HYTORC

TOOL MODEL: AVANTI 20

PRESSURE/TORQUE CONVERSION CHART

Standard Torque Chart

PRESSURE IN PSI	TORQUE IN FT.LBS.	TORQUE IN KGM	TORQUE IN NM	PRESSURE IN BAR
1500	2760	382	3741	104
1600	2944	407	3991	110
1800	3312	458	4490	124
2000	3680	509	4989	138
2200	4056	561	5498	152
2400	4432	613	6008	165
2600	4808	665	6518	179
2800	5184	717	7027	193
3000	5560	769	7537	207
3200	5929	820	8037	220
3400	6298	871	8538	234
3600	6667	922	9038	248
3800	7036	973	9538	262
4000	7405	1024	10038	276
4200	7754	1072	10511	290
4400	8103	1121	10984	303
4600	8452	1169	11458	317
4800	8801	1217	11931	331
5000	9150	1265	12404	345
5200	9501	1314	12880	358
5400	9852	1363	13355	372
5600	10203	1411	13831	386
5800	10554	1460	14307	400
6000	10905	1508	14783	414
6200	11241	1555	15238	427
6400	11577	1601	15694	441
6600	11913	1648	16149	455
6800	12249	1694	16605	468
7000	12585	1741	17060	482
7200	12918	1787	17512	496
7400	13251	1833	17963	510
7600	13584	1879	18414	524
7800	13917	1925	18866	538
8000	14250	1971	19317	552
8200	14614	2021	19811	565
8400	14978	2071	20304	579
8600	15342	2122	20798	593
8800	15706	2172	21291	607
9000	16070	2222	21784	620
9200	16434	2273	22278	634
9400	16798	2323	22771	648
9600	17162	2374	23265	662
9800	17526	2424	23758	676
10000	17890	2474	24252	690

* ISO DOCUMENT 9000

REV. 10/04

IMPORTANT SAFETY INSTRUCTIONS

WARNING: Your **HYTORC TORQUE MACHINE** is a power tool, and as with any power tool, certain safety precautions should be observed to avoid accidents or personal injury. The following tips will assist you.

- **READ ALL INSTUCTIONS.**
- **KEEP WORK AREA CLEAN AND WELL LIT.**
- **CONSIDER WORK AREA ENVIRONMENT.**Electrical Pumps should never be used in an atmosphere which can be considered potentially volatile. If there is any doubt, use an air pump. Also Note: metal to metal contact can cause sparks, precautions should be taken.
- **AVOID PREMATURE TOOL STARTING.** The Pump Remote Control is for the **TOOL OPERATOR** only.
- **STAY CLEAR DURING OPERATION.** In most cases, the tool will allow “hands free” operation. If the tool must be held or steadied during operation, use alternative means of securing the tool to the application
- **GUARD AGAINS ELECTRIC SHOCK.** Ensure the pump is properly grounded and the proper voltage is being used
- **STORE IDLE TOOLS.** When not in use, tool sand accessories should be properly stored to avoid deterioration
- **USE RIGHT TOOL.** Don’t force small tools or attachments to do the job of a larger tool. Don’t use a tool for purposes not intended.
- **PROPER SAFETY ATTIRE.** When handling/operating hydraulic equipment use work gloves, hard hats, safety shoes and other applicable clothing.
- **USE SAFETY GLASSES.**
- **MOVING EQUIPMENT.** Do not use hydraulic hoses, uni-swivels, pump power or remote cords as means of moving the equipment.
- **MAINTAIN TOOLS WITH CARE.** For top performance, inspect tools, powerpack and accessories for visual damage frequently and always prior to use. Always follow instruction for proper tool and pump maintenance. Refer to the Operations Maintenance Section for further clarification
- **STAY ALERT.** Watch what you are doing. Use Common sense. Do not use power equipment under the influence of any mood altering substances.
- **PRIOR TO OPERATION**
    - Ensure that all hydraulic connections are securely connected and there is no leakage
    - Verify that the Hydraulic hoses are not kinked or otherwise damaged.
    - Ensure the square drive and its retainer are fully and securely engaged.
    - Be certain that all connectors, elbows, fitting and swivels are not bent, loose or damaged.
- **PRIOR TO USE.**
    - Check sockets for size, quality and flaws. (Do not use if questionable)
    - Cycle tool to ensure proper function.
    - Locate a solid, secure reaction point.
    - Be sure the reaction arm retaining clamp is fully engaged.
    - Be sure the hydraulic hoses are free of the reaction point.
    - Pressurize the system momentarily; if the tool tends to “ride up” or to “creep”, stop and re-adjust the reaction arm to a more solid andsecure position.

  NOTE: Remain clear of the reaction arm during operation and never put body parts between reaction arm and reaction surfaces.
- **ALWAYS USE QUALITY ACCESSORIES.** Always use top quality impact sockets in good condition which are the correct size and fully engage the nut. Hidden flaws, however, remain a possibility which could cause breakage, so stay clear of sockets during operation
- **DO NOR USE** other equipment to enhance performance (Hammer on Socket/Tool)**NOTE:** Hytorc Pumps are designed to operate Hytorc Tools only. Damage may occur to the pump or the product that is being operated due to misuse.

SAVE THESE INSTRUCTIONS FOR FUTURE USE!