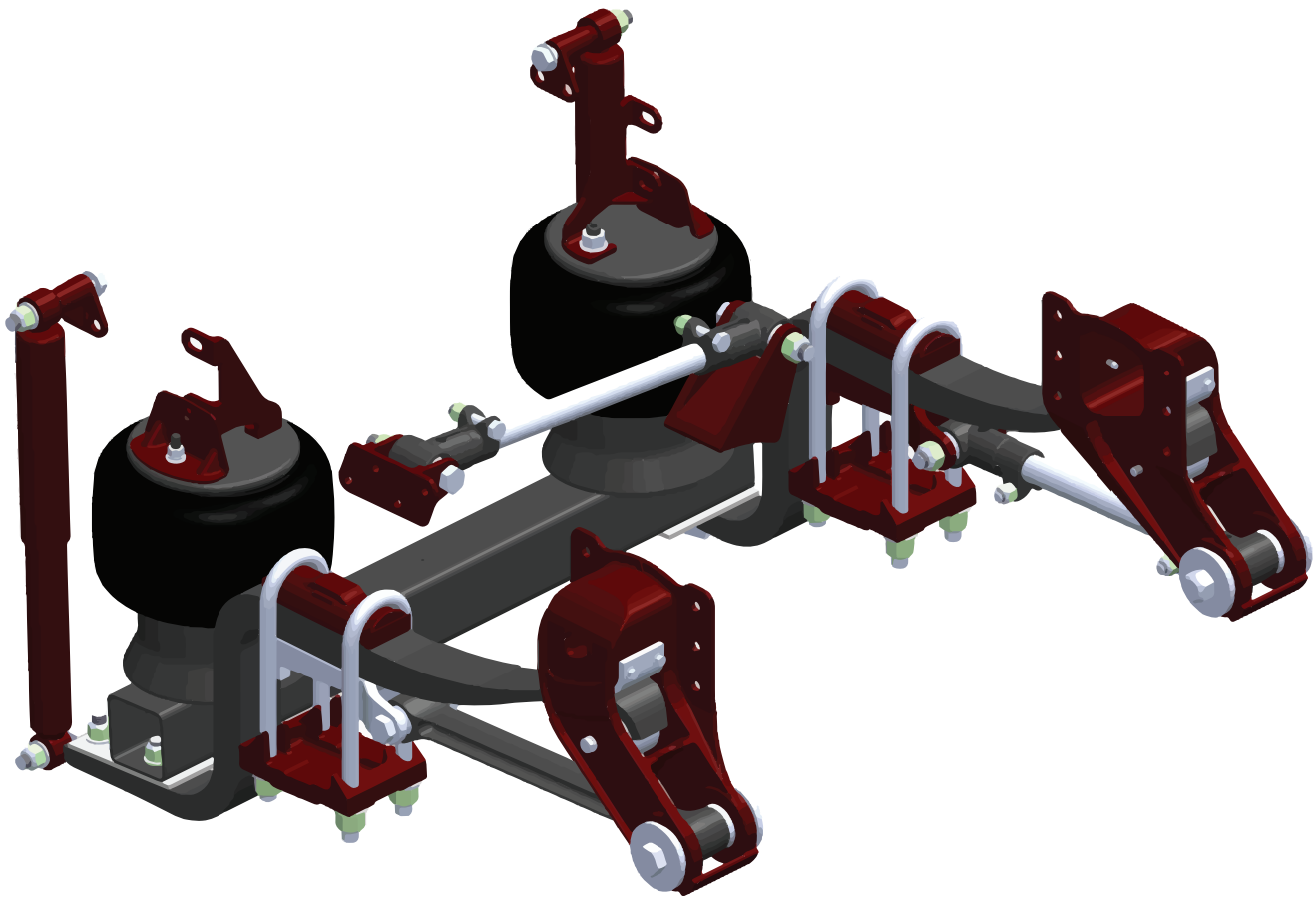


102AR

Maintenance Instructions
Installation Instructions
Service Parts



Reyco Granning Suspensions
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Document #: D712124
Revision: OR
Revision Date: 01/2013

COMPANY PROFILE

Reyco Granning Suspensions was formed by the merger and acquisition of two well-known names in the heavy-duty vehicle suspension industry: Reyco and Granning.

Reyco grew out of the Reynolds Mfg. Co. and was first known as a major supplier of brake drums for heavy-duty vehicles, and later developed a full line of air and steel spring suspensions for trucks, busses, trailers, and motorhomes.

Granning Air Suspensions was founded in 1949 in Detroit, Michigan as a manufacturer of auxiliary lift axle suspensions. Granning later became an innovator of independent front air suspensions for the motorhome industry.

Reyco Granning LLC was formed in early 2011 through a partnering of senior managers and MAT Capital, a private investment group headquartered in Long Grove, Illinois.

SAFETY PROCEDURES & INFORMATION	○ i.1
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SAFETY FIRST

Be sure to read and follow all installation and maintenance procedures.

LIFTING

Practice safe lifting procedures. Consider size, shape and weight of assemblies. Obtain help or the assistance of a crane when lifting heavy assemblies. Make sure the path of travel is clear.



PARTS HANDLING

When handling parts, wear appropriate gloves, eyeglasses and other safety equipment to prevent serious injury.

WELDING

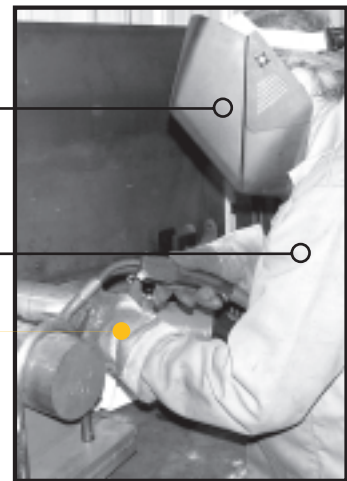
When welding, be sure to wear all personal protective equipment for face and eyes, and have adequate ventilation. When welding, protect spring beams and air springs from weld spatter and grinder sparks. Do not attach "ground" connection to springs.

Under normal use, steel presents few health hazards. Prolonged or repeated breathing of iron oxide fumes produced during welding may cause siderosis.

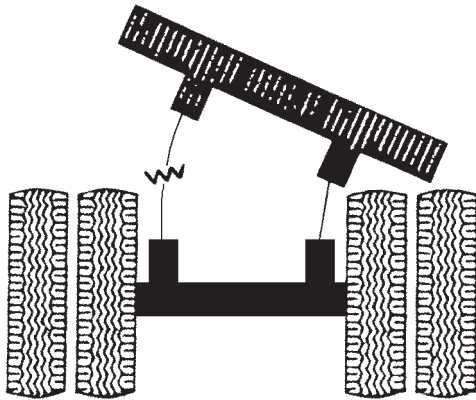
Welding Helmet

Welding Apron

Welding Gloves



WARNING



OVERLOADING

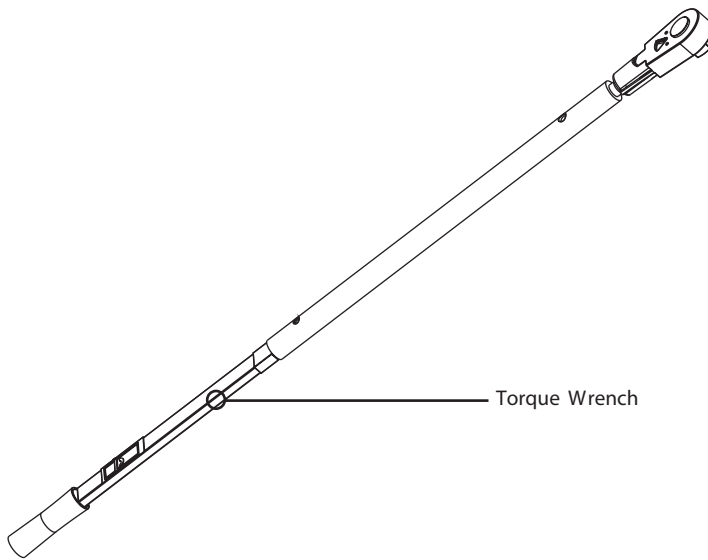
Overloading is the practice of transporting cargos that surpass the specified vehicle's ratings. Overloading can cause component failure, resulting in accidents and injuries.



This symbol indicates to the reader to use caution when seen and to follow specific requirements or warnings stated.



CAUTION: Specific torque requirements are recommended.



TORQUE

Proper tightening of the U-bolt nuts and alignment bolts are high priority items. A fastener system is considered "loose" any time the torque is found below required values. Failure to maintain the specified torque and to replace worn parts can cause component failure resulting in accident with consequent injury.

NOTE: It is extremely important after the first 1,000 to 3,000 loaded miles (1,600 - 4,800 kms) of operation, and with each annual inspection thereafter, that all of the bolt and nut tightening recommendations be followed. Any loose fasteners must be retorqued to comply with warranty requirements and to ensure long, trouble-free performance.

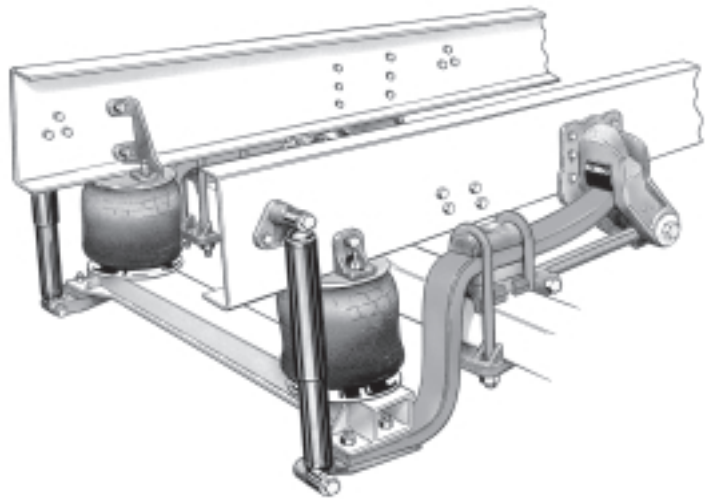
MODE L 102AR

The ReycoGranning Model 102AR is a four (4) point single axle / an eight (8) point tandem axle airspring tractor suspension which uses two (2) airsprings coupled to two (2) trailing taper-leaf beams per axle, and incorporates torque arms to position and align the axles. Best performance can only be achieved by proper installation and maintenance. Track rods are required for all axles.

1. Normally, prior to any installations at an OEM, engineering contacts between companies have been made, and all necessary information to make an installation has been exchanged. However, the following general steps are listed in the interest of all involved and should be included in an OEM plan to install the suspension.

2. Refer to ReycoGranning assembly drawing 85052 #2 (pg.M-5) showing the 8" (203mm) ride height for dimensions and component locations. Drawing 89391 shows the frame hole pattern for the 52" (1,321mm) tandem axle spacing for standard hanger patterns. Consult ReycoGranning Engineering or Sales Department for additional requirements.

3. The following instructions are for the "standard" single axle installation, 8" ride height, front engine configuration. Many other versions have been created, and are available upon request.



HANGER INSTALLATION

For Steps 3 through 8, refer to illustration on page I-5

3. Mark frame rails at centerline locations of hanger brackets. Cross-members are required at all hanger locations. Crossmembers are customer supplied.

Single axle is shown on page I-5. 52" (1,321mm) tandem axle spacing is standard. 54" (1,372mm) and 60" (1,524mm) spacings are optional.

4. Locate hangers (items 1 & 2) on proper vertical position on frame rails as shown below, while referencing dimension to axle centerline of vehicle.

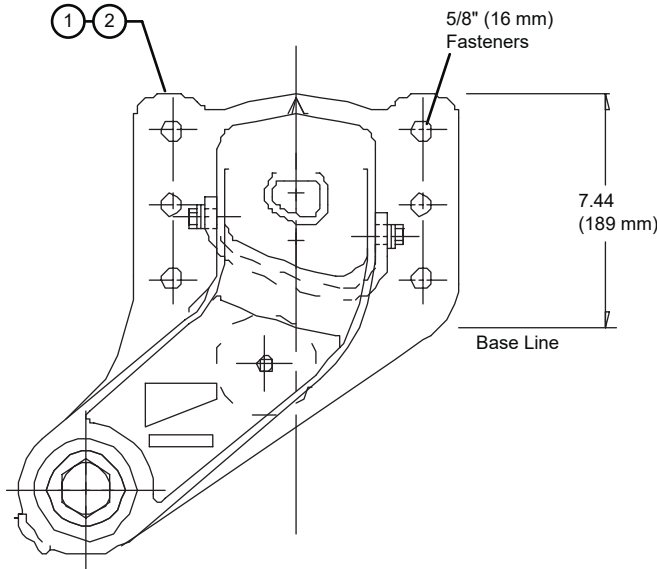
NOTE: Vertical hanger location must be as shown or be compensated by adjusting air spring height accordingly (to maintain proper pinion angles).

Hangers are furnished with standard drilled or special drilled holes.

5. Drill holes through frame rails for 5/8" bolts (16mm). Contact ReycoGranning Engineering for proper drawing number for bolt hole locations. Mount hangers (items 1 & 2) and crossmembers using Grade 8 fasteners. Fasteners are customer supplied.



CAUTION: Specific Torque requirements are needed.



UPPER FRAME PREP.

Air Spring Location

6. Locate and drill frame for airspring bracket assembly and mount brackets (item 33) on frame. See illustration pg. I-5. Fasteners are customer supplied.

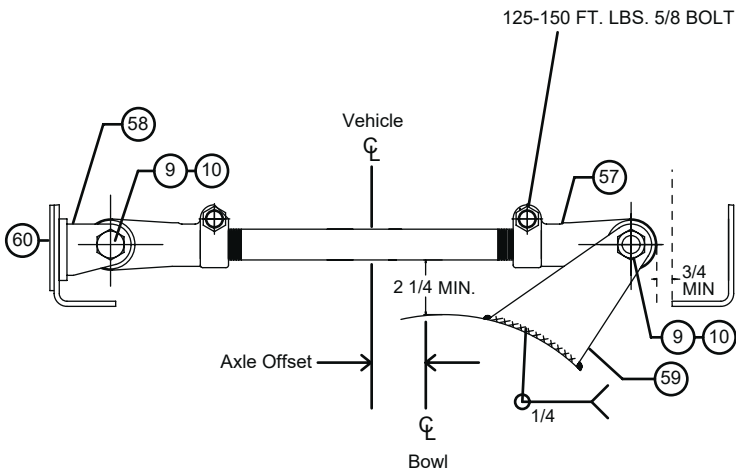
Shock Absorbers

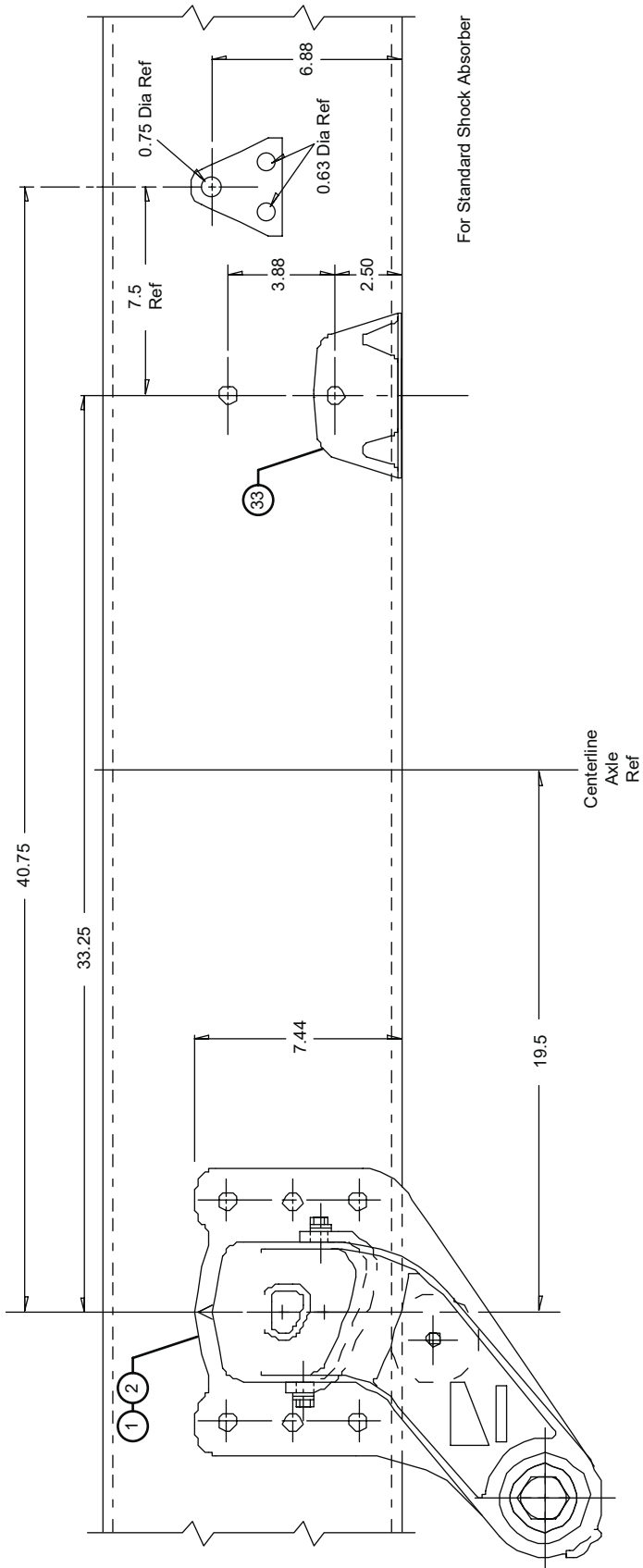
7. Locate and drill frame for upper shock absorber brackets (item 38) and mount brackets on frame. Contact ReycoGranning Engineering for proper drawing number for frame hole pattern. Fasteners are customer supplied.

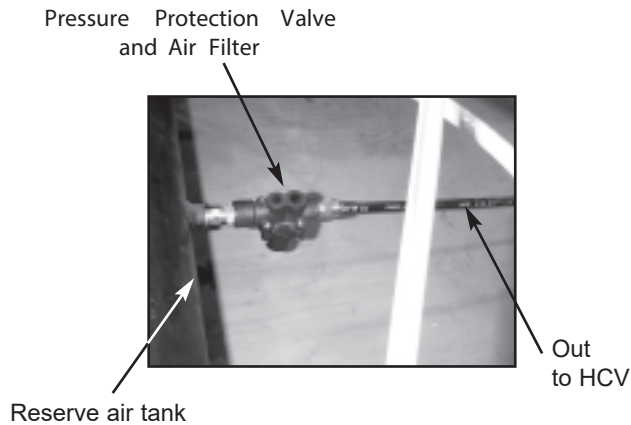
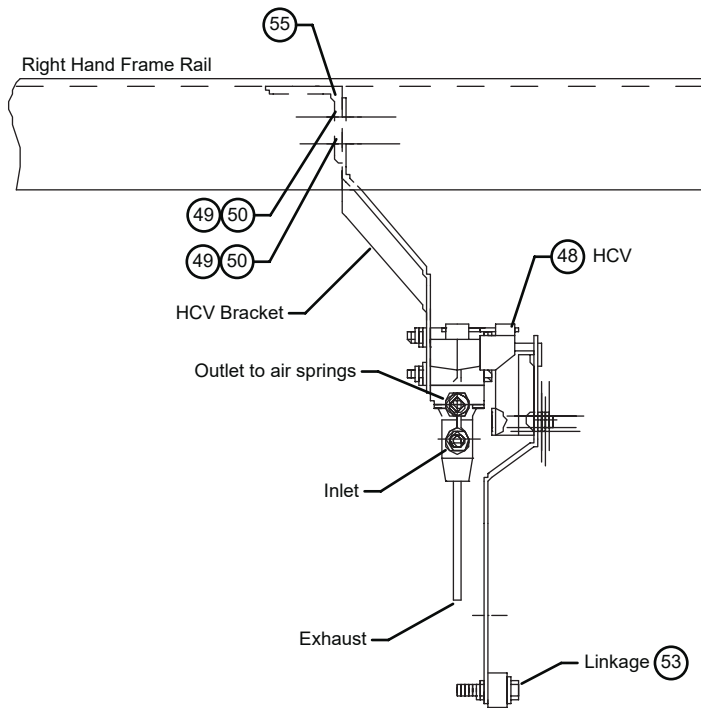
Track Rod

8. One track rod (item 57) is to be installed at the top of each axle bowl housing. Location to be determined by customer. ReycoGranning recommends that the axle bracket (item 59) always be located on the offset side of the vehicle centerline.

Locate and drill frame for track rod brackets (item 58) and loosely mount the brackets on frame rails. Fasteners are customer supplied. Location varies with axle angle and fixed or adjustable track rod. Backing plates for the track rod brackets (Item 60) are recommended, but are optional.







HEIGHT CONTROL VALVE/ AIR SYSTEM

9. One height control valve (HCV) (item 48) is used, regardless of the number of axles. The air springs on each side of the tractor are connected by 3/8" (9.5mm) minimum diameter tubing (customer furnished). Care must be taken to insure the HCV is positioned as shown below. The pressure protection valve and filter are installed between the HCV and the air reservoir.

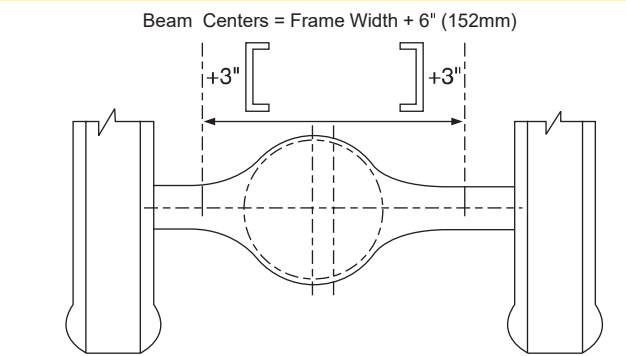
10. Install the HCV (item 48) to the Right Hand Frame Rail using the mounting brackets and fasteners furnished (items 49, 50, 51 & 55). Reyco Granning requires that the HCV be located on the forward axle of the tandem.

A bracket is provided and located on the lower air spring support assembly to aid in the connection of the HCV linkage arm.

11. Using customer supplied materials, connect the HCV to all air springs using 3/8" (9.5mm) diameter tubing. As with any pressure system, check for leaks and eliminate leakage, if present.

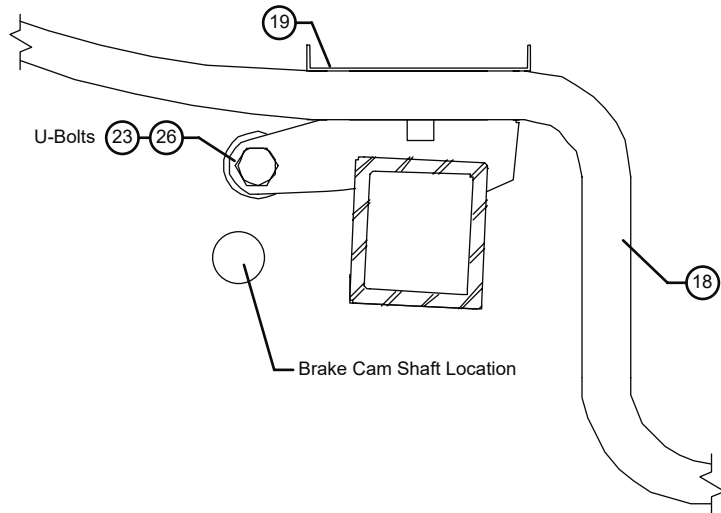
AXLE ASSEMBLY

12. Taperleaf beam (item 18) centers are frame width plus 6" (152mm). Establish beam centers on axle housings. If dowel pins are used, place axle seats in position on dowel pins located on axle. If dowel pins are not used, place axle seats on established beam centers.

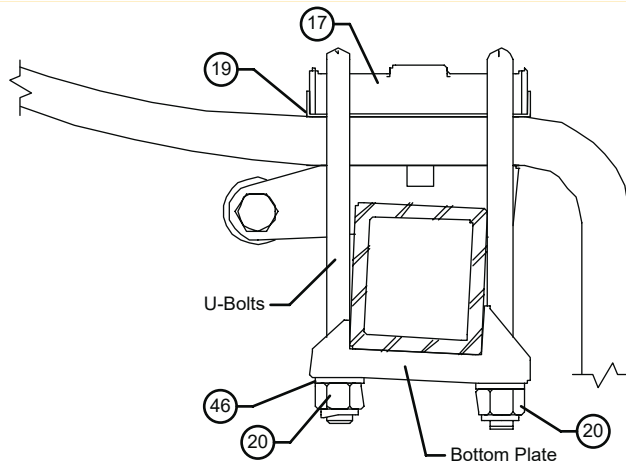


13. Position the spring beams (item 18) on the axle seats (items 23-26). Install a galvanized spring liner (item 19) on the top (tension) side of the spring beam.

Note: Brake cam shafts must be on forward side of axle for clearance. Be sure that the axle seats selected provide brake chamber and brake cam shaft assembly clearances.



14. Assemble the u-bolts (items 15, 16, 29 & 30), top plates (item 17), bottom plates (items 21, 22, 27, 28), washers (item 46) and nuts (item 20) into each group. Be sure liners (item 19) remain in proper position while loosely installing u-bolts. Do not torque u-bolt nuts at this time.



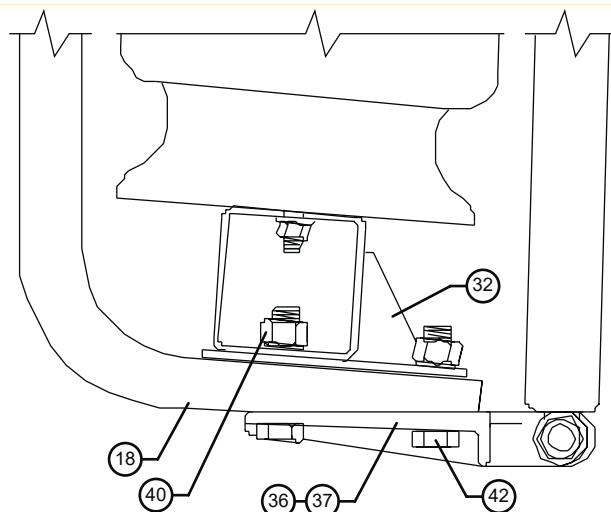
15. Install lower air spring support assemblies (item 32) and lower shock absorber brackets (items 36 & 37) loosely to spring beams.

NOTE: Lower shock absorber bracket is assembled at the rear side of each group as illustrated.

Square the spring beams to the axle assembly and torque u-bolt nuts (item 20) to 400-425 ft. lbs. (545-580 Nm). Tighten 3/4" capscrew nuts (item 40) to 400-425 ft. lbs. (545-580 Nm).



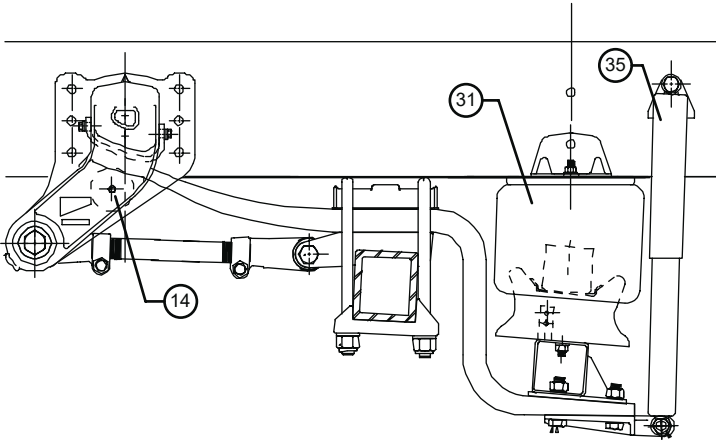
CAUTION: Specific Torque requirements are needed.



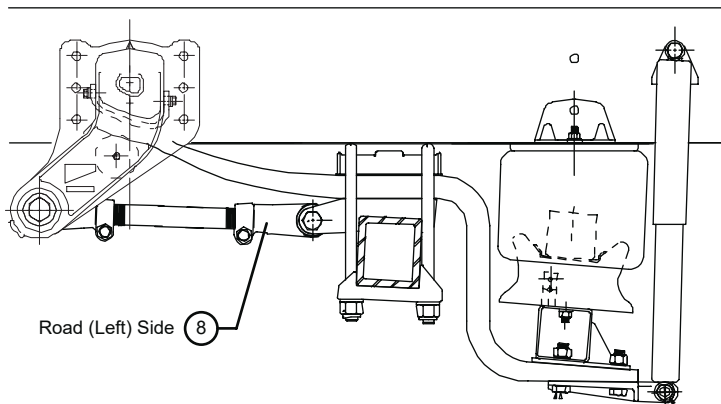
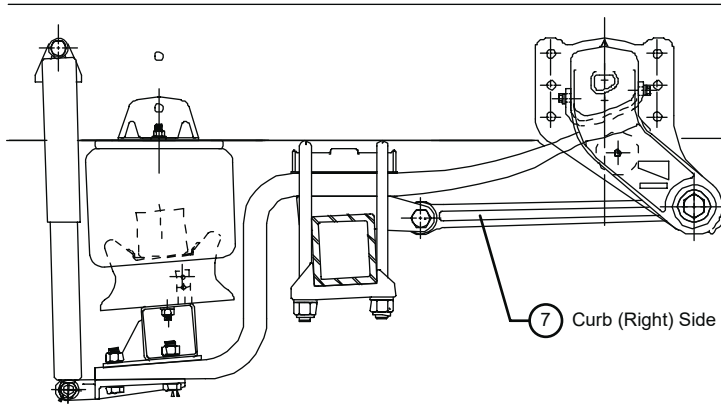
BEAM/AXLE ASSEMBLY INSTALLATION

17. Position the axle/suspension assembly under the vehicle with the spring beams resting in the hangers. See illustration.

Install air springs (item 31), shock absorbers (item 35), hanger rollers (item 14), using fasteners provided. (See assembly drawing.) Assemble fasteners, but do not torque yet.

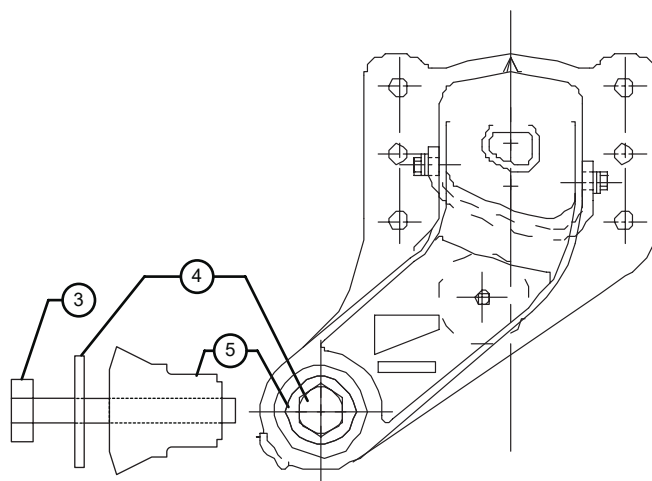


18. Set length of adjustable torque arm (item 8) equal to that of the rigid torque arm (item 7). Adjustable torque arms are for the roadside (left U.S.) of the vehicle, rigid for the curbside (right U.S.). Install torque arms using the following procedure.



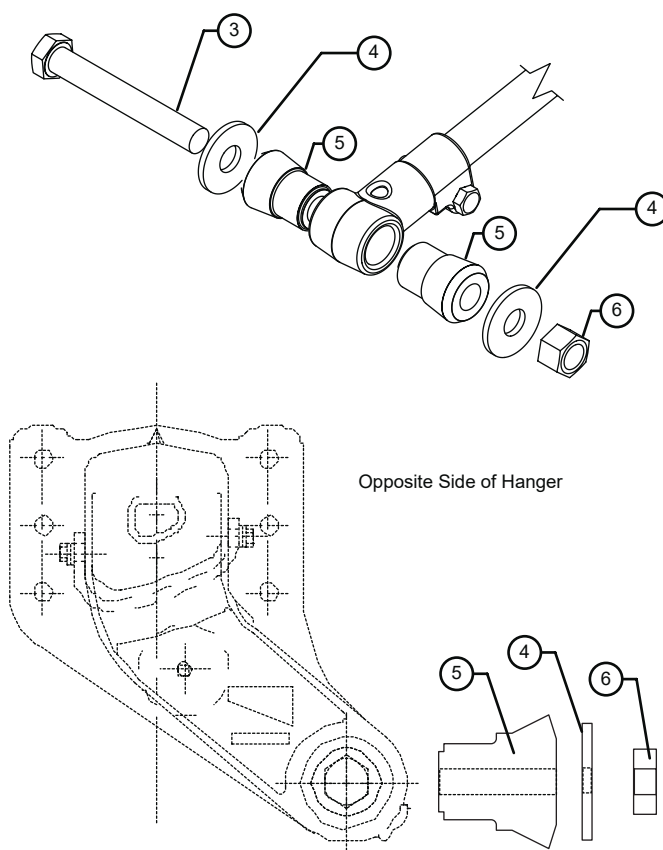
HANGER END T/A ASS'Y

19. Place flat compression washer (item 4) and rubber bushing (item 5) on torque arm bolt (item 3) and insert through the outside of the hanger and torque arm end. Use a lubricant that makes rubber slippery while wet but will dry. DO NOT USE PETROLEUM PRODUCTS ON BUSHINGS. Example: P80 rubber lubricant and water or soap and water.



20. Lubricate and place the second rubber bushing and flat compression washer on the bolt from the opposite side of the torque arm. Use rubber lubricant.

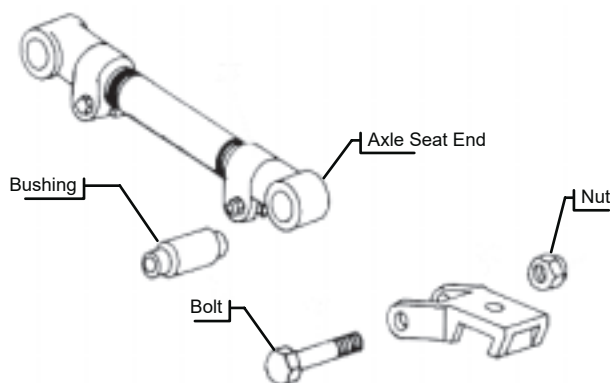
NOTE: Both ends of torque arm should be loosely assembled before tightening locknuts in steps 21 and 22.



21. Tighten the nut (item 6) to 500-525 ft. lbs. (680-715 Nm). There should be an even build-up of rubber on each side of the torque arm between the torque arm and the hanger.

NOTE: Do not tighten the adjustable torque arm clamping fasteners until after final alignment.

NOTE: It is desirable to have suspension at ride height when steps 21 and 22 tightening are done.

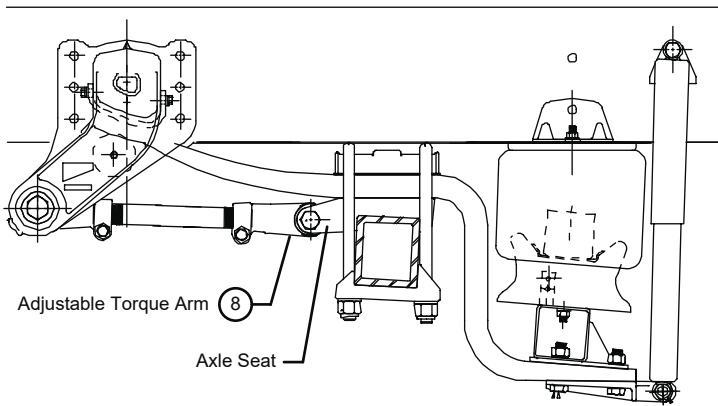


102AR (2 Hanger Bushings & 1 Axle Seat Bushing)



CAUTION: Specific Torque requirements are needed.

AXLE SEAT END T/A ASS'Y

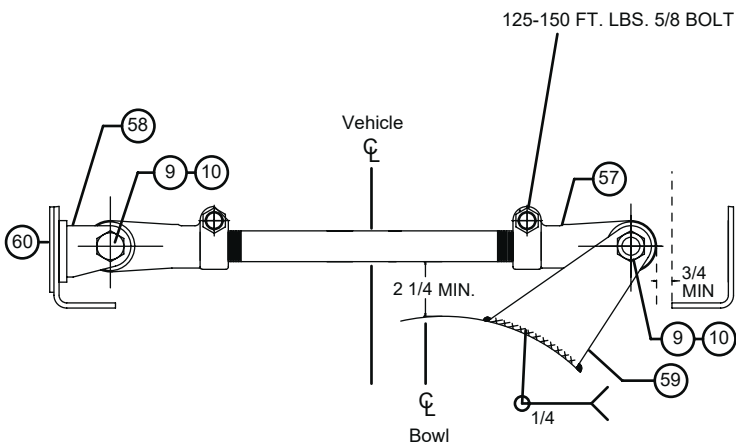


22. Install the axle seat end of the torque arm into the axle seat (bushing, item 11, is already installed in torque arm) with bolt (item 9) and nut (item 10). Torque to 400-425 ft. lbs. (545-580 Nm). (Adjustable side shown.)



CAUTION: Specific Torque requirements are needed.

TRACK ROD ASSEMBLY



24. Install the track rod(s) (item 57) into their proper bracket (item 58) on the frame. Loosely install item 59 on track rod bracket.

Check to see that no binding is occurring between the spring leaf beams and hangers.

With track rod level and frame at proper ride height, locate item 59 on axle and weld in place.

Torque after adjustments are made and proper ride height is maintained.

NOTE: If beams are in contact with sides of hangers, center them by adjusting length of lateral track rod(s).

HEIGHT CONTROL SYSTEM CHECKOUT

25. Install the linkage for the height control valve (item 48) between the valve and the bracket (item 52) on forward axle of tandem. Lower bracket (item 52) is to be mounted on the air spring support assembly (item 32).

26. Position unladen tractor on a level floor with tank air pressure maintained in excess of 70 psi. Disconnect the link and move the control valve (item 48) actuating lever to insure all the air is exhausted from the air springs.

27. Connect the link and let the airsprings fill with air until it shuts off. Measure distance from axle center to frame and adjust to proper mounting height as determined by OE Engineering.

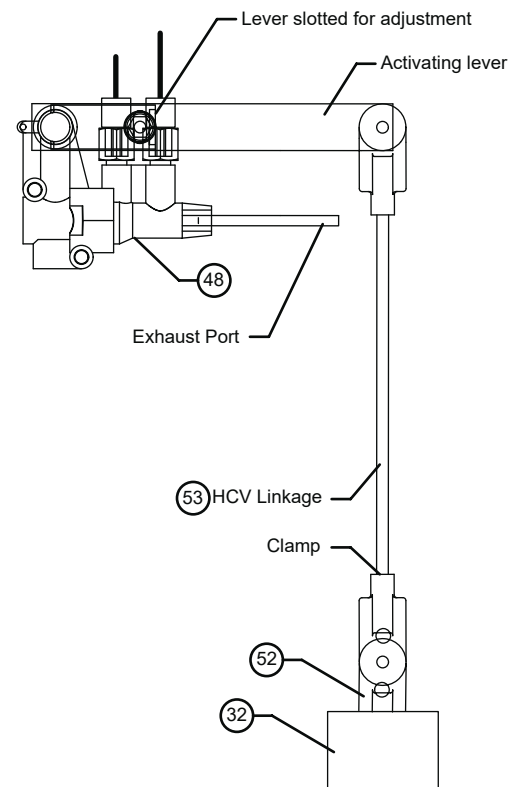
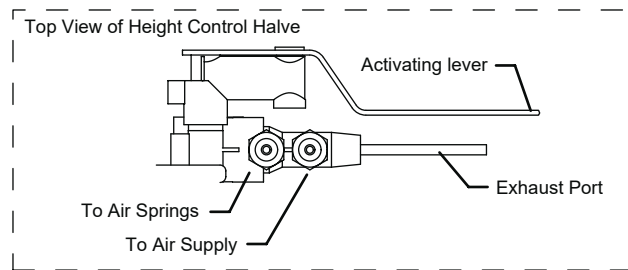
Loosen the hose clamp at the control valve and carefully move the link until the proper dimension is reached.

28. Recheck by disconnecting the link and deflating the airsprings about half way. When the link is reconnected, the airspring should reinflate to the proper ride height.

Torque all linkage fasteners to 5 ft. lbs. (7 Nm).

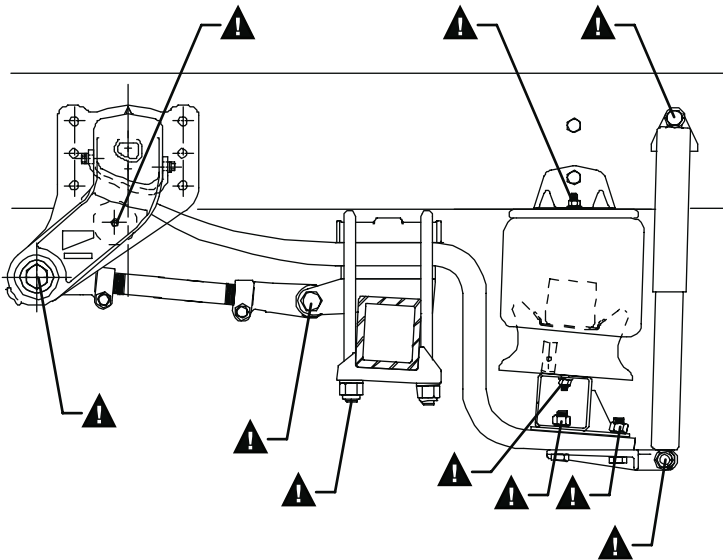


CAUTION: Specific Torque requirements are needed.



PRELIMINARY ALIGNMENT

29. Position the frame at the desired mounting height and perform preliminary rough alignment by centering axle laterally, and aligning axles squarely with respect to frame to within 1/4" (6.4mm) (right and left compared).



FINAL ALIGNMENT AND INS TALL ATION

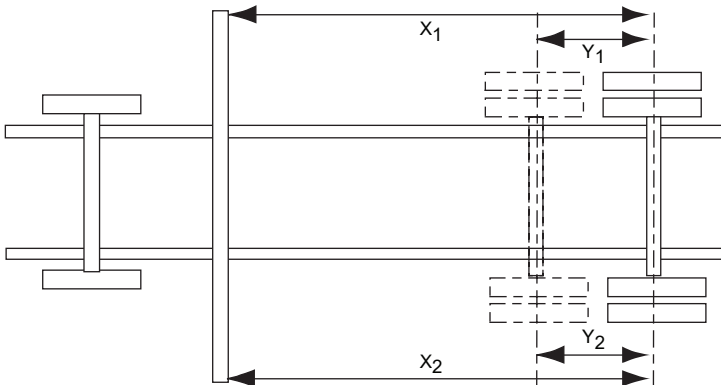
30. At this point, retorque u-bolts, to 400-425 ft. lbs. (545-580 Nm) and torque all other loose fasteners to the values listed on pg. M-1. Gradually bring the torque up in steps to avoid disturbing any alignments.



CAUTION: Specific Torque requirements are needed. See page m-1.

31. With the air system operating, perform final alignment by adjusting torque arm lengths to align within 1/8" (3.2mm) (right and left compared).

Tighten the adjustable torque arm clamping fasteners to 125 to 150 ft. lbs. (170-205 Nm). Axle spacing should be $\pm 1/16"$ (1.6mm).



See page M-2 for additional alignment details.



CAUTION: Specific Torque requirements are needed.

[illegible]

MAINTENANCE SCHEDULE _____○ m.1

IN SERVICE SUSPENSION ALIGNMENT _____○ m.2

TROUBLE SHOOTING GUIDE _____○ m.3

 Air _____○ m.3

 Height Control Valve _____○ m.3

 Fasteners _____○ m.4

 Bushings _____○ m.4

 Rough Ride/Air Springs _____○ m.4

 Shocks _____○ m.4

DRAWING - 85052 #2 _____○ m.5

BILL OF MATERIAL _____○ m.6

TABLE OF OPTIONS _____○ m.8

TYPICAL OF OPTIONS, PARTS & KITS _____○ m.9

MAINTENANCE RECORD _____○ m.10

The Reyco Granning Model 102AR Air Ride Suspension by design, requires a minimum of maintenance. Suspension systems require periodic checks to assure continued, trouble-free performance.

RECOMMENDED MAINTENANCE SCHEDULES

1. Pre-service inspection
2. First service inspection, after 1,000-3,000 miles, (1600-4,800 km).
3. PM inspections, concurrently with required annual inspection.
4. During replacement of any service parts.
5. Upon discovery of any loose components.

TORQUE REQUIREMENTS (Verify with each inspection.)

1. Tighten 7/8" u-bolt nuts	400-425 ft lb	545-580 Nm
2. Tighten 3/4" lower cross support nut	400-425 ft lb	545-580 Nm
3. Tighten 3/4" shock absorber end nut	150-175 ft lb	205-240 Nm
4. Tighten 1" torque arm end nut, hanger end	500-525 ft lb	680-715 Nm
5. Tighten 7/8" torque arm end nut, seat end	400-425 ft lb	545-580 Nm
6. Tighten 5/8" torque arm/ track rod clamp nut	125-150 ft lb	170-205 Nm
7. Tighten 3/4" top air spring mount fasteners	40-45 ft lb	55-60 Nm
8. Tighten 1/2" top & bottom air spring mount fasteners	25-30 ft lb	35-41 Nm
9. Tighten 1/2" beam retainer bolt	70-80 ft lb	95-110 Nm
10. Tighten 7/8" track rod end nut	400-425 ft lb	545-580 Nm
11. Tighten 1/2" track rod bracket nut	110-120 ft lb	150-165 Nm
12. Tighten 1/4" air valve and linkage nut	5 ft lb	7 Nm

VISUAL INSPECTION

1. Loose or missing fasteners, especially U-bolt nuts.
2. Damaged hangers or axle connection brackets.
3. Axle and spring alignment.

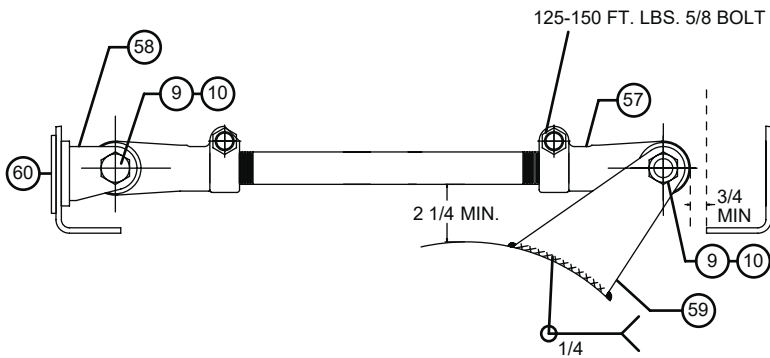
All torque values are with clean, dry, fasteners, and should only be verified with a quality calibrated wrench, of known accuracy. Failure to follow these recommendations could void the warranty. Failure to maintain the specified torque values and/or to replace worn parts, can cause component and/or system failure resulting in an accident with consequent injury.

ft lb = Foot - Pounds; Nm = Newton - Meters

Drive Axle Air-Ride Suspension System

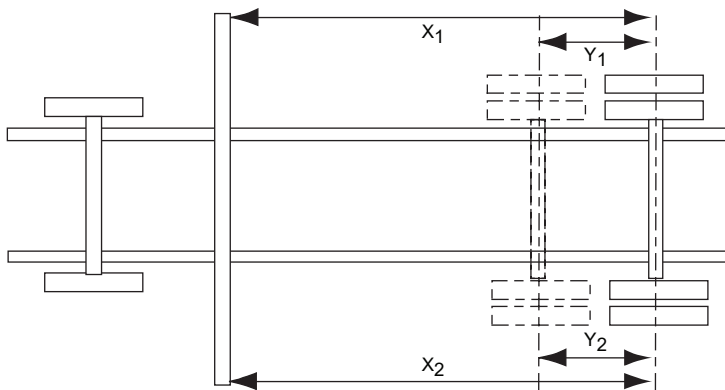
IN SERVICE SUSPENSION ALIGNMENT INSTRUCTIONS

Place unloaded tractor on a level floor area. Move it back and forth several times, slowly and without using brakes, to free all suspension joints.



Chock front wheel with tractor brakes released. Before alignment, make certain that all beams are not binding; that u-bolts and torque arm bolts are torqued to the manufacturers specifications, and all bushings are in good condition.

NOTE: If beams are in constant contact with sides of hangers, center them by adjusting length of lateral track rod(s).



Clamp an 8' (2,438mm) piece of straight bar stock or angle iron securely after positioning it squarely across the frame. (The use of a carpenter's square is recommended to be certain the bar is square to the frame).

The cross bar should be positioned as far forward of the drive axle as room will permit. Beginning on the fixed torque arm side, measure from the bar stock to the centerline of the rear drive axle on both sides.

If the measurements, x1 and x2, vary more than 1/8" (3.2mm), alignment adjustment should be made through the adjustable torque arm side. After aligning, tighten the 5/8" (15.9mm) adjustable torque arm clamp bolts to 125-150 ft. lbs. (170-205 Nm).



CAUTION: Specific Torque requirements are needed.

Once the rear drive axle is properly aligned, the front axle can then be aligned to the rear with the use of a standard trammel bar within $\pm 1/16"$ (1.6 mm).

Following the alignment of both axles, it is recommended that it be driven through a short series of turns and then returned to the shop and the alignment rechecked, after again freeing all suspension joints by moving it back and forth several times.

Check the alignment after the first 1,000- 3,000 (1,600-4,800 km) loaded miles of operation and during each annual inspection.

TROUBLE SHOOTING GUIDE

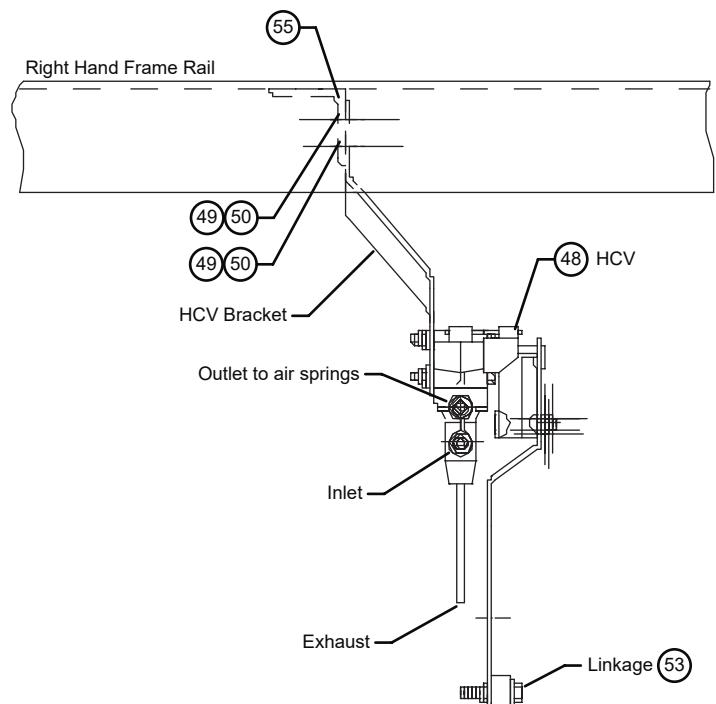
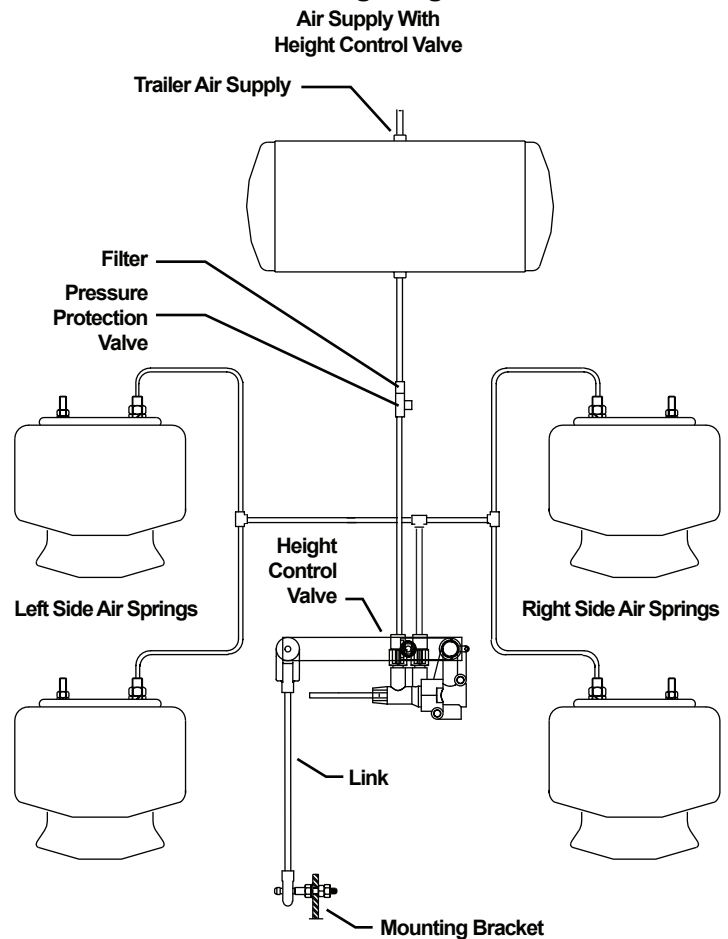
Air

Bags won't inflate (A) Check air supply at the height control valve. If supply is good, (B) check to see if air is going thru the valve when it is actuated. Majority of problems are found at this point. If air is going thru the valve, (C) check for blockage or a pinched airline to the air bags.

Height Control Valve

Always exhaust air out of the system and allow the unit to raise to the level the valve is set to maintain. This will help maintain a consistent method for the maintenance of ride height. Setting the ride height should be done with the vehicle on level ground. See pg. I-12 for adjustment procedure.

Plumbing Diagram



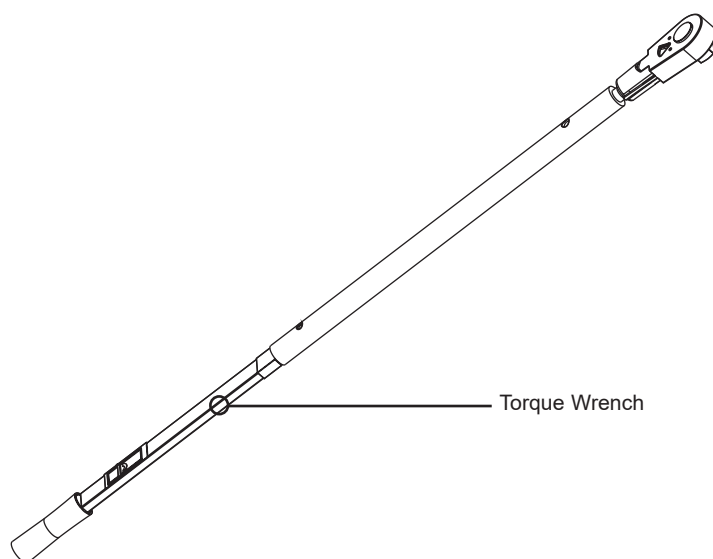
MAINTENANCE KIT

The following item numbers will help when maintaining parts for the model 102AR suspension.

TK15161 - Wear Pad Kit (2) - 102AR

TK19182 - Spring Rollers Rebushing Kit - 102AR

TK21640T - Hanger Bushing Kit - 102/102W/102AR



FASTENERS

Loose fasteners need immediate attention. Check components for wear and be sure holes are not worn or egg shaped. When replacing be sure threads are clean, lubricated and not deformed; consult the maintenance section for the correct torque specification and replace any fastener which is damaged or won't stay torqued. If bolts need to be replaced be sure to use the same grade of fastener.

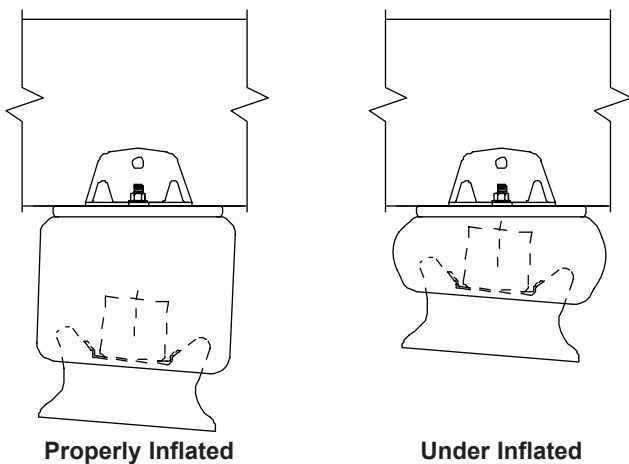


CAUTION: Specific Torque requirements are needed.



BUSHINGS

Inspect rubber bushings for large splits, tears and major wear. Rubber is attacked by sun, oils and greases. Replace any bushings which have the above damage.

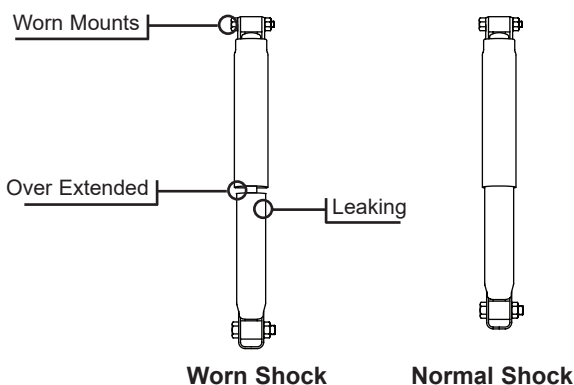


ROUGH RIDE

Check the air supply to the air springs. Visually check the air springs for proper ride height. See picture at right.

AIR SPRINGS

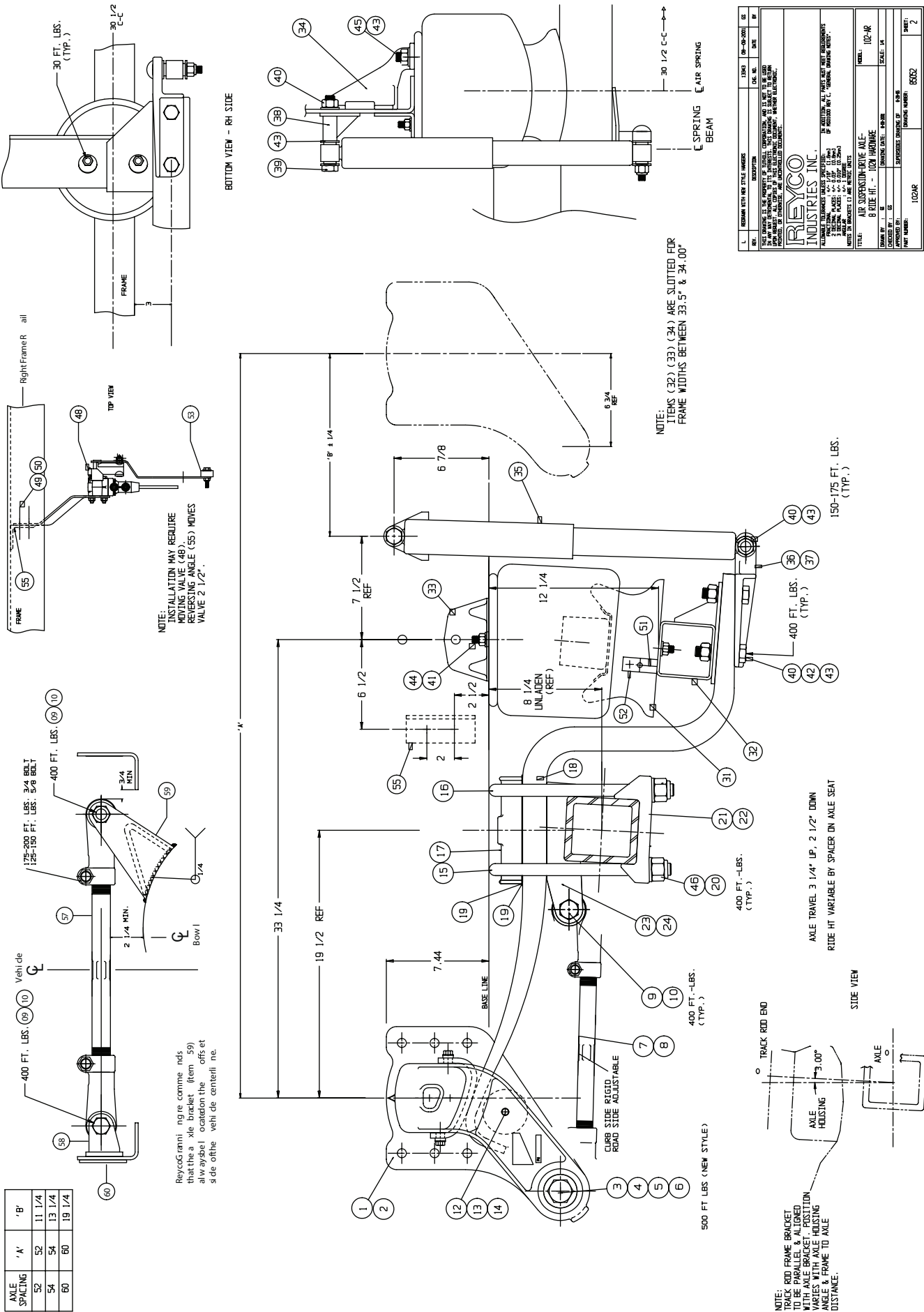
The air springs are equipped with internal bump stops for safety. However, do not operate the loaded unit on the bump stops for any extended period of time, except to move the unit to a repair facility.



SHOCKS

Shocks normally fail due to over extension. Check the mounting bolts to be sure no damage to the mounts has occurred. Shock replacement must be done with shocks recommended by the suspension or shock manufacturer. Shocks which are leaking badly need to be replaced immediately. A small amount of seepage, however, is not necessarily a sign of a defective shock absorber.

Maintenance Instructions Model 102AR



L	REMARKS WITH NEW STYLE NUMBERS	12345	16-20-2001	15
REV	DESCRIPTION	DATE	DATE	BY
1	THIS DRAWING IS THE PROPERTY OF REYCO INDUSTRIES, INC. AND IS NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT PERMISSION IN WRITING FROM REYCO INDUSTRIES, INC.			
REYCO INDUSTRIES, INC.				
VALLEYVIEW, INDIANA 47581-1000				
IN ADDITION, ALL PARTS MUST MEET REQUIREMENTS OF FEDERAL MOTOR VEHICLE SAFETY STANDARDS (FMVSS) AND NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION (NHTSA) REGULATIONS.				
TITLE: AIR SUSPENSION-DRIVE AXLE-8 RIDE HT. - 102AR				
DRAWN BY: 102AR				
CHECKED BY: 102AR				
APPROVED BY: 102AR				
DRAWING NUMBER: 85052				
SHEET: 2				

ITEM	PART NUMBER	DRAWING NO.	DESCRIPTION	SIN.	TAN.
1	22521-01	96039	Hanger & Pad Assembly - Left	1	2
2	22521-02	96039	Hanger & Pad Assembly - Right	1	2
3	23882-01	62158	Bolt - Torque Arm	2	4
4	T1724	67007	Washer - Torque Arm - Hanger	4	8
5	2123801	94105	Bushing- Torque Arm - Hanger	4	8
6	T5495	63153	Locknut - Torque Arm - Hanger	2	4
7	1101203	75043	Torque Arm - Rigid	1	2
8	1518601	84118	Torque Arm - Adjustable - (Cast)	1	2
9	1003301	72003	Bolt - Torque Arm - Seat	2	4
10	1009201	72044	Locknut - Torque Arm - Seat	2	4
11	0972901	70115	Bushing - Torque Arm - Seat Included in T.A assy	0	0
12	T3099	62158	Bolt - 1/2 - 20 - UNF X 4-1/2"	2	4
13	T1705	62159	Lockwasher - 1/2"	8	16
14	1367705	80110	Rubber Roller - 3-1/2"	2	4
15	1628901	79027	U-Bolt - Front Axle 12-1/2"	2	2
16	1624401	79027	U-Bolt - Front Axle 13"	2	2
17	0867701	68168	Top Plate	2	4
18	1567601	86007	Taper Leaf & Spring Beam	2	4
19	1681009	94031	Spring Liner - Top	2	4
20	2068801	93281	Nut - 7/8"	8	16
21	18781-05	90136	Bottom Plate - Front - Left	1	1
22	18781-05	90136	Bottom Plate - Front - Right	1	1
23	1988101	92100	Axle Seat - Front - Left Item 47 to be welded to seat if required	1	1
24	1988101	92100	Axle Seat Front - Right	1	1
25	1988401	92103	Axle Seat - Rear - Left	0	1
26	1988401	92103	Axle Seat - Rear - Right	0	1
27	18784-05	90138	Bottom Plate - Rear - Left	0	1
28	18784-05	90138	Bottom Plate - Rear - Right	0	1
29	16289-01	79027	U-Bolt - Rear Axle - 12-1/2"	0	2
30	1624401	79027	U-Bolt - Rear Axle - 13"	0	2
31	1288401	79167	Airspring - L X 8	2	4
32	1576601	86085	Airspring Support Assembly	1	2
33	1825802	93335	Bracket - Outboard Airspring	2	4
34	1825901	89467	Bracket - Inboard Airspring	2	4
35	1288701	79168	Shock Absorber	2	4

Maintenance Instructions Model 102AR

ITEM	PART NUMBER	DRAWING NO.	DESCRIPTION	Sin.	Tan.
36	2005401	92220	Bracket, Lower Shock, RH	1	2
37	2005501	92220	Bracket, Lower Shock, LH	1	2
38	1825601	89465	Bracket, Upper Shock Abs.	2	4
39	1524601	82069	Hex Bolt, 3/4" UNF X 6"	2	4
40	1434401	93281	Lock Nut, 3/4" UNF	8	16
41	1001601	93403	Flat Washer, 1/2"	2	4
42	1566901	82609	Hex Bolt, 3/4" UNF x 3"	4	8
43	2085201	93403	Hardened Washer, 3/4"	18	36
44	1292001	93280	Hex Nut, 1/2"-13 UNC	6	12
45	0821101	93280	Hex Nut - 3/4" UNF (Not Shown)	2	4
46	T7292	71078	Flat Washer - 7/8"-hardened	8	16
47	Varied	-	Spacer Ride-Hieght	2	4
48	23348-03	97157 #1	Height Control Valve (HCV)	1	1
49	12911-01	62158	Hex Bolt - 1/4 - 20 UNC x 1"	3	3
50	12912-01	93282	Hex Nut - 1/4 - 20 UNC	3	3
51	11152-01	73126	Hex Screw - 1/4, Self-Tapping	2	2
52	19750-01	92028	Link BKT, HCV Lower	1	1
53	25238-01	99249	Link - Replacement (Not Shown)	1	1
55	25627-01	99587	Mounting Angle - HCV	1	1
56	12915-03	79189	Protection Valve and Filter (Not Shown)	1	1
57	16429-01	87109	Track Rod, Adjustable	1	2
58	18273-01	87199	Frame Bracket, Track Rod	1	2
59	18251-02	87202	Axle Bracket, Track Rod	1	2
60	21370-01	94177	Backing Plate, Track Rod	1	2

Table of Options*				
Pinion Angle	Axle Seat Front Left	Axle Seat Front Right	Axle Seat Rear Left	Axle Seat Rear Right
3	1988101	1988101		
10.5			1988401	1988401
3	1988101	1988101		
12			2081201	2081201
2	2080801	2080801		
13			2081301	2081301
*Typical, most used axles seats, for Eaton 404, or RW40-145.				
Pinion Angle	Bottom Plate Front Left	Bottom Plate Front Right	Bottom Plate Rear Left	Bottom Plate Rear Right
3	18781-05	18781-05		
10.5			18784-05	18784-05
3	18781-05	18781-05		
12			18784-05	18784-05
2	18977-05	18977-05		
13			18784-05	18784-05
*These are typical options. More options available. Consult ReycoGranning Customer Service, 1-800-753-0050.				
Mt. Ht.	U-bolt Front of Axle		U-bolt Rear of Axle	
8"	16289-01		16244-01	

Maintenance Instructions Model 102AR

Typical Options, Parts and Kits needed to complete a suspension (Reference Assembly Drawing 85052#2)		
Single Axle (23,000 lb. Ground Load Rating)		
Qty.	Kit Number	Description
1	TK16261	Hanger / Hardware Kit
1	TK17992	Airspring / Hardware Kit
1	TK23843	Height Control Valve Kit
1	TK17956	Track Rod Kit
1	Contact Factory	Axle Seat Kit
1	1576601	Airspring Support Assy.
2	1567601	Spring Beam
Tandem Axle (40,000 lb. Ground Load Rating)		
Qty.	Kit Number	Description
1	TK16260	Hanger Kit
1	TK16259	Hardware Kit
2	TK17992	Airspring / Hardware Kit
1	TK23843	Height Control Valve Kit
2	TK17956	Track Rod Kit
1	Contact Factory	Axle Seat Kit
1	TK19167	Airspring Support Assy.
4	1567601	Spring Beam
Tandem Axle (46,000 lb. Ground Load Rating)		
Qty.	Kit Number	Description
1	TK16260	Hanger Kit
1	TK16259	Hardware Kit
2	TK20219	Airspring / Hardware Kit
1	TK23843	Height Control Valve Kit
2	TK17956	Track Rod Kit
1	Contact Factor	Axle Seat Kit
1	TK19167	Airspring Support Assy.
4	1567603	Spring Beam

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Reyco® **Granning®** **S U S P E N S I O N S**

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