

IDENTIFYING AND OPERATING HYTORC TOOLS



This is the Hytorc Avanti

It is a true multi-purpose tool and the most versatile Hytorc ever. This tool represents the state of the art in hydraulic torque/tension tools.

The secret of its versatility lies in its double spline drive and housing design. The center drive turns inside the outer reaction member opening the possibility for unlimited accessories for any bolting operation without changing the power head.



All of this happens without passing the twisting force through the body of the tool as with other tools.

Like the older style tools you choose “on” or “off” by placing the drive in the appropriate side of the tool. Looking down on the socket note the direction the drive will be turned as the piston advances. This is marked for you on the side of the Avanti.



You still have the 360x180 degree uniswivel and the release levers for your convenience.



But most importantly, the Avanti has the capability not only to handle your standard bolting using a reaction arm but to give you the future in bolting with the revolutionary LoadDisc and the worlds most perfect tensioner, the Hytorc Clamp.



The speed champion in the Hytorc stable is the sleek XXI the hydraulic wrench for the 21st century.



Like the Avanti it incorporates the double splined drive but unlike any other tool its internal design requires no “return stroke” of the drive.

Press the actuator and the drive goes forward. Release it, and the drive goes forward again, as fast as you can push and release the button! It even has a special “auto cycle” mode that lets the wrench operate continuously without the operator having to cycle the tool!



Releasing the XXI is a snap, with the sliding lever on top.

The XXI is designed specifically to give you the fastest application of the LoadDisc and Clamp.

All Hytorc tools come in a range of sizes to fit the torque or tension requirements of the job. You choose the right tool for your needs.

The number in the tool model represents approximately the maximum

ft/lb output of that tool in thousands. For example the Avanti-10 is capable of roughly 10,000 ft/lbs of torque.



This is the slim-line Hytorc Stealth most advanced narrow clearance tool on the planet.

It allows you to reach into tight areas where a socket style tool could never fit.



It also solves the problem of how to reach a nut on a long protruding stud.

And because it lays flat against a flange, within the height of the nut and applies its force “in-line” it gives a higher torque output for its size and cost, and is ideal for multi-tool applications and “hands free” operation.

It clicks apart to change sizes or accessories and there is no pin to lose or drop into your work.

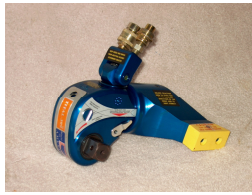


Like the XXI it can operate in the full automatic mode.

You may have occasion to use some of the earlier model narrow clearance tools such as the XLCT or even the ULC.

Contact your Hytorc representative for specific questions or torque charts for these tools.

This is the Hylorc MXT



It represents the best of a generation of single purpose square drive hydraulic wrenches with reaction arms. Although not the state of the art it was the largest selling model in history and you may find them on many of the jobs where you work.



Inside is a piston that is advanced and retracted by oil delivered from the pump through a pair of high pressure hoses.



Notice that the square drive is reversible depending on whether you want to loosen or tighten a bolt.



Since the drive is offset from the piston – if the piston goes forward as you look down on the socket, the drive will be turning clockwise.



If you look down on the socket in this case, the drive will move counter-clockwise – loosening the bolt. Reverse it and it will move clockwise, tightening the bolt.



The reaction arm blocks the wrench against a stationary object such as the next nut on a flange. It is easily adjusted with just the click of a trigger to one of 60 positions. It is designed to be used with the arm pointing in the same direction as the drive and socket do that the reaction point is in the same plane as the force being applied to the nut or bolt head. In this way you minimize side load and improve the accuracy of



the applied torque.

The uniswivel hose connector not only rotates 360 degrees but it also lays over so that the hoses do not interfere with the tool.

On either side is a lever to release the ratchet inside should the wrench get in a bind due to spring-back torsion in the bolt. Earlier versions of this tool include the XLT and even the SL which although not as advanced are still durable enough that you may run into them in your work.



This is the flagship of the Hytorc power packs – the Hytorc JETSTREAM-115 AUTOMATIC

It is a 0 to 10,000 psi adjustable hydraulic pump with a standard 115 volt electric motor and a 24 volt remote control.



The JETSTREAM-115 not only operates in the manual mode which is useful for loosening nuts that are already tight and for extra control whenever you need it, but it has an automatic mode which allows you to continuously advance up to 4 tool simultaneously without the operator having to toggle the remote control switch. The result is faster and more even operation, and less operator fatigue.

Hytorc also offers a pneumatic/hydraulic model for use in volatile environments or anywhere that air is more convenient than electricity for power.

All operate in a similar manner and will power any Hytorc tool. The larger units move more oil per minute and therefore run the tools faster than the smaller units.

All Hytorc tools operate on the principle of applying a known pressure in pounds per square inch (p.s.i.) into a cylinder of known diameter and area in square inches. If we know the pounds per square inch and the number of square inches inside the piston we can accurately predict the pounds of force coming out of the tool at the drive.

The pump is operated with a remote control in the hands of the tool operator.

To set a desired pressure, remove any attached tools from their applications. Start the pump and hold the switch in the advance position running the pistons in the tools to the end of their stroke, deadheading the pistons and causing the pressure to rise in the system. While continuing to hold the button in the advance position, screw down the pressure regulator until the gauge reaches the desired level. If you go past the right number, release the switch, back the regulator down a few turns and then start again. Hydraulic pressure must always be set from lower to higher to be reliably accurate. Lock the regulator in place with the locking ring and you are ready to go. Every bolt will receive exactly the same torque until you change the pressure setting.