Component Procedures: ABS Light

Table of Contents

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Components (itype_392)

The amber
ABS warning lamp
is located in the
instrument cluster
. The lamp illuminates at start-up to perform a self check. The lamp goes out when the self check program determines the system is operating normal. If an
ABS
component exhibits a fault the
CAB
will illuminate the lamp and register a trouble code in the microprocessor. The lamp is controlled by the CAB. The CAB controls the lamp sending a message to the instrument
cluster
.

Components (itype_32)

ABS
AND
BRAKE WARNING INDICATOR
S
The amber
ABS warning indicator
is located in the
instrument cluster
. It is used to inform the driver that the antilock function has been turned off due to a system malfunction. On a TJ model the warning indicator is controlled by the
CAB
and/or the main relay through an in-harness diode. The CAB controls the indicator by directly grounding the circuit. The main relay grounds the indicator circuit when it is de-energized.
The red brake warning indicator is located in the instrument
cluster
. It can be activated by application of the
parking brake
, a leak in the front or rear wheel brake hydraulic circuit, or by turning the ignition switch to the start
position.

Technician Safety Information (itype_15)

WARNING: ON VEHICLES EQUIPPED WITH AIRBAGS, REFER TO RESTRAINT SYSTEMS / AIRBAG SYSTEMS BEFORE ATTEMPTING A
STEERING WHEEL, STEERING COLUMN, OR
INSTRUMENT PANEL
COMPONENT DIAGNOSIS OR SERVICE. FAILURE TO TAKE THE PROPER PRECAUTIONS COULD RESULT IN ACCIDENTAL AIRBAG DEPLOYMENT AND POSSIBLE PERSONAL INJURY
.

Component Tests and General Diagnostics (itype_383)

HARD WIRED LAMP DIAGNOSIS
The following procedures will help to diagnose conditions that may cause an inoperative hard wired lamp
circuit condition.
WARNING: ON VEHICLES EQUIPPED WITH AIR-BAGS, REFER TO AIRBAG AND SEAT BELTS/AIR BAGS BEFORE ATTEMPTING ANY
STEERING WHEEL, STEERING COLUMN, OR
INSTRUMENT PANEL
COMPONENT DIAGNOSIS OR SERVICE. FAILURE TO TAKE THE PROPER PRECAUTIONS COULD RESULT IN ACCIDENTAL AIR-BAG DEPLOYMENT AND POSSIBLE PERSONAL INJURY
.
The diagnosis found here addresses an inoperative Anti-lock Brake System (
ABS
) lamp condition. If the ABS lamp stays on with the ignition switch in the On position, or comes on and stays

on while driving. If no ABS problem is found, the following procedure will help locate a short or open in the ABS lamp circuit.
1. Check the fused ignition switch output (run/start) fuse in the fuseblock module. If OK, go to Step 2. If not OK, repair the shorted circuit or component as required and replace the faulty fuse.
2. Turn the ignition switch to the On position. Check for battery voltage at the fused ignition switch output (run/start) fuse in the fuseblock module. If OK, go to Step 3. If not OK, repair the open fused ignition switch output (run/start) circuit to the ignition switch as required.
3. Turn the ignition switch to the Off position. Disconnect and isolate the battery negative cable. Remove the instrument cluster
. Connect the battery negative cable. Turn the ignition switch to the On position and within
five seconds
check for continuity between the
ABS warning indicator
driver circuit cavity of the instrument
cluster
wire harness connector A and a good ground. There should be continuity for
after ignition On, and then an open circuit. If OK, replace the faulty bulb. If not OK, go to Step 4.
4. Turn the ignition switch to the Off position. Disconnect and isolate the battery negative cable. Disconnect the Controller Anti-lock Brake (
CAB
) wire harness connector. Check for continuity between the ABS warning indicator driver circuit cavity of the instrument cluster wire harness connector A and a good ground. There should be no continuity If OK, go to Step 5. If not OK, repair the shorted ABS warning indicator driver circuit as required.
5. Check for continuity between the ABS warning indicator driver circuit cavities of the instrument cluster wire harness connector A and the CAB wire harness connector. There should be continuity. If not OK, repair the open ABS warning indicator driver circuit as required.