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POWER TRAIN SYSTEMS

CAN SYSTEMS, AFTER 2006

SYSTEM	READ / CLEAR CODE	DATA STREAM	ACTIVATION	ADAPTAION
ENGINE Gasoline Engine Diesel Engine	Y	Y	Y	Gasoline Engine: 1. Deceleration Sensor Zero Point Calibration 2. CVT Oil Pressure Calibration 3. Reset Memory 4. Check Mode 5. Electric Throttle Learning 6. Shift Control Synchronization Diesel Engine: 1. Reset Memory 2. Check Mode 3. Injector Compensation 4. Supply Pump Initialization 5. Crank Time Compensation Reset 6. A/F Sensor Compensation Reset 7. DPF Deterioration Record Clear 8. Pilot Quantity Learning 9. Learning Values Read
CT Transmission	Y	Y		1. AT/CVT Learning Value Initialization 2. Check Mode 3. Reset Memory 4. A/T Code Registration
CCS Cruise Control System	Y	Y	—	
HV Control Hybrid Vehicle ECU	Y	Y	Y	1. Initialization 2. Reset Memory 3. Inspection Mode 4. Check Mode

SYSTEM	READ / CLEAR CODE	DATA STREAM	ACTIVATION	ADAPTAION
HV Battery	Y	Y		1. Check Mode 2. Initialization
HV CCS Hybrid Vehicle Cruise Control System	Y	Y	—	
FCHV Fuel Cell Hybrid Vehicle	—	Y		
FC Fuel Cell	—	Y		
E-ACM Electrically Controlled Engine Vibration	Y	Y		
Stop and Go	Y			1. Starter Exchange 2. Reset A/C Information 3. Deceleration Sensor Zero Point Calibration 4. Deceleration Sensor Zero Point Clear 5. Oil Pump Air Bleeding
Multi-Mode M/T	Y	Y	Y	1. Initialization

NON-CAN SYSTEMS, 1997 ~ 2006

SYSTEM	READ / CLEAR CODE	DATA STREAM	ACTIVATION	ADAPTAION
ENGINE and ECT Engine and Transmission	Y	Y	Y	Gasoline Engine: 1. Reset ECM/Memory 2. Check Mode Setting 3. VIN 4. Deceleration Sensor Zero Point Calibration 5. CVT Oil Pressure Calibration Diesel Engine: 1. Injector Compensation 2. Pilot Quantity Learning
Sequential M/T Manual Transmission	Y			1. Parts Exchange
CCS Cruise Control System	Y	Y	—	
HV Control Hybrid Vehicle ECU	Y	Y		
HV Battery	Y	Y		1. Onboard Equalizing Charge 2. ECU Initialization
HV CCS Hybrid Vehicle Cruise Control	Y	Y	—	—
Stop and Go	Y	Y		

CHASSIS SYSTEM

CAN SYSTEMS, 2006 ~

SYSTEM	READ / CLEAR CODE	DATA STREAM	ACTIVATION	ADAPTAION
ABS / VSC / TRC Anti-Lock Brake System Vehicle Stability Control Traction Control	Y	Y	Y	1. Reset Memory 2. Zero Point Calibration 3. ECB Utility (if provided) 4. Inspection Mode 5. Air Bleeding 6. Check Mode 7. Test Mode
TPMS Tire Pressure Monitor	Y	Y	—	1. Reset Memory 2. ID Registration (ID Code) 3. Check Mode 4. ECU INITIALIZATION
AHC Active Height Control	Y	Y		
EMPS / EHPS Electric Motor Powering Steering Electric Hydraulic Power Steering	Y	Y	—	1. Torque sensor adjustment (Type 4) 2. Torque sensor adjustment (Type 5) 3. Torque sensor adjustment (Type 6) 4. Torque sensor adjustment (Japanese Models) 5. Check Mode
4WD 4-Wheel Drive	Y	Y	Y	1. Check Mode 2. Reset Memory
Intelligent Parking Assist	Y		—	
Electric Parking Brake	Y	—	Y	1. Reset Memory 2. Change Mode
Lane Keeping Assist	Y	Y	—	
Front Stabilizer	Y		Y	
Rear Stabilizer	Y		Y	
KDSS Kinetic Dynamic Suspension System	Y			1. Check Mode

Non-CAN SYSTEMS, 1997 ~ 2006

SYSTEM	READ / CLEAR CODE	DATA STREAM	ACTIVATION	ADAPTAION
ABS / VSC / TRC Anti-Lock Brake System Vehicle Stability Control Traction Control	Y	Y	Y	1. Reset Memory 2. Zero Point Calibration 3. ECB Utility (if provided) 4. Test Mode Setting 5. Air Bleeding
TPMS Tire Pressure Monitor	Y	Y	—	1. ID Registration (Color Code) 2. ID Registration (ID Code) 3. ECU Initialization
AHC Active Height Control	Y	Y		1. Height Offset Utility
EMPS / EHPS Electric Motor Powering Steering Electric Hydraulic Power Steering	Y	Y	—	1. Torque sensor adjustment (Type 1) 2. Torque sensor adjustment (Type 2)
VGRS Variable Gear Ratio Steering	Y		—	1. Steer Angle Adjust 2. Counter Clear 3. Clear Pre-driver Mailfunction counter value 4. System Lock 5. System Unlock
T/M Control	Y		—	
KDSS Kinetic Dynamic Suspension System	Y	Y		
Stabilizer	Y		—	1. Backup Memory Reset

AIR CONDITION SYSTEM

CAN SYSTEMS, 2006 ~

SYSTEM	READ / CLEAR CODE	DATA STREAM	ACTIVATION	ADAPTAION
Air Conditioner	Y	Y	Y	1. Servomotor Initialization 2. Refrigerant Gas Volume Check
Front Right Seat A/C	Y	Y	Y	
Front Left Seat A/C	Y	Y	Y	
Rear Right Seat A/C	Y	Y	Y	
Rear Left Seat A/C	Y	Y	Y	

Non-CAN, 1997 ~ 2006

SYSTEM	READ / CLEAR CODE	DATA STREAM	ACTIVATION	ADAPTAION
Air Conditioner	Y	Y	Y	1. Servomotor Initialization

MAIN BODY SYSTEMS

CAN SYSTEMS, 2006 ~

SYSTEM	READ / CLEAR CODE	DATA STREAM	ACTIVATION	ADAPTAION
SRS Airbag	Y	Y	—	1. Check Mode
Meter	Y	Y	Y	
Tilt & Telescopic	Y	Y	Y	
AFS	Y		Y	1. ECU Information Sync
Body / Gateway	Y	Y	Y	1. Initialization 2. Wireless Code Erasure 3. Wireless Code Registration
Body 4	Y	Y	Y	
Body 5	Y		Y	
Power Source Control	Y	Y		1. Auto Power OFF Cancel
Electric Power Control	Y	Y		
Charging Control				
Rain Sensor	Y	Y	—	
Intuitive P/A Clearance Sonar	Y	Y	Y	
Pre-Collision	Y	Y		1. Check Mode
Pre-Collision 2	Y	Y		
Navigation System	Y	—	—	
PCS WIL R Active Headrest R	Y			
PCS WIL L Active Headrest L	Y			

Non-CAN SYSTEMS, 1997 ~ 2006

SYSTEM	READ / CLEAR CODE	DATA STREAM	ACTIVATION	ADAPTAION
SRS Airbag	Y	—	—	
Meter		Y	Y	
Tilt & Telescopic	Y	Y	Y	
AFS	Y	Y	Y	1. Steering Sensor Initialization
Body / Gateway	Y	Y	Y	1. Wireless Register 2. Automatic door locking and unlocking function 3. ECU Connection Information Initialization
Body 2	Y	Y	Y	
Body 3	YY		Y	
Body 4	Y	Y	Y	
Body 5	—	Y	Y	
Power Source Control	Y	Y	Y	
Rain Sensor	—	Y	—	
Wiper	—	Y	Y	
Clearance Sonar	Y	Y	Y	
Pre-Collision	Y	Y	Y	
Mirror-L	—	Y	Y	
Mirror/Mirror-R	—	Y	Y	
Night View	Y			
Telematics				

GATEWAY SYSTEMS

CAN SYSTEMS, 2006 ~

SYSTEM	READ / CLEAR CODE	DATA STREAM	ACTIVATION	ADAPTAION
Gateway	Y	Y	—	
HV Gateway	Y	Y	—	
ECM Gateway	Y	Y	—	
ECB Gateway	Y	Y	—	
Mayday Gateway	Y	Y	—	
PM1 Gateway	Y	Y	—	1. Initialization
PM2 Gateway	Y		—	1. Initialization
Accessory Gateway	Y		—	
WIL Gateway	Y		—	

Non-CAN SYSTEMS, 1997 ~ 2006

SYSTEM	READ / CLEAR CODE	DATA STREAM	ACTIVATION	ADAPTAION
Gateway	Y			

IMMOBILIZER SYSTEMS

CAN SYSTEMS, 2006 ~

SYSTEM	READ / CLEAR CODE	DATA STREAM	ACTIVATION	ADAPTAION
Entry & Start /Smart Key	Y	Y	Y	
TDS Thief Detection System	Y	Y	Y	
Remote Engine Starter	Y	Y	—	1. Trouble Factor Code Clear
Starting Control	Y	Y	Y	

Non-CAN SYSTEMS, 1997 ~ 2006

SYSTEM	READ / CLEAR CODE	DATA STREAM	ACTIVATION	ADAPTAION
Smart Key	Y	Y	Y	
Thief Detection System	Y	Y	Y	
Immobilizer	Y	Y	Y	1. Key utility 2. Reset Immobiliser(No Master Keys)

SEAT/DOOR/ROOF SYSTEM

CAN SYSTEMS, 2006 ~

SYSTEM	READ / CLEAR CODE	DATA STREAM	ACTIVATION	ADAPTAION
Driver Door	Y			
Passenger Door	Y			
Rear Left Door	Y	Y	Y	
Rear Right Door	Y	Y	Y	
Back Door	Y			
Driver Door Motor	Y	Y	Y	
Passenger Door Motor	Y	Y	Y	
Rear Left Door Motor	Y	Y	Y	
Rear Right Door Motor	Y	Y	Y	
Driver Seat	Y (Note 1)	Y	Y	
Passenger Seat	Y (Note 1)	Y		
Rear Left Seat	Y	Y		
Rear Right Seat	Y	Y		
Slide Roof	Y	Y		
Back Door P/W	Y	Y	Y	

Note 1: 07' ~ 09' LS460 does support

Non-CAN SYSTEMS, 1997 ~ 2006

SYSTEM	READ / CLEAR CODE	DATA STREAM	ACTIVATION	ADAPTAION
Occupant Detect	Y	Y	—	1. Zero Calibration 2. Sensitivity Check
Driver Door	Y	Y	Y	
Passenger Door	Y	Y	Y	
Rear Left Door	Y	Y	Y	
Rear Right Door	Y	Y	Y	
Back Door	Y	Y	Y	
Driver Seat	—	Y	Y	
Passenger Seat	—	Y	Y	
Rear Left Seat	—	Y	Y	
Rear Right Seat	—	Y	Y	
Retractable Hardtop	Y	Y	Y	
Slide Roof	—	Y	Y	

SWITCH SYSTEMS

CAN SYSTEMS, 2006 ~

SYSTEM	READ / CLEAR CODEY	DATA STREAM	ACTIVATION	ADAPTAION
Master Switch	Y	Y	—	
Combination Switch	—	Y	—	
Driver Seat Switch	Y	Y	Y	
Steering Pad Switch	—	Y	—	
Center Console Switch	—	Y	Y	
Rear Console Switch	Y	Y	Y	

Non-CAN SYSTEMS, 1997 ~ 2006

SYSTEM	READ / CLEAR CODE	DATA STREAM	ACTIVATION	ADAPTAION
Master Switch	—	Y	Y	
Combination Switch	—	Y	—	
Driver Seat Switch	—	Y	—	
Rear Seat Switch	—	Y	—	
Steering Pad Switch	—	Y	—	
P Master Switch	—			

SPECIAL LOCAL VEHICLES

AVANZA, ~ 2005 / 05

SYSTEM	READ / CLEAR CODE	DATA STREAM	ACTIVATION	ADAPTAION
Engine	Y	Y		
ECT	Y	Y		
ABS	Y	Y		
Immobiliser	Y	—	—	

AVANZA, 2005 / 05 ~

SYSTEM	READ / CLEAR CODE	DATA STREAM	ACTIVATION	ADAPTAION
Engine	Y	Y		
ECT	Y	Y		
ABS	Y	Y		
SRS Airbag	Y	—	—	
Immobiliser	Y	—	—	

RUSH

SYSTEM	READ / CLEAR CODE	DATA STREAM	ACTIVATION	ADAPTAION
Engine	Y	Y		
ECT	Y	Y		
ABS	Y	Y		
SRS Airbag	Y	—	—	
Immobiliser	Y	—	—	

WORK SUPPORT

SYSTEM	FUNCTION DESCRIPTION
Transmission	<ol style="list-style-type: none"> 1. SMT Learning Value Initialization 2. G Sensor Zero Point Learning 3. AT/CVT Learning Value Initialization 4. CVT Oil Pressure Learning 5. AT Unit Correction (AT Code Read / Save) 6. AT Unit Correction (Automatic AT Code Registration) 7. AT Unit Correction (Manual AT Code Registration) 8. AT Unit Correction (AT Code Initialization) 9. Clutch Oil Pressure Learning
Electronic Controlled Diesel (ECD)	<ol style="list-style-type: none"> 1. Injector correction (each cylinder code confirmation) 2. Injector correction (manual ID code registration) 3. Injector class confirmation 4. Injector class setting 5. Filter's related work (compulsion again start) 6. Filter's related work (difference presses confirmation) 7. Supply pump initialization 8. Engine setting change
Radar Cruise	<ol style="list-style-type: none"> 1. Optical Axis Adjustment 2. Radar Cruise Initialization
Battery	<ol style="list-style-type: none"> 1. ECU Initialization
Mild HV	<ol style="list-style-type: none"> 1. Refresh Charge 2. SOC Learning
Stop & Go	<ol style="list-style-type: none"> 1. Starter Active Count Display 2. Starter Active Count Setting 3. Starter Active Count Clear 4. CVT Oil Pressure Pump Air Bleeding
VGRS	<ol style="list-style-type: none"> 1. Actuator Angle Center Adjustment 2. System Lock 3. System Unlock 4. Clear Predriver Malfunction Counter Value
Electric Power Steering	<ol style="list-style-type: none"> 1. Steering Wheel Zero Point Adjustment

CUSTOMIZE

CAN SYSTEMS, 2006 ~

ITEM	FUNCTION LIST
Door Lock	<ol style="list-style-type: none"> 1. All Unlock/Open-Close 2. Unlock Key Twice 3. Auto Lock 4. Auto Lock/ Shift 5. Auto Unlock/Shift
Warning	<ol style="list-style-type: none"> 1. Fr Sensor Onset Range 2. Rr Sensor Onset Range 3. Keep Sense Buzzer 4. Fr & Rr Buzzer Freq 5. Fr & Rr Buzzer Volume 6. Key Remind Volume 7. Key Remind Sound 8. Seat Belt Warning 9. Key Low Battery Warning 10. Driver Side Seatbelt Warning Buzzer 11. Front Passenger Side Seatbelt Warning Buzzer 12. キー抜き忘れウォーニング 13. リアドア開ウォーニング
Slide Roof	<ol style="list-style-type: none"> 1. Door Key Related Open 2. Door Key Related Close 3. Wireless Key Related Open 4. Wireless Key Related Close 5. Door Handle Lock Button 6. Door Key Related Operation 7. Wireless Key Related Operation
Unit Conversion	<ol style="list-style-type: none"> 1. Units By Region
PSD & PBD operation	<ol style="list-style-type: none"> 1. PBD Power Operation 2. Wireless PBD Operation 3. PBD SW Operation 4. PBD Buzzer 5. PBD Close SW Waiting Time 6. PBD Close SW Press Condition 7. Door Unlock with 1 Motion

ITEM	FUNCTION LIST
	<ul style="list-style-type: none"> 8. One Motion 9. One Motion with Unlock Door 10. PSD SW Operation (RL), PSD SW Operation (RR) 11. PSD Buzzer (RL), PSD Buzzer (RR) 12. Wireless PSD Operation (RL), Wireless PSD Operation (RR) 13. Smart Back Door P/W Up 14. Smart Back Door P/W Down 15. Smart Back Door P/W ON Time 16. Back Door P/W UP when half-shut

Non-CAN SYSTEMS, 1997 ~ 2006

ITEM	FUNCTION LIST
Door Lock	<ul style="list-style-type: none"> 1. Speed Autolock (Once) 2. All Unlock w/ D door open-close 3. IG ON Parking Unlock 4. Lock Shift Brake 5. Double Lock Set 6. Unlock /Park 7. All Unlock/Open-Close 8. Unlock Key Twice 9. Auto Lock 10. Auto Lock/ Shift 11. Lock Shift Brake 12. Mech. Key Entry Alarm Cancel 13. Lock W/Shift P-except P Brake Release 14. Auto Lock/ Shift not P 15. D-Seat 2Operation Unlock
Warning	<ul style="list-style-type: none"> 1. Key Remind Sound 2. Key Remind Volume 3. Buzzer Length 4. Door Open-Close Buzzer/P 5. Push-on Door-open Buzzer/P 6. Carry Out Key Buzzer 7. Door Op/Cl Buzzer 8. Push-on Door-close Buzzer

ITEM	FUNCTION LIST
	9. Key No Fit Warn Buzzer 10. Key Battery Warn Buzzer 11. Key Inside Lock Buzzer 12. Half Lock Buzzer 13. Smart Buzzer Volume 14. Smart Buzzer Number 15. Fr & Rr Buzzer Volume 16. Fr & Rr Buzzer Frequency 17. Keep Sense Status Buzzer 18. Rear Buzzer Onset Range 19. Front Buzzer Onset Range 20. Light Reminder 21. Key Reminder Sound 22. Key Reminder Volume 23. Seat Belt Warning 24. Key Left in Vehicle Buzzer 25. Lock Door in E/G Idling Buzzer 26. Passenger Take Key 27. Key Taken Warning (w/o P range) 28. Key Taken Warning (w/P range) 29. Number of Warning Buzzer Sound 30. Key Out Range Warning 31. Key Low Battery Warning
Slide Roof	1. Door Key Related Open 2. Door Key Related Close 3. Wireless Key Related Open 4. Wireless Key Related Close 5. Door Key Related Operation 6. Wireless Key Related Operation
Unit Conversion	1. Units By Region
Compass Calibration	1. Compass Calibration
PSD & PBD operation	1. Wireless PSD Operation (RR), Wireless PSD Operation (RL) 2. PSD Buzzer Volume (RR), PSD Buzzer Volume (RL) 3. PSD SW Operation (RR), PSD SW Operation (RL) 4. PBD Assist Open

ITEM	FUNCTION LIST
	5. PBD Assist Close 6. Wireless PBD Operation 7. PBD Buzzer Volume 8. PBD SW Operation 9. PBD One Motion
TVSS (Toyota Vehicle Security System)	1. Garage Mode 2. IG Door Lock 3. Piezo Buzzer Defeat

KEY REGISTER / ERASE

SYSTEM	FUNCTION DESCRIPTION
Smart Key	1. Key Status 2. Key Registration 3. Clear Keys (except Master-Key)

MODELS EQUIPPED WITH 23-PIN AND 17-PIN CONNECTOR

23-PIN CONNECTOR MODELS

1991 ~ 1997

SYSTEM	READ CODE	CLEAR CODE	DATA STREAM	ACTIVATION
Engine	Y	Disconnect fuse	Y	—
Airbag / SRS	Y	Y	—	—
ABS	Y	Disconnect fuse	—	—

17-PIN CONNECTOR MODELS

1991 ~ 1997

SYSTEM	READ CODE	CLEAR CODE	DATA STREAM	ACTIVATION
Engine	Y	Disconnect fuse	Y	—
Airbag / SRS	Y	Y	—	—
ABS	Y	Disconnect fuse	—	—
Traction	Y	—	—	—
Cruise Control	Y	—	—	—

—: ECU does not support the function.

TROUBLE SHUTTING:

Some models equipped not only one connector. Some systems can be found on OBD-II connector, 17-pin connector, and 23-pin connector individually.

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