



# TOOL CATALOG

"THE PROPER TOOL MAKES ANY JOB EASIER."

VALVE EQUIPMENT



CYLINDER, PISTON, RING,  
CONNECTING ROD EQUIPMENT



ENGINE BEARING EQUIPMENT



SPECIAL SERVICE TOOLS



GAUGES, METERS AND TESTERS



DIESEL TEST EQUIPMENT



MISCELLANEOUS EQUIPMENT

**ONAN**

1400 73RD AVENUE N.E. • MINNEAPOLIS, MINNESOTA 55432

A DIVISION OF ONAN CORPORATION

## GENERAL

The equipments listed in this catalog are intended to perform special repair functions. They are labor saving devices which save mechanics time and enable him to do a better job. Some of the items are factory production line tools. Blueprints are available for many of the Onan designed special tools which are recommended for use on Onan built engines. All tool prices are listed by part number in the Parts Price List (L-835).

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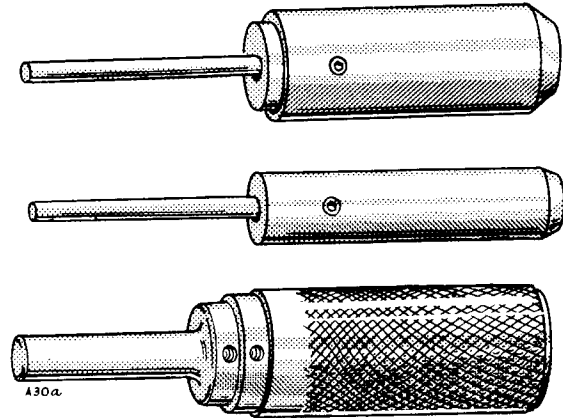
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## VALVE SERVICE EQUIPMENT

### VALVE SEAT DRIVER

Simplifies installation of valve seats into cylinder block.

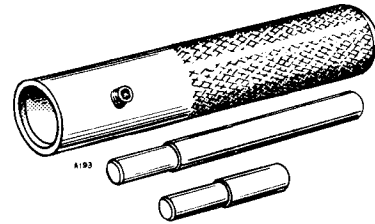
PART NO.	SERIES
420-0070	AH, BH, AJ, AK, MAJ, MKH
420-0071	ACK, CCK, CCKB, CK, LK, LKB, BF MCCK
420-0199	CW
420-0200	DSL, DSP, DRP, DRN, MDSL, MDSP
420-0270	All J-Series
420-0308	NH, NHA, NHB, NHC, NB



### VALVE GUIDE DRIVER

Assures correct removal of valve guides. Also used for installation of "J" series valve guides.

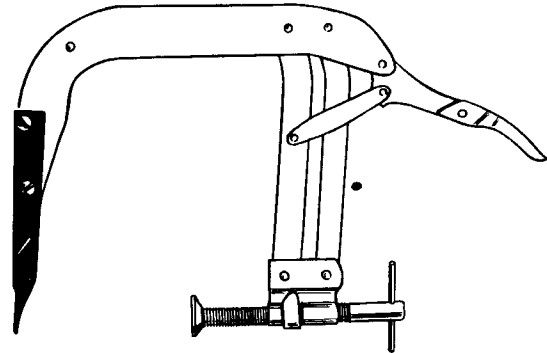
PART NO.	SERIES
420-0203	CW, DSP, MDSP, DRP, DRN, DSL, MDSL
420-0300	CCK, CCKB, LK, LKB, MCCK, NH, NHA, NHB, NHC, NB, BF, All "J" Series.



### VALVE SPRING COMPRESSOR

Heavily built, adjustable, safety lock compressor allows use of both hands when valve spring is compressed.

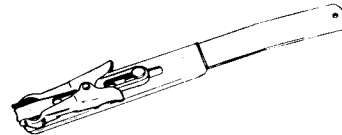
PART NO.	SERIES
420-0119	ALL



### VALVE LOCK REPLACER

Simplifies installation of split valve keepers.

PART NO.	SERIES
420-0105	ALL

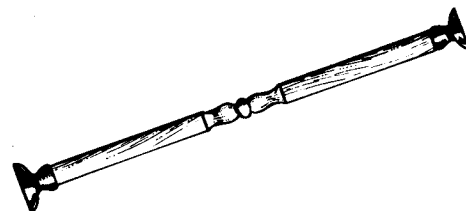


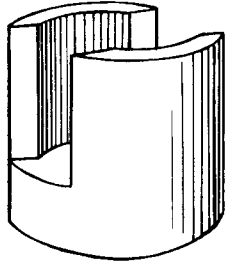
### VALVE GRINDING TOOL

Suction cups 15/16" & 1-1/16" hold valve while hand seating. Use on most valve sizes.

PART NO.	SERIES
420-0120	All

Replacement suction cups 15/16" - 420-0121, 1-1/16" - 420-0122.





**VALVE SPRING COMPRESSOR TOOL**

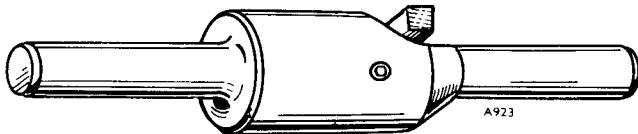
Designed especially for all Onan Diesel and "J" series – this tool simplifies removal of valve locks. Use with arbor press or valve spring compressor (420-0119).

PART NO.	SERIES
420-0210	All ONAN diesel and J-Series.

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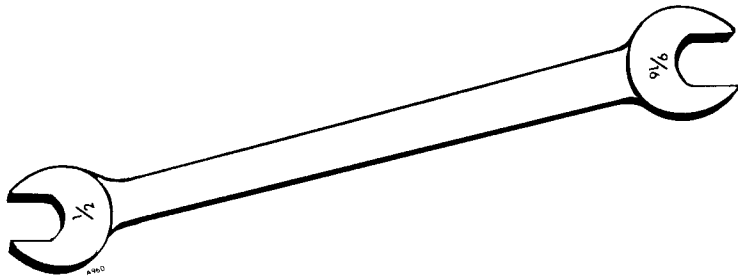
**VALVE SEAT REMOVER**

Mount in drill press and cut out old seat to remove.



PART NO.	SERIES
420-0311	All "J" Series NH, NHA, NHB, NHC, NB

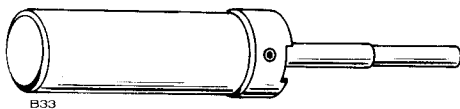
Replacement cutter blade - 420-0274



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**VALVE TAPPET ADJUSTING WRENCH**

PART NO.	SERIES
420-0139	All



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**VALVE SEAT STAKER**

Assures tight fit of seat. Eliminates danger of insert loosening in its bore.

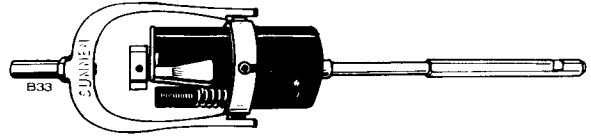
PART NO.	SERIES
420-0309	NB, NHA, NH, NHB, NHC (Intake)
420-0310	NB, NH, NHA, NHB, NHC (Exhaust)

## VALVE SERVICE EQUIPMENT (CONT.)

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### VALVE GUIDE HONING SET

Produces straight round holes - fast set up - easy to use.  
For popular sizes 5/16, 11/32, 3/8, and 7/16. Includes  
various mandrels, sleeves, stones, and metal storage box.



**PART NO.**

**SERIES**

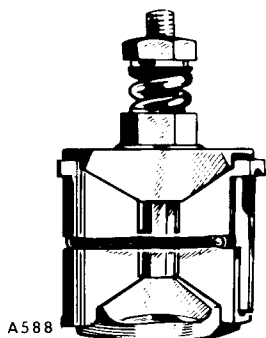
420-0305

ALL

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## CYLINDER, PISTON, RING, CONNECTING ROD EQUIPMENT

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### RIDGE REAMER

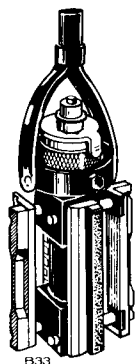
Removes ridge from top of cylinder wall. Bore diameter is 2-1/2" to 4-1/8".

PART NO.	SERIES
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420-0260	All plants.
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Replacement cutter blade - 420-0261

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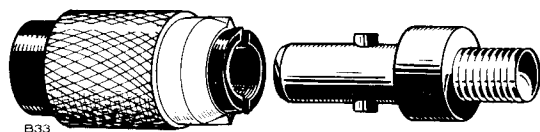
### CYLINDER HONE

Maintains alignment of original bore. Reconditions cylinder bore with less stock removal. Produces any finish required - fast stock removal. Assures fast seating of all rings (including chrome). Shipped with rough and medium finishing stones. Cylinder range 2-11/16" to 4-1/4". Use with cast iron, steel, and hardened sleeves.

PART NO.	SERIES
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420-0304	All plants.
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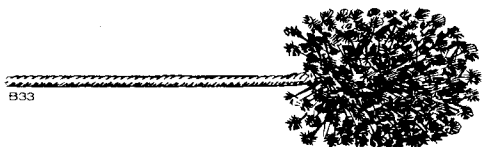
### CYLINDER HONE "QUICK COUPLER"

Use with 420-0304 cylinder hones, make cylinder honing an easier-faster operation. Permits drill (electric or air) to be quickly coupled or uncoupled from cylinder hone. Allows operator to have both hands free for removing hone from cylinder or for stone changing operation.

PART NO.	SERIES
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420-0306	All plants.
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### CYLINDER WALL MICRO-FINISHING BRUSH

Produces ideal cylinder wall finish to seat rings extremely fast. Reduces blow-by, lowers oil consumption, gives higher compression. Excellent for deglazing cylinder walls. Provides good cross hatch pattern.

PART NO.	SERIES
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420-0318	AK
420-0319	AJ
420-0320	LK, LKB, CCK, CCKB, NH, NHA, NHB, NHC, NB, All "J" Series, All Onan marine. BF

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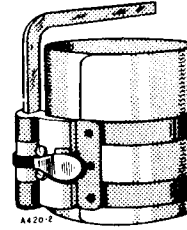
## CYLINDER, PISTON, RING, CONNECTING ROD EQUIPMENT (CONT.)

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### RING COMPRESSOR, EXPANSION

Ratchet lock action compresses all rings evenly for easy insertion into cyl. bore.

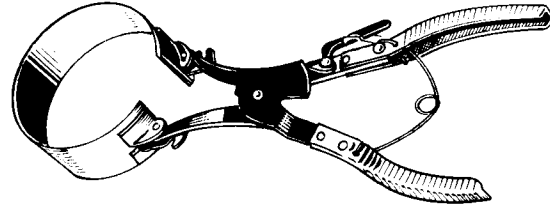
PART NO.	SERIES
420-0214	All



### RING COMPRESSOR, PLIERS TYPE

Furnished complete with pliers and (6) bands covering range of 2-7/8" to 4-3/8". Fits bands at 180° or 90° angle. Self-locking with instantaneous release.

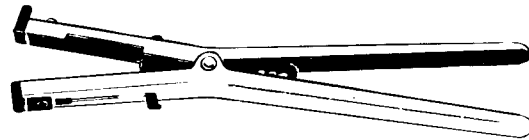
PART NO.	SERIES
420-0331	All



### PISTON RING SPREADER

Prevents ring breakage from over-expanding. Adjustable for 2-3/4" and larger rings.

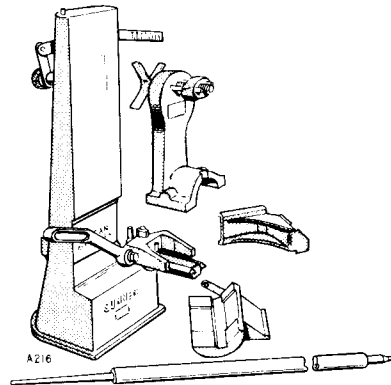
PART NO.	SERIES
420-0146	All



### CONNECTING ROD ALIGNING SET

The SUNNEN alignment set can be used on all rods up to 16-1/2" long with a 1-1/2" dia. or larger bearing. Checks rods with or without pistons. Includes aligner, V-block, bend & twist indicator, bending bar, side clamping fixture and instructions.

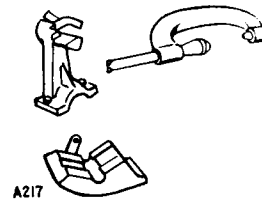
PART NO.	SERIES
420-0173	All plants except those listed with Aligning Adapter Set.



### CONNECTING ROD ALIGNING SET SMALL ROD ADAPTER

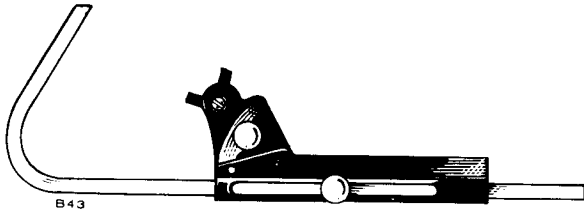
Adapts Rod Aligner to smaller size conn. rod bearing size of 1-1/8" to 1-1/2" diameter.

PART NO.	SERIES
420-0195	AH, BH, AJ, AK



CYLINDER, PISTON, RING, CONNECTING ROD EQUIPMENT ( CON'T.)

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**PISTON GROOVE CLEANER**

Removes carbon from piston ring grooves.

Spring-loaded cleaning cutter doesn't gouge or climb out of grooves.

WIDTHS: Complete with two cutters covering the following groove— $1/16''$ ,  $.070''$ ,  $5/64''$ ,  $3/32''$ ,  $1/8''$ ,  $5/32''$ ,  $3/16''$  and  $.220''$ .

**PART NO.**

420-0332

**SERIES**

ALL

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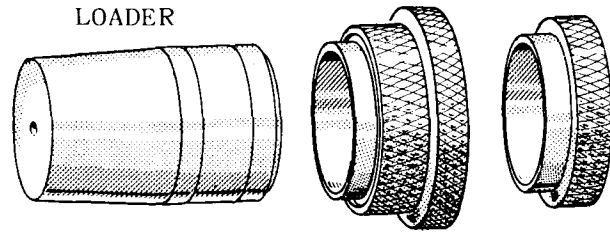


## ENGINE BEARING EQUIPMENT

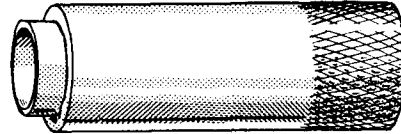
### OIL SEAL GUIDE & DRIVER

Simplifies seal installation and prevents damage to seal surfaces.

BEARING PLATE	SERIES
420-0181 *	BH, CK, ACK, CCK, CCKB, MCKK, LK, LK, AJ, AK, NH, NHA, NHB, NHC, NB, BF
420-0282	Loader only

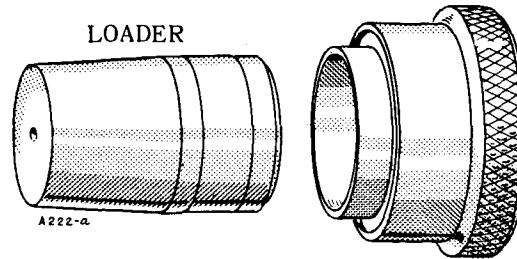


420-0207	CW, DSL, DSP, DRP, MDSL, MDSP, DRN
420-0250*	All J-Series
420-0339	Loader only (available separately)



### GEAR COVER

420-0183	CW, DSL, DSP, DRP, MDSL, MDSP, DRN
420-0312	AK, AJ
420-0281*	All J-Series
420-0339	Loader only (available separately)
420-0313	NH, NHA, NHB, NHC, NB, CCK, CCKB, BF



### CRANKSHAFT

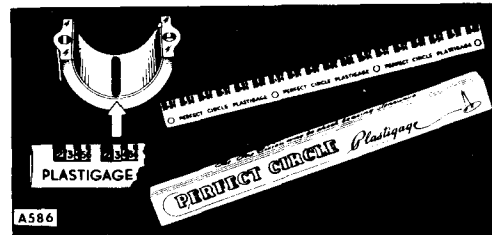
420-0182	MDSL, MDSP
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\* Includes Loader

### BEARING CLEARANCE GUIDE

"PLASTI-GAGE" simplifies fitting bearing clearances of split bearings. Use on Con. Rod split bearings.

PART NO.	SIZE RANGE
420-0256	0.002" to 0.006"
420-0257	0.004" to 0.009"

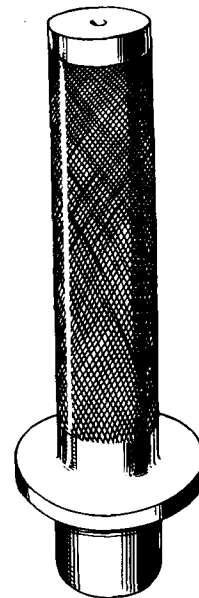


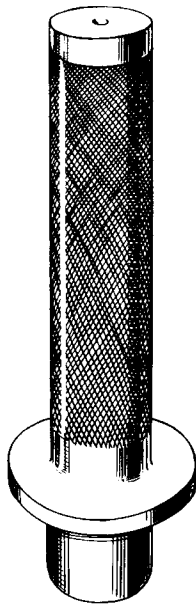
### MAIN BEARING DRIVER

Simplifies installation of precision sleeve main bearings.

PART NO.	SERIES
420-0127	AH, BH, MKH, AJ, AK, MAJ
420-0201	CW, MDSP, DSP, DRP, DSL, MDSL, DRN

**NOTE:** Also see listing for combination main and cam bearing drivers.





**CAM BEARING DRIVER**

Simplifies installation of precision sleeve cam bearings.

**FRONT BEARING**

PART NO.	SERIES
420-0206	CW, MDSP, DSP, DRP, DSL, MDSL, DRN

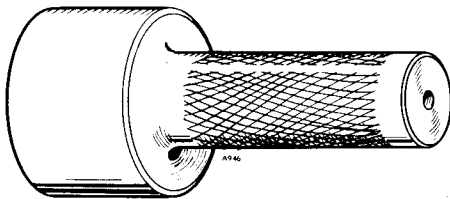
**REAR BEARING**

420-0205	CW, MDSP, DSP, DRP, DSL, MDSL, DRN
420-0264	JA, DJA, MDJA

**CENTER BEARING**

420-0254	All 4 Cylinder J & DJ Series
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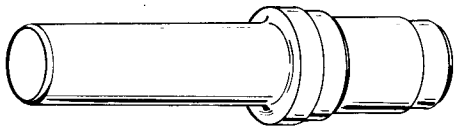
**NOTE:** Also see listing for combination main and cam bearing drivers.



**TIMING ADV. MECH. COVER DRIVER**

For proper installation of spark advance cover.

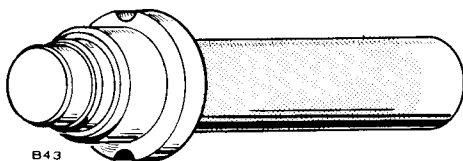
PART NO.	SERIES
420-0296	NH, NHA, NHB, NHC, CCK, CCKB Engines



**COMBINATION BEARING REMOVER - MAIN AND CAM**

Makes removing old bearings a simple task.

PART NO.	SERIES
420-0325	LK, LKB, CCK, CCKB, AJ, AK, NH, NHA, NHB, NHC, NB, BF AJ, AK, Cam Bearing only.



**COMBINATION MAIN AND CAM BEARING DRIVER**

Makes easier installation of precision crankshaft and camshaft bearings. Use one tool for many different models.

PART NO.	SERIES
420-0324	AH, BH, MKH, AJ, AK, MAJ, Cam Bearing only, CK, LK, LKB, ACK, CCK, CCKB, MCCK, NH, NHA, NHB, NHC, NB, BF
420-0326	JB, MJB, JC, MJC, DJB, MDJB, DJC, MDJC, RDJC, NH, NHA, NHB, NHC, NB

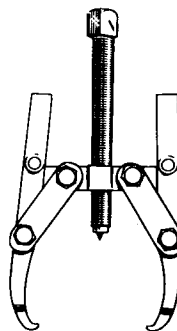
# SPECIAL SERVICE TOOLS & EQUIPMENT

## GEAR PULLER

Special arms for removal of crankshaft gear.

PART NO.	SERIES
420-0072	ALL

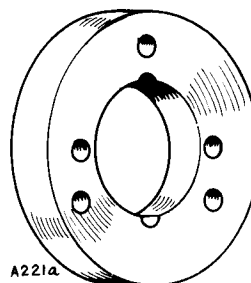
Replacement arm - 420-0148



## GEAR PULLER RING

Mounts to crankshaft gear. Extended edge permits use with any gear puller.

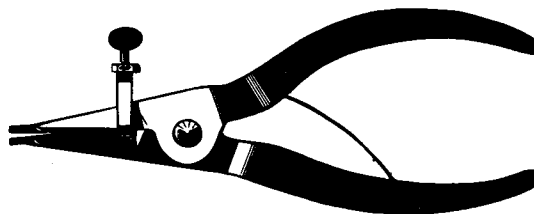
PART NO.	SERIES
420-0275	All J-Series (tapped 1/4" x 20 thds.)
420-0248	All plants except J-Series (tapped #10-32 thds.)



## SNAP RING PLIER

Adjustable to simplify removal of snap rings.

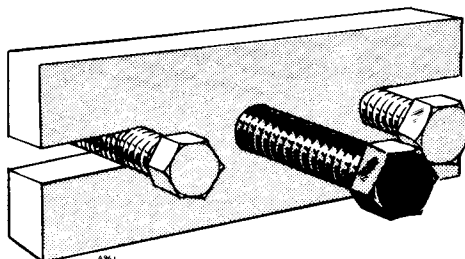
PART NO.	SERIES
420-0107	ALL



## FLYWHEEL PULLER

Simplifies flywheel removal.

PART NO.	SERIES
420-0100	BH, CK, LK, LKB, CCK, CCKB, NH, NHA, NHB, NHC, NB, MCCK, All J-Series, BF

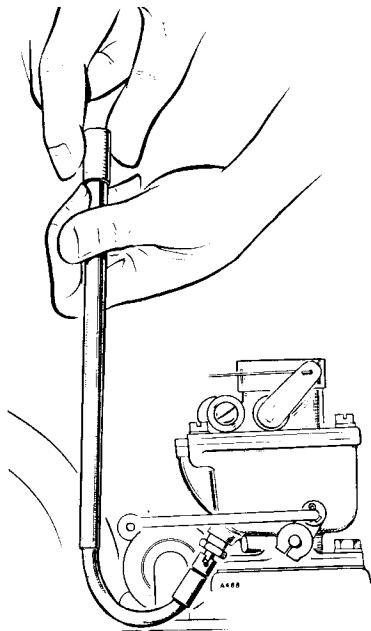


## BALL POINT DRIVER

Use on Allen head (socket head) type screws, in hard-to-get-at places. Works at any angle.

PART NO.	SERIES
420-0342	LK, CCK, NH, BF.

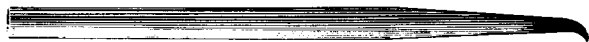




**CARBURETOR ADJUST. WRENCH**

Simplifies carb. main jet adjustments. Eliminates burns from hot manifold or exhaust pipes. Use with any cross-pin adjustment jet.

<b>PART NO.</b>	<b>SERIES</b>
420-0169	BH, CK, CCK,
420-0294	CCKB, J Series (With Zenith Carb.)
	MCCK, NH, NHA, NHB, NHC, NB
	All CCK mobile models



**ARMATURE AND FLYWHEEL PULLER BAR**

Pry bar simplifies armature and flywheel removal from crankshaft.

<b>PART NO.</b>	<b>SERIES</b>
420-0125	All plants.

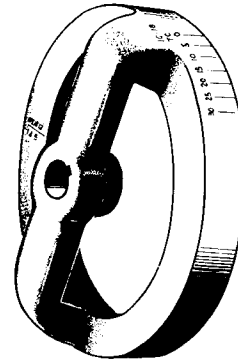
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## GAUGES, METERS, AND TEST EQUIPMENT

### MAGNETO ADJUSTING GAUGE

With timing marks to simplify ignition timing. Assures proper pole shoe air gap on flywheel magnetos.

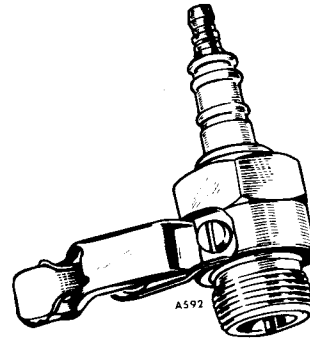
PART NO.	SERIES
420-0096	AH, MKH, AJ, AK, MAJ
420-0249	CCK, NB, NH, NHA, NHB, NHC



### TEST SPARK PLUG

Simulates normal compression firing. Ground to engine and connect hi-tension lead.

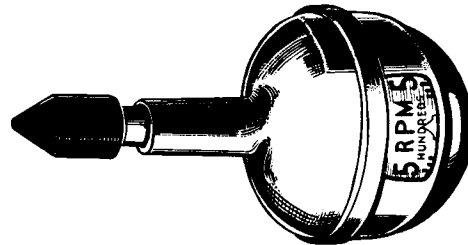
PART NO.	SERIES
420-0255	ALL



### TACHOMETER

Mechanical, inexpensive, requires contact with rotating part.

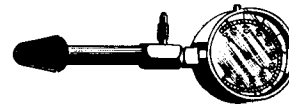
PART NO.	SERIES
302-0193	ALL



### COMPRESSION GAUGE

Measures compression of 0 to 250 psi. Neoprene adapter fits all spark plug holes.

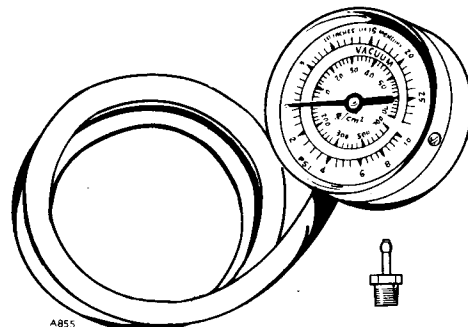
PART NO.	SERIES
420-0108	ALL



### VACUUM & PRESSURE GAUGE

Measures vacuum of 0 to 28 in., pressure 0 to 10 psi. Complete with hose, adapter, & instructions.

PART NO.	SERIES
420-0110	ALL



## GAUGES, METERS & TEST EQUIP. (CONT.)

### ONAN LOAD-TEST PANEL

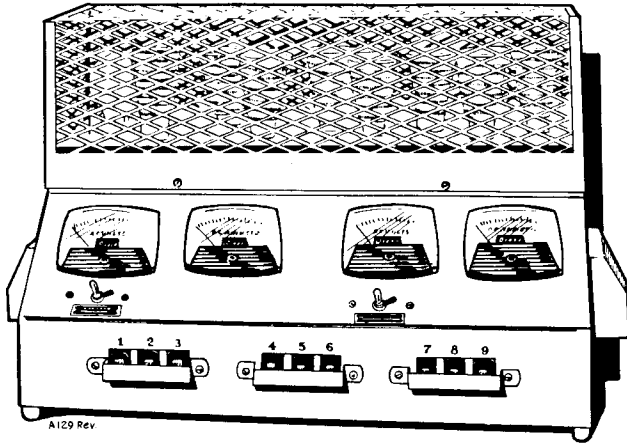
Load-Test panels are specially designed for use by Onan Distributors and Dealers for the following purposes:

1. Measuring generator electrical output.
2. Making proper adjustments to governor, carburetor and brush rig.
3. Making sales demonstrations of generating plants.

#### Four Panels are available:

No. 300-0219 AC only (W.D. 625-0128)

No. 300-0058 AC and DC (W.D. 84041)



No. 300-0608 AC only W/frequency meter  
(W.D. 625-0908)

No. 300-1044 AC only - no meters  
(W.D. 625-1246)

The AC voltmeters have 0-150 and 0-300 volt scales.

The DC voltmeters have 0-60 and 0-150 volt scales.

The AC Ammeter has a 0-50 ampere scale. The DC Ammeter has a 0-100 ampere scale.

Toggle switches connect the proper voltmeter or frequency meter scale into the circuit.

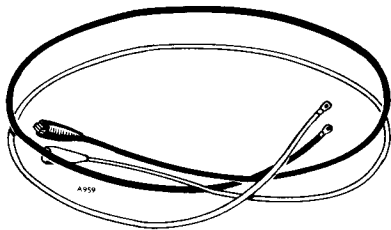
Nine numbered sockets, for cone heaters or lamps for use as loads, have individual switches correspondingly numbered.

300-0058 panel provides 5400 watts of load at 120 or 240 volts and 3600 watts at 32 volts.

300-0058 has 1 set each of 120 volt and 32 volt elements. 240 volt testing requires nine (9) 322-0008 elements. All test panels include 913-6 Instruction Book. Leads 420-0301 and 420-0302 not included.

300-0219, 300-0608, and 300-1044 have 1 set of 120 volt elements. Provide 5400 watts load.

300-1044 AC load bank. Slave unit only, no meters. Contains nine 600 watt resistive elements to increase load capacity of above units to 10,800 watts.



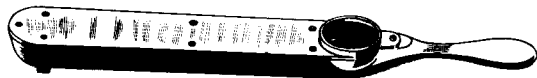
### LOAD-TEST PANEL LEADS

6 feet long - with lugs - connect to panel  
with battery clips - connect to generator.

#### PART NO.

420-0301 (red)

420-0302 (black)



### TORQUE WRENCH

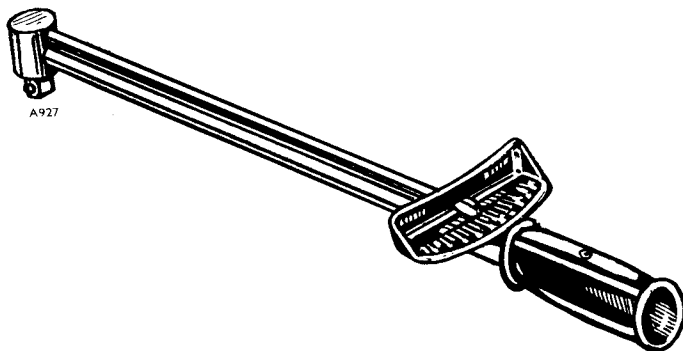
Measures torque accurately.

#### PART NO.

420-0106 (with dial) Has 1/2" drive.  
0-150 ft-lb.

420-0221 (Moving arm)  
0-50 ft-lb.

420-0222 (Moving arm)  
0-100 ft-lb.

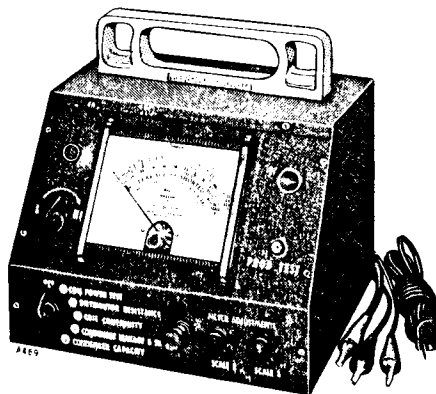


**MAGNETO ANALYZER**

Tests and checks variety of battery and magneto ignition coils, start solenoids, selenium rectifiers, condensers, spark plugs, distributors, etc. With instructions.

**PART NO.**

420-0235

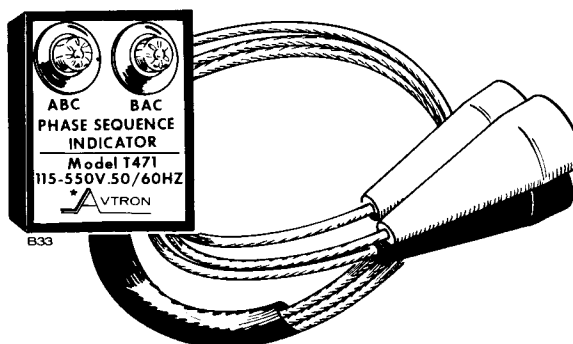


**PHASE SEQUENCE INDICATOR**

Connect to any 3 phase circuit - observe sequence lights - gives instant, positive phase sequence without damage to components.

**PART NO.**

420-0317



**ARMATURE GROWLER**

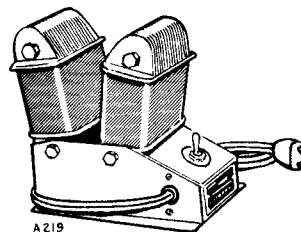
Tests armature for short circuits. Adjustable to test all Onan-built armatures. Designed for bench use.

**PART NO.**

420-0194

**SERIES**

Up to 10KW

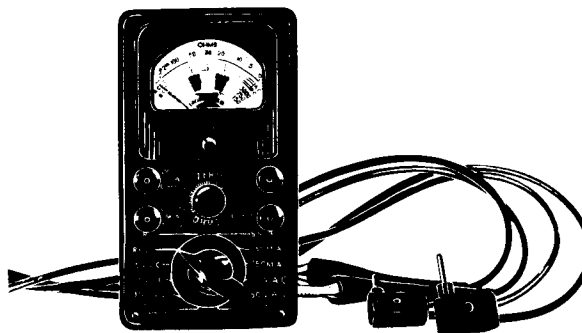


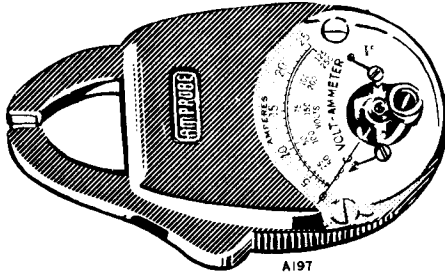
**AC-DC MULTIMETER**

Check ac-dc volts, ohms, dc milliamperes, complete with test leads & instructions. SCALE: AC-volts, 0-15, 150, 750, 3000. DC volts, 0-15, 75, 300, 750, 3000, DC-Milliamps, 0-15, 150, 750, ohms 0-30, 3000, 300,000

**PART NO.**

302-0195





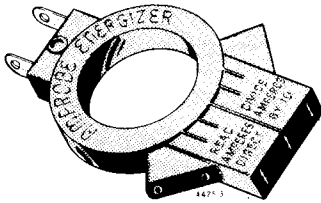
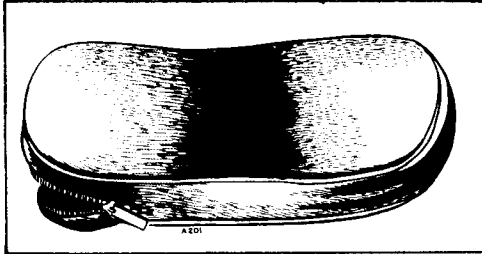
**SNAP-AROUND AC VOLT, AMMETER**

Insulated jaws snap around conductor for ammeter. Test leads for voltmeter. SCALE: 0-100 amps., 0-150/600 volts.

**PART NO.**

420-0187

Meter case with zipper - 420-0189

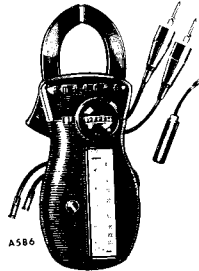


**10-POWER SENSITIZER**

Increase sensitivity of 420-0187 snap-around volt-ammeter by 10 times. Also useful as split plug for two conductor wire. Includes special case.

**PART NO.**

420-0188

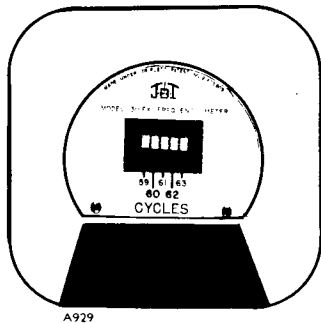


**SNAP-AROUND VOLT, OHM, AMMETER**

Check voltage, ohms, amps. Insulated jaws snap around conductor. Adjustable scale. Case and test leads included. SCALE: 0-300 amps, 0-600 volts. 25-ohms mid-scale.

**PART NO.**

420-0262



**FREQUENCY METERS**

Accurate reed-type meter indicates frequency

PART NO.	VOLTAGE (HERTZ)
302-0213	120-Volt, 60 Hertz
302-0221	240-Volt, 60 Hertz
302-0234	120-Volt, 50 Hertz
302-0256	240-Volt, 50 Hertz

Instrument case - 1 meter, 301-0500, 2 meter 301-0994.

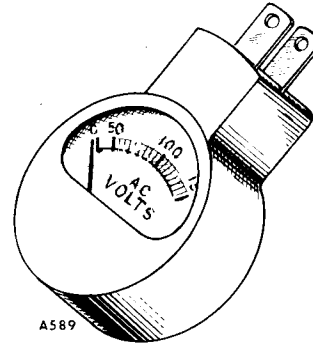


**PLUG-IN AC VOLTMETER**

Tests AC line voltage SCALE: 0-150 volts.

**PART NO.**

302-0300

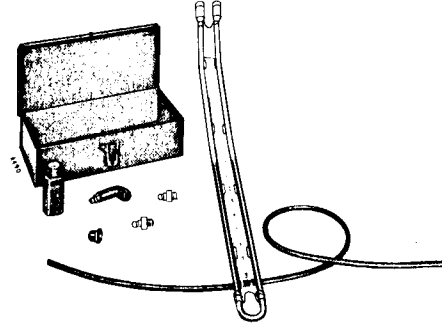


**GAS PRESSURE MANOMETER**

Accurate and portable device for determining velocity, static pressure, leakage, gas line pressure. Use for calibrating controls and balancing fuel-air ratios, etc.

**PART NO.**

420-0236

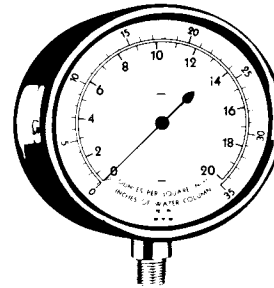


**GAS PRESSURE GAUGE**

Direct reading diaphragm-type. 0 to 20 oz. pressure, 0 to 35" water column. Instructions included.

**PART NO.**

420-0280



**ENGINE CONTROL TESTER**

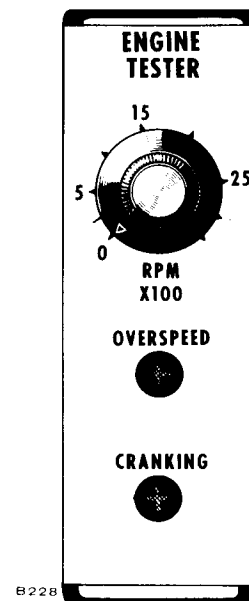
Used on YB Engine Controls, this plug-in module will check out the complete system (except relays). Time delays for LOP, overcrank and start/stop can also be checked.

**PART NO.**

420-0336

**SERIES**

WF, DFT, DFU, FT, DYB, DYH.

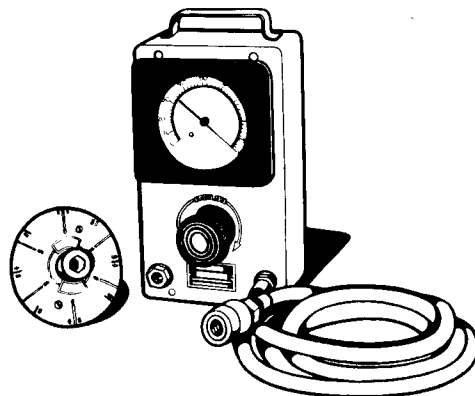


**GAUGES, METERS & TEST EQUIP. (CONT.)**

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**CYLINDER LEAKAGE TESTER**

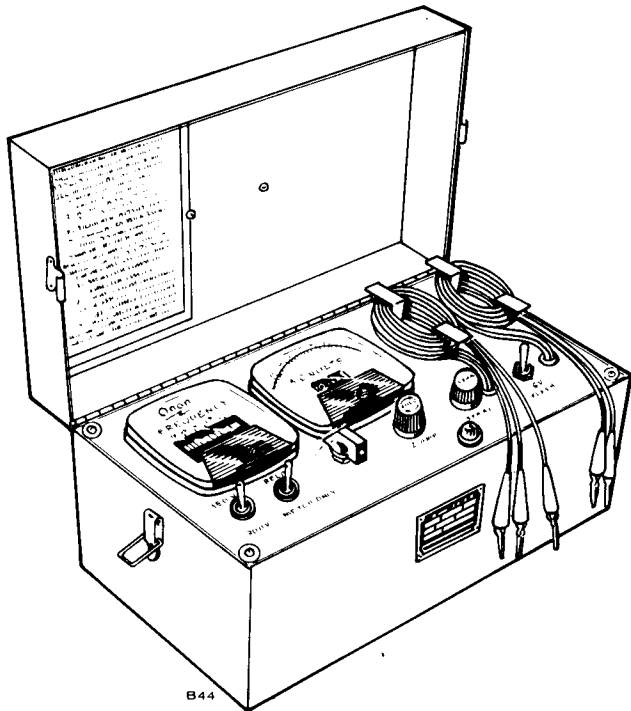
Gauge provides direct reading of cylinder leakage.  
Operates on your shop air supply, clip-on TDC indicator  
and test lamp.



**PART NO.**  
420-0343

ALL

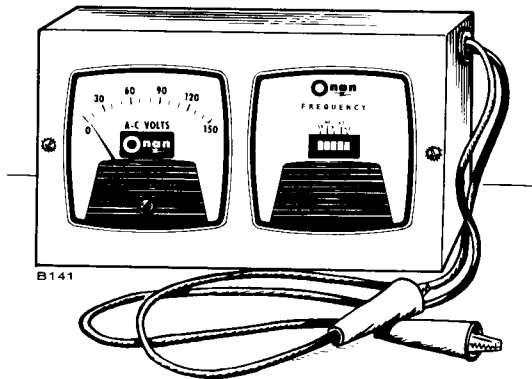
**SERIES**



**ONAN MULTI-TESTER**

A 5-purpose tester designed for field adjusting voltage-sensitive relays, generator field-flashing, voltage & frequency tests, continuity checks, electrical component tests, phase rotation. Includes: AC-voltmeter 0-600 volt, frequency meter (11 reed), buzzer and light continuity indicator, and phase rotation light. Includes 6 volt lantern battery.

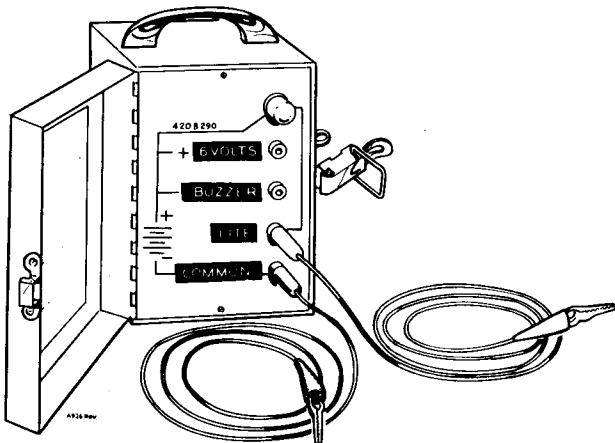
**PART NO.**  
420-0303



**AC VOLTS AND FREQUENCY TESTER**

A necessary instrument pack for installation and maintenance of R.V. electric generator sets. AC voltmeter 0-150 volt, plus 5 reed frequency meter 59-63 Hz.

**PART NO.**  
420-0335



**CONTINUITY TESTER**

Simplifies all continuity checks. Buzzer and light indicators. Voltage tap of 6VDC. Test prods included. Uses a 6-volt battery (lantern type) not included.

**PART NO.**  
420-0290

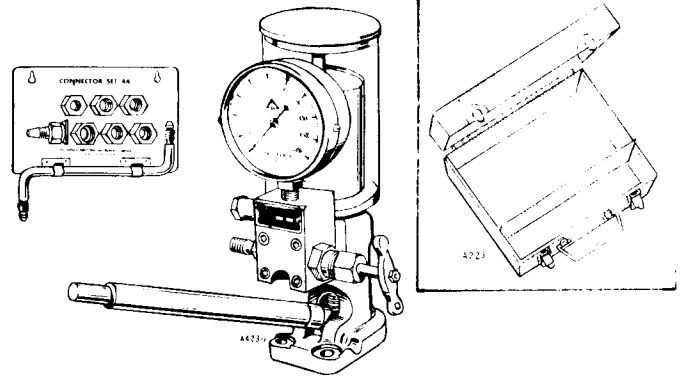
## DIESEL TEST EQUIPMENT

### DIESEL NOZZLE TESTER

Bacharach precision upright type nozzle tester with connector set. Tests nearly all types of nozzles for bench use.

**PART NO.**                      **SERIES**  
420-0184                      All Diesel Units.

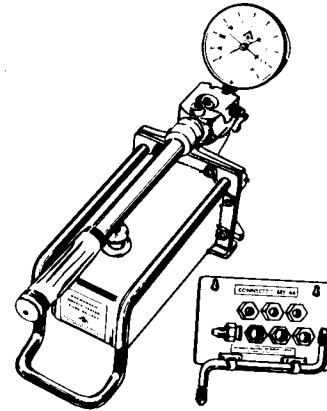
Metal case for tester - 420-0185



### PORTABLE DIESEL NOZZLE TESTER

Bacharach precision horizontal type nozzle tester with connector set. Tests nearly all types of nozzles for bench or portable use.

**PART NO.**                      **SERIES**  
420-0333                      All Diesel Units.

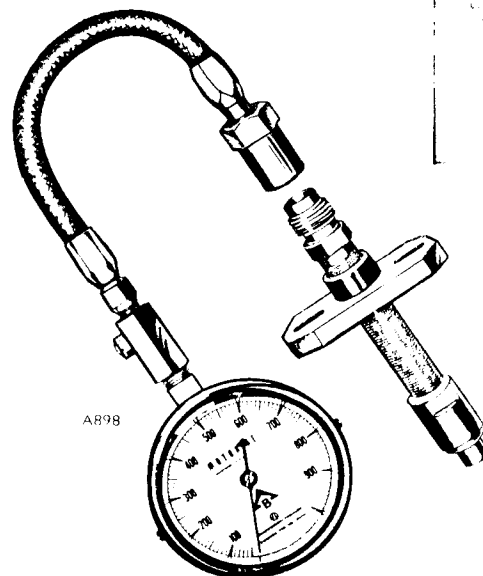


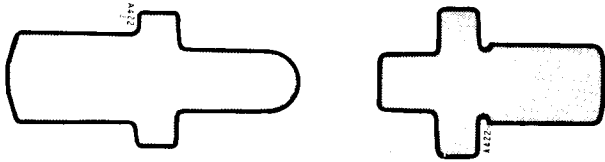
### DIESEL COMPRESSION TESTER

Includes adapter and check valve. Adaptable to nearly all diesel engines.

**PART NO.**                      **SERIES**  
420-0283                      All Diesel Units

Metal case - 420-0284

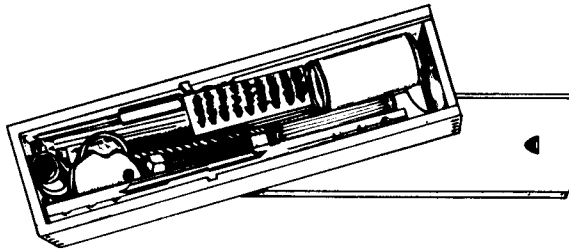




### TIMING GAUGE

Assures accurate timing of injection pump.

PART NO.	SERIES
147-0049	DSP (prior to serial #417052)
147-0051	DSP (Begin serial #417052) DSL, MDSL, DRP



### DIESEL PINTLE NOZZLE CLEANING KIT

Enables cleaning nozzles rather than complete replacement. Simplifies cleaning carbon fouled nozzles. Complete instructions included. Sold only as complete kit.

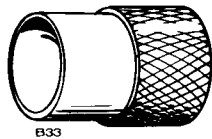
PART NO.
420-0208

#### Contains:

Brush, Bristle  
Tallow, 1/2 Ounce  
Brush, Wire (Brass)  
Stick Set, Orifice Cleaning  
Stick Set, Polishing  
Scraper, Pressure Chamber

Scraper, Valve Seat  
Sleeve, Centering  
Wiper Set, Valve  
Glass, Magnifier  
Block, Pintle Cleaning  
Box, Tool

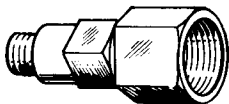
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### NOZZLE CENTERING SLEEVE

For centering nozzle in nozzle holder cap nut during assembly to the nozzle holder.

PART NO.	SERIES
420-0321	All Onan built Diesels



### DELIVERY VALVE TEST FIXTURE

Checks delivery valve seat for leakage. Used with Diesel nozzle tester.

PART NO.	SERIES
420-0322	All Onan built Diesels

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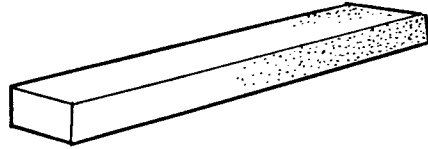
## MISCELLANEOUS EQUIPMENT

### BRUSH SEATING STONE

Special compound for rapid seating of new brushes.

**PART NO.**

420-0258



### COMMUTATOR STONE

Use for smoothing rough commutators or slip rings.  
Quickly removes carbon glaze.

**PART NO.**

420-0259



### SPRAY CAN PAINT

Pressurized can of spray paint for simple touch-up.

**PART NO.**

525-0137

525-0216

525-0305

**COLOR**

Silver Green

Marine White

Onan Green



### ONAN SERVICE LABEL KITS

Self adhesive labels of general instructions and Onan Logo. Simple to install.

**PART NO.**

98-1100

98-1807

98-2028

98-2290

98-2629

**USE**

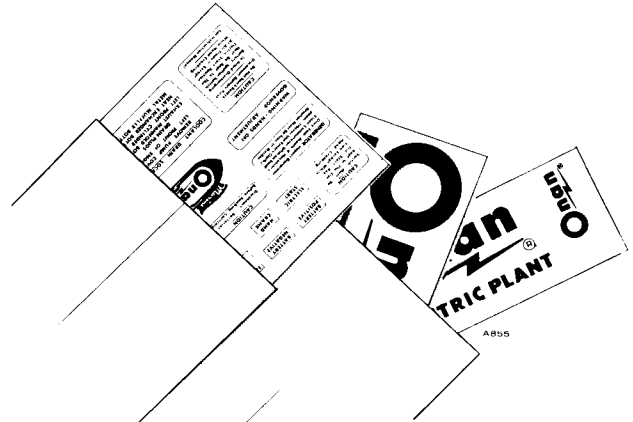
General purpose

Marine units

Welders

Diesels

Industrial engines



### SPARK PLUG WRENCH

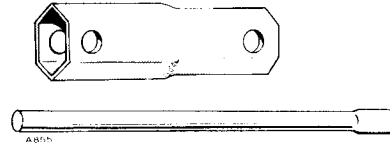
Fits most common spark plugs.

**PART NO.**

417-0147

**SERIES**

All plants.



### HYDROMETER, BATTERY

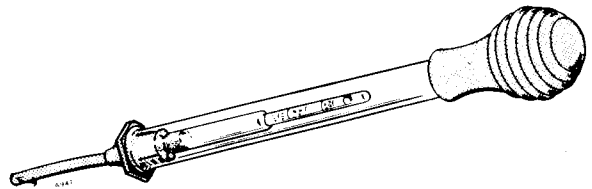
Checks specific gravity. Has graduated scale to show condition of battery.

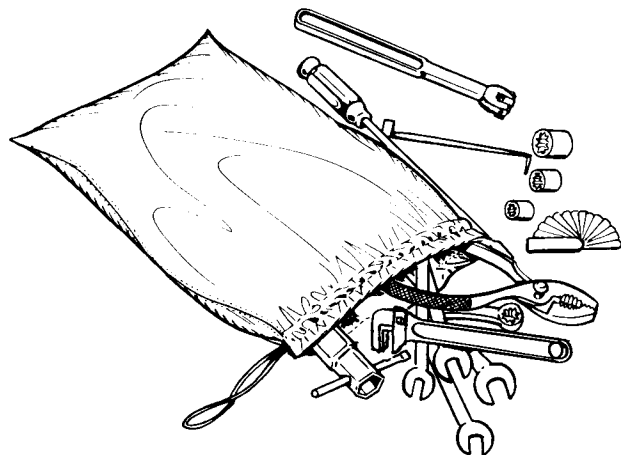
**PART NO.**

416-0325

**SERIES**

All plants.





**GENERAL PURPOSE TOOL KIT**

This tool kit provides most necessary hand tools to service and maintain small units. All tools are finest quality to assure durability.

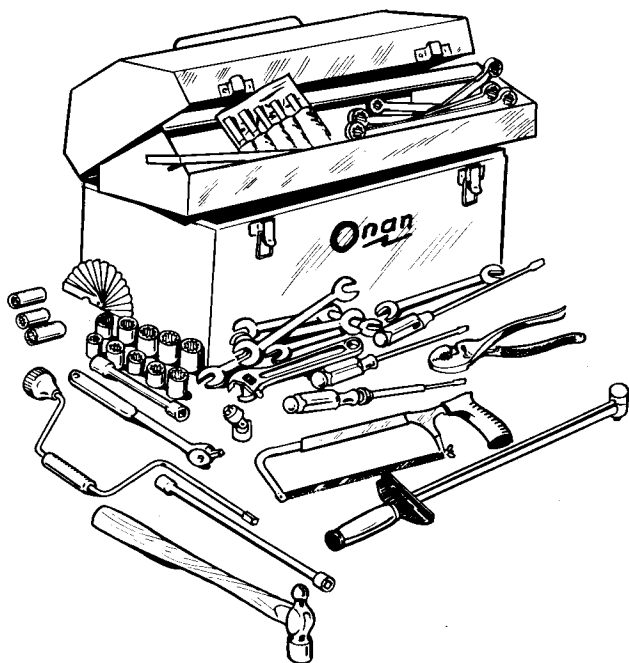
**NOTE:** *Tools illustrated are typical and do not always represent actual tools included in kit.*

**PART NO.** 420-0160

Each tool set contains the following (or equivalent):

Adjustable Wrench  
 Feeler Gauge  
 Screw Driver - Offset  
 Pliers  
 Tool Bag

Socket Wrench Handle  
 Sockets 7/16", 1/2", 9/16"  
 Open End Wrenches, 3/8", 7/16", 1/2", 9/16", 5/8"  
 Spark Plug Wrench  
 Screw Driver - Flat



**MAINTENANCE AND SERVICE TOOL SET**

This Snap-On tool set provides the necessary hand tools to overhaul, service, and maintain small and large units. All tools are finest quality to assure durability.

**NOTE:** *Tools illustrated are typical and do not always represent actual tools included in kit.*

**PART NO.** 420-0285

Each tool set contains the following (or equivalent):

Tool Box With Tote Tray  
 Feeler Gauge  
 Socket Wrench Handle (1/2" Drive) and Ratchet  
 Socket Wrench Extension (5" and 10")  
 Sockets (1/2" Drive) 7/16", 1/2", 9/16", 5/8", 11/16",  
 3/4", 13/16", 7/8", 15/16", 1",  
 Sockets - Deep Wall 5/8", 3/4", 15/16"  
 Socket Wrench Speed Handle  
 Socket Wrench U-Joint  
 Open End Wrench 3/8", 7/16", 1/2", 9/16", 5/8", 3/4",  
 7/8", 15/16", 1", 1-1/16", 1-1/8",

Adjustable Wrench, 8-inch  
 Screw Driver - Flat, Wedge, Clutch  
 Pliers  
 Pry Bar, 20-inch  
 Punch & Chisel Set  
 Hammer - Ball Peen  
 Hacksaw  
 Torque Wrench 0-175 lbs.  
 Box End Wrench 3/8", 7/16", 1/2", 9/16", 5/8",  
 3/4", 11/16", 13/16", 3/4", 7/8",  
 15/16", 1", 1-1/16", 1-1/4"

MISCELLANEOUS EQUIP. (CONT.)

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**ONAN SHIRT OR JACKET BACK PATCH**

Attractive 12" x 7" embroidered back patch featuring Onan logo in black and red lettering on a forest green background.



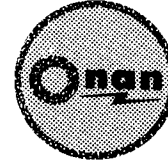
**PART NO.**

420-0345

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**ONAN SHIRT OR JACKET SHOULDER PATCH**

Handsome 3" diameter shoulder emblem embroidered in the same red, green, and black colors of the Onan back patch.



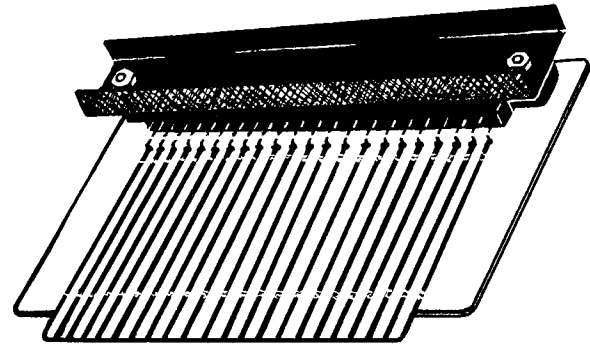
**PART NO.**

420-0347

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**EXTENSION BOARD**

Use in troubleshooting printed circuit boards. Extends the board to allow access for measurements.



**PART NO.**

300-0857

**SERIES**

Transfer Switches AT, LT  
Generators UK, UV, YB

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**ONAN SHIRT OR JACKET SHOULDER PATCH**

Good looking 1-3/4 x 3-1/2" patch. Smaller edition of the back patch.



**PART NO.**

420-0346

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ONAN WORLD WIDE PARTS COVERAGE

