## QUIGLEY MOTOR CO., INC - GM VEHICLE OPERATING INSTRUCTIONS / IFS 2003 & Newer

# QUADRA-VERSION FOUR-WHEEL DRIVE

Maximum traction made possible by selecting 4H or 4L of 2-speed transfer case. The transfer case electronically engages front locking differential, ensuring engine torque to all four wheels instead of just the two rear wheels.

CAUTION: When transfer case is in "N" (neutral position), the transmission "PARK" feature is disabled. Parking brake must be applied or vehicle may move unexpectedly causing serious injury or death.

TRANSFER CASE RANGE SELECTIONS (See Operating Instructions)

4-WHEEL DRIVE (LOW RANGE) POSITION

Power to front and rear axles at reduced speed.

NOTE: Speedometer will read much faster than vehicle is traveling.

Do not exceed 80 MPH indicated (30 MPH actual) speed.

**NEUTRAL** 

No power to either axle. Use for vehicle towing.

2-WHEEL DRIVE POSITION Power to rear axle only.

4-WHEEL DRIVE POSITION

Power to front and rear axles at normal speed.

SET 4L PARKING BRAKE N

**4H** 

## **OPERATION**

CAUTION: The vehicle should only be engaged in 4 Wheel Drive for off road operation or when road or weather conditions create poor traction. When you are operating the VAN on DRY roads keep the transfer case in 2H to prevent excessive tire wear and drive train damage.

#### **ENGAGING FOUR WHEEL DRIVE**

**Front Axle Locking Feature** – The front axle locks and unlocks automatically when you shift the transfer case. A short delay for the axle to lock or unlock is normal. If road conditions provide good traction there may be a delay for the axle to unlock.

Manual Transfer Case – The transfer case shift lever is on the floor to the right of the driver. Use this lever to shift into and out of four-wheel drive.

The four-wheel drive indicator light will come on after you shift into four-wheel drive and the front axle engages.

2-Wheel High (2H): This setting is for driving in most street and highway situations. Your front axle is not engaged in two-wheel drive.

**4-Wheel High (4H):** This setting engages your front axle for increased traction. Use 4H when you need extra traction, such as on wet or icy roads, or in most off-road situations.

You can shift from 2-WHEEL HIGH (2H) to 4-WHEEL HIGH (4H) or from 4-WHEEL HIGH (4H) TO 2-WHEEL HIGH (2H) while the vehicle is motion up to 55 mph. Do not shift into 4H while accelerating. In extremely cold weather, it may be necessary to stop or slow the vehicle to shift into 4-WHEEL HIGH (4H).

**Neutral (N):** Shift to this setting only when your vehicle needs to be towed or when using a power take-off. CAUTION: To guard against vehicle moving while unattended, NEVER park your vehicle with transfer case in neutral.

**4-Wheel Low (4L):** This setting also engages your front axle for increased traction and the lower gear increases power. It should be used only for off-road driving, there are 2 options for engaging 4L. **NOTE:** Speedometer will read nearly 3 times faster than vehicle is traveling. It is not recommended to exceed 80 MPH indicated (30 MPH actual) speed in 4WD Low Range.

- 1. <u>Engine Off:</u> Apply brakes, shift TRANSMISSION in N (Neutral). Take foot off brakes to allow a slight movement and shift TRANSFER CASE lever into 4L. Restart engine. If vehicle will not move or there is gear clashing then the lever was not fully engaged in 4L position, repeat procedure. Use same procedure to disengage 4L into either 4H or 2H.
- 2. Engine On: Slow the vehicle to about 1 to 3mph (2to 5 km/h) and shift TRANSMISSION into NEUTRAL (N). Shift the transfer case shift lever in one continuous motion. Do not pause in NEUTRAL (N) as you shift the transfer case into 4-WHEEL LOW (4L), or your gears could clash. If vehicle will not move or there is gear clashing then the 4L position was not fully engaged. Turn your engine off, then proceed to shift into 4L. Use same procedure to return to 4H or 2H.

### **RETURN TO TWO-WHEEL DRIVE**

For best fuel economy, less tire wear and quietest operation shift the transfer case to the two-wheel drive position (2H), when the need for 4- wheel drive is no longer required.

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