

NEW HOLLAND
MZ19H

REPAIR
MANUAL



MZ19H REPAIR MANUAL CONTENTS

SECTION 1 - GENERAL INFORMATION

SECTION 2 - MODEL/SERIAL NUMBER LOCATION

SECTION 3 - GREASING AND LUBRICATION

SECTION 4 - ENGINE

SECTION 5 - TRANSAXLE

SECTION 6 - CHASSIS

SECTION 7 - MOWER DECKS

SECTION 8 - ELECTRICAL SYSTEM

The sections used through out all New Holland product Repair manuals may not be used for each product. Each Repair manual will be made up of one or several books. Each book will be labeled as to which sections are in the overall Repair manual and which sections are in the each book.

The sections listed above are the sections utilized for the MZ19H series tractors.

SECTION 1 - GENERAL INFORMATION

CONTENTS

Section	Description	Page
	General Information.....	1-2
	Think Safety First.....	1-2
	Engine Specifications - (MZ19H).....	1-3
	Bolt Torques.....	1-7
	Maintenance Schedule - (MZ19H).....	1-8



This symbol means WARNING or PERSONAL SAFETY INSTRUCTION - read the instruction because it has to do with your safety. Failure to comply with the instruction may result in personal injury or even death.

This manual is intended as a service and repair manual only. The safety instructions provided herein are for troubleshooting, service, and repair of the MZ19H zero radius tractor. The MZ19H zero radius tractor and attachment operator's manuals contain safety information and operating tips for safe operating practices. Operator's manuals are available through your New Holland dealer.

THINK SAFETY FIRST

AVOID UNEXPECTED STARTING OF ENGINE...

Always turn off the engine and disconnect the spark plug wire(s) before cleaning, adjusting, or repair.

AVOID LACERATIONS AND AMPUTATIONS...

Stay clear of all moving parts whenever the engine is running. Treat all normally moving parts as if they were moving whenever the engine is running or has the potential to start.

AVOID BURNS...

Do not touch the engine, muffler, or other components which may increase in temperature during operation, while the unit is running or shortly after it has been running.

AVOID FIRES AND EXPLOSIONS...

Avoid spilling fuel and never smoke while working with any type of fuel or lubricant. Wipe up any spilled fuel or oil immediately. Never remove the fuel cap or add fuel when the engine is running. Always use approved, labeled containers for storing or transporting fuel and lubricants.

AVOID ASPHYXIATION...

Never operate an engine in a confined area without proper ventilation.

AVOID INJURY FROM BATTERIES...

Battery acid is poisonous and can cause burns. Avoid contact with skin, eyes, and clothing. Battery gases can explode. Keep cigarettes, sparks, and flames away from the battery.

AVOID INJURY DUE TO INFERIOR PARTS...

Use only original equipment parts to ensure that important safety criteria are met.

AVOID INJURY TO BYSTANDERS...

Always clear the area of bystanders before starting or testing powered equipment.

AVOID INJURY DUE TO PROJECTILES...

Always clear the area of sticks, rocks, or any other debris that could be picked up and thrown by the powered equipment.

AVOID MODIFICATIONS...

Never alter or modify any part unless it is a factory approved procedure.

AVOID UNSAFE OPERATION...

Always test the safety interlock system after making adjustments or repairs on the machine. Refer to the Electrical section in this manual for more information.

SECTION 1 - GENERAL INFORMATION

SPECIFICATIONS

MZ19H

ENGINE

Type.....	Kawasaki
Model.....	FH580V
Horsepower.....	14.2 kw (19)@3600 RPM
Cylinders.....	V-Twin
Displacement.....	585CC (35.7 cu. in.)
Low Idle Speed.....	1400 RPM
Maximum Speed:	
High Idle.....	3400 RPM
Oil Capacity.....	1.9 qt. (1.8L)
Spec Number.....	AS13
Fuel Unleaded Gasoline.....	87 octane min.
Vertical Shaft.....	1 in. (2.54 cm) Dia
Charge coil.....	12v - 13 amp
Other.....	Air cooled, Dual element air cleaner, Fuel pump, Overhead valve, Four cycle, Electronic ignition, Full pressure lubricated with oil filter

CONSTRUCTION

Front Frame.....	Welded 1 x 2 x .120 structural steel tube
Rear Frame.....	Welded, 7 and 10 ga. high strength steel
Frame Assembly.....	Front and rear frames bolted together

FUEL SYSTEM

Capacity.....	5 Gallon (18.9 L)
Type.....	Single fuel tank fender mounting on left side
Other.....	Fuel tank shut-off, Fuel filter (replaceable in-line type), Large diameter vented fuel cap, Tank includes molded beverage holder

TRACTION SYSTEM

Transaxles.....	Twin Hydro-Gear Hydrostatic Transaxles
Transaxle Drive.....	Belt drive with self-tensioning system
Ground speed.....	Infinite, 0 to 7-MPH (10.5-km/hr) forward, 0 to 3.4-MPH (5.5-km/hr) reverse
Transport Rods.....	Allow unit to be moved without engine running

ATTACHMENT DRIVE

Clutch.....	Electric Clutch
Type.....	Vertical drive with single deep B-groove Pulley

SECTION 1 - GENERAL INFORMATION

MZ19H

TIRES

Rear Drive Tires	18 x 10.5-10 4 ply with "Multitrac CS" tread
Front Castor Tires.....	410/350 x 4 with "sawtooth" tread
Tire Pressure	13 psi (90 kPa), rear, 35 psi (241 kPa) front

OPERATORS SEAT

Type.....	High back foam padded with arm rests
Mounting.....	Hinged mounting for easy access to battery and controls; spring suspension
Adjustment.....	Fore and aft 3 in. (76 mm) by loosening 2 knobs and sliding seat

STEERING

Levers.....	Dual wrap-around levers control hydraulic pumps
Dampening	Dual hydraulic dampers
Turning Radius	Zero radius turn (ZRT)

CONTROLS

Steering Lever	Dual wrap-around with cushioned grips
Parking Brake.....	Left hand operated lever with cushioned grip
Attachment Lift.....	Right hand operated lever with cushioned grip
Cutting Height.....	Rightside incorporated with attachment lift
Engine Throttle	Rightside console mounted lever
Ignition Switch	Rightside console mounted electric with key
Power Take Off.....	Rightside console mounted electric

INTERLOCKS

Seat	Operator presence switch
Control Lever.....	Dual neutral sensing switch
Power Take Off.....	Position switch
Brake	Position switch

ELECTRICAL SYSTEM

Battery Voltage	12 volt negative ground
Battery Type	BCI Group U1
Fused.....	(1) 30 amp blade type, main (1) 25 amp blade type, charge system (1) 10 amp (blade type) included with optional light kit

SECTION 1 - GENERAL INFORMATION

MZ19H

LUBRICATION FITTINGS

Front Castor Pivots.....	2 Fittings
Front Castor Wheels.....	2 Fittings
Lift Assembly	3 Fittings
Deck Idler Pivot	1 Fitting
Transaxle Idler Pivot.....	1 Fitting
Control Linkage Pivot	2 Fittings

DIMENSIONS

Wheel Base	52.1 in. (132.3 cm) center of castor to center of drive tires
Width	47.6 in. (120.9 cm) outside rear tires
Overall Width.....	65 in. (165.1 cm) with deck deflector down 58 in. (147.3 cm) Gate width with deck deflector up.
Overall Length	77.5 in. (196.9 cm)
Overall Height.....	41 in. (104.1 cm)
Track Width	37.5 in. (95.3 cm) center to center of rear tires 30.4 in. (77.2 cm) center to center of castor tires
Deck Width	65 in. (165.1 cm) w/deflector down

WEIGHT

Net Weight	680 lbs. (309 kg) (estimated)
------------	-------------------------------

DECK

Right side discharge. 52 in. (132 cm) cut, three blade mid-mounted rotary. Drawn 12 gauge steel deck with welded mounting brackets and gauge wheel brackets. Frame supported.

DECK BELT COVERS

Removable 16 gauge formed sheet metal, fastened to deck with thread forming screws. Access holes in top for greasing spindles.

DEFLECTOR

12 gauge formed, held down by torsion springs at pivot bracket.

ANTI-SCALP ROLLERS

One front mounted

DECK OFFSET

None. Deck centerline on machine centerline.

SECTION 1 - GENERAL INFORMATION

MZ19H

GAUGE WHEELS	One on each front corner, one on each rear corner to reduce scalping. Gauge wheels have four height position adjustments.
HEIGHT OF CUT	Adjusts from 1.5" to 4.5" (38 to 114 mm) (7 positions)
UNCUT CIRCLE	0" uncut circle
ENGINE TO DECK DRIVE	HB-section Kevlar cord "V" belt from engine clutch sheave to deck spindle sheaves. Spring loaded idler for belt tension and take-up
SPINDLE ASSEMBLIES	Three 17-mm diameter spindles turning in permanently lubed ball bearings. Die cast aluminum spindle housings.
BLADES	Three 18" x 2.5" x .187" heat treated steel blades
TIP SPEED	17,500 ft/min (5334 m/min) @ 3400 RPM nominal 18,070 ft/min (5507 m/min) @ 3500 RPM max
DECK MOUNTING	Deck suspended from front frame by four trunnion rods and attached to lift mechanism by two multi-position links ("pork chops").
OPTIONAL EQUIPMENT	
Recycler Kit	
Light Kit	
Snow Plow Attachment	
Tire Chains	
Smooth Castor Wheel Kit	
Striping Kit	
Decal Kit - Canada	
CERTIFICATION	Conforms to California CARB and EPA Certification. Conforms to ANSI B71.1-2001

SECTION 1 - GENERAL INFORMATION

BOLT TORQUES

DESCRIPTION	TORQUE
Blade to Spindle	80 - 100 ft lb (109 - 136 N·m)
Caster Bolts	77 - 95 ft lb (105 - 130 N·m)
Clutch Bolt	50 - 60 ft lb (68 - 82 N·m)
Engine Mounting Bolts	120 - 180 ft lb (164 - 246 N·m)
Spindle Pulley Nuts	80 - 100 ft lb (109 - 136 N·m)
Wheel Lug Nuts	70 - 90 ft lb (95.5 - 123 N·m)

SECTION 1 - GENERAL INFORMATION

MAINTENANCE SECHUDLE (MZ19H)

MAINTENANCE PROCEDURE	SERVICE INTERVAL
Check the engine oil	After first use
Check the engine oil level	Each use
Check the safety system	
Clean the air intake screen	
Clean the mower housing	
Check the cutting blades	
Grease all lubrication points ¹	Every 5 hours
Oil the linkage bushings ¹	
Service the foam air cleaner ¹	
Check the belts for wear/cracks	
Check the battery electrolyte	
Check the tire pressure	
Service the paper air cleaner ¹	Every 25 hours
Change the engine oil	Every 50 hours
Check the spark plug(s)	
Change the oil filter ¹	Every 100 hours
Replace the fuel filter	
Replace the paper air cleaner ¹	
Clean the engine shrouds and cooling fins ¹	Every 200 hours
Before Storage:	Every 300 hours
<ul style="list-style-type: none"> • Perform all maintenance procedures listed above. • Drain the fuel tank. • Charge the battery and disconnect the battery cables. • Paint any chipped surfaces. 	

¹More often in dusty, dirty conditions

IMPORTANT: Refer to your engine operator's manual for additional maintenance procedures.



If you leave the key in the ignition switch, someone could accidentally start the engine and seriously injure you or other bystanders.

Remove the key from the ignition and disconnect the wire from the spark plug(s) before you do any maintenance. Set the wire aside so that it does not accidentally contact the spark plug.

SECTION 2 - MODEL/SERIAL NUMBER LOCATION

CONTENTS

Section	Description	Page
	Model/Serial Number Location	2-2

SECTION 2 - MODEL/SERIAL NUMBER LOCATION

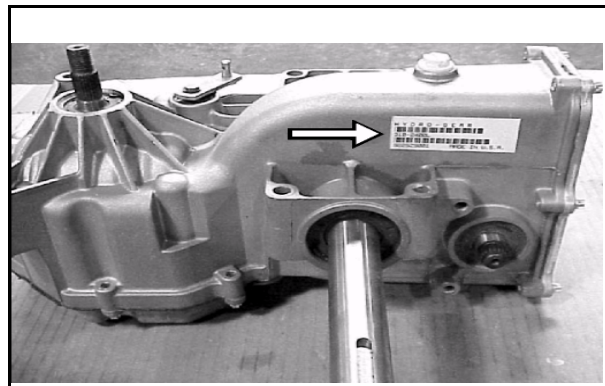
MODEL/SERIAL NUMBER LOCATION

The unit model and serial number plates is on the frame under the seat as shown in the illustration.

The engine has its own model and serial number identification. Consult the appropriate engine manufacture's service literature for the location and translation of the engine model and serial number information.



Transaxles also have their own model/serial number.



SECTION 3 - GREASING AND LUBRICATION

CONTENTS

Section	Description	Page
	Service Interval/Specification	3-2
	Lubrication Points	3-3

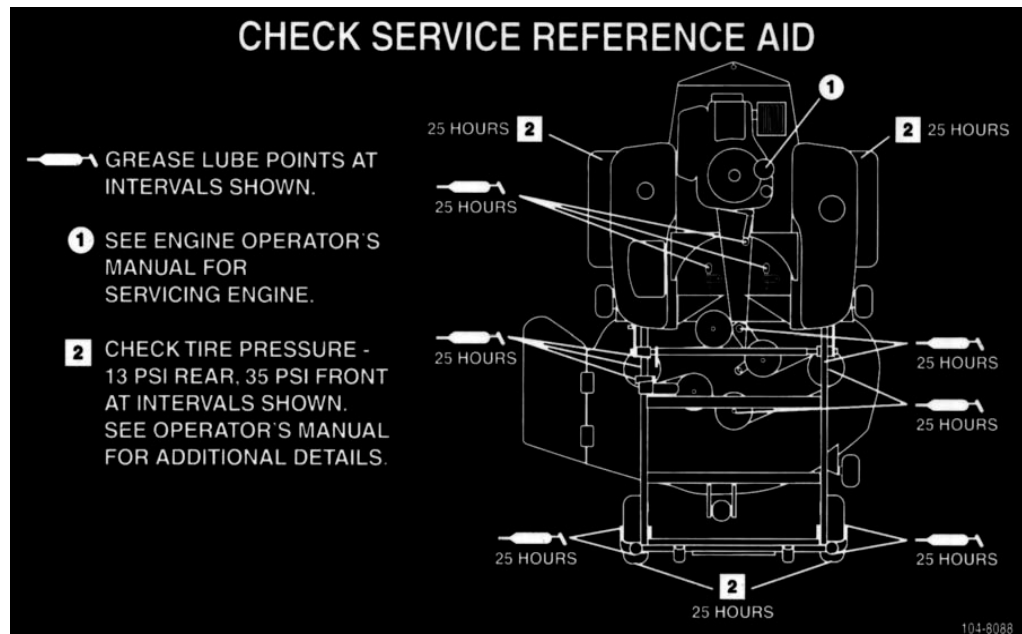
SECTION 3 - GREASING AND LUBRICATION

SERVICE INTERVAL/SPECIFICATION

The unit should be greased every 25 hours; more often when operating in dirty, dusty, or sandy conditions.

A decal located under the seat shows the location of all the grease zerks.

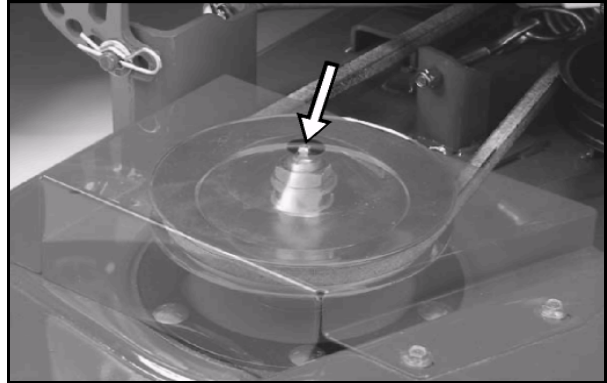
Grease Type: New Holland Ambra GR-9 multi-purpose grease (General-purpose lithium base grease).



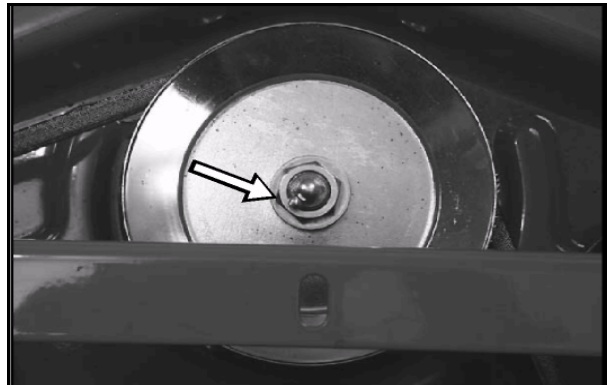
SECTION 3 - GREASING AND LUBRICATION

LUBRICATION POINTS

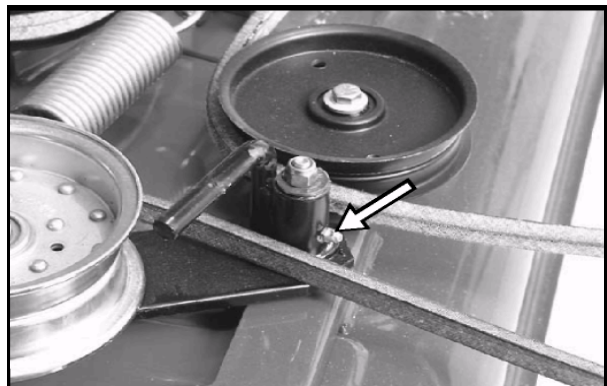
There is a grease fitting on the mower for right and left outer spindle.



The grease zerk for the center mower spindle.

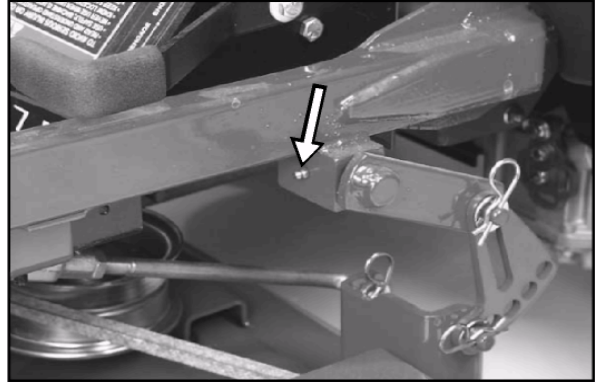


There is a grease fitting for the deck idler arm bushing.

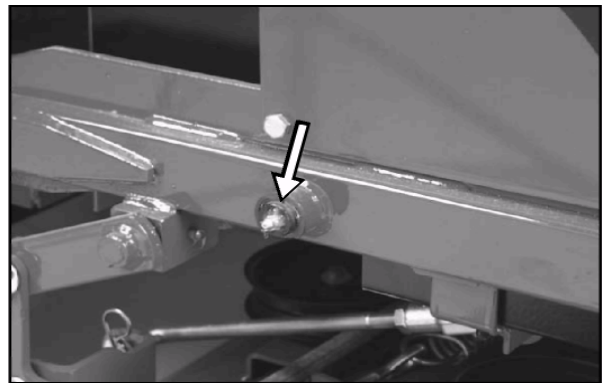


SECTION 3 - GREASING AND LUBRICATION

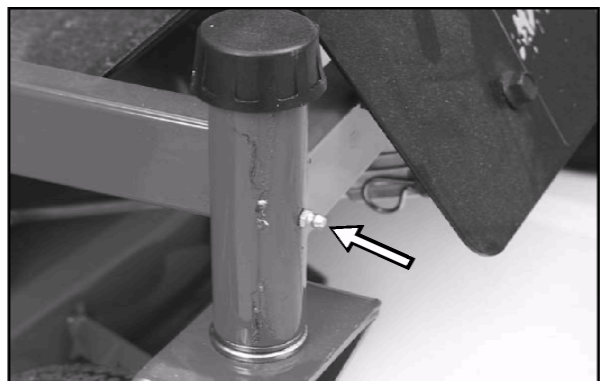
There are two grease fittings for the deck raising pivot bushings - one on each side of the unit.



The grease zerk for the deck height adjustment lever is on the right side of the machine.

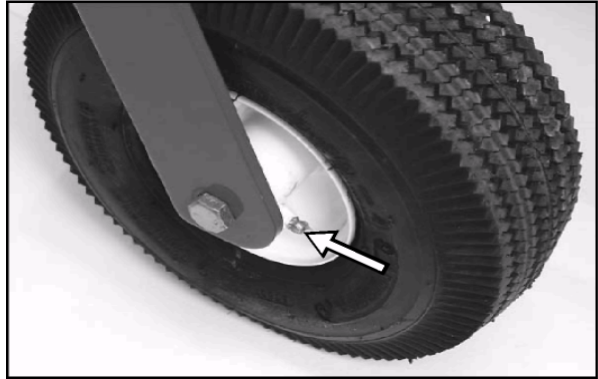


There are grease fittings for each front castor bushing,

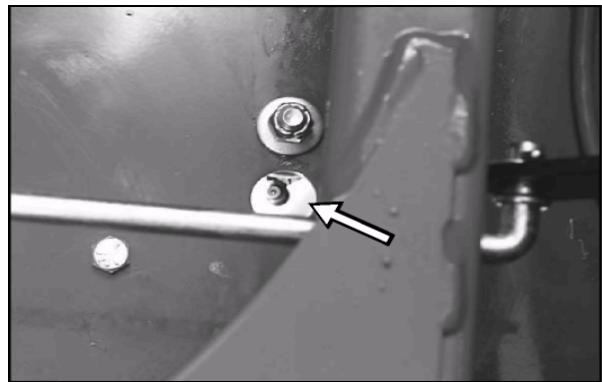


SECTION 3 - GREASING AND LUBRICATION

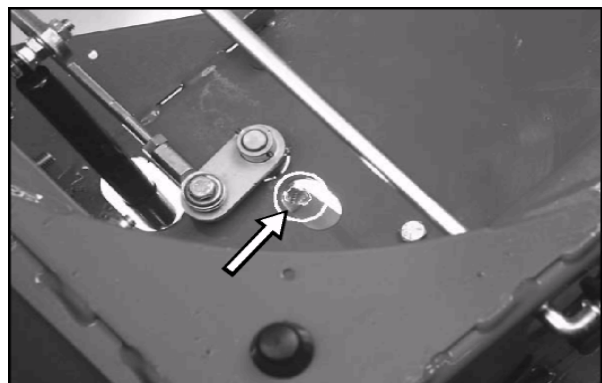
as well as the castor wheel bearings.



The zerk fitting for the traction belt idler bushing is located under the seat.



Also under the seat are the fittings for the motion control lever pivot bushings - one for each lever.



SECTION 3 - GREASING AND LUBRICATION

SECTION 4 - ENGINE

CONTENTS

Section	Description	Page
	Kawasaki Engine	4-2
	Kawasaki Air Cleaner	4-2
	Spark Plug	4-3
	Engine Remove and Replace	4-4

SECTION 4 - ENGINE

KAWASAKI ENGINE

Oil Type: New Holland Ambra Super Gold detergent oil (API service SC, SD, SE, SF, SG, or SH).

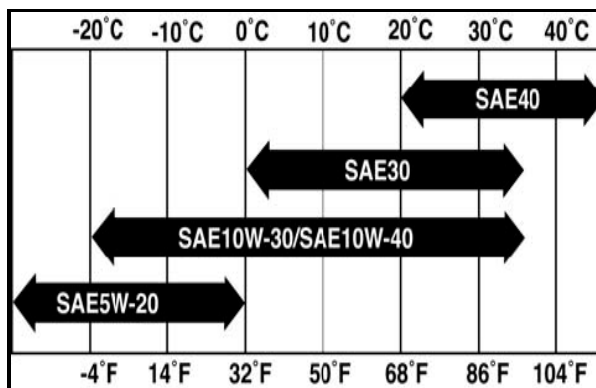
Crankcase Capacity (with filter): 1.6 qt. (1.5 l).

Viscosity: See table.

Change Oil:

- After the first use.
- Every 100 hours.

Change oil filter every 200 hours.

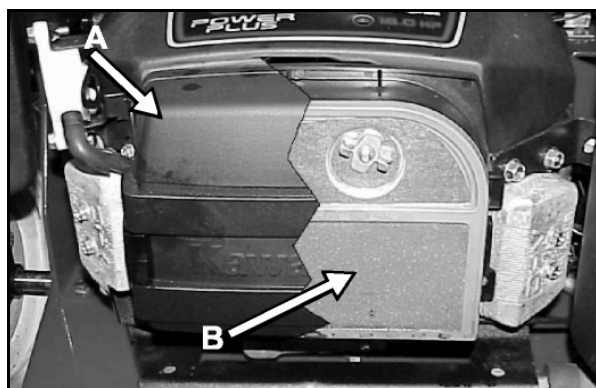


KAWASAKI AIR CLEANER

The air cleaner assembly consists of a paper filter element and a foam precleaner.

To clean the paper element, tap lightly on a flat surface to remove dust and dirt. Inspect the element for tears, oil contamination, and damage to the rubber seal.

NOTE: Never clean the paper element with compressed air or solvents. If the element is dirty or damaged, replace it immediately.



(A) COVER

(B) AIR FILTER

This as a preview PDF file from best-manuals.com



Download full PDF manual at best-manuals.com