

# *J-gun Flip Operations Manual*



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## **jGun Dual Speed Flip**

The J-gun Flip is a special implementation of the dual speed pneumatic torque wrench. These pneumatic tools allow the operator to rundown and tighten nuts without the hassles of installing and removing a reaction arm. Each J-gun Flip is equipped with a special mechanism which works as a handle in high speed and a reaction arm when placed in the high torque setting.

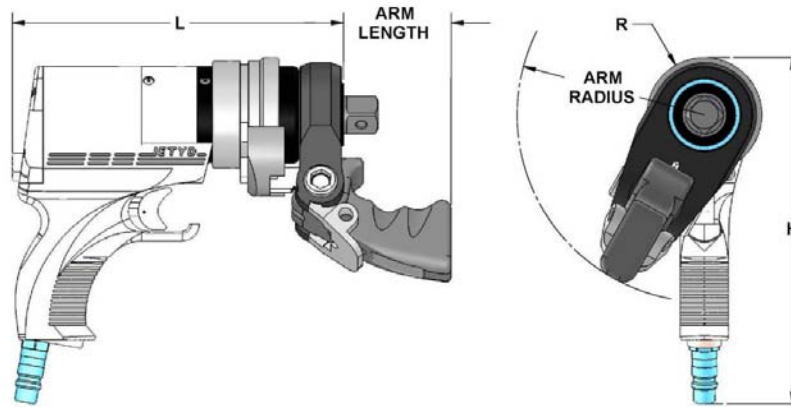
**Figure 1: J-gun Air 1 Dual Speed Flip with Socket**



## **jGun 1 Flip Specifications**

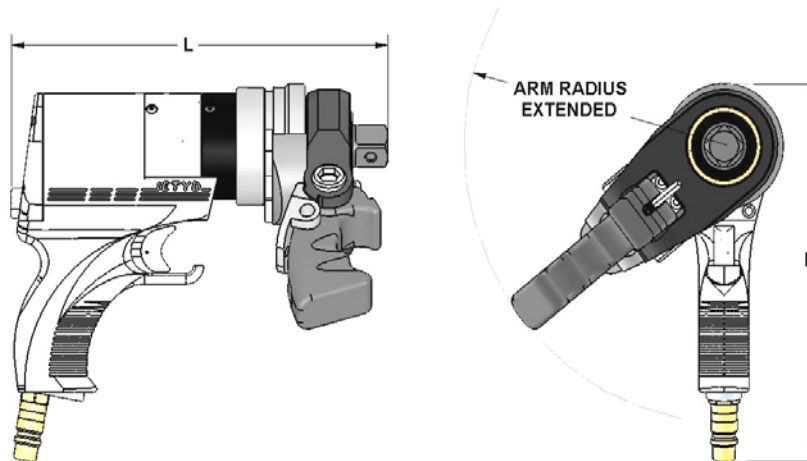
This section will give general dimensions for the current jGun 1 Flip tool. Both settings will be on the next page.

Figure 2: Current Dimensions for jGun 1 Dual Speed Flip (Maximum Torque Mode)



MODEL	JGUN AIR 1 DUAL SPEED FLIP
NOMINAL TORQUE MAX	1200 ft-lbs
HEIGHT (H)	8.94 in
LENGTH (L)	8.54 in
RADIUS (R)	1.48 in
ARM LENGTH	2.78 in
ARM RADIUS	4.83 in
WEIGHT	13.0 lbs
SPEED (RPM)	6.2

Figure 3: Dual Speed Flip in High Speed Mode



LENGTH	9.43 in
ARM RADIUS EXTENDED	6.84 in
SPEED (RPM)	1400

## **Torque/Speed Settings**

The Dual Speed Flip gun has two operation settings: High Speed and Maximum Torque

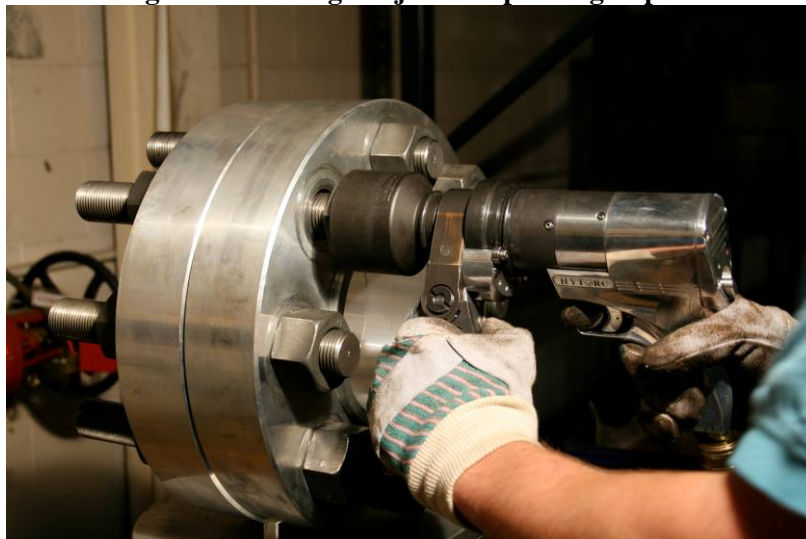
**Figure 4: Torque Operation Settings- High Speed (Left) and Maximum Torque (Right)**



### ***High Speed Operation***

- The jGun Flip operates in high speed when the arm is locked into the upward position. (Shown on the left in figure 4) The handle should be perpendicular to the body of the jGun.
- Once fully engaged, the housing and square drive will begin to rotate at high speed.
- Use this feature when you want to run nuts on or off a stud quickly
- When using the high speed feature be sure to hold the handle firmly as the gun reaches high rpm suddenly. (Shown in Figure 5)

**Figure 5: Holding the jGun Flip in High Speed**



## Maximum Torque Operation

- The jGun Flip functions in Maximum Torque mode when the arm is locked in the down position. (Shown on the right in figure 4)
- When the arm is locked in, it no longer serves as a handle, it is a Reaction Arm. **You must keep your hands off the reaction arm when in this mode.** See Figure 6 for illustration of how to hold the gun when in this setting.
- During operation, the square drive will move while the housing of the jGun will remain stationary.
- While in maximum torque mode the jGun Flip behaves similar to that of a single speed jGun. Tighten the nuts until the desired bolt load is reached.

**Figure 6: Safety Position for jGun Flip in Maximum Torque Setting**



### !!!CAUTION

**REMOVE YOUR HAND FROM THE REACTION ARM WHEN IN MAXIMUM TORQUING MODE.**

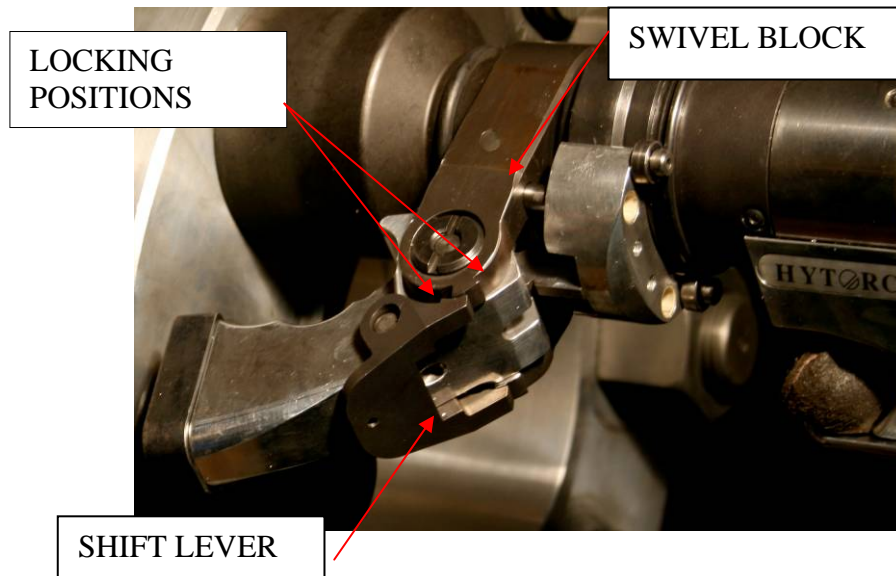
**PERSONAL INJURY MAY OCCUR IF YOUR HAND OR ANY PORTION OF YOUR BODY IS LOCATED BETWEEN THE REACTION ARM AND THE REACTION POINT.**

## Switching Settings

- Before changing torque settings, be sure that the lever that located on the reaction arm/handle is locked in place. The mechanism should not be free to move if it is fully engaged

- Connect the appropriate air fitting to the back of the jGun
- In order to switch between Max. Torque or high speed settings, press the shift lever and rotate the arm (see Figure 7) until it reaches the desired locking position on the swivel block. These locking positions prevent the handle/arm from accidentally moving into a different speed/torque position.

**Figure 7: Switching from Maximum Torque to High Speed**



- After making sure that the handle/arm is fully engaged, press the jGun trigger and run the gun to make sure that you are operating in the desired speed/torque setting.

### NOTE

**WHEN SHIFTING BETWEEN HIGH SPEED AND MAXIMUM TORQUE MODES, MAKE SURE THE TOOL IS STOPPED AND THE HANDLE/ARM IS FULLY ENGAGED IN EITHER THE UP OR DOWN POSITION.**

**FAILURE TO FULLY ENGAGE THE TOOL MAY AFFECT THE OPERATION OF THE TOOL AND ULTIMATELY RESULT IN THE LOSS OF CONTROL AND/OR DAMAGE TO THE TOOL.**

- If you experience any trouble shifting into a different setting, re-engage the handle/arm into the previous setting and make sure that it is locked. Press and hold the jGun trigger for 10 seconds and release. Attempt to shift the handle-arm once again. Repeat this step until the gun shifts freely.

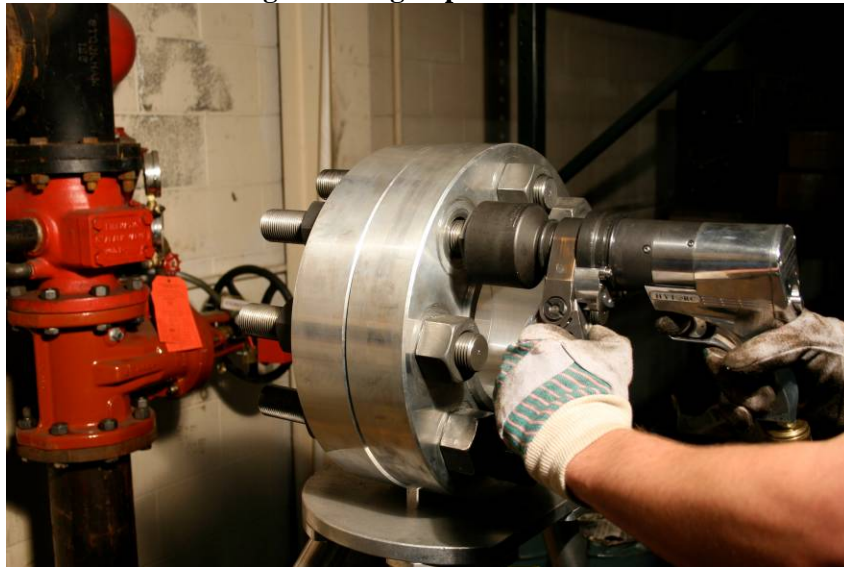


## **Typical Usage**

The following section is a simple guideline on how to use the jGun Flip on an application. The figures below show the flip gun being used with a demonstration flange.

- Prior to beginning make sure that the operator follows all safety and setup instructions. If you have any questions on these procedures please consult the Jetyd Operations Manual
- Shift the gun into High Speed mode by placing the arm in the upper position. Make sure that the lock on the handle is completely engaged. Run down all the nuts on the application using the high speed setting. Be sure to hold the handle firmly while operating the jGun.
- Run the nuts down until they seat and bring the jGun to a complete stop.

**Figure 8: High Speed Rundown**



- Next remove the tool from the nut and change the torque setting from high speed to maximum torque. Remember to press the shift lever, and rotate the arm until it reaches its locking position (see Maximum Torque Section for clarification). Press the jGun trigger to check that you have successfully changed torque settings.
- After switching settings, place the tool back on the nut and remove your hands from the reaction arm

**Figure 9: Maximum Torque Demonstration**



- Hold the jGun securely as it tightens the nut down to your desired torque setting. Press and hold the jGun trigger until you hear the motor stall. Repeat this step for all nuts which need to be tightened to the specific torque value.
- Congratulations! The process is complete you have successfully used your jGun Flip to tighten the fasteners on your application.

If you have any further questions please contact the Hytorc Customer Service Dept. in Mahwah, NJ.

