



## **Harrison Hydra-Gen Ltd.**

Hydraulic Driven AC Generator System

### **Installation and Maintenance Guide**

For Harrison Hydra-gen Model:

#### **HYDRA-QUBE**

(11-07-16) - Spec. A

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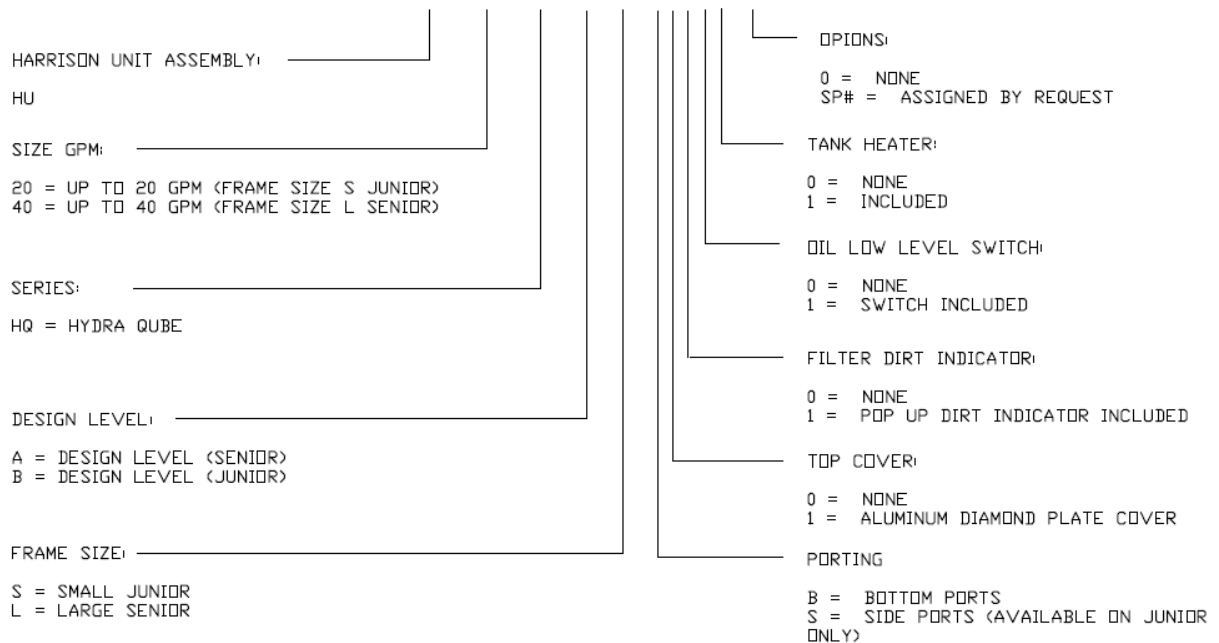
## GENERAL INFORMATION

The Hydra-Qube is a reservoir and cooler packaged in a frame. The Hydra-Qube comes in 2 frame sizes. The Junior is rated for flows up to 20 GPM and the Senior is rated for flows up to 40 GPM. Both the Jr. and the Sr. are supplied with mounting brackets that can be install on the bottom for floor mounting or on the back for wall mounting. **IMPORTANT:** Read this manual before proceeding in the installation of the Hydra-Qube.

## MODEL CODE

### HYDRA QUBE MODEL NUMBER

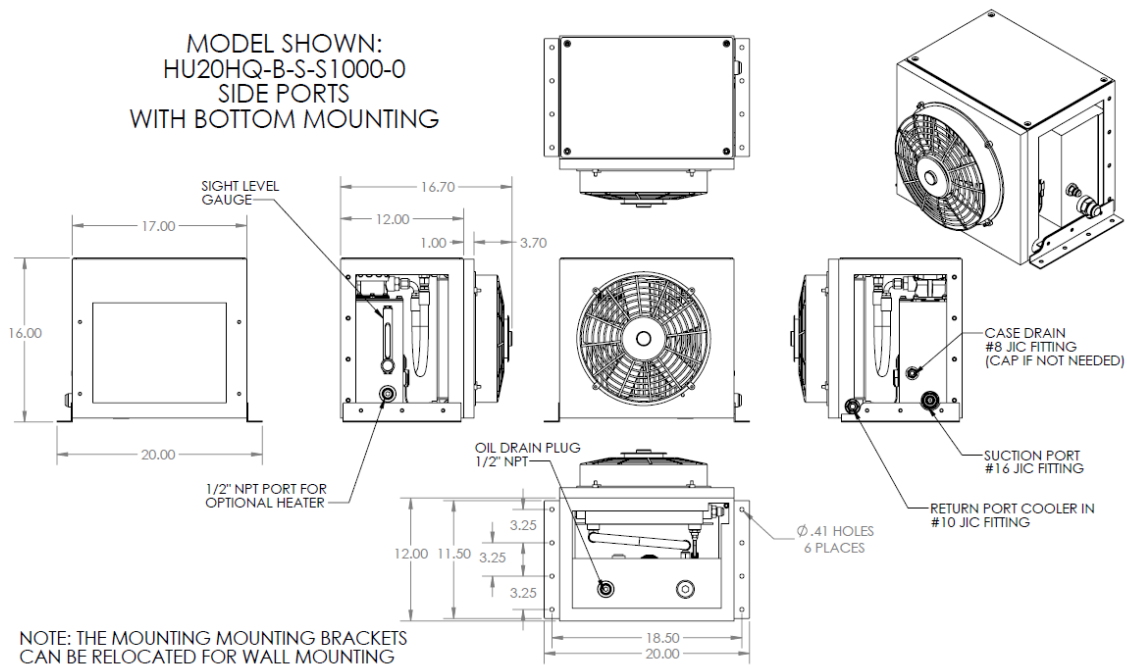
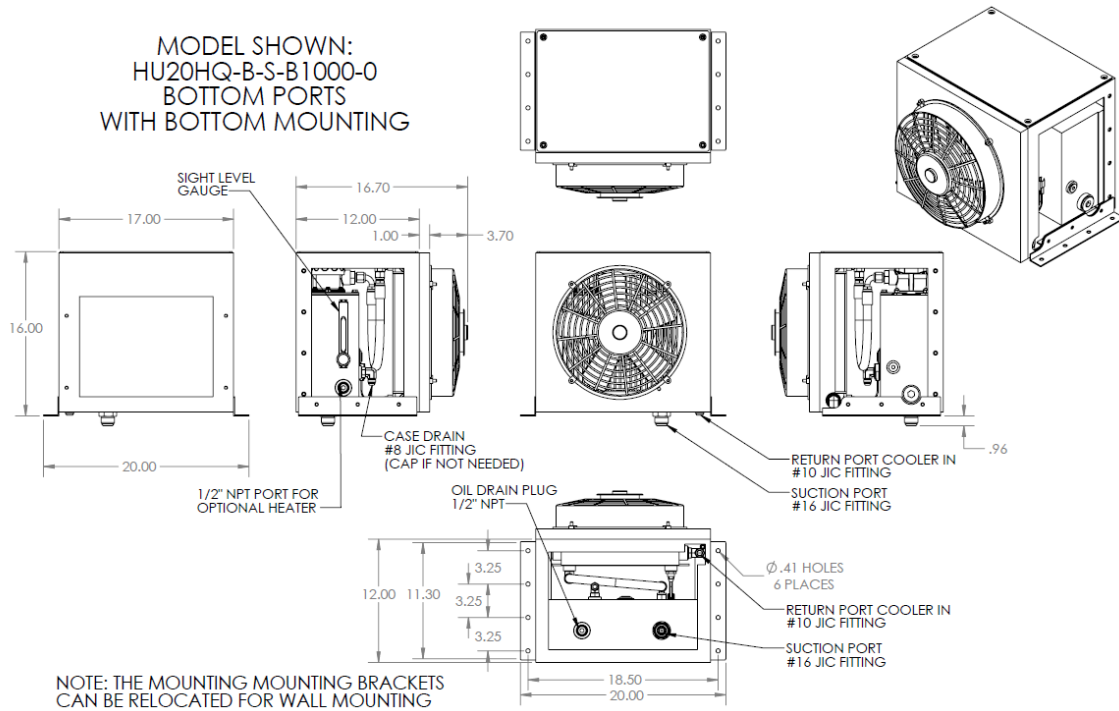
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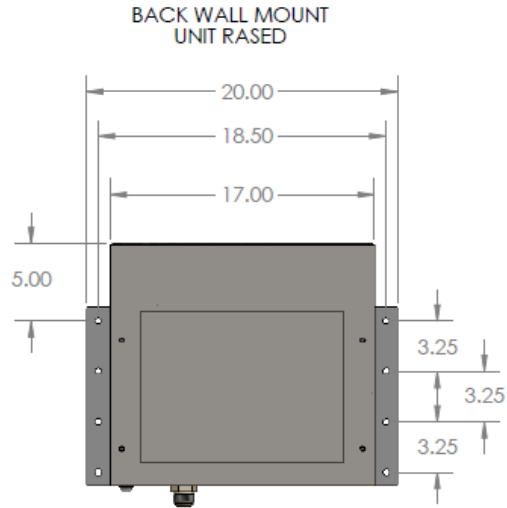
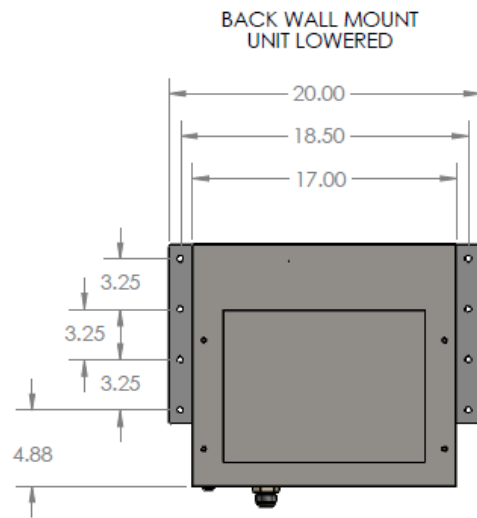


## SPECIFICATIONS

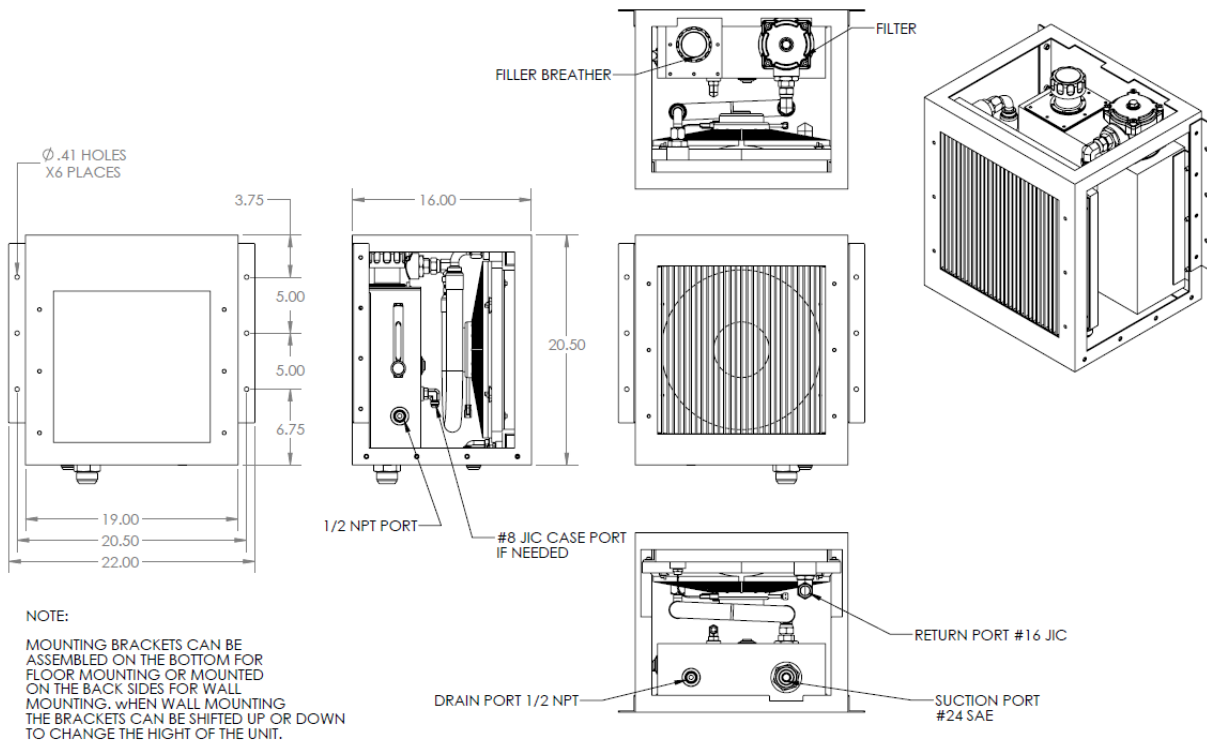
	Junior	Senior
<b>FRAME (LESS BRACKETS)</b>		
Height	15.6	20.5
Width	17.0	19.0
Depth	16.7	16.0
Weight		
<b>RESERVOIR</b>		
Reservoir Tank Size	14.5 W x 11.0 H x 6.0 D	15.0 W x 15.25 H x 6.0 D
Reservoir Volume to fill line	3.2 Gallons	4.75 Gallons
Anti-Splash Filler / Breather	Standard	Standard
In Tank Filter	Standard	Standard
Sight Level Gauge	Standard	Standard
Tank Heater 115 VAC	Option	Option
Low Level Switch	Option	Option
Pop-up Dirt Indicator	Option	Option
<b>COOLER</b>		
Cooler Size	13.42 W x 14.56 H x 2.48 D	
Fan	12 inch	16 inch
Fan Voltage	12 VDC	12 VDC
Thermostat 130°	Standard	Standard

## DIMENSIONS HYDRA-QUBE JUNIOR





## DIMENSIONS HYDRA-QUBE SENIOR



## INSTALLATION JUNIOR

When installing the Hydra-Qube Junior it is important to make sure there is good airflow. Improper installation could cause the system to overheat. Do not restrict the air flow or allow the hot air to wrap around into the fresh air in. Figure 1 below shows the air flow for the Hydra-Qube Junior. Fresh air is pulled in through the bottom and sides. The hot air exhausts out the fan (front face).

The Hydra-Qube must not be mounted in an area that makes it lower than the pump inlet.

The Suction hose port is a #16 SAE and is located on the bottom of the reservoir directly under the filter or out the side. Use only a 100R4 rated hose. **IMPORTANT: You must order the Hydra-Qube with the correct port location. YOU CAN NOT CHANGE THE PORT LOCATION WITHOUT CHANGING THE NOZZLE**

The return hose port is located on the bottom manifold of the cooler. It has a #10 SAE port and will have a fitting facing down for bottom mount or straight out the side.

There is a case drain port on the face of the reservoir between the reservoir and cooler or on the side. This has a #8 JIC fitting. This is used if the pump you are using has a case drain. If there are no case drains, keep this port plugged.

See the dimensional drawings above for port locations.

The fan requires 12VDC. This should be connected to the battery direct. Install a 25 amp fuse at the battery.

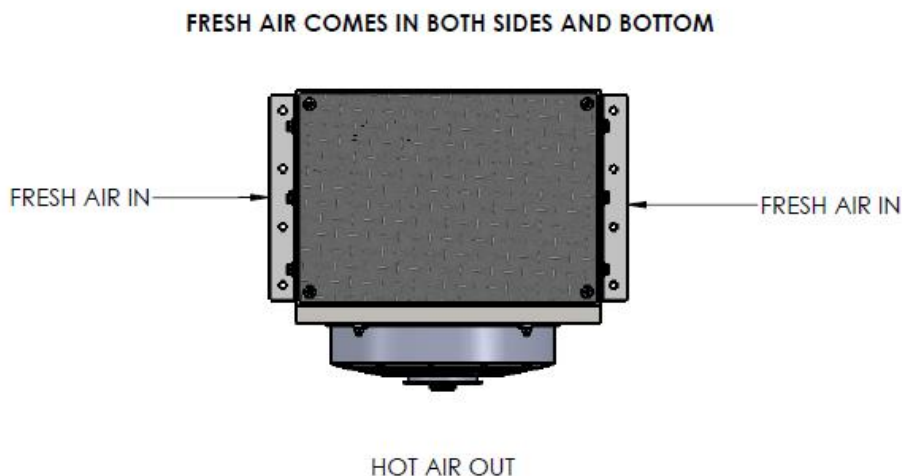


Figure 1

## INSTALLATION SENIOR

When installing the Hydra-Qube it is important to make sure there is good airflow. Improper installation could cause the system to overheat. Do not restrict the air flow or allow the hot air to wrap around into the fresh air in. Figure 2 below shows the air flow for the Hydra-Qube senior. Fresh air is pulled in through the cooler on the front face. The hot air can exhaust out both sides or the top and bottom. It is not necessary to have all four exhausts open. Never block off more than 2 sides. Example: If you are mounting the Hydra-Qube to a floor that has holes cut out for the hoses but otherwise is blocked off and you add a top cover, the side must remain open and not restricted.

The Hydra-Qube must not be mounted in an area that makes it lower than the pump inlet.

The Suction hose port is a #24 SAE and is located on the bottom of the reservoir directly under the filter. Use only a 100R4 rated hose.

The return hose port is located on the bottom manifold of the cooler. It has a #16 JIC fitting.

There is a case drain port on the face of the reservoir between the reservoir and cooler. This has a #8 JIC fitting. This is used if the pump you are using has a case drain. If there is no case drains, keep this port plugged.

The fan requires 12VDC. This should be connected to the battery direct. Install a 30 amp fuse at the battery.

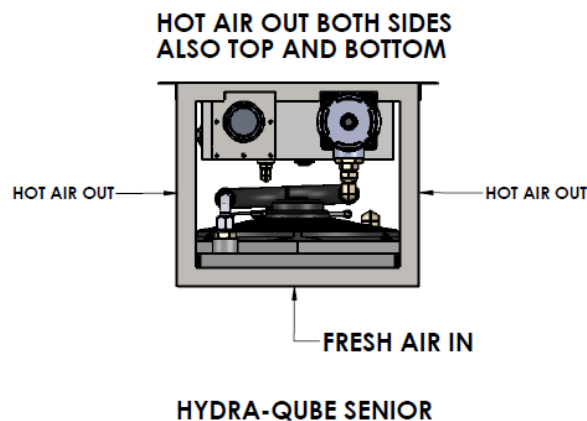
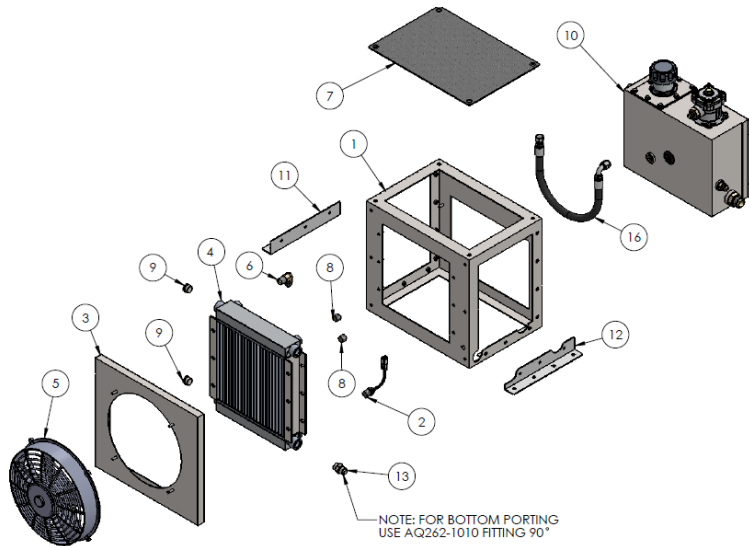


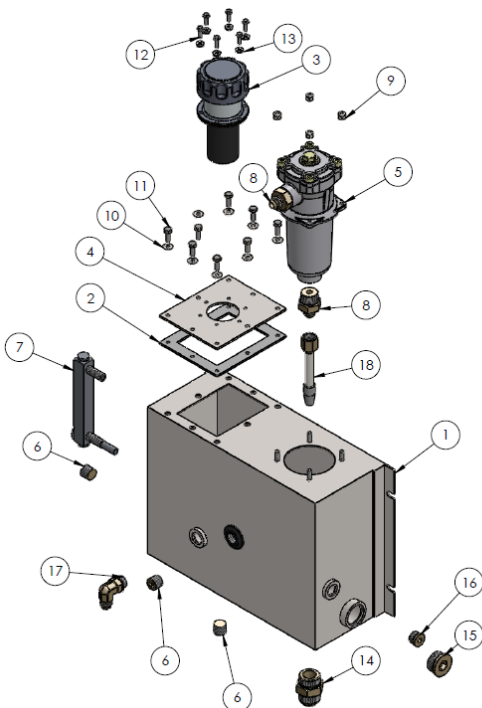
Figure 2

## HYDRA-QUBE JUNIOR PARTS LIST



### HYDRA-QUBE JUNIOR PARTS LIST HU20HQ-B-S-S1000 SHOWN

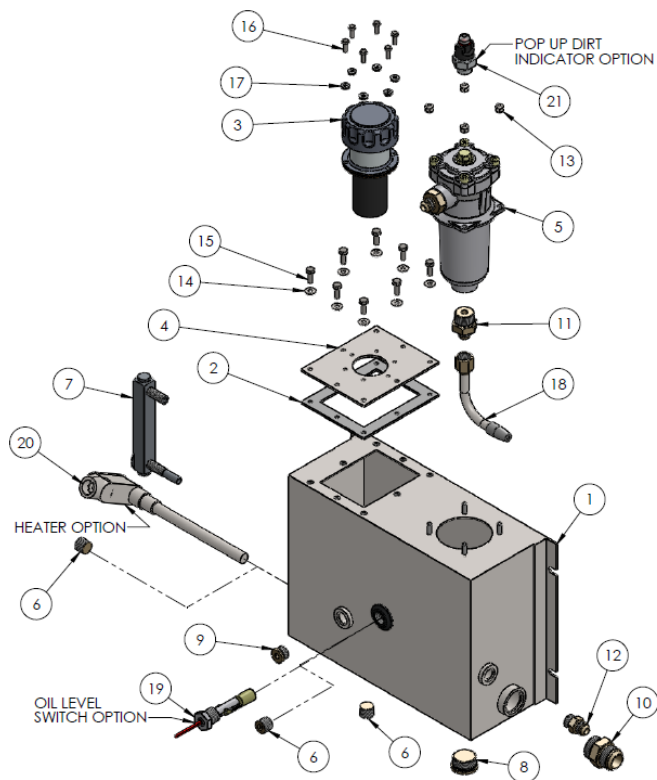
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	SM513-1290	HYDRA-QUBE JR FRAME	1
2	HP990-130T	THERMOSTAT	1
3	SM513-1289	FAN DUCT	1
4	WO990-3312	COOLER CORE	1
5	WO990-3312	12 VDC COOLER FAN	1
6	AQ224-0808	FITTING	1
7	SM513-1286	TOP COVER PLATE	1
8	AQ222-0800	1/2" NPT PIPE PLUG	2
9	AQ238-1000	#10 HOLLOW HEX PLUG	3
10	HP513-1003	RESERVOIR ASSEMBLY	1
11	SM513-1294	MOUNTING BRACKET	1
12	SM513-1293	MOUNTING BRACKET	1
13	AQ270-1010	#10 SAE TO #10 JIC FITTING	1
16	CR8210-3948	HOSE ASSEMBLY	1



### HYDRA-QUBE RESERVOIR CODE B HP513-1003 PARTS LIST

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	SM513-1291	HYDRA-QUBE JR TANK	1
2	CT330-4710B	INSPECTION PLATE GASKET	1
3	HC356-5715	FILLER BREATHER	1
4	SM415-1028	INSPECTION PLATE	1
5	WO206-1100	FILTER ASSEMBLY	1
6	AQ222-0800	1/2" NPT PIPE PLUG	3
7	WO990-4320	SIGHT LEVEL GAUGE	1
8	AQ270-1208	#12 SAE TO #8 JIC FITTING	2
9	DF990-5021	1/4 - 20 NYLOCK NUT	4
10	DF990-4010	BONDED WASHER	8
11	1/4 - 20 X 3/4	HEX HEAD BOLT	8
12	10 - 32 X 5/8	HEX WASHER SCREW	6
13	DF990-8818	BONDED WASHER	6
14	AQ270-1616	#16 SAE TO #16 JIC FITTING	1
15	AQ238-1600	#16 SAE HOLLOW HEX PLUG	1
16	AQ238-0800	#8 SAE HOLLOW HEX PLUG	1
17	AQ262-0808	#8 SAE TO #8 JIC 90 FITTING	1
18	CODE - B	TUBE ASSEMBLY	1
N/S	WO206-2200	FILTER ELEMENT	1

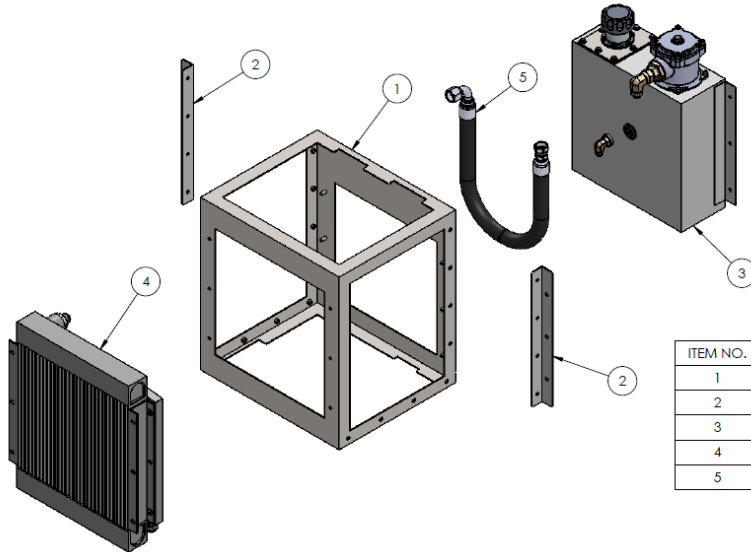




**HYDRA - QUBE RESERVOIR CODE - S  
HP513-1003  
PARTS LIST  
SHOWN WITH OPTIONS**

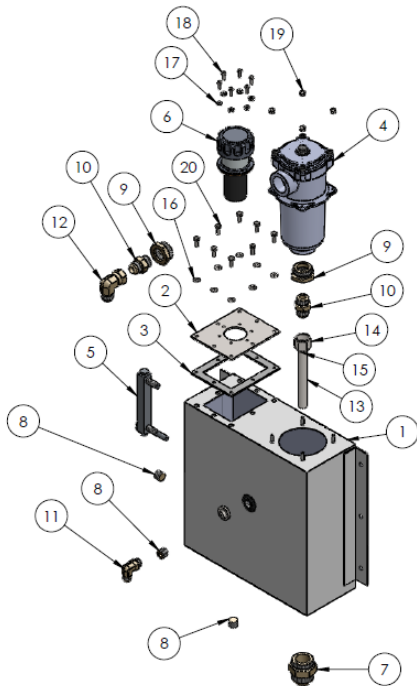
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	SM513-1291	HYDRA-QUBE JR TANK	1
2	CT330-4710B	INSPECTION PLATE GASKET	1
3	HC356-5715	FILLER BREATHER	1
4	SM415-1028	INSPECTION PLATE	1
5	WO206-1100	FILTER ASSEMBLY	1
6	AQ222-0800	1/2" NPT PIPE PLUG	3
7	WO990-4320	SIGHT LEVEL GAUGE	1
8	AQ238-1600	#16 SAE HOLLOW HEX PLUG	1
9	AQ238-0800	#8 SAE HOLLOW HEX PLUG	1
10	AQ270-1616	#16 SAE TO #16 JIC FITTING	1
11	AQ270-1208	#12 SAE TO #8 JIC FITTING	2
12	AQ270-0808	#8 SAE TO #8 JIC FITTING	1
13	DF990-5021	1/4 - 20 NYLOCK NUT	4
14	DF990-4010	BONDED WASHER	8
15	1/4 - 20 X 3/4	HEAX HEAD BOLT	8
16	10 - 32 X 5/8	HEX WASHER SCREW	6
17	DF990-8818	BONDED WASHER	6
18	CODE - S	TUBE ASSEMBLY	1
19	HY560-5510	OIL LEVEL SWITCH	1
20	WO990-ET21	120 VAC HEATER	1
21	WO206-VR2B	VISUAL DIRT INDICATOR	1

## HYDRA-QUBE SENIOR PARTS LIST



**HYDRA-QUBE SENIOR  
PARTS LIST  
HU40HQ-A/L-B0000-0  
SHOWN**

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	SM512-1266	FRAME	1
2	SM512-1268	MOUNTING BRACKET	2
3	HP512-1001	RESERVOIR ASSEMBLY	1
4	HP512-3120	COOLER ASSEMBLY	1
5	CR2315-3948	HOSE ASSEMBLY	1



**HYDRA-QUBE SENIOR RESERVOIR  
HP512-1001  
PARTS LIST**

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	SM512-1283	HYDRA-QUBE SENIOR TANK	1
2	SM415-1028	INSPECTION PLATE	1
3	CT330-4710B	INSPECTION PLATE GASKET	1
4	WO206-2400	FILTER ASSEMBLY	1
5	WO990-4320	SIGHT LEVEL GAUGE	1
6	HC356-5715	FILLER BREATHER	1
7	AQ270-2424	#24 SAE TO #24 JIC FITTING	1
8	AQ222-0800	1/2" NPT PIPE PLUG	3
9	AQ561-2012	#20 SAE TO #12 SAE REDUCER	2
10	AQ270-1212	#12 SAE TO #12 JIC FITTING	2
11	AQ262-0808	#8 SAE TO #8 JIC 90 FITTING	1
12	AQ271-1212	#12 SWIVEL 90	1
13	AQ250-0050	1/2 TUBE 6 3/4 LONG	1
14	AQ129-1200	#12 NUT	1
15	AQ900-1200	#12 SLEEVE	1
16	DF990-4010	BONDED WASHER	8
17	DF990-8818	BONDED WASHER	6
18	10-32 x 5/8	HEX WASHER SCREW	6
19	DF990-50Z1	1/4 - 20 NYLOCK NUT	4
20	1/4-20 x 3/4	HEX HEAD BOLT	8