



Installation Manual

Suspension Control Module
LCM03 - ver.4



Contents

Read Before Installation			4
CL-class	W215	2002 - 2006	38
	W216	2007 - 2013	7
CLS-class	W219	2004 - 2011	9
	W218	2012+	30
E-class	W211	2004 - 2009	9
	W212	2010+	30
	W207	2010+	30
GL-class	X164	2006 - 2012	10
	X166	2013+	18
ML-class	W164	2006 - 2011	10
	W166	2012+	18
R-class	W251	2006 - 2012	14
S-class	W220	2000 - 2006	7
	W221	2007 - 2013	7
	W222	2014+	future release
SL-class	R230	2003 - 2012	34
	R231	2013+	34
Ride Height Adjustment			42
Vehicle Connector Preparation			44
Warranty and Return Policy			48

Read Before Installation

Warning:

Suspension Control Module should be installed by an individual with extensive knowledge in electronics, wire identification and experience in extracting pins from the connector housing.

ProgRama is not responsible for any damage to the module or related devices due to improper installation.

Ride Height:

To retain proper ride comfort and to avoid damage to suspension components please follow these recommended height adjustments:

- AMG cars are already lower than their Mercedes counterparts. With this in mind it is recommended that AMG cars use less aggressive ride height setting of 0, 1 or 2.
- All non-AMG Mercedes models can use wheel setting of 0, 1, 2, 3 or 4.
- Stronger settings (5, 6 or 7) can be used for show purposes but are not recommended for everyday driving.

In some models the door must be closed in order for the Airmatic or ABC system to operate. This is a safety function and is normal on those vehicles.

Servicing your Mercedes:

When having the vehicle serviced, always disable the Suspension Control Module |by setting the height to factory level. This will prevent the possible misdiagnosing of the vehicle electronic system by the technician.

Technical Support:

For further information, please contact the manufacturer:
ProgRama Inc (toll free in USA): +1-866-961-7362.

Airmatic or ABC suspension?

216 chassis	CL	2007 - 2013
220 chassis	S	2000 - 2006
221 chassis	S	2007 - 2013

Both CL-class and S-class vehicles were manufactured with two kinds of suspensions:

- an air suspension (Airmatic), or
- the higher quality hydraulic suspension (ABC = Active Body Control).

You must know which type of suspension is in the vehicle before you can install the ProgRama Suspension Lowering Control Module.

One obvious difference between the two suspensions is the speed of changing the vehicle height. In general, if you have the more expensive ABC suspension and you change the vehicle height with the Mercedes control button in the cabin, the change will be instantaneous. On other hand, the same with the Airmatic air suspension takes many seconds.

If the vehicle is all-wheel drive, it will have the Airmatic suspension, as the ABC was available only on rear-wheel drive models.

Each vehicle equipped with ABC has an "ABC Sport" button that allows the driver to adjust the suspension range for different driving style preferences. If you have this button in the cabin, continue with ABC section on page 34.

If still in doubts, contact any Mercedes dealer with your VIN number and they can tell you which suspension you have.

Next, continue with the installation from the appropriate page:

Airmatic	S-class (W220)	page 22
	S-class (W221)	page 26
	CL-class (W216)	page 26
ABC	CL- or S-class	page 34

Which Airmatic sensors?

219 chassis	CLS	2004 - 2011
211 chassis	E	2004 - 2009

Both CLS-class and E-class vehicles were assembled with one of two kinds of height sensors, either:

- height sensor with 4-wires, or newer
- height sensor with 3-wires.

You must know which type of sensor is in the vehicle before you can install the ProgRama Suspension Lowering Control Module.

In general, many AMG models were manufactured using 4-wire sensors. For AMG vehicles, continue with page 22.

All non-AMG vehicles manufactured before 05/2005 were assembled using 4-wire height sensors, continue with page 22. Newer vehicles were assembled using 3-wire sensors, continue with page 26.

Another approach is one can locate one of the wheel height sensors, disconnect its connector and see how many pins are in the connector, three or four.

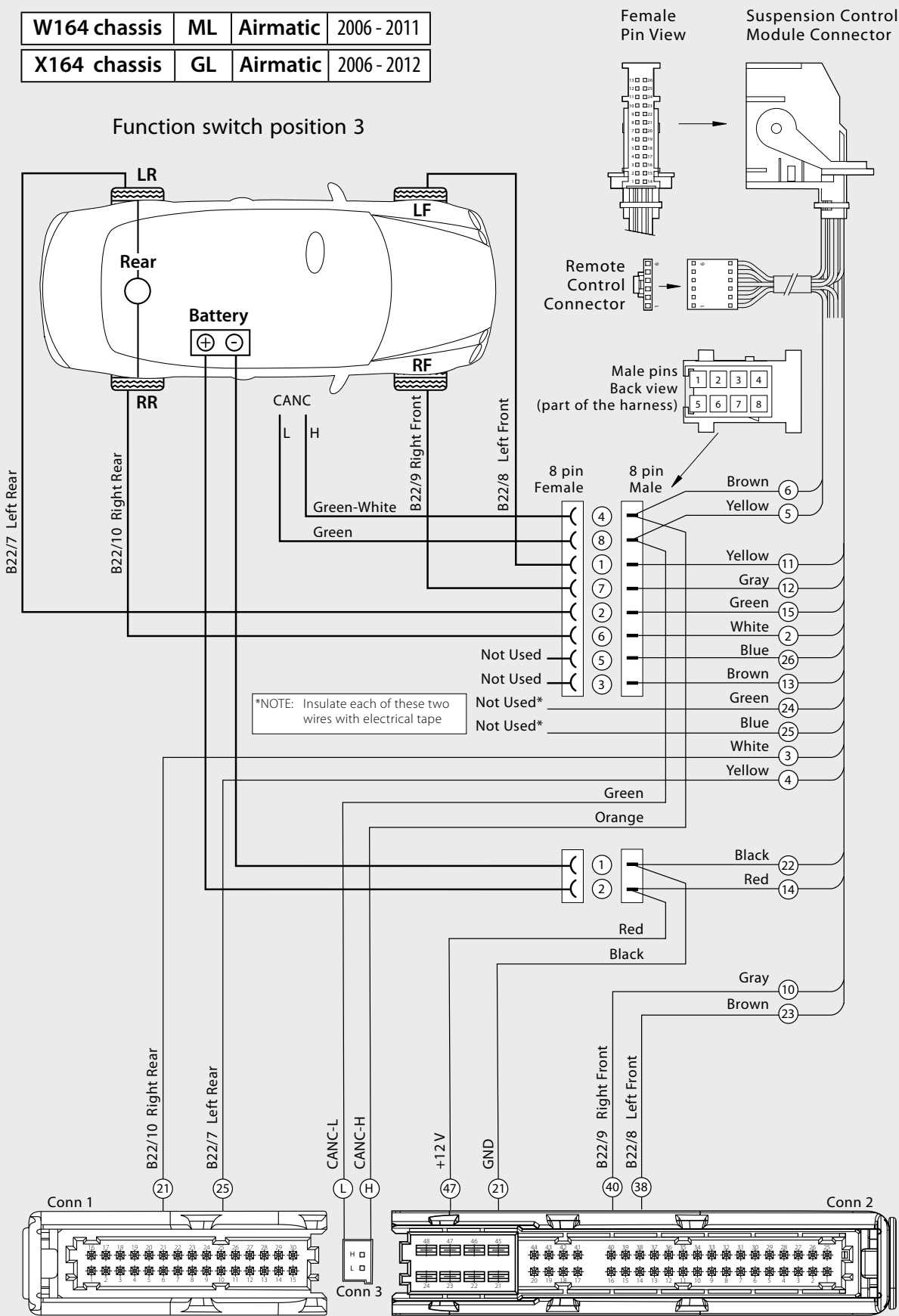
Next, continue with the installation from the appropriate page:

AMG		Airmatic 4-wire sensors	page 22
non - AMG	CLS-class (W219) before 05/2005	Airmatic 4-wire sensors	page 22
	CLS-class (W219) after 05/2005	Airmatic 3-wire sensors	page 26
	E-class (W211) before 05/2005	Airmatic 4-wire sensors	page 22
	E-class (W211) after 05/2005	Airmatic 3-wire sensors	page 26



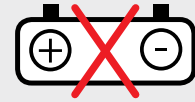
ML-class (W164 2006-2012) **GL-class** (X164 2006-2012) **AIRMATIC**

W164 chassis	ML	Airmatic	2006 - 2011
X164 chassis	GL	Airmatic	2006 - 2012



Airmatic (N51) Harness in the vehicle, Female Pin View

STEP-BY-STEP INSTALLATION



Disconnect the Battery



DISCONNECT THE BATTERY

Vehicle's Battery

RIGHT REAR	<p>REMOVE PIN FROM CAR HARNESS CONNECTOR...</p> <p>Refer to Vehicle's Connector Preparation on page 44.</p> <p>1</p>	<p>... AND INSERT IT INTO 8-PIN CONNECTOR</p> <p>Empty Female Shell back view</p> <p>6</p> <p>→ must click!</p>	<p>INSERT PIN FROM LOWERING MODULE HARNESS INTO CAR HARNESS CONNECTOR</p> <p>White 3</p> <p>21 must click!</p> <p>3</p>	<p>CHECK CONTINUITY</p> <p>4</p>
	<p>REMOVE PIN FROM CAR HARNESS CONNECTOR...</p> <p>25</p> <p>5</p>	<p>... AND INSERT IT INTO 8-PIN CONNECTOR</p> <p>Female Shell back view</p> <p>2</p> <p>→ click!</p>	<p>INSERT PIN FROM LOWERING MODULE HARNESS INTO CAR HARNESS CONNECTOR</p> <p>Yellow 4</p> <p>25 click!</p> <p>4</p>	<p>CHECK CONTINUITY</p> <p>8</p>
	<p>REMOVE PIN FROM CAR HARNESS CONNECTOR...</p> <p>38</p> <p>9</p>	<p>... AND INSERT IT INTO 8-PIN CONNECTOR</p> <p>Female Shell back view</p> <p>1</p> <p>→ click!</p>	<p>INSERT PIN FROM LOWERING MODULE HARNESS INTO CAR HARNESS CONNECTOR</p> <p>Brown 23</p> <p>38 click!</p> <p>23</p>	<p>CHECK CONTINUITY</p> <p>12</p>

RIGHT FRONT

13 REMOVE PIN FROM CAR HARNESS CONNECTOR...

14 ... AND INSERT IT INTO 8-PIN CONNECTOR

Female Shell back view

15 INSERT PIN FROM LOWERING MODULE HARNESS INTO CAR HARNESS CONNECTOR

Gray

16 CHECK CONTINUITY

CANC - H

17 REMOVE PIN FROM CAR HARNESS CONNECTOR...

Green-White

18 ... AND INSERT IT INTO 8-PIN CONNECTOR

Female Shell back view

19 INSERT PIN FROM LOWERING MODULE HARNESS INTO CAR HARNESS CONNECTOR

Orange

MALE BACK VIEW

20 CHECK CONTINUITY

MALE FRONT VIEW

CANC - L

21 REMOVE PIN FROM CAR HARNESS CONNECTOR...

Green

22 ... AND INSERT IT INTO 8-PIN CONNECTOR

Female Shell back view

23 INSERT PIN FROM LOWERING MODULE HARNESS INTO CAR HARNESS CONNECTOR

Green

MALE BACK VIEW

24 CHECK CONTINUITY

MALE FRONT VIEW

BATTERY GND

25 REMOVE PIN FROM CAR HARNESS CONNECTOR...

- BATTERY

26 ... AND INSERT IT INTO 2-PIN CONNECTOR

Empty Female Shell back view

27 INSERT PIN FROM LOWERING MODULE HARNESS INTO CAR HARNESS CONNECTOR

Black

MALE BACK VIEW

28 CHECK CONTINUITY

MALE

BATTERY +12V

29 REMOVE PIN FROM CAR HARNESS CONNECTOR...

+ BATTERY

30 ... AND INSERT IT INTO 2-PIN CONNECTOR

Female Shell back view

31 INSERT PIN FROM LOWERING MODULE HARNESS INTO CAR HARNESS CONNECTOR

Red

MALE BACK VIEW

32 CHECK CONTINUITY

MALE

33

Unscrew the Suspension Module screws and remove the cover

34

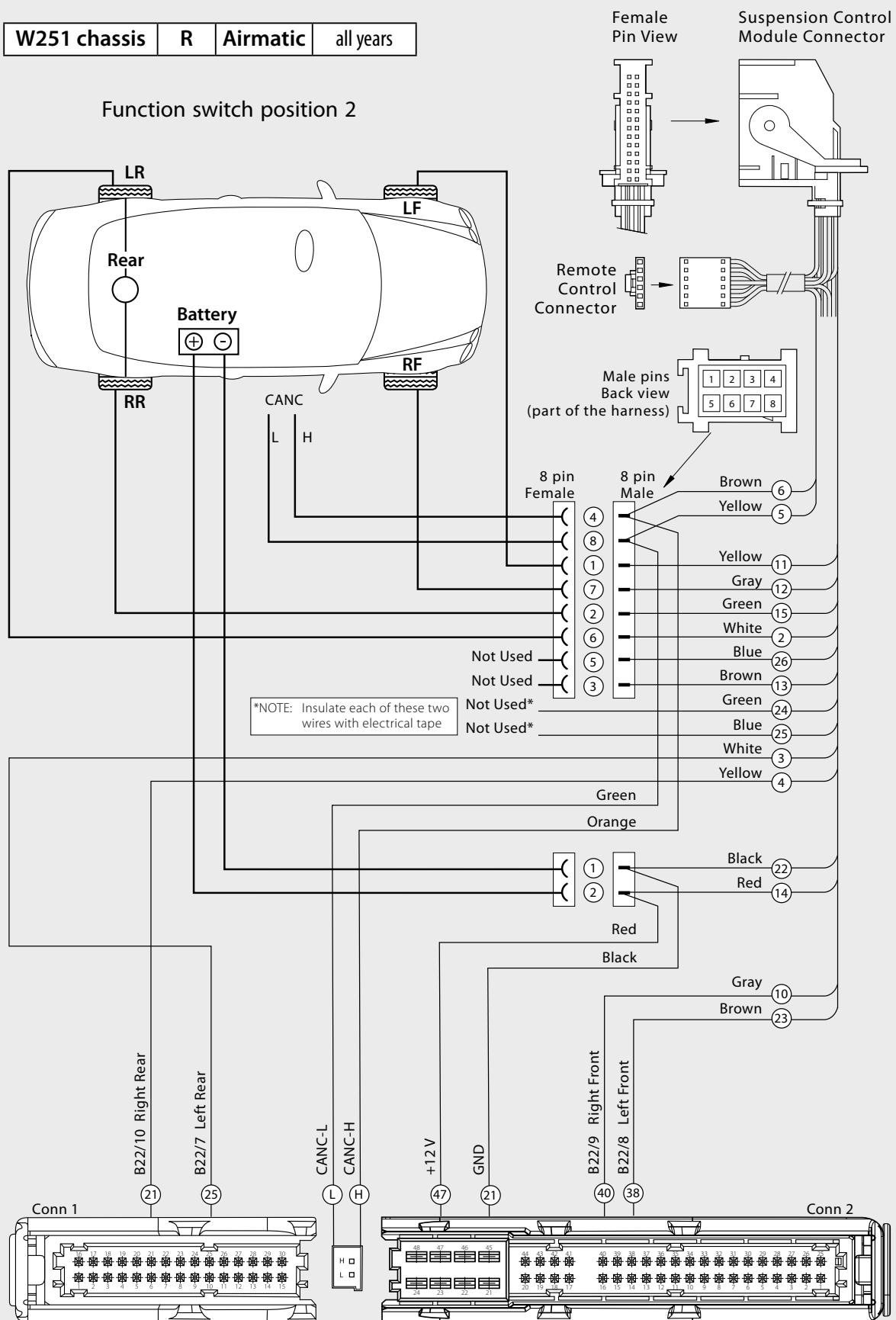
Rotate the Function Switch (center button) to position 3 (if rear axle raises instead of lowering, use position 5; if ALL wheel raise, use position 4)

35

To continue, go to Ride Height Adjustment on page 42

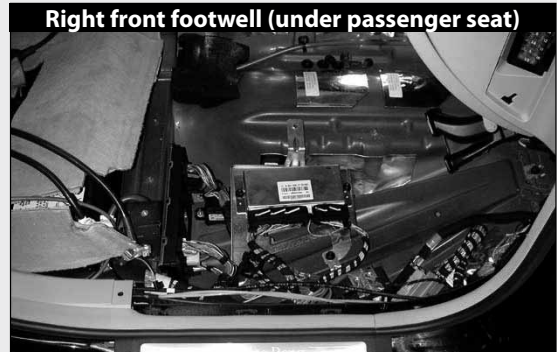
W251 chassis R Airmatic all years

Function switch position 2



Airmatic (N51) Harness in the vehicle, Female Pin View

STEP-BY-STEP INSTALLATION



DISCONNECT THE BATTERY

Vehicle's Battery

RIGHT REAR	<p>REMOVE PIN FROM CAR HARNESS CONNECTOR...</p> <p>Refer to Vehicle's Connector Preparation on page 44.</p> <p>1</p>	<p>... AND INSERT IT INTO 8-PIN CONNECTOR</p> <p>Empty Female Shell back view</p> <p>→ must click!</p> <p>2</p>	<p>INSERT PIN FROM LOWERING MODULE HARNESS INTO CAR HARNESS CONNECTOR</p> <p>Yellow 4</p> <p>21 must click!</p> <p>3</p>	<p>CHECK CONTINUITY</p> <p>4</p>
	<p>REMOVE PIN FROM CAR HARNESS CONNECTOR...</p> <p>5</p>	<p>... AND INSERT IT INTO 8-PIN CONNECTOR</p> <p>Female Shell back view</p> <p>→ click!</p> <p>6</p>	<p>INSERT PIN FROM LOWERING MODULE HARNESS INTO CAR HARNESS CONNECTOR</p> <p>White 3</p> <p>25 click!</p> <p>7</p>	<p>CHECK CONTINUITY</p> <p>8</p>
	<p>REMOVE PIN FROM CAR HARNESS CONNECTOR...</p> <p>9</p>	<p>... AND INSERT IT INTO 8-PIN CONNECTOR</p> <p>Female Shell back view</p> <p>→ click!</p> <p>10</p>	<p>INSERT PIN FROM LOWERING MODULE HARNESS INTO CAR HARNESS CONNECTOR</p> <p>Brown 23</p> <p>38 click!</p> <p>11</p>	<p>CHECK CONTINUITY</p> <p>12</p>

RIGHT FRONT

13 REMOVE PIN FROM CAR HARNESS CONNECTOR...

14 ... AND INSERT IT INTO 8-PIN CONNECTOR

Female Shell back view

15 INSERT PIN FROM LOWERING MODULE HARNESS INTO CAR HARNESS CONNECTOR

Gray

16 CHECK CONTINUITY

CANC - H

17 REMOVE PIN FROM CAR HARNESS CONNECTOR...

Green-White

18 ... AND INSERT IT INTO 8-PIN CONNECTOR

Female Shell back view

19 INSERT PIN FROM LOWERING MODULE HARNESS INTO CAR HARNESS CONNECTOR

Orange

MALE BACK VIEW

20 CHECK CONTINUITY

MALE FRONT VIEW

CANC - L

21 REMOVE PIN FROM CAR HARNESS CONNECTOR...

Green

22 ... AND INSERT IT INTO 8-PIN CONNECTOR

Female Shell back view

23 INSERT PIN FROM LOWERING MODULE HARNESS INTO CAR HARNESS CONNECTOR

Green

MALE BACK VIEW

24 CHECK CONTINUITY

MALE FRONT VIEW

BATTERY GND

25 REMOVE PIN FROM CAR HARNESS CONNECTOR...

BATTERY -

26 ... AND INSERT IT INTO 2-PIN CONNECTOR

Empty Female Shell back view

27 INSERT PIN FROM LOWERING MODULE HARNESS INTO CAR HARNESS CONNECTOR

Black

MALE BACK VIEW

28 CHECK CONTINUITY

Black

MALE

BATTERY +12V

29 REMOVE PIN FROM CAR HARNESS CONNECTOR...

BATTERY +

30 ... AND INSERT IT INTO 2-PIN CONNECTOR

Female Shell back view

31 INSERT PIN FROM LOWERING MODULE HARNESS INTO CAR HARNESS CONNECTOR

Red

MALE BACK VIEW

32 CHECK CONTINUITY

Red

MALE

33

Unscrew the Suspension Module screws and remove the cover

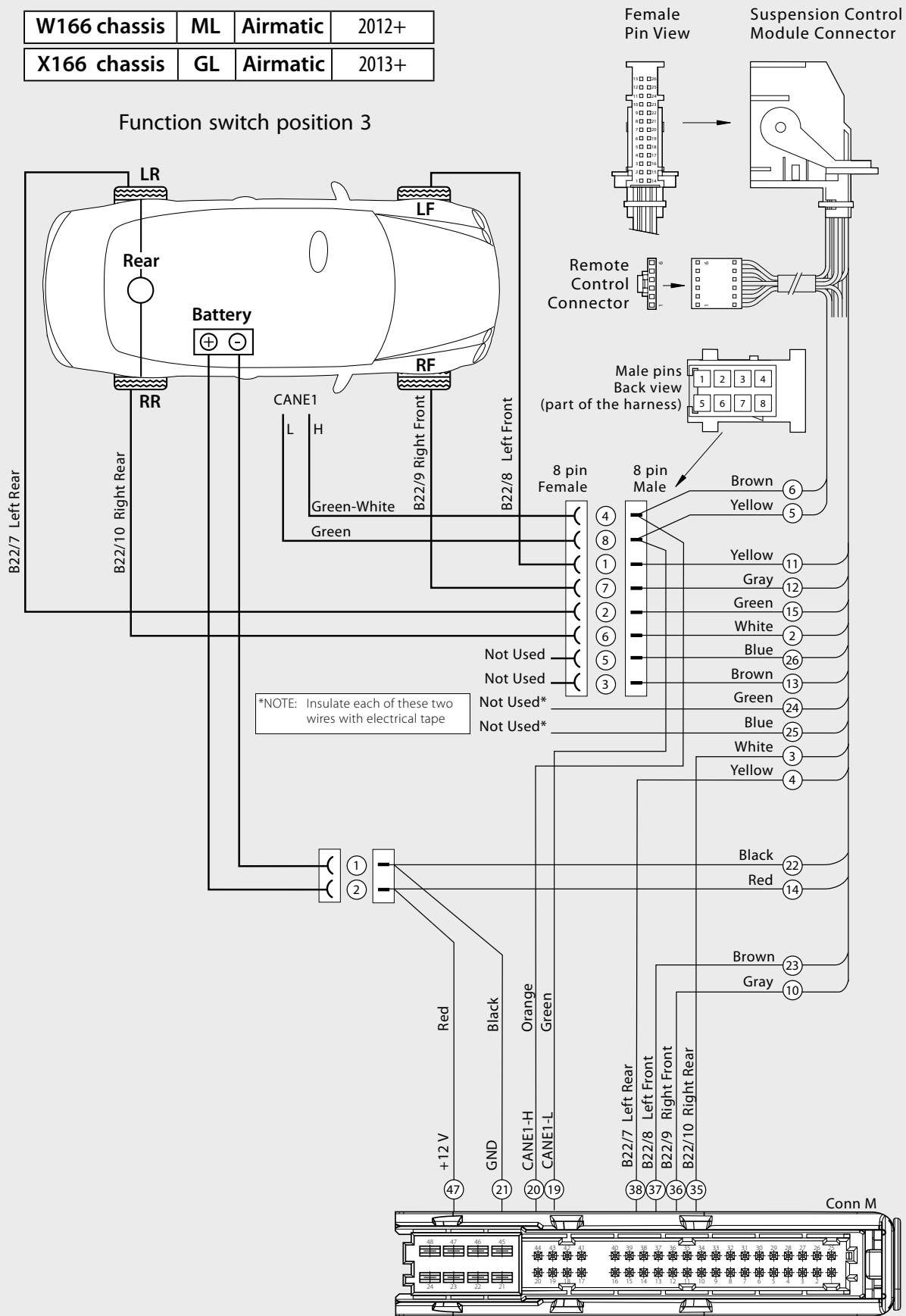
34

Rotate the Function Switch (center button) to position 2 (if rear axle raises instead of lowering, use position 5; if ALL wheel raise, use position 4)

35

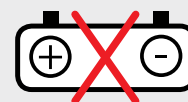
To continue, go to Ride Height Adjustment on page 42

W166 chassis	ML	Airmatic	2012+
X166 chassis	GL	Airmatic	2013+



Airmatic (N51/3) Harness in the vehicle, Female Pin View

STEP-BY-STEP INSTALLATION



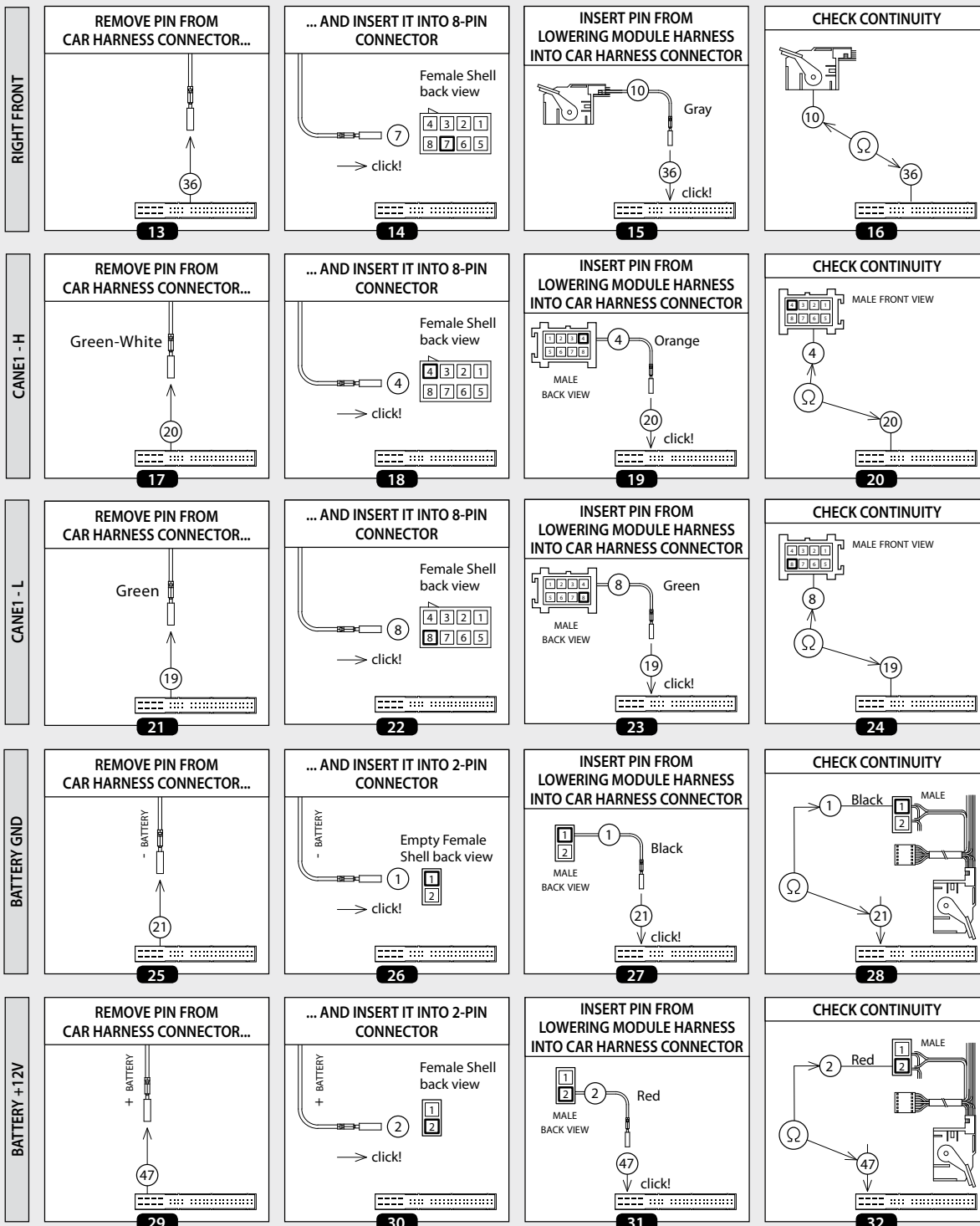
Disconnect the Battery



DISCONNECT THE BATTERY

Vehicle's Battery

RIGHT REAR	<p>REMOVE PIN FROM CAR HARNESS CONNECTOR...</p> <p>Refer to Vehicle's Connector Preparation on page 44.</p> <p>1</p>	<p>... AND INSERT IT INTO 8-PIN CONNECTOR</p> <p>Empty Female Shell back view</p> <p>2</p>	<p>INSERT PIN FROM LOWERING MODULE HARNESS INTO CAR HARNESS CONNECTOR</p> <p>White</p> <p>3</p>	<p>CHECK CONTINUITY</p> <p>4</p>
	<p>REMOVE PIN FROM CAR HARNESS CONNECTOR...</p> <p>5</p>	<p>... AND INSERT IT INTO 8-PIN CONNECTOR</p> <p>Female Shell back view</p> <p>6</p>	<p>INSERT PIN FROM LOWERING MODULE HARNESS INTO CAR HARNESS CONNECTOR</p> <p>Yellow</p> <p>7</p>	<p>CHECK CONTINUITY</p> <p>8</p>
	<p>REMOVE PIN FROM CAR HARNESS CONNECTOR...</p> <p>9</p>	<p>... AND INSERT IT INTO 8-PIN CONNECTOR</p> <p>Female Shell back view</p> <p>10</p>	<p>INSERT PIN FROM LOWERING MODULE HARNESS INTO CAR HARNESS CONNECTOR</p> <p>Brown</p> <p>11</p>	<p>CHECK CONTINUITY</p> <p>12</p>



Unscrew the Suspension Module screws and remove the cover

33

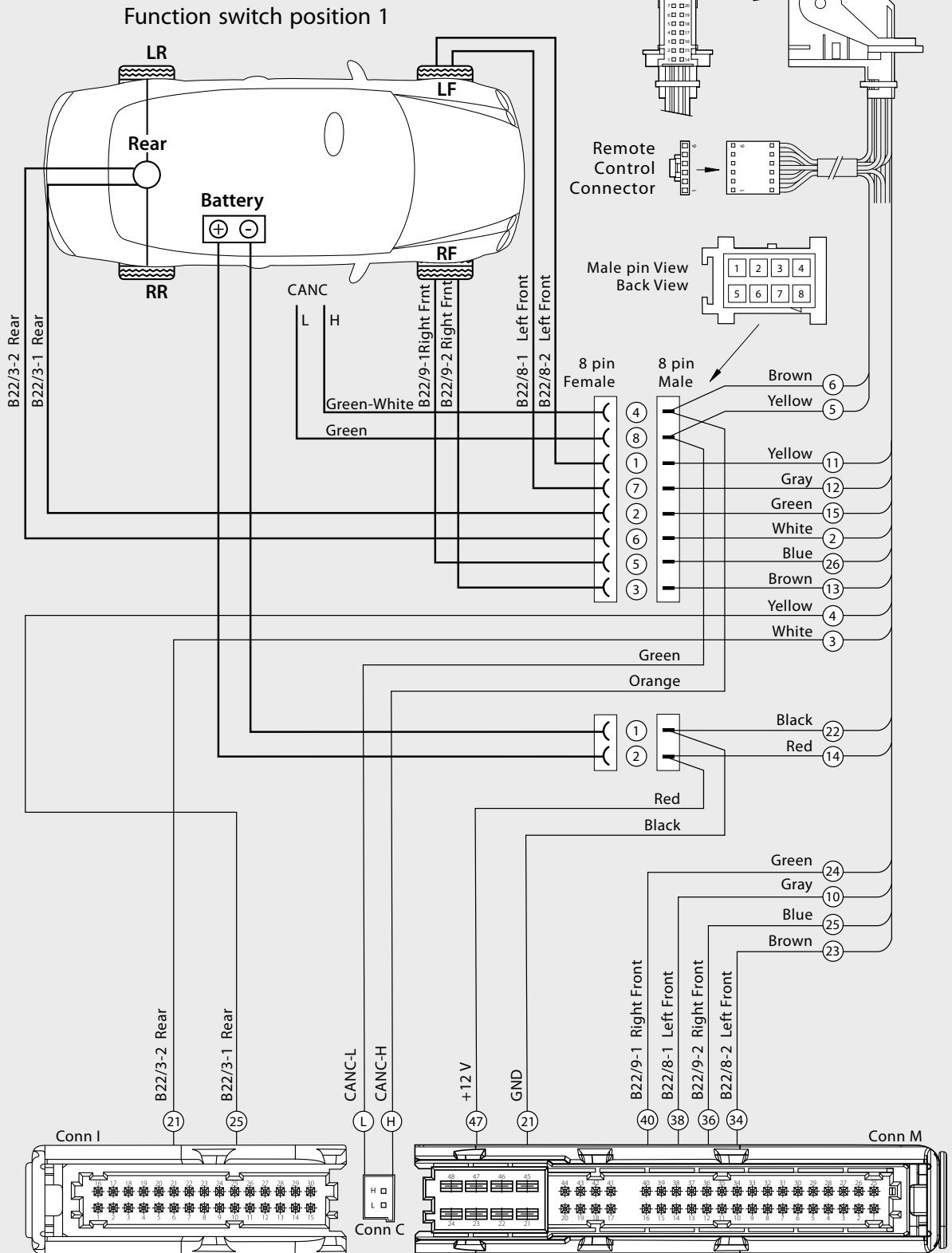
Rotate the Function Switch (center button) to position 3 (if rear axle raises instead of lowering, use position 5; if ALL wheel raise, use position 4)

34

To continue, go to Ride Height Adjustment on page 42

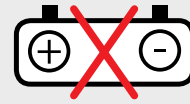
35

211 chassis	E	Airmatic	4-wire sensors	2004 till 05/2005
219 chassis	CLS	Airmatic	4-wire sensors	2004 till 05/2005
220 chassis	S	Airmatic	4-wire sensors	2000–2006



Airmatic (N51) Harness in the vehicle, Female Pin View

STEP-BY-STEP INSTALLATION



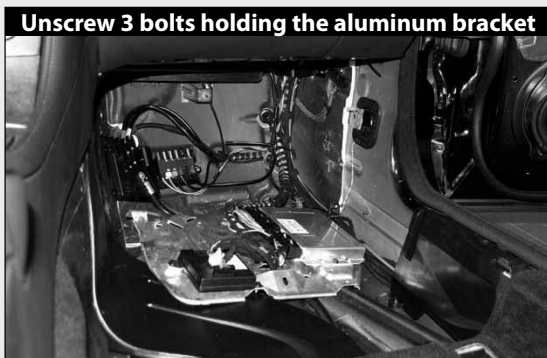
Disconnect the Battery



Right front upper footwell



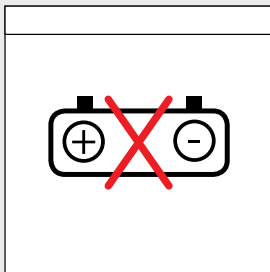
Pull the carpet back



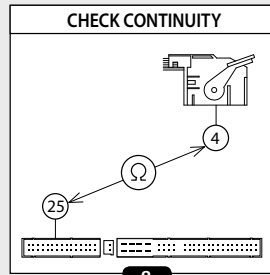
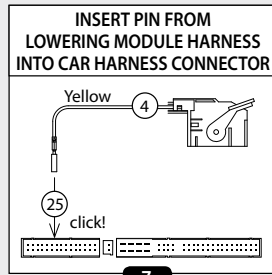
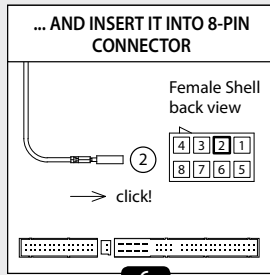
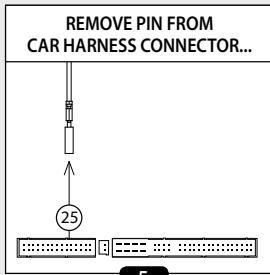
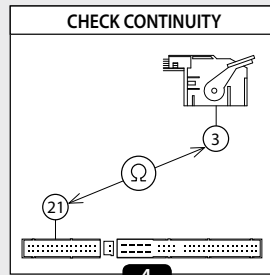
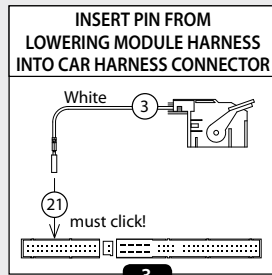
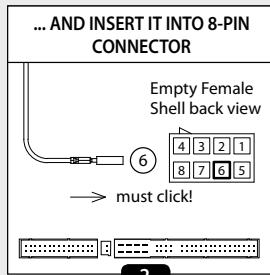
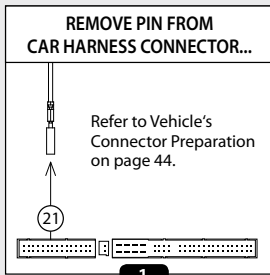
Unscrew 3 bolts holding the aluminum bracket

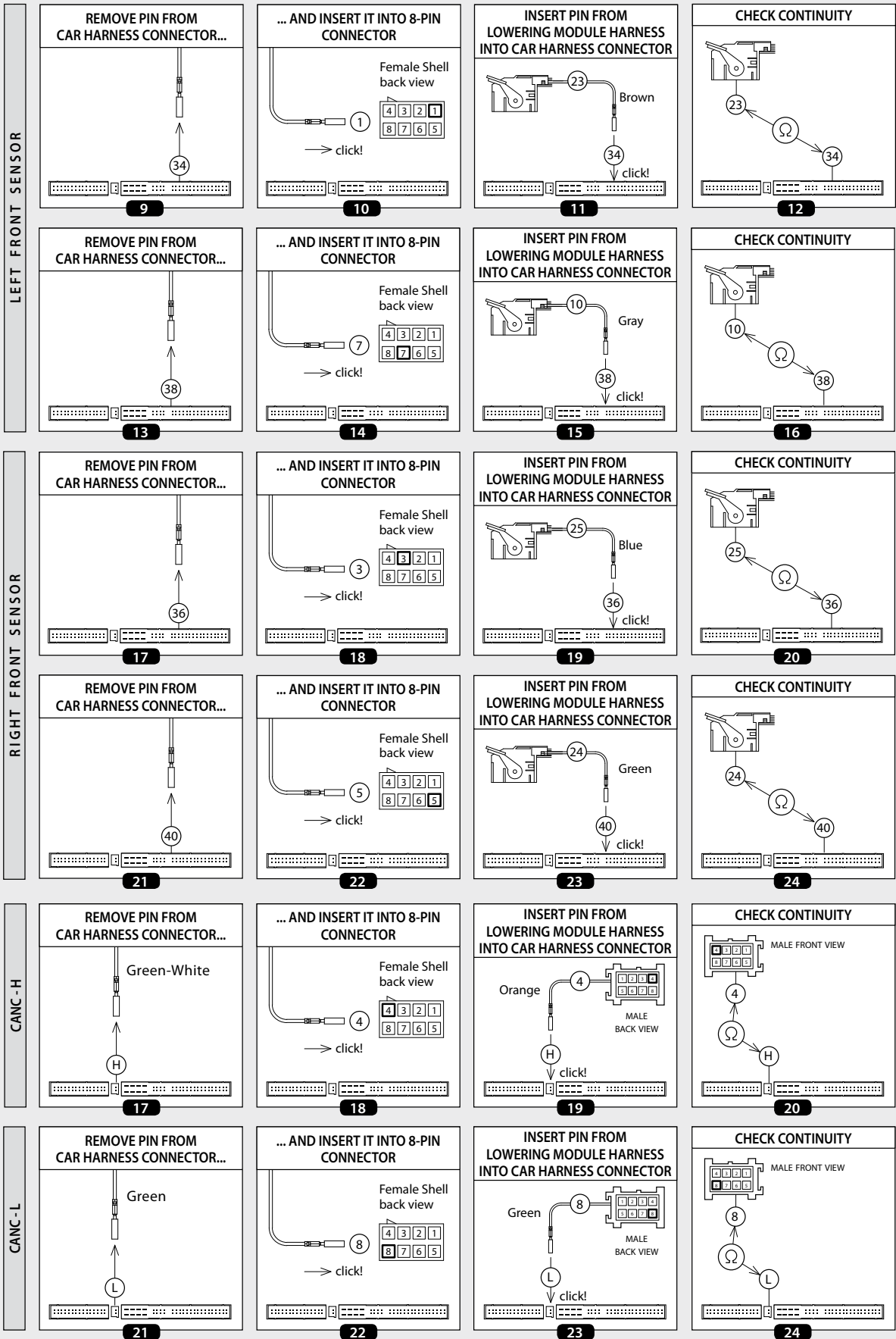


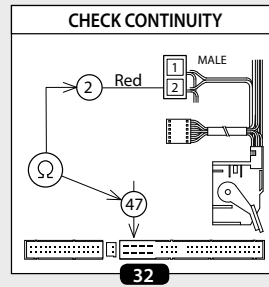
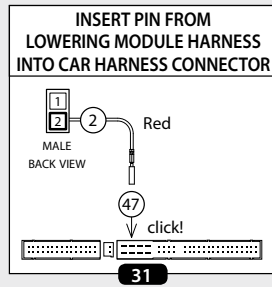
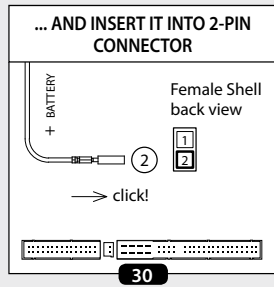
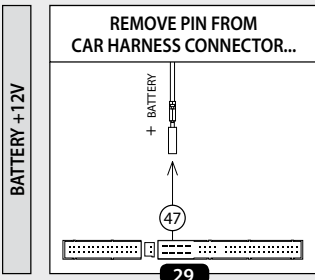
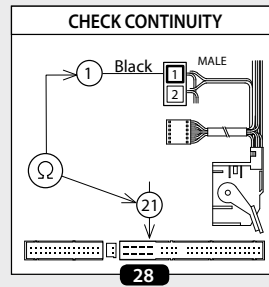
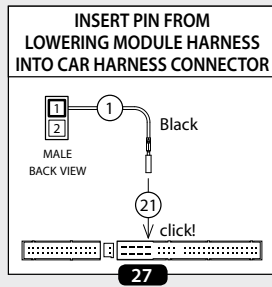
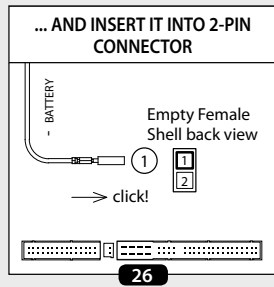
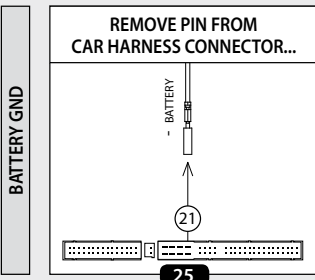
Airmatic (N51) with ADS



REAR SENSOR







Unscrew the Suspension Module screws and remove the cover

33

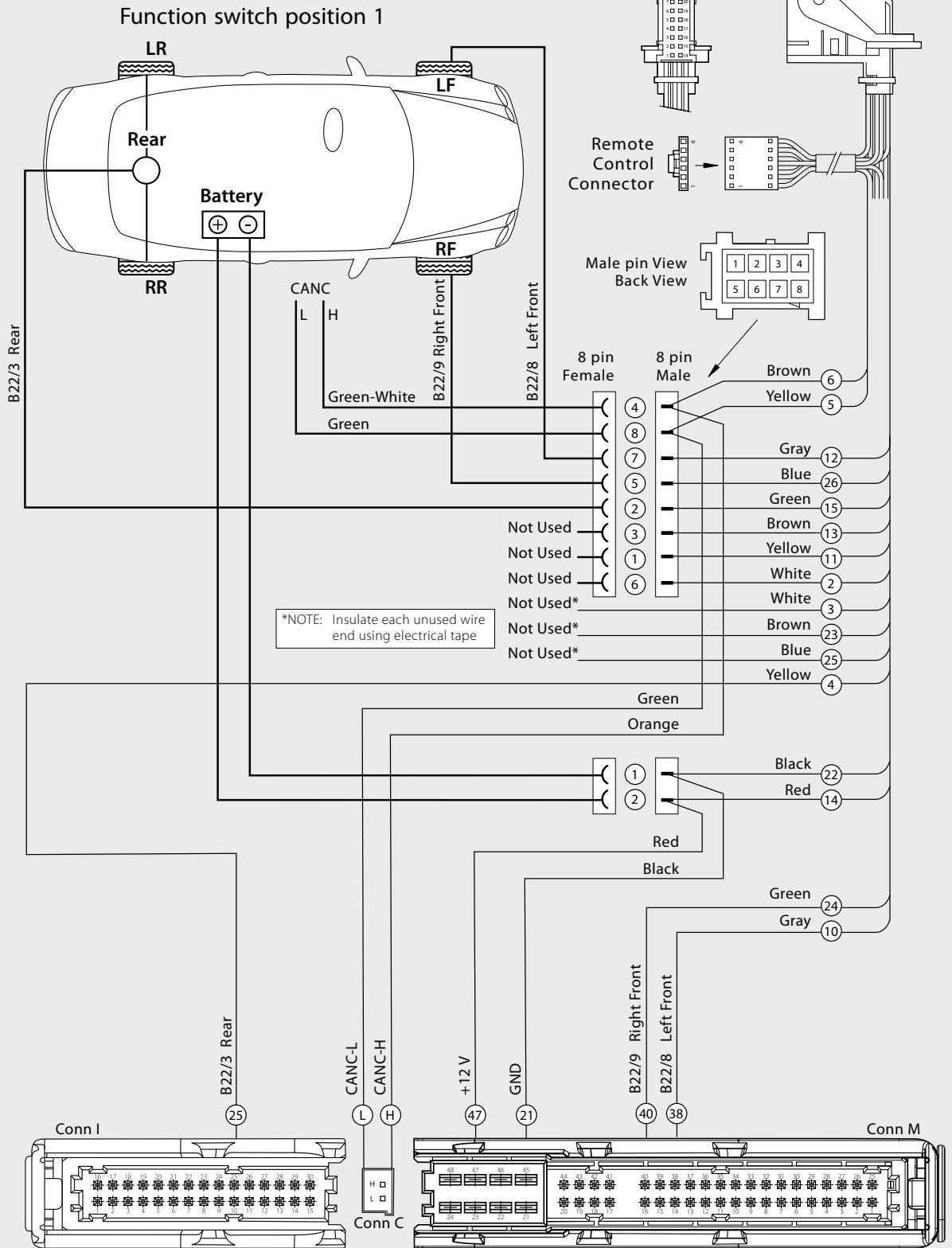
Rotate the Function Switch (center button) to position 1 (if ALL wheels raise instead of lowering, use position 6)

34

To continue, go to Ride Height Adjustment on page 42

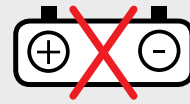
35

211 chassis	E	Airmatic	3-wire sensors	from 05/2005
219 chassis	CLS	Airmatic	3-wire sensors	from 05/2005
221 chassis	S	Airmatic	3-wire sensors	2007-2013



Airmatic (N51) Harness in the vehicle, Female Pin View

STEP-BY-STEP INSTALLATION



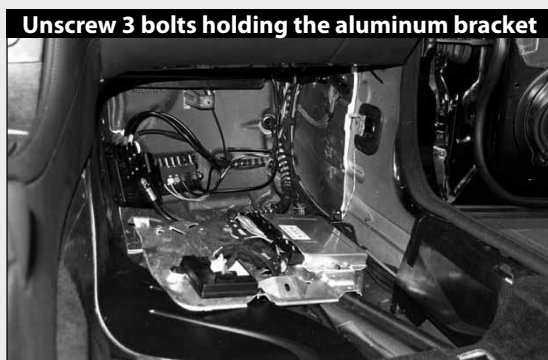
Disconnect the Battery



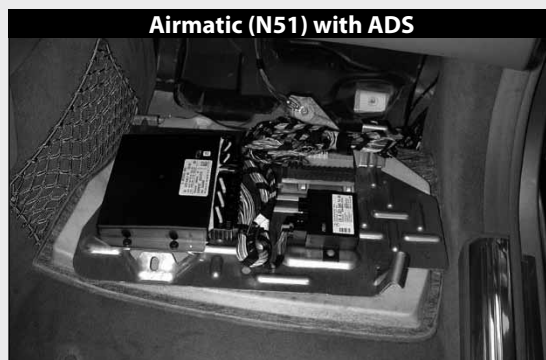
Right front upper footwell



Pull the carpet back



Unscrew 3 bolts holding the aluminum bracket



Airmatic (N51) with ADS

DISCONNECT THE BATTERY

Vehicle's Battery

REAR

REMOVE PIN FROM CAR HARNESS CONNECTOR...

5

... AND INSERT IT INTO 8-PIN CONNECTOR

Female Shell back view

2

click!

6

INSERT PIN FROM LOWERING MODULE HARNESS INTO CAR HARNESS CONNECTOR

Yellow 4

25

click!

7

CHECK CONTINUITY

25

4

8

LEFT FRONT

REMOVE PIN FROM CAR HARNESS CONNECTOR...

38

9

... AND INSERT IT INTO 8-PIN CONNECTOR

Female Shell back view

7

click!

10

INSERT PIN FROM LOWERING MODULE HARNESS INTO CAR HARNESS CONNECTOR

Gray 10

38

click!

11

CHECK CONTINUITY

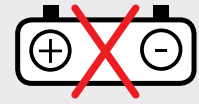
10

38

12

RIGHT FRONT	<p>REMOVE PIN FROM CAR HARNESS CONNECTOR...</p> <p>13</p>	<p>... AND INSERT IT INTO 8-PIN CONNECTOR</p> <p>14</p>	<p>INSERT PIN FROM LOWERING MODULE HARNESS INTO CAR HARNESS CONNECTOR</p> <p>15</p>	<p>CHECK CONTINUITY</p> <p>16</p>
CANC - H	<p>REMOVE PIN FROM CAR HARNESS CONNECTOR...</p> <p>Green-White</p> <p>17</p>	<p>... AND INSERT IT INTO 8-PIN CONNECTOR</p> <p>18</p>	<p>INSERT PIN FROM LOWERING MODULE HARNESS INTO CAR HARNESS CONNECTOR</p> <p>Orange</p> <p>19</p>	<p>CHECK CONTINUITY</p> <p>MALE FRONT VIEW</p> <p>20</p>
CANC - L	<p>REMOVE PIN FROM CAR HARNESS CONNECTOR...</p> <p>Green</p> <p>21</p>	<p>... AND INSERT IT INTO 8-PIN CONNECTOR</p> <p>22</p>	<p>INSERT PIN FROM LOWERING MODULE HARNESS INTO CAR HARNESS CONNECTOR</p> <p>Green</p> <p>23</p>	<p>CHECK CONTINUITY</p> <p>MALE FRONT VIEW</p> <p>24</p>
BATTERY GND	<p>REMOVE PIN FROM CAR HARNESS CONNECTOR...</p> <p>- BATTERY</p> <p>25</p>	<p>... AND INSERT IT INTO 2-PIN CONNECTOR</p> <p>Empty Female Shell back view</p> <p>26</p>	<p>INSERT PIN FROM LOWERING MODULE HARNESS INTO CAR HARNESS CONNECTOR</p> <p>Black</p> <p>27</p>	<p>CHECK CONTINUITY</p> <p>MALE</p> <p>28</p>
BATTERY +12V	<p>REMOVE PIN FROM CAR HARNESS CONNECTOR...</p> <p>+ BATTERY</p> <p>29</p>	<p>... AND INSERT IT INTO 2-PIN CONNECTOR</p> <p>Female Shell back view</p> <p>30</p>	<p>INSERT PIN FROM LOWERING MODULE HARNESS INTO CAR HARNESS CONNECTOR</p> <p>Red</p> <p>31</p>	<p>CHECK CONTINUITY</p> <p>MALE</p> <p>32</p>
	<p>29</p> <p>Unscrew the Suspension Module screws and remove the cover</p>	<p>30</p> <p>Rotate the Function Switch (center button) to position 1</p>	<p>31</p> <p>To continue, go to Ride Height Adjustment on page 42</p>	

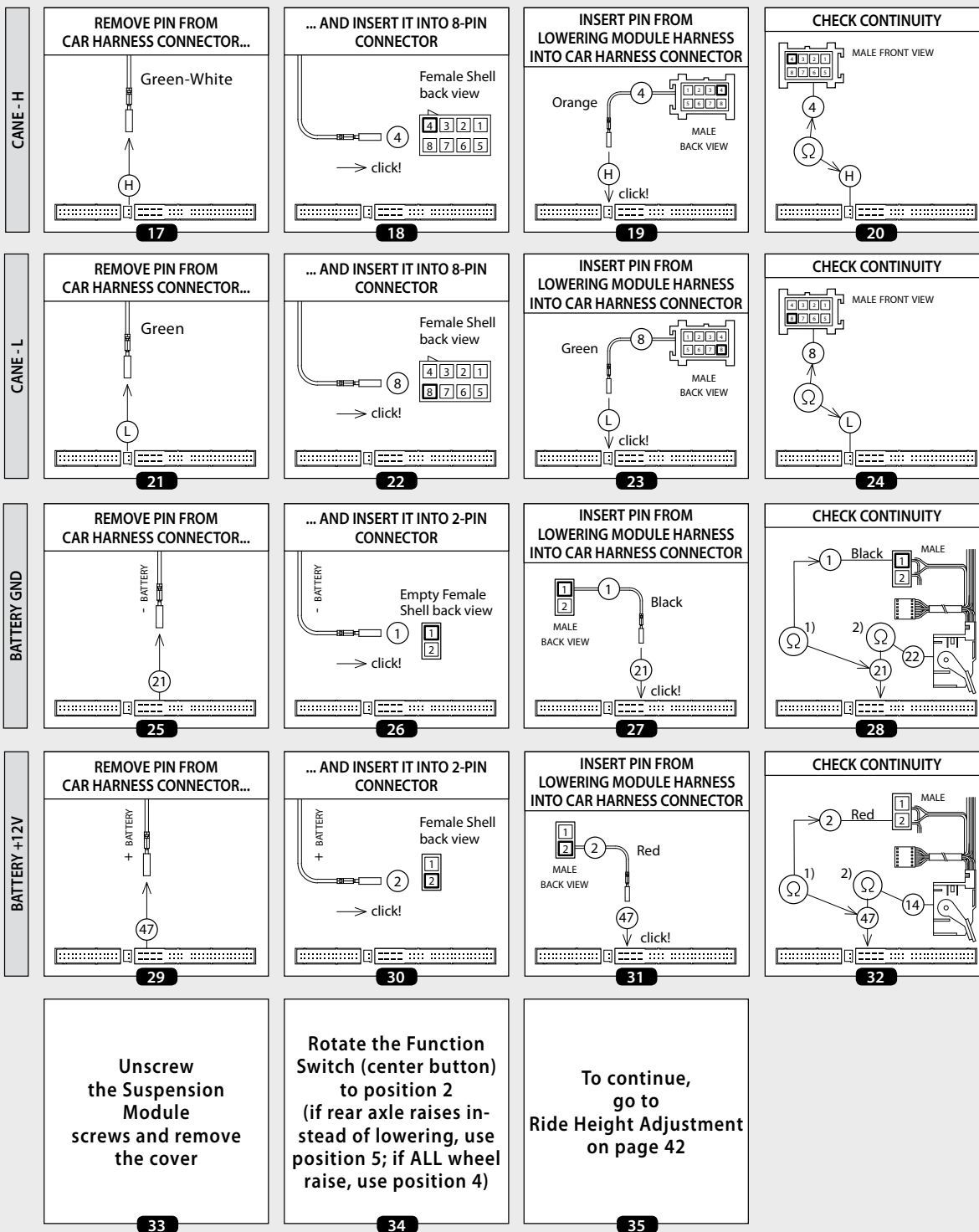
STEP-BY-STEP INSTALLATION



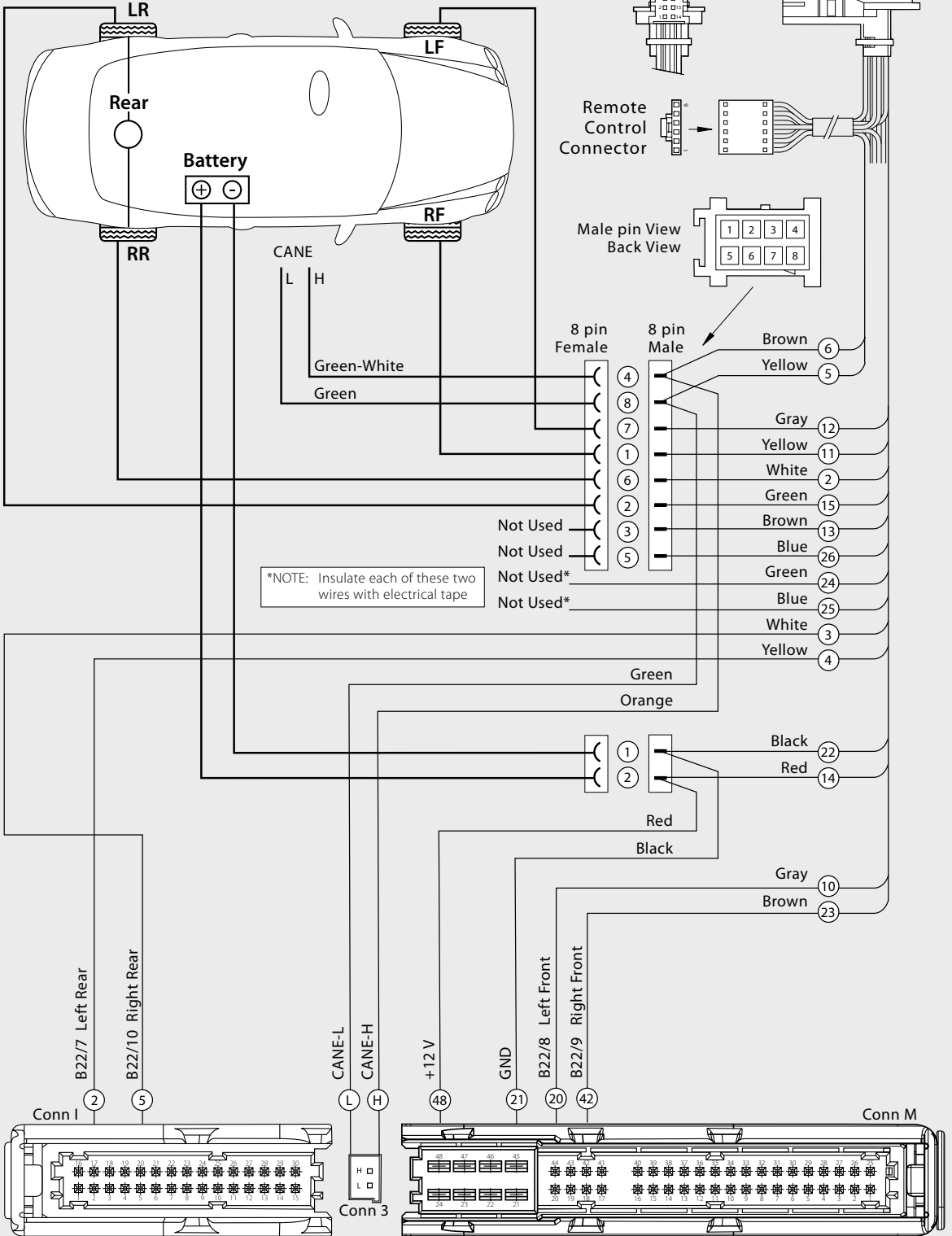
Disconnect the Battery

<p>Move the passenger's seat to the rearmost position</p>	 <p>Vehicle's Battery</p> <p>Disconnect the battery</p>	<p>Remove the floor mat and fold up the floor carpet.</p> <p>Remove the metal cover to expose the Airmatic control unit.</p>
---	--	--

RIGHT REAR	<p>REMOVE PIN FROM CAR HARNESS CONNECTOR...</p> <p>Refer to Vehicle's Connector Preparation on page 44.</p> <p style="text-align: center;">1</p>	<p>... AND INSERT IT INTO 8-PIN CONNECTOR</p> <p>Empty Female Shell back view</p> <p>→ must click!</p> <p style="text-align: center;">2</p>	<p>INSERT PIN FROM LOWERING MODULE HARNESS INTO CAR HARNESS CONNECTOR</p> <p>Yellow</p> <p>must click!</p> <p style="text-align: center;">3</p>	<p>CHECK CONTINUITY</p> <p style="text-align: center;">4</p>
LEFT REAR	<p>REMOVE PIN FROM CAR HARNESS CONNECTOR...</p> <p style="text-align: center;">5</p>	<p>... AND INSERT IT INTO 8-PIN CONNECTOR</p> <p>Female Shell back view</p> <p>→ click!</p> <p style="text-align: center;">6</p>	<p>INSERT PIN FROM LOWERING MODULE HARNESS INTO CAR HARNESS CONNECTOR</p> <p>White</p> <p>click!</p> <p style="text-align: center;">7</p>	<p>CHECK CONTINUITY</p> <p style="text-align: center;">8</p>
LEFT FRONT	<p>REMOVE PIN FROM CAR HARNESS CONNECTOR...</p> <p style="text-align: center;">9</p>	<p>... AND INSERT IT INTO 8-PIN CONNECTOR</p> <p>Female Shell back view</p> <p>→ click!</p> <p style="text-align: center;">10</p>	<p>INSERT PIN FROM LOWERING MODULE HARNESS INTO CAR HARNESS CONNECTOR</p> <p>Brown</p> <p>click!</p> <p style="text-align: center;">11</p>	<p>CHECK CONTINUITY</p> <p style="text-align: center;">12</p>
RIGHT FRONT	<p>REMOVE PIN FROM CAR HARNESS CONNECTOR...</p> <p style="text-align: center;">13</p>	<p>... AND INSERT IT INTO 8-PIN CONNECTOR</p> <p>Female Shell back view</p> <p>→ click!</p> <p style="text-align: center;">14</p>	<p>INSERT PIN FROM LOWERING MODULE HARNESS INTO CAR HARNESS CONNECTOR</p> <p>Gray</p> <p>click!</p> <p style="text-align: center;">15</p>	<p>CHECK CONTINUITY</p> <p style="text-align: center;">16</p>

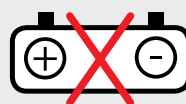


220 chassis	S	ABC	2000 - 2006
221 chassis	S	ABC	2007 - 2013
230 chassis	SL	ABC	2003 - 2012
231 chassis	SL	ABC	2013+

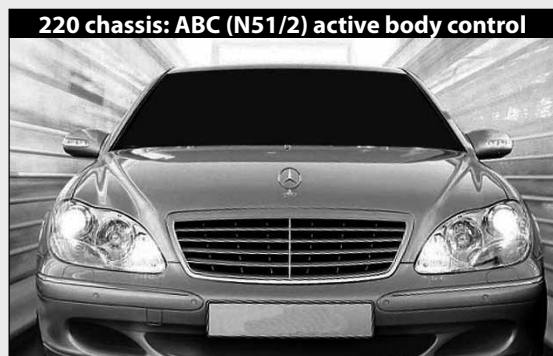
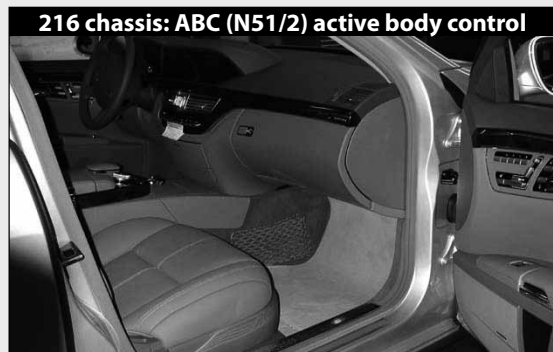


ABC (N51/2) Harness in the vehicle, Female Pin View

STEP-BY-STEP INSTALLATION



Disconnect the Battery



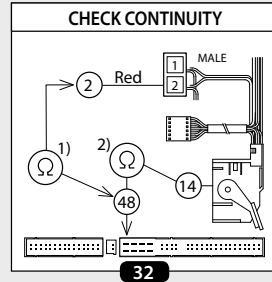
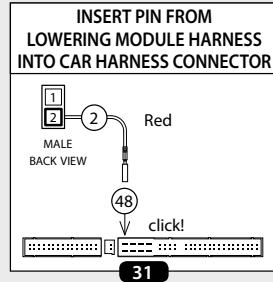
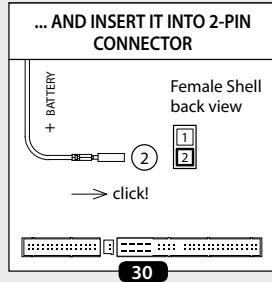
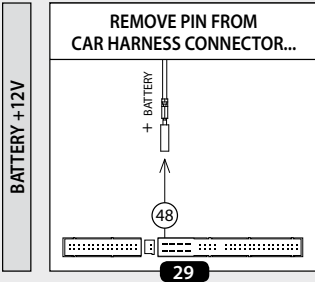
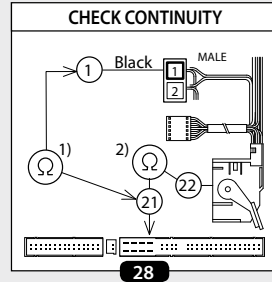
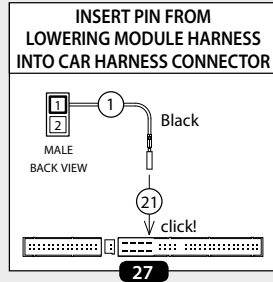
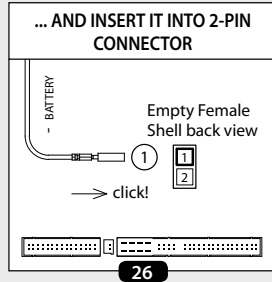
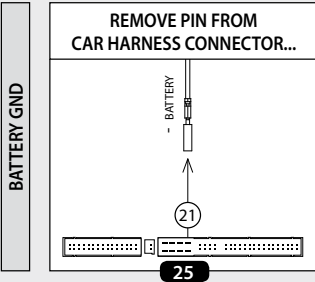
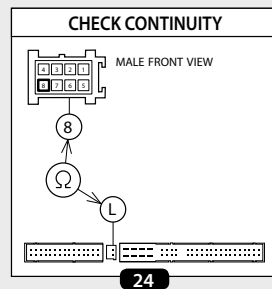
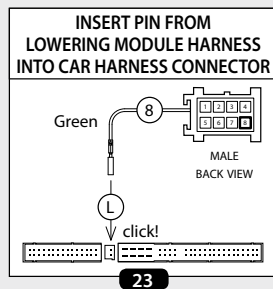
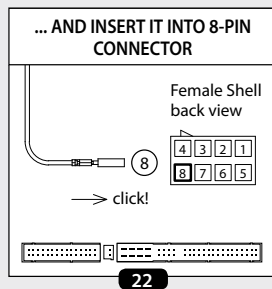
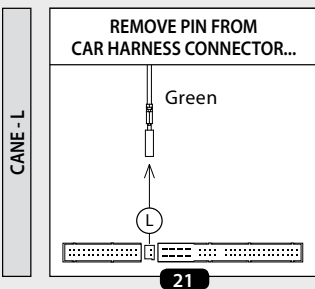
Shown on 220 S350



DISCONNECT THE BATTERY

Vehicle's Battery

RIGHT REAR	<p>REMOVE PIN FROM CAR HARNESS CONNECTOR...</p> <p>Refer to Vehicle's Connector Preparation on page 44.</p> <p>5</p> <p>1</p>	<p>... AND INSERT IT INTO 8-PIN CONNECTOR</p> <p>Empty Female Shell back view</p> <p>6</p> <p>→ must click!</p> <p>2</p>	<p>INSERT PIN FROM LOWERING MODULE HARNESS INTO CAR HARNESS CONNECTOR</p> <p>White 3</p> <p>5</p> <p>must click!</p> <p>3</p>	<p>CHECK CONTINUITY</p> <p>5</p> <p>3</p> <p>4</p>
	<p>REMOVE PIN FROM CAR HARNESS CONNECTOR...</p> <p>2</p> <p>5</p>	<p>... AND INSERT IT INTO 8-PIN CONNECTOR</p> <p>Female Shell back view</p> <p>2</p> <p>→ click!</p> <p>6</p>	<p>INSERT PIN FROM LOWERING MODULE HARNESS INTO CAR HARNESS CONNECTOR</p> <p>Yellow 4</p> <p>2</p> <p>click!</p> <p>7</p>	<p>CHECK CONTINUITY</p> <p>2</p> <p>4</p> <p>8</p>
	<p>REMOVE PIN FROM CAR HARNESS CONNECTOR...</p> <p>20</p> <p>9</p>	<p>... AND INSERT IT INTO 8-PIN CONNECTOR</p> <p>Female Shell back view</p> <p>7</p> <p>→ click!</p> <p>10</p>	<p>INSERT PIN FROM LOWERING MODULE HARNESS INTO CAR HARNESS CONNECTOR</p> <p>Gray 10</p> <p>20</p> <p>click!</p> <p>11</p>	<p>CHECK CONTINUITY</p> <p>10</p> <p>20</p> <p>12</p>
	<p>REMOVE PIN FROM CAR HARNESS CONNECTOR...</p> <p>42</p> <p>13</p>	<p>... AND INSERT IT INTO 8-PIN CONNECTOR</p> <p>Female Shell back view</p> <p>1</p> <p>→ click!</p> <p>14</p>	<p>INSERT PIN FROM LOWERING MODULE HARNESS INTO CAR HARNESS CONNECTOR</p> <p>Brown 23</p> <p>42</p> <p>click!</p> <p>15</p>	<p>CHECK CONTINUITY</p> <p>23</p> <p>42</p> <p>16</p>
	<p>REMOVE PIN FROM CAR HARNESS CONNECTOR...</p> <p>Green-White</p> <p>H</p> <p>17</p>	<p>... AND INSERT IT INTO 8-PIN CONNECTOR</p> <p>Female Shell back view</p> <p>4</p> <p>→ click!</p> <p>18</p>	<p>INSERT PIN FROM LOWERING MODULE HARNESS INTO CAR HARNESS CONNECTOR</p> <p>Orange 4</p> <p>H</p> <p>click!</p> <p>19</p>	<p>CHECK CONTINUITY</p> <p>MALE FRONT VIEW</p> <p>4</p> <p>H</p> <p>20</p>
CANE - H				



Unscrew the Suspension Module screws and remove the cover

33

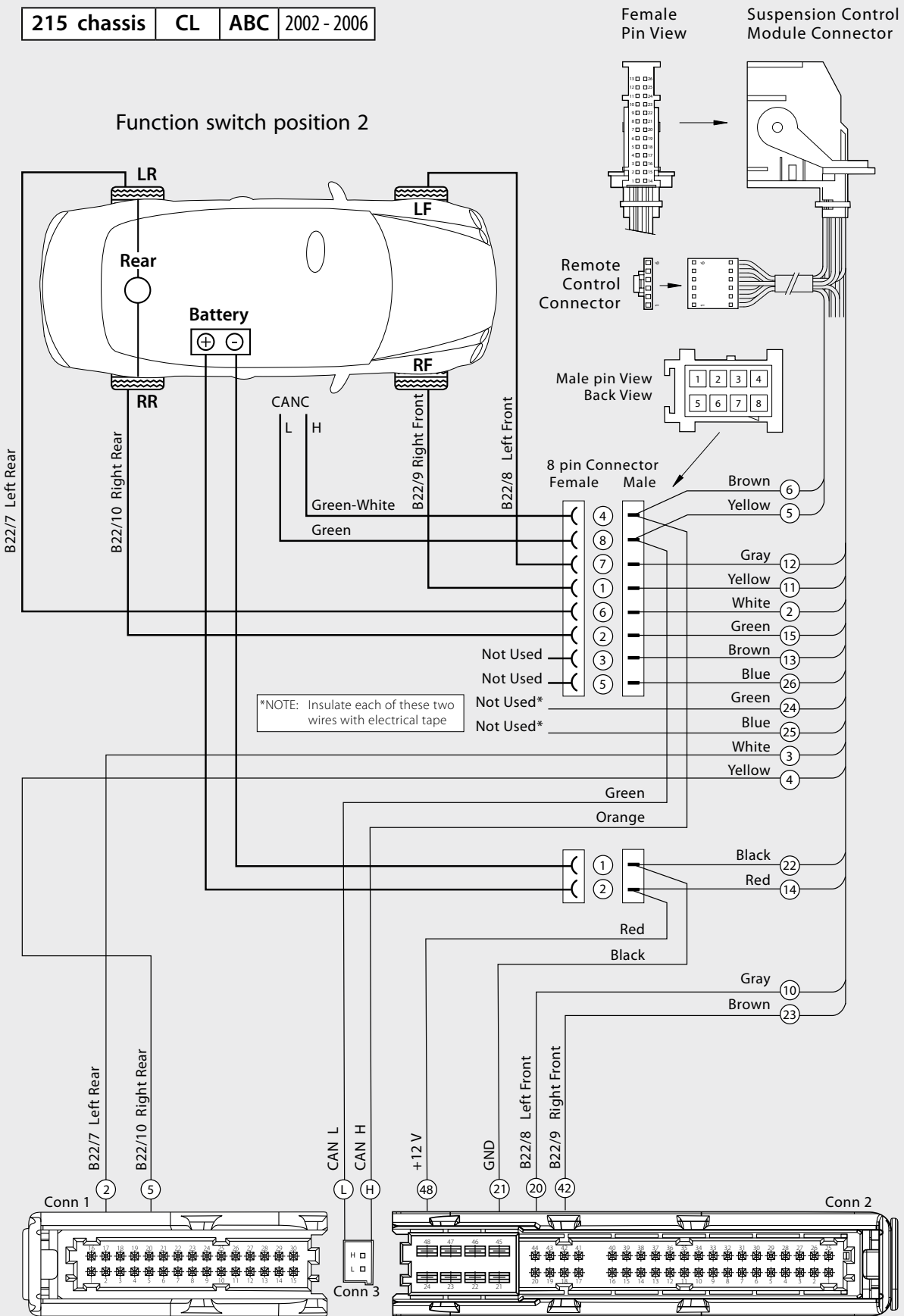
Rotate the Function Switch (center button) to position 3 (if rear axle raises instead of lowering, use position 5; if ALL wheel raise, use position 4)

34

To continue, go to Ride Height Adjustment on page 42

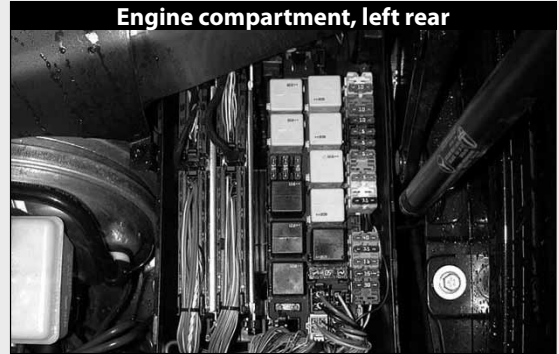
35

215 chassis | CL | ABC | 2002 - 2006



ABC (N51/2) Harness in the vehicle, Female Pin View

STEP-BY-STEP INSTALLATION



DISCONNECT THE BATTERY

Vehicle's Battery

RIGHT REAR	<p>REMOVE PIN FROM CAR HARNESS CONNECTOR...</p> <p>Refer to Vehicle's Connector Preparation on page 44.</p> <p>5</p> <p>1</p>	<p>... AND INSERT IT INTO 8-PIN CONNECTOR</p> <p>Empty Female Shell back view</p> <p>4 3 2 1 8 7 6 5</p> <p>→ must click!</p> <p>5</p> <p>2</p>	<p>INSERT PIN FROM LOWERING MODULE HARNESS INTO CAR HARNESS CONNECTOR</p> <p>Yellow 4</p> <p>5 must click!</p> <p>3</p>	<p>CHECK CONTINUITY</p> <p>5 4</p> <p>4</p>
LEFT REAR	<p>REMOVE PIN FROM CAR HARNESS CONNECTOR...</p> <p>2</p> <p>5</p>	<p>... AND INSERT IT INTO 8-PIN CONNECTOR</p> <p>Female Shell back view</p> <p>4 3 2 1 8 7 6 5</p> <p>→ click!</p> <p>6</p> <p>6</p>	<p>INSERT PIN FROM LOWERING MODULE HARNESS INTO CAR HARNESS CONNECTOR</p> <p>White 3</p> <p>2 click!</p> <p>7</p>	<p>CHECK CONTINUITY</p> <p>2 3</p> <p>8</p>
LEFT FRONT	<p>REMOVE PIN FROM CAR HARNESS CONNECTOR...</p> <p>20</p> <p>9</p>	<p>... AND INSERT IT INTO 8-PIN CONNECTOR</p> <p>Female Shell back view</p> <p>4 3 2 1 8 7 6 5</p> <p>→ click!</p> <p>7</p> <p>10</p>	<p>INSERT PIN FROM LOWERING MODULE HARNESS INTO CAR HARNESS CONNECTOR</p> <p>Gray 10</p> <p>20 click!</p> <p>11</p>	<p>CHECK CONTINUITY</p> <p>10 20</p> <p>12</p>

RIGHT FRONT

13 REMOVE PIN FROM CAR HARNESS CONNECTOR...

14 ... AND INSERT IT INTO 8-PIN CONNECTOR

Female Shell back view

click!

15 INSERT PIN FROM LOWERING MODULE HARNESS INTO CAR HARNESS CONNECTOR

Brown

click!

16 CHECK CONTINUITY

CANC - H

17 REMOVE PIN FROM CAR HARNESS CONNECTOR...

Green-White

18 ... AND INSERT IT INTO 8-PIN CONNECTOR

Female Shell back view

click!

19 INSERT PIN FROM LOWERING MODULE HARNESS INTO CAR HARNESS CONNECTOR

Orange

H click!

20 CHECK CONTINUITY

MALE FRONT VIEW

CANC - L

21 REMOVE PIN FROM CAR HARNESS CONNECTOR...

Green

22 ... AND INSERT IT INTO 8-PIN CONNECTOR

Female Shell back view

click!

23 INSERT PIN FROM LOWERING MODULE HARNESS INTO CAR HARNESS CONNECTOR

Green

L click!

24 CHECK CONTINUITY

MALE FRONT VIEW

BATTERY GND

25 REMOVE PIN FROM CAR HARNESS CONNECTOR...

BATTERY -

26 ... AND INSERT IT INTO 2-PIN CONNECTOR

Empty Female Shell back view

click!

27 INSERT PIN FROM LOWERING MODULE HARNESS INTO CAR HARNESS CONNECTOR

Black

click!

28 CHECK CONTINUITY

MALE

BATTERY +12V

29 REMOVE PIN FROM CAR HARNESS CONNECTOR...

BATTERY +

30 ... AND INSERT IT INTO 2-PIN CONNECTOR

Female Shell back view

click!

31 INSERT PIN FROM LOWERING MODULE HARNESS INTO CAR HARNESS CONNECTOR

Red

click!

32 CHECK CONTINUITY

MALE

Unscrew the Suspension Module screws and remove the cover

33

Rotate the Function Switch (center button) to position 2 (if rear axle raises instead of lowering, use position 5; if ALL wheel raise, use position 4)

34

To continue, go to Ride Height Adjustment on page 42

35

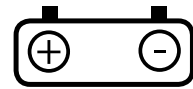
Ride Height Adjustment

Rotate all four Wheel Height Adjustment Switches (gray buttons) to position 3 (medium height).

1

Plug in the Suspension Lowering Module.

2



Reconnect the battery.

Green LEDs in the Suspension Lowering Module will blink.

3

Cycle the ignition key On then Off (do not start the engine).

4

Start the engine. Make sure you are parked on an even surface.

5

Press the factory Vehicle Height button (button LED On). Wait up to 20 seconds until vehicle raises.

6

Press the button again to lower the vehicle (button LED on the button will turn Off). Wait up to 20 seconds.

7

Adjust individual Wheel Height Adjustment Switches if required (to see the height changing, perform the next step).

8

Cycle the Vehicle Height button again (button LED On then Off), with up to 20 seconds in-between.

9

If still not satisfied, go back to step 8.

10

Replace the Suspension Lowering Module cover.

Congratulations, the module is installed!

11

We recommend to check all Trouble Codes and to perform an axle alignment.

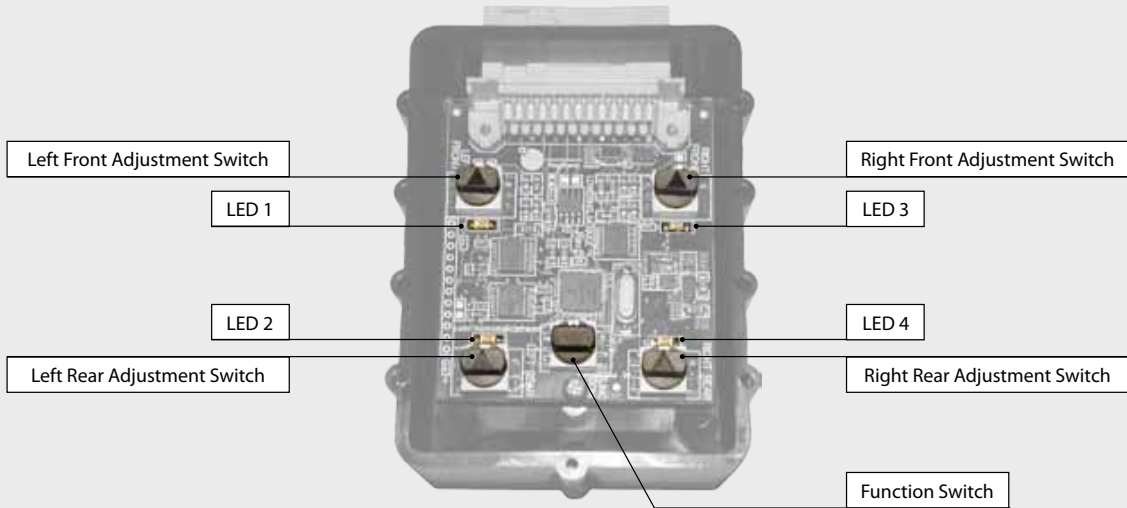
12

Function Switch (see installation instructions):

0 = Suspension Module Off (LEDs 1, 2, 3, 4 are OFF)

1...7 = Suspension Module On (three or four LEDs are ON)

Note, that only those switches with lit LED are active.

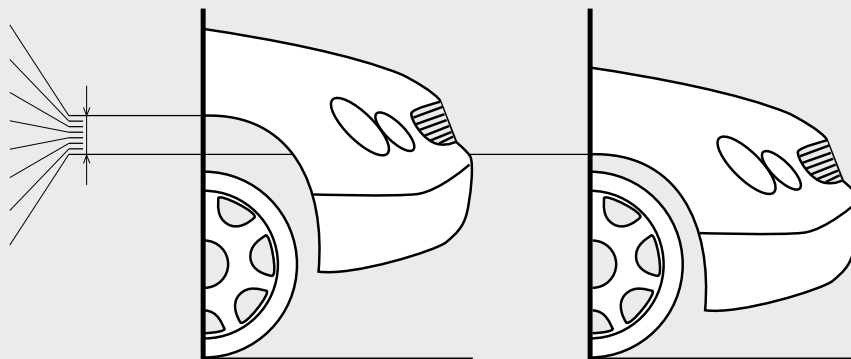


NOTES:

- It is quite common that even before the installation individual wheels are not at the same level. This is more noticeable when the vehicle is lowered. Small differences can be manually adjusted by rotating the individual Wheel Switches. Larger differences should be corrected at the dealer using proper equipment and procedure. Before going to the dealer, remember to turn off the ProgRama Suspension Module by rotating the Function Switch (center button) to position 0. Once back from the dealer, rotate the Function Switch back to it's original position 1 ... 7, Mercedes model dependent, as described in the Step-by-Step Installation.
- The following lowering values are an approximation and will vary from wheel to wheel and from vehicle to vehicle:

Wheel Height Adjustment Switch positions (only switches with LED lit are active):

- 0: lower by 3/8" [10 mm]
- 1: lower by 3/4" [20 mm]
- 2: lower by 1" [25 mm]
- 3: lower by 1 1/8" [30 mm]
- 4: lower by 1 3/8" [35 mm]
- 5: lower by 1 1/2" [40 mm]
- 6: lower by 1 3/4" [45 mm]
- 7: lower by 2" [50 mm]



Vehicle Connector Preparation

DISCONNECTING the 26 pin connector from the lowering module



CONNECTING the 26 pin connector to the lowering module



30 pin and 48 pin Connector Dissassembly

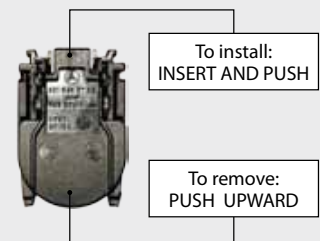
Remove cap by pushing and removing housing from plug by unlocking the two latches on the sides of the housing. Then slide header outward.



EXTRACTING the pins from the housing

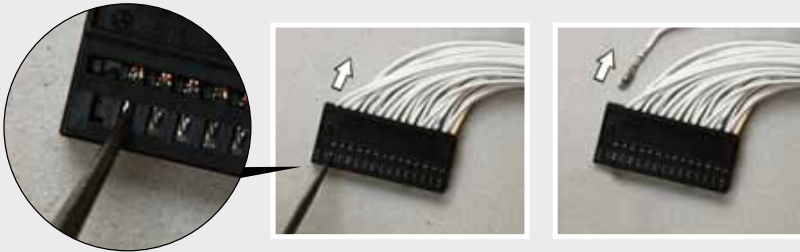


Side Cap Dissassembly and re-assembly



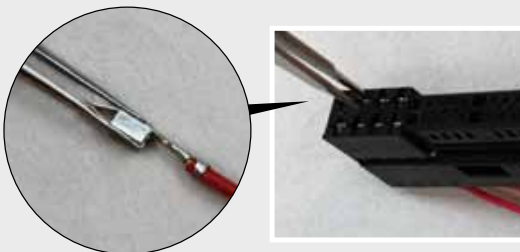
Extracting and Inserting pins

EXTRACTING the smaller pins from the housing



Use HAZET Tool No.: 4663-4
and Handle No.: 4669-4

EXTRACTING the larger pins from car connector



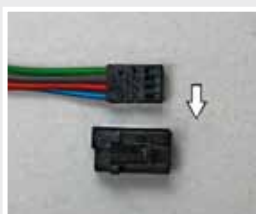
To Remove large pins use
HAZET Tool No.: 4662-4
or a solid thin wire

INSERTING the pins back into the connector housing



*In the 30 pin car connector use
extraction tools HAZET 4669-4
and 4663-4 or a solid thin wire.*

8 PIN FEMALE CONNECTOR



Insert header with wires
into housing

*To remove small pins use extraction tool
HAZET 4669-4 or a solid thin wire.*

Troubleshooting

Warranty and Return Policy

Suspension Control Module Warranty Policy

ProgRama, Inc offers a 30 day satisfaction guarantee on Suspension Control Module as well as a one year warranty against defects in materials or workmanship.

ProgRama, Inc's liability under this warranty shall be limited to the correction or replacement of any defective part or product in question which ProgRama, Inc determines to be necessary.

Warranty freight charges are the responsibility of the dealer, distributor and/or consumer. Excessive exposure to heat/sun, liquids and physical abuse will not be covered.

The Suspension Control Module warranty is to the original purchaser and is non-transferable.

This warranty is void unless proof of purchase is submitted. Purchase price must be consistent with ProgRama, Inc's Minimum Resale Price (MRP) pricing policy.

Removal of serial numbers and/or alteration of product or packaging will void all warranties.

ProgRama, Inc is not responsible for damages, including but not limited to improper installation, installation by a non-certified technician, damages to the vehicle, loss of time and loss of profit resulting from installation or use of our product. In no event is our responsibility higher than the purchasing price paid for our product.

Return Policy

ProgRama, Inc will not warranty, credit, or exchange any product returned without a valid Return Merchandise Authorization (RMA) number.

All RMA numbers are issued by ProgRama, Inc RMA department.

Defective units shall be repaired and returned in like kind. All units that must be refurbished to like new condition are subject to labor and parts charges to be determined by ProgRama, Inc.

All refunds for ProgRama, Inc products must be collected at original point of purchase - ProgRama, Inc will not credit dealers/customers that did not purchase products directly through ProgRama, Inc.

Governing Law and Venue

This warranty shall be governed by and construed in accordance with the laws of United States, and venue for any legal proceeding or action at law arising out of or construing this Agreement shall lie in the courts of South Florida, and the parties specifically waive any other venue.



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LCM03-ver.4
M-MIS-90312/4.0/20180328