

ROI Cabmate®
Cab Suspension

LINK®

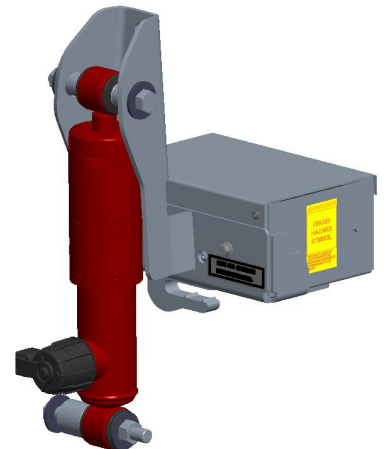
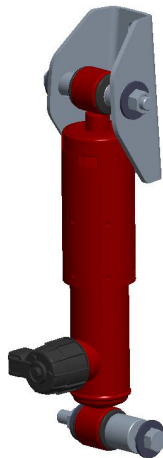
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Sioux Center, IA USA
51250-2120
www.linkmfg.com

**QUESTIONS?
CALL CUSTOMER
SERVICE
1-800-222-6283**

OWNER'S GUIDE

Cab Suspension
FREIGHTLINER CASCADIA
SLEEPER CABS
MODEL YEAR 2019 & NEWER

LINK PART NO.
26302010



1. PLUMBING INSTRUCTIONS

⚠️WARNING FOR SAFETY PURPOSES THE ROI CABMATE MUST BE SUPPLIED FROM A PRESSURE PROTECTED CIRCUIT. IN THE EVENT OF AN AIR LEAK IN THE CAB SUSPENSION, FAILURE TO PROVIDE A PRESSURE PROTECTED CIRCUIT MAY CAUSE LOSS OF AIR PRESSURE TO VITAL SYSTEMS ON THE VEHICLE.

⚠️WARNING CONNECT THE ROI CABMATE DIRECTLY TO THE MAIN AIR TANK. YOU WILL NEED AN AIR PRESSURE PROTECTION VALVE IN THE LINE. (INCLUDED IN THE PRESSURE PROTECTION KIT. LINK MFG. PART NO. 13500000). DO NOT USE AN AIR PRESSURE REGULATOR!

HEIGHT ADJUSTMENTS

Refer to installation instructions.

MAINTENANCE

The ROI CABMATE needs no lubrication and little maintenance. The following components should be checked at the time the truck is being serviced. However, immediate corrective action should be taken if a serious malfunction occurs.

| COMPONENT | POSSIBLE PROBLEM | CORRECTIVE ACTION |
|----------------|---|--|
| Airlines | Air leaks | Replace airline |
| Fittings | Air leaks | Replace fittings. |
| Air Springs | A. Improper height B. Air leakage C. Air springs not filling | A. Adjust valve linkage to maintain proper air spring height. B. Replace air spring. C. See "Electronic Troubleshooting" Section. |
| Control Box | Air spring(s) will not inflate when weight is added to the cab; OR Air spring(s) will not deflate when weight is removed from the cab. | See "Electronic Troubleshooting" Section. |
| Shock Absorber | Improper damping effect | A. Inspect LED for fault codes. If present, repair per "Electronic Troubleshooting" section. B. If no faults are present, replace shocks. |

⚠️WARNING LOSS OF AIR PRESSURE TO THE ROI CABMATE WILL CAUSE SUDDEN MOVEMENT OF THE CAB. PRIOR TO INSTALLING OR PERFORMING MAINTENANCE, BLOCK UP THE CABMATE TO PREVENT THE POSSIBILITY OF INJURY.

Prior to removing the control box for servicing, perform the following:

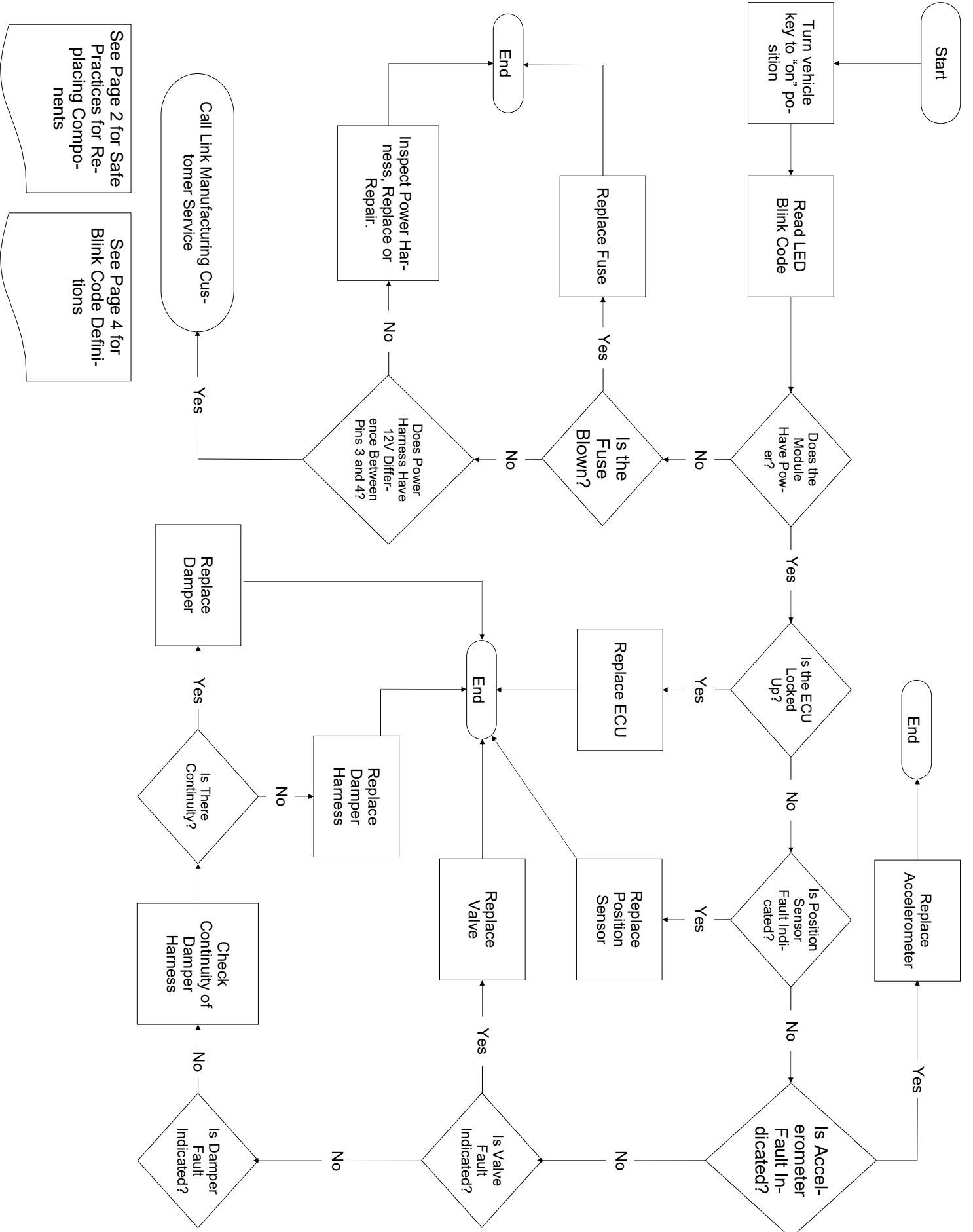
1. Unplug the power harness
2. Unplug the shock harness
3. Unplug the airlines from the control box
4. Disconnect the position sensor

2. TORQUE INSTRUCTIONS

IMPORTANT: Periodically check the tightness of all fasteners.

| TORQUE TABLE | | |
|-----------------|----------|--------------|
| COMPONENT | FASTENER | TORQUE |
| POSITION SENSOR | M5 | 26-44 IN-LBS |
| CONTROL BOX | 1/4 | 48-60 IN-LBS |
| SHOCKS | 1/2 | 60-70 FT-LBS |

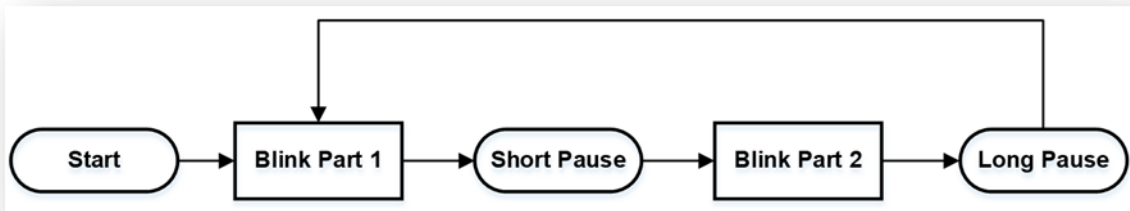
3. FAULT TROUBLESHOOTING FLOW CHART



See Page 2 for Safe Practices for Replacing Components

See Page 4 for Blink Code Definitions

4. BLINK CODE FLOW CHART AND TABLE

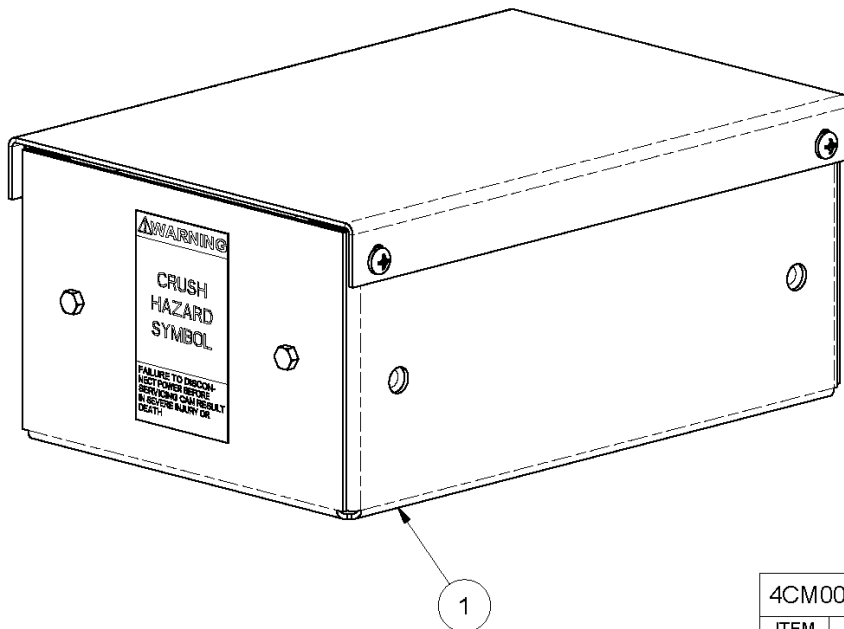


| Blink Code | | Fault Definition | |
|-----------------------|--------------|--------------------|------------------|
| Blink Part 1 | Blink Part 2 | Component | Description |
| 1 | 2 | Position Sensor | Low Voltage |
| 1 | 3 | Position Sensor | High Voltage |
| 5 | 1 | Fill Valve | Open Circuit |
| 5 | 2 | Fill Valve | Short to Ground |
| 5 | 3 | Fill Valve | Short to Battery |
| 5 | 4 | Fill Valve | Over Current |
| 6 | 1 | Exhaust Valve | Open Circuit |
| 6 | 2 | Exhaust Valve | Short to Ground |
| 6 | 3 | Exhaust Valve | Short to Battery |
| 6 | 4 | Exhaust Valve | Over Current |
| 2 | 3 | Accelerometer | Low Voltage |
| 2 | 4 | Accelerometer | High Voltage |
| 3 | 1 | PS Damper | Open Circuit |
| 3 | 2 | PS Damper | Short to Ground |
| 3 | 4 | PS Damper | Short to Battery |
| 3 | 5 | PS Damper | Over Current |
| 4 | 1 | DS Damper | Open Circuit |
| 4 | 2 | DS Damper | Short to Ground |
| 4 | 3 | DS Damper | Short to Battery |
| 4 | 5 | DS Damper | Over Current |
| LED on, no blinking | | ECU | Unknown Failure |
| Steady, slow blinking | | No faults detected | |

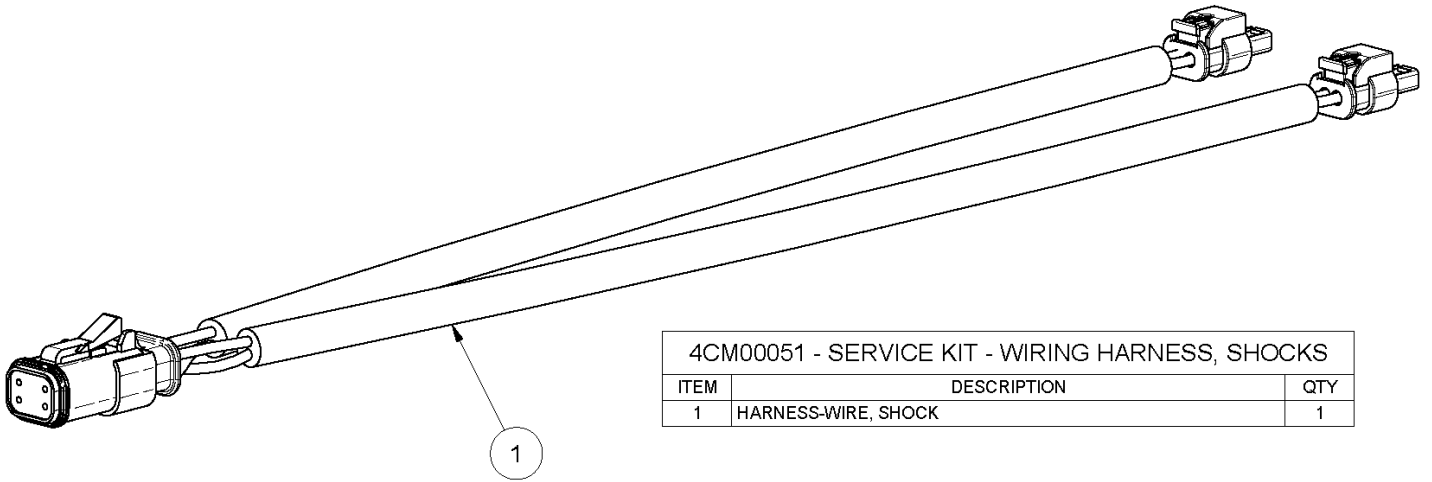
5. **WARRANTY** - Refer to www.ROIcabmate.com for warranty information and registration.

6. SERVICE KITS

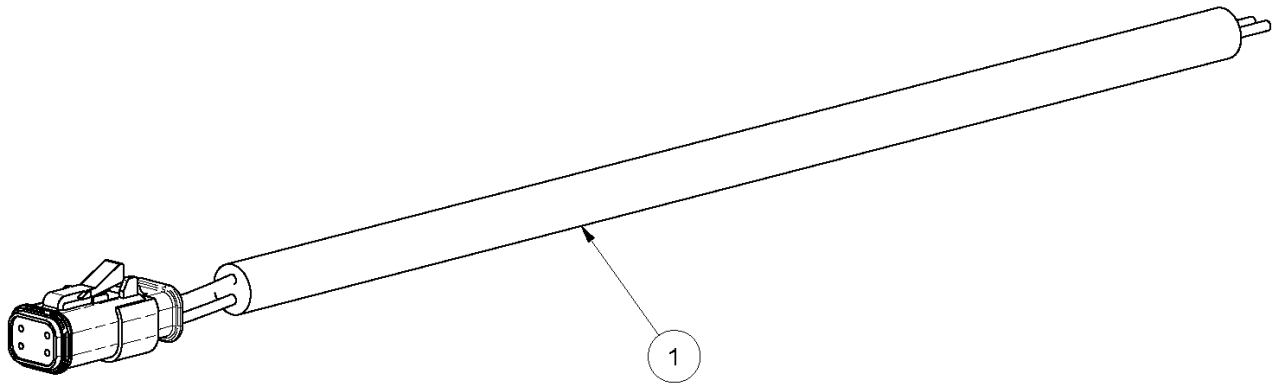
| ROI CABMATE - FREIGHTLINER CASCADIA | |
|-------------------------------------|--|
| ITEM NUMBER | DESCRIPTION |
| 4CM00047 | SERVICE KIT - ROI CONTROL MODULE |
| 4CM00051 | SERVICE KIT - WIRING HARNESS, SHOCKS |
| 4CM00052 | SERVICE KIT - WIRING HARNESS, POWER |
| 4CM00054 | SERVICE KIT - WIRING HARNESS AND FASTENERS, CONTROL MODULE |
| 4CM00055 | SERVICE KIT - AIRLINES WITH VALVES AND FITTINGS |
| 4CM00056 | SERVICE KIT - POSITION SENSOR, PIVOT BALL AND FASTENERS |
| 4CM00057 | SERVICE KIT -ACCELEROMETER WITH FASTENERS |
| 4CM00058 | SERVICE KIT - PIVOT BALL CLAMP WITH PIVOT BALLS |
| 4CM00059 | SERVICE KIT - ECU |
| 4CM00063 | SERVICE KIT - ROI SHOCK ABSORBER ASSEMBLY |
| 4CM00067 | SERVICE KIT - CAB BRACKET, RH |
| 4CM00068 | SERVICE KIT - CAB BRACKET, LH |
| 29910050 | SERVICE KIT - LINKAGE, SHORT |



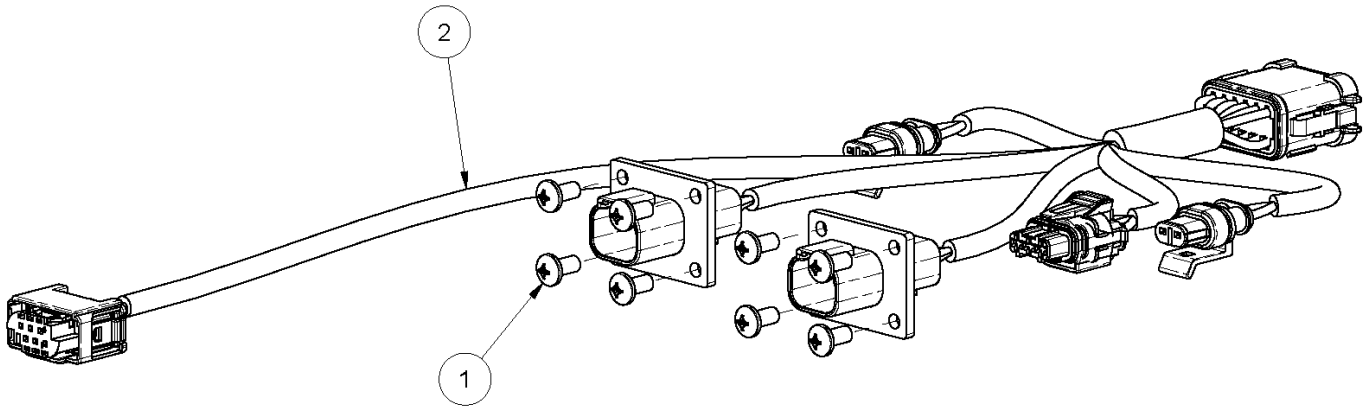
| 4CM00047 - SERVICE KIT - ROI CONTROL MODULE | | |
|---|----------------------|-----|
| ITEM | DESCRIPTION | QTY |
| 1 | ECU BOX, FL CASCADIA | 1 |



| 4CM00051 - SERVICE KIT - WIRING HARNESS, SHOCKS | | |
|---|---------------------|-----|
| ITEM | DESCRIPTION | QTY |
| 1 | HARNESS-WIRE, SHOCK | 1 |

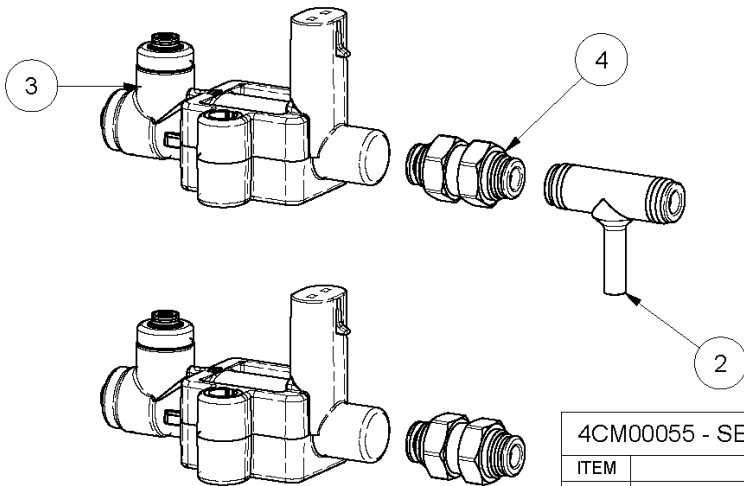


| 4CM00052 - SERVICE KIT - WIRING HARNESS, POWER | | |
|--|---------------------|-----|
| ITEM | DESCRIPTION | QTY |
| 1 | HARNESS-WIRE, POWER | 1 |



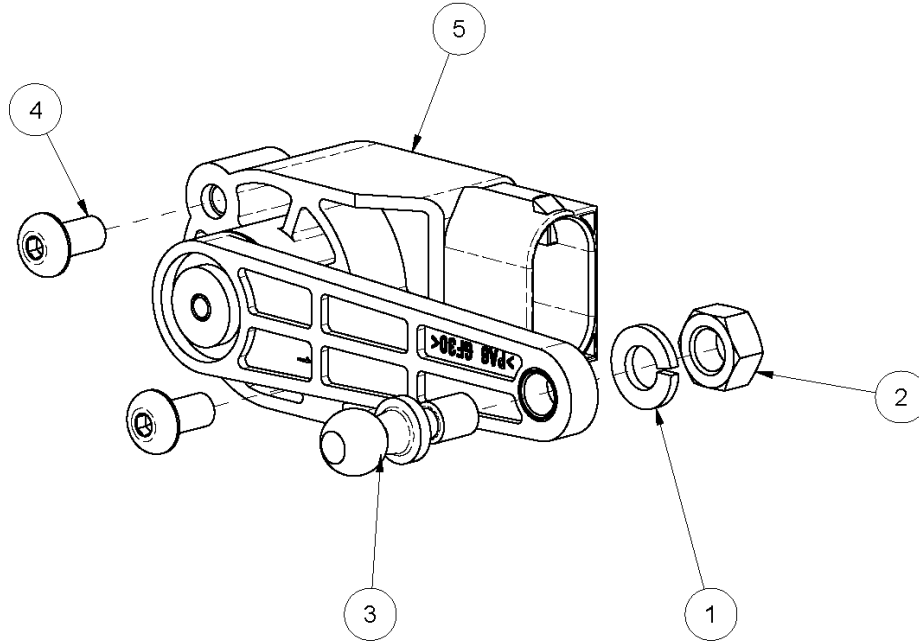
4CM00054 - SERVICE KIT - WIRING HARNESS AND FASTENERS, CONTROL MODULE

| ITEM | DESCRIPTION | QTY |
|------|--------------------------------|-----|
| 1 | #10 X 3/8 THREAD CUTTING SCREW | 8 |
| 2 | HARNESS-WIRE, CONTROL BOX | 1 |

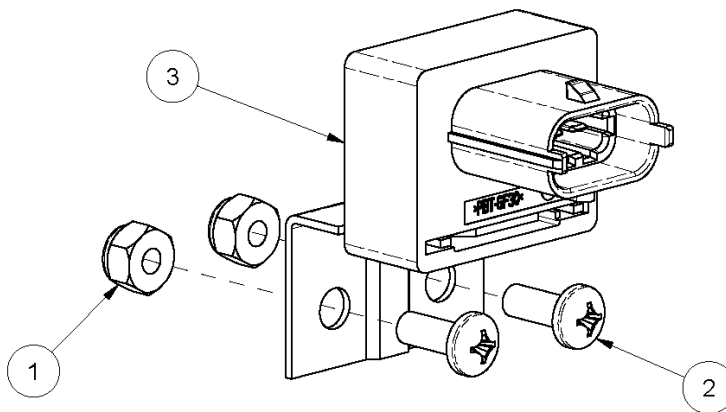


4CM00055 - SERVICE KIT - AIRLINES WITH VALVES AND FITTINGS

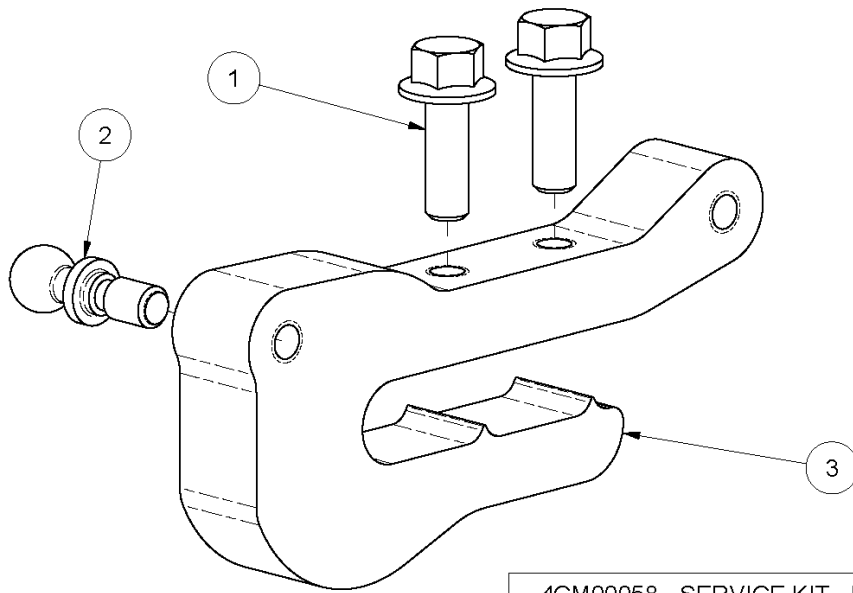
| ITEM | DESCRIPTION | QTY |
|------|---------------------------------------|-----|
| 1 | AIRLINE-NYLON, .250 O.D., BULK (FEET) | 2 |
| 2 | BRANCH TEE-PLUG-IN, 1/4" | 1 |
| 3 | SOLENOID-VALVE | 2 |
| 4 | UNION-BULKHEAD, 1/4" TB | 2 |



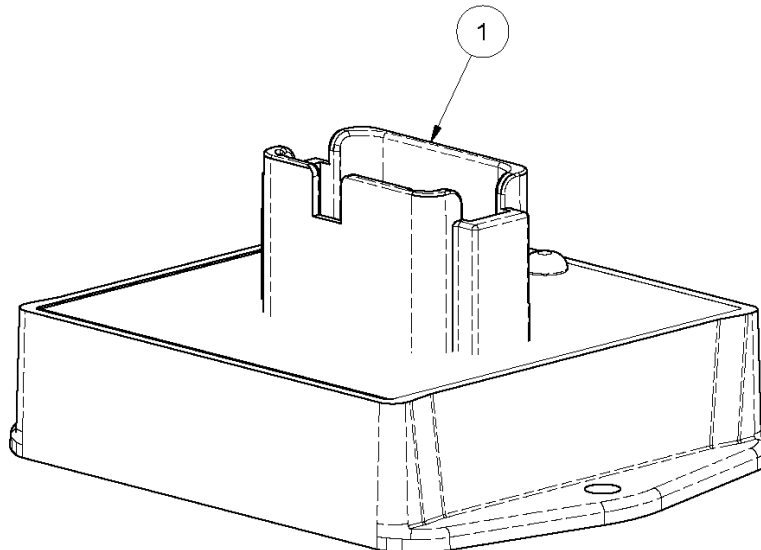
| 4CM00056 - SERVICE KIT - POSITION SENSOR, PIVOT BALL AND FASTENERS | | |
|--|---|-----|
| ITEM | DESCRIPTION | QTY |
| 1 | 1/4 LOCK WASHER | 1 |
| 2 | 1/4 UNC HEX NUT (GR B) | 1 |
| 3 | BALL-PIVOT, THREADED | 1 |
| 4 | M5X0.8X10 SOCKET BUTTON HD SS CAP SCREW | 2 |
| 5 | SENSOR-POSITION | 1 |



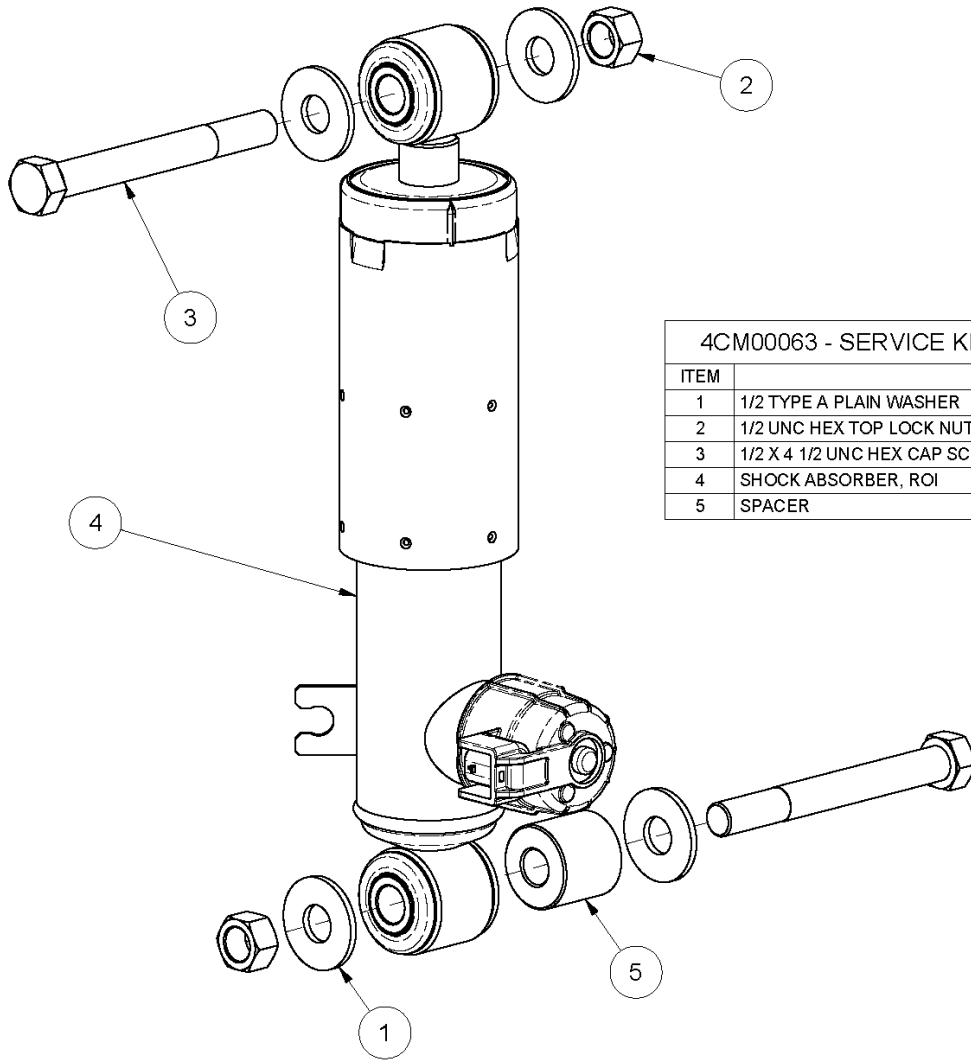
| 4CM00057 - SERVICE KIT -ACCELEROMETER WITH FASTENERS | | |
|--|--------------------------------------|-----|
| ITEM | DESCRIPTION | QTY |
| 1 | 10-24 NYLOCK NUT, SS | 2 |
| 2 | 10-24 x 1/2 UNC CR PH MACH SCREW, SS | 2 |
| 3 | ZF ACCELEROMETER ASSEMBLY | 1 |



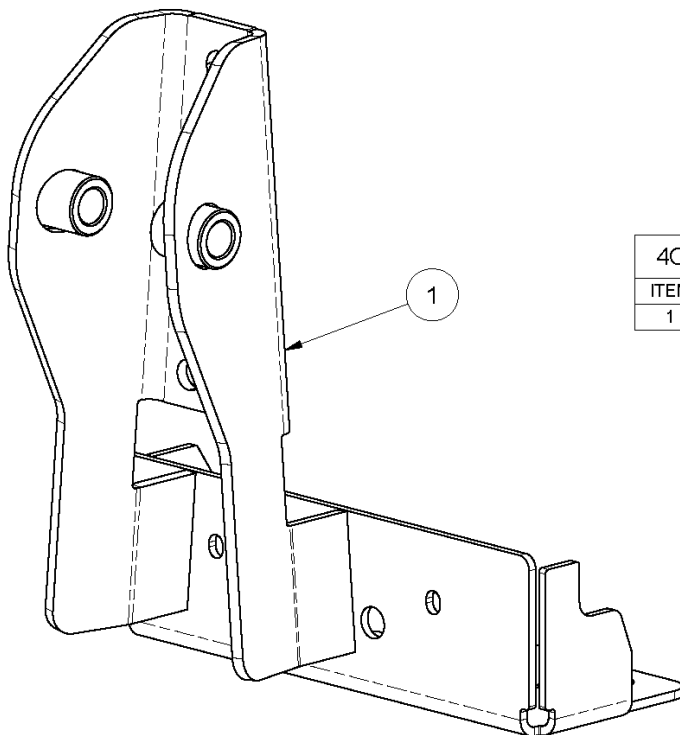
| 4CM00058 - SERVICE KIT - PIVOT BALL CLAMP WITH PIVOT BALLS | | |
|--|----------------------------|-----|
| ITEM | DESCRIPTION | QTY |
| 1 | 1/4 X 3/4 FLANGE HEAD BOLT | 2 |
| 2 | BALL-PIVOT, THREADED | 2 |
| 3 | CLAMP-PIVOT BALL | 1 |



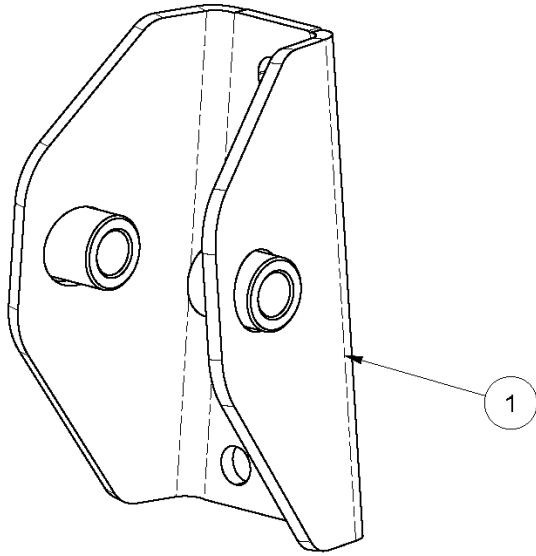
| 4CM00059 - SERVICE KIT - ECU | | |
|------------------------------|-----------------------------------|-----|
| ITEM | DESCRIPTION | QTY |
| 1 | CL449 CONTROLLER, FL NEW CASCADIA | 1 |



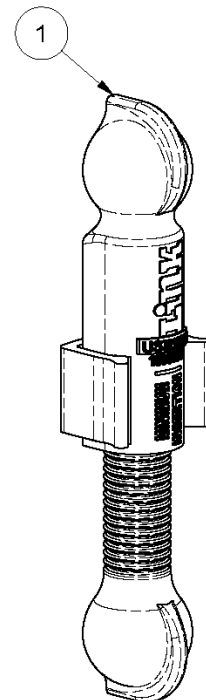
| 4CM00063 - SERVICE KIT - SHOCK ABSORBER ASSEMBLY | | |
|--|------------------------------------|-----|
| ITEM | DESCRIPTION | QTY |
| 1 | 1/2 TYPE A PLAIN WASHER | 4 |
| 2 | 1/2 UNC HEX TOP LOCK NUT (GR C) | 2 |
| 3 | 1/2 X 4 1/2 UNC HEX CAP SCR (GR 8) | 2 |
| 4 | SHOCK ABSORBER, ROI | 1 |
| 5 | SPACER | 1 |



| 4CM00067 - SERVICE KIT - CAB BRACKET, RH | | |
|--|-------------|-----|
| ITEM | DESCRIPTION | QTY |
| 1 | BRACKET-CAB | 1 |



| 4CM00068 - SERVICE KIT - CAB BRACKET, LH | | |
|--|-------------|-----|
| ITEM | DESCRIPTION | QTY |
| 1 | BRACKET-CAB | 1 |



| 29910050 - SERVICE KIT-LINKAGE,SHORT | | |
|--------------------------------------|---------------|-----|
| ITEM | DESCRIPTION | QTY |
| 1 | LINKAGE-VALVE | 1 |



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