

X-TRAIL - ALL MODE 4X4 SYSTEM

4WD MODE SWITCH

AUTO mode (AUTO indicator lamp ON)

- Electronic control allows optimal distribution of torque to front/rear wheels to match road conditions.
- Makes possible stable driving, with no wheel spin, on snowy roads or other slippery surfaces.
- On roads which do not require 4WD, it contributes to improved fuel economy by driving in conditions close to front-wheel drive.
- Sensors determine the vehicle's turning condition, and in response tight cornering/braking are controlled by distributing optimum torque to rear wheels.

NOTE:

- When driving in AUTO mode or LOCK mode, if there is a large difference between front and rear wheel speed which continues for a long time. oil temperature of drive system parts becomes too high and 4WD TF warning lamp flashes rapidly. (When 4WD warning lamp flashes, vehicle changes to front-wheel drive conditions.)
- When driving in AUTO mode, 4WD warning lamp may flash slowly if there is a significant difference in pressure or wear between tires. At this time, vehicle performance is not fully available and cautious driving is required. (Continues until engine is turned OFF.)
- If 4WD warning lamp is flashing rapidly, stop vehicle and allow it to idle for some time. Flashing will stop and AUTO mode will be restored.
- If the warning lamp flashes slowly during driving but remains OFF after engine is restarted. the system is normal. If it again flashes slowly after driving for some time, vehicle must be inspected.
- When the difference of revolution speed between the front and rear wheel with AUTO mode the shift switch occasionally changes to LOCK mode automatically. This is not malfunction.

LOCK mode (LOCK indicator lamp and AUTO indicator lamp ON)

- Front/rear wheel torque distribution is fixed, ensuring stable driving when climbing slopes.
- When LOCK mode is selected, vehicle will switch automatically to AUTO mode if vehicle speed increases. If vehicle speed then decreases, the vehicle automatically returns to direct 4-wheel driving conditions.

NOTE:

If there is a significant difference in pressure or wear between tires, full vehicle performance is not available.

Tire conditions are detected, and LOCK mode may be prohibited, or else speeds at which LOCK mode is enabled may be restricted.

2WD mode (indicator lamps OFF)

Vehicle is in front-wheel drive.

NOTE:

- If front wheels are slipping in 2WD mode, do not switch to AUTO or LOCK. This can cause difficulties for the system.
- The shift switch even if the shift switch is in 2WD mode. the shift switch occasionally automatically change to 4WD mode depending on the driving condition (For example; Depressing the acceleration firmly). This is not malfunction. However 4WD mode indicator lamp does not illuminate.

4WD WARNING LAMP

Turns ON when there is a malfunction in 4WD system It indicates that fail-safe mode is engaged and vehicle is in 2WD.

Also turns ON when ignition switch is turned ON, for purpose of bulb check. Turns OFF approximately for 3 seconds after the engine starts if system is normal.

4WD warning lamp indication

Condition	Display	4WD warning lamp
Self-diagnosis	When self-diagnosis is performed indicates location of malfunction by number of flashes.	-
Lamp check	Turns ON when engine is started to check for burned-out lamps.	Turns ON when ignition switch is turned ON. Turns OFF approximately 3 seconds after engine start.
4WD system malfunction	Turns ON if there is malfunction in 4WD system.	ON