14 GA.)			GROUND	A25069-ND
7	12	VT/GRY (20 GA.)			ADJUSTABLE PEDALSSENSOR RETURN	A1661-ND
8	14	VT /DB (20 GA.)			ADJUSTABLE PEDALS SENSOR SIGNAL	A1661-ND

Chrysler 2008-2009 Minivan
C1 Driver Seat with Memory

(If vehicle drivers seat with memory, drivers seat also has power and heat and passenger seat has power and heat)

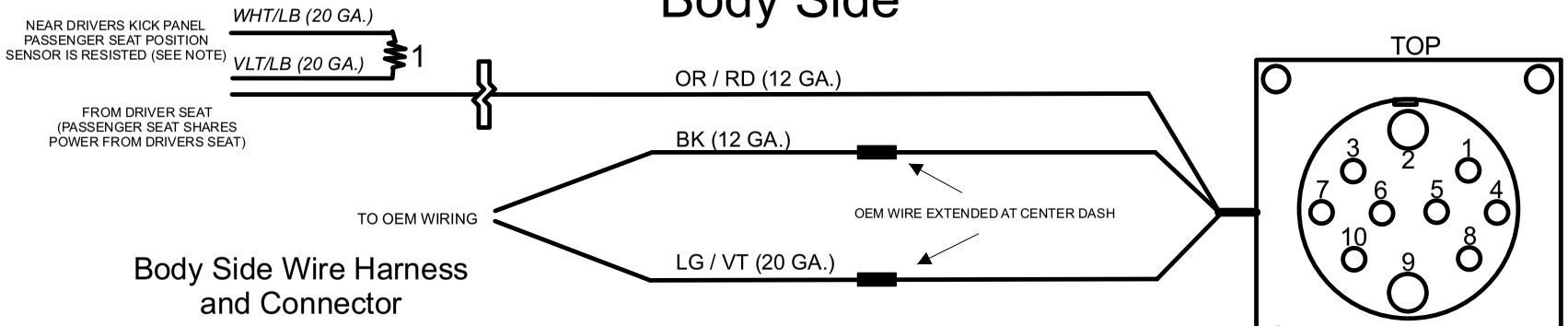
Seat Side - Memory Plug



	C1 Driver Memory Seat - Seat Side #08010-006 or #08180-007-SD after 9/9/2009* (C376 OEM CON NOT INCLUDED)					
CAV	OEM CAV	COLOR	PART #	EXT. (FT.)	FUNCTION	PIN PART #
1	1	LG / WT (20 GA.)	2075	3 or 9	ADJUSTABLE PEDALS MOTOR FORWARD	A1648-ND
3	2	LG/LB (20 GA.)	2023	3 or 9	ADJUSTABLE PEDALS MOTOR READWARD	A1648-ND
4	5	WT/OR (20 GA.)	TWISTED	3 or 9	CAN INTERIOR BUS (-)	A1648-ND
5	7	WT/GRY (20 GA.)	3036	3 or 9	CAN INTERIOR BUS (+)	A1648-ND
9	8	ORG/RED (14 GA.)	2063	3 or 9	FUSED B (+)	A25068-ND
6	9	VT/LB (20 GA.)	2070	3 or 9	ADJUSTABLE PEDALS SENSOR SUPPLY	A1648-ND
2	10	BK/ORG (14 GA.)	10609	3 or 9	GROUND	A25068-ND
7	12	VT/GRY (20 GA.)	2073	3 or 9	ADJUSTABLE PEDALSSENSOR RETURN	A1648-ND
8	14	VT /DB (20 GA.)	2072	3 or 9	ADJUSTABLE PEDALS SENSOR SIGNAL	A1648-ND

*After 9/9/2009, Rollx Vans changed seat wire harnesses to a longer harness with woven covering. This change allowed all vans to have a six-way seat installed without modifying the seat wire harness. When a six-way seat is not installed, the excess wire will be stored under the OEM Seat. If Memory Function is present, the added harness shares the same loom as the harness for power and heat. This part is #08180-007-SD.

2008-2009 Chrysler Minivan
C378 Passenger Seat with Power and Heat
Body Side



Body Side Wire Harness and Connector

BODY SIDE CONNECTOR
A25785-ND

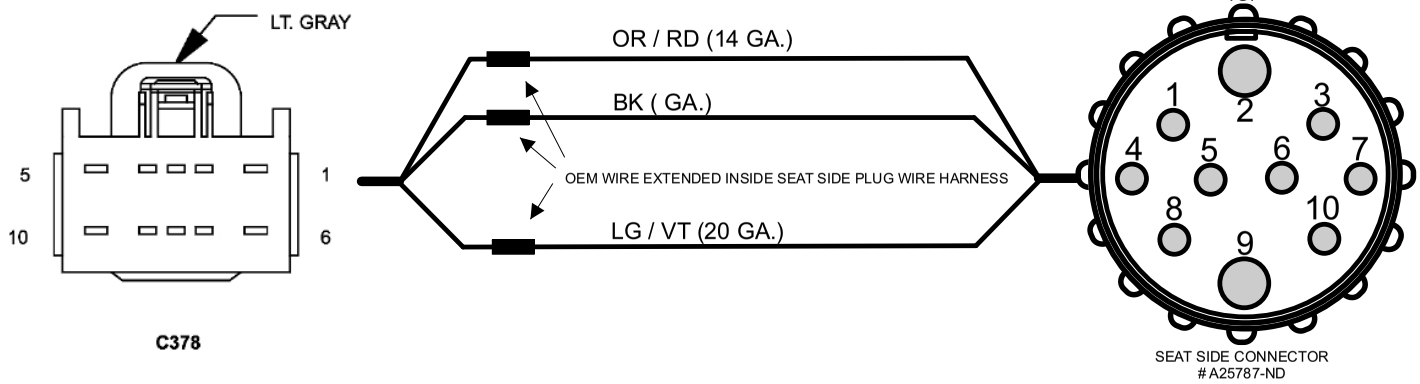
C 378 Passenger Power and Heat - Body Side						
CAV	OEM CAV	COLOR			FUNCTION	SOCKET PART #
9	1	OR/RD (14 GA.)			FUSED B(+)	A25069-ND
2	5	BK (16GA.)			GROUND	A25069-ND
6	10	LG/VT (18 GA.)			RIGHT SEAT HEATER B(+) DRIVER	A1661-ND
		LB/WHT (20 GA.)*			DRIVERS SEAT POSITION SENSOR DATA	RESISTED
		LB/VLT (20 GA.)*			DRIVERS SEAT POSITION SENSOR VOLTAGE	RESISTED

* Resisted near driver's kick panel if OEM Airbag Modules has part # ending in AK or before

Note:
Newer OEM Airbag Modules with part # ending in AL only get the Driver Side resisted. Older OEM Airbag Modules with part # ending in AK get the Driver and Passenger Side resisted. At some point in 2008 Chrysler decided to leave the passenger side circuit open so it no longer needs resistence when the seat is moved.

Seat Side

Seat Side Wire Harness and Connector



SEAT SIDE CONNECTOR
A25787-ND

C378 Passenger Power and Heat - Seat Side #08010-004 (C378 OEM CONNECTOR NOT INCLUDED)						
CAV	OEM CAV	COLOR	PART #	EXT. (FT.)	FUNCTION	PIN PART #
9	1	OR/RD (14 GA.)	2063	2 or 9	FUSED B(+)	A25068-ND
2	5	BK (16GA.)	10592	2 or 9	GROUND	A25068-ND
6	10	LG/VT (18 GA.)	3066	2 or 9	RIGHT SEAT HEATER B(+) DRIVER	A1650-ND


Rollx
VANS

2008 Chrysler Minivan
Air bag and Seatbelt Resistors for All Vans
(Body side near driver's kick panel)

ALL RESISTORS ARE - 1K OHM 1/4 W 1% (#R171171506)

DRIVER SEATBELT SENSOR (SEATBELT WARNING LIGHT)

LG/GRY (20 GA.) DRIVERS SEAT BELT SWITCH SENSE → ⏚

LG/GRY IS GROUNDED UNLESS VAN HAS MEMORY SEAT

PASSENGER SEATBELT SENSOR (SEATBELT WARNING LIGHT)

LB/GRY (20 GA.) PASSENGER SEAT BELT SWITCH SENSE

LB/TN (20 GA.) PASSENGER SEAT BELT SWITCH RETURN — 1 K

DRIVER SEAT POSITION (AIRBAG WARNING LIGHT)

LB/WHT (20 GA.) DRIVERS SEAT POSITION SENSOR DATA

LB/VLT (20 GA.) DRIVERS SEAT POSITION SENSOR VOLTAGE — 1 K

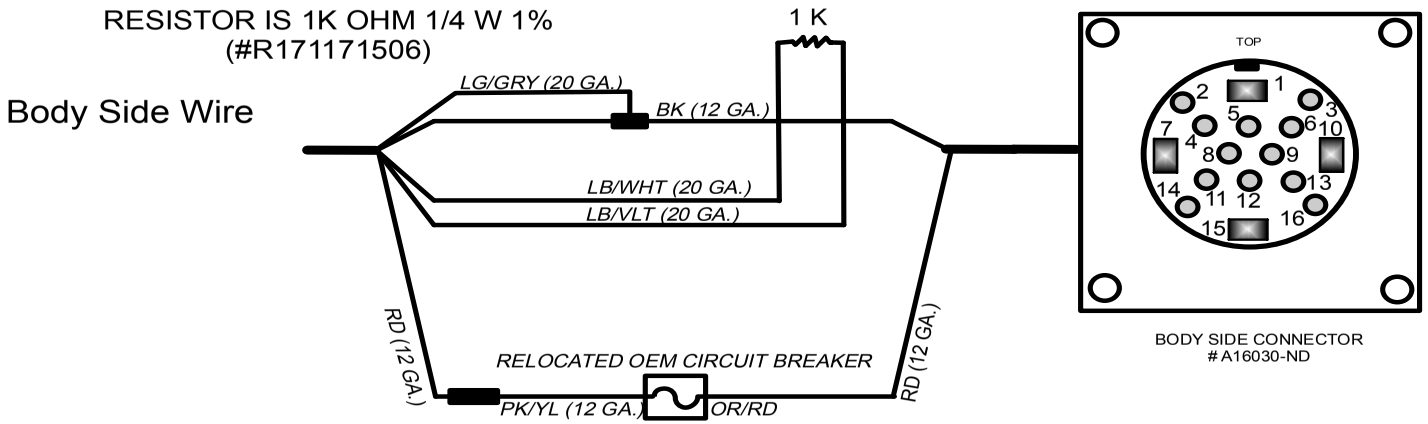
PASSENGER SEAT POSITION (AIRBAG WARNING LIGHT)

WHT/LB (20 GA.) PASSENGER SEAT TRACK POSITION SENSOR SIGNAL

VLT/LB (20 GA.) PASSENGER SEAT TRACK POSITION SENSOR SUPPLY — 1 K

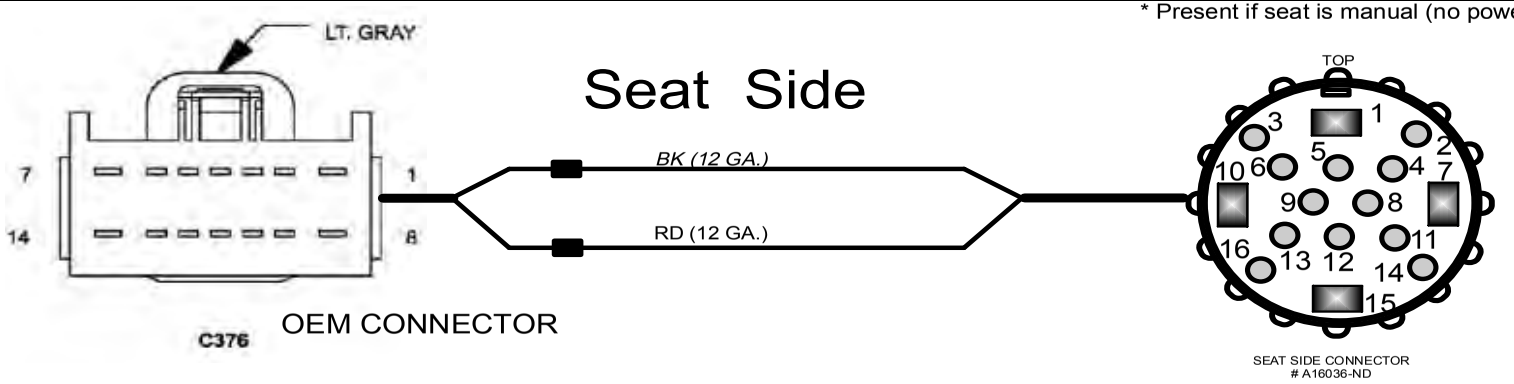
Note:
Newer OEM Airbag Modules with part # ending in AL only get the Driver Side resisted.
Older OEM Airbag Modules with part # ending in AK get the Driver and Passenger Side resisted.
At some point in 2008 Chrysler decided to leave the passenger side circuit open so it no longer needs resistence when the seat is moved.

2008 Chrysler Minivan
C376 Driver Seat with No Power (Manual) or Power Only
Body Side



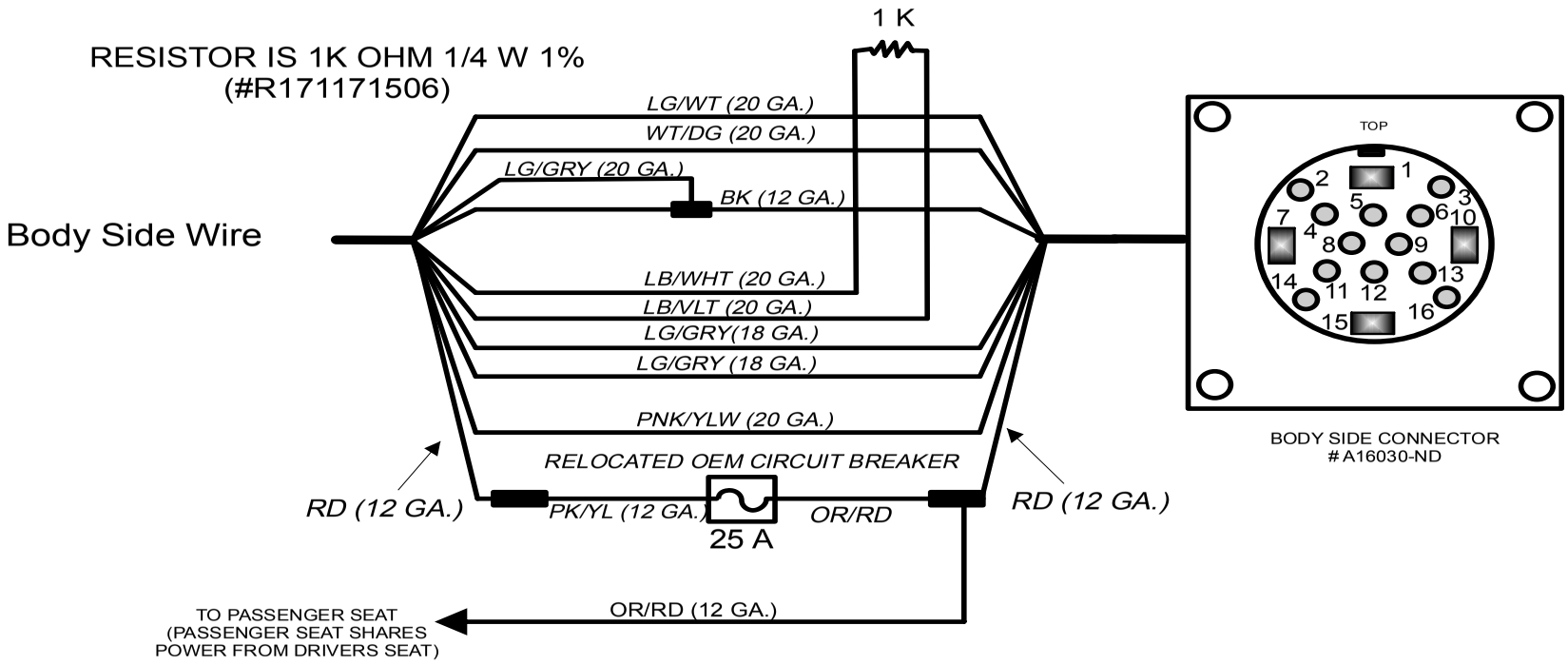
C376 Driver Power Only - Body Side						
CAV	OEM CAV	COLOR			DESCRIPTION	PIN PART #
1	7	BK (12 GA.)			GROUND	A25032-ND
7	8	RD (12 GA.)			FUSED B (+)	A25032-ND
	2	LG/GRY (20 GA.)*			DRIVERS SEAT BELT SWITCH SENSE	GROUNDED
	9	LB/WHT (20 GA.)*			DRIVERS SEAT POSITION SENSOR DATA	RESISTED
	10	LB/VLT (20 GA.)*			DRIVERS SEAT POSITION SENSOR VOLTAGE	RESISTED

* Present if seat is manual (no power)



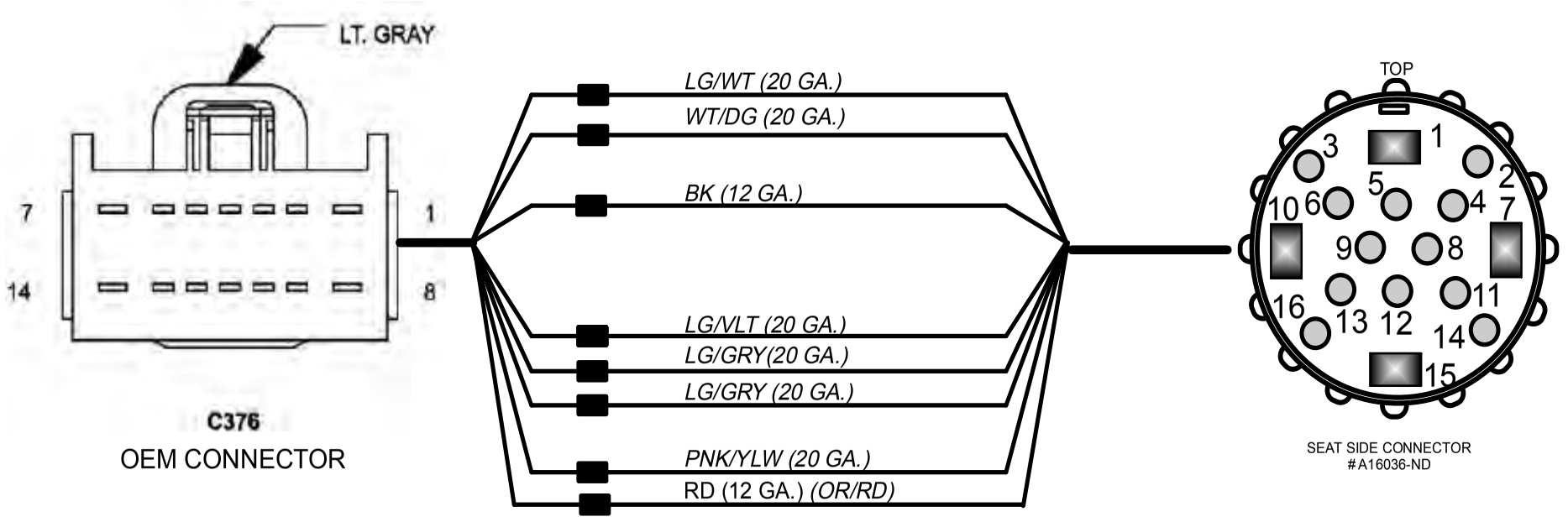
C376 Driver Power Only - Seat Side #08010-001 (C376 OEM CONNECTOR NOT INCLUDED)						
CAV	OEM CAV	COLOR	PART #	EXT. (FT.)	FUNCTION	SOCKET PART #
1	7	BK (12 GA.)	3006	3	GROUND	A25033-ND
7	8	RD (12 GA.)	3012	3	FUSED B (+)	A25033-ND

2008 Chrysler Minivan
C376 Driver Seat with Power and Heat
Body Side



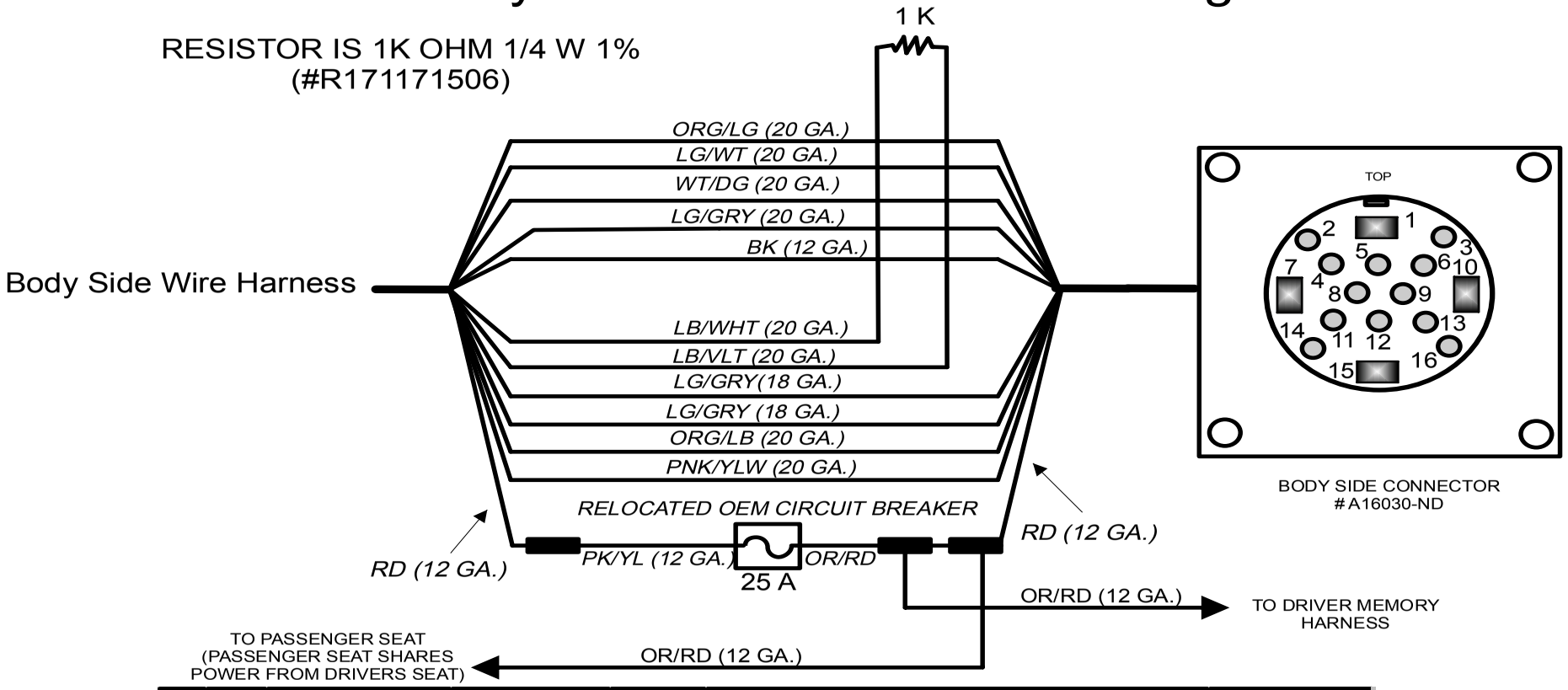
C376 Driver Power and Heat - Body Side						
CAV	OEM CAV	COLOR			DESCRIPTION	PIN PART #
1	7	BK (12 GA.)			GROUND	A25032-ND
15	1	OR / RD (12 GA.)			FUSED B(+)	A25032-ND
2	2	LG/GRY (20 GA.)			DRIVERS SEAT BELT SWITCH SENSE	GROUNDED
3	4	LG/WT (20 GA.)			FUSED RUN REALY OUTPUT	A1648-ND
5	5	WT/DG (20 GA.)			LIN BUS	A1648-ND
6	6	LG/VT (20 GA.)			RIGHT SEAT HEATER B(+) DRIVER	A1648-ND
7	8	RD (12 GA.)			FUSED B (+)	A25032-ND
	9	LB/WHT (20 GA.)			DRIVERS SEAT POSITION SENSOR DATA	RESISTED
	10	LB/VLT (20 GA.)			DRIVERS SEAT POSITION SENSOR VOLTAGE	RESISTED
9	11	LG/GRY(18 GA.)			LEFT REAR HEATER B(+) DRIVER	A1648-ND
11	12	LG/GRY (18 GA.)			RIGHT REAR HEATER B(+) DRIVER	A1648-ND
13	14	PNK/YLW (20 GA.)			FUSED RUN RELAY OUTPUT	A1648-ND

2008 Chrysler Minivan
C376 Driver Seat with Power and Heat
Seat Side



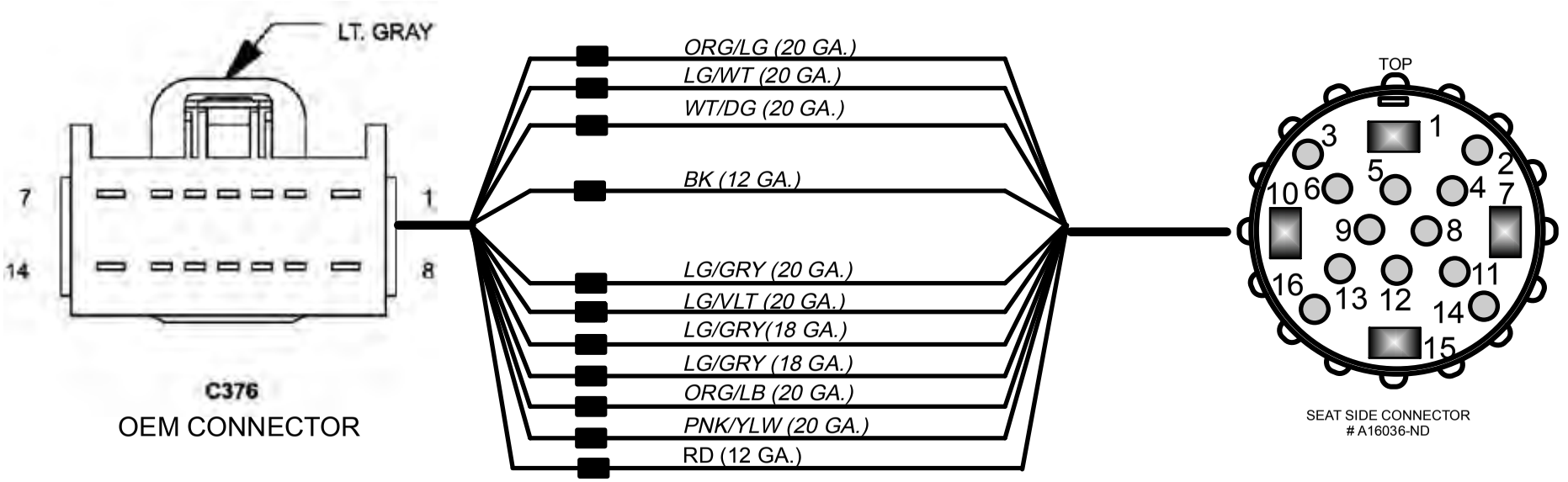
C376 Driver Power and Heat - Seat Side #08010-001 (C376 OEM CONNECTOR NOT INCLUDED)						
CAV	OEM CAV	COLOR	PART #	EXT. (FT.)	FUNCTION	SOCKET PART #
1	7	BK (12 GA.)	3006	3	GROUND	A25033-ND
3	4	LG/WT (20 GA.)	2075	3	FUSED RUN REALY OUTPUT	A1661-ND
5	5	WT/DG (20 GA.)	2042	3	LIN BUS	A1661-ND
6	6	LG/VT (20 GA.)	2076	3	RIGHT SEAT HEATER B(+) DRIVER	A1661-ND
7	8	RD (12 GA.)	3012	3	FUSED B (+)	A25033-ND
9	11	LG/GRY(18 GA.)	2022	3	LEFT REAR HEATER B(+) DRIVER	A1661-ND
11	12	LG/GRY (18 GA.)	2022	3	RIGHT REAR HEATER B(+) DRIVER	A1661-ND
13	14	PNK/YLW (20 GA.)	8077	3	FUSED RUN RELAY OUTPUT	A1661-ND

2008 Chrysler Minivan
C376 Driver Seat with Memory, Power and Heat
Body Side - Power and Heat Plug



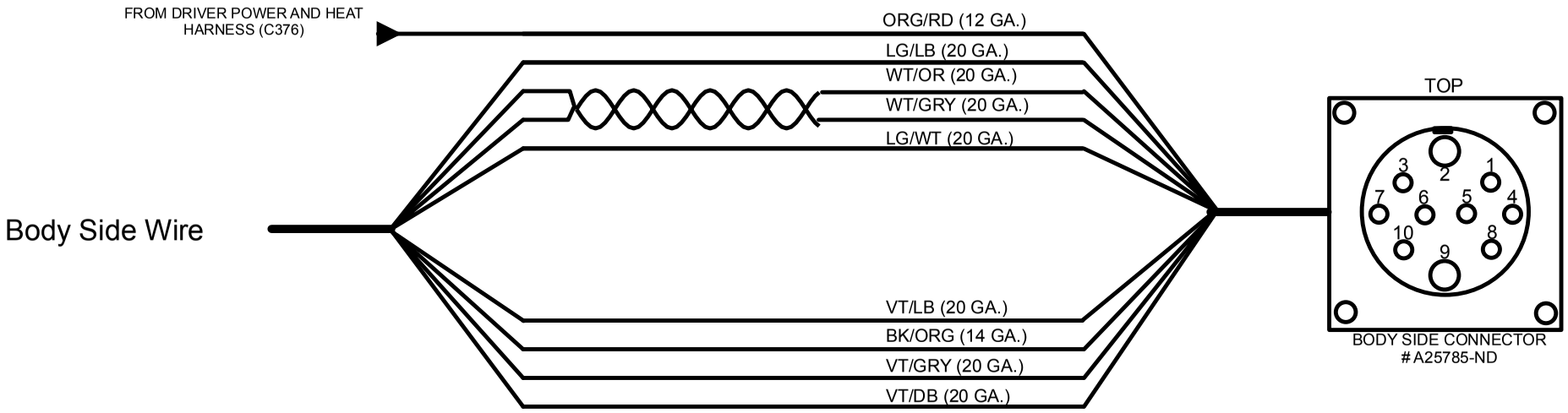
C376 Driver Memory, Power and Heat - Body Side						
CAV	OEM CAV	COLOR			DESCRIPTION	PIN PART #
1	7	BK (12 GA.)			GROUND	A25032-ND
2	2	LG/GRY (20 GA.)			DRIVERS SEAT BELT SWITCH SENSE	A1648-ND
3	4	LG/WT (20 GA.)			FUSED RUN REALY OUTPUT	A1648-ND
4	3	ORG/LG (20 GA.)			ADJUSTABLE PEDALS SWITCH REARWARD	A1648-ND
5	5	WT/DG (20 GA.)			LIN BUS	A1648-ND
6	6	LG/VT (20 GA.)			RIGHT SEAT HEATER B(+) DRIVER	A1648-ND
7	8	RD (12 GA.)			FUSED B (+)	A25032-ND
	9	LB/WHT (20 GA.)			DRIVERS SEAT POSITION SENSOR DATA	RESISTED
	10	LB/VLT (20 GA.)			DRIVERS SEAT POSITION SENSOR VOLTAGE	RESISTED
9	11	LG/GRY(18 GA.)			LEFT REAR HEATER B(+) DRIVER	A1648-ND
11	12	LG/GRY (18 GA.)			RIGHT REAR HEATER B(+) DRIVER	A1648-ND
12	13	ORG/LB (20 GA.)			ADJUSTABLE PEDALS SWITCH FORWARD	A1648-ND
13	14	PNK/YLW (20 GA.)			FUSED RUN RELAY OUTPUT	A1648-ND

2008 Chrysler Minivan
C376 Driver Seat with Memory, Power and Heat
Seat Side - Power and Heat Plug



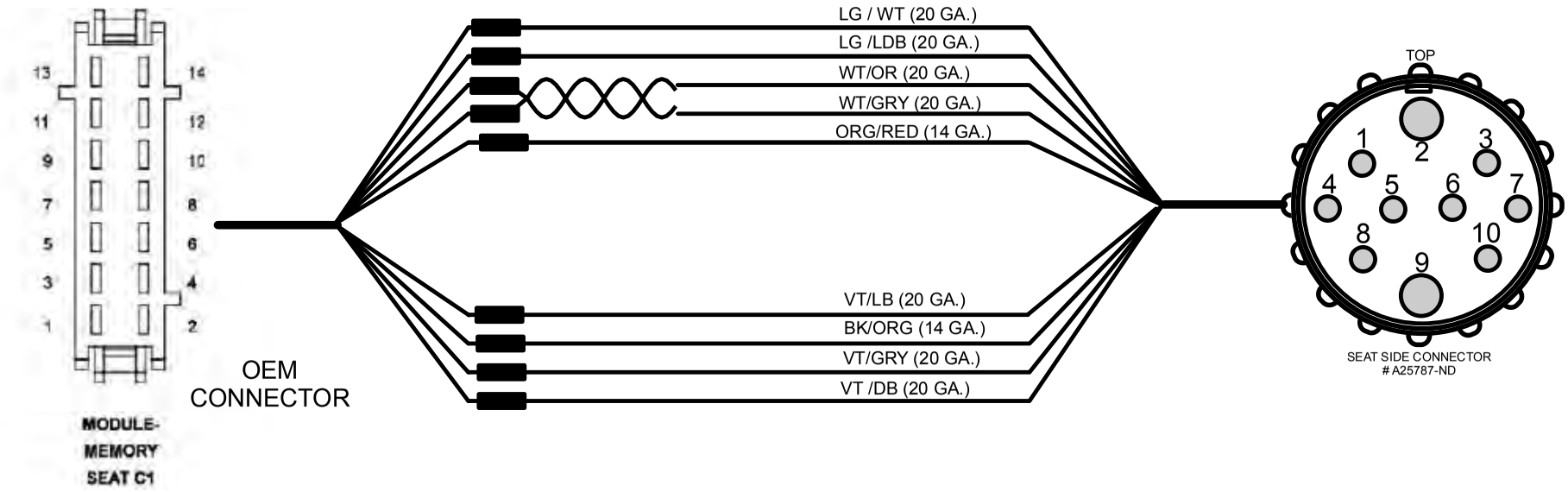
C376 Driver Memory, Power and Heat - Seat Side #08010-002 (C376 OEM CONNECTOR NOT INCLUDED)						
CAV	OEM CAV	COLOR	PART #	EXT. (FT.)	FUNCTION	SOCKET PART #
1	7	BK (12 GA.)	3006	3	GROUND	A25033-ND
2	2	LG/GRY (20 GA.)	2022	3	DRIVERS SEAT BELT SWITCH SENSE	A1661-ND
3	4	LG/WT (20 GA.)	2075	3	FUSED RUN REALY OUTPUT	A1661-ND
4	3	ORG/LG (20 GA.)	2079	3	ADJUSTABLE PEDALS SWITCH REARWARD	A1661-ND
5	5	WT/DG (20 GA.)	2042	3	LIN BUS	A1661-ND
6	6	LG/VT (20 GA.)	2076	3	RIGHT SEAT HEATER B(+) DRIVER	A1661-ND
7	8	RD (12 GA.)	3012	3	FUSED B (+)	A25033-ND
9	11	LG/GRY(18 GA.)	2022	3	LEFT REAR HEATER B(+) DRIVER	A1661-ND
11	12	LG/GRY (18 GA.)	2022	3	RIGHT REAR HEATER B(+) DRIVER	A1661-ND
12	13	ORG/LB (20 GA.)	2078	3	ADJUSTABLE PEDALS SWITCH FORWARD	A1661-ND
13	14	PNK/YLW (20 GA.)	2077	3	FUSED RUN RELAY OUTPUT	A1661-ND

2008 Chrysler Minivan
C1 Driver Seat with Memory
(If vehicle drivers seat with memory, drivers seat also has power and heat and passenger seat has power and heat)
Body Side - Memory Plug



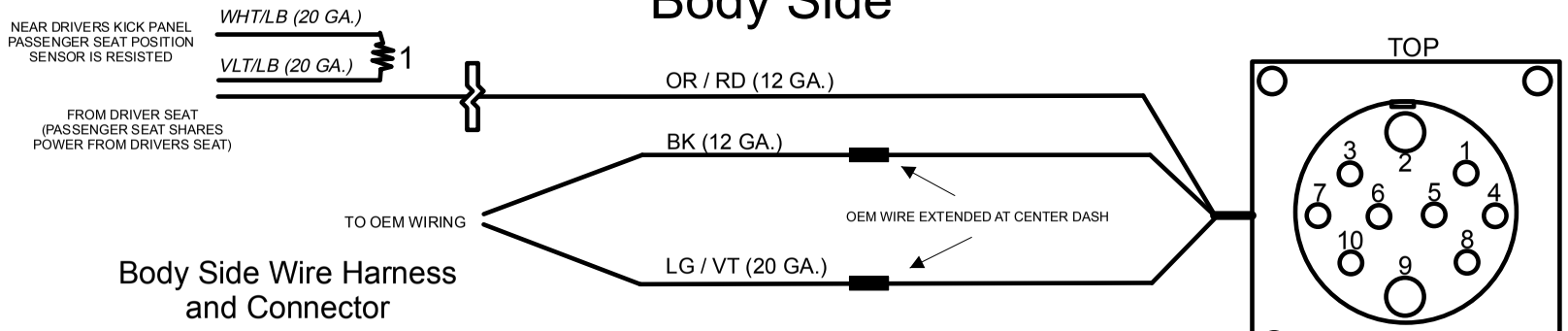
C1 Driver Memory Seat - Body Side						
CAV	OEM CAV	COLOR	PART #	EXT. (FT.)	FUNCTION	SOCKET PART #
1	1	LG / WT (20 GA.)			ADJUSTABLE PEDALS MOTOR FORWARD	A1661-ND
2	2	LG/LB (20 GA.)			ADJUSTABLE PEDALS MOTOR READWARD	A1661-ND
4	5	WT/OR (20 GA.)			CAN INTERIOR BUS (-)	A1661-ND
5	7	WT/GRY (20 GA.)			CAN INTERIOR BUS (+)	A1661-ND
2	8	ORG/RED (14 GA.)			FUSED B (+)	A25069-ND
6	9	VT/LB (20 GA.)			ADJUSTABLE PEDALS SENSOR SUPPLY	A1661-ND
9	10	BK/ORG (14 GA.)			GROUND	A25069-ND
7	12	VT/GRY (20 GA.)			ADJUSTABLE PEDALSSENSOR RETURN	A1661-ND
8	14	VT /DB (20 GA.)			ADJUSTABLE PEDALS SENSOR SIGNAL	A1661-ND

Chrsyler 2008 Minivan
C1 Driver Seat with Memory
(If vehicle drivers seat with memory, drivers seat also has power and heat and passenger seat has power and heat)
Seat Side - Memory Plug



C1 Driver Memory Seat - Seat Side #08010-006 (C1 OEM CONNECTOR NOT INCLUDED)						
CAV	OEM CAV	COLOR	PART #	EXT. (FT.)	FUNCTION	PIN PART #
1	1	LG / WT (20 GA.)	2075	3	ADJUSTABLE PEDALS MOTOR FORWARD	A1648-ND
2	2	LG/LB (20 GA.)	2023	3	ADJUSTABLE PEDALS MOTOR READWARD	A1648-ND
4	5	WT/OR (20 GA.)	TWISTED	3	CAN INTERIOR BUS (-)	A1648-ND
5	7	WT/GRY (20 GA.)	3036	3	CAN INTERIOR BUS (+)	A1648-ND
2	8	ORG/RED (14 GA.)	2063	3	FUSED B (+)	A25068-ND
6	9	VT/LB (20 GA.)	2070	3	ADJUSTABLE PEDALS SENSOR SUPPLY	A1648-ND
9	10	BK/ORG (14 GA.)	10609	3	GROUND	A25068-ND
7	12	VT/GRY (20 GA.)	2073	3	ADJUSTABLE PEDALSSENSOR RETURN	A1648-ND
8	14	VT /DB (20 GA.)	2072	3	ADJUSTABLE PEDALS SENSOR SIGNAL	A1648-ND

2008 Chrysler Minivan
C378 Passenger Seat with Power and Heat
Body Side



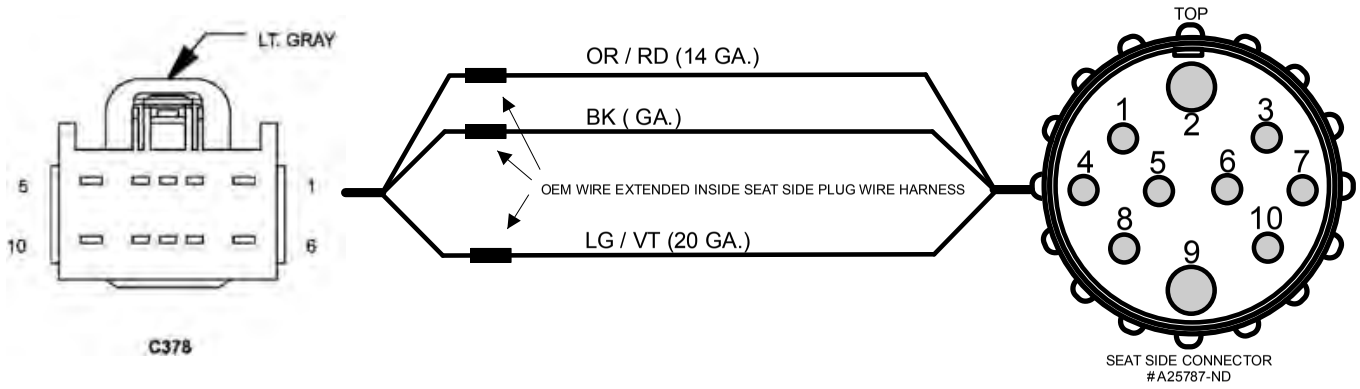
Body Side Wire Harness and Connector

C 378 Passenger Power and Heat - Body Side						
CAV	OEM CAV	COLOR			FUNCTION	SOCKET PART #
9	1	OR/RD (14 GA.)			FUSED B(+)	A25069-ND
2	5	BK (16GA.)			GROUND	A25069-ND
6	10	LG/VT (18 GA.)			RIGHT SEAT HEATER B(+) DRIVER	A1661-ND
		LB/WHT (20 GA.)*			DRIVERS SEAT POSITION SENSOR DATA	RESISTED
		LB/VLT (20 GA.)*			DRIVERS SEAT POSITION SENSOR VOLTAGE	RESISTED

* Resisted near driver's kick panel if OEM Airbag Modules has part # ending in AK or before

Seat Side

Seat Side Wire Harness and Connector



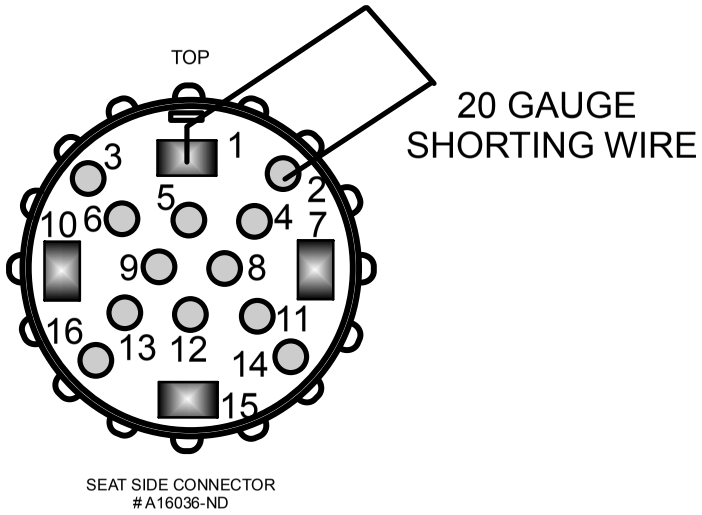
C378 Passenger Power and Heat - Seat Side #08010-004 (C378 OEM CONNECTOR NOT INCLUDED)						
CAV	OEM CAV	COLOR	PART #	EXT. (FT.)	FUNCTION	PIN PART #
9	1	OR/RD (14 GA.)	2063	2	FUSED B(+)	A25068-ND
2	5	BK (16GA.)	10592	2	GROUND	A25068-ND
6	10	LG/VT (18 GA.)	3066	2	RIGHT SEAT HEATER B(+) DRIVER	A1650-ND

For Driver Memory Seat Shunt Plug, see next page.

Must be installed if seat that has memory function is removed.
If not Seatbelt Waning Light will stay on.

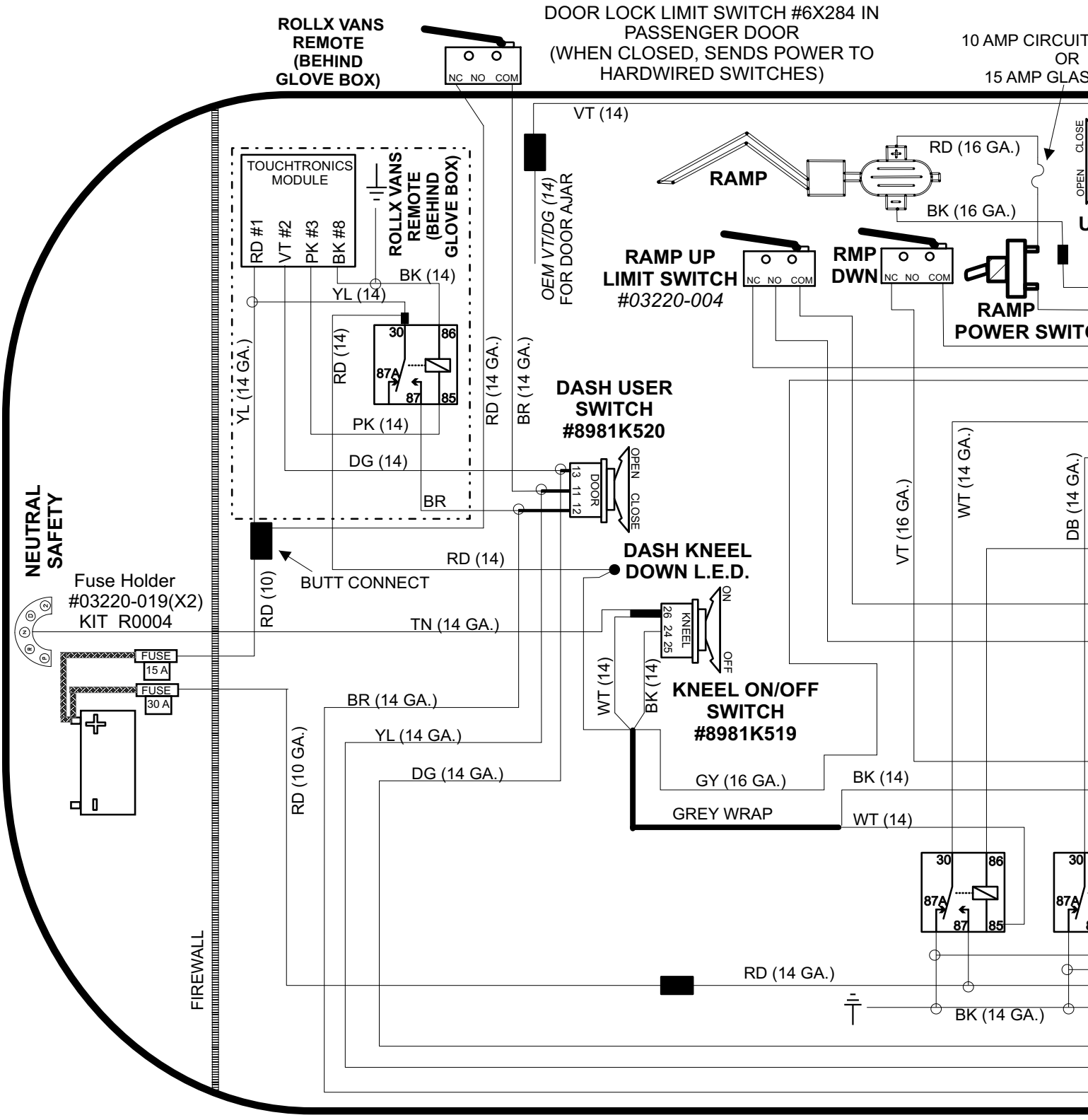
2008 Chrysler Minivan
C376 Driver Seat Shunt Plug

(To be installed in place of the Power and Heat Plug if van has memory seat and the seat is removed)



Shunt Plug - Memory 2008 #08011-001						
CAV	OEM CAV	COLOR	PART #	EXT. (FT.)	FUNCTION	PIN PART #
2	2				DRIVERS SEAT BLET SWITCH SENSE	A1661-ND
1	7	BK (20 GA.)	2009	0.25	GROUND	A25033-ND

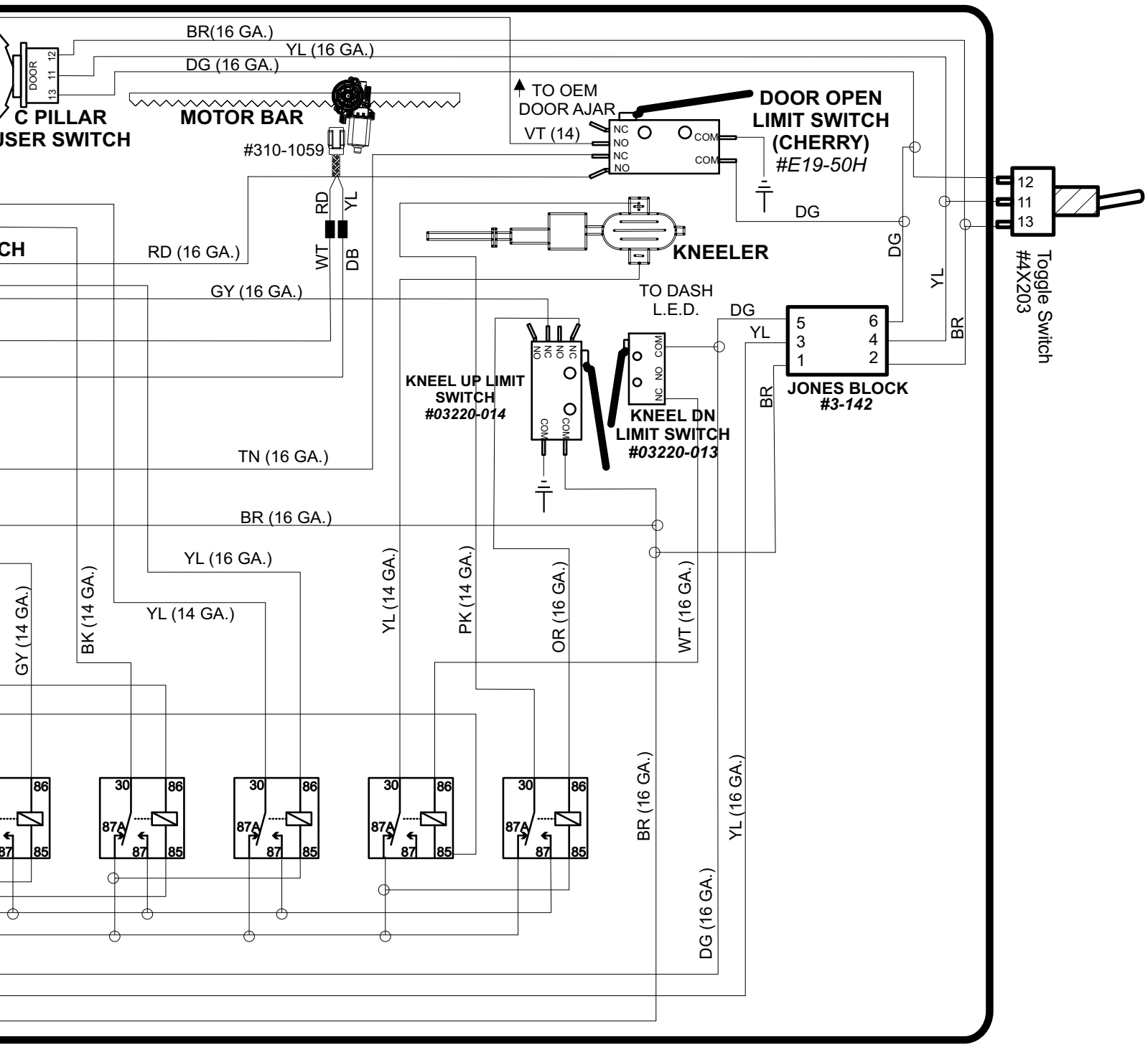
Rollx Vans Power Door (



Motor Bar) Wiring Diagram

T BREAKER

SS FUSE

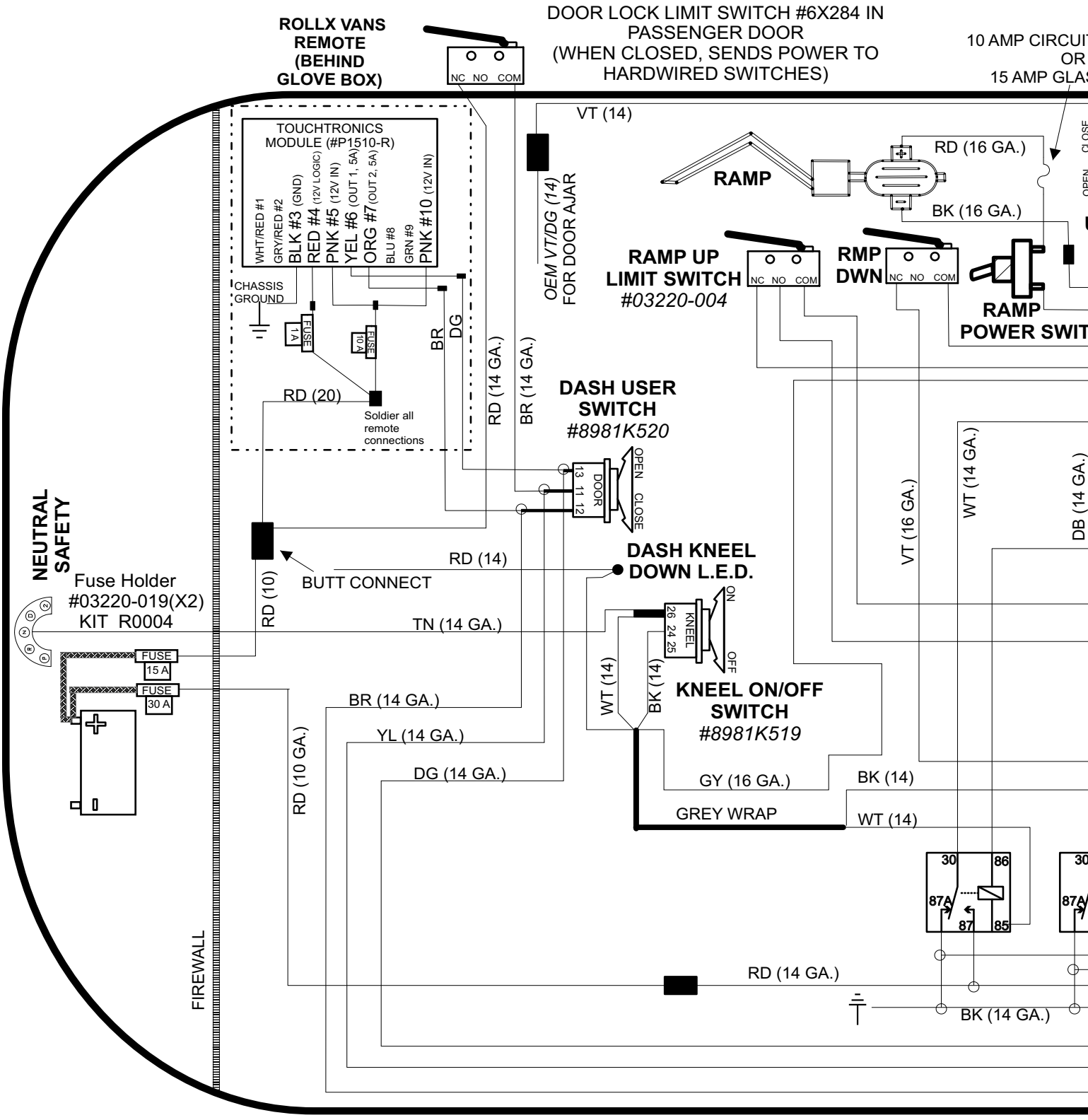


OR CLOSE RAMP DOWN RAMP UP KNEEL DOWN KNEEL UP

RELAYS (#5-1393302-8)

OCATED IN OEM SPARE TIRE KIT COMPARTMENT

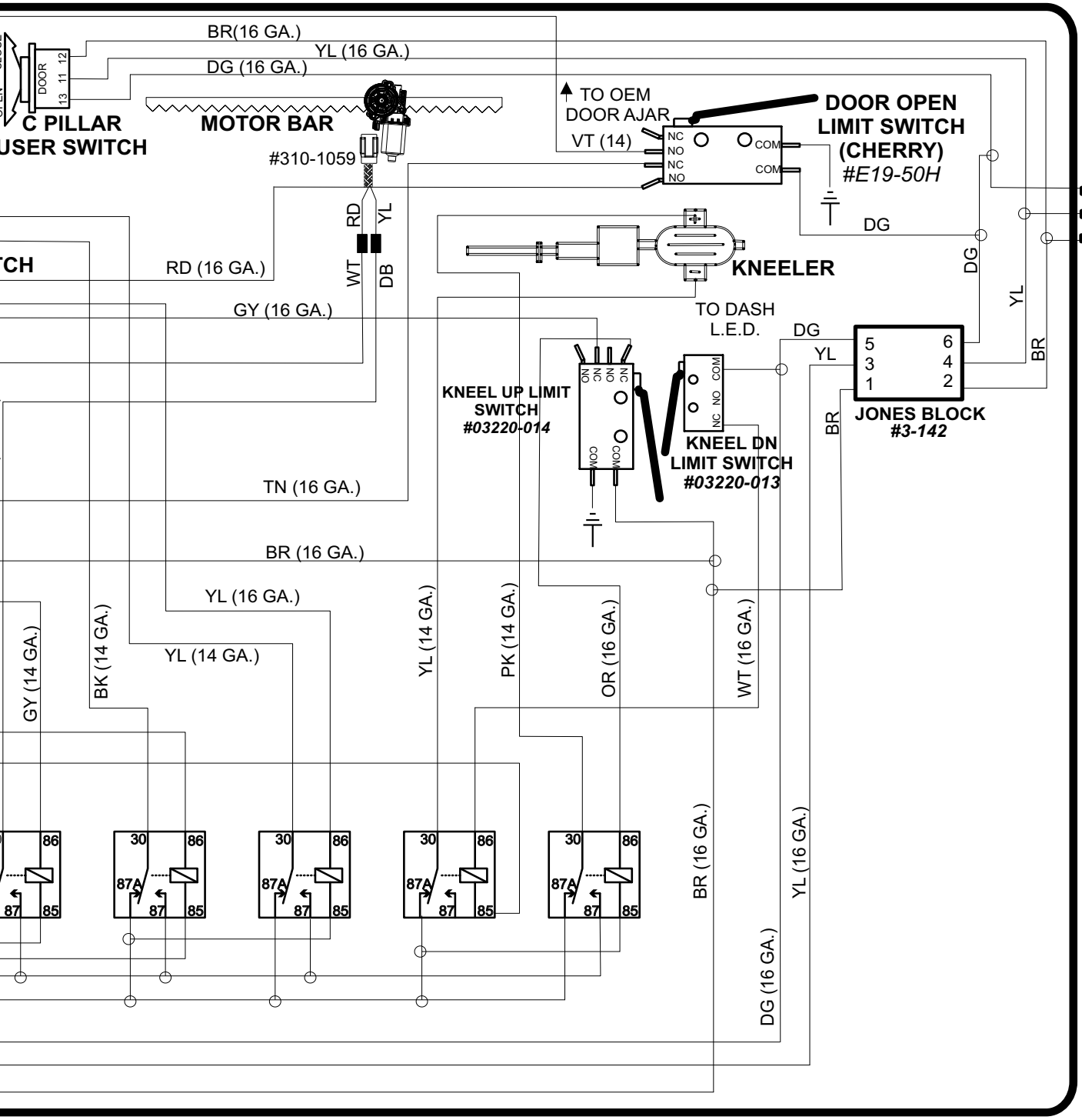
Rollx Vans Power Door (M
Touchtronic Power Touch 155



Motor Bar) Wiring Diagram v2
50-R Remote System (Jan. 2011)

T BREAKER

SS FUSE

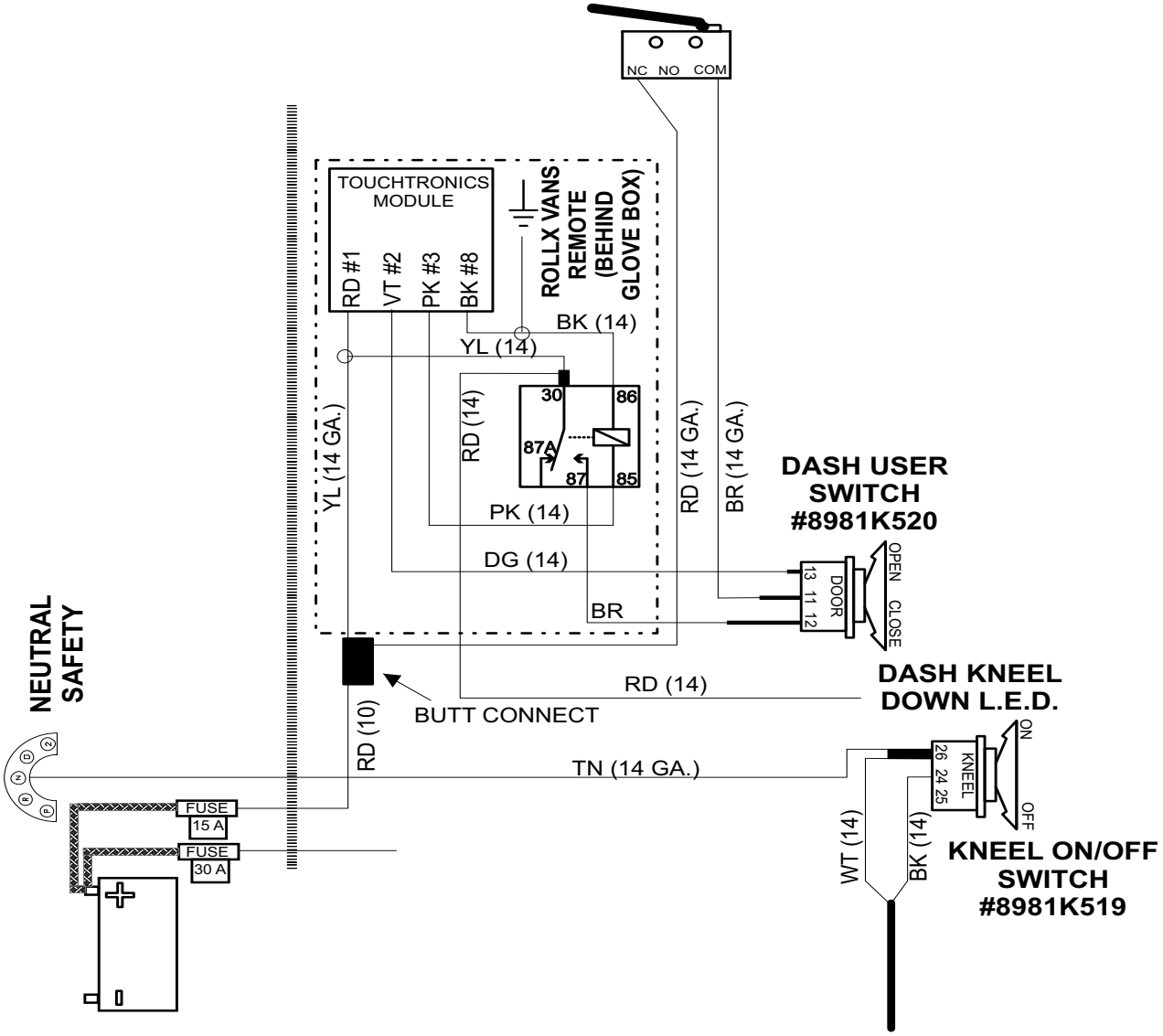


OOR CLOSE RAMP DOWN RAMP UP KNEEL DOWN KNEEL UP

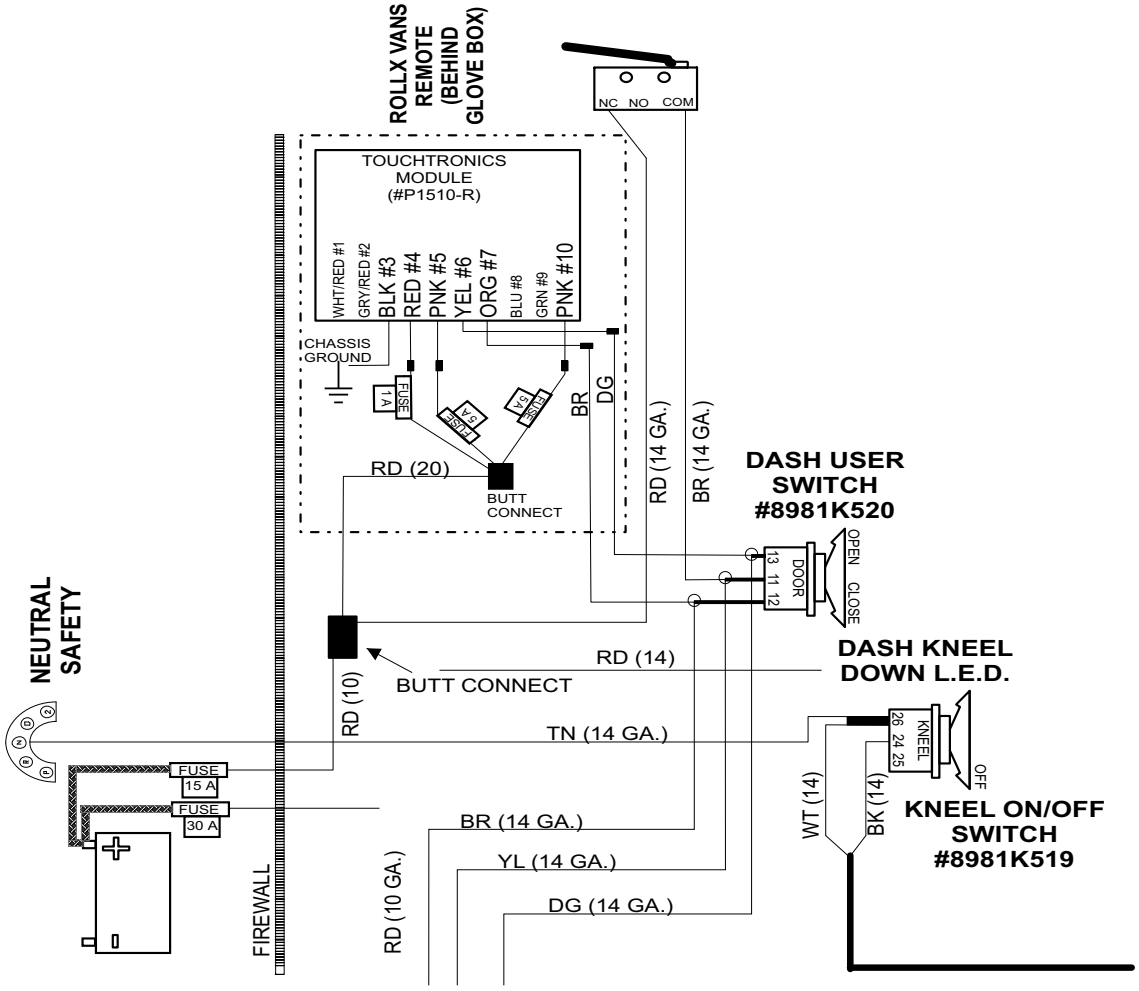
RELAYS (#5-1393302-8)

OCATED IN OEM SPARE TIRE KIT COMPARTMENT

Rollx Vans Power Door (Motor Bar) Wiring Diagram v2
Touchtronic Power Touch 1550-R Remote System Only
Before (Jan. 2011)



Rollx Vans Power Door (Motor Bar) Wiring Diagram v2
Touchtronic Power Touch P1550-ROL-02 Remote System Only
(After Jan. 2011)



PROGRAMMING THE REMOTE

ENROLLING NEW TRANSMITTERS-Self-Learning Receiver

1. Remove and reconnect power to unit. This will automatically place unit into LEARN mode for 5-seconds.
2.Press any button on transmitter once. Wait 5-seconds and confirm the transmitter has been enrolled by pressing any button and verifyint the correct output turned ON.

OR

1. Remove cover from receiver enclosure.
2.Locate LEARN switch *(small, push-button style switch located in the corner of the printed circuit board).*
3.Press and release the LEARN switch *(The red LEARN LED next to the switch will flash).*
4.Press any button on NEW transmitter.*(The red LEARN LED double blinks to confirm enrollment).*
5.Press any button on the new transmitter to confirm that the new transmitter code has been enrolled.
6.Replace receiver enclosure cover.

Doors

Door track - Periodically make sure lower door track is free of debris and vacuum track out. Make certain to clear out any water and ice that may be present. In the front of each door track there are plugs that can be removed to allow an air hose to be inserted to help remove debris.

Rollx Vans power door (If equipped) - Every 6 months lube the gear rack (bar) with a high quality white lithium grease. Make sure to clean off any old grease first.

Kneel System

Kneel chain - Every 6 months spray the chain inside the rubber boot with a high quality oil to lubricate and protect. DO NOT USE WD40.

Ramps

Folding ramp - Every 6 months spray the ramp's lower and upper hinge with high quality silicon lubricant.

In The Floor ramp - Every 6 months spray the ramp access cover's flap hinge with a high quality silicon lubricant. Also spray the two silver strips on the underside of the ramp to reduce friction.

New Rollx Vans Van Warranty Coverage Information

Rollx Vans provids a limited warranty on its minivan against defects in material or workmanship for a period of 3 years or 36,000 miles, whichever comes first. For warranty specifics please refer to an Owner's Manual or contact Rollx Vans Customer Service.

For all warranty or reimbursement needs, you must have prior authorization by the Rollx Vans Service Department.

1. Call 1-800-956-6668, and a Rollx Vans Customer Service Representative will assist you in any concerns or issues you have with your van.

2. The service representative will evaluate what repair is needed, and either set up an appointment with an "At Home" Service Technician or direct you to a nearby service facility. An authorization number must be issued.

Rollx Vans will work with many repair facilities. Rollx Vans reserves the right to approve a repair shop or recommend an alternative.

Rollx Vans may request that defective parts be returned to our Customer Service Department for inspection. If defective parts are found to be defective because of abuse or neglect, reimbursement for the new replacement parts may be denied. Rollx Vans reserves the right to use rebuilt components.

Rollx Vans will ship all warranted replacement parts by nationwide carrier. In most cases, shipment will be by ground transport and absorbed by Rollx Vans. Any other mode of transportation

Our Mission

To improve the quality of life of people with disabilities of all income levels by delivering the best modified vehicle.

We intend to keep that customer for life by following up with a level of service that exceeds all of their expectations.

Our Values

Quality • Compassion • Honesty • Integrity • Fairness