SAAB

Audio Equipment Manual – 1991

Audio Equipment Manual
Saab – 1991

Introduction

The sophisticated, high performance Saab/Clarion audio system in your car features a completely new design. It provides a higher level of operating convenience than ever before in an automotive sound system.

To make the most of the system's capabilities, however, you first will need to familiarize yourself with its features and controls. Please read this owner's manual carefully before operating the receiver/tape deck, equalizer/spectrum analyzer or compact disc player. Then practice performing all major functions while the car is stationary.

You will be rewarded with optimum audio performance on the road.

Saab/Clarion Audio Protection System

The superlative performance and high-fidelity sound of your Saab/Clarion audio system is designed to give you many years of listening pleasure. Unfortunately, these same qualities would make the system a tempting target for theft if protective measures were not taken. These measures have been taken with the Saab/Clarion Audio Protection System.

The Surest Protection: Removing Your Radio

Since there is no foolproof way to prevent a determined thief from breaking into your car, the most effective deterrent is to remove the incentive to do so. Nobody can take something that is not there to be stolen. That is why your Saab/Clarion audio system components have been designed on removable chassis.
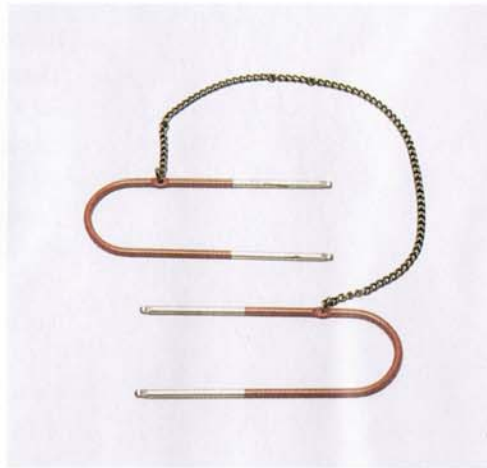
Simply insert the special removal tools provided into the holes on both sides of the faceplate until they lock in place. Withdraw the unit from the dash, ensuring it does not come in contact with the steering wheel.

NOTE! The power should be off and the tape should be ejected before removing the radio.

It takes just a few seconds and presents would be thieves with an empty space instead of a valuable target. You can either take the unit with you, or store it in your trunk. A specially designed protective carrying bag is available from your Saab dealer (Part Number 02 73 136). This bag is a convenient place to store your radio when it is removed and can hold your Saab head cleaning cassette (Part Number 02 59 994).

To reinstall your unit, just slide it back into position. Gently apply pressure between the two removal holes on each side of the unit simultaneously until it locks into place. There are no wires to worry about and nothing for you to connect.

When the radio and/or moved from the dash, preset stations in its me one month.

There is also a Tidy Bo Number 02 73 417) whic into the brackets when moved. This box prote connections and at the s convenient storage spac cles. The tidy box can b using outward finger pr ing towards you.

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iit, just slide it back into
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until it locks into place.
es to worry about and
connect.

When the radio and/or equalizer is re-
moved from the dash, it will retain any
preset stations in its memory for at least
one month.

There is also a Tidy Box available (Part
Number 02 73 417) which can be inserted
into the brackets when the units are re-
moved. This box protects the electrical
connections and at the same time offers a
convenient storage space for small arti-
cles. The tidy box can be easily removed
using outward finger pressure while pull-
ing towards you.

CAUTION!

1. Protect the unit from moisture, high
   ambient temperature and humidity.
   Take sufficient care when cleaning
   the interior of the car and provide
   adequate ventilation.
2. Wipe the unit with a soft, dry cloth
   for cleaning. In cases of severe con-
   tamination, use some cleaning alco-
   hol. Never use benzine, solvents or
   the like.

Using the Electronic Lock-Out System

The second protective measure in the
Saab/Clarion Audio Protection System is an
ingenious electronic lock-out feature. This
renders the cassette/receiver inoperable if
it is removed from the dash or if the radio
power is disconnected during servicing or
for any other reason. The only way to
make the unit functional again is by enter-
ing a special four digit code, which only
you know.

Keying in the code is simple. The easy-to-
understand instructions are given on the
special card which contains your code
numbers and are repeated here. After
you've put the unit back into the dash, sim-
ply:

1. Turn on the ignition.
2. Turn on the radio.
3. Key in your code numbers using the
   station preset switches (1-6). The unit
   will operate.

If you make a mistake while entering your
code, finish entering all four digits. Press
and hold the BAND switch until CODE
reappears on the display. Then enter the
correct code. Your radio also has a built-in
flashing light which indicates to outside
viewers that it contains an electronic Anti-
Theft System. When your ignition is
turned off, this light will flash. It will not
flash when the ignition is turned on. If you
think it is necessary to turn off the flash-
ing light, it can be done manually. Press
and hold the BAND switch until the light
goes out. This light will automatically be
turned on again after the ignition has been
turned on and off.

Anti-theft indicator

Code Entry switches   *Band switch*
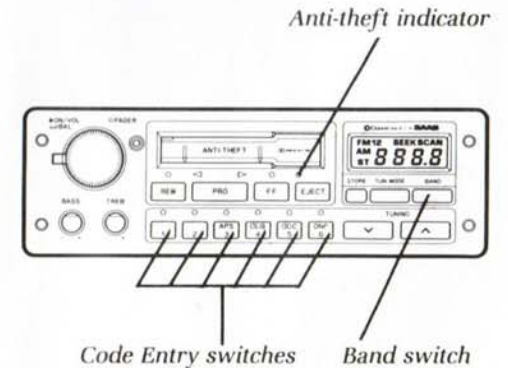
The Saab/Clarion Audio Protection System
is built-in. To enjoy the years of listening
pleasure your audio system was designed
to provide, all you have to do is use it.

Owner Identification Card

In your glove compartment, you will find an Owner Identification Card attached to a card carrier on which your electronic lock-out code and other important information is recorded. Your card also contains the step-by-step reinstallation procedures outlined above.

When you have transferred the owner identification information from your card carrier to your card, place the card in your wallet. Do not leave it in the glove compartment, where it can fall prey to vandals. File the card carrier with your other important documents, where it will not be available to anyone except you.

If you look at your card, you'll see that your radio part number has already been recorded on your Owner Identification Card. Be sure to record your radio serial, electronic lock-out code, vehicle identification and theft I.D. numbers on your card before placing it in your wallet or other safe place. If you lose your Owner Identification Card, contact your Saab dealer.

Key Performance/Convenience Features

Touch-plate Controls

Controls are logically arranged and fall readily to hand, through ergonomically efficient design. Touch-plate digital tuning eliminates conventional tuning knob inaccuracies.

Advanced FM Circuit Design

Incorporates an automatic distance/local circuit (Keyed Automatic Gain Control) that automatically adjusts FM tuner sensitivity for ideal reception based on signal strength. Also, a dual-gate Field Effect Transistor/Balanced Mixer reduces interference from strong adjacent signals. A Signal Actuated Stereo Control (SASC) circuit reduces noise and resists multipath interference, while a special noise-canceling circuit blocks strong noise impulses received through the antenna. It all adds up to clear, clean FM reception under virtually any operating conditions.

AM Stereo (Turbo)

Compatible with all Motorola type AM stereo broadcasts. As long as an AM station is broadcasting in stereo, this tuner will receive the signal and reproduce it.

Cassette Power Off Eject System (Turbo)

Protects tape and tape player from damage by automatically ejecting the tape when power is turned off.

Cassette Auto Reverse, Automatic Program System

Cassette will automatically reverse at the end of the tape or can be manually reversed at any point during play. Automatic Program System (APS) permits replay of the current selection or advancing on to the next.

Night Illumination

All switches are fully illuminated for night viewing.

A photocell is built into the face of each unit. They control the brightness of the display functions according to ambient lighting.

Automatic Antenna Circuit

When the radio is turned on, the electronic antenna automatically extends. When the radio is turned off, the antenna automatically retracts.

CAUTION!

When entering an automatic car wash, be sure to turn the radio off. If the car is driven through the car wash with the antenna extended, the antenna might be damaged.
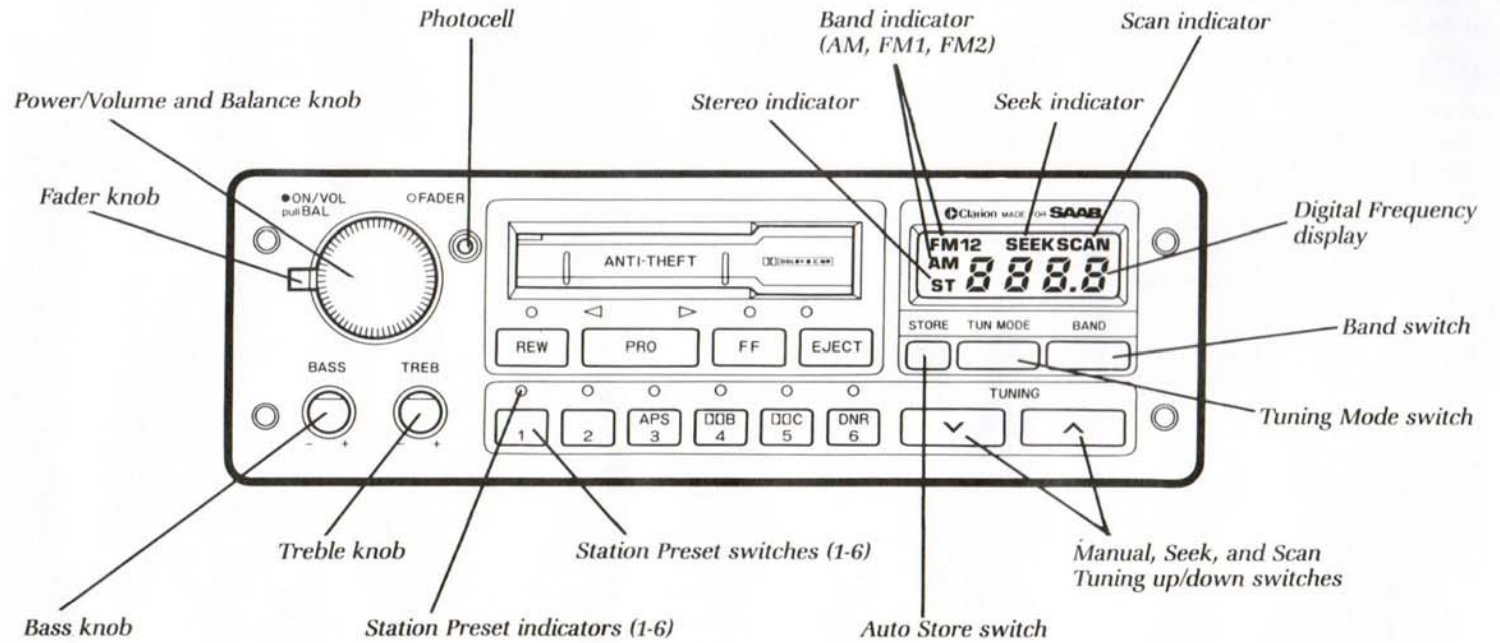
Tuner Feature

Power/Volume and

Fader knob

Bass knob

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Tuner Features and Operation (All Turbo Models)

All Turbo Models

Photocell

Band indicator
(AM, FM1, FM2)

Scan indicator

Power/Volume and Balance knob

Stereo indicator

Seek indicator

Fader knob

Digital Frequency
display

ANTI-THEFT

Band switch

Tuning Mode switch

BASS   TREB

Treble knob

Station Preset switches (1-6)

Manual, Seek, and Scan
Tuning up/down switches

Bass knob

Station Preset indicators (1-6)

Auto Store switch

Tuner Features and Operation

Power/Volume Control

Rotate the power/volume knob clockwise to turn on the radio. Rotating the knob more will increase the volume. If you hear a warning beep, you must enter your four-digit electronic lock-out code. (See Saab/Clarion Audio Protection System, p. 3).

Fader

(Front to Rear) Rotate the fader knob clockwise from the center click-stop position to emphasize the sound to the front speakers. Turn it counter-clockwise from the center click-stop position to emphasize the sound to the rear speakers.

Balance

(Left to Right) Pull the power/volume knob out to the locked position. Rotate the knob clockwise from the center click-stop position to emphasize the sound to the right speakers and counter-clockwise from the center click-stop position to emphasize the sound to the left speakers. After the adjustment is made push the knob back into its original position.

Treble

Depress the treble knob and it will spring outward so that the treble can be controlled. Rotate the knob clockwise from the center click-stop position to increase the treble. Turn it counter-clockwise from the center click-stop position to decrease the treble. After the adjustment is made,

push the knob back into its original position.

Bass

Depress the bass knob and it will spring outward so that the bass can be controlled. Rotate the knob clockwise from the center click-stop position to increase the bass. Turn it counter-clockwise from the center click-stop position to decrease the bass. After the adjustment is made, push the knob back into its original position.

NOTE!

When using the seven-band graphic equalizer, the bass and treble settings should be left in the center click-stop position.

Tuning

Use the Tuning Mode switch to select Manual, Seek, or Scan tuning. The frequency display will indicate both seek and scan modes. A blank display indicates manual mode.

Manual Tuning is accomplished by pressing the ∨ or ∧ switches. The ∨ switch lowers the frequency. The ∧ raises the frequency.

In the Seek Tuning mode, the radio automatically seeks out the next clear station when the ∨ or ∧ switch is depressed. Use the ∨ switch to seek the next clear lower frequency station, the ∧ switch to seek the next clear higher station.

Scan Tuning is started by pressing either the ∨ or ∧ switches. The radio will automatically scan for the next medium-to-strong frequency and play for a few seconds before continuing on to the next. Scanning can be stopped at any desired station simply by pressing the same switch again during the pause.

Station Presets

You can preset up to 18 stations—six on each of the three indicated bands. Once you know which stations you'll enjoy listening to regularly, you can use the preset function to summon them instantly.

First, use the BAND switch to select the AM, FM1 or FM2 band. Note that FM1 and FM2 both represent the regular FM band. The duplicate listing merely allows you to store six FM stations on one band, and six different FM stations on the other.

Using the manual mode, select the first station to be preset. Generally, this will either be the station you listen to most often or the first station on the dial that you listen to frequently. Use whatever sequence is easy for you to remember. To enter this station in memory, depress and hold the No. 1 memory preset switch. An indicator will illuminate above the switch you have preset. While this switch is held, you will hear the volume decrease and then return to its original level. When it returns to its original level, release the switch and that station is memorized. Tune to the next sta-

tion you want memoriz[...] procedure on the next [...] call up a memorized stat[...] appropriately numbered[...]

Auto Store

If you are driving in an [...] and thereby lose the stat[...] listen to—you can use th[...] tion to find and memor[...] stations in the area whi[...] To activate the Auto S[...] press the Auto Store (S[...] two seconds. In this me[...] automatically scan the [...] band (AM if on AM, FM[...] tions with strong signa[...] stored in the radio's me[...] stations cannot be foun[...] will be chosen. The auto[...] only store six stations a[...] AM or six on FM.

If you use the Auto Stor[...] lose the stations that ha[...] programmed into mem[...] reset when you are aga[...] local area.

Stereo Indicator

Whenever the radio is [...] signal, whether AM or [...] indicator will illuminate[...] display.

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hes. The radio will auto-
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and play for a few sec-
inuing on to the next.
stopped at any desired
pressing the same switch
ause.

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indicated bands. Once
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on them instantly.

ND switch to select the
band. Note that FM1 and
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ns on the other.

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et. Generally, this will ei-
you listen to most often
on the dial that you lis-
Use whatever sequence
remember. To enter this
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eset switch. An indicator
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switch is held, you will
ecrease and then return
l. When it returns to its
ase the switch and that
ed. Tune to the next sta-

tion you want memorized and repeat the
procedure on the next preset switch. To
call up a memorized station, simply tap the
appropriately numbered memory preset.

Auto Store

If you are driving in an unfamiliar area—
and thereby lose the stations you generally
listen to—you can use the Auto Store func-
tion to find and memorize the strongest
stations in the area which you're driving.
To activate the Auto Store function, de-
press the Auto Store (STORE) switch for
two seconds. In this mode the radio will
automatically scan the entire frequency
band (AM if on AM, FM if on FM). Six sta-
tions with strong signal strength will be
stored in the radio's memory. If six strong
stations cannot be found, weaker stations
will be chosen. The auto store function will
only store six stations at one time—six on
AM or six on FM.

If you use the Auto Store function, you will
lose the stations that had previously been
programmed into memory. They can be
reset when you are again driving in your
local area.

Stereo Indicator

Whenever the radio is receiving a stereo
signal, whether AM or FM, the stereo (ST)
indicator will illuminate in the frequency
display.

Checking The Tuning Mode

This radio is compatible in both U.S. and
European markets. All radios delivered to
the U.S. will be in the U.S. tuning mode.
To identify which mode the radio is in,
turn on the radio and manually tune up
and down the band. Note the frequency
range limits and tuning steps for each band
in the chart below.

If the radio has been delivered in the Eu-
ropean tuning mode, switching to the U.S.
mode can easily be done following these
steps:

1. Remove and reinstall the radio. DO
   NOT ENTER THE ANTI-THEFT CODE
   YET.

2. Push the Tuning Mode (TUN MODE)
   switch and quickly after, push the
   BAND switch almost as if you are
   pushing them both simultaneously.
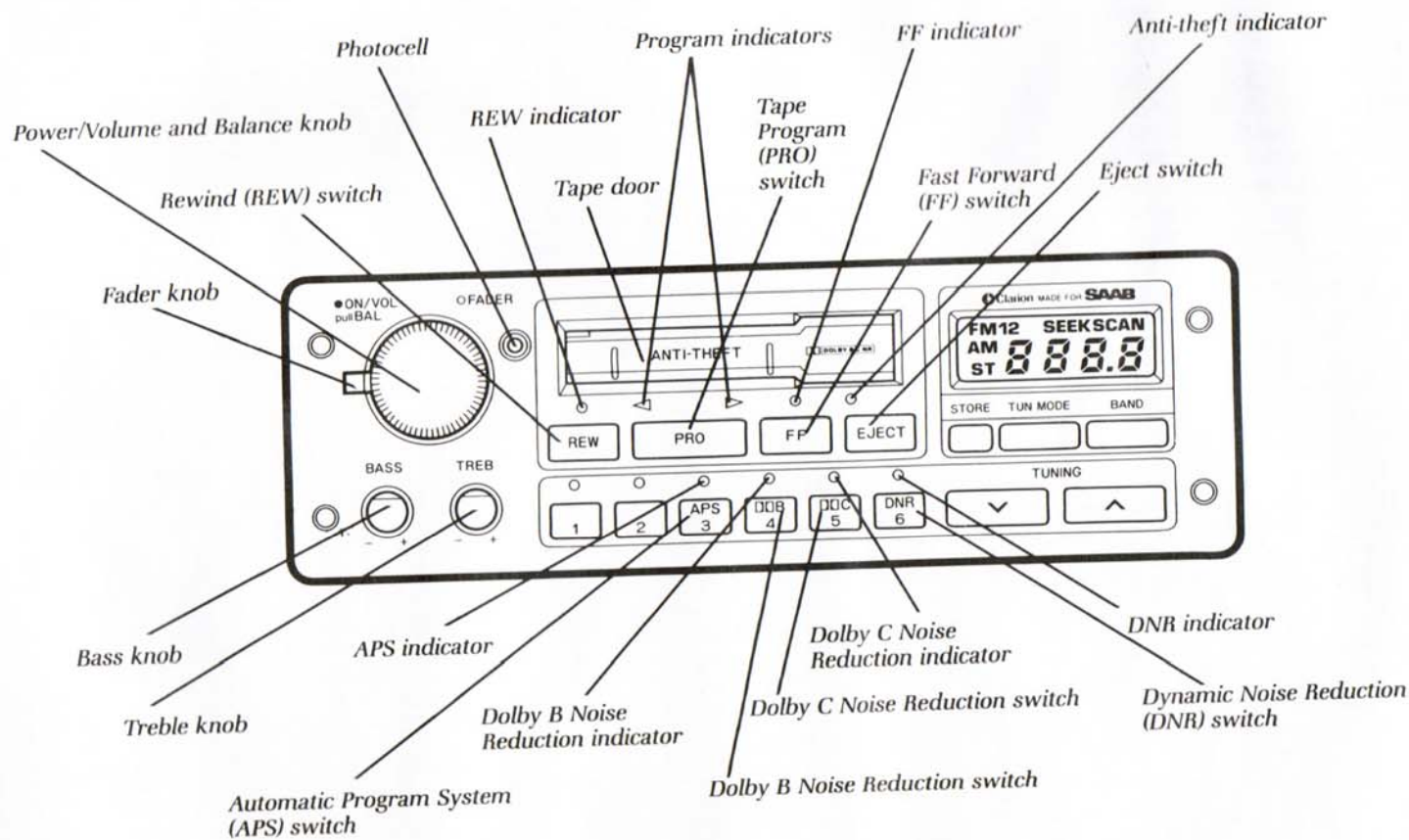   WATCH THE DISPLAY WHILE YOU

ARE PUSHING THESE SWITCHES.
THE DISPLAY WILL FLASH ONCE TO
INDICATE THE MODE CHANGE.

3. Release both switches.

4. Enter your correct anti-theft code.

5. Check the tuning spacing as shown on
   the chart below.

   To reverse the tuning mode, repeat
   this procedure.

	Band	Frequency Range	Steps
U.S.	FM AM	87.9 - 107.9 MHz 530 - 1620 kHz	.2 MHz 10 kHz
EUROPE	FM AM	87.5 - 108.0 MHz 531 - 1602 kHz	.1 MHz 9 kHz

Cassette Features and Operation (All-Turbo Models)

Photocell

Program indicators

FF indicator

Anti-theft indicator

REW indicator

Tape Program (PRO) switch

Power/Volume and Balance knob

Rewind (REW) switch

Tape door

Fast Forward (FF) switch

Eject switch

Fader knob

● ON/VOL pull BAL   ○ FADER

ANTI-THEFT

DOLBY NR

Clarion MADE FOR SAAB

FM12   SEEKSCAN
AM
ST   8888

REW   PRO   FP   EJECT

STORE   TUN MODE   BAND

BASS   TREB

1   2   APS 3   DOB 4   DOC 5   DNR 6

TUNING
∨   ∧

Bass knob

APS indicator

Dolby C Noise Reduction indicator

DNR indicator

Treble knob

Dolby B Noise Reduction indicator

Dolby C Noise Reduction switch

Dynamic Noise Reduction (DNR) switch

Automatic Program System (APS) switch

Dolby B Noise Reduction switch

Cassette Featu...
Operation

To Start

Turn on the Power sw...
unit, and the radio wi...
you hear a warning bee...
digit code. Insert a...
playing side up and th...
of the cassette to the...
begin playing, and th...
direction indicator w...
forward play, ◄ ▷ = r...
volume with the volu...
appropriate noise...
(described later in...
equalization is auto...
(described later in this...

Cassette Programmi...

The tape player feat...
which means the seco...
will automatically be p...
side is finished. But, if...
to listen to Side B mid...
you can switch in...
pressing the Tape Pro...

Fast Forward or Rew...

Fast Forward or Rew...
by pressing the FF or...
necessary to hold the s...
is fast forwarding or...
propriate indicator w...
the switch.

t indicator

tor

Noise Reduction
tch

Cassette Features and Operation

To Start

Turn on the Power switch to activate the unit, and the radio will begin playing. If you hear a warning beep, enter your four-digit code. Insert a cassette—desired playing side up and the exposed tape side of the cassette to the right. The tape will begin playing, and the appropriate tape direction indicator will light. (◁▶ = forward play, ◀▷ = reverse.) Next, adjust volume with the volume knob. Select the appropriate noise reduction setting (described later in this section). Tape equalization is automatically selected (described later in this section).

Cassette Programming

The tape player features Auto Reverse, which means the second side of a cassette will automatically be played when the first side is finished. But, if you decide you'd like to listen to Side B midway through Side A, you can switch instantly simply by pressing the Tape Program (PRO) switch.

Fast Forward or Rewind

Fast Forward or Rewind is accomplished by pressing the FF or REW switch. It is not necessary to hold the switch while the tape is fast forwarding or rewinding. The appropriate indicator will illuminate above the switch.

NOTE!

1. To release the cassette from fast forward, press the FF switch again. To stop the cassette from rewinding, press the REW switch again.

2. If the tape is wound completely in the FF mode, it will stop automatically and play the opposite side. If the tape is wound completely in the REW mode, it will stop automatically and play the same side.

3. If the tape is in the FF or REW mode and the PRO switch is pressed, the tape will stop and begin to play in the opposite direction.

Automatic Program System (APS)

This feature provides still more flexibility. It allows you to repeat the selection you are currently listening to or jump ahead to the next selection before the current one is finished.

To repeat the selection that is currently playing, tap the APS switch (the APS indicator will light) and the cassette rewind (REW) switch.

To jump to the next selection, tap APS and the cassette fast-forward (FF) switch.

NOTE! The APS system may occasionally be "fooled" by the long low-level passages in classical music, since these resemble the silent gaps between selections.

Tape Equalization

There are several different types of tape currently in use, and Automatic Tape Equalization is provided to enable you to match their playback characteristics for the best sound. Most tapes have a normal equalization of $120\mu s$ (normal bias). Unless there is some indication to the contrary—such as the designations "metal," "chrome" or "$70\mu s$" high bias—you can assume that the tape requires normal equalization and the unit will select the normal mode. However, high-performance metal and chrome cassettes (as well as ferrichrome, an infrequently used tape type) require a different equalization. In this case the unit will select the high-bias position.

There is one important exception: Many prerecorded cassettes today use chrome tape for improved performance with normal bias ($120\mu s$) equalization. In this case the unit will not select high-bias.

Noise Reduction

This tape player offers three types, Dolby®B (□□ B), Dolby®C (□□ C) and Dynamic Noise Reduction (DNR). If a cassette is Dolby encoded (look for the □□), press the appropriate Dolby □□ switch. If the cassette is not Dolby encoded, the DNR switch will still provide useful noise reduction. There are illuminated indicators for all three controls.

Eject

When you're finished listening to a tape, simply press the Tape Eject (EJECT) switch. The cassette will be released for retrieval from the tape slot, and the radio will resume playing the most recently tuned station. Your tape will automatically be ejected if the power is turned off.

NOTE! The power should be off and the tape should be ejected before removing the radio.

Routine Maintenance

To perform at its peak, your tape player requires periodic cleaning and demagnetization (elimination of the magnetic field that gradually builds up around the playback head). Of the two tasks, cleaning is the most important—dulled high frequencies will result if it is not carried out regularly.

Cleaning should be performed after every eight to ten hours of playing time, using the Saab head-cleaning cassette (Part Number 02 59 994) or that of another reputable brand. Demagnetizing should be carried out every 50 to 100 hours of playing time, using a quality head demagnetizer (available from most car stereo and audio stores).

CAUTION!

1. Store cassettes in their plastic cases when not in use.
2. Do not leave cassettes in your car, particularly during warm weather.
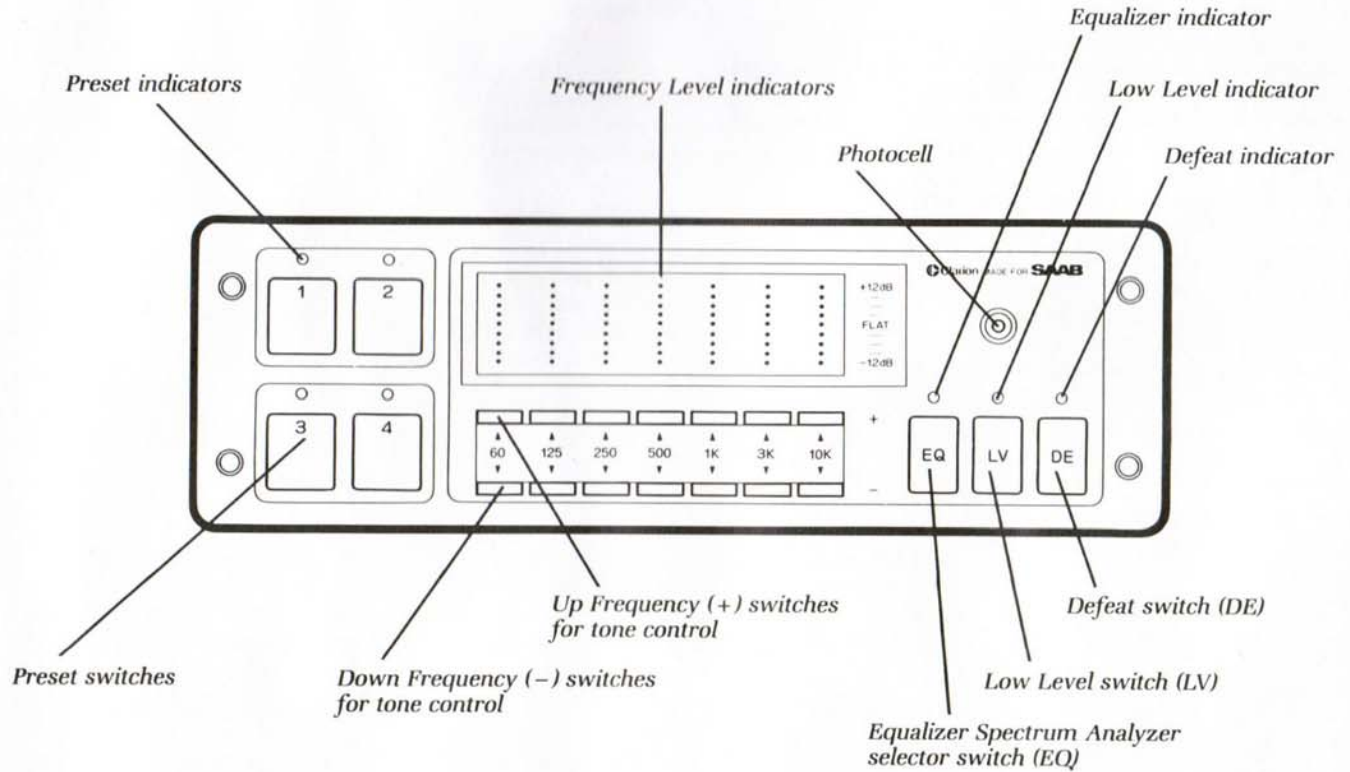3. Take up any slack in the cassette before playing.

4. Do not play C-120 (or longer) cassettes. The tape in these cassettes is very thin and prone to breakage.

Equalizer Fe

Preset indic

Preset switches

Equalizer Features and Operation

Preset indicators

Frequency Level indicators

Equalizer indicator

Low Level indicator

Photocell

Defeat indicator

+12dB

FLAT

-12dB

60   125   250   500   1K   3K   10K

EQ   LV   DE

Up Frequency (+) switches
for tone control

Defeat switch (DE)

Preset switches

Down Frequency (−) switches
for tone control

Low Level switch (LV)

Equalizer Spectrum Analyzer
selector switch (EQ)

Computer Control Equalizer/Spectrum Analyzer Operation

This sophisticated graphic equalizer/spectrum analyzer provides a range of tonal adjustments far beyond the capabilities of conventional tone controls. Because altering frequency response for better sound requires that you pay very close attention to what you are hearing, it is strongly recommended that the equalizer be manually adjusted only when the car is stationary.

Similarly, because the spectrum analyzer enables you to see the frequency band components and sound levels of the music you are listening to, it could prove distracting on the road and should not be used while driving.

However, you can easily and safely summon up any of four preferred frequency band equalizer settings simply by tapping the programmed memory preset switches.

NOTE! If the Defeat (DE) switch has been pressed and the DE indicator is on, the equalizer will be inoperative until DE is pressed again to override it. The Defeat switch serves as the on-off control for the equalizer.
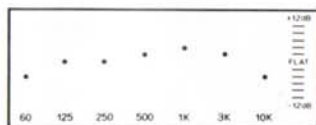
1 JAZZ
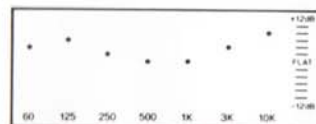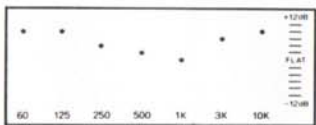
2 CLASSICAL
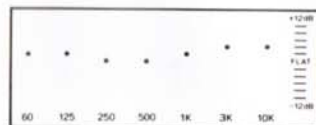
3 VOICE

4 ROCK

As shown above, your equalizer has been set at the factory to enhance four types of music. You may keep these settings or store new ones to suit your listening taste.

Equalizer memory

This equalizer is capable of storing up to four separate settings in its memory. Use the frequency band control switches to make your equalizer adjustment. As an example, suppose you want to decrease the

treble content of the music (at 10kHz) to reduce tape hiss.

Deemphasize this frequency by depressing and holding the (−) frequency band control switch.

Release the (−) frequency band control switch when you think you've reduced this frequency far enough. Conversely, to emphasize the selected frequency band, depress the (+) frequency band control switch.

Repeat this procedur[e]
quency band that needs
you wish to enter your s
simply press and hol[d]
memory preset (1–4) un

60 Hz Frequency Band

Controls the extreme lo[w]
be used to counter the
road noise, etc.

125 Hz Frequency Ban[d]

Controls the low frequen[cy]
frequency range empha[sis]
bass drums, etc. Cutti[ng]
range can help to allevia[te]
sound.

250 Hz Frequency Ban[d]

Controls the medium-
Rhythm section instrum[ents]
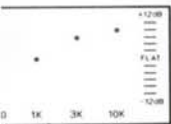etc.) are centered arou[nd]
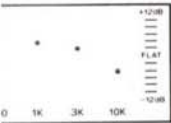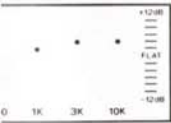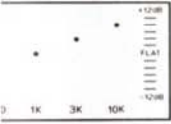range.

500 Hz Frequency Ban[d]

Controls the lower mid-[range]
The main sound energ[y]
ments and human vo[ice]
around this frequency r[ange]

1 kHz Frequency Band

Controls the mid-range f[requency]
500 Hz).

3 kHz Frequency Band

Controls the upper mid-r[ange]
The human ear is most

Equalizer

Repeat this procedure with each frequency band that needs adjusting. Then, if you wish to enter your settings in memory, simply press and hold an appropriate memory preset (1–4) until it flashes.

60 Hz Frequency Band

Controls the extreme low frequencies. Can be used to counter the masking effect of road noise, etc.

125 Hz Frequency Band

Controls the low frequencies. Boosting this frequency range emphasizes the sound of bass drums, etc. Cutting this frequency range can help to alleviate muffled speaker sound.

250 Hz Frequency Band

Controls the medium-low frequencies. Rhythm section instruments (drums, bass, etc.) are centered around this frequency range.

500 Hz Frequency Band

Controls the lower mid-range frequencies. The main sound energy of most instruments and human voices is centered around this frequency range.

1 kHz Frequency Band

Controls the mid-range frequencies (above 500 Hz).

3 kHz Frequency Band

Controls the upper mid-range frequencies. The human ear is most sensitive in this range. Excessive boost can therefore lend a stringent quality to the sound.

10 kHz Frequency Band

Controls the high frequencies. Can be used to attenuate tape hiss, etc.

NOTE! If the unit is removed or battery power is disconnected for any reason, the equalizer memory will retain your settings for up to one month.

Spectrum Analyzer

Simply press the Equalizer/Spectrum Analyzer (EQ) switch to turn on the spectrum analyzer; the EQ indicator will go out. Use the spectrum analyzer display to confirm the evidence of your ears. For example, if you feel the music could use more deep bass, and the spectrum analyzer confirms that there is little or no musical energy in the lower frequency bands, then adjust the equalizer accordingly.
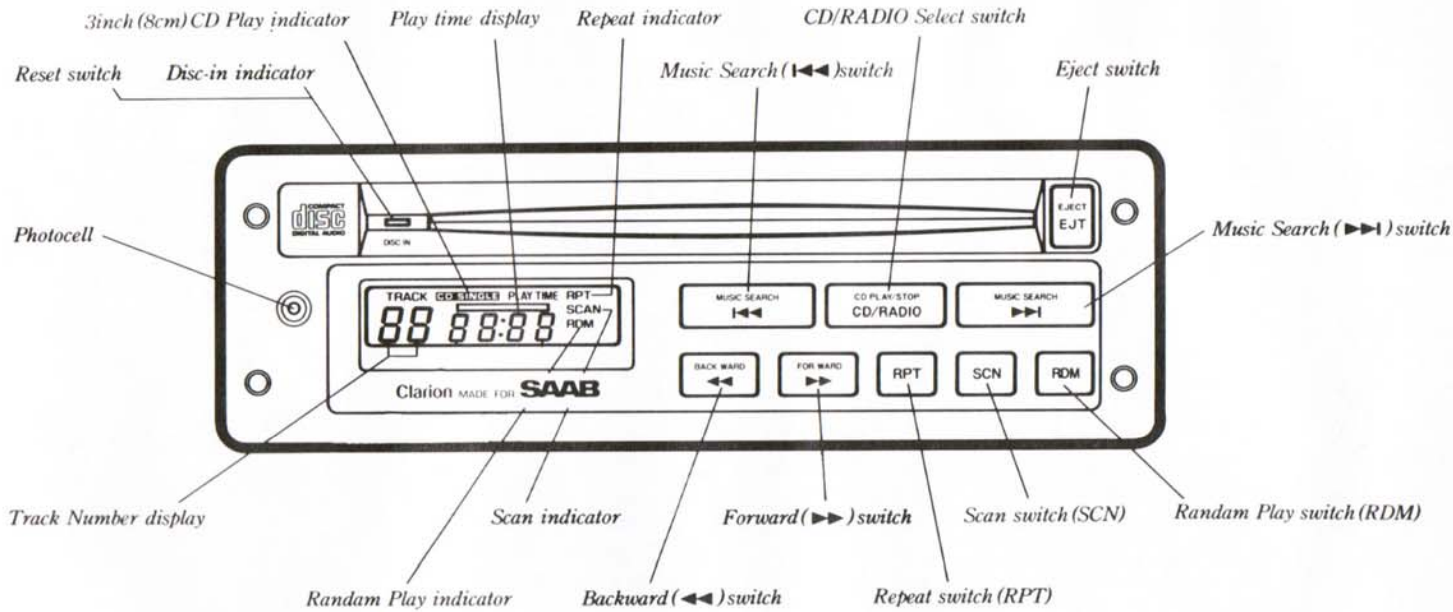
Low Level Switch

During high-powered listening, use of the Low Level (LV) switch will ensure that the musical content displayed does not exceed the upper level of the spectrum analyzer.

Defeat Switch

To restore flat (0 dB) frequency response, press the Defeat (DE) switch. The DE indicator will light, and all seven frequency band 0 dB indicators will illuminate to indicate reception of the command. As long as the DE indicator is illuminated, the frequency band control switches and the equalizer itself are inoperative. To readjust frequencies and turn on the equalizer again, you must first re-press the Defeat switch to reactivate it.

Compact Disc Player Features and Operation

CD CD DIGITAL AUDIO

3inch (8cm) CD Play indicator

Play time display

Repeat indicator

CD/RADIO Select switch

Reset switch *Disc-in indicator*

Music Search (◄◄)switch

Eject switch

Photocell

Music Search (►►I) switch

Track Number display

Scan indicator

Forward (►►) switch

Scan switch (SCN)

Randam Play switch (RDM)

Randam Play indicator

Backward (◄◄) switch

Repeat switch (RPT)

CD Player

Introduction

The optional Saab/Clar
(CD) player is designed
equalizer bracket on all S
are equipped with the
As an anti-theft measur
installation the CD pla
signed to utilize the sam
design as the graphic eq

This unit has been desig
the playing of compact

" **CD DIGITAL AUDIO** " symbol. No o
can be played. The adv
employed in this CD sys
the standard 5″ CD's a
played without utilizing

To Start

All audio functions and
controlled by the radio h
beep while turning the
you must enter your fo
lockout code. (See Saab/C
System p.3).

Gently insert the CD in
until the motorized load
matically accepts the dis
the CD is inserted with th
ward. When the disc is a
IN indicator will illumina
properly loaded and pla
If the disc is of the 3″ for
will illuminate in the disp

Music Search (▶▶I) switch

ndam Play switch (RDM)

Introduction

The optional Saab/Clarion compact disc (CD) player is designed to slide into the equalizer bracket on all Saab models which are equipped with the graphic equalizer. As an anti-theft measure and for ease of installation the CD player has been designed to utilize the same slide out chassis design as the graphic equalizer.

This unit has been designed specifically for the playing of compact discs bearing the " ◎disc " symbol. No other types of discs can be played. The advanced technology employed in this CD system permits both the standard 5″ CD's and 3″ CD's to be played without utilizing an adapter.

To Start

All audio functions and adjustments are controlled by the radio head. If you hear a beep while turning the audio system on you must enter your four digit electronic lockout code. (See Saab/Clarion Protection System p.3).

Gently insert the CD into the player slot until the motorized loading system automatically accepts the disc. Make sure that the CD is inserted with the label facing upward. When the disc is accepted the DISC-IN indicator will illuminate. The CD is now properly loaded and playback will begin. If the disc is of the 3″ format, "CD SINGLE" will illuminate in the display.

NOTE! After reinstalling the CD player it may become necessary to depress the Reset switch in order to make it operate.

The player will always start at track 1 and play the entire compact disc. It will also continuously repeat playing the whole compact disc until the PLAY/STOP or EJECT switch is depressed, or the ignition is turned off.

CAUTION!

Because compact disc players have wider dynamic range than conventional analog systems, peak levels are recorded with high fidelity. Also, the noise level is very low. If you inadvertently turn the volume up while listening to a portion with no signals or very low level signals, the speakers may be damaged when a part of the track with very loud peak levels are played.

Play/Stop

Turn the radio on. When you insert the CD, it will automatically start to play and the number 01 will appear in the display. The display shows the number of the track currently being played. It will also display the elapsed time of the selection in minutes and seconds. Press the CD/RADIO switch to stop play. The radio will play. Press the switch again to start play from the same point. If the ignition key is turned off during play, the unit will stop. When

the ignition key is switched on, play is resumed at the point where you left off.

Eject Switch

Press this switch to eject the CD. The Eject switch will still function with the ignition off. To prevent disc damage, if a disc is ejected and not removed from the player within 15 seconds, the disc will automatically be pulled back inside the player. However, disc play will not resume unless the CD/RADIO button is pressed.

NOTE! This feature will activate only when ejecting a standard 5″ disc.

Music Search

When the player is in the normal play mode, these switches are pressed to search for a desired track. Pressing either switch causes the player to advance to the next track, or return to the previous track.

[▶ ▶I]: When pressed once, the disc advances to the beginning of the next track on the disc; when pressed continuously, the disc moves to the beginning of succeeding tracks on the disc.

[I◀ ◀]: When pressed once, the disc returns to the beginning of the currently playing track; when pressed continuously, the disc moves further in reverse to the beginning of previous tracks on the disc.

Fast Forward/Fast Backward

Press the ►► Fast Forward or ◄◄ Fast Backward switch to activate a slow search. If you continuously depress the ►► or ◄◄ switch for more than ten seconds, the speed of the search will increase.

Scan

Press the Scan (SCN) switch to search for your favorite track. "SCAN" will illuminate in the display. This function will play the first ten seconds of every track. To stop scanning press the Scan (SCN) switch again. "SCAN" will disappear from the display.

Repeat

Press the Repeat (RPT) switch when your favorite track is being played. "RPT" will illuminate in the display. This will enable you to repeat play the selection continuously until you cancel this function. To cancel Repeat, press the Repeat (RPT) switch again. The RPT will disappear from the display.

Random

Press the Random (RDM) switch to select a random playback of tracks. "RDM" will illuminate in the display. The player will rapidly flash track numbers on the display as it determines the random playback order. Once the order has been selected (1-3 seconds), playback will begin at the first calculated track. Playback will then continue in a random fashion. To cancel Random, press the Random (RDM) switch again. The "RDM" will disappear from the display.

NOTE! If you drive over a severe bump the CD player may skip, particularly at low temperature. Play will resume at the same point on the disc automatically. This skip will not damage the disc.

Handling Precautions
Compact Disc Player

1. If the car is parked for a long time in the sun during summer or in a cold location during winter, the temperature inside the car will reach extreme levels. As the unit may not function properly in such a case, use it only after the ambient temperature has returned to normal.

NOTE! Should the temperature in the car reach an extreme level, hot or cold, the CD player will stop operating to protect the laser diode and **HH HH:HH** will illuminate. If this happens allow the CD player to return to normal temperature.

2. When the player is brought into a warm room from previously cold surroundings or when the room temperature is suddenly increased, condensation may form inside and the player may not be able to attain its full performance. In cases like this, allow the unit to stand for about an hour or raise the room temperature gradually.

Care of Discs

1. When holding discs, do not touch their signal surfaces. Hold by the edges, or by one edge and the center hole.

2. Do not affix gummed labels or tape to the label surfaces. Also, do not scratch or damage the label.

3. Discs rotate at high speed inside the player. Do not use damaged (cracked or warped) discs.

4. The presence of fingerprints or smudges on the surface of the disc, will not directly affect the recorded signals, but depending on the degree of contamination, the brightness of the light reflected from the signal surfaces may be reduced, causing degradation of sound quality. Always keep your discs clean by wiping them gently with a soft cloth from the inner edge toward the outer periphery.

5. If a disc becomes very dirty, dip a soft cloth in water and after wringing it out well, wipe the dirt away gently, and then remove any water drops with another soft dry cloth.

6. Do not use record cleaning sprays or anti-static agents on discs. Also, never clean discs with benzene, thinner, or other volatile solvents, since damage to the disc surface may result.

7. Discs are made of the same kinds of plastic used for conventional analog audio records. Be careful not to allow discs to warp in the car. Avoid locations with high heat or humidity, or extremely low temperatures. Avoid leaving discs in cars, since the interior of a car can become very hot in direct sunlight. Always read and abide by the precautionary notes provided with each disc.

Optional Three Compo

The sound reproductio the CD player can be f 9000 models with the optional 3-DIN Cabling 47 122.

This accessory, availab dealer, enables the Cl stalled together with th By creating a three co tem, your music enjoy with the ability to add izer tonal adjustments

NOTE! When the op and graphic equaliz gether in a Saab 9000 ponent audio syster proved provisions lighter and front as nated. Thus, installa bination of audio e tended for vehicles used by non-smokers

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high speed inside the
use damaged (cracked or

fingerprints or smudges
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recorded signals, but de-
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f the same kinds of plas-
nventional analog audio
ful not to allow discs to
Avoid locations with high
, or extremely low tem-
leaving discs in cars,
r of a car can become
t sunlight. Always read
ne precautionary notes
ch disc.

Optional Three Component System (9000)

The sound reproduction characteristics of the CD player can be further enhanced in 9000 models with the installation of the optional 3-DIN Cabling System Kit, P/N 02 47 122.

This accessory, available from your Saab dealer, enables the CD player to be installed together with the graphic equalizer. By creating a three component audio system, your music enjoyment will increase with the ability to add the graphic equalizer tonal adjustments to the CD player.

NOTE! When the optional CD player and graphic equalizer are used together in a Saab 9000 as a three component audio system, the only approved provisions for a cigarette lighter and front ashtray are eliminated. Thus, installation of this combination of audio equipment is intended for vehicles which are to be used by non-smokers.

Precaution

This equipment generates and uses radio frequency energy and if not installed and used properly, that is, in strict accordance with the manufacturer's instructions, may cause interference to radio and television reception. It has been type tested and found to comply with the limits for a Class B computing device in accordance with the specifications in Subpart J of Part 15 of the FCC Rules, which are designed to provide reasonable protection against such interference in a residential installation. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to confirm the interference by the following measure.

Move the CD player away from the device that is being interfered with to confirm that the interference disappears.

If necessary, the user should consult the car dealer or an experienced radio/television technician for additional suggestions. The user may find the following booklet prepared by the Federal Communications Commission helpful: "How to Identify and Resolve Radio-TV Interference Problems." This booklet is available from the U.S. Government Printing Office, Washington, DC 20402, Stock No. 004-000-00345-4.

WARNING!

Use of controls, adjustment, or performance of procedures other than those specified herein, may result in hazardous radiation exposure.

The compact disc player should not be adjusted or repaired by anyone except properly qualified service personnel.

DANGER—Invisible laser radiation when open and interlock failed or defeated.
AVOID DIRECT EXPOSURE TO BEAM (CAO7626 1)
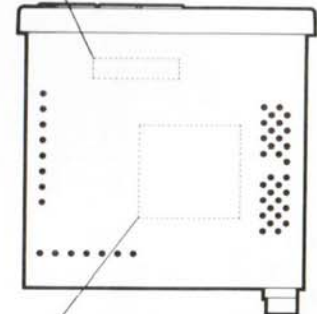
clarion compact disc player made for SAAB
PART NO. 02 47 171
12V D.C. NEG. GND. CLARION CO., LTD.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions : (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

THIS PRODUCTION COMPLIES WITH DHHS RULES 21 CFR SUBCHAPTER J APPLICABLE AT DATE OF MANUFACTURE.

MANUFACTURED BY CLARION CO., LTD.
50 KAMITODA, TODA-SHI, SAITAMA-KEN, JAPAN.

PU-2045A   SERIAL NO.

MANUFACTURED:

286-7552-00

CD Player

Features and Operation (All Non-Turbo Models)

Digital Frequency display

Dolby indicator

Tape Direction indicator

Seek indicator

Scan indicator

APS indicator

Tape Program switch (◁▷)

Station Preset indicator

Tape door

Fast Forward/Rewind (◄◄/ ►►) and Eject (⌒) switches

Stereo indicator

Band indicator (AM, FM1, FM2)

Anti-theft indicator

Band switch

Fader knob

Tuning Mode switch

Power/Volume and Balance knob

Photocell

Dolby B Noise Reduction switch ▭▭

Manual, Seek, Scan Tuning up/down switches

Bass knob

Treble knob

Automatic Program System switch (APS)

Station Preset switches (1-6)

All Non-Turbo Models

Tuner Features
Operation

Power/Volume Contr

Rotate the power/volu
to turn on the radio
more will increase th
appears on the displ
your four-digit electr
(See Saab/Clarion Au
tem, p.3).

Fader

(Front to Rear) Rota
clockwise from the ce
tion to emphasize the
speakers. Turn it cou
the center click-stop p
the sound to the rear

Balance

(Left to Right) Pull the
out to the locked posit
clockwise from the ce
tion to emphasize the
speakers and counter
center click-stop positi
sound to the left spe
justment is made, push
its original position.

Treble

Depress the treble kn
outward so that the
trolled. Rotate the kn
the center click-stop
the treble. Turn it cou
the center click-stop

Tuner Features and Operation

Power/Volume Control

Rotate the power/volume knob clockwise to turn on the radio. Rotating the knob more will increase the volume. If CODE appears on the display, you must enter your four-digit electronic lock-out code. (See Saab/Clarion Audio Protection System, p.3).

Fader

(Front to Rear) Rotate the fader knob clockwise from the center click-stop position to emphasize the sound to the front speakers. Turn it counter-clockwise from the center click-stop position to emphasize the sound to the rear speakers.

Balance

(Left to Right) Pull the power/volume knob out to the locked position. Rotate the knob clockwise from the center click-stop position to emphasize the sound to the right speakers and counter-clockwise from the center click-stop position to emphasize the sound to the left speakers. After the adjustment is made, push the knob back into its original position.

Treble

Depress the treble knob and it will spring outward so that the treble can be controlled. Rotate the knob clockwise from the center click-stop position to increase the treble. Turn it counter-clockwise from the center click-stop position to decrease the treble. After the adjustment is made, push the knob back into its original position.

Bass

Depress the bass knob and it will spring outward so that the bass can be controlled. Rotate the knob clockwise from the center click-stop position to increase the bass. Turn it counter-clockwise from the center click-stop position to decrease the bass. After the adjustment is made, push the knob back into its original position.

NOTE! When using the seven-band graphic equalizer, the bass and treble settings should be left in the center click-stop position.

Tuning

Use the Tuning Mode switch to select Manual, Seek, or Scan tuning. The frequency display will indicate both seek and scan modes. A blank display indicates manual mode.

Manual Tuning is accomplished by pressing the ∨ or ∧ switches. The ∨ switch lowers the frequency. The ∧ switch raises the frequency.

In the Seek Tuning mode, the radio automatically seeks out the next clear station when the ∨ or ∧ switch is depressed. Use the ∨ switch to seek the next clear lower frequency station, the ∧ switch to seek the next clear higher station.

Scan Tuning is started by pressing either the ∨ or ∧ switches. The radio will automatically scan for the next medium to strong frequency and play for a few seconds before continuing on to the next. Scanning can be stopped at any desired station simply by pressing the same switch again during the pause.

Station Presets

You can preset up to 18 stations — six on each of the three indicated bands. Once you know which stations you'll enjoy listening to regularly, you can use the preset function to summon them instantly.

First, use the BAND switch to select the AM, FM1 or FM2 band. Note that FM1 and FM2 both represent the regular FM band. The duplicate listing merely allows you to store six FM stations on one band, and six different FM stations on the other.

Using the manual mode, select the first station to be preset. Generally, this will either be the station you listen to most often or the first station on the dial that you listen to frequently. Use whatever sequence is easy for you to remember. To enter this station in memory, depress and hold the No. 1 memory preset switch. An indicator will illuminate in the display. While this

orward/Rewind (◄◄ / ►►)

nd Eject (⤢) switches

___ *Anti-theft indicator*

___ *Band switch*

___ *Tuning Mode switch*

lanual, Seek, Scan Tuning /down switches

All Non-Turbo Models

switch is held, you will hear the volume decrease and then return to its original level. When it returns to its original level, release the switch and that station is memorized. Tune to the next station you want memorized and repeat the procedure on the next preset switch. To call up a memorized station, simply tap the appropriately numbered memory preset.

Stereo Indicator

Whenever the radio is receiving an FM stereo signal, the Stereo (ST) indicator will illuminate in the frequency display.

Checking The Tuning Mode

This radio is compatible in both U.S. and European markets. All radios delivered to the U.S. will be in the U.S. tuning mode. To identify which mode the radio is in, turn on the radio and manually tune up and down the band. Note the frequency range limits and tuning steps for each band in the chart below.

If the radio has been delivered in the European tuning mode, switching to the U.S. mode can easily be done following these steps:

1. Remove and reinstall the radio. DO NOT ENTER THE ANTI-THEFT CODE YET.

2. Push the Tuning Mode (TUN MODE) switch and quickly after, push the BAND switch almost as if you are pushing them both simultaneously. WATCH THE DISPLAY WHILE YOU ARE PUSHING THESE SWITCHES. THE DISPLAY WILL FLASH ONCE TO INDICATE THE MODE CHANGE.

3. Release both switches.

4. Enter your correct anti-theft code.

5. Check the tuning spacing as shown on the chart below.

To reverse the tuning mode, repeat this procedure.

	Band	Frequency Range	Steps
U.S.	FM	87.9 - 107.9 MHz	.2 MHz
	AM	530 - 1620 kHz	10 kHz
EUROPE	FM	87.5 - 108.0 MHz	.1 MHz
	AM	531 - 1602 kHz	9 kHz

Cassette Featu
Operation

To Start

Turn on the Power sw
unit, and the radio wi
you see CODE displaye
digit code. Insert a c
playing side up and the
of the cassette to the r
begin playing, and the
direction indicator wi
forward play, ◀▷
adjust volume with t
Select the appropriat
setting (described late
Tape equalization is au
(described later in this

Cassette Programmin

The tape player featu
which means the secon
will automatically be pl
side is finished. But, if yo
to listen to Side B midw
you can switch inst
pressing the Tape Progr

Fast Forward or Rewin

Fast Forward or Rewin
by pressing the ◀◀
It is not necessary to ho
the tape is forwarding
tape will wind at a high
tion the arrows are poin
rection indicator befor
REW to verify tape dire

ng Mode (TUN MODE)
uickly after, push the
almost as if you are
both simultaneously.
DISPLAY WHILE YOU
 THESE SWITCHES.
WILL FLASH ONCE TO
 MODE CHANGE.
vitches.
rect anti-theft code.
ng spacing as shown on
v.
 tuning mode, repeat

	Steps
	.2 MHz
	10 kHz
	.1 MHz
	9 kHz

Cassette Features and Operation

To Start

Turn on the Power switch to activate the unit, and the radio will begin playing. If you see CODE displayed, enter your four-digit code. Insert a cassette — desired playing side up and the exposed-tape side of the cassette to the right. The tape will begin playing, and the appropriate tape direction indicator will light. (◁▶ = forward play, ◀▷ = reverse.) Next, adjust volume with the volume knob. Select the appropriate noise reduction setting (described later in this section). Tape equalization is automatically selected (described later in this section).

Cassette Programming

The tape player features Auto Reverse, which means the second side of a cassette will automatically be played when the first side is finished. But, if you decide you'd like to listen to Side B midway through Side A, you can switch instantly simply by pressing the Tape Program (◁▷) switch.

Fast Forward or Rewind

Fast Forward or Rewind is accomplished by pressing the ◀◀ or ▶▶ switches. It is not necessary to hold the switch while the tape is forwarding or rewinding. The tape will wind at a high speed in the direction the arrows are pointed. Check tape direction indicator before pressing FF or REW to verify tape direction.

NOTE! To release the cassette from the Fast Forward or Rewinding mode, partially depress the opposite function. Example: If the cassette is rewinding, depress Fast Forward partially to release.

If the tape is wound completely in the Fast Forward mode, it will stop automatically and play the opposite side. If the tape is wound completely in the Rewind mode, it will stop automatically and play the same side.

If the tape is in the Fast Forward or Rewind mode and the Program switch is pressed, the tape will stop and begin play in the opposite direction.

Automatic Program System (APS)

This feature provides still more flexibility. It allows you to repeat the selection you are currently listening to or jump ahead to the next selection before the current one is finished.

To repeat the selection that is currently playing, tap the APS switch (the APS indicator will light) and the cassette Rewind (◀◀) switch.

To jump to the next selection, tap APS and the cassette Fast Forward (▶▶) switch.

NOTE! The APS system may occasionally be "fooled" by the long low-level passages in classical music, since these resemble the silent gaps between selections.

Tape Equalization

There are several different types of tape currently in use, and Automatic Tape Equalization is provided to enable you to match their playback characteristics for the best sound. Most tapes have a normal equalization of 120μs (normal bias). Unless there is some indication to the contrary—such as the designations "metal," "chrome" or "70μs" (high bias)—you can assume that the tape requires normal equalization and the unit will select the normal mode. However, high-performance metal and chrome cassettes (as well as ferrichrome, an infrequently used tape type) require a different equalization. In this case the unit will select the high-bias position.

There is one important exception: Many prerecorded cassettes today use chrome tape for improved performance with normal bias (120μs) equalization. In this case the unit will not select high-bias.

Noise Reduction

This tape player offers Dolby® "B" Noise Reduction. If a cassette is Dolby encoded

(look for the □□), press the Dolby □□ switch. There is an illuminated indicator for this control located in the display screen.

Head-Release System

If the power is turned off while the tape is playing, the tape head will automatically release. When the power is turned on, the tape will begin normal play.

Eject

When you're finished listening to a tape, simply press the Fast Forward and Rewind buttons at the same time to eject the tape cartridge. The cassette will be released for retrieval from the tape slot, and the radio will resume playing the most recently tuned station.

Routine Maintenance

To perform at its peak, your tape player requires periodic cleaning and demagnetization (elimination of the magnetic field that gradually builds up around the playback head). Of the two tasks, cleaning is the most important—dulled high frequencies will result if it is not carried out regularly.

Cleaning should be performed after every eight to ten hours of playing time, using the SAAB head-cleaning cassette (Part Number 02 59 994) or that of another reputable brand. Demagnetizing should be carried out every 50 to 100 hours of playing time, using a quality head demagnetizer (available from most car stereo and audio stores).

CAUTION!

1. Store cassettes in their plastic cases when not in use.
2. Do not leave cassettes in your car, particularly during warm weather.
3. Take up any slack in the cassette before playing.

4. Do not play C-120 (or longer) cassettes. The tape in these cartridges is very thin and prone to breakage.

Broadcast Re

FM reception poses pa ing problems because transmitted at very h straight lines like light of obstacles can and do buildings, hills, etc. S cause "shadows" with signal.

In addition, FM signa flected by obstruction pens, direct and reflect same station can arriv tenna simultaneously. T is known as multipath i

The tuner in this unit w imize multipath interf common reception prol

Under weak signal cor Actuated Stereo Cont takes over to provide t ble signal, switching t when circumstances matic distance/local (Keyed Automatic Gain full sensitivity, while a amplifier provides a h ratio.

Optimum selectivity vi interference from stror and a special FM noise suppress ignition noise terference. Wide dyna overload distortion an noise it causes.

Broadcast Reception Performance Characteristics

FM reception poses particularly challenging problems because FM radio waves are transmitted at very high frequencies in straight lines like light waves. Any number of obstacles can and do get in the way: tall buildings, hills, etc. Such obstacles can cause "shadows" with momentary loss of signal.

In addition, FM signals can also be reflected by obstructions. When this happens, direct and reflected signals from the same station can arrive at the car's antenna simultaneously. The noise this causes is known as multipath interference.

The tuner in this unit was designed to minimize multipath interference and other common reception problems.

Under weak signal conditions, the Signal Actuated Stereo Control (SASC) circuit takes over to provide the strongest possible signal, switching to mono reception when circumstances warrant. An automatic distance/local reception circuit (Keyed Automatic Gain Control) provides full sensitivity, while a dual-gate FET RF amplifier provides a high signal-to-noise ratio.

Optimum selectivity virtually eliminates interference from strong nearby stations, and a special FM noise canceller works to suppress ignition noise and other pulse interference. Wide dynamic range avoids overload distortion and the unpleasant noise it causes.

Nor has AM reception been neglected in the design of this tuner. A special circuit feature permits only the strongest, clearest stations to get through when broadcast conditions are less than optimum. It is one more refinement that accounts for the superb performance of the tuner and adds to your listening enjoyment.

AM and FM

Both AM and FM reception have advantages and disadvantages resulting from their differing properties. AM waves can reach longer distances than FM waves. They can bend around buildings or mountains and bounce off the ionosphere. This means that an AM service area is very wide.

FM waves, on the other hand, have much higher frequencies and shorter wave lengths. Unlike AM waves, they cannot travel around corners. They reflect off solid objects in their path, which limit the areas they can reach. An average FM signal can be heard only within a 25-mile to 35-mile radius of a transmitter.

|	Arrival distance	Sound quality	Frequency
AM	60 - 120 miles	Fair	530 - 1,620 kHz
FM	25 - 30 miles	Good	87.9 - 107.9 MHz
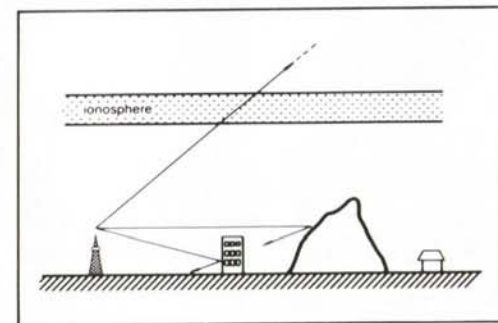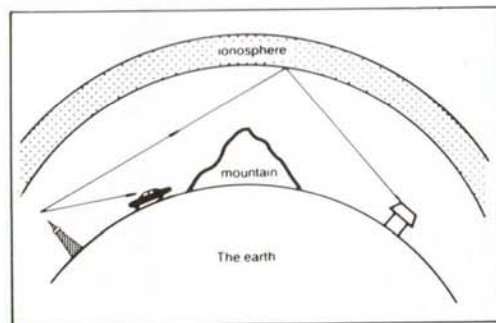
Stereo and Monaural

Stereo and monaural FM reception characteristics are also different. Monaural transmission utilizes the range of audio frequencies audible to the human ear. Stereo transmission relies on a range of frequencies that extend beyond human hearing limits on both the high and low ends. This broadened frequency range requires more power, thereby reducing the range of a station broadcasting in stereo.
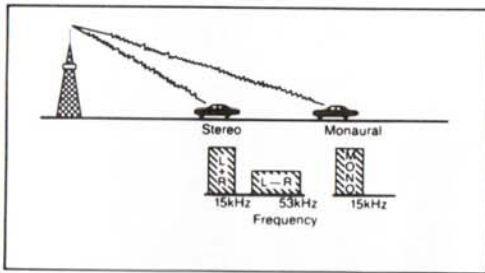

In weak signal areas — called fringe areas — there will be increased noise on stereo broadcasts. When signal strength diminishes significantly in the stereo mode, the radio will automatically switch to monaural transmission.
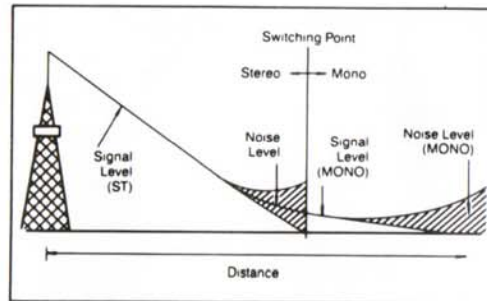
Fuse Replacement

If your radio will not activate when you turn on the Power switch or if your electric antenna will not function, a fuse may have blown. Check the car fuses first:
900—Fuse box (under rear seat).
Power Fuse #5 Blue 15 Amp
Memory Fuse #6 Blue 15 Amp
9000—Fuse box (in glove box).
Power Fuse #19 Blue 15 Amp
Memory Fuse #27 Blue 15 Amp
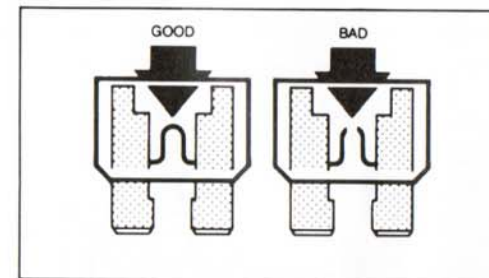
Radio/Amplifier

If the car fuses are good, check the radio fuses.

See directions below:

1. Insert the radio removal tools into the four holes in the face of the radio.

2. Slide the unit out
   blade type fuses a
   the bracket.

3. Check and replace
   sary using the remo
   fuse box.
   15 amp (blue)—am
   radio power
   3 amp (violet)—ante

CAUTION!

Never replace a "blo
fuse of a higher ra
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t activate when you turn
:h or if your electric an-
ction, a fuse may have
ar fuses first:
ler rear seat).
: 15 Amp
ue 15 Amp
glove box).
:e 15 Amp
ilue 15 Amp

BAD

good, check the radio

v:

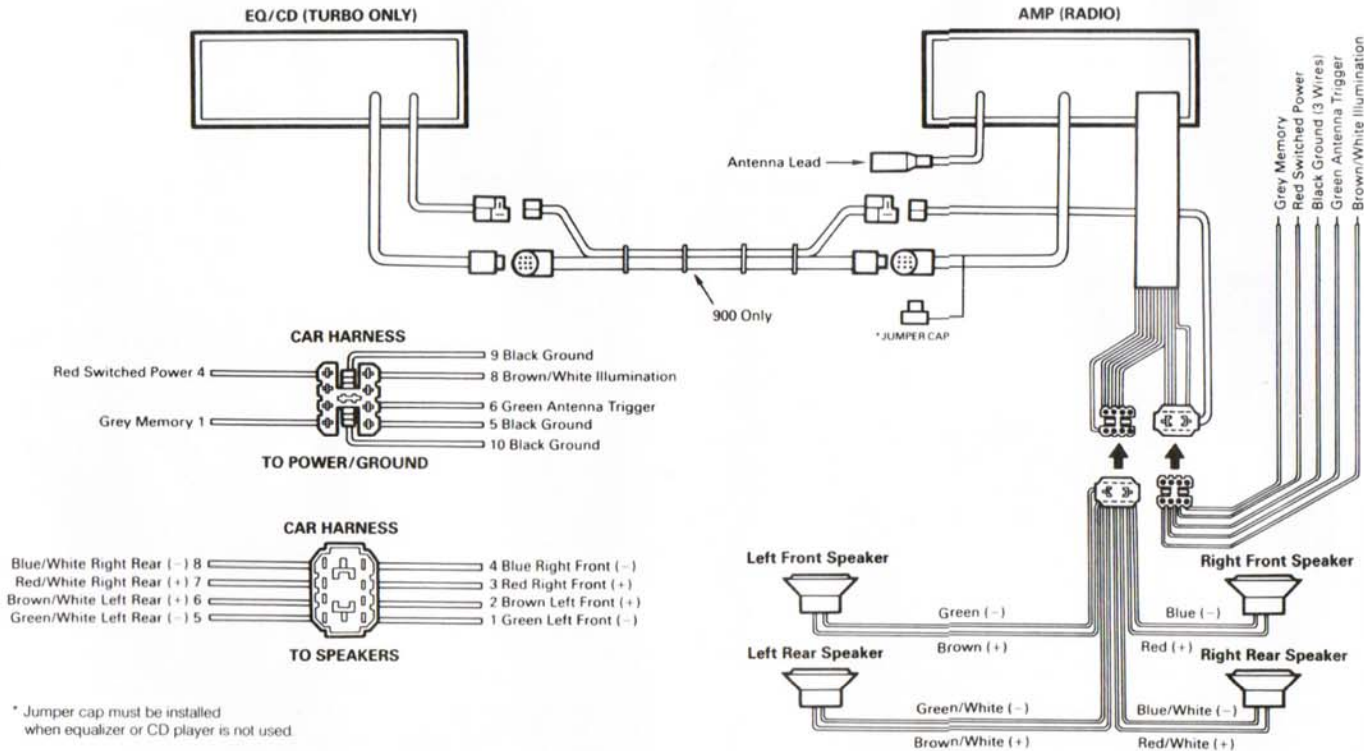removal tools into the
face of the radio.

2. Slide the unit out and locate the two
   blade type fuses at the rear inside of
   the bracket.

3. Check and replace the fuses as neces-
   sary using the removal tool found in the
   fuse box.
   15 amp (blue)—amplifier, equalizer and
   radio power
   3 amp (violet)—antenna trigger signal.

CAUTION!
Never replace a "blown" fuse with a
fuse of a higher rating. Replacing a
fuse with one of a higher rating may
cause permanent damage.

4. Reinstall the radio by sliding it back into
   place. Gently apply pressure between
   the two removal holes on each side of
   the unit simultaneously until it locks
   into place.

NOTE! To make the radio operational
again you must enter the electronic
lock-out code.

Wiring Diagram

Specification

Radio/Amplifi

EQ/CD (TURBO ONLY)

AMP (RADIO)

Antenna Lead →

900 Only

*JUMPER CAP

Grey Memory
Red Switched Power
Black Ground (3 Wires)
Green Antenna Trigger
Brown/White Illumination

CAR HARNESS

Red Switched Power 4

Grey Memory 1

9 Black Ground
8 Brown/White Illumination
6 Green Antenna Trigger
5 Black Ground
10 Black Ground

TO POWER/GROUND

CAR HARNESS

Blue/White Right Rear (−) 8
Red/White Right Rear (+) 7
Brown/White Left Rear (+) 6
Green/White Left Rear (−) 5

4 Blue Right Front (−)
3 Red Right Front (+)
2 Brown Left Front (+)
1 Green Left Front (−)

TO SPEAKERS

* Jumper cap must be installed
when equalizer or CD player is not used.

Left Front Speaker

Right Front Speaker

Green (−)   Blue (−)

Left Rear Speaker   Brown (+)   Red (+)   **Right Rear Speaker**

Green/White (−)   Blue/White (−)

Brown/White (+)   Red/White (+)

GENERAL—
Power Supply Voltage
Current Consumption
AUDIO SECTION—
 *Tone Action ....
Power Output ....

FM SECTION—
Frequency Range .....
 *Usable Sensitivity ....
 *50 dB Quieting Sensiti
 *Capture Ratio ....
 *Alternate Channel Sel
 *Stereo Separation ...
 *Frequency Response
AM SECTION—
Frequency Range .....
Usable Sensitivity (20 d

TAPE SECTION—
Tape Speed ....
 *WOW and Flutter ....
 *Signal To Noise Ratio
  Standard Tape (120 μ

  Cr02-Metal Tape (70 μ

 *Frequency Response .
 *Stereo Separation ....

Specifications

Radio/Amplifier Specifications

GENERAL—
Power Supply Voltage ....14.4 V (10.8 to 15.6 V allowable)
Current Consumption ....Less than 10 amps
AUDIO SECTION—
*Tone Action ....± 10 dB at 100 Hz; ± 10 dB at 10 kHz
Power Output ....20 watts × 4 at max. power output
                                                 (Separate amplifier)

FM SECTION—
Frequency Range ....87.9 to 107.9 MHz
*Usable Sensitivity ....13 dBf
*50 dB Quieting Sensitivity ....18 dBf
*Capture Ratio ....1.5 dB
*Alternate Channel Selectivity ....60 dB
*Stereo Separation ....35 dB at 1 kHz
*Frequency Response ....30 to 15,000 Hz ± 3 dB
AM SECTION—
Frequency Range ....530 to 1,620 kHz
Usable Sensitivity (20 dB S/N) ....28 µV

TAPE SECTION—
Tape Speed ....4.75 cm/s (1-7/8 ips)
*WOW and Flutter ....0.13% WRMS
*Signal To Noise Ratio
  Standard Tape (120 µs).......................53 dB/61 dB (Dolby B NR off/on)
                               53 dB/69 dB (Dolby C NR off/on) (TURBO)
  Cr02-Metal Tape (70 µs) ....56 dB/64 dB (Dolby B NR off/on)
                               56 dB/72 dB (Dolby C NR off/on) (TURBO)
*Frequency Response ....50 to 14,000 Hz ± 3 dB
*Stereo Separation ....42 dB

2" (50mm)

5⁵⁄₁₆"(135mm)

7-3/8" (188mm)

2-1/4" (58mm)
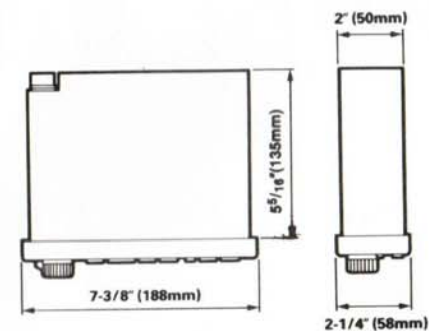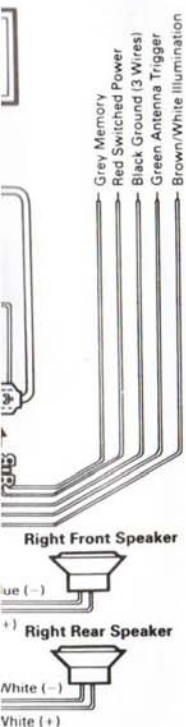
Specifications subject to design change.
* Marks comply with AD-HOC committee standards.
● Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation.
● "Dolby" and the double-D symbols ▯▯ are trademarks of Dolby Laboratories Licensing Corporation.

These tuners have been developed for the North American market only.

Grey Memory Power
Red Switched Power
Black Ground (3 Wires)
Green Antenna Trigger
Brown/White Illumination

Right Front Speaker

Blue (−)

Right Rear Speaker

White (−)

White (+)

Graphic Equalizer Specifications

Center Frequencies for Adjustment ....60 Hz/125 Hz/250 Hz/500 Hz/1 kHz/3 kHz/
                                           10 kHz
Adjustment Range ....± 12 dB each
Frequency Response ....20 Hz – 70 kHz, +0/ – 3 dB
Gain ....2.5 dB
Distortion ....0.003% (at 1 kHz)
Current Consumption ....580 mA
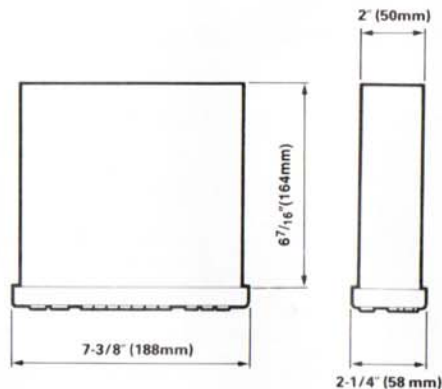
CD Specifications

AUDIO CHARACTERISTICS—
Frequency Response ....20 to 20,000 Hz, ± 3 dB
Harmonic Distortion ....0.008% (1 kHz, 0 dB)
Dynamic Range ....90 dB
WOW and Flutter ....Unmeasurable
Channel Separation ....75 dB (1 kHz)
Output Voltage/Impedance ....1.2 V/220 Ω

GENERAL—
Operating Voltage ....14.4 V DC (10.8 to 16.0 V allowable)
Grounding System ....Negative type
Current Consumption ....800 mA
Oversampling ....4 ×
Laser Pickup ....3 beam

2″ (50mm)
6⁷/₁₆″(164mm)
7-3/8″ (188mm)
2-1/4″ (58 mm)

2″(50mm)
7″(180mm)
7-3/8″ (188mm)
2-1/4″ (58 mm)
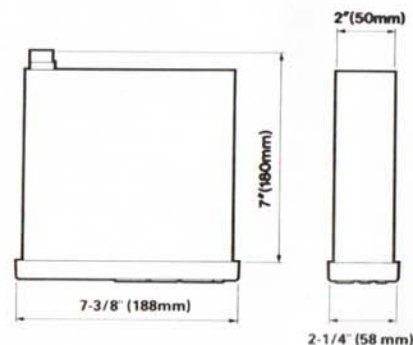
Audio Systen

Radio Head (Turbo)
Radio Head (Non-Turbo
Radio Bracket/Amplifie
  Convertible)
Radio Bracket/Amplifie
  Only) ....
Graphic Equalizer .....
CD Player ....
EQ/CD Bracket ....
EQ/CD DIN Cord (900
Removal Tools with Po
Radio Carrying Bag (Fi
Tidy Box (Used When
On/Off/Volume/Balance
On/Off/Volume/Balance
Bass/Treble Knobs ×2
Fader Knob (Turbo) ..
Fader Knob (Non-Turbo
15 Amp Fuse Blade Typ
5 Amp Fuse Blade Type
Audio System Owner's
Owner Identification C
Owner Identification C
Three Component Cabl

2" (50mm)

6⁷/₁₆"(164mm)

2-1/4" (58 mm)

2"(50mm)

7"(180mm)

2-1/4" (58 mm)

Audio System Part Numbers

	SAAB P/N
Radio Head (Turbo)	02 47 098
Radio Head (Non-Turbo)	02 47 015
Radio Bracket/Amplifier (Except 9000 Sedan, 900 Convertible)	41 11 100
Radio Bracket/Amplifier (9000 Sedan, 900 Convertible Only)	40 65 405
Graphic Equalizer	02 47 023
CD Player	02 47 171
EQ/CD Bracket	95 27 979
EQ/CD DIN Cord (900 Only)	95 28 217
Removal Tools with Pouch	02 73 706
Radio Carrying Bag (Fits All Removable Components)	02 73 136
Tidy Box (Used When Components Are Removed)	02 73 417
On/Off/Volume/Balance Knob (Turbo)	02 73 730
On/Off/Volume/Balance Knob (Non-Turbo)	02 47 049
Bass/Treble Knobs ×2	02 73 755
Fader Knob (Turbo)	02 61 362
Fader Knob (Non-Turbo)	02 47 056
15 Amp Fuse Blade Type (Blue)	79 74 645
5 Amp Fuse Blade Type (Amber)	02 11 300
Audio System Owner's Manual	02 14 726
Owner Identification Card (×2), Carrier (Turbo)	02 47 106
Owner Identification Card (×2), Carrier (Non-Turbo)	02 47 072
Three Component Cabling System Kit (9000 only)	02 47 122

Index

Photographs and Illustrations

MEMO

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MEMO

MEMO

Saab Cars USA, Inc., Orange, CT, USA.

SAAB
SCANIA