

Purchase a HPT 500 HD smoke machine & HDS 200 scan tool together & receive free OTC 3940-HD multimeter



# PROMOTIONS

All promotions valid Q2 2018. For promotion details and to redeem, visit Boschrebates.com. Dated proof of purchase and/or serial numbers required when registering for rebate. Must redeem within 30 days of promotion end date.



# with purchase of Bosch 3824 ESI[truck]



**12-Month Troubleshooting** and Repair Subscription



Buy an OTC 3896 Evolve, receive an OTC 1630 2-drawer service cart





Purchase a new OTC 3893 Encore scan tool, receive a FREE Bosch 18V 1/4 In. Hex Impact Driver with two 18V Lithium-Ion **FatPack Batteries** 





See page 6

# MUSCLETOOLS **Robinair A/C Tools & Equipment**

#### MADE IN USA\* - NEW LEAK DETECTORS FROM ROBINAIR MEETS SAE J2913 AND SAE J2791 ASHRAE 173-2012, EN14624-2012 INDUSTRY STANDARDS \* Made in USA with globally sourced components



#### LD3

- · Loud audible alert
- Automatic calibration

#### LD3 Features

- Long life, stable sensor
- Automatic calibration and reset to ambient
- 3 adjustable sensitivity levels
- Low battery indicator
- True mechanical pump
- Uses 4 AA alkaline batteries, included
- Comfortable rubberized Santoprene handle grip

#### LD5

- · Color display with graphics and visual alerts
- · Bar graph mode helps locate leaks faster
- · Loud audible alert
- LED inspection lights · Automatic and manual calibration

#### LD5 Features

- Unique color graphic LCD display
- Long life, stable sensor
- Automatic calibration and reset to ambient
- User friendly message and error screens
- High-intensity LED inspection light
- 3 adjustable sensitivity levels
- Low battery indicator
- True mechanical pump
- Audio mute function
- Uses 4 AA alkaline batteries, included Comfortable rubberized Santoprene handle grip

### UV Leak Detection Kit



#### 16235

2

#### **UV Leak Detection Kits**

- · The easiest and most accurate gun available today. No guesswork – a pre-measured application every time.
- One squeeze injects a pre-measured amount (1/8 oz.) of dye. No more adding too much dye.

CE LD7

#### I D7

- · Color display with graphics and visual alerts
- · Bar and Pinpoint graphing modes help locate leaks faster
- · Loud audible alert with mute option
- UV and Clear LED inspection lights
- Automatic and manual calibration

#### LD7 Features

- Patented 3 LED UV lights with 395-415 nm; wavelength is optimum for A/C dye fluorescence
- Unique color graphic LCD screen
- Long life, stable sensor lasts up to 10 years
- Sweep mode function to pinpoint leak source Automatic calibration and reset to ambient
- User friendly message and error screens
- High-intensity LED inspection light
- 3 adjustable sensitivity levels
- Low battery indicator
- True mechanical pump
- Audio mute function
- Uses 4 AA alkaline batteries, included
- Comfortable rubberized Santoprene handle grip

#### Syringe-type Injectors



Use these syringe-type injectors to add oil to a fully pressurized A/C system. Fill the barrel with the amount of oil needed, connect the injector, and press the plunger.

- 18480 R-134A oil injector, PAG labeled
- 18490 R-134A oil injector, POE labeled
- 18460 R1234YF oil injector, generic
- 18465 R1234YF oil injector, PAG labeled
- 18470 R1234YF oil injector, POE labeled
- Not recommended for UV dye injection.



#### Heavy Duty A/C Recovery and Multi-Refrigerant **Recover, Recycle and Recharge Machines**

#### 34888HD

The Robinair 34888HD heavy- duty machine recovers, recycles, evacuates, leak-tests and recharges R-134a with 98.5% efficiency in both small and large mobile air conditioning systems.

- · Large capacity, removable 50-lb. tank and liquid pump for larger A/C systems, typically found in buses
- · Nitrogen port to dry and leak test A/C systems · Fully automatic recovery,
- system evacuation.
- leak testing, refrigerant charge and oil drain/inject · Optional printer for capturing and retaining vehicle service data

#### 17800C

The 17800C recovers, recycles, evacuates and recharges, all in one fast and continuous operation through one hookup. It's ideal for mass transit vehicles, buses, refrigerated trailers or containers and other applications that use refrigerants not typically found in mobile applications.

- Automatically controls machine functions, leading the user through operations and
- also notifying when it's time to change the filter drier, and vacuum pump oil
- Automatically adjusts from liquid to vapor for fast and efficient recovery.
- Electronic scale makes it simple to recharge to factory specifications; also weighs recovered refrigerant and provides tank overfill protection.
- 5 cfm vacuum pump is large enough to thoroughly evacuate almost any system; making it ready for recharging.
- Manual air purge function to remove any non-condensable contaminants.
- · Vacuum leak test function allows user to monitor the system for vacuum decay to determine if a leak exists in the A/C system.
- Automatic oil drain allows the user to see amount of oil removed from the system being serviced.
- · Heavy-duty filter can handle up to 300 lbs. of refrigerant, effectively removing moisture and acid from the refrigerant.
- Easy to view 4.3" color graphical display.
- · Maintenance counters to monitor cumulative amounts of refrigerant recovered and charged, as well as other machine operation variables.
- · Optional printer can be added to expand capabilities and provide printed record of service performed.
- Compatible with R12, R22, R134A, R401A, R401B, R402A, R402B, R404A, R407A, R407B, R407C, R410A, R500, R502, and R507 refrigerants.







#### AC1234-4

#### Premier R-1234yf Recover, Recycle and Recharge Machine

The AC1234-4 is a fully automatic ACS machine that meets or exceeds SAE J2927 and J2843 standards for 1234yf recovery. The machine includes an integrated refrigerant identifier that samples the refrigerant in the vehicle's A/C system prior to recovery. AC1234-4 is a highly accurate and reliable machine capable of servicing both standard and high-voltage vehicle A/C systems.

- · Fully automatic operation program for service, walk away and return when complete
- · Unmatched, industry-leading 98.5% recovery efficiency
- Charge accuracy within +/- 1/2 oz
- · Automatic internal tank refill. No stopping to fill the internal tank during or before service
- Automatic oil drain shows how much oil was removed from the system during service
- · Automatic air purge removes the potential of air accumulating in the internal tank
- · Integrated refrigerant identifier (meets SAE J2927)
- Programmable vacuum operation helps get to the necessary vacuum level in any condition quickly
- System leak test to identify gross leaks in a system
- · Liquid refrigerant flushing function can flush A/C systems or individual components using liquid refrigerant instead of harsh chemicals
- Meets and exceeds SAE J2843 requirement for R-1234YF Recover, Recycle and Recharge equipment

### Robinair Vacuum Pumps

#### VacuMaster<sup>®</sup> Single Stage Vacuum Pumps

15115 1.5 CFM Vacuum Pump

3 CFM Vacuum Pump

5 CFM Vacuum Pump

15310

15510



#### VacuMaster® 2-Stage Vacuum Pumps

#### 15150

1.5 CFM Vacuum Pump

15300 3 CFM Vacuum Pump

15500 5 CFM Vacuum Pump

#### **CoolTech® Vacuum Pumps**

15434 4 CFM Vacuum Pump

15600 6 CFM Vacuum Pump



### **Robinair A/C Tools & Equipment**



	-		-	
A/C comparison chart features	34288NI	34788NI	34788NI-H	34988NI
Fully-Automatic Function: Program to recover, vacuum, leak test and charge without operating panel valves.		х	х	х
Automatic Dye Inject: Gives the user the ability to use the machine to inject UV dye into a vehicle's A/C system.				х
Automatic Oil Drain: A display reminds you to empty the graduated container to show the amount of oil to replace.	Х	х	Х	х
Oil Inject: Automatically inject oil back into the vehicle's A/C system.		Х*		X**
Refrigerant & Oil Database: A/C system capacities for North American market vehicles (Optional – not included with the machine)	Optional	Optional	Optional	Optional
A/C System Flush: Flushes a vehicle's A/C system with refrigerant, eliminating any residual oil or other liquid. (Flushing adapters not included)		Х	Х	х
Save & print before and after service data: Allows the user to store before and after service information by vehicle and print this information to provide to a customer.		х	х	х
Visual & Audible Alarm: Notifies the user when service is complete, or if a problem has occurred.		Х	Х	Х
Vacuum Leak Test: Monitors level after evacuation, informs of possible leak.		Х	Х	Х
Automatic Air Purge: Eliminates system-damaging air without monitoring gauges or opening valves.	Х	х	Х	х
Automatic Refrigerant Refill: Maintains a user-selectable amount of refrigerant in an internal vessel and signals when it's time to change supply tank, no monitoring required.		Х	х	х
Vacuum Feature: Defaults to 15 mins, programmable up to 99 mins. "Remaining time" is displayed.	х	х	Х	х
Display: Multilingual	Х	X***	Х	Х
Refrigerant Charging	Х	X***	X***	X***
Refrigerant Management System: Displays refrigerant use and monitors remaining filter life. Prompts appear when 1/3 of filter life remains.	х	х	х	х
Electric Vehicle: Capable of servicing high voltage electric compressor A/C systems.			х	
Printer	Optional	Optional	Optional	Х

\* One oil bottle. \*\* Two oil bottles and one UV dye bottle. \*\*\* Charge mode from high or low side, or use both sides.

# New Vehicle Database Screens



34411-H 134a database 134a database



#### R1234yf Aluminum Manifolds and Hose Set

- Easy-to-read 3-1/8" adjustable gauges.
- · Durable aluminum manifold block with fittings.
- · Improved face seal valves provide a tight seal,

#### 2-Way Brass Manifold 45111

- R134a Manifold Hose Kit
- · 90° manual couplers
- 72" R134a hose set

# 9010A

#### Slimline **Programmable Scale**

- · Completely portable refrigerant scale, battery powered, can be used with all refrigerants.
- Extreme accuracy.
- 110 lb./50 kg capacity.







#### less wear and improved flow. · Easy-to-grip control knobs.



- Confirm A/C system charge capacities directly from your Robinair A/C RRR machine for R-134a and R-1234yf systems, sold separately.
- Includes charge amounts and component oil capacities for vehicle model years 1997-2018 using R-134a refrigerant and vehicle model years 2013-2018 using R-1234yf refrigerant 34413-A.
- · Database helps ensure the vehicle system is charged with the correct amount of oil, per factory and OEM specification

34411-H - R-134a Vehicle A/C Refrigerant Database 2018. Compatible with legacy Robinair R-134a machines 34788, 34788-H, 34988.

34412-C - R-134a Vehicle A/C Refrigerant Database 2018. Compatible with new Robinair R-134a machines 34288NI, 34788NI, 34788NI-H, 34988NI.

#### R-1234yf Vehicle A/C Refrigerant Database 2018

34413-A - R-1234yf Vehicle A/C Refrigerant Database 2018. Compatible with new Robinair AC1234-4 R-1234yf recovery machine.

# MUSCLETOOLS Bosch HD Diagnostics

# Bosch ESI[truck] heavy-duty diagnostics



The ESI[truck] platform features software package options for vehicles technicians see every day. The 3823 and 3824 software packages include all makes/ models HD coverage, datastream and component actuations. Choose the 3824 package for even more – system info, technical info, parameter configurations, change calibrations, wiring diagrams, injector coding and service schedules.

# 3823 ESI[Truck] Pro level software

For professional techs looking to do DPF regeneration, component actuation, special tests and automatic module identification for Class 6-8 trucks.

#### Best aftermarket coverage

- ▶ Truck brands: Freightliner, International, Kenworth, Mack, Volvo, Peterbilt, Sterling, Western Star
- Engine brands: Caterpillar, Detroit Diesel-MBE, Volvo, Mack, Navistar, PACCAR, Perkins, Deutz, MTU
- Brake systems
- Transmissions
   Trailer ADC
- Trailer ABS
- In-depth heavy-duty, medium-duty
   Light-duty basic

# Functions and efficiency technicians need

- ► Fault code report for entire truck
- ► Automatic vehicle ID
- Read & clear fault codes
- Cylinder cut-out
- Injector actuations
- Key component actuations
- Bluetooth wireless to VCI
- Comparable to industry software including most OEM's

# 3824 ESI[Truck] Expert level software

For expert techs wanting all the functions of 3823 plus system info, technical info, parameter configurations, change calibrations, wiring diagrams, injector coding and service schedules.

# All the ESI[truck] Pro features plus expert-level diagnostics:

- System tests (some automated)
- Leakage tests
- Injector coding and trim files
- Calibrations (including VGT)
- Adjustments and settings
- Optional: repair information and troubleshooting
- Wiring diagrams
- Technical data
  - Component locations
  - Installation specs
  - Component specs
  - System operating specs

Learn more or request a demo at boschdiagnostics.com/pro.

ESI[truck] Software Packages features	Professional Packages		Expert Packages	
ESILITUCK SUTTINATE FACKAGES TEALUTES	3823BSC	3823	3824BSC	3824
10" tablet PC included	N/A	<b>Ø</b>	N/A	0
RP1210 communication interface	0	<b>Ø</b>	0	0
Create and print reports*	0	0	0	0
DPF regeneration and maintenance resets	0	<b>Ø</b>	0	0
Component actuations	0	<b>Ø</b>	0	0
Actuation tests	0	<b>Ø</b>	0	0
Data stream tables and graphing	0	0	0	0
Read and clear trouble codes	0	<b>Ø</b>	0	0
System tests (some automated)	N/A	N/A	0	0
Leakage tests	N/A	N/A	0	0
Injector coding and trim files	N/A	N/A	0	0
Calibrations (including VGT)	N/A	N/A	0	0
Adjustments and settings	N/A	N/A	0	0
Wiring diagrams	N/A	N/A	0	0
Technical data	N/A	N/A	0	0
One-year warranty	0	Ø	0	0
3824-08R troubleshooting and repair subscription for faster diagnosis of engine, brake, transmission, ABS coverage & more	N/A	N/A	Optional	Optional

\*HD Diagnostics coverage: Freightliner, International, Kenworth, Mack, Volvo, Peterbilt, Sterling, Westernstar, MD Trucks, Isuzu, GM and Ford. \*Engine coverage: Caterpillar, Cummins, Detroit Diesel-MBE, Deutz, MTU, Navistar, PACCAR, Perkins and Volvo, and includes medium- and light-duty software.

#### **Bosch HD Diagnostics**

# **Adapters**

#### 3824-06

#### Bosch ESI[truck] Trailer Adapter 7-pin PLC adapter for trailer **ABS diagnostics**

► J2497 Power Line Carrier (PLC) communication compatible Allows direct connection to trailer



- Works with or without tractor present – External power supply is necessary without tractor
- Bosch ESI[truck] trailer ABS coverage for Bendix, Haldex, Meritor Wabco and Wabash systems
- Compatible with 3824, 3824BSC, 3823 and 3823BSC diagnostic tools

#### 3824-10

#### Bosch ESI[truck] 9 Pin Adapter **Cable High Speed Comm**

- ▶ 9-pin heavy-duty diagnostic connector
- ► High-speed diagnostics communication
- Backward compatible with older black 9-pin vehicle connectors
- Compatible with 3824, 3824BSC, 3823 and 3823BSC diagnostic tools

# License Renewal

#### 3824-08

#### Bosch ESI[truck] License Renewal

12-Month Security Card includes one year of advanced diagnostic software for 3824, 3824BSC

# Subscription

#### 3824-08R

#### **Bosch ESI[truck] Troubleshooting and Repair Information** Subscription 3824-08R

- ► Fixes for +13,000 trouble codes
- ► Fixes for engine symptoms
- ► Can be added to 3824, 3824BSC, diagnostic tools

### Extended service contracts available for all ESI[truck] software packages

1, 2, & 3 year service contracts available. Contact ToolGuard for more information at 1-800-233-7055

# High-pressure leak detection for heavy-duty system diagnostics & repair

#### 1699500000

#### **HPT 500 Features**

- Produce leak detection smoke at higher pressure than standard machines (up to 20psi) for higher pressure systems
- ▶ Higher flow rate fills the system with smoke up to 5 times faster
- Ideal for finding leaks in exhaust after-treatment systems
- ▶ Test entire system, from intake to exhaust, in one 15 minute test
- ► High-pressure and large volume systems found in heavy-duty truck & turbocharged passenger vehicles

# 1699500001

#### **HPK 200 Accessory Kit** for HD and Medium Duty **Applications**

- Cooling system adapter
- SmokeMeister wands
- Exhaust stack retention hoop
- Power intake adapter 3.9" (2 included)
- Accessory storage case
  - ► Halogen inspection light
  - Vapor producing fluid
  - Ball-end hex point L key
  - Oxygen sensor port adapter





- Temperature sensor port adapter
- Pressure sensor port adapter
- Block off coupler
- Detachable 12V DC power cable
- Quick start guide

# Medium and heavy-duty diagnostics for heavy-duty and aftermarket shops

Ideal for heavy-duty shops as a second diagnostic tool and mobile repair trucks **Cost-effective solution for aftermarket** shops in need of heavy-duty coverage

#### **HDS 200 Features**

- Brilliant Color Display
- Rugged enclosure for durability
- Class 4 Class 8 truck coverage featuring "Automatic Protocol Search'
- ▶ HD J1587 / J1708 and J1939 CAN, Engine, Transmission/ABS coverage and more
- Global OBD II Quick Test
- Gasoline and diesel engine coverage
- Read and clear diagnostic trouble codes
- ► Live vehicle data includes
  - Engine speed - Engine ECU temperature
  - Percent acceleration pedal position
  - Engine intercooler temperature
- Engine coolant temperature
- Battery voltage
- Alternator voltage output
- Ambient air temperature
- Air inlet temperature
- On-screen definitions of diagnostic trouble codes

#### HDS 200 Includes

HD Scan tool, 9 Pin Deutsch Cable, 6 Pin Deutsch Cable, 16 Pin HD/OBD II Cable, USB Cable, Quick Start Guide, Carrying Case and 1-Year Warranty.



1699200239



# **MUSCLETOOLS** OTC professional diagnostics



# **3893 ENCORE**

### **Fastest from code-to-fix**

- OE-level Domestic / Asian / European Coverage
- 30 million on-tool fixes, maintenance tests and symptom assist
- Direct link to Identifix<sup>®</sup> and other repair forums
- Industry-leading light-duty diesel coverage
- 7" touch screen

Lifetime hardware warranty\* Made in USA with globally sourced components



# **3896 EVOLVE** All features of the OTC Encore plus

- The industry's best and only tool with full-system wiring diagrams
- Wireless, J2534 compliant VCI
- Dual-band Wi-Fi for secure connections to shop WiFi and wireless VCI
- Front and rear-facing camera
- 10.4" hi-res touch screen

Lifetime hardware warranty\* Made in USA with globally sourced components

# boschdiagnostics.com/pro

3914

\*Lifetime warranty applies only to tool hardware as long as owner maintains an active diagnostics subscription. Details at otctools.com.

# **3914 BATTERY & STARTING/CHARGING SYSTEMS TESTER**

- Test automotive batteries and create health reports
- Works on 6V and 12V automotive batteries - Regular Flooded, Enhanced Flooded, AGM, EV and Start-Stop.
- 12V/24V charging/starting systems tests
- Test charging and starting system health to diagnose charging issues
- Email test results (Stores 2,000 test records)
- Test batteries with as little as 1.5V
- 3 LED indicators (Blue: Connected, Green: Power, Red: Trouble)
- 20-inch cable with durable clamps
- Works with Encore or Evolve software version 2.10 and newer
   2.10 software includes a new battery and system test app
  - Communicates wirelessly to Encore & Evolve via Bluetooth



# TRIAGE TOOLS WITH CODECONNECT®

### **READ CODES AND FIND THE FIX WITH OTC**

Triage scan tools range from simple code readers to advanced diagnostic tools featuring live engine data, CodeConnect<sup>®</sup>, ABS and Airbag coverage. All scan tools will work with vehicles 1996 and newer, OBD II and CAN, with optional coverage for pre-1996 vehicles available.









3208	3209	3210		321	1	
OBD II & ABS Scan Tool	OBD II ABS & Airbag Scan Tool	CodeConnect® with ABS & Air		OBD I & II Scan Tool g		n Tool
Product Comparison			3208	3209	3210	3211
OBD II & CAN compatible			•	•	•	•
(All 1996 and newer vehicles)			•	•	•	•
On-screen codes, definitions and	d emissions status		•	•	•	•
Erases codes and turns off the C	heck Engine Light		•	•	•	•
Live data and freeze frame data			•	•	•	•
ABS/Airbag (Most 1996-2013 GM	I, Ford, Chrysler, Honda, Hy	undai, Nissan & Toyota)	ABS only	•	•	•
Manufacturer enhanced definitio	ins		•	•	•	•
AutoID™ identifies vehicle being	scanned			•	•	•
Color screen				•	•	•
Graphing live data				•	Dual PID	Dual PID
Internet updateable				•	•	•
Multilingual menu & code definit	ions			•	•	•
Record and play back data				•	•	•
Battery / alternator / charging system monitor			•	•	•	
OBD II Modes 1-A are supported including Mode 6 data			•	•	•	
CodeConnect® over 26 million fi	xes				•	•
OBD II Ford on-demand tests					•	•
Oil light & battery reset					•	•
Expanded European engine, ABS	and Airbag trouble code co	overage			•	
ABS live data and sensor reading •						
Steering and brake service resets					•	
OBD   coverage (1984 – 1995 GM	M & Ford, 1989 – 1995 Chry	rsler & Toyota)				•



#### 3838

#### Standalone TPMS tool with Bluetooth OBD II

The OTC 3838 is both a sensor activation and diagnostic device that features a wireless OBD II module for TPMS sensor registration. The tool works with all OEM and aftermarket sensors.

- Exclusive wireless OBD-II module for TPMS sensor registration.
- Standalone TPMS tool with activation, relearn & diagnostic capabilities.
- Three years of software updates included.
- Allows for cloning of universal sensors.
- Key fob signal test and infrared print capabilities.



#### 3415 CAN Test Box

# Breakout Box for Scan Tools

- Connects to Diagnostic Link Connector (DLC).
  Connect leads for increased diagnosis,
- analysis, and monitoring. • LEDs display signal detection – Flashing LED's • Magnifies DLC
- Displays battery voltage with warning

### SUBSCRIPTION SOFTWARE

#### 3893-LTW

#### Encore 1-year subscription and



Lifetime hardware warranty Encore Domestic, Asian and European Software 1-year subscription kit provides a year of frequent and valuable updates for new coverage, coverage enhancements, repair information, application improvements and includes the Diagnostics for Life\*

lifetime hardware warranty. Diagnostics for Life\* lifetime hardware warranty means OTC supports your Encore for as long as you own it, as long as you update it!

The "hardware warranty" applies to the Encore scan tool tablet only. Accessories, such as cables, adapters, batteries and case remain the 90 Day factory warranty from purchase.

#### 3895-08 OTC Genisys Touch Software Update



Genisys Touch Domestic, Asian and European Software update kit provides new coverage, coverage enhancements, repair information and application improvements.



#### 3167

#### Battery & Electrical System Diagnostic Tester

- Digital circuitry precisely controls battery test loads to accurately determine battery conditions.
- Tests both flooded lead acid and AGM/gel cell batteries accurately—down to 1 volt state of charge.
- Tests vehicle starting and charging systems with minimal user interaction.
- Tests all 6- & 12-volt batteries with a 50-2000 CCA operating range.
- Scales: CCA, CA, AHR, MCA, JIS, DIN.
- Removable/auto-sensing leads. (3' leads included in kits, optional 10' leads available.)
- Optional amp clamps for current drain tests and starting/charging measurements.
- Includes SABRE HP, 3' test leads, side-post terminal adapters, instruction manual, and molded-plastic carrying case.

#### 3834T

#### TPR Activation Tool VEHICLE COVERAGE THROUGH 2017

- New lower cost kit for use with
- Encore, Evolve, Genisys Touch scan tool or as a stand-alone tool.
- Works on vehicle TPMS sensors through 2017.
- Bright graphic display and simple navigation buttons enable vehicle selection for fast activation.
- Automatically adjusts activation output power to eliminate cross activation of near sensors.
- Tool includes a 6 month update
   subscription from www.tpmsupdates.com



VEHICLE O THROUGH

# **MUSCLETOOLS** Specialty Tools

# **Pliers & Cutters**



#### 4512

#### **Snap Ring Pliers Set – Internal/External**

- For internal or external snap rings; thumbscrew permits quick conversion.
- · Made of heavy-gauge tempered steel.
- · Includes two stainless steel handled picks.
- · Contained in a blow-molded plastic storage case.



#### 4513

#### Heavy-Duty Snap Ring Pliers Set (2 piece)

- Heat treated steel "circlip" pliers for large equipment repair. • Replaceable tips and spring ratchet locking mechanism to securely hold against snap ring tension.
- Internal pliers' capacity 3-1/16" to 6-1/4" (78 mm to 159 mm) snap rings.
- External pliers' capacity 3-1/2" to 6-1/2" (89 mm to 165 mm) snap rings.
- · Blow-molded storage case includes extra sets of replaceable tips.
- Overall length 16"; handle length 12-1/2".



#### 4514

#### Mini Snap Ring Pliers Set (4 piece)

- · Service S-ring and R-ring clips, internal or external, straight or angled. Ruggedly built of heat-treated chrome molybdenum steel.
- · Set includes two internal snap ring pliers (one straight, one 45°) and two external snap right pliers (one straight, one 45°).
- All pliers have .038" (1.0mm) diameter tips.
- Overall length 3"; handle length 2".

#### **5900A-PLUS**

#### Master Torx Bit Socket Set plus special 24mm External Torx® PLUS Socket

Updated 53-piece Master Torx Bit Socket Set plus special 24mm External Torx PLUS Socket required for Ford Super Duty pick-up beds starting model year 2017. Socket kit includes various sizes of Torx, Torx PLUS, Tamper Resistant Torx, Bit Sockets and External Torx Sockets in 1/4", 3/8" and 1/2" square drive. Convenient hard plastic clamshell case for protection and organization. Not rated for use with impact tools.



#### 6792

#### **Transmission Fluid Refill with Adapters**

- Connect to shop air supply to extract or dispense fluids
- Automatic pressure relief for safe operation Switch between Dispensing and Extraction by simple turn
- of valve Easy "Push On" quick connects, and Trigger lock for continuous flow
- Includes universal flexible nozzle
- Includes the 6792-EDB Extraction Dispenser Bottle and 6792-TFA Transmission Fluid Adapter (14 piece "OE style" ATF adapters)



#### 6792-EDB **Extraction Dispenser Bottle**

- Connect to shop air supply to extract or dispense fluids
- Automatic pressure relief for safe operation
- Switch between Dispensing and Extraction by simple turn of valve
- Easy "Push On" quick connects, and Trigger lock for continuous flow
- Includes universal flexible nozzle





#### 6792-TFA **Transmission Fluid Adapters**

- Vehicle application reference included
- Convenient storage case



#### Handled Pry Bars (3 PC)

- Includes 8", 12", and 18" lengths
- Dual durometer handle for great ergonomics
- Striking cap contacts bar protecting handle



#### Handled Pry Bars (3 PC)

- Includes 24", 36", and 48" lengths
- Dual durometer handle for great ergonomics
- Striking cap contacts bar protecting handle Made in USA

# **MUSCLETOOLS** Specialty Pullers

# **Specialty Pullers**



#### Gear and Pulley Pullers

These tools are perfect for removing timing gears, fan pulleys, harmonic balancers, and many other parts having tapped holes.

- Each puller will spread from 1-1/2" to 4-1/4". The puller blocks are 4-7/8" wide, tapped 5/8"- 18 UNF. Includes two hex head cap screws, 3/8"-16 x 3" long.
- 7392 Puller with 13" long screw
- 7393 Puller with 5-1/2" long screw



#### 522

#### Large Gear and Pulley Puller

Using this tool, you can easily remove a wide range of gears, pulleys, or other parts that have tapped holes.
The spread is 2" to 7-3/4". Its block is 8-1/4"

- wide, and its forcing screw is 3/4"-16 x 11-5/8" long.
- Accommodates any cap screws up to 1/2" diameter.



#### 518

#### Flange-type Puller

- Pulls harmonic balancers, timing gears, and other parts having two or three tapped holes.
- Slotted holes in puller body permit cap screws to be positioned to handle bolt circle diameters from 1-1/2" to 4-5/8"
- Three each of two cap screw sizes included: 3/8"-24 x 3" long and 3/8"-16 x 3" long.





#### 6930

#### Flange-Type Puller Combination

Heavy-duty flange puller features a live center forcing screw. Includes two live center forcing screw tips and two sets of commonly used automotive bolts. Puller will work on bolt circles from 1-1/2" to 4-1/4". Three cap screws, 3/8-24 x 3" long, and three cap screws, 3/8-16 x 3" long.



#### 525

#### Flange-Type Puller Combination

Two specialty pullers in one box. You get a flange-type puller for removal of harmonic balancers, timing gears, and other parts with two or three tapped holes. You also get a steering wheel, pulley, and flywheel puller. 525 includes: flange-type puller and steering wheel puller with four sets of cap screws. 3/8"-16 UNF x 3.5". 3/8"-24 UNF x 3.0" 5/16"-18 UNF x 3.5". 5/16"-24 UNF x 3.5"

#### 7319

4421

**Pilot Bearing** 

shanks

**Puller Attachment** 

Removes pilot bearings, thrust

hidden in a shaft or housing. • Jaws require a minimum of 5/8"

Min/Max reach is 1/8" to 1".

Works with both 5/8-18 as well

as M18-1.5 threaded hammer

washers, and smaller bearings

#### **Pilot Bearing Puller**

Designed to pull flywheel pilot bearings in close quarters where a slide hammer cannot be used. Operates on many models with engine in chassis. • Capacity: 7/8" to 2". I.D. reach: 1'







# **NEW**



#### 5943

#### 9-Piece Power Driver Socket Extensions

The new 5943, 9 piece Power Driver Socket Extension set from OTC adds versatility to your existing power tools and socket sets. Each extension uses a 1/4" hex shank for adjustable or locking chuck drills with 1/4", 3/8" or 1/2" square drive on the other end for sockets. 3 square drive sizes - 1/4", 3/8" and 1/2" and 3 lengths for each - 2" 6" and 12". Use your sockets with cordless power tools for short, medium and long reach applications. The 5943 is a great choice for running up multiple bolts like oil and transmission pans or rear ends instead of ratcheting each one by hand. Save time for proper torquing instead of hand turning bolts. Limited lifetime warranty



#### 6981

#### **Blind Hole Puller Set**

Pilot bearings and pilot bushings are one of the most critical components in a transmission clutch system. Damage, wear, or contamination can result in binding on the input gear and may be revealed as the clutch drag symptoms or even a growling sound when clutch pedal is fully released. Address these problems with the 6981 blind hole puller set from OTC.

- Innovative Design covers I.D. from 5/16" to 1-1/4" (Patent Applied for).
- 5 collet-actuator combinations cover 5/16" to 1-14" I.D.
- Use collets with Pulling Bridge or as Slide Hammer Attachment.
- Easy to read component application chart and instructions
- Conveniently laid out in rugged blow mold storage case.
- Forged and machined in Owatonna Minnesota, U.S.A



#### 1630 OTC 2-DRAWER SERVICE CART

The OTC 1630 2-Drawer Service Cart allows you to take assorted tools or tool kits right to the vehicle for handy access. The cart features 5" oversized casters (2-locking; 2-non-locking), an ergonomic grip handle, screw driver storage, locking top and gas shocks to support the lid. The cart has a 500-pound load capacity and stands 39.5" tall, 33.25" wide and 20" deep. The bottom tray is perfect for bulkier storage items, like rags, cleaners and solvents. The top bin is 5" tall and houses the drawer locking mechanism. The first drawer is 3.25" tall and the second drawer is 4.25" tall, both with a generous 20" depth. Safely store diagnostic hardware, cameras and expensive tools securely and within arms reach. The 1630 2-Drawer Service Cart from OTC will help keep your work area organized and save you trips running back and forth to your main tool cabinet. Lifetime Warranty.



#### 4680

#### Wiper Puller

The 4680 Wiper Puller from OTC has a unique design where jaws are forged with radius to hug the center screw for minimal spread, and for accessing recessed components. The radius also ensures optimal contact with object being pulled. It comes with 2 pair of legs - 9/16" width and 1" width - for many types of small component applications. The leg shoulders fit easily over the hex bar and can be snugged into position with a simple turn of a wing nut. Where there is minimal clearance, or deeply recessed access, the 4680 is a great tool choice to overcome these obstacles. Spread: 1" to 2-1/2"; Reach: 2-1/2". Lifetime Warranty.



#### 4676

#### Windshield Wiper Puller

Removes wiper arms on many foreign and domestic cars and light trucks. Will not damage wiper arm or hood cowling during removal. Simply place puller feet under wiper arm and tighten forcing screw against wiper shaft.

# **OIL DRAIN PLUGS**

# 1

#### 5911A Drain Plug Pro™

- Remove oil drain plug without
- touching the plug or hot oil.
- No touching hot plug.
- No hot oil on hands.
- No dropping of plug in hot oil. Strong magnetic end
  No oil soaked gloves.
- Just magnetically attach DRAIN PLUG PRO to
- pre-loosened drain plug and rotate to remove plug.
- Loosen drain plug with wrench.
   Place DRAIN PLUG PRO on plug so the second second
- Place DRAIN PLUG PRO on plug so that the tool locks on the plug hex.
- 3. Rotate handle to remove plug.
- 4. Pull plug away from oil stream.
- 5. Magnetic DRAIN PLUG PRO retains plug.

#### 5961

#### Drain Plug PRO Kit

The original innovation meets customer feedback for the broadest application possible! The 5961 Drain Plug PRO kit from OTC utilizes: • 1/4" square drive.

- Mounted on a flexible cable.
- Standard drain plug attachment.
- Low profile drain plug attachment.
- 17mm hex attachment for internally driven drain plugs.
- 5/16" bit driver attachment.
- All are conveniently stored in socket rail fashion.

Protect your hands and arms from hot oil in any application! Save time by preventing a dropped or lost drain plug. Never fish a dropped drain plug from a pan full of hot oil again! And, you can use the 1/4" square drive with any 1/4" drive socket you already own, to start bolts in hard to reach locations. The handy 5/16" bit driver lets you start screws in hard to reach places as well.

#### 5961HD

#### Heavy-Duty Drain Plug Pro™

- For Agricultural, Commercial, and Heavy- Duty Vehicle Applications
- Remove fluid drain plugs with out touching the plug or hot fluids!
- No touching hot plugs.No hot fluids on hands.
- No not fullas of hands.
   Removable attachment permits use with common 3/8" square drive sockets. Great for starting bolts in
- hard-to-reach places. • Attach to pre-loosened drain plugs
- and rotate to remove.Magnetic attachment for internal
- 1/2" square drive drain plugs.
- Magnetic attachment for large drain plugs.



# OTC 2359

#### 2359

2352

Lever Action Bucket Pump

Fits 5 gallon pails.
Includes 12" drum cover.
3 position handle for

Includes 5' hose

heavier oils.

different fluid viscosity. • Steel discharge spout.

• Up to 4.6 oz. / stroke.

For use with transmission

fluid, gear oil and other

#### Suction Oil Gun

- For use with gear oils to get them both into/out of gear boxes, transfer cases and differentials.
- 16 oz capacity and 14" hose.



#### 2357

#### **Brass Transfer Pump**

- Drain oil from crankcase or transmissions through dipstick tube from underhood not undercar.
- Pumps 3.2 oz per stroke.

#### 2421

#### Safety

air blow gun,

- snub nose rubber tip
- Impact and Weather resistant Nylon Body.
- Safety Venting in all tips.
- Corrosion Resistant Stainless Steel Nozzles.
- Drop Resistant Construction.
- Soft Rubber Grip and ergonomic design for convenience and comfort in extended use.
- Brass threaded air inlet.
- Variable speed trigger for control of amount of air dispensed.
- Conforms to OSHA STD 1910-95 (b) for max
- noise level when used with 90 PSI air pressure.
- Conforms to OSHA STD 1-13.1 for safety and are classified as safety Blow Guns.



# MUSCLETOOLS GM TOOLS



#### 2550

#### Key Fob Fixture

Used for removal and installation of the key blade pins in GM flip key fobs when replacing the fob and retaining the original key blade. Includes holding tray and drift pin for use with a hammer. Eliminates damage to all parts. Similar to BO-51098.

Applications: 2010 - 2015 GM vehicles including Buick, Cadillac, Chevrolet and GMC



#### 6706

#### **Injector Rail Assembly Remover**

Used for removal of the direct injection fuel rail without damage. The rail assembly must be removed as straight as possible to prevent damaging an injector bore in the cylinder head or the mount assembly. Similar to EN-49248.

**Applications:** 2007-2014 General Motors Direct Injection Engines including those used in Pontiac, Saturn, Cadillac and Chevrolet vehicles.



# 6759

#### Flywheel Holding Tool

Holds the flywheel in place for servicing the balancer or flywheel bolts. Mounts in place of the starter and engages the flywheel ring gear teeth. Similar to EN-50792.

Applications: 2013-14 Cadillac ATS, 2014 Cadillac CTS, 2013-14 Chevrolet Malibu, 2014 Chevrolet Impala & Buick Regal 2.0L, 2.5L engines.



#### 6758

#### Front Crank Seal Installer

Installs the front crank seal with the cover on or off the engine. The bolt is threaded into the crankshaft and the nut is tightened to seat the seal. Similar to EN-50820 & EN48034.

Applications: 2013-14 Cadillac ATS, 2014 Cadillac CTS, 2013-14 Chevrolet Malibu, 2014 Chevrolet Impala and Buick Regal 2.0L and 2.5L engines.



#### 6746

#### **Timing Chain Holding Tool**

This holding tool retains the timing chain position relative to the crankshaft position. The tool clamps around the timing chain pins on both the intake and exhaust sides of the cylinder head, allowing the cams to be serviced. Similar to EN-50656.

Applications: 2013-14 Cadillac ATS, 2014 Cadillac CTS, 2013-14 Chevrolet Malibu, 2014 Chevrolet Impala  $\vartheta$  Buick Regal 2.0L and 2.5L engines.



#### 6745 Comeboft Actu

#### Camshaft Actuator Locking Tool This locking tool engages the slots in the face of the

actuator and bolts to the cylinder head and cover to hold the actuator in position to remove or install the actuator bolt. Similar to EN-50793.

**Applications:** 2013-14 Cadillac ATS, 2014 Cadillac CTS, 2013-14 Chevrolet Malibu, 2014 Chevrolet Impala & Buick Regal 2.0L, 2.5L engines.



#### 6744

#### **Tensioner Retaining Pin**

Relieves the tension on the timing chain tensioner for camshaft, actuator, and timing chain service. Engages the tensioner arm and moves it forward to disengage the ratchet mechanism. Similar to EN-50837.

 $\begin{array}{l} \textbf{Applications: } 2013-14 \ \text{Cadillac ATS, } 2014 \ \text{Cadillac CTS, } \\ 2013-14 \ \text{Chevrolet Malibu, } 2014 \ \text{Chevrolet Impala } \\ \textbf{Buick Regal 2.0L and 2.5L engines.} \end{array}$ 



#### 6707 Injector Seal Installer Adapters

Two-piece kit includes tools to properly size the seal and install the seals in the proper groove on the injector tip for leak-free operation. Works to install both seals on the injector tip. Similar to EN-51105.

**Applications:** 2014-15 Chevrolet Silverado & GMC Sierra V6 and V8, 2015 Chevrolet Suburban/Tahoe, GMC Yukon/XL, 2014 Chevrolet Corvette, 2015 Cadillac Escalade.

# **NEW GM TOOLS**



#### 6708 Injector Retaining Clip Replacer

Removes and installs the injector retaining clips without over-spreading to ensure proper retention of the injector to the rail. Similar to EN-51097.

**Applications**: 2014-15 Chevrolet Silverado & GMC Sierra V6 and V8 engines, 2015 Chevrolet Suburban/ Tahoe, GMC Yukon/XL, 2014 Chevrolet Corvette, 2015 Cadillac Escalade V8 engines.



#### 6710

#### Fuel Pump Installation Gauge

Verifies that the camshaft fuel pump lobe is at base circle position before installing the high pressure fuel pump. Tool indicates the pump may be installed when it is flush to manifold surface. Similar to EN-51092.

**Applications:** 2014-15 Chevrolet Silverado & GMC Sierra V6 and V8 engines, 2015 Chevrolet Suburban/ Tahoe, GMC Yukon/XL, 2014 Chevrolet Corvette, 2015 Cadillac Escalade V8 engines



#### 6553

#### **Connecting Rod Guides**

Set of two connecting rod guides protect the crankshaft bearing surface from damage during piston and connecting rod removal or installation. Guides install onto the connecting rod after the cap is removed and help prevent nicking or scratching. Similar to EN-51454.

Applications: For use on rods with M8 X 1.0 threads.



#### 6712 Axle Seal Protector

Protects seal from being cut or nicked, both of which can cause immediate or eventual leaks. Similar to J-44394-A.

Applications: 2011 and later drive axles on most GM vehicles.

# **MUSCLETOOLS Motorcycle Tools**

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#### 4754

#### Universal Pulley Holder

- Universal design fits many different size pulleys having slots or holes, such as crankshaft / transmission pulleys or gears.
- Wrench is adjustable from 1-1/2" to 8-5/8"; four different size step pins are interchangeable
- Long handle enables technician to easily hold the pulley when tightening or loosening retaining bolts.



#### 4769

#### Wheel Rim Protector Set

Fits over the wheel rim to protect the wheel from being scratched or damaged while using tire spoons.



#### 4795

#### Safety Wire Twist Pliers

These versatile 8" pliers will reliably twist safety wire rapidly and consistently. The right hand twist mechanism features an automatic spring return. The forged alloy steel construction features tapered jaws for confined areas and mated cutters to cut safety wire. For use on safety wire applications found on vehicles, machinery, and aircraft.

#### 4796

#### **Steering Neck Bearing Race** Remover

Simple way to remove bearing race in the steering neck. Remover

is inserted into neck and bolt is adjusted to tighten the remover against I.D. of steering neck. The remover is then driven from other end of neck to remove race. Fits 1-1/8" to 2-5/8" I.D. bearing race

# 4844

#### Cam/Crank Locking Tool, Twin Cam & Dyna

- Designed to lock the cam and crank sprockets together for removal, replacement and proper torquing of the sprocket bolts.
- · Double end design covers;
- Twin Cam 88/B 1999 and later, Dyna 2006 and later



#### 4738 Chain Breaker and

#### **Riveting Tool Kit**

This heavy duty kit makes easy work out of breaking, pressing, and riveting # 415 - # 632 size standard and O-ring chains. The handle can be mounted in 3 different positions on the forged and hardened alloy c-frame, providing access while the chain is on the vehicle. The kit can rivet hollow nose master links as well as hardened pins. Storage case included.



#### 4838 Piston Ring Compressor Set, 6 Piece

This 6 ring set covers 2-7/8" thru 4-3/8" piston diameters. The ring compressor pliers feature a ratcheting lock to hold the handles in position for easy piston installation.



#### 4839 Adjustable Piston Ring **Expander Pliers**

These simple pliers include tips designed to capture the ends of piston rings to hold and expand them securely while installing onto pistons.



#### 4840 Piston Ring Compressor Set with Ring Expander

This complete set includes 12chrome plated compressor sleeves covering 1-3/8" thru 4-3/8 diameter piston applications. Both the ring compressor and ring expander pliers feature a ratcheting lock to hold the handles in position for easy piston and ring installation. Complete with a metal carry case.



### 4948

#### Water Pump Drive and Rotor Puller

- Installs the water pump drive gear on the rotor and removes the rotor from the crankshaft. Works on Polaris RZR XP.
- Similar to Polaris No. PA-49316.



#### 4860

#### Transmission and Steering **Bearing Puller/Installer Kit**

- This combination kit works on transmission main-shaft and steering stem bearings on HD motorcycles.
- Removes fork stem bearings on most applications, flywheel bearing 00-03 XL. Removes/installs inner bearing race on

trans main shaft Big twin 84 and later. Aftermarket trans main-shaft bearings & bushings on 5 & 6 speed LSD and RSD trans



#### 4888

### Flywheel Socket Set

The best flywheel sockets available. These offer a low profile design that provides full nut to socket contact to eliminate rounding off the nut and slippage. Made from heat-treated chrome moly steel.



#### 4991

#### Clutch Compressor Tool

This universal compressor is used to compress the drive or driven clutch during assembly of disassembly. Innovative design makes use quick and effective without binding. Works on all Polaris and TEAM clutches found on full-sized model ATV. Side x Side, and Snowmobile

# 4974

#### **Clutch Puller**

- Removes drive clutches on Polaris Side x Side and Snowmobile
- Snow Applications: 700/800 XCR Fuji 3 cylinder engines 1999-2001, all Domestic twin 2 -strokes model year 2000 and newer, FS/FST models 2006 and newer.
- Side x Side Applications: Ranger RZR XP 2011 and newer.
- 3/4-16 thread.

#### 4987 **Clutch Spider** Nut Socket

- Used to remove and install the drive clutch spider jam nut on 2011 & newer Polaris Ranger RZR XP.
- Similar to OE P/N PU-50578. Similar to Polaris No. PU-50578.

# 4989

#### **Clutch Spider Tool**

 Essential when servicing or re-building Polaris clutch. Fits P85 and P90 clutches found on Polaris ATV, Side x Side, and snowmobiles 1972 to Present. • Similar to Polaris No. 2870341.



### 4748

#### **Belt Tension Gauge**

This easy to use and read tool allows for accurate belt tension to be set after belt replacement, adjustment, or wheel service. Use on secondary drive belts with a 10 lb. spec.



#### 4852

#### Adjustable Primary Locking Bar

- Used to lock primary for service work. • Will work on Chain or Belt Drive style
- primary drives. • Adjustable length from 4" to 7-1/4" to
- cover virtually any application.

# 4882

#### **Rear Axle Wrench**

- This wrench allows for simple adjustment of drive belt tension or rear wheel alignment.
- · Eliminates the need to remove any exhaust components.
- 36mm wrench includes a 1/2" square drive allowing for use with a torque wrench for proper axle torque.





### Ball Joint kits / Strut Tamer II Extreme

# **BALL JOINT KITS**



#### 6559

#### **Ball Joint Master Service Kit.**

The 6559 Ball Joint Master Service Kit offers complete coverage of Car and Truck/Van/SUV applications. With 70+ adapters, c-frame and application guide means there is nothing else to add for servicing ball joints.

- The majority of vehicles have press-in ball joints, so stop searching for make-shift solutions for servicing these vehicles - everything required is laid out in this one complete kit.
- With a kit of this magnitude, finding the correct adapters and using them correctly is key to minimizing service time. That is exactly what the included ball joint application quide is designed to do - contains application charts and diagrams with step-by-step instructions.



#### 6529

#### Car Ball Joint Master Service Kit.

- This 50+ adapter kit is the most complete Car ball joint service kit available, and the first of its kind on the market.
- With 70% of OEM's having cars with press-in ball joints, this kit is designed to service those applications. • This kit is a subset of the 6559 and includes 50+ adapters,
- C-Frame, Ball Joint Application Guide, and Location Card all provided in 2 cases.



#### 6539

#### Truck Ball Joint Master Service Kit.

- This 55+ adapter kit is the most complete Truck/Van/SUV ball joint service kit available
- With the majority of Truck/Van/SUV applications having press-in ball joints and universal joints, this kit is designed to service those applications. (note; covers same applications as the 8031 Chrysler/Jeep Truck/Van/Suv Ball Joint Kit without requiring larger C-Frame).
- This kit is a subset of the 6559 and includes 55+ adapters, C-Frame, Ball Joint Application Guide, and Location Card all provided in 2 cases.

6697 Similar to Ford 205-830

Similar to Ford 205-429

6695

6698 Similar to Ford 205-831

#### Ford Axle Shaft Seal Installers

Correctly installs the seal onto the axle shaft & into the wheel knuckle, preventing front hub vacuum leaks that would cause the 4WD to not engage.

#### 6695

#### 6697

Ford Axle Shaft Seal Installer. Works on 2005newer Ford F-250, F-350, 4X4s having the vacuum-operated front axle.

#### 6698



#### 6667

#### Harmonic Balancer Puller

Designed for removing damper pulleys in tight engine compartments, without removing the radiator. Use on the following:

- GM 2000 Generation III 4.8L, 5.3L, 5.7L 6.0L, and 8.1L V8s. Also works on Cadillac 4.5L, 4.6L, and 4.9L V8s beginning in 1988. Chevrolet trucks 2003-later 4.2L 16, 2004-current 3.5L 15 and 2005-current 2.8L 14.
- Chrysler engines from 1990-later, including 2.0L, 2.4L-cyl; plus 2.5L, 2.7L, 3.3L, 3.5L, and 3.8L V6s.
- Ford 1995-later V8 engines with 3 spoke pressed on damper
- Mitsubishi Eclipse 1995-99 2.0L DOHC non-turbo. • Kit contains the 3-jaw puller, four lengths of
- forcing rods, and a forcing screw with a 3/8" square drive for ratchet use, and a 3/4" hex for wrench or socket use.



# 4525

#### **Flexible Hose Clamp Pliers**

Allows technician to access the flat-type hose clamps located in hard-to-reach areas. Pliers has locking mechanism to hold clamp in the open position, making removal and installation of clamp easier. Heavy-duty 24" cable flexes to almost any position. Pliers are spring loaded to the open position.

### **STRUT TAMER II EXTREME**



- tighter than before. • New extra thick 5/8" compression arms for superior
- strength, stability and safety.
- New locking trunions for optimal stability during spring compression.
- New Lock rings to hold arms in position standard. Eliminates arms from spreading or sliding when compressing offset or unique strut configurations. No tools needed to adjust
- New Spring capacity of 2-1/2" 10" diameter, 1-1/4" 24" vertical stroke.
- Extreme duty design to handle the heavier springs found on mid- and some full-size truck strut assemblies.

#### 6637

StrutTamer II Extreme Height 29" (736 mm) Width 21" (533 mm) Depth 20" (508 mm)

#### 6637-ST

StrutTamer II Extreme with stand Height 54" (1372 mm) (36" without handle) Width 22-1/2" (572 mm) Depth 32" (813 mm)





#### 7503HD **Tie Rod/Ball Joint Puller**

- A heavy-duty version of the original 7503
- puller, fitting all the same applications but twice the load capacity.
- Uses a large 3/4" drive screw with interchangeable tips included for multiple applications.



Ford Axle Shaft Seal Installer. Works on 1998-2004 Ford F-250, F-350, F-450, and F-550 4X4s having the vacuum-operated front axle.

Ford Axle Shaft Seal Installer. Works on 2005-newer Ford F-450, F-550, 4X4s having the vacuum-operated front axle.

# **MUSCLETOOLS Shop Equipment**



#### 1770A

#### 1,500 lb. Dual Wheel Dolly

- Hydraulic jack provides almost 5' of lift and tilts wheel assembly 4° to prevent damage to wheel seal.
- Independent lifting rack provides maximum stability; rollers won't catch on load.
- Swivel casters for easy
- maneuverability.Floor space is 45" by 41"
- 6' chain holds load in place.
- Covered by OTC Lifetime Warranty<sup>®</sup>.



#### 1735B 2,000 lb. Capacity HD **Motor-Rotor® Repair Stand**

- Handles a wide variety of engines, transmissions, torque converters, and rear axles from trucks, tractors, and construction machinery.
- The 50:1 ratio gearbox allows full rotation of mounted unit with just a turn of the crank and locks in position. Easily maneuvered when loaded.
- To ensure engine stability in all positions, this repair stand is equipped with a positive-crank handle locking mechanism.
- Twin-post design, featuring laterally adjustable, 3 position outboard support; provides an extremely stable workholding unit.
- Locking rear wheels anchor stand in position



#### 10-Ton Air Lift

- Adjustable lifting saddles and an extra wide stance for extra stability.
- 10 tons of lift at 200 PSI air pressure.
- Lifting range is 13" to 52'
- Automatic mechanical safety catch engages in five height positions.





#### **Truck Clutch and Flywheel Handler**

- Replaces 14" & 15-1/2" clutch
- assemblies weighing up to 250 lbs. • 13" low point enables access below
- side faring. Linkage raises load from horizontal
- to vertical position.
- 360 degree swivel head.
- Covered by OTC Lifetime Warranty®.



#### 5019A 2,200 lb. Capacity Low-Lift Transmission Jack

- Special mounting adapter fits popular Eaton® Fuller® RoadRanger® transmissions used on nearly all Class 7 and 8 heavy-duty trucks. Mounting plate angle is adjusted with the turn of a wrench.
- Swiveling pump handle permits ease of operation in restricted working spaces. Fast-acting pump quickly raises lifting
- Includes No. 540231 adapter for Eaton<sup>®</sup> Fuller<sup>®</sup> RoadRanger<sup>®</sup> transmissions

#### Specifications:

Min. height is 8-1/4" Max. height is 36-1/2" Max. forward tilt - 15° Max. backward tilt - 20° Max. side tilt (either side) - 12° Overall length - 52" Overall width - 32-1/2"



#### 4295 Wheel Stud Service Kit

- Installation done by pushing on the head, eliminating the need for threaded
  - adapters. Reduces number of adapters required - Reduces damage to studs, hubs/bearings
- Increases ease of use • Remove and install 10 studs in only
- 10-15 minutes
- · Can be powered with an impact wrench,
- no hydraulic power source required. . No need to remove hub from vehicle.



#### 2,200 and 4,400 lb. Capacity **Heavy-Duty Floor Cranes**

- To conserve valuable floor space. crane folds into a compact package for storage
- For "close-in" work, leg spread adjusts to clear vehicle's wheels, telescoping boom extension gives additional reach. Roller bearing mounted wheels and steering dolly provide ease of mobility.
- A two-speed hydraulic hand pump provides fast boom travel; descent of boom is under precise control of operator
- Covered by OTC Lifetime Warranty®.

1819 2,200 lb. Capacity Crane. Has hydraulic hand pump and 16-7/8" lifting chain.

#### 1820

4,400 lb. Capacity Crane. Has hydraulic hand pump and 18-3/8" lifting chain.



#### 20-Ton Truck Ramps

- Long, retractable T-handle enhances mobility.
- Non-skid rubber matting prevents
- slippage during use. • Durable, heavy-duty rubber wheels.
- Capacity per pair is 20 tons
- Covered by OTC Lifetime Warranty<sup>®</sup>

#### 5268

20-ton truck ramps handle up to 10" tread width.

#### 5269

Wide 20-ton truck ramps handle up to 16" tread width



### 1780

#### 22-Ton Capacity Jack Stands

- Height range is 13-7/8" to 19-7/8". • Saddle size 3" x 3-3/4"
- Pin-style (non-ratchet) three positions,
- 3" intervals.
- Reinforced collar to meet newest ANSI PALD test standards.
- 11" flat base prevents sinking into the soft around.



5091 shown mounted on transmission jack (jack not included).

### 5091

#### **HD Spindle Adapter**

- Adapter for low lift transmission jacks that holds the spindle assembly firmly in place during king pin service.
- Eliminates the need to completely disassemble the brakes to reduce
- spindle weight for handling Spindle assembly can be raised to a comfortable working height while replacing king pin bearings
- or bushings Patented design will work with
- standard HD truck bolt patterns and wheel stud sizes
- Adapts to most low lift transmission jacks.



#### 5130

#### 1,000 lb. Capacity DriveMaster<sup>™</sup> Driveline Lift

- Low profile of 7"
- Lift range: 23" to 30".
- Pivoting pump handle +/- 15° tilt in each direction
- Includes 553516 differential mounting adapter. Mounts easily using existing bolt patterns. Fits the most common differentials currently in use on Category 7 and 8 Heavy Duty Trucks. Including: Eaton, Fuller, Rockwell,
- Meritor, Spicer, International, and Mack. CE certified, PALD compliant
- Covered by OTC Lifetime Warranty®.

# Heavy-Duty Sockets / Transmission Jacks



#### 1794A

#### Air-Assisted 1,000 lb. Capacity High-Lift Transmission Jack

- Air-assist primary stage for rapidly raising the mounting head, activated by depressing foot pedal.
- Hydraulic secondary stage for precise operator control, activated by a hand pump to raise the load, and a release knob to lower the load.
- Big, easy-to-grip knobs that make mounting head adjustments simple, and a safety chain for securing the load.
- Wide leg base with 4" polyurethane swivel wheels that provide stability and easy maneuvering. (Brakes on two of the wheels.)
- Safety overload system to prevent jack from being used beyond its rated capacity.

#### Specifications:

Min. height is 37-5/8" Max. height is 76-1/2" Max. forward tilt – 42° Max. backward tilt – 46° Max. side tilt (either side) <u>+</u> 12° Leg width – 37-1/8"

#### 1793A

#### 1,000 lb. Capacity High-Lift Transmission Jack

- Universal saddle tilts front to back and side to side; features adjustable corner brackets and safety chain for optimum positioning of the load.
- Flash-chromed rams inhibit rust from entering the hydraulic system.
- Foot-operated pump and lowering pedal for ease of control when positioning or removing a transmission.
- Wide leg base with 4" polyurethane swivel wheels that provide stability and easy maneuvering. (Brakes on two of the wheels.)
- Safety overload system to prevent jack from being used beyond its rated capacity.

#### Specifications:

- Min. height is 35
- Max. height is 71-5/8"
- Max. forward tilt 24°
- Max. backward tilt 19°
- Max. side tilt (either side)  $\pm$  20° Leg width – 37-1/8"



#### 9850

#### Truck Wheel Bearing Locknut Sockets (6-pt.)

- Wheel bearing locknuts are easy to remove or install with these specially designed sockets. They're made of high-strength
- steel and resist rounding out. • 21 wheel bearing locknut sockets (6 pt.) with tool board.
- Sockets are designed for use with 3/4" square-drive manual tools
- only. Impact tool use voids warranty.

No.	Description
1901	Locknut socket (2-3/32")
1902	Locknut socket (2-3/8")
1904	Locknut socket (2-9/16")
1906	Locknut socket (3")
1908	Locknut socket (3-1/4")
1910	Locknut socket (3-1/2")
1912	Locknut socket (3-7/8")
1914	Locknut socket (4")
1915	Locknut socket (4-1/8")
1916	Locknut socket (4-3/8")
1918	Locknut socket (4-7/8")
1920	Locknut socket (2-1/4")
1921	Locknut socket (2-1/2")
1922	Locknut socket (2-5/8")
1923	Locknut socket (2-3/4")
1926	Locknut socket (3-3/4")
1928	Locknut socket (2-9/16" rounded)
1932	Locknut socket (2-7/8")
1934	Locknut socket (3-1/8")
1936	Locknut socket (2-3/8" rounded)
1939	Locknut socket (5-1/4")



#### 9851

#### Wheel Bearing Locknut Sockets (8-pt.)

- Wheel bearing locknuts are easy to remove or install with these specially designed sockets. They're made of high-strength steel and resist rounding out.
- 18 wheel bearing locknut sockets (8 pt.) with tool board.
- Sockets are designed for use with 3/4" square-drive manual tools only. Impact tool use voids warranty

#### No. Description

1903	Locknut socket (2-3/8")
1905	Locknut socket (2-9/16")
1907	Locknut socket (3")
1909	Locknut socket (3-1/4")
1911	Locknut socket (3-1/2")
1913	Locknut socket (3-7/8")
1917	Locknut socket (4-3/8")
1919	Locknut socket (4-7/8")
1924	Locknut socket (3-3/8")
1925	Locknut socket (3-3/4")
1927	Locknut socket (3-13/16")
1929	Locknut socket (2-5/8")
1930	Locknut socket (2-7/8")
1931	Locknut socket (3-5/8")
1933	Locknut socket (2-7/8")
1935	Locknut socket (3-1/8")
1937	Locknut socket (2-3/4")
1938	Locknut socket (4-1/2")



#### 9852

#### Wheel Bearing Locknut Sockets (6-pt.) or (8-pt.)

- Wheel bearing locknuts are easy to remove or install with these specially designed sockets. They're made of high-strength steel and resist rounding out.
- 12 popular sizes in 6- or 8-point.
   Sockets are designed for use with 3/4" square-drive manual tools only. Impact tool use voids warranty.

No.	Description
1904	Locknut socket (2-9/16" hex)
1908	Locknut socket (3-1/4" hex)
1909	Locknut socket (3-1/4" 8 pt.)
1910	Locknut socket (3-1/2" hex)
1913	Locknut socket (3-7/8" 8 pt.)
1914	Locknut socket (4" hex)
1915	Locknut socket (4-1/8" hex)
1921	Locknut socket (2-1/2" hex)
1922	Locknut socket (2-5/8" hex)
1923	Locknut socket (2-3/4" hex)
1928	Locknut socket (2-9/16" hex rounded)
1932	Locknut socket (2-7/8" hex)

#### 1758 Fuel Tank Handler

- Provides safe and efficient handling of fuel tanks.
  Adjustable from 24" to 38" horizontally, and
- 7" to 11" vertically, to service tanks up to 40 gallons. Universal adapter plate fits all OTC and virtually all competitive transmission lacks and power train lifts
- competitive transmission jacks and power train lifts in the market. • Gearing mechanism ensures equal extension of lift
- Gearing mechanism ensures equal extension of lift arms to ensure load is properly balanced over jack.
- Four adjustable support risers can be individually
- adjusted to ensure a perfect fit to any fuel tank design.
- Cross-link polyethylene foam pads protect tank from damage.



# MUSCLETOOLS Equipment



#### 4246

#### **Hendrickson Rear Suspension Bushing Tool Kit**

- Replace rusted and frozen heavy-duty rear suspension bushings faster and easier • Patent-pending design is suspensionmounted, eliminating the need to hold
- the tool during operation Remove/install Hendrickson PRIMAAX
- EX, COMFORT AIR, FCCC V Ride<sup>™</sup> Pivot and D-Pin Bushings
- Save time and effort during suspension service to get trucks back on the road faster
- Included adapters align tool with the suspension to ensure proper bushing installation and reduce the chance of misalignment and bushing damage
- Includes an OTC 4106A 25-ton high-force cylinder

#### 4247

- Adds an OTC 2510A air/hydraulic pump
- to make bushing service faster and easier
- Includes everything in the 4246 kit

#### 4250

#### Hendrickson Adapter Kit for Front Suspensions

- Use with your 4246 or 4247 Rear Tool on select Hendrickson Front Suspensions
- Remove and install Hendrickson PACCAR Monoleaf, Navistar Monoleaf, Volvo Monoleaf suspension Pivot Bushings

#### 4274

#### Hendrickson Front Suspension **Bushing Tool Kit**

#### Replace rusted and frozen heavy-duty front suspension bushings faster and easier

- Patent-pending design is suspensionmounted, eliminating the need to hold
- the tool during operation Remove and install Hendrickson PACCAR
- Monoleaf, Navistar Monoleaf, Volvo Monoleaf suspension Pivot Bushings
- Save time and effort during suspension service to get trucks back on the road faster
- Included adapters align tool with the suspension to ensure proper bushing installation and reduce the chance of misalignment and bushing damage
- Includes an OTC 4106A 25-ton high-force cylinder

#### 4275

- Adds an OTC 2510A air/hydraulic pump to
- make bushing service faster and easier
- Includes everything in the 4274 kit

#### 4254

#### Hendrickson Adapter Kit for **Rear Suspensions**

- Use with your 4274 or 4275 Front Tool on select Hendrickson Rear Suspensions
- Remove and install Hendrickson PRIMAAX EX, COMFORT AIR, FCCC V Ride<sup>™</sup> Pivot and D-Pin Bushings





4250





4254

Not responsible for errors in description. / 18-19 Q2 2018 edition, Printed in U.S.A.

5056



#### 5190A

#### Heavy-Duty U-Joint Puller

- The ideal tool for disassembling drivelines
- May be used with up to a one-inch impact wrench.
- Quickly and easily removes sealed U-joint cups without the need for hammering or heat.
- Will not damage the driveshaft, yoke, bearing cups, or joints.
- Fits practically all Class 7 and 8 trucks, including: Spicer driveline 1610, 1710, 1760, 1810, 1880 Spicer SPL 140, 170, and 250 "Life Series" Meritor (Rockwell) 16N, 17N, 18N, 1710Meritor RPL 20 and 25 "Permalube" Series.
- Covered by OTC Lifetime Warranty®.

# 5055

#### **Slack Adjust Pullers**

These pullers will yank even the most corroded slack adjuster off the S-camand do so in just a fraction of the time needed with "heat and beat" methods. Plus, they won't damage components. Both pullers have a rugged forcing screw and cast steel body. Puller No. 5055 fits many manual types, and the No. 5056 works on Rockwell, Haldex, Gunite, and Bendix automatic adjusters.

Covered by OTC Lifetime Warranty<sup>®</sup>.

#### 5055

Manual slack adjuster puller.

#### 5056

Automatic slack adjuster puller.

