# **BLACK+** DECKER

20 inch (508mm) Corded Mower



Thank you for choosing BLACK+DECKER! PLEASE READ BEFORE RETURNING THIS PRODUCT FOR ANY REASON.

SAVE THIS MANUAL FOR FUTURE REFERENCE.

#### **KEY INFORMATION YOU SHOULD KNOW:**

- Do not operate mower unless handle is locked into position.
  For best cutting results, keep blade sharpened and balanced.
- Inspect and thoroughly clean your mower after each use (a deck with caked grass will degrade performance).
  Make sure mowing area is clear of other persons or pets prior
- to starting and during operation.

#### SAFETY GUIDELINES - DEFINITIONS

It is important for you to read and understand this manual. The information it contains relates to protecting YOUR SAFETY and PREVENTING PROBLEMS. The symbols below are used to help you recognize this information.

⚠ **DANGER:** Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.

♠ WARNING: Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

⚠ CAUTION: Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.

**NOTICE:** Used without the safety alert symbol indicates potentially hazardous situation which, if not avoided, may result in property damage.

#### The following are explanations of important safety hazard pictorials on the mower.



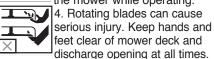
1. User must read and understand the instruction manual.



2. To avoid the risk of serious injury do not mow up and down slopes. Always mow across slopes.



3. To avoid the risk of injury to bystanders keep all persons and pets at a safe distance from the mower while operating.



Always be sure blade has stopped.
Wait for the blade to stop rotating
(approximately 3 seconds) after releasing
bail handle. Unplug mower before
removing or replacing grass catcher,
cleaning, servicing, transporting or lifting
the mower.



5. Objects struck by mower blade can cause serious injury. Stay behind the handle when the motor is running. Always

ensure persons and pets are clear of the discharge from the mower while operating. Always inspect mowing area before mowing and remove objects that could be thrown by blade. Release bail handle (switch lever) (2) to turn mower off and wait for the blade to stop rotating (approximately 3 seconds) before crossing walk, roads, patio and gravel drives.

# **△WARNING: IMPORTANT SAFETY WARNINGS AND INSTRUCTIONS**

AWARNING: WHEN USING ELECTRIC LAWN MOWERS, BASIC SAFETY PRECAUTIONS SHOULD ALWAYS BE FOLLOWED TO REDUCE THE RISK OF FIRE, ELECTRIC SHOCK, AND PERSONAL INJURY, INCLUDING THE FOLLOWING:

#### READ ALL INSTRUCTIONS

#### TO REDUCE RISK OF INJURY:

- Before any use, be sure everyone using this tool reads and understands all safety instructions and other information contained in this manual.
- Save these instructions and review frequently prior to use and in instructing others.

# ADANGER: IMPORTANT SAFE PRACTICES FOR WALK-BEHIND MOWERS

This mower is capable of amputating hands and feet and throwing objects. Failure to observe the following safety instructions could result in serious injury or death

#### **GENERAL OPERATION**

- Read, understand, and follow all instructions on the mower and in the instruction manual before starting.
- Do not put hands or feet near or under the mower. Keep clear of the discharge opening at all times.
- Only allow responsible adults, who are familiar with the instructions, to operate this mower.
- 4. Clear the area where the mower is

- to be used of objects such as rocks, sticks, wire, toys, bones, etc., which could be thrown by the blade. Objects struck by the blade can cause severe injury to persons. Stay behind the handle when the motor is running.
- 5. Be sure the area surrounding the mower is clear of bystanders before operating. All bystanders and pets should be kept at a safe distance. Stop the mower if anyone enters the area surrounding the mower.
- Do not operate mower barefooted or while wearing sandals. Always wear substantial footwear.
- Do not pull mower backward unless absolutely necessary. Always look down and behind before and while moving backward.
- 8. Never direct discharged material toward anyone. Avoid discharging material against a wall or obstruction. Material may ricochet back toward the operator. Release bail handle (switch lever) (2) to turn mower off and stop the blade when crossing gravel surfaces.
- 9. Do not operate mower without the entire grass catcher, discharge guard, rear guard, or other safety protective devices in place and working. Periodically check all guards and safety protective devices to ensure they are in good working order and will operate properly and perform their intended function. Replace a damaged latch, guard or other safety device before further use.
- Never leave a running mower unattended.
- 11. Always release the bail handle or switch lever (2) to stop the motor and wait until the blade comes to a complete stop and unplug the mower before cleaning the mower, removing the grass catcher, un-clogging the discharge guard, when leaving the mower, or before making any adjustments, repairs or inspections.
- 12. Operate mower only in daylight or good artificial light when objects in the path of the blade are clearly visible from the operating area of the mower.
- 13.Do not operate mower while under the influence of alcohol or drugs, or when you are tired or ill. Always stay alert, watch what you are doing, and use common sense.
- 14. Avoid dangerous environments. Never operate mower in damp or wet grass,

- never use mower in the rain. Always be sure of your footing; walk; never run.
- 15. Disengage the drive system, if so equipped, before starting the motor.
- 16.If the mower should start to vibrate abnormally, release the bail handle or switch lever (2), wait for the blade to stop and unplug mower, then check for the cause immediately. Vibration is generally a warning of trouble.
- 17.Always wear proper eye and respiratory protection when operating the mower.
- 18.The use of any accessory or attachment not recommended for use with this mower could be hazardous. Only use accessories approved by BLACK+DECKER.
- 19. Never overreach while operating the mower. Always be sure to keep proper footing and balance at all times while operating the mower.

#### SLOPE OPERATION

Slopes are a major factor related to slip and fall accidents, which can result in severe injury. Operation on all slopes requires extra caution. If you feel uneasy on a slope, do not mow it.

- Mow across the face of slopes; never up and down. Exercise extreme caution when changing direction on slopes.
- Watch for holes, ruts, bumps, rocks, or other hidden objects. Uneven terrain could cause a slip and fall accident. Tall grass can hide obstacles.
- Do not mow on wet grass or excessively steep slopes. Poor footing could cause a slip and fall accident.
- Do not mow near drop-offs, ditches, or embankments. You could lose your footing or balance.

#### CHILDREN

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

- Keep children out of the mowing area and under the watchful care of a responsible adult other than the operator.
- Be alert and turn mower off if a child enters the area.
- 3. Never allow children to operate the mower.
- 4. Use extra care when approaching blind corners, shrubs, trees, or other objects that may block your view of a child.

#### **GENERAL SERVICE**

- 1. Never operate mower in a closed area.
- Keep all nuts and bolts tight to be sure the equipment is in safe working condition.
- Never tamper with safety devices. Check their proper operation regularly.
- Keep mower free of grass, leaves, or other debris build-up. Allow mower to cool before storing.
- 5. If you strike a foreign object, release bail handle or switch lever (2) to turn mower off, wait for the blade to stop and unplug mower, then inspect the mower. Repair, any damage, before starting and operating the mower.
- Never make any adjustments or repairs with the motor running or while the mower is plugged in.
- Always unplug mower before adjusting, cleaning, repairing, inspecting, transporting, storing or leaving the mower.
- Check grass catcher components and the discharge guard frequently and when necessary replace with BLACK+DECKER recommended parts only.
- Mower blades are sharp. Wrap the blade or wear gloves, and use extra caution when servicing them.
- Maintain or replace safety and instruction labels, as necessary.

## FOR ALL DOUBLE-INSULATED LAWN MOWERS

- Replacement Parts
   When servicing use only identical replacement parts.
- Polarized Appliance Connections To reduce the risk of electric shock, this appliance has a polarized plug (one blade is wider than the other) and will require the use of a polarized extension cord. The appliance plug will fit into a polarized extension cord only one way. If the plug does not fit fully into the extension cord, reverse the plug. If the plug still does not fit, obtain a correct polarized extension cord. A polarized extension cord will require the use of a polarized wall outlet. This plug will fit into the polarized wall outlet only one way. If the plug does not fit fully into the wall outlet, reverse the plug. If the plug still does not fit, contact a qualified electrician to install the proper wall outlet. Do not change the equipment plug, extension cord receptacle, or extension cord plug in any way.

# MARNING: GENERAL SAFETY WARNINGS AND INSTRUCTIONS FOR ALL MOWERS

- THIS TOOL CAN BE DANGEROUS.
   Follow all warnings and Safety Instructions in this manual. The operator is responsible for following warnings and instructions in this manual and on unit. Restrict use of this mower to persons who read, understand and follow warnings and instructions in this manual and on unit.
- Avoid dangerous environment don't use lawn mowers in damp or wet locations.
- · Don't Use In Rain.
- Keep Children Away All visitors should be kept a safe distance from work area.
- Dress Properly Do not wear loose clothing or jewelry. They can be caught in moving parts. Use of rubber gloves and footwear is recommended when working outdoors.
- Use Safety Glasses Always use face or dust mask if operation is dusty.
- Use Right Appliance Do not use lawn mower for any job except that for which it is intended.
- Ground Fault Circuit Interrupter (GFCI) protection should be provided on the circuit(s) or outlet(s) to be used for the lawn mower. Receptacles are available having built-in GFCI protection and may be used for this measure of safety.
- MARNING: To prevent electric shock use only with an extension cord suitable for outdoor use, such as SW, SOW, STW, STOW, SJW, SJOW, SJTW, or SJTOW.
- USE OF EXTENSION CORDS

  Make sure the extension cord is in good condition before using. Always use the proper size extension cords with the tool that is, proper wire size for various lengths of cord and heavy enough to carry the current the tool will draw. Use of an undersized cord will cause a drop in line voltage resulting in loss of power and overheating. For proper size cords see chart below. To reduce the likelihood of disconnection of lawn mower cord from the cord set during operating:
- i) Make a knot as shown in Figures A and A1, or
- ii) Use one of the plug-receptacle retaining straps or connectors described in this manual (Figure B).

#### Volte 120V

Minimum Gauge for Cord Sets Total Length of Cord in Feet

26-50 51-100 101-150 (0-7,6m) (7,6-15,2m) (15,2-30,4m) (30,4-45,7m)

Not Recommended

Ampere Rating More Not more

American Wire Gauge

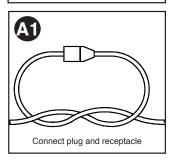
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12

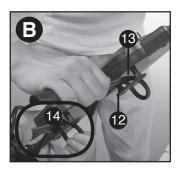
Appliance Cord set cord

Tie cord as shown



#### ATTACHING EXTENSION CORD (FIGURE B)

An extension cord retainer (12) that prevents the cord from coming unplugged is built into the switch handle. To use this feature, simply double the extension cord about 8 inches (203mm) from the end, and insert it into the opening (13) as shown in figure B. Push the extension cord into the two holding slots (14) to reinforce the hold. Gently tug on the cord to insure that it is firmly in the mower's retainer. Plug the receptacle end of the extension cord into the power cord and plug in extension cord.



- **Don't Abuse Cord** Never pull lawn mower by cord or yank it to disconnect from receptacle. Keep cord from heat, oil, and sharp edges.
- Don't Force Lawn Mower It will do the job better and safer at the rate for which it was designed.
- Don't Overreach Keep proper footing and balance at all times.
- Stay Alert Watch what you are doing. Use common sense. Do not operate lawn mower when you are tired.
- Disconnect Lawn Mower Disconnect the lawn mower from the power supply when not in use, before servicing, when changing accessories such as blades, and the like.
- Store Idle Lawn Mower Indoors When not in use, lawn mower should be stored in an indoor dry and locked-up place – out of reach of children.
- Maintain Lawn Mower With Care -Keep cutting edges sharp and clean for best and safest performance. Inspect lawn mower cord periodically and if damaged, have it repaired by an authorized service facility. Inspect extension cords periodically and replace if damaged. Keep handles dry, clean, and free from oil and grease.
- Keep guards in place and in working order.
- Keep blades sharp.
- Keep hands and feet away from cutting area.
- Objects struck by the lawn mower blade can cause severe injuries to persons. The lawn should always be carefully examined and cleared of all objects prior to each mowing.
- If lawn mower strikes a foreign object, follow these steps:
  - 1) Stop lawn mower. Release the switch
  - Unplug power cord.
  - Inspect for damage.
  - 4) Repair any damage before restarting and operating the lawn mower.
- Use identical replacement blades only

#### **SAVE THESE** INSTRUCTIONS

#### △DANGER: ADDITIONAL WARNINGS FOR MOWERS

CHECK FOR DAMAGED PARTS. Before further use of the mower, a guard or other part that is damaged should be carefully checked to determine that it will operate properly and perform its intended function. Check for alignment of moving parts, binding of moving parts, breakage of parts, mounting, and any other

conditions that may affect their operation. A guard or other part that is damaged should be properly repaired or replaced by an authorized service center unless otherwise indicated elsewhere in this manual.

 REPAIRS AND SERVICE. Repairs, maintenance and any adjustments not specified in this manual should be performed by BLACK+DECKER authorized service centers or other qualified service organizations, always using identical replacement parts.

⚠WARNING: Some dust created by this product contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:

· compounds in fertilizers

compounds in insecticides, herbicides and pesticides

arsenic and chromium from chemically treated lumber

To reduce your exposure to these chemicals, wear approved safety equipment such as dust masks that are specially designed to filter out microscopic particles.

 The label on your tool may include the following symbols. The symbols and their definitions are as follows:

V.....volts mW....milliwatts

nm.....wavelength in nonometers

A....amperes Hz....hertz

W.....watts

or AC.....alternating current

---or DC ...direct current no load speed

Class I Construction (grounded)

earthing terminal
safety alert symbol

□ .....Class II Construction (double insulated)

.../min or rpm...revolutions or

reciprocation per minute

Use proper respiratory protection
Read instruction manual before use
Use proper eye protection
Use proper hearing protection

FUNCTIONAL DESCRIPTION

1. Switch box

2. Bail handle

3. Upper-handle

4. Lower-handle

5. Upper-handle attachment levers (2)

6. Lower-handle attachment levers (2)

7. Cut height adjust lever

Grass collection bag

9. Rear door cover

Carrying handles

11. EdgeMax™



#### **ASSEMBLY**

**AWARNING:** Before assembly, make sure the bail handle is released and the mower is unplugged.

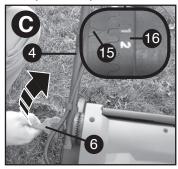
#### ATTACHING LOWER HANDLE

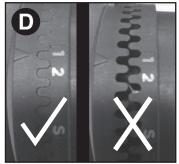
 Lift lower handle (4) into place making sure the arrow (15) on the base of the mower lines up with 1 or 2 on the base of the handle (16) (inset of Figure C) △CAUTION: Ensure each side of the lower handle is set on the same number. The arrow must be lined up with 1 or 2 for operation.

- Close the handle height adjust levers

   (6) as shown in Figure C. As you close each, make sure the teeth are engaged as shown in Figure D.
- If the connection between the handle and lever is too tight or loose, open the

lever and adjust the depth of the lever by turning the lever. Close it again until the teeth are fully clasped and each lever stays securely closed.



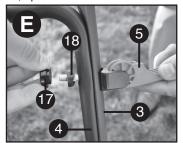


#### ATTACHING UPPER HANDLE (Figure E)

- Remove the upper-handle attachment levers (5), nuts (17), and washers (18) from the handle.
- Line up the holes on the bottom of the upper handle (3) with the holes on the top of the lower handle (4).

**NOTE:** Make sure the cord is located on the front of both handles. If it is not it may result in the cord tangling and the inability to easily store the mower.

- From the outside of the upper handle (3), slide the lever bolt through the holes.
- Slide the washer over the bolt of the lever and loosely assemble the entire assembly with the nut.
- Rotate the upper handle into its operating position.
- Close the lever. If it is too tight or too loose, open the lever and the nut to adjust



the clamping. Check the levers by closing them. They should be tight enough so the handles are held firmly, but loose enough so the levers can be fully closed. Adjust by opening the lever and turning the nut until the handles are secured.

SECURING THE MOTOR CABLE (FIGURE F)

A CAUTION: ATTACH CABLE SO THAT IT DOES NOT BECOME STRETCHED OR PINCHED IN THE JOINTS OF THE HANDLES DURING USE OR FOLDING. THIS CAN CAUSE DAMAGE TO THE CORD.

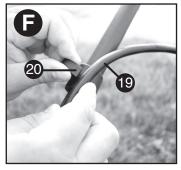
The motor cable (19) has to be fixed to the handles using the cable restraints (20) that are already attached to the handle. To clip the cable to the handle:

 Place the handles in operating position, see "Attaching Lower Handle" section.

 Run the cable up the front of the lower and upper handles.

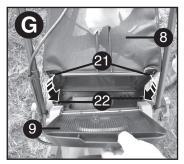
Pull back the cable restraint.

 Slide the motor cable under the clip and ensure it is fully held in place by the restraint.



#### **BAGGING**

- Ensure the side discharge attachment (24) (Figure I) and the mulching insert (23) (Figure H) are removed from the mower before bagging.
- Lift the rear door cover (9) and place the grass collection bag (8) onto the mower so the bag hooks (21) rest on the lugs (22) as shown in Figure G. Then lower the rear door cover.



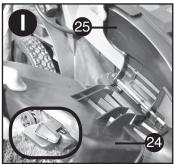
#### **MULCHING**

- Ensure the side discharge attachment (24) (Figure I) and the collection bag (8) are not attached.
- Lift the rear door cover (9) and slide the mulching insert (23) fully into the mower as shown in Figure H.
- Ensure the rear door cover (9) and side flap (25) fully close before turning mower on.



#### SIDE DISCHARGE

- Ensure the collection bag (8) is removed.
- Lift the rear door cover (9) and slide the mulching insert (23) fully into the mower as shown in Figure H.
- Lift the side flap (25) and hook side discharge attachment (24) onto the mower as shown in Figure I.
- Release the side flap and ensure the attachment holds in place before turning mower on as shown in the inset of Figure I.



OPERATION
READ THIS INSTRUCTION MANUAL
BEFORE OPERATING YOUR MOWER.
See "Functional Description" on page
to familiarize yourself with the location
of various controls and adjustments.
Save this manual for future reference.

⚠ DANGER: Sharp moving blade. Do not operate the mower in side discharge or mulching mode if the rear door is not closed under spring tension as serious injury could result. Take your mower to the nearest

service center for repair if rear door does not close.

**△ DANGER:** Sharp moving blade. Never operate the mower in bagging.

Never operate the mower in bagging mode unless the hanger hooks on the grass catcher are seated properly on the mower and the rear discharge door rests firmly against the top of the grass catcher as serious injury could result.

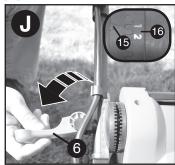
⚠ **WARNING:** Let the mower work at its own pace. Do not overload.

**△ DANGER**: SHARP MOVING BLADE.

⚠ DANGER: ROTATING BLADES CAN CAUSE SERIOUS INJURY. TO PREVENT SERIOUS INJURY, UNPLUG MOWER WHEN UNATTENDED, OR WHEN CHARGING, CLEANING, SERVICING, TRANSPORTING, LIFTING, OR STORING MOWER.

#### ADJUSTING HANDLE HEIGHT (FIGURE J)

- Open both lower-handle attachment levers (6).
- Adjust the handle so the arrow (15) on the base of the mower lines up with 1 or 2 on the base of the handle (16). Ensure the handle is set to the same number on both sides of the mower.
- Close both levers and ensure the handle is firmly latched and the teeth are engaged as shown in inset.



#### **ADJUSTING MOWER HEIGHT (FIGURE K)**

The height of cut is adjusted by the central cut height adjust lever, there are 7 positions to choose from.

**NOTE:** If you are not sure which height to cut, begin mowing with the cut height adjustment lever (7) in position 7 and adjust the height down as needed, as shown in **figure K**.

To set the height of cut:

- Pull the mower cut height adjustment lever out of the locking notch.
- Move the lever towards the rear of the appliance to lower the height of cut.
- Move the lever towards the front of the appliance to raise the height of cut.

 Push the height adjustment lever into one of the 7 locking notches.



# STARTING MOWER A DANGER: SHARP MOVING BLADE. NEVER ATTEMPT TO OVERRIDE THE OPERATION OF THIS SWITCH BOX AS SERIOUS INJURY COULD RESULT.

- Your mower is equipped with a special on-off switch box. To operate the mower, push the button (26) on the switch box (1), then pull the bail handle (2) to the handlebar as shown in Figure L. Release button and hold bail handle with both hands.
- To turn the mower off, just release the bail handle.

AWARNING: Never attempt to lock a switch or bail handle (2) in the on position.

NOTE: Once the bail handle has returned to the original position it will activate the "Automatic Braking Mechanism". The motor is electrically braked and the mower blade will stop rotating in 3 seconds or less.



#### MOWING (FIG. M - N)

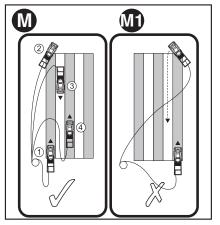
AWARNING: ALWAYS INSPECT AREA WHERE MOWER IS TO BE USED AND REMOVE ALL STONES, STICKS, WIRE, BONES AND OTHER DEBRIS WHICH MIGHT BE THROWN BY THE ROTATING BLADE.

We recommend to use your mower as outlined in this section in order to achieve

optimum results and to reduce the risk of cutting the main cable.

- Place the bulk of the cable on the lawn, close to the starting point (position 1 in fig. M).
- Switch the mower on as described above.
- Proceed as shown in fig. M.
- Move from position 1 to position 2.
- Turn right, stepping over the cable and proceed towards position 3.
- Turn left, stepping over the cable and move towards position 4.
- Repeat the above procedure as required.

**WARNING:** Do not work towards the cable as shown in **fig. M1**.



#### SAFETY SHIELD AND REAR DOOR

The safety shield (39 in Figure H) is designed to minimize the throwing of stones or other objects by the mower blade backward from under the mower deck. The shield, along with the rear door cover (9) minimizes the possibility of accidental foot contact with the blade. DO NOT operate mower without the safety shield and rear door in place.

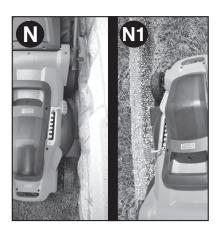
#### **EDGEMAX™**

EdgeMax<sup>™</sup> (11) allows you to cut grass right up to the edge of a wall or fence (fig. N).

EdgeMax™ allows you to accurately cut grass right up to the edge of your lawn (fig. N1).

 With the lawnmower parallel to the edge of your lawn, push the lawnmower along the edge of the lawn. Ensure that the EdgeMax™ is slightly over the edge of your lawn (fig. N1).

**NOTE:** When the side discharge attachment is attached EdgeMax<sup>™</sup> can only be used on the right side of the mower.



#### MOWER OVERLOAD

To prevent damage due to overload conditions, do not try to remove too much grass at one time. Slow down your cutting pace, or raise the cut height.

#### STORAGE

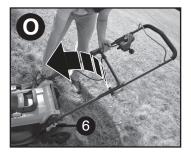
**AWARNING:** Rotating blade can cause serious injury. Release BAIL HANDLE (2) to turn mower off and unplug mower before lifting, transporting, or storing the mower. Store in a dry place.

A CAUTION: PINCH POINT. TO AVOID BEING PINCHED, KEEP FINGERS AWAY FROM AREA BETWEEN HANDLES WHEN FOLDING DOWN HANDLES.

A CAUTION: MAKE SURE CORD DOES NOT BECOME STRETCHED OR PINCHED IN THE JOINTS OF THE HANDLES DURING FOLDING. THIS CAN CAUSE DAMAGE TO THE CORD.

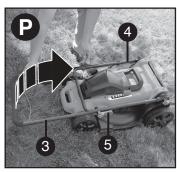
The handle of the mower can be easily folded down for quick and convenient storage.

 Holding onto the handle, open, but do not remove, the lower-handle attachment levers (6) and fold the handle to the front of the mower as



shown in Figure O.

 Open, but do not remove, the upperhandle attachment levers (5) and fold the upper handle (3) back over the lower



handle (4) as shown in **Figure P**.

The mower shold be compacted down



as shown in Figure Q. CARRYING THE MOWER

⚠ DANGER: ROTATING BLADES CAN CAUSE SERIOUS INJURY. TO PREVENT SERIOUS INJURY, UNPLUG MOWER WHEN UNATTENDED, CLEANING, SERVICING, TRANSPORTING, LIFTING, OR STORING MOWER.

 The mower can be carried using the convenient carry handles (10) as shown in Figure R. DO NOT attempt to lift the mower by grasping the upper



handle (3) or lower handle (4). **MOWING TIPS** 

AWARNING: ALWAYS INSPECT AREA WHERE MOWER IS TO BE USED AND REMOVE ALL STONES,

# STICKS, WIRE, BONES, AND OTHER DEBRIS WHICH MIGHT BE THROWN BY THE ROTATING BLADE.

 MARNING: Mow across the face of slopes, never up-and-down. Exercise extreme caution when changing direction on slopes. Do not mow excessively steep slopes. Always maintain good footing.

 Release bail handle to turn mower "OFF" when crossing any gravel area (stones can be thrown by the blade).

 Set mower at highest cutting height when mowing in rough ground or in tall weeds. Removing too much grass at one time can cause the motor to be overloaded and to stop. Refer to troubleshooting guide.

4. If the grass collection bag (8) is used during the fast growing season, the grass may tend to clog up at the discharge opening. Release bail handle to turn mower off and unplug mower. Remove the catcher and shake the grass down to the back end of the bag. Also clean out any grass or debris which may be packed around the discharge opening. Replace the grass catcher.

5. If mower should start to vibrate abnormally, release bail handle to turn mower off and unplug mower. Check immediately for cause. Vibration is a warning of trouble. Do not operate mower until a service check has been made. Refer to troubleshooting guide in manual.

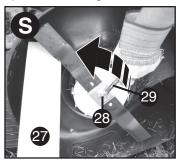
6. ALWAYS RELEASE BAIL HANDLE TO TURN MOWER OFF AND UNPLUG MOWER WHEN LEAVING IT UNATTENDED, EVEN FOR A SHORT PERIOD OF TIME.

# REMOVING AND INSTALLING BLADE

A DANGER: RISK OF INJURY. WHEN REASSEMBLING THE BLADE SYSTEM, ENSURE EACH PART IS REINSTALLED CORRECTLY, AS DESCRIBED BELOW. IMPROPER ASSEMBLY OF THE BLADE

### OR OTHER PARTS OF THE BLADE SYSTEM MAY CAUSE SERIOUS INJURY.

- MARNING: RELEASE BAIL HANDLE TO TURN MOWER OFF, WAIT FOR THE BLADE TO STOP, AND UNPLUG MOWER.
- Cut a piece of 2x4 wood (27) (about 2 feet long) (610 mm) to keep blade from turning while removing nut (28).
- Wear gloves and proper eye protection. Turn the mower on its side. Be careful of sharp edges of blade. Position wood and unscrew bolt with 9/16" wrench (29) as shown in Figure S.



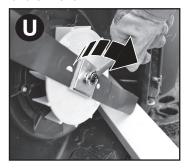
4. Note the orientation of each part as you remove it. Remove nut (30). Pull off washer (31), the blade insulator (32), and the blade (33) as shown in Figure T. Examine all pieces for damage and replace if necessary.

**NOTE:** The fan should not be able to be removed.

5. To reassemble, slide the blade (33) on. It can only be attached to the fan in one direction and location. Line up the D-shaped hole of the blade with the D-shaped post of the fan, ensuring the writing on the blade faces out away from the mower. Place the insulator (32) on the blade so that the two outer ribs extend past the blade. Place the square washer (31) on top of the insulator so that it sits inside of the two outer ribs on the insulator. Replace the nut (30) with the wide side against the washer.



 To tighten firmly, position the piece of wood as shown in Figure U to keep the blade from turning. Secure nut with the wrench.



#### **BLADE SHARPENING**

KEEP BLADE SHARP FOR BEST MOWER PERFORMANCE. A DULL BLADE DOES NOT CUT GRASS CLEANLY. USE PROPER EYE PROTECTION WHILE REMOVING, SHARPENING, AND INSTALLING BLADE. ENSURE THAT MOWER IS UNPLUGGED. Sharpening the blade twice during a mowing season is usually sufficient under normal circumstances. Sand causes the blade to dull quickly. If your lawn has sandy soil, more frequent sharpening may be required.

## REPLACE BENT OR DAMAGED BLADE IMMEDIATELY.

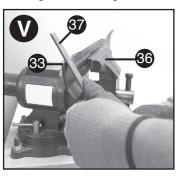
## WHEN SHARPENING THE BLADE:

- 1. Make sure blade remains balanced.
- 2. Sharpen blade at the original cutting angle
- Sharpen cutting edges on both ends of blade, removing equal amounts of material from both ends.

# TO SHARPEN BLADE IN A VISE: (Figure V)

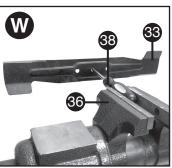
- Be sure the bail handle is released, the blade has stopped and the mower is unplugged before removing the blade.
- Remove blade from mower. See instructions for removing and installing blade.
- Secure blade (33) in a vise (36).
- Wear proper eye protection and gloves and be careful not to cut yourself.
- 5. Carefully file the cutting edges of the blade with a fine tooth file (37) or sharpening stone, maintaining the angle of the original cutting edge.
- 6. Check balance of blade and balance i needed before reattaching. See

- instructions for blade balancing.
- Replace blade on mower and tighten securely. See instructions for removing and installing blade.



#### **BLADE BALANCING (Figure W)**

Check balance of the blade (33) by placing center hole in the blade over a nail or round shank screwdriver (38), clamped horizontally in a vise (36). If either end of the blade rotates downward, file along the sharp edge of that dropping end. Blade is properly balanced when neither end drops.



#### LUBRICATION

No lubrication is necessary. Do not oil the wheels. They have plastic bearing surfaces which require no lubrication.

#### **CLEANING**

Release bail handle (2) to turn mower off, let the blade come to a stop and unplug mower. Use only mild soap and a damp cloth to clean the mower. Clean out any clippings which may have accumulated on the underside of the deck. After several uses, check all exposed fasteners for tightness.

#### PREVENTING CORROSION

Fertilizers and other garden chemicals contain agents which greatly accelerate the corrosion of metals. If you mow in

PROBLEM TF	ROUBLESHOOTING SOLUTION
Mower doesn't run when bail handle is activated.	A. Check to make sure mower is properly plugged in and that the button on switch box is being completely depressed before pulling the bail handle.  B. Release bail handle to turn mower off. Unplug mower. Turn mower over and check that blade is free to turn.
2. Motor stops while mowing.	A. Release bail handle to turn mower off. Unplug mower. Turn mower over and check that blade is free to turn.  B. Raise cutting height of wheels to highest position and start mower.  C. Avoid overloading the mower. Slow down the cutting pace, or raise the cut height.
Mower runs but cutting performance is unsatisfactory,	<ul> <li>A. Release bail handle to turn mower off. Unplug mower. Turn mower over and check:         Blade for sharpness - Keep blade sharp.         Deck and discharge chute for clogging.</li> <li>B. Wheel height adjustment may be set too low for grass condition. Raise cutting height.</li> </ul>
4. Mower is too hard to push.	A. Release bail handle to turn mower off. Unplug mower. Raise cutting height to reduce deck drag on grass. Check each wheel for free rotation.
5. Mower is abnormally noisy and vibrates.	A. Release bail handle to turn mower off. Unplug mower. Turn mower on side and check blade to ensure it has not been bent or damaged. If blade is damaged, replace with a BLACK+DECKER replacement blade. If the underside of the deck is damaged, return mower to a BLACK+DECKER authorized service center.  B. If there is no visible damage to the blade and the mower still vibrates: Release bail handle to turn mower off, unplug mower, and disassemble entire blade assembly as described in the "Removing and Installing Blade" section. Remove any debris and clean each piece. Replace each piece as described in the "Removing and Installing Blade" section. If mower still vibrates, return the mower to an authorized BLACK+DECKER authorized service center.
6. Mower not picking up clippings with bag.	A. Chute clogged. Release bail handle to turn mower off. Unplug mower. Clear chute of grass clippings. B. Raise cutting height of wheels to shorten length of the cut. C. Bag full. Empty bag more often.

areas where fertilizers or chemicals have been used, the mower should be cleaned immediately afterward as follows: Release bail handle (2) to turn mower off and unplug mower. Wipe all exposed parts with a damp cloth.

⚠ CAUTION: DO NOT POUR OR SPRAY WATER ON THE MOWER IN AN ATTEMPT TO CLEAN IT. Do not store the tool on or adjacent to fertilizers or chemicals. Such storage can cause rapid corrosion.

## MEETS CPSC SAFETY REQUIREMENTS

BLACK+DECKER Mowers conform to the safety standards of the American National Standards Institute, and the U.S. Consumer Product Safety Commission. The Blade turns when the motor is running.

#### MAINTENANCE

IMPORTANT: To assure product SAFETY and RELIABILITY, repairs, maintenance and adjustment (including brush inspection and replacement) should be performed by BLACK+DECKER Service Centers or other qualified service organizations, always using BLACK+DECKER replacement parts. When servicing use ONLY IDENTICAL REPLACEMENT PARTS.