PODZILLA Maintenance, Inspection, and Repair

April 2017


PODS

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Introduction

The PODZILLA lift is arguably the most important tool used in the delivery process. One of the key benefits of choosing PODS comes directly from the PODZILLA patented lift system -- specifically, the ability to transport a customer's belongings and place a container in nearly any location while keeping the container level, eliminating the risk of damage to the contents due to shifting.

This manual outlines all inspection, maintenance, and repair procedures which are necessary to keep the PODZILLA Lift up to brand and safety standards.

Maintenance

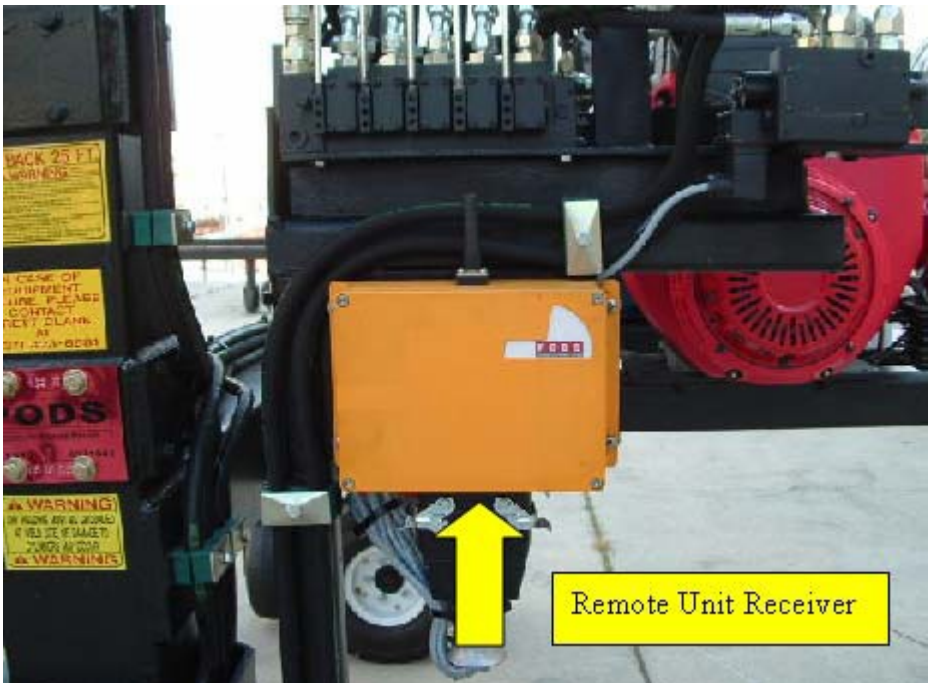
PODZILLA preventative maintenance should be performed on a 30 day cycle, if the lift averages 10 deliveries per day. Implementing a regular maintenance schedule ensures maximum service life with minimum breakdowns.

Installing a Charged Battery in the Remote

The remote control receiver unit is mounted to the PODZILLA frame under the valve control bank. The receiver is a sealed unit and has no parts that are serviceable at the end-user level. Therefore, for any remote control problem, always troubleshoot the remote transmitter unit:

- Ensure that the remote transmitter is turned on
- Press the reset button on the right side of the remote transmitter. If troubleshooting the transmitter does not fix the problem, put a fresh battery into the unit:

Figure 39



Remote Unit Receiver

If troubleshooting the remote transmitter and inserting a fresh battery does not fix the problem, contact Fleet Services or the manufacturer.

Turn unit over to access the bottom *(Figure 40)*

Figure 40



Place battery into battery recess *(Figure 41)*

Figure 41



Slide battery forward into position and lock. *(Figure 42)*

Figure 42



Lubricating the Lift

Friction causes heat and heat can be very destructive to mechanical and electrical components. Lubrication acts to reduce the friction of moving parts, thereby lowering operating temperatures. Like most mechanical equipment, the PODZILLA requires adequate lubrication to operate at maximum efficiency over a prolonged time.

Skills Required:	Low/Moderate
Tools Required:	Monolith AW2 (or equivalent) lubricating grease
	Old leather/rubber glove or paint brush
	Grease gun (for zerk fittings)

Lubricate the four lift legs and two spreader bars with grease. Extend all four lift legs and open the spreader bars. Use Monolith AW2 lubricating grease (or equivalent) and apply smooth, even coating using an old glove or paintbrush. Leave about 2' of lift leg dry and free from grease.

- Lube the zerk fittings on the four front drive wheels. Using the grease gun, fill the zerk fitting with grease until there is an overflow escape from the fitting.

- Lube zerk fittings on two guide wheels. Using the grease gun, fill the zerk fitting with grease until there is an overflow escape from the fitting.

- Lube zerk fittings on caster wheel assemblies. Using the grease gun fill the zerk fitting with grease until there is an overflow escape from the fitting.

Engine Maintenance

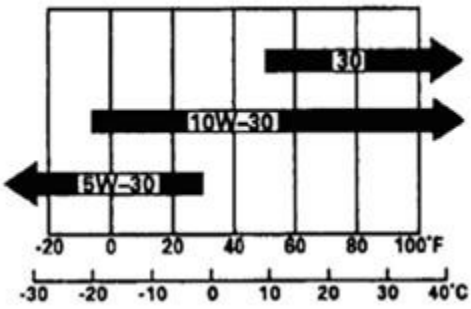
The PODZILLA is powered by a Honda gasoline engine—18hp, 20hp or 24hp. The original engines were 20hp, but as they are taken out of service, they are being replaced with 24hp engines. Preventative maintenance should be performed on a 30-day cycle if the lift averages 10 deliveries per day. At a minimum, maintenance for the lift engine should include the following tasks.

NOTE: These task(s) should be completed with the PODZILLA Lift System off of the truck bed.

Change the Oil

In the first month of lift operation the oil should be changed after 20 hours of use. Thereafter, change the oil and filter after every 50 hours of operation. Use the correct oil type and amount as per the manufacturer's chart in Figure 43.

Figure 43



Ambient Temperature

Without oil filter replacement:
1.27 US quarts
or
1.20 liters
With oil filter replacement:
1.59 US quarts
or
1.50 liters

- Change the oil filter with every oil change. Be sure to use the correct type and amount of oil (refer to Figure 43) when changing the oil. It is recommended to change the oil and filter after ever 50-100 hours of use.
- Clean the air filter after every 50 hours of lift operation. Air filters can be blown clean with an air compressor until the filter is discolored. This will allow for longer use.(As a norm, this process is usually handled at the time of a routine PM.)
- Replace the air filter after every 300 hours (12 months) of operation or sooner if needed; check visually.
- Replace the spark plug after every 200 hours of operation (or as needed if fouled).
- Check the fuel filter.
- Check the starter to ensure proper functioning.

Non-Engine Maintenance

- Change the hydraulic filter after every six months of lift operation.
- Check all electrical lines to the engine for frayed or exposed wires.
- Check the battery fluid level. If low, fill to the proper level.
- Check the wear discs every three months, or anytime excessive play in the legs is noticed.
- Wash the lift every other month, using a degreaser and a pressure washer to prevent build up of grease and dirt.

Tire Pressure (Drive and Caster Wheels)

It is important to follow the recommended pressure displayed on the tires, but keep in mind that the drive and steering tires are marked differently. Maximum maneuverability and the ability to climb inclines are dramatically improved when using the recommended tire pressure. The lift has been tested using a 12,500-pound load and unless appropriate tire pressure is maintained, the load is difficult to steer at full capacity. On an incline, the container and lift climbed a 1-in-12 pitch without any loss of power using the recommended pressure displayed on the tires. Tire pressure should be checked daily. A slow leak could cause a loss in pressure to go unnoticed until the lift is out on a job where the inability to move the container properly is realized.

NOTE: In winter operation, when it is necessary to run the lift engine throughout the day, be sure to leave the idle control at just above the halfway speed so that spark plugs will not become fouled.

Winter Weather Precautions and Recommendations

NOTE: In winter operation, use the choke ONLY to start the lift engine. NEVER use the choke to warm up the lift engine.

When ambient temperature is 32°F and colder, duct tape the air intake vents on the pull start housing. The cold air forced on the cylinders will not let the motor warm up enough to turn off the choke. Because of this the plugs are fouled and the oil becomes contaminated with gas.

For use on salted roads, be sure to keep the drive chains well oiled and the swivel base on the casters greased regularly.

Inspection

Introduction

The purpose of this section is to emphasize areas of the PODZILLA Lift System that should be included in your daily operational inspection. The information contained in this guide is for daily inspections of major component areas but is NOT intended to indicate or display all inspection or maintenance areas or parts of the PODZILLA Lift System. The daily inspection will be performed in conjunction with the Daily Driver Combined Checklist.

Daily Component Inspection

Every driver is required to complete a Driver Lift Operational Checklist prior to using the lift to verify that all parts are in working order. Routine and Daily lift maintenance is an important part of a driver's responsibility. A well maintained lift will avoid breakdowns and/or customer delay. The lift inspection detailed here is also a part of the daily Driver Combined Checklist. (See Appendix)

Mechanical Skill Required: Low/Moderate
Tools Required for Task:

- 9/16"Open-end or Socket Wrench for Nylon Bushing Plate Bolts
- 7/8" Open-end Wrench for Hydraulic Fittings
- 11/16" Open-end Wrench for Hydraulic Fittings
- Chevron Clarity ISO32 Hydraulic Fluid (as needed)
- One Quart 10W30 Motor Oil (detergent type) (as needed)
- Degreaser Solvent (as needed)
- Pressure Washer (as needed)
- Tire Pressure Gauge

To perform this inspection, the lift can be on or off of the truck but it must be completely closed with the engine off.

Gasoline Level Inspection

It is imperative to verify the level of fuel in the fuel cell/gasoline container to ensure continued operation throughout the day. Driver ETA's can be directly affected if the PODZILLA does not have the necessary fuel to ensure continued operation for a scheduled days route.

Step 1 Identify fuel cell/gasoline container
Step 2 Open fuel cell/gasoline container cap.
Step 3 Verify full fuel level in fuel cell/gasoline container.
Step 4 Scan the barcode located on the fuel cell/gasoline container.



Chain Assembly Inspection

Inspection of the chain assembly is an integral part of the daily inspection of the PODZILLA lift system. The chain assembly should always be inspected for rust, inadequate lubrication, excessive dirt or misalignment of the chain assembly with the sprocket assembly. Also verify all teeth are located throughout the entire sprocket assembly to ensure safe and continued operation throughout the scheduled day's route.

Step 1 Identify right drive wheel chain assembly.
Step 2 Inspect the chain assembly for rust, excessive dirt and alignment.
Step 3 Check the chain for slack
Step 4 Inspect the sprocket assembly for missing teeth.
Step 5 Spray chain lube onto chain assembly as necessary.
Step 6 Scan the designated barcode.



Ram Assembly Inspection

Inspection of the ram assembly is imperative to the operation of the PODZILLA lift system. Inspect all weld points throughout the entire perimeter of the ram assembly to ensure safe and efficient lift operation. Verify all 4 welds along the ram assembly are inspected for any cracks, breaks or separations.

Step 1 Identify right rear ram assembly
Step 2 Inspect the welds along all edges of the Ram Assembly for cracks, breaks or separations.
Step 3 Scan the designated barcode.



Wear Disk Cap Plate Bolts Inspection (Legs and Spreader Bar)

Inspect and verify all 32 wear disk cap plate bolts are tight and secure. Loose operation of the PODZILLA will occur if these bolts are not secure. Failure to tighten these bolts will result uneven wear of the ram assemblies which can lead to equipment failure and unnecessary down time. Use a 9/16” wrench to tighten all bolts to ensure safe and efficient lift operation.

Step 1 Identify Wear Disk Cap Plate Bolts
Step 2 Verify the wear disk cap plate bolts are located in the plates.
Step 3 Verify the wear disk cap plate bolts are secure.
Step 4 Scan the designated barcode.

Alternative (Simple) Inspection:

Step 1 Grab the bottom of the wheel leg while leg is in the up position and shake it back and forth. The leg should have a bit of play in it.
Step 2 When the play shake is between 1/3” and ½”, it is time to visually inspect and/or replace the bolts.

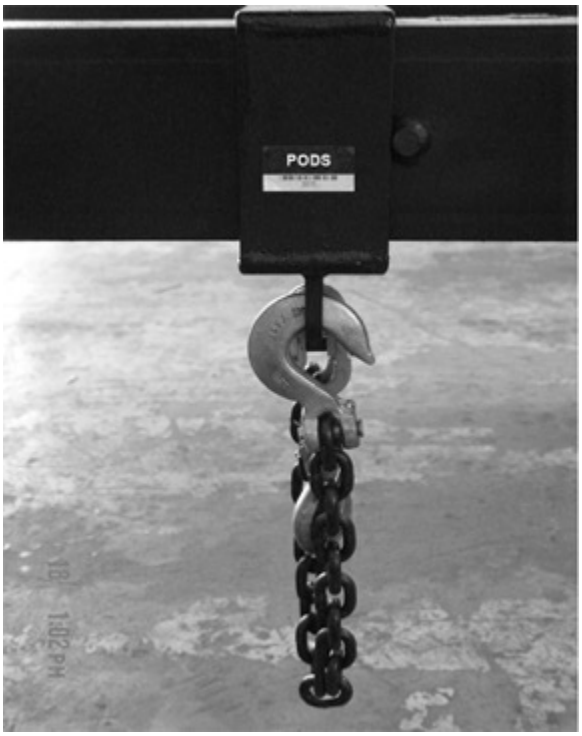




Lift Chain Assembly Inspection

Verify the lift chain assembly is secure and has not signs of weakness in the chain links. It is imperative to inspect the cotter pins on the lift chain assembly to ensure safe and efficient lift operation.

Step 1 Identify Lift Chain Assembly
Step 2 Verify complete chain assembly with chain chokers.
Step 3 Inspect chain assembly for cracks or elongated links.
Step 4 Look for mushroomed wear at last link to slider.
Step 5 Verify cotter pin installed.
Step 6 Inspect cotter pin for damage.
Step 7 Scan the designated barcode.



Main Beam Seam Weld Inspection (Right Side)

It is imperative to inspect all 9 main beam seam welds along the top and bottom of the main beam. Physically look under the main beam assembly to verify no cracks, breaks or separations are apparent in any of the welds throughout the main beam assembly.

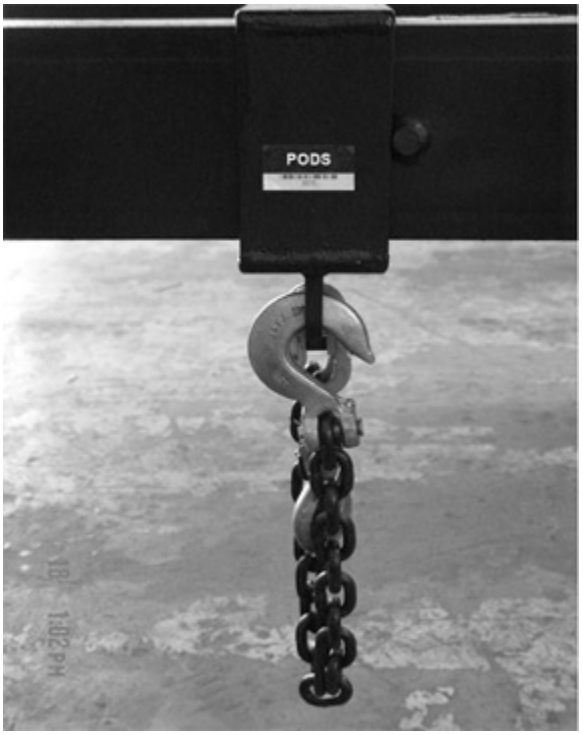
Step 1 Identify 9 Main Beam Seam Welds
Step 2 Inspect the main beam assembly for cracks, breaks or separations.
Step 3 Scan the designated barcode



Lift Chain Assembly Inspection

Verify the lift chain assembly is secure and has not signs of weakness in the chain links. It is imperative to inspect the cotter pins on the lift chain assembly to ensure safe and efficient lift operation.

Step 1 Identify Lift Chain Assembly
Step 2 Verify complete chain assembly with chain chokers.
Step 3 Inspect chain assembly for cracks or elongated links.
Step 4 Verify cotter pin installed.
Step 5 Inspect cotter pin for damage.
Step 6 Scan the designated barcode.



Ram Assembly Inspection (Left and Right)

Inspection of the ram assembly is imperative to the operation of the PODZILLA lift system. Inspect all weld points throughout the entire perimeter of the ram assembly to ensure safe and efficient lift operation. Verify all 4 welds along the ram assembly are inspected for any cracks, breaks or separations.

Step 1 Inspect the welds along all edges of the Ram Assembly for cracks, breaks or separations.

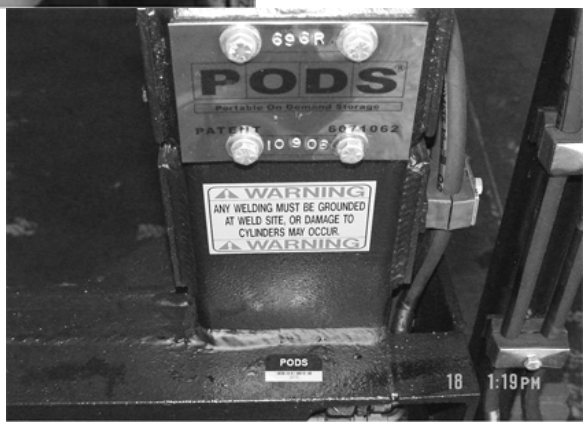
Step 2 Scan the designated barcode

Left Front Ram Assembly



Right Front Ram Assembly

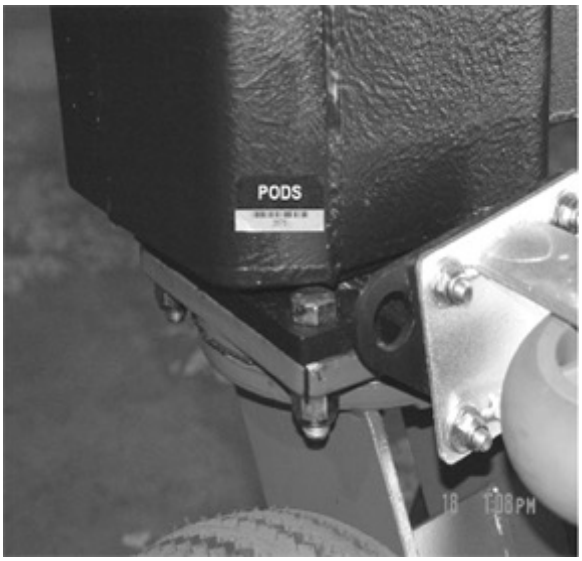




Lower Eye Hook Assembly Inspection (left side)

Inspect the lower eye hook assembly for any excessively worn metal, fractures, splits or non uniformity I the metal. It is imperative the welds of this eye hook are inspected to ensure safe operation when used for erecting a collapsible PODS Brand container.

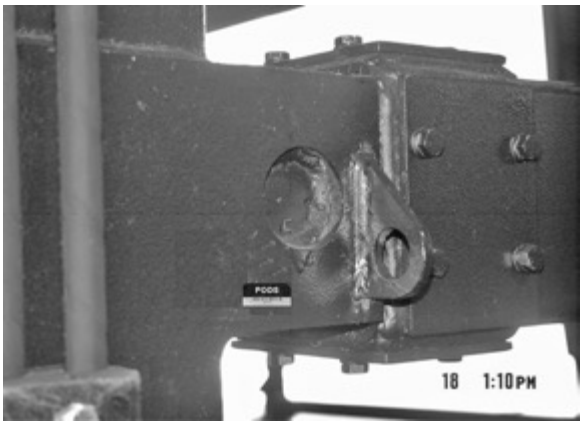
Step 1 Identify Lower Eye Hook Assembly
Step 2 Inspect the eye hook for worn metal.
Step 3 Inspect the eye hook for cracked or separated welds.
Step 4 Scan the designated barcode.



Upper Eye Hook Assembly Inspection (left side)

Inspect the upper eye hook assembly for any excessively worn metal, fractures, splits or non uniformity I the metal. It is imperative the welds of this eye hook are inspected to ensure safe operation when used for erecting a collapsible PODS Brand container.

Step 1 Identify Upper Eye Hook Assembly
Step 2 Inspect the eye hook for worn metal.
Step 3 Inspect the eye hook for cracked or separated welds.
Step 4 Scan the designated barcode.



PODS Brand Sign Inspection

Verify the PODS Brand Sign is not torn or broken. Verify the information on the sign is clearly visible. Verify the sign is clean and free of any debris which may diminish the ability to read the sign.

Step 1 Identify PODS Brand Sign
Step 2 Inspect the PODS Brand sign for worn/torn sign.
Step 3 Inspect the PODS Brand sign for missing hardware for sign attachment can the designated barcode.
Step 4 Inspect the PODS brand sign for dirt and clean with the necessary pressure washer



Upper Eye Hook Assembly Inspection (right side)

Inspect the upper eye hook assembly for any excessively worn metal, fractures, splits or non uniformity I the metal. It is imperative the welds of this eye hook are inspected to ensure safe operation when used for erecting a collapsible PODS Brand container.

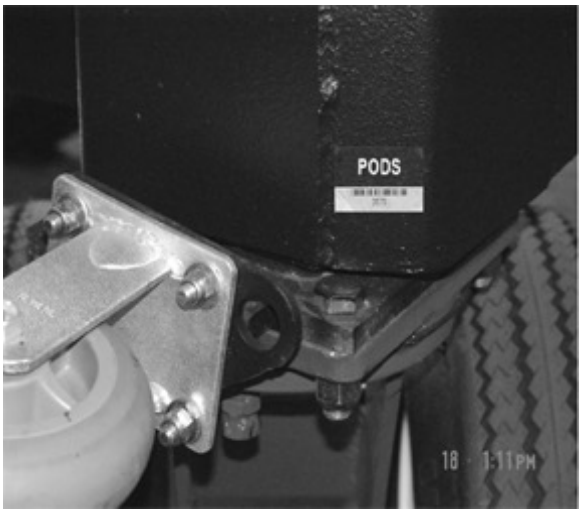
Step 1 Identify Upper Eye Hook Assembly
Step 2 Inspect the eye hook for worn metal.
Step 3 Inspect the eye hook for cracked or separated welds.
Step 4 Scan the designated barcode.



Lower Eye Hook Assembly Inspection (left side)

Inspect the lower eye hook assembly for any excessively worn metal, fractures, splits or non uniformity I the metal. It is imperative the welds of this eye hook are inspected to ensure safe operation when used for erecting a collapsible PODS Brand container.

Step 1 Identify Lower Eye Hook Assembly
Step 2 Inspect the eye hook for worn metal.
Step 3 Inspect the eye hook for cracked or separated welds.
Step 4 Scan the designated barcode.



Tire Pressure/Tire Inspection: Caster Tires and Drive Tires

Inspect and verify the correct tire pressure in each tire to ensure safe and efficient operation. Inaccuracies in movement as well as blown out tires are a direct reflection of low air pressure in tires. In order to achieve maximum maneuverability and the ability to climb inclines the air pressure should be in accordance with the recommended tire pressure indicated on the tire.

Inadequate tire pressure and poor tire condition will cause performance issues and failures. In addition, tire condition affects the longevity of bearings and axles. Cracking of the axle will leave a lift grounded and is a direct result of uneven air pressure in tires. Finally, the customer's experience is lessoned if drive tire and caster tire marks are left on driveway and is usually caused by tires being unevenly and under filled.

Step 1 Identify Front Caster Tires and Rear Drive Tires

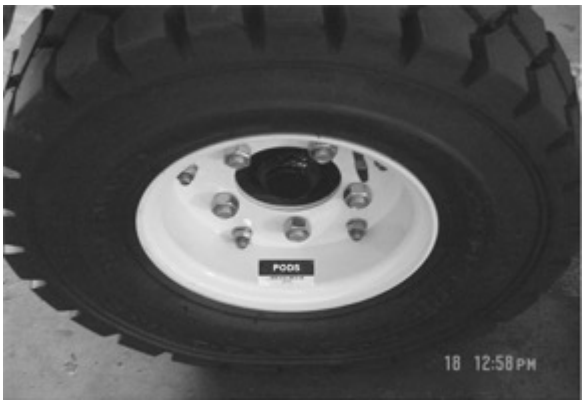
Step 2 Inspect the tires for excessive wear, cracks or punctures.

Step 3 Verify listed load range and tire pressure on sidewall of tires.

Step 4 Verify lug nuts are secure and snug.

Step 5 Scan the designated barcode

Drive Tires



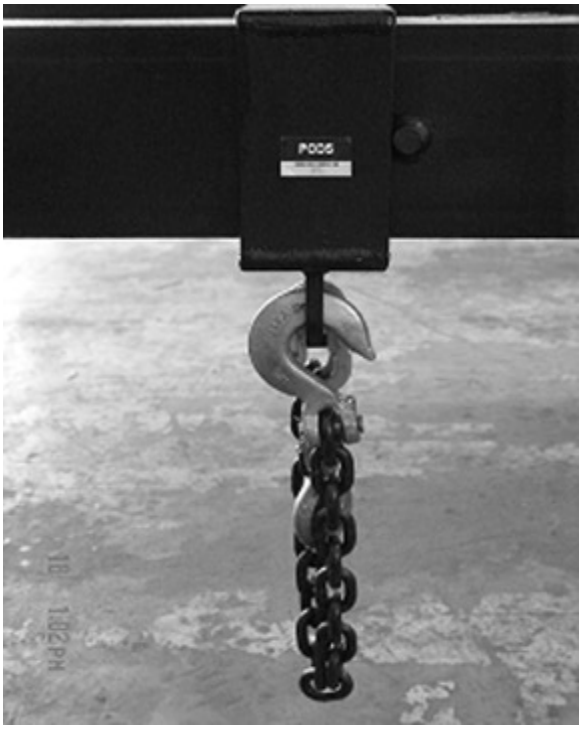
Castor Tires



Lift Chain Assembly Inspection

Verify the lift chain assembly is secure and has not signs of weakness in the chain links. It is imperative to inspect the cotter pins on the lift chain assembly to ensure safe and efficient lift operation.

Step 1 Identify Lift Chain Assembly
Step 2 Verify complete chain assembly with chain chokers.
Step 3 Inspect chain assembly for cracks or elongated links.
Step 4 Verify cotter pin installed.
Step 5 Inspect cotter pin for damage.
Step 6 Scan the designated barcode.



Main Beam Seam Weld Inspection (left side)

It is imperative to inspect all 9 main beam seam welds along the top and bottom of the main beam. Physically look under the main beam assembly to verify no cracks, breaks or separations are apparent in any of the welds throughout the main beam assembly.

Step 1 Identify Main Beam Seam Weld
Step 2 Inspect the main beam assembly for cracks, breaks or separations.
Step 3 Scan the designated barcode.



Hydraulic Fluid Verification

Verify the hydraulic fluid level is accurate as the PODZILLA lift is on/off the bed of the PODS delivery truck. Inspect the gauge to verify there are no cracks or leaks which would hinder the ability to obtain and accurate reading.

Step 1 Inspect the Sight Gauge for cracks or leaks.

Step 2 Verify hydraulic fluid fill minimum of 1/3 on Sight Gauge if the PODZILLA is ON the truck.

Step 3 Verify hydraulic fluid fill maximum of 2/3 on Sight Gauge if the PODZILLA is OFF of the truck.

Step 4 Scan the designated barcode.



Wear Disk Cap Plate Bolts Inspection

Inspect and verify all 32 wear disk cap plate bolts are tight and secure. Loose operation of the PODZILLA will occur if these bolts are not secure. Failure to tighten these bolts will result uneven wear of the ram assemblies which can lead to equipment failure and unnecessary down time. Use a 9/16” wrench to tighten all bolts to ensure safe and efficient lift operation.

Step 1 Identify Wear Disk Cap Plate Bolts

Step 2 Verify the wear disk cap plate bolts are located in the plates.

Step 3 Verify the wear disk cap plate bolts are secure.

Step 4 Scan the designated barcode.



Chain Assembly Inspection

Inspection of the chain assembly is an integral part of the daily inspection of the PODZILLA lift system. The chain assembly should always be inspected for rust, inadequate lubrication, excessive dirt or misalignment of the chain assembly with the sprocket assembly. Also verify all teeth are located throughout the entire sprocket assembly to ensure safe and continued operation throughout the scheduled day's route.

Step 1 Identify Right Drive Wheel Chain Assembly
Step 2 Inspect the chain assembly for rust, excessive dirt and alignment.
Step 3 Inspect the sprocket assembly for missing teeth.
Step 4 Spray chain lube onto chain assembly as necessary.
Step 5 Scan the designated barcode.



Engine Oil Verification

Verify the oil level in the PODZILLA motor is checked BEFORE the equipment is started to reduce the chances of having premature engine failure due to a lack of motor oil. Verify the necessary level of oil is clearly indicated on the Oil Dip Stick. Use a rag or paper towel to wipe of excess oil from the Oil Dip Stick. Add oil as necessary. Use the correct weight of oil based on the climate, as outlined in the maintenance section of this manual.

Step 1 Identify Oil Dip Stick
Step 2 Remove Oil Dip Stick from motor.
Step 3 Wipe Oil Dip Stick clean of residual oil.
Step 4 Fully insert the Oil Dip Stick.
Step 5 Remove Oil Dip Stick from motor.
Step 6 Verify the oil level in accordance with min/max level of the Oil Dip Stick.
Step 7 Add 10W30 motor oil to the motor as necessary. (oil capacity is 1.25-1.5 quarts)
Step 8 Scan designated barcode.



In addition to the procedure outlined above for Daily Inspection of the PODZILLA Lift System, the following processes should be performed to ensure safe lift operation.

1. Charge the hydraulic system. Start the hydraulic pump motor and allow it to run long approximately 3.5 seconds to warm the motor oil. With the motor running, charge the hydraulic system by opening and closing the valves for the legs, spreaders, and drive motors. Check the hydraulic control valve bank to make sure that each control and valve is operating properly. (Check all rams to ensure that they are working properly. There is a ram inside each of the two spreader housings and in each of the four vertical leg housings. Raise and lower each leg to assure proper functioning.

2. Check the hydraulic fluid filter connection for leaks. If it is leaking, tighten with the strap wrench or replace the hydraulic fluid filter. (Prince filter's or equivalent).

3. Check the hydraulic fluid filter connection for leaks. If it is leaking, tighten with the strap wrench or replace the hydraulic fluid filter. (Prince filters or equivalent).

4. Visually inspect all hydraulic hoses and fittings for hydraulic fluid leaks. If any leaking is noticed at the fittings, tighten the fittings using the appropriate wrench. (Replace any leaking or damaged hoses and/or any fittings that still leak after tightening.)

5. Check the spreader wheels for damage and excessive wear. These wheels are solid foam filled at the factory and do not require air pressure checks or adjustments. Replace the tire if it is worn through to the nylon thread belt.

6. Check the spring loaded locks on the (caster) lift wheels. The wheel frames should turn freely and lock into the travel position. Replace the springs if they are not functioning or if they are worn.

7. Check the gray guide wheels and wheel shafts for damage. Make sure the wheels turn freely. Replace damaged wheels and shafts.

8. Tie-Down Straps. If the tie-down straps show signs of wear, they should be replaced.

Repair

Types of Repairs

Maintenance of the Manual-Control Lift and the Remote-Control Lift is basically the same. The only difference is in the remote control and the receiver units on the remote control lift. No repairs on the transmitter or receiver of the remote-control lift can be made by a user. Any problems with the transmitter or receiver units should be directed to the operations manager of the Lift House facility at PODS Corporate headquarters.

In the field, the following types of maintenance and repairs are typically performed by the driver:

- Fill the gasoline tank for the engine
- Add hydraulic fluid (ONLY ISO32 Clarity Hydraulic Fluid) to the hydraulic fuel tank
- Tighten loose hydraulic hose connectors
- Replace a hydraulic line/hose
- Replace a cotter pin between chains and hooks

In the shop, the following types of repairs are generally performed while the lift is on the truck:

- Replace a hydraulic line/hose
- Replace the hydraulic pump
- Replace a tie-down assembly
- Replace a tie-down strap
- Service the engine
- Repair the engine
- Replace a guide wheel
- Replace nylon wear discs
- Replace or remove damaged wheels

Monthly inspection and maintenance, as well as the following types of repairs typically require the lift to be removed from the truck:

- Replace a nylon pad
- Replace a ram
- Repair welds
- Repair the engine
- Repair the front wheel drive chains
- Repair the front drive assembly
- Replace the hydraulic fluid filter

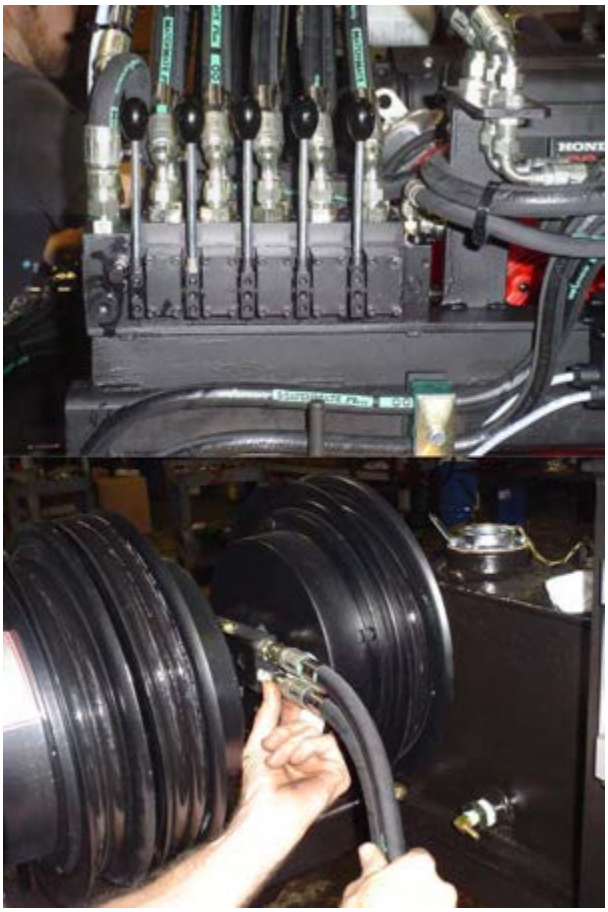
Cascade Reel Replacement

Tools Required for Task:

- 2-11/16” open end wrench
- 2-3/4” open end wrench
- 9/16” socket and ratchet
- 9/16” box end wrench
- Spill bucket
- Safety gloves

Step 1 Close and turn off the lift before working on the cascading reels.

Figure 102

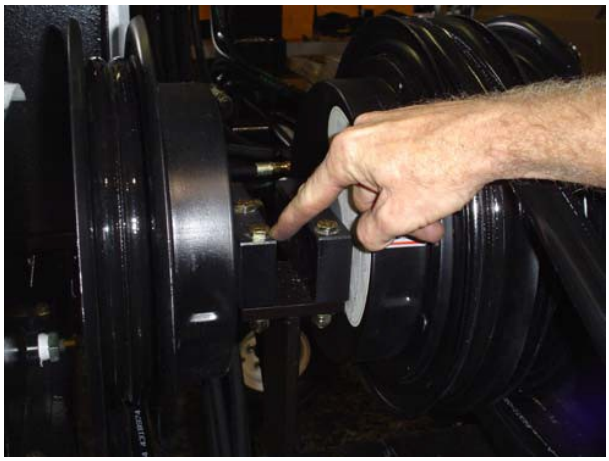


Step 2 Release pressure from the hydraulic lines by pushing handles on Walvoil valve backwards and forwards.

Step 3 Remove the hydraulic lines going out of the reel assembly that is to be replaced. Mark and label hydraulic lines

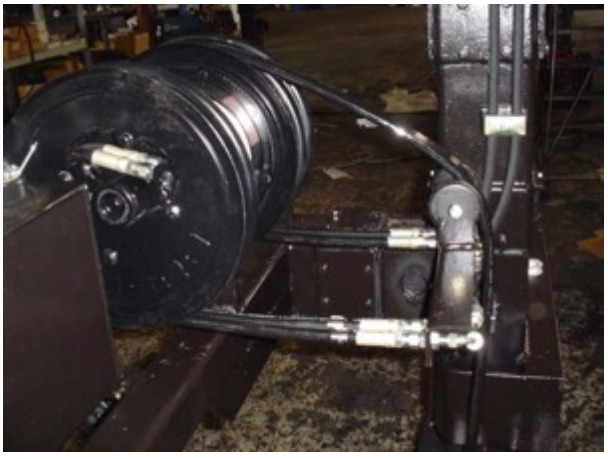
Step 4 The cascade reel is spring tension mounted and if the cascade reel isn't held firmly the cascade reel will uncoil quickly and dangerously. While firmly grasping the hydraulic hoses that are coming out of the front of the cascade reel unscrew hoses from hose block. Slowly unwind hose reel. Remember to wear safety gloves; the cascade reel may be sharp.





Step 5 Remove bolts that attach cascade reel to cascade reel mounting block. Remember you only need to remove the bolts that correspond to the reel that is being replaced.

Step 6 Install new hose reel.
Step 7 Align new hose reel with hose fittings that correspond.
Step 8 Attach new cascade reel to cascade reel mounting block and tighten bolts.
Step 9 Wind cascade reel 7 times.



Step 10 Reattach hoses to block.

Step 11 Re-attach hose to rear of reel.
Step 12 Check hydraulic fluid gauge and replace any fluid that is lost during this task.

Caster Axle Replacement

NOTE: Both caster wheels must be removed in order to remove the caster axle.

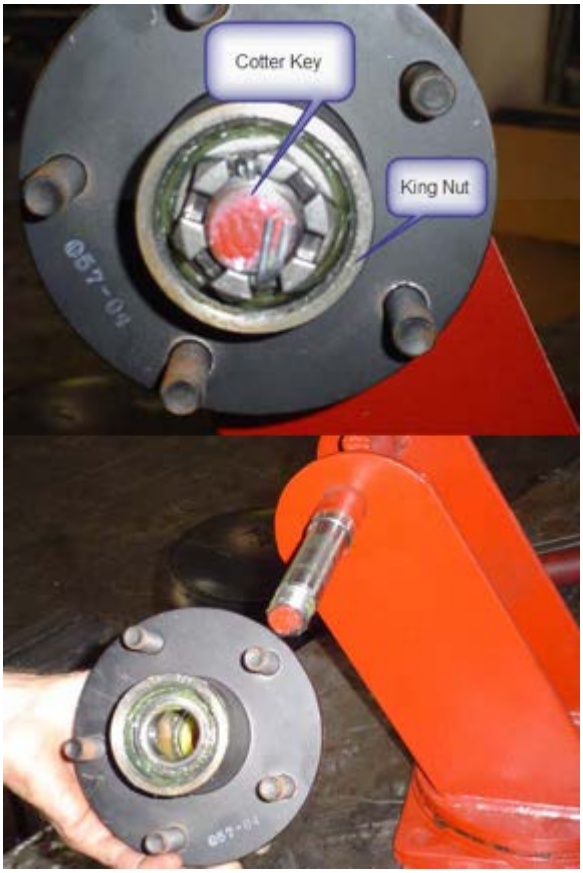
Tools Required for Task:

- 13/16" Socket and ratchet with extension
- Needle nose pliers
- Hammer
- Cut off wheel or torch
- Safety glasses

Step 1 Follow instructions from Caster Wheel Replacement on the previous page to remove both caster wheels.

Step 2 Remove dust cover.

Figure 103



Step 3 Remove the cotter key; unscrew and remove the king nut.

Step 4 Remove washer, hub and bearings *(Figure 48)*

Step 5 On the bottom of the axle assembly there is a welded locking bolt *(Figure 103).* Cut the weld using a cut-off wheel or torch and remove bolt. Remember to wear safety glasses when cutting the weld.



Step 6 Remove axle from caster assembly.

Step 7 Replace damaged axle with new axle, making sure the locking bolt hole on the axle and caster assembly are aligned.

Step 8 Install and tighten the locking bolt.

Step 9 Replace washer, hub, and bearings.

Step 10 Install king nut and cotter key. Be sure to bend the ends of the cotter key so it will not slip out of position.

Step 11 Replace dust cover using hammer to tap into place.

Step 12 Reinstall caster wheels and tighten lug nuts.

Caster Wheel Replacement

If a caster wheel is damaged, it should be replaced. The entire wheel assembly can be replaced if the damage is severe—unbolt the existing assembly and secure a new assembly to the lift leg. Each wheel is on a metal shaft that is secured with bolts. Damaged metal shafts should also be replaced. In order to perform this task easily, raise the damaged caster lift leg off the ground.

Tools Required for Task:

· 13/16" socket and ratchet with extension

- Raise the lift leg off the ground



Figure 104

Step 1 Remove 5 lug nuts.
Step 2 Remove tire and rim.
Step 3 Replace tire and rim.
Step 4 Retighten lug nuts.

Drive Chain Replacement

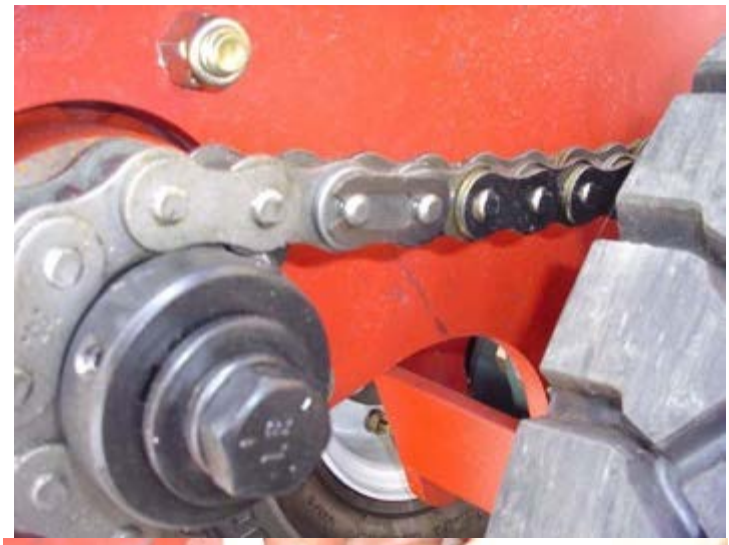
Tools Required for Task:

- Flat head screw driver

The drive wheel chains can become damaged if the spreaders are operated with the lifts drive wheels on the ground.

Step 1 Raise the leg of the lift of the drive chain that needs to be replaced.

Step 2 With lift running, turn wheel to find the master link.



Step 3 Raise the leg of the lift of the drive chain that needs to be replaced.

Step 4 With lift running, turn wheel to find the master link.

Step 5 Remove the master link locking clip and master link.



Step 6 Remove the master link locking clip and master link.

Step 7 Remove damaged chain.

Step 8 Install new chain.

Step 9 Secure the new chain's master link.

Drive Motor Replacement

Tools Required for Task:

- 2-3/4” open ended wrench
- 11/16” open ended wrench
- 15/16” open ended wrench
- Flat head screw driver
- Allen Wrench
- Bucket

Step 1 Remove the master link and chain following instructions from Drive Chain Replacement section.

Step 2 Remove the two hydraulic lines connected to the drive assembly. Use bucket to catch any hydraulic fluid that was in the lines. Mark the hydraulic lines after removing. Remove fittings from old motor.



Step 3 Using 2- ¾” open ended wrenches, remove 4 bolts attaching drive motor to lift. Remove motor.



Step 4 Remove gear from drive motor using an Allen wrench.



Step 5 Attach gear to new motor

Step 6 Attach hydraulic fittings to new motor

Step 7 Reattach drive motor to lift using 4 bolts

Step 8 Reattach hydraulic lines. Tighten the hydraulic lines to finger tight plus ¼ turn using a wrench. Remember to not over tighten the hydraulic fittings. It may cause the lift to leak.

Step 9 Check hydraulic fluid gauge and replace any fluid that is lost.

Podzilla Fuel Tank - Plastic Retrofit

The standard steel tanks on Podzilla do not allow the drivers to know the level of fuel inside, so the drivers had to carry sticks to measure the fuel level. The new tank is clear and it has a capacity of 7 gallons compared to the 5 gallons of the steel tank.

Parts and Labor

- Labor Time .75 – 1.00 Hrs.
- Part number **LHY079** Fuel Tank 7 GL Kit Natural Color (clear)

Tools Needed

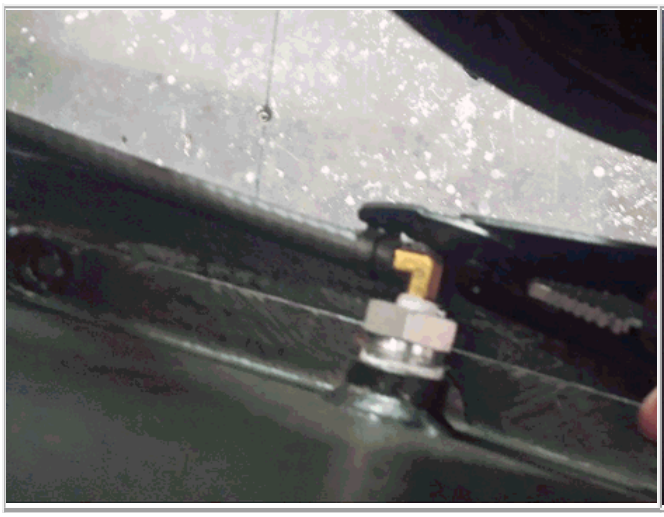
- 9/16 Socket and 9/16 wrench
- 7/16 socket and 7/16 wrench
- Standard screw driver and Phillips screw driver
- Cutters

Procedure

1. Remove breather cap from old tank and syphon the fuel from the old tank.



2. Remove and plug the fuel line. Then remove the mounting hardware securing the tank to the power rack.





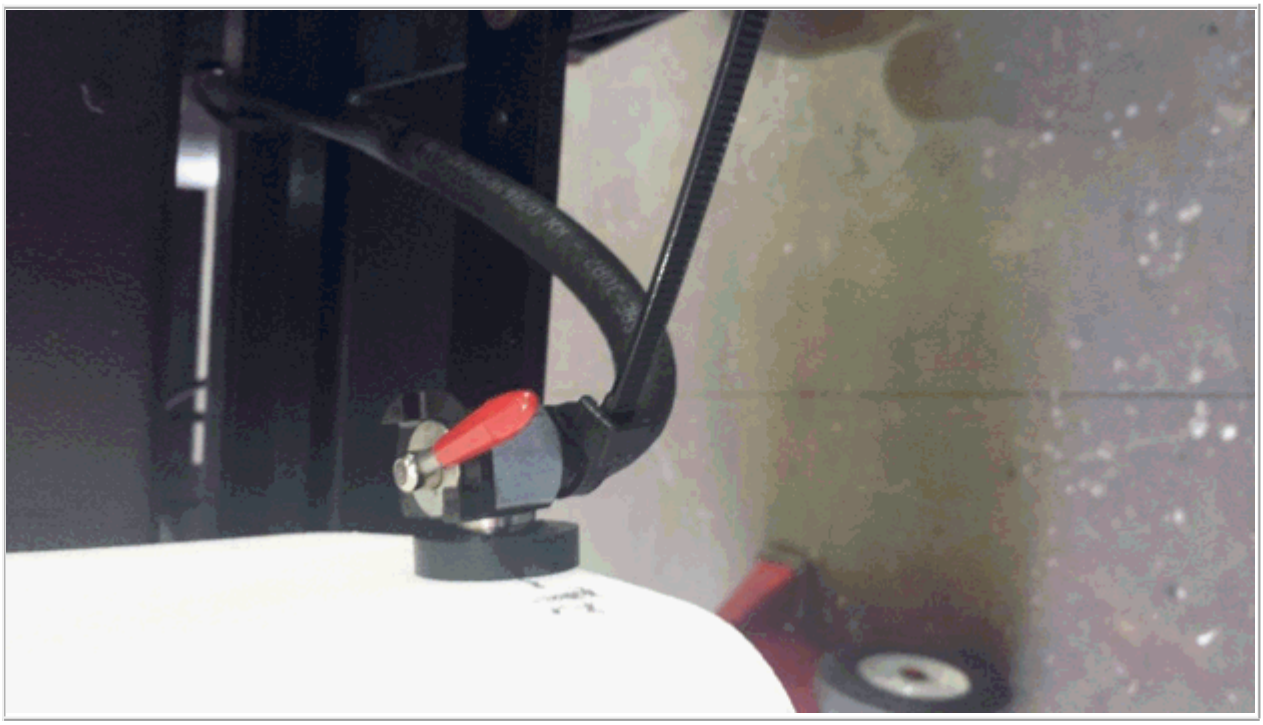
3. The plastic tank will come with two steel adapter plates and two steel tank straps for mounting.



4. Use the old tank hardware and loosely fit the tank mounts to the power rack. Do not tighten.



5. Attach the fuel line to the new tank and secure it with a zip tie or hose clamp.



6. Place the tank so the fuel petcock is facing the hydraulic tank. Place the mounting straps in the grooves of the plastic tank.



7. Secure the tank straps to the steel adapter plates. Use the ¼" hardware that came in the kit.



8. After you have tightened the steel straps then tighten the steel adapter plates to the power rack. Your installation is now complete. Make sure the pet cock is in the on position.

Guide Wheel Replacement

If a guide wheel is damaged, it should be replaced. Each wheel is on a metal shaft that is secured with a bolt. Damaged shafts should also be replaced. Replace the wheel and/or the shaft as follows:

Tools Required for Task:

- 2ea 9/16" Socket or open-end wrench

Step 1 Using the 2 wrenches, one on either side of the bolt, unscrew bolts from mounting plate.



Step 2 Slide the damaged wheel off the shaft. If necessary, replace the shaft.

Step 3 Slide a new wheel onto the shaft, making sure that the top of the new wheel is flush with the top of the mounting plate.

Step 4 Re-secure bolts to the mounting plate. If the guide wheel brackets are bent use tools, such as a crowbar and a hammer, to straighten the bracket. If bracket is too bent, heat (gas torch) may have to be applied to straighten it.

Hydraulic Hose Replacement

NOTE: If the connectors are leaking, tighten to stop leakage. If leaking continues, replace hose. If the hose is leaking, replace hose and connector.

Tools Required for Task:

- Replacement Hydraulic Hose w/Fittings
- 1/2" Open-end or socket wrench for nylon bushing plate bolts

· 7/8" Open-end wrench for hydraulic fittings
· 11/16" Open-end wrench for hydraulic fittings
· Chevron Clarity ISO32 hydraulic fluid (as needed)
· Container for hydraulic fluid run-off (a bucket)
· Hydraulic Spill Kit

Step 1 Loosen the two connectors on the leaking hose. Using an open-end or crescent wrench loosen the connector fittings. Have a container (bucket) ready to catch any hydraulic fluid spill as the connector is loosened.



Step 2 Remove the hose, and replace it with a new hose.

Step 3 Tighten the connectors to finger tight. Using the wrench, tighten ¼ turn. Be careful not to over-tighten the connectors or you will strain the metal and cause a leak at the connector.

Step 4 Check hydraulic fluid tank level and replace any fluid lost during the changing of the hose.

Step 5 Be sure to clean up any spilled hydraulic fluid using your Hydraulic Spill Kit.



Hydraulic Pump Replacement

Important: Review the unbolting procedure in section 3; it may be necessary to remove entire motor as older units have no universal holes and the whole unit may need to be replaced.

Tools Required for Task:

- 1” Open ended wrench
- 7/8” Open-end wrench
- 1 1/4” Open-ended wrench
- 9/16” Open-ended wrench
- 15” crescent wrench
- Spill bucket

Step 1 Disconnect the two hydraulic hoses that go to the pump. (Use a common plastic restaurant dish reservoir to collect the hydraulic fluid. Have several dry cloths on hand collect spillage.)

Step 2 Remove fittings from hydraulic pump

Step 3 Unbolt the pump from the engine mounting plate.

Step 4 Remove the old or damaged pump.

Step 5 Install fittings on the new pump.

Step 6 Remove love-joy on old pump.

Step 7 Install love-joy from old pump onto the new pump.





Step 8 Align the love-joy on the new pump so nylon bushing fits securely.

Step 9 Align love-joy on new pump with love-joy on motor.

Step 10 Bolt the new pump in place.

Step 11 Connect the hydraulic hoses to the new pump.

Step 12 Check hydraulic fluid gauge and replace any fluid that is lost during this task.

Note: Be careful when tightening the hose connectors. If you tighten them too much, you will strain the metal and the connector may break or leak.



Nylon Wear Disc Replacement

Each of the six (two horizontal spreader and four leg) spreader housings contain eight nylon wear discs. If the disks are quite worn, you will notice a lot of play in the leg when you operate the lift. All four sides of each of the outer housings have cover plates, with two wear discs under each plate.

Tools Required for Task:

- 9/16" Open-End or socket wrench and ratchet
- Electric Drill
- ¼" Drill Bit
- Replacement Wear Disc

Step 1 Remove the four 9/16" bolts in the cover plate.

Step 2 Remove the cover plate to expose the wear discs.



Step 3 Using a drill with a ¼" bit, drill straight into the disc approximately ¼" to ½."



Step 4 With the bit still lodged in the disc, pull on the drill to extract the nylon disc from the housing.

Step 5 Insert the new discs.

Step 6 Replace the cover plate. If the cover plate is bent it will also have to be replaced.

Step 7 Secure the cover plate with the four 9/16" bolts.

Step 8 Repeat the STEPS for the other three sides of the housing.

Step 9 Repeat all of the steps for each of the other spreader housings.

Step 10 Operate the spreaders to ensure the spreaders functions properly.

Replace the Drive Axle Assembly

Tools Required for Task:

- 13/16” socket and ratchet with 3/8” extension
- 2-2/4” open end wrench
- 13/16” open end wrench
- 7/8” open end wrench

Figure 108



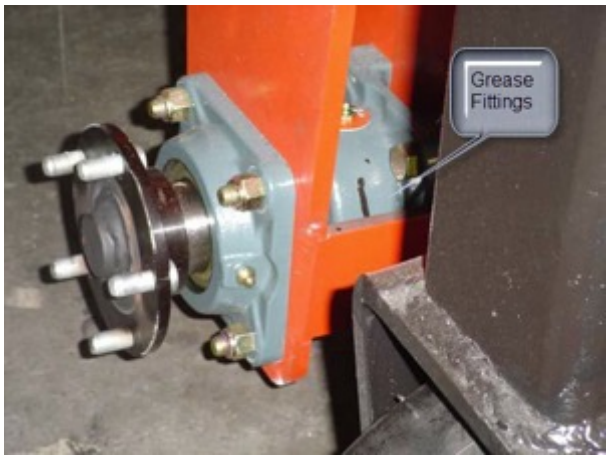
Step 1 Raise leg on lift that corresponds to the drive assembly that needs to be replaced and remove both tires.

Step 2 Remove drive chain using Drive Chain Replacement procedure.

Step 3 Remove bolts from small bearing using 2-3/4” open end wrenches, one on either side of the bolt.

Step 4 Remove bolts from large bearing using 2-¾" open ended wrenches - **CAREFUL THE DRIVE ASSEMBLY DOES NOT FALL FROM LIFT**.

Step 5 Before installing new drive assembly, ensure the grease fitting on the large fitting is either facing up or down. The grease fitting on the small bearing should be facing away from the motor section or the lift.



Step 6 Install bolts on large bearing first with the bolt heads on the inside of the assembly and the nuts on the outside. If the bolts to the small bearing are installed first, there will not be enough clearance to install large bearing bolts.

Step 7 Install bolts on small bearing with the bolt heads on the inside of the assembly and the nuts on the outside.

Step 8 Tighten bolts.

Step 9 Reinstall chain.

Step 10 Reattach tires.

Walvoil Valve Replacement

The Walvoil valve has two main hoses that feed the hydraulic fluid into and out of the hydraulic bank. For each one way or the other, causing a ram inside a spreader or vertical leg housing to retract or expand. control, there are two hose connectors. Operating a control from the bank opens the valve Walvoil valves can be repaired; however the entire bank is typically replaced if a valve goes bad.

Tools required for task:

- 11/16" Open-end wrench
- 7/8" Open-end wrench
- 9/16" Open-end wrench
- 2-½" open-end wrench

Step 1 Disconnect all hose connectors attached to the bank.

Step 2 Mark each hose line from bank to ensure the proper connection when assembling new valve bank.

Step 3 Remove fittings from valve

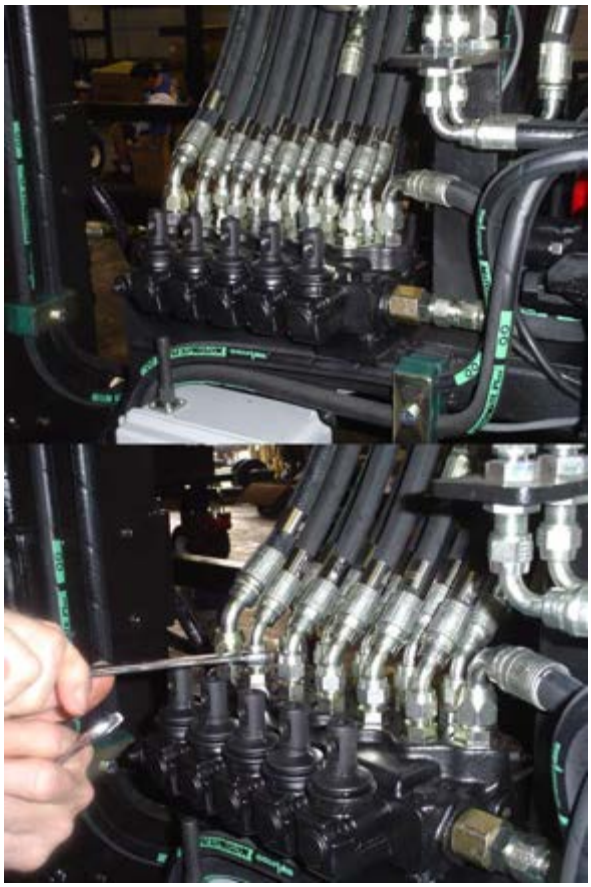
Step 4 Remove the 3-7/16s bolts from valve using 2-½" open-end wrenches.

Step 5 Bolt a new bank to the valve bank tree.

Step 6 Reinstall hose fittings to valve, O-ring side down

Step 7 Reconnect hoses to correct valves.

Step 8 Check hydraulic fluid gauge and replace any hydraulic fluid that is lost during this task. Be sure to clean up any spilled hydraulic fluid using your Hydraulic Spill Kit.



NOTE: Be careful when tightening the connectors. If you tighten them too much, you will strain the metal and the connector may break or leak.

Hardline Repair Procedure

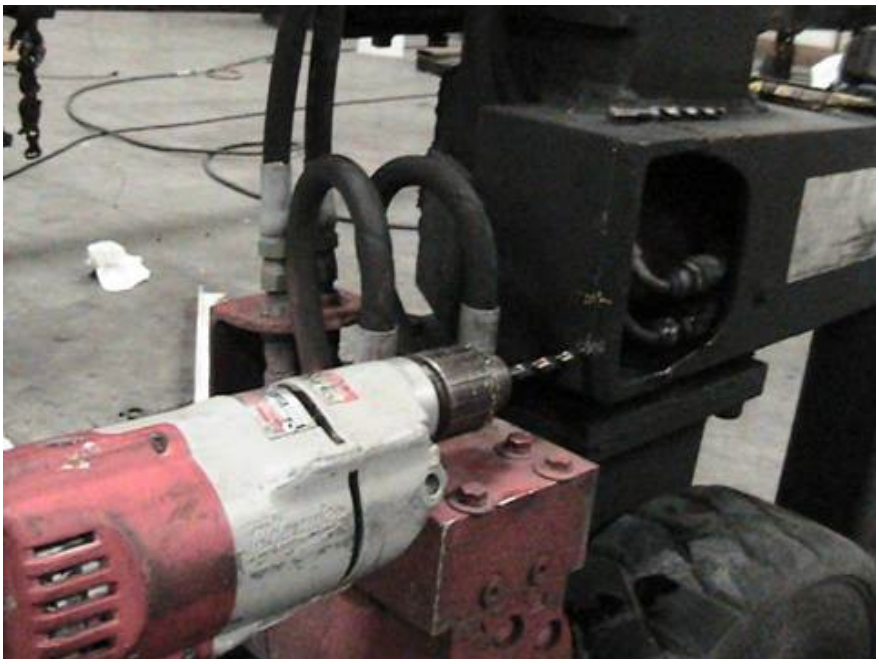
1. Common signs of hydraulic leak in PODZILLA side rail.



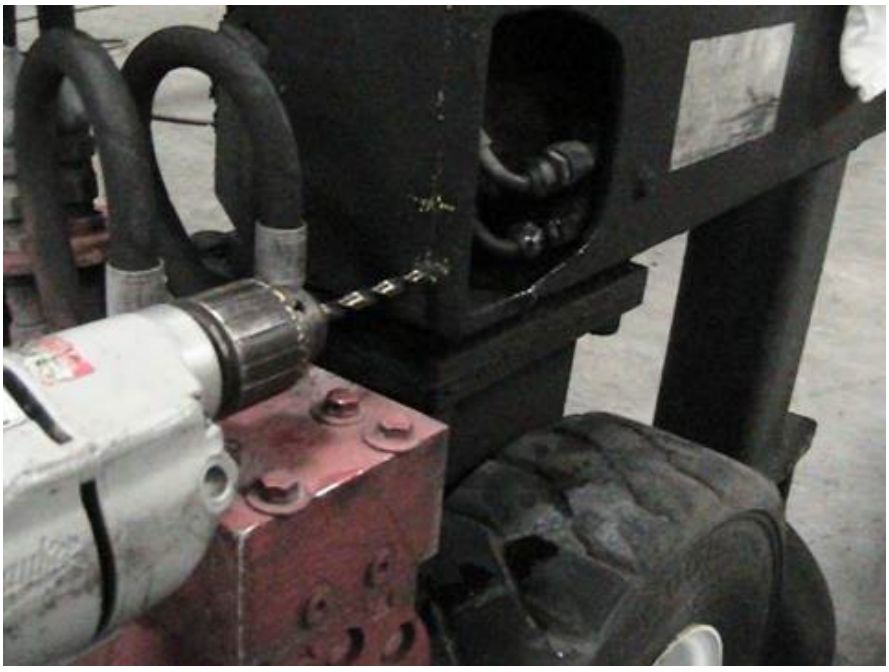
2. Side rail leak



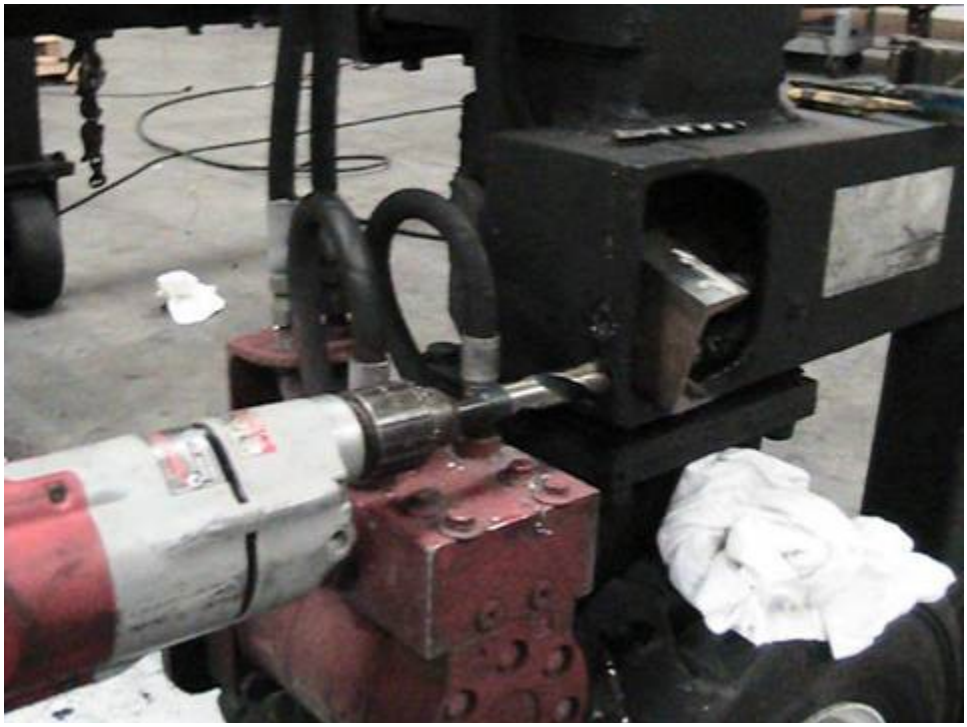
3. Place marks on rail end cap parallel with hydraulic tubing.



4. Drill 3/8 pilot holes at each marked location.



6. Place a piece of metal in front of fittings to prevent damage. Chase through the 3/8 holes with a 1 inch drill bit.



7. Outside rail cap view with 1 inch holes.



8. Inside rail cap view with 1 inch holes.



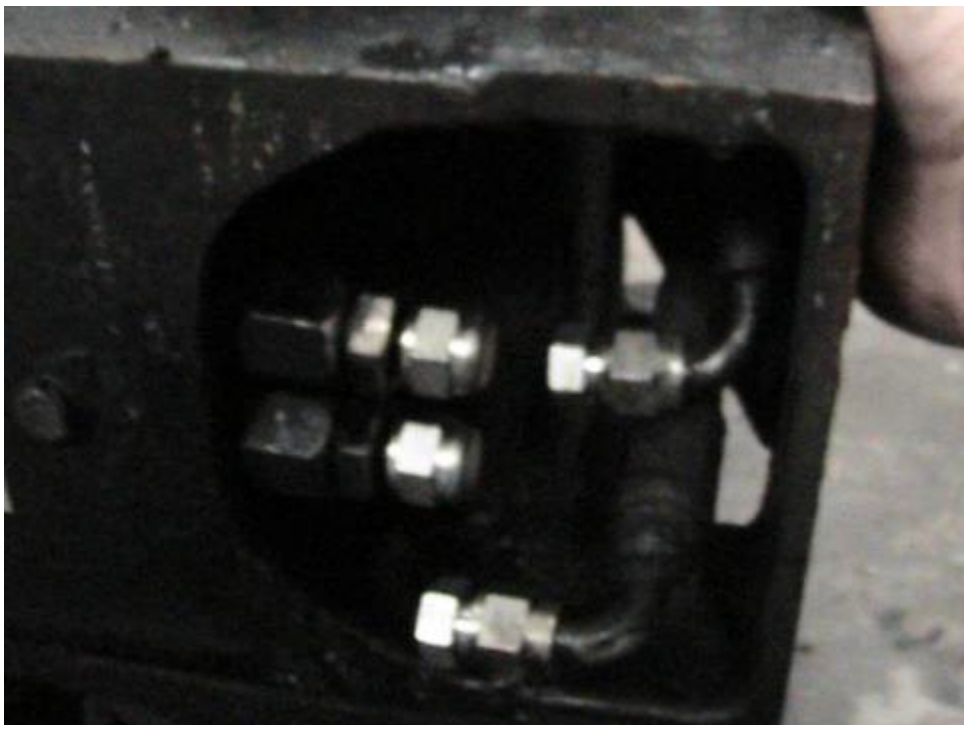
9. Use a 13/16th open end wrench in combination with an 11/16th wrench to prevent twist damage to fittings.



10. Remove fitting with 11/16th open end wrench.



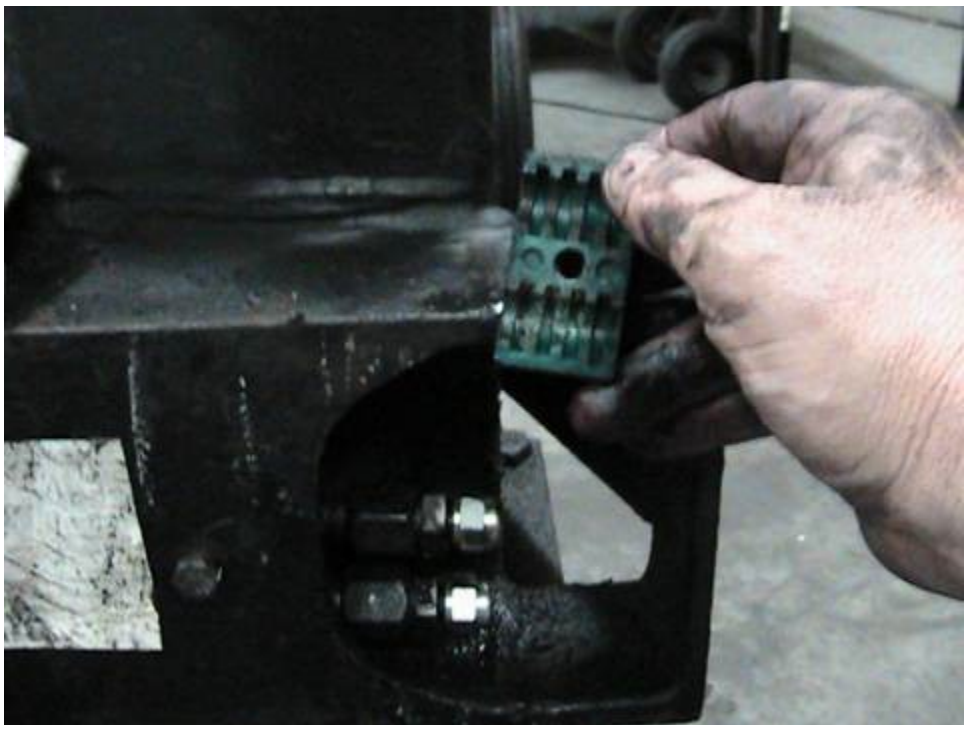
11. 3/8 caps and plugs can be used to reduce oil leakage.



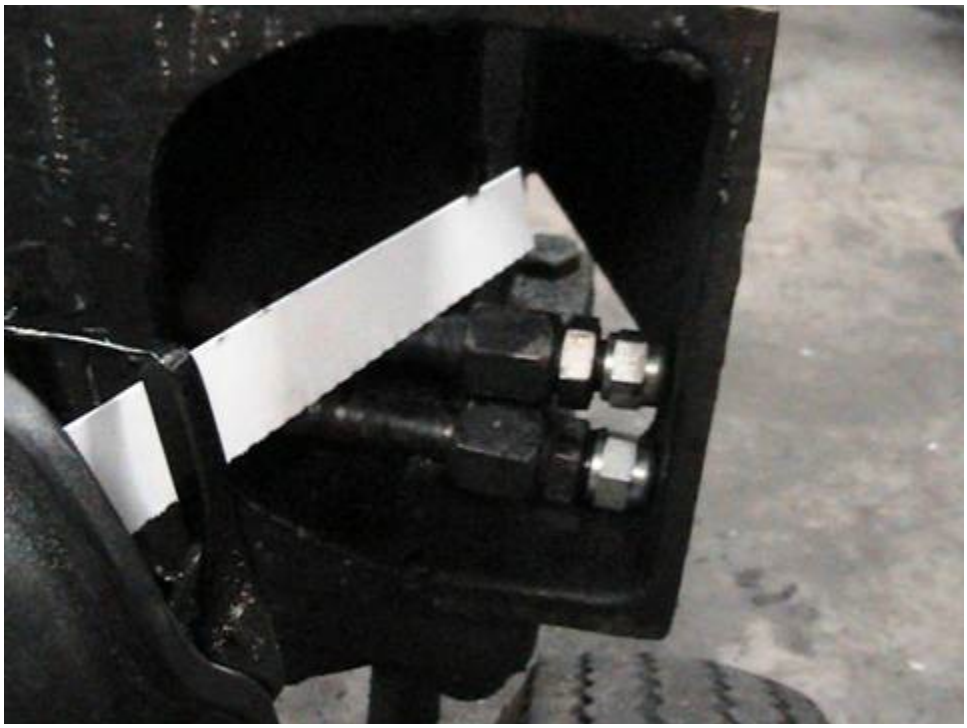
12. Remove both double tubing blocks, one at each end of rail.



13. Remove double tubing block.



14. Cut off Hydraulic adaptors.



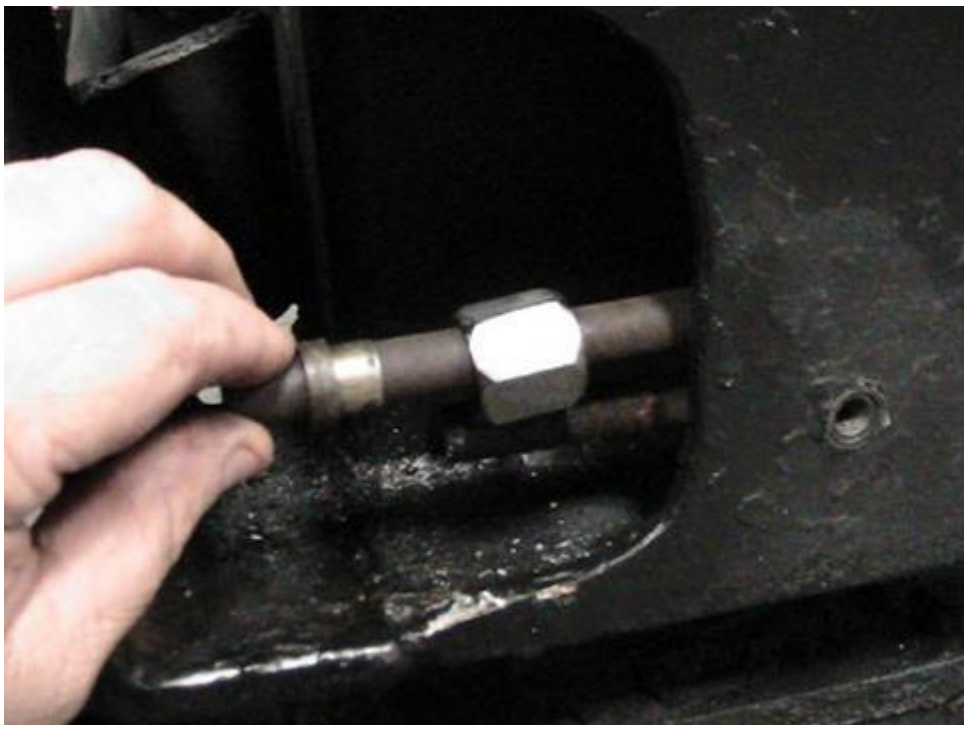
15. Cut off hydraulic adaptors at other end.



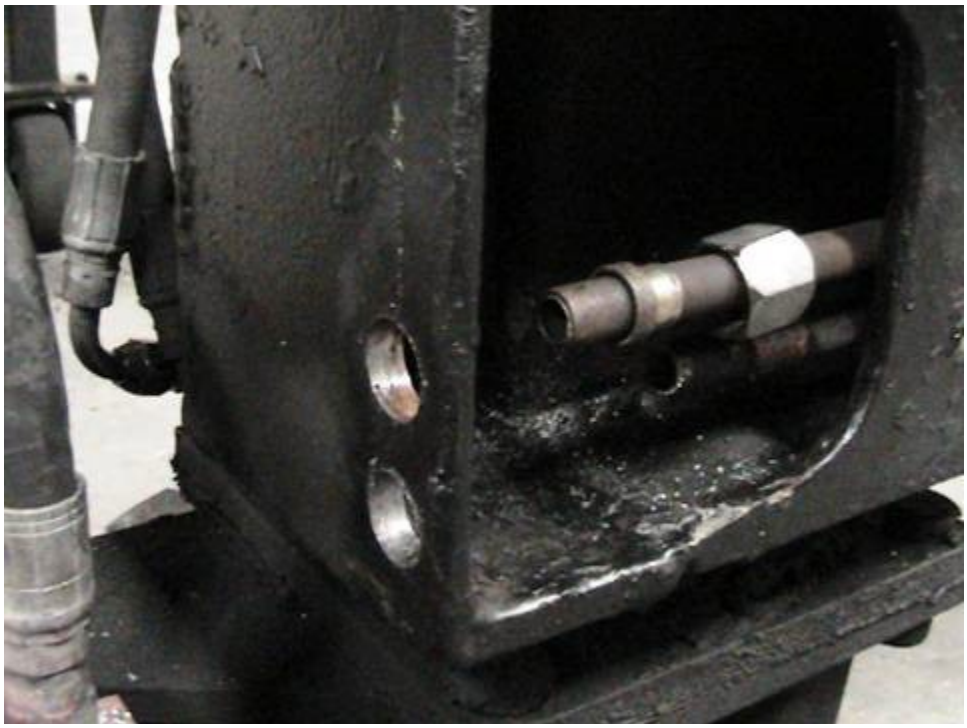
16. Insert cut end through previously drilled holes and pull completely out.



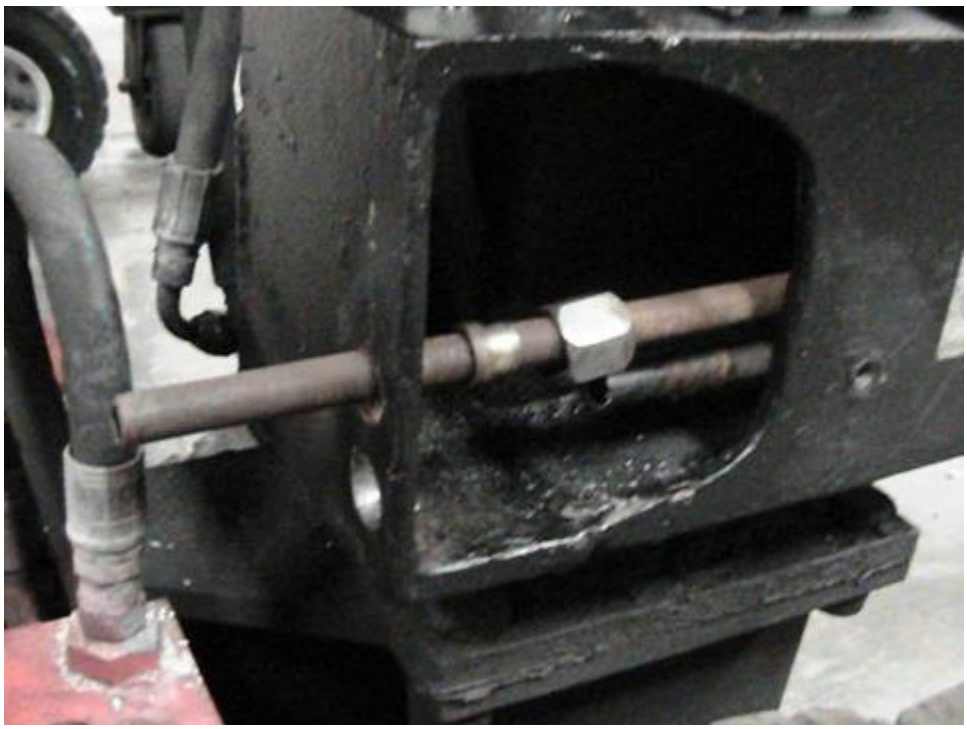
17. Install new ½ .049 wall seamless tubing. Slide fittings on while tubing end is visible in window.



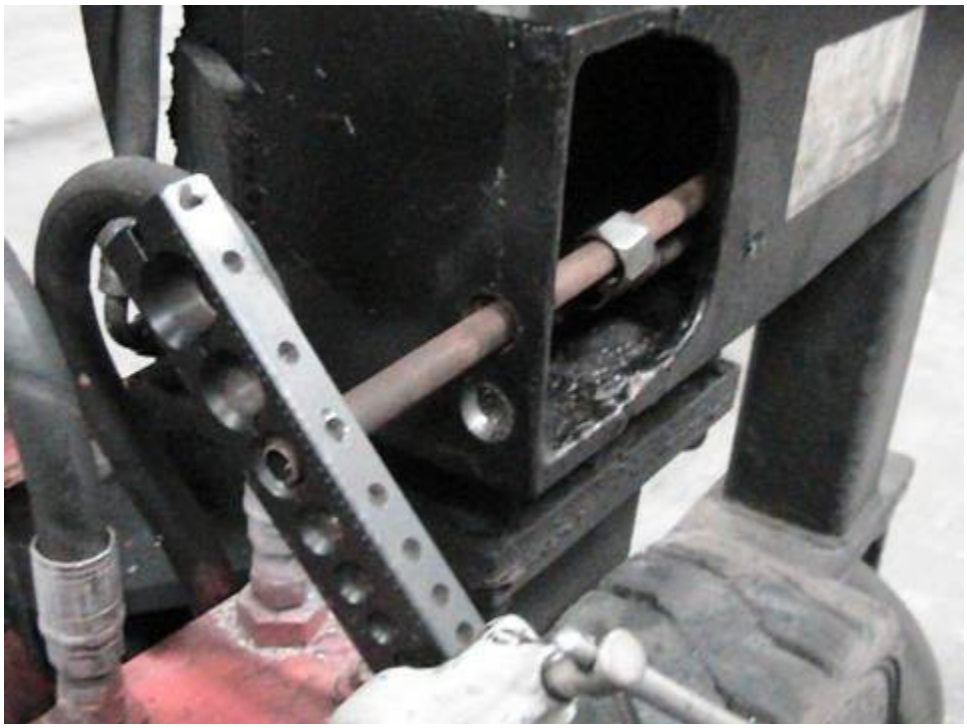
18. Fittings installed.



19. Push tubing through pre-drilled holes.



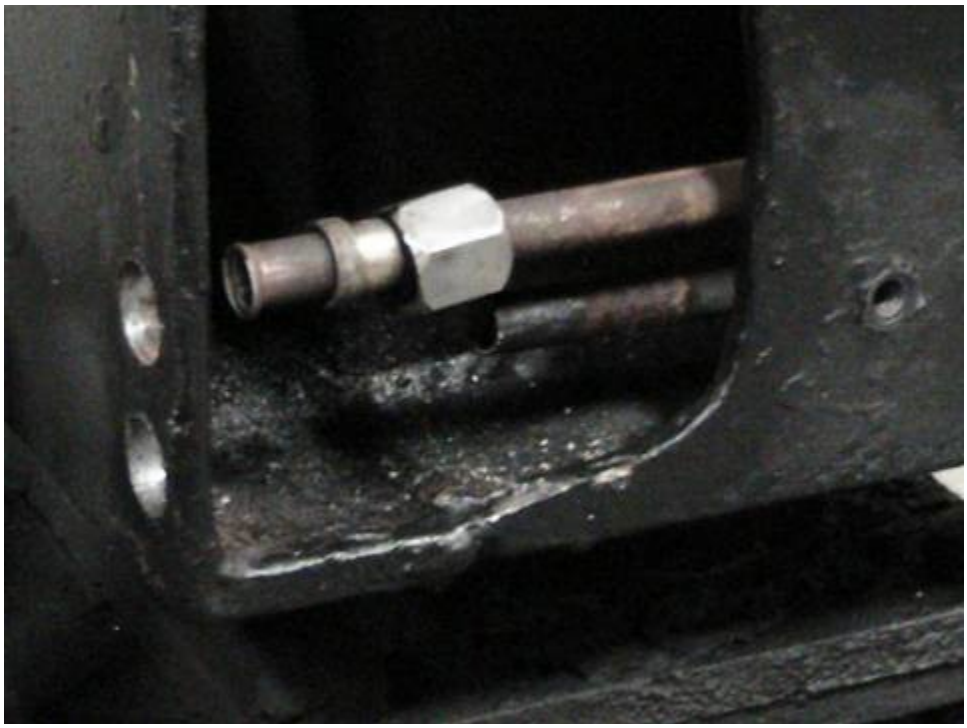
20. Use proper flaring tool to flare tubing.



21. Tubing with flaring completed.



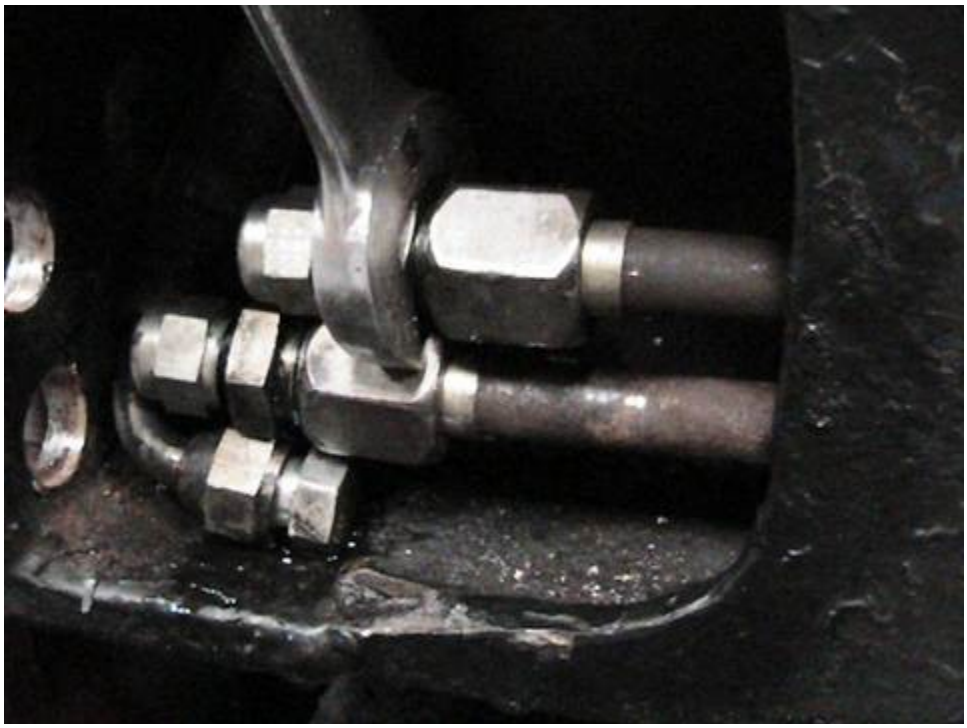
22. Slide tubing back and repeat flaring steps at other end of rail.



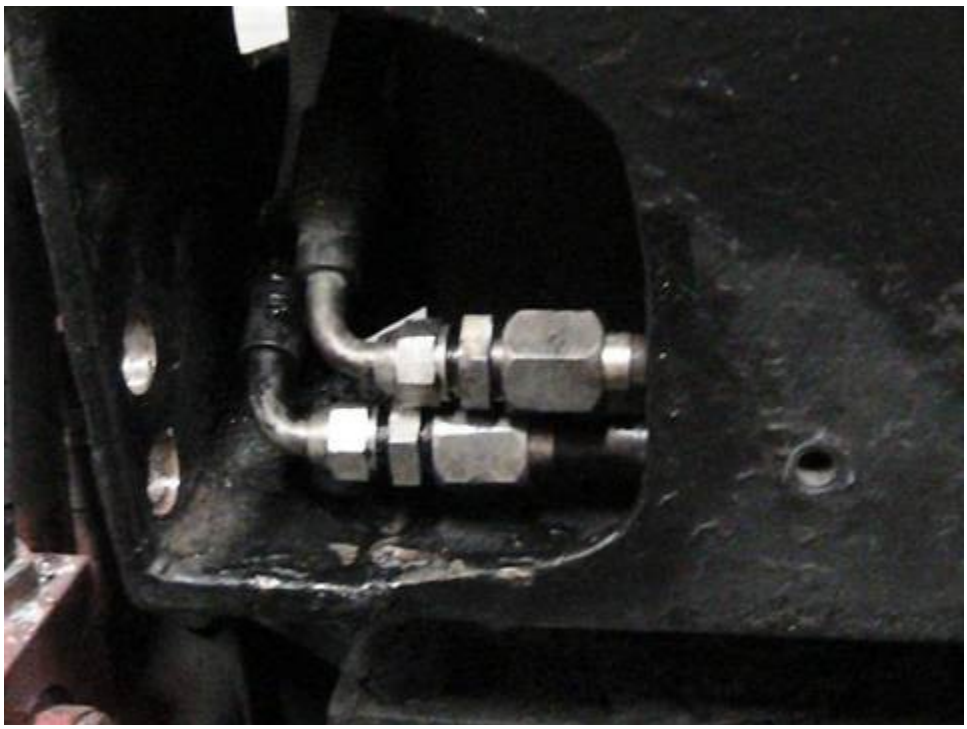
23. Assemble adaptor fittings and hose fittings.



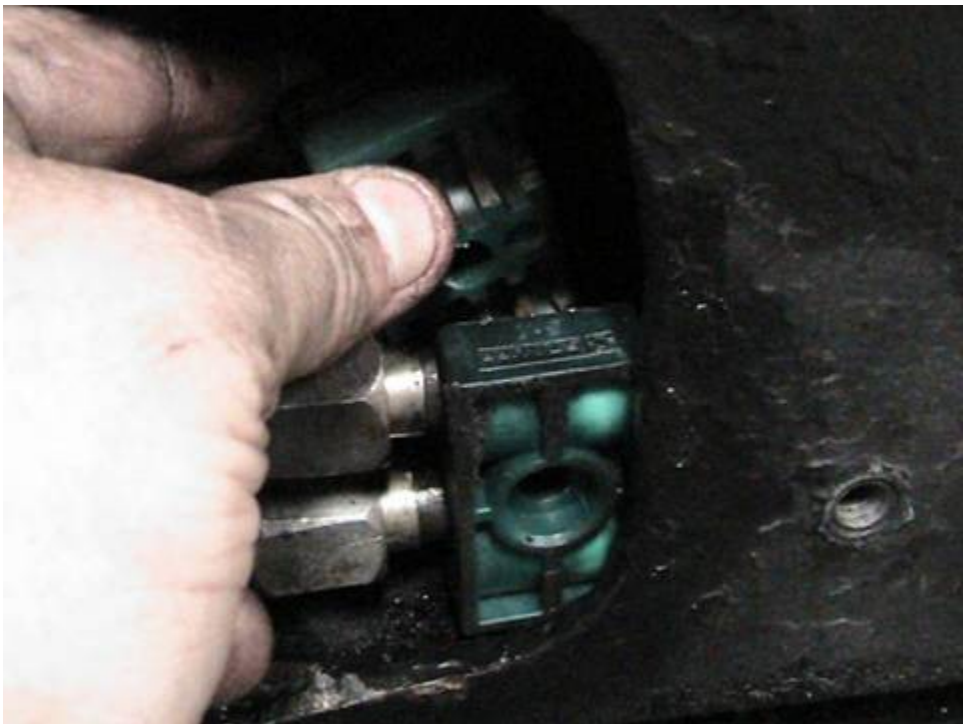
24. Tighten all fittings.



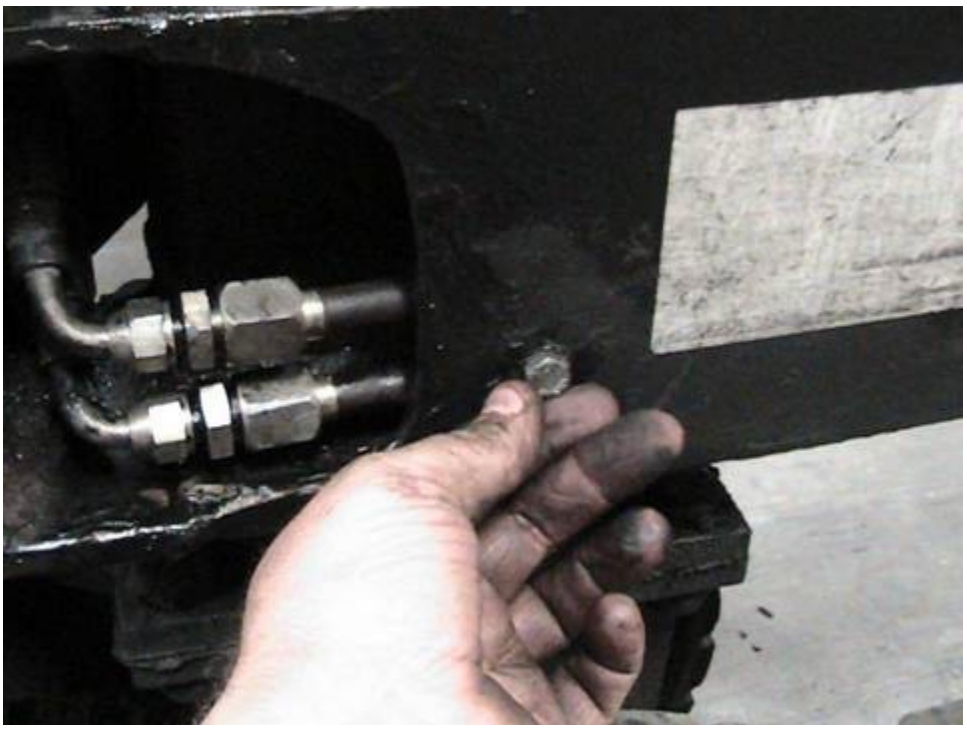
25. Adaptor and fittings assembled.



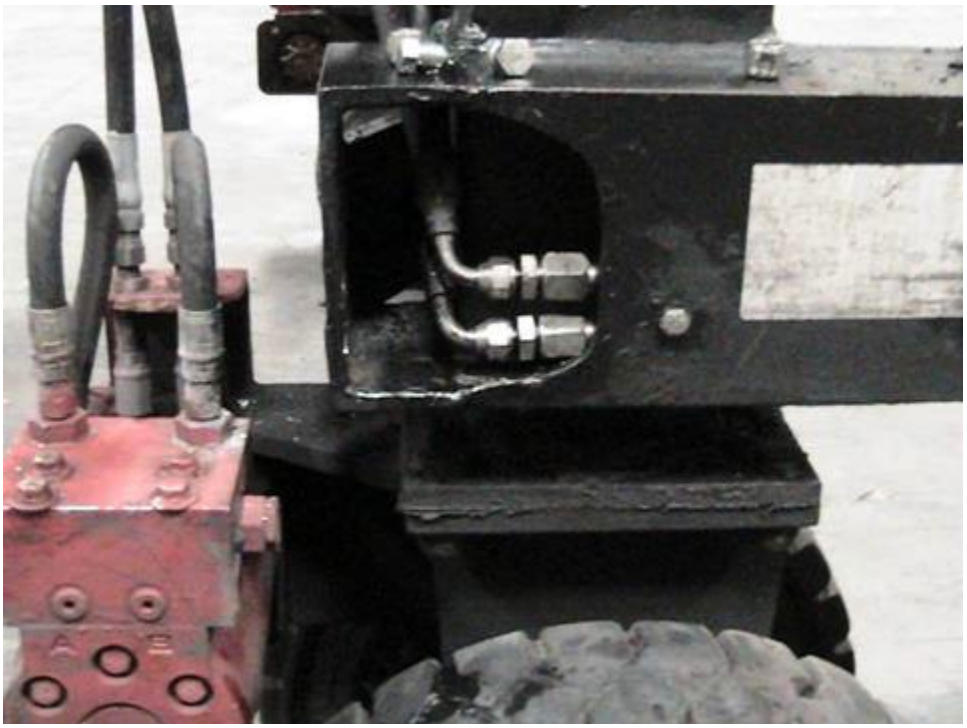
26. Assemble hose block and slide into position.



27. Install hose block hardware.



Job complete!



28. **Final Checks**
    - Start engine on low idle
    - Check for any signs of leaks
    - Test all functions
    - Pressure wash Lift and monitor for possible leaks

Spreader Repair Procedure

1. Spread PODZILLA completely open and completely raise drive legs.



2. Weld angle supports to inside and outside spreader tubes. (Alternatively, you can tie lift off using trucks and forklift.)



3. Locate cylinder pin and snap ring assembly



4. Remove two Snap rings for each inside spreader tube, one on each side.



5. Saturate cylinder pin area with WD40 12-14 hours prior to removal. Remove cylinder pin from inside spreader tubes.

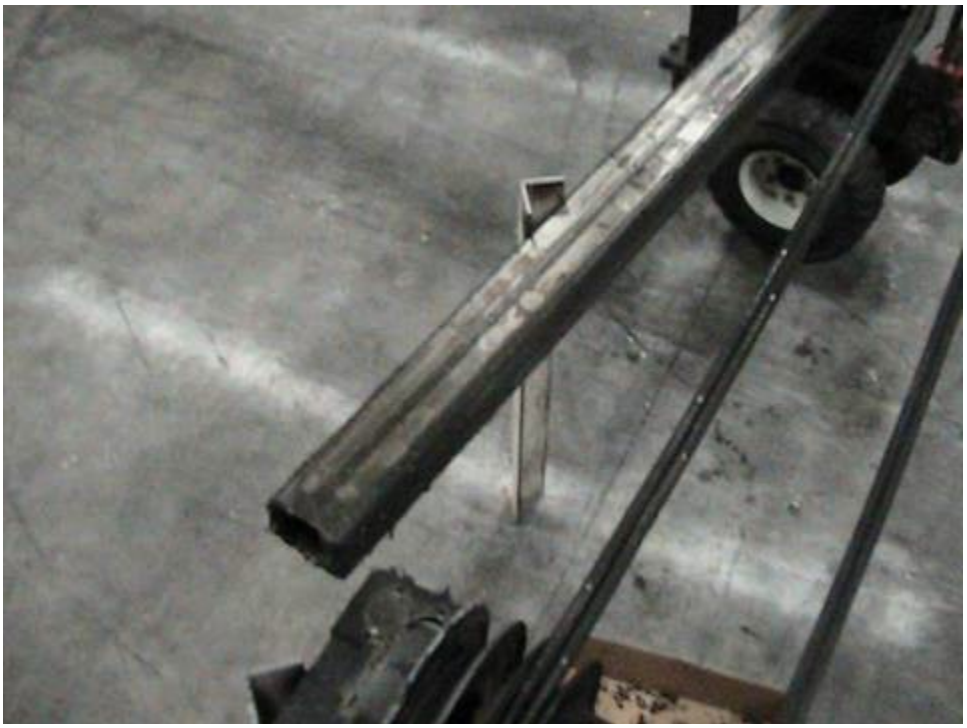


6. Start Honda engine and completely close spreader cylinders.

7. With two people gently push non control side away from control side.



8. Off-set spreader tube's to allow removal of spreader cylinder.



9. Remove all wear disks



10. Remove hydraulic supply lines from spreader cylinders



11. Remove adaptor fittings from cylinder and install plug fittings from new cylinder.



12. Locate Snap ring and cylinder pin assembly



13. Remove Snap ring from both sides of pin

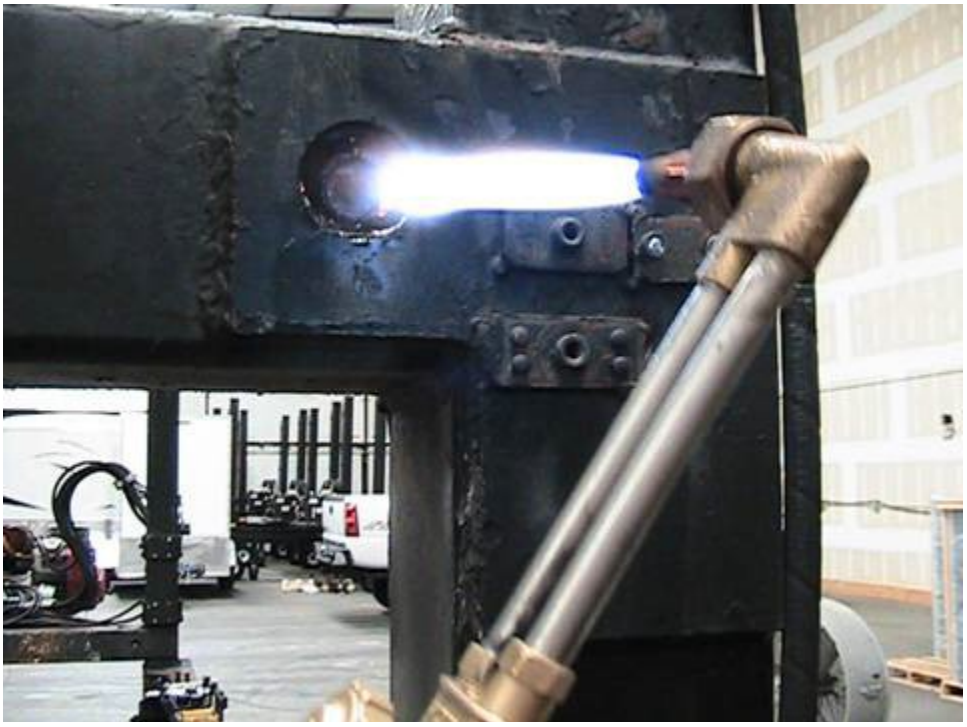


14. Saturate cylinder pin area with WD40 12-14 hours prior to removal. Remove cylinder pin



In some cases pin removal requires experienced torch operating skills.

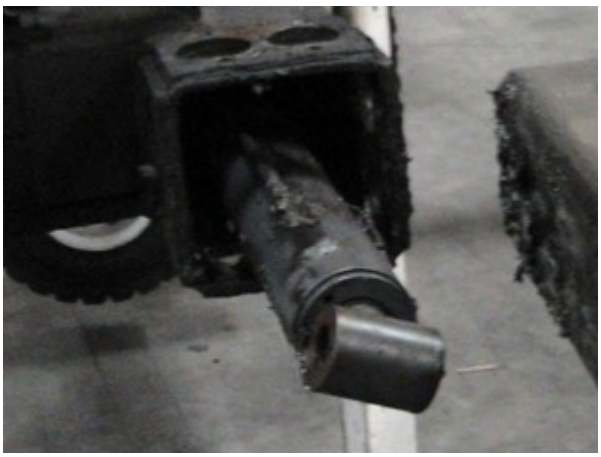
Damage may occur to pin boss if procedure is performed by non-qualified technician.



15. Pin removal without damage to pin boss or broach.

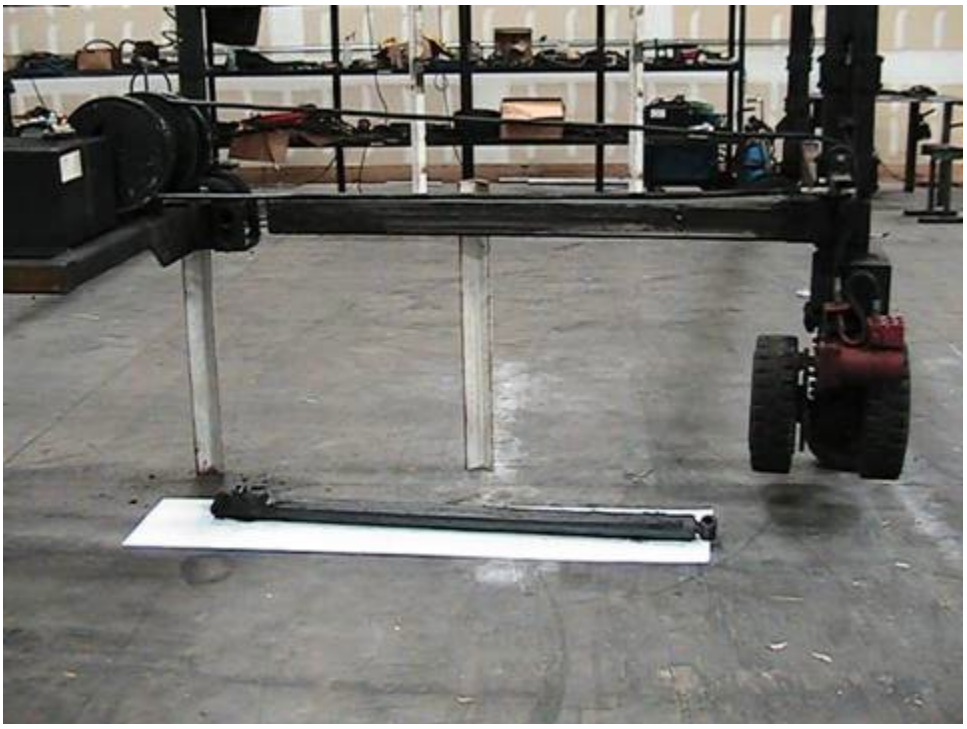


16. Remove cylinder from inside spreader tube





17. Remove cylinder plugs and re-install in new cylinder

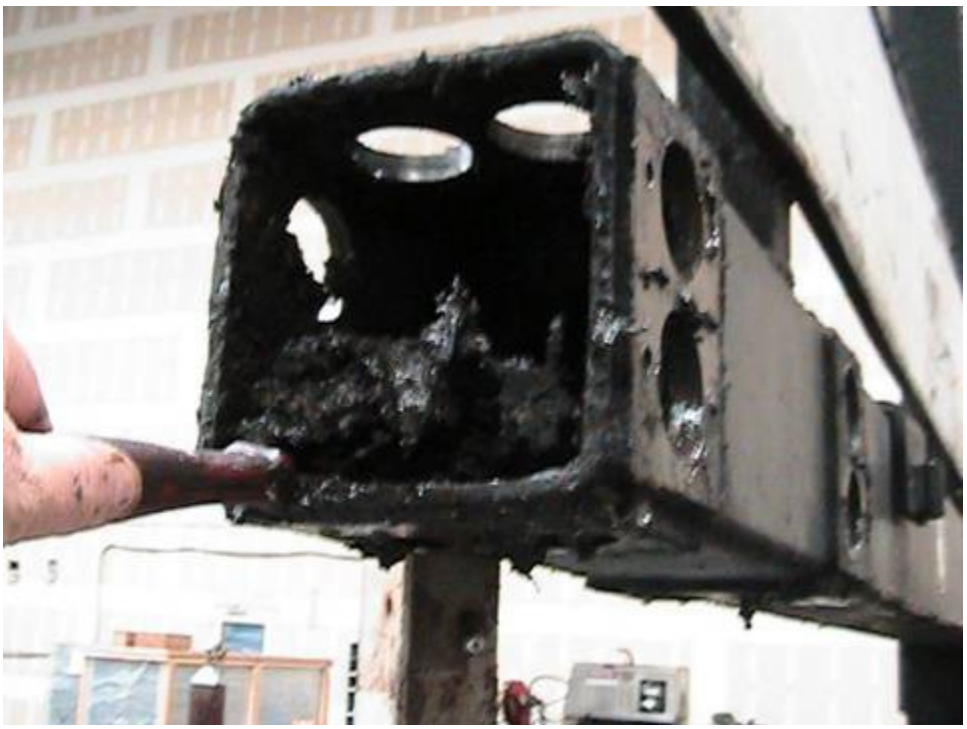




18. Remove the old grease from the inside spreader tube's



19. Remove the old grease from the outside spreader tube



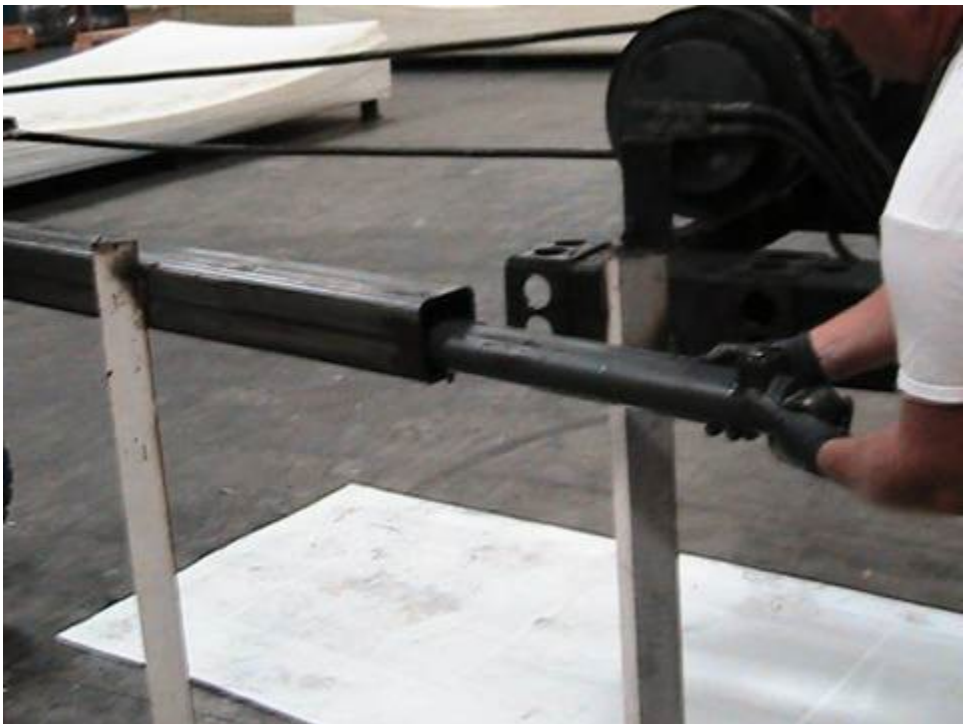
20. Acceptable condition of outside/inside spreader tube's

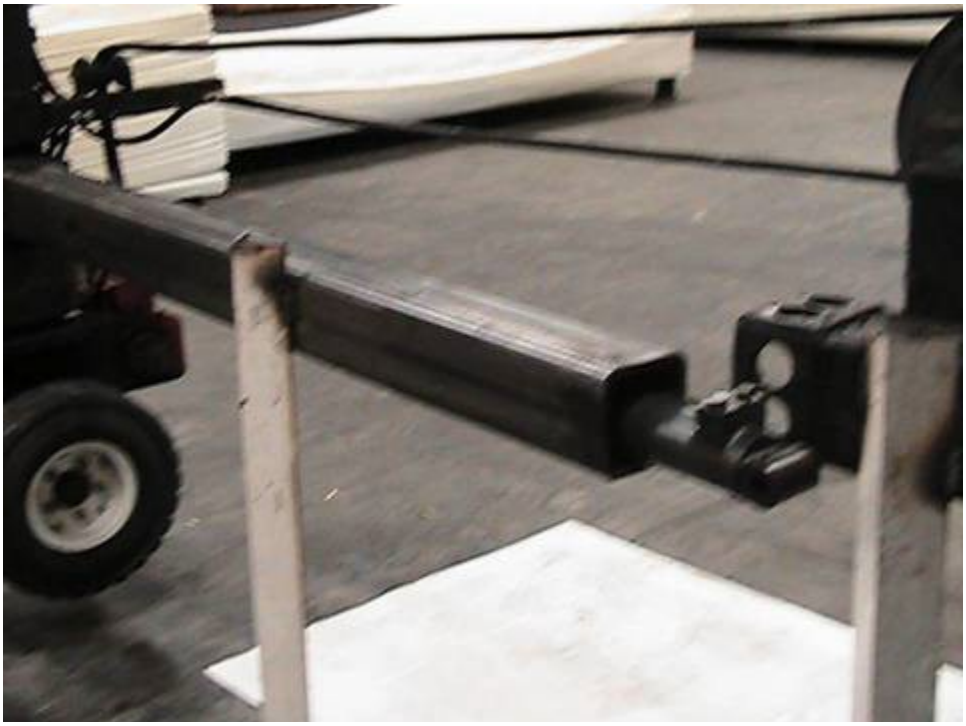


21. Use Dremel tool to remove all rust scale



22. Install new Hydraulic cylinder.





24. Use only new pins for replacement parts



25. Apply generous amounts of anti-seize compound to pin and pin boss



26. Align cylinder clevis with inner tube pin bosses and insert pin and snap rings.





28. Align spreader tubes and gently slide back together until inner spreader Tube support reaches outer spreader tube



29. Remove only the inner spreader tube support's at this point.

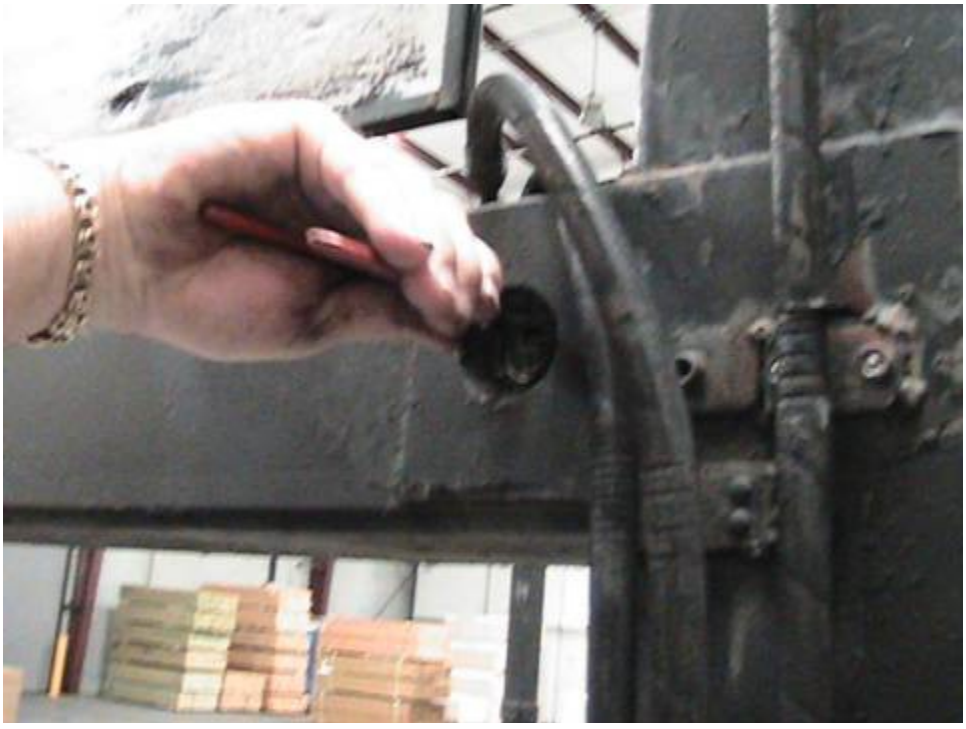
NOTE - Do Not Remove the outer spreader tube supports at this time.



30. Continue to slide together until cylinder clevis aligns with pin boss.



31. Install new Snap rings at each end of pin



32. Remove cylinder plugs and install adaptor fittings



33. Attach hydraulic hoses



34. Install all wear disks and cap plates



35. Remove outer spreader tube supports

36. 

37. Finish to a smooth surface and paint



38. **Final inspection**
    - Check for any signs of hydraulic leaks.
    - Check spread function.
    - Check Hydraulic oil level

Leg Cylinder Replacement

Tools / Materials

- 15/16 Wrench
- 15/16 socket
- ¾" wrench
- Pressure washer
- 4"x4"x2' beams
- Strap
- Forklift
- Punching tool

This procedure may be accomplished while PODZILLA is on the truck. This illustration shows the PODZILLA off the truck.

Step 1 Create support from the 4x4s to support the PODZILLA while you remove the wheel.

Step 2 Remove the wheel on the leg that will receive the new cylinder.

Step 3 Remove lower Snap ring from the lower leg pin.

Step 4 Remove the lower leg pin.

Step 5 Raise the hydraulic in order to contract the cylinder.

Step 6 Remove top cap. On older PODZILLA models, you will need to cut the weld holding the cap in place.

Step 7 Position a forklift forks above the leg.

Step 8 Tie a strap around the cylinder and secure the strap to the forks above the leg. Apply tension to the strap.

Step 9 Remove the hydraulic lines from the top of the leg and cap the lines.

Step 10 Remove the hydraulic fittings. Insert plugs. Some hydraulic fluid may leak from the cylinder.

Step 11 Remove the upper leg pin.

Step 12 Slowly raise the forks to lift the cylinder out of the leg.

Step 13 Tie the strap to a new cylinder as the old cylinder was tied. Lower/guide the new cylinder into the leg. Be sure to keep the cylinder aligned correctly in order to be able to reinsert the lower pin.

Step 14 Replace the top pin and snap rings.

Step 15 Replace the hydraulic fittings and lines.

Step 16 Bring hydraulic back down to lower the cylinder. Watch the pin hole in order to see the point at which the pin needs to be reinserted.

Step 17 Install lower pin.

Step 18 Install snap rings to lower pin.

Step 19 Raise the hydraulic to lift the left in order to reinstall the wheel.

Step 20 Reinstall the wheel.

Step 21 Pressure wash PODZILLA to remove hydraulic fluid which leaked during the repair.

1. Create support from the 4x4s to support the PODZILLA while you remove the wheel.



2. Raise the leg which will have the cylinder replaced; remove the wheel.



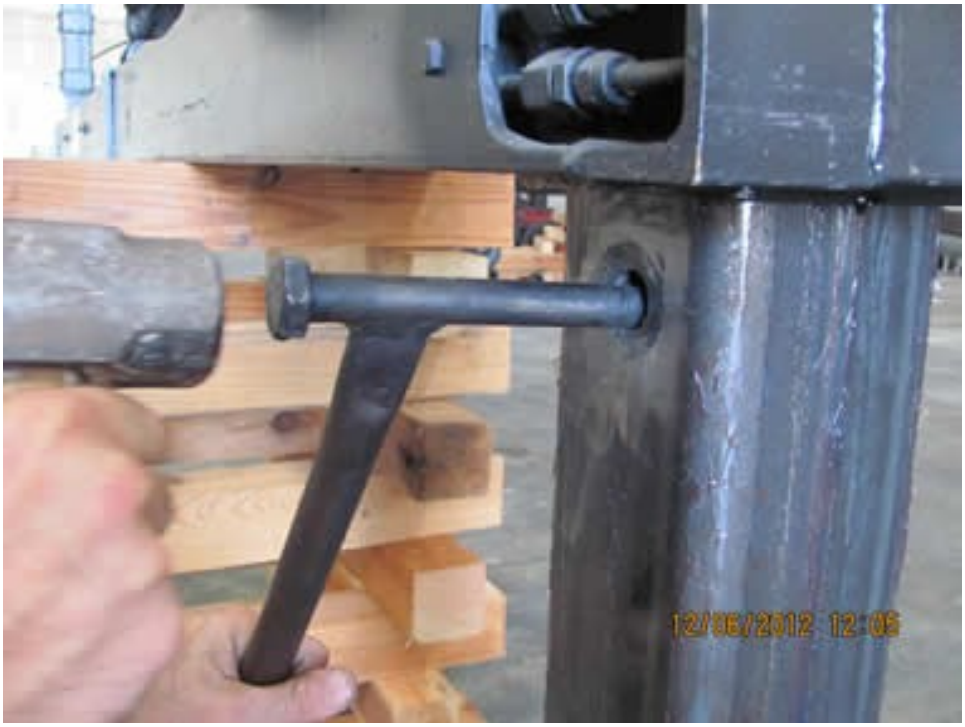
4. Lower the leg back down.



5. Remove the snap ring from the lower leg pin.



6. Use a hammer and any other implement to push the pin out of the leg and extract.



7. Leg pin being pushed out.



8. Raise the hydraulic in order to contract the cylinder. This will make it easier to pull it out of the leg.



9. Remove the top cap. On older PODZILLA models, you will need to cut the weld holding the cap in place.



11. Newer PODZILLA models will have a nut such as that shown here which you can unscrew to release the cap without having to cut a weld.



12. Lifting off the top cap.



13. Position the forks of a lift above the leg. Tie a strap around the cylinder and secure the strap to the forks.



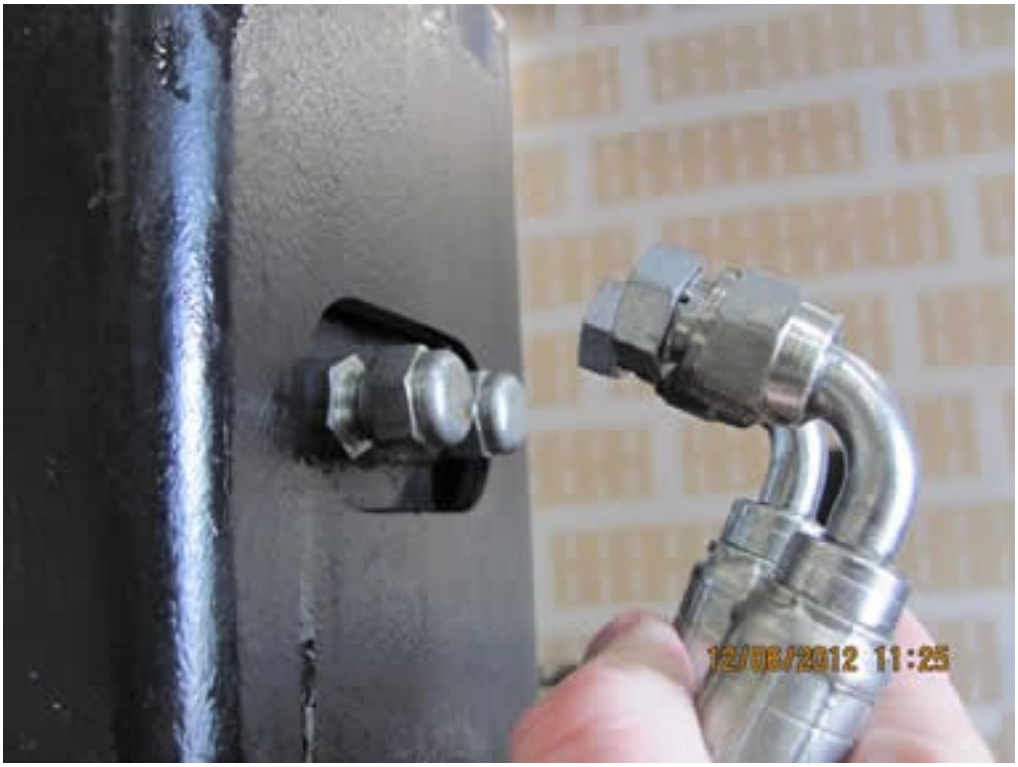
14. Detail of the strap tied around the cylinder in the leg.



15. Raise the fork slowly to apply tension to the strap to allow removing the upper pin.



16. Remove the hydraulic lines and cap.



17. Remove the hydraulic fittings on the cylinder.



18. Install plugs where the hydraulic fittings were removed.



20. Once the hydraulic lines and fittings are removed and everything is capped and plugged, remove the upper snap ring and pin from the leg. Be sure the strap is taught.



21. Slowly raise the forks to lift the cylinder out of the leg.



22. Leg cylinder lifted completely out of the leg.



23. Tie the strap to a new cylinder, then lower/guide the cylinder slowly into the leg.



24. Be sure to keep the cylinder aligned properly in order to be able to reinsert the lower pin.



25. Install the top leg pin. When the pin is replaced, you can let the forks down and remove the strap.



27. Replace the snap ring.



28. Reinstall hydraulic fittings and lines.



29. Bring the hydraulic back down to lower the cylinder. Watch the pin hole in order to see the point at which the pin needs to be reinserted. Replace the lower leg pin.



30. Reattach the wheel.








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Job complete.



Counterbalance Installation

Overview

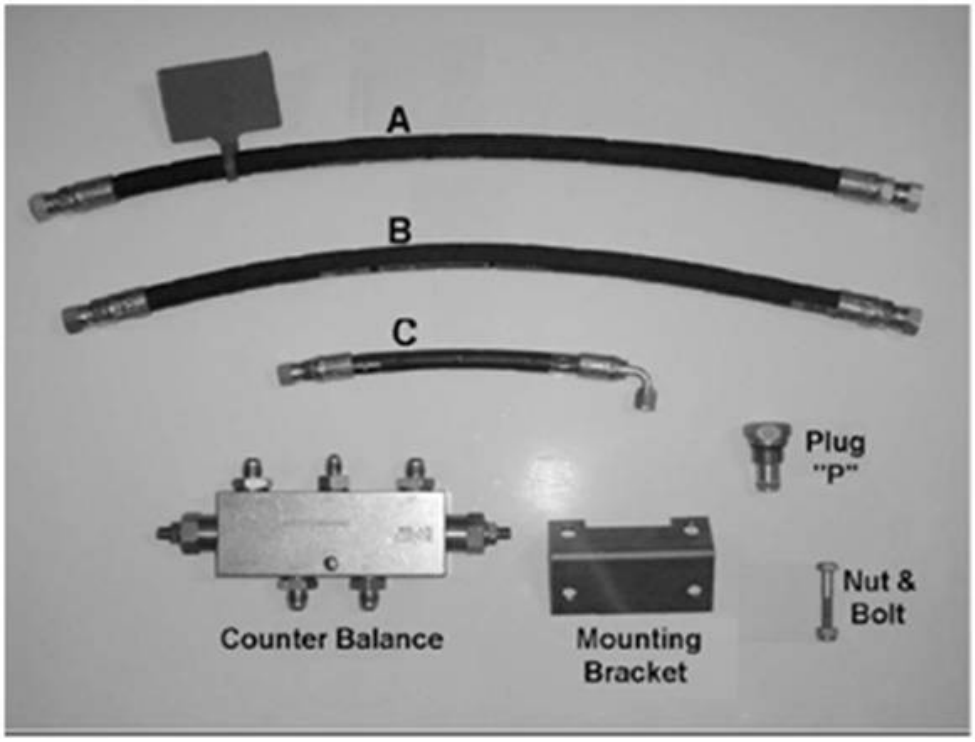
The contents of this section are designed to aid in installation of the hydraulic counterbalance kit. The counterbalance is designed to improve the performance of the PODZILLA® Lift Automatic Braking System. We have observed that older lifts operating under certain conditions such as mountainous terrain may show signs of wear in the brake system. If a decline in braking performance is noticed, such as the inability of the lift to remain parked on a steep incline, it is recommended that the lift be fitted with the counterbalance kit. The kit has been designed as a cost effective and simpler alternative to replacing the entire drive motor.

Upon completion the holding power is greatly increased over the stock unit. The installation does not require any advanced mechanical skills and can completed in about an hour per side using common hand tools. An alternative for do it yourself installation would be Ryder Lift Services, who can provide installation at an additional cost.

NOTE: It is highly recommended that both left and right side counterbalance valves be replaced at the same time before placing the lift back in service.

Parts List

Figure 111

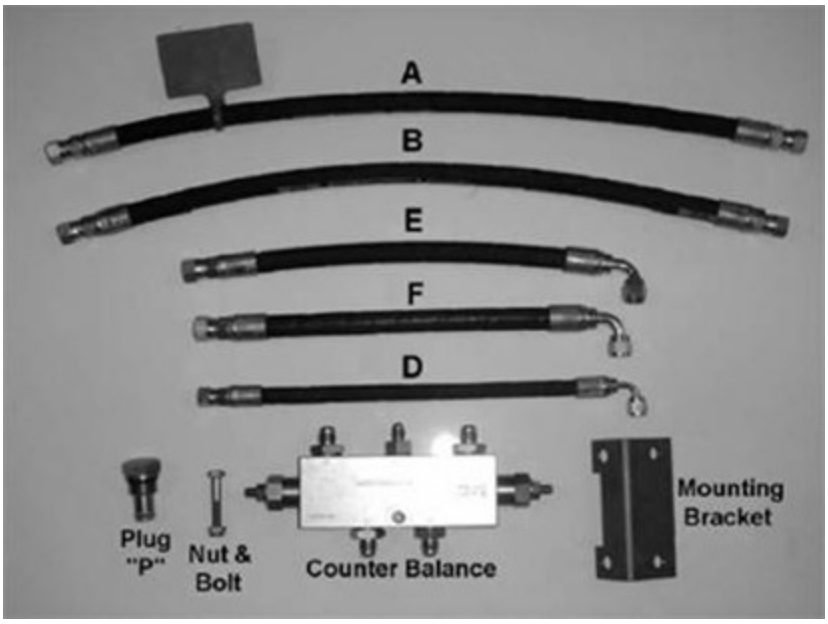


Left Side Kit

All hoses are tagged for easy identification

QTY	PART DESCRIPTION
1	3/8″ Hydraulic Hose 20″ length (A)
1	3/8″ Hydraulic Hose 20″ length (B)
1	1/4″ Hydraulic Hose 7″ length w/90° fitting (C)
1	Counterbalance valve assembly
1	Mounting Bracket
1	3/8″ bolt length 2″
1	3/8″ nut
1	Plug 1-1/16″

Figure 112



Right Side Kit

All hoses are tagged for easy identification

QTY	PART DESCRIPTION
1	3/8″ Hydraulic Hose 20″ length (A)
1	3/8″ Hydraulic Hose 20″ length (B)
1	3/8″ Hydraulic Hose 12″ length w/90° fitting (E)
1	3/8″ Hydraulic Hose 12″ length w/90° fitting (F)
1	1/4″ Hydraulic Hose 12″ length w/90° fitting (D)
1	Counterbalance valve assembly
1	Mounting Bracket
1	3/8″ bolt length 2″
1	3/8″ nut
1	Plug 1-1/16″

Tools Needed

QTY	TOOLS
1	1/2" open end wrench
1	9/16" open end wrench
1	5/8" open end wrench
1	11/16”open end wrench
1	Medium adjustable (crescent) wrench
1	Small Bucket

Ordering Information

The counterbalance kits can be ordered through the PODS ordering system under "Lift Parts." Be sure to order both left and right side kits at the same time.

Left Side Installation

Figure 113



Left Side Drive Motor Assembly

STEP 1

1. Place a bucket or container under the drive motor to collect any fluid that will drain from the lines.
2. Remove hoses from hydraulic motor pressure supply fittings “A” and “B” located at the top of the motor and set off to side of motor.
3. Remove hose from shuttle valve fittings “S” and “N” and discard.
4. Remove 1-1/16˝ shuttle valve fitting “S” from bottom of motor.
5. Replace with plug “P” and tighten snugly being careful not to strip threads or crush o-ring seal.



STEP 2

1. Loosen and remove (2) 5/16 Allen head bolts on the motor housing at the positions shown.
2. Attach bracket to motor housing and replace and tighten bolts.
3. Loosen the nut at the base of the



90° fitting on the side of the motor housing pictured.

4. 4. Rotate the fitting to the 2’ o’clock position and tighten.



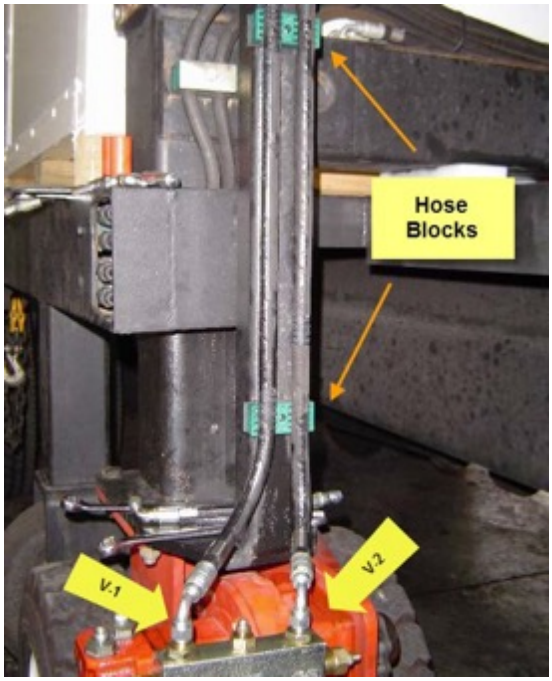
STEP 3

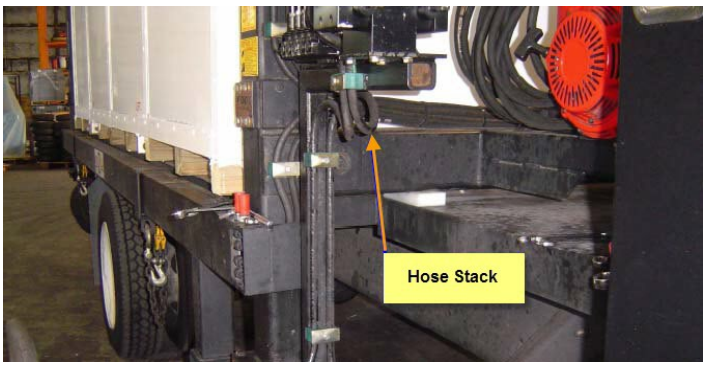
1. Place 3/8 bolt through counterbalance valve through top hole in bracket, attach washer and nut.
2. 2. Level valve assembly and tighten securely.



STEP 4

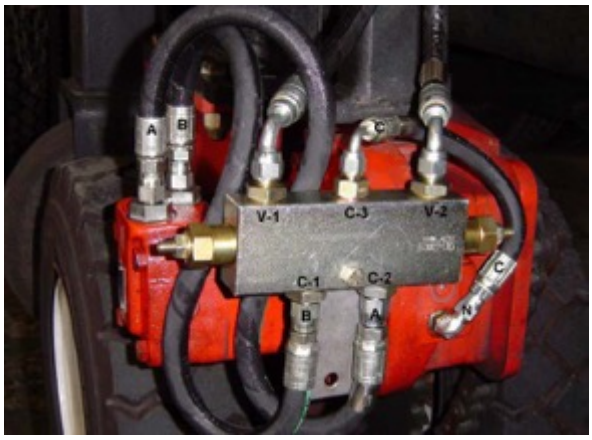
1. Loosen and remove top half of hose blocks.
2. Connect right side hose to V-2 on valve.
3. Connect left side hose to V-1 on valve.
4. Tighten both hose connections firmly.
5. Pull hose slack above top hose block evenly.
6. 6. Replace top of both hose blocks and tighten securely.



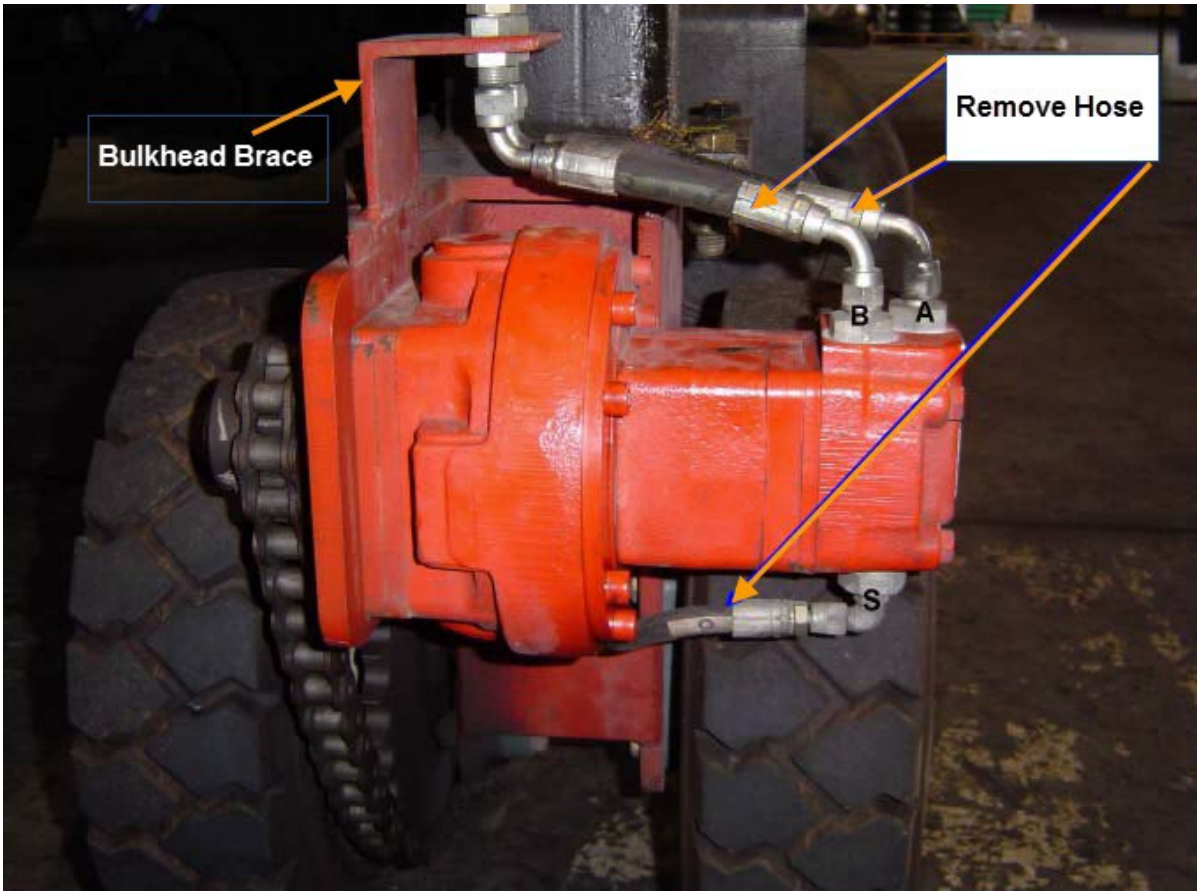


STEP 5

1. Attach hose “A” from C-2 to fitting “A” on motor.
2. Attach hose “B” from C-1 to fitting “B” on motor.
3. Attach hose “C” from C-3 to fitting “N” on housing.
4. 4. Tighten all fittings and proceed to right side installation procedure before testing.



Right Side Installation



Right Side Drive Motor Assembly

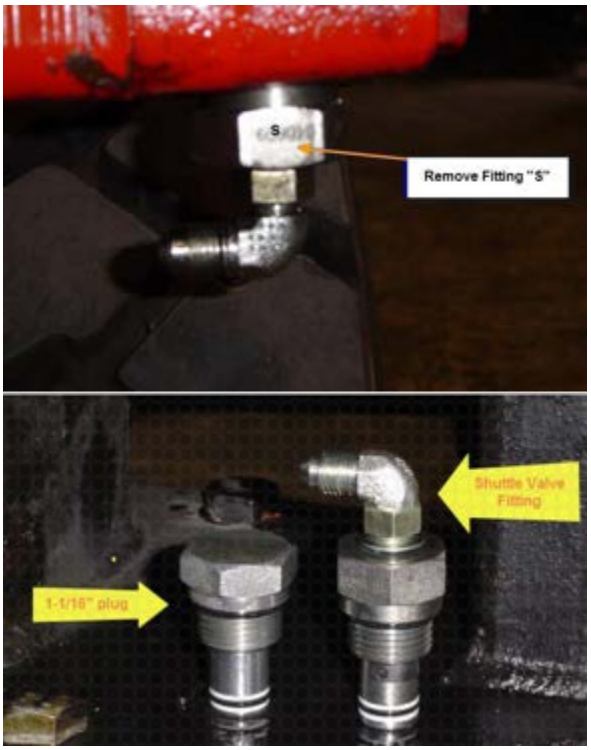
STEP 1

1. Place a bucket or container under the drive motor to collect any fluid that will drain from the lines.
2. Loosen and disconnect pressure supply hoses at connection to bulkhead bracket (K).
3. Disconnect and remove hoses from hydraulic motor pressure supply fittings “A” and “B” located at the top of the motor and discard hoses.
4. 4. Remove hose from shuttle valve fittings “S” and “N” and discard hose.



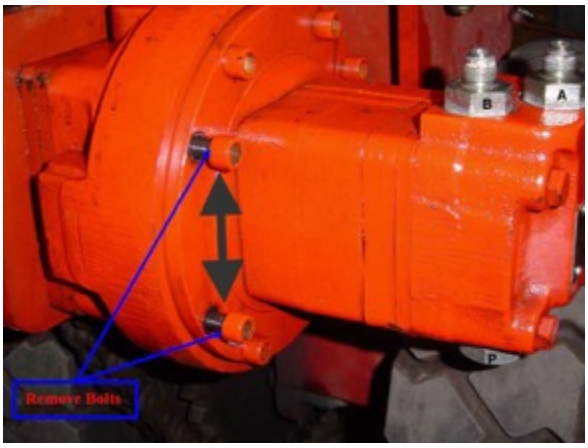
STEP 2

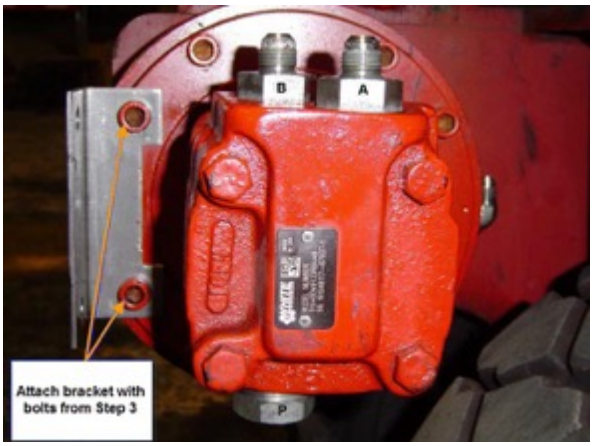
1. Remove 1-1/16″ Shuttle Valve Fitting “S” from bottom of motor.
2. 2. Replace with plug “P” and tighten snugly, being careful not to strip threads or crush the o-ring seal.



STEP 3

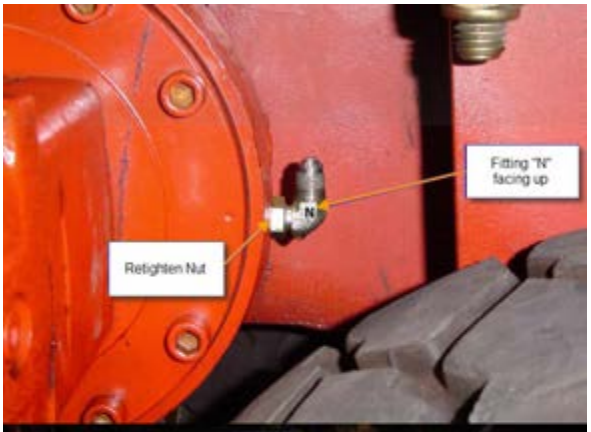
1. Loosen and remove (2) 5/16 Allen head bolts on the motor housing at the positions shown.
2. 2. Attach bracket to motor housing and replace and tighten bolts.





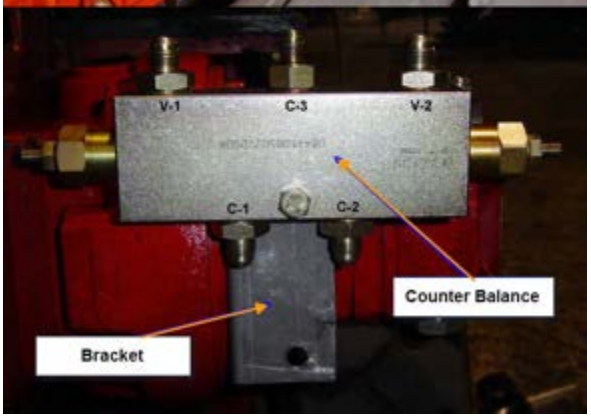
STEP 4

1. Loosen the nut at the base of the 90° fitting on the side of the motor housing pictured.
2. Rotate the fitting to the 12 o'clock position and tighten.



STEP 5

1. Place 3/8 bolt through counterbalance valve through top hole in bracket, attach washer and nut.
2. Level valve assembly and tighten securely.



STEP 6

1. Attach hose “D” from fitting C-3 on counterbalance valve to fitting "N" on housing.
2. Tighten both fittings securely.



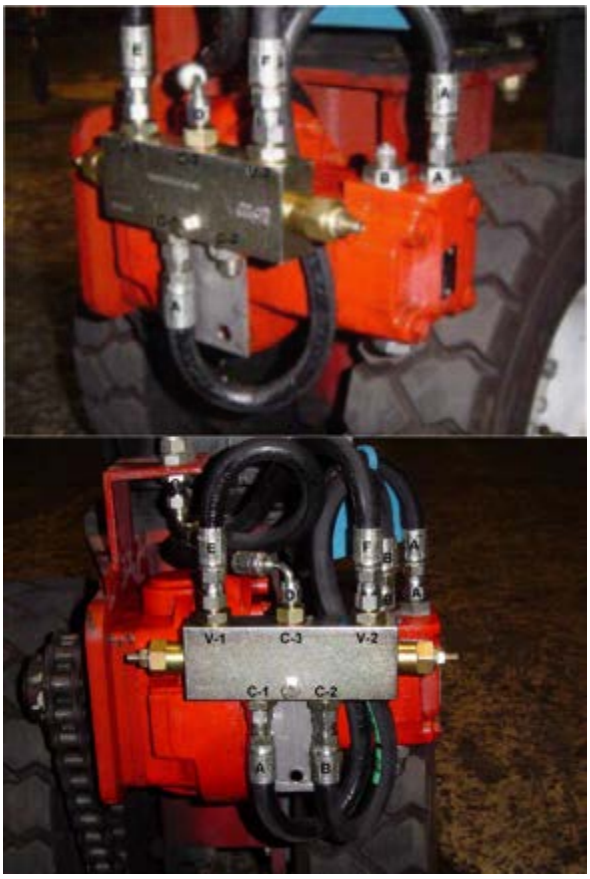
STEP 7

1. Attach hose (E) from counterbalance valve connection V-1 to bulkhead connection (G).
2. Attach hose “F” from counterbalance connection V-2 to bulkhead connection "H."
3. Tighten all connections securely.



STEP 8

1. Connect hose “A” from counterbalance connection C-1 to pressure supply fitting “A” on motor housing.
2. Connect hose “B” from counterbalance connection C-2 to pressure supply fitting 'B."
3. Tighten all connections securely.



CONGRATULATIONS!

You have now completed the installation of your counterbalance kits. To ensure trouble-free lift operation, prior to placing the lift back in service, please follow these steps.

1. Replace the hydraulic fluid lost during the installation. With the lift completely closed up the level should be at no more than ¾ on the tank sight glass.
2. Start the engine and check for any leaks. Turn off engine before tightening any leaky connections.
3. Extend lift completely and check hydraulic fluid level again.
4. With the engine running, move the lift forward and backwards and make several turns to ensure the valve operates properly. If possible, take the empty lift to a steep location to test brakes.

Appendix

Recommended Spare Parts

The following is a guide for making minor repairs and replacing parts on the lift system under normal usage. Repairs that require special machinery, tools, or equipment to complete are considered major repairs and are not included in this manual. Major repairs include ram replacements, welding repairs, etc.

Figure 44 contains a list of recommended quantities of spare parts that each storage center location should keep on hand per PODZILLA Lift System.

Figure 123: Recommended Spare Parts per PODZILLA per Location

QTY / 3 LIFTS	PODS P/N	DESCRIPTION
1	LEN101	Honda 20 HP engine
12	LCX104	3 x 72 Strap w/hook & chain
4	LWH201	Drive wheels
4	LWH106	Steer tires
1	LASS005	Spreader tire
2	LHY606	5 Gal ISO-32 clarity oil
2	LHY602	5 Gal NLGI-1 Ultra duty EP grease
1	LMEN004	Coil left/new style Honda
1	LMEN003	Coil right/new style Honda
2	LHY409	Chain assembly 80-pitch drive chains
2	LHY220	Emergency hose kits
2	LASS003	Bed block 1¾ x 3 x 8 nylon pad
2	LASS002	Bed block 1¼ x 3x 8 nylon pad
2	LHY603	Breather caps/gas caps
2	LWH502	5 Lug hub for casters
12 sets	LLA170	Wear disc cap plates--heavy duty
1	LHA146	Hose #46 14' Siamese
1	LASS004	Drive axle assembly
1	LWH109	Dust caps
1	LSI103	Decal PODZILLA
1	LSI102	Sign lift 12" x 72"
100	LPL304	Wear disk
1	LWH301	Wheel bumper grey

PODZILLA Full Preventative Maintenance (PM) Checklist

Date: _____ PRO-code: _____ Hour meter: _____

Lift S/N: _____ In-Service Date: _____ Technician: _____

Manager's signature is required on the bottom of this form if technician finds that Level 2 or 3 service is needed on the lift.

CHECK OFF	ORDER	Podzilla Full PM Service - Every 100 Hours of Runtime
	1	Remove air filter and clean or replace as needed.
	2	Change fuel filter.
	3	Change oil filter.
	4	Change engine oil.
	5	Change spark plugs.
	6	Change hydraulic filter.
	7	Check hydraulic fluid level. Correct level is 3/4 -ull in sight glass. Use only Chevron Clarity ISO-32.
	8	Check water level in battery. If low, refill to bottom edge of plastic.
	9	Use air impact on drive and steer tire lug nuts to ensure tightness.
	10	Grease all drive and caster bearings.
	11	Grease all inner steel tubes.
	12	Inspect frame and weld joints for damage or cracks--report damage findings.
	13	Inspect lift chain assemblies for excessive wear and cotter pins for correct placement.
	14	Inspect slider eyelet assemblies for excessive wear.
	15	Inspect tires for excessive rim or tire damage--per standard.
	16	Inspect tire pressure and follow manufacturer's recommended PSI--printed on tire.
	17	Inspect ram assemblies for signs of leaks--report leaks to management.
	18	Inspect wear disk cap plate bolts and hardware.
	19	Pressure wash lift as necessary to project a favorable image on the PODS brand.

Technician's Comments:

If checked, needs higher-level service ☐

Manager's signature: _____

PODZILLA Certification Checklist

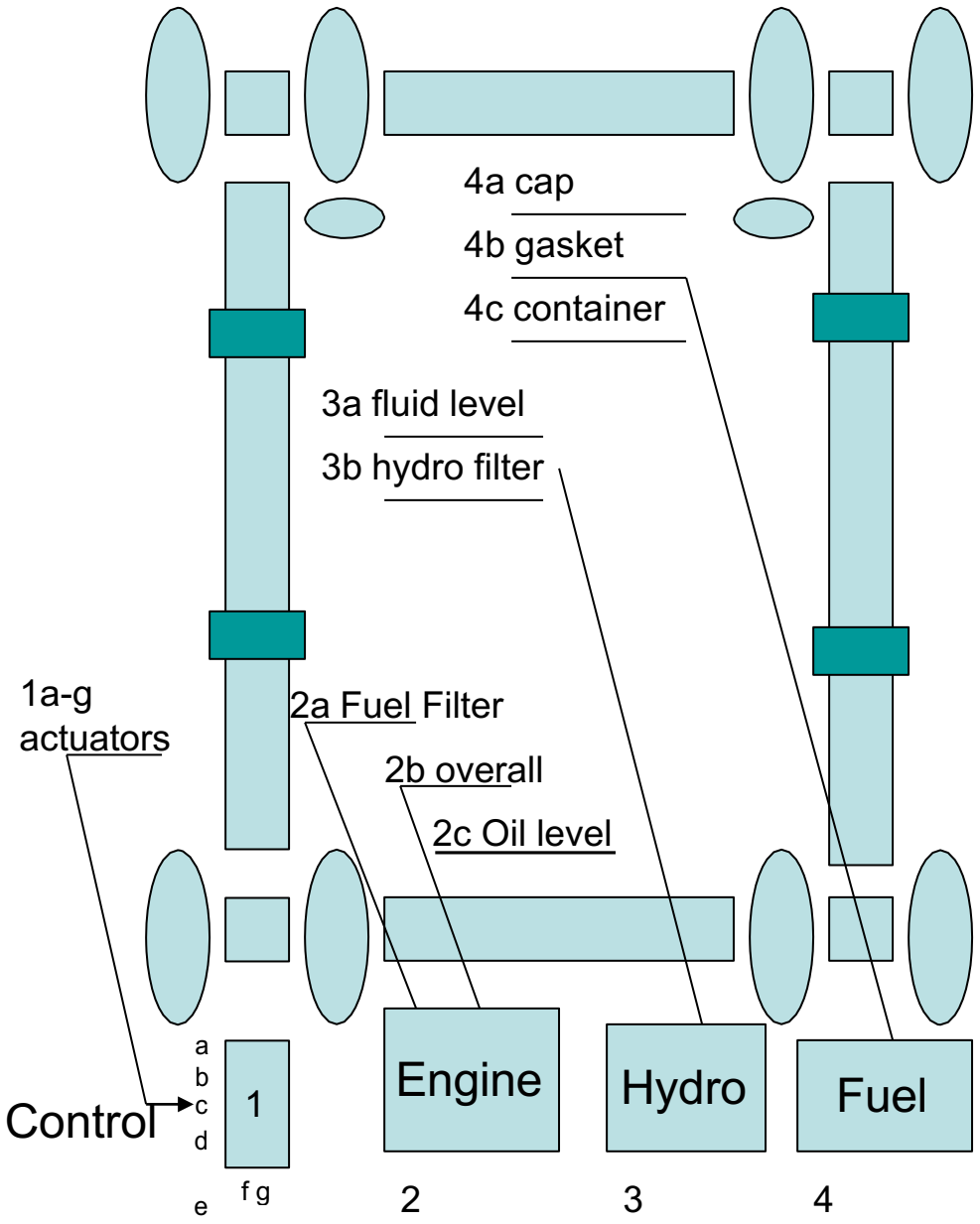
Podzilla Annual Certification Checklist	
	Inspect engine for proper service (3 points)
	Inspect for air filter change (2 points)
	Inspect for proper water level in battery (2 points)
	Inspect all wheel lugs (3 points)
	Inspect wear disk cap plate bolts and hardware (3 points)
	Inspect fuel filter for proper replacement (3 points)
	Inspect hydraulic filter for proper replacement (3 points)
	Inspect all driver and caster bearings for proper lubrication (3 points)
	Inspect all inner steel tubes for proper lubrication (3 points)
	Inspect and check all frame and weld joints for damage or cracks (3 points)
	Inspect chain eyelets for excessive wear (3 points)
	Inspect chain assemblies for correct cotter-pin placement (3 points)
	Inspect tires for excessive rim and tire damage (3 points)
	Check tires for recommended PSI (3 points)
	Inspect all drive and castor assemblies for signs of leaks (3 points)
	Inspect hydraulic fluid for proper levels and contamination (3 points)
	inspect hydraulic pump assembly (3 points)
	Inspect ignition assembly (3 points)
	Perform engine run test (3 points)
	Perform hydraulic pressure test (3 points)
	Inspect wear disc cap plates and hardware (3 points)
	Inspect and calibrate all remote systems (remote models only) (3 points)
	Inspect all valve systems for damage and leaks (3 points)
	Inspect spreader wheel assemblies (3 points)
	Inspect all cascade reels and hoses for damage and leaks (3 points)
	Inspect castor assembly lockout position (3 points)
	Inspect for pressure wash and degreasing [wash as needed] (3 points)
	Inspect paint for adherence to brand standards [paint as required] (3 points)
	Inspect signage and brackets (3 points)
	Inspect all decals (3 points)
	Inspect drive valve for correct tracking (3 points)
	Inspect all hoses and fittings (3 points)
	inspect guide wheel assembly (3 points)
	Inspect all hose block assemblies (3 points)

Date: _____

Unit Number: _____

Name: _____

INSPECTION RECORD



Engine Hours _____			
1	CONTROL	4	FUEL
1a		4a	
1b		4b	
1c		4c	
1d			
1e			
1f			
1g			
2	ENGINE		
2a			
2b			
2c			
3	Hydraulic		
3a			
3b			

"X" if OK at inspection

Date: _____

Unit Number: _____

Name:_____

INSPECTION RECORD

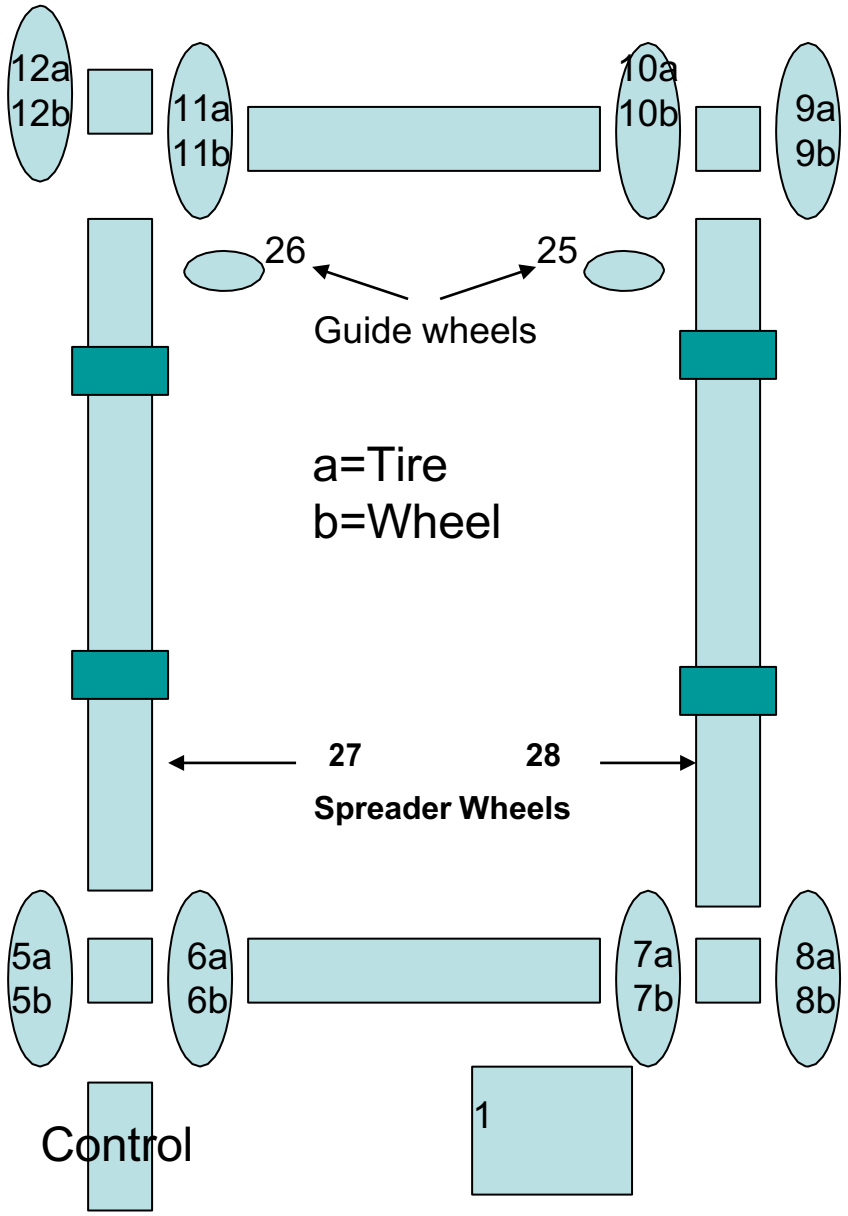
Write note in box and on back
if not

Date: _____

Unit Number: _____

Name:_____

INSPECTION RECORD



5a	PSI
5b	
6a	PSI
6b	
7a	PSI
7b	
8a	PSI
8b	
9a	PSI
9b	
10a	PSI
10b	
11a	PSI
11b	
12a	PSI
12b	
25	
26	
27	
28	

Hydro

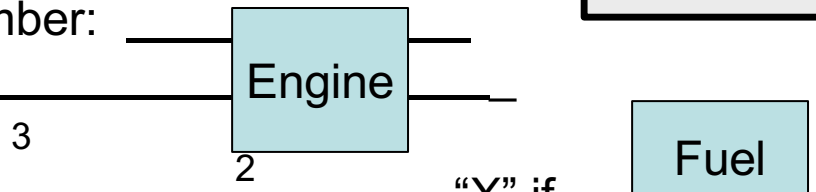
Write note in box and on back if not

Date: _____

Unit Number: _____

Name: _____

INSPECTION RECORD



"X" if OK at inspection

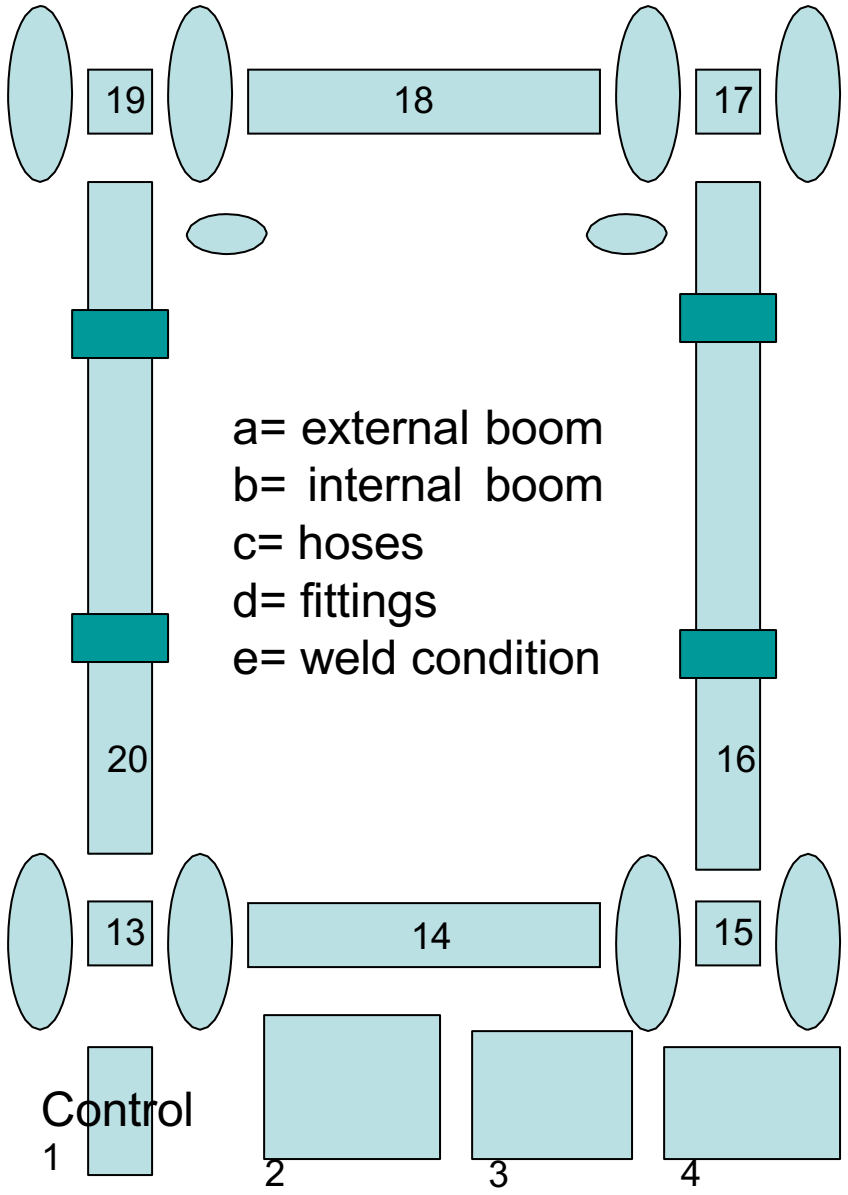
Write note in box and on back if not

Date: _____

Unit Number: _____

Name:_____

INSPECTION RECORD



a= external boom
b= internal boom
c= hoses
d= fittings
e= weld condition

13a		17a	
13b		17b	
13c		17c	
13d		17d	
13e		17e	
14a		18a	
14b		18b	
14c		18c	
14d		18d	
15a		19a	
15b		19b	
15c		19c	
15d		19d	
15e		19e	
16a		20a	
16b		20b	
16c		20c	
16d		20d	
Power Rack Welds			

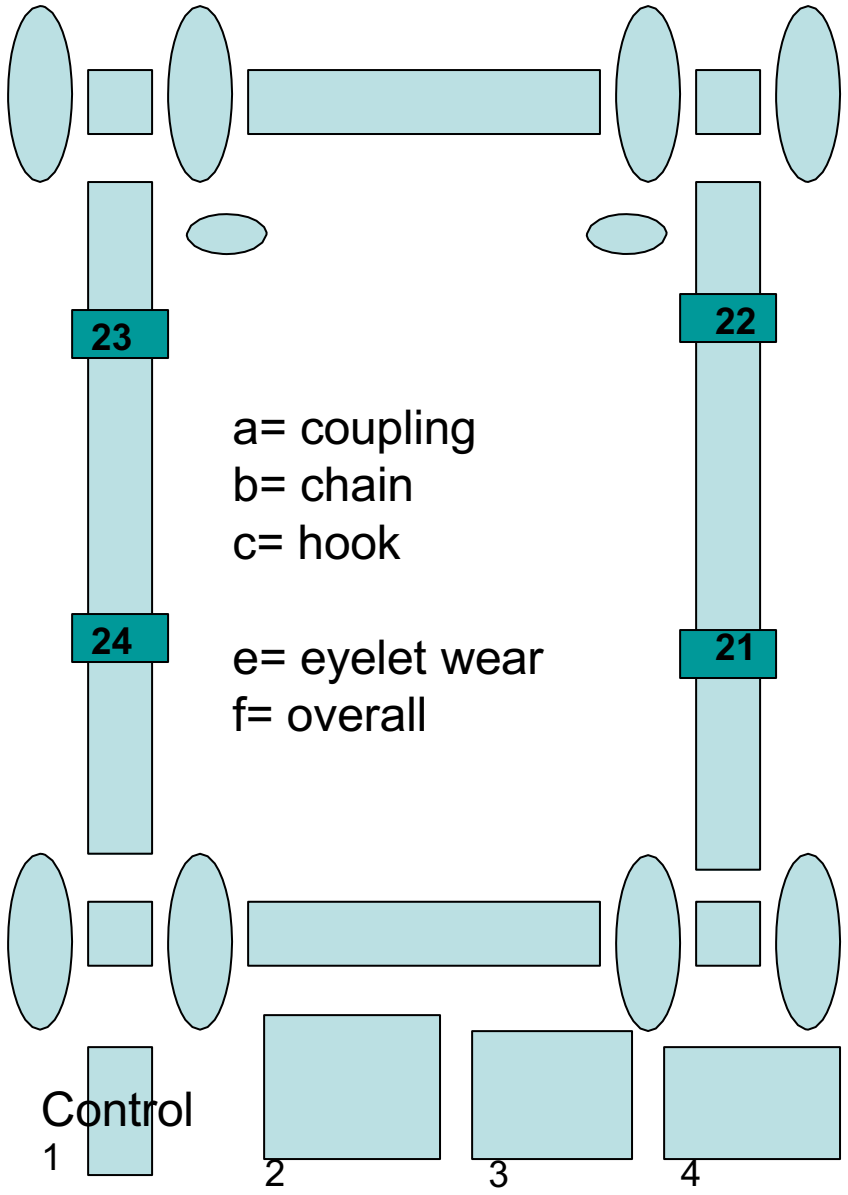
"X" if OK at inspection
Write note in box and on back if not

Date: _____

Unit Number: _____

Name:_____

INSPECTION RECORD



21a		23a	
21b		23b	
21c		23c	
21d		23d	
21e		23e	
21f		23f	
22a		24a	
22b		24b	
22c		24c	
22d		24d	
22e		24e	
22f		24f	

"X" if OK at inspection

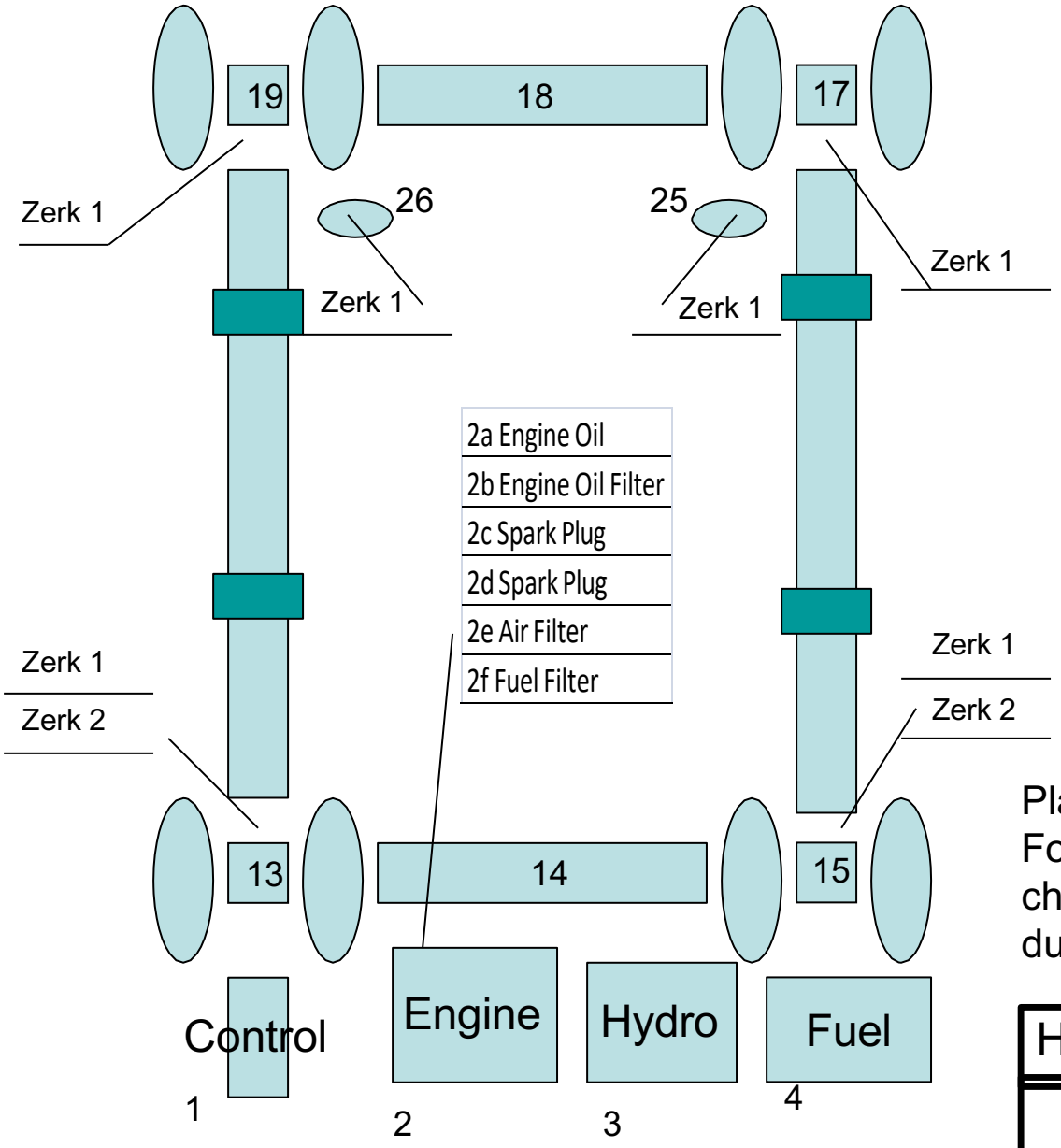
Write note in box and on back if not

Date: _____

Unit Number: _____

Name: _____

MAINTENANCE SIGN OFF RECORD



2	Engine Maintenance		Zerk Grease
2a		13z1	
2b		13z2	
2c		15z1	
2d		15z2	
2e		17z1	
2f		25z1	
	Boom Grease	19z1	
13		26z1	
14			
15			
17			
18			
19			

Place “X” in box when task is complete
For 2c/2d (spark plugs) please note if changed, if yes, or if left previous plug due to good condition.

Hydraulic Filter:	

Bearings: Apr/Oct