

ROTTLER

F69A CNC MACHINING CENTER

OPTIONAL EQUIPMENT CATALOG



RamSpeed.com.au

8029 S 200th St. Kent, WA 98032 USA | www.rottermfg.com | Ph: 253-872-7050 | Fax: 253-395-0230

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ORDERING PROCEDURE

Contact your regional Rottler sales rep for assistance in ordering optional equipment, replacement parts, or tooling.

If you are unable to contact your regional Rottler sales rep, call the factory at 253-872-7050 and ask to speak to the parts sales specialist.

Have the following information handy to expedite the ordering process:

1. Your name, business name, and contact number
2. Customer number
3. If you don't have a customer number, your billing address
4. Shipping address if different from billing address
5. Machine model and serial number
6. Part number and description of what you want to order
7. Preferred method of shipment

You may also contact us via e-mail with the above information. Send e-mail requests to:
parts@rottlermfg.com

In some cases you may be requested to send a photo of the part you are ordering if it is a replacement part, or doesn't appear in the database.

If you are unsure which part you need to order, contact our service department and ask to speak to one of our service consultants. They will assist you in determining which part you require.

THERE IS A MINIMUM ORDER OF \$25.00

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SOFTWARE PACKAGES

6758T Automatic Boring, Sleeving

Including Lower Offset for Honing Clearance, Automatic Cycle
Contact your Rottler Sales Representative or the factory for complete details.

6758U Multiple Pass Programmable Depth Of Cut

Rough and Finish Milling/Surfacing, Automatic Cycle
Contact your Rottler Sales Representative or the factory for complete details.

6773B Main Line Bore Machining

Including Circular Interpolation Thrust Facing (See Below Thrust Facing Toolholder), Automatic Cycle
Contact your Rottler Sales Representative or the factory for complete details.

650-2-20A Lifter Bore Machining

Automatic Cycle
Contact your Rottler Sales Representative or the factory for complete details.

6758Z Stroker Crankshaft Connecting Rod Clearance Software Package

Contact your Rottler Sales Representative or the factory for complete details.

8300 Splayed 4 Bolt Main Cap Machining Software

Requires 9043 Rottler CAM Software

650-2-44Z Block Lightening

For World Products Small Block Chevy Motown
Contact your Rottler Sales Representative or the factory for complete details.

650-2-44Y Block Lightening

For Dart Small Block Chevy Little M
Contact your Rottler Sales Representative or the factory for complete details.

650-2-45K Block lightening

For Big Block Chevy Dart - Big "M" - Software Package
Contact your Rottler Sales Representative or the factory for complete details.

650-3-45M Connecting Rod Boring Software Package

Contact your Rottler Sales Representative or the factory for complete details.

ROTTLER CAM (COMPUTER AIDED MANUFACTURING) SOFTWARE**9043 Rottler CAM (Computer Aided Manufacturing) Software Package**

When Rottler CAM #9043 is purchased together with a new machine, a three day introductory training course at Rottler factory is available for purchase. Additional training on Rottler CAM after the three day course is provided through instructional videos at www.RottlerTube.com or by internet and/or telephone support, charges apply.

RCAM-IH-INTRO

Three days introductory training for one person on Rottler CAM software at Rottler factory in a group class setting. Customers must have purchased #9043 Rottler CAM Software package before attending this training course. Customer must supply own Windows laptop. Full details of costs and conditions is available from the Rottler Sales Department.

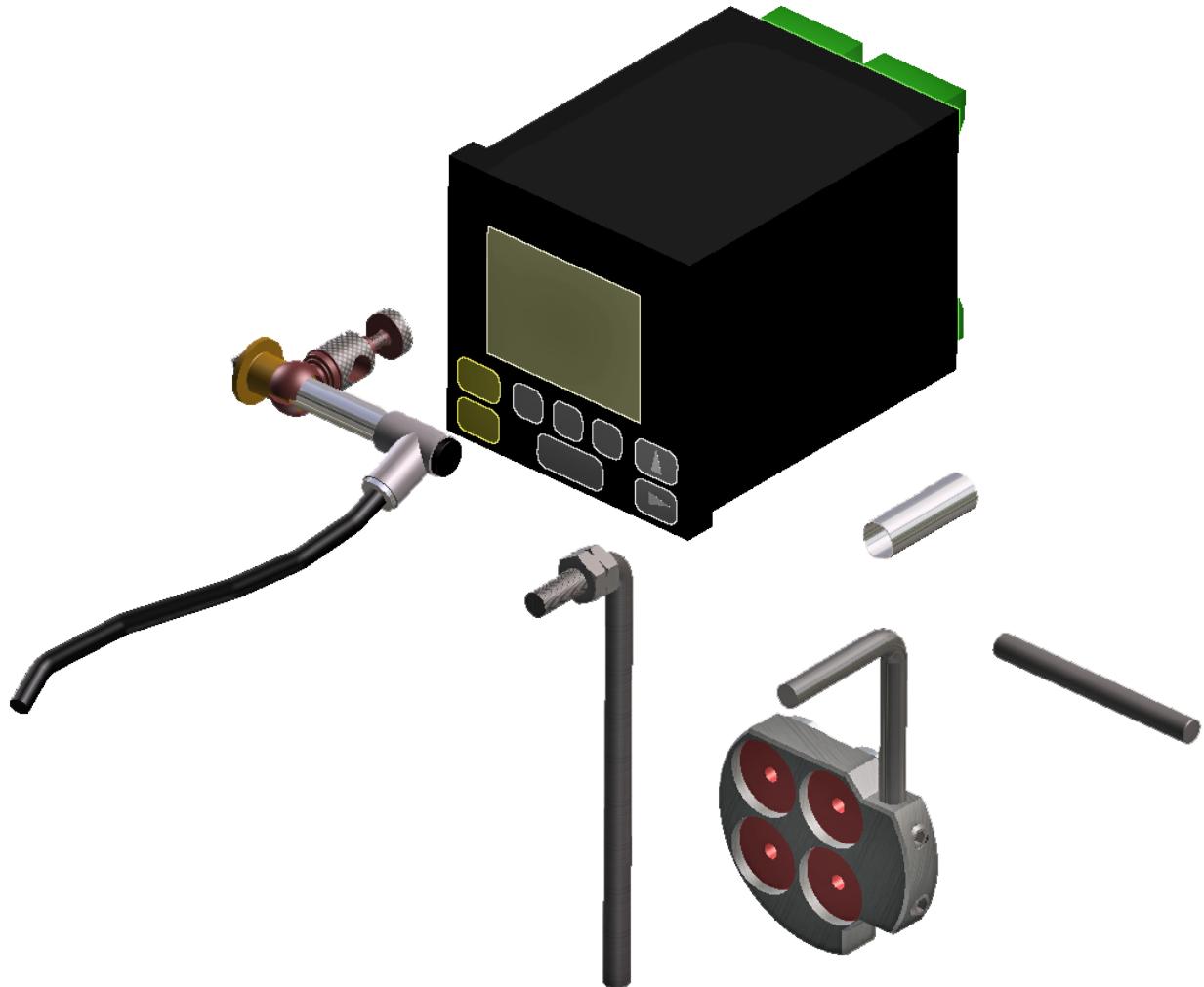
CYLINDER BORE CENTERING**Automatic Centering****650-3-59Y Renishaw Wireless Probing System**

Including 6 Probes/Stylus and software. Designed to Work Together with Rottler 4th Axis Fixture System. Price Includes Factory Installation During Machine Manufacture, Extra Charge Applies.



Manual Centering**502-12-7B Digital Runout Probe and Readout**

Including Magnetic Holder for Block Set Up and Manual Centering of Cylinder Bores and Main Line Bores

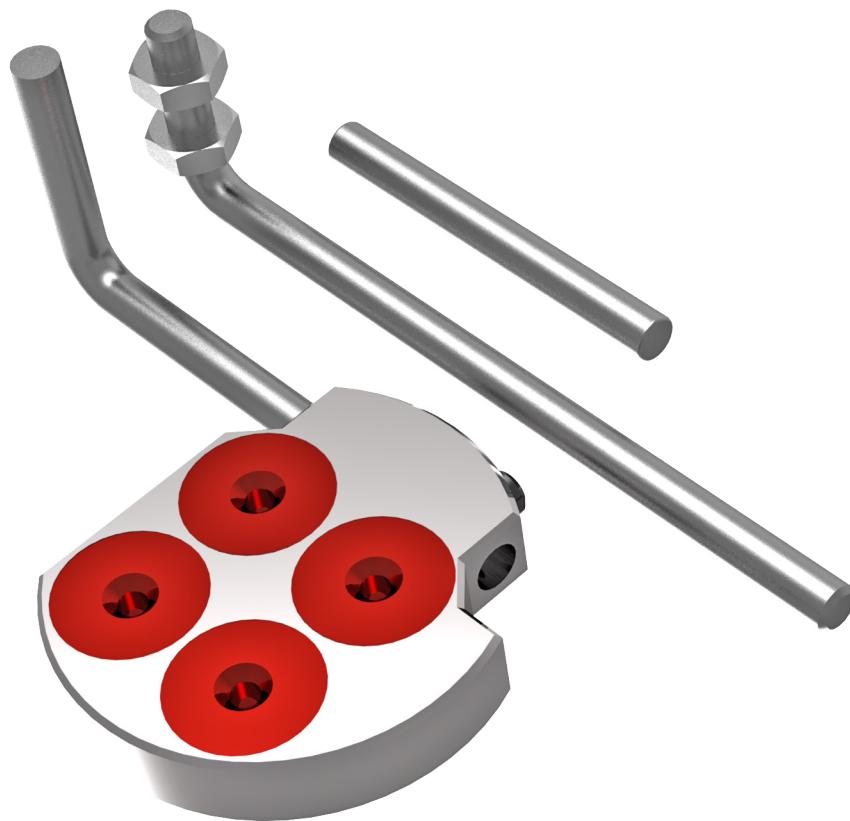


502-9-9A Mechanical run out indicator

General purpose (.001) resolution

**502-12-4 Magnetic base**

With (2) extension arms for indicators (4) magnet base for cylinder boring bar



BLOCK FIXTURING

Automatic

690-3-63 Computer Controlled Automatic 4Th Axis Block Roll Over Fixture

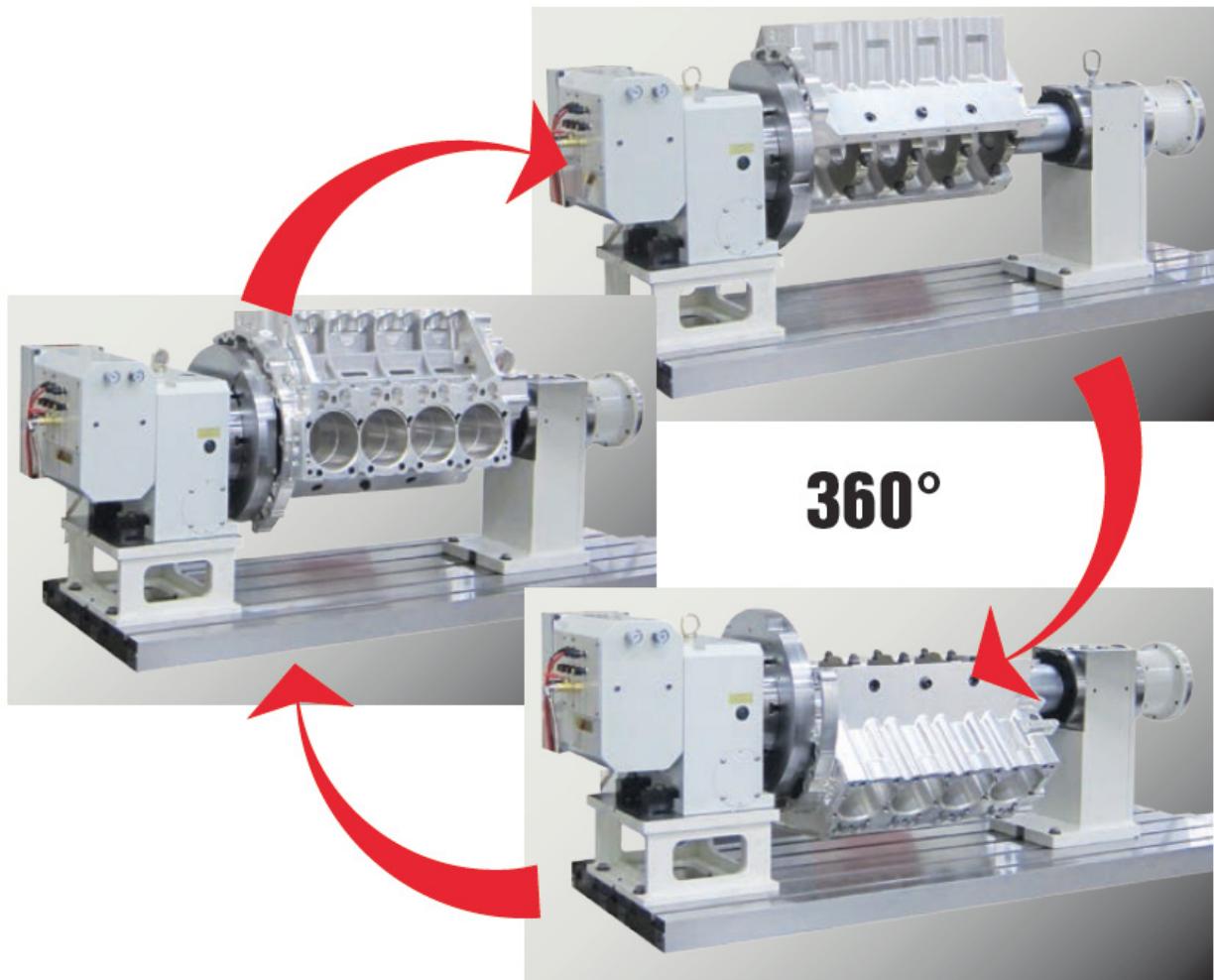
Including:

1: Rottler 4th Axis Software Packages.

2: Universal Engine Block Mounting System to Locate and Hold A Wide Variety of Camshaft Type V Blocks, Requires Main and Cam Bearing Locators to Precision Mount Blocks.

3: Adjustable Camshaft Centerline Locating Device to Set Up Camshaft Type V Blocks with Reference to the Centerline of their Camshaft and Crankshaft.

4: Power Tail Stock for Quick Mounting of Blocks and Rigid Support During Machining.

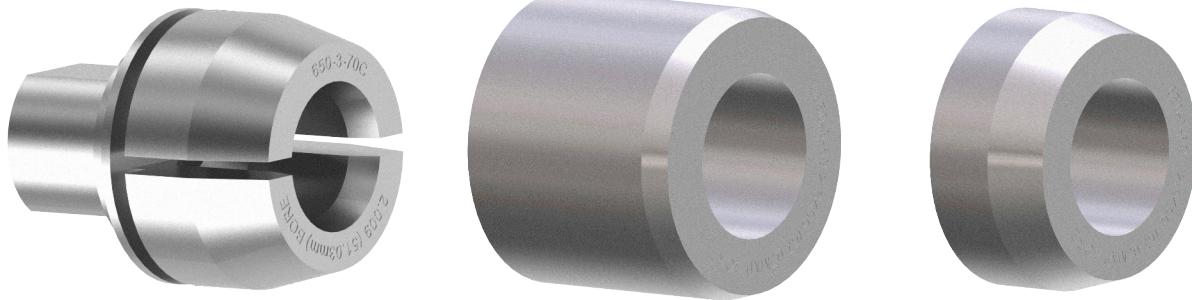


LOCATOR SETS

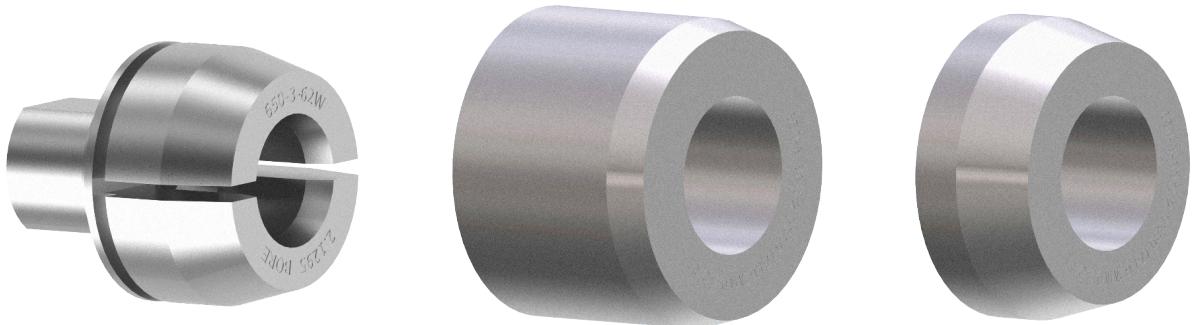
For 4th AXIS includes front & rear main locator and rear cam locator

CHEVROLET SETS

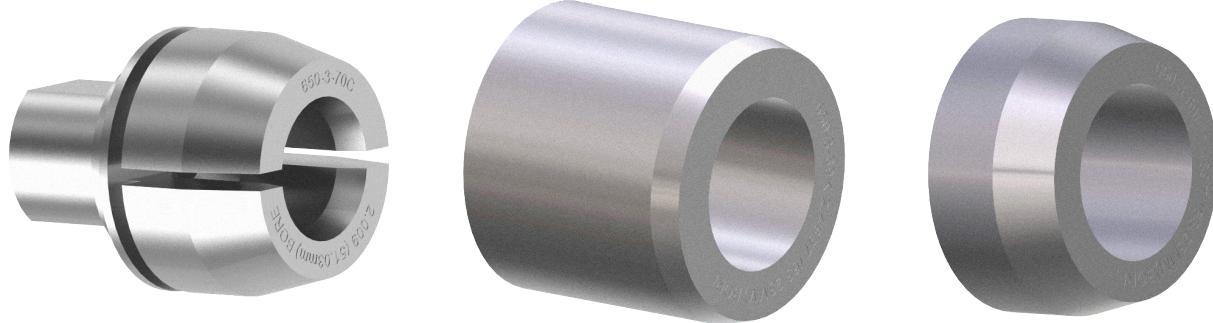
650-3-68 Locator Assembly (Small Block Chevy)

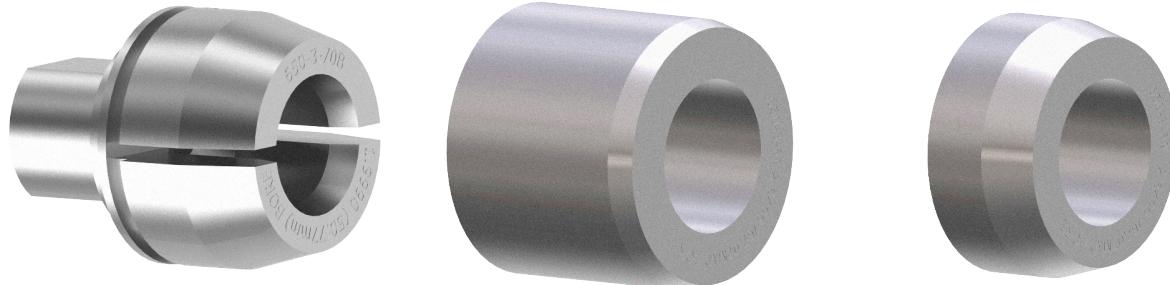
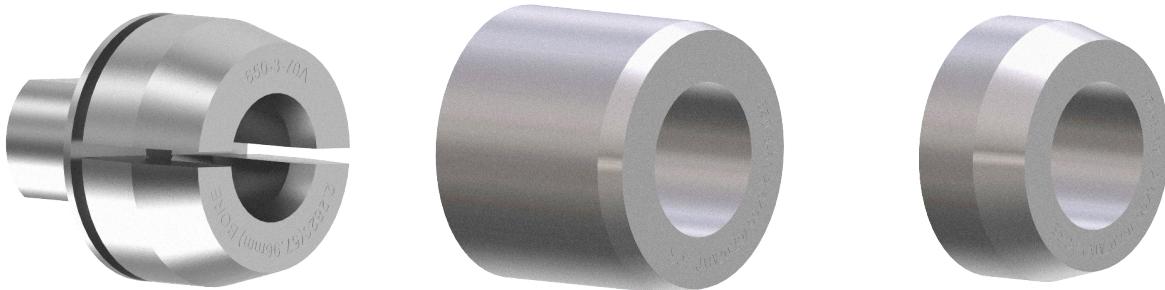


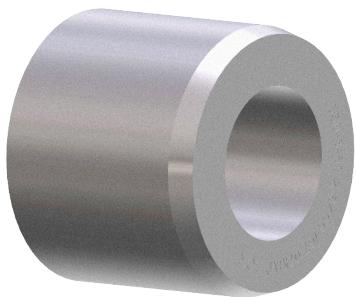
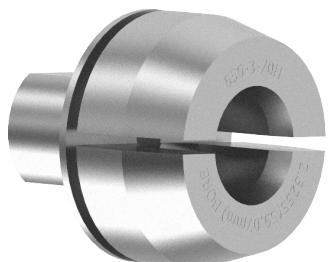
650-3-68B Locator Assembly (Big Block Chevy)

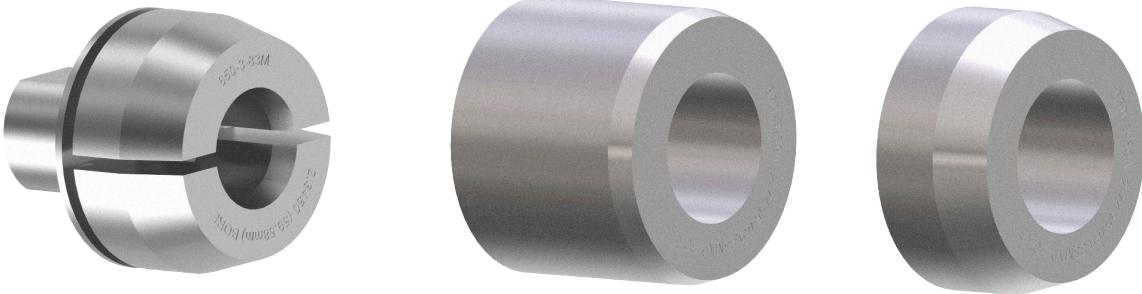
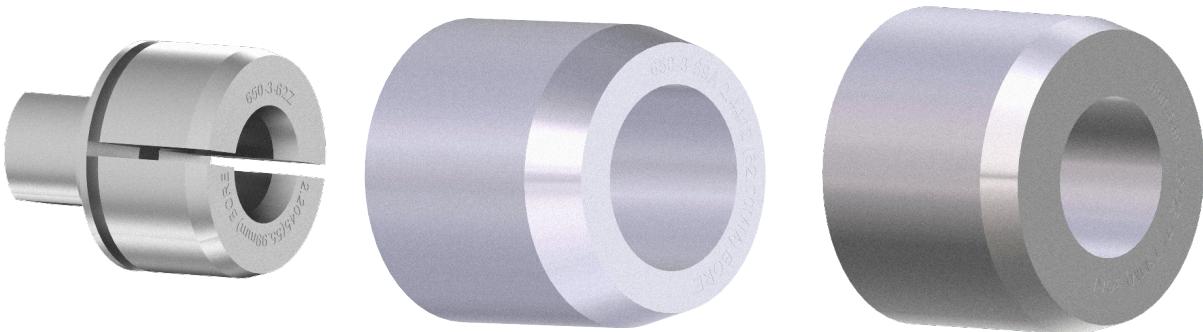
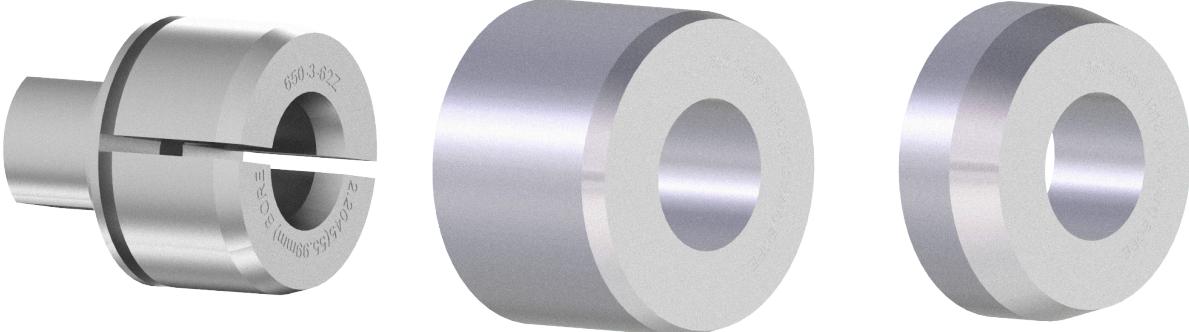


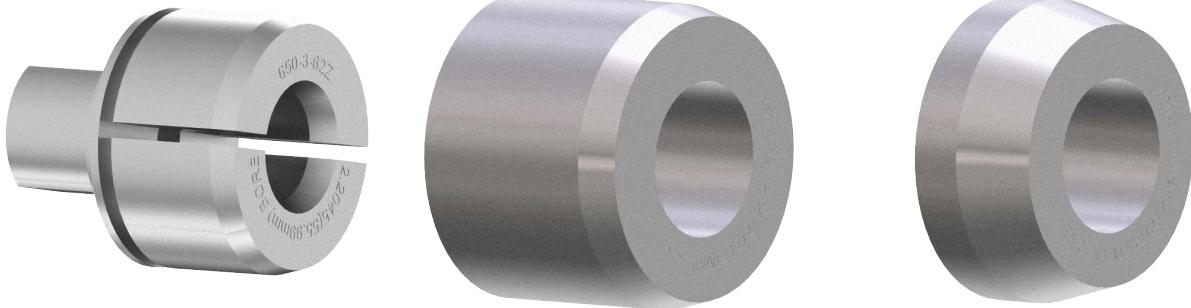
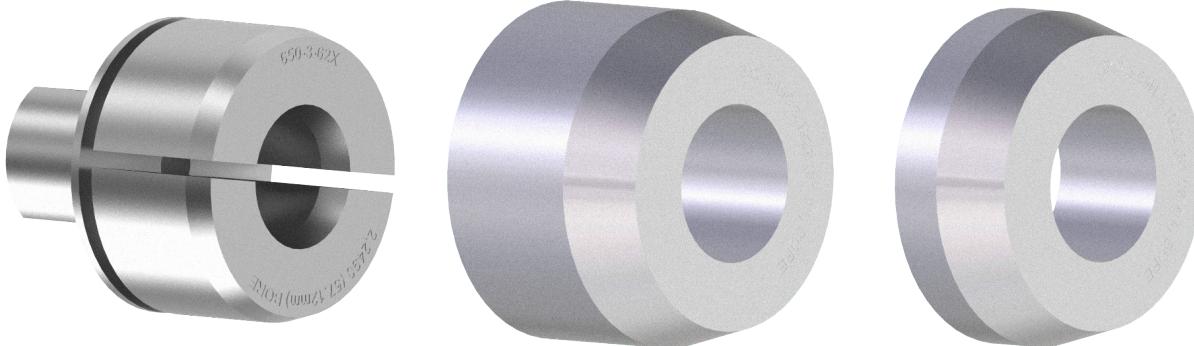
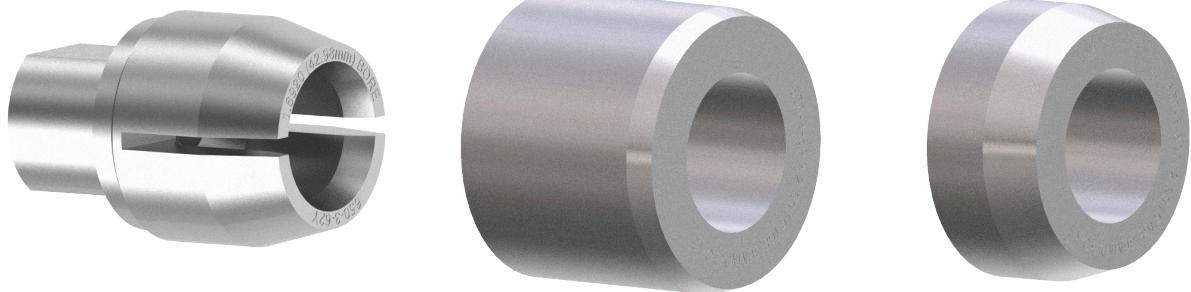
650-3-68L Locator Assembly (327 Small Journal Crank)

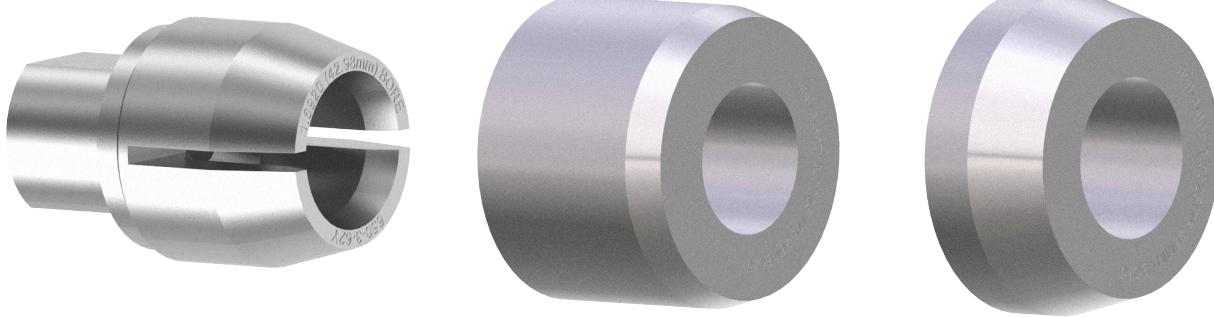
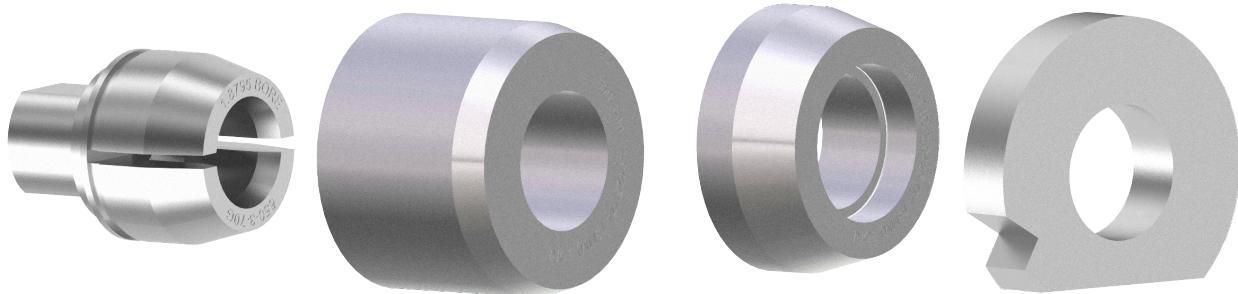


650-3-68J Locator Assembly (400 Small Block Chevy)**650-3-68G Locator Assembly (Chevy Bowtie Block)****650-3-68F Locator Assembly (Chevy 58mm Cam Bore) for 55mm Cam Journal**

650-3-68E Locator Assembly (Chevy 63mm Cam Bore) for 60mm Cam Journal**650-3-68M Locator Assembly (Chevy 5.3 liter 99 & Up)****650-3-68R Locator Assembly (Chevy Gen3 LS1 to LS6)**

650-3-68T Locator Assembly (Chevy LS7)**FORD SETS****650-3-68A Locator Assembly (Ford 289/302)****650-3-68H Locator Assembly (Ford 351W)**

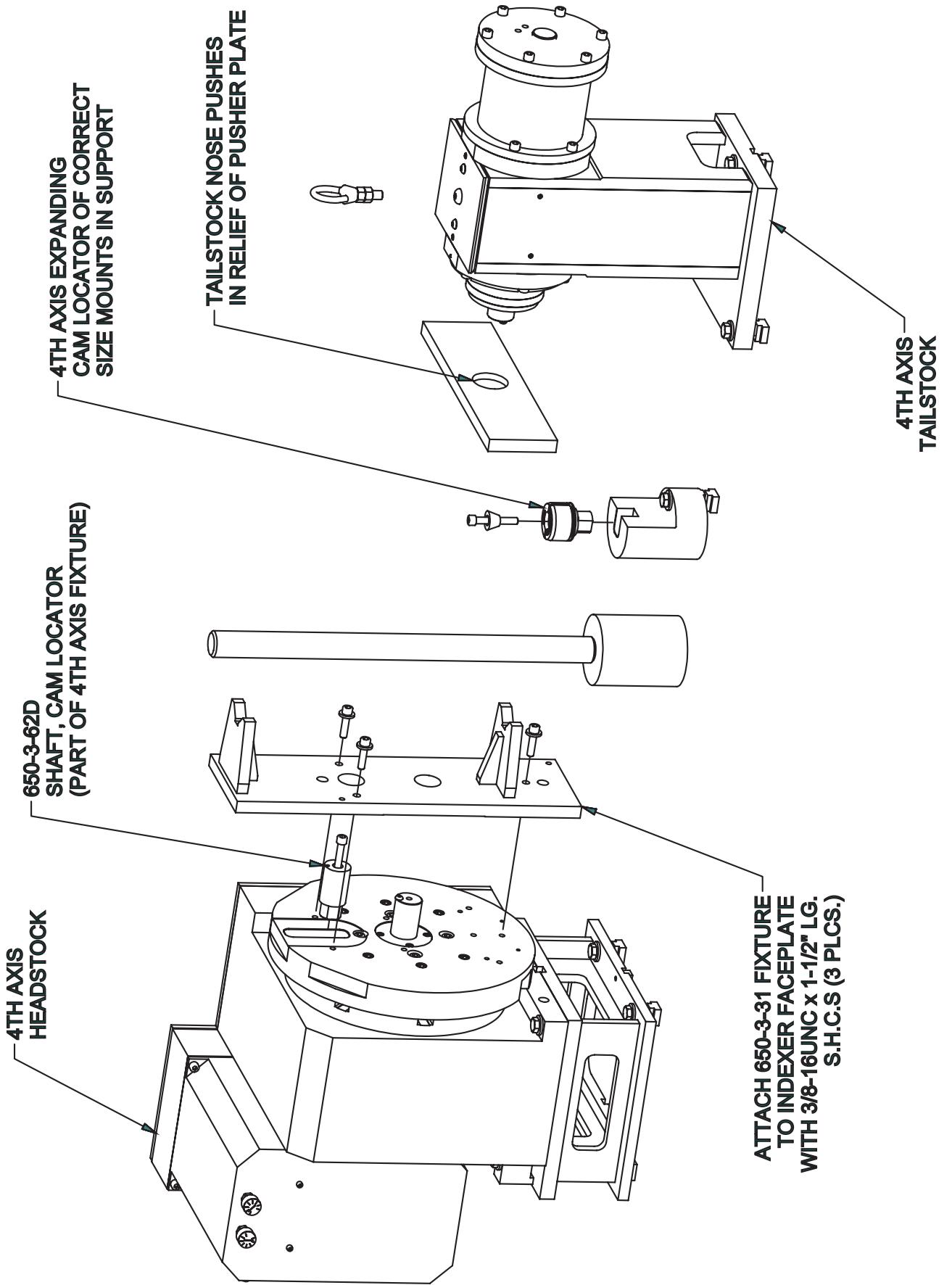
650-3-68P Locator Assembly (Ford 351C)**650-3-68C Locator assembly (Ford 460)****MOPAR SETS****650-3-68K Locator Assembly (Mopar 318)**

650-3-68D Locator Assembly (Mopar 360)**650-3-68Q Locator Assembly (Mopar 383,426,440)**

BLOCK END TRUING**650-3-30A Block End Truing Fixture Assembly**

(Requires 4th Axis Fixture #690-3-63) Used for Surfacing and Machining Front and Rear End of Block True to Crankshaft Centerline.

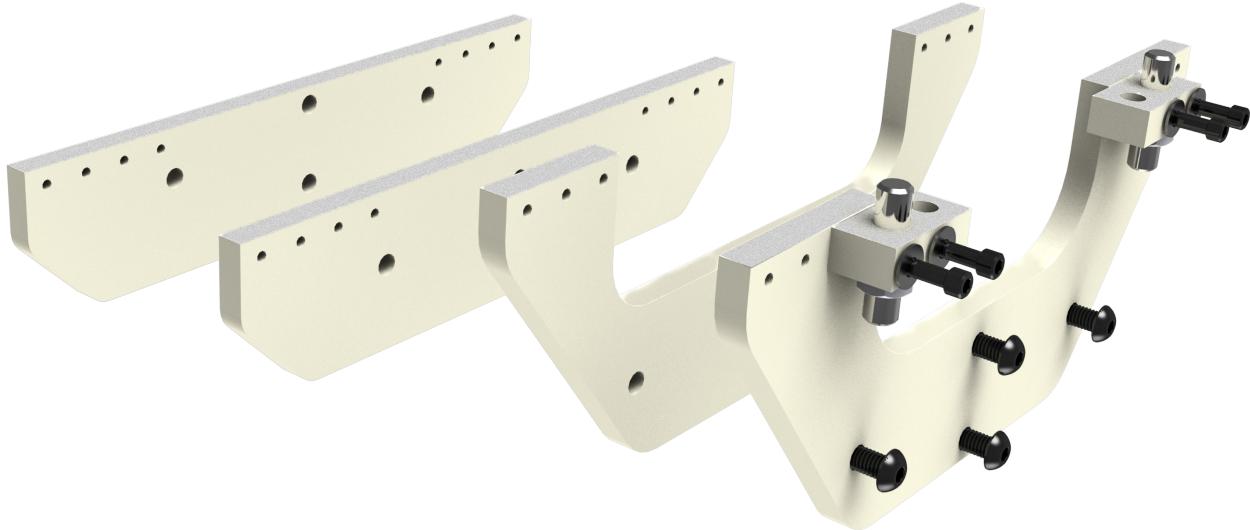




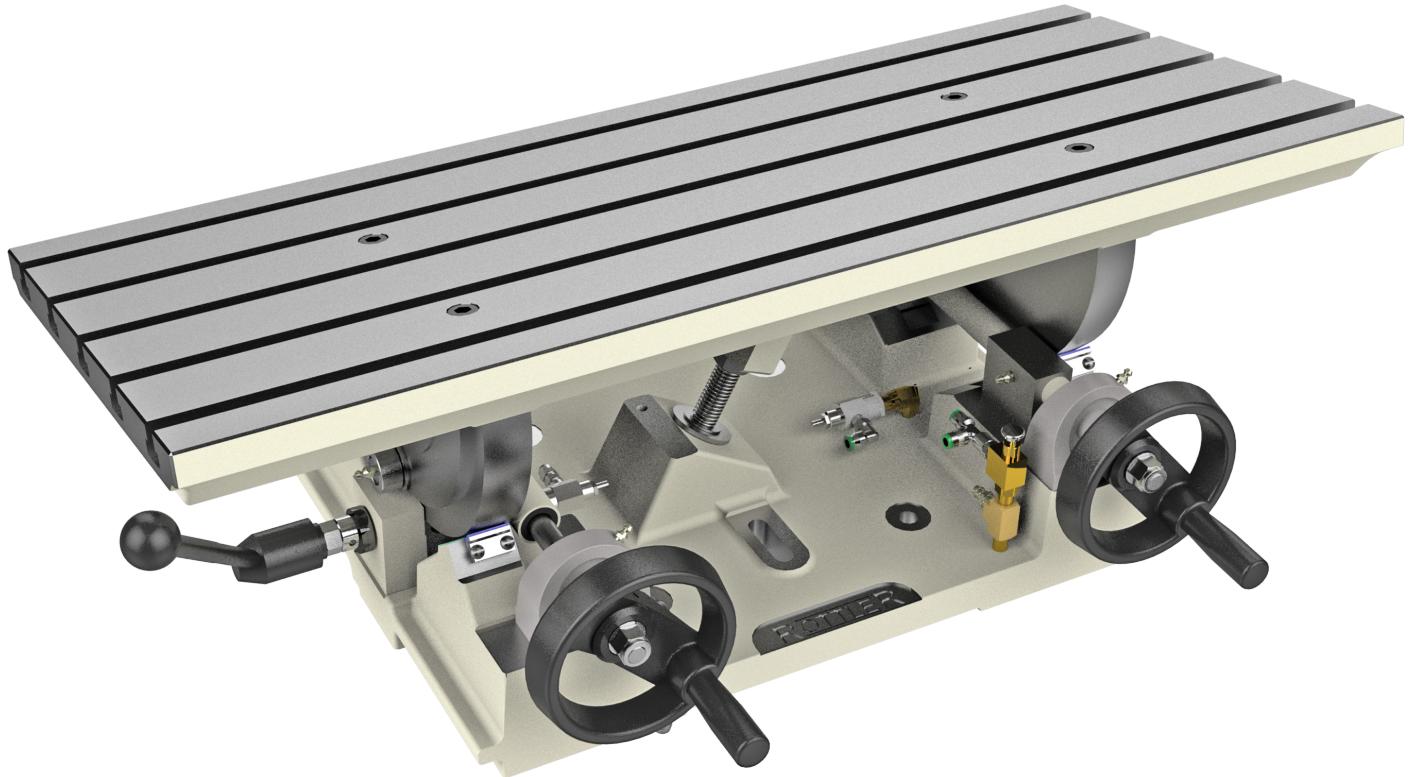
**650-3-30A FIXTURE APPLICATION
ON 4TH AXIS FIXTURE**

OVERHEAD CAM BLOCK FIXTURING**650-3-84 Overhead Cam Block Fixture**

For Overhead Cam Blocks for 4th Axis Fixture (690-3-63)

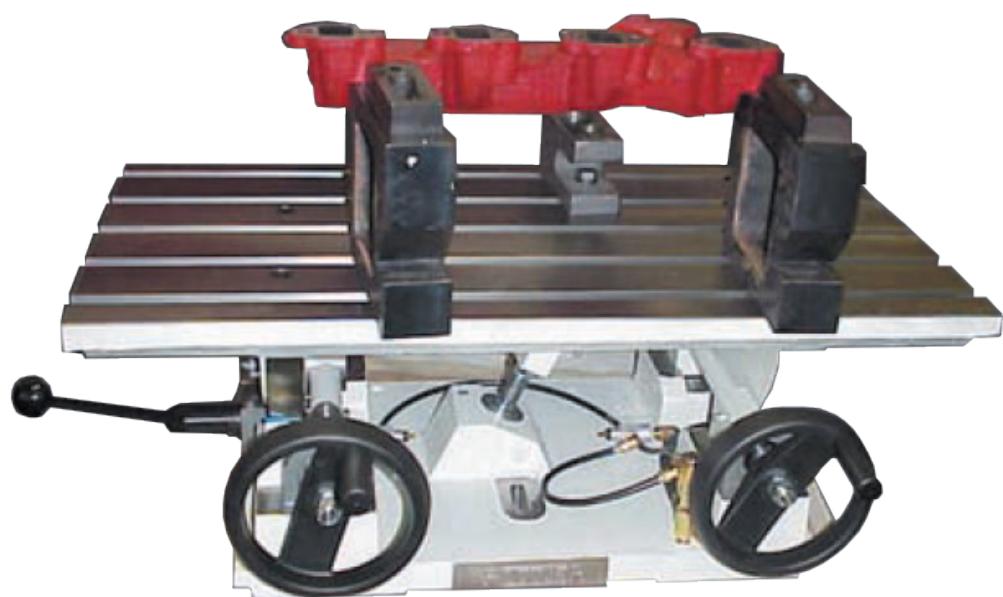
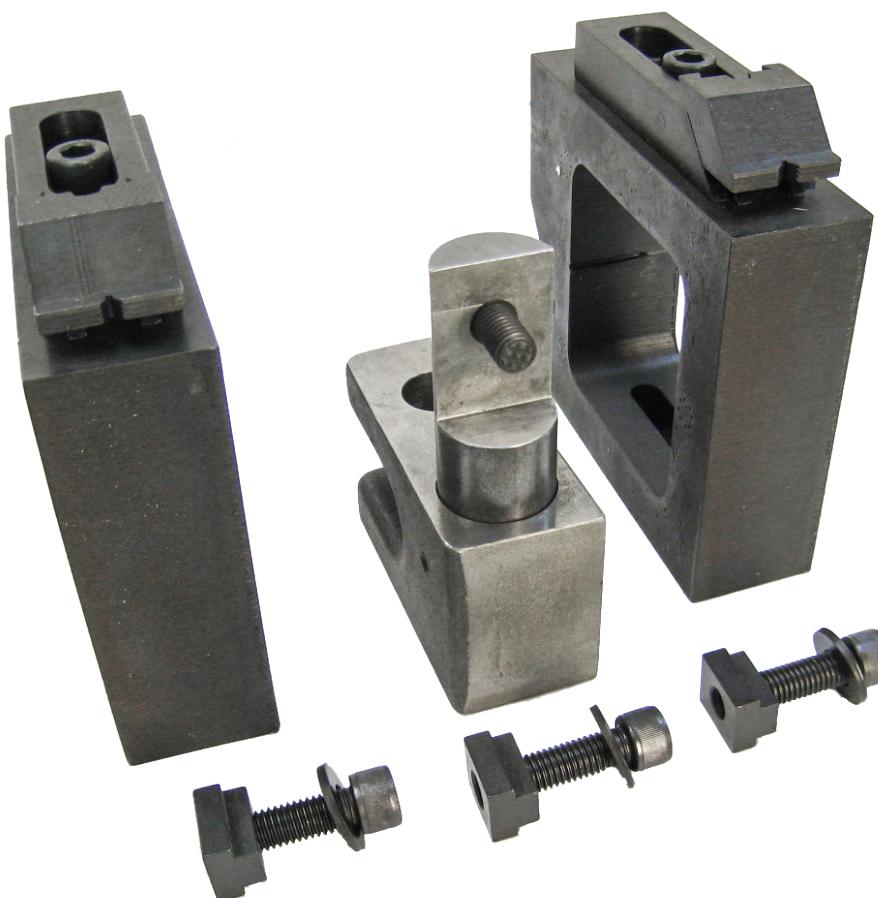
**CYLINDER HEAD SURFACING FIXTURE****7209M Leveling Table with Airfloat**

Complete with Universal Work Holding System for Surfacing Cylinder Heads and Small In-Line Blocks



7226G Exhaust and Intake Manifold Surfacing Fixture System

For 7209M Leveling Table



BLOCK MAIN LINE BORING AND CAM BORING FIXTURES**650-3-56 Line Bore Pivot Table**

Complete with Universal Work Hold System for Small In Line and 90 Degree V Blocks, used for Main Line Boring and Stroker Crank Clearance.

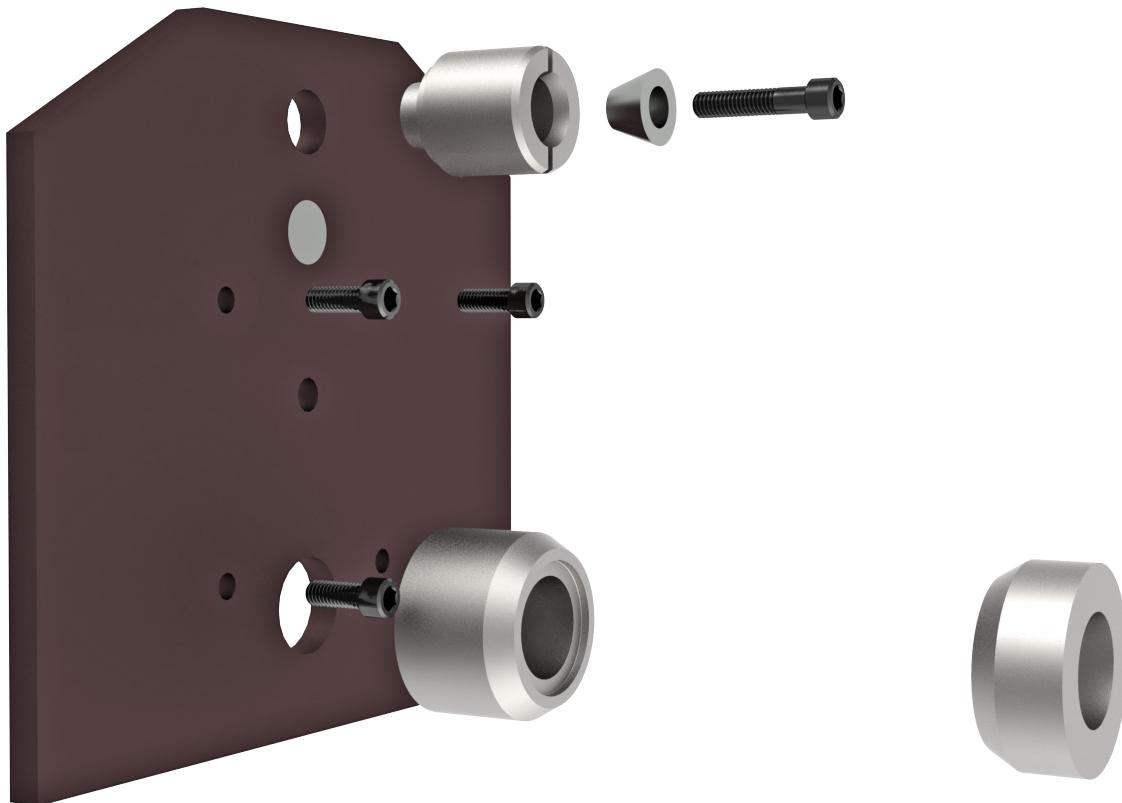
**6866 Wedge for Cummins 5.9liter Camshaft
Line Boring**

Requires 650-3-56 Pivot Table



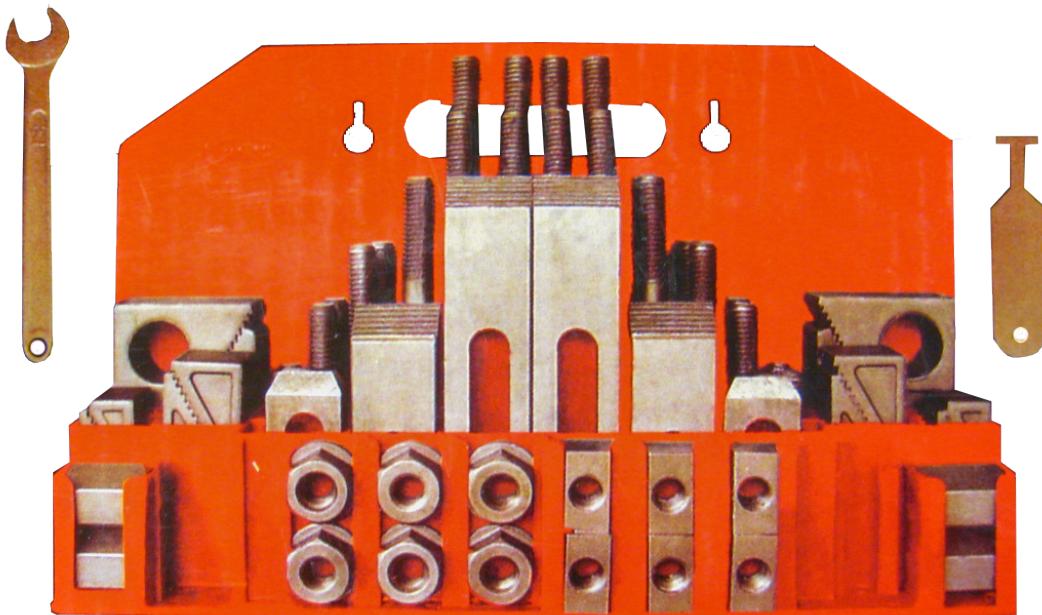
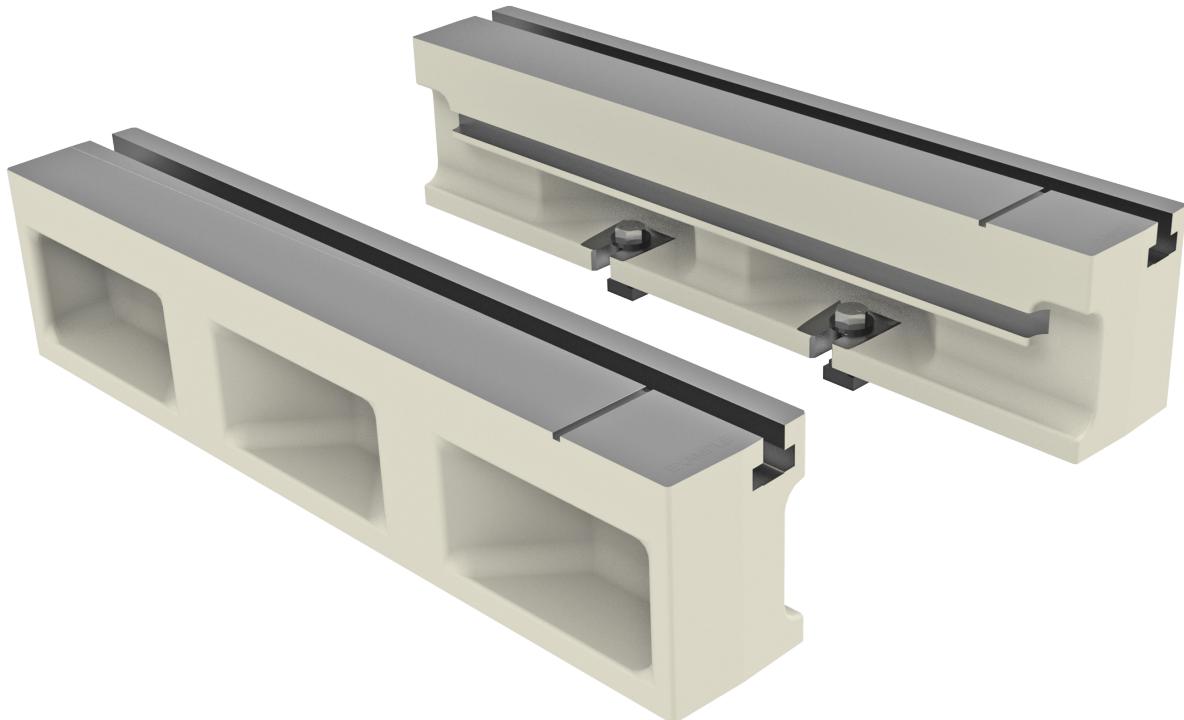
SPECIAL APPLICATION FIXTURE**650-3-82 Mopar 5.7L Hemi Fixture Assembly**

(Requires 4th Axis Fixture 690-3-63)



MISCELLANEOUS ACCESSORIES**650-3-37 1/2" (12.7mm) Universal Clamping Kit**

Including T-Nuts, Bolts, Studs, Strap Clamps, etc.

**7219W 5.2" (138.08mm) Heavy Duty T-Slot Universal Parallels**

USING 3RD PARTY TOOLING IN ROTTLER MACHINES WITH CAT 40 TOOLING.

When it is not convenient for the customer to order CAT 40 tooling from the factory or if the customer needs tooling that we don't stock, they may purchase tooling from 3rd part vendors such as MSC. The customer must specify a DIN 69871 SK 40 or ANSI B 5.50 CAT 40 tapered adaptor for use in Rottler machines.

Rottler uses a Parlec - A Style, CAT40 Taper, 5/8-11 Thread, 45 Degree Angle Radius, Standard Retention Knob with the following specifications: 1.68 Inch Overall Length, 0.281 Inch Coolant Hole Diameter, 0.74 Inch Knob Diameter, 0.12 Inch Flange Thickness, 0.64 Inch Knob to Flange Length, 0.635 Inch Pilot Diameter, Through Coolant

If customer purchases a DIN spec adaptor they will need to source a metric equivalent of the retention knob.

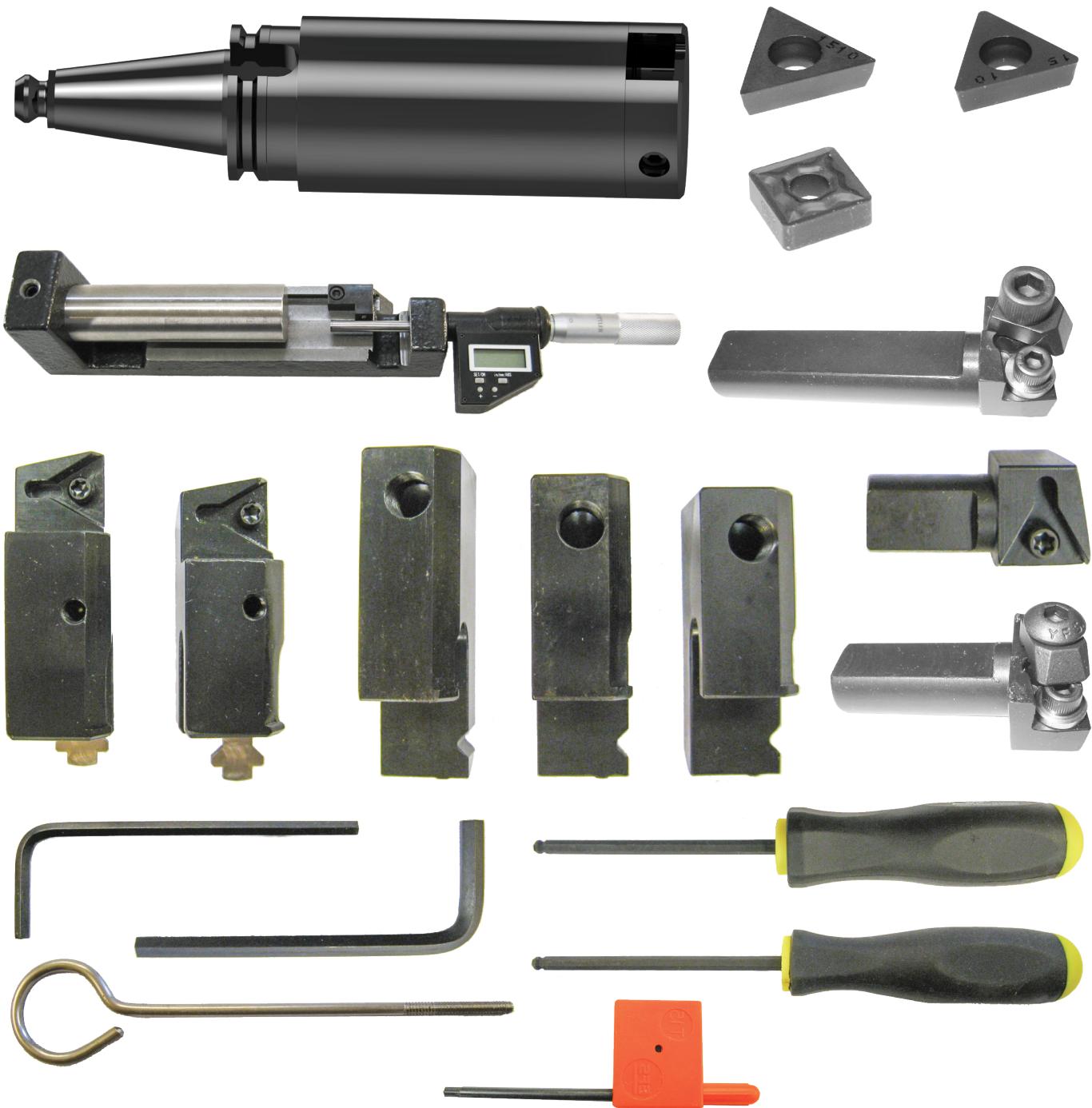
TOOLING FOR ENGINE BLOCK BORING AND RESLEEVING**650-2-1D Cutterhead Package**

2.0 - 4.0" (50.80 - 101.60mm) Diameter X 7.0" (177.80mm) Length Complete with Tooling and Digital Micrometer (See 'F60 Options' for breakdown)



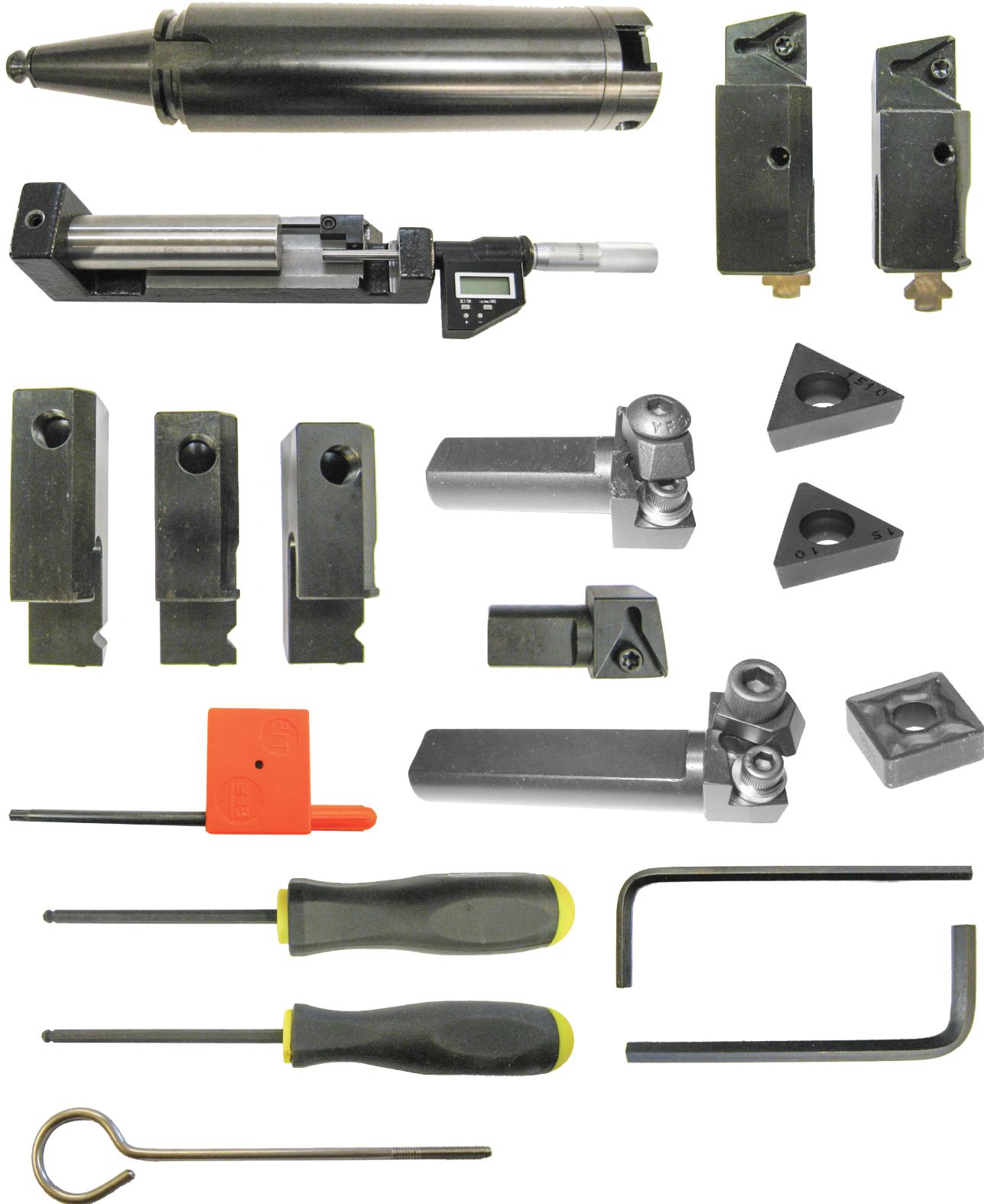
650-2-14B Cutterhead Package

2.9 - 5.0" (73.66 - 127.00mm) Diameter X 7.0" (177.80mm) Length Complete with Tooling and Digital Micrometer (See 'F60 Options' for breakdown)



650-2-14F Cutterhead Package

2.9 - 5.0" (73.66 - 127.00mm) Diameter X 10.0" (254mm) Length Complete with Tooling and Digital Micrometer (See 'F60 Options' for breakdown)



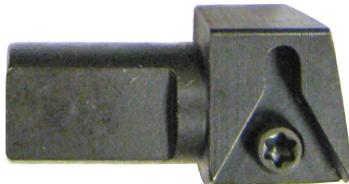
650-2-16D 1.400" (35.5mm) Spacer (Extension) for 650-2-14B&F Cutterheads**Miscellaneous Tooling for 650-2-14B&F Cutterheads**

501-29-6K PCD Tipped Triangular Insert For Boring/Counterboring Aluminum Only	6513J Brazed Carbide Tool Bit .037" Wide O Ring Grooving	6513L Brazed Carbide Tool Bit .039" Wide O Ring Grooving
A triangular PCD tipped insert with a central hole and text "501-29-6K" and "PCD".	A carbide tool bit labeled ".037" with a wide O ring grooving profile.	A carbide tool bit labeled ".039" with a wide O ring grooving profile.

6513N Brazed Carbide Tool Bit .060" Wide O Ring Grooving	6513P Brazed Carbide Tool Bit .085" Wide O Ring Grooving	6513Q Brazed Carbide Tool Bit .120" Wide O Ring Grooving
A carbide tool bit labeled ".060" with a wide O ring grooving profile.	A carbide tool bit labeled ".085" with a wide O ring grooving profile.	A carbide tool bit labeled ".120" with a wide O ring grooving profile.

6598M Cartridge Assembly

Positive Rake, 13/16 Shank Length, for Counter Boring

**6747P Cartridge Assembly**

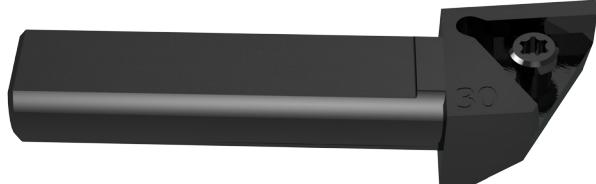
10 Degree Chamfer for Triangular Positive Rake Inserts

**6747F Cartridge Assembly**

20 Degree Chamfer for Triangular Positive Rake Inserts

**6747H Cartridge Assembly**

30 Degree Chamfer for Triangular Positive Rake Inserts

**6747K Cartridge Assembly**

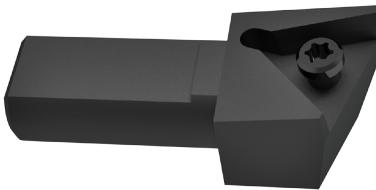
5 Degree Chamfer for Triangular Positive Rake Inserts

**6747G Cartridge Assembly**

15 Degree Chamfer for Triangular Positive Rake Inserts

**6747M Cartridge Assembly**

20 Degree Chamfer for Triangular Positive Rake Inserts
(Special Application Only)



6593L Cartridge Assembly

Offset Indexable Insert, Triangular Positive Rake (3.14 - 3.40" Diameter)

**6593M Cartridge Assembly**

Offset Indexable Insert, Triangular Positive Rake (3.40 - 3.90" Diameter)

**6593N Cartridge Assembly**

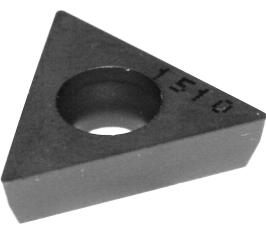
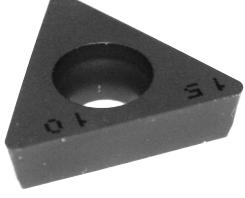
Offset Indexable Insert, Triangular Positive Rake (3.90 - 4.40" Diameter)

**6593P Cartridge Assembly**

Offset Indexable Insert, Triangular Positive Rake (4.40 - 4.90" Diameter)



Inserts for Cutterhead Tooling

RT211 Triangular Insert 1/4" (6.35mm) 1/64" (.397mm) radius, 1/4" triangular Insert holders only, general purpose and sleeving 	RT212 Triangular Insert 1/4" (6.35mm) 1/32" (.787mm) radius, 1/4" triangular Insert holders only, general purpose and sleeving 	RT321 Triangular Insert Positive rake, 3/8" (9.525mm) 1/64" (.397mm) radius, general purpose and sleeving 
RT322 Triangular Insert Positive rake, 3/8" (9.525mm) 1/32" (.787mm) radius, general purpose and sleeving 	RT321F Triangular Insert Positive rake, 3/8" 1/64" Radius, Precision Counterboring 	RT322F Triangular Insert Positive rake, 3/8" 1/32" Radius, Precision Counterboring 
RS322 Square Insert Negative rake, 1/32" (.787mm) radius, 3/8" (9.525mm) IC, black ceramic coated for high speed oversize thru boring 		

SURFACING TOOLING

650-2-8E Surfacing Cutterhead

Flycutter, 10" (254mm) Diameter Including (2) Radially and Axially Adjustable 3/8" (9.525mm) IC Insert Holders. Inserts must be ordered separately



650-2-8F Surfacing Cutterhead

Flycutter, 14" (356mm) Diameter Including (2) Radially and Axially Adjustable 3/8" (9.525mm) IC Insert Holders. Inserts must be ordered separately

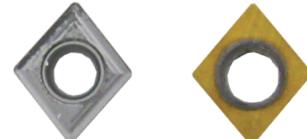


Inserts for Surfacing Cutterhead

6303B CBN Insert, Round Double-Sided, 3/8" (9.525mm) IC, for Cutting Cast Iron 	6303M PCD Insert, Round 3/8" (9.525mm) IC, for Cutting Aluminum 	6303K Coated Carbide Insert, Round 3/8" (9.525mm) IC, for General Purpose Use 
6303S CBN Insert, Round 3/8" (9.525mm) IC, for Cutting Aluminum Blocks with Liners 	6303U CBN Round Insert Single Sided, 3/8" IC. For hard cast iron 	

TOOLING FOR LIFTER BORE MACHINING**650-2-60B Lifter Bore Tooling Kit**

Utilizing Micro Adjustable Boring Bars from .750 - 1.180" (19.05 - 29.97mm)



650-2-60N Setting Fixture for 650-2-60B Lifter Tooling Package**650-2-60G Insert**

For 0.750 - 0.900 diameter cartridge

**650-2-60H Insert**

For 0.920 - 1.180 diameter cartridge



MAIN LINE BORE TOOLING

- Note: Cutterheads are not included with right angle drive and must be ordered separately
- Note: The Belt Drive Right Angle Drive is Designed for Limited Clearance Between Bearing Caps and It's Cutting Performance Will Deteriorate as Larger Diameters are Bored and Extension Spacers are Used.
- Note: Length of Bores can be Increased with Extension Spacers. The Addition of Extension Spacers Will Increase The Minimum Distance Between Bearing Housings by the Length of the Spacer. Allow for some Clearance either side of the Assembly for Safety While
- Rottler Right Angle Drive Line Bore System will not be able to Line Bore Blocks that have Castings Between the Main Bearing Caps Found in Some New Design Light Weight Blocks.
- Special Right Angle Drives are available for line boring overhead camshaft cylinder heads. Contact Rottler for more details and pricing.

6753Q Main Line Bore 90 Degree Right Angle Drive Assembly

Diameter 1.9 - 5.6" (48 - 142.2mm) Minimum clearance 3.29" (83.6mm) with 650-2-39B Cutterhead, Includes 5 extensions spacers



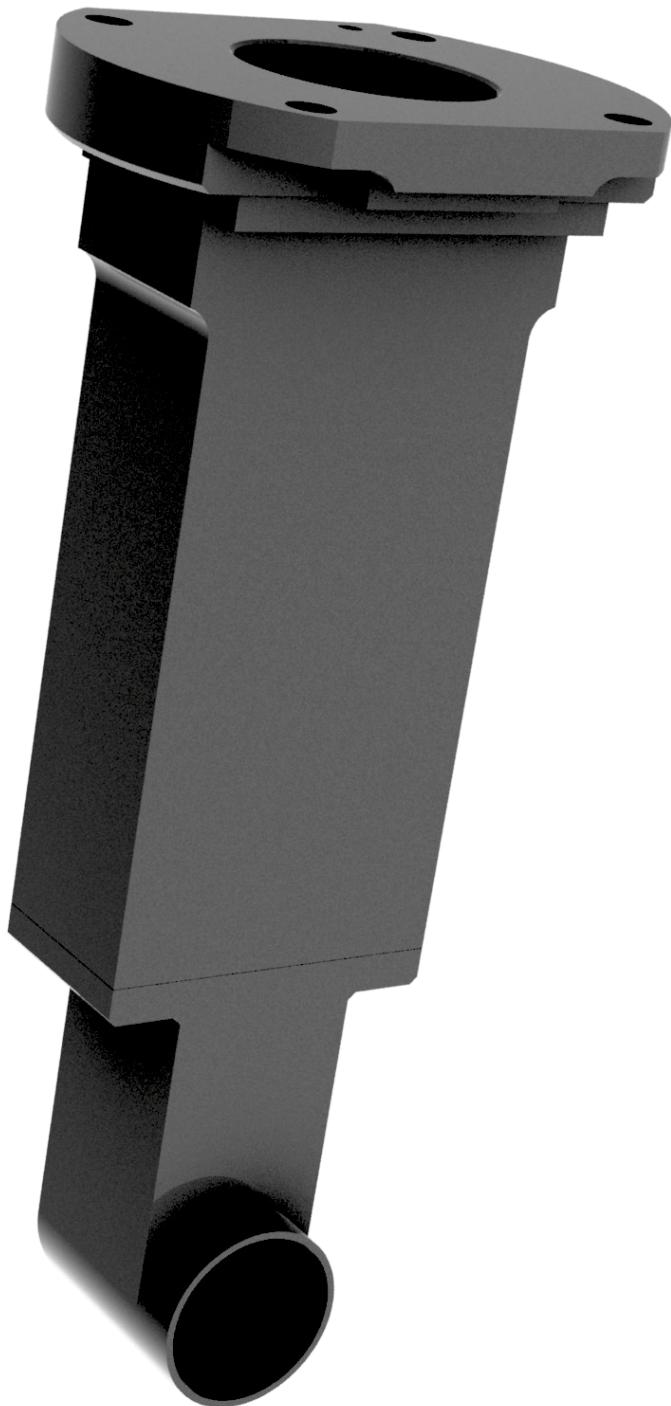
650-2-38G Special Belt Drive 90 Degree Right Angle Drive Assembly

For Limited Clearance Between Bearing Caps, Diameter 1.9 - 4.0" (48 - 101.6mm) Minimum clearance 2.7" (69mm) with 650-2-39B Cutterhead, includes 5 extension spacers



650-2-19M Narrow Right Angle Drive

1.9 - 2.4" (48 - 60.9mm) for special applications such as Cummins 5.9 camshaft tunnel. This Right Angle Drive does not require Cutterhead. Cummins 5.9 requires 6866 Wedge and 650-3-56 Line Bore Pivot Table



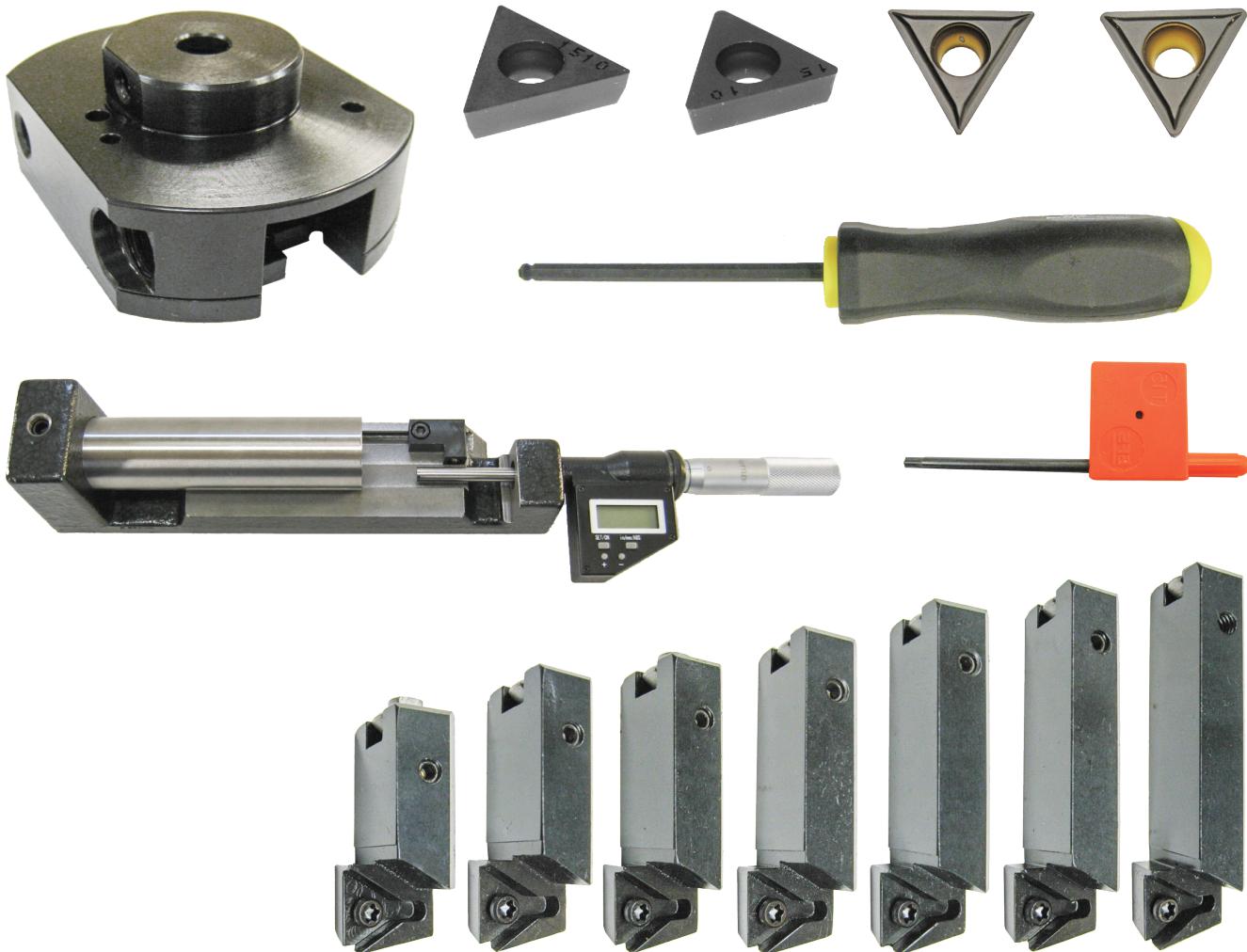
650-2-39B Cutterhead Package

Line Boring 1.9 - 4.0" (48.26 - 101.60mm) Diameter Complete with Tooling and Digital Micrometer. (When used with 11103 Drive, minimum distance between Bearing Housings 3.29") (83.6mm)



650-2-39C Cutterhead Package

Line Boring 2.9 - 5.6" (73.66 - 142.24mm) Diameter Complete with Tooling and Digital Micrometer. When used with 11103 Drive, minimum distance between Bearing Housings 4.07" (103.4mm)



SPECIAL MAIN LINE BORING THRUST FACING TOOL

6801M Tooling Package

Tool holder, Indexable Insert, Thrust Facing
.160 IC, Positive Rake



6801P Tooling Package

Tool holder, Indexable Insert, Thrust Facing 350 Chevy and
Other Small Blocks Line Boring



501-29-6G Insert, Triangular

.160 IC 1/64" (.397mm) Radius



501-29-6H Insert Screw



SPECIAL MAIN LINE BORING CHAMFERING TOOL**199-90 Tool holder, 2 - 3" (50.80 - 76.20mm)****199-96 Tool holder, 3 - 4" (76.20 - 101.60mm)****501-33E Tool bit, 45-Degree Chamfer**

CAM LINE BORING TOOLING**650-3-43T Cam Line Bore Tooling Package**

(Requires 650-3-30 Block End Truing Fixture, 650-3-1 Performance Fixture and 6753Q Right Angle Drive Assembly)
Customer Must Order Cam Line Bar Bushings and Cam Bearing Locators to Suit Diameter to be Line Bored.



CAM LINE BAR BUSHINGS

- If customer requires sizes other than listed below, rottler will manufacture the required size.
- Customer must provide the size, including tolerance, of the housing bore/s the bushing will be used in.
- Rottler will use this information to design the actual bushing.
- Bushings are machined smaller than housing bore.
- Sold in pairs.

650-3-43B Bushing - 63mm (2.480" +/- .0007)

(Sold in pairs)

**650-3-43C Bushing - 58mm (2.282" +/- .0007)**

(Sold in pairs)

**650-3-43D Bushing - (2.250" +/- .0007)**

(Sold in pairs)

**650-3-43E Bushing - (2.790" +/- .0007)**

(Sold in pairs)



650-3-43F Bushing - (2.309" +/- .0007)

(Sold in pairs)

**650-3-43H Bushing - (2.120" +/- .0007)**

(Sold in pairs)

**650-3-43K Bushing - (2.040" +/- .0015)**

(Sold in pairs)

**650-3-43G Bushing - (2.500" +/- .0007)**

(Sold in pairs)

**650-3-43J Bushing - (2.030" +/- .0007)**

(Sold in pairs)

**650-3-43L Bushing - (2.400" +/- .0007)**

(Sold in pairs)



650-3-43M Bushing - (2.125" +/- .0007)

(Sold in pairs)

**650-3-43P Bushing - (2.300" +/- .0007)**

(Sold in pairs)

**650-3-43R Bushing - (2.6733"+/- .0007)**

(Sold in pairs)

**650-3-43N Bushing - (2.150" +/- .0007)**

(Sold in pairs)

**650-3-43Q Bushing - (2.060" +/- .0007)**

(Sold in pairs)

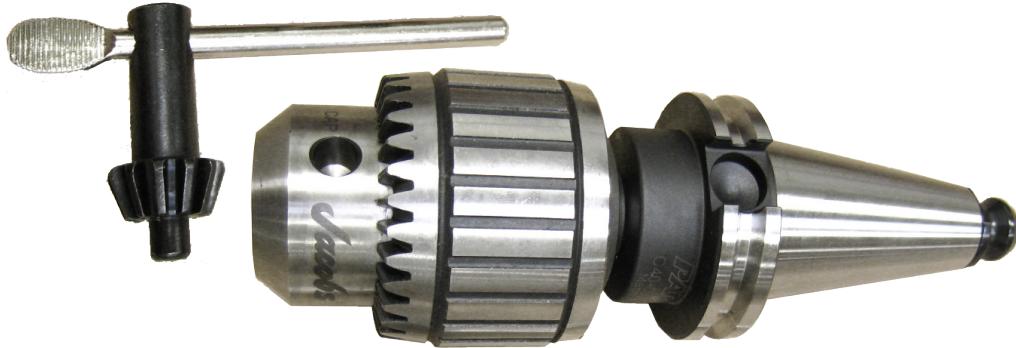
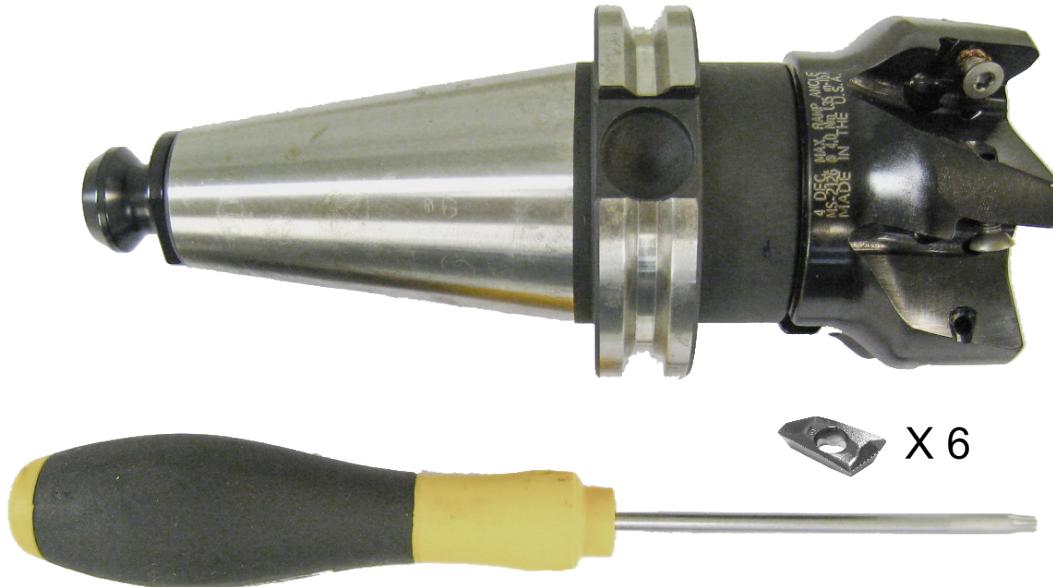
**650-3-43S Bushing - (2.0450 +/- .0007)**

(Sold in pairs)



THREAD TAPPING TOOLING**650-2-11K Quick Change Tap Holder Cartridge Assembly with Adapter**

650-2-11C Torque Control Tap Holder for 1/4" (6.35mm) taps  A close-up view of a torque control tap holder designed for 1/4 inch taps. It has a knurled collar and a tapered shank.	650-2-11D Torque Control Tap Holder for 5/16" (7.95mm) taps  A close-up view of a torque control tap holder designed for 5/16 inch taps. It has a knurled collar and a tapered shank.	650-2-11E Torque Control Tap Holder for 3/8" (9.525mm) taps  A close-up view of a torque control tap holder designed for 3/8 inch taps. It has a knurled collar and a tapered shank.
650-2-11F Torque Control Tap Holder for 7/16" (11.13mm) taps  A close-up view of a torque control tap holder designed for 7/16 inch taps. It has a knurled collar and a tapered shank.	650-2-11G Torque Control Tap Holder for 1/2" (12.70mm) taps  A close-up view of a torque control tap holder designed for 1/2 inch taps. It has a knurled collar and a tapered shank.	

DRILL TOOLING**650-2-44M Precision Drill Chuck Assembly****SHELL MILL ASSEMBLIES****650-2-44N 2 1/2" (63.50mm) Shell Mill Assembly**

650-2-44P 4" (101.60mm) Shell Mill Assembly**GAGES AND INDICATORS****650-3-38 Level-for Intake and Exhaust Manifolds****7152A Dual Axis Level Assembly**

650-2-44Q Three Dimensional Electronic Position Finder

With Spindle Adaptor and Retention Knob

**502-9-9S Indicator Mount**

Angled for small diameter main line bores

**502-9-9A Mechanical Run Out Indicator**

General Purpose (.001 Resolution)

**502-11-39D Mechanical Run Out Indicator**

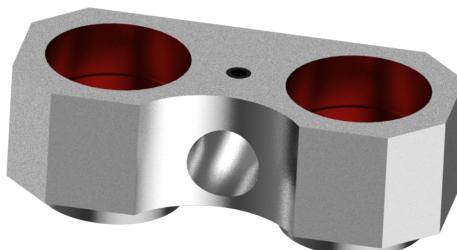
For Precision Bore Adjustment (.0001 Resolution)

**502-12-4 Magnetic Base**

Including (2) Extension Arms for Indicators (for centering cylinder bores) requires 502-9-9A

**502-12-4A Magnetic Indicator Holder Assembly**

For centering on main bores for line boring. (Requires 502-9-9A Mechanical Runout Indicator)

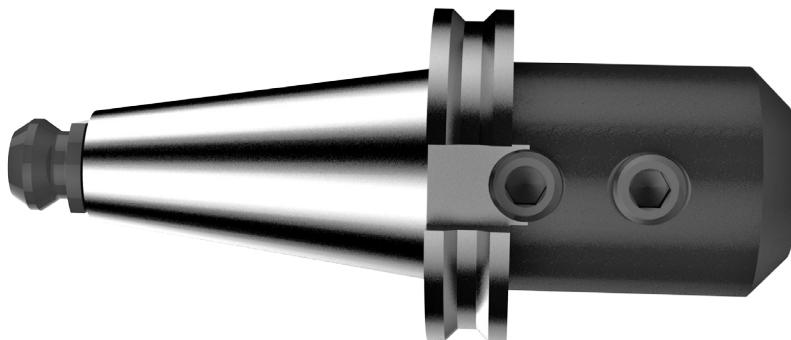


TOOLING FOR CRANKSHAFT STROKER CLEARANCING/NOTCHING**650-2-45H Roughing End Mill**

1" (25.4mm) diameter X 8 1/2" (216mm) long for block stroker clearance

**650-2-44A End Mill Adapter**

1" (25.4mm) Complete with 650-2-44L Retention Knob CAT 40 Taper



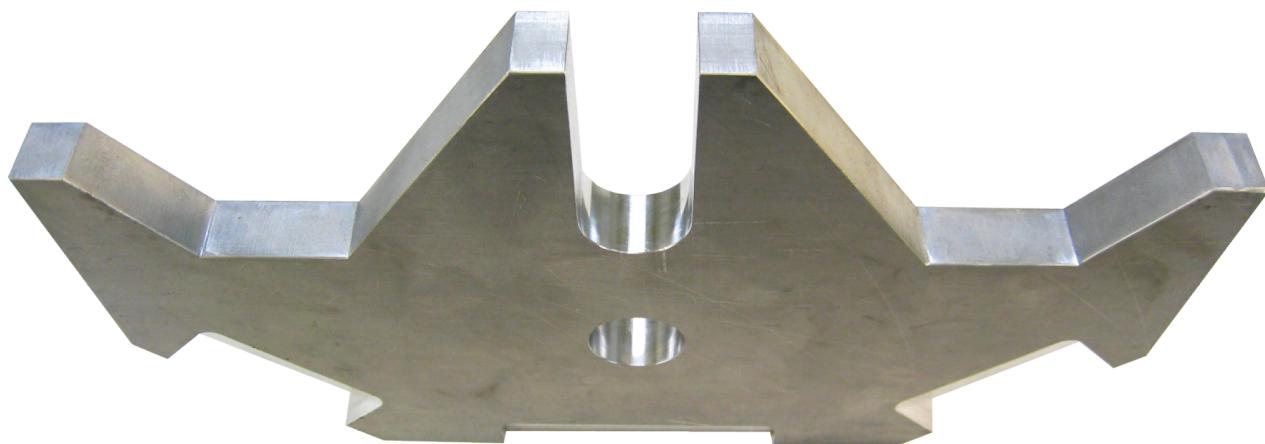
TOOLING FOR SPLAYED 4 BOLT MAIN CAP MACHINING**650-2-53 Splayed 4 Bolt Main Cap Machining Tooling Package**

Includes CAT40 Spindle adapters, spot facer, center drill, drill, 7/16" tap and torque tap holder. Recommend software packages 8300 & 9043 and 4th Axis Block Fixture 690-3-63.



BLOCK LIGHTENING TOOLING PACKAGES**650-2-44W Block Lightening Tooling Package for Dart Small Block Chev**

650-2-44X Block Lightening Tooling Package for World Products Small Block Chev

650-2-45J Block Lightening Tooling Package (CAT40 Taper) for Big Block Chevy**X 10****X 10****X 10****X 10**

650-2-45Q Big Block Main Cap Lightening Fixture Assembly with Tooling