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TESCO

TRANSPORTATION EQUIPMENT SUPPLY CO.

TESCO Tools for GE FDL Engines








TESCO Tools for GE FDL Engine

GE FDL Tools

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

General Maintenance

	<p>T87620 - Piston and Rod Lifter for GEVO Engine</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>T69130 - Weight Management Cylinder Mounting</p> <p>18 pt. 32mm Weight Management Cylinder Mounting Bolt Wrench with a 1/2" drive</p>
	<p>T51780N Fill Neck Pressure Fixture with Nut for GE and EMD Engines</p> <p>Fill Neck Pressure Fixture with Nut for GE and EMD Engines</p>
	<p>T68590 Capacitor Lifter</p> <p>The T68590 is used to lift the capacitor out of the auxiliary cab. The lifter is equipped with handles to allow two operators to lift the capacitor far enough out of the cab to connect to an overhead crane. The bottom beam slides through the two top brackets on the capacitor and is locked in place with the 3/8" bolt.</p>
	<p>T85372AL Replacement Leg Set</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>

**T68490 Infrared & Contact Thermometer**

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. It includes a surface temperature probe for use on pinions, shafts and hubs. It is rated -196 to 1112 degrees Fahrenheit (-127 to 600 degrees C).

It is compatible with K-Type Thermocouples and existing K Type Probes. This replaces the T2X3430 Pyrometer Kit.

**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

**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)

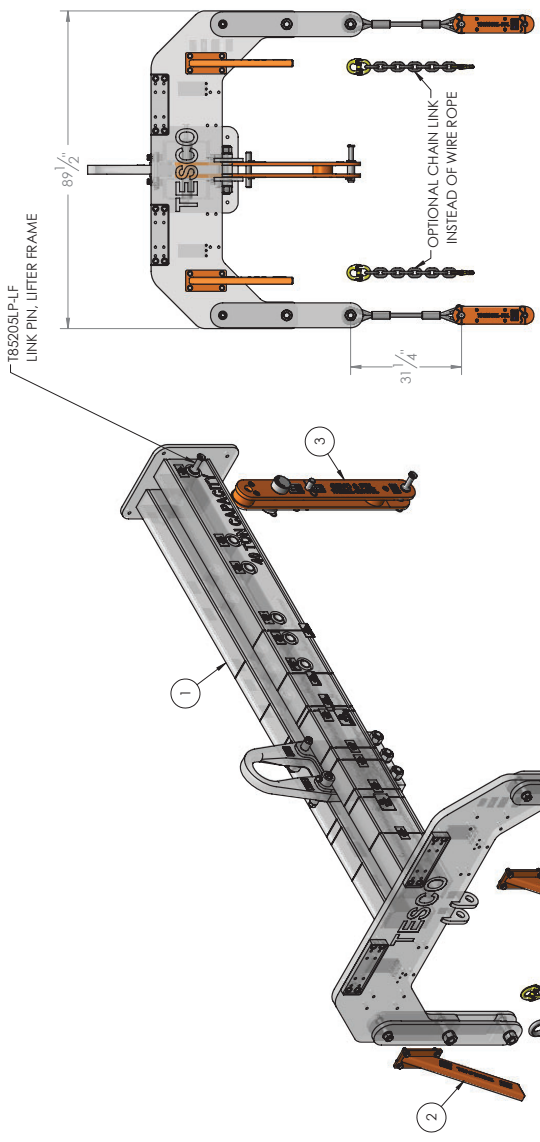
The number of different engines and configurations grew to a point where lifters became custom to individual locations and the part numbers and descriptions were confusing. This platform simplifies the entire process and allows future additions without sending the unit back to TESCO for modification. 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.

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

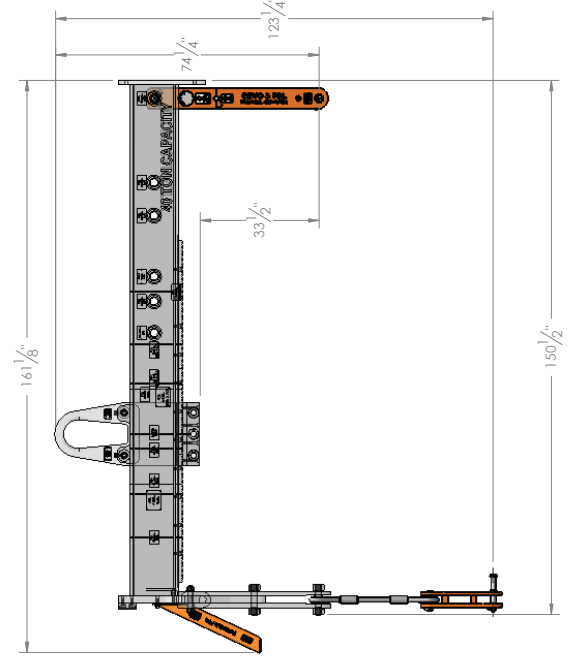
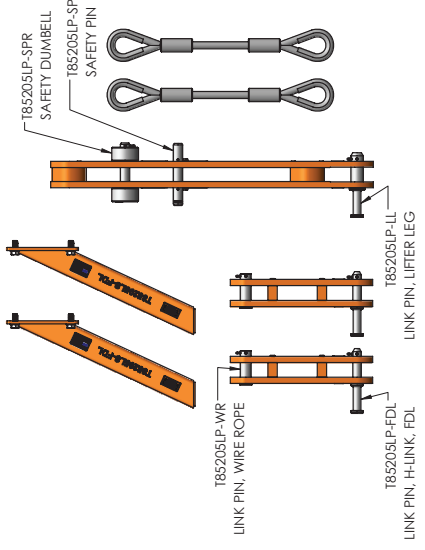
GE LOCOMOTIVE

FDL ENGINE LIFTER



T85205KT-FDL

FDL KIT



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	T85205	ENGINE LIFTER ASM F/END/FDL/GEVO/TIER 4	1
2	T85205LS-FDL	FDL LIFTER SUPPORT LEG ASM	2
3	T85205LL-GEVOFDL	LIFTER LEG F/GEVO & FDL	1
4	T85205HL-FDL	H-LINK ASM F/DDL	2
5	LC1320	1 1/8" X 34" Cable Assembly	2
6	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 ±.01
 TWO DECIMAL: .XX ±.01
 THREE PLACE DECIMAL: .XXX ±.0005
 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: GE FDL ENGINE LIFTER
 DWG. NO.:
 DATE: 1/20/2016
 CDS: FDL ENGINE LIFTER
 REV:

SCALE: B
 WT: 5243.16 lb
 SHEET 1 OF 1

PROPRIETARY:
 THE INFORMATION CONTAINED IN THIS
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 OR AS A WHOLE WITHOUT THE WRITTEN
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	<p>T68080 Torque Tool Verification Fixture</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> <table data-bbox="852 751 1166 856"> <tr> <td>T68080-250</td> <td>250 lb/ft</td> </tr> <tr> <td>T68080-750</td> <td>750 lb/ft</td> </tr> <tr> <td>T68080-1500</td> <td>1,500 lb/ft</td> </tr> </table>	T68080-250	250 lb/ft	T68080-750	750 lb/ft	T68080-1500	1,500 lb/ft
T68080-250	250 lb/ft						
T68080-750	750 lb/ft						
T68080-1500	1,500 lb/ft						
	<p>T68070 AC & DC Traction Motor Gearcase Bolting System</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>T67510 3/8" Square Drive Digital Torque Handle 5 to 100 Ft/Lbs</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>T67430 5-75 Ft. Lb. J Shank Micro Adjustable Wrench</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>T67051 Rectifier Module Lifter</p> <p>For GE FDL (Works on a DC EVO as well). This lifting adapter connects to the Geiske Lifter.</p>						

**T66780 Air Compressor Appliance for T63200SAA**

This appliance is used with the [T63200SAA](#) Extended Reach "C" Frame Lifter which was designed to allow for a longer reach into the locomotive cab in order to remove and install the components on GEVO locomotives. It is to be used with our [T66482](#) Air Compressor Lifting Cleat.

T63201 Equipment Blower Lifting Attachment

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.

The T63201 is reversible and can be used to address the blower from either side.

This attachment can be used with both the T57170 standard C-Frame as well as the T63200SAA extended reach C-Frame.

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.

T66281M WABCO/WABTEC Manual Air Compressor Valve Cap and Cage Tool Set

This kit contains all the tools to remove and install the Valve Caps and Cages on the WABCO/WABTEC 3CDC Air Compressor. Refer to the GE Maintenance Instructions for the full procedure.

**T63200SAA Extended Reach GEVO Traction Motor Blower Lifter with Stand and Appliance**

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 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.

**T57911 Electronic Torque Analyzer for Pneumatic and Hydraulic Wrenches 25 to 4000 FT LBS Universal Input Voltage**

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

**T57580 Torque Tester Adapter Set**

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" & 1-1/4".

	<p>T55572 Exhaust Manifold to Cylinder Torque Wrench Kit GE FDL Engines</p> <p>This torque kit consists of a preset torque handle set at 145 lb.ft. and a special torque adapter which is terminated with a 5/8" 12 point adapter. This is for torquing the bolts only, as the preset torque handle is a precision instrument. The T55572 Kit is shown in the picture as #1 and #2.</p> <p>To break the exhaust manifold bolts loose use the T57600 Handle with the T51433 5/8" 12 point adapter (#3 and #4 in the picture).</p> <ol style="list-style-type: none">1.T55570W Pre-set Torque Handle (100-300 lb. Ft.) set at 145 lb. Ft.2.T55571A Exhaust Manifold Adapter (5/8" 12 point)3.T57600 Exhaust Manifold Removing Tool4.T51433 Exhaust Manifold Adapter (5/8" 12 point)
	<p>T54910 Machinist's Hand Tool Cart</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>T54121 GE Dynamic Brake Grid Wrench</p> <p>This wrench features a 15/16" Box End and on the opposite side has a 15/16" Ratcheting Box End for removing and installing GE Dynamic Brake Grids.</p>
	<p>T50041 Air Control Kit for Various Pneumatic Kits</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>



T24303 Tool Cart for GE FDL EFI Engines

This is a complete tool cart with all the tools required for power assembly and turbocharger removal/installation for an engine equipped with an EFI fuel system. The cart is equipped with 4 wheels (2 with brakes) and hand grips for steering, as well as pick up positions for forklift trucks. A fixture is attached to hook directly to shop air that will provide three additional air outlets. A complete Tool Cart listing is shown below. Combination Mechanical and EFI Tool Carts are also available.

Kit Items listed below:

T10402	Rocker Arm Depressor	T51432	Exhaust Manifold Flange Adapter
T22303	Compression Tester Set	T16551	Master Rod Lifter
T10892	Piston Ring Compressor	T55570	Exhaust Manifold Elbow Torque Wrench
T22520	250 lb. Ft. Torque Wrench	T17801	Box Wrench Torque Kit
T10900	Piston Support Bar	T56051	Tappet Nut Torque Wrench Kit
T23221	Piston Retainer	T18230	600 lb. Ft. Torque Wrench
T10980	Piston Ring Groove Scrapper	T57141	1 1/2" Torque Adapter (Low Pressure)
T23500	Turbo Bolt Torque Adapter	T18250	1000 lb. Ft. Torque Wrench
T10992	Ring Expander	T55971	Pushrod Height Adjustment Gage
T52060	Feeler Gage	T18411	Piston Pin Bolt Wrench
T11220	Art Rod Guide Pin	T57150R	Fuel Roller Retaining Plate - Right
T52051	Cam Shaft Roller Lifter	T18560	Nozzle Knocker
T12300	Timing Tram Bar	T57150L	Fuel Roller Retaining Plate - Left
T24101	Pneumatic Torque Kit	T18593	Piston & Rod Lifter
T13221	Cylinder Insert Wrench	T57161	5mm Nut Runner
T54551	Cylinder Lifter	T19164	Turbo Lifter
T13670	(2) Cylinder Installation Guide Pins	T54442	Camshaft Section Wrench Adapter
T54330	Master Rod Cap Lifter	T50301	Tool Cart
T14062	Piston Retainer	T55991	Camshaft Segment Lifter
T54210	Test Gage Kit	T19510	Piston Protector
T14582	Art Rod Pin Bolt Wrench	T58160	Cam Section Bolt Speeder
T50370	Inlet Casing Wrench Adapter	T22040	Pneumatic Barring Over Tool
T14740	Art Rod Pin Retainer	T58440	Barring Arbor
T18231	Conn Rod Cap Removing Wrench	T57160	7mm Nut Runner
T14921	(2) Conn Rod Bearing Retainer	T18660	1 1/8" Socket
T23502	Turbo Mounting Bolt Removal Wrench	T56031	Tappet Rod Holder
T15110	Socket 15/16"	T15171	Adapter
T51750	Cooling System Test Kit	T54931	Fuel Line Torque Wrench
		T15926	Fuel Line Torque Kit

**T51750 Cooling System Test Kit for GE and EMD Engines**

This kit is designed to introduce 20 PSI water pressure to the cooling system via the water tank fill neck. The fill neck pressure fixture is placed on the fill neck the same as the locomotive pressure cap and a spring is then compressed to ensure a positive seal at 20 PSI. Other pressures can be utilized depending on railway mechanical specifications from 0-25 PSI.

House water is connected to regulator kit with the inlet valve closed, the dump valve closed, and the pressure regulator backed off (minimum spring pressure). The inlet valve is then opened, and pressure increased by the regulator to 20 PSI. Once the system is charged, the inlet valve is closed. Pressure should be maintained, otherwise a leak in the system is present.

NOTE: Sufficient time should be allowed for the system to be charged - if inlet valve is closed and the gage immediately reads less than 20 PSI, the system is not charged. Open inlet valve and finish charging system. If leaks are indicated, a full system inspection is required including an engine crankcase inspection. Once the test is complete, with the inlet valve closed, back off the pressure regulator to minimum spring pressure and open the dump valve to release the water under pressure. Direct the water away from all personnel by holding and directing the dump hose. Once the gage reads "0" and all flow is stopped, the fill neck pressure fixture can be removed. First reduce the spring pressure and then remove the fixture from the fill neck. The pressure regulator provides a range of 0-27 PSI water pressure and the fill neck pressure fixture spring rate was adjusted to relieve at 27 PSI.

T51760 Water Regulator Kit

T51780 GE Fill Neck Pressure Fixture

T51780 - Fill Neck Pressure Fixture

T51850 Tangs (3)

T51860 Gasket

T51870 Screws (6)

T51760 - Water Regulator Kit

T51800 Inlet Valve

T51790 Water Regulator

T51820 1/2" Pipe Cross

T51830 Pressure Gage (0-60 PSI)

T51840 1/2" Nipple

T51800 Dump Valve

T51810 Dump Hose

T16040 Hose

T50150 Cage



T19272 Machinist's Hand Tool Kit For Use On All Engines

This kit was assembled to aid general locomotive maintenance requirements. It has been supplied to shops that require a one part reference for a "General Tool Kit" listed below

- T19272 Machinist's Hand Tool Kit 1/2" Square Drive
- T219957P1 Diagonal Cutter
- T219957P38 Extension 5"
- T219957P2 Interlocking Joint Pliers
- T219957P39 Extension 12"
- T219957P3 Gripping Pliers
- T219957P41 Ratchet
- T219957P4 Needle Nose Pliers
- T219957P42 Socket - 7/16"
- T219957P5 Feeler Gages
- T219957P43 Socket - 1/2"
- T219957P6 Angled Feeler Gages
- T219957P44 Socket - 9/16"
- T219957P7 Flat Chisel
- T219957P45 Socket - 5/8"
- T219957P8 Flat Chisel
- T219957P46 Socket - 11/16"
- T219957P9 Tapered Punch
- T219957P47 Socket - 3/4"
- T219957P10 Tapered Punch
- T219957P48 Socket - 13/16"
- T219957P11 Pry Bar
- T219957P49 Socket - 7/8"
- T219957P12 Mirror
- T219957P50 Socket - 15/16"
- T219957P13 Allen Wrench Set
- T219957P51 Socket - 1"
- T219957P14 Soft Hammer
- T219957P52 Socket - 1 1/16"
- T219957P15 Ball Peen Hammer
- T219957P71 Socket - 1 1/4"
- T219957P31 Box Ratchet 3/4" - 7/8"
- T219957P72 Socket - 1 5/16"
- T219957P32 Screwdriver 8"
- T219957P73 Socket - 1 3/8"

- T219957P53 Socket - 1 1/8"
- T219957P16 Adjustable Wrench 8"
- T219957P54 Socket - 1 1/4"
- T219957P17 Adjustable Wrench 12"
- T219957P55 Universal
- T219957P18 Combination Wrench - 7/16" T219957P56 Speeder
- T219957P19 Combination Wrench - 1/2" T219957P57 Deep Socket - 9/16"
- T219957P20 Combination Wrench - 9/16" T219957P58 Deep Socket - 3/4"
- T219957P21 Combination Wrench - 5/8" T219957P59 Philips Head Wrench
- T219957P22 Combination Wrench - 11/16" T219957P60 Breaker bar
- T219957P23 Combination Wrench - 3/4" & 3/4" Square Drive Tools
- T219957P24 Combination Wrench - 13/16" T219957P64 Extension 8"
- T219957P25 Combination Wrench - 7/8" T219957P65 Ratchet
- T219957P26 Combination Wrench - 15/16" T219957P66 Universal
- T219957P27 Combination Wrench - 1"
- T219957P67 Extension 16"
- T219957P28 Combination Wrench - 1 1/16" T219957P69 Socket - 1 1/8"
- T219957P29 Combination Wrench - 1 1/8" T219957P70 Socket - 1 3/16"
- T219957P30 Combination Wrench - 1 1/4"
- T219957P33 Screwdriver 12"
- T219957P74 Socket - 1 7/16"
- T219957P75 Socket - 1 1/2"
- T219957P76 Socket - 1 5/8"
- T219957P77 Adapter 3/4" to 1/2"
- T219957P78 Tool Box



T18961 Torque Wrench Tester 0 1000 FT LBS Universal Input Voltage

This tester is used for testing and calibrating torque wrenches from 1,000 lb.ft. and under. The tester input features a 3/4" female input, and can be used with the individual adapters below for your specific application. It has a Class 1 accuracy of +- .5% of reading. Torque wrenches can be checked for breaking and tightening torque by using the appropriate side of the torque input shaft. Repair service is available.

[T57580](#) English Adapter Set - This set has 3/4" male adapters that fit into the T18961 Torque Tester. Includes: 1/2" 9/16", 5/8", 11/16", 3/4", 13/16", 7/8", 15/16", 1", 1 1/16", 1 1/8" & 1 1/4".

[T86060](#) Metric Adapter Set - This set has 3/4" male adapters that fit into the T18961 Torque Tester. Includes: 6, 8, 10, 12, 13, 14, 16, 17, 18, 19, 21, 24, 27, 30 & 32MM.



T17802MOE Metric Open End Wrench Set



- T16491 30-150 Lb/Ft Torque Wrench
- T15931 1/2" Drive Ratcheting Adapter
- T17802MOE-10 10 MM Open End Adapter
- T17802MOE-12 12 MM Open End Adapter
- T17802MOE-16 16 MM Open End Adapter
- T17802MOE-18 18 MM Open End Adapter
- T17802MOE-21 21 MM Open End Adapter
- T17802MOE-24 24 MM Open End Adapter
- T17802MOE-27 27 MM Open End Adapter
- T17802MOE-30 30 MM Open End Adapter
- T17802MOE-32 32 MM Open End Adapter
- T17801B Toolbox
- T68050 Torque Adapter Pin Depressor





T17802 Box Wrench Torque Kit

This kit was assembled to make general engine torque requirements both safer and easier. The kit contains a 30-150 lb.ft. torque handle, 1/2" sq. drive ratcheting head, and 12 point box wrench adapter ends from 1/2" through 1". This set is also available in open end adapters (T17802OE).

- 1 T16491 30-150 lb. Lb. Torque Handle
- 2 T15931 Ratchet Head (1/2" sq. drive)
- 3 T17711 Box Wrench Adapter 1/2"
- 4 T17721 Box Wrench Adapter 9/16"
- 5 T17731 Box Wrench Adapter 5/8"

	<p>6 T17741 Box Wrench Adapter 11/16" 7 T17751 Box Wrench Adapter 3/4" 8 T17761 Box Wrench Adapter 13/16" 9 T17771 Box Wrench Adapter 7/8" 10 T17781 Box Wrench Adapter 15/16" 11 T17791 Box Wrench Adapter 1" 12 T17801B Metal Storage Box w/Foam T68050 Torque Adapter Pin Depressor</p>
	<p>T17290 General Purpose Pneumatic Impact Wrench 3/4" Drive This is a 3/4" square drive impact wrench rated at 1000 lb.ft. for intermediate sized bolt removal. It is particularly suited for removal of master rod cap bolts and main frame main bearing side bolts. It is not recommended for bolt tightening.</p>
	<p>T16940 Impact Wrench Set For General Stripping Operation This 1/2" drive air impact wrench set can be used for removing miscellaneous hardware from 1/2" to 1". A complete set of deep sockets and flex sockets from 1/2" to 1" and standard sockets from 3/8" to 1" are provided to handle most jobs. All sockets and extensions are impact wrench quality to give long service. The impact wrench operates on shop air of 90 to 100 PSI and will deliver an ultimate torque of 320 lb.ft. This unit is also equipped with an adjustable trigger for various speed applications. A 5 ft. flexible hose with a swivel connector at the wrench end is also furnished, so the wrench can be used in tight places without hose kinking.</p> <p>Note: This impact wrench will retain its efficiency and give long service when oiled daily. It also provides valuable savings in time when removing components and hardware from the engine.</p> <p>Note: All sockets are 1/2" drive - 6 point impact quality</p> <p>Tools Below:</p>
<p>T16970 5" Extension T16980 10" Extension T17180 Standard Socket - 3/8" T17190 Standard Socket - 7/16" T17200 Standard Socket - 1/2" T17210 Standard Socket - 9/16" T17220 Standard Socket - 5/8" T17230 Standard Socket - 11/16" T17240 Standard Socket - 3/4" T17250 Standard Socket - 13/16"</p>	<p>T17110 Flex Socket - 5/8" T17120 Flex Socket - 11/16" T17130 Flex Socket - 3/4" T17140 Flex Socket - 13/16" T17150 Flex Socket - 7/8" T17160 Flex Socket - 15/16" T17170 Flex Socket - 1" T16990 Deep Socket - 1/2" T17010 Deep Socket - 9/16" T17020 Deep Socket - 5/8" T17030 Deep Socket - 11/16"</p>

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<p>T17260 Standard Socket - 7/8" T17270 Standard Socket - 15/16" T17280 Standard Socket - 1" T17090 Flex Socket - 1/2" T17100 Flex Socket - 9/16"</p>	<p>T17040 Deep Socket - 3/4" T17050 Deep Socket - 13/16" T17060 Deep Socket - 7/8" T17070 Deep Socket - 15/16" T17080 Deep Socket - 1"</p>
	<p>T16491X Adjustable Torque Handle 60-250 FT/LBS X Shank</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>T15931 Ratchet Adapter 1/2 Inch</p> <p>The T15931 is a 1/2" Drive Ratcheting Adapter that fits into a Y Shank torque wrench.</p>

**T12940 General Puller Set For GE FDL and Other Miscellaneous Uses**

This puller set is used for various maintenance applications on the GE Locomotive. It is useful in pulling tapered bearings, hubs, pulleys and gears.

**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

3 T18981 LOCTITE 609 Retaining Compound 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>T51750ICT Individual Cylinder Tester for GE FDL Engine For use on and FDL Engine</p>
	<p>T50071 Heavy Duty Kit for Removing Cylinder Hold Down Bolts</p> <p>The T16051 Air Motor is rated at 3400 N.m. / 2500 lb.ft.. Used mainly for stripping engines at overhaul.</p> <ol style="list-style-type: none"> 1. T16051 Torque Motor 1 1/2" sq. drive 2. T15971 Reaction Fixture 3. T50081 Extension 1 1/2" sq. drive 4. T50090 Universal Joint 1 1/2" sq. drive 5. T50101 2" 6 point Socket 1 1/2" sq. drive 6. T50041 Air Control Kit 7. T50071RB Reaction Bracket 8.
	<p>T24101 GE FDL Cylinder Hold Down Bolt Pneumatic Torque Wrench Kit</p> <p>This kit enables all shops to precisely control cylinder bolt torquing. It is the most complete kit offered. The air pressure is set on the air control kit in accordance with the individual motor torque curve while the air motor is running unloaded. The proper air setting will produce 1,350 lb.ft. cylinder bolt torque when the motor stalls during torquing. The 25:1 Verifier is used to audit the results and minor air pressure corrections may be needed. (1-10)</p> <ul style="list-style-type: none"> T16050 2500 lb. Ft. Air Drive Torque Motor T50041 Air Control Kit complete with cage T23600 25:1 Torque Verifier w/anti wrap up feature T23980 Cart T15971 Reaction Fixture T15980 Extension T15990 Universal Joint T16001 Socket T22520 30-250 lb. Ft. 1/2" drive ratcheting torque wrench T55670 Cyl. HD Bolt Torque Centering Device

	<p>T15681 Pneumatic FDL Power Assembly Bolt Torque Wrench Kit</p> <p>This set features the T16050 1" Drive Air Motor and a 5:1 Torque Verifier for checking final torque. This kit does not include a cart or a torque wrench.</p> <ol style="list-style-type: none">1. T16050 2500 lb. Ft. Air Drive Torque Motor2. T50041 Air Control Kit complete with cage3. T15971 Reaction Fixture4. T15980 Extension5. T15990 Universal Joint6. T16001 Socket7. T16500 5:1 Torque Verifier8. T55670 Cyl. HD Bolt Torque Centering Device
	<p>T67660 - GE FDL Reaction Bracket</p> <p>This reaction bracket is used in the GE FDL Cylinder Hold Down Bolt Torque Kit. T67660 is compatible with the following torque motors: T16070, T16071, T68900AM, T67711, T67710</p>
	<p>T16070 - 1-1/2" Drive Torque Motor 2950 Lb.Ft.</p> <p>This motor has a torquing range that ranges from 590 Lb.Ft. - 2950 Lb.Ft. or 800 N.m - 4000 N.m with an accuracy of +-3%. This lightweight air motor is used in T50071 Heavy GE FDL Cylinder Hold Down Bolt Torque Kit</p>
	<p>T16071 - 1" Drive Torque Motor 2950 Lb.Ft.</p> <p>This motor has a torquing range that ranges from 590 Lb.Ft. - 2950 Lb.Ft. or 800 N.m - 4000 N.m with an accuracy of +-3%. This lightweight air motor is used in T24101 GE FDL Cylinder Hold Down Bolt Torque Kit.</p>

	<p>T16462 Cylinder Liner Lifter for GE FDL Engines</p> <p>This lifter snaps and locks onto a cylinder liner for lifting purposes. It retains the diameter on three sides and is secured using the cam lock. It is most handy during cylinder assembly work.</p>
	<p>T65010 FDL Valve Cover Nut Adapter</p> <p>This adapter features a milled slot to accommodate the entire length of the FDL valve cover nut and is driven with a 1/2" square drive. This is useful in removing tight nuts and saves the operator's hand from unnecessary wear.</p>
	<p>T87400 10MM Upper Water Jumper Adapter</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>T54552H Replacement Handle Set</p> <p>This is a set of replacement handles for the T54552 and T54552C Power Assembly Lifters. The ends of the handles are equipped with a 1/2" square drive to aid in the installation and removal of the handles onto the lifter.</p>
	<p>T85702TW Thin Wall Exhaust Bellows Adapter</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>T67930 Mobile Torque Analyzer for Calibrating Torque Motors</p> <p>5000 LbFt capacity with 1" & 1 1/2" female square input. +- .5% accuracy of reading from 20% to 100% of full scale.</p> <p>This analyzer was designed to allow for more exact torque readings by using simulated "soft" joints during calibration. Shown is a 7FDL cylinder hold down "soft joint" that duplicates the actual torque run up of the real life application. It utilizes the actual 7FDL cylinder hold down bolt, washer, & threaded insert that the engine is equipped with.</p> <p>To date two soft joints have been developed:</p> <ul style="list-style-type: none">1 - GE 7FDL Cylinder Hold Down "Soft" Joint
	<p>T67880 FDL Stuck Power Assembly Removal Kit</p> <p>This kit was developed to remove stubborn power assemblies from the mainframe caused by freeze or mechanical damage. The kit includes:</p> <p>T14330 230 Volt Hydraulic Pump (Note: Specify voltage)</p> <p>Exhaust Port Jack Pad that mounts a hydraulic ram Air Intake Port Pad that mounts a hydraulic ram T22810 Ram Hydraulic Hose Harness Front Mount Vertical Stanchion Rear Stanchion that is in "V" of engine frame</p> <p>T16065 Power Assembly Lifter Shown (sold separately)</p>
	<p>T67840 Torque Tester Fixture</p> <p>TESCO now tests all GE Cylinder Hold Down Bolt Torques with a rundown fixture that duplicates the hold down bolt configuration.</p> <p>The torque reading on the certification sheet and sticker will be an actual reading of the torque applied in this application.</p> <p>The T67710M Torque System, as well as the T16050 and T16051 motors are also tested with this fixture.</p> <p>An actual GE cylinder hold down bolt, washer and anchor insert are used in the column minimizing variables in the test and assuring the same soft rundown as the true application.</p>

**T67711 230V Electric Powered Digital Display Torque Kit for GE 7FDL Cylinder Hold Down Bolts**

See T67710 for 230V Kit.

The drive can be set for torque and angle of turn to accomplish accurate stretching of these bolts. The kit includes:

- 2. T15971 Reaction Fixture with 2 T50830 Hold Down Clamps
- 3. T15980 Extension - 1" Sq. Drive
- 4. T15990 Universal Joint - 1" Sq. Drive
- 5. T16101 Socket - 1" Sq. Drive, 2" Hex

**T65071 Power Assembly Stand for GE FDL Engines**

This stand accommodates the installation or removal of individual Power Assembly Components outside of the engine. There is a machined ledge to catch the inside of the piston skirt and hold it in place and guide pins aid the cylinder onto the stand. Once the assembly is complete it can be picked up and moved with the T54552 Lifter (or T54552C if it is lifting the cylinder only).






There is a tool rack for a T10892 Ring Compressor, T18593 Piston Lifter and T10992 Expander attached to the stand's frame (not included with stand).






**T57530 Exhaust Manifold Adapter 5/8 Inch**

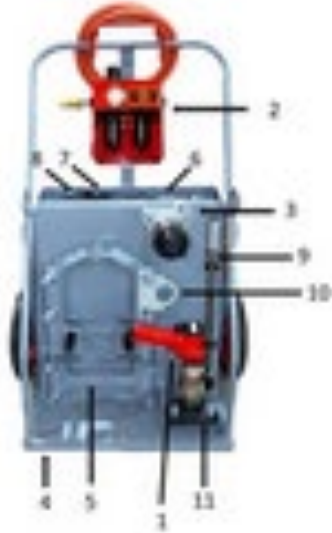
This adapter has a 5/8" box end and a 1/2" square drive to be used on the 5/8" Exhaust Manifold Bolts on GE FDL Engines.

**T55701 Exhaust Manifold Ratchet Wrench**

This is a 5/8" ratcheting wrench with a 5/8" open end on the opposing side for removing and installing GE FDL Exhaust Manifold Bolts. This wrench can be used as a speeder, but final torque should be done with a T55572 Torque Kit.

	<p>T55670 Cylinder Hold Down Bolt Torque Centering Device GE FDL Engines</p> <p>This device is shown on the T15971 reaction fixture. Some machinists prefer to remove the extension, universal and socket from the air motor when performing power assembly bolt removal and installation. This device holds the input of the extension in place so as to aid the installation of the air motor into the extension.</p>
	<p>T55572A Exhaust Manifold Adapter</p> <p>This is a 5/8" 12 point adapter that is used with the T55570W Handle to remove GE FDL Exhaust Manifold Bolts.</p>
	<p>T55470 GE FDL Engine Cylinder Hold Down Bolt Spinner Wrench</p>
	<p>T54890 Horizontal Cylinder Power Assembly Lifter for GE FDL Engines</p> <p>This lifter was designed to raise GE cylinders and power assemblies horizontally. Cylinders are lifted by moving the slider toward the mounting pad stop. To lift power assemblies, move slider toward handle.</p>
	<p>T54764 Welded FDL Head and Liner Lifter</p> <p>This lifter quickly clamps the body of the cylinder liner and locks in place. It is designed to allow rotation and positioning of this heavy assembly, easing handling in the rebuild and teardown areas.</p>

	<p>T54552C Cylinder Lifter for GE FDL Engines</p> <p>This lifter is used to install and remove a GE FDL cylinder from the main frame (Power assembly less piston and rod). It will slide along the center of gravity from a horizontal shipping position to the 22 1/2 degree installation position with minimal effort.</p>
	<p>T54552 Power Assembly Lifter for GE FDL Engines</p> <p>This lifter was developed to solve the problem of rigging a GE Power Assembly from the shipping position - (laying on the exhaust port side) to the 22 1/2 degree engine installation position. A 112 1/2 degree trolley is incorporated, allowing an operator easy repositioning of the power assembly. (See Photos)</p>
	<p>T51442 Exhaust Manifold Wrench - 15 16 inch 12 point Y shank</p>
	<p>T50390 1 5/8" - 12 Insert for GE FDL Cylinder Hold</p> <p>Down Bolt Threads These hardened inserts are threaded into the GE FDL main frame to accommodate the cylinder hold down bolts. They can be installed/removed with the T13221 or T13222 Insert Torque Adapters.</p>
	<p>T50072 Heavy Duty Kit for Removing Cylinder Hold</p> <p>Bottom of Form The T16070 Air Motor is rated at 4000 N.m / 2950 lb.ft.. Used mainly for stripping engines at overhaul.</p> <ul style="list-style-type: none"> 1 T16070 Torque Motor 1 1/2" sq. drive 2 T15971 Reaction Fixture 3 T50081 Extension 1 1/2" sq. drive 4 T50090 Universal Joint 1 1/2" sq. drive 5 T50101 2" 6 point Socket 1 1/2" sq. drive 6 T50041 Air Control Kit 7 T67660 Reaction Bracket

**T24102 GE FDL Cylinder Hold Down Bolt Pneumatic Torque Wrench Kit**


This kit enables all shops to precisely control cylinder bolt torquing. It is the most complete kit offered. The air pressure is set on the air control kit in accordance with the individual motor torque curve while the air motor is running unloaded. The proper air setting will produce 1,350 lb.ft. cylinder bolt torque when the motor stalls during torquing. The 25:1 Verifier is used to audit the results and minor air pressure corrections may be needed.

1. T16071 2950 lb. Ft. Air Drive Torque Motor
2. T50041 Air Control Kit complete with cage
3. T23600 25:1 Torque Verifier w/anti wrap up feature
4. T23980 Cart
5. T15971 Reaction Fixture
6. T15980 Extension
7. T15990 Universal Joint
8. T16001 Socket
9. T22520 30-250 lb. Ft. 1/2" drive ratcheting torque wrench
10. T55670 Cyl. HD Bolt Torque Centering Device
11. T67660 Reaction Bracket

**T23831 Reaction Plate**

This reaction plate is used with the T16050 Air Motor and T23600 Torque Verifier. It is used to interface with the T15971 reaction fixture used when removing and installing GE FDL power assemblies. It can also interface with barring arbors.

This plate is held onto the torque motor or verifier with twelve 1/4"-BSF x 5/8" British Whitworth Socket Head Cap Screws torqued to 184 Lb/In.

	<p>T23610 Manual Cylinder Hold Down Bolt Torque Kit</p> <p>The T23610 torque kit provides a moderately priced, most accurate alternative to the T15681 Pneumatic torque-controlled wrench for GE Cylinder Hold Down Bolts. The torque multiplier features a 1/2" square female input and a 1" square output. 56 lb.ft. input torque will result in 1400 lb.ft. required output torque. The torque multiplier is also equipped with an input ratcheting mechanism that eliminates drive line wrap-up, assuring maximum utilization of input motion and effort. The torque verifier is certified to be torque accurate to +/- 3%. Repair and return service is available.</p> <ol style="list-style-type: none"> 1. T22520 1/2" drive ratcheting torque wrench (30-250 lb. Ft.) 2. T15971 Reaction Fixture w/T50830 HD Clamps 3. T23600 25:1 Torque Multiplier 4. T13020 Locking Pin (3 required) 5. T13030 O-Ring (3 required) 6. T15980 Extension 7. T15990 Universal Joint 8. T16001 Socket 9. T50830 Heavy Duty Clamps
	<p>T23600 25:1 Torque Verifier For FDL Cylinder Hold Down Bolt Torque Verification</p> <p>This tool has a 1" square drive output and a 1/2" drive input with an anti wrap-up feature to prevent the torque wrench from releasing backward during torque buildup. 25:1 verification ratio. Rated to 2500 Ft. Lb.</p>
	<p>T22331 Quick Release Pins for T18703 Cylinder Jacket Lifter</p>

**T22303 GE FDL Compression Tester Set**

This set is used to test Cylinder Compression on GE FDL 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 T13683 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 T22303 Set contains:

- 8 T13683 FDL Compression Testers
- 1 T50960 Governor Stop Block
- 1 T22711 Storage Box

**T21500 Cylinder Compression Relief Hole Air Valve Adapter**

This tool allows for shop air pressure to be introduced through compression relief hole to pressurized firing chamber.

**T20241 Cylinder Head Lifter for GE FDL Engines**

This tool is used to lift cylinder heads during cylinder assembly. It is used with a hoist to lower the head into the cylinder jacket.

**T19923 GE FDL Front Mount Power Assembly Lifter**

This lifter mounts on the air inlet boss of the cylinder with four 5/8"-11 high tensile captive cap screws. The T19923 provides for the 22 1/2 degree engine installation position as well as the vertical lift. 4 - T13800 5/8"-11 mounting bolts are required.

**T19922 FDL Power Assembly Lifter - Front Mount With Hydraulic "A" Frame**

This lifter allows for the 22 1/2 degree (engine) and vertical cylinder pick up by re-positioning the "A" Frame Assembly. This feature allows the machinist to pull a cylinder or power assembly from the engine (22 1/2) and reposition it to vertical without re-rigging lift points. This facilitates placing the used cylinder in a vertical mount shipping container. Cylinders or power assemblies can also be lifted from the shipping container and tilted 22 1/2 degrees to accommodate engine mounting. A hydraulic jack is used to re-position the "A" Frame.

Caution: When removing or installing cylinders on the engine, the forward pin must be installed to assure the maximum safety factor of the design. The jack is used to re-position the "A" Frame only, and the forward pin is used to carry the loads imposed by jockeying the cylinder or power assembly on or off the engine.

**T19280 GE FDL Cylinder Service Fixture**

This fixture is used to aid assembly and disassembly of engine cylinders. Lifter pads are bolted to the inlet and exhaust ports of the cylinder to create rotation points for the cylinder. The pads establish a center of gravity for the cylinder and turning the cylinder requires a minimum of effort. A toggle clamp is provided to lock the cylinder in various service positions. A cylinder lifter is also provided to facilitate loading and unloading the cylinder from the fixture.

1. T19290 Cylinder Service Fixture
2. T23071 Exhaust Lifter Pad
3. T23061 Intake Lifter Pad
4. T19321 Cylinder Lifter

**T18703 Cylinder Jacket Lifter for GE FDL Engines**

This tool is used in back shops where handling the cylinder jacket requires a quick method of hookup and release. The two short pins allow upright jacket pickup through the rocker shaft holes and the two long pins allow for inverted cylinder jacket pickup through the cylinder mounting holes.

- 1 T18691 Lifting Pins (Long) 2 required
- 2 T18681 Lifting Pins (Short) 2 required
- 3 T22311 Shackle - 2 required
- 4 T22331 Quick Release Pins - 2 required
- 5 T22651 Cable assembly w/spring loaded safety hooks (2 required)

**T18400 Magnetic Base Drill Kit 230 Volt**

The magnetic base drill is used to re-drill and tap the engine main frame when cylinder hold down bolts strip. A plate with hardened liners fits into the cylinder assembly hole in the main frame. Two special hold down bolts are then inserted through the matching hardened bushings adjacent to the stripped hole, and tightened. The magnetic base drill fits on the plate over the hole to be drilled and is secured by the electromagnet. The drill can be precisely centered by the use of the swivel base on the drill stand, without removing power from the magnetic base. In this manner, the drill can be guided into the precision bushing.

The T18400 230V Drill is no longer available as a stand alone unit, however, we now offer a T66000 transformer that will connect with 230 Volts and transform to 115 V. These are available in 50 or 60 Hz configurations, and will allow the T18300 to work in locations that only supply 230 Volt power. Warning: secure power line to power outlet so the circuit cannot be interrupted. If power to the magnetic base is interrupted, the drill could fail and cause personal injury.

The drill stand is equipped with a two speed motor (250/500 RPM). It is suggested that the 250 RPM be used for drilling. A special tool is furnished to countersink the hole to the correct diameter. A tap and tap holder can be used with the drill motor to start the threads in the hole. Caution: DO NOT engage drill feed. Final tap by manual means when nearing the bottom of hole.

The magnetic base drill set accomplishes the precise job of drilling and tapping the holes for application of the hardened insert. Note: A complete set of instructions is furnished with each magnetic base drill set.

T18290 115 Volt Drill Stand

T66000 Transformer - 230V to 115V

T18360 Guide Plate with Hardened Fasteners

T18420 1 1/4" Cylinder Bolt Bushings (2 required)



T18430 1 35/64" Bushing

T18370 2 1/16" Bushing

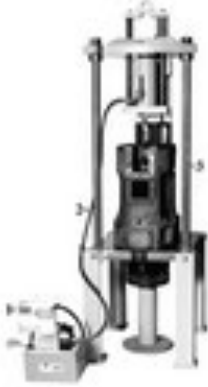



T18340 Tap Holder





T18330 1 5/8"-12 Special Tap





T18380 2 1/8"-16 Special Tap

	<p>T18350 Counterbore Extension T18310 1 11/16" Special Counterbore with Pilot T18320 1 35/64" Drill T18390 2 1/16" Drill T18441 Guide Plate Hold Down Bolts (2 required) T18450 2 1/8"-16 Repair Plug (6 supplied) T50390 1 5/8"-12 Insert (6 supplied) N405P19 Lock washers (6 supplied) T13221 Insert Wrench - shown on page B9</p>
	<p>T17480 5000 PSI Hydraulic Cylinder Leak Test Fixture for GE FDL Engines 230 Volt</p> <p>This fixture is supplied with all the hardware, hydraulic pump and necessary accessories to completely test rebuilt cylinders at 5000 PSI. Follow the GE instructions for exact details of the test.</p> <ol style="list-style-type: none"> 1. T14330 Motor Driven Pump 230 Volt 2. T10200 Hose 3. T17590 Valve and Plug Adapter 4. T17580 Gauge and Dummy Injector Assembly 5. T50230 Hold Down Bolt and Washer (4 required) T17660 "O" Ring for Piston (6 required) T19350 45 degree Test Valve (2 supplied) T19360 15 degree Test Valve (2 supplied) T21730 "O" Ring for test valves (12 supplied) 6. T17490 Stand 7. T17500 Test Fixture 8. T17700 Gage only 0-10,000 PSI 9. T50240 Set of Blanking Plates - 1 water 2 way
	<p>T16843 Cylinder Hold Down Bolt Impact Wrench Set W/ Air Control Kit</p> <p>The following kits provide the most rapid removal of cylinder hold-down bolts on GE engines (4 bolts per cylinder). Used for removal only.</p> <p>The T16843 kit provides an air control kit with a filter regulator and oiler assembly which greatly enhances the useful life of the wrench. Maximum shop air pressure should be used to remove the bolts.</p> <ol style="list-style-type: none"> 1. T16811 #5 Spline Drive Impact Wrench 2. T16830 Extension 3. T16820 Socket 4. T50041 Air Control Kit

	<p>T16842 Cylinder Hold Down Bolt Impact Wrench Set</p> <p>The following kits provide the most rapid removal of cylinder hold-down bolts on GE engines (4 bolts per cylinder). This kit comes without an air control kit and is used for removal only.</p> <p>The T16843 kit provides an air control kit with a filter regulator and oiler assembly which greatly enhances the useful life of the wrench. Maximum shop air pressure should be used to remove the bolts.</p> <ol style="list-style-type: none">1. T16811 #5 Spline Drive Impact Wrench2. T16830 Extension3. T16820 Socket4. T16040 Hose5. T21950 Oiler6.
	<p>T16811 - #5 Spline Drive Impact Wrench for Cylinder Hold Down Bolt Removal Only- GE FDL Engines</p> <p>3500 Ft. Lb. Max Torque Rating.</p>
	<p>T16730 Cylinder Head Alignment Tool for GE FDL Engines</p> <p>This tool is useful for aligning cylinder heads in the jacket during the cylinder assembly process. It enters the compression relief plug hole and engages the mating hole in the head. The pipe thread end is screwed into the head and the follower screwed toward the head to perfectly line up the passageway. The follower should be backed off before the liner is pressed into the jacket, otherwise damage to the tool could result.</p>

	<p>T16712 Hydraulic Cylinder Liner Remover 230 Volts</p> <p>This tool is used to hydraulically remove cylinder liners from GE FDL Cylinder Jackets. The top portion of the fixture swivels out of the way easing the loading and removal of the cylinder assembly. A T16712 is 230 Volts.</p> <ol style="list-style-type: none">1. T14330 Motor Driven Pump 230 Volt2. T10200 Hose3. T16710 Puller Complete with Ram
	<p>T16500 5:1 Torque Verifier</p> <p>This torque verifier has a 1" square drive output and a 3/4" square drive input. It operates between 250 and 2,500 Lb/Ft and has a 5:1 multiplication ratio. This is shown with the T23831 Reaction Plate.</p>
	<p>T16065 Power Assembly Lifter rear mount for GE FDL Engines</p> <p>This lifter is mounted on the rear of the cylinder by two T13791 1/2"-13 Grade 8 bolts at the water outlet boss. Vertical and 22 1/2 degree pick up points are provided. Rated Load: 1,050 Lbs</p>
	<p>T16051 Air Motor 1 1/2" Drive</p> <p>This motor has an 1 1/2" square drive and is used in the T50071 Heavy Duty GE FDL Cylinder Hold Down Bolt Torque Kit as well as both the T50031 and T50032 EMD Crab Nut Torque Kits.</p> <p>650 to 2,500 Lb/Ft 880-3,400 NM Max Air Pressure: 5 Bar Free Run Speed: 5 Revs/Min</p>

	<p>T16050 Torque Motor 2500 Lb/Ft</p> <p>Shown here with the T23830G reaction plate for barring over GEVO Engines.</p> <p>This air motor is used primarily for two operations. The T16050 is used in the T24101 and T15681 Kits to install and remove GE FDL Cylinder Hold Down Bolts and comes equipped with a T23831 Reaction Plate. The other configuration (shown here) is for barring the EVO and Tier 4 engines and is equipped with a T23820G Reaction Plate.</p> <p>TESCO offers complete repair and calibration service with rapid turnaround.</p> <p>650 to 2,500 Lb/Ft 880 to 3,400 NM +- 5% Accuracy Max Air Pressure: 5 Bar Free Run Speed: 5 Revs/Min</p>
	<p>T16031 0-160 PSI Gauge for Air Control Kits</p>
	<p>T15971 Reaction Fixture for FDL Cylinder Bolt Torquing and Removal</p> <p>This fixture was designed to securely attach to GE FDL Power Assemblies and allow a T16050 Air Motor or T23600/T16500 Torque Verifier to install or remove PA Bolts.</p>
	<p>T15682 Pneumatic FDL Power Assembly Bolt Torque Wrench Kit</p> <p>This set features the T16071 1" Drive Air Motor and a 5:1 Torque Verifier for checking final torque. This kit does not include a cart or a torque wrench.</p> <ol style="list-style-type: none"> 1. T16071 2950 lb. Ft. Air Drive Torque Motor 2. T50041 Air Control Kit complete with cage 3. T15971 Reaction Fixture 4. T15980 T15980 Extension 5. T15990 T15990 Universal Joint 6. T16001 T16001 Socket 7. T16500 5:1 Torque Verifier 8. T55670 Cyl. HD Bolt Torque Centering Device 9. T67660 Reaction Bracket

	<p>T13683 Compression Tester Individual Tester for GE FDL Engines</p> <p>Compression Testers Presently over 20000 of these testers are in service around the world and represent an outstanding product. Through their use, customers can very quickly determine faulty cylinders. They have virtually eliminated earlier blow-by test procedures. Complete instructions are included.</p> <p>Individual Testers T13683 Compression Tester - GE</p> <ul style="list-style-type: none"> 1 T50121 Gauge 2 T50330 Tee 3 T50341 Nipple 4 T50142 Release Valve 5 T50131 Check Valve 6 T50192 Filter 7 T50171 Socket 11 T50420 GE Adapter - complete w/plug
	<p>T13670 Power Assembly Guide Pin for GE FDL Engines</p> <p>These pins aid positioning power assemblies onto the main frame by guiding the cylinder locating boss into the main frame.</p>
	<p>T13222 Cylinder Hold Down Bolt Insert Wrench</p> <p>The T13222 wrench is equipped with a 1/2" square female drive and is intended to be used with an impact wrench to strip engines.</p>
	<p>T13221 Cylinder Hold Down Bolt Insert Wrench</p> <p>Two models of cylinder bolt insert wrenches are available for GE Engines: the T13221 and the T13222. The T13221 is equipped with a 3/4" female drive and a brass pilot. This wrench is intended for torquing and removal of inserts. The T13222 wrench is equipped with a 1/2" square female drive and is intended to be used with an impact wrench to strip engines.</p>

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T10300 Liner Bore Gage 9.000 Inch Diameter For GE FDL Engines






This tool is used to measure the inside diameter of the cylinder liner. The gage set comes with sufficient mandrels to measure from 6" to 12 1/8" diameter. The long shank allows for readings to be taken along the whole length of the GE liner.

This tool should be used with T10310 Gage and micrometer standard to establish the exact 9.000" reference diameter. The liner bore gauge measures bores with an accuracy of .0001".



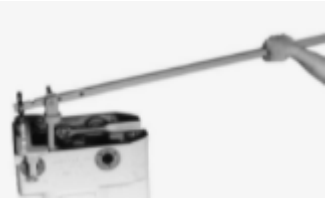


Pistons and Valves

	<p>T10310 - Piston Ring Gauge and Micrometer Standard - for 9.000" Bore - GE FDL Engines</p> <p>This tool has a 9.000 inch bore and is useful to measure piston ring wear (gap). A slot in the side of the box allows entrance of feeler gauges to measure the gap. Also, zeroing the cylinder liner bore gauge is accommodated by the 9.000" bore. Cylinder liner wear can be measured in this manner.</p>
	<p>T10421 Tappet Adjusting Wrench</p> <p>This wrench is used to tighten and loosen the tappet locknut and adjust tappet clearances</p>
	<p>T10472 Valve Seat Grinding Kit For GE FDL Engines</p> <p>These sets are used to face valve seats in cylinder heads. Grinding wheels are finished for 45-degree seats on one side and 15-degree seats on the other. The sets come complete with metal box.</p> <p>The dressing tool has been replaced by the T67680 (2) and T67670 (2A) lathe tools. The wheel is threaded onto the T67680 wheel holder, clamped in a chuck of an engine lathe and re-dressed using the T67670 diamond tip dressing tool.</p> <ul style="list-style-type: none"> 1 T10471AD Air Driver 2 T67680 Wheel Holder for Lathe 2A T67670 Diamond Cutting Tool Holder 3 T18810 Dressing Tool - Rough T18820 Dressing Tool - Finish 4 T10610 Grinding Wheel - 30 Degree T10620 Tapered Pilot 9/16" Standard T10630 Tapered Pilot .001 Oversize T10640 Tapered Pilot .002 Oversize T10650 Tapered Pilot .003 Oversize T10660 Tapered Pilot .004 Oversize T10670 Tapered Pilot .005 Oversize 5 T10500 Dial Indicator 6 T10510 Spring 7 T10541 Wheel Holder (2 Required)

	<p>T10892 Piston Ring Compressor - GE FDL Engines</p> <p>A must tool for assembling the piston with rings into the liner. A 9.000" diameter is ensured, which enables easy liner installation. All hinge loops have been welded to ensure bore integrity with use.</p>
	<p>T10892H Piston Ring Compressor Handle</p> <p>This handle is used as an alternative to the standard nut included with the T10892. The handle is threaded and attaches to the threaded lock and tightened and can then be used to guide the compressor without touching the piston.</p>
	<p>T10900 Piston Support Bar for GE FDL Engines</p> <p>This bar is inserted into the main frame bore under the piston skirt, positioning the piston properly to accept installation of the cylinder assembly. The piston position can be aligned by barring the crankshaft.</p>
	<p>T10980 Piston Ring Groove Scraper for GE FDL Engines</p> <p>This scraper is used to clean piston ring grooves prior to placing new piston rings on pistons. This operation ensures that the new rings can travel freely in the ring lands.</p>
	<p>T10980W Wide Groove Scraper for Oil Control Ring Groove on Cutback Pistons - GE FDL Engines</p> <p>This tool is equipped with a larger insert to scrape the wider oil control ring groove on cutback pistons.</p>
	<p>T10992 Piston Ring Expander GE FDL and EMD 645 and 710 Engines</p> <p>Superseded to T10993. Picture for reference only.</p>

	<p>T10993 Piston Ring Expander</p> <p>This is the newest version of the GE FDL and EMD piston ring expander. The tool incorporates a more precise radius and gripping tabs to grab and hold the piston rings for easy expansion. The handle has an internal spring return and is a lightweight alternative to the previous versions.</p>
	<p>T13261 Piston Pin Locating Dowels GE FDL Engines</p>
	<p>T14062 Piston Retainer for GE FDL Engines</p> <p>T14062 This tool is extremely useful when removing power assemblies by retaining the piston and rod in the liner. It also has wide use as a power assembly shipping aid.</p>
	<p>T14420 Valve Guide Driver for GE FDL Engines</p> <p>These drivers are essential to drive new valve guides in cylinder heads and to drive the fuel tappet rod guide into the cylinder jacket when rebuilding cylinder assemblies</p> <p>T14420 Valve Guide Driver - Shown as Item #1 in Diagram</p> <p>T14430 Tappet Rod Guide Driver - Shown as Item #2 in Diagram</p>
	<p>T14430 Fuel Tappet Rod Guide Driver for GE FDL Engines</p> <p>These drivers are essential to drive new valve guides in cylinder heads and to drive the fuel tappet rod guide into the cylinder jacket when rebuilding cylinder assemblies.</p> <p>T14430 Tappet Rod Guide Driver - Shown as Item #2 in Diagram</p> <p>T14420 Valve Guide Driver - Shown as Item #1 in Diagram</p>

	<p>T16792 Valve Checking Fixture for GE FDL Engines</p> <p>The valve checking fixture is used to re-qualify engine valves after rework. Valve stems can be checked for straightness, minimum diameter and proper length of keeper groove to stem end. Valve head thickness and seat run-out can be measured for both 15 degree and 45 degree valves. Valve head concaveness can also be measured. This fixture is equipped with one each 15 degree and 45 degree head gauges and a .5515 minimum stem diameter master mandrel for zeroing the stem checking gauge.</p>									
	<p>T18412 Piston Pin Bolt Torquing Kit for GE FDL Engines</p> <p>This kit was developed to allow torquing and removal of piston pin bolts by one machinist. Earlier T18410 wrenches required a second machinist to react the input of the wrench and ensure that the input location remained in line with the bolt. The new kit provides a guide cap that locates and reacts the input of the new wrench. (see below photo)</p> <table border="0"> <tr> <td>1</td> <td>T18412C</td> <td>Cap</td> </tr> <tr> <td>2</td> <td>T18412W</td> <td>Wrench</td> </tr> <tr> <td>3</td> <td>T15110</td> <td>15/16" 12 point drive socket</td> </tr> </table>	1	T18412C	Cap	2	T18412W	Wrench	3	T15110	15/16" 12 point drive socket
1	T18412C	Cap								
2	T18412W	Wrench								
3	T15110	15/16" 12 point drive socket								
	<p>T18593 Piston & Rod Assembly Lifter for GE FDL Engines</p> <p>The model T18593 piston and connecting rod lifter has been designed to eliminate the nuisance of screws and fittings that loosen with use, common on the earlier model T18590. This model features a snap open, snap closed operation with a safety catch in the closed position. We feel it is considerably easier to operate than all prior piston and rod lifters.</p>									
	<p>T19450 Manual Multiple Valve Spring Compressor Kit for GE FDL Engines</p> <p>This valve Spring Compressor will compress all four valve springs at one time allowing easy installation and removal of the valve spring keepers.</p>									

	<p>T19510 Piston Protector Set for GE FDL Engines</p> <p>The piston protector is clamped to a piston that has been exposed in an engine and provides protection from damage that may occur, should the engine be barred over to perform other maintenance. The protector slides up and down the main frame bore instead of the piston body.</p>
	<p>T19590 Hydraulic Ram and Pump Set for Use With T19450 Multiple Valve Spring Compressor Kit</p>
	<p>T21481 Single Valve Spring Compressor for GE FDL Engines</p> <p>The single valve spring compressor is used to compress one valve spring at a time. This allows for valve spring retainer removal or installation. This tool can also be used on the diesel engine by applying the T21500 air valve adapter in the compression relief hole and barring the engine over until all 4 valves are closed and the piston positioned at top dead center. Shop air is supplied to the air valve adapter thus forcing the valves to seat. Valve rotators and broken valve springs can be replaced in this manner. Install tool as illustrated in photo. T21481 Single Valve Spring Compressor T21500 Air Valve Adapter (not shown)</p>
	<p>T23221 Piston Retainer for GE FDL Engines</p> <p>This retainers main use is to aid conn rod bearing change outs by positioning the piston high in the cylinder and allowing for the crank shaft to be rotated out of liner bore. Once the bearing shells have been replaced, the crank shaft can be rotated back into the bore.</p>
	<p>T52060 Cylinder Valve Feeler Gauge for GE FDL Engines</p> <p>This feeler gauge features two feeler ends, .030 for exhaust valve setting and .020 for inlet valve setting. Both ends are also bent to accommodate ease of placement.</p> <p>T52060-.020 Replacement Tip T52060-.030 Replacement Tip</p>

	<p>T57432 Valve Retaining Tool GE FDL Engines</p> <p>This tool is installed into the cylinder liner after the valves have been placed to prevent the valves from falling out when the cylinder is rotated to install the keepers. The 1/2" hex is turned to compress the urethane ring against the liner bore.</p> <p>The T57432 comes with a 1/2" Hex Driver, an extension, and 1/2" drive speed handle.</p>
	<p>T66960 Speeder Socket for GE FDL Art Rod Pin Bolts</p> <p>This is an 1 1/8 Inch 3/8 Drive 12 Pt Speeder Socket for GE FDL Art Rod Pin Bolt.</p>
	<p>T66960-15/16 Speeder Socket for GE FDL Piston Pin Bolts</p> <p>This is a 15/16 Inch 3/8" Drive 12 Point Speeder Socket for GE FDL Piston Pin Bolts.</p>
	<p>T67670 Diamond Cutting Tool Holder</p> <p>This tool holds a diamond tip dressing tool and is used w/T67680 to re-dress grinding wheels using an engine lathe.</p>
	<p>T67680 Wheel Holder for Lathe</p> <p>This wheel holder accommodates all the wheels in the T10472 and T10472EMD grinding sets. The 1 1/2" stem is clamped in a chuck of an engine lathe to redress the wheel.</p>
	<p>T87620 - Piston and Rod Lifter for GEVO Engine</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>

GE Main Bearing and Crankshaft**T81255 Web Deflection Gage Assembly w/Storage Box**

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:

T81252-2A Evolution Mandrel

T81252-2B FDL Mandrel

T81252-2C Tier 4 Mandrel for Nitrided Crankshaft

T81252-2D Tier 4 Mandrel for Induction Hardened Crankshaft

**T81254 Crankshaft Deflection Gauge Kit**

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.

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.

Replacement parts are available:

T81252-2A Evolution Mandrel

T81252-2B FDL Mandrel





T81252-2C Tier 4 Mandrel for Nitrided Crankshaft





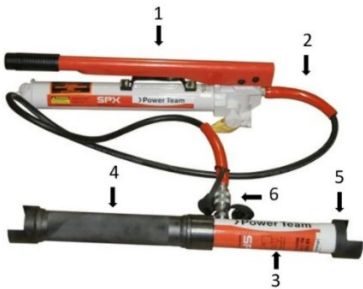
T81252-2D Tier 4 Mandrel for Induction Hardened Crankshaft


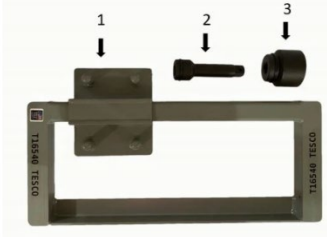



This kit and mandrels come with custom ground carbide points (T81252SP - Sharp Points) which thread into both the mandrel and opposing indicator stem, but can also be substituted for the rounded points (T81252T).

Caution: The dial indicator reads in .0001" increments and is very delicate. This must be treated as a precision instrument otherwise it will break.

	T67480 FDL Main Bearing Reaction Fixture
	T65820K Hydraulic Main Bearing Cap Lifter for GE FDL Engines
	T64611 GE FDL Crank Sensor Alignment Tool Shown here with T59001 GE FDL Magnetic Pickup Setting Tool
	59001 GE FDL Magnetic Pickup Setting Tool Shown here with T64611 GE FDL Crank Sensor Alignment Tool
	T58440P Shear Pin for GE FDL and GEVO Barring Arbors This shear pin is used in both the T58440 GE FDL and the T85650 GEVO Barring Arbors
	T58440 Barring Arbor for GE FDL EFI Engines without a Barring Gear Box The T58440 EFI Barring Arbor is for newer EFI engines that are not equipped with barring gear boxes. The arbor is installed in the new gear cover and secured. The T22040 Barring Over Tool is then used to power the barring arbor, and the operation is essentially the same as on older units. Replacement shear pins are available: T58440P CAUTION: After the barring operation is complete, the barring arbor must be removed from the engine and the gear cover reassembled.

	<p>T55900 Top Dead Centering Device for GE FDL Engines</p> <p>This tool is placed in the #1 right cylinder bore of a GE Main Frame to determine crankshaft top dead center. It is used mainly on new or re-manufactured main frames. The crankshaft is rotated to a position where the travel on the dial indicator is maximum.</p> <p>There may be 2 or 3 points where the crankshaft registers maximum travel on the dial indicator. The crankshaft should be centered in the dead band to locate top dead center. Once the crankshaft is in this location, use the T12300 Timing Tram Bar to mark the #1 right main frame doorway with a prick punch mark approximately 1/8" wide.</p>
	<p>T55560 Main Bearing Cap Lifter Air Bag Style GE FDL Engines</p> <p>This lifter was designed to aid the lowering and raising of Main Bearing Caps during main bearing change outs. It includes a 3/4" x 15" x 15" Jacking Pad that raises to a height of 8" when extended. Also included is a supply hose with throttling valves for raising and lowering the lifter.</p>
	<p>T50250 Manual Barring Over Tool for GE FDL Engines Equipped With a Notched Hub at Free End of Engine</p> <p>This barring over tool is to be used on GE engines that are equipped with a notched hub at the free end of the engine.</p>
	<p>T23094 Main Bearing Stud Stretch Gauge for GE FDL Engines</p> <p>This gage incorporates four adjustments to cover the various length studs in service. A knurled nut is loosened and a slider mechanism is used to line up set marks for the individual stud being measured. The nut should then be tightened. The indicator gage reads upright via the rocker mechanism. The indicator gage can be rotated 360 degrees and clamped at any position to accommodate the various stud locations on the engine. This unit comes complete with a storage box to ensure safe storage.</p>

	<p>T19141 Crankshaft Hydraulic Front Drive Hub Puller Set for GE FDL Engines</p> <p>This set is used to hydraulically pull the front drive and auxiliary drive hubs from GE crankshafts. A retaining plate is supplied to assure the hubs do not pop off the shaft. WARNING: This retaining plate must be used to provide safe removal of hubs.</p> <ol style="list-style-type: none"> 1 T12890 Ram and Pump Set 2 T18950 Retaining Plate 3 T15460 Stud (3 required) 4 T14960 Auxiliary Drive Hub Plate with screws 5 T21470 Front Hub Puller Plate <p>Metal tool Box included as well as various bolts, nuts and washers to complete all operations.</p>
	<p>T18280 - Protective Pad for Master Rod Shank - GE FDL Engines</p> <p>Item #3 In Diagram above. Pad is 10" x 14 1/2"</p>
	<p>T18270 - Protective Pad for Crankshaft Rod - GED FDL Engines</p> <p>Pad is 5 3/4" x 26 1/4"</p>
	<p>T18260 - Protective Pad for Crankshaft Main Journal - GE FDL Engines</p> <p>Pad is 4 1/2" x 28 3/4"</p>
	<p>T17420 Hydraulic Frame Spreader Kit for GE FDL Engines</p> <p>This spreader aids removal and installation of main bearing caps. In many locations, a main bearing cap will not drop once released by the stud nuts and side bolts. The main frame has to be spread slightly to open the machined throat that houses the cap. Placement of the spreader is accommodated by the lower ledge of the main frame.</p> <ol style="list-style-type: none"> 1 T17830 Pump 2 T17840 Hose 3 T22810 Cylinder 4 T22820 Extension 5 T22830 Cap 6 T22840 Coupler

	<p>T16770 Crankshaft Barring Tool for GE FDL Engines</p> <p>This tool is used to bar the crankshaft when an engine is being built up in the back shop and sufficient accessories have not been mounted to allow barring in the conventional manner. It is 48" long with two pins welded to the tubing that accommodate the hole spacing in the crankshaft drive flange.</p>
	<p>T15790 Main Bearing Torquing Kit for Inverted Main Frames GE FDL Engines</p> <p>This kit is used where main frames are inverted to remove and install crankshafts. The T16050 0-2,500 lb.ft. air powered torque wrench is used to provide power.</p> <ul style="list-style-type: none">1 T16540 Main Bearing Torquing Fixture2 T16470 Extension3 T16480 Socket
	<p>T13421 Main Bearing Insert Tool</p>
	<p>T12991 Main Bearing Wrench Right For GE FDL Engines</p> <p>This wrench is used to loosen or torque main bearing studs. Torquing is accomplished by using the T18250 0-1000 lb.ft. 1" square drive torque wrench. This wrench provides a 1" square female drive to accommodate the torque wrench.</p> <p>CAUTION: This wrench requires high input force and care must be exercised to avoid possible injury.</p>
	<p>T12981 Main Bearing Wrench Left For GE FDL Engines</p> <p>This wrench is used to loosen or torque main bearing studs. Torquing is accomplished by using the T18250 0-1000 lb.ft. 1" square drive torque wrench. This wrench provides a 1" square female drive to accommodate the torque wrench.</p> <p>CAUTION: This wrench requires high input force and care must be exercised to avoid possible injury.</p>

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T12300 Timing Tram Bar for GE FDL Engines

This tool is utilized to position No. 1 crankshaft throw to top dead center while installing the crankshaft gear train, per the GE instruction book.

Connecting and Art Rods

	<p>T67590 Master & Art Rod Checking Dowels</p> <p>These dowels are used as a quick go gage for GE FDL Master and Art Rods. The individual dowel is inserted into the oil hole and if the dowel is free to travel through the oil passage it indicates a good rod. If the dowel does not insert completely into the hole that is not necessarily a condemnation of the rod. Casting and drilling discrepancies can affect the oil passage, so the only way to condemn a rod would be to use a T24690 Rod Checking Fixture.</p>
	<p>T54330 Master Rod Cap Lifter for GE FDL Engines</p> <p>Changing Conn Rod Bearings on GE Engines requires the lowering and raising of the Conn Rod Cap. This tool reduces the manual effort required to perform this operation.</p> <p>Recommended Procedure: Install a T14062 Piston Retainer on one side at cylinder location of the bearing change. On the other side of the engine install a T23221 Piston Retainer (much longer leg keeps piston well into cylinder). Bar the engine so the master rod cap swings toward the cylinder that has the T23221 (long) piston retainer installed. Land both pistons on their respective retainers. Remove cap bolts and install the T54330 Master Rod Cap Lifter through the doorway where the T14062 (short) piston retainer is installed. (See application photo). Wiggle the lifter so as to release the cap and then lower it into the crankcase. Rotate crankshaft further to uncover the upper bearing. Pistons and Rods will be held up by their respective piston retainers. Remove bearing halves, clean cap and rod surfaces, install new bearing, and rotate crank back into location. Lift cap into location and bolt.</p> <p>1 T54330P - Replacement Master Rod Cap Lifter Guide Pin</p>

	<p>T24690 Connecting Rod Checking Fixture for GE FDL Engines</p> <p>All connecting rod measurements, parallel and twist can be made with this fixture. The connecting rod has only to be placed in the fixture for all measurements. The master setting mandrels are ground to establish the minimum length acceptable for both rods. By placing the rod into the fixture, the dial indicators indicate how much the rod length is over the minimum. Negative numbers indicate a short rod and the rod should be scrapped. the difference between the indicators tell the operator the "out of parallel" in 8".</p> <p>Twist is measured by placing a shim, measuring at the gap, between the mandrel and the rail.</p> <p>A butterfly mandrel is supplied to mount in the crankshaft bore of the master rod.</p> <table border="0"> <tr> <td>1</td> <td>T24690</td> <td>Fixture</td> </tr> <tr> <td>2</td> <td>T24690CM</td> <td>Crank Mandrel</td> </tr> <tr> <td>3</td> <td>T24690PM</td> <td>Piston Pin Mandrel</td> </tr> <tr> <td>4</td> <td>T24690AM</td> <td>Art Rod Mandrel</td> </tr> <tr> <td>5</td> <td>T24690MSM</td> <td>Master Rod (Min. Length) Setting Mandrel</td> </tr> <tr> <td>6</td> <td>T24690ASM</td> <td>Art Rod (Min. Length) Setting Mandrel</td> </tr> <tr> <td>7</td> <td>T24690RDI</td> <td>Right Hand Dial Indicator Assembly</td> </tr> <tr> <td>8</td> <td>T24690LDI</td> <td>Left Hand Dial Indicator Assembly</td> </tr> </table>	1	T24690	Fixture	2	T24690CM	Crank Mandrel	3	T24690PM	Piston Pin Mandrel	4	T24690AM	Art Rod Mandrel	5	T24690MSM	Master Rod (Min. Length) Setting Mandrel	6	T24690ASM	Art Rod (Min. Length) Setting Mandrel	7	T24690RDI	Right Hand Dial Indicator Assembly	8	T24690LDI	Left Hand Dial Indicator Assembly
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	<p>T18231 - 3/4" Square Drive, 40" Long Ratcheting Wrench for Removing Connecting Rod Cap Bolts</p>																								
	<p>T16551 Master Rod Lifter for GE FDL Engines</p> <p>This lifter aids the proper handling of master rods and features brass jaws that protect the polished flutes of the rod.</p>																								
	<p>T16510 Connecting Rod Service Fixture for GE FDL Engines</p> <p>This tool facilitates the proper holding and rotation of connecting rods made necessary for taking bearing crush readings and piston installation. The rod is held by two brass jaws (T16530) and can be rotated to various positions. The spindle of the fixture is equipped with a</p>																								

	<p>spring loaded plunger and bushing assembly that locates the various service positions and two cam operated clamps that lock the fixture in the service position.</p>
	<p>T14921 Connecting Rod Bearing Retainer for GE FDL Engines</p> <p>These aid replacement of the master rod onto the crankshaft pin by holding the bearing half shell at its spline line.</p>
	<p>T14740D Art Rod Retainer for GE FDL Engines</p> <p>This double pin arrangement retains the rod pin while barring engine.</p>
	<p>T14740 Art Rod Pin Retainer for GE FDL Engines</p> <p>This tool is useful in keeping the rod pin in location while barring the engine during repairs. (This pin has a tendency to slide in its bore and hit the main frame).</p>
	<p>T14582 FDL Art Rod and Piston Pin Bolt Wrench 1 1/8" 12 pt</p>
	<p>T14141 Master Rod Bearing Cap Kicker and Lifter for GE FDL Engines</p> <p>This tool is useful in removing master rod caps. (It cannot be used inside the engine).</p>
	<p>T11220 Art Rod Guide Pin for GE FDL Engines</p> <p>This pin aids placement of the art rod onto the art rod pin. Once the art rod is placed, this pin is removed and the art</p>

rod bolt can be installed easily. This provides perfect thread alignment for the bolt.

**Art Rod and Piston Pin Bolt Wrench for GE FDL Engines**

The various wrench combinations shown here aid in torquing art rod and piston pin bolts on GE engines.


1 T14582 3/4" sq. drive with 1 1/8" 12 point
T14994 3/4" sq. drive with 15/16" 12 point output (not shown)

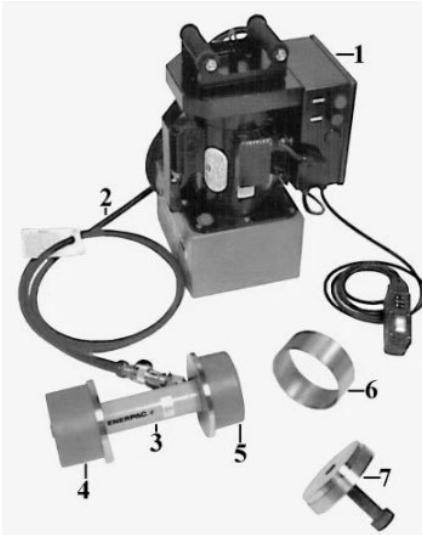
2 T15171 1/ 1/8" hex shank adapter with square drive for T15110 & T15100 sockets. (use with T14582 for piston pin bolts)

3 T15110 3/4" sq. drive 15/16" 12 point socket (use with T15171)

4 T15100 3/4" sq. drive 1 1/16" 12 point socket (use with T15171)

Camshaft

	<p>T65571 FDL Camshaft Gear Alignment Tool</p> <p>This tool is installed in place of the cam gear to accurately position the camshaft during gear replacement. The gear profiles are clearly marked 120 degrees apart and correspond to marks drawn in the cavity. The tool has an 1 1/2" nut machined onto the face for easy turning and is timed with a dowel in the cam side to assure proper position on the shaft.</p>
	<p>T58711 Cam Gear Lifter for GE FDL Engines</p> <p>This lifter attaches to the FDL Cam Gear and is able to rotate the gear freely 360 degrees with a wrench and mating internal gear. The lifter head engages the gear with two plates secured with a through stud and nut. The lifter incorporates ball races to rotate the gear smoothly. The gear is then installed back onto the shaft at the proper position. A handle attaches to the bottom of the lifter to help guide the unit. The head also rotates to aid the lifter and gear into and out of the engine. A locking pin prevents the head from rotating freely.</p>
	<p>T58160 Camshaft Spindle Bolt Speeder GE FDL Engines</p>
	<p>T58120 Cam Bearing Separator GE FDL Engines</p>
	<p>T55991 Camshaft Segment Lifter for GE FDI EFI Engines</p> <p>This lifter was developed to help with the installation and removal of cam shaft sections on GE EFI Engines. The need for this tool was dictated by the much heavier cam section equipping these engines as compared to the older fuel system. The lifter includes a removable "A" Frame which facilitates loading the cam section onto the lifting cradle.</p>



T55961 Hydraulic Cam Shaft Journal Bushing Installer Remover for EFI GE FDL Engines

This tool installs and removes cam shaft journal bushings. It is equipped with a ten-ton ram and two nylon protected pushing mandrels. Installing the first bushing into an engine without bushings requires the use of the starter spacer which fits over one of the mandrels. The other mandrel accommodates the bushing to be installed. The power unit is equipped with a pendant switch with three positions: advance, hold and retract. In the retract position the ram spring returns. Bushing removal is accomplished using the pushing collar provided. The unit comes with a 10' hose and the pump has four casters aiding its movement on the ramp.

* Please specify voltage.

- 1 T14320 Electric Hydraulic Pump - 115V 60Hz
- 1 T14330 Electric Hydraulic Pump - 230V 50/60Hz
- 2 T55961H Hose
- 3 T55961R Ram
- 4 T55961IM Bearing Installation Mandrel (single screw into ram position)
- 5 T55961RM Reaction Mandrel (two screws - onto ram base)
- 6 T55961SS Starter Spacer
- 7 T55961PC Pushing Collar





T54442 FDL Cam Section Bolt Adapter

The T54442 can be used to address FDL Camshaft Section Bolts as well as FDL EFI fuel pump mounting bolts. The outside diameter of the tool is .750 to allow the adapter to clear the tight clearance around the camshaft bolts. This features a Y shank stem.

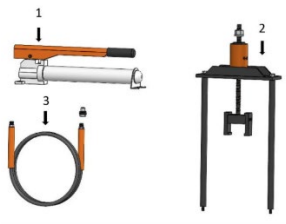












T52090 Hydraulic Cam Bearing Removal Kit for GE FDL Engines With Mechanical Fuel Systems


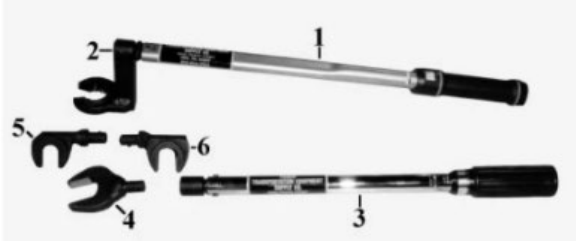



This kit is used to remove those few camshaft bearings that are very difficult to remove. To remove a bearing, the camshaft flange is disconnected one joint toward the generator end of the engine from the identified cam bearing. All crosshead rollers are raised and pinned from the cam bearing location to the free end of the engine. The cam shaft is slid forward toward the free end of the engine sufficiently to mount the four brass spacers in the adjacent







	<p>camshaft bolting flange. The hydraulic ram and adapter assembly is then bolted to the cam flange. The pump is connected to the ram and the cam bearing can then be removed with a minimum of effort.</p> <p style="text-align: right;">T52090 Hydraulic Camshaft Bearing Puller Kit</p> <p>1 T17830 Pump 2 T52230 Hose 3 T52240 Adapter Assembly 4 T52250 Ram 5 T52260 Brass Spacers (4 required)</p>
	<p>T52051 Camshaft Fuel Roller Lifter for GE FDL Engines</p> <p>This tool was designed to ease the job of raising and pinning the cam fuel roller that is required for cam shaft removal. The new two fork design will allow this lifter to work with EFI engines.</p> <p>NOTE: Cam air and exhaust rollers require the removal of the respective push rods in that the valve spring resistance is so great pin shearing will result.</p>
	<p>T11322 Camshaft Bearing Spanner Wrench</p> <p>This tool is used to aid removal and installation of camshaft bearings. During installation it is especially handy in aligning the bolt hole from the main frame. Installed on a cam bearing, two dowel pins fit the two locating holes of the bearing.</p>







GE Fuel Injection

	<p>T41340 Tier 4 Hydraulic Injector Puller</p> <p>1 T17830 - 10,000 PSI Hydraulic Hand Pump 2 T41340LP - Tier 4 Hydraulic Injector Puller Less Pump 3 HO1105 - 10' Hose (10,000 PSI)</p>
	<p>T54442-.75 3/4" 12 Point Adapter</p> <p>This adapter features a 3/4" 12 point socket on a Y shank stem for use with a standard T16491 Torque Wrench.</p>
	<p>T54933A High Pressure Fuel Line Wrench Adapter</p> <p>This adapter is a heavier duty version of the T54932A and can be used with a T54931H Break Loose Handle. It can also be used with the T54931W Wrench for torquing. The adapter and break loose handle can be used as a lightweight alternative to the T50001 High Pressure Fuel Line Wrench. It features a 16 mm Spigot input with a 1 1/4" 12 pt for GE FDL Engines.</p>
	<p>T87090 MAG Test Probe</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>T63260 Fuel Pump Depressor for GE FDL Engines</p> <p>This tool completely depresses the fuel pump onto its seat to allow pump mounting bolt installation. The cup that pushes the pump's threaded inlet is fitted with a brass bushing to protect against thread damage.</p>
	<p>T62792 Mechanical Nozzle Remover with Tip for GE FDL Engines</p>

	<p>T59810 Torque Screwdriver</p> <p>This is a micro adjustable 5 to 40 lb/in torque screwdriver for torquing the 5MM and 7MM Nuts on EFI Fuel Pumps. It is accurate to 6% of the indicated value between 20% to 100% of scale.</p>
	<p>T59570-TP90 Bosch Fuel Pump Adapter Bolt Wrench</p> <p>The T59570-TP90 is a standard T59570 Bosch Fuel Pump Mounting Bolt Adapter with a T200T-I torque handle preset to 90 lb./ft and permanently pinned to the adapter.</p>
	<p>T59570 Bosch Fuel Pump Mounting Adapter</p> <p>This 1/2" 12 point adapter is used with the Y shank T16491 30-150 lb/ft Torque Wrench to torque the front two mounting bolts on the Robert Bosch Fuel Pump. It's unique configuration escapes all the fuel lines that would normally interfere with the procedure.</p>
	<p>T59371S Bosch Fuel Pump Jam Nut Torque Verification Adapters</p> <p>For torque verification only. These 1" open end adapters differ from the T59370L & R in that material was removed and the input angle changed to allow torque verification without removing any fuel lines. The T59371S includes both a right and left hand adapter.</p>
	<p>T59370R Right Hand Jam Nut Adapter</p> <p>This is a 1" open end Y shank adapter for the T59370 Bosch Fuel Pump Kit.</p>

	<p>T59370L Left Hand Jam Nut Adapter</p> <p>This is a 1" Open End Y Shank Adapter for the T59370 Bosch Fuel Pump Kit</p>
	<p>T59370 Fuel Pump Manual Torque Wrench Kit for GE FDL Engines With Bosch Fuel Systems</p> <p>This kit includes everything that is needed to remove/torque the high pressure fuel line as well as the low pressure fuel line. The low pressure adapters feature an offset that allows the machinist to torque the low pressure lines without any interference from the pump and hoses. Also included is the T54931 kit that will allow high pressure fuel line service.</p> <p>1 & T54931 High Pressure Fuel Line Torque Kit 2 Includes T54930W Torque Handle and T54933A Adapter 3 T16491 30-150 lb. Ft. Torque Handle 4 T59141 Low Pressure Fuel Line Wrench 1 1/4" 5 T59370L Left Hand Jam Nut Adapter 1" 6 T59370R Right Hand Jam Nut Adapter 1"</p>
	<p>T59141 1 1/4" Open End Adapter</p> <p>This is an 1 1/4" Y Shank Open End Adapter for the high pressure fuel lines on a GE FDL Engine.</p>
	<p>T57161 5 MM Nut Runner for GE FDL Engines Using Lucas Bryce EFI Fuel Pumps</p> <p>The T57161 5mm nut runner is used for GE engines using Robert Bosch EFI fuel pumps to remove solenoid screws.</p>
	<p>T57160 7 MM Nut Runner for GE FDL Engines Using Lucas Bryce EFI Fuel Pumps</p> <p>The T57160 7mm Nut Runner is for GE engines using Lucas Bryce EFI fuel pumps. This wrench is for the solenoid screw.</p>

	<p>T57150 Fuel Roller Retaining Plates GE FDL Engines</p> <p>For GE engines equipped with EFI fuel systems. These retaining plates hold up the fuel roller while cam sections are being changed out.</p> <p>Note: Use T57150L for left plate and T57150R for right plate</p>												
	<p>T57141 Low Pressure Fuel Line Wrench Adapter 1 1/2"</p> <p>This 1 1/2" adapter is used for removal/installation of the low-pressure fuel lines on EFI engines. It has a 90 lb. max torque value.</p>												
	<p>T56051TA Torque Adapter for T56051 Tappet Nut Torque Wrench Kit</p> <p>This is a 1 1/8" X shank open end torque adapter for the T56051 FDL Tappet Nut Torque Kit.</p>												
	<p>T56051RA Reaction Adapter 1 3/8" Open End Adapter</p> <p>This is an 1 3/8" Open End Adapter with an X Shank drive for reacting the tappet nut on a GE FDL Power Assembly.</p>												
	<p>T56051 Tappet Nut Torque Wrench Kit for GE FDL EFI Engines</p> <p>This kit includes everything that is needed to torque and loosen the fuel tappet nut.</p> <table border="0"> <tr> <td>1</td> <td>T56051RH</td> <td>Reaction Handle</td> </tr> <tr> <td>2</td> <td>T56051TH</td> <td>T300T-I pre-set Torque Handle (200 lb. Ft.)</td> </tr> <tr> <td>3</td> <td>T56051RA</td> <td>1.375 Reaction Adapter</td> </tr> <tr> <td>4</td> <td>T56051TA</td> <td>Torque Adapter</td> </tr> </table>	1	T56051RH	Reaction Handle	2	T56051TH	T300T-I pre-set Torque Handle (200 lb. Ft.)	3	T56051RA	1.375 Reaction Adapter	4	T56051TA	Torque Adapter
1	T56051RH	Reaction Handle											
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4	T56051TA	Torque Adapter											
	<p>T56031 Tappet Rod Holder for GE EFI FDL Engines</p> <p>For GE engines equipped with EFI fuel systems. This tool holds the Tappet Rod in place while making initial adjustment of the tappet nut and the umbrella nut.</p>												

	<p>T55971 Pushrod Height Adjustment Gauge for GE FDL Engines</p> <p>For GE engines equipped with EFI fuel systems. This gauge, nylon bolts and a "zero" setting block are included. This gage is used to properly set the push rod height when the cam lobe is in the set position. This aids proper operation of the high pressure fuel pump and the timing of injection.</p>						
	<p>T54931H Fuel Line Break Loose Handle</p> <p>Is used together with T54933A High Pressure Fuel Line Adapter for breaking loose fuel lines.</p>						
	<p>T54931 High Pressure Fuel Line Torque Wrench</p> <p>The T54931 wrench set includes a T54930W torque wrench and T54933A adapter to accommodate the high pressure fuel lines on GE FDL Engines.</p> <table border="0"> <tr> <td>1</td> <td>T54930W</td> <td>Torque Wrench 22-220 lb. Ft.</td> </tr> <tr> <td>2</td> <td>T54932A</td> <td>High Pressure Fuel Line Adapter</td> </tr> </table>	1	T54930W	Torque Wrench 22-220 lb. Ft.	2	T54932A	High Pressure Fuel Line Adapter
1	T54930W	Torque Wrench 22-220 lb. Ft.					
2	T54932A	High Pressure Fuel Line Adapter					
	<p>T54442 FDL Cam Section Bolt Adapter</p> <p>The T54442 can be used to address FDL Camshaft Section Bolts as well as FDL EFI fuel pump mounting bolts. The outside diameter of the tool is .750 to allow the adapter to clear the tight clearance around the camshaft bolts. This features a Y shank stem.</p>						
	<p>T50001 1 1/4" High Pressure Fuel Line Wrench for Large FDL Fuel System</p> <p>This wrench was designed to remove the most stubborn fuel lines on GE FDL engines equipped with the large fuel system. The wrench is equipped with a 1/2" square drive to accommodate a T22520 ratcheting torque wrench, adding the ability to install the fuel line to the proper torque as well as remove it.</p>						
	<p>T22780 GE Fuel Rack Checking Tool</p>						

	<p>T20702 Universal Fuel Rack Setting Gauge for GE FDL Engines with Mechanical Fuel Systems</p> <p>These gauges allow setting racks from 14 to 28mm and are provided with a master setting block of 21mm for calibration. One gauge will set fuel racks on all GE engines equipped with mechanical racks.</p>
	<p>T18561 - Nozzle Kocker / Remover for GE FDL Engines</p> <p>Both ends are equipped with a large tip for removing nozzles. Replacement tips are also provided with the unit.</p> <ul style="list-style-type: none"> 1 T18580 Large Replacement Tip 2 T18570 Small Replacement Tip (Older engines)
	<p>T15927L High Pressure Fuel Line Torque Kit for GE FDL Mechanical Fuel Systems</p> <p>PLEASE NOTE: Custom tool kits can be quoted based on individual needs and preferences. Please Contact Us to request a custom kit.</p> <p>This kit includes all the equipment required to torque the high pressure fuel system on newer and older GE engines.</p> <ul style="list-style-type: none"> 1 T16491 Torque Handle 30-150 lb.ft 2 T15931 1/2" Ratchet Adapter 3 T14974 Fuel pump mounting wrench 1/2" 12 point (2 included) 4 T54442 12 pt. 1/2" adapter for fuel pump mounting bolt 5 T20250 Socket for fuel injector hold down nuts 6 T24170 Socket for fuel pump banjo fitting (newer engines) 7 T15942 7/8" open end adapter for HP fuel line (small system) 8 T231201" open end for small fuel system low pressure lines and fuel pump banjo fitting 9 T50001 1 1/4" adapter for HP fuel lines on large system 10 T20571 Metal Box



T15926ML Fuel Line Torque Kit for GE Marine FDL EFI Engines

PLEASE NOTE: Custom toolkits can be quoted based on individual needs and preferences. Please Contact Us to request a custom kit.





- 1 T16491 Torque Handle 30-150 lb.ft
- 2 T15931 1/2" Ratchet Adapter
- 3 T20250 1/2" x 3/4" Deep Well Socket
- 4 T59141 1 1/4" Open end Adapter
- 5 T64710 Spanner for Left Hand Locking Nut
- 6 T20571 Metal Box
- 7 T54442 1/2" 12 pt. Camshaft Torque Wrench Adapter
- 8 T15942 7/8" Torque Adapter
- 9 T65920 22 MM Socket
- 10 T14974 Fuel Pump Mounting Wrench
- 11 T18561 Nozzle Kocker
- 12 T18580 Nozzle Kocker Tips



T15926M&SL Fuel Line Torque Kit for GE Marine and Stationary FDL EFI Engines

PLEASE NOTE: Custom toolkits can be quoted based on individual needs and preferences. Please Contact Us to request a custom kit.

- 1 T16491 Torque Handle 30-150 lb.ft
- 2 T15931 1/2" Ratchet Adapter
- 3 T20250 1/2" x 3/4" Deep Well Socket
- 4 T59141 1 1/4" Open end Adapter
- 5 T64710 Spanner for Left Hand Locking Nut
- 6 T20571 Metal Box
- 7 T54442 1/2" 12 pt. Camshaft Torque Wrench Adapter
- 8 T15942 7/8" Torque Adapter
- 9 T65920 22 MM Socket
- 10 T14974 Fuel Pump Mounting Wrench
- 11 T18561 Nozzle Kocker
- 12 T18580 Nozzle Kocker Tips
- 13 T24170 1 5/16" Socket
- 14 T50001 Fuel Line Wrench
- 15 T57141 1 1/2" Adapter

	<p>T15926L Fuel Line Fuel Pump Torque Kit for GE FDL EFI Engines</p> <p>PLEASE NOTE: Custom tool kits can be quoted based on individual needs and preferences. Please Contact Us to request a custom kit.</p> <p>The T15926 Fuel line torque kit contains all the tools necessary for EFI fuel pump removal/installation as well as the high pressure line.</p> <ul style="list-style-type: none"> 1 T15931 Ratchet Adapter 1/2" 2 T50001 Fuel Line Wrench 3 T57141 1-1/2" Adapter 4 T14974 Fuel Pump Mounting Bolt Adapter 5 T24170 1-5/16" Socket 6 T20250 3/4" Deep Socket 7 T16491 30-150 lb. Ft. Torque Handle 8 T54442 1/2" 12 Point Adapter <p>T20571 Metal Box</p>
	<p>T14974 FDL Fuel Pump Mounting Bolt Adapter</p> <p>This wrench is used to torque or remove the fuel pump mounting bolts on an EFI fuel pump. The socket end features a 1/2" 12 point and has a 1/2" square female drive. The total length is 12 1/2" long.</p>
	<p>T14972 Fuel Pump Mounting Wrench (Straight)</p> <p>The T14972 features a 3/8" hex body driven by a 1/2" square drive.</p>
	<p>T14930 Offset Fuel Pump Mounting Wrench for Older FDL Engines</p> <p>This wrench is used to torque or remove the fuel pump mounting bolt below the fuel rack on older engines. It is equipped with an offset to accommodate clearance. The drive is 1/2" square female.</p>

**T11493 Fuel Nozzle Test Stand for GE FDL Engines**

The nozzle test stand is used to check nozzle pop pressures, spray patterns and dribble rates. The tester has an intensifier which allows gradual pressure elevation to allow for close pop observation. The speed connectors utilize "O" rings that require only hand tightening and loosening of the connection.

- 1 T18940 Nozzle Test Stand - Includes Handle and Gauge
- 2 T20691 Gauge
- 3 T14911 Speed Connector - Large Nozzle
- T14911R "O" Ring for Large Nozzle (package of 6)
- 4 T16422 Fuel Line

**T10404 Contoured Rocker Arm Depressor for GE FDL Engines**

This depressor has also been requested by various locations to aid rocker arm depression allowing for pushrod removal and installation. This particular depressor incorporates the same profile escapement as the T10402 which ensures that the depressor will not pop off. It was designed to allow the machinist to push straight forward to depress the rocker arm instead of pulling from overhead.

**T10402 Rocker Arm Depressor for GE FDL Engines**







This depressor has been requested by various railroads to aid Rocker Arm Depression allowing for pushrod removal and installation. This rocker arm depressor incorporates a 60 degree bend in the handle and approximately 15" extra length over the original T10401 Rocker Arm Depressor. These features greatly enhances the machinist's leverage. Also incorporated is a profile escapement where the depressor engages the rocker arm. This ensures that it will not pull off the arm.

**Fuel Pump Rack**







These gauges are used for GE engines with large fuel pump systems. Precise fuel settings can be accomplished by using these gauges. Exact full load settings are made easily by selecting the proper gauge.

- T20290 Fuel Rack Gauge 16 3/4 mm
- T20430 Fuel Rack Gauge 21 3/4 mm
- T20300 Fuel Rack Gauge 17 1/2 mm
- T20440 Fuel Rack Gauge 22 mm
- T20310 Fuel Rack Gauge 18 mm
- T20450 Fuel Rack Gauge 22 1/4 mm
- T20320 Fuel Rack Gauge 18 1/2 mm
- T20460 Fuel Rack Gauge 22 1/2 mm
- T20330 Fuel Rack Gauge 18 3/4 mm
- T20470 Fuel Rack Gauge 23 mm
- T20340 Fuel Rack Gauge 19 mm
- T20480 Fuel Rack Gauge 23 1/2 mm
- T20350 Fuel Rack Gauge 19 1/4 mm
- T21220 Fuel Rack Gauge 23 3/4 mm
- T20360 Fuel Rack Gauge 19 1/2 mm
- T20490 Fuel Rack Gauge 24 1/4 mm
- T20370 Fuel Rack Gauge 19 3/4 mm
- T20500 Fuel Rack Gauge 25 mm
- T20380 Fuel Rack Gauge 20 mm
- T24110 Fuel Rack Gauge 23 3/4 mm
- T20390 Fuel Rack Gauge 20 1/2 mm
- T24120 Fuel Rack Gauge 23 1/4 mm
- T20400 Fuel Rack Gauge 20 3/4 mm
- T24130 Fuel Rack Gauge 24 mm
- T20410 Fuel Rack Gauge 21 mm
- T24140 Fuel Rack Gauge 24 1/2 mm
- T20420 Fuel Rack Gauge 21 1/2 mm
- T24150 Fuel Rack Gauge 24 3/4 mm






GE Turbocharger

	<p>T66990 GE Turbocharger Labyrinth Seal Test Kit for FDL GEVO</p> <p>This kit contains all the tools needed to test the GE Turbocharger Labyrinth Seal.</p>
	<p>T19164TA Turnbuckle and Chain Assembly</p> <p>This is a replacement turnbuckle and chain assembly for the T19164 GE FDL Turbocharger Lifter.</p>
	<p>T67420 GE FDL Turbocharger Diffuser Ring Lifter</p>
	<p>T50370 Turbocharger Transition Section to Exhaust Inlet Casing Wrench</p> <p>This adapter features a 1/2" square drive and a 3/8" Hex output for the GE FDL Turbocharger Transition Section to Exhaust Inlet Casing Bolts.</p>
	<p>T23520 Turbocharger Mounting Bolt Torque Kit for GE FDL Engines</p> <p>All turbocharger mounting bolts on GE Engines require torquing per the maintenance instructions. This kit provides the tools for that practice.</p> <p>1 T22520 1/2" sq. drive ratcheting head 30-150 lb. Ft. torque wrench 2 T23500 Adapter</p>
	<p>T23502 Turbocharger Mounting Bolt Removal Wrench</p> <p>This wrench is 26" long with a bend in the handle and features a 1 1/2" 12 Point Box End for addressing FDL Turbocharger Mounting Bolts.</p>

	<p>T23500-3/4 Turbocharger Mounting Bolt Adapter</p> <p>This version of the FDL Turbocharger Mounting Bolt Adapter features a 3/4" square drive instead of the traditional 1/2" drive.</p>
	<p>T23500 Turbocharger Mounting Bolt Adapter</p> <p>This adapter is used with a 1/2" drive torque wrench to install the turbocharger mounting bolts. It is included in the T23520 Kit.</p>
	<p>T22552 Turbocharger Service Cart</p> <p>This cart was developed to aid the disassembly and assembly of GE Turbochargers. The turbocharger is mounted in the cage and secured with four holds down bolts. The cage is powered by an electric motor and gear that turns 360 degrees in either direction. The motor is operated by a push button and when released a mechanical brake locks the cage in place.</p> <p>Please specify a 115 Volt 50/60Cy 1 Phase unit or a 230V 50/60Cy 1 Phase unit.</p> <p>PLEASE NOTE - for use with GEVO turbochargers, a transition plate (T22552 - 12V GEVO) is required for this unit.</p>
	<p>T22270 Turbocharger Impeller Bearing Puller GE FDL Engines</p>
	<p>T20790 Guide Sleeve for GE FDL 1408/1412 Turbocharger Assembly/Disassembly</p>
	<p>T20780 Guide Sleeve for GE 1616 Turbocharger Assembly/Disassembly</p>
	<p>T20770 Rotor Stud Cap for GE FDL Turbocharger</p>

	<p>T20750 Puller Assembly for GE FDL Turbocharger Compressor Wheel</p> <p>For all GE models except early SAR 1408.</p>
	<p>T20720 Bearing Puller for GE 1616 Turbochargers</p>
	<p>T19164 Turbocharger Lifter for GE FDL Engines</p> <p>This lifter is designed to remove and install all turbochargers on GE Engines. A turnbuckle is provided to assist leveling the turbocharger.</p> <p>Part number for a replacement turnbuckle/chain assembly is T19164T.</p>
	<p>T15250 - BCO Turbocharger Core Plug Spanner Wrench (1-1/2" Hole Spacing x 1-1/8" Male Hex)</p> <p>Spanner Wrench for BCO Turbocharger Core Plugs with 1 1/2" hole spacing. It is equipped with a 1 1/8" male hex to drive the wrench.</p>
	<p>T15240 - BCO Turbocharger Core Plug Spanner Wrench (3/4" Hole Spacing x 1-1/8" Male Hex)</p> <p>Spanner Wrench for BCO Turbocharger Core Plugs with 3/4" hole spacing. It is equipped with a 1 1/8" male hex to drive the wrench.</p>
	<p>T11971 Turbocharger Bearing Installation Tool GE FDL Engines</p> <p>This puller will fit all GE and Elliot H58 & BC370 Turbochargers.</p>
	<p>T11921 Turbocharger Bearing Puller GE FDL Engines</p> <p>For GE 1408 & 1412 Turbocharger and Elliot H58 & BC370.</p>

GE Governor

	T55603AB Spherical Adapter Bolt for T55603 Governor Lifting Tool
	T55603 Governor Lifting Tool with Chain Fall for GE FDL and EMD Engines. This tool is used to remove and install engine governors on both GE and EMD locomotives. A pickup adapter is screwed into the top of the governor, replacing the eye hook and is then slid into the slot at the tip of the lifter. A safety bar is then placed at the end to ensure the adapter does not slide out. It is also equipped with a chain fall configuration that allows for level pickup of the governor.
	T55440 Governor Gear Box Lifter for GE FDL Engines
	T50960 Governor Stop Block for GE Engines with Governors Not Equipped with Shut Down Buttons The Governor Stop Block is placed over the tail rod of the governor and snapped in place, thus preventing the engine from firing.
	T15804 Governor Tail Rod Jack for GE FDL Engines Equipped with a Layshaft This fuel rack jack can be utilized on GE Engines equipped with a layshaft. It can be mounted on a governor gear box with a ratchet and 3/4" socket as well as adjusted to provide the .343 full load fuel position necessary for fuel pump adjustment. It incorporates an emergency trip feature to quickly release the governor tail rod to the shutdown position. This tool is used with the T12962 governor gap gage and the various fuel rack setting gages we supply.

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T15803 Fuel Rack Jacks for GE FDL Engines Without Layshafts

This tool is mounted on the governor gear box and is used to raise the governor tail rod to .343" (use T12962 Governor Gap Gauge) for establishing the full load fuel dimension.





An emergency trip feature is provided to release the jack immediately.







T12962 Governor Gap Gauge for GE FDL Engines

The governor gap gauge provides the .343 full load and 1.000 idle dimensions for setting governors and fuel racks. A must for fuel rack setting.

Traction Motor

	<p>T50920 - Tubing Assembly (2 T50730 Sleeves and 2 T50870 Nuts) For T50850 Pinion Puller Set</p> <p>Items #3,4,5 In Diagram</p>
	<p>T50730 Tubing Sleeve for T50850 Pinion Puller Set</p> <p>Item #3 In Diagram</p>
	<p>T50720 Tubing Only for T50920 Tubing Assembly</p> <p>Item #5 In Diagram</p>
	<p>T50850-APP Air Powered Traction Motor Pinion and Mechanical Hub Puller</p> <p>This mobile cart features an air powered pump to produce 0-40,000 PSI output while using all high pressure (60 degree) fittings throughout the unit. The system incorporates a two-gallon supply tank and air regulator with gauge conveniently placed at waist level. The hydraulic line also incorporates a 40,000 PSI output gauge with a shutoff valve.</p> <p>The cart comes complete with an 8' flexible hydraulic hose with standard high-pressure fittings to attach to the various adapters. The kit is intended to ease pinion and hub removal as opposed to manual kits.</p>

	<p>T59451 U Tube Reaction Bracket with Socket</p> <p>This tool is used with a PT2000 or PTS2000 Air Motor (sold separately) to install and remove U Tube Bolts on GE Traction Motors. The T59451 includes the adjustable height reaction bracket and a 2" six point socket to connect to the 1" drive on the air motor.</p> <p>The reaction bracket shaft is machined with a vertical groove which allows the reaction plate to slide and lock into three different heights to address the various depths of the U Tube Bolts.</p>
	<p>T51631 Traction Motor Commutator End Bearing Nut Spanner</p> <p>This is a 3/4" drive version of the Commutator End Bearing Nut Spanner Wrench design. The spanner features two hardened replaceable pins with machined shoulders fitting snug into the spanner plate. The pins have screwdriver slots for removal from the far side if the pins break. The tool also comes with two bolts to secure the plate to the commutator.</p>
	<p>T65531S Gear Case Plug Tool with Torque Wrench</p> <p>The adapter end has 15/16" and 1" drives and includes a preset torque handle.</p>
	<p>T60292 Induction Heater for Traction Motor Pinions 600-volt Single Phase</p>

**T60221 Induction Heater for Traction Motor Pinions 480 volt Single Phase for GE 761 Motors**

These heaters were designed and developed to aid traction motor pinion removal on General Electric Diesel Electric Locomotives. They are used in conjunction with the conventional hydraulic removal equipment. The procedure was developed as follows: Install the induction heater on the pinion and connect the hydraulic tubing, gauge and pump assembly complete with the proper backing plate. Pump the hydraulic assembly until 15,000 PSI is indicated on the gauge. Turn the induction heater on for 45 seconds then pump vigorously to complete pinion removal. For specific details contact TESCO. We can also help provide complete hydraulic equipment per your specific requirements.

**T60220 Induction Heater for Traction Motor Pinions 230 volt Single Phase for GE 761 Motors**




These heaters were designed and developed to aid traction motor pinion removal on General Electric Diesel Electric Locomotives. They are used in conjunction with the conventional hydraulic removal equipment. The procedure was developed as follows: Install the induction heater on the pinion and connect the hydraulic tubing, gauge and pump assembly complete with the proper backing plate. Pump the hydraulic assembly until 15,000 PSI is indicated on the gauge. Turn the induction heater on for 45 seconds then pump vigorously to complete pinion removal. For specific details contact TESCO. We can also help provide complete hydraulic equipment per your specific requirements.

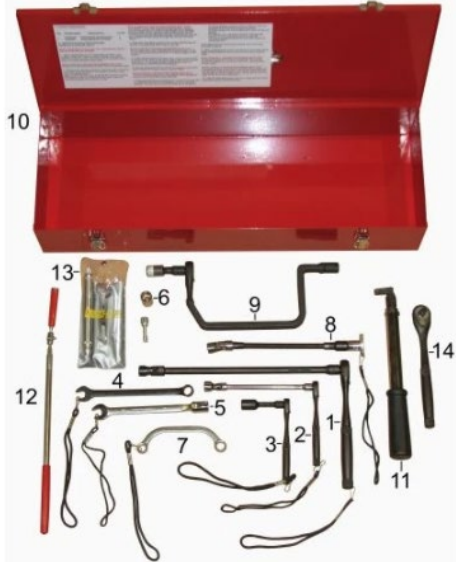
**T60171 Induction Heater for Traction Motor Pinions 460 volt Single Phase for GE 752 and EMD Motors**

These heaters were designed and developed to aid traction motor pinion removal on General Electric Diesel Electric Locomotives. They are used in conjunction with the conventional hydraulic removal equipment. The procedure was developed as follows: Install the induction heater on the pinion and connect the hydraulic tubing, gauge and pump assembly complete with the proper backing plate. Pump the hydraulic assembly until 15,000 PSI is indicated on the gauge. Turn the induction heater on for 45 seconds then pump vigorously to complete pinion removal. For specific details contact TESCO. We can also help provide complete hydraulic equipment per your specific requirements.

**T60170W Induction Heater Winding Only for Traction Motor Pinions 230 volt for GE 752 and EMD Motors**

These heaters were designed and developed to aid traction motor pinion removal on General Electric Diesel Electric Locomotives. They are used in conjunction with the conventional hydraulic removal equipment. The procedure was developed as follows: Install the induction heater on the pinion and connect the hydraulic tubing, gauge and pump assembly complete with the proper backing plate. Pump the hydraulic assembly until 15,000 PSI is indicated on the gauge. Turn the induction heater on for 45 seconds then pump vigorously to complete pinion removal. For specific details contact TESCO. We can also help provide complete hydraulic equipment per your specific requirements.

	<p>T60170 Induction Heater for Traction Motor Pinions 230 volt Single Phase for GE 752 and EMD Motors</p> <p>These heaters were designed and developed to aid traction motor pinion removal on General Electric Diesel Electric Locomotives. They are used in conjunction with the conventional hydraulic removal equipment. The procedure was developed as follows: Install the induction heater on the pinion and connect the hydraulic tubing, gauge and pump assembly complete with the proper backing plate. Pump the hydraulic assembly until 15,000 PSI is indicated on the gauge. Turn the induction heater on for 45 seconds then pump vigorously to complete pinion removal. For specific details contact TESCO. We can also help provide complete hydraulic equipment per your specific requirements.</p>
	<p>T59710-2.53 - Armature Shaft/Pinion Taper Gauge Set for GE 792 Motors</p> <p>For use with GE Traction Motors. Refer to GE Maintenance Instructions for details of operation.</p>
	<p>T59710 Armature Shaft Pinion Taper Gauge Set for GE 761 Motors</p> <p>For use with GE Traction Motors. Refer to GE Maintenance Instructions for details of operation.</p>



T58592 Speed Sensor Installation / Removal Kit - for GE AC Traction Motors

This kit was developed to aid the difficult removal and installation of speed sensors on GE AC Traction Motors. All assemblies have been pinned together and are equipped with lanyards to prevent dropping components into the traction motor cavity. If dropped they must be removed. The head of the sensor mounting bolt is 1/2" across the flats. The various combination of wrenches are useful to provide random access to difficult bolt head locations.

The T58592 kit was recently developed to address the newer truck styles that could not be accessed with the old kit. An inspection flashlight and telescoping magnet have also been included.





- | | | |
|----|-----------|---------------------------------|
| 1 | T58591-1 | Ratchet, Extension & Universal |
| 2 | T58591-2 | Ratchet, Extension & Universal |
| 3 | T58591-3 | Ratchet, Extension & Universal |
| 4 | T58591-4 | Box Wrench |
| 5 | T58591-5 | Flex Box Wrench |
| 6 | T58591-6 | Socket |
| 7 | T58591-7 | "S" Pattern Wrench |
| 8 | T58591-8 | Flex Extension & Socket |
| 9 | T58591-9 | Torque Adapter |
| 10 | T58591-10 | Box |
| 11 | T58591-11 | Torque Handle set at 15 lb. Ft. |
| 12 | T58591-12 | Magnetic Retriever |
| 13 | T58591-13 | Inspection Light & Mirror |
| 14 | T58591-14 | 3/8" Ratchet |


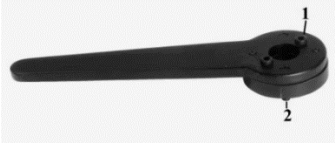




T58580 Spot Facing Tool for Gear Case Bolt Surfaces - GE AG Traction Motors

These tools are used to resurface the bolting surface on used gear cases that were run with loose joints. They re-establish proper bolting surfaces.

- T58430-6 AH Spot Facing Tool
 T58580 AG Spot Facing Tool

	<p>T58430-6 Spot Facing Tool for Gear Case Bolt Surfaces - GE AH Traction Motors</p> <p>These tools are used to resurface the bolting surface on used gear cases that were run with loose joints. They re-establish proper bolting surfaces.</p> <p>T58430-6 AH Spot Facing Tool T58580 AG Spot Facing Tool</p>
	<p>T58300 Gear Case Pneumatic Torque Kit for GE AG and AH Traction Motors</p> <p>This kit torques both AH and AG Gear Case Bolts quickly and properly.</p> <ul style="list-style-type: none"> 1 T20001 Torque Motor (1,500 lb. Ft. max) 2 T58300-RAG Reaction Arm 3 T58300-S AH Drive Socket 4 T58300-SAG AG Drive Socket 5 T58300-2 AH Standoff Adapter 6 T58300-AGSO AG Standoff Adapter 7 T50041 Air Control Kit
	<p>T58090 Socket for Speed Sensor GE FDL</p>
	<p>T58080 Cam Car Bolt Pneumatic Installation Removal Kit GE AC Traction Motors</p> <p>This kit was designed for use on the GE AC traction motor nose supports. It is used to install Cam Car Bolts by twisting the drive tang off ensuring proper installation. In addition a removal socket is included for removal of the bolt.</p> <p>CAUTION: Ensure that the air motor is running off clean air supply with a mist of lubricating oil.</p> <ul style="list-style-type: none"> 1 T20001 Torque Motor 2 T58080-RA Reaction Arm 3 T58080-RS Reaction Socket 4 T58080-CS Cam Car Installation Socket 5 T58080-CRS Cam Car Removal Socket

	<p>T52210K Traction Motor Axle Cap Torque Kit for GE Locomotives</p> <p>This kit consists of a 5 to 1 verifier, rated at 1250 lb.ft., with a 3/4" square female input and a 1" square male output. The kit also includes 2 - 1 7/8" sockets, 2 - 2" sockets, 2 - 2 1/4" sockets, 1 - 10" extension, 1 - 16" extension, 1 - universal joint and a storage box. Most locomotive traction motors can be serviced with these tools.</p> <table border="0"> <tr> <td>1</td> <td>T52210</td> <td>5:1 Verifier</td> </tr> <tr> <td>2</td> <td>T52210-S1</td> <td>1 7/8" Socket (2 required)</td> </tr> <tr> <td>3</td> <td>T16000</td> <td>2" Socket (2 required)</td> </tr> <tr> <td>4</td> <td>T52210-S2</td> <td>2 1/4" Socket (2 required)</td> </tr> <tr> <td>5</td> <td>T52210-E10</td> <td>Extension 10"</td> </tr> <tr> <td>6</td> <td>T52210-E16</td> <td>Extension 16"</td> </tr> <tr> <td>7</td> <td>T52210-UJ</td> <td>Universal Joint</td> </tr> <tr> <td>8</td> <td>T52210-SB</td> <td>Storage Box</td> </tr> </table>	1	T52210	5:1 Verifier	2	T52210-S1	1 7/8" Socket (2 required)	3	T16000	2" Socket (2 required)	4	T52210-S2	2 1/4" Socket (2 required)	5	T52210-E10	Extension 10"	6	T52210-E16	Extension 16"	7	T52210-UJ	Universal Joint	8	T52210-SB	Storage Box
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8	T52210-SB	Storage Box																							
	<p>T51630P Pin for T51630 Spanner Wrench</p> <p>Item #1 Shown in Diagram above. 2 required per wrench.</p>																								
	<p>T51630 Spanner Wrench for Commutator End Bearing Nuts on GE 752 Traction Motors</p> <p>Specifically designed for commutator end, bearing nuts on GE-752 Traction Motors.</p> <table border="0"> <tr> <td>1</td> <td>T51630P</td> <td>Pin (2 required)</td> </tr> <tr> <td>2</td> <td>T51630S</td> <td>Screw (2 required)</td> </tr> </table>	1	T51630P	Pin (2 required)	2	T51630S	Screw (2 required)																		
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2	T51630S	Screw (2 required)																							
	<p>T51560 Universal Traction Motor Pinion Advance Gauge</p> <p>This gauge is improved over prior two leg models in that with three legs an exact plane can be established and very accurate readings obtained. The gauge is calibrated in .001" increments and will accept advance readings up to .250". Three leg diameter positions are provided to ease working on various diameter pinion applications.</p>																								

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T50850GK Traction Motor Pinion Puller Gage Kit

This kit features a 40,000 pressure gage and all the fittings to connect in line with the T50850 Pinion Removal Set. Refer to OEM instructions for the use of this gage with the T50850 for pinion removal.



T50490 Armature Shaft Pinion Taper Gauge Set for GE 752 Motors

For use with GE Traction Motors. Refer to GE Maintenance Instructions for details of operation.

T50850 Hydraulic Traction Motor Pinion Puller Set

The GE 752 Traction Motor Pinion Puller Set has been redesigned to provide all high-pressure fittings rated at 60,000 PSI. The pump provided is rated at 40,000 PSI.

WARNING: This kit is utilized to remove 752 traction motor pinions hydraulically. Pinion retainer plates which bolt into the end of the armature shaft must be utilized when operating this equipment.

NOTE: Tubing as illustrated with 2 - T50730 Tubing Sleeves and 2 - T50870 Gland Nuts is catalog # T50920. *Should you require Pinion Retainer Plates, TESCO will build them to order.

T50890 Retainer Plate for GE 752 armature Shaft with threaded end.

T50900 Retainer Plate for GE 752 Armature Shaft with two threaded 1.00" - 8 holes on end of shaft.

T50910 Retainer Plate for GE 752 Armature Shaft with one threaded 1.00" - 8 hole on end of shaft.

T50850GK Gauge Kit - this kit includes a 0-30,000 PSI gauge and manifold complete with all high pressure connections to be inserted between the pump and tubing assembly.



- 1 T50860 Hydraulic Pump (40,000 PSI)
- 2 T50740 High Pressure Pump to Tubing Adapter
- 3 T50730 (2) Tubing Sleeves
- 4 T50870 (2) Gland Nuts
- 5 T50720 Tubing Only
- 6 T50880

Armature Shaft Pressure Adapter, 9/16"-18 female x 3/8"-24 male





3,4,5 T50920


Tubing Assembly (2 T50730 Sleeves and 2 T50870 Nuts)

Other armature shaft pressure adapter available:

- 1 T50850-FHA Flexible Hose Assembly
- 2 T50880-6 9/16" female x 3/8"-24 male x 6" long
- 3 T50880 9/16" female x 3/8"-24 male
- 4 T66610 MAC 90 Adapter 9/16"-18 female x 1/4"-19 BSP male
- T66610H Same as above w/hex base (not shown)
- 5 T54650 9/16"-18 female x 1/2"-20 male
- 6 T54451 3/4"-16 female x 3/8"-24 male
- 7 T54651 3/4"-16 female x 1/2"-20 male

Test and Control

	<p>T68490 Infrared & Contact Thermometer</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 rated -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>T87090 MAG Test Probe</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>T86670 High Pressure Fuel Pump Light</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>T70102 Digital Multimeter With Case and Leads 1500 Volt DC</p> <p>Voltage 200mv - 1500v DC 200mv - 1000v AC Complete with case and leads</p>

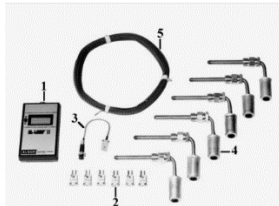
	<p>T67490 - Torque Tester for Click-Style Manual Torque Wrenches 100-1000 N.m</p> <p>This torque tester is designed for use with click type torque wrenches and has one measurement unit - Newton Meters. It features simple operation with only one button on the unit used to zero the display.</p> <p>Operating 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>T66020 Manifold Air Temperature Testing Kit</p>
	<p>T64842 Universal Capacitor Discharge Device for All GE AC Locomotives</p> <p>This set consists of one manual discharge assembly, seven individual shortening assemblies and a portable storage box.</p> <p>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>T57911 Electronic Torque Analyzer for Pneumatic and Hydraulic Wrenches 25 to 4000 FT LBS Universal Input Voltage</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.</p> <p>This tester will accept an input of 1" and 1 1/2" square drives</p>

**T54210 Test Gauge Kit**

This kit has three heavy duty glycerin filled pressure gauges (0-60, 0-100, 0-200 PSI) equipped with Hansen 2-HK Series Sockets. It is used to take pressure readings on locomotives equipped with test fittings. The kit comes complete with a metal box.

All gauges in this kit are available for individual sale. Also available are 30 PSI (T54210-30) and 160 PSI (T54210-160) gauges

- 1 T54210-60 0-60 PSI Gauge Complete with Socket
- 2 T54210-100 0-100 PSI Gauge Complete with Socket
- 3 T54210-200 0-200 PSI Gauge Complete with Socket

**T22062 Pre turbine Temperature Measuring Kit**

The pre turbine temperature measuring kit features a digital instrument with direct readings from -40 to +1,999 F. A chart is attached to the back of the instrument to convert 0 F to 0 C. It is powered by a 9V alkaline battery (radio type). The thermocouple used is of the type K variety. NOTE: The red wire in the thermocouple extension should always be connected to the negative terminal.

- T22062 Pre turbine Temperature Measuring Kit
- 1 T22072 Digital Instrument
- 2 T22090 Connector - Male
- 3 T50260 Adapter (instrument to thermocouple lead)
- 4 T22100 Thermocouple Probe - (6 in kit)
- 5 T22110 100' thermocouple extension type K

**T19951HP Pump with Gage for**

**T19951 Crankcase Overpressure Switch Tester for GE FDL Engines**

This tool is useful in setting pressure trip points on crankcase overpressure switches and in trouble shooting engines that have been reported with COP trips. The gauge is calibrated for +/- 0-20 inches of water.

**T15491 Hand Held Contact Non Contact Tachometer**

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

**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




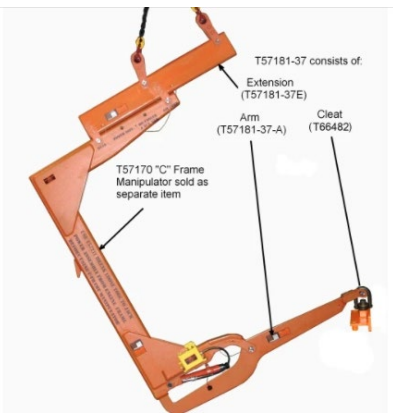
	<p>T54922C Mobile Battery Lifter Storage Cart</p> <p>This storage cart holds the T54923 Battery Lifter and features four casters allowing the cart and lifter to be easily moved around the shop.</p>
	<p>T54923 Battery Lifter for GE FDL Engine</p> <p>This tool was developed to ease the installation and 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.</p> <p>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>T68120 EVO Air Compressor Sensor Tool</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>T41030 Dynamic Brake Grid Lifter</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>T58904 GE Radiator Bank Lifter</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 chains falls are adjustable along the entire beam and are locked in position by tightening the locking pins.</p>








	<p>T80751AB EVO Water Pump Adapter Block</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>T80750AB-FDL FDL Water Pump Lifting Plate</p> <p>This adapter block bolts onto the FDL water pump and is then lifted using the T80750A and T80752 appliance for the "C" Frame Manipulator.</p>
	<p>T70051 Heavy Duty Fan Remover Tool For GE Locomotive GA57 Fan Units</p> <p>This tool is essential for removing radiator fans on GE Locomotive GA57 Fan Units. The tool body is heat treated and the jacking bolt is of grade 8 specification ensuring long life and durability.</p>
	<p>T68050 Torque Adapter Pin Depressor</p> <p>This tool is used to depress the spring plunger on various torque adapters to install or remove from torque wrenches.</p>
	<p>T67040 GE Hand Brake Housing and Housing Flange Bushing Installation Removal Kit</p> <p>This kit contains a mandrel, backing ring and dead blow hammer for use in installing and removing the Housing Flange Bushings on a Ellcon 210 Hand Brake for GE locomotives. It is also used to install the Housing Bushing.</p>
	<p>T66860 DWM Pin Puller Kit</p> <ol style="list-style-type: none"> 1. T66860-1 - Guide Studs 2. T66860-G1 - Main Puller Frame 3. T66860-7 - Saddle 4. T66860-10 - Puller Cap 5. T66860-2 - Puller Block 6. T66860-HS - Replacement Hardware 7. T66860-G2 - Main Puller Stud




	<p>T66560 GE FDL Oil Pump Lifter</p> <p>This tool is attached to the FDL Oil Pump and is lifted using the T57560 Cantilever Lifter. The lifter comes complete with bolts and nuts as shown.</p>
	<p>T66531 BKT Reverser Switch Lifter</p>
	<p>T66500 GE Dynamic Brake Grid Lifter</p> <p>This lifter was designed to ease installation and removal of dynamic brake grids. The hinged lifting paws attach quickly to the grid and minimize grid change out time.</p> <p>Caution: Inspect fit before use. Will not work on any non-GE grids.</p>
	<p>T66490 FDL Water Discharge Elbow Lifter</p> <p>This lifting plate is designed to provide a level lift for a GE FDL water discharge elbow. It features a swivel lifting hook. It is ideally lifted using the T57560 Cantilever Lifter.</p>
	<p>T66482 Air Compressor Lifter Cleat For Wabco 3 Cylinder Air Compressors</p> <p>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.</p>



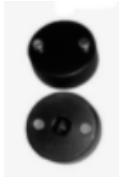

	<p>T66380A Water Pump Lifter Plate with Hoist Ring for GE FDL Engines</p> <p>This plate incorporates a swivel hoist ring to aid in the lifting and easy manipulation of the GE FDL water pump. The plate is connected to the T57560 cantilever lifter or other lifting device to remove and install inside the car body.</p>
	<p>T65770 Plow Straightener</p>
	<p>T63640 Fuel Nozzle Hold Down Stud Remover/Installer</p> <p>This tool has a .250" X .450" slot milled into the face to accommodate the flat on the Tailrod Studs and is driven with a 1/2" square drive.</p>
	<p>T63491-2.375 GE Check Valve Spreader Saddle ID 2.375" Inch</p> <p>The pipe saddle on this jack has an ID of 2 3/8" and a width of 3/4". It has a rotating knurled pad at the base and the length is adjustable by a total of 2 1/4".</p>
	<p>T62610 GE Pipe Jack Saddle</p> <p>The pipe saddle on this jack has an ID of 2.5" and a width of 3". It has a rotating knurled pad at the base and the length is adjustable by a total of 1 3/4".</p>
	<p>T59992 Upright Cylindrical Oil Cooler Lifter Attachment for C Frame Manipulator GE FDL</p> <p>Replacement strap part number is T59991-S</p>

	<p>T59522 Locomotive Motoring Device with 7' Cord</p> <p>The T59521 Reverser Handle plugs into the reverser on the control stand. The other end (plug end) plugs into the electrical jog receptical. A push button switch in the handle is depressed to jog the locomotive forward or backward using the locomotive battery and traction motor to provide power. The locomotive engine need not be started, eliminating smoke and noise.</p>
	<p>T59331 Spreader Beam Lifter Rated for 7 1/2 Tons</p> <p>Rated at 7 1/2 tons - this spreader beam can lift loads such as engine cabs (2 required). Pick up spacing is provided from 48" to 104". Custom sizes/ratings available.</p>
	<p>T59191 GE Engine Stands for FDL and 16 Cylinder HDL Engines Copy</p> <p>The top plate has been adapted to accommodate the 12-cylinder EVO engine.</p>
	<p>T57720 Ground Protection Device for Microprocessor Locomotives</p> <p>This ground protection device is used for microprocessor locomotives & includes a 5 AMP replaceable fuse. It is also equipped with alligator clips on each end for easy connection.</p>

	<p>T57561 11' Long Cantilever Lifter Multiple Use Rated At 700 lbs</p> <p>The T57561 - 11-foot-long cantilever lifter is rated 700 lbs. and is used for heavier locomotive components such as auxiliary generators. It weighs approximately 65 lbs. Lifter is shown here being used with the T55591 EMD Water Pump lifter which is sold as a separate item.</p>
	<p>T57560 8' Long Cantilever Lifter Multiple Use Rated At 375 lbs</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: T62660 - EMD Hinged Water Pump Lifter T67240 - EMD Large Water Pump Lifter T63860 - EMD Scavenger Oil Pump Lifter T66380A - GE FDL Water Pump Lifter</p>
	<p>T57400 Inertial Filter Blower Motor Impeller Remover for GE FDL Engines</p> <p>The 1"-8 threaded hole is installed into the impeller threads, tightened and struck on the opposite end for removal.</p>
	<p>T57181-37 GE Air Compressor Appliance</p> <p>This tool connects with the "C" Frame Manipulator to safely remove air compressors from the car bodies of GE Locomotives. The T57181-37 comes complete with a 37" arm (which connects to the bottom of the "C" Frame), an extension that connects to the outermost top holes, and a chain fall assembly.</p> <p>NOTE: The short chain length connects to the outer position of the extension. The shackle that is already connected to the "C" Frame must be removed and connected to the inner position of the extension, which can then be connected to the longer length of the chain fall. The lifting cleat (shown beside) is attached to the air compressor and then connected to the "C" Frame.</p> <p>T57181-37A - Arm T57181-37E - Top Extension T66482 - Cleat</p>

	<p>T55432 Intercooler Lifter GE FDL Engines</p> <p>Comes complete with lifter bolts - T55431B</p>									
	<p>T55420 Front End Cover Lifter for GE FDL Engines</p>									
	<p>T55320 Alternator Coupling Bolt Speeder Socket</p>									
	<p>T55066 Dynamic Brake Grid Lifter (Old Style)</p> <p>This page is for reference only. The T55066 has been superseded to the T66500 Dynamic Brake Grid Lifter.</p>									
	<p>T54922 Battery Lifter</p> <p>Superseded to T54923</p>									
	<p>T54831 GE FDL Engine Core Plug Ratchet Wrench</p> <p>This tool was designed to remove leaking engine core plugs without removing cylinders and exhaust manifold sections. Installation of new core plugs can also be accomplished by reversing the ratchet. The input drive is 3/4" female.</p> <table data-bbox="740 1535 1149 1633"> <tr> <td>1</td> <td>T54831</td> <td>Ratchet</td> </tr> <tr> <td>2</td> <td>T54831U</td> <td>Universal</td> </tr> <tr> <td>3</td> <td>T54831E</td> <td>Extension</td> </tr> </table>	1	T54831	Ratchet	2	T54831U	Universal	3	T54831E	Extension
1	T54831	Ratchet								
2	T54831U	Universal								
3	T54831E	Extension								
	<p>T54721 Axle Cap Pipe Plug Wrench 9/16" and 13/16" Double Square Female Drive Ends</p> <p>This wrench is used for removal and installation of axle cap pipe plugs and has 9/16" and 13/16" Double Square Female Drive Ends.</p>									

	<p>T54720 Axle Cap Pipe Plug Wrench 9/16" and 13/16" Square Female Drive Ends</p> <p>This wrench is used for removal and installation of axle cap pipe plugs with 9/16" and 13/16" Square Female Drive Ends</p> <p>NOTE: Nicked or damaged pipe plug ends may require the use of the T54721 Wrench.</p>
	<p>T50933H Radiator Fan Lifter Handles for T50933 Lifter</p>
	<p>T50933 Radiator Fan Lifter for GE 5GYA30 Motorized Fans</p> <p>This lifter aids removal and installation of 5GYA30 Motorized Fans in Dash 9 locomotives. It features a counterweight and an adjustable pick-up fixture between two points: one allowing the lifter alone to be lifted level and the other allowing the lifter with the fan to be lifted level.</p>
	<p>T50700 Bearing Nut Wrench 3/4" Square Female Drive for Radiator Fan Clutch Gear Unit GE Type GDY72</p> <p>Specifically for radiator fan-clutch gear unit (GE type GDY72). This wrench is equipped with a 3/4" square female drive. GE part # 493A948P1.</p>
	<p>T50380 Valve Cage Wrench for WABCO Air Compressors</p> <p>This tool was developed to simplify installation and removal of WABCO Air Cages.</p> <p>1) Wrench is held captive on cage. Knurled collar is screwed on to outside diameter of cage threads.</p> <p>2) Cage is shown as removed from cylinder head - captive to wrench.</p> <p>3) T50380 Valve Cage Wrench is equipped with a 1" square female drive that can be driven with a 1" square drive breaker bar or slugging wrench.</p>

	<p>T2X2823 - 1-1/4" Hex Power Diode Torquing Wrench, 3/8" Sq. Drive, for GE FDL Engines</p> <p>This wrench is equipped with a 3/8" square drive input and can torque 1 1/4" hex power diodes. Proper torque is most important to ensure satisfactory performance of the power conversion unit.</p>
	<p>T2X2437 - Spicer Drive Blower Coupling Bolt Wrench (3/8" Square Drive, 5/16" Hex) for GE FDL Engines</p> <p>This wrench is used to torque and loosen Spicer drive coupling bolts. It is equipped with a 3/8" female square drive input and a 5/16" hex bit on the output end.</p>
	<p>T19910 Cylinder Release Plug Spanner Wrench</p> <p>This unit is equipped with a 1/2" sq. drive to allow for torquing and removal of the current cylinder release plug body.</p>
	<p>T16884 Engine/Alternator Lifter for 8,12,16 Cylinder GE 7FDL Engines</p> <p>This lifter will accommodate 8-, 12- and 16-cylinder 7FDL engines with or without alternators. The lifter is rated 80,000 LBS and provides incremental 1/2" pick-up points by way of a Boston Gear arrangement to ensure level pick-up.</p> <p>This lifter has been functionally replaced by the T85205 Universal Engine Lifting Platform, however, the T16884 is still available for customers that only need to address the GE FDL Engine.</p>

**T18500 Dry Abrasive Blast Cleaning Machine**

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 with a slip out tray for removal of debris. Glass bead media is used where components are to be cleaned without affecting their critical dimensions

Height 95" Depth 66" Width 50"

Domestic Voltage: 230V 3PH 60CY for blower motor

115V 1PH 60CY for control circuit

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

**T16662 Vibration Damper Lifter for GE FDL Engines**

This tool is used to lift the GE FDL Vibration Damper. The thumbscrew is used to tighten the locking plate which serves to trap the edge of the vibration damper inside the lifter.

**T13640 Generator Alternator Rotor Coupling Bolt Wrench**

This wrench features a 1" square drive input and 1 7/8" box end adapter. It can be driven by the T18250 0-1000 lb.ft. torque wrench to accommodate bolt tightening.

This wrench will fit on all GE FDL engines including the EFI Models equipped with timing gears for Bosch Fuel Pumps.

The T13641 has been obsoleted due to a clearance problem with the GE split gears.

**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 мм 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 24мм	T17802M-24
147X3332	BOX END TORQUE ADAPTER 30мм	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-GEVDFDL
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