DR® VERSA-PRO™ Z-MOWER

SAFETY & OPERATING INSTRUCTIONS

Serial No. _____

Order No. _____

Original Language

DR Power Equipment
Toll-free phone: 1-800-DR-OWNER (376-9637)
Fax: 1-802-877-1213
Website: www.DRpower.com

⚠ WARNING

Read and understand this manual and all instructions before operating this DR® VERSA-PRO™ Z-MOWER.

Table of Contents

Conventions used in this manual

⚠ WARNING

This indicates a hazardous situation, which, if not avoided, ***could*** result in death or serious injury.

⚠ CAUTION

This indicates a hazardous situation, which, if not avoided, ***could*** result in minor or moderate injury.

NOTICE

This information is important in the proper use of your machine. Failure to follow this instruction could result in damage to your machine or property.

Serial Number and Order Number

A Serial Number is used to identify your machine and is located on the Serial Number Label on your machine. An Order Number is used to check and maintain your order history and is located on your packing slip. For your convenience and ready reference, enter the Serial Number and Order Number in the space provided on the front cover of this manual.

Additional Information and Potential Changes

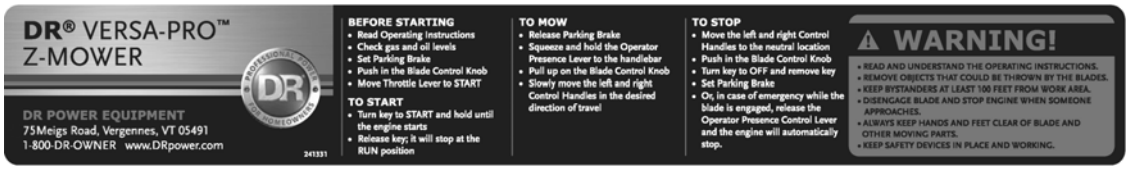
DR Power Equipment reserves the right to discontinue, change, and improve its products at any time without notice or obligation to the purchaser. The descriptions and specifications contained in this manual were in effect at printing. Equipment described within this manual may be optional. Some illustrations may not be applicable to your machine.

⚠ WARNING

Read this safety & operating Instructions manual before you use the DR VERSA-PRO Z-MOWER. Become familiar with the operation and service recommendations to ensure the best performance from your machine. If you have any questions or need assistance, please contact us at www.DRpower.com or call toll-free 1-800-DR-OWNER (376-9637) and one of our Technical Support Representatives will be happy to help you.

Labels

Your DR VERSA-PRO Z-MOWER carries prominent labels as reminders for its proper and safe use. Shown below are copies of all the Safety and Information labels that appear on the equipment. Take a moment to study them and make a note of their location on your mower as you set up and before you operate the unit. Replace damaged or missing safety and information labels immediately.



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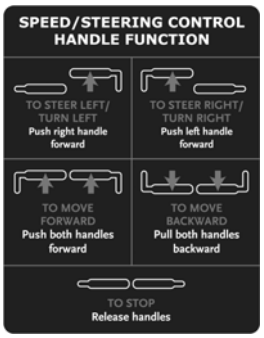

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Protecting Yourself and Those Around You

⚠ WARNING

This is a high-powered machine, with moving parts operating with high energy at high speeds. You must use proper clothing and safety gear when operating this machine to prevent or minimize the risk of severe injury. This machine can cut, and sever parts of your body if they become in contact with the moving blades. Always take the following precautions when operating this machine:

- Always wear protective goggles or safety glasses with side shields while mowing to protect your eyes from possible thrown debris.
- Wear shoes with non-slip treads when using your DR VERSA-PRO Z-MOWER. If you have safety shoes, we recommend wearing them. Do not use the machine while barefoot or wearing open sandals.
- Avoid wearing loose clothing or jewelry, which will catch on the mower's moving parts.
- Use ear protectors or ear plugs rated for at least 20 dba to protect your hearing.
- Wear long pants while mowing.

Operating the Mower Safely

⚠ WARNING

This is a high-powered machine, with moving parts operating with high energy at high speeds. You must operate the machine safely. Unsafe operation can create a number of hazards for you, as well as anyone else in the nearby area. The purpose of this machine is to perform work. The intention of this equipment is not for sport or recreation. Always take the following precautions when using this machine:

- Never allow people who are unfamiliar with these instructions to use the DR VERSA-PRO Z-MOWER.
- Keep bystanders at least 100 feet away from your work area at all times. The mower can throw objects far and at great speeds. To be safe, do not operate the machine near small children or pets, and never allow children to operate the mower. Disengage the blades and stop the engine when another person or pet approaches.
- Never carry passengers on your versa-pro z-mower.
- Clear the area of objects such as rocks, toys, wire, bones, sticks etc., which could be picked up and thrown by the blades.
- Keep your hands and feet away from the blades, belts, chains, blade pulleys, and concealed areas while the engine is running. Never reach under the deck or grab hold of any part of the deck when the engine is running.
- Always disengage the blades, set the parking brake, shut-off the engine, and remove the key whenever you leave the machine. Remove the spark plug wire(s) before adjusting the machine. If you have to stop to remove grass or debris from the underside of the deck, always disconnect the spark plug wire(s) first.
- The exhaust area on the engine becomes very hot with use. Allow the engine to cool before doing maintenance or making adjustments.
- Keep combustible substances away from the engine.
- When operating over uneven terrain and slopes, use extreme caution to ensure solid and firm footing. Keep a firm hold on the control handles and walk, never run.
- Stop the blades when crossing gravel drives, walks, or roads.
- Use extra caution when mowing in wet or slippery conditions.
- Always operate the mower from the operator's position, in the driver's seat or behind the mower. Never pass or stand on the discharge (right) side or in front of machine when the engine is running.
- Look down, and behind before and while moving backwards.
- Do not, under any conditions, remove, bend, cut, fit, weld, or otherwise alter standard parts on the DR versa-pro z-mower. This includes all shields and guards. Modifications to your machine could cause personal injuries and property damage and will void your warranty.
- If the machine starts to make an unusual noise or vibration, immediately shut off the engine, disconnect the spark plug wire(s), and allow all moving parts to come to a complete stop. Vibration is generally a warning of trouble. Inspect for clogging or damage. Clean and repair and/or replace damaged parts.
- While using the DR versa-pro z-mower, do not hurry or take things for granted. When in doubt about the equipment or your surroundings, stop the machine and take the time to look things over. Make sure that you have 100% control of the mower at all times.
- Do not operate the machine when under the influence of alcohol, drugs, or medication.
- Watch for traffic when mowing near roadways.
- While operating, stay alert for holes, rocks, or roots, which may cause damage to the equipment or injury to the operator. Keep at least three (3) feet away from drop-offs, ditches, creeks, culverts, washouts and public highways.
- Use the machine in daylight or good artificial light.
- The mower blades are sharp and can cut. Wrap the blades or wear gloves, and use extra caution when servicing.

Operating on Slopes and Uneven Terrain

⚠ WARNING

Slopes are a major factor related to tip-over, and slip and fall accidents, which can result in severe injury. Operating on slopes requires caution. If you feel uneasy on a slope, do not mow it. Always take the following precautions when using this machine on slopes:

Always:

- Remove objects such as rocks, tree limbs, etc.
- Watch out for holes, ruts, or bumps. Tall grass can hide obstacles.
- Mow across the face of slopes in the walk-behind position; never up and down. Exercise extreme caution when changing direction on slopes.
- Reduce speed and exercise extreme caution on slopes.
- Operate your machine smoothly and at a ground speed slow enough to insure complete control at all times. Avoid erratic operation and excessive speed.
- Reduce speed and use caution when making sharp turns. Sharp turns on any terrain may cause loss of control.

Never:

- Never mow near drop-offs, ditches, or embankments. You could lose your footing or balance.
- Never mow on slopes greater than 20 degrees or any excessively steep slopes.
- Never mow on wet slopes. Reduced traction could result in slipping.
- Never stop or change speed on slopes.
- Never stop or start suddenly when going uphill or downhill and avoid uphill starts.

Safety for Children and Pets

⚠ WARNING

Tragic accidents can occur if the operator is not alert to the presence of children and pets. Children are often attracted to the mower and the mowing activity. Never assume that children will remain where you last saw them. Always follow these precautions:

- Keep children and pets out of the mowing area and under the watchful care of a responsible adult.
- Be alert and turn the mower off if children or pets enter the work area.
- Before and while moving backwards, look behind and down for small children and pets.
- Never allow children to operate the mower.
- Use extra care when approaching blind corners, shrubs, trees, or other objects that may obscure your vision.

Safety with Gasoline - Powered Machines

⚠ WARNING

Gasoline is a highly flammable liquid. Gasoline also gives off flammable vapor that can be easily ignited and cause a fire or explosion. Never overlook the hazards of gasoline. Always follow these precautions:

- Never run the engine in an enclosed area or without proper ventilation as the exhaust from the engine contains carbon monoxide, which is an odorless, tasteless, and deadly poisonous gas.
- Store all fuel and oil in containers specifically designed and approved for this purpose and keep away from heat and open flame, and out of the reach of children.
- Replace rubber fuel lines and grommets when worn or damaged and after 5 years of use.
- Fill the gasoline tank outdoors with the engine off and allow the engine to cool completely. Don't handle gasoline if you or anyone nearby is smoking, or if you're near anything that could cause it to ignite or explode. Reinstall the fuel tank Cap and fuel container cap securely.

Safety with Gasoline - Powered Machines (continued)

⚠ WARNING

- If you spill gasoline, 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 gas vapors have dissipated. Wipe up any spilled fuel to prevent a fire hazard and properly dispose of the waste.
- Allow the engine to cool completely before storing in any enclosure. Never store a machine that has gas in the tank, or a fuel container, near an open flame or spark such as a water heater, space heater, clothes dryer or furnace.
- Never make adjustments or repairs with the engine running. Shut down the engine, disconnect the spark plug wires, keeping them away from the spark plugs to prevent accidental starting, wait 5 minutes before making adjustments or repairs.
- Never tamper with the engine's governor setting. The governor controls the maximum safe operation speed and protects the engine. Over-speeding the engine is dangerous and will cause damage to the engine and to the other moving parts of the machine. If required, see your authorized dealer for engine governor adjustments.
- Keep combustible substances away from the engine when it is hot.
- Never cover the machine while the muffler is still hot.
- Do not operate the engine with the air cleaner or the carburetor air intake cover removed. Removal of such parts could create a fire hazard. Do not use flammable solutions to clean the air filter.
- The muffler and engine become very hot and can cause a severe burn; do not touch.
- Never tamper with safety devices. Check their proper operation regularly.
- To reduce fire hazard, keep the engine and muffler free of debris build-up.

General Safety

⚠ CAUTION

The mower must be operated safely to prevent or minimize the risk of minor or moderate injury. Unsafe operation can create a number of hazards for you. Always take the following precautions when operating this mower:

- Keep in mind that the operator or user is responsible for accidents or hazards occurring to other people, their property, and themselves.
- Use caution when mowing close to fences, buildings, trees, etc. and ensure that you do not hit them with the mower deck. Doing so could damage the machine and cause you to lose control.
- When mowing, never deliberately run over any foreign object. It could damage the machine and throw the object with great force towards your surroundings.
- Areas wet with dew, rain or snow will be more slippery than when dry. Areas covered with loose gravel are more slippery than firm dry ground. Greater stopping distances are required in these slippery areas.
- See manufacturer's instructions for proper operation and installation of accessories. Only use accessories approved by DR Power Equipment.
- Keep all nuts and bolts tight, especially the blade attachment bolts.
- Keep the equipment and attachments in good operating condition.
- Learn to expect changes in operating conditions. Adding or removing attachments or weight to your equipment will make your machine perform differently.

A Note to All Users

Under California law, and the laws of some other states, you are not permitted to operate an internal combustion Engine using hydrocarbon fuels without an Engine spark arrester. This also applies to operation on US Forest Lands. All DR VERSA-PRO Z-MOWERS shipped to California, New Mexico, and Washington State are provided with spark arresters. 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/or federal regulations. Contact your local fire marshal or forest service for specific information in your area.

No list of warnings and cautions can be all-inclusive. If situations occur that are not covered by this manual, the operator must apply common sense and operate this DR VERSA-PRO Z-MOWER in a safe manner. Contact us at www.DRpower.com or call 1-800-DR-OWNER (376-9637) for assistance.

Chapter 2: Setting Up The DR VERSA-PRO Z-MOWER

It may be helpful to familiarize yourself with the controls and features of your DR VERSA-PRO Z-MOWER as shown in ***Figure 1*** before beginning these procedures. If you have any questions at all, please feel free to contact us at www.DRpower.com.

DR VERSA-PRO Z-MOWER Controls and Features

Note: The model shown in Figure 1 may look slightly different from your machine.

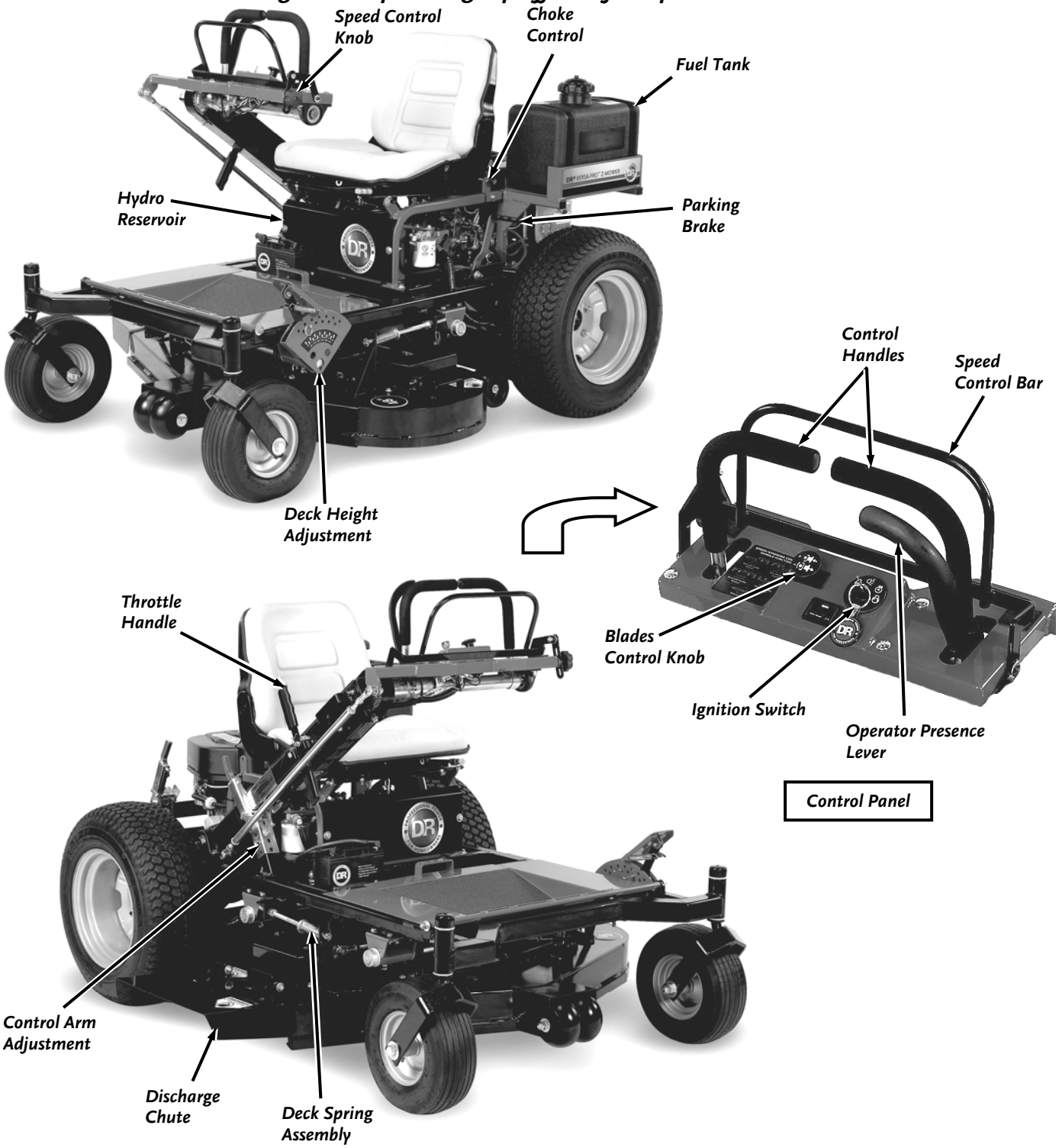


Figure 1

Specifications

	48" Wide Model	52" Wide Model
Engine	Kohler 25 HP	Kohler 25 HP
Type	OHV, AVS, ELS	OHV, AVS, ELS
Fuel Tank, Gasoline, Unleaded	5 Gallons	5 Gallons
Hydraulic Fluid	Amisol, 30 Weight, Synthetic, or equivalent	Amisol, 30 Weight, Synthetic, or equivalent
Hydraulic Fluid Tank	Metal, 5.5 Qts. (4.28L)	Metal, 5.5 Qts. (4.28L)
Hydraulic Fluid Filter (2)	25 Micron	25 Micron
Rear Tires	23" x 8.5" x 12" Turf	23" x 10.5" x 12" Turf
Front Tires	13" x 5" x 6" Ribbed	13" x 5" x 6" Ribbed
Speed	0 to 13 MPH	0 to 13 MPH
Electrical System	12-volt, Key Start	12-volt, Key Start
Deck	48", Welded 10 Gauge steel	52", Welded 10 Gauge Steel
Parking Brake	Drum	Drum
Cutting Height	1.5" to 4.5"	1.5" to 4.5"
Machine Overall Width	48"	52"
Machine Overall Length	70"	70"
Machine Overall Height	48"	48"
Machine Weight	820 lbs.	835 lbs.
Shipping Weight	960 lbs.	975 lbs.
Shipping Dimensions	73" x 50" x 54"	73" x 55" x 54"

Unpacking the Mower

Tools and Supplies Needed:

- Pry Bar
- Metal Shears (Side Cutters)
- Hammer
- Gloves and Eye Protection

⚠ CAUTION

- Wear eye protection when cutting the banding. The banding may have a lot of tension on it and may snap and cut you. Always stand to one side when cutting the band.
- Wear Gloves and use caution when prying off the support members so you do not injure yourself on the nails.
- Stabilize the shipping container on clean flat terrain before attempting to unpack and assemble the machine.

1. Pry off and remove the four top cross members of the shipping crate. **Be careful of the nails when removing the boards**.
2. Pry off and remove the vertical members and diagonal braces from the shipping crate.
3. Stand to one side and cut any bands holding the machine to the shipping pallet. **Be careful when cutting the banding**.
4. Using a Hammer, tap and remove the two Shipping Blocks from under the front of the machine.
5. Continue through the next sections in this Chapter to add Gasoline, check Tire pressure and hook up the Battery, then read and understand the "Operating" Chapter so you can set the Operator Position of the DR VERSA-PRO Z-MOWER to the Walk-Behind Position and drive the machine off the Pallet.

⚠ CAUTION

Go slow and use caution not to trip on the shipping pallet as you walk forward.

Note: *Do not discard your pallet and packaging material until you are fully satisfied with your new DR VERSA-PRO Z-MOWER.*

Adding Gasoline and Checking the Oil (the engine has already been filled with oil at the factory)

NOTICE

To get an accurate reading when checking the oil level:

- ⇒ The machine should be on a level surface.
- ⇒ The dipstick should be pressed completely down to get correct level reading.
- ⇒ The mower is shipped with oil already added to the engine. Only check the oil and add if needed. Do not overfill.

Tip: To avoid confusion, we recommend leaving the caps ON the Fuel and Oil Fills until you are ready to pour either gasoline or oil into the correct Fill.

Note: *Use only SAE 30 High Detergent oil. Other types of oil could cause problems with the operation of your machine. Please refer to your Engine Owner's Manual for detailed oil information.*

APPROXIMATE ENGINE OIL REQUIRED	
Kohler – 25.0 HP, OHV, AVS, ELS	54.4 TO 60.8 oz. (1.6 T0 1.8 L)

Note: *The Versa-Pro Z-Mower is shipped with Oil already added to the Engine. For detailed info on checking Oil or any other Engine specific questions please refer to you Engine Manufacturer's user manual.*

1. Place the machine on a level surface with the Control Arm in the driving position and the seat tilted forward (***Figure 2***).
2. Check the Oil level and add Oil as needed (Refer to your Engine Manufacturer's user manual for detailed Engine maintenance info).
3. Fill the Fuel Tank to not more than 1/4" from the bottom of the Fill Neck with fresh, unleaded gas (***Figure 3***). The Fuel Tank capacity is five gallons (Refer to your Engine Manufacturer's user manual for detailed Engine maintenance info).

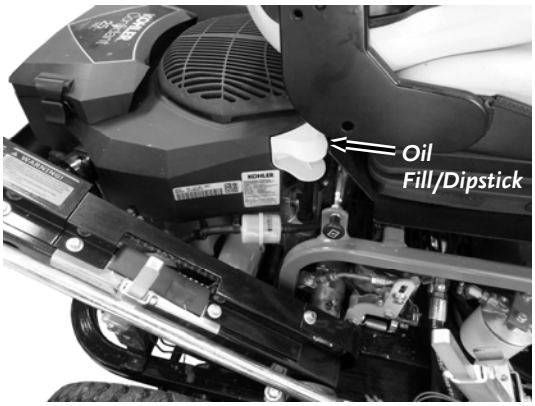


Figure 2

Check the Tire Pressure

Tools Needed:

- Tire Pressure Gauge
- Air Compressor

1. Remove the Valve Stem Protective Cap (***Figure 3***) and check the tire pressure with a Tire Pressure Gauge.
2. Check the manufacturers recommended pressure that is stamped on the side of the Tire.
3. If the pressure is too low, add air through the Valve Stem with an air hose.
4. Replace the Valve Stem Protective Cap when finished.

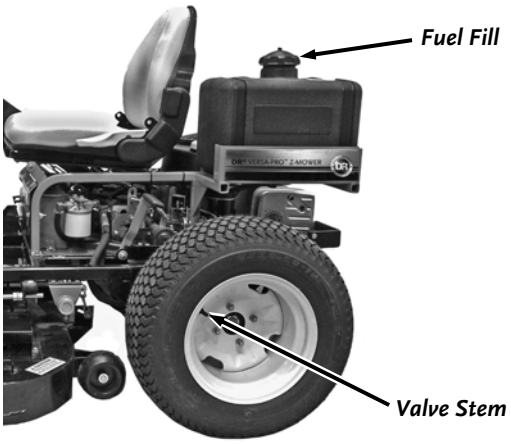


Figure 3

⚠ WARNING

Do not over inflate the tires. Inflate to the manufacturers recommended pressure found on the tires.

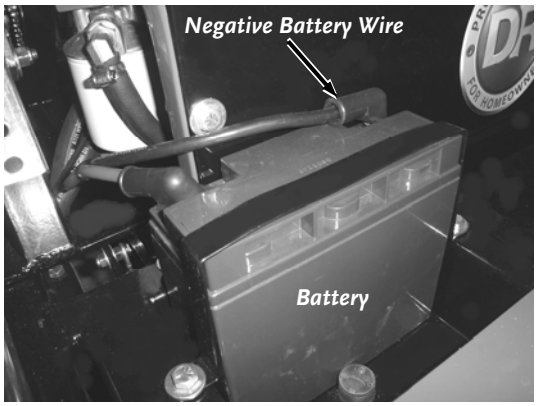


Figure 4

Connecting the Battery Wire

We ship all Electric-Starting systems with the negative terminal Battery wire disconnected. This prevents the Battery from discharging during shipment. Before using your DR VERSA-PRO Z-MOWER, you must connect the Battery wire.

Tools Needed:

- Two 5/16″ Wrenches

1. Attach the Negative Battery wire to the Negative Battery terminal using two 5/16″ Wrenches (***Figure 4***). The Screw and Nut are provided on the Battery Terminal.

Chapter 3: Operating the DR VERSA-PRO Z-MOWER

This chapter covers the procedures for starting and stopping your new DR VERSA-PRO Z-MOWER and discusses basic operation features. You may find it helpful to review the Controls and Features (***Figure 1***) on page 7 before reading this chapter.

The Pre-Start Safety Check

Your DR VERSA-PRO Z-MOWER is fitted with an Operator Presence System to prevent the Blades from rotating without an Operator in the proper position at the Controls. In addition, normal wear and tear can bring about the need for adjustment to some running parts to insure that they function properly in terms of safe operation.

⚠ WARNING

For your protection, you must perform these test procedures before each use of the machine to verify that the safety equipment is in good order and that no part adjustments are needed for safe operation.

Test your Operator Presence Control System:

1. Stand in the Operating Position behind the Control Handles or sit in the seat, start your machine, hold the Operator Presence Lever against the Right Handle (***Figure 1 on page 7***) and engage the Blades.
2. Remain behind the Control Handles or seated and release the Operator Presence Lever from against the Right Handle.
3. THE BLADES SHOULD STOP TURNING IMMEDIATELY and the Engine should shut off. If the Engine does not shut off and the Blades do not stop, your Operator Presence Control System may be damaged or disabled. Turn off your machine by using the ignition key and stop using your machine immediately!

⚠ WARNING

If the blades do not stop turning and the engine doesn't shut down when the above test is performed, turn off your machine by using the ignition key and stop using your machine immediately! Perform the following inspection to fix the problem before using the mower to prevent serious injury.

Inspect the system for the following:

- Intentional disabling of the system through part modification or temporary measures used to override the system.
- Loose electrical connections.
- Broken parts.

After inspection, repeat the test above. If your system still does not operate properly, REMOVE THE KEY FROM THE IGNITION SWITCH TO PREVENT OTHERS FROM OPERATING THE EQUIPMENT. Visit us at www.DRPower.com or call our Technical Support Representatives Toll Free at 1-800-DR-OWNER (376-9637) for assistance.

Before Starting the Engine

1. Check the oil level every time you use the machine (***see Figure 2 on page 9***).
2. Check the fuel level (***see Figure 3 on page 9***).

Starting the Engine

1. Make sure the Control Handles are at their Neutral position (***see Figure 1 on page 7***).
2. Make sure the Blades Control Knob is in the "STOP" (pushed in) position.
3. Move the Throttle Handle forward to the "START" position.
4. Pull the Choke Control all the way out to the Choke position.
5. Turn the Key to "START" to engage the Starter. When the Engine starts, release the Key. The Key Switch is spring loaded, and will return to the RUN position automatically.

NOTICE

If the engine fails to start after TEN (10) seconds of continuous cranking, turn the key to the off position and allow the starter motor to cool to prevent damage. Check the cause of hard starting; Refer to CHAPTER 6 - Troubleshooting.

6. Once the Engine has started, slowly return the Choke to its normal position. If the Engine stalls at low speed, or hesitates during acceleration, pull the Choke Control out as far as necessary until the Engine reaches its normal operating temperature.

Stopping the Engine

Note: *If the Engine has been working hard, or is hot, allow it to idle for 3 to 4 minutes before turning the Key OFF. This practice will help cool the Engine before stopping.*

1. To stop the Engine, pull the Throttle Control Lever back to the "STOP" position and turn the Key to the "OFF" position.

⚠ CAUTION

Always remove the key and set the parking brake when leaving the machine unattended, even if for just a few minutes. Prevent accidents; don't give children or unauthorized persons an opportunity to operate the machine.

Operating the Versa-Pro Z-Mower

Throttle Control

The Throttle Control (***Figure 1 on page 7***) regulates the speed of Engine as measured in R.P.M. (Revolutions per Minute). This Control **IS NOT** used to regulate the ground speed of the Mower. The Engine is designed with a special Governor that limits Engine R.P.M. Unlike an automobile, this Governor allows the Engine to operate most efficiently at a set speed, and protects it from damage caused by excessive R.P.M.

Always operate the machine with the Throttle Control set between 3/4 and Full speed.

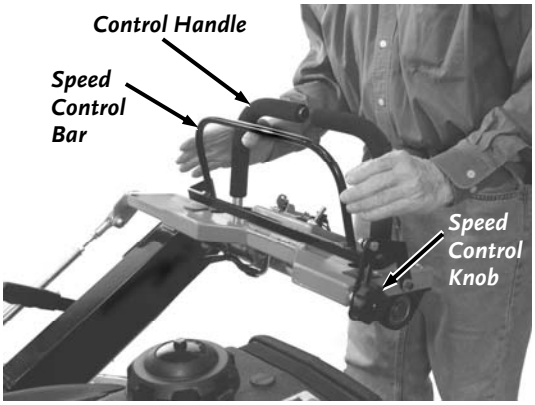


Figure 5

Speed Control

The Speed Control Knob is located on the left side of the Control Panel (***Figure 5***).

1. To set the desired speed, loosen the Speed Control Knob and move the Speed Control Bar forward or back.

Note: *The closer the Bar is to the Control Handles the slower the speed.*

2. When the desired speed is set, tighten the Speed Control Knob to secure the Speed Control Bar.

⚠ WARNING

- Do not operate the machine unless you have read this manual, and understand the controls completely. Do not attempt to mow until you are comfortable using the controls.
- The speed control should be set at a slow rate when operating the machine for the first time.
- Continue at a slow speed until you are familiar with how the machine operates.

Control Handles

1. After setting the Speed Control Bar to the desired speed, slowly push the Control Handles forward until they reach the Speed Control Bar (***Figure 6***).
2. Use the palm of your hands to hold the Control Handles forward while wrapping your fingers around the Speed Control Bar to assure stability.

Note: *It is important to hold the Control Handles together with the Speed Control Bar. This will keep the Controls stable and avoid jerking movements if the machine hits a bump or is moving over rough ground. Each time you release one of the Control Handles, it will go back to neutral, stopping that Wheel from turning.*

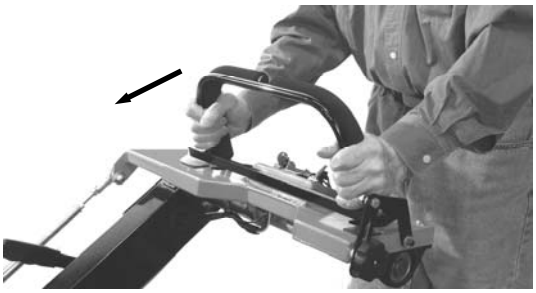


Figure 6

3. **To turn the Mower left,** slowly release the left Control Handle (let it move back toward you) until the Mower has reached its desired position, then return the left Control Handle to the forward position to continue going straight.
4. **To turn the Mower right,** slowly release the right Control Handle (let it move back toward you) until the Mower has reached its desired position, then return the right Control Handle to the forward position to continue going straight.
5. **To reverse,** slowly pull the Control Handles towards you from the neutral position.

⚠ WARNING

- Be very careful of your footing when operating the machine in reverse. Know what is behind you and take your time.
- Disengage the Blades before moving in reverse. Mow in the forward direction only, using reverse for maneuvering.

Stopping the Mower

1. **To stop the Mower,** slowly release both Control Handles and they will automatically return to neutral. If you need to stop quickly, remove your hands from the Control Handles and the machine will stop suddenly.

Note: *If the machine creeps while in neutral, see "Adjusting the Neutral Setting" on page 25.*

Stopping the Blades

1. **To stop the Blades,** Push in the Blade Control Knob (***Figure 1, on page 7***).

Note: *Activating the Operator Presence System by releasing the Operator Presence Lever from against the Right Handle will also disengage the Blades and shut off the Engine.*

Mowing

⚠ WARNING

- Keep all shields and discharge deflectors in place. Never attempt to clear discharge areas or mower blades without disengaging blades, turning the engine off, and removing key.
- Before you start mowing, take time to learn how to maneuver and control YOUR DR VERSA-PRO Z-MOWER. Carefully follow the steps below until you feel confident of your ability to safely operate and control the machine.

Practice Before Mowing

1. Make sure the Speed Control Bar is in the upright position.
2. Find a remote area free of obstacles and there are no children, and pets.
3. Start the Engine and set the Throttle just below half speed.
4. Raise the Deck (see page 14) and DO NOT engage the Blades at this time.

5. To go forward, position your hands, with fingers extended, on the sides of the Control Handles. Slowly push the Control Handles forward until you are able to grasp the Speed Control Bar with your fingers. Squeeze the Control Handles firmly against the Speed Control Bar. **NEVER** grasp the Control Handles alone without stabilizing them against the Speed Control Bar.
6. From a stopped position, practice turning to the right by gently squeezing the left Control Handle toward the Speed Control Bar. Then practice turning left by squeezing the right Control Handle toward the Speed Control Bar.
7. Repeat the previous steps, this time turning in a complete circle both left and right.
8. Once you are going straight, to turn left, slowly release the left Control Handle (let it move back toward you) until the Mower has reached its desired position. Then return the left Control Handle to the forward position to continue going straight. Repeat the same operation with the right Control Handle to turn right.
9. From a stopped position, slowly pull both Control Handles toward you to reverse the machine. Then practice turning left and right in reverse by operating one Control Handle at a time.
10. Now PRACTICE!

Mowing Speed

The design of the VERSA-PRO Z-Mower is to operate most efficiently at the maximum Blade speed. The speed of the machine should allow the Mower Blades to maintain this maximum speed while mowing across turf. Slow the machine for cutting tall grass, grass heavy with moisture, or when mowing on rough terrain. If the ground speed is too fast, or the Blade speed is too slow, the Mower Blades will not be able to lift the grass into the cutting position as the Mower passes over the ground, causing the mowing to be uneven. You should adjust the Speed Control Bar to limit your maximum speed (see page 12).

Deck Mowing Height and Transport Position

Probably, the best cutting height for your lawn was determined from previous experience. The first time you mow, set the cutting height a little higher than you would if using a narrow walk-behind mower. This will help you determine the best way to mow uneven areas so a wider cut does not result in scalping of the lawn.

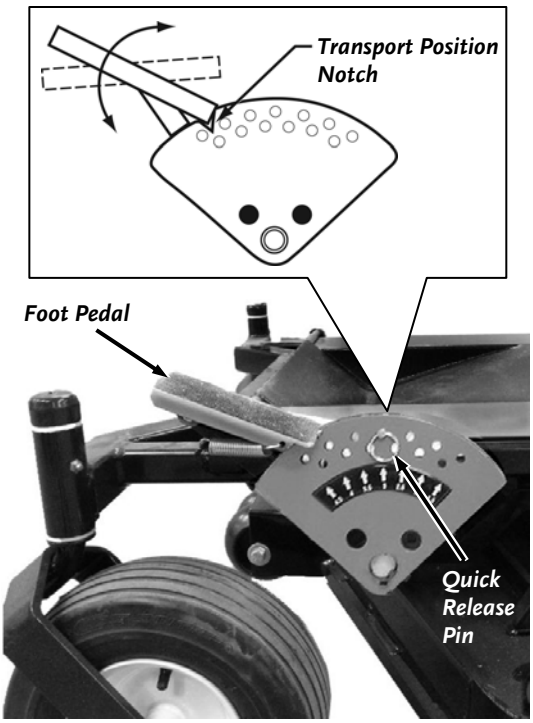


Figure 7

Note: *The adjustment of the Deck Height is by means of a foot pedal located at the left front of the machine (**Figure 7**).*

⚠ CAUTION

- Always disengage the blades and move the deck to the transport position when riding the machine from place to place.
- Never attempt to adjust the deck height while operating the machine in the walk-behind mode.
- Always disengage the blades before changing deck height.

1. To place the Deck in Transport Position, push the Foot Pedal all the way forward until the rear edge of the Pedal is beyond the Notch in the Rim of the Deck Adjusting Block. Tilt the rear of the Pedal downward and slowly release it until it engages the Notch.
2. Remove the Quick Release Pin and place it in the desired position.
3. Release the Foot Pedal from the Transport position by pushing it slightly forward while tilting it to lift the rear edge. Slowly allow the Pedal to move backward to the new pin location.

Changing Operator Positions

You can operate the DR VERSA-PRO Z-MOWER from the Driver's Seat or from a Walk-Behind position. The Walk-Behind position is useful for mowing on slopes or uneven terrain.

⚠ WARNING

When performing this operation, you must always first shut off the engine and set the parking brake.

1. To change the Operator's position from the Driver's Seat to the Walk-Behind mode, push the Control Arm Latch in (***Figure 8***), and then using the Handle on the side of the Control Arm, lift and rotate the Control Arm back to the Walk-Behind position.
2. Make sure the Control Arm latches firmly into place in the Walk-Behind position.
3. Reverse the procedure to return the Control Arm to the Driver's Seat position.

Note: *A switch is located in each Arm Rest. The Engine will shut off if you attempt to change the mode of operation with the Blades engaged.*

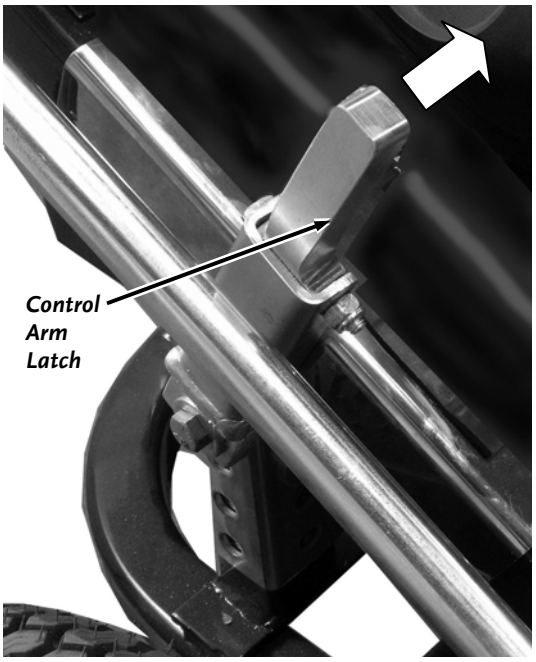


Figure 8

Mowing Tips

- For the best operation on average lawns, operate the Engine at Full Throttle.
- Control the ground speed by adjusting the Speed Control Bar.
- Uneven cutting is often the result of excessive ground speed. To correct uneven cutting, reduce the ground speed.
- Tall grass and weeds should be cut with the Mower Deck in its highest setting, then make a second pass cutting at the desired height.
- Always keep the Mower Blades sharp. Unsharpened Blades may result in poor cutting and cause unwanted vibrations that could damage your machine.

Obstacles

⚠ WARNING

- The mower can easily throw stones, sticks, and other debris up to 50 feet at great velocity which could cause personal injury or property damage. Do not run the machine over gravel driveways, loose stones or mulch with the mower blades spinning.
- Always check your work area before mowing and remove any debris that might tangle or damage the machine. If you do run into debris and the mower becomes tangled, turn off the engine and disconnect the spark plug wire(s) before attempting to untangle the machine.

Slopes

⚠ WARNING

- When operating the DR VERSA-PRO Z-MOWER over uneven terrain or slopes, use extreme caution to avoid tipping over the machine.
- Never use the DR VERSA-PRO Z-MOWER on slopes greater than 20 degrees. Doing so could result in serious injury or damage to your machine.

- If you have to mow on sloping terrain, mow in the "walk-behind" mode across the slope, not up and down, for better control.
- Use a slower speed going down a slope.

If the machine gets hung up

1. If the machine gets hung up disengage the Blades. NEVER try to free the machine from stumps or debris with the Blades engaged.
2. Try backing away from the obstacle.

⚠ WARNING

- If you need to leave the operating position to clear debris from the deck, first stop the blades, shut off the engine, wait five (5) minutes for the machine to cool and disconnect the spark plug wire(s), keeping it away from the spark plug(s).
- Never touch the exhaust areas or the spark plug(s)—as both are extremely hot.

Cutting in Wet and Heavy Growth

- Be very careful of your footing when mowing in wet conditions. Avoid steep slopes and other slippery areas.
- Use a slower speed when mowing in wet conditions.
- Use a slower speed or add cutting height when mowing in heavy growth.

Hand Pushing the Mower

⚠ WARNING

- Before performing these procedures, you must first shut off the engine, set the parking brake, wait five (5) minutes to allow parts to cool and disconnect the spark plug wire(s), keeping it away from the spark plug(s).
- You should have a helper when pushing the machine because the mower is heavy and could cause injury.

NOTICE

Only push the mower by hand. Never tow the machine. Towing can cause severe damage to the hydrostatic transmission.

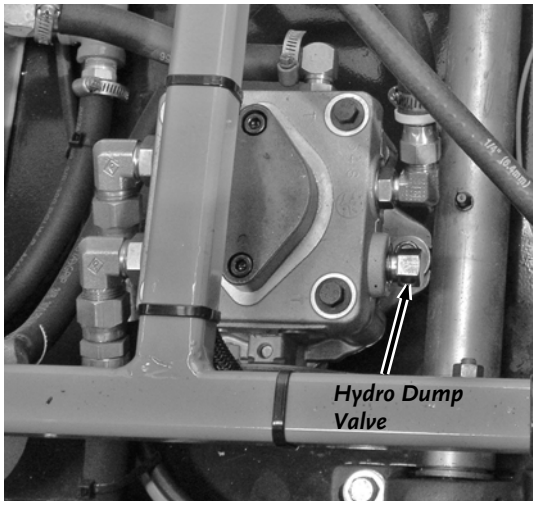


Figure 9

You can push Hydrostatic Transmission machines at a slow speed. To do this, locate the Hydro Dump Valve on the rear of each Pump (***Figure 9***).

Tool Needed:

- 5/8" Wrench

1. Tip the Seat forward to locate the Dump Valve Nuts.
2. Turn the Dump Valve Nut on each Pump counterclockwise for at least two revolutions. This will allow Fluid to bypass the Pump making it possible to push the machine.
3. After pushing the machine to the desired location, re-engage both Pumps by turning the Dump Valve Nuts clockwise and tighten them securely.

Chapter 4: Maintaining the DR VERSA-PRO Z-MOWER

Regular maintenance is the way to ensure the best performance and long life of your machine. Your DR VERSA-PRO Z-MOWER was fully adjusted at the factory and should stay in adjustment. However, should you notice changes in how the machine operates over time; the following procedures will provide the needed adjustments. For Engine maintenance, please refer to the Engine Owner's Manual that came with your Mower. Service intervals listed in the checklist below supersede those listed in the Engine Owner's Manual.

⚠ WARNING

When performing any adjustment or maintenance you must first shut off the engine, set the parking brake, wait five minutes to allow parts to cool and disconnect the spark plug wires keeping them away from the spark plugs.

Regular Maintenance Checklist

Note: *Consider the service intervals shown as maximum under normal operating conditions. Increase frequencies under extremely dirty or dusty conditions.*

Procedure	Before Each Use	Every 10 Hours	Every 25 Hours	Every 50 Hours	Every 100 Hours	Every 500 Hours
Check Operator Presence Switch	▲					
Check Engine Oil Level	▲					
Check Hydraulic Oil Level	▲					
Check General Condition, e.g. nuts, bolts, welds, etc.	▲					
Check Blade Sharpness	▲					
Clean Engine Exterior and Cooling Fins	▲					
Lube Spindles & Front Wheels		▲				
Check Battery Voltage		▲				
Check Cable connections		▲				
Check Deck Level			▲			
Check Tire Pressure			▲			
Clean Air Filter & Recliner			▲			
Check all Fasteners			▲			
Check Parking Brake Adjustment				▲		
Check all Belt Tensions				▲		
Lubricate Idler Assemblies				▲		
Replace Spark Plug(s)					▲	
Change Engine Oil and Filter					▲	
Replace Air Filter(s)					▲	
Lubricate Concentric Tubes in Control Arm					▲	
Lubricate Throttle Cable					▲	
Replace In-line Gas Filter					▲	
Replace Hydraulic Oil Filters ***NOTE:*** *1st time after 250 hours.*						▲

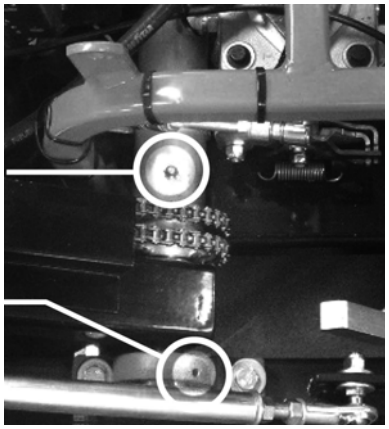


Figure 10

Blade Spindle Fitting (3 places)

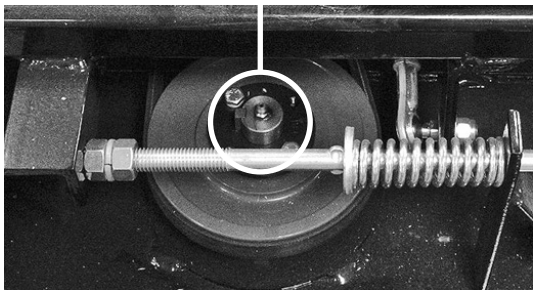


Figure 11

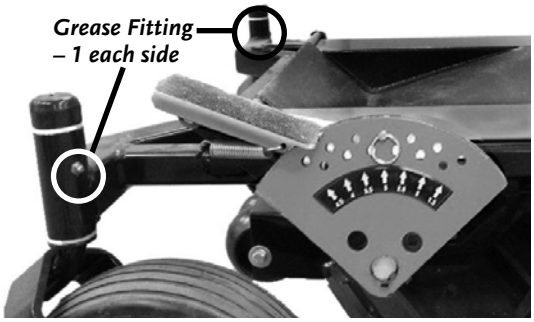


Figure 12

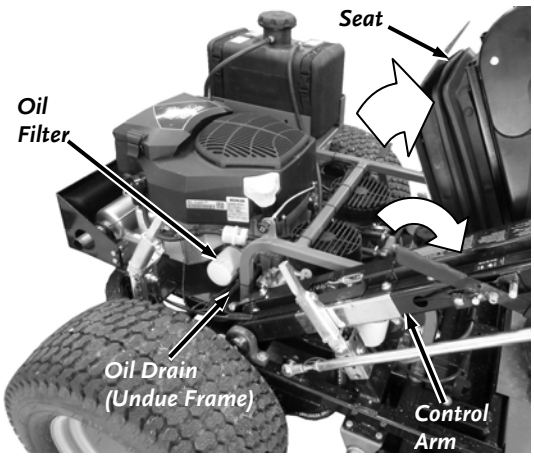


Figure 13

Lubrication

Your DR VERSA-PRO Z-MOWER was lubricated at the Factory. The operator needs to periodically lubricate the Throttle Cable, Concentric Tubes, Main Arm Pivot Bearings, Front Wheel Spindles, Blade Spindles, and provide Engine lubrication.

Tools and Supplies Needed:

- Grease gun w/Lithium grease
- Engine Oil (see section "Adding Oil and Gasoline" in Chapter 2 for Oil specifications)

1. Lubricate the Throttle Cable with SAE 30 Oil. Apply the lubricant into the cable housing while working the cable back and forth a few times. You should do this at both ends of the cable. Perform this lubrication more often in dry and dusty environments.
2. Using Lithium Grease, lubricate the two Fittings on the Upper Concentric Tube and one Fitting on the Lower tube (***Figure 10***).
3. Using SAE 30 Oil, lubricate the Lower Main Arm Pivot Bearings, one each side.
4. Using Lithium Grease, lubricate the Blade Spindles (***Figure 11***).
5. Using Lithium Grease, lubricate the Front Wheel Spindles (***Figure 12***) until grease starts to come out of the weep holes.

Removing and Replacing the Engine Oil and Filter

Note: *Drain the oil when the Engine is warm. Warm oil drains quickly and completely.*

Tools and Supplies Needed:

- Oil Filter Wrench (obtainable from a local auto parts or hardware store)
- Rags and a suitable container for used oil
- SAE 30 High Detergent Oil

Manually:

1. On the right side of the Kohler Engine there is a drain pipe with an Elbow that points down through a hole in the Frame (***Figure 13***). A Quick Release Valve is attached to the Elbow. Attach the Plastic Hose provided to the Quick Release Valve and drain the oil into a suitable Container.
2. The Engine Oil Filter is located on the Right side of the Engine. Using an Oil Filter Wrench, or grasping the Oil Filter firmly with your hand, unscrew the Oil Filter counterclockwise from the Engine. **ENSURE THAT THE OLD FILTER GASKET COMES OFF WITH THE FILTER**.
3. Wipe the Oil Filter mounting base on the Engine with a clean cloth.
4. Apply a thin coat of clean motor oil to the new Oil Filter Gasket. **DO NOT USE GREASE OR USED MOTOR OIL**.

5. Line up the threads carefully to avoid cross threading and screw the new Oil Filter on until the Filter Gasket contacts the base, and then tighten the Oil Filter 3/4 to 1 turn. **DO NOT OVER TIGHTEN**.
6. With the machine on a level surface, initially add 32 oz. of SAE 30 High Detergent oil (recommended by the Engine Manufacturer) into the Oil Fill (***Figure 14***) and wait one minute for the oil to settle.
7. Check the Dipstick and continue adding a few ounces of oil at a time, rechecking the Dipstick until the oil reaches the fill mark. Be careful not to overfill.

Note: *Be sure to use environmentally safe disposal procedures in the disposing of the used oil.*

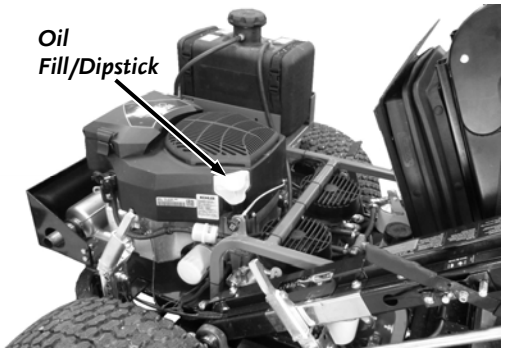


Figure 14

Alternate Method:

1. Remove the Oil Fill Cap and vacuum the oil from the Engine through the Oil Fill Tube using a Vacuum Oil Drainer.
2. Remove and replace the Oil Filter and oil per steps 2 through 7 above.

Note: *Be sure to use environmentally safe disposal procedures in the disposing of the used oil.*

Checking the Hydraulic Fluid

1. Lift the Driver's Seat to locate the Hydraulic Fluid Tank (***Figure 14***).
2. Remove the Fill Cap and check that the fluid level is about 1/4"-1/2" from the bottom of the Feeder Tube on the back of the Hydraulic Fluid Tank (***Figure 15***).
3. If fluid is required, add 30 Weight, Synthetic Hydraulic Fluid, or equivalent.

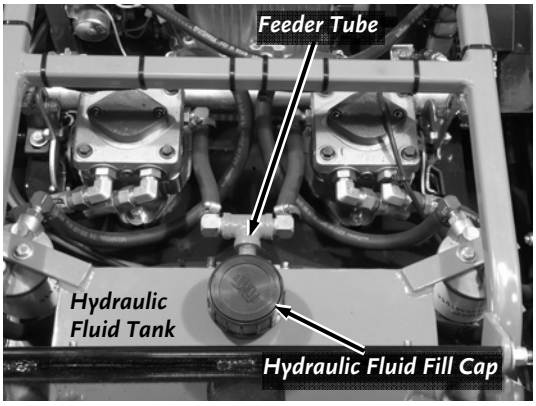


Figure 15

Removing and Replacing the Belts

Replacing the Engine to Deck Belt

NOTICE

Use only DR belts on your machine. They have been thoroughly tested and proven for many hours of use.

Tools needed:

- Two 1/2" Wrenches
- Two 3/4" Wrenches
- Tape Measure

1. Using two 3/4" Wrenches, loosen the two Adjusting Nuts of the Deck Rod Assemblies on each side of the Deck (***Figure 16***).
2. Grasp the Handle at the rear of the Foot Rest (***Figure 17***) and lift the Foot Rest to access the top of the Deck.

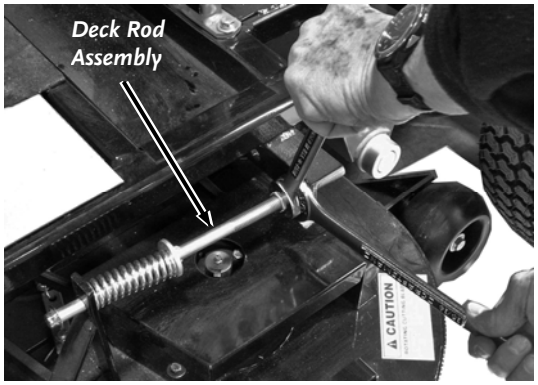


Figure 16

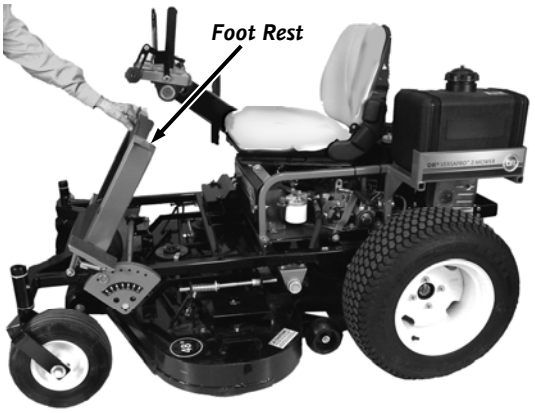


Figure 17

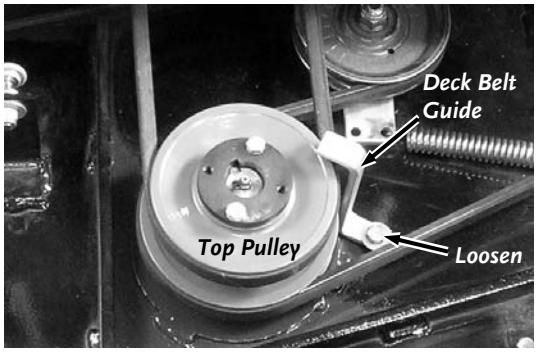


Figure 18

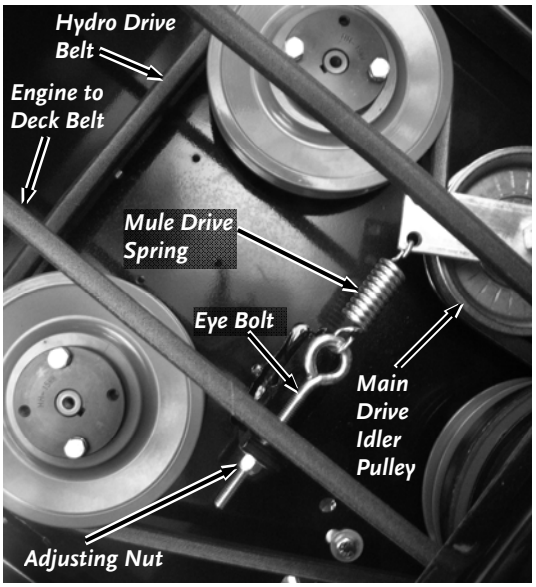


Figure 19

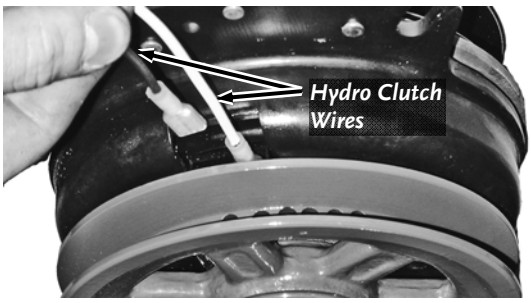


Figure 20

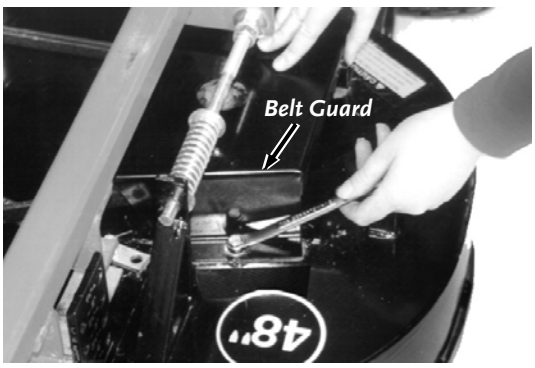


Figure 21

3. Using the 1/2" Wrenches, loosen the Deck Belt Guide and swing it out of the way (***Figure 18***). Remove the Engine to Deck Belt from the top Pulley and the Engine and then install the new Belt.
4. Apply tension to the Belt by tightening the Deck Rod Assemblies to the recommended 3-1/8" Spring length.
5. Move the Deck Belt Guide back into position and tighten it securely.

To Replace the Hydro Drive Belt

NOTICE

Use only DR belts on your machine. They have been thoroughly tested and proven for many hours of use.

Tools needed:

- Two 1/2" Wrenches
- Two 3/4" Wrenches
- Tape Measure

1. Refer to the previous instructions "To Replace the Deck Belt" and remove the Engine to Deck Belt.
2. Remove the Adjusting Nut from the Eye Bolt on the Main Drive Idler Pulley (***Figure 19***).
3. Disconnect the Electrical Wires from the Clutch (***Figure 20***).
4. Remove the old Belt.
5. Mount the new Belt and tighten it. The Belt should have 3/4" to 1" deflection.
6. Replace the Eye Bolt and Adjusting Nut on the Main Drive Idler Pulley.
7. Replace the Clutch Bracket and re-connect the Clutch Wires.
8. Mount the Belt onto the top Pulley on the Deck.
9. Replace the Engine to Deck Belt Guide.

Replacing the Deck Belt

Tools needed:

- 7/16" Wrench
- Two 1/2" Wrenches
- Tape Measure

1. Remove the Belt Guards from the Deck (***Figure 21***).
2. Remove the Engine to Deck Belt from the top Pulley on the Deck. See Steps 1 through 3 on page 19.
3. Work the Deck Belt off the Pulleys, starting with the Pulley closest to the Discharge Chute.
4. Mount the new Belt on the Deck Pulleys.
5. Replace the Engine to Deck Belt on the top Pulley on the Deck. See Steps 3, 4, and 5 on page 20.
6. Replace the Belt Guards.

Adjusting the Engine to Deck Belt

Tools needed:

- Two 3/4" Wrenches

1. To adjust the Engine to Deck Drive Belt tension, loosen the two Adjusting Nuts on the Deck Rod Assemblies (***Figure 16 on page 19***). Turn Rear Nut clockwise to tighten the Belt. For recommended tension, compress the Drive Springs to approximately 3-1/8" on both sides of the Deck.

Adjusting the Hydro Drive Belt

Tools needed:

- Two 3/4" Wrenches

1. Turning the Adjusting Nut clockwise on the Eye Bolt will tighten the Mule Drive Spring (***Figure 19 on page 20***). Tighten the Adjusting Nut until the Spring has about a 1/32" to 1/16" gap between the coils of the Spring.

Removing and Replacing the Blades

To obtain optimum mowing results, you should keep the mower blades sharp and well balanced. Follow the instructions below to remove, sharpen, and/or replace the blades.

Tools and supplies needed:

- 15/16" Wrench or Socket
- Two 1/2" Wrenches
- Pliers
- Gloves or a Rag
- Block of wood to brace the Blade

1. Remove the Deck from the chassis following the instructions on page 22. Invert the Deck as shown in (***Figure 22***).
2. Place a short piece of 2 x 4 lumber between the side of the Deck and the Blade to "lock" it in position. Using a 15/16" Wrench, remove the Blade attaching Bolts and Washers from the Spindle. Remove the Blade and repeat this step for the other two Blades.
3. File or grind the Blades evenly. Take care to retain the angle of the original cutting edge.

Note: *You should always check the Blade balance. Inexpensive blade balancers are available at most hardware stores.*

4. Reinstall the Blades with the Lift (turned up) portion facing up (***Figure 23***). Tighten the Blade attaching Bolts securely.

Note: *Be sure to seat the Blade completely over the small ridge in the Spindle Hub before tightening the Bolt.*

5. Reinstall the Deck following the instructions on page 22.

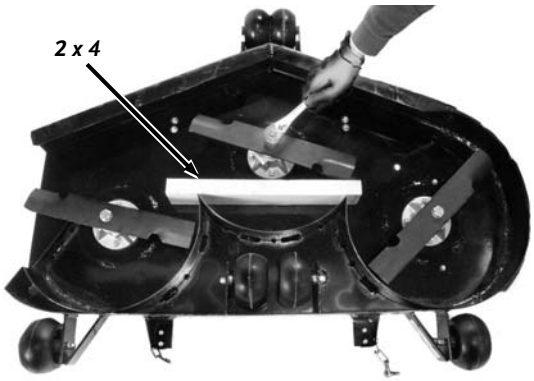


Figure 22

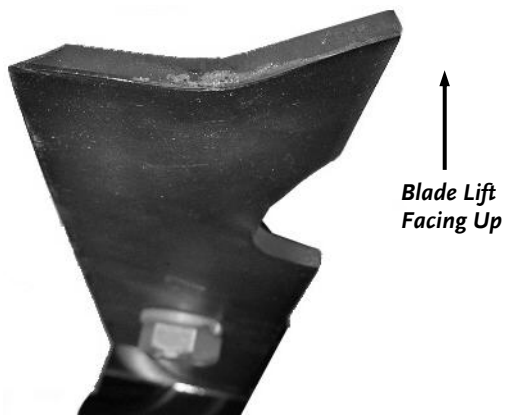


Figure 23

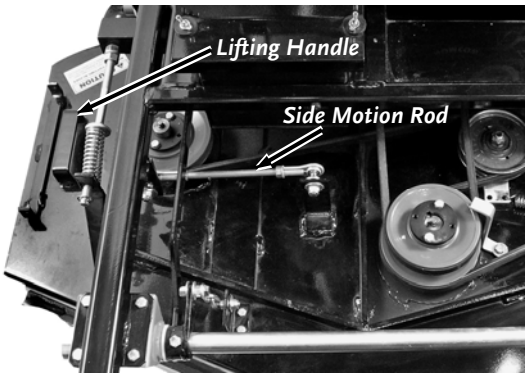


Figure 24

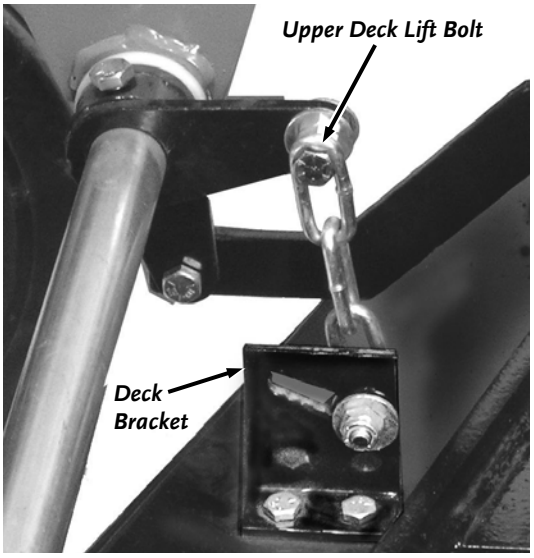


Figure 25

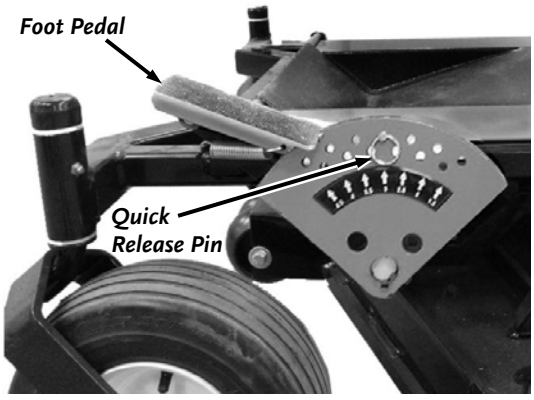


Figure 26

Removing the Deck

It is very important to clean the underside of the Deck frequently. Accumulation of clippings and debris will prevent the Mower from "lifting" grass into the cutting position and discharging clippings evenly. Grass accumulating under the Deck is often a cause of uneven cutting. For best results when cleaning the Deck, remove it from the chassis and invert it.

Tools needed:

- Two 1/2" Wrenches
- Two 3/4" Wrenches
- 9/16" Wrench
- Wood for blocking

1. Raise the Deck to the Transport Position. See "Deck Mowing Height and Transport Position" on page 14.
2. Stabilize the machine on a level surface and set the Parking Brake.
3. Grasp the Handle at the rear of the Foot Rest (***Figure 17 on page 19***) and lift the Foot Rest to access the top of the Deck.
4. Loosen the Deck Rod Assemblies (***Figure 16 on page 19***) on each side of the Deck.

Note: *The Deck Rod Assemblies will remain connected to the Deck.*

5. Loosen the Deck Belt Guide (***Figure 18 on page 20***) and swing it aside.
6. Remove the Engine to Deck Belt from the top pulley.
7. Using a 9/16" Wrench, remove one end of the Side Motion Rod (***Figure 24***).
8. Place several 3"- 4" high wood blocks evenly around the perimeter of the Mower Deck and lower the Deck until it rests on the wood blocks.
9. Using 1/2" Wrenches, remove the Upper Bolts (***Figure 25***) from the four Deck Lift Levers connecting the Chain to the Deck Brackets.
10. Using the Lifting Handles located on each side of the Deck, lift one side of the Deck and carefully remove the wood blocks. Lower the Deck until it rests on the Deck Wheels. Repeat for the other side.
11. Push the Foot Pedal forward to lift the Deck Height Adjuster as high as possible and pin it in place with the Quick Release Pin (***Figure 26***).
12. Release the Parking Brake.
13. Alternately push the front of the Mower to one side and pull the Deck from beneath the chassis.
14. Reverse the above procedure to re-install the Deck.
15. Re-adjust the Engine to Deck Belt tension following the instructions on page 20.

Leveling the Deck

There are four Adjustable Hangers (***Figure 27***) on the Mower Deck and used to maintain a consistent cutting height across the Deck. These may need adjustment from time to time.

Note: *A higher Bolt position allows lower cutting heights.*

Tools Needed:

- Two 1/2" Wrenches
- Wood Blocking

1. Raise the Deck to the Transport Position. See page 14. Place equal height Blocks beneath each corner of the Deck. Lower the Deck so that it rests on the Blocks and relieves the tension on the chain supports.
2. Re-position the Deck Bolt (***Figure 27***) in the slot as required by removing the Bolt, placing it in a higher or lower position, and then tighten securely.

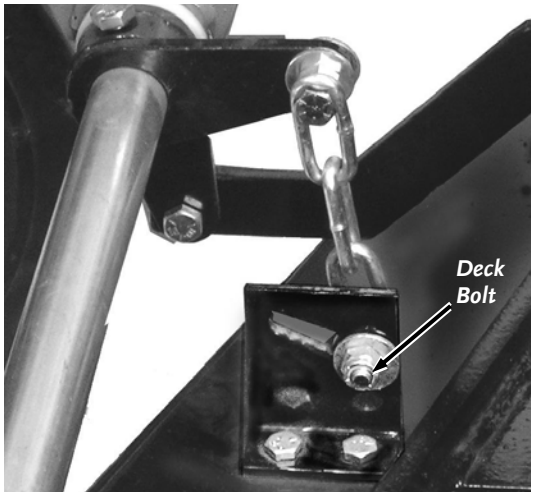


Figure 27

Adjusting the Parking Brake

Tools Needed:

- Needle Nose Pliers
- 7/16″ Wrench

1. Move the Brake Lever to the OFF position.
2. Remove the Hitch Clip and Clevis Pin from the Yoke on the Brake Arm (***Figure 28***).
3. Remove the Turnbuckle from the Brake Arm and turn it clockwise to tighten.

Note: *Over tightening will prevent the Brake Handle from engaging.*

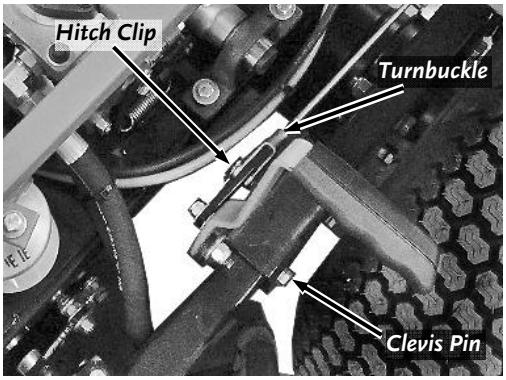


Figure 28

Adjusting the Control Panel Height

You may raise or lower the height of the Control Panel, in both the Ride and Walk-Behind modes by moving the respective Control Arm Rest Assemblies.

Tools Needed:

- Two 1/2″ Wrenches

<u>Ride Mode position:</u>

1. Move the Control Arm to the Walk-Behind position so it is out of the way.
2. Remove the Nut and Bolt in the Front Control Rest Tube (***Figure 29***).
3. Raise or lower the Tube to the desired height.
4. Replace the Nut and Bolt but do not tighten.
5. Rotate the Control Arm back in place and check Control Panel height.
6. If necessary, adjust the Control Arm Latch alignment hardware to align the Latch Housing flush with the Control Arm.
7. Tighten all hardware when adjustment is complete.

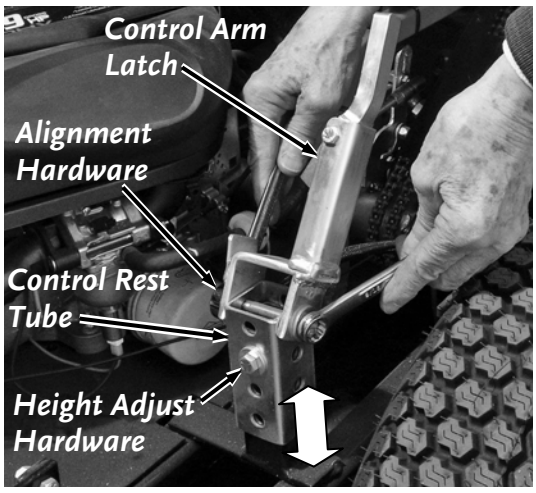


Figure 29

<u>Ride Mode position:</u>

1. Move the Control Arm to the Riding position so it is out of the way.
2. Perform steps 2 thru 7 above at the Rear Control Rest Tube.

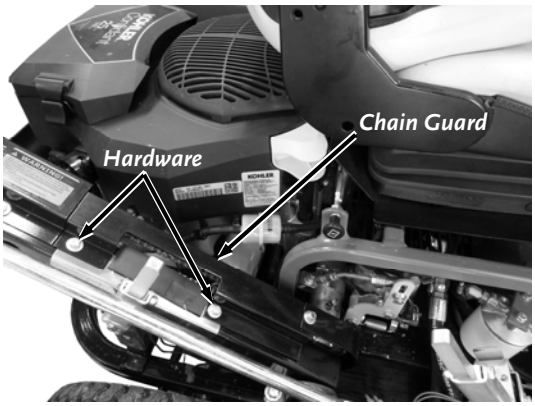


Figure 30

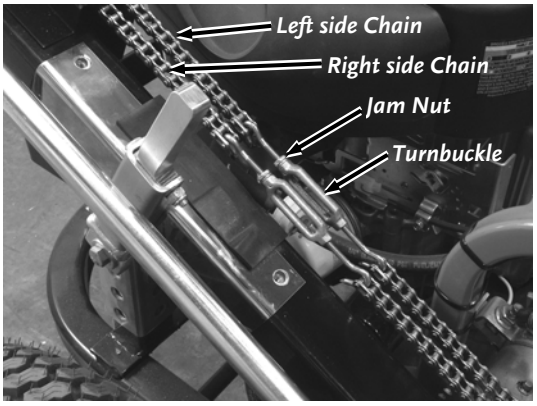


Figure 31

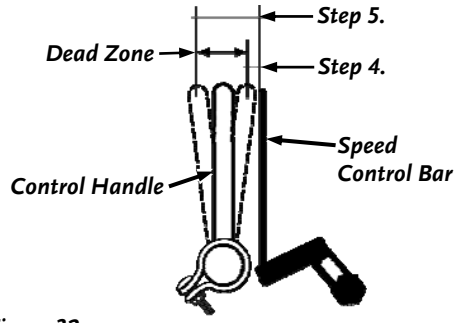


Figure 32

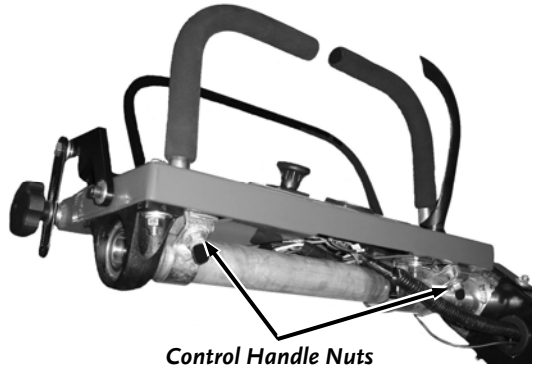


Figure 33

Adjusting the Hydro Tracking

The amount of tension on the Chain determines the amount of "play" or "slack" in the in the Control Handle travel. To insure equal response from both Control Handles, the tension on each Chain should be equal. If the machine is not tracking straight, perform the following adjustments:

⚠ CAUTION

Do not over tighten the chain. This can cause the control levers to jam in the forward or rear position.

Tools Needed:

- 1/2", 9/16", 7/16" & 3/8" Wrenches
- Pliers
- Masking Tape and Tape Measure

Check the Linkage Chain Tension

1. Place the Control Arm in the Walk-Behind position. Remove the Chain Guard from the Control Arm (***Figure 30***).
2. Viewing the Chains from the Operator Position, the Left Chain controls the Right Control Handle, and the Right Chain controls the Left Control Handle (***Figure 31***). Loosening the Chain will increase the amount of slack in the Chain, tightening will decrease the amount of slack in the Chain.
3. Apply a short length of tape along the top of each Control Handle and draw a reference line for use in measuring in steps 4 and 5 below.
4. Bring the Speed Control Bar to the vertical position. Using light hand pressure, move one Control Handle forward (***Figure 32***) until you feel resistance. Using a tape measure, note the distance between the Speed Control Bar and Control Handle.
5. Gently move the Control Handle backward until you feel resistance again. Note the distance from the Speed Control Bar.
6. The difference in the two measurements is an indication of the amount of slack in the Chain and the "Dead Zone" between Forward and Reverse.
7. Repeat Steps 4 and 5 for the other Control Handle.
8. Using a 3/8" Wrench and Pliers, loosen the Nut on the Turnbuckle for the Control with the greatest "Dead Zone". Adjust the Turnbuckle and re-measure until the tension is equal on both Control Handles. Re-tighten the Nut.
9. Check the full travel of each Control Handle to be certain it does not stick or jamb in any position.
10. Replace the Chain Guard and return the Control Arm to the Ride position.

Align the Control Handles

1. Position the Speed Control Bar as close to the Control Handles as possible and use it as a guide to align the Control Handles.
2. Using a 9/16" Wrench, loosen the Nuts on the lower end of the Control Handles (***Figure 33***).
3. Line up the Control Handles so they are even with each other and parallel with the Speed Control Bar. Once aligned, tighten the Nuts securely.

Equalize the Wheel Speeds

The Linkage Arm settings on the Left and Right Hydraulic Pumps should be the same to achieve equal speed on both Wheels. Adjust the Left Wheel speed to the Right Wheel speed as follows:

1. Remove the Left Steering Linkage Assembly (***Figure 34***) by sliding the spring loaded Collar (Figure 28) away from the Joint and separating the Linkage from the Ball Pivot (***Figure 35***).
2. Measure the location of the Ball Pivot in the Right Hydro Control Arm.
3. Loosen the Nut holding the Left Ball Pivot to the Hydro Control Arm.
4. Slide the Ball Pivot up or down, depending upon the adjustment required to match the Right Hydro Control Arm.

Note: *Sliding the Ball down increases the speed; sliding the ball up decreases the speed of the Wheel.*

5. Replace the Linkage Arm and test the alignment. Repeat the procedure if necessary.

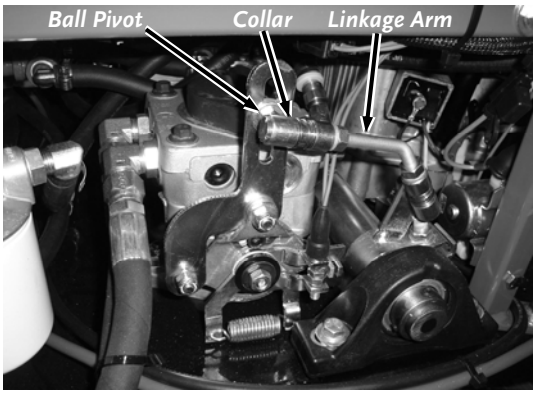


Figure 34

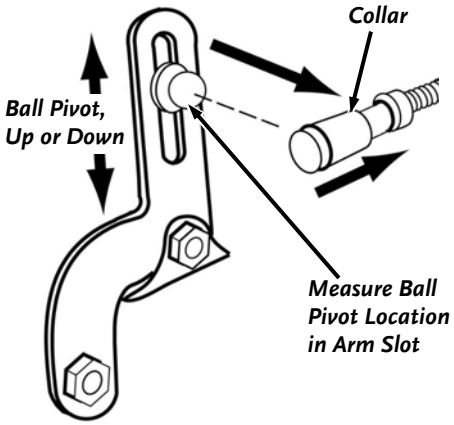


Figure 35

Adjusting the Neutral Setting

⚠ WARNING

- Keep the work area clear of children and pets.
- Stabilize the machine while in the elevated position during this procedure.
- Disengage the blades and stand clear of the rear wheels to avoid contact as they turn during this procedure.

It is important to maintain proper adjustment of the Steering Linkage so that each Handle reaches Neutral at the same position. ***Figure 36*** shows the location of the Pump Linkage on the Hydraulic Pumps, which you can adjust to achieve the correct setting.

Tools Needed:

- 1/4" Hex Key Wrench
- Lifting and Blocking Equipment

1. Block or raise the machine so that the Rear Wheels are off the ground and can rotate freely.
2. Loosen the Hex Socket Cap Screw at the bottom of the Pump Linkage on each Hydraulic Pump (***Figure 36***).
3. Start the Engine and run it at 3/4 Throttle setting.
4. Rotate the Pump Linkage forward and backward to find the Neutral position.
5. Once the Neutral position is determined, tighten the Cap Screw securely.
6. Repeat the procedure for the other Pump.
7. Move the Engine Throttle to Idle, turn OFF the Engine and remove the Blocking from the machine.
8. Re-start the Engine and test the setting.

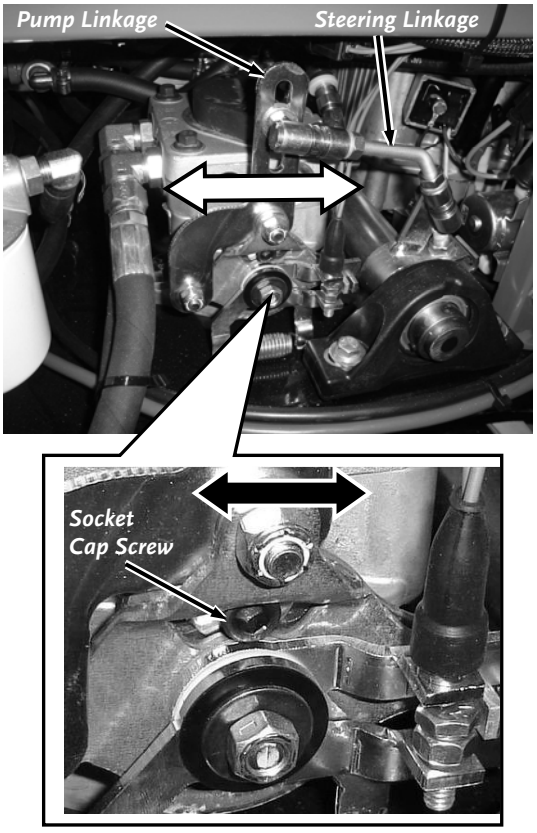


Figure 36

Figure 37

Figure 38

Replacing the Hydro Fluid Filters

Replace the two Hydro Fluid Filters after the first 250 hours of operation, and then again after 500 hours of operation.

Tools Needed:

- Oil Filter Wrench (obtainable from a local auto parts or hardware store)
- Rags and a suitable container for any used Hydraulic fluid
- 30 Weight, Synthetic, Hydraulic Fluid (as required)

1. Locate the two Hydro Fluid Filters (one on left side and one on right side) (***Figure 37 and 38***).
2. Using an Oil Filter Wrench, or grasping the Fluid Filter firmly with your hand, unscrew the Fluid Filter counterclockwise from the Hydro Fluid Filter Base. BE SURE THAT THE OLD FILTER GASKET COMES OFF WITH THE FILTER.
3. Wipe the mounting base for the Fluid Filter with a clean cloth.
4. Apply a thin coat of clean hydraulic fluid to the new Fluid Filter Gasket. DO NOT USE GREASE.
5. Line up the threads carefully to avoid cross threading and screw the new Fluid Filter on until the Filter Gasket contacts the base, and then tighten the Fluid Filter 3/4 to 1 turn. DO NOT OVER TIGHTEN.
6. Add any lost fluid during the Filter replacement. See page 19.

Note: *Be sure to use environmentally safe disposal procedures in the disposing of any used fluid.*

Battery Care

Proper care can extend the life of a Battery. Follow these recommendations to ensure your Battery's best performance and long life:

- Before charging the battery, observe its external appearance and keep it clean and dry. Never charge or use a Battery that shows cracks, changes shape, leaks, or otherwise obviously damaged.
- **Do not allow the Battery to run down completely before charging. Leaving the Battery discharged damages the Battery.** If the machine is not used, charge the Battery every 4 to 6 weeks. Operate the Engine for at least 45 minutes to maintain proper Battery charge.
- Store an unused Battery in a dry area that does not freeze.
- Do not charge an already charged Battery. In theory, you cannot overcharge our Battery with a trickle charger; however, when a Battery is fully charged and the Charger is still on, it generates heat that could be harmful to the Battery. A fully charged Battery will read 12V-13.2V with a Voltmeter.
- Do not continue to crank the Engine when the Battery charge is low.
- If the battery begins to leak, avoid contact with the leaking acid. Place the damaged battery in a plastic bag, then dispose of it properly.

⚠ WARNING

If battery acid does contact your skin or eyes, flush with cool water for at least 15 minutes and call a physician. IF YOU INGEST ACID, CALL A PHYSICIAN IMMEDIATELY

Charging the Battery

Operate the Engine for at least 45 minutes to maintain proper Battery charge. If the Battery loses its charge, you will need to use a trickle Charger (like the DR Battery Charger) to recharge it. The Charger should have an output of 12 volts at no more than 2 amps.

- At 1 amp, the Battery may need charging for as long as 48 hours.
- At 2 amps, the Battery may need charging for as long as 24 hours.

To connect a Battery charger to your DR VERSA-PRO Z-MOWER, follow the steps listed below.

1. Detach the two (2) Battery cables going to the Battery on your machine.
2. Attach the red (+) Battery Charger Wire to the red (+) Battery tab, and the black (-) Battery Charger Wire to the black (-) Battery tab.
3. Plug the Battery Charger into an outlet.

NOTICE

When you are finished charging the battery, disconnect the charger from the outlet first, then disconnect the battery charger wires from the battery. If you leave the battery charger wires connected to the battery, the battery will discharge itself back into the charger.

Disposing of the Battery Responsibly

The Battery is a sealed lead-acid Battery. Recycle or dispose of it in an environmentally sound way.

- Do not dispose of a lead-acid Battery in a fire; the Battery may explode or leak.
- Do not dispose of a lead-acid Battery in your regular, household trash. Law in most areas prohibits incinerating, disposing in a landfill, or mixing a sealed lead-acid Battery with household trash.

Recycling a Used Battery

NOTICE

Please dispose of used batteries responsibly, according to your local hazardous materials regulations. Never throw away used batteries in your household trash.

Please dispose of your used Batteries responsibly by recycling them. Call your local Solid Waste Management District or your local waste handler to locate the collection site nearest you. Some collection sites recycle Batteries year-round; others collect them periodically.

You can also visit the Web site of Earth 911 for more information [www.earth911.org]. Once there, click the Municipal HHW link under Hazardous Household Waste, and enter your zip code. The site lists recycling centers located near you.

For a fee, you can recycle your Batteries with the International Metals Reclamation Company. Visit them at www.inmetco.com and click Services; or contact them at:

INMETCO, PO Box 720, 245 Portersville Road, Ellwood City, PA 16117, (724) 758-2825; fax (724) 758-2845

To learn more about hazardous waste recycling, visit the Web site for Battery Council International [www.batterycouncil.org] or for the Environmental Protection Agency [www.epa.gov].

Chapter 5: Troubleshooting

Most problems are easy to fix. Consult the Troubleshooting Table below for common problems and their solutions. If you continue to experience problems, contact us at www.DRpower.com or call toll-free 1-800-DR-OWNER (376-9637) for support.

⚠ WARNING

When performing any adjustment or maintenance you must first shut off the engine, set the parking brake, wait five minutes to allow parts to cool and disconnect the spark plug wires keeping them away from the spark plugs.

Troubleshooting Table

SYMPTOM	POSSIBLE CAUSE
The Engine will not start. *(Please refer to the Engine Owner's Manual for Engine-specific procedures.)*	⇒ Check all the items under the section called Starting the Engine on page 11. ⇒ Check that the Control Handles are in the Neutral position. ⇒ Make sure the Spark Plug Wires are attached. ⇒ Make sure the Throttle is in the Start position and the Choke is pulled out. ⇒ Check the oil and gas level. See page 9. ⇒ The gas may be old, change it. Use a fuel stabilizer if you keep gas longer than one month. ⇒ The Spark Plug may be dirty or cracked; change it if necessary. If it's oily, leave it out, hold a rag over the Plug Hole and pull the Recoil Cord several times to blow out any oil in the Cylinder, then wipe off the Plug and reinsert it. ⇒ Check the Fuel Filter, it may be clogged. Replace if necessary. ⇒ The Air Filter may be dirty, change it following the procedure in the Engine Owner's Manual. ⇒ Check the wire connections—especially the ground connection, the large black wire coming from the Battery, where it connects to the Engine. ⇒ Check the wire connections to the solenoid. Disconnect the black Battery ground wire first to avoid sparks. Check to be sure that all of the connections are clean and tight. Reconnect the Battery ground wire. ⇒ Check the ground connection on the Solenoid where it bolts to the Frame. Using a wrench or socket, tighten the Bolts to ensure a good connection to the Frame. ⇒ The Battery may not be charged. Check the voltage yourself or at a service station. If it is low, charge it with a 12-volt, 1 to 2 amp trickle Charger. If you do not use your machine for at least 45 minutes at a time, the Battery may need to be periodically charged. See the Battery care section on page 26. ⇒ If your Engine still won't start, visit our website at www.DRpower.com.
The Engine lacks power or is not running smoothly. *(Please refer to the Engine Owner's Manual for engine-specific procedures.)*	⇒ Check the Throttle Lever travel and adjustment. Make sure the Throttle Lever is in the Run position. ⇒ Check that the Air Filter is clean. If it is dirty, change it following the procedure in the Engine Owner's Manual. ⇒ The Spark Plug may be dirty or cracked; change it if necessary. If it's oily, leave it out, hold a rag over the Plug Hole and pull the Recoil Cord several times to blow out any oil in the Cylinder, then wipe off the Plug and reinsert it. ⇒ The gas must be fresh and clean. If it is old, change it. Use a fuel stabilizer if you keep gas longer than four weeks or so. ⇒ Check the Fuel Filter, it may be clogged. Replace if necessary. ⇒ Check to make sure that your Engine has the right amount of clean oil. If it is dirty, change it following the procedure on page 18. ⇒ If your Engine still lacks power, visit our website at www.DRpower.com.

Troubleshooting Table (Continued)

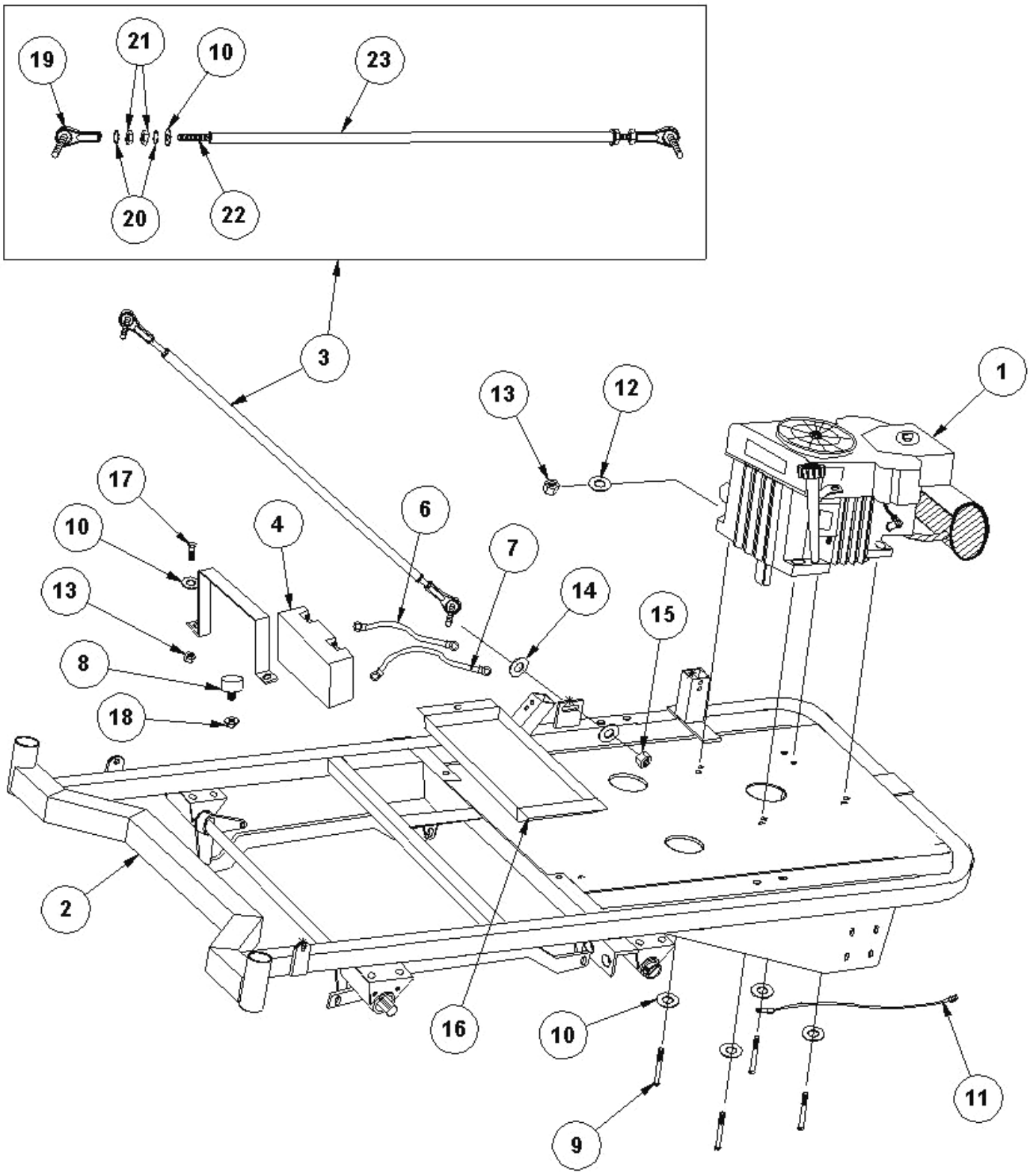
SYMPTOM	POSSIBLE CAUSE
The Engine smokes.	⇒ Check the oil level and adjust as needed. ⇒ You may be operating the machine on too great an incline. See Slopes on page 15. ⇒ Check the Air Filter(s) and clean or replace if needed ⇒ You may be using the wrong oil—too light for the temperature. Refer to your Engine Owner's Manual for detailed information. ⇒ Clean the Cooling Fins if they are dirty. ⇒ If your Engine still smokes, visit our website at www.DRpower.com.
Engine runs fine but the machine will not move.	⇒ The Drive Belt is broken or out of adjustment. See page 20. ⇒ The Transmission may be defective, visit our website at www.DRpower.com.
A Belt frays or rolls over its Pulley.	⇒ A Pulley groove may be nicked. Check the Belt for wear and hard spots. File off any nicks on the Pulley. ⇒ The Belt may be stretched; replace it.
The Mower Blades will not engage.	⇒ You are not holding the Operator Presence Lever against the Handle. ⇒ The Engine to Deck Belt is broken or out of adjustment. See page 19. ⇒ The Clutch wires are broken or disconnected. Re-connect the wires or call 1-800-DR-OWNER (376-9637) for assistance. ⇒ If your Mower Blades still will not engage, visit our website at www.DRpower.com.
The Blade Deck vibrates when engaged.	⇒ A Blade may not be seated properly on its Hub. Loosen the Blade Bolt, reseat the Blade, and tighten the Bolt. ⇒ Replace a Blade if it is chipped, bent, or broken. ⇒ A Spindle Bearing may be bad or a Spindle Shaft is bent, visit our website at www.DRpower.com.
A Blade is not cutting or is loose.	⇒ The Blade may not be seated properly on the hub. Loosen the Blade Bolt, reseat the Blade, and tighten the Bolt. ⇒ Sharpen the Blade; it may be dull or nicked.
The machine will not track straight, wheels pulling left or right.	⇒ Check the Tire pressure. See page 9. ⇒ The Hydro Tracking might be out of adjustment. See page 24.
The Mower "creeps" with the Control Handles at rest.	⇒ The Neutral Setting is out of adjustment. See page 25.
The Mower is not cutting evenly.	⇒ The Deck is not level. See page 23. ⇒ The Mower ground speed is too fast. Reduce the speed. See Tips on page 15. ⇒ The Mower Deck is clogged. Clean the underside of the Deck. ⇒ The Tire pressures are incorrect. See page 9.

Parts List - Engine to Chassis

NOTE: *Part numbers listed are available through DR Power Equipment.*

Ref#	Part#	Description
01	357170	Engine, 25HP, Kohler Confidant
02	241131	Frame
03	225431	Tie Rod Assembly
04	104831	Battery
05	241161	Battery, Strap
06	241181	Battery Cable, Red
07	241191	Battery Cable, Black
08	241171	Bumper, Battery Stop
09	227831	Bolt, 5/16"-18 x 2" HCS
10	227961	Washer, Flat, 5/16"
11	226591	Wire Assembly, Ground, Clutch
12	228001	Washer, Lock, Split, 5/16"
13	227911	Nut, Nylock, 5/16"-18
14	227971	Washer, Flat, 3/8"
15	227951	Nut, Nylock, 3/8"-24
16	226601	Tool Tray
17	227801	Bolt, 5/16"-18 x 3/4" HCS
18	241341	Nut, Lock, 5/16"-18
19	225231	Rod, Tie, End
20	228011	Washer, Split, 3/8"
21	228081	Nut, Hex, 3/8"-24
22	225441	Rod, Tie, All Thread
23	226551	Tube, Tie Rod, Short
Not Illustrated		
	278871	Fuel Line, Kohler Engine

Schematic – Engine to Chassis

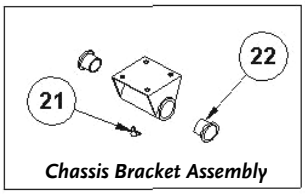


080210

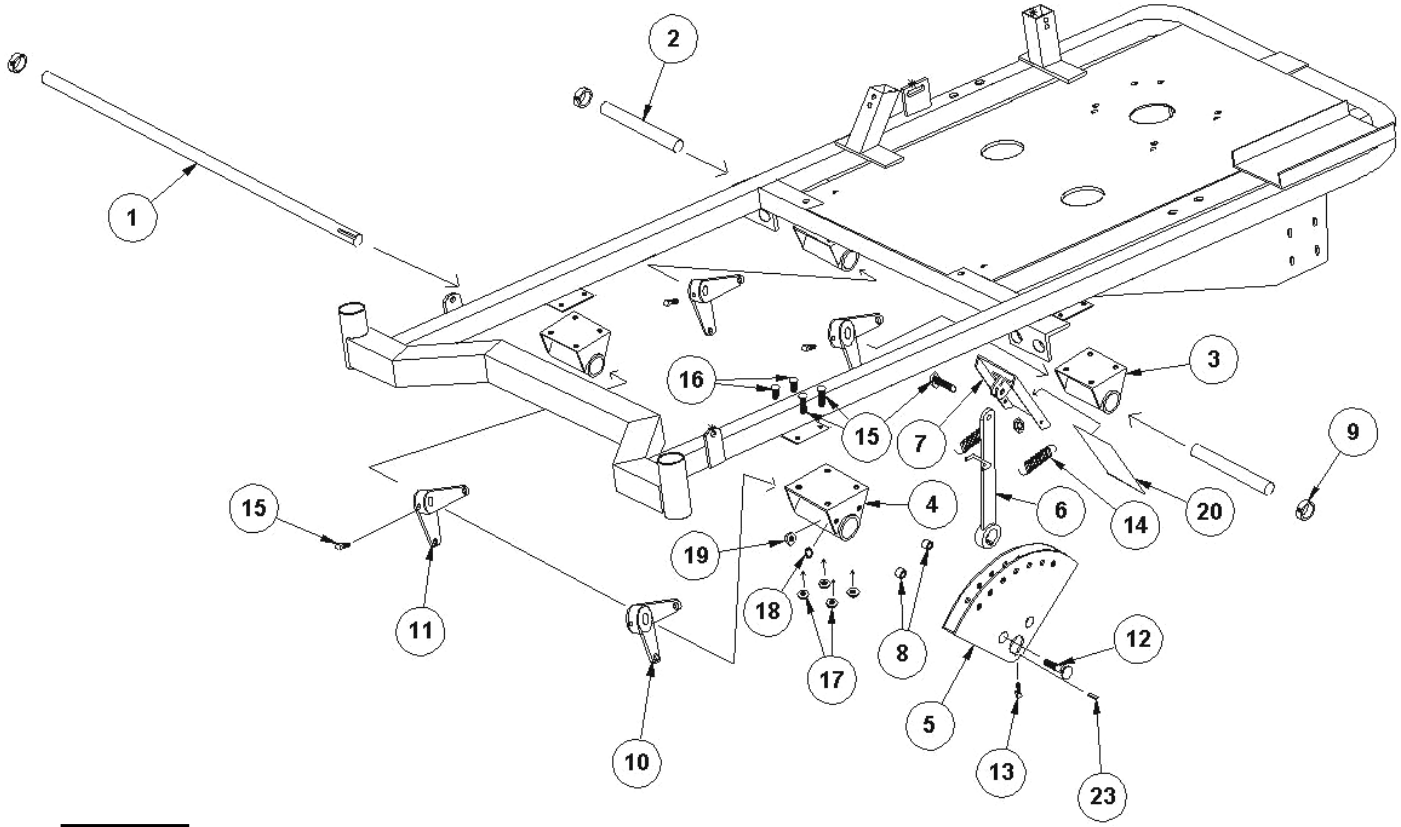
Parts List and Schematic - Chassis Foot Lift Assembly

NOTE: *Part numbers listed are available through DR Power Equipment.*

Ref#	Part#	Description
01	227701	Pivot Shaft w/Key
02	227681	Shaft, Deck
03	227641	Chassis Bracket w/No Holes
04	227651	Chassis Bracket w/Holes
05	227631	Block, Adjusting, Deck
06	227661	Arm, Foot Pedal
07	227671	Foot Pedal Assembly
08	227711	Spacer, Adjusting Block
09	167810	Collar, Caster
10	226531	Lever, Deck Lift, L/Hand
11	226521	Lever, Deck Lift, R/Hand
12	228261	Bolt, Carriage, 5/16"-18 x 1"
13	228331	Screw, Set, Square Head, 5/16"-18 x 1/2"
14	184190	Spring, Linkage
15	227811	Bolt, 5/16"-18 x 1" HCS
16	227801	Bolt, 5/16"-18 x 3/4" HCS
17	227911	Nut, Nylock, 5/16"-18
18	228001	Washer, Split, 5/16"
19	228041	Nut, Hex, 5/16"-18
20	226121	Non Slip Foot Pad
21	228221	Fitting, Pipe, Grease, 1/8"
22	167820	Bushing, Caster, Nylon
23	228151	Key Stock, 1/4" x 3/4"



Chassis Bracket Assembly

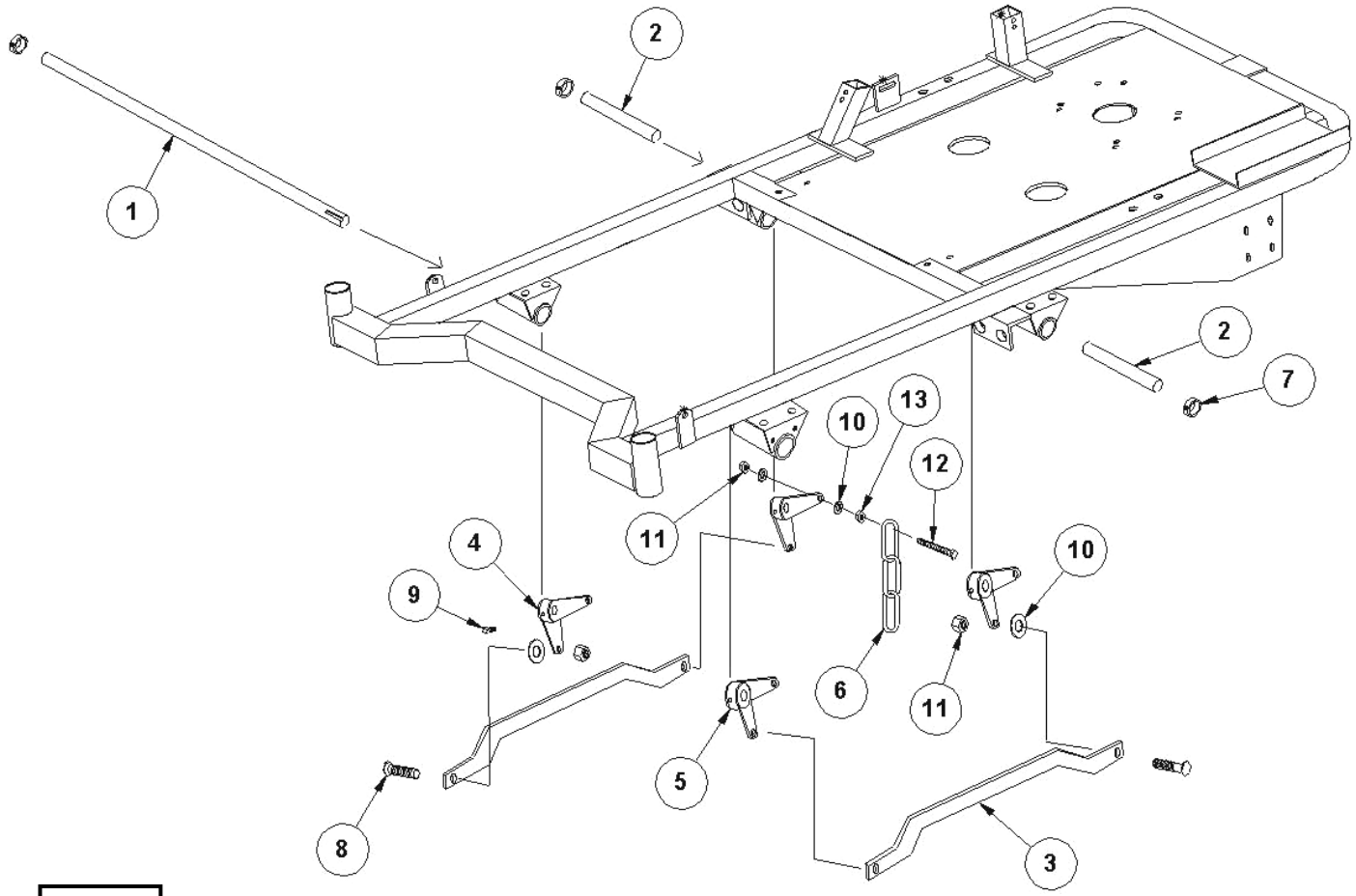


080210

Parts List and Schematic - Deck Lift Arm Assembly

NOTE: *Part numbers listed are available through DR Power Equipment.*

Ref#	Part#	Description
01	227701	Pivot Shaft w/Key
02	227691	Shaft, Deck
03	226471	Arm, Lift, Deck
04	226521	Lever, Deck Lift, R/Hand
05	226531	Lever, Deck Lift, L/Hand
06	227761	Chain, Deck Lift
07	167810	Collar, Caster
08	227821	Bolt, 5/16"-18 x 1-1/4" HCS
09	227811	Bolt, 5/16"-18 x 1" HCS
10	227961	Washer, Flat, 5/16"
11	227911	Nut, Nylock, 5/16"-18
12	226341	Bolt, 5/16"-18 x 1-1/4" HCS, Gr 8
13	228041	Nut, Hex, 5/16"-18



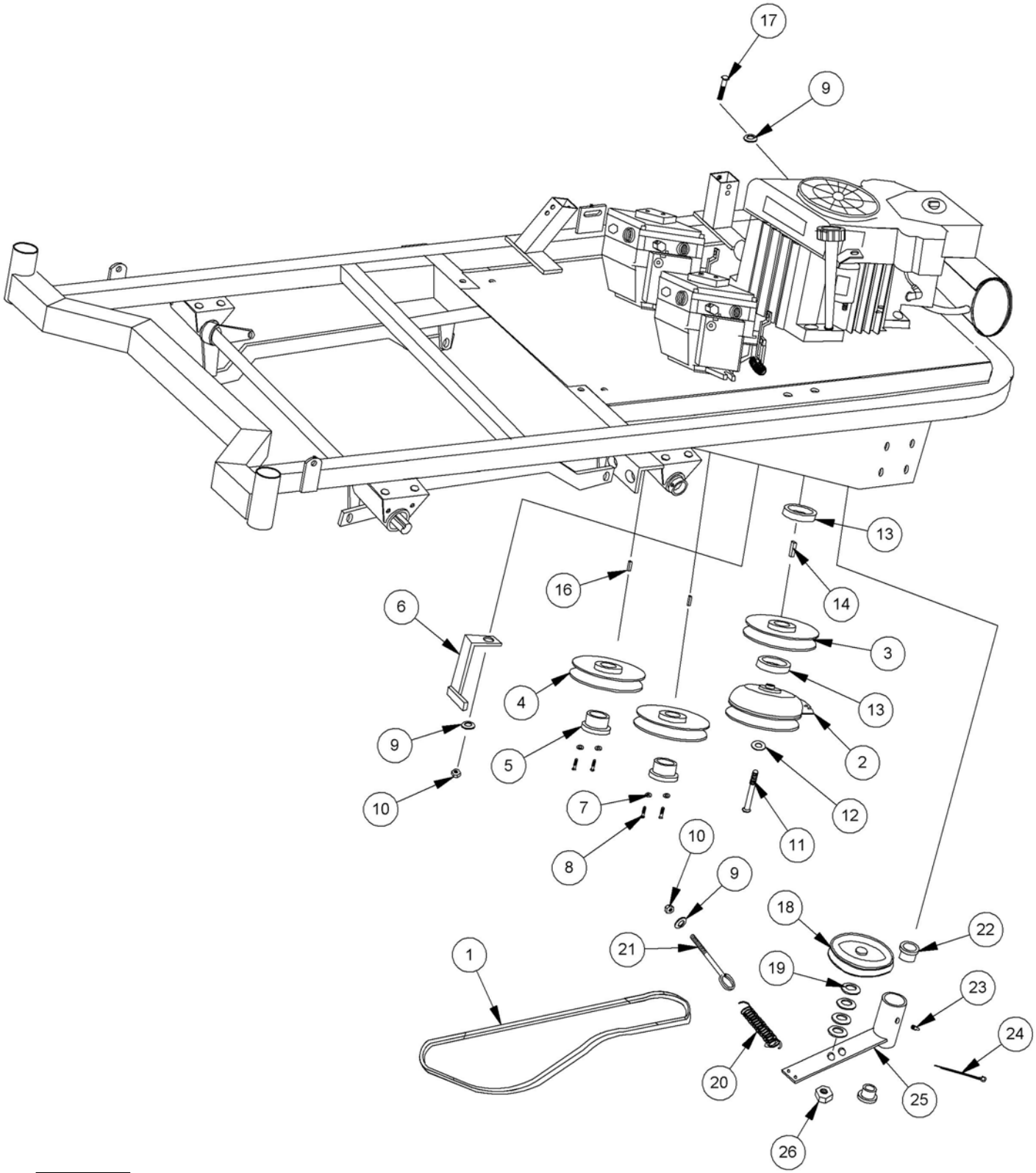
080210

Parts List - Lower Chassis Assembly

NOTE: *Part numbers listed are available through DR Power Equipment.*

Ref#	Part#	Description
01	228371	Hydro Belt
02	159220	Clutch for 1" Engine Shaft
03	202071	Pulley, Engine Drive, 1"
04	202081	Pulley, Hydro Drive
05	159620	Bushing, Hydro Pulley
06	227501	Bracket, Clutch
07	161900	Washer, Lock, Split, 1/4"
08	227781	Bolt, 1/4"-20 x 1" HCS
09	227961	Washer, Flat, 5/16"
10	227911	Nut, Nylock, 5/16"-18
11	228131	Bolt, 7/16"-20 x 3" Fine Thread
12	228021	Washer, Split, 7/16"
13	168411	Spacer, Engine Shaft, 1" ID
14	228151	Key Stock, 1/4" x 3/4"
16	228141	Key Stock, 3/16" x 1"
17	227831	Bolt, 5/16"-18 x 2" HCS
18	202061	Pulley, Idler, Deck
19	227981	Washer, Flat, 1/2"
20	176261	Spring, Mule Drive
21	167270	Bolt, Eye, 5/16"-18 x 3-1/2"
22	225261	Bushing, 1" ID, Bronze
23	226051	Fitting, Grease, 5/16", Drive
24	225421	Pin, Cotter
25	226631	Idler Assembly
26	227931	Nut, Nylock, 1/2"-13

Schematic –Lower Chassis Assembly



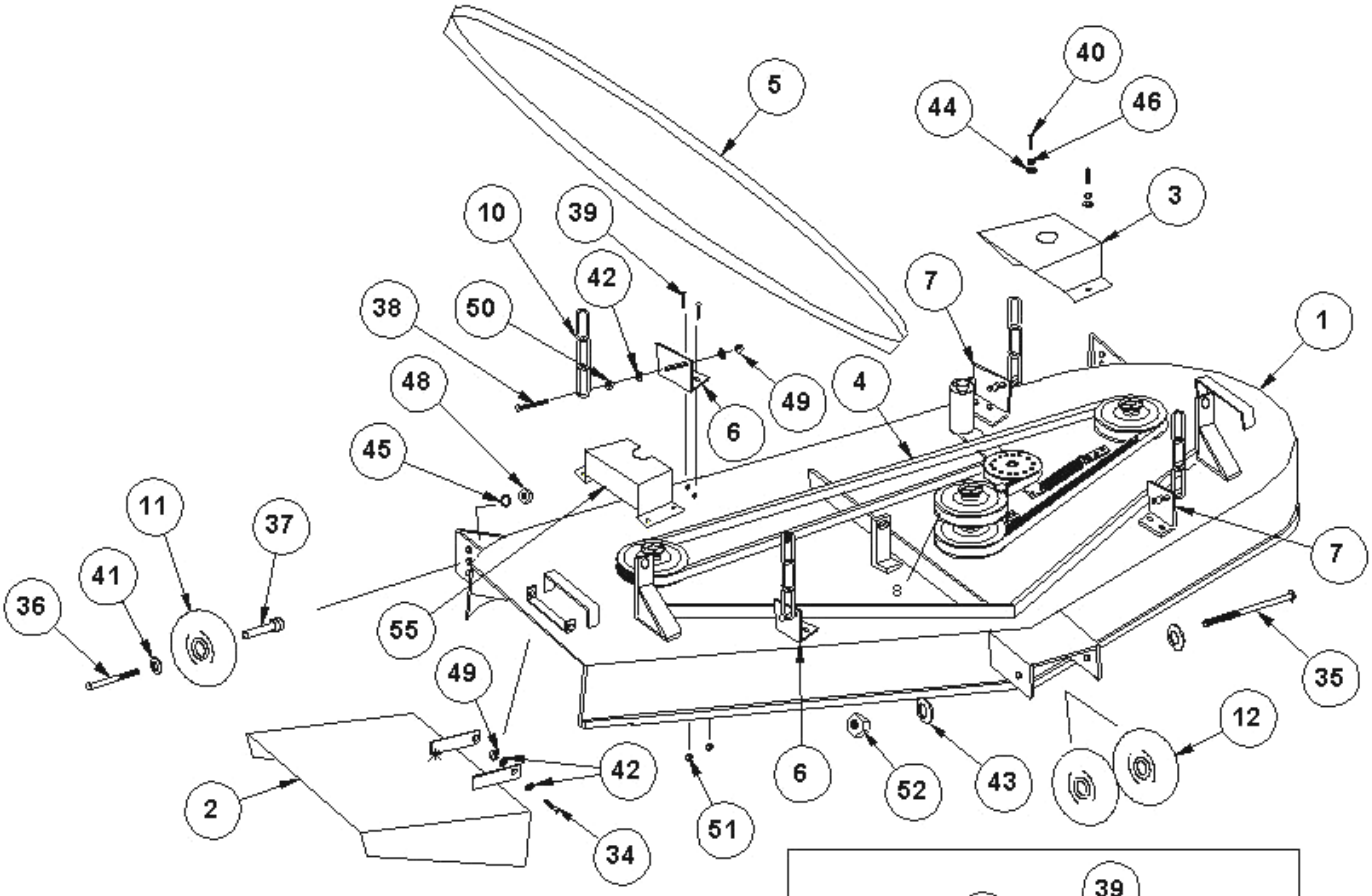
070110

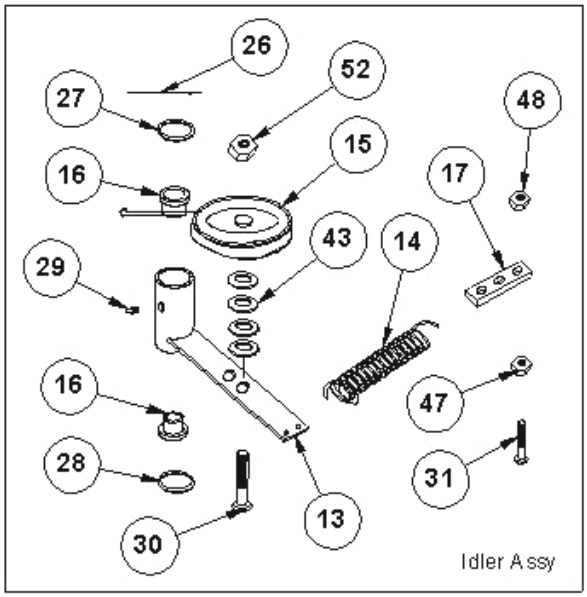
Parts List - Deck 48"

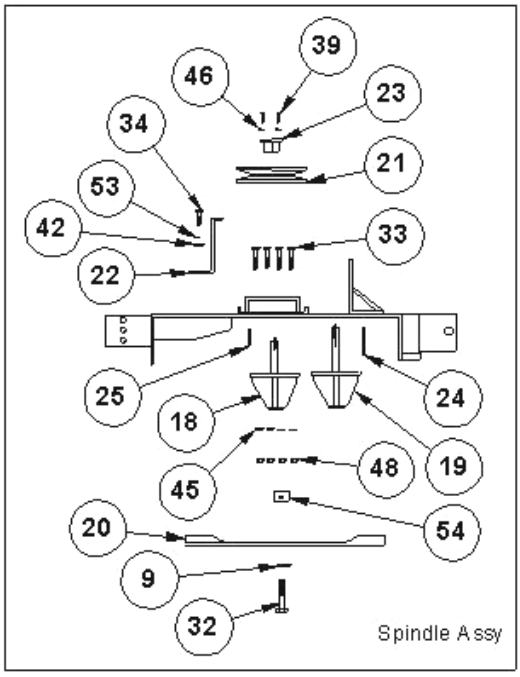
NOTE: *Part numbers listed are available through DR Power Equipment.*

Ref#	Part#	Description
01	227741	Deck Shell, 48"
02	228411	Deflector, Discharge
03	225171	Guard, Belt, 48", LH
04	155440	Belt, Deck
05	228581	Belt, Engine to Deck, 48"
06	226481	Bracket, Deck, Front, R/H
07	226491	Bracket, Deck, Front, L/H
08	209011	Pulley, Top, 48"
09	228021	Washer, Split, 7/16"
10	227761	Chain, Deck Lift
11	222861	Wheel, Anti Scalp, 5/8" Hole
12	222871	Wheel, Anti Scalp, 1/2" Hole
13	226631	Idler Assembly
14	202181	Spring, Deck
15	202061	Pulley, Idler, Deck
16	225261	Bushing, 1" ID, Bronze
17	225121	Extension, Flag Spring
18	156770	Spindle, Outside, 2"
19	159870	Spindle, Center, 3"
20	152871	Blade, for 48" Deck
21	202081	Pulley, Spindle
22	166041	Guide, Belt, Deck
23	225451	Bushing, Taper Pulley
24	228311	Key Stock, 1/4" x 2-1/2"
25	228161	Key Stock, 1/4" x 1-1/2"
26	225421	Pin, Cotter
27	228111	Bushing, Machine, 1" ID, 18 Ga.
28	167830	Bushing, Machine, 1" ID, 14 Ga.
29	226051	Fitting, Grease, Drive, 5/16"
30	228191	Bolt, 1/2"-13 x 2-1/4" HCS
31	227841	Bolt, 3/8"-16 x 1-1/4" HCS
32	226041	Bolt, Blade
33	227851	Bolt, 3/8"-16 x 1-1/2" HCS
34	227821	Bolt, 5/16"-18 x 1-1/4" HCS
35	222851	Bolt, 1/2"-13 x 7" HCS
36	223071	Bolt, Anti Scalp, 3/8" x 3-3/4"
37	222881	Bushing, Anti Scalp, Wheel
38	226341	Bolt, 5/16"-18 x 1-1/4" HCS, Gr 8
39	227781	Bolt, 1/4"-20 x 1" HCS
40	161920	Bolt, 1/4"-20 x 3/4" HCS
41	227971	Washer, Flat, 3/8"
42	227961	Washer, Flat, 5/16"
43	227981	Washer, Flat, 1/2"
44	161910	Washer, Flat, 1/4"
45	228011	Washer, Split, 3/8"
46	161900	Washer, Split, 1/4"
47	228051	Nut, Hex, 3/8"
48	227921	Nut, Nylock, 3/8"-16
49	227911	Nut, Nylock, 5/16"-18
50	228041	Nut, Hex, 5/16"-18
51	227901	Nut, Nylock, 1/4"-20
52	227931	Nut, Nylock, 1/2"-13
53	228001	Washer, Split, 5/16"
54	226021	Spacer, Blade, 5/8"
55	228571	Guard, Belt, 48", RH

Schematic - Deck 48"







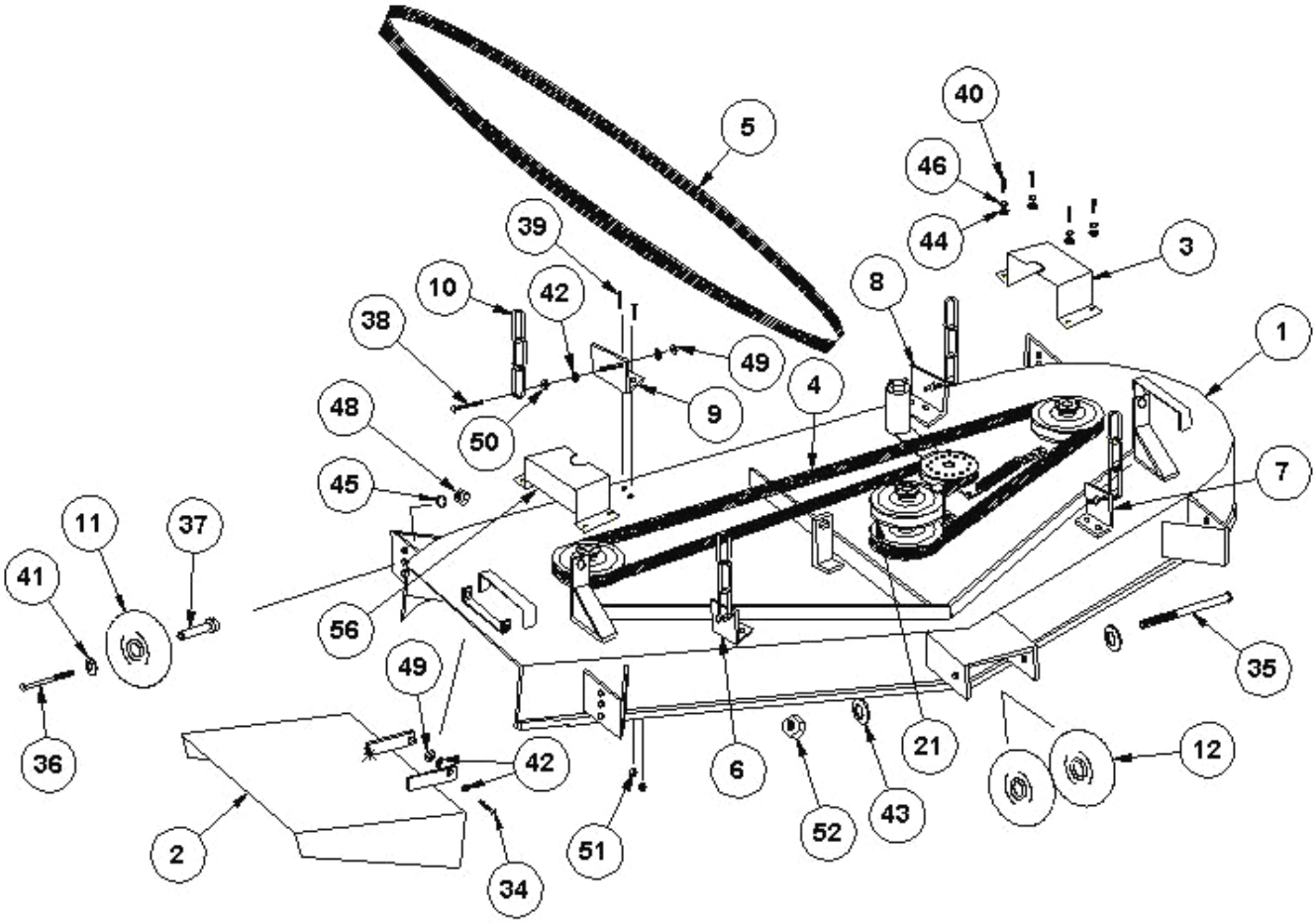
080210

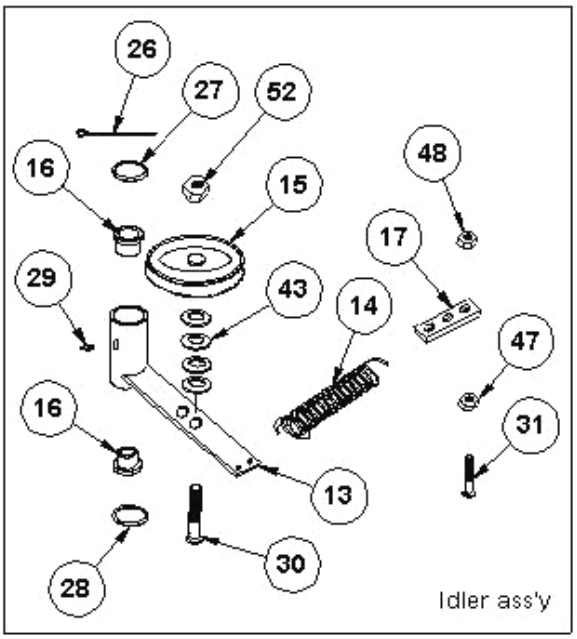
Parts List - Deck 52"

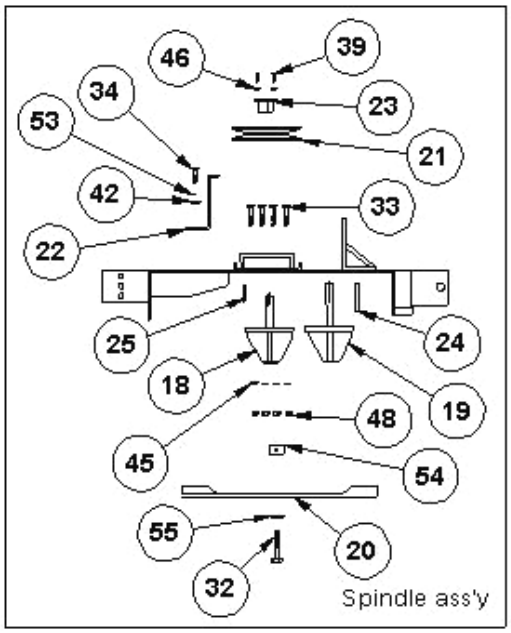
NOTE: *Part numbers listed are available through DR Power Equipment.*

Ref#	Part#	Description
01	227751	Deck Shell, 52"
02	158311	Deflector, Discharge
03	227531	Guard, Belt, 52", LH
04	225321	Belt, Deck
05	225331	Belt, Engine to Deck, 52"
06	226481	Bracket, Deck, Front, R/H
07	226491	Bracket, Deck, Front, L/H
08	226511	Deck Bracket Rear L/H
09	226501	Deck Bracket Rear R/H
10	227761	Chain, Deck Lift
11	222861	Wheel, Anti Scalp, 5/8" Hole
12	222871	Wheel, Anti Scalp, 1/2" Hole
13	226631	Idler Assembly
14	202181	Spring, Deck
15	202061	Pulley, Idler, Deck
16	225261	Bushing, 1" ID, Bronze
17	225121	Extension, Flag Spring
18	156770	Spindle, Outside, 2"
19	159870	Spindle, Center, 3"
20	225381	Blade, for 52" Deck
21	202081	Pulley, Spindle
22	166041	Guide, Belt, Deck
23	225451	Bushing, Taper Pulley
24	228311	Key Stock, 1/4" x 2-1/2"
25	228161	Key Stock, 1/4" x 1-1/2"
26	225421	Pin, Cotter
27	228111	Bushing, Machine, 1" ID, 18 Ga.
28	167830	Bushing, Machine, 1" ID, 14 Ga.
29	226051	Fitting, Grease, Drive, 5/16"
30	228191	Bolt, 1/2"-13 x 2-1/4" HCS
31	227841	Bolt, 3/8"-16 x 1-1/4" HCS
32	226041	Bolt, Blade
33	227851	Bolt, 3/8"-16 x 1-1/2" HCS
34	227821	Bolt, 5/16"-18 x 1-1/4" HCS
35	222851	Bolt, 1/2"-13 x 7" HCS
36	223071	Bolt, Anti Scalp, 3/8"-16 x 3-3/4"
37	222881	Bushing, Anti Scalp, Wheel
38	226341	Bolt, 5/16"-18 x 1-1/4" HCS, Gr 8
39	227781	Bolt, 1/4"-20 x 1" HCS
40	161920	Bolt, 1/4"-20 x 3/4" HCS
41	227971	Washer, Flat, 3/8"
42	227961	Washer, Flat, 5/16"
43	227981	Washer, Flat, 1/2"
44	161910	Washer, Flat, 1/4"
45	228011	Washer, Split, 3/8"
46	161900	Washer, Split, 1/4"
47	228051	Nut, Hex, 3/8"-16
48	227921	Nut, Nylock, 3/8"-16
49	227911	Nut, Nylock, 5/16"-18
50	228041	Nut, Hex, 5/16"-18
51	227901	Nut, Nylock, 1/4"-20
52	227931	Nut, Nylock, 1/2"-13
53	228001	Washer, Split, 5/16"
54	226021	Spacer, Blade, 5/8"
55	228021	Washer, Split, 7/16"
56	227521	Guard, Belt, 52", RH

Schematic - Deck 52"







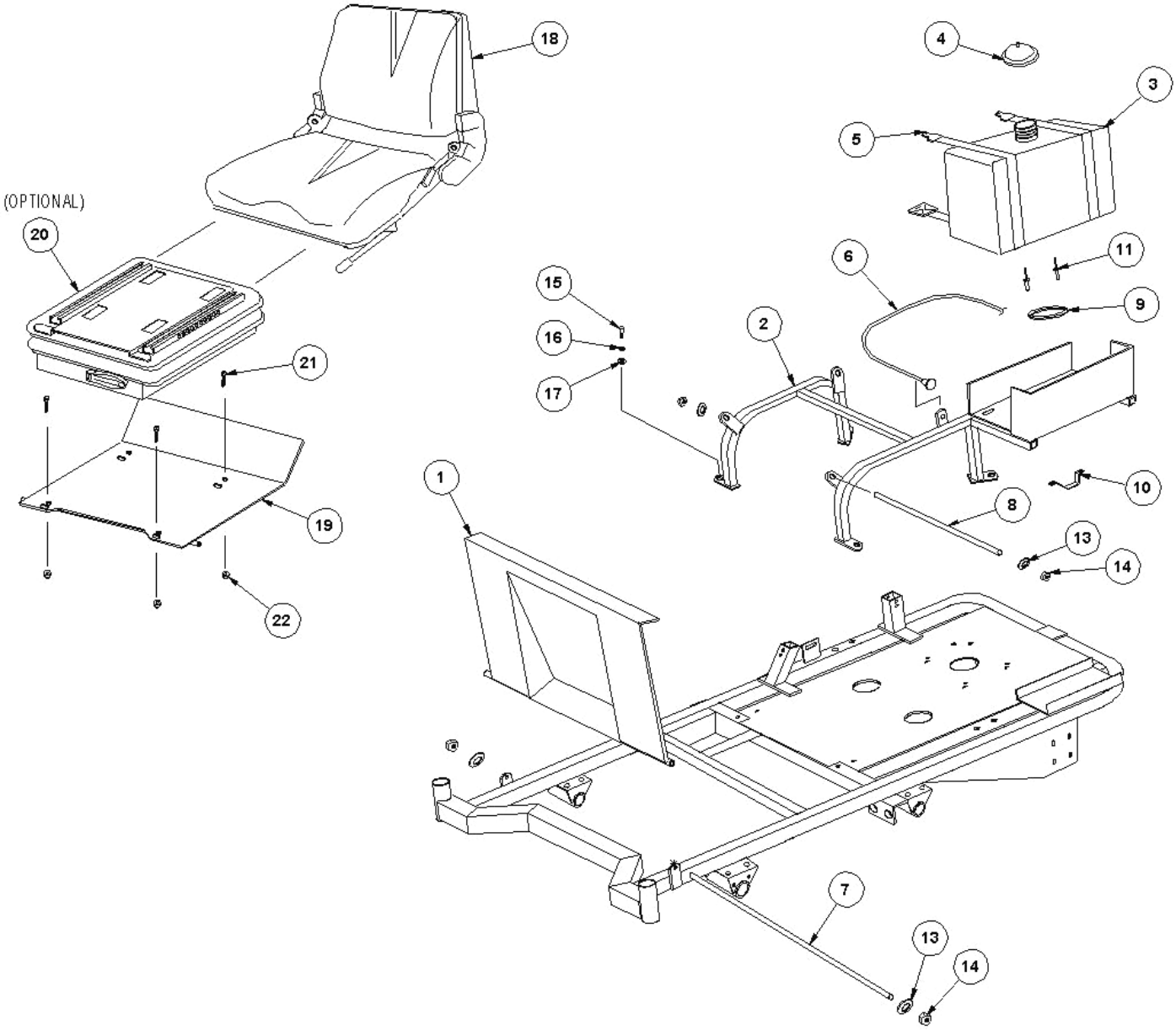
080210

Parts List - Seat Pedestal Assembly

NOTE: *Part numbers listed are available through DR Power Equipment.*

Ref#	Part#	Description
01	227731	Rest, Foot
02	226391	Pedestal, Seat
03	159191	Tank, Gas, 5 Gallon
04	165791	Cap, Gas
05	225131	Strap, Gas Tank
06	228721	Cable, Choke
07	225461	Rod, Foot Rest, All Thread
08	226011	Rod, Seat Plate, All Thread
09	225151	Ring, Gas Tank
10	225141	Bracket, Gas Tank Valve
11	228321	Rivet, 3/16"
12	226411	Plate, Seat
13	227971	Washer, Flat, 3/8"
14	227921	Nut, Nylock, 3/8"-16
15	227821	Bolt, 5/16"-18 x 1-1/4" HCS
16	228001	Washer, Split, 5/16"
17	227961	Washer, Flat, 5/16"
18	227611	Seat, Fold Down, Gray
19	226411	Plate, Seat
20	227621	Suspension (Optional Equipment)
21	227801	Bolt, 5/16"-18 x 3/4" HCS
22	227911	Nut, Nylock, 5/16"-18

Schematic - Seat Pedestal Assembly



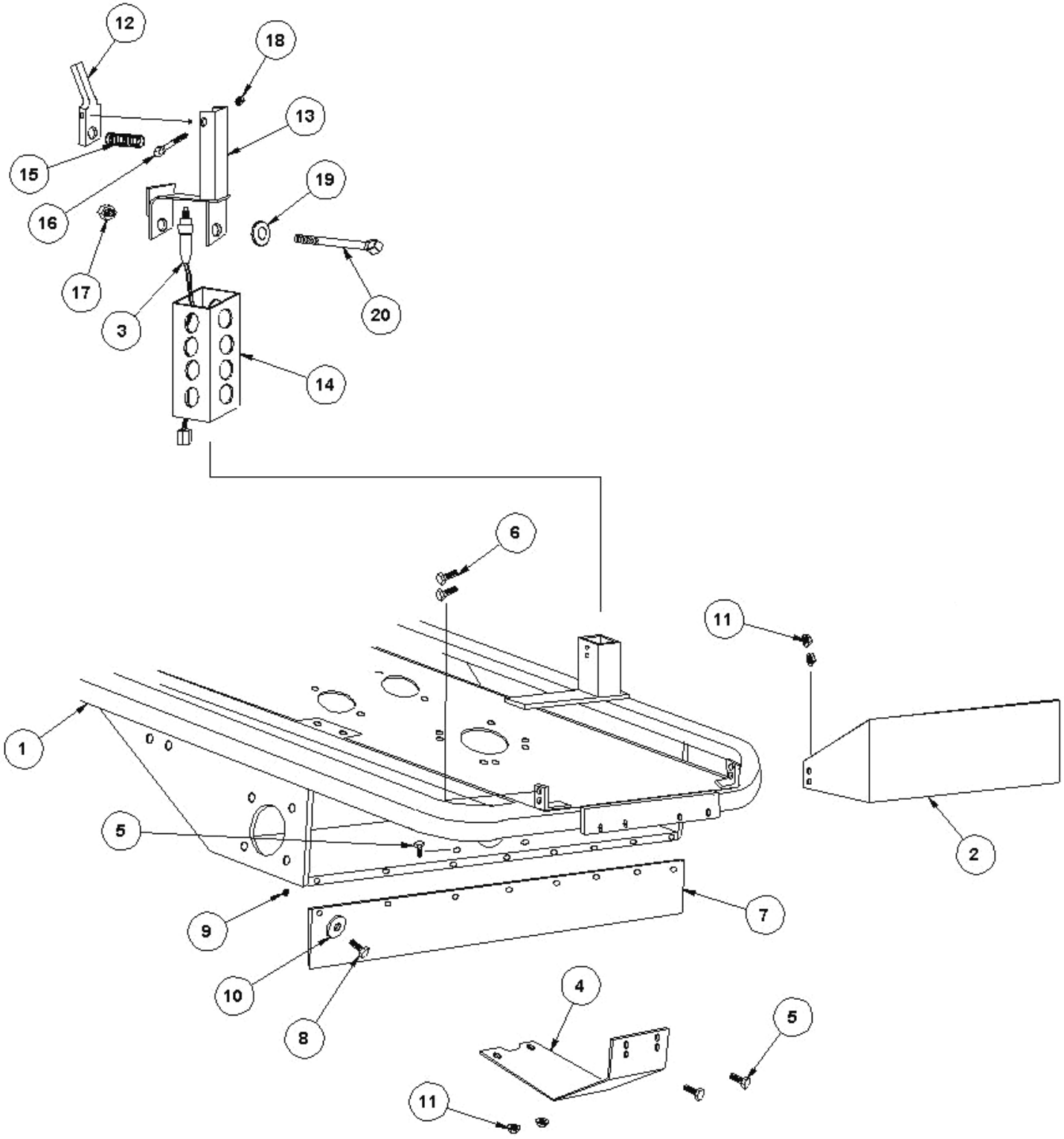
080210

Parts List - Arm Rest Assembly w/Rear Guards

NOTE: *Part numbers listed are available through DR Power Equipment.*

Ref#	Part#	Description
01	241131	Frame
02	228611	Guard, Rear, Mower
03	241241	Switch w/Leads and Boot
04	241151	Guard, Rear
05	228271	Bolt, 3/8"-18 x 3/4" HCS
06	228291	Bolt, 3/8"-18 x 1" HCS
07	241141	Guard, Debris
08	227801	Bolt, 5/16"-18 x 3/4" HCS
09	227911	Nut, Nylon Lock, 5/16"-18
10	227961	Washer, Flat, 5/16"
11	228241	Nut, Lock, Wiz, 3/8"
12	227601	Latch, Control Arm
13	158430	Housing, Control Arm Latch
14	225191	Tube, Control Rest
15	227511	Spring, Lock Out
16	228301	Bolt, 1/4"-20 x 1-3/4" HCS
17	227921	Nut, Nylock, 3/8"-16
18	227901	Nut, Nylock, 1/4"-20
19	227971	Washer, Flat, 3/8"
20	227861	Bolt, 3/8"-18 x 3" HCS

Schematic - Arm Rest Assembly w/Rear Guards



031015

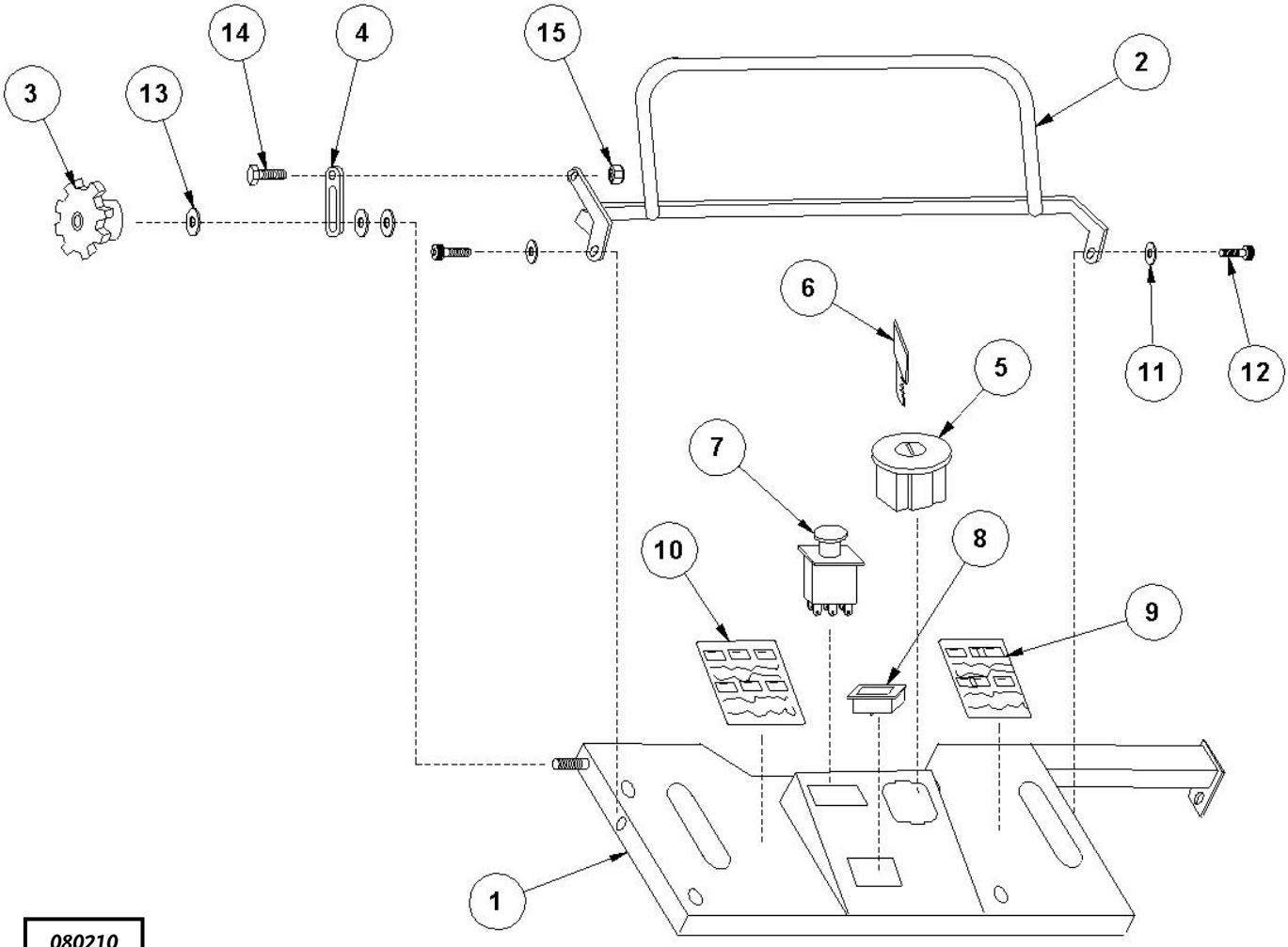
Parts List and Schematic - Control Panel Assembly

NOTE: *Part numbers listed are available through DR Power Equipment.*

Ref#	Part#	Description
01	241201	Control Panel W/Console
02	159180	Speed Bar Assembly
03	209071	Knob, Speed Control
04	225181	Plate, Slide, Speed Control
05	165191	Switch, Ignition
06	157201	Key, Ignition Switch
07	241211	Switch, Blade Engage
08	156251	Hour Meter w/Bezel
09	241311	Decal, Caution, Control Panel
10	228731	Decal, Control Panel
11	161910	Washer, Flat, 1/4"
12	228091	Screw, Cap, 1/4"-20 x 3/4"
13	227961	Washer, Flat, 5/16"
14	227811	Bolt, 5/16"-18 x 1" HCS
15	227911	Nut, Nylock, 5/16"-18

Not Illustrated

	278881	Wire Harness, w/OPC, Kohler Engine
	225081	Decal, Control Arm

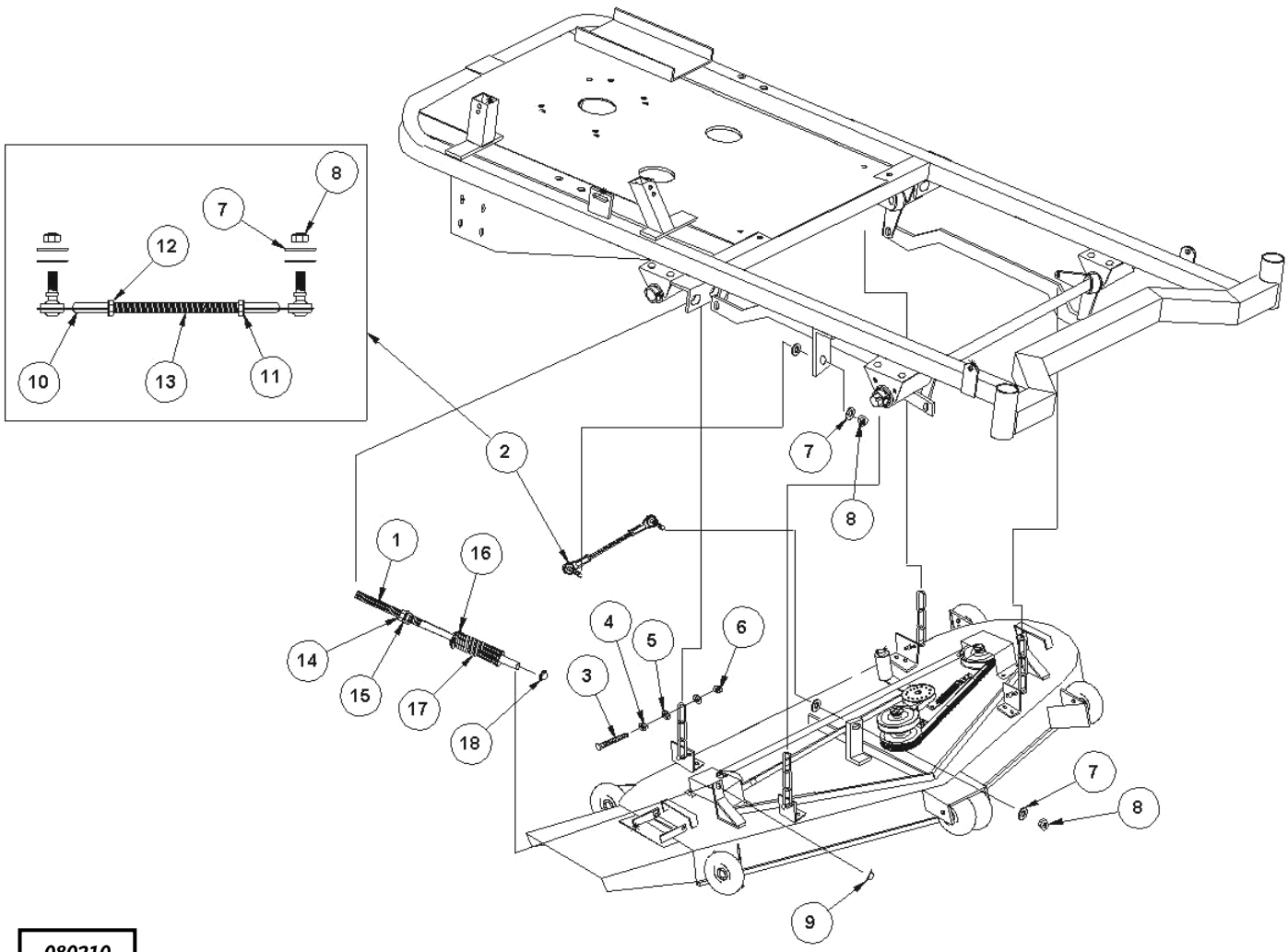


080210

Parts List and Schematic - Deck to Chassis Assembly

NOTE: *Part numbers listed are available through DR Power Equipment.*

Ref#	Part#	Description
01	185631	Deck Spring Assembly
02	225371	Side Motion Rod Assembly
03	226341	Bolt, 5/16"-18 x 1-1/4" HCS, Gr 8
04	228041	Nut, Hex, 5/16"-18
05	227961	Washer, Flat, 5/16"
06	227911	Nut, Nylock, 5/16"-18
07	227971	Washer, Flat, 3/8"
08	227951	Nut, Nylock, 3/8"-24
09	228351	Nut, Cap, Push, Deck Rod
10	225231	Rod, Tie, End
11	228011	Washer, Split, 3/8"
12	228081	Nut, Hex, 3/8"- 24
13	226321	Rod, Motion, Deck Side
14	228061	Nut, Hex, 1/2"-13
15	228031	Washer, Split, 1/2"
16	226611	Washer, Adjusting Rod, Deck
17	225411	Spring, Drive, Deck
18	228351	Cap, Push, Deck Rod



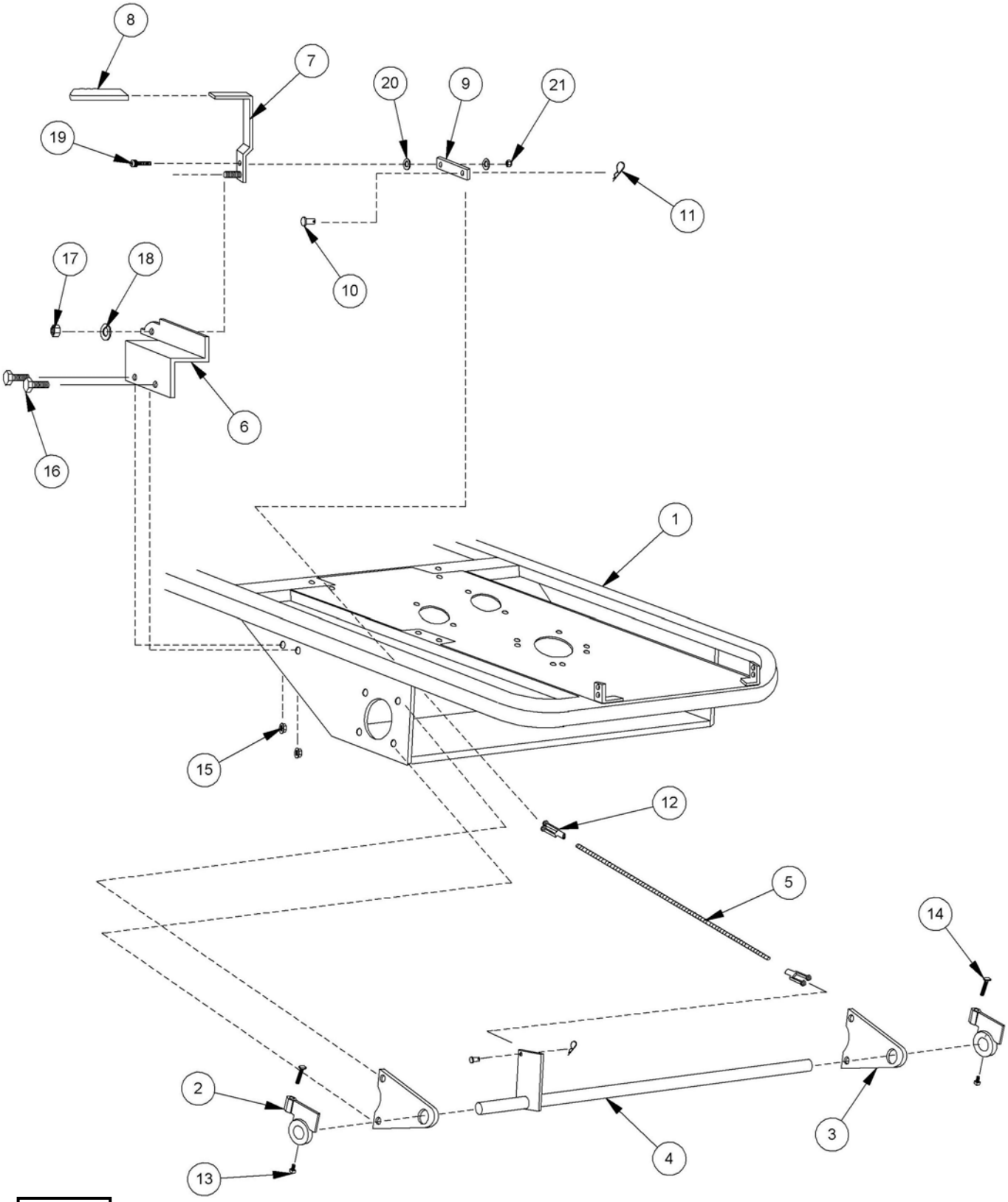
080210

Parts List - Parking Brake Assembly

NOTE: *Part numbers listed are available through DR Power Equipment.*

Ref#	Part#	Description
01	241131	Frame
02	226441	Crossflag Assembly
03	226431	Plate, Brake
04	226421	Brake Rod Assembly
05	226191	Rod, Push, Brake
06	226461	Plate, Handle, Brake
07	226451	Handle, Brake, Drum Brakes
08	158520	Grip, Throttle/Brake
09	226201	Link, Brake
10	226281	Pin, Clevis 1/4" x 3/4"
11	226291	Clip, Hitch # 2
12	226211	Yoke, Brake
13	228331	Screw, Set, Square Head, 5/16"-18 x 1/2"
14	227821	Bolt, 5/16"-18 x 1-1/4" HCS
15	228241	Nut, Wiz Lock, 3/8"
16	228281	Bolt, 3/8"-18 x 1" HCS
17	227921	Nut, Nylock, 3/8"
18	227971	Washer, Flat, 3/8"
19	228201	Screw, Cap, 1/4"-20 x 1"
20	161910	Washer, Flat, 1/4"
21	227901	Nut, Nylock 1/4"

Schematic - Parking Brake Assembly



070110

Parts List - Control Arm Assembly

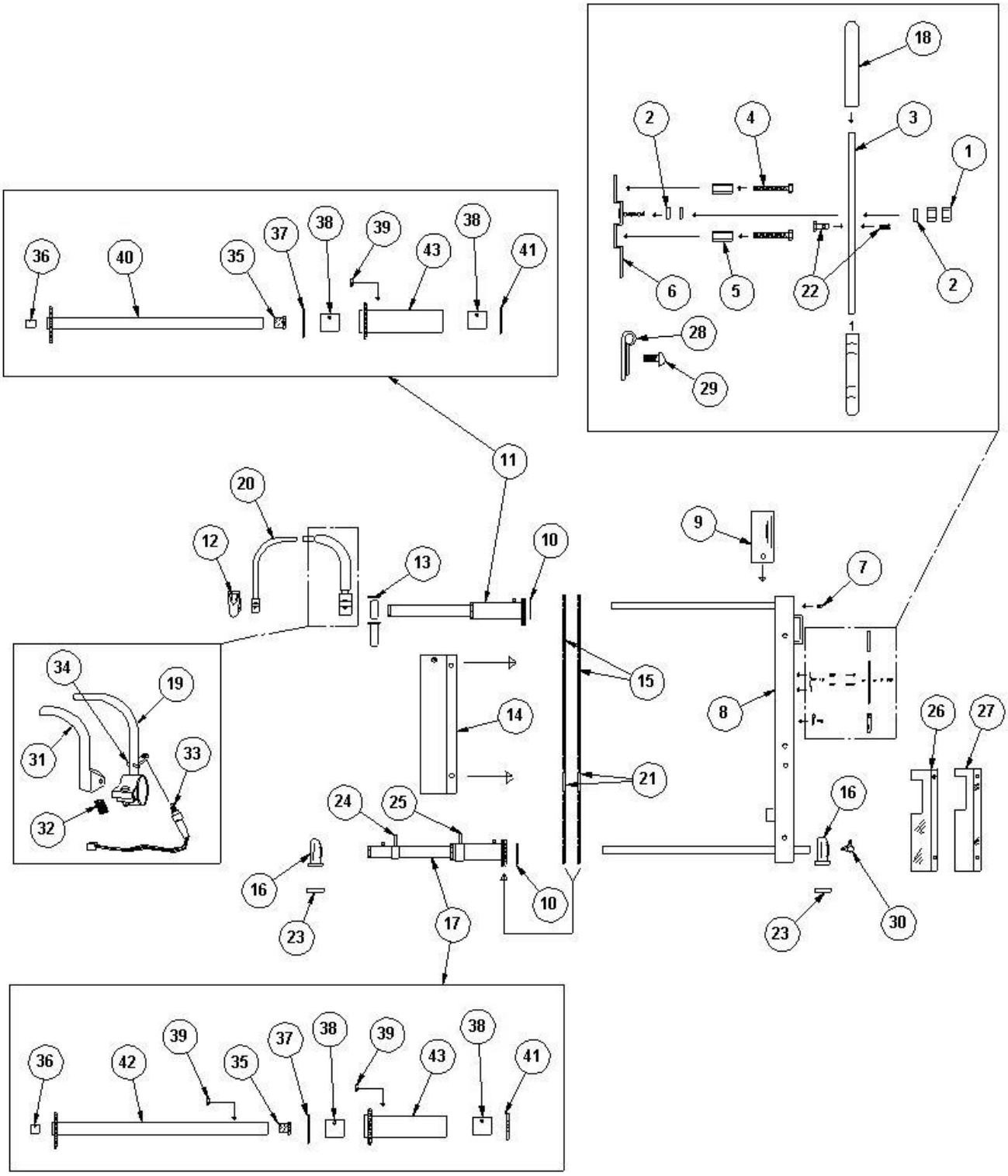
NOTE: *Part numbers listed are available through DR Power Equipment.*

Ref#	Part#	Description
01	227901	Nut, Nylock, 1/4"-20
02	228231	Washer, Plastic, 1/4"
03	227551	Handle, Throttle
04	227791	Bolt, 1/4"-20 x 1-1/2" HCS
05	227771	Spacer, 1/4" ID
06	227561	Mount, Throttle Cable
07	228211	Fitting, Pipe, Straight, 1/8"
08	226371	Control Arm Assembly
09	208991	Bracket, Control Shield End
10	228111	Bushing, Machine, 1" ID, 18 Gauge
11	199131	Upper Concentric Assembly
12	225251	Bearing, Control Head
13	226111	Block, Concentric Pillow
14	226381	Shield, Control Arm
15	225301	Chain, 69"
16	225241	Bearing, Main Arm Pivot
17	199141	Lower Concentric Assembly
18	158520	Grip, Throttle/Brake
19	241261	Handle, Control, Right
20	158621	Handle, Control, Left
21	200661	Turnbuckle
22	226101	Swivel, Throttle Wire
23	226581	Spacer, Pillow Block
24	226561	Clamp, Small
25	226571	Clamp, Large
26	226351	Guard, Chain, Ride Mode, LH
27	226361	Guard, Chain, Walk Mode, RH
28	227891	Clamp, Throttle Cable
29	227871	Screw, Truss, 1/4" x 1/2"
30	228221	Grease Fitting, 1/8"-90° Pipe
31	235141	Lever, Operator Presence
32	241231	Spring, OPC Lever
33	241241	Switch w/Leads and Boot
34	241221	Pin, Spring, 3/16" x 1"
35	225261	Bushing, Bronze, 1" ID
36	225281	Bearing, Needle, 1" ID
37	228121	Bushing, Machine, 1-1/2" ID,18 Ga.
38	225291	Bearing, Needle, 1-1/2" ID
39	226051	Fitting, Grease, Drive, 5/16"
40	227571	Tube, Upper, Inner
41	228181	Ring, Snap, 1-1/2"
42	227541	Tube, Lower, Inner
43	227581	Tube, Upper/Lower, Outer

Not Illustrated

	278861	Throttle Cable, Kohler Engine

Schematic - Control Arm Assembly



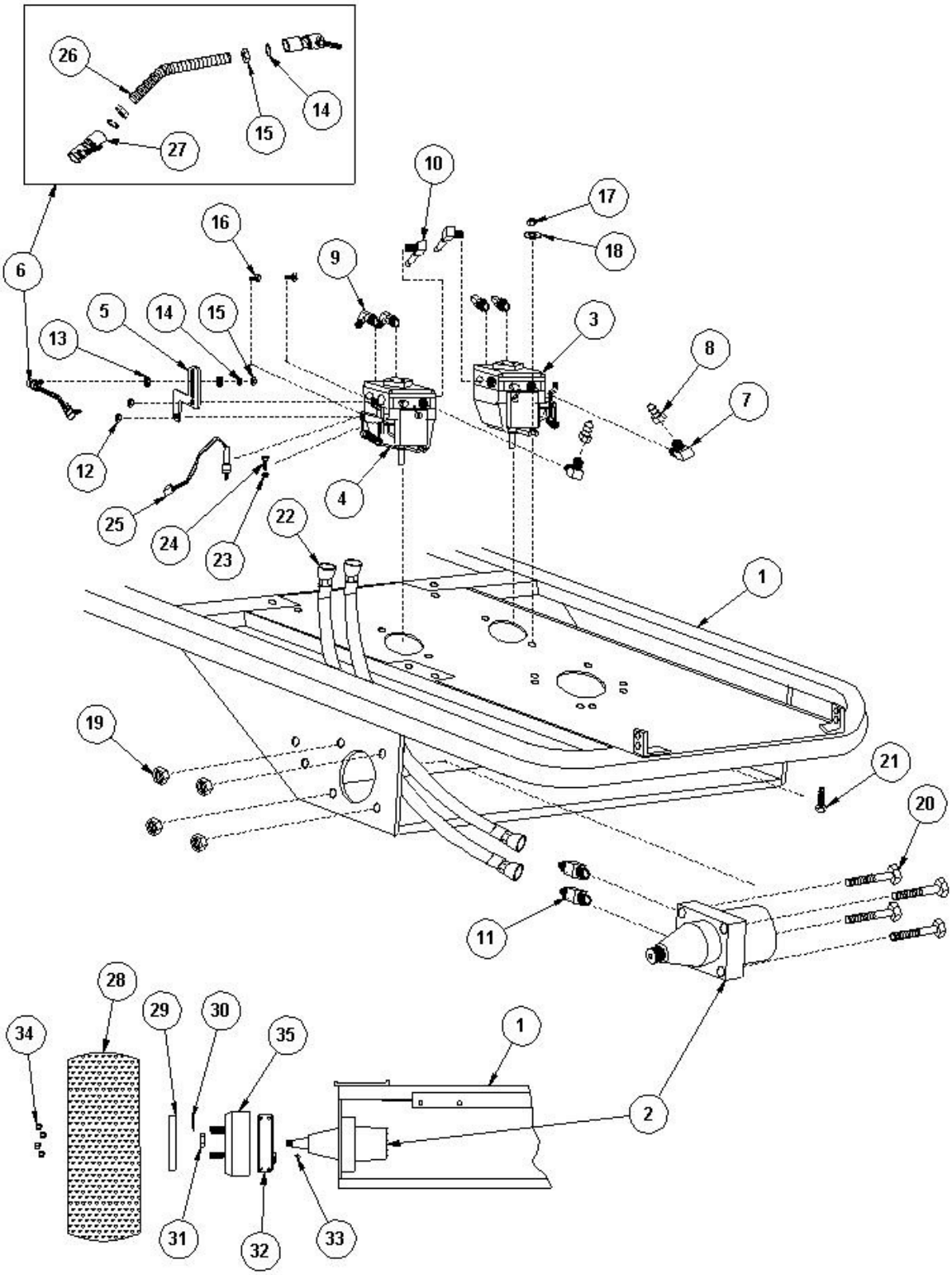
050514

Parts List - Wheel Drive Assembly

NOTE: *Part numbers listed are available through DR Power Equipment.*

Ref#	Part#	Description
01	241131	Frame
02	210701	Motor, Wheel
03	228381	Pump, Right Hand
04	228391	Pump, Left Hand
05	225161	Linkage, Pump
06	184200	Steering Linkage Assembly
07	226141	Fitting, 90 Degree, BDP
08	203981	Fitting, Push On, Hydro
09	226131	Fitting, Pump, 90 Degree
10	203951	Fitting, Filter, 90°
11	226331	Fitting, Straight, Wheel Motor
12	227911	Nut, Nylock, 5/16"-18
13	161910	Washer, Flat, 1/4"
14	228001	Washer, Split, 5/16"
15	228071	Nut, Hex, 5/16"-24
16	227801	Bolt, 5/16"-18 x 3/4" HCS
17	227921	Nut, Nylock, 3/8"-16
18	227971	Washer, Flat, 3/8"
19	227931	Nut, Nylock, 1/2"-13
20	228341	Bolt, 1/2"-13 x 3" HCS
21	227841	Bolt, 3/8"-16 x 1-1/4" HCS
22	226221	High Pressure Line
23	241291	Nut, Jam, 1/4"-20
24	161920	Bolt, 1/4"-20 x 3/4" HCS
25	241251	Switch w/Leads and Boot
26	226061	Rod, Steering Linkage
27	225221	Joint, Ball, Steering
28	226081	Rear Wheel & Tire, 23" x 10.5" x 12"
29	210731	Spacer, Wheel Motor
30	226261	Pin, Cotter
31	226301	Nut, Wheel Motor
32	210711	Brake, Drum
33	226311	Key, Woodruff
34	158271	Nut, Lug
35	210721	Drum, Wheel Motor

Schematic - Wheel Drive Assembly



050514

Parts List - Hydro Tank Assembly

NOTE: *Part numbers listed are available through DR Power Equipment.*

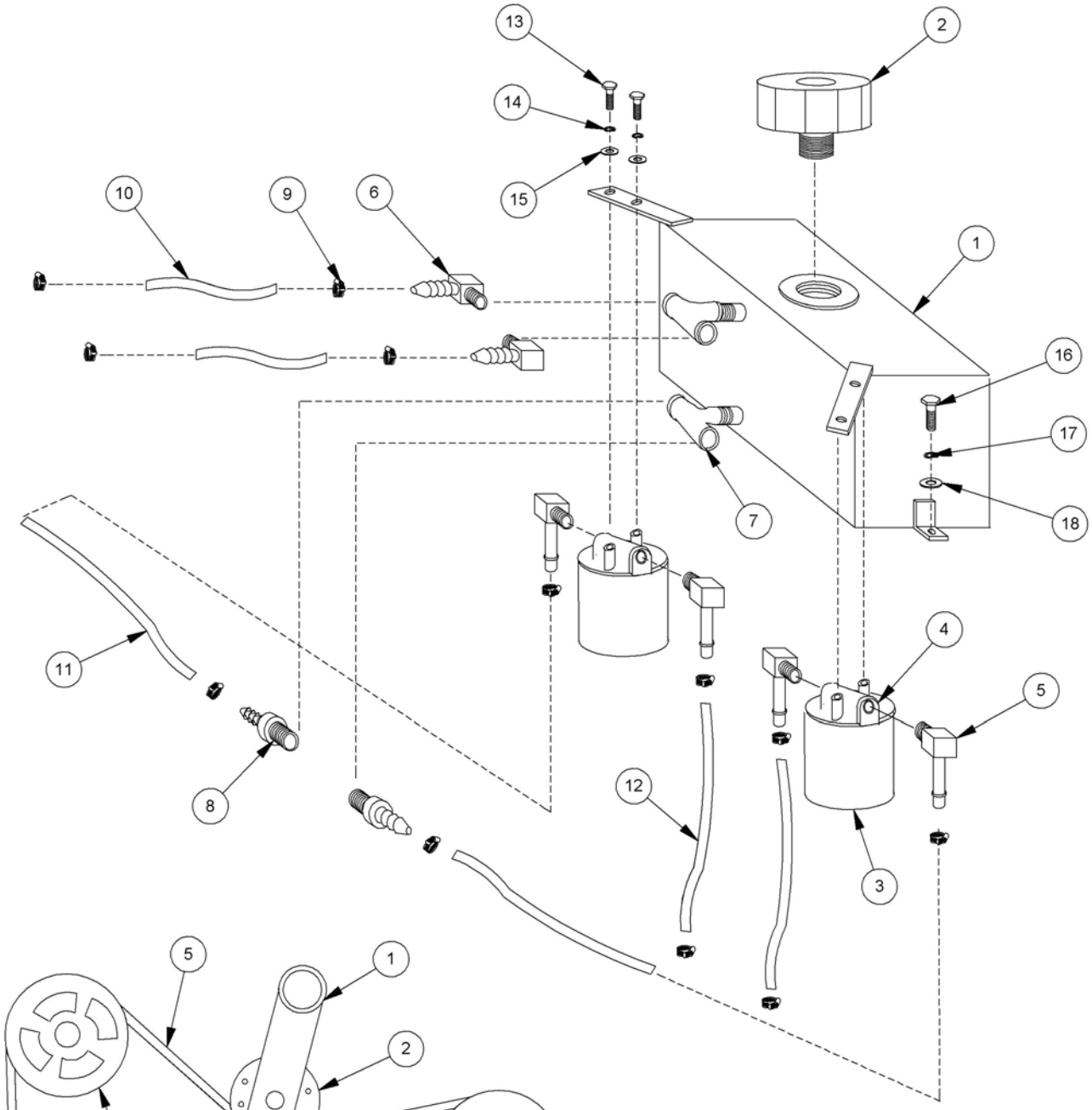
Ref#	Part#	Description
01	226401	Tank, Hydro, Metal
02	200651	Cap, Hydro Tank, Metal Tank
03	166141	Filter, Hydro
04	225311	Housing, Hydro Filter
05	203951	Fitting, Filter, 90 Degree
06	226151	Fitting, 90 Degree, Hydro Tank
07	226271	Tee, Pipe, 3/8"
08	226161	Fitting, Straight, Hydro Tank
09	227881	Clamp, Hose, 3/8"
10	226251	Hose, Tank to Pump, 5-1/2"
11	226231	Hose, Tank to Filter, 12"
12	226241	Hose, Filter to Pump, 18"
13	228401	Bolt, 1/4"-20 x 3/4" HCS
14	161900	Washer, Split, 1/4"
15	161910	Washer, Flat, 1/4"
16	227811	Bolt, 5/16"-18 x 1" HCS
17	228001	Washer, Split, 5/16"
18	227961	Washer, Flat, 5/16"

Parts List - Hydro Belt Configuration

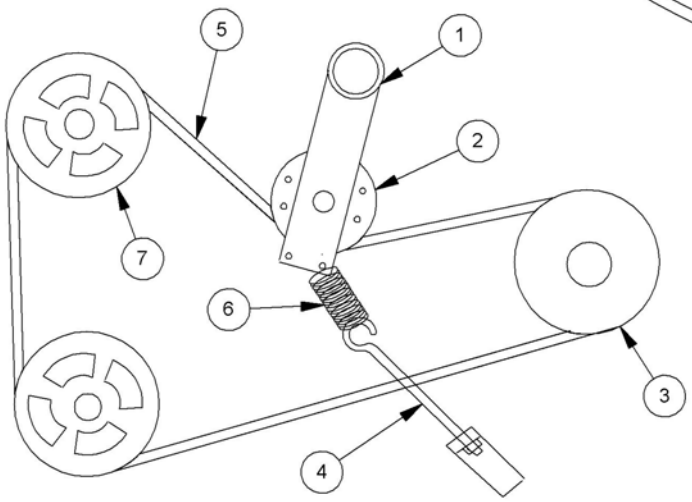
NOTE: *Part numbers listed are available through DR Power Equipment.*

Ref#	Part#	Description
01	226631	Idler Assembly
02	202061	Pulley, Idler, Deck
03	202071	Pulley, Engine Drive
04	167270	Bolt, Eye, 5/16"-18 x 3-1/2"
05	209211	Belt, Hydro
06	167261	Spring, Mule Drive
07	202081	Pulley, Hydro Drive

Schematic - Hydro Tank Assembly and Hydro Belt Configuration



Hydro Tank Assembly



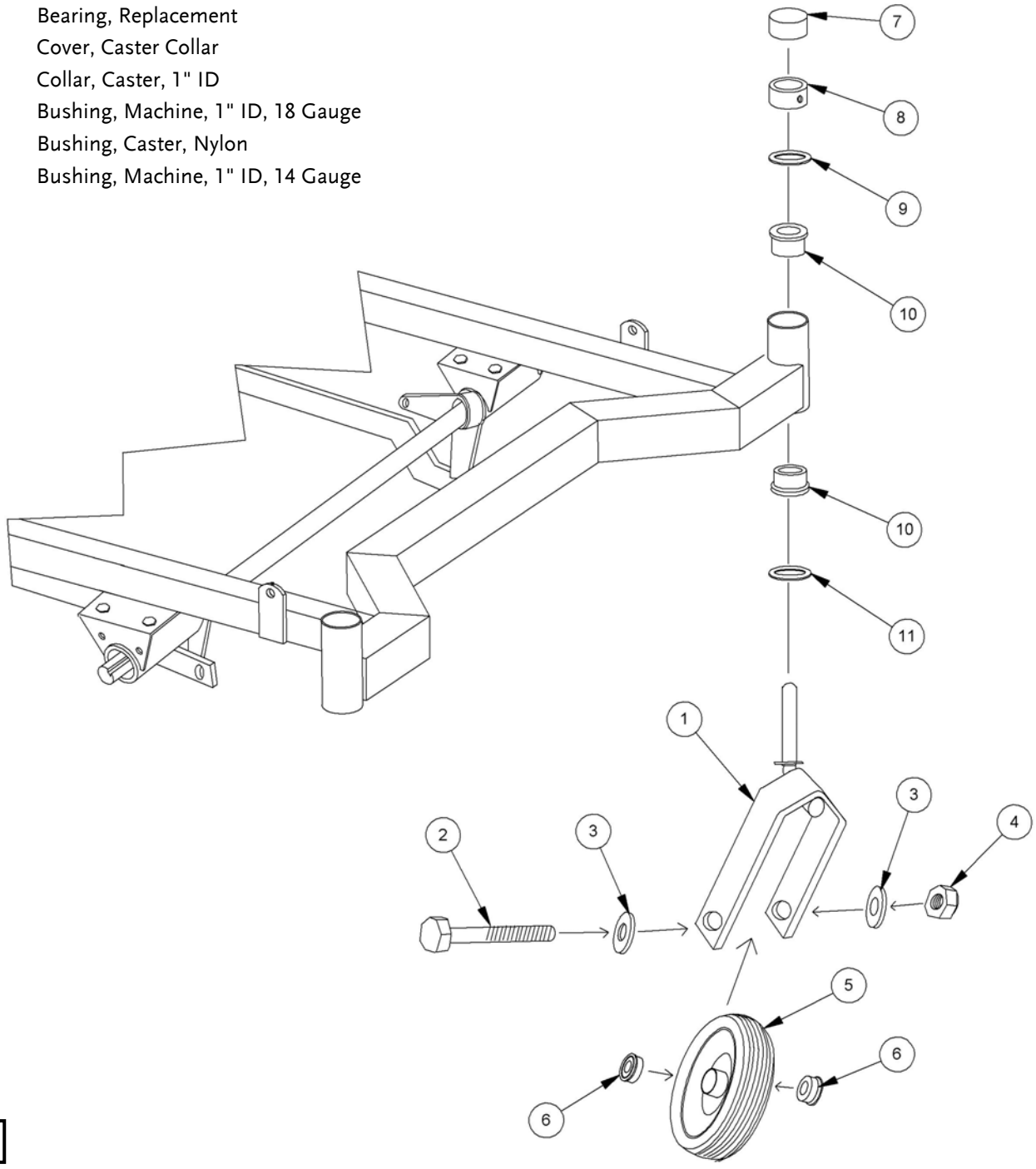
Hydro Belt Configuration

070110

Parts List and Schematic - Front Caster Assembly

NOTE: *Part numbers listed are available through DR Power Equipment.*

Ref#	Part#	Description
01	226641	Yoke, Caster, Black
02	226031	Bolt, Caster
03	227991	Washer, Flat, 5/8"
04	227941	Nut, Nylock, 5/8"
05	159611	Front Tire Assembly
06	208090	Bearing, Replacement
07	156701	Cover, Caster Collar
08	167810	Collar, Caster, 1" ID
09	228111	Bushing, Machine, 1" ID, 18 Gauge
10	167820	Bushing, Caster, Nylon
11	167830	Bushing, Machine, 1" ID, 14 Gauge



070110

DR® VERSA-PRO™ Z-MOWER

2-Year Limited Warranty

Terms and Conditions

The **DR**® VERSA-PRO™ Z-MOWER is warranted for two (2) years against defects in materials or workmanship when put to ordinary normal consumer and commercial use. The Engine manufacturer warrants the Engine separately.

For the purposes of all the above warranties, "ordinary normal consumer and commercial use" does not include misuse, accidents, or damage due to inadequate maintenance.

DR® Power Equipment certifies that the **DR**® VERSA-PRO™ Z-MOWER is fit for ordinary purposes for which a product of this type is used. **DR**® Power Equipment however, limits the implied warranties of merchantability and fitness in duration to a period of two (2) years in consumer and commercial use

The 2-Year Limited Warranty on the **DR**® VERSA-PRO™ Z-MOWER starts on the date the machine ships from our factory. The 2-Year Limited Warranty is applicable only to the original owner.

The warranty holder is responsible for the performance of the required maintenance as defined by the manufacturer's owner's manuals. The warranty holder is responsible for replacement of normally wearing parts such as the Drive Belts, Blades, Tires, Filters, Spark Plugs, and Battery. This warranty does not cover attachments and accessories to the machine.

During the warranty period, the warranty holder is responsible for the machine transportation charges, if required. During the warranty period, warranty parts will ship by standard method at no charge to the warranty holder. Expedited shipping of warranty parts is the responsibility of the warranty holder.

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

DR® Power Equipment 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**® VERSA-PRO™ Z-MOWER.

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

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

Daily Checklist for the DR VERSA-PRO Z-MOWER

To help maintain your DR VERSA-PRO Z-MOWER for optimum performance, we recommend you follow this checklist each time you use your machine.

⚠ WARNING

When performing any adjustment or maintenance you must first shut off the engine, set the parking brake, wait five minutes to allow parts to cool and disconnect the spark plug wires keeping them away from the spark plugs.

[ ] OIL: With the machine on a level surface, check the Engine oil level with the Dipstick and add more if necessary (only add oil to the level indicated on the Dipstick - do not overfill). Use SAE 30 high detergent motor oil.

[ ] GAS: Fill the Fuel Tank with clean, fresh, unleaded gasoline.

[ ] ENGINE AIR COOLING SYSTEM: It is very important to keep the Engine clean of debris. Remove grass and other built-up materials from the Air Intake Screen before, during, and after you mow. 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.

[ ] BLADE: Check the Blades for tightness, nicks and wear. Remove any wrapped weeds and grass from the Blade Bearing Housings to prevent buildup.

[ ] GENERAL CONDITION: Check the general condition of the machine, e.g.; nuts, bolts, welds etc.

End of Season and Storage

If you will not use the machine for an extended period, the following steps will help insure the best performance when you return it to service:

⚠ WARNING

When performing any adjustment or maintenance you must first shut off the engine, set the parking brake, wait five minutes to allow parts to cool and disconnect the spark plug wires keeping them away from the spark plugs.

Note: *Please refer to the Engine Owner's Manual for Engine-specific procedures.*

- Start the Engine and engage the Blades for approximately 1 minute to remove excess water from the Belts and Pulleys.
- Perform all required maintenance steps in the Maintenance Check List. See page 17.
- After 30 days, you should wax painted surfaces to protect the luster of the original finish. Wash the machine regularly with a mild automotive type detergent and water. Coat exposed bare metal surfaces with oil, or a light coating of grease to prevent rust, until you make permanent repairs.
- Change the oil and oil filter.
- Remove the Spark Plug(s) and pour about 1 ounce of motor oil into the Cylinder hole(s). Replace the Plug(s) and crank the Engine for a couple of seconds. This will coat the piston(s) and seat the valves to prevent moisture buildup.
- Clean/replace the Air Filter(s).
- Clean dirt and debris from the Cylinder Head Cooling Fins, Blower Housing, Debris Screen, and Muffler area of the Engine.
- If your Engine has a Fuel Filter, replace it.
- If your DR VERSA-PRO Z-MOWER will be idle for more than 30 days, we recommend using a gas stabilizer. This will prevent sediment from gumming up the Carburetor. If there is dirt or moisture in the gas or tank, remove it by draining the tank. Completely fill the tank with fresh, unleaded gas and add the appropriate amount of stabilizer or gasoline additive. Run the Engine for a short time to allow the additive to circulate.
- Remove any wrapped weeds from the Blade Bearing Housings. Clean grass and debris from the top and underneath the Mower Deck with a stiff brush.
- Check the Blades for nicks and wear. Remove the Blades and sharpen, or have them professionally sharpened if needed.
- You should remove the Battery and keep it in a cool, dry place when the DR VERSA-PRO Z-MOWER is in storage. We suggest charging the Battery once a month while the machine is stored and again when you are ready to start the new season. This will help the Battery maintain its charge all season. See page 26.

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