

OLDWI

0

51

HONDA

1998 GL1500 A/SE ELECTRICAL TROUBLESHOOTING MANUAL

Contents

How To Use This Manual	1-1
Troubleshooting Hints	1-10
Fuse Information	1-16
LCD Unit Display	1-17
Circuit Schematics (see Circuit Index)	
Component Location Index	11-0
Component Location Photographs	12-0
Component Index	13-0

Circuit Index

Accessory Lights	9-14
Automatic Level Control	5-2
Brake Lights	9-12
CB Radio (Asp)	10-14
CB Radio (SE)	10-16
CB Radio (Int)	
Charging System	3-20
Clock	5-1
Cornering Lights	9-3
Cruise Control	4-0
Engine Control System	3-0
Gauges	7-2
Ground Distribution	2-6
Handlebar Switch Illumination	9-4
Hazard Lights	9-6
Headlights	8-0
Horn	5-0
Illumination Lights	7-3
Indicators	7-0
Instrument Panel	7-2
License Plate Light	9-10
Low Fuel Warning	6-0
Marker Lights	
Fairing and Trunk	9-0
Saddlebags	9-2
Oil Pressure Warning	6-0
Parking Lights	9-10
Position Lights	9-6
Power Distribution	2-0
Radiator Fans	3-22
Radio	
Radio and Cassette	10-0
Reverse System	3-24
Speed Sensor Circuit	7-4
Spoiler Brake/Taillight	
SE Model only	9-15
Starting System	3-10
Taillights	9-10
Trunk Light	9-13
Turn Signal Lights	9-6

Page Numbering System

This manual divides the electrical system into individual sections. For example, Section 5 includes all Chassis Accessories. Component Location photographs are at the back of the manual in Section 12.

Within a section, the pages are numbered using the section number, a dash, and then a consecutive number beginning with zero. So if there are three pages in Section 2, the pages will be numbered 2-0, 2-1, and 2-2.

Outline of Each Circuit Section

A Circuit Schematic (wiring diagram) starts off each section. Schematics show:

- how all the components within a circuit work together
- current flow from the power source (top of page) to ground (bottom of page)
- switch positions (shown "at rest" as if the ignition was off)
- special instructions ("Solid-state: Do not check resistance")
- those circuits sharing a common power source or ground

A **System Description** (How the Circuit Works) appears in some sections; it explains basic circuit operation.

A **Troubleshooting** guide also appears in some sections and provides step-by-step instructions for diagnosis and repair. It includes symptom and diagnosis charts and self-tests for all possible measurements in the system.

Model Abbreviations for 1997 used in this manual:

- Asp Aspencade
- **SE** Special Edition

Symbols

The abbreviations and symbols explained here are used throughout the manual. You'll need to know what they mean before you can use the schematics effectively.

Wire Color Abbreviations

The following abbreviations are used to identify wire colors in the circuit schematics:

BLK black
BLU blue
BRN brown
GRN green
GRY gray
LT BLU light blue
LT GRN light green
ORN orange
PNK
REDred
WHT white
YEL yellow



A broken line means only

some of the circuit is shown;

G100

Without

ORN

Rear Speaker

C309

ORN

With

ORN

Rear Speaker

C310

See Ground

Distribution, page 2-10.

refer to the circuit listed for the complete schematic.

Wire choices for options or different models are labeled and shown with a "choice"

bracket like this.





Symbols (cont'd)

Switches

These switches move together; a dashed line shows a mechanical connection between them.



This is a relay shown with no current flowing through its coil. Unless otherwise noted, all switches are shown in their normal (rest) position, with power off.



Normally C Closed Contact

Shield

This represents RFI (Radio Frequency Interference) shielding around a wire. The shielding is always connected to ground.



Fuses

This means power is supplied when the ignition switch is in ON.



Diode

This diode allows current to flow only in the direction of the arrow.



ETM

goldwingdocs.com

i.

Circuit Schematic (cont'd)

Circuit schematics break the entire electrical system into individual circuits. Electrical components that work together are shown together so that you are not distracted by wiring that is not part of the circuit you are working on.

Each drawing is arranged so current flows from positive, at the top of the page, to ground, at the bottom of the page. The "HOT" label at the top of a fuse shows when the ignition switch supplies power to that fuse.

Each circuit is shown completely and independently on one schematic. Other circuits getting their power from the same point, or grounding at the same point, are not shown. However, if other circuits actually share some wires with the circuit shown, the shared wires of the other circuits will also be shown. Wires that connect to another circuit are shown with an arrowhead pointing in the direction of current flow. The name of the circuit or component that shares the wiring is provided for reference. You can check shared wiring by checking the operation of the other circuits.

"See Power Distribution" means there are more connections to other circuits that are not shown. All such shared circuits are shown on the Power Distribution circuit schematic. "See Ground Distribution" means there are more shared ground circuits which are shown on the Ground Distribution schematic.





The sample Power Distribution schematic shows how voltage is supplied from the positive battery terminal to the various circuits in the motorcycle.

Individual circuit schematics begin with a fuse. Power Distribution shows the wiring between the battery and the fuses. By combining Power Distribution with any individual schematic, you get a complete picture of how voltage is applied to the circuit.

You can use Power Distribution to speed your troubleshooting. If Power Distribution shows that an inoperative circuit and a second circuit share a fuse, check the operation of the second circuit. If it works, you know the fuse is good and voltage is available to the inoperative circuit. You can then continue troubleshooting.





The sample Ground Distribution schematic shows which components share the same ground point.



ETM

Component Location

The Component Location Index (Section 11) lists every component, connector, and ground and describes its location on the motorcycle. This index also gives references to component location photographs which are found in Section 12.

Component Location Photographs (Section 12) show the exact location and appearance of components, connectors, and grounds.

The Component Index (Section 13) lists all components and gives page references to all circuit schematics in which each component appears.

Component Location Index (Section 11)			
	(Refer to Section 12 for photographs.) Component	Photo No.	
	Auxiliary Input Connector Behind left fairing pocket	55	
Component or Connector Number	Bank Angle Sensor Below right rear of seat, on frame rail	32	
Number of Cavities In Connector	C6 (3-BLK) Behind instrument panel C10 (22-BLU) (SE) Behind left rear of seat	45	Photo Number in Section 11
Connector Color	C10 (22-WHT) (Asp) Below left rear of seat	38	

Component Index (Section 13)

Acc Fuse 10A 2-0, 5-2, 5-4, 7-6, 9-7, 10-0, 10-6, 10-15
Acc Terminal Fuse 5A 2-0
Accessory Terminal 2-0, 2-12
Air Pressure Control Switch Assembly 2-0, 2-4, 5-4, 5-5
Air Pressure Sensor 5-4
Air Pump Assembly 2-14, 5-5
Air Pump Fuse 10A 2-1, 5-4
Air Pump Relay

Five-Step Troubleshooting

1. Verify The Complaint

Turn on all the components in the problem circuit to check the accuracy of the customer complaint. Note the symptoms. Do not begin disassembly or testing until you have narrowed down the problem area.

2. Analyze The Schematic

Look up the schematic for the problem circuit. Determine how the circuit is supposed to work by tracing the current paths from the power source through the circuit components to ground. Also trace circuits that share wiring with the problem circuit. The names of circuits that share the same fuse, ground, or switch, and so on, are referred to on each circuit schematic. Try to operate any shared circuits you didn't check in step 1. If the shared circuits work, the shared wiring is OK, and the cause must be in the wiring used only by the problem circuit. If several circuits fail at the same time, the fuse or ground is a likely cause.

Based on the symptoms and your understanding of the circuit's operation, identify one or more possible causes of the problem.

3. Isolate The Problem By Testing The Circuit

Make circuit tests to check the diagnosis you made in step 2. Keep in mind that a logical, simple procedure is the key to efficient troubleshooting. Test for the most likely cause of failure first. Try to make tests at points that are easily accessible.

4. Fix The Problem

Once the specific problem is identified, make the repair. Be sure to use proper tools and safe procedures.

5. Make Sure The Circuit Works

Turn on all components in the repaired circuit in all modes to make sure you've fixed the entire problem. If the problem was a blown fuse, be sure to test all of the circuits on that fuse. Make sure no new problems turn up and the original problem does not recur.

Test Equipment

Voltmeter and Test Light

CAUTION: A number of circuits include solidstate devices. Voltages in these circuits should be tested only with a 10-megohm or higher impedance digital multimeter. Never use a test light on circuits that contain solid-state devices. Damage to the devices may result.

On circuits without solid-state devices, use a test light to check for voltage. A test light is made up of a 12-volt bulb with a pair of leads attached. After grounding one lead, touch the other lead to various points along the circuit where voltage should be present. The bulb will go on if there is voltage at the point being tested.

A voltmeter can be used in place of a test light. While a test light shows whether or not voltage is present, a voltmeter indicates how much voltage there is.

Self-Powered Test Light and Ohmmeter

CAUTION: Never use a self-powered test light on circuits that contain solid-state devices. Damage to these devices may result.

Diodes and solid-state devices in a circuit can make an ohmmeter give a false reading. To find out if a component is affecting a measurement, take one reading, reverse the leads, and take a second reading. If the readings differ, the component is affecting the measurement.

An ohmmeter can be used in place of a self-powered test light. The ohmmeter shows how much resistance there is between two points along a circuit. Low resistance means good continuity.



Self-Powered Test Light

Circuits that contain solid-state devices should only be tested with a 10-megohm or higher impedance digital multimeter.

Use a self-powered test light to check for continuity. This tool is made up of a light bulb, battery and two leads. If the leads are touched together, the bulb will go on.

A self-powered test light is only used on an unpowered circuit. First disconnect the battery or remove the fuse that feeds the circuit you are working on. Select two points along the circuit through which there should be continuity. Connect one lead of the self-powered test light to each point. If there is continuity, the test light's circuit will be completed and the bulb will go on.

Jumper Wire

Use a jumper wire to bypass an open circuit. A jumper wire is made up of an in-line fuse holder connected to a set of test leads. It should have a five ampere fuse. Never use a jumper wire across any load. This direct battery short will blow the fuse.

AME

Short Finder

Short finders are available to locate shorts to ground. The short finder creates a pulsing magnetic field in the shorted circuit and shows you the location of the short through body trim or sheet metal. Its use is explained in the following troubleshooting tests.

Troubleshooting Tests

Testing for Voltage

This test measures voltage in a circuit. When testing for voltage at a connector, you do not have to separate the two halves of the connector. Instead, probe the connector from the back. Always check both sides of the connector because dirt and corrosion between its contact surfaces can cause electrical problems.

- 1. Connect one lead of test light to a known good ground, or if you are using a voltmeter, be sure you connect its negative lead to ground.
- 2. Connect the other lead of the test light or voltmeter to the point you want to check.
- If the test light glows, there is voltage present. If you are using a voltmeter, note the voltage reading. It should be within one volt of measured battery voltage. A loss of more than one volt indicates a problem.



Troubleshooting Tests (cont'd)

Testing for Continuity

This test checks for continuity within a circuit. When testing for continuity at a connector, you do not have to separate the two halves of the connector. Instead, probe the connector from the back. Always check both sides of the connector because dirt and corrosion between contact surfaces can cause electrical problems.

- Disconnect the negative cable from the battery. If you are using an ohmmeter, hold the leads together and adjust the ohmmeter to read zero ohms.
- Connect one lead of self-powered test light or ohmmeter to one end of the part of the circuit you wish to test.
- 3. Connect the other lead to the other end.
- 4. If the self-powered test light glows, there is continuity. If you're using an ohmmeter, low or no resistance means good continuity.

Testing for Voltage Drop

Wires, connectors and switches are designed to conduct current with a minimum loss of voltage. A voltage drop of more than one volt indicates a problem.

- 1. Connect the positive lead of a voltmeter to the end of the wire (or to the side of the connector or switch) closest to the battery.
- 2. Connect the negative lead to the other end of the wire (or the other side of the connector or switch).
- 3. Turn on the components in the circuit.
- 4. The voltmeter will show the difference in voltage between the two points. A difference, or drop, of more than one volt indicates a problem. Check the circuit for loose or dirty connections.







Testing for a Short with a Test Light or Voltmeter

- 1. Remove the blown fuse and disconnect the load.
- 2. Connect a test light or voltmeter across the fuse terminals. Make sure that the voltage is being applied to the fuse terminals. You might have to put the ignition switch in RUN. Check the schematic to see.
- 3. Beginning near the fuse/relay box, wiggle the harness. Continue this at convenient points about six inches apart while watching the test light or voltmeter.
- 4. When the test light blinks or the voltmeter needle moves, there is a short to ground in the wiring near that point.

Testing for a Short with a Self-Powered Test Light or Ohmmeter

- 1. Remove the blown fuse and disconnect the battery and load.
- Connect one lead of a self-powered test light or ohmmeter to the fuse terminal on the load side.
- 3. Connect the other lead to a known good ground.
- 4. Beginning near the fuse/relay box, wiggle the harness. Continue this at convenient points about six inches apart while watching the test light or ohmmeter.
- 5. If the self-powered test light blinks or the ohmmeter needle moves, there is a short to ground in the wiring near that point.





Troubleshooting Tests (cont'd)

Testing for a Short with a Short Circuit Locator

- 1. Remove the blown fuse. Leave the battery connected.
- 2. Connect the short finder across the fuse terminals.
- 3. Close all switches in series in the circuit you're testing.
- Turn on the short circuit locator. It sends pulses of current to the short. This creates a pulsing magnetic field around the wiring between the fuse/ relay box and the short.
- 5. Beginning at the fuse/relay box, slowly move the short finder along the circuit wiring. The meter will show current pulses through sheet metal and plastic. As long as the meter is between the fuse and the short, the needle will move with each current pulse. Once you move the meter past the point of the short, the needle will stop moving. Check around this area to locate the cause of the short circuit.





Troubleshooting Precautions

Before Troubleshooting

- Check the main fuse and the fuse/relay box.
- Check the battery for damage, state of charge, and clean and tight connections.

CAUTION:

- Do not quick-charge a battery unless the battery ground cable has been disconnected or you will damage the alternator diodes.
- Do not attempt to crank the engine with the ground cable disconnected or you will severely damage the wiring.

While You're Working

- Make sure connectors are clean and have no loose pins or receptacles.
- Make sure multiple pin connectors are packed with silicone grease.



CAUTION:

- Do not pull on the wires when disconnecting a connector. Pull only on the connector housings.
- When connecting a connector, push it until it clicks into place.
- Refer to page 1-10 for cautions about troubleshooting circuits that contain solid-state devices.

Fuse Information

Fuse/Relay Box



Fuse Number	Fuse Identification	Amps	Circuit or Component Protected
1	Acc Terminal	5	Optional accessories
2	Horn/Turn/ Stop Relay	15	Horns, Horn turn relay coil, Position relay coil, Stop light relay coil, Turn signal cancel control unit, Turn signal flasher relay coil
3	Stop	15	Brake lights
4	Fan	10	Cooling fans
5	Head	15	Headlights, Instrument panel indicators
6	Air Pump	10	Auto level control system
7	Parking	10	Air pump (outlet), Parking lights
8	Tail Meter Position	15	Accessory lights; Instrument panel gauges, Instrument panel indicators, Cornering lights, Headlight relays, License plate light, Position lights, Side marker lights, Taillights, Reverse system control, Handlebar illumination
9	RVS Start	5	Reverse system
10	Acc	10	Air pump relay, CB radio, Stereo/cassette deck, Hazard lights, Instrument panel indicator illumination, Wheel speed sensor
11	Ign. Start Cruise	15	Bank angle sensor, Charging system, Cruise control indicators, Emission controls, Engine control module (ECM), Ignition coils, Ignition/cruise relay coil, Starting system
12	Head Relay	5	Headlights (high & low relay coils)
13	Back Up	5	CB radio, Stereo/cassette deck, Instrument panel indicator illumination, Trunk light

LCD Unit Display



goldwingdocs.com



Power Distribution



ETM



Power Distribution



nadocs.con wploi

ETM



Power Distribution



idocs.con

ETM



Ground Distribution: G100, G102, G103, and G104

- Circuit Schematic



ETM



Ground Distribution: G100, G102, G103, and G104

HEAD-LIGHTS (HIGH) RELAY FUSE/ HEADLIGHTS (LOW) RELAY RELAY HORN/ STOP LIGHTS TAIL (MAIN) RELAY TURN BOX Page 8-1 RELAY RELAY 8 ⓓ 2 3 (4) ACCESSORY TERMINAL \bigcirc Coil I Coil Coil Coil Coil 0 TURN CB SWITCH (DRIVER) Pages 10-15 and 10-17 CRUISE SIGNAL TRUNK LIGHT SWITCH RADIO/ CANCEL CONTROL CASSETTE VALVE LEFT HORN DECK UNIT UNIT Page 9-13 Page 10-1 Page 4-3 Page 9-6 Page 5-0 **CB/RADIO** C179 SWITCH C1 ASSEMBLY GRN GRN (SE Models C131 Only) GRN/BLK Page 9-4 C99 GRN GRN C89 (SE) C23 GRN C20 (Asp) GRN GRN GRN GRN SIDE C90 GRN STAND GRN SWITCH GRN Pages 3-1 and 3-11 C23 GRN GRN GRN C28 GRN C192 C192 GRN S148 GRN GRN S147* • GRN * Two Wire Splice . S157* GRN M To S167 on page 2-7.

nadocs.con 3





Ground Distribution: G100, G102, G103, and G104

- Circuit Schematic (cont'd)





goldwingdocs.com

Engine Control System



goldwingdocs.com



goldwingdocs.com



Engine Control System

Circuit Schematic (cont'd)





How the Circuit Works-

Engine performance is controlled by the engine control module (ECM). The ECM receives battery voltage when the engine stop switch is in RUN. The ECM monitors coolant temperature, intake air temperature, gear position, and engine speed. It also controls engine operation by operating several solenoid valves, ignition coils, and the fuel pump.

Carburetor Air Jet (CAJ) Solenoid Valves

The CAJ solenoid valves receive battery voltage from the ignition/cruise relay with the ignition ON. They receive a ground control signal from the ECM.

Pulse Secondary Air Injection (PAIR) Solenoid Valve

The PAIR solenoid valve receives battery voltage from the ignition/cruise relay with the ignition ON. It is controlled by a ground control signal from the ECM.

Ignition Coils

The three ignition coils receive battery voltage with the ignition ON and the engine stop switch in RUN. Each coil is fired individually when the ECM grounds the corresponding coil control line. The ECM can vary ignition timing based on other sensor information.

Gear Position Switch

The gear position switch supplies five input circuits to the ECM for the positions N, 2, 3, 4, and OD. The respective circuits are ground when in the associated gear and open otherwise.

Side Stand Switch

The side stand switch sends a ground signal to the ECM with the side stand switch in UP and is open in DOWN.

Troubleshooting

SYMPTOMDIAGNOSIS• Engine cranks but does not start.• Do Isolation Procedure 1.• Engine runs poorly.• Do Isolation Procedure 2.

(cont'd)

Intake Air Temperature (IAT) Sensor

The intake air temperature (IAT) sensor is a resistor that increases resistance with a decrease in temperature and decreases resistance with an increase in temperature. The IAT sensor sends this resistance signal to the ECM through the GRN/BLK sensor common and the GRY ambient air temperature input circuit.

Ignition Pulse Generators

The ignition pulse generators are coils that generate a magnetic pulse when the crankshaft magnet passes by the pulse generator pickups. This pulsing signal conveys crankshaft position and engine RPM information to the ECM. One end of these generators is tied to the GRN/BLK sensor common. The ignition pulse generator signals are sent to the ECM through the WHT/YEL and WHT/BLU circuits.

Fuel Pump

The fuel pump is a DC motor that receives ground through the GRN circuit. It receives a voltage control signal from the ECM.

Engine Coolant Temperature (ECT) Sensor

The engine coolant temperature (ECT) sensor is a resistor that increases resistance with a decrease in temperature and decreases resistance with an increase in temperature. The ECT sensor sends this resistance signal to the ECM through the GRN/BLK sensor common and the PNK/WHT coolant temperature input circuit.

Engine Control System








Engine Control System



goldwingdocs.com



Test A: Ignition Coil Input Test

Disconnect C54. Turn the ignition switch ON and place engine stop switch in RUN. 1. Check that there is battery voltage at BLK/WHT (ECM side of C54) circuit. If yes, go to test G. If no, service BLK/WHT circuit for an open.

Test B: Ignition Pulse Generator #1 Input Test

Disconnect C63 and connect ohmmeter across WHT/YEL and YEL circuits at generator side 1. of connector. Resistance should be about 400-500 ohms. If yes, check YEL, GRN/BLK, and WHT/YEL circuits between ECM and ignition pulse generators for an open. If no, replace ignition pulse generator.

Test C: Ignition Pulse Generator #2 Input Test

Disconnect C63 and connect ohmmeter across WHT/BLU and BLU circuits at generator side of 1. connector. Resistance should be about 400-500 ohms. If yes, check BLU, GRN/BLK, and WHT/BLU circuits between ECM and ignition pulse generators for an open.

If no, replace ignition pulse generator.

Test D: Fuel Pump Control Test



Gasoline is flammable and is explosive under certain conditions. Do not smoke or allow flames or sparks in your working area. Immediately wipe up any spills.

- Disconnect C184 (except Asp model) or C185 (Asp model). Momentarily jumper BLU circuit 1. (fuel pump side) to battery voltage. Fuel pump should run. If yes, service BLK/BLU circuit between ECM and C184 or C185 for an open. If no, go to step 2.
- Disconnect C127 (except Asp model) or C186 (Asp model). Check GRN circuit (Asp model) or 2. GRN/BLU circuit (SE model) for continuity for ground. If yes, service fuel pump. If no, service GRN or GRN/BLU circuit for an open.

Test E: Ignition Coil Input Test

Connect ohmmeter across BLK/WHT and YEL/BLU circuits at ignition coil side of C54. 1. Resistance should be about 4 ohms. If OK, service YEL/BLU circuit between ECM and C54 for an open. If not OK, service ignition coil.

aoldwingdocs.con

3-7

(cont'd)

Engine Control System

Troubleshooting (cont'd) -

Test F: Ignition Coil Input Test

 Connect ohmmeter across BLK/WHT and YEL/RED circuits at ignition coil side of C54. Resistance should be about 4 ohms.
 If OK, service YEL/RED circuit between ECM and C54 for an open.
 If not OK, service ignition coil.

Test G: Ignition Coil Input Test

 Connect ohmmeter across BLK/WHT and YEL/WHT circuits at ignition coil side of C54. Resistance should be about 4 ohms. If OK, service YEL/WHT circuit between ECM and C54 for an open. If not OK, service ignition coil.

Test H: Carburetor Air Jet (CAJ) Solenoid Valve #2 Input Test

- Disconnect C120 (CAJ solenoid valve). Turn ignition ON and check for battery voltage at BLK/LT GRN circuit. If yes, go to step 2. If no, service BLK/LT GRN circuit for an open.
- Connect ohmmeter across RED/WHT and BLK/LT GRN circuits (solenoid side). Resistance should be about 32 ohms. If yes, service RED/WHT circuits for an open between C120 and ECM. If no, replace CAJ solenoid valve.

Test I: Carburetor Air Jet (CAJ) Solenoid Valve #3 Input Test

- Disconnect C119 (CAJ solenoid valve). Turn ignition ON and check for battery voltage at BLK/LT GRN circuit. If yes, go to step 2. If no, service BLK/LT GRN circuit for an open.
- Connect ohmmeter across RED and BLK/LT GRN circuits (solenoid side). Resistance should be about 32 ohms. If yes, service RED circuits for an open between C119 and ECM. If no, replace CAJ solenoid valve.

Test J: Pulse Secondary Air Injection (PAIR) Solenoid Valve Input Test

- Disconnect C315 (PAIR solenoid valve). Turn the ignition ON and check for battery voltage at BLK/LT GRN circuit (harness side). If yes, go to step 2. If no, service BLK/LT GRN circuit for an open.
- Connect ohmmeter across BLK/RED and BLK/LT GRN circuits (solenoid side). Resistance should be about 32 ohms. If yes, service BLK/RED circuits for an open between C315 and ECM. If no, replace PAIR solenoid valve.



Test K: Engine Coolant Temperature (ECT) Sensor Input Test

 Disconnect coolant temperature sensor. Connect ohmmeter across sensor terminal. Resistance should be less than 2k-3k ohms at 68°F (20°C) and decrease with a temperature increase. If yes, check GRN/BLK and PNK/WHT circuits for an open between sensor and ECM.

If yes, check GRN/BLK and PNK/WHT circuits for an open between sensor and ECM. If no, replace sensor.

Test L: Intake Air Temperature (IAT) Sensor Input Test

 Disconnect C314 (IAT sensor). Connect ohmmeter across sensor terminal. Resistance should be less than 2k-3k ohms at 68°F (20°C) and decrease with a temperature increase. If yes, check GRN/BLK and GRY circuits for an open between sensor and ECM. If no, replace sensor.

Starting System



ETM



Starting System

How the Circuit Works

The starting system for the Asp and SE models is made up of the following components:

- Bank angle sensor
- Clutch switch
- Gear position switch
- Ignition/cruise relay
- Reverse diode assembly
- Reverse lever switch
- Reverse switch
- Reverse switch relay
- Side stand switch
- Starter relay A
- Starter relay B
- Starter/reverse motor
- Starter/reverse switch

The starter/reverse switch receives battery voltage from the IGN/cruise relay when the ignition is switched ON. The bank angle sensor supplies ground to the IGN/cruise relay.

- The starting system is activated when the driver presses and holds the starter/reverse switch.
- Voltage from the IGN/cruise relay is then sent through the reverse diode assembly, reverse switch relay coil, and gear position switch to ground.
- The reverse switch relay energizes and completes a ground path from the coil of starter relay A to ground through the reverse diode assembly, clutch switch, and the side stand switch.
- Starter relay A energizes and applies battery voltage to the coil and contacts of starter relay B when the reverse switch is in the FORWARD position.
- Starter relay B energizes and applies voltage to the starter/reverse motor. The starter motor turns to crank the engine.



Troubleshooting

SYMPTOM	DIAGNOSIS			
 Starter and reverse systems do not operate but the neutral indicator operates. 	 Weak battery or poor terminal connections. Blown RVS Start fuse. Open circuit at reverse lever switch or faulty starter/reverse motor; do test A2. 			
 Starter and reverse systems do not operate and the neutral indicator does not operate. 	 Poor battery terminal connections. Blown IGN Start Cruise fuse. Open circuit or faulty bank angle sensor, IGN/cruise relay, starter relay A; do test A1. 			
 Starter operates in neutral, but not in gear with clutch lever depressed and side stand switch UP. 	 Open circuit or faulty reverse diode assembly, clutch switch, or side stand switch; do test C1. 			
 Starter operates with clutch lever depressed and side stand switch UP, but not with clutch lever released and gear selector in NEUTRAL. 	 Open circuit or faulty reverse diode assembly or gear position switch; do test D1. 			
 Neutral indicator does not light, but starter operates with clutch lever released. 	 Open circuit to instrument panel bulb, bulb, or reverse diode assembly. 			

(cont'd)

Starting System

Troubleshooting (cont'd)

TEST A1: Power and Ground Reverse Lever Switch Isolation

- Disconnect C92 (reverse lever switch) and with ignition switch ON, check for battery voltage at BRN/WHT circuit.
 If yes, replace reverse lever switch.
 - If no, service BRN/WHT circuit for an open or short to ground.

TEST A2: Power and Ground Isolation

 Disconnect C57 (starter/reverse switch) and with ignition switch ON, check for battery voltage at BLK/LT GRN circuit. If yes, go to test A3. If no, go to test A4.

TEST A3: Power and Ground Starter Relay A Isolation

- Reconnect C57 and disconnect C41 (starter relay A). With ignition switch ON, check for voltage at YEL/RED circuit with starter/reverse switch depressed. If yes, go to step 2.
 If no, service YEL/RED circuit for an open. If OK, replace starter/reverse switch.
- Check for battery voltage at starter relay A BLK circuit from battery. If yes, go to step 3.
 If no, repair BLK circuit.
- With ignition switch ON, gearshift in NEUTRAL, and reverse lever switch in the FORWARD position, check for voltage between BLK (battery feed) circuit and C41 BRN/RED using a test light. If yes, go to step 4.
 If no, sevice BRN/RED circuit for an open between starter relay A and S302.
- Check for battery voltage across BLK circuits at starter relay A. If yes, go to step 5.
 If no, service BLK circuit between starter relay A and S227 for an open.
- Reconnect C41 and disconnect BLK circuits at starter/reverse motor terminal. Connect test light at starter/reverse motor terminal. With ignition switch ON, reverse lever switch FORWARD and gearshift in NEUTRAL, press and hold starter/reverse switch. Test lamp should light. If yes, replace starter/reverse motor. If no, replace starter relay A.

TEST A4: Power and Ground IGN/Cruise Relay Isolation

- Disconnect the IGN/cruise relay. With the ignition switch ON, check for battery voltage at both WHT circuits.
 If yes, go to step 2.
 If no, service WHT circuit for an open.
- Check for battery voltage between WHT and RED/WHT circuits. If yes, go to step 3. If no, go to test A5.
- Connect a fused jumper (15A) between WHT and BLK/LT GRN circuit at IGN/cruise relay and check fo battery voltage at BLK/LT GRN circuit at C57. If yes, replace IGN/cruise relay. If no, service BLK/LT GRN circuit.



TEST A5: Power and Ground Bank Angle Sensor Isolation

- Reconnect the IGN/cruise relay. Disconnect C11 (bank angle sensor). Turn the ignition switch ON and check for battery voltage at RED/WHT circuit. If yes, go to step 2. If no, service RED/WHT circuit for an open.
- Check for battery voltage at WHT circuit. If yes, go to step 3.
 If no, service WHT circuit for an open.
- Check for battery voltage between WHT and GRN circuits.
 If yes, replace bank angle sensor.
 If no, service GRN circuit for an open.

TEST B1: Reverse Switch Relay Isolation

- Disconnect C30 (reverse switch relay). With ignition switch ON and reverse lever switch in FORWARD, check for battery voltage at YEL/RED circuit. If yes, go to step 2. If no, go to test B2.
- Check for battery voltage at BRN/RED circuit with starter/reverse switch depressed. If yes, go to step 3.
 If no, service BRN/RED circuit for an open.
- Check for battery voltage between YEL/RED and BLK/RED circuits.
 If yes, go to step 4.
 If no, check BLK/RED circuit between reverse switch relay and reverse diode assembly for an open. If OK, replace reverse diode assembly.
- Check for battery voltage between YEL/RED and BLU/RED circuits.
 If yes, go to step 5.
 If no, check BLU/RED circuit between reverse switch relay and reverse diode assembly for an open. If OK, replace reverse diode assembly.
- With ignition switch ON, gearshift in NEUTRAL, and reverse lever switch in FORWARD, connect a fused jumper (15A) between BRN/RED circuit at C30 and ground. The starter should crank. If yes, replace reverse switch relay. If no, go to test B4.

TEST B2: Reverse Diode Assembly Isolation

- Disconnect reverse diode assemby connector. With ignition switch ON and reverse lever switch in FORWARD, check for battery voltage at BLK/WHT (diode D7) circuit. If yes, go to step 2. If no, go to test B3.
- Check for continuity at YEL/RED circuit between reverse diode assembly and reverse switch relay.
 If yes, replace reverse diode assembly.
 If no, service YEL/RED circuit.

Starting System

Troubleshooting (cont'd)

TEST B3: Reverse Lever Switch Isolation

Check continuity at BLK/WHT circuit between reverse switch lever and reverse diode assembly. 1. If ves, replace reverse lever switch. If no, service BLK/WHT circuit for an open.

TEST B4: Starter Relay B Isolation

- Reconnect any components disconnected in previous tests. Disconnect C313 (starter relay B 1. connector). With ignition switch ON and reverse lever in FORWARD, depress starter/reverse switch while checking for battery voltage at BLK (starter relay A feed) circuit. If yes, go to step 2. If no, service BLK circuit for an open.
- Depress starter/reverse switch while checking for battery voltage at YEL/RED circuit. 2. If yes, go to step 3. If no, check in-line fuse B, YEL/RED, and RED circuits for an open.
- Depress starter/reverse switch while checking for battery voltage between YEL/RED and 3. GRN/RED circuits. If yes, go to step 4. If no, go to test B5.
- Jumper the BLK and BLK (with PNK) circuits at starter relay B. With gear selector in NEUTRAL 4. and reverse lever switch in FORWARD, depress starter/reverse switch. Starter motor should crank. If yes, replace starter relay B.

If no, service BLK circuit between starter motor and starter relay B for an open.

TEST B5: Reverse Diode Assembly Isolation

- Check GRN/RED circuit continuity between starter relay B and reverse diode assembly. 1. If yes, go to step 2. If no, service GRN/RED circuit for an open.
- With reverse switch in FORWARD, check continuity between GRN/ORN circuit and ground. 2. If yes, replace reverse diode assembly. If no, check reverse switch and GRN/ORN circuit.

TEST C1: Clutch Switch Isolation

- Disconnect C326 (clutch switch connector). With side stand switch UP, check continuity of 1. GRN/WHT circuit to around. If yes, go to step 2. If no, check GRN/WHT circuit, side stand switch, and GRN circuit at C28 for an open.
- Disconnect C325 (clutch switch connector). Check continuity across clutch switch with clutch 2. lever depressed. If yes, check GRN/RED circuit for an open. If OK, replace reverse diode assembly. If no, replace clutch switch.



TEST D1: Gear Position Switch Isolation

 Disconnect C59 (gear position switch) and jumper LT GRN/RED circuit to ground. With side stand switch DOWN, reverse switch in FORWARD, and ignition switch ON, press starter/reverse switch. Starter should crank.

If yes, replace gear position switch.

If no, check LT GRN/RED circuit for an open between gear position switch and reverse diode assembly. If circuit is OK, replace reverse diode assembly.

TEST E1: Power and Ground Isolation

 Disconnect C57 (starter switch) and with ignition switch ON, check for battery voltage at BLK/LT GRN circuit. If yes, go to test E2. If no, go to test E3.

TEST E2: Power and Ground Starter Relay A Isolation

- Reconnect C57 and disconnect C41 (starter relay A). With ignition switch ON, check for voltage at YEL/RED circuit with starter switch depressed.
 If yes, go to step 2.
 If no, check YEL/RED circuit for an open. If OK, replace starter switch.
- Check for battery voltage at starter relay A BLK circuit from battery. If yes, go to step 3.
 If no, repair BLK circuit.
- With ignition switch ON and gearshift in NEUTRAL, check for voltage between BLK (battery feed) circuit and C41 BRN/RED using a test light. If yes, go to step 4.
 If no, service BRN/RED circuit for an open between starter relay A and S373.
- Reconnect C41 and disconnect BLK circuit at starter motor terminal. Connect test light at starter motor terminal. With ignition switch ON and gearshift in NEUTRAL, press and hold starter switch. Test lamp should light.
 If yes, replace starter motor.
 If no, check BLK circuit for an open. If OK, replace starter relay A.

TEST E3: Power and Ground IGN Relay Isolation

- Disconnect the IGN relay. With the ignition switch ON, check for battery voltage at both WHT circuits. If yes, go to step 2. If no, service WHT circuit for an open.
- Check battery voltage between WHT and RED/WHT circuits. If yes, go to step 3. If no, go to test E4.
- Connect a fused jumper (15A) between WHT and BLK/LT GRN circuit at IGN relay and check for battery voltage at BLK/LT GRN circuit at C57.
 If yes, replace IGN relay.
 If no, service BLK/LT GRN circuit.

Starting System

Troubleshooting (cont'd)

TEST E4: Power and Ground Bank Angle Sensor Isolation

- Reconnect the IGN relay. Disconnect C11 (bank angle sensor). With the ignition switch ON, 1. check for battery voltage at RED/WHT circuit. If yes, go to step 2. If no, service RED/WHT circuit for an open.
- 2. Check battery voltage at WHT circuit. If yes, go to step 3. If no, service WHT circuit for an open.
- 3. Check for battery voltage between WHT and GRN circuits. If yes, replace bank angle sensor. If no, service GRN circuit for an open.

TEST F1: Clutch Switch Isolation

- Disconnect C325 (clutch switch connector). With side stand switch UP, check continuity of 1. GRN/WHT circuit to ground. If yes, go to step 2. If no, check GRN/WHT circuit, side stand switch, and GRN circuit at C28 for an open.
- Disconnect C326 (clutch switch connector). Check continuity across clutch switch with clutch 2. lever depressed. If yes, check GRN/RED circuit in-line diode C and BRN/RED circuit for an open. If no, replace clutch switch.

TEST G1: Gear Position Switch Isolation

Disconnect C59 (gear position switch) and jumper LT GRN/RED circuit to ground. With side stand 1. switch DOWN and ignition switch ON, press starter/reverse switch. Starter should crank. If yes, replace gear position switch.

If no, check LT GRN/RED circuit in-line diode A and BRN/RED circuit for an open.



goldwingdocs.com

Charging System



goldwingdocs.com



How the Circuit Works

The alternator generates an alternating current (AC) voltage in its windings as it is driven by the engine. The integral regulator/rectifier converts this AC voltage into direct current (DC) voltage to maintain battery charge and operate the electrical system.

When the engine is running, battery voltage is supplied to the alternator regulator through the BLK/LT GRN circuit. The alternator then supplies voltage to the battery and electrical system through the WHT circuit. Capacitors are connected to each alternator terminal to reduce alternator electrical noise.

1		and the second		
Trout	hin	chr	otir	na –
	UIE	SIL	JUII	IU I
1100	0.0			. 3

SYMPTOM	DIAGNOSIS
Battery is overcharged or undercharged.	 Blown main fuse B. Open WHT circuit to battery; open circuit to regulator/rectifier or faulty alternator; do test A.

TEST A : Power and Ground Check

- Check for battery voltage at alternator terminal B. If yes, go to step 2. If no, service WHT circuit for an open.
- Disconnect C44 (alternator) connector. Turn ignition switch ON and check for battery voltage at BLK/LT GRN circuit.
 If yes, go to step 3.
 If no, service BLK/LT GRN circuit for an open.
- Reconnect C44 and start the engine. Measure voltage across the battery terminals. It should measure between 13.5 and 15.5 volts.
 If yes, perform a battery load test. See service manual, charging section.
 If no, service or replace alternator. See service manual, charging section.

Radiator Fans





goldwingdocs.com

Reverse System







Reverse System



joldwingdocs.com



How the Circuit Works

The reverse control unit takes a series of inputs from external switches and also monitors voltage developed at the starter/reverse motor to determine what outputs should be controlled to make reverse direction possible.

When the reverse lever switch is in the REVERSE position, battery voltage is applied to pin 3 (WHT/BLU) and ground is provided on pin 1 (GRN) from G100.

System Check

If power and ground are OK, the reverse control unit then starts a system check to look for the following:

- Battery voltage applied to pin 5 (BLU/RED) when the engine is started and oil pressure is above 1-3 psi.
- Ground present at pin 8 (LT GRN/RED) when the gearshift sensor is in NEUTRAL.
- Ground present at pin 10 (GRN/WHT) when the side stand switch is in the UP position.
- Ground present on pin 12 (YEL), providing a ground for the reverse indicator and to establish that the speed limiter fuse is good.

When the reverse indicator has been illuminated, the driver knows the system is ready for operation. The driver presses the starter/reverse switch and battery voltage is applied to pin 11 (YEL/RED) of the reverse control unit. As this input is received, a set of outputs starts controlling other system components.

- The reverse control unit provides 9 volts for one second on pin 14 (YEL/RED) to briefly energize the reverse relay switch. The reverse relay switch contacts close to provide a one second path to ground. This pulls the contacts of starter relay A closed.
- At the same time that pin 14 outputs to the reverse relay switch, the reverse control unit grounds pin 7 (LT BLU), which grounds the starter relay regulator. This provides the hold-in current path (BRN/RED) to keep the contacts of starter relay A closed while the starter/reverse switch is pushed.
- Pin 6 (ORN) is grounded by the reverse control unit when the starter/reverse switch is pushed and minimum load is applied to the motor.
- Pin 9 (WHT) is grounded when maximum load is applied to the motor.

System Reset

System reset is required when vehicle speed exceeds 2.5 km/h or when the starter/reverse motor has experienced an electrical motor brake of three seconds or more. The reverse control unit monitors the starter/reverse motor's voltage, and if it determines an excessive speed, it grounds pin 2 (GRY), allowing the speed limiter relay's contacts to close. This removes some of the voltage to the starter/reverse motor.

If it determines an electrical motor brake, then the control unit removes all power to the starter/reverse motor by de-energizing starter relay A. The reverse control unit also provides battery voltage to pin 4 (WHT/RED), turning the reverse indicator off. Before the system may be operated again, the reverse lever switch must be recycled back to the forward position, applying battery voltage to pin 14 (YEL/RED).

Reverse System

- Troubleshooting -

SYMPTOM	DIAGNOSIS
 Reverse system doesn't operate and the reverse indicator doesn't light. 	 No power to reverse control unit; do self-test A, pin 3.
	 No ground to control module; do self-test B, pin 1.
	 Bad side stand switch input; do self-test B, pin 10.
	 No neutral position input from gearshift sensor; do self-test B, pin 8.
	 Incorrect oil pressure switch input; do self-test A, pin 5.
	 Bad speed limiter fuse (65A); do self-test B, pin 12.
	 Faulty reverse control unit. Replace with known good reverse control unit.
 Reverse system operates for only a few seconds, then quits. Reverse indicator turns off or reverse system doesn't operate and the reverse indicator lights. 	 No voltage to starter/reverse motor; do self-test A, pin 13.
	 No control signal to reverse control unit from starter/reverse switch; do self-test A, pin 11.
	 No control signal from reverse control unit to reverse relay switch; do self-test A, pin 14.
	 No control signal from reverse control unit to starter relay regulator; do self-test A, pin 7.



	DIAGNOSIS
SYMPTOM	BIAGROOID
 Reverse system operates, but very slowly or no power on inclines. 	 Faulty control signal from reverse control unit to power relay control #1; do self-test A pin 6.
	 Faulty control signal from reverse control unit to power relay control #2; do self-test A pin 9.
	 Inoperative power relays; do self-test F.
	 If all the above are OK, check red circuits to power relay controls for battery voltage with ignition ON, starter reverse switch in REVERSE, and the starter/reverse switch pushed. If voltage is not present, service circuits for an open.
 Reverse system operates above 2.5 km/h down inclines. 	 Inoperative speed limiter relay; do self-test A pin 2.
 Reverse system operates, but reverse indicator doesn't light. 	 No control signal from reverse control unit indicator; do self-test A pin 4.

(cont'd)

Reverse System



ETM

SELF-TEST B: Continuity Test

Note: Disconnect C42 from reverse control unit. Make measurements between G100 (terminal) and desired pin on connector C42.



Reverse System

Troubleshooting (cont'd) **SELF-TEST C: Reverse Lever Switch** Note: Consult service manual for mechanical operations and alignment. 1. With transmission in NEUTRAL and reverse lever switch in FORWARD, see if the neutral indicator lights. If yes, go to step 3. If no, go to the next step. 2. Check for battery voltage at BRN/WHT circuit of reverse lever switch connector C92. If yes, go to the next step. If no, service BRN/WHT circuit for an open. 3. With C92 disconnected, check continuity between: . BRN and BLK/WHT circuits with reverse lever switch in FORWARD BRN and WHT/BLU circuits with reverse lever switch in REVERSE If no continuity exists, replace reverse lever switch. If all measurements are OK, go to the next step. 4. Service WHT/BLU circuit for an open. SELF-TEST D: Side Stand Switch With the ignition ON and side stand DOWN, check to see if side stand indicator lights. 1. If yes, go to step 3. If no, go to the next step. 2. With C28 disconnected, check for continuity between GRN circuit and ground G100. If yes, go to the next step. If no, service GRN circuit for an open. Disconnect C28 and check continuity between GRN/WHT and GRN circuits on switch side of 3. connector with side stand switch DOWN. If yes, go to the next step. If no, replace side stand switch, 4. With C28 still disconnected, check continuity between YEL/BLK and GRN circuits. If no, replace side stand switch. **SELF-TEST E: Gear Position Switch Test** 1. Disconnect C59. With the transmission in NEUTRAL, check continuity between LT GRN/RED circuit and ground. If not, replace the gear position switch.



SELF-TEST F: Power Relay Control Test

- 1. With suspected relay disconnected, apply 12 volts across coil and measure continuity across contacts.
 - Power relay control #1 continuity exists
 - Power relay control #2 continuity does not exist
 - If incorrect, replace relay. If OK, go to next step.
- Power relay control #1; check continuity of BLK circuit from contacts and repair if necessary. Power relay control #2; check continuity of WHT circuit from contacts and repair if necessary. If all measurements are OK, go to self-test H.

SELF-TEST G: Speed Limiter Relay Test

- With relay disconnected, apply 12 volts across the coil and measure continuity across contacts; continuity should exist. If not, replace speed limiter relay. If OK, go to next step.
- Check continuity of WHT circuit and YEL circuit from contacts and repair if necessary. If OK, go to self-test H.

SELF-TEST H: Reverse Resistors

- 1. Disconnect starter/reverse motor terminal connector from reverse resistors.
- 2. Disconnect connector C316 and measure between all wires and terminal from previous step.
- 3. If resistance is above 2 ohms for any measurement, replace reverse resistors.

Cruise Control







4-1

Cruise Control



goldwingdocs.con

4-2

ETM



Cruise Control

- How the Circuit Works

The cruise control system uses the following components to control vehicle speed in the cruise control mode:

- Clutch cruise cancel switch
- Cruise control actuator
- Cruise control switch
- Cruise control unit
- Cruise control valve unit
- Cruise valve relay
- Engine control module (ECM)
- Front brake light/cruise cancel switch
- Gear position switch
- Instrument panel
- Rear brake cruise cancel switch
- Throttle cancel switch

The cruise control unit receives several signals to operate. It must receive a battery voltage signal from the engine stop switch and the cruise ON switch at its ignition input. There must be a battery voltage signal at the cancel input that receives voltage from the front brake light/cruise cancel switch, throttle cancel switch, and rear brake cruise cancel switch. These switches complete the current path when both brakes are released and the throttle is not OFF (pushed clockwise). The cruise control unit has a 4th gear input and an overdrive (OD) input. The module must recognize a ground signal at its 4th gear or overdrive (OD) inputs to enter the cruise mode.

When the cruise ON switch is engaged, the cruise control unit grounds the cruise ON indicator control line and the cruise ON indicator lights. The system is activated when the unit receives a momentary voltage signal at its SET/DECEL input. The unit grounds the cruise SET indicator control line. It then looks at the speed signal outputs from the instrument panel and the engine speed from the ECM. It uses the ECM speed signal to control vehicle speed and the instrument panel speed signal to determine if the vehicle is above 30 mph and below 80 mph.

The cruise control unit maintains vehicle speed by energizing the cruise valve relay and grounding and opening its vacuum vent and valve control lines. Engine vacuum is then channeled through the cruise control valve unit to the cruise control actuator. The actuator pulls on the throttle linkage to increase vehicle speed. When the vehicle set speed is reached, the unit opens the vacuum valve control line and allows vacuum in the cruise control valve unit to hold the throttle linkage to maintain vehicle speed. If the unit detects vehicle speed increasing past the set speed, or if the SET/DECEL switch is held, the unit removes ground from the vent valve control circuit. Vacuum in the cruise control actuator is decreased, the throttle cable tension is relaxed, and the engine speed slows.

The cruise mode is disengaged by applying either brake, releasing the clutch, or moving the throttle to OFF. When either brake is applied, or if the throttle is moved to OFF, battery voltage is removed from the cancel input. This forces the unit to drop out of the cruise mode. There is also a redundant brake disable input to the cruise control unit. When the brake lights come on, battery voltage is applied to the cruise module to disengage the cruise control.



- Troubleshooting

SYMPTOM	DIAGNOSIS
 Cruise ON indicator does not light briefly when stop engine switch is first turned to RUN, but lights with cruise on. 	BLU/ORN circuit open.Faulty instrument panel.
 Cruise SET indicator does not light briefly when stop engine switch is first turned to RUN, but lights with cruise set. 	BLU/WHT circuit open.Faulty instrument panel.
Any other cruise related symptom.	Perform Isolation Procedure.

(cont'd)

Cruise Control

Troubleshooting (cont'd)

ISOLATION PROCEDURE

Note: Disconnect connector C33. Perform all checks in order.

If a result is incorrect, go to test referenced. If the result is correct, perform the next check. Throttle is at the cruise cancel mode position when the throttle is turned clockwise past the rest position.






Cruise Control

Troubleshooting (cont'd)

ISOLATION PROCEDURE (cont'd)

17

Start engine and allow to run for 30 seconds to allow vacuum to build in accumulator. Stop engine, put ignition switch ON, engine stop switch in RUN, and ground GRN/BLK wire of the cruise valve relay. Jumper BRN circuit to ground. Put cruise switch ON. Jumper BRN/BLK circuit to ground for about 3 seconds, then disconnect and observe if throttle turns and holds. If not, go to test L.



18

With ignition switch ON, cruise switch ON, engine stop switch in RUN, and ground GRN/BLK wire of the cruise valve relay, remove jumper at BRN circuit while observing throttle. Cruise control actuator releases throttle. If not, go to test M.



Note: If all isolation checks are correct, check wires between cruise control unit and male half of C33 for opens or shorts to ground. If all circuits are OK, replace cruise control unit and road-test. If not OK, speed signal from ECM may be at fault.



Test A: Cruise Unit Power

- Turn ignition switch ON and engine stop switch in RUN. Check for battery voltage at C138 WHT circuit. If yes, go to step 2. If no, service WHT circuit for an open.
- With ignition switch OFF, connect an ohmmeter across BLK/YEL and WHT circuits at C138. Check for continuity with cruise switch ON. If yes, service BLK/YEL circuit for an open between C33 and right combination switch. If no, replace right combination switch.

Test B: Cruise Unit Cancel Input Test

- Disconnect C132 (throttle cancel switch). Turn ignition and cruise switches ON and the engine stop switch to RUN. With front brake released, check for battery voltage at GRN/WHT circuit. If yes, go to step 2. If no, check front brake light/cruise cancel switch, BLK/BLU and GRN/WHT circuits for an open between C132 and C138. Replace/repair as necessary.
- 2. Reconnect C132 and disconnect C133 (rear cruise brake cancel switch). Turn ignition and cruise switches and the engine stop switch to RUN. With front brake and throttle released, check for battery voltage at GRN/WHT circuit. If yes, check rear brake cruise cancel switch and BRN/RED circuit for an open between C133 and cruise control unit. Replace/repair as necessary. If no, check throttle cancel switch and GRN/WHT circuit for an open between throttle cancel switch and rear brake cruise cancel switch.

Test C: Cruise Relay Valve Input Test

 Disconnect cruise valve relay connector. Turn the ignition and cruise switches ON and the engine stop switch to RUN. Release front and rear brakes and release throttle. Check for battery voltage at BRN/RED coil circuit. If yes, check relay for an open coil and GRN/BLK circuit for an open between cruise valve relay and C33. Replace/repair as necessary. If no, service BRN/RED circuit for an open.

Test D: Clutch Cancel Input Test

 Disconnect C323 (clutch cruise cancel switch). Turn the ignition and cruise switches ON, and the engine stop switch to RUN. Check for battery voltage at BLK/YEL circuit. If yes, check clutch cruise cancel switch and GRN/BLU circuit for an open between C323 and C33. Replace/repair as necessary. If no, service BLK/YEL circuit for an open.

(cont'd)

Cruise Control

Troubleshooting (cont'd)

Test E: SET/DECEL Switch Continuity Check

 Connect ohmmeter across WHT and WHT/YEL circuits at C138. Check for continuity with the cruise switch ON and SET/DECEL switch held on. If yes, service WHT/YEL circuit for an open between C138 and C33. If no, replace the cruise control switch.

Test F: RESUME/ACCEL Switch Continuity Check

 Connect ohmmeter across WHT and WHT/BLU circuits at C138. Check for continuity with the cruise switch ON and RESUME/ACCEL switch held on. If yes, service WHT/BLU circuit for an open between C138 and C33. If no, replace the cruise control switch.

Test G: Vacuum Valve Control Check

- Disconnect C131 (cruise control vent valve unit). Turn ignition and cruise switches ON and engine stop switch in RUN and ground the GRN/BLK wire at the cruise valve relay. Release throttle and both brakes. Check for battery voltage at BRN/WHT circuit. If yes, go to step 4. If no, go to step 2.
- Disconnect cruise valve relay connector. Check for battery voltage at BRN/RED circuits. If yes, go to step 3.
 If no, service BRN/RED circuit for an open between cruise valve relay and rear brake cruise cancel switch.
- Check for continuity at BRN/WHT circuit between C131 (cruise valve control unit) and cruise valve relay.
 If yes, replace cruise valve relay.
 If no, service BRN/WHT wire for an open.
- Check continuity to ground at C131 GRN circuit. If yes, go to step 5. If no, service BRN/WHT wire for an open.
- With C131 disconnected, check continuity between BRN/WHT and BRN/BLK circuits at cruise control valve side of C131.
 If yes, service BRN/BLK circuit for an open between C33 and C131.
 If no, replace cruise control valve unit.

Test H: Vent Valve Continuity Check

Disconnect C131 (cruise control valve unit) and check continuity between BRN/WHT and BRN circuits at cruise control valve side of C131.
 If yes, service BRN circuit for an open between C33 and C131.
 If no, replace cruise control valve unit.

ETM

Test I: Cruise SET Indicator Control Test

- Put engine stop switch in RUN and turn ignition ON. Check that cruise SET indicator lights briefly.
 If yes, service BLU/WHT circuit between instrument panel and cruise control unit.
 If no, go to step 2.
- Disconnect C66 (instrument panel). Turn ignition ON and put engine stop switch in RUN. Check for battery voltage at WHT circuit. If yes, go to step 3. If no, service WHT circuit for an open.
- Connect ohmmeter between WHT and BLU/WHT circuits at instrument panel half of C66. Check for continuity.
 If yes, check BLU/WHT circuit for an open between C66 and C33.
 If no, check bulb, WHT circuit, and BLU/WHT circuit for an open. Replace/repair as necessary.

Test J: Cruise ON Indicator Control Test

- Put engine stop switch in RUN and turn ignition ON. Check that cruise ON indicator lights briefly. If yes, service BLU/ORN circuit between instrument panel and cruise control unit. If no, go to step 2.
- Disconnect C66 (instrument panel). Turn ignition ON and engine stop switch in RUN. Check for battery voltage at WHT circuit. If yes, go to step 3. If no, service WHT circuit for an open.
- Connect ohmmeter between WHT and BLU/ORN circuits at instrument panel half C66. Check for continuity. If yes, check BLU/ORN circuit for an open between C66 and C33. If no, check bulb, WHT circuit, and BLU/ORN circuit for an open. Replace/repair as necessary.

Test K: Speed Signal Input Test

1. Disconnect C73. With ignition switch ON, check for about 5 to 10 volts at WHT/BLK circuit.



If yes, check WHT/BLK and YEL/RED circuit for an open or WHT/BLK wire between C73 & instrument panel for an open. If no, go to step 2.

(cont'd)

Cruise Control

Troubleshooting (cont'd) Test K: Speed Signal Input Test (cont'd) Turn ignition OFF and connect ohmmeter to YEL/RED circuit at the female half of C33. 2. Check for a short to ground. If yes, go to next step. If no, go to step 5. With ohmmeter connected from previous step, disconnect C99 (turn signal cancel control unit) 3. and check again for the short to ground. If yes, go to step 4. If no, service turn signal cancel control unit for a short to ground. With ohmmeter connected from previous step, disconnect radio/cassette player connector C1 4. and check again for the short to ground. If yes, service the WHT/BLK and YEL/RED circuit for a short to ground. If no, service radio/cassette player for a short to ground. With ohmmeter connected from previous step, check the male half of C33 for a short to ground. 5. If yes, service the YEL/RED circuit for a short to ground. If no, replace the cruise control unit. Test L: Cruise Control Actuator Vacuum Input Test 1. Connect vacuum gauge at source to cruise control valve unit. Start engine and check for vacuum. If yes, go to step 2. If no, service vacuum line system for a blockage or leak. Stop engine and connect vacuum pump to cruise control actuator. Operate vacuum pump and 2. check that the throttle turns, holds, and releases as vacuum is applied, maintained, and released. If yes, go to step 3. If no, check vacuum line to cruise control actuator for blockage or leaks. Replace/repair as necessary. Disconnect C131 and check for continuity to ground at GRN circuit. 3. If yes, replace cruise control valve unit. If no, service GRN circuit for an open. Test M: Cruise Control Actuator Vent Input Test Connect vacuum pump to vacuum source line of cruise control valve unit. Jumper BRN circuit 1. to ground. Jumper GRN circuit to ground. Jumper BRN/BLK circuit to ground. Jumper BRN/WHT circuit to battery voltage. Operate vacuum pump and allow time for cruise control actuator to pull throttle cable. Disconnect jumper at BRN/BLK circuit. Cable actuator should hold throttle cable. Disconnect jumper at BRN circuit. Cable actuator should release throttle. If yes, check BRN circuit for high resistance between C33 and C131. If no, replace cruise control valve unit.

ETM

goldwingdocs.com

Horn



ETM

Clock



Automatic Level Control







Low Fuel and Oil Pressure Warning System



goldwingdocs.com



goldwingdocs.com

Indicators







Instrument Panel: Gauges, Illumination Lights



ETM



Speed Sensor Circuit (Wheel Speed)



(Crankshaft Speed)



Note: For Ignition, Battery and Grounding details of the Engine Control Module ECM), see page 3-0

Headlights







Marker Lights: Fairing and Trunk



goldwingdocs.com







Marker Lights: Saddlebags



aoldwinadocs.com



Cornering Lights



Handlebar Switch Illumination





goldwingdocs.com

Turn Signal, Hazard and Position Lights







Turn Signal, Hazard and Position Lights



ETM



Tail, Parking, and License Plate Lights



ETM



Brake Lights





Trunk Light



Accessory Lights

- Circuit Schematic




Spoiler Brake/Taillight: SE Only



Radio and Cassette



goldwingdocs.com





Radio and Cassette



aoldwingdocs.com



Radio and Cassette

- Circuit Schematic (cont'd)



How the Circuit Works

The radio system is made up of the radio/cassette deck, driver and passenger headsets, left combination switch, instrument panel, and a passenger controller. The radio receives battery voltage from the ACC fuse with the ignition switch in ON, ACC, and PARK. The radio receives battery voltage from the Back Up fuse at all times to retain station preset memory. Radio information is transferred to the instrument panel LCD display through data, load, clock, and data ground circuits.

When the starter/reverse switch is pressed, battery voltage is applied to the radio. This signal turns the radio off during starter operation and forces the radio to blank the instrument panel LCD display through the blanking circuit. The left combination switch contains tune-up, tune-down, and radio mute controls. When the mute, tune-up, or tune-down function is requested by pushing the corresponding button, a ground signal from the GRN/BLK circuit is applied to the respective BLU/BLK, RED/BLK, or YEL/RED circuits to the radio. If equipped with a passenger controller, the tune-up and tune-down functions are available and work the same as the left combination switch.

Headset Operation

The driver and passenger helmets may be equipped with headset units. These headsets contain speakers and a microphone to allow two-way communication between driver, passenger and CB radio. The driver and passenger headsets are tied to the radio through a microphone, left channel, right channel, and ground lines. If equipped with a passenger controller, the passenger circuits run through the passenger controller.

Speakers - SE Models

The radio in the SE model uses a fader made up of two potentiometers. Each one controls volume between the front and rear speaker on one side. The plus and minus signals from one side are tied to opposite sides of the potentiometer. The wiper is tied to the front and rear speakers' common circuit. The minus circuit is tied to the front speakers and the plus circuit is tied to the rear speakers. Moving the fader wiper varies the potential on the common circuit. Because the front and rear speakers are tied to opposite speaker outputs (plus or minus), the volume is shifted between the front and rear.

Speakers - Asp Model

In models not equipped with rear speakers, the speakers are tied directly to the radio. The left and right sides are separated, with each side having separate plus and minus terminals. If equipped, the front tweeters are in parallel with the standard speakers.

In models equipped with rear speakers, the radio speaker outputs are tied to a fader. The fader has separate outputs for left front, right front, left rear, and right rear speakers.

Radio

- Troubleshooting -

SYMPTOM	DIAGNOSIS
 Radio does not come on and radio information does not appear on display. 	 Blown ACC fuse. Open LT GRN/BLK circuit or GRN circuit to radio/clock or radio/cassette deck; do test A.
 Radio loses preset station memory. 	Blown Back Up fuse.Open RED/YEL circuit.
 Radio does not turn off during starter cranking. 	Open YEL/RED circuit.
 Radio volume does not vary with vehicle speed. 	 Open WHT/BLK circuit or faulty radio/cassette deck; do test B.
 Radio operates but radio information is missing, or does not display properly. 	 Open or shorted data, load, clock, ground, or blanking circuits between instrument panel and radio/cassette deck; faulty radio or instrument panel; do test C.
 One or more front speakers are inoperative (Asp model without rear speakers). 	 Faulty speaker(s). Open or shorted speaker wires or faulty radio/cassette deck; do test D.
 One or more speakers are inoperative (Asp model with rear speakers). 	 Faulty speaker(s). Open or shorted speaker wires, faulty fader or radio/cassette deck; do test E.
 One or more speakers do not operate (SE model). 	 Faulty speaker(s). Open or shorted speaker wires, faulty fader or radio/cassette deck; do test F.
 All speakers operate but fader is inoperative, or one side is much louder (SE model). 	 Open speaker wires, faulty fader or radio/cassette deck; do test G.
 Driver and passenger headsets, mute, tune up, and tune down functions are inoperative. 	 Open GRN/BLK circuit at radio/cassette deck C1 pin 15. Faulty radio/cassette deck.
 Passenger headset is inoperative (without passenger controller). 	 Open GRN/BLK circuit at passenger headset or faulty passenger headset; do test H.
 Passenger headset is inoperative (with passenger controller). 	 Open GRN/BLK circuit at passenger controller; faulty passenger headset or controller; do test K.

SYMPTOM	DIAGNOSIS
 Passenger microphone is inoperative, but headset speakers are OK (without controller). 	 Open or shorted RED/BLU circuit. Faulty passenger headset or radio/cassette deck; do test H.
 Passenger microphone is inoperative, but headset speakers are OK (with controller). 	 Open or shorted RED/BLU circuit, faulty controller, passenger headset or radio/ cassette deck; do test K.
 Passenger LH and/or RH headset speakers don't operate (without passenger controller). 	 Open YEL or LT GRN/RED circuits be- tween headset and radio/cassette deck. Faulty headset or radio/cassette deck; do test H.
 Passenger LH and/or RH headset speakers don't operate (with passenger controller). 	 Open YEL or LT GRN/RED circuits between radio/cassette deck and passenger controller. Faulty headset, radio/cassette deck, or passenger controlle; do test K.
 Passenger and driver LH or RH headset speakers don't operate. 	 Open or shorted YEL or LT GRN/RED circuits between passenger controller and radio/cassette deck. Faulty radio/cassette deck; do test J.
 Driver's headset does not work but passenger headset is OK. 	 Open GRN/BLK circuit, BLK circuit, or faulty driver's headset; do test I.
 Driver's LH or RH headset channel does not work. 	 Open YEL or LT GRN/BLK circuits, faulty driver's headset or radio/cassette deck; do test l.
 Mute and/or tune up, tune down search functions do not operate from left combination switch, but headsets operate normally. 	 Open or shorted left combination switch wires, faulty left combination switch or radio/cassette deck; do test L.
 Tune up and/or tune down search functions do not work from passenger controller. 	 Open YEL/RED, RED/BLK, or GRN/BLK circuits or faulty passenger controller; do test M.
Poor reception.	Faulty antenna or antenna wire.
 Driver's microphone is inoperative but headset speakers are OK. 	 Open WHT circuit between driver's headset and radio/cassette deck. Faulty driver's headset or radio/cassette deck; do test I.

Radio

- Troi	uble	shooting (cont'd)
	Tes	t A: Radio Does Not Operate and Radio Information Does Not Appear On Display
	1.	Disconnect radio/cassette deck connector C1. Put ignition in ACC and check for battery v at pin 9 (LT GRN/BLK). If yes, go to step 2. If no, service LT GRN/BLK circuit for an open.
	2.	Check for continuity between the GRN circuit and ground. If yes, go to step 5. If no, service GRN circuit for an open.
	3.	Disconnect radio/clock connector C1. Put ignition in ACC and check for battery voltage at pin 8 (LT GRN/BLK). If yes, go to step 4. If no, service LT GRN/BLK circuit for an open.
	4.	Check for continuity between the GRN circuit and ground. If yes, go to step 5. If no, service LT GRN/BLK circuit for an open.
	5.	Check for battery voltage at pin 18 (RED/YEL) circuit. If yes, repair or replace radio/casssette deck (Asp and SE) or radio/clock (Int). If no, service RED/YEL circuit for an open.
	Test	B: Radio Volume Does Not Vary With Vehicle Speed
	1.	If speedometer does not operate, ropair speedometer. If arvies particulations in the

er does not operate, repair speedometer. If cruise control does not work, go to cruise control. If cruise and turn signals operate properly, disconnect radio/cassette deck connector C1 and connect voltmeter at C1 pin 16 (WHT/BLK). Turn ignition switch ON and slowly turn front wheel. Voltage should alternate between 10 and 0 volts as wheel is turned. If yes, service radio/cassette deck. If no, service WHT/BLK circuit for an open.

battery voltage

Test C: Radio Operates but Radio Information Does Not Display Properly

- Check continuity at RED, WHT, GRY, and two BLK circuits between radio connector C2 and C91. 1. If yes, go to step 2. If no, repair open circuits.
- 2. Replace the radio/cassette deck with a known good unit. Operate radio to see if display operates normally. If yes, replace the radio/cassette deck. If no, replace instrument panel,

Test D: One or Both LH Front or RH Front Speakers Are Inoperative (Asp Model Without Rear Speakers)

1. Disconnect suspect speaker(s) and momentarily connect a 1.5 volt battery across the suspect speaker terminals and listen for a "click" sound. If yes, check suspect wires for an open and check connector terminal connections. If they are OK, replace the radio/cassette deck. If no, replace the suspect speaker.



Test E: One or More Speakers Are Inoperative (Asp Model With Rear Speakers)

- Operate the radio. Do any speakers operate? If yes, go to step 2. If no, go to step 5.
- Adjust balance control toward LEFT. Does at least one LH speaker operate? If yes, go to step 3. If no, go to step 5.
- Adjust balance control toward RIGHT. Does at least one RH speaker operate? If yes, go to step 4. If no, go to step 6.
- Disconnect suspect speaker(s) and momentarily connect a 1.5 volt battery across the suspect speaker terminals and listen for a "click" sound.
 If yes, check suspect wires for an open and check connector terminal connections. If they are OK, replace the fader control.
 If no, replace suspect speaker.
- Disconnect fader connector. With ignition in ACC, tune in a strong station. Adjust balance control towards LEFT and volume on high. Connect voltmeter across BLU/GRN and GRY/BLK circuits from radio. With voltmeter set on lowest scale, check that A/C voltage varies around 1 volt. If yes, go to step 4.
 If no, check BLU/GRN and GRY/BLK circuit for an open.
 If the wires are OK, replace the radio/cassette deck.
- Disconnect fader connector. With ignition in ACC, tune in a strong station. Adjust balance control towards RIGHT and volume on high. Connect voltmeter across RED/GRN and BRN/BLK circuits from radio. With voltmeter set on lowest scale, check that A/C voltage varies around 1 volt. If yes, go to step 4.
 If no, check RED/GRN and BRN/BLK circuit for an open.
 If the wires are OK, replace the radio/cassette deck.

Test F: One or More Speakers Do Not Operate Normally (SE Model Only)

- Operate the radio. Do any speakers operate? If yes, go to step 2. If no, go to step 5.
- Adjust balance control toward LEFT. Does at least one LH speaker operate? If yes, go to step 3. If no, go to step 5.
- Adjust fader control toward RIGHT. Does at least one RH speaker operate? If yes, go to step 4. If no, go to step 6.
- Disconnect suspect speaker(s) and momentarily connect a 1.5 volt battery across the suspect speaker terminals and listen for a "click" sound.
 If yes, check suspect speaker wires to fader or radio/cassette player for an open. If wires are OK, replace the fader control.
 If no, replace the suspect speaker.

(cont'd)

Radio

Troubleshooting (cont'd)

5. Disconnect C130 (fader connector). With ignition in ACC, tune in a strong station. Adjust balance control towards LEFT and volume on high. Connect voltmeter across GRY/BLK and BLU/YEL circuits from the radio. With voltmeter set on lowest scale, check that A/C voltage varies around 1 volt.

If yes, go to step 4.

If no, check GRY/BLK, BLU/GRN, and BLU/YEL circuits for an open. If the wires are OK, replace the radio/cassette player.

6. Disconnect fader connector. With the ignition in ACC, tune in a strong station. Adjust balance control towards RIGHT and volume on high. Connect voltmeter across RED/YEL and BRN/BLK circuits from the radio. With voltmeter set on lowest scale, check that A/C voltage varies around 1 volt.

If yes, go to step 4.

If no, check RED/YEL, RED/GRN, and BRN/BLK circuits for an open. If the wires are OK, replace the radio/cassette player.

Test G: Fader Does Not Operate Normally or One Side Is Much Louder (SE Model Only)

- Disconnect C130 (fader connector). With ignition in ACC, tune in a strong station. Connect voltmeter across GRY/BLK and BLU/YEL circuits from the radio. With voltmeter set on the lowest scale, check that A/C voltage varies around 1 volt. If yes, go to step 2. If no, check GRY/BLK and BLU/YEL circuits for an open. If the wires are OK, replace the radio/cassette player.
- Connect voltmeter across RED/YEL and BRN/BLK circuits from the radio. With voltmeter set on the lowest scale, check that A/C voltage varies around 1 volt. If yes, go to step 3. If no, check GRY/BLK, BLU/GRN, and BLU/YEL circuits for an open. If the wires are OK, replace the radio/cassette player.
- With C130 disconnected, jumper GRY circuit to BLU/YEL circuit. Put ignition switch in ACC and operate radio. Listen to all LH speakers. They should be equally audible.
 If yes, go to step 4.
 If no, service GRY circuit for an open.
- 4. With C130 disconnected, jumper BRN/WHT circuit to RED/YEL circuit. Put ignition switch in ACC and operate radio. Listen to all RH speakers. They should be equally audible. If yes, replace fader. If no, service BRN/WHT circuit for an open.

Test H: Passenger Headset Is Inoperative but Driver Headset Is OK (Without Passenger Controller)

- Disconnect C12 and put ignition switch in ACC. Turn radio on. Check for 5 volts at GRN/BLK and LT GRN/RED circuits. If yes, go to step 2. If no, check suspect circuit for an open.
- Check for 5 volts between GRN/BLK and BLK circuits, between GRN/BLK and YEL circuits, and between GRN/BLK and RED/BLK circuits. If yes, go to step 3. If no, check suspect circuit for an open. If wire is OK, replace radio/cassette deck.

- Check RED/BLU and YEL circuits for a short to ground. If OK, go to step 4. If not OK, repair suspect circuit for a short to ground.
- Check continuity of circuits in headset jumper cable.
 If OK, go to step 5.
 If not OK, replace headset jumper.
- Connect a known good passenger headset. Does the substitute headset now operate? If yes, replace the passenger headset. If no.replace radio/cassette deck.

Test I: Driver Headset Is Inoperative but Passenger Headset Is OK

- Disconnect C311 and put ignition switch in ACC. Turn radio on. Check for 5 volts at GRN/BLK and LT GRN/RED circuits. If yes, go to step 2. If no, check suspect circuit for an open.
- Check for 5 volts between GRN/BLK and BLK circuits, between GRN/BLK and YEL circuits, and between GRN/BLK and WHT circuits. If yes, go to step 3. If no, check suspect circuit for an open. If wire is OK, replace radio/cassette deck.
- Check WHT and YEL circuits for a short to ground.
 If OK, go top step 4.
 If not OK, repair suspect circuit for a short to ground.
- Check continuity of circuits in headset jumper cable.
 If OK, go to step 5.
 If not OK, replace headset jumper.
- Connect a known good driver headset. Does the substitute headset now operate? If yes, replace the driver headset. If no, check YEL, LT GRN/RED and WHT circuits for an open.

Test J: Driver and Passenger Headsets Are Inoperative

- Disconnect C311. Put ignition switch in ACC and turn radio on. Check for 5 volts at GRN/BLK and LT GRN/BLK circuits. If yes, go to step 2. If no, check suspect circuit for an open or short to ground. If wires are OK, replace radio/cassette deck.
- Check for 5 volts between GRN/BLK and BLK circuits, between GRN/BLK and YEL circuits, and between GRN/BLK and WHT circuits.
 If OK, go to step 3.
 If not OK, service suspect circuits for an open.
- Disconnect radio connector C1. Check YEL, LT GRN/RED and WHT circuits for shorts to ground. Disconnect passenger headset connector. Check RED/BLU circuit for a short to ground. If yes, service suspect wires for a short to ground. If no, replace radio/cassette deck.

(cont'd)

Radio

Troubleshooting (cont'd)

Test K: Passenger Headset Is Inoperative but Driver Headset Is OK (With Passenger Controller)

- Disconnect C304 and check for 5 volts at GRN/BLK circuit with radio on. If yes, go to step 2.
 If no, service GRN/BLK circuit for an open.
- Disconnect C305 and check for 5 volts at GRN/BLK and LT GRN/RED circuits. If yes, go to step 3. If no, service GRN/BLK circuit for an open.
- Check for 5 volts between GRN/BLK and YEL circuits, and between GRN/BLK and RED/BLU circuits. If yes, go to step 4.
 If no, service open in suspect circuit(s).
- Check continuity of circuits in headset jumper harness.
 If OK, go to step 5.
 If not OK, replace jumper harness.
- Reconnect connectors C304 and C305. Substitute a known good passenger headset and see if system operates.
 If yes, replace passenger headset.
 If no, replace passenger controller.

Test L: MUTE, TUNE-UP, TUNE-DOWN Search Functions Do Not Operate

- Locate C21 and check for 5 volts at GRN/BLK circuit with radio on. If yes, go to step 2. If no, service GRN/BLK wire for an open.
- Disconnect radio connector C1 and connect ohmmeter between GRN/BLK circuit and BLU/BLK circuit. Check for continuity with MUTE button pressed. If yes, go to step 4. If no, go to step 3.
- At C21, connect ohmmeter between GRN/BLK and BLU/BLK switch pins with MUTE button pressed and check for continuity.
 If yes, service BLU/BLK circuit for an open between radio/cassette deck and C21.
 If no, replace left combination switch.
- At radio connector C1, connect ohmmeter between GRN/BLK circuit and RED/BLK circuit. Check for continuity with TUNE-UP button pressed. If yes, go to step 6. If no, go to step 5.
- At C21, connect ohmmeter between GRN/BLK and RED/BLK circuits. Check for continuity with TUNE-UP button pressed.
 If yes, service BLU/BLK circuit for an open between radio/cassette deck and C21.
 If no, replace left combination switch.
- At radio connector C21, connect ohmmeter between GRN/BLK and YEL/RED circuits. Check for continuity with TUNE-DOWN button pressed. If yes, replace radio. If no, go to step 7.



 At C21, connect ohmmeter between GRN/BLK and YEL/RED circuits. Check for continuity with TUNE-DOWN button pressed.
 If yes, service YEL/RED circuit for an open between radio and C21.
 If no, replace left combination switch.

Test M: TUNE-UP or TUNE-DOWN Functions Do Not Work From Passenger Controller

- Disconnect C304 and check for 5 volts at GRN/BLK circuit with ignition in ACC and radio on.
 If yes, go to step 2 (Asp or SE model) or step 3 (Int model).
 If no, service GRN/BLK circuit for an open.
- Disconnect C305 and check for 5 volts at GRN/BLK circuit with ignition in ACC and radio on.
 If yes, go to step 3.
 If no, service GRN/BLK circuit for an open.
- With C304 disconnected, connect ohmmeter between RED/BLK circuit and ground. Turn radio on. Press left combination switch TUNE-UP button and check for 5 volts. If yes, go to step 4.
 If no, service RED/BLK circuit for an open.
- Connect ohmmeter between YEL/RED circuit and ground. Press left combination switch TUNE-DOWN button and check for 5 volts.
 If yes, replace passenger controller.
 If no, service RED/BLK circuit for an open.

Citizen Band Radio: Asp



aoldwinadocs.com



Citizen Band Radio: SE





Citizen Band Radio

- How the Circuit Works

The CB transceiver receives battery voltage from the ACC fuse with the ignition switch in ON, ACC, or PARK. The transceiver gets battery voltage from the Back Up fuse at all times. When the starter/reverse or starter motor is engaged, battery voltage is applied to the CB transceiver through the YEL/RED circuit to mute the audio. The CB sends and receives audio information through the radio through a series of control lines that run between the radio/clock and CB transceiver. These lines control radio and CB muting, audio input and output, and other functions.

Note: If the radio does not operate, perform the radio diagnostic tests described in the radio section before diagnosing any CB symptoms.

Troubleshooting

SYMPTOM	DIAGNOSIS
 CB radio does not operate and display is blank. 	• Open power or ground circuit; do test A.
CB transceiver loses memory.	Open battery circuit to CB transceiver.
 CB transceiver does not turn off while starter/reverse motor is cranking. 	Open starter input circuit to CB transceiver.
 CB transceiver appears to come on but does not transmit or receive. 	 Faulty antenna, coaxial cable, open or shorted control circuit between CB trans- ceiver and radio; faulty CB transceiver or radio; do test C.
 CB transceiver receives and transmits but does not operate properly. 	 Open or shorted control circuit between transceiver and radio; faulty CB transceiv- er, or radio; do test C.
 CB transceiver transmits but does not receive. 	 Open or shorted control circuit between transceiver and radio; faulty CB transceiv- er, or radio; do test C.
 CB transceiver receives but does not transmit. 	 Faulty transmitter switch circuit or switch, open control circuit between CB and radio; do test B.
 CB transceiver channel select does not operate from driver switch but the transmit function operates. 	 Open channel select input circuit, switch, or faulty CB transceiver; do test E.
 CB transceiver does not transmit and/or channel select operates from driver switch but not from passenger switch. 	 Open circuit between passenger controller and CB transceiver or faulty passenger controller; do test D.



Troubleshooting

Test A: CB Radio Does Not Operate and Display Is Blank

- Disconnect connector C306 (Asp or Int model) or C4 (SE model). Put the ignition switch in ACC. Check for battery voltage at LT GRN/BLK circuit. If yes, go to step 2. If no, service LT GRN/BLK wire for an open.
- Check for voltage at RED/YEL circuit.
 If yes, go to step 3.
 If no, service RED/YEL circuit.
- Disconnect CB connector C25 and check for a good ground at GRN circuit.
 If yes, replace CB transceiver.
 If no, service GRN circuit for an open.

Test B: CB Receives but Does Not Transmit

- Does the channel select function operate from the driver's channel select switch? If yes, go to step 3.
 If no, go to step 2.
- Disconnect C20 and C23 (SE model) and check for a ground at GRN circuit. If yes, go to step 3.
 If no, service GRN circuit for an open.
- With C20 and C23 (SE model) disconnected, connect ohmmeter across WHT and GRN circuits at switch side of connector(s). Check for continuity with transmit switch held in TALK. If yes, go to step 4.
 If no, replace driver's CB switch.
- Reconnect connector C20 and C23 (SE model) and disconnect C306 (Asp or Int model). Check continuity to ground at WHT circuit with driver's transmit switch pressed. If yes, go to test C. If no, service WHT circuit for an open between driver's CB switch and CB transceiver.

Test C: CB Transceiver Input/Output Test

- Disconnect C4 (CB transceiver) and C17 (radio connector). Check continuity between the 9 circuits running between the CB transceiver and radio/cassette deck (Asp or SE model) or radio/clock (Int model). Also, check that connector terminals are not loose or dirty. If OK, go to step 2.
 If not OK, service suspect circuits for an open.
- With connectors C4 and C17 still disconnected, check that these 9 circuits are not shorted to ground.
 If OK, go to step 3.
 If not OK, service suspect circuits for a short to ground.
- Was the CB able to receive or transmit? If yes, go to step 5. If no, go to step 4.

(cont'd)

Citizen Band Radio

Troubleshooting (cont'd)

- Temporarily substitute a known good CB antenna and coaxial cable. Reconnect disconnected connectors. Does the CB now operate normally? If yes, replace suspect antenna or coaxial cable. If no, go to step 5.
- Temporarily substitute a known good CB transceiver. Reconnect disconnected connectors. Does the CB now operate normally? If yes, replace CB transceiver. If no, replace radio/cassette deck or radio/clock.

Test D: CB Does Not Transmit and/or Channel Select Does Not Operate From Passenger Switch

- Disconnect C304. Connect an ohmmeter to the harness side of C304 at the WHT circuit. Check continuity to ground while holding the driver's transmit switch in TALK. If yes, go to step 2. If no, service WHT circuit for an open.
- Connect an ohmmeter to the harness side of C304 at the ORN circuit. Check continuity to ground while holding the driver's channel select switch toward UP.
 If yes, go to step 2.
 If no, service ORN circuit for an open.
- Connect an ohmmeter to the harness side of C304 at the GRY circuit. Check continuity to ground while holding the driver's channel select switch toward UP. If yes, replace passenger's controller. If no, service GRY circuit for an open.

Test E: CB Channel Select Does Not Operate but Transmit Function Operates

1. Disconnect C306 (Asp or Int model) or C4 (SE model). Connect an ohmmeter to switch side of C306 or C4 ORN circuit and check continuity to ground while holding the driver's channel select switch toward UP.

If yes, go to step 2.

If no, check ORN circuit for an open between CB transceiver and driver's channel select switch. If circuit is OK, replace driver's CB switch.

 Connect an ohmmeter to switch side of C306 or C4 GRY circuit and check continuity to ground while holding the driver's channel select switch toward DOWN. If yes, replace CB transceiver. If no, check GRY circuit for an open between CB transceiver and driver's channel select switch. If circuit is OK, replace driver's CB switch.

goldwingdocs.com



goldwingdocs.com

Component Location Index

(Refer to Section 12 for photographs.)
Component Photo No.
Air Pressure Sensor 31 Behind right saddlebag
Air Pump Assembly 27 Behind left saddlebag
Alternator
Auxiliary Input Connector 49 Behind left fairing pocket
Bank Angle Sensor 31 Below right rear of seat, on frame rail
Battery 29 Below right side cover
Carburetor Air Jet (CAJ) Solenoid Valve #2 22 Behind right fairing pocket
Carburetor Air Jet (CAJ) Solenoid Valve #3 22 Behind right fairing pocket
CB Transceiver
Clutch Switch 47 On left handlebar
Clutch/Cruise Cancel Switch 47 On left handlebar
Cruise Control Actuator 6 Behind left fairing inner cover
Cruise Control Unit (20-BLK) 35 Below center rear of trunk
Cruise Control Valve Unit 5 Behind left fairing inner cover, on left side of fuel tank
Cruise Valve Relay
Engine Control Module (ECM) (26-YEL) 23 Behind right fairing inner cover
Engine Coolant Temperature (ECT) Gauge Sender

Engine Coolant Temperature (ECT) Sensor (2-GRN)
Fader (Asp) No Photo On top center of handlebar cover
Fader (SE) 47 On left side of handlebar
Front Brake Light Switch
Front Brake Light/Cruise Cancel Switch 46 On right handlebar, part of front brake switch
Fuel Level Sender 7 Behind left fairing inner cover, on fuel tank
Fuel Pump (1-GRN) 43 Below seat, in fuel tank
Fuel Reserve Sender (1-WHT) 43 Below seat, in fuel tank
Fuse/Relay Box 27 Behind left rear side cover
Gear Position Switch On right front of engine, above oil filter
Hazard Flasher Relay (3-BLK) 36 Below rear of trunk
Ignition Coils 44 Below reserve coolant tank
Ignition Pulse Generators No Photo Behind timing belt covers
Ignition Switch No Photo Center of instrument panel
In-Line Capacitor A 4 On rear of alternator
In-Line Capacitor B 3 Left rear of engine, on alternator
In-Line Capacitor D (2-RED) (Int, Asp)(with CB)
In-Line Capacitor D (SE) 59 Below seat, on top of fuel tank
In-Line Diode A

In-Line Diode B (2-WHT) 36 Below left side of trunk
In-Line Diode C 50 In harness, right side of air cleaner housing
In-Line Fuse A (5A) 29 Behind right side cover
In-Line Fuse B (5A) 29 Behind right side cover
Intake Air Temperature (IAT) Sensor 16 Right front of air cleaner case cover
On rear of right saddlebag, behind cover
Left Combination Switch 54 On top of left handlebar
Left Cornering Light Relay (4-BLU) (Asp) 15 Behind left side of fairing front cover
Left Cornering Light Relay (4-BLU) (SE) 19 Behind right side of fairing lower cover
Left Horn 15 Behind left fairing front cover
Left Noise Filter No Photo On left fan shroud
Left Radiator Fan Motor 52 Behind left radiator
Main Fuse A (30A) 2 Behind right side cover, forward of battery
Main Fuse B (55A) 2 Behind right side cover, forward of battery
Oil Pressure Switch 17 On lower right front of engine
Passenger Controller No Photo On right side of trunk
Power Control Relay #1 (4-WHT) 29 Behind right side cover, rear of battery
Power Control Relay #2 (4-WHT) 29 Behind right side cover, rear of battery
Pulse Secondary Air Injection (PAIR) Solenoid Valve 8 Behind left fairing inner cover, 8 near front of fuel tank 8

Radiator Fan Temperature Switch 14 On underside of left radiator, next to cooling fan
Radio Noise Filter No Photo Below rear seat
Rear Brake Cruise Cancel Switch 60 Behind right front side cover, above heat shield
Rear Brake Light Switch 25 Behind right front side cover
Rear Suspension Solenoid Valve 31 Behind right saddlebag
Relief Solenoid Valve 30 Behind right saddlebag
Reverse Control Unit (14-WHT) 35 Below rear of trunk
Reverse Diode Assembly 31 Below right side trunk, behind bank angle sensor
Reverse Lever Switch 7 Behind left fairing inner cover, near left side of fuel tank
Reverse Resistors 28 Behind right side cover, under battery box
Reverse Switch 26 Right side of engine, near dipstick
Reverse Switch Relay (4-BLK) 40 Below rear of seat
Right Combination Switch No Photo On top of right handlebar
Right Cornering Light Relay(4-BLU) (Asp)51Behind right side of fairing front cover
Right Cornering Light Relay (4-WHT) (SE) 19 Behind right side of fairing lower cover
Right Horn 18 Behind right fairing front cover 18
Right Noise Filter No Photo On right fan shroud
Right Radiator Fan Motor 53 Behind right radiator
(cont'd)

Component Location Index

(Refer to Section 12 for photographs.)	
Component	Photo No.
Side Stand Switch Left side, on side stand	3
Speed Limiter Fuse (65A) Below rear of seat	40
Speed Limiter Relay (4-WHT) Behind right saddlebag, ahead of shock absorber	29
Spoiler Brake/Taillight Control Module (3-WHT) Behind left saddlebag	1
Starter Relay A (4-RED) Behind right side cover, forward of batt	2 ery
Starter Relay B (2-WHT) Behind right side cover, on lower frame	25 rail
Starter Relay Regulator Behind left saddlebag	1
Starter/Reverse Motor I On lower right rear of engine	No Photo
Throttle Cancel Switch Near left side of air cleaner box, on fran	9 ne rail
Trunk Light Switch	No Photo
Turn Signal Cancel Control Unit N Inside steering head	lo Photo
Turn Signal Flasher Relay (3-WHT) Below rear of trunk	36
C6 (3-BLK)	45
C10 (22-BLU) (SE) Below left rear of seat	38
C10 (22-WHT) (Asp) Below left rear of seat	38
C11 (3-GRN)Below rear of seat	37
C12 (6-RED) Below left rear corner of seat	37

C16 (10-WHT) 45 Behind instrument panel
C20 (4-BRN) 12 Behind left front side of fairing
C21 (4-BLK) 12 Behind left front side of fairing
C22 (6-RED) 21 Right side of fairing, behind marker light
C23 (2-BLK) 12 Behind left side of fairing, below connector bracket
C24 (4-WHT) No Photo Behind headlight assembly
C25 (1-WHT) (SE) 58 Below left fairing pocket
C26 (1-WHT) (SE) No Photo Above radio/cassette player connectors, taped in harness
C28 (3-GRN) 5 Behind left fairing inner cover, near left side of fuel tank
C29 (2-BLU) 24 On bracket, on right side of fuel tank
C32 (22-RED) 38 Behind right saddlebag
C33 (22-BLK) 38 Below right rear of seat
C35 (4-RED) 1 Behind left saddlebag
C43 (2-WHT) 5 Behind left fairing inner cover, near left side of fuel tank
C44 (2-WHT) 4 On rear of alternator
C54 (4-WHT) 24 Behind right fairing inner cover, near ECM
C55 (13-WHT) 22 Behind right fairing pocket
C56 (2-BRN) 33 Below left rear of trunk

C57 (9-RED) 21 Right side of fairing, behind marker light
C58 (8-BLK) 12 Behind left front side of fairing
C59 (6-BLK)
C60 (2-BLU) 21 Behind right front side of fairing
C63 (4-WHT)
C66 (20-WHT) 45 Behind instrument panel
C67 (3-WHT) 20 Behind right fairing pocket
C68 (2-GRN) 20 Behind right fairing pocket
C69 (2-WHT) 18 Behind right front side of fairing
C71 (16-WHT) (Asp) 10 Behind left fairing pocket
C71 (16-WHT) (SE) 61 Behind left fairing pocket
C72 (13-BLK) 22 Behind right fairing pocket
C73 (14-BLK) (Asp) 10 Behind left fairing pocket
C73 (14-BLK) (SE) 61 Behind left fairing pocket
C75 (6-RED) 33 Below left rear of trunk
C76 (6-RED) 33 Below right rear of trunk
C77 (3-WHT) 37 Below trunk
C78 (3-WHT) No Photo Below trunk, near right saddlebag light assembly
C81 (2-BLK) 24 On bracket, near right side of fuel tank

C82 (2-GRN) 33 Below right rear of trunk
C84 (3-WHT) 37 Below trunk
C85 (3-WHT) No Photo Below trunk, near left rear light assembly
C86 (2-GRN) 33 Below left rear of trunk
C89 (2-RED) 39 Below left rear side of seat
C90 (6-BRN) 12 Behind left front side of fairing
C91 (14-BLK) 45 Behind instrument panel
C92 (3-RED) 5 Behind left fairing inner cover, near left side of fuel tank
C93 (6-GRN) 12 Behind left front side of fairing
C94 (9-BLK) 21 Right side of fairing, behind marker light
C95 (2-BLK) 15 Behind left side of front fairing
C97 (2-GRN) (Asp) 10 Behind left fairing pocket
C97 (2-GRN) (SE) 61 Behind left fairing pocket
C98 (3-BLK) 13 Left front of fairing, behind turn signal light
C99 (6-WHT) No Photo Inside steering head
C103 (6-WHT) No Photo Right rear of fairing, behind air pressure control switch assembly
C104 (3-RED) 37 Below trunk
C105 (3-BLK) 37 Below trunk
(cont'd)

Component Location Index

(Refer to Section 12 for photographs.)	
Component Photo No) .
C106 (2-WHT) 3 Below trunk	7
C107 (3-WHT) 4 Behind instrument panel	5
C108 (6-WHT) 4 Behind instrument panel	5
C109 (2-BLK)	2
C110 (2-BLK)	3
C112 (2-BLK) Behind fairing inner cover, on left side of fuel tank	5
C115 (1-CLR) 14 Below left radiator, near fan temperature switch	4
C119 (2-RED) 20 Behind right fairing pocket)
C120 (2-GRN) 20 Behind right fairing pocket)
C127 (1-GRN) (SE) 59 Below seat on fuel pump housing)
C127 (1-GRN) (Without CB) 41 Below seat on fuel pump housing	[
C130 (4-BLK) (SE) 12 Behind left front side of fairing, on bracket	!
C130 (Asp) 10 Behind left front side of fairing, on bracket	ı
C131 (4-BLK)5 Behind fairing inner cover, on left side of fuel tank	ł
C132 (2-BLU)5 Behind fairing inner cover, on left side of fuel tank	
C133 (2-RED) 24 On bracket, near right side of fuel tank	
C136 (3-WHT) 49 Below left fairing pocket	

C137 (6-RED) 49 Below left fairing pocket
C138 (6-BRN) 21 Right side of fairing, behind marker light
C147 (1-WHT) (SE) 59 Below seat, on top of fuel tank
C147 (1-WHT) (without CB) 41 Below seat, on top of fuel tank
C178 (4-WHT) 59 Below seat, on top of fuel tank
C181 (4-WHT) 12 Behind left front side of fairing, on bracket
C182 (4-WHT) 35 Below rear seat
C183 (1-GRN) 42 Below seat, on top of fuel tank
C184 (1-BLK) (SE) 59 Below seat, on top of fuel tank
C184 (1-BLK) (without CB) 41 Below seat, on top of fuel tank
C185 (1-WHT)
C186 (1-WHT) 42 Below seat, on top of fuel tank
C188 (3-WHT) No Photo Rear of left saddlebag, behind cover
C189 (3-WHT)
C190 (1-BLK)
C191 (14-ORN) No Photo Taped to harness, near right side of fuel tank
C192 (14-ORN) No Photo Behind fairing inner cover, on left side of fuel tank
C193 (1-BLK)
C194 (1-BLK)

C195 (1-BLK) 32 Rear of right saddlebag, behind cover
C300 (4-WHT) 10 Behind left fairing inner cover, near air cleaner housing
C301 (4-WHT) (with CB) 10 Behind left fairing inner cover, near air cleaner housing
C301 (4-WHT) (without CB) 11 Near left side of air cleaner housing
C302 (4-BLK) 39 Below left rear side of seat
C303 (4-BLK) 11 Near left side of air cleaner housing
C304 (6-BRN) 39 Below left rear side of seat
C305 (6-RED) No Photo Below left rear corner of seat
C306 (6-BRN) (Asp) 10 In rear of left side fairing pocket
C311 (6-RED) (Asp) 10 Behind left fairing pocket
C311 (6-RED) (SE) 61 Behind left fairing pocket
C312 (6-WHT) 38 Underneath right side of seat, in front of trunk support bracket
C315 (2-YEL)
C316 (3-BRN)
C330 (2-BLK) 38 Below left side of trunk
C331 (2-BLK) 34 In left underside of trunk lid
C333 (1-CLR) 48 Below center of seat
C334 (5-BLK) No Photo On passenger helmet audio cord

C335 (5-BLK) No Photo On driver helmet audio cord
G100 26 On frame, above dipstick
G102 14 On left radiator, near radiator fan temperature switch
G103 No Photo On engine, near coolant temperature sensor
G104 26 On right side of engine
G105 48 Below center of seat

Component Location Photographs

1. Left Side of Motorcycle (Saddlebag Removed)



2. Right Side, Below Battery (Rear Side Cover and Battery Box Removed)



- 3. Left Rear of Engine (Front Side Cover Removed)
- IN LINE CAPACITOR B (WITH CB) SIDE STAND SWITCH

4. Rear of Alternator (Removed from Engine)



5. Left Side, Next to Fuel Tank (Inner Cover Removed)



6. Below Reverse Lever (Inner Cover Removed)





C306 (6-BRN)

7. Left Side of Engine (Inner Cover Removed)



8. Behind Left Side of Fairing (Fairing Inner Cover Removed)



9. Behind Left Side of Fairing (Fairing Inner Cover Removed)



10. Left Rear of Fairing (Fairing Removed)

C97

(2-GRN)

C73

(14-BLK)



11. Left Rear of Fairing (Inner Cover Removed)



12. Behind Left Side of Fairing (Fairing Removed)





Component Location Photographs

13. Front of Motorcycle, Behind Position Light



14. Below Left Radiator (Front Cover Removed)



15. Behind Left Fairing Front Cover



16. Right Air Cleaner Housing Area



17. Lower Right Front of Engine (Under Cover Removed)



18. Right Front (Under Cover Removed)





19. Right Side of Fairing (Lower Fairing Cover Removed)



20. Below Right Fairing Pocket (Fairing Removed)



21. Right Side of Fairing (Fairing Removed)





23. Right Side (Inner Cover Removed)



24. Right Side (Inner Cover Removed)





Component Location Photographs

25. Right Rear of Engine (Front Side Cover Removed)



26. Right Rear of Engine (Front Side Cover Removed)



27. Left Side (Left Side Cover Removed)

28. Right Side, Below Battery (Rear Side Cover and Battery Box Removed)



29. Right Side (Rear Side Cover Removed)



30. Right Side (Saddlebag Removed)











31. Right Side (Saddlebag Removed)



32. Lower Rear of Right Saddlebag (Saddlebag Lower Cover Removed)



33. Below Rear of Trunk (Trunk Lower Cover Removed)



34. Inside Trunk, on Left Side of Lid



35. Top Rear, Under Trunk (Trunk Removed)



36. Top Rear, Under Trunk (Trunk Removed)



Component Location Photographs

37. Top Rear, Under Trunk (Trunk Removed)



38. Under Seat (Trunk Removed)



39. Under Rear of Seat (Seat Removed)



40. Under Front of Seat (Seat Removed)



41. Top of Fuel Tank (Seat Removed)



42. Top of Fuel Tank (Seat Removed) (With CB Radio)



12-6


43. Fuel Pump Assembly (Removed from Fuel Tank)



44. Top of Engine (Top Compartment and Air Cleaner Housing Removed)



45. Rear of Instrument Panel (Removed from Fairing)



47. Left Side of Handlebar

CANCEL SWITCH C318 (1-WHT) C319 (1-WHT)



48. Below Rear of Seat







12-7

Component Location Photographs

49. Below Left Fairing Pocket



50. Right Side (Inner Cover Removed)



51. Right Front (Fairing Lower Cover Removed)





53. On Right Fan Shroud



54. On Top of Left Handlebar





COM



55. Top Right Front of Engine



58. Below Left Fairing Pocket



59. Below Seat, on Top of Fuel Tank





60. Behind Right Front Side Cover





57. Top Right Handlebar



Component Location Photographs

61. Below Left Fairing Pocket



12-10

ETM

goldwingdocs.com

Component Index

Acc Fuse 10A	2-0, 5-1, 5-2, 7-4, 9-7,
Acc Terminal Fuse 5A	10-0, 10-14, 10-16 2-0
Accessory Terminal	
Switch Assembly	2-0, 2-4, 5-2, 5-3
Air Pressure Sensor	
Air Pump Fuse 10A	
Alternator	· · · · · · · · · · · · · · · · · · ·
Antenna Auxiliary Input Connector	10-3, 10-15, 10-17 10-7
Back Up Fuse 5A	2-0, 5-1, 9-13, 10-0,
Bank Angle Sensor	10-14, 10-16 2-3, 2-7, 3-10,
Battery	3-20, 4-1 2-0, 2-6, 3-11, 3-20,
Brake Light/Taillight (Left Sac	3-24, 3-26
Broke Liebt/Tellight (Biete Q	2-9, 9-10, 9-12
Brake Light/ laillight (Right Sa	addlebag) 2-4, 2-9, 9-11, 9-12
Carburetor Air Jet (CAJ) Sc	lenoid
Carburetor Air Jet (CAJ) So Valve #2	elenoid
Carburetor Air Jet (CAJ) So Valve #2 Carburetor Air Jet (CAJ) Sole CB/Radio Switch Assembly	elenoid
Carburetor Air Jet (CAJ) So Valve #2 Carburetor Air Jet (CAJ) Sole CB/Radio Switch Assembly CB Switch (Driver's)	Nenoid noid Valve #3 3-0 2-8, 9-4 2-8, 10-15, 10-17
Carburetor Air Jet (CAJ) So Valve #2 Carburetor Air Jet (CAJ) Sole CB/Radio Switch Assembly CB Switch (Driver's) CB Switch Illumination CB Transceiver	Denoid noid Valve #3 3-0 2-8, 9-4 2-8, 10-15, 10-17 9-4 2-0, 5-1, 10-14, 10-15,
Carburetor Air Jet (CAJ) So Valve #2 Carburetor Air Jet (CAJ) Sole CB/Radio Switch Assembly CB Switch (Driver's) CB Switch Illumination CB Transceiver	Delenoid
Carburetor Air Jet (CAJ) So Valve #2 Carburetor Air Jet (CAJ) Sole CB/Radio Switch Assembly CB Switch (Driver's) CB Switch Illumination CB Transceiver Center Light Assembly Channel Select Switch	Jenoid 3-0 noid Valve #3 3-0 2-8, 9-4 2-8, 10-15, 10-17 9-4 2-0, 5-1, 10-14, 10-15, 10-16, 10-17 2-4, 9-10 10-15, 10-17
Carburetor Air Jet (CAJ) So Valve #2 Carburetor Air Jet (CAJ) Sole CB/Radio Switch Assembly CB Switch (Driver's) CB Switch Illumination CB Transceiver Center Light Assembly Channel Select Switch	Denoid
Carburetor Air Jet (CAJ) So Valve #2 Carburetor Air Jet (CAJ) Sole CB/Radio Switch Assembly CB Switch (Driver's) CB Switch Illumination CB Transceiver Center Light Assembly Channel Select Switch Clutch Switch Clutch/Cruise Cancel Switch	Jenoid 3-0 noid Valve #3 3-0 2-8, 9-4 2-8, 10-15, 10-17 9-4 2-0, 5-1, 10-14, 10-15, 10-17 2-4, 9-10 10-15, 10-17 2-4, 9-10 3-11
Carburetor Air Jet (CAJ) So Valve #2 Carburetor Air Jet (CAJ) Sole CB/Radio Switch Assembly CB Switch (Driver's) CB Switch Illumination CB Transceiver Center Light Assembly Channel Select Switch Clutch Switch Clutch/Cruise Cancel Switch Cruise Control Actuator Cruise Control Switch	Denoid noid Valve #3 3-0 2-8, 9-4 2-8, 10-15, 10-17 9-4 2-0, 5-1, 10-14, 10-15, 10-17 2-4, 9-10 10-15, 10-17
Carburetor Air Jet (CAJ) So Valve #2 Carburetor Air Jet (CAJ) Sole CB/Radio Switch Assembly CB Switch (Driver's) CB Switch Illumination CB Transceiver Center Light Assembly Channel Select Switch Clutch Switch Clutch/Cruise Cancel Switch Cruise Control Actuator Cruise Control Switch	Jenoid 3-0 noid Valve #3 3-0 2-8, 9-4 2-8, 10-15, 10-17 9-4 2-0, 5-1, 10-14, 10-15, 10-17 2-4, 9-10 10-15, 10-17 2-4, 9-10 10-15, 10-17 4-2 4-3 4-2
Carburetor Air Jet (CAJ) So Valve #2 Carburetor Air Jet (CAJ) Sole CB/Radio Switch Assembly CB Switch (Driver's) CB Switch Illumination CB Transceiver Center Light Assembly Channel Select Switch Clutch Switch Clutch/Cruise Cancel Switch Cruise Control Actuator Cruise Control Switch Illumination Cruise Control Switch	Jenoid 3-0 noid Valve #3 3-0 2-8, 9-4 2-8, 9-4 2-8, 10-15, 10-17 9-4 2-0, 5-1, 10-14, 10-15, 10-17 2-4, 9-10 10-15, 10-17 3-11 4-2 4-3 4-2 4-2 4-2 4-2 4-2 4-2 4-2
Carburetor Air Jet (CAJ) So Valve #2 Carburetor Air Jet (CAJ) Sole CB/Radio Switch Assembly CB Switch (Driver's) CB Switch Illumination CB Transceiver Center Light Assembly Channel Select Switch Clutch Switch Clutch/Cruise Cancel Switch Cruise Control Actuator Cruise Control Switch Illumination Cruise Control Unit	Denoid noid Valve #3 2-8, 9-4 2-8, 9-4 2-8, 9-4 2-8, 10-15, 10-17 9-4 2-0, 5-1, 10-14, 10-15, 10-17 2-4, 9-10 10-16, 10-17 2-4, 9-10 10-15, 10-17 4-2 4-2 4-2 4-2 2-7, 4-2, 9-4 2-7, 4-0, 4-1, 4-2 2-7, 4-0, 4-1, 4-2
Carburetor Air Jet (CAJ) So Valve #2 Carburetor Air Jet (CAJ) Sole CB/Radio Switch Assembly CB Switch (Driver's) CB Switch Illumination CB Transceiver Center Light Assembly Channel Select Switch Clutch Switch Clutch/Cruise Cancel Switch Cruise Control Actuator Cruise Control Switch Illumination Cruise Control Switch Illumination Cruise Control Unit Cruise Control Valve Unit	Jenoid noid Valve #3 2-8, 9-4 2-8, 9-4 2-8, 9-4 2-8, 10-15, 10-17 9-4 2-0, 5-1, 10-14, 10-15, 10-17 2-4, 9-10 10-15, 10-17 3-11 4-2 4-2 2-7, 4-2, 9-4 2-7, 4-0, 4-1, 4-2 2-7, 4-0, 4-1, 4-2 2-7, 4-0, 4-1, 4-2 2-7, 4-0, 4-1, 4-2 2-7, 4-0, 4-1, 4-2 2-8, 4-3 2-8, 4-3
Carburetor Air Jet (CAJ) So Valve #2 Carburetor Air Jet (CAJ) Sole CB/Radio Switch Assembly CB Switch (Driver's) CB Switch Illumination CB Transceiver Center Light Assembly Channel Select Switch Clutch Switch Clutch/Cruise Cancel Switch Cruise Control Actuator Cruise Control Switch Illumination Cruise Control Switch Illumination Cruise Control Unit Cruise Control Valve Unit Cruise On Switch	Jenoid 3-0 noid Valve #3 3-0 2-8, 9-4 2-8, 9-4 2-8, 9-4 2-8, 10-15, 10-17 9-4 2-0, 5-1, 10-14, 10-15, 10-17 2-4, 9-10 10-15, 10-17 3-11 4-2 4-2 2-7, 4-2, 9-4 2-7, 4-0, 4-1, 4-2 2-7, 4-0, 4-1, 4-2 2-7, 4-0, 4-1, 4-2 2-7, 4-0, 4-1, 4-2 2-7, 4-0, 4-1, 4-2 2-7, 4-0, 4-1, 4-2 2-8, 4-3 4-1, 7-1 4-2
Carburetor Air Jet (CAJ) So Valve #2 Carburetor Air Jet (CAJ) Sole CB/Radio Switch Assembly CB Switch (Driver's) CB Switch Illumination CB Transceiver Center Light Assembly Channel Select Switch Clutch Switch Clutch/Cruise Cancel Switch Cruise Control Actuator Cruise Control Switch Illumination Cruise Control Switch Illumination Cruise Control Valve Unit "Cruise On Switch Cruise On Switch Cruise On Switch Cruise On Switch	Jenoid noid Valve #3 2-8, 9-4 2-8, 9-4 2-8, 9-4 2-8, 10-15, 10-17 9-4 2-0, 5-1, 10-14, 10-15, 10-17 10-16, 10-17 2-4, 9-10 10-15, 10-17 3-11 4-2 4-3 2-7, 4-2, 9-4 2-7, 4-0, 4-1, 4-2 2-7, 4-0, 4-1, 4-2 2-8, 4-3 4-1, 7-1 4-2

Dimmer Switch		5	8		0	į			,					•		1943	×					8-	0
Driver's Headset	•	3					•					1	C)-	3	3,	1	0	-7	7,	1	0-	8

Engine Control Module (ECM) 2-7, 3-0,
Engine Coolant Temperature (ECT)
Engine Coolant Temperature (ECT)
Gauge Sender
Engine Stop Switch
Fader 10-1, 10-4 Fan Fuse 10A 2-4, 3-22 Front Brake Light Switch 2-2, 4-0,
9-12, 9-15 Front Brake Light/Cruise Cancel Switch 4-2
Fuel Gauge
Fuel Level Sender 2-6, 7-2 Fuel Pump 2-7 3-2
Fuel Reserve Sender
Fuel Tank
2-8, 3-0, 3-10, 3-20, 3-21
3-24, 3-25, 4-0, 4-1, 4-2,
5-0, 5-1, 5-2, 5-3, 6-0, 7-0,
7-1, 7-2, 7-3, 7-4, 8-0, 8-1, 9-0, 9-2, 9-3, 9-4, 9-6, 9-7
9-10, 9-12, 9-13, 9-14
9-15, 10-0, 10-14, 10-16
Gear Position Switch
Gear Position Switch 3-1, 3-11, 3-25, 4-2, 7-0 Hazard Flasher Relay
9-15, 10-0, 10-14, 10-16 Gear Position Switch 3-1, 3-11, 3-25, 4-2, 7-0 Hazard Flasher Relay Hazard Switch 9-15, 10-0, 10-14, 10-16
9-15, 10-0, 10-14, 10-16 Gear Position Switch 4-2, 7-0 Hazard Flasher Relay 9-7 Hazard Switch 9-7 Head Fuse 15A 9-7 Hazard Flasher Relay 9-7 10-14, 10-16
9-15, 10-0, 10-14, 10-16 Gear Position Switch 3-1, 3-11, 3-25, 4-2, 7-0 Hazard Flasher Relay Hazard Switch 9-7 Head Fuse 15A 9-71, 7-1, 8-1 Headlights (High) Relay 9-7 1 9-7 1 9-7 1 9-7 1 9-7 1 9-7 1 9-7 1 1 9-7 1 9-7 1
9-15, 10-0, 10-14, 10-16 Gear Position Switch 4-2, 7-0 Hazard Flasher Relay 4-2, 7-0 Hazard Switch 9-7 Head Fuse 15A 9-7 Headlights (High) Relay 2-1, 2-8, 7-1, 8-1 Headlights (Low) Relay 2-1, 2-8, 8-1 Head Relay Fuse 5A
9-15, 10-0, 10-14, 10-16 Gear Position Switch 3-1, 3-11, 3-25, 4-2, 7-0 Hazard Flasher Relay Hazard Switch 9-7 Head Fuse 15A 9-7 Headlights (High) Relay 2-1, 2-8, 7-1, 8-1 Headlights (Low) Relay 9-1, 2-8, 8-1 Head Relay Fuse 5A 9-2, 3, 8-0 High Beam Indicator 9-1, 7-1, 8-1
9-15, 10-0, 10-14, 10-16 Gear Position Switch 4-2, 7-0 Hazard Flasher Relay 9-7 Hazard Switch 9-7 Head Fuse 15A 9-7 Headlights (High) Relay 2-1, 2-8, 7-1, 8-1 Headlights (Low) Relay 9-7, 2-3, 8-0 High Beam Indicator 9-7, 1, 8-1 Horn Switch
9-15, 10-0, 10-14, 10-16 Gear Position Switch 4-2, 7-0 Hazard Flasher Relay 4-2, 7-0 Hazard Switch 9-7 Head Fuse 15A 2-1, 7-1, 8-1 Headlights (High) Relay 2-1, 2-8, 7-1, 8-1 Headlights (Low) Relay 2-1, 2-8, 8-1 Head Relay Fuse 5A 2-2, 3, 8-0 High Beam Indicator 2-2, 5-0 Horn/Turn Relay 9-3 9-7 9-3 9-7
9-15, 10-0, 10-14, 10-16 Gear Position Switch 4-2, 7-0 Hazard Flasher Relay 4-2, 7-0 Hazard Switch 9-7 Head Fuse 15A 2-1, 7-1, 8-1 Headlights (High) Relay 2-1, 2-8, 7-1, 8-1 Head Relay Fuse 5A 2-2, 3, 8-0 High Beam Indicator 2-2, 5-0 Horn/Turn Relay 9-3, 9-7, 9-12, 9-15 Horn/Turn/Stop Relay Fuse 15A
9-15, 10-0, 10-14, 10-16 Gear Position Switch 3-1, 3-11, 3-25, 4-2, 7-0 Hazard Flasher Relay 2-0, 2-9, 9-7 Hazard Switch 9-7 Head Fuse 15A 2-1, 7-1, 8-1 Headlights (High) Relay 2-1, 2-8, 7-1, 8-1 Head Relay Fuse 5A 2-3, 8-0 High Beam Indicator 2-2, 5-0 Horn/Turn Relay 2-2, 2-8, 4-0, 5-0, 9-3, 9-7, 9-12, 9-15 Hour/Turn/Stop Relay Fuse 15A 2-1, 4-0, 5-0, 9-3, 9-7, 9-12, 9-15 Hour/Minute Selector Switch 5-1
9-15, 10-0, 10-14, 10-16 Gear Position Switch 3-1, 3-11, 3-25, 4-2, 7-0 Hazard Flasher Relay 2-0, 2-9, 9-7 Hazard Switch 9-7 Head Fuse 15A 2-1, 7-1, 8-1 Headlights (High) Relay 2-1, 2-8, 7-1, 8-1 Head Relay Fuse 5A 2-3, 8-0 High Beam Indicator 2-2, 2-8, 4-0, 5-0, 9-3, 9-7, 9-12, 9-15 Horn/Turn/Stop Relay Fuse 15A 2-1, 4-0, 5-0, 9-3, 9-7, 9-12, 9-15 Hour/Minute Selector Switch 5-1
9-15, 10-0, 10-14, 10-16 Gear Position Switch 3-1, 3-11, 3-25, 4-2, 7-0 Hazard Flasher Relay 9-7 Hazard Switch 9-7 Head Fuse 15A 2-1, 2-9, 9-7 Headlights (High) Relay 2-1, 2-8, 7-1, 8-1 Headlights (Low) Relay 2-1, 2-8, 7-1, 8-1 Head Relay Fuse 5A 2-3, 8-0 High Beam Indicator 2-10, 7-1, 8-1 Horn Switch 2-2, 2-8, 4-0, 5-0, 9-3, 9-7, 9-12, 9-15 Horn/Turn Relay 2-2, 2-8, 4-0, 5-0, 9-3, 9-7, 9-12, 9-15 Hour/Minute Selector Switch 5-1 IGN. Relay 10, 7-10, 8-12 Int 2-9, 3-4, 3-12 IGN./Cruise Relay 2-3, 3-0, 3-10, 10
9-15, 10-0, 10-14, 10-16 Gear Position Switch 3-1, 3-11, 3-25, 4-2, 7-0 Hazard Flasher Relay 2-0, 2-9, 9-7 Hazard Switch 9-7 Head Fuse 15A 2-1, 7-1, 8-1 Headlights (High) Relay 2-1, 2-8, 7-1, 8-1 Headlights (Low) Relay 2-1, 2-8, 8-1 Head Relay Fuse 5A 2-3, 8-0 High Beam Indicator 2-2, 5-0 Horn/Turn Relay 2-2, 2-8, 4-0, 5-0, 9-3, 9-7, 9-12, 9-15 Hour/Turn/Stop Relay Fuse 15A 2-1, 4-0, 5-0, 9-3, 9-7, 9-12, 9-15 Hour/Minute Selector Switch 5-1 IGN. Relay 1 Int 2-9, 3-4, 3-12 IGN./Cruise Relay 2-3, 3-0, 3-10, 3-20, 3-24, 4-1, 7-1

gnition Coils 3-0 gnition/Cruise Fuse 5A 3-20 gnition Pulse Generator #1 3-2, 7-5 Ignition Pulse Generator #2 3-2, 7-5 Ignition Switch 2-0, 2-1, 9-2, 9-10 Illumination 2-10 Illumination Lights 2-10, 7-3 Increase/Decrease Switch 5-3 In-Line Capacitor A 3-20 In-Line Capacitor B 3-20 In-Line Capacitor C 2-8, 5-3 In-line Diode A 3-17 In-line Diode B 2-4, 9-2, 9-11 In-line Diode B 2-4, 9-2, 9-11 In-line Diode C 3-17 In-line Fuse A 5A 3-26 Instrument Panel 2-0, 2-6, 2-10, 3-11, 3-26 Intake Air Temperature (IAT) Sensor <t< th=""></t<>
Inverter
LCD Unit 2-0, 2-6, 2-10, 3-24, 4-1, 5-1, 5-2, 5-3, 6-0, 7-0, 7-1, 7-4, 9-6, 10-0 Left Accessory Light 2-5, 2-9, 9-14 Left Brake Light/Taillight 2-5, 2-9, 9-10, 9-12 Left Combination Switch 2-1, 2-2, 5-0, 7-1, 8-0, 9-3, 9-6, 9-7, 10-7 Left Cornering Light 2-9, 9-3 Left Cornering Light Relay 2-1, 2-7, 2-9, 9-3 Left Fairing Marker Light 2-10, 9-0 Left Front Speaker 10-1, 10-4, 10-14, 10-16 Left Front Turn Signal/Position Light 2-10, 9-8 Left Headlight 2-10, 8-1 Left Rear Speaker 10-1, 10-4, 10-14, 10-16 Left Rear Speaker 10-1, 10-4 Left Rear Turn Signal Light 2-9, 9-9 Left Rear Turn Signal Light 2-9, 9-9 Left Saddlebag Marker Light 2-5, 2-9, 9-1 Left Side Trunk Marker Light
Low Fuel Indicator 6-0, 7-0

Main Fuse A 30A 2-0 Main Fuse B 55A 2-0, 3-20 Mute/Search Switch 10-3, 10-9
Neutral Indicator
Oil Pressure Indicator 6-0, 7-0 Oil Pressure Switch 3-25, 6-0 Outlet Switch 5-3 Overdrive Indicator 7-0
Parking Fuse 10A
Passenger Headset 10-2, 10-8, 10-9 Position Light Switch 2-1, 9-3, 9-6 Position Relay 2-2, 9-3, 9-7 Power Control Relay #1 3-26 Power Control Relay #2 3-26 Pressure Check Switch 5-2
Radiator Fan Temperature Switch 3-22 Radio/Cassette Deck 2-0, 2-8, 5-1, 7-4, 10-0, 10-1, 10-2, 10-3, 10-4, 10-14, 10-15, 10-16, 10-17
Radio/Clock 2-6, 2-18, 10-6, 10-7, 10-8, 10-9, 10-10, 10-22, 10-16
Radio Noise Filter2-10, 5-3Radio Switch Illumination9-4Rear Brake Cruise Cancel Switch4-2Rear Brake Light Switch2-2, 4-0, 9-12, 9-15Rear Suspension Solenoid Valve2-7, 5-3Relief Solenoid Valve2-7, 5-3Reverse Control Unit2-7, 3-24, 3-25,3-26, 6-0
Reverse Diode Assembly 3-11, 3-25, 8-0 Reverse Indicator 3-24, 7-0 Reverse Lever Switch 2-2, 3-10, 3-25, 7-0. 8-0
Reverse Resistors 3-26 Reverse Switch 3-11, 3-25 Reverse Switch Relay 3-11, 3-25 Right Accessory Light 2-5, 2-9, 9-14 Right Brake Light/Taillight 2-5, 2-9, 9-14 9-11, 9-12 9-11, 9-12
Right Combination Switch
9-4, 10-0, 10-14, 10-16 Right Cornering Light Right Cornering Light Relay Right Fairing Marker Light
(cont'd)

Component Index

Right Front Speaker 10-1, 10-4,
Right Front Turn Signal/
Position Light 2-10, 9-8 Right Front Tweeter 10-1, 10-4,
10-14, 10-16 Right Headlight 2-10, 8-1 Right Headlight Position Light 2-10, 8-0 Bight Horn
Right Noise Filter 2-4, 3-22 Right Radiator Fan Motor 2-4, 3-22 Right Rear Light Assembly 0.2
Right Rear Speaker 10-1, 10-4 Right Rear Turn Signal Light 2-9, 9-9 Bight Saddlebag Light Assembly 0.4, 0.0
Bight Saddlebag Marker Light
Right Side Trunk Marker Light 2-5, 2-9, 9-1 Right Turn Signal Indicator 2-10, 9-8 RVS Start Fuse 5A 2-2, 3-10, 3-25, 7-0, 8-0
Side Stand Indicator 7-0 Side Stand Switch 2-8, 3-1, 3-11, 2-8, 3-5, 7-0 3-15, 7-0
Speed Limiter Fuse 65A 2-6, 3-26 Speed Limiter Relay 3-26 Speedometer Illumination 2-10 Spoiler Brake/Taillight 2-9, 9-15
Spoiler Brake/Taillight Control Module 2-5,
Starter Motor 3-17 Starter Relay A 2-0, 3-11, 3-24 Starter Relay B 3-11, 3-26 Starter Relay Regulator 2-9, 3-24 Starter/Reverse Motor 3-11, 3-26 Starter/Reverse Switch 2-3, 3-10, 3-24,
8-0, 10-0, 10-14, 10-16 Starter Switch
10-6, 10-22 Stop Fuse 15A
Tachometer
9-4, 9-6, 9-10, 9-14, 9-15 Tail/Meter/Position Fuse 15A 2-1, 6-0, 7-0, 7-2, 8-0, 9-0, 9-2, 9-3,
9-4, 9-6, 9-10, 9-14, 9-15 Throttle Cancel Switch

Transmit Switch 10-15, 10-17 Trunk Light 2-0, 9-13 Trunk Light Assembly 2-5, 2-9, 9-9, 9-10, 9-11, 9-12 Trunk Light Switch 2-8, 9-13 Turn/Hazard Illumination 9-4 Turn Signal Cancel Control Unit 2-2, 2-8, 7-4, 9-3, 9-6 Turn Signal Flasher Relay 2-2, 9-7 Turn Signal Light Switch 9-7 Turn Signal Lights Cancel Switch 9-6 Turn Signal Switch 9-6 Turn Signal Switch 9-7
Vanity Mirror Light Switch
Wheel Speed Sensor 2-0, 2-6, 7-4, 10-0

Component Index

Right Front Speaker 10-1, 10-4,
10-14, 10-16 Right Front Turn Signal/ Position Light
Right Front Tweeter
Right Headlight Position Light2-10, 8-0Right Horn2-7, 5-0
Right Noise Filter2-4, 3-22Right Radiator Fan Motor2-4, 3-22Right Rear Light Assembly9-2
Right Rear Speaker 10-1, 10-4 Right Rear Turn Signal Light 2-9, 9-9 Bight Saddlebag Light Assembly 2-4, 2-9
Right Saddlebag Marker Light
Right Side Trunk Marker Light
Side Stand Indicator 7-0 Side Stand Switch 2-8, 3-1, 3-11,
3-25, 7-0 Speed Limiter Fuse 65A
Spoiler Brake/Taillight
Starter Motor 3-17 Starter Relay A 2-0, 3-11, 3-24 Starter Relay B 3-11, 3-26 Starter Relay Regulator 2-9, 3-24
Starter/Reverse Motor
Starter Switch
Stop Fuse 15A
Tachometer 2-10, 7-2 Tail (Main) Relay 2-1, 2-8, 3-24, 6-0, 7-0, 7-2, 7-3, 8-0, 9-0, 9-2, 9-3,
9-4, 9-6, 9-10, 9-14, 9-15 Tail/Meter/Position Fuse 15A 2-1, 6-0, 7-0, 7-2, 8-0, 9-0, 9-2, 9-3,
5-4, 9-0, 9-10, 9-14, 9-15 Throttle Cancel Switch 4-2

Transmit Switch 10-15, 10-17 Trunk Light 2-0, 9-13 Trunk Light Assembly 2-5, 2-9, 9-9, 9-10, 9-11, 9-12 Trunk Light Switch 2-8, 9-13
Turn/Hazard Illumination
7-4, 9-3, 9-6 Turn Signal Flasher Relay
Vanity Mirror Light Switch
Wheel Speed Sensor

ETM



Contents

How To Use This Manual	1-1
Troubleshooting Hints	1-10
Fuse Information	1-16
LCD Unit Display	1-17
Circuit Schematics (see Circuit Index)	
Component Location Index	11-0
Component Location Photographs	12-0
Component Index	13-0

Circuit Index

Accessory Lights	9-14
Automatic Level Control	5-2
Brake Lights	9-12
CB Radio (Asp)	10-14
CB Radio (SE)	10-16
CB Radio (Int)	
Charging System	3-20
Clock	5-1
Cornering Lights	9-3
Cruise Control	4-0
Engine Control System	3-0
Gauges	7-2
Ground Distribution	2-6
Handlebar Switch Illumination	9-4
Hazard Lights	9-6
Headlights	8-0
Horn	5-0
Illumination Lights	7-3
Indicators	7-0
Instrument Panel	7-2
License Plate Light	9-10
Low Fuel Warning	6-0
Marker Lights	
Fairing and Trunk	9-0
Saddlebags	9-2
Oil Pressure Warning	6-0
Parking Lights	9-10
Position Lights	9-6
Power Distribution	2-0
Radiator Fans	3-22
Radio	<u> </u>
Radio and Cassette	10-0
Reverse System	3-24
Speed Sensor Circuit	7-4
Spoiler Brake/Taillight	
SE Model only	9-15
Starting System	3-10
Taillights	9-10
Trunk Light	9-13
Turn Signal Lights	9-6

P N: 61MAM03-AH IPC35009711 1998 GL1500A/SE SERVICE MANUAL/ELECTRICAL TROUBLESHOOTING MANUAL Published by American Honda Motor Co., Inc. Printed in USA FIRST EDITION: SEPTEMBER 1994

 \bigcirc