

2004 BUELL XB9S

SERVICE MANUAL

Part Number 99490-04Y

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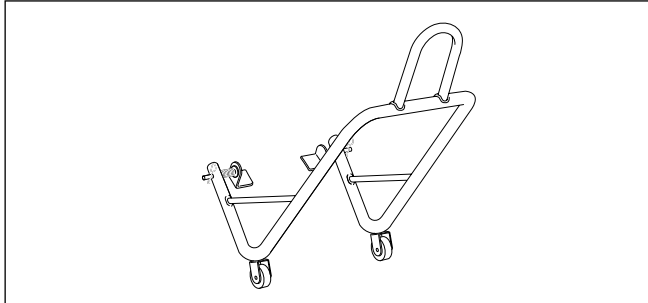
[Section 5: Starter](#)

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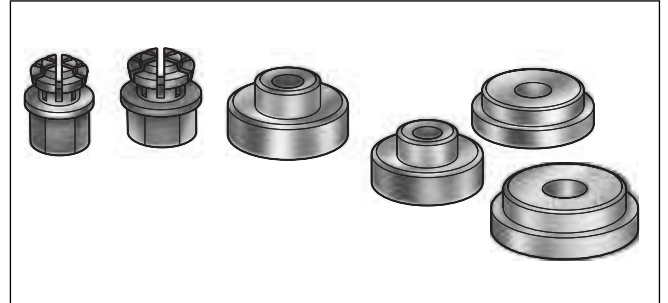
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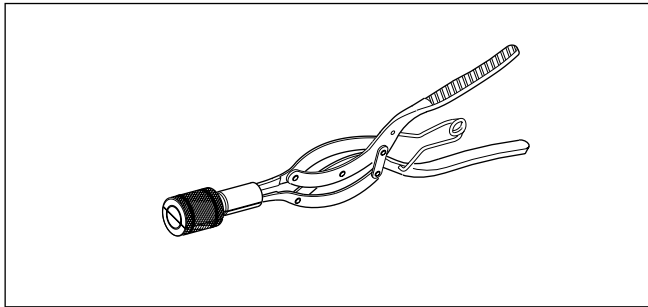
APPENDIX A—TOOLS



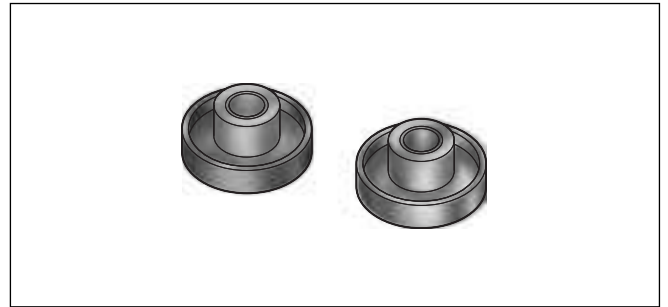
**Part No. B-41174 Rear Wheel Support Stand and
Part No. B-41174-2 Replacement Pad**



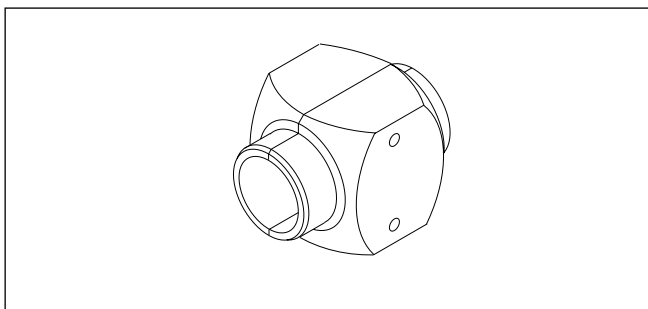
Part No. B-43993-7/-8 Wheel Bearing Collets



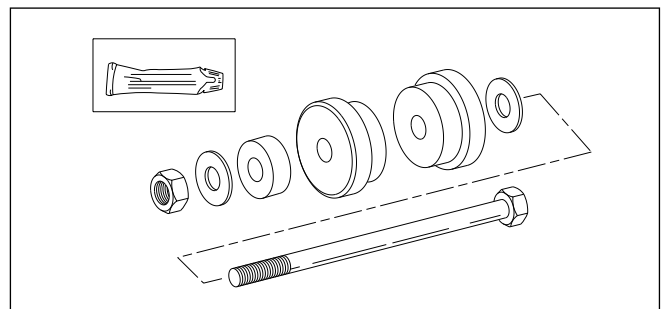
Part No. B-42887 Brake Caliper Piston Remover



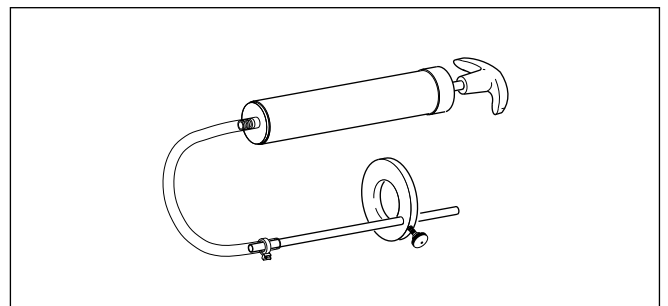
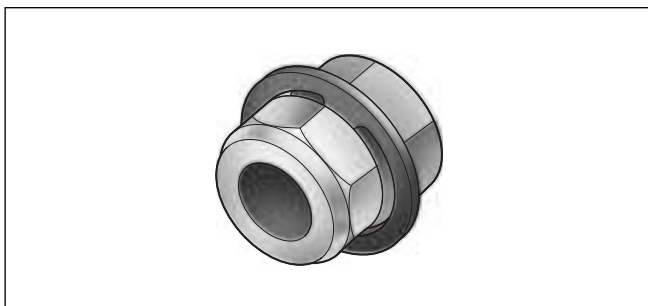
**Part No. B-45521 Steering Head Bearing Remover/
Installer**

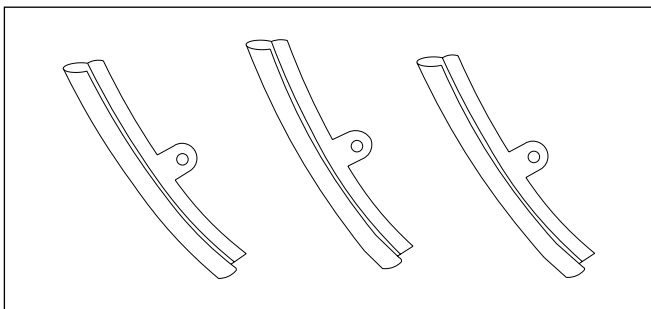


Part No. B-43721 Front Fork Seal Driver

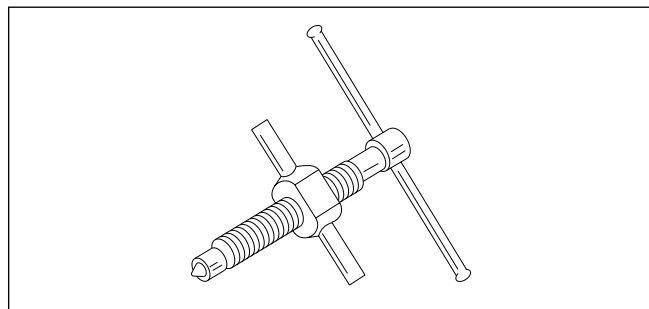


**Part No. HD-39302 Steering Head Bearing Race Installer
(Used with B-45521)**

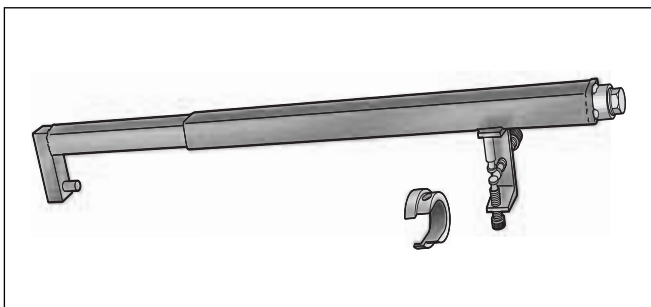




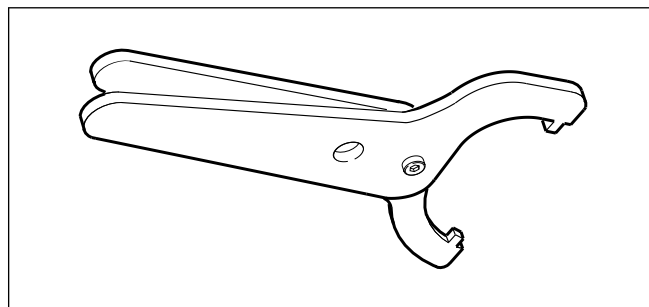
Part No. HD-01289 Rim Protectors



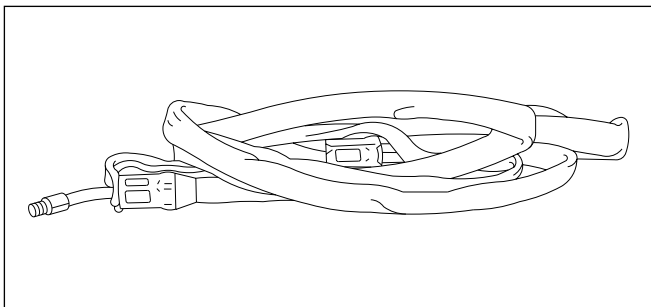
Part No. HD-33418 Universal Puller Forcing Screw



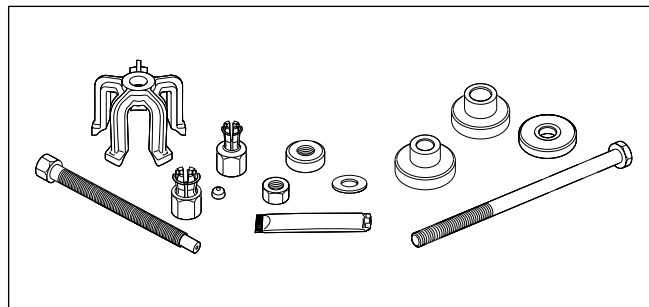
Part No. HD-45966 Fork Spring Compressing Tool



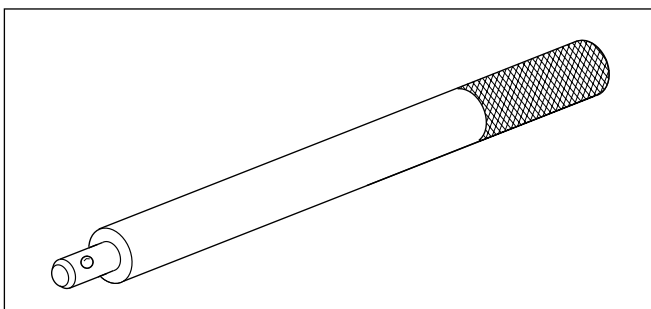
Part No. HD-94700-52C Shock Spanner Preload Adjustment Tool



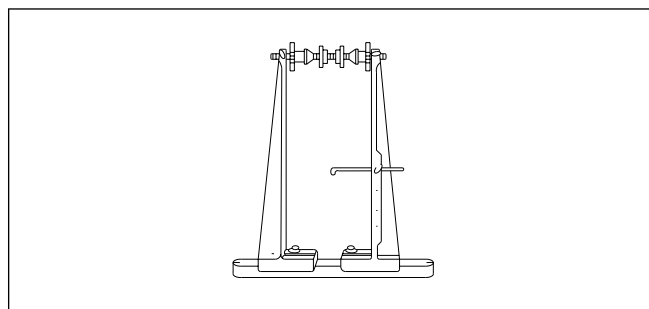
Part No. HD-28700 Tire Bead Expander



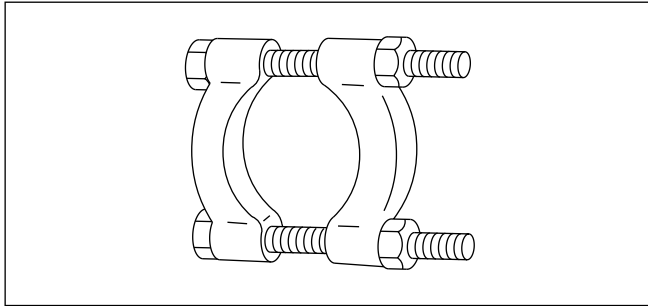
Part No. HD-44060 Wheel Bearing Remover/Installer



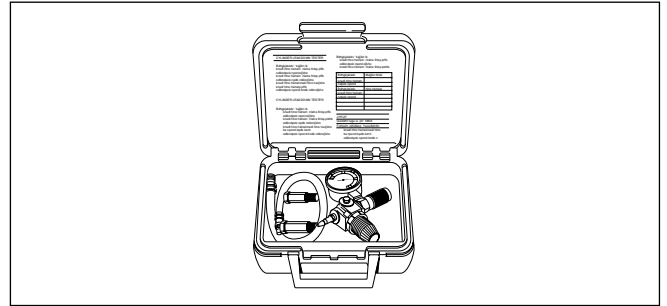
Part No. HD-33416 Universal Driver Handle



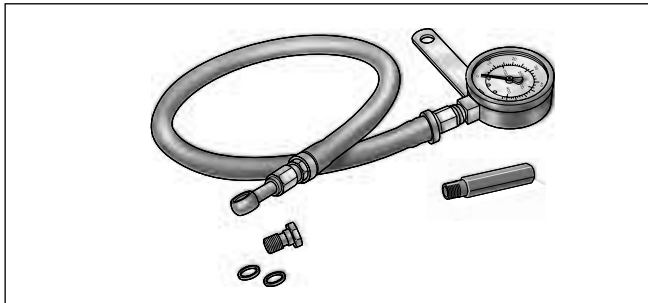
Part No. HD-99500-80 Wheel Truing and Balancing Stand



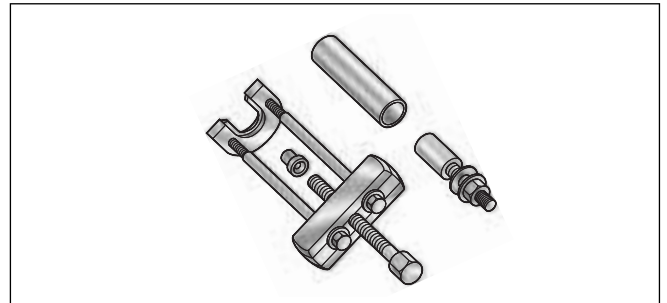
Part No. HD-95637-46A Wedge Attachment for Claw Puller. Use with HD-95635-46.



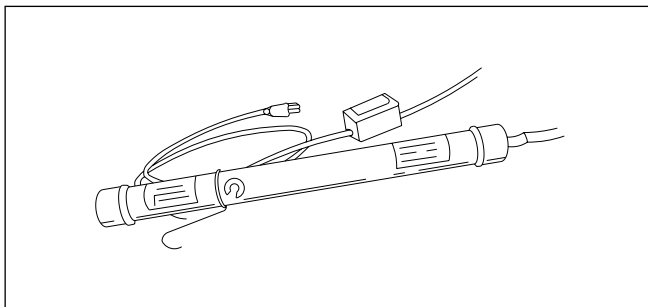
Part No. HD-35667A Cylinder Leakdown Tester



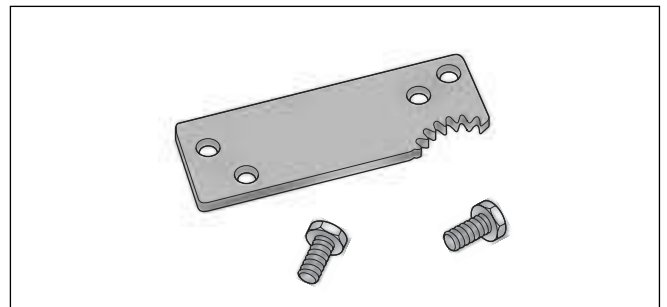
Part No. HD-96921-52A Oil Pressure Gauge



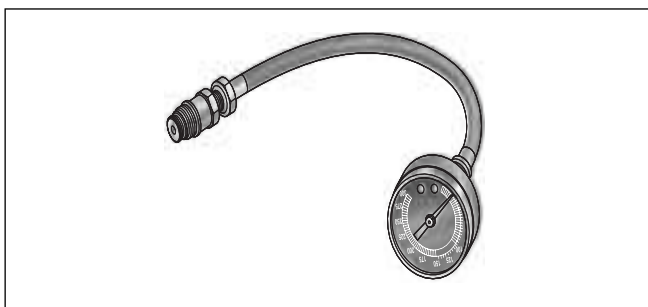
Part No. HD-34902-B Bearing Race Remover/Installer



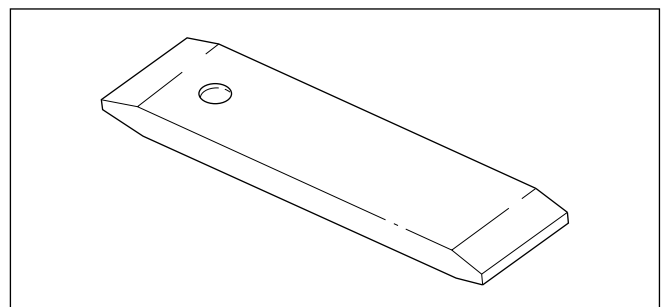
Part No. HD-35457 Black Light Leak Detector



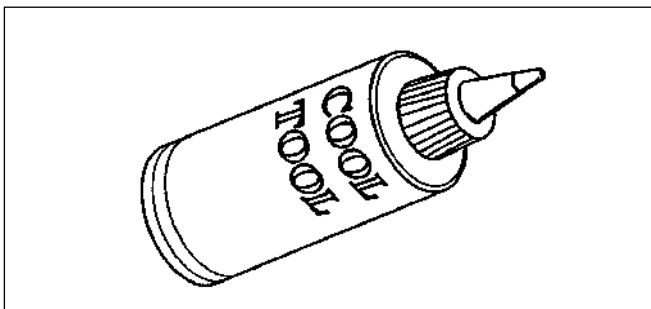
Part No. HD-43984 Crankshaft Locking Tool



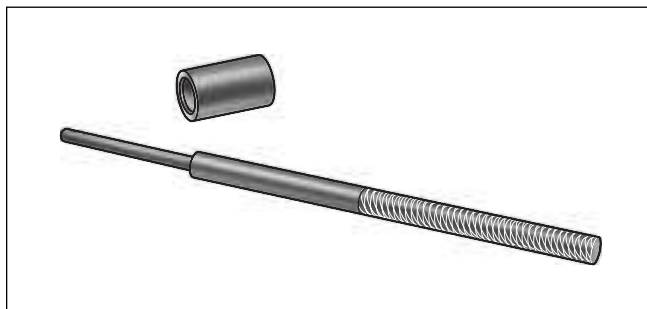
Part No. HD-33223-1 Cylinder Compression Gauge



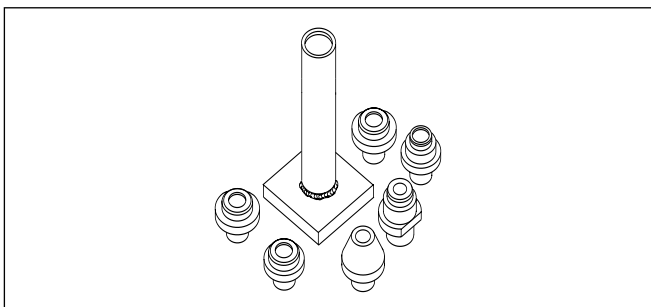
**Part No. HD-38362 Sprocket Locking Link (XB9S)
Part No. HD-46283 Sprocket Locking Link (XB12S)**



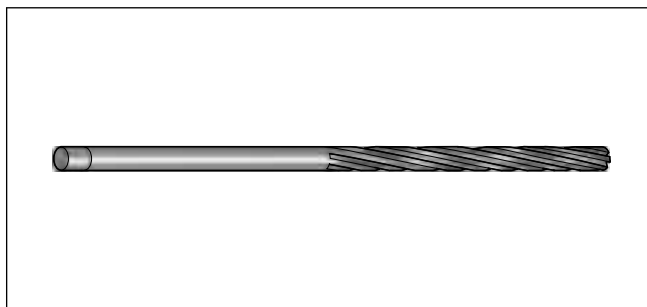
Part No. HD-39964 Reamer Lubricant (Cool Tool)



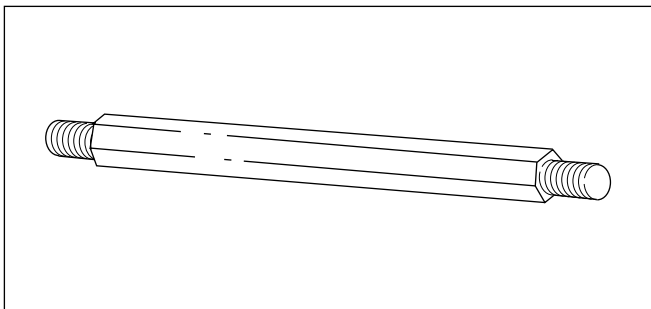
Part No. B-45524 Valve Guide Installer



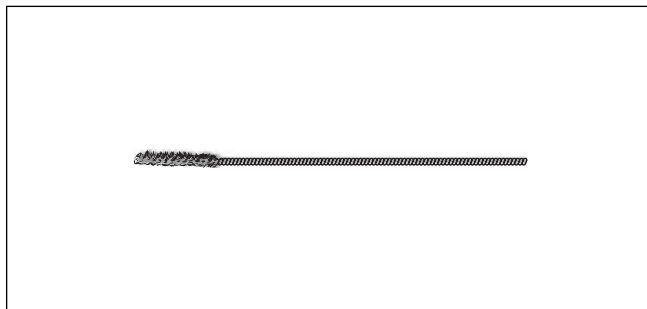
Part No. HD-39782 Cylinder Head Support



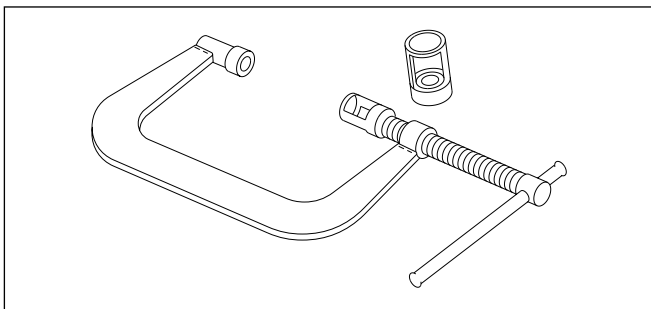
Part No. B-45523 Valve Guide Reamer (7mm)



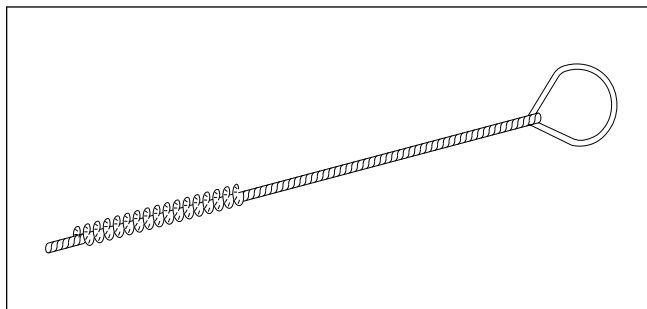
Part No. HD-39786 Cylinder Head Holding Fixture



Part No. B-45525 Valve Guide Hone

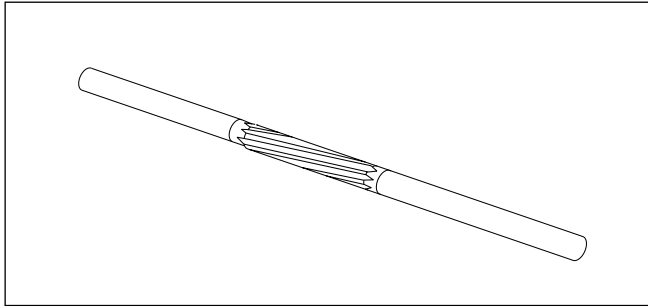


Part No. HD-34736B Valve Spring Compressor

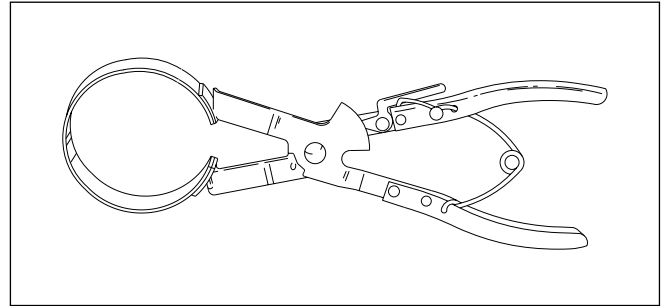


Part No. HD-34751 Nylon Valve Guide Brush

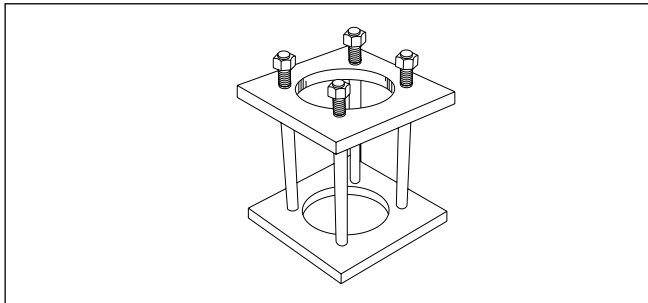
[HOME](#)



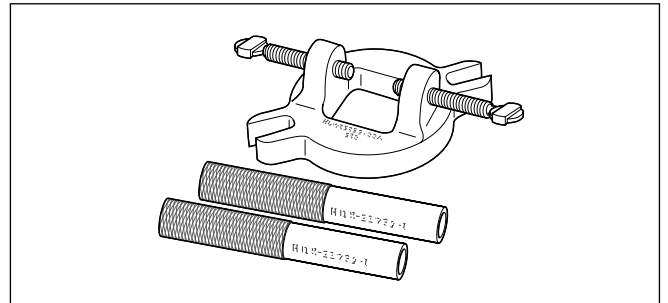
Part No. HD-94804-57 Rocker Arm Bushing Reamer



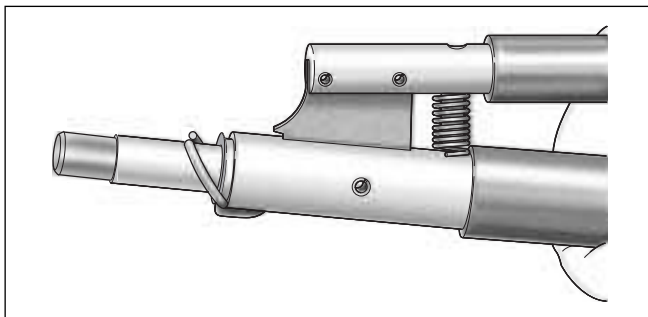
Part No. HD-96333-51C Piston Ring Compressor



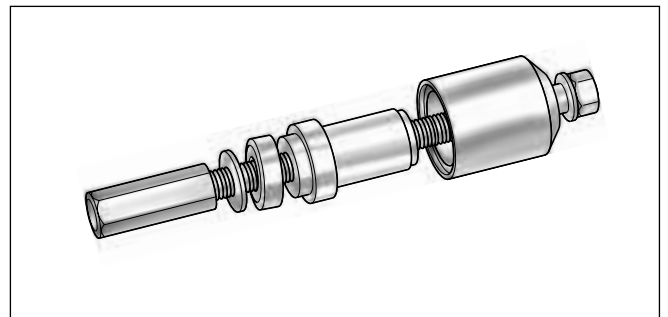
**Part No. HD-33446A Cylinder Torque Plates
and Torque Plate Bolts Part No. HD-33446-86**



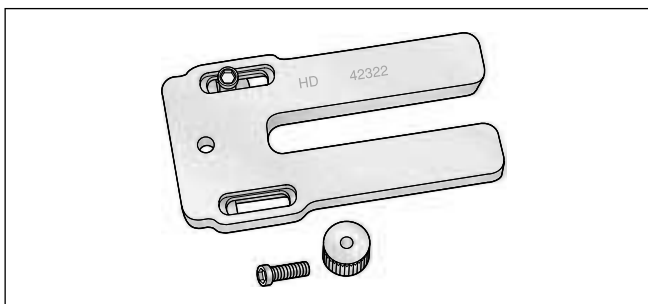
**Part No. HD-95952-33B Connecting Rod
Clamping Tool**



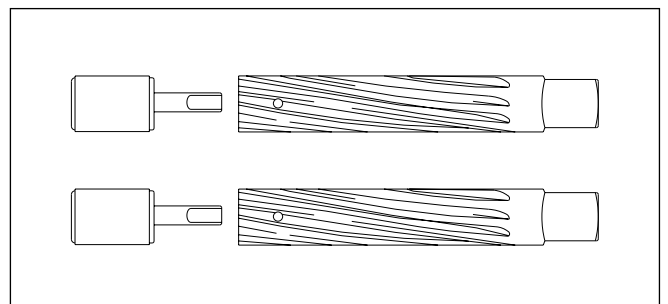
**Part No. HD-34623C Piston Pin
Retaining Ring Installer/Remover**



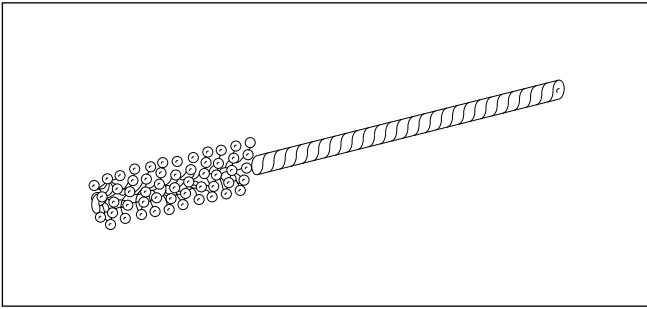
Part No. HD-95970-32D Piston Pin Bushing Tool



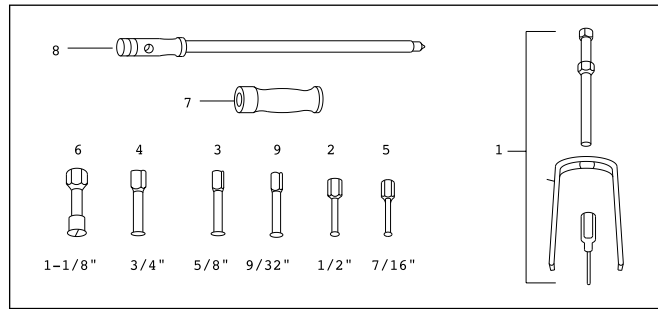
Part No. HD-42322 Piston Support Plate



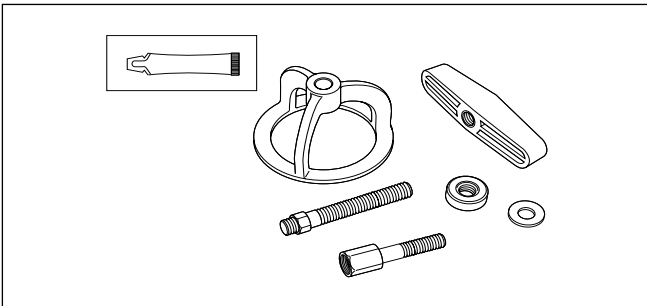
**Part No. HD-94800-26A Connecting Rod Bushing
Reamers and Pilots**



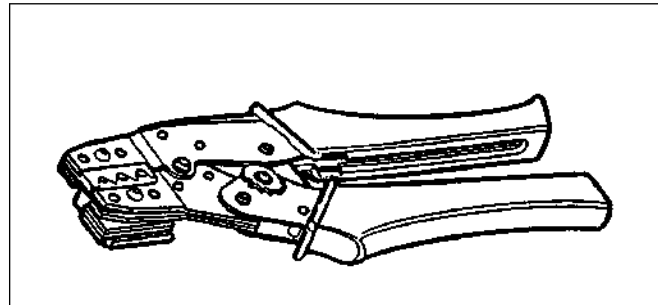
Part No. HD-35102 Wrist Pin Bushing Hone (20 mm)



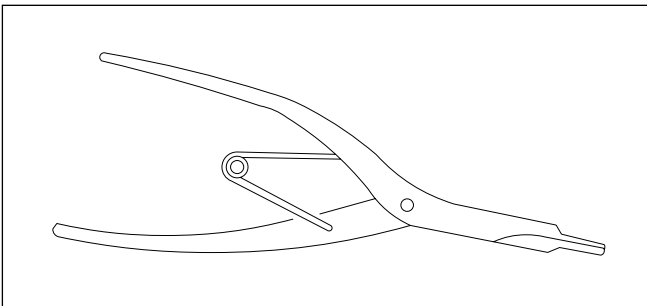
Part No. HD-95760-69A Bushing/Bearing Puller Tool Set.
Set includes items 1-7. Items 8 (HD-95769-69), 9 (HD-95770-69) and 10 (HD-95771-69) are optional.



**Part No. HD-38515-A Clutch Spring Compressing Tool
and Part No. HD-38515-91 Forcing Screw**



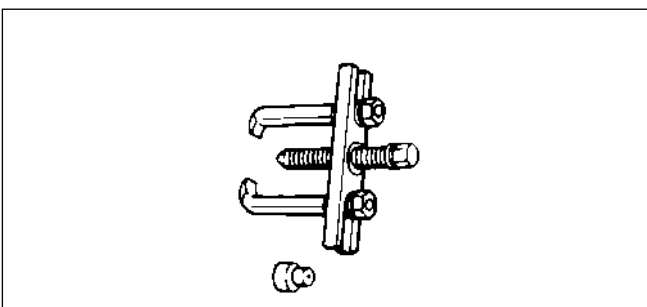
Part No. HD-39965 Deutsch Terminal Crimp Tool



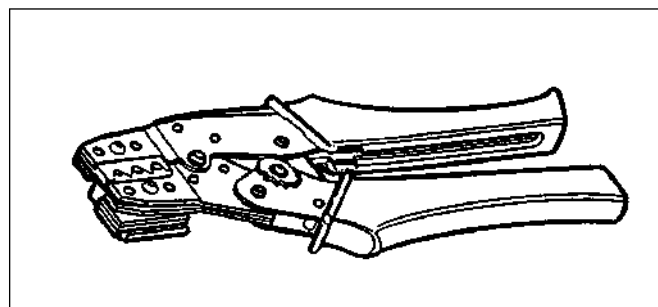
**Part No. J-5586 Transmission Shaft
Retaining Ring Pliers**



Part No. HD-41354 Speedometer Tester



Part No. HD-97292-61 Two Claw Puller



Part No. HD-41609 Amp Terminal Crimp Tool

REMOVING SOCKET/PIN TERMINALS

1. Remove connector from the retaining device, either attachment or rosebud clip.
2. Depress the button on the socket terminal side of the connector (plug) and pull apart the pin and socket halves.
3. Bend back the latch slightly and free one side of secondary lock, then repeat the step to release the other side. Rotate the secondary lock outward on hinge to access terminals in chambers of connector housing.
4. Looking in the terminal side of the connector (opposite the secondary lock), take note of the cavity next to each terminal.
5. See [Figure B-1](#). With the flat edge against the terminal, insert the pick tool (Snap-On TT600-3) into the cavity until it stops. Pivot the end of the pick away from the terminal (locktab is inside housing) and gently tug on wire to pull terminal from chamber. Do not tug on the wire until the tang is released or the terminal will be difficult to remove. A “click” is heard if the tang is engaged but then

inadvertently released. Repeat the step without releasing the tang.

NOTE

- If pick tool is not available, a push pin/safety pin may be used instead.
- An *ELECTRICAL TERMINAL CRIMP TOOL* (Part No. HD-41609) is used to install Amp Multi lock pin and socket terminals on wires. If new terminals must be installed, see *Crimping Instructions* on the next page.

INSTALLING SOCKET/PIN TERMINALS

NOTE

For wire location purposes, numbers are stamped into the secondary locks of both the socket and pin housings. See [Figure B-2](#).

1. From the secondary lock side of the connector, insert the terminal into its respective numbered chamber until it snaps in place. For proper fit, the slot in the terminal must face the tang in the chamber.

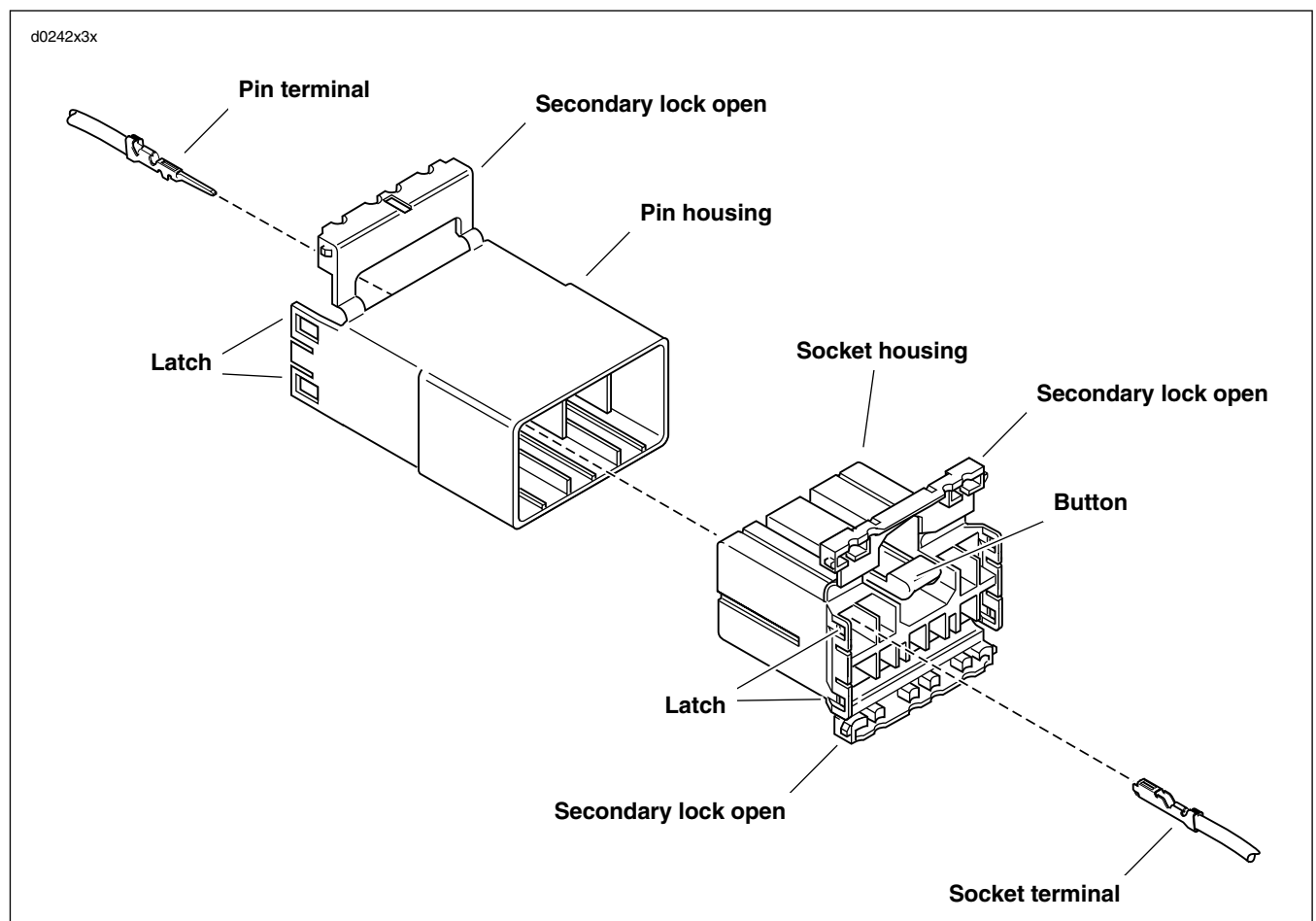


Figure B-1. 10-Place Amp Multilock Connector

d0243x8x

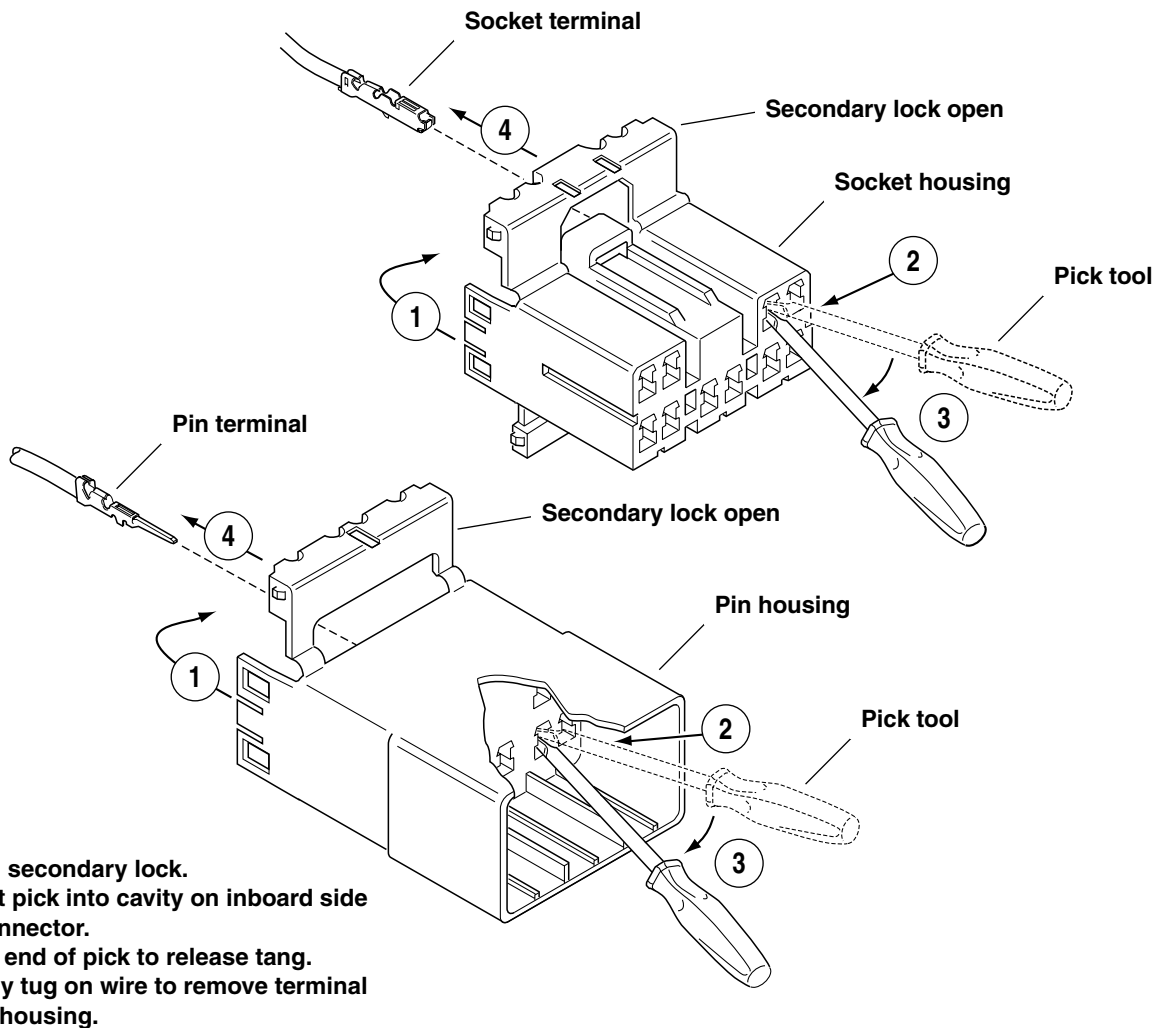


Figure B-2. Release Tang and Back Out Terminals

NOTES

- See [Figure B-3](#). The tang in the chamber engages the slot to lock the terminal in position.
- On the pin side of the connector, tangs are positioned at the bottom of each chamber, so the slot in the pin terminal (on the side opposite the crimp tails) must face downward.
- On the socket side, tangs are at the top of each chamber, so the socket terminal slot (on the same side as the crimp tails) must face upward.
- Up and down can be determined by the position of the release button (used to separate the pin and socket halves). Consider the button to always be on top of the connector.

2. Gently tug on wire end to verify that the terminal is locked in place and will not back out of chamber.
3. Rotate the hinged secondary lock inward until tabs fully engage latches on both sides of connector.
4. Insert the socket housing (plug) into the pin housing (receptacle) until it snaps in place.
5. Install connector on retaining device, either attachment or rosebud clip.

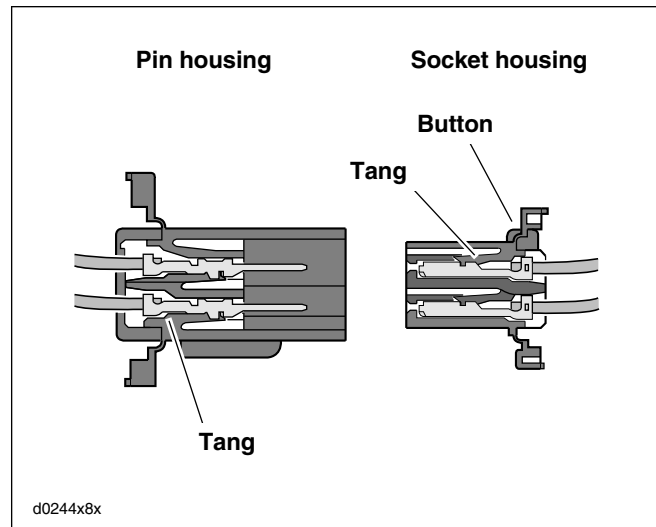
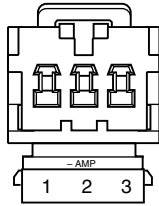


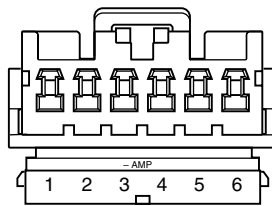
Figure B-3. Multilock Connector Cutaway View

Secondary locks open (socket housings shown)

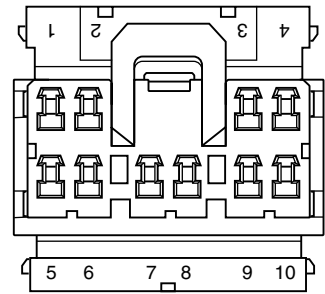
Stamped numbers on secondary locks indicate wire color locations



3-place



6-place



12-place

