

DR[®] POWERWAGON[™] 4 x 2

Safety and Operating Instructions



Important!

Please read the Safety & Operating Instructions and the separate Engine Manufacturer's Owner's Manual to become familiar with the basic features of the DR[®] POWERWAGON[™] 4 x 2 before operating it.

Country Home Products, Inc.
www.dr-owner.com

THANK YOU!

And congratulations on your purchase of a new DR[®] POWERWAGON[™] 4 X 2!

We have done our utmost to ensure your DR[®] POWERWAGON[™] 4 X 2 will be one of the most trouble-free and satisfying pieces of equipment you have ever owned. Please let us know of any questions or problems you may have. We want to answer or correct them as quickly as possible. (When you do call or write, please have your serial number and/or order number handy—it will speed things up!) We also hope to hear from you on how much you like your new helper.

And, please tell your friends about your new DR[®] POWERWAGON[™] 4 X 2. Having DR[®] Owners spread the word about our products and our way of doing business is the best advertising we can have, and the best way to help us provide even better service in the years to come.

Thanks once again!

Bill Lockwood

For all of us at...

COUNTRY HOME PRODUCTS

Introduction

Your new DR® POWERWAGON™ 4 x 2 is a carefully designed product launched to meet our customer's needs for a vehicle that can transport one or two people along with a load of up to 500 pounds on slopes up to 20 degrees and 1000 pounds on level ground. This new model of Powerwagon™ features easy operation, minimal effort to transport heavy loads, low fuel consumption, and rugged construction. Since its debut, this bestseller has turned out to be a favorite worldwide.

All of our products are designed and manufactured to meet our customer's high standards for rugged and quality products. This Powerwagon™ 4 x 2 has been extensively tested in typical home and field environments. As a result, this Powerwagon™ 4 x 2 has shown outstanding performance, high reliability and easy operation.

Your new DR® POWERWAGON™ 4 x 2 features a low center of gravity, powerful climbing capability and large payload capacity and can operate under all weather and field conditions. We are proud to provide you with this safe, comfortable, easy to use and economical Powerwagon™ 4 x 2.

Please read this manual carefully before operating your DR® Powerwagon™ 4 x 2. It contains important safety information, and instructions for set up, operation and maintenance.

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Safety Information

- **Dress Appropriately:** Wear shoes with non-slip treads or safety shoes if you have them. Do not operate the machine while barefoot or wearing open sandals. Avoid loose clothing or jewelry, which might get caught in the machine's moving parts.
- Check out the area you will be operating in before using your Powerwagon™ 4 x 2. Avoid excessively rugged or steep terrain.
- **Caution:** When traveling in high gear, do not use the pedal brake and the parking brake at the same time or pull the parking brake and press the clutch at the same time or the transmission may be damaged.
- Do not use the parking brake when traveling in high gear.
-  **Do not overload.** The Powerwagon™ 4 x 2 is rated for 1000 pounds of cargo weight on hard level ground and 500 on slopes up to 20 degrees.
- Drive in low gear when traveling with heavy loads or over rough terrain.
- Slow down when making turns.
- Do not change direction quickly on rough terrain.
- **Caution:** Do not change gears while in motion. Stop the vehicle to change gears.
- Do not force the shift lever. When the vehicle is stopped pump the brake pedal and then the clutch before trying to change gears. You may need to wait a few seconds for the transmission to stop turning.
-  **Do not carry passengers when traveling up, sideways, or down hills.**
- Be sure to keep pedestrians above you at all times when traveling up and down slopes.
- **Caution:** Only use low gear when traveling up or down slopes.
- Be sure to use the parking brake when stopped.
- Remove the key when not in use to prevent unauthorized use.
- Built in safety features are effective only when maintained and kept in place. Do not, under any conditions, remove, cut, bend, weld or change standard parts on any equipment. A change made on your own can make the vehicle unsafe and may void your warranty.
-  Always shut off the engine, allow to cool, remove the spark plug wire, apply parking brake and chock the wheels prior to making any adjustments to the vehicle.
- Keep combustible substances away from engine when hot.
- When using the DR® Powerwagon™ 4 x 2 don't take things for granted. When in doubt about the equipment or the surroundings, stop the machine and take the time to look things over. Make sure that you have 100% control of your machine at all times.
- **Do Not Overload the DR® Powerwagon™ 4 x 2.** Be careful of top heavy loads; the higher the load, the higher the chance the machine may tip over. Also, loads may shift during operation, so secure your loads and make them even, when possible to be safe.

- Do not rev the engine. Excessive speed or tampering with the engine governor can be dangerous.
- Keep your hands away from the belts and pulleys when the engine is running.
- Be particularly careful of small children and pets. Never allow children to operate the vehicle. Never carry children, adults or pets in the wagon bed. Use caution when operating the vehicle around other people or animals.
- Do not operate the vehicle under the influence of drugs or alcohol.

Safety with Gasoline- Powered Machines

- Do not run the machine in an enclosed area or without proper ventilation.
- Store all fuel in containers specifically designed for this purpose. Plastic containers are more likely to prevent sediment and condensation problems.
- Fill the gas tank outdoors with the engine off. Don't handle gasoline if you or anyone nearby is smoking, or if you are near a fire, sparks, or anything that could cause gasoline vapors to ignite or explode.
- If gasoline is spilled, do not attempt to start the engine. Move the machine away from the area of the spill and avoid creating any source of ignition until the gasoline vapors have dissipated. Wipe up any spilled fuel to prevent a fire hazard, and properly dispose of the waste.
- Allow the engine to cool before storing in any enclosure. Never store the machine near an open flame or sparks.
- Some state and local regulations require the use of a spark arrester on gasoline powered engines. Contact your local fire marshal or forest service for specific information in your area. If you are required to use a spark arrester, please contact one of our Customer Service Representatives 1-800 DR-OWNER (376-9637) who will assist you in obtaining one.

Special Note for California and Washington State Owners

- California and Washington states require the use of spark arresters on internal combustion engines. Failure of the owner/ operator to maintain this equipment in compliance with state regulations is a misdemeanor under California law and may be in violation of other state and federal regulations. Contact your local fire marshal or forest service for specific information in your area.

Country Home Products, Inc. reserves the right to discontinue, change and improve its products at any time without notice or obligation to the purchaser.

The descriptions and specifications contained in this manual were in effect at the time of printing. Some equipment described in this manual may be optional. Some illustrations may not be applicable to your machine.

Safety Labels

Take some time to become familiar with these safety information labels. Replace missing or damaged labels immediately. Note: these illustrations are not actual size.

OPERATE SAFELY

- Stop before Shifting.
- Max Load is 500 pounds on a slope and 1000 pounds on hard, level ground.
- Do not operate on slopes greater than 20 degrees.
- High Speed is 9 MPH. Use care in HIGH gear.
- Use care in turning, abrupt changes in direction could cause the vehicle to turn over.
- Use LOW gear in rough terrain, on slopes or in wet conditions.
- Set the Parking Brake whenever the vehicle is parked.

BEFORE STARTING

- Read Safety Manual
- Set the Parking Brake
- Check the gas and oil levels
- Check tire pressure
- Check that the dump lever latch is secure.
- Use choke on engine for cold starting

TO START ENGINE

- Push in the clutch and brake pedals.
- Release the parking brake.
- Set the shift lever to Neutral.
- Set the parking brake.
- Set the throttle at the halfway position
- If engine has not been used recently, set the choke lever.
- Turn the key to the starting position and hold until the engine starts, but no longer than 3 seconds.
- Release the key when the engine starts.
- If the choke was set, then slowly return the choke lever to the run position.
- Adjust the throttle.
- Release the parking brake
- Set the shift lever to HIGH, LOW, or Reverse.
- Slowly release the clutch and brake pedals.

TO STOP ENGINE

- Push in the clutch and brake pedals.
- Set the Parking Brake.
- Turn the key to off.

TO DUMP

- Open the tailgate and secure it against the side panel.
- Pull the dump lever release handle.
- Lift the dump lever.
- Lower the dump lever and be sure it is secured.
- Close the tailgate.

HIGH

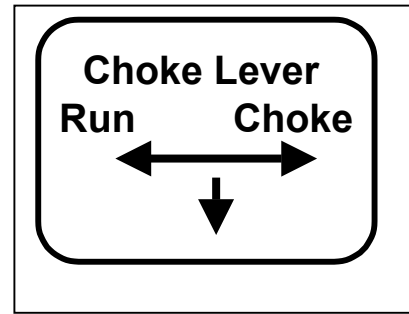
N - Start

LOW

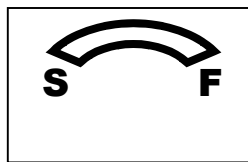
N

REVERSE

Model # PWR8-USA
Light Utility Vehicle
Operating Vehicle Weight
650 pounds
Gross Vehicle Weight Limit
2050 pounds on Level
1650 pounds on 20° Slope



PARKING BRAKE
LIFT
TO LOCK
BRAKE HANDLE



WARNING: Check Oil
Before Starting Engine

**BE SURE DUMP
LEVER IS SECURELY
LATCHED BEFORE
LOADING OR
OPERATING
POWERWAGON**

DR[®]
POWER EQUIPMENT

**COUNTRY HOME
PRODUCTS[®]**
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1(800)DR-OWNER (376-9637)
www.dr-owner.com

Transporting the DR® POWERWAGON™ 4 x 2

- The DR® Powerwagon™ 4 x 2 can be transported in the bed of a full size pick up truck or vehicle that can accommodate a pallet 45 x 108 inches, weighing 750 lbs.
- You will need:
 - 2 Ramps (2 x 10 x 7 ft. long)
 - Wire cutters
 - Knife
 - Hammer
 - Screwdriver
 - Two helpers
- The DR® Powerwagon™ 4 x 2 is shipped fully assembled, fixed to a pallet. The pallet can only be loaded on your vehicle one way at the trucking depot. The front of the DR® Powerwagon™ 4 x 2 will be towards the front of the truck.
- Secure the DR® Powerwagon™ 4 x 2 to your vehicle.
- Upon arrival at home, carefully remove the wrapping from the machine, cut the banding and remove the wheel chocks.
- Place the ramps from the back of the pallet to the ground. Make sure that the ramps are lined up with the wheels.
- **DO NOT ATTEMPT TO DRIVE THE VEHICLE DOWN THE RAMPS WITH THE ENGINE RUNNING. DO NOT STAND BEHIND THE VEHICLE WHEN OFFLOADING.**
- You should become familiar with the controls prior to unloading. Please be sure to know the location of the hand and foot brake as well as the gearshift.
- Be sure to read the Safety and Operating Instructions provided with your machine before attempting to operate the DR® Powerwagon™ 4 x 2.

Preparing The DR® POWERWAGON™ 4 x 2 For Operation

We have done our utmost to make it easy to get your DR® POWERWAGON™ 4 x 2 ready to roll. Please take a few minutes to read through this manual and your engine manual before attempting operation.

Checking and Adding Oil:

For your convenience the DR® POWERWAGON™ 4 x 2 is shipped fully assembled, with oil in the engine and transmission. However it is always wise to check the oil levels before operation. Make sure that the machine is on a level surface and unscrew the oil cap as shown. Oil should be at the level shown in figure 1. Add oil with the yellow cap off until oil starts to drip out. You can add oil here or at the oil fill shown in figure 2.



Figure 1

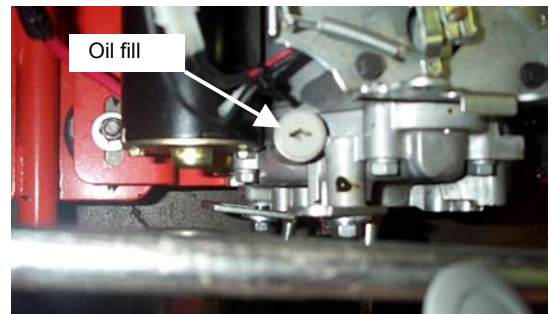


Figure 2

Checking the Transmission Oil:

The transmission is shipped with gear oil but should be checked before operation. If necessary, add SAE 90W gear oil until it shows 2/3 in the sight glass. See Figure 3.

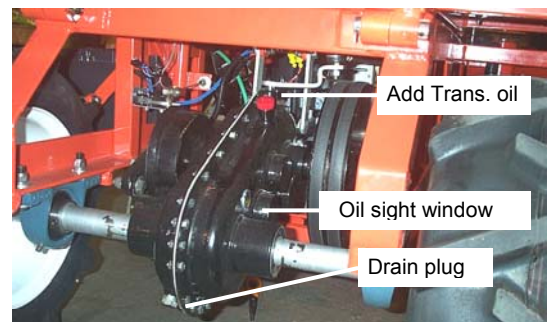


Figure 3

Adding Fuel:

⚠ Caution: Do not smoke or allow others to smoke or have any sparks or other sources of ignition near by while filling the gas tank. Only fill the tank outdoors.

The fuel tank is located under the seat. See Figure 4. The seat is held on hinges and folds forward to allow access to the tank. The tank holds approximately 2 ½ gallons of gasoline. The DR® POWERWAGON™ 4 x 2 uses regular unleaded fuel with a minimum octane rating of 85, and should be filled to about 1 ½ inches below the top of the filler neck to allow for fuel expansion. Refer to your engine manual for detailed fuel information.

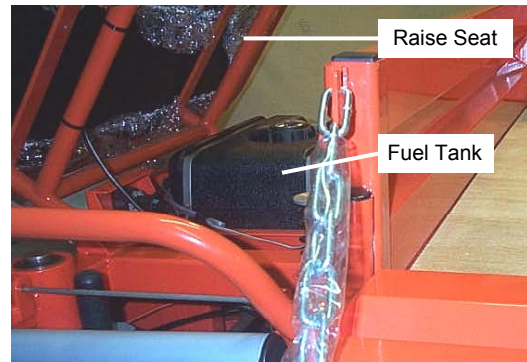


Figure 4

Fuel Shut Off and Cap:

Please take note of the fuel level gage we have incorporated into the gas cap. Also, there is a fuel shut off valve at the bottom of the tank. The lever has a red plastic handle, and off is up and on is down. See Figure 5. **Important:** Please be sure to shut off the fuel lever when transporting the DR® POWERWAGON™ 4 x 2. Whenever you add fuel inspect the fuel system for leaks.

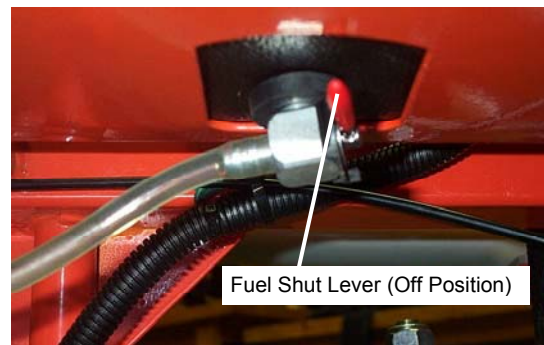


Figure 5

Connect the Battery

⚠ Do not smoke or allow others to smoke or have the battery near sparks or other sources of ignition while performing maintenance on or connecting or disconnecting the battery.

Your machine is shipped with negative battery cable disconnected. Unscrew the wing nut on the negative battery post (-) and place the green battery wire on the post and replace the wing nut.

Operator Controls

Please take some time to become familiar with the operator controls, and their function and location.

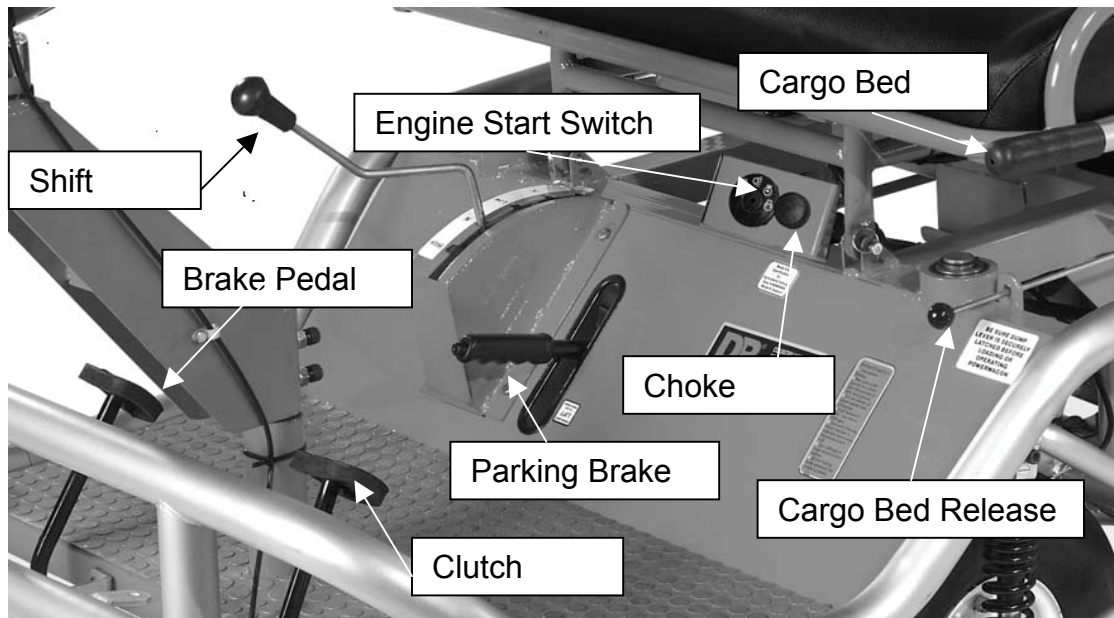


Figure 6

Your machine is equipped with **Operator Presence Safety Devices**. The machine will start only with the handbrake actuated and the gear shift in the neutral start position. Please note that there are two neutral positions, but only one will allow starting. The starter will crank, but the engine will not start. After the operator shifts into forward or reverse the operator must be seated for the engine to operate.

Engine choke: The choke control is located next to the engine start switch. **(Figure 7) Pulling the knob forward activates the choke for starting. Pushing the knob fully to the rear de-activates the choke for normal operation.** If necessary, you can access the choke on the engine from the side by reaching under the frame as shown. **(Figure 8.)** Move the lever to the right before starting and then back to the run position once the engine has started.

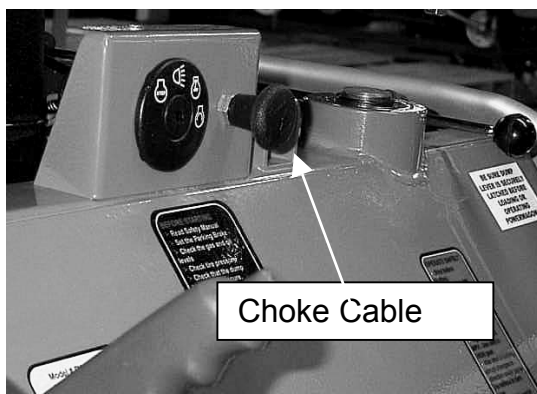


Figure 7

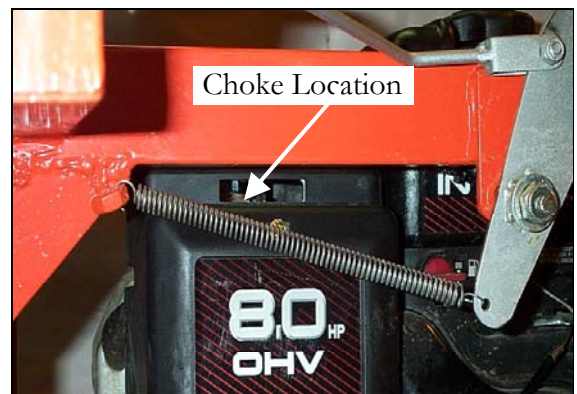


Figure 8

Engine Starting

Now that you have checked the oil, transmission and fuel and are familiar with the controls you are ready to start the engine. We know you are anxious to drive your DR® Powerwagon™ 4 x 2 but here are just a few more tips before you are ready.

- Move choke lever to start.
- Depress the clutch pedal (left pedal) and move the gear selector to the neutral-start position. Note: if the gear selector seems difficult to shift pump the brake.
- Make sure the parking brake is set.
- Move the throttle (on the left side of the handlebar) to S (slow). Note the throttle location on the left side of the handlebar in Figure 8-B. We have changed the location after the cover photo was taken.

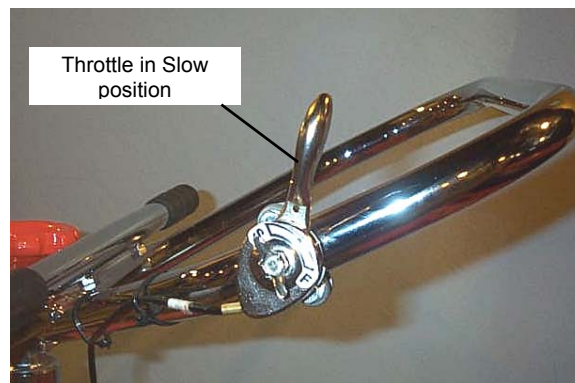


Figure 8-B

- Depress the brake pedal (right pedal).
- Turn the key on the start switch and release when the engine starts.
- You can get off the vehicle and move the choke to run.

Driving the DR® Powerwagon™ 4 x 2

For your first time out it is best to not carry any passengers until you are comfortable with the vehicle. Take a moment to review your surroundings and terrain. Be aware of all bystanders and make sure that they are aware of you. Make sure that no bystanders or pets are in front of or behind the vehicle.

⚠ This vehicle is not intended or equipped for public road or highway use. Do not drive on public roads, highways or sidewalks.

- Start your engine. See Page 13.
- Depress the foot brake.
- Depress the clutch.
- Move the throttle lever to run or fast.
- Release the parking brake.
- Move the gearshift to low gear. If the gear selector does not move easily do not force it. Slowly pump the foot brake and try again. This is normal; the rear brake and parking brake are part of the transmission.

⚠ Caution: Never try to shift the gears while the vehicle is in motion.

- Slowly take your foot off the brake and slowly release the clutch. As you release the clutch the vehicle will start to move.
- To stop, depress the clutch and slowly press the foot brake.
- When stopped, place the gear selector in neutral and apply the parking brake.
- Throttle the engine down
- Turn the key to the off position

This same sequence is used for reverse and high gear. Take some time to practice driving in low and reverse before trying the high gear. The DR® Powerwagon™ will travel approximately 8 to 9 mph in high gear and this can seem fast, and should only be used on flat terrain. **Note:** Top speed is approximate and depends on many factors such as belt wear, tire pressure, and engine condition. Your top speed may vary.

⚠ Caution: Use only low gear when traveling up or down slopes or with loads, or damage may occur to the belts or transmission.

Installation of Optional Side Rails

You can purchase the optional side rails that are shown in full on the front cover. Installation is quite easy. Pry off the caps that are in the tops of the tubes, then install the rails as shown. Screw in the bolts in all the tubes and tighten with an adjustable wrench. Save the caps with your Operating Manual.

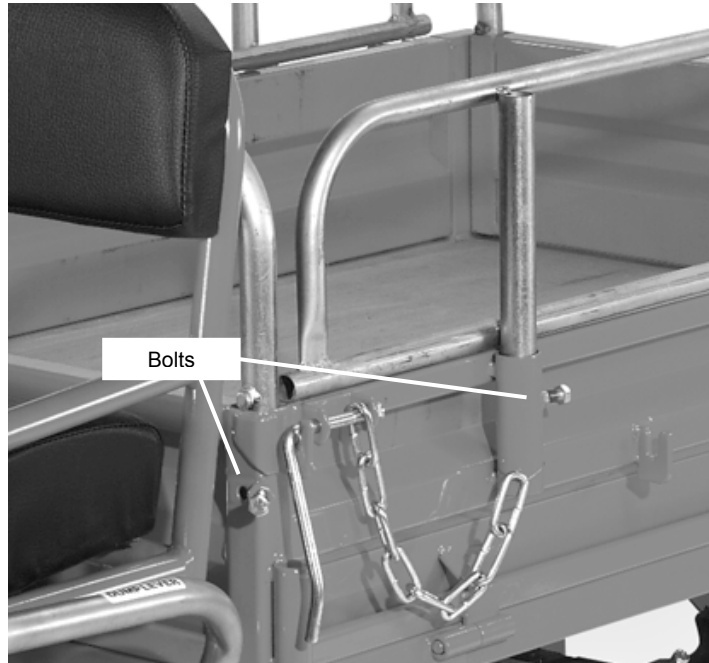


Figure 9

Cargo Bed Information

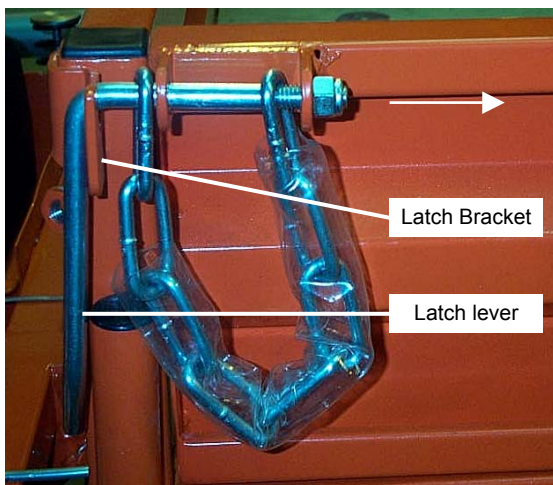


Figure 10

The Cargo bed has simple but sturdy latch mechanisms as shown in Figure 10. The sides are hinged at the bottom and the rear door is hinged at the corner. To unlock, move the lever to a straight up position and slide the lever out of the latch bracket in the direction of the arrow.

One end of the chain can slide off the lever and hook onto the latch bracket. See Figure 4 on page 11. This will allow the side to lay flat if you wish.

Rear Cargo Door

You can unlatch the bed door the same way as shown in Figure 10, and swing it all the way around and latch the door to the side. Secure the lever to the latch bracket on the bed side. See Figure 11.

Important: Secure the rear bed door raising the cargo bed.

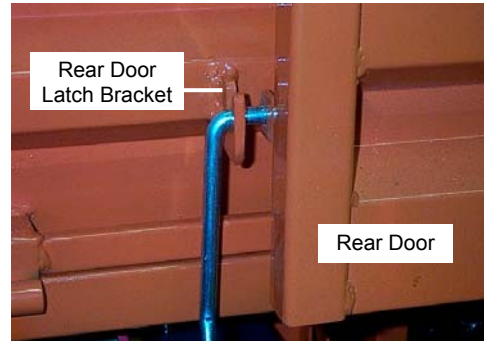


Figure 11

Cargo Bed Lock

The cargo bed has a lock that can be released by pulling the release lever in the direction of the arrow as shown in Figure 12.

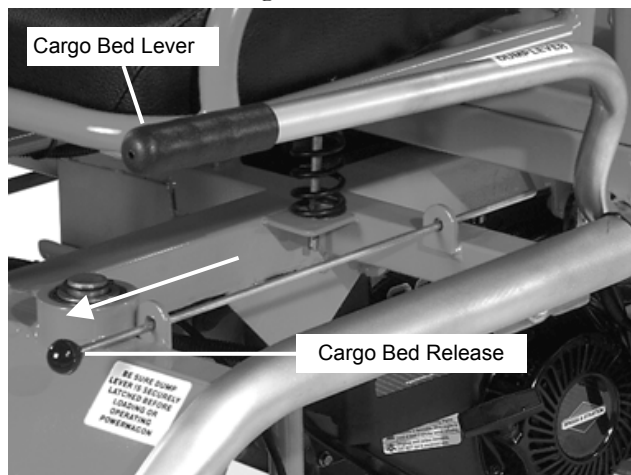


Figure 13

Important: Always place your hand on the cargo bed lever when unlocking the cargo bed to prevent the bed from tipping with unbalanced loads. Lift the cargo bed lever to tilt the bed. There is a rod located above the choke that can be raised up to keep the bed in a tilted position. Try to keep the loads balanced and even.

Important: Do not overload

Vehicle Weight and Cargo Capacity:

1000 pounds on level ground with two people on board.
500 pounds on a 20-degree slope with one person on board.

The vehicle weighs 650 pounds without cargo or people. The maximum weight limit (vehicle people and cargo) on level ground is 2050 pounds. On a 20-degree slope the weight limit is 1650 pounds.

Maintenance Information

The following section contains some useful information on the care and maintenance of your DR® Powerwagon™ 4 x 2. One of the more important items is checking the engine oil before you start your engine and changing the oil regularly. Never run your engine with low or dirty oil.

Tools Required:

You will need metric and fractional wrenches, sockets and Allen wrenches. Also, a set of straight and Phillips screwdrivers and pliers are needed. The chassis was made exclusively for us in Taiwan and requires metric tools. The engine, gas tank, and wire harness was manufactured in the US and requires fractional tools.

Engine Oil:

Your engine holds approximately 7/8 of a quart (28 ounces) of SAE 30 high quality detergent oil for operation in temperatures 40 degrees F and above. Refer to your engine manual for oil viscosity in lower operating temperatures.

Caution: The use of multi-viscosity oils (5w-30, 10w-30, etc.) will result in higher than normal oil consumption. When using multi-viscosity oil, check the oil level often. Multi-viscosity oils are recommended for use in temperatures below 40 degrees.

Caution: SAE 30 oil, if used below 40 degrees (4 degrees C), will result in hard starting and possible engine bore damage due to inadequate lubrication.

Check engine oil every 8 hours or daily.

Important: Change the oil after the first 5 hours of use, then every 50 hours or every season. Change the oil every 25 hours when operating the engine under heavy load or in high temperatures.

⚠ Always disconnect the spark plug when Servicing the engine or vehicle.

Changing the Oil:

Allow the engine to cool.
Place a suitable container under the oil drain.
Clean the area around the oil plug and the cap.
Remove the drain plug and allow all the oil to drain. Replace the plug, remove the oil cap and add oil until it shows at the level in Figure 1 on Page 10. Replace the cap and recycle the

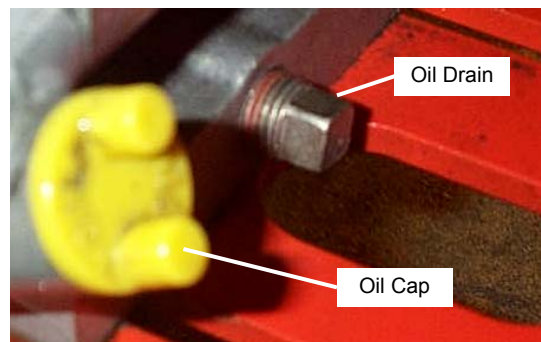


Figure 14

used oil according to your local regulations.

Spark Plug:

The spark plug gap should be set at .030. The plug is a RC12YC resistor type plug. This plug requires a 5/8 spark plug wrench for removal and installation.

Air Filter:

⚠ Always disconnect the spark plug wire before servicing.

Your engine has a flat cartridge type filter element. The Briggs and Stratton number is 491588. It does not have a pre cleaner. Replacement is recommended every 25 hours or sooner in dusty environments. Check your filter if your engine runs poorly, idles rough, or lacks power.

Removal requires a 5/16-nut driver or socket wrench, or a flat head screwdriver. Lift the cover about an inch so that it clears the tabs on the bottom of the cover. Then slide the cover down between the orange chassis and the spring. The element can then be replaced. When replacing the cover make sure that the tabs in the bottom of the cover fit into the slots on the air cleaner base.

See your engine manual for more information.



Figure 15

Transmission:

⚠ Always disconnect the spark plug wire before servicing.

The transmission is filled with gear oil at the factory, however it is wise to check it before you run the DR® Powerwagon™ 4 x 2 and then every eight hours or daily. It requires 2 liters (2.114 quarts) of 90w-gear oil. It is recommended that you change the oil after 200 hours. See Figure 3 on Page 10 for the location of the drain, fill and sight glass. When checking the engine oil make a habit of checking the transmission oil as well. The oil should show 2/3 in the sight glass.

Brake Information:

⚠ Always disconnect the spark plug wire before servicing.

Adjustment and repair of the brakes should be done carefully to ensure proper braking and that the front and rear are adjusted together.

The front and rear brakes operate simultaneously from the foot pedal. The rear brake can be operated from the hand (parking brake) also. They are actuated via cables that run from the pedal to the brake. There are three cables that run to a support bracket located under the floor in between the front wheels. See Figure 16. The bottom cable is the rear brake. The rear brake also has a support bracket at the rear end of the cable. See Figure 17. The cables have adjustment nuts that can lengthen or shorten the cables.

- To shorten the cable and increase the brake pressure, loosen the nut toward the front of the machine and tighten the rear nut against the support bracket.
- It is recommended that you adjust the front right and left equally.
- Loosen both forward nuts equally and tighten the rear nuts so that the brakes are locked on and then back the rear nuts off $\frac{1}{4}$ to $\frac{3}{8}$ inch. Re-tighten the front nuts.
- Be careful not to over-tighten the cables before you back the nuts off. You just want to tighten the cable so that the brake levers on the inside of the wheels are fully actuated. Move those levers by hand so that you get a feel for how much to tighten the cables.
- Adjust the left and right equally or you may find that the vehicle pulls to the right or left.

⚠ Caution: After adjusting the brakes, test them. Set the parking brake, start the engine and press the brake pedal. Depress the clutch and put the vehicle in gear. Slowly release the clutch. If the vehicle starts to move the brakes must be adjusted again. If the engine stalls, the brakes are operating properly. Then try operating the vehicle carefully in low gear at a slow speed without passengers or loads.

Important: The rear wheels have two shear bolts under each wheel hub. These will allow the rear wheels to continue to rotate for a foot or so before they engage the wheel axle. You will notice that if you were moving forward when you applied the hand brake the vehicle can still roll back a foot or so until the shear bolts engage. See the next section for more information.

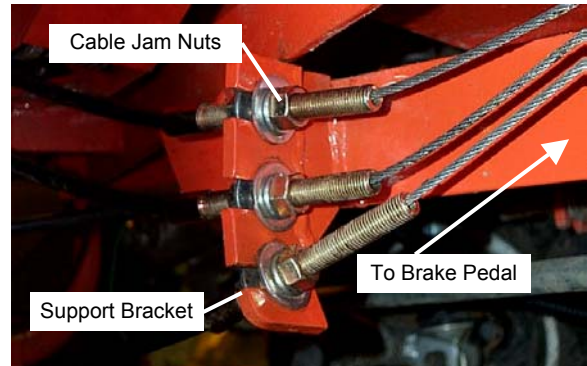


Figure 16

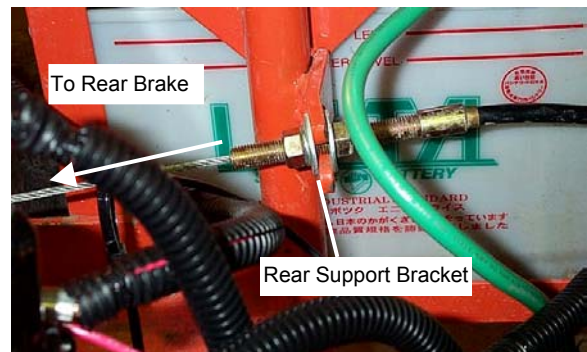


Figure 17

Wheel Shear Bolts:

We included two extra shear bolts with your DR® Powerwagon™ 4 x 2. These are meant to shear before damage can be done to the transmission. If you find that only one wheel is driving or hear rattling from the rear wheel hubs you may have broken shear bolts. These are easy to replace. You will need a 14 mm wrench or socket and an 8 mm Allen wrench.

⚠ Always disconnect the spark plug wire before servicing.

- Remove the wheel hubcap by removing the bolt in the center.
- Rotate the wheel slightly to take the tension off the bolts. The inner hub is slotted. The bolts should be away from either end of the slots.
- If the old bolts are no longer attached, find the through hole and install the new bolts as shown in Figure 18.

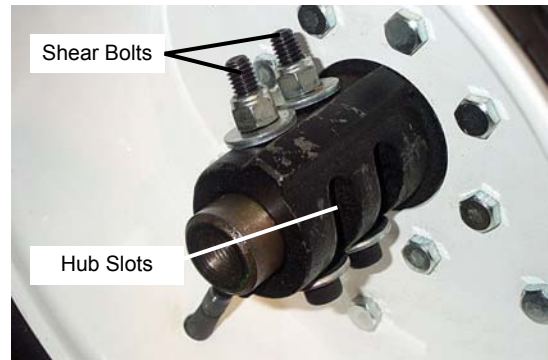


Figure 18

Fuel Filter and System:

⚠ Always disconnect the spark plug wire before servicing.

The fuel line runs from the valve on the fuel tank to a fuel filter. The line runs from the filter to the engine. There are no user serviceable parts in the filter and it should be replaced every 200 hours, or when it becomes clogged.

⚠ Caution: Do not smoke or allow others to smoke or have any sparks or other sources of ignition near by while filling the gas tank or servicing the fuel system. Only fill the tank outdoors.

To determine if the filter is clogged, close the valve under the tank. Have a suitable container handy to catch the fuel. Disconnect the fuel line from either the engine or engine side of the fuel filter. Put the end of the hose in the container and turn the tank valve on. Fuel should flow freely through the filter into the container. Remember that the fuel system is gravity fed and the hose should be lower than the tank.

Your engine does not have a fuel pump and fuel flows only because the tank is higher than the carburetor.

- Always use fresh, regular gasoline with a minimum 85 octane.
- Only buy gasoline in quantities that you will use up in one month. Gasoline can become stale and can cause poor engine performance.
- At the end of the season empty the gas tank, and run the engine until it runs out of gas. This will help keep the carburetor from getting gummed up.

- Alternately, you can purchase gas stabilizer and add that to the fuel in the tank and then run the engine. Follow the directions on the stabilizer.

Belt Information:

- The DR® Powerwagon™ is equipped with 2 agricultural duty belts. They are 55-inch belts and the replacement number is 4340-0550L. They should be replaced in pairs.
- If you find that the vehicle is starting to lose speed and power, and the engine is operating normally you may need to check the belts.
- Always check the engine operation before you adjust the belts. A dirty air filter, clogged fuel filter, or a fouled spark plug can exhibit the same symptoms.

The belts become tight when you release the clutch pedal. A cable runs from the clutch pedal to a support bracket. The end of the cable housing is attached to the support bracket with two nuts. The cable wire then runs to the idler roller lever. The idler roller lever is spring-loaded at the upper end. The spring runs from the lever to the spring support bracket and is connected to a threaded adjustment rod. The adjustment rod is attached to the spring support bracket with two nuts. With the clutch engaged the spring length should be 7 1/4 inches from the end of the hook to the end of the opposite hook. With the clutch pedal pushed in the spring should measure 7 7/8 inches. See Figure 21.

Caution: Improper belt tension can cause excessive belt wear and low power if too loose. If the belts are too tight then it will be hard or impossible to shift gears and transmission damage could occur.

There are two belt guides that are attached to the engine as shown in Figure 19. These are set at the factory and should never need adjustment. If you find that removal is necessary then the upper guide should be set at 3/8 inches from the belt, and the lower guide should be 1/4 inch from the belt. These guides enable the belts to slip on the engine pulley when the clutch is disengaged. Also note that the distance between the belts at the idler pulley should be 2 1/2 inches with the clutch engaged. See Figure 20.

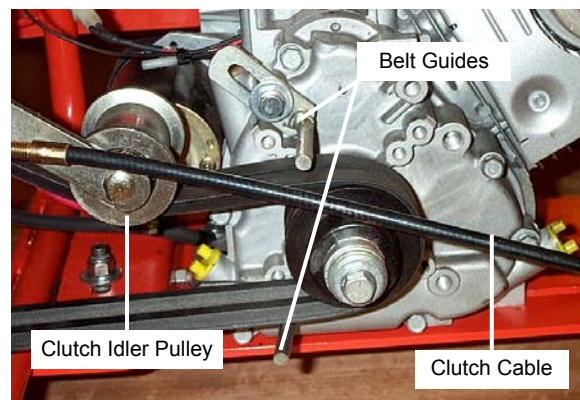


Figure 19

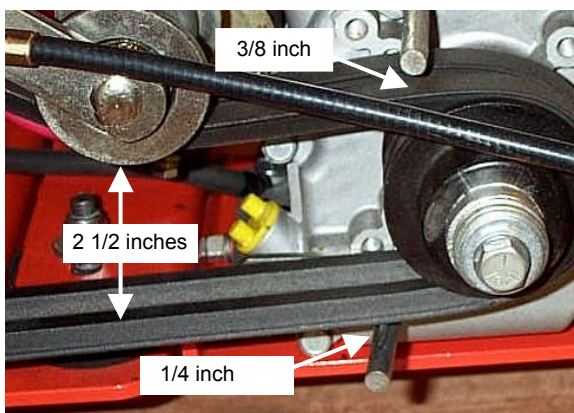


Figure 20

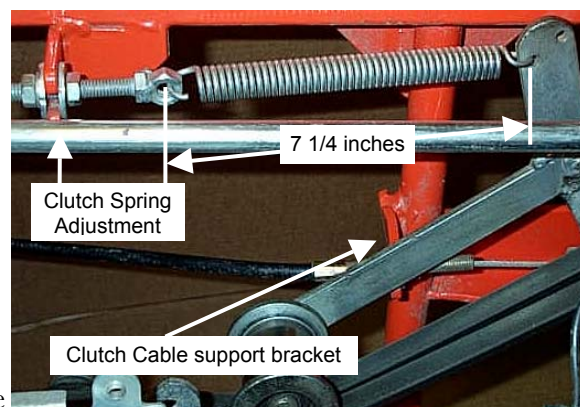


Figure 21

Caution: If the belt guides are improperly set, it may cause the gears to grind when shifting, or machine movement even when the clutch is disengaged.

Changing Belts:



Always disconnect the spark plug wire before servicing. Chock the wheels.

- Place the gear shifter in neutral.
- Loosen the nuts at the spring support bracket and disconnect the spring.
- With the belts now loose, it will be possible to roll them off the rear pulley by rotating the pulley backwards and guiding the belt off. It is easier to roll the inside belt off to the inside of the rear pulley.
- Take the outside belt off the front pulley.
- If you find that the front belt guides need to be loosened, first clean the area around the guides with a rag, then scribe or mark their location with a scribe or marker. This will make replacement easier.
- Take the inside belt off the front pulley.
- Place the new belts on the machine. It is easier to place the belts on the engine pulley first, then roll them onto the rear pulley.
- Replace the belt guides in the original location, if they were removed.

Tire Information:

In addition to visually checking the tires daily, you should check the tire every 50 hours with a tire pressure gage. The tires have tubes.

- Front tire pressure should be kept at 30 psi. Type: 4.00-6 4PR The maximum load rating is 265 pounds at 31 Psi.
- Rear tire pressure should be kept at 26 psi. Type: 19 x 8.00-10 4pr The maximum load rating is 825 pounds at 34 Psi.

Engine Mounts:

The engine mounting bolts should be checked for tightness every 50 hours. The rubber engine mounts should be checked every 25 hours for signs of cracking. Check the engine crankshaft pulley bolt every 50 hours.

Other Lubrication:

Lubricate cables, all pivot points such as the gear shift pivot, dump latch, seat pivot, clutch idler, and bed pivot every 200 hours or at least once a month with SAE 30W oil.

There are two grease fittings at the rear of the front wheel mounts. These should receive grease every 50 hours, using good quality lithium grease.

Checking the Bolts and Nuts:

Be sure to check for loose bolts and nuts and tighten them when necessary.

Be sure to check the wheel hub bolts after using the vehicle for 100 hours or on bi-weekly basis.

Torque values of the bolts are given as follows:

<u>Specification</u>	<u>Torque</u>
3/8"-16 NC (Ordinary)	30 foot-lbs.
3/8"- 16 NC (Medium)	32 foot-lbs.
7/16-14 NC (Medium)	35 foot-lbs.
M14xP2.0 (Rod Joint)	70 foot-lbs.

Battery Information:

Your DR® Powerwagon™ 4 x 2 has an automotive style 12 volt lead-acid battery.

Maintenance on this battery is similar to that of your car.



Always disconnect the spark plug wire before servicing.



Caution: Always wear eye protection when servicing the battery.



Caution: Always wear acid resistant gloves when servicing the battery



Caution: Never smoke or allow others to smoke or be near any other sources of ignition when servicing the battery.

- Remove the battery cell cap. Add distilled water to the cell or cells if needed. Replace the cap.

Important: Remember that battery acid is corrosive and can cause burns. Your battery and terminals and posts should be cleaned periodically with a mild solution of baking soda and water, and then rinsed thoroughly with plain water.

Notes:

1-Year Limited Warranty

Terms and Conditions

The DR® POWERWAGON™ 4 X 2 is warranted for one (1) year against defects in materials or workmanship when put to ordinary and normal residential use; ninety (90) days for any other use. The engine is warranted separately by the engine manufacturer.

For the purposes of all the above warranties, “ordinary and normal residential use” refers to non-commercial residential use and does not include misuse, accidents or damage due to inadequate maintenance.

Country Home Products, Inc. certifies that the DR® POWERWAGON™ 4 X 2 is fit for ordinary purposes for which a product of this type is used. Country Home Products, Inc. however, limits the implied warranties of merchantability and fitness in duration to a period of one (1) year in residential use; ninety (90) days for non residential use.

The 1-Year Limited Warranty on the DR® POWERWAGON™ 4 X 2 starts from the date the machine ships from our factory. The 1-Year Limited Warranty is applicable only to the original owner.

The owner is responsible for the performance of the required maintenance as defined by the manufacturer's owner's manuals. The owner is responsible for replacement of normally wearing parts such as belts, bearings, batteries and brake. Attachments and accessories to the machine are not covered by this warranty.

During the warranty period the warranty holder is responsible for any and all shipping and transportation charges, if required.

SOME STATES DO NOT ALLOW LIMITATIONS ON THE LENGTH OF IMPLIED WARRANTIES, SO THE ABOVE LIMITATIONS MAY NOT APPLY TO YOU.

Country Home Products, Inc. shall not be liable under any circumstances for any **incidental or consequential damages or expenses** of any kind, including, but not limited to, cost of equipment rentals, loss of profit, or cost of hiring services to perform tasks normally performed by the DR® POWERWAGON™ 4 X 2.

SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATIONS MAY NOT APPLY TO YOU.

Customer Service Hotline

Country Home Products, Inc.'s objective is to have 100% satisfied customers. For that reason, we operate a 6-day-a-week Technical Service Department for our Owners. You can access a Representative by dialing our TOLL-FREE Hotline at 1-800-DR-OWNER(376-9637). The sole job of our well-trained and friendly folks is to ensure that you get any help you need in a timely fashion. They are there to answer all your questions including (1) inquiries on any of the above warranties, (2) inquiries about replacement parts, or (3) your questions regarding service, maintenance and operation. Our Customer Service Representatives will also be happy to answer any of your questions regarding the separate warranties on all engines. However, to obtain service, repair or replacement of any engine within the time period covered by the manufacturer's limited warranty, follow the instructions and warranty information specifically pertaining to those items provided by their separate manufacturers.

THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS, AND YOU ALSO HAVE OTHER RIGHTS THAT VARY FROM STATE TO STATE.



COUNTRY HOME PRODUCTS, Inc.
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Daily Checklist for the DR® Powerwagon™ 4 x 2

To help maintain your DR® for optimum performance, we recommend you follow this checklist each time you use your machine.

- ✓ GAS: Fill the gas tank with clean, fresh, unleaded gas.
- ✓ OIL: Check the oil and add more if necessary (do not overfill).
- ✓ SPARK PLUG: Clean the spark plug and replace if needed.
- ✓ AIR FILTER: A clean air filter will mean an easier starting and better running engine. You should replace the paper air filter every 25 hours of use or more frequently if you are using the machine in dusty conditions.
- ✓ ENGINE AIR-COOLING SYSTEM: It is important to keep the engine clean of debris. Regularly remove debris from the blower housing and cooling fins. A dirty engine retains heat and can cause damage to the internal engine parts.
- ✓ BELTS: Check the belts for wear, proper alignment and tension.
- ✓ TRANSMISSION: Check the gear oil level at the sight window and make sure it shows in 2/3 of the window. Add SAE 90 gear oil if necessary.



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