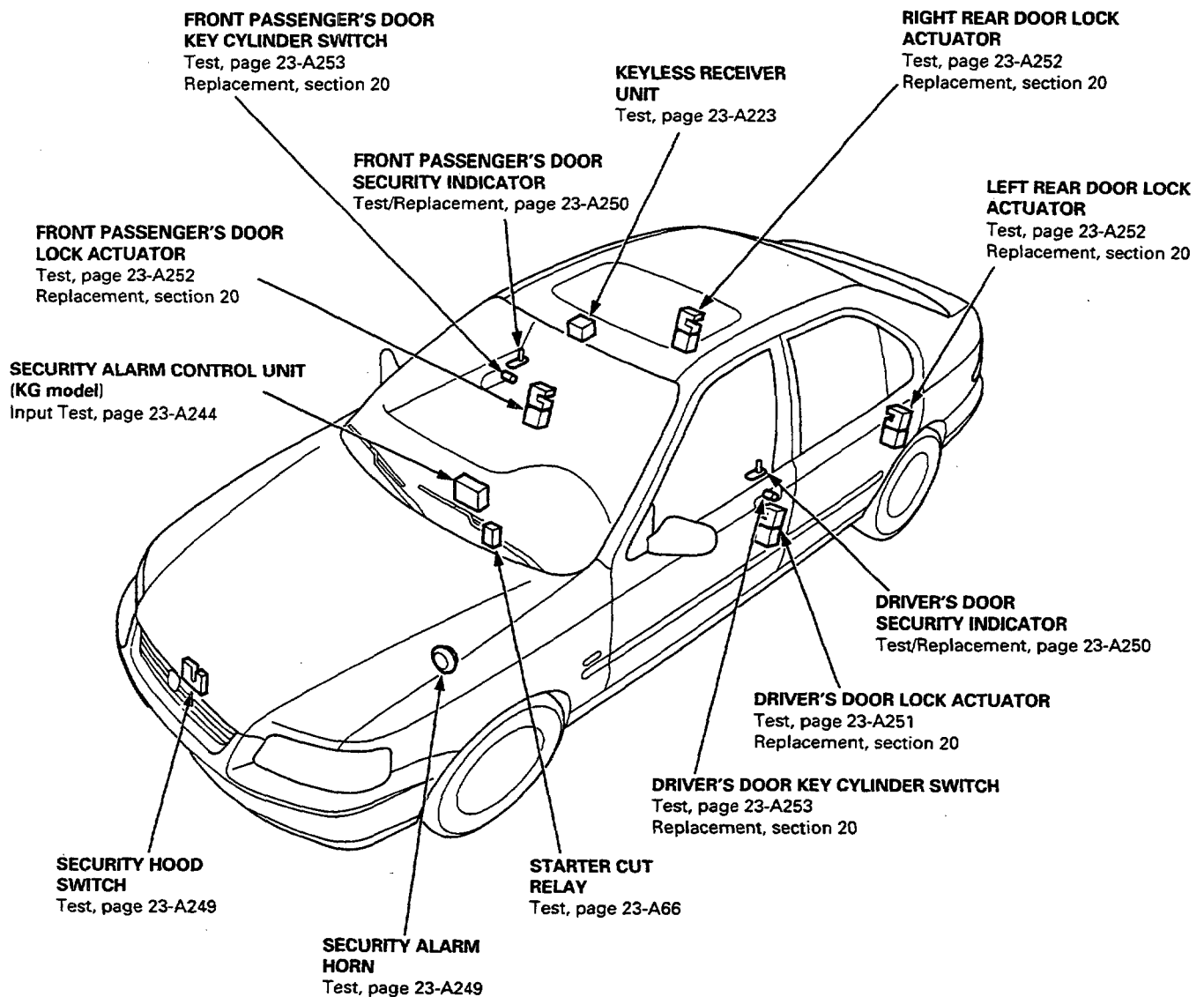
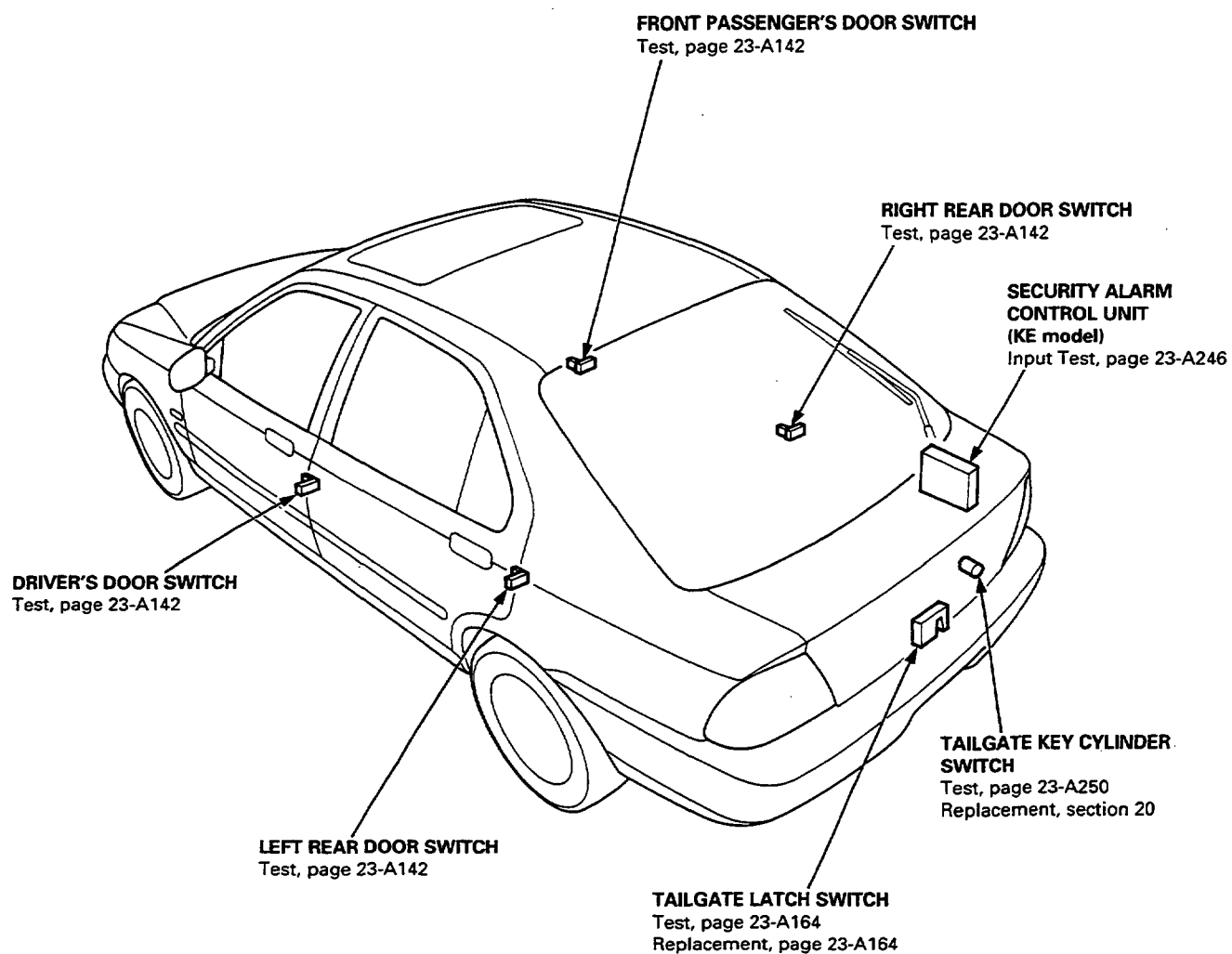
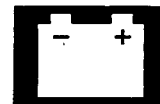


Security Alarm System

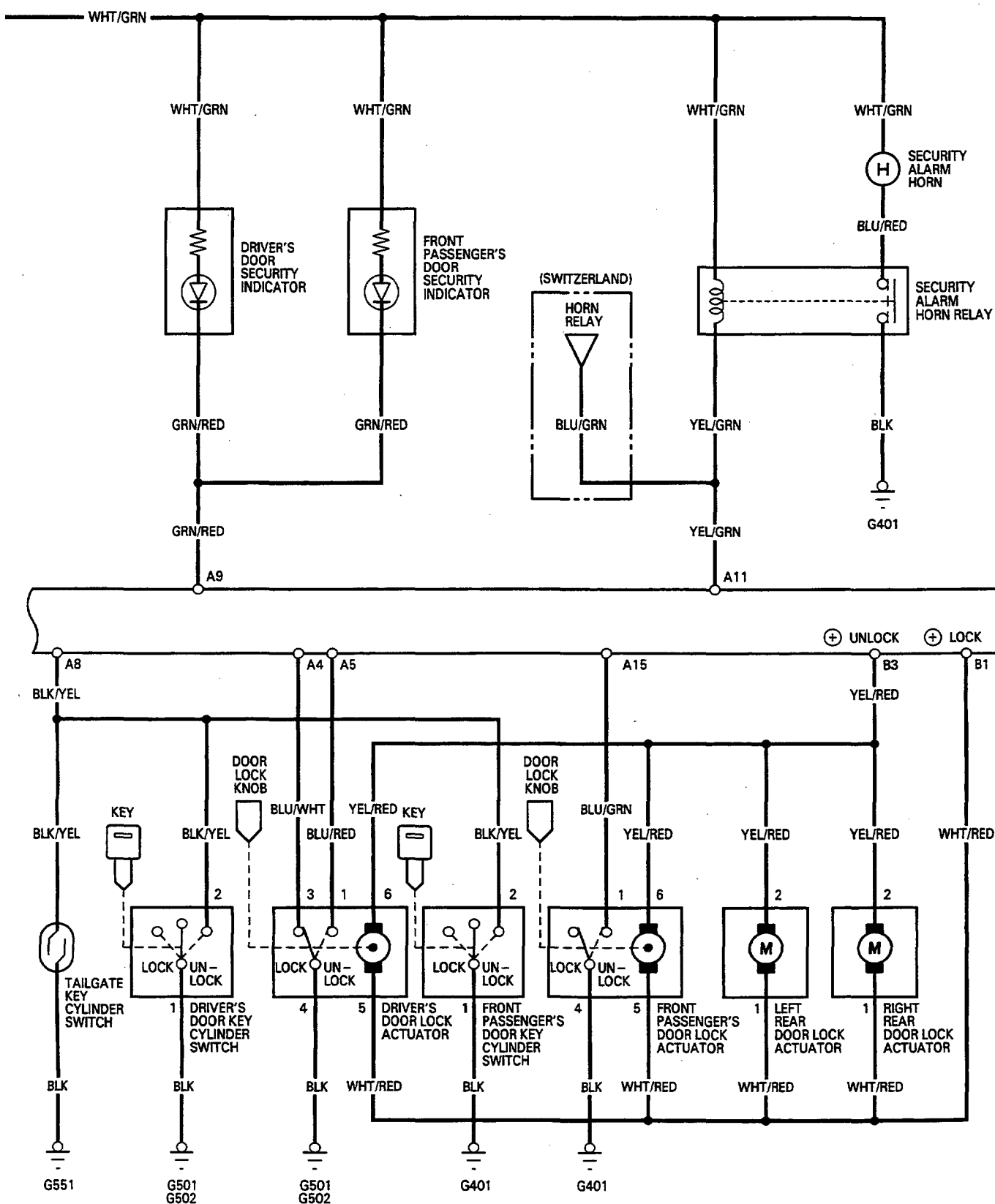
Component Location Index





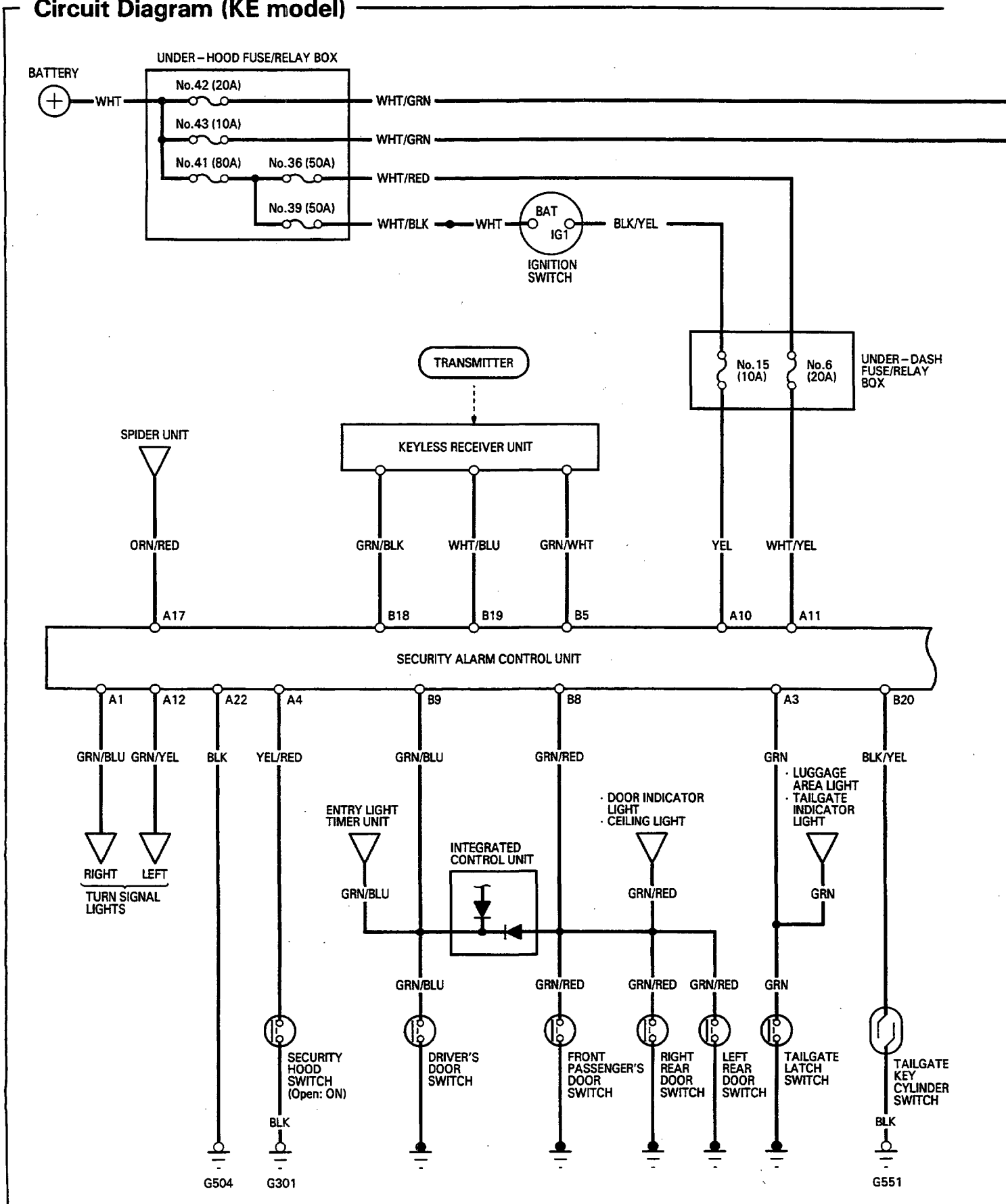
Circuit Diagram (KG model)

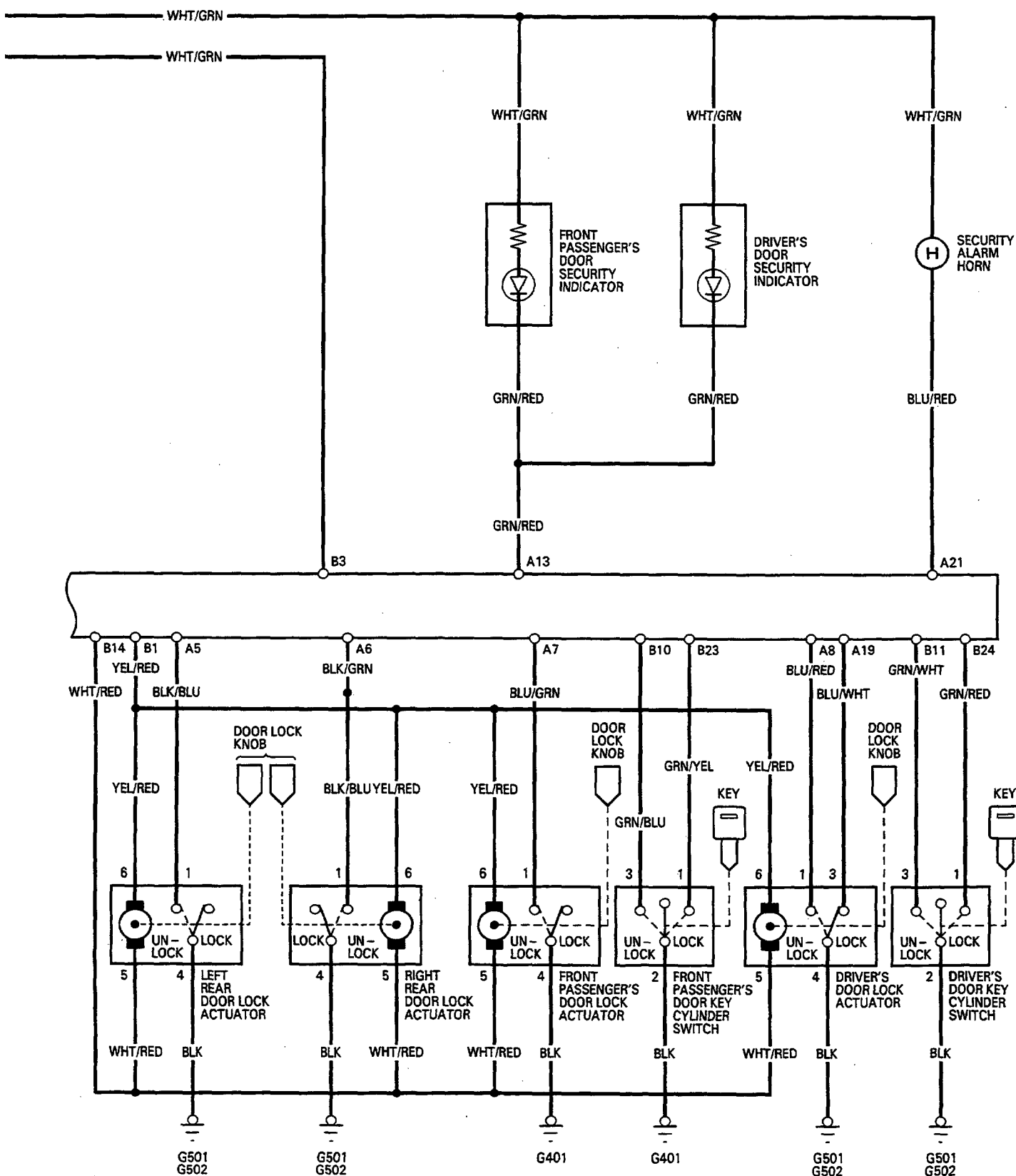




Security Alarm System

Circuit Diagram (KE model)





Security Alarm System

Troubleshooting

Security Alarm System:

NOTE: The numbers in the table show the troubleshooting sequence.

Symptom	Item to be inspected		In the under-dash fuse/relay box		Blown No. 41 (80 A) fuse in the under-hood fuse/relay box	Faulty indicator light (LED)	Horn circuit	Starting system	Spider unit	Starter cut relay	A/T gear position switch: (A/T)	Receiver unit/transmitter	Door key cylinder switch	Tailgate key cylinder switch	Tailgate switch	Hood switch	Door switch	Control unit input	Poor ground	Open circuit, loose or disconnected terminals
			Blown No. 6 (20 A) fuse	Blown No. 15 (10 A) fuse																
Security alarm cannot be set and indicator light does not flash.			1	2	3	4												5	G401	WHT/YEL, YEL
Starting system does not operate.								1	5	2	3							4		BLK/GRN, ORN/RED
Security alarm can be set, but alarm does not operate when the trunk, hood or a door is opened without the key.	Horn alarm				1		2											3	G401	*1YEL/GRN, WHT/GRN *2BLU/RED
Alarm is not cancelled when the driver's or front passenger's door is unlocked with the key or transmitter.												2	1					3	G401	GRN/WHT, *2GRN/BLU, *2GRN/BLK, *2WHT/BLU, *1BLK/YEL GRN/WHT
Alarm does not operate when the hood is opened without the key.																1		2	G301	YEL/RED
Alarm does not operate when the tailgate is opened without the key.														2	1			3	G551	BLK/YEL, GRN
Alarm does not operate when a door is opened without the key.																	1	2		GRN/BLU, GRN/RED

*1: KG model

*2: KE model



Keyless Entry System:

NOTE: The numbers in the table show the troubleshooting sequence.

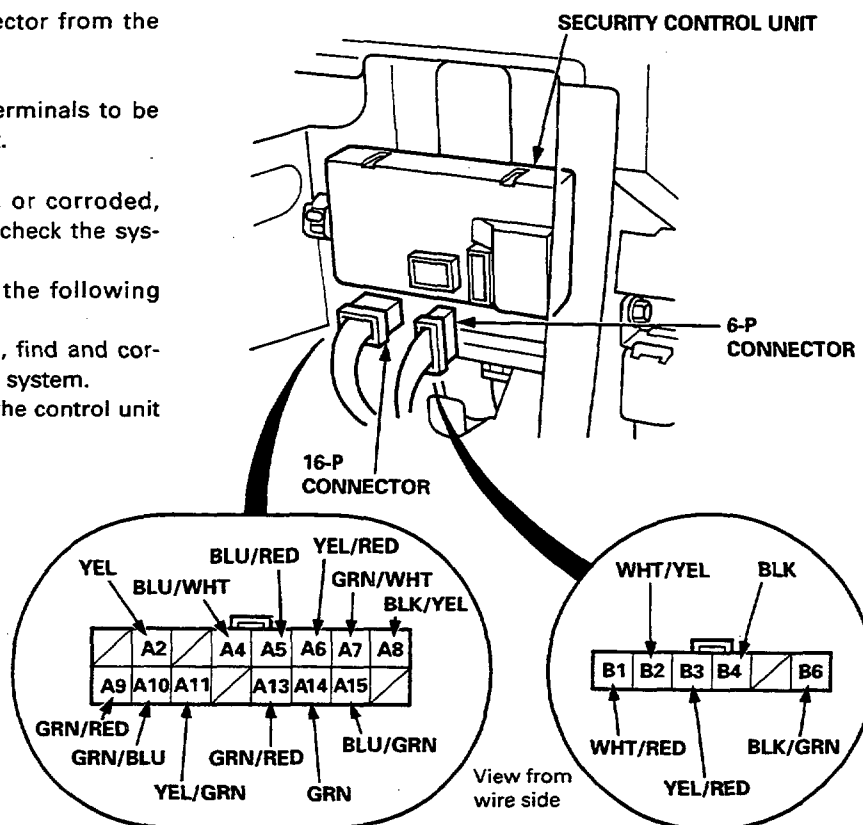
Item to be inspected		In the under-dash fuse/relay box		Blown No. 3 (7.5 A) in the under-dash fuse/relay box (KG model)	Door lock knob switch	Driver's door lock key cylinder switch	Passenger's door lock key cylinder switch	Driver's door lock actuator	Passenger's door lock actuator	Receiver unit/transmitter	Control unit input	Disconnected or obstructed door lock rod/linkage	Poor ground	Open circuit, loose or disconnected terminals
		Blown No. 6 (20 A) fuse	Blown No. 15 (10 A) fuse											
Symptom														
Power door lock system does not work at all.		1	2								3		G401	YEL/RED, WHT/RED
Doors do not lock or unlock with the driver's door key cylinder switch.	All doors					1					2		G501 G502	*GRN/RED, *GRN/WHT
	One or more doors								1		3	2		YEL/RED, WHT/RED
Doors do not lock or unlock with the passenger's door key cylinder switch.	All doors						1				2		G401	*GRN/BLU, *GRN/YEL
	One or more doors								1		3	2		YEL/RED, WHT/RED
Doors do not lock or unlock with the door lock knob.	All doors				1						2		G401 G501 G502	*GRN/BLU, *GRN/YEL, *BLU/RED, *BLU/WHT, BLK/YEL, BLU/WHT
	One or more doors							1	2		4	3	G501 G502	YEL/RED, WHT/RED
The power door lock system works properly but the keyless entry system does not work.				3						1	2			*WHT/BLU, *GRN/WHT, *GRN/BLK, BLK, WHT/RED

*: KE model

Security Alarm System

Security Alarm Control Unit Input Test (KG model)

1. Disconnect the 16-P and 6-P connector from the control unit.
2. Inspect the connector and socket terminals to be sure they are all making good contact.
 - If the terminals are bent, loose or corroded, repair them as necessary, and recheck the system.
 - If the terminals look OK, make the following input tests at the connector.
 - If any test indicates a problem, find and correct the cause, then recheck the system.
 - If all the input tests prove OK, the control unit must be faulty; replace it.



Terminal No.	Wire	Test condition	Test: Desired result	Possible cause if result is not obtained
B4	BLK	Under all conditions	Check for continuity to ground: There should be continuity.	<ul style="list-style-type: none"> • Poor ground (G401) • An open in the wire
B2	WHT/YEL	Under all conditions	Check for voltage to ground: There should be battery voltage.	<ul style="list-style-type: none"> • Blown No. 6 (20 A) fuse in the under-dash fuse/relay box • An open in the wire
A2	YEL	Ignition switch ON (II)	Check for voltage to ground: There should be battery voltage.	<ul style="list-style-type: none"> • Blown No. 15 (10 A) fuse in the under-dash fuse/relay box • An open in the wire
A9	GRN/RED	Under all conditions	Connect to ground: Security indicators should come on.	<ul style="list-style-type: none"> • Blown No. 42 (20 A) fuse in the under-hood fuse/relay box • Faulty security indicator • An open in the wire
A11	YEL/GRN	Under all conditions	Connect to ground: Security alarm horn should sound.	<ul style="list-style-type: none"> • Blown No. 42 (20 A) fuse in the under-hood fuse/relay box • Faulty security alarm horn relay • Faulty security alarm horn • An open in the wire
B6	BLK/GRN	Ignition switch ST (III)	Check for voltage to ground: There should be battery voltage.	<ul style="list-style-type: none"> • Faulty starter cut relay • An open in the wire

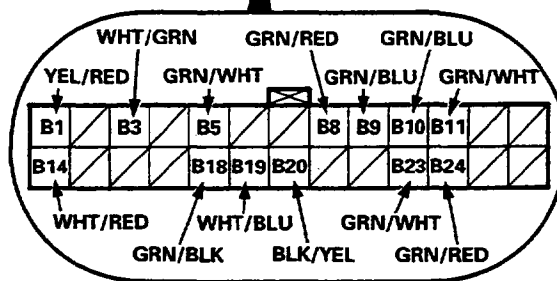
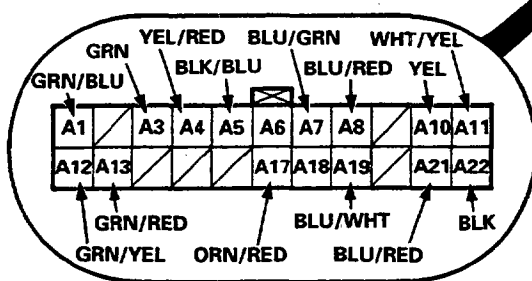
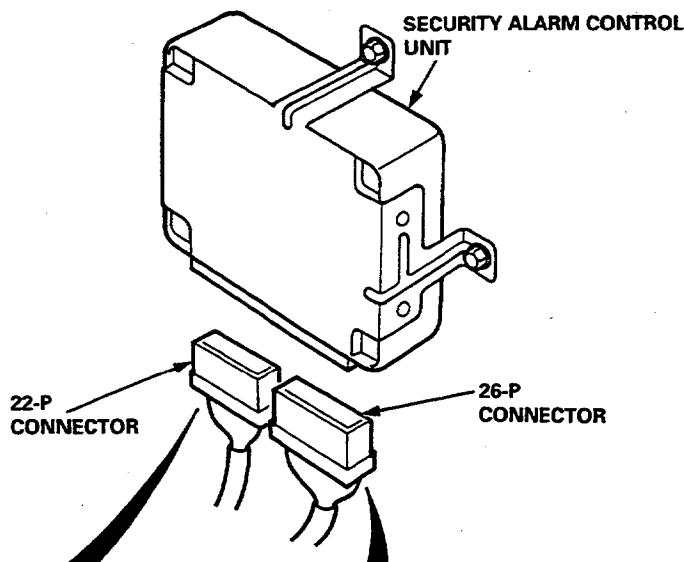


Terminal No.	Wire	Test condition	Test: Desired result	Possible cause if result is not obtained
A6	YEL/RED	Hood closed	Check for continuity to ground: There should be continuity.	<ul style="list-style-type: none"> Faulty security hood switch Poor ground (G301) An open in the wire
A10	GRN/BLU	Driver's door open	Check for voltage to ground: There should be 1 V or less.	<ul style="list-style-type: none"> Faulty driver's door switch An open in the wire
A13	GRN/RED	Passenger's door open	Check for voltage to ground: There should be 1 V or less.	<ul style="list-style-type: none"> Faulty passenger's door switch An open in the wire
A14	GRN	Tailgate open	Check for voltage to ground: There should be 1 V or less.	<ul style="list-style-type: none"> Faulty tailgate latch switch An open in the wire
A8	BLK/YEL	Tailgate key cylinder switch in UNLOCK	Check for continuity to ground: There should be continuity.	<ul style="list-style-type: none"> Faulty tailgate key cylinder switch An open in the wire
		Driver's door key cylinder switch in UNLOCK	Check for continuity to ground: There should be continuity.	<ul style="list-style-type: none"> Faulty driver's door key cylinder switch An open in the wire
		Front passenger's door key cylinder switch in UNLOCK	Check for continuity to ground: There should be continuity.	<ul style="list-style-type: none"> Faulty front passenger's door key cylinder switch An open in the wire
A4	BLU/WHT	Driver's door lock knob in LOCK	Check for continuity to ground: There should be continuity.	<ul style="list-style-type: none"> Faulty driver's door lock knob switch (built into the actuator) Poor ground (G501, G502) An open in the wire
A5	BLU/RED	Driver's door lock knob in UNLOCK		
A15	BLU/GRN	Front passenger's door lock knob in UNLOCK	Check for continuity to ground: There should be continuity.	<ul style="list-style-type: none"> Faulty front passenger's door lock knob switch (built into the actuator) Poor ground (G401) An open in the wire
B1 and B3	WHT/RED and YEL/RED	Connect the WHT/RED and WHT/YEL (B2) terminals and the YEL/RED and BLK (B4) terminals momentarily.	Check the door lock operation: All doors should lock.	<ul style="list-style-type: none"> Faulty door lock actuator An open in the wire Disconnected or obstructed door lock rod/linkage
		Connect the YEL/RED and WHT/YEL (B2) terminals and the WHT/RED and BLK (B4) terminals momentarily.	Check the door lock operation: All doors should unlock.	
A7	GRN/WHT	Under all conditions	Check for continuity in the wire between the keyless receiver unit and security alarm control unit.	<ul style="list-style-type: none"> An open in the wire

Security Alarm System

Security Alarm Control Unit Input Test (KE model)

1. Disconnect the 22-P and 26-P connectors from the control unit.
2. Inspect the connector and socket terminals to be sure they are all making good contact.
 - If the terminals are bent, loose or corroded, repair them as necessary, and recheck the system.
 - If the terminals look OK, make the following input tests at the connector.
 - If any test indicates a problem, find and correct the cause, then recheck the system.
 - If all the input tests prove OK, the control unit must be faulty; replace it.



Terminal No.	Wire	Test condition	Test: Desired result	Possible cause if result is not obtained
A22	BLK	Under all conditions	Check for continuity to ground: There should be continuity.	<ul style="list-style-type: none"> • Poor ground (G504) • An open in the wire
A11	WHT/YEL	Under all conditions	Check for voltage to ground: There should be battery voltage.	<ul style="list-style-type: none"> • Blown No. 6 (20 A) fuse in the under-dash fuse/relay box • An open in the wire
A10	YEL	Ignition switch ON (II)	Check for voltage to ground: There should be battery voltage.	<ul style="list-style-type: none"> • Blown No. 15 (10 A) fuse in the under-dash fuse/relay box • An open in the wire
B3	WHT/GRN	Under all conditions	Check for voltage to ground: There should be battery voltage.	<ul style="list-style-type: none"> • Blown No. 43 (10 A) fuse in the under-hood fuse/relay box • An open in the wire
A13	GRN/RED	Under all conditions	Connect to ground: Security indicators should come on.	<ul style="list-style-type: none"> • Blown No. 42 (20 A) fuse in the under-hood fuse/relay box • Faulty security indicator • An open in the wire
A21	BLU/RED	Under all conditions	Connect to ground: Security alarm horn should sound.	<ul style="list-style-type: none"> • Blown No. 42 (20 A) fuse in the under-hood fuse/relay box • Faulty security alarm horn • An open in the wire



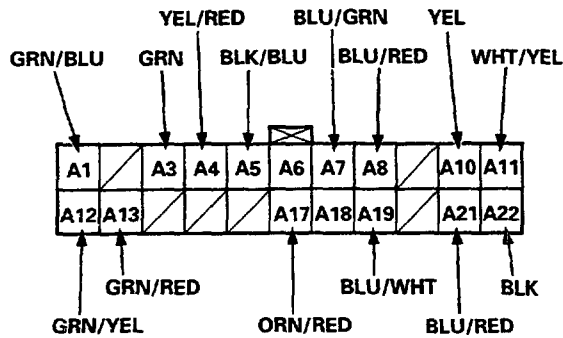
Terminal No.	Wire	Test condition	Test: Desired result	Possible cause if result is not obtained
A12	GRN/YEL	Connect battery power to the GRN/YEL terminal.	Right turn signal light should come on as the battery is connected.	<ul style="list-style-type: none"> • Poor ground (G201, G401, G501, G504) • An open in the wire
A1	GRN/BLU	Connect battery power to the GRN/BLU terminal.	Left turn signal light should come on as the battery is connected.	<ul style="list-style-type: none"> • Poor ground (G301, G401, G501, G503) • An open in the wire
A17	ORN/RED	Under all conditions	Check for continuity in the wire between the spider unit and security alarm control unit.	<ul style="list-style-type: none"> • An open in the wire
B18	GRN/BLK	Under all conditions	Check for continuity in the wire between the keyless receiver unit and security alarm control unit.	<ul style="list-style-type: none"> • An open in the wire
B19	WHT/BLU	Under all conditions		
B5	GRN/WHT	Under all conditions		
A4	YEL/RED	Hood open	Check for continuity to ground: There should be continuity.	<ul style="list-style-type: none"> • Faulty security hood switch • Poor ground (G301) • An open in the wire
B9	GRN/BLU	Driver's door open	Check for voltage to ground: There should be 1 V or less.	<ul style="list-style-type: none"> • Faulty driver's door switch • An open in the wire
B8	GRN/RED	Passenger's door open	Check for voltage to ground: There should be 1 V or less.	<ul style="list-style-type: none"> • Faulty passenger's door switch • An open in the wire
A3	GRN	Tailgate open	Check for voltage to ground: There should be 1 V or less.	<ul style="list-style-type: none"> • Faulty tailgate latch switch • An open in the wire
B20	BLK/YEL	Tailgate key cylinder switch in UNLOCK	Check for continuity to ground: There should be 1 V or less.	<ul style="list-style-type: none"> • Faulty tailgate key cylinder switch • An open in the wire
B24	GRN/RED	Driver's door key cylinder switch in LOCK	Check for continuity to ground: There should be continuity.	<ul style="list-style-type: none"> • Faulty driver's door key cylinder switch • Poor ground (G501, G502) • An open in the wire
B11	GRN/WHT	Driver's door key cylinder switch in UNLOCK		

(cont'd)

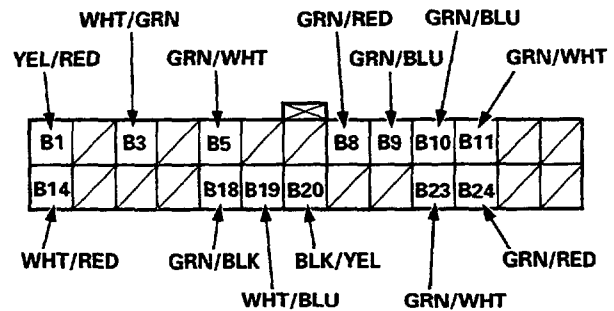
Security Alarm System

Security Alarm Control Unit Input Test (KE model cont'd)

22-P CONNECTOR:



26-P CONNECTOR:



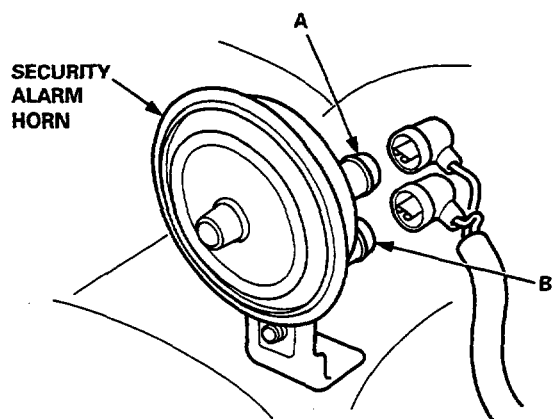
Terminal

No.	Wire	Test condition	Test: Desired result	Possible cause if result is not obtained
B23	GRN/YEL	Front passenger's door key cylinder switch in LOCK	Check for continuity to ground: There should be continuity.	<ul style="list-style-type: none"> Faulty front passenger's door key cylinder switch Poor ground (G401) An open in the wire
B10	GRN/BLU	Front passenger's door key cylinder switch in UNLOCK		
A19	BLU/WHT	Driver's door lock knob in LOCK	Check for continuity to ground: There should be continuity.	<ul style="list-style-type: none"> Faulty driver's door lock knob switch (built into the actuator) Poor ground (G501, G502) An open in the wire
A8	BLU/RED	Driver's door lock knob in UNLOCK		
A7	BLU/GRN	Front passenger's door lock knob in UNLOCK	Check for continuity to ground: There should be continuity.	<ul style="list-style-type: none"> Faulty front passenger's door lock knob switch (built into the actuator) Poor ground (G401) An open in the wire
A6	BLK/GRN	Right rear door lock knob in UNLOCK	Check for continuity to ground: There should be continuity.	<ul style="list-style-type: none"> Faulty right rear door lock knob switch (built into the actuator) Poor ground (G501, G502) An open in the wire
A5	BLK/BLU	Left rear door lock knob in UNLOCK	Check for continuity to ground: There should be continuity.	<ul style="list-style-type: none"> Faulty left rear door lock knob switch (built into the actuator) Poor ground (G501, G502) An open in the wire
B14 and B1	WHT/RED and YEL/RED	Connect the WHT/RED and WHT/YEL (A11) terminals and the YEL/RED and BLK (A22) terminals momentarily.	Check the door lock operation: All doors should lock.	<ul style="list-style-type: none"> Faulty door lock actuator An open in the wire Disconnected or obstructed door lock rod/linkage
		Connect the YEL/RED and WHT/YEL (A11) terminals and the WHT/RED and BLK (A22) terminals momentarily.	Check the door lock operation: All doors should unlock.	



Security Alarm Horn Test

1. Open the hood and disconnect the terminals from the security alarm horn.
2. Test the horn by connecting battery power to one terminal and grounding the other. The horn should sound.



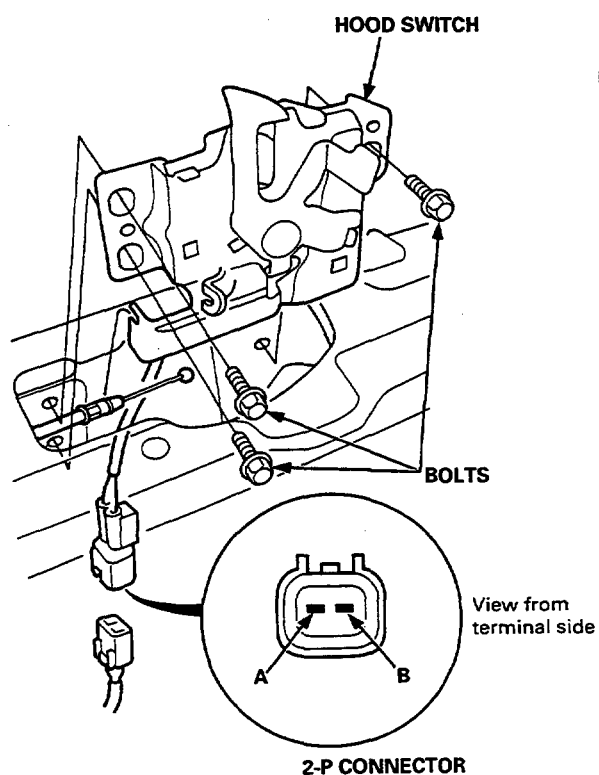
3. Replace the horn if it fails to sound.

Hood Switch Test/Replacement

1. Open the hood.
2. Disconnect the 2-P connector from the hood switch.
3. Check for continuity between the terminals A and B in each switch position according to the table.

Terminal		A	B
Position			
LHD	Hood open		
	Hood closed		
RHD	Hood open		
	Hood close		

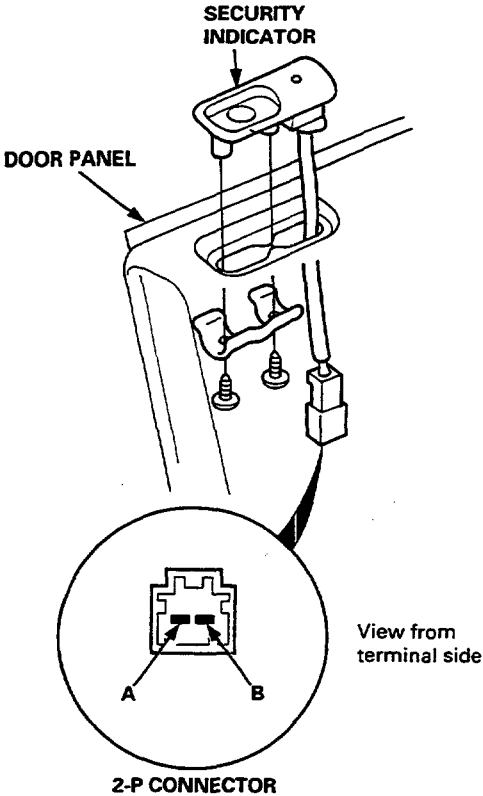
4. If the hood switch does not work properly, remove the two bolts and replace the switch.



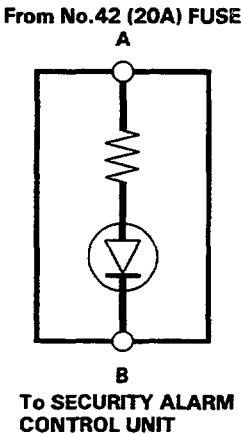
Security Alarm System

Security Indicator Test/Replacement

- 1. Remove the front door panel (see section 20).
- 2. Remove the two screws, and disconnect the 2-P connector from the security indicator.
- 3. Remove the security indicator from the door panel.



- 4. The LED should come on when power is connected to terminal A, and ground is connected to terminal B. If the LED does not come on, replace it.

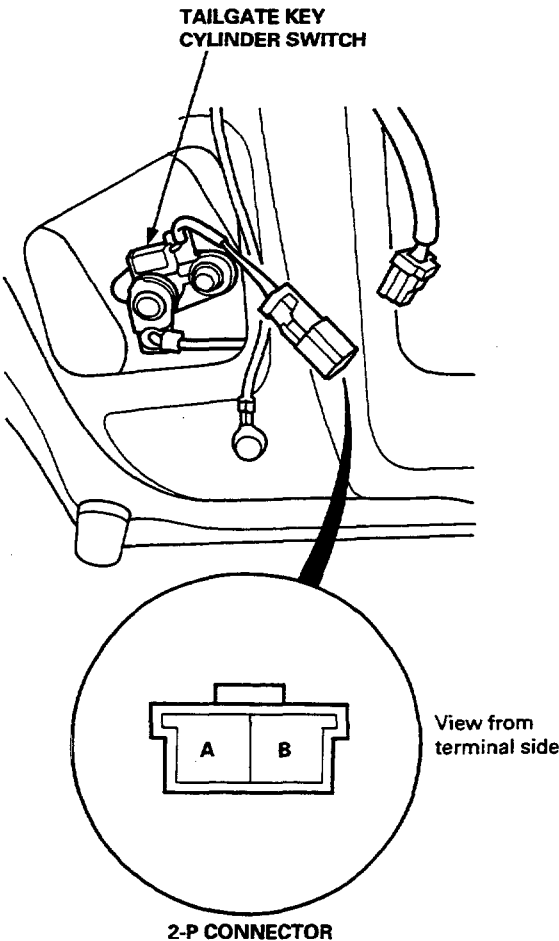


Tailgate Key Cylinder Switch Test

- 1. Open the trunk lid and disconnect the 2-P connector from the tailgate key cylinder switch.
- 2. Check for continuity between the terminals in each switch position according to the table.

Terminal	A	B
Position		
LOCK (Closed)		
UNLOCK (Open)	○ — ○	○ — ○

- 3. If it fails to work, replace the trunk key cylinder switch (see section 20).

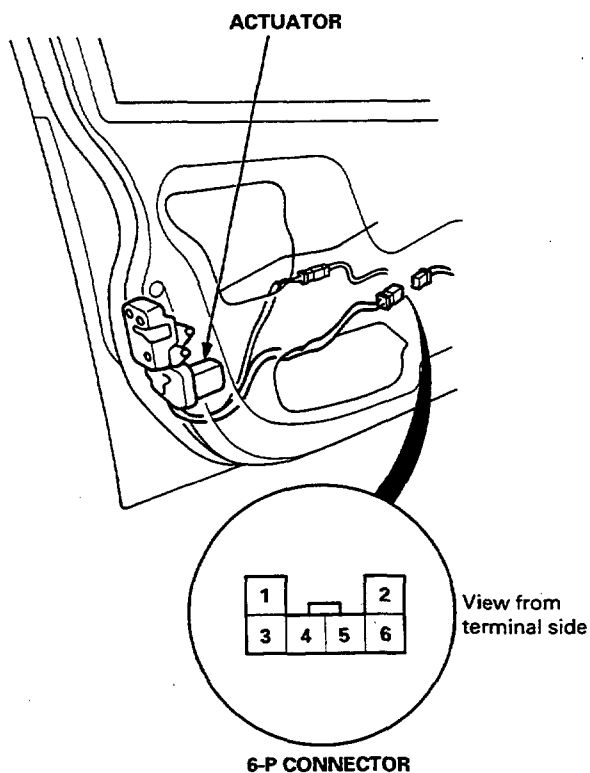




Driver's Door Lock Actuator Test

1. Remove the driver's door panel (see section 20).
2. Disconnect the 6-P connector from the door lock actuator.

NOTE: LHD type is shown, RHD type is symmetrical.



3. Test the actuator:

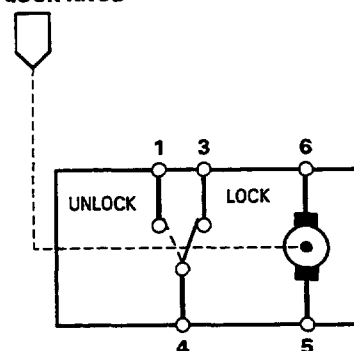
Terminal	6	5
Position		
LOCK	⊖	⊕
UNLOCK	⊕	⊖

CAUTION: To prevent damage to the actuator, connect battery power only momentarily.

4. Check for continuity between the terminals in each switch position according to the table.

Terminal	1	4	3
Position			
LOCK		○	○
UNLOCK	○	○	

DOOR LOCK KNOB



5. If the actuator does not work properly, replace it.

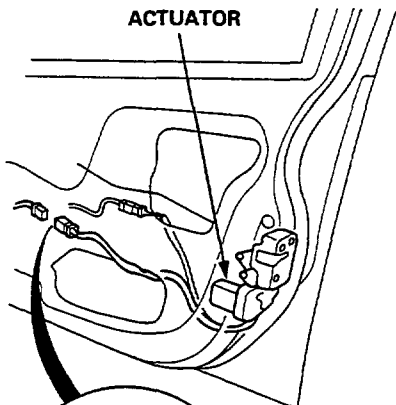
Security Alarm System

Passenger's Door Lock Actuator Test

1. Remove the passenger's door panel (see section 20).
2. Disconnect the 6-P or 2-P connector from the door lock actuator.

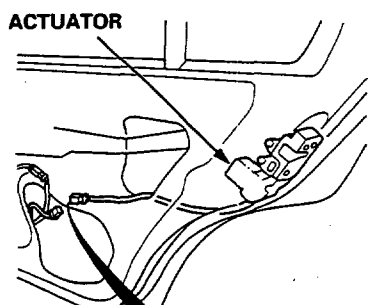
Front Passenger's Door:

NOTE: LHD type is shown, RHD type is symmetrical.



6-P CONNECTOR

Rear Passenger's Door:



2-P CONNECTOR
(KG model)

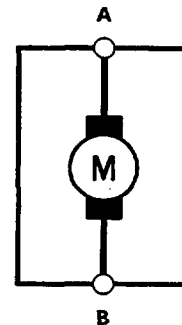
6-P CONNECTOR
(KE model)

3. Test the actuator:

Terminal	6 (B)	5 (A)
Position		
LOCK	⊖	⊕
UNLOCK	⊕	⊖

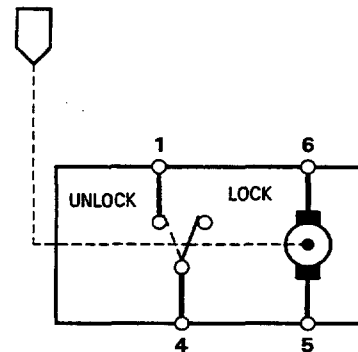
CAUTION: To prevent damage to the actuator, connect battery power only momentarily.

KG model:



KE model:

DOOR LOCK KNOB



4. Check for continuity between the terminals in each switch position according to the table.

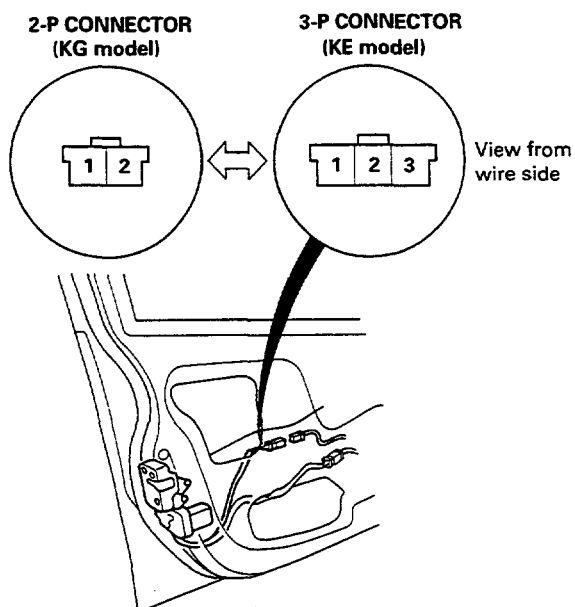
Terminal	1	4
Position		
LOCK		
UNLOCK	○	○

5. If the actuator does not work properly, replace it.



Key Cylinder Switch Test

1. Remove the front door panel (see section 20).
2. Disconnect the 3-P or 2-P from the actuator.
3. Check for continuity between the terminals in each switch position according to the table.



KG model:

Terminal	1	2
Position		
LOCK		
UNLOCK		

KE model:

Terminal	1	2	3
Position			
LOCK			
UNLOCK			