

***Hustler Z
Super Z
Owner's Manual***

HUSTLER®

•••••••

Hustler Turf Equipment

•••••

P.O. Box 7000

•••

Hesston, Kansas

•

67062-2097



WARNING:



The engine exhaust from this product contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

TABLE OF CONTENTS

1. General Information.....	Sect. 1
2. Safety Precautions.....	Sect. 2
3. Operation.....	Sect. 3
4. Maintenance.....	Sect. 4
5. Adjustments	Sect. 5
6. Troubleshooting	Sect. 6
7. Storage	Sect. 7
8. Product Literature	Sect. 8
9. Technical Specifications	Sect. 9
10. Index.....	Sect. 10

GENERAL INFORMATION

This manual applies to the following equipment:

Hustler Z 23/52", number 926881
Hustler Z 23/60", number 926915
Hustler Z 23/60", number 926923
Hustler Z 25/60", number 926931
Hustler Z 25/60", number 926949
Hustler Z 25/72", number 926964
Hustler Z 24/60", number 926667
Hustler Z 24/60", number 926675
Hustler Z 27/60", number 927111
Hustler Z 27/72", number 927160
Super Z 24/52", number 926725
Super Z 24/60", number 926741
Super Z 24/72", number 926766
Super Z 25/52", number 926972
Super Z 25/60", number 926980
Super Z 25/72", number 926998
Super Z 27/60", number 927038
Super Z 27/72", number 927046
Super Z 28EFI/60", number 927053
Super Z 28EFI/72", number 927061
Super Z 26LC/60", number 927558
Super Z 26LC/72", number 927566
Super Z 27/60"RD, number 927467
Super Z 27/72"RD, number 927624
Super Z 25/60"RD, number 927673
Super Z 25/72"RD, number 927681
HZ23KAW54XR7STA, number 927723
HZ23KAW60XR7STA, number 927731
HZ24HON60XR7STA, number 927756
HZ25KAW60XR7STA, number 927772
HZ25KAW66XR7STA, number 927798
HZ27KOH60XR7STA, number 927806
HZ27KOH66XR7STA, number 927814
SZ24HON60XR7SSA, number 927848
SZ24HON66XR7SSA, number 927855
SZ25KAW54XR7SSA, number 927871
SZ25KAW60XR7SSA, number 927889
SZ25KAW66XR7SSA, number 927897
SZ25KAW72XR7SSA, number 927913
SZ26KAWL60XR7SSA, number 927921
SZ26KAWL66XR7SSA, number 927939
SZ26KAWL72XR7SSA, number 927947
SZ26KAWL60RDSSA, number 927954
SZ27KOH54XR7SSA, number 927970
SZ27KOH60XR7SSA, number 927988
SZ28KOHEFI60XR7SSA, number 928010
SZ28KOHEFI66XR7SSA, number 928028
SZ28KOHEFI72XR7SSA, number 928036
SZ30KOH60XR7SSA, number 928044
SZ30KOH66XR7SSA, number 928051
SZ30KOH72XR7SSA, number 928069
HZ24HON60XR7STA, number 927756
SZ24HON60XR7SSA, number 927848
SZ24HON66XR7SSA, number 927855

To the new owner

The purpose of this manual is to assist owners and operators in maintaining and operating the Hustler Z tractor and deck. Please read it carefully; information and instructions furnished can help you achieve years of dependable performance.

A separate Engine Manual is included with your owner's packet which contains additional engine information that will not be repeated in this manual. You are urged to read it before attempting any operation or repair of the engine.

The Quick Reference Decals, located under the right front of the seat, the right front of the deck, and under the seat pan, are designed to give the operator brief information needed in the daily operation of the machine. These decals are not intended to be used in place of this manual but instead is to be used as an extension of this manual. These decals should not be removed or obliterated. Replace these decals if they become unreadable.

It is the **owner's responsibility** to make certain that the operator reads and understands this manual and the Quick Reference Decals before operating this machine. It is also the **owner's responsibility** to make certain that the operator is a qualified and physically able individual, properly trained in the operation of this equipment. Local regulations may restrict the age of the operator.

Using this manual

General operation, adjustment and maintenance guidance is outlined for both the experienced and novice Hustler user. Operating conditions vary considerably and cannot all be addressed individually. Through experience, however, operators should find no difficulty in developing good operating skills suitable to most conditions.

Directions used in this manual, for example RIGHT or LEFT, refer to directions when seated on tractor facing forward, unless otherwise stated.

Photographs and illustrations used were current at the time of printing, but subsequent production changes may cause your machine to vary slightly in detail. Hustler Turf Equipment reserves the right to redesign and change the machine as deemed necessary, without notification. If a change has been made to your machine which is not reflected in this owner's manual, or the parts manual, see your Hustler dealer for current information and parts.

Warranty registration

The Delivery and Warranty Registration form must be completed and signed to validate your warranty protection. As the new equipment owner, you are expected to see that the form is completed and forwarded to Hustler Turf Equipment at time of delivery.

Be sure to register the tractor plus each attachment that displays a model and serial identification number plate with Hustler Turf Equipment.

IMPORTANT: Any unauthorized modification, alteration, or use of non-approved attachments voids the warranty and releases Hustler Turf Equipment from any

liability arising from subsequent use of this equipment.

Model and serial number

Tractor model and serial numbers are found on the serial identification plate, located on the frame directly below and to the left of the operator's platform.

These numbers are required on the Warranty Registration form. They will also assure you of the correct service parts when replacement becomes necessary.

Parts and service

Use original Hustler replacement parts only. These parts are available through your local Hustler dealer. To obtain prompt, efficient service, always provide the following information when ordering parts:

1. Correct part description
2. Correct model number.
3. Correct serial number.

All warranty repair and service must be handled through an authorized Hustler dealer. Arrangements should be made through your local service center.

For location of nearest dealer, or should you need further assistance, contact:

Customer Service Department
Hustler Turf Equipment
P.O. Box 7000
Hesston, KS 67062
Telephone (620) 327-4911
FAX (620) 327-2458
Web site: www.hustlerturfequipment.com

**HUSTLER Z AND SUPER Z
TWO YEAR LIMITED WARRANTY FOR TRACTORS AND DECKS
(THREE YEAR LIMITED WARRANTY ON DECK
SPINDLE BEARING & DECK GAUGE FORK BEARING)**

WHAT IS COVERED BY THIS WARRANTY

Hustler Turf Equipment, makes the following warranty to the original purchaser only:

a. First and Second Year: Hustler Turf Equipment Tractors and Power Units are warranted for **two (2) years from date of delivery** on all materials and workmanship.

If the Purchaser discovers within this warranty period a defect in materials or workmanship:

- He must promptly notify Hustler Turf Equipment, or an authorized dealer, in writing of the defect. In no event shall such notification be received by Hustler Turf Equipment, or an authorized dealer later than twenty-five (25) months from date of delivery.
- Within a reasonable time after such notification, Hustler Turf Equipment, will correct any defect in material or workmanship on the Hustler Turf Equipment, by repairing or replacing part(s) with either new or used replacement parts.
- Such repair, including parts and labor shall be at the expense of Hustler Turf Equipment, and,

b. Third Year: At the conclusion of the two year limited warranty described in paragraph (a) above, there shall be an additional one year limited warranty on deck gauge fork bearings and deck spindle bearings only, **no labor.**

If the Purchaser discovers within this warranty period a defect in either of these bearings:

- He must promptly notify Hustler Turf Equipment, or an authorized dealer, in writing of the defect. In no event shall such notification be received by Hustler Turf Equipment, or an authorized dealer later than thirty-seven (37) months from date of delivery.
- Within a reasonable time after such notification, Hustler Turf Equipment, will provide new replacement bearing to install on the Hustler Turf Equipment.
- The installation of the deck gauge fork bearing and deck spindle bearing shall be at the expense of the owner, and,

c. Rental Units (90 days): Within 90 days of date of delivery Hustler Turf Equipment, provides a limited warranty on all materials and workmanship for units used for rental purposes.

If the Purchaser discovers within this warranty period a defect in materials or workmanship:

- He must promptly notify Hustler Turf Equipment, or an authorized dealer, in writing of the defect. In no event shall such notification be received by Hustler Turf Equipment, or an authorized dealer later than 120 days from date of delivery.
- Within a reasonable time after such notification, Hustler Turf Equipment, will correct any defect in

material or workmanship on the Hustler Turf Equipment, by repairing or replacing part(s) with either new or used replacement parts.

- Such repair, including parts and labor shall be at the expense of Hustler Turf Equipment, and,

d. Hustler Turf Equipment provides a limited warranty for the entire length of ownership by the original purchaser for the following items:

- Against all defects in the frame resulting from frame breakage.
- Against all defects in the mowing deck which results in the **front edge of the deck** being bent into the blades.
- Against hydraulic hose and fitting leaks.

If the original Purchaser discovers within this warranty period such a defect:

- He must promptly notify Hustler Turf Equipment or an authorized dealer, in writing of the defect. Such notification must be received by Hustler Turf Equipment or an authorized dealer during the period when the equipment is owned by the original purchaser.
- Hustler Turf Equipment will correct any defect in the frame resulting in frame breakage by repairing or replacing part(s) with new or used replacement parts.
- Hustler Turf Equipment will correct any defect in the deck resulting in the front edge of the deck being bent into the blades by repairing or replacing part(s) with either new or used replacement parts.
- Such repair, including parts and labor, shall be at the expense of Hustler Turf Equipment, and,

e. The engines are covered by a two (2) year limited warranty, by the engine manufacturer, to the original owner (commercial or residential) only **except the Caterpillar diesel engine** which is covered by a three (3) year limited warranty, and,

f. The battery is covered by a one (1) year limited warranty to the original owner only.

WHO MUST PERFORM THE WARRANTY SERVICE

All warranty service will be performed by dealers authorized by Hustler Turf Equipment. **Service calls and/or transportation expense** of the product to and from the authorized dealer, for warranty work, will be paid by the owner of the product. For warranty service you can contact an authorized dealer or write Hustler Turf Equipment, 200 South Ridge Road, Hesston, Kansas 67062, or call 1-620-327-4911.

WHAT IS NOT COVERED BY THIS WARRANTY

Hustler Turf Equipment, does not warranty:

- Some product, components or parts not manufactured by Hustler Turf Equipment

- Repairs made by unauthorized persons
- Damage caused by use of the Hustler Turf Equipment for purposes other than those for which it was designed
- Damages caused by disasters such as fire, flood, wind, and lightning
- Damages caused by neglect, abuse, abnormal use, improper or unreasonable use, accident, negligence or misuse
- Repairs or replacement resulting from the use of unauthorized parts, accessories or attachments
- Repairs or replacement as the result if any alterations or modifications, in the determination of Hustler Turf Equipment, which adversely affects the operation, performance or durability of the equipment.
- Hustler Turf Equipment which has the serial number removed or made illegible
- Depreciation or damage caused by normal wear, lack of reasonable and proper maintenance, failure to follow the product's owner's manual operating, maintenance and adjustment instructions or other operational instructions provided by Hustler Turf Equipment.
- Normal maintenance parts and service including, but not limited to, filters, fuel, lubricants, tune-up parts, belts, blades, blade sharpening, bearings, brake or steering adjustments
- Repairs necessary due to improper fuel, contaminates in the fuel system, or failure to properly prepare the fuel system prior to any period of non-use over three months

DISCLAIMER OF WARRANTY

The foregoing warranties are in lieu of all other warranties, expressed or implied, including but not limited to the implied warranties of merchantability and fitness for a particular purpose. However, if the Hustler Turf Equipment is purchased as a consumer product, any implied warranty of merchantability or fitness for a particular purpose is limited to the duration of this limited warranty. Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

LIMITATION OF REMEDIES

In no case shall Hustler Turf Equipment, be liable for any special, incidental, or consequential damages based upon breach of warranty, breach of contract, negligence, strict liability in tort, or any other legal theory.

Such damages include, but are not limited to:

- Loss of profits
- Loss of savings or revenue
- Loss of use of Hustler Turf Equipment or any associated equipment
- Cost of capital

- Cost of any substitute equipment, facilities, services or downtime
- The claims of third parties including customers, and injury to property

Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

TIME LIMIT

Any action for breach of warranty must be commenced within twenty-five (25) months following delivery of the goods in a non-rental application. Any action for breach of warranty must be commenced within 120 days following delivery of the goods in a rental application.

NO OTHER WARRANTIES

Unless modified in writing, signed by both parties, and approved by the President of Hustler Turf Equipment, this agreement is understood to be the complete and exclusive agreement between the parties, superseding all prior agreements, oral or written, and all other communications between the parties relating to the subject matter of this agreement. No employee of Hustler Turf Equipment, or any other party is authorized to make any warranty in addition to those made in this agreement.

ALLOCATION OF RISKS

This agreement allocates the risks of product failure between Hustler Turf Equipment, and the purchaser. This allocation is recognized by both parties and is reflected in the price of the goods.

OWNER'S RESPONSIBILITY

You must maintain your Hustler Turf Equipment product following the maintenance procedures described in your owner's manual. Such routine maintenance, whether performed by a dealer or by you, is at your expense.

This machine like any other powered equipment is potentially dangerous unless properly operated. Any operator **must** be cautious and keep safety in mind at all times. Any operator, prior to using the Hustler Turf Equipment, should thoroughly familiarize himself with the owner's manual regarding operation and safety of the machine, as well as all safety warnings on the machine itself.

WARRANTY REGISTRATION

1. The Warranty registration form **MUST** be completed and signed by the authorized dealer and original purchaser.
2. For validation, the completed Warranty registration form **MUST** be forwarded to Hustler Turf Equipment, within ten (10) days following date of purchase.
3. The date of purchase constitutes delivery.

SAFETY PRECAUTIONS



This safety alert symbol is used to call attention to a message intended to provide a reasonable degree of **PERSONAL SAFETY** for operators and other persons during the normal operation and servicing of this equipment.

DANGER – denotes immediate hazards which **WILL** result in severe personal injury or death.

WARNING - denotes a hazard or unsafe practice which **COULD** result in severe personal injury or death.

All operators should read this manual, or be instructed about safe operating and maintenance procedures. This is the owner's responsibility.

Improper use or maintenance by the operator or owner can result in injury. To reduce the potential for injury, comply with these safety instructions and always pay attention to the safety alert ▲ symbol, which means DANGER or WARNING - “personal safety instructions.” Failure to comply with the instructions may result in personal injury or death.

Incorrect usage of this machine may result in severe injury. Personnel operating and maintain it should be trained in the proper use and should read the manuals completely and thoroughly before attempting to set-up, operate, adjust, or service this machine.

The Quick Reference Decals, located under the right front of the seat, the right front of the deck, and under the seat pan, are designed to give the operator brief information needed in the daily operation of the machine. These decals are not intended to be used in place of this manual but instead is to be used as an extension of this manual. These decals should not be removed or obliterated. Replace these decals if they become unreadable.

It is the **owner's responsibility** to make certain that the operator reads and understands this manual and the Quick Reference Decals before operating this machine. It is also the **owner's responsibility** to make certain that the operator is a qualified and physically able individual, properly trained in the operation of this equipment. Local regulations may restrict the age of the operator.

The owner should also ensure that the operator/mechanic know that they are responsible for their own safety as well as the safety of other persons within the vicinity. **Remember**, the operator is responsible for accidents or hazards occurring to other people or their property.

- ▲ Never leave a running machine unattended. Always disengage deck clutch, place steering control levers in park brake position, stop tractor engine, and remove

ignition key when leaving operator's seat.

- ▲ **If you lose steering control while operating the machine, place the steering control levers in the park brake position immediately. Inspect the machine and involve your Hustler dealer to resolve the problem before continuing to operate.**
- ▲ Always remain seated while operating machine.
- ▲ Always keep safety shields and covers in place, except for servicing.
- ▲ Always maintain a safe distance from people and pets when mowing. Always stop machine if someone enters the area.
- ▲ Always operate machine in daylight or with adequate working lights.
- ▲ Follow daily and weekly checklists, making sure hoses are tightly secured and bolts are tightened.
- ▲ Always observe traffic laws while driving machine from one location to another. Watch for traffic when operating near or crossing roadways.
- ▲ Always keep engine and machine clean, removing accumulated dirt, trash and other material from machine. Clean up oil or fuel spillage. Allow machine to cool before storing.
- ▲ Inspect area to be mowed for hazards such as rocks, metal objects and other debris which may be thrown or entangled by mower blades. Remove these objects before mowing.
- ▲ Always be alert for hazards such as rocks, metal objects and other debris which may be thrown or entangled by mower blades. Watch out for holes or deep depressions.
- ▲ Always wear adequate eye protection when servicing the hydraulic system, battery, and cooling system, or when grinding mower blades and removing accumulated debris.
- ▲ Always wear adequate ear protection, such as earplugs, when operating this equipment as prolonged exposure to uncomfortable or loud noises can cause impairment or loss of hearing. Do not wear radios or music headphones while operating the machinery. Safe operation requires your full attention.
- ▲ Always be aware of what is behind the machine before backing up. Do not mow in reverse unless absolutely necessary. Always look down and behind before and while backing up.
- ▲ Always inspect machine for damage after striking a foreign object. If damage is found, repair machine immediately. Be sure to disengage deck clutch, place steering control levers in the park brake position, stop tractor engine and remove ignition switch key before leaving operator's seat to inspect damage.
- ▲ Always buckle seat belt, if provided with one, before starting tractor.
- ▲ Never push forward suddenly on the steering control levers while the machine is in rearward motion because the machine may tip backward.
- ▲ When moving in reverse, push forward slowly on

lever and avoid sudden movement. Rapid movement of the control levers in either direction could result in a reaction of the tractor that can cause serious injury.

- ▲ Never operate a poorly maintained machine.
- ▲ Never carry passengers.
- ▲ Never attempt high speed maneuvering, especially in crowded or congested areas.
- ▲ Never allow persons to operate this machine without proper instruction or allow children to operate machine. Allow only responsible adults who are familiar with these instructions to operate this machine.
- ▲ Never put hands or feet under any part of the machine while it is running.
- ▲ Never leave machine unattended with ignition key in switch, especially with children present.
- ▲ Never refuel tractor while engine is running; never refuel near an open flame or near devices which can create a spark. Refuel outdoors preferably, or in well ventilated areas.
- ▲ Never attempt to start engine when there is a strong odor of gasoline fumes present. Locate and correct cause.
- ▲ Never run the engine in an enclosed area unless exhaust is vented to the outside. Exhaust gases contain carbon monoxide which is odorless and deadly poison.
- ▲ Never attempt to make any adjustments or repairs to the tractor drive system, mower deck or any attachment while the tractor engine is running or deck clutch is engaged. Repairs or maintenance requiring engine power should be performed by trained personnel only.
- ▲ Never work under the machine or attachment unless it is safely supported with stands, blocks or a hoist.
- ▲ Do not touch hot parts of machine.
- ▲ Never direct discharge of material from mower deck towards bystanders. Do not operate the mower without either the discharge chute or the entire grass collection system in place.
- ▲ Always disengage the blades and wait for them to stop before crossing gravel drives, walks or roads.
- ▲ Always keep clear of the mower blades and attachments during their operation.
- ▲ Turn off blades when not mowing.
- ▲ Slow down before turning.
- ▲ Stop the engine before removing the grass catcher or unclogging the discharge chute. Never clear the discharge chute with the engine running. Turn off the engine and be sure the blades have stopped before cleaning. Use a stick to clear a plugged discharge area.
Never use your hand!
- ▲ Do not operate the machine while under the influence of alcohol or drugs.
- ▲ Exercise caution when loading or unloading the machine onto a trailer or truck.
- ▲ Always wear safety goggles or safety glasses with side shields when operating the mower.
- ▲ Data indicates that operators, age 60 years and above, are involved in a large percentage of riding mower-related injuries. These operators should evaluate their

ability to operate the mower safely enough to protect themselves and others from serious injury.

- ▲ Always disengage the blades and wait for them to stop before crossing gravel drives, walks or roads.
- ▲ Always keep clear of the mower blades and attachments during their operation.
- ▲ Never make sudden starts, stops, turns, or reverse direction, especially when maneuvering on slopes. The steering is designed for sensitive response. Rapid movement of the steering lever in either direction could result in a reaction of the tractor that can cause serious injury.
- ▲ If any attachment or additional weight is mounted on the rear of the unit, any rapid movement of the control levers in either direction could result in a reaction of the tractor that can cause serious injury.
- ▲ Use extreme caution when operating on slopes.
 - Be extremely careful changing directions on a slope. Slow down.
 - Do not operate where the machine could slip or tip.
- ▲ Do not remove or modify the stabilizer wheels.
- ▲ Remove obstacles such as rocks, tree limbs, etc.
- ▲ Keep all movement on slopes slow and gradual. Do not make sudden changes in speed or direction.
- ▲ Avoid starting and stopping on a slope. If tires lose traction, disengage the blades and proceed slowly straight down the slope.
- ▲ Do not turn on slopes unless necessary, and then, turn slowly and gradually downhill, if possible.
- ▲ Do not mow near drop-offs, ditches, or embankments. The machine could suddenly turn over if a wheel goes over the edge of a cliff or ditch, or if an edge caves in.
- ▲ Do not mow on wet grass. Reduced traction could cause sliding.
- ▲ Do not try to stabilize the machine by putting your foot on the ground.
- ▲ Watch for holes, ruts or bumps. Uneven terrain could overturn the machine. Tall grass can hide obstacles.
- ▲ Never leave machine unattended with ignition key in switch, especially with children present.
- ▲ Keep children out of the mowing area and under the watchful care of another responsible adult.
- ▲ Be alert and turn the machine off if children enter the area.
- ▲ Before and while backing, look behind and down for small children.
- ▲ Never carry children, even with the blades off. They may fall off and be seriously injured or interfere with safe machine operation.
- ▲ Never allow children to operate the machine.
- ▲ Use care when approaching blind corners, shrubs, trees, the end of a fence or other objects that may obscure vision.
- ▲ Use extra caution when handling gasoline and other fuels. They are flammable and vapors are explosive.
- ▲ Keep nuts and bolts tight, especially the blade attachment bolts. Keep equipment in good condition.
- ▲ Never tamper with safety devices. Check their proper operation regularly.
- ▲ Grass collection system components are subject to

wear, damage and deterioration, which could expose moving parts or allow objects to be thrown. Frequently check components and replace with manufacturer's recommended parts, when necessary.

- ▲ Mower blades are sharp and can cut. Wrap the blade(s) or wear gloves and use extra caution when servicing them.
- ▲ Use only genuine Hustler replacement parts to ensure that original standards are maintained.
- ▲ The Hustler mower is capable of operating horizontally (traverse) on moderately steep slopes. When operating on slopes up to 15 degrees, be aware of any conditions that may cause the tractor drive tires to lose traction resulting in a possible loss of control of the machine. An operator should not operate on a slope until he is thoroughly familiar with the equipment.

Do not operate the machine on slopes greater than 15 degrees.

It is strongly recommended that the operator drive the machine off of the slope, using extreme caution, if any sign of loss of traction is detected. Wait until the condition that caused the problem is resolved before attempting to operate on the slope again.

Terrain conditions can affect traction resulting in possible loss of control of the machine. Some of the conditions to be aware of are:

1. Wet terrain
2. Depressions in the ground; i.e. holes, ruts, washouts
3. Mounds of dirt
4. Soil type; i.e. sand, loose dirt, gravel, clay
5. Grass type, density, and height
6. Extremely dry conditions of grass
7. Tire pressure

The attachments mounted to the tractor will also affect the way it handles on a slope. Be aware that each attachment's characteristics vary.

Another consideration to safe mowing on slopes is to be aware of what is located at the bottom of the slope. Extreme caution should be used when there is a hazard located at the bottom of the slope. Some examples are:

1. Water; i.e. lake, river
2. Cliffs, retaining walls
3. Roads, highways
4. Buildings
5. Rocks

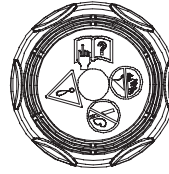
These are just a few examples of situations when caution must be used when operating on a slope. There are many other possibilities too numerous to mention. Just remember to always exercise extreme caution when operating on any slope.

- ▲ **When operating on terrain where there is a potential for a roll over, it is important that a ROPS be installed on the equipment. The ROPS will minimize chance of injury or death from rollover. Seat belt must be fastened while operating a machine equipped with ROPS. Failure to use seat belt will result in serious injury in the event of a roll over.**
- ▲ **Clean flammable material from machine. Prevent fires by keeping engine compartment, battery, hydraulic lines, fuel line, fuel tank and operator's station clean of accumulated trash, grass clippings, and other debris. Always clean up spilled fuel and oil.**
- ▲ Specific safety warning decals are located on the equipment near the immediate areas of potential hazards. These decals should not be removed or obliterated. Replace them if they become non-readable.

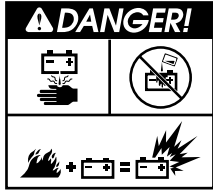
The following illustrations show the various **safety decals** that are located on the machine. A brief explanation is shown to help the operator understand the meanings of these decals.



Read Owner's Manual and Quick Reference Decal before attempting to operate this machine.



Do not smoke while refueling.
Do not fill tank with engine running, or while the engine is hot.
Allow engine to cool before storing machine inside a building.
Store away from open flame or spark if there is fuel in tank.
Clean up any gasoline spills.
Do not refuel while in enclosed trailer or other enclosed areas



Avoid skin contact with battery acid. Always wear eye protection when checking the battery, acid can cause serious injury to skin and eyes. If contact occurs, flush area with clean water and call physician immediately. Acid will also damage clothing.
Do not allow open flame near the battery when charging.
Hydrogen gas forms inside the battery. This gas is both toxic and flammable and may cause an explosion if exposed to flame. Always remove the negative ground first and replace it last.
Do not overfill battery.
Electrolyte may overflow and damage paint, wiring or structure. When cleaning the battery, use soap and water. Be careful not to get soap and water into the battery. Use soda mixed in water to clean corrosion off the terminals.



Hydraulic fluid escaping under pressure can penetrate skin. Hydraulic fluid may also cause infection in a minor cut or opening in the skin; if exposed to hydraulic fluid, see a doctor at once.
Before applying pressure to hydraulic system, make sure all connections are tight and all hoses and lines are in good condition.
Relieve all pressure in the system before disconnecting or working on hydraulic lines.
To find a leak under pressure, use a piece of cardboard or wood – never use your hands.
To relieve all pressure in system, turn engine off and lower attachment.



Do not remove or modify stabilizer wheels or injury can result. Never stop suddenly while backing down slopes. This action may result in a reaction of the tractor that can cause serious physical injury.



Keep shields or covers in place while machine is in operation. Keep hands away from rotating pulleys and belts.



Never operate the mower deck with side deflector removed or in raised position, except when the grass catcher attachment is being used.



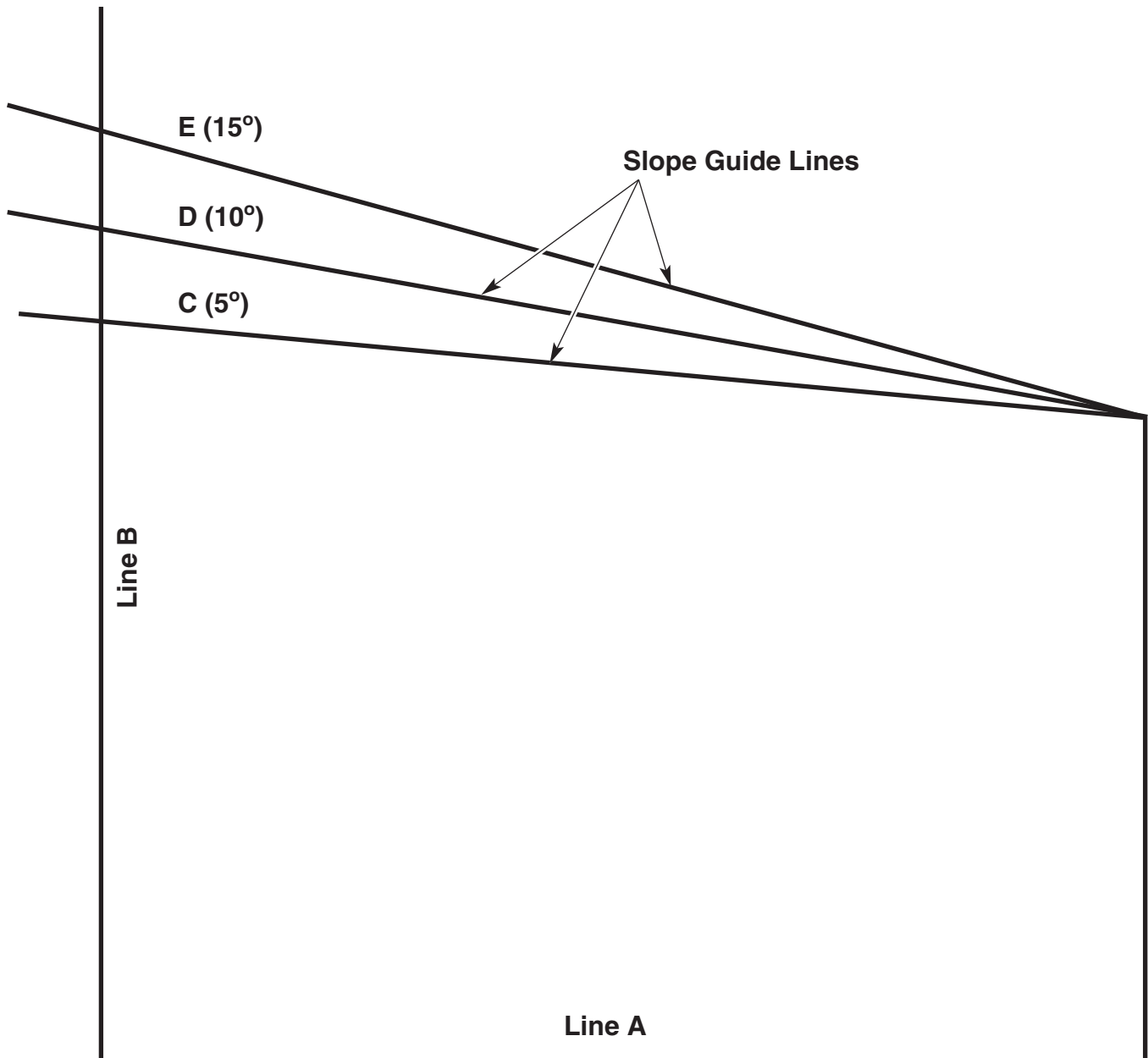
Whirling blades! Keep hands and feet away. Beware of thrown objects.



Hot surface!

SLOPE GUIDE

Use this diagram when determining the degree of slope to be mowed.



1. Hold this sheet of paper in front of you. Make sure that line A is horizontal.
2. Align line B with a verticle surface such as a pole, tree or building.
3. Fold the paper along the slope guide lines (C, D or E).
4. Align the closest slope guide line with the ground slope. This will give you a close estimation of the ground slope to be mowed.

Figure 2-1

OPERATION

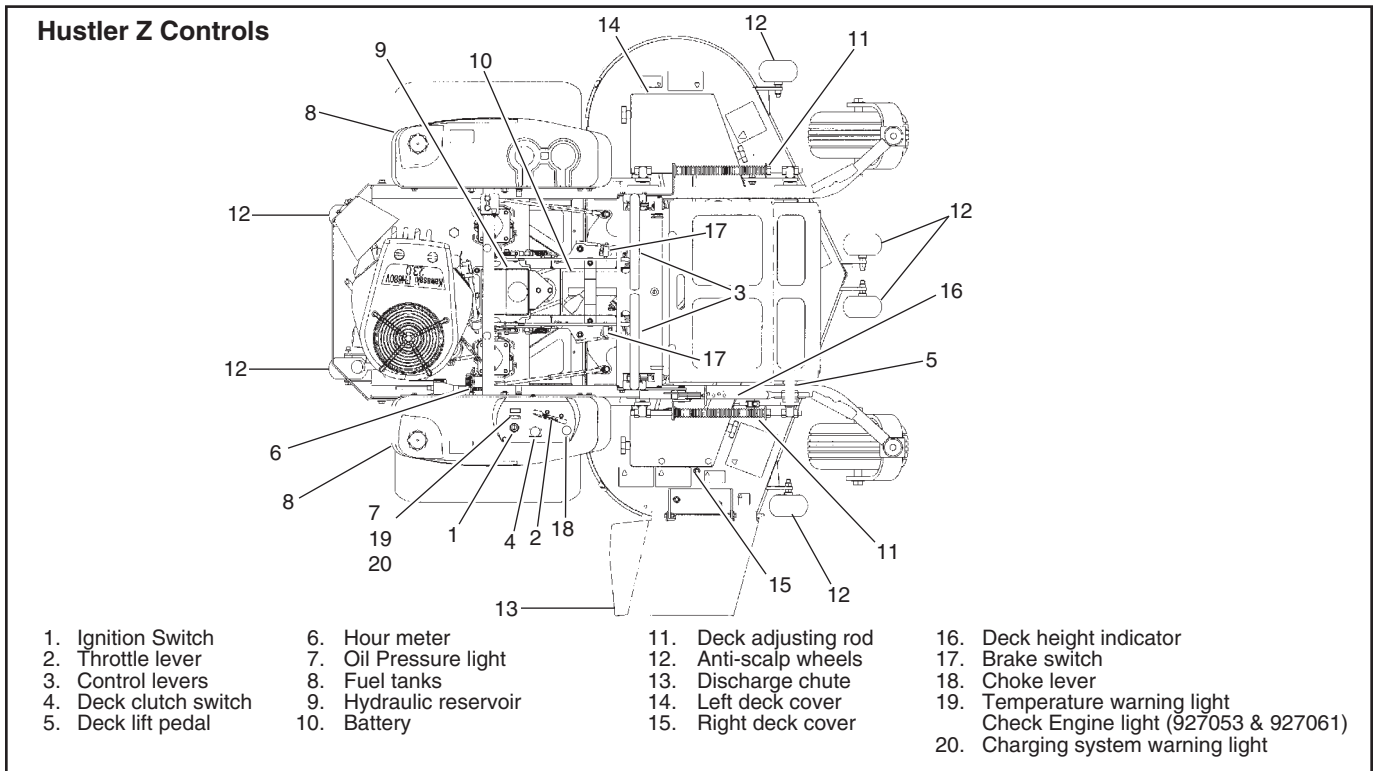


Figure 3-1

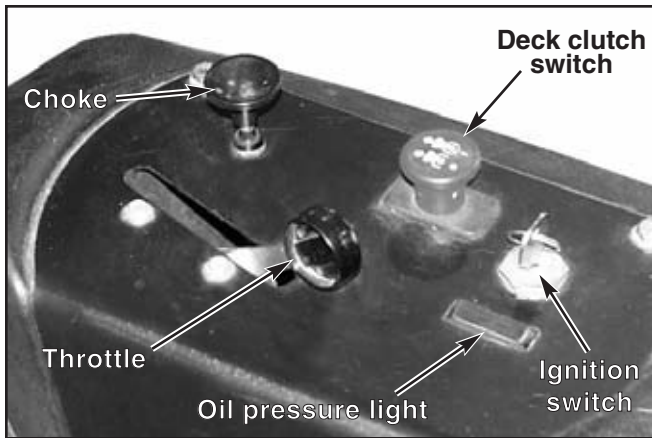


Figure 3-2a

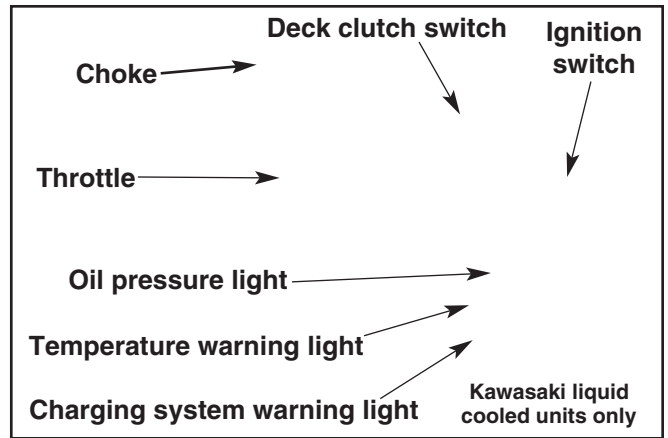


Figure 3-2c

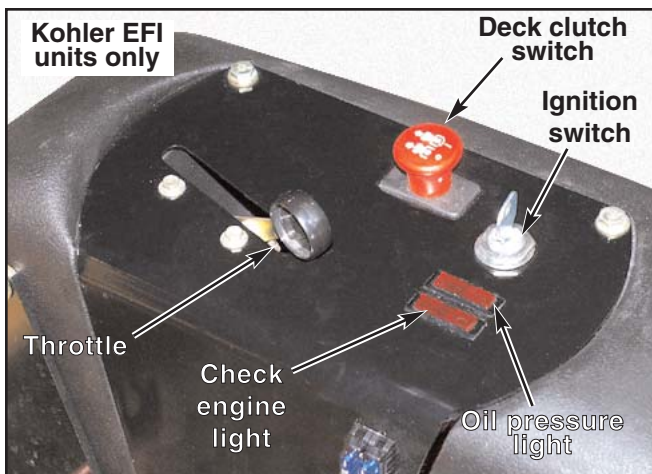


Figure 3-2b

IMPORTANT: When access is required under the seat platform make certain to place the control arms in the park brake position and pivot the arm rests upward before placing the seat platform in the full forward position to prevent arm rest damage.

Controls

For general location of the controls described in this section, refer to Figure 3-1.

- 1. Ignition switch (Fig. 3-2a - 3-2b - 3-2c)** – a three position switch: off, run, and start. With key inserted, rotate it clockwise to START position; release key when engine starts, and switch will automatically return to the RUN position.
- 2. Throttle control (Fig. 3-2a - 3-2b - 3-2c)** — a cable is linked to engine throttle for controlling engine speed.

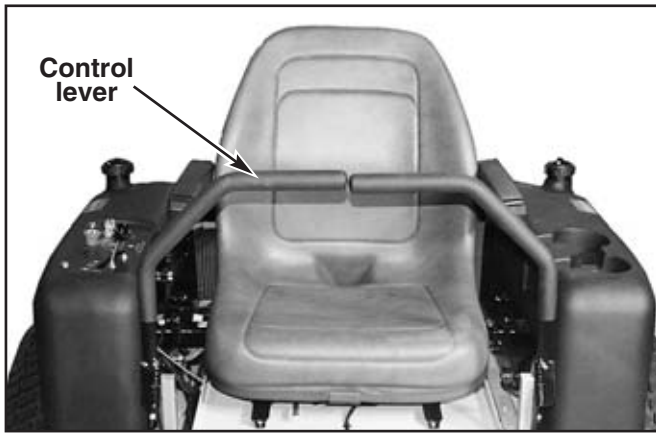


Figure 3-3

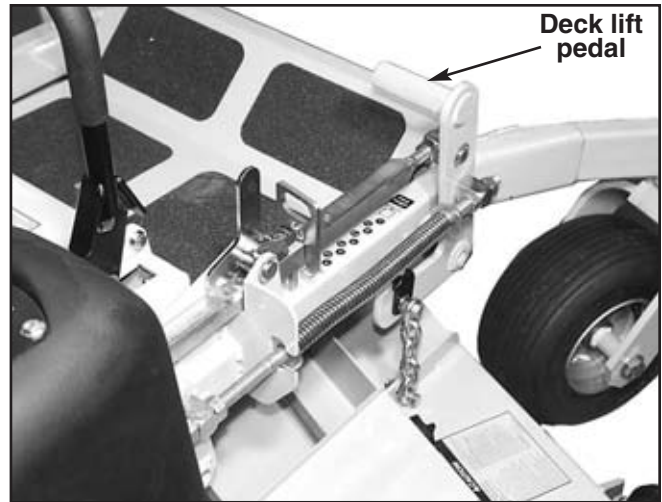


Figure 3-5



Figure 3-4



Figure 3-6

Move lever forward to increase engine rpm, move lever rearward to decrease engine rpm.

3. **Choke control (Fig. 3-2a)** – a cable is linked to manually operate the engine choke. When the lever is in the down position, the choke is in the off (run) position. When the lever is pulled up, the choke is in the on (start) position. **Do not** operate the machine in the on (start) position. **NOTE:** The choke control is not used on Models 927053, 927061, 928010, 928028 & 928036.
4. **Control levers (Fig. 3-3)** — these levers control the tractor's speed, direction, neutral lock, and park brake. Levers are used to steer, accelerate, decelerate and change direction. When the control levers are in the park brake position (3-4) the tractor will not move when the engine is on and drive pumps are operating.



WARNING: The parking brake is not designed to hold the tractor on steep slopes.

5. **Deck clutch switch (Fig. 3-2a - 3-2b)** — this switch engages the deck. Pull the switch up to engage and push switch down to disengage the clutch. **IMPORTANT:** Never engage clutch with engine running at high rpm or when the deck is under load. Clutch, belts or deck could be damaged.
6. **Deck lift pedal (Fig. 3-5)** — the deck lift pedal is used to raise or lower the deck. Push on the pedal to raise the deck and then place the deck height locking pin into the desired cutting height hole. Push the deck lift pedal to raise the deck when going over obstructions.

Instrumentation

7. **Electronic hour meter (Fig. 3-6)** — registers 1/10 hour increments up to 9,999.9 total hours. Connected to the ignition switch, the meter records the accumulative time while the ignition key is switched to the RUN position and the operator is on the seat.
8. **Oil pressure light and alarm (Fig. 3-2a - 3-2b)** — this light comes on when the ignition switch is placed in the RUN position and stays lit until the engine is running and a safe oil pressure is developed. If light comes on during operation, shut engine off immediately and locate and correct the problem. **Models 927558, 927566, 927921, 927939, 927947 & 927954 only** — an audible alarm will sound when the engine oil pressure drops below normal operating pressure.
9. **Check engine light (Fig. 3-2b)** — refer to Kohler engine owner's manual for details.
10. **Temperature warning light and alarm (Fig. 3-2c)** — this light will come on when the engine coolant temperature reaches an unsafe level during operation. If light comes on, shut down the machine as soon as possible. Never risk continued operation when light remains on; high temperatures can severely damage the engine. Never risk continued operation when light remains on; high temperatures can severely damage the engine.

Models 927558, 927566, 927921, 927939, 927947 & 927954 only — an audible alarm will sound when the engine coolant is close to overheating.

Safety interlock system

The tractor is equipped with a safety interlock system consisting of the park brake switches, seat switch, and deck clutch switch.

Check tractor safety start interlock system daily, prior to operation. This system is an important tractor safety feature. It should be repaired immediately if it malfunctions. The machine incorporates a separate seat switch which will stop the tractor engine when the operator is unseated for any reason while the tractor is operating. This is a safety feature designed to prevent runaway or accidental entanglement. To inspect the system:

1. The operator must be on the seat when testing the seat switch.
2. Set both control levers in the park brake position.
3. Start the engine and allow it to warm up to operating temperature.
4. With the deck clutch switch down and the control levers in the park brake position, slowly raise off of the seat. **The engine should continue to run.**
5. With the deck clutch switch up and/or the control levers in the neutral position, slowly raise off of the seat. **The engine should stop.**
6. **If the engine fails to stop** when the deck clutch switch is up or one or both of the control levers is up and the operator is off the seat, check the function of the seat switch. If the seat switch is not operating properly (**is not opening or closing**) and if the cause can not be determined, replace the seat switch.

If the problem can not be located, contact your Hustler Dealer.



WARNING: The safety interlock system should always function per steps 4 and 5. If it does not function properly, it should be corrected immediately. Do not operate machine without properly functioning seat safety switch.

Engine starting

The Hustler Z safety start interlock system is also designed to protect the operator and others from accidental injury due to unintentional engine starting. The engine starting motor will not engage until:

- A. Control levers are in the park brake position.
- B. Deck clutch switch is in the down (OFF) position.



WARNING: The safety interlock system must not be disconnected or bypassed.

NOTE: The operator's seat is equipped with a separate safety switch. If for any reason the operator should become unseated when the brake switches are disengaged or the deck clutch switch is engaged the engine will stop.

The following steps are the correct procedures for starting the engine. If difficulty is encountered, contact the

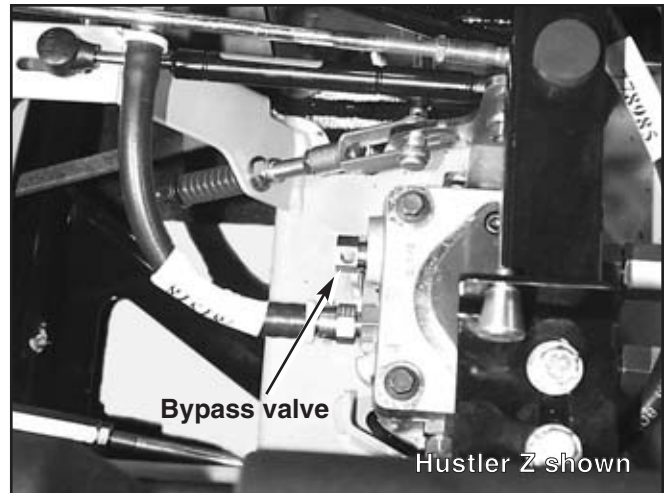


Figure 3-7

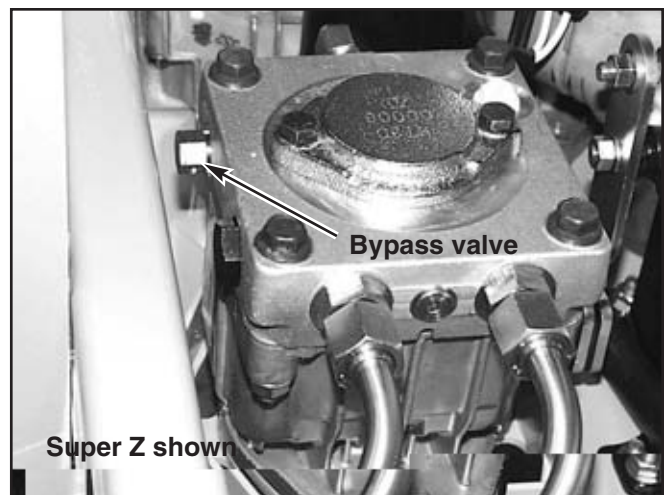


Figure 3-8

Hustler Dealer in your area.

1. Before starting tractor each day, perform daily pre-operation checking.
2. Make sure the control levers are in the park brake position and deck clutch switch is disengaged.
3. Use choke when engine is cold, or if warm engine fails to start within 5 seconds of cranking. Avoid flooding and operate engine without choking as soon as possible.

NOTE: There is no choke control on Models 927053, 927061, 928010, 928028 & 928036 proceed to Step 4.

4. Set throttle at approximately 1/2 open position.
5. Insert key in ignition switch and rotate full clockwise to engage starting motor. Release key when engine starts.

IMPORTANT: The engine starter should not be operated for periods longer than 30 seconds at a time. An interval of at least two minutes should be allowed between such cranking periods to protect the starter from overheating and burn-out.

6. Perform test to make sure safety start interlock system is operating properly. Refer to Safety start interlock system section.
7. As soon as engine begins to run, check to make certain the oil warning light is off. If not, stop engine

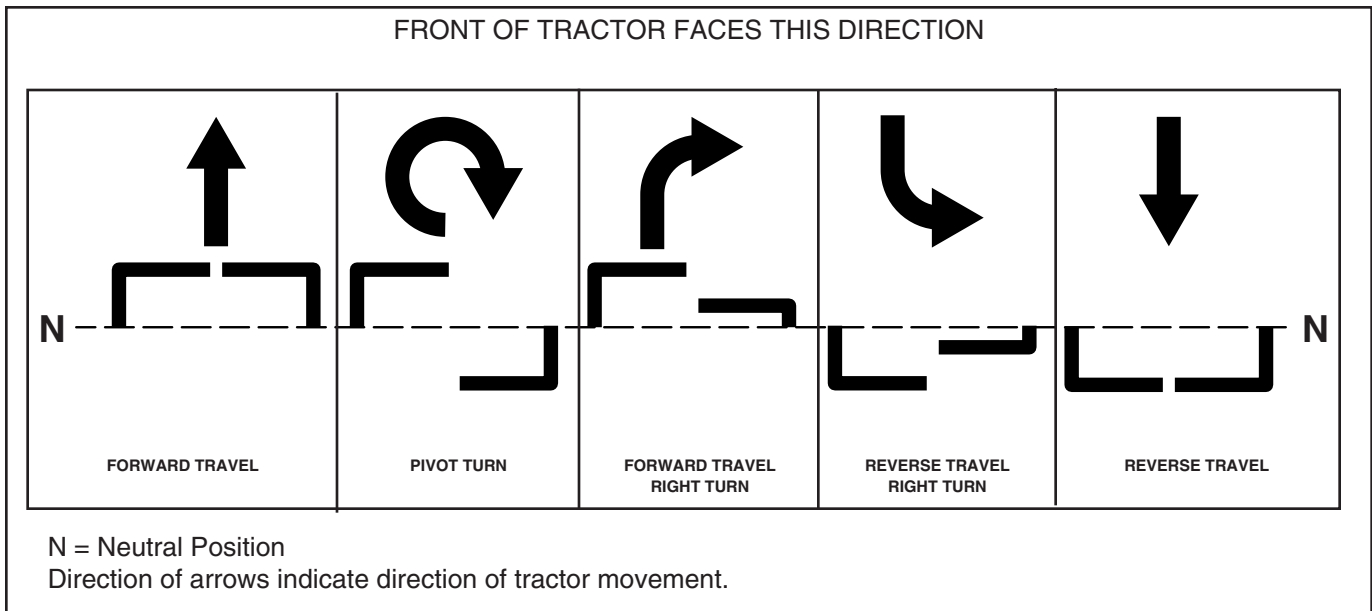


Figure 3-9

- immediately and check for the cause.
8. Allow the engine to idle a few minutes before advancing the throttle and/or engaging the deck clutch.
 9. Before stopping the engine, place the control levers in the park brake position, disengage the deck clutch, and throttle back to low idle for a couple of minutes; then rotate ignition key counter-clockwise to the OFF position. Remove the key from switch before leaving the tractor.

WARNING: Never leave the machine unattended with key in ignition switch.

Moving tractor with stalled engine

If it becomes necessary to move the tractor when the engine is inoperative, the hydraulic pumps are equipped with bypass valves. Before moving the unit, turn bypass valves counter clockwise one-half to one revolution. The valve stems on each hydraulic pump are located near the top and are identified as a hex stud. The valve is located per Figure 3-7 on the Hustler Z or Figure 3-8 on the Super Z.

Do not tow the machine. Move it by hand or use a winch to load on a trailer for transporting.

When transporting on another vehicle, the tractor should be facing forward and it must be secured.

IMPORTANT: Always make certain the two bypass valves are returned to their operating position before running the tractor following repairs.

Driving the tractor



DANGER: Never make sudden stops or reverse direction, especially when going down a slope. The steering is designed for sensitive response. Rapid movement of the control levers in either direction could result in a reaction of the tractor that can cause serious injury.

After starting engine, engage the control levers and steer as follows:

To go forward, push control levers forward an equal distance (Fig. 3-9).

To go in reverse, pull control levers rearward an equal distance (Fig. 3-9).

To turn left, move the right control lever farther forward from neutral than the left control lever.(Fig. 3-9)

To turn right, move the left control lever farther forward from neutral than the right control lever. (Fig. 3-9)

To pivot turn, move one control lever forward and the other control lever back of neutral. This will allow the drive wheels to counter-rotate. (Fig. 3-9)

To stop or decrease speed, move control levers to neutral. When going forward pull back gently on control levers. When going in reverse push forward gently on control levers.

DANGER: When moving in the rearward direction push forward gently on control levers and avoid sudden movement. Any sudden movement could cause the front of the mower to come off of the ground resulting in possible loss of control.

WARNING: Never stop suddenly while backing down slopes. This action may result in a reaction of the tractor that can cause serious physical injury.

To increase speed, increase control lever's distance from neutral. The farther forward control levers are from neutral, the faster tractor will travel forward. The farther back control levers are from neutral, the faster tractor will go in reverse.

Operating suggestions



DANGER: Prior to operating the tractor the operator should be thoroughly familiar with the proper use and operation of the equipment, should read the manual completely and thoroughly, and should have attempted slow moving maneuvers to become familiar with the operation of the equipment before attempting normal speed operation. An inexperienced operator should not mow on slopes or on uneven terrain.



WARNING: If you lose steering control while operating the machine, place the steering control levers in the park brake position immediately. Inspect the machine and involve your Hustler dealer to resolve the problem before continuing to operate.



WARNING: The unit's control levers are very responsive: **Easy does it!** For smooth operation, move lever slowly, avoid sudden movement. Skill and ease of operation come with practice and experience.



WARNING: Children or bystanders may be injured if they move or attempt to operate the tractor while it is unattended. Always disengage deck clutch, place control levers in park brake position, stop tractor engine, and remove ignition key when leaving operator's seat.

Inexperienced operators may have a tendency to oversteer and lose control. Slow-moving practice maneuvers are recommended to become familiar with these characteristics before attempting normal speed operation.



WARNING: Sharp depressions or raised obstacles (such as gutters or curbs) should not be directly approached at high speed in an attempt to "jump" them as the operator could be thrown from the equipment. Approach at a slow speed and angle one drive wheel at the obstruction. Continue at an angle until the wheel clears and then pivot the opposite wheel around.

When turning on soft wet turf, keep both wheels rolling either forward or backward. Pivoting on one stopped wheel can damage turf. This is especially important when mowing.

Tractor performance is maximum when the throttle is set at full rpm. This gives maximum power to the drive wheels and deck when needed. Use the control levers to control ground speed rather than engine rpm.



WARNING: Do not operate the equipment while wearing sandals, tennis shoes, sneakers, shorts or any type of loose fitting clothing.

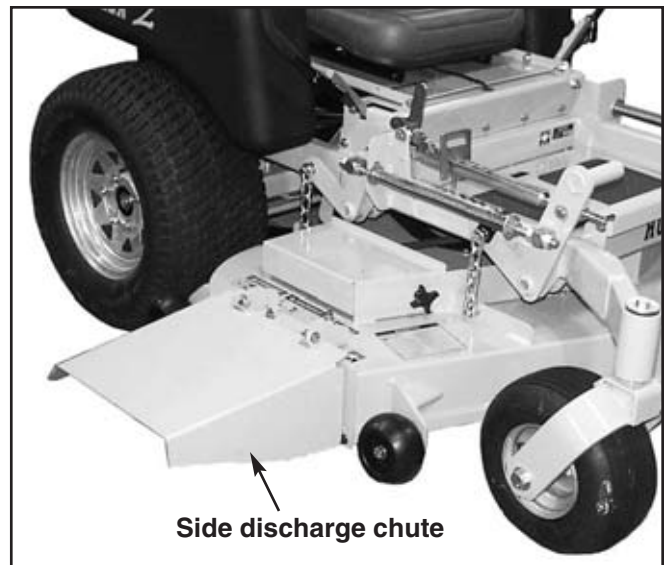


Figure 3-10

Always wear long pants, safety glasses and safety shoes when operating this machine.

Keep blades sharp. Many professional mowing companies have additional sets of blades and change blades twice a day: once in the morning and again at noon. **Many problems** with incorrect cutting patterns **are due to dull blades** or blades which have been **sharpened incorrectly**. Information on sharpening blades is listed in this manual's maintenance section. In addition, most communities have individuals or companies which specialize in sharpening mower blades. **Blade sharpness should be checked daily.**

Use high blade speed. Your Hustler Z is designed to operate at full throttle. The throttle setting directly controls blade speed. The highest blade speed generally gives best cut.

Direct grass discharge to right, away from unmown area. Select a mowing pattern that directs grass discharge towards the outside, not towards center, of mowing area. Generally, this means using a pattern utilizing **left turns** because side discharge (Fig. 3-10) is to **right**. In any case, avoid throwing grass discharge onto unmowed area because grass is then mowed "twice". Mowing twice puts an unnecessary load on the unit and reduces mowing efficiency.

When mowing a lawn for the first time cut grass slightly longer than normal to avoid scalping uneven terrain. When possible, it is best to use the cutting height that was used in the past. When cutting grass taller than six inches, you may want to mow the lawn twice to achieve a better quality of cut.

During normal mowing cut only about 1/3 of the grass blade. Cutting more than that is not recommended unless grass is sparse or it is the end of the mowing season.

Alternate mowing direction to keep the grass growing straight and better dispersion of the clippings.

Remember, grass grows at different rates at different time of the year. Mow more often in the early spring to maintain the same cutting height. As the growth rate slows in mid summer, mow less frequently. If you cannot mow at a regular interval, mow at a high cutting height; then mow

again two days later at a lower cutting height.

Raise the cutting height of the mower if the cutting width of the mower is wider than the previous mower. This ensures that uneven turf is not cut too short.

Raise the cutting height of the mower if the grass is slightly taller than normal or if it contains a high degree of moisture. Then mow it again with the cutting height set lower.

If the machine's forward motion must be stopped while mowing, a clump of grass clippings may drop onto your lawn. To avoid this, move onto a previously cut area with the blades engaged.



WARNING: Never direct discharge of material from mower deck towards bystanders.



WARNING: Never operate the mower deck with discharge chute removed or in raised position.



WARNING: Always check area to be mown for rocks and other debris before mowing.

Mower deck operation



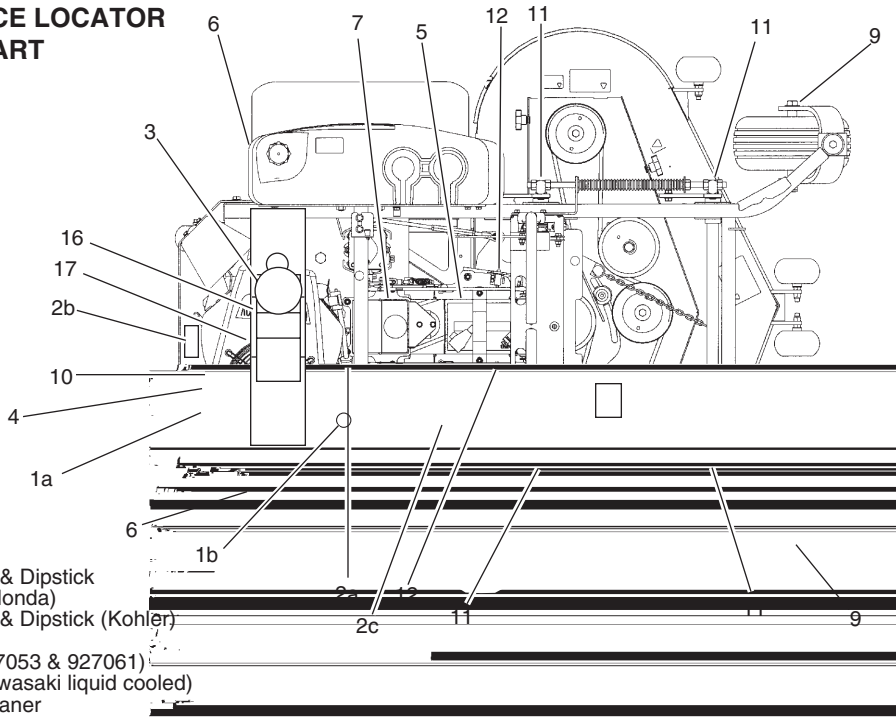
DANGER: Never attempt to make any adjustments to the mower deck while the engine is running or with the deck drive clutch engaged. Mower blades cannot be seen and are located very close to deck housing. Fingers and toes can be cut off instantly.

With the engine running, engage the deck clutch switch (Fig. 3-2) and advance engine throttle to full rpm.

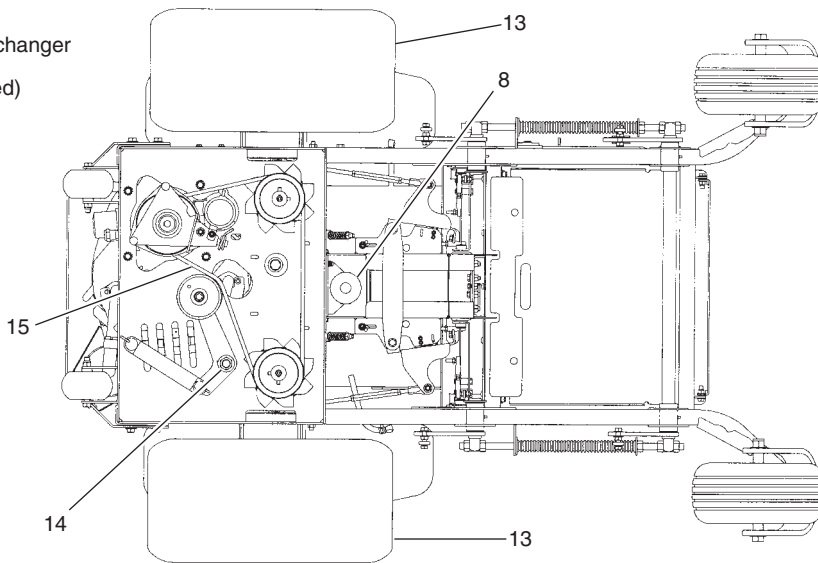
NOTE: Engaging the deck clutch at high engine rpm or when under heavy load (in tall grass for example) can cause belts and/or electric clutch to slip, resulting in premature wear or possible damage.

MAINTENANCE

MAINTENANCE LOCATOR CHART



- 1a. Engine Oil Fill & Dipstick (Kawasaki & Honda)
- 1b. Engine Oil Fill & Dipstick (Kohler)
- 2a. Fuel Filter
- 2b. Fuel Filter (927053 & 927061)
- 2c. Fuel Filter (Kawasaki liquid cooled)
- 3. Engine Air Cleaner
- 4. Engine Oil Drain Plug
- 5. Battery
- 6. Fuel Tanks
- 7. Hydraulic Oil Reservoir
- 8. Hydraulic Oil Filter
- 9. Gauge Wheel Bearing Zerk (2)
- 10. Engine Oil Filter
- 11. Deck Height Pivot Zerk (4)
- 12. Park Brake Switch
- 13. Drive Tire
- 14. Pump Idler Zerk (1)
- 15. Pump Belt
- 16. Hydraulic Oil Heat Exchanger
- 17. Engine Coolant Fill (Kawasaki liquid cooled)

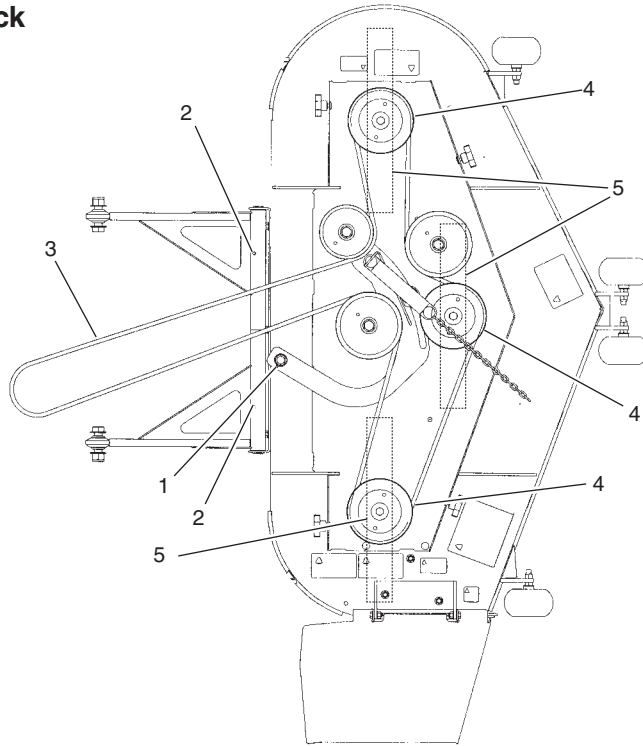


Viewed from bottom of tractor

Figure 4-1a

**MAINTENANCE LOCATOR
CHART**

Side discharge deck



- 1. Deck Idler Zerk (1)
- 2. Deck Pusher Arm Zerks (2)
- 3. Deck Belt
- 4. Spindle Housing Zerk (3)
- 5. Blades

Rear discharge deck

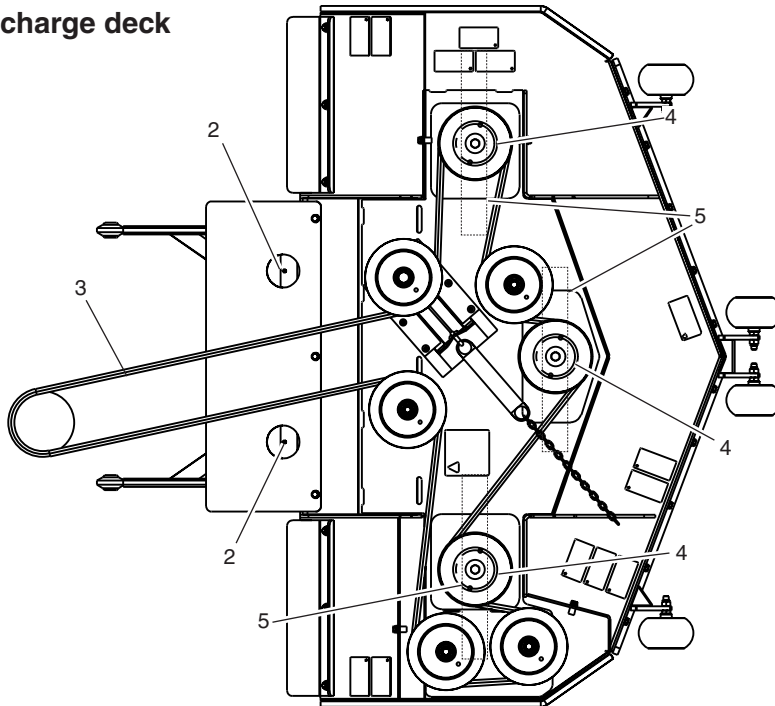
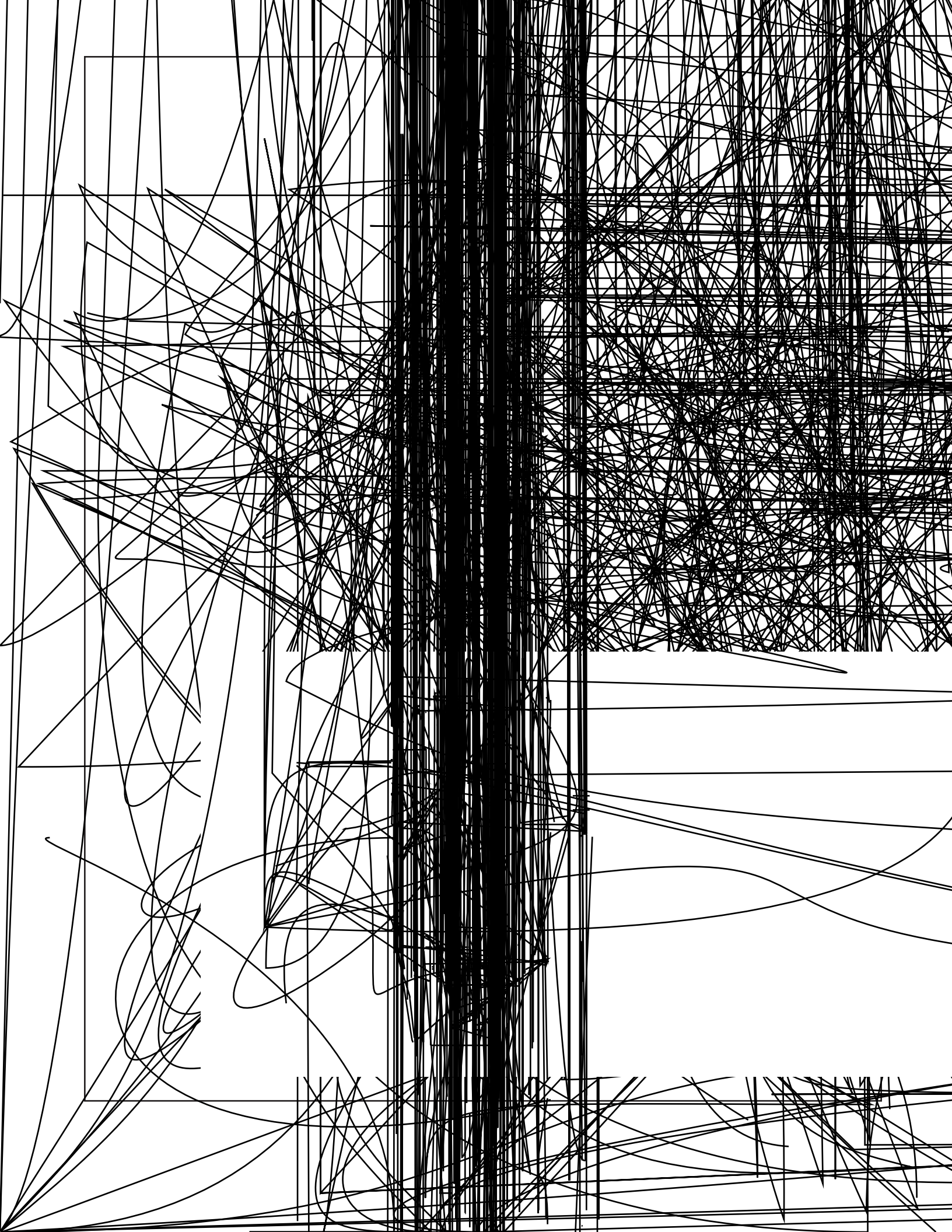


Figure 4-1b



SERVICE AT INTERVALS INDICATED	WEEKLY OR 50 HOURS	MONTHLY OR 100 HOURS	ANNUALLY OR 500 HOURS
Verify safety start interlock system			Daily
Check coolant level			Daily
Visually inspect unit for loose hardware and/or damaged parts			Daily
Visually inspect tires			Daily
Check oil level, engine (1)			Daily or every 4 hrs.
Clean air intake screen (5)			Daily or every 4 hrs.
Clean oil heat exchanger (5)			Daily or every 4 hrs.
Check radiator screen (5)			Daily or every 4 hrs.
Check fuel level			Daily
Blades - sharpen & securely fastened			Daily
Discharge chute - securely in place & in lowest position			Daily
Clean engine and pump compartment			Daily
Replace air cleaner paper element (5)			As needed
Grease deck idler	x		
Grease deck pusher arms	x		
Grease pump idler	x		
Grease deck height pivots	x		
Grease gauge wheel bearings	x		
Change engine oil & filter (1) (4)	x		
Clean cylinder and head fins (a)	x		
Check battery connections	x		
Check tire pressure with a gauge	x		
Check hydraulic oil level	x		
Clean engine exterior (a)	x		
Clean and regap spark plugs (a)		x	
Check pump and deck belt tension & condition (6)		x	
Check fuel and hydraulic lines (7)		x	
Check fuel valve and grommet (7)		x	
Tighten lug nuts on wheels (2)		x	
Change fuel filter			x
Clean or replace hydraulic fill cap			x
Change hydraulic filter and oil (3)			x
Grease deck spindle housings			x
Replace spark plugs			x
Drain & replace engine coolant			x
Clean radiator core (9)			x

NOTES:

1. Initial oil change is after 5 hours of operation. Thereafter, change oil after every 40 hours operation. Change more often under dusty or dirty conditions and during hot weather periods.
2. Torque initially and after first 2 hours of operation.
3. Perform initial hydraulic filter change after 50 hours (one week) of operation.
4. Change engine oil filter per the engine manufacturer's recommendations. Refer to Engine Owner's Manual for recommendations and other maintenance items.
5. Service more often under dusty or dirty conditions. Use caution when servicing to prevent dust contamination in the engine. **Do not** clean filter element. Replace with a new one.
6. **Pump drive belt only - Inspect every 100 hours** and replace if worn or cracking is noticed. Otherwise, **replace every 400 hours or 2 years** whichever comes first.
7. Check fuel line hoses, fuel valve and grommet for any cracks or leaks.

REFERENCES:

a — Refer to Engine Owner's Manual

NOTE: After completing maintenance cycle (500 hours), repeat cycle.

Introduction



WARNING: Unless specifically required, **DO NOT** have engine running when servicing or making adjustments to tractor. Place control levers in the park brake position, disengage deck clutch, and remove ignition switch key. Repairs or maintenance requiring engine power should be performed by trained personnel only. To prevent carbon monoxide poisoning, be sure proper ventilation is available when engine must be operated in an enclosed area. Read and observe safety warnings in front of manual.



DANGER: Before working on or under the deck, make certain engine cannot be accidentally started. Shut engine off and remove ignition switch key for maximum safety. Repairs or maintenance requiring engine power should be performed by trained personnel only.



DANGER: Exercise caution when working under the deck as the mower blades are extremely sharp. Wearing gloves is advisable when working around or with the blades.



WARNING: Except when changing or checking belt, **always** keep belt covers on mower for safety as well as cleanliness.



WARNING: When possible clean under mower, using a stick or similar instrument making sure that no part of the body, especially arms and hands are under mower.

Regular maintenance is the best prevention for costly downtime or expensive, premature repair. The following pages contain suggested maintenance information and schedules which the operator should follow on a routine basis.

Remain alert for unusual noises, they could be signaling a problem. Visually inspect the machine for any abnormal wear or damage. A good time to detect potential problems is while performing scheduled maintenance service. Correcting the problem as quickly as possible is the best insurance.



WARNING: Keep your machine clean and remove any deposits of trash and clippings, which can cause engine fires and hydraulic overheating as well as excessive belt wear.

Clear away heavy build-up of grease, oil and dirt, especially in the engine and hydraulic reservoir area; minute dust particle are abrasive to close-tolerance engine and hydraulic assemblies.

Daily inspect mower for grass clippings and wire and string tangles. The underside of the mower deck will collect a build-up of grass clippings and dirt, especially when grass is wet or has high moisture content. This build-up will harden, restricting blade and air movement and will probably show a poorer quality of cutting. Therefore it should be removed routinely.

To do this it will be necessary to raise and block the deck in the full up position and scrape the build-up from underneath.

Some repairs require the assistance of a trained service mechanic and should not be attempted by unskilled personnel. Consult your Hustler service center when assistance is needed.

Torque values

WARNING: Particular attention must be given to tightening the drive wheel lug nuts, wheel motor nuts, and blade spindle bolts. Failure to correctly torque these items may result in the loss of a wheel or blade, which can cause serious damage or personal injury.

Torque values given below:

	Ft-lbs.	Nm
Wheel (lug) nuts	65-75	88.14-101.7
Wheel motor nut (Hustler Z)	350-375	474.6-508.5
Wheel motor nut (Super Z).....	290-310	393.2-420.4
Blade spindle bolt top	65-75	88.14-101.7
Blade spindle bolt bottom (spindle with blade saddle).....	65-75	88.14-101.7
Blade spindle bolt bottom (spindle without blade saddle)	118	160.0

It is recommended that these be checked after the first 2 hours of operation, initially and every 50 hours following removal for repair or replacement.

For all other torques refer to the tractor parts manual for standard torque chart.

For engine torque values, see engine owner's manual.

Tires

It is important for level mowing that the tires have the same amount of air pressure. The recommended pressure are:

Drive wheels.....	8-10 psi
Gauge wheels	8-10 psi

Solid fill tires are not recommended for Hustler turf equipment. On any machine, with solid filled tires, the warranty claim will be denied.

WARNING: Explosive separation of a tire and rim can cause serious injury or death.

Do not attempt to mount a tire without the proper equipment and experience to perform the task.

Always maintain the correct tire pressure and never over inflate.

Never weld or heat a wheel and tire assembly as an explosion may occur. Welding can weaken or deform a wheel.

When inflating tires stand to one side and **not** in front of or over the tire assembly.

Check tires for low pressure, blemishes, damaged rims or missing lug bolts and nuts.

Hour meter

To recognize when your machine needs servicing, check the hour meter and the maintenance schedule. The hour meter shows the number of hours the engine has run and the maintenance schedule lists the service intervals. Fig. 4-2

Lubrication

1. Grease the front gauge wheel bearings per the Maintenance Schedule. Use SAE multi-purpose grease.
2. Grease the four deck lift pivots, located to the side of the operator's footrest per the Maintenance Schedule. Use SAE multi-purpose grease.
3. Grease the deck idler per the Maintenance Schedule. Use SAE multi-purpose grease.
4. Grease the pump idler per the Maintenance Schedule. Use SAE multi-purpose grease.
5. Grease the two deck pusher arm pivots per the Maintenance Schedule. Use SAE multi-purpose grease.
6. Grease the blade spindle assemblies per the Maintenance Schedule. The spindle assemblies require lubrication annually. Each spindle shaft is equipped with a grease zerk located under the deck. Use no more than one or two ounces of SAE multi-purpose grease, (1 to 2 pumps on an average grease gun). Do not force lubricant in to grease zerks. Bearings are sealed and do not require much lubricant.

Electrical system

The electrical system is a 12 volt, negative ground. Recommended battery size is a garden tractor BCI group U1R with 225 or better cranking AMP rating. A maintenance-free battery is recommended. Otherwise, follow battery manufacturer's maintenance, safety, storing and charging specifications.

The battery is located under the seat. Fig. 4-3

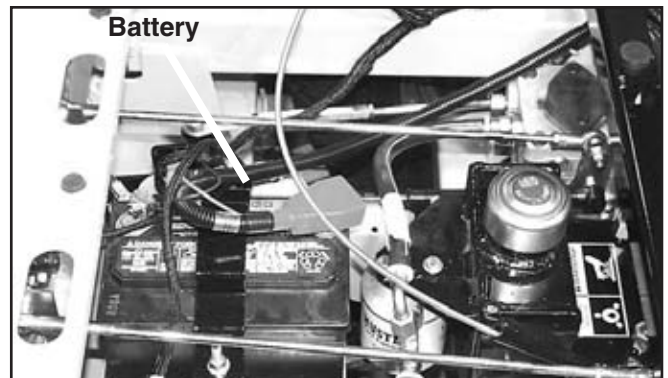


Figure 4-3



WARNING: Battery posts, terminals, and related accessories contain lead and lead compounds, chemicals known to cause cancer and reproductive harm. Wash hands after handling.



WARNING: Avoid skin contact with battery acid.

Always wear eye protection when checking the battery, acid can cause serious injury to skin and eyes. If contact occurs, flush area with clean water and call physician immediately. Acid will also damage clothing.

Do not allow open flame near the battery when charging.

Hydrogen gas forms inside the battery. This gas is both toxic and flammable and may cause an explosion if exposed to flame. Always remove the negative ground first and replace it last.

Do not overfill battery.

Electrolyte may overflow and damage paint, wiring or structure. When cleaning the battery, use soap and water. Be careful not to get soap and water into the battery. Use soda mixed in water to clean corrosion off the terminals.



WARNING: Shorts caused by battery terminals or metal tools touching metal tractor components can cause sparks. Sparks can cause a battery gas explosion which will result in personal injury.

Prevent the battery terminals from touching any metal tractor parts when removing or installing the battery.

Do not allow metal tools to short between the battery terminals and metal tractor parts.



WARNING: Incorrect battery cable routing could cause damage to the tractor and battery cables. This can cause sparks which can cause a battery gas explosion which will result in personal injury.

Always **disconnect** the negative (black) battery cable before disconnecting the positive (red) cable.

Common circuit failures are usually caused by shorting, corroded or dirty terminals; loose connections, defective wire insulation or broken wires. Switches, solenoids and ignition components may also fail, causing a shorted or open circuit.

Before attempting any failure diagnosis of the electrical system, use a test light or voltmeter to check the battery voltage. If the battery voltage is satisfactory, check the cleanliness and tightness of the terminals and ground connections. A general understanding of electrical servicing and use of basic test equipment is necessary for troubleshooting and repair.

Major overhaul or repair of the starting motor or alternator should be performed by trained technicians only.

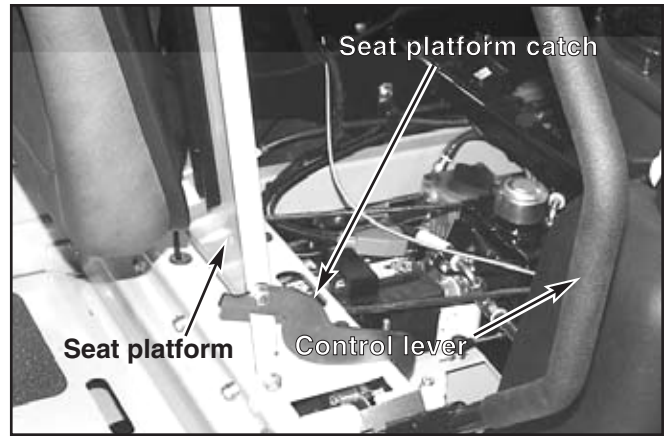


Figure 4-4

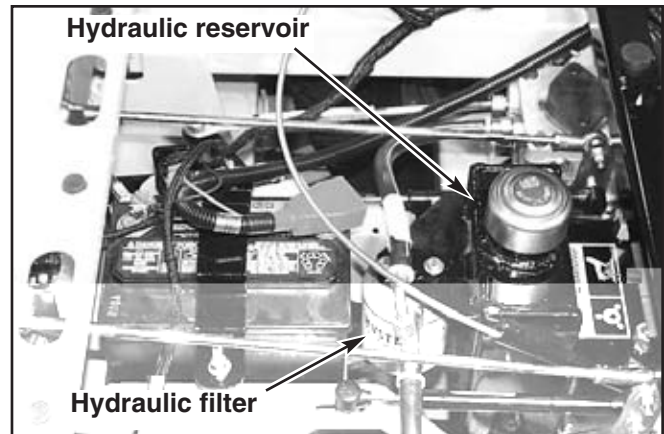


Figure 4-5

Access to engine and hydraulic pumps

The hydraulic pumps are accessed by lifting the seat platform. The seat platform is hinged at the front. To raise it, release seat latch and tilt seat platform up and forward. The seat platform catch (Fig. 4-4) will prevent the seat from going all the way over. However, if more access is desired under the seat platform, the seat platform catch can be raised allowing the seat to pivot more. **Make certain to place the control arms in the park brake position and pivot the arm rests upward before placing the seat platform in the full forward position to prevent arm rest damage.**



WARNING: Always wear adequate eye protection when servicing the hydraulic system and battery.

Hydraulic system

IMPORTANT: Never use hydraulic or automatic transmission fluid in this system; use only motor oil as specified. Remember, dirt is the primary enemy of any hydraulic system.



WARNING: Hydraulic oil escaping under pressure can penetrate skin. Hydraulic oil may cause infection in a minor cut or opening in the skin. If exposed to hydraulic fluid, see a doctor at once.

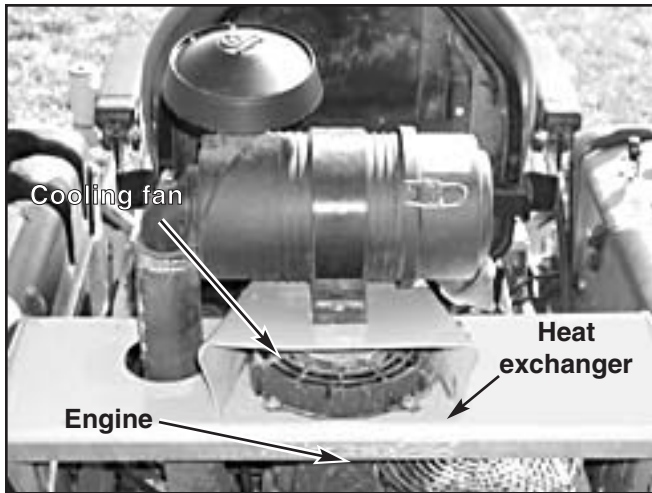


Figure 4-6



Figure 4-7

Before applying pressure to hydraulic system, make sure all connections are tight and all hoses and lines are in good condition. To find a leak under pressure, use a piece of cardboard or wood — **never** use your hands. Relieve all pressure in the system before disconnecting or working on hydraulic lines. To relieve pressure, lower all attachments and shut off engine.

The 1.0 U.S. gallon (3.79 liter) hydraulic reservoir is located in front of the engine and under the operator's platform. Fig. 4-5

Check oil level in hydraulic system after every 50 hours of operation or weekly, whichever occurs first. Check more often if system appears to be leaking or otherwise malfunctioning.

Fluid level should be 1" from top of reservoir. Use only SAE 10W40 SG, SF/CC, CD service motor oil.

Change hydraulic system filter element (Fig. 4-5) after first 50 hours of tractor operation, then replace filter and oil in reservoir every 500 hours thereafter. When changing hydraulic oil use 1/2 unit (approximately 3.5 oz.) of Lubrizol additive (Hustler P/N 027912). This additive, available from your Hustler dealer, will increase the performance life of the hydraulic system components.

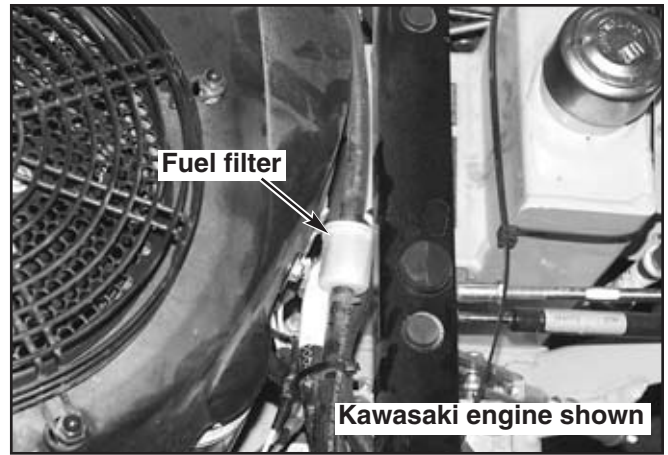


Figure 4-8

The system filter is located directly in front of the hydraulic reservoir. A standard oil filter wrench is used to change filter, threads are right handed. Use a **Hustler approved filter element only**.

IMPORTANT: Prefill the filter element with clean oil, before installing, to prevent drawing air into the system pump.

1. Fill the filter element with clean system oil. Smear a light coating of oil on upper surface of rubber seal.
2. Install the filter element on base. Tighten the oil filter by hand until the filter seal makes contact with the filter head, then tighten an additional 3/4 - 1 turn with an oil filter wrench. — **DO NOT OVERTIGHTEN**.
3. Start tractor engine and let run at approximately 2/3 throttle for a few minutes to work any trapped air out of the system before engaging the steering control lever.
4. Stop the engine and check the filter and connections for leaks.
5. Check the hydraulic reservoir for specified oil level. Add clean oil as necessary.

Clean or replace hydraulic reservoir cap annually. Cap may be cleaned by dipping in or flushing with cleaning solvent. Follow manufacturer's instructions and warnings for application of solvent type selected.

NOTE: The hydraulic pumps are equipped with bypass valves. For more information refer to Operation section, Moving tractor with stalled engine.

A hydraulic oil heat exchanger is installed on the Super Z. This heat exchanger is designed to keep hydraulic system oil temperature lower in hot operating conditions or heavy continuous operating conditions.

This hydraulic heat exchanger is located above the engine. Air is drawn across the cooling fins by an electric fan located above the heat exchanger. Fig. 4-6

Never force anything into the heat exchanger fins which may bend or distort them. For cleaning, use compressed air or pressurized water only.

Fuel system



WARNING: Observe usual fuel handling precautions; do not smoke while refueling, do

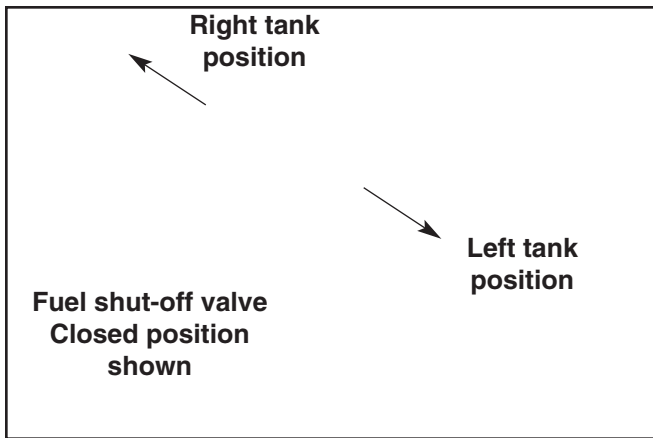


Figure 4-9a

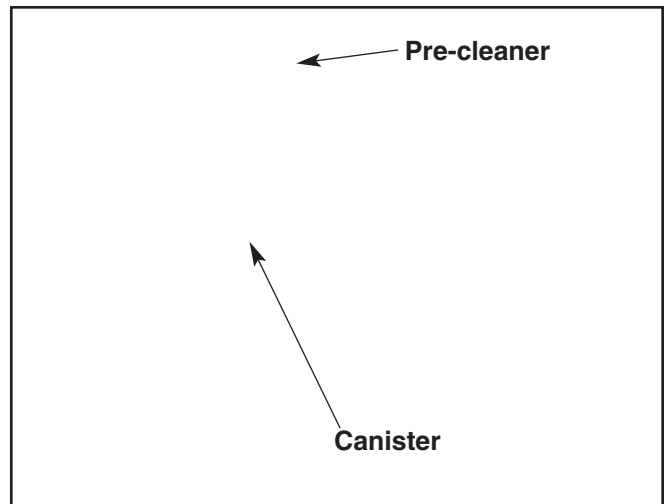


Figure 4-11

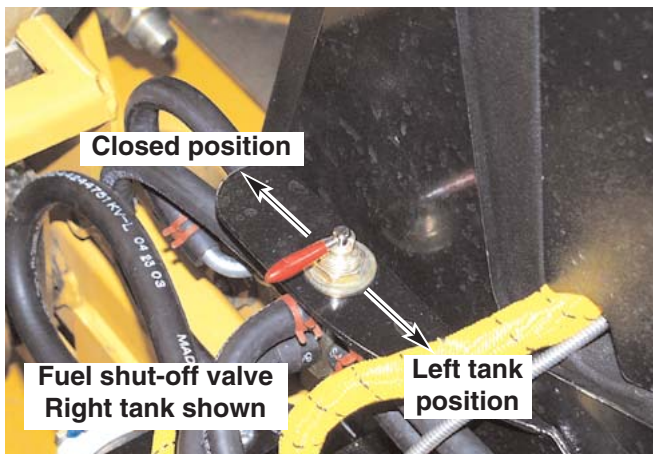


Figure 4-9b

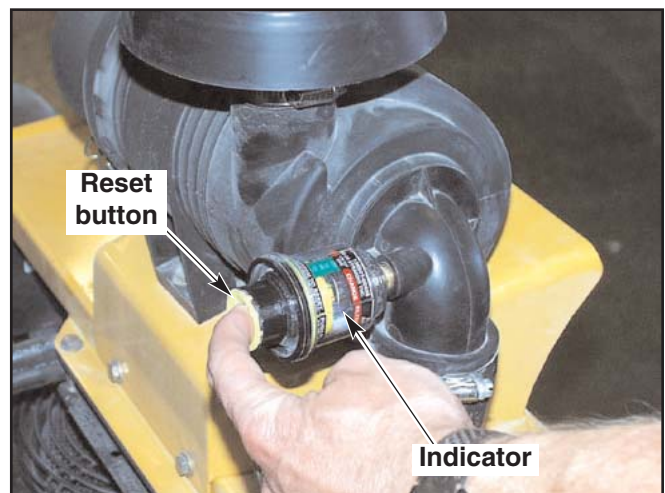


Figure 4-12

not fill tank with engine running or while engine is hot; allow engine to cool before storing machine inside a building, keep fuel away from open flame or spark and store machine away from open flame or spark if there is fuel in the tank. Read and observe safety precautions at front of this manual.



WARNING: Fuel System Under Pressure! The EFI fuel system operates under high pressure, and the fuel filter and fuel line used must be approved system components only. Use of

substitute parts can result in system failure, gasoline leakage and possible explosion.

The fuel tanks are located in the tractor's fenders. (Fig. 4-7) Total capacity for the fuel tanks is 15 U.S. gallon (56.8 liter)

Use regular unleaded gasoline with an octane rating of 87 or higher.

The fuel filter (Fig. 4-8) is installed in the fuel line between fuel tanks and engine fuel pump. Replace filter annually or after every 500 hours of operation, whichever occurs first.

When replacing the fuel filter, check the fuel line hoses and fuel shut-off valve grommet for any cracks or leaks. Replace as needed.

Hustler Z and Super Z tractors are equipped with a fuel shutoff valve located on the right fuel tank mount (Fig. 4-9a). Rotate the valve to the middle position (shown) to prevent fuel flow to the fuel pump. The forward position allows fuel to flow from the right fuel tank to the fuel pump. The rear position allows fuel to flow from the left fuel tank to the fuel pump. Close this valve to prevent fuel flow to the engine when servicing the fuel system or when transporting the unit on a trailer or truck.

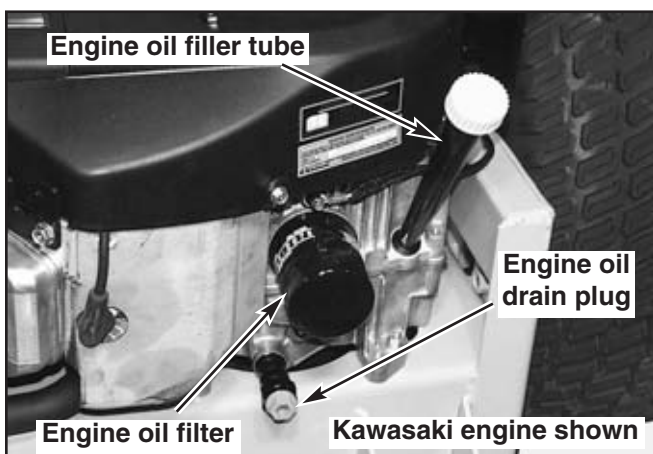


Figure 4-10

NOTE: Models 927053 & 927061 are equipped with a fuel shutoff valve located on the right fuel tank mount (Fig. 4-9b). Rotate the valve to the forward position to prevent fuel flow to the fuel pump. The middle position (shown) allows fuel to flow from the right fuel tank to the fuel pump. The rear position allows fuel to flow from the left fuel tank to the fuel pump.

Engine oil and filter

Check engine oil daily and after every 4 hours of operation. Crankcase dipstick and oil filler tube are located at the rear of the machine (Fig. 4-10). Tractor must be setting level when checking oil. Refer to engine manual and maintenance schedule for oil recommendation and capacities.

Change the engine oil and filter after the first 5 hours of operation, per the engine manufacturer's recommendations after that. If tractor is being operated in extremely dirty conditions, then it is recommended oil be changed more frequently.

The oil drain and oil filter are located at the rear of the engine. Fig. 4-10

Engine air filter

Perform engine air filter maintenance per the Service Interval chart on page 4-2.

A specially designed dry filter is standard equipment on the Hustler Z and Super Z tractors and supplies clean combustion air to the engine. Fig. 4-11

Safety filter

The Super Z liquid cool tractor is equipped with a safety filter. The filter element slides over the safety filter. Use Hustler part number 785279 only when replacing the safety filter.

NOTE: The safety filter does not require servicing unless it becomes contaminated with dirt or moisture.

Recommended service procedure

Many engine failures can be attributed to improper air cleaner servicing. Ingested dust and dirt will cause cylinder, piston and bearing damage in a few hours. "Dusted" engines will result from:

1. Overservicing the air filter element.
2. Improper installation.
3. Damaged filter, seals or canister.
4. Incorrect air filter element size.
5. Use of poorly designed aftermarket air filter elements.

Air cleaner servicing is an inexpensive maintenance check that can prevent costly non-warrantable premature engine damage.

Overservicing

Overservicing occurs when an air filter element is removed for cleaning or replacement before it is necessary. Each time the filter is removed a small amount of dirt and dust could fall in the intake system. This accumulated dirt can cause a dusted engine. It only takes a few grams of ingested dirt over the normal service life of an engine to

cause a dusted engine.

Do not clean element, replace with a new element only. Cleaning used air filter elements, through improper cleaning procedures, can get dust on the inside of the filter causing dirt ingestion and engine failure.

It is important to note that whenever an air filter element is cleaned by **any method**, the person or company performing the cleaning assumes responsibility for the integrity of the filter from then on. **The Donaldson warranty for air filters expires upon cleaning or servicing in any manner because the condition of the filter after servicing is completely out of their control. Therefore, on a dust ingested engine failure, there will be no warranty consideration if the air filter element has been cleaned or serviced in any manner.**

A partially dirty air filter element works better than a new element. Therefore, a dirty filter element is not bad for the engine unless it is excessively restricting the air flow and engine performance is affected. The reason is simple. The media in the filter must be porous to allow air to pass through it. When dirty air passes through the filter, the dirt plugs some of the holes in the media and actually acts as part of the filter media. When the next round of dirt enters, the first dirt helps filter out even smaller particles making the filter more efficient at stopping dirt from entering the engine. This is referred to as barrier filtration.

Of course, at some point the filter media becomes too clogged to allow air to pass.

The mowing conditions will determine the frequency of air filter element changing.

Improper installation of an air filter element

Dust must not leak past the seals on each end of the air filter element. The filter must be aligned within the canister and properly seated for an effective seal so that no dirt can enter the engine.

Damaged filter, seals or canister

Never bang or bump the filter element against the tire or any solid object, as dust and dirt particles will be forced through the media causing continual passing of dirt into the engine. Visually inspect the outside of the air cleaner canister periodically for external damage and replace if necessary.

Incorrect air cleaner element

Use only the correct Donaldson air filter element, Hustler part number 785261, which is designed to fit the canister properly.

Hustler air filter elements have the correct media composition, filter area, micron size and dimensions. Always use genuine Hustler filters. Many aftermarket filters have been found to be incompatible with Hustler's canisters and engines.

The air filter must remain intact to block passage of dirt and foreign particles from entering the engine. Being inclined to disbelieve the need for more expensive air filter elements used on gasoline engines may cause some individuals to opt for a less expensive part.

The filter element must be sufficient size and

construction to withstand stresses, caused by rapid cycling of the air volume demanded by the engine, without cracking or tearing under fatigue and pressure (especially diesel engines). Therefore, Hustler Turf Equipment and the engine manufacturers have carefully selected a reliable filter designed to fit the needs of the engines. The filter specified is a Donaldson filter, Hustler part number 785261.

Owners should be reminded that failure to use original equipment replacement parts is an “alteration” and will not be considered for warranty in the event of engine damage.

Recommended service procedure

1. Release clamps and remove element. Clean the canister with a damp cloth.
2. Before installing a new element, inspect it by placing a bright light inside and rotate the element slowly, looking for any holes or tears in the paper. Also check gaskets for cuts or tears. Do not attempt to use a damaged element which will allow abrasive particles to enter the engine.
3. Reinstall the dust cup. Make sure it seals all the way around the air cleaner body, then tighten the clamps.
4. Check all fittings and clamps periodically for tightness and inspect hoses for holes or cracks.
5. Periodically check the intake hose for signs of ingested dust. Locate and repair the source of ingested dirt.
6. Never operate a machine without an air filter installed.

Air restriction indicator

Any unit with a Kohler or Kawasaki engine will have an air restriction indicator installed in the air cleaner. Fig. 4-12

Replace the element whenever the restriction indicator shows reaches the change filter red line. Check the indicator daily and replace element as needed or annually whichever occurs first.

Reset the indicator by pushing in on the yellow button after each element change. Fig, 4-12

A restriction indicator takes the guesswork out of air cleaner servicing and allows you to safely benefit from the filter’s optimum performance.

Cooling system

Applies to models 927558, 927566, 927921, 927939, 927947 & 927954 only

Engine cooling is accomplished with circulated water and Ethylene Glycol mixture. The radiator is equipped with a pressure cap and overflow reservoir. System capacity is approximately 2.9 U.S. quart (2.7 liter). Follow the information found in the engine owner’s manual for the recommended coolant solution.

Visually inspect the system daily prior to operating tractor. Be sure the engine is level. Check the coolant level only when the system is cold. Check the coolant level only at the overflow reservoir (Fig. 4-13). The cooling system is a closed type. **Never open the radiator cap.** Doing so may induce air into the cooling system and may cause overheating. The coolant level should be between the “H” and “L” marks.

If the amount of coolant is insufficient, remove the cap

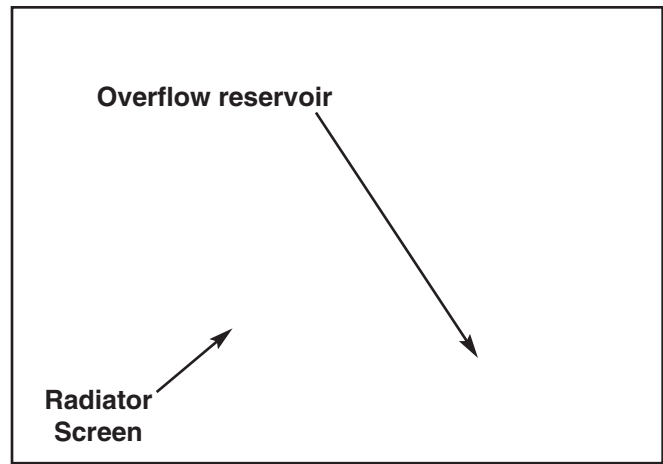


Figure 4-13

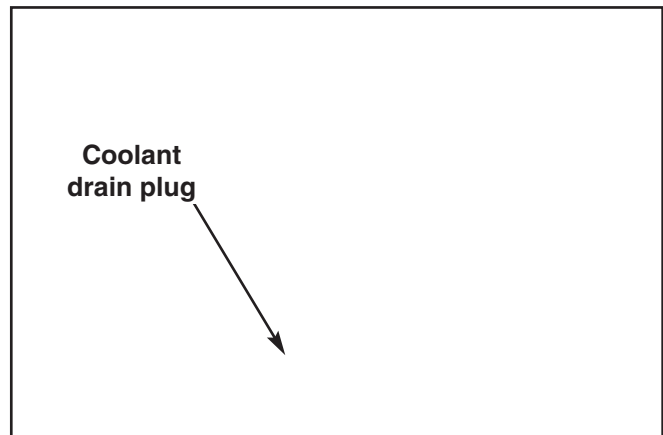


Figure 4-14

from the reservoir and add coolant to the “L” mark. Install the cap.



DANGER: Never remove radiator cap or overflow reservoir cap when engine is hot. Pressurized hot steam and water may be released, causing serious burns or possible blindness.

The system should be drained, flushed and refilled with fresh solution after every 500 hours of operation. To drain the radiator remove the overflow reservoir cap and remove the coolant drain plug. When draining the system use a flexible funnel to keep the coolant off the muffler. Fig. 4-14

If frequent refilling is necessary or if coolant appears rusty, thoroughly check the system. Refer to the engine manual for information on checking and cleaning system.

The engine cooling fan draws air through the engine cooling radiator. This is protected by a screen shroud. Keep the screen clean at all times and make sure trash is not allowed to accumulate on the radiator, nor allow the fins and cores to become plugged.

The radiator screen can be removed by disengaging the latch at the rear of screen and pulling the screen towards the rear of tractor. **IMPORTANT:** Take special care not to bend the screen mount.

Never force anything into the radiator fins which may bend or distort them. For cleaning, use compressed air or pressurized water only.

General engine maintenance

Detailed instructions and recommendations for break-in and regular maintenance are specified in the Engine Owner's manual. Please refer to this manual for engine servicing, lubricating oil levels with quality and viscosity recommendations, bolt torques, etc. The engine warranty is backed by the manufacturer. Special attention should be paid to applicable data which will not be duplicated here.

IMPORTANT: Refer to the Kohler EFI engine owner's manual for specific cleaning instructions.

Belt replacement

Figures 4-15, 4-16, 4-17, 4-18 and 4-19 show diagrams and descriptions of the unit's belt drive systems.

Inspect these belts frequently for wear and serviceability. Replace a belt that shows signs of severe cuts, tears, separation, weather checking and cracking, or burns caused by slipping. Slight raveling of belt covering does not indicate failure, trim ravelings with a sharp knife.



WARNING: If the pump belt fails, loss of control will occur especially when operating on a slope. **If you lose steering control while operating the machine, place the steering control levers in the park brake position immediately. Inspect the machine and involve your Hustler dealer to resolve the problem before continuing to operate.**

Inspect the belt pulley grooves and flanges for wear. A new belt, or one in good condition, should never run against the bottom of the groove. Replace the pulley when this is the case, otherwise belt will lose power and slip excessively.

Never pry a belt to get it on a pulley as this will cut or damage the fibers of the belt covering.

Keep oil and grease away from belts, and never use belt dressings. Any of these will destroy the belt composition in a very short time.

Mower blade maintenance

Check the mower blades daily, they are the key to power efficiency and well groomed turf. Keep them sharp, a dull blade will tear rather than cut the grass, leaving a brown ragged top on the grass within a few hours. A dull blade also requires more power from the engine.

Replace any blade which is bent, cracked or broken.



WARNING: Never attempt to straighten a bent blade by heating, or weld a cracked or broken blade as the blade may break and cause serious injury.



DANGER: Never work with blades while engine is running or deck clutch is engaged. Always place deck clutch in the **disengaged** position, place steering control levers in the park brake position and turn engine off. Block up mower when you **must** work under it. Wear

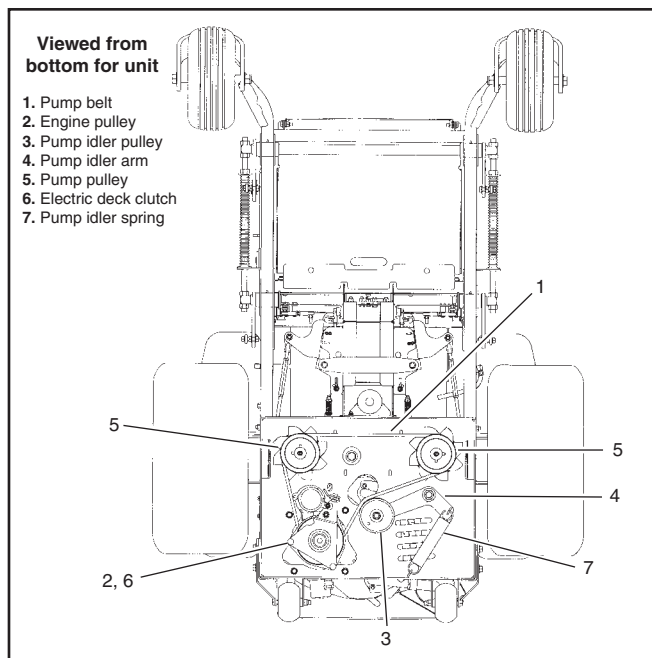


Figure 4-15

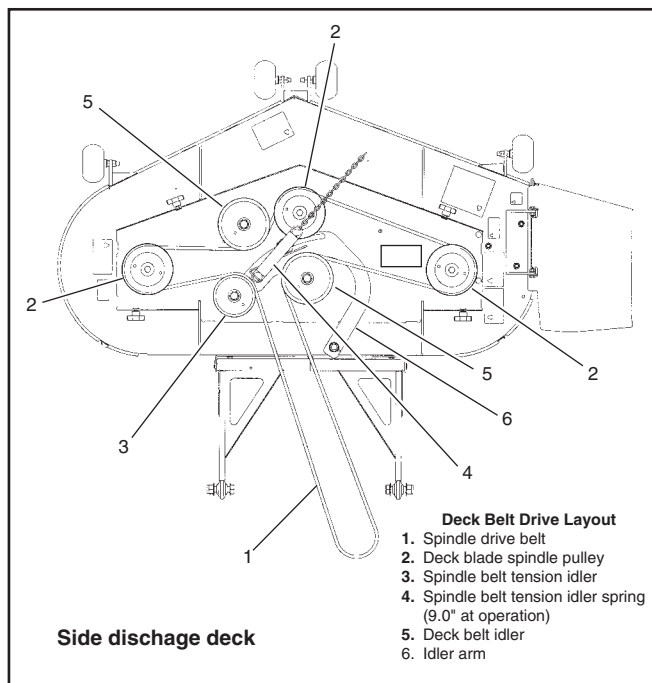


Figure 4-16

gloves when handling blades. **Always check for blade damage** if mower strikes rocks, branches or other foreign object during mowing!

Mower blade removal

On spindles with blade saddles, use a 3/4" wrench to remove the 1/2" cap screw holding the blade to the spindle saddle from underneath. On spindles without blade saddles, use a 15/16" wrench to remove the 5/8" cap screw holding the blade to the spindle shaft from underneath. **NOTE:** On rear discharge decks the right blade rotates opposite of the other two blades. Therefore, it has a left hand threaded bolt. It will be necessary to loosen it by turning it clockwise.

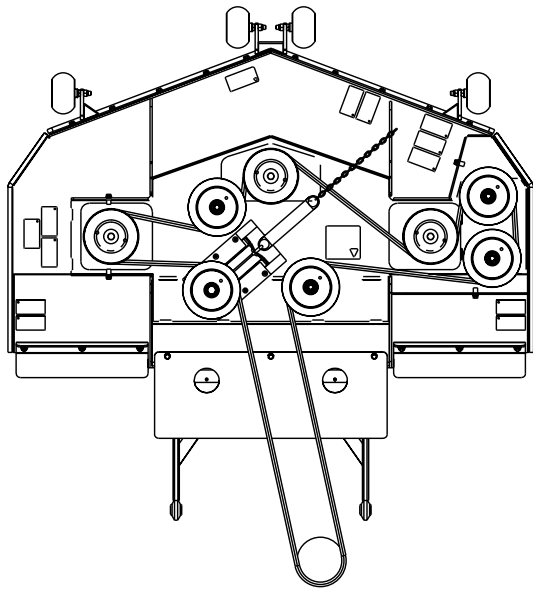


Figure 4-17

Sharpen the blades of a grinder following patterns as shown (Fig. 4-20). Touch-up sharpening can be done with a file.

Check the blades for balance following grinding. A commercial balancing tool is available through most hardware supply stores, or balancing can be done by placing the blades on an inverted line punch or 1/2" bolt. Blade should not lean or tilt. Spin the blade slowly, blade should not wobble. If blade is out of balance, true it up before reinstalling.

Lay the blade on a flat surface and check for distortion (Fig. 4-21 and 4-22). Replace any distorted blade.

Do not re-use spindle bolts which have stripped, worn or undercut threads. Torque bolts on spindles with blade saddles to 65-75 foot-pounds when reinstalling blades. Torque bolts on spindles without blade saddles to 118 foot-pounds when reinstalling blades.



WARNING: When mounting blades, rotate them after installation to ensure blade tips do not touch each other or sides of the mower.



WARNING: Failure to correctly torque the bolt may result in the loss of the blade which can cause serious injury.



WARNING: Mower blades are sharp and can cut. Wrap the blade(s) or wear gloves and use extra caution when servicing them.

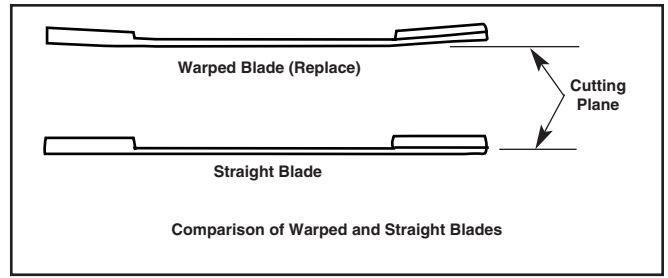


Figure 4-21

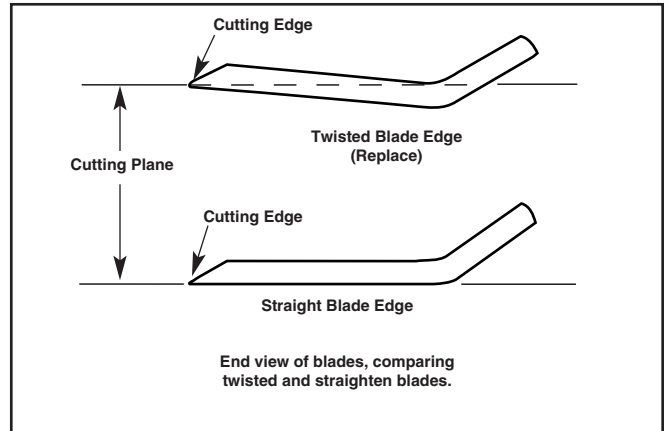


Figure 4-22

ADJUSTMENTS

Introduction



WARNING: Unless specifically required, **DO NOT** have engine running when servicing or making adjustments to tractor. Place control levers in the park brake position and remove ignition switch key. Repairs or maintenance requiring engine power should be performed by trained personnel only. To prevent carbon monoxide poisoning, be sure proper ventilation is available when engine must be operated in an enclosed area. Read and observe safety warnings in front of manual.

Your Hustler Z or Super Z was adjusted before it left the factory and was checked during predelivery setup. However, after start-up and continued use, a certain amount of break-in wear will cause some adjustments to change.

Remain alert for unusual noises, they could be signaling a problem. Visually inspect the machine for any abnormal wear or damage. A good time to detect potential problems is while performing scheduled maintenance service. Correcting the problem as quickly as possible is the best insurance.



WARNING: Keep your machine clean and remove heavy deposits of trash and clippings, they can cause engine fires and hydraulic overheating as well as excessive belt wear.

Clear away heavy build-up of grease, oil and dirt, especially in the area of reservoir and oil and engine combustion air; minute dust particle are abrasive to close-tolerance engine and hydraulic assemblies.

Some repairs require the assistance of a trained service mechanic and should not be attempted by unskilled personnel. Consult your Hustler service center when assistance is needed.

Torque values



WARNING: Particular attention must be given to tightening the drive wheel lug nuts, wheel motor nuts, and blade spindle bolts. Failure to correctly torque these items may result in the loss of a wheel or blade, which can cause serious damage or personal injury.

Torque values given below:

	Ft.-lbs.	Nm
Wheel (lug) nuts	65-75	88.14-101.7
Wheel motor nut (Hustler Z)	350-375	474.6-508.5
Wheel motor nut (Super Z).....	290-310	393.2-420.4
Blade spindle bolt top	65-75	88.14-101.7
Blade spindle bolt bottom (spindle with blade saddle).....	65-75	88.14-101.7
Blade spindle bolt bottom (spindle without blade saddle)	118	160.0

375527_0406

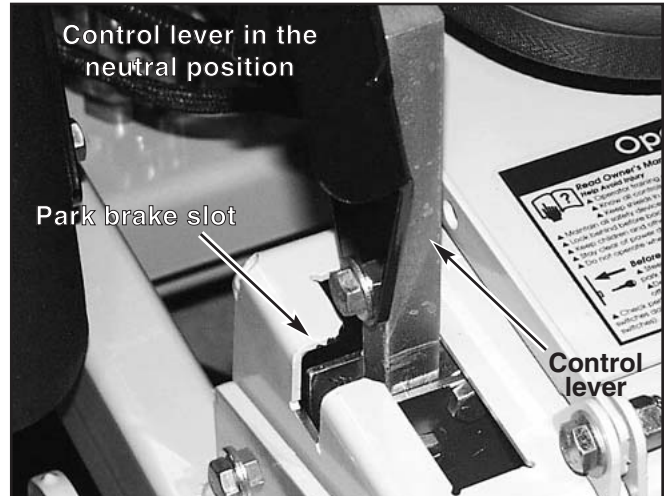


Figure 5-1

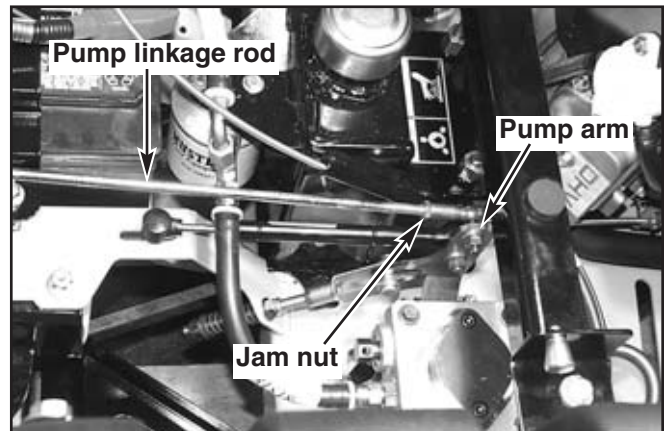


Figure 5-2

It is recommended that these be checked after the first 2 hours of operation, initially and every 50 hours following removal for repair or replacement.

For engine torque values, see engine owner's manual.

For all other torques refer to the parts manual for standard torque chart.

Steering linkage

The neutral adjustment for the control levers in the neutral position is discussed in this section.

The tractor steering has been factory adjusted to eliminate creeping when the control levers are in the neutral position (Fig. 5-1). However, should the tractor begin to creep, the control lever linkage can be adjusted as follows:

Control Lever Neutral Adjustment

Before considering any adjustment, check the tire air pressure and make certain hydraulic system oil is at operating temperature. Unequal tire pressure will cause the tractor to drift to one side. Refer to tire pressure information in the Maintenance section of this manual.

Fine adjustment to the unit's steering is made with the adjustable pump linkage rods located between the control

lever and pump arms. Fig. 5-2

Neutral is properly adjusted when the control levers are in the neutral position and the drive wheels are not turning.

If the tractor creeps in the neutral position the control linkage may be adjusted as follows:

1. Raise and block the tractor up so the drive wheels are off of the floor.



WARNING: Make certain machine is secure when it is raised and placed on the jack stands. The jack stands should not allow the machine to move when the engine is running and the drive wheels are rotating. **Use only certified jack stands.**

2. Position the control lever in the neutral position. Disengage the deck clutch.
3. Start the engine and observe which way the wheels are rotating.
4. If wheel(s) are rotating forward, loosen the jam nuts on the pump linkage rods and rotate the rod to lengthen the steering control linkage until the wheel(s) come to a stop. Fig. 5-2

NOTE: The left linkage controls the left hydraulic pump and the right linkage controls the right hydraulic pump.

Repeat for the opposite side if necessary.

5. If wheel(s) are rotating in reverse then loosen the jam nuts on the pump linkage rods and rotate the rod to shorten the steering control linkage until the wheel(s) come to a stop. Fig. 5-2

NOTE: The left linkage controls the left hydraulic pump and the right linkage controls the right hydraulic pump.

Repeat for the opposite side if necessary.

6. When both wheels remain in neutral, tighten the jam nuts to lock the turnbuckle in place.
7. Test again by moving the control levers forward and backward before returning them to the neutral position. If the tires are in neutral, the unit is now ready for operation.

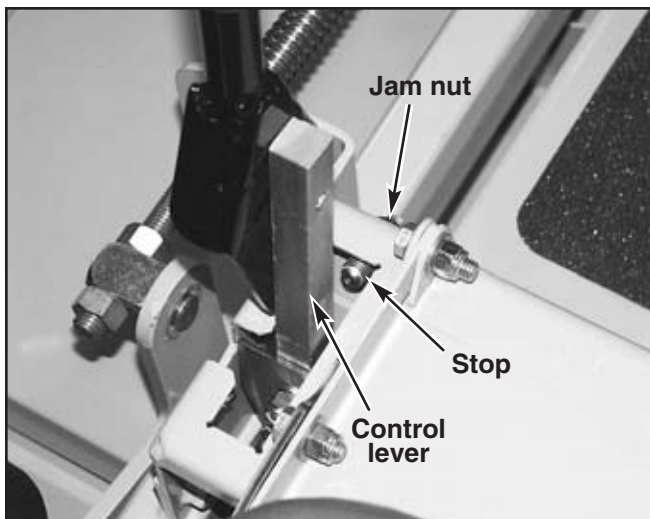


Figure 5-3

8. After adjusting for neutral it may be necessary to re-adjust the control lever stop. Fig. 5-3

Control lever stops

The control lever stops (Fig. 5-3) are designed to do two things: First, and most important, they must keep the pumps from bottoming out internally. Secondly, the stops may be adjusted to help drive straight when the control levers are pushed forward against the stops.

To keep the pumps from bottoming out internally use the following procedure:

1. To make the first adjustment the tractor engine must NOT be running.
2. Check to make sure the control levers are against the stops before the pumps are bottomed out internally. To do this, gently and slowly move the control levers forward and feel if there is some resistance on the pump lever before the control levers hit the stops. Check one side at a time. If you sense that the pump arms are stopping the forward motion of the control arms, loosen the jam nut on the adjustable stop of the corresponding side and turn the stop (set screw) inward to stop the control levers slightly before the pump bottoms out. Lock in place when the adjustment is correct by re-tightening the jam nut.
3. Do this for each side.

To adjust the stops for driving straight when control levers are against the stops during operation:

1. Determine which drive tire is rotating too fast when both control levers are against the stops. Then stop the tractor and loosen the lock nut on the side which is rotating too fast and turn the stop (set screw) inward to stop the control lever sooner. Tighten the lock nut on the stop and test again. Repeat this procedure until unit drives straight.

NOTE: Since this is a hydrostatic drive, variables such as temperature of oil, efficiency of pumps and motors, tire pressure etc. may effect the consistency of the ability to rely on the stops to drive straight without the operator making minor steering adjustments with the control arms.

Steering dampener

The steering dampener (Fig. 5-4) is spring loaded to return the control levers to the neutral position from the reverse position. This gives the operator a sense of neutral during operation.

To set the steering dampeners in the correct operating position follow these steps:

1. Place the control lever in the neutral position.
2. Loosen the steering dampener's front ball stud.
3. Pull the dampener spring housing pass the point that the internal spring is engaged.
4. Release the dampener spring housing and allow the internal spring to bring the housing back to the neutral position.
5. Tighten the nut on the steering dampener's front ball stud.

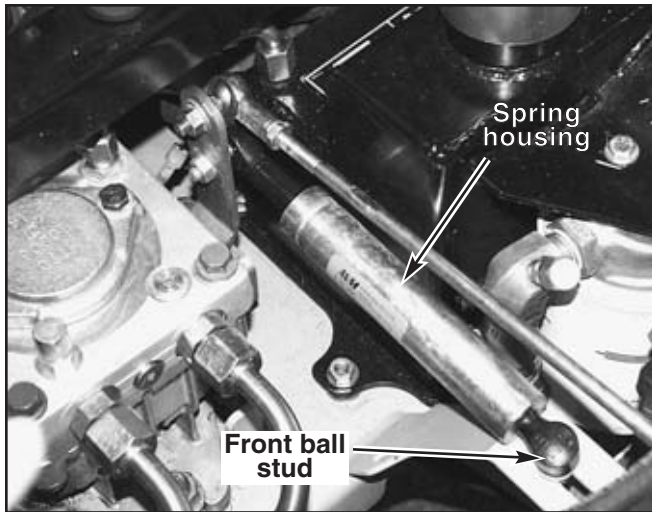


Figure 5-4

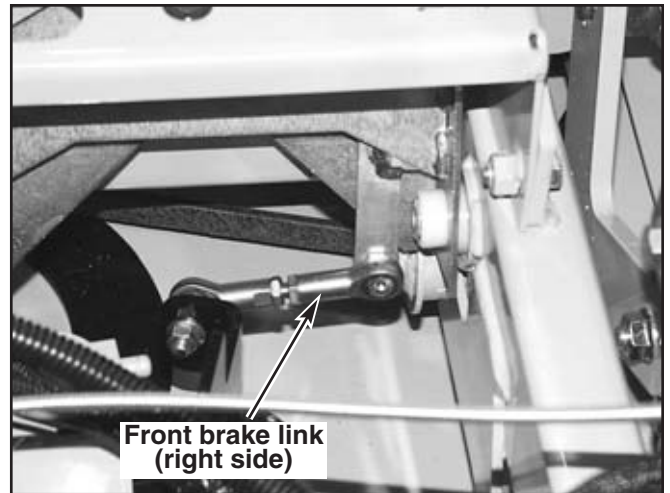


Figure 5-6

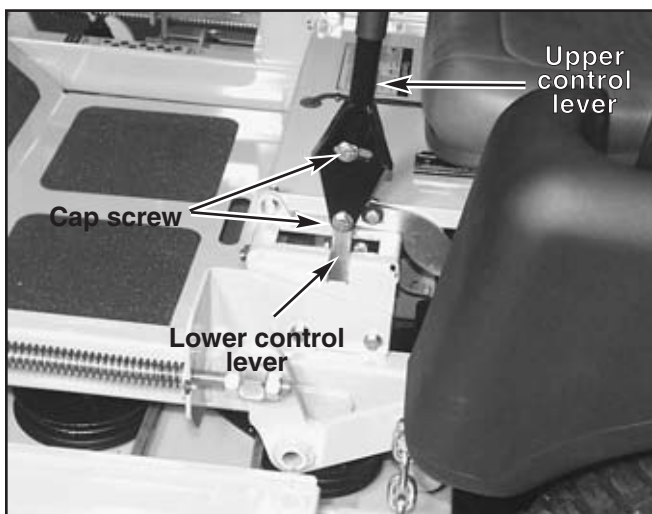


Figure 5-5

Control lever adjustment

The control levers can be adjusted for operator comfort. By loosening the cap screws that attaches the upper control lever to the lower lever (Fig. 5-5), the upper control lever can be pivoted to fit the operator's personal preference.

The control levers should be adjusted so that they align with each other when in the neutral position.

Park brake adjustment

Occasionally check the park brakes and adjustment using the following method:

1. Position the control levers in the neutral position. Disengage the deck clutch.



WARNING: Make certain machine is secure when it is raised and placed on the jack stands. The jack stands should not allow the machine to move when the engine is running and the drive wheels are rotating. **Use only certified jack stands.**

NOTE: The front brake link is not adjustable. Fig. 5-6

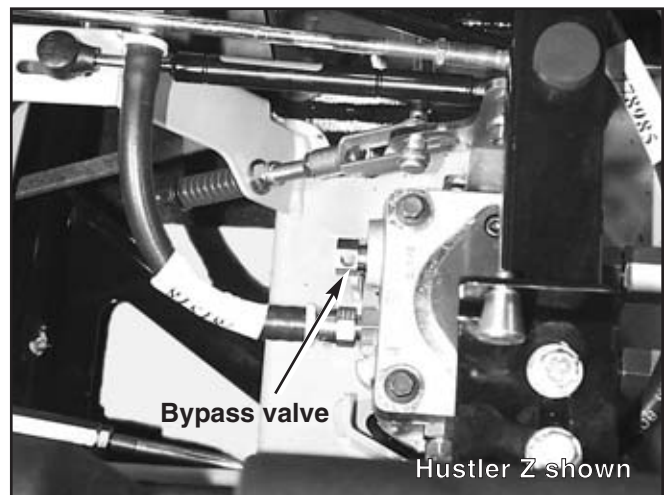


Figure 5-7

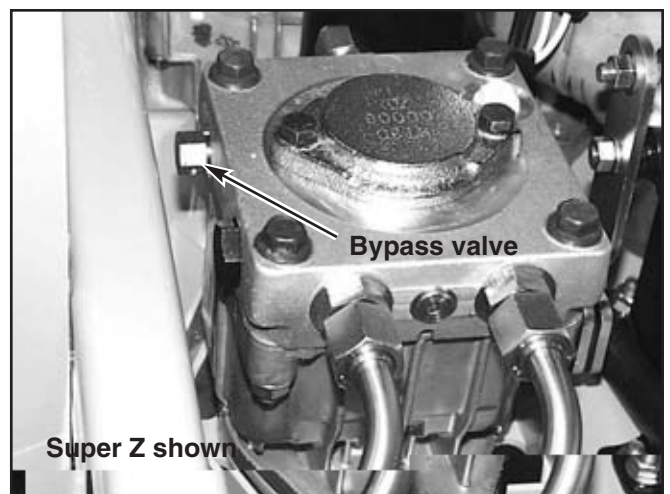


Figure 5-8

2. Raise and block the tractor up so the drive wheels are off of the floor.
3. Open the hydraulic pump's bypass valve (Fig. 5-7 & 5-8), on the side that is being adjusted, by turning bypass valves counter clockwise one-half to one revolution. The valve stems on each hydraulic pump are located

near the top and are identified as a hex stud.

4. Rotate the tire. The tire should rotate. Remember hydraulic oil resistance will prevent the tire from rotating freely even with the bypass valves open. There should be no resistance from the brakes at this point.
5. **Hustler Z** - Move the control lever to where it is touching the outside edge of the lever's travel slot. Fig. 5-9
Super Z - Move the control lever to where it is just inside (1/8") the park brake slot. Fig. 5-10
NOTE: When the control lever is against the outside edge of the the slot, the brakes should **not** be engaged.
6. Rotate the tire. If the brake is adjusted properly the tire will still rotate but friction will start to become noticeable here. However, if no brake resistance is noticed, the brake needs adjusted as follows:
7. Loosen the brake linkage jam nuts. Fig. 5-11
8. Rotate the tire and at the same time rotate the turnbuckle to shorten the length of the brake linkage to increase the brake pressure. When you feel the brake begin to engage, stop adjusting the turnbuckle. Retighten the jam nuts on the turnbuckle.
9. Place the control lever in the park brake position (Fig. 5-9 & 5-10). The tire should not rotate when the control lever is in the park brake position.
10. Place the control lever in the neutral position. The tire should rotate freely.
11. Close the hydraulic pump's bypass valve.
12. Repeat steps 3 thru 11 for the other side.
13. Remove the jack stands and lower the unit. It is now ready to operate.

Hydraulic pump belt adjustment

The pump drive belt tension remains constant by means of a tension idler and spring (Fig. 5-12). There is no tension adjustment of this belt. **NOTE: Replace the belt every 400 hours or every two (2) years whichever comes first.**



WARNING: If the pump belt fails, loss of control will occur especially when operating on a slope. **If you lose steering control while operating the machine, place the steering control levers in the park brake position immediately. Inspect the machine and involve your Hustler dealer to resolve the problem before continuing to operate.**

Deck drive belt adjustment

The spindle belt tension remains constant by means of a tension idler and spring (Fig. 5-13). The spring tension should be such that the belt does not slip under normal operating load conditions, assuming the belt is not excessively worn or damaged. As belt stretches and wears in, adjustment may become necessary. To increase belt tension, move the spring chain one (or more) link(s) at the anchor bracket (Fig. 5-13). Installed spring length should be 9.0" ± .3" (22.8 cm ± .76 cm) originally with adjustments of .60" (15.2mm) per chain link. (Fig. 5-14)

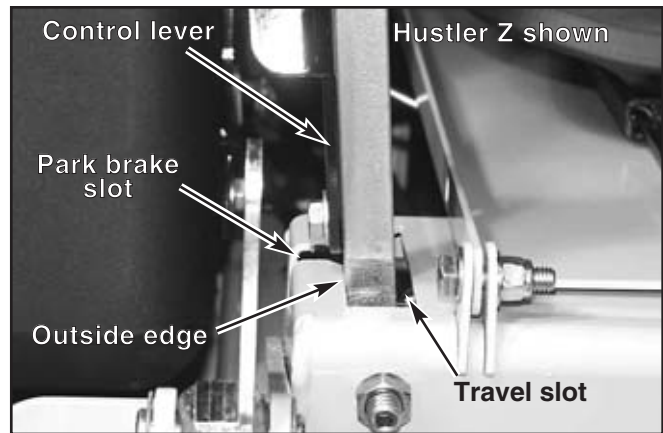


Figure 5-9

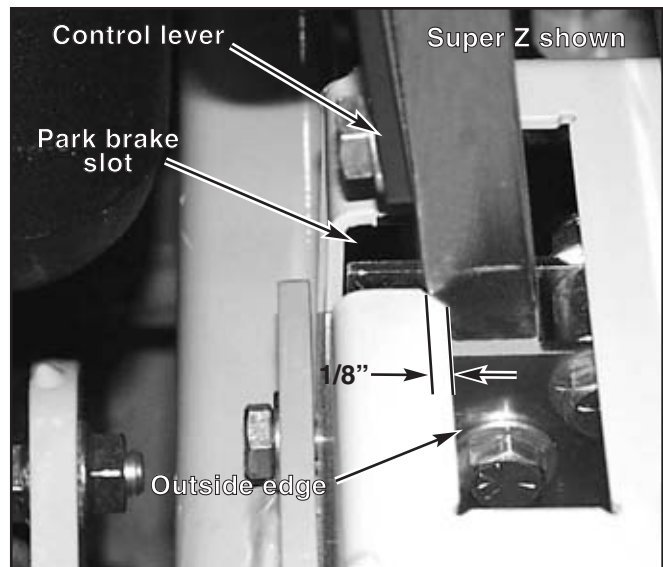


Figure 5-10

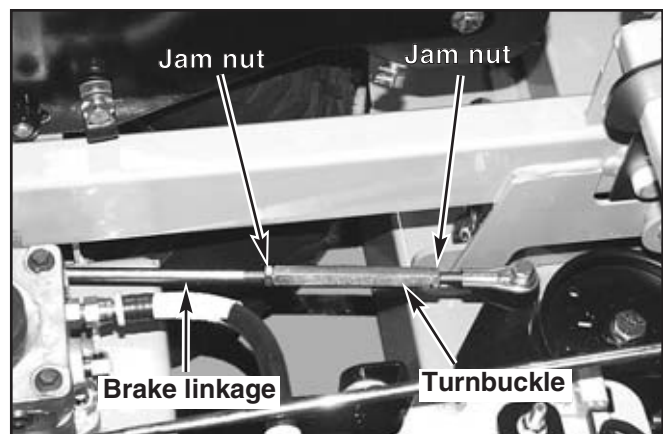


Figure 5-11

IMPORTANT: Do not over tension the spring to compensate for a badly worn belt or pulley.

Engine RPM setting

The Hustler Z and Super Z are designed so that the engine will run at 3600 rpm static pump load only. At this speed the hydraulic pumps are running at their maximum rated speed.

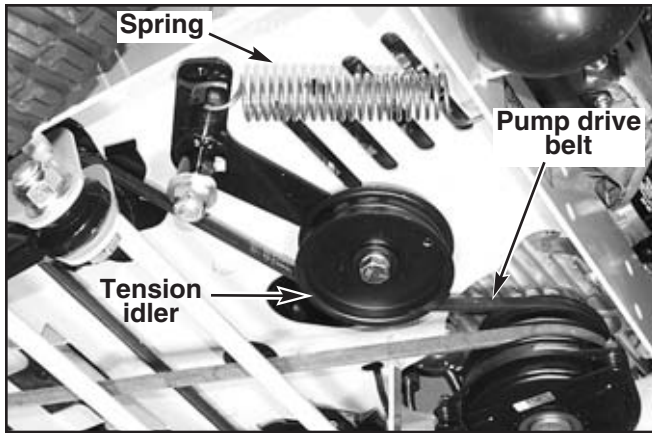


Figure 5-12

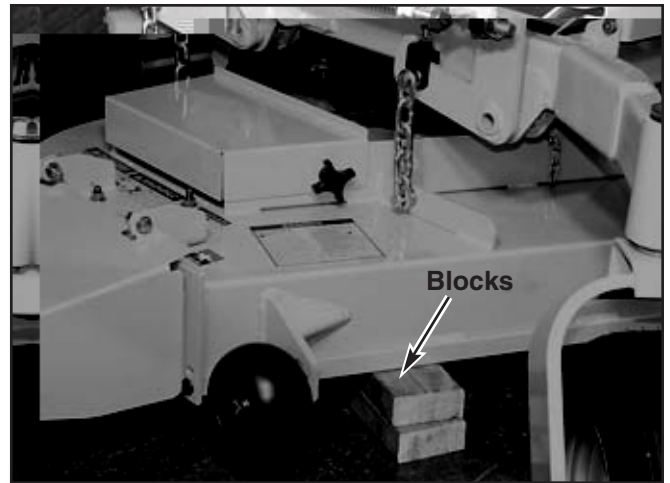


Figure 5-15

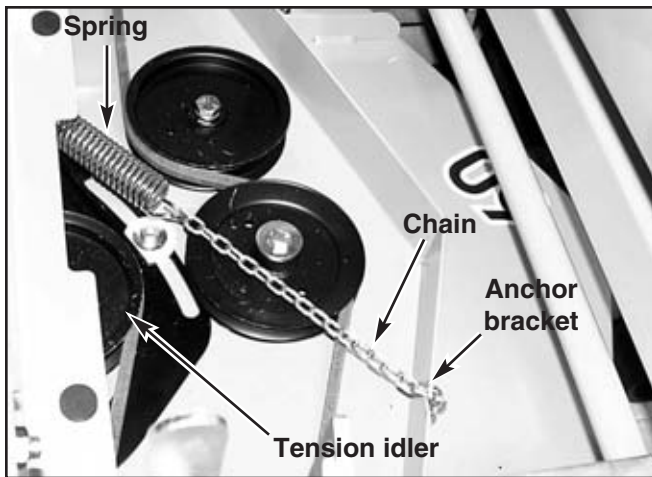


Figure 5-13

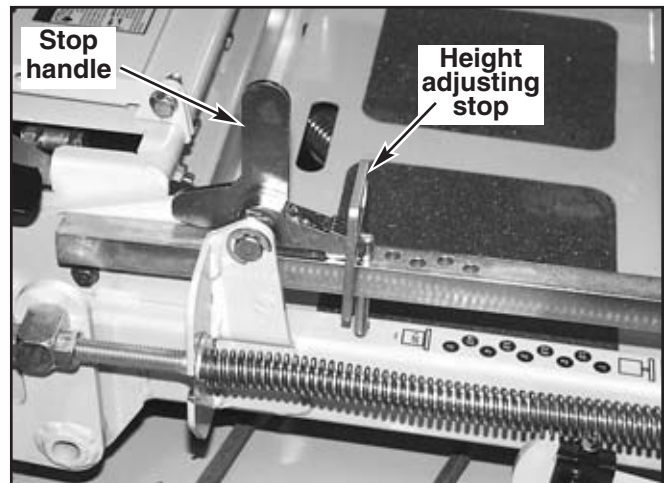


Figure 5-16

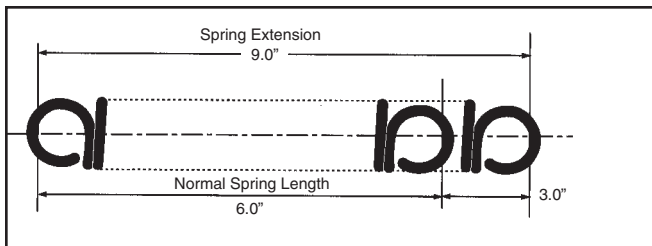


Figure 5-14

Deck leveling and height adjustment

The mower deck has three areas that may need to be checked and adjusted periodically. Before considering any mower deck leveling adjustments, check that the tire air pressure is within the specified range.

Deck level adjustments

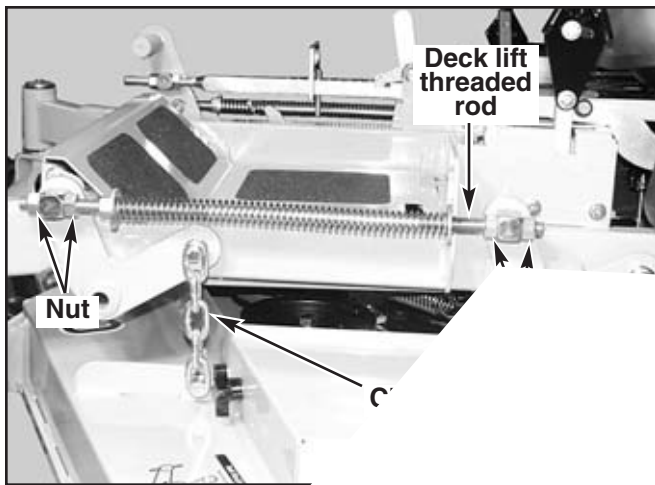
Leveling the deck must be done in the following manner and order:

1. Check tire pressures to make certain they are properly inflated before starting to level deck. The recommended pressures are as follows:
 Drive wheels tire pressure.....8 - 10 psi
 Gauge wheels tire pressure.....8 - 10 psi



WARNING: Stop engine. Make sure deck clutch switch is **in the down (OFF) position**. Place control levers in the brake position before leaving machine.

2. Park the unit on a flat surface.
3. Raise deck and place 3" of blocking under all 4 corners of the deck (Fig. 5-15). This will set the cutting height at 3-1/4 ". **NOTE:** Back of deck will automatically be set 1/4" higher. **NOTE:** When blocking up the rear discharge decks make certain the blocks are not in the discharge opening.
NOTE: To level an XR7 deck use a 3" block under the back of the deck and a 4" block under the front of the deck. This will set the cutting height at 3-1/2 ".
4. Set cutting height at 3-1/4" in the height indicator by placing the height adjusting stop in the 3" hole, and turning the height stop so that the flat side is against the stop handle. Fig. 5-16
NOTE: On a XR7 deck set cutting height at 3-1/2" in the height indicator by placing the height adjusting stop in the 3-1/2" hole, and turning the height stop so that the pin side is against the stop handle.
5. Clamp the height adjusting stop against the stop handle (5-16). This will assure that the height will not move during the setting process. Otherwise, spring pressure



Fig

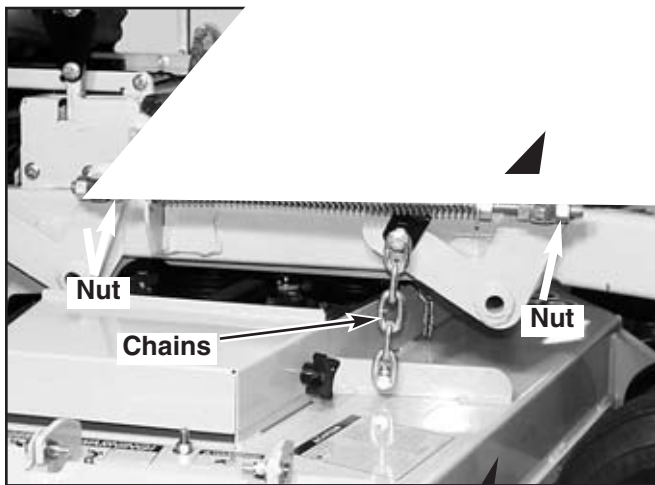


Figure 5-18

from the deck lift springs will tend to pull the stop away from the handle.

6. Loosen all nuts on the deck lift threaded rods, and the hardware on the adjuster (on the front), until **all** the deck lift chains are loose. The deck is sitting tightly on all four blocks. Fig. 5-18, 5-19
7. Loosen the two nuts on the height indicator so that the foot pedal is free. Fig. 5-18
8. Start the leveling process at the **left front** of the tractor.
9. Set the amount of threads protruding on the deck lift rod from the lift block at approximately 1". Fig. 5-21
10. Jam both nuts against the block.
11. Push or pull on the deck lift foot pedal until the chain on the left front just becomes tight, making sure that the deck stays tight against the 3" or 4" block.
12. While keeping the chain tight, tighten the nuts against the deck lift block on the height indicator rod. Fig. 5-20
13. Go to the **right front** of the tractor.
14. Loosen the 5/16" jam nut on the adjuster lift chain (5-19), and back the adjuster bolt out to allow the adjuster to move up and down freely.
15. Be sure that adjuster is free to move up and down.
16. Tighten the adjuster bolt until the chain just becomes tight, making sure that the deck stays tight against the

3" or 4" block.

17. Tighten the adjuster bolt jam nut to prevent the adjuster bolt from moving. Fig. 5-19
18. Tighten the hardware holding the chain and adjuster onto the deck lift arm.
19. Go to the **right rear** of the tractor.
20. Make sure that there is still slack in the chain. If not, loosen the two nuts on the block holding the threaded rod until there is slack in the deck lift chain. Fig. 5-18
21. Tighten the appropriate nut until the chain just becomes tight, making sure that the deck stays tight against the 3" block.
22. Tighten the other nut on the opposite side of the block, and jam them tightly together against the block.
23. Go to the **left rear** of the tractor.
24. Make sure that there is still slack in the chain. If not, loosen the two nuts on the block holding the threaded rod until there is slack in the deck lift chain. Fig. 5-17
25. Tighten the appropriate nut until the chain just becomes tight.
26. Tighten the other nut on the opposite side of the block, and jam them tightly together against the block.
27. Compress the deck lift assist springs so that there is 1" of space between the front nut and on the spring and the rear nut on the deck lift block (Fig. 5-21). Typical both sides.

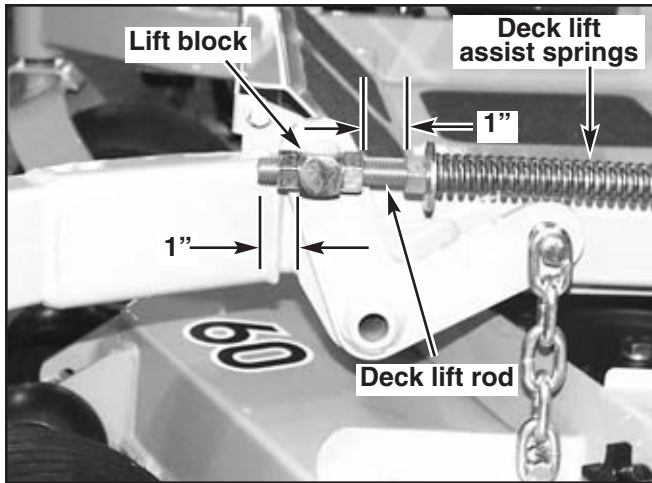


Figure 5-21

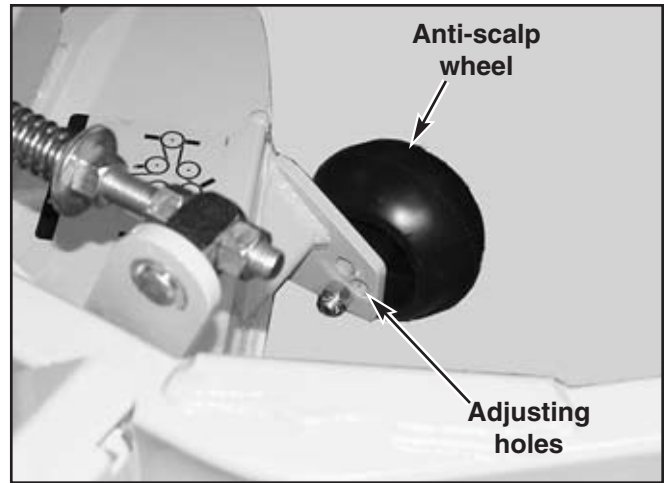


Figure 5-23

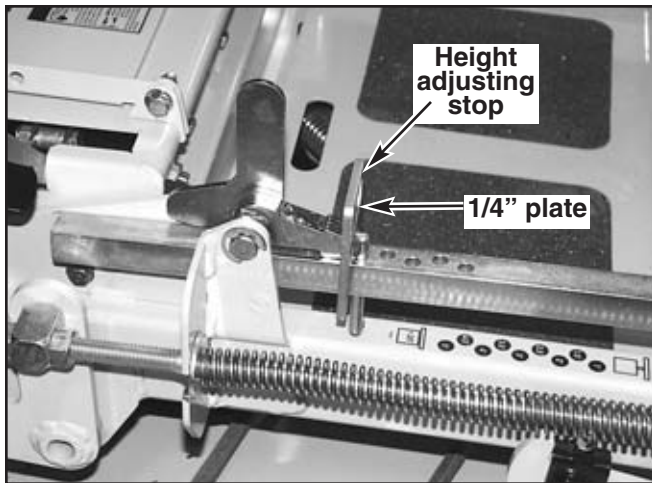


Figure 5-22

Anti-scalp wheels

Anti-scalp wheel kits are standard on the Hustler Z. These anti-scalp wheels are designed to minimize scalping when mowing on rough uneven terrain.

After setting the cutting height, adjust the anti-scalp wheels so they extend below the deck but **do not contact the ground**. They should always be at least 1/4" to 3/4" (.6 cm to 1.9 cm) below the deck. With the unit sitting on a flat level surface, the wheel position can be adjusted up or down as needed from 3/4" to 1-3/4" (1.9 cm to 9.5 cm) below the blade surface. Move the front wheels up or down, in 1/2" (1.3 cm) increments, using the different axle mount holes in the wheel mount bracket. Fig. 5-23

NOTE: When the anti-scalp wheels are installed, the minimum cutting height is 1" (2.5 cm) with the anti-scalp wheels set at 3/4".

28. When completed, all chains will be tight, and deck cutting height will be set to the deck height indicator.

Deck cutting height adjustment

Deck height is adjustable from 1" to 5" (2.54 cm - 12.7 cm) in 1/4" increments. The holes in the height adjusting bar are spaced at 1/2" intervals. By turning the height adjusting stop around, 1/4" increments can be attained due to the 1/4" plate that is part of the stop. Fig. 5-22

EXAMPLE: When the height adjusting stop is placed in the 1" hole, **with the 1/4" plate facing to the front of the unit**, the cutting height is at 1". When the height adjusting stop is placed in the 1" hole, **with the 1/4" plate on the operator's side of the hole**, the cutting height is at 1-1/4".

When the height adjusting stop is placed in one of the holes, with the 1/4" plate on the operator's side of the hole, the deck height will be set at one of the following: 1-1/4", 1-3/4", 2-1/4", 2-3/4", 3-1/4", 3-3/4", 4-1/4" or 4-3/4".

When the height adjusting stop is placed in one of the holes, with the 1/4" plate facing to the front of the unit, the deck height will be set at one of the following: 1", 1-1/2", 2", 2-1/2", 3", 3-1/2", 4", 4-1/2" or 5".

The notch located at the rear of the right height adjusting bar is to be used when the deck is placed in the transport mode.

TROUBLESHOOTING

The majority of operating problems that occur with a system can be traced to improper adjustments or delayed service. A consistently applied preventative maintenance program, as outlined in the maintenance section of this manual, will prevent many problems. The following chart is designed to help you locate a problem by suggesting probable causes and the recommended solutions.

SYMPTOMS	PROBABLE CAUSES	SUGGESTED REMEDIES
Starting motor does not crank	Control handle not in park brake position or switch not adjusted	Place control handle in park brake position or re-adjust switch
	Mower clutch switch engaged	Disengage clutch switch
	Weak or dead battery	Recharge or replace
	For additional causes	See engine manual
Engine cranks but does not start	No fuel or line plugged	Fill tank or replace line
	Numerous	See engine manual
Engine: Runs with continuous misfiring or engine runs unevenly or erratically	Numerous	See engine manual
Loss of power or system will not operate in either direction	Restrictions in air cleaner	Service air cleaner
	Hydraulic line blockage	See your dealer
	Internal interference or leakage in wheel motor	See your dealer
	Insufficient hydraulic oil supply	Check level in reservoir
		Have dealer check hydraulic pump
	Poor compression	See your dealer
	Steering linkage needs adjustment	Adjust linkage
	Air in system	Check filter & fittings
For additional causes	See engine manual	
Low oil pressure	Low oil level	Add oil
	Oil diluted or too light	Change oil and check for source of contamination
	Failed oil pump	See your dealer
High oil consumption	Numerous	See your dealer
Tractor jerky when starting or operates in one direction only	Steering control linkage needs adjustment	Adjust linkage
	Pump or wheel motors faulty	See your dealer
	Tow valves not closed completely	Close tow valves
Hydraulic system operates hot (oil in reservoir smells rancid)	Low hydraulic oil level	Fill reservoir
	Hydraulic pump faulty	See your dealer
	Hydraulic oil cooler clogged	Clean oil cooler core
Tractor creeps when steering control levers are in neutral	Steering linkage needs adjustment	Adjust linkage
Tractor circles or veers in one direction	Steering linkage needs adjustment	Adjust linkage
	Wheel motors faulty	See your dealer
	Hydraulic pump faulty	See your dealer
Tractor creeps when parking brake engaged	Steering linkage out of adjustment	Adjust steering linkage
	Brakes need adjustment	Adjust parking brakes

SYMPTOMS	PROBABLE CAUSES	SUGGESTED REMEDIES
Liquid Cooled Engine Overheating: Temperature light glows	Leaks in system	Replace/tighten hoses and connections
	Coolant level low	Add coolant
Frequent refilling of radiator required	Radiator screen clogged	Clean screen
Coolant appears rusty	Radiator core clogged	Clean radiator core
	Thermostat sticking or inoperative	See engine manual
	Heat light malfunction	See your dealer
	For additional causes	See engine manual
Air Cooled Engine Overheating:	Air intake screen or cleaning fins clogged	Clean screen and fins
	For additional causes	See engine manual

STORAGE

When storing the unit at the the end of the mowing season, the following steps should be taken to ensure readiness for the next mowing season.

1. Remove all grass, dirt, and trash from tractor and mower. Clean tractor and mower and touch up all scrapes with Hustler spray paint.
2. Clean paper air filter. Replace if necessary. Wash and re-oil foam precleaner.
3. Check thoroughly for any worn or damaged parts that need replacing and order them from your dealer.
4. Thoroughly lubricate machine, according to lubrication instructions.
5. Check hydraulic oil level. Add oil if necessary. Change oil and filter if not done in last 500 hours. Lubrizol additive is required. Refer to Maintenance section.
6. Block tractor up so weight is off tires.
NOTE: Do not deflate tires.
7. Perform separate engine and battery preparation as listed below.
8. Store tractor in a clean, dry place.

Preparation of engine for storage

When engine is to be unused for long periods, proceed as follows:

1. Run engine for a minimum of 15 minutes.
2. Drain oil from crankcase while engine is still warm.
3. Refill with fresh oil of proper viscosity.
4. Drain fuel tank and run the engine until it stops from lack of fuel. Gasoline evaporates if left in carburetor for long periods, forming gum and varnish deposits in carburetor. These deposits will cause engine flooding and loss of power.
5. Remove and replace fuel filter if not done in previous 100 hours.
6. Remove spark plugs and pour a tablespoon of engine oil into each spark plug hole, Install plugs, but do not reconnect plug leads.
7. Crank engine with starter at least a dozen revolutions to distribute oil over cylinder walls and valve mechanism.
8. Clean exterior surface of engine. Spread a light film of oil over any exposed metal surfaces of engine that are subject to corrosion.
9. Clean dirt and chaff from cylinders and fins, blower housing and muffler.
10. Check oil filler cap and fuel tank cap to make certain they are securely in place.

Preparation of battery for storage

When the machine is to be unused for long periods, it is best to disconnect the battery and remove it from the unit. At this time perform the following battery maintenance:

1. Clean battery
2. Check the electrolyte level
3. Charge the battery, if necessary
4. Store battery in a cool, dry place (do not expose to freezing temperatures)
5. Always keep the battery fully charged. (Especially important to prevent battery damage when the temperature is below 32F.)

New season preparation

Before starting the tractor following post season storage, the following servicing is required:

1. Clean tractor, removing trash and dirt accumulation.
2. Check engine oil and hydraulic oil levels.
3. Fill fuel tank with fresh gasoline. Run machine at half speed for 5 minutes, checking operation of steering control lever. Stop engine and check for oil leaks, loose fittings and so forth.
4. Tighten any bolts that have loosened and make sure all hair pins, cotter pins and clevis pins are in place.
5. Install all safety shields and review safety precautions listed in this manual.
6. Check and inflate tires to 8-10 psi.
7. Install a fully charged battery and attach the battery cables.

PRODUCT LITERATURE

This section contains sources of additional literature concerning your tractor. Literature should be ordered from your Hustler dealer or direct from indicated source.

Hustler Z & Super Z Parts Manual

If you would like to order a Parts Manual for this tractor, the Hustler p/n for that manual is listed below. Please call Hustler Turf Equipment at (620) 327-1246 to order the manual. You may also mail, FAX, or e-mail your order by using the form on page 8-3. Hustler Turf Equipment will accept credit card payment for this manual.

Model	Model Number	Parts Manual P/N	List Price
Hustler Z	926881, 926915, 926923, 926931 926949, 926964, 926667, 926675 927111, 927723, 927731, 927772, 927798, 927806, 927814, 927556	375535	\$22.50
Super Z	926725, 926741, 926766, 926972 926980, 926998, 927038, 927046, 927053, 927061, 927558, 927566, 927467, 927624, 927848, 927855, 927871, 927889, 927897, 927913 927921, 927939, 927947, 927954, 927970, 927988, 928010, 928028, 928036, 928044, 928051, 928069, 927848, 927855	375543	\$22.50

Engine information

The Hustler Z uses a Kawasaki 23hp or 25hp engine, a Honda 24hp engine or a 27hp Kohler engine. The Super Z uses a Kawasaki 25hp engine, Kawasaki 26hp engine, a Honda 24hp engine, a 27hp Kohler engine or a 28hp Kohler engine. Primary source of information is the engine operator's manual, which is included with the owner's manual packet. For additional copies order Hustler P/N 778423 (Kawasaki), Hustler P/N 785642 (Honda), Hustler P/N 742684 (Kohler) or Hustler P/N 791467 (Kohler EFI).

For additional engine service manual information contact your local Kawasaki, Honda or Kohler dealer.

DESCRIPTION	ENGINE MANUFACTURER'S PART NUMBER	ORDER HUSTLER PART NUMBER
Kawasaki Service Manual	9924-2045-02	771535
Honda Service Manual	61ZJ410Z	787671
Kohler Service Manual	PP2450	747345

Hydraulic pump information

Power to wheel motors is supplied by two Hydro-Gear hydraulic pumps.

For more information:

Hydro-Gear
Customer Services
1411 So. Hamilton Street
Sullivan, IL 61951
Phone: (217) 728-2581

NOTE: During warranty period, check with your Hustler dealer before attempting repairs on any tractor system. Unauthorized repair work can void warranty of tractor, engine, and other components.

Wheel motors information

For more information on Hustler Z wheel motors:

Parker Hannifin Corporation
2745 Snapps Ferry Road
Greenville, TN 37745
Phone: (423) 787-2499

For more information on Super Z wheel motors:

White Hydraulics
P.O. Box 30250
Nashville, TN 37241-0250
Phone: (270) 885-1110

NOTE: During warranty period, check with Hustler dealer before attempting repairs on any tractor system. Unauthorized repair work can void warranty of tractor, engine, and other components.

FREQUENTLY ORDERED PARTS

Part No.	Description
027912	Lubrizol 7 oz. bottle
027920	Lubrizol 10 oz. bottle
768341	Hydraulic oil filter (Hustler Z only)
783939	Hydraulic oil filter (Super Z only)
781443	Pump drive belt
782292	B-Section belt, deck (926881, 926725, 926972)
781310	B-Section belt, deck (926915, 926923, 926931, 926949, 926667, 926675, 926741, 926980, 927111, 927038)
784207	B-Section belt, deck (926964, 926766, 926998, 927046)
795781	B-Section belt, rear discharge deck (927467, 927673)
797167	B-Section belt, rear discharge deck (927624, 927681)
797720	60" XR7 belt
797936	66" XR7 belt
798744	72" XR7 belt
068478	Fuel filter (Kawasaki)
	Fuel filter (Kawasaki liquid cooled)
785626	Fuel filter (Honda)
068478	Fuel filter (Kohler)
772079	Engine oil filter (Kawasaki)
785634	Engine oil filter (Honda)
747303	Engine oil filter (Kohler)
777391	21" High sail cw blade (60Z with blade saddles) (side discharge deck)
782516	21" High sail cw blade (60Z without blade saddles) (side discharge deck)
781898	18" High sail cw blade (52Z) (side discharge deck)
783977	24" High sail cw blade (72Z) (side discharge deck)
795252	21" High sail cw blade (60Z decks beginning with serial number 05011098) (side discharge deck)
795526	18" High sail cw blade (52Z decks beginning with serial number 05020101) (side discharge deck)
795260	24" High sail cw blade (72Z decks beginning with serial number 05020206) (side discharge deck)
793794	20-1/2" Flat cw blade (60" rear discharge deck - left and center blade)
795633	20-1/2" Flat ccw blade (60" rear discharge deck - right blade)
796839	23.86" Flat cw blade (72" rear discharge deck - left and center blade)
796508	23.86" Flat ccw blade (72" rear discharge deck - right blade)
794685	20.5" High sail cw blade (60" XR7 deck)
798702	24.5" High sail cw blade (72" XR7 deck)
797696	18.5" High sail cw blade (54" XR7 deck)
798496	22.5" High sail cw blade (66" XR7 deck)
785261	Remote filter element
782763	Remote filter element (liquid cooled)

**Hustler Z Parts Manual (P/N 375535) Order Form
Super Z Parts Manual (P/N 375543) Order Form**

To order by mail:

Fill out this form, fill out the credit card information or attach a check and send it to:

**Hustler Turf Equipment
P.O. Box 700
Hesston, KS 67062**

To order by e-mail:

Using this form as a guide, send all necessary information, including credit card information to:

jhamm@excelhustler.com

To order by Telephone or FAX:

Telephone: call (620) 327-1142 to place an order

FAX this completed form to 1-800-221-8691

Name: _____

Address: _____

Telephone: _____

Master Card Number: _____ **Expiration Date:** _____

Visa Card Number: _____ **Expiration Date:** _____

QTY	Part Number	Description	Unit Price	Total Price
	375535	Hustler Z Parts Manual	\$22.50	
	375543	Super Z Parts Manual	\$22.50	

TECHNICAL SPECIFICATIONS

ENGINE SPECIFICATIONS

	Kawasaki	Kawasaki	Honda	Kohler	Kohler	Kawasaki
Horsepower	23	25	24	27	28	26
No. of Cylinders	2	2	2	2	2	2
Displacement	41.2 CU IN (675 CC)	41.2 CU IN (675 CC)	40.9 CU IN (670 CC)	44.0 CU IN (725 CC)	44.0 CU IN (725 CC)	41.2 CU IN (675 CC)
Compression Ratio	8.1:1	8.1:1	8.3:1	9.0:1	9.0:1	8.6:1
Max. Torque	39.8 FT LBS @ 2400 RPM	41.0 FT LBS @ 2400 RPM	37.5 FT LBS @ 2500 RPM	42.7 FT LBS @ 3000 RPM	44.8 FT LBS @ 2200 RPM	42.7 FT LBS @ 2400 RPM

Starter 12-volt (.8 kW), solenoid shift positive engagement.

Ignition Electronic.

Charging System 12-volt, 15-amp.

Fuel Unleaded gasoline with octane rating of 87 or higher.

Fuel Filter Replaceable, automotive-type.

Cooling Water cool

Belt driven fan

Governor Mechanical.

Warranty 1 year limited.

TRACTION DRIVE SYSTEM:

Type Dual hydrostatic. Individual pumps power two direct-drive wheel motors. Hydrostatic system operates on 10W40 motor oil.

Pumps

Hustler Z - Hydrogear BDP10
Two variable displacement, axial piston type. Each pump powers one drive wheel motor.

Super Z - Hydrogear BDP21
Two variable displacement, axial piston type. Each pump powers one drive wheel motor.

Pump Drive V-belt drive from engine crankshaft.

Final Drive

Hustler Z - Parker-Ross TF024OUS080AAFW Direct drive high-torque wheel motors. One for each drive wheel.

Super Z - White CE 20 Direct drive high-torque wheel motors. One for each drive wheel.

Filter Replaceable spin-on type.

Ground Speed - infinitely variable

Hustler Z - 0-9 MPH (0-14.48 KPH) forward and 0-5 MPH (0-8 KPH) reverse

Super Z -

Transport 0-15 MPH (0-24.14 KPH) forward

Mowing 0-10 MPH (0-16.09 KPH) forward and 0-7.5 MPH (0-12.07 KPH) reverse

Steering Twin lever steering provides independent control of each drive wheel. Speed, forward, reverse, brake, and turns are all controlled with hand operated controls.

Turning Radius True zero degree. Turns within its own length. Counter-rotating, independent drive wheels.

BRAKES:

Service Hydrostatic dynamic braking.

Parking Automotive style drum brakes. When steering levers are placed in neutral

position, integral park brakes are automatically engaged.

Mower Drive Single V-belt drive from engine with electric clutch. Spring tension idler pulley for long belt life.

TIRES:

Front Two - 13 x 6.50 - 6, rib tread.

Drive tire:

24 x 12.00 - 12, turf tread.

CAPACITIES:

Fuel System 12 US GAL (45.4 L).

Hydraulic Oil 1.5 US GAL (5.7 L)

Engine Coolant 2.9 US QT (2.7 L)

DIMENSIONS: Height 39 IN (39 CM).

W/60 IN Deck Length 75 IN (190.5 CM).

Overall width with 60" deck and discharge chute up 62 IN (157.48 CM).

Tire-to-tire width 53 IN (134.62 CM).

Weight 1100 LBS (500 KG).

W/52 IN Deck Length 74 IN (188 CM).

Overall width with 52" deck and discharge chute up 59 IN (149.86 CM).

Tire-to-tire width 52 IN (132.08 CM).

Weight 1075 LBS (488.6 KG).

W/72 IN Deck Length 79 IN (200.6 CM).

Overall width with 72" deck and discharge chute up 70.4 IN (178.8 CM).

Tire-to-tire width 60 IN (152.4 CM).

Weight 1130 LBS (512.5 KG).

SAFETY FEATURES:

Operator presence system connected to deck and drive clutches. Stabilizer rollers at rear of tractor.

SEAT:

Standard: Molded-vinyl seat with armrests. Fore and aft adjustments.

Optional: Molded-vinyl, suspension seat with armrests. Fore and aft adjustment

CONSTRUCTION:

Mainframe is 1.5 IN x 3 IN x .187 IN (3.8 CM x 7.62 CM x .47 CM) rectangular steel tubing. Drive motors mounted to .179 IN (.45 CM) welded steel. Front caster wheels mounted with roller bearings on each wheel. Front caster forks are .50 IN (1.27 CM)

DECK LIFT: Foot-operated deck height adjustment. Pin for setting height, transport position.

CONTROLS: Hand-operated choke/throttle, ignition switch,

electric mower clutch. Integrated parking brakes.

INDICATORS: Hour meter, engine oil warning light, check engine warning light.

CUP HOLDER: Two cup holders molded into the left side fuel tank. Accommodates nearly any cup size.

DECKS

Common Specifications

Type: Free-floating mower using three blades with center blade to the front. Mower is suspended at the corners.

Includes 6 deck-mounted rollers to improve flotation in rolling and uneven terrain.

Deck Lift: Raise and lower deck from driver's seat with simple foot-operated deck height adjustment. Pin for setting height, transport position. Change cutting heights, hop curbs, and trailer more easily.

Construction: .125 IN (.317 CM) welded steel. Solid 1 IN x .375 IN (2.55 CM x .95 CM) steel bars reinforce impact areas on trim edges. .187 IN x .375 IN (.47 CM x .95 CM) in box-section reinforced front edge. Reinforcements welded onto spindle mount areas. Steel deck housing is 5 IN (1.27 CM) deep to provide room for high-capacity mowing.

Cutting Heights:

Foot-operated deck height adjustment. Pin for setting height, transport position. Height adjustment in .25 IN increments from 1 IN to 5 IN (2.55 CM to 12.7 CM)

Blade Drive V-belt drive to all three spindles. Spring tension idler pulleys.

Spindles Machine ductile housing. 1 IN (2.5 CM) diameter high carbon steel shafts and sealed ball bearings.

Flotation Suspended mower floats on four spring-assisted chains. 6 anti-scalp wheels are standard.

60" Side Discharge Deck Specifications

Mowing Blades Heavy-duty, heat-treated, high-lift steel blades.

21 IN x 2.75 IN x .25 IN (60Z deck with blade saddles)

21 IN x 3.00 IN x .25 IN (60Z deck without blade saddles)

Blade Tip Speed
18,375 FPM

52" Side Discharge Deck

Mowing Blades Heavy-duty, heat-treated, high-lift steel blades.

18 IN x 3.00 IN x .25 IN

Blade Tip Speed

18,900 FPM

72" Side Discharge Deck

Mowing Blades Heavy-duty, heat-treated, high-lift steel blades.

24 IN x 3.00 IN x .25 IN

Blade Tip Speed

18,525 FPM

60" Rear Discharge Deck Specifications

Mowing Blades Heavy-duty, heat-treated, flat steel blades.

20.5 IN x 2.5 IN x .203 IN

Blade Tip Speed

18,375 FPM

72" Rear Discharge Deck

Mowing Blades Heavy-duty, heat-treated, flat steel blades.

23.86 IN x 2.5 IN x .203 IN

Blade Tip Speed

18,525 FPM

54" XR7 Side Discharge Deck

Mowing Blades Heavy-duty, heat-treated, flat steel blades.

18.50 IN x 3.00 IN x .25 IN

Blade Tip Speed

18,400 FPM

60" XR7 Side Discharge Deck

Mowing Blades Heavy-duty, heat-treated, flat steel blades.

20.50 IN x 3.00 IN x .25 IN

Blade Tip Speed

18,400 FPM

66" XR7 Side Discharge Deck

Mowing Blades Heavy-duty, heat-treated, flat steel blades.

22.50 IN x 3.00 IN x .25 IN

Blade Tip Speed

18,900 FPM

72" XR7 Side Discharge Deck

Mowing Blades Heavy-duty, heat-treated, flat steel blades.

24.50 IN x 3.00 IN x .25 IN

Blade Tip Speed

18,900 FPM

INDEX

	PAGE		PAGE
Access to engine and hydraulic pump.....	4-6	Hydraulic pump belt adjustment	5-4
Adjustment introduction.....	5-1	Hydraulic pump information.....	8-1
Anti-scalp wheels	5-7	Hydraulic system.....	4-6
Belt replacement.....	4-11	Indicators.....	9-1
Brake specifications	9-1	Instrumentation	3-2
Capacities specification.....	9-1	Lubrication	4-5
Construction specification.....	9-1	Maintenance introduction.....	4-4
Control lever adjustment.....	5-3	Model and serial number.....	1-2
Control lever stops	5-2	Moving tractor with stalled engine	3-4
Controls	3-1	Mower blade maintenance	4-11
Controls specifications	9-1	Mower blade removal	4-11
Cooling system.....	4-10	Mower deck operation.....	3-6
Cup holder.....	9-1	New season preparation	7-1
Cutting height specifications.....	9-1	Operating suggestions	3-5
Decals	2-2	Park brake adjustment	5-3
Deck cutting height adjustment.....	5-7	Parts and service.....	1-2
Deck drive belt adjustment.....	5-4	Preparation of battery for storage.....	7-1
Deck leveling and height adjustment	5-5	Preparation of engine for storage	7-1
Deck lift specifications.....	9-1	Safety features specifications	9-1
Deck warranty	1-2	Safety interlock system	3-3
Dimensions.....	9-1	Seat	9-1
Driving the tractor.....	3-4	Steering dampener.....	5-2
Electrical system	4-5	Steering linkage.....	5-1
Engine air filter	4-9	Super Z Parts Manual	8-1, 8-3
Engine information.....	8-1	Tires.....	4-5
Engine oil and filter.....	4-9	Tire specifications	9-1
Engine rpm setting	5-4	To the new owner.....	1-1
Engine specifications	9-1	Torque values.....	4-5, 5-1
Engine starting	3-3	Traction drive system specification	9-1
Frequently ordered parts	8-2	Tractor warranty.....	1-2
Fuel system.....	4-7	Using this manual.....	1-1
General engine maintenance	4-11	Warranty registration	1-1
Hour meter	4-5	Wheel motor information.....	8-1
Hustler Z Parts Manual	8-1, 8-3		