

CONTROL SYSTEMS

W1860BE.book Page 2 Tuesday, January 28, 2003 11:01 PM

5MT GEAR SHIFT LEVER

CONTROL SYSTEM

۲

1. 5MT Gear Shift Lever

The manual transmission's gear shift lever system is a parallel link type whose stay is mounted through a cushion rubber.



(7)

Joint

(8) Rod

- (1) Knob
- (2) Lever
- (3) Cushion rubber
- (4) Boot

Studios

Brought to you

2. 6MT Gear Shift Lever

A: GENERAL

The six-speed manual transmission's control system has a gear shift lever specially designed for the use with it. The gearshift lever is complete with a parallel-link gear shift mechanism as is the case with the five-speed transmission's gearshift lever. To prevent accidental shifting to the reverse gear, the lever has a mechanism that allows a shift into reverse only after the slider has been pulled up.



—(

CONTROL SYSTEM

udios

W1860BE.book Page 4 Tuesday, January 28, 2003 11:01 PM

6MT GEAR SHIFT LEVER

Studios

CONTROL SYSTEM

 (\mathbf{r})

B: OPERATION

When shifting gear into reverse, the driver pulls the slider up (toward the knob). This causes the reverse check cable to move the reverse lever on the six-speed transmission to the lock release position. Since the reverse check system in the transmission then becomes in the state ready for a shift into reverse, the driver can move the gear shift lever to the reverse position.

Should the reverse check cable be severed, the spring in the holder pushes up the slider and keeps it in the raised position, alerting the driver to the abnormality. Since the reverse check system does not function under this condition, a voluntary or involuntary shift to the reverse position can take place without any restriction.









- (2) Reverse check cable
- (3) Reverse select lock position
- (4) Reverse select lock release position

- (5) Slider (in reverse select lock release position or when cable is broken)
- (6) Slider (in reverse select lock position)
- (7) Holder
- (8) Spring



W1860BE.book Page 6 Tuesday, January 28, 2003 11:01 PM

SELECT LEVER

CONTROL SYSTEM

۲

3. Select Lever

- The automatic transmission's select lever moves through seven positions.
- The select lever makes shift direction (longitudinal) movements as well as select direction (lateral) movements. The select lever is guided by a gate to make these movements.
- To transmit movements of the select lever to the transmission, a select cable is used.

• The select lever mechanism has a detent spring and a detent arm. It ensures more precise positioning of the select lever.



CS-00075

Brought to you

Studios

- (1) Select cable
- (2) Detent spring
- (3) Base plate
- (4) Detent arm
- (5) Gate

(6) Select lever assembly

(7) Arm

(A) View A



W1860BE.book Page 7 Tuesday, January 28, 2003 11:01 PM

۲

SHIFT LOCK AND KEY INTERLOCK SYSTEM

CONTROL SYSTEM

udios

4. Shift Lock and Key Interlock System A: GENERAL

To increase safety during standing start, the shift lock system prevents movement of the select lever from the "P" position to any other position unless the brake pedal is depressed. This system is also provided with a key interlock function which prevents removal of the ignition key from the key cylinder unless the selector lever is placed in the "P" position.



W1860BE.book Page 8 Tuesday, January 28, 2003 11:01 PM

SHIFT LOCK AND KEY INTERLOCK SYSTEM

CONTROL SYSTEM

۲

B: SHIFT LOCK SYSTEM OPERATION

Studios The shift lock system has a solenoid-operated plunger (1). With the select lever in the "P" position, the plunger remains extended, holding the lock arm (2) in its raised (locking) position. When the brake pedal is depressed with the ignition switch in either the ON or START position, the solenoid is energized and the plunger is retracted. This causes the lock arm to tilt forward to the select lever release position. The select lever now can be moved to any other position. The "P" position of the select lever is detected by the inhibitor switch (3).



CS-00161

- (1) Solenoid
- (2) Lock arm
- (3) Inhibitor switch





W1860BE.book Page 9 Tuesday, January 28, 2003 11:01 PM

۲

SHIFT LOCK AND KEY INTERLOCK SYSTEM

C: KEY INTERLOCK FUNCTION

• When the select lever is at any position other than "P", the solenoid is energized and its pin is held extended. Being caused to stay in its upright position by extension of the pin, the interlock lever interferes with the stopper portion of the rotator which turns together with the ignition key. Thus, the ignition key cannot be rotated to the "LOCK" position.



CS-00078

CONTROL SYSTEM

is

Studios

- (1) Column cover
- (2) Key
- (3) Push button
- (4) Extended
- (5) Solenoid pin
- (6) Solenoid unit
- (7) Lever fulcrum
- (8) Lever spring
- (9) Interlock lever
- (10) Interlock activated

(11) Lock

(12) Interlock position

- (13) Stopper(14) ACC
- (15) ON
- (16) START
- (17) View A
- (18) Rotator
- (19) Key
- (20) Interlock lever
- (21) Solenoid

W1860BE.book Page 10 Tuesday, January 28, 2003 11:01 PM

SHIFT LOCK AND KEY INTERLOCK SYSTEM

CONTROL SYSTEM

 (\mathbf{r})

• When the select lever is moved to "P", the "P" position switch in the select lever assembly operates, deenergizing the solenoid. As the push force of the solenoid pin is removed, the lever spring causes the interlock lever to tilt and become clear of the rotator's stopper. Then the key can be rotated to the "LOCK" position and removed from the ignition switch.



CS-00079

- (1) Retracted
- (2) Interlock deactivated





