



- Engineered in the U.S.A.
- Lifetime Marathon Warranty®

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Heavy-Duty Class 4 – 8 Trucks

Category	Class	GVWR2	Representative Vehicles
Medium	4	62 - 71 kN (14,001 - 16,000 lbs.)	city cargo van, beverage delivery truck, wrecker, school bus
	5	71 - 87 kN (16,001 - 19,500 lbs.)	
	6	87 - 116 kN (19,501 - 26,000 lbs.)	
	7	116 - 147 kN (26,001 - 33,000 lbs.)	
Heavy	8	147 kN and over (33,00 lbs. and over)	truck tractor, concrete mixer, dump truck, fire truck, city transit bus

HEAVY-DUTY TOOLS

Sleeve Puller / Installer Sets



Sleeve Puller / Installer Sets

These sets work on a wide array of truck, bus, and tractor engines, as well as those in other vehicles. They'll handle wet and dry sleeves – and you won't need to remove head studs. Save time, effort, and money.

- Choice of two sets: manual or 17-1/2 ton hydraulic powered.
- Wide range of adapter plates available to fit most engines.

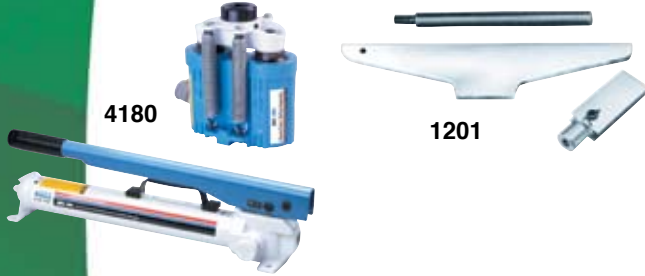
Manual Sleeve Puller Set

This manually operated, screw-powered device removes cylinder sleeves from most truck, bus, and tractor engines. Adapter plates (not included in the set) accommodate a wide range of bore sizes. See application chart on next page. The puller enables one technician to handle sleeve-pulling tasks.

Not recommended for Mack engines (use No. 1202 set).

No.	Description
24824	Thrust washer
37592	Three-way head
27908	13" risers (3 required)
22205	Forcing nut
208675	Swivel assembly
10088	Cap screws, hex hd. (3)
10586	Flat washers (3)
11466	Thrust bearing
32976	Pulling screw

No. 1200 – Manual sleeve puller set. Wt., 26 lbs.



Installing Conversion Kit for 1200 Set

Permits the No. 1200 sleeve puller to handle both removing and installing operations. Use plate Nos. 1253–1256 for installing, and plate Nos. 1219–1250 for removing. Plates are not included with kit.

No.	Description
33769	Screw extension
41291	Installing bar
302340	Yoke assembly

No. 1201 – Installing conversion kit. Includes screw ext., installing bar, and yoke assembly. Wt., 17 lbs., 13 oz.

SLEEVE PULLER PLATE APPLICATION CHART

The puller plates listed here work with manual and 17-1/2 ton hydraulic sleeve pullers	Bore Dia.	Plate No.
J.I. CASE – 207 Diesel	4"	1227
CATERPILLAR – 1673C; 1674; 3304; 3306; D330C; D333C; D334 D326, D337	4-3/4"	1240
CUMMINS – V Series 903 NT855	5-1/8"	1246
H & NH	5-1/2"	1250
GENERAL MOTORS – 53 Series	4-7/8"	1242
71 Series	3-7/8"	1225
INT'L HARVESTER – C-221, C-263	4-1/4"	1232
D-166, D-188, D-236, D-282, C-248, D-248, D-310, D-358, D-155	3-9/16"	1221
D-179, D-206, D-239	3-11/16"	1222
C-281, D-281, D-361	3-7/8"	1225
D-691, D-461	4-1/8"	1230
D-407	4-3/4"	1240
JOHN DEERE – 4-270, 6-404	4-5/16"	1233
6-531	4-1/4"	1232
6-619	4-3/4"	1240
8-955	5.12"	1246
MACK – END(T) 673, 675, 676	5.512"	1250
672	4-7/8"	1243
END (T) 711, 707	4-7/8"	1242
PERKINS – AD3.152, AG3.152, AD4.203	5"	1245
AG4.212, A4.236, AG4.236, A6.354, A6.3541, ATC6.3541, AT6.354, AT6.3541	3.6"	1219
Universal puller for wet-type sleeves, see following page.	3-7/8"	1223

17-1/2 Ton Hydraulic Sleeve Puller Set

Removes and installs sleeves of many makes and models of trucks, buses, and tractors. See chart at left and on next page.

Contents of Set No. 1202:

No.	Description	No.	Description
37592	Three-way head	27908	13" risers (3 req'd)
33769	Screw extension	41291	Installing bar
302482	Speed nut	10221	Hex safety nut
302340	Yoke assembly	208675	Swivel assembly
10088	Cap screws, hex hd (3)	10586	Flat washers (3)
32976	Pulling screw	21714	Insert
4180	Hyd. ram/pump assy.		

No. 1202 – 17-1/2 ton hydraulic sleeve puller set. Wt., 86 lbs.

No. 1203 – Sleeve puller without hydraulic assembly. Wt., 45 lbs., 10 oz.

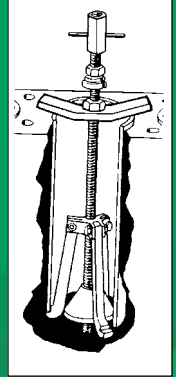
Universal Puller for Wet-Type Sleeves

This tool will remove cylinder sleeves faster than ordinary pullers because it requires very little setup time. Cone adjustment positions the puller jaws quickly, locking bar is tightened. To aid in breaking "frozen" sleeves loose, adjustable bridge is positioned on the cylinder block and the bearing-mounted forcing nut is tightened. Next, bridge is removed and slide hammer assembly is attached. With a few sharp hammer blows, sleeve is pulled. In most cases, job time will average less than two minutes per cylinder. The puller features a 5 lb. slide hammer to help bust loose even the most stubborn sleeves.

- Special adapters are unnecessary.
- Adjustable jaws fit sleeves 3" to 6-1/2" in diameter.

No. 1205 – Sleeve puller with 5 lb. slide hammer assembly. Wt., 20 lbs., 10 oz.

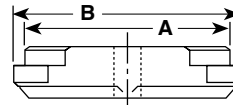
No. 1204 – Sleeve puller without 5 lb. slide-hammer assembly. Wt., 14 lbs.



Bore Inches	"A" I.D. +.010 -0.000	"B" O.D. +.015 -0.015	OTC Plate Number
3.600"	3.585	3.657	1219
3-9/16"	3.547	3.663	1221
3-11/16"	3.671	3.792	1222
3-7/8"	3.840	4.047	1223
3-7/8"	3.859	4.093	1225
4"	3.984	4.218	1227
4-1/8"	4.109	4.229	1230
4-1/4"	4.235	4.470	1232
4-5/16"	4.302	4.450	1233
4-3/4"	4.734	5.171	1240
4-7/8"	4.860	4.980	1242
4-7/8"	4.860	5.045	1243
5"	4.977	5.120	1245
5-1/8"	5.093	5.593	1246
5-1/2"	5.484	5.718	1250

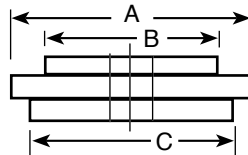
Sleeve Removal Plates

Designed to work with set Nos. 1200, 1202, and 1203, these removal plates fit the full spectrum of cylinder sleeve sizes. Determine engine bore size ("A" dimension) and O.D. of sleeve to be pulled ("B" dimension). Then consult chart to the right.



Sleeve Installation Plates

Each of these dry-sleeve installation plates covers a range of bore sizes. Their reversible design makes both sides usable. The plates work with our manual or 17-1/2 ton hydraulic puller/installers (Nos. 1200, 1202, and 1203). Check chart at right to ensure correct sleeve selection.

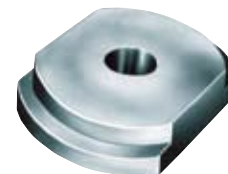
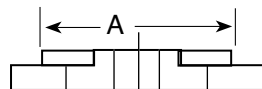


Fits Sleeves From	"A"	"B"	"C"	No.
3-3/16" to 3-7/16"	3-7/8"	3.171"	3.421"	1252
3-9/16" to 3-7/8"	4-1/4"	3.546"	3.859"	1253
4-1/8" to 4-3/8"	4-3/4"	4.109"	4.359"	1254
4-3/8" to 4-3/4"	5-1/4"	4.390"	4.734"	1255
4-13/16" to 5-3/4"	6-3/8"	4.797"	5.734"	1256

Blank Sleeve Remover Plates

These sleeve puller blanks supplement the sleeve puller plates listed above. Should a standard plate be unavailable, you can machine these blanks to the required bore size.

- Includes instructions.



Machined Bore Dim. "A"	Will Machine to Bore Size Dim. "A"	Blank Number
5.250	4.750	39058
4.750	4.400	39057
4.400	3.812	38722
3.812	3.437	38724
3.437	3.000	38723

Oil Seal and Wear Ring Installer

This two-piece tool makes the difficult job of correctly installing the rear crankshaft seal and wear ring on most Navistar DT-360 and DT-466 engines thru 1996 an easy task. Bolt the adapter to the crankshaft and wrench the component home.

- Eliminates damage to seals or wear ring that can occur when driving them into place.

No. 5022 – Oil seal and wear ring installer for 5.0" dia. seals (ZTSE4749 for 6.5" dia.). Wt., 32 lbs.



5022

HEAVY-DUTY TOOLS

Glow Plug / Compression Service



Cylinder Liner Height Gauge with Hold-Down Bar

This set lets you meet those exacting specifications necessary for optimum diesel engine performance. It accurately measures cylinder bore flatness and depth. The hold-down bar correctly seats the liner for accurate measurement of liner protrusion. The easy-to-read dial is in .001 inch graduations, 1.000" range.

No. 7106 – Cylinder liner height gauge with hold-down bar, in plastic case. Wt., 7 lbs., 7 oz.

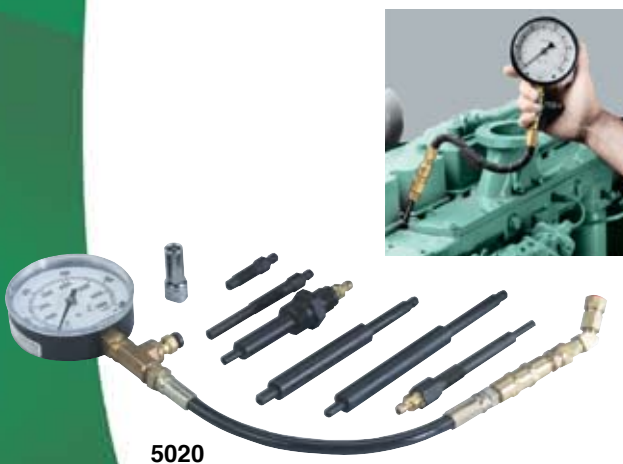


Diesel Glow Plug Removal Tool

- Removes damaged, stuck-in glow plugs on diesel engines without having to remove cylinder head, saving hours of service time!
- When glow plug tip is melted and plug cannot be removed without breaking it off, this tool is the only answer.
- Tool includes 10 mm and 12 mm split nuts that provide added threads for pulling. One of three furnished spacers is installed under split nut to give a solid base for extraction without breaking glow plug off. Split nut is held with a wrench as the glow plug is unscrewed from the head.
- Services diesels in popular 3/4- and 1-ton pickups. Comes in a plastic storage case.

No. 6005 – Includes 10 mm x 1.00 mm and 12 mm x 1.25 mm split nuts, three spacers (3/16", 1/4", 5/16"), plastic storage/organizer case, and instructions. Wt., 5 oz.

Services Ford – 1983-87 6.9L, 1988-98 7.3L, GM – 1992-2000 6.5L, 1982-93 6.2L, 1980-85 5.7L, plus many import and ag. diesel engines



Diesel Compression Tester with Adapters

This easy-to-use compression tester is designed for light- and medium-duty diesel engines equipped with glow plugs. A dual-reading gauge, featuring a push-button release valve, measures compression to 1000 PSI and 7000 kPa. The hose end has quick disconnect fittings. The tester comes with glow plug and nozzle adapters in a handy storage case.

Tester services these engines:

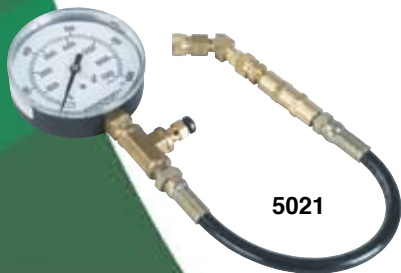
- Cummins B and C
- Navistar DT466/DT360
- Ford/Navistar 6.9L & 7.3L
- Detroit 6.2L & 6.5L
- Hino diesel and Mitsubishi Fuso truck engines

No. 5020 – Diesel compression tester with adapters. Wt., 7 lbs., 13 oz.

No. 5021 – Universal diesel engine compression gauge. Wt., 1 lb., 8 oz.

No. 304802 – Replacement gauge. Wt., 8 oz.

Similar to Ford 303-D091 (D93T-6000-A)



Similar to Ford No. 303-D092 (D93T-6000-B)

Replacement Adapters (available separately)

No. 47484 – Hino diesel truck engines with 12 mm x 1.25 thread

No. 209633 – Ford 6.6L & 7.8L diesels

No. 217791 – Cummins B 3.9L 4 cyl. & 5.9L 6 cyl. '89-'98

No. 308472 – Mitsubishi Fuso truck 4D & 6D engines with 10 mm x 1.25 thread

No. 310810 – Cummins C 8.3L 6 cyl. '88-'96

No. 310832 – Ford/Navistar 6.9L & 7.3L, Detroit 6.2L & 6.5L with 10 mm x 1.0 thread

No. 310840 – Navistar DT466/DT360

Ford Diesel Compression Test Adapter

- Use with OTC No. 5021 diesel engine compression gauge.
- Remove glow plug; this adapter is used to connect the No. 5021 gauge to perform a compression test.
- Application: 1994–2003 Ford vans and pickups with 7.3L direct-injected turbocharged (DIT) diesel engine.

No. 6076 – Ford diesel compression test adapter. Wt., 5 oz.

Similar to
Ford 303-D103
(D94T-6600-E)



6076

Ford Diesel Compression Test Adapter

- Use with OTC No. 5021 diesel engine compression gauge.
- Works on 2003-2006 Ford vans and trucks—with 6.0L diesel engines.

6660 – Ford diesel compression test adapter. Wt., 7 oz.

Similar to
Ford 303-757



6660

Ford 5-pin Connector Harness for Glow Plug Testing

- Provides an easy way to check glow plug resistance without having to remove the valve cover of 1994-98 Ford trucks and vans with 7.3L DIT (direct-injected turbocharged) diesel engine.
- Use with any standard digital volt ohmmeter to check glow plug resistance.

No. 6088 – Ford 5-pin connector harness for glow plug testing. Wt., 4 oz.

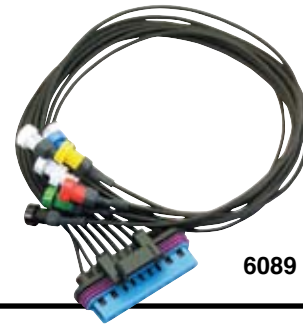


6088

Ford 9-pin Connector Harness for Glow Plug Testing

- Permits testing glow plug resistance without having to remove the valve cover of 1998-1/2–2003 Ford trucks and vans with 7.3L DIT (direct-injected turbocharged) diesel engines.
- Use with any standard digital volt ohmmeter to check glow plug resistance.

No. 6089 – Ford 9-pin connector harness for glow plug testing. Wt., 8 oz.



6089

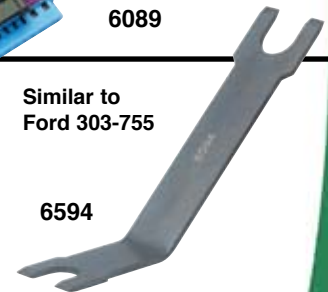
Ford Oil Line Disconnect Tool

- Use to disconnect the high-pressure oil rail supply line from the fuel rail when removing fuel injectors.
- Works on the 6.0: diesel engine found in 2003–'07 F-250, F-350, F-450, and F-550 trucks, and Ford Excursions.

No. 6594 – Ford oil line disconnect tool. Wt., 5 oz.

Similar to
Ford 303-755

6594



High Pressure Oil Line Disconnect Tool

- Use to disconnect the high pressure oil line from the cylinder head.
- Works on 1998 - 2003 Ford vans and trucks with 7.3L direct-injected, turbo-charged (DIT) diesel engines.

No. 6595 – High pressure oil line disconnect tool. Wt., 3 oz.

Similar to Ford
303-625

6595



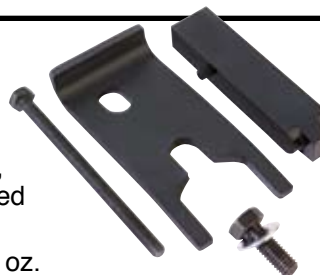
Ford Injector Remover/Installer Kit

- Removes and installs injectors without damaging the injector or cylinder head.
- Application: 1994–2003 Ford 3/4- and 1-ton trucks, Super Duty trucks, and vans with 7.3L direct-injected turbocharged (DIT) diesel engine.

No. 6067 – Ford injector remover/installer kit. Wt., 6 oz.

Similar to
Ford 303-491
and 303-492

6067



HEAVY-DUTY TOOLS

Diesel Injector & Fuel Tools



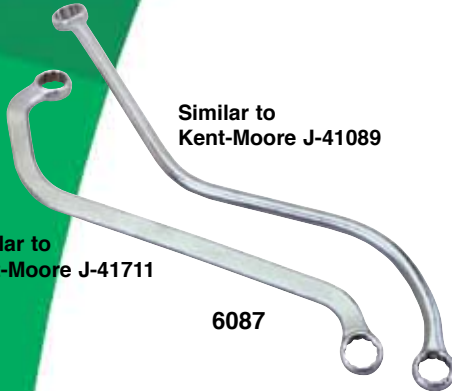
6069

Similar to
Miller 8318

Cummins Diesel Fuel Injector Remover Kit

- Kit contains a fuel injector connector tube remover and fuel injector puller. The fuel injector connector tube must be removed before pulling the injector, or both will be damaged.
- Application: 1998-1/2–2002 Dodge pickups and vans with 5.9L 24-valve Cummins diesel turbo engine.

No. 6069 – Cummins diesel fuel injector remover kit. Wt., 8 oz.



Similar to
Kent-Moore J-41089

Similar to
Kent-Moore J-41711

6087

GM Injection Pump Wrench Set

- Use to loosen or tighten injection pump retaining bolts whenever pump timing adjustment or pump service is required. Services 1996–2000 GM full-size 2- and 4-wheel drive trucks, vans, and Suburbans with 6.5L diesel engine.
- Two specially bent wrenches are needed, due to the location of the throttle, cruise control, T.V. cable bracket, cooling system crossover pipe and bracket, and the thermostat housing.
- Wrenches are 15 mm, 12-point, double box-end type.

No. 6087 – GM injection pump wrench set. Wt., 1 lb.



5060

Detroit Diesel Injector Socket

Because of their location, some injectors are difficult to remove or install. But with this 30 mm socket, you'll be able to attach a 3/8" square-drive tool or 7/8" wrench. The socket fits injectors snugly to provide a good grip and avoid damage.

- Works on 6.2L and 6.5L engines.

No. 5060 – Detroit Diesel injector socket. Wt., 8 oz.



6080

Master Cummins Diesel Fuel Injection Test Kit

- Includes the fittings and gauge needed to check fuel pressure, fuel volume, and fuel restrictions from the delivery pump to the injection pump.

Contents:

No. 518501 – Special quick-disconnect banjo fitting (M14 x 1.5 external).

No. 7915 – Two fuel injection quick-coupler adapters.

No. 7426 – Quick-disconnect banjo fitting (M12 x 1.5 external).

No. 223336 – Gauge assembly.

No. 6082 – Fuel volume test adapter.

No. 6078 – Diesel fuel inlet restriction test adapter.

- Application: 1988–98 Dodge pickups and vans with 5.9L 12-valve, & 1998-1/2–2003 5.9L 24-valve Cummins diesel engines.

No. 6080 – Master Cummins diesel fuel injection test kit. Wt., 5 lbs.

Cummins Diesel Fuel Volume Test Adapter

- Use to perform fuel volume test on fuel transfer pump. Fuel volume is as important as fuel pressure. Pump may pass pressure test, but fail volume test. Fitting is threaded into transfer pump, and No. 6082 is attached to the barbed end. The end of the 2 ft. tubing is placed into a container for fuel to be measured.
- Application: 1994–1998-1/2 Dodge pickups and vans with 5.9L 12-valve Cummins diesel engine.

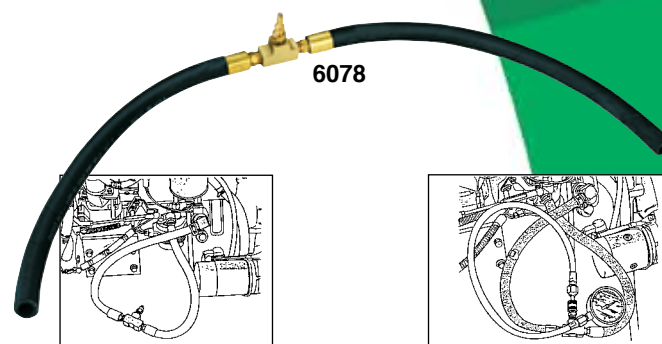
No. 6082 – Cummins diesel fuel volume test adapter. Wt., 3 oz.



Cummins Diesel Fuel Inlet Restriction Test Adapter

- Adapter is used to perform a vacuum test on the transfer pump; excessive vacuum reading indicates a fuel inlet restriction.
- Application: 1988–95 Dodge trucks and vans with 5.9L 12-valve Cummins diesel engine. Included in OTC set No. 6080.

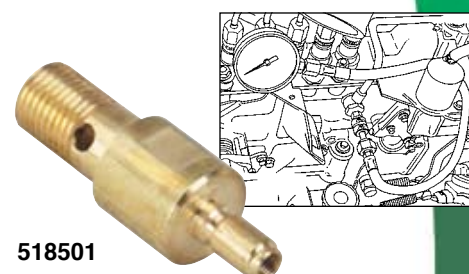
No. 6078 – Cummins diesel fuel inlet restriction test adapter. Wt., 1 lb., 3 oz.



Special Quick-Disconnect Banjo Fitting

- Adapter fitting (M14 x 1.5 male) is used to check fuel pressure from the delivery pump to the injection pump. Use with gauge assembly of OTC set No. 6079.
- Has quick-connect Schrader valve on end of fitting for safety and ease of hook-up to gauge. Included in OTC kit No. 6080.
- Application: 1996–1998-1/2 Dodge pickups and vans with 5.9L 12-valve Cummins engine.

No. 518501 – Special quick-disconnect banjo fitting. Wt., 3 oz.



Cummins Engine Barring Tool

Need to manually rotate an engine? This tool makes the job easy. Just insert the tool into the flywheel housing until it engages the ring gear. Then attach a 1/2" square drive ratchet or breaker bar and turn. The tool's load-bearing collar provides friction-free operation while rotating the tool in the housing.

- Works on Cummins B and C series diesel engines and 5.9L diesels used in Dodge pickups.

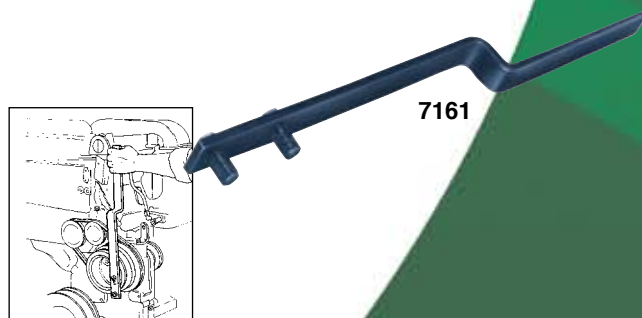
No. 7471A – Cummins engine barring tool. Wt., 11 oz.



Cummins Engine Turning Tool

This tool makes easy work of manually rotating a Cummins 855 cubic inch engine. It's essential hardware when you're bringing pistons to top dead center to adjust injector timing.

No. 7161 – Cummins engine turning tool. Wt., 4 lbs., 5 oz.



HEAVY-DUTY TOOLS

Pullers, Air Cooler Tester



7119

Similar to
Kent-Moore J-29953-A

Compressor Drive-Gear Coupling Puller

Here's the solution for removing the coupling from the Cummins Compact and Bendix air compressors found on many Cummins 855 cubic inch engines. The split collet design fits over the coupling, and mechanical force does the work.

- Works on compressors with 1-3/4" O.D. shaft.

No. 7119 – Compressor drive-gear coupling puller. Wt., 2 lbs., 7 oz.



7120B

7120A

Cummins Drive-Pulley Tool Set

This two-piece set is designed to remove and install the drive pulley on Cummins NH and NTC 855 cubic inch engines. The 7120B remover simply bolts into the tapped holes for pulling. The 7120A installer threads onto the pulley accessory drive shaft for easy installation.

No. 7120 – Cummins drive-pulley tool set. Wt., 5 lbs., 5 oz.

No. 7120A – Drive-pulley installer. Wt., 2 lbs., 3 oz.

No. 7120B – Drive-pulley remover. Wt., 3 lbs.

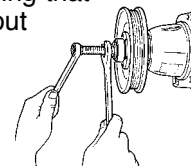


5071

Cummins Water Pump Pulley Tool

This heavy-duty tool is designed to remove or install water pump pulleys on Cummins L10 and M11 engines, 1991 and newer. The installer has a rugged thrust bearing that allows for friction-free pulley installation without damaging pump components.

No. 5071 – Cummins water pump pulley tool. Wt., 2 lbs., 4 oz.

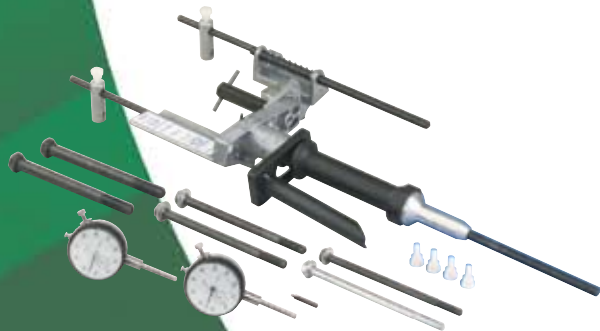


5039

Charged Air Cooler Tester

This is the easy way to find air leaks in the charged air cooler systems used on class 7 & 8 truck engines. The tester features a large 2-1/2", 0-60 PSI pressure gauge, regulator and relief valve, and two safety cables. It also has quick disconnect air fittings that attach to a 3", 3-1/2", or 4" cooler hose.

No. 5039 – Charged air cooler tester. Wt., 7 lbs., 6 oz.



7470

Cummins Diesel Injector Timing Kit

Measures static timing on Cummins J, K, N, NH, V-12, N-14, and L-10 series diesel engines. With this tool you can determine the injector push tube travel in relation to piston travel. Tool is installed with one dial indicator in the injector bore and the other on the injector push tube. Turn the engine over manually to find top dead center. By checking the gauges, you can determine if timing is within factory specifications, then make adjustments to the cam followers.

No. 7470 – Cummins diesel injector timing kit. Wt., 15 lbs.

Truck Clutch Alignment Shafts

These 10-spline clutch alignment shafts are available in the three most popular sizes: 1-1/2", 1-3/4", 2" O.D., and are designed for use on heavy-duty single, two-plate, push/pull, manual, and self-adjust clutches. The shafts are constructed of lightweight fiberglass-reinforced nylon that won't hang up in clutch disc splines. Yet, they're rugged and will easily support the weight of heavy pressure plates.

No. 5070 – Truck clutch alignment shaft. 1-1/2" O.D., 30 mm pilot. Wt., 10 oz.

No. 7072A – Truck clutch alignment shaft. 1-1/2" O.D., 1" pilot, 10 splines, 3.25" long. Similar to Ford 308-D001 (D79T-7550-A). Wt., 10 oz.

No. 7073A – Truck clutch alignment shaft. 1-3/4" O.D., 1-1/4" pilot, spline 3.75" long. Similar to Ford 308-D002 (D79T-7550-B). Wt., 11 oz.

No. 7074A – Truck clutch alignment shaft. 2" O.D., 1-1/4" pilot. 10 splines, 3.6" long. Similar to Ford 308-D003 (D79T-7550-C). Wt., 13 oz.

No. 7480 – Truck clutch alignment shaft. 1-3/4" O.D., 1" pilot. Similar to Ford 308-D010 (D93T-7550-A). Wt., 7 oz.

No. 5029 – Clutch alignment shaft. 2" O.D., 1-1/4" pilot. 10 splines, 7.3" long. Similar to Ford 308-D011 (D93T-7550-B). Wt., 1 lb.

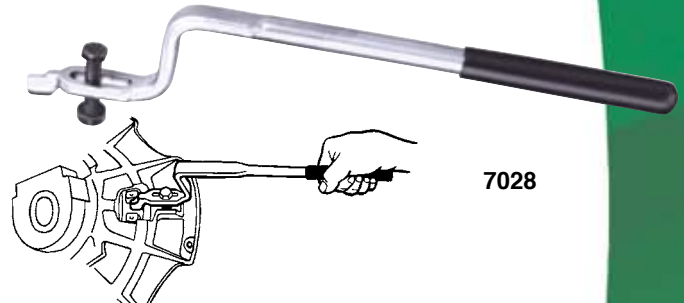
No. 5030 – Clutch alignment shaft. 1-3/4" O.D., 1-1/4" pilot, spline 7.375" long. Similar to Ford 308-D012 (D93T-7550-C). Wt., 13 oz.



Clutch-Adjusting Wrench

This clutch-adjusting wrench will solve the difficult, time-consuming job of internally adjusting heavy-duty Spicer clutches. Using this wrench is much quicker and easier than makeshift methods such as pry bars, which often result in component damage, poor job performance, or extra downtime.

No. 7028 – Clutch-adjusting wrench. Wt., 1 lb., 8 oz.

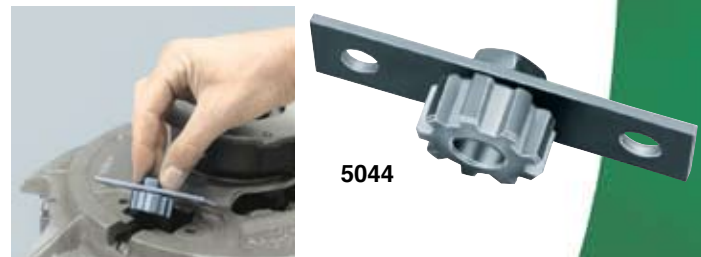


Self-Adjusting Clutch Rotating Tool

This handy tool replaces the self-adjuster mechanism on Spicer self-adjusting clutches, allowing you to manually adjust them with a wrench or socket.

- 3/4" hex drive.

No. 5044 – Self-adjusting clutch rotating tool. Wt., 7 oz.



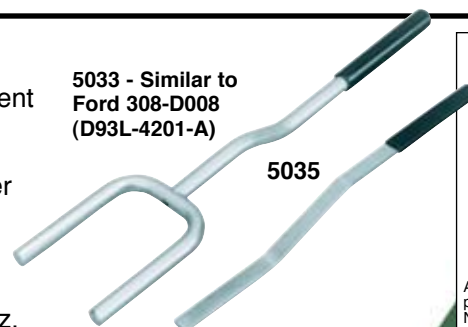
Truck Clutch Adjustment Set

The gauges in this set enable you to check the adjustment of pull-type, heavy-duty clutches, ensuring their correct operation. One gauge checks the amount of free play between the yoke and the bearing's wear pad. The other gauge lets you determine the amount of travel between the release bearing and transmission bearing cap.

No. 5035 – Truck clutch adjustment set. Wt., 1 lb., 8 oz.

No. 5034 – Clutch pedal free play gauge. Wt., 1 lb., 4 oz.

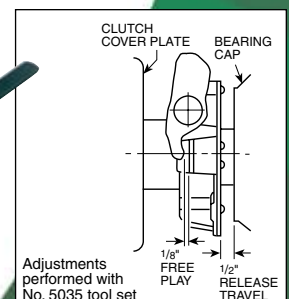
No. 5033 – Release bearing travel gauge. Wt., 4 oz.



5033 - Similar to Ford 308-D008 (D93L-4201-A)

5035

5034 - Similar to Ford 308-D009 (D93L-7025-A)



HEAVY-DUTY TOOLS

Clutch & Flywheel Tools



Clutch Service Set

Here's an ideal companion set to the No. 5015 clutch handler. Designed for Spicer heavy-duty clutches, the nine tools in this set help with a variety of jobs, from clutch installation and removal to flywheel drive-pin installation to clutch adjustment.

- Includes handy plastic carrying case.

No. 5043 – Clutch service set.
Wt., 15 lbs., 13 oz.

OTC No.	Description
5044*	Self-adjust clutch rotating tool. Rotates adjusting ring.
5045*	Flywheel drive pin installing tool. Aligns and installs drive pins in 14" heavy-duty truck pot-type flywheels.
5046*	Clutch release tool. Removes shipping blocks from between clutch housing and release bearing.
7028*	Adjusting wrench. For internal adjustment of multiple lever and angle-spring clutches.
7073A*	Clutch alignment tool. 1-3/4" O.D. Provides perfect fit to spline of clutch disc.
7074A*	Clutch alignment tool. 2" O.D. Provides perfect fit to spline of clutch disc.
213013	Pair of 3/8" flywheel to clutch guide pins.
213014	Pair of 7/16" flywheel to clutch guide pins.
213015	Hex key wrench. Removes/installs flywheel drive pin set screws.

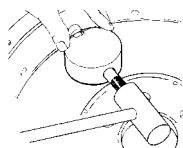
* Tool is available separately.



Clutch Release Tool

- Permits removal of the shipping blocks from new clutch assemblies.

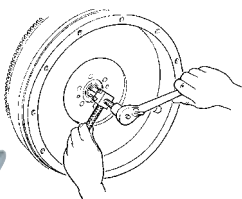
No. 5046 – Clutch release tool. Wt., 3 lbs., 10 oz.



Drive Pin Installing Tool

- Enables precise alignment and installation of the spacer plate drive pins on a pot-type 14" flywheel.
- Ensures free action of clutch assembly.

No. 5045 – Drive pin installing tool. Wt., 3 lbs.

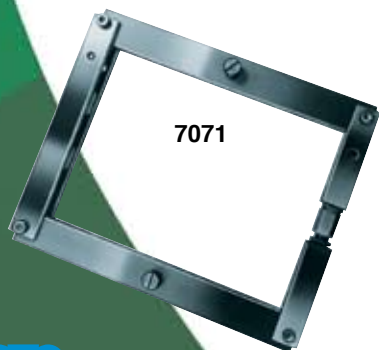


Pilot Bearing Pullers

These tools make quick work of pulling stubborn, rusted pilot bearings. No. 5048 fits 1-1/4" I.D. bearings, and No. 5049 fits 1" I.D. bearings. The puller's forcing screw expands the jaws inside the bearing and simultaneously pushes against the crankshaft.

No. 5048 – Pilot bearing puller for 1-1/4" I.D.
Wt., 1 lb., 3 oz.

No. 5049 – Pilot bearing puller for 1" I.D.
Wt., 1 lb., 3 oz.



Differential Housing Spreader

Removing and installing differential ring gear assemblies is typically a difficult, time-consuming chore – that is, unless you're using this differential housing spreader. This device uses mechanical screw power to spread the housing, allowing easy removal of the differential assembly while eliminating damage often caused by makeshift methods.

- Works on Dana axle models 30 through 70.

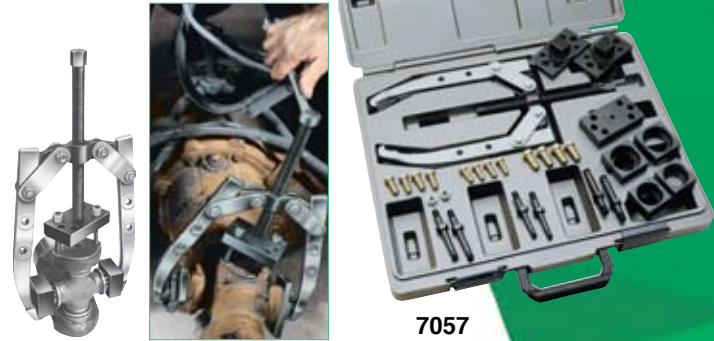
No. 7071 – Differential housing spreader.
Wt., 34 lbs.

U-Joint Puller

This service tool easily removes stubborn, corroded bearings without damaging U-joint components, even in limited space. The tool applies up to 7 tons of force to separate yoke assemblies and remove bearings. Far superior to sledgehammer methods.

- Works on Meritor 16N, 17N, 18N, and 1710 series U-joints and Spicer 1600/1610 to 1880 series U-joints.
- Includes plastic storage box, No. 1036 2-jaw puller, and instructions.

No. 7057 – U-joint puller. Wt., 16 lbs., 3 oz.

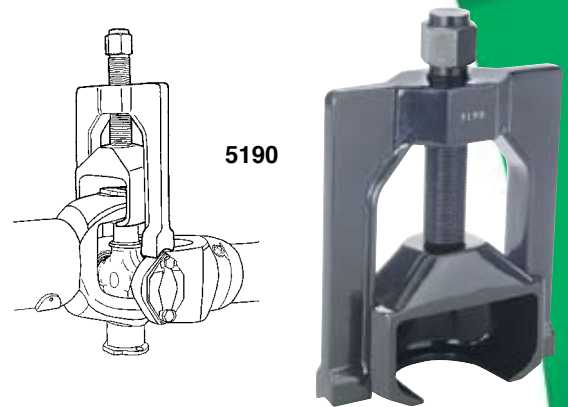


Heavy-Duty U-Joint Puller

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, 1710
 - Meritor RPL 20 and 25 "Permalube" Series

No. 5190 – Heavy-duty universal joint puller. Wt., 11.4 lbs.



Heavy-Duty Bearing Cup Installer

Quickly and easily installs bearing cups on Dana/Spicer SPL "Life Series" quick-disconnect universal joints.

- Three individual adapters press bearings to the manufacturer's recommended depths.
- Adapters fit Spicer SPL 140, 170, and 250 series drivelines.

No. 5191 – Heavy-duty bearing cup installer. Wt., 18 lbs.



Heavy-Duty Bearing Cup Installer

Quickly and easily installs bearing cups on bolt-retained universal joints. Fits series 1610 to 1880 and nearly all other heavy-duty truck and machine type u-joints with bolt-retained bearing cups.

- Automatically aligns bearing cups during installation.
- Eliminates the possibility of damage to the needle bearing.

No. 5192 – Heavy-duty bearing cup installer. Wt., 1 lb., 11 oz.



U-Joint Tool

Designed for a 1/2" impact wrench, this U-joint tool removes even the most stubborn U-joints with ease. It's compact and easily set up, making it ideal for service calls. And it can be used at different angles and in tight places, eliminating those damaging makeshift methods. The puller's legs have holes for bolt storage.

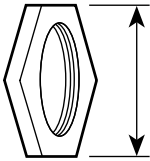
- Bolts included: 5/16"-24 x 1-1/2", 3/8"-24 x 1-1/2", 7/16"-20 x 1-1/2", M8-1.25 mm x 35 mm.
- Works on most Dana Spicer and Meritor U-joints – **except** Spicer's Life series model SPL250X.

No. 7490 – U-joint tool. Wt., 10 lbs., 7 oz.

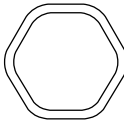


HEAVY-DUTY TOOLS

Truck Wheel Bearing Locknut Sockets

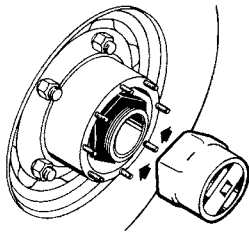


Measure from flat to flat to determine size of locknut, then consult chart to select a socket. **Warranty is void if tool is subjected to impact wrench use.**



* Fits special "rounded" hex nut found on Dana axles of some Ford trucks.

* Depth of locknut sockets is 5".



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.

NOTE: Sockets are designed for use with 3/4" square-drive manual tools only. Impact tool use voids sockets' warranty.

1902 – Similar to Ford No. 205-039 (T70T-4252-B)

1904 – Similar to Ford No. 205-040 (T70T-4252-D)

1905 – Similar to Ford No. 205-041 (T70T-4252-E)

1910 – Similar to Ford No. 205-042 (T70T-4252-K)

1928 – Similar to Ford No. 205-043 (T70T-4252-W)

Measure from flat to flat to determine size of locknut, then consult chart to find the correct socket.

Socket No.	Opening Size	Socket No.	Opening Size
1901	2-3/32" (6 pt.)	1924	3-3/8" (8 pt.)
1920	2-1/4" (6 pt.)	1910	3-1/2" (6 pt.)
1902	2-3/8" (6 pt.)	1911	3-1/2" (8 pt.)
1936*	2-3/8" (6 pt.)	1925	3-3/4" (8 pt.)
1903	2-3/8" (8 pt.)	1926	3-3/4" (6 pt.)
1921	2-1/2" (6 pt.)	1927	3-13/16" (8 pt.)
1904	2-9/16" (6 pt.)	1912	3-7/8" (6 pt.)
1905	2-9/16" (8 pt.)	1913	3-7/8" (8 pt.)
1928*	2-9/16" (6 pt.)	1914	4" (6 pt.)
1922	2-5/8" (6 pt.)	1915	4-1/8" (6 pt.)
1923	2-3/4" (6 pt.)	1940	4-1/8" (8 pt.)
1937	2-3/4" (8 pt.)	1916	4-3/8" (6 pt.)
1932	2-7/8" (6 pt.)	1917	4-3/8" (8 pt.)
1933	2-7/8" (8 pt.)	1938	4-1/2" (8 pt.)
1906	3" (6 pt.)	1941	4-13/16" (8 pt.)
1907	3" (8 pt.)	1918	4-7/8" (6 pt.)
1934	3-1/8" (6 pt.)	1919	4-7/8" (8 pt.)
1935	3-1/8" (8 pt.)	1939	5-1/4" (6 pt.)
1908	3-1/4" (6 pt.)	7795	2-1/2" (6 pt.)
1909	3-1/4" (8 pt.)	7796	2-3/4" (6 pt.)

Metric Truck Wheel Bearing Locknut Sockets

Socket No.	Opening Size	Socket No.	Opening Size
1950M	54 mm (6 pt.)	1957M	90 mm (8 pt.)
1951M	55 mm (6 pt.)	1958M	94 mm (8 pt.)
1952M	60 mm (6 pt.)	1962M	100 mm (8 pt.)
1953M	70 mm (6 pt.)	1959M	106 mm (8 pt.)
1954M	71 mm (6 pt.)	1960M	110 mm (8 pt.)
1955M	80 mm (6 pt.)	1961M	120 mm (8 pt.)
1956M	82 mm (8 pt.)		



9850

Truck Wheel Bearing Locknut Sockets (6-pt.)

No. 9850 – 21 wheel bearing locknut sockets with tool board.

Wt., 54 lbs., 7 oz.

No. 62908 – Display board only. Wt., 5 lbs., 7 oz.

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

Wheel Bearing Locknut Sockets (8 pt.)

No.	Qty.	Description	No.	Qty.	Description	No.	Qty.	Description
1903	1	Locknut socket (2-3/8")	1917	1	Locknut socket (4-3/8")	1930	1	Locknut socket (2-7/8")
1905	1	Locknut socket (2-9/16")	1919	1	Locknut socket (4-7/8")	1931	1	Locknut socket (3-5/8")
1907	1	Locknut socket (3")	1924	1	Locknut socket (3-3/8")	1933	1	Locknut socket (2-7/8")
1909	1	Locknut socket (3-1/4")	1925	1	Locknut socket (3-3/4")	1935	1	Locknut socket (3-1/8")
1911	1	Locknut socket (3-1/2")	1927	1	Locknut socket (3-13/16")	1937	1	Locknut socket (2-3/4")
1913	1	Locknut socket (3-7/8")	1929	1	Locknut socket (2-5/8")	1938	1	Locknut socket (4-1/2")

No. 9851 – 18 wheel bearing locknut sockets (8 pt.) with tool board. Wt., 53 lbs., 14 oz.

No. 62909 – Display board only. Wt., 6 lbs., 11 oz.

Wheel Bearing Locknut Sockets

- A selection of popular sizes in 6- or 8-point.

No. 9852 – 12 wheel bearing locknut sockets and tool board. Wt., 34 lbs., 4 oz.

No. 62910 – Display board only. Wt., 5 lbs., 3 oz.

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



9851



9852

Tubular Spanner Wrenches

- Six-lug, spanner-type wrenches remove and install rear wheel bearing locknuts. They're built for use with a 3/4" square-drive ratchet or breaker bar.

No. 1929 – Wrench for servicing Chevrolet and GMC 5,200 and 7,200 lb. axles. Socket O.D. is 2-5/8". Wt., 1 lb., 11 oz.

No. 1930 – Wrench for servicing Chevrolet and GMC 11,000 to 13,500 lb. axles. Socket O.D. is 2-7/8". Wt., 2 lbs., 5 oz.

No. 1931 – Wrench for servicing Chevrolet and GMC 15,000 lb. axles; 17,000 lb. 2-spd. axles; 15,000 lb. trailing axles. Socket O.D. is 3-5/8". Wt., 3 lbs., 14 oz.



Budd Wheel Sockets

- Metric sizes for Isuzu, Hino, Mitsubishi Fuso, and import trucks; fit front and rear axle wheels.
- 1-1/2" hex Budd wheel socket for American-made trucks with dual rear wheels.

These sockets work on the import truck Budd wheels. Their extra deep design lets you remove both nut and stud with just the one socket. Usable with a 1" square drive impact wrench.

No. 1944 – Consists of 1945A, 1946A, 1947A, 1948A, and 1949A, in a blow molded organizer case.

No. 1945A – 35 mm hex socket with 17 mm sq. Wt., 2 lbs.

No. 1946A – 38 mm hex socket with 20 mm sq. Wt., 2 lbs., 8 oz.

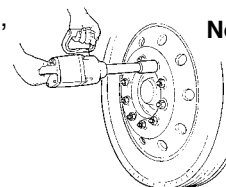
No. 1947A – 41 mm hex socket with 21 mm sq. Wt., 2 lbs., 14 oz.

No. 1948A – 33 mm hex Budd wheel socket. For Mack Midliners, White Volvo, and other import trucks w/dual rear wheels. Wt., 1 lb., 8 oz.

No. 1949A – 1-1/2" hex Budd with 13/16" square wheel socket. For American-made trucks with dual rear wheels. Wt., 2 lbs., 8 oz.



No. 1944



HEAVY-DUTY TOOLS

Locknut, Lug, Hubcap Tools



9814

Truck Pinion Sockets

We've designed and built these sockets to have the correct clearance for yoke and locknut assemblies on a variety of truck transmissions and differentials. The sockets have 3" of usable depth and are 4" long. Using the right tools saves time and effort, eliminating the need to destroy standard sockets by grinding them down to fit tight pinion clearances.

No. 9814 – Tool board and six sockets, 1975 thru 1980 listed above. Wt., 22 lbs., 6 oz.

No. 1981* – Socket only, not included in set. Wt., 3 lbs., 10 oz.

No. 62911 – Tool board only. Wt. 2 lbs.

Socket No.	Opening Size
1975	2" (6 pt.)
1976	2-1/8" (6 pt.)
1977	2-1/4" (6 pt.)
1978	2-3/8" (6 pt.)
1979	2-5/8" (6 pt.)
1980	2-3/4" (6 pt.)
1981*	2-1/2" (6 pt.)

NOTE: Use sockets with 3/4" square-drive, manually powered handles only. Warranty void if tool is subjected to impact wrench use.



9901

"Major Persuader" Pry Bar Merchandiser

- Displays five of OTC's biggest pry bars on a bright, eye-level merchandiser.
- Display measures 16"w x 18"d x 64"h.
- Includes 5 pry bars: two 30", two 46", and one 54" in length.

No. 9901 – Heavy-duty pry bar merchandiser display. Wt., 40 lbs.

Bar No.	Qty.	Desc.
7168	2	30" jimmy bar
7420	2	46" jimmy bar
7421	1	54" jimmy bar



5047

Lug Nut Cap Remover

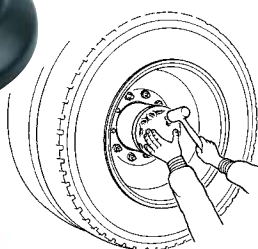
Chrome-plated lug nut caps found on many heavy-duty trucks and trailers can be tough to remove, and they're easily damaged if you pry them off or use an ordinary cap remover. This tool avoids those problems. It is ruggedly built and features specially coated jaws that won't slip off the caps, no matter how much squeezing force you apply.

- Features cushioned handles.

No. 5047 – Lug nut cap remover. Wt., 13 oz.



5059



Hubcap Installer

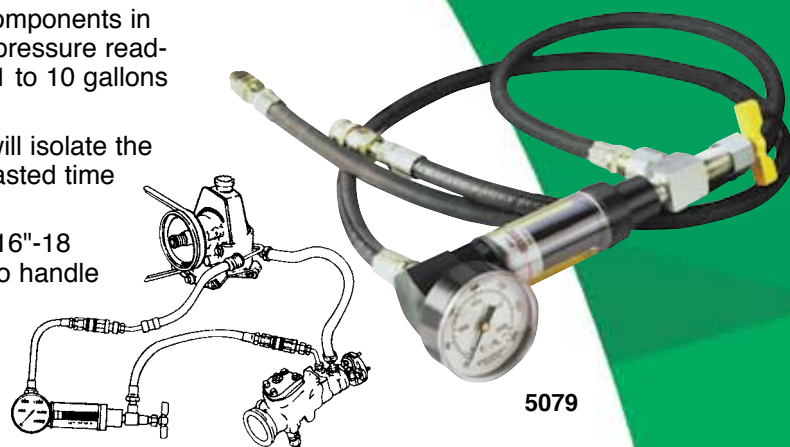
Truckers like chrome, and many of them accent their truck's drive axle with chrome hubcaps designed to snugly fit around the axle-shaft bolts. Unfortunately for service shops, these hubcaps are often tricky to install without causing damage. That's where our hubcap installer comes in handy. Constructed of high-density polyethylene, this tool guides the cap into place over the axle nuts, protecting it from unwanted and costly dents.

No. 5059 – Hubcap installer. Wt., 1 lb.

Heavy-Duty Power Steering Pump Analyzer

- There is only one way to troubleshoot problem components in a heavy-duty power steering system: a flow and pressure reading meter. OTC's new No. 5079 measures both: 1 to 10 gallons oil flow and up to 3,000 psi of pressure.
- When connected in line, this universal analyzer will isolate the failed components in just minutes. There is no wasted time as in trial and error methods.
- The set is complete with high pressure hoses, 9/16"-18 standard fittings, and quick disconnect couplers to handle Eaton/Vickers, TRW, Ross, and Shepard power steering systems.

No. 5079 – Heavy-duty power steering pump analyzer. Wt., 6 lbs.



Kingpin & Brake Anchor Pin Pusher

With this pin remover, hydraulic force and precision tooling replace torch-and-hammer methods for getting the job done quickly and easily. Five special collars and two pins allow this unit to work on both straight and tapered kingpins and accommodates sizes from 7/8" to 2" in diameter and up to 11-1/4" long. The tool delivers 30 tons of hydraulic force to push out even the most corroded kingpins. A job that could consume the better part of a day is done in minutes. The anchor pin can be removed quickly by using the special adapter installed in the pusher's base block and the unit positioned over the brake's spider.

- Works on many models of trucks and buses.
- 27-1/2" high x 8-1/2" wide. • 30-ton capacity.
- Set includes No. 4002 hydraulic hand pump, No. 9767 hose, No. 9798 hose-half coupler, No. 4121 Power Twin 30-ton ram, and No. 29424 anchor pin adapter.

No. 4240 – Complete kingpin and anchor pin pusher set with hydraulics. Wt., 114 lbs.

No. 4241 – King- and anchor-pin pusher with anchor pin adapter without hydraulics. Wt., 59 lbs., 3 oz.

No. 29424 – Anchor pin adapter only. Wt., 1 lb., 12 oz.



Mack Kingpin Socket

Here is a socket that makes life a little easier for anyone who works on Mack trucks. Designed for 1/2" square drive ratchet or breaker bar, the socket fits the slotted adjusting screw in tapered kingpins used on most Mack front axles (12,000 to 20,000 lbs.).

No. 5053 – Mack kingpin socket. Wt., 13 oz.

Socket O.D. 1.8"



Truck Tie Rod Socket

Designed to withstand the force of a 3/4" drive impact wrench, this rugged socket makes truck tie-rod end removal quick and simple.

- Works on inner and outer tie rod ends on 12,000 to 16,000 lb. truck axles.

No. 5068 – Truck tie rod socket. Wt., 3 lbs., 4 oz.

Socket I.D. 2-3/4"



HEAVY-DUTY TOOLS

Steering, Brake, and Suspension Service



6065

Socket I.D. 2-1/8"

Tie Rod Socket for Medium-Duty Trucks

- Services GM-, Ford-, and Chrysler-built 1-ton 2WD and 4WD trucks.
- Also works on medium-duty Class 2 through Class 6 trucks.
- Use with a 1/2" drive impact wrench to easily remove the tie rod ends from the tie rod.

No. 6065 – Tie rod socket for medium-duty trucks.
Wt., 1 lb., 13 oz.

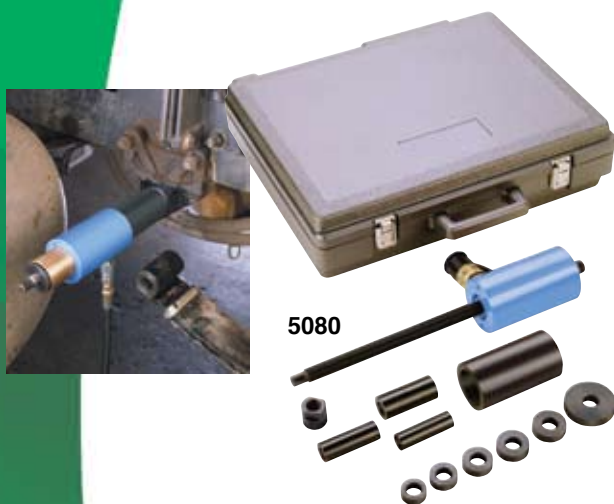


1767

Hendrickson Primaax Quick Alignment Socket

- Hendrickson – Approved tool.
- Used to adjust axle alignment on the Primaax air suspension.
- Works on Primaax models 230, 460, and 690 rear suspensions.

No. 1767 – Hendrickson Primaax quick alignment socket.
Wt., 3 lbs., 8 oz.



5080

Truck Front Leaf Spring, Pin, and Bushing Service Set

- Delivers 10 tons of hydraulic force to remove and install truck front spring eye bushing assemblies quickly and easily.
- Services bushings with diameters from 1-1/4" through 1-7/8", and pin diameters from 7/8" through 1-1/8". Handles all popular OE and aftermarket components, including Horton pin and bushing assemblies.
- Service bushing assemblies, in many cases, without removing leaf spring hangers and spring assemblies from the vehicle.
- All accessories are included except the hydraulic hand pump, which must be purchased separately.

No. 5080 – Truck front leaf spring, pin, & bushing service set.
Wt., 20 lbs. 8 oz.



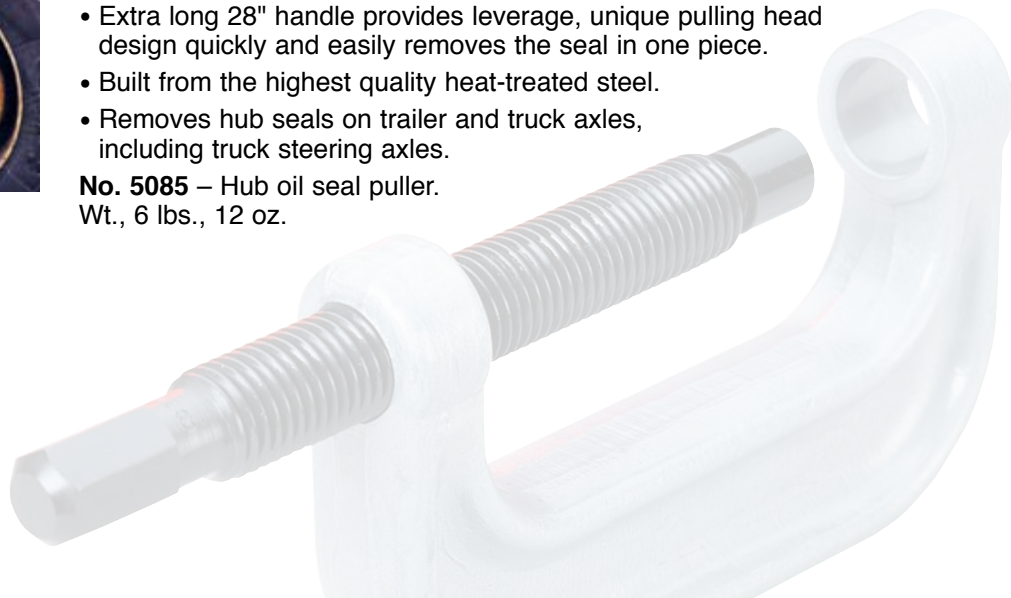
5085



Hub Oil Seal Puller

- Eliminates bearing and hub damage that can occur when a punch and hammer is used to remove the seal.
- Extra long 28" handle provides leverage, unique pulling head design quickly and easily removes the seal in one piece.
- Built from the highest quality heat-treated steel.
- Removes hub seals on trailer and truck axles, including truck steering axles.

No. 5085 – Hub oil seal puller.
Wt., 6 lbs., 12 oz.



Universal Bearing Cup Installer

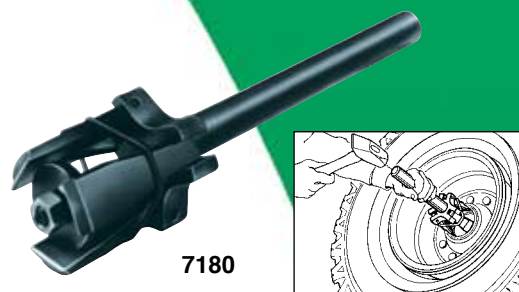
This handy, adjustable tool is designed to install wheel-bearing cups in a wide range of heavy-duty axles. Simply adjust and lock the jaws to the cup I.D., slip on the new cup, set it in the bore, and drive it in with a hammer. The tool helps eliminate the damage caused by makeshift methods.

- Works on axles from 11,000 to 50,000 lb. capacity.
- Adjusts to fit 3-5/8" to 6-1/2" O.D. bearing cups, which adds up to as many as 30 individual drivers.

No. 7180 – Universal bearing cup installer. Wt., 11 lbs.

No. 52038 – Replacement jaw.

No. 207561 – Replacement retaining spring.



Slack Adjuster Pullers

These pullers will yank even the most corroded slack adjuster off the S-cam — and 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.

No. 5055 – Manual slack adjuster puller. Wt., 5 lbs.

No. 5056 – Automatic slack adjuster puller. Wt., 6 lbs.



Air Brake Service Kit

This kit has the tools needed to remove slack adjusters and push-rod clevis pins used in the S-cam brake systems of class 7 and 8 vehicles.

- Works on manual or automatic slack adjusters.
- Includes Nos. 5055 and 5056 slack adjuster pullers, 5057 brake clevis pin press, and a plastic storage case.

No. 5054 – Air brake service kit. Wt., 14 lbs., 10 oz.



Clevis Pin Press

Removing corroded clevis pins from a brake air-chamber pushrod can be a maddening and time-consuming task — unless you’re using our clevis pin press. This handy screw-operated tool applies the force just where it’s needed. The pin is easily removed from its hole without damaging nearby components.

No. 5057 – Clevis pin press. Wt., 1 lb., 13 oz.

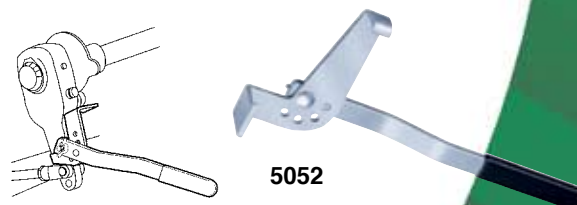


Slack Check

This tool enables you to quickly check the brake adjustment on class 7 and 8 trucks and trailers having S-cam brakes. It features a sturdy, four-position handle to provide the leverage you need at the proper angle.

- Works on manual or automatic slack adjusters.

No. 5052 – Slack check. Wt., 1 lb., 3 oz.

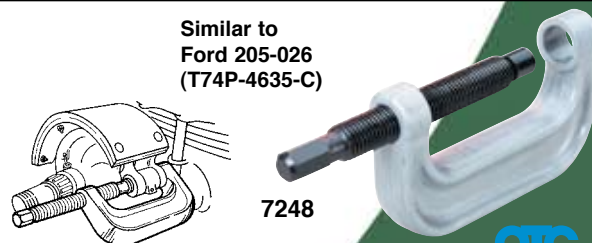


Heavy-Duty Anchor Pin Press

With this rugged C-frame press, you can easily remove stubborn and rusted brake anchor pins from spyders on heavy-duty vehicles. Mechanical screw power does the job quickly and efficiently.

- Works on brake pins up to 1-1/4" in diameter.

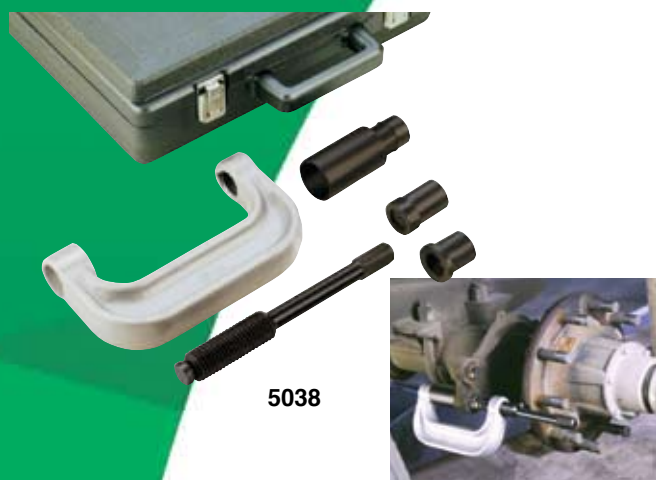
No. 7248 – Heavy-duty anchor pin press. Wt., 9 lbs., 6 oz.



Similar to
Ford 205-026
(T74P-4635-C)

HEAVY-DUTY TOOLS

Brake Service



Brake Anchor Pin and Bushing Service Set

With the No. 5038, there's no need to remove the bearing hub assembly just to replace the pins and bushings on 16-1/2" S-cam trailer and tractor "Q" brake systems. Much less complicated and time consuming!

- Special tooling and our C-frame press get you past the hub assembly, so you can do the job quickly and professionally without damaging other parts.
- Includes everything needed for removal and replacement.
- Tooling is available separately for the tech who already owns the 7248 C-frame press.

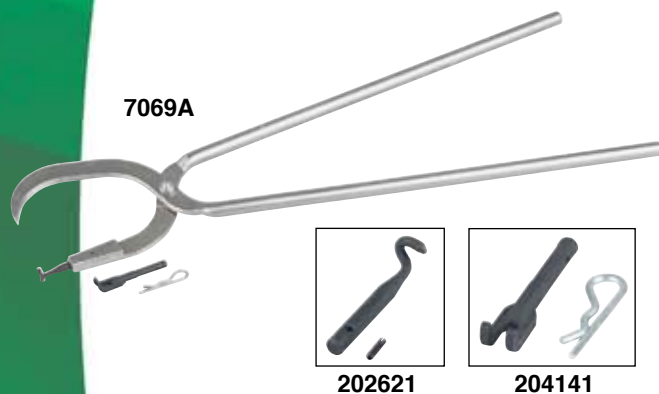
No. 5038 – Brake anchor pin and bushing service set includes C-frame press and tooling in a plastic storage case. Wt., 13 lbs., 9 oz.



Axle-Stud Cone Pliers

Now you can easily remove the tapered cone from studs used on the rear axles of medium and heavy-duty trucks. This specially designed tool gives you the leverage needed to expand the cone and remove it from the stud for axle removal.

No. 7077 – Axle stud cone pliers. Wt., 13 oz.



Heavy-Duty Brake Spring Pliers

Save time and effort when removing and installing return springs on the brake shoes of heavy-duty vehicles. This specially designed pliers works for hydraulic wedge-type and "S" cam air brakes. Its 26-1/4" length gives you the leverage to do the job more easily, and the huge jaw opening accommodates even the widest brake shoes.

No. 7069A – Heavy-duty brake spring pliers with "S" cam and wedge-type replaceable tips. Wt., 4 lbs., 8 oz.

No. 202621 – Wedge-type replacement tip. Wt., 2 oz.

No. 204141 – "S" cam replacement tip. Wt., 2 oz.

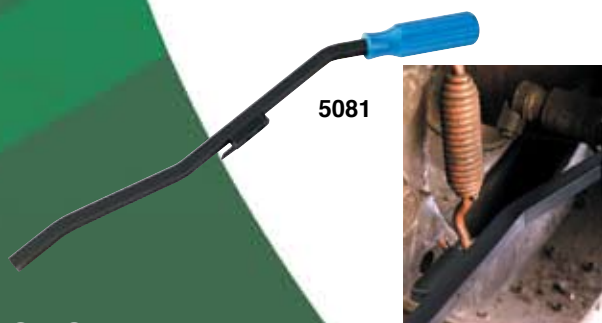


Truck Brake Spring Pliers

• Designed to remove and install the brake shoe return springs on medium-duty and heavy-duty drum brakes.

No. 4592 – Truck Brake Spring Pliers. Wt., 2 lbs., 13 oz.

No. 4592-1 – Replacement tip.



S-Cam Air Brake Spring Tool

• Eliminate makeshift, unsafe methods of unhooking and reconnecting retaining springs when replacing brake shoes on heavy-duty tractors and trailers.

• Simply hook the retaining spring loop and press down. Lever action against the axle makes the job a snap!

No. 5081 – S cam air brake spring tool. Wt., 1 lb., 6-oz.

No. 314548 – Replacement hook kit. Wt., .5 lb.

Hydraulic Brake Spring Tool

Here's a tool to remove and install the return springs in Lucas Girling hydraulic brake systems. The tool's machined tip cradles the return spring securely, and its sliding fulcrum gives you all the leverage needed to do the job. A knurled handle helps prevent slipping.

- Works on 1984 to current Ford F600, F700, and F800 series having Lucas Girling hydraulic brakes.

No. 7462 – Hydraulic brake spring tool.
Wt., 10 oz.



Lucas Rear Brake Adjusting Tool

If you're working on a lot of medium-duty hydraulic brake systems, you need our adjusting tool. It enables you to easily adjust Lucas Girling hydraulic brake systems (popular in Ford F700, F800, and F900 series). The tool's offset design and extra handle length get the job done quickly.

No. 5072 – Lucas rear brake adjusting tool.
Wt., 1 lb., 2 oz.

Similar to Ford
206-D005 (D90T-2588-A)

5072



Truck Transmission Bearing Service Set

The set is designed to help you remove input shaft bearings and countershaft bearings, in both the main and auxiliary boxes of heavy-duty Fuller transmissions. It will also remove end yokes from 1600/1610-1810 series transmissions. The puller delivers 10 tons of mechanical power— essential force for working on big gearboxes.

- Works on Fuller twin-countershaft transmissions: 125, 600, 660, 900, 9500, 1100, 12500, 12600, 13000, 14600, 15600, and 8600 series, 910-913, 915, and 9513.

No. 7070A – Truck transmission bearing service set.
Wt., 14 lbs., 3 oz.

No. 7075 – Transmission output shaft end yoke remover only. Wt., 4 lbs., 3 oz.

No. 7207 – Collet only. Wt., 4 lbs., 13 oz.



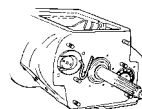
7075

Transmission Timing Block Sets

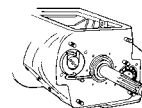
These sets enable one-man installation of front and rear countershaft bearings on Fuller twin-countershaft transmissions. The set positions the upper countershaft, yet lets you slide it aside to insert the main shaft. When the main shaft is in place and timing marks line up, turn the tool vertically to engage and position the countershaft to main shaft.

No. 7108 – Timing block set for Fuller RTO 610/613 transmissions. Wt., 1 lb., 2 oz.

No. 7109 – Timing block set for Fuller RT and RTO 910, 915, 9513, 12509, 12510, 12513, and 12515 transmissions. Wt., 1 lb., 12 oz.



Positioned for main shaft timing.



Positioned for bearing installation.



HEAVY-DUTY TOOLS

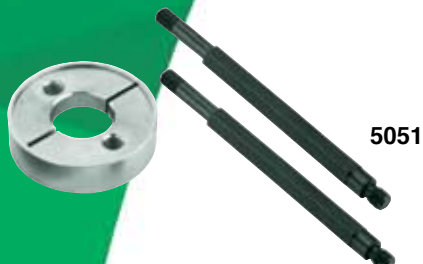
Transmission Service Tools



Bearing Puller Set

This puller set, designed for use with our No. 7070A transmission service set (sold separately), is designed to remove front countershaft and input shaft bearings on Fuller RT, RTO 610/613 twin countershaft transmissions.

No. 205776 – Bearing puller set. Wt., 2 lbs., 10 oz.



Bearing Puller Set

When teamed with our No. 7070A puller, this puller set will remove front and rear countershaft bearings from the main case of Eaton® Fuller® 2 Series Roadranger® transmissions.

- Includes pulling collet, sleeve, and a pair of puller legs.

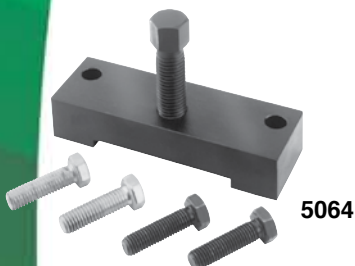
No. 5051 – Bearing puller set. Wt., 3 lbs., 12 oz.



Timing Tool

- Designed to support the main-case upper countershaft during transmission assembly and timing.
- Works on Eaton® Fuller® 2 Series Roadranger® transmissions.

No. 5063 – Timing tool. Wt., 2 lbs., 5 oz.



Countershaft Pushing Tool

Replacing rear countershaft bearing snap rings in Eaton Fuller transmissions? With this tool, you can easily move the countershaft rearward to expose the snap ring.

- Works on Eaton® Fuller® Roadranger® transmissions (series 2, 5, 6, and 7).

No. 5064 – Countershaft pushing tool. Wt., 4 lbs., 11 oz.



Countershaft Bearing Driver

- Eases the task of installing a main-case countershaft bearing.
- Works on Eaton® Fuller® 2 Series Roadranger® transmissions.

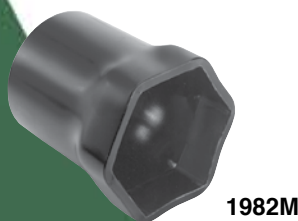
No. 5065 – Countershaft bearing driver. Wt., 3 lbs., 14 oz.



Bearing Driver

This tool is designed to install the bearing on 2" diameter input shafts used in Eaton® Fuller® Roadranger® transmissions.

No. 5066 – Bearing driver. Wt., 5 lbs., 6 oz.



70 mm Hex Socket

Attach this heavy-duty socket to your 3/4" drive ratchet or breaker bar, and you'll be able to easily remove the end-yoke locknut on Eaton® Fuller® 2 Series Roadranger® transmissions.

No. 1982M – 70 mm hex socket. Wt., 3 lbs., 13 oz.

Auxiliary Countershaft Shim Tool

When you're working on Eaton® Fuller® 2 Series Roadranger® transmissions, this tool holds the auxiliary countershaft in place while you set the bearing end play.

- Includes a support strap for .100 and .125 shim settings, and metric and standard mounting bolts.

No. 5062 – Auxiliary countershaft shim tool.
Wt., 3 lbs., 13 oz.

5062



Cummins® Injector Puller

This helpful puller will handle a variety of injectors found in Cummins engines: mechanical L-10, PDT, and PTD top-stop 855NH. Its two-jaw design firmly grips the injector while it is being removed by the slide hammer.

- Includes storage case and special adapter for pulling STC injectors.

No. 5042 – Cummins injector puller.
Wt., 6 lbs.

5042



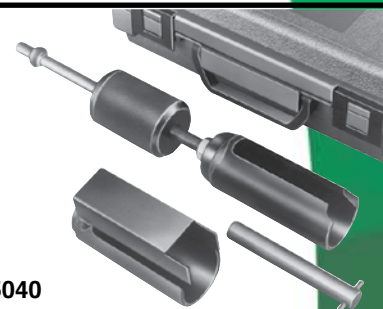
Cummins® Injector Remover/ Installer

This is our best tool for removing or installing fuel injectors on Cummins L10 and N14 Celect electronically controlled engines. The large slide hammer and pin-type pulling adapter easily—and safely—handle injector jobs.

- Includes storage case.
- Two installing adapters help prevent damage to an injector's electronic solenoid.

No. 5040 – Cummins injector remover/installer.
Wt., 7 lbs., 1 oz.

5040



Cummins® Fuel Injector Puller Adapter

When combined with our No. 5028 injector puller or a slide hammer with a 1/2"-20 threaded shaft, this adapter gives you an easy, damage-free way to remove fuel injectors from Cummins B and C series engines.

No. 217793 – Cummins fuel injector puller adapter for B and C series engines with 12 mm x 1.5 injector threads. Wt., 5 oz.

No. 215844 – Cummins fuel injector puller adapter for B and C series engines with 14 mm x 1.5 injector threads. Wt., 5 oz.

217793

215844



Mack Fuel Injector Nozzle Tool

Here's a handy tool for removing or installing injector nozzles on Mack E-6 4 VH and E-9 4 VH four-valve engines. The puller threads directly into the nozzle holder, and mechanical screw power does the pulling while a cylindrical guide holds the injector steady.

- Includes gauge to ensure correct injector depth during installation.

No. 7455 – Mack fuel injector nozzle tool.
Wt., 2 lbs., 2 oz.

7455



HEAVY-DUTY TOOLS

Fuel and Injector Tools



7117

Caterpillar Fuel Injector Nozzle Puller

We've designed this nozzle puller to remove pencil nozzles on Cat engines. The tool applies straight, even pulling power through a bridge assembly and mechanical forcing screw. The job is done quickly— and without damage.

- Works on Caterpillar 1100/3208 diesel engines.

No. 7117 – Caterpillar fuel injector nozzle puller.
Wt., 1 lb., 13 oz.



7121

Fuel Injector Nozzle Puller

We've designed this puller to remove the pencil-type fuel injector nozzles used in many agricultural and construction engines. The slide hammer action gives a straight, even pull without damaging components.

- Works on Case, Caterpillar, GM, John Deere, Waukesha, and White diesel engines.

No. 7121 – Fuel injector nozzle puller.
Wt., 2 lbs., 5 oz.



5028

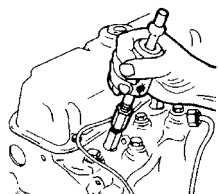
Slide Hammer Puller

The No. 5028 slide hammer is just 8-1/2" long to fit into tight spots, but its 1-1/2 pound hammer gives you a little extra muscle for stubborn jobs. It's perfect for pulling injector nozzles. The shank is threaded 1/2" –20 and has a 5/8" –18 threaded adapter included. Works with many OTC pulling attachments.

No. 5028 – Slide hammer puller.
Wt., 2 lbs.



218163



Ford Fuel Injector Puller Adapter

Designed to work with the No. 5028 slide-hammer puller, this adapter removes injectors from Ford 6.6L and 7.8L diesel engines without damage.

- Slide-hammer threads are 1/2" x 20. Threaded end for injector is 14 mm x 1.5.

No. 218163 – Ford fuel injector puller adapter.
Wt., 3 oz.



7458

Bosch Nozzle Socket

Here's a helpful multipurpose tool for removing or installing injector nozzles. You use the inner socket to hold the nozzle stationary, and the outer socket to loosen or tighten the nozzle's gland nut.

- Works on Bosch KDEL 21 mm injector nozzles used in John Deere engines.

No. 7458 – Bosch nozzle socket. Wt., 11 oz.

Fuel Injector Pump Rotating Tool

Maximum fuel economy requires precise injector timing. The tool securely grips the front of the fuel injection pump so you can rotate it while fine-tuning the system.

- Works on Stanadyne rotary fuel pumps found on International's 6.9 and 7.3 liter engines.

No. 7461 – Fuel injection pump rotating tool. Wt., 1 lb., 14 oz.

Similar to
Ford No. 303-228
(T83T-9000-C)



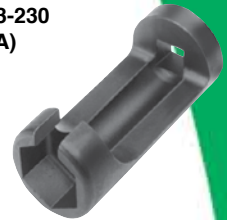
Diesel Fuel Line Wrenches

Fuel line nuts are often hard to reach, but these unique 3/8" square-drive tools solve that problem. With them, you can loosen or tighten fuel lines at the fuel injector nozzle or fuel injection pump without damaging the nut.

No. 7453A – Fuel line wrench, 2.6" long. For International DT466 and 9L diesel engines. Fits 19 mm fuel line nuts. Wt., 4 oz.

No. 7460 – Fuel line wrench, 2.6" long. For International 6.9L and 7.3L diesel engines. Fits 5/8" hex nut. Wt., 5 oz.

Similar to
Ford No. 303-230
(T83T-9396-A)



Injector Seat Cleaner

Carbon buildup on an injector seat surface prevents proper seating of new injectors. With this tool, you'll be able to clear away carbon deposits and avoid seating problems.

- Works on 6.9L and 7.3L Ford/Navistar diesels.
- Thread size is 24 mm x 2-6g.

No. 5023 – Injector seat cleaner. Wt., 10 oz.

Similar to
Ford No. 303-232
(T83T-9527-A)

5023



Injector Sleeve Set

Here are the ideal tools for removing and installing the injector sleeves of International DT466 engines. The removing tool threads onto a slide hammer with 5/8" - 18 threads to remove sleeves quickly. The installer seats new sleeves equally fast, without damage.

No. 5024 – Injector sleeve set. Wt., 1 lb., 8 oz.



Calibration Fluid

- For use in diesel injection pump testers and injector nozzle testers, such as our Nos. 4200 Nozlrater and No. 4210 Nozlrater II.

- 1 gallon

No. 208629 – Calibration fluid. Wt., 7 lbs.



208629

HEAVY-DUTY TOOLS

Injector Nozzle Tester Tools



4200

Specifications	
Overall width	5-3/4"
Overall length (includes handle)	26"
Overall height	11-1/4"
Weight (empty)	15 lbs., 10 oz.
Max. pressure	5000 PSI (350 bar)
Max. reservoir cap.	.692 gal. of diesel fuel (160 cu. in.)
Usable reservoir cap.	.628 gal. of diesel fuel (145 cu. in.)
Outlet port	For 3/8" tube
Gauge	Calibrated 0-5000 PSI (350 bar) Has 3-1/2" dial face with maximum reading indicator needle.
Gauge connection	1/4" NPT internal
Stroke of 1/2" dia. piston	3/4"
Volume per full stroke	.147 cu. in. (2.4 cc)
Intake filter	2 micron

Nozlrater Diesel Injector Nozzle Tester

Here is the ultimate tool for diagnosing a number of problems that affect diesel fuel injector nozzles. The Nozlrater tester enables you to check for leakage, pop-off pressure, spray pattern, and chatter. This tool will accommodate a wide range of injectors. We also offer adapters so you can troubleshoot nozzles used in popular automotive, agricultural, and construction engines. Nozlrater features a rugged, lightweight reservoir that holds 7/10 of a gallon of fuel. It is equipped with a replaceable 2-micron filter. The large, dual-scale, high-pressure gauge is protected by a guard and includes an indicator needle to record maximum pressure reached. The tester is light enough to be easily carried for field use. Or you can bench-mount it, using the holes in its base.

- Not designed for Cummins or Detroit injectors.

No. 4200 – Nozlrater diesel injector nozzle tester. 5000 PSI maximum pressure capacity. Wt., 15 lbs., 10 oz.

No. 17169 – Replacement filter. Wt., 1 oz.

No. 11565 – Gauge. Wt., 10 oz.



4202

Nozzle Tester Manifold/Adapter Sets

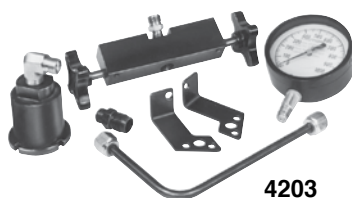
These adapter sets expand our No. 4200 Nozlrater to troubleshoot a wide range of diesel engine injector nozzles.

No. 4202 – Adapters for servicing Audi, GM, Mercedes-Benz, Nissan/Datsun, Toyota, and VW Rabbit diesel engines. Wt., 2 lbs., 14 oz.

No. 4203 – Manifold/adapter set. Tests Caterpillar high- and low-pressure, capsule-type nozzles, and high-pressure, pencil-type nozzles on 1100 and 3200 series engines. Complete with Nos. 39870 and 206168 adapters, low-pressure gauge (up to 1,000 PSI), cap plug and mounting brackets. Wt., 6 lbs., 13 oz.

No. 4203 optional adapters

No.	Description
209197	Adapter to convert the 4203 for testing other high-pressure, pencil-type nozzles with adapters in the 4201 set.
207036	Straight adapter for pencil-type nozzles on 3300 and 3406-B.



4203

Adapter No.	No. 4202 set includes: Description	Chevy Chevette & GM 1980 & newer C.A.V. nozzles	GM 1979 & newer pencil nozzles	GM 1978 pencil nozzles	Nissan, Toyota, & VW Rabbit Diesels	Audi & Mercedes-Benz
36352	Fuel line assy., 9/16"-18 R.H. thd. with 24° on pipe.	•	•	•	•	•
23617	90° adapter, 9/16"-18 external R.H. thd. (Ermeto 24°) to 9/16"-18 internal R.H. thd. (Ermeto 24°).	•	•	•	•	•
23621	Straight adapter, 9/16"-18 external R.H. thd. (Ermeto 24°) to 1/2"-20 external L.H. thd. (60° seat).	•	•		•	•
23622	Adapter nut, 12 X 1.5 mm internal R.H. thd. to 1/2"-20 internal L.H. thd.	•			•	•
201917	Adapter nut, 9/16"-18 internal R.H. thd. to 1/2"-20 internal L.H. thd.		•	•		
23693	Straight adapter, 1/2"-20 external L.H. thd. (Ermeto 24° & 90° seat) to 9/16"-18 external R.H. thd. (Ermeto 24°).			•		

Nozzle-Tester Adapter Set

This is our universal adapter set for testing injection nozzles on the most popular automotive, agricultural, and construction diesel engines. The set has 17 adapters that connect to our No. 4200 Nozlrater testing unit.

- Includes handy metal storage box.
- 23622— used on 1989–95 Cummins 5.9L, 1983–94 Ford 6.9L and 7.3L.
- 23623— used on 1996–2000 Cummins 5.9L and Navistar 6.6L and 7.8L

No. 4201 – Nozzle-tester adapter set.
Wt., 4 lbs., 2 oz.



4201

Adapter No.	Description	I.H. Truck	I.H. Farm Construction	John Deere	Oliver & Allis	Waukesha	Case, Ford Tractor, Massey, & Perkins	White	Mack	Caterpillar Pencil Nozzles	Deutz	GM Autos	VW, Audi, & Mercedes Autos	Mercedes & Magaris Truck
36352	Fuel line assembly, 9/16"–18 R.H. thd. with 24° on pipe.	•	•	•	•	•	•	•	•	•	•	•	•	•
23622	Adapter nut, 12 X 1.5 mm internal R.H. thd. to 1/2"–20 internal L.H. thd.	•		•	•	•	•	•			•	•	•	
23623	Adapter nut, 14 X 1.5 mm internal R.H. thd. to 1/2"–20 internal L.H. thd.	•	•	•	•	•	•		•					•
23624	Adapter nut, 18 X 1.5 mm internal R.H. thd. to 1/2"–20 internal L.H. thd.		•		•	•	•							
201917	Adapter nut, 9/16"–18 internal R.H. thd. to 1/2"–20 internal L.H. thd.	•	•	•	•	•	•	•				•		
23626	Adapter nut, 5/8"–18 internal R.H. thd. to 1/2"–20 internal L.H. thd.	•	•		•	•	•							
201912	Adapter nut, 3/4"–16 internal R.H. thd. to 1/2"–20 internal L.H. thd.					•								
201913	Adapter nut, 9/16"–24 internal R.H. thd. to 1/2"–20 internal L.H. thd.	•	•											
23693	Straight adapter, 1/2"–20 external L.H. thd. (Ermeto 24° & 90° seat) to 9/16"–18 external R.H. thd. (Ermeto 24°).	•	•	•	•	•	•	•				•		
23692	Straight adapter, 3/8"–24 external R.H. thd. to 9/16"–18 external R.H. thd. (internal Ermeto 24°).	•	•											
23617	90° adapter, 9/16"–18 external R.H. thd. (Ermeto 24°) to 9/16"–18 internal R.H. thd. (Ermeto 24°).	•	•	•	•		•	•	•		•	•	•	•
23621	Straight adapter, 9/16"–18 external R.H. thd. (Ermeto 24°) to 1/2"–20 external L.H. thd. (60° seat).	•	•	•			•	•	•		•	•	•	•
208370	Banjo adapter, 9/16"–18 external R.H. thd. (24° seat).		•	•										
201916	Adapter, 9/16"–18 external R.H. thd. to 9/16"–18 internal R.H. thd. ferrule.			•										
208369	90° adapter, 9/16"–18 external R.H. thd. to 9/16"–18 internal R.H. thd.	•												
38279	Straight adapter, 14 X 1.5 mm external R.H. thd. (Ermeto 60°) to 9/16"–18 external R.H. thd. (internal Ermeto 24°).			•										
43468	Straight adapter, 1/2"–20 external R.H. thd. (Ermeto 24°) to 9/16"–18 external R.H. thd. (internal Ermeto 24°).							•						
Additional Accessories Available (not included in 4201 Set)														
44026	Straight adapter, 9/16"–18" R.H. thd. (Ermeto 24°) to Caterpillar 1100 & 3200 series pencil nozzle.									•				
201920	Adapter nut, 14 X 1.5 mm external thd. to o"–18 internal R.H. thread	Connects OTC 4200 Nozlrater to other fittings used in the industry.												
309277	Adapter nut, 14 X 1.5 mm internal thread	For use only on Mack 4-valve diesels. (E6 & E9)												

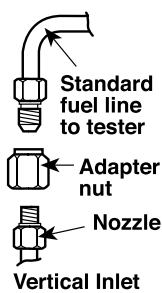
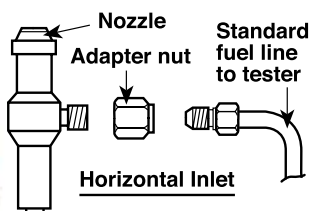
HEAVY-DUTY TOOLS

Injector Nozzle Tester Tools



4210

Specifications:	
Overall width	5-3/4"
Overall length (incl. handle)	15"
Overall height	10-3/4"
Weight (empty)	13 lbs., 15 oz.
Maximum pressure	5000 PSI (350 bar)
Max. reservoir capacity	.68 gal. (157 cu. in.)
Usable reservoir capacity	.58 gal. (134 cu. in.)
Outlet port	For 1/4" tube
Gauge	Dual calibrated, 0-5000 PSI, 0-350 bar, 1% accuracy, 2-1/2" dial with dual scale (PSI & bar).
Gauge connection	1/4" NPTF
Stroke of 1/2" dia. piston	5/8"
Volume per full stroke	1 cc
Intake filter	2 micron



Nozlrater® II Injector Nozzle Tester

The No. 4210 tests the small injector nozzles used in smaller car and light-truck engines. It enables you to diagnose leakage, pop-off pressure, spray pattern, and chatter. It has a .68-gallon reservoir and is equipped with a replaceable 2-micron filter. It delivers 1cc of fuel per stroke and won't flood small nozzles. The unit is light enough to be easily carried for field use, or you can bench-mount it.

- Includes fittings, fuel line, and 5,000 PSI (350 bar) gauge.
- Works on nozzles from Audi, GM, Mercedes-Benz, Nissan/Datsun, Toyota, and VW Rabbit diesels.

No. 4210 – Nozlrater II injector nozzle tester. Wt. 13 lbs., 15 oz.

No. 17169 – Replacement filter. Wt., 1 oz.

No. 303292 – Gauge. Wt., 6 oz.

Accessory Fittings (for use with, but not included with, No. 4210 Nozlrater® II)

No.		Description
303570		Fuel line used on nozzles with 90° horizontal inlets. 1/2"-20 internal R.H. thread to 1/2"-20 external L.H. thread (60° seat).
23624		Adapter nut, 18 X 1.5 mm internal R.H. thread to 1/2"-20 internal L.H. thread.
201917		Adapter nut, 9/16"-18 internal R.H. thread to 1/2"-20 L.H. internal thread.
23626		Adapter nut, 5/8"-18 internal R.H. thread to 1/2"-20 internal L.H. thread.
201912		Adapter R.H. thd. to 1/2"-20 internal L.H. thread.
201913		Adapter nut, 9/16"-24 internal R.H. thread to 1/2"-20 internal L.H. thread.
208384		Used to adapt standard fuel lines to the following adapters.
23693		Straight adapter, 1/2"-20 external L.H. thread (Ermeto 24° and 90° seat) to 9/16"-18 external R.H. thread (Ermeto 24°).
201916		Adapter, 9/16"-18" external R.H. thread to 9/16"-18 internal R.H. thread ferrule.
38279		Straight adapter, 14 X 1.5 mm external R.H. thread (external 60° seat) to 9/16"-18 external R.H. thread (internal Ermeto 24°).
43468		Straight adapter, 1/2"-20 external R.H. thread (Ermeto 24°) to 9/16"-18 external R.H. thread (internal Ermeto 24°).
44026		Straight adapter, 9/16"-18 external R.H. thread (Ermeto 24°) to Caterpillar 1100 & 3200 series pencil nozzle.

Adapter No.	Description	GM 1980 & Newer Poppet Nozzles	GM 6.2L Diesels	Chevy Chevette	Audi & Mercedes-Benz	Datsun, Toyota, & VW Rabbit	1989-95 5.9L Dodge (Cummins)	1996-2000 5.9L Dodge (Cummins)	1983-94 6.9L & 7.3L Ford (with Navistar)	6.6L & 7.8L Ford (with Navistar)
23622	Adapter nut, 12 X 1.5 mm female R.H. thd. to 1/2"-20 internal L.H. thd.	•		•	•	•	•		•	
23623	Adapter nut, 14 X 1.5 mm female R.H. thd. to 1/2"-20 internal L.H. thd.		•					•		•
201917	Adapter nut, 9/16"-18 internal R.H. thd. to 1/2"-20 internal L.H. thd.									GM 1979 & Newer Pencil Nozzles (not included with 4210)