# AS



## **Diesel Timing Gauge Set**

#### SP500<sup>‡</sup> Diesel Timing Gauge Set (Blue-Point®)

 Used to update existing 2017DSP diesel service sets to handle 1994–1998 Cummins® B engines used in Dodge® Ram® 250/350 pickup trucks and some Ford® trucks

#### SP5001<sup>‡</sup> Dial Indicator (Blue-Point®)

- · Features rack and pinion construction
- Refer to the pump manufacturer's service manual when using this gauge
- Gauge diameter is 2-1/4"
- Range is 30 mm
- · Gauge is marked in .01 mm increments

#### SP5002<sup>‡</sup> Gauge Holder (Blue-Point®)

- Used in the fuel injection pump in place of the #1 delivery valve to locate the base circle of the injection pump cam
- Male thread is M22 x 1.5

#### SP503<sup>‡</sup> Spline Socket (Blue-Point®)

 Used to remove and replace the delivery valve on most Bosch® fuel injection pumps

#### SP504 Gear Puller (Blue-Point®)

- · Used to remove the injection pump gear
- Bolt thread is M8 x 1.25
- Bolt length is 44 mm

## **DIESEL: SERVICE TOOLS FOR CUMMINS® ENGINES**



## Pulley Installers and Pullers CJ83C Pulley and Gear Puller

- Ideal for servicing crankshaft pulleys, gears and timing gears on a wide range of gasoline and diesel engines, including Cummins® accessory drives and water pumps
- Includes (2) 3/8"-16 x 3", 5/16"-18 x 2-1/2" and M10-1.5 x 65 mm bolts
- Nominal capacity is 3-1/2 ton

#### M1324 Pulley Installer

- · For installing the accessory drive pulley on the shaft
- Includes 7/8"-14 NC threaded adaptor, washer type bearing and installer housing





## Torque Adaptor Set ST669 6 pc Torque Adaptor Set

 Used to loosen and adjust lock nuts to manufacturing specifications

#### ST669-1 Handle Assembly

Included in the ST669 Torque Adaptor Set

#### M1302B18 12-Point Deep Socket

• 9/16" deep, 12-point socket

#### M1302B24 12-Point Deep Socket

• 3/4" deep, 12-point socket

#### M1302A5 Screwdriver

• 1/2 x .062" screwdriver

#### TM82 1/4" Drive 1/4" Flat Tip Short Bit Socket

· Manufactured from high-grade alloy steel



## Compression Adaptors/Injector Style

## M3540C<sup>‡</sup> Compression Adaptor

• For Cummins® 855 in<sup>3</sup> NH, and 903 V8 and L10 diesel engines

#### M3584C<sup>‡</sup> Compression Adaptor

• For Case®/Cummins® Series B 2.9, 3.9 and 5.9 L diesel engines

#### M3585C<sup>‡</sup> Compression Adaptor

For Case®/Cummins® Series C 8.3 L engines

448

Snapon.com 1.877.762.7664



## **DIESEL: SERVICE TOOLS FOR CUMMINS® ENGINES**

## **Injector Brushes**

#### MB5D Bronze Injector Brush (Blue-Point®)

· Bronze non-abrasive brush cleans carbon from injector tips

#### MB6BTA 9" Injector Brush (Blue-Point®)

- Stainless steel wire brush cleans the injector cavity in the cylinder head
- 9" long



#### Fuel Line Tools CJ148 Fuel Line Plug

· For plugging fuel lines

#### **CJ149 Fuel Tube Remover**

· For fuel inlet tubes on late-model vehicles

#### YA6615<sup>‡</sup> 24 mm Flare Nut Wrench for Cummins® (Blue-Point®)

- Used on Dodge® trucks with 5.9 L engines (2003 and later) and 6.7 L engines (2007 and later)
- · Easily slides into the confined area of the cylinder head
- Wrench is required to hold the 24 mm flare nut while the 19 mm fuel line coupler is loosened



## Air Compressor Fuel Pump Wrenches M1321 Air Compressor/Fuel Pump Wrench

- Includes a 5/8", 12-point box wrench on both ends
- · Accommodates air compressor and fuel pump flange bolts on NH Series Inline 6-cylinder engines

#### M1328A Air Compressor/Fuel Pump Wrench

• Includes a 5/8", 12-point box wrench on one end for servicing fuel pumps and a specially designed 11/16" open end for access to air compressor bolts

#### M1329 Fuel Pump Wrench

- Includes a 7/16", 12-point box end for servicing fuel pump bolts on NH Series engines equipped with Cummins® air compressors
- 6-5/8" long



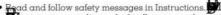
## Valve Adjusting Wrenches M1319 Valve Adjusting Wrench

- 7/8", 12-point box wrench to tighten lock nuts on rocker arms
- Designed to clear the aftercooler
- 12" long

#### M1322 Valve Adjusting Wrench

- 3/4", 12-point box wrench to tighten lock nuts on rocker arms
- Designed to clear the aftercooler
- 14-3/4" long





- Anot expose gasoline or fuel to flames, sparks or other sources of ignition.
- only in well ventilated are we.

  are the puller application.
- the proper type and size of puller for the job.
- Wear safety goggles (user and bystanders).
- Do not use chrome or industrial finish hand tools with power drivers or impact drivers.
- ‡These products can expose you to chemicals which are known to the state of California to
- Read Safety Precautions on pages W1-W4









cause cancer and reproductive harm. See pages P1-P2 for details.

## **DIESEL: SERVICE TOOLS FOR CUMMINS® ENGINES**





#### • 10-1/2" long CJ140 5 pc Diesel Injector Puller Set

- Used on fuel injectors in Cummins® B and C Series 3.9 L, 5.9 L and 8.3 L engines used in Dodge® pickups, Case® tractors and off-road equipment
- Will service all 1994-1998-1/2 standard injectors, as well as fuel inlet tubes

Slide hammer puller services D, top stop and small V8 injectors

## CJ140-1 Slide Hammer Injector Puller

- Used to pull injectors from heads on 1998-1/2-2002 Dodge® and Cummins® engines
- 8 x 1.25 mm thread

Injector Pullers CJ125A Injector Puller

Use the CJ144 Puller to pull the fuel inlet tube prior to removing the injector

#### CJ141 Diesel Injector Puller Adaptor

• Used on Cummins® diesel injectors prior to 1994

## CJ142 M14 Diesel Injector Puller Adaptor

• Used on Cummins® diesel injectors from 1994-1998-1/2

#### CJ143 8 mm Diesel Injector Puller

Used on 1998-1/2 Cummins® diesel injectors in tight-access areas

#### CJ144 15 mm Diesel Injector Puller

• Used on 1998-1/2-2002 Cummins® diesel fuel inlet tubes







## Cummins® B and C Series

TSM24 1/2" Drive 6-Point Metric 24 mm Flank Drive® **Deep Socket** 

TWM14A 1/2" Drive 6-Point Metric 14 mm Flank Drive® **Shallow Socket** 

#### YA9565A‡ Engine Turning Tool (Blue-Point®)

· Used to rotate the engine for making valve and injection pump adjustments on Cummins® and Case® 3.9 L, 5.9 L and 8.3 L B and C Series engines

## **DIESEL TOOLS**



## **Engine Sockets**

#### FRXM21 3/8" Drive 6-Point Metric 21 mm Flank Drive® Flare Nut Socket

- · Manufactured from special steel with a higher alloy content
- Precision forged and heat-treated for optimum strength and durability
- Nickel-chrome plating helps protect against corrosion and makes it easy to wipe

## FTXEL45E 3/8" Drive TORX® T45 Extra-Long Bit Socket Driver

- Quickly and easily access intake bolts on Cummins® N14 diesel engines without removing the air pump
- Can also be used on older Cummins® NH Big Cam 4 diesel engines
- 3/8" square drive
- Various applications on European vehicles

#### PPM516A 1/2" Drive SAE 1/2" Male Square Drain Plug Socket

- 1/2" square male end
- Extra strength to remove drain plugs
- 1-7/16" long

## SIML200 1/2" Drive 6-Point SAE 5/8" Flank Drive® Extra Deep Impact Socket

- 5/8" single hex for the stud used for the rocker box on engines equipped with Jacobs® engine brake
- 1/2" drive, 5" long



450



## Compression Adaptor

#### M3545C‡ Glow Plug Compression Adaptor

 For Ford®/International 6.9/7.3 L, Mercedes-Benz® E320 and Westerbeke® Marine engines



## **Pulley Puller**

## SP448 Pulley Puller (Blue-Point®)

- · For removing the air pump pulley
- · Fits over the pulley flange



## Injector Height Gauges

- Used to set injectors during installation and at set service intervals
- Knurled handle screws into the gauge at a 90° angle for work in close quarters

#### SP7882 6 pc Diesel Injector Height Gauge Set

- · Five-in-one gauge set covers all applications for Detroit Diesel® 50 and 60 Series engines
- Includes (5) injector height gauges and (1) handle
- Includes a storage pouch

SP7882-1 Diesel Injector Height Gauge Handle SP7882-782 Injector Height Gauge (78.2 mm) (Blue-Point®) SP7882-788 Injector Height Gauge (78.8 mm) (Blue-Point®) SP7882-803 Injector Height Gauge (80.3 mm) (Blue-Point®) SP7882-810 Injector Height Gauge (81.0 mm) (Blue-Point®) SP7882-821 Injector Height Gauge (82.1 mm) (Blue-Point®)



## Diesel Fuel System Tools

#### FPWD14<sup>‡</sup> Duramax<sup>®</sup> Fuel Pressure Sensor Wrench

- · Saves hours of time by eliminating the need to remove the EGR cooler system and fuel rail—simply unbolt air conditioning compressor to remove the front EGR valve
- 2 pc design reduces the time required to service the fuel pressure release valve
- Tool slips onto the release valve from back to front allowing the handle to slide into the crescent end of the socket, making loosening the fuel pressure release valve easier



## Oil Rail Gauge ORG1315<sup>‡</sup> Oil Rail Gauge

#### · Correctly determine dimension and select correct backup ring when installing high-pressure oil manifolds

- Used to install high-pressure oil manifolds on International® DT466 and MaxxForce® engines from 2004-2013
- All three sizes in one tool
- · No stacking of feeler gauges
- Heat-treated 4130 for durability and accuracy
- Red vinyl-dipped handle for increased visibility
- Large ring end for easy handling





Wear safety goggles (user and bystanders).
Do not use chrome or industrial finish hand tools with power drivers or impact drivers. ‡These products can expose you to chemicals which are known to the state of California

to cause cancer and reproductive harm. See pages P1-P2 for details.
• Read Safety Precautions on pages W1-W4











### **Governor Gap Wrenches** M3530 Governor Gap Adjusting Wrench

• 3/8" open ends, 4" long • Special thin design with 30° and 60° angle heads

#### M3531 Governor Gap Lock Nut Wrench

• 7/16" open ends and is 4-1/4" long

Special thin design with 30° and 60° angle heads



## **Fuel Line Disconnect Tools** FDT1116<sup>‡</sup> Fuel Line Disconnect Tool Set

- Includes (4) fuel line disconnect tools—a straight and a 90° angle for the 11.8 mm fuel lines and a straight and a 90° angle for the 16 mm fuel lines
- OEM tool sets ZTSE4773 and ZTSE4772 do NOT include the straight tools—the straight tools allow access into tight areas
- All four tool handles are highly visible orange for easy identification
- Set includes FDT11, FDT11STR, FDT16 and FDT16STR FDT11<sup>‡</sup> Angled Fuel Disconnect Tool
- 90° angle for 11.8 mm fuel lines
- · Handle is highly visible orange for easy identification

#### FDT11STR‡ Straight Fuel Disconnect Tool

- For 11.8 mm fuel lines
- The OEM tool sets ZTSE4773 and ZTSE4772 do NOT include the straight tools the straight tools allow access into tight areas
- Handle is highly visible orange for easy identification FDT16<sup>‡</sup> Angled Fuel Disconnect Tool
- 90° angle for 16 mm fuel lines
- Handle is highly visible orange for easy identification

#### FDT16STR<sup>‡</sup> Straight Fuel Disconnect Tool

- For 16 mm fuel lines
- The OEM tool sets ZTSE4773 and ZTSE4772 do NOT include the straight tools the straight tools allow access into tight areas
- Handle is highly visible orange for easy identification

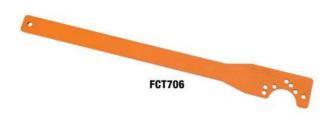


## Starter Bolt and Fuel Filter Wrenches **B4400A Starter Bolt Wrench**

- · Manufactured from special alloy steel and heat-treated for optimum strength
- Specially contoured for tight-access areas
- Used for John Deere® starter bolts

#### WSW3 Duramax® Fuel Filter Water Sensor Wrench

- · Glass-filled nylon tool with four sizes: 40, 41, 42 and 46
- All-in-one tool that works on all four OEM and aftermarket sizes available in the marketplace today



## Fan Clutch Wrench FCT706 Fan Clutch Wrench (Blue-Point®)

- · Used for heavy-duty truck engines
- · Hole pattern on the tool aligns with fasteners on the fan hub
- Open end wrench is used to remove the fan clutch
- 24-1/2" long for maximum leverage





## **Feeler Gauges** FB308D Step Feeler Gauge Set and Holder (Blue-Point®)

- · Used for adjusting valves
- Includes 12 step blades in sizes .008"/.010"-.028"/.030"

#### FB325A<sup>‡</sup> 25 pc SAE and Metric Feeler Gauge Set (Blue-Point®)

- Includes blade sizes .0015 and .002-.025"
- Double stamped with SAE and metric sizes

#### FB328A‡ Step Feeler Gauge Set and Holder (Blue-Point®)

- For adjusting valves
- Includes two step blades: .011"/.013" and .013"/.015"
- For valve adjustment on GM® 8.2 L engines
- Double stamped with SAE and metric size

#### FB300A<sup>‡</sup> Bent Blade Feeler Gauge Set (Blue-Point®)

45° blade ends

## **Push Rod Wrenches** M3517B Push Rod Lock Nut Wrench

- 1/2" open end, 102° offset handle M3518 Push Rod Adjusting Wrench
- 5/16" open end, 102° offset handle



## **Crowfoot Wrench** SCFM2538 3/8" Drive Cummins® Wastegate Solenoid **Crowfoot Wrench**

- · Crowfoot design helps to not damage the solenoid while providing access to it during removal or installation
- Crowfoot design and square drive allow for proper torquing of the solenoid during installation



## Specialty Service Tools S6201 M20 x 1.5 Rethreader Tap

- · Manufactured from special steel with a higher alloy
- · Industrial finish helps protect against corrosion
- Precision machined and heat-treated for optimum strength and durability











ad and follow safety messages in Instructions.

Anot expose gasoline or fuel to flames, sparks or other sources of ignition.

Anotypin well ventilated areas.

e safety information in the current Snap-on catalog.

‡These products can expose you to chemicals which are known to the state of California to cause cancer and reproductive harm. See pages P1–P2 for details.

• Read Safety Precautions on pages W1-W4





## Special Application Sockets

## EMSM3814 3/8" Drive Metric 14 mm Sensor Socket

- Sensor sockets specially designed cutout ensures a tight fit on sensors without cutting wires
- Precise fit; six-sided, more flat-to-flat contact, avoids rounding the sensor (as opposed to two-sides with standard wrench)
- Thin outside diameter for greater accessibility to sensors that are tucked away
- Industrial finish helps protect against corrosion
- The square drive end has grooved detents on all four interior walls

#### FLS1219<sup>‡</sup> 1/2" Drive Fuel Line Socket

- Designed to easily torque fuel injector lines correctly, reducing or eliminating the possibility of a fuel leak or damaging the line, fuel rail or fittings
- Easily applies the 30 ft-lb factory-required torque
- No torque adaptors with complicated calculations required
- Use on Cummins® ISB engines 1998-present
- 1/2" drive, 19 mm

## FLS1222<sup>‡</sup> 1/2" Drive Fuel Line Socket

- · Easily applies 80 ft-lb factory-required torque
- No torque adaptors with complicated calculations required
- Use on Cummins® ISX engines 2007–present
- 1/2" drive, 22 mm

## IPSTML10 1/4" Drive 6-Point 10 mm Flex Impact Socket

- · Removes and installs glow plugs
- Designed with a retention O-ring that holds the glow plug in the socket while being installed or removed
- Industrial finish helps protect against corrosion
- Precision machined and heat-treated for optimum strength and durability

## IPSTML8 1/4" Drive 6-Point 8 mm Metric Deep-Flex Impact Socket

 Removes and installs glow plugs on following vehicles: Ford® 2011–2012 F250®/F350® Super Duty® 6.7 L Power Stroke® Diesel 2011–2014 F450®/F550® Super Duty® 6.7 L Power Stroke® Diesel Dodge® 2007–2009 Dodge® Sprinter® Van; Jeep® 2007–2009 Grand Cherokee® Freightliner® 2007–2011 3.0 L V6 Diesel Sprinter® Van; Mercedes® 2007–2009 E320 3.0 L V6 Diesel, 2011 3.0 L V6 Diesel Sprinter® Van

#### S6200 1/2" Drive 12-Point Metric 12 mm Engine Bearing Cap Bolt Impact Socket

- Use to service engine cam bearing cap bolts on both older and newer generation Detroit Diesel® engines
- Newer generation Detroit Diesel® engines use longer cam bolts than earlier generation engines
- The S6200 is specially designed to work on both engine generations
- 4-3/8" long

## MFIMMD10 3/8" Drive 12-Point Metric 10 mm Shallow Magnetic Power Socket

- For use on Detroit Diesel® 60 series, the MFIMMD10 is used on the three camshaft gear thrust plate bolts located inside the camshaft gear cover within the front gear case on the engine
- The mechanic must go through the cover to start the bolts; if one is dropped, it is very labor intensive and time consuming to retrieve
- Applies to 2002 and later 60 series Detroit Diesel® engines with the compact gear case (please note: earlier engines with the tall gear case have 13 mm six-point bolts)
- Magnetic sockets are perfect for installing and removing a fastener as the magnetic feature will hold the fastener in the socket, saving time and frustration
- Power sockets designed and intended for use with power nut runners; do not use with impact drivers
- Industrial, black-oxide, finish helps protect against corrosion

#### M3525A 1/2" Drive Spanner Socket

- 1/2" drive, 3-7/32" long
- Includes 1-1/8" internal hex for use on "Fuel Squeezer" Series engines

#### M3503B 3/8" Drive Fuel Line Nut Socket

- 1/2" wrench opening
- 3/8" drive, 6-point
- · Shaped for access to fuel line nuts
- 3-1/4" long
- Additional applications include the head temperature sensor on Buell® Motorcycles

#### TLEPL50 1/4" Drive TORX Plus® 5EPL Socket

- Manufactured from special steel with higher alloy content
- Precision forged and heat-treated for optimum strength and durability
- Nickel-chrome plating helps protect against corrosion and makes it easy to wipe clean







## **Belt Tensioning Tools SRD6 Belt Tensioner Release Tool**

- 6" long adaptor with 1/2" male square
- Female triple square drive allows more flexibility to work around obstacles by coming in at different angles with a 1/2" breaker bar
- · Similar to the Snap-on® 6" torque adaptors but with a
- If using with a torque wrench, refer to the Snap-on® SS306G Torque Chart for the formula to obtain the correct applied torque

#### **Heavy-Duty Applications:**

- For serpentine belt tensioners with a 1/2" square drive opening found on Detroit Diesel® Series 60® and Caterpillar® engines
- Other applications include buses and delivery vans where the doghouse or engine shrouding can get in the way and make the work area very tight

#### **Automotive Applications:**

 1/2" serpentine belt tensioners on Dodge®/Chrysler® (2.0 and 3.0 L engines) Ford®, Lincoln® and Mercury® (2.3, 3.0, 4.2 and 4.6 L engines) GM® (2.5, 4.7, 5.0 and 5.7 L engines) vehicles



#### YA9340 Serpentine Belt Wrench (Blue-Point®)

- Used to release any serpentine belt tensioner with a 1/2" square drive opening
- Ratcheting action allows better positioning of the tool, creating a greater swing angle than a solid-type serpentine belt wrench
- Reversible ratchet head is only 1" thick so it will fit between the tensioner face and fan blades on Detroit Diesel® S Series 60® and some Caterpillar® engines
- Also ideal for working on buses and delivery vans where the doghouse or engine shrouding restrict access
- Compact overall length keeps handle from coming in contact with radiator hoses, charged air cooler pipes, hydraulic lines or frame rails
- Vinyl grip for comfort
- 13" overall length

## Ford® ICP Sensor Socket

## S6196KR 3/8" Square Drive 6-Point ICP Sensor Socket for Ford® Vehicles

- Easily removes and installs the ICP Sensor on 2002 and 2003 Ford® 6.0 L diesel truck engines
- Spring retention securely holds the sensor during use
- 6-point configuration and Flank Drive® wrenching system
   Nickel-chrome finish resists rust and corrosion



S6196KR

## **Glow Plug Tool**

## **FGPT Glow Plug Harness Tool**

- · Prevents damage to the harness and connector rail
- · Removes and installs glow plug connectors
- Orange color for easy identification in dark engine compartments



## Diesel Exhaust Fluid (DEF) Tools

#### DEFT300<sup>‡</sup> 3 pc Diesel Exhaust Fluid (DEF) Tube Release Forks Set

- Designed to depress locks that retain DEF lines, allowing for easy removal
- Each fork has both a straight and 90° design to access most locations
- Reduces time spent fighting with hard-to-reach clips
- Includes DEFT322, DEFT325 and DEFT334

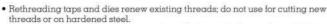
DEFT322<sup>‡</sup> Small DEF Fork DEFT325<sup>‡</sup> Medium DEF Fork DEFT334<sup>‡</sup> Large DEF Fork



## Diesel Pulse Adaptor

#### MT257B Diesel Pulse Adaptor (Blue-Point®)

- Tests injector timing or engine RPM on diesel engines equipped with 1/4" or 6 mm external steel fuel injector lines
- · Enables use with inductive pick-up timing light to test engine timing
- Not for use on diesels with common rail fuel systems



- Do not use power sockets or accessories with impact drivers or impact drivers.
  Do not use "cheater bars" on handles.
  Read and follow safety messages in the Instructions.
- ‡These products can expose you to chemicals which are known to the state of California to cause cancer and reproductive harm. See pages P1-P2 for details.
- Read Safety Precautions on pages W1-W4













## Ford® Fuel Filter Wrench

#### FFW2A 3/8" Drive 24/36 mm Fuel Filter Socket

- Double-sided 3/8" drive socket includes both a 24 mm 6-point socket and a 36 mm slotted socket
- Made of machined aluminum and anodized for surface protection



## Injector Brushes

#### MB5D Bronze Injector Brush (Blue-Point®)

Bronze non-abrasive brush cleans carbon from injector tips

#### MB73A Injector Brush (Blue-Point®)

• Combination 5/16" and 13/16" dia. stainless steel wire brush cleans the injector bore and injector tip hole in the cylinder head



## Injector Hold-Down Fastener Tools

## S6340E 3/8" Drive TORX® T40 Injector Hold-Down Fasteners Bit Socket

- · Manufactured from a special alloy steel and heat-treated for optimum strength
- Snap-on® bits are designed with precise fit and tight tolerance to prevent slippage and disengagement
- Perfect length of 3-1/8" is ideal for removing and reassembling Ford® Power Stroke® 6.0 L diesel injectors
- A regular length T40 bit socket is too short and a long T40 bit socket is too long when used with a ratchet or torque wrench and will not fit the application

S6340E2 T40 TORX® Driver Bit





WSW4

EMSM1230



EMSM3817

## Sensor and Filter Sockets EMS1230 1/2" Drive SAE 15/16" Sensor Socket EMSM1230 1/2" Drive Metric 30 mm Sensor Socket

- Specially designed cutout ensures a tight fit on the sensors without cutting wires
- Precise fit; six-sided more flat-to-flat contact avoids rounding the sensor (as opposed to two-sides with a standard wrench)
- Thin outside diameter for greater accessibility to sensors that are tucked away
- Special alloy steel, heat-treated for optimal hardness and strength
- Square drive end has grooved detents on all four interior walls

#### EMSM3813 3/8" Drive Metric 13 mm Sensor Socket

- Sensor sockets specially designed cutout ensures a tight fit on sensors without cutting wires
- Precise fit; six-sided, more flat-to-flat contact, avoids rounding the sensor (as opposed to two-sides with standard wrench)
- Thin outside diameter for greater accessibility to sensors that are tucked away
- The square drive end has grooved detents on all four interior walls

#### EMSM3817 3/8" Drive Metric 17 mm Sensor Socket

- Sensor sockets specially designed cutout ensures a tight fit on sensors without
- · Precise fit; six-sided, more flat-to-flat contact, avoids rounding the sensor (as opposed to two-sides with standard wrench)
- Thin outside diameter for greater accessibility to sensors that are tucked away
- Sockets are made with special alloy steel; heat-treated for optimal hardness and strength
- Industrial finish helps protect against corrosion
- · The square drive end has grooved detents on all four interior walls

#### WSW4 3/8" Drive Isuzu® Water Sensor Crowfoot Wrench

 3/8" drive crowfoot wrench for the removal and installation of the fuel filter's plastic water sensor without damage

456



#### Ford® Diesel Turbo Tools PSWT10K Power Stroke® Diesel Turbo Wrench for Ford®

- 10 mm wrench is ideal for accessing the turbo mounting bolts located between the firewall and the turbo with the exhaust intake in the way
- Designed for use on 2003–later Ford® F-250®, F-350®, E-250® and E-350® vehicles with 6 L Power Stroke® diesel engines
- Additional applications on Navistar® VT365 engines and some International® 4000 Series of medium-duty trucks
- · Wrench has a 0° offset 6-point head
- · Designed to remove excessively tight fasteners off the intake when removing turbocharger where a conventional 15° offset wrench will not work
- 5-1/2" long

## Fuel Injector Sockets

- Complies with Ford® TSB 11-10-10
- 12-point, 17 mm crowfoot design allows the socket to slip onto the injector easily at any angle
- · Design allows the socket to spin under bent fuel lines
- · Nose geometry reduces electrical connection damage
- · Depth stop keeps the socket at the specified height
- · Thick mass reduces flex and flare nut damage
- · Design allows for clearance to torque the fitting without a torque adapter

#### YA1140<sup>‡</sup> Diesel Injector Crowfoot Socket Set (Blue-Point®)

• Includes 2 pc YA1140-1 and YA1140-21

#### YA1140-1<sup>‡</sup> Long Diesel Injector Crowfoot Socket (Blue-Point®)

- Ford® 6.7 L Power Stroke® Diesel
- Inline design of the YA1140-1 allows accurate torquing of the injector and clears the plastic housing and fuel return line

#### TAP1225<sup>‡</sup> Turbo Vane Actuator Puller

- Specially designed for Ford® 6.4 L turbo diesel to save the technician time
- · Compact size fits on or off the truck
- Self-aligning for easy install
- Removes the actuator link rod from the arm on the turbo of 2008-2010 Ford® 6.4 L Power Stroke® diesel engines

#### TVA1650<sup>‡</sup> Turbo Vane Actuator Installer for Ford® Vehicles

- · Simply rotate the arm up, slip the selfcentering installer over the arm, and with two wrenches the stud is pushed into the arm in a matter of seconds
- Compact size of tool allows it to be used either on or off the truck
- Single-purpose design saves time and allows the user to work more efficiently while reducing the potential to damage parts during installation
- Fine thread actuator reduces the torque required to loosen the press fit



PSWT10K





TVA1650

#### Complies with Ford® TSB 11-10-10

- 12-point, 17 mm crowfoot design allows the socket to slip onto the injector easily at any angle
- · Design allows the socket to spin under bent fuel lines
- · Nose geometry reduces electrical connection damage
- · Depth stop keeps the socket at the specified height
- Thick mass reduces flex and flare nut damage
- · Design allows for clearance to torque the fitting without a torque adapter

#### YA1140-21<sup>‡</sup> Offset Diesel Injector Crowfoot Socket (Blue-Point®)

- Ford® 6.7 L Power Stroke® Diesel
- · Design of the YA1140-21 allows it to rotate under the fuel line while the depth stop keeps it at the specified height to clear the plastic housing
- Complies with Ford® TSB 11-10-10



YA1140



YA1140-1



YA1140-21

## **DIESEL: AUTOMOTIVE DIESEL**

## Injector Pullers

#### IPK1760<sup>‡</sup> Sprinter® Van Diesel Injector Puller Kit

- Removes stuck injectors in minutes instead of hours
- · Will not damage the valve cover
- Injector can most likely be reused as a core
- Includes tools to remove the top of the injector, clean the injector seat and a thread chaser for the clamp hole
  - . Do not use chrome or industrial finish hand tools with power drivers or impact drivers.
  - not use "cheater bars" on handles.
  - bil, do not push on handles
  - Sockets and accessories can break if used with impact drivers.

    Aken sockets or accessories can cause injury.

  - Wear safety goggles (user and bystanders).
  - $\ddagger$ These products can expose you to chemicals which are known to the state of California to cause cancer and reproductive harm. See pages P1-P2 for details.
  - Read Safety Precautions on pages W1–W4















## Injector Pullers

## IPK1720<sup>‡</sup> Cummins® 5.9 L and 6.7 L Injector Puller

- For use on Dodge® Cummins® 5.9-6.7 L diesel engines equipped with the high-pressure common rail fuel system
- Designed to slip the puller cup in the groove on the injector and lever it out against the head of the mid-cover center bolts after the wires and retaining bolts have been removed
- Height adjustable for 5.9 L and 6.7 L HPCR engines
- No need to bolt the tool down, moves quickly from injector to injector pulling them straight out, saving time and reducing the likelihood of damaging the head or injector



## Metric Injector Sockets S6128 Metric Injector Socket

- . 6-point. 30 mm, 2-1/16" bolt clearance
- 7/16" opening depth, 2-11/16" long
- 7/8" external hex on the drive end

#### S6104B Metric Injector Socket

- For VW® and Mercedes® diesel engines
- 12-point, 27 mm
- Clearance bored to fit over the fuel injector
- 1/2" drive; 3-1/4" long



## Flywheel Lock (Blue-Point®)

## YA6925<sup>‡</sup> Flywheel Lock for GM® Duramax® 6.6 Liter Engines (Blue-Point®)

- For 2001–later Duramax® 6.6 L diesel truck engines
- · Saves time by not removing the starter motor
- Holds the engine in place for high-torque requirements
- Handle is visible to remind the technician that the engine is locked



## Diesel Exhaust Bung Rethreading Kit RNDSL7<sup>‡</sup> 7 pc Diesel Exhaust Bung Rethreading Kit

- Unique design and geometry allows access to difficult to reach bungs
- Designed to reach the bottom thread even with inverted flare fittings
- Will cleanup most EGT sensor bungs allowing a new sensor to be installed without the need for exhaust component replacement
- Inverted cone design allows the tap to fully engage all threads unlike flat bottom rethreading taps
- Six different sizes and included drive adaptor will accommodate repair of most EGT sensors on cars, light, medium and heavy-duty trucks
- Square-to-hex adaptor allows use of 14 mm or 9/16" socket or wrench

RND1615

RNDADP1<sup>‡</sup> Hex to Square Adaptor RND1615<sup>‡</sup> M16 x 1.5 Rethreader RND1415<sup>‡</sup> M14 x 1.5 Rethreader RND14125<sup>‡</sup> M14 x 1.25 Rethreader RND1215<sup>‡</sup> M12 x 1.5 Rethreader RND12125<sup>‡</sup> M12 x 1.25 Rethreader RND1210<sup>‡</sup> M12 x 1.0 Rethreader RNDPKG1<sup>‡</sup> Pouch



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Snapon.com 1.877.762.7664

RND1210



## Sensor and Filter Sockets

#### OFSKIT 4 pc Oil/Fuel Filter Socket Set

- Removes and installs 24, 27, 35, 36 mm and 1-1/4" oil filters
  Includes (1) A127 and (1) A106 Oil Filter Sockets, (1) S3624 Filter Flip Socket and (1) A129 Cummins® Diesel Fuel Filter Socket in a storage tray

#### A127 Applications:

- Removes and installs 27 mm (1-1/16") oil filters on Mercedes-Benz® 1.8 L 4-cylinder engines (2003-later)
- Aftermarket oil filters with one nut at the top of the canister

#### A129 Applications:

- Removes and installs fuel filter housings found on Dodge® Ram® trucks with the 24-valve Cummins® diesel engine (2002-later)

#### A106 Applications:

- GM® Ecotec®, 2.0, 2.2 and 2.4 L 4-cylinder engines
- Saturn®: L-series (2001), Ion and Vue (2002-later)
- GM®: Cavalier™, Sunfire®, Grand AM, Sonoma, S10, Alero (2002–later) Malibu®: 2002–2006 Pontiac®: G6 and Solstice (2006)

- Chevrolet®: HHR, Cobalt, Cobalt SS (2006)
- Saab®: Some general applications

#### S3624 Applications:

- Removes and installs all three filter caps on Ford® 6.0 L Power Stroke® dieselpowered vehicles, such as Super Duty® pickups, Econoline® vans and Excursion®
- Additional 24 mm applications:
- Buick®: VVT-V6 Rendezvous Ultra, LaCrosse® CSX
- Cadillac®: VVT-V6 CTS®, STS®, SRX®
- Saturn®: L-3000 V6

## Additional 35/36 mm applications:

- Audi®/Volkswagen®: VR6 engine BMW®: 6-, 8- and 12-cylinder engines
- Mercedes-Benz®: diesel engines
- Mini Cooper®
- Volvo®: 40 and 50 series, XC90® with 3.2 L 6-cylinder engine

#### OFS2432 24/32 mm Oil Filter Housing Flip Socket

- Used for Audi<sup>®</sup>, Volkswagen<sup>®</sup>, Porsche<sup>®</sup>, Chrysler<sup>®</sup>, Dodge<sup>®</sup>, Jeep<sup>®</sup>, RAM<sup>®</sup>, Lamborghini<sup>®</sup> and Mercedes-Benz<sup>®</sup> vehicles
- Removal and installation of the oil filter housing on 2.0 L I4 diesel engine, 3.0 L V6, 3.6 L V6, 4.0 L V8 turbo, 4.2 L V8, 5.2 L V8, 5.5 L V8 turbo and 6.3 L V9 engines
- Manufactured from special alloy steel

#### A129 Diesel Fuel Filter Socket

- · Use for removing and installing fuel filter housings
- 1-1/8" wrench size
- 3/8" drive

#### **SWR3 Water Sensor Socket**

- Easily removes and replaces a water sensor without damage when changing the fuel filter on 2001-present GM<sup>®</sup> 6.6 L DuraMax<sup>®</sup> diesel engines in Chevrolet<sup>®</sup>/ GMC<sup>®</sup> pickups and in Chevrolet<sup>®</sup>/GMC<sup>®</sup> medium-duty trucks
- · Manufactured from high-strength chemical-resistant glass-filled nylon
- NOTE: Due to possible sensor distortion from previous incorrect removal/ installation methods, the sensor may slip in the SWR3 during removal; used to reinstall the sensor when proper hand tightening is used
- 3/8" square drive

#### S3624 3/8" Square Drive Metric 24/36 mm Filter Flip Socket

- One tool will remove/install all three filter caps on Ford® 6.0 L Power Stroke® diesel-powered vehicles such as Super Duty® Series pickups, Econoline® vans and Excursion®
- Used for removal and installation of the oil filter cap, primary and secondary fuel filter caps
- · Not for impact use
- Requires optional 3/8" drive extension (FX1 or FXWP1 1-1/2" long)

#### 24 mm applications:

- Buick® vehicles: VVT-V6 Rendezvous Ultra, LaCrosse® CSX
- Cadillac® vehicles: VVT-V6 CTS®, STS®, SRX®
   Saturn® vehicles: L-3000 V6

#### 35/36 mm applications:

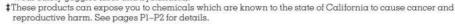
- Audi®/Volkswagen®: VR6 engine
  BMW®: 6-, 8- and 12-cylinder engines
- · Mercedes-Benz®: diesel engines
- · Mini Cooper®
- Volvo®: 40 and 50 Series, XC90® with 3.2L 6-cylinder engine
- Nickel-chrome finish







Wear safety goggles (user and bystanders).



• Read Safety Precautions on pages W1-W4



**OFSKIT** 



**OFS2432** 



A129



S3624











IPK1220







**IPK1640** 

## Injector Pullers

#### ICP1610<sup>‡</sup> Duramax® LB7 Injector Cup Puller

Designed to remove and help avoid damage to injector cup sleeves

· A must-have tool when re-sealing the sleeves, allowing the technician to work

Heat-treated alloy steel for long life

#### IPK1170<sup>‡</sup> Injector Puller Kit

Used for GM® LB7 Duramax® engines
 Pulls injector straight

Pulls far enough to completely remove a stuck injector

Saves time by reducing the likelihood of loosening the sleeves (up to 1/2 hour

Removes sleeve from the injector without damage

#### IPK1220<sup>‡</sup> Injector Puller Kit

• Removes diesel injectors on VW® and Audi® vehicles from 2000-present

Correct tools all in one kit—no searching for shop tools

• Kit contains (3) adaptors with 2 lb slide weight on a 10" slide shaft

 Kit includes the newest style adaptor to keep this kit current for the next ten-plus years

#### IPK1330<sup>‡</sup> Injector Puller Kit

- Used to remove diesel injectors from GM® vehicles produced from 2004–2010 with an LLY, LBZ or LMM Duramax® engine
- Pulls injector straight out without rocking
- Pulls far enough to completely remove a stuck injector
- Saves time and reduces the likelihood of damaging the injector or head

#### IPK1400<sup>‡</sup> Injector Puller Kit

- Removes fuel injectors from GM® vehicles produced from 2009-current with SIDI engines
- · Works on many other makes and models of motor vehicles
- Designed to pull the injector straight out reducing the possibility of damaging the injector or head
- Pulls injector straight out without rocking
- · Sturdy enough so it won't slip off
- · Saves time and reduces the likelihood of damaging the head or injector

#### IPK1630<sup>‡</sup> 6.7 L Ford® Power Stroke® Injector Puller

- Factory tools rock the injector, binding it to the head and possibly damaging injector; the IPK1630 pulls the injector straight out without rocking and damaging the injector or head
- Unique cantilever I-beam design allows easy assembly on the motor and provides a solid platform for pulling the most stubborn injectors
- Lifts about 3/4" to completely remove a stuck injector
  Saves time by reducing the likelihood of damaging the head or injector
- · Made from heat-treated alloy steel for rigidity and durability

#### IPK1640<sup>‡</sup> GM® LML Duramax® Injector Puller

- · A factory tool will rock the injector, binding it into the head and may damage the injector. The IPK1640 will pull the injector straight out without rocking, reducing the possibility of damaging the injector or head
- Custom I-beam bridge design allows easy access to hard to reach injectors and a solid pulling bridge to pull out the most stubborn injectors
- Lifts about 3/4" to completely remove a stuck injector
- Saves time by reducing the likelihood of damaging the head or injector
- Made from heat-treated alloy steel for rigidity and durability

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## **HEAVY-DUTY TRUCK SERVICE TOOLS**

## Suspension/Steering Tools (Heavy-Duty Truck)

#### PAR1188A<sup>‡</sup> Pitman Arm Remover F-Series

- Patented design uses leverage action and requires less torque and space compared to other pitman arm tools and removal methods
- · Requires less clearance and eliminates the need to remove the steering box on most trucks
- · Accommodates pitman arms that are 3" wide
- · Forged alloy steel construction securely locks the tool in place

#### S2030<sup>‡</sup> 1/2" Drive 1-1/8" Crowfoot Air Suspension Wrench

- Low profile wrench with spline drive designed to access the tight area inside the air bag mounting bracket
- · Because of tight area and limited access to the air spring mounting bracket, this design saves technicians 30 minutes over current methods
- Blind stop on the wrench also acts as a strengthening gusset
- Heat-treated forged alloy steel for strength and durability



**PAR1188A** 



S2030

## **Hand Sockets**

#### PPM624 3/4" Drive SAE 3/4" Internal Final Drive Pipe Plug Socket

 Designed for final drive drain plugs on Caterpillar® D8 dozers as well as Komatusu® WA500 wheel loaders and 275, 375 and 475 dozers

#### S6100 3/8" Drive 3-Lobe Hand Wheel Socket

- Designed to aid in the removal of rusted and corroded hand wheels without breaking them
- Manufactured from special steel with a higher alloy content
- Precision forged and heat-treated for optimum strength and durability
- Nickel-chrome plating helps protect against corrosion and makes it easy to wipe clean

#### S6160 1/2" Drive 12-Point Metric 12 mm Extra-Long Head Bolt Socket

- Use on 1986-later Nissan® engines with 12 mm head bolts
- 8" length reaches past the cam and rocker assembly to service head bolts
- Thin-profile socket and shank will reach through the access hole and past the overhead camshaft
- Additional high-torque applications include removal and installation of universal joint flange bolts on Ford®/Mercury® cars such as Mustang®, Crown Victoria®, Lincoln®, Ford® Explorer®, Ranger® and F-150®/F-250® trucks

#### S6194 1/2" Drive 12-Point Metric 12 mm Head Bolt Socket

- Used on Toyota® and Nissan® cars and trucks, and Honda® cars with 12 mm head bolts
- 4-1/8" length reaches past the cam and rocker assembly to service the head bolts
- Thin-profile socket and shank reach through the access hole and past the overhead camshaft
- · Additional high-torque applications include removal and installation of universal joint flange bolts on Ford® Explorer®, Ranger® and F-150®/F-250® trucks

#### S6260 1/2" Drive 12-Point SAE 1/2" Heavy-Duty Spicer® Drive Impact Socket

- For removal of heavy-duty Spicer® drive shaft bolts that have 1/2" fasteners found on Kenworth® and Peterbilt® trucks, and many other heavy-duty applications
- 8" long

#### SHR20 Oil Galley Drain Plug Socket

- For the removal and installation of the oil galley drain plug on Caterpillar® 6 cylinder engines
- Galley plugs may leak and need to be removed so a new O-ring can be installed
- Low-profile design helps get into tight applications
- Special alloy steel provides corrosion resistance
- 1/2" drive, 5/8" Hex socket, 6-point, 1-1/4" long

#### SIMDML202 3/4" Drive 20 mm Double Hex Impact Socket

 For use on CAT® C7 cylinder head bolts, found mostly in CAT® earth moving machinery



PPM624



S6100









SHR<sub>20</sub>



Read and follow safety messages in the instructions.

In the follow safety messages in the instructions.

In the puller application of the puller application of the puller, do not use damaged parts of the proper type and size of puller for the job.

Wear safety goggles (user and bystanders).

These products an expose you to choosing which are the products an expose you to choosing the many types.

‡These products can expose you to chemicals which are known to the state of California to cause cancer and reproductive harm. See pages P1-P2 for details.

• Read Safety Precautions on pages W1-W4









## HEAVY-DUTY TRUCK SERVICE TOOLS













## Impact Sockets

#### DW402C 3/4" Drive 6-Point SAE 1-1/4" Dayton Lug Nut Impact Socket

For use with socket retainers

#### S6197 1/2" Drive 12-Point SAE 1/2" Heavy-Duty Drive Line Impact Socket

- Used on Kenworth® and Peterbilt® heavy-duty drivelines with 1/2" fasteners and many other heavy-duty 1/2" application's
- Socket will clear the weld yoke, when removing the cap screws holding the wing bushings to the end yoke
- 4-1/8" long

#### S6199 3/4" Drive U-Bolt Impact Socket

- Used on semi trucks using 5/8" dia. U-bolts for springs and other suspension components
- Up to 2" longer than a standard deep socket to easily accommodate the excess thread length—saves time compared to cutting off excess thread to use a standard deep socket
- 1-1/8" wrench size, six-point, 3/4" drive, 5" long

#### S6217 3/4" Drive Head Bolt Impact Socket

- · For head bolts on heavy-duty trucks and buses with MBE900 Mercedes-Benz® engine
- Used on certain Detroit Diesel® head bolts with the MBE900 Mercedes-Benz® engine where clearance requires a thin-walled socket
- · Socket height helps when using a torque wrench due to the length of the torque wrench handle for clearance
- 3/4" drive, 12-point, 17 mm, 4-3/4" long

#### S6218 1/2" Drive Metric 18 mm Double Hex Socket

- Used in conjunction with a 1/2" drive impact gun to remove driveshaft bolts on Kenworth® semi-trucks
- 1/2" drive, 12-point, 18 mm, 6" long socket
- · Manufactured from special steel with a higher alloy content
- Industrial finish helps protect against corrosion
- Precision machined and heat-treated for optimum strength and durability

#### S6230 1/2" Drive 6-Point SAE 15/16" Impact Socket

- Snap-on® sockets using the Flank Drive® wrenching system grip the fastener on the flanks/flats, delivering 15-25% more turning power
- Forged from tough alloy steel to increase safety and are heat-treated to a lower hardness to add impact resistance and ductility
- Designed for Autocar® and CCC®-style dump trucks and garbage trucks that use the 30/36 spring brake chamber made by MGM® Brakes added ® to F450 on SRDM624
- When doing an emergency repair on the road or changing the diaphragm, the chamber needs to be caged before towing or disassembly
- Currently technicians are using a 15/16" wrench—this is time consuming and can be dangerous when servicing a broken down vehicle in traffic
- Length is designed to accommodate the very long threaded spring brake release stud assembly (release tool) in the brake chamber
- Standard deep 15/16" impact sockets are not long enough to fully engage the threads of the spring brake release stud assembly (release tool) in the spring brake chamber

#### SIML302 3/4" Drive 6-Point SAE 15/16" Flank Drive® Extra-Deep Impact Socket

- Flank Drive® wrenching configuration
- Special alloy steel combines strength and durability

#### SIMML343 Extra-Long Metric Impact Socket

Used for removing and installing the lug nuts on Case® and International® combines