

Sayber OSG

OPEN SOURCE GRINDER PROJECT

DC1 METALWORK

ID	ITEM DESCRIPTION	QTY	UOM	WHERE USED	SUPPLIER
200	Left frame plate	1	EA	Frame	Water Jet
201	Right frame plate	1	EA	Frame	Water Jet
203	Rear support	1	EA	Frame to pivot	Water Jet
204	Front support	1	EA	Frame to pivot	Water Jet
205	Spacers, 1/2" x 3/8" x 6"	12	EA	Frame	Water Jet
206	Spacers 1.5" x 0.375"	11	EA	Frame	Fabricate from 1/4" schedule 40 pipe
207	Front mount	1	EA	Base	Water Jet
208	Rear mount	1	EA	Base	Water Jet
209	Base	1	EA	Base	Water Jet
210	Support gusset front	1	EA	Base	Water Jet
210	Support gusset rear	1	EA	Base	Water Jet
211	Tracking arm	1	EA	Tracking arm	Water Jet
212	Hinge top	1	EA	Tracking arm	Water Jet
213	Hinge bottom	1	EA	Tracking arm	Water Jet
214	Tracking hinge spacer, 1/4" steel	1	EA	Tracking arm	Water Jet
215	Platen D plate	1	EA	Platen attachment	Water Jet
216	Platen	1	EA	Platen attachment	Water Jet
217	Platen support bracket	2	EA	Platen attachment	Fabricated from 2" angle iron
WHEELS					
600	Tracking wheel, 3" dia. Crowned	1	EA	Tracking arm	Oregon Blade Maker
601	Platen wheel, 2" dia, flat	2	EA	Flat platen D plate	Oregon Blade Maker
602	Drive wheel, 4" dia, 5/8" bore, alum. crowned	1	EA	Motor	Oregon Blade Maker

FASTENERS

ID	ITEM DESCRIPTION	QTY	UOM	WHERE USED	SUPPLIER
401	Socket head capscrew, 1/4" NC x 2.5", SS	21	EA	Frame left and right, various positions	McMaster-Carr 92196A552
402	1/4" NC hex nut, stainless	21	EA	Frame left and right, various positions	McMaster-Carr 92673A113
Base					
403	10-32 x 3/4" pan head screw, Stainless	12	EA	Front and rear mounts to gussets	McMaster-Carr 91772A831
404	10-32 x 3/4" flat head screw, Stainless	6	EA	Base to front and rear mounts/gussets, from underneath base.	McMaster-Carr 91771A831
Tracking Arm to Frame					
405	Hex head capscrew, 1/2" NC x 3", SS	1	EA	Tracking arm pivot	McMaster-Carr 92198A724
406	Nylon locking nut, 1/2" NC, SS	1	EA	Tracking arm pivot	McMaster-Carr 91831A137
407	Flat washer, 1/2" USS, SS	2	EA	Tracking arm pivot	McMaster-Carr 93852A113

408	Flat washer, 1/2" SAE, Zinc	15	EA	Tracking arm pivot	
409	Section of 1" schedule 40 pipe	1.1	Inches	Fabricate from schedule 40 1" pipe	
410	Thin leather or fiber spacer	2	EA	Fabricate from vulcanized fiber spacer material	
414	Bolt, 1/4 NC x 1, SS	2	EA	Spring holding bolts on tension arm	
402	1/4" NC hex nut, stainless	4	EA	Hold spring holding bolts on tension arm	
Wheels					
411	Socket head capscrew, 1/2" NC x 3.5", SS	3	EA	Holding wheels on	McMaster-Carr 92196A726
412	Hex jamb nut, 1/2" NC, stainless steel	4	EA	Use to lock the wheels and mount to the D plate.	McMaster-Carr 91847A520
413	Shim, stainless steel, 0.505" ID x 0.75" OD, 0.06"	6	EA	Spacing the tracking wheel off the lower hinge. As required.	McMaster-Carr 97022A543
Tracking hinge					
414	Bolt, 1/4 NC x 1, SS	2	EA	Tracking hinge top to tracking arm	McMaster-Carr 92240A542
415	Machine screw, 10-32" x 2", socket head, SS	1	EA	Tracking hinge pin	McMaster-Carr 92196A279
Work rest					
218	Tool arm, 1.5" x 20" square alum. 6160T6	2	EA	Flat platen and adjustable work rest	Metal Supermarkets
503	Adjustable handle, 5/16" x 0.75", Zinc	2	EA	Adjustable work rest	McMaster-Carr 64835K69
219	Round bar, 5/8"	16	Inches	Adjustable work rest	Metal Supermarkets
220	Bar stock, 1" x 1.5" x 6" long	1	EA	Adjustable work rest	Metal Supermarkets
416	Sets crew, 1/4" -20 x 3/8" cup point	3	EA	Adjustable work rest	McMaster-Carr 91375A535
221	Work table, aluminum, 1/4" x 9" x 5"	1	EA	Adjustable work rest	Metal Supermarkets
417	Flat head, 1/4"-20 x 3/4", SS	4	EA	Attach table	McMaster-Carr 92210A540
421	Socket head capscrew, 5/16" NC x 2"	1	EA	Adjustable work rest	
Flat platen					
418	Button head capscrew, 1/4" NC x 3/4", SS	2	EA	Platen brackets to D plate	McMaster-Carr 92949A540
419	Flat washer, 1/4", SS	4	EA	Platen brackets to D plate, extra spacer.	McMaster-Carr 90107A029
425	Flat head, 1/4" x 3/4"	2	EA	Platen to platen bracket	
426	Hex nut, 1/4" NC	2	EA	Platen to platen bracket	
Motor and frame mounting					
420	Button head capscrew, 3/8" NC x 1", SS	4	EA	Mounting motor C face to right frame	McMaster-Carr 92949A624
422	Hex head capscrew, 3/8" x 1-1/4", SS	1	EA	Mounting frame mount to support rear	
423	Flat washer, 3/8", SS	1	EA	Mounting frame mount to support rear	
424	Hex nut, 3/8" NC, SS	1	EA	Mounting frame mount to support rear	

OTHER

ID	ITEM DESCRIPTION	QTY	UOM	WHERE USED	SUPPLIER
500	Extension spring, 3" long, 30#	2	EA	Tension to tracking arm	McMaster-Carr 9628K29
501	Adjustable handle, 3/8" x 1.188", Zinc	3	EA	Securing tool arms and mount to support front	McMaster-Carr 6271K62
502	Knob, phenolic, 1/4"-20 x 1" w/1.5" fluted knob	2	EA	Tracking adjust and tilt release.	McMaster-Carr 6479K92
504	Phenolic Tapered Handle, 3/8"-16 x 1/2" 1" Dia	1	EA	Tracking arm	McMaster-Carr 62385K65
505	Paint, Rust-Oleum Universal Hammered Forge	1	CAN	Paint frame and base	Home Depot
506	Loctite red	2	OZ	All mechanical fastening where nylon locking nut is not in use.	Auto parts store

FILE UPDATED: 2017-07-23 DC

R1: Changed ID 401 to 1/4" x 2.5"	DC
R2: Changed 17" aluminum tool arms to 20".	DC
R3: Changed count on 411 and 412 to 21 each.	DC
R3: Added 5/16" capscrew (421) for work rest.	DC
R4: Added 3/8" rear mount fasteners	DC
R4: Added one more 3/8" adjustable handle (501)	DC
R5: Added 1/4" flat heads and nuts for platen	DC
R6: Reduced tubular spacers count from 19 to 11	DC