



SILVER EAGLE

MANUFACTURING COMPANY

EAGLE SERIES – VA DOLLY

OPERATION PROCEDURES

MAINTENANCE INSTRUCTIONS

PARTS LIST

FOR

OLD DOMINION FREIGHT LINES



Model: VAST20W

Unit Number: 843001 – 843040

VIN: 6011 – 6050

Part Number: 15588

Manufactured: August 2003

TABLE OF CONTENTS

FIFTHWHEEL OPERATION INSTRUCTIONS	PAGE 2
REQUIRED DOLLY MAINTENANCE	PAGE 3
FIFTHWHEEL MAINTENANCE INSTRUCTIONS	PAGE 4 – 7
DRAWBAR EYE REMOVAL & INSTALLATION	PAGE 8
FRAME ASSEMBLY PARTS	PAGE 9 – 10
FIFTHWHEEL PARTS	PAGE 11 – 12
AIR SYSTEM PARTS	PAGE 13
SUSPENSION PARTS	PAGE 14
ELECTRICAL PARTS	PAGE 15

SILVER EAGLE FIFTH WHEEL OPERATING INSTRUCTIONS



Coupling

1. Make sure jaw is locked open and trailer is at proper height.
2. Back dolly slowly under trailer until jaw locks kingpin and handle moves to the center of the dolly.

Uncoupling

1. With vehicle at rest in a relaxed condition and landing gear down, (not being pushed together or pulled apart), pull fifth wheel handle upward and outward to lock the fifth wheel open.
2. Pull dolly slowly out from under the trailer.

Note

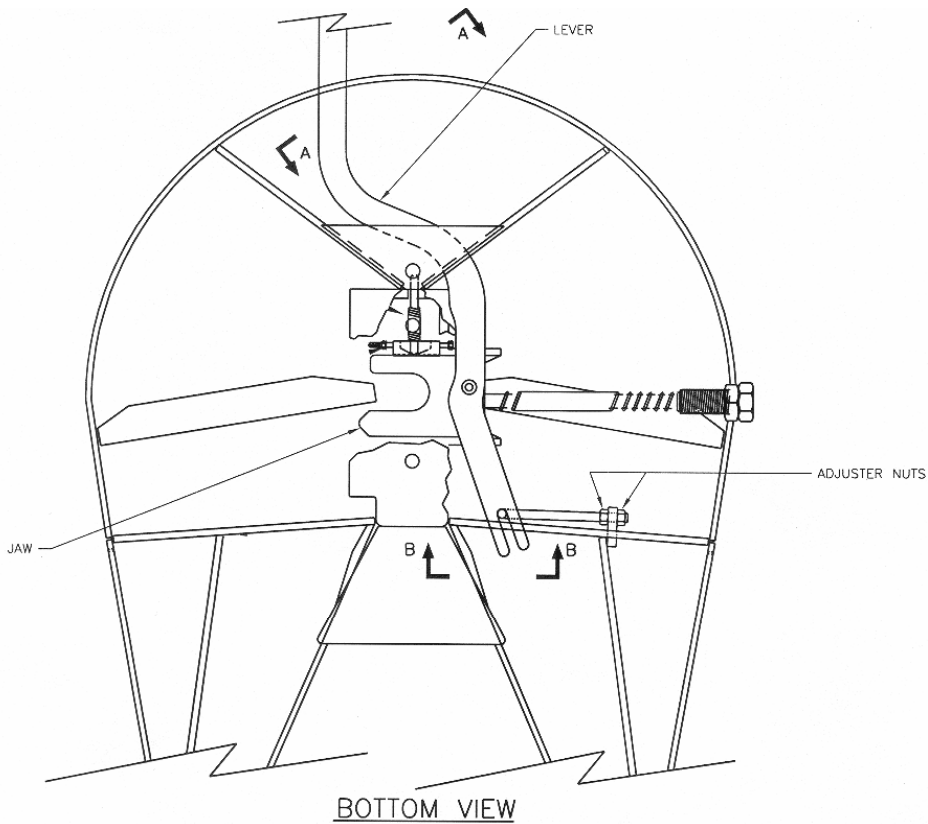
If the handle will not pull outward when the vehicle is in a relaxed condition, use landing gear to raise trailer and unload the dolly fifth wheel.

***Contact Silver Eagle Customer Service
for a video tape on coupling and uncoupling twin/double trailers***

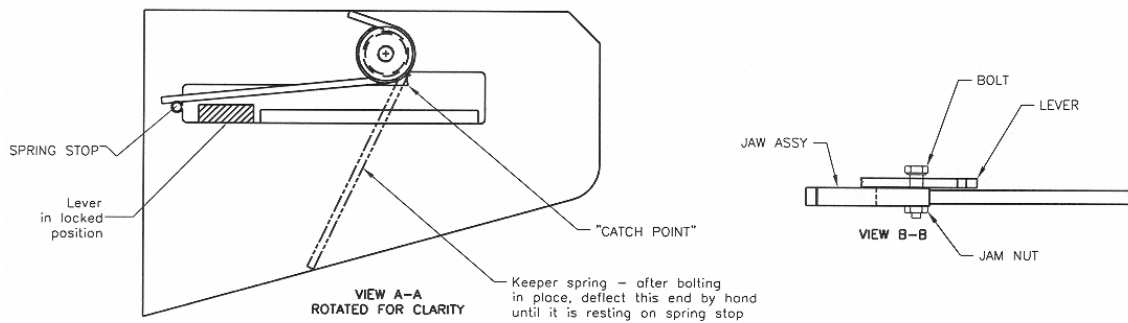
SINGLE AXLE CONVERTER DOLLY REQUIRED MAINTENANCE

*Refer to illustration, following, for part descriptions.
Refer to Parts Catalog for part numbers.*

First 50 - 100 Miles	Consult wheel maintenance instructions. Check wheel nut torque. <i>Recheck at every dismount.</i>
Every 1,000 Miles	Check axle maintenance instructions. Check axle for oil levels and leaks.
First 5,000 miles or 30 days	<ol style="list-style-type: none">1) Tighten the fifth wheel/leaf spring U-bolts to 375 lbs/ft torque. Tighten the axle seat bolts to 420 lbs./ft. torque.2) Inspect springs for broken leaves and missing or broken spring keepers or keeper bolts.3) Inspect drawbar eye assembly and tighten shank nut (Item 14) as required. NOTE: Tighten shank nut until shock absorber bushings bulge almost to outer edge of shock housing. Be sure to reconnect the shank nut safety wire after tightening shank nut.4) Tighten all other fasteners as required. Replace any worn, stripped or missing fasteners with appropriate grade and strength.5) Inspect all air lines and electrical cables for chafing, kinking, leakage or damage.6) Inspect fifth wheel table assembly for bent, worn, cracked or excessively loose parts. Replace any cracked parts and worn or missing fasteners, readjust or tighten fasteners as necessary.



BOTTOM VIEW



PERFORMANCE TESTING/ADJUSTMENTS

1. Pull the lever into the uncoupling position. This is where the lever is pulled out and held up by the "Catch Point" indicated in view A-A. If the lever won't stay up, the adjuster nuts on the adjuster at the back end of the lever are probably screwed in too far. Back them off until lever will stay on the catch point.
2. Test the 5th wheel for proper coupling with a test kingpin. Test with the lever in the uncoupling position. If it doesn't release from the "catch point", then the adjuster nuts probably need to be screwed in further.
3. With the jaw closed or in the coupled position, pick the lever up and out of the locked position. Hold the lever just shy of falling back into the locked position. Release the lever to ensure that it passes freely into the locked position.
4. When 5th Wheel functions properly, tighten the lever adjuster locknut securely.

ADJUSTMENT OF LEVER & JAW ASSEMBLY

1. Release Jam Nut (refer to View B-B)
2. Tighten bolt until lever is secure against Jaw assembly.
3. Loosen bolt ¼ turn or until assembly moves freely.
4. While holding bolt secure from turning, tighten jam nut.

Silver Eagle Fifth Wheel Maintenance

Jaw Removal (Refer To Diagram D)

1. Make sure the jaw is closed. If not, it can be closed by pushing the trip block (16) forward with a rod or bar. The jaw should be all the way across the center casting (the handle will be in). **Caution: Keep your hands clear of the jaw, it is spring-loaded.**
2. Using a pair of vise grips, clamp the trip lock rod in front of the guide hole on 5th wheel center casting (16) so as to prevent it from moving aft when jaw is removed.
3. When removing the guide bolt (25), applying an anti-seizing compound to the exposed threads often makes the removal process easier.
4. Remove the jaw spring (22) by pulling it through the push rod guide nut.
5. Pull the fifth wheel lever (19) all the way out.
6. Disconnect the fifth wheel lever (19) from the jaw/pushrod assy (18).
7. Remove the jaw/pushrod assy (18) from the 5th wheel table.
8. Lubricate and install the replacement jaw/pushrod assy (18) in the table making sure the pointed tine on the jaw is to aft end of the dolly
9. Slide jaw/pushrod assy in place without spring. Align hole in jaw with mating hole in lever.
10. Apply loctite 242 medium strength thread adhesive or equivalent to cleaned threads of capscrew (23) and jam nut.
11. Thread capscrew (23) into jaw/pushrod assy (18) with two washers (20) between the capscrew head & the lever. Torque the jaw bolt to approximately 70 ft-lbs. The lever should have minimum clearance to allow free rotation against the jaw without binding through its full travel.
12. Tighten the jam nut (1/6-1/4) turn – after contacting the jaw while ensuring the capscrew does not turn.
13. Slide pushrod spring (22) on push rod of the jaw
14. While holding lever back far enough so the jaw pushrod protrudes into the guide nut, tighten the guide nut (25) securely
15. Remove the vise grips from the trip block rod.
16. Test the table to ensure the jaw opens and closes properly.

Jaw Spring Removal/ Reassembly (item 22)

- Complete steps 1 through 4 of Jaw Removal.
- Completes steps 13 through 17.

Lever Removal/ Reassembly (item 19)

- Remove lever (19)
- During Reassembly make sure the 2" jam nut is jammed to the 2" standard nut.
- Test the table to ensure the jaw opens and closes properly.

Lever Removal/ Reassembly

- Complete step 1 & 6 of jaw removal
- Install new lever
- Complete steps 10 thru 12 of jaw removal.
- Test the table to ensure the jaw opens and closes properly.

Trip block/ Trip block Spring Removal/ Reassembly

- Complete steps 1 through 5
- Remove the 3/8 bolt, 3/8 lock nut and the two 3/8 washers
- Release the vise grips. **Caution: The trip block is under spring Pressure. Keep hands clear of it when releasing vise grips.**
- Remove the trip block (16) and the trip block spring through the throat of the 5th wheel table. **Caution: The jaw is under spring pressure. Use pliers or another suitable device to remove old trip block and spring.**
- Install the new trip block and / or trip block spring in the throat of the 5th wheel table. Caution: The jaw is under spring pressure. Use pliers or another suitable device to install new trip block and spring.
- Push the trip block (16) as far forward as possible, with a rod or bar and reinstall vise grips to the trip block rod of item (16) in front of 5th wheel center casting.
- With anti-seize applied to the 3/8 bolt, reinstall the bolt, two washers and lock nut making sure the trip block can freely move fore and aft when pushing on it with a rod or bar (leaving the lock nut 1/6"-3/32" from being fully tightened should work well).
- Release the vise grips. **Caution: The trip block is under spring pressure. Keep hands clear of it when releasing vice grips.**
- Test the table to ensure the jaw opens and closes properly.

DRAWBAR EYE REMOVAL & INSTALLATION INSTRUCTIONS

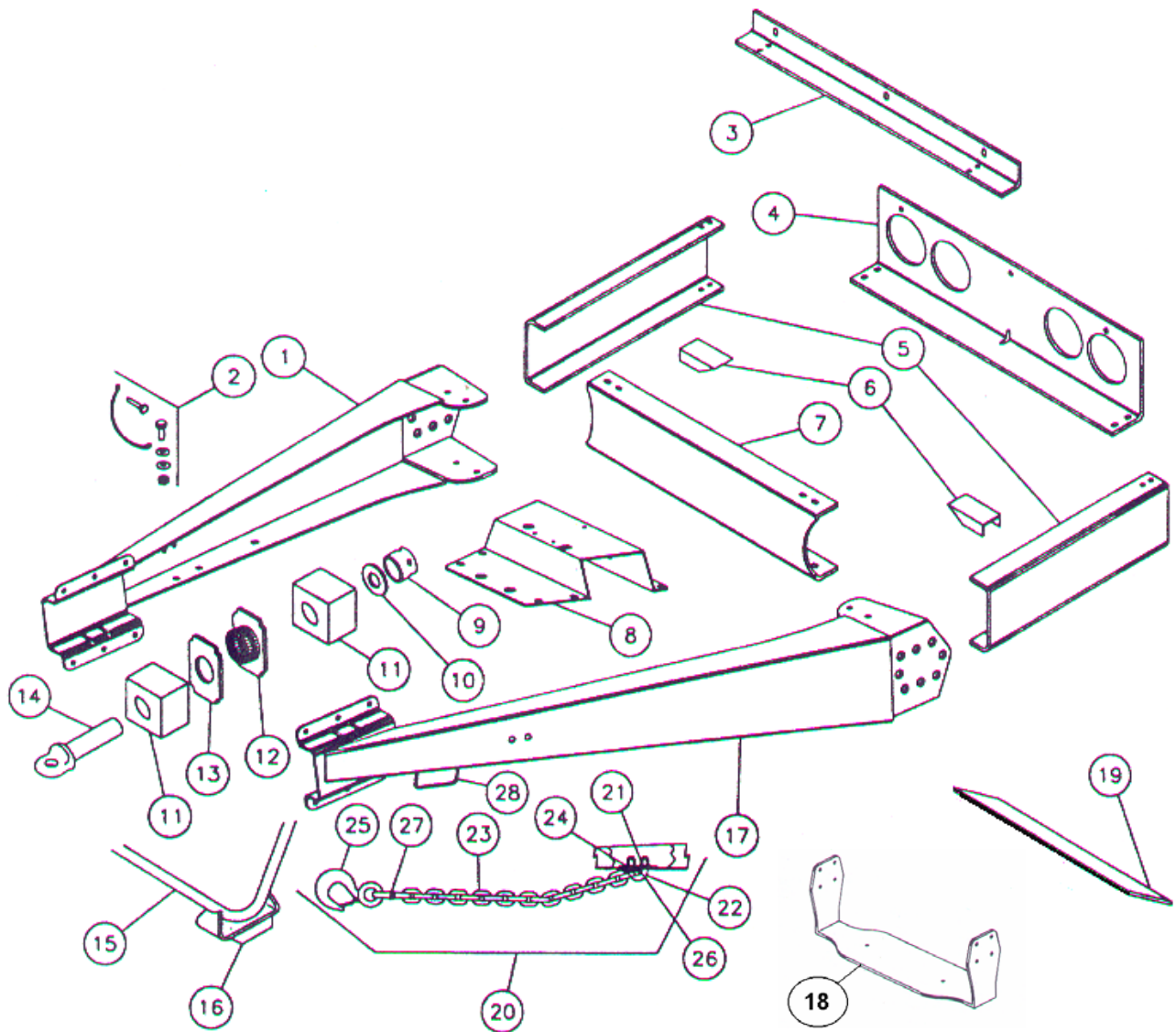
1. Place dolly under a trailer. Set brakes on trailer and dolly.
2. Remove safety wire if present, on 1283 nut.
3. Remove 1283 nut and 1193 washer or 15315 and 15660
4. Use forklift or eye removal tool (Silver Eagle part no. 15314) to pull against drawbar eye and remove it from the shock housing.
5. Clean any debris from inside of shock absorber bushing and lubricate with rubber lubricant or soapy water
6. Lubricate the shock absorber bushing with rubber lubricant or soapy water and install into the shock housing.
7. Lubricate the shank of the new drawbar eye with rubber lubricant or soapy water and install into the shock housing.

NOTE: The shank of the drawbar eye will only be able to be pushed into the shock absorber bushings a little way by hand. There are three methods of pushing it in the final amount:

- (1) Place the dolly under a trailer or up against a solid wall. Set the brakes on the trailer and dolly. Use a forklift or hostler to push against the drawbar eye until it is seated on the shock absorber bushing.
 - (2) Use a sledge hammer to hammer on the end of the drawbar eye until it is seated in the shock absorber bushing.
 - (3) Use the eye removal tool as #4 above.
8. After the drawbar eye is in place, clean the threads on the shank.
VERY IMPORTANT: Coat the threads with Never-SeeZ, pipe compound, or some other similar product. to prevent corrosion and keep the nut from seizing.
 9. Install a new washer and thread the nut onto the shank.
 10. Tighten the nut until the rubber shock absorber bushing bulges toward the outer edge of the shock housing at the corners – this is approximately 400-500 ft/lbs of torque.

NOTE: Shock absorber bushing may split if tightened excessively.

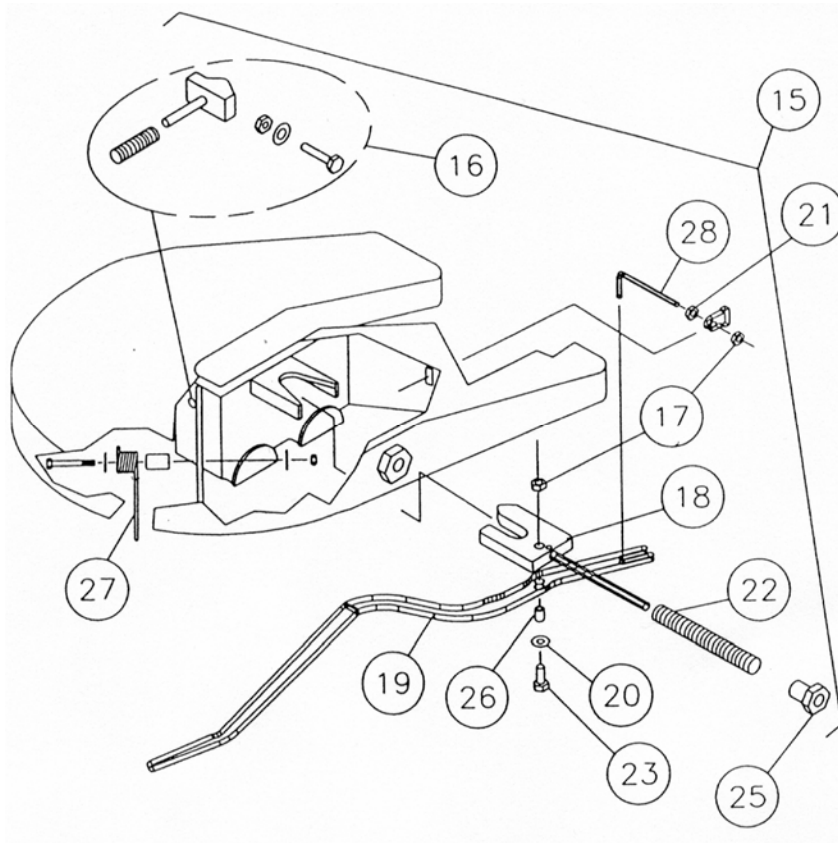
11. Install the safety/ground wire through one side of the nut and shank. This is accomplished by drilling through one side of the nut and shank providing a hole for the bolt and nut securing the safety wire. This completes the ground circuit and prevents the nut from backing off
12. Periodically check the tightness of the nut and adjust as necessary. You should not be able to turn the lunette eye by hand at any time.



FRAME ASSEMBLY

Item	Part Nbr	Description
1	Quote	DRAWBAR KIT, CURBSIDE
2	12590	INSTALLATION, STAINLESS GROUND WIRE ASSY
3	11092G	ADAPTER, TAILPLATE, SPIN-AROUND TILTSTOP
4	15416G	TAILPLATE WELDMENT, 4-LT + LIC LT, VA
5	10173G	SIDE CHANNEL, 72, VA
6	13348G	BRACKET, 6-HOLE, AIR TANK, VA
7	11374G	CROSSMEMBER ONE -PIECE DWB VA DOLLY
8	11518G	VALVE PLATE, STD, VA, GALV
9	15315	NUT, SHANK, HEX
10	15660	WASHER, SHANK, DRAWBAR EYE, 1/2", HEX NUT
11	9520	BUSHING, SHOCK ABSORBER, RUBBER, VA, (2 PAIR REQ'D)
11	12170	BUSHING, SHOCK ABSORBER, URETHANE, VA (2 PAIR REQ'D)

Item	Part Nbr	Description
12	9714G	DIVIDER WELDMENT, SHOCK HOUSING
13	9440G	DIVIDER, SHOCK HOUSING
14	1171	EYE & SHANK, 3/8" SHANK, HRND EYE
15	11011G	SUPPORT LEG WELDMENT WITH FOOT
16	8808	RUBBER PAD, BOLT-ON, SUPPORT LEG
17	Quote	DRAWBAR KIT, ROADSIDE
18	13456G	BALLAST HANGER W/FASTENERS
19	13439G	INSTALLATION, BALLAST, 62#, UNDER-TANK, VA
20	15674	SAFETY CHAIN ASSY, 3/4", GR 80, 7-TON SINGLE
21	15673	CHAIN SHACKLE, BOLT, NUT, PIN, 7/8", GALV
23	6124	SAFETY CHAIN 3/4" X 11-1/2", GR 80, CHROMATE
25	11427	HOOK, 7-TON, W/O SAFETY LATCH
27	5317	LINK, LOCKING, 3/4, GR 8
28	5767	HANDLE ASSY, HINGED, UNDER
NS	11393	SAFETY LATCH, 7 TON HOOK



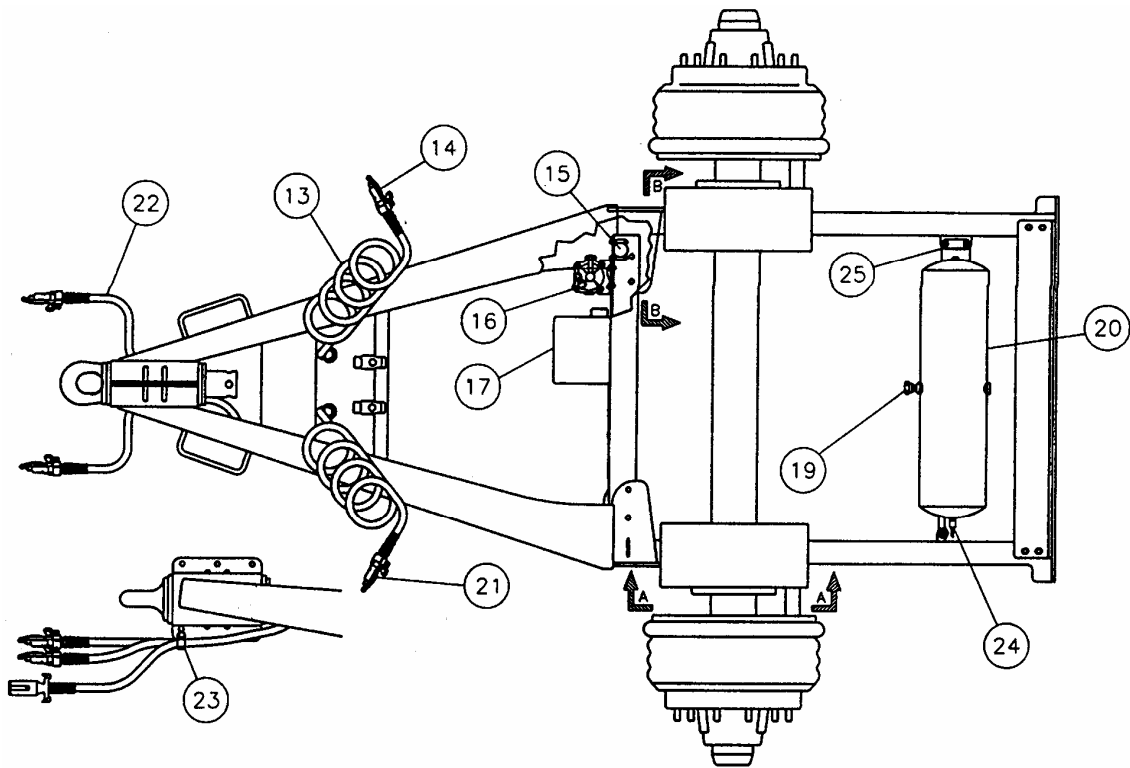
FIFTHWHEEL

Item	Part Nbr.	Description
15	13830	5TH WHEEL TABLE ASSY, LH RELEASE, (ROADSIDE) FRONT PULL HANDLE
16	3432	TRIP BLOCK KIT, LH, W/SPRING & FASTENERS, ROADSIDE
17	8820	NUT, 1/2-13 UNC, TOP LOCK, JAM, HX, GR 5, PLTD
18	8944	JAW ASSY, HUCKED PUSHROD, LH
19	10056	LEVER, JAW, 5 TH WHEEL, FRONT PULL, ROADSIDE
20	1150	WASHER, 1/2, FLAT, SAE, PLTD
21	1601	NUT, 1/2-13 UNC, HX, FIN, GR 5, PLTD
22	8368	SPRING, JAW, 12-3/8"
23	4131	CAPSCREW, 1/2-13 UNC X 2-1/2, HX, GR 5, PLTD
25	1342	GUIDE, PUSHROD
26	13381	LEVER BUSHINGS
27	13460	SECURITY SPRING FOR LEVER W/POST & FASTENERS
28	13462	LEVER ADJUSTER KIT

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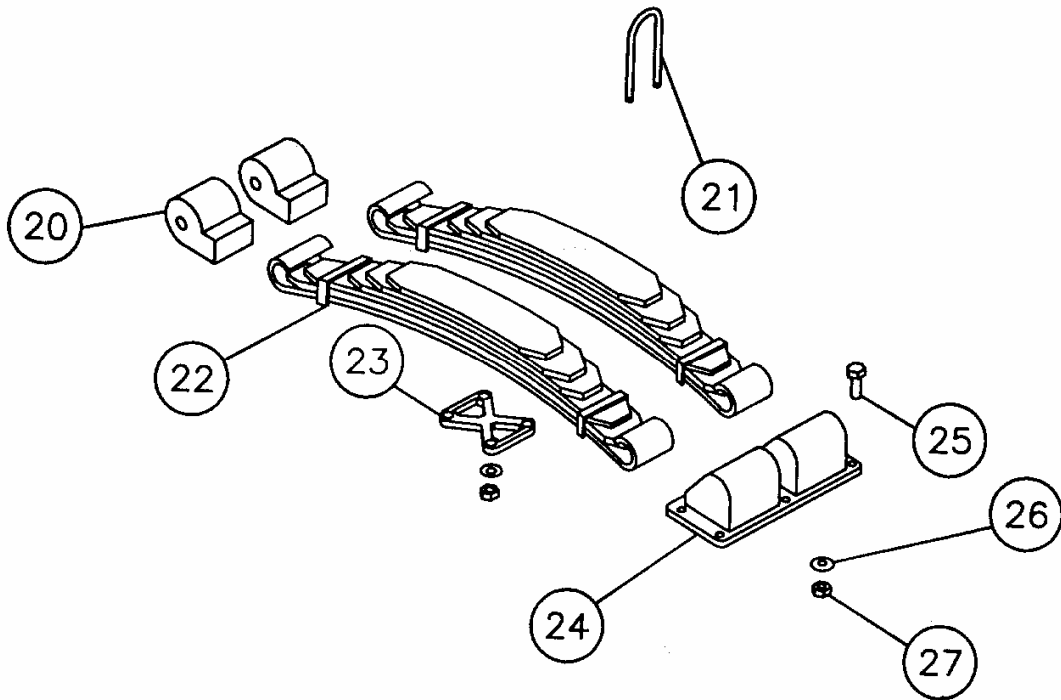
5TH WHEEL SERVICE KIT COMPONENTS

- 1- TRIP BLOCK SPRING
- 1- TRIP BLOCK
- 1- JAW W/HUCKED PUSHROD
- 1- JAW SPRING
- 1- CAPSCREW, 3/8 X 5
- 1- CAPSCREW, 1/2 X 2-1/2
- 2- NUT, 1/2, TOP LOCK
- 1- NUT, 3/8, METAL LOCK
- 2- WASHER, 1/2, FLAT
- 2- WASHER, 3/8



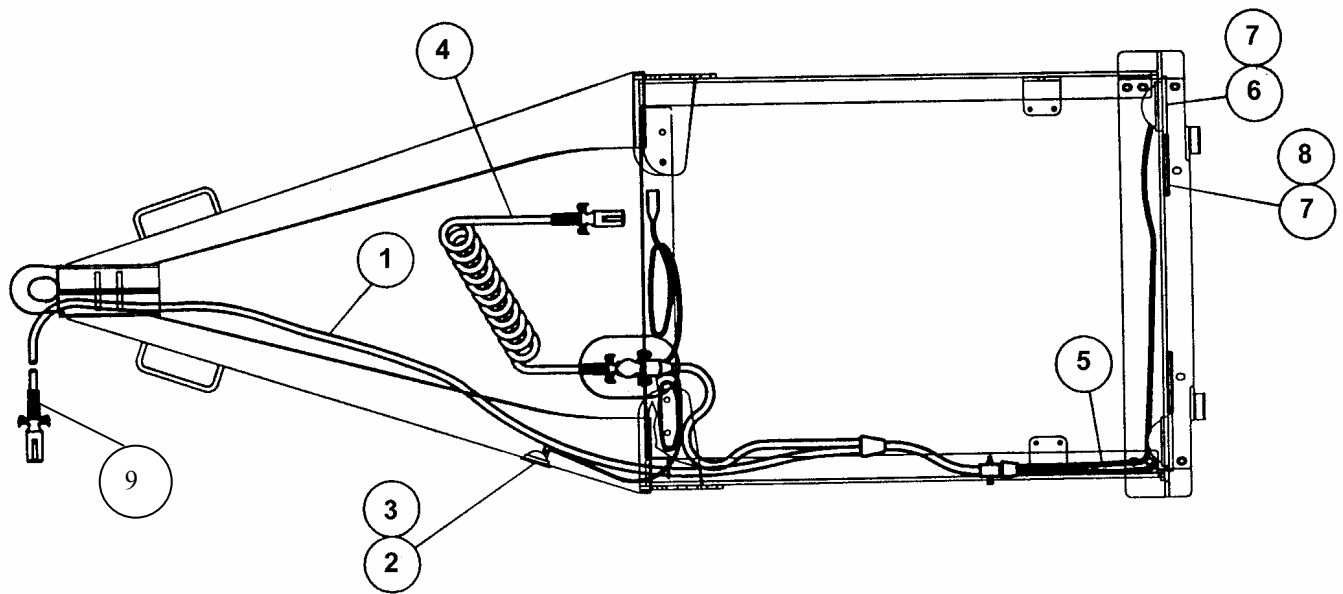
AIR SYSTEM

Item	Part No.	Description
13	3085	HOSE AIR 3/8 X 78 RUBBER 1/2 X 1/2 CONN
14	5854	GLADHAND, SERVICE, W/FULL FACE BLUE SEAL
15	6294	VALVE, PRESSURE PROTECTION PR-3 BENDIX
16	6688	VALVE, RELAY, R-12P WITH BRACKET
17	13738	VALVE, RELAY / ABS CONTROL MERITOR / WABCO, PLC
18	9858	VALVE, EMERGENCY CONTROL, 110376 SEALCO
19	1772	VALVE, CHECK, SC-3, 1/2" NPT, BENDIX
20	8913	AIR RESERVOIR, SIDE DRAIN, PDR COAT, MIDWEST, 1425 CI
21	5855	GLADHAND, EMERGENCY, W/FULL FACE RED SEAL
22	6213	HOSE, AIR, 3/8 X 49, RUBBER, 1/4 X 1/2 CONN (Other Sizes Available)
23	12181	KIT, 3 HOLE CLAMP W/S-HOOK
24	1775	VALVE, DRAIN, LEVER, 150 PSI, 1/4" NPT-M
25	7452	ISO-PAD/FASTENER KIT FOR MOUNTING AIR TANK
NS	1775	VALVE, DRAIN LEVER, 150 PSI, 1/4" NPT-M
NS	1181	BULKHEAD FITTING, BRASS
NS	14762	INSTALLATION, TIRE INFL SYS 1100R AUTOMATIC



SUSPENSION

Item	Part No.	Description
20	1204	BUSHING, SPRING BOOT, RUBBER, PAIR
20	12172	BUSHING, SPRING BOOT URETHANE, PAIR
21	1645	U-BOLT ASSY, 1 X 4 X 8, RT, W/NUTS & WASHERS
22	3539	SPRING ASSY, 7 LEAF W/ LONG REBOUND
23	13461	PRESSURE PLATE, 4", MULTI-USE
24	15398G	INSTALLATION, ONE DBL BOOT HSG, BOLTED, GALV
25	3547	CAPSCREW, 5/8-11 UNC X 3 HX, GR 5, PLTD
26	1172	WASHER, 5/8, FLAT, F436, HRND, PLTD
27	1164	NUT, 5/8-11 UNC, METAL LOCK, HX, GR C, PLTD



ELECTRICAL

Item	Part Nbr.	Description
1	15130	HARNESS FRONT, "Y", SEALED, 96", 3' EXT, ABS, PSI LT
2	9562	LENS, AMBER, TRUCKLITE, ABS
3	9563	GROMMET, LAMP, TRUCKLITE, MODEL 30
4	10327	CABLE, 7-WAY, COILED 12', W/PLUGS, ABS
5	5585	HARNESS, REAR, 2-LIGHT
6	15650	LAMP RED 4" LED BLK-FLG TLITE D. SHELL W/PLUG
7	2509	GROMMET, LAMP, GROTE
8	10831	REFLECTOR 4-1/4" ROUND, RED FIT 2509 GROMMET
9	13641	LIGHT CORD, 3' EXT
NS	13739	CABLE, ABS POWER, 19", MERITOR/WABCO
NS	10079	CABLE, ABS SENSOR EXTENSION, 6'