SERVICE. SUPPORT. INNOVATION.

SERVICE UPDATE SEMINAR 2016-2017

KOHLER® Engines

Table of Contents

Command PRO® Twins

Engines with Shortened Crankshafts

Currently a number of engine specifications utilize a specific and unique crankshaft length for products. Shortening (cutting) of the crankshaft is performed by the OEM prior to installation on the application.

Below is listing of the Engine Specification, Equipment, and the Shortened Amount to permit installation.

Please be aware that any replacement engines, short blocks, and crankshafts will contain the normal length crankshaft and that shortening will be necessary before use.

Only in Warranty situations is the labor for doing so chargeable to Kohler.

Engine Specification	Bandit Equipment	Original Length from PTO Face	Amount Removed	Finished Length from PTO Face
CH740-3007	HB195 HB20	4.46”	0.71”	3.75”
CH742-3102				
CH740-3155	65XP 75XP	4.46”	2.0”	2.46”
CH742-3116				
CH740-3007				
CH742-3102				
CH980-2026				
CH980-3018				
CH980-2002	2550	4.46”	1.96”	2.50”
CH980-3000				
CH980-3024				

Electronic Fuel Injection (EFI)

Clutch Noise on ECV940/980

An intermittent howling noise has been reported on multiple ECV940/980 engines. After the investigation process, we have identified this noise as originating from the PTO clutch.

This noise typically occurs under the following conditions:

- During the first 1-3 minutes of run time when the engine temperature is at ambient (first start of the day).
- At the low engine speed setting.

Engine repairs should not be performed in an effort to resolve this noise.

Starting at, or changing to the mid-speed setting usually results in no noise. We suspect most will not experience this anomaly if they are starting a cold engine at mid-speed as instructed in the owner's manual.

999cc Electronic Governor Improvements

Service Bulletin 345 described the significant changes implemented for Model Year 2016, electronic governor equipped, 999cc engines. These changes improve reliability by reducing vibration and addressing fatigue/wear on critical components.

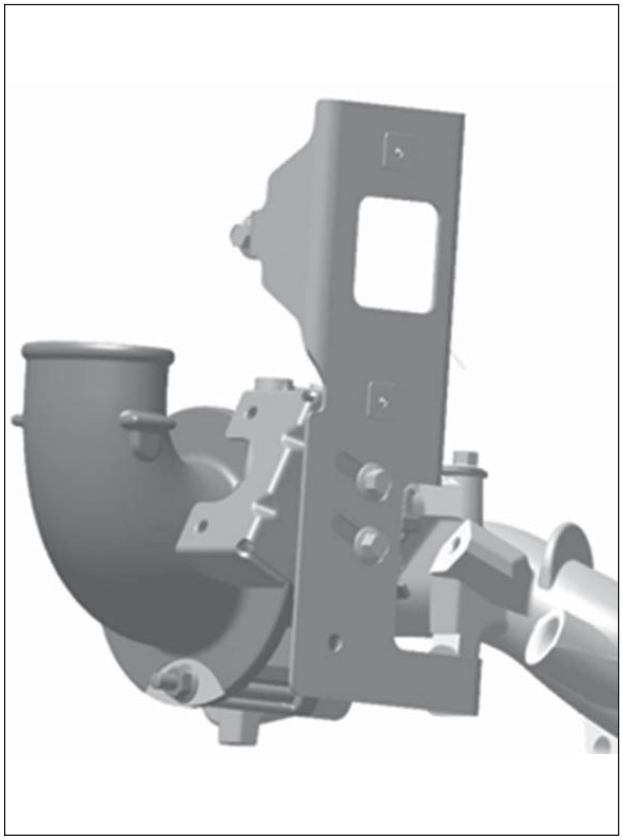
These changes include:

- **Redesigned bracket for electronic governor system.**
  Fourth leg added for stability.
  Extra mounting bolt added to Digital Linear Actuator (DLA) bracket for increased rigidity.

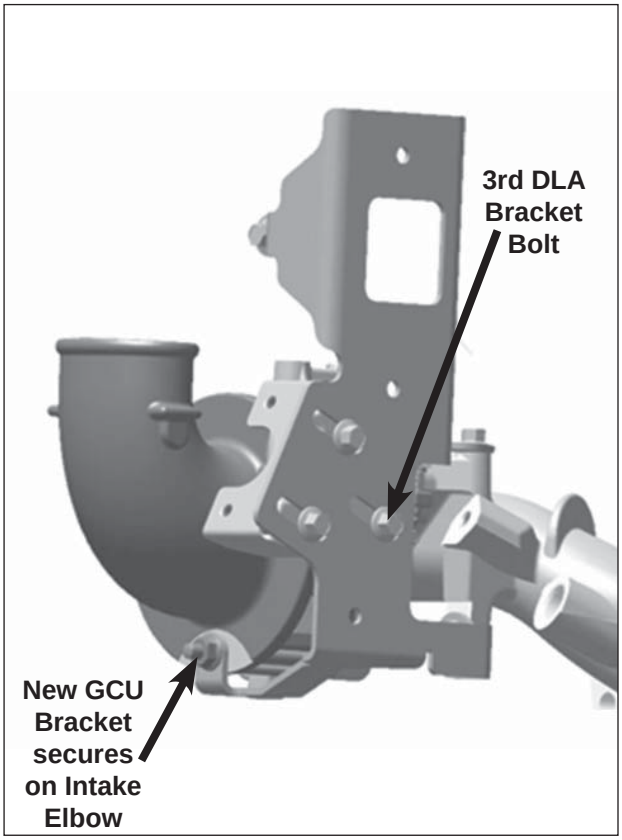
- **Improvements to the DLA.**
  High performance grease applied internally that will not migrate or evaporate.
  Larger ball bearing to improve resistance to vibration induced damage.

- **Rerouting of wires, harness, and the addition of shrink tubing to address stress on the wire connections.**

- **Improvements to Governor Control Unit (GCU).**
  Redesigned housing to prevent breakage of mounting ears.
  Gold terminals for increases connectivity.
  Adhesive used to secure wiring harness to GCU to prevent wear of terminals.



Old Version



New Version

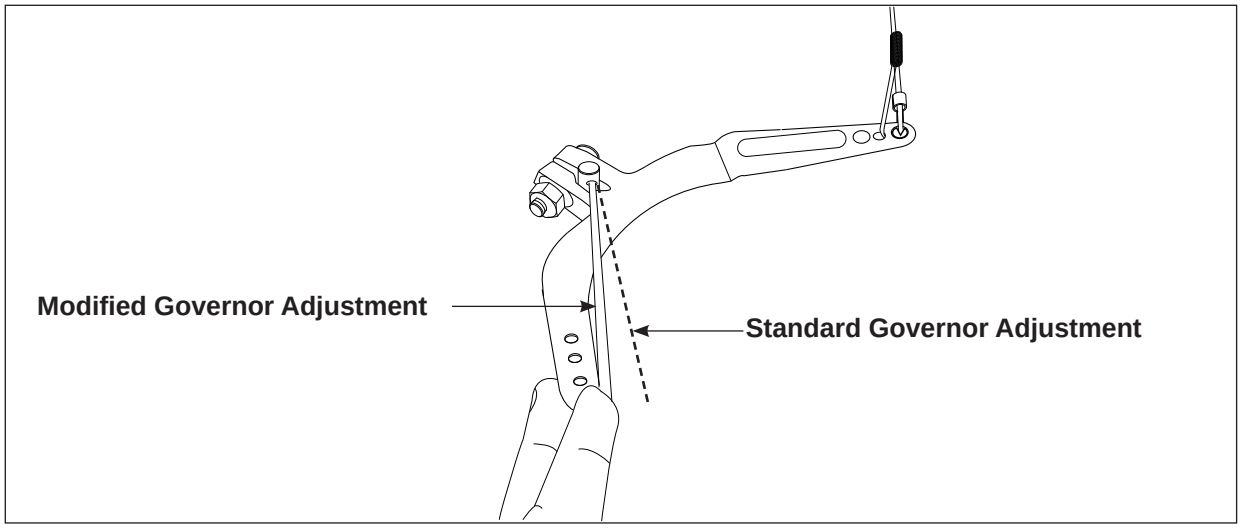
Mechanical Governor Modified Adjustment Procedure (Surging)

There have been isolated reports of some newer ECH/ECV engines exhibiting a high-speed/no-load surge.

This is most commonly reported of **new unsold engines with minimal hours**. The surge typically ceases with PTO engagement (load). The surge may cease with several hours of normal operation.

Remember, there are many possible causes of an engine surge. Specifically, run quality faults that are not caused by governor components/adjustments.

The modified governor adjustment illustrated below may resolve the surge. Testing suggests this may resolve surging conditions on older engines as well.



Standard Governor Adjustment

1. Loosen fastener.
2. Turn governor shaft counterclockwise to stop.
3. Secure fastener.

Modified Governor Adjustment

1. Loosen fastener.
2. Turn governor shaft counterclockwise to stop.
3. Slightly back off stop.
4. Secure fastener.
5. If surge persists, make incremental adjustments in the same manner.
6. If/When speed becomes uncontrollable, adjustment has been backed off too far.
7. If ineffective, return to standard governor adjustment.
8. Check speed setting and adjust as necessary.

NOTES

XT Series™

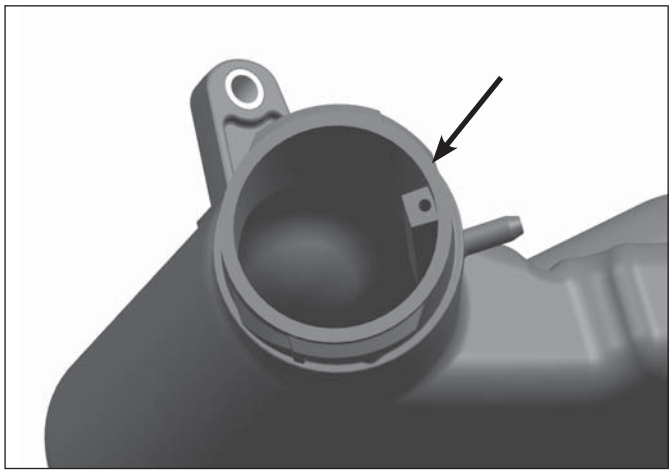
XT Series™ Fuel Tank Replacement

Service Bulletin 344, released in October 2015, discussed the availability of a new fuel tank for XT Series™ engines. The fuel tank was implemented with a material that addresses isolated incidents of nylon leaching into the fuel system as well as poor fuel cap installation and fit.

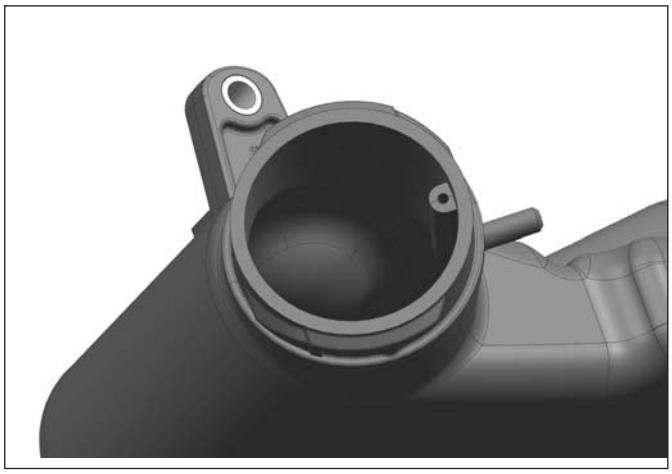
This was previously covered in the 2014-2015 Service Update Book.

The original tank (14 065 56-S) is the only one that should be replaced. It has been discovered, that incorrect fuel tanks are being replaced.

We have identified the engine specifications for which fuel tank (14 065 56-S) was originally installed.



Original Tank 14 065 56-S.



New Tank 14 065 63-S.

XT Series™ Specifications Affected	
XT650-2036	XT775-2018
XT650-2037	XT775-3051
XT650-2100	XT775-3055
XT675-2087	XT775-3076
XT675-2100	XT775-3078
XT675-2101	XT800-3068
XT675-3073	XT800-3071
XT675-3078	XT800-3073
XT675-3079	XT800-3075
XT675-3085	XTX675-3012
XT675-3096	XTX775-3011
XT675-3097	

NOTES

New Product

7000 Series™ PRO

PRO Performance Air Cleaner

Existing 7000 Series™

NEW 7000 Series™ PRO

Existing Confidant®

7000 Series™ Heavy-Duty Filter

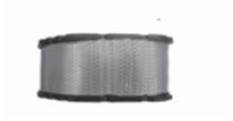
7000 Series™ PRO PRO Filter

Confidant® Heavy-Duty Filter

- NOW with a 3-Year Limited Consumer Warranty.
- Based on KOHLER® Command PRO® commercial engine design.
- Pressure lubrication extends engine life by keeping critical components well lubricated.
- Increased maintenance intervals with NEW PRO Filter.
- PRO Performance filtration package increases air, oil, and fuel filter capacity for extra protection.*
- OPTION: Reliable starting, hot or cold, even at temperatures below freezing with Smart-Choke™ technology.
  - No need to choke the engine — starts at any throttle position.
  - Adds just the right amount of fuel during start up.

* Options based on OEM equipment.

Standard Filter (~1500 cm²)

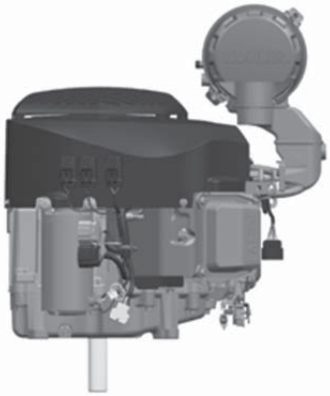


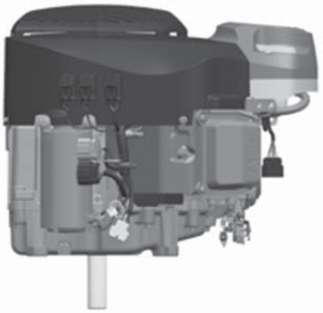
MY16 PRO Performance Filter
MY17 High Performance Filter (~3000 cm²)

NEW! PRO Filter (~4100 cm²)

Confidant® Heavy Duty (~6500 cm²)

Command PRO®

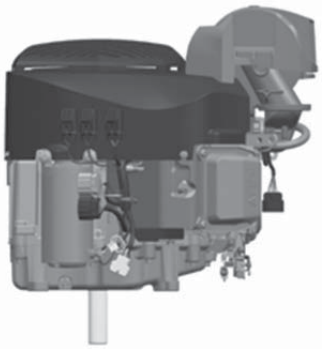


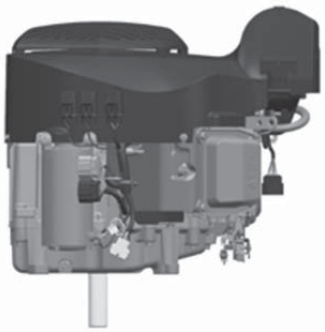


7000 Series™ HD Filter

1.1 in.

Confidant®





7000 Series™ PRO Filter

7500 Series™ EFI

Get the same reliable power and fuel savings that commercial landscapers enjoy.

The 7500 Series™ EFI boasts closed-loop electronic fuel injection that gives the performance of a pro-grade engine in consumer ZTRs.

Most Powerful Kohler Consumer Engine
700cc Class

Available with HD or PRO Air Filter
EKT740 - 25 hp (HD and PRO)
EKT750 - 27 hp (HD and PRO)

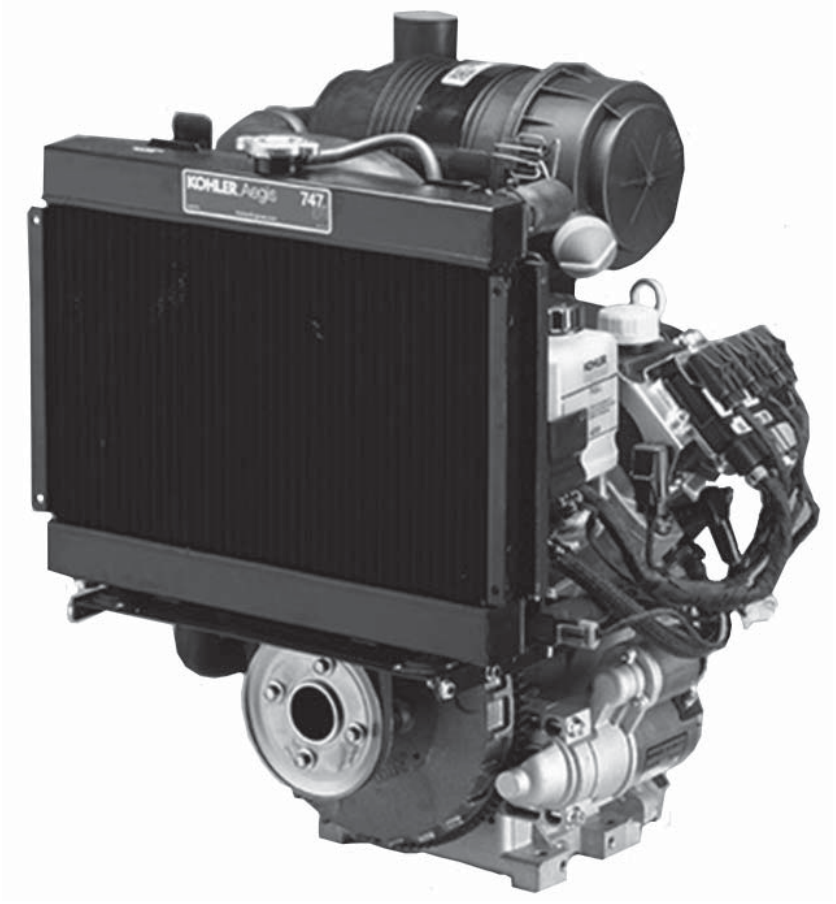
- Uses 12.5% less fuel that a carbureted engine.*
- Automotive grade fuel injection technology provides easy starts in any condition.
- The 7500 Series™ EFI automatically optimizes for fuel quality and altitude.
- Backed with a 3-Year Limited Consumer Warranty.

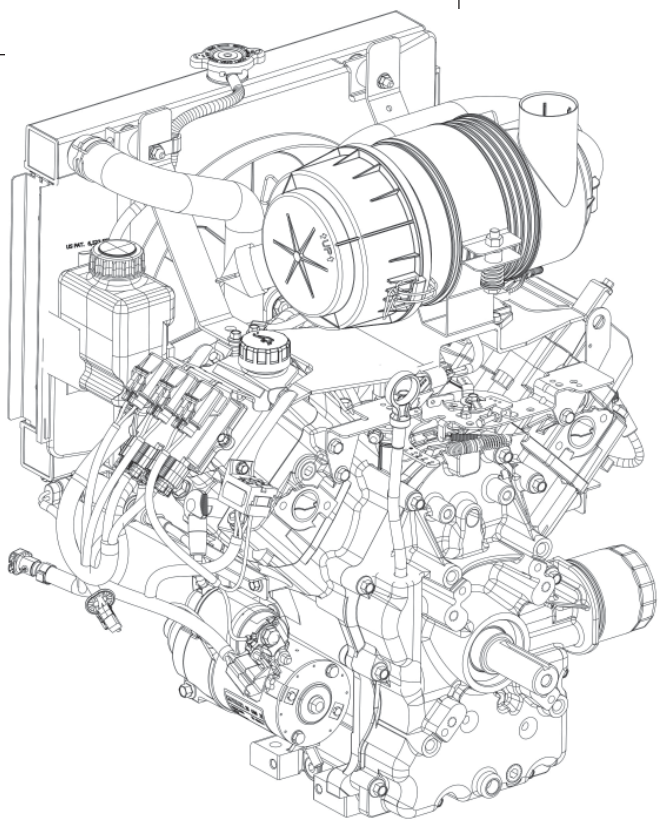
* Compared to a comparable KOHLER carbureted engine.

ELH775 Aegis® with Delphi EFI

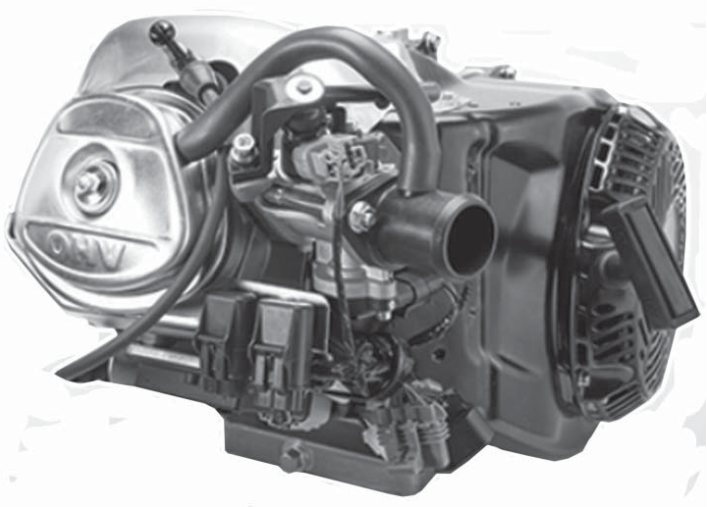
Liquid-Cooled Horizontal Shaft Twin Cylinder Featuring Delphi EFI (as found on Command PRO® EFI)

- Throttle Position Sensor
- Engine Temperature Sensor
- Fuel Injectors
- Crankshaft Position Sensor
- Ignition Coils
- Manifold Absolute Pressure/Air Temperature Sensor (TMAP)
- 4-Wire Oxygen Sensor
- Fuel Rail and Electric Fuel Pump



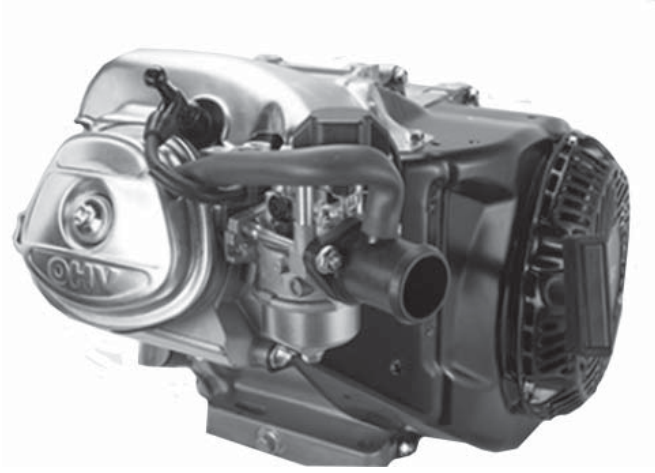


Command PRO® EFI (ECH440)



- Same fuel saving advantages as the Command PRO® line featuring the same closed loop components.
- Currently launched for customer specifications. No basic specification available at this time.
- 3-Year Commercial Warranty.

Command PRO® eChoke™ (CH395 and CH440)



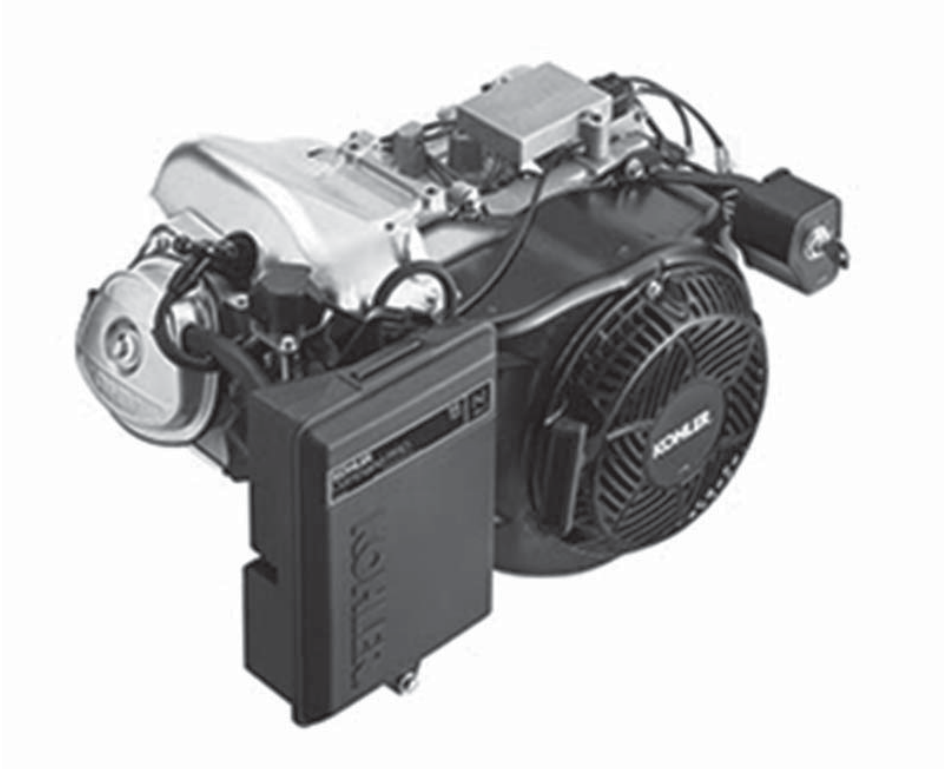
- **Easy Starts — Superior Starting**
  There is no manual choke, so there's no guesswork and less chance of operator error.
- **Smart Starts**
  eChoke™ monitors both engine and ambient temperatures to identify the precise choke position for optimal starting.
  Operational down to 0ºF (-18ºC).
- **Quick Starts**
  Just turn the key and go. No manual choke!
- **Remote Starts (optional)**
  Enables remote-start functionality if installed on equipment.

Command PRO® Electronic Governor (CH395 and CH440)

- **Speed Stability**
  Eliminate hunting due to mechanical control systems.

- **Maximum Power**
  Power from the electronic governor will be higher than that of mechanical control systems. This will allow pressure washer and portable generators to be rated at a higher advertised power level.

- **“Tighter” Speed Operating Range**
  Allow a tighter frequency range, meaning less variation in rpm under continuous power condition.
  Our current mechanical system has about +/- 2.5 Hz while an electronic governor is around +/- 1 Hz under load. No load is about the same.



Applications that Would Benefit from this Technology

Generators/Welders	Deliver consistent, steady frequency output and can auto idle without a solenoid.
Pressure Washers	Prolongs pump life by automatically idling down when the user releases the trigger handle.
Water and Trash Pumps	Engine can be automatically activated based on water level by a remote switch.

Command PRO® CH270TF, CH395TF, and CH440TF Tri-Fuel Options

The CH270TF, CH395TF, and the CH440TF Command PRO® will now be available with a tri-fuel option of gasoline, LP and NG. This is a specification engine that has been fitted with a special tri-fuel carburetor and certified for each fuel. The engine is set up for gasoline as it leaves Kohler with an available kit to be installed by OEMs, Kohler Distributors or Dealers. The kit can be installed in 15 minutes.

Special Tri-Fuel Carburetor

The intended target for these engines is generator units.

Customer Benefits include:

- These tri-fuel engines will provide customers the opportunity to operate on any available fuel (great during storm outages with fuel supply shortages).
- Fuel cost savings (due to the low price of LP and NG).
- Cleaner emissions on LP and NG engines.
- Customers will value not needing to deal with "smelly" gasoline/fuel spills.
- Customers will value the extended run times available when running with NG or LP supply lines.

Dealer Benefits Include:

- Stock a single engine model and as long as they have the necessary fuel kits to be able to set the engine to accept gasoline, LP, or natural gas.
- Cut inventory costs while also allowing them to quickly make adjustments to meet the exact needs of their customers.
- Kits can be installed within 15 minutes.
- The kit will include: one selector valve, one fuel regulator and one 31” gaseous fuel line.

The first release of these engines are CH395TF and CH440TF set-up for 60Hz with low profile air cleaners. Coming soon will be the 50Hz and 60Hz CH270TF-CH440TF series with heavy duty air cleaners as well as the 60Hz CH270TF with the low profile air cleaner.

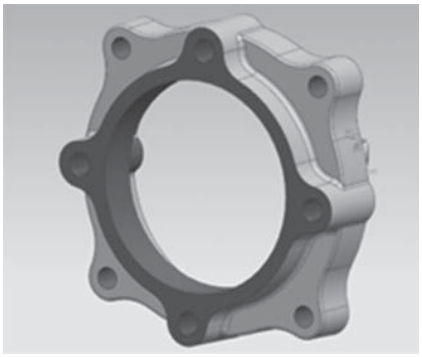
Command PRO® 4.5 and 5.5 HP (CH245 and CH255)

- Quad-Clean™ heavy-duty cyclonic air cleaner.
- Built in warm air system for winter operation.
- OHV slant cylinder.
- Cast iron cylinder liner.
- Quiet muffler with heat shield and spark arrestor.
- Dual ball bearings.
- Steel forged and hardened crankshaft.
- Dual oil fills and drains.
- Carbon canister fuel cap.
- Remote choke and throttle capable.
- Easy access throttle, choke, and shutoff.
- Fuel Secure™ (Auto Fuel Shutoff).

Command PRO® 2:1 Reverse Drive (CH270 and CH395)

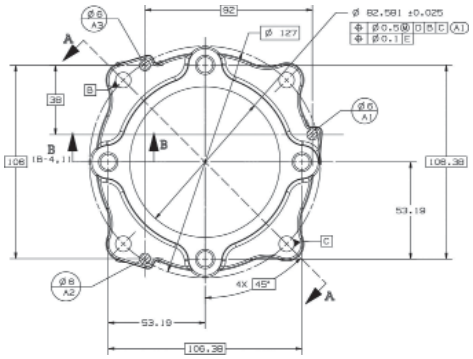
- 1 inch diameter PTO .
- CH395 — Available Now
- CH270 — Future Dated

Command PRO® 9 Tooth Spline Crank (CH440)

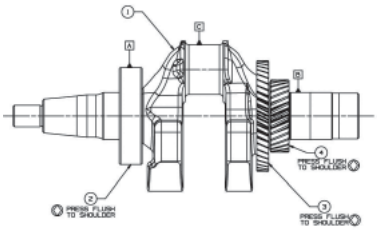


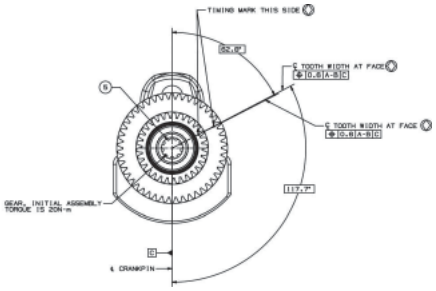
Providing a 9 tooth internal spline with an SAE "A Type" mount on the CH440 enables us to provide the customer:

- Meet the challenge of fitting this size engine with a hydraulic pump into the confined envelope of their application.
- It shortens the engine and pump package by as much as 8 to 11 inches depending on the vendor of the pump adapter.
- Eliminates the need to purchase and install hydraulic pump adapter and engine to pump coupler.
- Available now.



Hydraulic Pump Mount
17 029 03





Crankshaft Assembly
17 014 158

Command PRO® One Inch Crankshaft (CH270 and SH265)

Due to popular demand, we have developed the one inch crankshaft.
It is available on the CH270 and the SH265, and is available now.

Command Twin CH730-3320 eChoke™

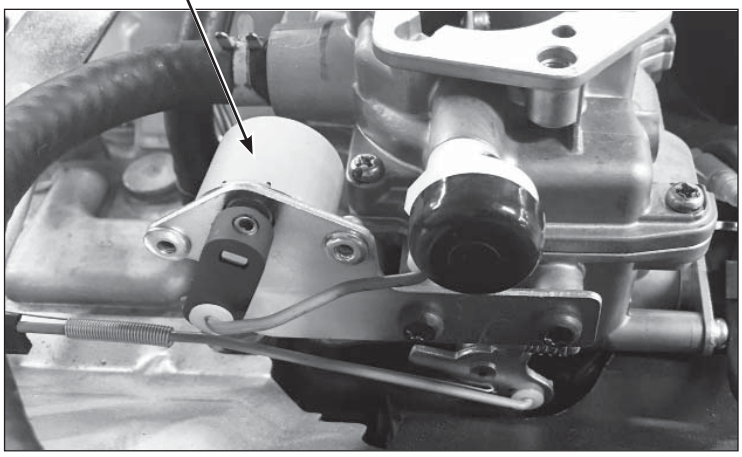
Easy Starts — Superior Starting
- There is no manual choke, so there's no guess work and less chance of operator error.

Smart Starts
- eChoke™ monitors both engine and ambient temperatures to identify the precise choke position for optimal starting.
- Operational down to 0ºF (-18ºC).

Quick Starts
- Just turn the key and go. No manual choke!

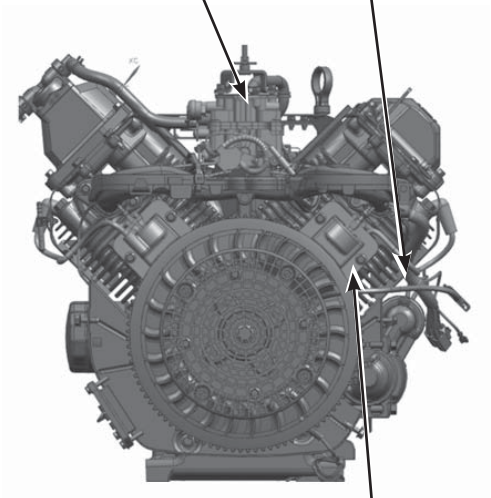
Remote Starts
- Enables remote-start functionality if installed on equipment.

Stepper Motor (Choke Control)

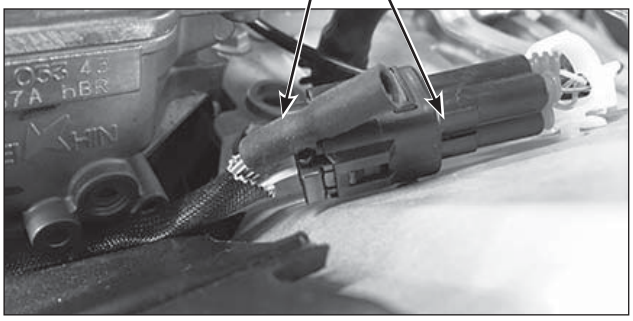


Carburetor/eChoke™ Assembly

Wiring Harness



Stepper Motor 4-Pin and MIL Connectors



Ignition Module (Temperature Sensor, Speed Sensor, and ECU)

Bluetooth® (25 761 45-S)

Android Bluetooth® Wireless Features:

- Trouble code display with descriptions and links to diagrams.
- Clear Codes.
- Data Items Display List.
- Date Screen Creation and Display.
- Service Manual Display.
- ECU Identifier Display.
- Gauge-Style Meter Display.
- TPS Initialization Procedures.
- Guided Diagnostics Procedures.
- Pre-Defined Data Sets (Fuel/History Etc.).
- Data Recording/Saving/Playback.
- Data Logging/Retrieval.

HARDWARE REQUIREMENTS

The Kohler Diagnostic app has been developed to run on smart phones and tablets using the Android™ operating system. Communications with Kohler EFI engines is accomplished using the Wireless Interface Module, featuring Bluetooth® wireless technology.

To install and run the app, verify your smart phone or tablet meets the following minimum specifications:

Smart Phone / Tablet:

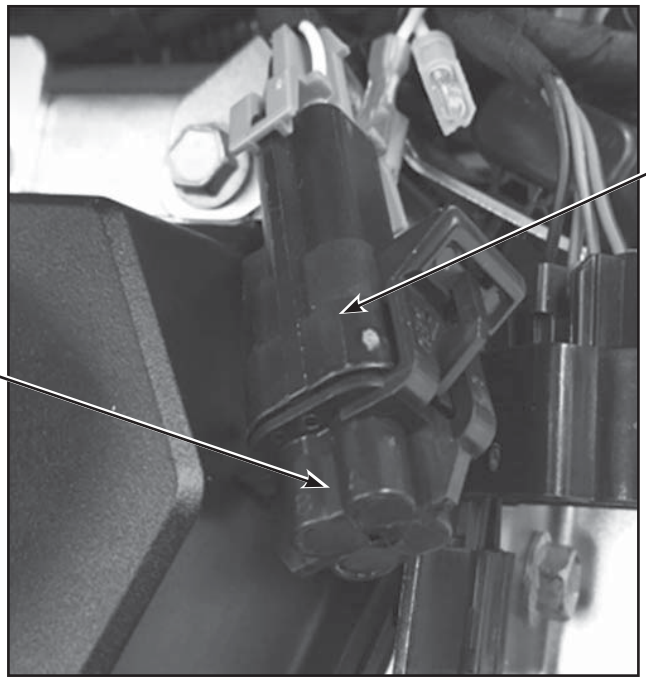
- Minimum operating system: Android 4.0
- Dual core processor / 2 GB internal memory / external microSD™ (32 or 64 GB) slot / 500 MB RAM
- Internet and Bluetooth wireless technology capable

HARDWARE NOTES / TROUBLESHOOTING

- The Kohler Diagnostic app is currently designed to work with Android-based tablets and smart phones. It will not work on Microsoft® Windows™ or Apple® iPad™ or iPhone™ products.
- The tablet / device must be equipped with Bluetooth wireless technology.
- Some application features require the device to be connected to the internet.
- Using devices classified as eReaders or notebooks is not recommended.
- Devices that do not meet minimum specifications may work, but may display vehicle data slower than desired.
- Verify all device software updates have been installed and are working.

EFI Diagnostic Adapter

New Style 4-Pin Connector and Diagnostic Adapter (Used on ECH940/980)
25 176 23-S



Diagnostic Jumper/Adapter

Miscellaneous

Policy Adjustments for Balance System Failures on Courage® Single Engines

The Policy Adjustment program for Courage® Single balance weight failures has been modified to correspond with the age of the engines built in the suspect time frame.

Engines that fail outside the normal two year warranty period will be covered as follows:
If an engine fails between second and third year of life, the Central Distributor will supply a short block at no charge and can approve up to two hours labor. If the failure occurs between the third and fourth year of life, the Central Distributor will supply a short block at no charge and can approve up to one hour labor. Engines between four and five years of service will receive a short block only. In most cases, engines failing outside the five year period will not be given warranty or policy adjustment consideration.

For any policy adjustment consideration to be given the engine must have been maintained properly, not been used commercially, and have less than 450 hours. The program applies only to the original owner. Required information includes: proof of original ownership, date of purchase, engine serial number, hours of operation (if available), and digital photo or Central Distributor verification of failure.

Age	Short Block	Labor
2-3 Years	Yes	Up to 2 Hours
3-4 Years	Yes	Up to 1 Hour
4-5 Years	Yes	None

NOTES

Bulletins, Etc.

Below is a list of all service and parts-related documents released or revised from January 2016 through October 2016. To be sure you are viewing the most current version, please see Bulletins listed on www.KOHLERPLUS.com.

Parts Bulletins

PB-236	Rectifier-Regulator 25 403 32-S (was 25 403 21-S) (Rev. 2/16)
PB-263	EFI Diagnostic Software 25 761 23-S – SOFTWARE UPDATE (Rev. 5/16)
PB-264	XT Series Primer Service
PB-265	ASAM Conversion Kits
PB-266	Auto Choke Arm Assembly Identification

Service Bulletins

SB-221	Crankshaft Splined Insert Lube Interval Recommendation (Rev. 5/16)
SB-316	CH440 Exhaust Improvements (Rev. 3/16)
SB-341	Extended Warranty Coverage (Rev. 10/16)
SB-342	Stumble Due to Insufficient Choke Thermostat Heating (Rev. 9/16)
SB-345	Updated Electronic Governor Components (Rev. 10/16)
SB-347	Cylinder Leakdown Tools and Test Procedures
SB-348	Engine Stall (Rev. 6/16)
SB-349	CH270 Carburetor Inlet Valve Disc Damage

KOHLER Engines

Parts Bulletin

NO.	236
MODEL	Command PRO Command PRO EFI
DATE ISSUED	3/04
DATE REVISED	2/16

Rectifier-Regulator 25 403 32-S (was 25 403 21-S)

This latest rectifier-regulator (see Figure 1), has a ground lug and built-in over-voltage protection that is self-resetting. The over-voltage protection prevents possible damage to other electrical components if an engine is jump-started. This regulator is especially recommended for use on EFI engines, **except** on Walker mowers where there is insufficient clearance for it to be used. When replacing an earlier regulator, like part number 25 403 05 (see Figure 2), just use the new regulator. To replace an older regulator (see Figure 3), use kit **24 755 144-S,** which includes the new regulator and the necessary conversion pieces.

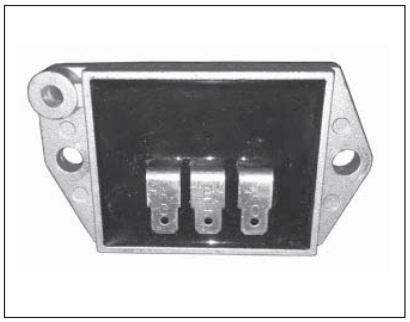


Figure 1.

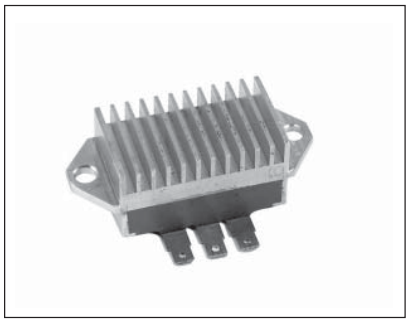


Figure 2.

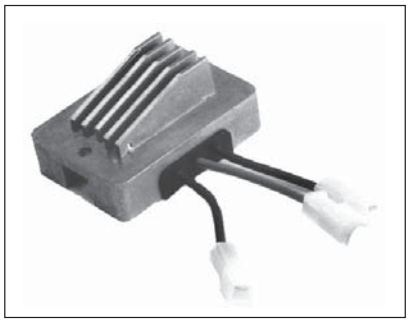


Figure 3.

The protective circuit in the new regulator works much like a circuit breaker. If excessive voltage is detected, the protective circuit breaks/opens the charging circuit (B+ output) to prevent the elevated voltage from reaching other components. Excessive voltage can be due to spikes caused by attaching or disconnecting jumper cables, or by loose battery terminal connections. It can also result from a defective battery that is not capable of holding a charge.

Important Service Notes

Once the circuit has been tripped, the circuit will discontinue charging for approximately 20 seconds. After 20 seconds the regulator will resume charging. If the over-voltage condition has not been corrected, the circuit will discontinue charging for another 20 seconds. This condition will repeat until the overcharge condition is corrected. Stop the engine. With the engine off, test voltage across the battery terminals. If it is below 12 volts, use an auxiliary charger to charge the battery.

When the battery has been charged, start the engine and test to confirm that charging output has been restored. Allow the engine to run for several minutes and test again. If the battery is defective, the B+ circuit will trip repeatedly until the faulty battery is replaced.

 ENGINE DIVISION, KOHLER CO., KOHLER, WISCONSIN 53044

KOHLER Engines

Parts Bulletin

NO.	263
MODEL	All Kohler EFI Equipped Engines
DATE ISSUED	7/15
DATE REVISED	5/16

EFI Diagnostic Software 25 761 23-S – SOFTWARE UPDATE

UPDATE 10 for Version 2.11 Software **5/2016**

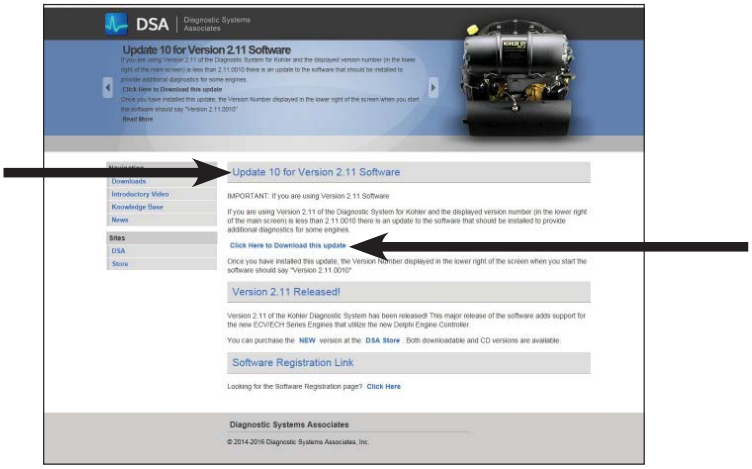
IMPORTANT: If you are using Version 2.11 Software

If you are using Version 2.11 of the Diagnostic System for Kohler and the displayed version number (in the lower right of the main screen) is less than 2.11.0010 there is an update to the software that should be installed to provide additional diagnostics for EZT715, EZT725, EZT740, and EZT750 engines. This is a **no-charge** update for 2.11 software users.

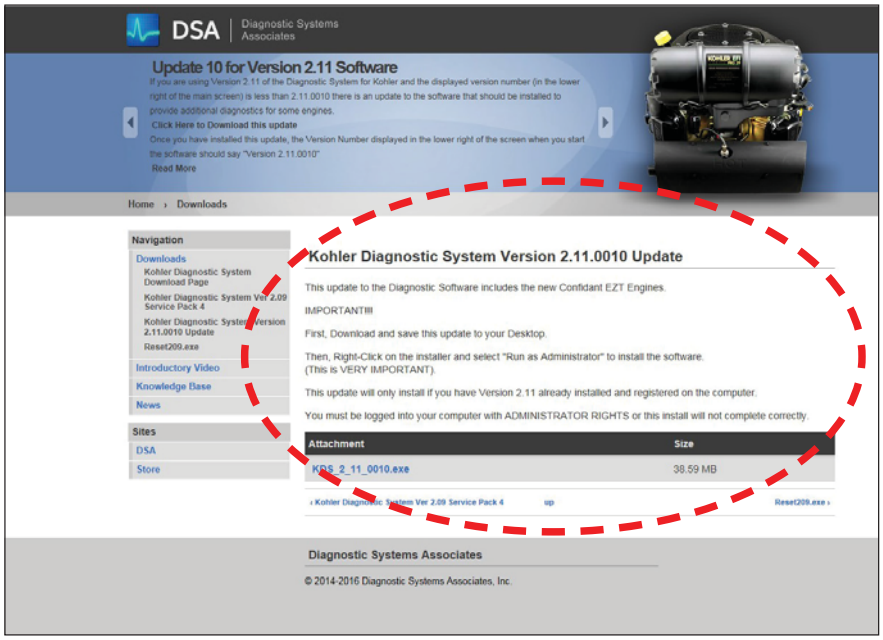
To download Update 10, enter the following web site into your web browser address line:

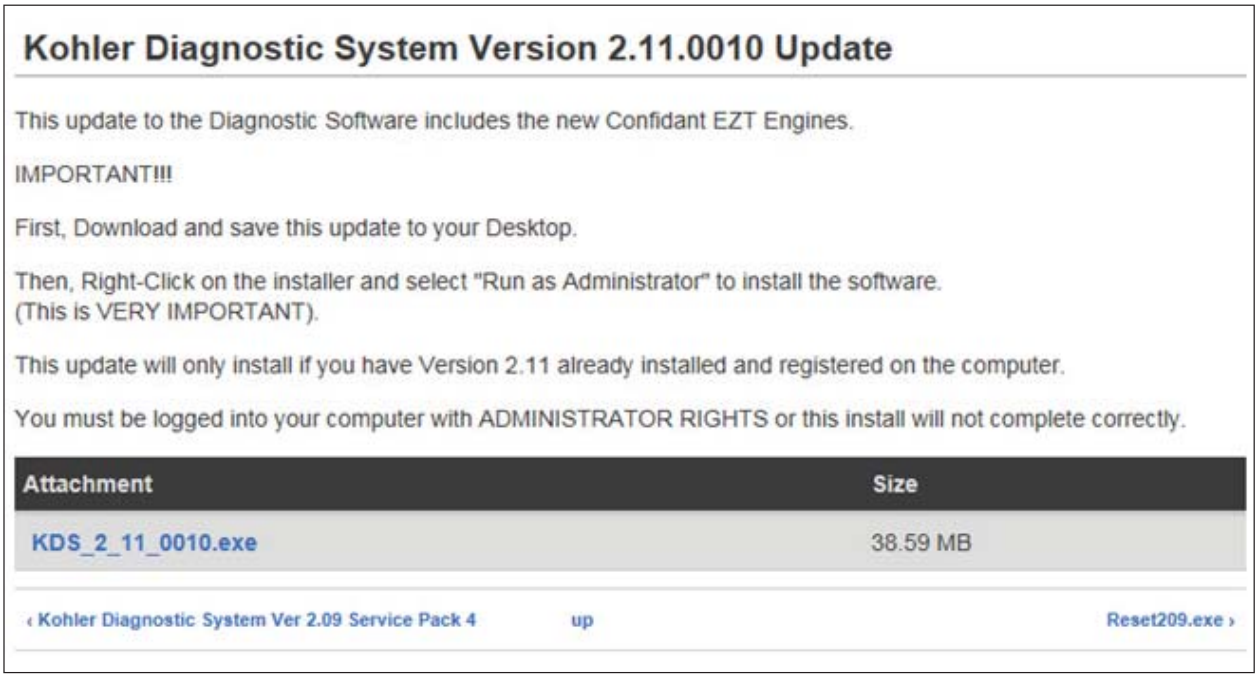
http://kohler.diagsys.com/

Under the header **Update 10 for Version 2.11 Software**, select "**Click Here to Download this update**" link.



Follow the IMPORTANT instructions as listed on the next screen shown below.





At the screen to run or save the update (shown below), CLICK on the downward triangle and choose **SAVE AS** to save this update to your desktop.

Right click the installer icon on your desktop and select "Run as Administrator" to install the software.

KOHLER Engines

Parts Bulletin

NO. 264

MODEL XT Series

DATE ISSUED	DATE REVISED
6/16	

XT Series Primer Service

The original XT Series primer (14 390 04-S) is no longer available as a service part. Replacement of the original primer will require one of the following kits. Installation instructions are included with each kit.

Products in California are required to use a conversion kit.

California pressure washers will need to be converted to a manual choke system.

California rotary mowers will need to be converted to an auto choke system.

The table below has the appropriate kit to order from your source of supply.

State and/or Product	Order and Install Kit
All states except California	14 755 36-S Primer Kit
XT Series on California Pressure Washer	14 755 34-S Primer to Manual Choke Conversion Kit
XT Series on California Rotary Mower	14 755 35-S Primer to Auto Choke Conversion Kit

ENGINE DIVISION, KOHLER CO., KOHLER, WISCONSIN 53044

KOHLER Engines

Parts Bulletin

NO.	265
MODEL	CH/CV22, CH/CV23, CH/CV25
DATE ISSUED	6/16
DATE REVISED	

ASAM Conversion Kits

Kohler Engines is currently unable to provide direct replacement components for the ASAM (analog spark advance module) 24 584 09-S and 24 584 10-S modules. Until such replacements are available, the ignition system will need to be converted using the appropriate kit for the engine being serviced.

The conversion kit includes two new ignition modules, new flywheel, duplex lead, and installation instructions.

Order the conversion kit based on the horsepower of the engine being serviced, from your source of supply.

For 22 hp or 23 hp Engine Specifications 66XXX, 67XXX, or 76XXX

Order kit **24 755 307-S** from your source of supply.

This kit converts the engine from ASAM ignition to CDI (capacitive discharge) fixed ignition.

For 25 hp Engine Specifications 68XXX, or 69XXX

Order kit **24 755 308-S** from your source of supply.

This kit converts the engine from ASAM ignition to MDI (magnetic discharge) ignition.

KOHLER Engines

Parts Bulletin

NO.	266
MODEL	XT-6, XT6.5, XT650, XT6.75, XT675, XT-7, XT775, XT8
DATE ISSUED	6/16
DATE REVISED	

Auto Choke Arm Assembly Identification

This bulletin may be used to aid in the identification of the **auto choke arm assembly** used on certain XT Series engines.

Since the introduction of the auto choke feature on this engine series, a number of different **rotating lever arm** design assemblies have been used prior to the current **push/pull rod** design which is covered on page 4 of this bulletin.

The primary differences with the rotating lever arm style have been:

1. Overall length of the assembly (rod). See Figure 1.
2. Position and design of the welded bracket on the thermostat housing for attaching to the muffler. See Figures 2 and 3.
3. Change to the outer support bracket that serves as a linkage stop.

NOTE: All references to length are measured from the bushing on the thermostat housing end, to the end of the shaft. See Figure 1.

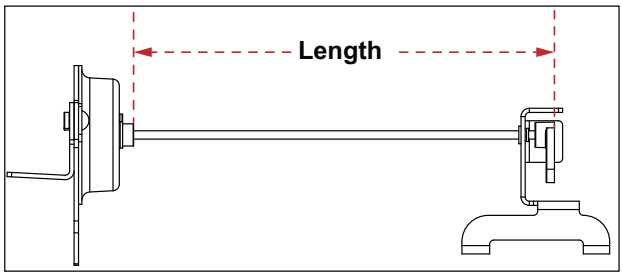


Figure 1. Length Reference Drawing.

The welded bracket position on the thermostat housing, illustrated in Figures 2 and 3, is based on the muffler size.

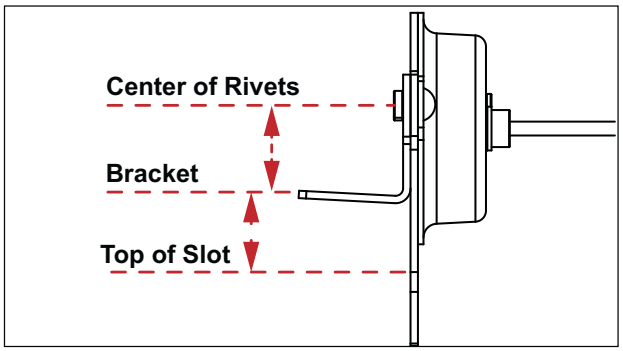


Figure 2. Bracket Position for Small Muffler.

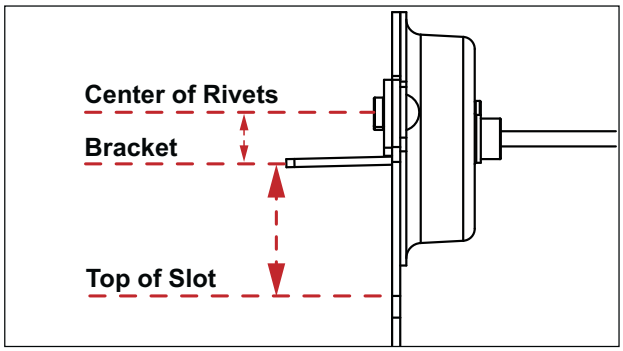
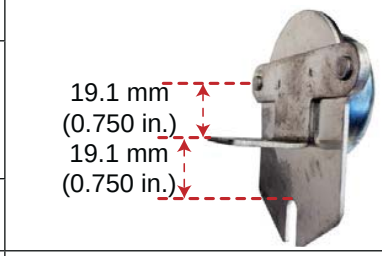
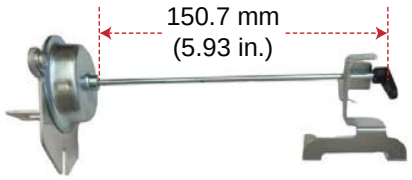
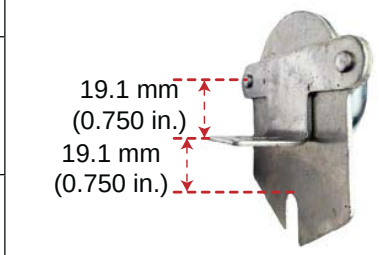
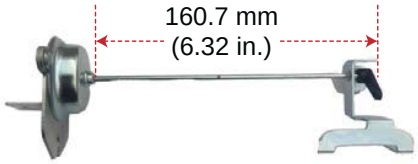
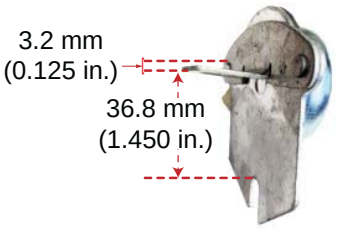
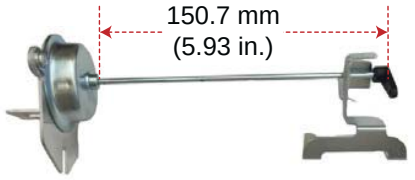
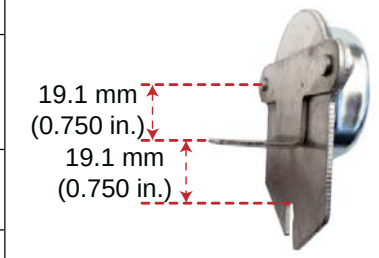
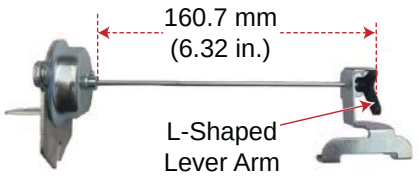
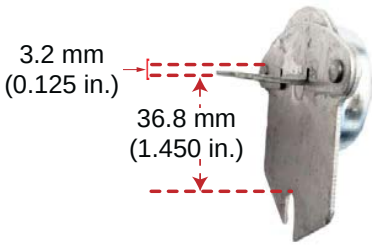
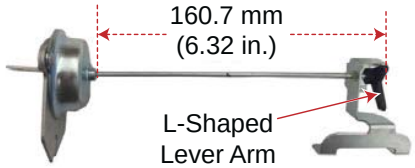


Figure 3. Bracket Position for Large Muffler.

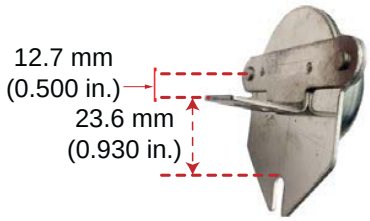
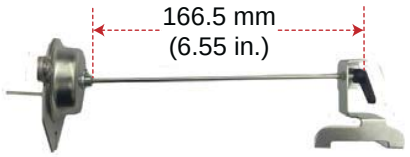
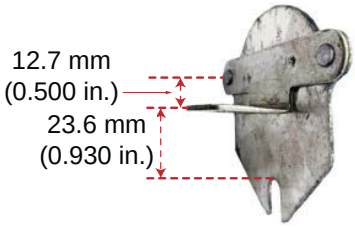
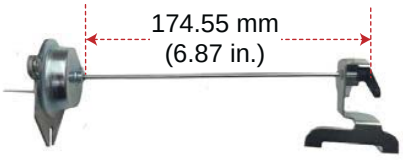
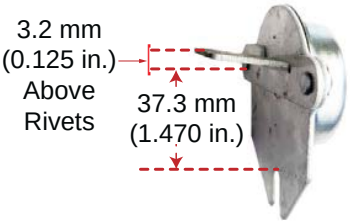
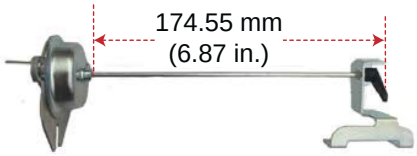
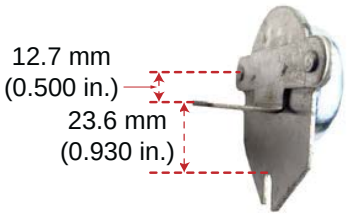
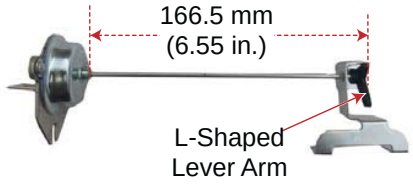
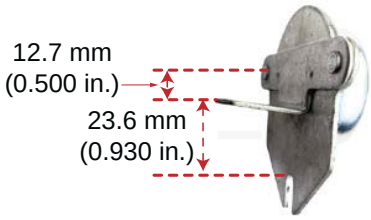
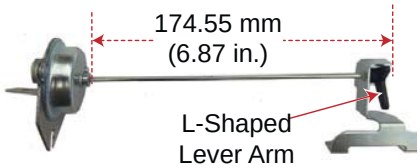
XT-6, XT6.5, XT650, XT6.75, XT675 (149cc Displacement) Auto Choke Arm Assemblies

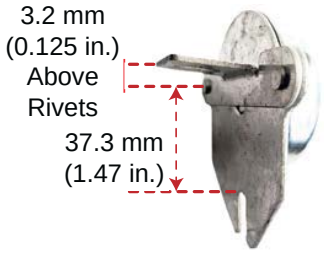
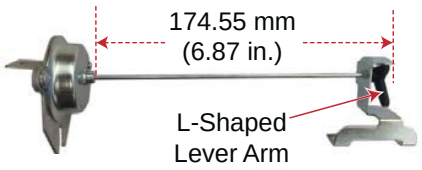
Original Service Part Number	Current/Pending Replacement Service Part Number
14 187 02-S	14 187 02-S
14 187 04-S, 14 187 10-S	14 187 10-S
14 187 07-S	14 187 07-S
14 187 14-S, 14 187 16-S, 14 187 17-S	14 187 17-S

Description	Housing Bracket Detail	Auto Choke Arm Assembly
14 187 02-S • Used with thin (6 mm/0.236 in.) carburetor spacer and small muffler. • Introduced in 2009.		
14 187 04-S • Used with thick (16 mm/0.625 in.) carburetor spacer and small muffler. • Introduced in 2010.		
14 187 07-S • Used with thin (6 mm/0.236 in.) carburetor spacer and large muffler. • Introduced in 2012.		
14 187 10-S • Used with thick (16 mm/0.625 in.) carburetor spacer and small muffler. • Outer bracket has a built-in stop for L-shaped lever arm. • Introduced in 2013.		
14 187 14-S, 14 187 16-S, 14 187 17-S • Used with thick (16 mm/0.625 in.) carburetor spacer and large muffler. • Outer bracket has built-in stop for L-Shaped lever arm. • Introduced in 2013 (material and certification changes occurring since).		

XT-7, XT775, XT8 (173cc Displacement) Auto Choke Arm Assemblies

Original Service Part Number	Current/Pending Replacement Service Part Number
14 187 01-S, 14 187 11-S	14 187 01-S
14 187 03-S, 14 187 12-S, 14 187 19-S	14 187 12-S
14 187 08-S, 14 187 15-S, 14 187 18-S	14 187 18-S

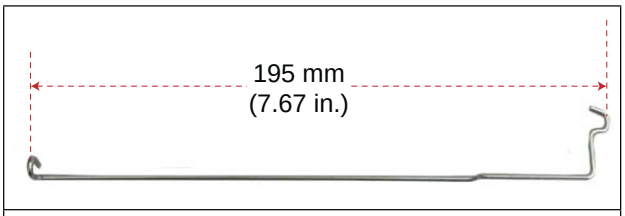
Description	Housing Bracket Detail	Auto Choke Arm Assembly
14 187 01-S • Used with thin (8 mm/0.314 in.) carburetor spacer and small muffler. • Introduced in 2009.		
14 187 03-S • Used with thick (16 mm/0.625 in.) carburetor spacer and small muffler. • Introduced in 2010.		
14 187 08-S • Used with thick (16 mm/0.625 in.) carburetor spacer and large muffler. • Introduced in 2012.		
14 187 11-S • Used with thin (8 mm/0.314 in.) carburetor spacer and small muffler. • Same as 14 187 01-S but outer bracket has a built-in stop for L-Shaped lever arm. • Introduced in 2013.		
14 187 12-S & 14 187 19-S • Used with thick (16 mm/0.625 in.) carburetor spacer and small muffler. • Same as 14 187 03-S but outer bracket has a built-in stop for L-Shaped lever arm and material change. • Introduced in 2013.		
14 187 15-S & 14 187 18-S	Details and illustrations on page 4.	

14 187 15-S & 14 187 18-S		
• Used with thick (16 mm/0.625 in.) carburetor spacer and large muffler.		
• Same as 14 187 08-S but outer bracket has a built-in stop for L-Shaped lever arm and material change.		
• Introduced in 2013.		

Push/Pull with Top Mounted Thermostat Design 2014 and Newer

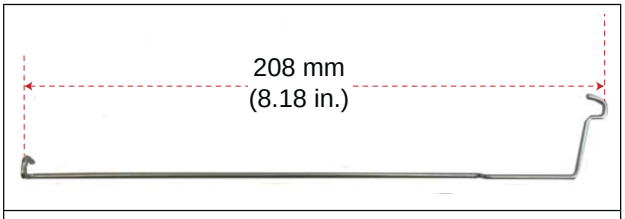
This design consists of a thermostatic coil with lever, mounted on TOP of the muffler and moves a formed link (rod), which is pushed/pulled to actuate the choke. Two different length links were used depending on the engine involved.

14 187 20-S Auto Choke Coil



14 079 32-S Linkage

- Used on XT650, XT675 engines.



14 079 33-S Linkage

- Used on XT775, XT8 engines.

KOHLER Engines

Service Bulletin

NO.	221
MODEL	K582, M18 & M20, CH18-26, TH16, TH18
DATE ISSUED	8/92
DATE REVISED	5/16

Crankshaft Splined Insert Lube Interval Recommendation

While it was previously thought that spline lubricant would remain effective for as long as the pump mounting remained intact, we now recommend that splines be re-lubricated **every 500 hours** of operation.

Misalignment and lack of lubricant remain as the two major causes of premature wear and/or costly tooth damage to splined inserts. Without any recommended interval, spline service was being neglected, resulting in damage.

Every 500 hours of operation, separate the pump from the engine. Make a preliminary inspection of the spline area. The presence of rust-colored dust or powder could indicate that the spline teeth have been wearing. Clean the splines with solvent and make a closer inspection for wear or damage. If the splines are in good condition, apply a **liberal** coating of grease to the teeth. Use either Dow Corning G-N Metal Assembly Paste (Kohler Part No. 25 357 12-S) or Dow Corning #77 Assembly Paste.

As you remount the pump to the engine, be certain the mating surfaces are clean and free of any foreign material, and that the pump is correctly aligned.

If you have a splined insert that has been damaged, the following kits are available for spline replacement.

Description	Kohler Part Number
9 tooth insert	82 755 02-S
11 tooth insert	25 755 27-S
13 tooth insert	48 755 21-S

Routing	Service Manager	Sales Manager	Parts Manager	Chief Mechanic	Mechanic No. 1	Mechanic No. 2	Mechanic No. 3	Mechanic No. 4	Return This To
Initial Here									

 ENGINE DIVISION, KOHLER CO., KOHLER, WISCONSIN 53044

KOHLER Engines

Service Bulletin

NO.	316
MODEL	CH440
DATE ISSUED	5/12
DATE REVISED	3/16

CH440 Exhaust Improvements

The May 2012 issue of this bulletin explained two failure issues with the CH440 engine on some air compressor applications.

The first issue related to the original electric starter 17 098 05-S, with the recommendation to replace a failed starter with the new version 17 098 11-S after confirming the compressor is equipped with an unloader valve and that it is functioning properly.

After the release of this bulletin, active CH440 specs were updated to use the new version starter 17 098 11-S, and stock of the original starter was used on appropriate application specs. The original starter part number has been superseded to the new starter.

The second issue related to muffler cracking, usually around the welds at the mounting flange, with the recommendation to use new muffler kit 17 068 80-S for replacement.

Over the next several years, improvements have been made to CH440 exhaust assemblies (for all applications) that included running changes and several new part numbers.

Those exhaust system improvements include the following:

- Extra support arm, aluminized steel body change to 17 068 70-S muffler (September 2012).
- Cast iron inlet elbow design muffler 17 068 87-S; muffler secures to engine with M10x35 mm screws and inlet elbow is secured to muffler with serrated flange lock nuts (May 2013).
- Muffler shield mounting screws were changed from black plated (that were rusting in certain applications) to stainless steel (to prevent rust) (November 2013).
- Internal improvements made to muffler support plate (material thickness increased and weld method changed) and inlet housing (welding lines for supporting plate reinforced from 4 to 8 weld lines) (March 2014).
- Released new part number muffler assembly 17 068 95-S implemented with new stainless steel exhaust gasket replacing the graphite gasket increasing stiffness of muffler assembly. This muffler assembly is secured with M10x40 mm screws and lock washers (May 2014).

Exhaust failures in the field can be better addressed with the latest released components identified in our online parts lookup system Kohler PLUS (www.kohlerplus.com). Please consult Kohler PLUS for the most up-to-date supersessions.

Routing	Service Manager	Sales Manager	Parts Manager	Chief Mechanic	Mechanic No. 1	Mechanic No. 2	Mechanic No. 3	Mechanic No. 4	Return This To
Initial Here									

 ENGINE DIVISION, KOHLER CO., KOHLER, WISCONSIN 53044

KOHLER Engines

Service Bulletin

NO.	341
MODEL	CV940, CV980 ECV940, ECV980
DATE ISSUED	6/15
DATE REVISED	10/16

Extended Warranty Coverage

The intent of this service bulletin is to assist dealers supporting 999cc Command PRO engines built prior to January 2015. Based on dealer feedback, Kohler found engines may be more susceptible to performance issues caused by excessive heat in certain operating conditions and climates. This latest revision reflects multiple hours of additional testing and analysis completed by Kohler to help dealers more effectively diagnose compromised 999cc Command PRO engines.

Based of feedback from dealers and customers, Kohler made numerous product improvements to the 999cc Command PRO engine starting in 2014; aimed at reducing oil consumption and heat. These changes included introducing EFI, using 20W-50 oil, a new breather design, and engine architecture changes which reduced oil consumption by 66% and lowered cylinder head temperatures by up to 90˚F. Following the implementation of these changes, Kohler added a 4th year of engine warranty and sought to implement a service plan that allowed Kohler dealers to quickly diagnose and process engines with reports of high oil consumption or low power.

To expedite engine diagnosis Kohler relied heavily on leakdown and compression testing. This allowed dealers to complete diagnosis without removing the engine from the application saving several hours of shop time and minimizing downtime for the customer. Since this diagnostic procedure was put in place, Kohler has analyzed a significant number of replaced engines returned by dealers to validate the recommended test procedure.

Summary of Kohler testing, analysis, and results:

- 100% of engines returned had leakdown results that exceeded previously communicated limits.
  - o Despite leakdown results, a majority of these engines demonstrated normal oil consumption and power.
- The number of engines actually experiencing high oil consumption or low power was small.
- A random sampling of these engines were run an additional 500 hours and performance was monitored.
  - o Oil consumption and power did not change through the duration of the test.
- Engine performance should not degrade over time under normal operating conditions and proper maintenance.

NOTE: The test data referenced above has been provided to Kohler distributors and can be shared at the request of the dealer.

Routing	Service Manager	Sales Manager	Parts Manager	Chief Mechanic	Mechanic No. 1	Mechanic No. 2	Mechanic No. 3	Mechanic No. 4	Return This To
Initial Here									

 ENGINE DIVISION, KOHLER CO., KOHLER, WISCONSIN 53044

Based on these learnings, leakdown test results by themselves, do not indicate poor engine performance, high oil consumption, or low power on the 999cc Command PRO engine. Additionally, the testing has shown improvements made since the introduction of EFI to be much more resilient and durable than the carbureted predecessors. As a result, for the engines listed below, Kohler Engines has lifted the prior hour limitation on the 4th year of coverage. This program will not however provide coverage on engines where there is not a failure or confirmable performance issue or customer complaint.

CV940, CV980 Engines
CV940-2010
CV940-2011
CV980-2011
CV980-2012
CV980-2013

ECV940, ECV980 Engines
ECV940-2011
ECV940-2012
ECV940-2013
ECV980-2011
ECV980-2016

To assist with diagnosis issues related to low power and high oil consumption, please follow the process outlined below:

Troubleshooting Oil Consumption and Low Power

Oil Consumption

NOTE: It has been determined that most customer reports of oil consumption are due to breather issues or oil leakage.

1. If oil leaks are present, repair.
2. Verify Kohler branded oil of the proper viscosity and level is being used at the correct service intervals. Verify the oil level is being inspected properly, as outlined by the owner's manual. If not, this must be done before additional repairs/troubleshooting is performed.
3. Oil consumption persists and has been verified by the servicing facility:
   a. Perform crankcase vacuum test as outlined by the service manual.
   b. If less than 4 in. of water, replace the breather assembly and confirm proper operation/assembly of the breather system components.
   c. If above 4 in. of water, contact your Kohler Distributor for assistance verifying an oil consumption report.

Low Power and/or Run Quality

NOTE: It has been determined that most customer reports of low power are due to electronic governor system faults, refer to SB-345 Updated Electronic Governor Components.

1. Identify if the fault can be duplicated. If only the customer can duplicate intermittently, request a brief video of the fault occurring to assist with verification. This should occur prior to taking delivery of the unit.
2. Verify the fault reported does not result in illuminated warning lights on the control panel, ECU fault codes, cylinder specific misfires, and/or affect PTO engagement.
3. Verify the fault reported affects engine speed. For example, the engine does not respond to the speed selected or does not continue to operate at the speed selected. Electronic governor components faults are most likely to affect the engine speed.

4. Confirm that the electronic governor update service kit has not already been installed. If not, install the appropriate service update kit part number 62 755 53-S on ECV940 specs or 62 755 54-S on ECV980 specs. For 43xxxxxxxx and 44xxxxxxxx engines (specs ECV940-2011 and ECV980-2011, the brush style throttle position sensor (TPS) should also be replaced. Perform the ECU/TPS reset procedure provided in the kit instructions.

The latest design engines will continue to be used as replacements where the engine conditions and troubleshooting support this approach, but mainly for engines that experience a major mechanical failure such as dropped valves and/or broken cam gears (without signs of abuse or neglect). This decision will be at the discretion of the local Kohler Central Distributor.

If a complete engine is approved, submit a labor only Policy Adjustment claim using the 62 874 17-S piston as the Defective Part Number, enter SB341 in the Work Unit field, up to 3.5 hours of labor for a carburetor to EFI conversion or 2.5 hours for an EFI to EFI conversion, using flat rate labor code of 4000, up to 1 hour for diagnostic time using the miscellaneous flat rate code of 9999, and $100 in the Miscellaneous Section for parts profit compensation. Submit the claim for pre-authorization to the Kohler Central Distributor representative that approved replacement. Tag the engine and parts with the corresponding claim number and retain them until you have received your reimbursement.

Claims for other conditions found as outlined in this Service Bulletin should be submitted using standard warranty policies using the part number of the actual defective part and the related labor time.

KOHLER Engines

Service Bulletin

NO. **342**

MODEL **XT650, XT675**

DATE ISSUED	DATE REVISED
7/15	9/16

Stumble Due to Insufficient Choke Thermostat Heating/ Possible Difficult Hot Restart

Some XT650 and XT675 engines may exhibit a rich stumble when load is applied. This is a fault that is most likely to occur when new, and is not a fault likely to develop over time. Below is a list of the engine specs that could present this condition.

Engine Specs
XT650-2036
XT650-2037
XT650-3038
XT650-3039
XT675-2087
XT675-3088

This stumble can be duplicated by starting and mowing for about 1 minute under light load conditions. Next, engage the power drive and enter medium ("normal") load/cutting conditions. This is where the stumble is most pronounced. Continue to mow for 5 seconds, then stop and wait for 5 seconds before engaging the power drive and mowing again. The stumble should be most pronounced when the power drive is engaged and load is encountered.

Observation of choke operation is likely to reveal insufficient choke opening while mowing.

New Baffle Kit 14 755 33-S has been released and is available from your local Central Distributor Technical Support. When installed, it increases the heat directed to the choke thermostat to ensure the choke opens sufficiently.

Submit a warranty claim indicating 14 187 20-S as the Defective Part Number and 0.5 hour of labor to install the kit.

Routing	Service Manager	Sales Manager	Parts Manager	Chief Mechanic	Mechanic No. 1	Mechanic No. 2	Mechanic No. 3	Mechanic No. 4	Return This To
Initial Here									

 ENGINE DIVISION, KOHLER CO., KOHLER, WISCONSIN 53044

KOHLER Engines

Service Bulletin

NO.	345
MODEL	ECV940, ECV980
DATE ISSUED	4/16
DATE REVISED	10/16

Updated Electronic Governor Components

There have been reports of running conditions potentially caused by electronic governor system (E-GOV) faults such as surging and/or not operating consistently at the selected engine speed. Design changes have been made to this system that can be used to update existing engines experiencing the related symptoms. It is also recommended that this upgrade be performed for all commercial customer units and any new units in dealer stock. The update can be done using electronic governor service kit 62 755 53-S on ECV940 specs or 62 755 54-S on ECV980 specs. The tables below list the engine specs that can be updated with each kit.

62 755 53-S ECV940 Specs
ECV940-2011
ECV940-3011

62 755 54-S ECV980 Specs
ECV980-2011
ECV980-3011

The E-GOV system faults addressed in this bulletin are for faults that are intermittent but also repetitive. These faults may not be easily duplicated at the repair facility. It is important that faults not related to the E-GOV system be ruled out before proceeding with repairs.

The following conditions may be misdiagnosed as faults of the E-GOV system. Troubleshoot and repair these faults prior to performing E-GOV repairs. These are faults that will NOT be resolved by replacement of E-GOV components.

1. **Electrical issues not related to the E-GOV system.**
   - o Correct battery voltage and charging system operation should be confirmed. Ensure all connections at battery, engine, and starter are secure.
   - o Unit Safety System components, such as a seat switch, may result in an intermittent cut out of the engine.

2. **Illuminated warning lights on the control panel.**
   - o Malfunction Indicator Light will illuminate if the ECU identifies a fault within the fuel injection system. Troubleshoot using the Kohler EFI Diagnostic Software.
   - o Low Engine Oil Pressure Light will illuminate if oil pressure is excessively low. Test oil pressure circuit for proper operation. Check engine oil pressure with a gauge.
   - o High Engine Oil Temperature Light will illuminate if the oil temperature switch in the oil pan (starter side) detects excess heat. Test switch for proper operation. Confirm oil temperature with Kohler EFI Diagnostic Software.

3. **ECU fault codes.**
   - o Current codes will illuminate the Malfunction Indicator Light. Troubleshoot as stated in #1.
   - o Historic codes should be recorded and cleared. Troubleshoot only if the code reoccurs and is likely related to a current customer complaint.

Routing	Service Manager	Sales Manager	Parts Manager	Chief Mechanic	Mechanic No. 1	Mechanic No. 2	Mechanic No. 3	Mechanic No. 4	Return This To
Initial Here									

 ENGINE DIVISION, KOHLER CO., KOHLER, WISCONSIN 53044

4. **Misfire of an individual cylinder.**
   - o If the misfire is isolated to a specific cylinder, such as cylinder #2, inspect that cylinder and related components for a fault. This could be caused by a loss of spark, fuel, or a mechanical engine fault such as a dropped valve seat and/or rocker arm.

5. **OEM control system fault (PTO will not engage or engine speed limited to 2500 RPM).**
   - o The OEM control system may prevent engagement of the PTO and limit engine speed to 2500 RPM. Refer to OEM troubleshooting diagnostics.

If the E-GOV update service kit has already been installed (as evidenced by Figure 1), and faults persist, this indicates the fault is not likely caused by the E-GOV system. Once the service kit has been installed, subsequent E-GOV system repairs will be performed with replacement components as needed, not another kit.

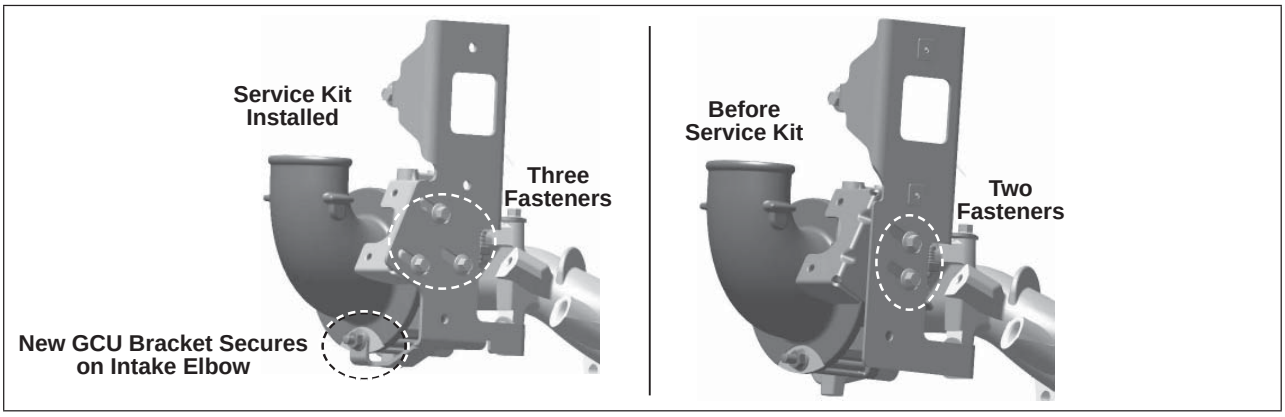


Figure 1. Identifying E-GOV Service Kit Components.

For engine speed issues not resolved with the above recommendations:

1. Prior to taking delivery of the unit, identify if the fault can be readily duplicated. If only the customer can duplicate intermittently, request a brief video of the fault occurring to assist with verification. If the fault cannot be duplicated, gather a detailed description of the fault in the customer's words.

2. If the condition experienced and/or described is determined to be caused by the E-GOV system and the symptoms include one or more of the following:
   a. The engine does not respond to speed input selection (often reported as sticking or binding resolved by tapping on E-GOV components).
   b. The engine does not maintain the selected speed (intermittently over-speeds or bogs, surging).
   c. Obvious physical damage to E-GOV components (broken GCU, over-extended DLA, obvious wire harness and/or connector damage).

3. Install the appropriate E-GOV update service kit. 43xxxxxxx and 44xxxxxxx engines (specs ECV940-2011 and ECV980-2011) should have the throttle position sensor (TPS) replaced and initialized at the same time.

Upon repair submit a Warranty Repair warranty claim using the 25 179 01-S part as the Defective Part Number, enter ME6264Y in the Work Unit field, up to 1.5 hours of labor, using flat rate labor code of 4000. Tag the replaced parts with the corresponding claim number and retain them until you have received your reimbursement.

Kohler Engines has also created a toll free number 1-877-333-3948 for technical support with these E-GOV engines and systems.

KOHLER Engines

Service Bulletin

NO.	
	347
MODEL	
	ALL
DATE ISSUED	DATE REVISED
5/16	

Cylinder Leakdown Tools and Test Procedures

Recent investigation has identified discrepancies regarding the accuracy of leakdown test results. There are numerous variables contributing to these inaccuracies, with the main factors being the leakdown test tool, the techniques used during the test procedure, and understanding the test results.

Single Gauge Leakdown Tools

Single gauge leakdown tools, such as cylinder leakdown tester 25 761 05-S, utilize one gauge to set the incoming line pressure and the same gauge to observe pressure differential created by cylinder leakage. Single gauge tools typically do not indicate a PSI value, instead indicating a percentage of leakage in conjunction with shaded areas indicating Low, Moderate, and High. Once the valve is opened and air flows into the cylinder, the gauge indicates an approximate amount of cylinder leakage.

With a single gauge tool, once the valve is opened, the incoming air pressure can no longer be regulated at a specific pressure. Without the ability to precisely regulate incoming air pressure while simultaneously observing pressure differential on a second gauge, a single gauge tool cannot accurately measure a specific percentage of leakage.

Kohler Tool 25 761 05-S and the shaded areas indicating Low, Moderate, and High leakage are reasonably accurate for cylinders exhibiting normal (green/Low) to high normal (yellow/Moderate) amounts of leakage. **The percentage of leakage indicated is not accurate and should be ignored, relying solely on the text of the shaded areas.** Refer to Figure 1: This cylinder has leakage in the yellow shaded area indicating moderate; the 60% should not be read as the actual cylinder leakage.

Figure 1. This should not be understood as having 60-70% leakage.

Because the current version of 25 761 05-S requires approximately 35 PSI to set/zero the gauge, this tool becomes less accurate when indicating high (red shaded) leakage. Numerous independent tests have identified 35 PSI can be insufficient for accurately measuring high amounts of leakage. This is more problematic on a single gauge tool where the incoming line pressure cannot be regulated precisely at 35 PSI. A tool utilizing an incoming line pressure of 75 PSI or more may indicate a passing leakage value on the same cylinder that fails utilizing a tool that relies on a lower incoming line pressure such as 35 PSI.

Kohler Engines continues to support the value of this tool as an indicator of the source of the cylinder leakage. The current tester is also useful in determining the relative condition of the engine when descriptions of low, moderate, and high are used (not a percentage of leakage).

Routing	Service Manager	Sales Manager	Parts Manager	Chief Mechanic	Mechanic No. 1	Mechanic No. 2	Mechanic No. 3	Mechanic No. 4	Return This To
Initial Here									

ENGINE DIVISION, KOHLER CO., KOHLER, WISCONSIN 53044

Dual Gauge Leakdown Tools

Dual gauge leakdown tools (see Figure 2) utilize one gauge to precisely regulate incoming line pressure and a second gauge to observe pressure differential created by cylinder leakage. Ideally, both gauges will be identical and read up to 100 PSI. This tool provides the ability to precisely regulate incoming line pressure while identifying an accurate percentage of leakdown. For example, with 100 PSI of incoming line pressure indicated on one gauge and 80 PSI indicated on the second gauge, 20% leakage can easily be calculated. Additionally, the incoming line pressure can be precisely regulated as needed. For example, with 80 PSI of incoming line pressure indicated, and 40 PSI indicated on the second gauge, 50% leakage is calculated.

Figure 2. Dual Gauge Leakdown Test Tool.

Confirming and Retaining Tool Accuracy

Inspect the pressure gauges for faults, such as the needle not being in the proper position at rest (see Figure 3); this indicates a defective gauge that requires replacement. It is critical to release (by turning counterclockwise) regulator pressure every time the tool is used, as excess line pressure can damage the gauge.

Figure 3.

For dual gauge tools utilizing identical gauges, confirm the gauges are accurate to each other (connect tool only to air supply and regulate air pressure- both gauges should indicate the same value); small discrepancies can then be documented and compensated for.

A Master Orifice Tool can and should be used to verify the accuracy of any leakdown test tool. The master orifice (Kent-Moore 646953A) indicates an industry standard of acceptable leakage for the leakdown tool used and the environmental conditions it is being used in. Ideally, this procedure would be done prior to performing every leakdown test.

Understanding the Results

It is important to understand leakdown testing is a static test, meaning the leakage identified may not be accurate for a running engine (a dynamic test). A running engine produces significant cylinder pressures and conditions that cannot be replicated by static test procedures.

Whenever high leakage is identified, the next step is verification. The source of high leakage should be documented. If the engine runs acceptably, it should be ran under conditions that duplicate normal loads and normal operating temperatures. A consecutive test of the failing cylinder should be performed immediately afterwards. If the cylinder now passes, document and return to service.

If the cylinder fails consecutive leakdown tests, consider the source of leakage and any related customer complaints before disassembly. Oil consumption, spark plug condition, and crankcase vacuum need to be taken into consideration.

For example, high leakage past a valve will not cause engine oil consumption, though excess oil entering the intake may create excess carbon deposits on the intake valve that prevents proper valve sealing. **This excess oil may be caused by a valve guide/seal issue and/or breather system issue that does not require head removal to repair.** Excess carbon deposits on valves can result in high static leakdown test values without significantly affecting engine performance or actual (dynamic) valve sealing.

High dynamic leakage into the crankcase will overwhelm the ability of the breather system to function and maintain proper crankcase vacuum, often forcing excess oil into the breather system and creating excess oil consumption. **If high leakage into the crankcase is measured static and crankcase vacuum testing passes, dynamic leakage is not likely to be excessive.** This too could be caused by a condition that does not require engine disassembly and repair, such as a flooding carburetor that is affecting piston to cylinder lubrication and sealing.

KOHLER Engines

Service Bulletin

NO.	
	348
MODEL	
	KT715-KT745
DATE ISSUED	DATE REVISED
5/16	6/16

Engine Stall

The potential exists for these engines to stall for no apparent reason. This issue is limited to KOHLER® 7000 Series engines within the serial number range of **45327xxxxx through 4613302464**. Not all engines in this serial range will exhibit the condition.

If a customer experiences a stall condition, check the standard items such as proper fuel level, inspect for fuel cap vent operation, as well as proper fuel flow to the carburetor. If all of these items are found to be correct and the stall condition still occurs, it is recommended to perform the following fix that involves cutting the existing evap line as shown in Figure 1, inserting a new T-Fitting (25 155 56-S) and a new line (25 326 28-S 14" cut to an 8" length) that will connect to fitting on air cleaner base.

NOTE: Refer to the appropriate service manual disassembly and reassembly procedures as needed.

1. To access the evap line, remove the air cleaner cover, air cleaner element, and air cleaner base.

2. Locate the existing evap line (as shown in Figure 1), remove it from the purge port nipple on the carburetor, and cut it in half.

Figure 1. Cut Existing Evap Line in Half.

3. Install the new T-Fitting at the location of the cut line. Take the new 25 326 28-S 14" long line and cut it to an 8" length. Install and route the new 8" long line as shown in Figure 2.

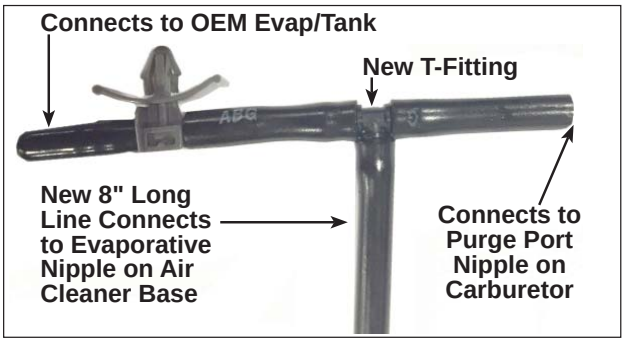


Figure 2. New T-Fitting and New Line Assembly.

4. New T-Fitting and line assembly is shown installed on the engine in Figure 3.

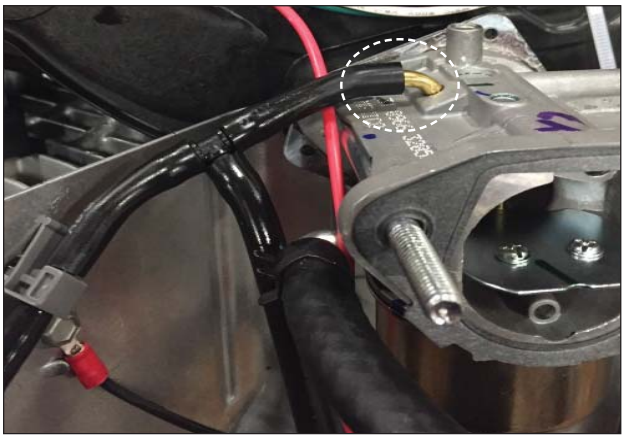


Figure 3. New T-Fitting/Line Assembly Installed.

Routing	Service Manager	Sales Manager	Parts Manager	Chief Mechanic	Mechanic No. 1	Mechanic No. 2	Mechanic No. 3	Mechanic No. 4	Return This To
Initial Here									

ENGINE DIVISION, KOHLER CO., KOHLER, WISCONSIN 53044

5. Route the new 8" long evap line from the T-Fitting to the plugged port on the air cleaner base. Remove and discard the plastic cap at that location. See Figure 4.

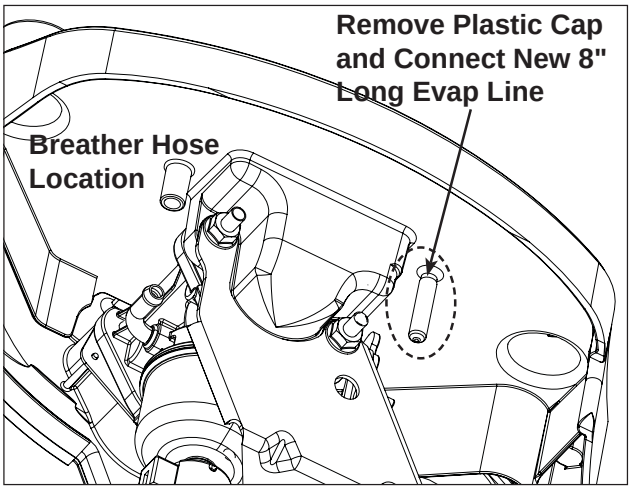


Figure 4. Connect New 8" Long Evap Line to Air Cleaner Base.

6. Reassemble the engine following service manual reassembly procedures as needed. Run the engine to confirm engine performance.

Normal warranty terms apply. Submit warranty claim using 25 326 71-S as the Defective Part Number and ZZ (Other) as the Failure Code. Labor Time of up to 0.5 hour using Labor Code 9999 for Misc Labor.

KOHLER Engines

Service Bulletin

NO.	349
MODEL	CH270 w/auto fuel shutoff
DATE ISSUED	6/16
DATE REVISED	

CH270 Carburetor Inlet Valve Disc Damage

Isolated reports have been received regarding inconsistent running or stalling due to restricted fuel flow through the carburetor and/or carburetor shut-off valve.

The restricted fuel flow is due to shut-off valve disc damage or deterioration caused by an improper casting that can put excess pressure on the disc during rotation, as well as poor disc resilience. See Figure 1.

Both of these issues have been corrected in engines built after **June 3, 2015**, serial number **45154XXXXX**. At this same time, carburetor kit part number 17 853 66-S, was updated with a more resilient disc material and a casting change that provides proper tolerance.

If an issue is encountered, ensure proper fuel flow from the tank. If it is determined to be an issue with restricted fuel flow due to the damage to the disc, a complete carburetor replacement is recommended. Order carburetor kit 17 853 66-S from your source of supply.

Normal warranty terms apply and may be filed as applicable.

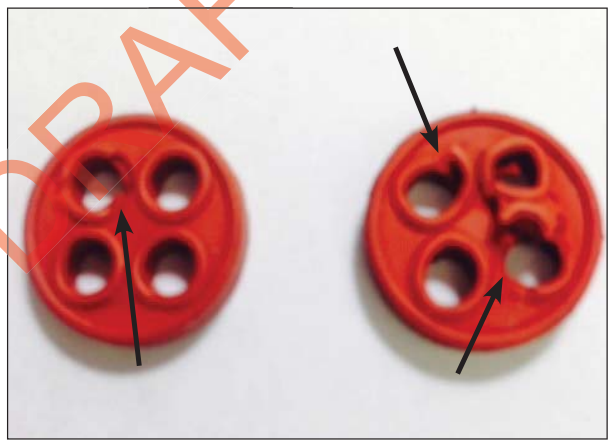


Figure 1. Damaged Discs.

Routing	Service Manager	Sales Manager	Parts Manager	Chief Mechanic	Mechanic No. 1	Mechanic No. 2	Mechanic No. 3	Mechanic No. 4	Return This To
Initial Here									

ENGINE DIVISION, KOHLER CO., KOHLER, WISCONSIN 53044

NOTES

Warranty

CD Approvals

- CD approval is required for all engine and short block replacements for Non-Expert Dealers.
- CD Approval is required for all repairs exceeding $2000.00 for Expert Dealers and $1000.00 for Non-Expert Dealers.
- CD comments for approval must be entered into Central Distributor Comments field.
- If there is excessive labor requested on a claim approved by the CD it must be called out in the comments field. Please state that you approve the requested additional labor in this field.
- Please be sure to pass this on to all approvers at your location.

Contact Information

For all Warranty System questions, reporting of performance issues and/or missing engine serial numbers please send an e-mail to the Kohler Engines Warranty Department via engineswarrantyclaims@kohler.com.

NOTES

KOHLER® Engines

ENGINE DIVISION, KOHLER CO., KOHLER, WI 53044