3.0 HP *2-Cycle* COMPACT DR® TRIMMER/MOWER ASSEMBLY and OPERATING INSTRUCTIONS

Please read these instructions before you assemble your DR® TRIMMER/MOWER.

PLEASE NOTE: *We are constantly updating our manuals. Your Trimmer may differ slightly from the one illustrated and described inside.*

—CONTENTS—

We Want You to be Totally Satisfied

The DR® TRIMMER/MOWER is designed to provide year after year of trouble-free performance. To ensure that you are totally satisfied with this important purchase, we offer the following Assurance of Satisfaction:

The DR® TRIMMER/MOWER is guaranteed for one full year against defects in materials and workmanship (90 days commercial). If you believe that a part is defective, please call or write us immediately. We will do our best to remedy the problem, including repairing or replacing defective parts as quickly as possible. The engine is guaranteed separately by the manufacturer. Please see the engine manual for complete engine warantee information.

If within the first 30 days of using your machine you are less than 100% satisfied, please write or call us Toll-Free 1(800)DR-OWNER (376-9637). We will do everything possible to answer your questions or make it right—even if it means that you return your DR® for a full refund, including standard UPS shipping. For future reference when dealing with warranty matters, please save the box your DR® TRIMMER/MOWER arrived in. Also, fill out the information below and keep it in a safe place.

ORDER #: _____

YOUR DR® SERIAL #: _____

DATE PURCHASED: ____/____/____

NAME PURCHASED UNDER: _____

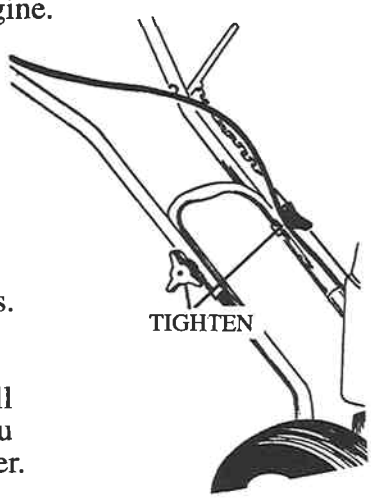
_____

—ASSEMBLY—

Open carton and lift Trimmer out of cardboard packaging. Your DR® is shipped completely assembled except that the handlebars need to be raised and adjusted for the proper height and secured. **NOTE:** The handlebars may be covering the recoil knob before raised. The recoil is located on the right side of the engine.

THE HANDLEBARS

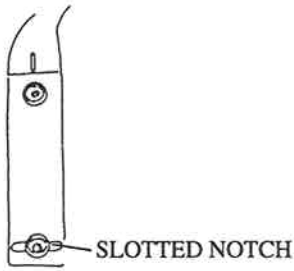
The height of the handlebars depends on each individual. It's crucial to find the height that allows the Mow-Ball to float along the ground and remain balanced. Finding the right height will probably take several attempts. However, by placing the lower handlebars in the middle notch (see the instructions below) you'll be able to easily judge whether you need the handlebars higher or lower.



Adjusting the height.

1) Loosen the bolts at the base of the handlebars.

2) Slide the handlebars to desired position in the slotted notch at the base of the handlebars (the middle position will give the average height needed). From the middle determine whether you need the handlebars higher or lower.



3) Tighten nuts to secure.

4) After adjusting the height of the handlebars, you will need to adjust the PTA Chain. See page 18.

For storing and transporting your DR®, simply loosen (not remove) both handlebar knobs and carefully fold the upper handlebar section forward so it rests on the front of the machine.

CUTTING HEIGHT DISKS

One Cutting Height Adjustment Disk is already installed on your machine, just above the Mow-Ball. The tips of the cords will cut approximately 1-1/2 to 2 inches off the ground this way — 1 to 1-1/2 inches if the disk is removed and 2 to 2-1/2 inches if you install your additional, second disk. See page 19 for installation instructions.

—OPERATING THE DR®—

You will soon learn that your new DR® is VERY EASY to handle. But it is important to follow the few guidelines we present here, so you get the LONGEST life possible from your cutting cords — trim and mow with the LEAST effort and UTMOST SAFETY and enjoy many years of trouble-free service.

ADDING THE GAS/OIL MIXTURE:

IMPORTANT! THE 3.0 HP 2-Cycle DR® TRIMMER/MOWER IS SHIPPED WITHOUT THE GAS/OIL MIXTURE. DO NOT ATTEMPT TO START YOUR DR® UNTIL A GAS/OIL MIXTURE HAS BEEN ADDED.

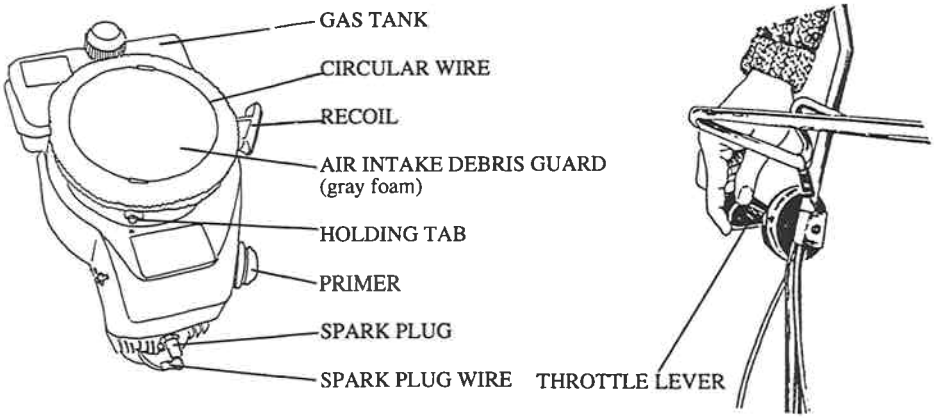
The first step after assembling the DR® is to mix the gas & oil in a 24:1 ratio as shown in the following fuel mix chart. *DISREGARD MIX RATIO INSTRUCTIONS ON OIL CONTAINERS IF INSTRUCTIONS CONFLICT WITH CHART BELOW.* Use fresh, unleaded regular gas (leaded gas is an acceptable substitute but doesn't burn as clean as unleaded). Don't use gas containing Methanol (wood alcohol). Use a clean, high quality 2-cycle oil. **Do not mix the gas and oil directly in the tank, use a separate container.** Fill tank completely for an easier start.

FUEL MIX CHART		MIXTURE 24:1	
U.S.		S. I. (METRIC)	
Gas	Oil To Be Added	Petrol	Oil To Be Added
1 Gallon	5 Ounces	4 Liters	.167 L
2 Gallons	11 Ounces	8 Liters	.333 L
5 Gallons	27 Ounces	20 Liters	.833 L

NOTE: The 3.0 HP DR® is not equipped with an engine mounted ignition switch as indicated in the engine manufacturer's booklet. The CHOKE, as well as the ON/OFF FUNCTION, are located on the handlebar mounted THROTTLE LEVER.

Connect the spark plug wire to the spark plug. Be careful not to splash gas or solvents onto the shield. Wash shield with soap and water only. For additional engine information and suggestions for maintenance and operation, see the Engine Manufacturer's Instructions, found in the plastic bag.

TO START THE MACHINE:



1) Push the THROTTLE LEVER on right side of handlebar halfway down to the fast idle (rabbit) position.

2) Push the PRIMER (located on the right side of the engine to the rear of the recoil) approximately 6 times, pausing 3 to 4 seconds between each push. **Be sure to always cover the PRIMER VENT HOLE with your finger when pushing the primer.**

3) Resting one hand on the handlebar, lean over comfortably, grasp the STARTER HANDLE and pull rope out slowly until you feel the most resistance. Let rope rewind slowly.

4) Now, pull rope with a rapid, continuous full arm stroke. Don't let the STARTER HANDLE snap back against starter.

5) Repeat instructions 3 and 4 several times until engine fires. When engine starts, leave THROTTLE LEVER where it is (at rabbit) and let engine warm up for several minutes. **If engine is difficult to start, repeat step 2.**

If you are restarting the engine after a short shutdown, repeat steps 3 and 4 with the Throttle Lever in the choke position. You should not need to reprime the engine. As soon as the engine starts, be sure to pull the Throttle Lever back to idle (toward the turtle).

THE EASY ALTERNATIVE

Two-hand pull start: Stand to the side of machine so that the Trimmer Head is to your right, handlebar to the left. Place right foot on wheel and engine, and using both hands, pull the starting cord straight up.

SAFETY TIPS:

Before engaging Trimmer Head, make sure you are wearing protective goggles, long pants and shoes.

• Like any trimmer, the tips can throw pieces of sticks, small stones,gravel and bits of debris. **IT'S IMPORTANT TO MAKE SURE NO ONE IS STANDING WITHIN 50 FEET OF YOU AND THE MACHINE — ESPECIALLY CHILDREN AND PETS!** If someone or something is approaching, release the Brake Bar to stop the Mow-Ball from rotating and do not engage it until the area is clear again.

• It is important to be careful when using your DR® around wires, ropes, hoses and fencing. It is possible that these and other obstacles in the area you are mowing can become wound around the shaft of your DR® TRIMMER/MOWER, potentially causing harm to the machine or even the operator.

• NEVER LEAVE THE ENGINE RUNNING WHEN CHANGING CORDS OR MAKING ANY OTHER ADJUSTMENTS.

TO START TRIMMER HEAD:

1) Simply bring the Brake Bar toward you and grip it together with the handlebar in your left hand. KEEP HOLDING THE BRAKE BAR TO THE HANDLEBAR, as shown in the illustration at left below. The Cutting Head with its cords will now be rotating, and will continue to rotate until you release the Brake Bar from the handlebar, as shown in the second illustration.

To START the cords spinning...

To STOP the cords spinning...

TO STOP THE TRIMMER HEAD/SPINNING CORDS:

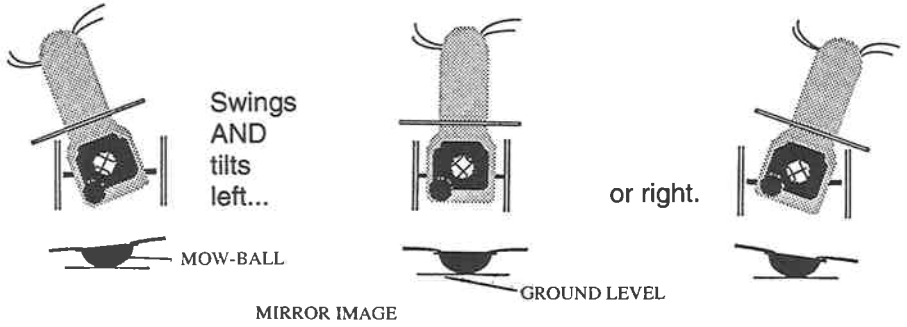
Simply release the Brake Bar. Just straighten your fingers. The Trimmer Head will stop and the engine will continue to run. When you're not cutting it is important to set the engine at "idle" (turtle) so that you're not putting unnecessary wear on it.

TO SHUT OFF THE ENGINE:

Pull Throttle Lever all the way back, toward yourself and as far as it will go, to the "off" position.

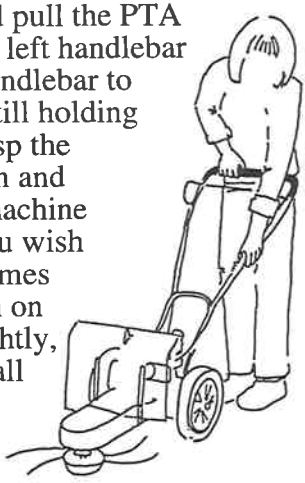
PARALLEL TRIMMING ACTION (PTA):

In one smooth motion of the handlebars, you can swing the machine and the Trimmer Head left or right, leaving the wheels parallel to the fence, border, or whatever objects are being trimmed, and extending the cutting cords way beyond the wheels. At the same time the machine is ALSO TILTED, left or right, so cords skim under fences, etc.



To engage Parallel Trimming Action:

Reach forward and pull the PTA Lever on the lower left handlebar back against the handlebar to unlock the axle. Still holding the lever back, grasp the handlebar as shown and twist it to tilt the machine in the direction you wish to mow. It sometimes helps to bear down on the handlebars slightly, lifting the Mow-Ball off the ground, taking the weight off the axle.



To lock in one of These PTA Modes:

Simply release the PTA Lever.

To Return to the Flat and Forward Mode:

Pull the lever back again and twist the machine to the original, straight ahead position.

—CUTTING CORDS—

In order to get the best and most effective use from your DR® in all trimming & mowing situations, please read the following information.

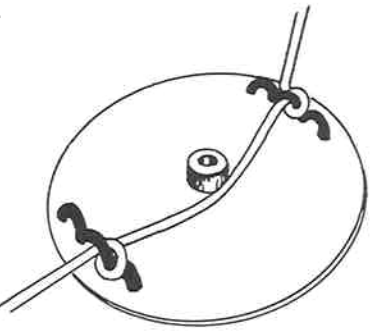
• The important thing to remember is that, because conditions vary so much, our best advice to you is to experiment with various combinations of cord weight and installation and engine speed. In a short time, you will discover what works best for your particular mowing and trimming situations.

• The larger the diameter of the material being cut, generally, the larger diameter cord you should use. But, the larger the diameter cord you use, the more power is required from the engine to counter the air resistance of the larger cord as it spins.

• **The best performance, however, will usually be from the smallest diameter cord which is still capable of cutting the material at hand combined with the fastest engine speed.**

• Also, it is generally true that the higher the trimmer head speed, the faster you can cut. If you prefer to trim and mow slowly, or when trimming around delicate plantings or along mulched paths or gravel driveways, it is wise to slow the speed of the engine.

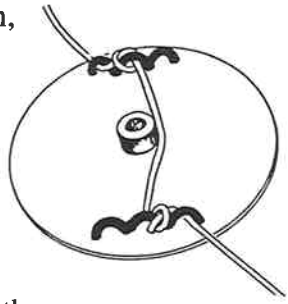
• There are two thicknesses of cord for your DR®: Regular Duty (90 mil) and Heavy-Duty (130 mil). The 3.0 HP COMPACT is shipped with one strand of 130 mil cord inserted as shown at right. This has generally proven to be the most effective cord arrangement for both weights of cord and will produce approximately an 18" cutting swath. Where the most power is needed in thicker diameter growth such as berry canes, brambles, thistle or ragweed, you'll want to use the Heavy-Duty 130 mil cord in combination with a high engine speed.



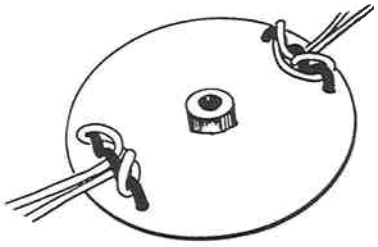
Here's the easy way to thread cutting cord through the loops on the Trimmer Head Plate.

• Most mowing and trimming chores using the COMPACT DR® can be handled by one strand of the Regular-Duty 90 mil cord inserted as shown above. When mowing or trimming in very dense or tall grasses and weeds, it is not always necessary to change to a thicker cord. Increasing the engine speed and therefore the speed that the cord is turning will effectively improve cutting action in heavy growth. If the

90 mil cord is coming loose during operation, try knotting the cord in the holder on one side as shown at right for a more secure hold.



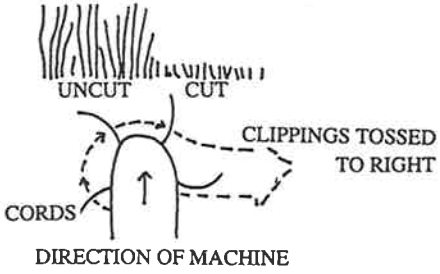
• Some owners have found that inserting two 90 mil cords as shown below works well in some conditions. This method will provide a larger cutting swath but does require a faster engine speed because of the increased air resistance of two cords. With two cords inserted, you can acheive approximately a 21" cutting swath. We do not recommend using two 130 mil cords on the COMPACT DR®. This has proven to exert too great a drag on the COMPACT's engine and will severely reduce the effectiveness of its trimming and mowing action. We encourage you to experiment with different cord insertion methods. Soon you'll learn which cord is appropriate for which chores. **NOTE: You should always pull cords snug after looping.**



—MOWING & TRIMMING TIPS—

Since nylon cord mowing is a whole new technology, we thought it better to give you more rather than too little information — to speed up your getting acquainted with your new DR®.

• Always try to cut and trim with the already-mowed side to your right, and tall grass or weeds to the left. This is because **the DR® discharges the cut material to the right.**



• DO NOT REMOVE THE MOW-BALL FOR MOWING AND TRIMMING.

• Many owners like to mow the easy, open areas first, with their regular riding or walk-behind mowers, then finish off both close quarters mowing and trimming in all the odd and hard-to-reach spots with the DR®. With this method, you'll find the whole process of lawn cutting and trimming will proceed much faster and easier.

• **Remember that you can trim AND mow in one action**, without changing anything on the machine. You might be trimming the end of a section of lawn you left uncut with your regular mower and in the next moment be mowing material at the edge of your lawn that you ordinarily don't cut.

• **Keep in mind: Just the tips do the cutting,** not the whole length of the cords, so don't force the DR® into material faster than it can cut.

• **Allow the front-end of the machine to rest lightly on the Mow-Ball.** Your DR® maneuvers and cuts in ALL directions — front, reverse, to the sides. The Trimmer head actually GLIDES on the Mow-Ball.

• **Use the larger of our Heavy-Duty cord** — the 130 mil — for more power on the larger diameter material.

• **DO NOT run the machine along the edge of gravel driveways or over loose stones at full throttle.** The slower the speed, the less chance the material will be thrown about. The grass there is usually light, so less power is needed anyway. The same advice holds true for mulched areas, chipped bark mulches, etc.

• **If grass is very thick and heavy**, try raising the head off the ground 3 or 4 inches by simply bearing down on the handlebars. Cut the material off first at this height, then make a second pass with the Mow-Ball on the ground.

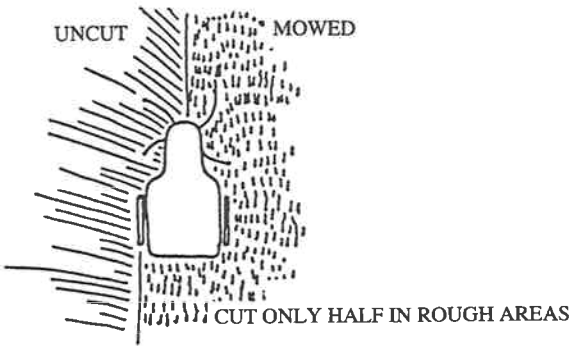
• **VERY IMPORTANT:** In order to achieve the best and smoothest cut, do NOT lift up on the handlebars while operating your DR®. Doing so causes weight to be forced down on the Mow-Ball. This uses energy, slows the cutting down and produces a less satisfactory cut. Ideally, you want to allow the Mow-Ball to rest lightly on the ground while the wheels balance most of the weight.

• While mowing or trimming it is important not to go faster than the cords are able to cut. Mowing and trimming speed is dependent on your particular conditions — thickness, dryness, height and density, etc. of material to be cut. Cords tend to wrap when the operator is moving forward too fast. It's a good idea to look and see if the shaft is winding up with grass, now and then. Make sure the engine is turned off.

• **If you find that your COMPACT is cutting too low, or doesn't seem to have enough power, you should try adding a 2nd Cutting Height Adjustment Disk (included in your product package).** Adding a second disk may make all the difference for scalping in uneven terrain, or handling in thick and tall grass. Adding more than 2 disks, however, is not recommended because the Mow-Ball and the wheels will be at different heights and will result in an uneven cut. See page 19 for installation instructions.

• When testing the capability of the machine in heavier growth, just **EASE it into the material**. If the stems are too tough or woody, and can't be severed right off, the cords tend to wrap around the stems they can't cut, wearing the cords down or breaking them off.

• Just as with your other equipment, you must take some time with heavy growth. You can't do it all in one pass with the DR®. If you're having a tough time on the grass, take a half-width cut (keeping the cut grass to the right if possible).



• **Use PTA** along garden edges so that the cords will reach beyond the wheels of the DR® TRIMMER/MOWER. Then you won't have to put one wheel in soft soil.

• **When trimming along fences and buildings,** take your first pass with the DR® in its regular mowing position, leaving about 3 or 4 inches from the fence. Then, return for another pass with the machine cutting in its PTA mode. Tilted into PTA, you will be going with the tips right up to or under your fence. This action will really clear it out beautifully.

• This is much the same situation for **Christmas tree stands, rows of blueberry bushes, etc.** With the DR®, you can very precisely control the cutting tips, still cutting the grass but leaving the tree bark unharmed. This is most effective with the lighter weight of cord.

• **If you're on a slight hill** you'll often find it convenient to use your DR® instead of your regular walk-behind mower because it is so much easier to roll on its two over-sized wheels.

• **You can also PULL your DR® as well as push it.** With just one hand, in many situations, pulling makes more sense.

• Because the DR® cords cut the grass — however tall — just once, you can **collect clippings (as well as leaves) as a very usable mulch.** The bulk stays intact, without all the clumping that results from overly-chopped mowings of your regular rotary-blade machines. Since the DR® sweeps cut material to its right, you can use the machine almost like a lawn broom to make wind-rows, for easy raking.

• **The DR® is a great end-of-season garden cleaner-upper.** You may have to yank up some of the thicker, woody stems, but the DR® can tackle much of the growth. The greener the better (since the fresher material contains more moisture and is easier to cut). Take care with poison ivy, as contact with the plant's juice is harmful.

In short order, you will see what techniques work best with the DR® at your place, in your different conditions.

—TROUBLESHOOTING—

ATTENTION: Please do not allow grass and weeds to wind up tightly around the Trimmer Shaft and Head.

GRASS WINDING

• **You may be trying to cut too much, too fast**. There is not time for the machine to clean itself out. You have to take smaller bites, and not push into heavy growth too rapidly. Be patient, and give the machine the time it needs. Remember, just the tips cut, not the whole length of cord.

• Are you using the Heavy-Duty cord? That will cut tougher, larger diameter growth but requires more power. If your COMPACT bogs down in thick grass try the 90 mil cord instead. In most situations it is better.

• When grass is quite thick at the baseline, try pushing down slightly on the handlebars, to cut at a higher angle where it is a bit thinner. Drop the machine down and pull it back towards you. This action will help the DR® clean itself. Then go into the material again.

• **Be sure to run the engine at full throttle in heavy or wet grass.** The shaft will more likely wrap with grass when the trimming head is going slower so keep it revved up.

• If there is lots of dead grass, or the undergrowth hasn't been cut for years, it may be too heavy for the DR®. We suggest you rent a larger piece of equipment to do the bulk of the first-time cutting, and then maintain the area with the DR®.

• There will always be some build-up of grass on the shaft. When it gets excessive, cut it with a knife or loosen with a screwdriver, and remove by hand. If you've had considerable grass winding, it is a good idea to remove the trimmer head and check that grass has not become tightly packed between the bearing and the washer.

• **If the Trimmer Head winds up with tall grass:** Lift the head off the ground slightly by pressing down on the handlebar and back the machine out. The spinning head will tend to clean itself. Try cutting again with the Mow-Ball lifted off the ground a few inches, taking bites at a higher angle.

Some winding of grass is inevitable. To avoid this situation: Proceed gradually, taking small bites, especially in thick and tall grass. If vegetation starts to accumulate on the shaft, back the machine out...it will tend to clean itself. Return with Mow-Ball elevated off ground several inches, and cut where grass is less dense. Please see page 13 for more suggestions on refining this technique. Keep trimming and mowing, and remove it later. If head becomes too tightly wound up, the shaft will heat up and cause damage. Stop the machine, and then either use your hands or a knife to cut away wrapped grass. **NEVER CUT GRASS OR DEBRIS FROM THE SHAFT WHEN THE ENGINE IS RUNNING.**

CORDS WINDING ON HEAD

• You may be going too fast into vegetation — taking too big a bite. Only the tips of the cords cut — not the entire length. If this happens, the cords could have a tendency to wrap around the shaft.

• Use the heavier of the cords, and run the engine wide open (fast throttle). If the trimmer head is not spinning fast enough (in heavy not regular growth) the cords could catch themselves on the shaft.

• It could also be that the engine lacks power. See page 16, and check the engine manufacturer's maintenance instructions included with your trimmer.

CORDS COME OUT

Please read the suggestions under GRASS WINDING on pages 13-14. Many of them apply here, too. You could be cutting too fast in large weeds. Especially if there are woody weeds in the material, the cords could wrap around the stalks they cannot cut, and pull the cords from the holder. If the cords can't cut quickly, they can tear themselves from the machine. Just "nudge" the tips into heavy growth rather than go rapidly into such a patch. Proceed with the ability of the cords to cut. Also — spin new cords a minute so they "set" and pull themselves tight before cutting vegetation. See pages 9 and 10 for several suggestions for inserting cord. You will have to experiment to find which method works best in your particular situation.

ENGINE HARD TO START

• **Check Air Filter —** because the Air Filter is located behind the Shield at the front of the machine, it is especially important to check the Filter frequently and clean or replace if necessary. See page 22 for cleaning instructions.

COUNTRY HOME PRODUCTS® has available a Pre-filter Dust Bag (Part #T-129D). This bag fits over the Air Filter and traps large particles of debris, while still allowing good air flow to the engine. It will eliminate frequent cleaning and contributes to the increased life of your engine. Please see parts list on page 25.

• **Check Air Intake Debris Guard.** This is designed to keep debris out of the engine, to allow better air intake for easier starting. It's very important to keep the air cooling system clean, especially in dry, dusty conditions. Don't let it get clogged or the engine will be hard to start and could be damaged by overheating.

It is necessary to remove and clean the Guard frequently. See page 22 for removal and cleaning information.

• **Check for adequate fresh fuel.** Also, check to see that the fuel line and tank vent cap are not obstructed and that the air breather is clean.

• Be sure that you are trying to start the engine according to instructions on page 6. **Also, remember that if you are restarting a warm engine after a short shut down you do not need to prime the engine.**

• **The spark plug may also be fouled.** If so, clean and regap the spark plug. If the spark plug porcelain is cracked, it needs to be replaced.

ENGINE LACKS POWER

• Check the Air Intake Debris Guard and clean if needed.

• Check the Air Filter and clean if necessary.

• Check to see if perhaps the Trimmer Head is wound up tightly with grass. If so, cut and loosen with a knife and remove.

• Are you using two of the 130 mil cords to cut? Our experience has shown that two 130 mil cords are sometimes just too much weight for the COMPACT DR®'s engine to turn. Try using one 130 mil cord or two of the 90 mil cords instead.

• The belt could be off the pulley. Check its alignment according to the drawing and directions under "BELT ADJUSTMENT AND REPLACEMENT" on page 20.

• Check to make sure that you mixed the proper amount of oil in the fuel mixture. The correct ratio is 24 parts gas to 1 part oil. Drain the tank and fill with the correct mixture if necessary (see page 5 for correct amounts).

MOW-BALL WEAR

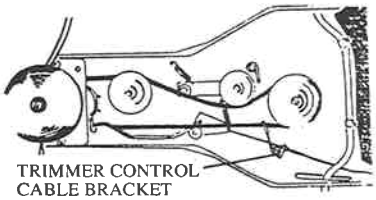
The Mow-Ball is designed primarily to glide on the grass and ground while mowing and trimming. Try not to push the machine over tar, concrete, driveways of gravel, and sharp rocks. Avoid pushing up on the handlebars, which forces the Mow-Ball down into hard and abrasive objects and surfaces. If anything, raise the head end slightly when on such surfaces by bearing down a little on the handlebars, to keep from steady contact with tar and concrete. Following these suggestions will greatly add to the life of the Mow-Ball.

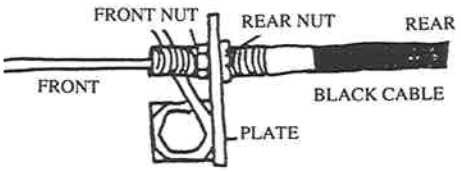
For Owners trimming and mowing in areas where the terrain is exceptionally rocky or abrasive, we now have an alumimum Mow-Ball available. Please see your parts list on page 25 or call us **TOLL-FREE 1(800)DR-OWNER** for the details.

TRIMMER HEAD

If Trimmer Head stops spinning when you're holding back the brake bar and the machine is operating under a heavy load, the Control Cable may need adjustment. Do not adjust the Trimmer Control Cable Bracket until you have checked to see that the Belt is on the correct side of Idler Pulley #1 as shown above. Here's how to adjust the belt should you need to:

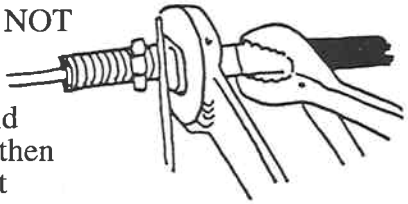
1. It is necessary to get under the machine. There are two ways of doing this: (A) Set the trimmer up on a workbench, or other raised area, allowing you to reach under the machine or (B) Tip the machine up on the handlebars. Locate the Trimmer Control Cable Bracket as follows:





2. With wrench or pliers, loosen the nut in front of the bracket so that it looks like the illustration at right, leaving about an 1/8th inch space between nut and bracket.

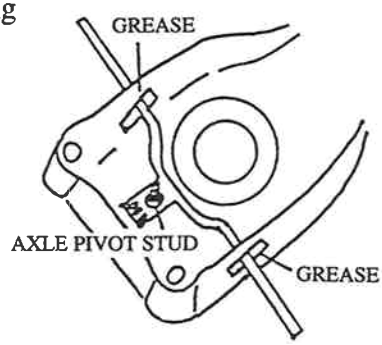
3. Take your pliers and grip the metal end of the black cable (making sure you DO NOT pinch the black cable itself), and at the same time take your wrench and tighten the rear nut until it is flush and tight against the plate. The parts will then be in the same position as in the right drawing, only 1/8" forward.



If Trimmer Head keeps spinning after you release the brake bar, follow step two in previous instructions, but loosen the rear nut and leave 1/8" space between rear nut and bracket. Tighten the front nut until it meets the bracket (plate).

PARALLEL TRIMMING ACTION DIFFICULT

If the "PTA" mechanism is hard to swing from side to side, please practice a bit more, following the earlier instructions (page 8). There is a simple twist of the handlebars to slide the housing over the axle when the PTA device is unlocked by pulling it back against the handlebar. It should not be any great effort. Try pressing down on the handlebar, which elevates the front end and takes the weight off the axle. Then turn to right or left.



A quick cure is some grease or oil on the axle at the points where the housing slides and on the axle, especially when the machine has been operated in dry, dusty conditions.

If the PTA is not swinging freely, try loosening the Axle Pivot Stud Nut 1/4 turn.

To adjust the PTA Cable and eliminate any slack, put the "S" Hook in PTA Lever on next half or full link.

If you've adjusted the handlebar height you will need to adjust the PTA chain by doing the following:

• If you raised the handlebars, the chain will need to be tightened by taking a link up on the S-hook.

• If you lowered the handlebars, the chain will need to be loosened by lowering a link down on the S-hook.

• The PTA Cable connected to the PTA Chain should be tight after you've made your adjustment. If slack remains, try taking up another link.

—MAINTENANCE & REPAIRS—

TO DISASSEMBLE THE TRIMMER HEAD FOR:

• Cleaning

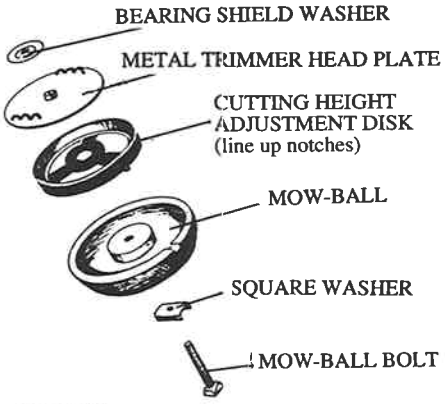
• Adding or Removing Cutting Height Adjustment Disks
See illustrations on the following page.

1. Remove the orange plug from the Bearing Housing outer shaft.

2. Insert a screwdriver or Allen wrench through the hole and rotate the Mow-Ball until you feel the screwdriver lock in place in the inner shaft.

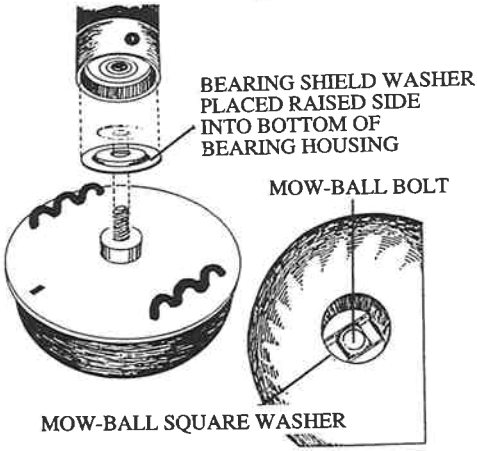
3. Turn the Trimmer Head Assembly clockwise with your hands (or counter-clockwise, depending on where you are standing) until it unscrews completely from the Trimmer Head Shaft.

4. Disassemble unit into illustrated components.



To Reassemble Trimmer Head:

Reassemble in reverse order. Be sure to replace the washers at the top of the bolt, the large one first with its raised side up and then the smaller flat washer. Make sure, too, that the square head of the Trimmer Head Bolt is in the groove at the bottom of the Mow-Ball. Hold the square bolt head tightly in place with one finger as you turn the Trimmer Head Assembly (clockwise to tighten if you're working from below Trimmer), and counter-clockwise if you're working from above.

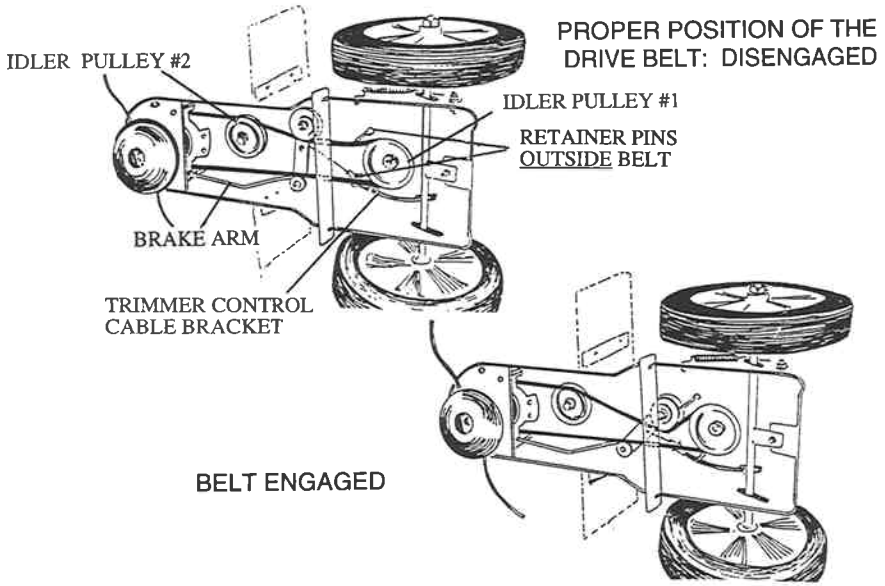


(Holding the bolt in place prevents it from turning in groove and digging into plastic of Mow-Ball.) Tighten Head Assembly. **An improper installation may cause serious damage to the ball bearings.**

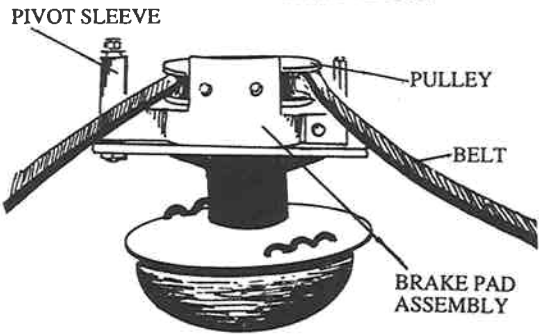
There is a SECOND Cutting Height Adjustment Disk (in addition to the one already installed on your DR®) included in your Product Package. It's a good idea to use both Disks if your machine is cutting too low, or if you are cutting in very tall grass. See top drawing on this page for installation instructions.

BELT ADJUSTMENT AND REPLACEMENT:

The diagrams below show how the belt and pulley assembly should look, from the underside of the machine.



TO REPLACE THE BELT:



NOTE: The replacement belt is GATES #3L390. Loosen the bolts that hold the Bearing Housing so that it can be dropped at least 1/4". Remove belt from Bearing Housing Pulley, then push the old belt forward, and then up over the pulley and remove. Slide the new belt between pulley and main frame housing, then drop it down over pulley so belt seats in groove. Then follow belt diagram above working backward for proper placement. Loop the belt on the Engine Pulley making sure the belt is INSIDE of Idler Pulley #1. Retighten Bearing Housing Bolts on the top of the DR® frame.

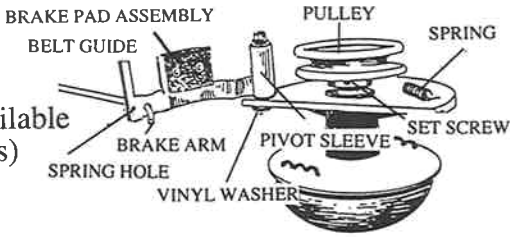
TO CHECK OR REPLACE BEARING HOUSING ASSEMBLY:

If the Trimmer Head doesn't spin when you engage the Brake Bar, and you have checked to make sure that the belt is on the correct side of Idler Pulley #1 (see above) and the Control Cable is properly adjusted you need to check the Bearing Housing as follows: With the machine off, remove the V-Belt from the Engine Pulley. Then, pull

back the Brake Bar and tape or tie the Brake Bar to the handlebar (or have someone hold it for you). Walk around to the side of the machine and test to see that the Trimmer Head rotates freely. If it does not, the bearings may be frozen and you may need to replace the Bearing Housing Assembly. See below instructions on how to remove the Bearing Housing.

1. Remove the 3 Bearing Housing Retaining Bolts from the top of the DR® frame with a 7/16" wrench or socket and an adjustable wrench and lift out the entire unit. Next, maneuver the Brake Arm out of the Brake Actuator.

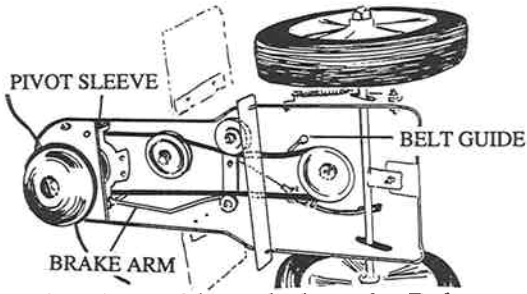
2. Release the spring from the Brake Pad Assembly. Unscrew the bolt on top of the Pivot Sleeve and detach the Brake Pad Assembly from the Bearing Housing Assembly.



3. To remove the Pulley, unscrew the Set Screw from the Pulley with an Allen wrench. Loctite 242® (available at most hardware or auto parts stores) has been used on the Set Screw. Tap the Pulley down to loosen it from the shaft. Be careful not to hit the shaft, as it will expand and make the Pulley harder to remove. Remove the Pulley and Key (1" rectangular metal piece located in a groove in the shaft). A pulley puller may have to be used.

4. Place the Pulley and Key on the new Bearing Housing Shaft leaving the Shaft recessed about 1/16th of an inch and secure with the Set Screw. You may want to use some Loctite 242® to keep the Set Screw in place. Insert the Pivot Sleeve Bolt through the Bearing Housing, add the vinyl washer and the spacer, then bolt the Brake Pad Assembly to the Bearing Housing. Reattach Spring on the Bearing Housing.

5. Insert the L-shaped end of the Brake Arm into the hole in the plate BEFORE mounting the Bearing Housing Assembly.



6. Take the new Bearing Housing Assembly and place the Belt around the Pulley as shown above. Be sure the Belt is placed on the INSIDE of the Brake Pad Assembly Pivot Sleeve and on the INSIDE of the Belt Guide above the Spring Hole.

7. Put the other, opposite end of the Belt around the Motor Pulley, making sure the Belt is INSIDE of the Retaining Pins and on the INSIDE of the Idler Pulley.

8. Now, set the new Bearing Housing Assembly into place, insert the 3 Bearing Housing Retainer Bolts back into their position and tighten.

TO REMOVE INSTALL OR CLEAN AIR FILTERS:

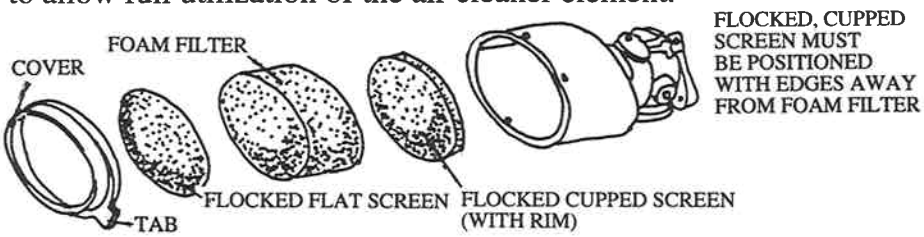
Keeping filters clean and free of debris will contribute to the increased life of your engine.

To Service the Foam Filter:

It is very important to clean and reoil the Foam Filter every 3 months or 25 operating hours and more often if used in dry, dusty conditions. Wash Foam Filter in water and detergent solution. Squeeze (don't twist) until all dirt is removed. Rinse well with water. Wrap in cloth and squeeze (don't twist) until completely dry. Place 1-2 tablespoons of engine oil on filter and squeeze to distribute evenly. Use paper towel or rag to remove excess oil.

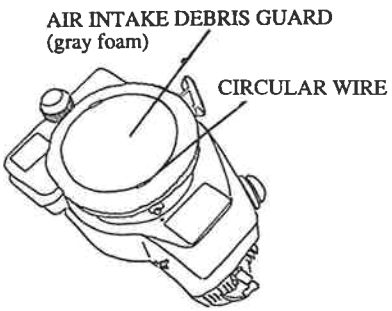
To Service Screen Filters:

Wash in detergent solution. Rinse thoroughly in water, air dry. When reassembling oval air cleaners, it is important to place the flocked cupped screen (see diagram below) into housing with edge against carburetor end of housing. If you should place this screen in incorrectly your engine will not get enough air and will run poorly. The screen should be installed to hold the element away from the housing to allow full utilization of the air cleaner element.



TO CLEAN THE AIR INTAKE DEBRIS GUARD:

This should be kept clear of grass and debris and cleaned several times a season — more frequently if used in dry, dusty conditions. To clean the Air Intake Debris Guard remove the foam guard by pushing down on the circular wire and slipping it out of the holding tabs. Wash in soap and water. Rinse well, dry and reinstall.



END OF SEASON TIPS:

• Remove and clean spark plug. Pour approximately 1/2 oz. (15 ml.) of engine oil into cylinder. Check the gap and replace plug if necessary. Crank the engine slowly to distribute oil.

• Machines being stored over 30 days need to be protected or drained of fuel to prevent gum from forming in the fuel system or on essential carburetor parts. **THERE ARE TWO OPTIONS:**

1. Remove ALL of the gas/oil mixture from gas tank by either running machine until it stops from lack of fuel or by draining the fuel into an appropriate container outdoors.

2. Leave a gas/oil mixture in the tank but add a gasoline additive or stabilizer to prevent gumming in the engine and carburator. Put the additive in the tank first (follow recommended mix ratios on additive container) and then fill with fresh gas/oil mixture. Run the engine for about 10 minutes to circulate the additive.

• Pull Starter Handle slowly until resistance is felt due to compression pressure, then stop. Release starter tension slowly to prevent engine from reversing due to compression pressure. This position will close both the intake and exhaust ports to prevent corrosion of the piston and cylinder bore.

• Clean debris from top and bottom of machine. Using a forceful spray of water is not recommended, as the water could contaminate the fuel system.

• Clean dirt and chaff from cylinder, cylinder head fins, blower housing, rotating screen and muffler areas.

• Check the Trimmer Head Plate and clean out any debris from the bottom of the Bearing Housing.

• Check the V-Belt, remove any debris from the Trimmer Head Pulley.

• Clean the Air Filters, see page 22 of this booklet.

• Lubricate the engine throttle cable, clutch brake control cable and idler pulleys with WD-40 or similar silicone spray.

BEGINNING OF SEASON TIPS:

- If you drained your **gas/oil mixture** put in a fresh supply in a 24:1 ratio. Use fresh unleaded gas and a clean, good quality 2-cycle oil. Use separate container to mix. Fill tank completely for an easier start. See fuel mix chart on page 5 for the proper gas/oil ratio.

- Check the Mow-Ball and Cutting Height Adjustment Disks for wear and replace if necessary. Make sure that they are lined up with the notches in the Trimmer Head Plate.

- Check the 3 Bearing Housing Assembly Bolts. Tighten them up with a 3/8" wrench or socket if loose.

- Check condition of cutting cords and replace if frayed or damaged.

CONGRATULATIONS on getting your new DR® TRIMMER/MOWER!

Please let us know of any questions or problems you may have, we want to answer or correct them as quickly as possible. We also hope to hear from you on how much you like your new helper.

Tell all your friends about the DR®! We would sure appreciate it. Thanks!

and all us at...

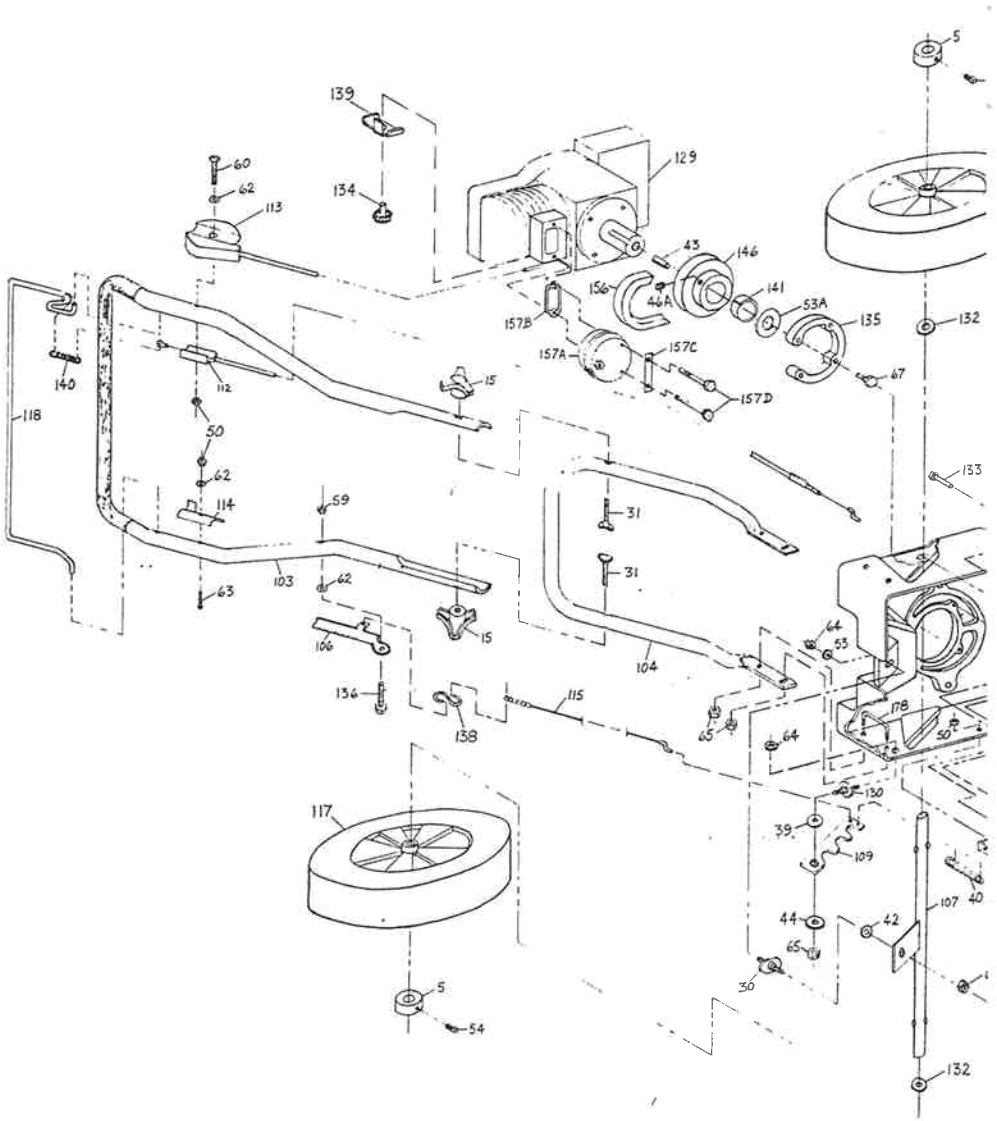
COUNTRY HOME PRODUCTS®, INC.

DR® TRIMMER/MOWER PARTS LIST

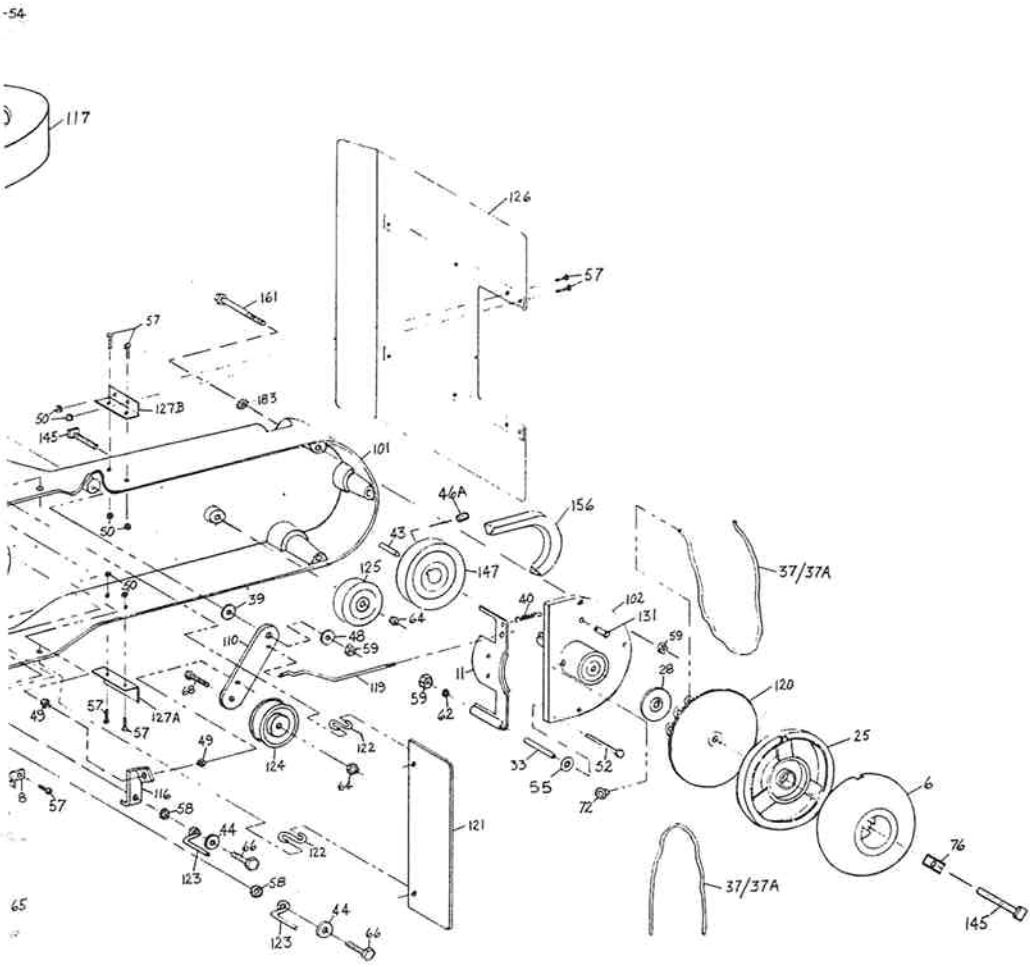
ITEM#	DESCRIPTION
T101	Main Frame
T102	Bearing Housing Assembly
T103	Upper Handlebar
T104	Lower Handlebar
T05	Wheel Retaining Ring/Set Screw
T06	Mow-Ball
T06A	Aluminum Mow-Ball
T106	PTA Latch Bracket Handle
T107	Axle
T08	Return Spring Bracket
T109	PTA Latch
T110	Idler Arm
T11	Brake Assembly
T112	Clutch Cable
T113	Throttle Control and Cable
T114	Brake Bar Stop Bracket
T15	Handlebar Knob
T115	PTA Cable
T116	PTA Cable Bracket
T117	Wheel 10"
T118	Brake Bar
T119	Brake Rod
T120	Trimmer Head Plate
T121	Rubber Stone Guard
T122	Hanger
T123	Belt Retainer
T124	Flat Idler Pulley
T25	Cutting Height Adjustment Disk
T126	Shield Assembly
T127A	Shield Mounting Bracket (left)
T127B	Shield Mounting Bracket (right)
T28	Bearing Shield Washer
T129/92	Engine
T129D	Dust Bag
T130	Pivot Stud PTA
T30	Pivot Stud Axle
T31	Handlebar Bolt
T131	Clevis Pin
T32	Spacer 1/4 x .32
T132	1/2" Axle Washer
T33	1/4" x 1-3/4" Spacer
T133	1/4" - 20 x 1-1/2" Hex Head Bolt
T134	1/4" - 20 x 1/2" Hex Head Bolt
T135	Engine Spacer
T136	1/4" - 20 x 1-1/4" Hex Bolt
T137	Pkg. 24 Regular-Duty Cord
T37A	Pkg. 24 Heavy-Duty Cord
T37AX	Roll Heavy-Duty Cord
T138	S-Hook (PTA Cable)
T39	Non-Metal Washer 1/8"

ITEM#	DESCRIPTION
T40	Extension Spring 2"
T140	Clutch Cable Spring 1-7/8"
T141	Engine Pulley Spacer
T42	.01 Plastic Axle Washer
T43	Key 3/16" Square
T44	5/16" Flat Washer
T145	3/8" x 2" Square Mow-Ball Bolt
T46A	5/16" - 18 Set Screw
T146	Engine Pulley
T147	Head Pulley
T48	1/4" Flat Washer
T49	5/6" Hex Nut (included w/T112)
T50	10 - 24 Elastic Stop Nut
T51	Nylon Tie
T53A	Flat Washer 3/8" USS
T54	Set Screw 1/4" - 20 x 3/8" Square
T55	Brake Washer .750 x .3902/P
T156	V-Belt GATES 1390
T57	10 - 24 x 5/8" Pan Head Bolt
T157	Muffler Assembly
T58	Ext. Tooth Lock Washer 5/16"
T59	1/4" - 20 Elastic Stop Nut
T59A	1/4" - 20 Center Lock Nut
T60	10 - 24 x 2" Pan Head Screw
T62	#10 Flat Washer
T63	10 - 24 x 1-1/4" Round Bolt
T64	3/8" 16 Elastic Stop Nut
T164	3/8" - 16 Center Lock Nut
T65	5/16" 16 Elastic Stop Nut
T165	5/16" - 18 Center Lock Nut
T66	5/16" - 18 x 2-1/4" Hex Head Bolt
T166	5/16" - 18 x 2-1/4" Hex Head Bolt
T67	3/18" - 20 x 1/2" Hex Head Bolt
T167	1/4" - 20 x 2-1/4" Hex Head Bolt
T68	3/8" - 16 x 1-1/2" Hex Bolt
T72	Vinyl Plug
T75	V-Idler Pulley
T76	Mow-Ball Rectangular Washer
T79	Safety Goggles
T83	J19LM Spark Plug
T180	Foam Air Filter
T181	Isomount
T181A	Flat Filter Screen
T181B	Cupped Filter Screen
T181C	Metal Air Filter Cap
T182	Spring Pin
188	Nylon Washer 5/16" - .062
189	1/4" SAE Washer

DR® TRIMMER/MOWER



REPLACEMENT PARTS



DAILY CHECK-LIST

☐ GAS/OIL

Fill tank with a 24:1 mixture of fresh unleaded gas (leaded gas in an acceptable substitute but doesn't burn as clean as unleaded, do not use gas containing Methanol) and a high quality oil. Be careful not to spill gas on the shield. Gasoline will cloud the shield. If gas does spill onto the shield, wash immediately with soap and water.

☐ AIR FILTER

A clean filter will mean a much easier-starting machine. Please see pages 22 and 23 of this booklet for instructions on cleaning your filter.

☐ CUTTING CORDS

Check cords on Trimmer Head Plate. Replace broken or frayed cords. Remove wrapped grass or debris from the Trimmer Head.

☐ MOW-BALL/SPACER DISKS

Check Mow-Ball and Spacer Disk for wear. Make sure the Mow-Ball and Spacer Disk are lined up with the notch in the Trimmer Head Plate. See page 18 of this booklet for the replacement instructions.

☐ ENGINE

It's very important to keep the engine clean! A dirty engine retains heat and can cause damage to the internal parts. A quick cleaning after each use is recommended.

COUNTRY HOME PRODUCTS®
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