

Alcoa  
Fastening  
Systems



# Recoil® KEYSERT® Products

Solid Threaded Inserts, Tooling, & Kits



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# Introduction

## KEYSERT®

### Thread Repair Inserts

#### The Solid Alternative for Thread Repair

Keyserts are solid, one-piece, key-locking inserts used to repair damaged threads or for use in original equipment. The Keysert locking keys provide a positive mechanical lock which prevents rotation due to vibration or torsion. Keyserts are available in carbon or stainless steel, both in inch and metric series. Thinwall, Heavy Duty, Extra Heavy Duty, and Solid insert styles are available separately or in kits containing a range of sizes. Installation tools are also available separately or in a range kit.

Requests for more information are welcome. The user assumes full responsibility for his or her applications. THERE IS NO WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE. No one is authorized by our company to make oral warranties.

#### Features

- Installed with standard drills and taps
- Easy installation
- May be used in many materials; aluminum, magnesium, and cold rolled steel
- Easy to remove

#### Typical Applications

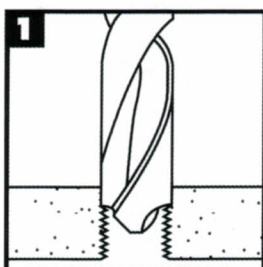
- Trucks, RV's
- Machinery, Small Engine
- Molds, Tool and Die
- MRO Tasks

#### Important Note

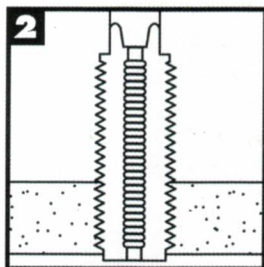
- Keyserts are not recommended for use in brittle materials, like cast iron or plastic

## Installation and Removal

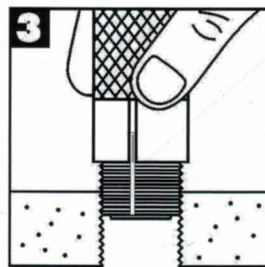
### Installation



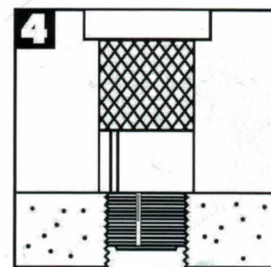
Drill out old threads with a standard drill.  
**Note: Drill is oversize - see charts for proper dimensions.** Chamfer the hole with a standard countersink (82°-100°).



Tap new threads with a standard tap. See charts for proper size and depth.

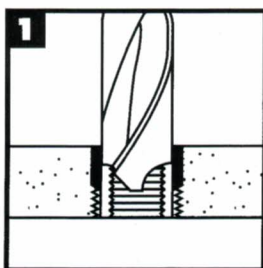


Screw in the insert until slightly below surface.

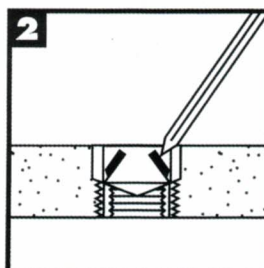


Drive keys down with several hammer taps on the proper installation tool.

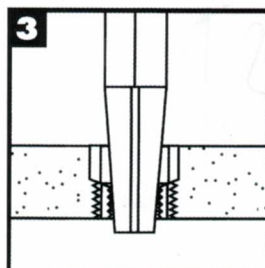
### Removal



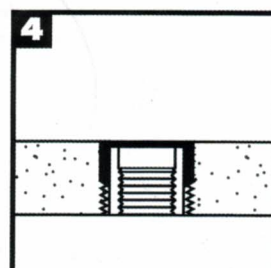
Drill out material between keys and internal thread with standard drill to specified depth (refer to charts for proper dimensions).



Deflect keys inward and break off.



Remove insert using an E-Z Out or similar type tool.



Same size replacement insert may be installed in the original hole.

# Carbon Steel Bulk Keyserts

## Thinwall - Inch Series - Carbon Steel

| INSERT             |                                      |                                       |        | INSTALLATION                     |                      |                                    | REMOVAL          |               |       |       |
|--------------------|--------------------------------------|---------------------------------------|--------|----------------------------------|----------------------|------------------------------------|------------------|---------------|-------|-------|
| Insert<br>Part No. | Internal<br>Thread<br>Class 2B or 3B | External<br>Thread (Mod.)<br>Class 2A | Length | Installation<br>Tool<br>Part No. | Tap<br>Drill<br>Size | C'Sink<br>Diameter<br>+.010/- .000 | Thread Tap       |               | Drill |       |
|                    |                                      |                                       |        |                                  |                      |                                    | Size<br>Class 2B | Min.<br>Depth | Size  | Depth |
| *73601             | 10-24                                | 5/16-18                               | 0.31   | 72190                            | I                    | 0.32                               | 5/16-18          | 0.37          | 7/32  | 1/8   |
| *74601             | 10-32                                |                                       |        |                                  |                      |                                    |                  |               |       |       |
| *73041             | 1/4-20                               | 3/8-16                                | 0.37   | 72250                            | Q                    | 0.38                               | 3/8-16           | 0.43          | 9/32  | 3/16  |
| *74041             | 1/4-28                               |                                       |        |                                  |                      |                                    |                  |               |       |       |
| *73051             | 5/16-18                              | 7/16-14                               | 0.43   | 72312                            | X                    | 0.44                               | 7/16-14          | 0.50          | 11/32 | 3/16  |
| *74051             | 5/16-24                              |                                       |        |                                  |                      |                                    |                  |               |       |       |
| *73061             | 3/8-16                               | 1/2-13                                | 0.50   | 72375                            | 29/64                | 0.51                               | 1/2-13           | 0.56          | 13/32 | 3/16  |
| *74061             | 3/8-24                               |                                       |        |                                  |                      |                                    |                  |               |       |       |
| *73071             | 7/16-14                              | 9/16-12                               | 0.56   | 72375                            | 33/64                | 0.57                               | 9/16-12          | 0.62          | 15/32 | 3/16  |
| *74071             | 7/16-20                              |                                       |        |                                  |                      |                                    |                  |               |       |       |
| *73081             | 1/2-13                               | 5/8-11                                | 0.62   | 72500                            | 37/64                | 0.63                               | 5/8-11           | 0.68          | 17/32 | 3/16  |
| *74081             | 1/2-20                               |                                       |        |                                  |                      |                                    |                  |               |       |       |

## Heavy Duty - Inch Series - Carbon Steel

| INSERT             |                                      |                                       |        | INSTALLATION                     |                      |                                    | REMOVAL          |               |         |       |
|--------------------|--------------------------------------|---------------------------------------|--------|----------------------------------|----------------------|------------------------------------|------------------|---------------|---------|-------|
| Insert<br>Part No. | Internal<br>Thread<br>Class 2B or 3B | External<br>Thread (Mod.)<br>Class 2A | Length | Installation<br>Tool<br>Part No. | Tap<br>Drill<br>Size | C'Sink<br>Diameter<br>+.010/- .000 | Thread Tap       |               | Drill   |       |
|                    |                                      |                                       |        |                                  |                      |                                    | Size<br>Class 2B | Min.<br>Depth | Size    | Depth |
| *73582             | 8-32                                 | 5/16-18                               | 0.31   | 70582                            | I                    | 0.32                               | 5/16-18          | 0.37          | 7/32    | 1/8   |
| *73602             | 10-24                                | 3/8-16                                | 0.31   | 72190                            | Q                    | 0.38                               | 3/8-16           | 0.37          | 9/32    | 1/8   |
| *74602             | 10-32                                |                                       |        |                                  |                      |                                    |                  |               |         |       |
| *73042             | 1/4-20                               | 7/16-14                               | 0.37   | 72250                            | X                    | 0.44                               | 7/16-14          | 0.43          | 11/32   | 3/16  |
| *74042             | 1/4-28                               |                                       |        |                                  |                      |                                    |                  |               |         |       |
| *73052             | 5/16-18                              | 1/2-13                                | 0.43   | 72312                            | 29/64                | 0.51                               | 1/2-13           | 0.50          | 13/32   | 3/16  |
| *74052             | 5/16-24                              |                                       |        |                                  |                      |                                    |                  |               |         |       |
| *73062             | 3/8-16                               | 9/16-12                               | 0.50   | 72375                            | 33/64                | 0.57                               | 9/16-12          | 0.56          | 15/32   | 3/16  |
| *74062             | 3/8-24                               |                                       |        |                                  |                      |                                    |                  |               |         |       |
| *73072             | 7/16-14                              | 5/8-11                                | 0.62   | 72375                            | 37/64                | 0.63                               | 5/8-11           | 0.68          | 17/32   | 3/16  |
| *74072             | 7/16-20                              |                                       |        |                                  |                      |                                    |                  |               |         |       |
| *73082             | 1/2-13                               | 3/4-16                                | 0.62   | 72500                            | 45/64                | 0.76                               | 3/4-16           | 0.68          | 21/32   | 3/16  |
| *74082             | 1/2-20                               |                                       |        |                                  |                      |                                    |                  |               |         |       |
| *73092             | 9/16-12                              | 3/4-16                                | 0.81   | 72500                            | 45/64                | 0.76                               | 3/4-16           | 0.94          | 21/32   | 3/16  |
| *74092             | 9/16-18                              |                                       |        |                                  |                      |                                    |                  |               |         |       |
| *73102             | 5/8-11                               | 7/8-14                                | 0.87   | 72625                            | 53/64                | 0.88                               | 7/8-14           | 1.00          | 25/32   | 5/16  |
| *74102             | 5/8-18                               |                                       |        |                                  |                      |                                    |                  |               |         |       |
| 73122              | 3/4-10                               | 1 1/8-12                              | 1.12   | 72875                            | 1 1/16               | 1.14                               | 1 1/8-12         | 1.31          | 31/32   | 5/16  |
| 74122              | 3/4-16                               |                                       |        |                                  |                      |                                    |                  |               |         |       |
| 73142              | 7/8-9                                | 1 1/4-12                              | 1.25   | 72875                            | 1 3/16               | 1.27                               | 1 1/4-12         | 1.44          | 1 3/32  | 5/16  |
| 74142              | 7/8-14                               |                                       |        |                                  |                      |                                    |                  |               |         |       |
| 73162              | 1-8                                  | 1 3/8-12                              | 1.37   | 72100                            | 1 5/16               | 1.39                               | 1 3/8-12         | 1.56          | 1 7/32  | 5/16  |
| 74162              | 1-12                                 |                                       |        |                                  |                      |                                    |                  |               |         |       |
| 74162-14           | 1-14                                 |                                       |        |                                  |                      |                                    |                  |               |         |       |
| 73182              | 1 1/8-7                              | 1 1/2-12                              | 1.62   | 70182                            | 1 7/16               | 1.52                               | 1 1/2-12         | 1.84          | 1 11/32 | 5/16  |
| 74182              | 1 1/8-12                             |                                       |        |                                  |                      |                                    |                  |               |         |       |
| 73202              | 1 1/4-7                              | 1 5/8-12                              | 1.81   | 70202                            | 1 9/16               | 1.64                               | 1 5/8-12         | 2.06          | 1 15/32 | 5/16  |
| 74202              | 1 1/4-12                             |                                       |        |                                  |                      |                                    |                  |               |         |       |
| 73242              | 1 1/2-6                              | 1 7/8-12                              | 2.00   | 70242                            | 1 13/16              | 1.89                               | 1 7/8-12         | 2.28          | 1 23/32 | 5/16  |
| 74242              | 1 1/2-12                             |                                       |        |                                  |                      |                                    |                  |               |         |       |

\* INDICATES PARTS NORMALLY AVAILABLE FROM STOCK.

LEAD TIMES AND MINIMUMS MAY APPLY ON ALL OTHER SIZES.

**BOLD** ITEMS HAVE A 3B INTERNAL THREAD CLASS, ALL OTHERS HAVE A 2B INTERNAL THREAD CLASS

# Carbon Steel Bulk Keyserts

## Technical Notes:

Material: Inserts - C1215 or equivalent  
Keys - 302 Stainless Steel

Finish: Carbon Steel Inserts - Zinc Phosphate and  
Ferrocote 364-3 Oil

Stainless Steel Inserts - Passivated

Tolerances:  $\pm 0.10$  inch or  $\pm .25$  mm unless  
specified otherwise.

Dimensions: Inch sizes are in inches.

Metric sizes are in millimeters.

Keys: Inserts with internal thread size 5/16 or M7  
and larger are furnished with 4 locking keys.



## Thinwall - Metric - Carbon Steel

| INSERT             |                                |                                |        | INSTALLATION                     |                      |                                 | REMOVAL          |               |       |       |
|--------------------|--------------------------------|--------------------------------|--------|----------------------------------|----------------------|---------------------------------|------------------|---------------|-------|-------|
| Insert<br>Part No. | Internal<br>Thread<br>Class 6H | External<br>Thread<br>Class 6g | Length | Installation<br>Tool<br>Part No. | Tap<br>Drill<br>Size | C'Sink<br>Diameter<br>+.25/-.00 | Thread Tap       |               | Drill |       |
|                    |                                |                                |        |                                  |                      |                                 | Size<br>Class 6H | Min.<br>Depth | Size  | Depth |
| *75051             | M5-.8                          | M8-1.25                        | 8.0    | 72190                            | 6.9                  | 8.25                            | M8-1.25          | 9.5           | 5.50  | 4.00  |
| *75061             | M6-1                           | M10-1.25                       | 10.0   | 72250                            | 8.8                  | 10.25                           | M10-1.25         | 11.5          | 7.50  | 4.75  |
| *75081             | M8-1.25                        | M12-1.25                       | 12.0   | 72312                            | 10.8                 | 12.25                           | M12-1.25         | 13.5          | 9.50  | 4.75  |
| 77081              | M8-1                           |                                |        |                                  |                      |                                 |                  |               |       |       |
| *75101             | M10-1.5                        | M14-1.5                        | 14.0   | 72375                            | 12.8                 | 14.25                           | M14-1.5          | 15.5          | 11.50 | 4.75  |
| 77101              | M10-1.25                       |                                |        |                                  |                      |                                 |                  |               |       |       |
| *75121             | M12-1.75                       | M16-1.5                        | 16.0   | 72500                            | 14.75                | 16.25                           | M16-1.5          | 17.5          | 13.50 | 4.75  |
| 78121              | M12-1.25                       |                                |        |                                  |                      |                                 |                  |               |       |       |

## Heavy Duty - Metric - Carbon Steel

| INSERT             |                                |                                |        | INSTALLATION                     |                      |                                 | REMOVAL          |               |       |       |
|--------------------|--------------------------------|--------------------------------|--------|----------------------------------|----------------------|---------------------------------|------------------|---------------|-------|-------|
| Insert<br>Part No. | Internal<br>Thread<br>Class 6H | External<br>Thread<br>Class 6g | Length | Installation<br>Tool<br>Part No. | Tap<br>Drill<br>Size | C'Sink<br>Diameter<br>+.25/-.00 | Thread Tap       |               | Drill |       |
|                    |                                |                                |        |                                  |                      |                                 | Size<br>Class 6H | Min.<br>Depth | Size  | Depth |
| 75042              | M4-.7                          | M8-1.25                        | 8.0    | 71042                            | 6.90                 | 8.25                            | M8-1.25          | 9.5           | 5.50  | 4.00  |
| 75052              | M5-.8                          | M10-1.25                       | 10.0   | 72190                            | 8.80                 | 10.25                           | M10-1.25         | 12.5          | 7.50  | 4.75  |
| 75062              | M6-1                           | M12-1.25                       | 12.0   | 72250                            | 10.80                | 12.25                           | M12-1.25         | 14.5          | 9.50  | 4.75  |
| 75082              | M8-1.25                        | M14-1.5                        | 14.0   | 72312                            | 12.80                | 14.25                           | M14-1.5          | 16.5          | 11.50 | 4.75  |
| 77082              | M8-1                           |                                |        |                                  |                      |                                 |                  |               |       |       |
| 75102              | M10-1.5                        | M16-1.5                        | 16.0   | 72375                            | 14.75                | 16.25                           | M16-1.5          | 18.5          | 13.50 | 4.75  |
| 77102              | M10-1.25                       |                                |        |                                  |                      |                                 |                  |               |       |       |
| 75122              | M12-1.75                       | M18-1.5                        | 18.0   | 72500                            | 16.75                | 18.25                           | M18-1.5          | 20.5          | 15.50 | 4.75  |
| 78122              | M12-1.25                       |                                |        |                                  |                      |                                 |                  |               |       |       |
| 75142              | M14-2                          | M20-1.5                        | 20.0   | 71142                            | 18.75                | 20.25                           | M20-1.5          | 22.5          | 17.50 | 4.75  |
| 77142              | M14-1.5                        |                                |        |                                  |                      |                                 |                  |               |       |       |
| 75162              | M16-2                          | M22-1.5                        | 22.0   | 72625                            | 20.50                | 22.25                           | M22-1.5          | 24.5          | 17.75 | 6.35  |
| 77162              | M16-1.5                        |                                |        |                                  |                      |                                 |                  |               |       |       |
| 78182              | M18-1.5                        | M24-1.5                        | 24.0   | 71182                            | 22.50                | 24.25                           | M24-1.5          | 26.5          | 19.75 | 6.35  |
| 75202              | M20-2.5                        | M30-2                          | 30.0   | 72875                            | 28.00                | 30.25                           | M30-2            | 34.5          | 25.75 | 6.35  |
| 78202              | M20-1.5                        |                                |        |                                  |                      |                                 |                  |               |       |       |
| 78222              | M22-1.5                        | M32-2                          | 32.0   | 72875                            | 30.00                | 32.25                           | M32-2            | 36.5          | 27.75 | 6.35  |
| 75242              | M24-3                          | M33-2                          | 33.0   | 71242                            | 31.00                | 33.25                           | M33-2            | 37.5          | 28.75 | 6.35  |
| 77242              | M24-2                          |                                |        |                                  |                      |                                 |                  |               |       |       |

\* INDICATES PARTS NORMALLY AVAILABLE FROM STOCK.

LEAD TIMES AND MINIMUMS MAY APPLY ON ALL OTHER SIZES.

# Carbon Steel Bulk Keyserts

Solid threaded inserts are perfect for:

- relocating holes that have been drilled or tapped in the wrong place
- plugging holes or filling in holes that are too big

**Technical Notes:**

**Material:** Inserts - C1215 or equivalent

Keys - 302 Stainless Steel

**Finish:** Carbon Steel Inserts - Zinc Phosphate and  
Ferrocote 364-3 Oil

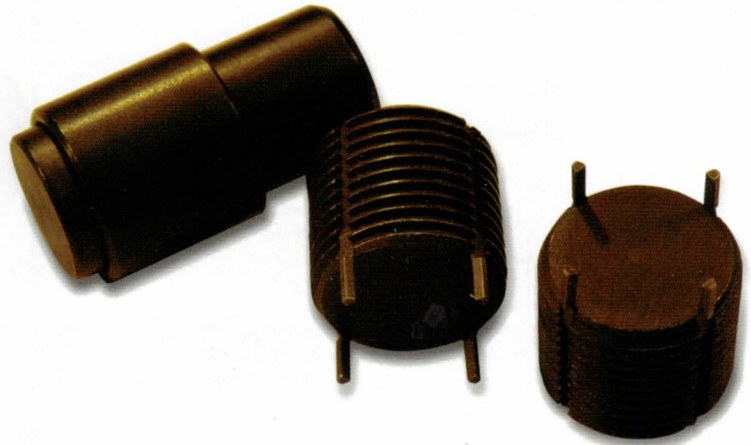
Stainless Steel Inserts - Passivated

**Tolerances:** ±0.10 inch or ±.25 mm unless  
specified otherwise.

**Dimensions:** Inch sizes are in inches.

Metric sizes are in millimeters.

**Keys:** Inserts with internal thread size 5/16 or M7  
and larger are furnished with 4 locking keys.



## Solid - Inch Series - Carbon Steel

| Insert<br>Part No. | External<br>Thread (Mod.)<br>Class 2A | Length | Installation<br>Tool<br>Part No. | Tap<br>Drill<br>Size | C'Sink<br>Diameter<br>+.010/- .000 | INSTALLATION     |               | REMOVAL |       |
|--------------------|---------------------------------------|--------|----------------------------------|----------------------|------------------------------------|------------------|---------------|---------|-------|
|                    |                                       |        |                                  |                      |                                    | Thread Tap       |               | Drill   |       |
|                    |                                       |        |                                  |                      |                                    | Size<br>Class 2B | Min.<br>Depth | Size    | Depth |
| 73054              | 5/16-18                               | 0.31   | 70054                            | I                    | 0.32                               | 5/16-18          | 0.37          | 7/32    | 1/8   |
| 73064              | 3/8-16                                | 0.31   | 70064                            | Q                    | 0.38                               | 3/8-16           | 0.37          | 9/32    | 1/8   |
| 73074              | 7/16-14                               | 0.37   | 70074                            | X                    | 0.44                               | 7/16-14          | 0.43          | 11/32   | 3/16  |
| 73084              | 1/2-13                                | 0.43   | 70084                            | 29/64                | 0.51                               | 1/2-13           | 0.50          | 13/32   | 3/16  |
| 73094              | 9/16-12                               | 0.50   | 70094                            | 33/64                | 0.57                               | 9/16-12          | 0.56          | 15/32   | 3/16  |
| 73104              | 5/8-11                                | 0.62   | 70104                            | 37/64                | 0.63                               | 5/8-11           | 0.68          | 17/32   | 3/16  |
| 73124              | 3/4-16                                | 0.68   | 70124                            | 45/64                | 0.76                               | 3/4-16           | 0.68          | 21/32   | 3/16  |
| 73144              | 7/8-14                                | 0.87   | 70144                            | 53/64                | 0.88                               | 7/8-14           | 1.00          | 25/32   | 5/16  |
| 74164              | 1-12                                  | 0.87   | 70164                            | 15/16                | 1.02                               | 1-12             | 1.00          | 27/32   | 5/16  |
| 74184              | 1 1/8-12                              | 1.12   | 70184                            | 1 1/16               | 1.14                               | 1 1/8-12         | 1.31          | 31/32   | 5/16  |
| 74204              | 1 1/4-12                              | 1.25   | 70204                            | 1 3/16               | 1.27                               | 1 1/4-12         | 1.44          | 1 3/32  | 5/16  |
| 74224              | 1 3/8-12                              | 1.37   | 70224                            | 1 5/16               | 1.39                               | 1 3/8-12         | 1.56          | 1 7/32  | 5/16  |

## Solid - Metric - Carbon Steel

| Insert<br>Part No. | External<br>Thread<br>Class 6g | Length | Installation<br>Tool<br>Part No. | Tap<br>Drill<br>Size | C'Sink<br>Diameter<br>+.25/- .00 | INSTALLATION     |               | REMOVAL |       |
|--------------------|--------------------------------|--------|----------------------------------|----------------------|----------------------------------|------------------|---------------|---------|-------|
|                    |                                |        |                                  |                      |                                  | Thread Tap       |               | Drill   |       |
|                    |                                |        |                                  |                      |                                  | Size<br>Class 6H | Min.<br>Depth | Size    | Depth |
| 75084              | M8-1.25                        | 8.0    | 71084                            | 6.90                 | 8.25                             | M8-1.25          | 9.5           | 5.50    | 4.00  |
| 77104              | M10-1.25                       | 10.0   | 71104                            | 8.80                 | 10.25                            | M10-1.25         | 12.5          | 7.50    | 4.75  |
| 78124              | M12-1.25                       | 12.0   | 71124                            | 10.80                | 12.25                            | M12-1.25         | 14.5          | 9.50    | 4.75  |
| 77144              | M14-1.5                        | 14.0   | 71144                            | 12.80                | 14.25                            | M14-1.5          | 16.5          | 11.50   | 4.75  |
| 77164              | M16-1.5                        | 16.0   | 71164                            | 14.75                | 16.25                            | M16-1.5          | 18.5          | 13.50   | 4.75  |
| 78184              | M18-1.5                        | 18.0   | 71184                            | 16.75                | 18.25                            | M18-1.5          | 20.5          | 15.50   | 4.75  |
| 78204              | M20-1.5                        | 20.0   | 71204                            | 18.75                | 20.25                            | M20-1.5          | 22.5          | 17.50   | 4.75  |
| 78224              | M22-1.5                        | 22.0   | 71224                            | 20.50                | 22.25                            | M22-1.5          | 24.5          | 17.75   | 6.35  |
| 78244              | M24-1.5                        | 24.0   | 71244                            | 22.50                | 24.25                            | M24-1.5          | 26.5          | 19.75   | 6.35  |
| 77304              | M30-2                          | 30.0   | 71304                            | 28.00                | 30.25                            | M30-2            | 34.5          | 25.75   | 6.35  |
| 77322              | M32-2                          | 32.0   | 71322                            | 30.00                | 32.25                            | M32-2            | 36.5          | 27.75   | 6.35  |
| 77332              | M33-2                          | 33.0   | 71332                            | 31.00                | 33.25                            | M33-2            | 37.5          | 28.75   | 6.35  |

ALL ITEMS ON THIS PAGE ARE CONSIDERED NON-STOCK ITEMS. LEAD TIMES AND MINIMUMS MAY APPLY.

# Carbon Steel Bulk Keyserts

## Extra Heavy Duty - Inch Series - Carbon Steel

| INSERT             |                                |                                       |        | INSTALLATION                     |                      |                                    |                  | REMOVAL       |         |       |
|--------------------|--------------------------------|---------------------------------------|--------|----------------------------------|----------------------|------------------------------------|------------------|---------------|---------|-------|
| Insert<br>Part No. | Internal<br>Thread<br>Class 2B | External<br>Thread (Mod.)<br>Class 2A | Length | Installation<br>Tool<br>Part No. | Tap<br>Drill<br>Size | C'Sink<br>Diameter<br>+.010/- .000 | Thread Tap       |               | Drill   |       |
|                    |                                |                                       |        |                                  |                      |                                    | Size<br>Class 2B | Min.<br>Depth | Size    | Depth |
| 73563              | 6-32                           | 5/16-18                               | 0.31   | 70563                            | I                    | 0.32                               | 5/16-18          | 0.37          | 7/32    | 1/8   |
| 73583              | 8-32                           | 3/8-16                                | 0.31   | 70583                            | Q                    | 0.38                               | 3/8-16           | 0.37          | 9/32    | 1/8   |
| 73603              | 10-24                          | 7/16-14                               | 0.31   | 70603                            | X                    | 0.44                               | 7/16-14          | 0.37          | 11/32   | 3/16  |
| 74603              | 10-32                          |                                       |        |                                  |                      |                                    |                  |               |         |       |
| 73043              | 1/4-20                         | 1/2-13                                | 0.37   | 70043                            | 29/64                | 0.51                               | 1/2-13           | 0.43          | 13/32   | 3/16  |
| 74043              | 1/4-28                         |                                       |        |                                  |                      |                                    |                  |               |         |       |
| 73053              | 5/16-18                        | 9/16-12                               | 0.43   | 70053                            | 33/64                | 0.57                               | 9/16-12          | 0.50          | 15/32   | 3/16  |
| 74053              | 5/16-24                        |                                       |        |                                  |                      |                                    |                  |               |         |       |
| 73063              | 3/8-16                         | 5/8-11                                | 0.50   | 70063                            | 37/64                | 0.63                               | 5/8-11           | 0.56          | 17/32   | 3/16  |
| 74063              | 3/8-24                         |                                       |        |                                  |                      |                                    |                  |               |         |       |
| 73073              | 7/16-14                        | 3/4-16                                | 0.62   | 70073                            | 45/64                | 0.76                               | 3/4-16           | 0.68          | 21/32   | 3/16  |
| 74073              | 7/16-20                        |                                       |        |                                  |                      |                                    |                  |               |         |       |
| 73083              | 1/2-13                         | 7/8-14                                | 0.68   | 70083                            | 53/64                | 0.88                               | 7/8-14           | 0.75          | 25/32   | 5/16  |
| 74083              | 1/2-20                         |                                       |        |                                  |                      |                                    |                  |               |         |       |
| 73093              | 9/16-12                        | 7/8-14                                | 0.81   | 70093                            | 53/64                | 0.88                               | 7/8-14           | 0.94          | 25/32   | 5/16  |
| 74093              | 9/16-18                        |                                       |        |                                  |                      |                                    |                  |               |         |       |
| 73103              | 5/8-11                         | 1-12                                  | 0.87   | 70103                            | 15/16                | 1.02                               | 1-12             | 1.00          | 27/32   | 5/16  |
| 74103              | 5/8-18                         |                                       |        |                                  |                      |                                    |                  |               |         |       |
| 73123              | 3/4-10                         | 1 1/4-12                              | 1.12   | 70123                            | 1 3/16               | 1.27                               | 1 1/4-12         | 1.31          | 1 3/32  | 5/16  |
| 74123              | 3/4-16                         |                                       |        |                                  |                      |                                    |                  |               |         |       |
| 73143              | 7/8-9                          | 1 3/8-12                              | 1.25   | 70143                            | 1 5/16               | 1.39                               | 1 3/8-12         | 1.44          | 1 7/32  | 5/16  |
| 74143              | 7/8-14                         |                                       |        |                                  |                      |                                    |                  |               |         |       |
| 73163              | 1-8                            | 1 1/2-12                              | 1.37   | 70163                            | 1 7/16               | 1.52                               | 1 1/2-12         | 1.56          | 1 11/32 | 5/16  |
| 74163              | 1-12                           |                                       |        |                                  |                      |                                    |                  |               |         |       |

ALL ITEMS ON THIS PAGE ARE CONSIDERED NON-STOCK ITEMS. LEAD TIMES AND MINIMUMS MAY APPLY.

## Carbon Steel Cross-Reference Index

| Keysert<br>Part No. | Alternate<br>Part No. | Keysert<br>Part No. | Alternate<br>Part No. | Keysert<br>Part No. | Alternate<br>Part No. |
|---------------------|-----------------------|---------------------|-----------------------|---------------------|-----------------------|
| 73041               | RKKA 1/4-20           | 73601               | RKKA 10-24            | 74202               | RKK 1 1/4-12          |
| 73042               | RKK 1/4-20            | 73602               | RKK 10-24             | 74242               | RKK 1 1/2-12          |
| 73051               | RKKA 5/16-18          | 74041               | RKKA 1/4-28           | 74601               | RKKA 10-32            |
| 73052               | RKK 5/16-18           | 74042               | RKK 1/4-28            | 74602               | RKK 10-32             |
| 73061               | RKKA 3/8-16           | 74051               | RKKA 5/16-24          | 75051               | KNM 5x0.8F            |
| 73062               | RKK 3/8-16            | 74052               | RKK 5/16-24           | 75061               | KNM 6x1F              |
| 73071               | RKKA 7/16-14          | 74061               | RKKA 3/8-24           | 75081               | KNM 8x1.25F           |
| 73072               | RKK 7/16-14           | 74062               | RKK 3/8-24            | 75101               | KNM 10x1.5F           |
| 73081               | RKKA 1/2-13           | 74071               | RKKA 7/16-20          | 75121               | KNM 12x1.75F          |
| 73082               | RKK 1/2-13            | 74072               | RKK 7/16-20           | 77081               | KNM 8x1F              |
| 73092               | RKK 9/16-12           | 74081               | RKKA 1/2-20           | 77101               | KNM 10x1.25F          |
| 73102               | RKK 5/8-11            | 74082               | RKK 1/2-20            | 78121               | KNM 12x1.25F          |
| 73122               | RKK 3/4-10            | 74092               | RKK 9/16-18           | 75142               | KNHM 14x2F            |
| 73142               | RKK 7/8-9             | 74102               | RKK 5/8-18            | 77142               | KNHM 14x1.5F          |
| 73162               | RKK 1-8               | 74122               | RKK 3/4-16            | 77162               | KNHM 16x1.5F          |
| 73182               | RKK 1 1/8-7           | 74142               | RKK 7/8-14            | 78182               | KNHM 18x1.5F          |
| 73202               | RKK 1 1/4-7           | 74162-14            | RKK 1-14              | 78202               | KNHM 20x1.5F          |
| 73242               | RKK 1 1/2-6           | 74162               | RKK 1-12              | 78222               | KNHM 22x1.5F          |
| 73582               | RKK 8-32              | 74182               | RKK 1 1/8-12          | 77242               | KNHM 24x2F            |

# Stainless Steel Bulk Keyserts

## Thinwall - Inch Series - Stainless Steel

| INSERT             |                                |                                      |        | INSTALLATION                     |                      |                                   | REMOVAL          |               |       |       |
|--------------------|--------------------------------|--------------------------------------|--------|----------------------------------|----------------------|-----------------------------------|------------------|---------------|-------|-------|
| Insert<br>Part No. | Internal<br>Thread<br>Class 3B | External<br>Thread (Mod)<br>Class 2A | Length | Installation<br>Tool<br>Part No. | Tap<br>Drill<br>Size | C'Sink<br>Diameter<br>+.010/-.000 | Thread Tap       |               | Drill |       |
|                    |                                |                                      |        |                                  |                      |                                   | Size<br>Class 2B | Min.<br>Depth | Size  | Depth |
| *73606             | 10-24                          | 5/16-18                              | 0.31   | 72190                            | I                    | 0.32                              | 5/16-18          | 0.37          | 7/32  | 1/8   |
| *74606             | 10-32                          |                                      |        |                                  |                      |                                   |                  |               |       |       |
| *73046             | 1/4-20                         | 3/8-16                               | 0.37   | 72250                            | Q                    | 0.38                              | 3/8-16           | 0.43          | 9/32  | 3/16  |
| *74046             | 1/4-28                         |                                      |        |                                  |                      |                                   |                  |               |       |       |
| *73056             | 5/16-18                        | 7/16-14                              | 0.43   | 72312                            | X                    | 0.44                              | 7/16-14          | 0.50          | 11/32 | 3/16  |
| *74056             | 5/16-24                        |                                      |        |                                  |                      |                                   |                  |               |       |       |
| *73066             | 3/8-16                         | 1/2-13                               | 0.50   | 72375                            | 29/64                | 0.51                              | 1/2-13           | 0.56          | 13/32 | 3/16  |
| *74066             | 3/8-24                         |                                      |        |                                  |                      |                                   |                  |               |       |       |
| *73076             | 7/16-14                        | 9/16-12                              | 0.56   | 72375                            | 33/64                | 0.57                              | 9/16-12          | 0.62          | 15/32 | 3/16  |
| 74076              | 7/16-20                        |                                      |        |                                  |                      |                                   |                  |               |       |       |
| *73086             | 1/2-13                         | 5/8-11                               | 0.62   | 72500                            | 37/64                | 0.63                              | 5/8-11           | 0.68          | 17/32 | 3/16  |
| *74086             | 1/2-20                         |                                      |        |                                  |                      |                                   |                  |               |       |       |

## Heavy Duty - Inch Series - Stainless Steel

| INSERT             |                                |                                                   |        | INSTALLATION                     |                      |                                   | REMOVAL          |               |        |       |
|--------------------|--------------------------------|---------------------------------------------------|--------|----------------------------------|----------------------|-----------------------------------|------------------|---------------|--------|-------|
| Insert<br>Part No. | Internal<br>Thread<br>Class 3B | External<br>Thread (Mod)<br>Class 2A or <b>3A</b> | Length | Installation<br>Tool<br>Part No. | Tap<br>Drill<br>Size | C'Sink<br>Diameter<br>+.010/-.000 | Thread Tap       |               | Drill  |       |
|                    |                                |                                                   |        |                                  |                      |                                   | Size<br>Class 2B | Min.<br>Depth | Size   | Depth |
| <b>*73587</b>      | 8-32                           | 5/16-18                                           | 0.31   | 70582                            | I                    | 0.32                              | 5/16-18          | 0.37          | 7/32   | 1/8   |
| *73607             | 10-24                          | 3/8-16                                            | 0.31   | 72190                            | Q                    | 0.38                              | 3/8-16           | 0.37          | 9/32   | 1/8   |
| *74607             | 10-32                          |                                                   |        |                                  |                      |                                   |                  |               |        |       |
| *73047             | 1/4-20                         | 7/16-14                                           | 0.37   | 72250                            | X                    | 0.44                              | 7/16-14          | 0.43          | 11/32  | 3/16  |
| *74047             | 1/4-28                         |                                                   |        |                                  |                      |                                   |                  |               |        |       |
| *73057             | 5/16-18                        | 1/2-13                                            | 0.43   | 72312                            | 29/64                | 0.51                              | 1/2-13           | 0.50          | 13/32  | 3/16  |
| *74057             | 5/16-24                        |                                                   |        |                                  |                      |                                   |                  |               |        |       |
| *73067             | 3/8-16                         | 9/16-12                                           | 0.50   | 72375                            | 33/64                | 0.57                              | 9/16-12          | 0.56          | 15/32  | 3/16  |
| *74067             | 3/8-24                         |                                                   |        |                                  |                      |                                   |                  |               |        |       |
| *73077             | 7/16-14                        | 5/8-11                                            | 0.62   | 72375                            | 37/64                | 0.63                              | 5/8-11           | 0.68          | 17/32  | 3/16  |
| 74077              | 7/16-20                        |                                                   |        |                                  |                      |                                   |                  |               |        |       |
| *73087             | 1/2-13                         | 3/4-16                                            | 0.62   | 72500                            | 45/64                | 0.76                              | 3/4-16           | 0.68          | 21/32  | 3/16  |
| *74087             | 1/2-20                         |                                                   |        |                                  |                      |                                   |                  |               |        |       |
| 73097              | 9/16-12                        | 3/4-16                                            | 0.81   | 72500                            | 45/64                | 0.76                              | 3/4-16           | 0.94          | 21/32  | 3/16  |
| 74097              | 9/16-18                        |                                                   |        |                                  |                      |                                   |                  |               |        |       |
| 73107              | 5/8-11                         | 7/8-14                                            | 0.87   | 72625                            | 53/64                | 0.88                              | 7/8-14           | 1.00          | 25/32  | 5/16  |
| 74107              | 5/8-18                         |                                                   |        |                                  |                      |                                   |                  |               |        |       |
| 73127              | 3/4-10                         | 1 1/8-12                                          | 1.12   | 72875                            | 1 1/16               | 1.14                              | 1 1/8-12         | 1.31          | 31/32  | 5/16  |
| 74127              | 3/4-16                         |                                                   |        |                                  |                      |                                   |                  |               |        |       |
| 73147              | 7/8-9                          | 1 1/4-12                                          | 1.25   | 72875                            | 1 3/16               | 1.27                              | 1 1/4-12         | 1.44          | 1 3/32 | 5/16  |
| 74147              | 7/8-14                         |                                                   |        |                                  |                      |                                   |                  |               |        |       |
| 73167              | 1-8                            | 1 3/8-12                                          | 1.37   | 72100                            | 1 5/16               | 1.39                              | 1 3/8-12         | 1.56          | 1 7/32 | 5/16  |
| 74167              | 1-12                           |                                                   |        |                                  |                      |                                   |                  |               |        |       |

\* INDICATES PARTS NORMALLY AVAILABLE FROM STOCK AND INTERNAL THREAD CLASS 3B.  
LEAD TIMES AND MINIMUMS MAY APPLY ON ALL OTHER SIZES.

**BOLD** ITEMS HAVE A 3A EXTERNAL THREAD CLASS, ALL OTHERS HAVE A 2A EXTERNAL THREAD CLASS

# Stainless Steel Bulk Keyserts

## Technical Notes:

Material: Inserts - 303 Stainless Steel

Keys - 302 Stainless Steel

Finish: Carbon Steel Inserts - Zinc Phosphate and  
Ferrocote 364-3 Oil

Stainless Steel Inserts - Passivated

Tolerances:  $\pm 0.10$  inch or  $\pm .25$  mm unless  
specified otherwise.

Dimensions: Inch sizes are in inches.

Metric sizes are in millimeters.

Keys: Inserts with internal thread size 5/16 or M7  
and larger are furnished with 4 locking keys.



## Thinwall - Metric - Stainless Steel

| INSERT             |                                |                                |        | INSTALLATION                     |                      |                                   |                  | REMOVAL       |       |       |
|--------------------|--------------------------------|--------------------------------|--------|----------------------------------|----------------------|-----------------------------------|------------------|---------------|-------|-------|
| Insert<br>Part No. | Internal<br>Thread<br>Class 6H | External<br>Thread<br>Class 6g | Length | Installation<br>Tool<br>Part No. | Tap<br>Drill<br>Size | C'Sink<br>Diameter<br>+ .25/- .00 | Thread Tap       |               | Drill |       |
|                    |                                |                                |        |                                  |                      |                                   | Size<br>Class 6H | Min.<br>Depth | Size  | Depth |
| *75056             | M5-.8                          | M8-1.25                        | 8.0    | 72190                            | 6.9                  | 8.25                              | M8-1.25          | 9.5           | 5.50  | 4.00  |
| *75066             | M6-1                           | M10-1.25                       | 10.0   | 72250                            | 8.8                  | 10.25                             | M10-1.25         | 11.5          | 7.50  | 4.75  |
| *75086             | M8-1.25                        | M12-1.25                       | 12.0   | 72312                            | 10.8                 | 12.25                             | M12-1.25         | 13.5          | 9.50  | 4.75  |
| 77086              | M8-1                           |                                |        |                                  |                      |                                   |                  |               |       |       |
| *75106             | M10-1.5                        | M14-1.5                        | 14.0   | 72375                            | 12.8                 | 14.25                             | M14-1.5          | 15.5          | 11.50 | 4.75  |
| 77106              | M10-1.25                       |                                |        |                                  |                      |                                   |                  |               |       |       |
| *75126             | M12-1.75                       | M16-1.5                        | 16.0   | 72500                            | 14.75                | 16.25                             | M16-1.5          | 17.5          | 13.50 | 4.75  |
| 78126              | M12-1.25                       |                                |        |                                  |                      |                                   |                  |               |       |       |

## Heavy Duty - Metric - Stainless Steel

| INSERT             |                                |                                |        | INSTALLATION                     |                      |                                   |                  | REMOVAL       |       |       |
|--------------------|--------------------------------|--------------------------------|--------|----------------------------------|----------------------|-----------------------------------|------------------|---------------|-------|-------|
| Insert<br>Part No. | Internal<br>Thread<br>Class 6H | External<br>Thread<br>Class 6g | Length | Installation<br>Tool<br>Part No. | Tap<br>Drill<br>Size | C'Sink<br>Diameter<br>+ .25/- .00 | Thread Tap       |               | Drill |       |
|                    |                                |                                |        |                                  |                      |                                   | Size<br>Class 6H | Min.<br>Depth | Size  | Depth |
| 75047              | M4-.7                          | M8-1.25                        | 8.0    | 71042                            | 6.90                 | 8.25                              | M8-1.25          | 9.5           | 5.50  | 4.00  |
| 75057              | M5-.8                          | M10-1.25                       | 10.0   | 72190                            | 8.80                 | 10.25                             | M10-1.25         | 12.5          | 7.50  | 4.75  |
| 75067              | M6-1                           | M12-1.25                       | 12.0   | 72250                            | 10.80                | 12.25                             | M12-1.25         | 14.5          | 9.50  | 4.75  |
| 75087              | M8-1.25                        | M14-1.5                        | 14.0   | 72312                            | 12.80                | 14.25                             | M14-1.5          | 16.5          | 11.50 | 4.75  |
| 77087              | M8-1                           |                                |        |                                  |                      |                                   |                  |               |       |       |
| 75107              | M10-1.5                        | M16-1.5                        | 16.0   | 72375                            | 14.75                | 16.25                             | M16-1.5          | 18.5          | 13.50 | 4.75  |
| 77107              | M10-1.25                       |                                |        |                                  |                      |                                   |                  |               |       |       |
| 75127              | M12-1.75                       | M18-1.5                        | 18.0   | 72500                            | 16.75                | 18.25                             | M18-1.5          | 20.5          | 15.50 | 4.75  |
| 78127              | M12-1.25                       |                                |        |                                  |                      |                                   |                  |               |       |       |
| 75147              | M14-2                          | M20-1.5                        | 20.0   | 71142                            | 18.75                | 20.25                             | M20-1.5          | 22.5          | 17.50 | 4.75  |
| 77147              | M14-1.5                        |                                |        |                                  |                      |                                   |                  |               |       |       |
| 75167              | M16-2                          | M22-1.5                        | 22.0   | 72625                            | 20.50                | 22.25                             | M22-1.5          | 24.5          | 17.75 | 6.35  |
| 77167              | M16-1.5                        |                                |        |                                  |                      |                                   |                  |               |       |       |
| 78187              | M18-1.5                        | M24-1.5                        | 24.0   | 71182                            | 22.50                | 24.25                             | M24-1.5          | 26.5          | 19.75 | 6.35  |
| 75207              | M20-2.5                        | M30-2                          | 30.0   | 72875                            | 28.00                | 30.25                             | M30-2            | 34.5          | 25.75 | 6.35  |
| 78207              | M20-1.5                        |                                |        |                                  |                      |                                   |                  |               |       |       |
| 78227              | M22-1.5                        | M32-2                          | 32.0   | 72875                            | 30.00                | 32.25                             | M32-2            | 36.5          | 27.75 | 6.35  |
| 75247              | M24-3                          | M33-2                          | 33.0   | 71242                            | 31.00                | 33.25                             | M33-2            | 37.5          | 28.75 | 6.35  |
| 77247              | M24-2                          |                                |        |                                  |                      |                                   |                  |               |       |       |

\* INDICATES PARTS NORMALLY AVAILABLE FROM STOCK.

LEAD TIMES AND MINIMUMS MAY APPLY ON ALL OTHER SIZES.

# Tooling & 4-Piece Range Kits

## TOOLING-ONLY RANGE KIT

### Keysert Tooling Range Kit

Part No. 72000

| Keysert Tool No. | Installs Inch Series (TW & HD) | Installs Metric Series (TW & HD) |
|------------------|--------------------------------|----------------------------------|
| 72190            | #10                            | M5                               |
| 72250            | 1/4"                           | M6                               |
| 72312            | 5/16"                          | M8                               |
| 72375            | 3/8"-7/16"                     | M10                              |
| 72500            | 1/2"-9/16"                     | M12                              |
| 72625            | 5/8"                           | M16                              |
| 72875            | 3/4"-7/8"                      | M20-22                           |
| 72100            | 1"                             | N/A                              |



## 4-PIECE RANGE KITS

### UNC Carbon Steel Thinwall Range Kit

Part No. 76003

| Size    | Keysert Insert No. | No. of Pieces | Keysert Tool No. | No. of Pieces |
|---------|--------------------|---------------|------------------|---------------|
| 1/4-20  | 73041              | 12            | 72250            | 1             |
| 5/16-18 | 73051              | 12            | 72312            | 1             |
| 3/8-16  | 73061              | 12            | 72375            | 1             |
| 1/2-13  | 73081              | 6             | 72500            | 1             |

### UNC Stainless Steel Thinwall Range Kit

Part No. 76004

| Size    | Keysert Insert No. | No. of Pieces | Keysert Tool No. | No. of Pieces |
|---------|--------------------|---------------|------------------|---------------|
| 1/4-20  | 73046              | 12            | 72250            | 1             |
| 5/16-18 | 73056              | 12            | 72312            | 1             |
| 3/8-16  | 73066              | 12            | 72375            | 1             |
| 1/2-13  | 73086              | 6             | 72500            | 1             |



### Metric Coarse Carbon Steel Thinwall Range Kit

Part No. 75003

| Size    | Keysert Insert No. | No. of Pieces | Keysert Tool No. | No. of Pieces |
|---------|--------------------|---------------|------------------|---------------|
| M5-0.8  | 75051              | 12            | 72190            | 1             |
| M6-1.0  | 75061              | 12            | 72250            | 1             |
| M8-1.25 | 75081              | 12            | 72312            | 1             |
| M10-1.5 | 75101              | 12            | 72375            | 1             |

### Metric Coarse Stainless Steel Thinwall Range Kit

Part No. 75004

| Size    | Keysert Insert No. | No. of Pieces | Keysert Tool No. | No. of Pieces |
|---------|--------------------|---------------|------------------|---------------|
| M5-0.8  | 75056              | 12            | 72190            | 1             |
| M6-1.0  | 75066              | 12            | 72250            | 1             |
| M8-1.25 | 75086              | 12            | 72312            | 1             |
| M10-1.5 | 75106              | 12            | 72375            | 1             |

# 6-Piece & Master Range Kits

## 6-PIECE RANGE KITS

**UNC Carbon Steel Heavy-Duty Range Kit**  
Part No. 70003

| Size    | Keysert<br>Insert No. | No. of<br>Pieces | Keysert<br>Tool No. | No. of<br>Pieces |
|---------|-----------------------|------------------|---------------------|------------------|
| 1/4-20  | 73042                 | 20               | 70042               | 1                |
| 5/16-18 | 73052                 | 15               | 70052               | 1                |
| 3/8-16  | 73062                 | 10               | 70062               | 1                |
| 1/2-13  | 73082                 | 6                | 70082               | 1                |
| 5/8-11  | 73102                 | 3                | 70102               | 1                |
| 3/4-10  | 73122                 | 3                | 70122               | 1                |

**UNF Carbon Steel Heavy-Duty Range Kit**  
Part No. 71003

| Size    | Keysert<br>Insert No. | No. of<br>Pieces | Keysert<br>Tool No. | No. of<br>Pieces |
|---------|-----------------------|------------------|---------------------|------------------|
| 1/4-28  | 74042                 | 20               | 70042               | 1                |
| 5/16-24 | 74052                 | 15               | 70052               | 1                |
| 3/8-24  | 74062                 | 10               | 70062               | 1                |
| 1/2-20  | 74082                 | 6                | 70082               | 1                |
| 5/8-18  | 74102                 | 3                | 70102               | 1                |
| 3/4-16  | 74122                 | 3                | 70122               | 1                |

**UNC Stainless Steel Heavy-Duty Range Kit**  
Part No. 70004

| Size    | Keysert<br>Insert No. | No. of<br>Pieces | Keysert<br>Tool No. | No. of<br>Pieces |
|---------|-----------------------|------------------|---------------------|------------------|
| 1/4-20  | 73047                 | 20               | 70042               | 1                |
| 5/16-18 | 73057                 | 15               | 70052               | 1                |
| 3/8-16  | 73067                 | 10               | 70062               | 1                |
| 1/2-13  | 73087                 | 6                | 70082               | 1                |
| 5/8-11  | 73107                 | 3                | 70102               | 1                |
| 3/4-10  | 73127                 | 3                | 70122               | 1                |

**UNF Stainless Steel Heavy-Duty Range Kit**  
Part No. 71004

| Size    | Keysert<br>Insert No. | No. of<br>Pieces | Keysert<br>Tool No. | No. of<br>Pieces |
|---------|-----------------------|------------------|---------------------|------------------|
| 1/4-28  | 74047                 | 20               | 70042               | 1                |
| 5/16-24 | 74057                 | 15               | 70052               | 1                |
| 3/8-24  | 74067                 | 10               | 70062               | 1                |
| 1/2-20  | 74087                 | 6                | 70082               | 1                |
| 5/8-18  | 74107                 | 3                | 70102               | 1                |
| 3/4-16  | 74127                 | 3                | 70122               | 1                |

## MASTER RANGE KITS

**UNC Carbon Steel Heavy-Duty Range Kit**  
Part No. 73003

| Size    | Keysert<br>Insert No. | No. of<br>Pieces | Keysert<br>Tool No. | No. of<br>Pieces |
|---------|-----------------------|------------------|---------------------|------------------|
| 1/4-20  | 73042                 | 20               | 70042               | 1                |
| 5/16-18 | 73052                 | 15               | 70052               | 1                |
| 3/8-16  | 73062                 | 10               | 70062               | 1                |
| 7/16-14 | 73072                 | 10               | 70072               | 1                |
| 1/2-13  | 73082                 | 6                | 70082               | 1                |
| 9/16-12 | 73092                 | 5                | 70092               | 1                |
| 5/8-11  | 73102                 | 3                | 70102               | 1                |
| 3/4-10  | 73122                 | 3                | 70122               | 1                |
| 7/8-9   | 73142                 | 3                | 70142               | 1                |
| 1-8     | 73162                 | 2                | 70162               | 1                |

**UNF Carbon Steel Heavy-Duty Range Kit**  
Part No. 74003

| Size    | Keysert<br>Insert No. | No. of<br>Pieces | Keysert<br>Tool No. | No. of<br>Pieces |
|---------|-----------------------|------------------|---------------------|------------------|
| 1/4-28  | 74042                 | 20               | 70042               | 1                |
| 5/16-24 | 74052                 | 15               | 70052               | 1                |
| 3/8-24  | 74062                 | 10               | 70062               | 1                |
| 7/16-20 | 74072                 | 10               | 70072               | 1                |
| 1/2-20  | 74082                 | 6                | 70082               | 1                |
| 9/16-18 | 74092                 | 5                | 70092               | 1                |
| 5/8-18  | 74102                 | 3                | 70102               | 1                |
| 3/4-16  | 74122                 | 3                | 70122               | 1                |
| 7/8-14  | 74142                 | 3                | 70142               | 1                |
| 1-12    | 74162                 | 2                | 70162               | 1                |

**UNC Stainless Steel Heavy-Duty Range Kit**  
Part No. 73004

| Size    | Keysert<br>Insert No. | No. of<br>Pieces | Keysert<br>Tool No. | No. of<br>Pieces |
|---------|-----------------------|------------------|---------------------|------------------|
| 1/4-20  | 73047                 | 20               | 70042               | 1                |
| 5/16-18 | 73057                 | 15               | 70052               | 1                |
| 3/8-16  | 73067                 | 10               | 70062               | 1                |
| 7/16-14 | 73077                 | 10               | 70072               | 1                |
| 1/2-13  | 73087                 | 6                | 70082               | 1                |
| 9/16-12 | 73097                 | 5                | 70092               | 1                |
| 5/8-11  | 73107                 | 3                | 70102               | 1                |
| 3/4-10  | 73127                 | 3                | 70122               | 1                |
| 7/8-9   | 73147                 | 3                | 70142               | 1                |
| 1-8     | 73167                 | 2                | 70162               | 1                |

**UNF Stainless Steel Heavy-Duty Range Kit**  
Part No. 74004

| Size    | Keysert<br>Insert No. | No. of<br>Pieces | Keysert<br>Tool No. | No. of<br>Pieces |
|---------|-----------------------|------------------|---------------------|------------------|
| 1/4-28  | 74047                 | 20               | 70042               | 1                |
| 5/16-24 | 74057                 | 15               | 70052               | 1                |
| 3/8-24  | 74067                 | 10               | 70062               | 1                |
| 7/16-20 | 74077                 | 10               | 70072               | 1                |
| 1/2-20  | 74087                 | 6                | 70082               | 1                |
| 9/16-18 | 74097                 | 5                | 70092               | 1                |
| 5/8-18  | 74107                 | 3                | 70102               | 1                |
| 3/4-16  | 74127                 | 3                | 70122               | 1                |
| 7/8-14  | 74147                 | 3                | 70142               | 1                |
| 1-12    | 74167                 | 2                | 70162               | 1                |