



SPECIAL SERVICE TOOLS CATALOG



K-Line® Industries, Inc.

www.klineind.com • 1-800-824-K-LINE (5546)



Since 2006 K-Line® Industries has been an official supplier of Toro Special Service Tools for Toro distributors worldwide. K-Line designs and manufactures specially designed tools to ensure that maintenance and service can be performed quickly and efficiently.

MOWERS

Tooling used to service Mowers including Greensmaster®, Greensmower®, Reelmaster®, Turf Pro®, Turf Truck®, and Groundsmaster®.

TOR192660 SEAL INSTALLATION TOOL

Used to ensure the correct fit and positioning of the lip seals used in the hydraulic drive wheel motors. Place the seal inside the ring with the seal lip toward the motor. Slide the main tube of the tool into the ring. Position the tool squarely into the bore of the motor housing. Tap against the main tube of the tool to seat the seal.



APPLICATIONS: SAND PRO®; GREENSMASER® 3, 300, 300-D, 3000-D; REELMASTER® 350-D

TOR214677 FITTING UPDATE KIT

Required to update hydraulic flow test kits to be compatible with products using o-ring face seal fittings. Includes fittings to convert J.I.C. flare fitting to o-ring face seal fittings.

Hydraulic flow test kits requiring updates were offered as Part Nos. NU-3125 or 8-15-5K-1K.

KIT CONTENTS: (Available Separately)

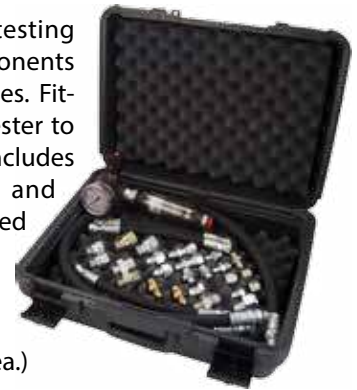
- TOR214679 - ADAPTER (2ea.)
- TOR214680 - ADAPTER (2ea.)
- TOR214681 - ADAPTER (2ea.)
- TOR214682 - ADAPTER (2ea.)
- TOR214683 - TUBE ASSEMBLY (2ea.)
- TOR214687 - ADAPTER (2ea.)



APPLICATIONS: GREENSMASER® 3000, 3100, 3000-D; REELMASTER® 216, 216-D; GROUNDMASTER® 220-D, 223-D; GROUNDMASTER® 322-D, 325-D, 327, 345 (w/ power steering)

TOR214678 HYDRAULIC TESTER AND FITTING KIT

Recommended for use in testing hydraulic circuits and components for flow and pressure capacities. Fittings allow connection of tester to most Toro products listed. Includes flowmeter, hoses, fittings, and o-ring face seal fittings required for newer machines.



KIT CONTENTS:

(Available Separately)

- TOR202849 - FLARE PLUG (1ea.)
- TOR203093 - CAP NUT (2ea.)
- TOR203205 - CAP NUT (1ea.)
- TOR203207 - UNION FLARE (1ea.)
- TOR203595 - UNION FLARE (1ea.)
- TOR207155 - UNION FLARE (2ea.)
- TOR207541 - FLARE PLUG (2ea.)
- TOR207591 - UNION FLARE (2ea.)
- TOR208045 - STRAIGHT REDUCER (1ea.)
- TOR208046 - STRAIGHT REDUCER (2ea.)
- TOR214679 - ADAPTER (2ea.)
- TOR214681 - ADAPTER (2ea.)
- TOR214682 - TUBE END REDUCER (2ea.)
- TOR214683 - TUBE END REDUCER (2ea.)
- TOR214687 - ADAPTER (2ea.)
- TOR214695 - TUBE ASSEMBLY (1ea.)
- TOR218657 - STRAIGHT FITTING (2ea.)
- TOR308432 - HOSE ASSEMBLY (2ea.)
- AT40001 - 15GPM FLOWMETER (1ea.)

APPLICATIONS: GMT; GREENSMASER® 3, 3000, 3100, 3000-D; GROUNDMASTER® 52, 62, 72, 200-D, 223-D, 224, 322-D & 327 (w/power steering); HTM-175®; PARKMASTER®; REELMASTER® 216, 216-D, 223-D, 350-D, 2300-D, 2600-D; SAND PRO®; TURF PRO 84®; TURF TRUCK® 200; WORKMASTER®

TOR238900A BEARING REPLACEMENT TOOL KIT

Use the puller to remove bearings from the cutting unit's front and rear rollers. Use the two driving tubes to install bearings into the rollers. (One drive tube also doubles as a drill guide in case the bearing shaft doesn't have a hole.) May be used on swaged, full, and Wiehle rollers.

APPLICATIONS: GREENSMASTER® 3, 300, 3000, 3000-D, 3100



TOR241030 PLASTIC PLUG

Insert the plug into the cutting unit bearing housing, in place of the reel motor, when sharpening or grinding the reel. Also used for bearing protection when shipping the cutting unit. Fits 2" hole.

APPLICATIONS: GREENSMASTER® 3, 300, 3100



TOR2437T DIAL INDICATOR

For use with the Timing Tool Kit (TOR80117AM) to adjust timing of injection pump. 10mm dial indicator. Range 0.01mm - 10mm.

APPLICATIONS: REELMASTER® 335-D, 3500-D, 6500-D, 6700-D; GROUNDMASTER® 455-D



TOR2968 360° MAGNETIC PROTRACTOR

Place on each "PRO" cutting unit's side frame top surface to check the attitude of the mower. Adjust mower to achieve $0^\circ \pm \frac{1}{2}^\circ$ attitude in relation to the level ground. Can also be used to set angles of bedknives when trueing knives in bedknife grinders and to check frame alignments when repairing damaged mowers, etc.

APPLICATIONS: 58" PROFESSIONAL®; 70" PROFESSIONAL®; SUPER PRO; Reel Sharpening and other general uses



TOR299100 HANDLE ASSEMBLY

Used for applying lapping compound to cutting units while keeping mechanic's hands a safe distance from the rotating reel assembly.

APPLICATIONS: HTM-175®; REELMASTER® 350-D, 450-D; TURF PRO 84®; all REEL MOWERS



TOR3003B DIESEL COMPRESSION TEST KIT

0-1000 PSI gauge allows testing of diesel engines to check general operating condition of engine.

Visit www.klineind.com for a complete list of additional adapters.

KIT CONTENTS: (Available Separately)

TOR1352 - Adapter
TOR4026 - Adapter
TOR4093 - Glow Plug Adapter
TOR4099 - Adapter
AT3600-5 - Gauge and Hose Assembly
AT3600B - Adapter
AT3600CC - Adapter
AT3600DD - Adapter
AT3600EE - Adapter
AT3600GG - Adapter
AT3600KK - Adapter

APPLICATIONS: REELMASTER® 2300 & 2600, 216-D, 223-D, 350-D, 450-D, 335-D, 3500-D; GROUNDMASTER® 220-D, 325-D, 223-D, 322-D, 72-D, 3000-D; GREENSMASTER® 3000-D



TOR31397 GRINDING BAR

Provides an accurate, flat surface to which the bedknife should be mounted during bedknife grinding and trueing on a bedknife grinding machine.

APPLICATIONS: GREENSMASTER® 21"



TOR31826 PINION REMOVAL/INSTALLATION TOOL

Used with a 3/8" drive ratchet wrench to remove and install wheel pinions onto the axle.

APPLICATIONS: Self-propelled, front drive, walk power mowers with threaded axle shafts; 25" commercial self-propelled rotary mowers with threaded axle shafts.



TOR4035 TUNE-UP SET

Use to tune up Peugeot engines.

KIT CONTENTS: (Available Separately)

AT40023 - Dial Indicator
TOR70153N - Flywheel TDC Locator Pin
TOR80117AM - Timing Tool Kit
TOR80117EZ - Crankshaft Rotating Wrench
TOR80149 - Injector Socket
TOR976697 - Camshaft Seal Installer

APPLICATIONS: REELMASTER® 335-D, 3500-D, 6500-D, 6700-D; GROUNDMASTER® 455-D



TOR4038 DIFFERENTIAL CASE GAUGE

Used to determine the number of shims required between the 4WD rear axle differential housing.



APPLICATIONS: REELMASTER® 335-D (4WD), 3500-D (4WD);
GROUNDMASTER® 455-D (4WD)

TOR4039 PILOT BUSHING DRIVER

Used to install the pilot bushing into the ends of the 4WD rear axle.



APPLICATIONS: REELMASTER® 335-D (4WD),
3500-D (4WD); GROUNDMASTER® 455-D (4WD)

TOR4040 PINION NUT TOOL

Used to remove or install the pinion nut on the 4WD rear axle.



APPLICATIONS: REELMASTER® 335-D (4WD),
3500-D (4WD); GROUNDMASTER® 455-D (4WD)

TOR4041 BEVEL GEAR REMOVER TOOL

Used to separate the bevel gears from their shafts in the ends of the 4WD rear axle.



APPLICATIONS: REELMASTER® 335-D (4WD), 3500-D (4WD);
GROUNDMASTER® 455-D (4WD)

TOR4043 OIL SEAL INSTALLATION TOOL

Used to install oil seals in the ends of the 4WD rear axle.



APPLICATIONS: REELMASTER® 335-D (4WD),
3500-D (4WD); GROUNDMASTER® 455-D (4WD)

TOR 4050 CLUTCH NUT SPANNER WRENCH

For use in removing, installing, and correctly torquing spanner nuts on PTO clutch assemblies.



APPLICATIONS: GROUNDMASTER® 455-D

TOR4051 CLUTCH NUT SPANNER WRENCH

For use in removing, installing, and correctly torquing spanner nuts on PTO clutch assemblies.



APPLICATIONS:
GROUNDMASTER® 455-D

TOR4054 CASTOR BUSHING INSTALLER

The tool is required to evenly install new bushings without castor arm removal.



APPLICATIONS: GROUNDMASTER® 200 & 300 Series Decks

TOR4058 FAN CLUTCH PULLEY

SPANNER WRENCH



This specially designed wrench holds the fan clutch pulley when removing the fan. The long handle provides easy access to the difficult-to-reach pulley.

APPLICATIONS: REELMASTER® 335-D, 3500-D;
GROUNDMASTER® 455-D

TOR4059 FAN CLUTCH NUT WRENCH

This open end wrench is sized to fit the hex nut on the fan. The thin design provides easy access to the nut.



APPLICATIONS: REELMASTER® 335-D, 3500-D;
GROUNDMASTER® 455-D

TOR4060 DRUM BUSHING AND SEAL INSTALLER

Contains all the tools required to remove and replace the dust seal and bushings in the drum. In addition, the precision reamer will ensure the finished diameter of the bushings meets factory specifications.



KIT CONTENTS:

(Available Separately)

TOR4061 - Reamer

TOR4062 - Bushing and Seal Installer

APPLICATIONS: GREENSMOWER® 1000

TOR4063 REEL BEARING ADJUSTING SOCKET

Used to install and adjust the reel bearing adjusting nut.



APPLICATIONS: GREENSMOWER® 500

TOR4070 REELMASTER® CUTTING UNIT KIT

This kit contains all the special tools required to install new seals and roller bearings in both full and Wiehle rollers.

KIT CONTENTS: (Available Separately)

TOR4064 - Reel Bearing Nut Adjusting Tool

TOR4065 - Oil Seal Installer

TOR4066 - Bearing Installer

TOR4067 - Bearing Driver

TOR4068 - Inner Seal Installer

TOR4069 - Outer Seal Installer

TOR4071 - Outer Oil Seal Installer

TOR4072 - Oil Seal Protector

TOR4073 - Drive Handle

TOR4074 - Reel Drive Adapter

APPLICATIONS: REELMASTER® 6500-D, 6700-D



TOR4095 DECK PROXIMITY TOOL

Used to make adjustments to the Deck Proximity Switch.

APPLICATIONS:

GROUNDMASTER® 4000, 4100



TOR4108 SLEEVE DRIVER/BEARING INST. KIT

Used to install bearings and seals into front and rear rollers that have a threaded roller shaft. Also used to drive the wear sleeve into position on the cutting reel shaft.

KIT CONTENTS: (Available Separately)

TOR4105 - Roller Seal & Bearing Installation Set

TOR4107 - Sleeve Driver

APPLICATIONS: GREENMASTER® Flex 21



TOR4112 REEL DRIVE SHAFT

For use with 5 inch reels. Use spline insert tool for rotating cutting reel when hydraulic motor is removed. Also use this tool for installation of threaded inserts into cutting reel shaft.

APPLICATIONS: REELMASTER® 5010 Series



TOR47009 HYDRAULIC TEST KIT

Used to take various hydraulic pressure readings for diagnostic tests. Quick disconnect fittings attach directly to mating fittings on test unit without the use of tools. High pressure hose (5ft.) is provided for remote readings. Refer to product operators manual for correct pressure specifications.

KIT CONTENTS:

TOR213165 - Quick Disconnect Socket (4ea.)

TOR213166 - Quick Disconnect Plug (1ea.)

TOR307984 - Hose Assembly (1ea.)

AT40012 - 1,000 PSI Pressure Gauge (1ea.)

AT40017 - 5,000 PSI Pressure Gauge (1ea.)

AT40018 - 10,000 PSI Pressure Gauge (1ea.)

APPLICATIONS: REELMASTER® 223-D, 3500-D, 4500-D, 5100-D, 5300-D; GROUNDMASTER® 580-8;

May also be used on any hydraulic system



TOR491430 SEAL PROTECTOR

Used on 9/16" shafts to protect the lips of the shaft oil seal from damage by sliding the seal protector over the reel motor shaft before installing the seal. Lightly coating the seal protector with clean oil will ease movement of seal over the tool. For use with the TOR491450 and TOR491460 Seal Installers.

APPLICATIONS: REELMASTER® 223-D; GREENMASTER® 3, 300, 3000, 3000-D, 3100



TOR491450 SEAL INSTALLER

Use the installer and a small hammer to drive the reel motor shaft seal into position in the bore of the reel motor body. Intended to be used with the TOR491430 Seal Protector.

APPLICATIONS: GREENMASTER® 3, 300, 3000, 3000-D, 3100



TOR491460 SEAL INSTALLER

Use the installer and a small hammer to drive the reel motor shaft seal into position in the bore of the reel motor body. Intended to be used with the TOR491430 Seal Protector.

APPLICATIONS: TURF PRO 84®; HTM-175®; REELMASTER® 350-D, 450-D; SUNDSTRAND V-TYPE TRANSMISSIONS (for charge pump shaft seal)



TOR498060 BEARING PULLER ASSEMBLY

Used to press the reel shaft out of the reel bearings in the side case of the mower. Mount tool onto ratchet ring studs and, with reel pinion nut positioned flush with the end of the reel shaft, turn tool's spindle against the reel shaft. This action pushes the shaft out through the bearing.

APPLICATIONS: REELMASTER® Reel Mowers: 5-Blade, 7-Blade, 11-Blade



TOR510870 DETENT INSTALLATION TOOL

Use this tool and a 3/8 in. drive torque wrench to tighten the detent stud. Apply Loctite® No. 222 to the threads of the detent stud. Anchor the stud to the slotted end of the valve bank No. 1 spool by torquing the stud to 10 - 14ft. lb. (1.4 - 1.9kg-m).

APPLICATIONS: GREENMASTER® 3, 300, 3000, 3000-D, 3100



TOR510880A BEDKNIFE SCREW TOOL

This screwdriver-type bit is made to fit Toro bedknife attaching screws. Use this bit with a torque wrench to secure the bedknife to its bedbar. With clean bedbar threads and new screws torque to 250-300in.-lb. (288-345KgCm), a bedknife will be securely fastened.

APPLICATIONS: HTM-175®; GREENMASTER® 3, 300, 300-D; GREENMASTER® 21"; GREENSMOWER 21" Series 4; REELMASTER® Mowers 5, 7 and 11-Blade; REELMASTER® 216, 350-D, 450-D; SPARTAN®; SUPER PRO®; TURF PRO®



TOR6004 DINGO WHEEL PULLER

This puller is used to remove the wheel front hub. Can also be used on a Dingo wheel hub as the bolt pattern is the same.

APPLICATIONS: REELMASTER® 5010 Series



TOR6100 WHEEL PULLER

Aids in the removal of the GM5900 wheel hub.

APPLICATIONS: GROUNDMASTER® 5900



TOR6005 SEAL REMOVER / INSTALLER

Used to remove and install pre-2009 seals. Can be used at both bench height and floor level work surfaces. Reduces seal removal time by 50%. Can be used on similar sized seals in other equipment.

APPLICATIONS:

GREENSMASER® Flex 18, Flex 21



TOR70153A2 SHIM SET

Used with TOR70153A1 Main Seal Installer to install the two side seals to the No. 1 main bearing cap.

APPLICATIONS: REELMASTER® 335-D, 3500-D, 6500-D, 6700-D; GROUNDMASTER® 455-D



TOR70153D FRONT COVER SEAL INSTALLER

Used with a small hammer to install front crankshaft seals.

APPLICATIONS: REELMASTER® 335-D, 3500-D, 6500-D, 6700-D; GROUNDMASTER® 455-D



TOR6009 SEAL INSTALLER

Required to properly install the new Flex axle seals (2009).

KIT CONTENTS:

- TOR6009-1 - Male Expander (1ea.)
- TOR6009-2 - Female Expander (1ea.)
- TOR6009-3 - Long Flange Tube (1ea.)
- TOR6009-4 - Short Flange Tube (1ea.)
- TOR6009-5 - Long Spacer (1ea.)
- TOR6009-6 - Short Spacer (1ea.)
- 46990168 - Jam Nut (2ea.)
- 46990212 - Small Washer (4ea.)
- 46990213 - Large Washer (3ea.)

APPLICATIONS: GREENSMASER® Flex 18, Flex 21



TOR70153N FLYWHEEL T.D.C. LOCATOR PIN

Used to set injection pump timing.

APPLICATIONS:

REELMASTER® 335-D, 3500-D, 6500-D, 6700-D; GROUNDMASTER® 455-D



TOR80117AM TIMING TOOL KIT

For use on the Roto Diesel DPC Pump. Use with the TOR2437T Dial Indicator to adjust timing of injection pump.

APPLICATIONS: REELMASTER® 335-D, 3500-D, 6500-D, 6700-D; GROUNDMASTER® 455-D



TOR6018 FRONT BEARING INSTALLER

The TOR6018 is used to install the Front Deck Roller Bearings. Can also be used to install Castor Wheel Bearings.

APPLICATIONS: GROUNDMASTER® 3500 & 4500 Decks, 4000, 4100, 5900



TOR6019 STEERING ALIGNMENT TOOL SET

Used to ensure that the front and rear steering assemblies are properly centered for steering assembly service. These tools are required for adjustment of wheel alignment or when replacing tie rods. One of the tools centers the front steering assembly and one centers the rear.

KIT CONTENTS:

- TOR6019-1 - Front Alignment Assembly (1ea.)
- TOR6019-2 - Rear Alignment Assembly (1ea.)

APPLICATIONS: GROUNDMASTER® 360



TOR80117EZ CRANKSHAFT ROTATING WRENCH

Used with a ½" drive ratchet wrench to turn the crankshaft.

APPLICATIONS:

REELMASTER® 335-D, 3500-D, 6500-D, 6700-D; GROUNDMASTER® 455-D



TOR80149 INJECTOR SOCKET

Used to remove and install fuel injectors.

APPLICATIONS: REELMASTER® 335-D, 3500-D, 6500-D, 6700-D; GROUNDMASTER® 455-D



TOR976697 CAMSHAFT SEAL INSTALLER

Used to install the camshaft seal.

APPLICATIONS: REELMASTER® 335-D



UTILITY VEHICLES

Tooling used to service Utility Vehicles including Hydroject™, Parkmaster®, Sand Pro®, Workman® and Workmaster®.

TOR4020 HYDROJECT™ SERVICE TOOL KIT

Used to service the HYDROJECT™ 3000/4000.

KIT CONTENTS:

(Available separately, descriptions below)

- TOR4001 - Nitrogen Accumulator Kit
- TOR4002 - Accumulator Seal Installation Tool
- TOR4003 - Accumulator Cap Wrench
- TOR4005 - Water System Pressure Gauge
- TOR4006 - Flow Meter
- TOR4007 - Valve Lift Indicator
- TOR4008 - Valve Spring Compressor
- TOR4009 - Valve Seal Installation Tool
- TOR4010 - Pump Seal Installation Tool
- TOR4011 - Seal Insertion Mandrel
- TOR4013 - Pump Seal Extraction Tool
- TOR4014 - Pump Seal Outlet Cover
- TOR4015 - Pump Wear Sleeve Driver



APPLICATIONS: HYDROJECT™ 3000/4000

TOR4001 NITROGEN ACCUMULATOR KIT

The charging valve connects the accumulator to a high pressure (3000-3500 PSI) nitrogen tank for checking and recharging the accumulator. Gauge has dual graduations: 0-6000 PSI, 0-40,000 kPa. An International Model TOR4001EXP is also available and does not include the TOR4001-1 Fitting Set.



Included in the TOR4020 Hydroject™ Service Tool Kit.

REPLACEMENT PARTS:

- TOR4001-1 - Fitting Set
- TOR4001-10 - Copper Washer
- TOR4001-7 - Accumulator Adapter Fitting

APPLICATIONS: HYDROJECT™ 3000/4000

TOR4002 ACCUMULATOR SEAL INSTALLER

A special tool required for installing the piston seal during accumulator rebuilding.

Included in the TOR4020 Hydroject™ Service Tool Kit.

APPLICATIONS: HYDROJECT™ 3000



TOR4003 ACCUMULATOR CAP WRENCH

After discharging the accumulator, use the special ½" drive wrench for removing the accumulator cap and base. Also used for correctly torquing the cap and base after repairs.



Included in the TOR4020 Hydroject™ Service Tool Kit.

APPLICATIONS: HYDROJECT™ 3000

TOR4005 WATER SYSTEM PRESSURE GAUGE

Comprised of an extremely rugged hydraulic pressure gauge and special fitting, this tool is temporarily connected to the high pressure water system, measuring the water pressure available at the cycling valve.



Included in the TOR4020 Hydroject™ Service Tool Kit.

APPLICATIONS: HYDROJECT™ 3000/4000

TOR4006 FLOW METER

This flow meter, comprised of an electronic digital flow meter and hydraulic pressure gauge, is used to measure pump efficiency and inlet water pressure.



Included in the TOR4020 Hydroject™ Service Tool Kit.

APPLICATIONS: HYDROJECT™ 3000/4000

TOR4007 VALVE LIFT INDICATOR

A dial indicator and special adapter for measuring and adjusting cycling valve lift. Range: .001 - 1.000 inches in .001 graduations.



Included in the TOR4020 Hydroject™ Service Tool Kit.

APPLICATIONS: HYDROJECT™ 3000/4000

TOR4008 VALVE SPRING COMPRESSOR

Used for servicing the cycling valve and valve seat.

Included in the TOR4020 Hydroject™ Service Tool Kit.

APPLICATIONS: HYDROJECT™ 3000/4000



TOR4009 VALVE SEAL INSTALLATION TOOL

Used to correctly install the cycling valve seal into the valve body. Used with the TOR4011 Seal Insertion Mandrel.

Included in the TOR4020 Hydroject™ Service Tool Kit.

APPLICATIONS: HYDROJECT™ 3000/4000



TOR4010 PUMP SEAL INSTALLATION TOOL

Used to correctly install the pump displacement rod seal into the pump head. Used with the TOR4011 Seal Insertion Mandrel.

Included in the TOR4020 Hydroject™ Service Tool Kit.

APPLICATIONS: HYDROJECT™ 3000/4000



TOR4011 SEAL INSERTION MANDREL

This insertion mandrel is used with the TOR4009 Valve Seal Installation Tool and the TOR4010 Pump Seal Installation Tool.

Included in the TOR4020 Hydroject™ Service Tool Kit.

APPLICATIONS: HYDROJECT™ 3000/4000



TOR4013 PUMP SEAL EXTRACTION TOOL

Used to hydraulically extract pump seals from a cylinder head.

Used with the TOR4014 Pump Seal Outlet Cover.

Included in the TOR4020 Hydroject™ Service Tool Kit.

APPLICATIONS: HYDROJECT™ 3000/4000



TOR4014 PUMP SEAL OUTLET COVER

Cover plate and seal for blocking outlet flow, allowing quick removal of used pump seals. Used with the TOR4013 Pump Seal Extraction Tool.

Included in the TOR4020 Hydroject™ Service Tool Kit.

APPLICATIONS: HYDROJECT™ 3000/4000



TOR4015 PUMP WEAR SLEAVE DRIVER

Driver used for the removal and installation of the wear seal located in the pump gear box.

Included in the TOR4020 Hydroject™ Service Tool Kit.

APPLICATIONS: HYDROJECT™ 3000/4000



TOR4094 CLUTCH REMOVAL TOOL

Removes the CVT clutch from the engine.

APPLICATIONS: WORKMAN® 1100 and 2100 Series



TOR4097 PULLER WHEEL

Used to remove the wheel hub from the motor shaft. Includes the TOR4097-3 Spacer which most hub assemblies will need.

APPLICATIONS: SAND PRO®



TOR4098 CLUTCH SERVICE KIT

This kit is required to remove the drive clutch spider from the post of the fixed sheave.

KIT CONTENTS:

TOR4098-1 - Spanner Socket

TOR4098-2 - Clutch Bar

APPLICATIONS: WORKMAN® 1100 and 2100 Series



TOR4106 AUTO. BATTERY DISCHARGE TESTER

Recommended for quick and accurate load testing. This tool is used to determine the capacity of the Workman® battery pack and also for finding faulty batteries in the battery pack.

APPLICATIONS: WORKMAN® E2050, E2065



TOR6001 MICRO-TRAK TESTER

Tests the monitor function by sending a signal to the monitor. If the signal does not display on the monitor, the monitor is bad. Used to test the inputs and power leads to the monitor.

APPLICATIONS: Multi-Pro 1200 & 1250 Sprayer



TOR6002 CLUTCH ALIGNMENT TOOL

Used to aid in the assembly of the clutch plate to the flywheel when the pressure plate is being installed.

APPLICATIONS: WORKMAN® HD



TOR6006 WRENCH

Used to properly remove and torque rotor retaining nuts.

APPLICATIONS:

Pro Force™ Debris Blower



TOR6008 TINE REMOVAL TOOL

This Titan Quick Change Tine Removal Tool provides an easy way to aid in the removal of tines in the sleeve.



APPLICATIONS: ProCore 648, 864, 1298

TOR6010 SPANNER WRENCH

Provides an easy way to adjust the spring rate to the desired ride quality when a cab or plow is added.



APPLICATIONS: WORKMAN® MD, MDX, MDE

TOR6013 PRIMARY CLUTCH PULLER

This tool allows removal of the primary clutch on the Workman® MD and MDX 2010 model year and newer. These units are equipped with a different clutch than previous years.



APPLICATIONS: WORKMAN® MD, MDX, 2010 and newer

TOR6014 SPRAYER CLUTCH PULLER

This tool allows removal of the TEAM Clutch on 2010 and newer sprayers. These units are equipped with a different clutch than previous years.



APPLICATIONS: Multi-Pro® 1200 & 1250 Sprayer

TOR6025 CLUTCH PULLER

This tool allows removal of the primary clutch on the Workman MDX-D 2012 model year and newer. These units are equipped with a different clutch than previous models.



APPLICATIONS: WORKMAN® MDX-D

TOR6027 SECONDARY CLUTCH PRESS TOOL

This tool is used for the disassembly of the secondary team clutch in the TORO® Workman® MD, MDX, MDX-D and the Multi Pro® 1250 (MP1250) Sprayer vehicles



APPLICATIONS: WORKMAN® MD, MDX, MDX-D, Multi Pro® 1250

TOR6028 MOTOR ROTOR REMOVER/INSTALL TOOL

This tool is used to facilitate the removal and install of the Motor Rotor.



APPLICATIONS: Greensmaster® Triflex™ Hybrid 3320/3340 and eFlex® 1800/2100

TOR6029 GENERATOR ROTOR REMOVER/INSTALL TOOL

This tool is used to facilitate the removal and install of the Generator Rotor.



APPLICATIONS: Greensmaster® Triflex™ Hybrid 3320/3340

TOR6030 RIVET NUT INSTALLATION HAND TOOL

A very useful tool for installing or removing 3/8"-16 or 3/8"-24 sized rivet nuts; only requires one 11/16" ratchet and one 7/8" wrench. Also, this hand installation tool uses a standard socket head cap screw as a mandrel, making replacement easy. Instructions Included



GENERAL TOOLS

General tooling used to service various TORO® products.

TOR4028 BLADE HEIGHT GAUGE

Used to measure the height of a rotary blade to determine if tilt is within proper specifications. Made from heavy gauge steel.



TOR4029 BLADE BALANCING TOOL

This precision crafted tool is for balance checking rotary blades with 5/16" to 1 1/2" diameter holes. Can be used to balance objects that have a concentric center hole, and is made of a magnetic material. This tool uses a sliding magnetic chuck to hold the blade.



TOR4030 ROTARY BLADE HOLDING FIXTURE

This fixture is used to hold the rotary blade when removing or installing blades on rotary mower decks.



TOR4036 SPARK TESTER

Used to determine if ignition spark is present.



TOR4044 FITTING SET

SET CONTAINS:

TOR4044-1 - 3/4-16 UNF Male 37° Flare to 1/2 NPTF Female Straight Fitting (2ea.)

TOR4044-2 - 1/2 NPTF Male to 13/16-16 UNF Male O-ring Face Seal Straight Fitting (2ea.)



TOR4076 CYLINDER LEAKAGE TESTER

The dual gauge is designed to allow you to monitor the input air line pressure - reads to 100 PSI. Unit has precision pressure regulator which controls exact test accuracy, 25-inch long heavy-duty high pressure hose, and 14mm and 18mm combination threaded end, with 14mm extension included for long reach plugs.



TOR4077 GRADUATED CYLINDER

Maximum capacity is 1000ml : 10ml.
Maximum temperature is 121°C.



TOR4079 HYDRAULIC FITTING KIT

Contains over 35 plugs, caps, unions, reducers and fittings used to hook up gauges for hydraulic testing.



TOR4082A INJECTOR SOCKET

This is a special deep socket used to remove and install injectors on PEUGEOT TUD5 engines.



TOR4085 TIMING PIN SET

Used to set pump engine timing on PEUGEOT TUD5 engines.



TOR4090 GREASE GUN ADAPTER

Converts standard jaw-type lube couplers to steel needle points. Two sleeves fit all standard couplers.



TOR4091 DRAG LINK SOCKET

Used to remove and tighten the end screw on the drag link of the steering linkage. 1 3/16" blade width, 1/2" square drive.



TOR4102 BATTERY WATER FILLER

Ensures the battery is filled to the correct water level when the electrolyte level is checked. Works with all standard non-sealed batteries.



TOR6003 USB/SERIAL ADAPTER

This USB/Serial Adapter allows for a machine to laptop interface. It is used to connect existing cables to a laptop that does not have a serial port to allow full use of Toro P/C.



TOR6007 HYDRAULIC HOSE KIT

Two hoses and fittings that can be used along with the TOR6011 High Flow Hydraulic Filter Kit for easy installation into the traction systems of large TORO machines, significantly reducing tool installation time.



TOR6011 HIGH FLOW HYDRAULIC FILTER KIT

The High Flow Hydraulic Filter Kit can be used to filter the oil after a component failure in order to prevent debris from transmitting throughout the system causing subsequent failures. It can also be used to promote/generate additional seasonal service revenue during hydraulic flush and oil changes. Features large flow and high pressure capabilities - 40 gpm/5000 psi (150 lpm/345 bar). Use with the AT40002 or AT40004 Flowmeters and the TOR6007 Hydraulic Hose Kit.



TOR6015 HEAVY DUTY SPRING COMPRESSOR

Used to compress the shock in order to remove the spring. Fully adjustable to fit various shock sizes. The oversized handle provides maximum leverage and the safety cap prevents the shock from slipping out during compression. Can handle springs up to 400lbs.



TOR6023 DIAMETER/CIRCUMFERENCE MEASURING TAPE

Easy to use and read spring steel measuring tape. Accurately measures the circumference and diameter of any sphere to help determine overall wear. It is most commonly used to measure the wear of a bed knife roller in the turf market.



AT20000 INJECTOR TESTER KIT

Used to test and adjust the opening pressure of the injection nozzles, analyze the shape and atomization of the spray jet, tightness of nozzles and chatter characteristics of diesel engines.

SPECIFICATIONS:

Max. Pressure: 9000psi (62 MPa).
Fuel tank volume: 1/4 Gallon

KIT CONTENTS:

AT20000-1 - Fuel Injector Tester (pictured)
AT20000-2 - 1000ml Beaker
AT20000-3 - M14 x M12 Straight Fuel Line
AT20000-4 - M14 x M14 Straight Fuel Line
AT20000-5 - M14 x M12 Formed Fuel Line
AT20000-6 - M14 x M14 Formed Fuel Line



AT30000 SMALL TRACTOR SPLITTING STAND

Designed to be a safe and effective tool for the maintenance, service and repair of small to midsize tractors with component sections weighing up to 4,000 pounds. The AT30000 includes both a stationary base and a rolling base allowing you to move the two sections of the tractor easily. Both the tall and short spacers as well as the 2 ton screw jacks provided with the splitting system allow for fine height adjustment. Has a height range of 11.50" to 30".



AT3391 OIL FILTER CUTTER

This Oil filter cutter is used to cut open spin-on filters to inspect the filter media for contaminants. This is a common practice when diagnosing potential engine problems. Will cut filters from 2 7/8" to 6 1/4" diameter. Features two position adjustable height cutting blade.



U.S. Patent No. 3,900,948

AT40001-AT40004 HYDRAULIC FLOWMETERS

Used to diagnose faults in hydraulic circuits, determine hydraulic horsepower and test for component wear such as hydraulic valve and cylinder leakage. These Flowmeters can be part of a predictive maintenance program, allowing strategized pump, valve, motor and cylinder rebuilding.



Part Number	Flow Range	Description
AT40001	1-15 GPM	Flowrator with Load Valve and Pressure Gauge
AT40002	4-40 GPM	Flowrator with Load Valve and Pressure Gauge
AT40003	1-15 GPM	Flowrator with Load Valve, Pressure Gauge and Temperature Gauge
AT40004	4-40 GPM	Flowrator with Load Valve, Pressure Gauge and Temperature Gauge

AT40032 DIGITAL PRESSURE GAUGE: 0-5000 PSI/BAR

This Digital Pressure Gauge has a precise +/- 0.25% full scale accuracy. The 4 digit digital display will reduce the potential for errors in readings by eliminating parallax error commonly produced with analog gauges.



SOME FEATURES:

- Digital pressure gage, selectable engineering units: 5000 psi, 351.5 kg/cm², 344.8 bar
- Service: Compatible liquids and combustible gases
- Accuracy: 0.25% F.S. ±1 least significant digit @ 70°F (21°C) (Includes linearity, hysteresis, repeatability)

AT40031 DIGITAL HYDRAULIC TESTER

The AT40031 Digital Hydraulic Tester has been designed for easy connection to a hydraulic circuit so that flow, pressure and temperature can be readily checked. The tester can take full back pressure up to 6000 psi and the built in loading valve enables many of the operating conditions to be simulated. The tester can be connected anywhere in the hydraulic system to test pumps, motors, valves and cylinders in both flow directions.



FEATURES:

- Flows up to 100 US gpm
- Pressure up to 6000 psi
- Temperature up to 120°C (250°F)
- Digital display for flow/temp, analogue pressure
- Flow accuracy 1% of full scale
- Bi-directional loading valve with INTERPASS™ burst disc protection fitted as standard

KL100017 MOLEX® HAND CRIMP TOOL

This crimper features full cycle ratcheting to ensure complete crimps.



FEATURES:

- Crimp Size: 22AWG to 14AWG
- For Use With: MX-150L Crimp Terminals

KL100018 PACKARD HAND CRIMP TOOL

Hand Crimp Tool for Weather Pack Connectors.



FEATURES:

- Crimps Weather Pack terminal and seal in one cycle
- Ratchet assembly assures a perfect crimp every time
- Wire range: 20-14 ga.

KL100019 PACKARD HAND CRIMP TOOL

Hand Crimp Tool for Metri-Pack Connectors.

FEATURES:

- Crimps 20-14 ga. male and female terminals in the Metri-Pack 150 and 280 Series
- Ratchet assembly assures a perfect crimp every time



KL100020 DEUTSCH HAND CRIMP TOOL

This tool crimps a wide range of contact sizes with no need to change out dies or locators and provides a symmetrical four indent crimp.

FEATURES:

- Crimps Solid Pin & Socket Contacts
- For use with 12 to 24 AWG
- Contact Sizes: 12 to 20 solid pins & sockets
- Ratchet mechanism ensures proper termination



KL100021 CRIMPER HAND TOOL KIT

Includes all four of our available hand crimpers: KL100017, KL100018, KL100019, and KL100020.



TORO ALSO RECOMMENDS

NOTE: The special tools, kits, and miscellaneous items in this section should be ordered via TORO's OMS system and customer service.

PART #	DESCRIPTION
117-2727	"O"-Ring Seal Kit with Case
107-0392	Battery Protection Terminal
107-0342	Diaelectric Gel Electrical Sealant
85-4750	Diagnostic Display Box
119-5303	Diag. Master Controller Overlay (English)
119-5304	Diag. Slave Controller Overlay (English)
Grounds Master 4300	
94-2703	Spindle Plug
117-0171	Diagnostic Overlay (English)
Grounds Master 4500-4700	
107-1998	Grease Nozzle
117-4795	Diag. Master Controller Overlay (English)
117-4796	Diag. Slave Controller Overlay (English)
Grounds Master 580D	
88-1860	580D Diag. Display Overlay V1.0 (English)
92-4087	580D Diag. Display Overlay V2.0 (English)
Greens Master 1000/1600	
13-8199	Cutting Unit Adj. Gage Bar Assy.
Flex 18/21	
115-0803	Roller Bearing Rebuild Tool Kit
107-8133	Installer Washer-Flat
107-3505	Roller Spacer-Tool
104-6126	Installer Washer-Flat
Greens Master 3150	
2410-30	Plastic Cap/Plug
04399	Turf Evaluator Mirror

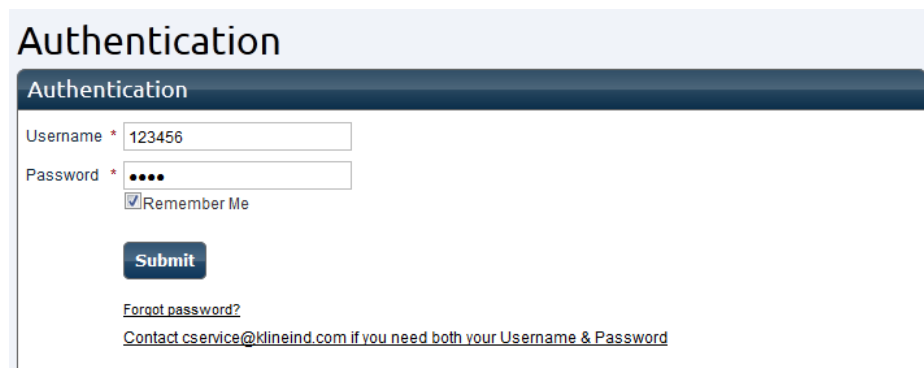
PART #	DESCRIPTION
Greens Master 3100-D	
108-6715	Cutting Unit Adj. Gage Bar Assy.
119-8010-03	Cutting Unit Kick Stand
117-0975	Reel Bearing Installation Tool
115-0803	Roller Rebuild Kit
115-0852	Tool-Inner Seal
115-0853	Tool-Bearing/Outer Seals
107-8133	Washer-Flat
Reelmaster 5210	
110-0666	Diagnostics Overlay (English)
Triflex	
115-8227	Diagnostics Overlay (English)
Grounds Master 360	
120-0273	Diag. Master Controller Overlay (English)
120-0272	Diag. Slave Controller Overlay (English)
115-1944	Toro Diag CAN Bus programming Cable
Reelmaster 6500/6700	
98-1852	Cutting Unit Adj. Gage Bar Assy.
99-3503	Angle Indicator
Reelmaster 7000	
120-1679	Diagnostics Overlay (English)

Order From Our Newly Designed Website

In 2012, K-Line Industries, Inc. rolled out a new website designed to better serve our customers. Your online account profile now gives you advanced order status and tracking information, access to all of our special prices and deals on our TORO® tools, easy product reordering, an address book to set up any and all of your billing and shipping addresses, and more.

To view and purchase our complete line of TORO® Special Service Tools on our website, point your browser to <http://www.klineind.com/login.php> where we have already assigned you an online account profile using your **TORO® Dealer #** and the word "**toro**" as your password. For example, if your TORO® dealer number is **123456**, then your username is **123456**, and the password is **toro**.

NOTE: Passwords are case sensitive. So **toro** is correct, **TORO** or **Toro** is not.



The image shows a screenshot of a web browser displaying a login page titled "Authentication". The page has a dark blue header with the word "Authentication" in white. Below the header, there are two input fields: "Username *" with the value "123456" and "Password *" with four black dots. Below the password field is a checkbox labeled "Remember Me" which is checked. A blue "Submit" button is positioned below the checkbox. At the bottom of the form, there is a link for "Forgot password?" and a line of text that reads "Contact cservice@klineind.com if you need both your Username & Password".

If you are having problems logging in please contact K-Line Customer Service at cservice@klineind.com or 1-800-824-5546.



**For product information or to place an order
visit us online at www.klineind.com**

**or call K-Line Customer Service at
1-800-824-K-LINE (5546) or 1-616-396-3564
Fax 1-800-528-9138 or 1-616-396-8974
Email: cservice@klineind.com**