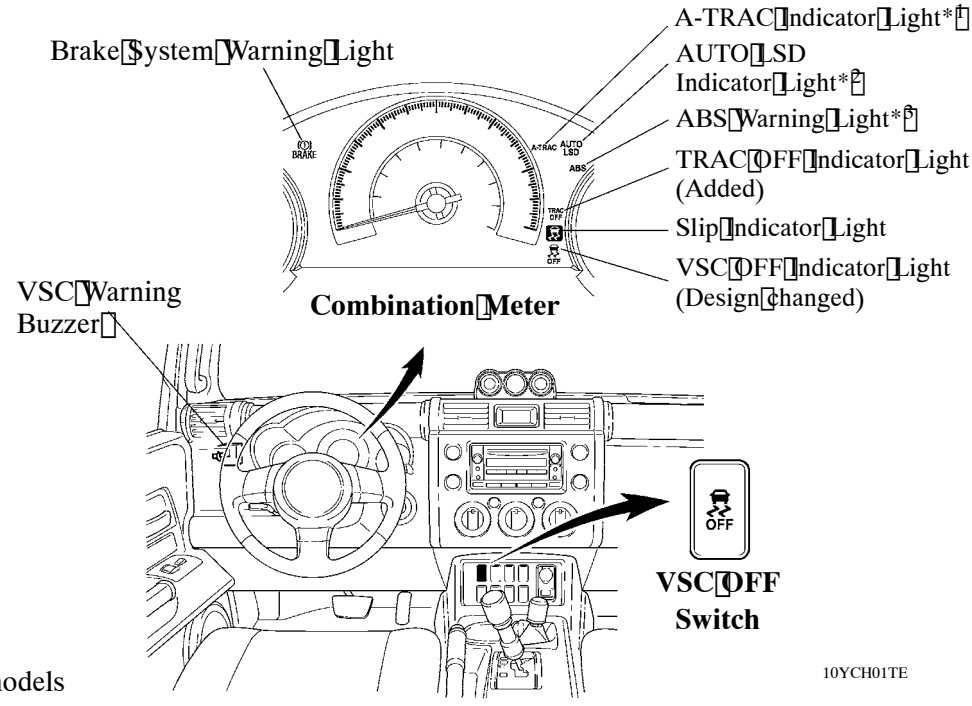
NEW FEATURES

■ BRAKE CONTROL SYSTEM (ABS with EBD, Brake Assist, TRAC, A-TRAC, AUTO LSD and VSC)

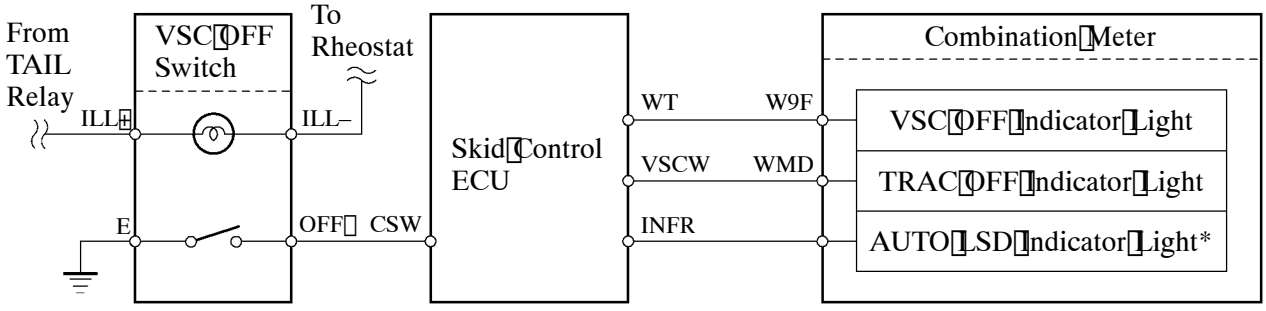
1. General

- A VSC OFF switch is used on the '09 FJ CRUISER. Various brake control functions can be activated or deactivated by operating the VSC OFF switch.
- The AUTO LSD switch is no longer used on 2WD models due to the VSC OFF switch being provided.
- Normal mode, TRAC-OFF mode or VSC-OFF mode can be selected by operating the VSC OFF switch.
- The design of the indicator lights in the combination meter and illumination state of respective lights regarding the brake control system have been changed. For details about the design of the indicator lights, refer to page 3.
- The VSC function is also operational during HL mode for full-time 4WD models (MT) and H4 mode for part-time 4WD models (AT).



*1: 4WD models
*2: 2WD models
*3: Example of U.S.A. models

▶ Wiring Diagram ◀

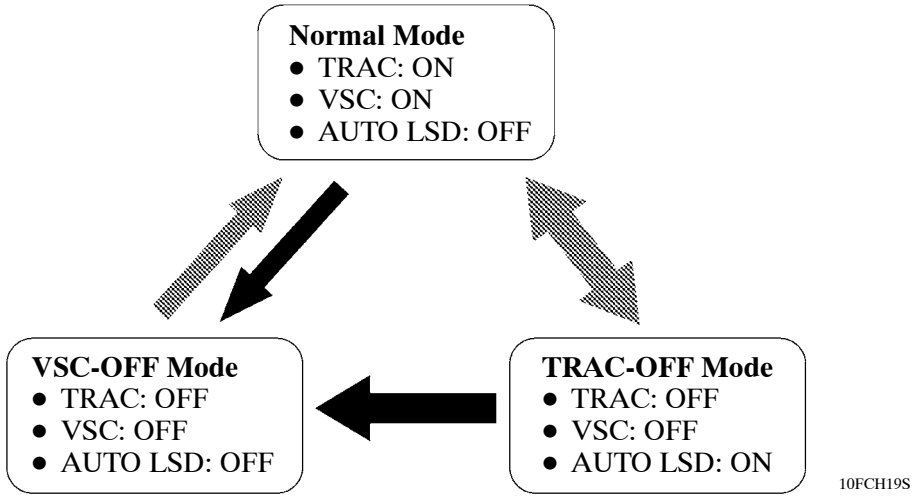


*: 2WD models

2. Function of VSC OFF Switch (2WD Models)

The VSC OFF switch can select the 3 modes [Normal mode, TRAC-OFF mode (AUTO LSD), VSC-OFF mode].

- Briefly pressing the VSC OFF switch in Normal mode selects the TRAC-OFF mode, turning the AUTO LSD ON (standby state).
- Pressing and holding the VSC OFF switch for 3 seconds or more with the vehicle stopped selects the VSC-OFF mode, disabling TRAC and VSC functions.
- After the ignition switch is turned OFF in the TRAC-OFF mode or VSC-OFF mode, turning the ignition switch ON (IG) again selects the Normal mode.



: Switch Operation (Press shortly).

: Switch Operation.
(Keep pressing for 3 seconds with the vehicle at a standstill).

- The operations of the brake control functions and the illumination state of the respective indicator lights in each mode are as follows:

○: Controlled ×: Not Controlled

Item	Brake Control Function			TRAC OFF Indicator Light	VSC OFF Indicator Light	AUTO LSD Indicator Light
	TRAC	VSC	AUTO LSD	TRAC OFF 10YBE03TE	OFF 10FCH15TE	AUTO LSD 03NCH010Y
Normal Mode	○	○	×	—	—	—
TRAC-OFF Mode (AUTO LSD)	×*1	×*1	○	—	Light ON*2	Light ON
VSC-OFF Mode	×	×*3	×	Light ON	Light ON	—

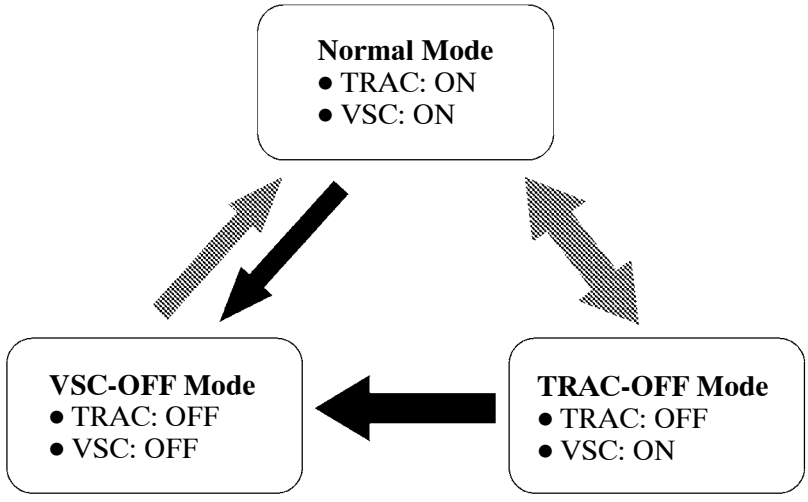
*1: The control is effected when the vehicle speed increases.
*2: The indicator light goes off when the vehicle speed increases.
*3: The control is effected during braking or while the yaw rate is large.

3. Function of VSC OFF Switch (4WD Models)

The VSC OFF switch can select the 3 modes [Normal mode, TRAC-OFF mode, VSC-OFF mode].

- Briefly pressing the VSC OFF switch in Normal mode selects the TRAC-OFF mode, disabling the TRAC function.
- Pressing and holding the VSC OFF switch for 3 seconds or more with the vehicle stopped selects the VSC-OFF mode, disabling TRAC and VSC functions.
- After the ignition switch is turned OFF in the TRAC-OFF mode or VSC-OFF mode, turning the ignition switch ON (IG) again selects the Normal mode.
- The switch operation has no effect on the brake control functions during LL mode for full-time 4WD models (MT) and L4 mode for part-time 4WD models (AT) because the TRAC and VSC are inoperative in those modes.

▶ H2, H4, H, HL mode ◀



10FCH19S

: Switch Operation (Press shortly).

: Switch Operation.
(Keep pressing for 3 seconds with the vehicle at a standstill).

- The operations of the brake control functions and the illumination state of the respective indicator lights in each mode are as follows:

○: Controlled ×: Not Controlled

Item	Brake Control Function		TRAC OFF Indicator Light	VSC OFF Indicator Light
	TRAC	VSC	TRAC OFF 10YBE03TE	OFF 10FCH15TE
Normal Mode	○*1	○	—	—
TRAC-OFF Mode	×	○	Light ON	—
VSC-OFF Mode	×	×*2	Light ON	Light ON

*1: The engine output is not regulated during H4 and HL modes.
*2: The control is effected during braking or while the yaw rate is large.

4. Warning and Indicator Lights and VSC Warning Buzzer

The warning and indicator lights and VSC warning buzzer operate as follows. Also, changes made to the '09 FJ CRUISER are enclosed by bold lines.

○: Illuminates Δ: Blinks

Condition		Warning Light		Indicator Light					VSC Warning Buzzer
		BRAKE 03NCH007Y	ABS *6 03NCH008Y	TRAC OFF 10YBE03TE	OFF 10FCH15TE	03NCH009Y	AUTO LSD *1 03NCH010Y	A-TRAC *2 10FCH22TE	
Initial Check		○	○	○	○	○	○		
During Operation	TRAC					Δ			
	AUTO LSD*1				○*7	Δ	○*7		
	A-TRAC*2					Δ		○*10	
	VSC					Δ			Intermittent Sound
TRAC-OFF Mode				○*2	○*1		○		
VSC-OFF Mode				○	○				
Driving Mode	HL*3, H4*4								
	LL*3, L4*4			○	○	Δ*8		○*10	
	Rear Diff. Lock*5		○	○	○	Δ*8		○*10	
During Hydraulic Brake Booster Protection						○*9			Intermittent Sound*9
Cannot operate due to a malfunction	ABS/Brake Assist		○			○			
	EBD	○	○			○			
	TRAC					○			
	AUTO LSD*1					○			
	A-TRAC*2					○			
	VSC					○			
Others	Low Brake Fluid Level	○	○			○			
	Zero point calibration of yaw rate & deceleration sensor not done					○			
	Low Accumulator Pressure	○	○			○			Continuous Sound
	Skid Control ECU Malfunction	○	○						

*1: Only for 2WD models *2: Only for 4WD models *3: Full-time 4WD models
*4: Part-time 4WD models *5: Models with Rear Diff. Lock *6: Example of U.S.A. models
*7: This indicator light turns on when the AUTO LSD is operational (standby state) with the TRAC OFF mode.
*8: When A-TRAC is activated
*9: An extreme rise in the temperature of the hydraulic brake booster causes the VSC warning buzzer to sound. Further rise in the temperature causes the VSC warning buzzer to sound (continuously for 3 seconds) and the slip indicator light to come on.
*10: This indicator light turns on when the A-TRAC is operational (standby state) with the A-TRAC switch pressed.