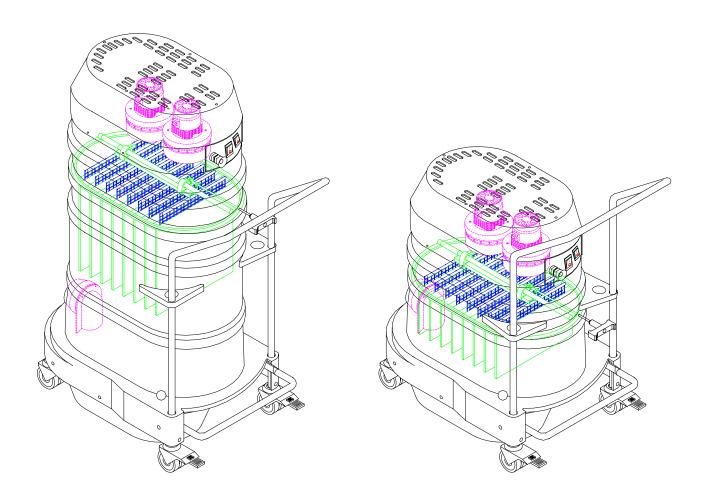
Ruwac_® USA Industrial Vacuums

WS Series

Parts Manual

Model No.	
Serial No.	
Filter No.	
Start-Up Date	



Contents

Warranty Safety Parts <u>I. Warranty</u>

RUWAC warrants that new equipment which are complete units and are sold and/or manufactured by RUWAC, Inc. will be free from defects in material and workmanship for a period of 18 months from date of shipment or 12 months from date of start-up, whichever come first. RUWAC warrants that replacement parts sold hereunder will be free from defects in material or workmanship for a period of 120-days after the date of shipment. RUWAC machines that have been completely re-built at the factory will carry a 180-day warranty from date of shipment. All field repairs preformed by authorized RUWAC service personnel are covered by a 120-day parts only warranty.

RUWAC, Inc. will not assume any responsibility under the terms of this limited warranty on equipment, which has not been paid in full. This warranty does not apply to any equipment that has been disassembled, repaired, or otherwise altered by any person without the written authorization of RUWAC'S service department, nor does it apply to any product that has been subjected to failure due to corrosive or abrasive attack, misused, damaged, or improperly installed, nor does it apply to motors, controls, and components not manufactured by RUWAC, Inc. Motors, controls, and other Sub vendor's components therefor are warranted only to the extent of the manufacture's warranty. All warranty work on such products must be authorized by RUWAC, Inc. and must be performed in an authorized shop as designated by the manufacturer. RUWAC sole liability and buyer's sole and exclusive remedy hereunder is the replacement or repair at RUWAC'S option of products not complying with this warranty. Such repair or replacement shall be F.O.B. RUWAC'S factory, and RUWAC reserves the right to invoice all expenses incurred when repairs are made in the field at the request of the customer, except as specifically set forth herein, RUWAC makes no warranty express or implied, with respect to the products and/or service supplied hereunder, this warranty is in lieu of and excludes all other warranties, including without limitation, any warranty of merchantability, fitness for a particular purpose, or conformance to purchaser's specifications.

II. Safety

CAUTION: Standard Ruwac WS machines are not to be used for the removal of liquids or any volatile, viscous, flammable or explosive media. If you are unsure about your application requirements consult your Ruwac representative.

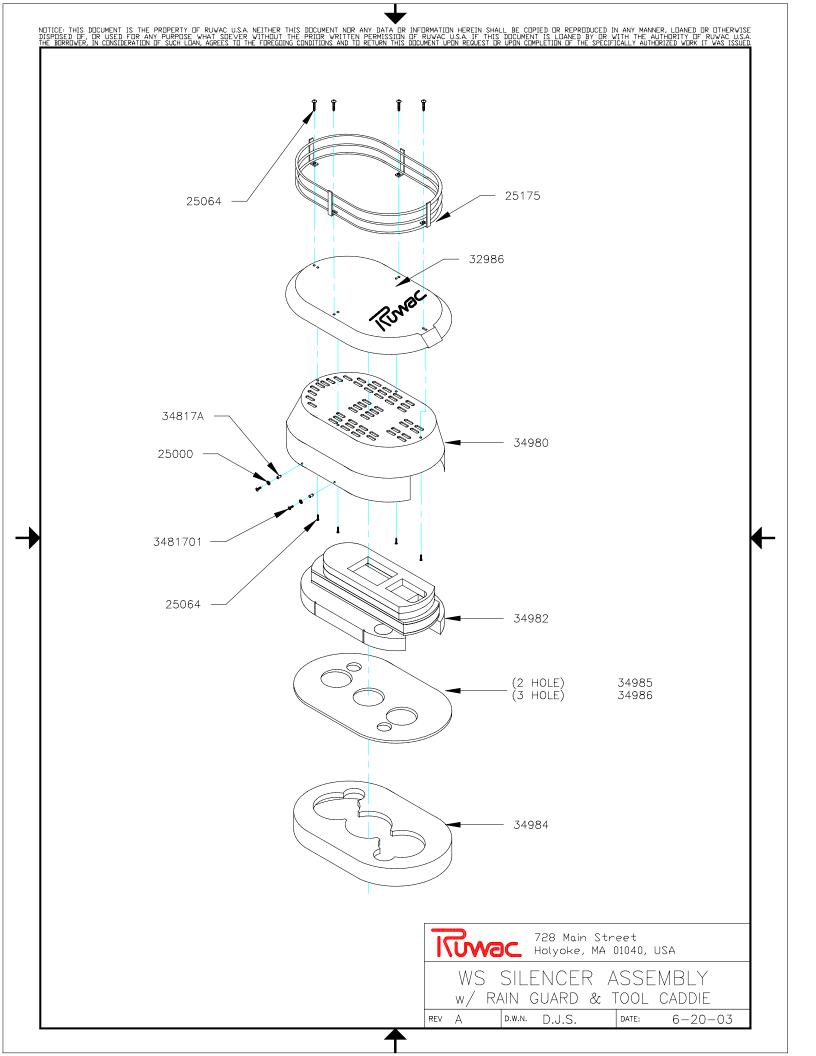
CAUTION: Standard Ruwac WS machines are designed for intermittent use, i.e. not more then 2 hours continuously. If you are unsure about your application requirements consult your Ruwac representative.

CAUTION: A dust mask should be worn when working with used filters.

CAUTION: Disconnect the machine from the power source before and during inspection and/or maintenance.

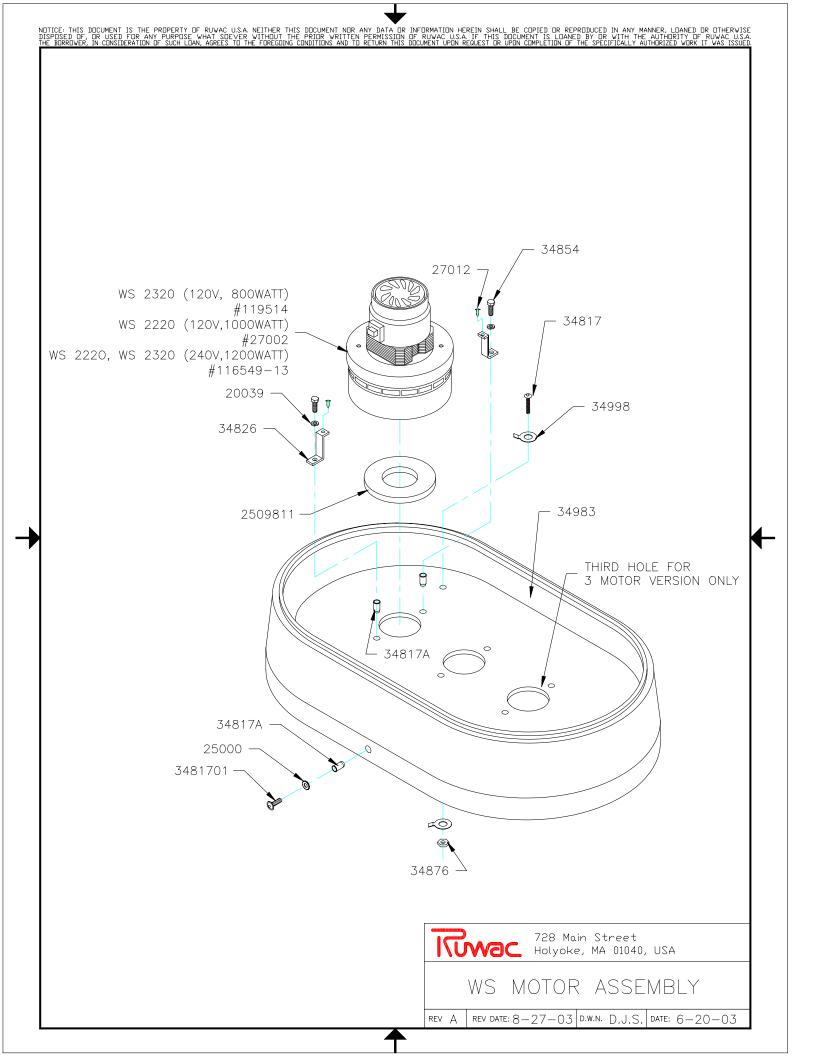
CAUTION: Machines equipped with a reverse pulse module must always be supplied adequately when the machine is on. The module is controlled by an electrical sequential timer (requires a 110 volt power supply) or differential pressure switch. The module itself requires a source of compressed air of 90 PSI at 2-4 CFM (depending on module). This device prevents the accumulation of material on the filter and therefore prevents the machine from being held under excessive stresses due to material blockage.

CAUTION: Machines equipped with a motorized shaker must be supplied with a three phase, 230-460 volt (depending on motor) power supply when ever the machine is on. The motorized shaker is controlled by an electrical sequential timer (requires a 110 volt power supply), a differential pressure switch or a manual switch. Manual switch models should be actuated before and after every use while the vacuum is off. This device prevents the accumulation of material on the filter and therefore prevents the machine from being held under excessive stresses due to material blockage.



WS DIFFUSER ASSEMBLY

PART NUMBER	DESCRIPTION	QTY
25175	TOOL BASKET	1
32986	RAIN GUARD	1
34980	SILENCER HOOD	1
34982	SILENCER FOAM ASSEMBLY	1
34985	AIR CHANNEL PLATE,2 MOTOR	1
34986	AIR CHANNEL PLATE,3 MOTOR	1
34984	FOAM ASSEMBLY FOR MOTORS,LOWER	1
25064	#8 X 5/8 PHIL PAN HEAD,ZINC	8
3481701	M6X25 ALLEN HEAD SCREW	4
25000	1/4" STAR WASHER,EXTERNAL	4
34817A	M6 BLIND PEM	4



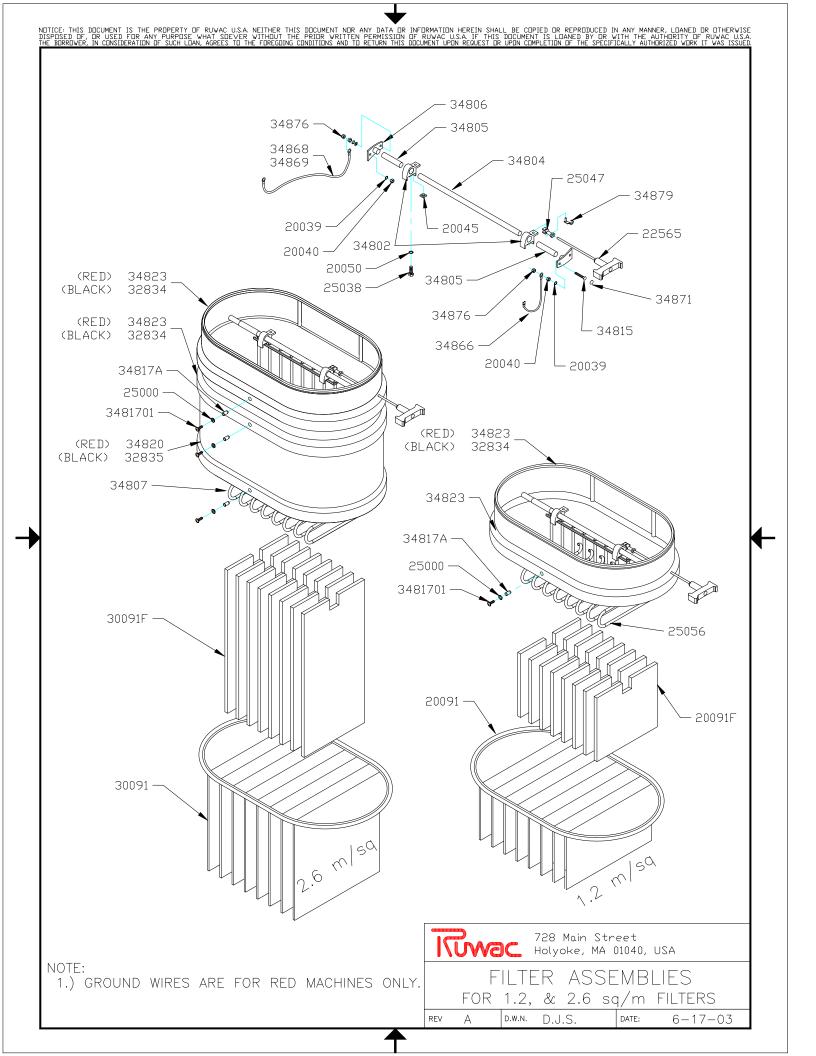
WS MOTOR ASSEMBLY

WS2220 120V, 240V

PART NUMBER	DESCRIPTION	QTY
34854	M6X25 HEX CAP	4
27012	#8 X 1/2" PHIL PAN HEAD,ZINC	4
34817	M6 X 20 ULS ALLEN HEAD SCREW	1
34998	GROUND CONNECTION, FOR BOLT	2
34983	WS MOTOR DECK	1
34876	M6 LOCK NUT,ZINC	1
3481701	M6X25 ALLEN HEAD SCREW	2
25000	1/4" STAR WASHER,EXTERNAL	2
34817A	M6 BLIND PEM	6
2509811	NEOPRENE SPONGE GASKET	2
34826	MOTOR HOLD DOWN BRACKET,WS	4
20039	M6 SPLIT LOCK WASHER	4
116549-13	MOTOR,240V, 1200 WATT	2
27002	MOTOR,120V, 1000 WATT	2

WS2320 120V, 240V

PART NUMBER	DESCRIPTION	QTY
34854	M6X25 HEX CAP	6
27012	#8 X 1/2" PHIL PAN HEAD,ZINC	6
34817	M6 X 20 ULS ALLEN HEAD SCREW	1
34998	GROUND CONNECTION, FOR BOLT	2
34983	WS MOTOR DECK	1
34876	M6 LOCK NUT,ZINC	1
3481701	M6X25 ALLEN HEAD SCREW	2
25000	1/4" STAR WASHER,EXTERNAL	2
34817A	M6 BLIND PEM	8
2509811	NEOPRENE SPONGE GASKET	3
34826	MOTOR HOLD DOWN BRACKET,WS	6
20039	M6 SPLIT LOCK WASHER	6
116549-13	MOTOR,240V, 1200 WATT	3
119514	MOTOR,120V, 800 WATT	3

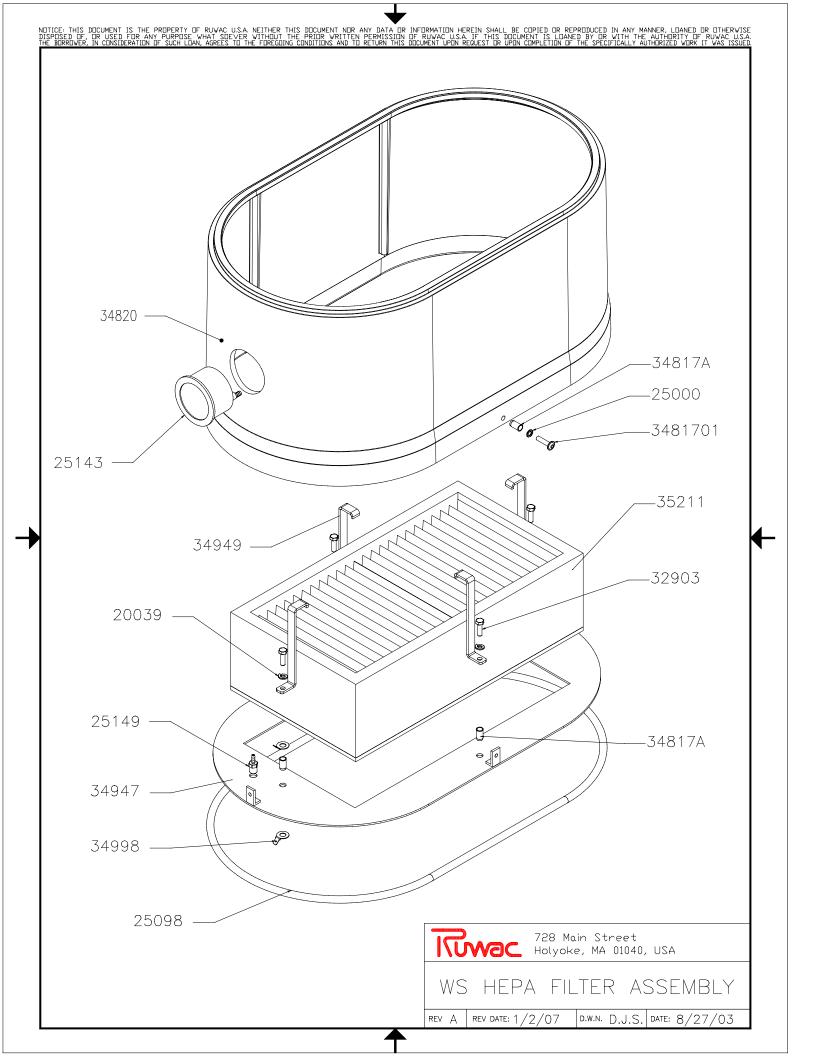


1.2 FILTER ASSEMBLY

PART NUMBER	DESCRIPTION	QTY
34806	SHAKER ROD MOUNTING SUPPORT	2
34805	CLEAR HOSE, 3/4 ID	2
34804	SLIDE BAR	1
25047	STEEL YOKE END	1
34879	SPRING CLIP,6X12	1
22565	SHAKER BAR WITH SWIVEL HANDLE	1
34871	PLASTIC PLUG 4.5/13	4
34815	M6 X 30 ALLEN SCREW COUNTERSUNK	4
20039	M6 SPLIT LOCK WASHER	4
20040	M6 HEX NUT	4
20045	SQUARE NUT, 8MM, ZINC	2
20050	M8 LOCK WASHER	2
34802	SLIDE ASSEMBLY, W/HOOK	2
25038	M8 HEX CAP-1.25X20 ZINC	2
34868	GROUND, DEFLECTOR, 1.2 FILTER, NO GROUND FOR BLACK MACHINES	1
34866	GROUND, SHAKER TO MOTOR DECK, NO GROUND FOR BLACK MACHINES	1
34876	M6 LOCK NUT	2
32834	HOUSING SPACER,SMALL,BLACK	1
34823	HOUSING SPACER,SMALL,RED	1
34817A	M6 BLIND PEM	2
25000	1/4" STAR WASHER	2
3481701	M6X25 ALLEN HEAD SCREW	2
20091	FILTER, 13 SQ/FT, 1.2M2	1
25056	FILTER SHAKER INSERT, 1.2M	1
20091F	FILTER INSERT, 1.2M	1

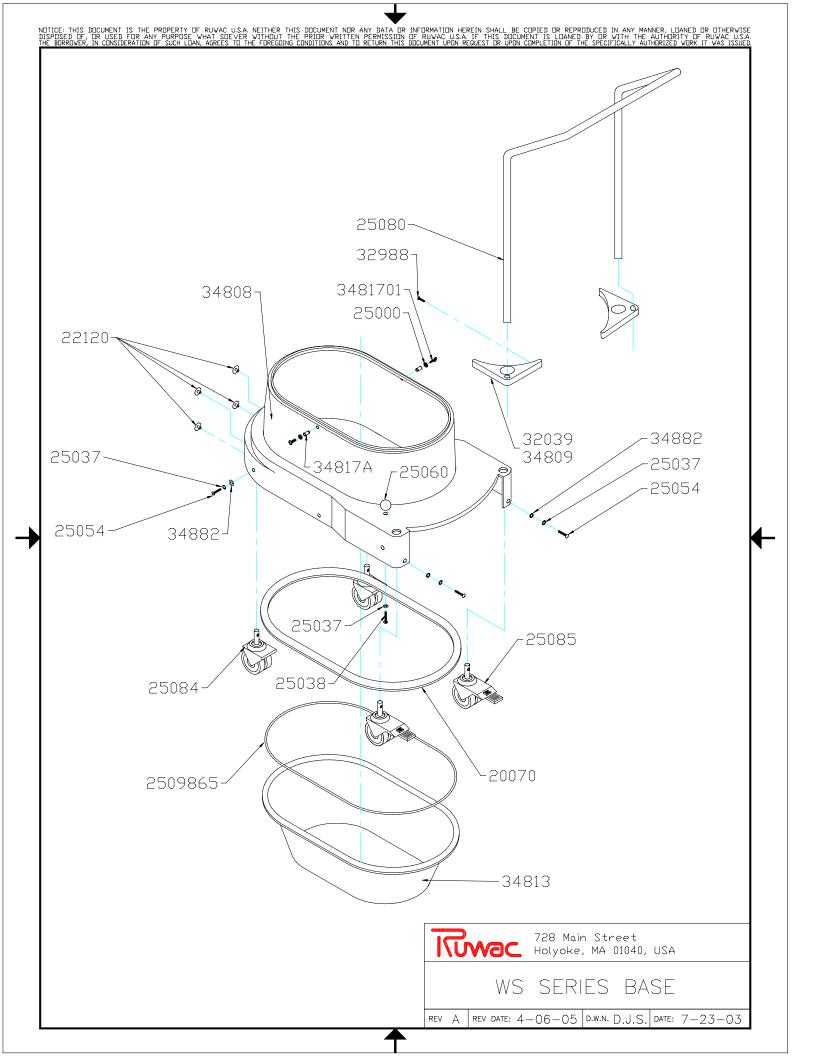
2.6 FILTER ASSEMBLY

PART NUMBER	DESCRIPTION	QTY
34806	SHAKER ROD MOUNTING SUPPORT	2
34805	CLEAR HOSE, 3/4 ID	2
34804	SLIDE BAR	1
25047	STEEL YOKE END	1
34879	SPRING CLIP,6X12	1
22565	SHAKER BAR WITH SWIVEL HANDLE	1
34871	PLASTIC PLUG 4.5/13	4
34815	M6 X 30 ALLEN SCREW COUNTERSUNK	4
20039	M6 SPLIT LOCK WASHER	4
20040	M6 HEX NUT	4
20045	SQUARE NUT, 8MM, ZINC	2
20050	M8 LOCK WASHER	2
34802	SLIDE ASSEMBLY, W/HOOK	2
25038	M8 HEX CAP-1.25X20 ZINC	2
34869	GROUND, DEFLECTOR, 2.6 FILTER, NO GROUND FOR BLACK MACHINES	1
34866	GROUND, SHAKER TO MOTOR DECK, NO GROUND FOR BLACK MACHINES	1
34876	M6 LOCK NUT	2
32834	HOUSING SPACER, SMALL, BLACK	2
34823	HOUSING SPACER,SMALL,RED	2
32835	HOUSING SPACER,LARGE,BLACK	1
34807	HOUSING SPACER,LARGE,RED	1
34817A	M6 BLIND PEM	6
25000	1/4" STAR WASHER	6
3481701	M6X25 ALLEN HEAD SCREW	6
30091	FILTER, 28 SQ/FT, 2.6 M2	1
34807	FILTER SHAKER INSERT, 2.6M	1
30091F	FILTER INSERT,2.6M	1



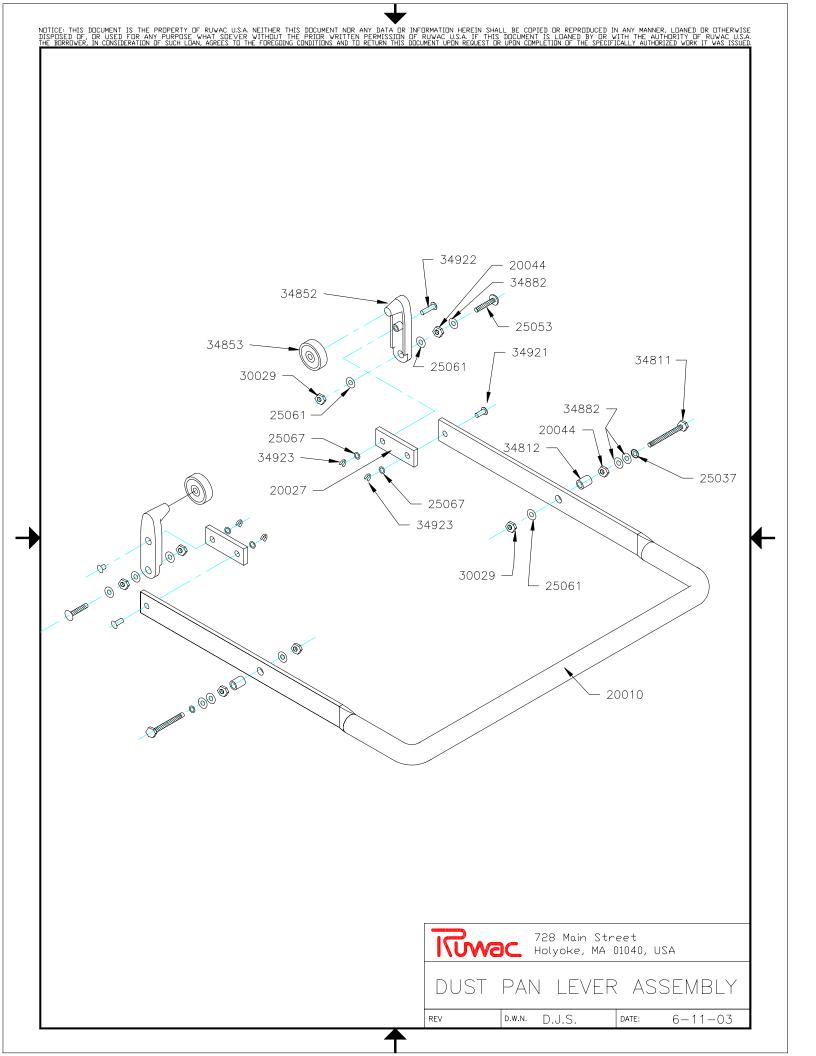
WS HEPA FILTER & MINIHELIC ASM

PART NUMBER	DESCRIPTION	QTY
34817A	M6 BLIND PEM	6
25000	1/4" STAR WASHER,EXTERNAL	2
3481701	M6X25 ALLEN HEAD SCREW	2
35211	HEPA FILTER 40 SQ FOOT,WS,DS1	1
32903	M6X1.0 X 20 HEX CAP SCREW,ZINC	4
34947	HEPA ADAPTER PLATE,DS1	1
20039	M6 SPLIT LOCK WASHER	4
34949	HEPA HOLD DOWN BRACKET	4
34820	HOUSING SPACER,LARGE,RED	1
34998	GROUND CONNECTION, FOR BOLT	2
25098	GASKET,ROUND,10MM	1
25143	MINIHELIC, WITH MOUNTING	1
25149	HOSE BARB ,1/8 NPT X 1/8 BARB	1
34800	CLEAR HOSE, 1/8" ID	0.5



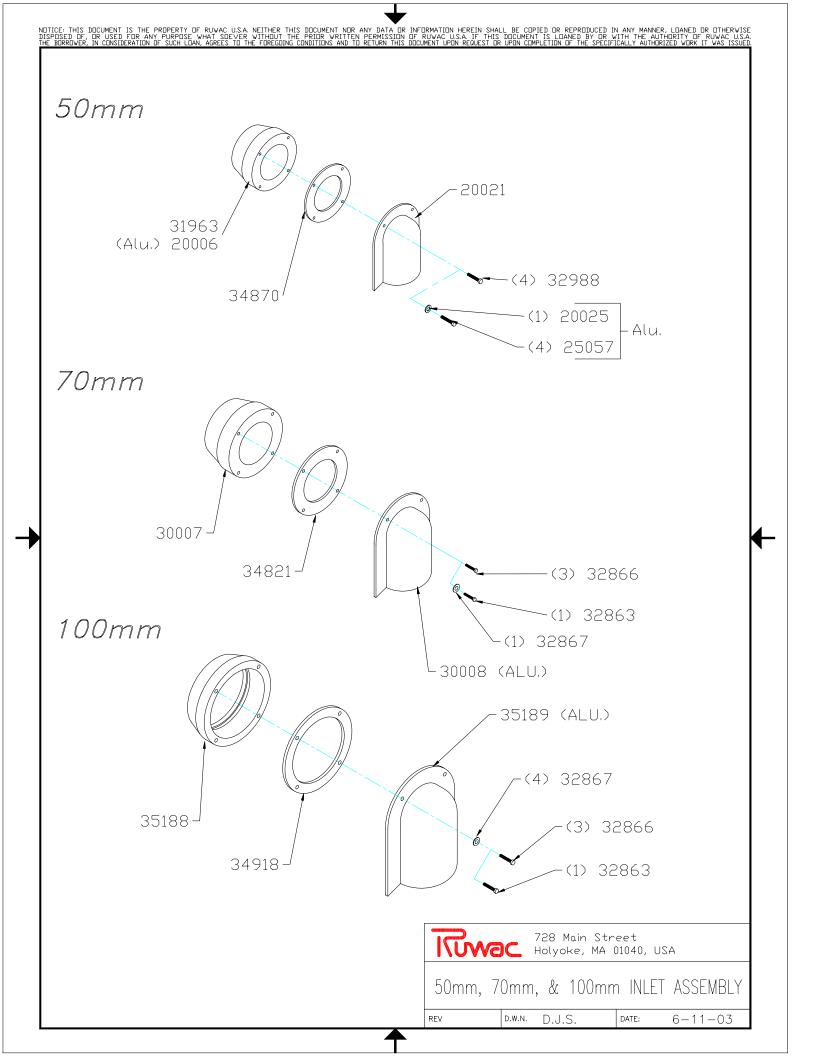
WS BASE ASSEMBLY

PART NUMBER	DESCRIPTION	QTY
25080	PUSH HANDLE	1
32988	#8 X 1 PHIL TRUSS HEAD,ZINC	4
3481701	M6X25 ALLEN HEAD SCREW	2
25000	1/4" STAR WASHER	2
32039	HANDLE SUPPORT,PLASTIC	2
34809	HANDLE SUPPORT,ALUMINUM	2
34882	M8 FLAT WASHER	4
25037	M8 WASHER	5
25054	M8 X 25 HEX BOLT	4
25085	DUAL CASTERS,FIXED,75MM,W/STUD	2
20070	GASKET,DUST PAN/LOWER HOUSING, 20X15MM	1
34813	DUST PAN,35LTR,RED	1
25038	M8 HEX CAP-1.25X20 ZINC	1
25060	KNOB,BLACK,8MM	1
34817A	M6 BLIND PEM	2
25084	DOUBLE CASTERS,SWIVEL,75MM	2
22120	PLUG,8MM,BLACK	4
34808	LOWER HOUSING,RED	1
2509865	DUST PAN REPLACEMENT GASKET	1



DUST PAN LEVER ASSEMBLY

PART NUMBER	DESCRIPTION	QTY
20010	FOOT LEVER	1
25061	M8 FLAT WASHER,ZINC	6
30029	M8 LOCK NUT	4
34923	C SPRING CLIP	4
25067	M6 FLAT WASHER	4
20027	FLAT STEEL PIVOT	2
34853	DUST PAN LEVER BEARING	2
34852	DUST PAN TENSION LEVER	2
34922	PIN,D=6X 19MM	2
20044	M8 HEX NUT -8	4
34882	M8 FLAT WASHER	6
25053	M8 X 35 CARRIAGE SCREW	2
34921	PIN D6X15	2
34812	SPACER FOR FOOT LEVER	2
25037	M8 WASHER,EXTERNAL	2
34811	M8 HEX BOLT,X 55-8.8	2



50mm INLET

PART NUMBER	DESCRIPTION	QTY
31963	INLET,50MM, GFK BLACK PLASTIC	1
20006	INLET,50MM,ALUMINUM	1
34870	GASKET 50MM INLET	1
20021	INLET DEFLECTOR,50MM,METAL	1
32988	#8 X 1 PHIL TRUSS HEAD,ZINC	4
20025	WASHER,STAR LOCKING,M4	1
25057	M4X20 SOCKET SCREW CAP	4

70mm INLET

30007	INLET,70MM,ALUMINUM	1
34821	GASKET,70MM INLET	1
30008	DEFLECTOR,70MM,ALUMINUM	1
32866	M58X30 SOCKET CAP,ALLEN HEAD	3
32863	M58X20 SOCKET CAP SCREW	1
32867	M5 EXT TOOTH LOCK WASHER ZINC	1

100mm INLET

35188	INLET,100MM,ALUMINUM	1
34918	GASKET,100MM INLET	1
35189	DEFLECTOR,100MM,ALUMINUM	1
32867	M5 EXT TOOTH LOCK WASHER ZINC	4
32866	M58X30 SOCKET CAP,ALLEN HEAD	3
32863	M58X20 SOCKET CAP SCREW	1