Startup/Shutdown Diagnostics

To perform shutdown diagnostics:
1. With the ignition Off, press and hold the Valet button.
2. Turn the ignition On and then back Off while holding the Valet button.
3. Release the Valet button.
4. Press and release the Valet button. The LED flashes to report the last shutdown for one minute or until the ignition is turned on, as shown in the following table:

Startup Diagnostics is why the unit did not attempt to start. Shutdown diagnostics is why the unit shut off. If a unit tries to start 3 times and fails it will always give a 3 flash shutdown for tach since it never saw the vehicle run. More than likely the issue is not tach.

Scan the QR code to go to our Snakepit Training YouTube page for remote pairing and operational features as well as product overviews . Youtube.com/SnakePitTraining

Flashes	4x03/4x05 Shutdown Diagnostics — Shutdown Mode	4x05.2 — Shutdown Mode	5x05/4x06/5x06 — Shutdown Mode	4x10/5x10 — Shutdown Mode	DS4 — Shutdown Mode
1	Runtime Expired	Runtime Expired	Runtime Expired	Runtime Expired	Runtime Expired
2	Over-rev shutdown	Over-rev shutdown	Over-rev shutdown	Over-rev shutdown	Over-rev shutdown
3	Low or no RPM, low battery	Low or no RPM, low battery	Low or no RPM, low battery	Low or no RPM, low battery	Low or no RPM, low battery
4	Transmitter shutdown	Transmitter shutdown	Transmitter shutdown	Transmitter shutdown	Transmitter shutdown
5	Hood Shutdown	Brake Shutdown	Brake Shutdown	Brake Shutdown	Brake Shutdown
6	Brake Shutdown	Hood Shutdown	Hood Shutdown	Hood Shutdown	Hood Shutdown
7	Neutral safety shutdown black/white	N/A	Manual trans/turbo mode/timer mode	Manual trans/turbo mode/timer mode	Manual trans/turbo mode/timer mode
8	Wait-to-start timed out	Parking Brake input (black/white)	Neutral Safety (black/white)	N/A	N/A
9	N/A	Low battery (voltage mode)	Low battery (voltage mode)	Low battery (voltage mode)	Low battery (voltage mode)
10	N/A	N/A	Alarm triggered during remote start	Alarm triggered during remote start	Alarm triggered during remote start
11	N/A	N/A	Wait to start input time out	Wait to start input time out	Wait to start input time out

Startup Diag	4x05.2	5x05/4x06/5x06	4x10/5x10	DS4
P. Light Flashes	Shutdown	Shutdown	Shutdown	Shutdown
5	Brake active	Brake active	Brake active	Brake active
6	Hood active	Hood active	Hood active	Hood active
7	N/A	Manual Trans mode	Manual Trans mode	Manual Trans mode
8	Parking Brake wire	Neutral Safety/Park Brake	Safety Switch off (Black 2 pin)	DS4WS used as hood but not connected
9	Garage Mode	Garage Mode	Garage Mode	Remote Start Valet
10	Car Finder*	Car Finder*	Car Finder*	Car Finder*

Garage Mode/Remote Start Valet

Key on/off then press and release valet	4x05.2/4x06/5x06	9 fast flashes entering mode. 9 slow flashes exiting mode.
Key on/off then press and hold valet for 5 seconds	DS4	9 fast flashes entering mode. 9 slow flashes exiting mode.

DS4 can also be taken in and out of Start Valet by pressing Function 4 times and then Unlock

*Car Finder will occur on 1 button Remotes not configured for Lock/Unlock when the R/S button is held down

Security Zones

The status LED will blink a number of times after the alarm has been triggered and disarmed. This zone reporting is reset with an ignition cycle. The system stores the last two full alarm triggers in memory. Each new trigger is added to the history while the oldest are deleted. Trigger history is reported in order of newest to oldest in "Long-term event history." To perform long term event history: Press and hold the control center/valet button, turn ignition on, within 5 seconds release the button, then press and release the button. The LED will flash the zone number.

LED Flash	Zone
1	Trunk
2	Shock
3	Door
4	Instant trigger/Tilt
5	Ignition
6	Hood
7	Other Sensor (DS4)

Extra siren chirps

Chirps	Reason	Solution
1 chirp after disarm chirp	Low battery in aftermarket fob	Change/charge battery in fob
1 chirp after arm chirp	Zone open warning	Check zones
4 chirps with unlock	Zone was triggered	Cycle ignition to clear zone reporting
5 chirps with unlock	Zone was triggered w/NPC	Cycle ignition to clear zone reporting

Misc:
Turbo Timer Mode: Turn on setting. With car running hit F-F-Remote start or pulse activation input.

DS4 2-Way Remote Fob Finder: With key off, press and hold valet for 5 seconds for 2 Way remote finder.

10th digit from the left of VIN is the model year, not the door sticker.

Code	Year	Code	Year	Code	Year	Code	Year	Code	Year	Code	Year
A	1980	L	1990	Y	2000	A	2010	L	2020	Y	2030
B	1981	M	1991	1	2001	B	2011	M	2021	1	2031
C	1982	N	1992	2	2002	C	2012	N	2022	2	2032
D	1983	P	1993	3	2003	D	2013	P	2023	3	2033
E	1984	R	1994	4	2004	E	2014	R	2024	4	2034
F	1985	S	1995	5	2005	F	2015	S	2025	5	2035
G	1986	T	1996	6	2006	G	2016	T	2026	6	2036
H	1987	V	1997	7	2007	H	2017	V	2027	7	2037
J	1988	W	1998	8	2008	J	2018	W	2028	8	2038
K	1989	X	1999	9	2009	K	2019	X	2029	9	2039

Key on and valet button functions

	Antena button/Valet button press	Action
Key on	Press and release*	Alarm Override
Key on	press release 1x press and hold	Brain pairing mode
Key on	press release 2x press and hold**	Delete transmitters
Key on	press release 3x press and hold**	Reset Features
Key on	press release 4x press and hold**	Virtual tach reset
	*override press count default is 1	
	** then hit lock on fob	

Smart Start

LED	Orange	Green	White*
Sync with	Cell tower	Brain data	GPS

*Not on 200/250/300/350/450

Configuration Wires		
Mode	Grey wire	White Wire
ESP2	OPEN	OPEN
D2D	Ground	OPEN
Auto/Astro	Open	Ground

Ground white for analog

DS4
Responder LC Command table

Level Button	Direct Access	𝒇 x 1 LEVEL 1	𝒇 x 2 LEVEL 2	𝒇 x 3 LEVEL 3	𝒇 x 4 LEVEL 4
🔒	Arm/Lock (Panic)	Silent Arm	Sensor Bypass	Sensor Silent Arm	Full Silent Arm
🔓	Disarm/Unlock	Silent Disarm	Alarm Valet	Car Finder	Start Valet
🎧	Remote Start	Runtime Reset	Timer Start	Smart Start	Defogger
AUX	AUX/Trunk	AUX 1	AUX 2	AUX 3	AUX 4
𝒇	Advance Level Change Car (3 sec.), Enter programming (8 sec.)	Temperature Check (2-way only)	Runtime Remaining (2-way only)	Alarm Report (2-way only)	
🔒+🔓	Combo Valet (Both Remote Start and Alarm Valet)				

4x06/5x06/4x10/5x10*
Responder LC Command table

Level Button	Direct Access	𝒇 x 1 LEVEL 1	𝒇 x 2 LEVEL 2	𝒇 x 3 LEVEL 3	𝒇 x 4 LEVEL 4
🔒	Arm/Lock (Panic)	Silent Arm	Sensor Bypass	Sensor Silent Arm	Full Silent Arm
🔓	Disarm/Unlock	Silent Disarm	Remote Valet	Car Finder	
🎧	Remote Start	Runtime Reset	Timer Start	Smart Start	Defogger
AUX	AUX/Trunk	AUX 1	AUX 2	AUX 3	AUX 4
𝒇	Advance Level Change Car (3 sec.), Enter programming (8 sec.)	Temperature Check (2-way only)	Runtime Remaining (2-way only)	Alarm Report (2-way only)	

*Some features not available depending on platform and build date

Red 4-pin port, Bitwriter/ESP2 or D2D programming
The Red 4-pin plug may be configured as a Bitwriter/ESP2 or D2D port. The factory default is Bitwriter/ESP2 mode.

To use as D2D mode follow the below steps:
1. Make sure White/Blue activation wire is grounded.

2. Power the unit up. The system LED flashes for 5 seconds to confirm D2D mode change.

3. Remove the White/Blue wire from ground.

To change from D2D to Bitwriter/ESP2 mode:
1. Make sure the White/Blue activation wire is grounded.

2. Power the unit up, the system LED turns on solid for 5 seconds to confirm Bitwriter/ESP2 mode change.

3. Remove the White/Blue wire from ground.

The procedure can be repeated to toggle from one mode to the other. Important: If you power up the system with the White/Blue activation wire ungrounded, the system LED will come on solid for 5 seconds indicating the system is in Bitwriter/ESP2 mode.