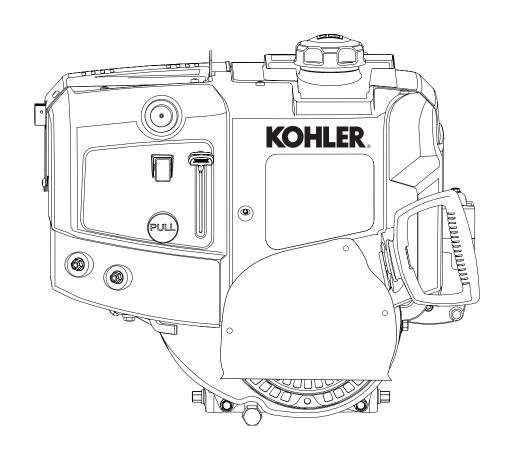
# OWNER'S MANUAL

# **KOHLER** SNOWPRO

# HORIZONTAL CRANKSHAFT

# **WH208**



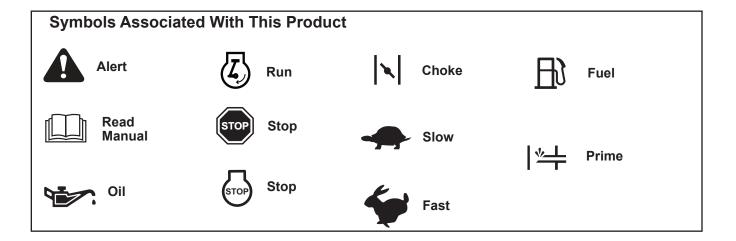


**Congratulations on your purchase of a Kohler Engine.** Every part, every component, every system on a KOHLER engine is guided by our exclusive Performance Engineering philosophy:

- To operate on the leading edge of innovation
- To push the boundaries of cleaner, more efficient engines
- To manufacture the highest performing, most reliable engines on the market

You can rest assured that your Kohler Engine will provide maximum power and reliability in all operating conditions. Also, Kohler engines are backed by a worldwide network of over 10,000 distributors and dealers. For more information on Kohler Engines or to find a Kohler Service Center, visit KohlerEngines.com.

To keep your engine in top operating condition, follow the maintenance procedures in this manual.



# **Safety Precautions**

To ensure safe operation please read the following statements and understand their meaning. Also refer to your equipment owner's manual for other important safety information. This manual contains safety precautions which are explained below. Please read carefully.



# **WARNING**

Warning is used to indicate the presence of a hazard that *can* cause *severe* personal injury, death, or substantial property damage if the warning is ignored.



#### CAUTION

Caution is used to indicate the presence of a hazard that *will* or *can* cause *minor* personal injury or property damage if the caution is ignored.

#### **NOTE**

Note is used to notify people of installation, operation, or maintenance information that is important but not hazard-related.

#### For Your Safety!

These precautions should be followed at all times. Failure to follow these precautions could result in injury to yourself and others.







Explosive Fuel can cause fires and severe burns.

Do not fill the fuel tank while the engine is hot or running.

### **Explosive Fuel!**

Gasoline is extremely flammable and its vapors can explode if ignited. Store gasoline only in approved containers, in well ventilated, unoccupied buildings, away from sparks or flames. Do not fill the fuel tank while the engine is hot or running, since spilled fuel could ignite if it comes in contact with hot parts or sparks from ignition. Do not start the engine near spilled fuel. Never use gasoline as a cleaning agent.

# **WARNING**



Carbon Monoxide can cause severe nausea, fainting or death.

Avoid inhaling exhaust fumes, and never run the engine in a closed building or confined area.

#### **Lethal Exhaust Gases!**

Engine exhaust gases contain poisonous carbon monoxide. Carbon monoxide is odorless, colorless, and can cause death if inhaled. Avoid inhaling exhaust fumes, and never run the engine in a closed building or confined area.

# **WARNING**



Hot Parts can cause severe burns.

Do not touch engine while operating or just after stopping.

#### **Hot Parts!**

Engine components can get extremely hot from operation. To prevent severe burns, do not touch these areas while the engine is running, or immediately after it is turned off. Never operate the engine with heat shields or guards removed.





Electrical Shock can cause severe injury or death.

Use only a 3 wire extension cord with a Ground Fault Circuit Interrupter (GFCI) outlet.

## **Electrical Shock!**

Use only a 3-wire extension cord and Ground Fault Circuit Interrupter (GFCI) outlet. Plug into the engine first then the wall outlet. After starting, remove cord from wall outlet first, then remove from the electric starter.





Accidental Starts can cause severe injury or death.

Disconnect and ground spark plug leads before servicing.

#### **Accidental Starts!**

Disabling engine. Accidental starting can cause severe injury or death. Before working on the engine or equipment, disable the engine as follows: 1) Disconnect the spark plug lead(s). 2) Disconnect negative (-) battery cable from battery.

# **WARNING**



Rotating Parts can cause severe injury.

Stay away while engine is in operation.

### **Rotating Parts!**

Keep hands, feet, hair, and clothing away from all moving parts to prevent injury. Never operate the engine with covers, shrouds, or guards removed.

# California Proposition 65 Warning

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

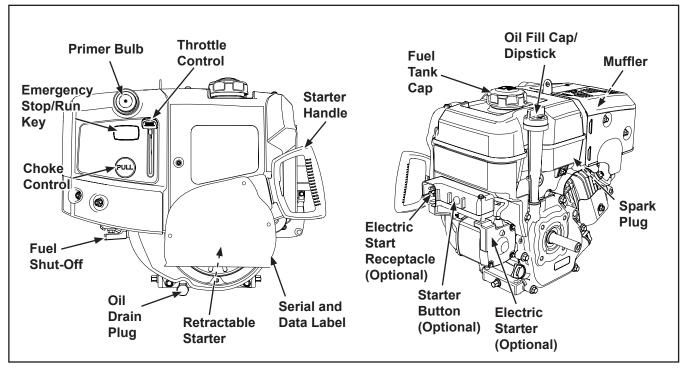


Figure 1. Control and Service Point Locations.

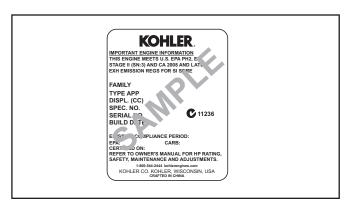


Figure 2. Serial and Data Label (Example).

The Emission Compliance Period referred to on the Emission Control or Air Index label indicates the number of operating hours for which the engine has been shown to meet Federal and CARB emission requirements. The following table provides the Engine Compliance Period (in hours) associated with the category descriptor found on the certification label.

#### **Emission Compliance Period (Hours)**

EPA	Category C 125 hours		
CARB	Moderate 125 hours		

Refer to serial and data label for engine displacement. Exhaust Emission Control System for model WH208 is EM for U.S. EPA and Europe.

#### Oil Recommendations

Using the proper type and weight of oil in the crankcase is extremely important. So is checking oil daily and changing oil regularly. Failure to use the correct oil, or using dirty oil, causes premature engine wear and failure.

### Oil Type

Use high quality detergent oil of API (American Petroleum Institute) service class SJ or higher. Select the viscosity based on the air temperature at the time of operation as shown in the following table.

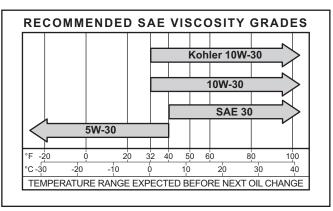


Figure 3. Oil Viscosity Grades Table.

Refer to **Maintenance Instructions** for detailed oil check and oil change procedures.

### **Fuel Recommendations**



# **WARNING**

Explosive Fuel can cause fires and severe burns.

Do not fill the fuel tank while the engine is hot or running.

Gasoline is extremely flammable and its vapors can explode if ignited. Store gasoline only in approved containers, in well ventilated, unoccupied buildings, away from sparks or flames. Do not fill the fuel tank while the engine is hot or running, since spilled fuel could ignite if it comes in contact with hot parts or sparks from ignition. Do not start the engine near spilled fuel. Never use gasoline as a cleaning agent.

## **General Recommendations**

Purchase gasoline in small quantities and store in clean, approved containers. A container with a capacity of 2 gallons or less with a pouring spout is recommended. Such a container is easier to handle and helps eliminate spillage during refueling.

Do not use gasoline left over from the previous season, to minimize gum deposits in your fuel system and to ensure easy starting.

Do not add oil to the gasoline.

Do not overfill the fuel tank. Leave room for the fuel to expand. Do not fill above the base of the filler neck.

#### **Fuel Type**

For best results use only clean, fresh, unleaded gasoline with a pump sticker octane rating of 87 or higher. In countries using the Research method, it should be 90 octane minimum.

Unleaded gasoline is recommended as it leaves less combustion chamber deposits and reduces harmful exhaust emissions. Leaded gasoline is not recommended.

#### Gasoline/Alcohol blends

Gasohol (up to 10% ethyl alcohol, 90% unleaded gasoline by volume) is approved as a fuel for Kohler engines. Other gasoline/alcohol blends including E20 and E85 are not to be used and are not approved. Any failures resulting from use of these fuels will not be warranted.

#### Gasoline/Ether blends

Methyl Tertiary Butyl Ether (MTBE) and unleaded gasoline blends (up to a maximum of 15% MTBE by volume) are approved as a fuel for Kohler engine. Other gasoline/ether blends are not approved. Any failures resulting from use of these fuels will not be warranted.

# **Operating Instructions**

Also read the operating instructions of the equipment this engine powers.

#### **Pre-Start Checklist**

• Check oil level. Add oil if low. Do not overfill.

NOTE: Engines are shipped without oil. Do not start engine with no or low oil. This will cause damage to the engine and will not be covered under warranty.

- Check fuel level. Add fuel if low.
- Check cooling air intake areas and external surfaces of engine. Make sure they are clean and unobstructed.
- Check that all shrouds, equipment covers, and guards are in place and securely fastened.
- Check that any clutches or transmissions are disengaged or placed in neutral. This is especially important on equipment with hydrostatic drive. The shift lever must be exactly in neutral to prevent resistance which could keep the engine from starting.



# **WARNING**

Carbon Monoxide can cause severe nausea, fainting or death.

Avoid inhaling exhaust fumes, and never run the engine in a closed building or confined area.

Engine exhaust gases contain poisonous carbon monoxide. Carbon monoxide is odorless, colorless, and can cause death if inhaled. Avoid inhaling exhaust fumes, and never run the engine in a closed building or confined area.

# **Starting**

1. Turn the fuel shut-off valve to the **ON** position. See Figure 4.

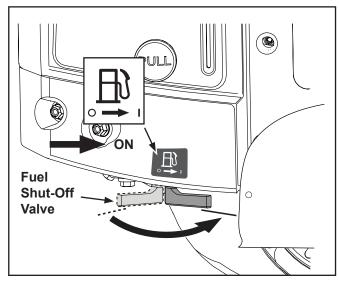


Figure 4. ON Position of Fuel Shut-Off Valve.

2. **For a Cold Engine** – Place the throttle control to the **FAST** positions. See Figure 5. Pull the choke control into the **CHOKE/ON** position. See Figure 6.

For a Warm Engine (normal operating temperatures) – Place the throttle control to the FAST position. See Figure 5. A warm engine usually does not require the choke on.

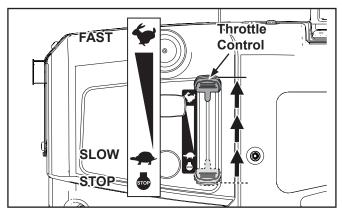


Figure 5. FAST Position of Throttle Control.

NOTE: The choke position for starting may vary depending upon temperature and other factors. Once engine is running and warm move the choke control to the **RUN/OFF** position. See Figure 10.

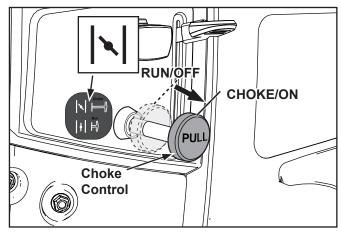


Figure 6. CHOKE/ON Position of Choke Control.

3. Place finger or thumb on center of primer bulb. Push the primer bulb three times. See Figure 7.

NOTE: It is usually not necessary to prime a warm engine.

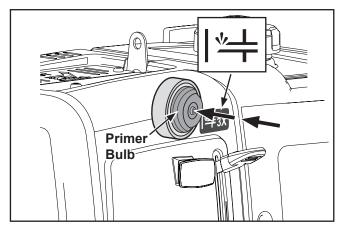


Figure 7. Pushing Primer Bulb.

4. Start the engine as follows:

For Retractable Start – SLOWLY pull the starter handle until just past compression – STOP! Return starter handle, pull firmly with a smooth, steady motion to start. Pull the handle straight out to avoid excessive rope wear from the starter rope guide. See Figure 8.

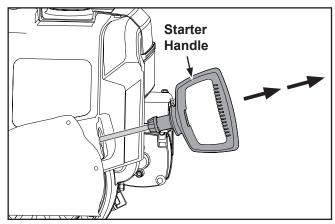


Figure 8. Operating the Retractable Starter.

NOTE: Extend the starting rope periodically and check its condition. If the rope is frayed, have it replaced immediately by your Kohler Engine Service Center.



# **WARNING**

Electrical Shock can cause severe injury or death.

Use only a 3 wire extension cord with a Ground Fault Circuit Interrupter (GFCI) outlet.

Use only a 3-wire extension cord and Ground Fault Circuit Interrupter (GFCI) outlet. Plug into the engine first then the wall outlet. After starting, remove cord from wall outlet first, then remove from the electric starter.

For (Optional) Electric Start – First plug the 3-wire extension cord into the electric start receptacle and then into a Ground Fault Circuit Interrupter (GFCI) wall outlet. Press the starter button. See Figure 9. DO NOT hold the starter button in for more than 10 seconds. Wait one full minute between start attempts. If engine does not start after 4 attempts refer to Troubleshooting Chart.

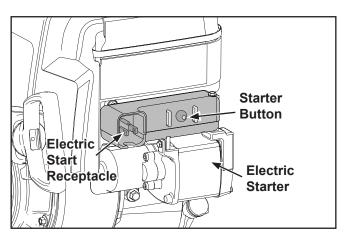


Figure 9. Electric Starter, Receptacle and Starter Button (Optional).

 Gradually return the choke control to the RUN/ OFF position after the engine starts and warms up. See Figure 10.

The engine/equipment may be operated during the warm up period, but it may be necessary to leave the choke partially on until the engine warms up.

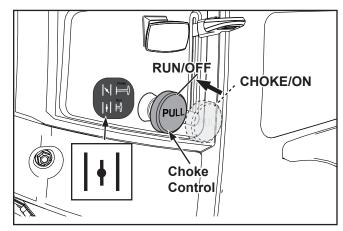


Figure 10. RUN/OFF Position of Choke Control.

# **Normal Stopping**

- 1. If possible, remove the load.
- 2. Move the throttle control to the **SLOW** or **LOW** idle position. Allow the engine to run at idle for 30-60 seconds. See Figure 11.
- 3. Turn the fuel shut-off valve to the **OFF** position. See Figure 13.
- 4. Brush snow off engine and equipment.

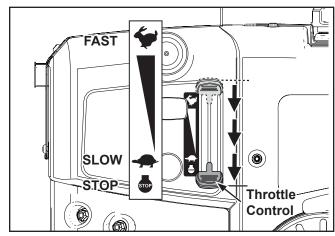


Figure 11. STOP Position of Throttle Control.

# **Emergency Stopping**

1. Pull out the stop/run key. See Figure 12.

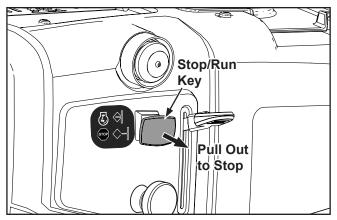


Figure 12. Emergency Stop/Run Key.

2. Turn the fuel shut-off valve to the **OFF** position. See Figure 13.

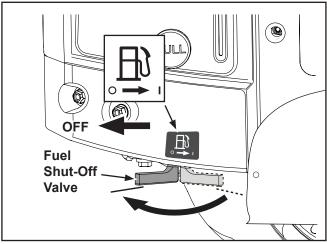


Figure 13. OFF Position of Fuel Shut-Off Valve.

- 3. Brush snow off engine and equipment.
- 4. Install the stop/run key into the key slot.

# Operating

#### **Angle of Operation**

Continuous operation at angles up to 20° with no less than 1/2 full fuel tank. Check oil level to assure crankcase oil level is correct. Refer to **Check Oil Level**.

Intermittent operation, up to one minute at angles up to 25° with 1/2 full fuel tank. Check oil level to assure crankcase oil level is correct. Refer to **Check Oil Level**.

Refer to the operating instructions of the equipment this engine powers. Because of equipment design or application, there may be more stringent restrictions regarding the angle of operation.

NOTE: Do not operate this engine continuously at angles exceeding 20° in any direction.

Engine damage could result from insufficient lubrication.

#### Cooling

NOTE: If ice builds up on the retractable starter screen or other cooling areas, stop the engine immediately and clean. Operating the engine with blocked or dirty air intake and cooling areas can cause extensive damage due to overheating. Refer to Clean Air Intake/Cooling Areas.



# **WARNING**

**Hot Parts can cause severe burns.** Do not touch engine while operating or just after stopping.

Engine components can get extremely hot from operation. To prevent severe burns, do not touch these areas while the engine is running, or immediately after it is turned off. Never operate the engine with heat shields or guards removed.

### **Engine Speed**

NOTE: Do not tamper with the governor setting to increase the maximum engine speed.

Overspeed is hazardous and will void the engine warranty. The maximum allowable high idle speed for these engines is 3750 RPM, no load.

### **Maintenance Instructions**

Maintenance, repair or replacement of the emission control devices and systems, which are being done at the customers expense, may be performed by any non-road engine repair establishment or individual. Warranty repairs must be performed by an authorized Kohler Engine Service Center.



# **WARNING**

Accidental Starts can cause severe injury or death.

Disconnect and ground spark plug leads before servicing.

Disabling engine. Accidental starting can cause severe injury or death. Before working on the engine or equipment, disable the engine as follows: 1) Disconnect the spark plug lead(s). 2) Disconnect negative (-) battery cable from battery.

#### **Maintenance Schedule**

These required maintenance procedures should be performed at the frequency stated in the table below. They should also be included as part of any seasonal tune-up.

Frequency	Maintenance Required			
Daily or Before Starting Engine	Check oil level.			
	Fill fuel tank.			
	Check air intake and cooling areas; clean as necessary.1			
Yearly	Change oil.			
	Clean cooling areas.			
	Replace spark plug, and set gap.			
	Replace fuel filter (if equipped).			
4- 6 11 1				

<sup>1</sup>Perform these maintenance procedures more frequently under extremely dusty, dirty conditions.

## **Check Oil Level**

The importance of checking and maintaining the proper oil level in the crankcase cannot be overemphasized. Check oil **BEFORE EACH USE** as follows:

- 1. Make sure the engine is stopped, level, and is cool so the oil has had time to drain into the sump.
- 2. Clean the area around and beneath the dipstick before removing it. This will help keep snow, ice, and other foreign matter out of the engine. See Figure 14.

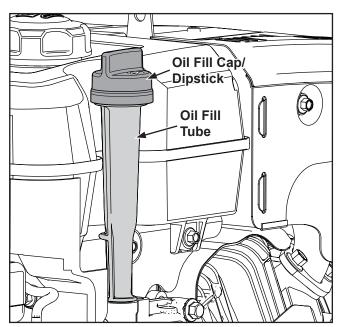


Figure 14. Oil Fill Cap/Dipstick and Oil Fill Tube.

- Unscrew and remove the oil fill cap/dipstick; wipe off oil. Reinsert the dipstick into the oil fill tube and screw in.
- 4. Unscrew and remove the oil fill cap/dipstick and check that oil level is correct. The correct oil level is between the F and L marks on the dipstick. See Figure 15.

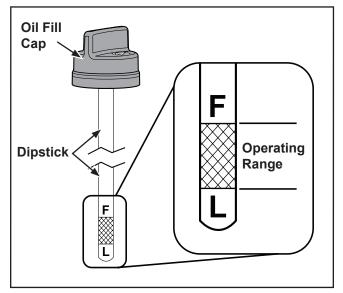


Figure 15. Correct Oil Level.

5. If the level is low, add oil of the proper type (refer to **Oil Type**) and to the correct level. Always check the level before adding more oil.

NOTE: To prevent extensive engine wear or damage, always maintain the proper oil level in the crankcase. Never operate the engine with the oil level above or below the correct operating range.

6. Reinstall the oil fill cap/dipstick and tighten securely. See Figure 14.

#### Oil Disposal

Protect and respect the environment. Dispose of oil at your local recycling center or municipal collection center in accordance with local ordinances.

### **Change Oil**

**For a new engine,** change oil after the first **5 hours** of operation. Thereafter, change oil after every **15 hours** of operation or yearly, which ever comes first.

**For an overhauled engine,** use **Kohler 5W-30** service class, SJ or higher oil for the first **5 hours** of operation. Change the oil after this initial run-in period. Refill with service class SJ or higher oil as specified in the **Oil Viscosity Grades Table** (Figure 3).

Change the oil while the engine is still warm. The oil will flow freely and carry away more impurities. Make sure the engine is level when filling, checking, or changing the oil.

Change the oil as follows:

- 1. To keep snow, ice, etc., out of the engine, clean the area around the oil fill cap/dipstick before removing it. See Figure 14.
- Remove the oil drain plug and the oil fill cap/ dipstick. Allow ample time for complete drainage. See Figures 14 and 16.

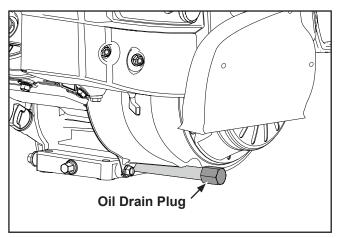


Figure 16. Oil Drain Plug Location.

- 3. Reinstall the oil drain plug and tighten to 9-13.5 N·m (80-120 in. lb.). See Figure 16.
- Fill the crankcase, with new oil of the proper type. Refer to **Oil Type.** Always check the level before adding more oil.
- 5. Reinstall the oil fill cap/dipstick and tighten securely. See Figure 14.

NOTE: To help protect the environment dispose of used oil in accordance with local ordinances.

#### Ignition System

This engine is equipped with a dependable electronic magneto ignition system. Other than periodically checking/replacing the spark plug, no maintenance or adjustments are necessary or possible with this system.

In the event starting problems should occur which are not corrected by replacing the spark plug, see your Kohler Engine Service Center for trouble analysis.

# **Check Spark Plug**

Annually or every **100 hours** of operation, remove the spark plug, check condition, and reset the gap or replace with a new plug as necessary. The original spark plug is a Champion® XC12YC, the Kohler equivalent is a **Kohler Part No. 25 132 14-S.** Equivalent alternate brand plugs can also be used.

- 1. Before removing the spark plug, clean the area around the base of the plug to keep dirt and ice out of the engine.
- 2. Remove the plug and check its condition. Replace the plug if worn or reuse is questionable.

NOTE: Do not clean the spark plug in a machine using abrasive grit. Some grit could remain in the spark plug and enter the engine causing extensive wear and damage.

- 3. Check the gap using a wire feeler gauge. Adjust the gap to **0.76 mm (0.030 in.)** by carefully bending the ground electrode. See Figure 17.
- 4. Reinstall the spark plug into the cylinder head. Torque the spark plug to 24 N·m (18 ft. lb.).

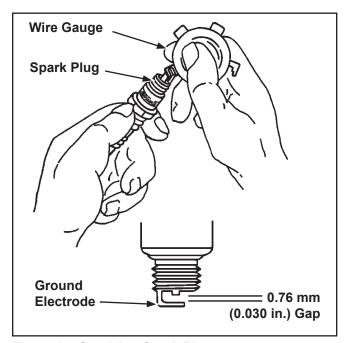


Figure 17. Servicing Spark Plug.

# Clean Air Intake/Cooling Areas

To ensure proper cooling, make sure the recoil starter screen, cooling fins, and other external surfaces of the engine are kept clean **at all times**.

Before each season of operation, clean the cooling fins and external surfaces as necessary. Reinstall the blower housing and other cooling shrouds.

NOTE: Operating the engine with a blocked screen, dirty or plugged cooling fins, and/or cooling shrouds removed, will cause engine damage due to overheating.

# Carburetor Troubleshooting and Adjustments

NOTE: Carburetor adjustments should be made only after the engine is at operating temperature.

The carburetor is designed to deliver the correct fuel-to-air mixture to the engine under all operating conditions. The idle mixture is set at the factory and normally does not require adjustment.

NOTE: To ensure correct engine operation at altitudes above 1525 meters (5000 ft.), it may be necessary to have an authorized Kohler dealer install a special high-altitude jet kit in the carburetor. If a high-altitude kit has been installed, the engine must be reconverted to the original jet size, before it is operated at lower altitudes, or overheating and engine damage can result.

If the engine is hard to start, runs roughly, or stalls at low idle speed, it may be necessary to adjust or service the carburetor. Engine must not exceed 3750 RPM if the high speed screw is adjusted. See Figure 18.

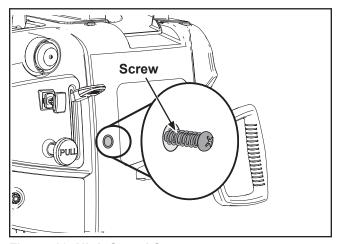


Figure 18. High Speed Screw.

# **Troubleshooting**

If engine troubles are experienced that appear to be fuel system related, check the following areas before adjusting the carburetor.

- Make sure the fuel tank is filled with clean, fresh gasoline.
- Make sure the fuel tank cap vent is not blocked and that it is operating properly.
- Make sure the fuel shut-off valve is fully open.
- Make sure fuel is reaching the carburetor. This
  includes checking the fuel lines and components
  for restrictions or problems. Replace as necessary.
- Make sure stop/run key switch is functioning properly.

If, after checking the items listed above, the engine is hard to start, runs roughly, or stalls at low idle speed, it may be necessary to adjust or service the carburetor.

# **Troubleshooting**

When troubles occur, be sure to check the simple causes which, at first, may seem too obvious to be considered. For example, a starting problem could be caused by an empty fuel tank. Some common causes of engine troubles are listed in the table below.

Do not attempt to service or replace major engine components, or any items that require special timing or adjustment procedures. Have this work done by a Kohler Engine Service Center.

	Possible Cause									
Problem	No Fuel	Improper Fuel	Electrical Outlet, Extension Cord, or Starter Faulty	Incorrect Oil Level	Engine Overloaded	Faulty Spark Plug	Plug Lead Disconnected	Missing Stop/Run Key		
Will Not Start	•	•	•		•	•	•	•		
Hard Starting	•	•	•	•	•	•				
Stops Suddenly	•			•	•	•	•			
Lacks Power		•		•	•	•				
Operates Erratically		•			•	•				
Knocks or Pings		•			•	•				
Skips or Misfires		•				•				
Backfires					•	•				

### Storage

If the engine will be out of service for two months or more, use the following storage procedure:

- 1. Clean the exterior surfaces of the engine.
- 2. Change the oil while the engine is still warm from operation. Refer to **Change Oil**.
- 3. The fuel system must be completely emptied, or the gasoline must be treated with a stabilizer to prevent deterioration. If you choose to use a stabilizer, follow the manufacturers recommendations, and add the correct amount for the capacity of the fuel system. Fill the fuel tank with clean, fresh gasoline. Run the engine for 2-3 minutes to get stabilized fuel into the carburetor.

To empty the system, run the engine until the tank and system are empty.

- 4. Remove the spark plug. Add one tablespoon of engine oil into the spark plug hole. Install the plug, but do not connect the plug lead. Crank the engine two or three revolutions.
- 5. Remove the spark plug. Cover the spark plug hole with your thumb, and turn the engine over until the piston is at the top of its stroke. (Pressure against the thumb is greatest.) Reinstall the plug, but do not connect the plug lead.
- 6. Store the engine in a clean, dry place.

# **Transport**

- 1. Turn the fuel valve to the **OFF** position.
- 2. Tighten the fuel cap.
- 3. Read and follow the transport guidelines provided by equipment manufacturer.

#### Major Repair

Major repair information is available in Kohler Engine Service Manuals. This type of repair generally requires the services of a trained mechanic and the use of special tools and equipment. Kohler Engine Service Centers have the facilities, training, and genuine Kohler replacement parts necessary to perform this service.

For the nearest sales and service location:

- Visit our Web site: www.KohlerEngines.com
- Call 1-800-544-2444 (U.S. and Canada)
- Look in your local telephone directory under Engines-Gasoline

### Parts Ordering

The engine model, specification, and serial numbers are required when ordering replacement parts from your Kohler Engine Service Center. These numbers are found on the identification plate which is affixed to the engine shrouding. Include letter suffixes if there are any. See Serial Data Label on Page 4.

Always insist on genuine Kohler parts. All genuine Kohler parts meet strict standards for fit, reliability, and performance.

Specifications								
Model:	WH208							
Bore:	mm	70	Peak Torque (Minimum):	N·m	11.8			
	(in.)	(2.8)		(ft. lb.)	(8.7)			
Stroke:	mm	54	Compression Ratio:	8.2:1				
	(in.)	(2.1)	Compression Ratio.					
Displacement:	СС	208	Weight (Recoil Start):	kg (lbs.)	17.2 (38)			
	(cu. in.)	(12.7)	(Electric Start):	kg (lbs.)	19 (42)			
*Gross Power	kW	4.5	Oil Capacity:	L	0.6			
(@ 3600 RPM):	(HP)	(6.0)		(U.S. qt.)	(0.63)			
*Net Power	kW	4.2	Fuel Tank Capacity:	L	3.2			
(@ 3600 RPM):	(HP)	(5.6)		(U.S. qt.)	(3.4)			
Exhaust Emission Control System:			EM for U.S. EPA and Europe					

\*Horsepower ratings exceed Society of Automotive Engineers Small Engine Test Code J1940. Actual engine horsepower is lower and affected by, but not limited to, accessories (air cleaner, exhaust, charging, cooling, fuel pump, etc.), application, engine speed and ambient operating conditions (temperature, humidity, and altitude). Kohler reserves the right to change product specifications, designs, and equipment without notice and without incurring obligation.

## Snow PRO WH208 ENGINE LIMITED WARRANTY

Kohler Co. warrants to the original retail consumer that each new Snow PRO engine sold by Kohler Co. will be free from manufacturing defects in materials or workmanship in normal residential homeowner service for a period of three (3) years from date of purchase, provided it is operated and maintained in accordance with Kohler Co.'s instructions and manuals. If used commercially the Snow PRO engine is covered by a 90-day¹ limited warranty.

The warranty period begins on the date of purchase by the original retail consumer or commercial end user. "Residential homeowner service" means residential use by a retail consumer. "Commercial use" means all other uses, including use for commercial, or rental purposes. Once in commercial use, the engine will thereafter be considered a commercial use engine for the purposes of this warranty.

Our obligation under this warranty is expressly limited, at our option, to the replacement or repair at Kohler Co., Kohler, Wisconsin 53044, or at a service facility designated by us of such parts as inspection shall disclose to have been defective.

#### **EXCLUSIONS:**

Mufflers on engines used commercially (non-residential) are warranted for 90 days from date of purchase. This warranty does not apply to defects caused by casualty or unreasonable use, including faulty repairs by others and failure to provide reasonable and necessary maintenance.

The following items are not covered by this warranty: Engine accessories such as fuel tanks, clutches, transmissions, power-drive assemblies, and batteries, unless supplied or installed by Kohler Co. These are subject to the warranties, if any, of their manufacturers.

Kohler Co. AND/OR THE SELLER SHALL NOT BE LIABLE FOR SPECIAL, INDIRECT, INCIDENTAL, OR CONSEQUENTIAL DAMAGES OF ANY KIND, including but not limited to labor costs or transportation charges in connection with the repair or replacement of defective parts.

IMPLIED OR STATUTORY WARRANTIES, INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, ARE EXPRESSLY LIMITED TO THE DURATION OF THIS WRITTEN WARRANTY. We make no other express warranty, nor is any one authorized to make any on our behalf.

Some states do not allow limitations on how long an implied warranty lasts, or the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion 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.

#### TO OBTAIN WARRANTY SERVICE:

Purchaser must bring the engine to an authorized Kohler service facility. To locate the nearest facility, visit our Web site, www.KohlerEngines.com, consult your local telephone directory, or telephone 1-800-544-2444.

ENGINE DIVISION, KOHLER CO., KOHLER, WISCONSIN 53044

<sup>1</sup>With the exception of countries governed by the European Union (EU), where a one (1) year warranty is required for commercial/professional use.

# KOHLER CO. FEDERAL AND CALIFORNIA EMISSION CONTROL SYSTEMS LIMITED WARRANTY SMALL OFF-ROAD ENGINES

The U.S. Environmental Protection Agency (EPA), the California Air Resources Board (CARB), and Kohler Co. are pleased to explain the Federal and California Emission Control Systems Warranty on your small off-road equipment engine. In California beginning in 2006, "emissions" means both exhaust and evaporative emissions. For California, engines produced in 2006 and later must be designed, built and equipped to meet the state's stringent anti-smog standards. In other states, 1997 and later model year engines must be designed, built and equipped, to meet the U.S. EPA regulations for small non-road engines. The engine must be free from defects in materials and workmanship which cause it to fail to conform with U.S. EPA standards for the first two years of engine use from the date of sale to the ultimate purchaser. Kohler Co. must warrant the emission control system on the engine for the period of time listed above, provided there has been no abuse, neglect or improper maintenance.

The emission control system may include parts such as the carburetor or fuel injection system, the ignition system, and catalytic converter. Also included are the hoses, belts and connectors and other emission related assemblies.

Where a warrantable condition exists, Kohler Co. will repair the engine at no cost, including diagnosis (if the diagnostic work is performed at an authorized dealer), parts and labor.

#### MANUFACTURER'S WARRANTY COVERAGE

Engines produced in 2006 or later are warranted for two years in California. In other states, 1997 and later model year engines are warranted for two years. If any emission related part on the engine is defective, the part will be repaired or replaced by Kohler Co. free of charge.

#### OWNER'S WARRANTY RESPONSIBILITIES

- (a) The engine owner is responsible for the performance of the required maintenance listed in the owner's manual. Kohler Co. recommends that you retain all receipts covering maintenance on the engine, But Kohler Co. cannot deny warranty solely for the lack of receipts or for your failure to assure that all scheduled maintenance was performed.
- (b) Be aware, however, that Kohler Co. may deny warranty coverage if the engine or a part has failed due to abuse, neglect, improper maintenance or unapproved modifications.
- (c) For warranty repairs, the engine must be presented to a Kohler Co. service center as soon as a problem exists. Call 1-800-544-2444 or access our web site at: www.KohlerEngines.com, for the names of the nearest service centers. The warranty repairs should be completed in a reasonable amount of time, not to exceed 30 days.

If you have any questions regarding warranty rights and responsibilities, you should contact Kohler Co. at 1-920-457-4441 and ask for an Engine Service representative.

#### COVERAGE

Kohler Co. warrants to the ultimate purchaser and each subsequent purchaser that the engine will be designed, built and equipped, at the time of sale, to meet all applicable regulations. Kohler Co. also warrants to the initial purchaser and each subsequent purchaser, that the engine is free from defects in materials and workmanship which cause the engine to fail to conform with applicable regulations for a period of two years.

Engines produced in 2006 or later are warranted for two years in California. For 1997 and later model years, EPA requires manufacturers to warrant engines for two years in all other states. These warranty periods will begin on the date the engine is purchased by the initial purchaser. If any emission related part on the engine is defective, the part will be replaced by Kohler Co. at no cost to the owner. Kohler Co. is liable for damages to other engine components caused by the failure of a warranted part still under warranty.

Kohler Co. shall remedy warranty defects at any authorized Kohler Co. engine dealer or warranty station. Warranty repair work done at an authorized dealer or warranty station shall be free of charge to the owner if such work determines that a warranted part is defective.

Listed below are the parts covered by the Federal and California Emission Control Systems Warranty. Some parts listed below may require scheduled maintenance and are warranted up to the first scheduled replacement point for that part. The warranted parts include the following if they were present in the engine purchased:

- Oxygen sensor (if equipped)
- Intake manifold (if equipped)
- Exhaust manifold (if equipped)
- Catalytic muffler (if equipped)
- Thermal reactor muffler (if equipped)
- Spark advance module (if equipped)
- Air filter, fuel filter, and spark plugs (only to first scheduled replacement)
- · Crankcase breather
- Air injection system (if equipped)
  - Air pump or pulse valve assembly (if equipped)
  - Control/distribution valve (if equipped)
  - Distribution manifold (if equipped)
  - Air hoses (if equipped)
  - Vacuum lines (if equipped)

- Ignition module(s) with high tension lead
- Gaseous fuel regulator (if equipped)
- Electronic control unit (if equipped)
- Carburetor or fuel injection system (if equipped)
- Fuel lines, fuel line fittings and clamps (if equipped)
- Fuel metering valve (if equipped)
- Evaporative system (if equipped)
  - Canister (if equipped)
  - Canister filter (if equipped)
  - Vapor hose (if equipped)
  - Orifice connector (if equipped)
  - Fuel tank (if equipped)
  - Fuel cap (if equipped)
  - Primer bulb canister (if equipped)

#### LIMITATIONS

This Emission Control Systems Warranty shall not cover any of the following:

- (a) repair or replacement required because of misuse or neglect, improper maintenance, repairs improperly performed or replacements not conforming to Kohler Co. specifications that adversely affect performance and/or durability and alterations or modifications not recommended or approved in writing by Kohler Co.,
- (b) replacement of parts and other services and adjustments necessary for required maintenance at and after the first scheduled replacement point,
- (c) consequential damages such as loss of time, inconvenience, loss of use of the engine or equipment, etc.,
- (d) diagnosis and inspection fees that do not result in eligible warranty service being performed, and
- (e) any add-on or modified part, or malfunction of authorized parts due to the use of add-on or modified parts.

#### MAINTENANCE AND REPAIR REQUIREMENTS

The owner is responsible for the proper use and maintenance of the engine. Kohler Co. recommends that all receipts and records covering the performance of regular maintenance be retained in case questions arise. If the engine is resold during the warranty period, the maintenance records should be transferred to each subsequent owner. Kohler Co. reserves the right to deny warranty coverage if the engine has not been properly maintained; however, Kohler Co. may not deny warranty repairs solely because of the lack of repair maintenance or failure to keep maintenance records.

Normal maintenance, replacement or repair of emission control devices and systems may be performed by any repair establishment or individual; however, warranty repairs must be performed by a Kohler authorized service center. Any replacement part or service that is equivalent in performance and durability may be used in non-warranty maintenance or repairs, and shall not reduce the warranty obligations of the engine manufacturer.



FOR SALES AND SERVICE INFORMATION IN U.S. AND CANADA, CALL **1-800-544-2444** 

KohlerEngines.com

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