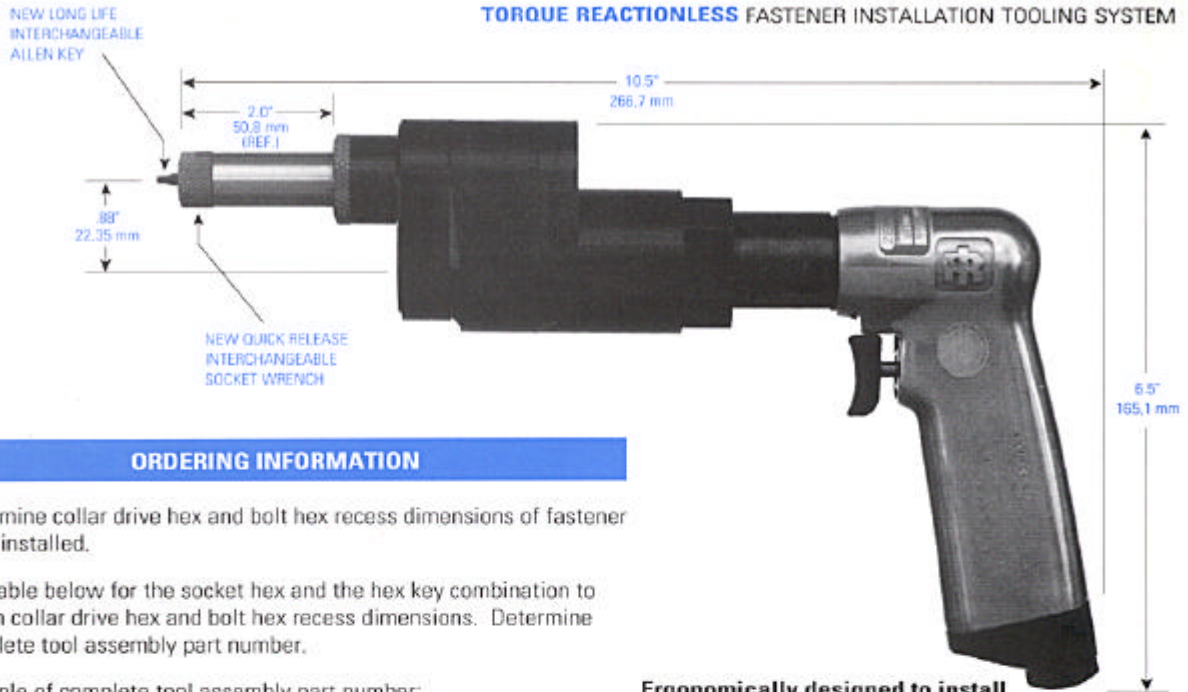


## SMALL NUTRUNNER SERIES 1 TORQUE REACTIONLESS FASTENER INSTALLATION TOOLING SYSTEM



### ORDERING INFORMATION

1. Determine collar drive hex and bolt hex recess dimensions of fastener to be installed.
2. See table below for the socket hex and the hex key combination to match collar drive hex and bolt hex recess dimensions. Determine complete tool assembly part number.
3. Example of complete tool assembly part number:

ZT945-312-078

Second dash number indicates the hex key to match bolt hex recess. (.078 = 5/64")

First dash number indicates the socket hex to match collar drive hex. (.312 = 5/16")

Basic part number includes 1 each of ZT945028 motor assembly, ZT945051 head assembly, ZT945044 series socket and ZT945040 series hex key.

Zephyr Tool.

**Ergonomically designed to install HI-LOK®, HI-LITE®, HI-TIGUE® two-piece frangible hex fasteners.**

- Zero reaction torque
- Light weight; low noise
- Quick change sockets and hex keys
- Self-engaging hex key mechanism
- Increases productivity; reduces cost

### TECHNICAL DATA

WEIGHT		STALL TORQUE		SOCKET FREE SPEED	POWER RATING	
LB	KG	IN-LB	N•m	RPM	HP	kw
2.5	1.1	118.8	13.4	500	.25	.19

FASTENER SIZE DASH	FASTENER SIZE		COMPLETE ASS'Y PART NUMBER	SOCKET SIZE		SOCKET PART NUMBER	HEX KEY SIZE		HEX KEY PART NUMBER	SOCKET SPEED AT TORQUE-OFF RPM	
	IN	MM		IN	MM		IN	MM			
-5	5/32	3.97	ZT945-187-062	3/16	4.76	ZT945044-187	1/16	1.59	ZT945040-062	ALUM	STEEL
			ZT945-218-062	7/32	5.56	ZT945044-218	1/16	1.59	ZT945040-062		
			ZT945-250-062	1/4	6.35	ZT945044-250	1/16	1.59	ZT945040-062		
			ZT945-281-062	9/32	7.14	ZT945044-281	1/16	1.59	ZT945040-062	420	NR
			ZT945-312-062	5/16	7.94	ZT945044-312	1/16	1.59	ZT945040-062		
			ZT945-343-062	11/32	8.73	ZT945044-343	1/16	1.59	ZT945040-062		
-6	3/16	4.76	ZT945-218-078	7/32	5.56	ZT945044-218	5/64	1.98	ZT945040-078	375	NR
			ZT945-250-078	1/4	6.35	ZT945044-250	5/64	1.98	ZT945040-078		
			ZT945-281-078	9/32	7.14	ZT945044-281	5/64	1.98	ZT945040-078		
			ZT945-312-078	5/16	7.94	ZT945044-312	5/64	1.98	ZT945040-078		
			ZT945-343-078	11/32	8.73	ZT945044-343	5/64	1.98	ZT945040-078		
			ZT945-375-078	3/8	9.53	ZT945044-375	5/64	1.98	ZT945040-078		
-8	1/4	6.35	ZT945-312-094	5/16	7.94	ZT945044-312	3/32	2.38	ZT945040-094	210	NR
			ZT945-343-094	11/32	8.73	ZT945044-343	3/32	2.38	ZT945040-094		
			ZT945-375-094	3/8	9.53	ZT945044-375	3/32	2.38	ZT945040-094		
			ZT945-437-094	7/16	11.11	ZT945044-437	3/32	2.38	ZT945040-094		

PATENT 5236461

MOTOR HAS 1/4" NPT INLET; 5/16" (8MM) MINIMUM HOSE SIZE RECOMMENDED. PERFORMANCE DATA IS AT 90 PSI (620 kPa) AIR PRESSURE. NR = NOT RECOMMENDED. USE ZT946

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## SMALL NUTRUNNER SERIES 1 TORQUE REACTIONLESS FASTENER INSTALLATION TOOLING SYSTEM



### ORDERING INFORMATION

1. Determine collar drive hex and bolt hex recess dimensions of fastener to be installed.
2. See table below for the socket hex and the hex key combination to match collar drive hex and bolt hex recess dimensions. Determine complete tool assembly part number.
3. Example of complete tool assembly part number:

ZT946-343-094

Second dash number indicates the hex key to match bolt hex recess. (.094 = 3/32")

First dash number indicates the socket hex to match collar drive hex. (.343 = 11/32")

Basic part number includes 1 each of ZT946028 motor assembly, ZT946051 head assembly, ZT945044 series socket and ZT945040 series hex key.

Zephyr Tool.

**Ergonomically designed to install HI-LOK®, HI-LITE®, HI-TIGUE® two-piece frangible hex fasteners.**

- Zero reaction torque
- Light weight; low noise
- Quick change sockets and hex keys
- Self-engaging hex key mechanism
- Increases productivity; reduces cost

### TECHNICAL DATA

WEIGHT		STALL TORQUE		SOCKET FREE SPEED	POWER RATING	
LB	KG	IN-LB	N-m	RPM	HP	kw
2.5	1.1	198	22.4	300	.25	.19

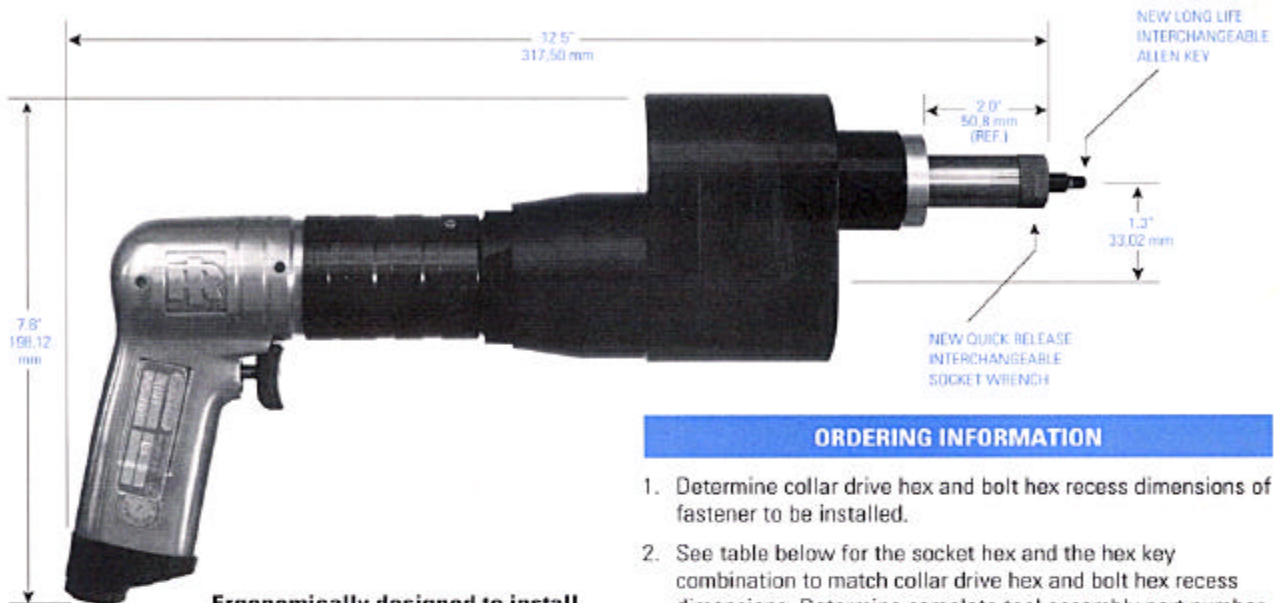
FASTENER SIZE DASH	FASTENER SIZE		COMPLETE ASS'Y. PART NUMBER	SOCKET SIZE		SOCKET PART NUMBER	HEX KEY SIZE		HEX KEY PART NUMBER	SOCKET SPEED AT TORQUE-OFF RPM	
	IN	MM		IN	MM		IN	MM			
-5	5/32	3.97	ZT946-187-062	3/16	4.76	ZT945044-187	1/16	1.59	ZT945040-062	ALUM	STEEL
			ZT946-218-062	7/32	5.56	ZT945044-218	1/16	1.59	ZT945040-062		
			ZT946-250-062	1/4	6.35	ZT945044-250	1/16	1.59	ZT945040-062		
			ZT946-281-062	9/32	7.14	ZT945044-281	1/16	1.59	ZT945040-062		
			ZT946-312-062	5/16	7.94	ZT945044-312	1/16	1.59	ZT945040-062		
			ZT946-343-062	11/32	8.73	ZT945044-343	1/16	1.59	ZT945040-062		
-6	3/16	4.76	ZT946-218-078	7/32	5.56	ZT945044-218	5/64	1.98	ZT945040-078	270	250
			ZT946-250-078	1/4	6.35	ZT945044-250	5/64	1.98	ZT945040-078		
			ZT946-281-078	9/32	7.14	ZT945044-281	5/64	1.98	ZT945040-078		
			ZT946-312-078	5/16	7.94	ZT945044-312	5/64	1.98	ZT945040-078		
			ZT946-343-078	11/32	8.73	ZT945044-343	5/64	1.98	ZT945040-078		
			ZT946-375-078	3/8	9.53	ZT945044-375	5/64	1.98	ZT945040-078		
-8	1/4	6.35	ZT946-312-094	5/16	7.94	ZT945044-312	3/32	2.38	ZT945040-094	200	120
			ZT946-343-094	11/32	8.73	ZT945044-343	3/32	2.38	ZT945040-094		
			ZT946-375-094	3/8	9.53	ZT945044-375	3/32	2.38	ZT945040-094		
			ZT946-437-094	7/16	11.11	ZT945044-437	3/32	2.38	ZT945040-094		

PATENT 5238481

MOTOR HAS 1/4" NPT INLET; 5/16" (8MM) MINIMUM HOSE SIZE RECOMMENDED. PERFORMANCE DATA IS AT 90 PSI (620 kPa) AIR PRESSURE.

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## LARGE NUTRUNNER SERIES 1 TORQUE REACTIONLESS FASTENER INSTALLATION TOOLING SYSTEM



**Ergonomically designed to install HI-LOK®, HI-LITE®, HI-TIGUE® two-piece frangible hex fasteners.**

- Zero reaction torque
- Light weight; low noise
- Quick change sockets and hex keys
- Self-engaging hex key mechanism
- Increases productivity; reduces cost

### ORDERING INFORMATION

1. Determine collar drive hex and bolt hex recess dimensions of fastener to be installed.
2. See table below for the socket hex and the hex key combination to match collar drive hex and bolt hex recess dimensions. Determine complete tool assembly part number.
3. Example of complete tool assembly part number:

ZT928-750-187

Second dash number indicates the hex key to match bolt hex recess. (.187 = 3/16")

First dash number indicates the socket hex to match collar drive hex. (.750 = 3/4")

Basic part number includes 1 each of ZT928028 motor assembly, ZT927050 head assembly, ZT927044 series socket and ZT92704 series hex key.

Zephyr Tool.

### TECHNICAL DATA

WEIGHT		INSTALLATION MAX. TORQUE		SOCKET FREE SPEED	POWER RATING	
LB	KG	IN-LB	N•m	RPM	HP	kw
5.0	2.2	500	56.5	175	.7	.5

FASTENER SIZE DASH	FASTENER SIZE		COMPLETE ASS'Y PART NUMBER	SOCKET SIZE		SOCKET PART NUMBER	HEX KEY SIZE		HEX KEY PART NUMBER
	IN	MM		IN	MM		IN	MM	
-10	5/16	7.94	ZT928-375-125	3/8	9.53	ZT927044-375	1/8	3.18	ZT92804-125
			ZT928-437-125	7/16	11.11	ZT927044-437	1/8	3.18	ZT92804-125
-12	3/8	9.53	ZT928-437-156	7/16	11.11	ZT927044-437	5/32	3.97	ZT92804-156
			ZT928-500-156	1/2	12.70	ZT927044-500	5/32	3.97	ZT92804-156
-14	7/16	11.11	ZT928-562-187	9/16	14.29	ZT927044-562	3/16	4.76	ZT92804-187
			ZT928-750-187	3/4	19.05	ZT927044-750	3/16	4.76	ZT92804-187
-16	1/2	12.70	ZT928-687-218	11/16	17.46	ZT927044-687	7/32	5.56	ZT92804-218
-18	9/16	14.29	ZT928-875-250	7/8	22.23	ZT927044-875	1/4	6.35	ZT92804-250-18
-20	5/8	15.88	ZT928-1000-250	1.000	25.40	ZT927044-1000	1/4	6.35	ZT92804-250-20

U.S.A. PATENT NO. 5238461

MOTOR HAS 1/4" NPT INLET; 5/16" (8MM) MINIMUM HOSE SIZE RECOMMENDED  
PERFORMANCE DATA IS AT 90 PSI (620 kPa) AIR PRESSURE.

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