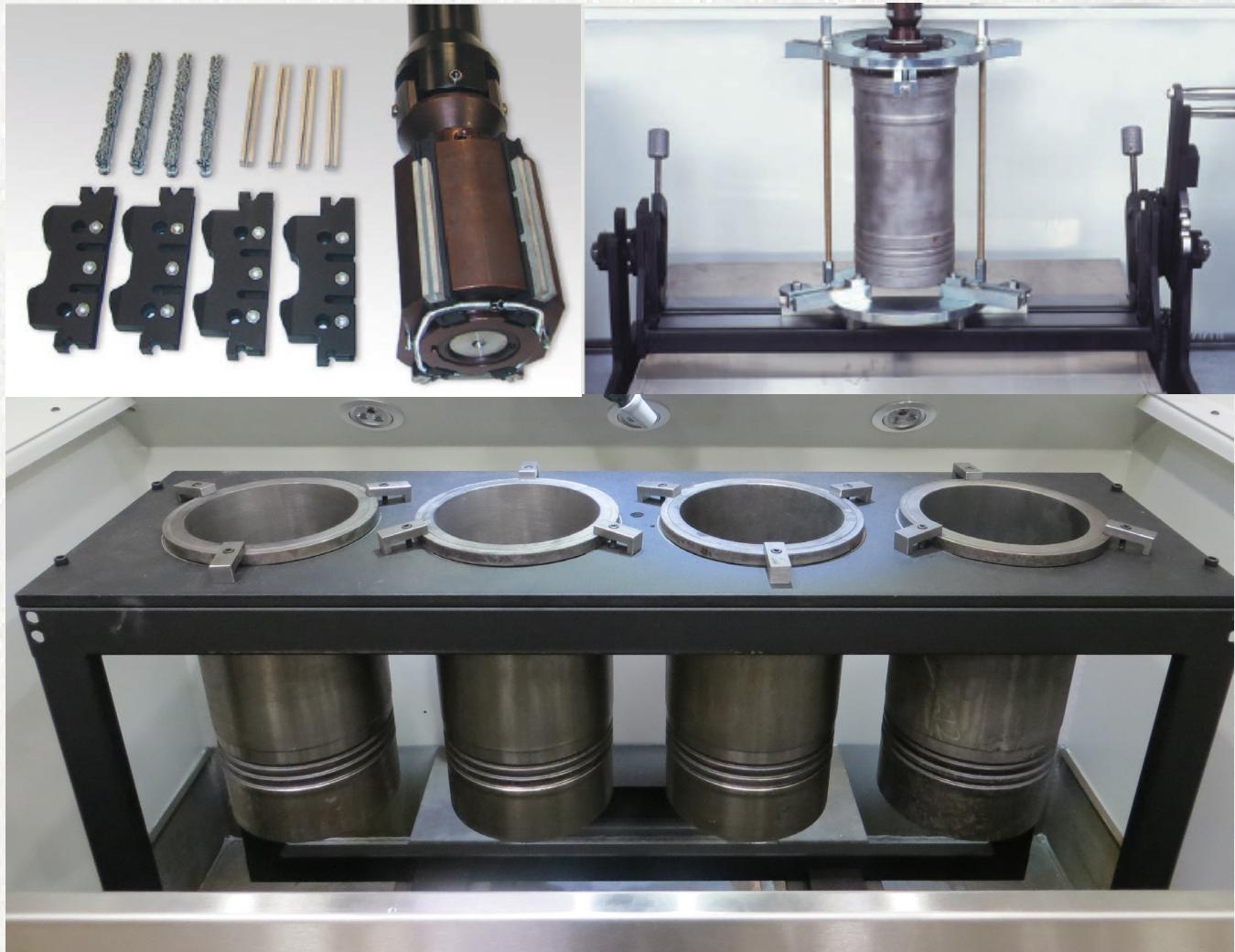


# ROTTLER

THE CUTTING EDGE  
**HP7A OPTIONAL  
EQUIPMENT PARTS  
MANUAL**



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

December 8, 2014



## **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 specialists.

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](mailto: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**



## Contents

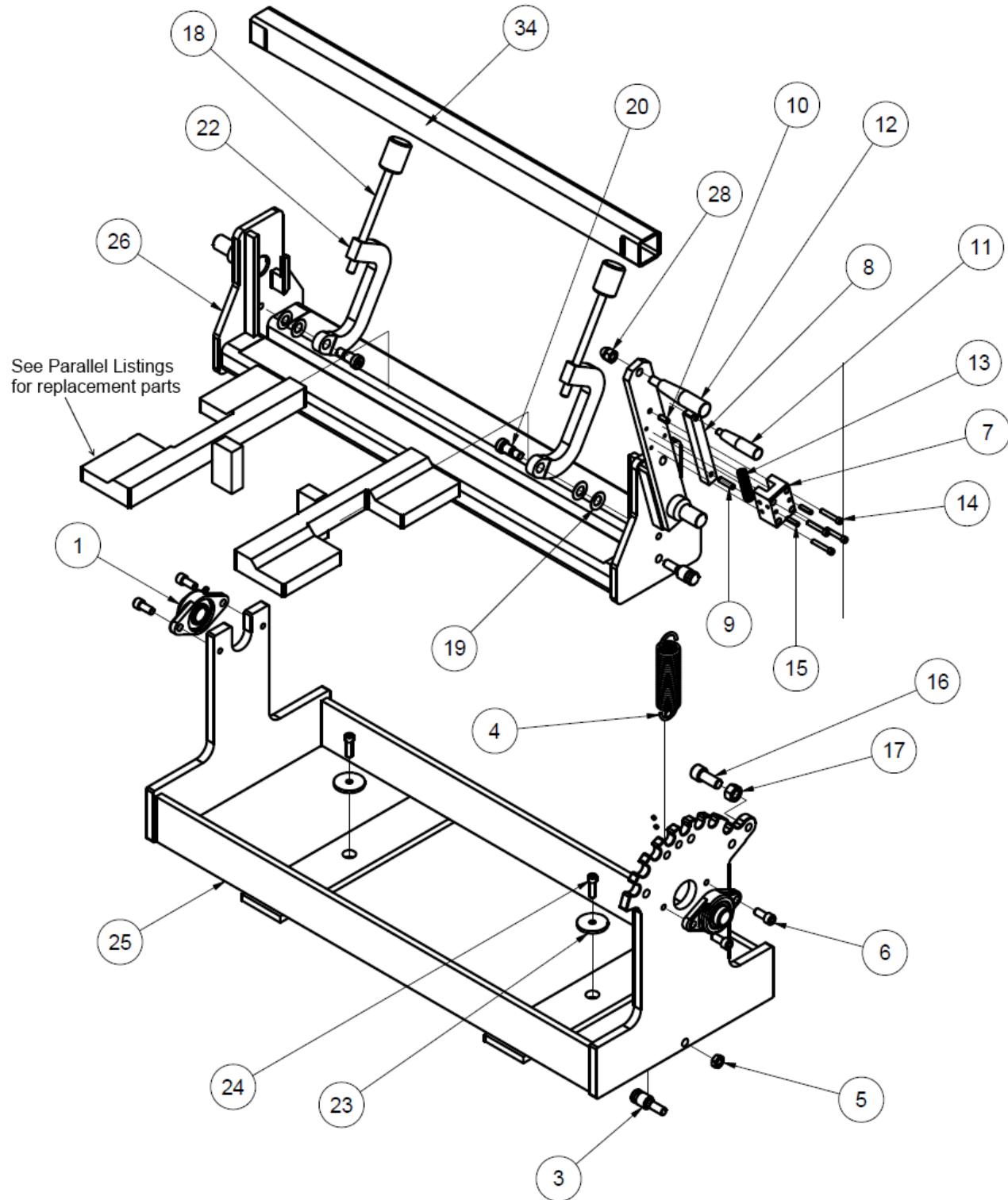
Fixturing.....	4
514-7C Manual Indexable Roll Over Fixture Parts.....	4
Parallel Block Riser Sets.....	6
Splash Tray & Magnet .....	7
502-1-30H Clamp Arm Parts .....	8
11115 2" (50mm) X 3" (75mm) Parallels.....	10
11112 Universal Heavy Duty T-Slot Parallels Parts .....	11
11114 Universal Heavy Duty T-Slot Parallels Parts .....	13
Cylinder Liner Fixtures .....	15
514-11-5 Cylinder Liner Honing Fixture Parts .....	15
514-11-6 Fixture Plate Parts .....	16
514-11-7 Fixture Plate Parts .....	17
514-11-4 Fixture Plate Parts .....	18
Optional Coolant and Filter Equipment.....	19
514-4-71C Synthetic coolant .....	19
514-4-71D Coolant refractor.....	19
514-7-66D Filter paper .....	20
514-2-40 Optional canister filter system.....	20
514-2-39P Filter Cartridge 10 micron .....	21
514-2-39Q Filter Cartridge 20 micron.....	21
514-2-39Z Filter Cartridge 150 micron .....	21
514-3-68W External Coolant Tank Parts.....	22
Precision Hone Heads, Sleeves and Stone Holders .....	23
514-10 Medium Hone Head Parts .....	23
Stone Holders for Medium Hone Head .....	25
514-10-13 Series Stone Holder Parts.....	26
514-9A Large Hone Head Parts .....	27
514-9-4 Series Sleeve Parts .....	28
514-9-6J Stone Holder.....	29
514-9-6A Stone Holder .....	29
514-9-6B Stone Holder .....	29
514-9-6C Stone Holder .....	29
514-9-6D Stone Holder .....	30

514-9-6E Stone Holder .....	30
514-9-6F Stone Holder .....	30
514-9-6G Stone Holder.....	30
514-9-6H Stone Holder.....	31
514-9-6K Stone Holder .....	31
514-9-6L Stone Holder.....	31
514-9-6M Stone Holder.....	31
514-9-6N Stone Holder.....	32
514-9-6P Stone Holder .....	32
514-9-6Q Stone Holder.....	32
514-9-6R Stone Holder .....	32
514-9-6S Stone Holder .....	33
514-9-6 Series Stone Holder Parts .....	33
Abrasives for Precision Hone Heads .....	34
Diamond Stones .....	34
514-9-14F Diamond stones, 80 grit .....	34
514-9-14R Diamond stones .....	34
514-9-14W Diamond stones, 140/170 grit.....	34
514-9-14K Diamond stones, 170/200 grit .....	34
514-9-14M Diamond stones, 170/200 grit .....	34
514-9-14J Diamond stones, 270/325 grit.....	35
514-9-14T Diamond stones, 270/325 grit .....	35
514-9-14Z Diamond Stones 270/325 grit.....	35
514-9-14E Diamond stones, 325/400 grit .....	35
514-9-14Q Diamond stones, 325/400 grit.....	35
514-9-14X Diamond stones, 325/400 grit .....	36
514-9-14V Diamond stones, 400 grit .....	36
514-9-14C Diamond stones, 500 grit.....	36
514-9-14P Diamond stones, 500 grit .....	36
514-9-14D Diamond stones, 325/400 grit.....	36
514-9-14U Diamond stones, 500 grit .....	37
514-9-14L Diamond stones, 550 grit .....	37
514-9-14N Diamond stones, 550 grit .....	37
514-9-14G Diamond stones, 600 grit.....	37
514-9-14S Diamond stones, 600 grit .....	37

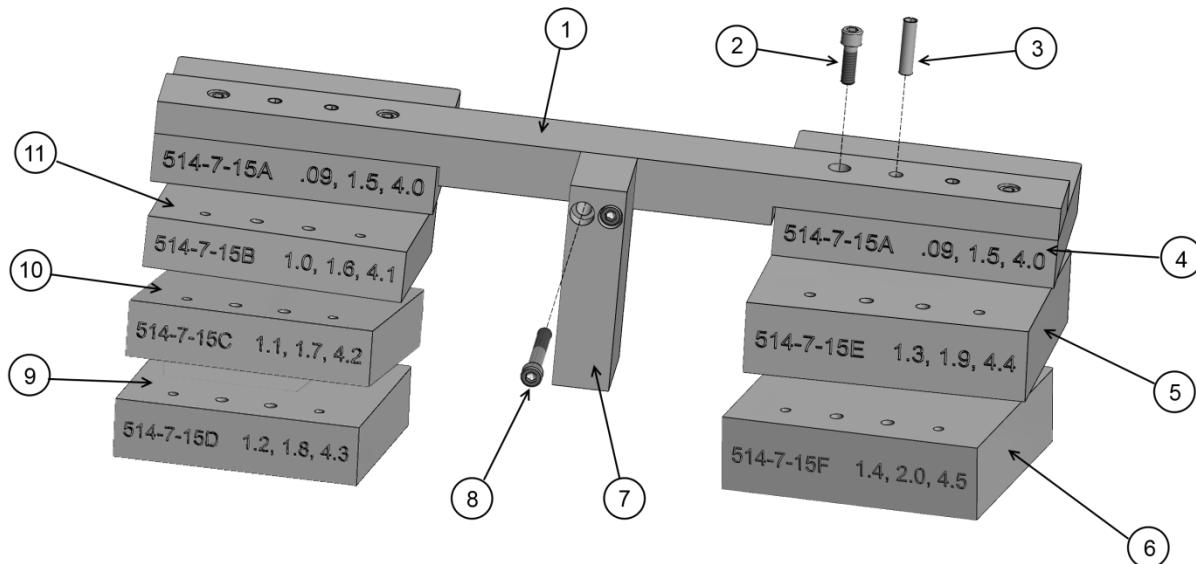
514-9-21G Diamond stones, 800 grit.....	38
514-9-21H Diamond stones, 1000 grit.....	38
514-9-21J Diamond stones, 1200 grit.....	38
Brushes for Plateau Finishing .....	39
514-9-14H Brushes, for Plateau Finishing.....	39
514-9-14Y Brushes, for Plateau Finishing.....	39
Special Stones for Finishing Aluminum Silicone Cylinders.....	40
514-9-18P Special Red Finish Diamonds.....	40
514-9-18N Silicone Abrasive Exposing Stones .....	40
514-9-21 Polishing felt pads .....	40
514-9-21F Silicone Paste .....	40
Optional Measuring Equipment.....	41
201 Mitutoyo Surface Tester Surftest.....	41
514-8-27 Stone Depth Scale and Holder Assembly (inch).....	41
514-8-27F Stone Depth Scale and Holder Assembly (metric) .....	41

## Fixturing

### 514-7C Manual Indexable Roll Over Fixture Parts



514-7C BLOCK HOLD DOWN FIXTURE ASSEMBLY - HONE			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	2	514-7-13	BLOCK, FLANGE, BLOCK HOLDDOWN FIXTURE
3	2	514-3-72A	PIN, SPRING RETAINER, BLOCK HOLD DOWN FIXTURE
4	1	514-3-34A	SPRING, EXTENSION - BLOCK HOLD DOWN FIXTURE
5	2	MF-165	1/2-13UNC HEX NUT
6	4	MF-39	Hexagon Socket Head Cap Screw
7	1	514-3-56A	INDEX PIN SUPPORT - BLOCK HOLD DOWN FIXTURE HONE
8	1	514-7-9B	INDEX PIN - BLOCK HOLD DOWN FIXTURE - HONE
9	1	MF-227A	Pin - Slotted Spring
10	1	MF-227B	Pin - Slotted Spring
11	1	514-3-58A	HANDLE, INDEX - BLOCK HOLD DOWN FIXTURE - HONE
12	1	514-3-59B	HANDLE, PIVOT ARM - BLOCK HOLD DOWN FIXTURE & V6/V8 AIR FIXTURE
13	1	514-3-70	SPRING, HANDLE RETURN
14	4	MF-17	Hexagon Socket Head Cap Screw
15	2	MF-226	Pin - Slotted Spring
16	1	MF-46A	Hexagon Socket Head Cap Screw
17	1	MF-166	5/8-11UNC HEX NUT
18	2	7223	CLAMP ASSEMBLY - MANUAL V6/V8 COMB. FIXTURE
19	4	514-7-21	Bellville Spring
20	2	514-7-22A	5/8 x 3/4" LG. SOCKET SHOULDER SCREW
22	2	514-7-10A	CLAMP ARM (MACHINING), BLOCK HOLD DOWN FIXTURE - HONE
23	2	514-7-1C	WASHER, HOLDDOWN - BLOCK HOLDDOWN FIXTURE - HONE
24	2	MF-32	S.H.C.S.3/8 - 16 UNC - 1 1/4
25	1	514-7-1E	MAIN FRAME REDESIGN (MACHINING)
26	1	514-7-3C	CRADLE (MACHINING), BLOCK HOLD DOWN FIXTURE
27	2	514-7-15	SUPPORT, BLOCK - BLOCK HOLD DOWN FIXTURE
28	1	514-3-59C	1/2-13UNC ACORN NUT
35	2	514-3-56B	TERCITE PAD

**Parallel Block Riser Sets**

PARALLEL BLOCK RISER PARTS			
ITEM	PART NUMBER	DESCRIPTION	QTY
1	514-7-15Q	PARALLEL CROSS SUPPORT	2
2	MF-14	1/4-20 X 3/4 SHCS	8
3	MF-226	1/4 X 1 ROLL PIN	8
4	514-7-15A	A SPACER	4
5	514-7-15E	E SPACER	4
6	514-7-15F	F SPACER	4
7	514-7-15R	PARALLEL NUB	2
8	MF-19	1/4-20 X 2 SHCS	4
9	514-7-15D	D SPACER	4
10	514-7-15C	C SPACER	4
11	514-7-15B	B SPACER	4

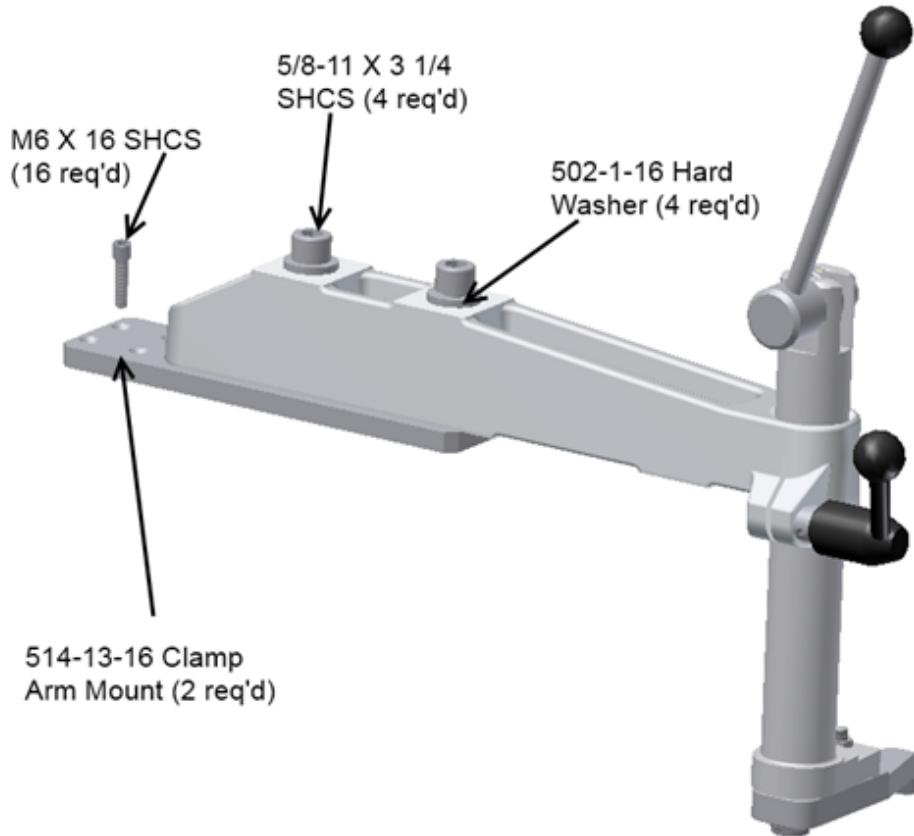
**Splash Tray & Magnet**

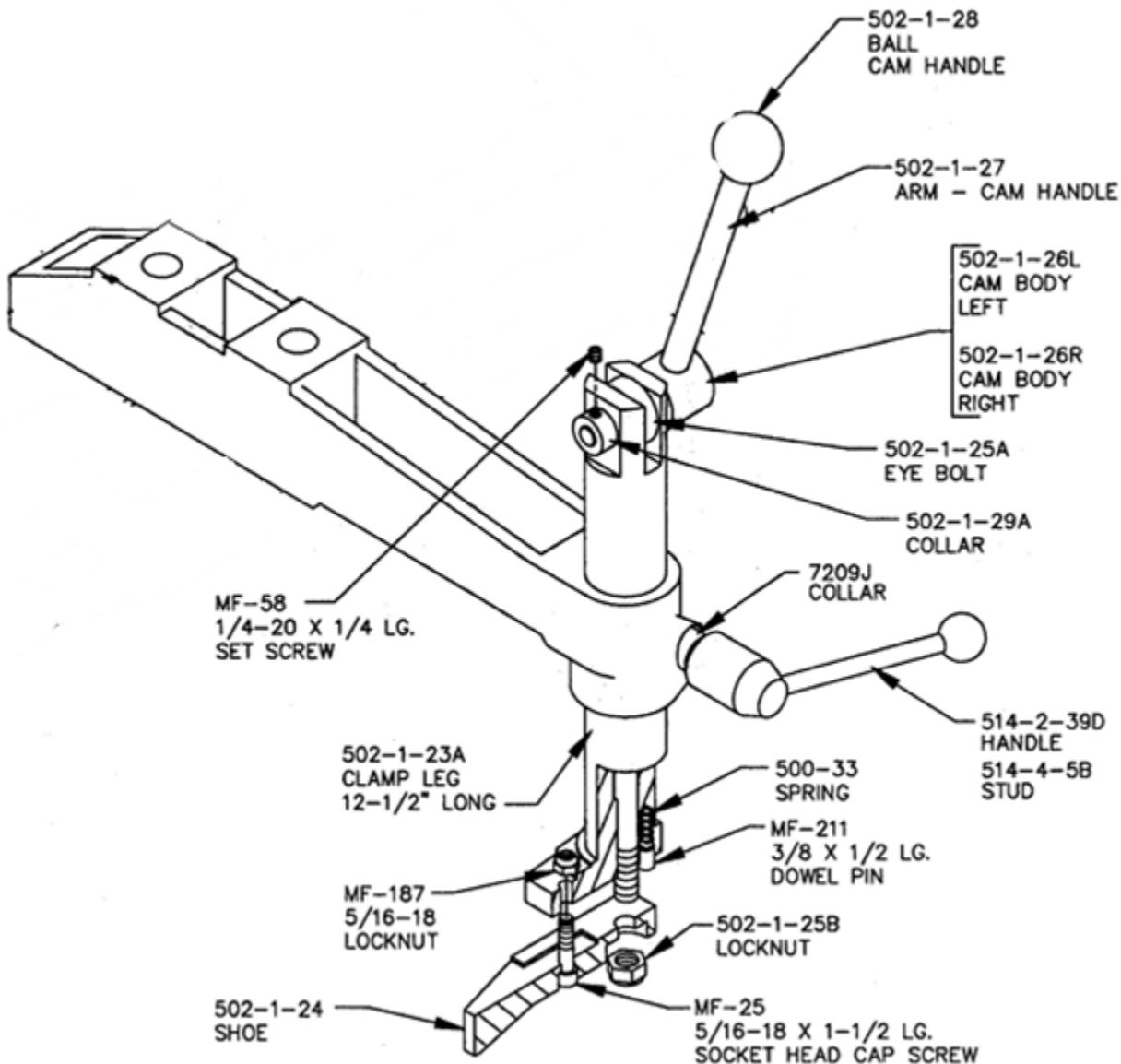
**514-7-65S Splash Tray**

**514-7-65T Magnet Assembly**

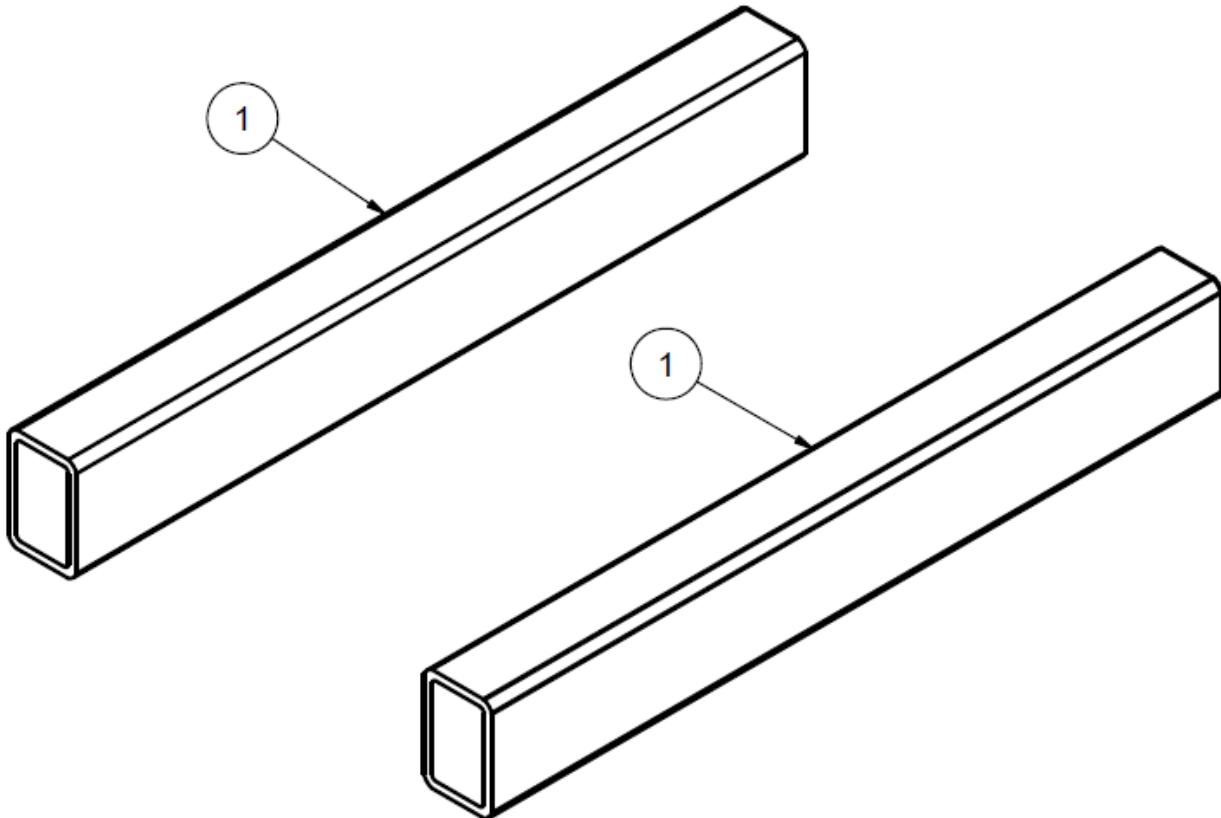


## 502-1-30H Clamp Arm Parts



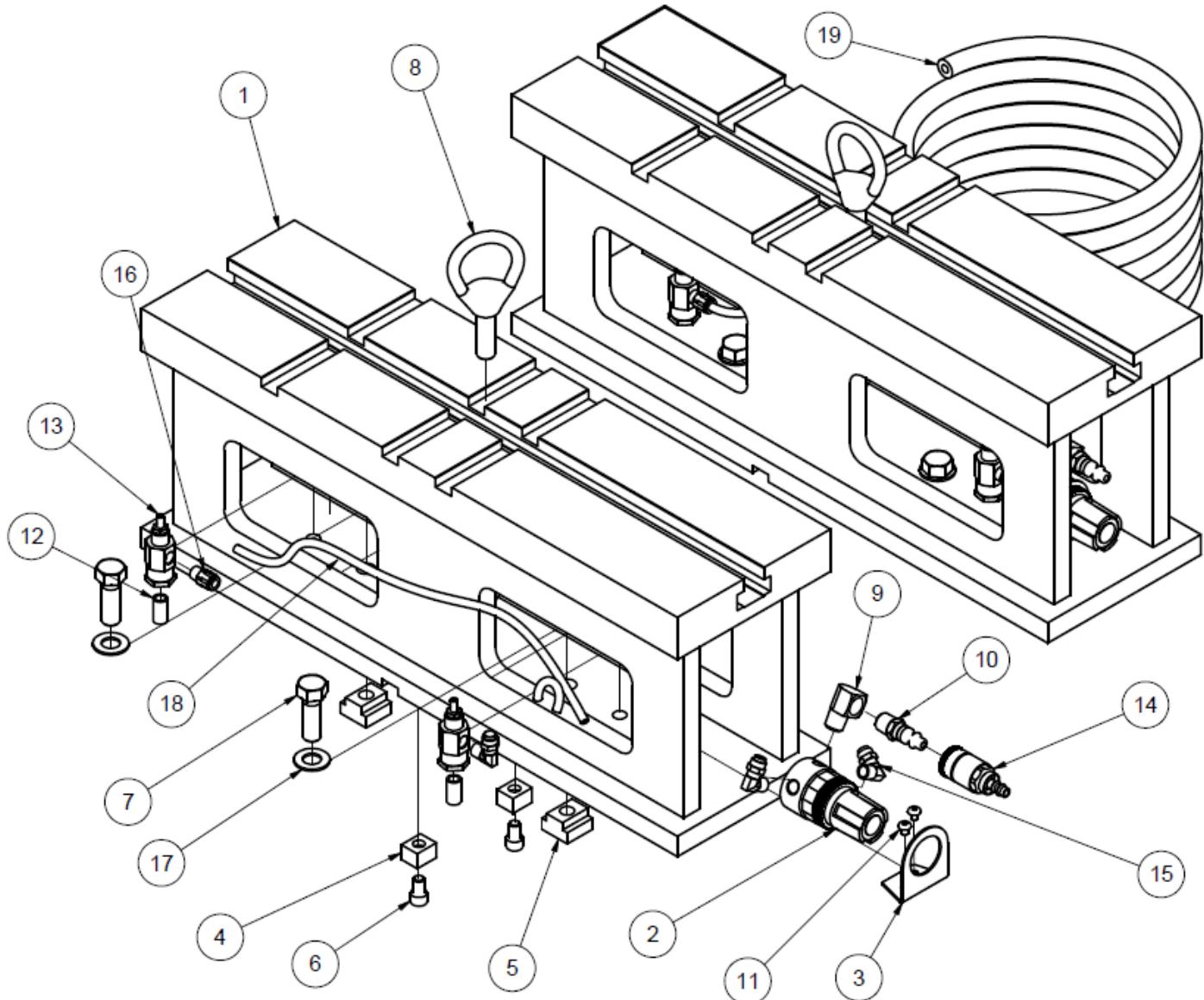


**11115 2" (50mm) X 3" (75mm) Parallels**



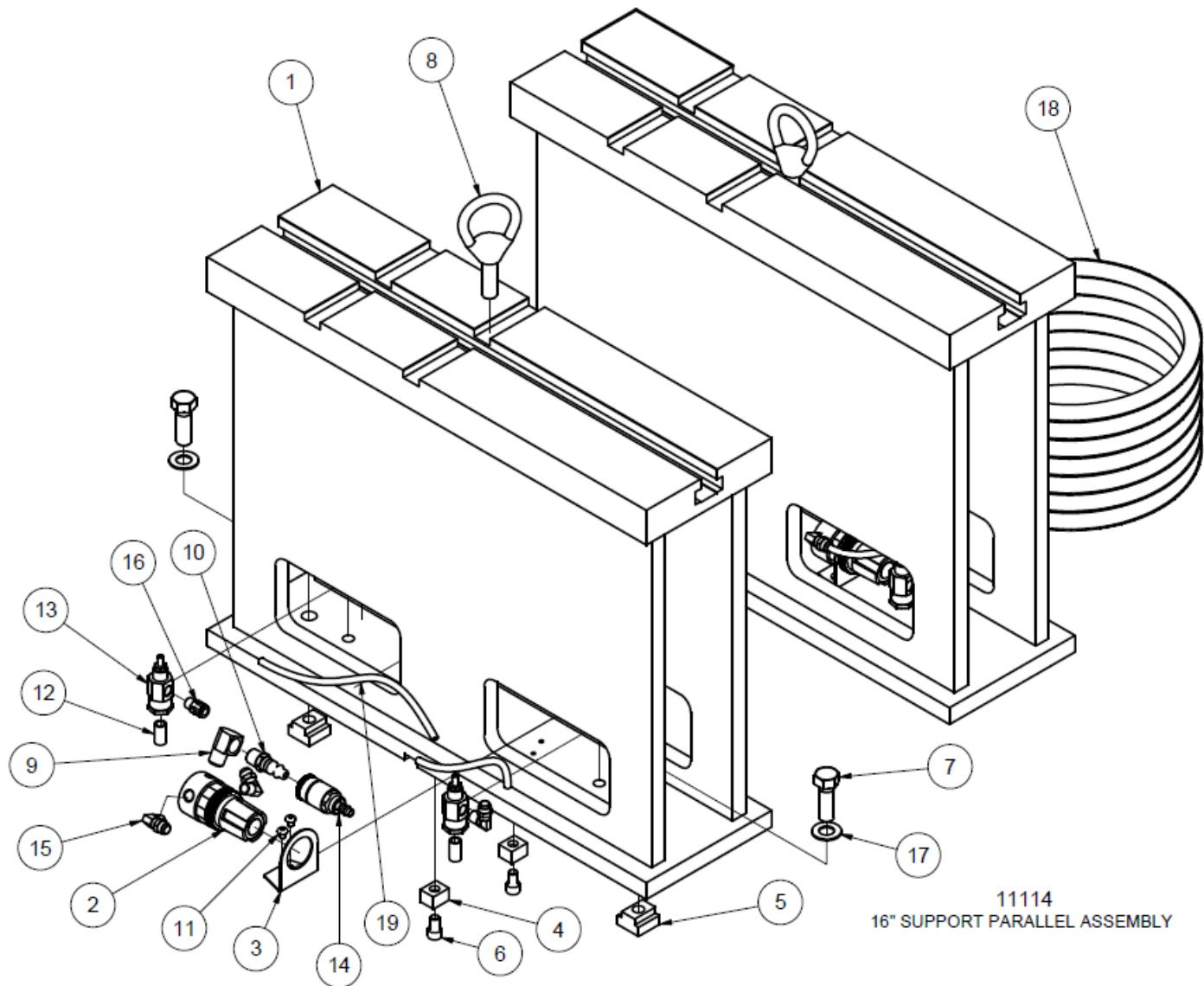
11115 2" x 3" PARALLEL SET			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	2	11115A	2" x 3" PARALLEL

**11112 Universal Heavy Duty T-Slot Parallels Parts**



11112 SUPPORT PARALLEL ASSEMBLY 8"			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	2	11112A	SUPPORT PARALLEL 8" (MACHINING)
2	2	502-27-17	Regulator 0 - 60 PSI
3	2	502-27-17A	Regulator Bracket
4	4	650-3-9	Key
5	4	650-3-10	TN-5 T-Nut
6	4	MF-21A	5/16-18UNC x 1/2" LG. S.H.C.S.
7	4	MF-137A	1/2-13UNC x 1-1/2" LG. HEX BOLT
8	2	502-3-13	Lift Eye
9	2	502-11-17S	1/4 STREET ELL
10	2	502-11-16X	Quick Connect air Fitting Male
11	4	MF-87	10-24UNC x 1/4" LG. SOCKET BUTTONHEAD SCREW
12	4	502-11-17J	Nipple, Close 1/8" NPT
13	4	502-11-35A	Flo Control
14	1	502-11-16W	Quick connect air fitting female
15	6	502-11-16I	Elbow, Male 1/4 FPT x 1/8 PT
16	2	514-4-17W	FITTING 1/8NPT x 1/4" POLY STRAIGHT
17	4	MF-180	1/2" FLAT WASHER
18	3 FT.	502-11-15	1/4" OD BLACK POLYFLO
19	15 FT.	502-1-98	1/4" AIR HOSE

**11114 Universal Heavy Duty T-Slot Parallels Parts**

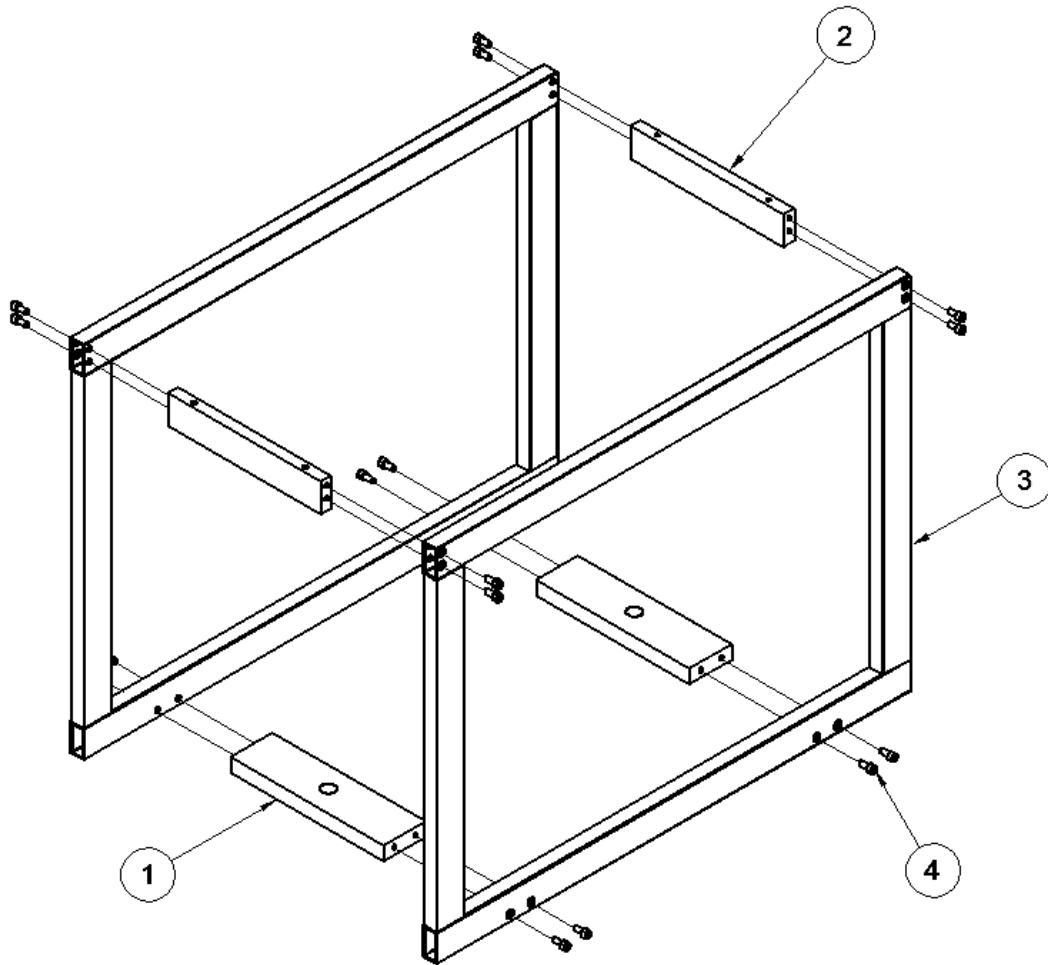


11114  
16" SUPPORT PARALLEL ASSEMBLY

11114 SUPPORT PARALLEL ASSEMBLY 16"			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	2	11114A	SUPPORT PARALLEL 16" (MACHINING)
2	2	502-27-17	Regulator 0 - 60 PSI
3	2	502-27-17A	Regulator Bracket
4	4	650-3-9	Key
5	4	650-3-10	TN-5 T-Nut
6	4	MF-21A	5/16-18UNC x 1/2" LG. S.H.C.S.
7	4	MF-137A	1/2-13UNC x 1-1/2" LG. HEX BOLT
8	2	502-3-13	Lift Eye
9	2	502-11-17S	1/4 STREET ELL
10	2	502-11-16X	Quick Connect air Fitting Male
11	4	MF-87	10-24UNC x 1/4" LG. SOCKET BUTTONHEAD SCREW
12	4	502-11-17J	Nipple, Close 1/8" NPT
13	4	502-11-35A	Flo Control
14	1	502-11-16W	Quick connect air fitting female
15	6	502-11-16I	Elbow, Male 1/4 FPT x 1/8 PT
16	2	514-4-17W	FITTING 1/8NPT x 1/4" POLY STRAIGHT
17	4	MF-180	1/2" FLAT WASHER
18	15 FT.	502-1-98	1/4" AIR HOSE
19	3 FT.	502-11-15	1/4" OD BLACK POLYFLO

## Cylinder Liner Fixtures

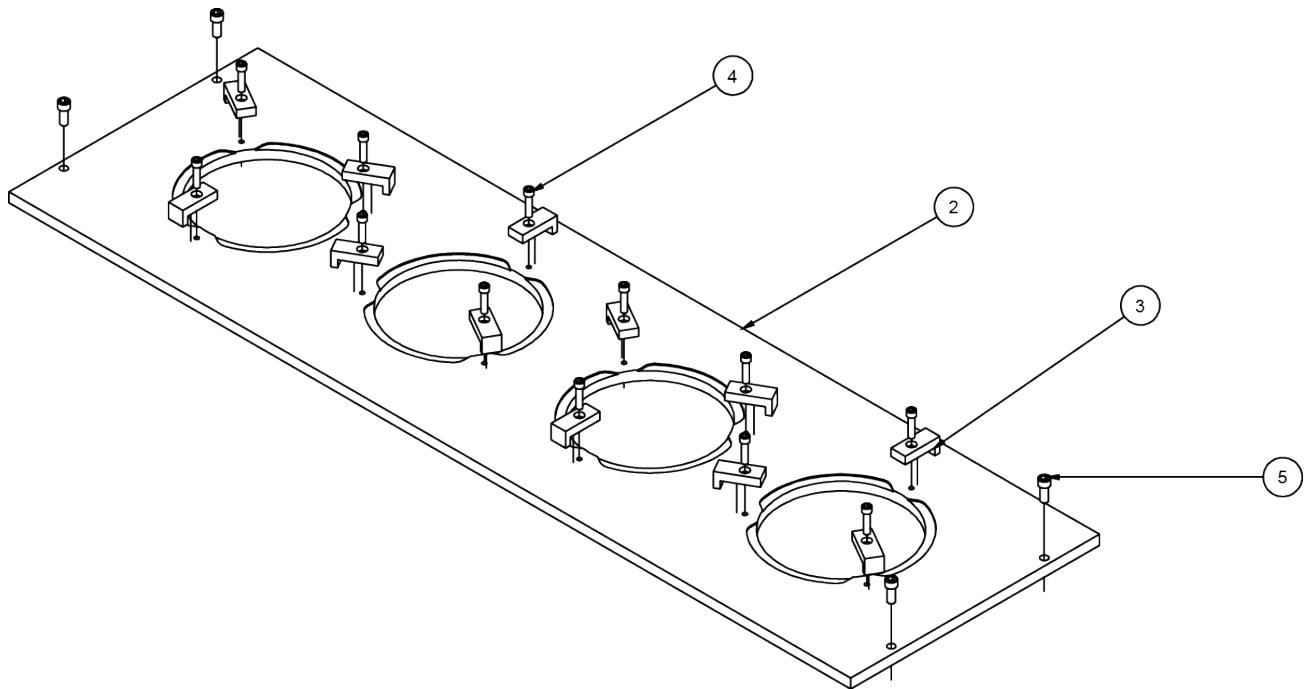
### 514-11-5 Cylinder Liner Honing Fixture Parts



**514-11-1A MAIN FRAME ASSEMBLY, CAT CYLINDER SLEEVE HONE FIXTURE**

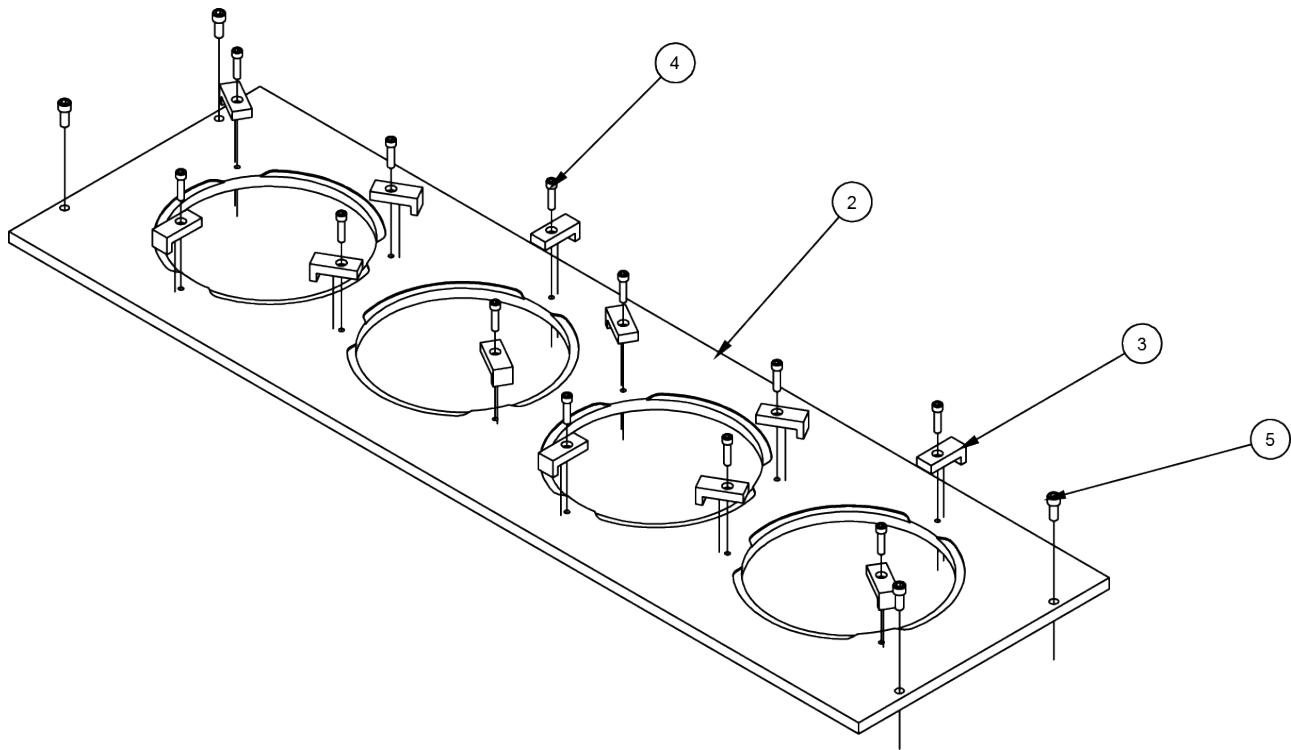
ITEM	QTY	PART NUMBER	DESCRIPTION
1	2	514-11-1E	LOWER CROSS BAR, CAT CYLINDER SLEEVE HONE FIXTURE
2	2	514-11-1D	UPPER CROSS BAR, CAT CYLINDER SLEEVE HONE FIXTURE
3	2	514-11-1B	FRONT/REAR FRAME (MACHINING), CAT CYLINDER SLEEVE HONE FIXTURE
4	16	MF-21	S.H.C.S. 5/16 - 18 UNC - 5/8

**514-11-6 Fixture Plate Parts**

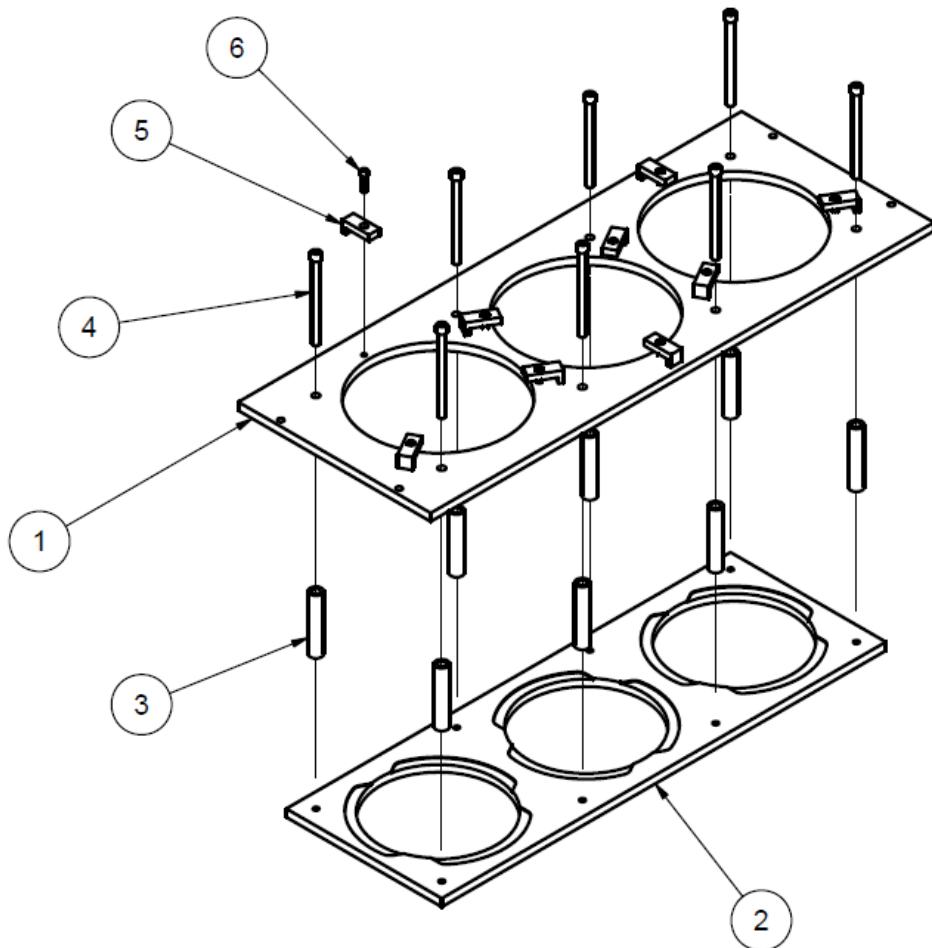


Parts List			
ITEM	QTY	PART NUMBER	DESCRIPTION
2	1	514-11-6A	3400 SLEEVE TOP PLATE FIXTURE
3	12	514-11-2C	CLAMP
4	12	MF-15	1/4 - 20 UNC - 1"
5	4	MF-22	5/16 - 18 UNC - 3/4"

## 514-11-7 Fixture Plate Parts



Parts List			
ITEM	QTY	PART NUMBER	DESCRIPTION
2	1	514-11-7A	3400 SLEEVE TOP PLATE FIXTURE
3	12	514-11-2C	CLAMP
4	12	MF-15	1/4 - 20 UNC - 1"
5	4	MF-22	5/16 - 18 UNC - 3/4"

**514-11-4 Fixture Plate Parts**

514-11-4 CAT C175 FIXTURE PLATE ASSEMBLY			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	514-11-4A	FIXTURE PLATE TOP - CAT C175 SLEEVE
2	1	514-11-4C	UPPER PLATE, CAT C175 FIXTURE, CAT CYLINDER SLEEVE HONE FIXTURE
3	8	514-11-4E	SPACER, CAT C175 SLEEVE FIXTURE
4	8	MF-38	3/8-16UNC x 5" LG. S.H.C.S.
5	9	514-11-2C	CLAMP
6	9	MF-15	1/4-20UNC x 1" LG. S.H.C.S.

## Optional Coolant and Filter Equipment

### 514-4-71C Synthetic coolant

(for use with diamond stones) 5 gal (20 liter) (mix with water 20:1)



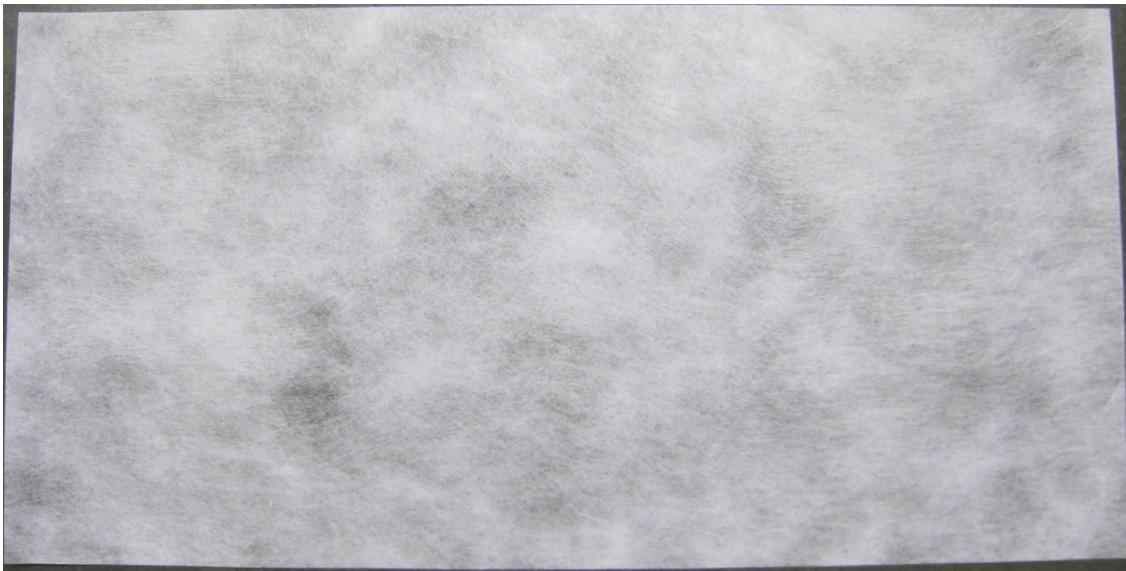
### 514-4-71D Coolant refractor

Sold as complete kit only



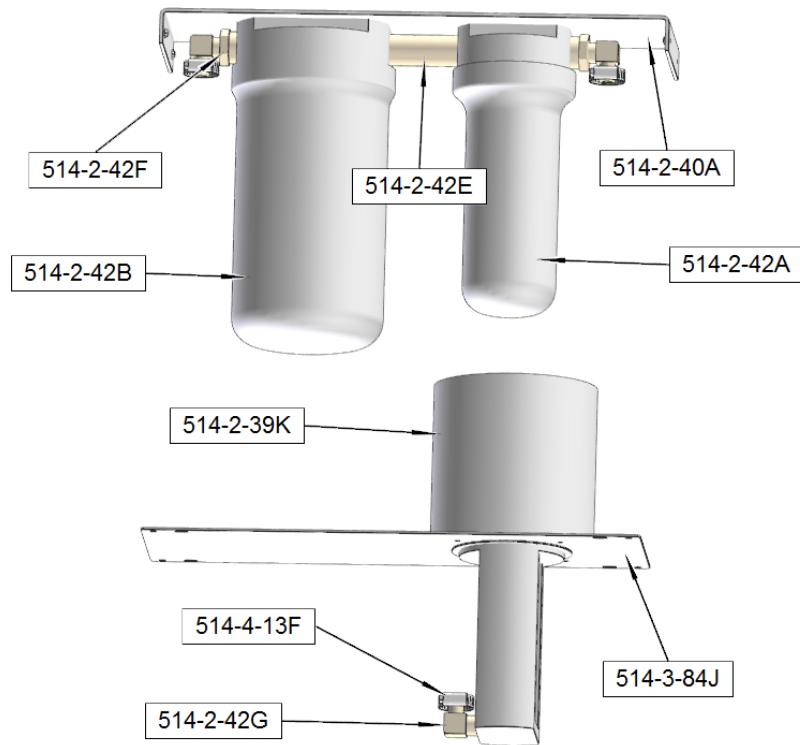
## 514-7-66D Filter paper

For standard coolant system (minimum order of 25)



## 514-2-40 Optional canister filter system

With high volume pump includes (1) one 10 micron and (1) one 20 micron canister filter



### 514-2-39P Filter Cartridge 10 micron

(replacement filter for 514-2-40) for synthetic coolant only

### 514-2-39Q Filter Cartridge 20 micron

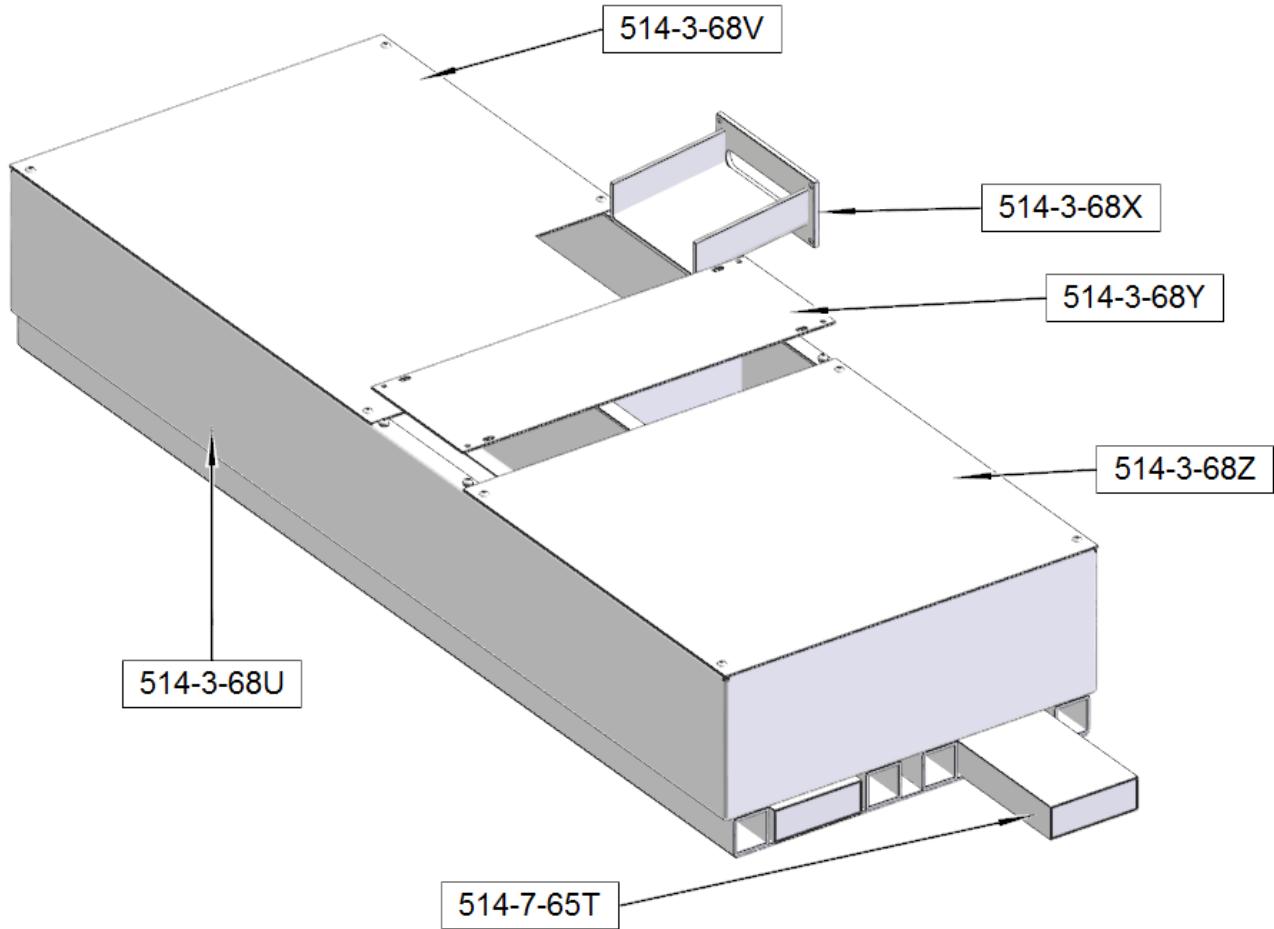
(replacement filter for 514-2-40) for synthetic coolant only

### 514-2-39Z Filter Cartridge 150 micron

(replacement filter for 514-2-40 for oil base coolant only)

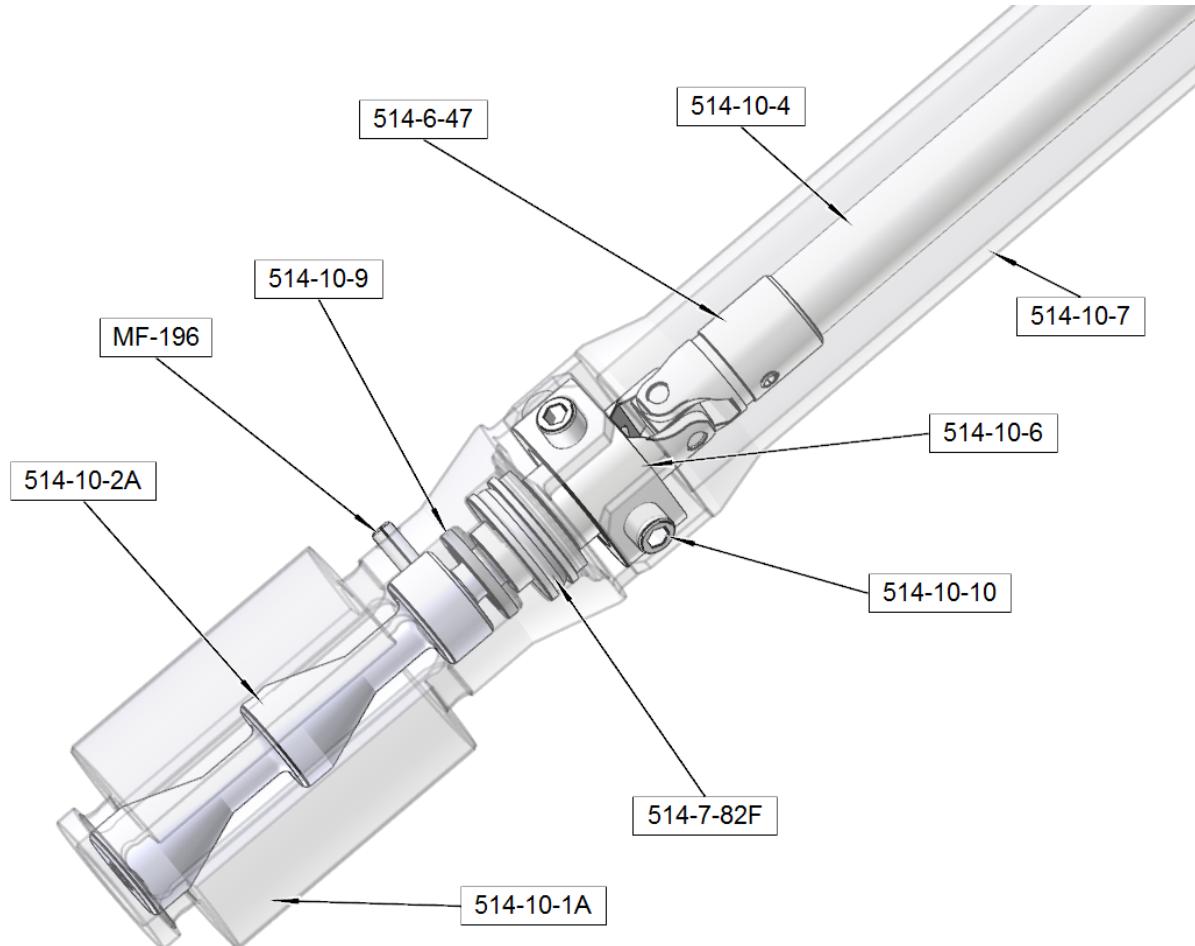


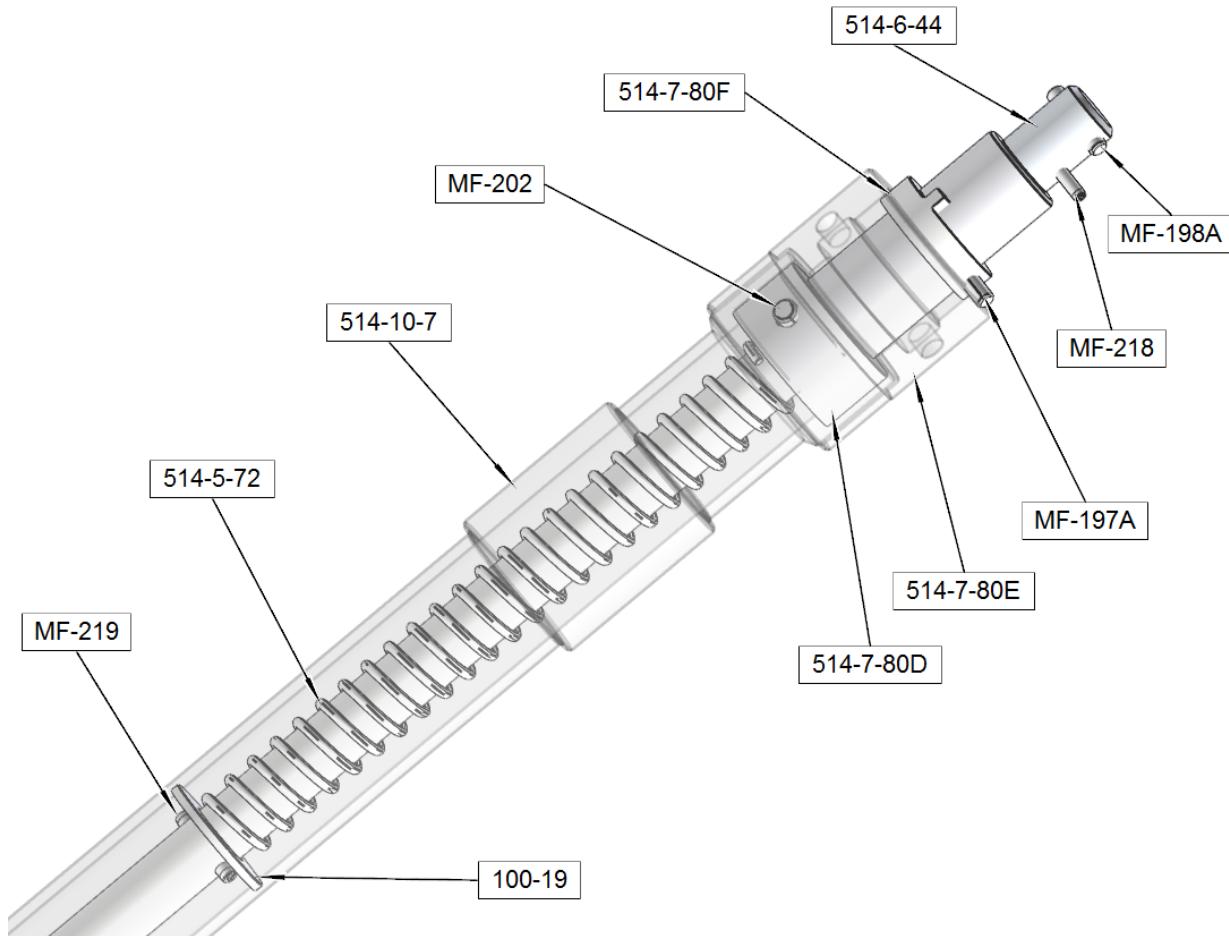
**514-3-68W External Coolant Tank Parts**



## Precision Hone Heads, Sleeves and Stone Holders

### 514-10 Medium Hone Head Parts





## Stone Holders for Medium Hone Head

**514-10-13A** Stone holder, 2.25 - 2.43" (57.15 - 61.72mm), set of 4



**514-10-13B** Stone holder, 2.38 - 2.63" (60.45 - 66.80mm), set of 4



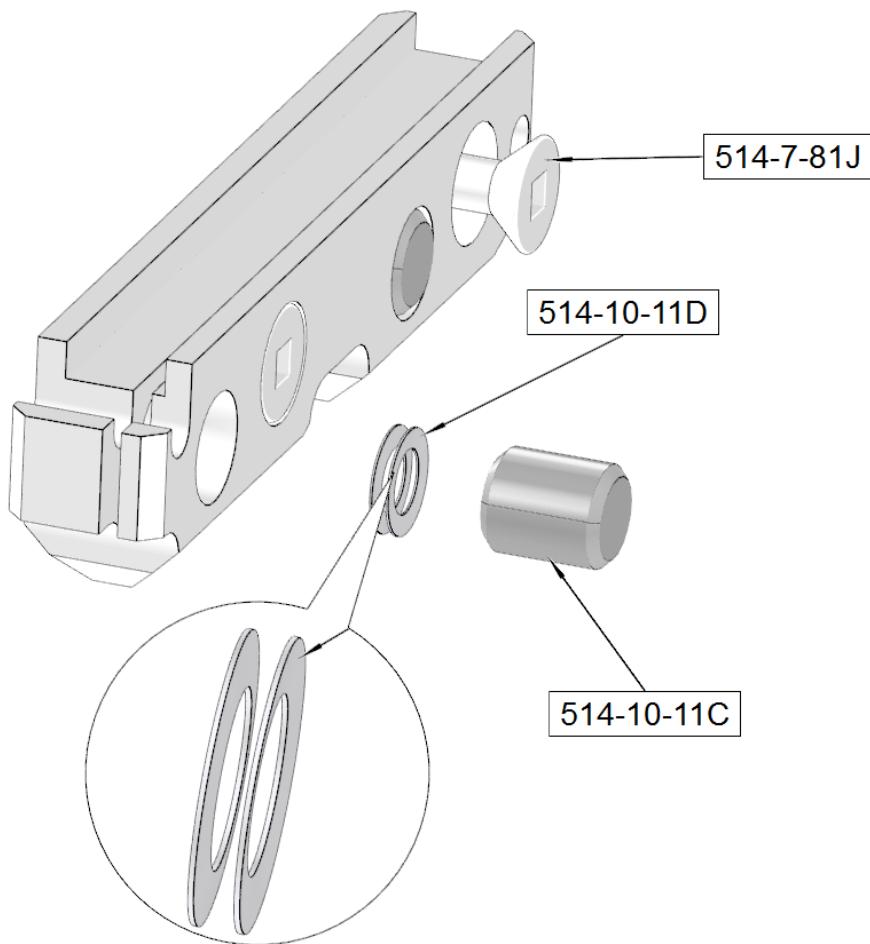
**514-10-13C** Stone holder, 2.58 - 2.83" (65.53 - 71.88mm), set of 4



**514-10-13D** Stone holder, 2.78 - 3.03" (70.61 - 76.96mm), set of 4

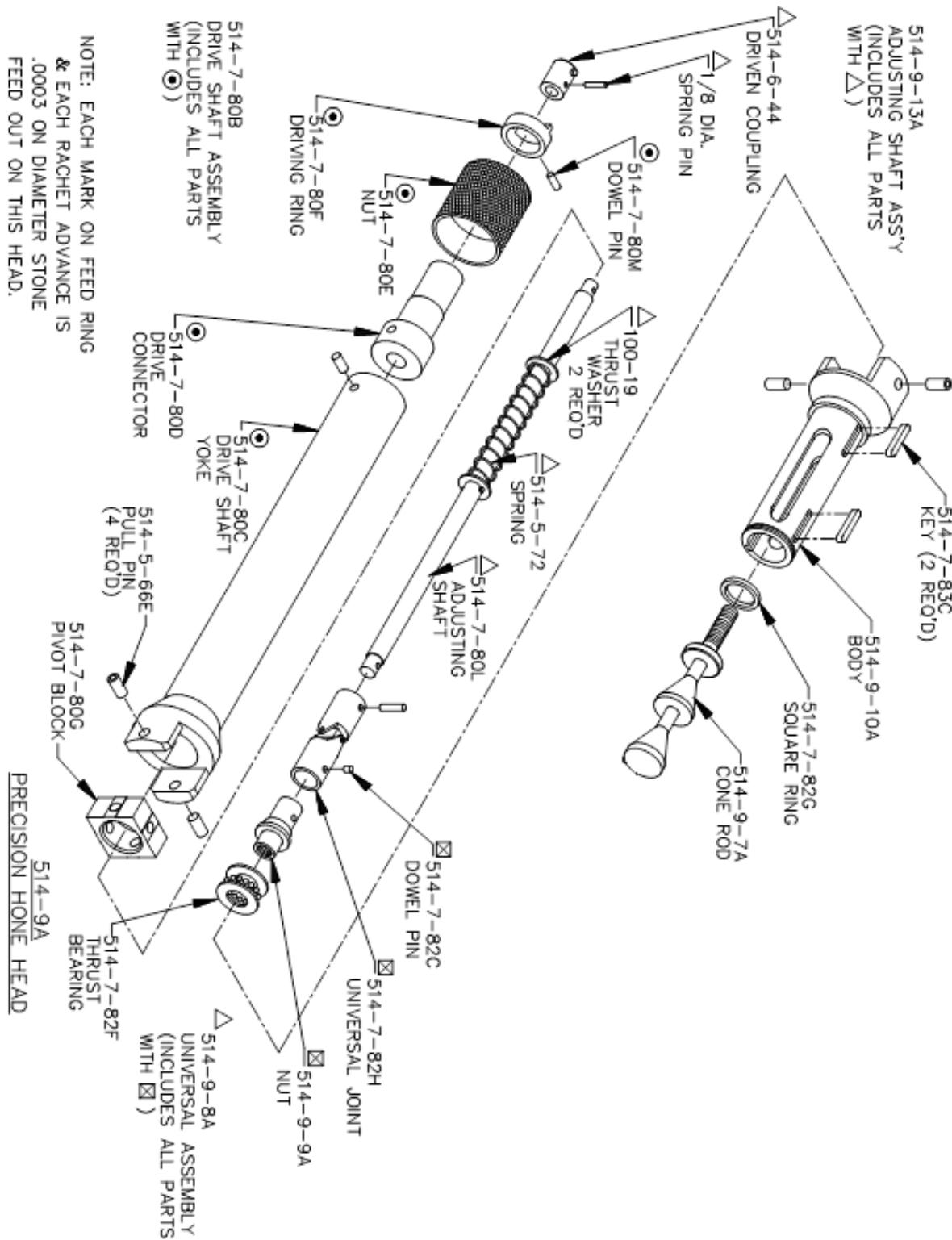


**514-10-13 Series Stone Holder Parts**

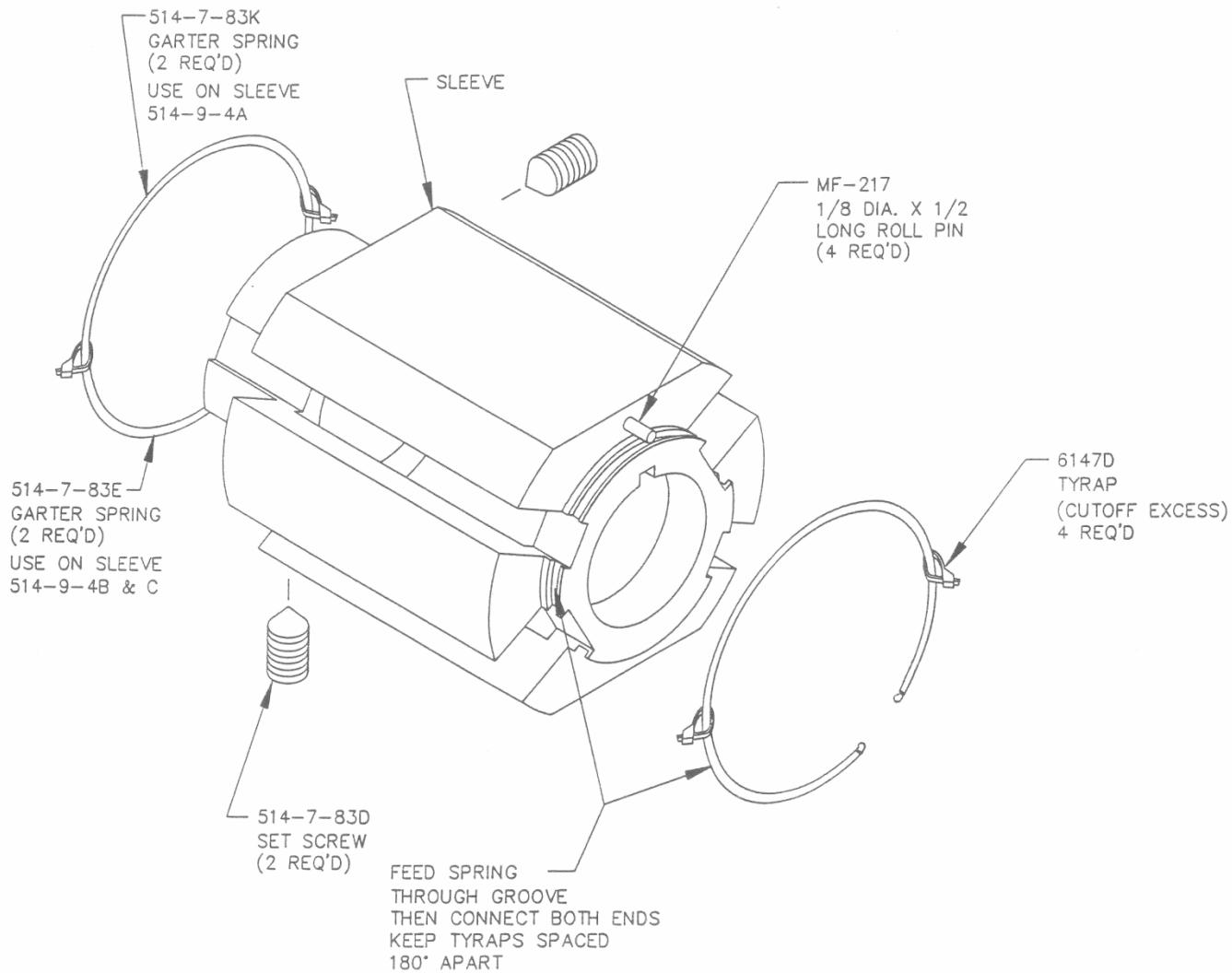


# ROTLER

## 514-9A Large Hone Head Parts



**514-9-4 Series Sleeve Parts**



**514-9-6J Stone Holder**

2.990 - 3.44" (75.95 - 87.38mm) set of 4 (Requires  
Sleeve 514-9-4A)

Note: To hone diameter 2.84" (72.14mm) use 514-9-  
14D Stone Set .200" (5.1mm) height with 514-9-6J  
Stone Holders



**514-9-6A Stone Holder**

3.165 - 3.630" (80.39 - 92.20mm) set of 4  
(Requires Sleeve 514-9-4A)



**514-9-6B Stone Holder**

3.415 - 3.880" (86.74 - 98.55mm) set of 4  
(Requires Sleeve 514-9-4A)



**514-9-6C Stone Holder**

3.665 - 4.130" (93.09 - 104.90mm) set of 4  
(Requires Sleeve 514-9-4B)



**514-9-6D Stone Holder**

3.915 - 4.380" (99.44 - 111.25mm) set of 4  
(Requires Sleeve 514-9-4B)



**514-9-6E Stone Holder**

4.165 - 4.630" (105.79 - 117.60mm) set of 4  
(Requires Sleeve 514-9-4B)



**514-9-6F Stone Holder**

4.415 - 4.880" (112.14 - 123.95mm) set of 4  
(Requires Sleeve 514-9-4C)



**514-9-6G Stone Holder**

4.665 - 5.130" (118.49 - 130.30mm) set of 4  
(Requires Sleeve 514-9-4C)



**514-9-6H Stone Holder**

4.915 - 5.380" (124.84 - 136.65mm) set of 4  
(Requires Sleeve 514-9-4C)



**514-9-6K Stone Holder**

5.165 - 5.630" (131.19 - 143.00mm) set of 4  
(Requires Sleeve 514-9-4C)



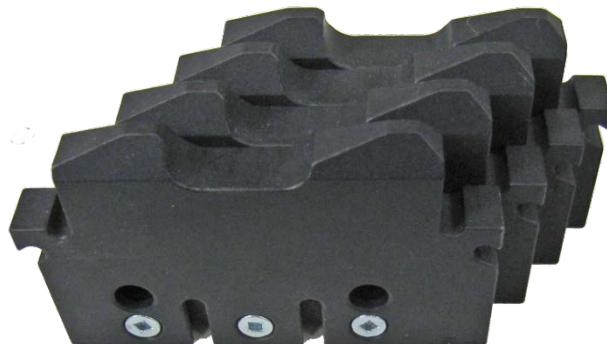
**514-9-6L Stone Holder**

5.415 - 5.880" (137.54 - 149.35mm) set of 4  
(Requires Sleeve 514-9-4C)



**514-9-6M Stone Holder**

5.665 - 6.130" (143.89 - 155.70mm) set of 4  
(Requires Sleeve 514-9-4C)



**514-9-6N Stone Holder**

5.915 - 6.380" (150.24 - 162.05mm) set of 4  
(Requires Sleeve 514-9-4C)



**514-9-6P Stone Holder**

6.165 - 6.630" (156.59 - 168.40mm) set of 4  
(Requires Sleeve 514-9-4C)



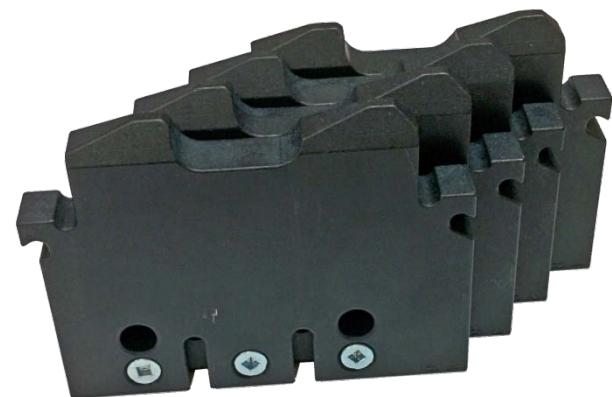
**514-9-6Q Stone Holder**

6.415 - 6.880" (162.94 - 174.75mm) set of 4  
(Requires Sleeve 514-9-4C)



**514-9-6R Stone Holder**

6.665 - 7.130" (169.29 - 181.10mm) set of 4  
(Requires Sleeve 514-9-4C)

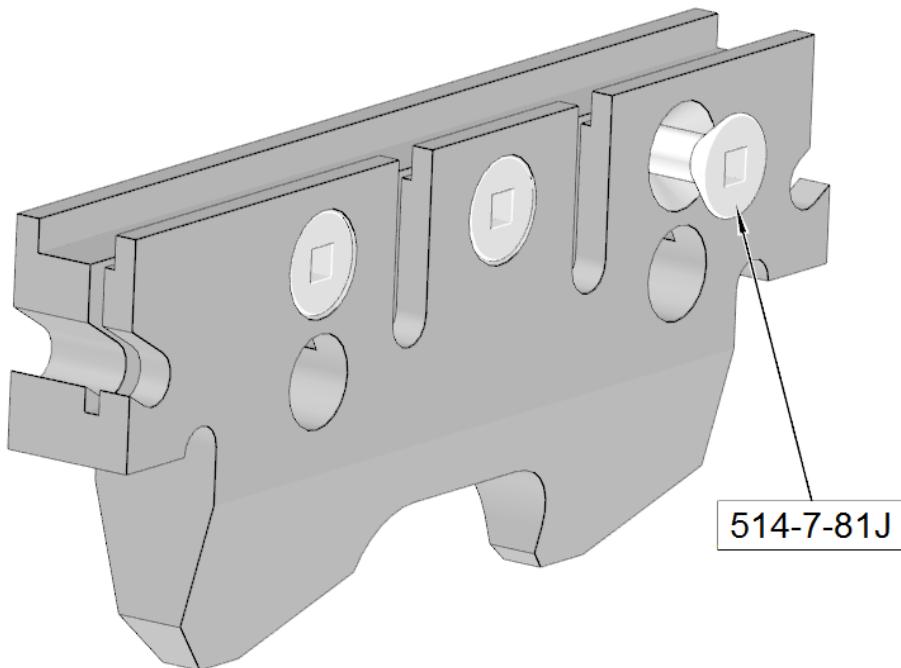


**514-9-6S Stone Holder**

6.915 - 7.380" (175.64 - 187.45mm) set of 4  
(Requires Sleeve 514-9-4C)



**514-9-6 Series Stone Holder Parts**



## Abrasives for Precision Hone Heads

NOTE: Ra - Roughness Average. Value before Ra is in micro inches. Value in brackets um is micro meters. Long designates length of stone. Height designated thickness of stone.

### Diamond Stones

.312" (7.90mm) Height

#### 514-9-14F Diamond stones, 80 grit

3" (76mm) long, 90Ra (2.25um)

stock removal .004-.007/min.



#### 514-9-14R Diamond stones

80 grit, 3 1/2" (89mm) long, 90Ra (2.25um)

stock removal .004-.007/min. (.102 - .178mm)



#### 514-9-14W Diamond stones, 140/170 grit

3" (76mm) long, 50-75Ra (1.25 - 1.875um)



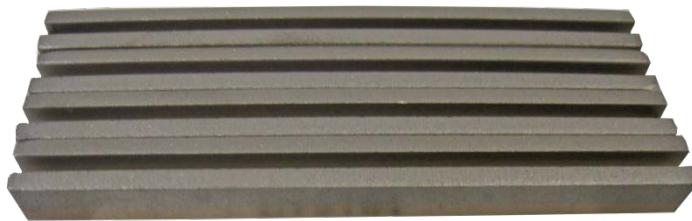
#### 514-9-14K Diamond stones, 170/200 grit

3" (76mm) long, 45-60Ra (1.125 - 1.5um)



#### 514-9-14M Diamond stones, 170/200 grit

3 1/2" (89mm) long, 45-60Ra (1.125 - 1.5um)



**514-9-14J Diamond stones, 270/325 grit**  
3" (76mm) long, 35-45Ra (.875 - 1.125um)



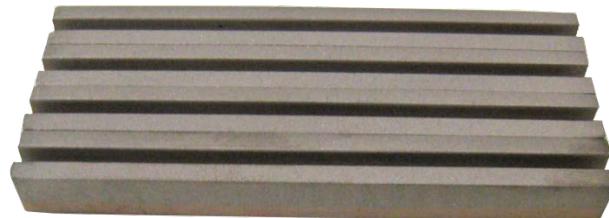
**514-9-14T Diamond stones, 270/325 grit**  
3 1/2" (89mm) long, 35-45Ra (.875 - 1.125um)



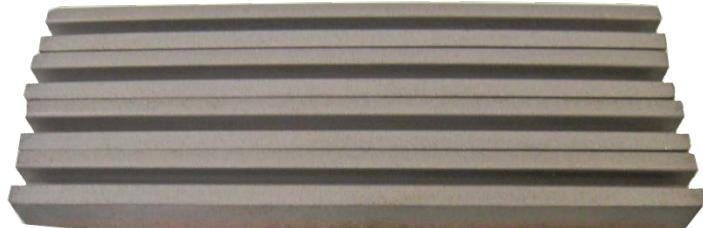
**514-9-14Z Diamond Stones 270/325 grit**  
4" (102mm) long, 35-45Ra (.875 - 1.125um)



**514-9-14E Diamond stones, 325/400 grit**  
3" (76mm) long, 24-30Ra (.6 - .75um)



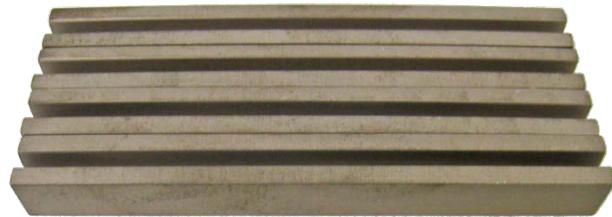
**514-9-14Q Diamond stones, 325/400 grit**  
3 1/2" (89mm) long, 24-30Ra (.6 - .75um)



**514-9-14X Diamond stones, 325/400 grit**  
4" (102mm) long, 24-30Ra (.6 - .75um)



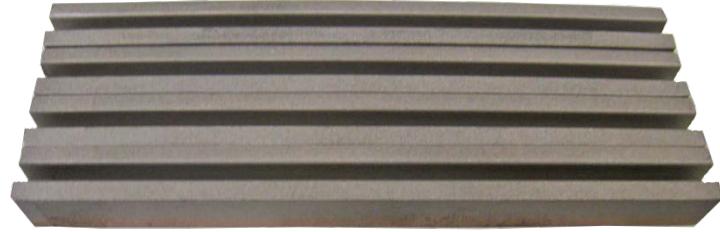
**514-9-14V Diamond stones, 400 grit**  
3" (76mm) long, 15-19Ra (.375 - .475um)



**514-9-14C Diamond stones, 500 grit**  
3" (76mm) long, 18-22Ra (.45 - .55um)



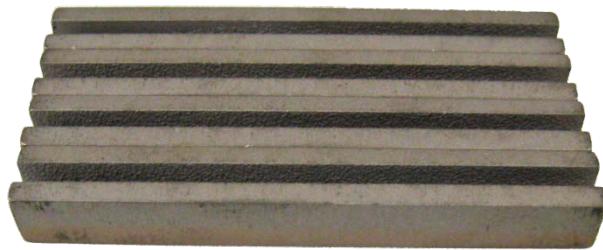
**514-9-14P Diamond stones, 500 grit**  
3-1/2" (89mm) long, 18-22Ra (.45 - .55um)



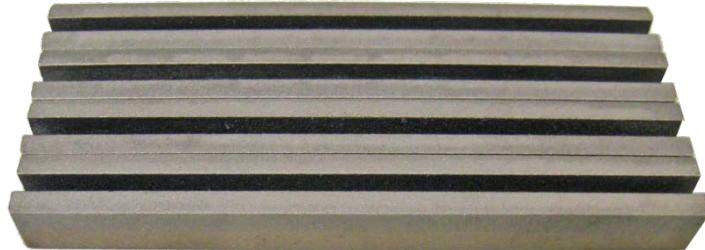
**514-9-14D Diamond stones, 325/400 grit**  
3" (76mm) long, 18-22Ra (.45 - .55um)  
Special required for bores under 2.990" diameter  
(75.94mm) .200" (5.1mm) Height



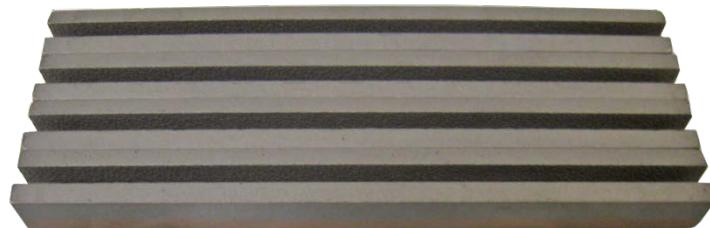
**514-9-14U Diamond stones, 500 grit**  
2 1/2" (64mm) long, 18-22Ra (.45 - .55um)



**514-9-14L Diamond stones, 550 grit**  
3" (76mm) long, 15-19Ra (.375 - .475um)



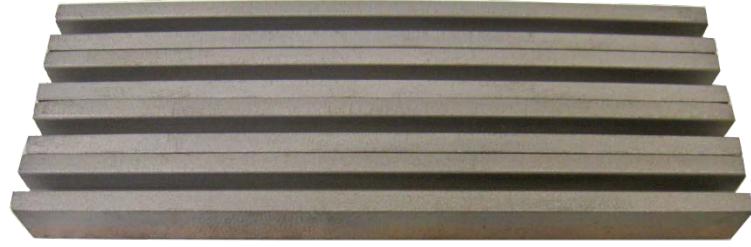
**514-9-14N Diamond stones, 550 grit**  
3 1/2" (89mm) long, 15-19Ra (.375 - .475um)



**514-9-14G Diamond stones, 600 grit**  
3" (76mm) long, 8-12Ra (.2 - .3um)



**514-9-14S Diamond stones, 600 grit**  
3 1/2" (89mm) long, 8-12Ra (.2 - .3um)



**514-9-21G Diamond stones, 800 grit**  
3" (76mm) long



**514-9-21H Diamond stones, 1000 grit**  
3" (76mm) long



**514-9-21J Diamond stones, 1200 grit**  
3" (76mm) long



## Brushes for Plateau Finishing

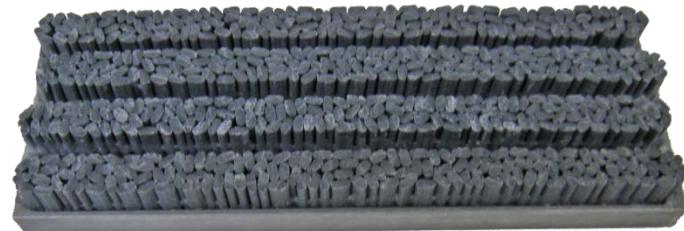
### 514-9-14H Brushes, for Plateau Finishing

.550" (14mm) height, 3 1/2" (89mm) long,  
requires one or two size smaller stone holder  
compared to .312" (7.90mm) height diamond  
stone. For diameter range, please see HP7A  
manual.



### 514-9-14Y Brushes, for Plateau Finishing

.395" (10mm) height, 3 1/2" (89mm) long,  
requires same or one size smaller stone holder  
compared to .312" (7.90mm) height diamond  
stone. For diameter range, please see HP7A  
manual.



## Special Stones for Finishing Aluminum Silicone Cylinders

(Refer to bulletin No. 284) Requires Rottler Precision Hone Heads

### 514-9-18P Special Red Finish Diamonds

For final sizing (set of 4)



### 514-9-18N Silicone Abrasive Exposing Stones

For Removing Aluminum (set of 4)



### 514-9-21 Polishing felt pads

For use with 514-9-21F silicon paste. (set of 4)

### 514-9-21F Silicone Paste

For use with 514-9-21 Polishing felt pads



## Optional Measuring Equipment

### 201 Mitutoyo Surface Tester Surftest

Sold only as complete unit



### 514-8-27 Stone Depth Scale and Holder

#### Assembly (inch)

Sold only as complete unit

### 514-8-27F Stone Depth Scale and Holder

#### Assembly (metric)

Sold only as complete unit

