

# SNAP IT<sup>®</sup>

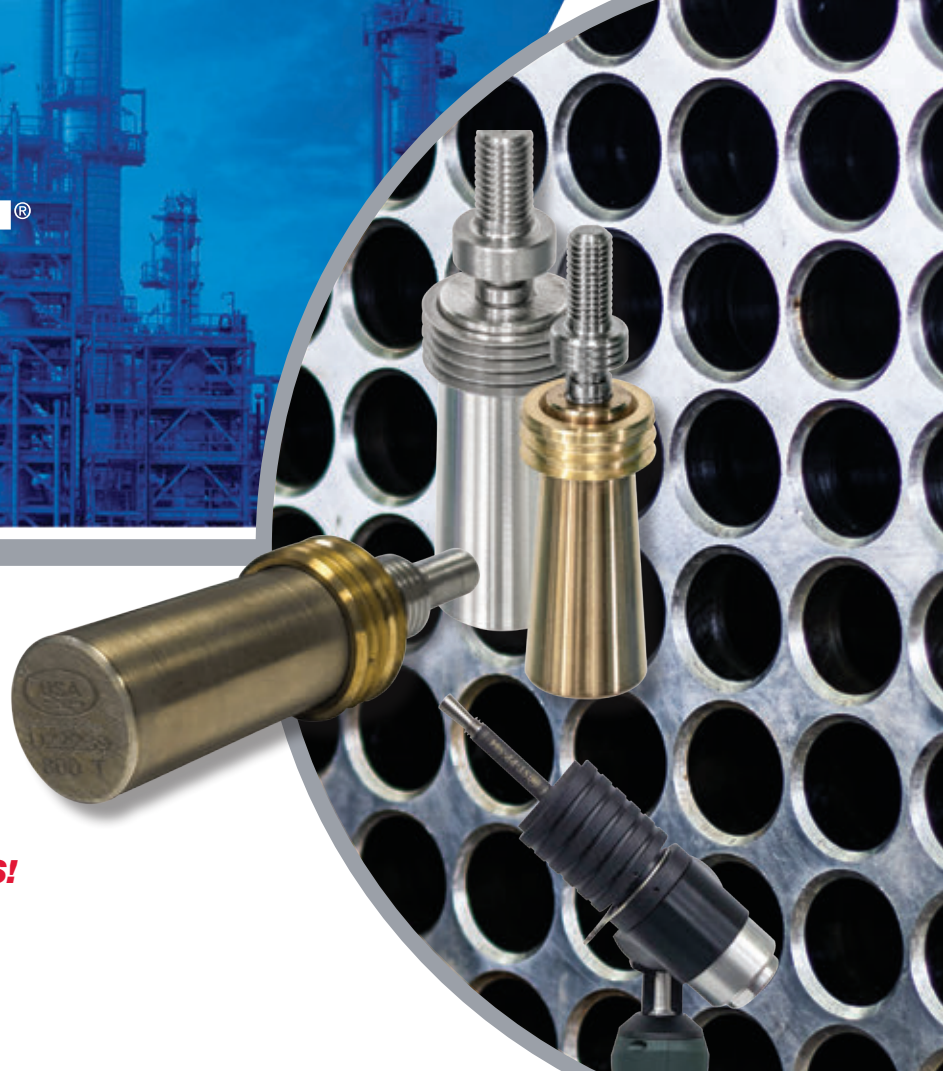
JR & SR  
ENGINEERED TUBE PLUGS

MEDIUM & HIGH PRESSURE  
RATED MODELS  
up to 7,000 PSIG

ASME PCC-2 Compliant

Fast Delivery

**WE DELIVER IN DAYS, NOT WEEKS!**



# SNAP IT<sup>®</sup> JR & SR

## Engineered Tube Plugs & Accessories

*Widely utilized in Refining, Petrochemical, Chemical, Power Generation, Water/Wastewater, Pharmaceutical, Semiconductor & many other industrial process manufacturing sectors.*

**(800) 456-8721**

[USAIndustries.com](http://USAIndustries.com) | [info@USAIndustries.com](mailto:info@USAIndustries.com)



**BRINGING SERVICE CLOSER:**

S. Houston, TX | Corpus Christi, TX | Prairieville, LA | Broken Arrow, OK

***New Locations Coming Soon!***

# ABOUT

# USA

USA Industries is proud to be an **ISO 9001:2015–certified leader** in designing, manufacturing, and supplying innovative solutions for piping isolation, testing, and maintenance across heat exchangers, boilers, and condensers. With state-of-the-art facilities in Texas and Louisiana, our team of experts is **dedicated to delivering exceptional quality and support** throughout every step of the rental, purchasing, and customer service process.

Our portfolio of industry-leading products includes cutting-edge solutions trusted across a wide range of industries, notably our ASME PCC-2 compliant, Snap It® Jr. (medium pressure) and Sr. (high pressure) engineered tube plugs.

## **INDUSTRIES WE SERVE:**

- Oil & Gas
- Refining
- Petrochemical
- Chemical Processing
- Energy & Power Generation
- Nuclear Utilities
- Water & Wastewater Treatment
- Pharmaceutical
- Semiconductor
- Paper & Pulp Mills

**many other industrial sectors**

## **AROUND-THE-CLOCK SUPPORT:**

**We're here for you 24/7, 365 days a year** — ready to provide the expert guidance and service that sets us apart. Contact us today to experience the USA Industries difference.

## **BRINGING SERVICE CLOSER:**

S. Houston, TX | Corpus Christi, TX | Prairieville, LA | Broken Arrow, OK

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### **SNAP-IT PLUGS ARE ASME PCC-2 COMPLIANT.**

ASME PCC-2 stands for the American Society of Mechanical Engineers (ASME) Post Construction Committee 2. It is a standard developed to provide guidelines and procedures for the repair of pressure equipment, including vessels, piping, and related components, after they have been constructed and put into service. ASME PCC-2 covers various aspects of repair, including design, fabrication, inspection, and testing, and it offers recommendations for both temporary and permanent repairs depending on the situation. The standard is widely used in industries where pressure equipment is prevalent, such as petrochemical, oil and gas, power generation, and manufacturing.



Snap-It tube plugs provide a safe, weld-free solution for sealing heat exchanger, boiler, and condenser tubes. When installed correctly, they stop leaks without damaging tubes or tube sheets. The system includes full tube preparation and installation tooling for both near-end and far-end applications, making tube plugging faster, easier, and more reliable than traditional methods.

**SAFETY:**

- Withstands blowout pressures over 18,000 PSID.
- Eliminates welding, reducing the risk of igniting hazardous chemicals or fumes.

**SAVE TIME & LABOR COSTS:**

- Quick installation in minutes.
- Enables “through-the-tube plugging” without removing the rear head cover.
- No welding required.
- Reduces maintenance labor costs and unit downtime.

**COST-EFFECTIVE:**

- Higher initial cost offset by labor savings and reduced downtime.
- Prevents damage to tube sheets and ligaments, minimizing costly maintenance.
- Reduces reloading times in tubular reactors.

**VERSATILE & RELIABLE:**

- Fits multiple tube sizes and available in various materials.
- Compatible with existing installation/removal systems.
- Affordable tooling rental or purchase options.
- Guaranteed leak-free helium seal to  $1 \times 10^{-9}$  c/sec.

**KIT:**

Ten (10) plugs

**PRESSURE RATING:**

1000 PSID (68.9 BarG) - Higher pressures available upon request

**TUBE ID SIZE RANGES:**

0.472” to 1.336” (11.99mm to 33.93mm) - Larger/smaller sizes available upon request

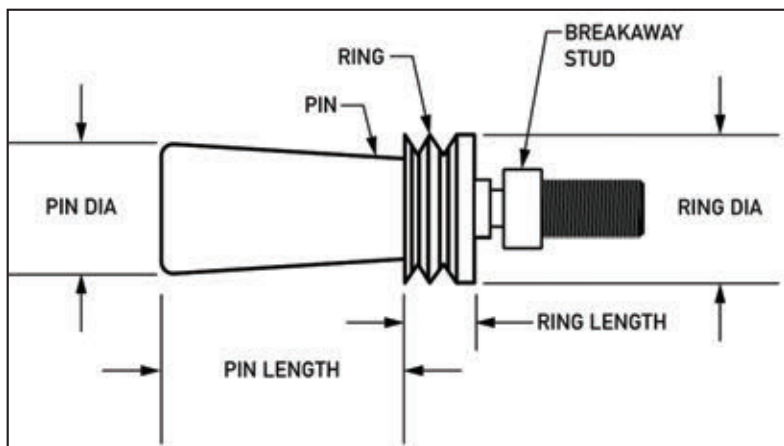
**STANDARD MATERIALS:**

Brass, Carbon Steel, Stainless Steel (304 & 316) - Any alloy available upon request

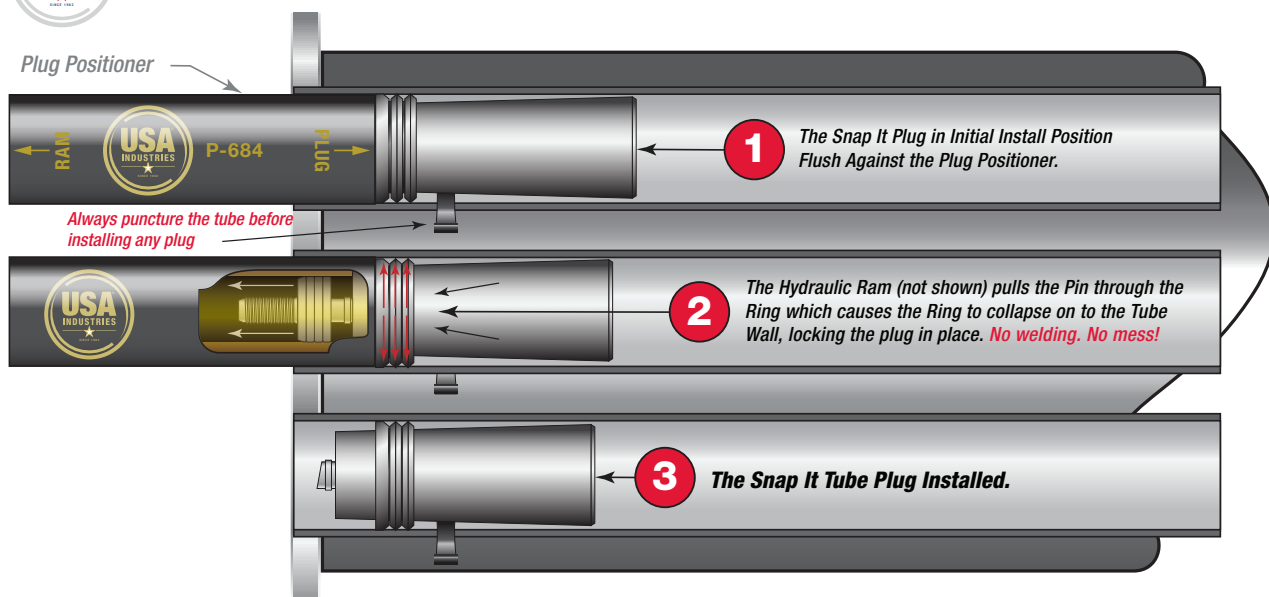
*Snap-It Plugs must be installed within the tube’s rolled section in the tubesheet. If tubes are not rolled, contact USA Industries (800-456-8721) before installation. Clean scale and pitting using Snap-It Brushes, and remove any weld droop to ensure proper seating of the plug.*

# PLUG PARTS & INSTALLATION EXPLANATION

# JR



*Can be used in high temperature/pressure heat exchangers*



# SPECS & ACCESSORIES

# JR



Plug #	Plug Range - Tube ID In(mm)	Pin Length In(mm)	Brush Kit	Positioner	Pull Rod	Channel Head Pull Rod
JR-471-"m"	0.472-0.515 (11.99-13.08)	1.63 (41.4)	JRA-471**"	PP-471	I	CHPRA-"X"-I
JR-491-"m"	0.492-0.540 (12.50-13.72)	1.67 (42.4)	JRA-491**"	PP-491		
JR-512-"m"	0.513-0.562 (13.03-14.27)	1.59 (40.3)	JRA-512**"	PP-512		
JR-524-"m"	0.525-0.585 (13.34-14.86)	1.28 (32.5)	JRA-524**"	PP-524		
JR-555-"m"	0.556-0.616 (14.12-15.65)	1.40 (35.6)	JRA-555**"	PP-555		
JR-584-"m"	0.585-0.649 (14.86-16.48)	1.32 (35.5)	JRA-584**"	PP-584	II	CHPRA-"X"-II
JR-621-"m"	0.622-0.689 (15.80-17.50)	1.57 (39.9)	JRA-621**"	PP-621		
JR-649-"m"	0.650-0.713 (16.51-18.11)	1.32 (35.5)	JRA-649**"	PP-649		
JR-670-"m"	0.671-0.740 (17.04-18.80)	1.66 (42.2)	JRA-670**"	PP-670		
JR-712-"m"	0.713-0.777 (18.11-19.74)	1.32 (35.5)	JRA-712**"	PP-712		
JR-735-"m"	0.736-0.810 (18.69-20.57)	1.68 (42.7)	JRA-735**"	PP-735	III	CHPRA-"X"-III
JR-774-"m"	0.775-0.838 (19.69-21.29)	1.32 (35.5)	JRA-774**"	PP-774		
JR-804-"m"	0.805-0.890 (20.45-22.61)	1.7 (43.2)	JRA-804**"	PP-804		
JR-837-"m"	0.838-0.902 (21.29-22.91)	1.32 (35.5)	JRA-837**"	PP-837		
JR-853-"m"	0.854-0.949 (21.69-24.10)	1.72 (43.7)	JRA-853**"	PP-853		
JR-899-"m"	0.900-0.963 (22.86-24.46)	1.32 (35.5)	JRA-899**"	PP-899		
JR-919-"m"	0.920-1.019 (23.37-25.88)	1.76 (44.7)	JRA-919**"	PP-919		
JR-962-"m"	0.963-1.027 (24.46-26.09)	1.32 (35.5)	JRA-962**"	PP-962		
JR-979-"m"	0.980-1.079 (24.89-27.41)	1.82 (46.2)	JRA-979**"	PP-979		
JR-1024-"m"	1.025-1.088 (26.04-27.64)	1.32 (35.5)	JRA-1024**"	PP-1024		
JR-1054-"m"	1.055-1.156 (26.80-29.31)	1.90 (48.3)	JRA-1054**"	PP-1054		
JR-1087-"m"	1.088-1.152 (27.65-29.26)	1.32 (35.5)	JRA-1087**"	PP-1087		
JR-1103-"m"	1.104-1.203 (28.04-30.56)	1.90 (48.3)	JRA-1103**"	PP-1103		
JR-1149-"m"	1.150-1.213 (29.21-30.81)	1.32 (35.5)	JRA-1149**"	PP-1149		
JR-1171-"m"	1.172-1.270 (29.77-32.26)	2.00 (50.8)	JRA-1171**"	PP-1171		
JR-1212-"m"	1.213-1 336 (30 81-33.93)	2.00 (50.8)	JRA-1212**"	PP-1212		

**Notes:**

"m" - Substitute the suffix "m" with the following material code: C - carbon steel, S - 316 stainless, B - brass, Y - Cr/Moly, M - monel, K - 90/10 CuNi, J - 70/30 CuNi. Other Materials Available.

\*\*" - For Brass, Copper, or Copper Nickel tubes add the Suffix -LD to the Brush Kit. Tube Preparation Brushes are required for use with Snap It™ Jr Plugs.

"X" - Channel Head Pull Rod Assemblies are available in 2', 4', or 6' lengths. Insert the appropriate # for the length required. For Through the Tube Applications, Extension Assemblies (See page 7T) are available in 2', 4', or 6' lengths. Specify the total # of each size needed for your application.

# SIZING CHART FOR ROLLED TUBES



	TUBE GAUGE			TUBE O.D.				
	BWG	WALL TKNS	5/8"	3/4"	7/8"	1"	1 1/4"	1 1/2"
<b>Rolled I.D.</b>	8				.578	.703	.953	1.203
<b>Near End</b>	8				555-M	670-M	919-M	1171-M
<b>Far End</b>	8				524-M	649-M	899-M	1171-M
<b>Rolled I.D.</b>	9	0.148		.484	0.609	0.734	0.984	1.234
<b>Near End</b>	9	0.148		471-M	584-M	712-M	979-M	1212-M
<b>Far End</b>	9	0.148		471-M	555-M	670-M	919-M	1171-M
<b>Rolled I.D.</b>	10	0.134		.509	.634	.759	1.009	1.259
<b>Near End</b>	10	0.134		491-M	621-M	735-M	979-M	1212-M
<b>Far End</b>	10	0.134		471-M	584-M	712-M	962-M	1171-M
<b>Rolled I.D.</b>	11	0.12		.534	.659	.784	1.034	1.284
<b>Near End</b>	11	0.12		524-M	649-M	774-M	1024-M	1212-M
<b>Far End</b>	11	0.12		491-M	621-M	735-M	979-M	1212-M
<b>Rolled I.D.</b>	12	0.109		.554	.679	.804	1.054	1.304
<b>Near End</b>	12	0.109		524-M	670-M	774-M	1024-M	1212-M
<b>Far End</b>	12	0.109		512-M	621-M	735-M	979-M	1212-M
<b>Rolled I.D.</b>	13	0.095		.579	.704	.829	1.079	1.329
<b>Near End</b>	13	0.095		555-M	670-M	804-M	1054-M	1212-M
<b>Far End</b>	13	0.095		524-M	649-M	774-M	1024-M	1212-M
<b>Rolled I.D.</b>	14	0.083	.476	.601	.726	.851	1.101	
<b>Near End</b>	14	0.083	471-M	584-M	712-M	837-M	1087-M	
<b>Far End</b>	14	0.083	555-M	670-M	804-M	1054-M		
<b>Rolled I.D.</b>	15	0.072	.495	.620	.745	.870	1.120	
<b>Near End</b>	15	0.072	491-M	584-M	735-M	853-M	1103-M	
<b>Far End</b>	15	0.072	471-M	584-M	712-M	837-M	1054-M	
<b>Rolled I.D.</b>	16	0.065	.508	.633	.758	.883	1.133	
<b>Near End</b>	16	0.065	491-M	621-M	735-M	853-M	1103-M	
<b>Far End</b>	16	0.065	471-M	584-M	712-M	837	1054-M	
<b>Rolled I.D.</b>	17	0.058	.521	.646	.771	.896	1.146	
<b>Near End</b>	17	0.058	512-M	621-M	735-M	853-M	1103-M	
<b>Far End</b>	17	0.058	491-M	584-M	735-M	853-M	1103-M	
<b>Rolled I.D.</b>	18	0.049	.537	.662	.770	.912	1.162	
<b>Near End</b>	18	0.049	524-M	649-M	774-M	899-M	1149-M	
<b>Far End</b>	18	0.049	491-M	621-M	735-M	853-M	1103-M	
<b>Rolled I.D.</b>	19	0.042	.549	.674	.799	.924	1.174	
<b>Near End</b>	19	0.042	524-M	649-M	774-M	899-M	1149-M	
<b>Far End</b>	19	0.042	512-M	621-M	735-M	853-M	1149-M	
<b>Rolled I.D.</b>	20	0.035	.562	.687	.812	.937	1.187	
<b>Near End</b>	20	0.035	524-M	649-M	774-M	899-M	1149-M	
<b>Far End</b>	20	0.035	524-M	649-M	774-M	853-M	1149-M	
<b>Rolled I.D.</b>	21	0.032	.567	.692	.817	.942	1.192	
<b>Near End</b>	21	0.032	555-M	670-M	804-M	919-M	1171-M	
<b>Far End</b>	21	0.032	524-M	649-M	774-M	853-M	1149-M	
<b>Rolled I.D.</b>	22	0.028	.575	.700	.825	.950	1.200	
<b>Near End</b>	22	0.028	555-M	670-M	804-M	919-M	1171-M	
<b>Far End</b>	22	0.028	524-M	649-M	774-M	919-M	1171-M	
<b>Rolled I.D.</b>	23	0.025	.580	.705	.830	.955	1.205	
<b>Near End</b>	23	0.025	555-M	670-M	804-M	919-M	1171-M	
<b>Far End</b>	23	0.025	555-M	670-M	804-M	919-M	1171-M	
<b>Rolled I.D.</b>	24	0.022	.585	.710	.835	.960	1.210	
<b>Near End</b>	24	0.022	555-M	670-M	804-M	919-M	1171-M	
<b>Far End</b>	24	0.022	555-M	670-M	804-M	899-M	1171-M	

Substitute the suffix "M" with the following material code:

- C = Carbon Steel
- B = Brass
- S = 316 SS
- J = 70/30 CuNi
- K = 90/10 CuNi
- Y = Chrome/Moly
- M = Monel
- I = Inconel
- N = Nickel 200
- T = Titanium
- H = Hastelloy
- Z = Zirconium

**NEAR END** = Plugging front end of tube sheet

**FAR END** = "Through the tube," plugging rear end of tube sheet

**NOTES:**

- 1) Tube ID's often vary between inlet & outlet due to corrosion and/or erosion, this chart and recommended tube sizes are to be used as Reference only.
  - 2) Tube Preparation Brushes are required for use with all Snap It Plugs.
- \* Larger sizes available upon request

All tube inner diameters listed above are based upon a 10% wall reduction



The Snap It® Sr. Engineered Tube Plug, exclusively produced by USA Industries, provides a reliable, weld-free solution for high-pressure heat exchangers, with installation times up to 80% faster than conventional tapered plugs. Designed to protect the tube sheet's integrity, this plug can endure pressures of up to 7000 PSID.

**SAFETY:**

- Withstands blowout pressures over 28,000 PSID.
- Eliminates welding, reducing the risk of igniting hazardous chemicals or fumes.

**SAVE TIME & LABOR COSTS:**

- Quick installation in minutes.
- No welding required.
- Reduces maintenance labor costs and unit downtime.

**COST-EFFECTIVE:**

- Higher initial cost offset by labor savings and reduced downtime.
- Prevents damage to tube sheets and ligaments, minimizing costly maintenance.
- Reduces reloading times in tubular reactors.

**VERSATILE & RELIABLE:**

- Fits multiple tube sizes and available in various materials.
- Compatible with existing installation/removal systems.
- Affordable tooling rental or purchase options.
- Guaranteed leak-free helium seal to  $1 \times 10^{-9}$  c/sec.

**KIT:**

Ten (10) plugs, one (1) Go/No-Go guage, one (1) brush

**PRESSURE RATING:**

7000 PSID (483 BarG) - Higher pressures available upon request

**TUBE ID SIZE RANGES:**

0.401" to 1.180" (11.99mm to 29.97mm) - Larger/smaller sizes available upon request

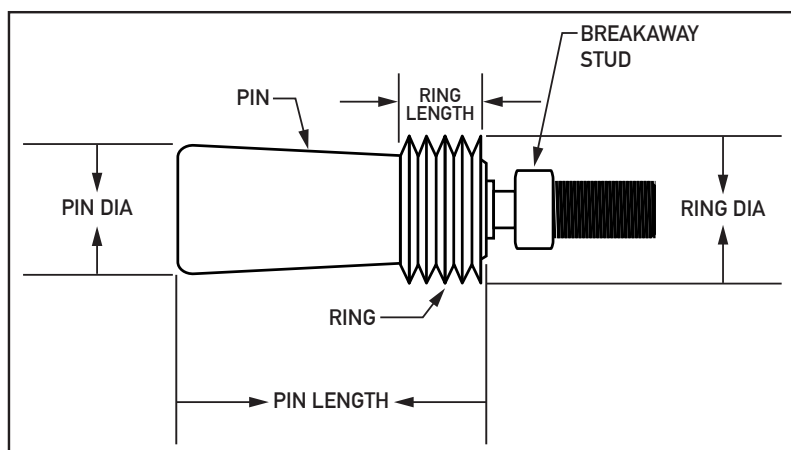
**STANDARD MATERIALS:**

Brass, Carbon Steel, Stainless Steel (304 & 316) - Any alloy available upon request

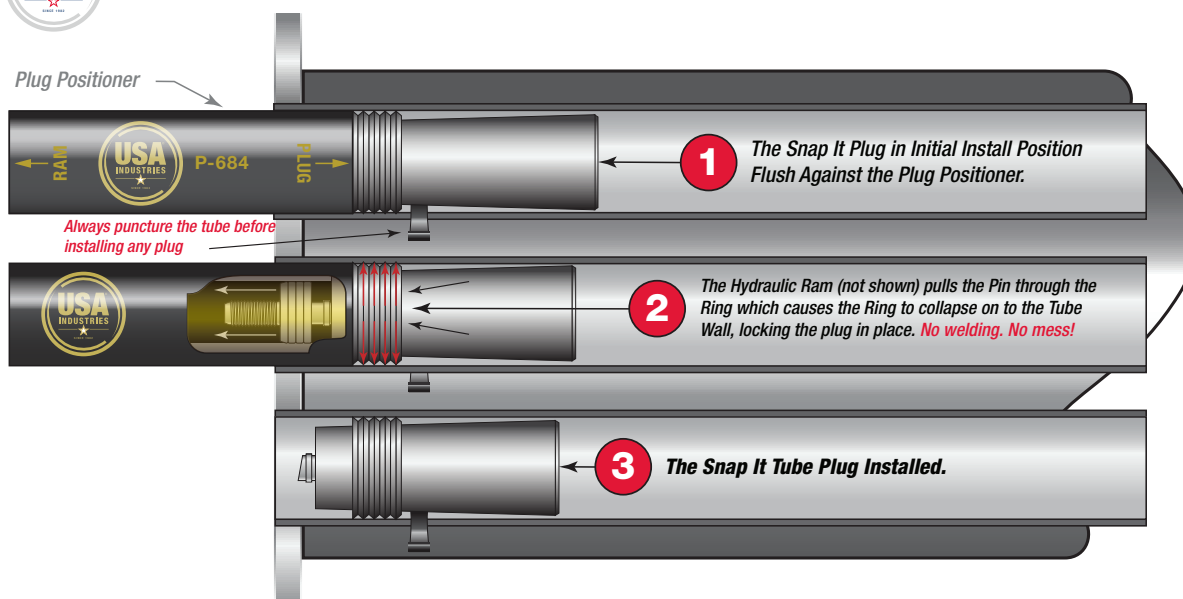
*Snap-It Plugs must be installed within the tube's rolled section in the tubesheet. If tubes are not rolled, contact USA Industries (800-456-8721) before installation. Clean scale and pitting using Snap-It Brushes, and remove any weld droop to ensure proper seating of the plug.*

# PLUG PARTS & INSTALLATION EXPLANATION

# SR



*Can be used in high temperature/pressure heat exchangers*



# SPECS & ACCESSORIES

# SR



SR Kit Part No.	Plug Range - Tube ID Inches (mm)	Brush Kit	Positioner	Plug Positioner	Pull Rod Assembly	Channel Head Pull Rod
SR-400-"m"	0.401-0.420 (10.16-10.68)	SRA-400- <sup>***</sup>	PP-400			I CHPRA-"X"-I
SR-420-"m"	0.421-0.440 (10.69-11.19)	SRA-420- <sup>***</sup>	PP-420	PP 400-440		
SR-440-"m"	0.441-0.460 (11.20-11.70)	SRA-440- <sup>***</sup>	PP-440			
SR-460-"m"	0.461-0.480 (11.71-12.21)	SRA-460- <sup>***</sup>	PP-460			
SR-480-"m"	0.481-0.500 (12.22-12.72)	SRA-480- <sup>***</sup>	PP-480	PP 460-500		
SR-500-"m"	0.501-0.520 (12.73-13.22)	SRA-500- <sup>***</sup>	PP-500			
SR-520-"m"	0.521-0.540 (13.23-13.73)	SRA-520- <sup>***</sup>	PP-520			
SR-540-"m"	0.541-0.560 (13.74-14.24)	SRA-540- <sup>***</sup>	PP-540	PP 520-580		
SR-560-"m"	0.561-0.580 (14.25-14.75)	SRA-560- <sup>***</sup>	PP-560			
SR-580-"m"	0.581-0.600 (14.76-15.26)	SRA-580- <sup>***</sup>	PP-580			
SR-600-"m"	0.601-0.620 (15.27-15.76)	SRA-600- <sup>***</sup>	PP-600			II CHPRA-"X"-II
SR-620-"m"	0.621-0.640 (15.77-16.27)	SRA-620- <sup>***</sup>	PP-620			
SR-640-"m"	0.641-0.660 (16.28-16.78)	SRA-640- <sup>***</sup>	PP-640	PP 600-680		
SR-660-"m"	0.661-0.680 (16.79-17.27)	SRA-660- <sup>***</sup>	PP-660			
SR-680-"m"	0.681-0.700 (17.28-17.79)	SRA-680- <sup>***</sup>	PP-680			
SR-700-"m"	0.701-0.720 (17.80-18.30)	SRA-700- <sup>***</sup>	PP-700			
SR-720-"m"	0.721-0.740 (18.31-18.81)	SRA-720- <sup>***</sup>	PP-720			
SR-740-"m"	0.741-0.760 (18.82-19.32)	SRA-740- <sup>***</sup>	PP-740	PP 700-780		
SR-760-"m"	0.761-0.780 (19.33-19.83)	SRA-760- <sup>***</sup>	PP-760			
SR-780-"m"	0.781-0.800 (19.84-20.34)	SRA-780- <sup>***</sup>	PP-780			
SR-800-"m"	0.801-0.820 (20.35-20.84)	SRA-800- <sup>***</sup>	PP-800			III CHPRA-"X"-III
SR-820-"m"	0.821-0.840 (20.85-21.35)	SRA-820- <sup>***</sup>	PP-820	PP 800-860		
SR-840-"m"	0.841-0.860 (21.36-21.86)	SRA-840- <sup>***</sup>	PP-840			
SR-860-"m"	0.861-0.880 (21.87-22.37)	SRA-860- <sup>***</sup>	PP-860			
SR-880-"m"	0.881-0.900 (22.38-22.87)	SRA-880- <sup>***</sup>	PP-880			
SR-900-"m"	0.901-0.920 (22.88-23.38)	SRA-900- <sup>***</sup>	PP-900			
SR-920-"m"	0.921-0.940 (23.39-23.87)	SRA-920- <sup>***</sup>	PP-920	PP 880-960		
SR-940-"m"	0.941-0.960 (23.88-24.40)	SRA-940- <sup>***</sup>	PP-940			
SR-960-"m"	0.961-0.980 (24.41-24.89)	SRA-960- <sup>***</sup>	PP-960			
SR-980-"m"	0.981-1.000 (24.90-25.40)	SRA-980- <sup>***</sup>	PP-980			
SR-1000-"m"	1.001-1.020 (25.41-25.91)	SRA-1000- <sup>***</sup>	PP-1000			
SR-1020-"m"	1.021-1.040 (25.92-26.42)	SRA-1020- <sup>***</sup>	PP-1020	PP 980-1060		
SR-1040-"m"	1.041-1.060 (26.43-26.92)	SRA-1040- <sup>***</sup>	PP-1040			
SR-1060-"m"	1.061-1.080 (26.93-27.43)	SRA-1060- <sup>***</sup>	PP-1060			
SR-1080-"m"	1.081-1.100 (27.44-27.94)	SRA-1080- <sup>***</sup>	PP-1080			
SR-1100-"m"	1.101-1.120 (27.95-28.45)	SRA-1100- <sup>***</sup>	PP-1100			
SR-1120-"m"	1.121-1.140 (28.46-28.96)	SRA-1120- <sup>***</sup>	PP-1120	PP 1080-1160		
SR-1140-"m"	1.141-1.160 (28.97-29.46)	SRA-1140- <sup>***</sup>	PP-1140			
SR-1160-"m"	1.161-1.180 (29.47-29.97)	SRA-1160- <sup>***</sup>	PP-1160			

**Notes:**

Standard Sr Kit includes 10 plugs, 1 Brush and 1 Go/No Go Gauge. However, plugs and items can be ordered individually - Consult factory for more information.

**"m"** - Substitute the suffix 'm' with the following material code: C - carbon steel, S - 316 stainless, B - brass, Y - Cr/Moly, M - monel, K - 90/10 CuNi, J - 70/30 CuNi. Other Materials Available.

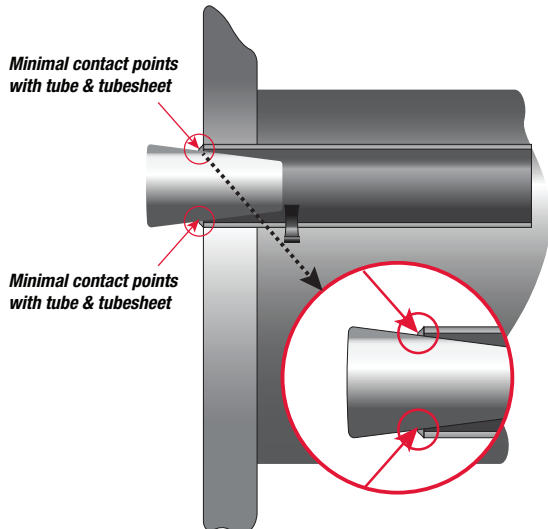
**"\*"** - Brush and Go/No Go Gauge furnished with every 10 plugs.

**"X"** - Channel Head Pull Rod Assemblies (See Page 7T) are available in 2', 4', or 6' lengths. Insert the appropriate # for the length required.

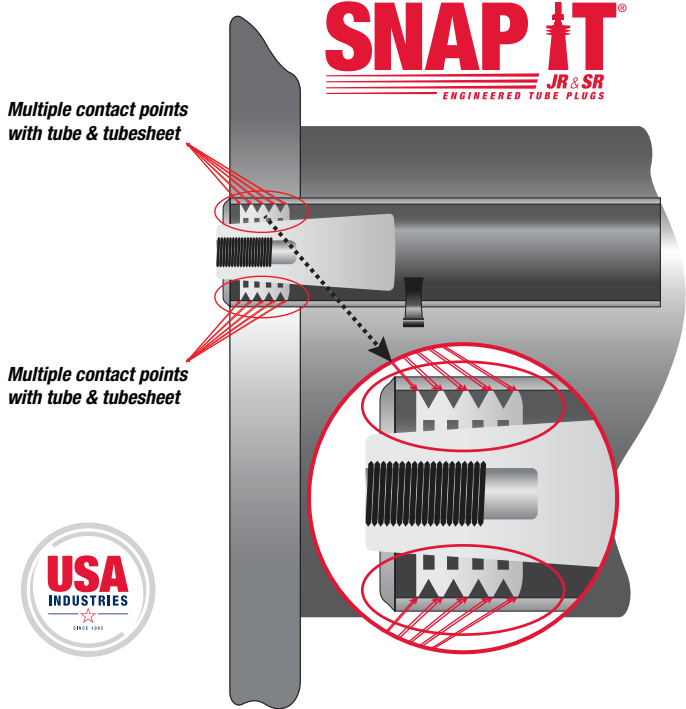
# HAMMER DRIVEN VS. ENGINEERED TUBE PLUGS

Hammer-driven tapered plugs are prone to ejection during shell-side pressure testing or when tubes are insufficiently vented prior to installation. Unintended plug blowouts present significant safety hazards to both personnel and nearby equipment. Snap It Engineered Tube Plugs provide a controlled, mechanical tube-plugging solution featuring multiple engagement points, engineered to ensure reliable sealing performance in compromised or degraded tubes across heat exchangers, condensers, and boiler systems.

## HAMMER-DRIVEN



vs.



- Welding may be required for high-pressure use
- Can eject violently — serious risk to personnel
- Safety factor unknown
- Welded plugs make future re-tubing difficult and costly
- Uncontrolled force can overstress tubes, joints, or crack tubesheets
- Fails to meet ASME PCC-2 standards

- **NO WELDING REQUIRED**
- **SAFE** — Jr. model rated up to 1000 PSID & Sr. model up to 7000 PSID
- **RELIABLE** — delivers a helium leak-tight seal
- **COST-EFFECTIVE** — designed for permanent, lifecycle performance
- **EFFICIENT** — hydraulic installation minimizes turnaround and labor times
- **CONTROLLED** — installation force protects adjacent tubes and ligaments
- Jr. model — **suited for through-the-tube plugging**
- **ASME PCC-2 COMPLIANT**
- Manufactured in an **ISO 9001:2015** registered facility

# INSTALLATION & REMOVAL

# KIT



## INTRODUCING SURES NAP™ PRO

Built to install Snap It® JR & SR Engineered Tube Plugs in heat exchangers, boilers, and condensers. No shop air, pumps, hoses, or electrical connections required — delivering a cleaner, safer worksite. With no hydraulic fluids or external power, it's the environmentally superior alternative to traditional electric hydraulic units.

**CORDLESS • HOSELESS • BATTERY-OPERATED**

### SURES NAP PRO Installation & Removal Tools Kit

With USA Industries' Snap It installation and removal tools, the process of plugging your heat exchangers, boilers and condensers couldn't be easier! Now you can remove or eliminate problems caused by welded or hammer-driven tube plugs, such as: safety risks, inconsistent installation, unpredictable pressure-holding capacity, damage to tube sheets, holes and tubes, as well as time-consuming and expensive welding costs!



# INSTALLATION & REMOVAL

# KIT



## TUBE PREPARATION & INSTALLATION COMPONENTS:

### PREPARATION:

Tube brushes are ideal for properly prepping your heat exchanger tubes for a tube plug. The brushes remove pitting and corrosion from inside the tube, allowing optimum sealing and holding forces for your Snap It tube plug.

### DRILL GUNS & BRUSHES:

Because Snap It Jr. has a range of tube sizes that it can effectively seal, brush kits come with 3-4 brushes per kit. With the drill guns, attach the smallest brush in your brush kit that effectively cleans and preps the tube. Snap It Sr. brushes are provided for the exact tube size ordered, ensuring a perfect fit. This step is absolutely crucial to ensuring you have the optimal seal with your tube plugs.

#### CORDLESS KIT

Makita Brushless & Cordless Drill Gun



Brush Kit (Sold Separately)

#### CONVENTIONAL KIT (ELECTRIC)

Brush Kit (Sold Separately)



Pneumatic Drill Gun

### INSTALLATION:

Components are compact and lightweight. The cordless hydraulic SureSnap Pro is the simplest, safest, quickest and easiest way to install Snap It Sr or Snap It Jr tube plugs. Conventional kit pump operates on shop air - 80 to 120 PsiG (2.7-8.6 BarG) @20 CFM.

### CONVENTIONAL COMPONENTS:

Ram Head | Hydraulic Pump | Hydraulic Hose with Quick Connects and Pressure Gauge Safety Cable | Near End Pull Rod Assembly

### Plug Size Ranges (Tube ID):

JR MODEL: 0.472" to 1.336" (11.99mm - 33.93mm)

SR MODEL: 0.401" to 1.180" (10.16mm - 29.97mm)

#### CORDLESS KIT

SureSnap Pro™ Installation Tool

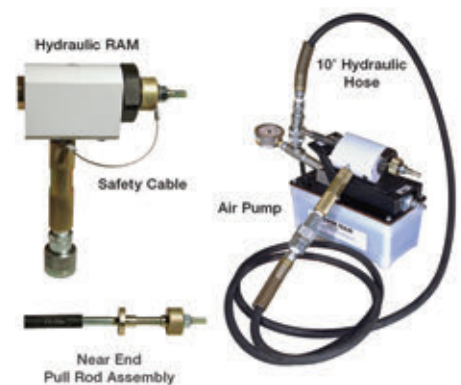


Near End Pull Rods

Makita Rapid Charger

Makita LXT 18V / 5.0Ah Lithium Ion Batteries

#### CONVENTIONAL KIT (PNEUMATIC)



Hydraulic RAM

Safety Cable

Air Pump

10' Hydraulic Hose

Near End Pull Rod Assembly

### REMOVAL:

Designed to easily and quickly remove installed tube plugs. The plug removal tool features a nose piece that threads into the pin of an installed plug, allowing the pin to separate from the ring. The tool securely retains the pin while a serrated spear grips the ring's ID, and the integral slide hammer removes both the ring and pin in a single operation. Extended models are also available.

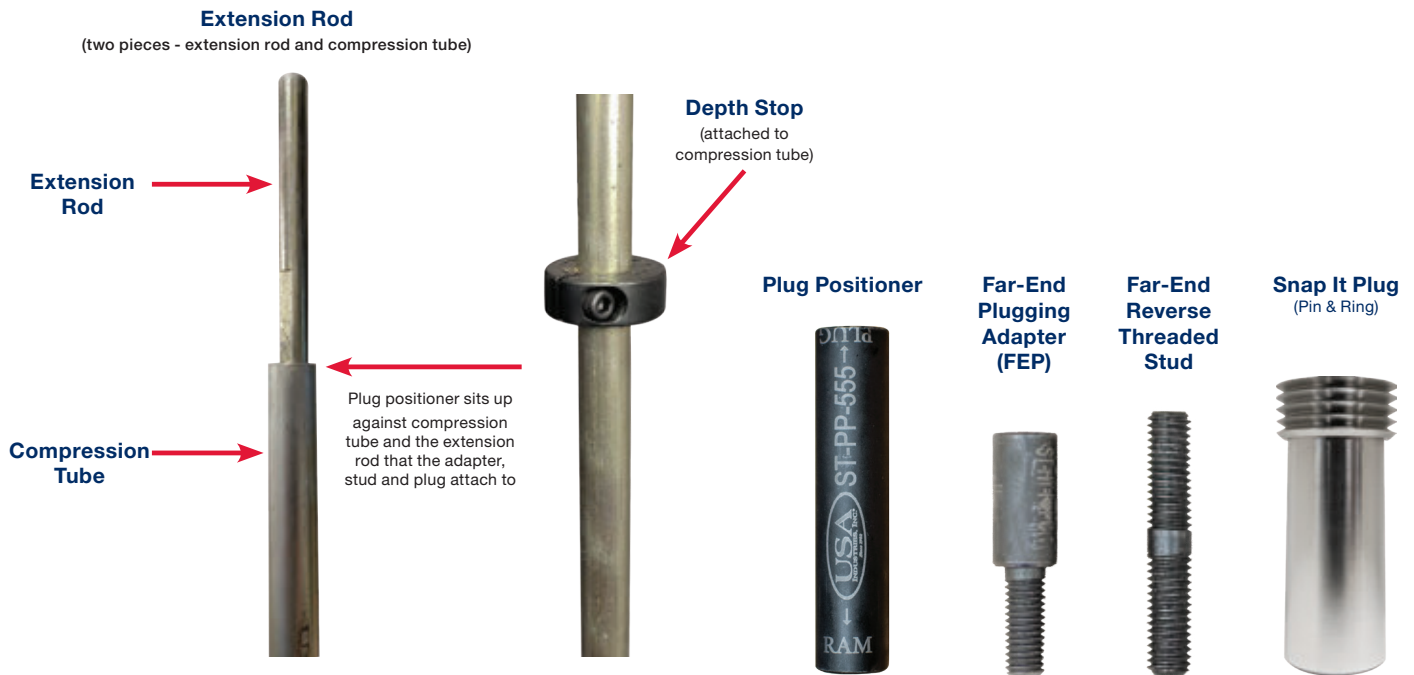
### COMPONENTS:

Manual Slide Hammer Tool | Spears (multiple size options)

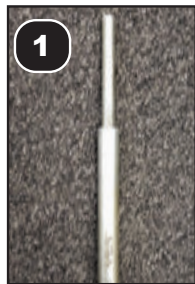


# THROUGH-THE-TUBE PLUGGING PULL ROD ASSEMBLY

# PARTS

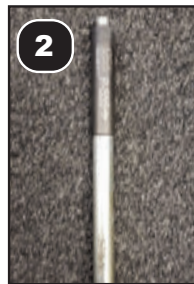


## SEQUENCE OF THROUGH-THE-TUBE THREADING PULL ROD ASSEMBLY



**1**

Slide Compression Tube over Extension Rod so that Extension Rod Extends Beyond Compression Tube.



**2**

Place Plug Positioner over Extension Rod so the Plug Positioner Rests atop the Compression Tube.



**3**

Screw Far-End Plugging Adapter into the Threaded End of the Extension Rod.



**4**

Screw Far-End Reverse Threaded Stud into Far-End Plugging Adapter.



**5**

Screw Plug onto the Far-End Reverse Threaded Stud.



**6**

Rest Base of the Plug Ring onto the top of the Plug Positioner.

# LEAK DETECTION

# TOOLS

Heat exchangers play a critical role in various industrial processes, and even small leaks can lead to significant performance losses, contamination, and safety hazards. Vacuum leak detection provides a highly sensitive, accurate, and non-destructive method to pinpoint leaks early before they escalate into costly failures.

With the **VLD-2500 VACUUM LEAK DETECTOR**, simply seal one end of the tube with a rubber plug or a t-handle with a nozzle, then insert the detector into the tube to be tested and press the trigger. If there's a leak, the VLD-2500 reliably detects it with high precision.



Insert the **TLD 2500 TUBE LEAK DETECTOR** guns into the tube to be tested. Actuate pressurizing gun by depressing the trigger, the plugging gun seals automatically when pressurizing. After supply pressure is reached, or 100 PSIG (whichever is less), release trigger. If the pressure holds, the tube is OK; if it drops, the tube is leaking - Simple.



# TUBE CUTTER ONE-REV

Before installing tube plugs in heat exchangers, boilers, or condensers, it is recommended to puncture the tube interior to prevent pressure buildup. If this step is skipped, internal pressure can accumulate and eject the tube plugs, posing serious risks to personnel, equipment, and surrounding property.

USA Industries' **ONE-REV INTERNAL TUBE CUTTERS** provide a fast, simple solution for puncturing or cutting the inside of these tubes. Designed for hand operation, the One-Rev Tube Cutter is used with a properly sized wrench, pliers, or ratchet that fits the tool's Drive Shank.



## PRODUCT FEATURES:

- Tube Sizes: Compatible with 1/2" - 2-1/2" tubes of all gauges
- Standard Reach: 10" reach; extended reaches available upon request
- Cutting Bits: Manufactured from high-quality, hardened tool steel for maximum cutting edge retention
- Cutter Compatibility: Fits 1/2" through 2-1/2" tube cutters
- Interchangeability: Directly interchangeable with Airetool bits

# HETX RELATED PRODUCTS



## PNEUMATIC & ELECTRIC ROLL MOTORS

Used to expand tubes to a specific size to create a tight fit within a larger component, a process critical for equipment like boilers and heat exchangers.



## TUBE EXPANDERS

Attached to a roll motor, they are a tool used to increase the diameter of a tube, to create a tight, leakproof mechanical joint with a tube sheet, header, or another pipe.

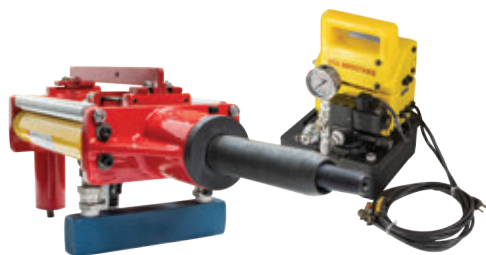
## TUBE CLEANING EQUIPMENT & ACCESSORIES

Used to remove built-up deposits, scale, and other debris from the inside of pipes, tubes, and other hollow instruments to restore them to peak efficiency. They are essential for maintaining industrial equipment like heat exchangers, condensers, and boilers.



## BOILER TUBE CUTTERS

A thick-walled boiler tube cutter is a specialized tool, often powered by a drill, used to cut boiler tubes with thick walls in industrial boilers and heat exchangers.



## TUBE PULLERS

Specialized hydraulic tools used to remove tubes from industrial equipment like heat exchangers and boilers. They are designed to grip and extract tubes quickly and efficiently.

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