ABC123	Entire Article 2000 Chevrolet Camaro

ARTICLE BEGINNING

2000 ACCESSORIES & EQUIPMENT
General Motors Anti-Theft Systems

Camaro & Firebird

*** PLEASE READ THIS FIRST ***

WARNING: Vehicles are equipped with air bag supplemental restraint system. Before attempting ANY repairs involving steering column, instrument panel or related components, see SERVICE PRECAUTIONS and DISABLING & ACTIVATING AIR BAG SYSTEM in appropriate AIR BAG RESTRAINT SYSTEMS article.

DESCRIPTION & OPERATION

PASS-KEY(R) II SYSTEM

PASS-Key(R) II is a standard system designed to prevent vehicle theft by disabling engine's fuel system and starter, unless an ignition key with a specific electrical resistance is used in ignition key lock cylinder. PASS-Key(R) II system operates using sensing contacts which are located in ignition key lock cylinder. These contact a key resistor pellet which is located on the ignition key. When lock is rotated, battery voltage is applied through appropriate fuse to Body Control Module (BCM). Pellet resistance is then compared with programmed value in BCM non-volatile memory. There are 15 different resistances available. System components include ignition key, ignition key lock cylinder, Body Control Module (BCM), theft deterrent relay and Powertrain Control Module (PCM).

CONTENT THEFT DETERRENT SYSTEM

The Content Theft Deterrent (CTD) system option, combined with Remote Keyless Entry (RKE), operates separately from PASS-Key(R) II system. CTD system sounds horn and flashes parking lights in the event of forced entry through doors or rear hatch, or shock sensor is tripped. Horn chirp, arming and delay features of CTD system are programmable by vehicle operator.

ARMING & DISARMING (CTD SYSTEM)

Arming Procedure

Close all windows and place shift lever in Park. Turn ignition switch to LOCK position and remove key. Open any door. Lock doors using electric switch or LOCK button on remote keyless entry transmitter. Locking door with key will not arm system. Close doors. Red LED located on instrument panel upper trim panel will flash briefly every 2 seconds, indicating system is armed. System may also be armed with windows open.

Disarming Procedure

Red LED will be off, indicating system is disarmed. To disarm rear hatch leaving doors armed, use rear hatch button on remote keyless entry transmitter. Five seconds after closing rear hatch, rear hatch will become armed again. To disarm system after it has been fully armed, turn ignition on or use UNLOCK button on remote keyless entry transmitter.

Passive Arming

If ignition is turned off and a door was opened, system will automatically arm six seconds after all doors are closed (locked or unlocked). In all other cases, system will wait 30 seconds after all doors are closed before automatically arming.

Locking Vehicle Without Arming System

Lock doors manually with inside lock knobs or front door lock key and close them.

Driver's Door Delay

BCM is programmed to allow an 8-second delay after driver's door is opened to turn ignition key on. This can be programmed to no delay, if transmitter is always used to disarm system.

Deactivating Alarm

If PANIC button on remote transmitter set off alarm, PANIC button must be pressed again to deactivate alarm. If a door or rear hatch switch set off alarm, press any button on remote transmitter or turn ignition on. If UNLOCK button is pressed, alarm will silence, system will disarm and driver's door will unlock. If LOCK or PANIC button is pressed, alarm will silence, system will remain armed and doors will remain locked. If rear hatch button is pressed, alarm will silence, hatch will disarm and unlock. Alarm will deactivate automatically after 2 minutes.

COMPONENT LOCATIONS

COMPONENT LOCATIONS (PASS-KEY(R) II & CTD SYSTEM)

Component	Location
Body Control Module (BCM)	Above Right I/P Insulator Panel, Near Blower Motor
Horn Relay	In Underhood Electrical Center, Left Front Of Engine Compartment
Powertrain Control Module (PCM)	In Engine Compartment, Rearward Of Right Strut Tower
Theft Deterrent Relay	Under Center Of Dash, Attached To Inflatable Restraint Module Bracket
Theft Deterrent Shock Sensor	Mounted On Back Side Of Right Rear Wheelwell

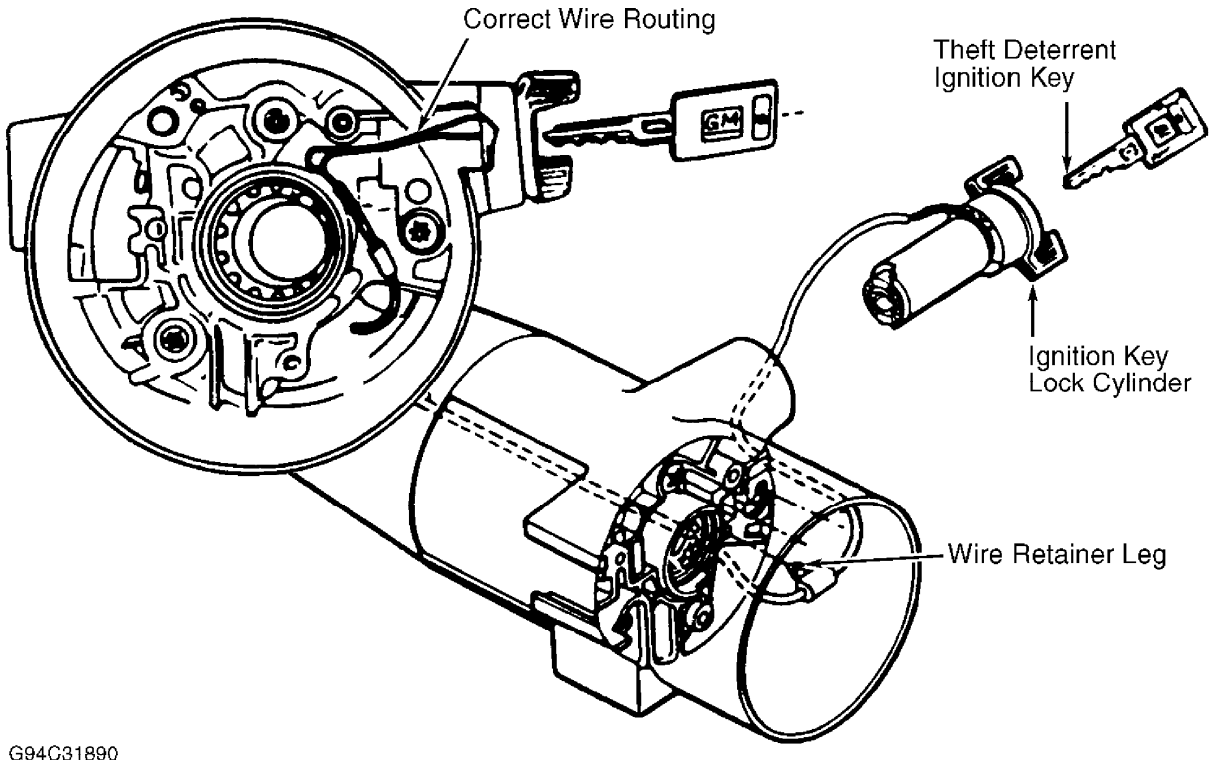

Fig. 1: Ignition Key Lock Cylinder Wiring Routing
Courtesy of General Motors Corp.

PROGRAMMING

PROGRAMMING NEW MODULE

NOTE: New modules are unprogrammed. New module must be programmed with code that matches customer's key for PASS-Key(R) II operation. New module can only be programmed once.

1) To program a NEW Body Control Module (BCM), install new module into vehicle. Insert customer's key into ignition switch and turn to RUN position. Start engine to verify operation.
2) Observe SECURITY indicator light. SECURITY indicator light should illuminate for about 5 seconds and go out (BCM is programmed). If SECURITY indicator light flashes one flash per second and engine starts, module did not program key code. Check wiring, contacts to key resistance pellet and key for defects or intermittents. Repair or replace as necessary, and then repeat programming procedure.

REPLACING IGNITION KEY

Verifying Correct Key Code
Lost or broken keys must be replaced with a key that has proper resistance value. To determine resistance value or code, insert key into PASS-Key(R) II (VATS) Interrogator (J 35628-A) and read key code. Use key blank matching this key code and cut it to match original.

NOTE: Do not disconnect Yellow 2-pin SIR connector when determining key code.

Determining BCM Programmed Key Code

To determine unknown BCM key code, use PASS-Key(R) II (VATS) Interrogator (J 35628-A) and the following procedure.

1) Connect Interrogator wiring to PASS-Key(R) II dash connector at base of steering column. DO NOT connect to steering column wiring.

2) Turn on Interrogator and move key code switch to "1" position and attempt to start engine. If engine starts, key code is "1". If engine does not start, turn ignition off and press 4-minute timer on Interrogator.

3) When timer indicator light goes out, move key code switch to next number and attempt to start engine. If engine does not start, continue trying different key codes until proper key code is found. See PASS-KEY(R) II KEY RESISTANCE table.

PASS-KEY(R) II KEY RESISTANCE

Key Code No.	Nominal Value (Ohms)	Acceptable Range (Ohms)
1	402	386-438
2	523	502-564
3	681	654-728
4	887	852-942
5	1130	1085-1195
6	1470	1411-1549
7	1870	1795-1965
8	2370	2275-2485
9	3010	2890-3150
10	3740	3590-3910
11	4750	4650-4960
12	6040	5798-6302
13	7500	7200-7820
14	9530	9149-9931
15	11,800	11,328-12,292

CUSTOMIZING CTD SYSTEM

ENTERING PROGRAMMING MODE

Turn ignition switch to ON position to disarm system. Turn ignition off. Remove RADIO fuse No. 17 (15-amp) located in instrument panel fuse block behind left side of dash. Turn ignition switch to ACC position. Chime will sound, indicating programming mode has been entered.

One chime indicates exit lighting, delayed illumination, last door closed locking and lockout prevention can be customized. Two chimes indicate remote lock control verification, arming method,

arming verification, driver's door delay and shock sensor enable/disable can be customized.

EXITING PROGRAMMING MODE

Turn ignition switch to OFF position and reinstall RADIO fuse No. 17 (15-amp).

EXIT LIGHTING AND DELAYED ILLUMINATION

Enter programming mode. See ENTERING PROGRAMMING MODE. Turn courtesy lights on. Count number of chimes (mode number). Turn courtesy light switch off. Alternate courtesy light switch on and off until proper number of chimes is obtained.

Mode 1
Both off (interior lights will turn on or off at same instant a door is opened or closed).

Mode 2
Delayed illumination only (interior lights will stay on for 25 seconds after doors are closed).

Mode 3
Exit lighting only (interior lights will come on whenever ignition key is removed).

Mode 4
Factory setting. Both on (combines Mode 2 and 3).

Continue customizing or exit programming mode.

LAST DOOR CLOSED LOCKING & LOCKOUT PREVENTION

Enter programming mode. See ENTERING PROGRAMMING MODE. Press LOCK switch on door. Count number of chimes (mode number). Press LOCK switch on door until proper number of chimes is obtained.

Mode 1
Both off (doors will lock/unlock when power door lock switch is pressed).

Mode 2
Factory setting. Lock-out prevention only (with key in ignition and exiting out driver's door).

Mode 3
Last door closed locking only (if power door lock switch is used to lock vehicle while any door is open, doors will not lock until after all doors are closed).

Mode 4
Both on (combines Mode 2 and 3).

Continue customizing or exit programming mode.

REMOTE LOCK CONTROL VERIFICATION

Enter programming mode. See ENTERING PROGRAMMING MODE. Press UNLOCK switch on remote lock control transmitter. Count number of chimes (mode number). Press UNLOCK switch on remote lock control transmitter until proper number of chimes is obtained.

Mode 1
All off (headlights and horn will not provide feedback indicating a lock/unlock command has been received by remote transmitter).

Mode 2
Horn will sound briefly and parking lights will flash when LOCK button on remote transmitter is pressed. Only parking lights will flash when UNLOCK button is pressed.

Mode 3
Horn will sound briefly and parking lights will flash every time LOCK and UNLOCK buttons are pressed.

Mode 4
Parking lights will flash every time LOCK and UNLOCK buttons are pressed.

Mode 5
Factory setting. Lamps will flash upon first push of LOCK button, lights will flash and horn will sound upon second push of LOCK button and lights will flash upon any push of UNLOCK button.

Continue customizing or exit programming mode.

THEFT-DETERRENT ARMING METHOD

Enter programming mode. See ENTERING PROGRAMMING MODE. Press UNLOCK switch on door. Count number of chimes (mode number). Press UNLOCK switch on door until proper number of chimes is obtained.

Mode 1
Alarm system off (system will not arm).

Mode 2
Remote control transmitter lock (when doors are locked using transmitter, system will arm itself).

Mode 3
Factory setting. Remote transmitter/power door lock switch (if either transmitter or power door lock switch is used to lock doors, system will arm itself).

Mode 4
Passive, automatic arming. Remote transmitter/power door lock

switch arming (system will arm itself after all doors are closed).

Continue customizing or exit programming mode.

THEFT-DETERRENT ARMING VERIFICATION

Enter programming mode. See ENTERING PROGRAMMING MODE. Press LOCK switch on remote transmitter. Count number of chimes (mode number). Press LOCK switch on remote transmitter until proper number of chimes is obtained.

Mode 1
All off (no horn chirps, parking lights do not flash).

Mode 2
Parking lights will flash and horn will chirp twice to verify system is armed using any arming method.

Mode 3
Factory setting. If remote transmitter is used to arm system, parking lights will flash and horn will chirp twice to verify system is armed. If either power door lock switch or passive arming is used, lights will flash for verification.

Mode 4
When vehicle arms, only parking lights will flash for verification.

Continue customizing or exit programming mode.

DRIVER'S DOOR ALARM DELAY & SHOCK SENSOR ENABLE

Enter programming mode. See ENTERING PROGRAMMING MODE. Turn parking lights on and off. Count number of chimes (mode number). Alternate parking lights on and off until proper number of chimes is obtained.

Mode 1
Zero delay and shock sensor disabled (alarm will sound immediately if driver's door is opened with key and shock sensor will not be available to measure sharp blows to vehicle).

Mode 2
Eight second delay and shock sensor disabled (alarm will sound 8 seconds after driver's door is opened with key and shock sensor will not be available to measure sharp blows to vehicle).

Mode 3
Zero delay and shock sensor enabled (alarm will sound immediately after driver's door is opened with key and shock sensor will be available to measure sharp blows to vehicle).

Mode 4
Factory setting. Eight second delay and shock sensor enabled

(alarm will sound 8 seconds after driver's door is opened with key and shock sensor will be available to measure sharp blows to vehicle).

Continue customizing or exit programming mode.

ADJUSTMENTS

SHOCK SENSOR

Shock sensor sensitivity has been preset and should not require adjustment. If adjusting shock sensor is necessary, remove label. Turn adjustment screw clockwise to decrease sensitivity, counterclockwise to increase sensitivity.

TROUBLE SHOOTING

NOTE: If problem cannot be resolved by the following trouble shooting procedures, diagnose by symptom. See SYMPTOM TESTS.

CTD SYSTEM

Ensure parking lights, horn and electrical door locks operate. Ensure Red LED flashes once per second with door open and system not armed. Check CTD system fuses. If system fault is intermittent, check component connectors for loose connections and dirty terminals. Check if customer has changed programmable features from factory settings.

PASS-KEY(R) II SYSTEM

1) Look into key opening and check key pellet sensing contacts in ignition key lock cylinder. If contacts are damaged, or not Silver in color, replace ignition key lock cylinder. Ensure ignition key lock cylinder wiring is properly routed and not twisted when replacing lock cylinder. Cut off wire retainer leg on original connection when replacing ignition key lock cylinder. See Fig. 1. Using PASS-Key(R) II (VATS) Interrogator (J 35628-A), check ignition keys. If key code window displays "E" for error, or display is erratic, replace key.

2) Check ignition key for cracked, dirty or coated resistor pellet. Ensure key does not have excess plastic around resistor pellet contacts. Check PASS-Key(R) II system fuses. Check for improperly installed aftermarket electronic equipment. If system fault is intermittent, check component connectors for loose connections, open wires and dirty terminals.

3) If theft deterrent relay must be replaced, check for short in Purple wire between theft deterrent relay and starter solenoid. A short in Purple wire may cause theft deterrent relay to fail.

SYMPTOM TESTS

NOTE: For Content Theft Deterrent (CTD) and PASS-Key(R) II system component locations, see COMPONENT LOCATIONS.

NOTE: To prevent misdiagnosis, check for DTCs. See appropriate SELF-DIAGNOSTICS article in ENGINE PERFORMANCE. SECURITY indicator light will remain illuminated for one minute after PASS-Key(R) II system fault has been repaired.

SYMPTOM INDEX

TEST A: CTD ALARM MODE ALWAYS ON

1) Open, and then close driver door. If courtesy lights turn off, go to next step. If courtesy lights stay on, check for DTCs related to interior light system. See appropriate BODY CONTROL MODULES article. If no DTCs are present, see ILLUMINATION/INTERIOR LIGHTS article.

2) Disconnect theft deterrent shock sensor. If alarm is still on, go to next step. If alarm is not on, replace theft deterrent shock sensor.

3) Disconnect BCM connector C3. Connect a test light between BCM connector C3, terminal D14 and battery voltage. See Fig. 2. If test light is off, go to next step. If test light is on, repair short to ground in Light Green wire between BCM connector C3, terminal D14 and shock sensor connector terminal "B". See WIRING DIAGRAMS.

4) Connect a test light between BCM connector C3, terminal D2 and battery voltage. If test light is off, replace BCM. See REMOVAL & INSTALLATION in appropriate BODY CONTROL MODULES article. If test light is on, repair short to ground in Light Blue wire between BCM connector C3, terminal D2 and shock sensor connector terminal "D".

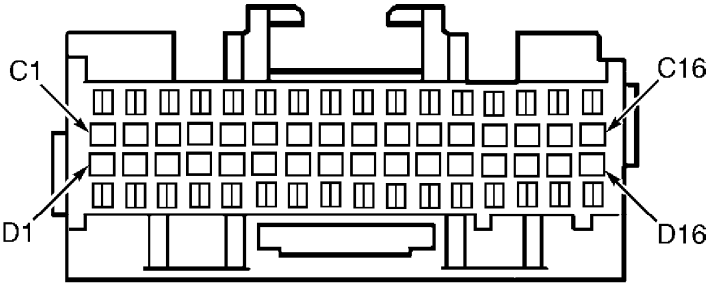

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Fig. 2: Identifying BCM Connector C3 Terminals
Courtesy of General Motors Corp.

TEST B: CTD SYSTEM INOPERATIVE

1) Check for BCM DTCs. If DTCs are present, see appropriate BODY CONTROL MODULES article. If no DTCs are present, go to next step.
2) Check CTD system LED connector and BCM for poor connections. Repair as necessary. If connections are okay, see TEST C: CTD SYSTEM RED LED DOES NOT ILLUMINATE.

TEST C: CTD SYSTEM RED LED DOES NOT ILLUMINATE

CAUTION: Do not use battery or test light to test LED. Damage to LED may result.

1) Using DVOM set on diode scale, backprobe BCM connector C3, terminal C16 (Dark Green wire) with positive test lead and BCM connector C3, terminal C1 (Black wire) with negative test lead. See Fig. 2. If LED illuminates, go to next step. If LED does not illuminate, go to step 3).
2) Check BCM connector C3 for poor connections. If connections are okay, replace BCM. After replacement, program new BCM. See PROGRAMMING NEW MODULE under PROGRAMMING.
3) Disconnect LED connector. Connect test light between LED connector terminal "A" (Black wire) and battery voltage. If test light illuminates, go to next step. If test light does not illuminate, repair open in Black wire between LED and ground. See WIRING DIAGRAMS.
4) Check Dark Green wire between BCM connector C3, terminal C16 and LED connector terminal "B" for open or poor connection. See WIRING DIAGRAMS. If Dark Green wire is okay, replace LED. Disconnect battery, and then reconnect.

TEST D: HORNS INOPERATIVE IN CTD ALARM MODE

Ensure horns have not been programmed off. See CUSTOMIZING CTD SYSTEM. Disconnect horn relay connector. Disconnect BCM connector C3. Connect test light between BCM connector C3, terminal C9 (Black wire) and battery voltage. See Fig. 2. Press steering wheel horn switch. If test light does not illuminate, repair open in Black wire between horn relay and BCM. If test light illuminates, replace BCM. After replacement, program new BCM. See PROGRAMMING NEW MODULE under PROGRAMMING.

TEST E: LIGHTS INOPERATIVE IN CTD ALARM MODE

1) Ensure CTD arming verification is not programmed off. See CUSTOMIZING CTD SYSTEM. Disconnect theft deterrent relay connector. Connect test light between theft deterrent relay harness connector terminal C1 (Orange wire) and ground. See WIRING DIAGRAMS.

2) If test light does not illuminate, repair open in Orange wire between parking light relay and splice. If test light illuminates, connect test light between parking light relay connector terminals C1 (Orange wire) and A1 (Black/White wire). Press UNLOCK, and then LOCK buttons on remote transmitter. If test light flashes on, and then off, go to step 4). If test light does not flash on, and then off, go to next step.

3) With test light still connected to parking light relay connector terminal C1 (Orange wire), backprobe BCM connector C3, terminal C8 (Black/White wire). See Fig. 2. Press UNLOCK, and then LOCK buttons on remote transmitter. If test light flashes on, and then off, repair open in Black/White wire between parking light relay and BCM. If test light does not flash on, and then off, replace BCM. After replacement, program new BCM. See PROGRAMMING NEW MODULE under PROGRAMMING.

4) Connect test light between parking light relay connector terminal C2 (Orange wire) and ground. If test light does not illuminate, repair open in Orange wire between parking light relay and splice. If test light illuminates, connect test light between parking light relay connector terminal A2 (Brown wire) and ground. Place headlight switch in PARK position. If test light illuminates, replace parking light relay. If test light does not illuminate, repair open in Brown wire between parking light relay and splice.

TEST F: THEFT DETERRENT SHOCK SENSOR INOPERATIVE

1) Ensure tamper label on shock sensor is not broken. If tamper label is broken, shock sensor sensitivity may be misadjusted. Enter BCM diagnostic mode. See SELF-DIAGNOSTIC SYSTEM in appropriate BODY CONTROL MODULES article. Access CTD system shock sensor. While in diagnostic mode, tap shock sensor with finger. If chime does not sound when sensor is tapped, go to next step. If chime sounds when sensor is tapped, check sensor sensitivity adjustment. See ADJUSTMENTS.

2) Exit BCM diagnostic mode. Turn ignition switch to OFF position. Disconnect shock sensor connector. Connect test light between shock sensor connector terminals "A" (Orange wire) and "C" (Black wire). See WIRING DIAGRAMS. If test light illuminates, go to step 4). If test light does not illuminate, go to next step.

3) Connect test light between shock sensor connector terminal "A" (Orange wire) and chassis ground. If test light illuminates, repair open in Black wire between shock sensor and ground. See WIRING DIAGRAMS. If test light does not illuminate, repair open in Orange wire between shock sensor and splice.

4) Connect a jumper wire between shock sensor harness connector terminal "A" (Orange wire) and shock sensor terminal "A" (Orange wire). Connect a jumper wire between shock sensor harness connector terminal "C" (Black wire) and shock sensor terminal "C" (Black wire). Connect test light between shock sensor terminal "D"

(Light Blue wire) and battery voltage. See WIRING DIAGRAMS. Tap shock sensor with finger. If test light flashes when sensor is tapped, go to next step. If test light does not flash when sensor is tapped, replace shock sensor.

5) With jumper wires still connected, connect test light between shock sensor terminal "B" (Light Green wire) and battery voltage. Tap shock sensor with finger. If test light flashes when sensor is tapped, go to next step. If test light does not flash when sensor is tapped, replace shock sensor.

6) Remove jumper wires. Disconnect BCM connector C3. Connect a jumper wire between BCM connector C3, terminals D2 (Light Blue wire) and D14 (Light Green wire). See Fig. 2. Using DVOM, check for continuity between shock sensor connector terminals "D" (Light Blue wire) and "B" (Light Green wire). If continuity does not exist, go to next step. If continuity exists, replace BCM. After replacement, program new BCM. See PROGRAMMING NEW MODULE under PROGRAMMING.

7) Connect a jumper wire between BCM connector C3, terminal D2 (Light Blue wire) and ground. Connect test light between shock sensor terminal "D" (Light Blue wire) and battery voltage. See WIRING DIAGRAMS. If test light illuminates, repair open in Light Green wire between shock sensor and BCM. If test light does not illuminate, repair open in Light Blue wire between shock sensor and BCM.

TEST G: ENGINE DOES NOT CRANK, SECURITY INDICATOR LIGHT ILLUMINATES FOR ABOUT 5 SECONDS, THEN TURNS OFF

1) Remove starter relay from underhood electrical center No. 2. Connect test light between starter relay socket terminal C6 (Yellow/Black wire) and battery voltage. See WIRING DIAGRAMS. Observe test light and turn ignition switch to START position. If test light does not illuminate, check for poor connection, open or short to voltage in Yellow/Black wire. If Yellow/Black wire is okay, replace BCM. After replacement, program new BCM. See PROGRAMMING NEW MODULE under PROGRAMMING. If test light illuminates, go to next step.

2) Connect test light between starter relay socket terminal B4 (Dark Green wire) and ground. See WIRING DIAGRAMS. On A/T models, place transmission in Park or Neutral. On M/T models, depress clutch pedal. On all models, observe test light and turn ignition switch to START position. For A/T models, go to next step. For M/T models, go to step 4).

3) On A/T models, if test light does not illuminate, check for an open in Dark Green wire between starter relay and transmission range switch. Check for open or poor connections in transmission range switch. Check for open in Purple/White wire between transmission range switch and STRTR mini-fuse (15-amp) in underhood electrical center No. 2. Check for open in Yellow wire between ignition switch and STRTR mini-fuse (15-amp) in underhood electrical center No. 2. See WIRING DIAGRAMS. Repair or replace as necessary.

4) On M/T models, if test light does not illuminate, check for an open in Dark Green wire between starter relay and clutch start switch. Check for open or poor connections in clutch start switch. Check for open in Purple/White wire between clutch start switch and STRTR mini-fuse (15-amp) in underhood electrical center No. 2. Check for open in Yellow wire between ignition switch and STRTR mini-fuse

(15-amp) in underhood electrical center No. 2. See WIRING DIAGRAMS. Repair or replace as necessary.

5) On all models, if test light illuminates, connect test light between starter relay socket terminal C4 (Red wire) and ground. Observe test light. If test light does not illuminate, check for open IGN MAXI-fuse(R) (50-amp) or open in Red wire between starter relay socket terminal C4 and IGN MAXI-fuse(R) (50-amp). Repair as necessary. If test light illuminates, go to next step.

6) Connect 30-amp fused jumper wire between starter relay connector terminals C4 (Red wire) and B6 (Purple wire). Turn ignition switch to START position. If engine does not crank, diagnose problem with starting or charging system. See appropriate GENERATORS & REGULATORS article or STARTERS article in STARTING & CHARGING SYSTEMS. If engine cranks, check for poor connections at starter relay. If connections are okay, replace starter relay. Also, check for short in Purple wire between starter relay and starter solenoid. A short in Purple wire may cause starter relay to fail.

TEST H: ENGINE CRANKS BUT WILL NOT START, SECURITY INDICATOR LIGHT ILLUMINATES FOR ABOUT 5 SECONDS, THEN TURNS OFF

1) Disconnect BCM connector C3. Turn ignition switch to RUN position. Using DVOM, measure voltage between BCM connector C3, terminal D8 (Dark Blue wire) and ground. See Fig. 2. If measurement is about 5 volts, go to step 3). If measurement is not about 5 volts, go to next step.

2) Check for open or short in Dark Blue wire between BCM and PCM. See WIRING DIAGRAMS. Also, check for poor connections at BCM and PCM. If Dark Blue wire and connections are okay, check for related DTCs stored in PCM. See appropriate SELF-DIAGNOSTICS article in ENGINE PERFORMANCE.

3) Turn ignition off. Reconnect BCM connector. Turn ignition switch to RUN position. Using DVOM, measure voltage between BCM connector C3, terminal D8 (Dark Blue wire) and ground. See Fig. 2. If measurement is about 2.5 volts, check for related DTCs stored in PCM. See appropriate SELF-DIAGNOSTICS article in ENGINE PERFORMANCE. If measurement is not about 2.5 volts, check for poor connections at BCM. If connections are okay, replace BCM. After replacement, program new BCM. See PROGRAMMING NEW MODULE under PROGRAMMING.

TEST I: SECURITY INDICATOR LIGHT ON STEADY, ENGINE STARTS

1) Disconnect BCM connector C3. Turn ignition switch to RUN position. If SECURITY indicator light illuminates, check for short to ground in Gray wire between instrument cluster connector terminal A3 and BCM connector C3, terminal C12. See WIRING DIAGRAMS. If Gray wire is okay, replace instrument cluster.

2) If SECURITY indicator light does not illuminate, perform lock cylinder and harness test. See TEST K: LOCK CYLINDER & HARNESS TEST. If keys, lock cylinder and lock cylinder harness are okay, replace BCM. After replacement, program new BCM. See PROGRAMMING NEW MODULE under PROGRAMMING.

TEST J: SECURITY INDICATOR LIGHT NEVER ILLUMINATES, ENGINE STARTS

WARNING: Vehicles are equipped with air bag supplemental restraint system. When locating 2-pin ignition switch lock cylinder harness connector at base of steering column, do not confuse connector with Yellow 2-pin air bag supplemental restraint system connector also located at base of steering column.

1) Disconnect BCM connector C3. Connect 10-amp fused jumper wire between BCM connector C3, terminal C12 (Gray wire) and ground. See Fig. 2. Turn ignition switch to RUN position. If SECURITY indicator light illuminates, check for poor connections at BCM. Repair as necessary. If connections are okay, replace BCM. After replacement, program new BCM. See PROGRAMMING NEW MODULE under PROGRAMMING. If SECURITY indicator light does not illuminate, go to next step.

2) Check for poor connections or open in Gray wire between BCM and instrument cluster. Also, check for open or short to ground in Orange wire between instrument cluster and PWR ACCY fuse No. 7 (15-amp) located in instrument panel fuse block in left side of dash. Check instrument cluster printed circuit and SECURITY indicator light bulb. Replace as necessary. See WIRING DIAGRAMS.

TEST K: LOCK CYLINDER & HARNESS TEST

1) Insert ignition key into PASS-Key(R) II (VATS) Interrogator (J 35628-A). Turn Interrogator on. Read key code shown on Interrogator display. If display is 1-15, go to next step. If display is "E" for error, clean and retest key. If key code is invalid, replace key.

2) Record displayed key code. Turn Interrogator off. Connect Interrogator to 2-pin ignition switch lock cylinder harness connector at base of steering column. Insert ignition key into ignition switch lock cylinder. Turn Interrogator on. While observing display on Interrogator, turn ignition switch slowly to START position. Check if displayed key code matches value recorded earlier.

NOTE: Both wires of 2-pin ignition switch lock cylinder harness connector at base of steering column are White. When probing 2-pin connector, check wire color at BCM side of connector.

3) If displayed code does not match value recorded earlier, check for poor connection at ignition switch lock cylinder. If connection is okay, replace ignition switch lock cylinder and harness. If displayed code matches value recorded earlier, connect test light between battery voltage and terminal "B" (Purple/White wire) of 2-pin ignition switch lock cylinder harness connector at base of steering column. If test light illuminates, go to step 5). If test light does not illuminate, go to next step.

4) Disconnect BCM connector C3. Connect test light between BCM connector C3, terminal C1 (Black wire) and battery voltage. If test light does not illuminate, repair open in Black wire. If test light illuminates, check for poor connection at BCM or for open in Purple/White wire. If connection and Purple/White wire are okay,

replace BCM. After replacement, program new BCM. See PROGRAMMING NEW MODULE under PROGRAMMING.

5) Disconnect BCM connector C3. Turn ignition switch to RUN position. Connect test light between terminals "A" (White/Black wire) and "B" (Purple/White wire) of 2-pin ignition switch lock cylinder harness connector (module side) at base of steering column. If test light illuminates, repair short to voltage in White/Black wire. If test light does not illuminate, check for open or short to ground in White/Black wire. If White/Black wire is okay, replace BCM. After replacement, program new BCM. See PROGRAMMING NEW MODULE under PROGRAMMING.

REMOVAL & INSTALLATION

NOTE: For ignition switch removal and installation procedure, see STEERING COLUMN SWITCHES - CAMARO & FIREBIRD article. For BCM removal and installation procedure, see BODY CONTROL MODULES - CAMARO & FIREBIRD article.

CLUTCH PEDAL POSITION SWITCH

Removal & Installation

Disconnect negative battery cable. Remove driver-side knee bolster. Locate switch on pedal assembly. Disconnect harness connector. Remove switch. To install, reverse removal procedure.

SHOCK SENSOR

Removal & Installation

Disconnect negative battery cable. Remove right rear inner trim panel. Disconnect harness connector. Remove sensor. To install, reverse removal procedure.

TRANSMISSION RANGE SWITCH

NOTE: Transmission range switch may also be referred to as Park/Neutral position switch.

Removal & Installation

Disconnect negative battery cable. Remove center console. Disconnect harness connector. Remove switch. To adjust, snug switch bolts and place shift lever in Neutral. Insert .094" (2.34 mm) pin in adjustment hole. Rotate switch until pin drops .590" (15 mm) into switch. Tighten bolts to 19 INCH lbs. (2.2 N.m). To complete installation, reverse removal procedure.

WIRING DIAGRAMS

ABC123

Entire Article
2000 Chevrolet Camaro

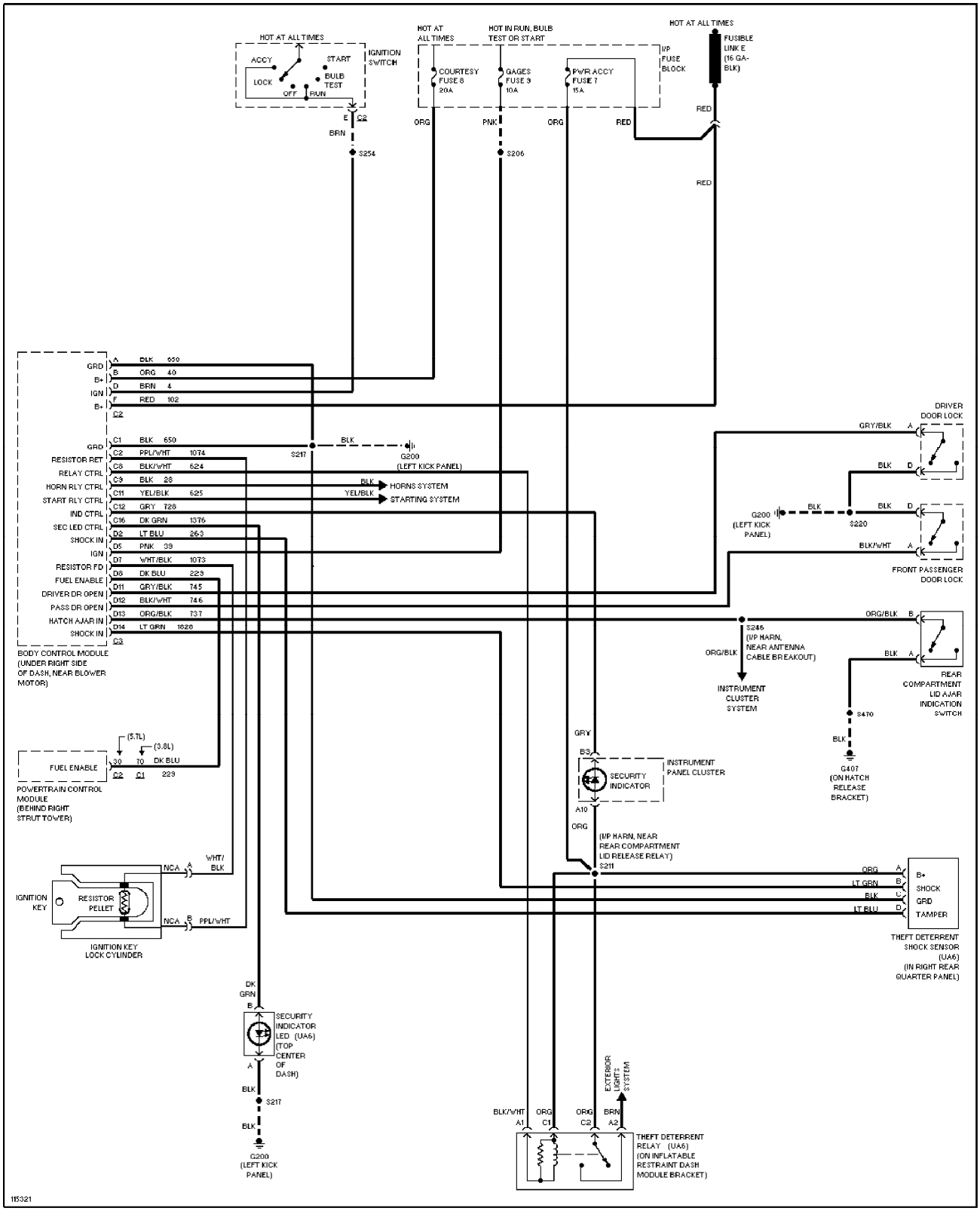

Fig. 3: Anti-Theft System Wiring Diagram (Camaro & Firebird)

END OF ARTICLE

