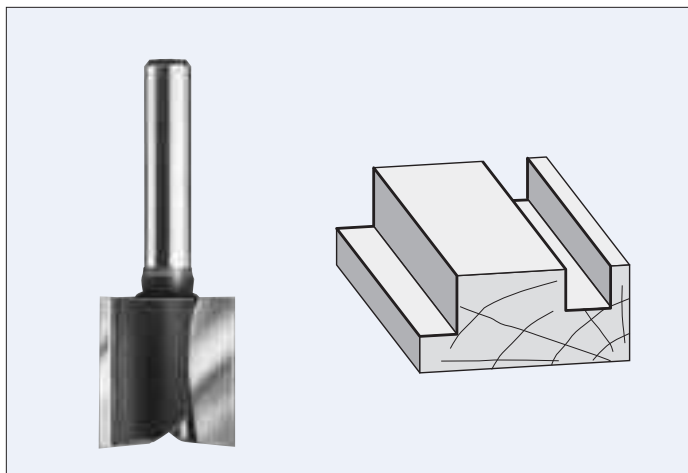


## RM100

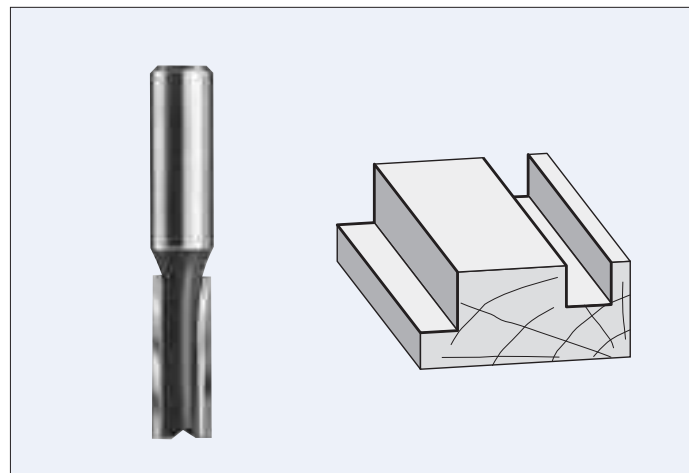
### STRAIGHT BITS "METRIC" SIZES TWO FLUTES



PART NO.	CUTTING DIAM.	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH
RM100	3mm	5/16"	1/4"	1-9/16"
RM101	4mm	7/16"	1/4"	2"
RM102	5mm	7/16"	1/4"	2"
RM103	6mm	3/4"	1/4"	2"
RM104	7mm	3/4"	1/4"	2"
RM105	8mm	3/4"	1/4"	2"
RM106	8mm	1"	1/4"	2-1/4"
RM107	9mm	3/4"	1/4"	2"
RM108	10mm	3/4"	1/4"	2"
RM109	11mm	3/4"	1/4"	2"
RM110	12mm	3/4"	1/4"	2"
RM111	13mm	3/4"	1/4"	2"
RM112	14mm	3/4"	1/4"	2"
RM113	15mm	3/4"	1/4"	2"
RM114	16mm	3/4"	1/4"	2"
RM115	16mm	1-1/4"	1/4"	2-1/4"
RM116	17mm	3/4"	1/4"	2"
RM117	18mm	3/4"	1/4"	2"
RM118	19mm	3/4"	1/4"	2"
RM119	20mm	3/4"	1/4"	2"
RM120	21mm	3/4"	1/4"	2"
RM121	22mm	3/4"	1/4"	2"
RM122	25mm	3/4"	1/4"	2"

## RM130

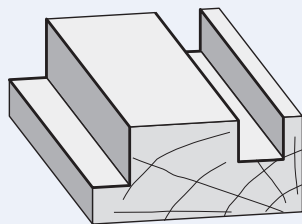
### STRAIGHT BITS "METRIC" SIZES TWO FLUTES



PART NO.	CUTTING DIAM.	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH
RM130	6mm	3/4"	1/2"	2-1/2"
RM131	8mm	1"	1/2"	2-5/8"
RM132	10mm	1"	1/2"	2-1/2"
RM133	10mm	1-1/4"	1/2"	3"
RM134	12mm	1"	1/2"	2-5/8"
RM135	12mm	1-1/4"	1/2"	2-7/8"
RM136	12mm	1-1/2"	1/2"	3"
RM137	12mm	2"	1/2"	4-1/4"
RM138	14mm	1"	1/2"	2-5/8"
RM140	16mm	1"	1/2"	2-5/8"
RM141	16mm	1-1/4"	1/2"	2-7/8"
RM142	16mm	1-1/2"	1/2"	3-1/8"
RM143	18mm	1-1/4"	1/2"	2-7/8"
RM144	19mm	1"	1/2"	2-5/8"
RM145	19mm	1-1/4"	1/2"	2-7/8"
RM146	19mm	1-1/2"	1/2"	3-1/8"
RM147	20mm	1"	1/2"	2-5/8"
RM148	20mm	1-1/4"	1/2"	2-7/8"
RM149	22mm	1"	1/2"	2-5/8"
RM150	25mm	1-1/4"	1/2"	2-7/8"
RM151	25mm	1-1/2"	1/2"	3-1/8"
RM152	27mm	1-1/4"	1/2"	2-7/8"
RM153	30mm	1"	1/2"	2-5/8"
RM154	35mm	1"	1/2"	2-5/8"
RM155	40mm	1-1/4"	1/2"	2-7/8"
RM156	51mm	1-1/4"	1/2"	2-7/8"

**R1000**

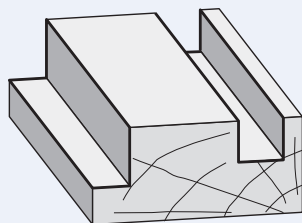
**1/4" SHANK STRAIGHT  
ROUTER BITS SOLID CARBIDE**



PART NO.	CUTTING DIAM.	CUTTING LENGTH	SHANK LENGTH	NO. FLUTE	OVERALL LENGTH
R1000	1/8"	3/8"	1"	1	1-1/2"
R1008	7/32"	3/4"	1"	1	2"
R1100	1/8"	3/8"	1"	2	1-1/2"
R1104	5/32"	5/8"	7/8"	2	1-1/2"
R1106	3/16"	5/8"	1-1/4"	2	2"
R1108	7/32"	3/4"	1-1/4"	2	2"
R1110	1/4"	3/4"	1-1/4"	2	2"
R1112	1/4"	1"	1-1/4"	2	2-1/2"

**R1302**

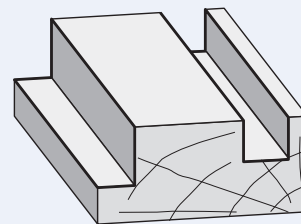
**STRAIGHT ROUTER BITS  
TWO FLUTES SOLID CARBIDE**



PART NO.	CUTTING DIAM.	CUTTING LENGTH	SHANK DIAM.	SHANK LENGTH	OVERALL LENGTH
R1302	3/8"	1"	3/8"	1-3/4"	3"
R1304	1/4"	3/4"	1/2"	1-1/4"	3"
R1306	1/4"	1"	1/2"	2"	3"
R1308	5/16"	1"	1/2"	2"	3"
R1310	1/2"	1-1/4"	1/2"	1-1/2"	3"

**R2000**

**1/4" SHANK  
STRAIGHT ROUTER BITS ONE FLUTE**

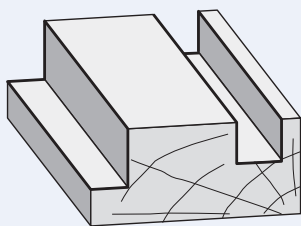


PART NO.	CUTTING DIAM.	CUTTING LENGTH	SHANK LENGTH	OVERALL LENGTH
R2000	1/8"	7/16"	1-1/4"	2"
R2000-1	5/32"	7/16"	1-5/16"	2"
R2001 *	3/16"	7/16"	1-1/4"	2"
R2003	1/4"	1/2"	1-5/16"	2"
R2004	1/4"	3/4"	1-1/4"	2"
R2005 *	1/4"	1"	1-1/4"	2-1/4"
R2006	9/32"	3/4"	1"	2"
R2008	5/16"	1"	1"	2-1/4"
R2008-1	3/8"	3/4"	1"	1-15/16"
R2008-2	3/8"	1"	1-1/8"	2-3/8"
R2008-3	1/2"	3/4"	1"	1-3/4"
R2008-4	1/2"	1"	1"	2-1/8"
R2008-5	5/8"	3/4"	1"	1-15/16"
R2008-6	3/4"	3/4"	1"	1-3/4"

\* Not guaranteed due to extreme length and/or fragility

## R2009

### 1/4" SHANK STRAIGHT ROUTER BITS TWO FLUTES

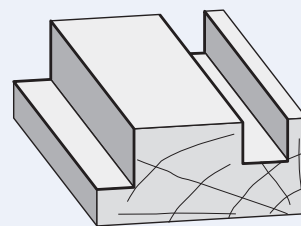


PART NO.	CUTTING DIAM.	CUTTING LENGTH	SHANK LENGTH	OVERALL LENGTH
R2009-1 *	1/16"	3/16"	1-3/8"	1-7/8"
R2009-2	3/32"	1/4"	1-5/8"	1-7/8"
R2010	1/8"	7/16"	1-1/4"	2"
R2010-1	5/32"	7/16"	1-5/16"	2"
R2011	3/16"	7/16"	1-1/4"	2"
R2011-1	3/16"	5/8"	1-1/8"	2-1/8"
R2011-2	7/32"	3/4"	1-1/8"	1-7/8"
R2012	1/4"	1/2"	1-1/4"	2"
R2013	1/4"	3/4"	1-1/4"	2"
R2014 *	1/4"	1"	1-1/4"	2-1/4"
R2017	9/32"	3/4"	1-1/4"	2"
R2017-1	9/32"	1"	1-1/8"	2-1/4"
R2018	5/16"	3/4"	1-1/8"	2"
R2019	5/16"	1"	1-1/4"	2-1/4"
R2021	3/8"	3/4"	1-1/4"	2"
R2022	3/8"	1"	1-1/4"	2-1/4"
R2023	3/8"	1-1/4"	1-1/4"	2-1/2"
R2023-1	7/16"	3/4"	1-1/8"	2"
R2024	7/16"	1"	1-1/8"	2-1/4"
R2025	1/2"	3/4"	1-1/4"	2"
R2026	1/2"	1"	1"	2-1/4"
R2026-1	1/2"	1-1/4"	1-1/8"	2-1/2"
R2027	9/16"	3/4"	1-1/4"	2-1/8"
R2027-1	9/16"	1"	1-3/8"	2-1/2"
R2028	5/8"	3/4"	1-1/4"	2"
R2028-1	5/8"	1"	1-1/8"	2-1/4"
R2029	11/16"	3/4"	1-1/4"	2"
R2029-1	11/16"	1"	1-1/8"	2-1/4"
R2030	3/4"	3/4"	1"	2"
R2030-1	3/4"	1"	1-1/8"	2-1/4"
R2031	13/16"	3/4"	1-1/4"	2"
R2032	7/8"	3/4"	1-1/4"	2"
R2032-1	15/16"	3/4"	1-1/8"	2"
R2033	1"	3/4"	1-1/4"	2"

\* Not guaranteed due to extreme length and/or fragility

## R2034

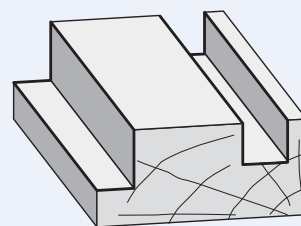
### 3/8" SHANK STRAIGHT ROUTER BITS ONE FLUTE



PART NO.	CUTTING DIAM.	CUTTING LENGTH	SHANK LENGTH	OVERALL LENGTH
R2034	1/4"	3/4"	1-1/4"	2-1/4"
R2034-1	3/8"	1"	1-1/4"	2-11/16"
R2034-2	3/8"	1-1/4"	1-1/4"	2-5/8"

## R2035

### 3/8" SHANK STRAIGHT ROUTER BITS TWO FLUTES

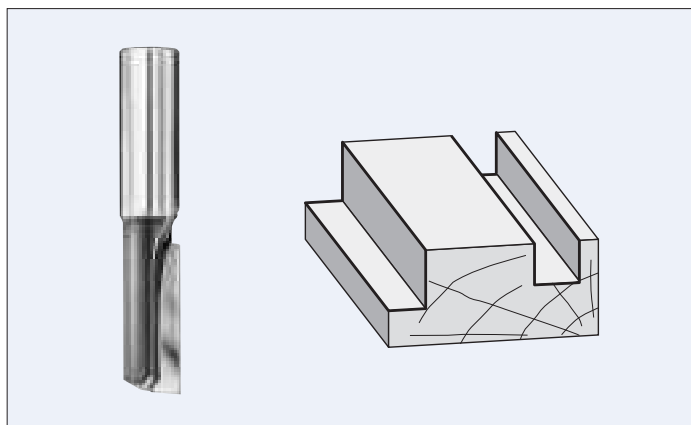


PART NO.	CUTTING DIAM.	CUTTING LENGTH	SHANK LENGTH	OVERALL LENGTH
R2035	1/8"	7/16"	1-1/4"	2"
R2035-1	5/32"	7/16"	1-1/4"	2"
R2037	1/4"	3/4"	1-3/8"	2-1/4"
R2038	5/16"	1"	1-3/8"	2-1/2"

3/8" Shank Router Bits cont'd...

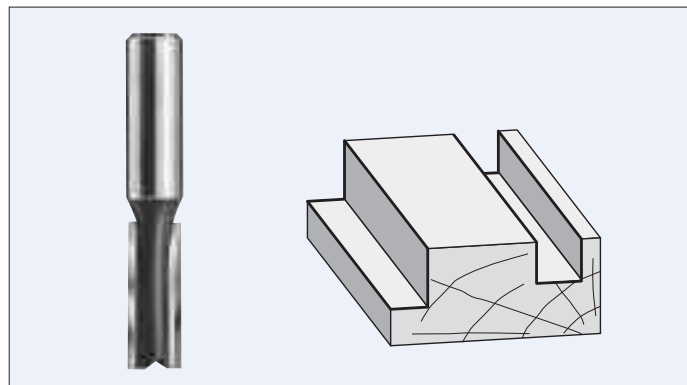
**R2038-1****3/8" SHANK STRAIGHT ROUTER BITS TWO FLUTES cont'd...**

PART NO.	CUTTING DIAM.	CUTTING LENGTH	SHANK LENGTH	OVERALL LENGTH
R2038-1	3/8"	3/4"	1-1/2"	2-1/4"
R2039	3/8"	1"	1-3/8"	2-1/2"
R2040	3/8"	1-1/4"	1-3/8"	2-3/4"
R2042	7/16"	1"	1-1/4"	2-1/2"
R2043	1/2"	1"	1-1/4"	2-1/2"
R2043-1	1/2"	1-1/4"	1-1/4"	2-1/2"
R2043-3	5/8"	3/4"	1-1/4"	2-1/4"
R2043-5	13/16"	3/4"	1-1/4"	2-1/4"
R2043-6	7/8"	3/4"	1-1/4"	2-1/4"
R2043-7	1"	3/4"	1-1/4"	2-1/4"

**R2044****1/2" SHANK STRAIGHT ROUTER BITS ONE FLUTE**

PART NO.	CUTTING DIAM.	CUTTING LENGTH	SHANK LENGTH	OVERALL LENGTH
R2044*	1/4"	3/4"	1-3/8"	2-1/2"
R2045*	1/4"	1"	1-1/4"	2-1/2"
R2047	5/16"	1"	1-1/2"	2-3/4"
R2049	3/8"	1"	1-3/8"	2-1/2"
R2050*	3/8"	1-1/4"	1-3/8"	2-3/4"
R2051	1/2"	1"	1-1/4"	2-1/2"
R2052	1/2"	1-1/4"	1-3/8"	2-7/8"
R2054	1/2"	1-1/2"	1-3/8"	3-1/8"
R2055	1/2"	2"	1-7/8"	4-1/4"
R2056	9/16"	1-1/4"	1-1/4"	2-7/8"
R2057	5/8"	1-1/4"	1-1/4"	2-7/8"

\* Not guaranteed due to extreme length and/or fragility

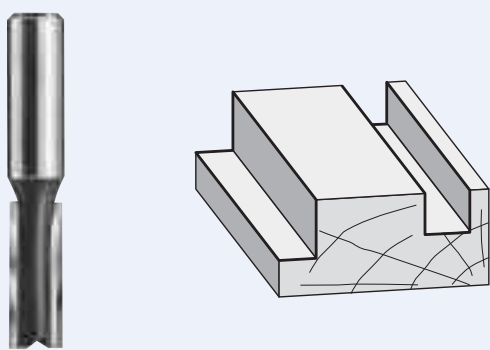
**R2057****1/2" SHANK STRAIGHT ROUTER BITS TWO FLUTES**

PART NO.	CUTTING DIAM.	CUTTING LENGTH	SHANK LENGTH	OVERALL LENGTH
R2057-0	15/64"	3/4"	1-3/8"	2-1/2"
R2057-1*	1/4"	1/2"	1-3/8"	2"
R2058*	1/4"	3/4"	1-3/8"	2-1/2"
R2058-1*	1/4"	1"	1-3/8"	2-1/2"
R2059	5/16"	3/4"	1-3/8"	2-1/2"
R2060*	5/16"	1"	1-3/8"	2-1/2"
R2061	3/8"	3/4"	1-3/8"	2-1/2"
R2062	3/8"	1"	1-3/8"	2-1/2"
R2063*	3/8"	1-1/4"	1-3/8"	2-3/4"
R2063A	13/32"	1"	1-3/8"	2-3/4"
R2064	7/16"	1"	1-1/4"	2-5/8"
R2065	7/16"	1-1/4"	1-3/8"	2-3/4"
R2065-1	31/64"	1"	1-3/8"	2-5/8"
R2066	1/2"	1"	1-3/8"	2-5/8"
R2067	1/2"	1-1/4"	1-3/8"	2-7/8"
R2069	1/2"	1-1/2"	1-3/8"	3"
R2070	1/2"	1-1/2"	2-1/2"	4-1/4"
R2071*	1/2"	2"	1-7/8"	4-1/4"
R2072*	1/2"	2-1/2"	1-7/8"	4-1/2"
R2074	17/32"	1-1/4"	1-3/8"	2-7/8"
R2074-1	9/16"	1"	1-3/8"	2-5/8"
R2075	9/16"	1-1/4"	1-3/8"	2-7/8"
R2076	5/8"	1"	1-3/8"	2-5/8"
R2077	5/8"	1-1/4"	1-3/8"	2-7/8"
R2078	5/8"	1-1/2"	1-3/8"	3"
R2079	5/8"	2"	1-1/4"	3-5/8"
R2081	21/32"	1-1/4"	1-3/8"	2-7/8"
R2083	11/16"	1-1/4"	1-3/8"	2-7/8"
R2083-1	23/32"	1-1/4"	1-3/8"	2-7/8"
R2084	3/4"	1"	1-3/8"	2-5/8"
R2085	3/4"	1-1/4"	1-3/8"	2-7/8"
R2086	3/4"	1-1/2"	1-3/8"	3"
R2087	3/4"	2"	1-3/8"	3-5/8"
R2088	25/32"	1-1/4"	1-3/8"	2-7/8"

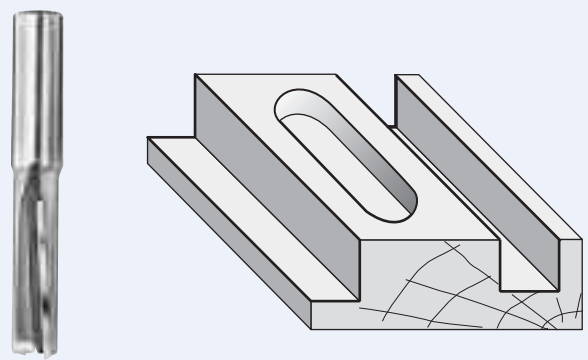
**1/2" Shank Router Bits cont'd...**

**R2089**
**1/2" SHANK STRAIGHT ROUTER BITS  
BITS TWO FLUTES cont'd**

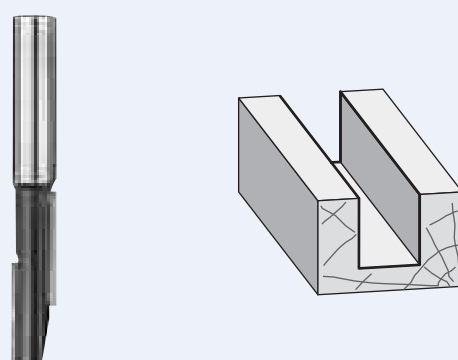
PART NO.	CUTTING DIAM.	CUTTING LENGTH	SHANK LENGTH	OVERALL LENGTH
R2089	13/16"	1"	1-3/8"	2-5/8"
R2090	13/16"	1-1/4"	1-3/8"	2-7/8"
R2090-1	7/8"	1"	1-3/8"	2-5/8"
R2091	7/8"	1-1/4"	1-3/8"	2-7/8"
R2092-1	1"	1"	1-3/8"	3"
R2093	1"	1-1/4"	1-3/8"	2-7/8"
R2093-1	1"	1-1/2"	1-1/4"	3"
R2093-2	1"	2"	1-3/8"	3-5/8"
R2094	1-1/16"	1-1/4"	1-3/8"	2-7/8"
R2095	1-3/16"	1-1/4"	1-3/8"	2-7/8"
R2096	1-1/8"	1-1/4"	1-3/8"	2-7/8"
R2097	1-1/4"	1-1/4"	1-3/8"	2-7/8"
R2098	1-3/8"	1-1/4"	1-3/8"	2-7/8"
R2099	1-1/2"	1-1/4"	1-3/8"	2-7/8"
R2099-1	1-5/8"	1-1/4"	1-3/8"	2-7/8"
R2100	1-3/4"	1-1/4"	1-3/8"	2-7/8"
R2100-1	1-7/8"	1-1/4"	1-3/8"	2-7/8"
R2101	2"	1-1/4"	1-3/8"	2-7/8"

**R2150**
**3/4" SHANK  
STRAIGHT ROUTER BITS TWO FLUTES**


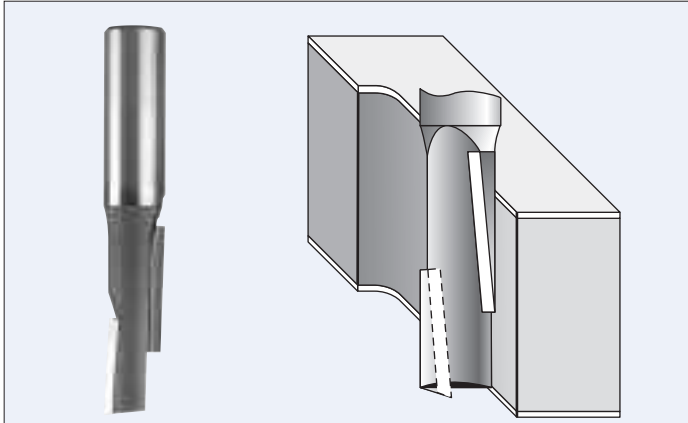
PART NO.	CUTTING DIAM.	CUTTING LENGTH	SHANK LENGTH	OVERALL LENGTH
R2150	3/4"	1-1/4"	1-1/2"	3"
R2151	3/4"	1-1/2"	1-1/2"	3-1/4"
R2152	3/4"	2"	1-3/4"	4"
R2153	3/4"	2-1/2"	2"	4-1/2"
R2158	1"	1-1/2"	1-1/2"	3-1/4"
R2160	1"	2"	2"	4-1/4"

**R2110**
**1/2" SHANK  
STRAIGHT ROUTER BITS  
TWO FLUTES DOWN SHEAR**


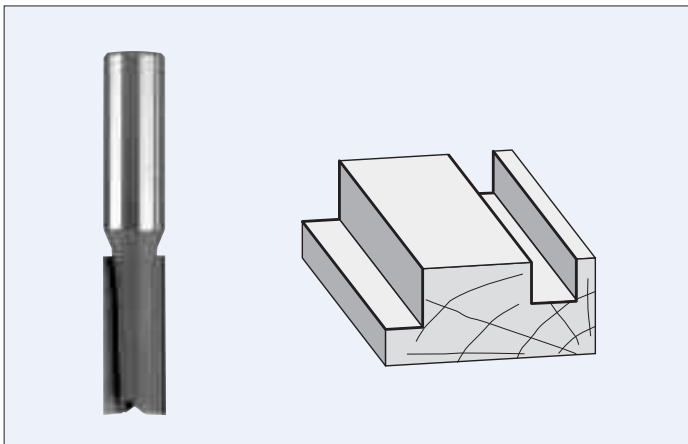
PART NO.	CUTTING DIAM.	CUTTING LENGTH	SHANK LENGTH	OVERALL LENGTH
R2110	3/8"	1"	1-1/2"	2-3/4"
R2111	1/2"	1-1/4"	1-1/4"	2-7/8"
R2112	1/2"	1-1/2"	1-3/8"	3-1/8"
R2113	1/2"	2"	2"	4-1/4"

**R2200**
**STAGGER TOOTH  
STRAIGHT ROUTER BITS**


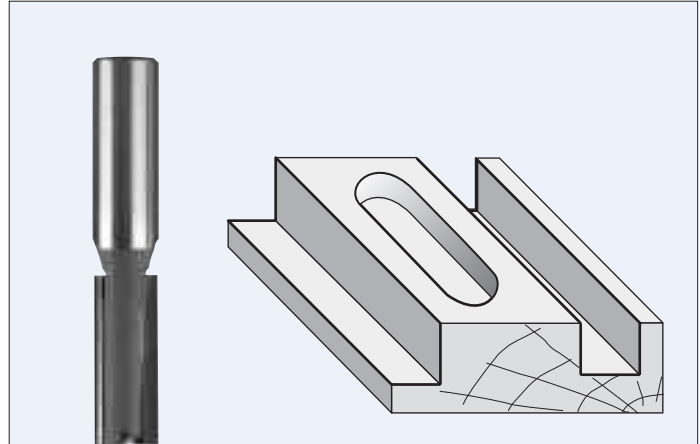
PART NO.	CUTTING DIAM.	CUTTING LENGTH	SHANK DIAM.	SHANK LENGTH	OVERALL LENGTH
R2200S	1/4"	1"	1/4"	1-1/2"	2-1/4"
R2200	3/8"	1-3/8"	3/8"	1-1/4"	3"
R2201	3/8"	1-1/2"	1/2"	1-3/8"	3-1/8"
R2202	1/2"	1-1/2"	1/2"	1-3/8"	3-1/8"
R2203	1/2"	2"	1/2"	1-5/8"	4-1/4"
R2203-1	1/2"	2-1/8"	1/2"	1-5/8"	4-1/4"

**R2206****STAGGER TOOTH BITS  
WITH COMPRESSION SHEAR**

PART NO.	CUTTING DIAM.	CUTTING LENGTH	SHANK DIAM.	SHANK LENGTH	OVERALL LENGTH
R2206	1/2"	1-1/2"	1/2"	1-5/8"	3-1/8"
R2207	1/2"	2"	1/2"	2"	4-1/4"

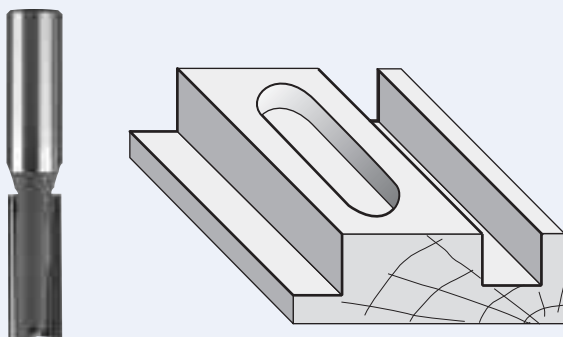
**R2210****LEFT HAND ROUTER BITS  
1/2" SHANK TWO FLUTES**

PART NO.	CUTTING DIAM.	CUTTING LENGTH	SHANK LENGTH	OVERALL LENGTH
R2210	5/16"	3/4"	1-3/8"	2-1/2"
R2211	5/16"	1"	1-3/8"	2-3/4"
R2212	3/8"	1"	1-3/8"	2-3/4"
R2213	7/16"	1-1/4"	1-1/4"	3"
R2214	1/2"	1-1/4"	1-3/8"	2-7/8"
R2215	1/2"	1-1/2"	1-3/8"	3"
R2216	1/2"	2"	1-7/8"	4-1/4"
R2217	9/16"	1-1/4"	1-3/8"	2-7/8"
R2218	5/8"	1-1/4"	1-3/8"	2-7/8"
R2219	3/4"	1-1/4"	1-3/8"	2-7/8"
R2220	3/4"	2"	1-3/8"	3-5/8"
R2221	13/16"	1-1/4"	1-3/8"	2-7/8"
R2222	7/8"	1-1/4"	1-3/8"	2-7/8"
R2223	1"	1-1/4"	1-3/8"	2-7/8"

**R2230****PLUNGE POINT BITS  
1/4" SHANK TWO FLUTES**

PART NO.	CUTTING DIAM.	CUTTING LENGTH	SHANK LENGTH	OVERALL LENGTH
R2230	5/16"	3/4"	1-1/8"	2"
R2232	3/8"	1"	1-1/8"	2-1/4"
R2233	1/2"	3/4"	1-1/8"	2"
R2234	1/2"	1"	1-1/8"	2-1/8"
R2235	5/8"	3/4"	1-3/8"	2-1/8"
R2236	7/8"	3/4"	1-1/8"	2"
R2237	1"	3/4"	1-1/8"	2"

All above bits supplied with **bottom carbide** for **plunging** operations.

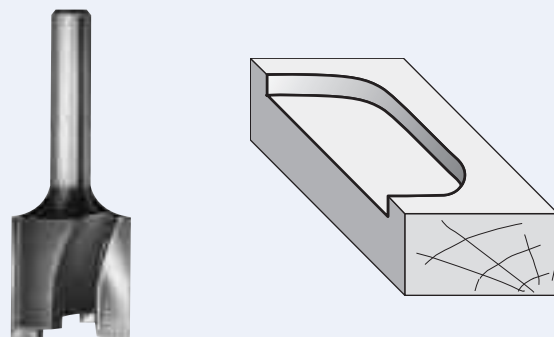
**R2240**
**PLUNGE POINT BITS  
1/2" SHANK TWO FLUTES**


PART NO.	CUTTING DIAM.	CUTTING LENGTH	SHANK LENGTH	OVERALL LENGTH
R2240	5/16"	3/4"	1-3/8"	2-1/2"
R2241	3/8"	1-1/4"	1-1/2"	3"
R2242	7/16"	1"	1-1/4"	2-3/4"
R2243	1/2"	1"	1-3/8"	2-5/8"
R2244	1/2"	1-1/4"	1-3/8"	2-7/8"
R2245	1/2"	1-1/2"	1-3/8"	3-1/8"
R2246	1/2"	2"	1-7/8"	4-1/4"
R2247	5/8"	1-1/4"	1-3/8"	2-7/8"
R2248	5/8"	2"	1-7/8"	3-3/4"
R2249	3/4"	1"	1-3/8"	2-5/8"
R2250	7/8"	1-1/4"	1-3/8"	2-7/8"
R2251	1"	1"	1-3/8"	2-5/8"
R2252	1-5/8"	1"	1-3/8"	2-5/8"
R2253	1-3/4"	1-1/4"	1-3/8"	2-7/8"
R2254	1-7/8"	1-1/4"	1-3/8"	2-7/8"

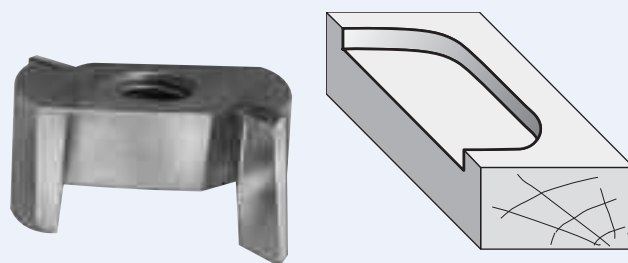
**AR15MB**
**THREADED ARBOR  
FOR MORTISING BITS**


PART NO.	SHANK DIAM.	TYPE OF THREAD	OVERALL LENGTH
AR12MB	1/2"	1/4-28	2-3/8"
AR14MB	1/4"	1/4-28	1-3/4"

Fits R2310 to R2314 mortising bits, screw type.

**R2300**
**MORTISING BITS  
TWO FLUTES**


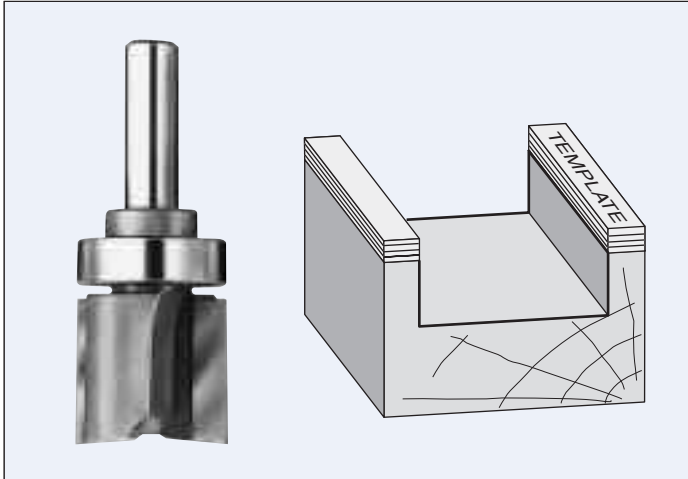
PART NO.	CUTTING DIAM.	CUTTING LENGTH	SHANK DIAM.	SHANK LENGTH	OVERALL LENGTH
R2300	1/2"	3/4"	1/4"	1-1/4"	2"
R2301	5/8"	3/4"	1/4"	1-1/4"	2"
R2302	3/4"	3/4"	1/4"	1-1/4"	2"
R2303	1"	3/4"	1/4"	1-1/8"	2"
R2304	1-1/4"	1/2"	1/4"	1-1/4"	1-3/4"
R2305	1-1/4"	1-1/4"	1/2"	1-1/4"	2-7/8"

**R2310**
**MORTISING BITS  
SCREW TYPE TWO FLUTES**


PART NO.	CUTTING DIAM.	THREADED HOLE	CUTTING LENGTH
R2310	3/4"	1/4-28 Thread	1/2"
R2311	7/8"	1/4-28 Thread	1/2"
R2312	1"	1/4-28 Thread	1/2"
R2313	1-1/8"	1/4-28 Thread	9/16"
R2314	1-1/4"	1/4-28 Thread	5/8"

**R2320**

**STRAIGHT PLUNGE BITS WITH CENTRE  
BALL BEARING GUIDE TWO FLUTES**



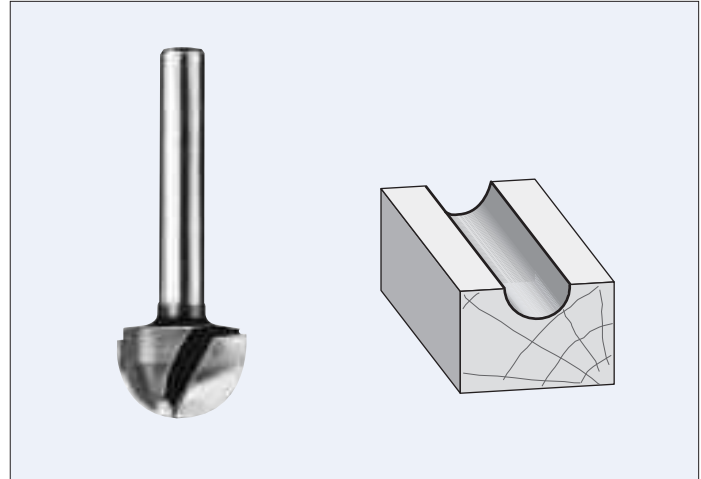
PART NO.	CUTTING DIAM.	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH
R2320 (A)	1/2"	1"	1/4"	2-1/2"
R2320-1(A)	1/2"	1-1/4"	1/4"	2-3/4"
R2320-2(A)	1/2"	1/2"	1/4"	2-3/4"
R2321 (B)	5/8"	1"	1/4"	2-1/2"
R2322 (C)	3/4"	1"	1/4"	2-1/2"
R2322-1(E)	3/4"	1"	1/2"	3"
R2322-2(E)	3/4"	2"	1/2"	3-5/8"
R2323 (D)	1"	1"	3/8"	2-3/4"
R2324 (H)	1"	1-3/4"	1/2"	3-3/4"
R2325 (F)	1-1/8"	1-1/2"	1/2"	3-5/8"
R2326 (G)	1-1/4"	1-3/4"	1/2"	3-1/4"

**Replacement Parts**

(A)	Ball Bearing B3-1	Lock Ring WO1	Screw WNC525
(B)	Ball Bearing B3-3	Lock Ring WO1	Screw WNC525
(C)	Ball Bearing B4	Lock Ring WO1	Screw WNC525
(D)	Ball Bearing B6-1	Lock Ring WO2	Screw WNC525
(E)	Ball Bearing B4-1A	Lock Ring WO4	Screw WNC518
(F)	Ball Bearing B6-4	Lock Ring WO3	Screw WNC518
(G)	Ball Bearing B6-5	Lock Ring WO3	Screw WNC518
(H)	Ball Bearing B6-1A	Lock Ring WO4	Screw WNC518

**R2400**

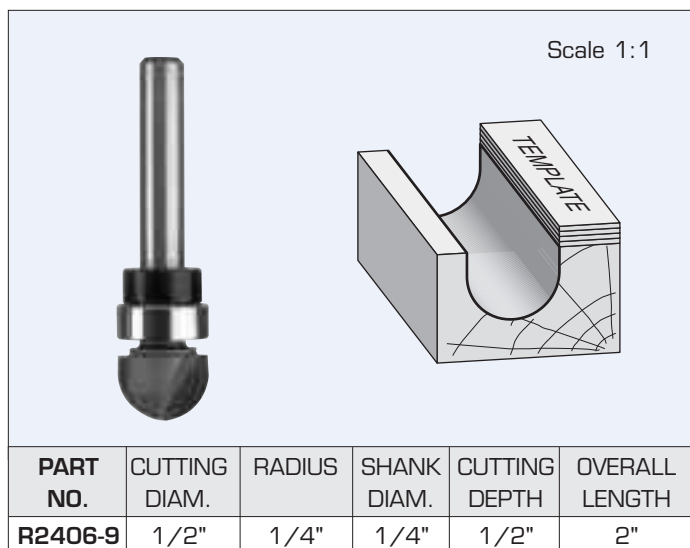
**ROUND NOSE BITS  
SHALLOW PROFILE**



PART NO.	CUTTING DIAM.	RADIUS	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH
R2400	1/8"	1/16"	3/8"	1/4"	1-3/4"
R2401	3/16"	3/32"	1/2"	1/4"	1-3/4"
R2402	1/4"	1/8"	1/2"	1/4"	1-3/4"
R2402-1	5/16"	5/32"	1/2"	1/4"	1-1/2"
R2403	3/8"	3/16"	1/4"	1/4"	1-1/2"
R2403-1	3/8"	3/16"	1/4"	1/2"	1-7/8"
R2403-2	7/16"	7/32"	5/8"	1/4"	1-3/4"
R2403-3	7/16"	7/32"	5/8"	1/2"	2-3/8"
R2404	1/2"	1/4"	5/16"	1/4"	1-1/2"
R2404-1	1/2"	1/4"	5/16"	1/2"	2"
R2405	5/8"	5/16"	3/8"	1/4"	1-1/2"
R2405-1	5/8"	5/16"	3/8"	1/2"	2"
R2406	3/4"	3/8"	1/2"	1/4"	1-1/2"
R2406-1	3/4"	3/8"	1/2"	1/2"	2"
R2406-2	7/8"	7/16"	5/8"	1/4"	1-3/4"
R2406-3	7/8"	7/16"	5/8"	1/2"	2"
R2406-4	1"	1/2"	5/8"	1/4"	1-3/4"
R2406-5	1"	1/2"	5/8"	1/2"	2-3/16"
R2406-6	1-1/4"	5/8"	3/4"	1/2"	2-3/16"



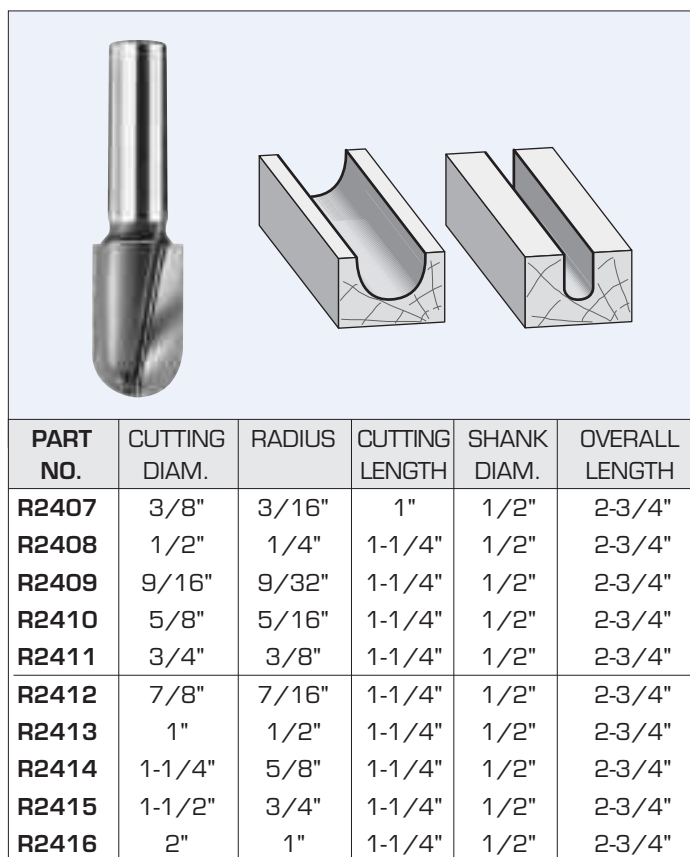
## R2406-9 CORE BOX BIT WITH BEARING GUIDE TWO FLUTES



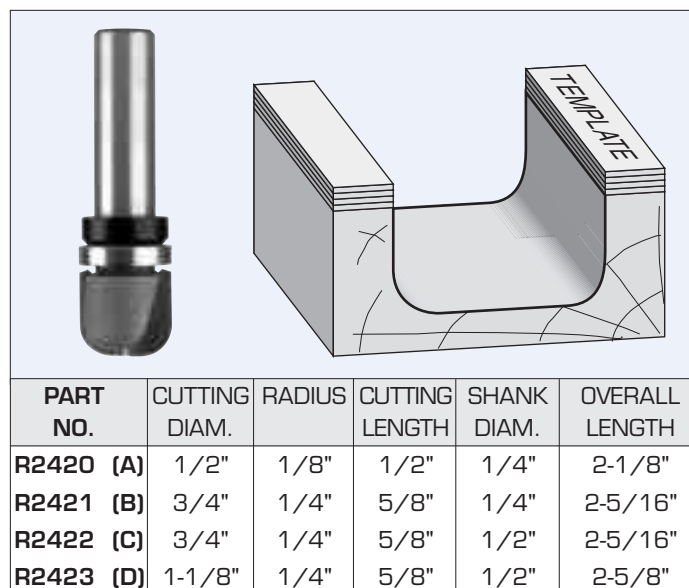
### Replacement Parts

Ball Bearing B3-1 Lock Ring WO1 Screw WNC525

## R2407 ROUND NOSE BITS DEEP PROFILE



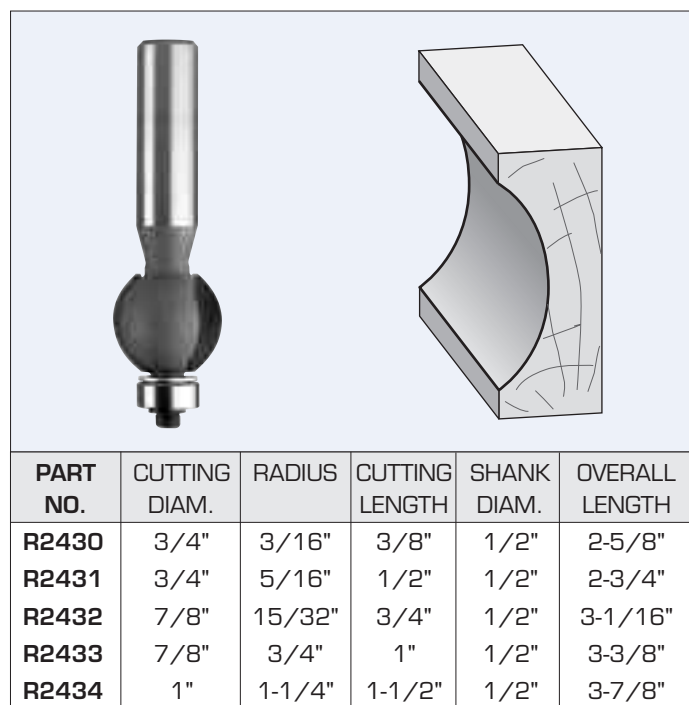
## R2420 COVE PLUNGE BITS WITH CENTRE BALL BEARING



### Replacement Parts

(A) Ball Bearing B3-1 Lock Ring WO1 Screw WNC525  
 (B) Ball Bearing B4 Lock Ring WO1 Screw WNC525  
 (C) Ball Bearing B4-1A Lock Ring WO4 Screw WNC518  
 (D) Ball Bearing B6-4 Lock Ring WO3 Screw WNC518

## R2430 CONVEX BEADING BITS WITH BEARING GUIDE

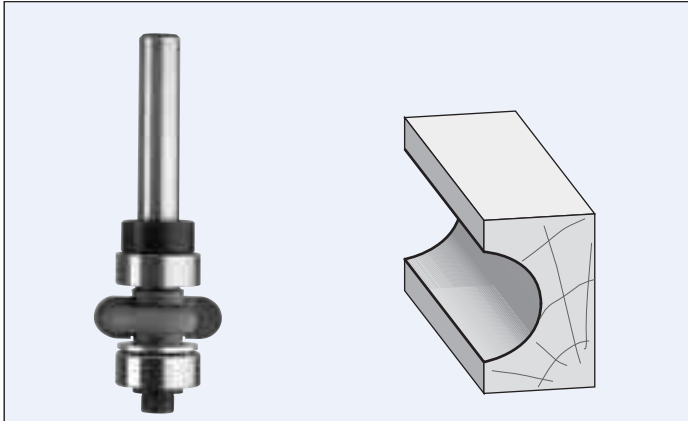


### Replacement Parts

Ball Bearing B3 Washer WR58  
 Spring Washer WFS506 Screw WNC538

## R2436

### CONVEX BEADING BITS WITH TWO BALL BEARINGS



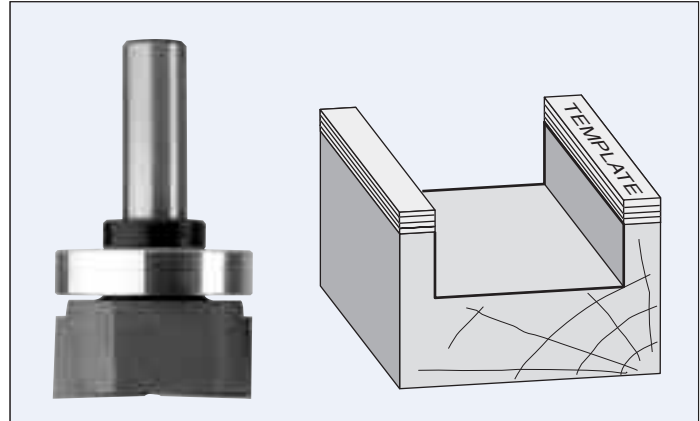
PART NO.	CUTTING DIAM.	RADIUS	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH
R2436	3/4"	1/8"	1/4"	1/4"	2-1/4"
R2437	7/8"	13/64"	25/64"	1/4"	2-3/8"

#### Replacement Parts

Lock Ring WO1      Centre Ball Bearing B3-1  
Washer WR58      Lower Ball Bearing B3  
Spring Washer WFS506      Screw for Bearing WNC538

## R2450

### BOTTOM CLEANING BITS WITH UPPER BALL BEARING



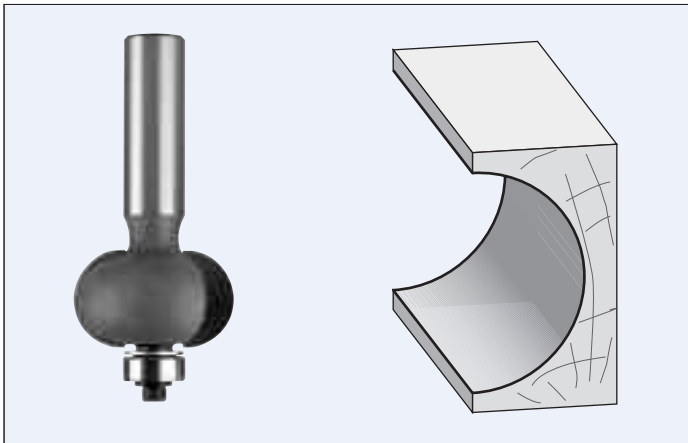
PART NO.	CUTTING DIAM.	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH
R2450 (A)	3/4"	7/16"	1/4"	2-3/16"
R2451 (B)	1"	7/16"	1/2"	2-1/2"
R2452 (C)	1-1/2"	5/8"	1/2"	2-3/4"

#### Replacement Parts

(A) Ball Bearing B4      Lock Ring WO1      Screw WNC525  
(B) Ball Bearing B6-1A      Lock Ring WO4      Screw WNC518  
(C) Ball Bearing B10      Lock Ring WO3      Screw WNC518

## R2440

### CONVEX BEADING BITS WITH BEARING GUIDE



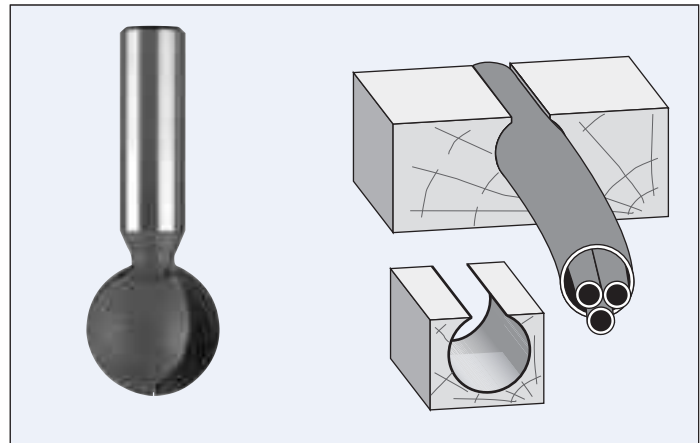
PART NO.	CUTTING DIAM.	RADIUS	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH
R2440	13/16"	5/32"	5/16"	1/4"	1-7/8"
R2441	7/8"	3/16"	3/8"	1/4"	2"
R2442	31/32"	15/64"	15/32"	1/4"	2"
R2444	1-1/4"	25/64"	25/32"	1/2"	3"

#### Replacement Parts

Ball Bearing B3      Spring Washer WFS506  
Washer WR58      Screw WNC538

## R2455

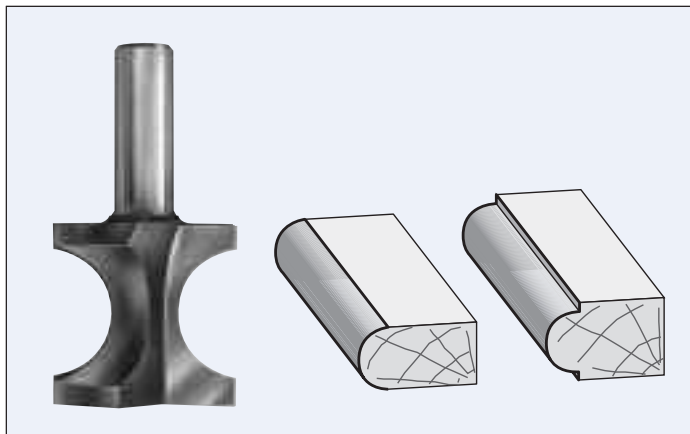
### BALL GROOVING BITS TWO FLUTES



PART NO.	LARGE DIAM.	SMALL DIAM.	SHANK DIAM.	OVERALL LENGTH
R2455	1/2"	1/4"	1/2"	2-1/4"
R2456	5/8"	9/32"	1/2"	2-7/16"
R2457	3/4"	5/16"	1/2"	2-1/2"
R2458	7/8"	5/16"	1/2"	2-5/8"
R2459	1"	11/32"	1/2"	2-3/4"
R2460	1-1/8"	13/32"	1/2"	2-7/8"
R2461	1-1/4"	7/16"	1/2"	3"

## R2500

### HALF ROUND BITS (BULL NOSE)



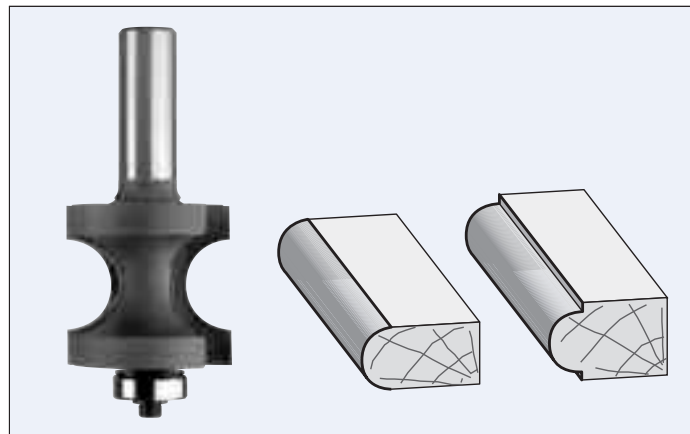
PART NO.	LARGE DIAM.	RADIUS	CUTTER OPENING	CARBIDE HEIGHT	SHANK DIAM.
R2500-1	17/32"	5/64"	5/32"	1/2"	1/4"
R2500-2	17/32"	5/64"	5/32"	1/2"	1/2"
R2500	19/32"	7/64"	7/32"	1/2"	1/4"
R2501	21/32"	9/64"	9/32"	3/4"	1/4"
R2502	7/8"	13/64"	13/32"	3/4"	1/4"
R2503	1-1/32"	17/64"	35/64"	1"	1/4"
R2504	19/32"	7/64"	7/32"	1/2"	1/2"
R2505	21/32"	9/64"	9/32"	3/4"	1/2"
R2506	7/8"	13/64"	13/32"	3/4"	1/2"
R2507	1-1/32"	17/64"	35/64"	1"	1/2"
R2507-1	1-1/16"	5/16"	5/8"	1-1/8"	1/2"
R2508	1-5/16"	3/8"	3/4"	1-3/8"	1/2"
R2509	1-11/16"	1/2"	1"	1-9/16"	1/2"
R2510	2"	5/8"	1-1/4"	2"	1/2"
R2511	2-3/8"	3/4"	1-1/2"	2"	1/2"
R2511-1*	2-3/8"	3/4"	1-1/2"	2"	1/2"

\* Max. RPM 16,000

\* This router bit has 3 flutes and is suitable for cutting solid surface materials, solid woods and composite materials

## R2512

### HALF ROUND BITS (BULL NOSE) WITH BEARING



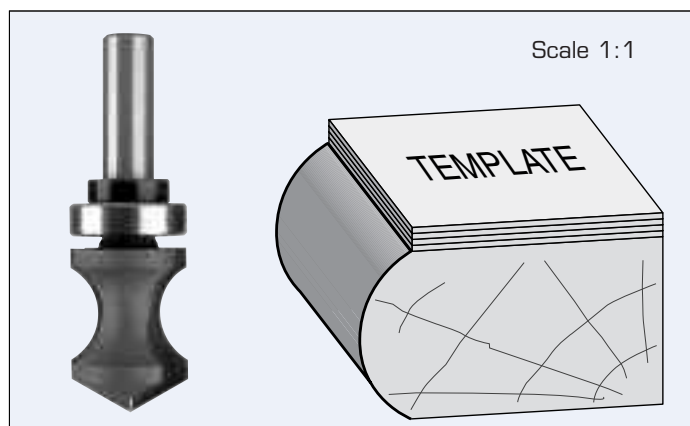
PART NO.	LARGE DIAM.	RADIUS	CUTTER OPENING	CARBIDE HEIGHT	SHANK DIAM.
R2512(A)	25/32"	9/64"	17/64"	3/4"	1/2"
R2513(A)	29/32"	13/64"	25/64"	3/4"	1/2"
R2514(A)	1-1/32"	17/64"	35/64"	1"	1/2"
R2515(B)	1-3/8"	3/8"	3/4"	1-1/4"	1/2"
R2516(C)	1-3/4"	1/2"	1"	1-9/16"	1/2"
R2517(D)	2"	5/8"	1-1/4"	2"	1/2"

#### Replacement Parts

(A) Ball Bearing B3	Washer WR58
Spring washer WFS506	Screw WNC538
(B) Ball Bearing B3-4	Washer WR59
Spring Washer WFS506	Screw WNC512
(C) Ball Bearing B4	Washer WR59
Spring Washer WFS508	Screw WNF1012
(D) Ball Bearing B4	Washer WR59
Spring Washer WFS508	Screw WNF1012

## R2519

### BULL NOSE BIT WITH UPPER BALL BEARING - PLUNGE TYPE

					
Scale 1:1					
PART NO.	LARGE DIAM.	RADIUS	CUTTER OPENING	CUTTING LENGTH	SHANK DIAM.
R2519	1-1/8"	1/2"	7/8"	1-9/16"	1/2"

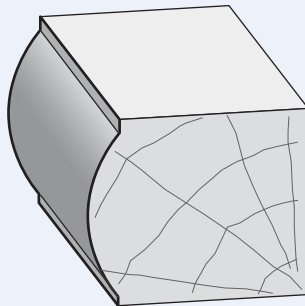
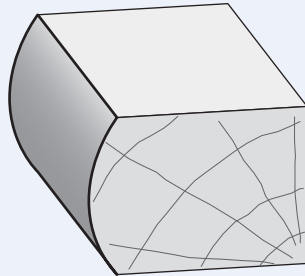
Overall length of bit 3-5/8"

#### Replacement Parts

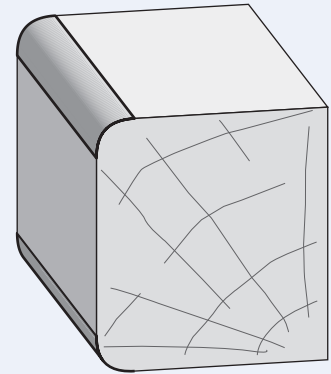
Ball Bearing B6-4	Lock Ring W03	Screw WNC518
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**R2520****TRUE BULL NOSE BIT  
TWO FLUTES**

Scale 1:1



PART NO.	CUTTING DIAM.	RADIUS	CUTTING LENGTH.	SHANK DIAM.	OVERALL LENGTH
R2520	13/16"	23/32"	1-1/4"	1/4"	2-1/2"
R2521	13/16"	23/32"	1-1/4"	1/2"	2-3/4"

**R2525****ADJUSTABLE  
ROUNDING OVER SET 3 WINGS**

PART NO.	LARGE DIAM.	RADIUS	SHANK DIAM.	OVERALL LENGTH
R2525	1-1/2"	3/16"	1/2"	3-5/8"
R2526	1-5/8"	1/4"	1/2"	3-5/8"
R2527	1-7/8"	3/8"	1/2"	3-5/8"

Fully adjustable set for corner rounding top and bottom in just one pass.

R 3/16" Adjustable from 3/8" to 1-1/4" wood thickness  
 R 1/4" Adjustable from 1/2" to 1-1/4" wood thickness  
 R 3/8" Adjustable from 3/4" to 1-1/4" wood thickness

#### Replacement Cutters

R 3/16"	Top cutter	(right)	R2525CR
R 3/16"	Bottom cutter	(left)	R2525CL
R 1/4"	Top cutter	(right)	R2526CR
R 1/4"	Bottom cutter	(left)	R2526CL
R 3/8"	Top cutter	(right)	R2527CR
R 3/8"	Bottom cutter	(left)	R2527CL

#### Replacement Parts

Ball Bearing B6-3

Arbor and nut AR20

Nut only WNF516

Spacer A (6.0mm 2 pcs.) WF618

Spacer B (3.0mm 1 pc.) WF610

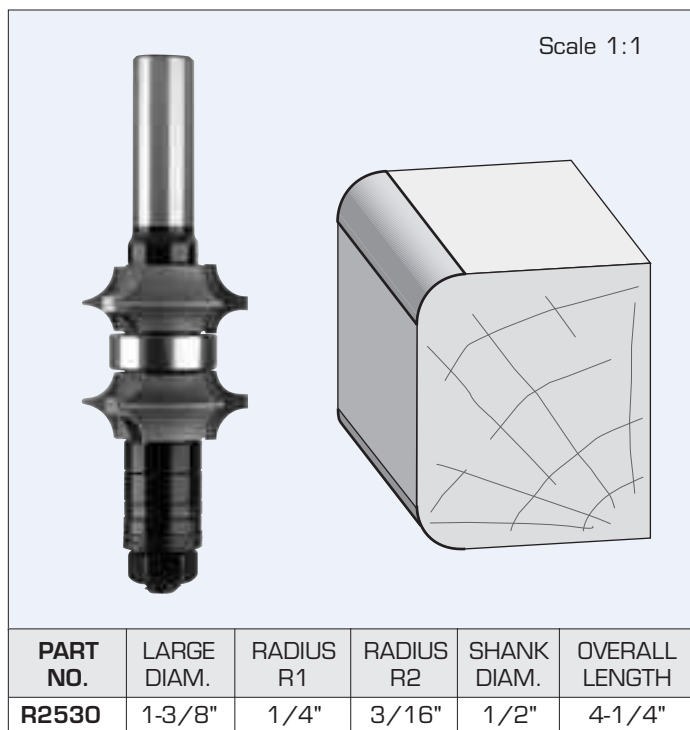
Spacer C (1.0mm 2 pcs.) WF608

Spacer D (0.5mm 2 pcs.) WF606

Spacer E (0.1mm 6 pcs.) WF604

## R2530

### ADJUSTABLE ROUNDING OVER SET 3 WINGS DOUBLE RADIUS



Fully adjustable set for corner rounding top and bottom in just one pass.

R 3/16" Adjustable from 3/8" to 1-3/8" wood thickness  
R 1/4" Adjustable from 1/2" to 1-1/2" wood thickness

#### Replacement Cutters

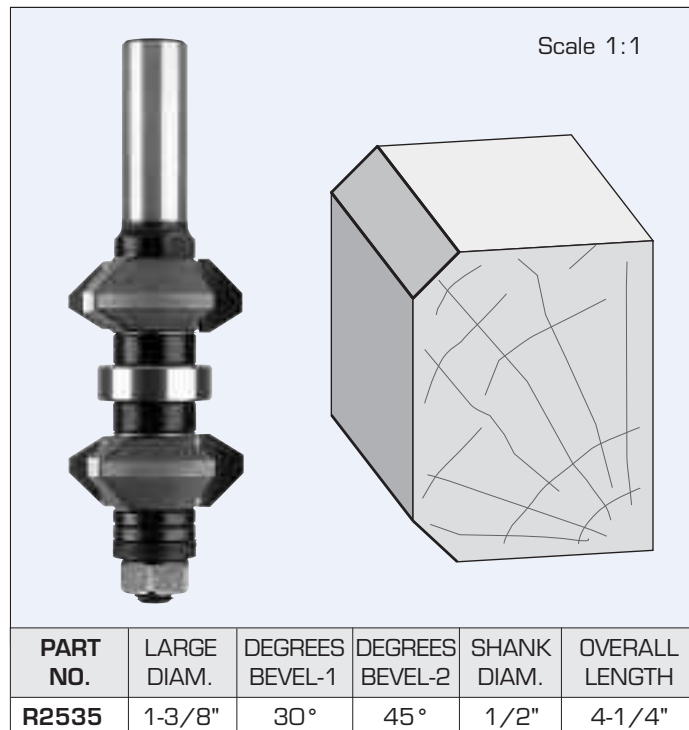
Top cutter (right) R2530CR  
Bottom cutter (left) R2530CL

#### Replacement Parts

Ball Bearing B5  
Arbor and nut AR22  
Nut only WNF516  
Spacer (6.0mm 2 pcs.) WF618  
Spacer (3.0mm 2 pcs.) WF610  
Spacer (1.0mm 3 pcs.) WF608  
Spacer (0.5mm 1 pc.) WF606  
Spacer (0.1mm 4 pcs.) WF604

## R2535

### ADJUSTABLE 3 WINGS CHAMFERING SET DOUBLE ANGLE



Fully adjustable set for corner bevelling top and bottom in just one pass.

Bevel 30° adjustable from 3/8" to 1-3/8" wood thickness  
Bevel 45° adjustable from 1/2" to 1-5/8" wood thickness

#### Replacement Cutters

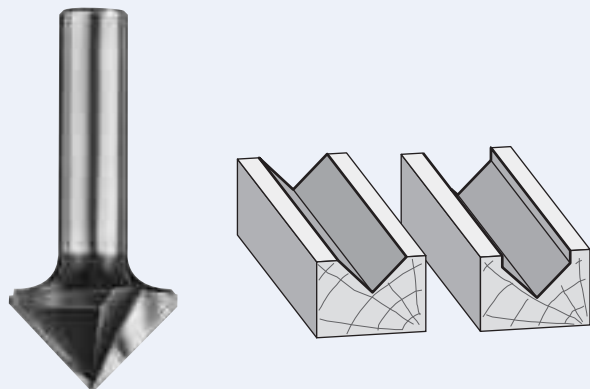
Top cutter (right) R2535CR  
Bottom cutter (left) R2535CL

#### Replacement Parts

Ball Bearing B5  
Arbor and nut AR22  
Nut only WNF516  
Spacer (6.0mm 2 pcs.) WF618  
Spacer (3.0mm 2 pcs.) WF610  
Spacer (1.0mm 4 pcs.) WF608  
Spacer (0.5mm 1 pc.) WF606  
Spacer (0.1mm 4 pcs.) WF604

**R2541**

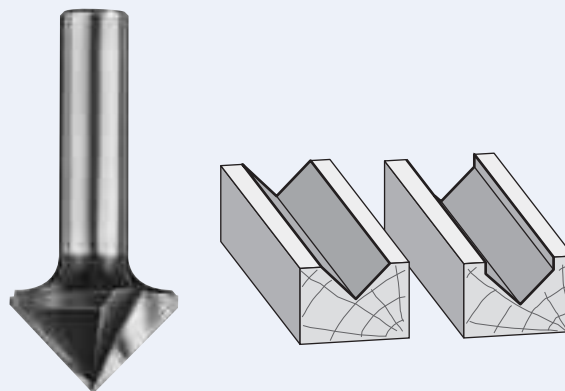
**"V" GROOVING BITS**  
**90° INCLUDED ANGLE**



PART NO.	CUTTING DIAM.	CUTTING DEPTH	SHANK DIAM.	OVERALL LENGTH
R2541	3/8"	1/2"	1/4"	1-3/4"
R2541-1	3/8"	1/2"	1/2"	1-3/4"
R2542	1/2"	1/2"	1/4"	1-3/4"
R2542-1	1/2"	1/2"	1/2"	2-1/8"
R2543	5/8"	1/2"	1/4"	1-3/4"
R2543-1	5/8"	1/2"	1/2"	2-1/8"
R2543-2	3/4"	5/8"	1/4"	1-3/4"
R2544	3/4"	5/8"	1/2"	2-1/4"
R2544-1	7/8"	5/8"	1/4"	2"
R2544-2	7/8"	5/8"	1/2"	2-1/4"
R2545	1"	3/4"	1/4"	1-3/4"
R2545-1	1"	3/4"	1/2"	2-3/8"
R2546	1-1/4"	1"	1/2"	2-1/2"
R2547	1-1/2"	1-1/4"	1/2"	2-7/8"
R2548	1-3/4"	1-1/2"	1/2"	3"
R2549	2"	1-3/4"	1/2"	3"

**R2550**

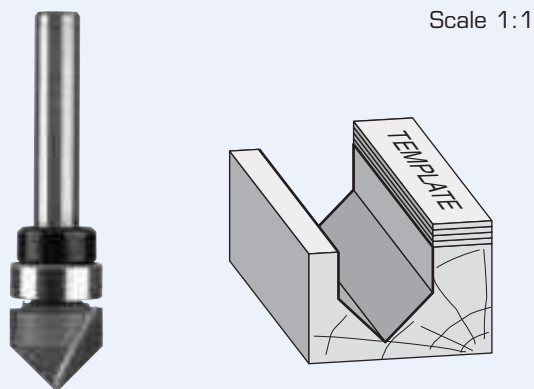
**"V" GROOVING BITS**  
**60°/70° INCLUDED ANGLE**



PART NO.	CUTTING DIAM.	INCLUDED ANGLE	CUTTING DEPTH	SHANK DIAM.	OVERALL LENGTH
R2550	1/2"	60°	1/2"	1/4"	1-3/4"

**R2560**

**"V" GROOVING BITS**  
**WITH BEARING GUIDE 90°**



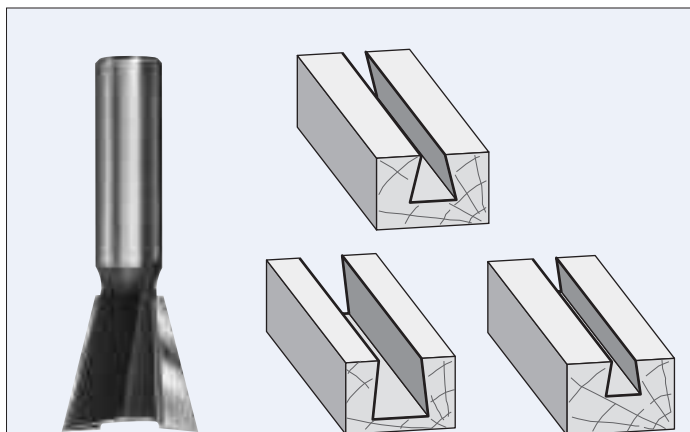
PART NO.	CUTTING DIAM.	CUTTING DEPTH	SHANK DIAM.	OVERALL LENGTH
R2560	1/2"	1/2"	1/4"	2"

#### Replacement Parts

(A) Ball Bearing B3-1    Lock Ring WO1    Screw WNC525

## R2600

### DOVETAIL BITS TWO FLUTES



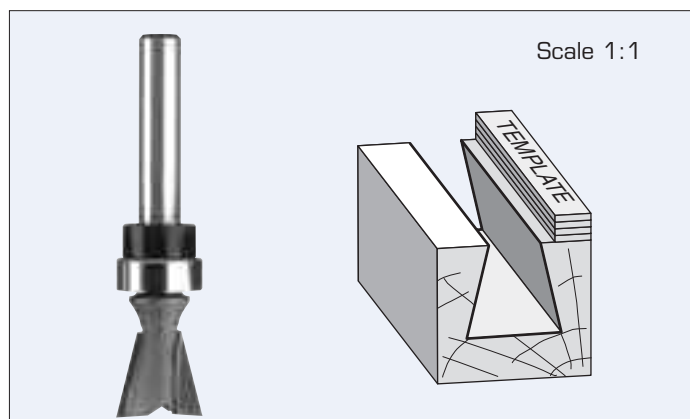
PART NO.	DEGREE EA. SIDE	LARGE DIAM.	DEPTH OF CUT	SHANK DIAM.	OVERALL LENGTH
R2600	9°	5/16"	3/8"	1/4"	2-1/2"
R2600-1	25°	13/64"	5/32"	1/4"	2-3/8"
R2600-2	7.5°	1/4"	5/16"	1/4"	2-1/2"
R2601	9°	3/8"	3/8"	1/4"	1-5/8"
R2602	14°	1/2"	1/2"	1/4"	1-3/4"
R2602-1	14°	17/32"	1/2"	1/4"	1-3/4"
R2603	9°	3/8"	3/8"	3/8"	2"
R2604	7°	1/2"	1/2"	3/8"	2"
R2604-1	9°	5/16"	3/8"	1/2"	2-1/2"
R2605	9°	3/8"	3/8"	1/2"	1-5/8"
R2606	14°	1/2"	1/2"	1/2"	2-3/16"
R2606-1	7°	5/8"	5/8"	1/2"	2-3/8"
R2607	7°	5/8"	7/8"	1/2"	2-1/16"
R2608	7°	3/4"	7/8"	1/2"	2-1/2"
R2608-1	14°	3/4"	3/4"	1/2"	2-1/2"
R2609	7°	7/8"	7/8"	1/2"	2-5/8"
R2609-1	14°	7/8"	7/8"	1/2"	2-5/8"
R2610	14°	1"	1"	1/2"	2-5/8"
R2610-1	7°	1-1/8"	3/4"	1/2"	2-3/8"
R2611	14°	1-1/4"	1"	1/2"	2-5/16"

#### LEFT HAND DOVETAIL BITS

PART NO.	DEGREE EA. SIDE	LARGE DIAM.	DEPTH OF CUT	SHANK DIAM.	OVERALL LENGTH
R2600L	9°	5/16"	3/8"	1/4"	2-1/2"
R2605L	9°	3/8"	3/8"	1/2"	1-5/8"
R2606L	14°	1/2"	1/2"	1/2"	2-1/4"
R2607L	7°	5/8"	7/8"	1/2"	2-1/16"
R2608L	7°	3/4"	7/8"	1/2"	2-1/2"
R2609L	7°	7/8"	7/8"	1/2"	2-5/8"
R2609-1L	14°	7/8"	7/8"	1/2"	2-5/8"
R2610L	14°	1"	1"	1/2"	2-5/8"

## R2620

### DOVETAIL BIT WITH BEARING GUIDE TWO FLUTES, 14 DEGREES



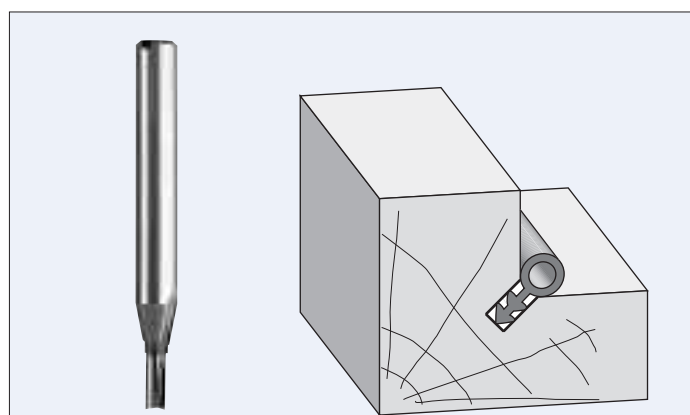
PART NO.	DEGREE EA. SIDE	CUTTING DIAM.	CUTTING DEPTH	SHANK DIAM.	OVERALL LENGTH
R2620	14°	1/2"	1/2"	1/4"	2-1/4"

#### Replacement Parts

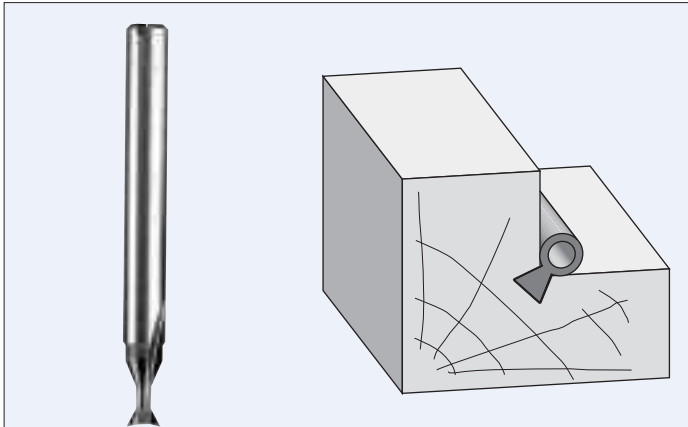
Ball Bearing B3-1      Lock Ring W01      Screw WNC525

## R2630

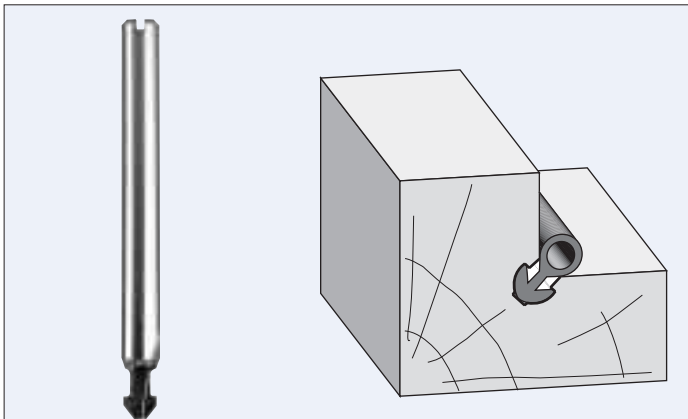
### TEE/BUMPER MOULDING GROOVING BITS TWO FLUTES



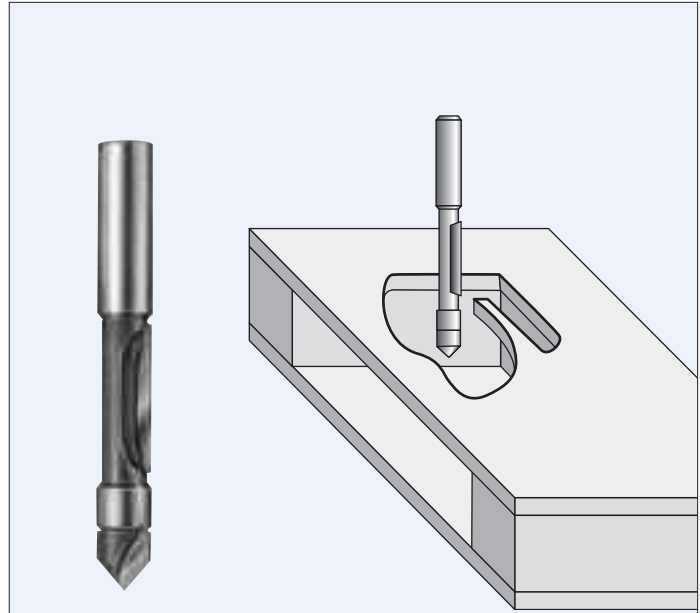
PART NO.	CUTTING DIAM.	CUTTING DEPTH	SHANK DIAM.	OVERALL LENGTH
R2630	1/8"	5/16"	1/4"	2-3/16"

**R2631**
**TEE/BUMPER MOULDING  
GROOVING BITS TWO FLUTES**


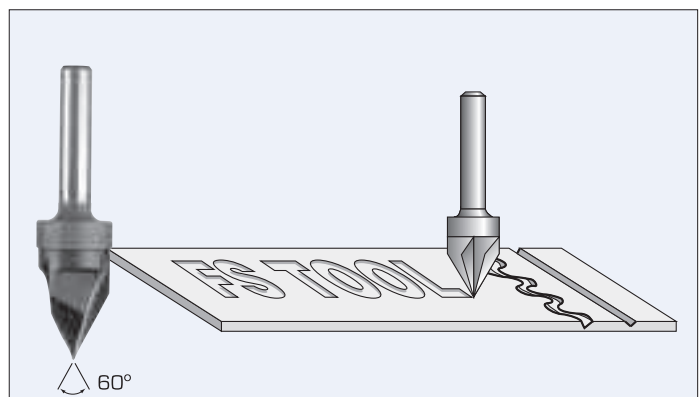
PART NO.	LARGE DIAM.	DEGREES EA. SIDE	DEPTH OF CUT	SHANK DIAM.	OVERALL LENGTH
R2631	13/64"	25°	5/32"	1/4"	2-3/8"

**R2632**
**TEE/BUMPER MOULDING  
GROOVING BITS TWO FLUTES**


PART NO.	LARGE DIAM.	SMALL DIAM.	DEGREES EA. SIDE	DEPTH OF CUT	SHANK DIAM.	OVERALL LENGTH
R2632	7/32"	5/64"	38°	5/16"	1/4"	2-9/16"

**R2700**
**PANEL PILOT BITS  
WITH PLUNGE POINT**


PART NO.	CUTTING DIAM.	CUTTING LENGTH	SHANK DIAM.	FLUTES	OVERALL LENGTH
R2700	1/4"	3/4"	1/4"	1	2-1/2"
R2701	3/8"	1"	3/8"	1	3"
R2702	1/2"	1-3/16"	1/2"	1	3-1/2"
R2703	1/2"	2"	1/2"	1	4-1/2"
R2704	3/8"	1"	1/4"	2	3"
R2705	3/8"	1"	3/8"	2	3"
R2706	1/2"	1-1/4"	1/2"	2	3-3/4"
R2707	1/2"	2"	1/2"	2	4-1/2"

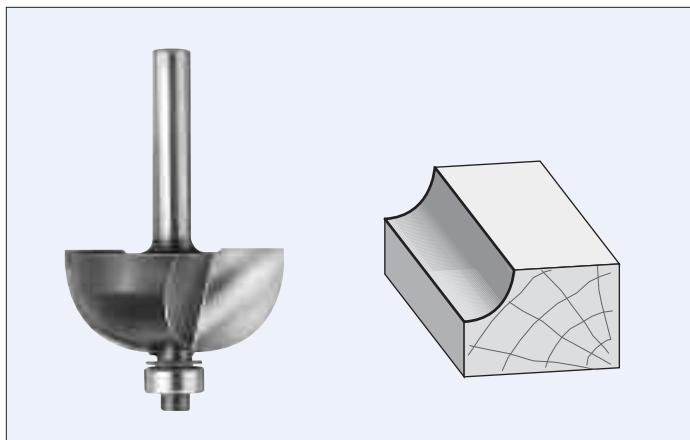
**R2710**
**SOLID CARBIDE  
ENGRAVING BITS THREE FLUTES**


PART NO.	CUTTING DIAM.	CUTTING DEPTH	SHANK DIAM.	OVERALL LENGTH
R2710	9/16"	7/8"	1/4"	2-1/4"



## R2800

### COVE BITS WITH BALL BEARING GUIDE



PART NO.	LARGE DIAM.	RADIUS	CARBIDE HEIGHT	SHANK DIAM.
R2800-1 (A)	1/2"	1/16"	1/2"	1/4"
R2800-2 (A)	1/2"	1/16"	1/2"	1/2"
R2800-3 (A)	5/8"	1/8"	1/2"	1/4"
R2800-4 (A)	5/8"	1/8"	1/2"	1/2"
R2800-A (A)	3/4"	3/16"	9/16"	1/4"
R2803-A (A)	3/4"	3/16"	9/16"	1/2"
R2800 (A)	7/8"	1/4"	9/16"	1/4"
R2803 (A)	7/8"	1/4"	9/16"	1/2"
R2803-1 (A)	1"	5/16"	9/16"	1/4"
R2803-2 (A)	1"	5/16"	9/16"	1/2"
R2801 (A)	1-1/8"	3/8"	9/16"	1/4"
R2804 (A)	1-1/8"	3/8"	9/16"	1/2"
R2802 (A)	1-3/8"	1/2"	3/4"	1/4"
R2805 (A)	1-3/8"	1/2"	3/4"	1/2"
R2806 (A)	1-5/8"	5/8"	3/4"	1/2"
R2807 (B)	1-7/8"	3/4"	1"	1/2"
R2808 (B)	2-3/8"	7/8"	1-1/4"	1/2"
R2809 (B)	2-3/8"	1"	1-1/4"	1/2"
R2810* (B)	3"	1-1/4"	1-1/2"	1/2"

\*Max. RPM 18,000

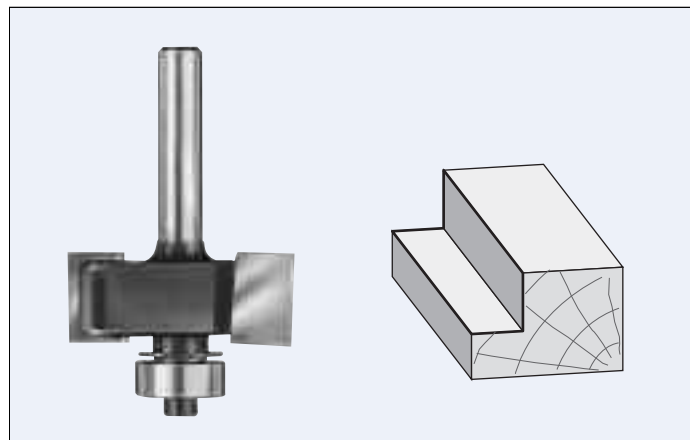
#### Replacement Parts

(A) Ball Bearing B1      Washer WR12  
Spring Washer WFS504      Screw WNC338

(B) Ball Bearing B3      Washer WR58  
Spring Washer WFS506      Screw WNC538

## R2900

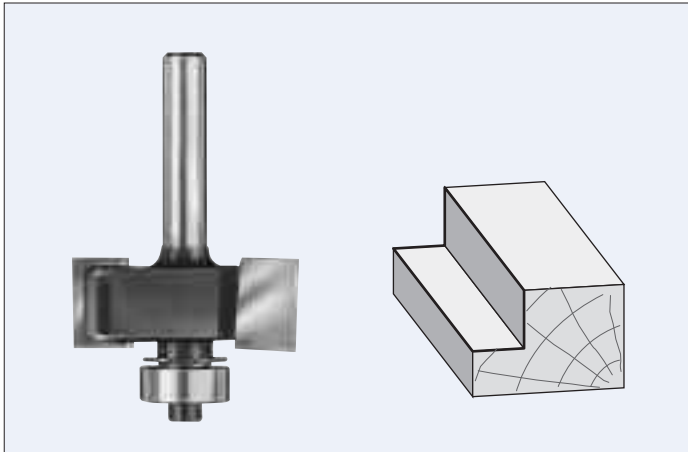
### RABBETING BITS WITH 1/2" DIAMETER BALL BEARING GUIDE



PART NO.	LARGE DIAM.	RABBET DEPTH	CARBIDE HEIGHT	SHANK DIAM.	OVERALL LENGTH
R2900	1-1/4"	3/8"	1/2"	1/4"	2"
R2901	1-1/4"	3/8"	1/2"	1/2"	2-3/8"
R2902	1-3/8"	7/16"	1/2"	1/4"	2"
R2903	1-3/8"	7/16"	1/2"	1/2"	2-3/8"

#### Replacement Parts

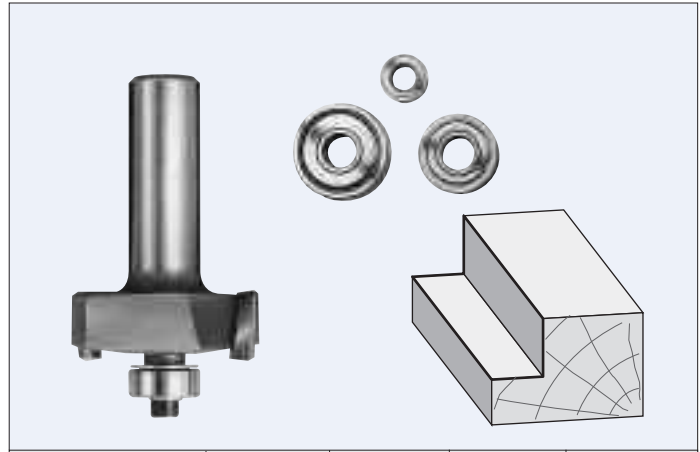
Ball Bearing B3      Washer WR58  
Spring Washer WFS506      screw WNC538

**R2905****RABBETING BITS  
WITH 3/8" DIAMETER  
BALL BEARING GUIDE**

PART NO.	LARGE DIAM.	RABBET DEPTH	CARBIDE HEIGHT	SHANK DIAM.	OVERALL LENGTH
R2905	1-1/4"	7/16"	1/2"	1/4"	2"
R2906	1-1/4"	7/16"	1/2"	1/2"	2-3/8"
R2907	1-3/8"	1/2"	1/2"	1/4"	2"
R2908	1-3/8"	1/2"	1/2"	1/2"	2-3/8"

**Replacement Parts**

Ball Bearing B2      Washer WFS500  
Spring Washer WFS506      Screw WNC538

**R2950****RABBETING BITS  
WITH 4 BALL BEARINGS FOR  
4 DIFFERENT RABBET DEPTHS**

PART NO.	CUTTING DIAM.	CARBIDE HEIGHT	SHANK DIAM.	OVERALL LENGTH
R2950 (complete set)	1-3/8"	1/2"	1/4"	2"
R2951 (complete set)	1-3/8"	1/2"	1/2"	2-3/8"

**TYPICAL ASSEMBLY****1/2" RABBET DEPTH**

PART NO.	DESCRIPTION
WFS500	Flat Washer 5/16" - 3/16"
B2	Ball Bearing 3/8" - 3/16"
WFS506	Spring Washer 1/4" - 1/8"
WNC512	Screw NC5 - 1/2"

**7/16" RABBET DEPTH**

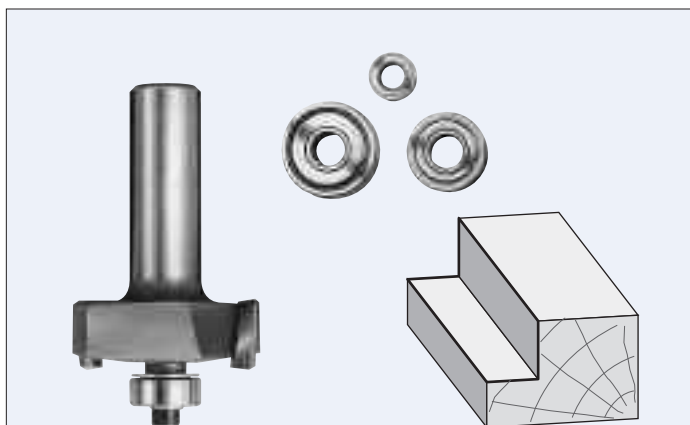
PART NO.	DESCRIPTION
WR58	Raised Washer 1/2" - 3/16"
B3	Ball Bearing 1/2" - 3/16"
WFS506	Spring Washer 1/4" - 1/8"
WNC512	Screw NC5 - 1/2"

**3/8" RABBET DEPTH**

PART NO.	DESCRIPTION
WR59	Raised Washer 16mm - 5mm
B3-2	Ball Bearing 5/8" - 3/16"
WFS506	Spring Washer 1/4" - 1/8"
WNC512	Screw NC5 - 1/2"

**5/16" RABBET DEPTH**

PART NO.	DESCRIPTION
WR59	Raised Washer 16mm - 5mm
B3-5	Ball Bearing 3/4" - 3/16"
WFS506	Spring Washer 1/4" - 1/8"
WNC512	Screw NC5 - 1/2"

**R2960**
**RABBETING BITS  
WITH 7 BALL BEARINGS FOR  
7 DIFFERENT RABBET DEPTHS**


PART NO.	CUTTING DIAM.	CUTTING EDGE	SHANK DIAM.	OVERALL LENGTH
<b>R2960</b> (complete set)	1-3/8"	1/2"	1/4"	2"
<b>R2961</b> (complete set)	1-3/8"	1/2"	1/2"	2-3/8"

**TYPICAL ASSEMBLY**
**1/2" RABBET DEPTH**

PART NO.	DESCRIPTION
<b>WFS500</b>	Flat Washer 5/16" - 3/16"
<b>B2</b>	Ball Bearing 3/8" - 3/16"
<b>WFS506</b>	Spring Washer 1/4" - 1/8"
<b>WNC512</b>	Screw NC5 - 1/2"

**7/16" RABBET DEPTH**

PART NO.	DESCRIPTION
<b>WR58</b>	Raised Washer 1/2" - 3/16"
<b>B3</b>	Ball Bearing 1/2" - 3/16"
<b>WFS506</b>	Flat Washer 5/16" - 1/8"
<b>WNC512</b>	Screw NC5 - 1/2"

**3/8" RABBET DEPTH**

PART NO.	DESCRIPTION
<b>WR59</b>	Raised Washer 16mm - 5mm
<b>B3-2</b>	Ball Bearing 5/8" - 3/16"
<b>WFS506</b>	Spring Washer 1/4" - 1/8"
<b>WNC512</b>	Screw NC5 - 1/2"

**5/16" RABBET DEPTH**

PART NO.	DESCRIPTION
<b>WR59</b>	Raised Washer 16mm - 5mm
<b>B3-5</b>	Ball Bearing 3/4" - 3/16"
<b>WFS506</b>	Spring Washer 1/4" - 1/8"
<b>WNC512</b>	Screw NC5 - 1/2"

Typical assembly cont'd...

**R2960**
**TYPICAL  
ASSEMBLY Cont'd...**
**1/4" RABBET DEPTH**

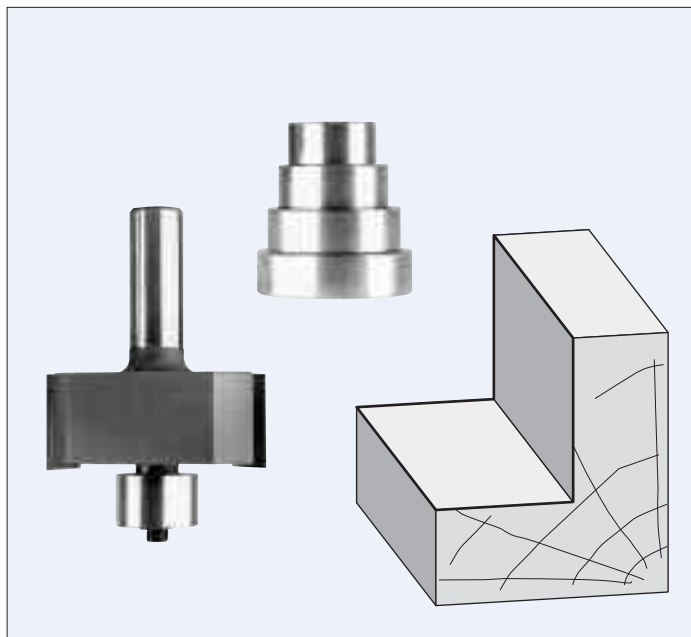
PART NO.	DESCRIPTION
<b>WR59</b>	Raised Washer 16mm - 5mm
<b>B6</b>	Ball Bearing 7/8" - 3/16"
<b>WFS506</b>	Spring Washer 1/4" - 1/8"
<b>WNC512</b>	Screw NC5 - 1/2"

**1/8" RABBET DEPTH**

PART NO.	DESCRIPTION
<b>WR59</b>	Raised Washer 16mm - 5mm
<b>B6-2</b>	Ball Bearing 1-1/8" - 3/16"
<b>WFS506</b>	Spring Washer 1/4" - 1/8"
<b>WNC512</b>	Screw NC5 - 1/2"

**FLUSH**

PART NO.	DESCRIPTION
<b>WR59</b>	Raised Washer 16mm - 5mm
<b>B8</b>	Ball Bearing 1-3/8" - 3/16"
<b>WFS506</b>	Spring Washer 1/4" - 1/8"
<b>WNC512</b>	Screw NC5 - 1/2"

**R2970****MULTI RABBETING ROUTER SETS  
TWO FLUTES**

CUTTING DIAM.	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH
2"	7/8"	1/2"	3-5/64"

PART NO.	DESCRIPTION/DEPTH OF RABBET
<b>R2970</b>	<b>6 piece rabbeting set</b> 1/8", 1/4", 3/8", 1/2", 5/8", 3/4"
<b>R2971</b>	<b>12 piece rabbeting set</b> 1/16", 1/8", 3/16", 1/4", 5/16", 3/8", 7/16", 1/2", 9/16", 5/8", 11/16", 3/4"
<b>R2972</b>	<b>17 piece rabbeting set</b> 1/16", 1/8", 3/16", 15/64", 1/4", 5/16", 23/64", 3/8", 7/16", 15/32", 1/2", 9/16", 19/32", 5/8", 11/16", 23/32", 3/4"

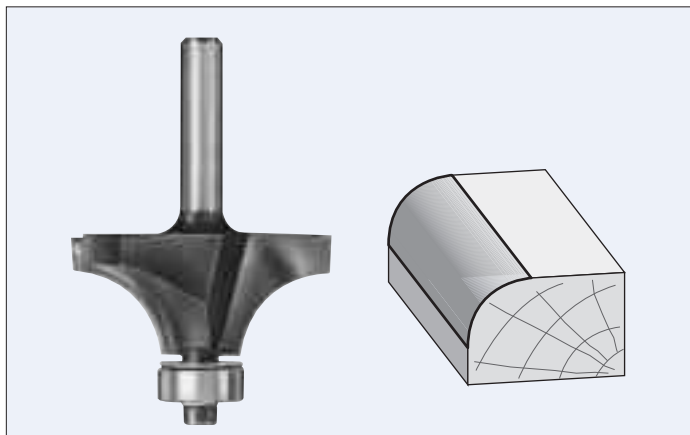
This multi rabbeting set produces rabbet cuts from 1/16" through to 3/4", in 1/16" increments, plus five precision rabbets in 1/64" and 1/32" increments.

**R2970****REPLACEMENT  
PARTS**

PART NO.	DESCRIPTION/DEPTH OF RABBET
<b>R2973</b>	Rabbeting bit with two 1/2" bearing
<b>B3-1</b>	Ball Bearing
<b>WFS506</b>	Washer
<b>WRS220</b>	Spacer 2.2mm
<b>WNC512</b>	Screw
<b>WRC476</b>	Collar 47.6mm Diam. 1/16" rabbet depth
<b>WRC444</b>	Collar 44.4mm Diam. 1/8" rabbet depth
<b>WRC413</b>	Collar 41.3mm Diam. 3/16" rabbet depth
<b>WRC399</b>	Collar 39.9mm Diam. 15/64" rabbet depth
<b>WRC381</b>	Collar 38.1mm Diam. 1/4" rabbet depth
<b>WRC349</b>	Collar 34.9mm Diam. 5/16" rabbet depth
<b>WRC325</b>	Collar 32.5mm Diam. 23/64" rabbet depth
<b>WRC317</b>	Collar 31.7mm Diam. 3/8" rabbet depth
<b>WRC286</b>	Collar 28.6mm Diam. 7/16" rabbet depth
<b>WRC270</b>	Collar 27.0mm Diam. 15/32" rabbet depth
<b>WRC254</b>	Collar 25.4mm Diam. 1/2" rabbet depth
<b>WRC222</b>	Collar 22.2mm Diam. 9/16" rabbet depth
<b>WRC206</b>	Collar 20.6mm Diam. 19/32" rabbet depth
<b>WRC190</b>	Collar 19.0mm Diam. 5/8" rabbet depth
<b>WRC159</b>	Collar 15.9mm Diam. 11/16" rabbet depth
<b>WRC143</b>	Collar 14.3mm Diam. 23/32" rabbet depth
<b>B3-1</b>	Bearing 1/2" Diam. 3/4" rabbet depth

## R3000

### ROUNDING OVER BITS W/BALL BEARING GUIDE TWO FLUTES



PART NO.	LARGE DIAM.	RADIUS	CARBIDE HEIGHT	SHANK DIAM.
R3000-1	5/8"	1/16"	5/16"	1/4"
R3000-2	3/4"	1/8"	3/8"	1/4"
R3000-3	3/4"	5/32"	3/8"	1/4"
R3000	7/8"	3/16"	1/2"	1/4"
R3001	1"	1/4"	1/2"	1/4"
R3002	1-1/8"	5/16"	1/2"	1/4"
R3003	1-1/4"	3/8"	5/8"	1/4"
R3004	1-1/2"	1/2"	3/4"	1/4"
R3004-1	1-3/4"	5/8"	7/8"	1/4"
R3005-1	5/8"	1/16"	5/16"	1/2"
R3005-2	3/4"	1/8"	3/8"	1/2"
R3005-3	3/4"	5/32"	3/8"	1/2"
R3005	7/8"	3/16"	1/2"	1/2"
R3006	1"	1/4"	1/2"	1/2"
R3007	1-1/8"	5/16"	1/2"	1/2"
R3008	1-1/4"	3/8"	5/8"	1/2"
R3009	1-1/2"	1/2"	3/4"	1/2"
R3009-1	1-3/4"	5/8"	7/8"	1/2"
R3010	2"	3/4"	1"	1/2"
R3010-1	2-1/4"	7/8"	1-1/4"	1/2"
R3011	2-1/2"	1"	1-1/4"	1/2"
R3011-1 *	2-3/4"	1-1/8"	1-3/8"	1/2"
R3012 *	3"	1-1/4"	1-1/2"	1/2"
R3012-1 **	3-1/4"	1-3/8"	1-9/16"	1/2"
R3013 **	3-1/2"	1-1/2"	1-3/4"	1/2"

\* Max. RPM 18,000

\*\* Max. RPM 16,000

#### Replacement Parts

Ball Bearing B3

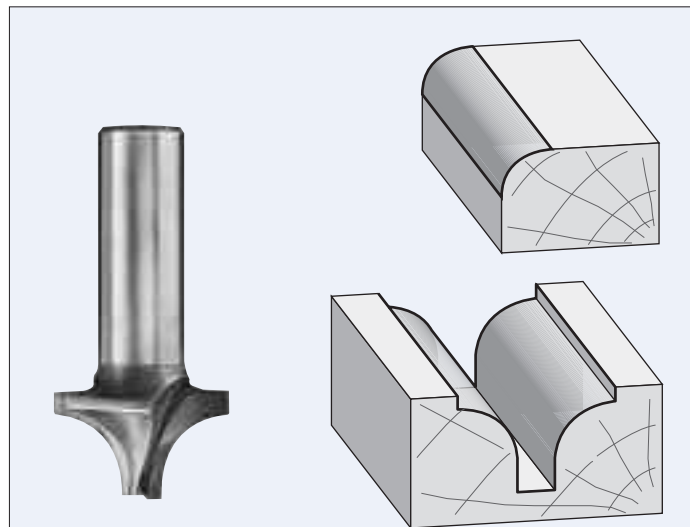
Spring Washer WFS506

Washer WR58

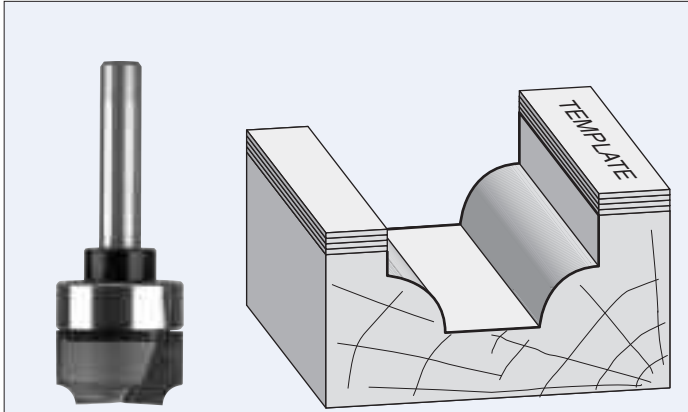
Screw WNC538

## R3020

### PLUNGING ROUNDING OVER BITS



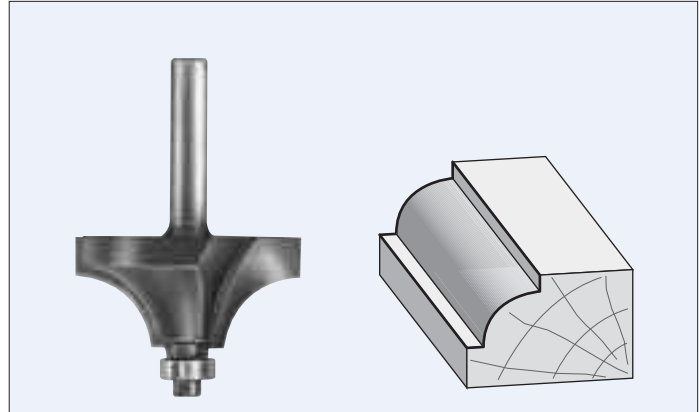
PART NO.	LARGE DIAM.	RADIUS	SMALL DIAM.	CARBIDE HEIGHT	SHANK DIAM.
R3020-1	3/8"	1/8"	1/8"	5/16"	1/4"
R3020	5/8"	3/16"	1/4"	5/16"	1/2"
R3021	3/4"	1/4"	1/4"	1/2"	1/4"
R3022	3/4"	1/4"	1/4"	1/2"	1/2"
R3023	7/8"	5/16"	1/4"	9/16"	1/4"
R3024	7/8"	5/16"	1/4"	9/16"	1/2"
R3025	1"	3/8"	1/4"	5/8"	1/4"
R3026	1"	3/8"	1/4"	5/8"	1/2"
R3027	1-3/8"	1/2"	3/8"	1"	1/2"
R3028	1-3/4"	5/8"	1/2"	1-1/4"	1/2"
R3029	2"	3/4"	1/2"	1-7/16"	1/2"

**R3030****CORNER ROUNDING BITS PLUNGE  
TYPE WITH CENTER BALL BEARING**

PART NO.	LARGE DIAM.	RADIUS	SMALL DIAM.	CARBIDE HEIGHT	SHANK DIAM.
R3030 (A)	1/2"	1/8"	1/4"	3/8"	1/4"
R3032 (B)	3/4"	1/8"	1/2"	3/8"	1/4"
R3034 (C)	7/8"	5/16"	1/2"	1/2"	1/4"
R3036 (D)	1-1/8"	5/16"	1/2"	9/16"	1/2"

**Replacement Parts**

(A) Ball Bearing B3-1	Lock ring W01	Screw WNC525
(B) Ball Bearing B4	Lock ring W01	Screw WNC525
(C) Ball Bearing B5	Lock ring W01	Screw WNC525
(D) Ball Bearing B6-4	Lock ring W03	Screw WNC518

**R3100****BEADING BITS  
WITH BALL BEARING GUIDE**

PART NO.	LARGE DIAM.	RADIUS	CARBIDE HEIGHT	SHANK DIAM.
R3100-1	5/8"	1/16"	5/16"	1/4"
R3100-2	3/4"	1/8"	3/8"	1/4"
R3100-3	3/4"	5/32"	3/8"	1/4"
R3100	7/8"	3/16"	1/2"	1/4"
R3101	1"	1/4"	1/2"	1/4"
R3102	1-1/8"	5/16"	1/2"	1/4"
R3103	1-1/4"	3/8"	5/8"	1/4"
R3104	1-1/2"	1/2"	3/4"	1/4"
R3105-1	5/8"	1/16"	5/16"	1/2"
R3105-2	3/4"	1/8"	3/8"	1/2"
R3105-3	3/4"	5/32"	3/8"	1/2"
R3105	7/8"	3/16"	1/2"	1/2"
R3106	1"	1/4"	1/2"	1/2"
R3107	1-1/8"	5/16"	1/2"	1/2"
R3108	1-1/4"	3/8"	5/8"	1/2"
R3109	1-1/2"	1/2"	3/4"	1/2"
R3109-1	1-3/4"	5/8"	7/8"	1/2"
R3110	2"	3/4"	1"	1/2"
R3111	2-1/4"	7/8"	1-1/4"	1/2"
R3112	2-1/2"	1"	1-1/4"	1/2"
R3112-1 *	2-3/4"	1-1/8"	1-3/8"	1/2"
R3113 *	3"	1-1/4"	1-1/2"	1/2"
R3113-1 **	3-1/4"	1-3/8"	1-9/16"	1/2"
R3114 **	3-1/2"	1-1/2"	1-3/4"	1/2"

\* Max. RPM 18,000

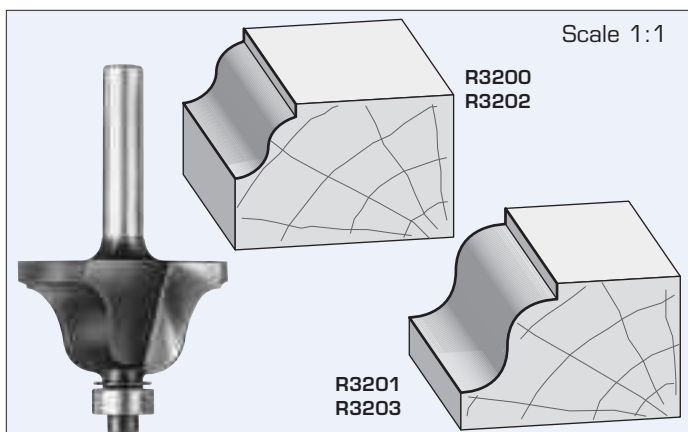
\*\* Max. RPM 16,000

**Replacement Parts**

Ball Bearing B2	Spring Washer WFS506
Washer WFS500	Screw WNC538

## R3200

### ROMAN OGEE BITS WITH BALL BEARING GUIDE

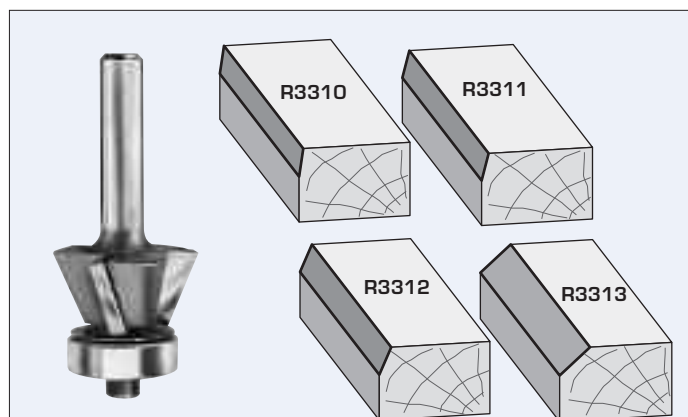


PART NO.	LARGE DIAM.	RADIUS	CARBIDE HEIGHT	SHANK DIAM.
R3200	1"	5/32"	5/8"	1/4"
R3201	1-3/8"	1/4"	3/4"	1/4"
R3202	1"	5/32"	5/8"	1/2"
R3203	1-3/8"	1/4"	3/4"	1/2"

**Replacement Parts** Ball Bearing B1  
Spring Washer WFS504 Washer WR12 Screw WNC338

## R3310

### BEVEL TRIM BITS WITH BALL BEARING GUIDE THREE FLUTES

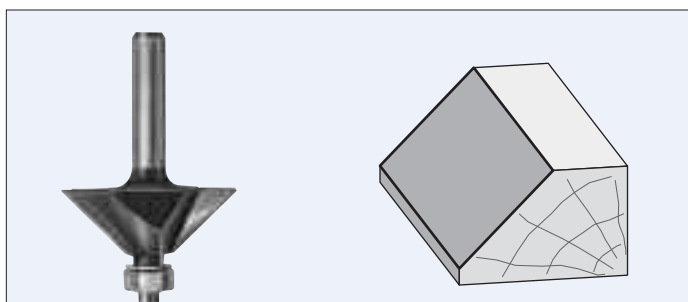


PART NO.	CUTTING DIAM.	DEGREE BEVEL	CARBIDE HEIGHT	SHANK DIAM.	OVERALL LENGTH
R3310	3/4"	10°	3/8"	1/4"	1-7/8"
R3311	13/16"	15°	3/8"	1/4"	1-7/8"
R3312	15/16"	25°	3/8"	1/4"	1-7/8"
R3313	1-7/16"	45°	3/8"	1/4"	1-7/8"

**Replacement Parts** Ball Bearing B3-4  
Spring Washer WFS506 Washer WR59 Screw WNC538

## R3300

### CHAMFER BITS WITH BALL BEARING GUIDE

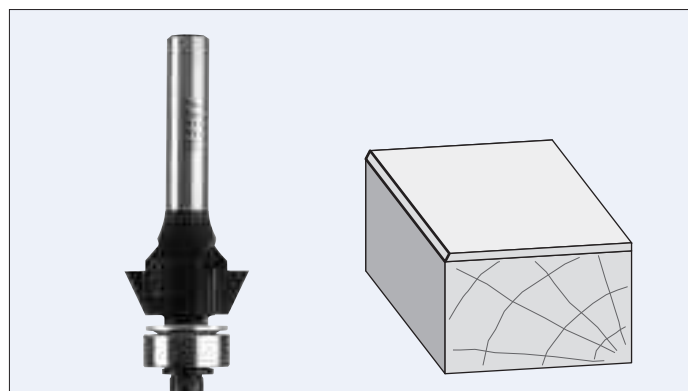


PART NO.	CUTTING DIAM.	DEGREE BEVEL	CARBIDE HEIGHT	SHANK DIAM.	OVERALL LENGTH
R3300 (A)	1/2"	15°	1/4"	1/4"	1-3/4"
R3300-1 (A)	17/32"	15°	1/2"	1/4"	2-1/16"
R3301 (A)	27/32"	25°	1/2"	1/4"	2"
R3302 (B)	1-1/2"	45°	1/2"	1/4"	2-1/8"
R3302-1 (C)	1-1/4"	45°	1/2"	1/4"	2"
R3303 (B)	3/4"	15°	1/2"	1/2"	2-3/8"
R3304 (B)	1"	25°	1/2"	1/2"	2-3/8"
R3304-1 (C)	1-1/4"	45°	1/2"	1/2"	2-3/8"
R3305 (B)	1-1/2"	45°	1/2"	1/2"	2-3/8"
R3305-1 (B)	2"	45°	3/4"	1/2"	2-5/8"
R3306 (B)	2-1/2"	45°	1"	1/2"	2-13/16"
R3307 * (B)	3-1/64"	45°	1-1/4"	1/2"	3-1/8"

**Replacement Parts** \* Max. RPM 18,000  
(A) Ball bearing B2 (B) Ball bearing B3 (C) Ball bearing B1  
Washer WFS500 Washer WR58 Washer WR58  
Spr. Wshr. WFS506 Spr. Wshr. WFS506 Spr. Wshr. WFS506  
Screw WNC 538 Screw WNC538 Screw WNC538

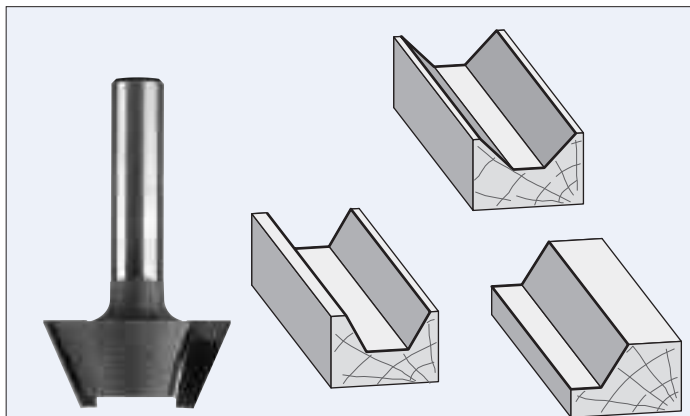
## R3320

### BEVEL TRIM BITS WITH BALL BEARING GUIDE TWO FLUTES

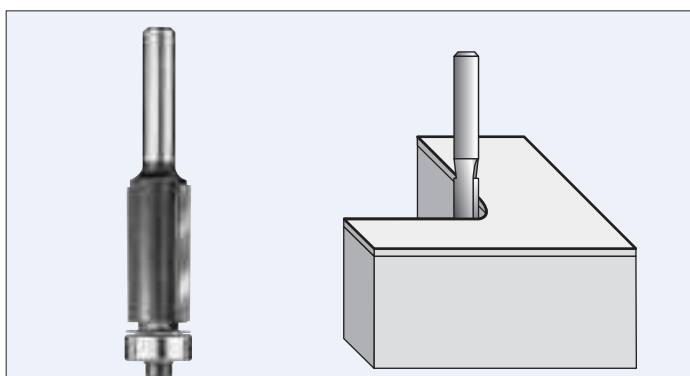


PART NO.	CUTTING DIAM.	DEGREE BEVEL	CARBIDE HEIGHT	SHANK DIAM.	OVERALL LENGTH
R3320 (B)	1/2"	0°	1/4"	1/4"	2-1/8"
R3321 (B)	5/8"	15°	1/4"	1/4"	2-1/8"
R3322 (B)	3/4"	25°	1/4"	1/4"	2-1/8"
R3323 (B)	1"	45°	1/4"	1/4"	2-1/8"
R3324 (A)	1"	15°	3/8"	1/4"	2"
R3325 (C)	5/8"	15°	1/2"	1/4"	2"

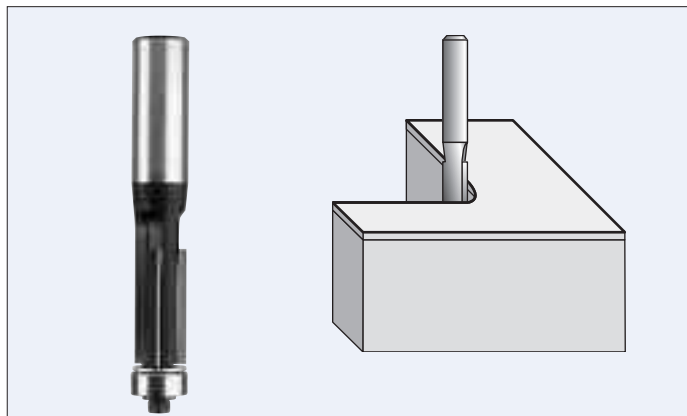
**Replacement Parts**  
(A) Ball Bearing B4 Spring Washer WFS508 Screw WNF1012  
(B) Ball Bearing B3 Spring Washer WFS506  
Washer WR58 Screw WNC538  
(C) Ball Bearing B1 Spring Washer WFS504  
Washer WR12 Screw WNC338

**R3330****BEVEL BITS  
PLUNGE TYPE TWO FLUTES**

PART NO.	CUTTING DIAM.	CARBIDE HEIGHT	SHANK DIAM.	DEGREE BEVEL	OVERALL LENGTH
R3330-1	9/16"	5/8"	1/4"	10°	1-3/4"
R3330-2	1/2"	1/2"	1/4"	15°	2"
R3330	7/8"	3/8"	1/4"	23°	1-5/8"
R3331	1"	3/8"	1/4"	30°	1-5/8"
R3332	1-3/8"	3/8"	1/4"	45°	1-5/8"

**R3400****BALL BEARING FLUSH  
TRIMMING BITS TWO FLUTES**

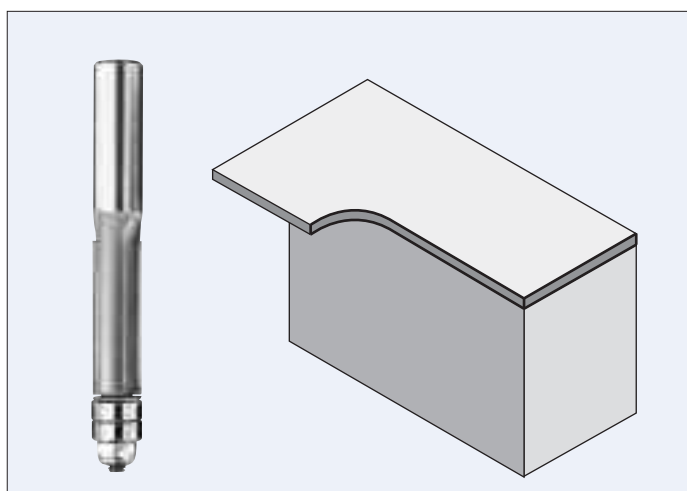
PART NO.	CUTTING DIAM.	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH
R3400-1 (E)	1/4"	1/2"	1/4"	2"
R3400-2 (E)	1/4"	1"	1/4"	2-1/2"
R3400 (A)	3/8"	1"	1/4"	2-5/8"
R3401 (A)	3/8"	1/2"	1/4"	2-1/4"
R3402 (B)	1/2"	1"	1/4"	2-5/8"
R3403 (B)	1/2"	1/2"	1/4"	2-1/4"
R3403-1 (C)	5/8"	5/8"	1/4"	2-1/4"
R3404 (B)	1/2"	1"	3/8"	2-3/4"
R3404-1 (B)	1/2"	1/2"	1/2"	2-3/4"
R3405 (B)	1/2"	1"	1/2"	3-1/4"
R3407 (B)	1/2"	1-1/2"	1/2"	3-7/8"
R3408 (B)	1/2"	2"	1/2"	4-1/4"
R3409 (F)	3/4"	1"	1/2"	3"

**R3500****BALL BEARING  
FLUSH TRIMMING BITS THREE FLUTES**

PART NO.	CUTTING DIAM.	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH
R3500 (B)	1/2"	1"	1/4"	2-5/8"
R3501 (B)	1/2"	1/2"	1/4"	2-1/4"
R3501-1 (D)	7/8"	1/2"	1/4"	2-1/4"
R3502 (B)	1/2"	1"	1/2"	3-1/4"
R3503 (B)	1/2"	1/2"	1/2"	2-3/4"
R3504 (B)	1/2"	1-1/2"	1/2"	3-7/8"

**Replacement Parts for R3400 to R3504**

(A) Ball Bearing B2 (C) Ball Bearing B3-4 (E) Ball Bearing BO1  
(B) Ball Bearing B3 (D) Ball Bearing B4-1 (F) Ball Bearing B4

**R3510****FLUSH TRIM BITS WITH DOUBLE  
BALL BEARING GUIDE TWO FLUTES**

PART NO.	CUTTING DIAM.	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH	NO. OF FLUTES
R3510	1/2"	1-1/2"	1/2"	4-1/16"	2
R3511	1/2"	2"	1/2"	4-1/2"	2
R3512	1/2"	1-1/2"	1/2"	4-1/16"	3

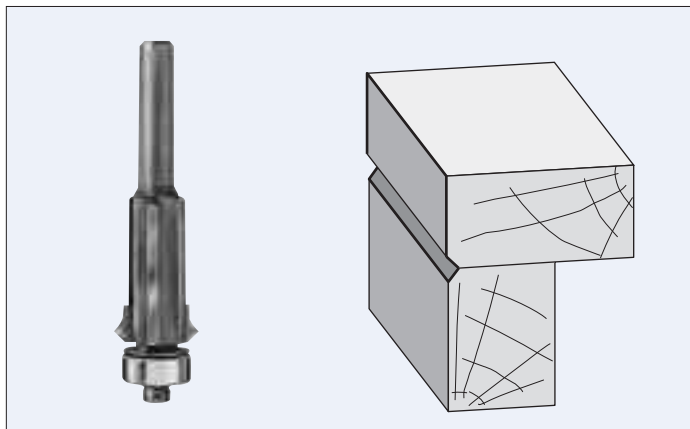
**Replacement Parts**

Ball Bearing B3 Washer WR58  
Nut WN1024 Spring Washer WFS508



## R3520

### FLUSH TRIM "V" GROOVE BITS WITH BALL BEARING GUIDE



PART NO.	CUTTING DIAM.	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH
R3520	5/8"	1"	1/4"	2-1/2"
R3521	5/8"	1"	1/2"	3"

#### Replacement Parts

Ball Bearing B3

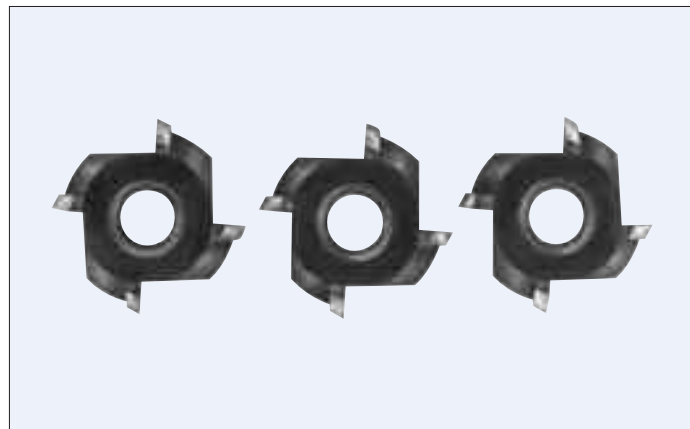
Spring Washer WFS506

Washer WR58

Screw WNC538

## R3609

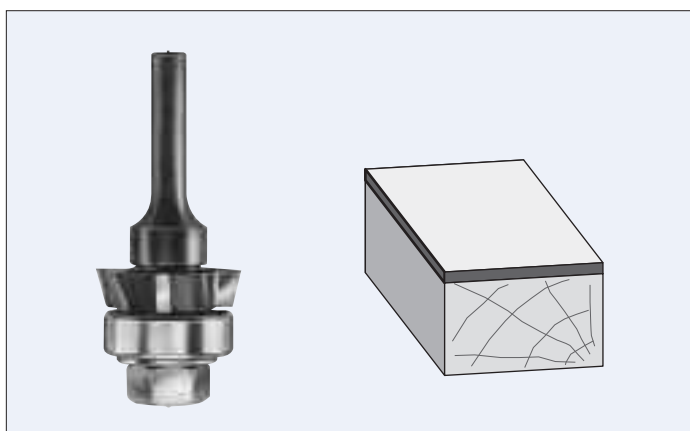
### FOUR WING CUTTERS ONLY



PART NO.	CUTTING DIAM.	TYPE OF CUT	CARBIDE HEIGHT
R3609	7/8"	Flush	1/4"
R3610	1"	15°	1/4"
R3611	1-1/16"	25°	1/4"

## R3600

### FOUR WING CUTTER ASSEMBLY



PART NO.	TYPE OF CUT	SHANK DIAM.
R3600	Flush	1/4"
R3602	Flush	1/2"
R3603	15°	1/4"
R3605	15°	1/2"
R3606	25°	1/4"
R3608	25°	1/2"

#### Replacement Parts

Ball Bearing B5

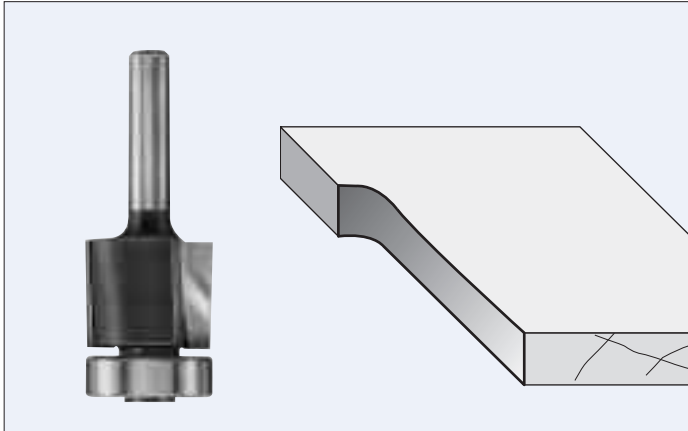
Arbor 1/4" Shank AR14

Nut only WNF516

Arbor 3/8" Shank AR13

Arbor 1/2" Shank AR12

Spring Washer WF608

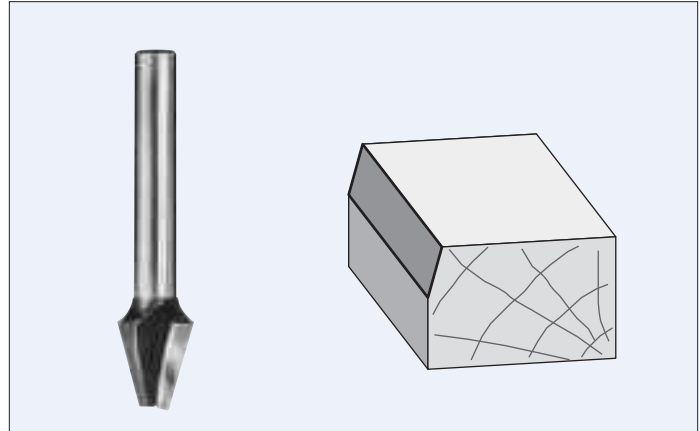
**R3700****HELIX LAMINATE TRIM BITS**

PART NO.	CUTTING DIAM.	TYPE OF CUT	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH
R3700-1 (A)	5/8"	Flush	5/8"	1/4"	2-3/16"
R3700 (B)	3/4"	Flush	5/8"	1/4"	2-3/8"
R3700-2 (B)	3/4"	Flush	1"	1/4"	2-7/8"
R3701 (B)	3/4"	Flush	5/8"	1/2"	2-1/2"
R3703 (B)	3/4"	15°	3/8"	1/2"	2-1/4"

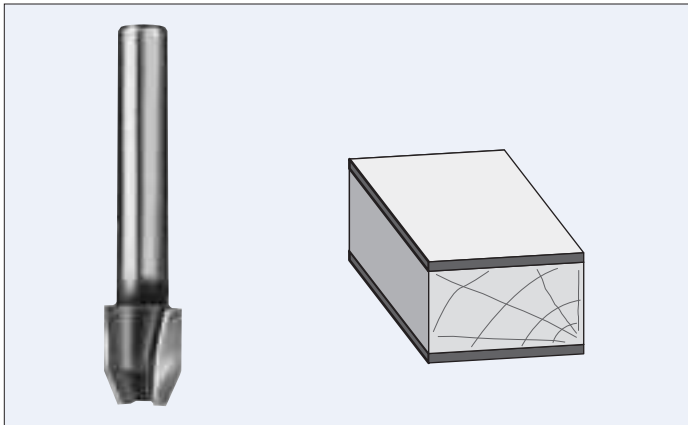
**Replacement Parts**

(A) Ball Bearing B3-3 Screw W103214

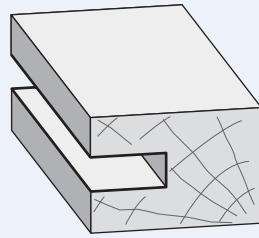
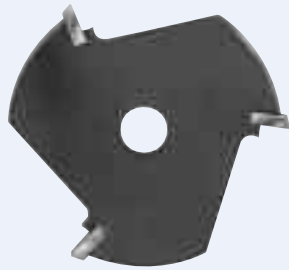
(B) Ball Bearing B4 Washer WFS500 Screw WNF1012

**R3840****BEVEL TRIM BITS**

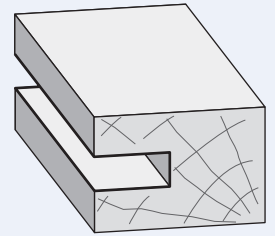
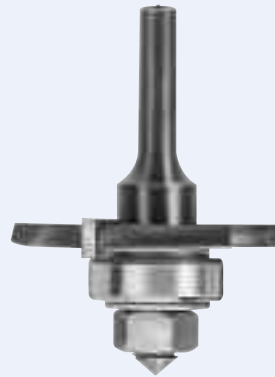
PART NO.	DEGREE BEVEL	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH
R3840	7°	1/2"	1/4"	2"
R3841	15°	1/2"	1/4"	2"
R3842	15°	1/2"	1/2"	2"
R3843	25°	1/2"	1/4"	2"
R3844	25°	1/2"	1/2"	2"

**R3800****1/4" SHANK  
COMBINATION BEVEL & FLUSH  
LAMINATE TRIM BITS**

PART NO.	CUTTING DIAM.	CARBIDE LENGTH	NO. OF FLUTES	DEGREE BEVEL	OVERALL LENGTH
R3800	3/8"	1/2"	2	23°	1-1/8"
R3801	3/8"	1/2"	2	23°	1-5/8"
R3802	1/2"	1/2"	2	23°	1-5/8"
R3803	1/2"	1/2"	2	30°	1-5/8"
R3804	1/2"	1/2"	2	35°	1-5/8"
R3805	1/2"	1/2"	2	45°	5/8"

**R3900****SLOTING CUTTERS ONLY  
1-7/8" DIAMETER**

PART NO.	KERF (inch)	KERF (mm)	NO. WINGS
R3900	1/16"	1.6	2
R3900-1	.065"	1.65	2
R3900-3	.075"	1.9	2
R3901	5/64"	1.98	2
R3902	3/32"	2.4	2
R3902-1	.110"	2.8	2
R3903	1/8"	3.2	2
R3903-1	5/32"	4.0	2
R3903-2	3/16"	4.8	2
R3904	1/4"	6.35	2
R4000A	.055"	1.4	3
R4000	1/16"	1.6	3
R4000-1	.065"	1.65	3
R4001	.070"	1.8	3
R4001-1	.075"	1.9	3
R4002	5/64"	1.98	3
R4002-1	.085"	2.16	3
R4003	3/32"	2.4	3
R4003-1	.110"	2.8	3
R4005	1/8"	3.2	3
R4005-A	.140"	3.6	3
R4005-1	5/32"	4.0	3
R4006	3/16"	4.8	3
R4007	1/4"	6.35	3
R4100	1/16"	1.6	4
R4101	.070"	1.8	4
R4102	.080"	2.0	4
R4103	3/32"	2.4	4
R4104	1/8"	3.2	4
R4105	3/16"	4.8	4
R4106	1/4"	6.35	4

**R4120****SLOTING CUTTER  
ASSEMBLY**

2 WING PART NO.	3 WING PART NO.	KERF (inch)	KERF (mm)
R4120	R4140	1/16"	1.6
R4121	R4141	.065"	1.65
N/A	R4141-1	.070"	1.8
R4121-2	R4141-2	.075"	1.9
R4122	R4142	5/64"	1.98
N/A	R4143	.085"	2.16
R4124	R4144	3/32"	2.4
R4125	R4145	.110"	2.8
R4126	R4146	1/8"	3.2
N/A	R4147	.140"	3.6
R4128	R4148	5/32"	4.0
R4130	R4150	3/16"	4.8
R4132	R4152	1/4"	6.35

**Note:**

Assemblies available with 1/4", 3/8" and 1/2" shank sizes.  
To indicate shank diameter when ordering, add following numbers at the end of tool part number:  
NO. 14 for 1/4" shank  
NO. 12 for 1/2" shank  
NO. 13 for 3/8" shank

All above use Ball Bearing Part No. B5



PART NO.	OUTSIDE DIAM.	INSIDE DIAM.	THICKNESS
B01	1/4"	1/8"	7/64"
B1	3/8"	1/8"	5/32"
B2	3/8"	3/16"	1/8"
B2-1	1/2"	1/8"	11/64"
B3	1/2"	3/16"	5.0mm
B3-1	1/2"	1/4"	3/16"
B3-1A	14mm	7.0mm	5.0mm
B3-1B	14mm	8.0mm	4.0mm
B3-2	5/8"	3/16"	5.0mm
B3-3	5/8"	1/4"	5.0mm
B3-4	16mm	5.0mm	5.0mm
B3-4A	16mm	8.0mm	5.0mm
B3-5	3/4"	3/16"	3/16"
B3-6	19mm	6.0mm	6.0mm
B4	3/4"	1/4"	9/32"
B4-1A	3/4"	1/2"	5/32"
B4-1	22mm	7.0mm	7.0mm
B5	7/8" (22.20mm)	5/16" (7.94mm)	7.0mm
B6	7/8"	3/16"	6.6mm
B6-1	26mm	10mm	8.0mm
B6-1A	1"	15mm	5.5mm
B6-2	1-1/8"	3/16"	6.6mm
B6-3	28mm	8.0mm	9.0mm
B6-4	1-1/8"	1/2"	5/16"
B6-4A	1-7/32"	5/16"	8.6mm
B6-5	1-1/4"	15mm	8.5mm
B6-5A	1-1/4"	8.0mm	5.0mm
B6-6	1-5/16"	5/16"	8.6mm
B7	35mm	15mm	11.0mm
B8	1-3/8"	3/16"	6.6mm
B10	1-1/2"	15mm	8.5mm
B12	2"	15mm	12.5mm



PART NO.	DESCRIPTION
ARCNC	5/16" x 1/2" x 2" Overall Length

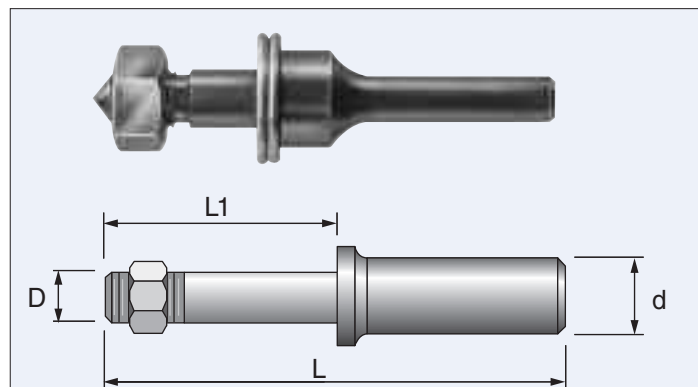
**Arbor includes:**

2 Washers 1.0mm WF608

1 Washer 0.5mm WF606

1 Screw WNF1012

1 Raised Washer WR59

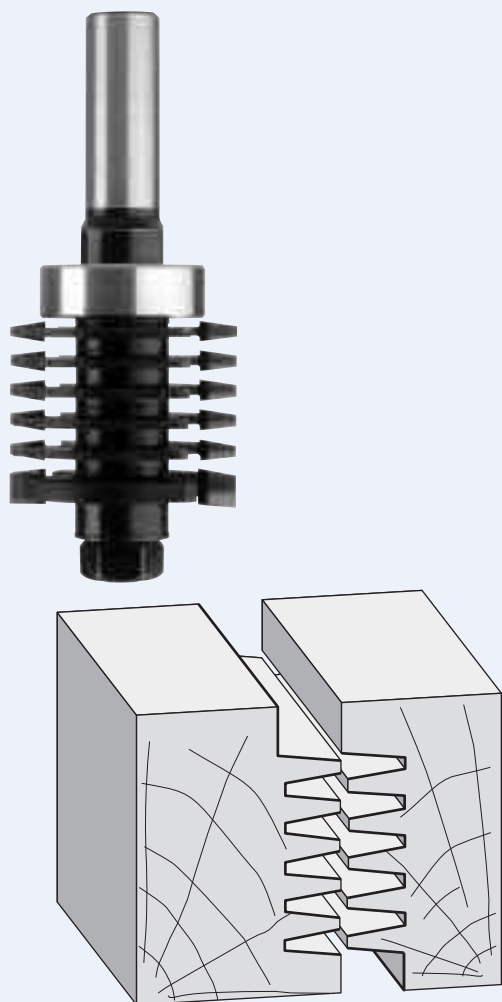


PART NO.	SPINDLE DIAM.(D)	SHANK DIAM.(d)	LENGTH (L1)	OVERALL LENGTH(L)
AR14	5/16"	1/4"	7/8"	2-3/8"
AR13	5/16"	3/8"	1-7/16"	3"
AR12	5/16"	1/2"	1"	2-3/8"
AR11	5/16"	1/2"	1-3/8"	3"
AR20	5/16"	1/2"	2-1/8"	3-3/4"
AR21	5/16"	1/2"	1-1/2"	3-1/8"
AR22	5/16"	1/2"	2-5/8"	4-1/4"
AR23	5/16"	1/2"	1-3/4"	3-5/16"

For Additional Replacement Parts  
see pages F88 to F90

## R4160

### FINGER JOINT ROUTER CUTTER SET



PART NO.	CUTTING DIAM.	MAX. WOOD THICKNESS	SHANK DIAM.	NO. OF TEETH
<b>R4160</b> Complete Set	1-9/16"	1-3/8"	1/2"	2

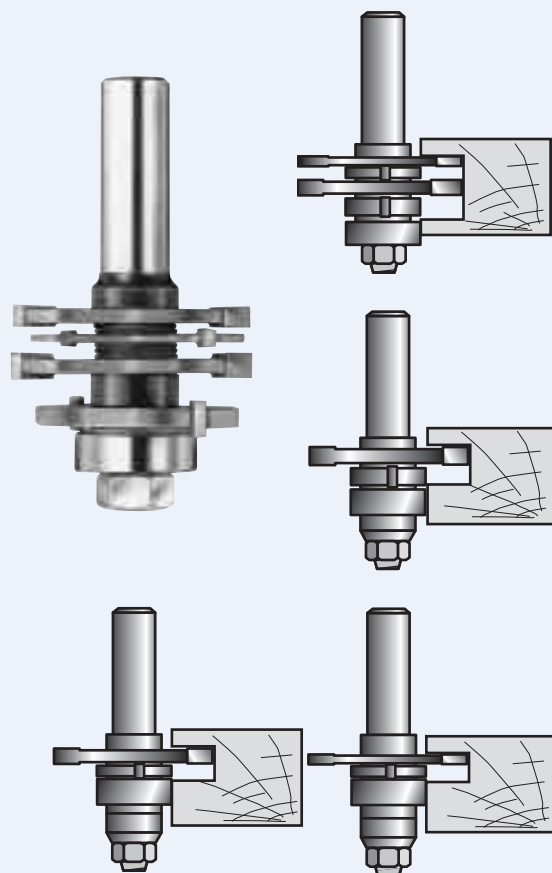
- Cutter assembly allows you to cut from one-finger to five-fingers in one pass and above five-fingers in multiple passes
- Both cuts are performed with same router setting. Simply turn over the counter-cut for a perfect fit (see diagram)
- Cutters feature European style "Chip Breakers" allowing for a safer cut

#### STANDARD SET CONSISTS OF:

Arbor with nut (1 piece)	AR20
Ball bearing (1 piece)	B6-3
Finger joint cutter (5 pieces)	R4160-1
Straight cutter (1 piece)	R4160-2
Spacer 3.4mm (6 pieces)	WF612
Washer 1.0mm (2 pieces)	WF608
Shim 0.5mm (1 piece)	WF606
Shim 0.1mm (10 pieces)	WF604

## R4162

### MULTI PURPOSE SLOTING CUTTER SET



PART NO.	CUTTING DIAM.	MAX. WOOD THICKNESS	SHANK DIAM.	NO. OF TEETH
<b>R4162</b> Complete Set	1-7/8"	1/8" to 23/32"	1/2"	2

- Multi-purpose cutter set with four cutters and bearing guide enables you to cut grooves and dados from 1/8" to 23/32" wide, in increments of 0.1mm (0.004")
- Tongue and groove can also be achieved with proper set-up

#### STANDARD SET CONSISTS OF:

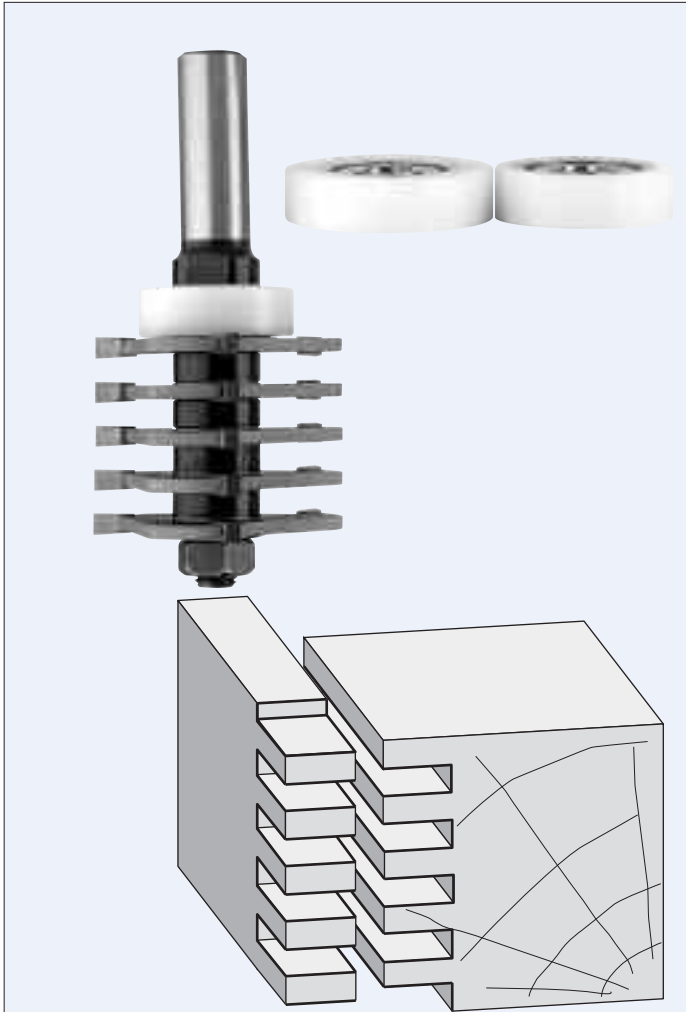
##### FOUR SINGLE CUTTERS MARKED:

A - width 1/8" (3.2mm)	R3903
B - width 5/32" (4.0mm)	R3903-1
C - width 3/16" (4.8mm)	R3903-2
D - width 1/4" (6.35mm)	R3904
Arbor with nut (1 piece)	AR11
Ball bearing	B5

##### SPACERS, WASHERS AND SHIMS:

Spacer 6.0mm (3 pieces)	WF618
Spacer 1.0mm (5 pieces)	WF608
Shim 0.5mm (4 pieces)	WF606
Shim 0.1mm (10 pieces)	WF604

All washers and shims are 5/8" diam. x 5/16" bore.  
A full 3/4" cut can be achieved using one additional cutter 5/32" width (cutter B) R3903-1 (sold separately)

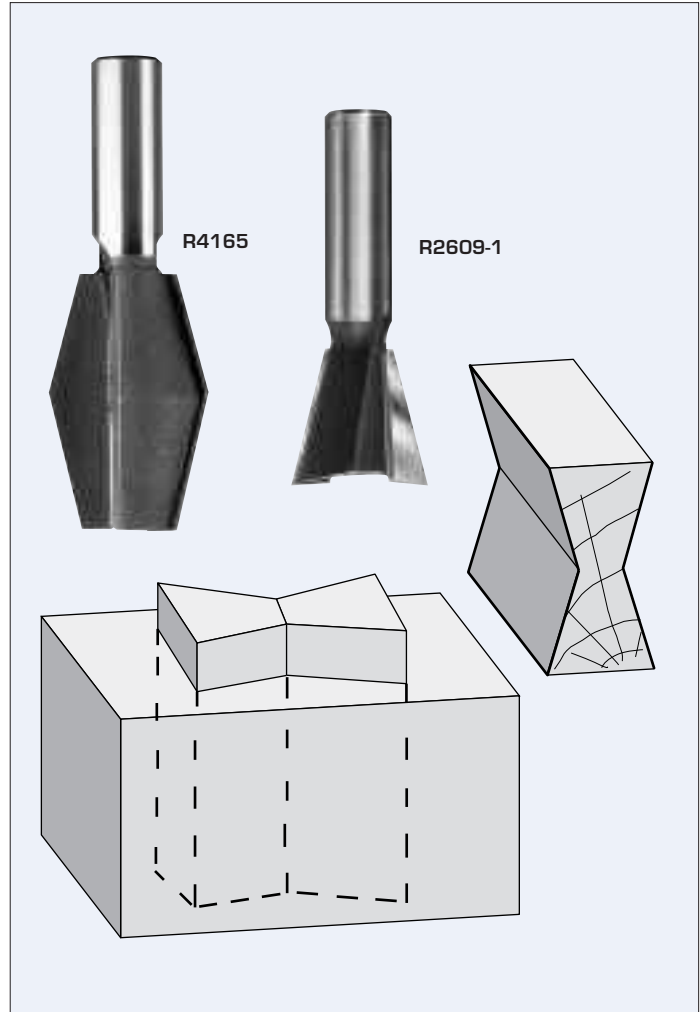
**R4164****"BOX JOINT" SLOTTING  
CUTTER SET THREE WINGS**

PART NO.	CUTTING DIAM.	GROOVE WIDTH	SHANK DIAM.	NO.OF TEETH
<b>R4164</b> Complete Set	1-7/8"	5/32"	1/2"	3

- New "Box Joint" cutter set is ideally suited for producing instrument cases, jewelry boxes, drawers, etc.
- Maximum material width 1-9/16"
- Three ball bearing guides offer alternative cutting depths
- Each set is supplied with an instruction sheet

**STANDARD SET CONSISTS OF:**

Cutters (5 pieces)	R4005-1
Arbor and nut (1 piece)	AR20
Washer (1 piece)	WR59
Spacer 5.5mm (4 pieces)	WF616
Spacer 1.0mm (1 piece)	WF608
Shim 0.5mm (1 piece)	WF606
Super glide bearing 28mm (1 piece)	B28
Super glide bearing 29mm (1 piece)	B32
Super glide bearing 34mm (1 piece)	B34

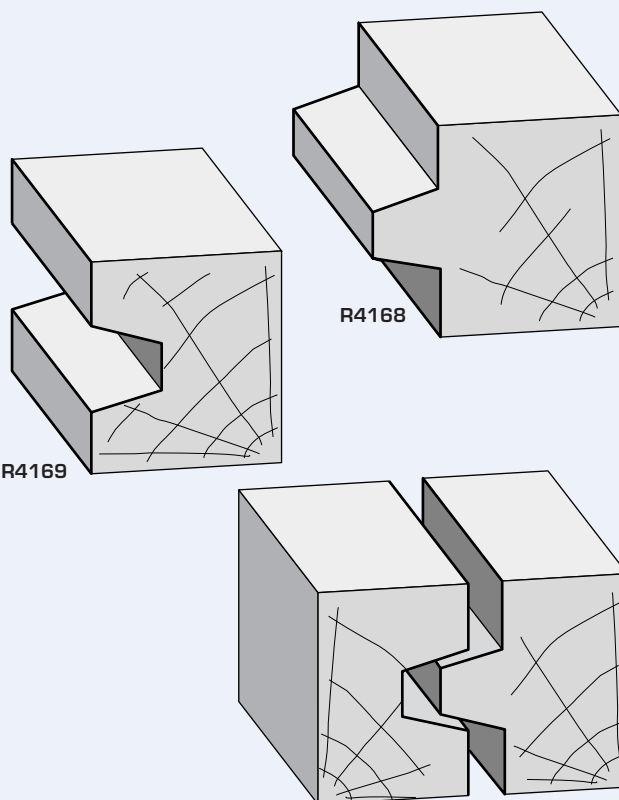
**R4165****SPLINE GLUE  
JOINT BITS TWO FLUTES**

PART NO.	CUTTING DIAM.	CUTTING LENGTH	DEGREE EA.SIDE	SHANK DIAM.	OVERALL LENGTH
<b>R4165(A)</b>	1-7/64"	1-13/16"	14°	1/2"	3-5/16"
<b>R2609-1</b>	7/8"	7/8"	14°	1/2"	2-5/8"

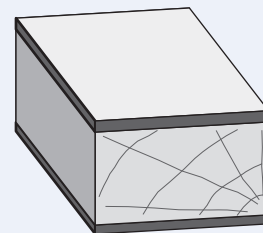
**(A)** Above bit can be used with other Dovetail bits  
R2602, R2606, R2608-1, R2610 (page F15)

**R4167**
**BEVEL GLUE JOINT BITS  
TWO FLUTES**

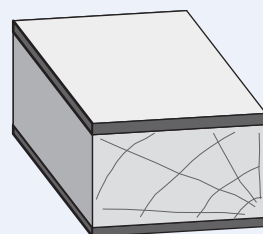

Scale 1:1



PART NO.	CUTTING DIAM.	CUTTING LENGTH	DEGREE EA. SIDE	SHANK DIAM.	OVERALL LENGTH
R4167	Complete set (2-Bits)				
R4168	1-1/4"	1-1/4"	15°	1/2"	2-3/4"
R4169	1-1/4"	1-1/4"	15°	1/2"	2-3/4"

**R5000**
**FLUSH TRIMMER  
SOLID CARBIDE**


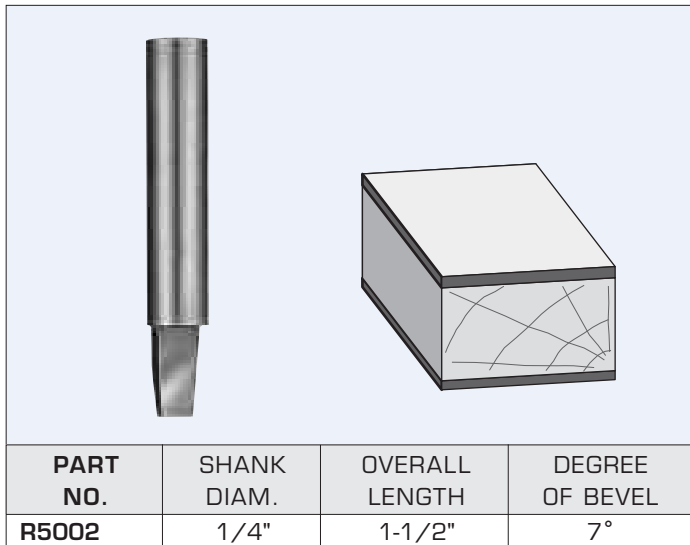
PART NO.	CUTTING EDGE	SHANK DIAM.	OVERALL LENGTH	TYPE OF CUT
R5000	3/8"	1/4"	1-1/2"	Flush
R5000-1	1/4"	1/4"	1-1/2"	Flush

**R5001**
**BEVEL TRIMMER 1/4" CUTTING  
EDGE SOLID CARBIDE**


PART NO.	SHANK DIAM.	OVERALL LENGTH	DEGREE OF BEVEL
R5001	1/4"	1-1/2"	7°

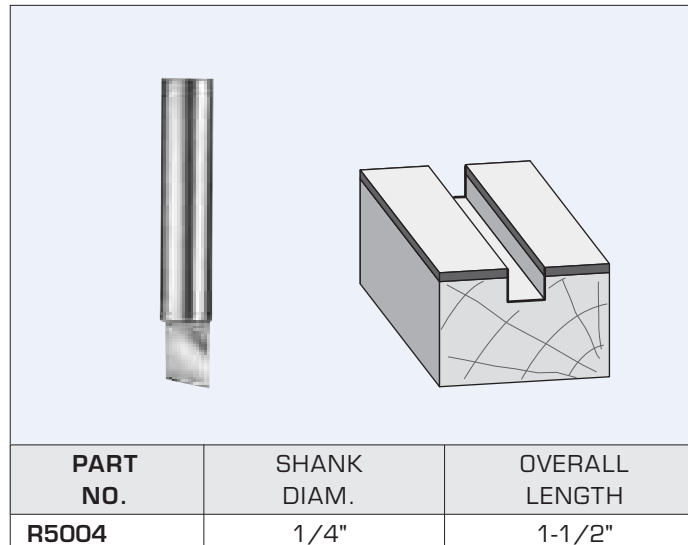
## R5002

**FLUSH & BEVEL TRIMMER**  
3/8" CUTTING EDGE SOLID CARBIDE



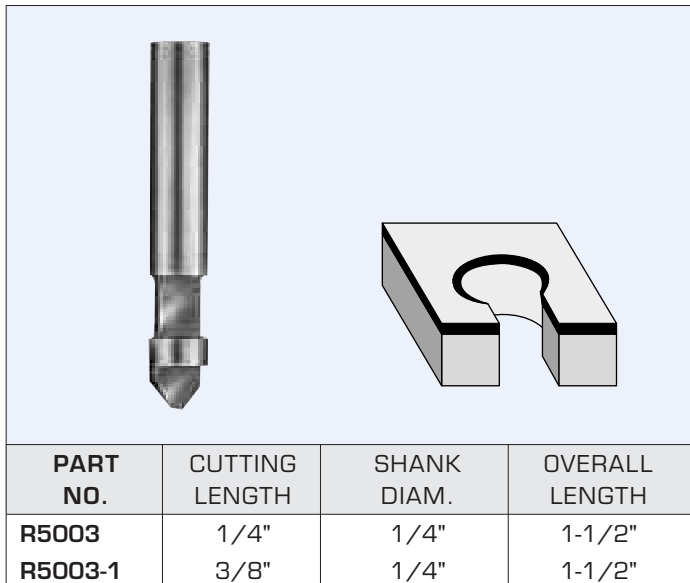
## R5004

**RIP & SLOTTING BITS**  
3/8" CUTTING EDGE SOLID CARBIDE



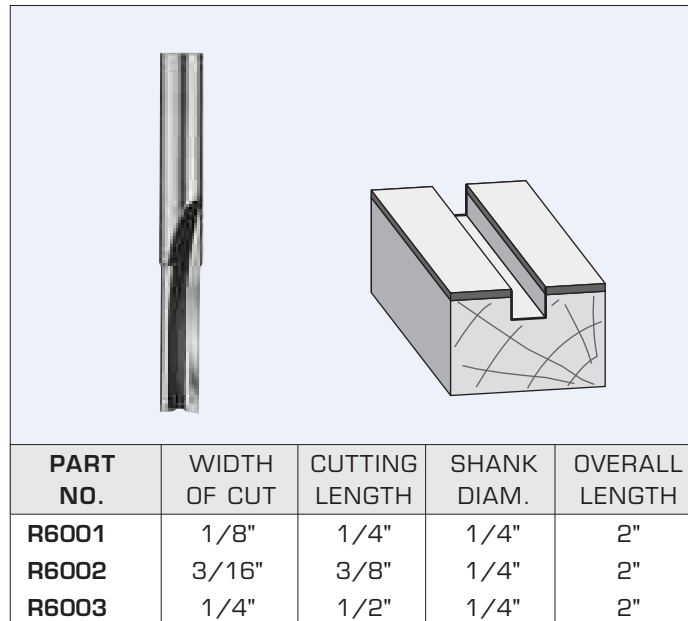
## R5003

**FLUSH TRIMMER WITH PLUNGE POINT SOLID CARBIDE**

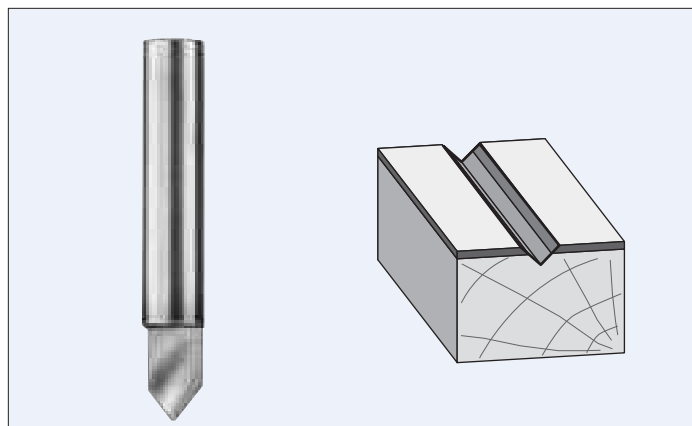


## R6001

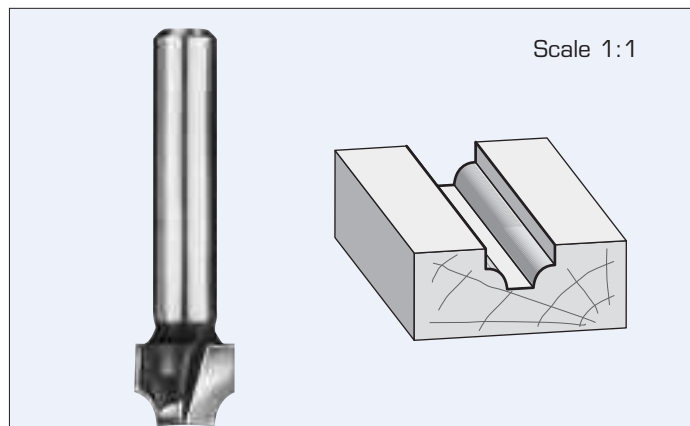
**FLAT BOTTOM VEINING BITS**  
SOLID CARBIDE TWO FLUTES



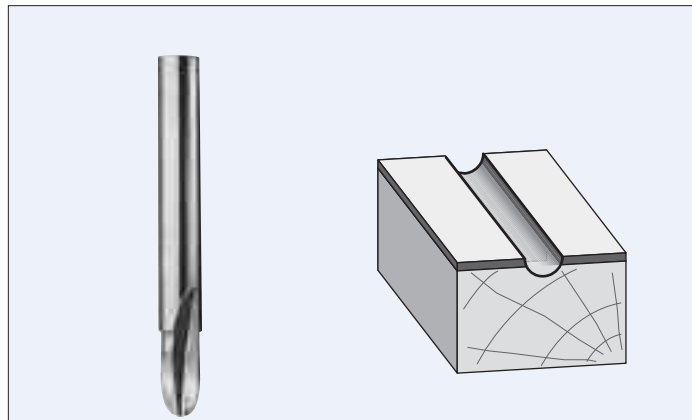


**R6005**
**"V" GROOVING VEINING BITS  
SOLID CARBIDE 90° INCL. ANGLE**


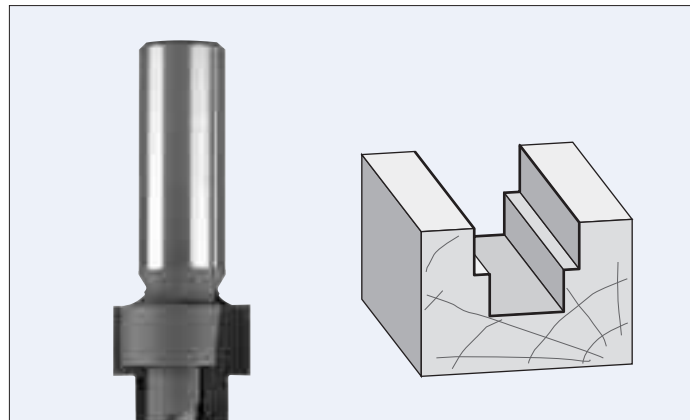
PART NO.	CUTTING DIAM.	SHANK DIAM.	OVERALL LENGTH
R6005	1/4"	1/4"	1-1/2"

**FRB01**
**BEADING BIT  
TWO FLUTES**


PART NO.	LARGE DIAM.	RADIUS	CARBIDE HEIGHT	SHANK DIAM.
FRB01	3/8"	1/8"	5/16"	1/4"

**R6007**
**ROUND BOTTOM VEINING BITS  
SOLID CARBIDE TWO FLUTES**


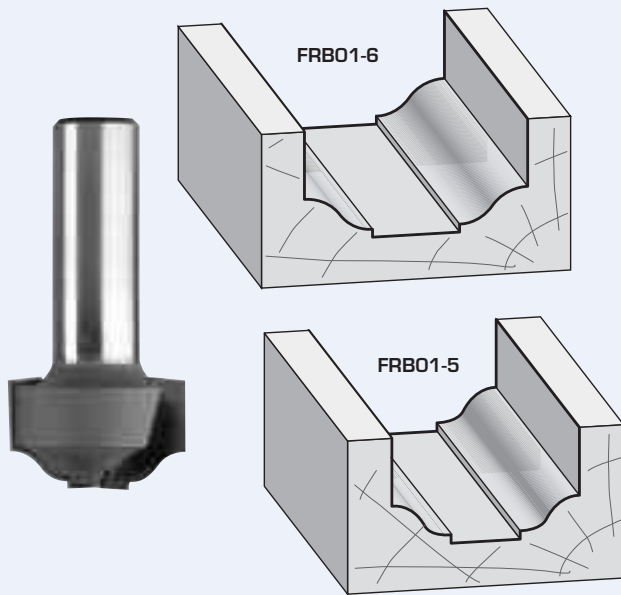
PART NO.	RADIUS	WIDTH OF CUT	SHANK DIAM.	OVERALL LENGTH
R6007	1/16"	1/8"	1/4"	2"
R6008	3/32"	3/16"	1/4"	2"
R6009	1/8"	1/4"	1/4"	2"

**FRB01-2**
**STEPPED RABBETING BITS  
TWO FLUTES**


PART NO.	LARGE DIAM.	DEPTH OF CUT	SMALL DIAM.	DEPTH OF CUT	SHANK DIAM.
FRB01-2	3/4"	1/2"	3/8"	1/4"	1/4"
FRB01-3	3/4"	3/8"	1/2"	1/4"	1/4"
FRB01-4	7/8"	5/16"	9/16"	3/8"	1/2"

**FRB01-5**
**PLUNGE TYPE  
OGEE BITS**

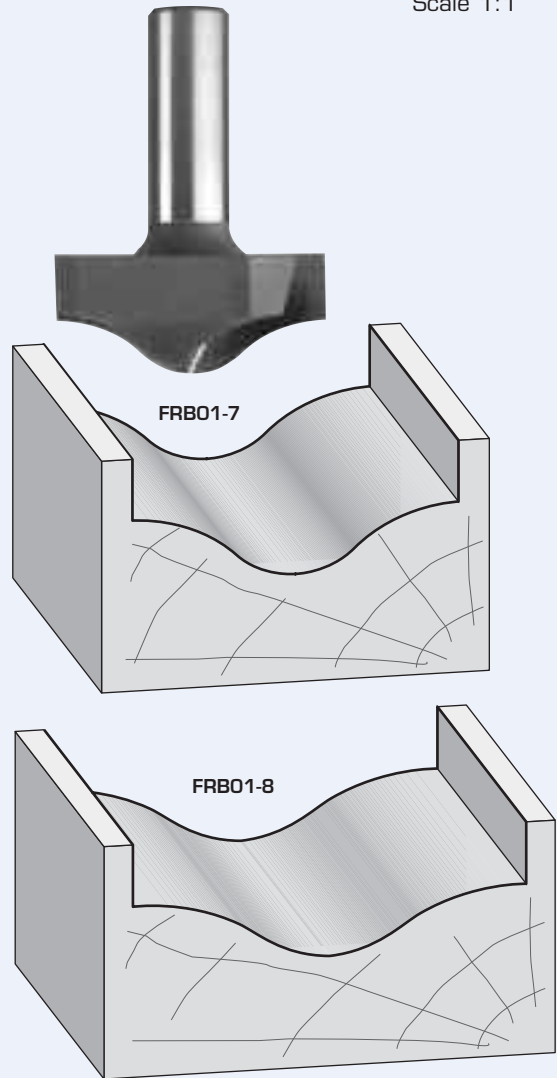
Scale 1:1



PART NO.	LARGE DIAM.	SMALL DIAM.	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH
FRB01-5	1"	3/8"	19/32"	1/2"	2-3/32"
FRB01-6	1-3/16"	15/32"	19/32"	1/2"	2-3/32"

**FRB01-7**
**ROUND AND OGEE  
PLUNGE TYPE BITS**

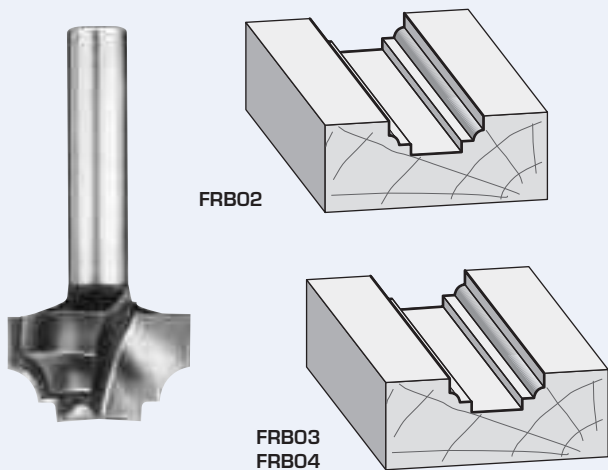
Scale 1:1



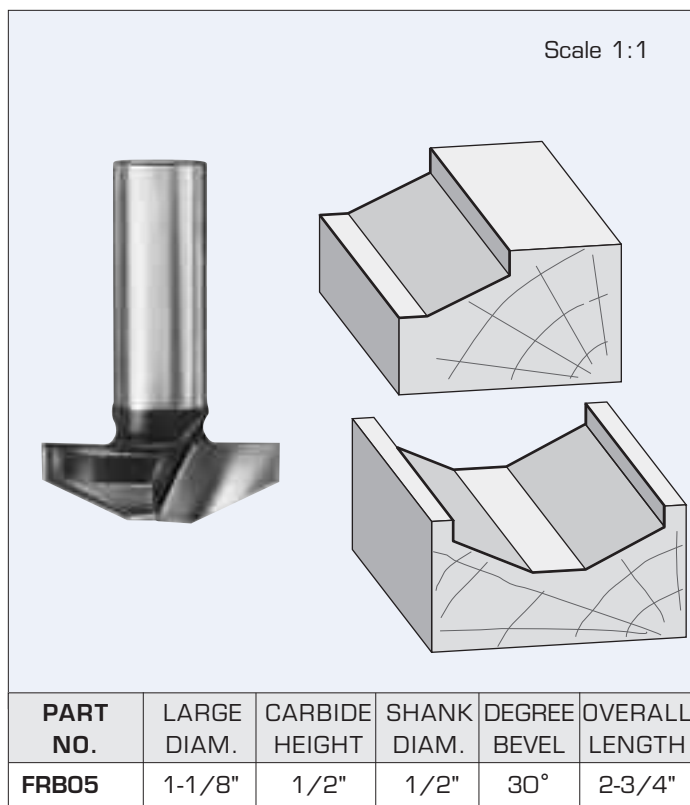
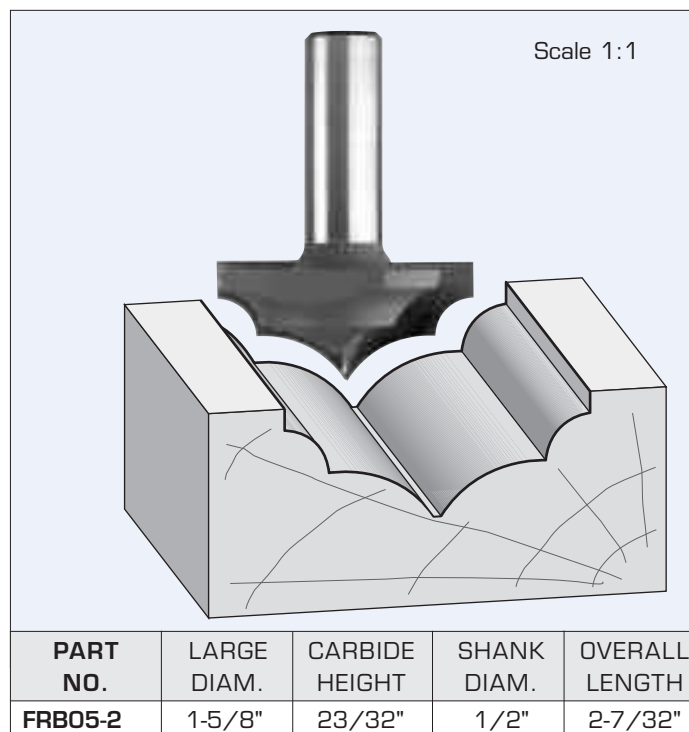
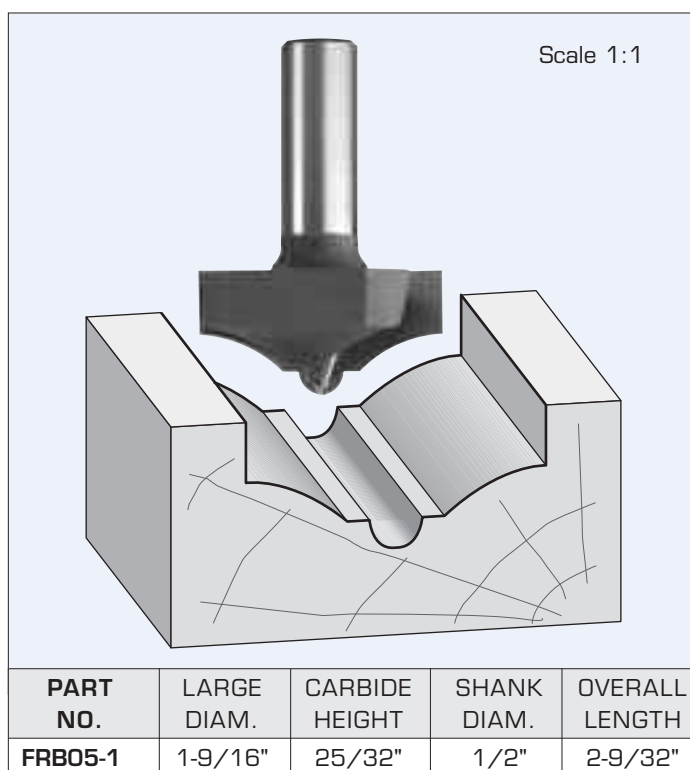
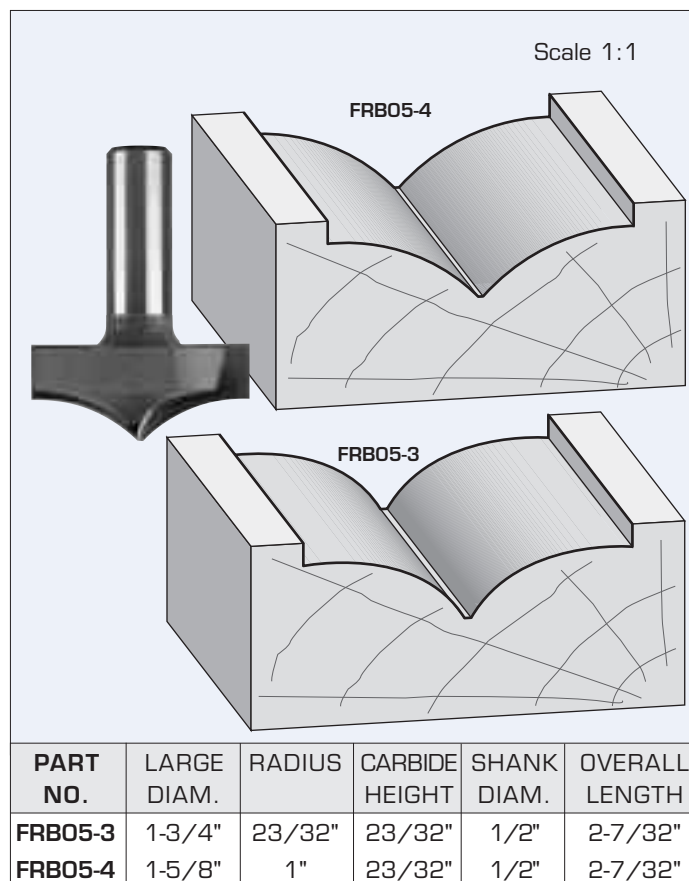
PART NO.	LARGE DIAM.	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH
FRB01-7	1-5/8"	23/32"	1/2"	2-13/64"
FRB01-8	1-31/32"	23/32"	1/2"	2-13/64"

**FRB02**
**TRADITIONAL  
BITS**

Scale 1:1

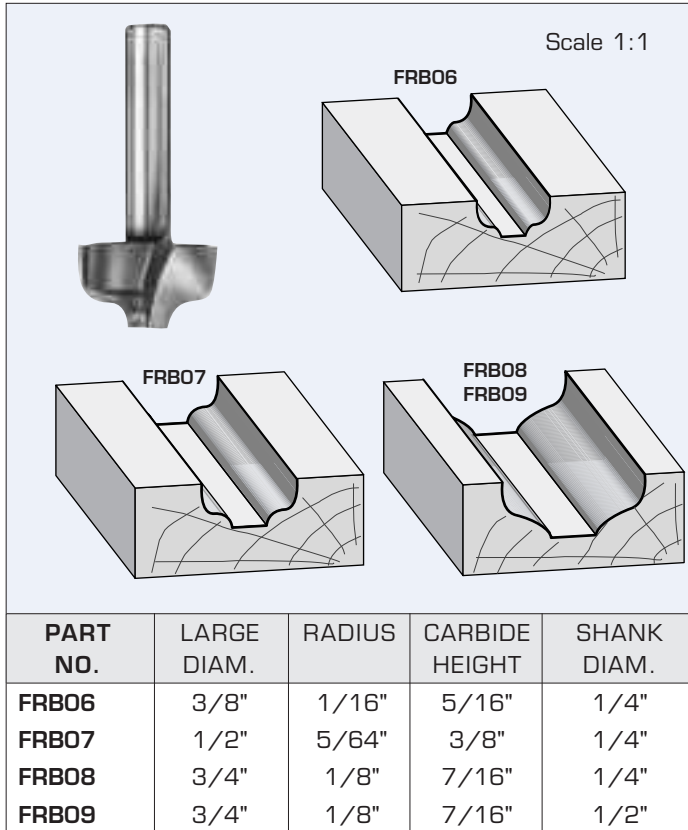


PART NO.	LARGE DIAM.	RADIUS	CARBIDE HEIGHT	SHANK DIAM.
FRB02	1/2"	3/64"	3/8"	1/4"
FRB03	3/4"	1/16"	7/16"	1/4"
FRB04	3/4"	1/16"	7/16"	1/2"

**FRB05**
**RAISED PANEL BIT  
PLUNGE TYPE TWO FLUTES**

**FRB05-2**
**ROUNDING OVER  
PLUNGE BITS**

**FRB05-1**
**ROUND AND OGEE  
PLUNGE TYPE BITS**

**FRB05-3**
**ROUNDING OVER  
PLUNGE BITS**


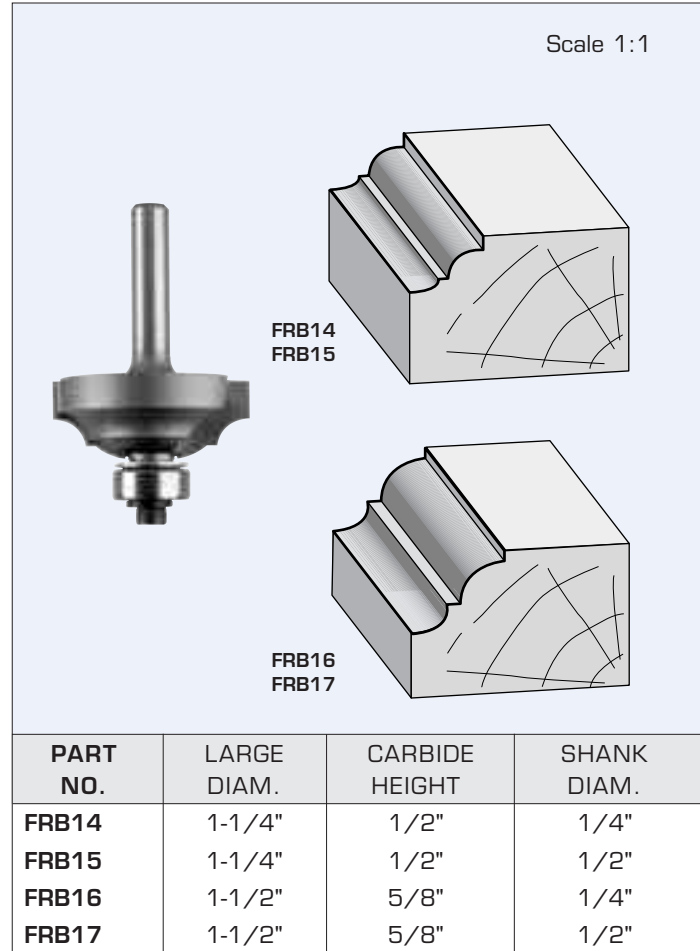
## FRB06

### OGEE BITS TWO FLUTES



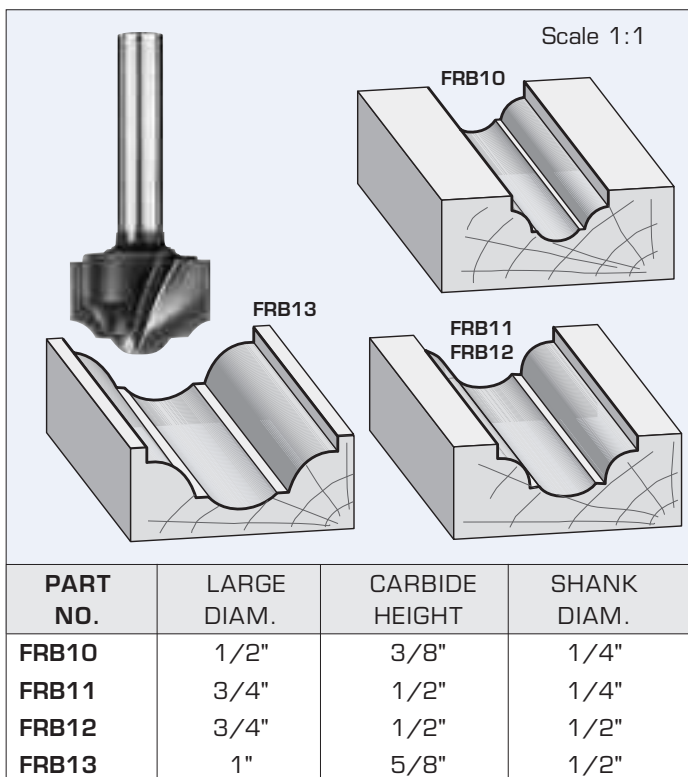
## FRB14

### CLASSICAL BITS WITH BALL BEARING GUIDE



## FRB10

### CLASSICAL BITS TWO FLUTES



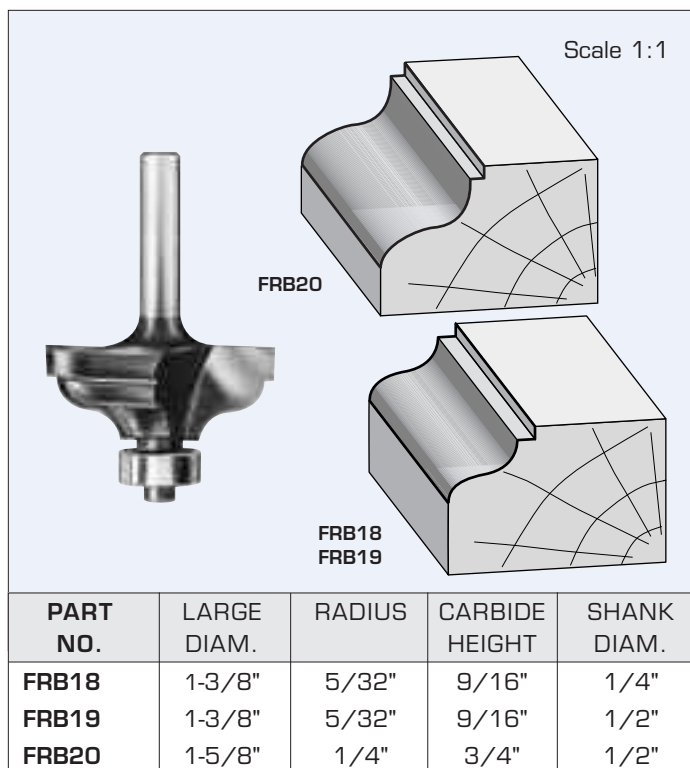
#### Replacement Parts

Ball Bearing B3

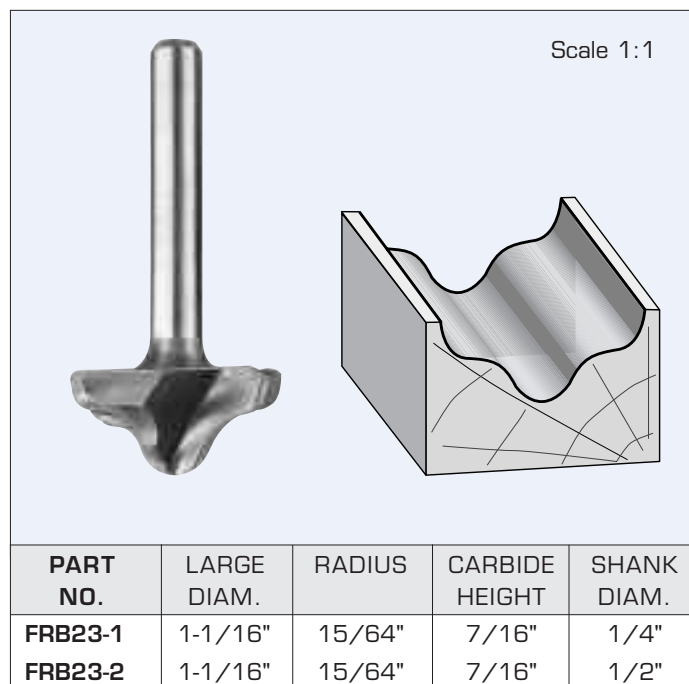
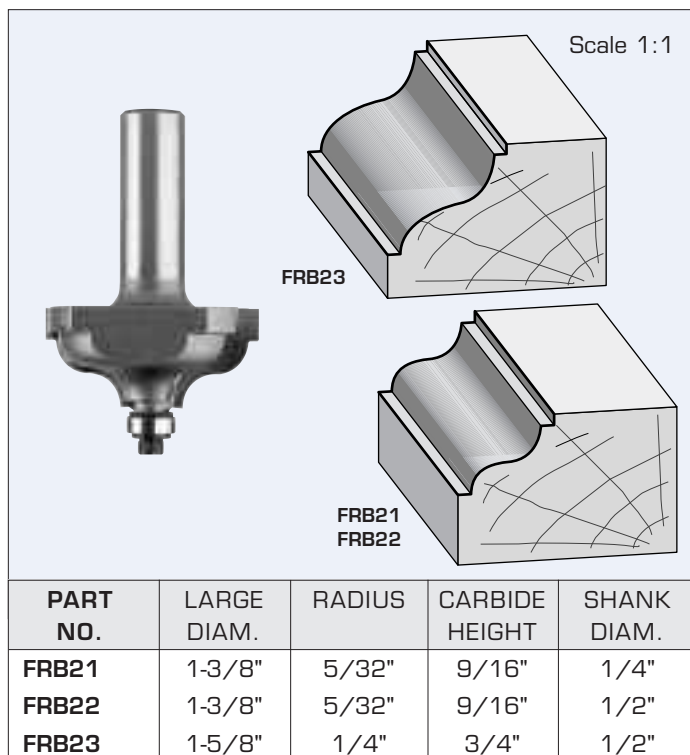
Spring Washer WFS506

Washer WR58

Screw WNC538

**FRB18**
**OGEE BITS  
WITH BALL BEARING GUIDE**


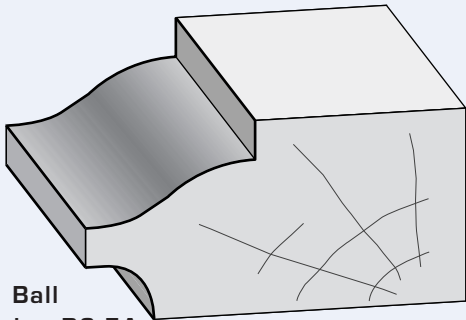
**Replacement Parts** Ball Bearing B3  
Spring Washer WFS506 Washer WR58 Screw WNC538

**FRB23-1**
**OGEE BITS  
PLUNGE TYPE**

**FRB21**
**OGEE BITS  
WITH BALL BEARING GUIDE**


**Replacement Parts** Ball Bearing B2  
Spring Washer WFS506 Washer WFS500 Screw WNC538

**FRB23-5****RAISED PANEL BIT  
WITH BACK CUTTER**

Scale 1:1

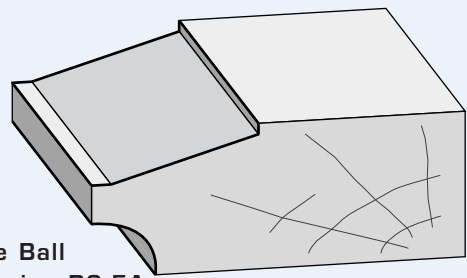
Use Ball  
Bearing B3-4AUse Ball  
Bearing B6-5A

PART NO.	LARGE DIAM.	MAX. WOOD THICKNESS	SHANK DIAM.	OVERALL LENGTH
FRB23-5	3-3/8"	1-3/16"	1/2"	3-1/16"

Max. RPM 12,000

**FRB23-6****RAISED PANEL  
BIT WITH BACK CUTTER**

Scale 1:1

Use Ball  
Bearing B3-4AUse Ball  
Bearing B6-5A

PART NO.	LARGE DIAM.	MAX. WOOD THICKNESS	SHANK DIAM.	OVERALL LENGTH
FRB23-6	3-3/8"	1-1/16"	1/2"	2-15/16"

Max. RPM 12,000

**STANDARD SET CONSISTS OF:**

Raised Panel Bit	FRB23-5RP
Back Cutter	FRB23-5BC
Ball Bearing 16x8x5mm	B3-4A
Ball Bearing 1-1/4"x8mmx5mm	B6-5A
Washer 12x8x1.0mm	WF510
Shim 12x8x0.1mm (2 pieces)	WF501
Shim 12x8x0.2mm (2 pieces)	WF502
Shim 12x8x0.5mm (2 pieces)	WF505
Lock Washer	WFS510
Nut NF5/16	WNF516

**STANDARD SET CONSISTS OF:**

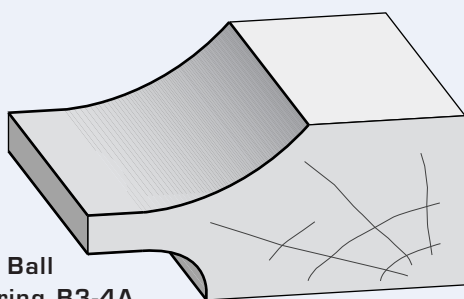
Raised Panel Bit	FRB23-6RP
Back Cutter	FRB23-5BC
Ball Bearing 16x8x5mm	B3-4A
Ball Bearing 1-1/4"x8mmx5mm	B6-5A
Washer 12x8x1.0mm	WF510
Shim 12x8x0.1mm (2 pieces)	WF501
Shim 12x8x0.2mm (2 pieces)	WF502
Shim 12x8x0.5mm (2 pieces)	WF505
Lock Washer	WFS510
Nut NF5/16	WNF516

## FRB23-7 RAISED PANEL BIT WITH BACK CUTTER

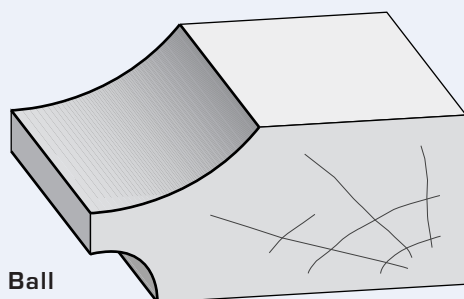
Scale 1:1



Use Ball  
Bearing B3-4A



Use Ball  
Bearing B6-5A



PART NO.	LARGE DIAM.	MAX. WOOD THICKNESS	SHANK DIAM.	OVERALL LENGTH
FRB23-7	3-3/8"	1-1/16"	1/2"	2-15/16"

Max. RPM 12,000

### STANDARD SET CONSISTS OF:

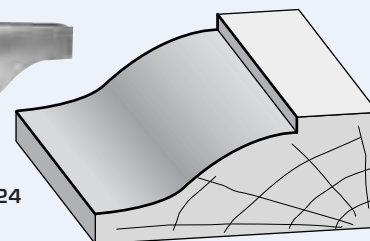
Raised Panel Bit	FRB23-7RP
Back Cutter	FRB23-5BC
Ball Bearing 16x8x5mm	B3-4A
Ball Bearing 1-1/4"x8mmx5mm	B6-5A
Washer 12x8x1.0mm	WF510
Shim 12x8x0.1mm (2 pieces)	WF501
Shim 12x8x0.2mm (2 pieces)	WF502
Shim 12x8x0.5mm (2 pieces)	WF505
Lock Washer	WFS510
Nut NF5/16	WNF516

## FRB24 OGEE RAISED PANEL BIT WITH BALL BEARING GUIDE

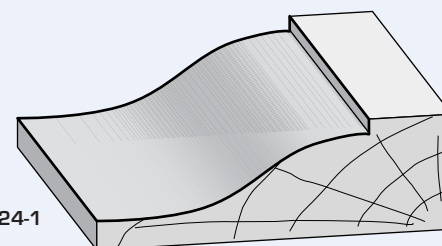
Scale 1:1



FRB24



FRB24-1



PART NO.	LARGE DIAM.	CARBIDE HEIGHT	SHANK DIAM.
FRB24	2-5/8	11/16"	1/2"
FRB24-1	3-3/8	5/8"	1/2"

Max. RPM 16,000

### Replacement Parts

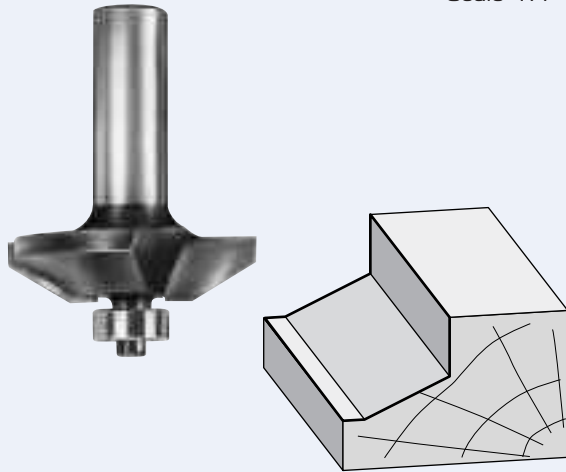
Ball Bearing B3  
Washer WR58

Spring Washer WFS506  
Screw WNC538



**FRB25**
**RAISED PANEL BIT  
TWO FLUTES**

Scale 1:1



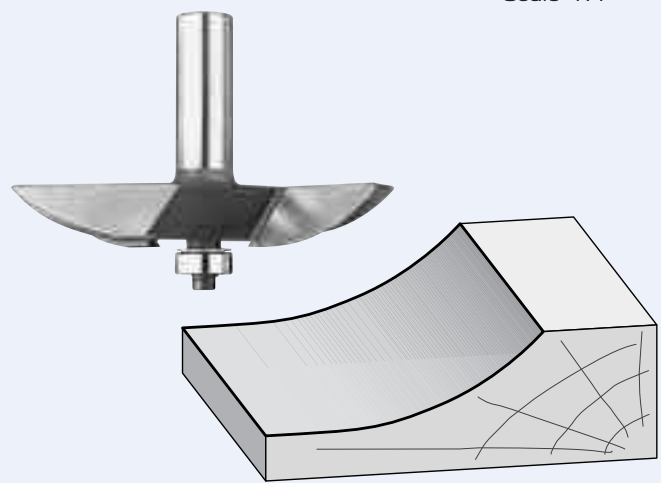
PART NO.	CUTTING DIAM.	CARBIDE HEIGHT	SHANK DIAM.	OVERALL LENGTH	DEGREE BEVEL
FRB25	1-5/8"	1/2"	1/2"	2-1/2"	25°

**Replacement Parts**

 Ball Bearing B3      Spring Washer WFS506  
 Washer WR58      Screw WNC538

**FRB25-2**
**COVE RAISED  
PANEL BIT**

Scale 1:1



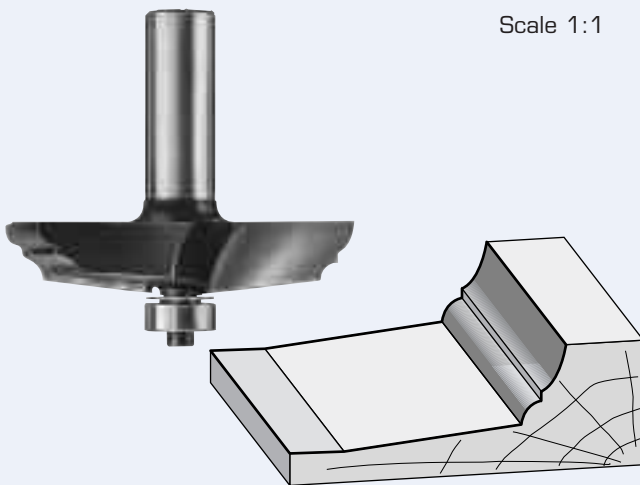
PART NO.	CUTTING DIAM.	CARBIDE HEIGHT	SHANK DIAM.	OVERALL LENGTH	RADIUS
FRB25-2	3-3/8"	1/2"	1/2"	2-3/8"	1-9/16"

**Max. RPM 16,000**
**Replacement Parts**

 Ball Bearing B3      Spring Washer WFS506  
 Washer WR58      Screw WNC538

**FRB25-1**
**CLASSICAL RAISED  
PANEL BIT**

Scale 1:1



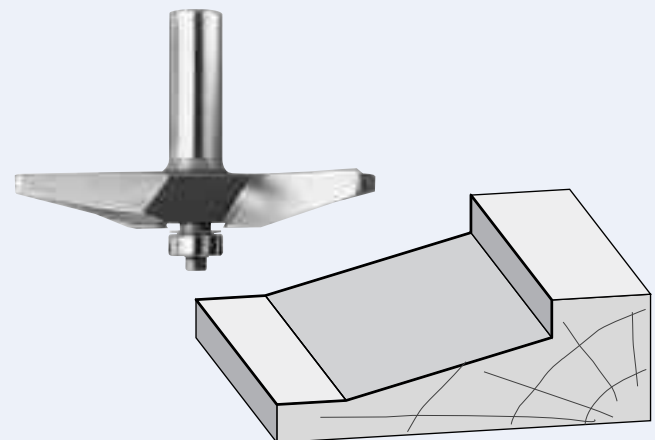
PART NO.	CUTTING DIAM.	CARBIDE HEIGHT	SHANK DIAM.	OVERALL LENGTH	RADIUS
FRB25-1	2-1/2"	1/2"	1/2"	2-3/8"	1/4"

**Replacement Parts**

 Ball Bearing B3      Spring Washer WFS506  
 Washer WR58      Screw WNC538

**FRB25-3**
**PROVINCIAL RAISED  
PANEL BIT**

Scale 1:1



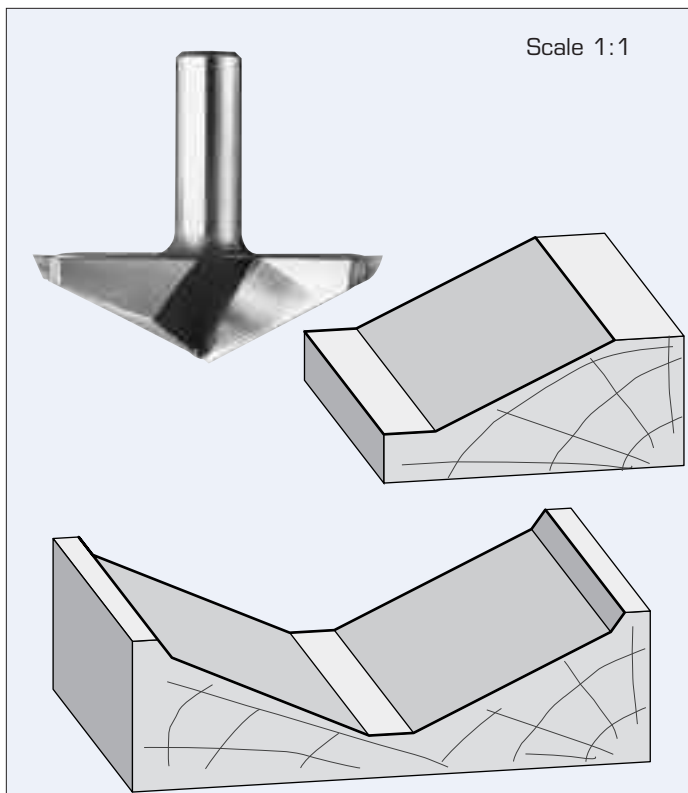
PART NO.	CUTTING DIAM.	CARBIDE HEIGHT	SHANK DIAM.	OVERALL LENGTH	DEGREE BEVEL
FRB25-3	3-3/8"	1/2"	1/2"	2-3/8"	15°

**Max. RPM 16,000**
**Replacement Parts**

 Ball Bearing B3      Spring Washer WFS506  
 Washer WR58      Screw WNC538



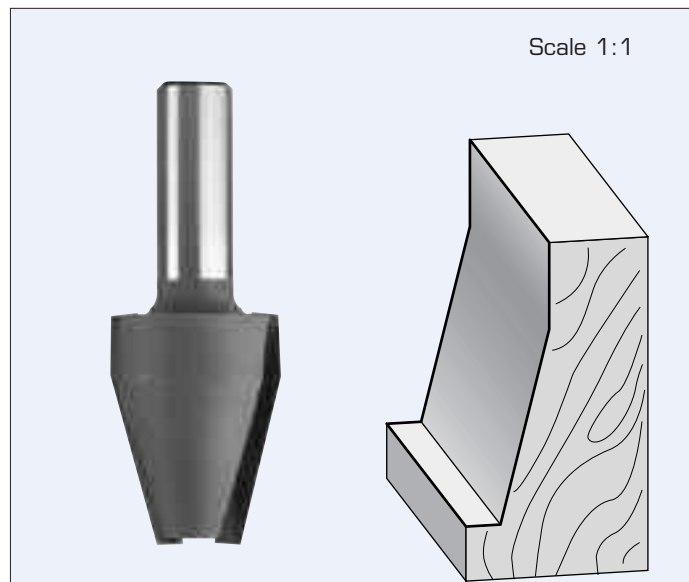
## FRB25-4 PROVINCIAL RAISED PANEL BIT TWO FLUTES



PART NO.	CUTTING DIAM.	CARBIDE HEIGHT	SHANK DIAM.	DEGREE OF BEVEL	OVERALL LENGTH
FRB25-4	2-3/4"	3/4"	1/2"	25°	2-1/4"

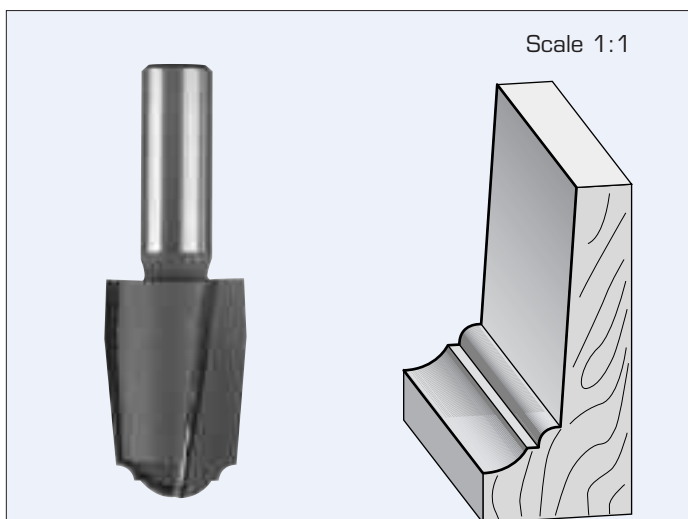
Max. RPM 18,000

## FRB25-6 VERTICAL RAISED PANEL BITS TWO FLUTES



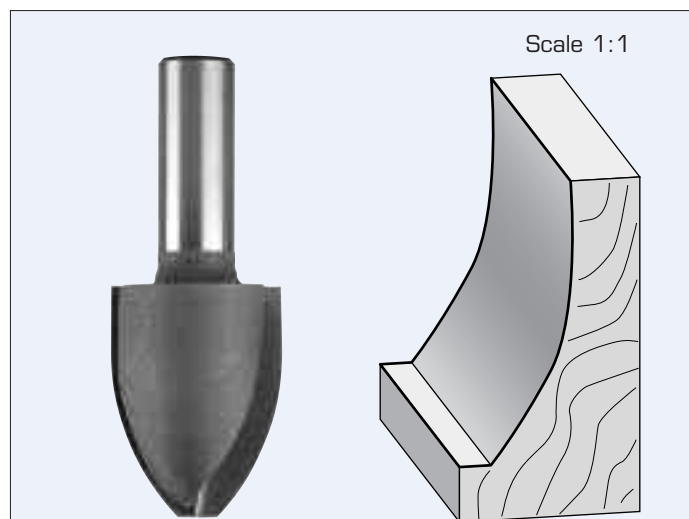
PART NO.	CUTTING DIAM.	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH
FRB25-6	1-1/8"	1-1/2"	1/2"	2-7/8"

## FRB25-5 VERTICAL RAISED PANEL BITS TWO FLUTES



PART NO.	CUTTING DIAM.	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH
FRB25-5	1"	1-1/2"	1/2"	2-7/8"

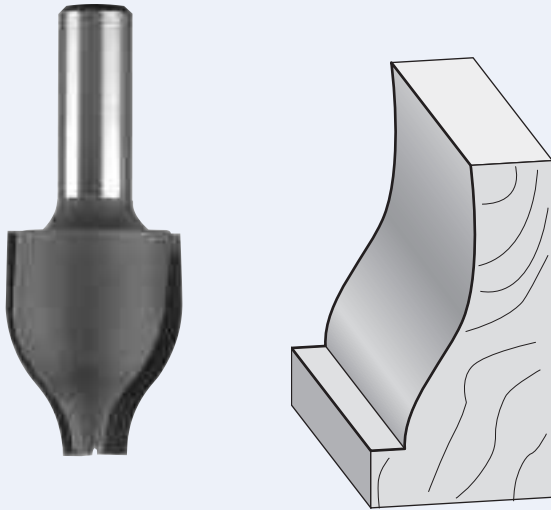
## FRB25-7 VERTICAL RAISED PANEL BITS TWO FLUTES



PART NO.	CUTTING DIAM.	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH
FRB25-7	1-1/8"	1-1/2"	1/2"	2-7/8"

**FRB25-8****VERTICAL RAISED PANEL BITS  
TWO FLUTES**

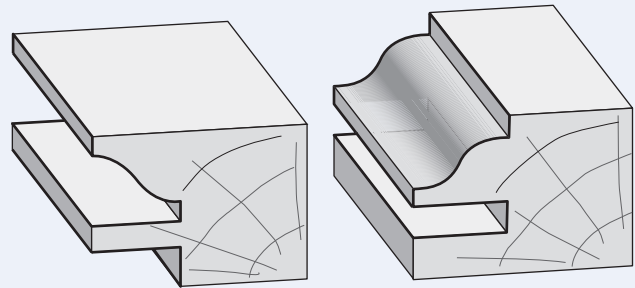
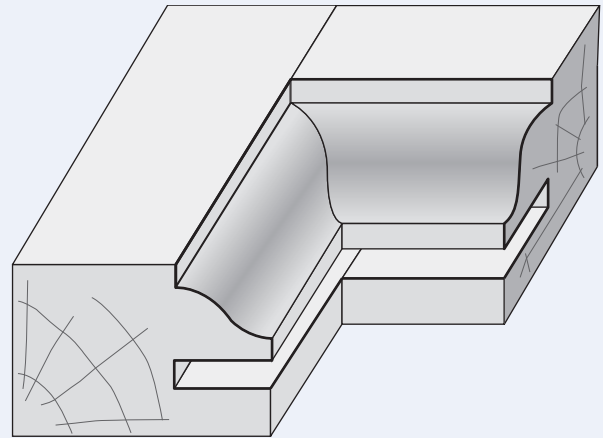
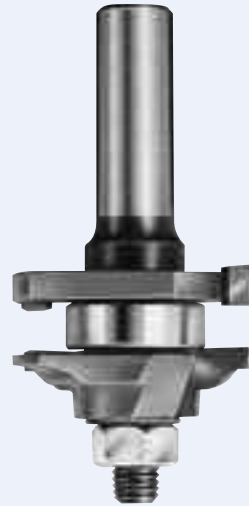
Scale 1:1



PART NO.	CUTTING DIAM.	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH
FRB25-8	1-3/16"	1-1/2"	1/2"	2-7/8"

**FRB27****STILE AND RAIL  
REVERSIBLE ONE PIECE SET**

Scale 1:1



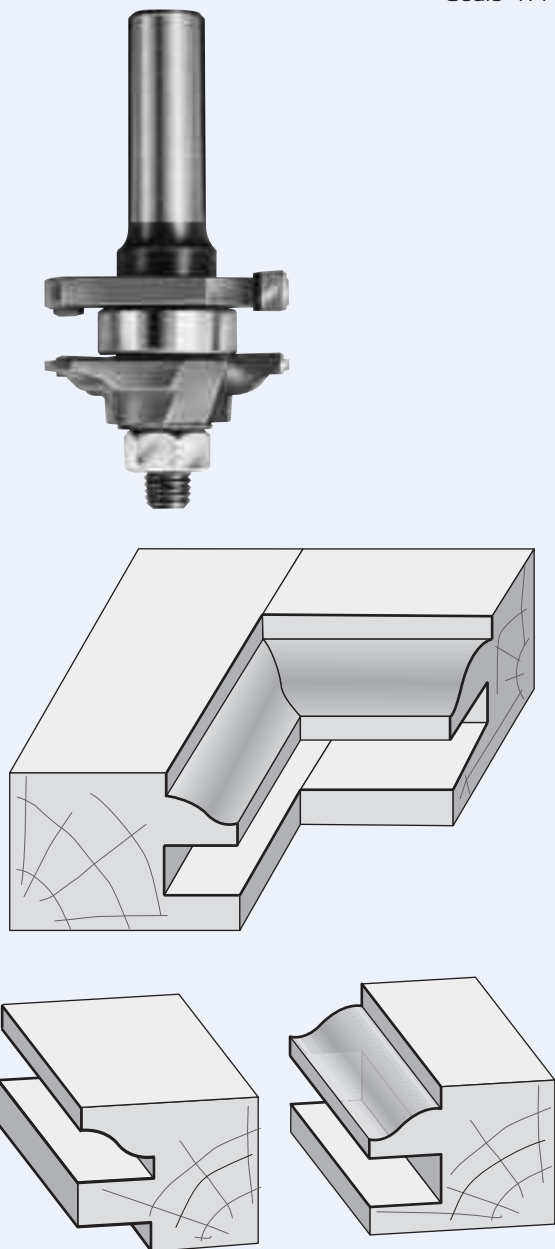
PART NO.	LARGE DIAM.	WOOD THICKNESS	OVERALL LENGTH	SHANK DIAM.	GROOVE WIDTH	GROOVE DEPTH
FRB27	1-13/16"	3/4" to 7/8"	3"	1/2"	5/32"	1/2"

**Replacement Parts**

Profile cutter only	FRB27P
Groover only	FRB27G
Arbor and nut	AR11
Nut only	WNF516
Ball Bearing	B5
Washer	WF608
Spacer 0.05mm	WF600
Spacer 0.01mm	WF604

**FRB28**
**STILE AND RAIL  
REVERSIBLE ONE PIECE SET**

Scale 1:1



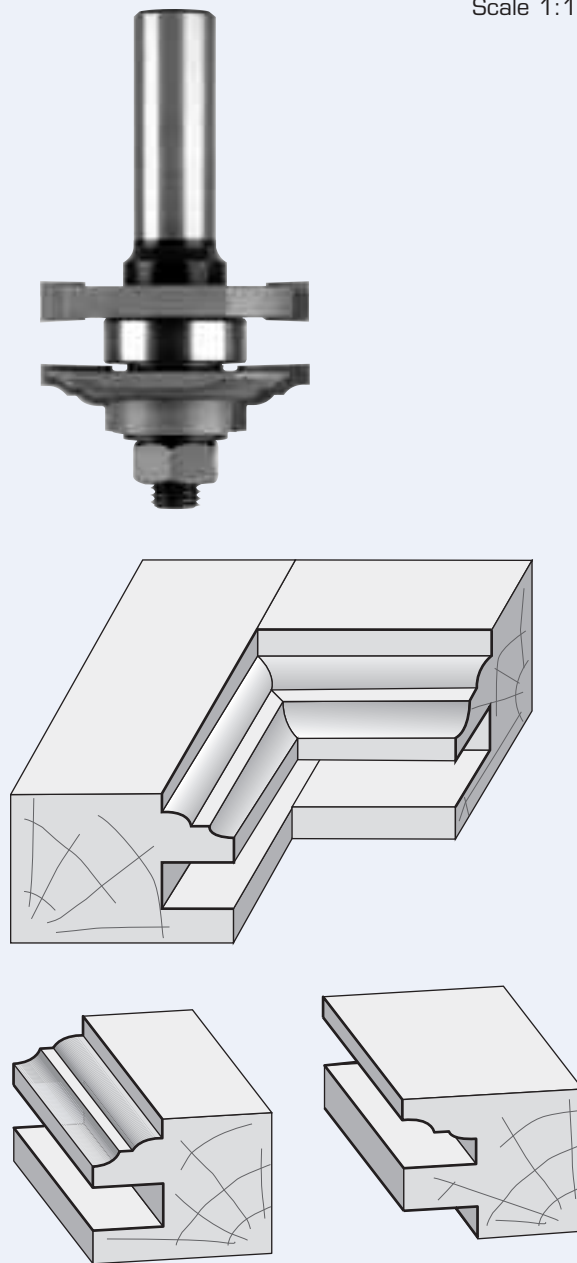
PART NO.	LARGE DIAM.	WOOD THICKNESS	SHANK DIAM.	GROOVE WIDTH	GROOVE DEPTH
FRB28	1-5/8"	3/4" to 7/8"	1/2"	1/4"	3/8"

**Replacement Parts**

Profile cutter only	FRB28P
Groover only	FRB28G
Arbor and nut	AR11
Nut only	WNF516
Ball Bearing	B5
Washer	WF608
Spacer 0.05mm	WF600
Spacer 0.01mm	WF604

**FRB30**
**STILE AND RAIL  
REVERSIBLE ONE PIECE SET**

Scale 1:1



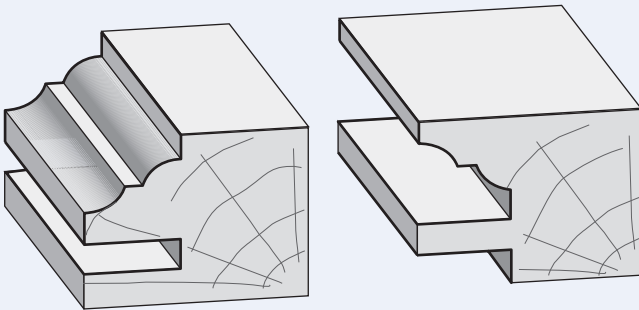
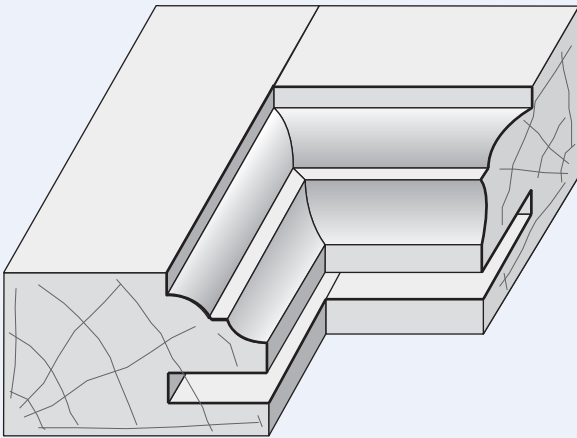
PART NO.	LARGE DIAM.	WOOD THICKNESS	SHANK DIAM.	GROOVE WIDTH	GROOVE DEPTH
FRB30	1-5/8"	3/4" to 7/8"	1/2"	1/4"	3/8"

**Replacement Parts**

Profile cutter only	FRB30P
Groover only	FRB28G
Arbor and nut	AR11
Nut only	WNF516
Ball Bearing	B5
Washer	WF608
Spacer 0.05mm	WF600
Spacer 0.01mm	WF604

**FRB31****STILE AND RAIL  
REVERSIBLE ONE PIECE SET**

Scale 1:1



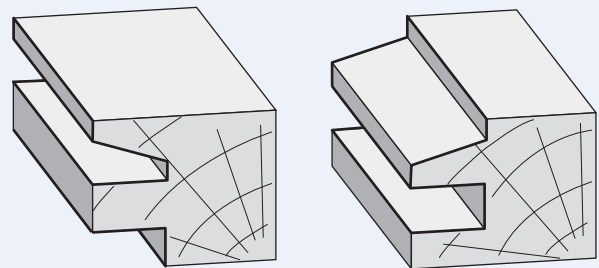
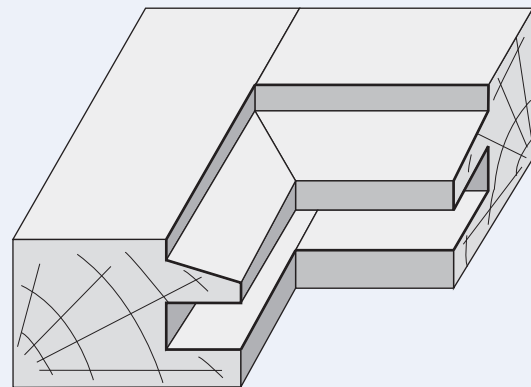
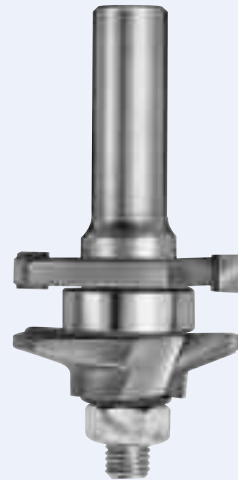
PART NO.	LARGE DIAM.	WOOD THICKNESS	SHANK DIAM.	GROOVE WIDTH	GROOVE DEPTH
FRB31	1-13/16"	3/4" to 7/8"	1/2"	5/32"	1/2"

**Replacement Parts**

Profile cutter only	FRB31P
Groover only	FRB27G
Arbor and nut	AR11
Nut only	WNF516
Ball Bearing	B5
Washer	WF608
Spacer 0.05mm	WF600
Spacer 0.01mm	WF604

**FRB31-1****STILE AND RAIL  
REVERSIBLE ONE PIECE SET**

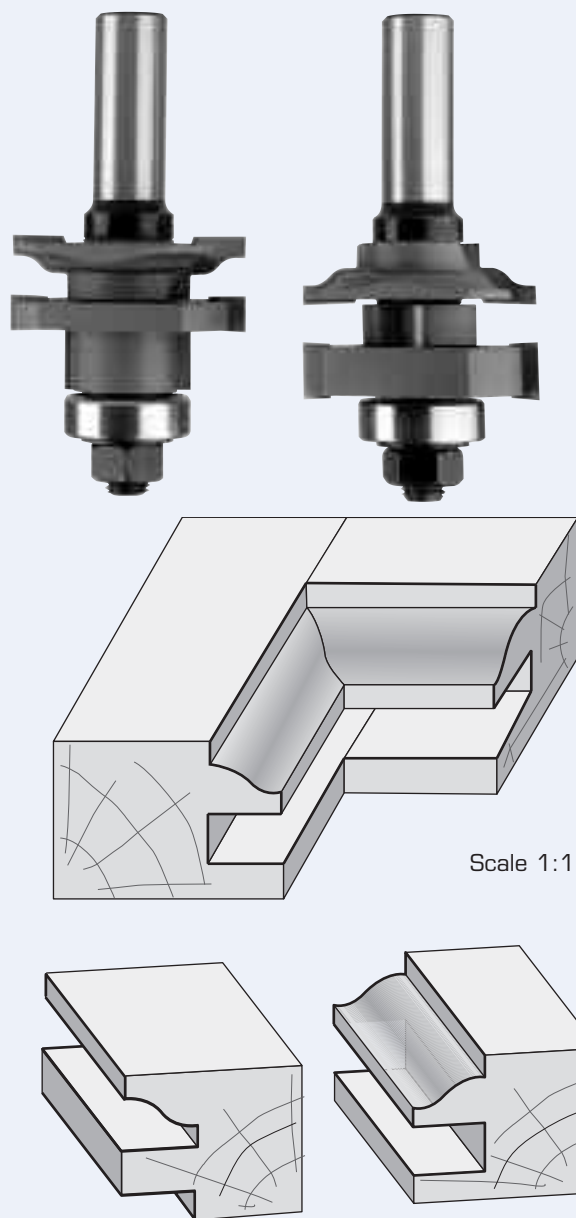
Scale 1:1



PART NO.	LARGE DIAM.	WOOD THICKNESS	SHANK DIAM.	GROOVE WIDTH	GROOVE DEPTH
FRB31-1	1-5/8"	3/4" to 7/8"	1/2"	1/4"	3/8"

**Replacement Parts**

Profile cutter only	FRB31-1P
Groover only	FRB28G
Arbor and nut	AR11
Nut only	WNF516
Ball Bearing	B5
Washer	WF608
Spacer 0.05mm	WF600
Spacer 0.01mm	WF604

**FRB31-2**
**STILE AND RAIL  
TWO PIECE SET**


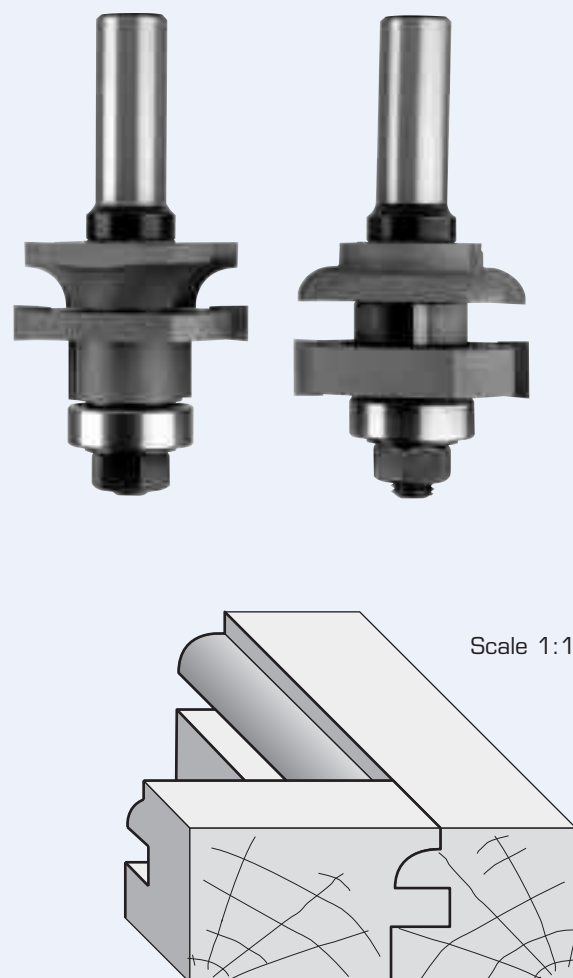
PART NO.	LARGE DIAM.	WOOD THICKNESS	SHANK DIAM.	GROOVE WIDTH	GROOVE DEPTH
FRB31-2	1-5/8"	3/4" to 1"	1/2"	1/4"	3/8"

**Replacement Parts for Stile**

Profile cutter	FRB28P	Spacers 1.0mm (2pcs.)	WF608
Groover	FRB28G	Shims 0.1mm (3 pcs.)	WF604
Straight cutter	FRB31-2C	Shim 0.05mm (1pc.)	WF600
Arbor and nut	AR23		
Nut only	WNF516		
Ball Bearing	B5		

**Replacement Parts for Rail**

Profile cutter	FRB31-2PR	Spacers 1.0mm (4pcs.)	WF608
Straight cutter	FRB31-2CR	Shims 0.1mm (2pcs.)	WF604
Rabbeting cutter	FRB31-2R	Shims 0.05mm (2pcs.)	WF600
Arbor and nut	AR23		
Nut only	WNF516		
Ball Bearing	B5		

**FRB31-3**
**STILE AND RAIL  
TWO PIECE SET**


PART NO.	LARGE DIAM.	WOOD THICKNESS	SHANK DIAM.	GROOVE WIDTH	GROOVE DEPTH
FRB31-3	1-5/8"	3/4" to 1"	1/2"	1/4"	3/8"

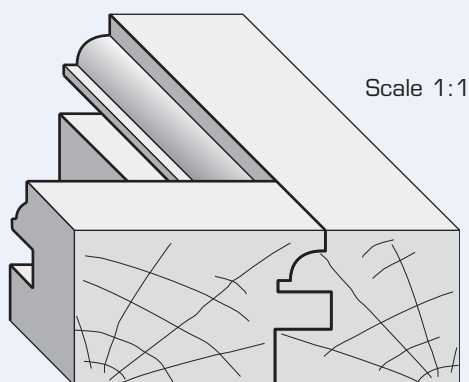
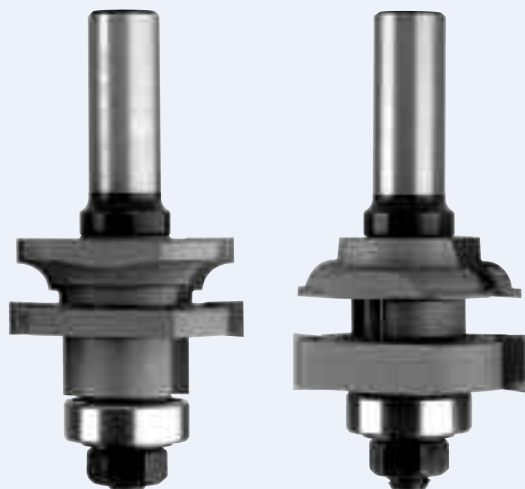
**Replacement Parts for Stile**

Profile cutter	FRB31-3P	Spacers 1.0mm (2pcs.)	WF608
Groover	FRB28G	Shims 0.1mm (3 pcs.)	WF604
Straight cutter	FRB31-2C	Shim 0.05mm (1pc.)	WF600
Arbor and nut	AR23		
Nut only	WNF516		
Ball Bearing	B5		

**Replacement Parts for Rail**

Profile cutter	FRB31-3PR	Spacers 1.0mm (4pcs.)	WF608
Straight cutter	FRB31-2CR	Shims 0.1mm (2pcs.)	WF604
Rabbeting cutter	FRB31-2R	Shims 0.05mm (2pcs.)	WF600
Arbor and nut	AR23		
Nut only	WNF516		
Ball Bearing	B5		

## FRB31-4

STILE AND RAIL  
TWO PIECE SET

Scale 1:1

PART NO.	LARGE DIAM.	WOOD THICKNESS	SHANK DIAM.	GROOVE WIDTH	GROOVE DEPTH
FRB31-4	1-5/8"	3/4" to 1"	1/2"	1/4"	3/8"

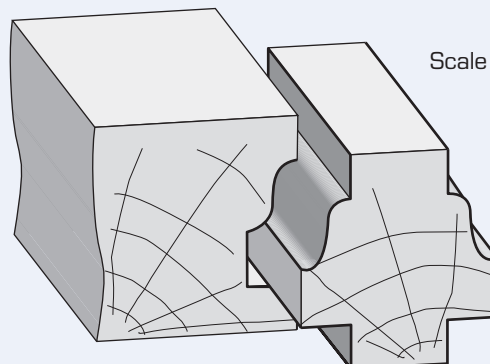
## Replacement Parts for Stile

Profile cutter	FRB31-4P	Spacers 1.0mm (2pcs.)	WF608
Groover	FRB28G	Shims 0.1mm (3 pcs.)	WF604
Straight cutter	FRB31-2C	Shim 0.05mm (1pc.)	WF600
Arbor and nut	AR23		
Nut only	WNF516		
Ball Bearing	B5		

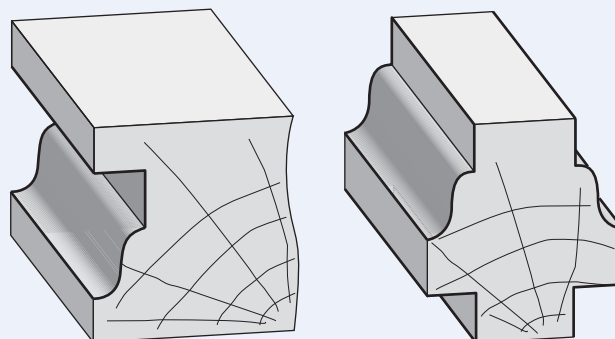
## Replacement Parts for Rail

Profile cutter	FRB31-4PR	Spacers 1.0mm (4pcs)	WF608
Straight cutter	FRB31-2CR	Shims 0.1mm (2pcs)	WF604
Rabbeting cutter	FRB31-2R	Shims 0.05mm (2pcs)	WF600
Arbor and nut	AR23		
Nut only	WNF516		
Ball Bearing	B5		

## FRB31-5

REVERSIBLE OGEE  
WINDOW SASH ASSEMBLY

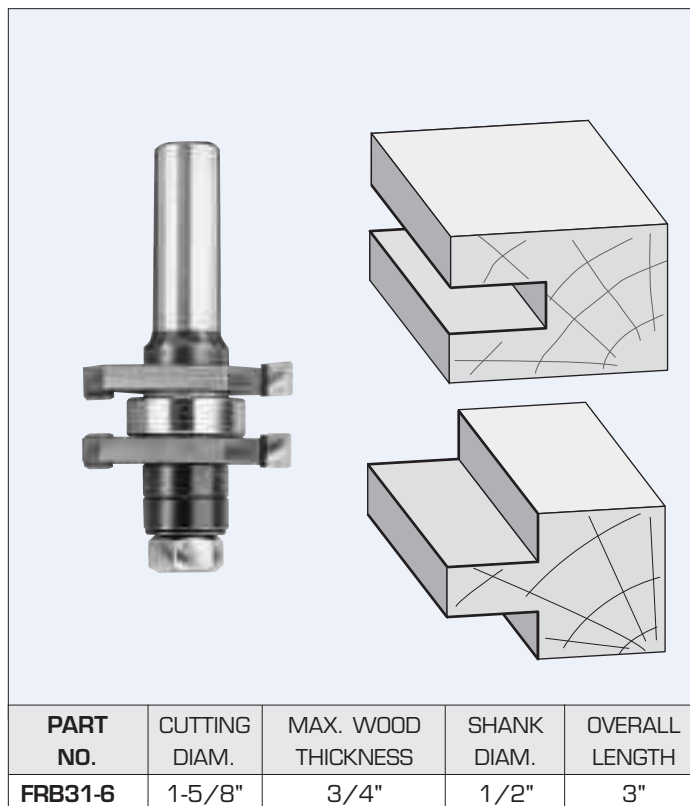
Scale 1:1



PART NO.	LARGE DIAM.	WOOD THICKNESS	SHANK DIAM.	OVERALL LENGTH
FRB31-5	1-3/8"	1-1/8" to 1-3/4"	1/2"	3-3/4"

## Replacement Parts

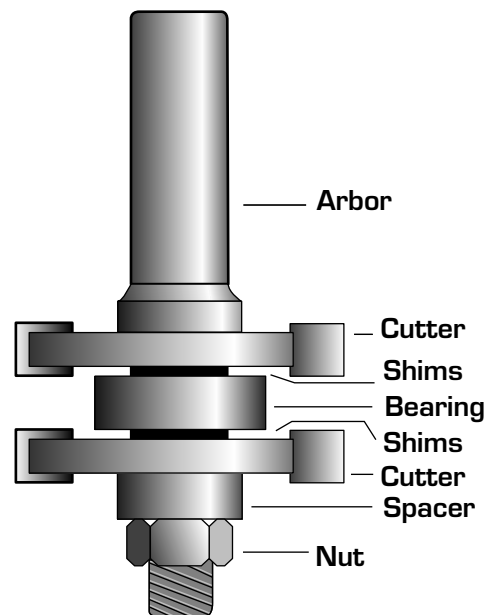
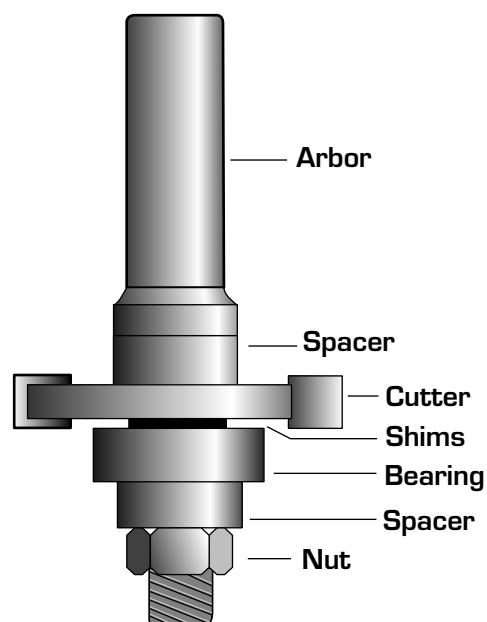
Profile cutter	FRB31-5C	Spacer 6.0mm (3 pcs.)	WF618
Rabbeting cutter	FRB31-5R	Spacer 3.0mm (1 pc.)	WF610
Arbor and nut	AR20	Spacer 1.0mm (1 pc.)	WF608
Nut only	WNF516	Spacer 0.5mm (2 pcs.)	WF606
Ball Bearing	B5	Spacer 0.1mm (3 pcs.)	WF604

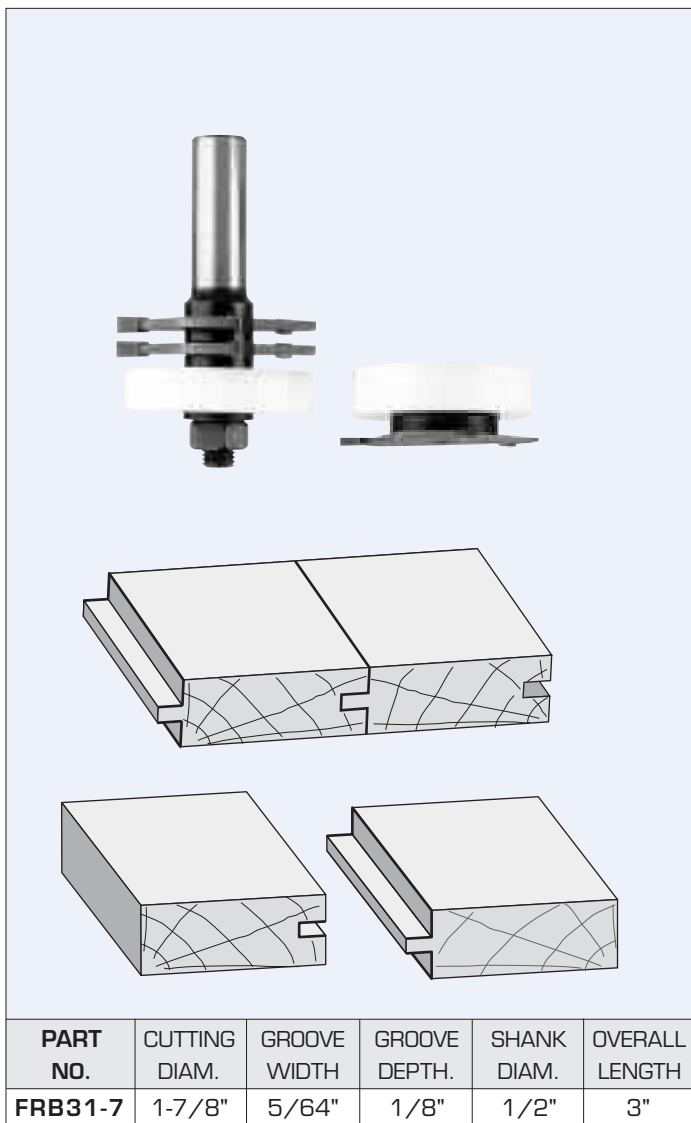
**FRB31-6**
**ANGULAR TONGUE AND GROOVE CUTTER SET**

**STANDARD SET CONSISTS OF:**

Arbor and nut	AR11
Ball Bearing	B5
Spacers 6.0mm (2 pcs.)	WF618
Washer 1.0mm (1 pc.)	WF608
Shims 0.5mm (2 pcs.)	WF606
Shims 0.1mm (4 pcs.)	WF604
Cutters 1-5/8" diam.	
1/4" kerf x 2 Teeth (2 pcs.)	FRB28G

**Angular Tongue and Groove Cutter Set**

This newly developed Tongue and Groove Cutter enables perfect results in stock up to 18mm (apx. 3/4"). The groove is of 1/4" (6.35mm) in width and of 3/8" (9.5mm) in depth. When changing over from assembly (A) to assembly (B), according to the drawings on the right, the centre of the groove is automatically adjusted and there is no need to raise or lower the router. With the aid of the supplied shims, there is always the possibility to achieve the required tightness of the joint, even after resharpening groovers.

**FRB31-6**
**TYPICAL ASSEMBLY**
**Typical Assembly (A)  
(tongue)**

**Typical Assembly (B)  
(groove)**


**FRB31-7**
**TONGUE AND GROOVE  
CUTTER SET**


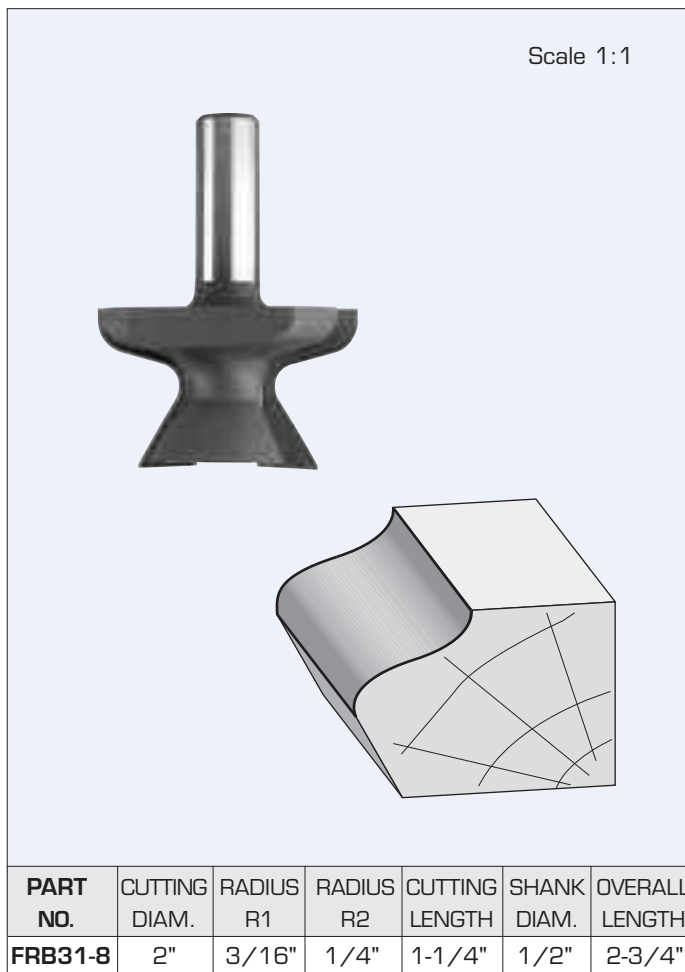
**MAXIMUM WOOD THICKNESS 3/8"**

**STANDARD SET CONSISTS OF:**

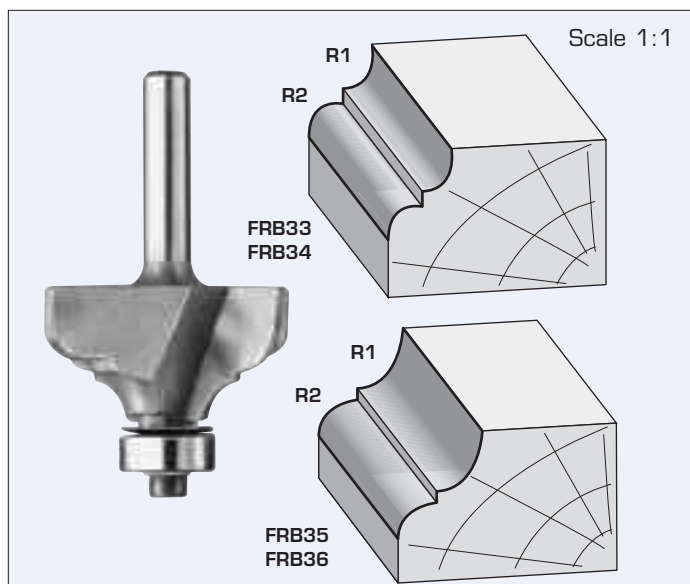
Arbor & nut (1 piece)	AR11
Groover 5/64" (1 piece)	R4005-1
Rabbeting Cutter 5.32" (2 pieces)	R4002
Super Glide Bearing 40.8mm	B36
Super Glide Bearing 43mm	B38
Spacer 6.0mm (1 piece)	WF618
Spacer 3.15mm (1 piece)	WF611
Spacer 1.0mm (2 pieces)	WF608
Shim 0.1mm (1 piece)	WF604
Shim 0.05mm (1 piece)	WF600

**FRB31-8**
**OUTER EDGE  
DOOR TRIMMER BIT**


Scale 1:1





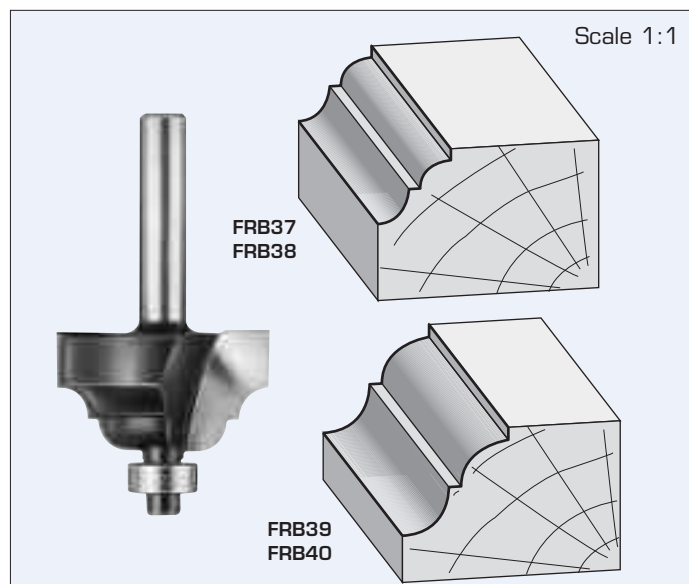
**FRB33**
**OGEE FILLET BIT  
WITH 1/2" BEARING**


PART NO.	LARGE DIAM.	RADIUS R1	RADIUS R2	CARBIDE HEIGHT	SHANK DIAM.
FRB33	1-1/8"	5/32"	5/32"	1/2"	1/4"
FRB34	1-1/8"	5/32"	5/32"	1/2"	1/2"
FRB35	1-3/8"	1/4"	3/16"	11/16"	1/4"
FRB36	1-3/8"	1/4"	3/16"	11/16"	1/2"

**Replacement Parts**

Ball Bearing B3  
Washer WR58

Spring Washer WFS506  
Screw WNC538

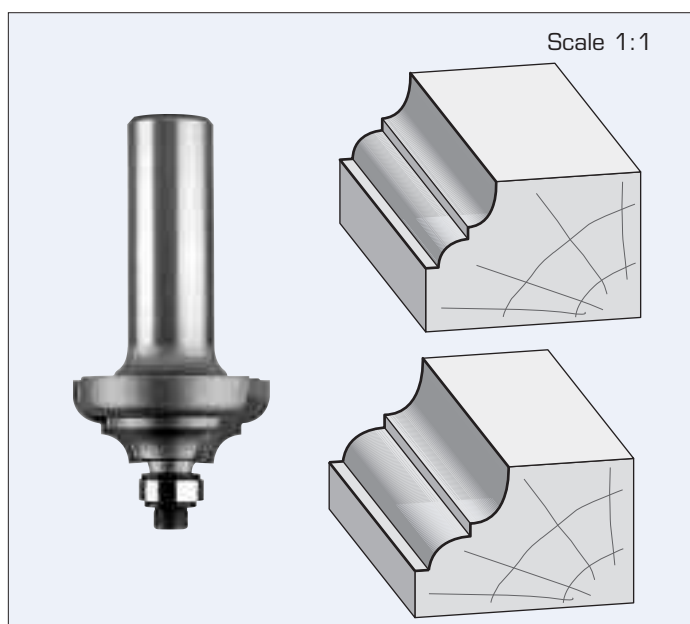
**FRB37**
**ROMAN OGEE BIT  
WITH 3/8" BEARING**


PART NO.	LARGE DIAM.	RADIUS	CARBIDE HEIGHT	SHANK DIAM.
FRB37	1"	5/32"	5/8"	1/4"
FRB38	1"	5/32"	5/8"	1/2"
FRB39	1-3/8"	1/4"	3/4"	1/4"
FRB40	1-3/8"	1/4"	3/4"	1/2"

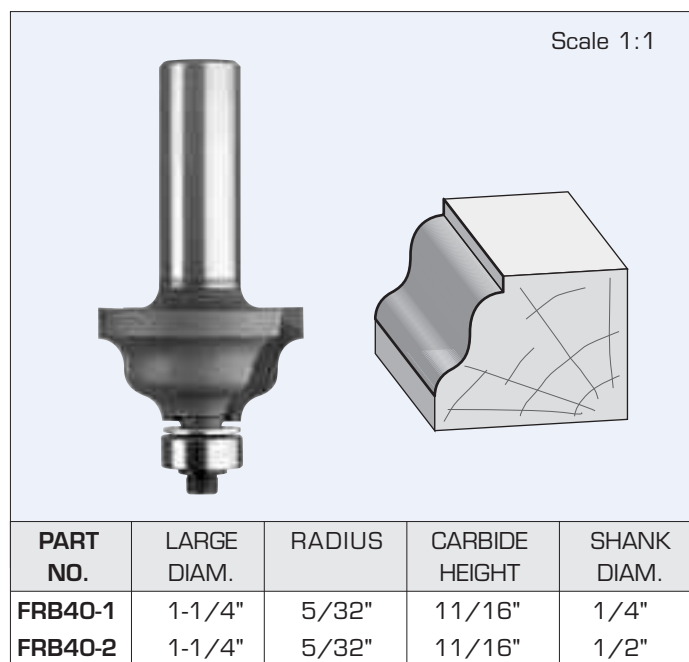
**Replacement Parts**

Ball Bearing B1  
Washer WR12

Spring Washer WFS504  
Screw WNC338

**FRB33**
**OGEE FILLET BIT  
USING 3/8" BEARING**


Profiles produced by using FRB33 to FRB36 with additional 3/8" Ball Bearing (Part No. B2) and Washer (WFS500)

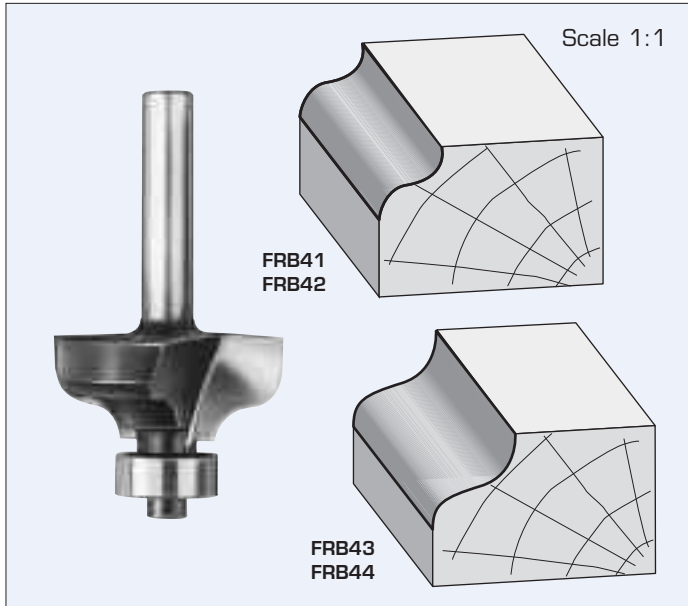
**FRB40-1**
**WAVY EDGE BIT  
WITH 1/2" BEARING**


PART NO.	LARGE DIAM.	RADIUS	CARBIDE HEIGHT	SHANK DIAM.
FRB40-1	1-1/4"	5/32"	11/16"	1/4"
FRB40-2	1-1/4"	5/32"	11/16"	1/2"

**Replacement Parts**

Ball Bearing B3  
Washer WR58

Spring Washer WFS506  
Screw WNC538

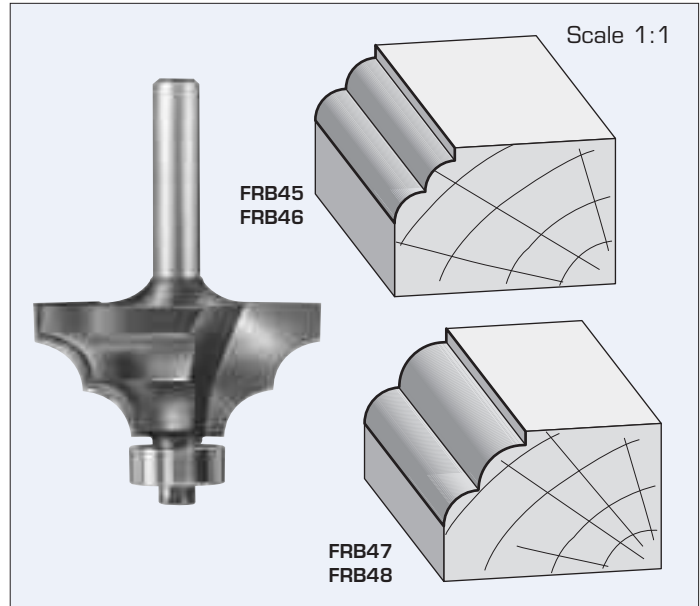
**FRB41**
**PANELLING BIT  
WITH 1/2" BEARING**


PART NO.	LARGE DIAM.	RADIUS	CARBIDE HEIGHT	SHANK DIAM.
FRB41	1-1/8"	5/32"	1/2"	1/4"
FRB42	1-1/8"	5/32"	1/2"	1/2"
FRB43	1-3/8"	1/4"	11/16"	1/4"
FRB44	1-3/8"	1/4"	11/16"	1/2"

**Replacement Parts**

Ball Bearing B3  
Washer WR58

Spring Washer WFS506  
Screw WNC538

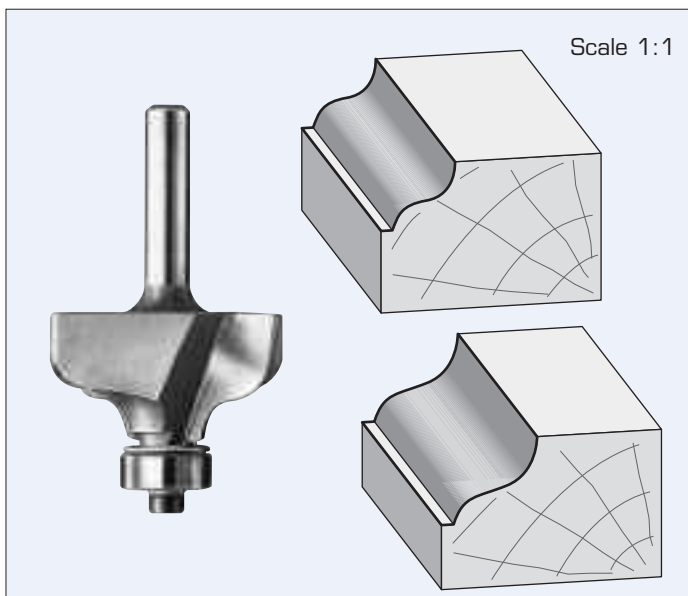
**FRB45**
**CLASSICAL BIT  
WITH 1/2" BEARING**


PART NO.	LARGE DIAM.	RADIUS	CARBIDE HEIGHT	SHANK DIAM.
FRB45	1-1/8"	5/32"	1/2"	1/4"
FRB46	1-1/8"	5/32"	1/2"	1/2"
FRB47	1-3/8"	7/32"	11/16"	1/4"
FRB48	1-3/8"	7/32"	11/16"	1/2"

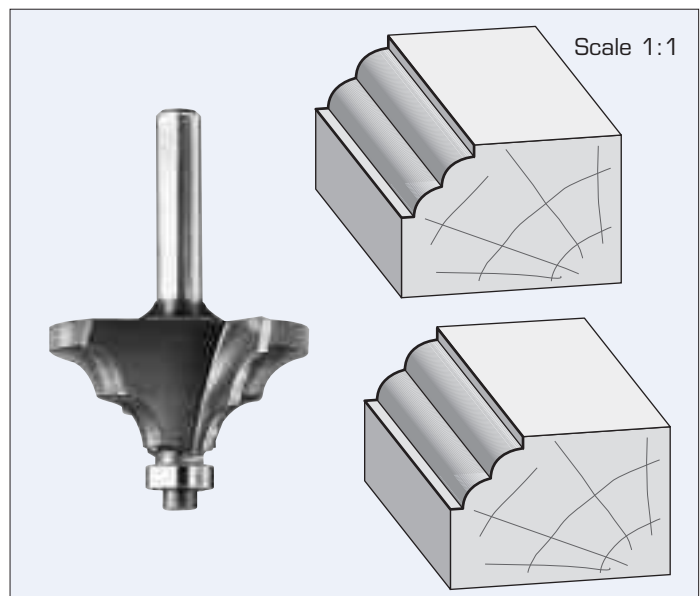
**Replacement Parts**

Ball Bearing B3  
Washer WR58

Spring Washer WFS506  
Screw WNC538

**FRB41**
**PANELLING BIT  
USING 3/8" BEARING**


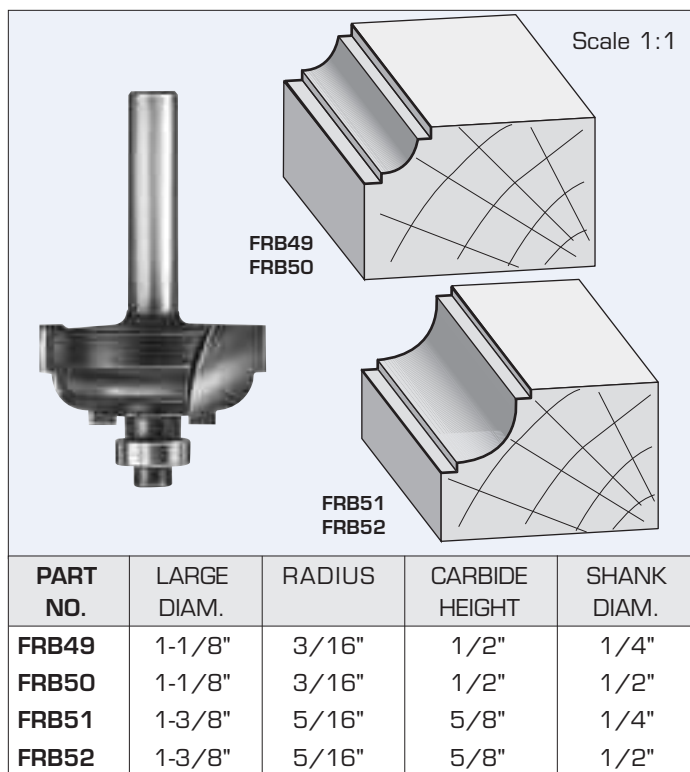
Profiles produced by using FRB41 to FRB44 with additional 3/8" Ball Bearing (Part No. B2) and Washer (WFS500)

**FRB45**
**CLASSICAL BIT  
USING 3/8" BEARING**


Profiles produced by using FRB45 to FRB48 with additional 3/8" Ball Bearing (Part No. B2) and Washer (WFS500)

## FRB49

### CLASSIC PANEL BITS



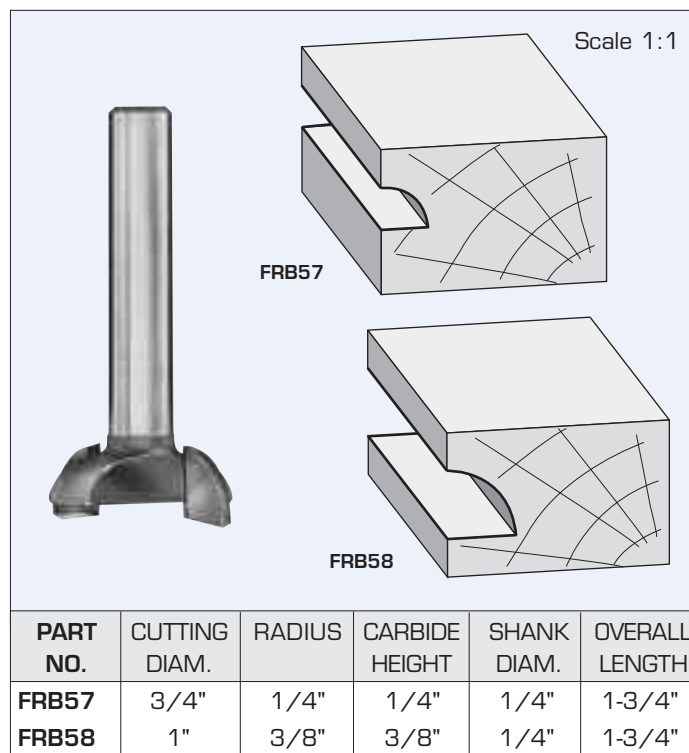
#### Replacement Parts

Ball Bearing B3  
Washer WR58

Spring Washer WFS506  
Screw WNC538

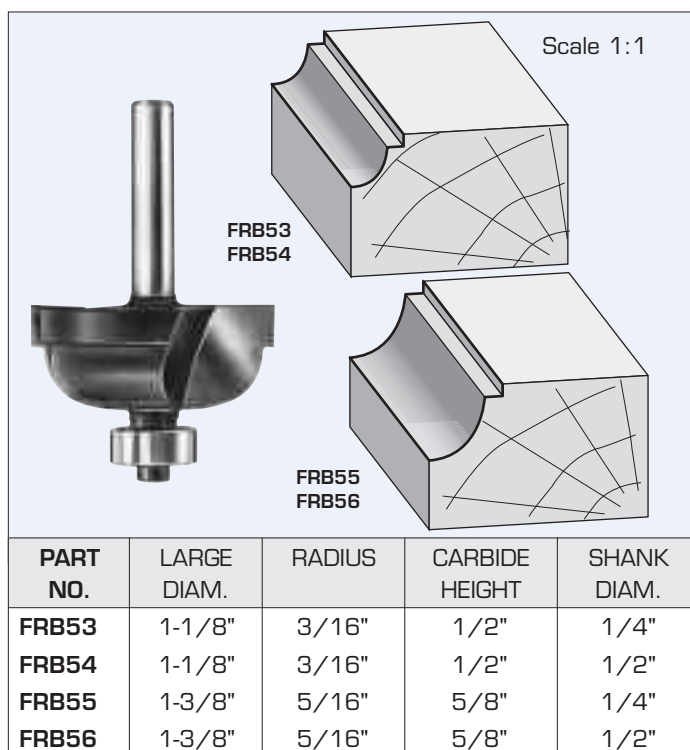
## FRB57

### FINGER GRIP BITS



## FRB53

### FLAT OGEE BITS



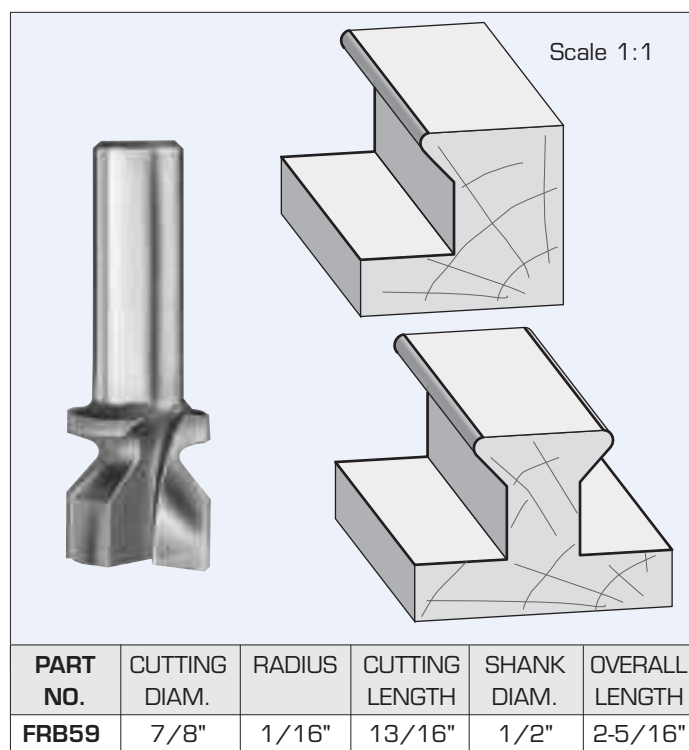
#### Replacement Parts

Ball Bearing B3  
Washer WR58

Spring Washer WFS506  
Screw WNC538

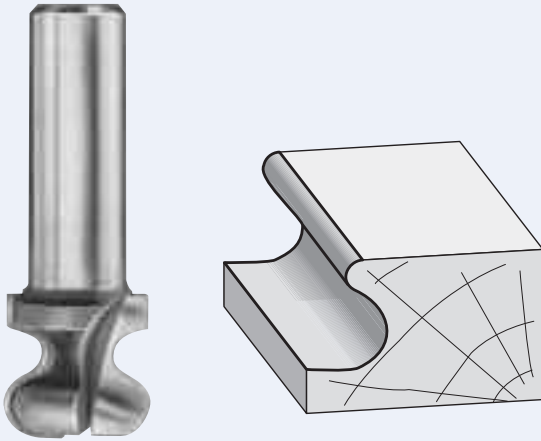
## FRB59

### FINGER GRIP BIT



**FRB60**
**FINGER GRIP BIT**

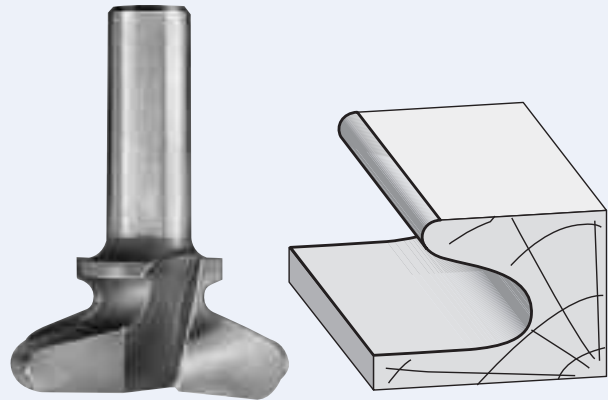
Scale 1:1



PART NO.	CUTTING DIAM.	RADIUS R1	RADIUS R2	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH
FRB60	3/4"	3/32"	3/16"	3/4"	1/2"	2-1/4"

**FRB62**
**FINGER GRIP BIT**

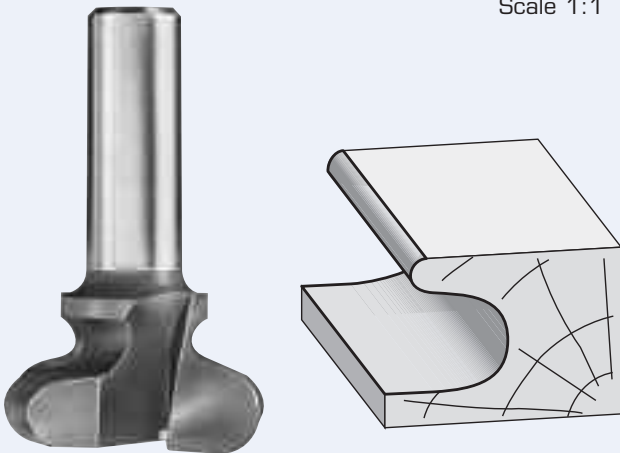
Scale 1:1



PART NO.	CUTTING DIAM.	RADIUS R1	RADIUS R2	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH
FRB62	1-3/4"	3/32"	3/16"	13/16"	1/2"	2-5/16"

**FRB61**
**FINGER GRIP BIT**

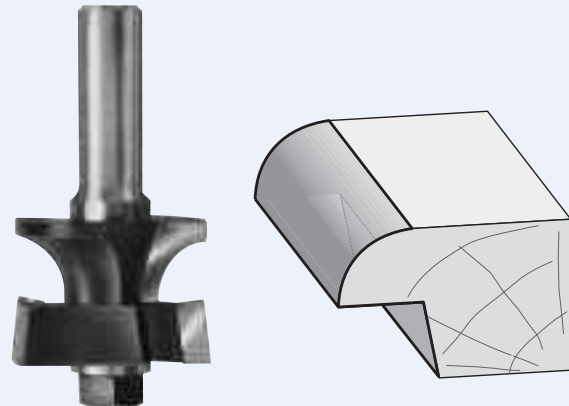
Scale 1:1



PART NO.	CUTTING DIAM.	RADIUS R1	RADIUS R2	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH
FRB61	1-1/2"	5/64"	15/64"	13/16"	1/2"	2-5/16"

**FRB62-5**
**DOOR LIP ROUTER SET**

Scale 1:1



PART NO.	LARGE DIAM.	WOOD THICKNESS	RADIUS	DEG. BEVEL	SHANK DIAM.	OVERALL LENGTH
FRB62-5	1-5/8"	1" Max.	3/8"	10°	1/2"	3"

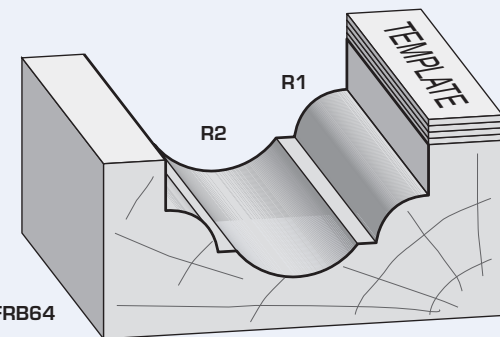
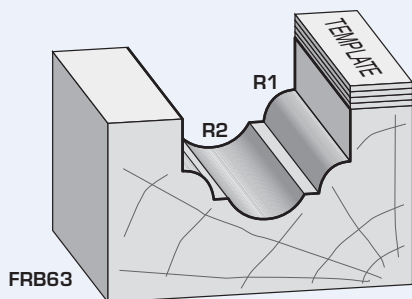
**Replacement Parts**

Radius cutter	FRB62-5RC
Bevel cutter	FRB62-5BC
Arbor and nut	AR11
Nut only	WNF516

## FRB63

PANELLING BIT WITH UPPER  
BALL BEARING, ROUND BOTTOM

Scale 1:1



PART NO.	CUTTING DIAM.	RADIUS R1	RADIUS R2	CARBIDE HEIGHT	SHANK DIAM.	OVERALL LENGTH
FRB63 (A)	7/8"	5/32"	7/32"	1/2"	1/4"	2"
FRB64 (B)	1-3/8"	1/4"	13/32"	9/16"	1/2"	2-5/8"

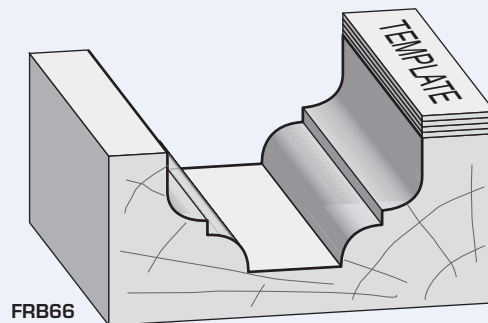
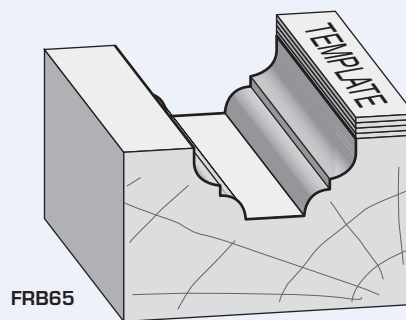
### Replacement Parts

- (A) Ball Bearing B5 External Circlip WC01  
(B) Ball Bearing B7 External Circlip WC02

## FRB65

PANELLING BIT WITH  
UPPER BALL BEARING, FLAT BOTTOM

Scale 1:1



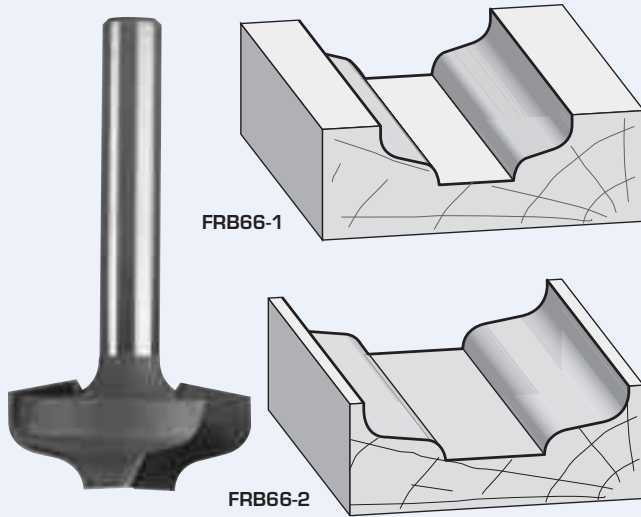
PART NO.	LARGE DIAM.	SMALL DIAM.	RADIUS R	CARBIDE HEIGHT	SHANK DIAM.	OVERALL LENGTH
FRB65 (A)	7/8"	0.319"	9/64"	3/8"	1/4"	2"
FRB66 (B)	1-3/8"	0.522"	13/64"	9/16"	1/2"	2-5/8"

### Replacement Parts

- (A) Ball Bearing B5 External Circlip WC01  
(B) Ball Bearing B7 External Circlip WC02

**FRB66-1****FLAT BOTTOM OGEE BITS  
PLUNGE TYPE**

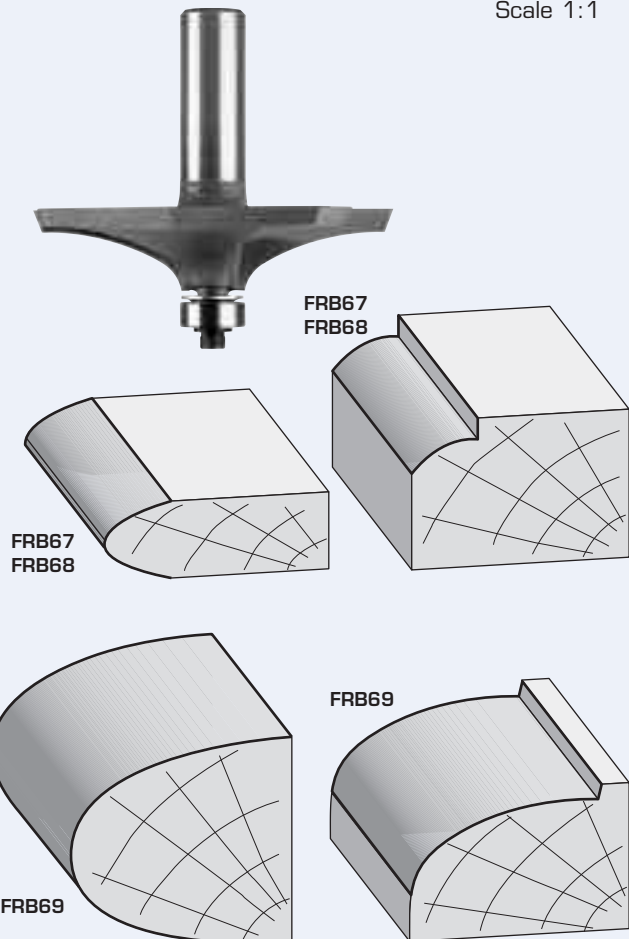
Scale 1:1



PART NO.	CUTTING DIAM.	CUTTING LENGTH	RADIUS	SHANK DIAM.	OVERALL LENGTH
FRB66-1	1"	3/8"	1/8"	1/4"	2"
FRB66-2	1-3/8"	3/8"	1/8"	1/2"	2-1/4"

**FRB67****THUMB NAIL BITS  
WITH BALL BEARING GUIDE**

Scale 1:1



PART NO.	CUTTING DIAM.	RADIUS	CUTTING HEIGHT	SHANK DIAM.	OVERALL LENGTH
FRB67	1-3/16"	15/32"	3/8"	1/4"	2-1/16"
FRB68	1-3/16"	15/32"	3/8"	1/2"	2-1/16"
FRB69 *	2-3/4"	1-7/8"	11/16"	1/2"	2-1/2"

\*Max. RPM 18,000

**Replacement Parts**

Ball Bearing B3

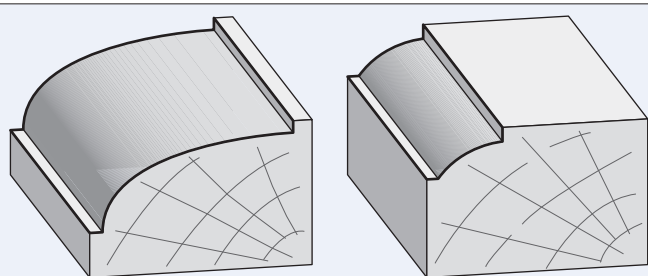
Spring Washer WFS506

Washer WR58

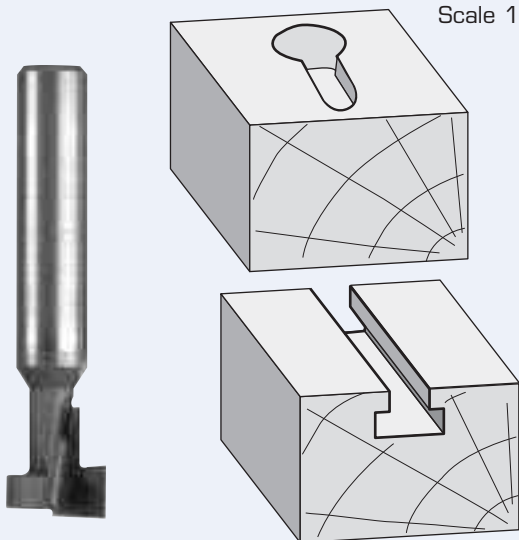
Screw WNC538

**THUMB NAIL BITS BEADING TYPE**

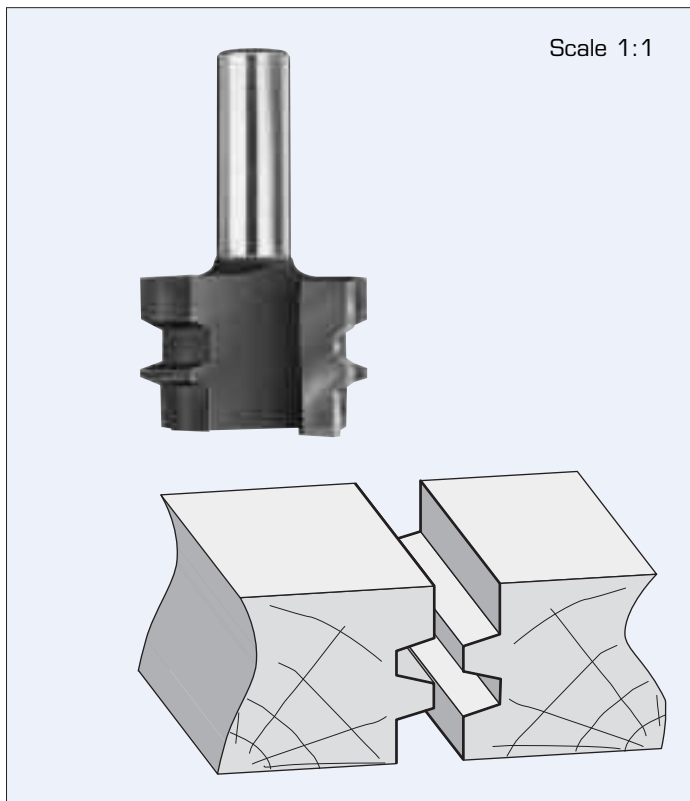
Shapes produced by using above bits with 3/8" bearing  
PART No. B2, replace washer with PART No. WFS500

**FRB66-5****KEYHOLE BIT  
ONE FLUTE**

Scale 1:1

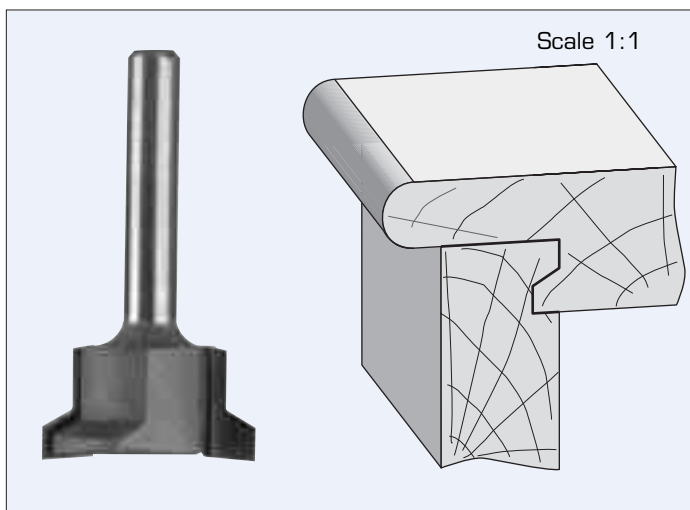


PART NO.	LARGE DIAM.	SMALL DIAM.	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH
FRB66-5	3/8"	3/16"	3/8"	1/4"	1-1/2"

**FRB72**
**GLUE JOINT BIT  
TWO FLUTES**


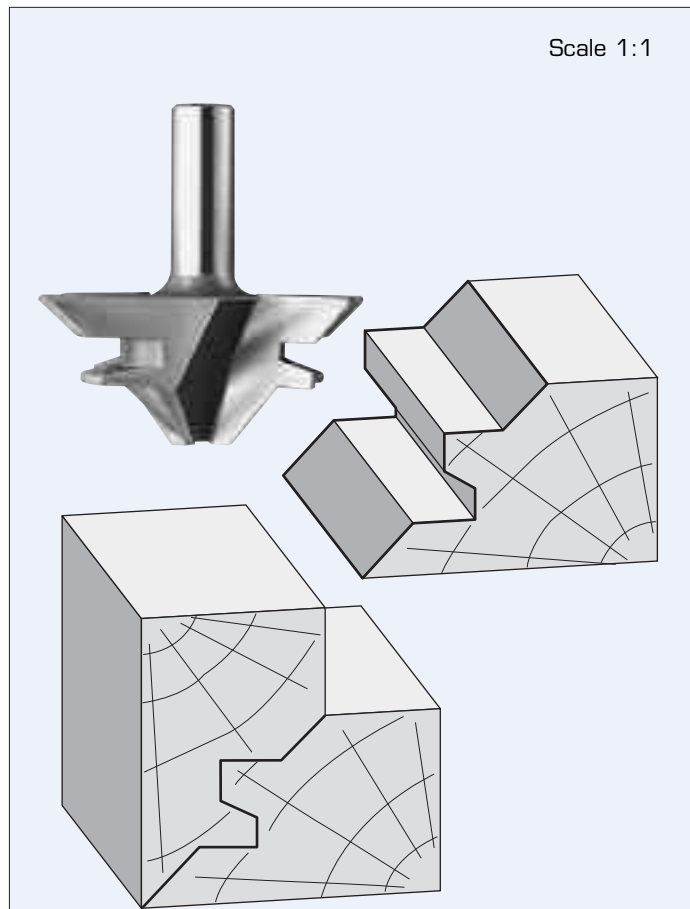
Scale 1:1

PART NO.	CUTTING DIAM.	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH
FRB72	1-29/64"	1-1/8"	1/2"	2-5/8"

**FRB72-1**
**DRAWER LOCK BITS  
TWO FLUTES**


Scale 1:1

PART NO.	CUTTING DIAM.	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH
FRB72-1	3/4"	1/2"	1/4"	1-7/8"
FRB72-3	1"	1/2"	1/2"	1-7/8"

**FRB73**
**LOCK MITER BITS  
90° CORNER TWO FLUTES**


Scale 1:1

PART NO.	CUTTING DIAM.	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH
FRB73-1	1-1/2"	1/2"	1/4"	1-5/8"
FRB73-2	1-3/4"	3/4"	1/2"	2-1/4"
FRB73*	2-23/32"	1-3/16"	1/2"	2-11/16"

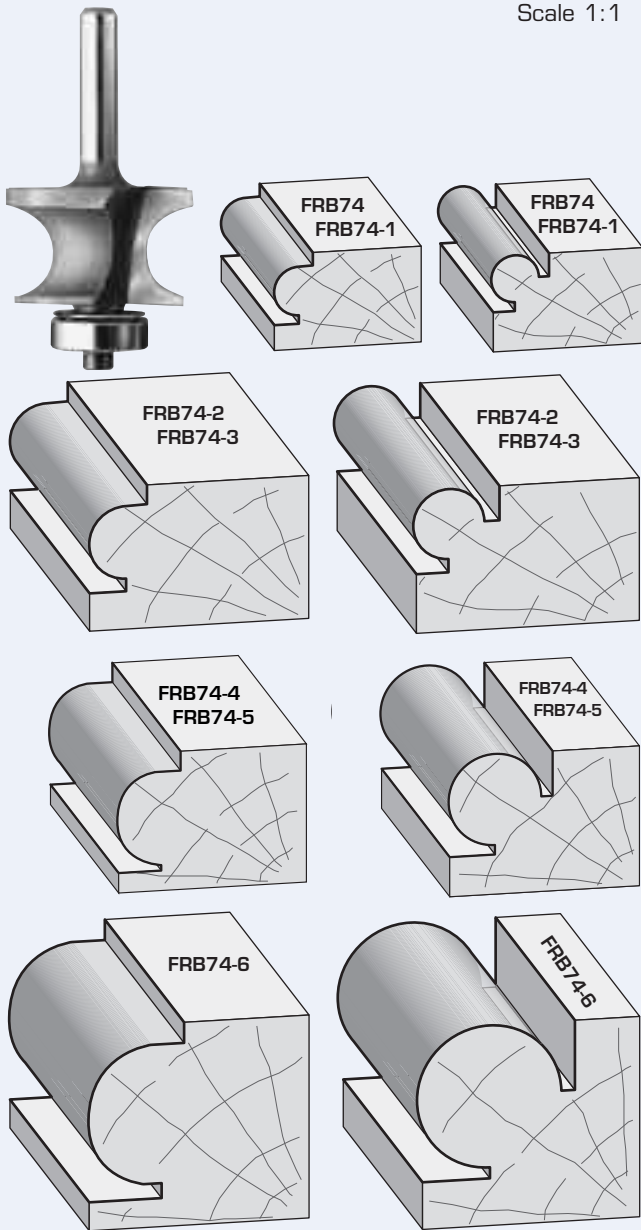
\*Max. RPM 18,000



# FRB74

## CORNER BEADING BITS WITH BALL BEARING GUIDE

Scale 1:1



PART NO.	CUTTING DIAM.	RADIUS	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH
FRB74 (A)	7/8"	1/8"	9/16"	1/4"	2-1/8"
FRB74-1 (A)	7/8"	1/8"	9/16"	1/2"	2-1/2"
FRB74-2 (B)	1-1/16"	3/16"	5/8"	1/4"	2-1/4"
FRB74-3 (B)	1-1/16"	3/16"	5/8"	1/2"	2-5/8"
FRB74-4 (B)	1-1/4"	1/4"	3/4"	1/4"	2-3/8"
FRB74-5 (B)	1-1/4"	1/4"	3/4"	1/2"	2-5/8"
FRB74-6 (B)	1-1/2"	3/8"	1"	1/2"	3"

### Replacement Parts For (A)

Ball Bearing B3  
Washer WR58  
Spring Washer WFS506  
Screw WNC538

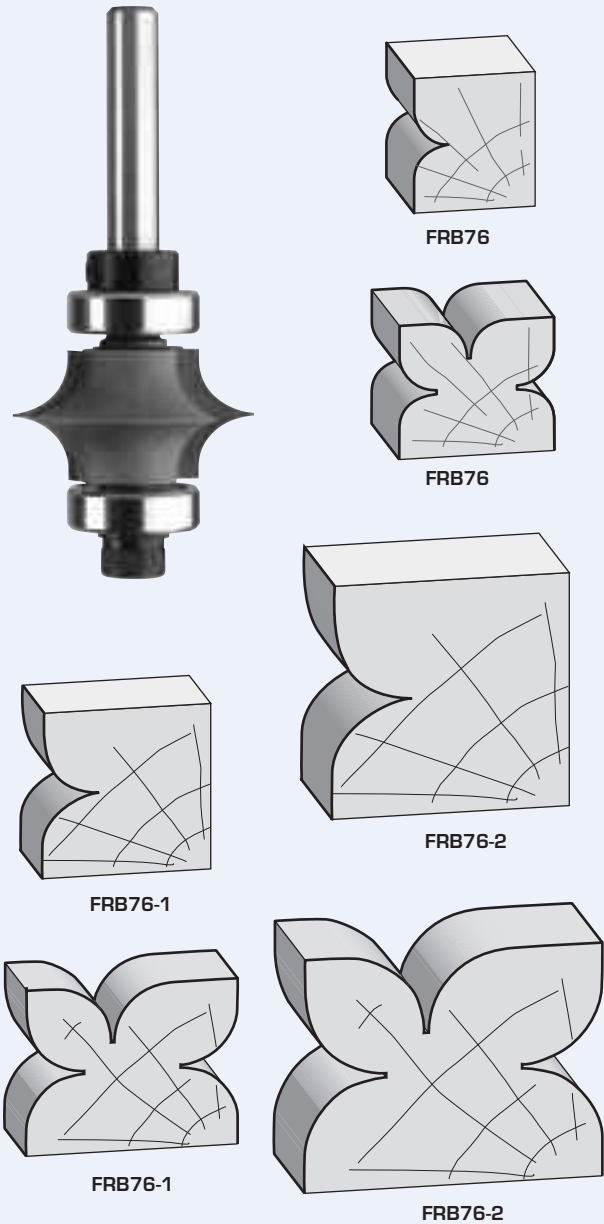
### Replacement Parts For (B)

Ball Bearing B3-4  
Washer WR59  
Spring Washer WFS506  
Screw WNC538

# FRB76

## BEADING BITS LEAF-EDGE STYLE

Scale 1:1

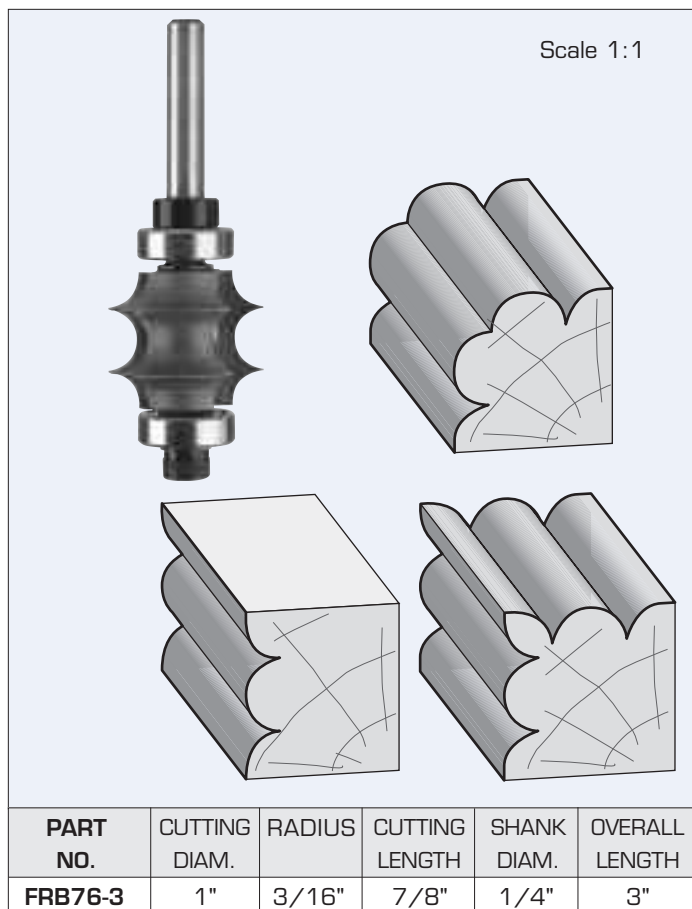


PART NO.	CUTTING DIAM.	RADIUS	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH
FRB76	1"	3/16"	1/2"	1/4"	2-1/2"
FRB76-1	1-1/8"	1/4"	5/8"	1/4"	2-5/8"
FRB76-2	1-3/8"	3/8"	7/8"	1/4"	2-7/8"

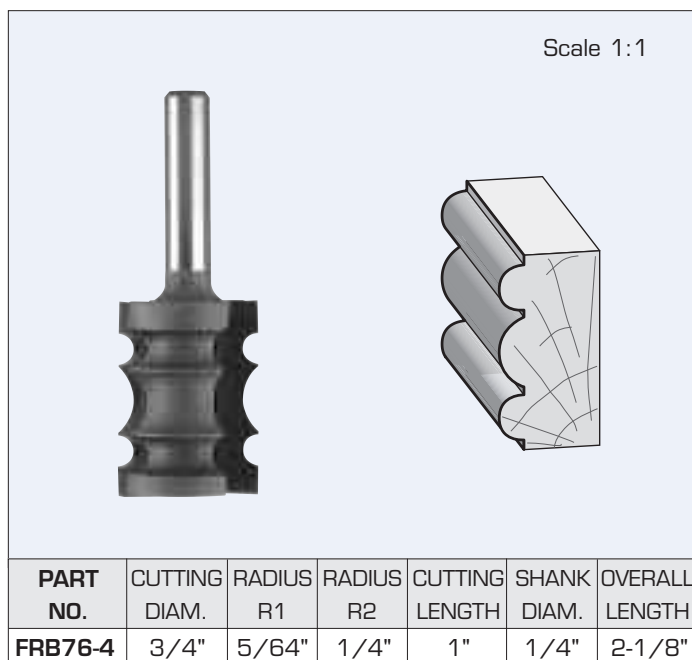
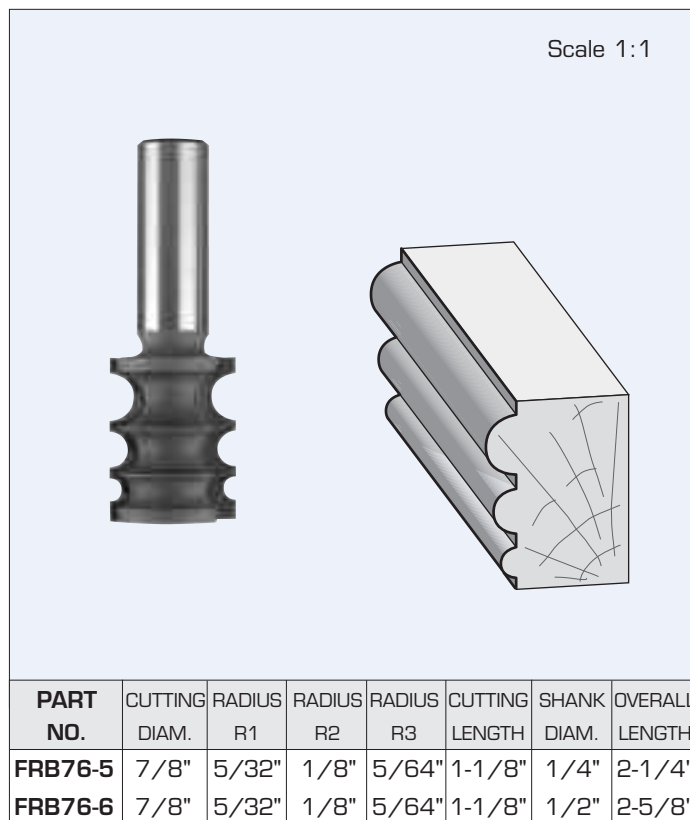
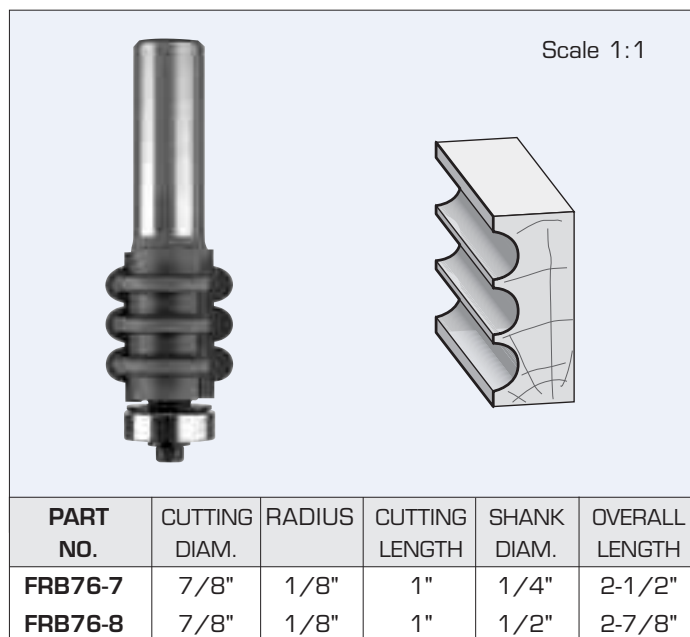
### Replacement Parts

Ball Bearing B3-3  
Lock Ring WO1  
Lock Ring Screw WNC525  
Screw WNF1012



**FRB76-3**
**BEADING BIT  
DOUBLE LEAF EDGE STYLE**

**Replacement Parts**

Ball Bearing B3-3 Lock Ring WD1 Screw WNF1012

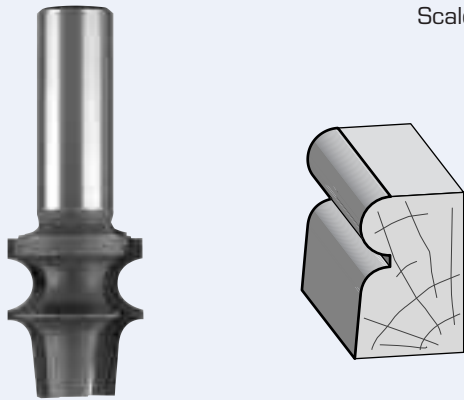
**FRB76-4**
**TRIPLE BEADING BIT  
TWO FLUTES**

**FRB76-5**
**VARIABLE  
BEADING BITS**

**FRB76-7**
**CONVEX BEADING BITS  
WITH BALL BEARING GUIDE**

**Replacement Parts**

Ball Bearing B3-4  
Washer WR59

Spring Washer WFS506  
Screw WNC538

**FRB76-9**
**EDGE BEADING BITS  
TWO FLUTES**

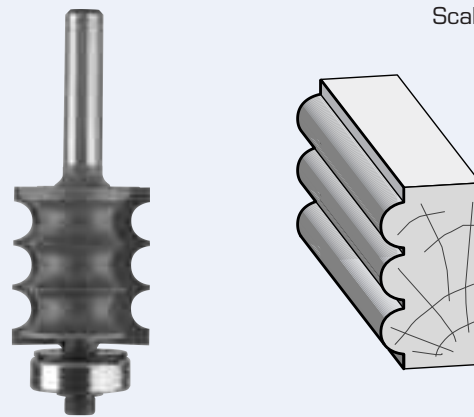
Scale 1:1



PART NO.	CUTTING DIAM.	RADIUS	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH
FRB76-9	7/8"	5/32"	1-1/32"	1/4"	2-5/16"
FRB77	7/8"	5/32"	1-1/32"	1/2"	2-1/2"

**FRB77-5**
**TRIPLE BEADING BITS WITH BALL BEARING GUIDE**

Scale 1:1



PART NO.	CUTTING DIAM.	RADIUS	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH
FRB77-5	7/8"	1/8"	1"	1/4"	2-1/2"
FRB77-6	7/8"	1/8"	1"	1/2"	2-7/8"

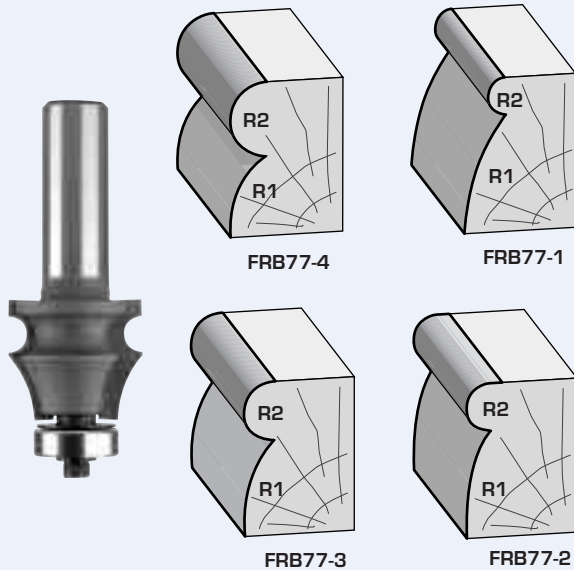
**Replacement Parts**

 Ball Bearing B3-4  
Washer WR59

 Spring Washer WFS506  
Screw WNC538

**FRB77-1**
**EDGE BEADING BITS  
WITH BALL BEARING GUIDE**

Scale 1:1



PART NO.	CUTTING DIAM.	RADIUS R1	RADIUS R2	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH
FRB77-1	1"	1"	3/32"	7/8"	1/2"	2-3/4"
FRB77-2	1"	3/4"	1/8"	7/8"	1/2"	2-3/4"
FRB77-3	1"	9/16"	5/32"	7/8"	1/2"	2-3/4"
FRB77-4	1"	3/8"	3/16"	7/8"	1/2"	2-3/4"

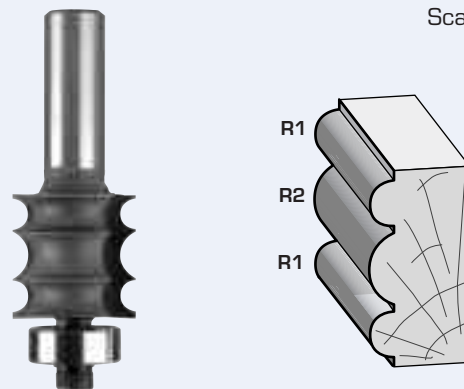
**Replacement Parts**

 Ball Bearing B3-4  
Washer WR59

 Spring Washer WFS506  
Screw WNC538

**FRB77-7**
**TRIPLE BEADING BITS WITH BALL BEARING GUIDE**

Scale 1:1



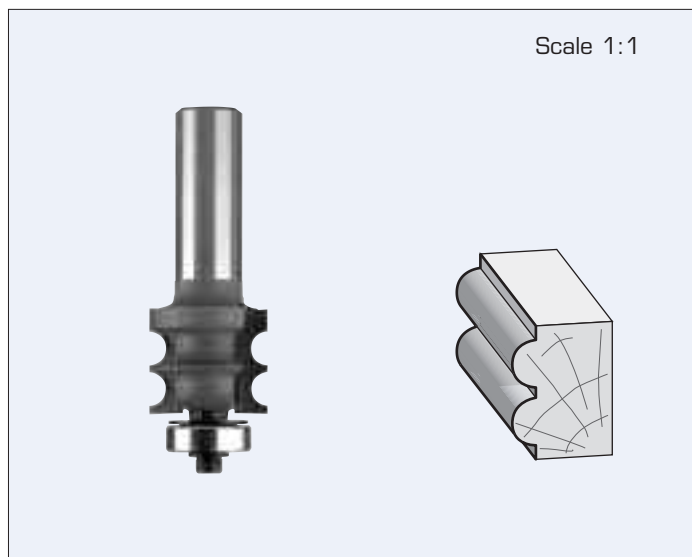
PART NO.	CUTTING DIAM.	RADIUS R1	RADIUS R2	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH
FRB77-7	1"	1/8"	3/16"	1"	1/4"	2-1/4"
FRB77-8	1"	1/8"	3/16"	1"	1/2"	2-1/4"

**Replacement Parts**

 Ball Bearing B4  
Washer WFS500

 Spring Washer WFS506  
Screw WNC538

## FRB77-9 DOUBLE BEADING BIT WITH BALL BEARING GUIDE



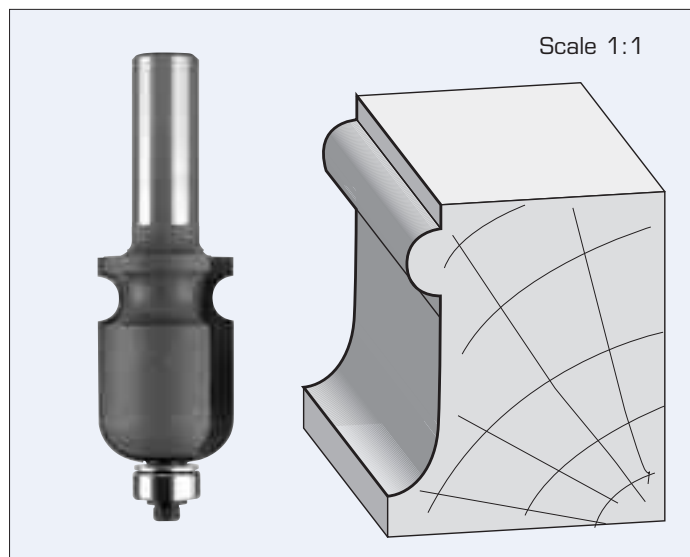
PART NO.	CUTTING DIAM.	RADIUS	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH
FRB77-9	7/8"	1/8"	3/4"	1/2"	2-5/8"

### Replacement Parts

Ball Bearing B3-4  
Washer WR59

Spring Washer WFS506  
Screw WNC538

## FRB78-2 ARCHITECTURAL MOULDING BIT



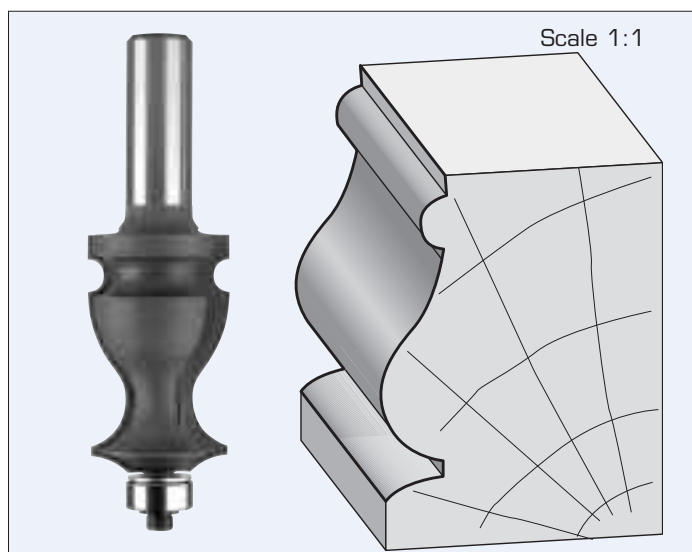
PART NO.	LARGE DIAM.	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH
FRB78-2	1"	1-1/2"	1/2"	3-3/8"

### Replacement Parts

Ball Bearing B3  
Washer WR58

Spring Washer WFS506  
Screw WNC538

## FRB78-1 ARCHITECTURAL MOULDING BIT



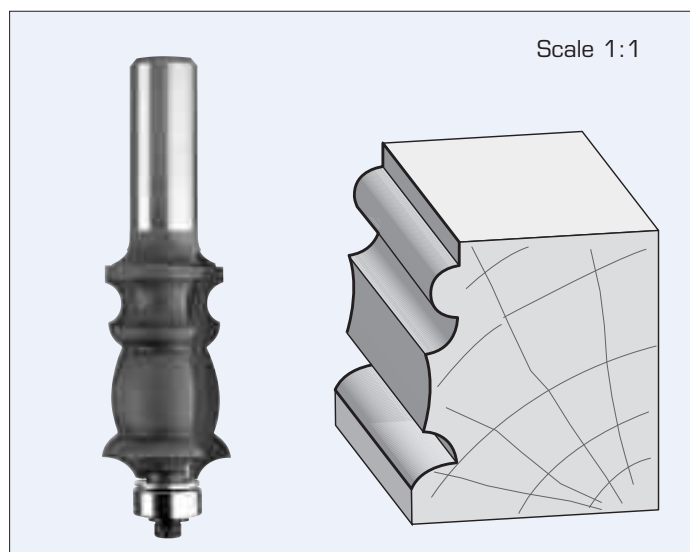
PART NO.	LARGE DIAM.	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH
FRB78-1	1-1/16"	1-3/4"	1/2"	3-3/4"

### Replacement Parts

Ball Bearing B3  
Washer WR58

Spring Washer WFS506  
Screw WNC538

## FRB78-3 ARCHITECTURAL MOULDING BIT



PART NO.	LARGE DIAM.	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH
FRB78-3	1"	1-1/2"	1/2"	3-1/2"

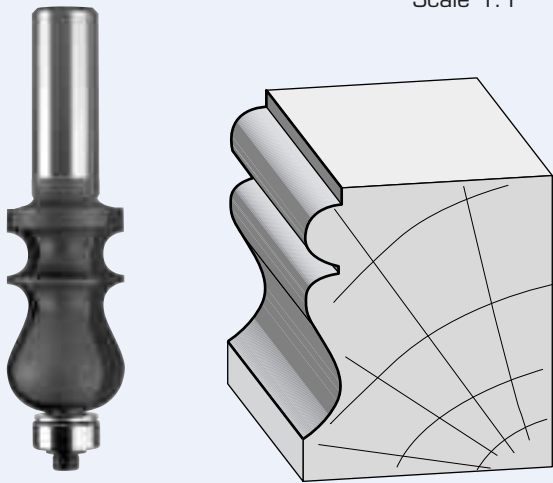
### Replacement Parts

Ball Bearing B3  
Washer WR58

Spring Washer WFS506  
Screw WNC538

**FRB78-4**
**ARCHITECTURAL MOULDING  
BIT WITH BALL BEARING GUIDE**

Scale 1:1



PART NO.	LARGE DIAM.	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH
FRB78-4	7/8"	1-1/2"	1/2"	3-3/8"

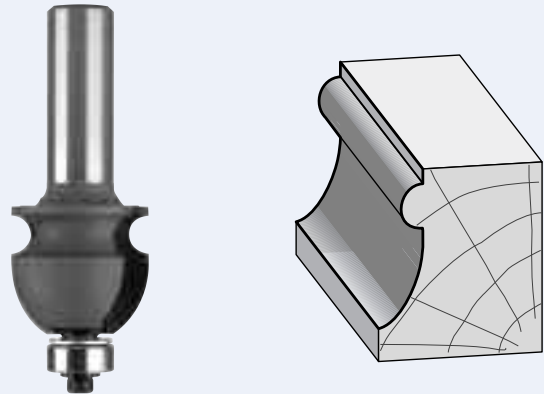
**Replacement Parts**

 Ball Bearing B3  
Washer WR58

 Spring Washer WFS506  
Screw WNC538

**FRB78-6**
**ARCHITECTURAL  
MOULDING BIT WITH BEARING**

Scale 1:1



PART NO.	LARGE DIAM.	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH
FRB78-6	1"	1"	1/2"	2-7/8"

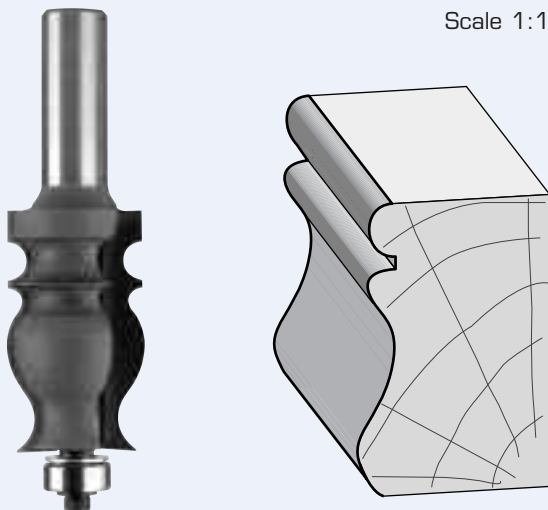
**Replacement Parts**

 Ball Bearing B3  
Washer WR58

 Spring Washer WFS506  
Screw WNC538

**FRB78-5**
**ARCHITECTURAL MOULDING  
BIT WITH BALL BEARING GUIDE**

Scale 1:1



PART NO.	LARGE DIAM.	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH
FRB78-5	1"	1-3/4"	1/2"	3-3/4"

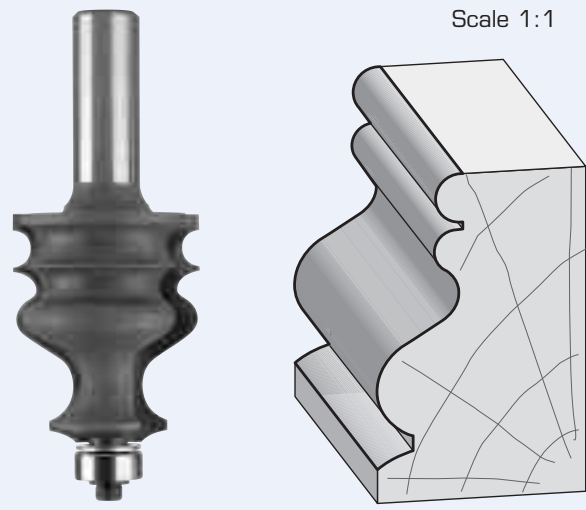
**Replacement Parts**

 Ball Bearing B3  
Washer WR58

 Spring Washer WFS506  
Screw WNC538

**FRB100**
**EDGE MOULDING BIT  
WITH BALL BEARING GUIDE**

Scale 1:1

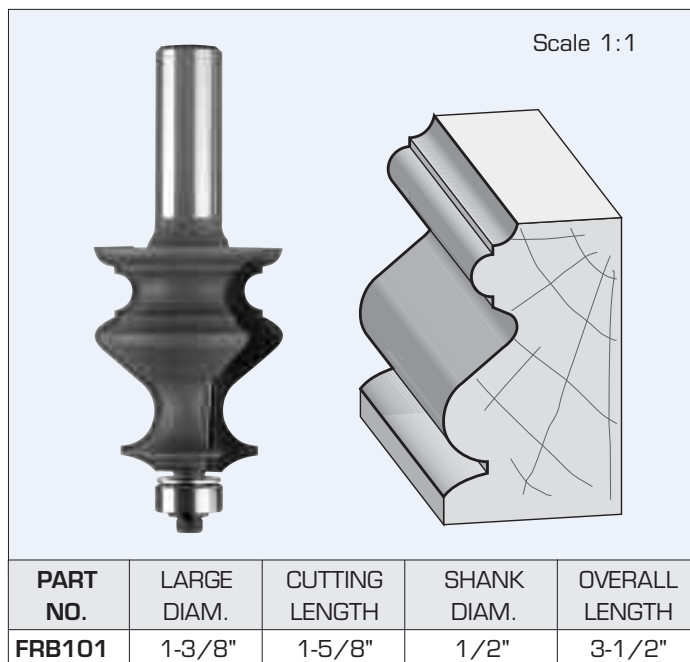


PART NO.	LARGE DIAM.	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH
FRB100	1-3/8"	1-5/8"	1/2"	3-1/2"

**Replacement Parts**

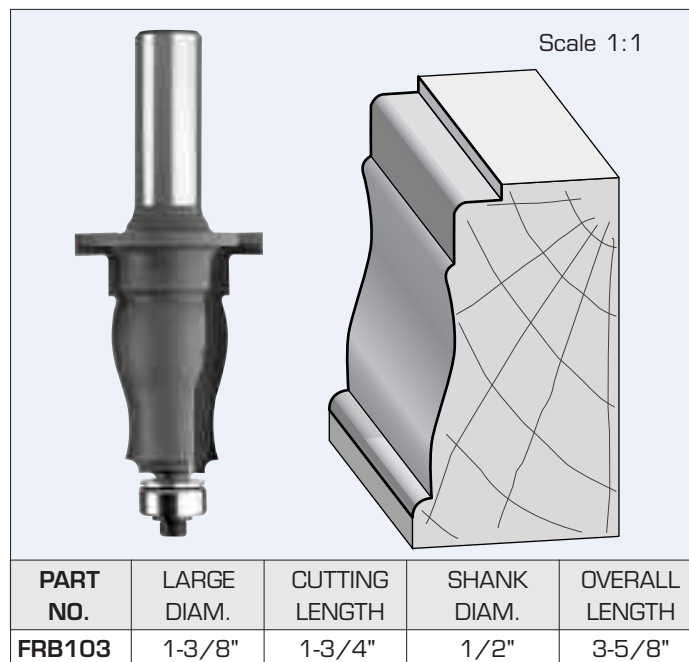
 Ball Bearing B3  
Washer WR58

 Spring Washer WFS506  
Screw WNC538

**FRB101**
**EDGE MOULDING BIT  
WITH BALL BEARING GUIDE**

**Replacement Parts**

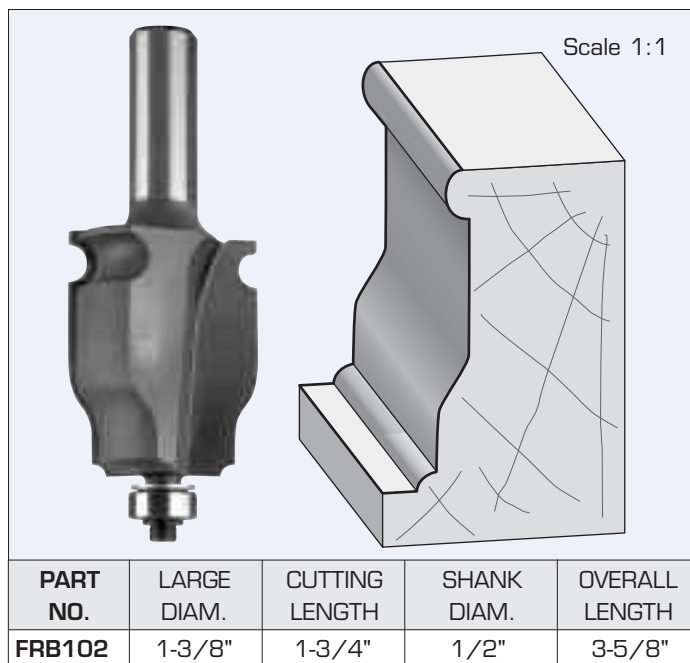
Ball Bearing B3  
Washer WR58

Spring Washer WFS506  
Screw WNC538

**FRB103**
**EDGE MOULDING  
BIT WITH BALL BEARING**

**Replacement Parts**

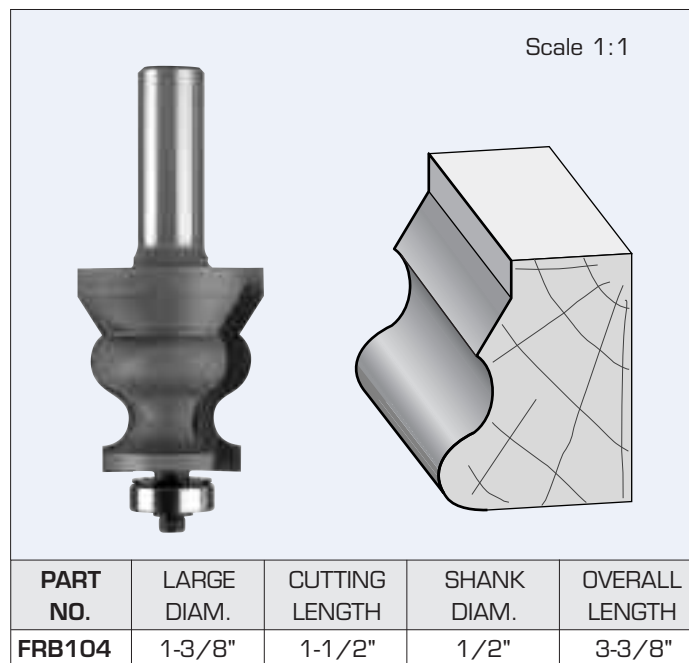
Ball Bearing B3  
Washer WR58

Spring Washer WFS506  
Screw WNC538

**FRB102**
**EDGE MOULDING BIT  
WITH BALL BEARING GUIDE**

**Replacement Parts**

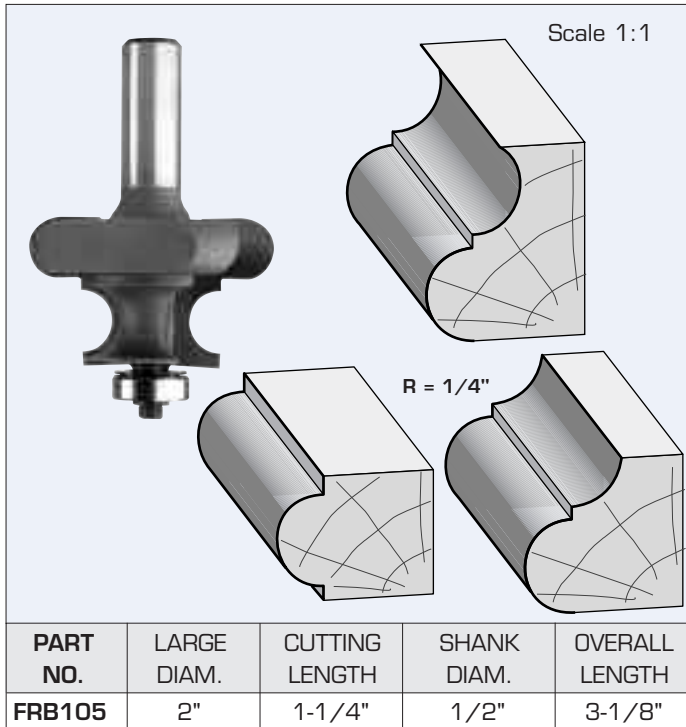
Ball Bearing B3  
Washer WR58

Spring Washer WFS506  
Screw WNC538

**FRB104**
**EDGE MOULDING BIT  
WITH BALL BEARING GUIDE**

**Replacement Parts**

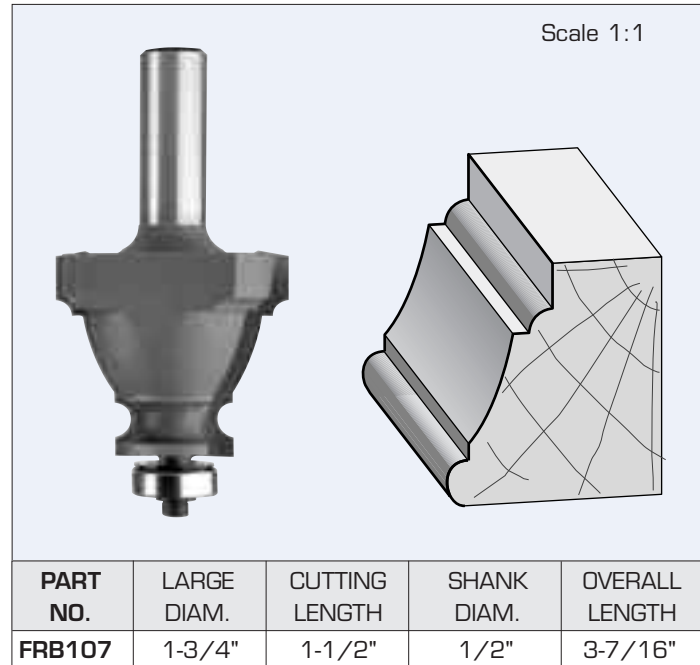
Ball Bearing B3-4  
Washer WR59

Spring Washer WFS506  
Screw WNC538

**FRB105**
**EDGE MOULDING BIT  
WITH BALL BEARING GUIDE**

**Replacement Parts**

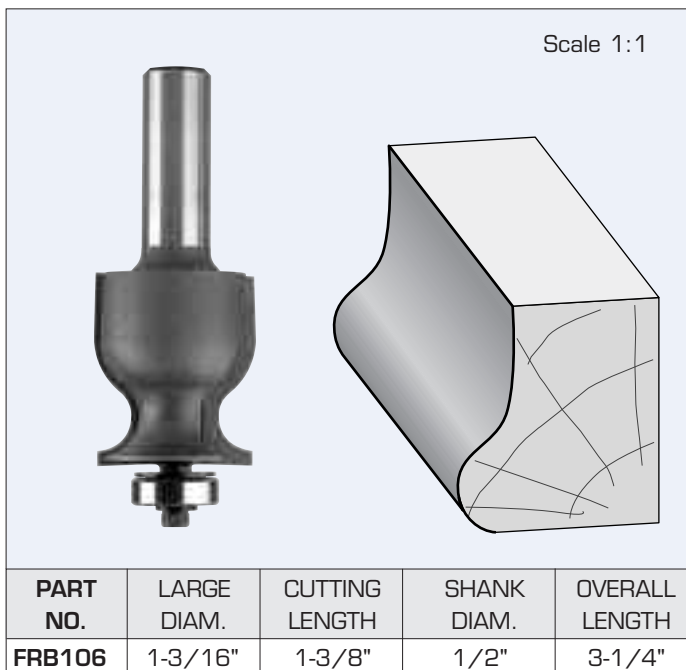
Ball Bearing B3-4  
Washer WR59

Spring Washer WFS506  
Screw WNC538

**FRB107**
**EDGE MOULDING  
BIT WITH BALL BEARING GUIDE**

**Replacement Parts**

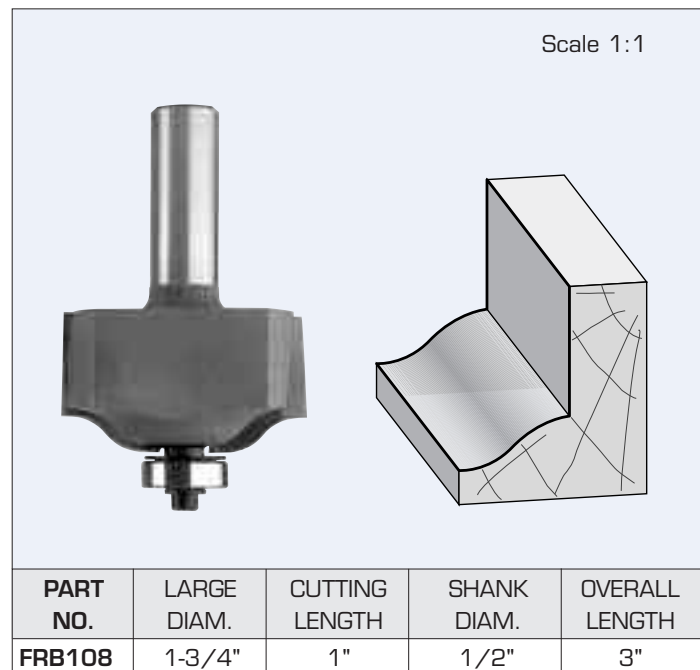
Ball Bearing B3-4  
Washer WR59

Spring Washer WFS506  
Screw WNC538

**FRB106**
**EDGE MOULDING BIT  
WITH BALL BEARING GUIDE**

**Replacement Parts**

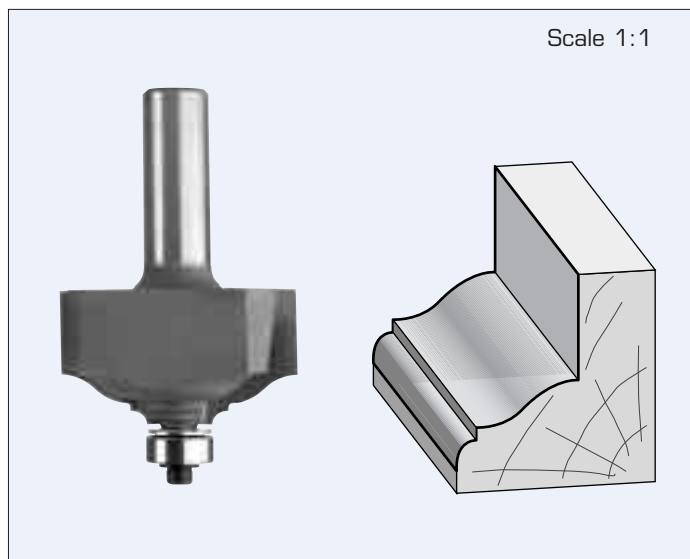
Ball Bearing B3-4  
Washer WR59

Spring Washer WFS506  
Screw WNC538

**FRB108**
**EDGE MOULDING BIT  
WITH BALL BEARING GUIDE**

**Replacement Parts**

Ball Bearing B3-2  
Washer WR59

Spring Washer WFS506  
Screw WNC512

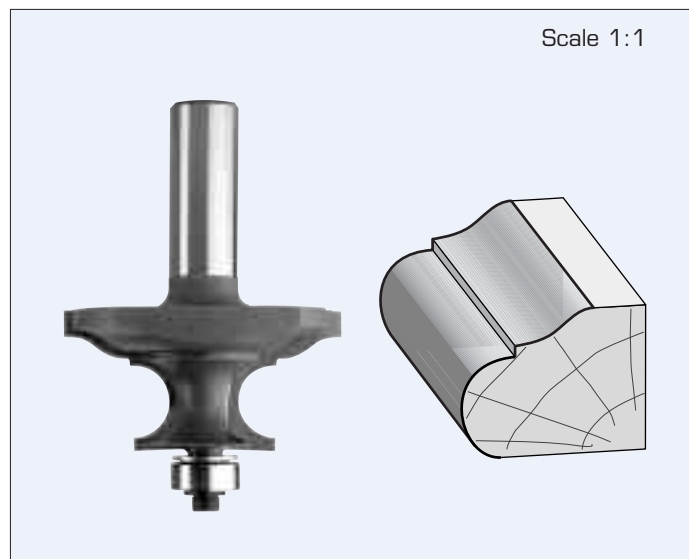
**FRB109**
**EDGE MouldING BIT  
WITH BALL BEARING GUIDE**


PART NO.	LARGE DIAM.	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH
FRB109	1-3/4"	1"	1/2"	3"

**Replacement Parts**

Ball Bearing B3  
Washer WR58

Spring Washer WFS506  
Screw WNC538

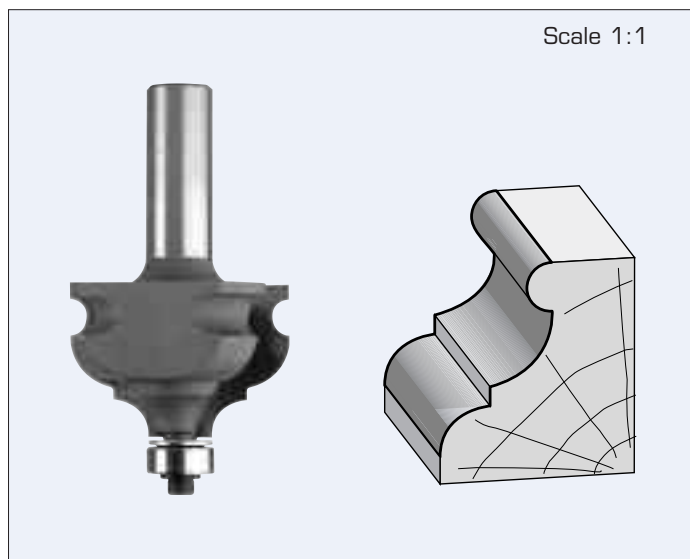
**FRB111**
**MOULDING BIT  
WITH BALL BEARING GUIDE**


PART NO.	LARGE DIAM.	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH
FRB111	2"	1"	1/2"	2-7/8"

**Replacement Parts**

Ball Bearing B3  
Washer WR58

Spring Washer WFS506  
Screw WNC538

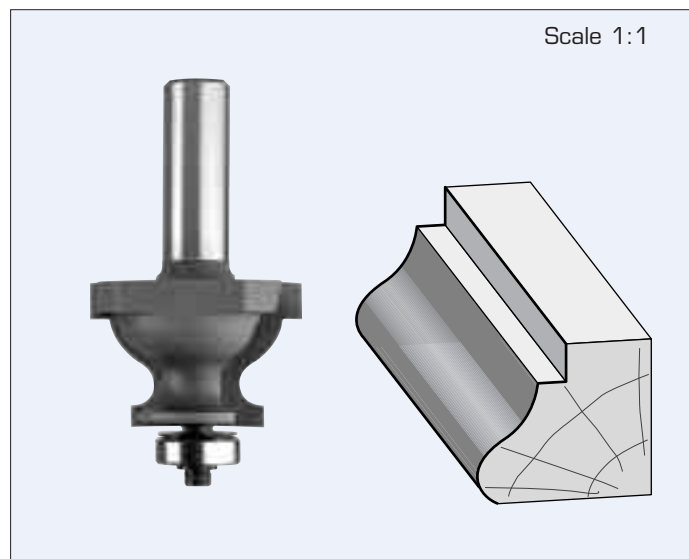
**FRB110**
**MOULDING BIT  
WITH BALL BEARING GUIDE**


PART NO.	LARGE DIAM.	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH
FRB110	1-5/8"	1-1/8"	1/2"	3"

**Replacement Parts**

Ball Bearing B3  
Washer WR58

Spring Washer WFS506  
Screw WNC538

**FRB112**
**MOULDING BIT  
WITH BALL BEARING GUIDE**


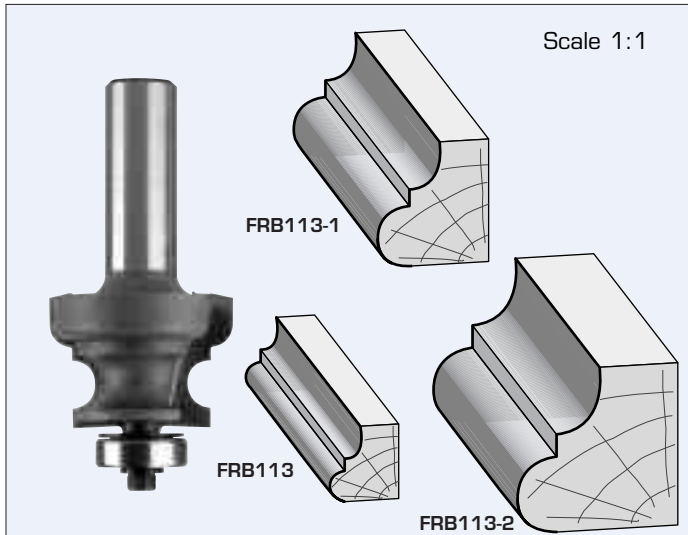
PART NO.	LARGE DIAM.	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH
FRB112	1-9/16"	1-1/8"	1/2"	3"

**Replacement Parts**

Ball Bearing B3-4  
Washer WR59

Spring Washer WFS506  
Screw WNC538



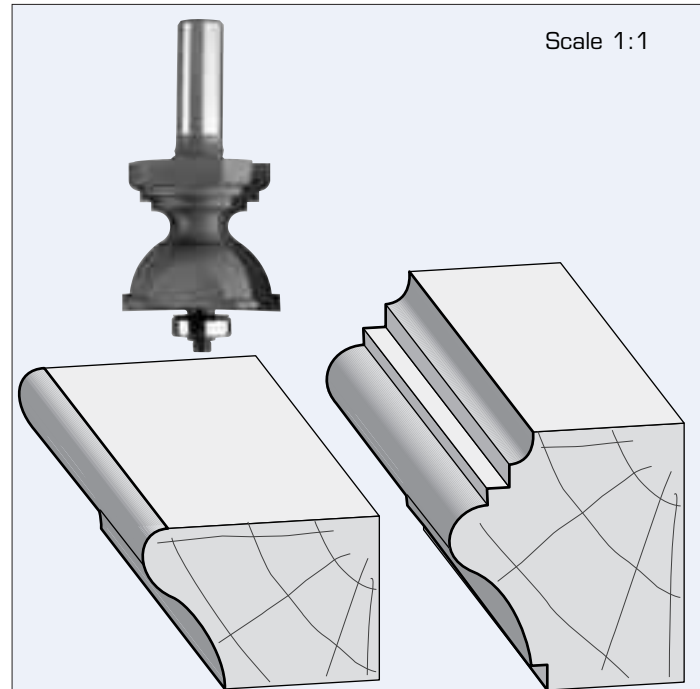
**FRB113**
**MOULDING BIT  
WITH BALL BEARING GUIDE**


PART NO.	CUTTING DIAM.	RADIUS R1	RADIUS R2	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH
FRB113	13/16"	5/64"	5/64"	19/32"	1/2"	2-1/2"
FRB113-1	1-1/4"	5/32"	5/32"	7/8"	1/2"	2-3/4"
FRB113-2	1-9/16"	7/32"	3/16"	1-3/16"	1/2"	3-1/16"

**Replacement Parts**

Ball Bearing B3-4  
Washer WR59

Spring Washer WFS506  
Screw WNC538

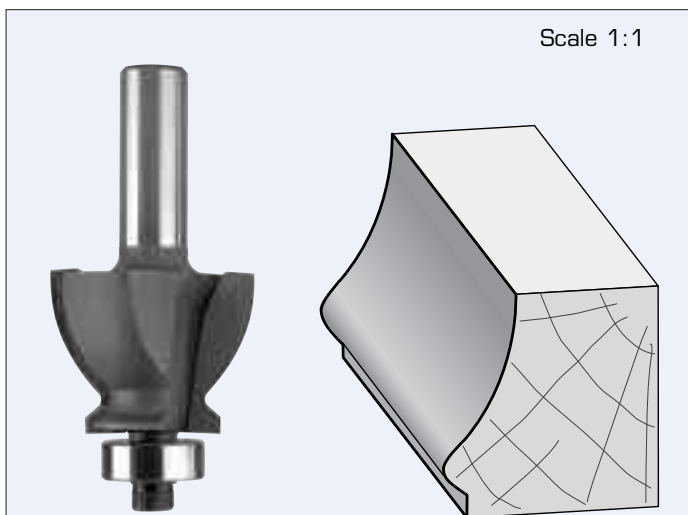
**FRB115**
**MOULDING BIT  
WITH BALL BEARING GUIDE**


PART NO.	LARGE DIAM.	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH
FRB115	1-21/32"	1-9/16"	1/2"	3-1/2"

**Replacement Parts**

Ball Bearing B3-4  
Washer WR59

Spring Washer WFS506  
Screw WNC538

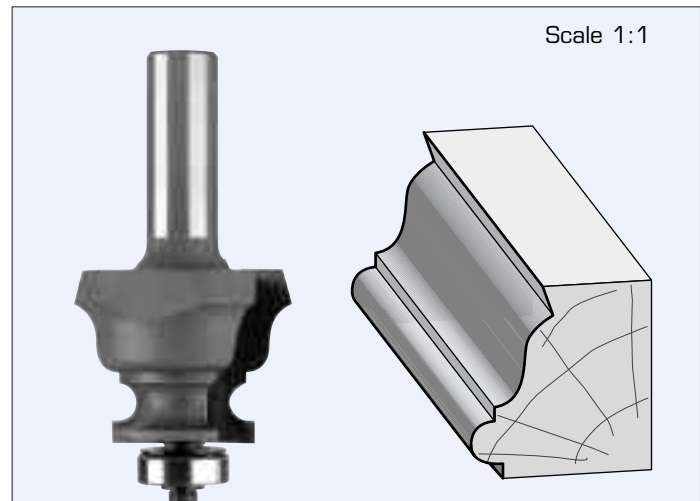
**FRB114**
**MOULDING BIT  
WITH BALL BEARING GUIDE**


PART NO.	LARGE DIAM.	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH
FRB114	1-1/2"	1-3/16"	1/2"	3-1/4"

**Replacement Parts**

Ball Bearing B4  
Screw WNF1012

Spring Washer WFS500

**FRB116**
**MOULDING BIT  
WITH BALL BEARING GUIDE**


PART NO.	LARGE DIAM.	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH
FRB116	1-1/2"	1-3/16"	1/2"	3-1/8"

**Replacement Parts**

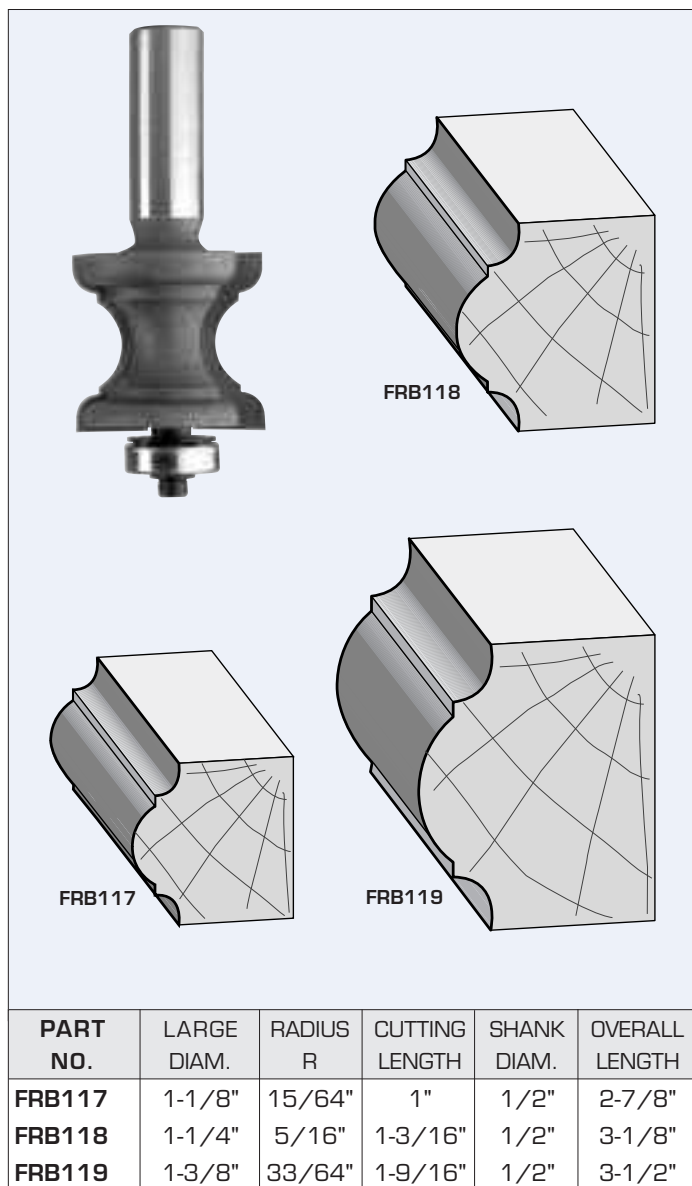
Ball Bearing B3-4  
Washer WR59

Spring Washer WFS506  
Screw WNC538



**FRB117**
**MOULDING BITS  
WITH BALL BEARING GUIDE**

Scale 1:1


**Replacement Parts**

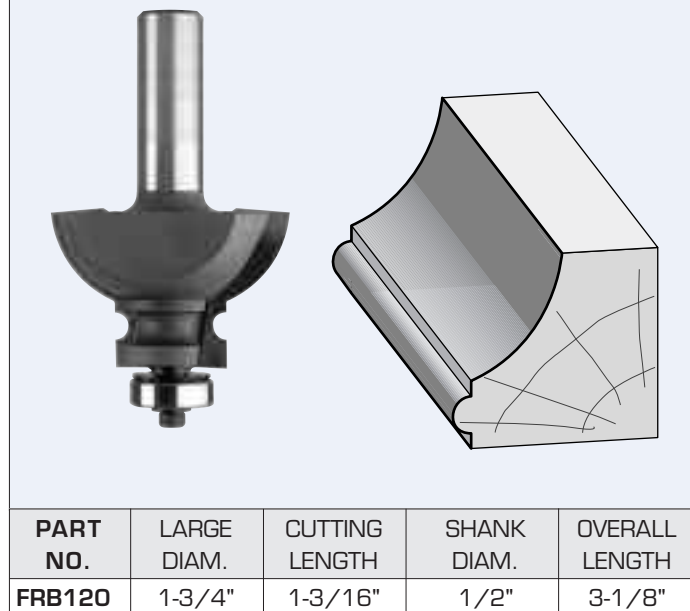
Ball Bearing B3-4  
Washer WR59

Spring Washer WFS506  
Screw WNC538

PART NO.	LARGE DIAM.	RADIUS R	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH
FRB117	1-1/8"	15/64"	1"	1/2"	2-7/8"
FRB118	1-1/4"	5/16"	1-3/16"	1/2"	3-1/8"
FRB119	1-3/8"	33/64"	1-9/16"	1/2"	3-1/2"

**FRB120**
**MOULDING BIT  
WITH BALL BEARING GUIDE**

Scale 1:1


**Replacement Parts**

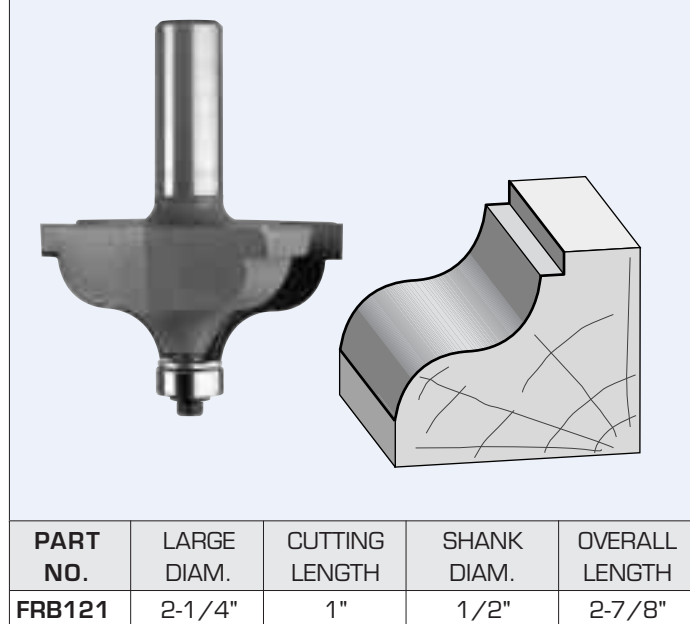
Ball Bearing B3-4  
Washer WR59

Spring Washer WFS506  
Screw WNC538

PART NO.	LARGE DIAM.	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH
FRB120	1-3/4"	1-3/16"	1/2"	3-1/8"

**FRB121**
**MOULDING BIT  
WITH BALL BEARING GUIDE**

Scale 1:1


**Replacement Parts**

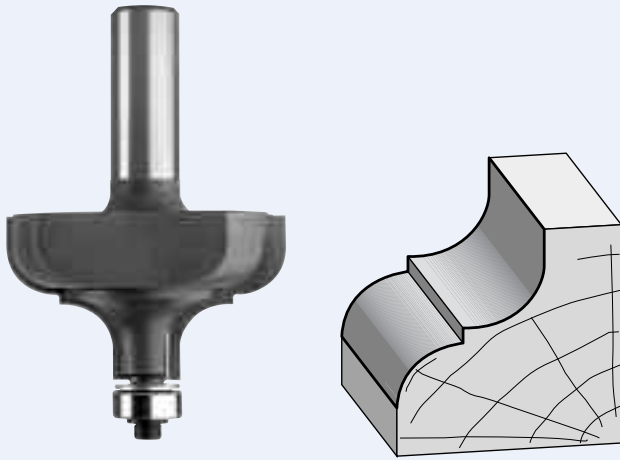
Ball Bearing B3  
Washer WR58

Spring Washer WFS506  
Screw WNC538

PART NO.	LARGE DIAM.	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH
FRB121	2-1/4"	1"	1/2"	2-7/8"

**FRB122**
**MOULDING BIT  
WITH BALL BEARING GUIDE**

Scale 1:1



PART NO.	LARGE DIAM.	RADIUS	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH
FRB122	2"	21/64"	1-7/32"	1/2"	3-1/8"

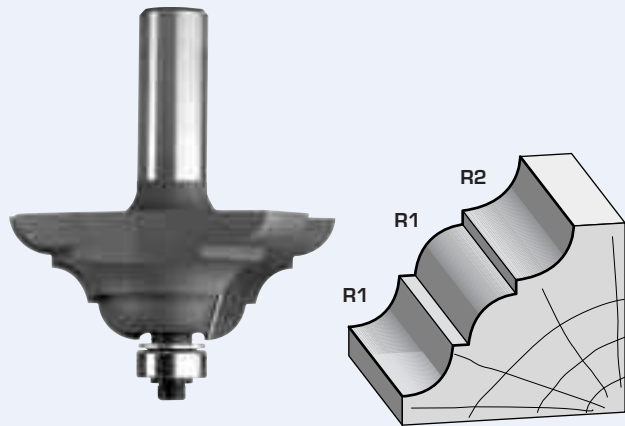
**Replacement Parts**

 Ball Bearing B3  
Washer WR58

 Spring Washer WFS506  
Screw WNC538

**FRB124**
**MOULDING BIT  
WITH BALL BEARING GUIDE**

Scale 1:1



PART NO.	LARGE DIAM.	RADIUS R1	RADIUS R2	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH
FRB124	2-5/16"	1/4"	19/64"	7/8"	1/2"	2-3/4"

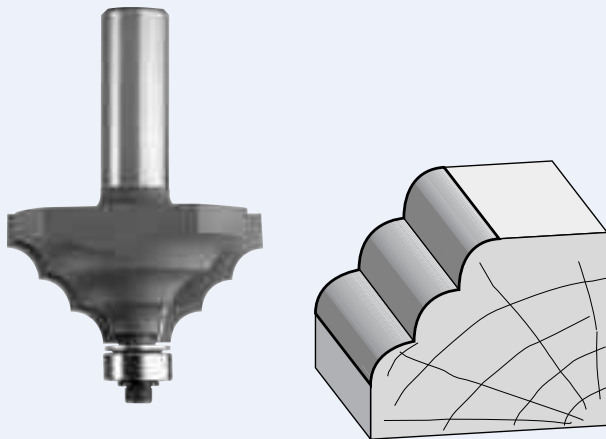
**Replacement Parts**

 Ball Bearing B3  
Washer WR58

 Spring Washer WFS506  
Screw WNC538

**FRB123**
**MOULDING BIT  
WITH BALL BEARING GUIDE**

Scale 1:1



PART NO.	LARGE DIAM.	RADIUS	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH
FRB123	1-7/8"	15/64"	15/16"	1/2"	2-7/8"

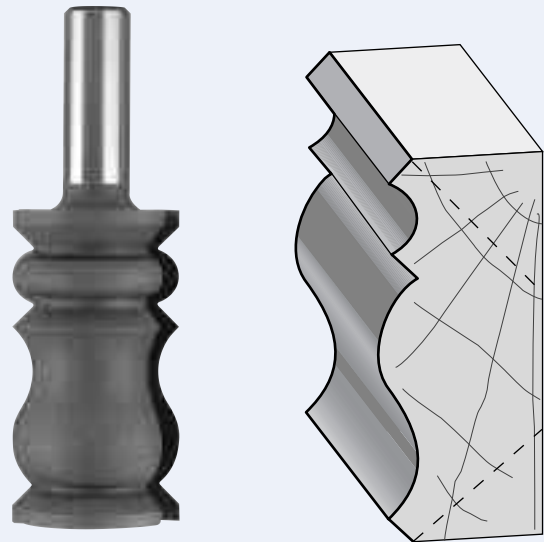
**Replacement Parts**

 Ball Bearing B3  
Washer WR58

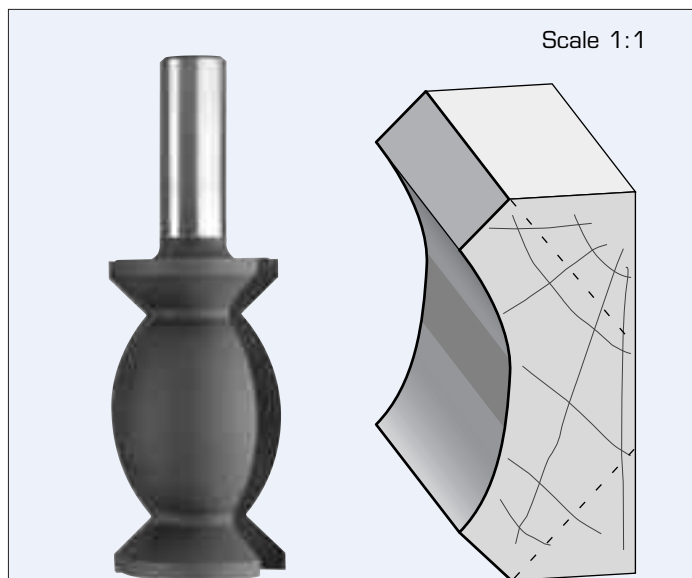
 Spring Washer WFS506  
Screw WNC538

**FRB150**
**CROWN MOULDING BIT  
TWO FLUTES**

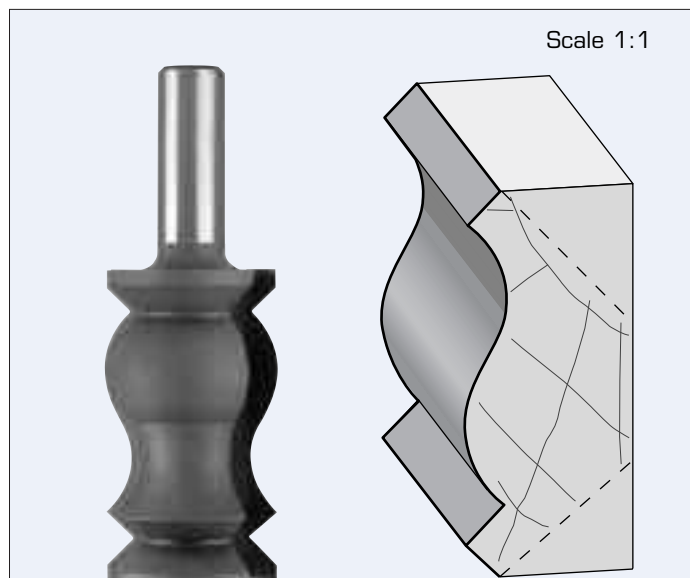
Scale 1:1



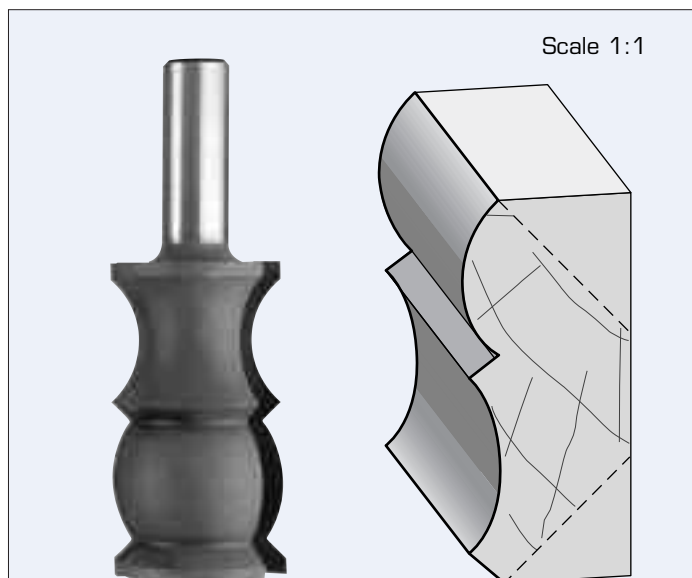
PART NO.	LARGE DIAM.	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH
FRB150	1-1/4"	2-1/4"	1/2"	3-3/4"

**FRB151**
**CROWN MOULDING BIT  
TWO FLUTES**


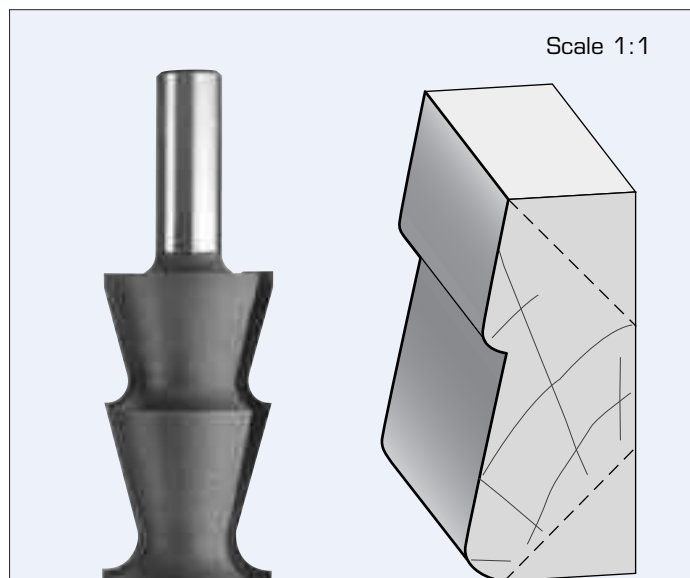
PART NO.	LARGE DIAM.	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH
FRB151	1-1/4"	2-1/4"	1/2"	3-3/4"

**FRB153**
**CROWN MOULDING BIT TWO FLUTES**


PART NO.	LARGE DIAM.	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH
FRB153	1-1/4"	2-1/4"	1/2"	3-3/4"

**FRB152**
**CROWN MOULDING BIT  
TWO FLUTES**


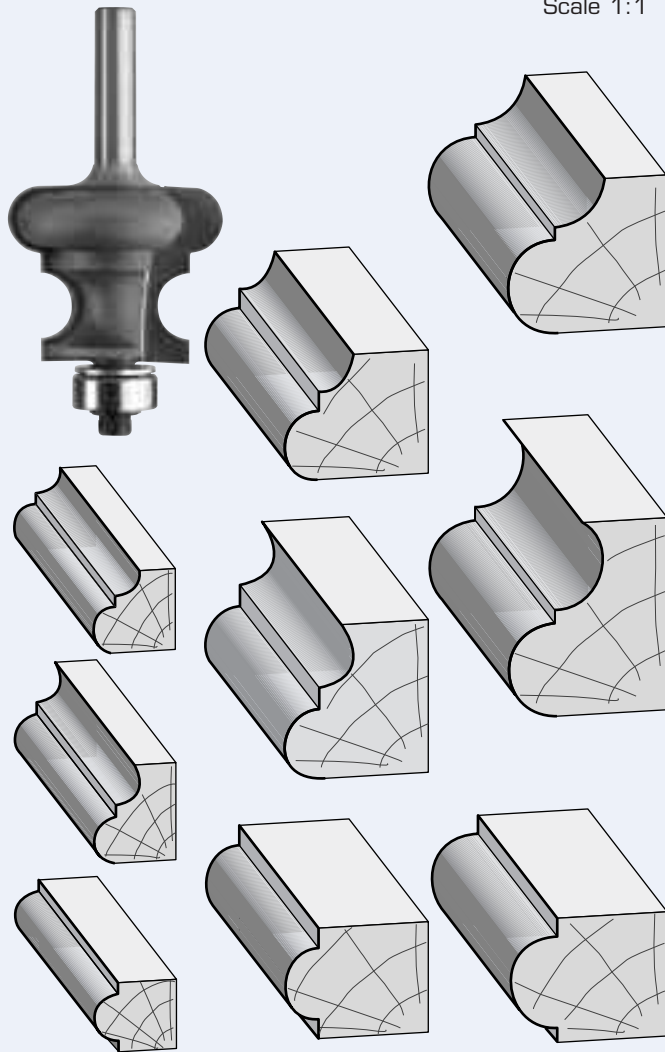
PART NO.	LARGE DIAM.	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH
FRB152	1-1/4"	2-1/4"	1/2"	3-3/4"

**FRB154**
**CROWN MOULDING BIT  
TWO FLUTES**


PART NO.	LARGE DIAM.	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH
FRB154	1-1/4"	2-1/4"	1/2"	3-3/4"

**FRB160**
**MATCHED BEAD BITS  
WITH BALL BEARING GUIDE**

Scale 1:1


 FRB160  
FRB161

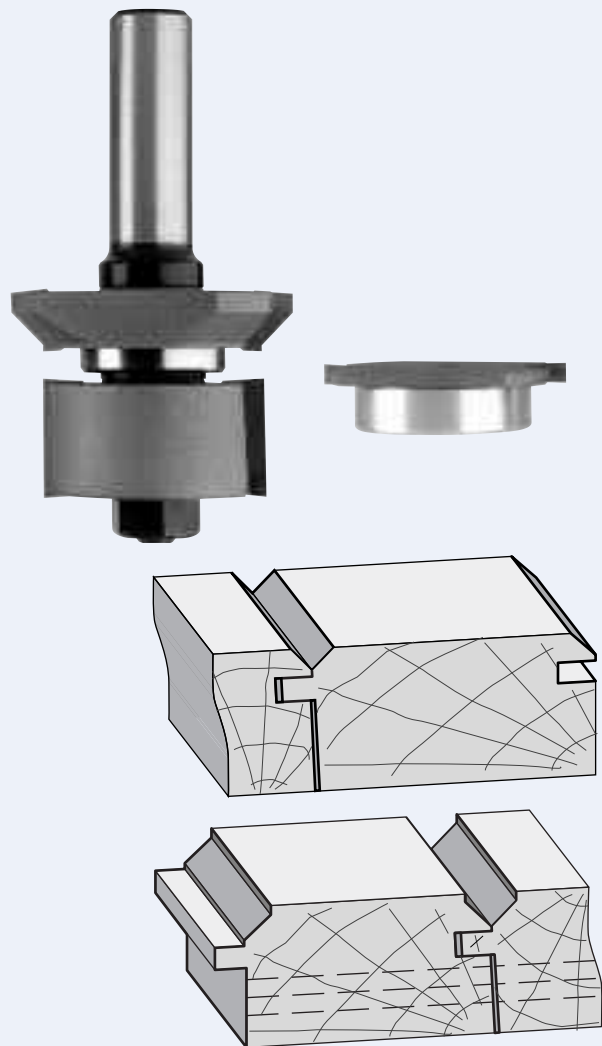
 FRB162  
FRB163

FRB164

PART NO.	LARGE DIAM.	RADIUS	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH
FRB160 (A)	1"	1/8"	5/8"	1/4"	2-1/4"
FRB161 (A)	1"	1/8"	5/8"	1/2"	2-5/8"
FRB162 (A)	1-1/4"	3/16"	1"	1/4"	2-5/8"
FRB163 (A)	1-1/4"	3/16"	1"	1/2"	2-7/8"
FRB164 (B)	2"	1/4"	1-1/4"	1/2"	3-1/8"

**Replacement Parts**

<b>A)</b> Ball Bearing B3 Washer WR58	Spring Washer WFS506 Screw WNC538
<b>B)</b> Ball Bearing B3-4 Washer WR59	Spring Washer WFS506 Screw WNC538

**FRB170**
**TONGUE AND  
GROOVE "V" PANEL BIT SET**


PART NO.	LARGE DIAM.	DEG. BEVEL	GROOVE WIDTH	GROOVE DEPTH	SHANK DIAM.	OVERALL LENGTH
FRB170	1-13/16"	45°	5/32"	1/4"	1/2"	3"

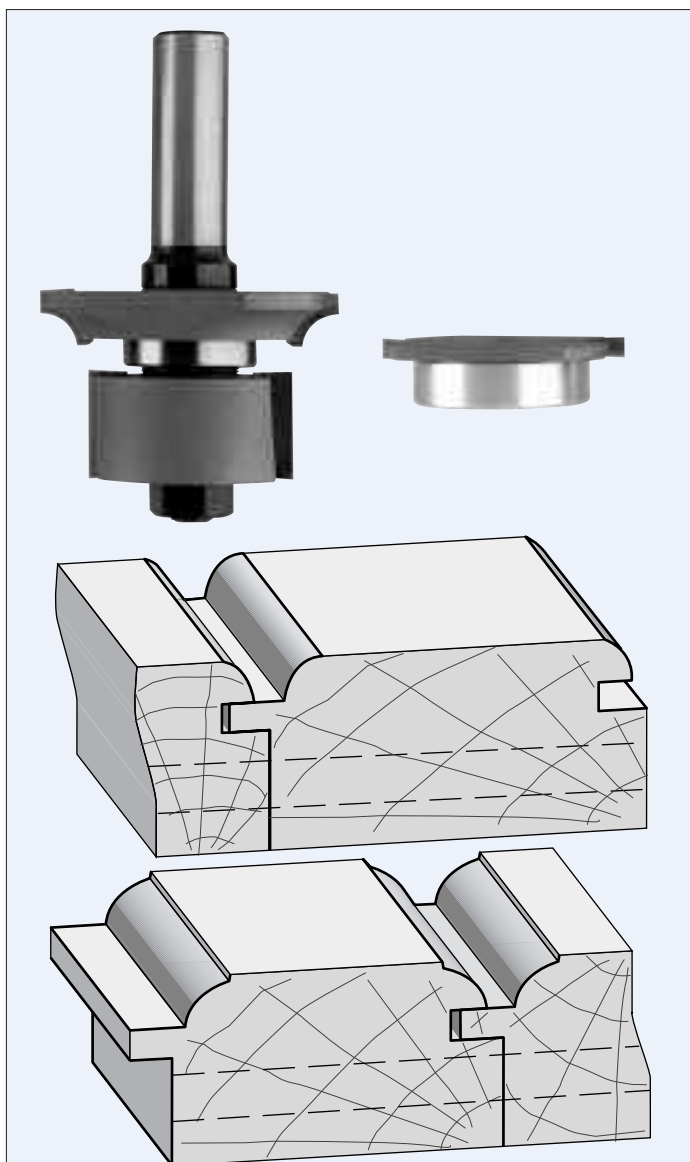
**MINIMUM WOOD THICKNESS 1/2"**  
**MAXIMUM WOOD THICKNESS 1"**

**Replacement Cutters**

Profile Cutter FRB170PC  
Rabbeting Cutter FRB170RC  
Grooving Cutter FRB170GC

**Replacement Parts**

Arbor and Nut AR21	Spacers 3.0mm (3 pcs.)	WF610
Nut only WNF516	Spacers 1.0mm (3 pcs.)	WF608
Ball Bearing B5	Shim 0.5mm (1 pc.)	WF606
Ball Bearing B6-6	Shim 0.4mm (1 pc.)	WF605
	Shims 0.1mm (3 pcs.)	WF604
	Shim 0.05mm (1 pc.)	WF600

**FRB171**
**TONGUE AND GROOVE  
RADIUS PANEL BIT SET**


PART NO.	LARGE DIAM.	RADIUS	GROOVE WIDTH	GROOVE DEPTH	SHANK DIAM.	OVERALL LENGTH
FRB171	1-13/16"	15/64"	5/32"	1/4"	1/2"	3"

**MINIMUM WOOD THICKNESS 1/2"**  
**MAXIMUM WOOD THICKNESS 1"**

**Replacement Cutters**

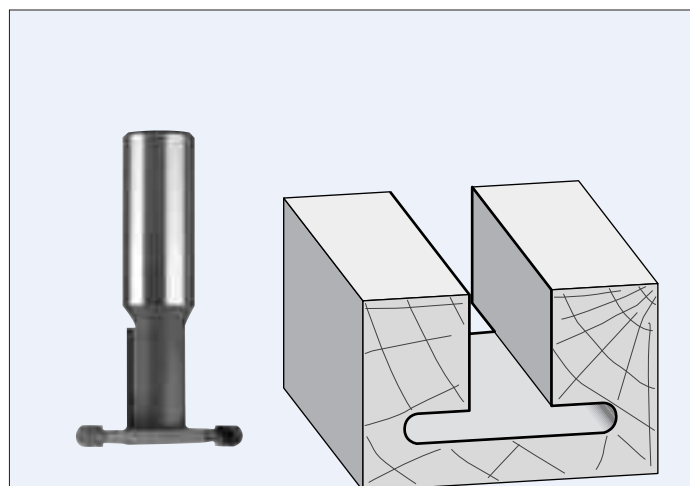
Profile Cutter FRB171PC

Rabbeting Cutter FRB170RC

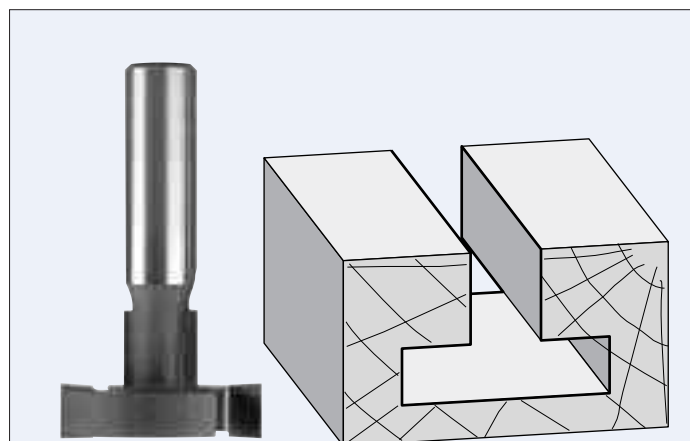
Grooving Cutter FRB171GC

**Replacement Parts**

Arbor and Nut AR21	Spacers 3.0mm (3 pcs.)	WF610
Nut only WNF516	Spacers 1.0mm (3 pcs.)	WF608
Ball Bearing B5	Shim 0.5mm (1 pc.)	WF606
Ball Bearing B6-6	Shim 0.4mm (1 pc.)	WF605
	Shims 0.1mm (3 pcs.)	WF604
	Shim 0.05mm (1 pc.)	WF600

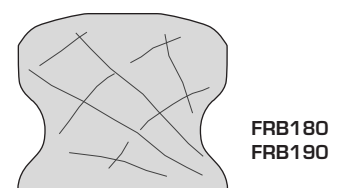
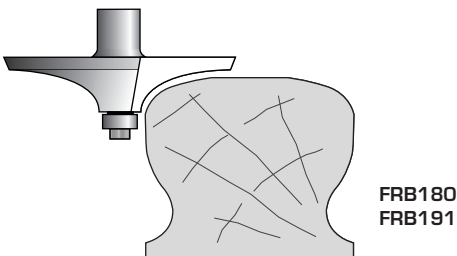
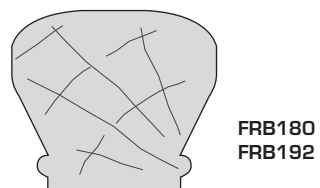
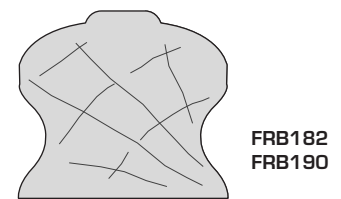
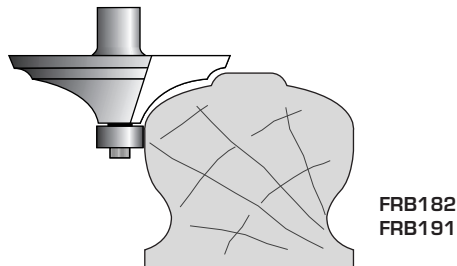
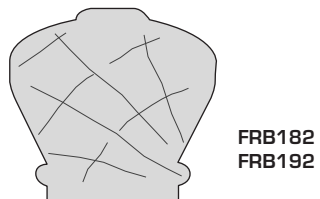
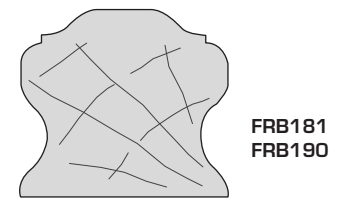
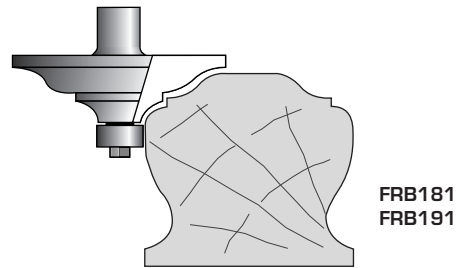
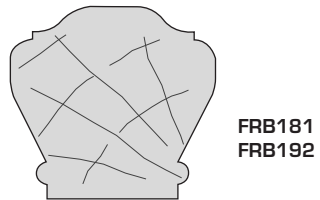
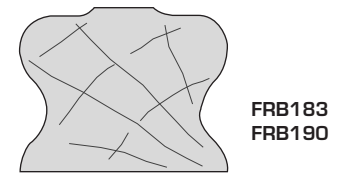
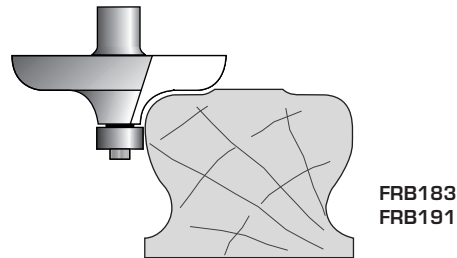
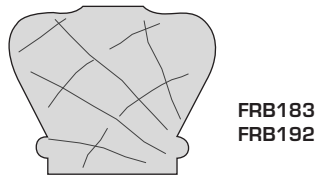
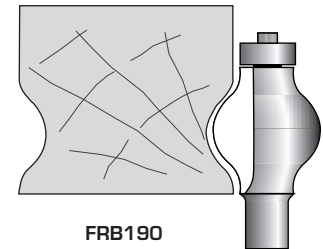
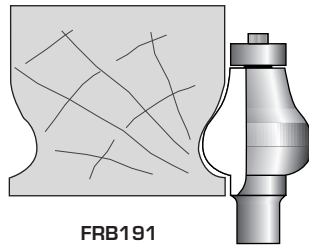
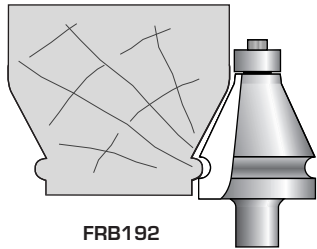
**FRB174**
**RADIUS T-SLOT  
BITS ONE PLUS TWO WINGS**


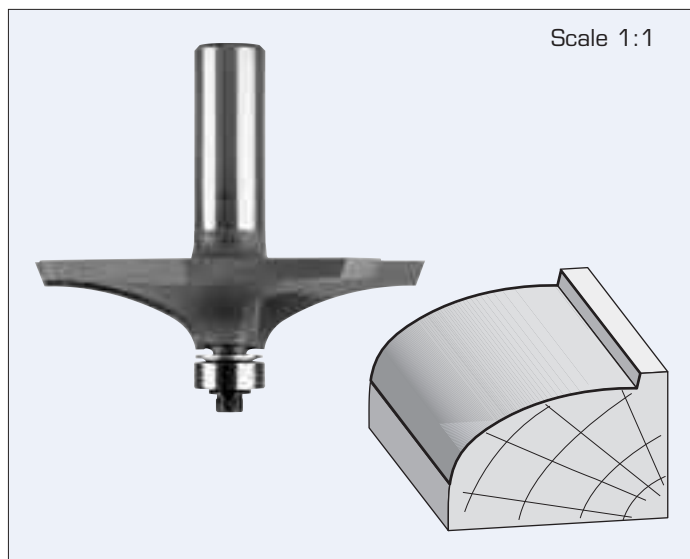
PART NO.	LARGE DIAM.	SMALL DIAM.	GROOVE WIDTH	RADIUS	CUTTING LENGTH	SHANK DIAM.
FRB174	1-1/8"	7/16"	5/32"	5/64"	13/16"	3/8"
FRB175	1-1/8"	7/16"	5/32"	5/64"	13/16"	1/2"
FRB176	1-39/64"	3/8"	5/32"	5/64"	13/16"	3/8"

**FRB177**
**T-SLOT BITS  
TWO PLUS TWO WINGS**


PART NO.	LARGE DIAM.	SMALL DIAM.	GROOVE WIDTH	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH
FRB177	1-3/32"	3/8"	5/16"	13/16"	1/2"	2-5/8"
FRB178	1-3/32"	3/8"	5/16"	13/16"	3/8"	2-3/8"
FRB179	1-3/8"	1/2"	3/8"	7/8"	1/2"	2-9/16"

# HANDRAIL BIT SELECTION



**FRB180**
**HANDRAIL BIT  
WITH BALL BEARING GUIDE**


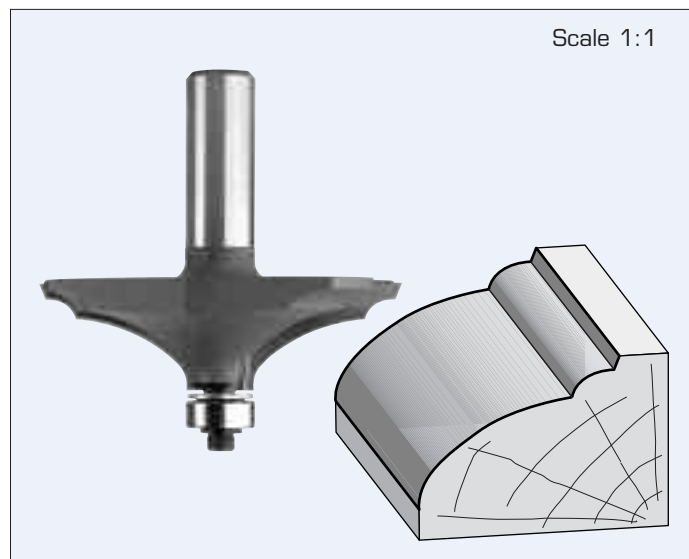
PART NO.	LARGE DIAM.	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH
FRB180	2-3/4"	11/16"	1/2"	2-1/2"

**Max. RPM 18,000**

**Replacement Parts**

Ball Bearing B3  
Washer WR58

Spring Washer WFS506  
Screw WNC538

**FRB182**
**HANDRAIL BIT  
WITH BALL BEARING GUIDE**


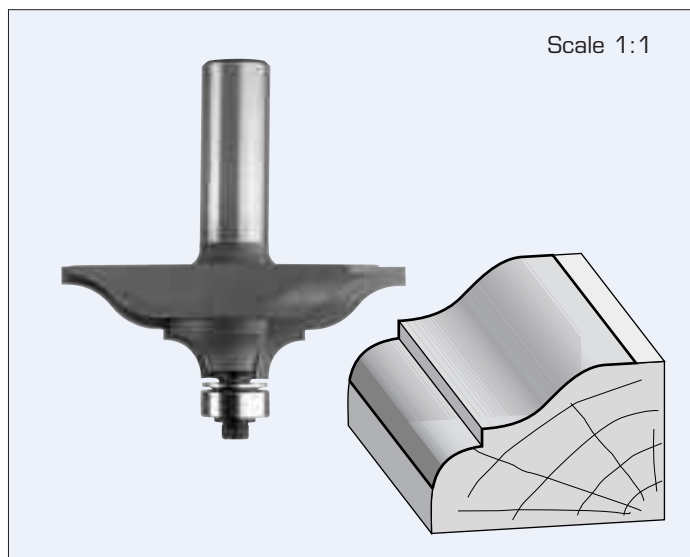
PART NO.	LARGE DIAM.	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH
FRB182	2-5/8"	3/4"	1/2"	2-5/8"

**Max. RPM 18,000**

**Replacement Parts**

Ball Bearing B3  
Washer WR58

Spring Washer WFS506  
Screw WNC538

**FRB181**
**HANDRAIL BIT  
WITH BALL BEARING GUIDE**


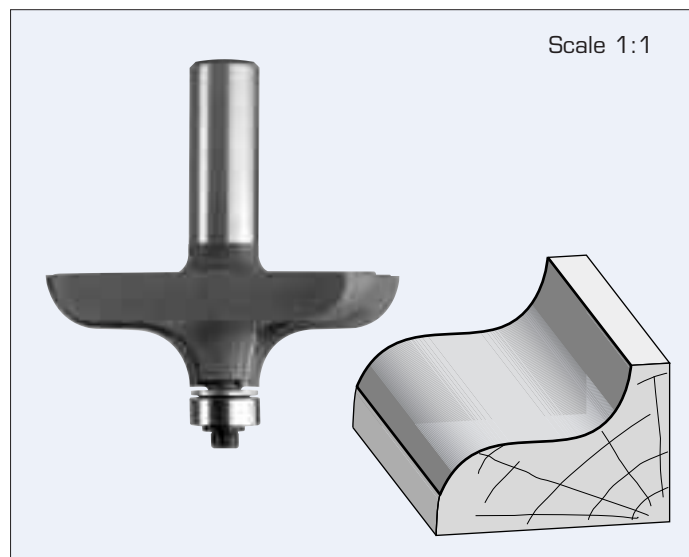
PART NO.	LARGE DIAM.	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH
FRB181	2-1/2"	25/32"	1/2"	2-3/4"

**Max. RPM 18,000**

**Replacement Parts**

Ball Bearing B3  
Washer WR58

Spring Washer WFS506  
Screw WNC538

**FRB183**
**HANDRAIL BIT  
WITH BALL BEARING GUIDE**


PART NO.	LARGE DIAM.	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH
FRB183	2-1/2"	25/32"	1/2"	2-3/4"

**Max. RPM 18,000**

**Replacement Parts**

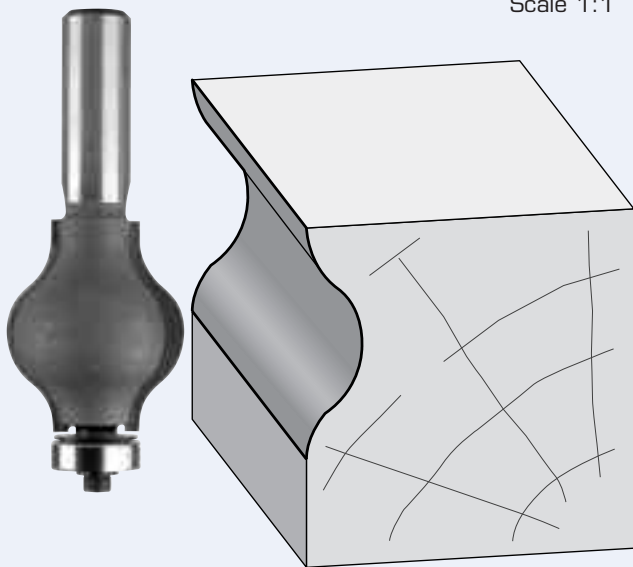
Ball Bearing B3  
Washer WR58

Spring Washer WFS506  
Screw WNC538



**FRB190**
**HANDRAIL BIT  
WITH BALL BEARING GUIDE**

Scale 1:1

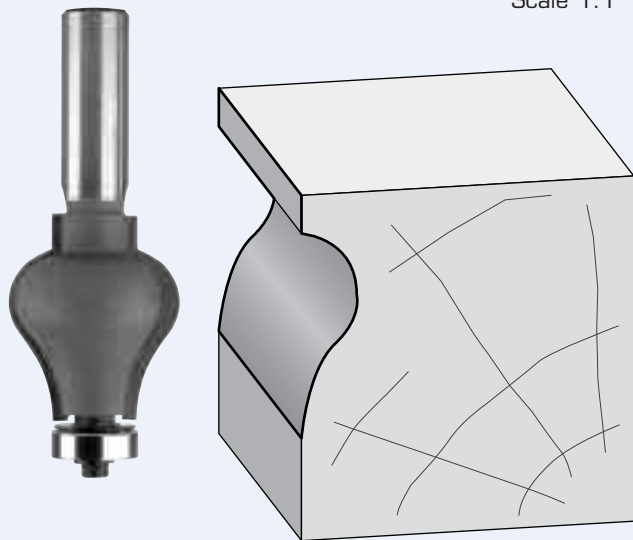


PART NO.	LARGE DIAM.	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH
FRB190	1-1/4"	1-1/2"	1/2"	3-3/8"

Replacement Parts (see below)

**FRB191**
**HANDRAIL BIT  
WITH BALL BEARING GUIDE**

Scale 1:1



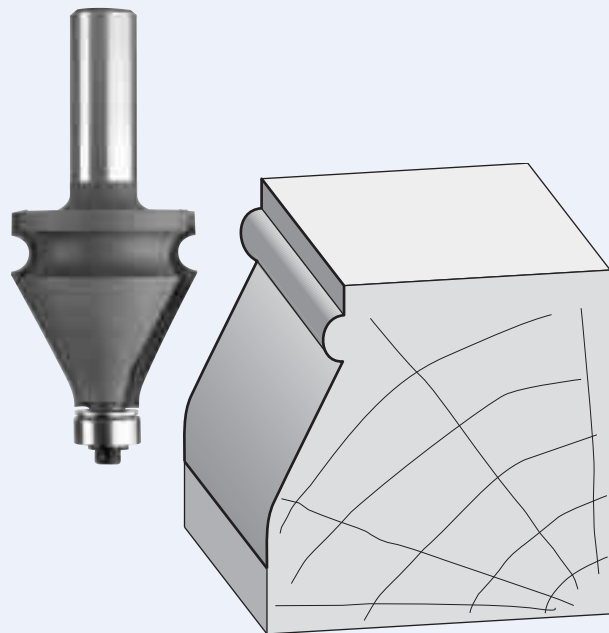
PART NO.	LARGE DIAM.	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH
FRB191	1-1/4"	1-1/2"	1/2"	3-3/8"

Replacement Parts for FRB190 &amp; FRB191

 Ball Bearing B3-4      Spring Washer WFS506  
 Washer WR59      Screw WNC538

**FRB192**
**HANDRAIL BIT  
WITH BALL BEARING GUIDE**

Scale 1:1



PART NO.	LARGE DIAM.	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH
FRB192	1-3/8"	1-1/2"	1/2"	3-3/8"

Replacement Parts

 Ball Bearing B3  
 Washer WR58

 Spring Washer WFS506  
 Screw WNC538



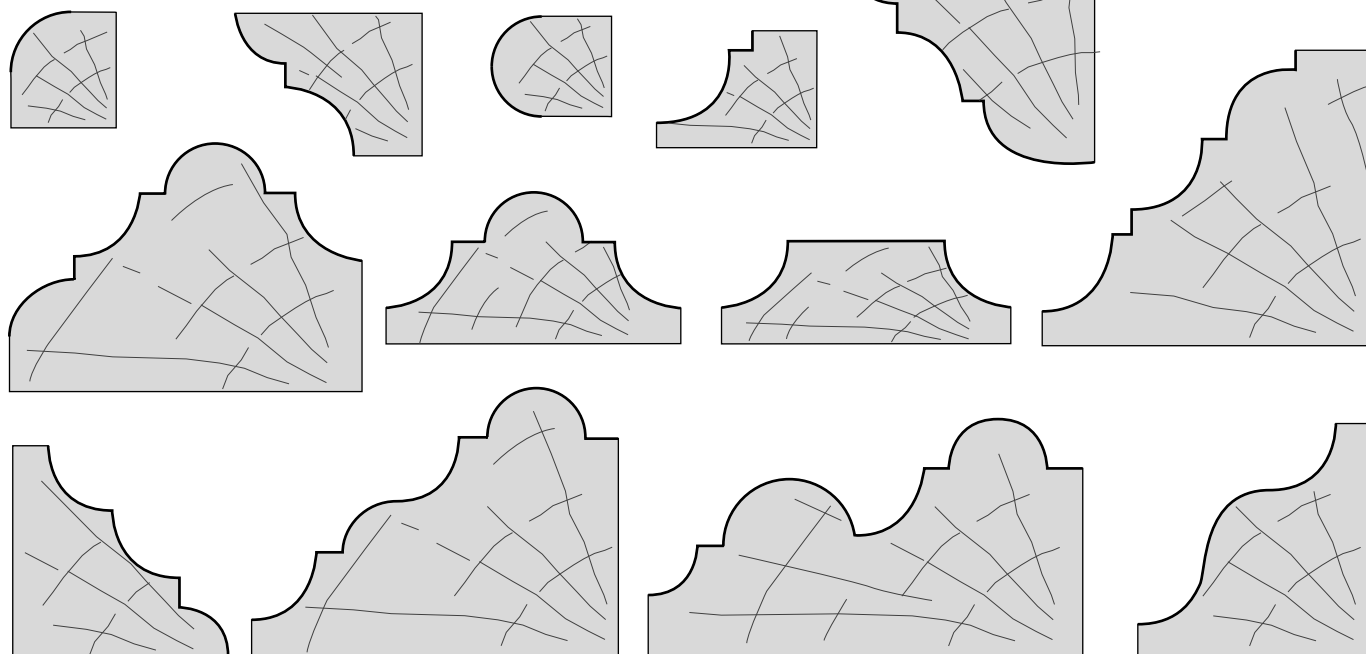
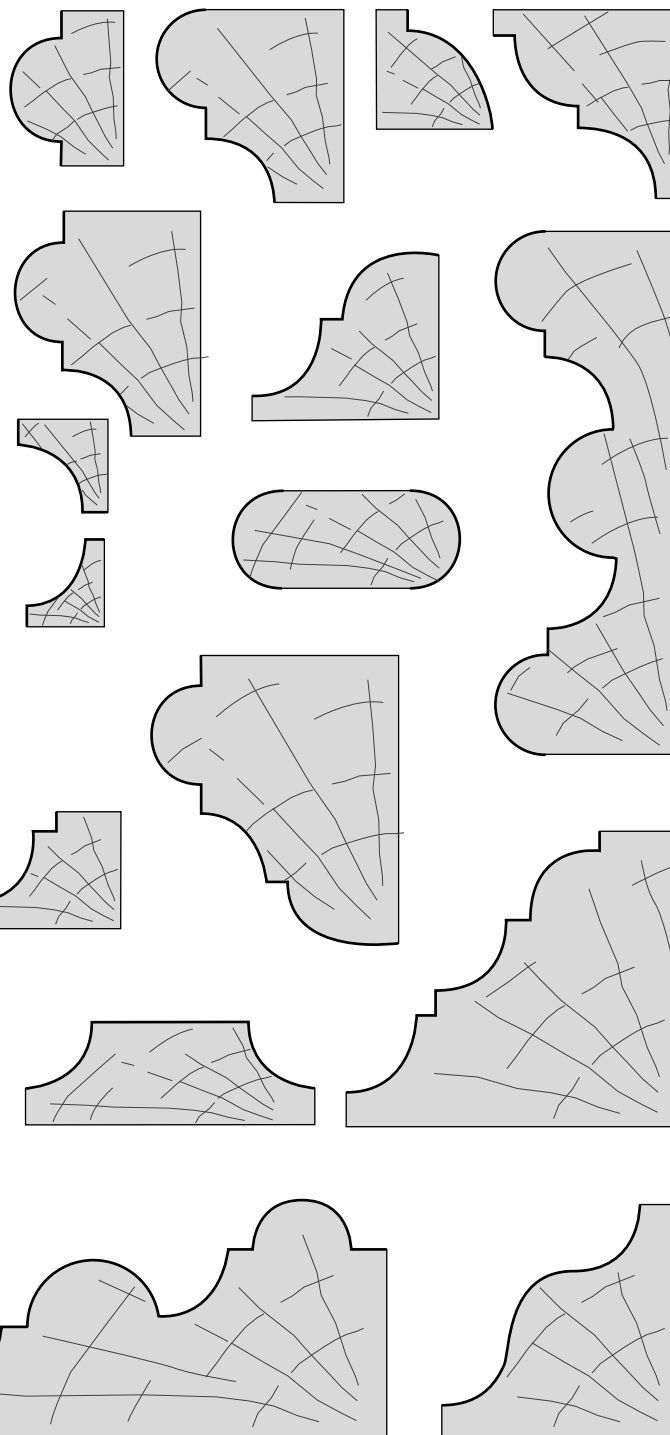
**FRB195**
**MULTI PROFILE BIT WITH BALL BEARING GUIDE  
TWO FLUTES**


Scale 1:1

PART NO.	LARGE DIAM.	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH
FRB195	2-1/8"	1-7/8"	1/2"	3-3/4"

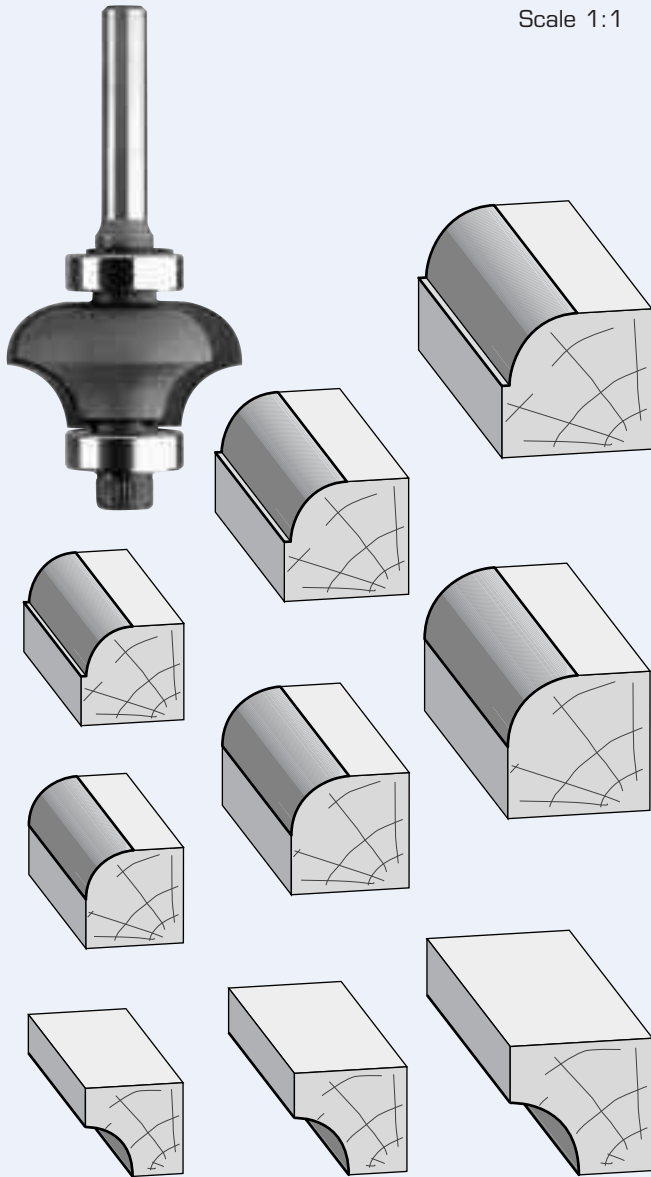
**Max. RPM 18,000**
**Replacement Parts**

 Ball Bearing B3  
Washer WR58

 Spring Washer WFS506  
Screw WNC538


**FRB200**
**MATCHING CORNER  
ROUND/COVE BITS**

Scale 1:1



FRB200

FRB201

FRB202

PART NO.	LARGE DIAM.	RADIUS	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH
FRB200	1-1/8"	1/4"	35/64"	1/4"	2-19/32"
FRB201	1-1/4"	5/16"	43/64"	1/4"	2-23/32"
FRB202	1-3/8"	3/8"	51/64"	1/4"	2-27/32"

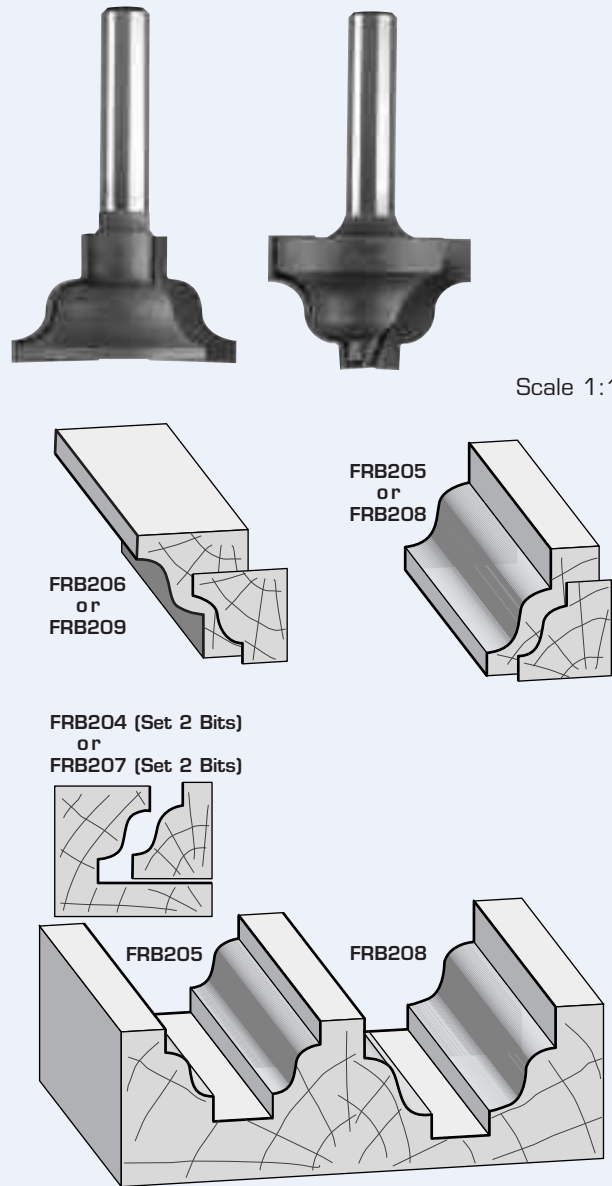
This unique router bit with two flutes and double ball bearing guides performs two machining cuts, rounding over and cove. To achieve beading cuts, use additional Ball Bearing part No. B3-1B

**Replacement Parts**

Ball Bearing B3-4A  
External Circlip WCO1  
Screw WNF1012  
Washer WFS500

**FRB204**
**STILE AND RAIL  
BITS, TWO PIECE SETS**


Scale 1:1


 FRB206  
or  
FRB209

 FRB205  
or  
FRB208

 FRB204 (Set 2 Bits)  
or  
FRB207 (Set 2 Bits)

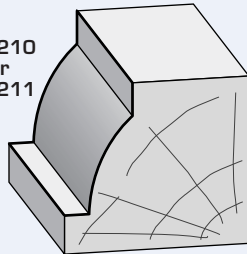
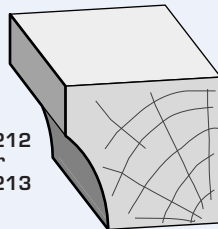
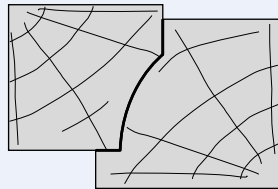
FRB205

FRB208

PART NO.	CUTTING DIAM.	RADIUS	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH
FRB204	Complete Set (2 bits)				
FRB205	13/16"	1/8"	1/2"	1/4"	1-5/8"
FRB206	1"	1/8"	1/2"	1/4"	1-5/8"
FRB207	Complete Set (2 bits)				
FRB208	1"	5/32"	21/32"	1/4"	1-25/32"
FRB209	1-1/8"	5/32"	21/32"	1/4"	1-25/32"

**FRB210**
**SASH BAR JOINT BITS  
TWO FLUTES**

Scale 1:1


 FRB210  
or  
FRB211

 FRB212  
or  
FRB213


PART NO.	CUTTING DIAM.	RADIUS	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH
FRB210	1-1/16"	43/64"	11/16"	1/4"	2-1/4"
FRB211	1-1/16"	43/64"	11/16"	1/2"	2-5/8"
FRB212	1-7/64"	43/64"	27/32"	1/4"	2-1/16"
FRB213	1-7/64"	43/64"	27/32"	1/2"	2-5/16"

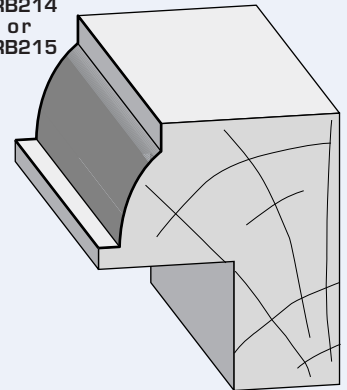
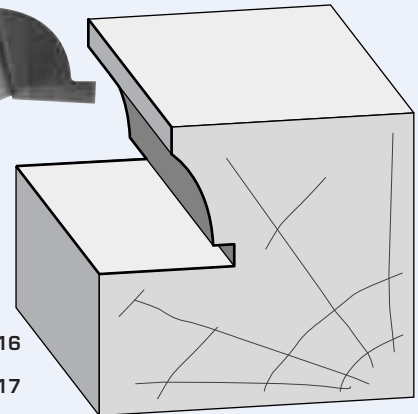
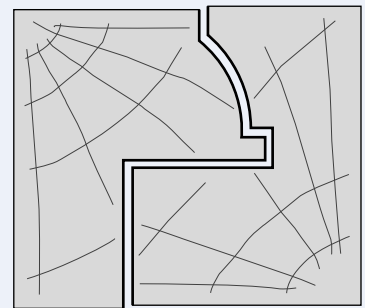
**Replacement Parts**

 Ball Bearing B2  
Washer WFS500

 Spring Washer WFS506  
Screw WNC538

**FRB214**
**STILE AND RAIL  
SETS TWO FLUTES**

Scale 1:1


 FRB214  
or  
FRB215

 FRB216  
or  
FRB217


PART NO.	CUTTING DIAM.	RADIUS	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH
FRB214 (A)	1-1/16"	43/64"	43/64"	1/4"	2-1/4"
FRB215 (A)	1-5/16"	11/32"	19/32"	1/4"	2-1/4"
FRB216 (B)	1-3/16"	43/64"	5/8"	1/4"	2-1/16"
FRB217 (B)	1-7/16"	11/32"	15/32"	1/4"	2-1/16"

**Replacement Parts**

 A) Ball Bearing B2  
Washer WFS500

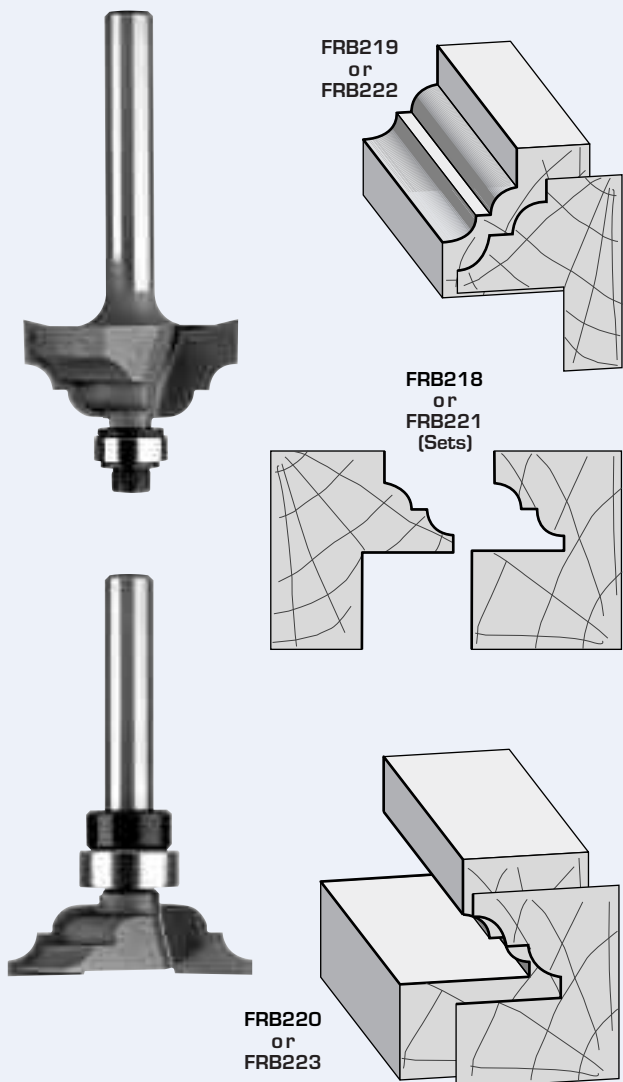
 Spring Washer WFS506  
Screw WNC538

 B) Ball Bearing B3-1  
Lock Ring WO1

Screw WNC525

**FRB218**
**STILE AND RAIL BITS  
TWO PIECE SETS**

Scale 1:1



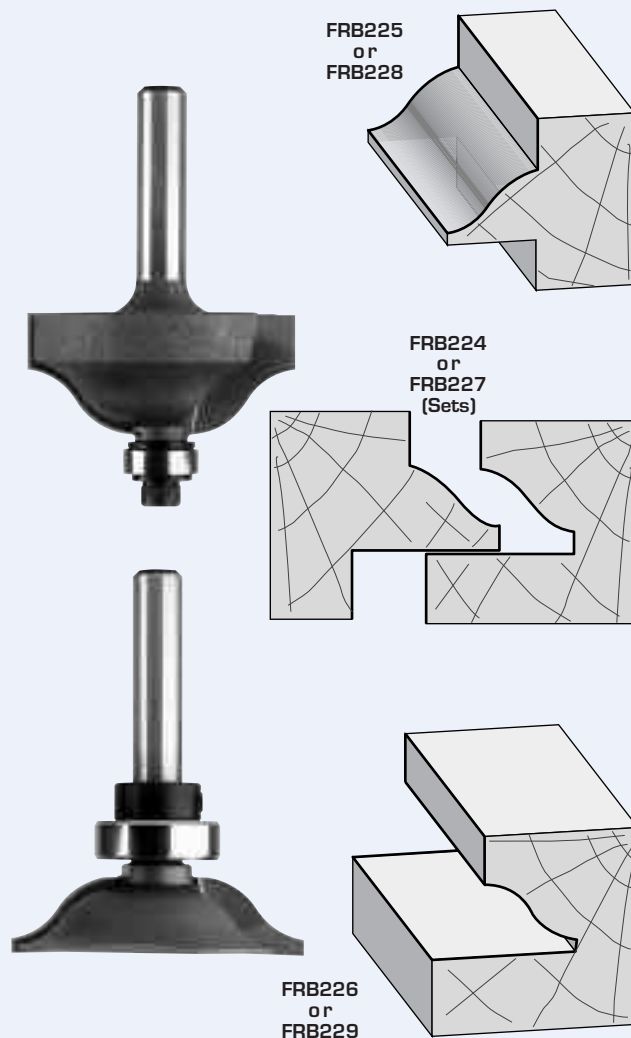
PART NO.	LARGE DIAM.	RADIUS	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH
<b>FRB218</b>	Complete Set (2 bits)				
<b>FRB219 (A)</b>	1-5/64"	9/64"	1/2"	1/4"	2"
<b>FRB220 (B)</b>	1-13/64"	9/64"	23/64"	1/4"	2"
<b>FRB221</b>	Complete Set (2 bits)				
<b>FRB222 (A)</b>	1-5/16"	11/64"	5/8"	1/4"	2"
<b>FRB223 (B)</b>	1-7/16"	11/64"	15/32"	1/4"	2"

**Replacement Parts**

- A)** Ball Bearing B2                      Spring Washer WFS506  
       Washer WFS500                      Screw WNC538
- B)** Ball Bearing B3-1  
       Lock Ring WO1                      Screw WNC525

**FRB224**
**STILE AND RAIL  
BITS TWO PIECE SETS**

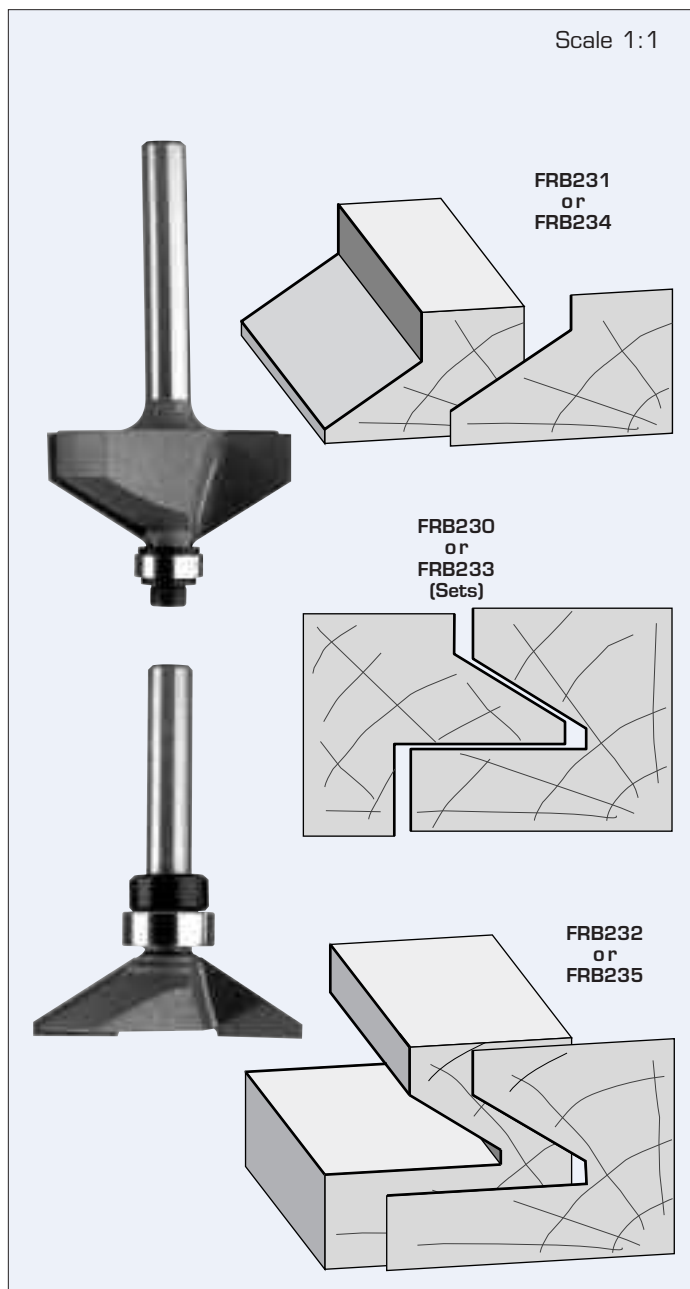

Scale 1:1



PART NO.	LARGE DIAM.	RADIUS	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH
<b>FRB224</b>	Complete Set (2 bits)				
<b>FRB225 (A)</b>	1-5/16"	21/64"	35/64"	1/4"	2-3/64"
<b>FRB226 (B)</b>	1-7/16"	21/64"	25/64"	1/4"	2"
<b>FRB227</b>	Complete Set (2 bits)				
<b>FRB228 (A)</b>	1-15/32"	21/64"	35/64"	1/4"	2-3/64"
<b>FRB229 (B)</b>	1-39/64"	21/64"	7/16"	1/4"	2"

**Replacement Parts**

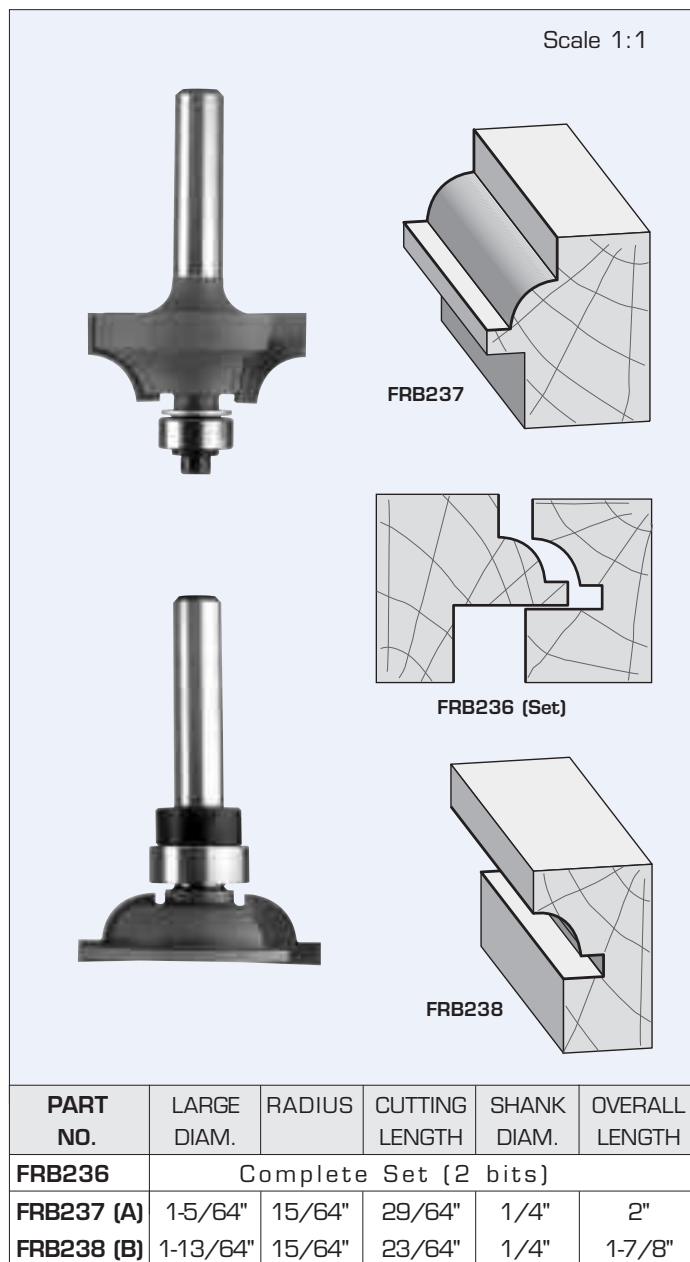
- A)** Ball Bearing B2                      Spring Washer WFS506  
       Washer WFS500                      Screw WNC538
- B)** Ball Bearing B3-1  
       Lock Ring WO1                      Screw WNC525

**FRB230**
**STILE AND RAIL BITS  
TWO PIECE SETS**


PART NO.	LARGE DIAM.	DEG. BEVEL	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH
FRB230	Complete Set (2 bits)				
FRB231 (A)	1-5/16"	33°	35/64"	1/4"	2-1/16"
FRB232 (B)	1-7/16"	33°	25/64"	1/4"	2"
FRB233	Complete Set (2 bits)				
FRB234 (A)	1-9/16"	32°	43/64"	1/4"	2-1/8"
FRB235 (B)	1-11/16"	32°	31/64"	1/4"	2"

**Replacement Parts**

- A) Ball Bearing B2      Spring Washer WFS506  
Washer WFS500      Screw WNC538
- B) Ball Bearing B3-1      Screw WNC525  
Lock Ring WO1

**FRB236**
**STILE AND RAIL  
BITS TWO PIECE SETS**


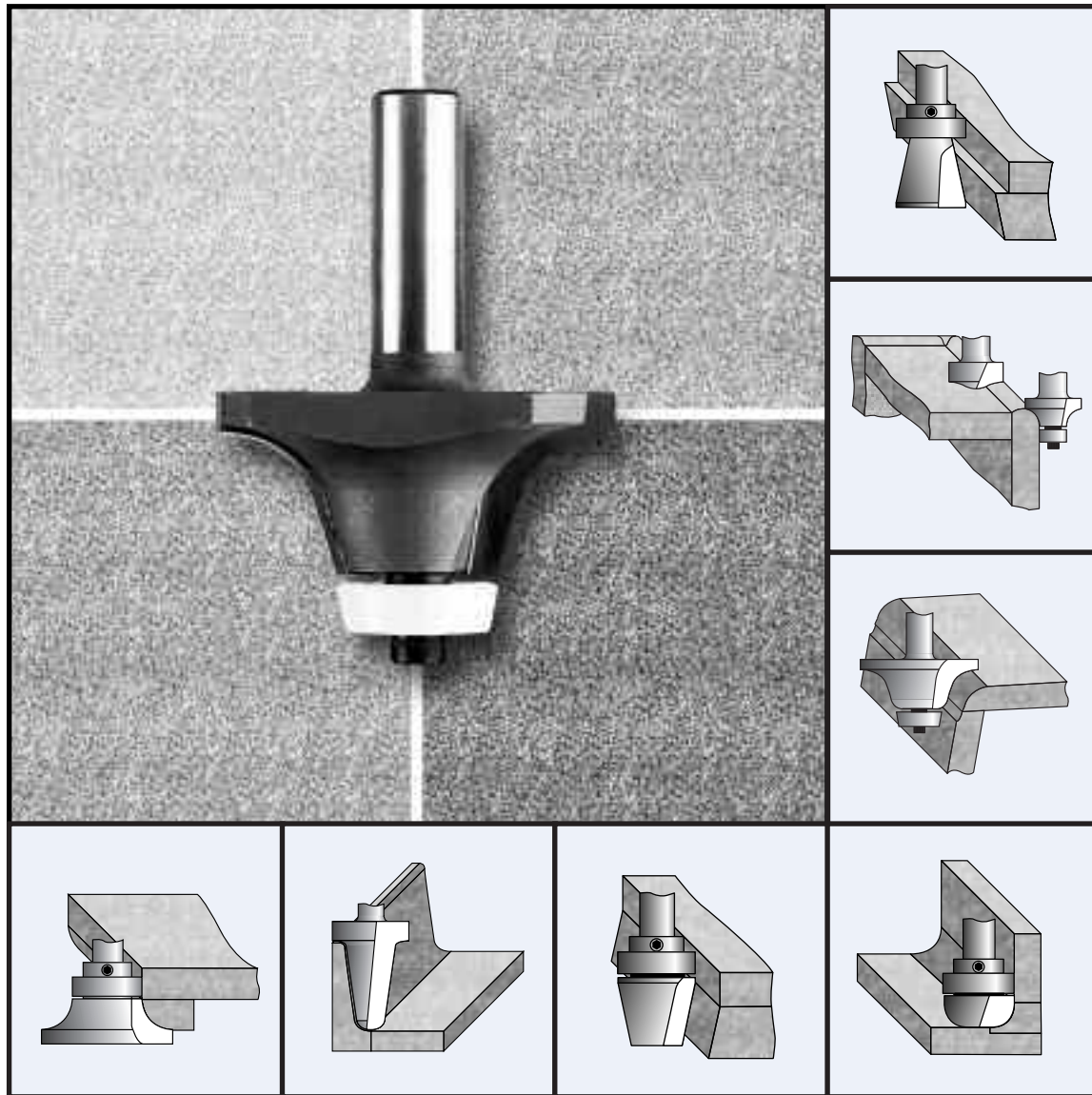
PART NO.	LARGE DIAM.	RADIUS	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH
FRB236	Complete Set (2 bits)				
FRB237 (A)	1-5/64"	15/64"	29/64"	1/4"	2"
FRB238 (B)	1-13/64"	15/64"	23/64"	1/4"	1-7/8"

**Replacement Parts**

- A) Ball Bearing B2      Spring Washer WFS506  
Washer WFS500      Screw WNC538
- B) Ball Bearing B3-1      Screw WNC525  
Lock Ring WO1

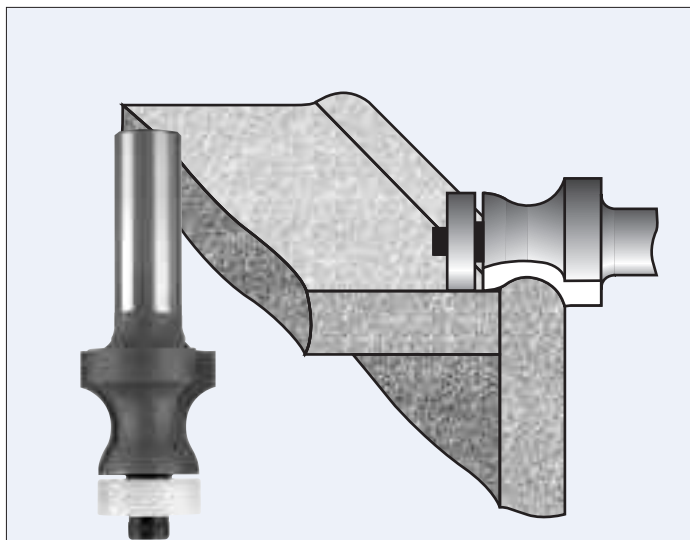
# SOLID SURFACE ROUTER BITS

**SPECIAL ROUTER BITS FOR FABRICATING SOLID SURFACE MATERIALS**  
(WILSONART® GIBRALTAR®, SSV®, CORIAN®, SURELL®, AVONITE®, FOUNTAINHEAD®, etc.)



**FS Tool Router Bits** have been specifically engineered for the fabrication of **solid surface materials**. Tough carbide grades and specific tool geometry ensures extended tool life. Ball bearing guides, where possible, have a nylon shield to prevent marking of the workpiece. See page E7 for solid surface circular saw blades.



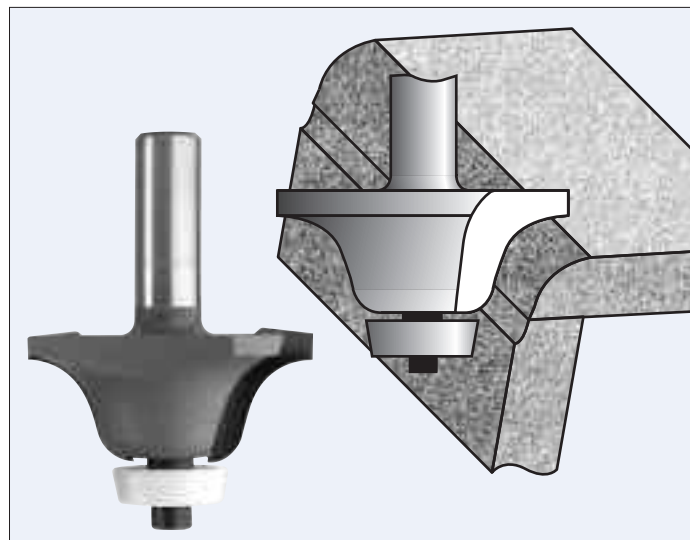
**FRB400**
**COUNTER TOP BITS  
TWO FLUTES**


PART NO.	CUTTING DIAM.	RADIUS	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH
FRB400	1"	5/16"	7/8"	1/2"	2-7/8"
FRB401	1"	5/16"	1-1/8"	1/2"	3-1/16"

**Replacement Parts**

Ball Bearing B22  
Screw WNF1012

Spring Washer WFS508

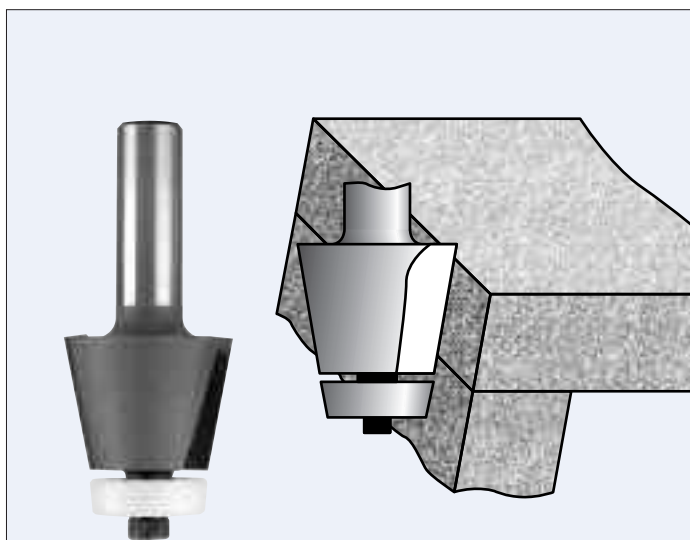
**FRB403**
**ROMAN OGEE  
UNDERMOUNT BOWL BITS**


PART NO.	CUTTING DIAM.	RADIUS	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH
FRB403	2-1/8"	1/2"	1"	1/2"	3"
FRB404	2-3/8"	9/16"	1-1/4"	1/2"	3-3/8"

**Replacement Parts**

Ball Bearing B24  
Screw WNF1012

Spring Washer WFS508

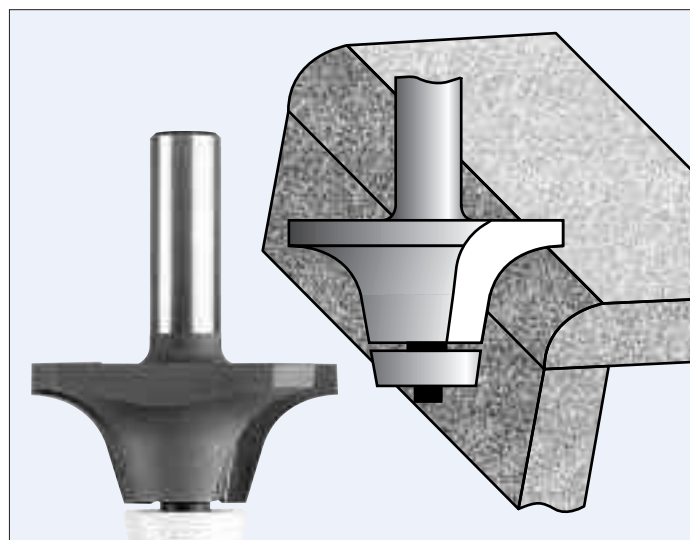
**FRB402**
**BEVEL UNDERMOUNT  
BOWL BITS**


PART NO.	CUTTING DIAM.	DEG.OF BEVEL	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH
FRB402	1-1/4"	12°	1"	1/2"	3-3/16"

**Replacement Parts**

Ball Bearing B24  
Screw WNF1012

Spring Washer WFS508

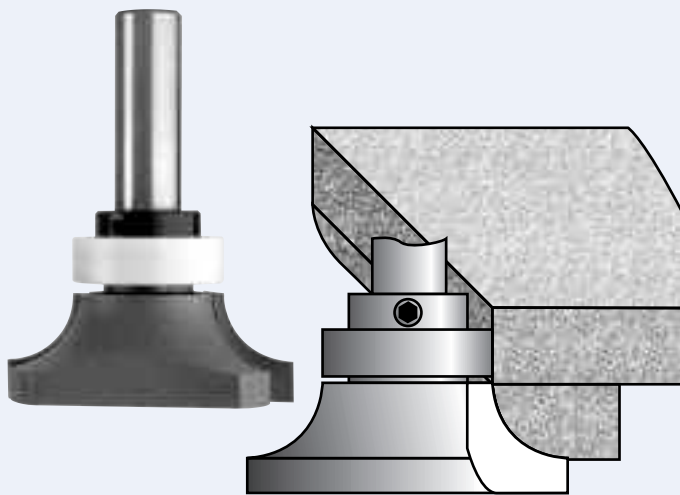
**FRB405**
**ROUNDING OVER  
UNDERMOUNT BOWL BITS**


PART NO.	CUTTING DIAM.	RADIUS	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH
FRB405	2-1/8"	1/2"	1"	1/2"	3-1/8"
FRB406	2-1/4"	9/16"	1-1/4"	1/2"	3-1/4"

**Replacement Parts**

Ball Bearing B24  
Screw WNF1012

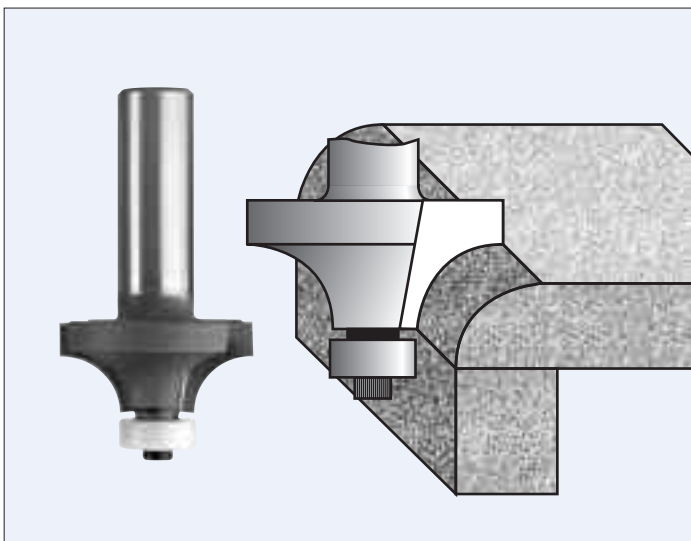
Spring Washer WFS508

**FRB407****INVERTED ROUNDING  
OVER BITS**

PART NO.	CUTTING DIAM.	RADIUS	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH
FRB407	2-1/8"	1/2"	3/4"	1/2"	2-7/8"
FRB408	2-5/8"	3/4"	1"	1/2"	3"

**Replacement Parts**

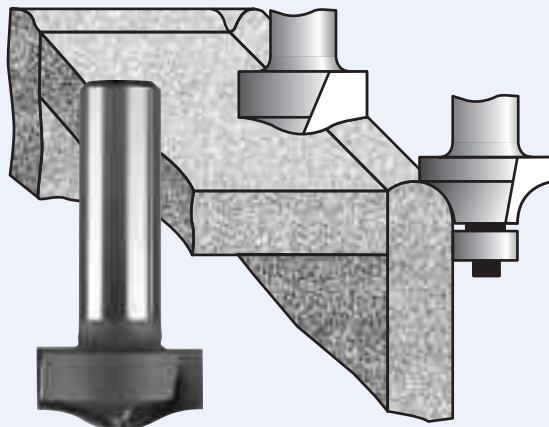
Ball Bearing B30 Lock Ring W03 Screw WNC518

**FRB410****ROUNDING OVER BITS**

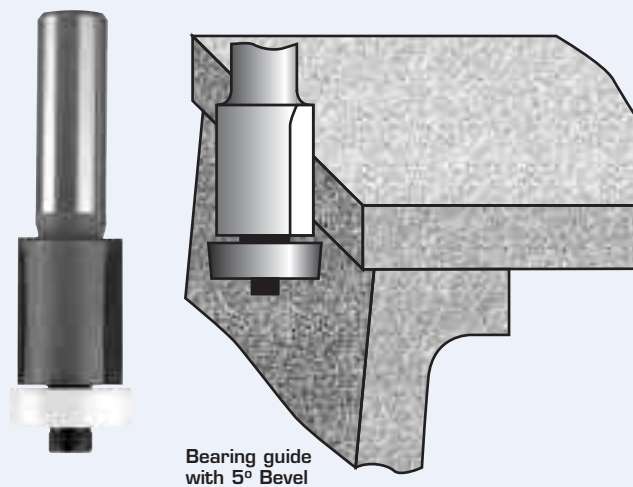
PART NO.	CUTTING DIAM.	RADIUS	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH
FRB410	1-1/8"	5/16"	1/2"	1/2"	2-5/16"
FRB411	1-1/4"	3/8"	5/8"	1/2"	2-7/16"
FRB412	1-1/2"	1/2"	3/4"	1/2"	2-9/16"
FRB413	2"	3/4"	1"	1/2"	2-3/4"

**Replacement Parts**Ball Bearing B20  
Screw WNC538

Spring Washer WFS506

**FRB416****COUNTER-TOP BITS  
"NO-DRIP" DESIGN**

PART NO.	CUTTING DIAM.	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH
FRB416	1"	1/2"	1/2"	2-1/8"

**FRB418****OVER-HANG 1/16"  
5 DEGREE ROUGH-OUT BIT**

PART NO.	CUTTING DIAM.	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH
FRB418	3/4"	1"	1/2"	3-1/4"

**Application:**

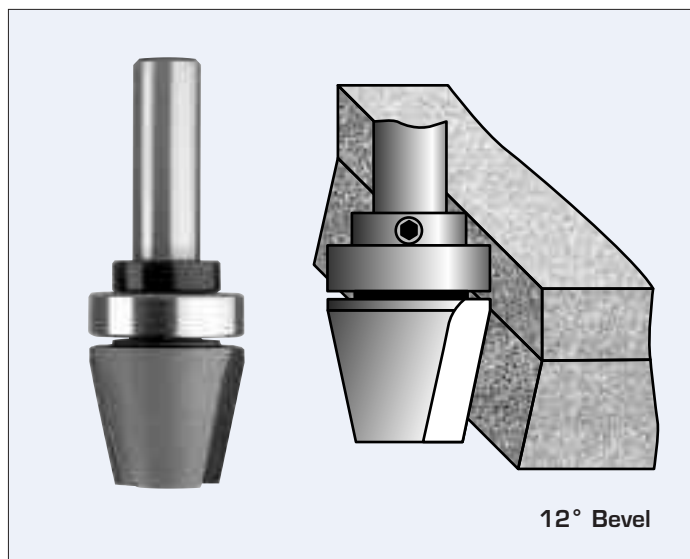
Using a template, this tool will "rough-out" the sink cut-out. A second tool (flush trim FRB424) will finish the cut flush.

**Replacement Parts**

Ball Bearing B26

Screw WNF1012



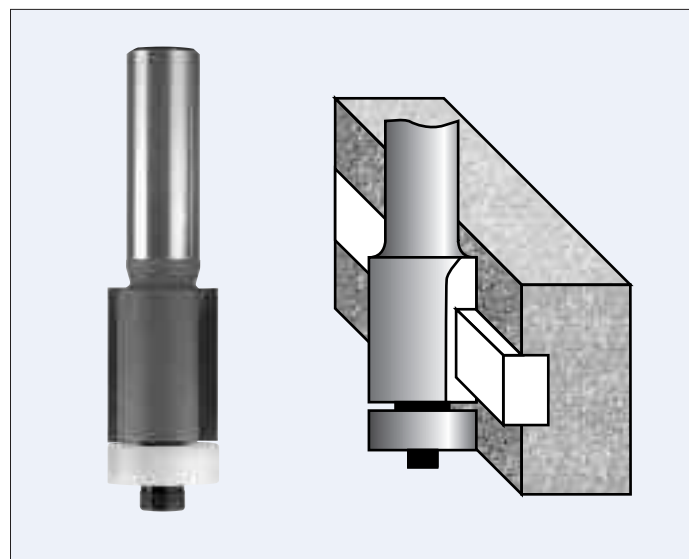
**FRB420**
**TOPMOUNTED  
COUNTERTOP BIT**


PART NO.	CUTTING DIAM.	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH
FRB420	1-1/8"	1"	1/2"	3-1/8"

**Replacement Parts**

Ball Bearing B6-4  
Screw WNC518

Lock Ring WO3

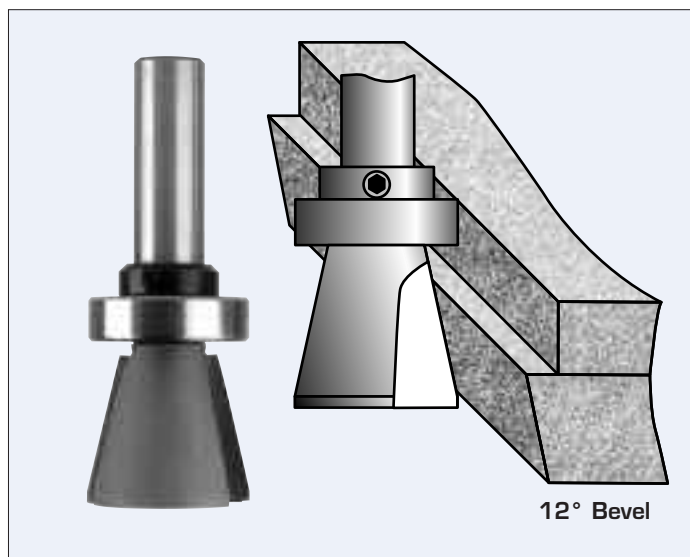
**FRB424**
**INLAY FLUSH  
TRIMMING BITS 0-DEGREES**


PART NO.	CUTTING DIAM.	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH
FRB424	3/4"	1"	1/2"	3-1/4"

**Replacement Parts**

Ball Bearing B22

Screw WNF1012

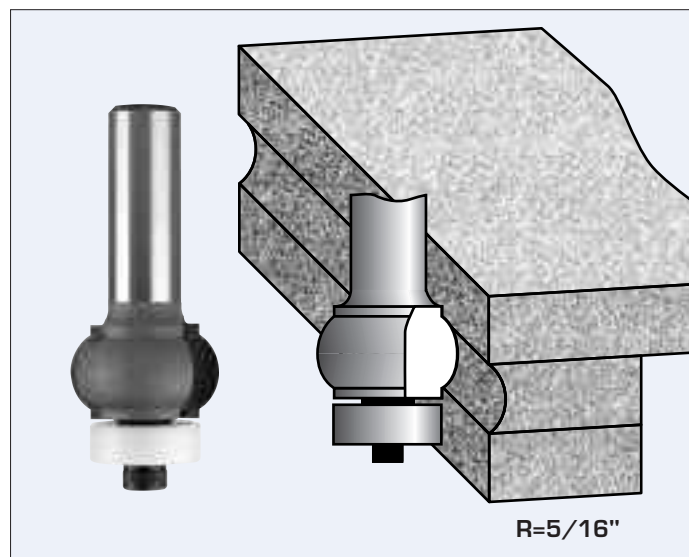
**FRB422**
**TOPMOUNTED  
BOWL BIT**


PART NO.	CUTTING DIAM.	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH
FRB422	1-1/8"	1"	1/2"	3-1/8"

**Replacement Parts**

Ball Bearing B6-4  
Screw WNC518

Lock Ring WO3

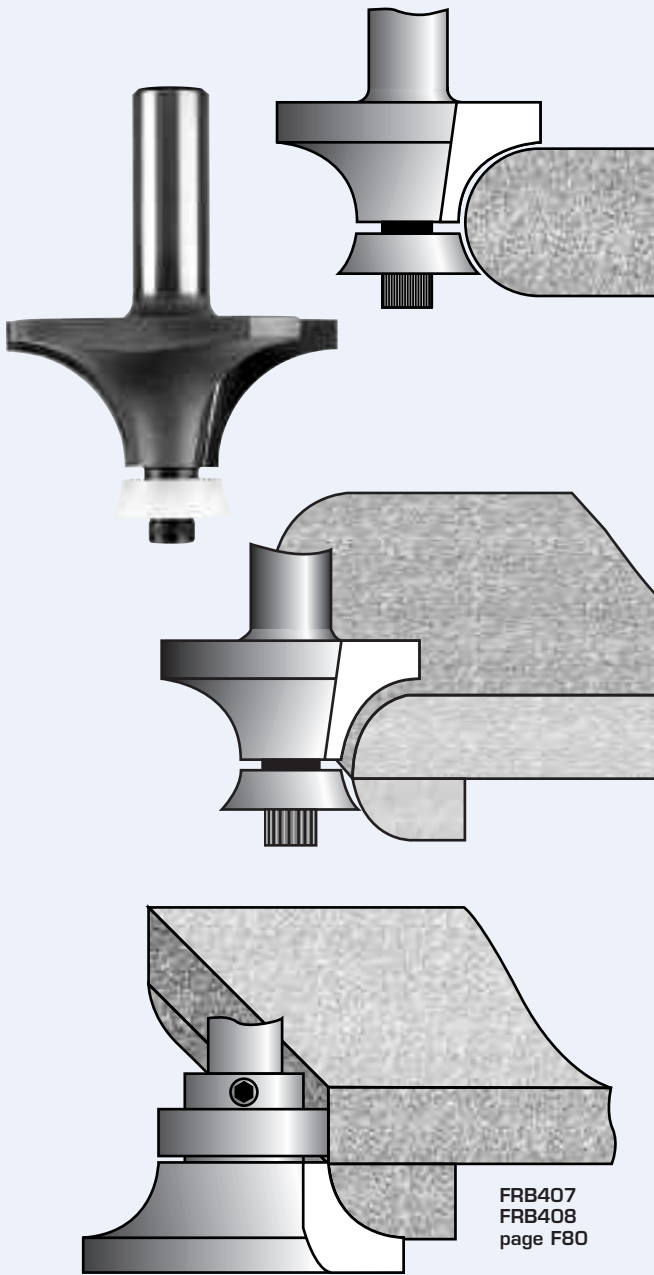
**FRB426**
**EDGE COVE  
TRIMMING BIT**


PART NO.	CUTTING DIAM.	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH
FRB426	1"	5/8"	1/2"	2-5/8"

**Replacement Parts**

Ball Bearing B22

Screw WNF1012

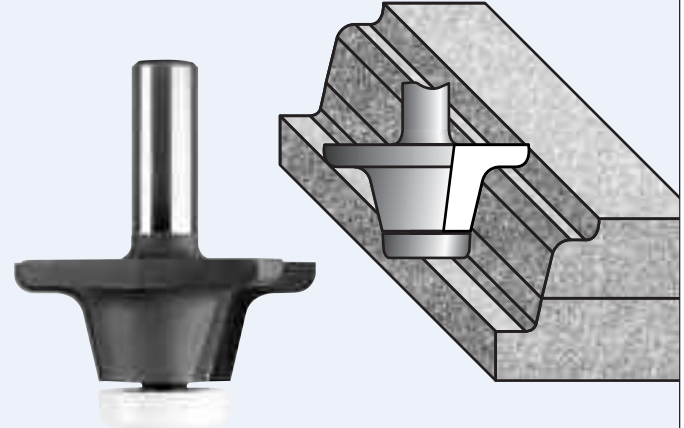
**FRB430**
**CORNER ROUNDING BITS  
WITH RADIUS BALL BEARING**


FRB407  
FRB408  
page F80

PART NO.	LARGE DIAM.	SMALL DIAM.	RADIUS	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH
FRB430 (A)	1-5/8"	5/8"	1/2"	47/64"	1/2"	2-1/16"
FRB431 (B)	2-1/8"	5/8"	3/4"	63/64"	1/2"	2-15/16"
FRB432 (C)	2-5/8"	5/8"	1"	1-15/64"	1/2"	3-3/16"

**Replacement Parts**

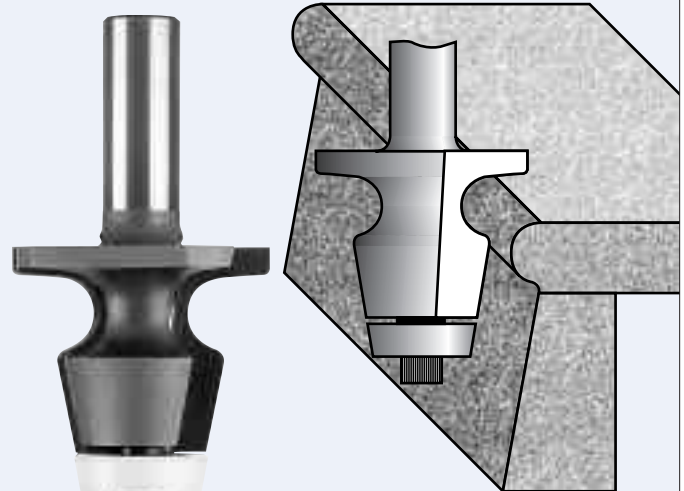
- (A) Ball Bearing B80      Screw WNF1012  
Washer WFS500
- (B) Ball Bearing B82      Screw WNF1012  
Washer WFS500
- (C) Ball Bearing B84      Screw WNF1012  
Washer WFS500

**FRB436**
**UNDERMOUNT  
BOWL BITS TWO FLUTES**


PART NO.	LARGE DIAM.	RADIUS R1	RADIUS R2	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH
FRB436	2-1/4"	13/64"	5/32"	15/16"	1/2"	23/4"

**Replacement Parts**

- Ball Bearing B21      Screw W103214  
Washer WFS500

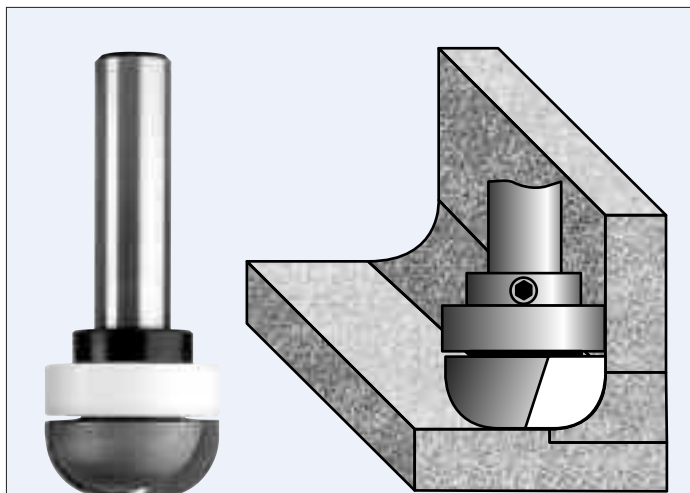
**FRB438**
**UNDERMOUNT  
PROFILE BOWL BITS**


10° Bevel

PART NO.	LARGE DIAM.	SMALL DIAM.	RADIUS	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH
FRB438	1-21/32"	7/8"	15/64"	1-5/16"	1/2"	3-5/16"

**Replacement Parts**

- Ball Bearing B24      Screw WNF1012  
Washer WFS500

**FRB440**
**COVE BIT WITH CENTRE  
BALL BEARING GUIDE**


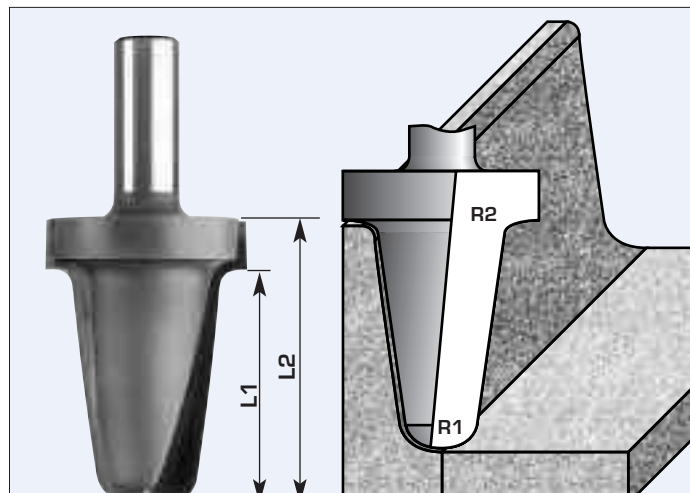
PART NO.	CUTTING DIAM.	RADIUS	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH
FRB440	1-1/8"	25/64"	1/2"	1/2"	2-7/8"

**Replacement Parts**

Ball Bearing B30

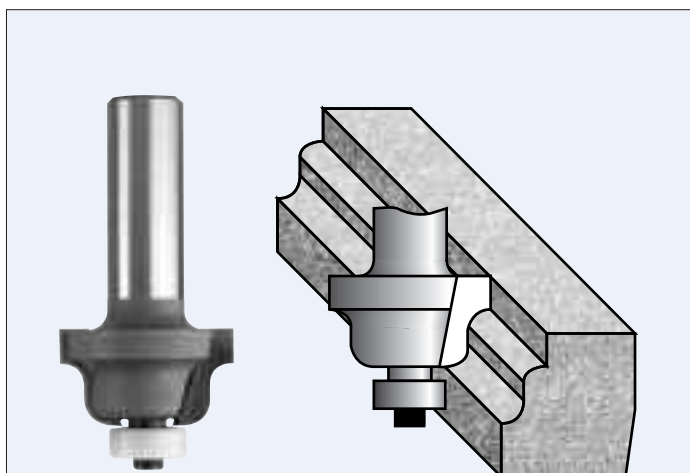
Screw WNC518

Lock Ring WO3

**FRB444**
**CORNER COVE  
BITS TWO FLUTES**


PART NO.	CUTTING DIAM.	RADIUS R1	RADIUS R2	CUTTING L1	CUTTING L2	OVERALL LENGTH
FRB444	1-17/32"	15/64"	1/8"	1-3/16"	1-9/16"	3-1/16"
FRB446	1-17/32"	15/64"	1/8"	1-3/4"	2-5/32"	3-11/16"

Above bits supplied with 1/2" shank diam.

**FRB442**
**ROMAN OGEE BIT  
TWO FLUTES**


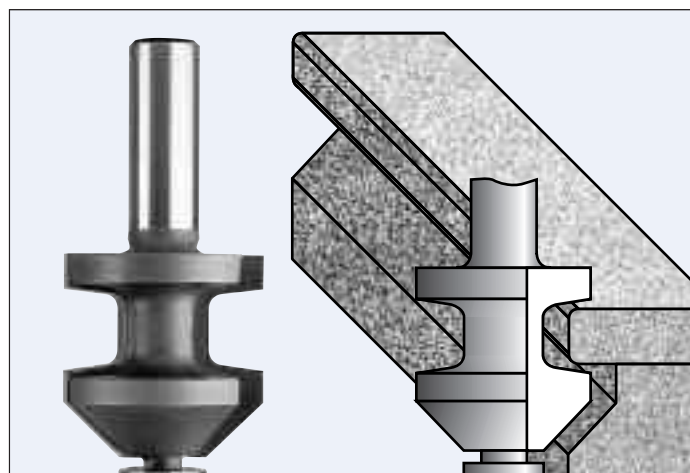
PART NO.	CUTTING DIAM.	RADIUS R1	RADIUS R2	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH
FRB442	1-1/8"	1/8"	5/32"	5/8"	1/2"	2-9/16"

**Replacement Parts**

Ball Bearing B20

Screw WNC538

Washer WFS500

**FRB448**
**BEVEL HOB BIT  
TWO FLUTES**


PART NO.	CUTTING DIAM.	RADIUS	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH
FRB448	1-3/8"	1/8"	1-7/16"	1/2"	2-7/8"

**Replacement Parts**

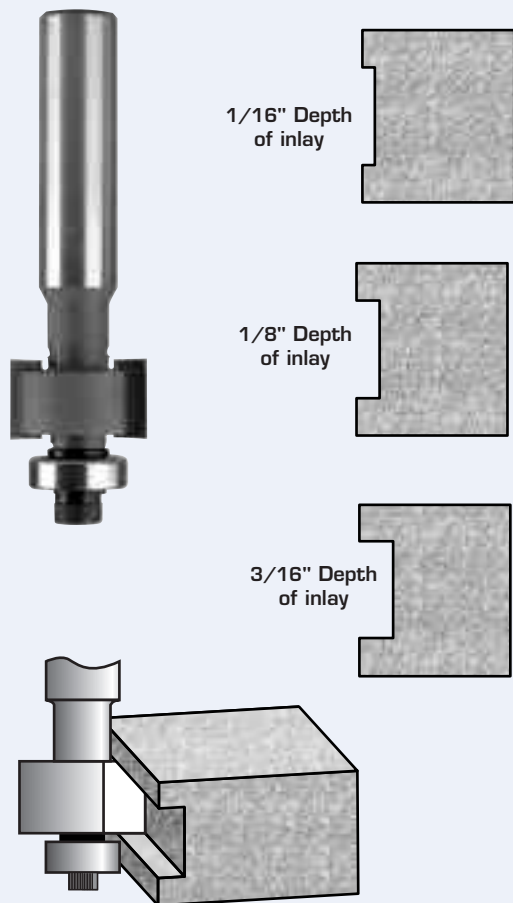
Ball Bearing B3-3

Screw WNF1012

Washer WFS502

**FRB460****FACE INLAY BITS  
TWO FLUTES**

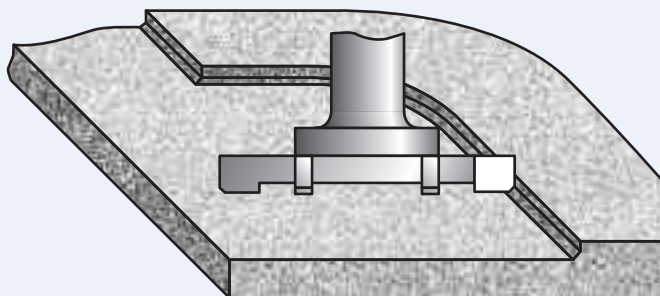
Scale 1:1



PART NO.	CUTTING DIAM.	CUTTING WIDTH	DEPTH OF INLAY	SHANK DIAM.	OVERALL LENGTH
FRB460 (A)	7/8"	1/4"	1/16"	1/2"	3"
FRB461 (B)	7/8"	1/4"	1/8"	1/2"	3"
FRB462 (C)	7/8"	1/4"	3/16"	1/2"	3"
FRB463 (A)	7/8"	1/2"	1/16"	1/2"	3-1/2"
FRB464 (B)	7/8"	1/2"	1/8"	1/2"	3-1/2"
FRB465 (C)	7/8"	1/2"	3/16"	1/2"	3-1/2"
FRB466 (A)	7/8"	3/4"	1/16"	1/2"	3-1/2"
FRB467 (B)	7/8"	3/4"	1/8"	1/2"	3-1/2"
FRB468 (C)	7/8"	3/4"	3/16"	1/2"	3-1/2"

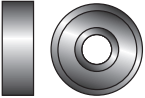







**Replacement Parts**

- (A) Ball Bearing B4                      Washer WFS500  
Screw WNF1012
- (B) Ball Bearing B3-3                    Washer WFS500  
Screw WNF1012
- (C) Ball Bearing B3-1                    Washer WFS500  
Screw WNF1012

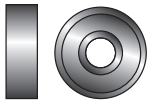







**FRB470****BOWL AND  
COUNTERTOP TRIM BIT 6 WING**

PART NO.	CUTTING DIAM.	CARBIDE HEIGHT	SHANK DIAM.	OVERALL LENGTH
FRB470	2-1/16"	1/4"	1/2"	3-5/16"

# ROUTER BIT REPLACEMENT PARTS INDEX

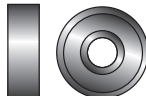







ROUTER BIT PART NO.	CAT. PAGE	 BALL BEARING(S)	 FLAT/SPRING WASHER	 RAISED WASHER	 SCREW	 EXTERNAL CIRCLIP	 LOCK RING	 LOCK RING SCREW	 HEX NUT
FRB14 to FRB17	F36	B3	WFS506	WR58	WNC538	-	-	-	-
FRB18 to FRB20	F37	B3	WFS506	WR58	WNC538	-	-	-	-
FRB21 to FRB23	F37	B2	WFS506	WFS500	WNC538	-	-	-	-
FRB23-5 to FRB23-6	F38	see page F38	-	-	-	-	-	-	-
FRB23-7	F39	see page F39	-	-	-	-	-	-	-
FRB24 to FRB24-1	F39	B3	WFS506	WR58	WNC538	-	-	-	-
FRB25 to FRB25-3	F40	B3	WFS506	WR58	WNC538	-	-	-	-
FRB27	F42	see page F42	-	-	-	-	-	-	-
FRB28 to FRB30	F43	see page F43	-	-	-	-	-	-	-
FRB31 to FRB31-1	F44	see page F44	-	-	-	-	-	-	-
FRB31-2 to FRB31-3	F45	see page F45	-	-	-	-	-	-	-
FRB31-4	F46	see page F46	-	-	-	-	-	-	-
FRB31-5	F46	B5	-	-	-	-	-	-	WNF516
FRB31-6	F47	see page F47	-	-	-	-	-	-	WNF516
FRB31-7	F48	see page F48	-	-	-	-	-	-	WNF516
FRB33 to FRB36	F49	see page F49	-	-	-	-	-	-	-
FRB37 to FRB40	F49	B1	WFS504	WR12	WNC338	-	-	-	-
FRB40-1 to FRB40-2	F49	B3	WFS506	WR58	WNC538	-	-	-	-
FRB41 to FRB48	F50	see page F50	-	-	-	-	-	-	-
FRB49 to FRB56	F51	B3	WFS506	WR58	WNC538	-	-	-	-
FRB62-5	F52	see page F52	-	-	-	-	-	-	-
FRB63	F53	B5	-	-	-	WCO1	-	-	-
FRB64	F53	B7	-	-	-	WCO2	-	-	-
FRB65	F53	B5	-	-	-	WCO1	-	-	-
FRB66	F53	B7	-	-	-	WCO2	-	-	-
FRB67 to FRB69	F54	B3	WFS506	WR58	WNC538	-	-	-	-
FRB74 to FRB74-1	F56	B3	WFS506	WR58	WNC538	-	-	-	-
FRB74-2 to FRB74-6	F56	B3-4	WFS506	WR59	WNC538	-	-	-	-
FRB76 to FRB76-2	F56	B3-3	-	-	WNF1012	-	WO1	WNC525	-
FRB76-3	F57	B3-3	-	-	WNF1012	-	WO1	WNC525	-
FRB76-7 to FRB76-8	F57	B3-4	WFS506	WR59	WNC538	-	-	-	-
FRB77-1 to FRB77-4	F58	B3-4	WFS506	WR59	WNC538	-	-	-	-
FRB77-5 to FRB77-6	F58	B3-4	WFS506	WR59	WNC538	-	-	-	-
FRB77-7 to FRB77-8	F58	B4	WFS506	WFS500	WNC538	-	-	-	-
FRB77-9	F59	B3-4	WFS506	WR59	WNC538	-	-	-	-
FRB78-1 to FRB78-3	F59	B3	WFS506	WR58	WNC538	-	-	-	-
FRB78-4 to FRB78-6	F60	B3	WFS506	WR58	WNC538	-	-	-	-
FRB100	F60	B3	WFS506	WR58	WNC538	-	-	-	-
FRB101 to FRB103	F61	B3	WFS506	WR58	WNC538	-	-	-	-
FRB104	F61	B3-4	WFS506	WR59	WNC538	-	-	-	-
FRB105 to FRB107	F62	B3-4	WFS506	WR59	WNC538	-	-	-	-
FRB108	F62	B3-2	WFS506	WR59	WNC512	-	-	-	-
FRB109 to FRB111	F63	B3	WFS506	WR58	WNC538	-	-	-	-
FRB112	F63	B3-4	WFS506	WR59	WNC538	-	-	-	-
FRB113 to FRB113-2	F64	B3-4	WFS506	WR59	WNC538	-	-	-	-
FRB114	F64	B4	-	WFS500	WNF1012	-	-	-	-
FRB115 to FRB116	F64	B3-4	WFS506	WR59	WNC538	-	-	-	-
FRB117 to FRB120	F65	B3-4	WFS506	WR59	WNC538	-	-	-	-
FRB121	F65	B3	WFS506	WR58	WNC538	-	-	-	-
FRB122 to FRB124	F66	B3	WFS506	WR58	WNC538	-	-	-	-
FRB160 to FRB163	F68	B3	WFS506	WR58	WNC538	-	-	-	-
FRB164	F58	B3-4	WFS506	WR59	WNC538	-	-	-	-
FRB170	F68	see page F68	-	-	-	-	-	-	-
FRB171	F69	see page F69	-	-	-	-	-	-	-
FRB180 to FRB183	F71	B3	WFS506	WR58	WNC538	-	-	-	-
FRB190 to FRB191	F72	B3-4	WFS506	WR59	WNC538	-	-	-	-
FRB192	F72	B3	WFS506	WR58	WNC538	-	-	-	-
FRB195	F73	B3	WFS506	WR58	WNC538	-	-	-	-
FRB200 to FRB202	F74	see page F74	-	-	-	-	-	-	-
FRB210 to FRB215	F75	B2	WFS506	WFS500	WNC538	-	-	-	-
FRB216 to FRB217	F75	B3-1	-	-	-	-	WO1	WNC525	-

# ROUTER BIT REPLACEMENT PARTS INDEX

ROUTER BIT PART NO.	CAT. PAGE	 BALL BEARING(S)	 FLAT/SPRING WASHER	 RAISED WASHER	 SCREW	 EXTERNAL CIRCLIP	 LOCK RING	 LOCK RING SCREW	 HEX NUT
FRB219	F76	B2	WFS506	WFS500	WNC538	-	-	-	-
FRB220	F76	B3-1	-	-	-	-	WO1	WNC525	-
FRB222	F76	B2	WFS506	WFS500	WNC538	-	-	-	-
FRB223	F76	B3-1	-	-	-	-	WO1	WNC525	-
FRB225	F76	B2	WFS506	WFS500	WNC538	-	-	-	-
FRB226	F76	B3-1	-	-	-	-	WO1	WNC525	-
FRB228	F76	B2	WFS506	WFS500	WNC538	-	-	-	-
FRB229	F76	B3-1	-	-	-	-	WO1	WNC525	-
FRB231	F77	B2	WFS506	WFS500	WNC538	-	-	-	-
FRB232	F77	B3-1	-	-	-	-	WO1	WNC525	-
FRB234	F77	B2	WFS506	WFS500	WNC538	-	-	-	-
FRB235	F77	B3-1	-	-	-	-	WO1	WNC525	-
FRB237	F77	B2	WFS506	WFS500	WNC538	-	-	-	-
FRB238	F77	B3-1	-	-	-	-	WO1	WNC525	-
FRB400 to FRB401	F79	B22	WFS508	-	WNF1012	-	-	-	-
FRB402 to FRB406	F79	B24	WFS508	-	WNF1012	-	-	-	-
FRB407 to FRB408	F80	B30	-	-	-	-	WO3	WNC518	-
FRB410 to FRB413	F80	B20	WFS506	-	WNC538	-	-	-	-
FRB418	F80	B26	-	-	WNF1012	-	-	-	-
FRB420 to FRB422	F81	B6-4	-	-	-	-	WO3	WNC518	-
FRB424 to FRB426	F81	B22	-	-	WNF1012	-	-	-	-
FRB430	F82	B80	-	WFS500	WNF1012	-	-	-	-
FRB431	F82	B82	-	WFS500	WNF1012	-	-	-	-
FRB432	F82	B84	-	WFS500	WNF1012	-	-	-	-
FRB436	F82	B21	-	WFS500	W103214	-	-	-	-
FRB438	F82	B24	-	WFS500	WNF1012	-	-	-	-
FRB440	F83	B30	-	-	-	-	WO3	WNC518	-
FRB442	F83	B20	-	WFS500	WNC538	-	-	-	-
FRB448	F83	B3-3	-	WFS502	WNF1012	-	-	-	-
FRB460	F84	B4	-	WFS500	WNF1012	-	-	-	-
FRB461	F84	B3-3	-	WFS500	WNF1012	-	-	-	-
FRB462	F84	B3-1	-	WFS500	WNF1012	-	-	-	-
FRB463	F84	B4	-	WFS500	WNF1012	-	-	-	-
FRB464	F84	B3-3	-	WFS500	WNF1012	-	-	-	-
FRB465	F84	B3-1	-	WFS500	WNF1012	-	-	-	-
FRB466	F84	B4	-	WFS500	WNF1012	-	-	-	-
FRB467	F84	B3-3	-	WFS500	WNF1012	-	-	-	-
FRB468	F84	B3-1	-	WFS500	WNF1012	-	-	-	-
R2320 to R2320 -1	F8	B3-1	-	-	-	-	WO1	WNC525	-
R2321	F8	B3-3	-	-	-	-	WO1	WNC525	-
R2322	F8	B4	-	-	-	-	WO1	WNC525	-
R2322-1 to R2322-2	F8	B4-1A	-	-	-	-	WO4	WNC518	-
R2323	F8	B6-1	-	-	-	-	WO2	WNC525	-
R2324	F8	B6-1A	-	-	-	-	WO4	WNC518	-
R2325	F8	B6-4	-	-	-	-	WO3	WNC518	-
R2326	F8	B6-5	-	-	-	-	WO3	WNC518	-
R2327	F8	B10	-	-	-	-	WO3	WNC518	-
R2406-9	F9	B3-1	-	-	-	-	WO1	WNC525	-
R2420	F9	B3-1	-	-	-	-	WO1	WNC525	-
R2421	F9	B4	-	-	-	-	WO1	WNC525	-
R2422	F9	B4-1A	-	-	-	-	WO4	WNC518	-
R2423	F9	B6-4	-	-	-	-	WO3	WNC518	-
R2430 to R2434	F9	B3	WFS506	WR58	WNC538	-	-	-	-
R2436 to R2437	F10	B3-1 / B3	WFS506	WR58	WNC538	-	WO1	WNC525	-
R2440 to R2444	F10	B3	WFS506	WR58	WNC538	-	-	-	-
R2450	F10	B4	-	-	-	-	WO1	WNC525	-
R2451	F10	B6-1A	-	-	-	-	WO4	WNC518	-
R2452	F10	B10	-	-	-	-	WO3	WNC518	-
R2512 to R2514	F11	B3	WFS506	WR58	WNC538	-	-	-	-
R2515	F11	B3-4	WFS506	WR59	WNC512	-	-	-	-
R2516	F11	B4	WFS508	WR59	WNF1012	-	-	-	-

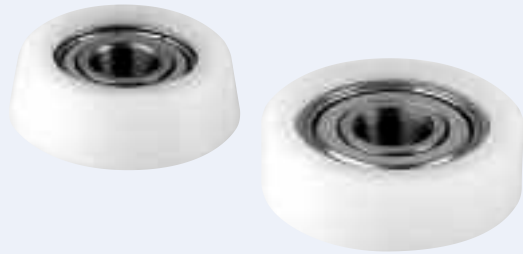


## ROUTER BIT REPLACEMENT PARTS INDEX

ROUTER BIT PART NO.	CAT. PAGE	 BALL BEARING(S)	 FLAT/SPRING WASHER	 RAISED WASHER	 SCREW	 EXTERNAL CIRCLIP	 LOCK RING	 LOCK RING SCREW	 HEX NUT
R2517	F11	B4	WFS508	WR59	WNF1012	-	-	-	-
R2519	F11	B6-4	-	-	-	-	WO3	WNC518	-
R2525 to R2527	F12	B6-3	-	-	-	-	-	-	WNF516
R2530	F13	B5	-	-	-	-	-	-	WNF516
R2535	F13	B5	-	-	-	-	-	-	WNF516
R2560	F14	B3-1	-	-	-	-	WO1	WNC525	-
R2620	F15	B3-1	-	-	-	-	WO1	WNC525	-
R2800-1 to R2806	F17	B1	WFS504	WR12	WNC338	-	-	-	-
R2807 to R2810	F17	B3	WFS506	WR58	WNC538	-	-	-	-
R2900 to R2903	F17	B3	WFS506	WR58	WNC538	-	-	-	-
R2905 to R2908	F18	B2	WFS506	WFS500	WNC538	-	-	-	-
R2950 to R2951	F18	see page F18	-	-	-	-	-	-	-
R2960 to R2961	F19	see page F19	-	-	-	-	-	-	-
R2970 to R2972	F20	see page F20	-	-	-	-	-	-	-
R3000 to R3013	F21	B3	WFS506	WR58	WNC538	-	-	-	-
R3030	F22	B3-1	-	-	-	-	WO1	WNC525	-
R3032	F22	B4	-	-	-	-	WO1	WNC525	-
R3034	F22	B5	-	-	-	-	WO1	WNC525	-
R3036	F22	B6-4	-	-	-	-	WO3	WNC518	-
R3100 to R3114	F22	B2	WFS506	WFS500	WNC538	-	-	-	-
R3200 to R3203	F23	B1	WFS504	WR12	WNC338	-	-	-	-
R3300 to R3301	F23	B2	WFS506	WFS500	WNC538	-	-	-	-
R3302	F23	B3	WFS506	WR58	WNC538	-	-	-	-
R3302-1	F23	B1	WFS506	WR58	WNC538	-	-	-	-
R3303 to R3304	F23	B3	WFS506	WR58	WNC538	-	-	-	-
R3304-1	F23	B1	WFS506	WR58	WNC538	-	-	-	-
R3305 to R3307	F23	B3	WFS506	WR58	WNC538	-	-	-	-
R3310 to R3313	F23	B3-4	WFS506	WR59	WNC538	-	-	-	-
R3320 to R3323	F23	B3	WFS506	WR58	WNC538	-	-	-	-
R3324	F23	B4	WFS508	-	WNF1012	-	-	-	-
R3325	F23	B1	WFS504	WR12	WNC338	-	-	-	-
R3400-1 to R3400-2	F24	B01	-	-	WNC2732	-	-	-	-
R3400 to R3401	F24	B2	WFS506	WFS500	WNC538	-	-	-	-
R3402 to R3403	F24	B3	WFS506	WR58	WNC538	-	-	-	-
R3403-1	F24	B3-4	WFS506	WR59	WNC538	-	-	-	-
R3404 to R3408	F24	B3	WFS506	WR58	WNC538	-	-	-	-
R3409	F24	B4	WFS508	-	WNF1012	-	-	-	-
R3500 to R3501	F24	B3	WFS506	WR58	WNC538	-	-	-	-
R3501-1	F24	B4-1	WFS508	-	WNF1012	-	-	-	-
R3502 to R3504	F24	B3	WFS506	WR58	WNC538	-	-	-	-
R3510 to R3512	F24	B3 (2 pieces)	WFS508	WR58	-	-	-	-	WN1024
R3520 to R3521	F25	B3	WFS506	WR58	WNC538	-	-	-	-
R3600 to R3608	F25	B5	WF608	-	-	-	-	-	WNF516
R3700 -1	F26	B3-3	-	-	W103214	-	-	-	-
R3700 to R3703	F26	B4	-	WFS500	WNF1012	-	-	-	-
R4120 to R4152	F27	see page F27	-	-	-	-	-	-	-
R4160 to R4162	F29	see page F29	-	-	-	-	-	-	WNF516
R4164	F30	see page F30	-	-	-	-	-	-	WNF516

**B01****BALL BEARING GUIDES**

PART NO.	OUTSIDE DIAM.	INSIDE DIAM.	THICKNESS
B01	1/4"	1/8"	7/64"
B1	3/8"	1/8"	5/32"
B2	3/8"	3/16"	1/8"
B2-1	1/2"	1/8"	11/64"
B3	1/2"	3/16"	5.0mm
B3-1	1/2"	1/4"	3/16"
B3-1A	14mm	7.0mm	5.0mm
B3-1B	14mm	8.0mm	4.0mm
B3-2	5/8"	3/16"	5.0mm
B3-3	5/8"	1/4"	5.0mm
B3-4	16mm	5.0mm	5.0mm
B3-4A	16mm	8.0mm	5.0mm
B3-5	3/4"	3/16"	3/16"
B3-6	19mm	6.0mm	6.0mm
B4	3/4"	1/4"	9/32"
B4-1A	3/4"	1/2"	5/32"
B4-1	22mm	7.0mm	7.0mm
B5	7/8"	5/16"	7.0mm
	(22.20mm)	(7.94mm)	
B6	7/8"	3/16"	6.6mm
B6-1	26mm	10mm	8.0mm
B6-1A	1"	15mm	5.5mm
B6-2	1-1/8"	3/16"	6.6mm
B6-3	28mm	8.0mm	9.0mm
B6-4	1-1/8"	1/2"	5/16"
B6-4A	1-7/32"	5/16"	8.6mm
B6-5	1-1/4"	15mm	8.5mm
B6-5A	1-1/4"	8.0mm	5.0mm
B6-6	1-5/16"	5/16"	8.6mm
B7	35mm	15mm	11.0mm
B8	1-3/8"	3/16"	6.6mm
B10	1-1/2"	15mm	8.5mm
B12	2"	15mm	12.5mm

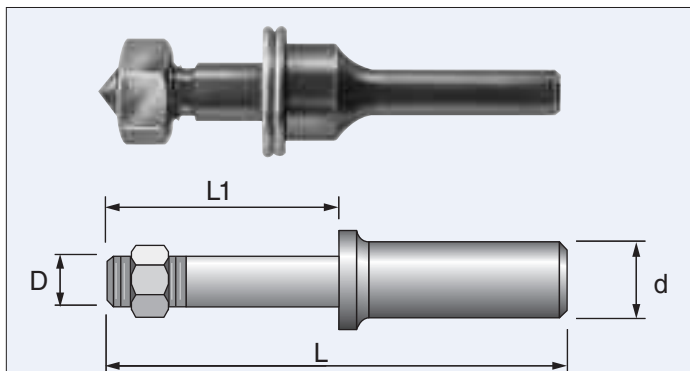
**B20****SUPER-GLIDE  
BALL BEARING ASSEMBLIES**

PART NO.	OUTSIDE DIAM.	INSIDE DIAM.	DEGREE OF TAPER
B20	1/2"	3/16"	0°
B21	25mm	1/4"	5°
B22	3/4"	1/4"	0°
B24	7/8"	1/4"	10°
B26	7/8"	1/4"	5°
B27	27mm	1/4"	0°
B28	28mm	5/16"[8mm]	0°
B30	1-1/8"	15mm	0°
B32	29mm	5/16"[8mm]	0°
B34	34mm	5/16"[8mm]	0°
B36	40.8mm	5/16"[8mm]	0°
B38	43mm	5/16"[8mm]	0°

**B80****SUPER-GLIDE RADIUS  
BALL BEARING ASSEMBLIES**

PART NO.	OUTSIDE DIAM.	INSIDE DIAM.	THICKNESS	RADIUS
B80	27/32"	1/4"	1/4"	1/2"
B82	3/4"	1/4"	1/4"	3/4"
B84	3/4"	1/4"	1/4"	1"

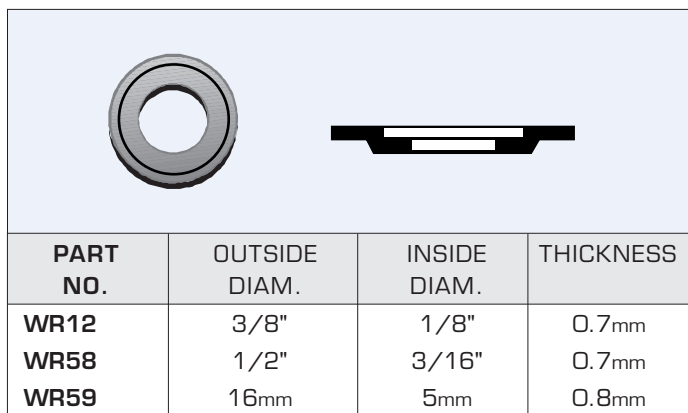


**AR14**
**ARBORS - ROUTER CUTTER  
ARBORS WITH NUT & WASHER**


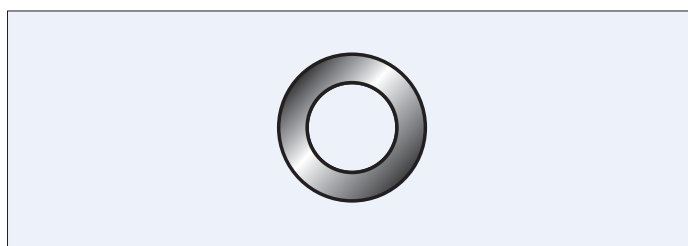
PART NO.	SPINDLE DIAM. (D)	SHANK DIAM. (d)	LENGTH (L1)	OVERALL LENGTH (L)
AR14	5/16"	1/4"	7/8"	2-3/8"
AR13	5/16"	3/8"	1-7/16"	3"
AR12	5/16"	1/2"	1"	2-3/8"
AR11	5/16"	1/2"	1-3/8"	3"
AR20	5/16"	1/2"	2-1/8"	3-3/4"
AR21	5/16"	1/2"	1-1/2"	3-1/8"
AR22	5/16"	1/2"	2-5/8"	4-1/4"
AR23	5/16"	1/2"	1-3/4"	3-5/16"

**WA3814**
**ROUTER BIT ADAPTORS**

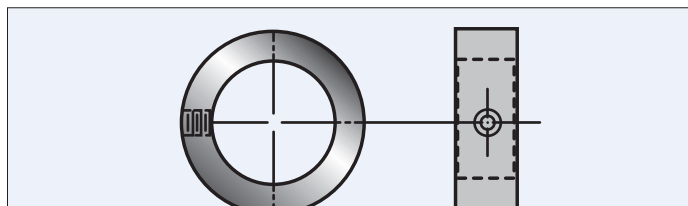

PART NO.	OUTSIDE DIAM. MACHINE COLLET	INSIDE DIAM. ROUTER SHANK	LENGTH
WA3814	3/8"	1/4"	1"
WA1238	1/2"	3/8"	1"
WA1214	1/2"	1/4"	1"

**WR12**
**RAISED WASHERS  
(DUST SHIELDS)**


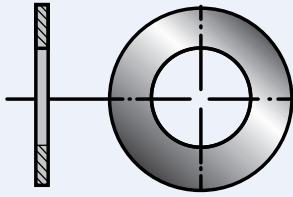
PART NO.	OUTSIDE DIAM.	INSIDE DIAM.	THICKNESS
WR12	3/8"	1/8"	0.7mm
WR58	1/2"	3/16"	0.7mm
WR59	16mm	5mm	0.8mm

**WFS500**
**FLAT/SPRING  
WASHERS**


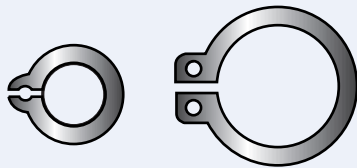
PART NO.	OUTSIDE DIAM.	INSIDE DIAM.	THICKNESS
WFS500	5/16"	3/16"	1.2mm
WFS502	3/8"	1/4"	1.4mm
WFS504	3/16"	7/64"	1/64"
WFS506	1/4"	1/8"	1/64"
WFS508	3/8"	3/16"	1.0mm
WFS510	12mm	5/16"	1.0mm

**W01**
**LOCK RINGS**


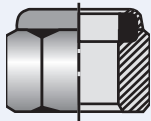
PART NO.	OUTSIDE DIAM.	INSIDE DIAM.	SCREW PART NO.
W01	11mm	1/4"	WNC525
W02	16mm	3/8"	WNC518
W03	21mm	1/2"	WNC518
W04	18mm	1/2"	WNC518

**WF501****SPACERS - SHIMS  
FLAT**

PART NO.	OUTSIDE DIAM.	INSIDE DIAM.	THICKNESS
WF501	12mm	8mm	0.1mm
WF502	12mm	8mm	0.2mm
WF505	12mm	8mm	0.5mm
WF510	12mm	8mm	1.0mm
WF600	5/8"	5/16"	0.05mm
WF604	5/8"	5/16"	0.1mm
WF605	5/8"	5/16"	0.4mm
WF606	5/8"	5/16"	0.5mm
WF608	5/8"	5/16"	1.0mm
WF610	5/8"	5/16"	3.0mm
WF611	5/8"	5/16"	3.15mm
WF612	16mm	5/16"	3.4mm
WF614	1/2"	1/4"	5.0mm
WF616	5/8"	5/16"	5.5mm
WF618	5/8"	5/16"	6.0mm

**WC01****EXTERNAL CIRCLIP**

PART NO.	INSIDE DIAM.	THICKNESS
WC01	3/8"	0.8mm
WC02	1/2"	1.0mm

**WN1024****NYLON INSERT LOCKNUT**

PART NO.	TYPE
WN1024	10-24

**WNC****SCREWS**

PART NO.	SCREW TYPE	SCREW DIAM.	THREADS PER IN.	OVERALL LENGTH
WNC2732	NC2	11/128"	56	7/32"
WNC518	NC5	1/8"	40	1/8" HEADLESS
WNC525	NC5	1/8"	40	2.5mm HEADLESS
WNC338	NC3	0.099"	48	3/8"
WNC538	NC5	1/8"	40	3/8"
WNC512	NC5	1/8"	40	1/2"
WNF1012	NF10	3/16"	32	1/2"
W103214	10/32	3/16"	32	1/4"

**WNF516****HEX NUTS  
FOR ROUTER ARBORS**

PART NO.	DESCRIPTION	APPLICATION
WNF516	5/16-24 NF	All arbors with 5/16-24 NF Thread