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TRANSPORTATION EQUIPMENT SUPPLY CO.

## TESCO Tools for GE EVO Engines







# **TESCO Tools for GE Evolution Engine**

## **GE Evolution Tools**

1. **General Maintenance**
2. **Cylinder and Head**
3. **Pistons and Valves**
4. **Main Bearing and Crankshaft**
5. **Connecting Rods**
6. **Camshaft**
7. **Fuel Injection**
8. **Turbocharger**
9. **Traction Motor**
10. **Test and Control**
11. **Miscellaneous**
12. **GE / TESCO Cross Reference List**

## General Maintenance

	<p><b>T87620 - Piston and Rod Lifter for GEVO Engine</b></p> <p>This lifter is designed to lift GEVO Piston and Rod Assemblies by addressing the top piston ring groove. Also, used to recover failed pistons when pin holes are unable to be accessed.</p>
	<p><b>T85372AL Replacement Leg Set</b></p> <p>The T85372AL is a set of two replacement leg assemblies for the older T85372 and T85371 Water Based Intercooler Pullers. These have a 3/4" thread and will not fit in the newer (larger) T85373 legs.</p>
	<p><b>T68490 Infrared &amp; Contact Thermometer</b></p> <p>The instrument range is -20 to 1652 degrees Fahrenheit or -30 to 900 degrees Celsius. It is powered by two AA Alkaline Batteries and comes with operating instructions.</p> <p>It includes a surface temperature probe for use on pinions, shafts and hubs. It is rates -196 to 1112 degrees Fahrenheit (-127 to 600 degrees C).</p> <p>It is compatible with K-Type Thermocouples and existing K Type Probes. this replaces the T2X3430 Pyrometer Kit.</p>
	<p><b>T65420 Air to Air Heat Exchanger Stand</b></p> <p>This stand is custom fabricated to hold an EVO Air to Air Heat Exchange Unit. The stand features forklift slots to move the unloaded fixture into position and the air to air unit is moved with the T65330 Lifter.</p>

**Torque Wrenches for General Maintenance**

1. T59810 -Torque Screwdriver 4-36 In-LB
2. T18220 -3/8" Drive Ratcheting Torque Wrench (10-75 Ft. lbs)
3. T67430 -J Shank (.425") Adjustable Torque Handle (5-75 Ft. lbs)
4. T67510 - 3/8" sq. drive, Flex Head Digital Torque Handle (5-100 Ft. lbs)
5. T20710 -3/8" sq. drive 30-250 In-lbs torque wrench
6. T16491 -Y Shank (.560") Adjustable Torque Handle (30-150 Ft. lbs)
7. T54930W -45-220 lb. Ft. torque handle (spigot drive)
8. T16491X -X Shank (.735") Adjustable Torque Handle (60-250 Ft. lbs)
9. T16492 - TECH X Shank (.735") Adjustable Digital Torque Handle (25-250 Ft. lbs)
10. T-200T-I Y Shank (.560") Pre-Set Torque Handle (45-200 Ft. lbs)
11. T22520 1/2" Drive Ratcheting Torque Wrench (30-250 Ft. lbs)
12. T-300T-I X Shank (.735") Pre-Set Torque Handle (100-300 Ft. lbs)
13. T18230 Torque Wrench - 3/4" Ratchet Style Square Drive 100-600 FT-LB
14. T18250 Torque Wrench, 0-1000 Lb.Ft., 1" Square Drive

**T98111 Electrician's Hand Tool Set With Toolbox  
For Use on All Locomotives**

16 Piece Open End Wrench Set, 1/4" to 1 1/4"  
8 Piece Mini Open End Wrench Set, 13/16" to 3/8"

8" Adjustable Wrench

7" Straight Locking Plier

1/4" Drive, 6 Point Sockets, 5/32" to 9/16"

1/4" Drive, Deep 6 Point Sockets, 3/16" - 9/16"

1/4" Drive Ratchet with 2" and 6" Extensions

1/4" Drive Spinner Handle

1/4" Drive Universal Joint

3/8" Drive, 12 Point Sockets, 3/8 to 3/4"

3/8" Drive, Deep 12 Point Sockets, 3/8" to 3/4"

3/8" Drive Universal Sockets, 3/8" to 9/16"

3/8" Drive Ratchet with 3" and 6" Extensions

3/8" Drive Universal Joint

1/2" Drive, 12 Point Sockets, 7/16 to 1 1/4"

1/2" Drive Ratchet With 5" and 10" Extensions

1/2" Drive Impact Universal Joint

1/2" Drive Socket Breaker Bar

Ratcheting Box End Wrench, 3/8" x 7/16"

Ratcheting Box End Wrench, 1/2" x 9/16"

Nut drivers, 3/16 to 3/8"

#1 x 3 Phillips Head Screwdriver

#2 x 4 Phillips Head Screwdriver

#2 x 6 Phillips Head Screwdriver

1/4 x 4 Slotted Screwdriver







5/16 x 6 Slotted Screwdriver








3/16 x 10 Slotted Screwdriver

13 Piece Standard Ball End Hex Key Set



Pin Punch, 3/32" Point, 4 1/2" Long






Pin Punch, 5/32" Point, 5" Long

	<p><b>T87040 GEVO Alternator Lineup Pin</b></p>
	<p><b>T87010 GEVO Oil Drain Line Adapter</b></p>
	<p><b>T86890 24mm Oil Pan Bolt Adapter</b></p> <p>This offset adapter features a 24MM 12 point box end and is driven with a 1/2" square drive.</p>
	<p><b>T86770 GEVO Pneumatic Barring Over Tool With Remote Control</b></p> <p>This kit features the T16050EVO barring over motor with a remote-control feature with 20 feet of hose. The replacement hose and hand valve are available as an individual part number - T22030HH.</p> <p>1 T16050EVO Air Motor 2 T22031 Complete Remote-Control Unit</p>
	<p><b>T86760 GEVO 12 Cylinder Oil Pump Lifter</b></p>
	<p><b>T86690 GE Oil Filter Housing Lifting Adapter for C Frame Manipulator</b></p> <p>This tool was designed to lift both sizes of GE oil filter housings with the door lid closed. The appliance is attached to the T57170 "C" Frame Manipulator, and the single fork reaches through the holes in the frame under the tank. The load can then be manipulated with the hydraulic ram on the "C" Frame Manipulator.</p>

	<p><b>T86550 EVO Oil Pump Lifting Adapter</b></p> <p>This plate is attached to an EVO Oil Pump and then lifted with a T80751A Appliance.</p>
	<p><b>T86400 Water Pressure Lock Out Clamp GEVO</b></p>
	<p><b>T86060 Metric Torque Adapter Set</b></p> <p>Includes 6, 8, 10, 12, 13, 14, 16, 17, 18, 19, 21, 24, 27, 30 &amp; 32 MM.</p>
	<p><b>T85953 EVO Blanking Tools - works on all EVO engines.</b></p> <p>GEVO Blanking Tool for Cooling System Test Kit</p> <p>This kit consists of the T85953-4 (4 inch) and the T85953-6 (6 inch) blanking caps. The T85953-6 has recently been modified from 5.75" long to 3.625" long to avoid interference issues.</p>
	<p><b>T85953-6 6" EVO Blanking Tool</b></p>
	<p><b>T85953-4 4" EVO Blanking Tool</b></p>
	<p><b>T85953-6 6" EVO Blanking Tool</b></p>



	<p><b>T85952-5 GEVO 5" Blanking Plate For Cooling System Test</b></p>
 <p>T16050EVO GEVO Barring Motor  T16491 30-150 Ft. Lb. Torque Wrench  T16492TECH Digital Adjustable Torque Wrench  T18230 100-600 Ft. Lb. Torque Wrench  T22520 50-250 Ft. Lb. Torque Wrench  T-300T-I Pre Set Torque Handle  T50041 Air Control Kit  T80101 Piston Ring Compressor  T80160 36MMx2 Stud Driver  T80160R 36MMx2 Stud Remover  T80170 45MMx2 Stud Driver  T80170R 45MMx2 Stud Remover  T80192 Piston Ring Expander  T80310V-22 ½ Liner Lifter  T80440-A Piston Retainer  T80481 Fuel Injector and Pump Puller  T80790 Main Bearing Removal Tool  T80850 Main Bearing Cap Nut Runner  T81130 Piston Saddle  T81201 Inlet/Exhaust Retainer for Strongback  T81230 Nozzle Carbon Cleaner  T81253 Crankshaft Deflection Gage Kit  T81310 Injector Alignment Tool  T81330 Injector Sleeve Torquing Tool  T81351 30MM Open End Wrench  T81920 Main Bearing Side Bolt Socket  T85162 Turbo Speed Sensor Tool</p>	<p><b>T85901 GEVO Tool Cart Complete with Tools</b>  This kit contains the most common maintenance tooling for the EVO engine conveniently stored on a mobile cart.</p> <p>T85220 Valve Setting Feeler Gage  T85233 Cam Bolt Torque Adapter  T85261 Crankshaft Speed Sensor Torque Wrench  T85281 Fuel Pump Adapter  T85311 Strongback Lifter  T85320 Head Lifter  T85330 Power Assembly Lifter  T85340 Piston and Rod Lifter  T85410 55MM Speed Socket  T85421 Oil Pump Torque Adapter  T85620 Conn Rod Bearing Retainers  T85630 Fuel Pump Retainer  T85650 Barring Arbor  T85702 Exhaust Bellows Adapter  T85730 Piston Ring Scraper  T85760 Compression Tester Set  T85820 Fuel Pump Wrench  T85900C Tool Cart  T85712 Conn Rod Torque Kit  T85170 Turbo Torque Adapter</p>

	<b>T85780 GEVO 16 Cylinder Engine IFE Lifter</b>
	<b>T85680 EVO Oil Cooler Lifting Attachment</b>  This lifter was designed to lift the oil coolers on GE locomotives. It features a two-piece design, with the T85680P Plate bolting securely to the oil cooler and the T85681A Arm attaching to the T57170 "C" Frame Manipulator.
	<b>T85531 EVO Integrated Front End Lifter</b>
	<b>T85421 24MM Oil Pump Torque Adapter</b>  The 24 MM 12 point Oil Pump Adapter has a pronounced offset to accommodate the oil pump bolts. It is used with the T-300T-I pre set Torque Wrench.
	<b>T85373 Water Based Intercooler Remover Installer for GEVO Engines</b>  This tool is used to remove and install the water based intercoolers on Evolution Engines. The tool features a robust direct driven roller chain drive to perform the change outs. The direct drive mechanism features a 3/4" female square drive as shown below and drives the installation and removal of the intercooler using a ratchet wrench. Studs are used to thread into the frame to guide the fixture in place and are retained with the nuts provided. A ratcheting box end wrench is included for ease of installation. The plate then bolts onto the exposed intercooler face and is attached to the puller arm for removal and installation.

**T85205 Universal Engine Lifter**

The T85205 Engine Lifter supersedes the previous designs and is a universal lifting platform that will accommodate EMD Engines, GE FDL, Evolution, and Tier 4 Engines with and without the muffler attached. The frame is universal and all that is required for quotation/purchase is to let us know what engines you plan on lifting and in what configuration (muffler / no muffler for EVO / T4).

The .pdf file below shows the individual engine components broken into part numbers and placement on the universal frame.

[T85205 Universal Engine Lifter \(PDF\)](#)

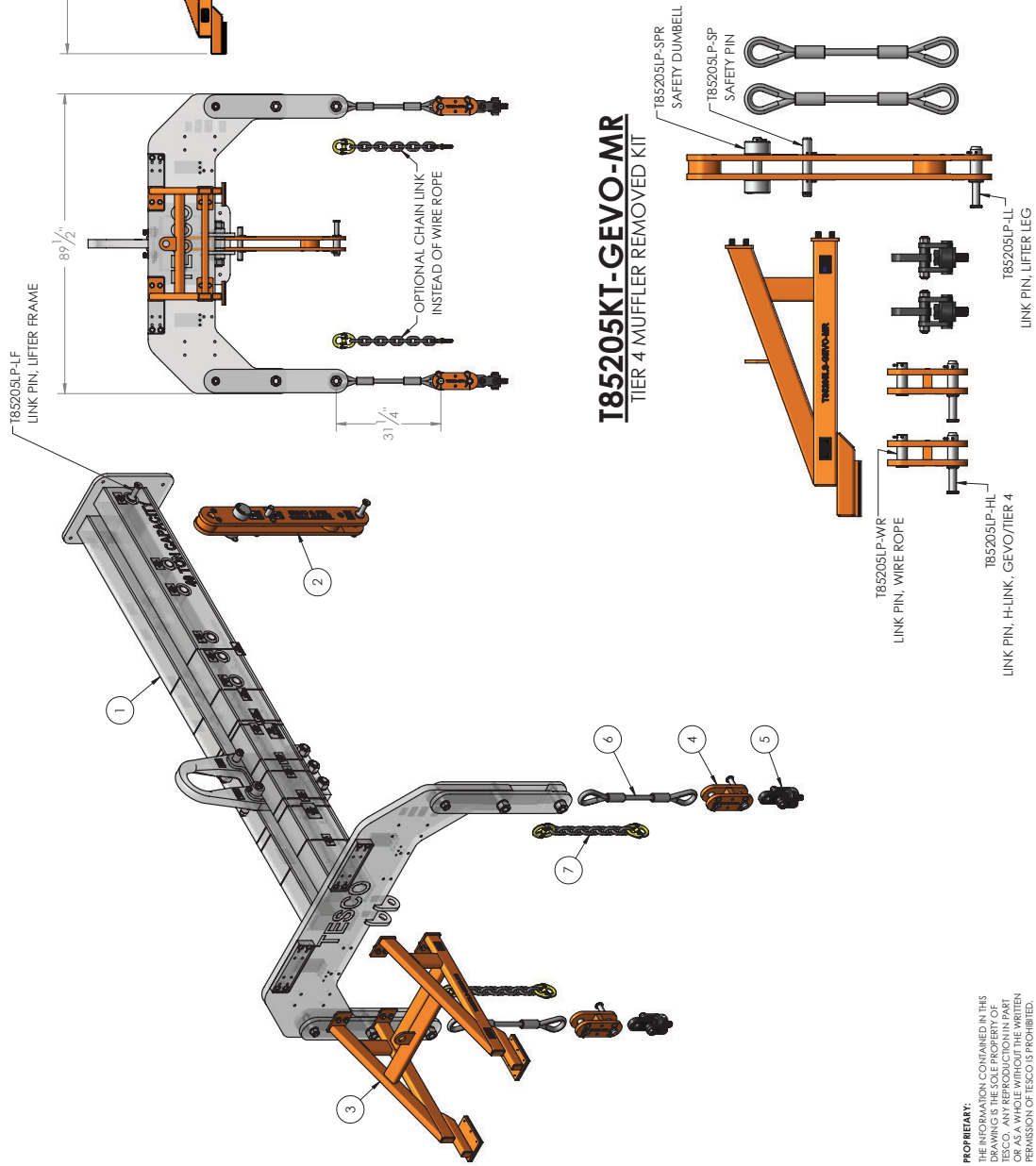
The number of different engines and configurations grew to a point where lifters became custom to individual locations and the part numbers and descriptions were confusing. This platform simplifies the entire process and allows future additions without sending the unit back to TESCO for modification. For example, if you have the T85205 with the components for the EVO Engine and would like to start lifting T4 Engines you would simply order the individual components on the T4 callout page and install onto your existing frame.

# GE EVOLUTION LOCOMOTIVE

## GEVO ENGINE LIFTER MUFFLER REMOVED

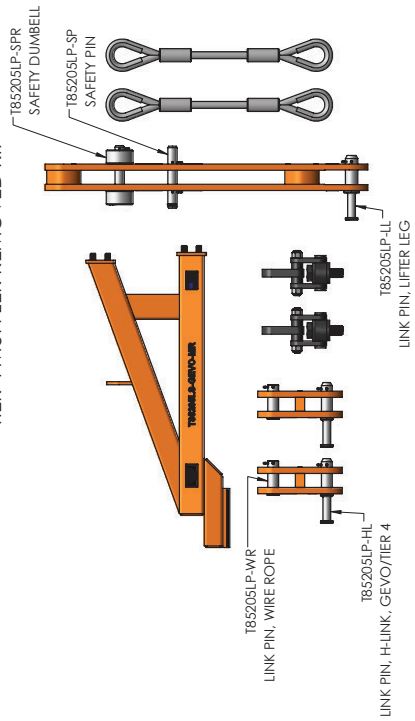
**WARNING!**  
DO NOT EXCEED RATED CAPACITY.  
INSPECT BEFORE EVERY USE. REPORT ANY  
OBSERVED DAMAGE AND REMOVE LIFTER  
FROM SERVICE. IMPROPER OPERATION  
MAY RESULT IN SERIOUS INJURY.

**WIL/RATED LOAD: 80,000LBS**



### T85205KT-GEVO-MR

#### TIER 4 MUFFLER REMOVED KIT



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	T85205	ENGINE LIFTER ASM F/EMD/FDL/GEVO/TIER 4	1
2	T85205LL-GEVOFDL	LIFTER LEG F/GEVO & FDL	1
3	T85205LS-GEVO-MR	GEVO LIFTER SUPPORT MUFFLER REMOVED ASM	1
4	T85205HL-GEVO	GEVO H-LINK	2
5	T85205SHR-GEVO	SWIVEL HOIST GEVO, M36	2
6	LC1320	1 1/8" X 34" Cable Assembly	2
7	T85205LC	ENGINE LIFTER CHAIN LINK	2

UNLESS OTHERWISE SPECIFIED:  
DIMENSIONS ARE IN INCHES  
TOLERANCES:  
FRACTIONAL: 1/64  
ANGULAR: MACH±.5° BEND ±1°  
ONE DECIMAL: .X ±0.1  
TWO DECIMALS: .XX ±0.01  
THREE PLACE DECIMAL: .XXX ±0.005  
INTERPRET GEOMETRIC TOLERANCING PER:  
ASME Y14.5-2009

COMPANY NAME  
TRANSPORTATION EQUIPMENT SUPPLY COMPANY  
8106 HAWTHORNE DRIVE  
ERIE, PA 16509  
(814) 866-1932

TOOL NAME  
GEVO ENGINE LIFTER MUFFLER REMOVED

DWG. NO.  
DATE  
1/20/2016

REV  
GEVO-MR ENGINE LIFTER

SIZE: B SCALE: 1:35 WT: 5438.63 lb SHEET 1 OF 1

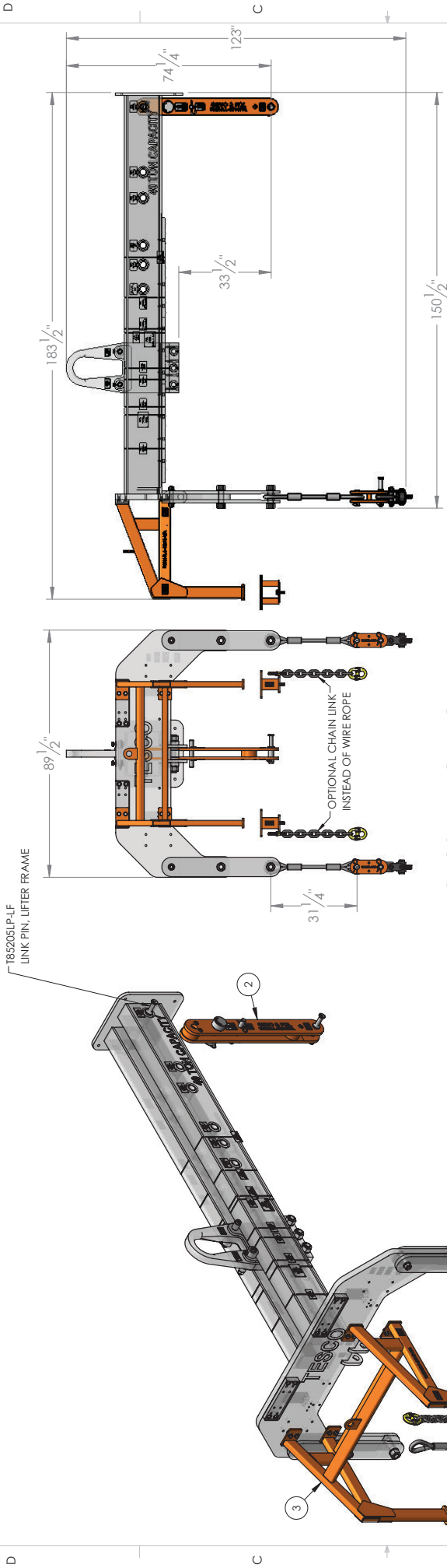
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# GE EVOLUTION LOCOMOTIVE

## GEVO ENGINE LIFTER MUFFLER ATTACHED

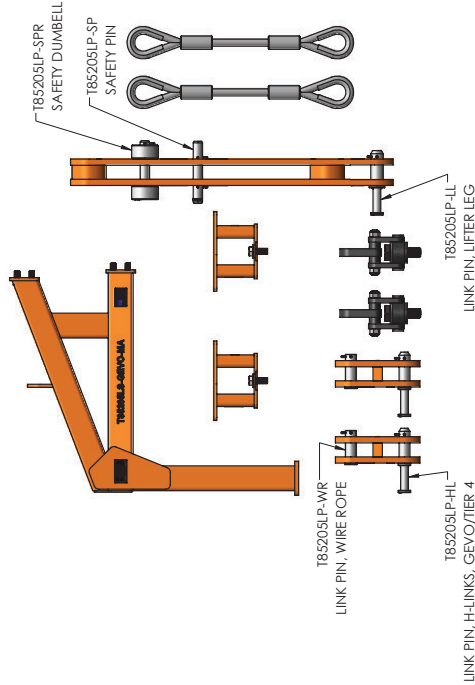
**WARNING!**  
DO NOT EXCEED RATED CAPACITY.  
INSPECT BEFORE EVERY USE. REPORT ANY  
OBSERVED DAMAGE AND REMOVE LIFTER  
FROM SERVICE. IMPROPER OPERATION  
MAY RESULT IN SERIOUS INJURY.

WLL/RATED LOAD: 80,000LBS



### T85205KI-GEVO-MA

#### GEVO MUFFER ATTACHED KIT



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	T85205	ENGINE LIFTER ASM /FEMD/FDL/GEVO/TIER 4	1
2	T85205LL-GEVOFDL	LIFTER LEG F/GEVO & FDL	1
3	T85205LS-GEVO-MA	GEVO LIFTER SUPPORT MUFFER ATTACHED ASM	1
4	T85205LS-P	GEVO LIFTER SUPPORT PLATFORM ASM	2
5	T85205HL-GEVO	GEVO H-LINK	2
6	T85205SHR-GEVO	SWIVEL HOIST GEVO, M36	2
7	LC1320	1 1/8" X 3/4" Cable Assembly	2
8	T85205LC	ENGINE LIFTER CHAIN LINK	2

UNLESS OTHERWISE SPECIFIED:  
DIMENSIONS ARE IN INCHES  
TOLERANCES:  
FRACTIONAL: 1/64  
ANGULAR: MACH±.5° BEND ±1°  
ONE DECIMAL: .X ±0.1  
TWO DECIMAL: .XX ±0.01  
THREE PLACE DECIMAL: .XXX ±0.005  
INTERPRET GEOMETRIC TOLERANCING PER:  
ASME Y14.5-2009

COMPANY NAME  
TRANSPORTATION EQUIPMENT SUPPLY COMPANY  
8106 HAWTHORNE DRIVE  
ERIE, PA 16509  
(814) 866-1932

TOOL NAME  
GEVO ENGINE LIFTER MUFFER ATTACHED  
DWG. NO.  
DATE  
1/20/2016  
CDS  
GEVO-MA ENGINE LIFTER  
REV

SIZE: B SCALE: 1:35 WT: 5544.51 lb SHEET 1 OF 1

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**T85000 Hand Tool Kit for GEVO Locomotives:**

## Tool Kit Contents

## Tool Box

3/8" Drive Socket Set 8-22 MM

3/8" Drive Deep Socket Set 8-22 MM

1/2" Drive Socket Set 10-32 MM

1/2" Drive Deep Socket Set 10-32 MM

Combo Wrench Set 10-24 MM

Combo Wrench 30 MM

Combo Wrench 32 MM

10 MM Box End Adapter

24 MM Box End Adapter

30 MM Box End Adapter

24 MM Open End Adapter

30 MM Open End Adapter

Torque Handle 30-150 Ft. Lbs.

Torque Handle 40-200 Ft. Lbs.

Torque Handle 60-300 Ft. Lbs.

1-1/2" 12 Point Flare Nut Adapter

10 MM Impact Socket

1-1/2" Open End Torque Adapter

1-5/8" 12 Point Flare Nut Wrench

1/2" Drive Indexing Ratchet

1-1/2" Open End Crow Foot Wrench

1/2" Drive, 1-5/8" Speeder Socket

1" Ratchet Flare Nut Wrench

1/2" Drive, 12 MM Offset Adapter

3/8" Drive, 55 MM Speeder

3/4" Drive, 20 MM Impact Socket

3/4" Drive, 24 MM Impact Socket

3/4" Drive, 27 MM Impact Socket

32 MM Handle Speeder

24 MM Offset Torque Adapter

14 MM Cam Bolt Adapter

12 MM Torque Adapter

1/2" Drive Ratchet Adapter

3/8" Ratchet

Main Bearing Side Bolt Socket

20 MM 12 Point Torque Adapter

	<b>T81440 Driver for Alternator Dowels GEVO</b>
	<b>T80990-M16 M16 Stud Driver 2.0 pitch</b> Shown here along with M12 and M14 Stud Drivers
	<b>T80990-M14 M14 Stud Driver 2.0 pitch</b> Shown here along with M12 and M16 stud drivers
	<b>T80990-M12 M12 Stud Driver 1.75 pitch</b>
	<b>T80950 Water Oil Pump Gear Puller Evolution Locomotives</b>
	<b>T80910 24MM Torque Adapter</b> This is a 24MM 12 Pt adapter with an X Shank Drive.



**T80902 Metric Hand Tool Kit For GEVO Locomotives**




Kit Item	QTY
3/8" Drive, 6MM Impact Hex Driver	1
3/8" Drive, 8 MM Impact Hex Driver	1
3/8" Drive, 10 MM Impact Hex Driver	1
1/2" Drive, 6 MM Impact Hex Driver	2
1/2" Drive, 8 MM Impact Hex Driver	2
1/2" Drive, 10 MM Impact Hex Driver	2
1/2" Drive, 12 MM Impact Hex Driver	2
1/2" Drive, 14 MM Impact Hex Driver	2
3/8" Drive 22 MM 6 Point Impact Socket	2
3/8" Drive, 12 Point Socket Set, 7-22 MM	1
1/2" Drive, 12 Point Socket Set, 10-36 MM	1
1/2" Drive, 12 Point Deep Well Socket Set, 10-36 MM	1
1/2" Drive, 6 Point Impact Socket Set, 10-36 MM	1
3/8" Drive Socket Breaker Bar	1
3/8" Drive Ratchet	1
3/8" Drive Sliding T-Handle	1
3/8" Drive Impact Universal Joint	1
1/2" Drive Socket Breaker Bar	1
1/2" Drive Ratchet	1
1/2" Drive Sliding T-Handle	1
1/2" Drive Impact Universal Joint	1
1/2" Male to 3/4" Female Impact Adapter	2
1/2" Male to 3/8" Female Impact Adapter	2
3/4" Male to 1" Female Impact Adapter	2
Combination Wrench Set, 10MM - 36 MM	1
2 Pound Soft Face Hammer	1
2 Pound Ball Peen Hammer	1
Feeler Gauge Set - .04 to 1.0 MM	1
Magnetic Pickup Tool	1
Mirror	1













**T80752 Water and Oil Pump Appliance**

The T80750 Water Pump Appliance is mounted onto the T57170 "C" Frame Manipulator and is used to remove and install HDL Water Pumps. It is now used in conjunction with the [T80750A](#) to remove Evolution Water Pumps.



	<p><b>T80750GA EVO Water Pump Adapter</b></p> <p>This adapter was designed to fit into the Geiske Lightweight Lifting Fixture to address the GE EVO and T4 Water Pumps. This adapter comes with the T80751AB Adapter Block as well.</p>
	<p><b>T80751A EVO Water Pump Lifting Arm</b></p> <p>This Arm is used with the T80752 Water Pump "C" Frame Appliance to remove and install Evolution Water Pumps. The mounting block is mounted to the top of the water pump and the lifter interfaces with the ball end to allow the pump to articulate as it is lifted. The mounting plate is retained with a safety latch. The new T80751AB Mounting Block is contoured to match the ring around the threaded hole on top of the Water Pump.</p> <p>This Arm can be used to lift the FDL water pump by using the T80750AB-FDL mounting block.</p>
	<p><b>T68080 Torque Tool Verification Fixture</b></p> <p>The T68080 Torque Rundown Fixture is a fast and portable tester for air motors up to 1,500 lb/ft. The fixture simulates the bolting operation by allowing a soft rundown as opposed to the hard stop of the traditional tester. It is accurate to within 1% of the reading and can also be used to verify torque wrenches.</p> <p>Available Ranges:</p> <p>T68080-250 250 lb/ft  T68080-750 750 lb/ft  T68080-1500 1,500 lb/ft</p>

	<p><b>T68070 AC &amp; DC Traction Motor Gearcase Bolting System</b></p> <p>The T68070 is a complete Bolting System for both AC and DC Traction Motor Drive Gearcase Bolts. The system can be preset with proper torque and angle of turn settings for both motors and is accurate and repeatable to within 1 degree. The Air Motor has an integral transducer and angle encoder for precise torque installations, and only operates in the forward direction - the bolts must be removed with a separate air motor or impact.</p>
	<p><b>T67510 3/8" Square Drive Digital Torque Handle 5 to 100 Ft/Lbs</b></p> <p>This is a 3/8" drive 5 to 100 Lb/Ft adjustable torque wrench. It is accurate +-2% Clockwise and +- 3% counter clockwise between 20 and 100% of full scale. The T67510 operates in six measurement modes (ft-lb, in-lb, N•m, Kgcm, dNm, angle).</p>
	<p><b>T67471 EVO Alternator Stator Lifter</b></p> <p>This tool bolts to the EVO Alternator Stator and is attached to an overhead crane to install/remove the shipping support shims.</p>
	<p><b>T67430 5-75 Ft. Lb. J Shank Micro Adjustable Wrench</b></p> <p>This is a single scale (English) J Shank Torque Wrench adjustable from 5 to 75 Lb/Ft. This wrench has an accuracy of 4% from 20% to 100% of full scale and adjusts in .5 Lb/Ft increments.</p>
	<p><b>T67340 EMD GE U Tube Bearing Grease Plug Adapter</b></p>

	<p><b>T67220 Water Tank Vent Valve Tool</b></p>
	<p><b>T66941 Steerable Truck Journal Box "C" Press</b></p> <p>The T66941 has been upgraded with a 115/230 volt hydraulic pump and a storage stand.</p>
	<p><b>T65330 Air to Air Heat Exchanger Lifter</b></p> <p>This lifter is used to remove and install Air to Air Heat Exchangers on Evolution Locomotives.</p>
	<p><b>T63201 Equipment Blower Lifting Attachment</b></p> <p>This appliance is used to lift the equipment blowers out of GE locomotive cabs. The safety pin is installed through the appliance and locked against the central blower rib. The load is leveled with the "C" Frame Ram.</p> <p>The T63201 is reversible and can be used to address the blower from either side.</p> <p>This attachment can be used with both the T57170 standard C-Frame as well as the T63200SAA extended reach C-Frame.</p> <p>There are two different style pins for this lifter. #1 in the picture is the T63200P Locking Pin for the original T63200 Blower Appliance. #2 is the T63201-7 Locking Pin for the current T63201 Blower Appliance.</p>
	<p><b>T63200SAA Extended Reach GEVO Traction Motor Blower Lifter with Stand and Appliance</b></p> <p>This lifter was designed to allow for a longer reach into the locomotive cab in order to remove and install the traction motor blowers on GEVO locomotives. It features the same hydraulic manipulation arm found on our standard T57170 "C" Frame Manipulator. The lifter design also features a counterweight which enables the</p>

	<p>lifter to stay level in both the loaded and unloaded state. It comes complete with the Blower Motor Appliance and Storage Stand. Please note that the Blower Lifting Appliance used with this lifter is part number T63201. It is the same adapter used with the standard T57170 C-Frame. We also make a second attachment for this "C" Frame that can be used for installing and removing air compressors. It is our part number T66780.</p>
	<p><b>T57911 Electronic Torque Analyzer for Pneumatic and Hydraulic Wrenches 25 to 4000 FT LBS Universal Input Voltage</b></p> <p>This torque tester has a range of 25-4000 lb.ft. with an accuracy of +/-0.5% of reading from 20% to 100% of full scale. It can also be used for manual torque wrenches and other torquing devices. Reaction arms to accommodate the T22020 and T16050 Air Motors come with the unit, and special brackets can be fabricated on request. Two knurled fasteners hold the reaction arms in place and allow for sliding to custom positions. This tester will accept an input of 1" and 1 1/2" square drives</p>
	<p><b>T57580 Torque Tester Adapter Set</b></p> <p>This adapter set contains 12 adapters from 1/2" through 1-1/4" which are terminated with a 3/4" square drive that inserts into torque analyzers. They are used to verify torque on various torque wrench box end and socket applications. It comes complete with an aluminum stand for storage of each adapter. Includes: 1/2", 9/16", 5/8", 11/16", 3/4", 13/16", 7/8", 15/16", 1", 1-1/16", 1-1/8" &amp; 1-1/4".</p>

	<p><b>T54910 Machinist's Hand Tool Cart</b></p> <p>This tool cart was developed to aid machinists with transport of their small tools and parts to the locomotive service location. It is equipped with four 8" wheels, two fixed and two swivel. Under the push handle is located a tray to accommodate paper wipe towels.</p>
	<p><b>T50041 Air Control Kit for Various Pneumatic Kits</b></p> <p>The T50041 Air Control Kit features a modular two piece pressure regulator and filter/lubricator mounted to the T50150 Protective Cage. The pressure gage reads up to 160 PSI and the kit has all 1/2" NPT hardware along with a 10' hose.</p>
	<p><b>T16491X Adjustable Torque Handle 60-250 FT/LBS X Shank</b></p> <p>This is a dual scale micro adjustable X Shank Torque Wrench from 60 to 250 Lb/Ft (70-350 NM). It has an accuracy of +/- 4% of indicated value between 20 to 100% of full scale.</p>
	<p><b>T16050EVO Barring Over Air Motor</b></p> <p>The T16050EVO Barring Over Motor is the same motor used to install and remove FDL Power Assemblies with a different reaction plate. Due to the increased barring drag in Evolution and Tier 4 engines this motor is now used as a barring motor. It comes equipped with a T23830G Reaction Plate.</p>

**Consumable Products For Engine Maintenance**

These are the consumable items that we carry to support ordinary engine maintenance and repair functions. These items are all shipped with Material Safety Data Sheets

1 T11431 G-N Metal Assembly Paste (Molycote) 1 can = 17.6 oz.

2 T24890 LOCTITE Threadlocker 1 can = 50 ml

4 T23960 LOCTITE Threadlocker 1 can = 50 ml

5 T16400 Fel-Pro Copper Compound 2 can = 16 oz.



6 T23950 Anti-Seize (9 Oz. Brush-top Can)

7 T21630 LUBRIPLATE Petroleum Lubricating Grease 1 can = 14 oz. Multi-purpose.

8 41A330204P8 LUBRIPLATE Petroleum Lubricating Grease 1 can = 14 oz. Cup type lubricant.






9 T16380 Scotch 1/2" Thread Sealant and Lubricant 1 roll = 520

**Cylinder and Head**

	<p><b>T87400 10MM Upper Water Jumper Adapter</b></p> <p>This is a "Y" shank 10MM torque adapter for the Evolution Series Engine upper water jumpers. The 10MM box end is offset ninety degrees and is in a 12 point configuration.</p>
	<p><b>T85702TW Thin Wall Exhaust Bellows Adapter</b></p> <p>This tool shares the same body as the standard T85702 Exhaust Bellows Adapter, but the box end has been milled down to a minimum dimension to accommodate bolt heads with minimal surrounding clearance.</p> <p>These adapters will fit in the tight spaces, but removing the material around the box portion will significantly shorten the adapter's service life. It is recommended that anytime a standard T85702 will address a bellows bolt, it should be used.</p>
	<p><b>T85473GC Slotted EVO Power Assembly Lifter</b></p> <p>This lifter attaches via four bolts to the exhaust manifold and lifts the EVO Power Assembly vertically and at 22.5 degree. Switching between the two positions is done by simply sliding the pickup point to the proper position and lifting.</p>
	<p><b>T80840-50 50MM Speeder Socket</b></p> <p>This speeder socket is shown next to the new 50MM EVO Cylinder Head Nut. The traditional 55MM speeder socket fits poorly on the new 50MM nuts, so this tool was developed to address the new nut size. It features a 1/2" square drive.</p>
	<p><b>T80841 Lightweight 55MM Speeder Socket</b></p> <p>The T80841 is a 55MM Speeder Socket made from aluminum to be a lightweight alternative for speeding EVO Cylinder Head Nuts down. The socket features a 1/2" square drive.</p>

	<p><b>T80840 55MM Speeder Socket</b></p> <p>The 55 MM Speeder Socket has a 1/2" square drive to accommodate a ratchet or nut runner when speeding the 55MM EVO Cylinder Nut onto the stud.</p>
	<p><b>T87261 GE-EVO 12MM X 1.75 Pitch Gage</b></p> <p>This Gage was developed to reduce confusion with regard to installing the wrong length bolt on the power assembly.</p> <p>60MM Long Exhaust          55MM Long Power Assembly - Head to Strongback          50MM Long High-Pressure Fuel Pump Mounting</p> <p>Caution: Installing the high-pressure fuel pump with the 60MM long bolt can result with a loose pump, causing fuel leaks.</p>
	<p><b>T87152 Tier 3 Valve Cover Puller</b></p> <p>This updated design incorporates an adjustable tab to address casting and cover variances, and the tabs are machined at an angle to address the cover as close as possible. The frame itself has two 1/4" plates for additional stability.</p> <p>A large screw and T Handle were added to this version for increased durability and this is also available in a T87152-LSK Kit to upgrade a T87151 tool to a T87152.</p>
	<p><b>T87120 GEVO Compression Relief Plug Wrench</b></p> <p>This wrench has both 18MM and 22M 12-point sockets</p>
	<p><b>T87050 GEVO Water Outlet Flange Alignment Tool</b></p>



	<b>T86510 EVO Liner Removal Wedge</b>
	<b>T86110 Cylinder Stud Tensioner Assembly Lifter</b>  This lifter has two wire ropes that terminate with shackles to attach to the adjustable eye bolts on the Cylinder Stud Tensioning Plate.
	<b>T86001 Rotating EVO Power Assembly Lifter</b>  This lifter is attached to the top of an EVO Power Assembly and with minimal effort rotates the assembly from the vertical to the 22.5 degree installation and removal position. The trolley incorporates a T handle brake to lock the lifter in position. This lifter uses the T80731B set for replacement bolts.
	<b>T85840 Liner Depressor Set</b>
	<b>T85811 Cylinder Liner Lifter for GEVO Engines</b>  The Liner Lifter is fitted to the top lip of the EVO liner and is secured by tightening a locking screw. A brass inserts on the jaw ensures that nothing marks the bore. There is a handle provided to help position the liner during installation and removal.



**T85810K Liner Removal and Lifting Kit GEVO Engines**

This kit contains everything needed to remove and install the liner into the strongback. The Aluminum blocks are placed into the liner bore and hydraulically expanded to brace against the piston as the engine is barred. As the piston comes up the liner is pushed out of its seat. The O-ring can then be removed and installed. The T85810 Liner Lifter can then be installed onto the liner and lifted out of the strongback. Wire brushes and a small vacuum cleaner are included to aid with cleaning.

- 1. T85810 GEVO Liner Lifter
- 2. Vacuum Cleaner
- 3. Kit Carrying Case
- 4. T85840 Liner Depressor
- 5. T85810K-H10 10' Hydraulic Hose
- 6. T85810P Hydraulic Pump
- 7. T85810AB Aluminum Spreader Blocks
- 8. T85810R Hydraulic Ram
- 9. T85810-A2 Liner Retainer Blocks (3)
- 10. T85810K-P26 Brass Brush
- 11. T85810K-P25 Soft Brush
- 12. Vacuum Crevice Tool

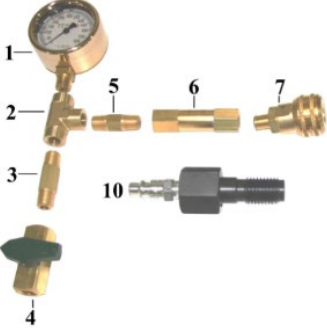










**T85760 EVO Compression Tester Set**





This set is used to test Cylinder Compression on GE EVO Engines. These sets have proven their value to diagnose low compression on individual power assemblies. Readings below 270 PSI may be viewed as low. The set contains eight individual T85750 Compression Testers and a padded hard plastic storage box.

Problems found include liner scoring, worn rings, loose piston crowns, chipped valves and cuts in the valve seats. It is important to remove these assemblies as they burn fuel inefficiently and elevate exhaust temperature. Testers are typically used a bank at a time or as an engine set. Once installed on the engine the operator must prevent the engine from starting. The batteries are used to crank the engine to trap readings. If a power assembly is identified as being low a second test should be performed with a reliable tester (new preferable) to duplicate the reading, and if the readings are consistent the power assembly should be removed.

- The T85760 Set contains:
- 8. T85750 EVO Compression Tester
  - 1. T22711 Storage Box






 <p>1 2 3 4 5 6 7 10</p>	<p><b>T85750 EVO Compression Tester</b></p> <p>This is a single compression tester with an adapter to accommodate an EVO Power Assembly.</p> <ul style="list-style-type: none"> <li>1 T50121 Gage</li> <li>2 T50330 Tee</li> <li>3 T50341 Nipple</li> <li>4 T50142 Release Valve</li> <li>5 T50131 Check Valve</li> <li>6 T50192 Filter</li> <li>7 T50171 Socket</li> <li>10 T85610 EVO Adapter</li> </ul>
	<p><b>T85741 EVO Power Assembly Stand</b></p> <p>This assembly stand was developed so power assemblies can be assembled or disassembled by component locally at the work site. The T85741 is specific for GEVO assemblies. With the addition of the T41220 Adapter Plate this stand will also allow for the assembly and disassembly of Tier 4 power assemblies.</p>
	<p><b>T85702 Exhaust Bellows Adapter</b></p> <p>The T85702 Adapter is used to torque the Exhaust Manifold Bolts on an Evolution Engine. There is a 1/2" square drive on one end and a 12MM 12 point on the other.</p>
 <p>T85610 Adapter</p>	<p><b>T85610 EVO Compression Tester Adapter Only</b></p> <p>The T85610 is used with a Compression Tester to check cylinder compression readings on an Evolution engine. The T85610 threads directly into the cylinder compression hole and the Compression Tester is connected.</p>








	<p><b>T85410 55MM Speed Socket for EVO Cylinder Nuts</b></p> <p>This is a lightweight aluminum 55MM Speeder Socket for the EVO cylinder hold down nuts. The outer diameter is knurled for a good hand grip and the socket features a 3/8" square drive.</p>
	<p><b>T85330 EVO Power Assembly Lifter</b></p> <p>The T85330 is used to lift the Evolution Power Assembly either at the 22 1/2-degree installation position or vertically.</p> <p>Both the T85320 and the T85330 are distinctly marked according to the application so that they are not used improperly.</p> <p>T80731B Replacement Bolt Set - (2) 10 MM &amp; (2) 12 MM with hex head milled to 17 MM</p>
	<p><b>T85320 EVO Cylinder Head Lifter</b></p> <p>The T85320 lifts the Evolution Head at 22 1/2 degrees or vertically via the two pick-up points. The four mounting bolts are captive in the lifter base to ensure retaining both proper bolt grade and size.</p> <p>T80731B Replacement Bolt Set - (2) 10 MM &amp; (2) 12 MM with hex head milled to 17 MM</p>
	<p><b>T85312 EVO Strongback, Liner and Connecting Rod Lifter</b></p> <p>The T85312 lifts the Evolution Strongback, Head, Liner and Conn Rod package at a 22 1/2 degree installation angle or vertically. Warning: Ensure mounting bolts are torqued and threads in lifter are good. Place out of service for repair any lifter that has defective mounting threads as personal injury could result. Use with care.</p> <p>T85311BK Replacement bolt and washer kit (4 required)</p>
	<p><b>T82001 Power Assembly Stud Safety Fixture for GEVO Engines</b></p> <p>The T82001 Safety fixture slides over the top two power assembly studs to ensure that the assembly cannot fall down onto a machinist's hands while work is being performed in the cavity.</p>

	<p><b>T81732 Hydraulic Tensioning Kit for Cylinder and Main Bearing Studs GEVO Engines</b></p> <p>The T81732 consists of the tools needed to tension and remove the Cylinder Stud Nuts and Main Bearings on Evolution Engines. This kit is shown with the compact pump option (standard), and the larger mobile pump is also available.</p> <p>The cylinder stud nut tensioner features a new plate design which allows this tensioner to be used on all current GEVO Engines as well as the new Tier 3 High Pressure Common Rail Fuel System Engines. The pump is air over hydraulic and the kit comes in a mobile storage container. Instructions are included.</p> <p>NOTE: If you currently have a T81731 Tensioner, it can be modified to the new design here at TESCO.</p>
	<p><b>T81280 55MM Thin Wall Deep Socket</b></p> <p>This 55 MM deep well 6 point socket has a 1" square drive and is used to speed the EVO cylinder head nuts onto the studs. The outside diameter has also been machined for clearance.</p>
	<p><b>T81201 Inlet and Exhaust Roller Retainer for GEVO Engines</b></p> <p>T81201 Inlet and Exhaust Roller Retainer The retainer body is screwed into the mating thread in the strongback by turning the knurled portion by hand. The roller retainer bar can then be set using a 3/16" hex key.</p>
	<p><b>T80310V-22.5 Vertical and 22.5 Degree Pickup Liner Lifter for GEVO Engines</b></p> <p>The T80310V-22.5 accommodates vertical as well as 22.5 degree pick-up. The top and bottom plate sandwich the liner and the nut secures the package for lifting.</p>

	<p><b>T80160R Stud Remover 36 MM for GEVO Cylinder Studs</b></p> <p>The T801060 and T80160R are used to remove and install the 36 MM Cylinder Studs. In addition to the hex milled into the bodies, an additional hex is milled into the removable top piece so that the driver/remover can be removed even when it is tight on the stud.</p>
	<p><b>T80160 Stud Driver 36 MM for GEVO Cylinder Studs</b></p> <p>The T801060 and T80160R are used to remove and install the 36 MM Cylinder Studs. In addition to the hex milled into the bodies, an additional hex is milled into the removable top piece so that the driver/remover can be removed even when it is tight on the stud.</p>
	<p><b>T80120 Cylinder Head Lifter Horizontal GEVO</b></p>

**Pistons and Valves**

	<p><b>T87620 - Piston and Rod Lifter for GEVO Engine</b></p> <p>This lifter is designed to lift GEVO Piston and Rod Assemblies by addressing the top piston ring groove. Also, used to recover failed pistons when pin holes are unable to be accessed.</p>
	<p><b>T80193 250MM Piston Ring Expander</b></p> <p>This 250 MM Piston Ring Compressor allows for installation and removal of EVO piston rings. The new T80193 version incorporates a sturdy yet lightweight handle and a precision machined guide for and easy insertion and handling of the 250MM EVO piston rings.</p>
	<p><b>T85730 Piston Ring Groove Scraper for HDL and GEVO Engines</b></p> <p>The piston ring groove scraper is used to remove carbon deposits from Evolution piston ring grooves. The tips can be replaced by driving out the two roll pins and installing a new insert into the lightweight aluminum handle. The replacement tips are part number T85730T.</p>
	<p><b>T85340 Piston and Rod Lifter for GEVO Engines</b></p> <p>The T85340 Piston and Connecting Rod Lifter features a lock in both the open and closed positions. The release lever is pulled to release the lock.</p>
	<p><b>T81290 GEVO Valve Spring Compressor</b></p>

	<p><b>T81130 Piston Assembly Saddle for GEVO Engines</b></p> <p>The T81130 is used to center the piston in the liner bore. The saddle sits on the close edge of the bore and the wedges are placed under the far end securing the piston in place. The cables assure the wedges do not fall into the main frame cavity.</p>
	<p><b>T80440AB Replacement Bolts 2 Required for T80440A Piston Retainer</b></p>
	<p><b>T80440-A EVO Piston and Connecting Rod Retainer</b></p> <p>The T80440-A is a piston and connecting rod retainer for Evolution Engines. This retainer secures the piston and conn rod in power assemblies during installation and removal. It bolts on the lower edge of the liner. T80440AB Replacement Bolts (2 required)</p>
	<p><b>T80192 Superseded to T80193</b></p>
	<p><b>T80101 Piston Ring Compressor 250 MM for GEVO Engines</b></p> <p>This 250 MM Ring Compressor is used on Evolution Engines. It allows easy assembly of pistons into liners during power assembly build up.</p>
	<p><b>T86520 Needle Pliers for Piston Pin C Clips GEVO Engines</b></p>
	<p><b>T85730T Replacement Tip for T85730 Piston Ring Groove Scraper Top of Form</b></p>



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**T80441GC Piston Rod Retainer**



## Main Bearing and Crankshaft

	<p><b>T81255 Web Deflection Gage Assembly w/Storage Box</b></p> <p>The web deflection gage is also available in a bare configuration if a full complement of checking mandrels is not required. This set contains the web deflection gage assembly with the counterweight and spring ready to use with any mandrel, and a padded storage case. There are four individual mandrels for GE Engines:</p> <p>T81252-2A Evolution Mandrel  T81252-2B FDL Mandrel  T81252-2C Tier 4 Mandrel for Nitride Crankshaft  T81252-2D Tier 4 Mandrel for Induction Hardened Crankshaft</p>
	<p><b>T87080K Crankcase Pressure Test Kit</b></p>
	<p><b>T86770 GEVO Pneumatic Barring Over Tool With Remote Control</b></p> <p>This kit features the T16050EVO barring over motor with a remote control feature with 20 feet of hose. The replacement hose and hand valve are available as an individual part number - T22030HH.</p> <p>1 T16050 EVO Air Motor  2 T22031 Complete Remote Control Unit</p>
	<p><b>T85850 Alternator Coupling Inch Dirty 30 Inch Bolt Speeder Socket 3 8 Inch Square Drive</b></p> <p>This speeder is used on the "dirty 30" alternator coupling bolts. The speeder has a 3/8" square drive and a knurled outer diameter for easy handling.</p>
	<p><b>T85650 Barring Arbor for GEVO Engines</b></p> <p>The T85650 Barring Arbor is needed in the new Evolution Engines that are not equipped with a barring gear box. The arbor is installed into the gear cover and a T22040 or T16050EVO Barring Over Tool is used to power the arbor. Caution: When the barring operation is complete the barring arbor must be removed and the gear cover reassembled. The shear pin used with this barring arbor is the same pin used with the GE FDL arbor.</p> <p>Part number for the shear pin is T58440P.</p>






	<p><b>T85590 EVO Right Side Barring Over Tool</b></p>
	<p><b>T85440B EVO Crankshaft Flange Lifter</b></p>
	<p><b>T85291-2 GEVO Speed Sensor Alignment Tool Straight Sided Slot</b></p>
	<p><b>T85291-1 GEVO Speed Sensor Alignment Tool Tapered</b></p>
	<p><b>T85261S EVO Crankshaft Speed Sensor Socket</b></p> <p>The T85261 features a slot in the 1 3/16" deep well that allows the sensor wire to escape. The wire can be wrapped around the plastic spool and retained with the Velcro straps. The extension has a 3/8" square drive. The tool measures just under 12" and the extension is free to be removed from the socket.</p>
	<p><b>T85261 EVO Crankshaft Speed Sensor Torque Wrench Set</b></p> <p>This set consists of the T85261S Crankshaft Speed Sensor Socket along with a 3/8" square drive ratcheting torque wrench pre-set to 80 Nm.</p>

	<p><b>T85112 Main Bearing Frame Spreader Tool Without Pump</b></p> <p>This spreader aids the installation and removal of EVO main bearing caps. In cases that the cap does not drop when the main bearing stud nuts and side bolts are released, a slight spreading of the jaw is needed. The spreader is placed on the lower edge of the main frame and a hydraulic pump is connected. Pump and hose not included.</p> <p>This product is available in the T85111 Kit which consists of this spreader and the T85110P pump.</p>																											
	<p><b>T85111 EVO Frame Spreader with Pump</b></p> <p>This spreader aids the installation and removal of EVO main bearing caps. In cases that the cap does not drop when the main bearing stud nuts and side bolts are released, a slight spreading of the jaw is needed. The spreader is placed on the lower edge of the main frame and a hydraulic pump is connected.</p> <p>Consists of T85112 Main Bearing Spreader and T85110P pump.</p>																											
	<p><b>T85051 EVO Main Bearing Cap and Tensioner Cylinder Lifter Kit</b></p> <p>This kit consists of tooling necessary to lift and lower both the main bearing caps as well as the hydraulic main bearing stud tensioner cylinders on GEVO engines. The kit consists of the following:</p> <table border="0"> <tr> <td>1</td> <td>T85050SL</td> <td>Main Hydraulic Jack</td> </tr> <tr> <td>2</td> <td>T85050CL</td> <td>Auxiliary Jack / Cap Lifter</td> </tr> <tr> <td>3</td> <td>T85050TL</td> <td>Tensioner Lifting Bracket</td> </tr> <tr> <td>4</td> <td>T85050-9</td> <td>Arm for #7 and #9 Bearing</td> </tr> <tr> <td>5</td> <td>T85050W</td> <td>Main Bearing Tensioner Wrench</td> </tr> <tr> <td>6</td> <td>T80830</td> <td>Main Bearing Tut Wrench</td> </tr> <tr> <td>7</td> <td>T85051PA</td> <td>Pump Assembly</td> </tr> <tr> <td>8</td> <td>T85051HA</td> <td>Hose Assembly (4 Included)</td> </tr> <tr> <td>9</td> <td>T85051SB</td> <td>Storage Box</td> </tr> </table>	1	T85050SL	Main Hydraulic Jack	2	T85050CL	Auxiliary Jack / Cap Lifter	3	T85050TL	Tensioner Lifting Bracket	4	T85050-9	Arm for #7 and #9 Bearing	5	T85050W	Main Bearing Tensioner Wrench	6	T80830	Main Bearing Tut Wrench	7	T85051PA	Pump Assembly	8	T85051HA	Hose Assembly (4 Included)	9	T85051SB	Storage Box
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	<p><b>T85050W Main Bearing Tensioner Cylinder Wrench</b></p> <p>The T85050W features a 2 1/2" open end and is used to turn the hydraulic main bearing tensioning cylinders.</p>																											

	<p><b>T85050TL Tensioner Lifting Bracket</b></p> <p>This bracket rests on top of the T85050CL ram end and the tensioner cones are placed into the semi-circle holders for movement into position to tension/remove the stud.</p>
	<p><b>T85050SL Main Hydraulic Jack</b></p> <p>This is the main column for the T85051 Kit and it threads onto the main bearing stud adjacent to the cap to be addressed. There are hydraulic connections that feed back to the pump as well as connections for the T85050CL Auxiliary Arm.</p>
	<p><b>T85050CL Auxiliary Cap Lifter</b></p> <p>As part of the T85051 Kit, this adapter arm connects to the T85050SL and is used to raise and lower main bearing caps as well as tensioner cones into position.</p>
	<p><b>T85050-9 Adapter for 7th and 9th Main Bearing Position</b></p> <p>This adapter to the T85051 GEVO Main Bearing Cap Lifter is used where the internal oil baffles interfere with access to the 7th and 9th bearing caps.</p>
	<p><b>T81920 EVO Main Bearing Cap Side Bolt Socket</b></p> <p>This is a 1" Square Drive 27MM 12 Point Socket used with the T81052 Main Bearing Side Bolt Torque Kit to install and remove the EVO Main Bearing Side Bolts.</p>
	<p><b>T81731MB Hydraulic Tensioning Kit for Main Bearing Studs</b></p> <p>This kit contains two EVO main bearing tensioner pods, two high pressure hydraulic hoses, a two-way adapter and quick disconnect swivel connections. This will work with any style tensioner pump from the T81732 Kits, but there is no pump included in the T81731MB</p>

	<p><b>T81380 Main Bearing Sensor Torque Adapter for GEVO Engines</b></p>
	<p><b>T81254 Crankshaft Deflection Gauge Kit</b></p> <p>This gage is used to determine crankshaft deflection during alternator installation on Evolution, and FDL, and Tier 4 engines. Simply attach the proper length mandrel onto the gage to correspond with the engine being serviced.</p> <p>Directly below the gage is a counterweight so that when the gage is positioned between the webs, it will automatically face downward displaying the gage face. The kit comes complete in a compact storage box for added protection. The dial indicator has .0001" gradations.</p> <p>Replacement parts are available:</p> <ul style="list-style-type: none"> <li>T81252-2A Evolution Mandrel</li> <li>T81252-2B FDL Mandrel</li> <li>T81252-2C Tier 4 Mandrel for Nitride Crankshaft</li> <li>T81252-2D Tier 4 Mandrel for Induction Hardened Crankshaft</li> </ul> <p>This kit and mandrels come with custom ground carbide points (T81252SP - Sharp Points) which thread into both the mandrel and opposing indicator stem, but can also be substituted for the rounded points (T81252T).</p> <p>Caution: The dial indicator reads in .0001" increments and is very delicate. This must be treated as a precision instrument otherwise it will break.</p>

	<p><b>T81052 Pneumatic Torque Kit for Main Bearing Side Bolts</b></p> <p>This kit was designed to provide precise torque to EVO and Tier 4 Main Bearing Side Bolts, ensuring proper squeeze of the joint.</p> <ul style="list-style-type: none"> <li>1 T20001 Air Motor - 1" Square Drive rated for 300 to 1,450 Lb/Ft</li> <li>2 T81050RA Reaction Arm</li> <li>3 T50041 Air Control Kit</li> <li>4 T81920 27MM Side Bolt Socket</li> <li>5 T40300 30MM Side Bolt Socket</li> </ul>
	<p><b>T80850 Main Bearing Cap Nut Runner Tool</b></p> <p>This 3/8" square drive tool engages the main bearing cap nut utilizing two balls 180 degrees apart. The tool is applied to the nut by pulling the knurled collar back allowing the balls to recede into the tool. By turning the tool these balls engage the nut and the collar can be released locking the tool to the cap nut. The tool can then be turned by using a 3/8" palm ratchet.</p>
	<p><b>T80830 Main Bearing Nut Wrench</b></p> <p>The T80830 features a 70 MM open end and is used to turn the main bearing nuts.</p>
	<p><b>T80790 Main Bearing Shell Remover for GEVO Engines</b></p> <p>This brass insert is inserted into the crankshaft oil hole and the engine is slowly barred to remove the top main bearing shell.</p>
	<p><b>T80340 Main Bearing Cap Lifter</b></p>
	<p><b>T80250 Vibration Damper Lifter</b></p> <p>This lifter is designed to grip and lift an Evolution Vibration Damper Lifter. The machined grooves capture the edge of the damper and the thumbscrew is tightened to hold the locking plate during the lift.</p>

	<b>T80240 Barring Over Tool for Left Side of Engine</b>
	<b>T80210 Intermediate Gear Lifter</b>
	<b>T80170R 45MM Stud Remover</b> <p>The T80170 and T80170R are used to install and remove the 45 MM X 2 main bearing studs. After the tool is finished installing/removing stud by using the large hex pattern on the body, the tool is removed by turning the hex on the top in the opposite direction.</p>
	<b>T80170 45MM Stud Driver</b> <p>The T80170 and T80170R are used to install and remove the 45 MM X 2 main bearing studs. After the tool is finished installing/removing stud by using the large hex pattern on the body, the tool is removed by turning the hex on the top in the opposite direction.</p>
	<b>T23830G GEVO Reaction Plate</b> <p>This reaction plate is used with the T16050 Air Motor. It interfaces with the barring arbor.</p>




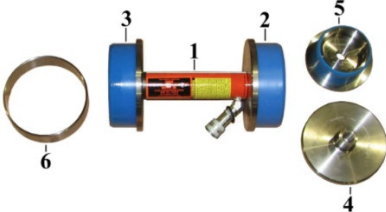

**T16050EVO Barring Over Air Motor**

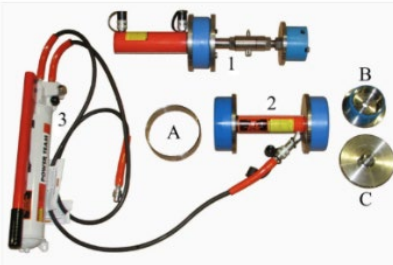



The T16050EVO Barring Over Motor is the same motor used to install and remove FDL Power Assemblies with a different reaction plate. Due to the increased barring drag in Evolution and Tier 4 engines this motor is now used as a barring motor. It comes equipped with a T23830G Reaction Plate.

**Connecting Rods**

	<p><b>T85712S-3/4 Conn Rod Socket</b></p> <p>This is a 24MM 12-point Sweep Socket that is used for tightening Evolution Connecting Rod Bolts. It has a 3/4" square drive and is also available with a 1" square drive - T85712S.</p>									
	<p><b>T86741 Connecting Rod Cap Lifter for EVO and Tier 4</b></p> <p>This lifter is used for lifting GEVO and Tier 4 connecting rod caps and features a pan which provides better support to the cap while it is being lifted. An eye was added for connecting to an overhead crane to aid in balancing the lifter.</p> <p>In addition, the pins that interface with the rod cap have been shortened to allow for easier access into the engine.</p>									
	<p><b>T85712 Connecting Rod Torque Kit With 25:1 Torque Verifier For GEVO Engines</b></p> <p>This kit contains a 25:1 verifier with anti-wrap up feature, a custom reaction arm and a 24MM Sweep Socket to apply the pre-torque and angle of turn per OEM instructions to Evolution Connecting Rod Bolts. After the pre-torque is applied the machinist can mark a position on the conn rod to line up with the green line on the socket and then apply torque until the hash mark lines up with the red line on the socket.</p> <table border="0"> <tr> <td>1</td> <td>T85712V</td> <td>25:1 Verifier with Anti Wrap-up Feature</td> </tr> <tr> <td>2</td> <td>T85712RA</td> <td>Reaction Arm</td> </tr> <tr> <td>3</td> <td>T85712S</td> <td>24MM Sweep Socket</td> </tr> </table>	1	T85712V	25:1 Verifier with Anti Wrap-up Feature	2	T85712RA	Reaction Arm	3	T85712S	24MM Sweep Socket
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	<p><b>T85620 Connecting Rod Bearing Retainer Set for GEVO Engines</b></p> <p>This set is used to retain and position the connecting rod upper bearing shell on evolution engines. The two different retainers are required due to clearance constraints. One tool can be tightened by hand using the knurled knob, while the other needs a 1/4" hex wrench.</p>									

**Camshaft**








	<p><b>T87200 Cam Roller Retaining Plug</b></p> <p>This tool retains the cam rollers on EVO and Tier 4 engines in the PA positions not accessible for T81201 retainers. The long shaft is guided through the strongback and bottomed in the cam roller cup. The handle threads are tightened squeezing the "O" ring to retain the roller. The adjustable stop is positioned so the finger grips the edge of the strongback and prevents the tool and roller from falling through. This tool will retain a single roller so two will be required per power assembly.</p>
	<p><b>T85602 Large Cam Bearing Removal and Installation Tool for GEVO and Tier 4 Engines</b></p> <p>This tool is used to install and remove the large camshaft bearings on GEVO and Tier 4 engines. For bare frames a starter spacer (ref. 1) is included to start the installation process. This kit is normally powered with a T85601B Double Acting Ram, but only one hose is attached to the single acting ram.</p> <p>The T85602SB (ref. 5) is a small diameter mandrel that can be used to install large bearings by anchoring in the small diameter bore. The T85602PC (ref. 4) is a pushing collar that is used to remove the large bearings.</p> <ul style="list-style-type: none"> <li>1 T22810 Hydraulic Ram w/Elbow</li> <li>2 T85603LBI Large Bearing Installation Mandrel</li> <li>3 T85603LBR Large Bearing Reaction Mandrel</li> <li>4 T85602PC Pushing Collar</li> <li>5 T85602SB Small Bearing Mandrel</li> <li>6 T85602SS Starter Spacer</li> </ul>
	<p><b>T85601B Double Acting Hydraulic Pump w/Hose and Couplers</b></p> <p>The T85601B consists of a double acting 2 Speed, 10,000 PSI hydraulic pump, two hydraulic hoses and quick connect couplers for use in the T85462K Kit.</p>


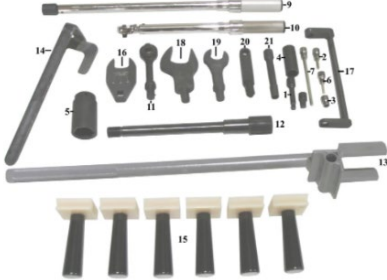

	<p><b>T85462K Cam Bearing Installation and Removal Kit for GEVO and Tier 4 Engines</b></p> <p>The T85462K Cam Bearing Installation and Removal Kit includes all the items required for GEVO and Tier 4 Engines.</p> <p>The T85601B Pump and Hose Kit (ref.3) powers both installation and removal kits (ref. 1 &amp; 2).</p> <p>the T85601 (ref. 2) kit is used to install and remove the large bearings that populate the main frame. For bare frames a starter spacer (ref. A) is included to start the installation process and the pump kit only uses one hose to power the single acting ram.</p> <p>Reference B is a small diameter mandrel that can be used to install the large bearings by anchoring in the small diameter bore. Reference C is a pushing collar that is used to remove the large bearings.</p> <p>The T85462 (ref. 1) is used to install and remove the small bearings. Both hoses of the pump kit are used to power the double acting ram.</p>
	<p><b>T85462 Small Cam Bearing Removal and Installation Tool for GEVO and Tier 4 Engines</b></p> <p>This assembly is used to install and remove the small camshaft bearings on GEVO and Tier 4 engines. It requires the T85601B Double Acting Pump to power the cylinder.</p>
	<p><b>T85233 EVO Cam Bolt Adapter</b></p> <p>This 14 MM 12 point adapter is used to torque the Cam Bolts on Evolution Engines. It is used with the T16492TECH Adjustable X Shank Torque Wrench.</p> <p>This adapter now has a click length of 4.5" so no conversions are required when using with the above torque wrench.</p>
	<p><b>T85020 Idler Gear Lifter for GEVO Engines</b></p> <p>The T85020 attaches and lifts the Evolution idler gear. The lifting jaw can be rotated 360 degrees to accommodate left and right cam sections and lock into proper position by using the locking pin. The jaw is opened and closed by turning a flange nut.</p>

	<b>T85010 Camshaft Section Lifter for GEVO Engines</b>  This lifter aids in the installation, timing and removal of Evolution cam sections. The mounting surface has nylon pads to protect the cams, and has Velcro straps to retain the section during transportation.
	<b>T81390 Cam Segment Alignment Pin for GEVO Engines</b>
	<b>T81120 Cam Bearing Remover GEVO</b>
	<b>T80350 Cam Bearing Positioner GEVO</b>






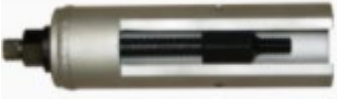
## Evolution Fuel Injection






	<p><b>T86500-5 Fuel Injector Washer Installation Adapter</b></p> <p>This adapter is used to install a copper washer onto an EVO Fuel Injector. The face is machined to surround the washer and a groove is machined inside to help seat the new copper washer as it is lightly struck on the flat striking surface with a soft hammer.</p>
	<p><b>T86840-11 1/2" Drive Ratcheting Adapter X Shank</b></p>
	<p><b>T86840-8 Toolbox</b></p> <p>Toolbox for T86842 Fuel Injection Tooling Kit. This box comes with foam inserts and a hard plastic case.</p>
	<p><b>T86840-7 6MM Long Hex Driver</b></p> <p>6MM Long Hex Driver, 3/8" Drive</p>
	<p><b>T86840-6 5MM Hex Driver</b></p> <p>5MM Hex Driver, 3/8" Drive</p>
	<p><b>T86840-5 36MM Deep Well Socket</b></p> <p>36MM Deep Well Socket, 1/2" Drive</p>
	<p><b>T86840-3 10MM Socket</b></p> <p>10MM 12 Point Socket, 3/8" Drive</p>

	<b>T86840-2 6 MM Hex Driver</b>  6MM Hex Driver, 3/8" Drive
	<b>T86840-1 Extension</b>  3" Extension for 3/8" Drive Socket.
	<b>T86840-4 22 MM Deep Well Socket</b>  22MM Deep Well Socket, 1/2" Drive
	<b>T87110 EVO Injector Alignment Tool</b>  Top of Form
	<b>T87090 MAG Test Probe</b>  Probe can be used to indicate if a solenoid or relay is energized. If the solenoid is electrically energized, the LED will light.
	<b>T86980 GEVO Injector Sleeve Remover</b>  This tool is used to pull out the fuel injector sleeve after it has been unscrewed using tool T81330
	<b>T86920 GEVO Injector Lever Action Puller</b>  This lightweight tool has been designed to remove the fuel injectors on GEVO engines through the use of a lever action.





	<p><b>T86860 Tier 3 Fuel Injector Puller Tool</b></p>																																																															
	<p><b>T86842 High Pressure Common Rail Fuel System Changeover Kit</b></p> <p>This kit contains all the common tools for the Tier 3 common rail fuel system in a portable hard plastic box.</p> <table border="0"> <tr> <td>1</td> <td>T86840-1</td> <td>3" Extension 3/8" Drive</td> </tr> <tr> <td>2</td> <td>T86840-2</td> <td>6MM Hex Drive, 3/8" Drive</td> </tr> <tr> <td>3</td> <td>T86840-3</td> <td>10MM 12 Point Socket, 3/8" Drive</td> </tr> <tr> <td>4</td> <td>T86840-4</td> <td>22MM Deep Well Socket, 3/8" Drive</td> </tr> <tr> <td>5</td> <td>T86840-5</td> <td>36MM Deep Well Socket, 1/2" Drive</td> </tr> <tr> <td>6</td> <td>T86840-6</td> <td>5MM Hex Drive, 3/8" Drive</td> </tr> <tr> <td>7</td> <td>T86840-7</td> <td>6MM Long Hex Drive, 3/8" Drive</td> </tr> <tr> <td>8</td> <td>T86840-8</td> <td>Toolbox</td> </tr> <tr> <td>9</td> <td>T16491X</td> <td>30-250 Ft-lbs Adjustable, X Shank Torque Wrench</td> </tr> </table> <p>Wrench</p> <table border="0"> <tr> <td>10</td> <td>T18220</td> <td>5-75 Ft-lbs Adjustable Torque Wrench, 3/8" Ratchet</td> </tr> <tr> <td>11</td> <td>T86840-11</td> <td>X Shank to 1/2" Ratchet Adapter</td> </tr> <tr> <td>12</td> <td>T86790</td> <td>Injector Alignment Tool</td> </tr> <tr> <td>13</td> <td>T86860</td> <td>Fuel Injector Puller Tool</td> </tr> <tr> <td>14</td> <td>T86800</td> <td>Injector Alignment Wrench</td> </tr> <tr> <td>15</td> <td>T86810</td> <td>Fuel Line Blocks</td> </tr> <tr> <td>16</td> <td>T86831</td> <td>Side Pipe Crow's Foot Wrench</td> </tr> <tr> <td>17</td> <td>T85702-16</td> <td>16 MM 12 point, 1/2" Drive Wrench</td> </tr> <tr> <td>18</td> <td>T17801MOE-41XL</td> <td>41MM Open End Adapter</td> </tr> <tr> <td>19</td> <td>T17801MOE-27XL</td> <td>27MM Open End Adapter</td> </tr> <tr> <td>20</td> <td>T85233</td> <td>14MM Cam Bolt Adapter</td> </tr> <tr> <td>21</td> <td>T85820</td> <td>12MM 12 Point Socket, 1/2" Drive</td> </tr> </table>	1	T86840-1	3" Extension 3/8" Drive	2	T86840-2	6MM Hex Drive, 3/8" Drive	3	T86840-3	10MM 12 Point Socket, 3/8" Drive	4	T86840-4	22MM Deep Well Socket, 3/8" Drive	5	T86840-5	36MM Deep Well Socket, 1/2" Drive	6	T86840-6	5MM Hex Drive, 3/8" Drive	7	T86840-7	6MM Long Hex Drive, 3/8" Drive	8	T86840-8	Toolbox	9	T16491X	30-250 Ft-lbs Adjustable, X Shank Torque Wrench	10	T18220	5-75 Ft-lbs Adjustable Torque Wrench, 3/8" Ratchet	11	T86840-11	X Shank to 1/2" Ratchet Adapter	12	T86790	Injector Alignment Tool	13	T86860	Fuel Injector Puller Tool	14	T86800	Injector Alignment Wrench	15	T86810	Fuel Line Blocks	16	T86831	Side Pipe Crow's Foot Wrench	17	T85702-16	16 MM 12 point, 1/2" Drive Wrench	18	T17801MOE-41XL	41MM Open End Adapter	19	T17801MOE-27XL	27MM Open End Adapter	20	T85233	14MM Cam Bolt Adapter	21	T85820	12MM 12 Point Socket, 1/2" Drive
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	<p><b>T86831 32MM Modified Crow's Foot Wrench for T86840 HPCR Fuel Kit</b></p>																																																															



	<p><b>T86820 EVO Fuel Pump Torque Kit</b></p> <p>This kit includes all the tools required to change out a GEVO fuel pump.</p> <ol style="list-style-type: none"> <li>1 T80481 Injector Tip and Pump Puller</li> <li>2 T81310 Fuel Injector Alignment Tool</li> <li>3 T16491 150 Ft. Lb Torque Wrench</li> <li>4 T85820 Fuel Pump Base Bolt Adapter</li> <li>5 T57141 1 1/2" Low Pressure Fuel Line Adapter</li> <li>6 T81351 30mm High Pressure Fuel Line Adapter</li> <li>7 T15942 7/8" Open End Adapter</li> <li>8 3/8" Square Drive, 100 Ft. Lb Flex Ratchet Torque Wrench</li> <li>9 10mm 3/8" Drive 12 Point Socket 12mm 3/8" Drive 12 Point Socket 18mm 3/8" Drive 12 Point Socket 24mm 3/8" Drive 12 Point Socket</li> <li>10 Tool Box</li> </ol>
	<p><b>T86810 Set of 6 Fuel Line Blocks for High Pressure Common Rail Tier 3 Fuel Kit</b></p>
	<p><b>T86800 Tier 3 Fuel Injector Alignment Wrench</b></p>
	<p><b>T86790 Injector Alignment Tool for HPCR Fuel Kit</b></p>
	<p><b>T86700 GEVO Fuel Reservoir Mounting Wrench</b></p> <p>Adapter to be used with T16491 Torque Wrench.</p>
	<p><b>T86630 AL GEVO Aluminum Manual Fuel Injector Nozzle Remover</b></p>

	<p><b>T86501 Fuel Injector Washer Changeout Kit GEVO Engines</b></p> <p>This kit is used to remove the copper washer from EVO Fuel Injectors. The Kit includes a soft hammer, a clamp to hold the inverted injector and two notched removal adapters.</p> <p>The T86500-5 Installation adapter is available separately.</p>																																										
	<p><b>T86380 14MM Injector Adapter</b></p> <p>This is a 1/2" square drive 14MM hex adapter for the EVO high pressure injector.</p>																																										
	<p><b>T86240 Fuel System Crowfoot Wrench 1 1/2" 12 Point</b></p> <p>This is a 1 1/2" crowfoot adapter with a 1/2" square drive.</p>																																										
	<p><b>T85910 Fuel Injector Sleeve Extraction Tool Set for GEVO Engines</b></p> <table border="0"> <tr> <td>1</td> <td>T85910-1</td> <td>Puller Assembly</td> </tr> <tr> <td>2</td> <td>T85910-2</td> <td>EZ Out Assembly</td> </tr> <tr> <td>3</td> <td>T85910-3</td> <td>Torque Multiplier</td> </tr> <tr> <td>4</td> <td>T85910-4</td> <td>Case</td> </tr> <tr> <td>5</td> <td>T85910-5</td> <td>Breaker Bar</td> </tr> <tr> <td>6</td> <td>T81330</td> <td>Injector Sleeve Torquing Tool</td> </tr> <tr> <td>7</td> <td>T85910-7</td> <td>3/4" - 10 Left Hand Nuts (5)</td> </tr> <tr> <td>8</td> <td>T85910-8</td> <td>1/2" F to 3/4" Male Adapter</td> </tr> <tr> <td>9</td> <td>T85910-9</td> <td>EZ Out</td> </tr> <tr> <td>10</td> <td>T85910-10</td> <td>Wire Brushes (3)</td> </tr> <tr> <td>11</td> <td>T85910-11</td> <td>Plastic Brush</td> </tr> <tr> <td>12</td> <td>T85910-12</td> <td>Crank brush assembly</td> </tr> <tr> <td>13</td> <td>T85910-13</td> <td>Brass Washer Pick</td> </tr> <tr> <td>14</td> <td>T85910-14</td> <td>Spare brush for crank assembly</td> </tr> </table>	1	T85910-1	Puller Assembly	2	T85910-2	EZ Out Assembly	3	T85910-3	Torque Multiplier	4	T85910-4	Case	5	T85910-5	Breaker Bar	6	T81330	Injector Sleeve Torquing Tool	7	T85910-7	3/4" - 10 Left Hand Nuts (5)	8	T85910-8	1/2" F to 3/4" Male Adapter	9	T85910-9	EZ Out	10	T85910-10	Wire Brushes (3)	11	T85910-11	Plastic Brush	12	T85910-12	Crank brush assembly	13	T85910-13	Brass Washer Pick	14	T85910-14	Spare brush for crank assembly
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	<p><b>T85820 EVO Fuel Pump Base Bolt Wrench</b></p> <p>This is a 1/2" square drive 12MM 12 point adapter for the EVO fuel pump base bolts.</p>																																										

	<p><b>T85702-16 Marine Tier 3 Nozzle Adapter 16MM</b></p> <p>This is a 16MM 1/2" Drive Torque Adapter for use on marine engines as well as Tier 3 EVO engines.</p>
	<p><b>T85630 High Pressure Fuel Pump Roller Retainer for GEVO Engines</b></p> <p>The roller retainer fits into the retainer slot in the strongback to hold up the fuel roller.</p>
	<p><b>T85281 12mm Fuel Pump Torque Adapter</b></p> <p>This is a 12MM 12 point EVO fuel pump adapter to be used with the Y shank T16491 Torque Wrench.</p>
	<p><b>T85220 Valve Setting Feeler Gages for Inlet 45MM and Exhaust 95MM on GEVO Engines</b></p> <p>The gage has a .45 MM and a .95 MM tip attached to the knurled handle. Replacement tips are available.</p> <p>The T85220S replacement tip set includes one .45 MM and one .95 MM replacement tip.</p>
	<p><b>T81830 Fuel Pump Installation Tool for GEVO Engines</b></p>
	<p><b>T81351 30MM High Pressure Fuel Line Adapter</b></p> <p>The 30 MM open end adapter is used to remove and install EVO high pressure fuel lines. It is used with the Y shank T16491 Torque Wrench.</p>

	<p><b>T81330 Fuel Injector Sleeve Torquing Tool for GEVO Engines</b></p> <p>The T81330 Injector Sleeve Torquing Tool has a removable 1/2" square drive extension and 4 machined tangs that fit into the injector sleeve for installation and removal.</p> <p>To aid in removal of the sleeve once the threads are disengaged - use tool T86980</p>
	<p><b>T81310 Fuel Injector Alignment Tool for GEVO Engines</b></p> <p>This tool is used to align the fuel injectors on Evolution Engines. The extension is milled out to profile the injector face.</p>
	<p><b>T81230 Nozzle Carbon Cleaner for GEVO Engines</b></p>
	<p><b>T80781 36mm Open End Adapter</b></p> <p>This is a 36MM open end adapter that fits in the X shank T16491X torque wrench.</p>
	<p><b>T80770 Fuel Line Torque Wrench Adapter</b></p> <p>This is a 1 1/2" Open End Adapter with a 1/2" Square Drive.</p>
	<p><b>T80481 Fuel Injector and Fuel Pump Puller Slide Hammer Style for GEVO Engines</b></p> <p>The Evolution Nozzle Knocker uses the same body as the T18560 knocker with different adapters. The T80481 comes with a T80480N Adapter that threads directly into the nozzle and a T80480P tip used to remove stubborn fuel pumps.</p> <p>These adapters are also available separately.</p>



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 A black, cylindrical metal tip with a slightly wider diameter at one end.	<p><b>T80480P Replacement Fuel Pump Removal Tip for T80481 GEVO Knocker</b></p>
 A black, cylindrical metal tip with a threaded section on one end.	<p><b>T80480N Injector Tip for Use in T80481 GEVO Nozzle Knocker</b></p>

**Turbocharger**

	<p><b>T66990 GE Turbocharger Labyrinth Seal Test Kit for FDL GEVO</b></p> <p>This kit contains all the tools needed to test the GE Turbocharger Labyrinth Seal. A complete Bill of Material is available here for viewing.</p>
	<p><b>T87160 GEVO Labyrinth Seal Assembly Lifter</b></p>
	<p><b>T86782 Ruggedized Telescoping EVO Turbocharger Rotor Turning Tool</b></p> <p>The tubing wall thickness has been increased 50%, a solid aluminum handle incorporated, and a key clutch part improved (heat treated alloy steel).</p> <p>This tool will provide improved service life over prior models.</p>
	<p><b>T85170-19 Turbocharger to Exhaust Manifold Adapter 19MM</b></p> <p>This is a 19MM 12 point torque adapter for the EVO turbo to exhaust manifold bolts. It features a 3/4" square drive and angle milled into the 19MM face for clearance around the bolt.</p>
	<p><b>T85170 Turbocharger Mounting Bolt Adapter 20MM</b></p> <p>This 20 MM 12 point adapter is driven by a 3/4" square drive input and is used to install/remove EVO turbocharger mounting bolts. It is used with a T18230 Torque Wrench. (Drive centers are 4")</p>





	<p><b>T85162 Turbo Speed Sensor Installation Torque Kit for GEVO Engines</b></p> <p>This kit consists of a T85162S extension with a slot milled into the side to accommodate the sensor wires, a T85162W 24 lb/ft preset torque handle and a T85162RA 3/8" square drive ratcheting adapter.</p>
	<p><b>T81370 16MM Inside Turbo Foot Bolt Adapter</b></p> <p>This adapter features a 1/2" square drive and two 16MM 12 point box ends to remove or install the inner EVO Turbo Foot Bolts.</p>
	<p><b>T81360 EVO Turbo Strut Lock Nut Adapter</b></p> <p>This is a 2 3/16" Open End Torque Adapter for the GEVO Turbo Strut Lock Nut.</p>
	<p><b>T59890 Low Profile Turbocharger Lifter for GE Evolution Engines</b></p> <p>This lifter is used to remove and install turbochargers on EVO engines.</p> <p>T13791- Replacement Bolts 1 3/4" Long  T59890B -Replacement Bolts 3" Long (Used to bolt through adapter plate)  T59890P- Replacement Anchor Pin</p>

## Traction Motor

	<p><b>T67280CP AC Traction Motor Wheel Slip and Speed Sensing Tester</b></p> <p>Accommodates GE and EMD Locomotives.</p> <p>The tester is battery powered with charger and mounted on a cart for ease of movement. It includes mounting locations that allow for GE and EMD speed sensing cables to be mounted directly to the tester. The tester powers a 192 tooth gear that is proximate to the cable magnetic pick up. The tester can be powered in both directions using a 75' cable and pendant that the electrician operates in the cab of the locomotive. It has a range of 0-2800 RPM in both directions.</p> <p>The tester helps identify faulty cables, cable connections, wiring faults and ensures proper operation of the AC wheel slip systems.</p> <p>It is complete with a cable expansion for the location on the GE locomotive that prevents direct cable connection to the tester.</p>
	<p><b>T65971 Traction Motor Dog Bone Guide</b></p>



**Test and Control**

	<p><b>T68490 Infrared &amp; Contact Thermometer</b></p> <p>The instrument range is -20 to 1652 degrees Fahrenheit or -30 to 900 degrees Celsius. It is powered by two AA Alkaline Batteries and comes with operating instructions.</p> <p>It includes a surface temperature probe for use on pinions, shafts and hubs. It is rates -196 to 1112 degrees Fahrenheit (-127 to 600 degrees C).</p> <p>It is compatible with K-Type Thermocouples and existing K Type Probes. this replaces the T2X3430 Pyrometer Kit.</p>
	<p><b>T87090 MAG Test Probe</b></p> <p>Probe can be used to indicate if a solenoid or relay is energized. If the solenoid is electrically energized, the LED will light.</p>
	<p><b>T86670 High Pressure Fuel Pump Light</b></p> <p>This light is connected to the high pressure fuel pump to determine if the connection is powered. The light uses a replaceable 44 Watt bulb.</p>
	<p><b>T70102 Digital Multimeter with Case and Leads 1500 Volt DC</b></p> <p>Voltage 200mv - 1500v DC 200mv - 1000v AC Complete with case and leads</p>





	<p><b>T67490 - Torque Tester for Click-Style Manual Torque Wrenches 100-1000 N.m</b></p> <p>This torque tester is designed for use with click type torque wrenches and has one measurement unit - Newton Meters. It features simple operation with only one button on the unit used to zero the display. Operating Range: 100-1000 N.m Accuracy of + / - 1% over operating range Comes with traceable calibration certificate. Drive size: 27 mm hex. Supplied with 3/4" square drive socket</p>
	<p><b>T64842 Universal Capacitor Discharge Device for All GE AC Locomotives</b></p> <p>This set consists of one manual discharge assembly, seven individual shortening assemblies and a portable storage box. The manual discharge assembly has six 5,000 OHM 225 Watt radial wire wound resistors connected in parallel to dissipate any residual charge, and then the individual cables are connected to the individual capacitors until maintenance is complete per OEM instructions.</p>
	<p><b>T57911 Electronic Torque Analyzer for Pneumatic and Hydraulic Wrenches 25 to 4000 FT LBS Universal Input Voltage</b></p> <p>This torque tester has a range of 25-4000 lb.ft. with an accuracy of +-.5% of reading from 20% to 100% of full scale. It can also be used for manual torque wrenches and other torquing devices. Reaction arms to accommodate the T22020 and T16050 Air Motors come with the unit, and special brackets can be fabricated on request. Two knurled fasteners hold the reaction arms in place and allow for sliding to custom positions. This tester will accept an input of 1" and 1 1/2" square drives</p>
	<p><b>T15491 Hand Held Contact Non Contact Tachometer</b></p> <p>This hand held tachometer kit includes 5 speed tips, male and female cones and an extension. Speed: 0-200 RPM Range: 0-2,000RPM 0-20,000RPM  Accuracy: +1/2 of 1% full scale</p>

**T12290 Magnetic Base Dial Indicator**







The magnetic base dial indicator is used to check the crankshaft thrust clearance and various backlash readings. The high precision gage comes with .0005" dial increments, and the magnetic base is controlled with a button built onto the base. The gage also comes with an extension and a swivel adapter for easy adjustments.





**Miscellaneous**

	<p><b>T54923 Battery Lifter for GE FDL Engine</b></p> <p>This tool was developed to ease the installation and removal of batteries on GE locomotives. The pickup point can be adjusted so that the lifter is level both loaded and unloaded. The spacer plates and stops on the forks provide the proper spacing so that the smaller batteries are at the same center of gravity as the larger trays. This version supersedes the T54922 with an improvement of the fork arrangements. The new forks are custom machined and mechanically attached to more precisely match the tubing dimensions. This allows the operator to slide the forks between hole positions much easier, and the load is more evenly distributed on the tubing.</p>
	<p><b>T68120 EVO Air Compressor Sensor Tool</b></p> <p>This tool was designed to install and remove EVO Air Compressor Sensors. The socket features a 1/2" square drive and a significant portion of the body has been machined to accommodate sensor wires. The socket end is a 3/4" 12 point.</p>
	<p><b>T85891 Alternator Conical Mounting Plate Bolt Wrench</b></p> <p>This wrench is used to address the hard to reach back bolts on an Evolution Alternator Conical Mounting Plate. The box end is a 24MM 12 Point and the drive end has a 1/2" square drive. The adapter is just over 14" long and is 1/2" thick.</p>
	<p><b>T41030 Dynamic Brake Grid Lifter</b></p> <p>This lifter was developed for the new GE T4 Brake Grids, however, it will address any dynamic brake grid with a steel barrier with lifting holes on the side.</p>
	<p><b>T58904 GE Radiator Bank Lifter</b></p> <p>This lifter is rated at 3600 LBS and can be used for FDL, EVO and Tier 4 radiator banks. The middle chain fall position is fixed and the two end</p>

	<p>chains falls are adjustable along the entire beam and are locked in position by tightening the locking pins.</p>
	<p><b>T80751AB EVO Water Pump Adapter Block</b></p> <p>This adapter block is included with the T80751A Water Pump Appliance and attaches to the top of EVO Water Pump for installation and removal. The bottom of the lifting plate is contoured to match the shape of the threaded portion of the EVO Water Pump.</p>
	<p><b>T86690 GE Oil Filter Housing Lifting Adapter for C Frame Manipulator</b></p> <p>This tool was designed to lift both sizes of GE oil filter housings with the door lid closed. The appliance is attached to the T57170 "C" Frame Manipulator and the single fork reaches through the holes in the frame under the tank. The load can then be manipulated with the hydraulic ram on the "C" Frame Manipulator.</p>
	<p><b>T86641 Traction Cup Connection Socket</b></p>
	<p><b>T86330 Locomotive Lifting Fixture GEVO Locomotive</b></p>
	<p><b>T85930 EVO Corner Air Duct Lifter</b></p> <p>This lifter is bolted onto the top of the corner air duct and lifted with an overhead crane. The pick up eye is off center to accommodate the center of gravity and ensure a level lift.</p>

	<p><b>T85830 EVO Soft Plug Torque Adapter</b></p>
	<p><b>T85500 GEVO Conical Mount Stud Clearance Check Set Gage</b></p>
	<p><b>T85450 Water and Oil Pump Adjusting Ring Wrench</b></p> <p>This wrench is used to rotate the EVO Water and Oil Pump Mounting Adjustment Rings to adjust pump drive gear backlash.</p>
	<p><b>T85101 Mag Pick up Connecting Torque Tool</b></p>
	<p><b>T81700 40MM Open End Torque Adapter GEVO Alternator Mount to Alternator Foot Nut</b></p>
	<p><b>T81690 56MM Open End Torque Adapter GEVO Engine Mount to Engine Foot Nut</b></p>
	<p><b>T80670 24mm EVO Oil Circulation Pump</b></p> <p>This is a 24mm 12 point Box Adapter for the GEVO Oil Circulation Pump and is fitted with an X Shank drive.</p>
	<p><b>T80630 10mm GEVO Intercooler Bolt Torque Adapter</b></p> <p>This is a 10mm Hex Adapter for the GEVO Intercooler Bolt and it features a Y shank drive.</p>

	<b>T66760 Air to Air Heat Exchanger Core Lifter for GEVO Locomotives</b>
	<b>T66630 AMD 103 Brake Adjusting Wrench</b>  This wrench is 18" long with a 55mm open end. The tool is used to back the brake shoe away from the wheel on all AMD103 (Amtrak Genesis) locomotives.
	<b>T66531 BKT Reverser Switch Lifter</b>
	<b>T66482 Air Compressor Lifter Cleat For Wabco 3 Cylinder Air Compressors</b>  This lifting cleat is to be used in conjunction with the T57170 "C" Frame Manipulator fitted with the T57181-37 Extension to lift air compressors from GE Locomotives. It is designed to attach to the air compressor with the discharge piping flange still attached, significantly reducing the amount of time it takes to attach to and remove the air compressors. It comes complete with the swivel hoist ring and mounting bolts.
	<b>T65770 Plow Straightener</b>
	<b>T64620 Spring Lifter</b>

	<p><b>T59830 Locomotive Truck Turning Fixture</b></p>
	<p><b>T57720 Ground Protection Device for Microprocessor Locomotives</b></p> <p>This ground protection device is used for microprocessor locomotives &amp; includes a 5 AMP replaceable fuse. It is also equipped with alligator clips on each end for easy connection.</p>
	<p><b>T57561 11' Long Cantilever Lifter Multiple Use Rated At 700 lbs</b></p>
	<p><b>T57560 8' Long Cantilever Lifter Multiple Use Rated At 375 lbs</b></p> <p>The T57560 - 8 foot long cantilever lifter is rated at 375 lbs. and can be used for lighter locomotive component change outs. It incorporates three pickup points located 30", 33", and 36" from its pickup hook. Typical use is for both GE and EMD water and lube oil pumps. It weighs approximately 37 lbs.</p> <p>Lifter is shown here being used with the T55591 EMD Water Pump lifter which is sold as a separate item.</p> <p>Other lifters that are commonly used with this are:</p> <ul style="list-style-type: none"> <li>T62660 - EMD Hinged Water Pump Lifter</li> <li>T67240 - EMD Large Water Pump Lifter</li> <li>T63860 - EMD Scavenger Oil Pump Lifter</li> <li>T66380A - GE FDL Water Pump Lifter</li> </ul>
	<p><b>T18500 Dry Abrasive Blast Cleaning Machine</b></p> <p>This blast machine is used to clean carbon, varnish, rust or other buildup from engine components. Compressed air to the blast nozzle is controlled by a switch activated by the operator's elbow. An air pressure regulator is provided to adjust blast intensity. A dust collection system is provided by with a slip out tray for removal of</p>





debris. Glass bead media is used where components are to be cleaned without affecting their critical dimensions

Height 95" Depth 66" Width 50"

Export Voltage: 230V 3PH 50CY for blower motor  
230V 1PH 50CY for control circuit

NOTE: AT 80PSI, approximately 85 CFM of air is required to power this machine. This demand can be supplied by a 20hp air compressor minimum for constant duty operation.

T18500 Complete Blast Cleaning Machine

T18501 Complete Blast Cleaning Machine w/ parts tumbler mounted on access door for automatic cleaning

T18470 Replacement Air Hose

T18480 Replacement Abrasive Hose

T18510 Viewing Window

T18520 Rubber Gloves (Pair)

T18530 Rubber Gauntlets

T18490 Abrasive Gun - with tungsten carbide orifice

T18540 Replacement Dust Bags

T18550 Glass Bead Media - BT10 for general cleaning (50 lb. Bag)

T18551 Aluminum Oxide - 80 grit for more severe cleaning

**High Pressure Hot Water Cleaners for Inlet Port Cleaning**

These machines deliver up to 210 F water at 2,000 PSI at a rate of 5 gallons per minute. Water is heated by a diesel fuel oil fired burner. These kits include both the special and general-purpose wands, necessary hoses and protective clothing. These kits allow a crew of two men to completely clean inlet ports in on a 16-cylinder engine, including engine assembly and disassembly in an 8-hour shift. These kits are also most useful for other locomotive cleaning jobs.

Kit #	Spare Parts #	Pump Drive Description
T23320	T23470	208V 60HZ 3PH Motor
T23340	T23460	230V 60HZ 3PH Motor
T23330	T23440	230V 50HZ 3PH Motor
T23380	T23410	Gas Engine (Battery Start)
T23390	T23400	Diesel Engine (Battery Start)
T23270	Ref. 1	Straight Wand
T23280	Ref. 2	90-degree Wand

GE Part Number	Description	TESCO Part Number	Other GE Part Number
147X1089-1	PISTON RING COMPRESSOR	T10892	
147X1099-2	PISTON RING EXPANDER	T10992	41A219803P1
147X1406-2	RETAINER TOOL	T14062	41B513677G4
147X1492-1	BEARING SHELL HOLDER AND CAP GUIDE	T14921	41A219606P1
147X1511	SOCKET, 15/16 IN	T15110	
147X1517-1	ADAPTER	T15171	41B513813G1
147X1568-1	BOLT TORQUING KIT	T15681	
147X1604	HOSE ASSEMBLY	T16040	41B514909P3
147X1677	BARRING-OVER TOOL	T16770	41B514153G1
147X1679-2	VALVE CHECKING FIXTURE	T16792	
147X1780-1	TORQUE WRENCH SET	T17802	
147X1856	NOZZLE KNOCKER	T18560	41C613609G1
147X2457	USE 147X3337	T54440	41B513359P7
147X2471	HYDRAULIC CYLINDER LIFTER	DELETED	
147X2608	NOZZLE KNOCKER	T80481	
147X2625	14 MM 12 PT TQ (CHANGED PART NUMBER PER BIBY LUNA - 12/13/13)	T85233	
147X2673	CRANKSHAFT DEFLECTION - SUP TO 147X3067	T81252	
147X2788P	FUEL PUMP ADAPTER 12MM		
147X2810-1	DYNAMIC BRAKE GRID LIFTER	T66500	
147X2836	GE MECHANICAL FUEL LINE KIT	T15927L	
147X2867	WATER PRESSURE LOCK-OUT CLAMP	T86400	
147X2869	COMBINATION TOOL CART (LESS TOOL CART)	T24302CLC	
147X2870	RING HANDLE FOR 147X2610 RING COMPRESSOR TOOL	T80101H	
147X2871	PISTON RING COMPRESSOR HANDLE	T10892H	
147X2872	SHORT P/A LIFTER	T54552C	
147X2873	BEARING PRESS (CAMSHAFT SLEEVE BEARING)	T55960	
147X2874	FUEL ROLLER RETAINING PLATE	T57150	
147X2875	CAMSHAFT SEGMENT LIFTER	T55991	
147X2877	DIGITAL MULTIMETER WITH CASE	T70102	
147X2879	HANDLE AND GAUGE	T18940	
147X2880	O-RING SMALL NOZZLE, PACKAGE 6	T14441R	
147X2881	SPEED CONNECTOR SMALL	T14441	
147X2882	O-RING LARGE NOZZLE, PACKAGE 6	T14911R	
1472883	FUEL LINE CRANKCASE W/OVER PRESSURE SWITCH TESTER CALIBRATED 0-20 IN OF WATER	T16422	
147X2884	1/2 SQ RATCHETING ADAPTOR	T15730	
147X2885	TORQUE WRENCH 1 IN SQUARE (TO DRIVE 0-1000 LB)	T18250	
147X2886	MACHINE HAND TOOL SETS - SUP TO 147X2749 (T19272)	T19271	
147X2887	HAND HELD TECHOMETER, SPEED 0-200RPM, RANGE 0-200RPM	T15490	
147X2888	IMPACT WRENCH	T16950	
147X2889	DEEP SOCKET, 9/16 IN - 2 PCS	T17010	
147X2890	INDUCTION HEATER, 460 VOLT	T60171	
147X2891	ADJUSTABLE TORQUE SCREWDRIVER	T59810	
147X2892	"F" COUPLER LIFTER	T57500	
147X2893	KNUCKLE LIFTER	T57490	
147X2894	SPRING PACK LIFTER	T57760	
147X2896	TOP OPERATED DRAWBAR "C" HOOK LIFTER	T58720	
147X2897	WIPER MOTOR WRENCH	T58400	
147X2898	HOPPER CAR DOOR OPERATORS	T58190	
147X2899	HOUSTON SWITCH TESTER	T60200	
147X2900	VERTICAL FLOAT FUEL SENSOR	T60190	
147X2901	MICROPHOR CHLORINATOR CAP WRENCHES 147X2902	T59980	
147X2902	SIGNAL BATTERY LIFTER	T59741	
147X2903	RAIL CAR GRATE LIFTER	T62560	
147X2904	PUNCH WITH HANDLE	T59480	
147X2905	SNYDER FUEL FILL NECK INSTALLATION/REMOVAL WRENCH	T62730	
147X2906	BRAKE SHOE KEY REMOVER	T59200	
147X2907	CAM BEARING SEPARATOR	T58120	
147X2908	BENT ROCKER ARM DEPRESSOR	T10404	
147X2909	BOSCH FUEL LINE JAM NUT ADAPTER	T59371S	
147X2910	SPREADER BEAM	T59331	
147X2911	INERTIAL FILTER BLOWER MOTOR IMPELLER REMOVER	T57400	
147X2912	KEENSERT INSTALLATION TOOLS	T59360	
147X2913	"T" HANDLE WRENCH	T58330	
147X2914	TAILROD STUD ADJUSTING SOCKET	T63640	
147X2915	MAIN BEARING TEMPERATURE SENSOR TORQUE ADAPTER	T81380	
147X2916	CONN ROD, CAP LIFTING TOOL	T86740	
147X2917	HYDRAULIC TENSIONING KIT FOR CYLINDER AND MAIN BEARING STUDS - GEVO ENGINES	T81732	
147X2918	INTERCOOLER REMOVER/INSTALLER	T85373	
147X2919	GE TURBO ROTATING TOOL	T86780	
147X2920	GE LABYRINTH SEAL TURBO TEST	T66990	
147X2922	1/2 IN RATCHET ADAPTER	T15930	
147X2923	REACTION HANDLE	T56051RH	
147X2924	TORQUE HANDLE	T56051TH	
147X2925	REACTION ADAPTER	T56051RA	
147X2926	TORQUE ADAPTER	T56051TA	
147X2928	POWER ASSEMBLY LIFTER	T54552	
147X2929	PISTON PIN BOLT TORQUE KIT	T18412	
147X2930	CROSSHEAD GUIDE PULLER	T16920	
147X2931	GEVO MAIN BEARING STUD TENSIONING KIT	T81732MB	
147X2932	PRESSURE TESTER KIT	T87030	

147X2933	ADAPTER KIT	T87030-DRY
147X2934	FEMALE TO MALE ADAPTER, 3/4 IN TO 1/2 IN	T219957P77
147X2936	HEX HEAD WRENCH	T219957P59
147X2937	DRIVE IMPACT UNIVERSAL JOINT	T219957P55
147X2938	RATCHET, 1/2 IN	T219957P41
147X2939	SCREWDRIVER 8	T219957P32
147X2940	BALL PEEN HAMMER	T219957P15
147X2941	COMBINATION WRENCH	T219957P24
147X2942	MIRROR	T219957P12
147X2943	EVO LEVER ACTION NOZZLE PULLER	T86920
147X2944	EVO FUEL PUMP TORQUE KIT	T86820
147X2945	CAPACITOR DISCHARGE RESISTOR	T64841
147X2946	TRACTION MOTOR DOG BONE GUIDE	T65971
147X2947	CORNER AIR DUCT LIFTER	T85930
147X2951	GEVO CONNECTING ROD CAP LIFTER	T86741
147X2950	HYTORC PUMP WITH ENCODER - HY-QAS240-EN (ORDER 240V PUMP FOR AUSTRALIA VOLTAGE)	HY-QAS240
147X2952	STORAGE CARD FOR "C" FRAME MANIPULATOR	USE 147X3002
147X2953	WATER/OIL PUMP APPLIANCE ARM	T80752
147X2954	AIR COMPRESSOR LIFTER CLAT FOR WABCO 3 CYLINDER AIR COMPRESSORS	T66482
147X2955	AIR TO AIR STAND TOOLS	T65420
147X2956	OIL COOLER LIFTING ATTACHMENT FOR "C" FRAME MANIPULATOR - GEVO	T85680
147X2957	GEVO 12 CYLINDER OIL PUMP LIFTER	T86760
147X2958	EXTENDED REACH GEVO TRACTION MOTOR BLOWER LIFTER - WITH STAND	T63200SAA
147X2959	EQUIPMENT BLOWER LIFTING ATTACHMENT FOR "C" FRAME MANIPULATOR	T63201
147X2960	HYTORC TOOLS PART NUMBER - 3MXT HYDRAULIC TORQUE HEAD (NEED 2-1/16 IN 1 IN DRIVE SHALLOW SOCKET FOR TIE BAR MOUNTING BOLTS)	3MTX
147X2961	ALTERNATOR CONICAL/PLATE MOUNTING BOLS WRENCH SET (FERFUSON PART NUMBER LISTED)	GEVODMRTK
147X2962	GEAR CASE PLUG TOOL TOOLS	T65530S
147X2963	GEVO ALTERNATOR LINEUP PIN	T87040
147X2964	MAG TEST PROBE	T87090
147X2965	BARRING OVER TOOL (T16050EVO AND T22031)	T86770
147X2966	MAIN BEARING CAP LIFTER KIT - EVOLUTION	T85051
147X2967	COMBINATION ENGINE LIFTER	T85202FC
147X2968	CRANKSHAFT SENSOR WRENCH SET	T85261
147X2970	LINER, PISTON AND STRONGBACK LIFTER	T85311
147X2971	SUP TO 147X2971-1 (T8462K)	T85461K
147X2971-1	CAM BEARING ADAPTER PRESS PLATE KIT	T85462K
147X2972	EXHAUST BELLOWS ADAPTER	T85701
147X2973	FUEL PUMP BASE BOLT ADAPTER	T85820
147X2974	EVO TOOL CART	T85900C
147X2975	BLANKING TOOLS	T85953
147X2976	5 IN BLANKING TOOLS	T85952-5
147X2977	ROTATING PA LIFTER	T86000
147X2978	METRIC TORQUE ADAPTER SET	T86060
147X2979	OIL PUMP LIFTING ADAPTER	T86550
147X2980	MANUAL NOZZLE PULLER W/TIP	T86630
147X2981	M36X2 RETHREADING TAP	T86650
147X2982	M36X2 RETHREADING DIE	T86660
147X2983	HIGH PRESSURE FUEL PUMP LIGHT	T86670
147X2984	OIL FILTER HOUSING LIFTER	T86690
147X2985	ATS LIFTER	T86750
147X2986	CYLINDER LINER REMOVAL WEDGE	T86510
147X2987	ADAPTER ASSEMBLY F/T52090 KIT	T52240
147X2988	ELECTRIC POWERED HYDRAULIC PUMP - 230V	T55961P
147X2989	HYDRAULIC V-228 MAIN BEARING CAP TOOL	T65820K
147X2990	PISTON HOLDING TOOL	T85080
147X2991	BOX WRENCH TORQUE KIT	T17801
147X2992	24MM BOX END ADAPTER	T80700
147X2993	CONICAL MOUNT STUD CLEARANCE TOOL	T85500
147X2994	EVO POWER ASSEMBLY LIFTER	T86001
147X2995	115 VOLT MAIN BEARING WRENCH	T19250
147X2996	CAM SHAFT BEARING SPREADER	T11322
147X2997	FDL OIL PUMP LIFTER	T66560
147X2998	OIL COOLER LIFTER	T59992
147X2999	AIR COMPRESSOR APPLIANCE	T57181-37
147X3000	WATER PUMP LIFTER PLATE	T66380A
147X3001	INTERCOOLER LIFTER	T55432
147X3002	"C" FRAME STORAGE CART	T57170SC1
147X3003	DYNAMIC BRAKE GRID WRENCH	T54121
147X3004	COMBO DECADE BOX	T64931C
147X3005	REACTION FIXTURE WITH T50830 (14X2019-2) HD CLAMPS	T15971
147X3006	13 FEET LONG X 1 IN DR. EXTENSION	T15980
147X3007	SOCKET	T16001
147X3008	5:1 TORQUE VERIFIER	T16500
147X3009	GE PISTON RETAINERS	T23221
147X3010	TURBOCHARGER MOUNTING BOLT TORQUE KIT	T23520
147X3011	CART FOR CYLINDER HOLD DOWN BOLT TORQUING	T23980
147X3012	CAM SHAFT FUEL ROLLER LIFTER	T52051
147X3013	PISTON RING GROOVE SCRAPER	T10980
147X3014	POWER ASSEMBLY GUIDE IN FOR GE FDL ENGINES	T13670

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147X3015	COMPESSION TESTER SET - SET OF 8 TESTERS FOR GE FDL ENGINES	T22303
147X3016	TURBO LIFTER	T19164
147X3017	GE FDL MAG PICK-UP SETTING TOOL	T59001
147X3018	GE FDL CRANK SENSOR SETTING TOOL	T64611
147X3019	MAIN BEARING CAP LIFTER	T19231
147X3020	OPEN END TORQUE WRENCH KIT	T17801-OE
147X3021	GE FILL NECK PRESSURE FIXTURE	T51780
147X3022	GE FILL NECK PRESSURE FIXTURE WIT 3/4 N FITTINGS FOR COOLING SYSTEM TESTER	T51780-3/4
147X3023	WABCO MANUAL AIR COMPRESSOR VALVE CAP AND CAGE TOOL SET	T66281M
147X3024	WIDE GROOVE SCRAPER FOR OIL CONTROL RING GROOVE ON CUTBACK PISTONS - GE FDL ENGINES	T10980W
147X3025	PISTON PROTECTOR	T19510
147X3026	0-160 PSI GAUGE FOR AIR CONTROL KITS	T16031
147X3027	CYLINDER HOLD DOWN BOLT IMPACT WRENCH SET (WITHOUT AIR CONTROL KIT) GE FDL ENGINES - FOR REMOVAL ONLY	T16842
147X3028	5000 PSI HYDRAULIC CYLINDER LEAK TEST FIXTURE - 115 V - FOR GE FDL ENGINES	T17380
147X3029	CYLINDER HEAD LIFTER FOR GE FDL ENGINES	T20241
147X3030	1 5/8 IN-12 INSERT (6 SUPPLIED)	T50390
147X3031	EXHAUST MANIFOLD RATCHET WRENCH - 5/8 IN FOR GE FDL ENGINES	T55701
147X3032	PROTECTIVE PAD FOR MASTER ROD SHANK - GE FDL ENGINES	T18280
147X3033	GE CRANKSHAFT FRONT COVER PULLER	T58530
147X3034	ART ROD GUIDE PIN	T11220
147X3035	MASTER ROD BEARING CAP KNOCKER AND LIFTER FOR GE FDL ENGINES	T14141
147X3036	ART ROD PIN RETAINER	T14740
147X3037	TURBOCHARGER BEARING PULLER - GE FDL ENGINES	T11921
147X3038	BCO TURBOCHARGER CORE PLUG SPANNER WRENCH (3/4 IN HOLE SPACING X 1-1/8 IN MALE HEX)	T15240
147X3039	BCO TURBOCHARGER CORE PLUG SPANNER WRENCH (1-1/2 IN HOLE SPACING X 1-1/8 IN MALE HEX)	T15250
147X3040	PULLER ASSEMBLY FOR GE FDL TURBOCHARGER COMPRESSOR WHEEL	T20750
147X3041	SPANNER WRENCH FOR COMMUTATOR END BEARING NUTS ON GE-752 TRACTION MOTORS	T51630
147X3042	PIN (W REQUIRED)	T51630P
147X3043	SCREW (2 REQUIRED)	T51630S
147X3044	VIBRATION DAMPER LIFTER FOR GE FDL ENGINE	T16662
147X3045	UNIVERSAL ENGINE/ALTERNATOR IFTER FOR 8, 12, 16 CYLINDER GE 7FDL ENGINES AND EMD ENGINES	T16884C
147X3046	DRY ABRASIVE BLAST CLEANING MACHINE	T18500
147X3047	RADIATOR FAN LIFTER HANDLES FOR T50933 LIFTER	T50933H
147X3048	AXLE CAP PIPE PLUG WRENCH - 9/16 IN AND 13/16 IN SQUARE FEMALE DRIVE ENDS	T54720
147X3049	AXLE CAP PIPE PLUG WRENCH - 9/16 IN AND 13/16 DOUBLE SQUARE FEMALE DRIVE ENDS	T54721
147X3050	LOCOMOTIVE MOTORING DEVICE WITH 7 FT CORD	T59521
147X3051	GE PIPE JACK - SADDLE ID 2.5 IN, SADDLE WIDTH 3 IN, KNURLED PAD	T62610
147X3052	2.375 GE CHECK VALVE SPREADER, SADDLE ID 2.375 IN, SADDLE WIDTH 0.75 IN, Knurled PAD	T63491
147X3053	AIR COMPRESSOR LIFTER CLEAT FOR ALL GE LOCOMOTIVE AIR COMPRESSORS	T66481
147X3054	FDL WATER DISCHARGE ELBOW LIFTER	T66490
147X3055	BKT AND REVERSER SWITCH LIFTER	T66530
147X3056	HEAVY DUTY FAN REMOVER TOOL FOR GE LOCOMOTIVE GA57 FAN UNITS	T80750AB-FDL
147X3057	SEAL KIT - CART REGULATOR AND EVO CAP	T87030SK
147X3058	GASKET FOR FDL CAP	T51860
147X3059	FDL FILL CAP	T87030-G7
147X3060	EVO FILL CAP	T87030-G7E
147X3061	SPANNER WRENCH	T87030-5
147X3062	HOSE, 15 FT - SUP TO -1 T87031HA	T87030-H15
147X3062-1	HOSE ASSEMBLY, 15 FT	T87031HA
147X3063	MALE QD FITTING ON FILL CAP - SUPERSEDED TO 147X3062-1 HOSE NO FITTINGS	FT1520
147X3064	FEMALE QD FITTING ON CART - SUP TO	FT522
147X3065	OPEN-END WRENCH ADAPTER, 7/8 IN	T15942
147X3066	INLINE EVO CRANKSHAFT DEFLECTION GAGE MANDREL	T81252-L250
147X3067	CRANKSHAFT DEFLECTION GAUGE	T81253
147X3068	V228 CRANSHAFT DEFLECTION GAGE MANDREL	T81252-V228
147X3069	12 POINT 3/4 N DR X 24MM SWEEP DIAL SOCKET	T85712S
147X3070	10MM OPEN END ADAPTER, Y-SHANK	T17801MOE-10
147X3071	1.5 IN CROWS FOOT ADAPTER	T57141
147X3072	RETAINER BOLTS	T80440AB
147X3073	30MM Y-SHANK TOOL	T81351
147X3074	EXHAUST MANIFOLD BOLT ADAPTER	T85702
147X3075	WIRE BRUSHES (3)	T85910-10
147X3083	RETAINING BOLT WITH CIRCLIP	T57150SB
147X3085	REACTION ARM	T81050RA
147X3086	TIER 4 MAIN BEARING SIDE BOLT SOCKET	T40300
147X3087	442 STANDARD SOLUTION (3000PPM/39000US) NIST TRACEABLE - 1 QT/LTR	442-3000Q
147X3088	CERTIFICATE OF NIST TRACEABILITY FOR CONDUCTIVITY/TDS STANDARD SOLUTION	SC-3000Q
147X3089	115V MOTORIZED PUMP	T14320
147X3090	HOSE	T55961H
147X3091	RAM	T55961R
147X3092	BEARING INSTALLATION MANDREL	T55961IM
147X3093	STARTER SPACER	T55961SS
147X3094	REACTION MANDREL	T55961RM
147X3095	PUSHING COLLAR	T55961PC
147X3096	3/8 IN HEX BIT, 1/2 IN DRIVE SOCKET INDUSTRIAL FINISH	GSA12E
147X3097	BOX - WRENCH ADAPTER - 9/16 IN	
147X3098	BOX - WRENCH ADAPTER - 3/4 IN	T17751
147X3099	BOX - WRENCH ADAPTER - 15/16 IN	T17781
147X3100	TORQUE WRENCH, 30-200LB-IN, 3/8 IN DRIVE	T20710
147X3101	INTERNAL MICROMETER W/ 3 MEAS. POINTS - 1.7500 TO 2.000 IN	T21380

147X3102	SOCKET-5/16 IN,12-POINT, 3/8 IN DRIVE	TF101
147X3103	NOZZLE ALIGNMENT TOOL	T40650
147X3104	HEAD STUD INSTALLER	T40060
147X3105	HEAD STUD REMOVER	T40060R
147X3107	ROD BEARING RETAINERS	T40310
147X3108	MAIN BEARING CAP LIFTER KIT	T40530
147X3109	NOZZLE SLEEVE TORQUE ADAPTER	T40620
147X3110	24MM OPEN END TORQUE ADAPTER	T40390
147X3111	MAIN BEARING STUD TENSIONER LIFTING ARM	T40480
147X3112	48MM X 2 STUD DRIVER - MB STUDS	T40070
147X3113	48MM X 2 STUD REMOVER - MB STUDS	T40070R
147X3114	MAIN BEARING NUT RUNNER	T40080
147X3115	TURBOCHARGER LIFTER	T40360
147X3116	INJECTOR HOLD DOWN BOLT TORQUE ADAPTER	T40560
147X3117	NOZZLE CARBON CLEANER	T40600
147X3118	40MM OPEN ENDED ADAPTER	T40630
147X3119	FUEL INJECTOR COPPER SEAL REMOVER	T40640
147X3120	FUEL PUMP LIFTER WITH ENGINE CAB	T40210
147X3121	NOX AND O2 SENSOR INSTALL SOCKET	S6176
147X3122	TRACTION MOTOR SPEED SENSOR TESTER	T67280CP
147X3123	M&S TENSIONING KIT	T81731M
147X3125	ALIGNMENT TOOL	T86790
147X3126	IN PULLER	T86860
147X3127	CLAMP BOLT EXTENSION	T85706-16
147X3128	OPEN END TORQUE ADAPTER	T17801MOE-27X
147X3129	CROWS FOOT ADAPTER	T86831
147X3130	TURBOCHARGER LIFTER	T19164
147X3131	VALVE SEAT GRINDING SET	T10472
147X3132	SOCKET 2" HEX 1" Square Drive	T16101
147X3133	PNEUMATIC TORQUE	T81051
147X3134	HYDRAULIC CYLINDER LINER REMOVER	T16711
147X3135	LIGHTWEIGHT COMPONENT ASSEMBLY/REMOVAL 'C' FRAME	T86721
147X3136	LIGHTWEIGHT 'C' FRAME STORAGE CART	T86721SC
147X3137	CYLINDER HEAD LIFTER	T40320
147X3138	OIL COOLER LIFTER	T40520
147X3139	FRONT CAM BEARING INSTALLATION AND REMOVAL KIT	T40020
147X3140	ENGINE LIFTER UPGRADE KIT	T85201U
147X3141	CAM GEAR LIFTER	T40120
147X3142	CAM GEAR LIFTER	T40110
147X3143	LARGE CAM BEARING INSTALL & REMOVAL KIT	T40010
147X3144	STRONG BACK AND CYLINDER LINER LIFTER	T40290
147X3146	EGR COOLER LIFTER	T40100
147X3147	HIGH PRESSURE TURBOCHARGER LIFTER	T40791
147X3148	CYLINDER LINER LIFTER	T40540
147X3149	L6/R6 CAM FOLLOWER RETAINER	T87200
147X3151	ADAPTER BLOCK FOR OIL PUMP LIFTER	T40260
147X3152	CRANKSHAFT DEFLECTION GAGE MANDREL FOR T4 ENGINES	T40040
147X3153	LIFT	T40830
147X3155	1-7/8" IMPACT SOCKET, 6 PT W/ 1" SQ. DRIVE	T52210-S1
147X3161	AH MOTOR DRIVE SOCKET	T58300-S
147X3162	METRIC OPEN ENDED TORQUE KIT	T17801MOE
147X3163	GEAR CASE PLUG TOOL - 15/16" AND 1"W/ TORQUE WRENCH	T65531S
147X3164	C FRAME STORAGE CART	T57170C1
147X3165	CONN ROD CAP LIFTER - GEVO ENGINES	T86340
147X3166	CAM BEARING BUSHING INSTALLER/REMOVER	T55961
147X3167	REPLACEMENT DRIVE PINS FOR ARBOR T58440 IN TOOL CART	T58440DP
147X3168	CAM GEAR LIFTER	T58711
147X3169	CAM ALIGNMENT TOOL	T65570
147X3170	TOOL CART 7FDL EFI ENGINE	T24303
147X3172	1-1/8" SOCKET	T18660
147X3173	AIR COMPRESSOR LIFTER CLEAT	T66842
147X3174	FULE LINE TORQUE KIT	T15926ML
147X3175	SOCKET FOR SPEED SENSOR	T58090
147X3176	EXHAUST MANIFOLD	T55572
147X3177	FUEL PUMP MOUNTING BOLT	T14791
147X3178	COOLING SYSTEM TEST KIT	T51750ICT
147X3179	TURBO BOLT TORQUE ADAPTER	T23500
147X3180	VALVE LASH NUT WRENCH	T40570
147X3181	CYLINDER LINE LIFTER	T40660
147X3182	CYLINDER LINE RETAINER SET	T40670
147X3183	HEAD NUT RUNNER	T40050
147X3184	WATER & OIL ADJUSTING RING WRENCH	T85450
147X3185	ENGINE STAND SET	T59191
147X3186	PRE-TURBINE TEMP SENSOR MEASUREMENT FOR GE EFI AND MFI ENGINES	T22062
147X3188	3/4" DRIVE WITH 15/16" 12 POINT	T14994
147X3189	REACTION PLATE FOR #5 NORBAR	T23831
147X3190	INTERCOOLER LIFTER	T55431B
147X3191	ALTERNATOR PIN GUIDE REMOVAL TOOL	T64310-7D
147X3192	REPLACEMENT BOLT ALTERNATOR DOWEL REMOVAL TOOL BOLT	T64310-7DB
147X3193	UNIVERSAL ENGINE LIFTING PLATFORM	T85205
147X3194	FDL ENGINE COMPONENT SET	T85205KT-FDL

147X3196	SPRING	T10510
147X3197	53 PSI WATER PRESSURE TESTER (DRY)	T87031
147X3198	PART	T40291
147X3199	PART	T40081
147X3200	FUEL INJECTOR SEAL RING REMOVER	T86501
147X3202	EVO ROD CAP NUT SOCKET SET	T85710S
147X3203	55MM THIN WALL DEEP WELL SOCKET W/ 1" DRIVE	T81280
147X3204	OIL DRAIN LINE ADAPTOR	T87010
147X3205	PORKCHOP WRENCH	T14582
147X3206	FLYWHEEL/FLEX PLATE ALIGNMENT PINS	T67550
147X3207	X	T90750A
147X3208	REPAIR KIT TOOL - HYDRAULIC TENSIONING KIT FOR CYLINDER AND MAIN BEARING STUDS	T81732MBSK
147X3209	HIGH PRESSURE TURBO LIFTER	T40490
147X3210	REACTION PIN	T58440RP
147X3211	SOCKET	T55320
147X3212	ENGINE LIFTING BRACKET KIT	T86260IMB
147X3213	NUTS	T86280P12
147X3214	BOLTS	T86260P11
147X3215	PA ASSEMBLY STAND	T65071
147X3216	13/16 ADPT, BOX, TORQUE WRENCH	T17761
147X3217	COPPER WASHER INSTALLATION TOOL	T40980
147X3218	QUEENSLAND REACTION FIXTURE	T15971Q
147X3219	METRIC BOX END TORQUE KIT	T17802M
147X3220	GOVERNOR STOP BLOCK	T50960
147X3221	QUEENSLAND EXTENSION	T15980Q
147X3222	QUEENSLAND TORQUE KIT	T15681Q
147X3223	QUEENSLAND POWER ASSEMBLY LIFTER	T19923Q
147X3224	IGBT & RM LIFT DEVICE	T67730
147X3225	MAIN BEARING FRAME SPREADER	T85111
147X3226	EGR CLEANING KIT	T41080
147X3227	BOX WRENCH TORQUE KIT	T17802
147X3228	FUEL PUMP MOUNTING WRENCH	T14972
147X3229	FDL COMPONENT SET	T8205KT-FDL
147X3230	EMD COMPONENT SET	T8205KT-EMD
147X3231	LARGE BEARING INSTALL REMOVAL KIT F/GEVO & TIER 4	T85602
147X3232	JAM NUT TORQUE VERIFICATION ADAPTERS	T59370S
147X3233	DIGITAL MULTIMETER WITH CASE AND LEADS	T70102
147X3234	CAM BEARING INSTALL REMOVAL TOOL - DO NOT USE	T85462
147X3235	CAM BEARING INSTALL REMOVAL TOOL	T85462
147X3236	LARGE BEARING INSTALL REMOVAL KIT F/GEVO & TIER 4	T85602
147X3237	UNIVERSAL ENGINE LIFTER KIT - WITH MUFFLER ATTACHED	T85205TK-T4-MA
147X3238	UNIVERSAL ENGINE LIFTER KIT - WITH MUFFLER REMOVED	T85205TK-T4-MR
147X3239	CYLINDER HEAD ONLY LIFTER	T40320GC
147X3240	HEAD AND STRONG BACK ONLY LIFTER	T41130
147X3241	TIER 4 EGR COOLER LIFTER	T41040
147X3242	TIER 4 DYNAMIC BRAKE GRID LIFTER	T41030
147X3243	TIER 4 MANDREL FOR NITRIDED CRANKSHAFT	T81252-2C
147X3244	TIER 4 MANDREL FOR INDUCTION HARDENED CRANKSHAFT	T81252-2D
147X3245	TIER 4 FUEL PUMP ALIGNMENT TOOL	T40210-AT
147X3246	LUBE OIL AND FUEL OIL CONDITION MONITOR SENSOR SOCKET	T4T40900
147X3247	LOCOMOTIVE PLOW STRAIGHTENER	T65770
147X3248	CAM BOLT ADAPTER	T85231
147X3250	GEVO FUEL INJECTOR SLEEVE TORQUING TOOL	T81330
147X3251	ENGINE LIFTER PLATFORM	T85205
147X3252	FDL COMPONENT SET	T85202KT-FDL
147X3253	TIER 4 STRONGBACK AND LINER LIFTER	T40291
147X3254	BEARING RETAINER FIXTURE	T63610
147X3255	HYDRAULIC RAM AND PUMP	T12890
147X3256	BALL PEEN HAMMER	T219957P15
147X3257	AIR MOTOR FOR GE AND EMD CYLINDER HOLD DOWN BOLTS	T16051
147X3258	REPLACEMENT BLOCK F/WATER PUMP ADAPTER	T80750AB
147X3259	MARINE EGR FLUSHING KIT	T41080M
147X3260	EVO LINER REPLACEMENT TABLE STAND	T85745
147X3261	0-600 PSI COMPRESSION TESTER GAGE	T50121
147X3262	EMD ADAPTER	T50160
147X3263	REACTION PLATE	T22531
147X3264	COVER SEAL ADAPTER(CUSTOMER MUST SUPPLY THE VALVE COVER)	T64720C
147X3265	STIFF GAGE ASSEMBLY	T64720S
147X3266	1/4 BSF X 7/8 SHCS	T25065/14
147X3267	FUEL LINE TORQUE KIT F/EFI	T15926L
147X3268	TIER 4 MARINE VEE ENGINE EGR CLEANING KIT	T41080MV
147X3269	TIER 4 MARINE INLINE ENGINE EGR CLEANING KIT	T41080MI
147X3271	CYLINDER HOLD DOWN BOLT INSERT WRENCH 1/2" SQUARE DRIVE - GE FDL ENGINES	T13222
147X3272	ENGINE LIFTER EVO & TIER 4	T85202
147X3273	MARINE FLYWHEEL LIFTER	T40940
147X3274	45MM X 2 STUD DRIVER - MB STUDS	T80170
147X3275	45MM X 2 STUD REMOVER - MB STUDS	T80170R
147X3276	PISTON & ROD LIFTER FOR 25' CRANE	T40410
147X3277	MARINE 250MDC L2ORANGE HPFP LIFTER	T41060
147X3278	V250 OIL COOLER BRACKET LIFTER	T41180
147X3279	TIER 4 MARINE SEAWATER PUMP LIFTER	T40960

147X3281	SPEED SENSOR ALIGNMENT TOOLS	T85291-1
147X3282	SPEED SENSOR ALIGNMENT TOOLS	T85291-2
147X3283	EVOLUTION POWER ASSEMBLY STAND	T85741
147X3284	I.F.E. LIFTER (INTEGRATED FRONT END)	T85531
147X3285	ANTI-SEIZE (9 OZ. BRUSH-TOP CAN)	T23950
147X3286	LOCTITE 262 - 50 ML	T23960
147X3287	LINER, PISTON AND STRONGBACK LIFTER	T85312
147X3288	24MM BOX END ADAPTER	T80911
147X3289	24MM OIL PUMP TORQUE ADAPTER	T85421
147X3290	CRANKSHAFT DEFLECTION GAUGE KIT - CONTAINS MANDRELS FOR HDL, FDL AND GEVO ENGINES	T81254
147X3291	MAIN BEARING FRAME SPREADER	T85112
147X3292	METRIC CROWDS FEET	T17802MOE
147X3293	EGR 3GPM PRESSURE WASHING MACHINE HOTSY HD 3.0	T41200
147X3294	EGR PRESSURE WASHING MACHINE ACCESSORY SET (FOR T41200)	T41210
147X3295	5/8" BOX WRENCH ADAPTER	T17731
147X3296	UNIVERSAL LIFTER (T85205) ATTACHMENT KIT 2 GEVO WITH MUFFLER REMOVED	T85205KT-GEVO-MR
147X3297	GUAGE (0-60 PSI)	T51830
147X3298	LOWER LINER SEAL INSTALLATION/REMOVAL KIT	T54771
147X3299	HYDRAULIC RAM	T54770R
147X3300	TOP ASSEMBLY	T54770TA
147X3301	WOBBLE PLATE	T54770WP
147X3302	T54770FC FEMALE COUPLER (2 REQUIRED)	T54770FC
147X3303	YDRAULIC PUMP 2 WAY	T54770P
147X3304	T54770HA HOSE ASSEMBLY (2 REQUIRED)	T54770HA
147X3305	MARINE MAIN BEARING CAP SIDE BOLT SOCKET	T81920M
147X3306	TORQUE KIT F/MAIN BEARING SIDE BOLTS F/ TIER 2 MARINE INLINE	T81052M
147X3307	TIER 4 CONROD BOLT TORQUE MULTIPLIER	T41140
147X3308	L250 OIL PUMP FILTER ADAPTER	T40760-A
147X3309	40K PSI FLEX LINE T50850FHA	T50850FHA
147X3310	PUMP TO TUBING ADAPTER T50740	T50740
147X3311	MAIN BEARING STUD TENSIONER REPAIR KIT	T817325K
147X3312	STARTER MOTOR LIFTING TOOL	T55690
147X3313	GE-EVO 12MM X 1.75 PITCH GAGE	T87261
147X3314	T85205-GEVO-MR KIT	T85205KT
147X3315	GEVO COMPRESSION RELIEF PLUG WRENCH	T87120
147X3316	LINK PIN (SHORT)	T85205LP-WR
147X3317	LINK PIN (LONG)	T85205LP-HL
147X3318	H-LINK ASM F/GEVO	T85205HL-GEVO
147X3319	36MM SWIVEL HOIST RING	T85205SHR-GEVO
147X3320	56 &#1084;&#1084; GEVO ENGINE MOUNT TO ENGINE FOOT NUT	T81690
147X3321	40MM OPEN END TORQUE ADAPTOR - GEVO ALTERNATOR MOUNT TO ALTERNATOR FOOT	T81700
147X3322	GE RADIATOR BANK LIFTER	T58904
147X3323	C FRAME MANIPULATOR*	T57170
147X3324	CRANKCASE PRESSURE TEST KIT	T87080K
147X3325	OPEN END TORQUE WRENCH KIT	T17802-OE
147X3326	CAM SEGMENT ALIGNMENT PIN FOR GEVO ENGINE	T81390
147X3327	GEVOADMRTK ALTERNATOR CONICAL/PLATE MOUNTING BOLTS	T85891
147X3328	T85205-GEVO-MA KIT	T85205-GEVO-MA
147X3329	LIFTER, INVERTER CAPACITOR	T68590
147X3330	GEVO INJECTOR SLEEVE REMOVER	T86980
147X3331	BOX END TORQUE ADAPTER 24&#1084;&#1084;	T17802M-24
147X3332	BOX END TORQUE ADAPTER 30&#1084;&#1084;	T17802M-30
147X3333	CROWFOOT OPEN END WRENCH 1-1/2 INCH	T86170
147X3334	WATER REGULATOR KIT	T51760
147X3335	EVO 50-PSI FILL NECK CAP ASSEMBLY	T87031-G7EN
147X3336	L/V250 EGR COOLER CLEANING KIT	T41080MC
147X3337	CAM SECTION BOLT TORQUE ADAPTER	T54442
147X3338	17MM TORQ ADP 12PT BX	T80681
147X3339	LIFTER FOR CYLINDERS	T85521
147X3340	TIER 4 POWER ASSEMBLY LIFTER	T40220GC
147X3341	COMPLETE REMOTE CONTROL UNIT	T22031
147X3342	1-1/4" OPEN END ADAPTER	T59141
147X3343	L250 VIBRATION DAMPER AND PTO SHAFT TORQUE KIT	T41250
147X3344	V250 PTO SHAFT TORQUE KIT	T41270
147X3345	V250 VIBRATION DAMPER TORQUE KIT	T41260
147X3346	19MM BOX END TORQUE ADAPTOE	T80810
147X3347	GE PISTON EXPANDER	T10993
147X3348	FUEL NOZZLE KNOCKER/REMOVER	T18561
147X3349	TAPPET ROD HOLDER	T56030
147X3350	EVO SOFT PLUG TORQUE ADAPTER	T85830
147X3351	Y SHANK (.560") PRE-SET TORQUE HANDLE (45-200 FT. LBS)	T-200T-I
147X3352	INFRARED & CONTACT THERMOMETER	T68490
147X3353	PISTON PIN LOCATING DOWELS - GE FDL ENGINES	T13261
147X3354	PISTON & ROD ASSEMBLY LIFTER FOR GE FDL ENGINES	T18593
147X3355	FUEL PUMP INSTALLATION TOOL	T81830
147X3356	EVO TOOL CART COMPLETE W/TOOLS	T85901
147X3357	T3 VALVE COVER PULLER	T87152
147X3358	GE EVO TURBO MOUNTING FLANGE BOLT EXTRACTOR	T87180
147X3359	EVO CAM ROLLER RETAINING PLUG SET	T87200S
147X3360	EXHAUST BELLOWS ADAPTER (1/2" SQ. DRIVE, 12MM 12 POINT) GEVO ENGINES	T40370
147X3361	CAPACITOR DISCHARGE RESISTOR	T64842



147X3362	CAM CAR INSTALLATION SOCKET	T58080-CS	
147X3363	CAM CAR REMOVAL SOCKET	T58080-CRS	
147X3364	BOSCH FUEL PUMP MOUNTING ADAPTER	T59570	
147X3365	PISTON PIN BOLD WRENCH (3/4IN SQUARE DRIVE - 15/16IN 12 PT)	T14993	
147X3366	TURBOCHARGER LIFTER FOR GE FDL ENGINES	T19162	
147X3367	CRANKSHAFT DEFLECTION GAUGE FOR GE FDL ENGINES	T12270	
147X3368	DIGITAL DIAL INDICATOR	T81252GD	
147X3369	FDL FUEL PUMP MOUNTING BOLT ADAPTER	T14974	
147X3370	COMBINATION SPLITTER & FLUSHER KIT	T41360C	
147X3371	INTERMEDIATE GEAR LIFTER	T85000GC	T80210
147X3372	GEVO AND HDL WATER PUMP IMPELLER REMOVER	T81950	
147X3373	EVO CRANKSHAFT FLANGE LIFTER	T85441B	
147X3374	FLEX PLATE LIFTER	T85431-B	
147X3375	CAM IDLER GEAR LIFTER	T81510	
147X3376	TIER 4 MAIN BEARING CAP ROLLOVER LIFTER	T40860	
147X3377	MAIN BEARING CAP LIFTER	T80341	
147X3378	GEVO WATER OUTLET FLANGE ALIGNMENT TOOL	T87050	
147X3379	INDIVIDUAL MARINE TENSIONER	T81731M-T	
147X3380	12M X 1.75 CAPTIVE BOLTS	T85470B	
147X3381	50MM SPEEDER SOCKET	T80840-50	
147X3382	LIGHTWEIGHT 55MM SPEEDER SOCKET	T80841	
147X3383	PISTOL GRIP PNEUMATIC AIR MOTOR	T20001	
147X3384	ENGINE LIFTER SPREADER BAR - KAZ SHUNTER	TX1060	
147X3385	ENGINE/ALTERNATOR ASSEMBLY LIFTER SPREADER BAR	TX1060A	
147X3386	ENGINE LIFTER ATTACHMENT LUGS	TX1060-SA1	
147X3387	BARRING OVER MOTOR - PNEUMATIC	T22020	
147X3388	BARRING OVER ARBOR 13 TOOTH PINION	TX1030	
147X3389	Y-SHANK 27MM HEX	TJ1200	
147X3390	Y-SHANK 32MM HEX	TJ1210	
147X3392	FRAME SPREADER WITH HAND PUMP	TX1040	
147X3393	STUD DRIVER, M27	TX1000	
147X3394	STUD REMOVER, M27	TX1000R	
147X3395	VALVE SETTING GAUGES	TX1120	
147X3396	CONN ROD BEARING RETAINER - SET OF 2	TX1080	
147X3397	INJECTOR WASHER INSTALL/REMOVAL ADAPTOR	TJ1860	
147X3398	PISTON/LINER INSTALL CONE -HINGED	TX1310	
147X3399	WEB DEFLECTION MANDREL FOR SX	TX1340	
147X3400	MAIN BEARING REMOVAL MUSHROOM	TX1480	
147X3401	INJECTOR REMOVER LEVER	TX1500	
147X3402	INJECTOR SLEEVE TORQUE/REMOVER	TX1490	
147X3403	INJECTOR SLEEVE CARBON CLEANER	TX1510	
147X3404	CYLINDER HEAD LIFTING ADAPTER - PART OF LIFTER THAT IS ATTACHED TO HEAD	TX1470	
147X3405	LOWER POWER ASSEMBLY LIFTER	TX1410	
147X3406	ELEVATED PISTON RETAINER	TX1390	
147X3407	LINER - DISENGAGER	TX1430	
147X3408	CONROD ALIGNMENT TOOL	TX1450	
147X3409	UNDER CAB LIFTER FOR THE POWER ASSEMBLY TOOLING	TX1370	
147X3410	UNDER CAB LIFTER FOR THE DUAL IMPELLER COOLANT PUMP/OIL PUMP	TX1460	
147X3411	HIGH PRESSURE FUEL PUMP	TX1380	
147X3412	INTERCOOLER LIFTER	TX1170	
147X3413	EMD ENGINE COMPONENT KIT	T85205KT-EMD	
147X3414	10MM UPPER WATER JUMPER ADAPTER	T87400	
147X3415	VALVE ADJUSTMENT WRENCH WS19	TJ1632	
147X3416	DEPTH MICROMETER 6¿	T35002	
147X3417	EQUIPEMENTS BLOWER LIFTER TOOL	T63200	
147X3418	J SHANK (.425") ADJUSTABLE TORQUE	T67430	
147X3419	3/8" SQ. DRIVE, FLEX HEAD DIGITAL	T67510	
147X3420	TORQUE WRENCH		
147X3421	PROTECTIVE PAD CRANKSHAFT ROD FDL	T18270	
147X3422	MAGNETIC BASE DIAL INDICATOR	T12290	
147X3423	380V 50HZ 400 TON DOUBLE ACTING PUMP	T14331	
147X3424	TUBING (ONLY)	T50720	
147X3425	HYDRAULIC PUMP (40,000 PSI)	T50860	
147X3426	TUBING SLEEVE	T50730	
147X3427	GLAND NUT	T50870	
147X3428	TUBING ASSY, WITH 2- T50730 SLEEVES & 2 ¿ T50870 NUTS	T50920	
147X3429	REPLACEMENT BOLTS FOR T16065 LIFTER	T13791	
147X3430	CYLINDER BOLT HOLD DOWN BOLT MANUAL TORQUE MULTIPLIER	T23600	
147X3431	REACTION BRACKET	T59450	
147X3432	U TUBE REACTION BRACKET W/SOCKET	T59451	
147X3433	MANUAL PUMP & HOSE FOR FRAME	TP85110P	
147X3434	REPLACEMENT BOLT KIT F/T85311	T85311BK	
147X3435	THUMBSCREW W/NYLON TIPS (SET OF 2)	T85312TS	
147X3436	POWER ASSEMBLY STUD SAFETY FIXTURE	T40340	
147X3437	ROTOR VANES (6 PER SET)	T16218	
147X3438	CONICAL SLEEVE INDUCTION HEATER 230V 50HZ 1PH	T85510	
147X3439	3/4¿ SQUARE DRIVE 7/8¿ (22MM) 12 POINT DEEP IMPACT SOCKET	T80800S	
147X3440	ARM ATTACHMENT, PISTOL GRIP PNEUMATIC AIR MOTOR	T19289	
147X3441	EXHAUST MANIFOLD ADAPTER	T57530	
147X3442	16MM X 2 STUD REMOVER (COLLET AND HOLDER)	TJ1280R	
147X3443	TAPPET ROD HOLDER FOR GE EFI FDL ENGINES	T56031	

147X3444	GAGE FOR THE TENSIONER PUMP, 30,000 PSI	T81731G
147X3445	CYLINDER HEAD LIFTER HORIZONTAL GEVO	T80120
147X3446	VIBRATION DAMPER LIFTER	T80250
147X3447	GEVO VALVE SPRING COMPRESSOR	T81290
147X3448	IDLER GEAR LIFTER FOR GEVO ENGINES	T85020GC
147X3449	TIER 2/3 POWER ASSEMBLY LIFTER	T85473GC
147X3450	ENGINE LIFTER CHAIN LINK	T85205LC
147X3451	LIFTER LEG F/GEVO & FDL	T85205LL-GEVOFDL
147X3452	SAFETY DUMBELL	T85205LP-SPR
147X3453	SAFETY PIN	T85205LP-SP
147X3454	LINK PIN, LIFTER LEG	T85205LP-LL
147X3455	RA REACTION ARM	T58080-RA
147X3456	REACTION SOCKET	T58080-RS
174X3270	RATCHET ADAPTER (3/8" SQUARE DRIVE, Y-SHANK)	T15931-3/8