

C O N T E N T S

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GENERAL

In addition to standard hand tools, Special Service Tools which are either essential or desirable to quickly and efficiently perform maintenance and repair operations, have been designed and made available. Any garage servicing and repairing Henry J automobiles should have all the essential tools listed in this section. The desirable tools, or their equivalent, although not necessarily required, will simplify operations and increase shop efficiency.

Essential and desirable tools are listed numerically in this section, together with the tool name, in groups which are in the same order as sections of this manual. Figs. 314 and 315 show most of the tools and their numbers to assist in identifying the tools. In addition, illustrations showing the application of most of the tools are provided throughout this manual where the operation calling for use of the tool is described.

It is suggested that the tools be mounted on suitable display boards in the shop for convenience and to show customers the adequacy of available service equipment.

All of the tools listed herein are available from Miller Manufacturing Company, 5919 Tireman Avenue, Detroit 4, Michigan, and should be ordered direct from them by number and name. Prices and availability of the listed tools will be furnished upon request to the Miller Manufacturing Company.

ENGINE TUNE-UP

- KF-13 Fuel Pump Pressure Gauge
- * DD-29 Valve Tappet Wrenches
- * MTU-36 Spring Tension Checking Scale
- W-189 Cylinder Compression Gauge
- C-425 Vacuum Gauge
- # C-863 Ignition Timing Light

ENGINE REPAIR

- KF-5 Pilot Bushing Remover
- KF-6 Pilot Bushing Installing & Burnishing Tool
- KF-8 Main Bearing Upper Shell Removing Tool
- *# KF-24 Engine Repair Stand (Requires KF-131 Adapter Set)
- # C-26 Piston Pin Reamer, Size .750"
- * DD-29 Valve Tappet Wrenches
- KF-31 Vibration Damper Puller (for 6-cyl. engine crankshaft gear)
- C-38 Valve Guide Reamer
- *# MH-80 Valve Refacer
- DD-82-1 Piston Pin Reamer, Size .8125"

* Indicates Desirable but not essential tools.
Indicates Not Illustrated.

HENRY J SHOP MANUAL

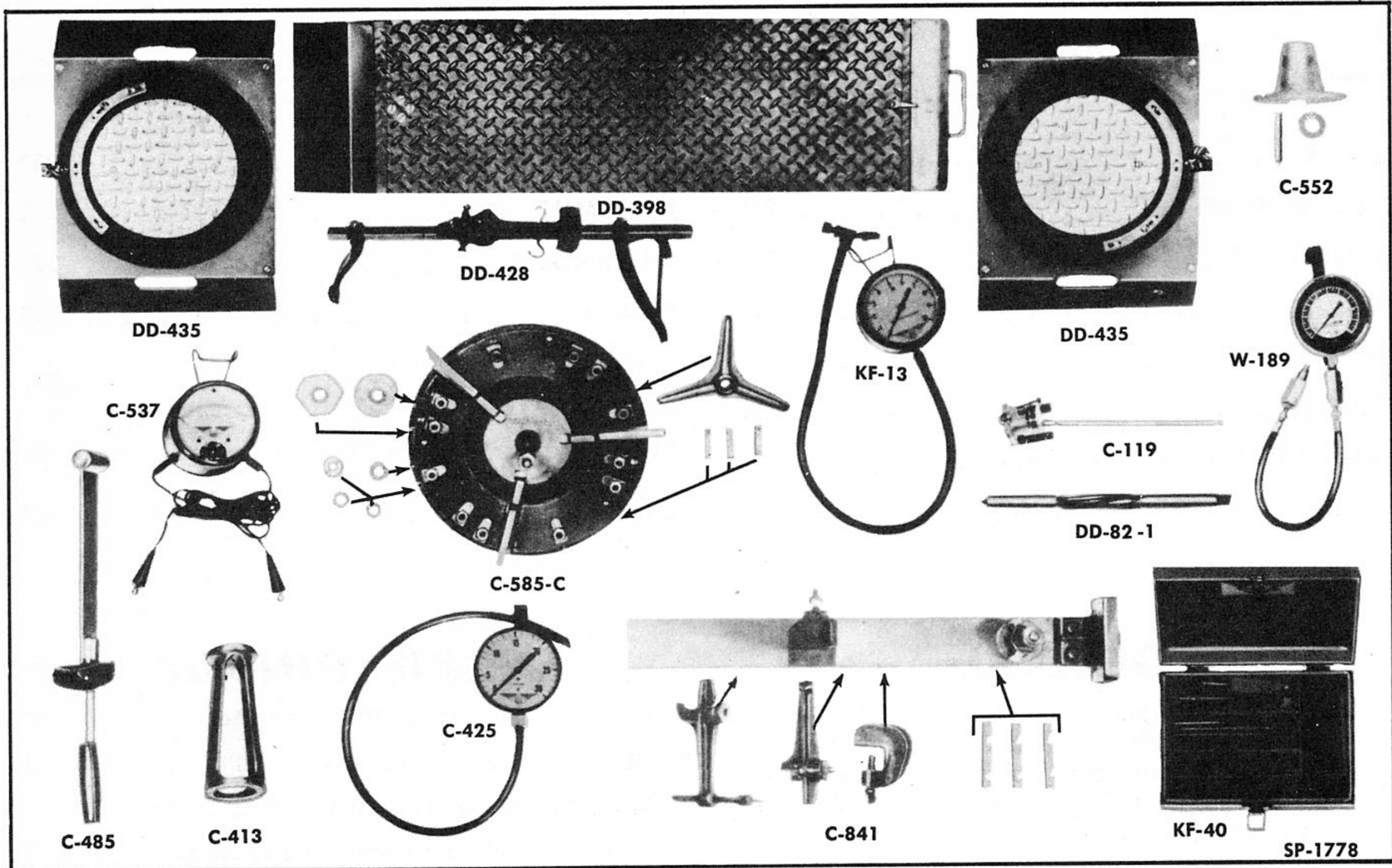


Fig. 314—Special Service Tools

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|-----------|--|-----------|--|
| *# KF-102 | Valve Seat Grinder | * C-385 | Piston Ring Compressor |
| W-102 | Dial Indicator (Part of W-99 Gauge Set) | * C-482 | Valve Spring Lifter |
| C-119 | Cylinder Bore Checking Gauge | C-524 | Torque Indicating Wrench, 100 ft. lb. |
| *# KF-131 | Engine Stand Adapter Set (Required for all KF-24 engine repair stands purchased prior to March 1951) | *# C-647 | Spring Testing Fixture |
| # KF-142 | Valve Tappet Reamer Set | C-690 | Piston Fitting Gauge and Scale |
| # W-172 | Crankshaft and Camshaft Gear Puller (except camshaft gear on 4-cyl. engine) | C-841 | Connecting Rod Aligning Fixture |
| W-175 | Crankshaft Pulley Puller | *# C-3012 | Cylinder Ridge Reamer |
| W-177 | Valve Guide Driver (4-cyl. engine) | KF-13 | Fuel Pump Pressure Gauge |
| W-215 | Valve Guide Driver (6-cyl. engine) | * KF-40 | Carburetor Overhaul Kit |
| # W-231 | Flywheel Dowel Drill and Reamer Set | *# KF-141 | Carburetor Overhaul Kit |
| C-249 | Valve Guide Reamer, Size .343" | *# KF-65 | Fuel Pump Diaphragm Flexing Tool |
| C-259 | Piston Ring Tool, Size 3-1/8" | * KF-66 | Fuel Pump Oil Seal Remover and Installer |

* Indicates Desirable but not essential tools.

Indicates Not Illustrated.

FUEL

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- C-425 Vacuum Gauge
- *# DD-425 Gasoline Mileage Tester

COOLING

- W-115 Water Pump Fan Hub Puller
- W-116 Water Pump Impeller Puller (4-cyl. engine)
- *# C-311 Pressure Flushing Gun
- C-551 Water Pump Housing Seat Refacer (4-cyl. engine)

CLUTCH

- KF-5 Pilot Bushing Remover
- KF-6 Pilot Bushing Installing and Burnishing Tool
- C-360 Clutch Plate Aligning Arbor
- * C-485 Torque Indicating Wrench, 175 lbs.
- C-585-C Clutch Rebuilding and Adjusting Fixture (C-585-A can be reworked using Adapter Kit KF-123)
- *# C-647 Spring Testing Fixture
- *# C-771 Flywheel Turning Tool

TRANSMISSION AND OVERDRIVE

- KF-14 Universal Joint Flange Installer
- KF-20 Overdrive Governor Wrench
- KF-69 Remote Control Gearshift Gauge
- # KF-97 Snap Ring Pliers
- *# KF-100 Transmission Repair Stand
- KF-128 Transmission Pinion Bearing Driver
- W-165 Pinion and Transmission Shaft Oil Seal Puller
- W-193 Transmission Cluster Gear Arbor
- C-360 Clutch Plate Aligning Arbor
- C-452 Universal Joint Flange Puller
- C-784 Universal Joint Flange Holding Wrench
- C-3105 Transmission Rear Oil Seal Driver

PROPELLER SHAFTS AND UNIVERSAL JOINTS

- KF-14 Universal Joint Flange Installer
- W-148 Universal Joint Bearing Clamp and Adapter
- C-452 Universal Joint Flange Puller
- C-552 Universal Joint Pin Jig
- C-784 Universal Joint Flange Holding Wrench

CHASSIS SUSPENSION

- KF-32 King Pin Bushing Remover and Installer
- KF-118 Lower Suspension Arm Gauge
- KF-122 Upper Suspension Arm Gauge
- C-369 King Pin Bushing Reamer
- DD-398 Toe-In Checking Board
- DD-428 Universal Camber-Caster Gauge
- DD-435 Front Wheel Turntable (Pair)

REAR AXLE

- KF-3 Tapered Roller Bearing Puller (Adapter SP-1100 required)
- KF-14 Universal Joint Flange Installer
- KF-15 Axle Shaft Puller (Adapter SP-341 required)
- W-99 Pinion and Ring Gear Gauge Set
- W-126 Pinion Front Bearing Cup Driver
- KF-128 Pinion Bearing Driver
- W-129 Axle Housing Spreader
- W-142 Differential Case Bearing Cone Driver
- W-147 Pinion Oil Seal Driver
- W-165 Pinion and Transmission Shaft Oil Seal Puller
- W-207 Axle Shaft Inner Oil Seal Driver
- C-319 Rear Wheel Hub Puller
- C-413 Outer Bearing Cup Driver
- C-452 Universal Joint Flange Puller
- C-690 Spring Scale
- C-784 Universal Joint Flange Holding Wrench

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