



PROBABLE DRIVE FAILURE

SQUARE/ALLEN DRIVE WORKING TORQUE

DRIVE SIZE: The square or hex drive of each HYTORC is limited in its maximum output by its material and its engagement area. Since your HYTORC uses specially suited alloy steel for its drive members, the following maximum torque output can be achieved without drive failure, provided the reaction member abuts close to the same plane as the nut to be turned.

DRIVE SIZE	MAXIMUM WORKING TORQUE	PROBABLE FAILURE
1/2" Allen	350 ft./lbs.	380 ft./lbs.
1/2" Square	385 ft./lbs.	425 ft./lbs.
5/8" Allen	685 ft./lbs.	750 ft./lbs.
3/4" Allen	1,185 ft./lbs.	1,300 ft./lbs.
3/4" Square	1,390 ft./lbs.	1,485 ft./lbs.
7/8" Allen	1,880 ft./lbs.	2,065 ft./lbs.
1" Allen	2,810 ft./lbs.	3,100 ft./lbs.
1" Square	3,230 ft./lbs.	3,400 ft./lbs.
1-1/8" Allen	4,000 ft./lbs.	4,400 ft./lbs.
1-1/4" Allen	5,500 ft./lbs.	6,100 ft./lbs.
1-3/8" Allen	7,300 ft./lbs.	8,000 ft./lbs.
1-1/2" Allen	9,500 ft./lbs.	10,400 ft./lbs.
1-1/2" Square	11,520 ft./lbs.	12,475 ft./lbs.
1-5/8" Allen	12,000 ft./lbs.	13,200 ft./lbs.
1-3/4" Allen	15,000 ft./lbs.	16,500 ft./lbs.
1-7/8" Allen	18,500 ft./lbs.	20,300 ft./lbs.
2" Allen	22,500 ft./lbs.	24,700 ft./lbs.
2-1/4" Allen	32,000 ft./lbs.	35,100 ft./lbs.
2-1/2" Allen	44,000 ft./lbs.	48,200 ft./lbs.
2-1/2" Square	52,500 ft./lbs.	63,625 ft./lbs.

If the reaction arm cannot abut on the same plane as the nut to be turned. Less torque should be applied as the additional side load has to be taken into consideration.

When torque requirements are close or more than the values listed above, use HYTORC's Socket Hex - Drive with replaceable Hex Insert Bits.