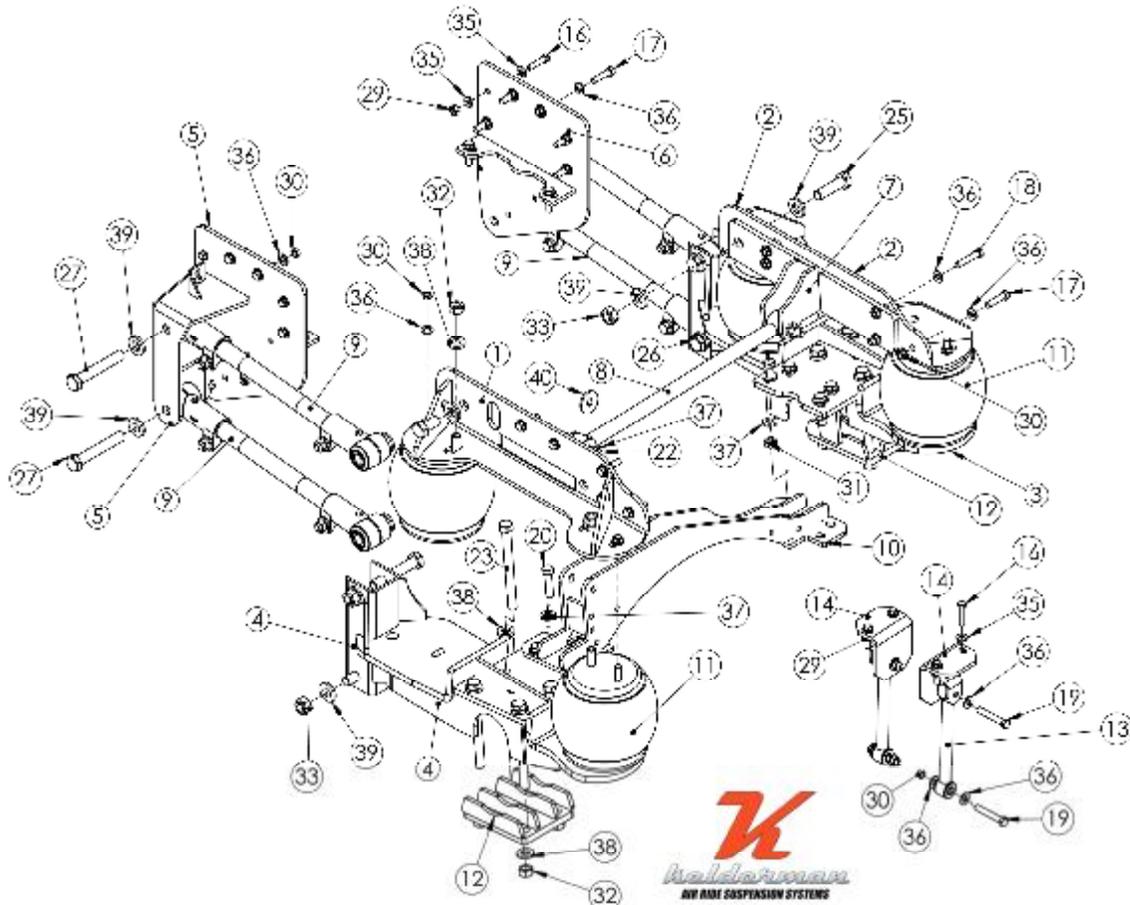




2686 Highway 92 - Oskaloosa, IA 52577
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2007+ Dodge 3500 HD Chassis Cab 4-Link Rear



INTRODUCTION

IMPORTANT!

It is important that the entire installation instructions be read thoroughly before proceeding with suspension installation.

PRODUCT INSTALLER RESPONSIBILITIES

Installer is responsible for installing the product in accordance with Kelderman Mfg., Inc. specifications and installation instructions.

Installer is responsible for providing proper installation of vehicle components and attachments as well as required or necessary clearance for suspension components, axles, wheels, tires, and other vehicle components to ensure a safe and sound installation and operations.

Installer is responsible for advising the owner of proper use, service, and maintenance required by the product and for supplying maintenance and other instruction as readily available from Kelderman Mfg., Inc.

WARNING!

A correct installation must result in the suspension and axle being “loaded” within the range specified by axle and suspension manufacturers. Please check vehicle specifications and intended usage to insure axle will be within Gross Weight Rating (GAWR). No alteration of any suspension component is permitted.

DEFINITION OF TERMS

WARNING –indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

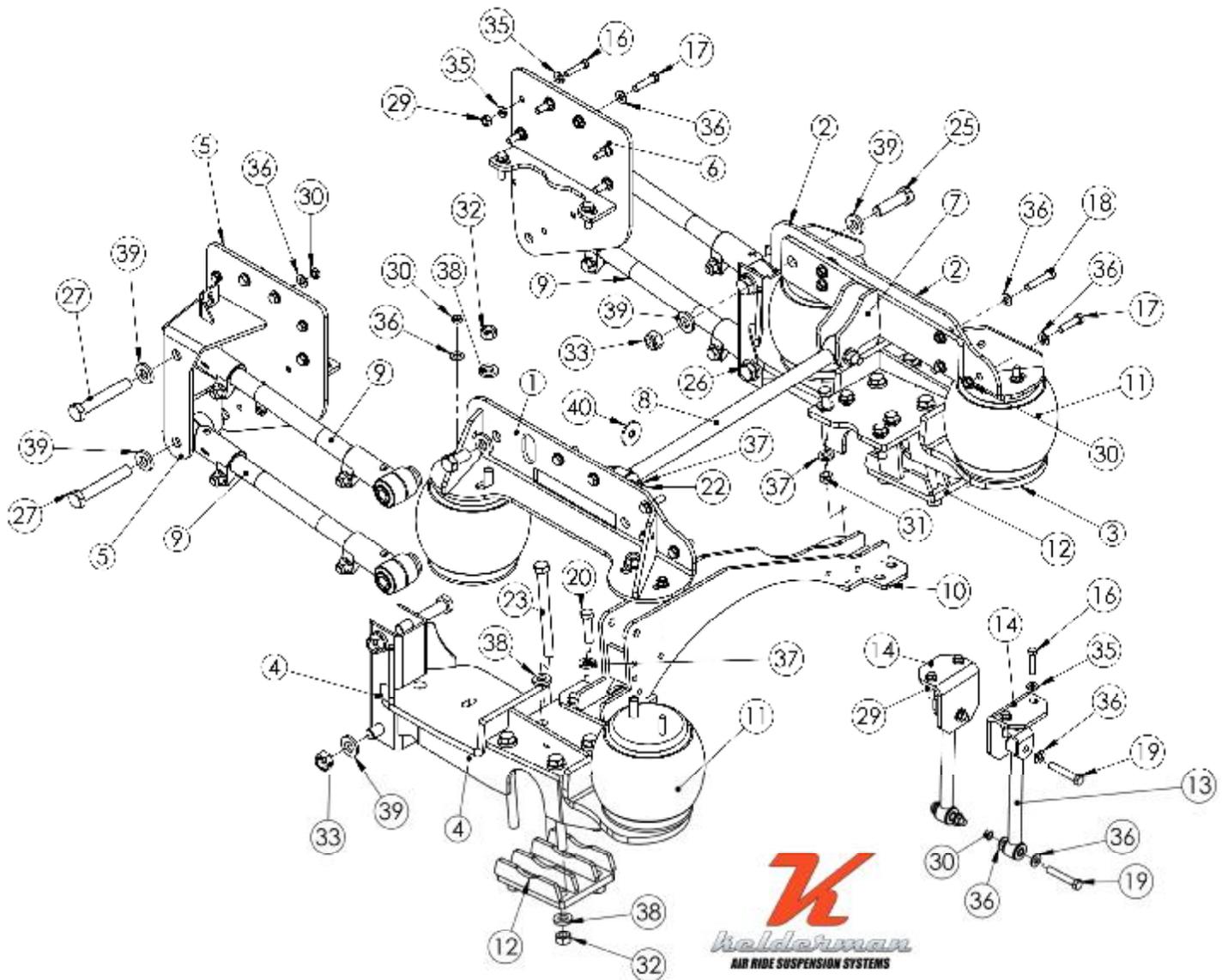
CAUTION –a potential hazardous situation may result in property damage.

NOTE –provide information or suggestions that help you correctly perform a task.

TORQUE –the italicized torque alerts you to tighten fasteners to a specified torque value.



K *kelderman* **AIR SUSPENSION SYSTEMS**



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	50053	(DS) UPPER BAG MOUNT	1
2	50054	(PS) UPPER BAG MOUNT	1
3	50094	(PS) Lower Bag Mount	1
4	50035	(DS) Lower Bag Mount	1
5	50770	(DS) SIDE PLATE	1
6	50771	(PS) SIDE PLATE	1
7	50052	UPPER PHB MOUNT	1
8	50048	PHB 24 1/4"	1
9	20190	Trailing Arms(Stock)	4
10	30100	CROSSMEMBER	1
11	5323	FIRESTONE AIR BAG - 5323	4
12	50095	LOWER AXLE CLAMP MOUNT	2
13	25008	10" End Links	2
14	50006	End Link Mounting Bracket	2
15	12111	BOLT-1/4"-20 X 1" GR8	4
16	13415	BOLT - 7/16"-20 X 2" GR8	8
17	12011	BOLT - 1/2"-20 X 2" GR8	20
18	12017	BOLT -1/2"-20 X 2 1/2" GR8	2
19	12021	BOLT - 1/2"-20 X 3" GR8	4
20	12415	BOLT - 5/8"-18 X 2 1/2"	8
21	12427	BOLT - 5/8"-18 X 4"	1
22	12431	BOLT-5/8"-18X 4 1/2"-GR8	1
23	12561	BOLT - 3/4" -16X8.00-GR8-YZ	8
24	12603	BOLT - 7/8"-14X1.75-GR8-YZ	1
25	12613	BOLT- 7/8" 14X3.00-GR8-YZ	1
26	12629	BOLT - 7/8"-14 X 5" GR8	4
27	12633	BOLT - 7/8"-14 X 5 1/2" GR8	4
28	13140	HEX NUT - 1/4" -20-GR8-YZ	4
29	13145	HEX NUT 7/16"-11-GR8-YZ	8
30	13144	HEX NUT - 1/2"-13 GR8	30
31	13146	HEX NUT - 5/8"-11 GR8	10
32	13148	HEX NUT 3/4"-10-C-YZ	12
33	13150	HEX NUT - 7/8"-9-C-YZ	10
34	13000	1/4" FLAT WASHER	8
35	13003	7/16" FLAT WASHER	16
36	13004	1/2" FLAT WASHER	56
37	13006	5/8" FLAT WASHER	20
38	13008	3/4" FLAT WASHER	20
39	13010	7/8" FLAT WASHER	20
40	16955	5/8" x 2" x 3/16" WASHER	2

PRE-INSTALLATION CHECKLIST

Check the vehicle wheel alignment prior to installation to insure no precondition already exists; record the information for verification.

Measure and record the wheelbase and centering dimensions before beginning installation.

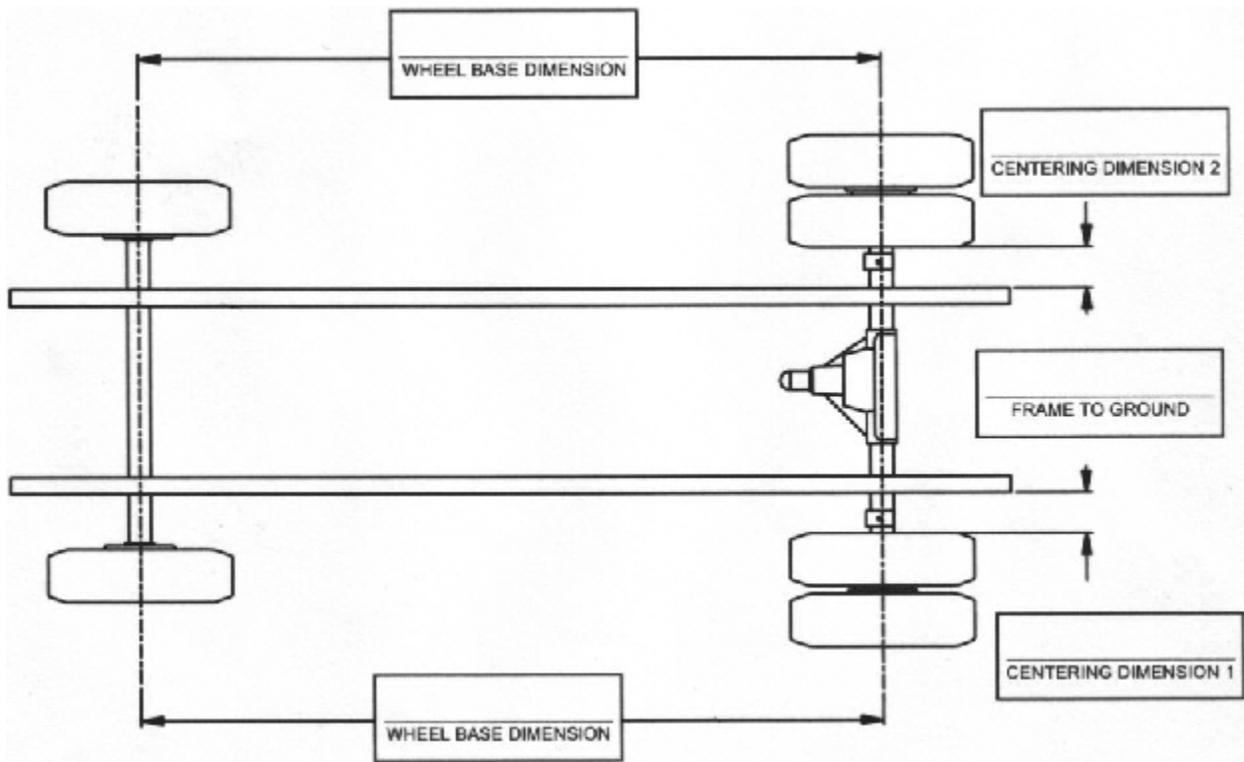
Measure and record the height from the ground up to the rear of the frame.

Measure and record the pinion angle. *See page 5 for specific instructions.*

Remove the attached body, if applicable. Remember to disconnect all electrical connections and fuel filler tube, before removing the body. The installation can also be completed using a lift to raise the vehicle. If using a lift, chassis body removal may not be necessary but removal of rear wheels will aid in installation.

If not using a lift, block the front wheels so the vehicle cannot roll.

Jack up the rear frame of the truck in order to unload the rear leaf springs. Do not lift the wheels off the ground (if not using a lift to install the suspension). Do not jack on the axle itself.



DETERMINING PINION ANGLE

The pinion angle is critical in the correct installation of your Kelderman Air Ride Suspension System. The pinion angle can be easily determined with the use of a magnetic angle gauge.

To measure the angle, find a flat surface to attach angle gauge. Mark the location of your gauge with a marking pen or scribe. Record the angle on the gauge for future reference.

Note: It may be necessary to remove gauge. Marking the position of the gauge is critical to ensure accurate angle readings during adjustment steps of the assembly of your Kelderman Air Suspension System.



Pinion Angle: _____°



DISASSEMBLY

1. Jack up the rear of the frame so that most of the tension is off the leaf springs. Place a set of jack stands under the frame, block the tires so the axle won't move and place a jack stand under the pinion so it doesn't rotate.

Place jack under axle to keep from rotating.



2. On the driver's side separate the emergency brake cables. They will be re-routed through the forward drivers side forward sideplate. Remove the bolt that connects the brake lines to the top of the axle. Also remove the bolt that connects the wiring harness and passenger side e-brake cable to the front side of the axle. These brake lines and cables will now connect to the crossmember of the air suspension. See step 3 in assembly.

Drivers side e-brake cable

Passenger side e-brake cable



3. Next, remove the front leaf spring perches, leaf springs and factory sway bar end link mounts and the overload pads. Use a torch to cut off the rivets. Next, punch out the rivets.

Overload pads



4. The best way to remove the riveted pads is to use a torch to cut the rivet heads off. Make sure that there are no fuel lines, brake lines, or wiring that can be damaged while cutting the rivets off.

Passenger side plate



INSTALLATION

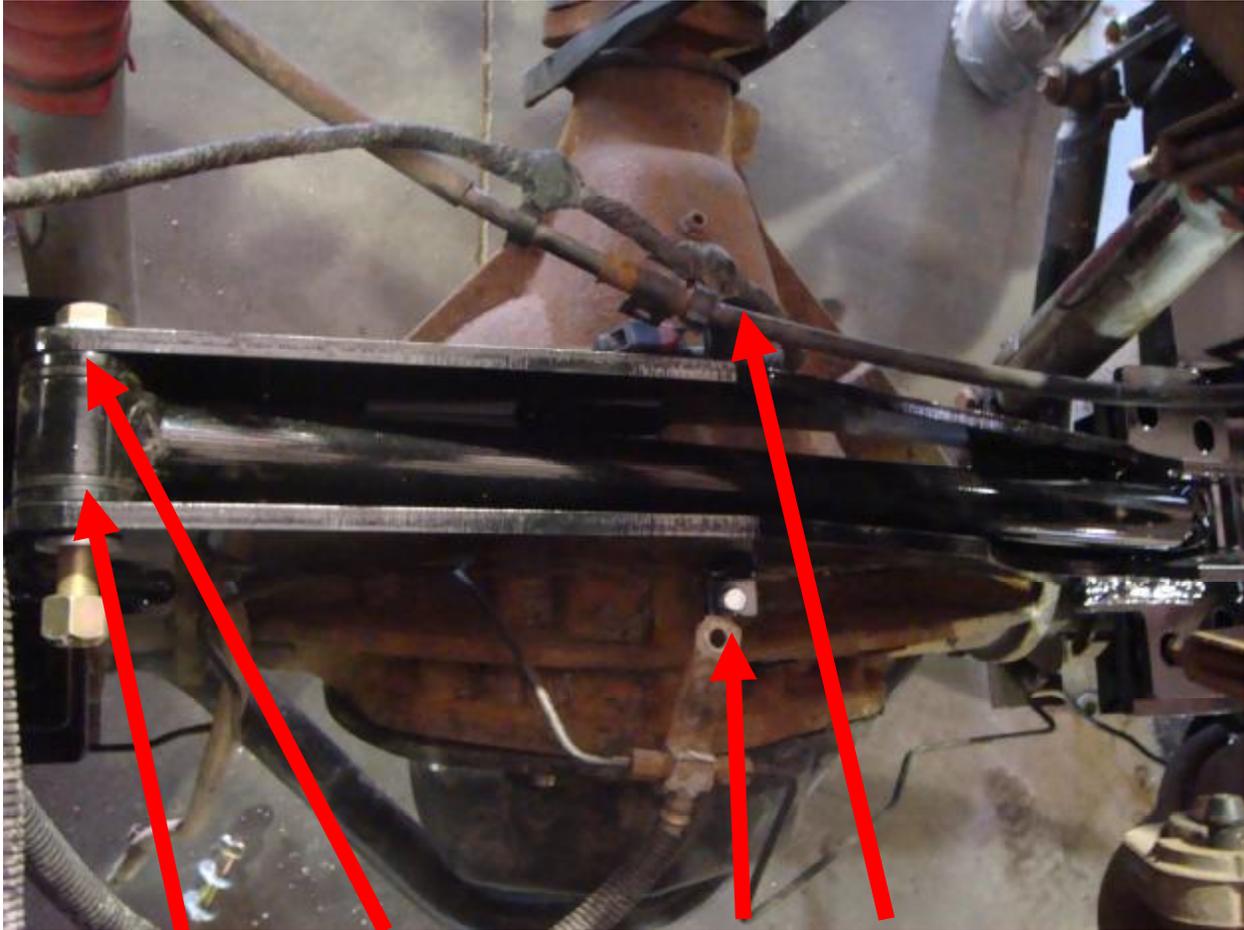
1. Locate the 4-link side plates (part # 50770 DS and 50771 PS). These mount to the frame in the factory mounting holes. Place the mount against the frame and use two 7/16" x 2" bolts, flat washers and top lock nuts to fasten the mount to the side and six 1/2" x 2" bolts, flat washers and top lock nuts to fasten to the bottom of the frame. Once you have all the bolts started, **torque the 1/2" bolts to 85 lb/ft and the 7/16" bolts to 55 lb/ft**

2. Locate the lower bag mounts (part #50035 DS and 50094PS). Place these mounts over the leaf spring perches on the axle. Now fasten to the axle using the lower axle clamps (part # 50095), 3/4x8" bolts, flat washers and lock nuts. Drop the bolts down from the top. Do not tighten the bolts until the pan hard bar crossmember and pan hard bar have been installed **Then you can torque the 3/4" bolts to 250 lb/ft.**

Drivers side lower bag mount



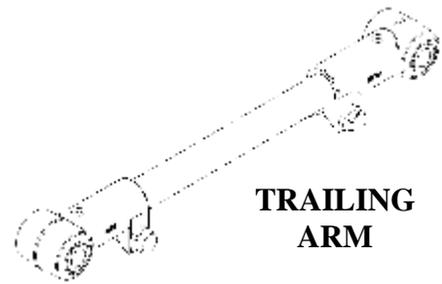
3. Locate the cross member/pan hard bar mount (part # 30100). It fastens to the lower bag mounts with the four 5/8" x 2 1/2" bolts. The pan hard bar mounting point locates on the drivers side. . Once you have all the bolts started, you can start tightening the bolts. Beginning with the bottom air bag mounts, **torque the 3/4" bolts to 275 ft/lbs.** Use a criss-cross pattern when tightening. Next, **torque the 5/8x2" bolts to 150 ft/lbs.** Now you can go back torque the lower bag 3/4" bolts. Attach the emergency brake cable to the tab on the cross member with the 1/4x1" bolt. Locate the pan hard bar (part# 50048) and the two 3/16 thick spacers (part # 16955). Install the pan hard bar in the crossmember with the 5/8x4 1/2" bolt. Place a spacer on each side. Install the bolt so the nut is rear ward coming out of the cross member. Do not tighten this bolt yet.



Spacer on each side of ph bar

Bolt brake line fastens here

4. Locate the trailing arms (part # 20190). Set the distance between the knuckles at 8 1/4". This will get the pinion angle somewhat close. The trailing arms fasten into the forward side plates with the 7/8" x 5 1/2" bolts. Insert the bolts from the outside in. The rear of the trailing arms fastens into the lower bag mounts with the 7/8" x 5" bolts. Insert the bolts from the inside out (the nuts go on the tires side). Start the nuts on the bolts but do not tighten. Once the install is complete and the alignment is finished, come back and tighten the bolts to 310 ft/lbs.



TRAILING ARM

Do not tighten the 7/8" bolts until Step xx NOTE: On the drivers side, make sure to run the emergency brake cable over the top of the trailing arms. Also reconnect the forward emergency brake cables to the adjuster. Once the install is complete adjust the cable as necessary

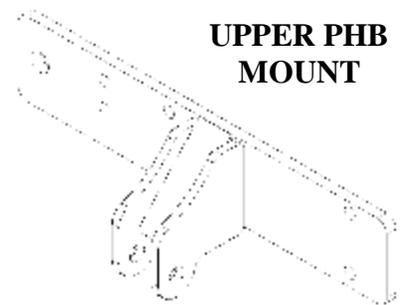
5. Locate the four Firestone air bags (part # 5323). Set them on top of the lower bag mounts and fasten in place with the 1/2x 4" bolts, flat washers and lock washers. **Torque to 35 ft/lbs.**

6. Locate the upper bag mount (part # 50053 DS). Install the driver's side mount first. You will have to open up a couple of the holes for the 1/2" bolts. Place the bag mount against the frame and over the airbags and fasten to the bottom of the frame using five 1/2" x 2" bolts, flat washers and top lock nuts. Use the 7/8x2" bolt, flat washers and top lock nut to fasten the air bag mount to the side of the frame. Once all bolts are installed and snug, **torque 1/2" bolts to 85 lb/ft. torque 7/8" bolts to 300 lb/ft.**

7. Locate the passengers side upper air bag (part # 50054) mounts and the pan hard bar mounting plate (part # 50052) The pan hard bar mount on the inside of the frame the same time you fasten the upper bag mount. Use the two 1/2x2 1/2" bolts to sandwich the frame between the upper bag mount and the pan hard bar mount. You will also use the four 1/2x2" bolts and the 7/8x3" bolt to finish tightening the brackets. **Torque the 1/2" bolts to 75 ft/lbs and the 7/8" bolts to 310 ft/lbs.** You will have to drill a 1/2" hole for the center most 1/2" bolt. Use the five 1/2x2" and 7/8x2" bolts to fasten the drivers side. Once the upper bag plates are torqued, you can now fasten the top of the air bags to the air bag mount using the 1/2" and 3/4" nuts and lock washers. **Torque these nuts to 35 lb/ft.**



Drivers side upper bag mount

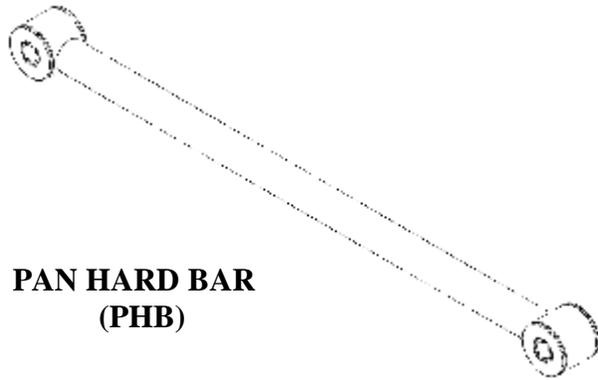


UPPER PHB MOUNT

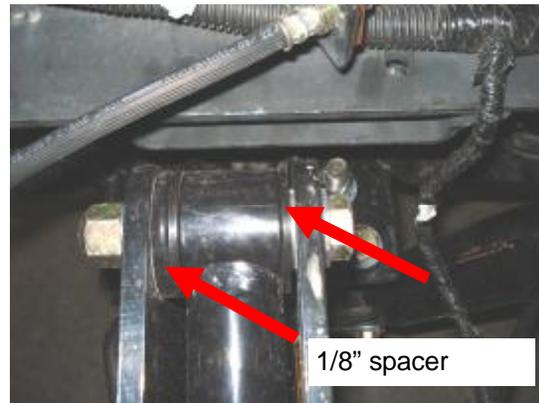


**Drill this hole
CAUTION! Make
sure to not drill
into any fuel or
brake lines**

8. Now that the passenger side upper panhard bar mount is installed, connect the panhard bar to the mount with the 5/8x4" bolts. It does not use spacers like the drivers side. **Torque these bolts to 150 lb/ft.**

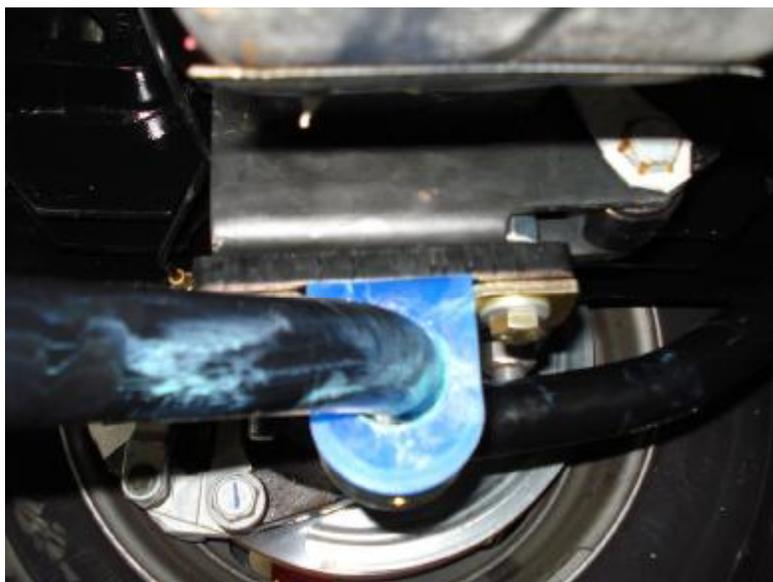


**PAN HARD BAR
(PHB)**



9. Locate the sway bar end link relocation brackets (part# 50006). Fasten to the frame using the four 7/16 x2" bolts. Torque to 55 ft/lbs.
10. Locate the sway bar (part # 129-130), end links (part# 25008) and the adaptor plate. The plate attaches to the bottom of the shock mount. Use the 7/16" countersunk bolt in the **forward hole** of the lower shock mount. Use the "D" bushing and two 7/16x1 1/2" bolts to attach the sway bar in place. Attach the sway bar to the end link with the 1/2x3" bolts. Make sure the large washer goes on the outside of the lower end link. **Torque the 7/16" bolts to 55 ft/lbs.**

Adaptor plate fastened to oem shock mounts



Sway bar endlink bracket



ALIGNMENT

1. Once all the brackets are installed and tightened, adjust the jack stands that are holding up the rear of the frame so that the distance between the upper and lower air bag mounting brackets is 8". Once this height is set, refer to the original measurements taken in step 1. After the adjustments are made, go ahead and **torque all the 7/8" bolts to 310 lb/ft.**
2. Check wheelbase measurement on vehicle: To adjust wheelbase, turn either both left or both right trailing arms as a set. This will prevent the trailing arms from binding. Keep checking measurement and adjusting until your wheelbase measurement is the same on both sides within 1/8".
3. Check pinion angle with angle gauge. It is important to place gauge in exact position used to take measurement in the beginning. To adjust pinion angle, adjust either both top or both bottom trailing arms. Always turn them the same direction and only 1/2 turn at a time. Keep checking measurements and adjusting until your pinion angle is the same as your initial measurement.

AIR CONTROL SYSTEM



1. Plumbing of the system. Insert the fittings in the top of the four air bags. The mechanical system uses a Haldex height control valve. Use the 1/4" x 1 1/4" bolts to fasten the height control valve to the front trailing arm bracket on each side. Mount the ball to the end of the height control valve, fasten the lock collar to the lower control arm and connect the linkage between them. If you are using the electronic control system, attach the electronic sensor to the mount. Just snug the bolts now. You will have to check the range of motion with the sensor with the chassis completely out of air. Make sure that the sensor is not bottomed out on its range of motion. The sensor has a dead band on the last 5% of travel. Rotate the sensor on the slotted hole to ensure it has the correct range of motion. If the sensor hits the dead band in operation it will flash error codes on the display. **NOTE:** if you are doing the mechanical system, locate the dump valve solenoids. Mount them to the cross-member in front of the fuel tank with the 1/4x1 " bolt. Each solenoid has 2 wires coming out of it. One is for the ground and the other is the trigger wire. It works well to use the 1/4" bolt that holds the solenoids in place to serve as the ground spot. Use the diagram to finish wiring the trigger wire.
2. Locate the compressor box and air tank. Mount the box somewhere on the frame, preferably on the driver's side frame rail. Use the wiring diagram provided at the end of the instruction packet to wire up the system. We prefer to mount the air tank next to the compressor box. Try and have the air tank lower so that any moisture will flow down the bottom of the tank and not in the box.

3. Once you have the compressor wired up, the air line going to the air tank, run an air line from the air tank to the bottom port of the height control valves. You will have to use a "T" fitting to send an air line to each height control valve. Locate the clear line and plastic fitting supplied with the height control valve and install it in the top port. This is the exhaust. Next locate the three brass "T" fittings. Connect the two air bags on each side with a "T" fitting. Next, connect the right side and left sides together with another "T" fitting. Last, connect this "T" fitting to the middle port on the height control valve.

4. Once the system is wired up and plumbed, turn on the ignition and the compressor will start running. Upon first start up when there is no air in the tank, it will take around 6-8 minutes until the system is charged, air bags filled. After the compressor shuts off, check for leaks. It works best to use soapy water or gas leak detector sold at hardware stores. Check all the fittings and connections in the entire system. If installing the electronic system use the directions that are supplied with that to start your calibration process.

****NOTE:** Once the system is wired up and plumbed, turn on the ignition and the compressor will start running. Upon first start up when there is no air in the tank, it will take around 6-8 minutes until the system is charged, air bags filled. After the compressor shuts off, check for leaks. It works best to use soapy water or gas leak detector sold at hardware stores. Check all the fittings and connections in the entire system.

FINAL INSPECTION CHECKLIST

1. Air System Start Up and Check - remove all jacks, next air the system up by either using the fill valve on the air tank or by starting the vehicle and switching the compressor switch to "ON".
Note: the maximum allowable pressure in the air tank is 175 psi. It is recommended to fill the air tank using the supplied Schrader valve so that the compressors are not taxed too much by running for a long period of time.
2. Height Control Valve Operation Check - with one end of the valve linkage disconnected, rotate the valve arm down 45°, air should exhaust from the air bag. Rotating the valve arm up 45° should cause the valve to fill the air bag.
3. Measure & Record the "Ride Height" of the air bag - measure ride height of the air bag from upper air bag mount to lower air bag mount (see Figure below). To adjust the ride height, complete the following steps (see Figure below). Loosen upper height control valve bolt. Rotating height control valve body toward rear of chassis this will increase the ride height. Rotating height control valve body toward front of chassis will decrease ride height. Tighten upper height control valve bolt. Once the ride height is set, reconnect the linkages. Jostle the suspension up and down and allow it to come back to ride height. Recheck the initial measurement and adjust if needed.
4. Bushing Bolts Final Torque - with the suspension at ride height, torque all bushing fasteners. This will include all fasteners for the Control Arm and Pan Hard Bar. (Refer to *Torque* table for specific torques).
5. Reinstall shocks and mounting nuts.
6. Move the suspension through its entire range of motion by inflating and deflating the air bags to achieve full travel. Check for any interference with the pan hard bar, axle, shocks, exhaust, frame, brake lines, fuel lines, etc. Reconnect valve linkage to trailing arm.
7. Recheck all fasteners for specified torque.
8. Double check all electrical connections and wire routings.
9. **IMPORTANT!** Check all fittings and air lines for air leaks.
10. Measure and record wheelbase and centering dims on final dimension sheet.
11. Reinstall the chassis body (if applicable).

ADJUSTING WHEEL BASE / PINION ANGLE

1. With vehicle lifted to ride height on jack stands, let air out of airbags. Check wheelbase measurement on vehicle. To adjust wheelbase, turn either both left or both right 4-Link Bars. **Always turn them the same direction and only 1/2 turn at a time.** Keep **checking measurement and** adjusting until your wheelbase and pinion angle measurement are the same as initial measurement. Once the alignment is done, torque the pinch bolts on the 4-Link Bars to 100 ft. lbs.
2. Test drive. Once the system is installed, bolts torqued, and the air system checked for leaks, the vehicle is now ready for a test drive. The vehicle should drive straight and be without any driveline vibration. If there is shutter upon take off, then the pinion angle is off. This can be adjusted by shortening or lengthening the upper or lower trailing arms. If the truck pulls to the right or left, the alignment is off. Adjust by shortening or lengthening the trailing arms on the same side.

OPERATION GUIDELINES

1. After all final checks are complete, it is recommended to perform a road test. If vehicle pulls to the left or right, or any driveline vibration occurs, return and recheck wheelbase measurements and driveline angles. **Note:** improper driveline angles may have a detrimental affect on ride, U-joints, and transmission.
2. **Kneeling Operation:** Moving the dump switch to "ON" position will exhaust all air from the air bags and lower the rear of the vehicle approximately 3-4 inches. Air bags will inflate when the switch is returned to the "OFF" position. **WARNING: Do not drive the vehicle while the Dump Switch is on and the air bags are deflated.**
3. **IMPORTANT!** During servicing check tightness of all fasteners and for any air systems leaks.
4. **IMPORTANT!** Immediate corrective action should be taken if malfunctions occur.
5. **Air Bag Ride Height Setting Procedure for Systems with Dual Height Control Valves**
 1. Deflate the passenger side air bag by disconnecting the linkage from the arm.
 2. With the driver side linkage connected, measure the ride height and adjust accordingly by the methods mentioned above.
 3. Once the ride height is set for the driver side, repeat the same steps for the passenger side, including deflating the driver side air bag.
 4. Once the ride height is set, reconnect the linkages.
 5. Jostle the suspension up and down and then allow it to come back to ride height. Recheck the initial measurement and adjust if needed. **Note:** this procedure to set ride height can be done when empty or under light load.

SERVICE & MAINTENANCE

The Kelderman suspension needs no lubrication and little maintenance. The following components should be checked at the same time the chassis is being serviced. However, immediate corrective action should be taken if a serious malfunction occurs. See Exploded Assembly on page 18 for details.

Caution! If maintenance or service is to be done on the air system, be sure to drain **all** air from system. Serious injury could occur if components are removed while system is full of air.

Note: It is important to release any moisture contained within the air reservoir on a daily basis. Not releasing the moisture on a regular basis will cause the drain valve to not operate properly, and may cause the valve to malfunction. Excess moisture in the system can also cause premature failure of other components including the tank itself.

AIR BAG SERVICE

The forward air bag can be serviced without removing the axle brackets from the axle. Detach the upper air bag mounting studs from the upper bag plate. Now, utilizing a modified 3/4" wrench, the forward air bag lower mounting bolt can be loosened. Then, rotate the air bag counter-clockwise off the lower mounting bolt. Now remove air bag. To install, reverse process.

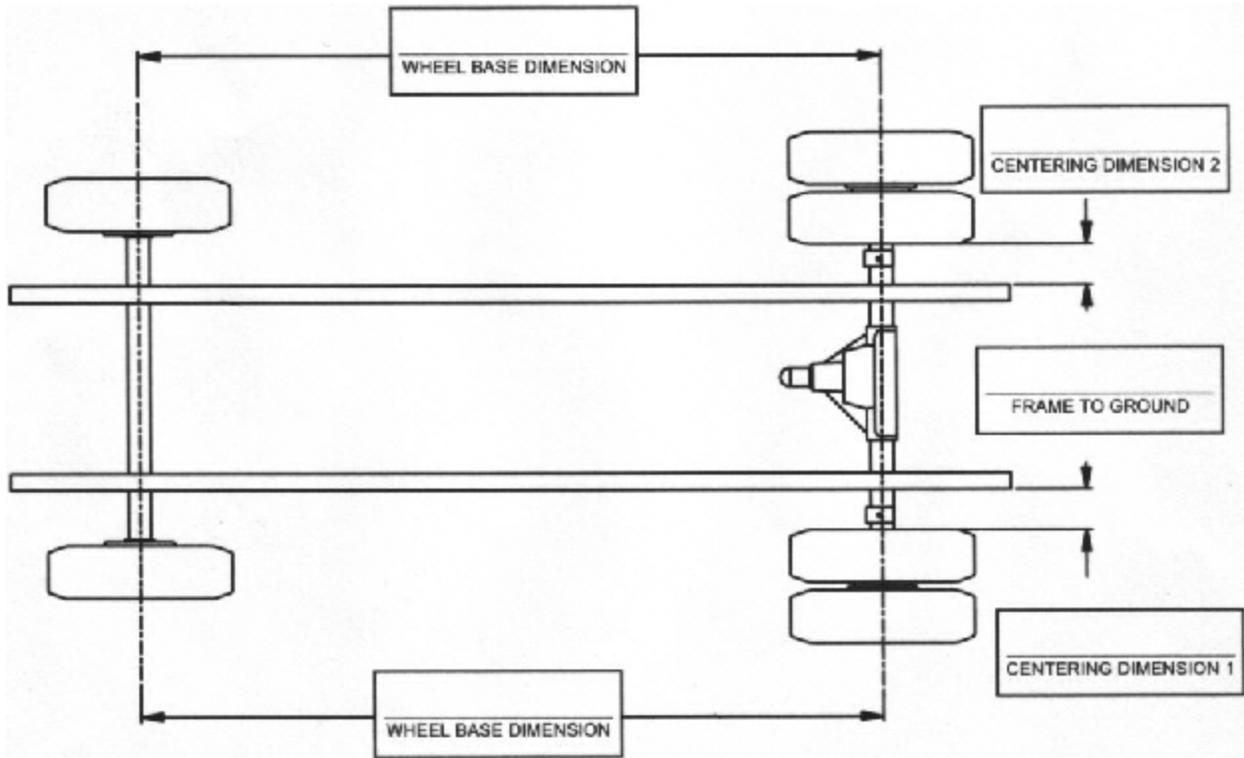
SERVICE & MAINTENANCE CHECKLIST

1. Check and document rear axle alignment.
2. Verify ride height at 8" between upper and lower air bag mounting plates.
3. Verify suspension function via dump and re-inflation.
4. Check for air leaks and system integrity.
5. Check clearances throughout suspension motion range.
6. Check driveline angle.
7. Check 4 wheel alignment.

TORQUE TABLE

Location	Fastener	Torque
Front trailing arm mounts	1/2" UNF Nuts	85 LB/FT
Front trailing arm mounts	5/8" UNF Nuts	150 LB/FT
Lower bag mounts	3/4" UNF Nuts	250 LB/FT
Upper bag mounts	1/2" UNF Nuts	85 LB/FT
Upper bag mounts	5/8" UNF Nuts	150 LB/FT
Air bags	1/2" UNC Nuts	35 LB/FT
Air bags	1/2" UNC Bolts	35 LB/FT
Air bags	3/4" UNF Nuts	35 LB/FT
Pan hard bar	5/8" UNF Nuts	150 LB/FT
Trailing arms	5/8" UNC Nuts	150 LB/FT
Trailing arms	7/8" UNF Nuts	310 LB/FT
Sway bar bolts	7/16" UNF Nuts	55 LB/FT

FINAL DIMENSION SHEET



K
kelderman
AIR SUSPENSION SYSTEMS

DODGE 4500 OWNERS GUIDELINES

The Kelderman suspension needs no lubrication and little maintenance. However, immediate corrective action should be taken if a serious malfunction occurs.

CAUTION! If maintenance or service is to be done on the air system, be sure to drain all air from the system. Serious injury could occur if components are removed while system is full of air.

PRODUCT OWNER RESPONSIBILITIES

- Owner is solely responsible for pre-operation inspection, periodic inspections, maintenance, and use of the product as specified in the particular Kelderman MFG. instructions available by product model, except as provided in this warranty, and for maintenance of other vehicle components. Of particular importance is the re-torque of fasteners including axle bolts, four link bolts, and pan hard bar bolts. This re-torque must be performed within 90 days of the suspension being put into service.
- Owner is responsible for “down time” expenses, cargo damage, and all business costs and losses resulting from a warrantable failure.
- The Kelderman Air Suspension is fully automatic in controlling the height of the chassis. No manual intervention to control air pressure or ride height is needed during the course of operation.
- The Compressor Switch must be on for the compressor to operate. During difficult starting circumstances, (i.e. extremely cold weather) it is recommended to turn the compressor switch off until the vehicle is running, so it will not draw current from the battery. The compressor is controlled by the pressure switch located in the Air Control Box. This switch automatically turns the compressor on when the tank pressure falls below 110 psi, and turns them off at 145 psi.
- The Low Pressure Warning Light indicates a severe drop in tank pressure (below 45 psi). Immediate corrective action should be taken to determine the cause of air loss. Compressor switch should be turned off if Low Pressure Warning Light is on, and remains on even after the compressor has run for a normal period of time. **NOTE:** The Low Pressure Warning Light could come on briefly when the “Dump” feature is being used.
- It is important to release any moisture contained within the air tank on a daily basis. This is done by pulling on the attached release cable for approximately 5 seconds. Not releasing the moisture on a regular basis will cause the drain valve to not operate properly.

CHECK AT EVERY VEHICLE SERVICE INTERVAL:

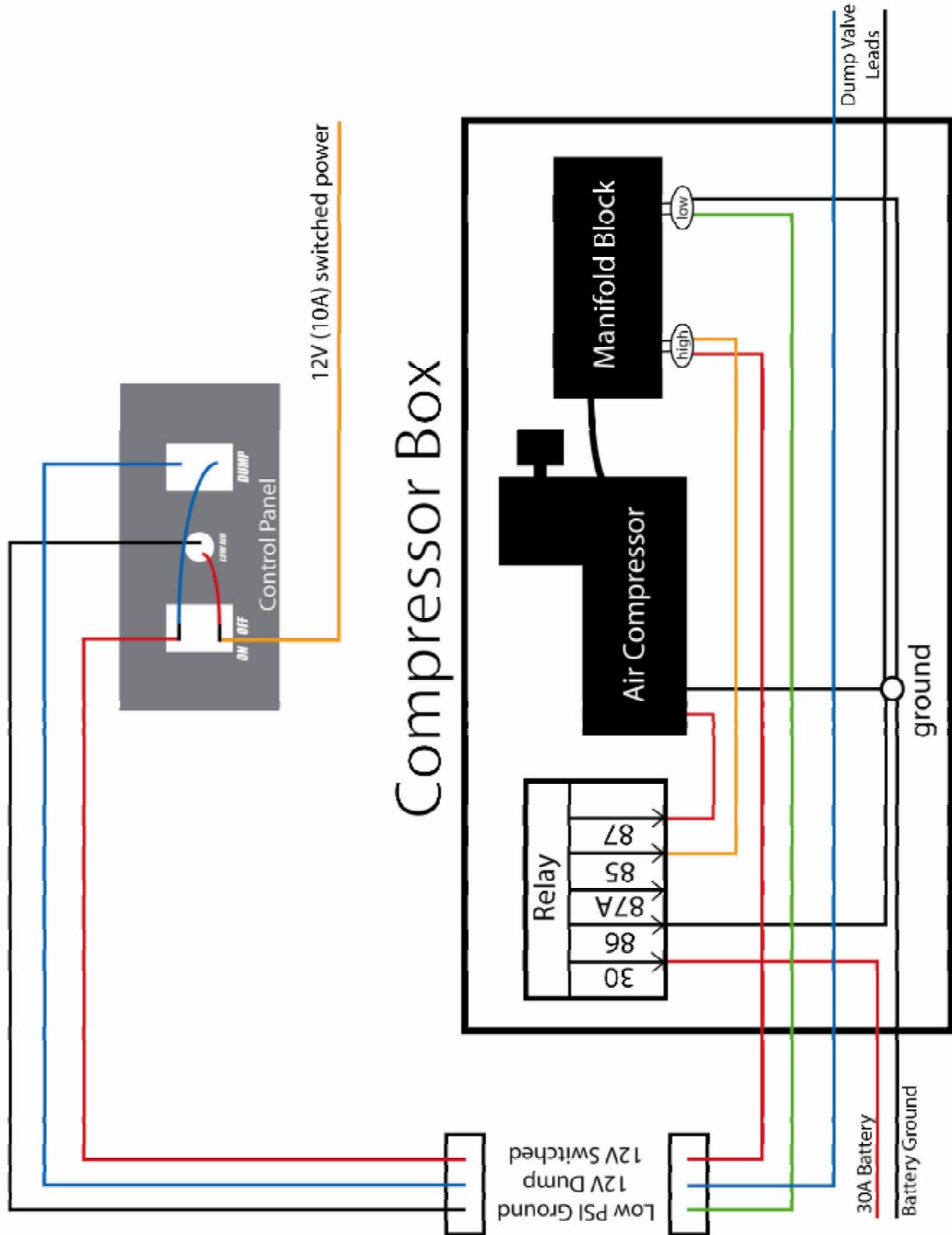
- Check Ride Height $\pm 1/4$ "
- Check for air leaks around fittings.

CHECK AFTER THE FIRST 1000 MILES:

- Recheck & tighten any loose fasteners.
- Check for any loose or worn components.

CHECK AFTER EVERY 30,000 MILES:

- Check trailing arm bushings and pan hard bar bushings for wear; replace if worn.



Compressor Box

12V (10A) switched power

Low PSI Ground
12V Dump

30A Battery
Battery Ground

Dump Valve Leads

ground

Manifold Block

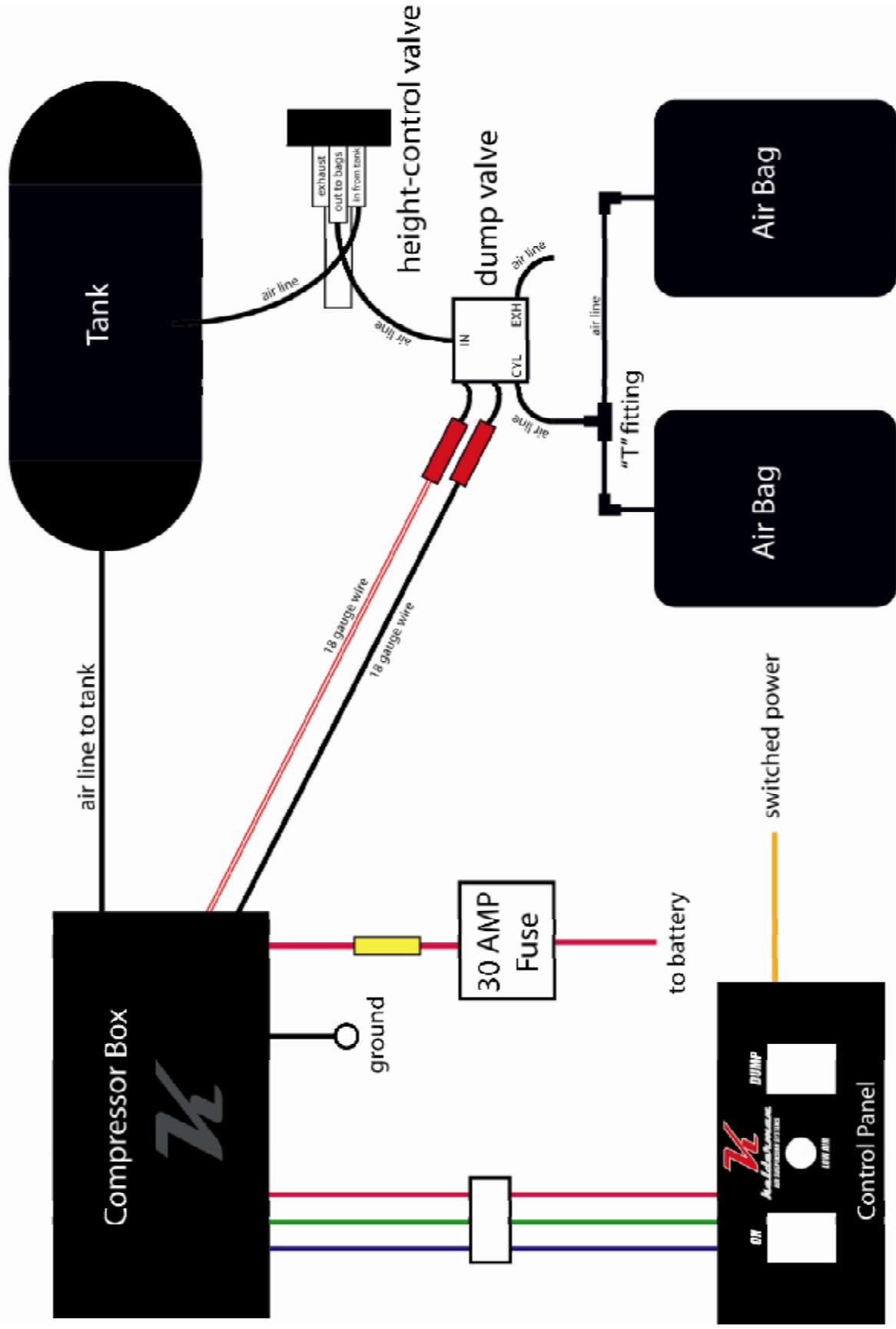
Air Compressor

Relay

30
86
87A
85
87

high
low

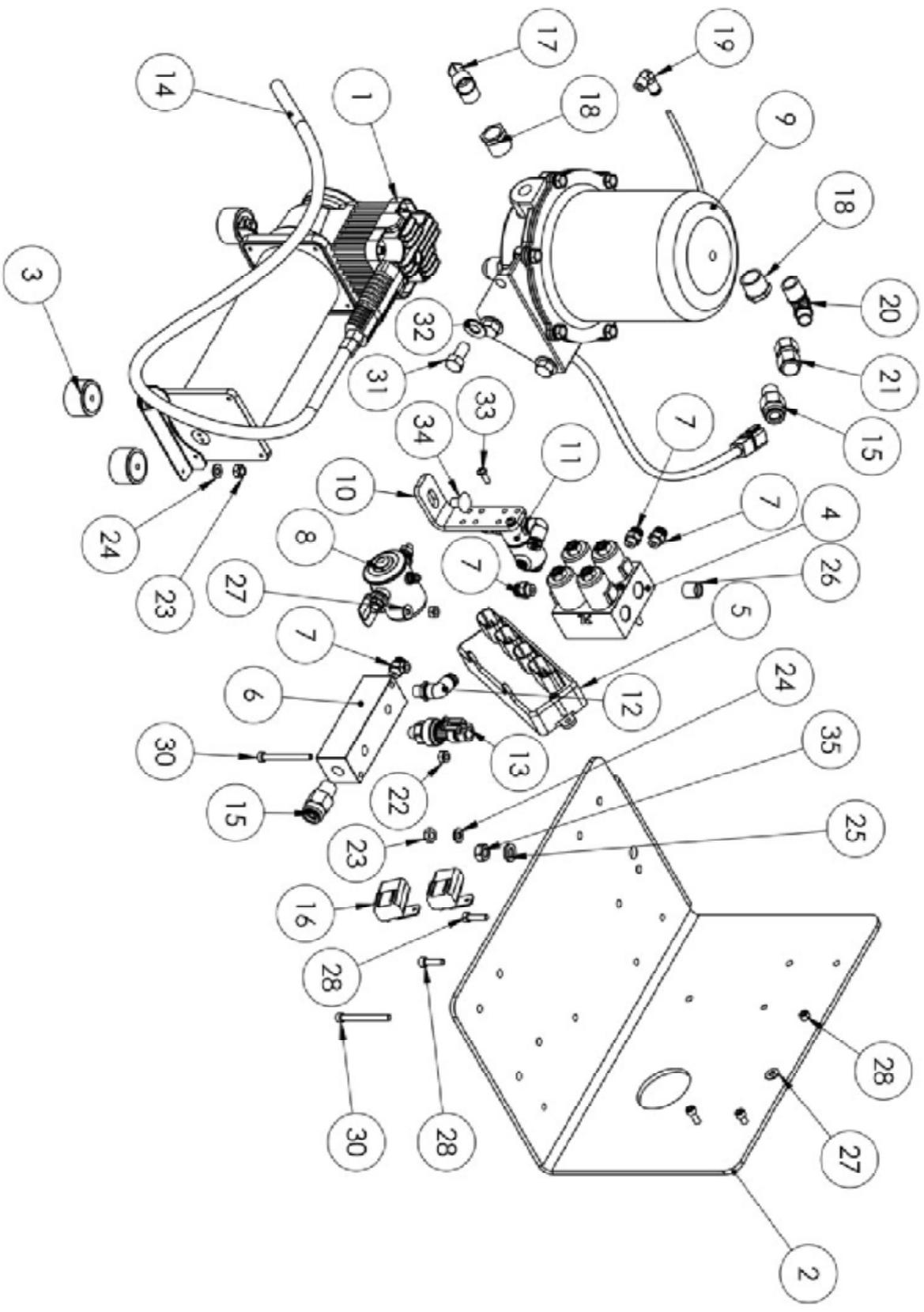
Compressor Box Self-Leveling Kit Wiring Diagram (shown with optional dump valve)



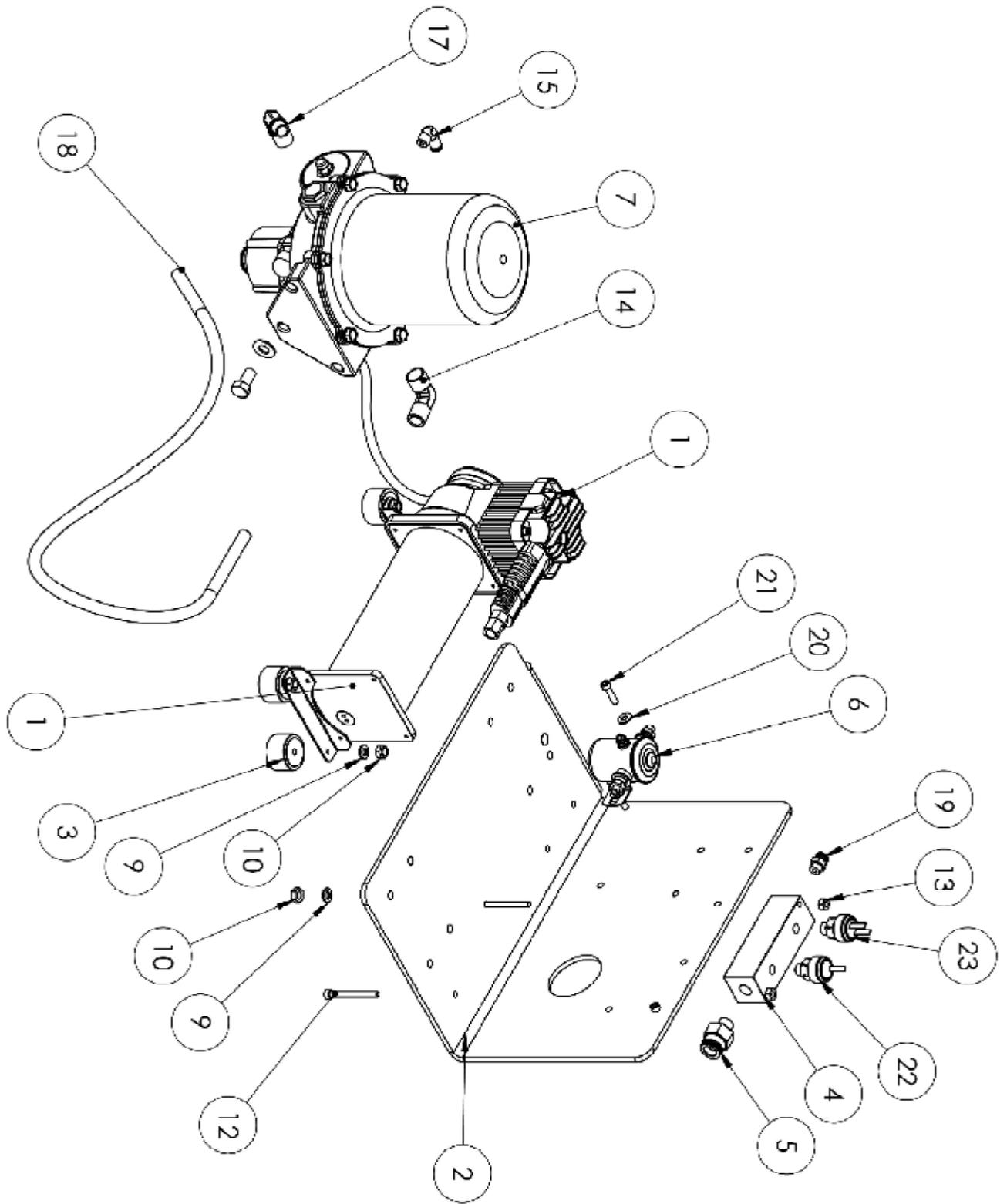
TROUBLE SHOOTING GUIDE

<u>COMPONENT</u>	<u>POSSIBLE PROBLEM</u>	<u>CORRECTIVE ACTION</u>
Air lines	Air leaks	Replace air line.
Fittings	Air leaks	Remove fitting and apply fresh joint compound. Reinstall fitting, but Do Not Over Tighten. Do not use Teflon tape.
Air Bags	A. Improper height B. Air leakage	A. Adjust valve linkage to maintain proper air spring height. B. Replace air bag.
Panhard Bar	A. Loose nuts on lateral control rod bolts. B. Worn bushings	A. Tighten securely. B. Replace lateral control rod.





ITEM	PART NUMBER	DESCRIPTION	QTY.
1	45050	450C COMPRESSOR	1
2	41100	COMPRESSOR MOUNTING PLATE	1
3	2NPA5	Compressor Feet	4
4	IIFP 2X2397-M4	Norgren 2-Way Manifold Valve	1
5	AA-EC2-KELD	ECU	1
6	50622	MANIFOLD	1
7	68PMT-4-4-X	1/4 x 1/4 Straight	4
8	XA 210846	S. Tekonsha Relay	1
9	54260	Nabtesco Air Dryer	1
10	16698	Purge Valve Mounting Bracket	1
11	241153-12	KIP Purge Valve	1
12	169PMT-4-2	1/4 x 1/8 Elbow	3
13	51152	Pressure Sensor AA	1
14	92793	Vicair Braided Hose	1
15	68PMT-6-4	3/8 x 1/4 Straight	2
16	51162-a	Fuse Holder (Wiring Harness)	2
17	1202P-6-4	3/8" male x 1/4" female	1
18	28-107L	1/2 to 3/8 reducer	2
19	169PMT-4-4	1/4 x 1/4 Elbow	1
20	3390	1/4" x 3/8" Elbow male/male	1
21	46-510	Check Valve 1/4"	1
22	NUT-TLHEX-.19-20	LOCK NUT #10	11
23	13140	NUT-HEX-.25-20-GR8-YZ	8
24	13042	WASHER-LOCK-.25-.26X.49-.062-YZ	8
25	13044	WASHER-LOCK-.31-.32X.58-.078-YZ	1
26	3149-04	1/4" Plug	1
27	Flat Washer 0.19		4
28	Bolt 0.19-32x0.75x0.75-N		7
29	Bolt 0.19-32x1.5x1.125-N		2
30	Bolt 0.19-32x2x1.125-N		2
31	Bolt 0.3750-16x0.75x0.75-N		3
32	Flat Washer 0.375		3
33	Bolt 0.164-32x0.5x0.5-N		2
34	Bolt 0.3125-18x0.5x0.5-N		1
35	HNUT 0.3125-18-D-N		1



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	45050	450C COMPRESSOR	1
2	41100	COMPRESSOR MOUNTING PLATE	1
3	2NPA5	Compressor Feet	4
4	50624	MANIFOLD	1
5	1568-6-4	3/8 x 1/4 Straight	1
6	XA 210846	S. Tekonsha Relay	1
7	DU4-58270	Mechanical Air Dryer	1
8	HBOLT 0.3750-16x0.75x0.75-N		3
9	13042	WASHER-LOCK-.25-.26X.49-.062-YZ	8
10	13140	NUT-HEX-.25-20-GR8-YZ	8
11	Preferred Narrow FW 0.375		3
12	HX-SHCS 0.19-32x2x1.125-N		2
13	NUT-TLHEX-.19-20	LOCK NUT #10	5
14	1579-06-08	1/2" x 3/8" Swivel	1
15	169PMT-4-4	1/4 x 1/4 Elbow	1
16	28-107L	1/2 to 3/8 reducer	2
17	3390	1/4" x 3/8" Elbow male/male	1
18	92793	Viair Braided Hose	1
19	68PMT-4-4-X	1/4 x 1/4 Straight	1
20	Preferred Narrow FW 0.19		2
21	HX-SHCS 0.19-32x0.75x0.75-N		3
22	PS15T	Low Pressure Sensor	1
23	90101	High Pressure Sensor	1