

## Bi-Xenon Headlights with AFS



Light Function	Bulb Used	Power Output
Parking light	2x3 LEDs dimmed (via 2 optical fibers)	not specified
Daytime running light (DRL)	2x3 LEDs dimmed (via 2 optical fibers)	not specified
Turn signal	PSY24W	24 watts
Country light / highway light	D3S	35 watts
Low beam headlight	D3S	35 watts
Cornering light (static)	H7	55 watts
Coming home / leaving home	2x2 LEDs and gas discharge lamp D35	not specified
Side marker light	3 LEDs	approx. 2 watts

The all-weather light function is not offered on North American market vehicles with bi-xenon headlights and AFS. The installation space for the ACC sensors is vacant so Adaptive Cruise Control (ACC) is available.

The parking lights are used for the coming home/leaving home function in conjunction with the low beams.



### Reference

For further information about the head and tail lights of the 2012 A6, refer to Self-Study Program 990403, *The 2012 Audi A7 Onboard Power Supply and Networking*.

## Bi-Xenon Headlight with AFS Components

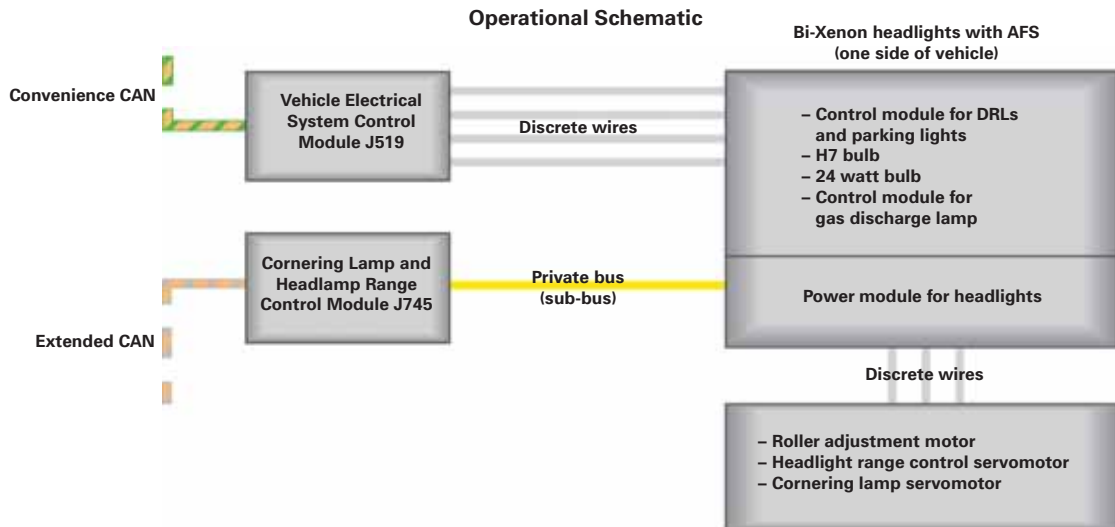


### Actuation

Vehicle Electrical System Control Module J519 actuates the control module for the DRLs and parking lights, the control module for the gas-discharge lamp, the H7 bulb, and the 24-watt bulb separately.

Cornering Lamp and Headlamp Range Control Module J745 actuates the power module for headlights over a private CAN.

Left Headlamp Power Output Stage J667 actuates the adjusting motor for the roller, the servo motor for headlight range control and the servo motor for the dynamic cornering light.

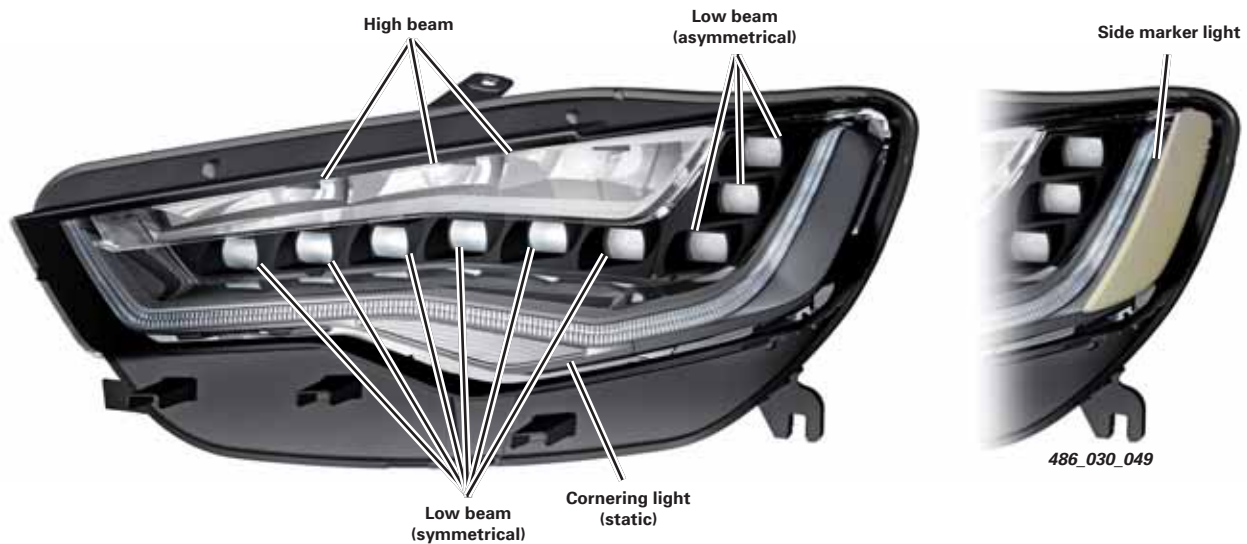


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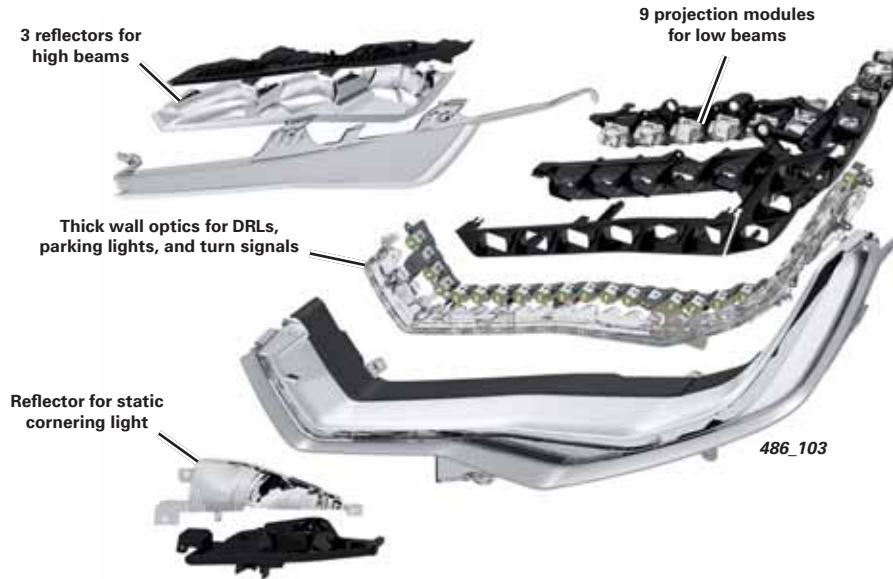
## LED Headlights

The LED headlights of the A6 feature LEDs for lighting functions. Each headlamp has a total of 57 LEDs together with accompanying heat sinks. A fan integrated into the headlight prevents the electronic components from overheating.

Reflectors or projection modules are used, depending on the lighting function. Thick-walled optics are employed for the DRLs, parking lights, and turn signals to achieve a homogenous appearance for these lighting functions.



Light Function	LEDs Used
Parking light	LEDs (white, dimmed)
Daytime running light (DRL)	LEDs (white)
Turn signal	2x2 LEDs
Low beam headlight	14 LEDs (5x2 chip and 4 single LEDs)
High beam headlight	12 LEDs (3x4 chip, in addition to low beams)
Cornering light (static)	4 LEDs (1x4 chip, in addition to low beams)
Coming home / leaving home	14 LEDs (5x2 chip and 4 single LEDs)
Side marker light	3 LEDs (white with yellow reflector)



### DRLs / Parking Lights

The DRLs and parking lights consist of 24 white LEDs. They are activated by a pulse-width modulated signal (PWM). The LEDs are operated in a dimmed state for the parking light function.



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### Turn Signals

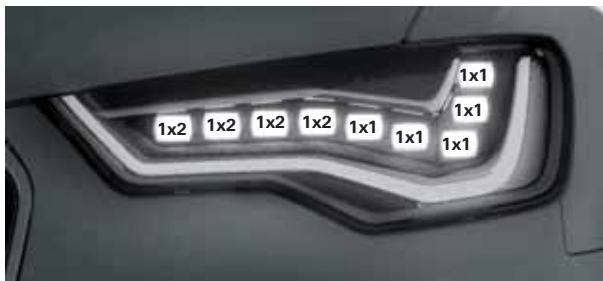
The turn signal is comprised of 24 yellow LEDs. During turn signal operation, the LEDs for the DRLs are dimmed to the level of the parking light.



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### Low Beam Headlights

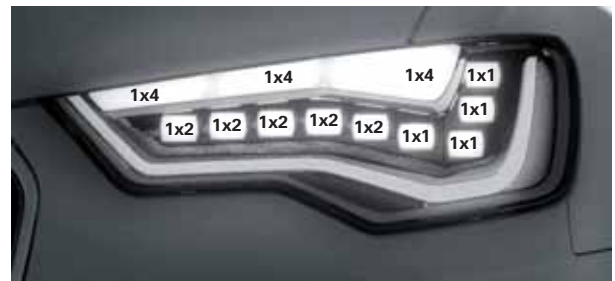
Nine projection modules with a total of 14 LEDs are used for the low beams. The LEDs for the DRLs are dimmed to the level of the parking light.



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### High Beam Headlights

Three quadruple chips are activated for the high beam function in addition to the LEDs for the low beams and parking lights.

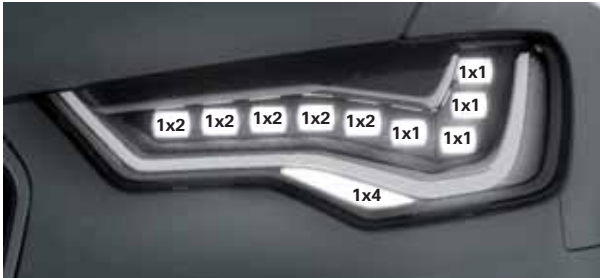


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### Cornering Light (static)

A quadruple chip below the parking light is activated in addition to the low beam function for the static cornering light. These LEDs are provided with a reflector which illuminates the area to the side of the vehicle when turning.

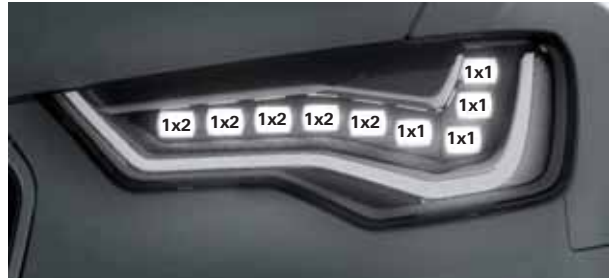
This light is activated either by the turn signal and a speed below 25 mph (40 km/h), or a wide steering angle at a speeds below 44 mph (70 km/h).



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### Coming Home / Leaving Home

The same LEDs that create the low beam are used for the coming home/leaving home lighting functions. These functions are activated either when exiting the vehicle by opening the driver's door, or when unlocking the vehicle with the radio remote key. Light Switch E1 must be in the "AUTO" position, Rain/Light Recognition Sensor G397 must recognize darkness, and both functions must be enabled in the MMI.



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## LED Headlight Components

The individual components shown here can be replaced separately in the LED headlight.

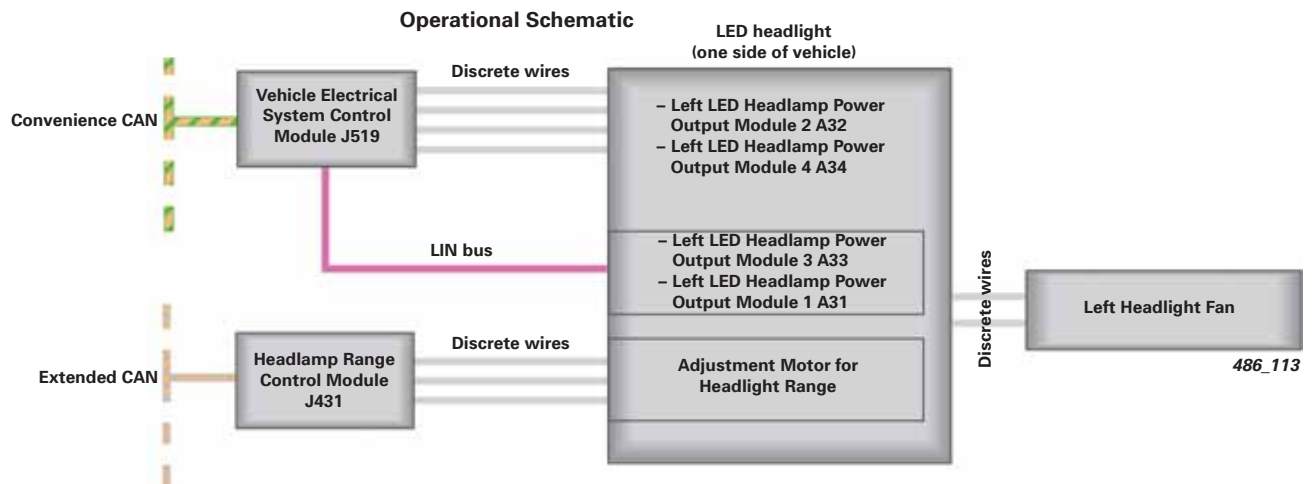
LED groups or individual LEDs cannot be replaced in the LED headlight.



## Actuation

Power modules 2 and 4 are energized over separate lines by Vehicle Electrical System Control Module J519. Power modules 1 and 3 are LIN slaves of J519.

Power module 1 A31 controls the fan in the LED headlight over separate lines. The fan is activated with "terminal 15 on" and runs permanently until terminal 15 is switched OFF.



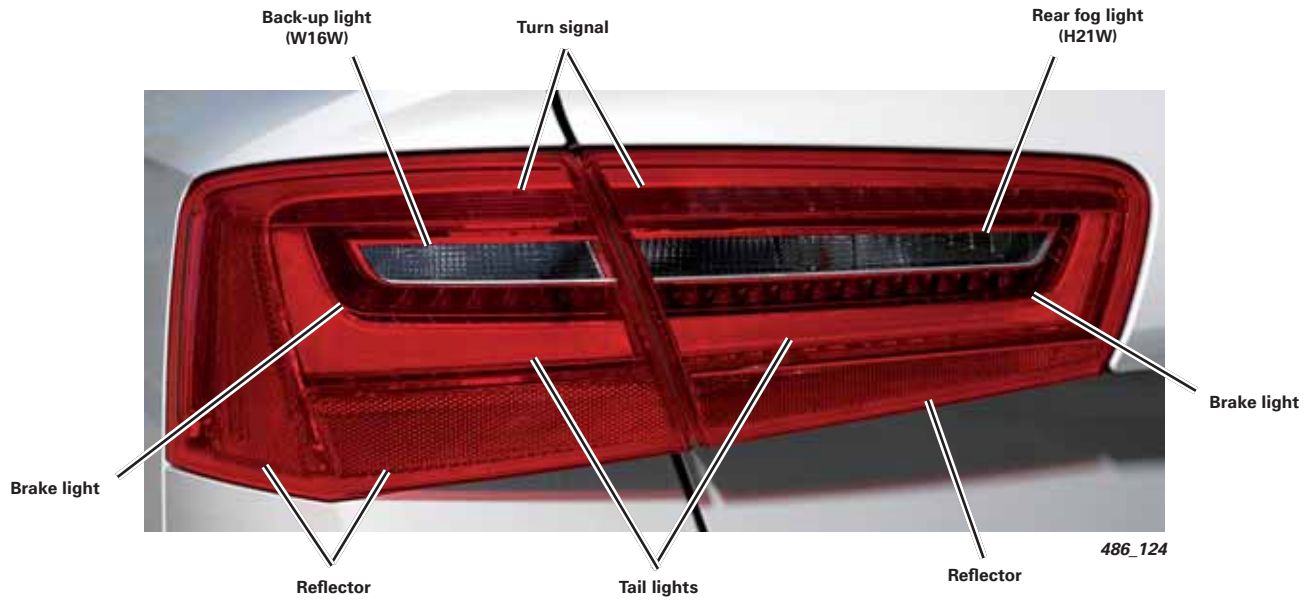
### Note

When replacing components of the LED headlights, always use VAS 6613 to prevent ESD.

## Rear Lights

### LED Rear Lights

Almost all rear light functions utilize LED technology. The only exceptions are the back-up lights, which use a 16-watt bulb, and the rear fog light, which uses a 21-watt halogen bulb.



# Rear Lights at Night

## Tail Light

The LEDs also have an optical fiber to reinforce the impression of a continuous band of lights from all angles.



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## Brake Light (combined with tail light)

The brake light is comprised of 45 LEDs.



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## Turn Signal (combined with tail light)

The turn signal is comprised of 45 LEDs that are also employed for the brake light function.



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## Fog Light with Tail and Brake Light

This configuration ensures that the two lighting functions can be clearly differentiated. It also maintains the legally mandated minimum distance between the brake light and the fog light.



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## Light Functions not Illustrated

### Backup Light

A 16-watt bulb is used for the backup light. The backup light function operates only in the quarter panel light.

### High Mounted Brake Light

The 2012 A6 has a center high-mounted brake light at the upper edge of the rear window. This light supplements the brake light function comprised of 18 LEDs

Light Function	Type
Tail light	30x LED
Brake light	45x LED
Turn signal	45x LED
Rear fog light	1x H21W, 21 Watt
Backup light	1x W16W, 16 Watt
High mounted brake light	18x LED
Side marker light	2x LED

# Climate Control

## Overview

### Climate Control System Versions

Three-zone and four-zone climate control systems are available on the 2012 A6.

On the three-zone system, rear passengers can adjust the temperature via a button located on the rear center console.

Two humidity sensors, Humidity Sensor in Fresh Air Intake Duct J657 and Humidity Sensor G355 are used in both the three- and four-zone systems.

The four-zone system also has Rear A/C Display Control Head E265 with the following functions:

- Temperature adjustment
- Fan adjustment
- Separate rear left and right air distribution adjustment

To provide climate control in the rear, the four-zone system has air outlets in the B-pillars. The four-zone climate control system has the following features:

- Automatic recirculation control by Air Quality Sensor G238
- Residual heat function
- Separate footwell temperature control
- Glove compartment cooling system
- Three different air conditioning modes: soft, medium, and intensive

### Three-Zone Climate Control System



### Four-Zone Climate Control System



#### Reference

For further information about the climate control systems of the 2012 A6, refer to Self-Study Program 990603, *The 2012 Audi A7 Occupant Protection, Infotainment, Climate Control, and Head-Up Display*.

Introduction

The 2012 A6 comes equipped with the MMI Radio plus or the MMI Navigation plus system, depending on vehicle model level.

MMI Radio plus



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MMI Navigation plus



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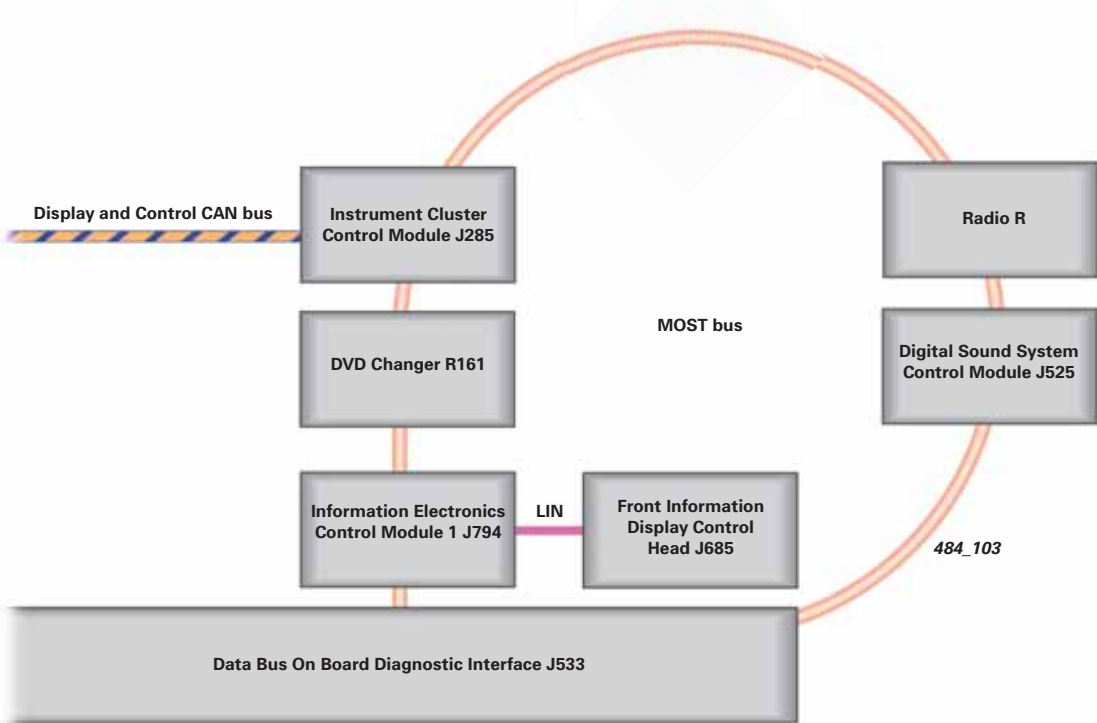


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Topology

The A6 Infotainment control modules communicate over the MOST bus. This allows very high data transfer rates.

Picture signals from the back-up camera or DVD changer are transmitted as FBAS signals to Information Electronics Control Module 1 J794.



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## Radio Media Center (RMC)

The MMI Radio plus system belongs to the Radio Media Center infotainment platform.

Depending on equipment level, the Radio Media Center combines nearly all the hardware functions of a modern infotainment system in a single housing, which is the equivalent of a 1-DIN device. The RMC is also central controller for the infotainment system.

The main difference in the RMC with the third generation MMI system is that there is no separate radio control module. The functions of the radio are integrated into Information Electronics Control Module 1 J794. On vehicles with MMI Radio plus, J794 has an additional audio amplifier.

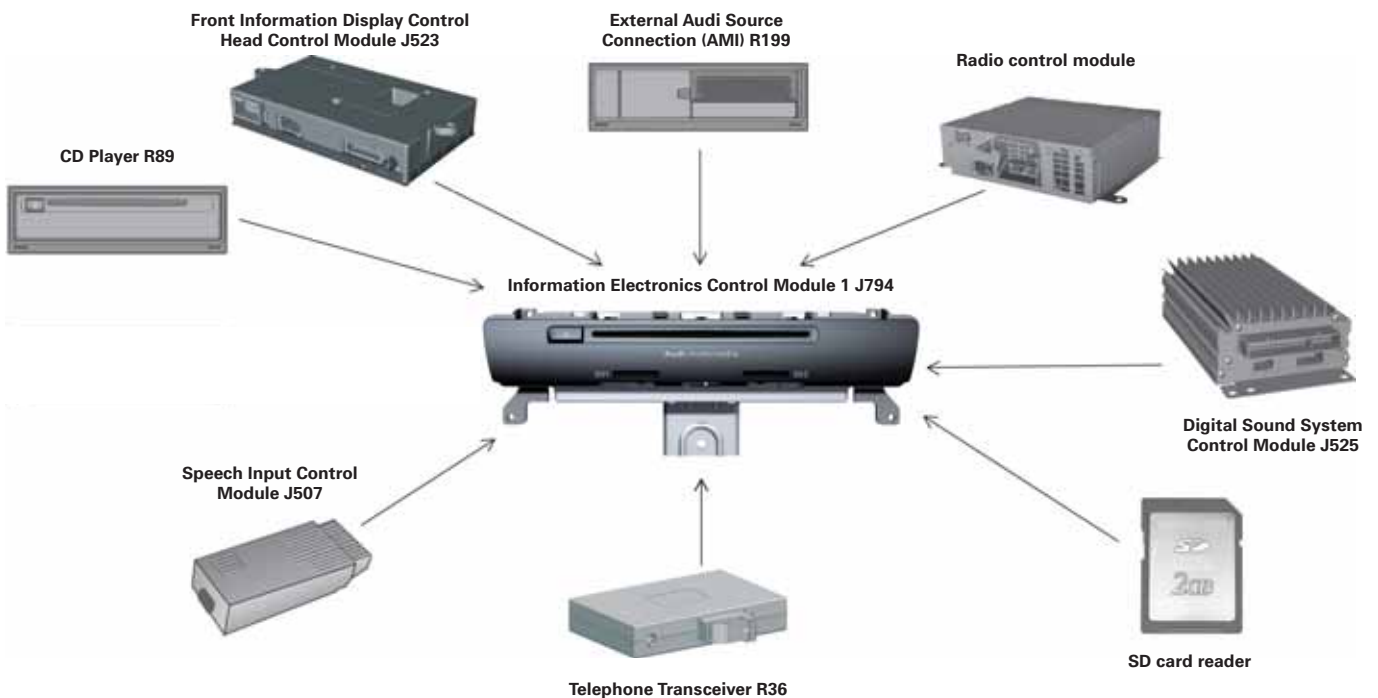
Radio diagnosis with the VAS Scan Tool is done through Address Word 5F – Information Electronics Control Module 1 J794.

Front panel of J794 for MMI Radio plus



## RMC Control Modules

This illustration below shows which control modules and functions are grouped within Information Electronics Control Module J794 of the Radio Media Center.



## MMI Radio Plus (RMC)

MMI Radio plus has the following features:

- Two SD card readers
- Integrated six-channel amplifier for the Audi Sound System with 180 watts power output
- Bluetooth interface
- Speech dialogue system
- Driver Information System (DIS) with monochrome screen in the instrument cluster
- Digital satellite radio
- AUX in on center console
- Compatible with optional equipment
- 6.5-inch color display with 400 x 200 pixel resolution
- Control panel with six freely assignable radio station keys
- FM tuner with dual diversity

With MMI Radio plus, the CD drive and the SD card reader support playback of the following audio files:

- MP3
- WMA
- AAC
- WAV

The metadata in these files (album, track, artist, etc.) and the embedded album cover can also be displayed.

### Bluetooth Interface

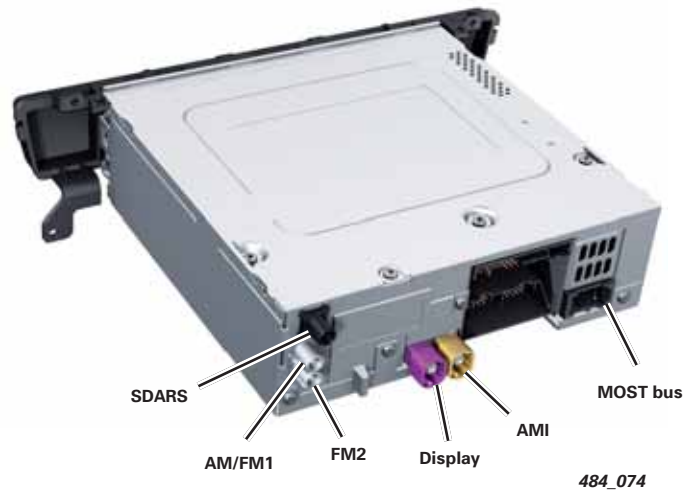
The MMI Radio for the A6 comes with a Bluetooth interface, which enables the RMC to be used for the hands-free telephone and audio streaming.

The Bluetooth HFP profile is used for the hands-free telephone and A2DP for audio streaming. The AVRCP profile is used to control the audio player connected via Bluetooth. The scope of the control options is dependent upon the device in use.

Front panel of J794 for MMI Radio plus



Back panel of J794 for MMI Radio plus



### Speech Dialogue System

MMI Radio plus comes with an integrated speech dialogue system, which can be used, among other things, for the hands-free telephone or for selecting a radio channel. The main functions of the RMC can be operated by voice control (for example, find a contact in a directory, dial a number, etc.).

## MMI Navigation Plus

The MMI Navigation plus system is identical to the system of the 2011 A8. It is a third generation MMI system with the internal designation MMI3G plus. MMI Navigation plus features the following:

- 60 GB hard drive (with approximately 20 GB for Jukebox)
- 3D navigation with 3D city models
- DVD drive
- Two SD card readers (for SDHC cards up to 32 GB in size)
- Premium speech dialogue system
- Radio control module with phase diversity
- Six-channel amplifier with 180 watts power output (integrated into the radio control module)
- 8-inch TFT screen with 800 x 480 pixel resolution
- Driver information system with 7-inch color screen in the instrument cluster
- MMI touch
- Bluetooth interface for:
  - Hands-free telephone (HFP)
  - Audio streaming (A2DP)

The A6 with MMI Navigation plus also includes the following standard equipment:

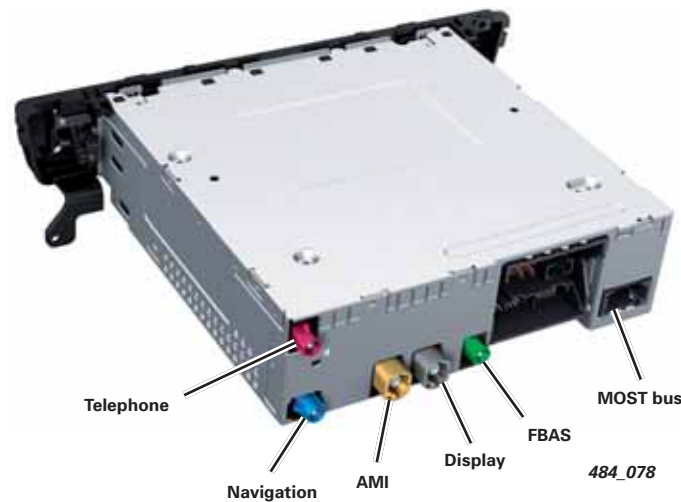
- Audi Music Interface
- Audi Connect (WLAN hotspot)
- Digital satellite radio tuner

Front panel of J794 for MMI Navigation plus



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Back panel of J794 for MMI Navigation plus



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## New Features of MMI Navigation Plus – Audi Connect

### Google Earth Map

The 3D map display can be expanded to include satellite mapping via Google Earth.

The 3D satellite map display is produced by combining the 3D map display with the existing 3D topographical display. This function is only available in combination with Audi Connect and an active data link.

### WLAN Hotspot

The A6 has a WLAN hotspot in combination with Audi Connect. Passengers with suitable devices can use the WLAN hotspot to surf the Internet, retrieve data or e-mails or, for example, to conveniently and securely download the latest apps for an iPad.

When a network link is active, it is indicated at the bottom right of the display. 2G is displayed for GSM network and 3G for UMTS network.

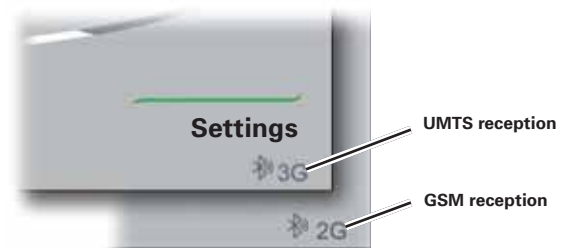
The Universal Mobile Telecommunications System (UMTS) is a third generation (3G) mobile communications standard which provides for significantly higher data transfer rates (up to 7.2 Mbit/s with HSDPA [High Speed Downlink Packet Access] and up to 384 kbit/s without) than the second generation (2G) mobile communications standard, the GSM Standard (up to 220 kbit/s with EDGE and max. 55 kbit/s without).

3D satellite map



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Network connectivity display



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### Note

The final operational features and graphic displays for Audi Connect and Google Earth may differ from those presented here. Always check appropriate literature for the latest information.

## Google Earth Mapping

If the Google Earth variant is active, the satellite maps are loaded directly from the Internet (currently from Google Earth). This satellite map is combined with the navigation map on the hard drive to produce a 3D satellite map.

The prerequisites for use of Google Earth maps are:

- MMI Navigation plus
- Audi Connect
- Data capable SIM card

### Loading Google Earth Maps

The following requirements must be met in order to load mapping material from Google Earth:

- T-Mobile SIM card inserted in the card reader
- Active Audi Connect account
- Configured data link

Also, in the "Settings" menu of the navigation system:

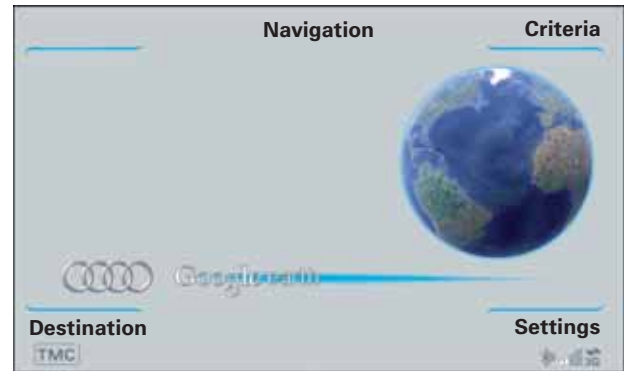
- Map type must be set to "Position 3D"
- Map display must be set to "Google Earth"

If these requirements are met, Information Electronics Control Module 1 J794 always loads the satellite map for the current location and the expected route. The loaded data packets are cached on the hard drive, where the current map view is then unpacked and displayed.

If enough data packets are stored for a certain route because the user travels this route on a daily basis, a 3D satellite map can be displayed even without an active link to Google Earth.

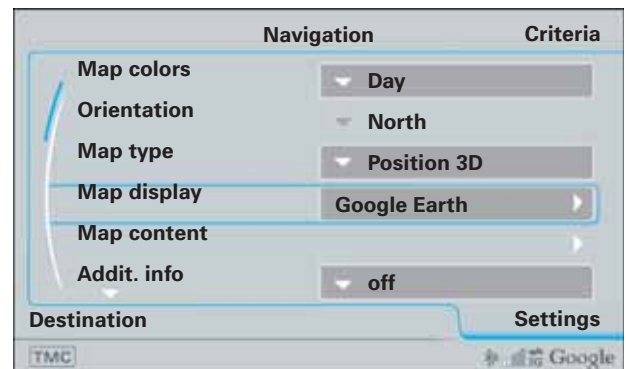
If there is not enough data in the cache to display a map of adequate quality on the MMI screen, the system informs the user and switches to the standard map.

Google Earth home page



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Settings for Google Earth



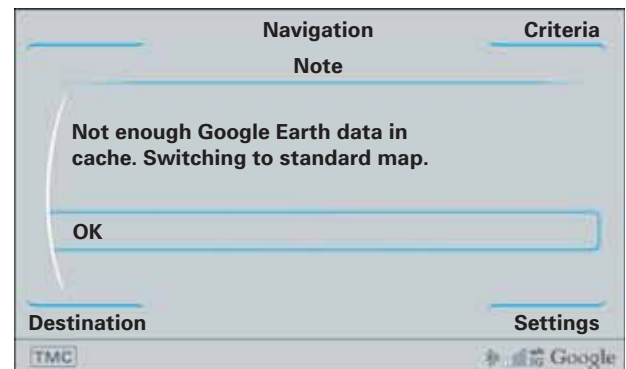
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3D satellite map



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This message is displayed if too little data is available



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#### Note

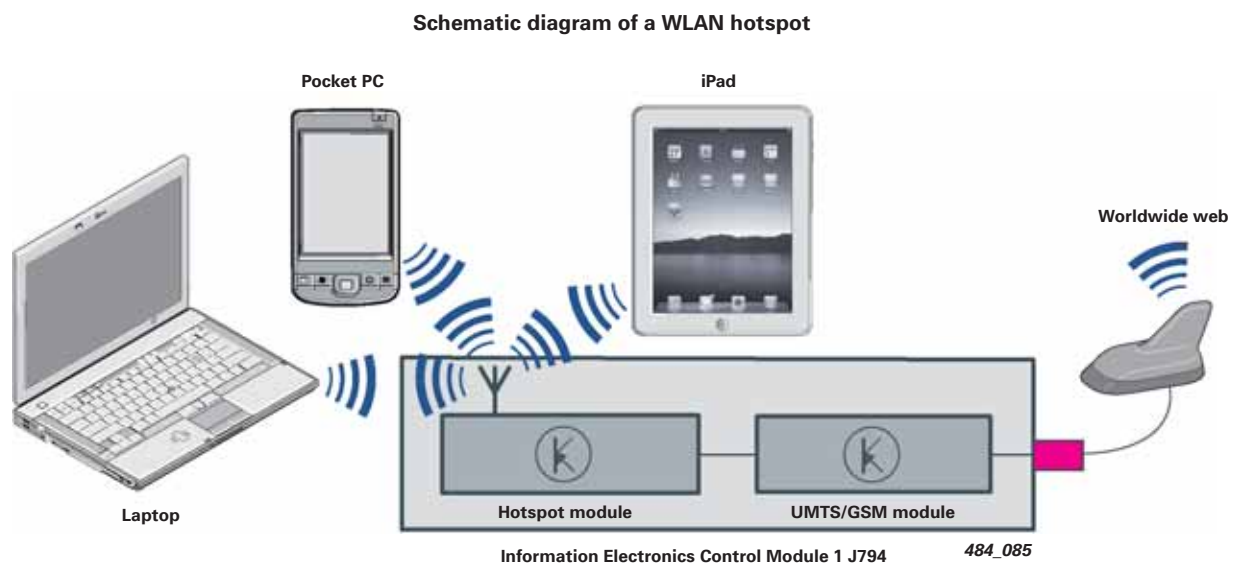
The final operational features and graphic displays for Audi Connect and Google Earth may differ from those presented here. Always check appropriate literature for the latest information.



## WLAN Hotspot

Wireless high-speed internet access is made possible via WiFi connectivity technology, which provides a link between WLAN (wireless local area network) hotspots and multiple devices.

A hotspot is a location which offers public Internet access via a wireless network. Unlike a regular WLAN network, the devices usually do not have to be linked to one another or networked. They are linked separately to the hotspot. Like most public hotspots, Audi also uses the IEEE802.11b/g wireless standard for transmitting data.



## WLAN on the Audi A6

Audi Connect is required to implement the WLAN hotspot. It transforms the A6 into a full-fledged office on wheels. Up to eight devices (for example, iPads, laptops, PDAs, etc.) can be linked to the hotspot. The reception range is confined to the interior of the vehicle.

The WLAN hotspot is installed with the following equipment combination:

- MMI Navigation plus
- Audi Connect

The control module required for the WLAN hotspot is integrated in Information Electronics Control Module 1 J794. The hotspot can also be used for connecting suitable devices via WLAN.

The UMTS module connects the device to the Internet via the vehicle's external aerial. The UMTS module is built into J794. Maximum download speed is 7.2 Mbit/s.

The following Internet connectivity requirements must be met:

- T-Mobile SIM card inserted in the card reader
- Active Audi Connect account
- Configured data link



### Note

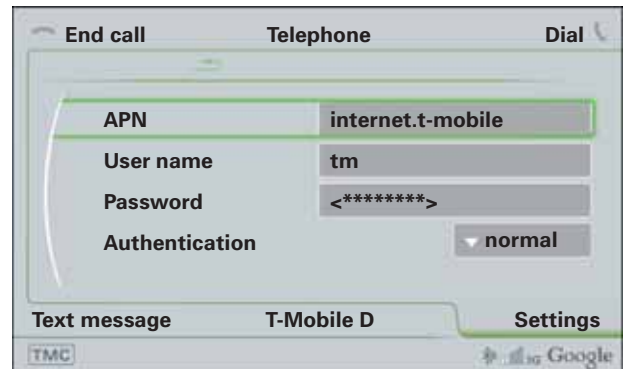
The final operational features and graphic displays for Audi Connect and Google Earth may differ from those presented here. Always check appropriate literature for the latest information.

## Setting up a Data Link to the Internet

When a data link is set up for the first time, it is configured automatically. If this fails, the following values must be entered manually in the telephone submenu "Data connection" under "Connection settings":

- APN (access point)
- User name
- Password
- Authentication

"Connection settings" menu



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## Connecting a WLAN Device

To connect the device, the car phone must be in operation. To connect a WLAN device to the hotspot for the first time, the following values must be entered into the device:

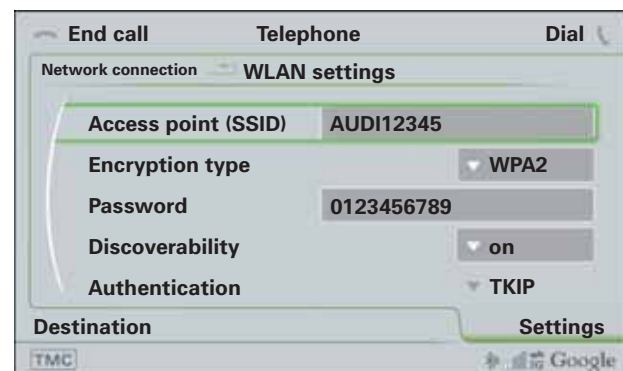
- Access point (SSID) — name of WLAN network
- Encryption type — WEP, WPA or WPA2
- Password
- Discoverability ON

The following values can be changed individually in the "WLAN settings" submenu. Likewise, the same values must be entered into the WLAN device.

The "WLAN settings" submenu can be accessed via the following menu options:

- Telephone
- Settings
- Connections
- Network connection (WLAN)
- WLAN settings

"WLAN profile" menu



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### Note

The final operational features and graphic displays for Audi Connect and Google Earth may differ from those presented here. Always check appropriate literature for the latest information.

## Operating Unit

### Multimedia System Control Head E380

Two versions of E380 are used on the A6. Vehicles equipped with MMI radio plus have a six button keypad for selecting radio presets. On vehicles with the MMI Navigation plus, a touchpad is standard equipment.

E380 has been redesigned for the A6, and is different from the E380 found on the 2011 A8. The "Info" and "Tone" buttons have been eliminated. However, these two functions are still available in the main menu.

E380 is connected to Information Electronics Control Module 1 J794 via a serial RS232 port. E380 is also responsible for activating the MMI display. It is diagnosed via J794 using Address Word 5F.

Operating unit for MMI Radio plus



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Operating unit for MMI touch



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### Button Combinations for Service Work

E380 has modified button combinations for system reset functions and for activating the Engineering menu.

### System Reset

To reset the MMI system, the following buttons must be pressed briefly at the same time:

- Turn-push button
- Softkey at top right
- MENU

Button combination for system reset



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### Engineering Menu

To access this menu, the following buttons must be pressed one after the other and held down:

- CAR
- BACK

Button combinations for the Engineering menu



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## MMI Display

### Front Information Display Control Head J685

Two different displays are used on the A6, depending on vehicle model level. They differ from one another in terms of their size and resolution.

The display is connected to Information Electronics Control Module 1 J794 by a 4 pin connector.

The various features of the display are listed below.

#### 6.5-inch MMI Display

The 6.5-inch display is a TFT color screen with ¼ VGA resolution. This is equivalent to 400 x 240 pixels. It comes standard with the MMI Radio plus system.

Two of the four wires are used for transferring images via LVDS, and one is used for transferring data via the LIN bus. The fourth wire provides a ground circuit.

The display is supplied with electrical power via a separate connector.

#### 8-inch MMI Display

The 8-inch display is a TFT color screen with VGA resolution. This is equivalent to 800 x 480 pixels. It comes exclusively with MMI Navigation plus.



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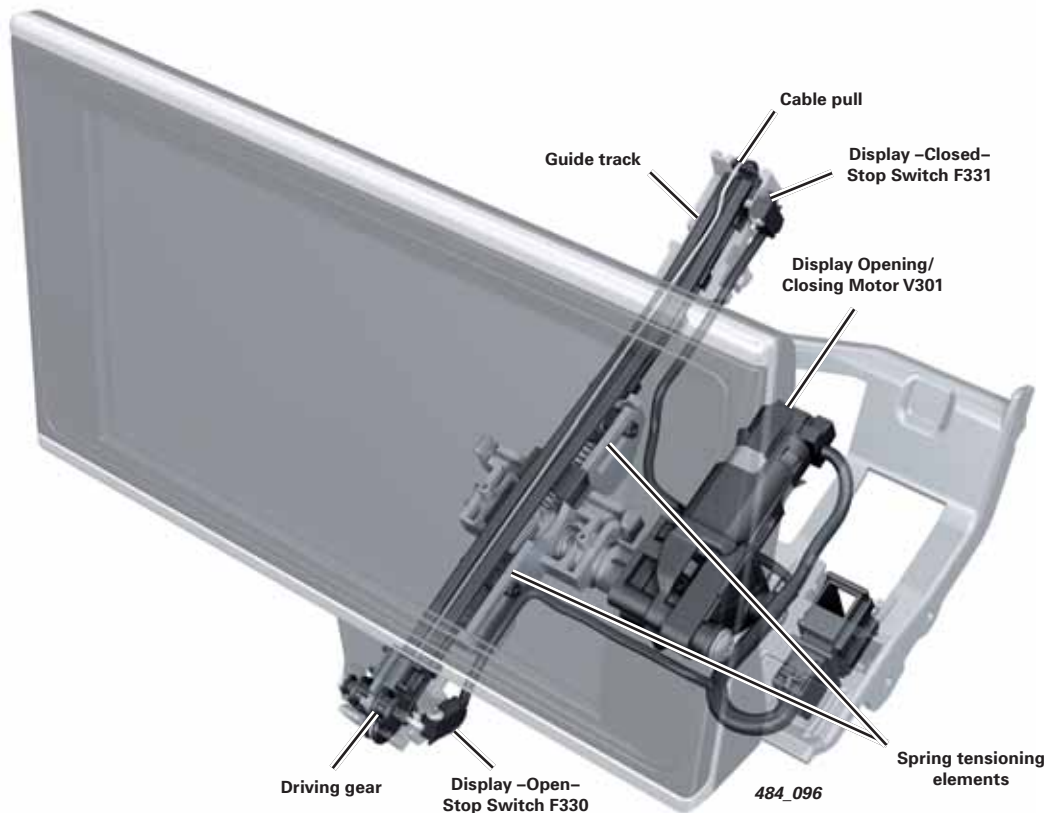
## MMI Display Swivel Mechanism

A cable pull drive is used to raise and lower the MMI display.

The swivel mechanism has the following parts:

- Display Opening/Closing Motor V301
- Display –Open– Stop Switch F330
- Display –Closed– Stop Switch F331
- Cable pull
- Spring tensioning elements
- Guide track
- Driving gear

## Design



## Operation

When the display is opening, V301 drives the pulley. The cable is retracted below the driving gear and unreeled above the driving gear. The driving gear moves down.

The display mount is firmly attached to the driving gear and is swiveled downward, opening the display.

## Activation Mechanism

The motor and both limit switches are activated and evaluated by Multimedia System Control Head E380.

## Service Position

The display must be placed into a service position before it can be removed. During this process, the driving gear is moved to within a defined distance of Display –Closed– Stop Switch F331

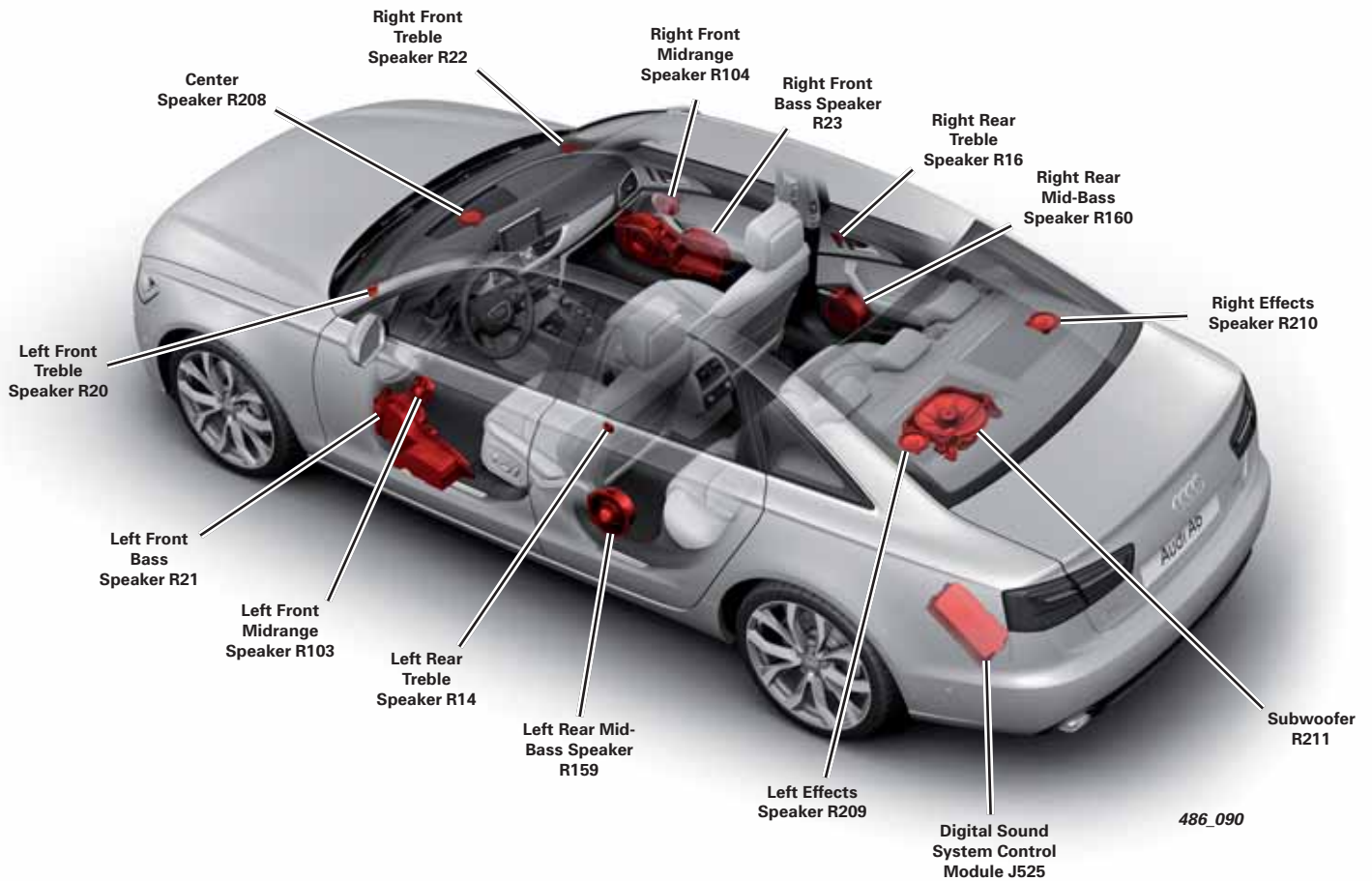
This prevents damage to F331 during removal. The display is moved into the service position using Guided Fault Finding.

## Sound Systems

Three sound systems are offered for the A6. Sound system availability is vehicle model dependent. They are:

- The Audi Sound System
- The Bose Surround Sound System
- The Bang & Olufsen Advanced Sound System

### Bose Surround Sound System

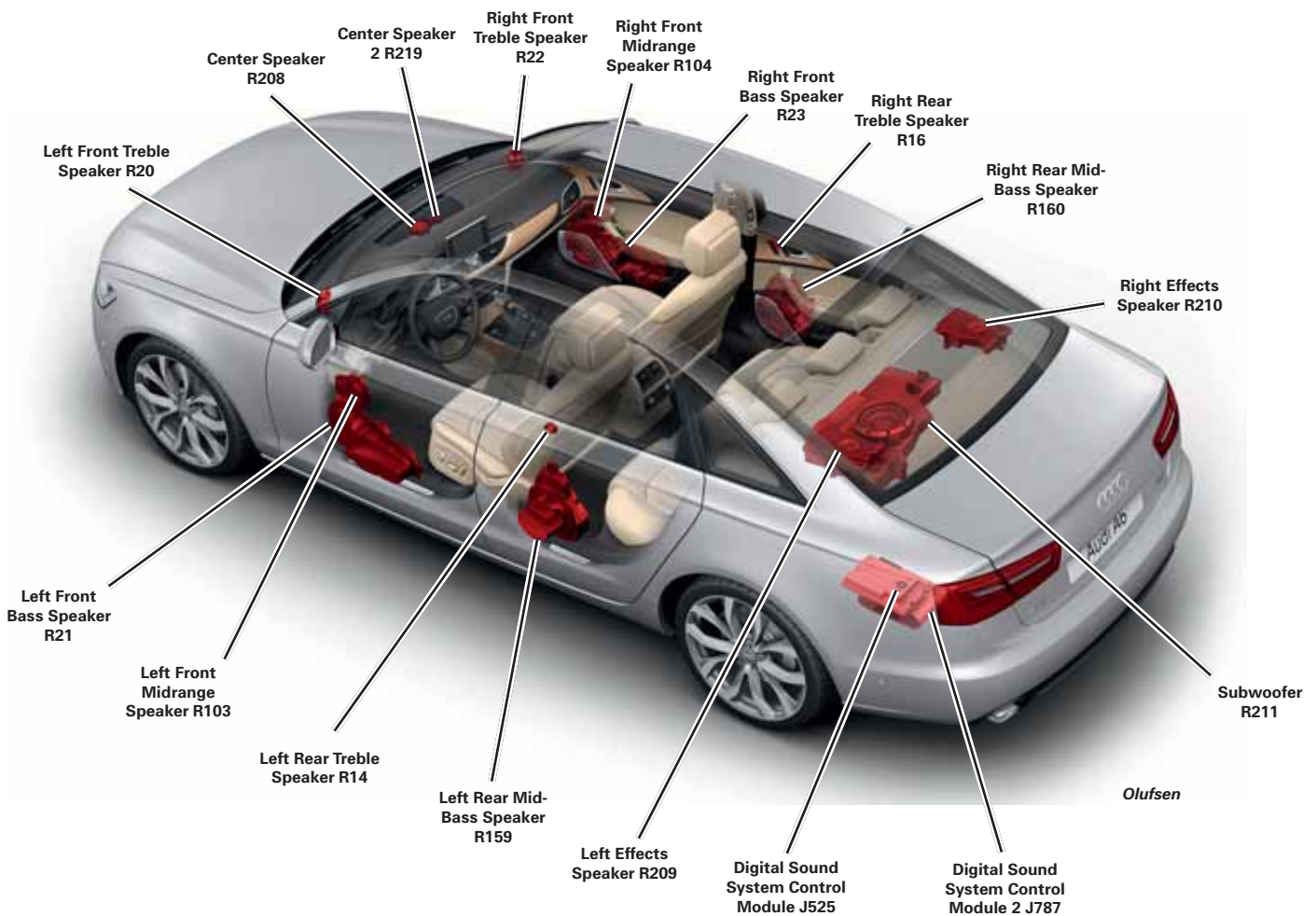


## Bang & Olufsen Advanced Sound System

The Bang & Olufsen Advanced Sound System uses 15 loudspeakers and two amplifiers. They create a sense of space resembling the ambience of a concert hall.

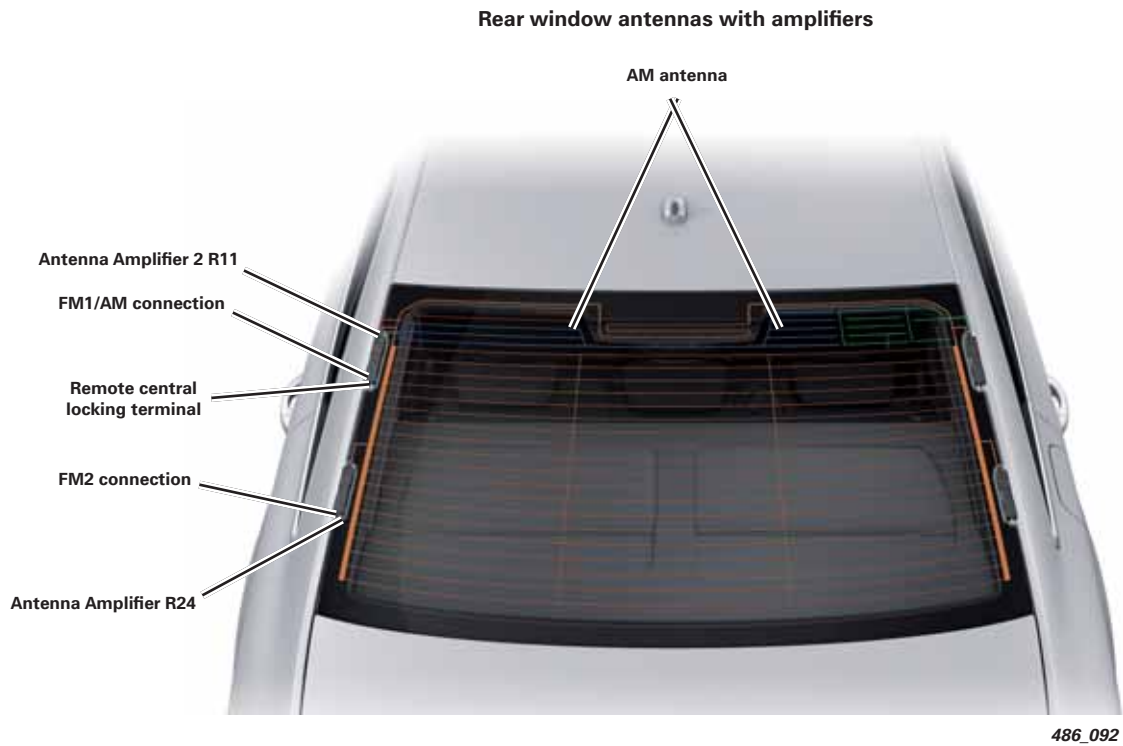
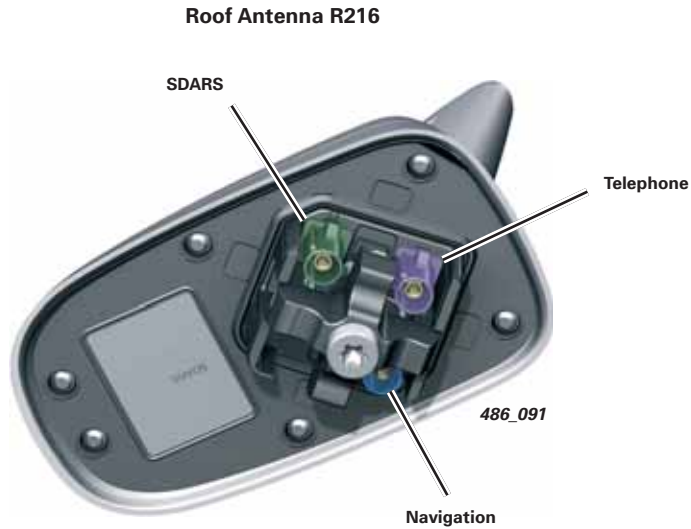
Both amplifiers supply the loudspeakers with 1300 watts total RMS output power. Retractable tweeters in the instrument panel set the stage for a perfect production.

**Bang & Olufsen Sound System**



## Antenna Overview

The antennas for the A6 are located in the rear window glass and the roof. The amplifiers for the rear glass mounted antennas are located in the D-pillar.





# Head-Up Display

## Introduction

The term “head-up display” describes optical systems which project information from various automotive systems into the driver’s extended field of vision.

To view this information, the driver does not have to change their head position significantly and can continue to focus on the road ahead while maintaining an upright posture. Since the driver’s head can remain “up” and need only be lowered slightly, the system is referred to as a head-up display.

The use of special windshields on models with head-up display gives the impression that the display is not actually in the windshield area, but at a comfortable distance of 8.2 ft (2.5 m) away from the driver. The head-up display appears to hover over the hood.



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## Viewing Advantages of Head-Up Display Over Instrument Cluster Display

- The placement of the head-up display in the extended field of vision of the driver means that the driver’s head only needs to be inclined approximately five to 10 degrees to see display data. To see similar data on the instrument cluster display, the driver’s head needs to be inclined approximately 20–25 degrees.
- As the head-up display can be seen in the extended field of vision of the driver, the human eye does not have to adapt to darker surroundings to register the display content, unlike a glance at the instrument cluster.  
This particularly applies during daylight. Adaptation of the eyes from bright to dark to register vehicle parameters and subsequent adaptation from dark to bright can be avoided.
- As the head-up display is perceived at a distance of approximately 6.5 ft – 8.2 ft (1.9 m – 2.4 m) away from the driver, the time the eye needs to focus is significantly lower than glancing periodically at an instrument cluster.

These benefits mean that desired information can be seen more easily and with greater clarity than glancing at an instrument cluster. With head-up display, driver attention to the road ahead is increased.

Use of head-up display greatly improves perception of what is happening on the road, improving overall road safety.

## Display Information

Content of the head-up display has been restricted to the most important vehicle parameters. Current vehicle speed is always shown. It cannot be deactivated in the MMI.

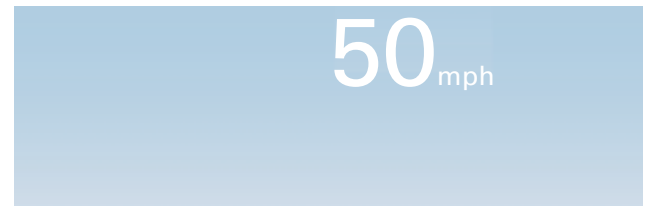
Other display content is only shown if activated in the MMI. Content can be activated in the MMI at the menu option "Head-up Display", then menu "Display Content".

Other content is only displayed temporarily, for example warnings, or modified system settings.

### The display can show the following content:

#### Current Vehicle Speed

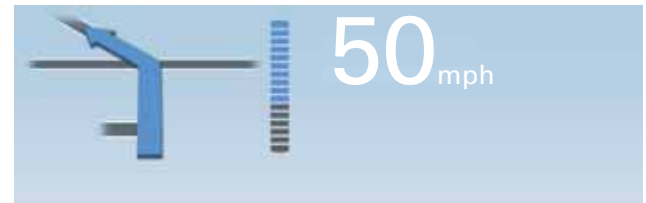
Current vehicle speed is the only vehicle variable that is always displayed. This display cannot be deactivated by the driver.



482\_003

#### Navigation Information

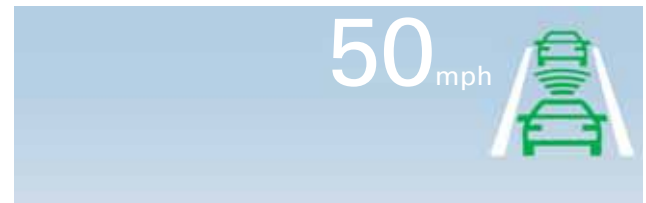
"Navigation Information" is only displayed when the route guidance function is active. This information must be activated in the MMI.



482\_004

#### Combined Display of ACC and Audi Active Lane Assist

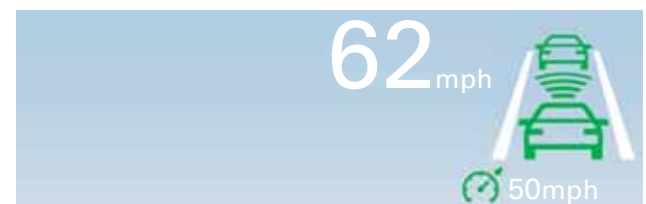
The "ACC/Audi active lane assist" display content must be activated in the MMI.



482\_005

#### Current ACC Set Speed

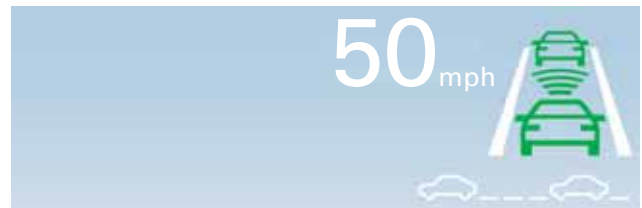
The set control speed of the ACC appears temporarily in the head-up display if modified. The "ACC / Audi active lane assist" display content must be activated in the MMI.



482\_006

### Current ACC Control Distance

This display appears for a short period of time if a change is made to the control distance for ACC.



482\_007

### Audi Night Vision Assist Warning

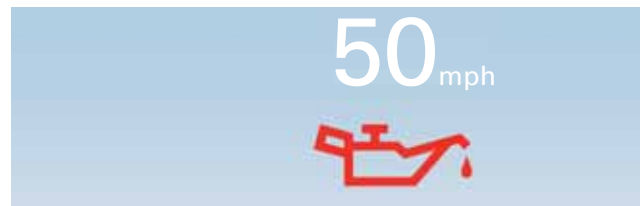
Audi Night Vision Assist warnings can also be shown on the head-up display, once activated in the MMI.



482\_010

### Red Warning Symbols

If red warning signals appear in the instrument cluster, they also appear on the head-up display. The display of red warning symbols cannot be deactivated, and are only displayed briefly. When red warning signals are displayed, all other content is suppressed except vehicle speed.

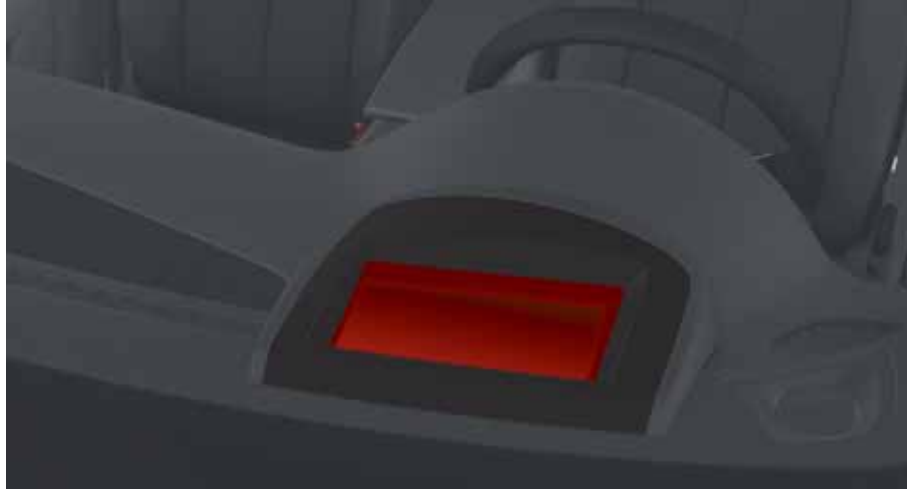


482\_011

## Windshield Projection Head Up Display Control Module J898

The central component of the head-up display system is J898. It contains all the optical, mechanical, and electrical components required for the system.

J898 is mounted in the instrument panel, directly in front of the instrument cluster.



482\_012

Windshield Project Head Up Display Control Module J898



482\_013



### Note

If J898 is defective, the complete unit must be replaced. Replacement requires the removal of the windshield. For more information, refer to current technical literature.

## Optical System

The head-up display is generated by backlighting with 15 LEDs a high resolution TFT display, which is a matrix of Thin Film Transistors.

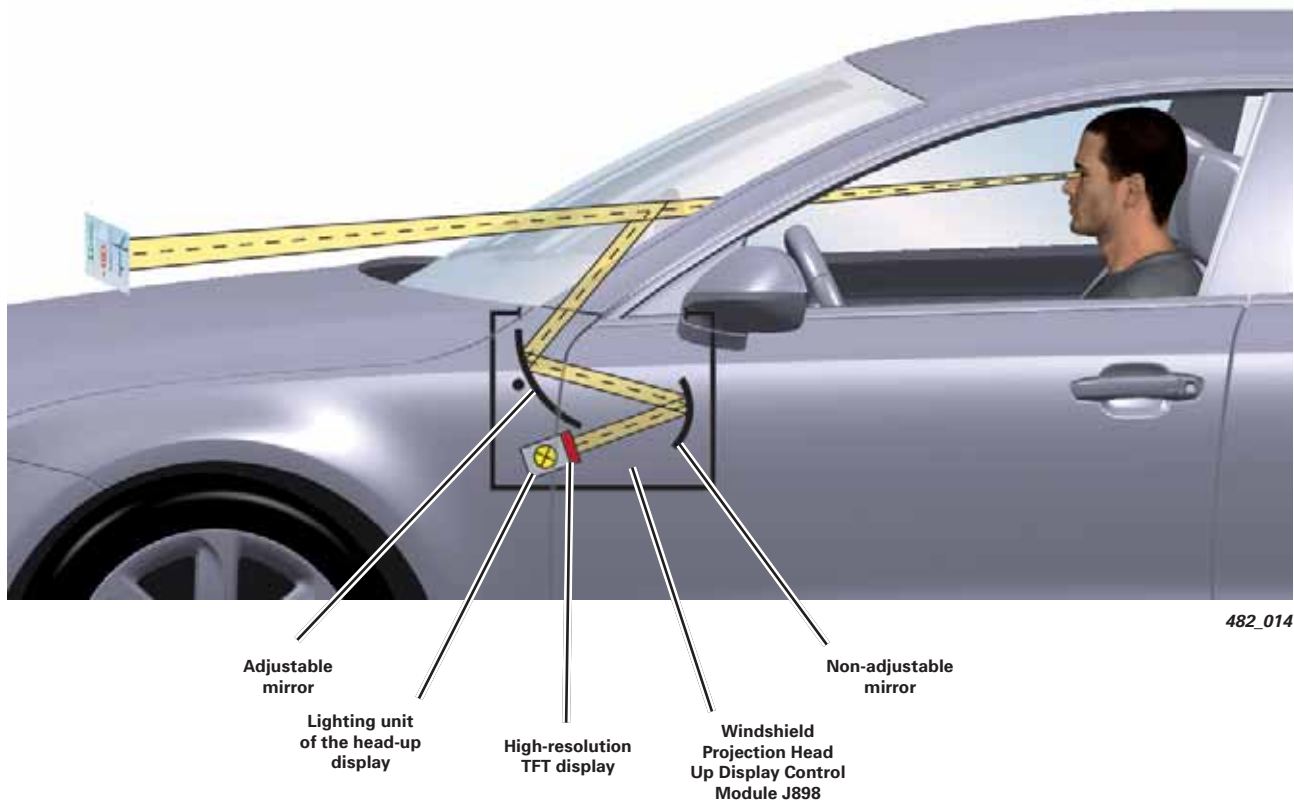
The display's function is similar to that of a slide projector. Light rays are projected via two deflection mirrors onto the windshield. One of the two mirrors is adjustable and is used for height adjustment of the display. This adapts the position of the head-up image to the seating position or body size of the driver.

The mirrors also correct any image distortion caused by curvature of the windshield.

The light intensity of the displayed image is continuously adapted to current ambient lighting conditions. To do this, Windshield Projection Head Up Display Control Module J898 evaluates luminosity values from Rain/Light Recognition Sensor G397.

The driver can adjust the brightness of the display according to their needs. This is done through the MMI and the system controls located on the vehicle light switch.

The light intensity is configured so the display also remains easily legible in direct sunlight.



### Reference

The operation and calibration of the head-up display system for the 2012 A6 is the same as for the 2012 A7. For more details, refer to Self-Study Program 990603, *The 2012 Audi A7 Occupant Protection, Infotainment, Climate Control, and Head-Up Display*.

## Windshield

The windshield is an important optical component of the head-up display. Because the display image is also reflected by the windshield, its function represents a third mirror.

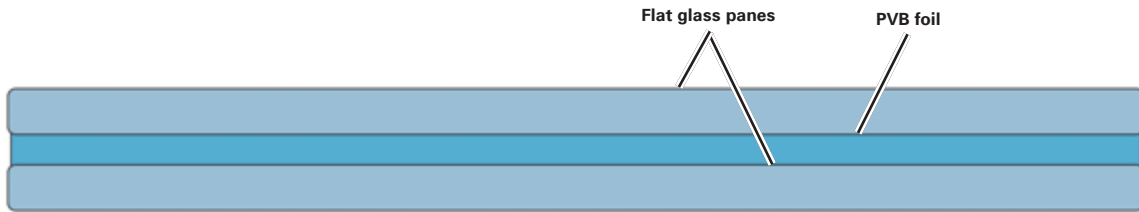
A standard windshield can create a disruptive double image.

The windshield of a vehicle with the head-up display differs from a conventional windshield in that the PVB foil (polyvinyl butyral) between the two flat glass panes of a head-up windshield is not a constant thickness.

A head-up windshield has a slight wedge shape, so the thickness of the windshield increases slightly in an upward direction. This wedge shape eliminates the potential for double images.

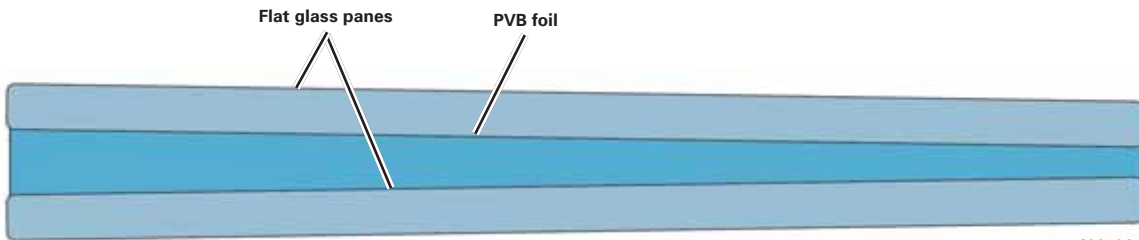
The tolerances for windshield installation are very tight for a vehicle with head-up display.

Windshield of a vehicle without head-up display



482\_016

Windshield of a vehicle with head-up display



482\_015

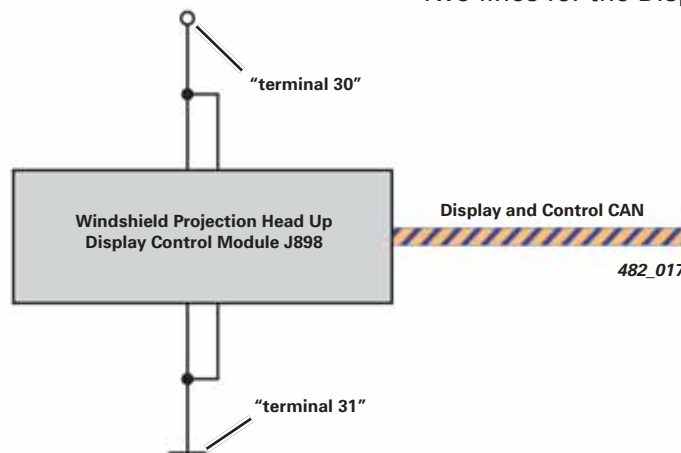
## Electrical System

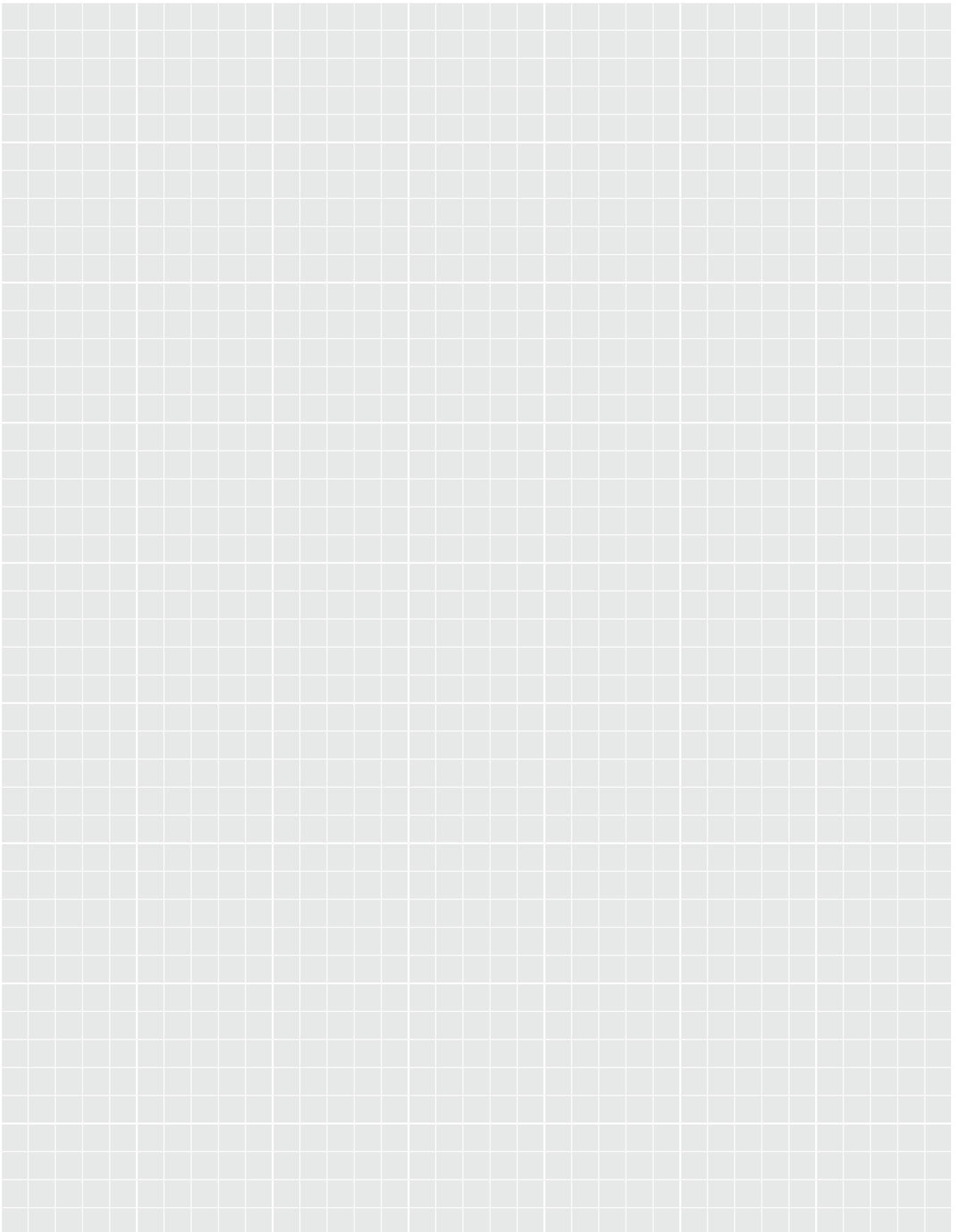
Windshield Projection Head Up Display Control Module J898 communicates with other control modules over the Display and Control CAN.

It is accessed with the VAS Scan Tool through Address Word 82.

There are six electrical connections at the control module:

- Two lines for "terminal 30"
- Two lines for "terminal 31"
- Two lines for the Display and Control CAN





# Self Study Programs for the 2012 Audi A7

## SSP 990203 The 2012 Audi A7 Vehicle Introduction

- Body
- Occupant Protection
- Engine
- Power Transmission
- Suspension System
- Electrical System
- Climate Control
- Infotainment

## SSP 990303 The 2012 Audi A7 Running Gear and Suspension Systems

- Axles and Wheel Alignment
- Adaptive Air Suspension
- Steering System
- Electromechanical Steering
- Brake System
- ESP
- Sensor Electronics Control Module J849
- Adaptive Cruise Control (ACC)
- Wheels and Tires
- Tire Pressure Monitoring (TPMS)

## SSP 990403 The 2012 Audi A7 Onboard Power Supply and Networking

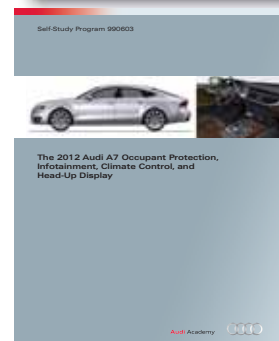
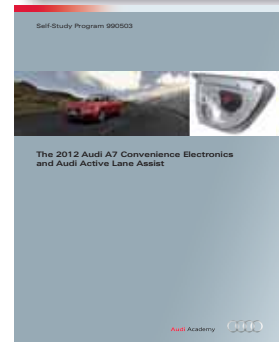
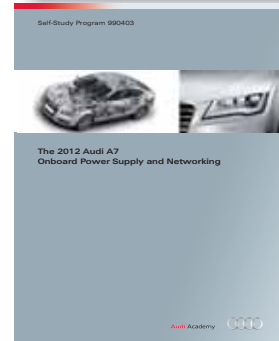
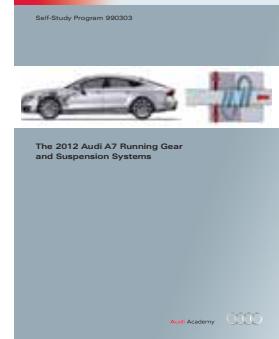
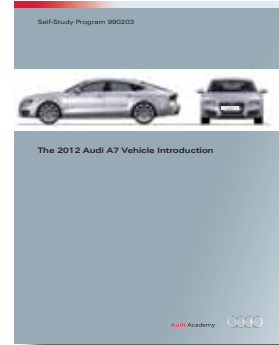
- Power Supply
- Networking
- Control Modules
- Exterior Lighting

## SSP 990503 The 2012 Audi A7 Convenience Electronics and Audi Active Lane Assist

- Topology
- Convenience Electronics
- Audi Active Lane Assist

## SSP 990603 The 2012 Audi A7 Occupant Protection, Infotainment, Climate Control, and Head-Up Display

- Occupant Protection
- Audi pre sense
- Infotainment
- Air Conditioning
- Seat System
- Head-Up Display





# Knowledge Assessment

An on-line Knowledge Assessment (exam) is available for this Self-Study Program.

The Knowledge Assessment is required for Certification.

You can find this Knowledge Assessment at:

**[www.accessaudi.com](http://www.accessaudi.com)**

From the accessaudi.com Homepage:

- Click on the "ACADEMY" tab
- Click on the "Academy Site" link
- Click on the "CRC/Certification" link
- Click on Course Catalog and select "990613 — The 2012 Audi A6 Vehicle Introduction"

For assistance please call:

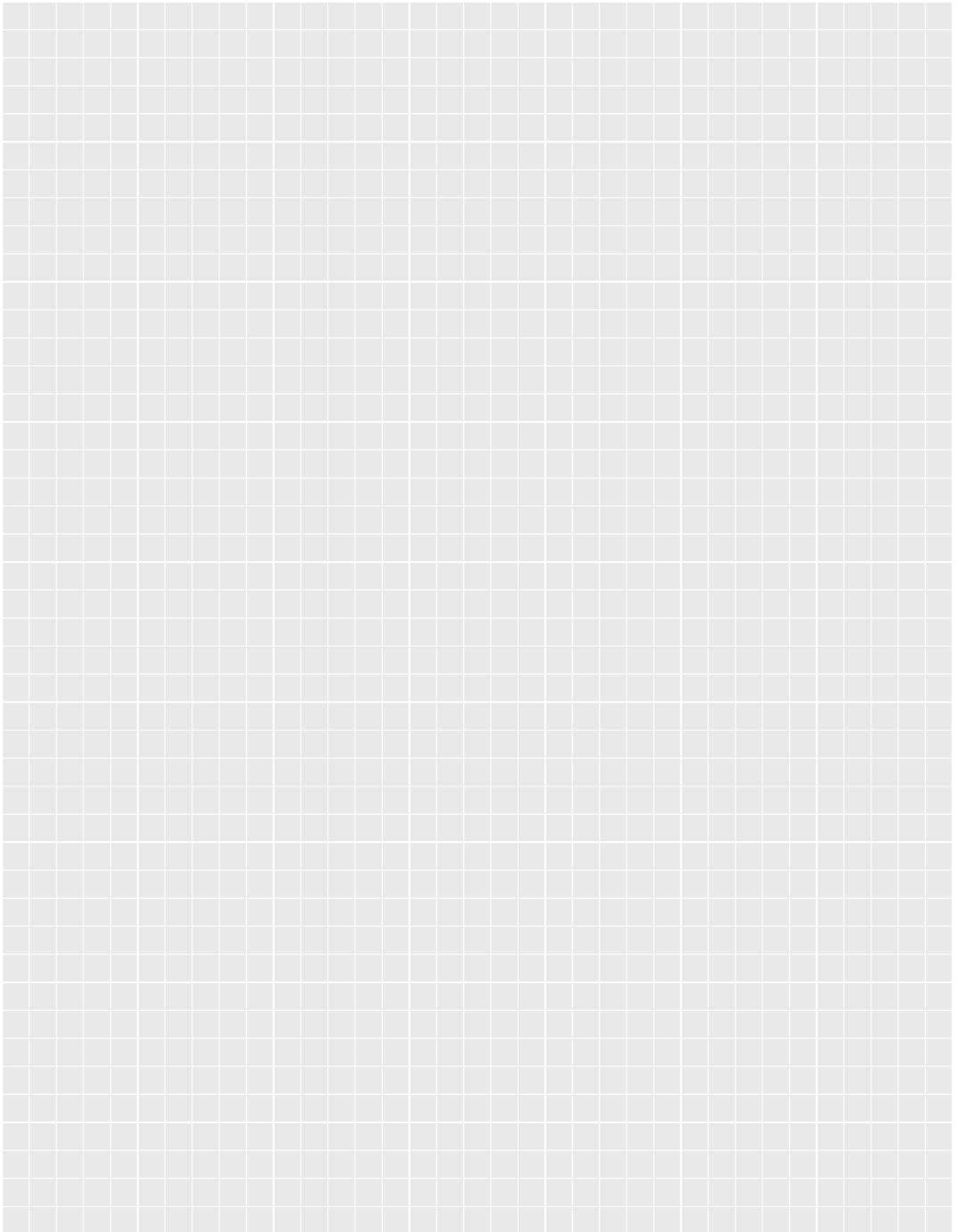
**Audi Academy**  
**Certification Resource Center (CRC)**  
**1-877-283-4562**  
**(8:00 a.m. to 8:00 p.m. EST)**

Or you may send an email to:

**[audicrhelpdesk@touchstone-group.com](mailto:audicrhelpdesk@touchstone-group.com)**

*Thank you for reading this Self-Study Program and taking the assessment.*

# Notes





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990613

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