

TIG Torch Assemblies

AIR-COOLED TORCHES

Product Name	Max. Amp. Rating (AC, DC)	Tungsten Range	Cable Length ft. (m)	No. of Cables	Product Number
PTA-9	125	.020-1/8" (0.5-3.2 mm)	12.5 ft. (3.8 m)	1	K1781-1
			25 ft. (7.6 m)	2	K1781-2
			25 ft. (7.6 m)	1	K1781-3
PTA-9F	125	.020-1/8" (0.5-3.2 mm)	25 ft. (7.6 m)	2	K1781-4
PTA-9FV	125	.020-1/8" (0.5-3.2 mm)	25 ft. (7.6 m)	1	K1781-6
PTA-17	150	.020-5/32" (0.5-4.0 mm)	12.5 ft. (3.8 m)	1	K1781-7
			25 ft. (7.6 m)	1	K1782-1
			25 ft. (7.6 m)	2	K1782-2
			25 ft. (7.6 m)	1	K1782-3
PTA-17F	150	.020-5/32" (0.5-4.0 mm)	25 ft. (7.6 m)	2	K1782-4
PTA-17FV	150	.020-5/32" (0.5-4.0 mm)	25 ft. (7.6 m)	1	K1782-10
PTA-17V	150	.020-5/32" (0.5-4.0 mm)	12.5 ft. (3.8 m)	1	K1782-6
			25 ft. (7.6 m)	2	K1782-7
			25 ft. (7.6 m)	1	K1782-8
PTA-26	200	.020-5/32" (0.5-4.0 mm)	12.5 ft. (3.8 m)	2	K1782-9
			25 ft. (7.6 m)	1	K1783-1
			25 ft. (7.6 m)	2	K1783-2
			25 ft. (7.6 m)	1	K1783-3
PTA-26F	200	.020-5/32" (0.5-4.0 mm)	25 ft. (7.6 m)	2	K1783-4
PTA-26FV	200	.020-5/32" (0.5-4.0 mm)	25 ft. (7.6 m)	1	K1783-10
PTA-26V	200	.020-5/32" (0.5-4.0 mm)	12.5 ft. (3.8 m)	1	K1783-11
			25 ft. (7.6 m)	2	K1783-6
			25 ft. (7.6 m)	1	K1783-7
			25 ft. (7.6 m)	2	K1783-8
				2	K1783-9

- "F" model torches feature flexible heads for significantly greater comfort and access to tight spaces.
- "V" model torches have a convenient gas control valve on the torch to quickly and easily control the shielding gas flow when a gas solenoid valve is not installed in the power source.

WATER-COOLED TORCHES

Product Name	Max. Amp. Rating (AC, DC)	Tungsten Range	Cable Length ft. (m)	No. of Cables	Product Number
PTW-18	350	.020-5/32" (0.5-4.0 mm)	12.5 ft. (3.8 m)	3	K1784-1
			25 ft. (7.6 m)	3	K1784-2
PTW-20	250	.020-1/8" (0.5-3.2 mm)	12.5 ft. (3.8 m)	3	K1784-3
			25 ft. (7.6 m)	3	K1784-4

TIG Torch Starter Pack

TYPICAL CURRENT RANGES FOR TUNGSTEN ELECTRODES⁽¹⁾

Tungsten Electrode Diameter In. (mm)	DC		AC				Alumina Nozzle Size
	DCEN(-)	DCEP(+)	Balanced Wave		Unbalanced Wave		
	1%, 2% Thoriated Tungsten	1%, 2% Thoriated Tungsten	Pure Tungsten	1%, 2% Thoriated Tungsten Zirconiated	Pure Tungsten	1%, 2% Thoriated Tungsten Zirconiated	
0.020 (0.5)	5-20	(2)	10-20	5-20	5-15	5-20	4,5,6
0.040 (1.0)	15-80	(2)	20-30	20-60	10-60	15-80	4,5,6
1/16 (1.6)	70-150	10-20	30-80	60-120	50-100	70-150	5,6
3/32 (2.4)	150-250	15-30	60-130	100-180	100-160	140-235	6,7,8
1/8 (3.2)	250-400	25-40	100-180	160-250	150-210	225-325	6,7,8
5/32 (4.0)	400-500	40-55	160-240	200-320	200-275	300-400	8,10

⁽¹⁾ With argon gas.

⁽²⁾ DCEP (+) is not commonly used in these sizes.

TIG TORCH STARTER PACK

Torch Kit	Starter Pack Product No.	Includes:
TIG Mate™ 17 Air Cooled	K2266-1	PTA-17 torch (K1782-1), parts kit (KP508), Harris flowmeter/regulator, 10 ft. gas hose, Twistmate™ (K960-1) adapter, work clamp and cable.
TIG Mate™ 17V Air Cooled	K2265-1	PTA-17V torch (K1782-6), parts kit (KP508), Harris flowmeter/regulator, 10 ft. gas hose, and work clamp and cable.
TIG-Mate™ 20	K2267-1	PTA-20 torch (K1784-30), parts kit (KP510), Harris flowmeter/regulator, 10 ft. gas hose, Twist-Mate™ (K1622-4) adapter, work clamp and cable and 10 ft. water hose.



TIG TORCH STARTER PACK

TIG TORCH STARTER PACK

TIG Torch Connectors

LINCOLN TIG TORCH CONNECTORS (APPLIES TO FIXED, FLEXIBLE AND VALVED TORCHES)

TIG Torch	No. of Cables	Required Power Cable Connectors by Power Source Type			
		Precision TIG 275 & 375	Power Source w/ 1/2" Output Studs	Power Source w/ Twist Mate & Pass through Gas	Power Source w/ Twist Mate & Separate Gas
PTA-9	1	K2166-3	K1893-3	K1622-1	K960-1
	2	K2166-2	None Required	N/A	N/A
PTA-17	1	K2166-3	K1893-3	K1622-1	K960-1
	2	K2166-2	None Required	N/A	N/A
PTA-26	1	K2166-1	K1893-2	K1622-3	N/A
	2	K2166-2	None Required	N/A	N/A
PTW-20	3	None Required	K1893-1 ⁽¹⁾	K1622-4	N/A
PTW-18	3	None Required	K1893-1 ⁽¹⁾	K1622-4	N/A

⁽¹⁾This item is included in the KP504 hook-up kit.
N/A = No connector kit is available for this combination.



GAS HOOK-UP KITS FOR CONNECTING TO POWER SOURCES WITH 1/2" OUTPUT TERMINALS

KP504 (For PTW-18 and PTW-20)		
Item	Part No.	Description
2(a)	S19558-4	Water Hose 12.5 ft. (3.8m)
1(b)	S19558-1	Gas Hose 12.5 ft. (3.8m)
2(d)	S19558-5	Water Adapter Fittings 5/8 ft. (15.8mm)
1(d)	S19558-6	Water Hose Coupler
1(e)	K1893-1	Power Cable Adapter

KP505 (For PTA-9, PTA-9F, PTA-17, PTA-17F, PTA-26 and PTA-26F)		
Item	Part No.	Description
1(a)	S19558-2	Gas Hose 18 in. (457mm) from solenoid valve to power cable adapter
1(b)	S19558-1	Gas Hose 12.5 ft. (3.8m)

KP506 (For PTA-17V and PTA-26V)		
Item	Part No.	Description
1(a)	S19558-1	Gas Hose 12.5 in. (3.8m) with 5/8-18 right hand male fittings.

TIG TORCH CONNECTORS

TIG TORCH CONNECTORS

TIG Parts Kits

PRO-TORCH TIG PARTS KITS

Torch Series	Parts Kit	Items Included	Item No.
PTA-9 Series	KP507	Back Cap - Long	KP2035-4
		Collet - .040 (1.0)	KP2029-2
		Collet - 1/16 (1.6)	KP2029-3
		Collet Body - .040 (1.0)	KP2031-2
		Collet Body- 1/16 (1.6)	KP2031-3
		Alumina Nozzle - 1/4 (6.0)	KP2017-1
		Alumina Nozzle - 5/16 (8.0)	KP2017-2
		Alumina Nozzle - 3/8 (10.0)	KP2017-3
		Tungsten Electrode, 2% Thoriated .040" x 7.0" (1.0 x 178 mm) Tungsten Electrode, 2% Thoriated 1/16" x 7.0" (1.6 x 178 mm)	
			Included w/above kit.



KP507

Torch Series	Parts Kit	Items Included	Item No.
PTA-17 Series	KP508	Back Cap - Short	KP2036-2
		Collet - .040 (1.0)	KP2030-2
		Collet - 1/16 (1.6)	KP2030-3
		Collet - 3/32 (2.4)	KP2030-4
		Collet Body - .040 (1.0)	KP2032-2
		Collet Body - 1/16 (1.6)	KP2032-3
		Collet Body - 3/32 (2.4)	KP2032-4
		Alumina Nozzle - 1/4 (6.0)	KP2016-6
		Alumina Nozzle - 5/16 (8.0)	KP2016-5
		Alumina Nozzle - 3/8 (10.0)	KP2016-4
PTW-18 & PTA-26	KP509	Back Cap -Short	KP2036-2
		Collet - 1/16 (1.6)	KP2031-3
		Collet - 3/32 (2.4)	KP2031-4
		Collet - 1/8 (3.2)	KP2031-5
		Collet Body - 1/16 (1.6)	KP2032-3
		Collet Body - 3/32 (2.4)	KP2032-4
		Collet Body - 1/8 (3.2)	KP2032-5
		Alumina Nozzle -5/16 (8.0)	KP2016-5
Alumina Nozzle - 3/8 (10.0)	KP2016-4		
Alumina Nozzle - 1/2 (12.5)	KP2016-2		
PTW-20	KP510	Back Cap - Long	KP2035-3
		Collet - 1/16 (1.6)	KP2029-3
		Collet - 3/32 (2.4)	KP2029-4
		Collet - 1/8 (3.2)	KP2029-5
		Collet Body - 1/16 (1.6)	KP2031-3
		Collet Body - 3/32 (2.4)	KP2031-4
		Collet Body - 1/8 (3.2)	KP2031-5
		Alumina Nozzle - 5/16 (8.0)	KP2017-2
Alumina Nozzle - 3/8 (10.0)	KP2017-3		
Alumina Nozzle - 7/16 (11.0)	KP2017-4		
		Tungsten Electrode, 2% Thoriated 1/16" x 7.0" (1.6 x 178 mm) Tungsten Electrode, 2% Thoriated 3/32" x 7.0" (2.4 x 178 mm) Tungsten Electrode, 2% Thoriated 1/8" x 7.0" (3.2 x 178 mm)	
			Included w/each of the above kits.



KP508



KP509



KP510

TIG TORCH PARTS KITS

TIG TORCH PARTS KITS

TIG Torch Expendables

PRO-TORCH TIG CONSUMABLE PARTS

Collet

Tungsten Diameter In./mm	Torch Type	
	PTA-9 Series PTW-20 Series	PTA-17 Series PTA-26 Series PTW-18 Series
	Length 1.0"	Length 1-15/16"
.020" (0.5 mm)	KP2029-1	KP2030-1
.040" (1.0 mm)	KP2029-2	KP2030-2
1/16" (1.6 mm)	KP2029-3	KP2030-3
3/32" (2.4 mm)	KP2029-4	KP2030-4
1/8" (3.2 mm)	KP2029-5	KP2030-5
5/32" (4.0 mm)		KP2030-6



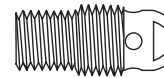
Collet (KP2029-3)



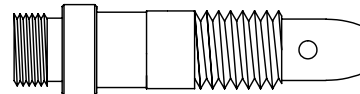
Collet (KP2030-4)

Collet Body

Tungsten Diameter In./mm	Torch Type	
	PTA-9 Series PTW-20 Series	PTA-17 Series PTA-26 Series PTW-18 Series
	Length 13/16"	Length 1-13/16"
.020" (0.5 mm)	KP2031-1	KP2032-1
.040" (1.0 mm)	KP2031-2	KP2032-2
1/16" (1.6 mm)	KP2031-3	KP2032-3
3/32" (2.4 mm)	KP2031-4	KP2032-4
1/8" (3.2 mm)	KP2031-5	KP2032-5
5/32" (4.0 mm)		KP2032-6



Collet Body (KP2031-X)



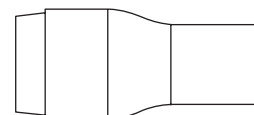
Collet Body (KP2032-X)

Alumina Nozzles (for use with above collet bodies)

Orifice Diameter In./mm	Size (16th inch)	Torch Type	
		PTA-9 Series PTW-20 Series	PTA-17 Series PTA-26 Series PTW-18 Series
		Length 1-5/32" (29.3mm)	Length 1-27/32" (29.3 mm)
1/4" (6 mm)	4	KP2017-1	KP2016-6
5/16" (8 mm)	5	KP2017-2	KP2016-5
3/8" (10 mm)	6	KP2017-3	KP2016-4
7/16" (11 mm)	7	KP2017-4	KP2016-3
1/2" (12.5 mm)	8	KP2017-5	KP2016-2
5/8" (16 mm)	10	KP2017-6	KP2016-1



Alumina Nozzle (KP2016-2)



Alumina Nozzle (KP2017-1)

All line art is drawn to scale.

TIG TORCH EXPENDABLES

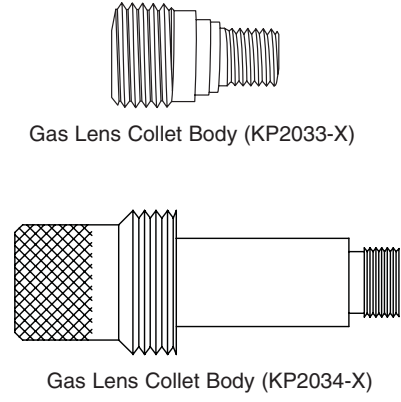
TIG TORCH EXPENDABLES

TIG Torch Expendables

PRO TORCH TIG CONSUMABLE PARTS

Gas Lens Collet Bodies

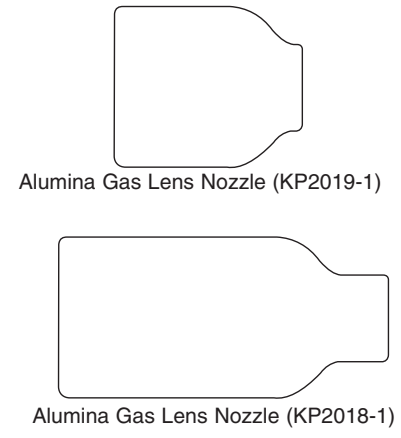
Tungsten Diameter In./mm	Torch Type	
	PTA-9 Series PTW-20 Series	PTA-17 Series PTA-26 Series PTW-18 Series
	Length 7/8"	Length 1-15/16"
.020" (0.5 mm)	KP2033-1	KP2034-1
.040" (1.0 mm)	KP2033-2	KP2034-2
1/16" (1.6 mm)	KP2033-3	KP2034-3
3/32" (2.4 mm)	KP2033-4	KP2034-4
1/8" (3.2 mm)	KP2033-5	KP2034-5
5/32" (4.0 mm)		KP2034-6



Note: KP2034-X series Gas Lens Collet Bodies require KP2037-3 gas lens insulator.

Alumina Gas Lens Nozzles (for use with Gas Lens Collet Bodies)

Orifice Diameter In./mm	Size (16th inch)	Torch Type	
		PTA-9 Series PTW-20 Series	PTA-17 Series PTA-26 Series PTW-18 Series
		Length 1" (25.4mm)	Length 1 11/16" (42.9mm)
1/4" (6 mm)	4	KP2019-1	KP2018-5
5/16" (8 mm)	5	KP2019-2	KP2018-4
3/8" (10 mm)	6	KP2019-3	KP2018-3
7/16" (11 mm)	7	KP2019-4	KP2018-2
1/2" (12.5 mm)	8		KP2018-1
			Length .700" (7.8 mm)
11/16" (17 mm)	Short		KP2018-6



Note: KP2018-X series Alumina Gas Lens Nozzles require the KP2037-3 gas lens insulator.

Back Caps

Size	Torch Type	
	PTA-9 Series PTW-20 Series	PTA-17 Series PTA-26 Series PTW-18 Series
Short	KP2035-1	KP2036-2
Medium	KP2035-2	
Long	KP2035-4	KP2036-1



These parts are not to scale due to space limitations.

All line art is drawn to scale unless otherwise noted.

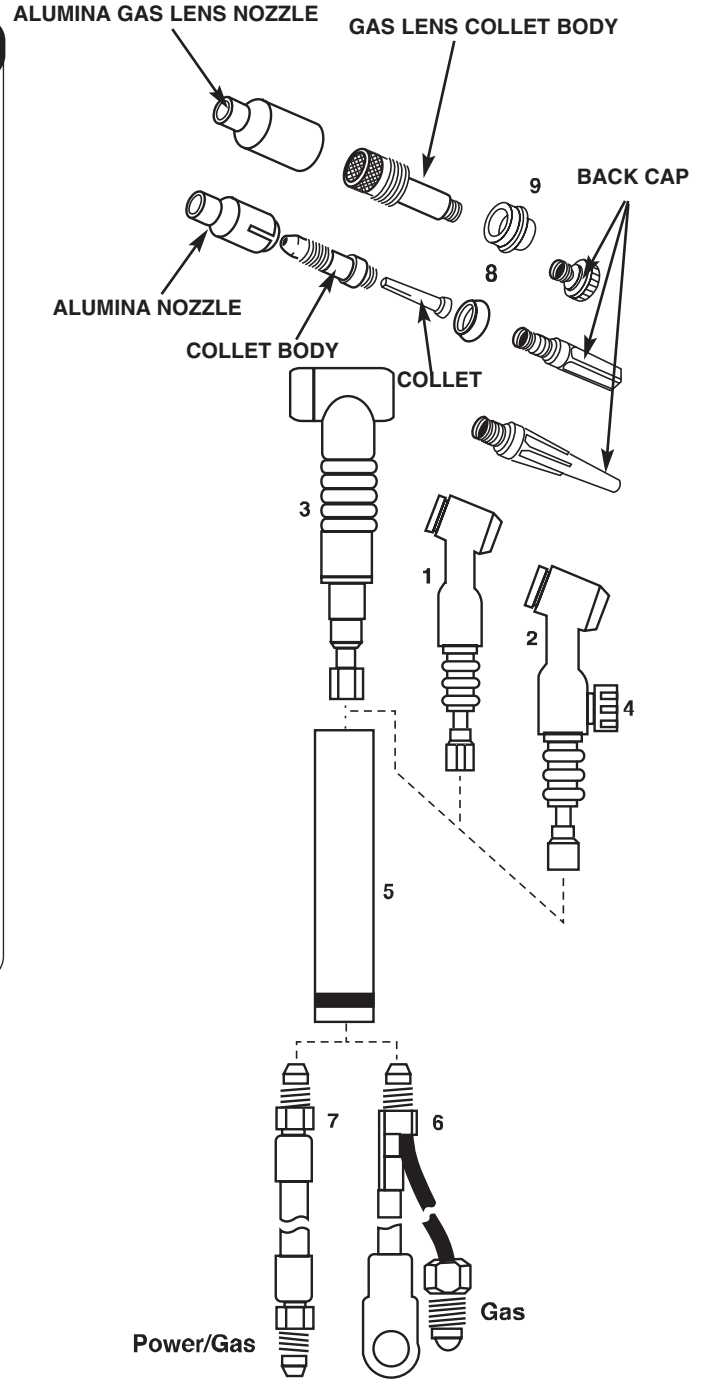
TIG TORCH EXPENDABLES

TIG TORCH EXPENDABLES

TIG Torch Assemblies

PTA-9, -17, -26 SERIES AIR-COOLED REPLACEMENT PARTS

Item	Description	Part Number	Model
1	Torch body with gaskets	S19258-1	PTA-9
		S19259-1	PTA-17
		S19260-1	PTA-26
2	Torch body with gaskets	S19259-2	PTA-17V
		S19260-2	PTA-26V
3	Torch body with gaskets	S24922-1	PTA-9F
		S24923-1	PTA-17F
		S24925-1	PTA-26F
4	Valve Knob with "O" Ring	S19515-1	PTA-17V
		S19515-2	PTA-26V
5	Torch Handle	S19511-1	PTA-9
			PTA-17
			PTA-17V
		S19511-2	PTA-26
6	Power Cable and Gas, 2 piece 12.5' (3.8 m)	S19512-2	PTA-9
			PTA-17
	25' (7.6 m)	S19512-6	PTA-26
		S19512-4	PTA-9
7	Power Cable and Gas, 1 piece 12.5' (3.8 m)	S19512-1	PTA-9
			PTA-17
	25' (7.6 m)	S19512-5	PTA-26
		S19512-3	PTA-9
		S19512-7	PTA-17
		S19512-8	PTA-26
8	Cup Gasket, 2 pack	S19515-6	PTA-9
		S19515-7	PTA-17
			PTA-26
		S19515-9M	PTA-17F
9	Gas Lens Insulator	KP2037-3	PTA-17
			PTA-26



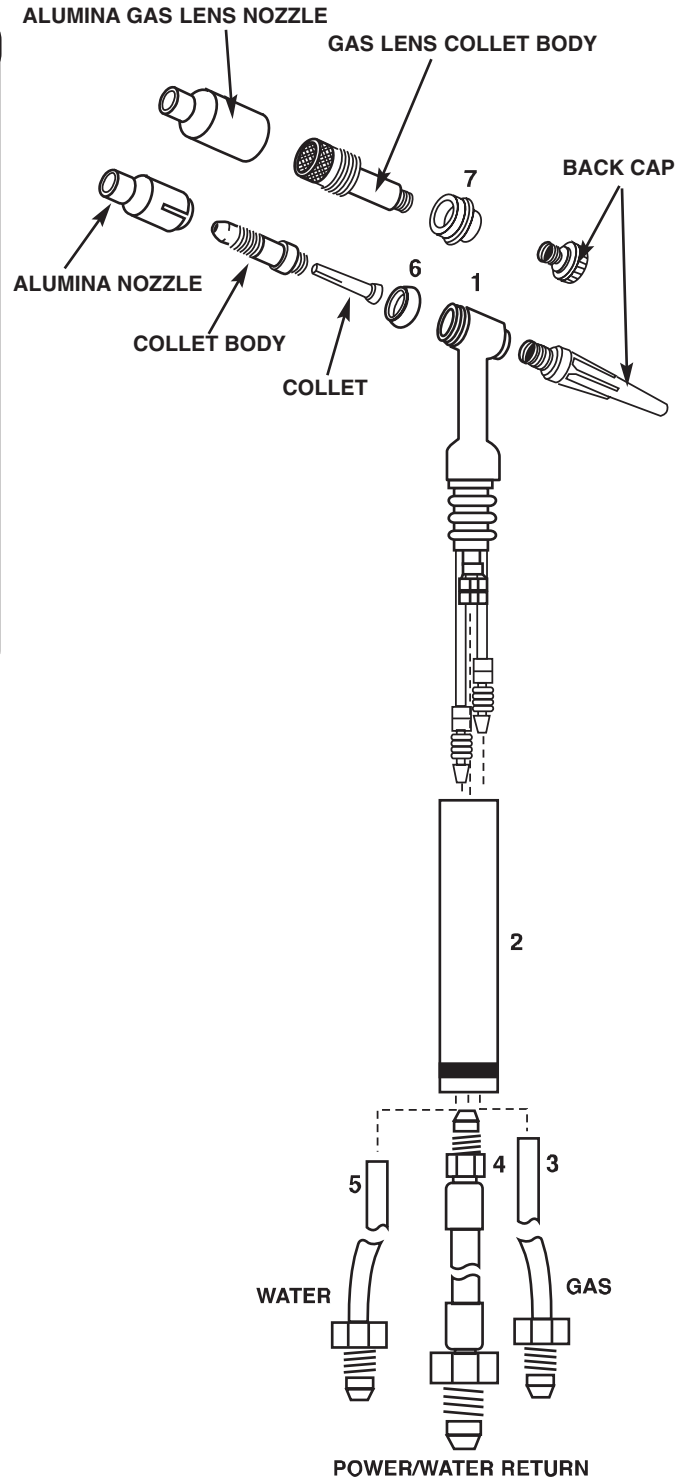
TIG TORCH ASSEMBLIES

TIG TORCH ASSEMBLIES

TIG Torch Assemblies

PTW-18, -20 SERIES WATER-COOLED REPLACEMENT PARTS

Item	Description	Part Number	Model
1	Torch body with gaskets	S19261-1	PTW-18
		S19262-1	PTW-20
2	Torch Handle	S19511-2	PTW-18
		S19511-1	PTW-20
3	Gas Hose	12.5' (3.8 m)	PTW-18
		25' (7.6 m)	PTW-18
		12.5' (3.8 m)	PTW-20
		25' (7.6 m)	PTW-20
4	Power Cable	12.5' (3.8 m)	PTW-18
		25' (7.6 m)	PTW-18
		12.5' (3.8 m)	PTW-20
		25' (7.6 m)	PTW-20
5	Water Hose	12.5' (3.8 m)	PTW-18
		25' (7.6 m)	PTW-18
		12.5' (3.8 m)	PTW-20
		25' (7.6 m)	PTW-20
6	Cup Gasket, 2 pack	S19515-7	PTW-18
		S19515-6	PTW-20
7	Gas Lens Insulation, 2 pack	KP2037-3	PTW-18



TIG TORCH ASSEMBLIES

TIG TORCH ASSEMBLIES