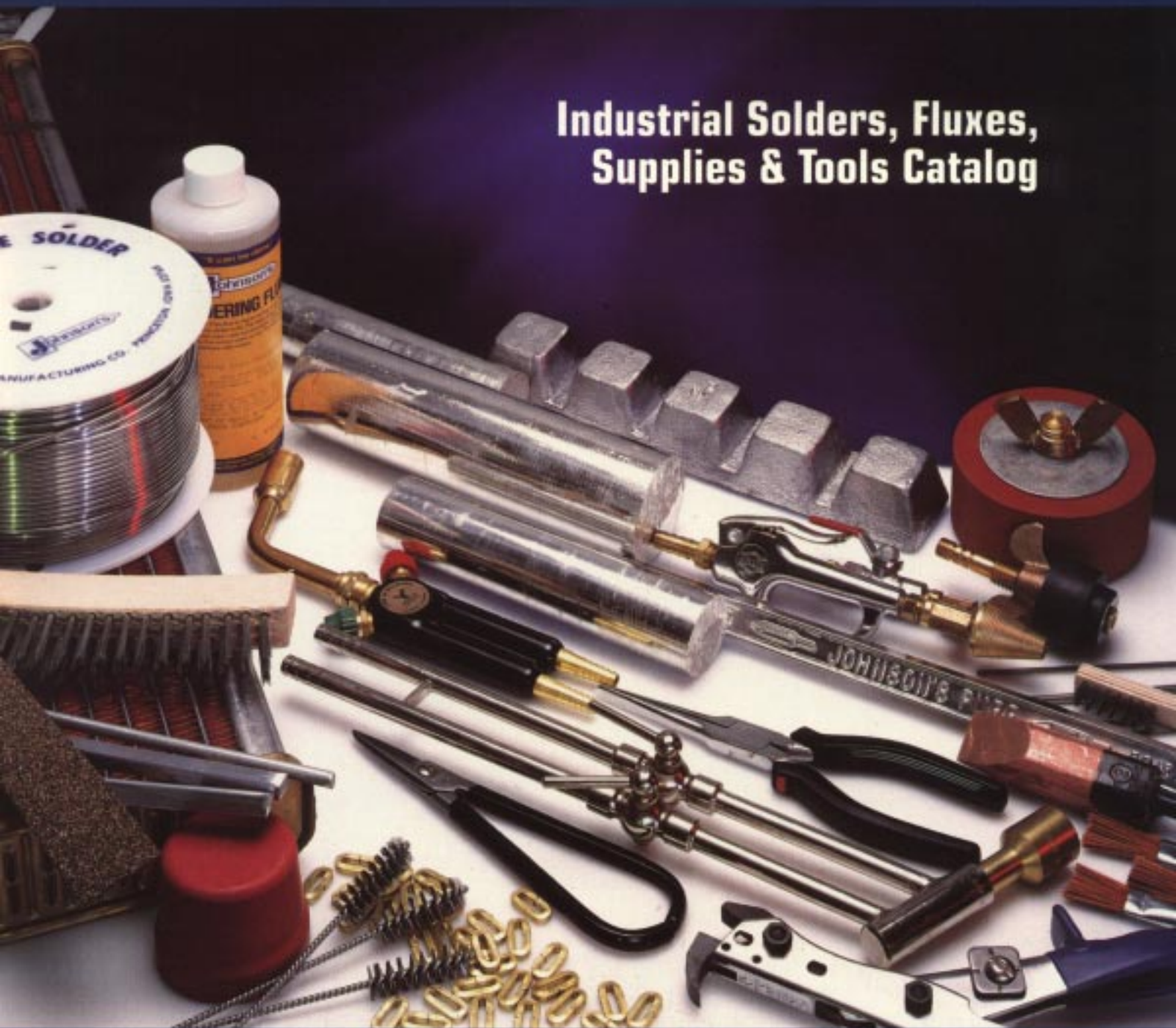


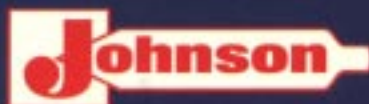
JOHNSON

INNOVATION IN SOLDER TECHNOLOGY SINCE 1909

**Industrial Solders, Fluxes,
Supplies & Tools Catalog**



"It Can Be Done" *With* Johnson



SOLDERING SOLUTIONS

Since 1909

SOLDERING FLUID

Johnson's story began in St. Louis, Missouri in the late 1800's. This statement was provided by the late Charles W. Johnson, son of the late founder, Charles H. Johnson.

"The original Johnson's Soldering Fluid was developed as a result of the difficulty my father had in soldering laundry equipment which he manufactured and repaired. The galvanized cylinders of the washing machines posed a very difficult soldering problem." Besides making fluid for his own needs, the elder Johnson began giving it to his friends in the St. Louis area.

When he moved to Cedar Rapids, Iowa in the early 1900's his friends still wanted this unique soldering flux. In 1909 Johnson began marketing Johnson's Soldering Fluid and at that time he coined a slogan "It can be done", which has been used in conjunction with Johnson's logo ever since.

Today, Johnson produces one of the most complete lines of solders, fluxes and tinning compounds in the entire world. While our company is increasingly driven by new product development and technology, nonetheless, we pay strict heed to our founders commitment to provide "quality, consistency and uniformity" with every batch.



JOHNSON'S SOLDERING FLUID

The "Original" Soldering Fluid

The standard by which all other general purpose fluxes are compared, but never equaled. Prove to yourself that this is the one flux that will save you more time and money than any other. Far superior to salts or powder fluxes. Johnson's Soldering Fluid enables all solders to flow at their lowest possible temperature, yet it protects your work at higher temperatures without burning away. Your solder joints will be stronger and less solder will drop off your work.

Johnson's Soldering fluid contains no free acid. It is highly active when heated (becomes active at 150° F) yet it is nearly inactive when cold.

Johnson's Soldering Fluid will do more soldering per pound than any other flux, liquid or powder. Johnson's Soldering Fluid may be diluted; mix with equal volume of water for radiator repair; use full strength for tough jobs. Reapply extra flux while work is hot if necessary for the most difficult jobs. Residues wash off with water.

ITEM	SINGLE PART NO.	CASE PART NO.	NO. IN CASE	SHIP WT. CASE
Bench Btle	01-02	01-04	24	9#
Pint	01-07	01-08	12	19#
Quart	01-09	01-10	6	18#
Gallon	01-11	01-12	4	50#
5-Gallon	01-14	01-14		61#
15-Gallon	01-15	01-15		179#
55-Gallon	01-55	01-55		665#



SOLDERING FLUXES

LLOYD'S STAINLESS STEEL FLUX

The Preferred Flux for all Stainless Steels

Lloyd's Stainless Steel Soldering Flux is our most aggressive flux for soldering most difficult to solder metals except magnesium and aluminum. A truly outstanding flux (perhaps the finest of its type in the world) for all grades of stainless when using soldering coppers (irons); also solders chrome, and cast iron bearing shells, where other fluxes may fall short.

This balanced chemical and acid combination produces strong solder joints that are bright and shiny. Commonly used with all non-lead solders such as Johnson's 460 tin-silver for soldering food handling equipment, our new IA-423, tin-silver-copper ternary eutectic solder, 95/5 tin-antimony solder and all other common solders. Residues are water soluble and must be removed from the workpiece immediately after soldering.

ITEM	SINGLE PART NO.	CASE PART NO.	NO. IN CASE	SHIP WT. CASE
Quart	03-06	03-07	6	17#
Gallon	03-08	03-09	4	44#

JOHNSON'S NO. 1 STAINLESS STEEL FLUX

Our Best Flux for Torch Work on Stainless

Johnson's No. 1 Stainless Steel Flux is an excellent flux for torch soldering stainless steels, monel, nickel and chrome. This balanced formulation starts to clean the instant it's applied, and continues throughout the soldering process.

Johnson's No.1 works well with non-lead solders and other solders as well. It can be diluted with water to become a more general purpose flux. Johnson's No. 1's residues are water soluble, yet remain active, therefore should be removed from the workpiece immediately after soldering.

ITEM	SINGLE PART NO.	CASE PART NO.	NO. IN CASE	SHIP WT. CASE
Quart	02-06	02-07	6	18#
Gallon	02-08	02-09	4	45#

JOHNSON'S SOLDERING PASTE

The "Original" Johnson Paste Flux for Sweat Joints

Johnson's Soldering Paste contains a balanced formulation of inorganic chlorides in a pure petrolatum base. This grease type paste flux, known for its light color and soft composition has been preferred by many plumbers for sweat soldering copper joints and brass fittings. It becomes quite active when heated, to pull solder deep into the joints, yet it's residues are considered mild because they do not turn copper pipes green.

ITEM	SINGLE PART NO.	CASE PART NO.	NO. IN CASE	SHIP WT. CASE
3 Oz. Bottle	05-03	05-04	24	5#
1 Lb. Jar	05-09	05-10	24	30#

WATER REMOVABLE SOLDERING PASTE

NEW! Approved for all Potable Water Supplies

Johnson's Water Removable Soldering Paste is biodegradable, non-hazardous and 100% cold water flushable. It contains no zinc or ammonium chloride, yet it improves the wetting and flow of all lead free solders. Exceeds ASTM B813-93 & CDA STM 1.0, as well as Federal Spec. A-A-51145C-92, Type 1, Form A.

ITEM	SINGLE PART NO.	CASE PART NO.	NO. IN CASE	SHIP WT. CASE
3 Oz. Bottle	05-23	05-24	24	5#
1 Lb. Jar	05-29	05-30	24	30#

JOHNSON'S CRYSTAL GEL SOLDERING FLUX

NEW! A Mild Chloride Formula for Stained Glass Work

Johnson's Crystal Gel Soldering Flux is thicker, easier to apply, without running off the workpiece. It offers just the right combination of gentle fluxing activity and will not stain metals prior to soldering, yet it solders fast, leaving all joints bright and shiny. Excellent flux for copper foil work. Use with Johnson's IA-423 Lead-Free Solder for strongest possible joints.

ITEM	SINGLE PART NO.	CASE PART NO.	NO. IN CASE	SHIP WT. CASE
4 Oz. Bottle	04-20	04-21	24	9#
Quart	04-28	04-29	6	16#

PRODUCTION FLUXES

LLOYD'S NO. 14 MILD ORGANIC FLUX

Lowest Residues for Dip Soldering

Lloyd's No. 14 Organic Soldering Flux is a uniquely mild solution of free halides for soldering copper, brass, tin plate and other easy-to-solder metals. Leaves no corrosive residue afterwards. Commonly used for soldering stained glass articles with lead or brass came, dip soldering cable ends, architectural copper roofing and many other applications.

ITEM	SINGLE PART NO.	CASE PART NO.	NO. IN CASE	SHIP WT. CASE
Gallon	04-61	04-62	4	40#
5 Gallon	04-64		1	49#

LLOYD'S NO. 6 SOLDERING FLUID

A Low Staining Flux

Lloyd's No. 6 Soldering Fluid is an ideal flux for soldering brass, copper, steel, lead, tinplate, terne plate and other coated metals. Uses include production soldering of stained glass lamp shades, brass musical instruments, and other products where a low staining flux is desirable. Lloyd's No. 6 may be diluted and its residues are easily removed with water.

ITEM	SINGLE PART NO.	CASE PART NO.	NO. IN CASE	SHIP WT. CASE
Quart	06-04	06-05	6	18#
Gallon	06-06	06-07	4	46#
15 Gallon	06-09			166#

J-33 FLUX FOR GALVANIZED METALS

Produces Strong Joints with Minimal Staining

Johnson's J-33 Liquid Flux for Galvanized is an active chloride formulation, with the power to handle the toughest galvanized jobs. J-33 is used with Johnson's non-leaded Galvanized Repair Alloy and a torch for repairing galvanized surfaces, or with 50/50 low-antimony solder and a soldering iron for sheet metal seams. J-33's residues are active and should be removed immediately after soldering to prevent dulling of coated metals.

ITEM	SINGLE PART NO.	CASE PART NO.	NO. IN CASE	SHIP WT. CASE
Quart	30-05	30-06	6	17#
Gallon	30-02	30-03	4	43#
15 Gallon	30-04			162#

BIO-SAFE SOLDERING FLUX

*Biodegradable, Organic,
Neutral pH, Non-Toxic*

Like Johnson's Bio-Bake described on the next page, Bio-Safe is an environmentally friendly flux, but with a slightly lower active temperature range, approximately 650°F. Bio-Safe's residues are non-corrosive and need only to be removed for cosmetic purposes.



ITEM	SINGLE PART NO.	CASE PART NO.	NO. IN CASE	SHIP WT. CASE
3.5 Fl. Oz.	45-03	45-04	24	8#
Gallon	45-09	45-10	4	46#

It Can
Be Done
With
JOHNSON



ANTI-DROSS SOLDER POT WAFERS

Returns up to 75% of Oxides to Metal

Johnson's Anti-Dross Solder Pot Wafers help you recover metal from your dross before skimming a solder pot. When properly introduced to the pot, this dross reducer brings dirt to the surface, and returns oxides into solder. All that's left is a powdery dust to be skimmed off.



ITEM	SINGLE PART NO.	CASE PART NO.	NO. IN CASE	SHIP WT. CASE
2 Oz. Ea.	41-50	41-51	24	4#

JOHNSON'S ACTIVATED ROSIN FLUX

Non-Corrosive (RA Type) Flux

Johnson's Rosin Flux is most often used for soldering electrical terminals, architectural roofing and metals that are easy-to-solder such as copper and pretinned brass. Residues are not considered corrosive yet they may be removed for appearance.

ITEM	SINGLE PART NO.	CASE PART NO.	NO. IN CASE	SHIP WT. CASE
Gallon	27-04	27-05	4	33#

ALUMAWELD SOLDERING FLUXES

Johnson's Alumaweld Fluxes are available as a slurry mixture in small jars, or as a powder in bulk form for production soldering of aluminum and its alloys.

ITEM	SINGLE PART NO.	CASE PART NO.	NO. IN CASE	SHIP WT. CASE
1/4 Lb. Btle.	48-02	48-03	12	4#
500 Lb. Drum	45-31		1	535#

BIO-BAKE RADIATOR CORE BAKING FLUX

Biodegradable, Organic, Neutral pH, Non-Toxic

Johnson's BioBake Soldering Flux is nothing short of revolutionary! This organic, production flux is non-toxic, biodegradable and neutral. In a tank, BioBake does not become depleted with time because it does not rely on free acid for its fluxing power. Instead, its chemicals are released only when heat is applied. Flux tanks that are properly filtered, should not have to be changed, so you don't have to ship spent flux off-site to be disposed of.

BioBake's organic salts remain active well over 700°F. Excellent results are achieved at higher temperatures and the oven dwell time is shortened, for example 680° F for 2 minutes. Residues are non-corrosive.

ITEM	PART NO.	SHIP WT.
5 Gallon	45-64	57#
15 Gallon	45-65	147#

C-71-2 CORE BAKING FLUX CONCENTRATE

Organic Flux for Strongest Bonds, Cleanest Cores

Johnson's C-71-2 Core Baking Flux is a powerful organic flux for baking radiator cores in batch or conveyor ovens. Properly diluted at 8:1 with clean water this flux produces excellent tube-to-fin bonds across the full width of the tube. C-71-2 bakes clean, giving a uniform pink color to all cores. After soldering occurs, C-71-2 volatilizes, leaving no corrosive residues.

ITEM	SINGLE PART NO.	CASE PART NO.	NO. IN CASE	SHIP WT. CASE
Gallon	28-02	28-03	4	43#
15 Gallon	28-04		1	160#

WELL-BAKE CORE BAKING FLUX

Fortified with Chlorides to Extend Active Range

Johnson's Well-Bake Core Baking Flux is an aggressive organide flux that offers an extended active temperature range. Most often used for baking industrial radiators, hard-to-bake cores or when torches are used for soldering the tube-to-fin bond. Well-Bake contains chlorides, yet leaves very little corrosive residue behind. Suggested dilution is 10:1.

ITEM	PART NO.	SHIP WT.
15 Gallon	28-14	161#

BLACKSTONE™ 3345 FLUX

Strong Inorganic Acid Flux for Tinning

Offers a high degree of activity and has excellent wetting characteristics. May be used for high-speed tinning of brass strip or steel wire. Also effective with a soldering iron or torch.

ITEM	PART NO.	SHIP WT.
15 Gallon	09-55	615#

**Johnson Mfg. Co is an authorized distributor of Blackstone Fluxes manufactured by Kester Solder Co., Div. Litton Industries. In addition to our own selection of fluxes, we can offer Blackstone technology to help solve any industrial soldering problem.*

SAFE FLUX-14 HEADER DIPPING FLUX

Organic Flux Cleans, Wets Large Areas

Johnson's Safe Flux-14 Header Dipping Flux is designed primarily for dip soldering tube-to-header joints and coated side channels in copper/brass radiator assemblies.

This active flux wets the entire header surface, promotes very strong solder bonds, and leaves no corrosive residues after soldering temperatures are reached. Typical dilution is 1:1.

ITEM	SINGLE PART NO.	CASE PART NO.	NO. IN CASE	SHIP WT. CASE
Gallon	18-02	18-03	4	42#
15 Gallon	18-05		1	155#

WELL-DIP SOLDERING FLUX

Organide Dipping Flux Fortified with Chlorides

Johnson's Well-Dip Header Dipping Flux is an organide flux that offers the extended temperature range of a chloride formula but like an organic, it leaves very little residue after soldering.

Handles extended dwell times needed to solder large industrial radiators and/or when solder pot temperatures set high due to low solder capacity.

ITEM	PART NO.	SHIP WT.
15 Gallon	18-75	156#

DELTA TUBE MILL FLUX

Super Fast Wetting Action for High-Speed Mills

Johnson's Delta Tube Mill Flux is a very effective organic flux for today's high speed soldering operations such as strip tinning and tube mills. Its unique wetting system insures fast, complete coverage. Dilution with up to 4 parts of clean water is possible. Delta's high speed tinning action and rapid evolution leaves the inside surfaces of radiator tubing very clean and residue free.

ITEM	PART NO.	NO. IN CASE	SHIP WT. CASE
15 Gallon	19-15	1	157#

B-118 ORGANIC SOLDERING FLUX

Our Most Aggressive Organic Flux for Torch Work

Johnson's B-118 Organic Soldering Fluid is a highly concentrated organic acid flux, commonly used for production soldering of new radiators and heater cores. When heated to soldering temperatures, B-118's residues are rendered inactive. No harmful green or blue residues remain to corrode radiators during periods of storage. The standard dilution for dip soldering is 4 parts water to 1 part flux, for torch soldering use 1:1 or use full strength for tough jobs.

ITEM	SINGLE PART NO.	CASE PART NO.	NO. IN CASE	SHIP WT. CASE
Gallon	17-03	17-04	4	43#
15 Gallon	17-15		1	160#
55 Gallon	17-55		1	580#

PASTE SOLDERS



JOHNSON'S FLO-RITE™ PASTE SOLDERS Smooth Flux and Alloy Formulations

Johnson's Flo-Rite family of paste fluxes are engineered to provide a wide range of activation levels, temperature ranges and viscosities to meet today's production soldering requirements. Whether combined with non-leaded or tin/lead solder powder, the result is always a smooth, dispensable paste solder that will compliment your soldering operation.

Typical applications include soldering automotive components, appliance manufacturing, ice making machines, pumps, valves and many other products. Residues are water soluble and are easily removed. Please tell us your requirements so we can blend the paste solder that is just right for your application.

F-610 is an active flux formulation which we stock in the following popular alloy combinations, while F-611 is less active for easier-to-solder components and where residues are more difficult to remove.

FORMULA	SINGLE PART NO.	NO. IN CASE	SHIP WT. CASE
F610, F611			
4 Lb. Jar	F610-87-5050-04	8	35#
1 Lb. Jar	F610-87-6040-01	12	14#
1 Lb. Jar	F610-87-9505-01	12	14#
1 Lb. Jar	F611-67-5050-01	12	14#

**Flo-Rite is a registered trademark of Kester Solder Company, Division of Litton Industries.*

E-127 FLUX-'N-SOLDER with PURE TIN Fastest Tinning for Most Common Metals

Johnson's E-127 Flux-'N-Solder with Pure Tin is the ideal blend of mild chlorides in paste form, mixed with pure tin powder to create a versatile tinning compound. E-127 is widely used by service shops for pretinning cast iron bearing shells, prior to babbitting. It is also used in the restoration of antique cars before adding body solder, and for pretinning parts to be later assembled and then soldered with a non-corrosive flux.

Johnson's E-127 has a melting temperature of 450°F and is compatible with all solders. It's residues are water soluble and should be removed after soldering.

ITEM	SINGLE PART NO.	CASE PART NO.	NO. IN CASE	SHIP WT. CASE
1 Lb. Jar	16-02	16-03	12	14#
4 Lb. Jar	16-04	16-05	6	26#

95/5 (Tin/Antimony) FLUX-'N-SOLDER Proven Best for Lead-Free Plumbing

Johnson's 95/5 tin/antimony Flux-'N-Solder is a very smooth, non-leaded paste solder. In addition to being used for potable water systems, it is often used for soldering stainless steels, for high temperature or underground applications and where increased joint strength is necessary.

Like other Johnson Flux-'N-Solders, it is very easy to apply and holds in the joint to provide uniform pretinning when heat is applied. Melting temperature is 450 to 464°F. When tinning occurs, 95/5 wire solder should be added to insure a full joint.

ITEM	SINGLE PART NO.	CASE PART NO.	NO. IN CASE	SHIP WT. CASE
1 Lb. Jar	15-02	15-03	12	14#

50/50 (Tin/Lead) FLUX-'N-SOLDER Paste Solders have Many Industrial Uses

Many industrial uses still exist for this easy-to-use Flux-'N-Solder combination. Unlike E-127, this formula contains 50/50 powdered solder (50% lead), and therefore must not be used when soldering drinking water systems, food handling equipment, livestock tanks, etc.

Due to its relatively low melting temperature (360 to 420 °F) and its rapid tinning action, this paste is excellent for soldering automotive components and other assemblies. Residues are water soluble and should be removed after soldering.

ITEM	SINGLE PART NO.	CASE PART NO.	NO. IN CASE	SHIP WT. CASE
1 Lb. Jar	10-07	10-08	12	14#

60/40 (Tin/Lead) FLUX-'N-SOLDER Johnson's (RA Type) Rosin Flux Formula

Johnson's 60/40 C-7 Rosin Flux-'N-Solder is an excellent medium-tech, non-corrosive paste solder for electrical connections, and other easy-to-solder components. Melting range is 360 to 374°F.

ITEM	SINGLE PART NO.	CASE PART NO.	NO. IN CASE	SHIP WT. CASE
1 Lb. Jar	13-02	13-03	12	14#



JOHNSON'S TIN-EZY POWDER

Industrial Strength Tinning Compound

Johnson's Tin-Ezy is the fastest acting tinning compound you can use. A very dry, free flowing blend of powdered solder and special flux that cuts through dirt, grease, oil, paint and rust when heated.

Tin-Ezy is most commonly used for tinning auto and industrial radiators, and other large areas economically. It works well on all common metals including aluminum, bronze, galvanized and other tough to tin metals. Tin-Ezy is usually mixed with water or Johnson's Soldering Fluid to be applied as a slurry, but is also quite effective when applied dry to heated metal. Its water soluble residues remain hygroscopic and corrosive until removed. Keep lid tightly closed when not in use, to prevent hardening.

ITEM	SINGLE PART NO.	CASE PART NO.	NO. IN CASE	SHIP WT. CASE
1 Lb. Jar	20-02	20-03	12	14#
4 Lb. Jar	20-04	20-05	6	27#
15 Lb. Pail	20-06	20-07	4	65#

JOHNSON'S TIN-EZY POWDER with PURE TIN

Full-Strength Power, Contains No Lead

Johnson's Tin-Ezy with Pure Tin tins quickly, yet contains no lead. Like regular Tin-Ezy, it is also made in a low-humidity environment to keep it dry and free-flowing for increased storage life. This special chloride flux formulation is blended only with grade A pure tin powder. Johnson's Tin-Ezy with Pure Tin is compatible with all solders however, it is particularly useful for tinning new metal, using Johnson's Pure 497 non-leaded solder. Melting temperature is 450°F. Residues are water soluble and should be removed just after soldering.

ITEM	SINGLE PART NO.	CASE PART NO.	NO. IN CASE	SHIP WT. CASE
1 Lb. Jar	20-62	20-63	12	14#
3 Lb. Jar	20-64	20-65	6	21#
12 Lb. Pail	20-66	20-67	4	52#

JOHNSON'S TIN-EZY BUTTER

Fast-Acting, Easy to Apply Tinning Butter

Johnson's Tin-Ezy Butter is a fast acting tinning compound. Its smooth butter form makes it easy to apply right out of the jar; no mixing required and its tin/lead solder particles will not fall-out. Just brush on the surface to be tinned, apply heat. As soon as the tinning occurs, remove the heat to prevent charring. Tin-Ezy's residues are water soluble and should be removed.

ITEM	SINGLE PART NO.	CASE PART NO.	NO. IN CASE	SHIP WT. CASE
1 Lb. Jar	23-02	23-03	12	14#
4 Lb. Jar	23-04	23-05	6	27#
15 Lb. Pail	23-06	23-07	4	65#

JOHNSON'S TIN-EZY BUTTER with PURE TIN

Pure Tin Tinning at its Easiest, Safest

Johnson's Tin-Ezy Butter with Pure Tin is gaining popularity among radiator shops. Our smooth tinning butter works really fast. Tin-Ezy Butter makes sense when using it on new metals, followed with Johnson's Pure 497 Solder or other non-leaded alloy. Like regular Tin-Ezy Butter, you should remove heat as soon as tinning occurs to avoid charring. Residues are water soluble and are easily washed off.

ITEM	SINGLE PART NO.	CASE PART NO.	NO. IN CASE	SHIP WT. CASE
1 Lb. Jar	23-62	23-63	12	14#
4 Lb. Jar	23-64	23-65	6	27#
15 Lb. Pail	23-66	23-67	4	65#

JOHNSON'S NO. 523 BODY TINNING PASTE

Use with No. 523 Non-Leaded Body Solder

This high tin content paste produces very strong bonds that are also highly corrosion resistant. Its temperature range is compatible with No.523 Body Solder. This paste will not dewet steel during subsequent soldering operations. Residues must be completely washed off with water before sanding, prior to finishing.

ITEM	SINGLE PART NO.	CASE PART NO.	NO. IN CASE	SHIP WT. CASE
2 Lb. Jar	21-64	21-65	8	18#

POWDER FLUXES & CLEANERS



JOHNSON'S D-5 POWDER FLUX

Super Dry Compound, Super Fast Wetting!

Johnson's D-5 Powder Flux is specially formulated to form the fastest soldering blended powder flux available. D-5 also contains a special wetting agent so it stays on your work better; it doesn't dewet, or run off.

Johnson's guarantees the free-flowing quality and uniformity of every batch. Usual mixes are 2 to 4 pints of clean water to 1 pound of flux.

ITEM	SINGLE PART NO.	CASE PART NO.	NO. IN CASE	SHIP WT. CASE
10 Lb. Pail	31-02	31-03	4	44#
50 Lb. Pail	31-04		1	52#

JOHNSON'S 7129 TOP FLUX

Lowest Melting Flux Blanket for Solder Pots

Johnson's 7129 Top Flux is used as a blanket on solder pots for dipping and tube mill operations. It is well suited to high speed soldering because of its low temperature activation level, yet it remains active throughout the entire process.

All soldering salt formulations are hygroscopic and containers should be kept sealed to prolong storage life.

ITEM	PART NO.	SHIP WT.
50 Lb. Pail	31-28	52#
425 Lb. Drum	31-29	450#

JOHNSON'S HIGH-TEMP TOP FLUX

Long-Lasting Flux Blanket for Solder Pots

Johnson's High-Temp Top Flux is a unique blend of inorganic chlorides (salts) which forms a blanket on solder pots to minimize dross buildup. Sealing out oxygen keeps good metal from turning to oxides, which would otherwise have to be skimmed off and sold as scrap. This formula has an extended temperature range to prolong its life on the pot.

ITEM	SINGLE PART NO.	CASE PART NO.	NO. IN CASE	SHIP WT. CASE
10 Lb. Pail	36-51	36-52	4	41#
50 Lb. Pail	36-53		1	52#
425 Lb. Drum	36-45		1	450#

JOHNSON'S MAGNA-FLUX

Economical, General Purpose Powder Flux

Johnson's Magna-Flux is an economical blend of chlorides (these are often referred to as soldering salts) which clean and flux metals fast. It may be used dry on heated metal, but is generally mixed with water to form a slurry, then brushed on the area to be soldered.

Soldering salts attract moisture from the air; make sure the lid is kept tight to prevent humidity from turning these salts hard in the pail.

ITEM	PART NO.	SHIP WT.
50 Lb. Pail	36-04	52#

MURIATIC ACID

Hydrochloric Acid for Cleaning

Johnson's full strength muriatic (hydrochloric) acid is effective for cleaning copper and brass, pickling steel and removing lime from radiators. We recommend limited use only.

Muriatic acid should be diluted with water for most jobs. Keep containers closed when not in use. Read directions on the label and refer to OSHA Material Safety Data Sheet before using.

ITEM	SINGLE PART NO.	CASE PART NO.	NO. IN CASE	SHIP WT. CASE
Gallon	25-04	25-05	4	42#
15 Gal. Drum	25-07			152#

JOHNSON'S METAL CLEANER

Cleans, Phosphatizes Metals Economically

Johnson's Metal Cleaner is a concentrated, phosphoric acid based metal cleaner that is very effective for cleaning and phosphating steels prior to painting, plating or powder coating. Removes light oils, mill slag and rust. Standard dilution for steel is 2:1 however, it may be diluted even more for effective cleaning of aluminum, brass, copper, or stainless steels.

ITEM	SINGLE PART NO.	CASE PART NO.	NO. IN CASE	SHIP WT. CASE
Gallon	35-08	35-09	4	40#
15 Gallon	35-15		1	153#

It Can
Be Done
With
JOHNSON



CLEANING COMPOUNDS

SUPER-X BOILOUT COMPOUND

Economical Flakes for Cleaning Radiators

Johnson's Super-X Boilout Compound is dependable, fast acting and economical. Easier to handle, non-dusting, odorless flakes that dissolve fast. May be used with chemicals to soften water, aid in rinsing, strip paint and remove dirt are melted together and then put in flake form.

Super-X has been used successfully in all types of water across the US. Typical use is 1/2 to 3/4 lb. per gallon of water, depending on the hardness of your water and the kind and amount of dirt on your work.

ITEM	PART NO.	SHIP WT.
40 Lb. Pail	33-12	42#
100 Lb. Drum	33-01	104#
500 Lb. Drum	33-02	515#

SUPER-Z ULTRASONIC STRIPPER

Used with Cavitation, Strips Radiators Fast

Johnson's Super-Z Ultrasonic Stripper works amazingly fast. In head to head tests, Super-Z strips faster than other products tested and lasts a long, long time. It suspends soil and sludge longer to keep the efficiency of your transducer at its highest level. Super-Z rinses clean, leaves brass surfaces bright and shining, not a dull copper color. Mix 1/2 to 3/4 lb. per gallon of clean water.

ITEM	PART NO.	SHIP WT.
40 Lb. Pail	33-40	42#
115 Lb. Drum	33-15	119#
500 Lb. Drum	33-41	515#

ULTRASONIC COPPER REMOVER

Eliminates Copper Build-up Instantly

Johnson's Ultrasonic Copper Remover works great for removing even the heaviest deposits of copper that build up in ultrasonic cleaning tanks. Copper deposits reduce the effectiveness of the transducers, requiring longer cleaning times and/or higher temperatures.

Johnson's Copper Remover, in concentrated form, can be used to scrub away heavy layers; when diluted and left to soak, it removes the rest without harming your stainless steel tank.

ITEM	SINGLE PART NO.	CASE PART NO.	NO. IN CASE	SHIP WT. CASE
10 Lb. Pail	38-01	38-02	4	39#

JOHNSON'S BIO-CLEAN

Biodegradable Shop and Equipment Cleaner

Johnson's Bio-Clean is an environmentally safe, biodegradable, all-purpose cleaner which has many uses around a shop. Regular use helps keep your shop clean and presentable. This combination of ingredients provides excellent grease cutting properties in addition to dirt and grime removal.

ITEM	SINGLE PART NO.	CASE PART NO.	NO. IN CASE	SHIP WT. CASE
Gallon	40-11	40-12	4	38#

JOHNSON'S COOL-CLEAN

Internal Cooling System Cleaner

Johnson's Cool-Clean is a special formulation of additives developed to add life to cooling systems. It lubricates, retards corrosion and helps prevent cooling systems from plugging up. After back-flushing the system, add the proper mixture of antifreeze and water. Next add Johnson's Cool-Clean, run engine for 5 minutes and then check for uniform dispersement. For autos add 4 fl.oz., heavy duty radiators add 8 fl.oz.

ITEM	SINGLE PART NO.	CASE PART NO.	NO. IN CASE	SHIP WT. CASE
Gallon	39-11	39-12	4	40#

JOHNSON'S ALUMA-CLEAN

Cleans Aluminum Radiators Safely

Aluma-Clean works safely, at room temperature to remove dirt, oil, and road grime from radiator fins, without dissolving the top layer of metal away.

ITEM	SINGLE PART NO.	CASE PART NO.	NO. IN CASE	SHIP WT. CASE
Gallon	41-11	41-12	4	39#



ADDITIVES & NEUTRALIZERS



JOHNSON'S NO-SEEP POWDER

The Best, Most Economical Radiator Stop Leak

Johnson's developed this improved stop leak powder, which is sold only to professional radiator shops. It is packaged in easy to open, wide mouth jars (quarts) and super economical plastic pails (gallons).

Add No-Seep Powder to radiators for additional insurance against pin hole leaks. When added dry and spread with air, it remains throughout the system until it is filled with coolant. Then it flows to any leak and acts quickly to block the hole, preventing further loss of coolant.

ITEM	SINGLE PART NO.	CASE PART NO.	NO. IN CASE	SHIP WT. CASE
Quart	249-01	249-02	6	8#
Gallon	249-03	249-04	4	18#

JOHNSON'S NO-SEEP LIQUID

Radiator Shop Insurance in a Bottle

Johnson's No-Seep Liquid is an effective additive for stopping pinhole leaks in cooling systems. Its composition of natural fibers and resins is compatible with all cooling system chemicals. No-Seep circulates in solution until leak occurs, then acts to plug tiny leaks fast.

ITEM	SINGLE PART NO.	CASE PART NO.	NO. IN CASE	SHIP WT. CASE
4 Oz. Bottle	250-02	250-04	24	7#
Gallon	250-11	250-12	4	38#

AIR-FLO RADIATOR SEAL

Distribute with Air Before Filling Radiator

Air-Flo Seal is an effective cooling system sealer. Shops add a tablespoon to a repaired radiator and spread it with air. When the radiator is filled with coolant for use, Air Flo Seal is activated to help seal leaks.

ITEM	SINGLE PART NO.	CASE PART NO.	NO. IN CASE	SHIP WT. CASE
Quart	248-01	248-02	6	8#

TEST TANK POWDER

Fluoresces, Neutralizes, Precipitates Solids

Johnson's Test Tank Powder and Blocks perform three functions that aid in the leak testing of radiators. When properly diluted, they raise the pH of the test tank water to neutralize acid carried into the tank from prior cleaning operations. This keeps the water from becoming irritating to the operator and makes it less corrosive to his tools.

The same pH adjustment causes solids to fall out of solution, to the bottom of the tank. This keeps water near the top clearer so that leaks are easier to see. Both powder and blocks introduce a safe, green fluorescent dye which amplifies the light seen around air bubbles as they rise from a leaking radiator, making leaks easier to detect.

ITEM	SINGLE PART NO.	CASE PART NO.	NO. IN CASE	SHIP WT. CASE
12 Oz. Bag	32-05	32-06	12	10#

TEST TANK BLOCKS

This Solid Form is Preferred by Some Shops

Johnson's Test Tank Blocks and Powder are very safe and useful chemicals when added to your test tank. Dilute one bag or block for every 100 to 300 gallons of clean water for best results.

ITEM	SINGLE PART NO.	CASE PART NO.	NO. IN CASE	SHIP WT. CASE
1 Lb. Tub	34-01	34-02	12	13#

ALUMA-TEST TANK FLUID

Used for Testing Aluminum Radiators

Many shops are setting up a separate tank just for testing aluminum radiators. Johnson's Aluma-Test fluoresces water, making it easy to locate leaks, and without leaving a white powdery residue as with regular test tank solutions.

ITEM	SINGLE PART NO.	CASE PART NO.	NO. IN CASE	SHIP WT. CASE
Pint	37-01	37-02	12	14#



PAINTS & FUEL TANK LINER

JOHNSON'S 119 BLACK RADIATOR PAINT

Known for its Black, High-Gloss, Fast Coverage

Johnson's 119 Black Radiator Paint is specially formulated for radiator shops. Makes repaired radiators look like new. It covers extremely well and strips off easily with our Super-X Boilout Compound in your hot tank. Our top quality paint is designed to be used with any common paint solvent such as VM&P Naptha, Stoddard's Solvent, etc. Usual mix is 2 to 3 parts of thinner to 1 part of paint. This paint is provided in open head pails because it must be stirred prior to mixing, and with each use. Johnson guarantees the consistency of this fine economical paint. DOT-Combustible.

ITEM	PART NO.	SHIP WT.
5 Gallon Plastic Pail	150-03	40#
5 Gallon Metal Pail	150-03M	41#

JOHNSON'S SAFETY PAINT

Pre-Mixed, Dries Quickly to Glossy Black

Johnson's Safety Paint is an excellent paint that was designed to reduce VOC emissions when spraying radiators. It requires fewer passes than other paints, and dries quickly to a glossy black sheen. Johnson's Safety Paint is premixed, so no further dilution is necessary. Works best with Johnson's Latex Paint Sprayers, either part number 438-50 or 438-60, which features an adjustable siphon pick-up. (Refer to page 26)

ITEM	SINGLE PART NO.	CASE PART NO.	NO. IN CASE	SHIP WT. CASE
Gallon	150-05	150-06	4	39#
5 Gallon	150-04			47#

JOHNSON'S SAFETY PAINT IN COLORS

Restores a New Look to OEM Repairs

ITEM	SINGLE PART NO.	CASE PART NO.	NO. IN CASE	SHIP WT. CASE
Gal. Yellow	150-25	150-26	4	39#
Gal. Grey	150-36	150-37	4	39#
Gal. Green	150-47	150-48	4	39#
Gal. White	150-58	150-59	4	39#

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JOHNSON'S FUEL TANK LINER

Thicker, One Coat Application, Saves Time

Johnson's Fuel Tank Liner was developed for use by radiator professionals and repair shops. It has a thick consistency that allows it to cover the inside of the tank in just one coat. Fuel Tank Liner is resistant to all fuels and fuel additives, as well as water. Johnson's formula always stays flexible; will not harden, crack and then peel off, to cause obstruction of the fuel flow. Proper preparation of the tank and curing of this liner is essential. Directions are included on each can. Flammable.

ITEM	SINGLE PART NO.	CASE PART NO.	NO. IN CASE	SHIP WT. CASE
Quart	238-01	238-02	6	16#
Gallon	238-03		1	10#

GLOSSY BLACK TOUCH-UP PAINT

Gives Small Repair Jobs that New Look

Johnson's Glossy Black Radiator Touch-Up Paint is an extremely fast drying formula that comes in handy around any radiator shop. Use for small jobs, or to put the finishing touch on radiators which show signs of being handled. Cans must be shaken vigorously before each use.

ITEM	SINGLE PART NO.	CASE PART NO.	NO. IN CASE	SHIP WT. CASE
13 Oz. Spray Can	150-11	150-12	12	10#

RADIATOR EPOXIES



REPAIR-BOND EPOXY & HEADER-BOND EPOXY

Two-Part Epoxy Systems for Aluminum Radiators

Johnson's Epoxy Service Kit includes one Mix-Pac Epoxy Gun, one each 50ml Repair-Bond and Header-Bond cartridges, one 2:1 and 1:1 plunger, and one ten pack of static mixing tips.

These new epoxies have been field tested by the best; both adhere to aluminum like crazy and both are very strong when properly cured. Repair-Bond Epoxy is thicker and cures faster, making it the ideal epoxy for repairs in the core. Header-Bond Epoxy is thinner, allowing it to flow around tubes on the air side of the header. Its slower cure time forms a nice radius around tubes. Complete instructions are provided with each kit.

ITEM	SINGLE PART NO.	CASE PART NO.	NO. IN CASE	SHIP WT. CASE
Service Kit	234-CS			4#
Repair-Bond	234-01	234-02	10	3#
Header-Bond	234-05	234-06	10	3#
Mix-Pac Gun	234-10			2#
Mixers 10/Pk	234-11	234-12	5	2#
2:1 Plunger	234-13			
1:1 Plunger	234-14			

HOT MELT EPOXY

Economical, 5 Sticks per Package

Hot Melt Epoxy is easy to use and very economical. It provides good bond strength for many aluminum radiator repair situations. Apply heat to the radiator until sufficiently hot to melt the epoxy on contact. Avoid heating the epoxy directly with the flame, to prevent charring.

ITEM	SINGLE PART NO.	CASE PART NO.	NO. IN CASE	SHIP WT. CASE
Hot Melt	245-55	245-56	12	1#

JOHNSON'S HAND CLEANER

Great Hand Cleaner, Leaves Hands Soft!

Safe for the environment because it contains biodegradable surfactants and scrubbers. Removes grease and oils, as well as flux, lead and deeply embedded grime, yet is gentle on the skin.

ITEM	GALLON PART NO.	CASE PART NO.	NO. IN CASE	SHIP WT. CASE
Hand Cleaner	160-23	160-24	4	40#

JOHNSON'S NYLOBOND KIT

Black Repair Epoxy for Nylon (Plastic) Tanks

Johnson's Nylobond is by far the most effective epoxy for plastic (nylon) automotive radiator tank repairs. Each single-use kit includes an ample amount of black resin, special hardener, pretreat solution and fiberglass cloth to do two normal repairs, so long as you can do them at the same time. Easy to follow directions will enable anyone to make a nice looking, strong and long lasting repair.

ITEM	SINGLE PART NO.	CASE PART NO.	NO. IN CASE	SHIP WT. CASE
Nylobond	239-01	239-02	12	4#

JOHNSON'S ALUMABOND KIT

Off-White Repair Epoxy for Aluminum

Johnson's Alumabond forms a very strong bond with aluminum, its alloys and all clad materials. It also adheres to header epoxies used by several radiator manufacturers. Packaged in single-use kits, like Johnson's Nylobond. Each Alumabond kit includes a liberal quantity of epoxy resin, special hardener, pretreat solution for precleaning the aluminum, easy to follow directions.

ITEM	SINGLE PART NO.	CASE PART NO.	NO. IN CASE	SHIP WT. CASE
Alumabond	239-11	239-12	12	4#

MASTER HEAT GUN FOR EPOXIES

Model VT-750C Deluxe Heat Gun

This top-of-the line heat gun features a non-slip stand with up to 90 degrees rotation, variable temperature control and an Off-Cool-Hot switch to eliminate residual heat. Cooling system experts like its rugged heat gun because you can dial any temperature from ambient up to 1000° F.

ITEM	PART NO.	SHIP WT.
Master Heat Gun	234-50	4#



GASKET TAPES & SEALANTS

JOHNSON'S PREMIUM GASKET TAPES

Setting the New Standard for Quality, Durability

Johnson's newest gasket tapes offer excellent compressibility, resistance to crushing, and memory retention. This premium cork and rubber combination covers a broader range of applications than other gasket tapes we've tested. Both thicknesses, the standard 1/16" x 100' and double thick 1/8" x 50', are 1 1/4" wide. The 1/16" material is also available in 6" x 10' and 6" x 100' rolls.

ITEM	SINGLE PART NO.	CASE PART NO.	NO. IN CASE	SHIP CASE
1/16" x 100'	235-21	235-22	10	30#
1/16" x 100'	Bulk Pack	235-23	10	28#
1/8" x 50'	235-24	235-25	10	30#
1/16" x 6" x 10'	235-28	235-29	10	14#
1/16" x 6" x 100'	235-30		1	14#

JOHNSON'S GASKET TAPE

The Choice of Many for Bolt-On Applications

Our standard cork and rubber compound serves the needs of many radiator shops doing heavy duty work. Forms a water tight seal. Standard, 1/16" thickness x 1 1/4" width covers most bolt-on applications; cuts your inventory cost. Also available in 1/8" x 50' rolls.

ITEM	SINGLE PART NO.	CASE PART NO.	NO. IN CASE	SHIP WT. CASE
1/16" x 100'	235-01	235-02	10	30#
1/16" x 100'	Bulk Pack	235-03	10	28#
1/8" x 100'	235-04	235-05	10	30#

TAPERED HOLE RASP

Fastest Way to Clear Gasket Tape Out of Bolt Holes

For best gasket tape results, use this bit with a cordless drill to quickly remove excess gasket materials from the bolt holes. Helps prevent crushing of the tape during reassembly.

ITEM	SINGLE PART NO.
1/4" x 1/2" x 7/8" Bit length	282-01



RTV BLUE SILICONE

Premium Quality Sealant for Radiator Work

Packaged in a convenient size to help you keep your stock fresh; standard 11 Oz. cartridges.

ITEM	SINGLE PART NO.	CASE PART NO.	NO. IN CASE	SHIP WT. CASE
11 Oz.	236-11	236-12	12	10#

JOHNSON'S EPDM O-RING MATERIAL

Highest Quality, Longest Lasting

EPDM material retains its memory longer than other gasket materials and is available for use in all PTR's (plastic tank radiators) where O-rings are required.

ITEM	PART NO.	SHIP WT.
.125" x 50'	237-11	1#
.139" x 50'	237-12	1#

HEATER CORE INSTALLATION FOAM

High-Quality Polyester Foam

Use this quality polyester foam as a seal and to reduce noise.

Has an adhesive backing for ease of application. Packaged in 2" x 1/2" x 25' rolls.



ITEM	SINGLE PART NO.	CASE PART NO.	NO. IN CASE	SHIP WT. CASE
2" x 1/2" x 25'	213-01	213-02	10	1#

RADIATOR PARTS & TUBING



A 5/16" BLACK RUBBER OVERFLOW TUBING

This high quality tubing is used by manufacturers and repair shops alike because it is so durable and economical.

ITEM	PART NO.	SHIP WT.
5/16" x 100' Roll	210-05	5#

3/8" JOMANCO OVERFLOW TUBING [not shown]

An extremely rugged plastic overflow tubing that withstands heat, pressure and oil.

ITEM	PART NO.	SHIP WT.
3/8" x 100' Jomanco	201-01	4#

B COPPER OVERFLOW TUBING

This material is refrigeration grade, easy to work with.

ITEM	PART NO.	SHIP WT.
5/16" x .032" x 50'	244-01	6#

C AMBER LATEX TEST HOSE

Soft, pliable rubber test tubing slips easily on air stem plugs, and grips well.

ITEM	PART NO.	SHIP WT.
1/4" ID X 1/2" OD x 10' Roll	211-02	1#
1/4" ID X 1/2" OD x 50' Roll	211-03	4#

RED RUBBER HOSE [not shown]

A general purpose tubing for low pressure gas, air or liquids.

ITEM	PART NO.	SHIP WT.
1/4" ID X 1/2" OD x 50'	212-01	5#
1/4" ID X 1/2" OD x 10'	212-02	1#

D BRASS REINFORCING RINGS

These 1/8" dia. solid brass rings add extra strength to soldered inlets and outlets.

ITEM	PART NO.	SHIP WT.
1 3/8" OD Rings, 50/Pkg	258-01	1#
1 1/2" OD Rings, 50/Pkg	259-01	2#

E BRASS DRAIN COCKS

Johnson's Brass Drain Cocks are available in 1/8" and 1/4" Regular Style, and 1/4" GM Style with narrower T-handles.

	1/8" SIZE	SHIP	1/4" REG.	1/4" GM	SHIP
PACKAGING	PART NO.	WT.	PART NO.	PART NO.	WT.
50/Ctn	240-01	2#	241-01	241-01 GM	3#
100/Ctn	240-02	3#	241-02	241-02 GM	5#
500/Ctn	240-04	15#	241-04	241-04 GM	25#

RIGHT ANGLE DRAIN COCKS [not shown]

These quality brass right angle drain cocks are useful for certain applications.

	1/4" RT ANGLE	SHIP WT.
PACKAGING	PART NO.	
50/Ctn	241-06	5#
100/Ctn	241-07	9#

F BRASS FLANGES

Johnson's Brass Flanges are the highest quality. Available in the following three sizes.

	1/8" SIZE	1/4" SIZE	1/2" SIZE	SHIP
PACKAGING	PART NO.	PART NO.	PART NO.	WT.
50/Ctn	242-01	243-01	243-51	1#
100/Ctn	242-02	243-02	243-52	2#
500/Ctn	242-04	243-04		8#

G BRASS TUBE REINFORCERS

Square 1/8" brass rod formed for close fit-up around tubes on the air side of headers.

ITEM	PART NO.	SHIP WT.
1/2" Pkg of 100	255-02	1#
3/4" Pkg of 100	257-02	1#

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PERSONAL PROTECTION

H NEOX VAT GLOVE

Coated with reinforced neoprene to protect against cuts, abrasion and a broad range of radiator shop chemicals. Guaranteed liquid proof.

ITEM	PAIR PART NO.	DOZEN PART NO.	NO. IN CASE	SHIP WT. CASE
14" Neox	220-01	220-02	12 Pair	7#

I GRAB-IT GLOVES

Coated with rough-finished rubber for handling slippery or abrasive materials. Liquid proof.

ITEM	PAIR PART NO.	DOZEN PART NO.	NO. IN CASE	SHIP WT. CASE
12" Grab-It	222-01	222-02	12 Pair	7#

J SCORPIO GLOVES

Scorpio gloves are thinner than vat gloves for working at the test tank. They resist cutting and are liquid proof, yet offer better feel for handling a torch.

ITEM	PAIR PART NO.	DOZEN PART NO.	NO. IN CASE	SHIP WT. CASE
Scorpio	225-07	225-08	12 Pair	5#

ORANGE UTILITY GLOVES [not shown]

These gloves work great for handling radiators however, they're not liquid proof.

ITEM	PAIR PART NO.	DOZEN PART NO.	NO. IN CASE	SHIP WT. CASE
Orange	221-01	221-02	12 Pair	3#

K BRASS SHEET

A convenient material for solder-on patches.

ITEM	PART NO.	SHIP WT.
24 Ga, 12" x 10' Roll	246-02	10#

BLACK BEAUTY HOSE CUTTER [not shown]

Teflon coated blade cuts most radiator and heater hose fast, straight. Far safer than using a knife.

ITEM	PART NO.	SHIP WT.
Hose Cutter	215-00	1#
Replacement Blade	215-02	

L DUST MASKS

3-M Dust Masks are the best of their type because they have dual adjustable straps for individual fit and comfort; an exhalation valve to make breathing easier; low profile allows for the use of safety glasses or goggles; NIOSH/OSHA approved for particles less than .05 mg/m3 including asbestos, cadmium, lead and other dusts, fumes and mists; flame retardant.

ITEM	SINGLE PART NO.	CASE PART NO.	NO. IN CASE	SHIP WT. CASE
Dust Mask	218-01	218-10	10	2#

RUBBER APRONS

Johnson's aprons will serve you well. Both are approximately the same size and fit, the basic difference is that the heavier apron will hold up to rougher use and last longer.

ITEM	PART NO.	SHIP WT.
Regular Weight Apron	227-01	1#
Heavy Duty 35" x 47"	227-50	2#

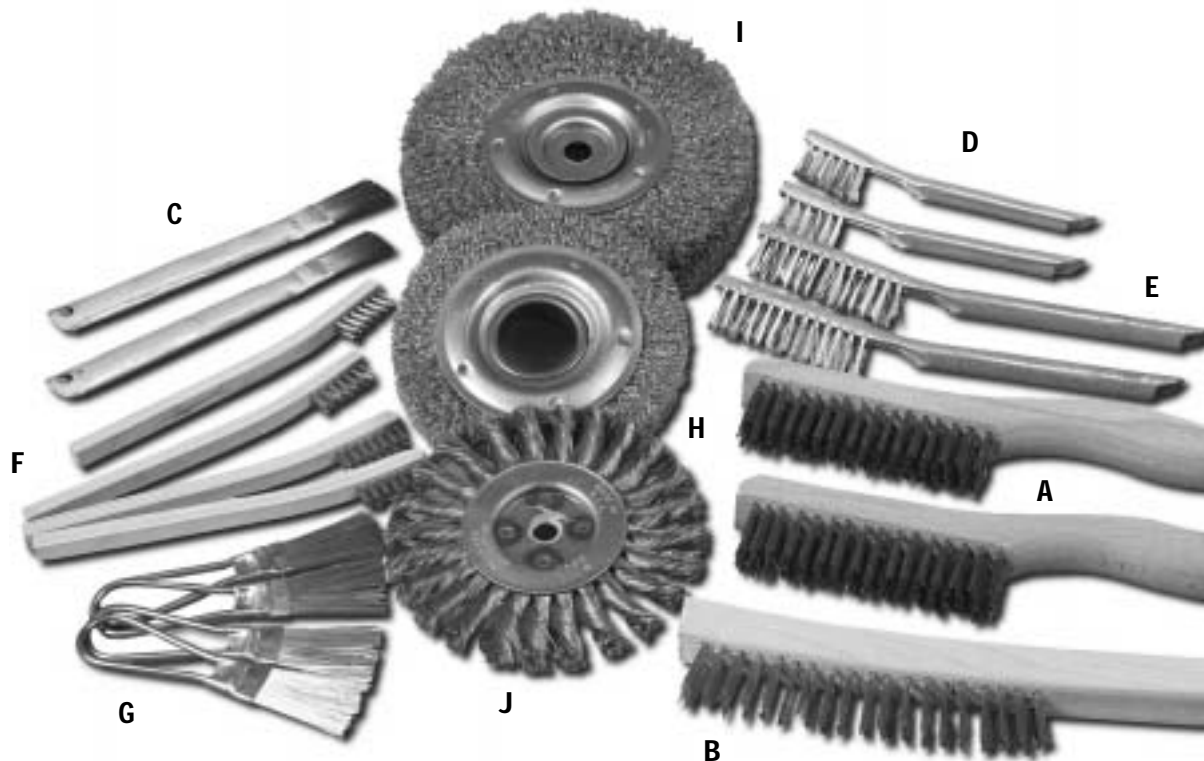


M STAINLESS HOSE CLAMPS (Box of 10)

Quality Stainless Steel hose clamps, made in USA.

SIZE	PART NO.	SIZE	PART NO.
7/32" to 5/8"	253-04M	3/4" to 1 3/4"	253-20
5/16" to 7/8"	253-06M	1 1/16" to 2"	253-24
7/16" to 1"	253-08	1 5/16" to 2 1/4"	253-28
9/16" to 1 1/16"	253-10	1 13/16" to 2 3/4"	253-36
5/8" to 1 1/4"	253-12		

BRUSHES & WIRE WHEELS



A WOODEN SHOE HANDLE BRUSH

The block size is 10" x 1¹/₁₆", brush part length 5" and the trim 1³/₁₆". 4 rows, stainless steel.

ITEM	DOZEN PART NO.	SHIP WT.
Shoe Handle Brushes	281-04	5#

B WOODEN CURVED HANDLE BRUSH

The brush part length 6¹/₄" and the trim 1³/₁₆", 3 rows stainless.

ITEM	DOZEN PART NO.	SHIP WT.
Curved Handle Brushes	281-06	6#

C STRAIGHT METAL SCRATCH BRUSH

Wire face width 1¹/₈" and trim 1⁵/₈", stainless steel bristles.

ITEM	DOZEN PART NO.	SHIP WT.
9" Straight Metal Brushes	281-08	2#

D-E METAL TOOTH BRUSHES

6¹/₂" all metal, 2 row brush has 1¹/₂" x 1¹/₂" trim.

10" all metal 2 row brush has 3¹/₄" x 7⁷/₈" trim; both brushes have stainless steel bristles.

ITEM	DOZEN PART NO.	SHIP WT.
D 6-1/2" Tooth Brush	281-09	1#
E 10" Tooth Brush	281-10	2#

F MINI THREE-ROW STAINLESS TOOTHBRUSH

This little wood handle toothbrush works great for cleaning header troughs before installing gaskets and for cleaning aluminum surfaces prior to soldering, brazing or applying epoxy. Overall length is 8". Brush part is 1¹/₂" x 1¹/₂" long. Stainless steel.

ITEM	DOZEN PART NO.	SHIP WT.
Mini 3-Row, Stainless Bristles	281-12	1#

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G LOOP HANDLE BRUSH

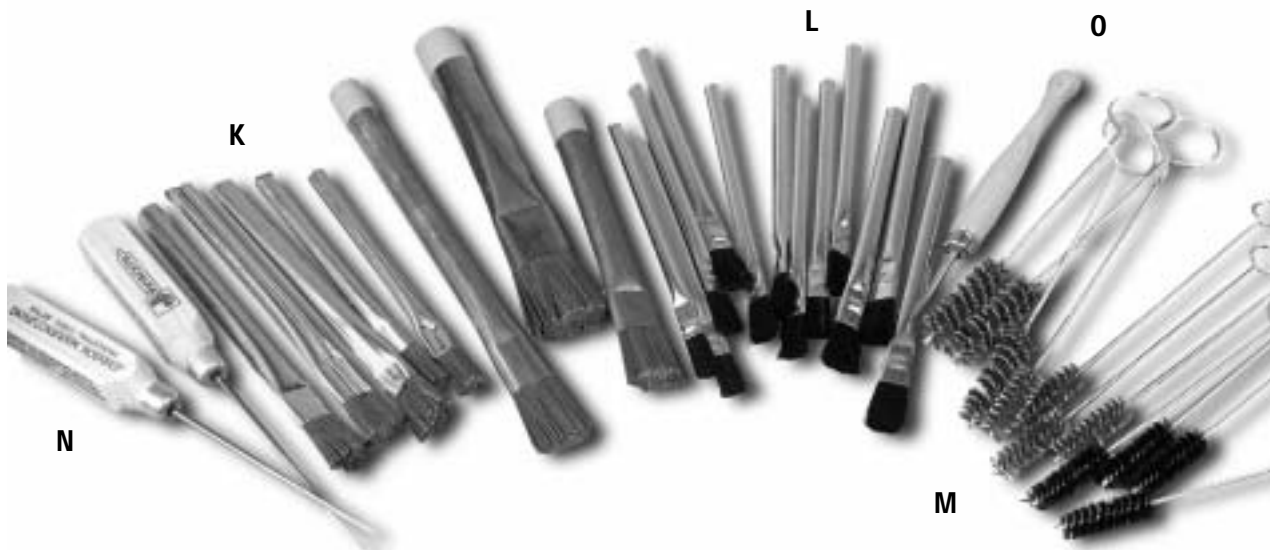
Overall length of this brush is 5¹/₂", 1¹/₄" wire face width and 1⁵/₈" trim. Stainless steel.

ITEM	DOZEN PART NO.	SHIP WT.
Loop Handle Brush	281-02	1#

H-J WIRE WHEEL BRUSHES

These heavy duty wire wheels are commonly used in shops for cleaning tools, etc. Do not use for cleaning or removing solder from any surfaces.

ITEM	PART NO.	SHIP WT.
H 6" HD Wire Wheel	281-15	2#
I 8" HD Wire Wheel	281-17	4#
J 6" Twisted Wire Wheel	281-18	2#
8" Twisted Wire Wheel	281-19	2#



FLUX & TUBE BRUSHES

K FIBERGLASS ACID BRUSHES

Fiberglass acid brushes have thousands of fine fibers that carry more flux to your work. Plastic coating on fibers provides extra scrubbing power, or it may be burned away using an open flame to create a softer brush to hold more flux. When bristles wear down, simply pull more from the handle, and trim even.

ITEM	BRUSH SIZE	DOZEN PART NO.	SHIP WT.
Tin Handle	3/8" x 6"	280-17	1#
Large Tin Handle	1/2" x 7"	280-19	1#
Copper Handle	5/8" x 6"	280-26	2#
Copper Handle	5/8" x 9"	280-28	2#
Copper Handle	7/8" x 6"	280-31	2#
Copper Handle	7/8" x 9"	280-33	3#

L HORSEHAIR ACID SWABS

Compare stiffness and wearing quality of these 100% horsehair, tin handle acid brushes. Available in three popular sizes.

ITEM	BRUSH WIDTH	GROSS PART NO.	12 GR. PART NO.	WT. GROSS
#1 Acid Brushes	3/8"	280-01	280-02	29#
#2 Acid Brushes	1/2"	280-03	280-04	36#
#3 Acid Brushes	9/16"	280-05	280-06	48#

Historic Johnson Trademarks

Some of our older customers may wish to reminisce by looking at the history of Johnson's registered trademarks. Now that we have your attention, if anyone still has one of our original Johnson Soldering Fluid glass bench bottles from the 1910 to 1920 era, please give us a call... Thanks

1909-1954



1955-1975



1976-Present



M RADIATOR TUBE BRUSHES

Stiffer, long lasting fiberglass fibers hold up well to harsh chemicals, withstand heat and flame better than bristle tube brushes.

Bristle tube brushes are effective for cleaning and tinning radiator tube-to-header joints.

Rugged Stainless Steel tube brushes are much stiffer to provide fast cleaning.

ITEM	DOZEN PART NO.	GROSS PART NO.	SHIP WT. GROSS
1/2" Fiberglass	280-11	280-10	4#
1/2" Bristle	280-13	280-12	2#
ITEM	EACH PART NO.	DOZEN PART NO.	SHIP WT. DOZEN
1/2" Stainless Steel	280-14	280-15	1#

N JOHNSON'S ICE PICKS

Johnson's Ice Picks are very effective tools for removing dirt and debris from solder joints. The 6" tapered blade in a wooden handle provides plenty of reach for hard to get places.

ITEM	SINGLE PACK NO.	CASE PART NO.	NO. OF PKGS/CS.	SHIP WT.
Ice Picks 10/Pack	451-10	451-50	5	7#

O BURNISHER

Its flattened, slightly curved blade may be used like an ice pick, but it is also very effective for scrubbing (abrading) Penny Solder into the surface of aluminum. Refer to our CHT Aluminum Soldering Kit described on page 31.

ITEM	PART NO.
Burnisher Tool	450-01

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TEST PLUGS & ACCESSORIES



EXPANSION TEST PLUGS

Johnson stocks a complete line of quality Anderson expansion test plugs, filler neck testers, and heater testers. Repair parts and replacement rubbers are also available for immediate shipment.

ITEM	PART NO. (BRASS)	PART NO. (NYLON)	SHIP WT.
Test Plug Sets	351-CS	351-BSN	5#
Brass set of 13 consists of two each 1 1/4", 1 1/2", 1 5/8", 1 3/4", one 2", one each 1 1/8" regular and 1 1/2" large filler neck testers, plus one set of 7/8" bus heater testers.			
Nylon set of 22 consists of two each 1", 1 1/4", 1 3/8", 1 1/2", 1 5/8", 1 3/4", one 2", one each 1 1/8" regular and 1 1/2" large filler neck testers, and one foreign double gripper, plus one set each 1/2", 3/4" and 7/8" heater testers.			
1" Plug	351-0A	351-0AN	1#
1-1/8" Plug	351-0B	351-0BN	1#
1-3/8" Plug	351-0F	351-0FN	1#
1-1/16" Plug	351-00	351-00N	1#
1-1/4" Plug	351-01	351-01N	1#
1-1/2" Plug	351-02	351-02N	1#
1-5/8" Plug	351-03	351-03N	1#
1-3/4" Plug	351-04	351-04N	1#
2" Plug	351-05	351-05N	1#

Rubbers Only—Add (R) to Brass Part Number

FILLER NECK TESTERS

ITEM	PART NO. (BRASS)	PART NO. (NYLON)	SHIP WT.
1-1/8" Regular Filler Neck	352-01	352-01N	1#
1-1/2" Large Filler Neck	352-02	352-02N	1#
Foreign Double Gripper	352-03	352-03N	1#
Regular Double Gripper	352-04	352-04N	1#
Large Double Gripper	352-05	352-05N	1#

Rubbers Only—Add (R) to Brass Part Number

HEATER TESTER SETS

ITEM	PART NO. (BRASS)	PART NO. (NYLON)	SHIP WT.
1/2" Heater Test Set	353-10	353-10N	1#
3/4" Heater Set	353-20	353-20N	1#
7/8" Bus Heater Set	353-30	353-30N	1#

Rubbers Only—Add (R) to Brass Part Number

HEAVY DUTY EXPANSION TEST PLUGS

Johnson's also stocks heavy duty brass test plugs with open stems for testing heat exchangers and charged air coolers.

ITEM	PART NO. CLOSED	PART NO. OPEN	SHIP WT.
HD Charged-Air-Cooler Test Set	351-CAS	8#	
CAC Set of 18 items consists of one each 2 1/2" and 3 1/4" open and closed plugs, two each 2 3/4", 3", 3 1/2", and 4", two 5/8" cast handles, one 6" extension, one CAC adapter and one pair of Johnson's Safety Chain Clamps.			
2" Heavy Duty Plug	351-06	352-06	
2-1/8" HD Plug	351-07	352-07	
2-1/4" HD Plug	351-08	352-08	
2-1/2" HD Plug	351-09	352-09	
2-3/4" HD Plug	351-10	352-10	
3" Heavy Duty Plug	351-11	352-11	
3-1/4" HD Plug	351-12	352-12	
3-1/2" HD Plug	351-13	352-13	
4" Heavy Duty Plug	351-14	352-14	

Rubbers Only—Add (R) to Brass Part Number

TEST PLUG PARTS & ACCESSORIES

ITEM	PART NO.
1/2" Brass Wing Nut Only	351-15
5/8" Brass Wing Nut Only	351-16
Small Brass Open Stem Only	351-17
Large Brass Open Stem Only	351-18
4" x 5/8" Cast Handle For HD Plugs	351-26
6" HD Filler Neck Extension	351-27



JOHNSON'S SAFETY CHAIN CLAMPS

For testing charged air coolers where up to 30 PSI pressure is used. Adjustable Chain Clamps fit around the outside of all CAC inlets, behind the bead. Properly installed, these clamps will keep plugs from coming out unexpectedly.

ITEM	PART NO. EACH	PART NO. PAIR	SHIP WT. PAIR
Safety Chain Clamp(s)	356-01	356-02	4#



test caps & tools

TEST CAPS

Soft red rubber Test Caps offer excellent gripping power for fast air testing of radiators.

ITEM	PART NO.	NO. OF CAPS/SET	SHIP WT.
Set of Test Caps	350-CS	20	6#
1" Cap	350-01	1	1#
1-1/8" Cap	350-02	2	1#
1-1/4" Cap	350-03	1	1#
1-3/8" Cap	350-04	4	1#
1-1/2" Cap	350-05	1	1#
1-5/8" Cap	350-06	4	1#
1-3/4" Cap	350-07	1	1#
1-7/8" Cap	350-08	1	1#
2" Cap	350-09	1	1#
2-1/8" Cap	350-10	1	1#
2-1/4" Cap	350-11	1	1#
2-1/2" Cap	350-12	1	1#
2-3/4" Cap	350-13	1	1#

OIL COOLER WRENCHES

These handy Oil Cooler Wrenches will make your life a lot easier. Three sizes cover approximately 90% of pal nuts used for installing oil coolers in plastic tanks. Saves knuckles.

ITEM	PART NO.	SHIP WT.
Set of 3 Oil Cooler Wrenches	417-CS	2#

JOHNSON'S ROD OUT TOOLS

Johnson's rod out tools are specially hardened and all have rounded edges to protect the walls of radiator tubes.

ITEM	PART NO.	SHIP WT.
Set of 4- 36" Rod Out Tools	420-CS	1#
3/16" x 36"	420-01	1#
1/4" x 36"	420-02	1#
3/8" x 36"	420-03	1#
1/2" x 36"	420-04	1#
3/8" x 72"	420-05	1#
1/4" x 72"	420-06	1#
3/16" x 72"	420-07	1#

BAND-IT TOOLS, STRAPS, CLIPS

Band-It Tools are ideal for occasional use around a radiator shop. Many shops band crossflow radiators to add stability. This tool is easy to use, durable and has a built-in cutter. Stainless steel bands and clips resist corrosion, last longer.

ITEM	PART NO.	SHIP WT.
Band-It Pok-It II Tool	445-00	1#
3/8" x 100 Ft. Stainless Steel Band	445-01	2#
3/8" Stainless Steel Clips, 100/Box	445-02	1#
1/4" x 100 Ft. Stainless Steel Band	445-03	2#
1/4" Stainless Steel Clips, 100/Box	445-04	1#
Heavy Duty Band-It Tool	446-00	4#

NECK ROUNDERS

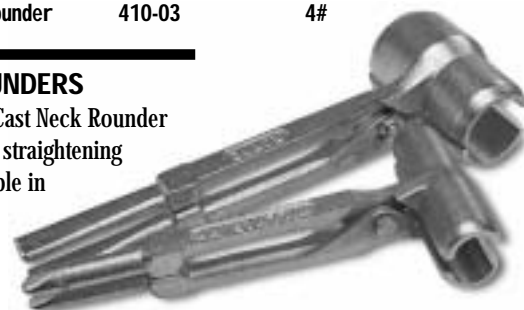
Johnson's Steel Neck Rounders offer good utility at competitive prices. Insert the nearest size in a brass inlet or outlet and squeeze while rotating the tool, to restore roundness.

ITEM	PART NO.	SHIP WT.
Set of 3 Neck Rounders	410-CS	8#
Large Size Neck Rounder	410-01	3#
Medium Size Neck Rounder	410-02	2#
Extra Large Neck Rounder	410-03	4#

CAST NECK ROUNDERS

The handle of each Cast Neck Rounder also can be used for straightening heater necks. Available in four popular sizes.

ITEM	PART NO.	SHIP WT.
Small Cast Rounder	410-53	2#
Medium Cast Rounder	410-54	2#
Large Cast Rounder	410-55	4#
Larger Cast Rounder	410-56	5#



CLEANING EQUIPMENT



A MEGA-FLUSH II GUN

Utilizing a venturi style mixer, Johnson's Mega-Flush II converts more compressed air and water into a single, powerful cleaning stream, with less back pressure and noise than any other flush gun made. Its greater capacity affords faster, more thorough backflushing of radiators and large heat exchangers. Its unique trigger gives precise air control for gentle backflushing of cooling systems. Great for cleaning up equipment.

ITEM	PART NO.	SHIP WT.
Mega-Flush II Gun	429-CS	5#
Replacement Air Valve	429-02	1#
Black Rubber Cone	429-10	1#
20" Extension	429-15	1#

B MINI-FLUSH GUN

Johnson's Mini-Flush Gun offers about as much pressure, though not as much volume, as the Mega-Flush II. Ideal for under-the-hood back flushing through a heater hose because of its compact size and brass cone. Also great for cleaning up your equipment or shop.

ITEM	PART NO.	SHIP WT.
Mini-Flush Gun	429-50	2#

QUIET SAFETY BLOW GUN [not shown]

Tip design is soft for autobody work; produces a bigger volume of air yet with less noise than other air blow guns.

ITEM	PART NO.	SHIP WT.
Safety Blow Gun	437-50	1#

C MARK-A-LEEK WET OR DRY CRAYONS

Paint sticks are great for marking wet or dry surfaces. Available in both red and yellow.

ITEM	PART NO.	SHIP WT.
Red Paint Sticks, Dozen	247-10	1#
Yellow Paint Sticks, Dozen	247-12	1#

D STREAMWAY SANDBLASTER & AIR BLOW GUN

This portable sand blaster is our most popular model for the spot cleaning of radiators, tanks, tools and equipment. It removes dirt, oxides, paint, rust and scale easily and economically. Its standard No. 25 Air Blow Gun is tapered to fit into the back of the blast gun body. One quart capacity. Produces best results at 125 psi. or more however, many applications such as cleaning spots on an aluminum radiator can be satisfactorily handled at lower pressures.

ITEM	PART NO.	SHIP WT.
No. 37 Sand Blast Cleaner	436-00	2#
Steel Replacement Nozzle	436-02	
Blow Gun Only	437-00	1#
10" Extension	437-01	1#

SANDY JET BLASTER

Its large capacity makes this unit ideal for cleaning big areas such as heavy duty radiator tanks and equipment.

ITEM	PART NO.	SHIP WT.
Model F-50	435-00	12#
1/8" Air Jet	435-01	
1/4" Steel Nozzle	435-04	
5/16" Steel Nozzle	435-06	
1/4" Ceramic Nozzle	435-07	
5/16" Ceramic Nozzle	435-08	
Gun Body Complete	435-10	1#

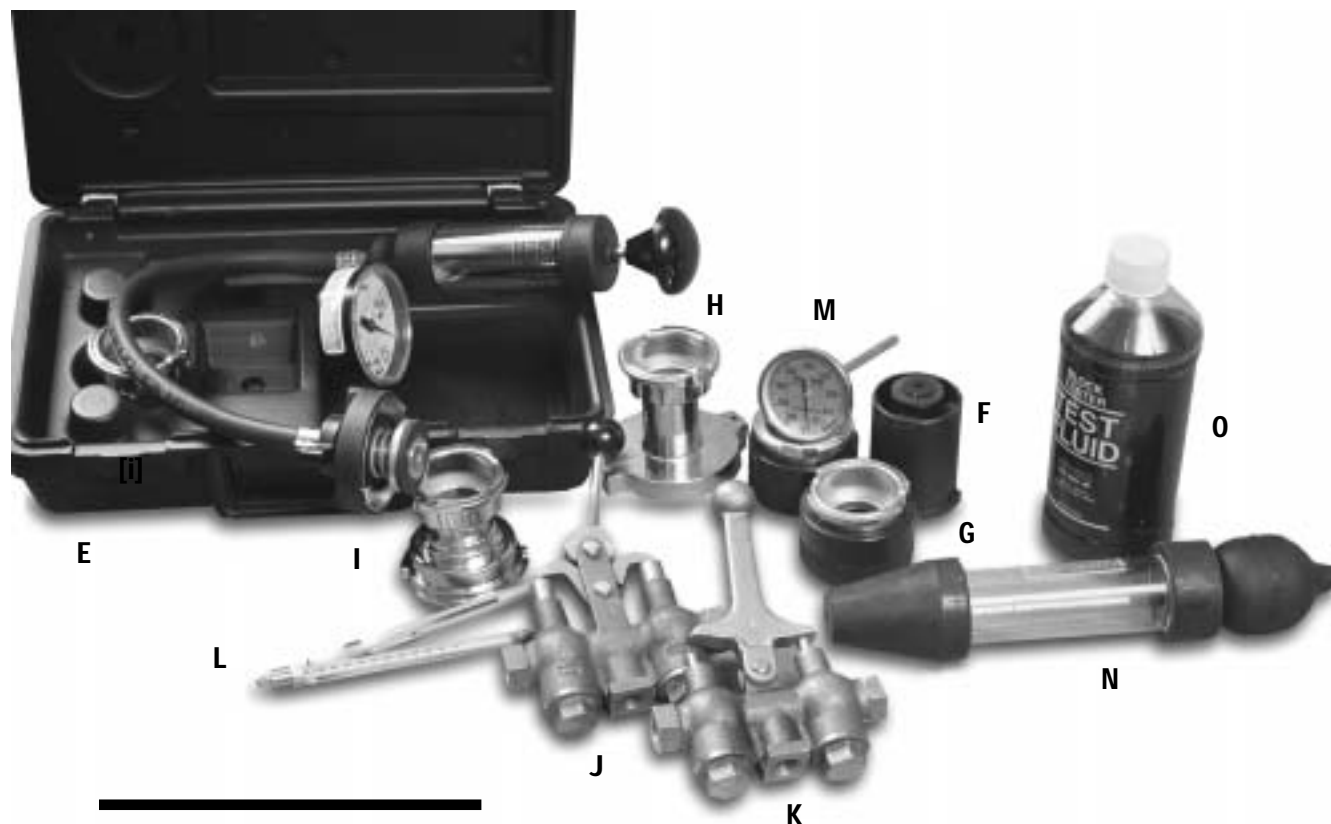


ABRASIVES, TWO GRADES FOR RADIATOR SHOPS

Black Beauty Abrasive Sand has sharp edges for fast cutting, very economical, as well.

Alumablast is a fine blend of oxides that are highly effective for spot cleaning aluminum radiators prior to repair. A little goes a long way.

ITEM	SIZE	PART NO.	SHIP WT.
Black Beauty Sand, Coarse	50 Lb.	435-50	51#
Alumablast Oxide, Fine	50 Lb.	435-80	51#



E-I STANT COOLING SYSTEM TESTER

A must for every radiator shop. Show your customer the leaks in his or her cooling system. Use it anywhere a radiator cap will fit. Adapter lets you check pressure caps on the spot. Helps you sell needed cooling system parts and services.

ITEM (NEW ITEM NO.)	PART NO.	SHIP WT.
E ST 270, 30 Lb. Tester (12270)	355-CS	3#
270 Conversion Kit for ST 250 (12701)	355-00	1#
A-450 Truck Adptr Kit (12450)	355-01	1#
TA-17 Threaded Adptr VW Caps (12017)	355-02	1#
270 2 Gage for Stant Testers (12702)	355-03	
F TA-27 32mm Neck Adptr Toyota (12027)	355-04	1#
TA-21 45mm Cap Adptr (12021)	355-05	1#
G TA-18 Adptr Volvo, Saab, Renault (12018)	355-06	1#
TA-19 Threaded Adptr for BMW (12019)	355-07	1#
TA-16 Threaded Adptr for VW (12016)	355-08	1#
TA-15 Adptr White, GMC Trucks (12015)	355-09	1#
TA-23 Threaded Adptr LeMans (12023)	355-10	1#
A-450-1 Rubber Plug for Stant (12451)	355-11	
Rubber Gasket (12452)	355-12	
H 6mm Adptr Kit for A-450 (12453)	355-13	1#
Hose & Head Kit for #255 Tester (12557)	355-14	1#
270 3 Repair Kit for ST 270 (12703)	355-18	1#
TA-26 Adptr GM, Saturn, Ford (12026)	355-19	1#
TA-22 Deep Adapter (12022)	355-25	1#
TA-24 44mm Adapter (12024)	355-26	1#
TA-25 Deep Adapter (12025)	355-27	1#
250-5 1", 3/4" Adapter (12505)	355-28	1#
I 255 2 3/4" Adapter (12552)	355-29	1#

MITYVAC COOLING SYSTEM TEST KIT

The model 4500 Silverline™ is a professional test kit that includes an all-metal Dual Converter vacuum/pressure pump, standard radiator adapter, temperature probe, needle probe and 24" of 1/4" I.D. test tubing. Mityvac allows single-handed operation for checking cooling system temperature ranges, sensors, leaks, etc. Kit includes a 110 page User's Manual.

ITEM	PART NO.	SHIP WT.
4500 Silverline Vacuum Kit	358-CS	5#

J-K LIFT VALVES, AIR RELIEF VALVE

Kingston two-stage Air Control Valve (364-10) offers better control, smoother operation, than our economical, single stage valve (364-12). Both are durable however both may be rebuilt using the appropriate repair kit.

ITEM	PART NO.	SHIP WT.
J Kingston Air Control Valve	364-10	2#
Repair Kit for 364-10	364-11	1#
K Single Action Air Valve	364-12	2#
Repair Kit for 364-12	364-13	1#

L-M THERMOMETERS

Use our quality Pocket Thermometer for testing liquids to 220°F or our 2" Dial Thermometer for testing solders from 200 to 1000°F

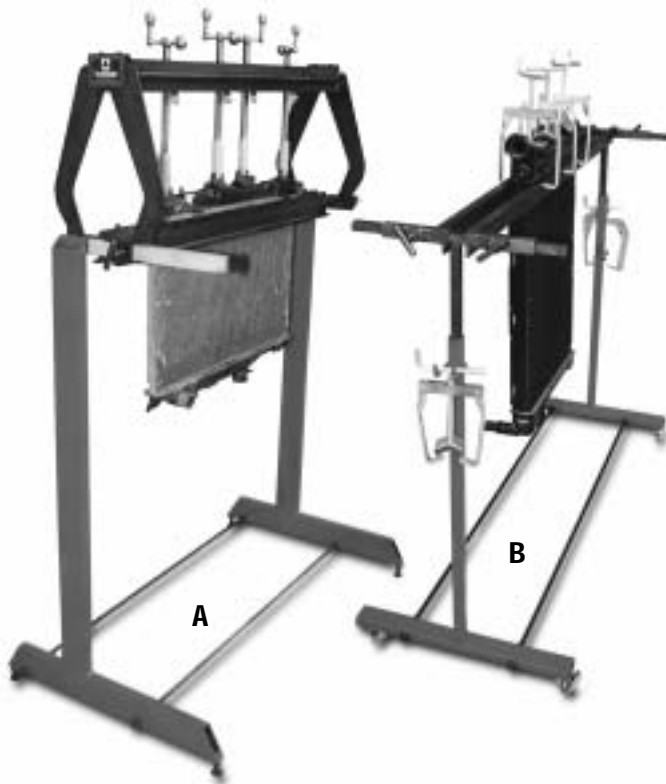
ITEM	PART NO.	SHIP WT.
L Pocket Thermometer (0-220°F)	510-00	
Refill for Pocket Therm 510-00	510-01	
M Dial Thermometer (200-1000°F)	516-00	1#

N-O UNIVERSAL COMBUSTION LEAK TESTER

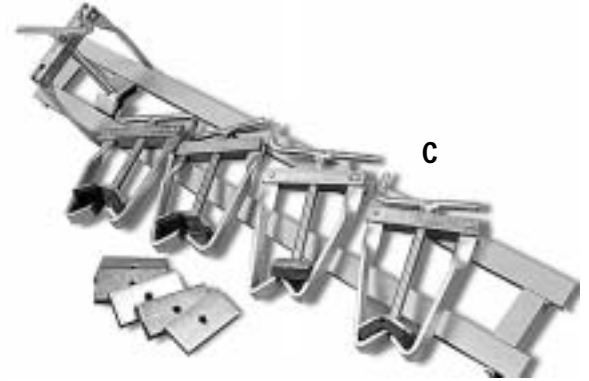
Detects carbon monoxide (CO) in your cooling system that may be the result of a blown head gasket or cracked block. Blue fluid turns yellow within 60 seconds if CO is present.

ITEM	SINGLE PART NO.	CASE PART NO.	SHIP WT.
N Universal Block Tester	371-00		2#
O Test Fluid, Pint(s)	370-01	370-02	13#

PTR EQUIPMENT



It Can
Be Done
With
JOHNSON



A TANKMATE PTR ASSEMBLY FIXTURE

Professional Series II, Quick-Release Clamps

This fixture is packed with innovation, making it the simplest, easiest to operate unit on the market. It utilizes gear arms, connected by torsion rods that allow a movable rail to open and close smoothly, while centering the screw clamps, front to back, at all times. Loads radiators fast and holds them securely in just seconds.

The TankMate comes equipped with 4 Quick Release Screw Clamps that raise and lower with the flip of a trigger. Balanced ball cranks and powerful $\frac{3}{4}$ " acme threads turn easily delivering up to 500 Lbs. of actual force, per clamp. (Total= 2000 Lb. for all 4 clamps.) Chrome vanadium die springs and patented pressure indicators allow you to apply the correct amount of force with each clamp, assuring uniform gasket compression. TankMates are built strong, to last a long time.

ITEM	PART NO.	SHIP WT.
TankMate Pro Series II w/4 Clamps	428-PS	153#
Additional Quick Release Clamp	428-01	4#
14" PTR Header Bars, Pair	428-14	4#

B CLAMPMATE PTR ASSEMBLY STAND

Maximum Versatility, Minimum Cost

Johnson's ClampMate holds every PTR, from the smallest to the world's largest heavy duty Mack Truck unit which is over 40" wide. Features casters for easy rolling, plus height adjustment for tall radiators like Modine AdTech units. Comes with 5 Gold-Series Straight L-Clamps, upgraded from those shown. Extra clamp available for Mack units. (Macks require 6 clamps)

ITEM	PART NO.	SHIP WT.
ClampMate PTR Stand w/6 L-Clamps	428-CM	80#
Additional Straight L-Clamp, Each	421-13	2#

C AD-TECH HEADER FRAME SET

This header frame and clamp set provides an economical way to change gaskets and/or tanks on all three (3) sizes of the AdTech series on Ford, Kenworth and Peterbilt and other trucks. Proprietary to this series of radiators only. Each clamp comes with both a "V" pad and flat pad to fit every tank configuration.

ITEM	PART NO.	SHIP WT.
AdTech Header Frame w/5 L-Clamps	421-CS	16#
Header Frame Only	421-01	6#
Additional L-Clamp, Each	421-13	2#

D JOHNSON'S GOLD STANDARD J-CLAMP

Use these quality clamps to fit-up conventional brass tanks to headers, prior to soldering. All Johnson's Clamps feature replaceable pads.

ITEM	SINGLE PART NO.	PAIR PART NO.	SHIP WT. PAIR
Standard J-Clamp	423-01	423-02	4#

E JOHNSON'S GOLD 2-WAY J-CLAMP

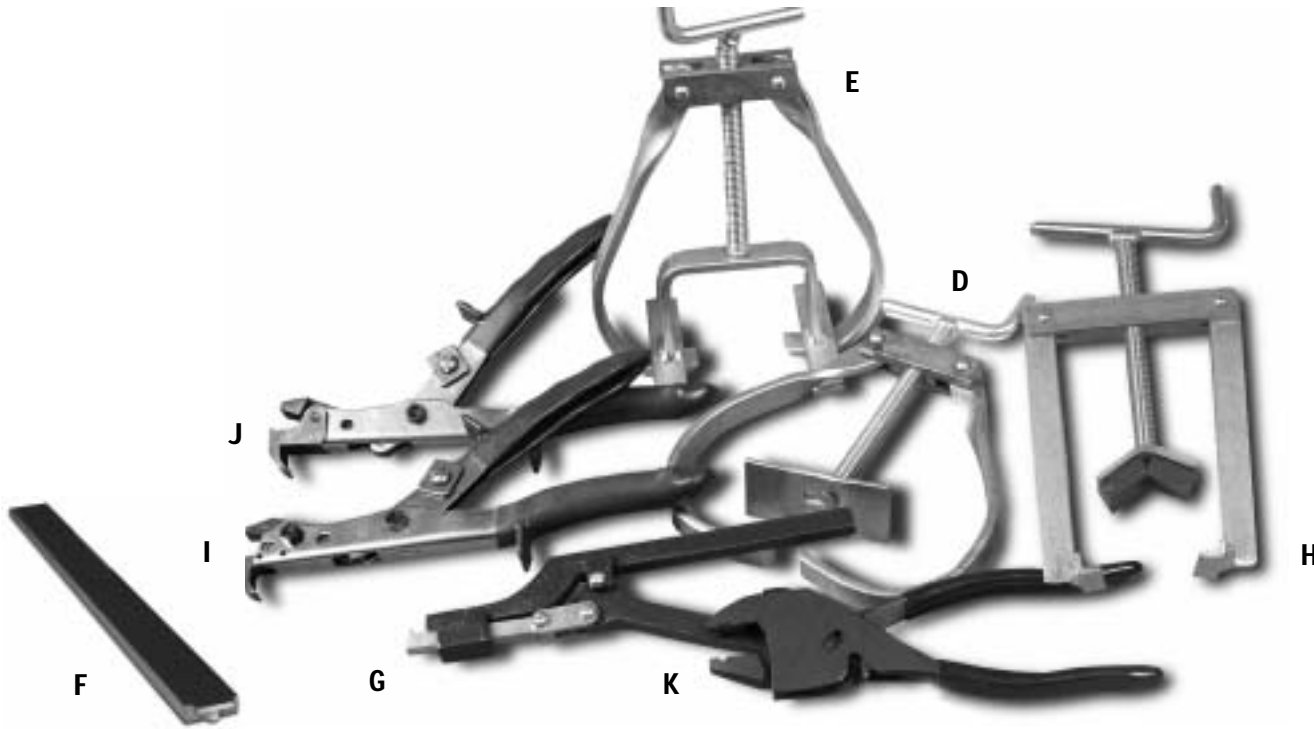
This style features longer arms and a pad that straddles deep drawn brass tanks or may be used the conventional way.

ITEM	SINGLE PART NO.	PAIR PART NO.	SHIP WT. PAIR
2-Way J-Clamp	424-01	424-02	4#

JOHNSON'S GOLD TRACTOR J-CLAMP [not shown]

This style has both longer arms and a wider yoke making it ideal for clamping truck and tractor units.

ITEM	SINGLE PART NO.	PAIR PART NO.	SHIP WT. PAIR
Tractor J-Clamp	426-01	426-02	4#



F HEADER TOOL FOR BEHR RADIATORS

This new tool was recently designed by Behr engineers to properly reset the header over the tank flange. One surface locates on top of the header, while another is machined to the correct depth for resetting the dimple.

ITEM	PART NO.	SHIP WT.
Behr Header Tool	418-01	1#

G TAB LIFTER

For lifting tabs and removing crimping strips. Easy to use with a rolling action to pull tabs up and away from the header.

ITEM	PART NO.	SHIP WT.
Tab Lifter	413-01	1#
Replacement Bit	413-02	

SOFT BRASS HAMMER

Another great PTR tool (borrowed from the sheet metal industry). Handy for restoring the shape of headers and the vertical alignment of tabs prior to crimping.

ITEM	PART NO.	SHIP WT.
Soft Brass Hammer	411-05	1#

H JOHNSON'S STRAIGHT PTR CLAMPS

Straight arms and a longer handle enable this Gold-Series PTR header clamp to produce more gasket compression with less effort and less distortion. Most automotive PTR's require three clamps; plastic tanks longer than 20" require four clamps.

ITEM	SINGLE PART NO.	PAIR PART NO.	SHIP WT. PAIR
Straight PTR Clamp	425-51	425-52	4#

I JOHNSON'S TAB TOOL

The standard of the industry for lifting and crimping PTR tabs! Its hardened claw helps you open tabs "the right way" by lifting them up and away from the header. Its hardened jaws and compound action let you crimp tabs closed, faster than with any other hand tool. Thousands of satisfied users worldwide.

ITEM	PART NO.	SHIP WT.
Johnson's Tab Tool	414-01	1#
Spring for Tab Tool	414-02	

J JOHNSON'S WIDE TAB TOOL

Like our regular Tab Tool, but has a wider claw and jaws for lifting and crimping wide aluminum tabs like those found on General Motors PTR's. Both Tab Tools work great with the TankMate, Professional Series II fixture.

ITEM	PART NO.	SHIP WT.
Johnson's Wide Tab Tool	414-01W	1#
Spring for Tab Tool	414-02W	

K JOHNSON'S TAB PLIERS

For crimping tabs and crimp strips on all automotive, truck and tractor radiators. Features hardened jaws, adjustable bite, parallel action, and a 10:1 power ratio to make crimping tabs a breeze.

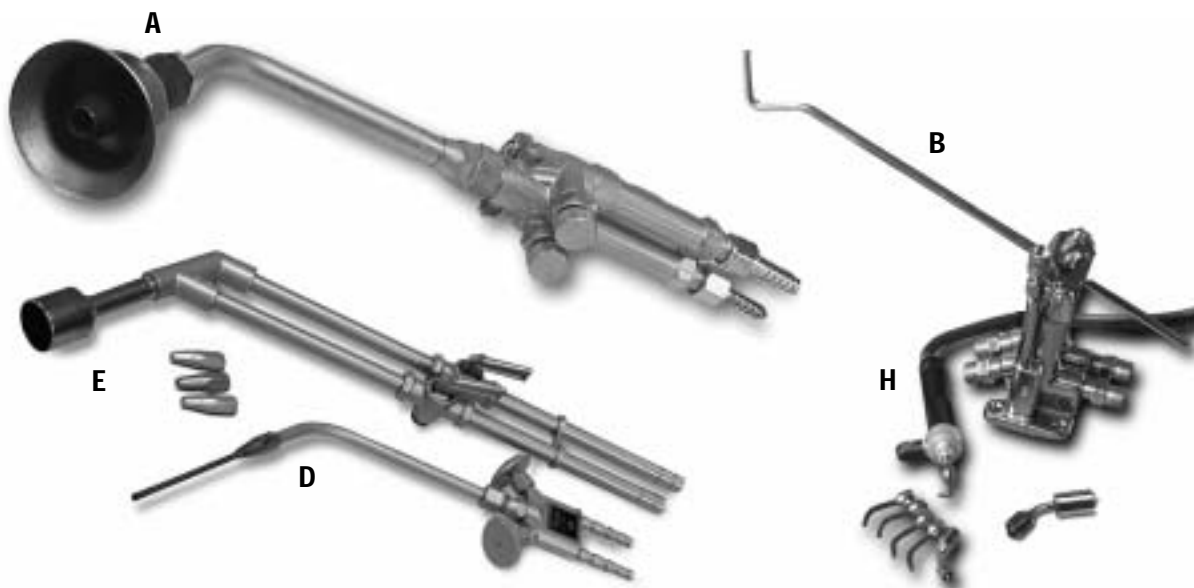
ITEM	PART NO.	SHIP WT.
Johnson's Tab Pliers	412-01	1#

HAND SEAMER [not shown]

This tool, commonly used in the sheet metal industry, works great for straightening headers prior to installing plastic tanks. A must if you are working on heavy duty PTR's.

ITEM	PART NO.	SHIP WT.
Hand Seamer	416-50	2#

TORCHES & ACCESSORIES



A HARRIS BELL TORCH

This lever action torch is preferred by many industrial shops because it puts out a big bushy flame. Idles as soon as you release the lever. Great for tearing down heavy duty radiators.

ITEM	PART NO.	SHIP WT.
Harris Bell Torch with Tip	333-00	3#
Harris Bell Tip only	333-01	

B GASAVER & STAND

Save both time and fuel gas. Hang torch on hook to extinguish flame. Lift torch and pass tip by the pilot flame to relight. No need to adjust torch settings. Works with natural gas or LP. The Gasaver Stand mounts to your bench or tank to position the torch hanger in a convenient place.

ITEM	PART NO.	SHIP WT.
Gasaver Torch Shut-off	319-01	3#
Replacement Pilot Light	319-02	
Gasaver Mounting Kit	319-03	5#

AIR REGULATOR, FILTER, SHUT-OFF VALVE

Air regulators do not provide full shut-off. Use 439-04 and 439-05 in line with this regulator for complete shut-off.

ITEM	PART NO.	SHIP WT.
Air Filter with Drain, 1/4"	439-02	2#
Air Pressure Regulator	439-03	1#
Air Line Shut Off Valve	439-04	
1/4" Brass Close Nipple	439-05	



C RADIATOR TEST VALVE

This handy 3-Way Air Relief Valve allows operator to fill, hold and release air pressure when air testing radiators.

ITEM	PART NO.	SHIP WT.
3-Way Air Relief Valve, 1/4"	439-15	1#

D REXARC NO. 42 GAS/OXY TORCH, TIPS

A compact little torch with precise thumb wheel control that burns any fuel gas with oxygen. Optional Radiator Tip.

ITEM	PART NO.	SHIP WT.
Rexarc No. 42 Torch	335-00	1#
Rexarc #60F NG-LP/Oxy Tip	335-01	
Rexarc #55F NG-LP/Oxy Tip	335-02	
Rexarc #45F NG-LP/Oxy Tip	335-03	
Rexarc #38F NG-LP/Oxy Tip	335-04	
Rexarc #60 Acetylene/Oxy Tip	335-05	
Rexarc #55 Acetylene/Oxy Tip	335-06	
Rexarc #45 Acetylene/Oxy Tip	335-07	
Rexarc #38 Acetylene/Oxy Tip	335-08	
Rexarc #183-53 Radiator Tip (4 ³ / ₄ " long Acetylene/Oxy Tip)	335-09	

E REXARC GAS/AIR TORCH, TIPS

You'll like the feel of this all brass, gas/air torch with lever valves. This torch allows you to change tip sizes; 1N, 2N, 3N (tips are additional).

ITEM	PART NO.	SHIP WT.
Rexarc Lever Valve Torch	334-00	1#
Rexarc 1N, Gas/Air Tip	334-01	
Rexarc 2N, Gas/Air Tip	334-02	
Rexarc 3N, Gas/Air Tip	334-03	

JOHNSON'S HURRICANE PILOT LIGHTS

Use this convenient little, all brass pilot for lighting torches. It is hard to blow out and burns very little gas.

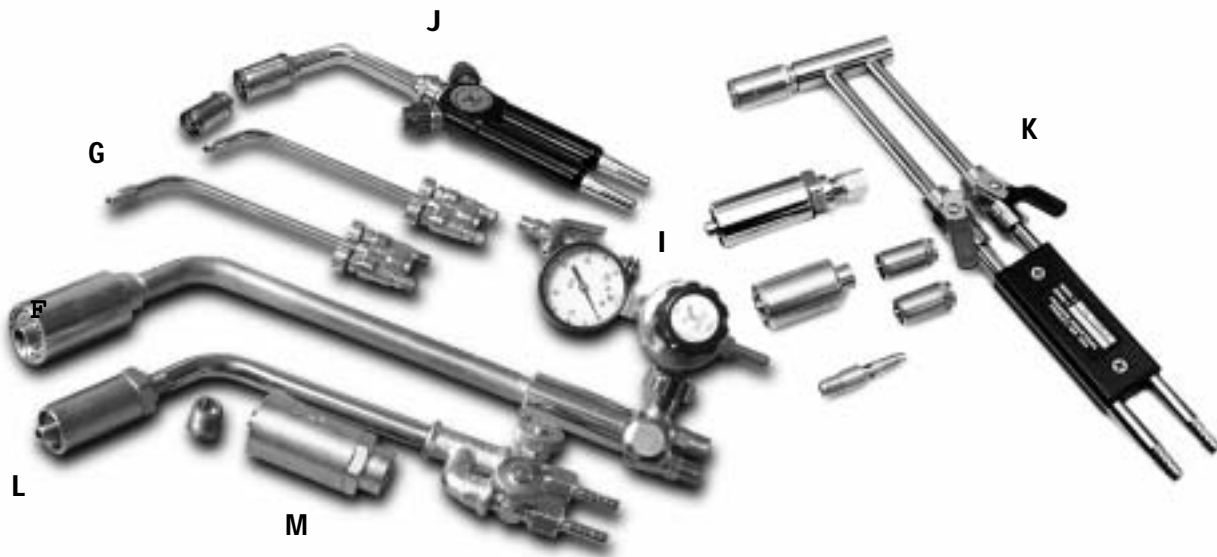
ITEM	SINGLE PART NO.	CASE PART NO.	NO. IN CASE	SHIP WT. CASE
Nat. Gas Pilot	320-00	320-10	10	3#
LP. Gas Pilot	320-01	320-11	10	3#

F BIG SMITH TORCH, TIPS

If you need a gas/air torch for tearing down big radiators or working large headers, this is the one. Smith packs 150,000 BTU in this torch, about equivalent to a No. 8 tip. This Big Smith produces a nice, smooth flame that is easy to set and control.

ITEM	PART NO.	SHIP WT.
Big Smith Torch NE-173 with Tip	329-CS	2#
NE-171 Heating Tip Only	329-01	

TORCHES



G SMITH GAS/AIR & GAS/OXY TORCHES, TIPS

Smith torches are well known for their compact design, easy to adjust valves, and overall high quality. The 328-00 (NE-120B) series burns gas and compressed air and is ideally suited for most soldering jobs.

The 326-00 (NE-140B) series uses gas and oxygen and is preferred by many radiator shops for silver brazing.

ITEM	PART NO.	SHIP WT.
Smith NE-120B Gas/Air Torch	328-00	1#
Acetylene/Air Tip NE-121	328-02	
Small Gas/Air Tip NE-122	328-03	
Medium Gas/Air Tip NE-123	328-04	
Large Gas/Air Tip NE-124	328-05	
Smith NE-140B Gas/Oxy Torch	326-00	1#
NG or LP/Oxy Tip NE-151	326-01	
NG or LP/Oxy Tip NE-152	326-02	
NG or LP/Oxy Tip NE-153	326-03	
NG or LP/Oxy Tip NE-154	326-04	
NG or LP/Oxy Tip NE-155	326-05	
NG or LP/Oxy Tip NE-156	326-06	
Valve for NE-140B Torch	326-07	
Tips NE-151 Thru NE-155 & Holder	326-10	1#

H SMITH LITTLE TORCH AND TIPS

A great Little Torch for repairing light gage aluminum because it offers precise control and a pinpoint flame.

ITEM	PART NO.	SHIP WT.
Smith Little Torch with 5 Tips	325-CS	1#
Little Torch and #4 Tip Only	325-01	1#
#1 Acetylene/Oxygen Tip	325-02	
#2 Acetylene/Oxygen Tip	325-03	
#3 Acetylene/Oxygen Tip	325-04	
#4 Acetylene/Oxygen Tip	325-05	
#5 Acetylene/Oxygen Tip	325-06	
#6 Acetylene/Oxygen Tip	325-07	
NE-1LP NG or LP/Compressed Air Tip	325-10	
Twin Tip for Little Torch	325-12	
6' Hose Set for Little Torch	325-15	1#
Smith Welding Goggles	325-17	1#

I NATIONAL REGULATOR & GAGE

ITEM	PART NO.	SHIP WT.
Regulator with 100# Gage	324-CS	2#
Gage with 2" Face Only	324-01	2#

J-M NATIONAL TORCHES, TIPS & ACCESSORIES

The National #3A-B3 Gas/Air Torch is our most popular torch because it is sturdy, lightweight and versatile. Tips are available for many combinations of gas and air, or gas and oxygen.

The National #L-7 Torch has positive shut-off type Lever Valves for one-handed operation. Using the #373 Adapter, all National's Gas/Air Tips, from N-0 to N-6, can be used with this torch.

The National #4 Gas/Air Torch is an all brass torch for fast heating with natural or LP gas and compressed air.

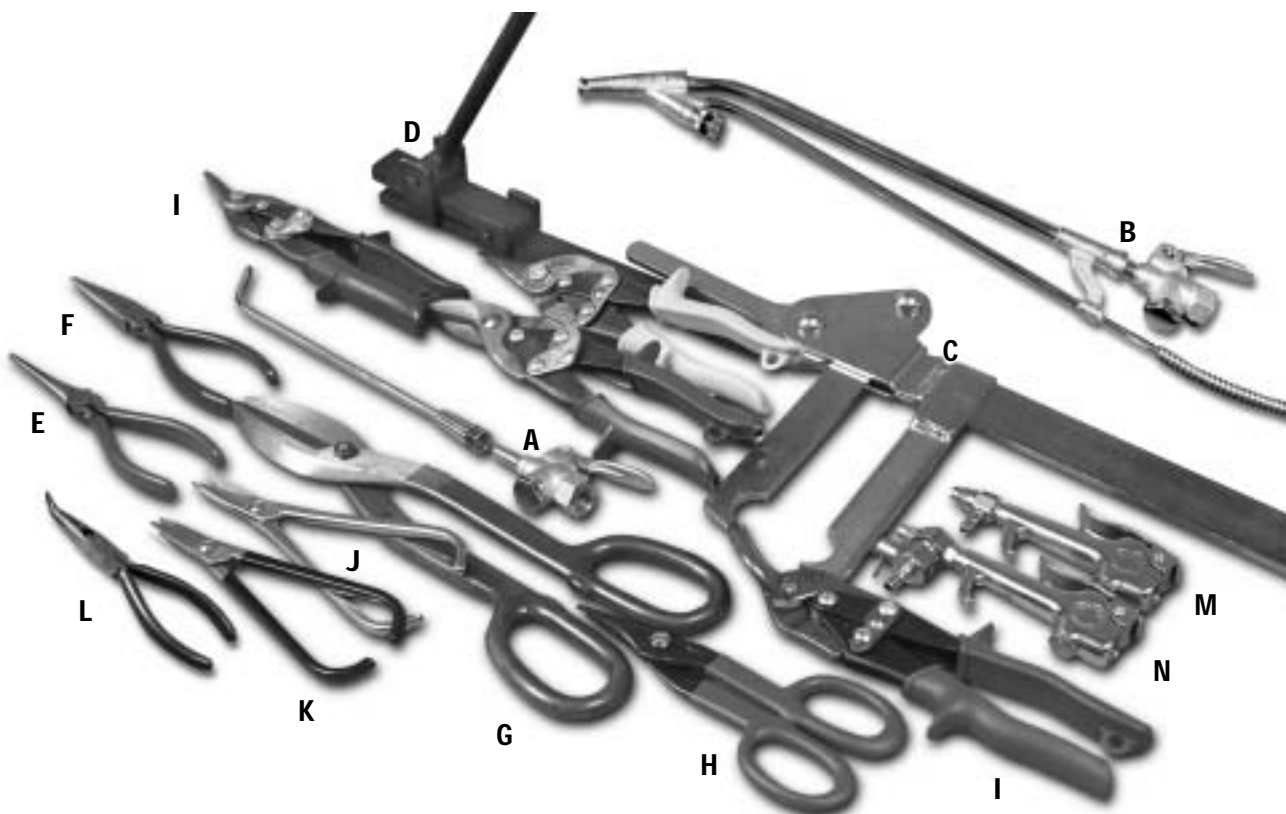
NATIONAL TORCHES	PART NO.	SHIP WT.
J 3A-B3 Gas/Air Torch, N-1 & N-2 Tips	321-CS	1#
3A-B Torch Only (No Tips)	321-00	1#
[K] #L-7 Torch, N-2 Tip, #373 Adapter	322-CS	2#
#L-7 Torch Only (No Tips)	322-00	2#
[I] #4 Torch, All Brass	323-CS	2#
#4 Torch only, (No Tips)	323-00	2#

GAS/AIR TIPS	PART NO.	TIP O.D.	HOLE I.D.
N-0 Gas/Air Tip	321-01	5/8"	1/16"
N-1 Gas/Air Tip	321-02	5/8"	3/32"
N-2 Gas/Air Tip	321-03	3/4"	5/32"
N-3 Gas/Air Tip	321-04	1"	3/16"
N-4 Gas/Air Tip	321-05	1"	7/32"
N-4 Adapter	321-06		
#373 Adapter	322-04		
[m] N-6 Gas/Air Tip	323-03	1-1/4"	5/16"
N-6 Adapter	323-04		

GAS/OXY TIPS	PART NO.	SHIP WT.
OX-1 Gas/Oxygen Tip	321-11	
OX-2 Gas/Oxygen Tip	321-12	
OX-3 Gas/Oxygen Tip	321-13	
OX-4 Gas/Oxygen Tip	321-14	
OX-5 Gas/Oxygen Tip	321-15	

NATIONAL PARTS	PART NO.	SHIP WT.
Elbow Nut	321-19	
Elbow Tube	321-20	
Elbow Nut Gasket	321-21	
Valve Assembly Green	321-22	
Valve Assembly Red	321-23	
Green Knob Only	321-24	
Red Knob Only	321-25	
Hose Set with Fittings, 12'	321-28	3#

SPRAYERS & TOOLS



A STREAMWAY AIR BLOW GUN, EXTENSION

Streamway Blow Guns are very handy because of their quick hook up with Streamway Paint Sprayers described below and Streamway Sand Blasters (page 20). These little blow guns are also extremely durable.

ITEM	PART NO.	SHIP WT.
Streamway Air Blow Gun	437-00	1#
10" Extension for Blow Gun	437-01	1#

B STREAMWAY PAINT SPRAYER

Commonly used for spraying solvent thinned radiator paints. Needle valve behind the tip regulates paint flow. Many states regulate the release of VOC's. Check with your local or state Air Quality Management Agency for information.

ITEM	PART NO.	SHIP WT.
Air/Liquid Paint Sprayer	438-00	1#
6' Metallic Hose	438-01	1#

C BULLDOG CLAMP, JAWS

This cam action clamp is the fastest, surest way to hold anchor-age straps in position, while soldering them to brass tanks. Bulldog Clamps provide a 3' span.

ITEM	PART NO.	SHIP WT.
3' Bulldog Clamp	422-00	5#
Set of Jaws for Clamp	422-01	1#

D SIDE NOTCHER AND REPLACEMENT BIT

Side notchers are useful for notching side straps. These tools last a long time and replacement bits are available.

ITEM	PART NO.	SHIP WT.
Side Notcher Tool	415-01	3#
Replacement Bit	415-02	1#

E-M PLIERS, SNIPS

Our selection of pliers, snips and shears are among the finest available for radiator repair work.

ITEM	PART NO.	SHIP WT.
E Duckbill Pliers, Thin, 7"	400-01	1#
F Long Nose Pliers, 7"	401-01	1#
G Straight Cut Snips, 12"	402-01	1#
H Circular Cut Snips, 7"	403-01	1#
I Straight Aviation Snips, 10"	404-01	1#
J Curved Fin Snips, 7"	405-01	1#
K Straight Cut Fin Snips, 7"	405-01S	1#
Compound Offset Shear, 9"	406-01	1#
L Bent Needle Nose Pliers, 5"	409-01	1#

M-N LATEX PAINT SPRAYERS

An economical and extremely efficient tool for spraying radiators using latex (water reducible) paint. Using 60 to 120 PSI. air pressure, its venturi action disperses paint quickly and uniformly. Between uses, simply place paint gun in a can of water to prevent plugging.

Johnson's Adjustable Latex Paint Sprayer (438-60) features an adjustable syphon paint pick-up. Fully open, it covers radiators twice as fast as the 438-50, and can be turned down for spraying flat surfaces.

ITEM	PART NO.	SHIP WT.
M Latex Paint Sprayer	438-50	1#
N Adjustable Paint Sprayer	438-60	1#



A-B PLASTIC DRUM FAUCET, PUMP

Fits all Johnson drums for safe, easy dispensing of flux as well as many other liquids.

ITEM	PART NO.	SHIP WT.
A 3/4" Drum Faucet	452-00	
B Plastic Drum Pump	453-00	1#

C SQUIRT BULB

This rubber squirt bulb floats in the test tank; handy for quenching repairs with water.

ITEM	SINGLE PART NO.	CASE PART NO.	NO. IN CASE	SHIP WT. CASE
Squirt Bulb	454-01	454-02	12	1#

D FLUX SPRAYER, BOTTLE

The most economical way to apply flux to large areas such as radiator headers

ITEM	SINGLE PART NO.	CASE PART NO.	NO. IN CASE	SHIP WT. CASE
7" Trigger Sprayer, With Pint Bottle	455-03	455-04	12	1#

E FIN COMBS, SET OF 4

This set of 4 Plastic Fin Combs offer 8 different fin counts, covering most all radiator applications.

ITEM	PART NO.	SHIP WT.
Fin Combs, Set of 4	456-CS	1#

F METAL FIN COMB

Ace Fin Combs are adjustable to straighten most flat fin radiators.

ITEM	SINGLE PART NO.	CASE PART NO.	NO. IN CASE	SHIP WT. CASE
Metal Fin Comb	456-01	456-02	10	3#

G RUBBER FLUX POT

Heavy Duty Rubber Flux Pot, 5- 1/2" O.D. x 4" high, holds 1 quart.

ITEM	PART NO.	SHIP WT.
Rubber Flux Pot	457-01	1#

H LID-OFF TOOL (For Plastic Pails)

This long handled tool provides good leverage for removing lids from plastic without damage. Reseal pails between each use to keep flux clean and dry.

ITEM	PART NO.	SHIP WT.
Lid-Off Tool	458-01	1#

DRUM (BUNG) WRENCH [not shown]

Opens drums easily, fits most standard bungs.

ITEM	PART NO.	SHIP WT.
Drum Wrench	459-00	1#

JOHNSON'S HEADER-DIP SOLDER POTS

Solder radiators the way factories do it. Johnson's Solder Pot is a must for manufacturers and high volume, heavy-duty shops. Solders tubes-to-headers in one fast, easy operation. Also, the quickest way to tin tanks, straps and side channels before reassembly.

Johnson's Solder Pots are well insulated to protect worker and save gas. No hot spots. Uniform heat is provided across the full width of the pot to insure the best job and minimum solder usage.

Johnson's Solder Pots are available from the factory with a four week lead time. Please specify Natural or L-P Gas when ordering.

ITEM	PART NO.	SHIP WT.
#524 Solder Pot, 48" x 10" x 4"	524-00	450#
#549 Solder Pot, 60" x 12" x 8"	549-00	490#

FIBERGLASS FLUX TANKS, STANDS, LIDS

ITEM	PART NO.	SHIP WT.
48" X 10" X 4" Tank	524-10	9#
48" Lid for Tank	524-11	5#
48" Stand for Tank	524-12	18#
60" x 12" x 4" Tank	549-10	14#
60" Lid for Tank	549-11	6#
60" Stand for Tank	549-12	24#

SOLDER POTS & SUPPLIES



SILVER BRAZING & SUNDRIES



LLOYD'S NO.7 SILVER BRAZING FLUX

For the Strongest Silver Solder Joints

This smooth white paste flux is excellent for silver brazing (also called silver soldering) from 800 to 1650°F. Lloyd's No. 7 enables all silver solders and phos-copper alloys to flow at their lowest temperature. Works great on brass, copper, iron, steel and stainless steels. Lloyd's No. 7 is usually thinned with water to form a slurry that is easy to apply. Will not crystallize; if allowed to dry out, simply add a little more water and stir in. Residues are water soluble; hot water speeds the flux removal process.

ITEM	SINGLE PART NO.	CASE PART NO.	NO. IN CASE	SHIP WT.
12 Oz. Squirt	07-05	07-06	12	12#
1/2 Lb. Jar	07-07	07-08	12	8#
1 Lb. Jar	07-09	07-10	12	15#
4 Lb. Jar	07-11	07-12	4	26#
55 Lb. Pail	07-13		1	58#

PHOS-COPPER BRAZING ALLOYS

Contains 5% and 15% Silver Respectively

For low temperature brazing of brass and copper. These alloys should not be used on steel. 5% Phos-Copper is an economical alloy, recommended where close fit-ups can not be maintained. 15% Phos-Copper is recommended where ductility is of prime importance. Both alloys work best with Lloyd's No. 7 Silver Brazing Flux.

ITEM	PART NO.	SHIP WT.
1 Lb. 5% Silver, 1/16." Dia.	905-03	1#
1 Lb. 15% Silver, .050" x 1/8"	915-03	1#

JOHNSON'S SUPERBRAZE

Contains Silver, Flows Like 15%

An amazingly fine Phos-Copper Brazing Alloy with flow and strength characteristics similar to that of 15% phos-copper. Superbrazes melts fast and holds strong to make repair jobs quick, easy and economical. It is the ultimate brazing alloy for copper/brass radiator repair. Not for use on iron based alloys. Use with Lloyd's No. 7 Silver Brazing Flux for the best results.

ITEM	PART NO.	SHIP WT.
1 Lb. Superbrazes, .050" x 1/8"	910-03	1#

JOHNSON'S BEAR CLAMP (not shown)

Economical Radiator Positioner

Positions automobile radiators for many types of repairs. Johnson's Bear Clamp features adjustable height, tilt rotation and span. Its clamping arm may be used separately like a bulldog clamp. Set includes arm, base, claws, jaws and paws.

ITEM	PART NO.	SHIP WT.
Bear Clamp, Complete	427-CS	20#
Bear Clamp with Jaws	427-01	6#
Jaws Only - Set of 2	427-02	1#
Paws Only - Set of 2	427-03	2#
Claws Only - Set of 2	427-04	3#
Mounting Base	427-05	11#

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SOLDERING EQUIPMENT

SCHMIDT GAS/AIR SOLDERING IRON

The Schmidt Torch uses gas and compressed air to provide continuous heat to the tip. It produces a concealed flame that is easy to adjust by means of a bench mounted mixing valve, leaving just one supply line running to the burner head. Excellent for many jobs in a shop. Not recommended for use on fuel tanks.

ITEM	PART NO.	SHIP WT.
Gas Fired Copper complete except for Bafflehead and Copper tip	310-00	1#
1-1/2" Bafflehead for #2 and #3 Copper tips	310-02	
1-3/4" Bafflehead for #4, 5 & 6 Coppers and #8 Hatchet Copper	310-03	
2" Bafflehead for #8 Coppers, (except Hatchet Coppers)	310-04	
Burner Head Only	310-10	
Mounting Hooks, Pair	310-13	
#2 Chisel Copper	310-22C	1#
#3 Chisel Copper	310-23C	1#
#4 Chisel Copper	310-34C	2#
#5 Chisel Copper	310-35C	2#
#6 Chisel Copper	310-36C	3#
#6 Hatchet Copper	310-36H	3#
#8 Hatchet Copper	310-38H	4#

SAL-AMMONIAC BARS

Pure, long lasting Sal-Ammoniac Blocks are ideal for fast cleaning and tinning of soldering coppers. Each block has a dimple on the top to retain solder when tinning an iron.

ITEM	SINGLE PART NO.	CASE PART NO.	NO. IN CASE	SHIP WT. CASE
1/2 Lb. Bar	24-01	24-02	24	14#
1 Lb. Bar	24-03	24-04	12	14#

JOHNSON BENCH FURNACES

Double burners and a refractory lining enable this unit to heat several soldering coppers at a time, fast. This bench mounted furnace is made from cast iron and is built to last. Truly the standard of the industry for many years. Specify Nat. or LP gas.

ITEM	PART NO.	SHIP WT.
#101 Bench Furnace, Nat. Gas	101-NG	24#
#101 Bench Furnace, L-P Gas	101-LP	24#

FORGED SOLDERING COPPERS, HANDLES

Genuine drop forged coppers hold their heat and shape longer than imitations. Always keep coppers tinned using Johnson's Sal Bars and Johnson's Soldering Fluid.

Note: Coppers are sold in pairs; Wood Handles sold singly.

WEIGHT PER PAIR, STYLE	PART NO. PAIR	SHIP WT. PAIR
2 Lb/Pair, Pointed	300-02	2#
3 Lb/Pair, Pointed	300-03	3#
4 Lb/Pair, Pointed	300-04	4#
5 Lb/Pair, Pointed	300-05	5#
6 Lb/Pair, Pointed	300-06	6#
2 Lb/Pair, Chisel	301-02	2#
3 Lb/Pair, Chisel	301-03	3#
4 Lb/Pair, Chisel	301-04	4#
4 Lb/Pair, Hatchet	302-04	4#
6 Lb/Pair, Hatchet	302-06	6#
8 Lb/Pair, Hatchet	302-08	8#
Wood Handle for 2, 3, 4 Lb. Each	303-03M	
Wood Handle for 5, 6, 8 Lb. Each	303-04L	

DUPLEX ACETYLENE SOLDERING IRON

Many roofers can attest to the quality of this acetylene fired soldering iron. It provides continuous heat for long seams and has a shield to keep wind from blowing out the flame. A single gas valve swivels to prevent kinks in the supply line.

ITEM	PART NO.	SHIP WT.
Duplex Soldering Iron	315-00	3#
1 1/4 Lb. Copper	315-11	1#
3/4 Lb. Copper	315-12	1#

NON-LEADED SOLDERS



JOHNSON'S PURE SOLDERS

Vacuum Cast for Highest Purity

Johnson Manufacturing Company has produced Pure Solders for many years. All Johnson's solders are alloyed to their full metal content and guaranteed to meet or exceed existing Government and ASTM Specifications. As alloyers of virtually every type of solder, we produce many "hard-to-run" alloys, at the request of our customers.

Johnson's exclusive, patented vacuum casting process (Patent No. 3,996,992) eliminates air and dirt inclusions and prevents the formation of oxides during the casting process. Result, all Johnson Solders melt clean and hold strong. You'll notice the difference.

Johnson's Pure Solders are available in all standard forms of wire, rod and bar, plus our exclusive 100% oxide-free, vacuum cast billets which are excellent for use in solder pots. Rosin and acid cores are available in most standard alloys including non-lead solders.

ALUMAWELD TIN-ZINC SOLDERS

Alumaweld Solders have many uses. No. 22 is used for swaging the ends of foil banked capacitors; No. 21 offers the lowest melting point (390°F-eutectic) and No. 1 is a highly effective cast iron repair alloy.

911 GALVANIZE REPAIR SOLDER

Johnson's Non-Leaded (Tin-Zinc-Copper) Galvanize Repair Solder was developed by ILZRO. It is the most effective alloy yet for touch-up of bare spots and weld contaminated areas on galvanized surfaces.

JOHNSON'S CAMES FOR STAINED GLASS WORK

Johnson's lead came are produced in both C and H sections, for use in making light catchers and other stained glass articles. Packaged on 25 Lb. spools.

JOHNSON'S IA-423 LEAD-FREE SOLDER

Ternary Eutectic Tin/Silver/Copper, Melts at 423°F

Just recently, Johnson licensed the right to manufacture and sell a new solder that was developed at Ames Laboratory, on the campus of Iowa State University in Ames, Iowa. We called this new, non-lead solder IA-423.

What's so unique about IA-423? It is a ternary eutectic alloy, meaning that it is a combination of three elements (Tin, Silver and Copper) which melts and flows at a single, low melting point, 423° F (217° C). Eutectic alloys are shinier, stronger, and retain a greater percentage of their strength at elevated temperatures than other non-eutectic alloys. This could be the solder breakthrough you are looking for.

JOHNSON'S SPECIAL LEAD-FREE SOLDERS

For Manufacturing, Plumbing, Radiator Repair

Johnson's 497 Solder is safe to use for soldering potable water systems, it wets brass extremely well and it offers just the right melting range for plumbing work. These same properties also make it a great radiator repair solder. Other alloys such as 492 and 95/5 are excellent for plumbing while Johnson's 460 Silver Bearing Solder offers the high strength and safety required for food handling equipment and utensils, ice machines and more.

JOHNSON'S 523 LEAD-FREE AUTO BODY SOLDER

Primarily developed for the major automakers, this unique non-lead body solder is much safer to use than traditional body solders which contain lead. It melts at a higher temperature and it provides superior strength for recreating sculpture lines, wheel wells, etc. Most effective when used with Johnson's 523 Autobody Tinning Paste.

BABBITTS, ALL COMMON GRADES & TIN BASED

Johnson produces a wide range of tin/antimony/copper babbitts including grades 1,2 & 3 in both bar and wire form. Vacuum casting eliminates oxides and alloy segregation.

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What is the CHT™ Process?

CHT stands for Continuous Heat Transfer. The Johnson process for soldering aluminum radiators requires continuous heat to be applied to the underside of the radiator while supplemental heat is applied on top as the repair is made. Then by swaging (abrading) Zinc-Tech alloy into the surface by means of our electric abrader tool, a true metalurgical bond is accomplished without the use of any flux.

CHT ALUMINUM SOLDERING KIT

Johnson's CHT Aluminum Soldering Kit is the easiest, fastest, safest, surest, and most environmentally friendly way to make many repairs on aluminum radiators, heaters and condensers. It is also one of the most economical ways. Request our CHT brochure for full details today.

DESCRIPTION	PART NO.	SHIP WT.
Johnson's CHT Aluminum Soldering Kit	295-CS	14#

Kit includes everything pictured above (except the heater) and everything listed below with an asterisk ()*

* Johnson's Ceramic Hot Plate	295-00	6#
Replacement Ceramic Top	295-01	2#
* Electric Abrader Tool with Chuck	290-CS	1#
* Sure Fire Self-Lighting Torch Head	327-CS	1#
* Pencil Flame Tip for Sure Fire Torch	327-01	
* RadStand with Clamp	431-CS	4#
* Burnisher Tool	450-01	
* Zinc-Tech 102 (Penny Solder) 1/4 Lb.	790-01	
* Alumabrazing, 1/4 Lb. Tube	800-03	
* Alumabrazing Flux, 4 Oz. Jar	801-01	

ZINC-TECH 102 ALLOY

We nicknamed this alloy "Penny Solder", because when used with the CHT process, it requires less than a penny's worth of solder to make a typical aluminum radiator repair. Properly used with Johnson's Abrader Tool, Penny Solder scrubs (abrades) its way through the tenacious aluminum oxide layer, then wets the parent metal forming an intimate (metalurgical) bond. Properly made joints will not turn loose due to galvanic corrosion. Penny Solder melts and flows under 750°F. It contains no toxic metals such as cadmium or lead, and it is highly attracted to aluminum.

ITEM	SINGLE PART NO.	CASE PART NO.	SHIP WT. CASE/10
Zinc-Tech 102, 1/4 Lb. Tube	790-01	790-10	3#

JOHNSON'S ALUMABRAZE ROD AND FLUX

Guaranteed to Equal or Exceed All Other Brands!

Alumabrazing Rod and Flux will produce joints that are generally stronger than the aluminum itself. Melting Range of our aluminum brazing rods are approx. 1040 to 1145°F comparing favorably with all popular brands.

ITEM	SINGLE PART NO.	CS. OF 10 PART NO.	SHIP WT. CASE
Alumabrazing, 1/4 Lb. Tube	800-03	800-04	3#
#5 Alumabrazing 1/4 Lb. Tube	800-05	800-06	3#
Alumabrazing Flux, 4 Oz. Jar	801-01	801-02 12/Cs.	4#

JOHNSON'S ALUMASOL FLUX

An excellent water soluble, organic flux for low temperature soldering of aluminum and its many alloys.

ITEM	SINGLE PART NO.	CASE PART NO.	NO. IN CASE	SHIP WT. CASE
3 Oz. Bottles	48-51	48-52	24	4#

ALUMINUM SOLDERING & BRAZING

Innovation... OUR TRADITION, OUR FUTURE!

Johnson Manufacturing Company has played a key role in the development of non-leaded solders, environmentally safer fluxes and specially engineered tools for industry.

It all began with Johnson's Soldering Fluid over 85 years ago, safer then, as now because it contains no free acid.

Using our exclusive vacuum casting process, we can virtually eliminate inclusions, oxidation and segregation from solders we manufacture.

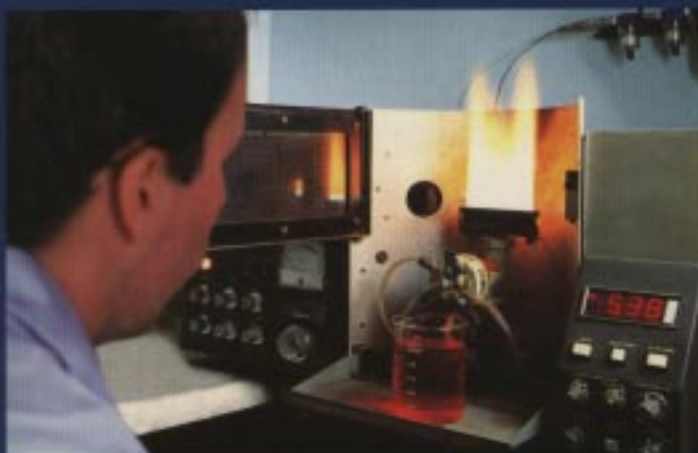
Our tin-zinc solders for aluminum capacitors and non-leaded body solders used by automakers have lead us to a position of prominence in each of these fields.

BIOBake is perhaps the first biodegradable, organic, non-toxic and neutral pH, soldering flux that excels for copper/brass radiator production.

Johnson's CHT soldering process for aluminum heat exchangers offers great promise for other industries as well.

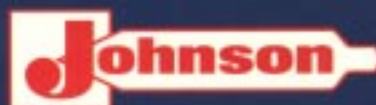
Our IA-423 non-leaded ternary eutectic solder is ideal for industries in need of strong, corrosion resistant solder that can handle elevated temperatures for severe applications.

Today, Johnson is more ready than ever to provide your company with correct Soldering Solutions.



JOHNSON PRODUCTS

Additives	9, 10
Alumabrazo Rod	31
Band-It Tools	19
Brass Sheet	14
Brushes, Wire Wheels	16, 17
CHT Kit, Supplies	31
Cleaners	8, 9
Drain Cocks, Flanges	14
Epoxies	12
Flush Guns	20
Gasket Tapes	13
Gloves, Aprons	15
Header Clamps	23, 27
Hose Clamps	14
Ice Picks	17
Lift Valves	21
Neck Rounders	19
Non-Leaded Solders	30
Organic Fluxes	4
Paint Sprayers	26
Paste Fluxes	3
Paste Solders	6
Pliers, Snips	26
Powder Fluxes	8
Production Fluxes	4, 5
PTR Equipment	22
PTR Tools	23
Radiator Paints	11
Radiator Strippers	9
Rod Out Tools	19
RTV Silicone	13
Sal Ammoniac Bars	29
Sand Blasters	20
Silver Brazing Flux, Rod	28
Solder Pots	27
Soldering Coppers	29
Solders	30
Stainless Steel Fluxes	3
Tab Tools, Lifters	23
Test Caps	19
Test Equipment	21
Test Plugs	18
Test Tank Neutralizers	10
Tinning Compounds	7
Top Fluxes	8
Torches, Accessories	24, 25
Tube Reinforcers	14



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