

JUARA
BY GRS®



3X STARTER SET

#502-516 • INSTRUCTIONS

XY BALL MOVEMENT

JAWS



Insert 5 mm Hex Key into either side.
Turn to open and close jaws.



X AXIS



Y AXIS



ROTATION



3X MASTER CLAMPS

CLAMP ATTACHMENT



BOTTOM



SIDE

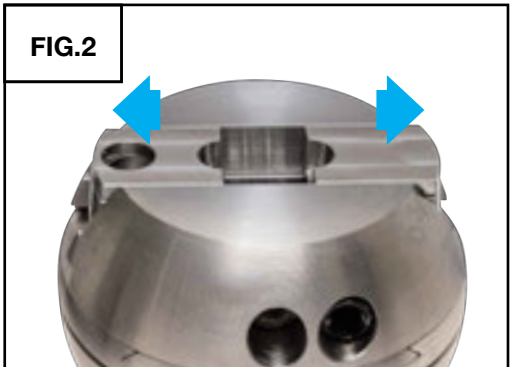
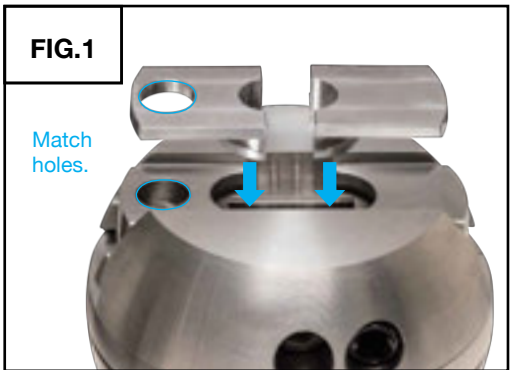


ANGLE

MASTER JAW SEAT



INSTALLATION



3X MASTER CLAMPS + FIXTURES

FIXTURE IN JAWS



The 3X Master Clamps are compatible with the 3X Holder (included).



502-547

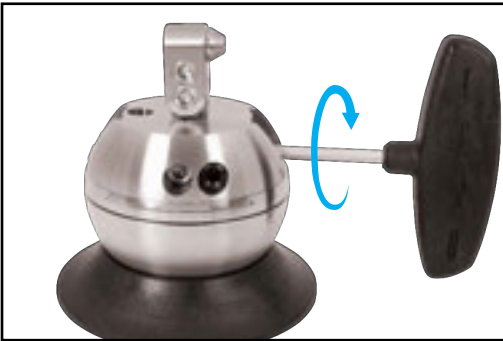
The 3X Master Clamps are also compatible with these 3X fixtures (sold separately).



502-505



502-506



502-507



502-508



502-509



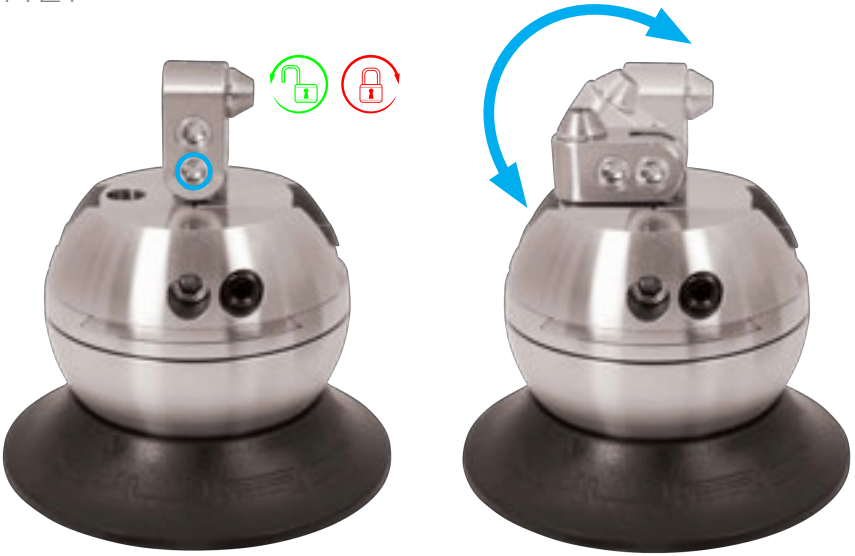
502-082

OPTIONAL



523-520

3X HOLDER MOVEMENT TILT

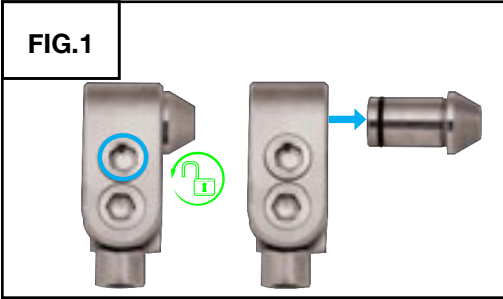


ROTATION

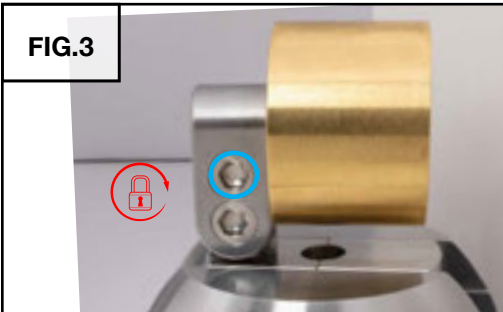
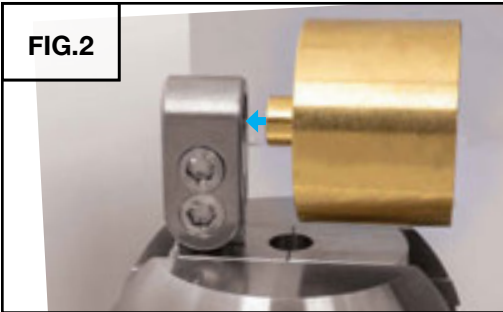
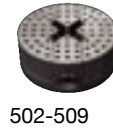
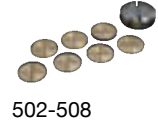


Jaws may need to be loosened slightly to rotate holder.

3X HOLDER + FIXTURES



The 3X Holder is compatible with these 3X fixtures (sold separately).

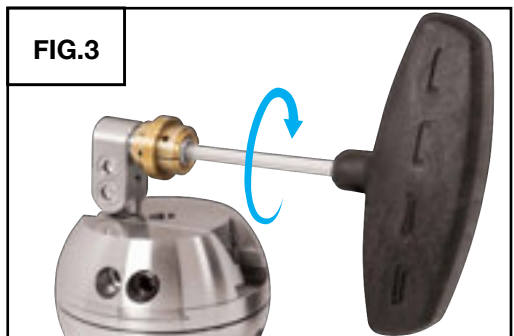
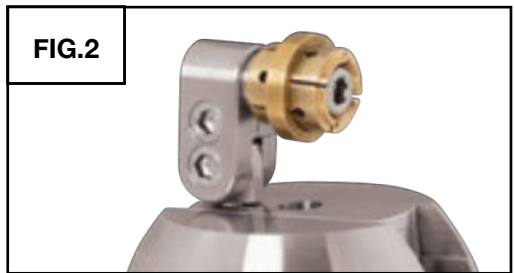
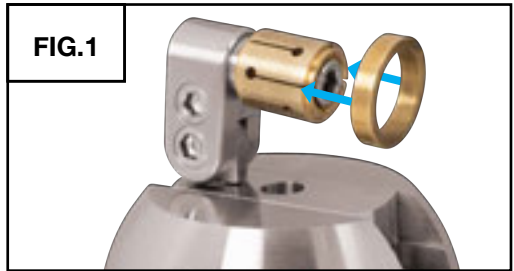
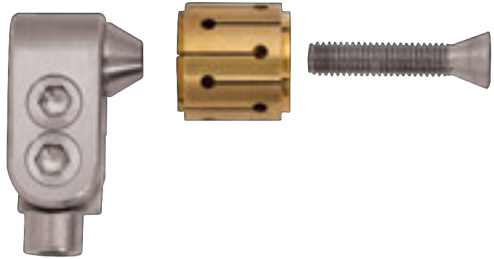


3X HOLDER + COLLETS

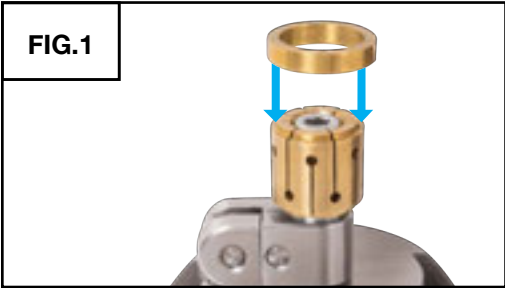
HORIZONTAL RING HOLDING



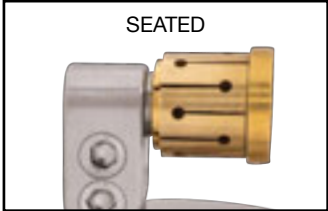
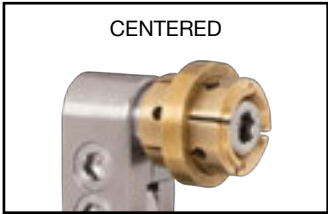
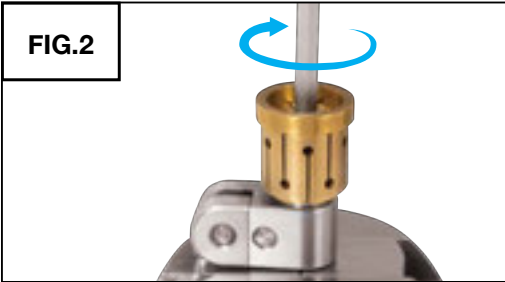
- 502-504 **Brass Collets**
- 500-504 **Plastic Collets**
- 523-059 **Radius Divider**
- 502-004 **Screw**



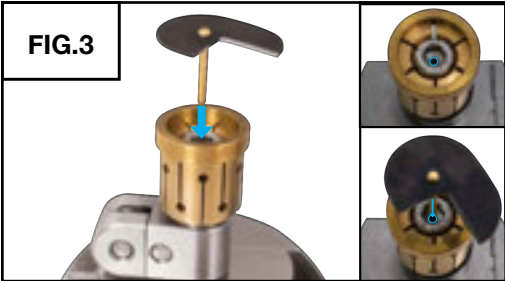
VERTICAL RING HOLDING



The brass collets offer the option of fitting rings to the center of the collet or on the seat on either end.



RADIUS DIVIDER



ORBITAL BALL + JAWS

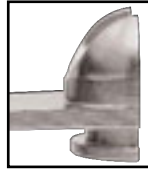
CLAMP ATTACHMENT



Additional Orbital Ball and screw available (500-546).



BOTTOM



SIDE



ANGLE

MASTER JAW SEAT



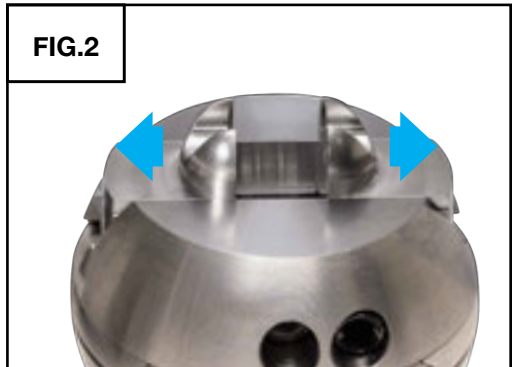
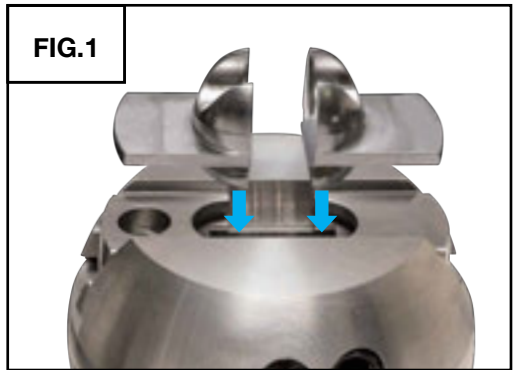
523-034



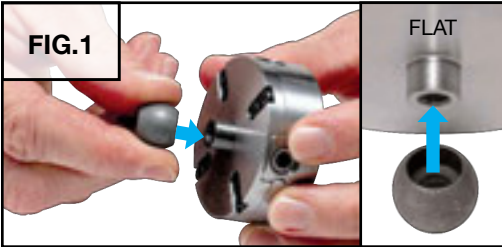
523-033



INSTALLATION



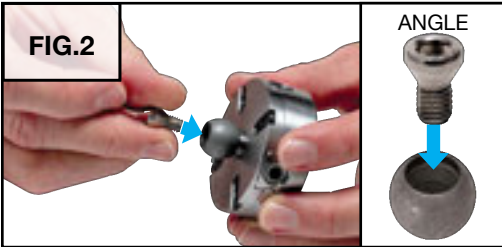
ORBITAL BALL INSTALLATION



The 3X Orbital Ball and Jaws are compatible with the 3X Holder (included).



502-547



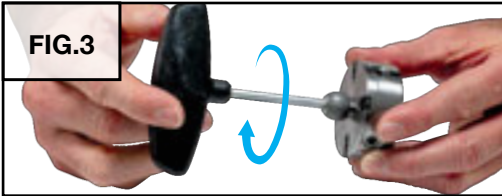
The Orbital Ball and Jaws are compatible with these 3X fixtures (sold separately).



502-505



502-507



502-508



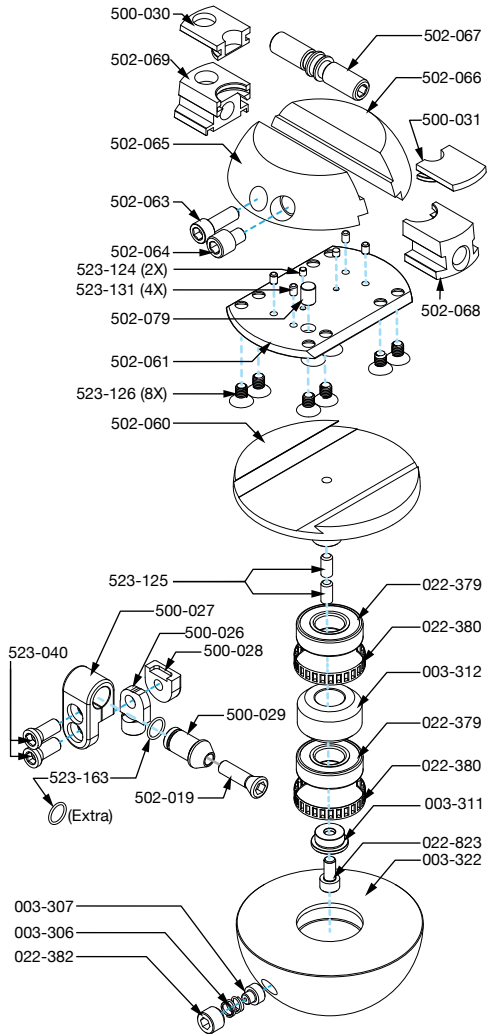
502-509



502-082



PART #	DESCRIPTION	QTY
XY BALL		
003-306	Brake & Drag Spring	1
003-307	Brake Element	1
003-311	Bearing Retainer	1
003-312	Bearing Spacer Brake Rotor	1
003-322	416 Stainless Steel 80 mm Ball Base for Engravable MicroBlock	1
022-379	R8 Shielded Bearing	2
022-380	Tolerance Ring	2
022-382	M10 X 1.5 Flat Nose Set Screw X 8mm	1
022-823	M5 X .8 X 10mm Long SHCS	1
500-030	3x Flat Clamp w/Hole (Left Hand)	1
500-031	3X Flat Clamp w/o Hole (Right Hand)	1
502-060	Dovetail Base & Bearing Mount	1
502-061	Dovetail Plate	1
502-063	Centering Screw	1
502-064	Threaded Eccentric Pin "Lock"	1
502-065	Top Crown Half Locking Side	1
502-066	Top Crown Half Non Locking	1
502-067	Jaw Clamp Screw	1
502-068	Master Jaw Left Hand Thread	1
502-069	Master Jaw Right Hand Thread	1
502-079	Locking Cylinder	1
523-124	M3 X .5 Set Screw 3 mm Long	2
523-125	M5 X .8 Set Screw 10 mm Long	2
523-126	M5x.8 8 mm Long 18-8 Stainless Steel Torx Drive Flat Head Screw	8
523-131	Alloy Steel Dowel Pin 1/8 X 3/16 Plain Finish	4
3X HOLDER		
500-026	3X Mounting Stem & Pivot	1
500-027	3X Holder Body	1
500-028	3X Threaded Clamp Nut	1
500-029	3X Mandrel Expansion Cone	1
523-040	3X Holder Custom-made Screw	2
502-019	M6 Screw with Tapered Head	1
523-163	O-Ring, 8 mm X 1 mm 90 Black	2



The XY Ball is also compatible with these QC Workholding Fixtures (sold separately).



500-001



500-002



500-003



500-004



500-005



500-006



500-007



500-009



500-010



502-078