

# ELECTRODE COOLING CHAMBERS & TAPERED ADAPTERS

## FEATURES AND SPECIFICATIONS

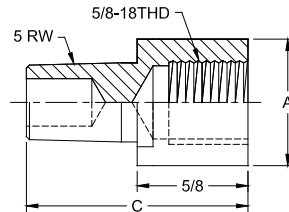
- Cooling Chamber recommended for additional cooling capacity on internally cooled applications
- Cooling Chamber is designed to provide supplementary cooling in special, hard to cool applications

- Securely sealed and locked in position with allen head set screw
- Tapered Adapter converts 5/8-18 thread to 5 RW tapers
- Use with Stud/Nut welding applications

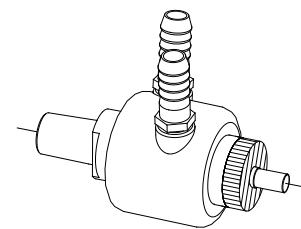
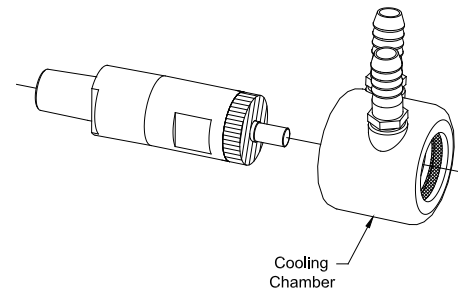
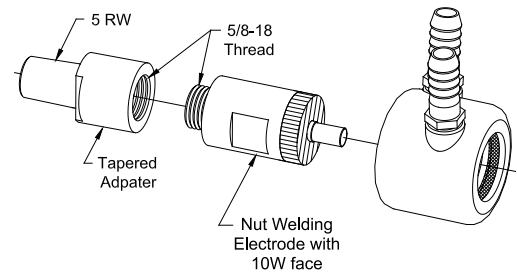
## WELDING ELECTRODE ACCESSORIES



TAPERED ADAPTER			
Part No.	To Fit Dia. Electrode A	Taper	Overall Length C
18-7741	1	5 RW	1-3/4
18-7742	1-1/4		



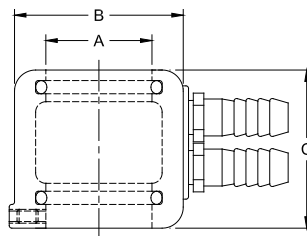
### TAPERED ADAPTER CONVERSION FROM 5/8-18 THREAD TO 5 RW TAPER



ASSEMBLED CONVERSION

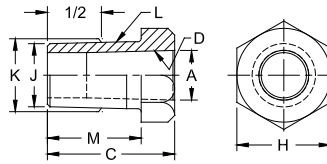


COOLING CHAMBER			
Part No.	To Fit Dia. Electrode A	O.D. B	Overall Length C
18-1340	5/8	1-1/4	1-1/2
18-1341	7/8	1-1/2	1-1/2
18-1342	1	1-3/4	1-1/2
18-1343	1-1/4	2	1-7/8

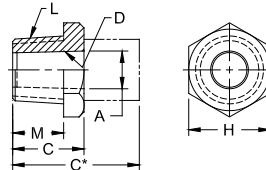


# ADAPTERS

MALE TAPER TO FEMALE TAPER ADAPTERS								
Adapter Part No.	Male Taper			Female Taper			Hex. Over Flats H	Overall Length C
	Size L	Minor Dia. J	Dia. at 1/2 K	Size D	Major Dia. A	Length Under Head M		
18-741	5 RW	.588	.613	4 RW	.463	7/8	7/8	1-3/16
18-742	7 RW	.819	.844	5 RW	.625	1-3/16	1	1-1/2
18-7414	6 RW	.706	.731	5 RW	.625	7/8	1	1-3/16
18-7415	4 RW	.438	.463	5 RW	.625	5/8	7/8	1-3/4
18-7416	5 RW	.588	.613	6 RW	.750	7/8	1	2-1/4

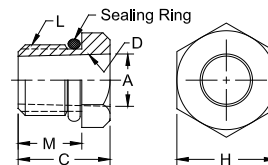


MALE PIPE THREAD TO FEMALE TAPER ADAPTERS						
Adapter Part No.	Male Thd. Size L	Female Taper		Length Under Head M	Hex. Over Flats H	Overall Length C
		Size D	Major Dia. A			
18-746-07	1/2-14 pipe	4 RW	.463	5/8	1	7/8
18-747-07	1/2-14 pipe	5 RW	.625	5/8	1	7/8
18-7465-07	1/2-14 pipe	5 RW Male Cap	.414	9/16	7/8	7/8
18-748-06	5/8-14 pipe	4 RW	.463	9/16	1	3/4
18-749-06	5/8-14 pipe	5 RW	.625	9/16	1	3/4
18-756-09	3/4-14 pipe	4 RW	.463	7/8	1-1/4	1-1/8
18-757-09	3/4-14 pipe	5 RW	.625	7/8	1-1/4	1-1/8
18-7576-09	3/4-14 pipe	6 RW	.750	7/8	1-1/4	1-1/8



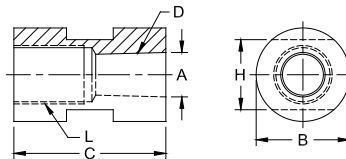
\*Adapters of longer lengths available in 1/8" increments upon request

MALE THREAD TO FEMALE TAPER ADAPTERS							
Adapter Part No.	Male Thd. Size L	Female Taper		Length Under Head M	Hex or Dia. Over Flats H	Overall Length C	Sealing Ring Part No.
		Size D	Major Dia. A				
18-750	5/8-18	4 RW	.463	9/16	7/8 Hex	13/16	18-10060-11
18-751	5/8-18	5 RW	.625	9/16	1 Hex	1-11/16	18-10060-11
18-755*	3/4-10	5 RW	.625	9/16	1 Dia.	1-9/16	18-10060-12
18-770	7/8-14	4 RW	.463	5/8	1 Hex	13/16	18-76460
18-771	7/8-14	5 RW	.625	5/8	1 Hex	13/16	18-76460
18-7743	1-14	5/8-18 Thd.	-	5/8	1-1/4 Hex	1	18-10060-17
18-785	1-14	4 RW	.463	9/16	1-1/4 Hex	13/16	18-10060-17
18-786	1-14	5 RW	.625	9/16	1-1/4 Hex	13/16	18-10060-17
18-7863	1-14	6 RW	.750	3/4	1-1/4 Hex	1-3/4	18-10060-17
18-787	1-14	7 RW	.875	3/4	1-1/4 Hex	2-1/8	18-10060-17
18-7875	1-14	5 RW	.625	9/16	1-1/4 Dia.	11/16	18-10060-17
18-7876	1-14	6 RW	.750	5/8	1-1/4 Dia.	7/8	18-10060-17



\*This part has 3/4" wrench flats

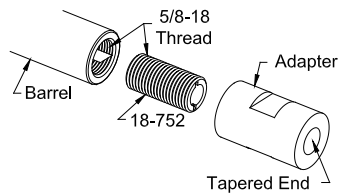
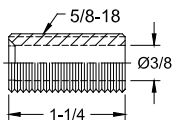
FEMALE THREAD TO FEMALE TAPER ADAPTERS						
Adapter Part No.	Female Thd. Size L	Female Taper		Outside Dia. B	Over Wrench Flats H	Overall Length C
		Size D	Major Dia. A			
18-753	5/8-18	4 RW	.475	1	3/4	1-5/8
18-754	5/8-18	5 RW	.625	1	3/4	1-5/8
18-7591	3/4-10	4 RW	.463	1-1/4 Hex.	1-1/4	1-3/4
18-7592	3/4-10	5 RW	.625	1-1/4 Hex.	1-1/4	1-3/4



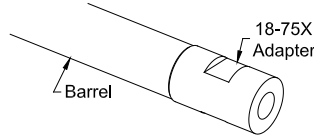
See page 6 for Metric Conversions  
See page 7 for Taper Dimensions  
See page 34 for ejector type adapters

## CONVERSION FROM 5/8-18 THREAD INTO 4, 5, 6, RW TAPER

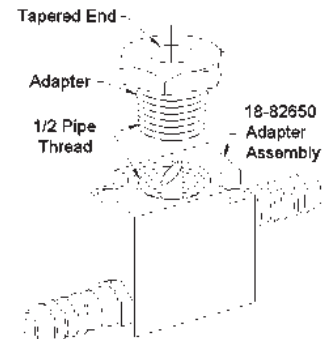
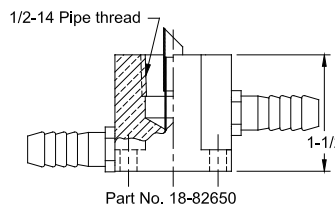
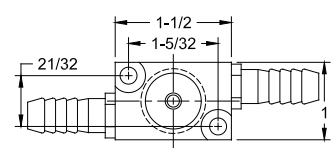
Part No. 18-752



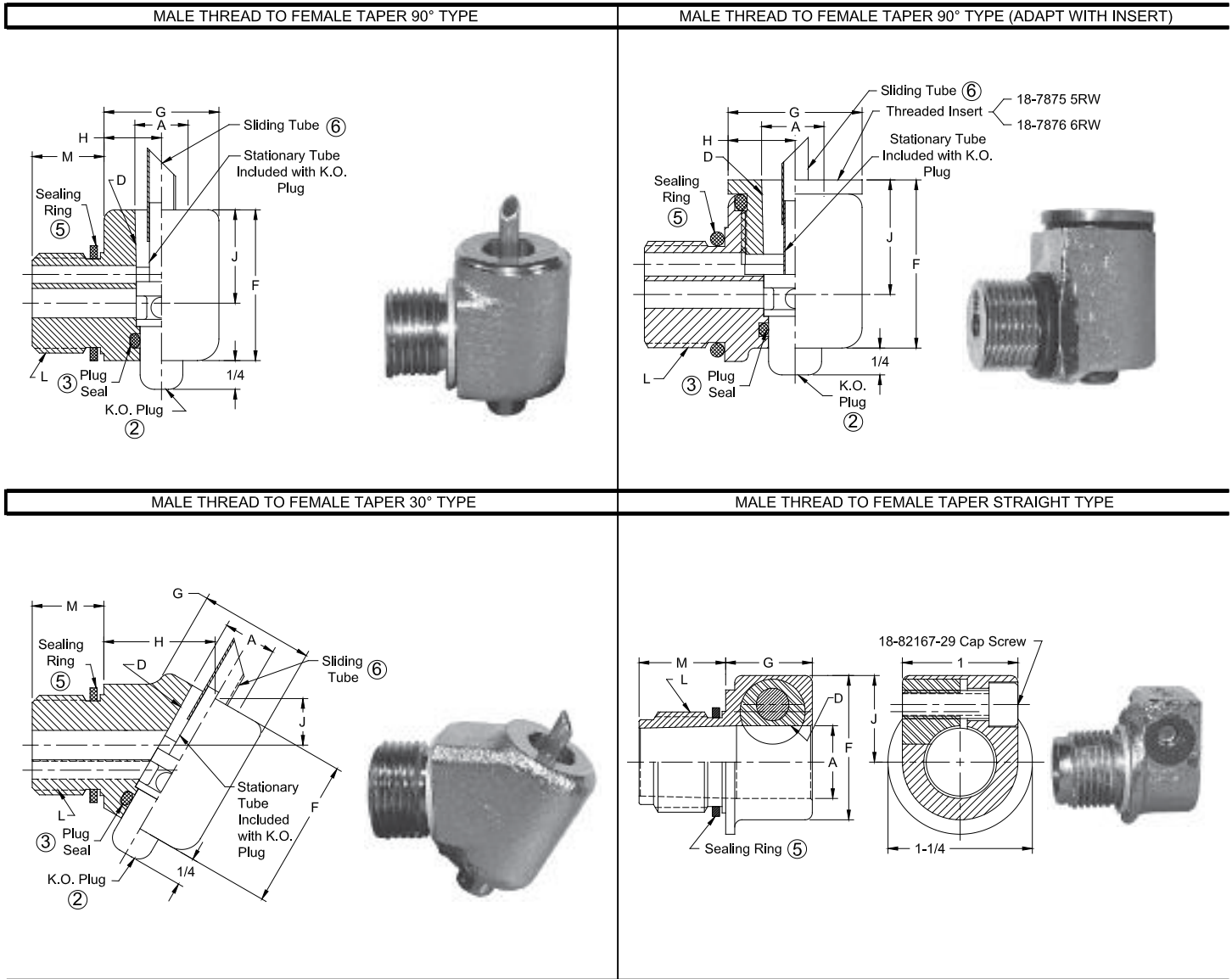
Threaded adapter used with tapered adapter to convert holder to use tapered electrodes.



## CONVERSION FROM THREADED ADAPTER INTO 4, 5, 6, RW TAPER



# MALE THREAD TO FEMALE TAPER UNIVERSAL ADAPTERS



MALE THREAD TO FEMALE TAPER UNIVERSAL ADAPTERS													
Adapter Part No.	Adapter Angle	Male Thread		Female Taper		Overall Head Height	Head Diameter or Length	End Barrel to C.L. of Taper	C.L. Barrel to C.L. of Taper	K.O. Plug Part No.	K.O. Plug Seal Ring Part No.	Sealing Ring Part No.	Sliding Tube Part No.
		Thread Size L	Length M	Taper Size D	Major Dia. A								
18-764	90°	7/8-14	9/16	4 RW	.463	1-9/16	1	19/32	13/16	18-50021	18-10060-8	18-76460	18-50041-1
18-765	30°							1-1/16	15/32				
18-766	90°					1-13/16	1	19/32	1-1/16	18-50022			18-40043-3
18-767	30°	7/8-14	9/16	5 RW	.625	1-13/16	1-1/16	1-11/32	53/64	18-50022	18-10060-10	18-76460	18-40043-3
18-768	Str.					1-1/4	3/4	--	3/4	--	--		--
18-780	90°					1-13/16	1-1/4	21/32	1-1/16	18-50022			18-40043-3
18-781	30°	1-14	3/4	5 RW	.625	1-13/16	1-5/16	1-3/8	13/16	18-50022	18-10060-10	18-10060-17	18-40043-3
18-784	Str.					1-1/4	3/4	--	3/4	--	--		--
18-782	90°	1-14	3/4	7 RW	.875	2-3/16	1-1/2	25/32	1-3/16	18-50023	18-10060-12	18-10060-17	18-40043-4
18-783	30°						1-9/16	1-3/8	13/16				
18-7805*	90°	1-14	3/4	5 RW	.625	1-13/16	1-1/4	21/32	1-1/16	18-50022	18-10060-10	18-10060-17	18-40043-3
18-7815*	30°						1-5/16	1-3/8	13/16				
18-7806*	90°	1-14	3/4	6 RW	.750	1-15/16	1-1/4	21/32	1-3/16	18-50022	18-10060-10	18-10060-17	18-40043-3
18-7816*	30°						1-5/16	1-7/16	59/64				

\*These adapters have threaded inserts 18-7875 (5RW) or 18-7876 (6RW) taper

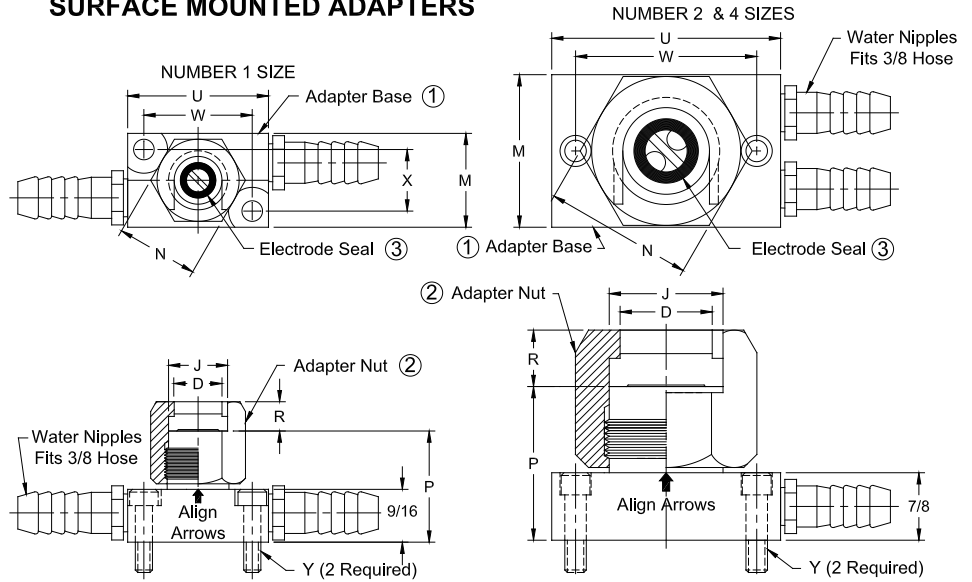
# 800 SERIES "NU-TWIST"® ADAPTERS

## CMW "NU-TWIST"® FEATURES

1. Hex locking nut may be tightened or loosened effectively by hand or wrench for easy replacement of electrodes.
2. "O" ring seals provide water tight connections.
3. Double groove construction in bore or locking nut accurately aligns and locks the

4. electrode in position with a maximum of a turn and one half.
4. Through use of baffles in adapters and in electrodes over 1" long efficient cooling is effectively achieved.
5. All components are of corrosion-resistant alloys.
6. Maintenance costs are unusually low.
7. Adapter bases are RWMA CLASS 2 material.

## SURFACE MOUNTED ADAPTERS



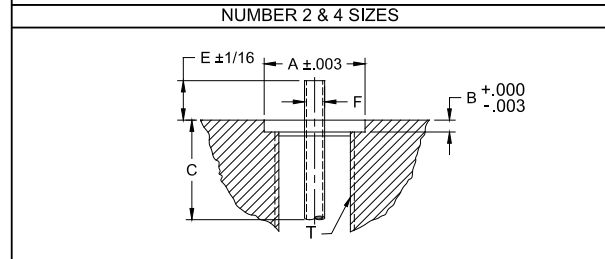
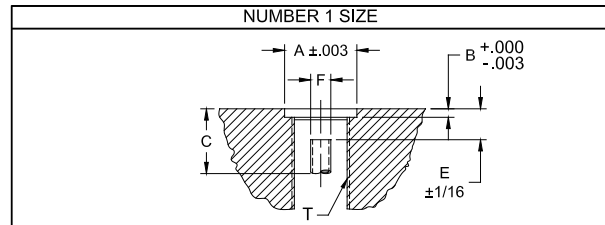
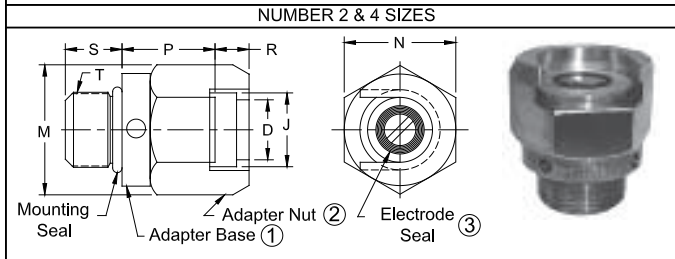
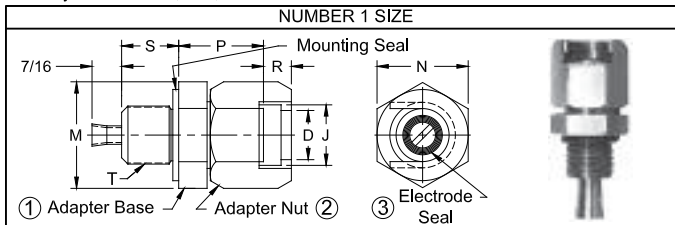
800 SERIES "NU-TWIST"® SURFACE MOUNTED											
Size	Adapter Part No.	Adapter Size									
		D	J	M	N	P	R	U	W	X	Y
1	18-801	1/2	5/8	1	7/8	1-1/4	1/4	1-1/2	1-5/32	21/32	No. 10-24 Scr.
2	18-802	15/16	1-1/8	1-1/2	1-1/2	1-13/16	7/16	2-1/2	2	--	No. 1/4-20 Scr.
4	18-804	1-7/16	1-5/8	2	2	1-13/16	7/16	3	2-3/8	--	No. 1/4-20 Scr.

REPLACEMENT PARTS				
Adapter Part No.	Water Nipples	Adapter Base 1	Adapter Nut 2	Electrode Seals 3
18-801		18-80110	18-80150	18-10060-5
18-802	18-10050	18-80210	18-80250	18-10060-1
18-804		18-80410	18-80450	18-10061-14

For replacement parts see page 51

## 800 SERIES "NU-TWIST"® THREADED ADAPTERS & MOUNTING INFORMATION

May use with 100, 200, and 300 series holders to make "NU-TWIST"® holders

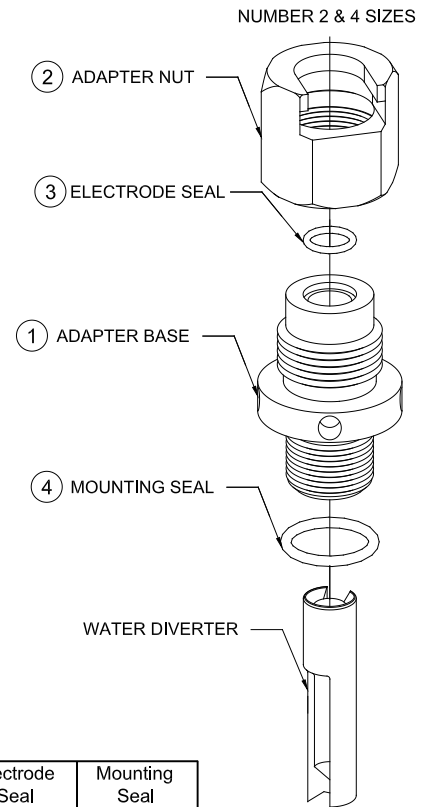
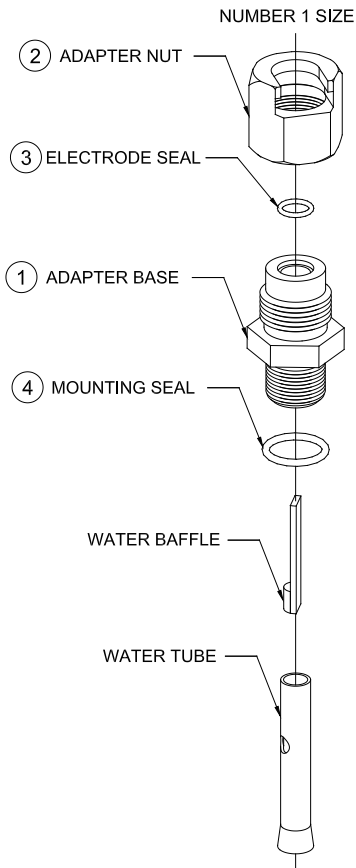


800 SERIES "NU-TWIST"® THREADED									
Size	Adapter Part No.	Adapter Size							
		D	J	M	N	P	R	S	T (Thread)
1	18-811	1/2	5/8	1	7/8	15/16	1/4	9/16	5/8-18
2	18-812	15/16	1-1/8	1-1/2	1-1/2	1-5/16	7/16	3/4	1-14
4	18-814	1-7/16	1-5/8	2	2	1-5/16	7/16	3/4	1-1/2-12

MOUNTING INFORMATION FOR THREADED ADAPTERS							
Size	Thd. Adapter Assy. No.	C'bore Dia. A	C'bore Depth B	Thread Depth Min. C	Tube Height E	Tube Dia. F	Thread T
1	18-811	.750	.083	5/8	3/8	.244	5/8-18
2	18-812	1.126	.113	13/16	15/16	.244	1-14
4	18-814	1.626	.173	13/16	15/16	.375	1-1/2-12

For replacement parts see page 51

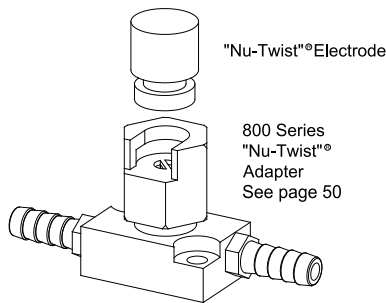
# 800 SERIES "NU-TWIST"<sup>®</sup> THREADED ADAPTER REPLACEMENT PARTS



Adapter Assembly Part No.	Adapter Base* 1	Adapter Nut 2	Electrode Seal 3	Mounting Seal 4
18-811	18-81110	18-80150	18-10061-5	18-10060-11
18-812	18-81210	18-80250	18-10061-10	18-10060-17
18-814	18-81410	18-80450	18-10061-14	18-10060-25

\* Adapter base includes water tube & baffle or water diverter

## "NU-TWIST"<sup>®</sup> ELECTRODES



- No tapers or threads
- Can be extracted with a simple turn of hexagon locking nut
- Any contour in electrode face can be located or relocated in a given position
- Water circulated to end of electrode for maximum cooling
- Silver plated contact surfaces on electrode and base for maximum conductivity
- Provides a simple, low-cost electrode for most applications
- Electrodes shown can be modified with contours to provide faces required for most resistance welding applications

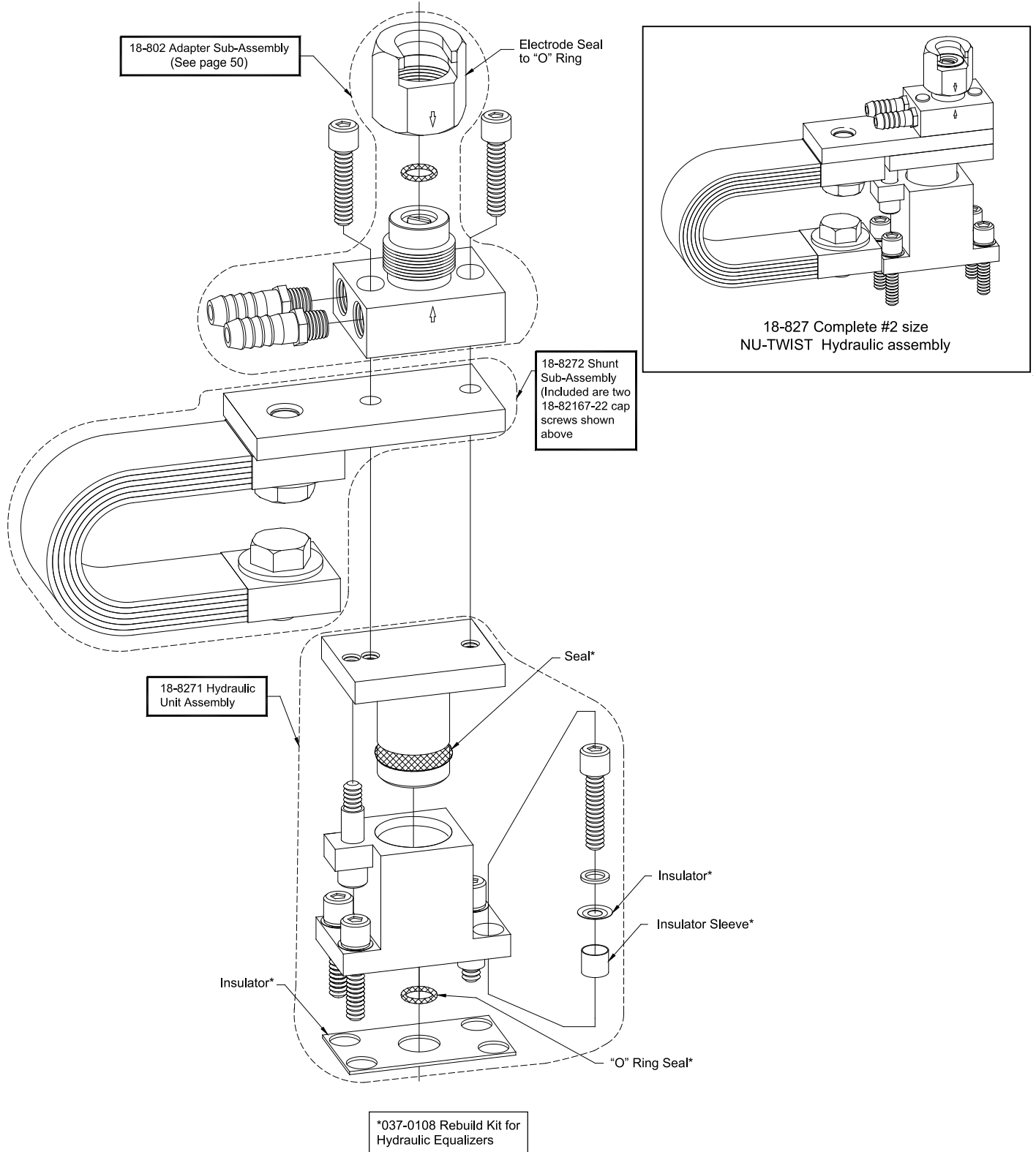
FLAT FACE "NU-TWIST" <sup>®</sup> ELECTRODE				TYPE 0 FLAT & 0 TRUNCATED "NU-TWIST" <sup>®</sup> ELECTRODE								
Size	Type	Electrode Part No.		Body Dia. H	Weld Face Dia. A	Overall Length C	Adapter Clearance E	Water Hole Dia. F	Water Hole Depth G	Electrode Seat Dia. J	Elect. Ext. From Adapt. K	
		RWMA CLASS 2	RWMA CLASS 3									
1	0 Flat	338750	538750	1/2	1/2	3/4	--	1/4	3/8	.625	1/2	
		338030	538030	1/2	1/2	1-1/2	--	1/4	1-1/8	.625	1-1/4	
1	0 Trunc.	378750	578750	1/2	1/4	3/4	--	1/4	3/8	.625	1/2	
		378030	578030	1/2	1/4	1-1/2	--	1/4	1-1/8	.625	1-1/4	
1	Flat	338751	538751	5/8	5/8	3/4	5/16	1/4	3/8	.625	1/2	
		338031	538031	5/8	5/8	1-1/2	5/16	1/4	1-1/8	.625	1-1/4	
2	Flat	338012	538012	1-1/4	1-1/4	1	5/8	1/2	1/2	1.125	1/2	
		338052	538052	1-1/4	1-1/4	2	5/8	1/2	1-1/2	1.125	1-1/2	
4	Flat	338014	538014	1-3/4	1-3/4	1	5/8	3/4	1/2	1.625	1/2	
		338054	538054	1-3/4	1-3/4	2	5/8	3/4	1-1/2	1.625	1-1/2	

Special face contours, lengths and diameters available on special order

# HYDRAULIC EQUALIZING ADAPTERS AND ASSEMBLY REPLACEMENT PARTS

## HYDRAULIC EQUALIZING ADAPTERS AND ASSEMBLIES

18-827 COMPLETE #2 SIZE "NU-TWIST"® ASSEMBLY



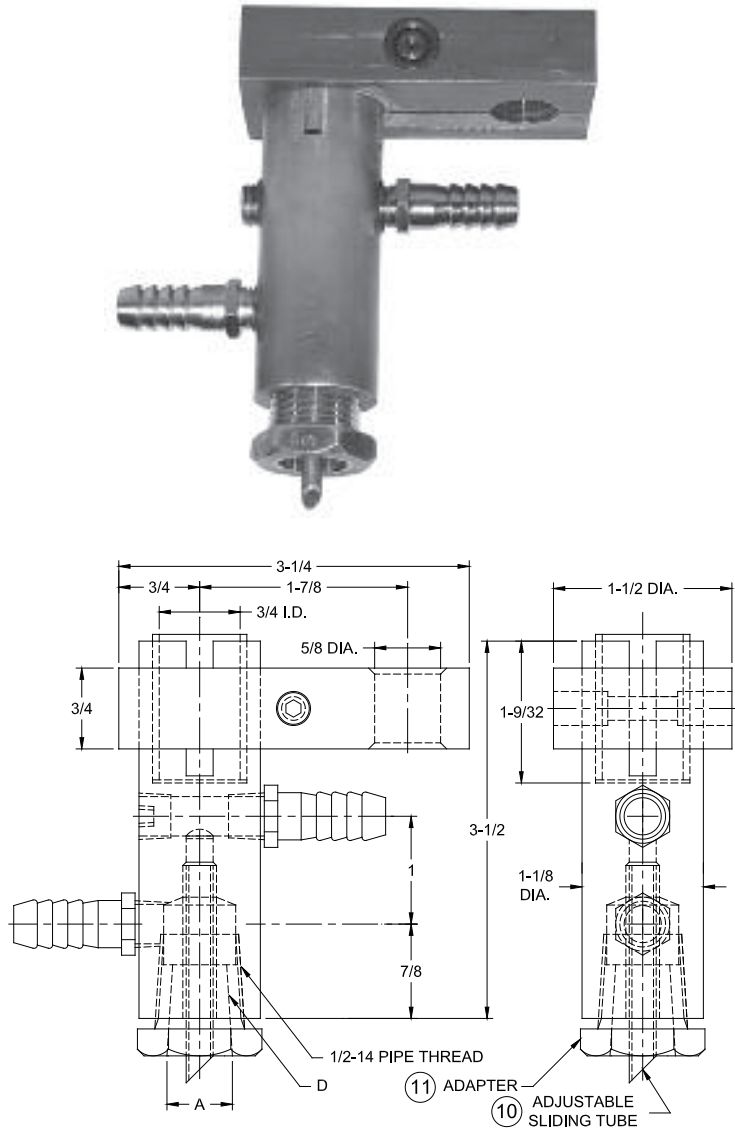
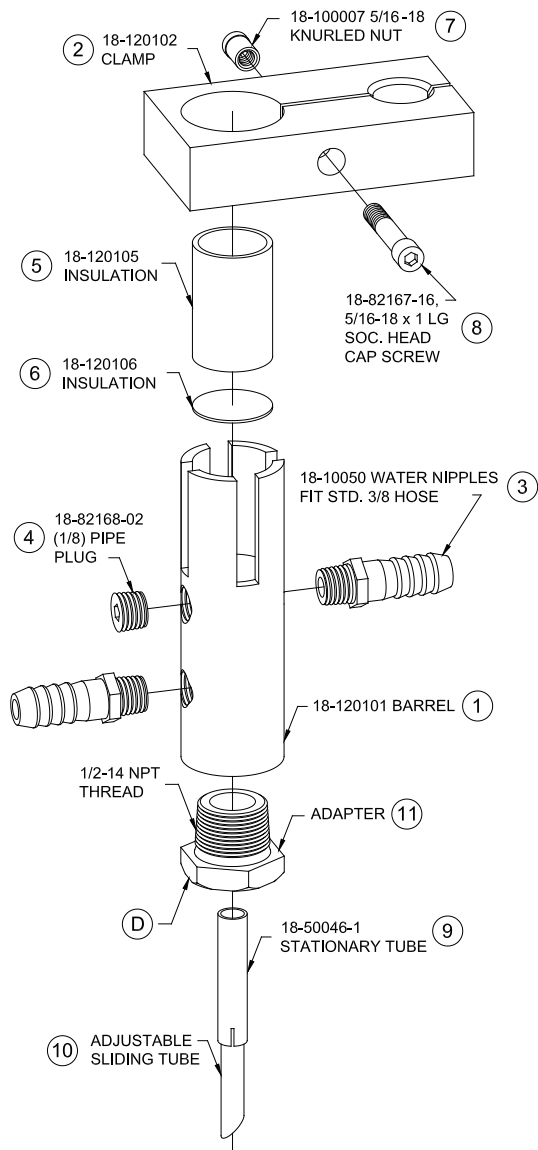


# MULTI-SPOT WELDER ELECTRODE ADAPTERS

CMW electrode adapters for multispot air or hydraulic pistons are supplied with 3/4 diameter straight piston rod ends. These adapters are equipped with means for attaching the welding cable from the transformer and the water hoses to the inlet and outlet water connections.

These adapters are available in four basic assemblies as shown in the table.

## MULTI-SPOT WELDER ELECTRODE ADAPTER REPLACEMENT PARTS



Part No. Assembly	Major Tape Dia. A	Attachment Type D	Adjustable Sliding tube 10	Adapter Part No. 11*
18-1201	--	1/2-14 NPT	18-10046-23	--
18-1202	.414	5 RW Male cap	--	18-7465-07
18-1203	.463	4 RW	18-10046-23	18-746-07
18-1204	.625	5 RW	18-10046-23	18-747-07

All assemblies include items 1, 2, 3, 4, 5, 6, 7, 8, and 9.

\* See page 31 for adapter details.