



GT Development Corporation



Form No. 400-

Rev.: **A**
 DCR 2304
 Incorp. By: M.Hillis
 Date: 07/17/07

APPLICATION INSTRUCTION

AP85040

SHEET 1 OF 4

Title:
 APPLICATION INSTRUCTION, LACM AIR LINE ASSY

Used on:
 5040-xxx-xx

Written By: K. CURTIN

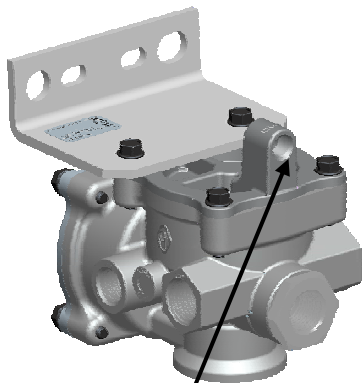
Date: 7/17/07

Lift Axle Control Module (LACM) Air Line Connections

A. Overview

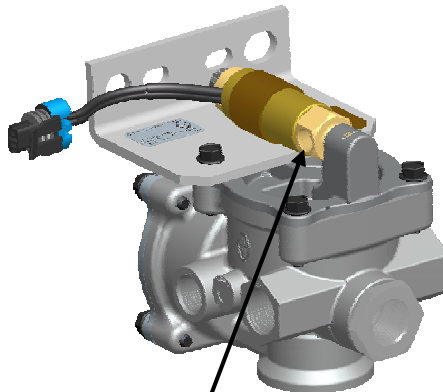
The GT Lift Axle Control Module controls airflow to and from the Lift and Load (Ride) bags of an auxiliary axle. There are three main valve types:

AIR ONLY



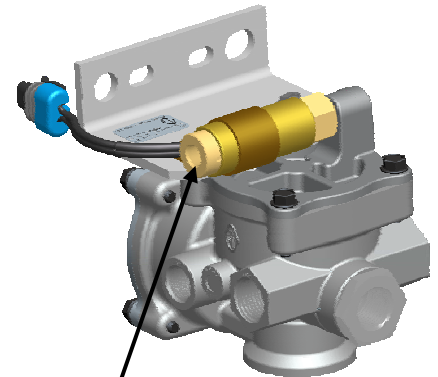
PILOT

NORMALLY CLOSED
 SOLENOID



PILOT

NORMALLY OPEN
 SOLENOID

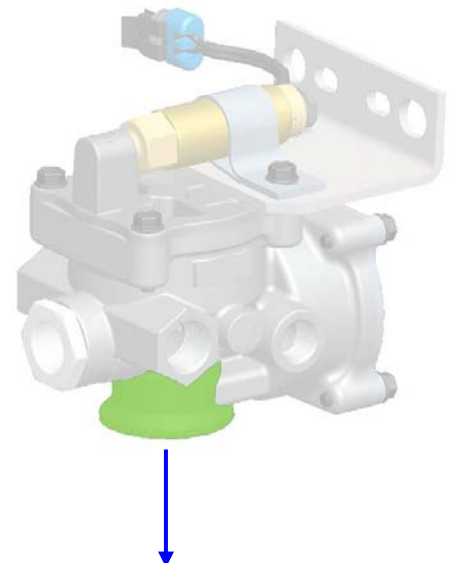


PILOT

B. Mounting

1. Mount the LACM to an adequate flat surface using 1/2" (M12) or 5/16" (M8) fasteners.
2. Mount the LACM **ONLY** with the exhaust vent facing downward. Failure to do so will prevent contaminants from exiting the valve and may cause valve failure.

Mount **ONLY** with exhaust facing downward





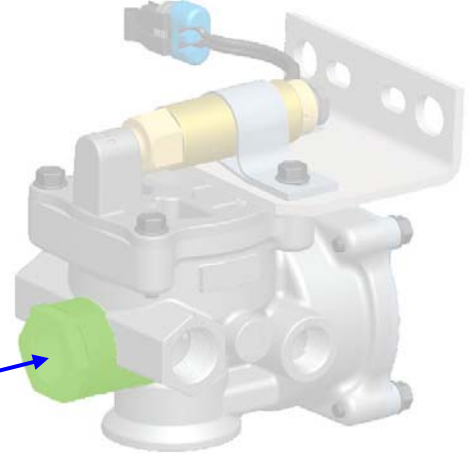
C. Air Connections

All LACM versions have 4 main (plus an optional gauge port) air line connection locations.

1. MAIN SUPPLY

The Main Supply port is the connection to the Supply air reservoir (downstream of the pressure protection valve). GT recommends use of a 1/2" Supply line to ensure adequate airflow.

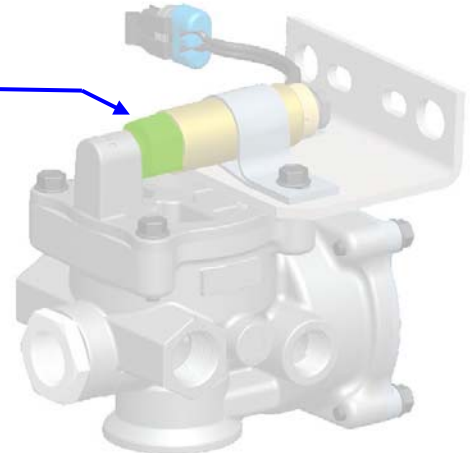
Connect the Main supply to the axle's air reservoir, downstream of the PPV.



2. PILOT PORT (Control port)

The Pilot port is the connection to the auxiliary axle regulated pilot. The pilot port is connected downstream of the auxiliary axle regulator. GT recommends use of a 1/4" Pilot line. **The Pilot is connected to the inlet per Section A above.** (Normally Closed Solenoid shown)

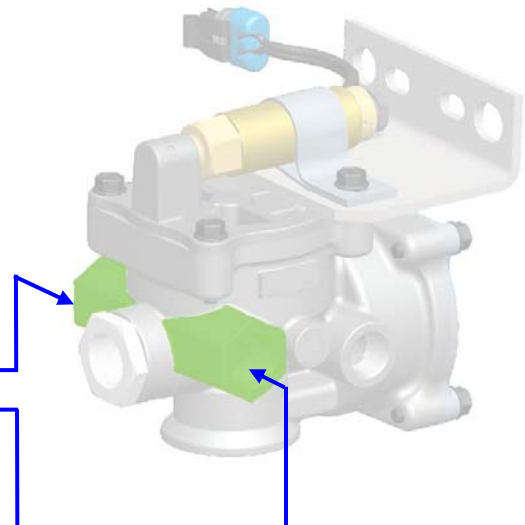
Connect the pilot port to the axle's Load Bag Regulator.



3. LOAD DELIVERY PORTS (2 per valve)

The Load delivery ports are the connection from the LACM to the Load (Ride) Bags. One port is connected to each Load bag. GT recommends use of 1/2" Load delivery lines to ensure adequate airflow.

Connect the Load Delivery ports to the axle's Load bags.

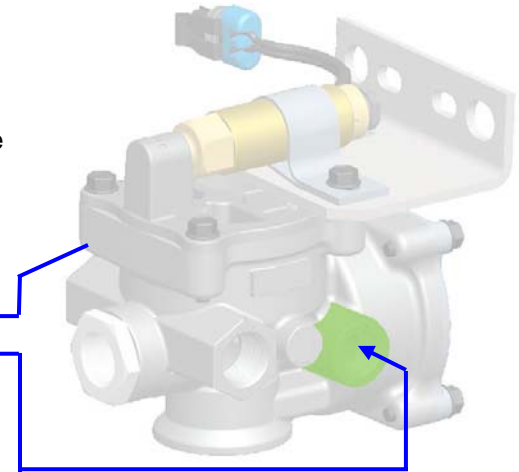




4. LIFT DELIVERY PORTS (2 per valve)

The Lift delivery ports are the connection from the LACM to the Lift bags. One port is connected to each Lift bag. GT recommends use of 3/8" Lift delivery lines to ensure adequate airflow.

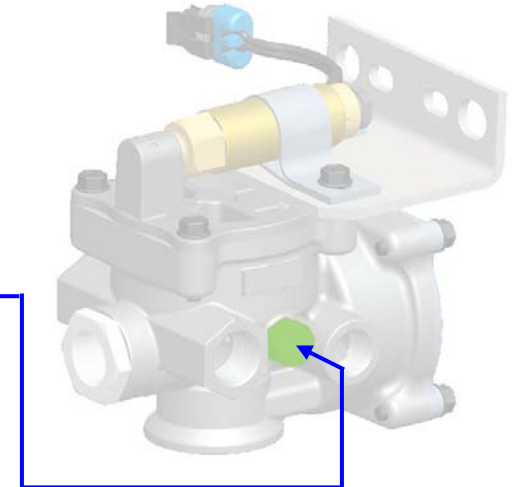
Connect the Lift delivery ports to the axle's Lift bags.



5. (OPTIONAL) GAUGE PORT

The optional Gauge port is common with the Load delivery ports. This port should be connected to the auxiliary axle's Load bag air pressure gauge.

Connect the Gauge port to the Load bag pressure gauge.



D. Electrical Connection

Solenoid equipped valves are either polarity sensitive or non-polarity sensitive. This characteristic can be confirmed by the colors of the wires:

1. Polarity sensitive:



Black - Common

Red - Positive

2. Non-Polarity sensitive:

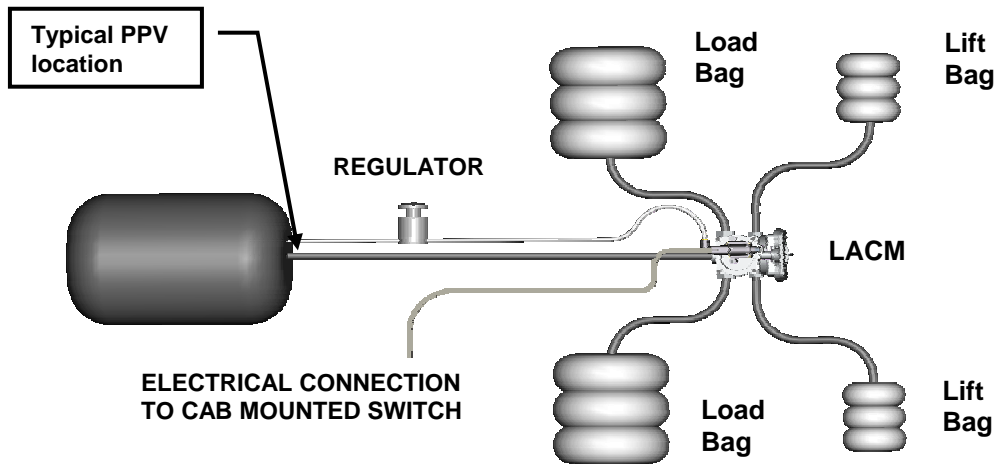


Both White



E. Typical Installation

Solenoid LACM, w/o gauge port
Pressure Protection Valve (PPV) not shown



F. Pressure Protection Valve Replacement

If kit is equipped with a replacement Pressure Protection Valve (PPV), replace the PPV supplying the auxiliary axle. The main supply line (1/2") and pilot (1/4") are connected to the PPV.

Installation of the replacement PPV will ensure adequate airflow to the LACM.

Replace the auxiliary axle PPV with the supplied unit.

