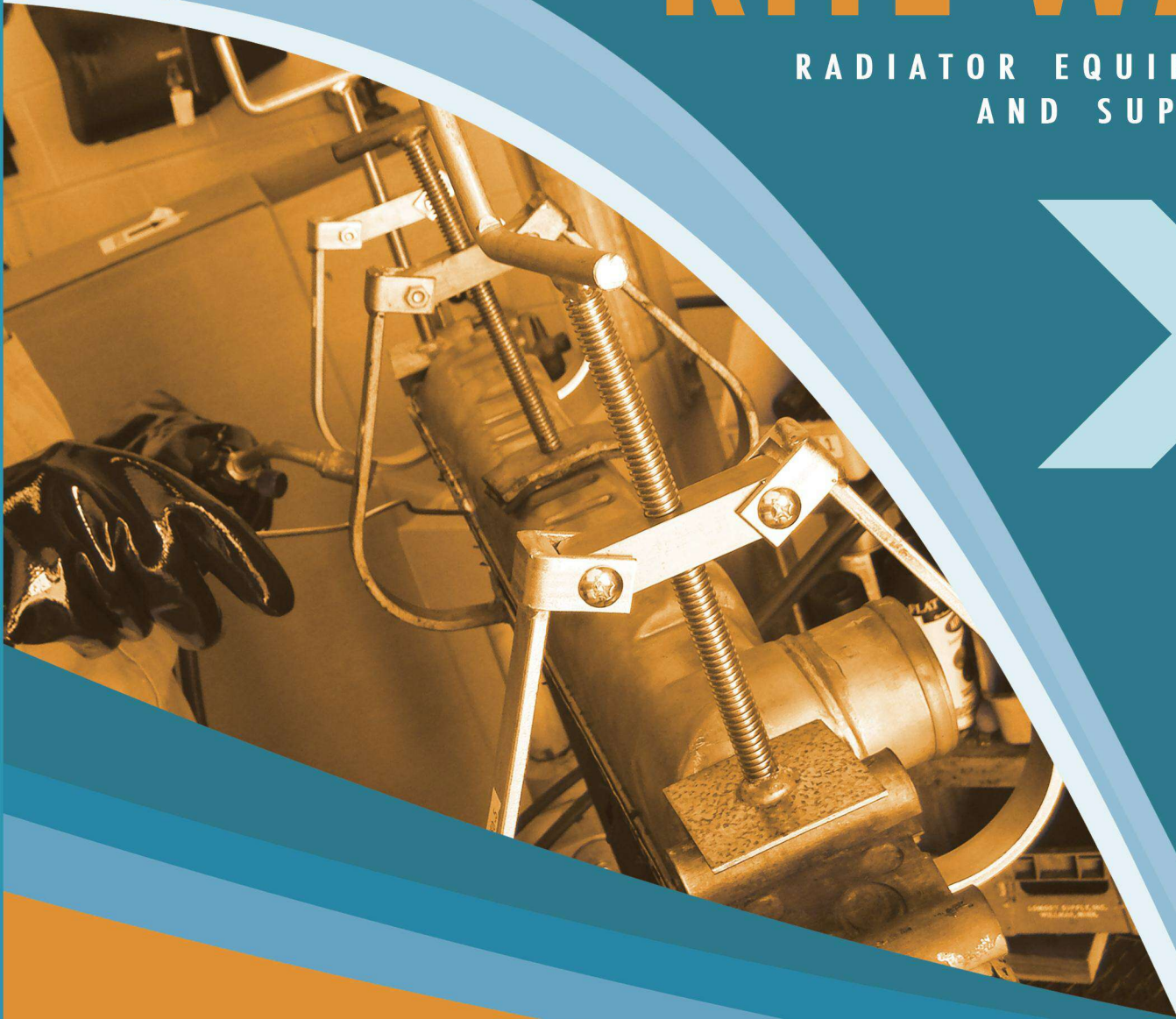


Northern®
RADIATOR

RITE-WAY

RADIATOR EQUIPMENT
AND SUPPLIES



Testing Equipment & Plugs • Rubber Goods • Hose/Tubing • Clamps
Torches/Burners • Tools • Chemicals/Supplies • Solder/Supplies
Brushes • Replacement Parts • Radiator Equipment

TESTING EQUIPMENT & PLUGS

RADIATOR TEST CAP

Red rubber test caps beveled at the opening for easy attachment. Test caps are ideal for low pressure testing, simply slide cap over connection & test. May be ordered in a complete set (#1-20) or individually. #1-20 (set) includes all sizes, including multiples of popular sizes.



RW0001-20 Set of 20 Caps

PART #	SIZE	NO. OF CAPS IN 1 SET
RW0001-01	1"	1
RW0001-02	1 1/8"	1
RW0001-03	1 1/4"	2
RW0001-04	1 3/8"	1
RW0001-05	1 1/2"	4
RW0001-06	1 5/8"	1
RW0001-07	1 3/4"	4
RW0001-08	1 7/8"	1
RW0001-09	2"	1
RW0001-10	2 1/8"	1
RW0001-11	2 1/4"	1
RW0001-12	2 1/2"	1
RW0001-13	2 3/4"	1

FILLER NECK TEST PLUGS

Expansion plug with open stem seals the overflow opening and allows for pressure check.

RW0003-19 Fits 1 1/8" Filler Neck (Standard Passenger Car)
 RW0003-20 Fits 1 5/8" Filler Neck (Standard Truck)
 RW0003-21 Fits 32mm Filler Neck (Foreign Car)



3 IN 1 STEP PLUGS

This popular plug design features a wing nut that easily compresses the rubber for positive lock and fast accurate tests. Three different sizes on each plug reduces the number of plugs needed.

RW0006-1 3 Plug Size: 1", 1 1/8", 1 1/4" RW0006-4 3 Plug Size: 2 1/8", 2 1/4", 2 3/8"
 RW0006-2 3 Plug Size: 1 3/8", 1 1/2", 1 5/8" RW0006-5 3 Plug Size: 2 1/2", 2 5/8", 2 3/4"
 RW0006-3 3 Plug Size: 1 3/4", 1 7/8", 2" RW0006-6 3 Plug Size: 2 7/8", 3", 3 1/8"



RW0003-6 Replacement wing nut for all sizes - Thread size: 1/2-13 UNC
 RW0003-7-8 Replacement stem - Bolt size: 1/2-13 UNC x 4"



RW0003-7-8

CHARGE AIR COOLER TEST PLUGS

Heavy-duty extra large plugs for charge air coolers. Available in 7 sizes. Each set includes 1 each of the open and closed plugs.

RW0007-212 2 1/2" Plug Set RW0003-5 Replacement 4" wing nut
 RW0007-234 2 3/4" Plug Set RW0003-7-9 Replacement 5/8" closed stem 3" Long
 RW0007-300 3" Plug Set RW0003-7-10 Replacement 5/8" open stem
 RW0007-314 3 1/4" Plug Set
 RW0007-312 3 1/2" Plug Set
 RW0007-334 3 3/4" Plug Set
 RW0007-400 4" Plug Set
 RW0007-412 4 1/2" Plug Set



AIR INFLATABLE TEST PLUG

Blow up design works great for sealing round or unusual shaped openings. Tire valve type inflator allows for easy inflation and air lock.

RW0019 Set of 5 Test Plugs (1 of each size below) RW0019-3 3" Test Plug
 RW0019-2 2" Test Plug RW0019-4 4" Test Plug
 RW0019-5 5" Test Plug
 RW0019-6 6" Test Plug



TESTING EQUIPMENT & PLUGS

STA-TITE EXPANSION RADIATOR PLUGS & SETS

Northern Sta-Tite plugs are manufactured with a brass bolt and wing nut, stainless steel washer and high density rubber. Replacement rubbers and brass parts may be purchased separately.

- RW0003-12 Set of 12 Sta-Tite Test Plugs
1 each of: 1", 1 1/8", 1 3/8", 1 5/8", 1 3/4", 2" Plugs, & 1 1/8",
and 1 5/8" filler neck test plugs, 2 each of: 1 1/4" & 1 1/2" plugs.
- RW0003-23 Set of 23 Sta-Tite Test Plugs
1 each of: 5/8", 3/4", 7/8" open & closed, 1", 1 1/8", 1 3/8", 1 5/8", 1 7/8",
2", 2 1/8", 2 1/4" plugs, & 1 1/8", 1 5/8", and 32mm filler neck test plugs,
2 each of: 1 1/4", 1 1/2", 1 3/4" plugs
- RW0003-10 Set of 10 Sta-Tite Jumbo Plugs
1 each of: 2 3/8", 2 1/2", 2 5/8", 2 3/4", 2 7/8", 3", 3 1/4", 3 1/2", 3 3/4", 4"
- RW0003-12R Rubbers only for set of 12 plugs
RW0003-23R Rubbers only for set of 23 plugs
RW0003-10R Rubbers only for set of 10 jumbo plugs



INDIVIDUAL PLUGS & PARTS

PART #	DESCRIPTION	PART #	DESCRIPTION	PART #	DESCRIPTION
RW0005-2-0	1/2" Closed	RW0003-134	1 3/4"	RW0003-278-1	2 7/8" Open
RW0005-2-1	5/8" Open	RW0003-134-1	1 3/4" Open	RW0003-300	3"
RW0005-2-2	5/8" Closed	RW0003-178	1 7/8"	RW0003-300-1	3" Open
RW0005-3-1	3/4" Open	RW0003-178-1	1 7/8" Open	RW0003-314	3 1/4"
RW0005-3-2	3/4" Closed	RW0003-200	2"	RW0003-314-1	3 1/4" Open
RW0005-4-1	7/8" Open	RW0003-200-1	2" Open	RW0003-312	3 1/2"
RW0005-4-2	7/8" Closed	RW0003-218	2 1/8"	RW0003-312-1	3 1/2" Open
RW0003-100	1"	RW0003-218-1	2 1/8" Open	RW0003-334	3 3/4"
RW0003-100-1	1" Open	RW0003-214	2 1/4"	RW0003-334-1	3 3/4" Open
RW0003-118	1 1/8"	RW0003-214-1	2 1/4" Open	RW0003-400	4"
RW0003-118-1	1 1/8" Open	RW0003-238	2 3/8"	RW0003-400-1	4" Open
RW0003-114	1 1/4"	RW0003-238-1	2 3/8" Open	RW0003-0	1/4" 20 Wing Nut
RW0003-114-1	1 1/4" Open	RW0003-212	2 1/2"	RW0003-3	1/2" 13 Wing Nut
RW0003-138	1 3/8"	RW0003-212-1	2 1/2" Open	RW0003-2	5/8" 18 Wing Nut
RW0003-138-1	1 3/8" Open	RW0003-258	2 5/8"	RW0003-7-4	1/2" Closed Stem
RW0003-112	1 1/2"	RW0003-258-1	2 5/8" Open	RW0003-7-6	1/2" Open Stem
RW0003-112-1	1 1/2" Open	RW0003-234	2 3/4"	RW0003-7-9	3" Closed Stem
RW0003-158	1 5/8"	RW0003-234-1	2 3/4" Open	RW0003-7-10	5/8" Open Stem
RW0003-158-1	1 5/8" Open	RW0003-278	2 7/8"		

Individual replacement rubbers available on request.

ECONOMY PLUG SET

Economy plugs are available in the same sizes as Sta-Tite test plugs. The dimensions and construction are similar except they are lighter weight and have a nylon bolt and wing nut.

- RW0003-8 Set of 8 Economy Test Plugs
1 each of: 1", 1 1/8", 1 1/4", 1 3/8", 1 1/2", 1 5/8", 1 3/4", 1 7/8"
- RW0003-12E Set of 12 Economy Test Plugs (Refer to Sta-Tite sets on sizes)
- RW0003-23E Set of 23 Economy Test Plugs (Refer to Sta-Tite sets on sizes)



PART #	DESCRIPTION	PART #	DESCRIPTION	PART #	DESCRIPTION
RW0005-2-2E	5/8" Economy	RW0003-138E	1 3/8" Economy	RW0003-218E	2 1/8" Economy
RW0005-3-2E	3/4" Economy	RW0003-112E	1 1/2" Economy	RW0003-214E	2 1/4" Economy
RW0005-4-2E	7/8" Economy Closed	RW0003-158E	1 5/8" Economy	RW0003-0E	1/4" 20 Nylon Nut
RW0003-100E	1" Economy	RW0003-134E	1 3/4" Economy	RW0003-3E	1/2" 13 Nylon Nut
RW0003-118E	1 1/8" Economy	RW0003-178E	1 7/8" Economy	RW0003-7-2E	1/4 - 20 Nylon Stem
RW0003-114E	1 1/4" Economy	RW0003-200E	2" Economy		

Other sets are available upon request.

TESTING EQUIPMENT & PLUGS

ENGINE COMBUSTION LEAK TEST KIT

Locate blown gaskets, cracked heads or cracked blocks quickly as test fluid changes color when leak is found. Before you start engine repairs, be sure there are no internal motor leaks.

With motor idling, place the tester in radiator filler neck and close off the overflow tube. Use rubber syringe as directed to pull air from radiator, through liquid. If combustion gas is leaking into the cooling system, test fluid changes from blue to yellow.

The test fluid may be reused 6 or 7 times and returns to the original color when air is re-introduced after test.

Z14005	Engine Combustion Leak Test Kit
Z14006	Test Fluid Only 16 oz.
Z14007	Large Radiator Fill Neck Adapter



COOLING SYSTEM TESTER

This tester helps locate leaks in modern automotive pressurized cooling systems and allows you to test all the way up to 30 PSI. Gauge is accurate and easy to read. Tests 2 1/4" x 1" and 2 1/4" x 3/4" pressure caps. Comes complete with test system, gauge, instruction manual, spacer, and adapter. All in a durable, plastic carrying case.

RW0090	Cooling System Test Kit
RW0090-1	Truck Adapter Kit
RW0090-2	Foreign Car Adapter
RW0090-4	Gauge only for Cooling System Tester (#90)
RW0090-5	Replacement Spacer for 1" Deep Tractor Radiator Filler Necks
RW0090-6	Radiator Cap Adapter
RW4540	Late Model Foreign Car Adapter 45mm



CHARGE AIR COOLER TEST KIT

Plug the inlet and outlet, then pressurize the charge air cooler, close the valve and watch the gauge for leaks. If for example caterpillar pressure decay is less than 5 PSI in 15 seconds the CAC is ok. With this slim one size fits all connections 2"-6" it is not usually necessary to remove CAC from chassis.

RW0090-11	Charge Air Cooler Tester Kit
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CHARGE AIR COOLER LEAK TESTING OEM RATE SPECIFICATIONS:

Caterpillar	5 psi in 15 seconds @ 30 psi	International	5 psi in 15 seconds @ 30 psi
Cummins (ISB, ISC, N14)	7 psi in 15 seconds @ 30 psi	GMC/Chevy	5 psi in 15 seconds @ 30 psi
Cummins (ISX, M11)	5 psi in 15 seconds @ 30 psi	Mack	5 psi in 15 seconds @ 30 psi
Detroit Diesel	5 psi in 30 seconds @ 25 psi	Mercedes	5 psi in 15 seconds @ 25 psi
Dodge	7 psi in 15 seconds @ 30 psi	Volvo	7 psi in 15 seconds @ 30 psi
Ford	1.5 psi in 60 seconds @ 28 psi		

Note: charge air coolers are not designed to be 100% air tight or leak free.

RUBBER GOODS

PYLOX COATED GLOVES

A heavy duty pylox coated glove that resists oil, acids, caustics, abrasion, snags, tears, and punctures. Black



RW0012 Pair 12 1/2" Gauntlet Industrial Size

RW0013 Pair 14 1/2" Gauntlet Industrial Size

BLASTING GLOVES

Replacement gloves for Northern or other blast cabinets. Strong, heavy duty construction. Protects the whole arm.



RW0345-12

Pair 23" Black Neoprene/Cotton Lined

RW0345-45

Pair 23" Black Rubber

HEAVY DUTY APRON

Our heavy duty, vinyl, industrial aprons provide tough protection against torching, welding, sand blasting, etc. Brown in color and available in two sizes.



RW0016

36" x 36" Industrial Apron

RW0017

Tall 36" x 48" Industrial Apron

GOLDEN GRAB-IT II GLOVE

Jersey knit lined for comfort and flexibility. Fully coated crinkled rubber finished. Supplies superior grip.



RW0009 Pair - Golden Color

THIN NITRILE DISPOSABLE GLOVE

A multi-purpose, disposable and lightweight glove made of 100% nitrile. Just 4 mils thin, yet provides three times the puncture resistance of natural latex or vinyl gloves.



RW0010

Box of 50 Pair

TEST HOSE

A soft, flexible tubing that slips on and off test plugs easily. Available in either latex or rubber tubing.

RW0046-25 1/4" I.D. x 1/2" O.D. Amber Latex, 25' Roll

RW0046-50 1/4" I.D. x 1/2" O.D. Amber Latex, 50' Roll

RW0047 1/4" I.D. x 1/2" O.D., 25' Roll



RW0046-25

RW0047

RADIATOR OVERFLOW TUBING

Designed specifically as radiator overflow tubing with greater flexibility and kink resistance than plastic tubing.

RW0041 5/16" I.D. x 1/16" wall x 100' Coil Black Rubber

RW0042 7/16" I.D. x 1/16" wall x 100' Coil Black Rubber

RW0043 5/16" I.D. x .032" wall x 25' Copper

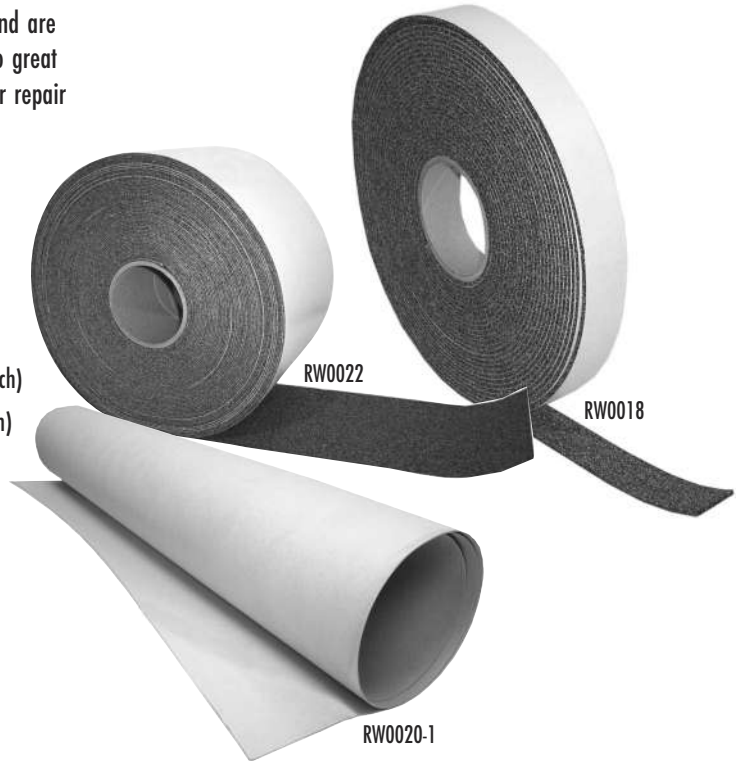


HOSE & TUBING

PREMIUM RADIATOR GASKET MATERIAL & TAPES

Northerns premium gasket materials are a composite cork and rubber, and are engineered for use in radiators and cooling systems. This material is also great for custom made gaskets. Use Northerns premium gasket tape when your repair and reputation are on the line.

RW0018	1 1/4" x 1/16" x 100' Gasket Tape
RW0018-2	1 1/4" x 1/8" x 50' Gasket Tape
RW0018-7	1 1/4" x 1/16" x 100' Green Premium Gasket Tape
RW0018-8	1 1/4" x 1/8" x 50' Green Premium Gasket Tape
RW0020	Nu-Tech Natural Fiber Gasket Material 39" wide (sold by the inch)
RW0020-1	39" x 60" Nu-Tech Natural Fiber Gasket Material (pre-cut length)
RW0022	6" x 1/16" x 10' Extra Wide Gasket Tape
RW0022-1	6" x 1/16" x 100' Extra Wide Gasket Tape



HEATER SEALING FOAM

Increase heater output and eliminate air leaks with this special high density foam. It has a self-adhesive back and is designed for pressurized air sealing in automotive heaters, heat ducting or weather stripping. Available in 25' rolls or convenient 3' single use packs.

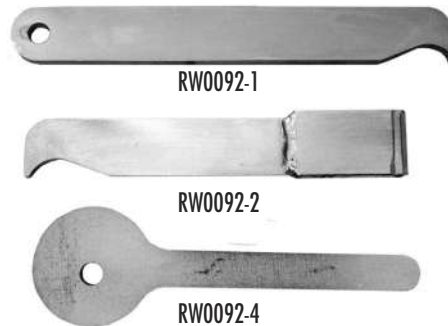
RW2300	3/4" Thick x 1 1/4" Wide x 25' Roll
RW2301	3/4" Thick x 1 1/4" Wide x 3' Long (Single use pack for 1 heater core installation)



RADIATOR CLAMPS

Fast-action, instantly adjustable, and locks in any position. Securely holds radiator components for solder assembly.

RW0092	Radiator Clamp 36"
RW0092-1	Replacement Stationary Jaw for Clamp
RW0092-2	Replacement Adjustable Jaw for Clamp
RW0092-4	Replacement Cam for Clamp



Replacement parts available for all clamps. Call Northern for information.



CLAMPS

SURE GRIP HEADER CLAMPS

A specially designed steel clamp with a non-slip grip. Also available in a larger size for large industrial tanks.



RW0050-5 Header Clamp 6"
RW0050-3 Industrial Sure Grip Header Clamp 9"
RW0050-7 Replacement Pad

SURE GRIP SHOULDER CLAMP

A uniquely designed clamp for use when tank implements prevent use of Northern Sure Grip Header Clamp.



RW0051 Sure Grip Shoulder Clamp

PLASTIC TANK HEADER CLAMP

Positively locks radiator tanks on to radiator cores for faster and easier assembly.



RW0050-6 Sure Grip Header Clamp

T BOLT CONSTANT TENSION CLAMP

Stainless steel band with plated steel bolt and spring.

Z72010	2 3/4" I.D. HOSE	Z72013	3 1/2" I.D. HOSE
Z72011	3" I.D. HOSE	Z72014	4" I.D. HOSE
Z72012	3 1/4" I.D. HOSE	Z72015	4 1/2" I.D. HOSE



HOSE CLAMPS

Quality 1/2" stainless steel bands with interlocked stainless steel clamp. Heavy zinc plated carbon steel screw resists corrosion, plus it's sized for 5/16" hex socket or flat blade screwdriver. Made in the U.S.A. Sold in boxes of 10 clamps.

RW6202	1/4" to 5/8" Hose Clamp
RW6203	5/16" to 7/8" Hose Clamp
RW5710	1/2" to 1 1/8" Hose Clamp
RW5712	1/2" to 1 1/4" Hose Clamp
RW5716	3/4" to 1 1/2" Hose Clamp
RW5720	3/4" to 1 3/4" Hose Clamp
RW5724	1" to 2" Hose Clamp
RW5728	1 5/16" to 2 1/4" Hose Clamp
RW5732	1 9/16" to 2 1/2" Hose Clamp



HEAVY DUTY, CONSTANT TORQUE CLAMPS

Constant Torque Clamps adjust with the hose & fitting to maintain constant tension on the connection, eliminating leak paths. Great choice for fluctuating & extreme temperature applications.

5/16" Hex Head & 9/16" Band width, 410 Stainless Steel Screw

PART #	MIN SIZE	MAX SIZE	SAE SIZE
Z72000	5/8"	1 1/4"	12
Z72001	1 3/16"	1 3/4"	20
Z72002	1 5/16"	2 1/4"	28
Z72003	1 13/16"	2 3/4"	36
Z72004	2 5/16"	3 1/4"	44
Z72005	2 9/16"	3 1/2"	48
Z72006	3 1/4"	4 1/8"	--
Z72007	3 3/4"	4 5/8"	--
Z72008	4 1/4"	5 1/8"	--

Sold in box of 10.



TORCHES

BELL LEVER TORCH

A high output heating and soldering torch designed for natural gas or propane and 50 to 100 PSI of compressed air. Once the flame is adjusted, the pilot light can be retained during down time and full flame returned instantly by pressing the handle. 16" long and completely automatic. Excellent where high heat is needed.



- RW0037 Complete Bell Torch with Tip
- RW0037-1 Replacement Tip

REGO TORCH

This compact and lightweight 8 oz. torch is designed to operate with oxygen/acetylene, natural gas and propane. Features easy to adjust up front "thumb" gas valves and slip on 3/16" hose connection. Great for small detail repair.



- RW0045 Rego Torch
- RW0045-1 5/8" Tip
- RW0045-2 5/16" Tip
- RW0045-3 5/32" Tip
- RW0045-5 60° Gooseneck
- RW0045-6 Oxygen Valve Stem Assembly
- RW0045-7 Gas Valve Stem Assembly

NATIONAL RADIATOR TORCH

This versatile, lightweight torch is compact and easy to handle. Replacement tips allow many combinations of gas and air or gas and oxygen. All tips sold separately. Specify tip type and size when ordering.

- RW0032 National Torch
- RW0032-1-0 Type N Tip, Gas & Air, Size #0
- RW0032-1-1 Type N Tip, Gas & Air, Size #1
- RW0032-1-2 Type N Tip, Gas & Air, Size #2
- RW0032-1-3 Type N Tip, Gas & Air, Size #3
- RW0032-1-4 Type N Tip, Gas & Air, Size #4
- RW0032-2-1 Type OX Tip, Gas & Oxygen, Size #1
- RW0032-2-2 Type OX Tip, Gas & Oxygen, Size #2
- RW0032-2-3 Type OX Tip, Gas & Oxygen, Size #3
- RW0032-2-4 Type OX Tip, Gas & Oxygen, Size #4
- RW0032-2-5 Type OX Tip, Gas & Oxygen, Size #5
- RW0032-5 National Torch & 2 Tips



PARTS BREAKDOWN FOR RW0032

- RW0032-7-1 Elbow nut
- RW0032-7-2 Elbow & venturi tube assembly
- RW0032-7-3 Elbow nut retaining ring
- RW0032-7-4 Valve stem assembly, green
- RW0032-7-5 Valve stem assembly, red
- RW0032-7-6 Green valve wheel
- RW0032-7-7 Red valve wheel

TOOLS

4 IN 1 ROUNDERS

Quickly restores roundness to radiator and heater fittings. Heavy cast tool is plated for corrosion resistance and long life.



RW0077-2	7/8" x 1 5/8" Small Rounder
RW0077-1	1 5/16" x 1 7/8" Large Rounder
RW0077-0	1 3/4" x 2 1/2" XL Rounder

MULTI-HEAD FIN STRAIGHTENER

Six fin straighteners in one. Quickly and easily straightens fins in nearly any radiator or condenser.



RW0067 Fin Straightener

ACE HI ADJUSTABLE FIN COMB

Bristles automatically adjust to any fin spacing. Cleans lint and dirt out of fin spaces and straightens soft aluminum fins.



RW0068 Fin Comb

CORE SNIPS

Solid, forged, light metal snips. Compact and handy, yet cuts the toughest metal with ease.



RW0078 Core Snips w/Curved Cut

ICE PICKS

A multi-purpose tool used in the radiator shop for straightening radiator fins, piercing holes, etc. Has a wooden handle with nickel plated ferrule and a 4 1/2" carbon steel blade. Overall length is 9". Sold per dozen.



RW0040 Ice Pick

RADIATOR TAB TOOL

Excellent for lifting crimps or tabs on plastic radiator tanks. Has 4 different settings for uniform crimping, and unique design makes lifting the crimp easy.



RW0184 Tab Tool
RW0184-1 Extra Wide Tab Tool
RW0184-2 Spring for Tab Tool

ROD OUT TOOL SETS

High quality spring steel assures maximum service. Purchased by sets or individual sizes. Manual tube cleaning rods.

RW0052-4	Set of 4 (One of each: 3/16", 1/4", 3/8" & 1/2")
RW0052-3	Set of 3 (One of each: 3/16", 1/4", & 3/8")
RW0052-1-1	3/16" Wide x 36" Long
RW0052-1-2	1/4" Wide x 36" Long
RW0052-1-3	3/8" Wide x 36" Long
RW0052-1-4	1/2" Wide x 36" Long
RW0052-2-1	1/4" Wide x 65" Long
RW0052-2-2	3/16" Wide x 65" Long
RW0052-2-3	1/2" Wide x 65" Long



Manual tube cleaning rod.



RADIATOR TAB LIFTER TOOL

Excellent for lifting crimps or tabs on plastic radiator tanks. Reaches tab in constricted areas under connections and brackets.



RW0924 Tab Lifter Tool

TOOLS/CHEMICALS

AIR REGULATOR/AIR GAUGE

Gives an accurate reading and has an easy to control regulator. Gauge range up to 60 lbs. One of the most important tools in the shop.



RW0039 Regulator Only
RW0039-2 Gauge Only

HYDRO GUN

Northern's Hydro-Gun features a protect cone nozzle and a heavy-duty squeeze-type trigger air valve with a molded handle. Gun includes a long handle to keep water from spraying the user.

RW0054-2	12" Hydro Gun	RW0054-6	Hydro Gun Only (w/o cone or wand)
RW0054-5	24" Hydro Gun	RW0054-7	Replacement Air Trigger Valve
RW0054-4	Protect Cone Only (1/2" NPT)		



POWDER FLUX

A white powder flux that mixes easily with water. (5 lbs. flux to 1 gallon water)



RW0137-10 10 lb. Soldering Flux
RW0137-50 50 lb. Soldering Flux

ENAMEL RADIATOR PAINT

A very popular enamel paint that is used by radiator shops nation wide. Great coverage and economically priced. Mixes approximately 4 parts thinner/1 part paint.



RW0101-1 1 Gallon Black
RW0101-5 5 Gallon Black

Note: This product may be subject to shipping restrictions.

PREMIUM LATEX PAINT

A premium latex water based paint that is designed exclusively for radiator shops. This paint has been chemically formulated to flow well, cover well, clean up easily and make your repairs look great. Cover your work with the best, Riteway Premium Latex Paint!



RW0115-1 1 Gallon Black
RW0115-5 5 Gallon Black

CHARGE AIR COOLER CLEANER

For internal cleaning of charge air coolers. Renews performance and enhances heat transfers.

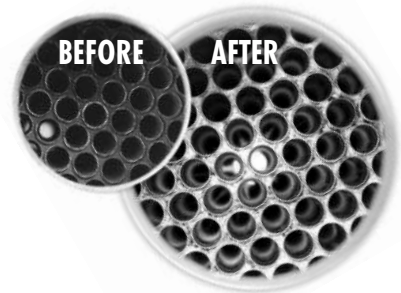


RW0149-5 5 Gallon Drum
RW0149-15 15 Gallon Drum

EGR FLUSH

An alkaline detergent formulated to remove carbon exhaust buildup and other contaminants from EGR coolers.

Z14016 - 1 Gallon



CHEMICALS

SUPERIOR LIQUID FLUX

Liquid soldering flux has a carefully balanced zinc chloride formulation. The special cleaning action dissolves sulfides, chlorides, nitrates and oxide corrosion quickly and easily. This means you will use less flux and get a clean surface ready for solder bond.



RW0139-1	1 Gallon Superior Liquid Flux
RW0139-5	5 Gallon Superior Liquid Flux
RW0139-15	16 Gallon Superior Liquid Flux

TINNING POWDER, PASTE & WHIZ

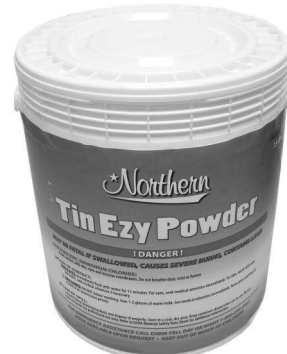
A special formula that works well on cast iron and copper alloys.



RW0111-12	12 lb. Lead Free Tinning Powder
RW0117-6	4 lb. Lead Free Tinning Paste
RW0118-1	1 Qt. Tinning Whiz Paste (Contains Lead)

NORTHERN TIN EZY POWDER

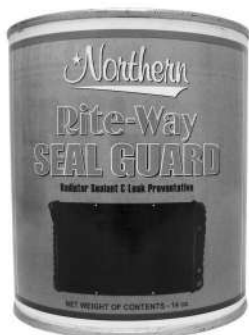
Fast acting tinning compound in combination of powdered solder and special flux. Works well on tough-to-tin metals. Contains lead.



RW0113-1	15 lb. Tin Ezy
RW0113-2	4 lb. Tin Ezy

SEAL GUARD

Seal guard is a powder radiator sealer which disperses with air throughout the radiator to seal pin hole leaks and eliminate come backs. An exclusive industrial sealer for the radiator repair industry.



RW0114-1	1 qt. Seal Guard
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MASTER POWDER

A new and improved neutralizing product that is available in powder form. Neutralizes acid and impurities in the test tank and prolongs the life of your tank.



RW0131-1	1 Bag Powder 12 ounces per bag
RW0131-12	Case of 12 Bags - 9 lbs.

SPOT GUARD

A liquid sealer for stopping tiny leaks that cannot be economically soldered. Dilute 1 part of this highly concentrated formula with 5 parts water.



RW0120-1	1 Gallon Spot Guard
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ALCOHOL BASE A/C FLUSH SOLVENT

A flush solvent for Air Conditioning systems. Dries quickly and leaves no residue! Contains no CFC's and may be used for R-12 or R-134A systems. This alcohol base carries less of an odor than turpentine based flushes.



530-1060	1 Gallon Alcohol Base Flush
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COOLANT TEST STRIPS

Our PH Test Strips are the fast and reliable way to test coolant in busy repair shops. Routine testing will alert you to cooling system problems and help you prevent costly repairs to your vehicles. Now you can test both PH and freeze protection at 1 time with 1 test strip.



RW0132	PH Test Strips (50 per bottle)
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SUPER C BOIL OUT COMPOUND

A specially formulated radiator cleaning compound made in high concentrated form with an anti-dust ingredient for easy dispensing. Very fast stripping action and excellent cleaning. Mix 8 oz. per gal. of water.



RW0140-50	50 lb. Super C Boil Out Compound
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CHEMICALS/SUPPLIES

FUEL TANK LINER KITS

Northern Fuel Tank Liner is resistant to gasoline, diesel fuel, hydraulic fluids, alcohol, ethanol and other fuel additives. Its major use is to seal leaking fuel tanks. Complete Kit includes Cleaner, Prep and Sealer!



- RW0125-8 Motorcycle & Small Engine Fuel Tank Liner Kit (Pints)
 RW0125-9 Auto & Farm Tank Liner Kit (Quarts)

FUEL TANK CLEANER

Cleaning and defuming the tank: Pour the quart of Tank Cleaner into the emptied tank. Slop to cover all surfaces. Allow to soak for 15 minute intervals. Drain and rinse several times to be sure no detergent residue remains. Remember a few extra minutes of cleaning will let the chemical work so please be patient for the best results. Do not get onto skin or clothing. Be sure to wear gloves and eye protection goggles.



- RW0125-78 Fuel Tank Cleaner Pint
 RW0125-77 Fuel Tank Cleaner Quart

TANK PREP

Northern Tank Prep is a petroleum solvent and a drying agent to remove any water from the tank.

Having a clean, dry, well-prepared tank surface free of petroleum residue and water is necessary for a successful tank liner bond.



- RW0125-55 Tank Prep Pint
 RW0125-56 Tank Prep Quart

FUEL TANK LINER

Internal rusting is caused by condensation in the fuel tank. Internal fuel tank liner is designed to seal leaks and prevent further rusting. Fuel Tank Liner will bond to existing rust and form a chemical barrier to prevent it from flaking off and plugging the fuel line or carburetor.



- RW0125-3 Tank Liner Pint
 RW0125-1 Tank Liner Quart
 RW0125-2 Tank Liner Gallon (Hazardous fees apply)

FOAMING ALUMINUM CLEANER

Northern High Performance Foaming Aluminum Cleaner is an industrial strength acid cleaner designed specifically for cleaning aluminum parts. Spray it on let it foam, rinse off.



- Z14001 1 Quart Bottle w/sprayer

STAINLESS STEEL POLISHING KIT

Northern's show car quality polishing kit includes the right rouge and tools for a mirror-smooth, brilliant finish. Northern's radiator polishing kit is designed for smooth surface polishing, not for cast surfaces.



- Z12455 Polishing Kit

NORTHERN EPOXY KIT

Use for repair on plastic tank radiators and radiators with epoxy filled headers. Kits include applicator and plunger. Mixing nozzle and epoxy sold separately.

- RW0441 Mixing Nozzle for 5 oz. Epoxy
 RW0444 Northern 5 oz. Epoxy Cartridge
 RW0475 Northern Epoxy Applicator Kit (uses 2 oz. cart.)
 RW0478 Northern 2 oz. Epoxy Cartridge
 RW0475-2 Northern Replacement 2 to 1 Plunger
 RW0476 Mixing Nozzle for #478 (Small)



EXO-COAT EXTERNAL FUEL TANK SEALER

Northern Exo-Coat is for external use on metal tanks. Can be used on fuel tanks, pontoon floats, floating docks and barges. Just brush it on and let it air dry. Light rust and pin holes are sealed. 1 pint covers 2 average fuel tanks.

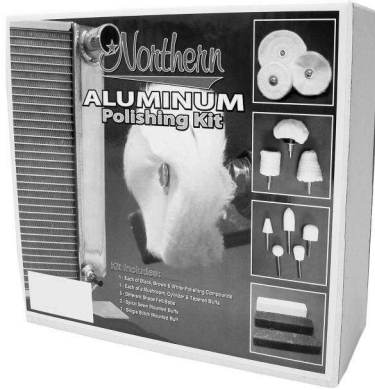


- RW0126

SOLDER/SUPPLIES

ALUMINUM POLISHING KIT

Northern's show car quality polishing kit includes the right rouge and tools for a mirror-smooth, brilliant finish. Northern's radiator polishing kit is designed for smooth surface polishing, not for cast surfaces.



Z12450 Polishing Kit

STIC-TITE

A remarkably effective way to repair aluminum radiators. Very easy to apply; just heat surface until hot enough to melt Stic-Tite and then apply a generous amount to heated surface.



Z12156 Stic-Tite

NORTHERN SOLDER

Northern's Solder is made of high quality virgin materials.



RW0172-9	40/60 Solid Heavy Wire .148
RW0172-10	40/60 Solid Light Wire .125
RW0173	Acid Core
RW0175	50/50 Solid Wire .125 I.D.

PHOSON 5 ROD

A low temperature rod for brazing copper, brass, and bronze. Ideal for repairing cracked tanks. Contains 5% silver. Rod size 1/8" x 20". Use with RW0145 Silver Brazing Flux.



RW0155 Phoson Rod, Per LB.
RW0145 2 oz. Silver Brazing Flux

ALUMINUM ROD WITH FLUX

Make durable aluminum repairs with your torch and this aluminum rod repair kit. Available in 350° or 600° solder.



Z12171	Alloy 1 350° Solder Kit w/12 Rods & 1 Jar Flux
RW0171-4	Replacement Flux for Alloy 1
RW0171-5	Alloy 5 600° Solder Kit w/6 rods & 1 Jar Flux
RW0171-6	Replacement Flux for Alloy 5
Z12177	600° Alumabrazo Flux Core (10)

RADIATOR CAPS

RADIATOR & COOLANT RECOVERY CAPS

Renews cooling system performance and protects against boilover and coolant loss.



RW0021-1

Overall - H: 1" W: 2 ¹⁹/₆₄" PSI: 7 lbs.

For Radiator and Overflow
Reservoir Systems; Fits 3/4" Deep Neck



RW0021-2

Overall - H: 1" W: 2 ¹⁹/₆₄" PSI: 13 lbs.

For Radiator and Overflow
Reservoir Systems; Fits 3/4" Deep Neck



RW0021-3

Overall - H: 1 ¹³/₃₂" W: 2 ¹⁹/₆₄" PSI: 13 lbs.

For Radiator and Overflow
Reservoir Systems; Fits 3/4" Deep Neck



RW0021-4

Overall - H: ³¹/₃₂" W: 2 ⁵¹/₆₄" PSI: 7 lbs.
2 ¹¹/₁₆" O.D. Fill Neck, Fits 3/4" Deep Neck



RW0021-5

Overall - H: 1" W: 2 ¹⁹/₆₄" PSI: 10 lbs.
2 ³/₁₆" O.D. Fill Neck, Fits 3/4" Deep Neck



RW0021-6

Overall - H: ³¹/₃₂" W: 1 ⁴⁹/₆₄" PSI: 13 lbs.
Fits 32 MM I.D., 16 MM Deep Neck



RW0021-9

Overall - H: ³¹/₃₂" W: 2 ⁵¹/₆₄" PSI: 4 lbs.
2 ¹¹/₁₆" O.D., Fits 3/4" Deep Neck



RW0021-11

Overall - H: 1" W: 2 ¹⁹/₆₄" PSI: 4 lbs.
2 ³/₁₆" O.D., Fits 3/4" Deep Neck



RW0021-12

Overall - H: 1" W: 2 ¹⁹/₆₄" PSI: 16 lbs.
2 ³/₁₆" O.D., Fits 3/4" Deep Neck



RW0021-14

Overall - H: 1 ¹³/₆₄" W: 2 ¹⁹/₆₄" PSI: 7 lbs.
2 ³/₁₆" O.D., Fits 1" Deep Neck



RW0021-15

Overall - H: 1 ¹³/₆₄" W: 2 ¹⁹/₆₄" PSI: 4 lbs.
2 ³/₁₆" O.D., Fits 1" Deep Neck



RW0021-22

Overall - H: 1" W: 2 ¹⁹/₆₄" PSI: 16 lbs.
2 ³/₁₆" O.D., Fits 3/4" Deep Neck

RADIATOR CAPS

RADIATOR & COOLANT RECOVERY CAPS

Renews cooling system performance and protects against boilover and coolant loss.



RW0021-23

Overall - H: $3\frac{1}{32}"$ W: $1\frac{49}{64}"$ PSI: 16 lbs.
Fits 32 MM I.D., 16 MM Deep Neck



RW0021-24

Overall - H: $2\frac{19}{64}"$ W: $3\frac{1}{2}"$ PSI: 10 lbs.
 $2\frac{3}{16}"$ O.D., Fits $\frac{3}{4}"$ Deep Neck



RW0021-25

Overall - H: $1\frac{13}{32}"$ W: $2\frac{19}{64}"$ PSI: 10 lbs.
 $2\frac{3}{16}"$ O.D., Fits 1" Deep Neck



RW0021-40

Overall - H: $\frac{13}{32}"$ W: $2\frac{51}{64}"$ PSI: 10 lbs.
 $2\frac{11}{16}"$ O.D. Fill Neck, Fits $\frac{3}{4}"$ Deep Neck



RW0021-292B

Overall - H: $\frac{31}{32}"$ W: $2\frac{51}{64}"$ PSI: 7 lbs.
 $2\frac{11}{16}"$ O.D. Fill Neck, Fits $\frac{3}{4}"$ Deep Filler Neck



RW0021-294B

Overall - H: $\frac{31}{32}"$ W: $2\frac{51}{64}"$ PSI: 15 lbs.
 $2\frac{11}{16}"$ O.D. Fill Neck, Fits $\frac{3}{4}"$ Deep Filler Neck



RW0021-65

Overall - H: $\frac{11}{16}"$ W: $1\frac{23}{32}"$ PSI: 13 lbs.
Fits 32 MM I.D., 10 MM Deep Neck



RW0021-66

Overall - H: $\frac{11}{16}"$ W: $1\frac{23}{32}"$ PSI: 16 lbs.
Fits 32 MM I.D., 10 MM Deep Neck



RW0021-70

Overall - H: $\frac{31}{32}"$ W: $2\frac{19}{64}"$ PSI: 10 lbs.
 $2\frac{3}{16}"$ O.D., Fits $\frac{3}{4}"$ Deep Filler Neck



RW0021-72

Overall - H: $\frac{31}{32}"$ W: $2\frac{19}{64}"$ PSI: 10 lbs.
 $2\frac{11}{16}"$ O.D., Fits $\frac{3}{4}"$ Deep Neck



RW0021-73

Overall - H: $\frac{31}{32}"$ W: $2\frac{19}{64}"$ PSI: 10 lbs.
 $2\frac{3}{16}"$ O.D., Fits $\frac{3}{4}"$ Deep Filler Neck



RW0021-74

Overall - H: $\frac{31}{32}"$ W: $2\frac{19}{64}"$ PSI: 20 lbs.
 $2\frac{3}{16}"$ O.D., Fits $\frac{3}{4}"$ Deep Filler Neck

RADIATOR CAPS

RADIATOR & COOLANT RECOVERY CAPS

Renews cooling system performance and protects against boilover and coolant loss.



RW0021-75

Overall - H: 1 ³¹/₆₄" W: 2 ¹⁷/₃₂" PSI: 15 lbs.



RW0021-76

Overall - H: 1" W: 2 ²³/₆₄" PSI: N/A



RW0021-77

Overall - H: 1" W: 2 ⁵¹/₆₄" PSI: 15 lbs.

2 ¹¹/₁₆" O.D., Fits 3/4" Deep Neck



RW0021-78

Overall - H: 1 ⁵/₆₄" W: 3 ⁷/₆₄" PSI: 15 lbs.



RW0021-79

Overall - H: 1 ⁵/₆₄" W: 3 ⁷/₆₄" PSI: 10 lbs.



RW0021-80

Overall - H: 1" W: 2 ¹⁹/₆₄" PSI: 13 lbs.



RW0021-81

Overall - H: 1" W: 2 ¹⁹/₆₄" PSI: 7 lbs.

2 ³/₁₆" O.D., Fits 3/4" Deep Neck

RADIATOR CAPS

SACRIFICIAL ANODE CAPS

These are patented, scientifically tested radiator caps with a magnesium sacrificial anode attached to the bottom of the radiator cap that hangs down into the coolant. The anode is designed to attract and absorb the electrical energy that causes electrolysis and the magnesium is consumed instead of the aluminum components in the cooling system, thereby reducing repair and maintenance costs.

Z17700

16 lb. Automotive Cap
Adjustable 3 1/2" to 6"



Z17703

15 lb. Heavy Duty Truck Cap
Adjustable 5" to 8 1/4"



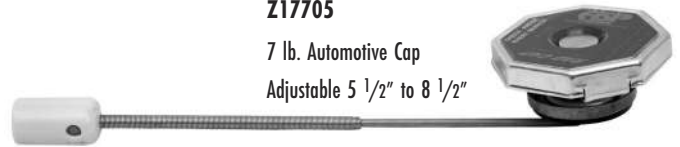
Z17704

13 lb. Automotive Cap
Adjustable 3 1/2" to 6"



Z17705

7 lb. Automotive Cap
Adjustable 5 1/2" to 8 1/2"



RACE RADIATOR HIGH PRESSURE CAPS

Northern high pressure radiator caps, exact PSI calibrated. Don't trust your race engine to a No-Name cap! Opening at the wrong pressure and bleeding off coolant will cause your expensive race engine to overheat. We exactly calibrate our cap springs to open at the pressure stated, so your cap stays closed when its supposed to be closed. Buy the best radiator cap, save your race engine. Buy a Northern High Pressure Race Radiator Cap.

20 lb.....	Z19200
24 lb.....	Z19201
26 lb. Sprint Car Cap	Z19210
28 lb.....	Z19202



WELD-ON FILLER CAPS

Kit includes either aluminum or steel threaded weldable bung and an anodized aluminum billet filler cap with an o-ring seal. Each bung is approximately 2" in diameter OD.

Aluminum Weldable Bung with Filler Cap.....	Z19220
Steel Weldable Bung with Filler Cap	Z19221



Z19220

Z19221

BRUSHES

NORTHERN FIBERGLASS BRUSHES

The tough fiberglass bristles run full length of the handles. Just pull bristles out of the handle as you need to. Long lasting and durable. Sold individually

- RW0102 Copper Handle $\frac{5}{8}$ " x 6" Long
- RW0103 Copper Handle $\frac{7}{8}$ " x 6" Long
- RW0103-1 Copper Handle $1 \frac{1}{8}$ " x 6" Long
- RW0104 Copper Handle $\frac{5}{8}$ " x 9" Long
- RW0104-1 Copper Handle $\frac{7}{8}$ " x 9" Long
- RW0104-2 Copper Handle $1 \frac{1}{8}$ " x 9" Long
- RW0207 Stainless Handle $\frac{3}{8}$ " x $6 \frac{1}{2}$ " Long
- RW0207-1 Stainless Handle $\frac{1}{2}$ " x $6 \frac{1}{2}$ " Long



RW0102



RW0103



RW0104

NORTHERN TWIST BRUSHES

Durable, long lasting brushes that hold up well against harsh chemicals. Choose from fiberglass or stainless bristles.

- RW0205 Fiberglass Brush 3" Long x $1 \frac{1}{2}$ " I.D. per dozen
- RW0209 Stainless Steel Brush 2" Long x $\frac{3}{8}$ " I.D. per dozen



BRUSHES

Our quality metal, stainless steel and wood handle brushes are used for variety of different uses, from cleaning parts, to preparing them for painting.



RW0210



RW0215



RW0211



RW0216

NUMBER	ROWS	LGTH. OF BRUSH	LGTH. OF WIRE	WT. PER DOZ.
RW0210	4 x 17	5"	$1 \frac{1}{4}$ "	5 lbs.
RW0211	3 x 19	$6 \frac{1}{4}$ "	$1 \frac{1}{4}$ "	$5 \frac{1}{2}$ lbs.
RW0215	---	$5 \frac{1}{4}$ "	$1 \frac{1}{2}$ "	$1 \frac{1}{4}$ lbs.
RW0216	3 x 7	$1 \frac{1}{2}$ "	$\frac{1}{2}$ "	1 lbs.

STEP-UP/STEP-DOWN ALUMINUM HOSE

Dual size hose connection. For hose that is $1 \frac{5}{16}$ " to $1 \frac{1}{2}$ ". Weld on or use as an adaptor.



Z17629

HOSE ADAPTER KIT

Adapts radiator outlet up one size to your hose size.

Kit includes:

One each of 1 " to $1 \frac{1}{4}$ ", $1 \frac{1}{2}$ " to $1 \frac{3}{4}$ ", and $1 \frac{3}{4}$ " to 2 " hose adapters.



Z16524

REPLACEMENT PARTS

GM MOUNTING PAD KIT

Rubber pad that molds to radiator for exact fit. Cut to length.



Z16516 6 1/2" x 1" x 3/8" - 2 Pack

SQUARE RUBBER MOUNT PADS

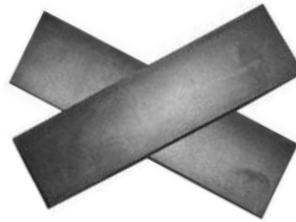
Great for positioning mounting studs to prevent rubbing on radiator and creating holes or stress cracks.



RW0178-43 3" x 3 3/16" - 2 Pack

RADIATOR MOUNTING PADS

Universal rubber mount pads for anywhere.



Z21230 Sold 2 per Pack

GROMMETS

Eliminate vibration damage with our new radiator mounting grommets. An excellent add on sale to your radiator repair.



RW0178-38

RW0178-37

RW0178-37 Chrysler Radiator Grommet; OE # 04266396, 10 Pk
RW0178-38 Ford Radiator Grommet; OE # E6DZ-8125A, 10 Pk

PLASTIC TANK COOLER HOLE PLUGS

Heavy duty metal plugs used in plugging cooler holes on plastic tanks. Includes rubber gasket.



RW0178-26 1" Dia. Cooler Hole Plug
RW0178-27 1 1/4" Dia. Cooler Hole Plug

SAFETY SIGHT GLASS

Check coolant levels without removing pressure cap.



RW0009-4



RW0009-5



RW0009-9



RW0009-10



RW0009-11

RW0009-4 Sight glass & o-ring 7/8" diameter w/14 threads (Fits RW0009-5)
RW0009-5 Sight glass assembly 1" diameter brass flange requires brazing .925" hole
RW0009-9 Sight glass assembly w/brass male 1/2-14 NPT thread
RW0009-10 Sight glass assembly 1 1/8" diameter brass flange requires brazing .925" hole
RW0009-11 Flat face glass 1/2-14 NPT with brass body for checking fluid levels (oil or coolant) in reservoirs and radiators

FILLER NECKS

Made of quality brass and aluminum materials for fast repairs and extended life. Many types available for your convenience.

RW0176 3/8" Regular Filler Neck
RW176-1 5/16" Overflow Filler neck
RW0177 Large Filler Neck
RW0177-1 Large Filler Neck w/Overflow Tube
RW0177-2 Brass 4" x 1 3/8" w/3 Slots CAT
RW0177-3 Steel 4" x 1 3/8" w/3 Slots CAT
RW0178 Foreign Car Filler Neck 32mm
RW0179 Tractor Filler Neck, 1" Deep Neck

BRASS



RW0176



RW0176-1



RW0177-1



RW0177-2



RW0177-3



RW0178



RW0179

ALUMINUM

ALL ALUMINUM FILL NECKS

Z17610 90 Degree Filler Neck Kit Aluminum Weld On
Z17606 Regular Filler Neck Only
Z17607 Aluminum Overflow Fitting
Z12006 1 1/2" Filler Neck Tee - Remote Fill
Z17641 1 1/4" Filler Neck Tee - Remote Fill
RW0178-4 Stamped Foreign Car Filler Neck 32mm
Z17800 Machined 32mm Aluminum Filler Neck Z12006 / Z17641



Z17607



Z17606



Z17610



RW0178-4



Z17800

REPLACEMENT PARTS

REINFORCEMENT RINGS

Brass rings made for reinforcing the connections when soldering to the radiator. Sold in pks of 20.



RW0179-5	1 3/8" I.D. Reinforcement Rings
RW0179-6	1 1/2" I.D. Reinforcement Rings
RW0179-15	1 3/4" I.D. Reinforcement Rings
RW0179-16	2" I.D. Reinforcement Rings

SOFT BRASS SHEETING

Very useful material for making and repairing metal radiator tanks. 24 gauge, 15" width. Sold per linear foot.



RW0151 Soft Brass Sheetting (Specify Length)

FAN MOTOR OR CONDENSER QUICK MOUNT KIT

Universal pad type mounts for through the radiator mounting. Kit includes 4 of each part.



Z18344 Fan Motor Mount Kit

PLASTIC AND BRASS DRAIN COCKS & VENT VALVES

Replacement OEM and after-market radiator drain cocks, made of durable plastic and brass.



RW0008-0	Brass 1/4" GM Drain Cock w/Short wing, 25 per pkg	RW0008-10	Honda/Toyota/Isuzu/Mitsu./Mazda (Screw in), 10 per pkg
RW0008-01	Pet Cock Int'l Truck - 1/4 NPT x 3/8 Flare, 90° Degree	RW0008-17	Nissan/Mazda/Ford/Honda/Isuzu (Screw in), 10 per pkg
RW0008-1	Brass 1/8" size, 25 per pkg	RW0008-19	Jeep/Mopar (UNF Screw in), 10 per pkg
RW0008-2	Brass 1/4" size, 25 per pkg	RW0008-23	GM Slot-pin Drain Cock, 5 per pkg
RW0008-4	Ford Escort (Short Stem), 10 per pkg	RW0008-24	Chrysler 1/2 - Turn Drain Plug, 10 per pkg
RW0008-5	Ford Pickup (Long Stem), 10 per pkg	RW0008-25	Drain Cock M12 xd 1.75 Northern Ag Radiators, Each
RW0008-6	General Motors Various (Short Stem), 10 per pkg	RW0008-26	Vent Valve for ADTECH Radiators
RW0008-7	Ford/Mazda/Nissan (Screw in), 10 per pkg	RW0009-1	Brass Drain Cock Flange 1/4" size, 25 per pkg
RW0008-8	Brass 90° Degree Petcock 1/4" NPT, 5 per pkg	RW0009-2	Brass Drain Cock Flange 1/8 size, 25 per pkg
RW0008-9	Brass Petcock w/hose fitting 1/4" NPT, 25 per pkg		

REPLACEMENT PARTS

PARTS FOR ALL ALUMINUM PERFORMANCE RADIATORS

ALUMINUM RADIATOR MODIFICATION CONNECTIONS & FITTINGS

The radiator modification kit eliminates the need for an expensive custom made radiator and saves you hundreds of dollars! Includes all the hardware necessary to customize a Race Pro Radiator to fit your vehicle! Kit includes 1 each of 1 3/4" & 1 1/2" diameter aluminum hose connections & fittings. Requires aluminum welding and fabrication.

Radiator Modification Kit Z12013



Z12013

DOUBLE BEADED CONNECTIONS

Three inch connection with bead on both ends. Cut to length, miter to form angles or use as a splicer. Weldable 6061-T6 Aluminum, .058 Wall. Solves connection fit problems.

1" x 3" Connection (each) Z17630

1 1/4" x 3" Connection (each) Z17631

1 3/8" x 3" Connection (each) Z17632

1 1/2" x 3" Connection (each) Z17633

1 3/4" x 3" Connection (each) Z17634

2" x 3" Connection (each) Z17635



Z17630-Z17635



Z17617

90° DEGREE CONNECTIONS

1" 90° Degree Hose Connection (each) Z17645

1 1/4" 90° Degree Hose Connection (each) Z17646

1 1/2" 90° Degree Hose Connection (each) Z17617

1 3/4" 90° Degree Hose Connection (each) Z17648

2" 90° Degree Hose Connection (each) Z17649



Z17625

PROBLEM SOLVER CONNECTIONS & KIT

LS-1 MOD Kit 1 1/2", 1 3/8", 1/8" NPT Vent Bung (Kit) Z17625

WELDABLE PIPE THREAD BUNGS

1/8", 1/4", 3/8", 1/2" & 3/4" Assortment, 1 Each Z17550

1 1/4" NPT Aluminum Bungs, 2 Pk Z17551

1" NPT Aluminum Bungs, 2 Pk Z17552

1/4" NPT Aluminum Bungs, 5 Pk Z20400

Single Pack 3/8" NPT, Single Pk Z17643

Connections are made from 6061 or 6063 aluminum.



Z17643



Z20400



Z17550

WELDABLE BUNGS FOR "AN" HOSE CONNECTIONS

To be used with all types of AN hose. Fittings require aluminum welding.

AN 6 Z17540

AN 8 Z17541

AN 10 Z17542

AN 12 Z17543

AN 16 Z17544

AN 20 Z17545



Z17540-Z17645



Z17555

THREADED BOSS BUNGS

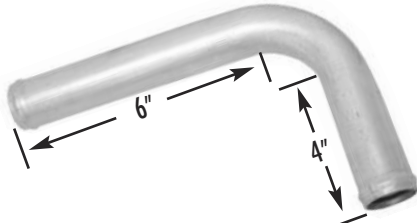
1/4-20 Machined Threaded Boss, 4 Pk Z17555

COOLANT PLUMBING

High Performance Coolant Plumbing Solutions!

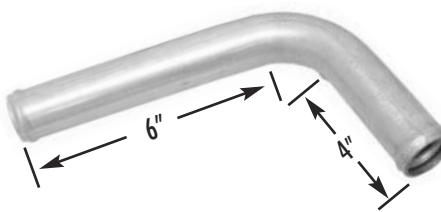
High flow, mandrel bent, stainless steel gives your cooling system a great look! Beaded on both ends and pre-bent coolant hose connections.
Polishable stainless steel. *All measurements are approximate.

90° STEEL TUBE



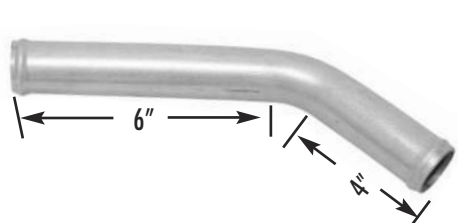
1 1/4" Dia.....	Z71000
1 1/2" Dia.....	Z71001
1 3/4" Dia.....	Z71002

75° STEEL TUBE



1 1/4" Dia.....	Z71003
1 1/2" Dia.....	Z71004
1 3/4" Dia.....	Z71005

45° STEEL TUBE



1 1/4" Dia.....	Z71006
1 1/2" Dia.....	Z71007
1 3/4" Dia.....	Z71008

6" STRAIGHT SILICONE RADIATOR HOSE



1 1/4" Dia.....	Z71025
1 1/2" Dia.....	Z71026
1 3/4" Dia.....	Z71027

45° SILICONE RADIATOR HOSE



1 1/4" Dia.....	Z71028
1 1/2" Dia.....	Z71029
1 3/4" Dia.....	Z71030

90° SILICONE RADIATOR HOSE



1 1/4" Dia.....	Z71031
1 1/2" Dia.....	Z71032
1 3/4" Dia.....	Z71033

STEP-UP/DOWN SILICONE RADIATOR HOSE



1 1/4" to 1 1/2" (8" Length)	Z71035
1 1/4" to 1 3/4" (8" Length)	Z71036

Great for GM LS motors.

SILICONE ENGINE COOLANT PLUMBING KIT

High Tech, High Flow Engine Coolant Plumbing!

Designed for all engines, however your application could require additional Northern Coolant Plumbing components depending on the complexity.

Northern Engine Coolant plumbing can be used on all engines, flat heads to Hemi's. It's high tech cooling at an affordable price.

Z71051

Kit Includes:

- 1 1/2" 45° Silicone Elbow
- 1 1/2" 90° Silicone Elbow
- 1 3/4" 90° Silicone Elbow
- 1 3/4" 45° Double beaded Steel Elbow
- 1 3/4" x 6" Straight Silicone Elbow
- 1 1/2" x 3" Double beaded aluminum connection



COOLANT PLUMBING



TURBO INTERCOOLER & CHARGE AIR COOLER SILICONE HOSES

2 1/2" Charge Air Cooler Hose, 6" Long, 3 Rings.....	Z71073
3" Charge Air Cooler Hose, 6" Long, 3 Rings.....	Z71047
3" Charge Air Cooler Hose, 6" Long, 2 Rings.....	Z71074
3 1/8" Charge Air Cooler Hose, 6" Long, 3 Rings.....	Z71075
3 1/4" Charge Air Cooler Hose, 6" Long, 3 Rings.....	Z71076
3 1/2" Charge Air Cooler Hose, 6" Long, 3 Rings.....	Z71048
3 1/2" Charge Air Cooler Hose, 6" Long, 2 Rings.....	Z71077
4" Charge Air Cooler Hose, 6" Long, 3 Rings	Z71049
4" Charge Air Cooler Hose, 6" Long, 2 Rings.....	Z71078
4" Charge Air Cooler Hose, 7" Long, 3 Rings.....	Z71079
4" Charge Air Cooler Hose, 8" Long, 3 Rings.....	Z71080
4 1/2" Charge Air Cooler Hose, 6" Long, 3 Rings.....	Z71081



DIESEL ENGINE SILICONE HUMP HOSE CONNECTORS

COOLANT HUMP HOSE

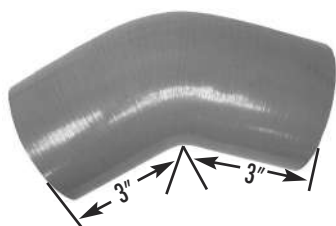
1 1/2" Coolant Hump Hose, 6" Long, (Fluoro-Lined for long life)	Z71040
1 3/4" Coolant Hump Hose, 6" Long, (Fluoro-Lined for long life)	Z71041
2" Coolant Hump Hose, 6" Long, (Fluoro-Lined for long life)	Z71042
2 1/2" Coolant Hump Hose, 6" Long, (Fluoro-Lined for long life)	Z71043

AIR INTAKE HUMP HOSE

*Use these hoses for cold intake

3" Charge Air Cooler Hump, 6" Long	Z71044
3 1/2" Charge Air Cooler Hump, 6" Long	Z71045
4" Charge Air Cooler Hump, 6" Long	Z71046
3" Charge Air Cooler Hump, 8" Long	Z71052
3 1/2" Charge Air Cooler Hump, 8" Long	Z71053
4" Charge Air Cooler Hump, 8" Long	Z71054

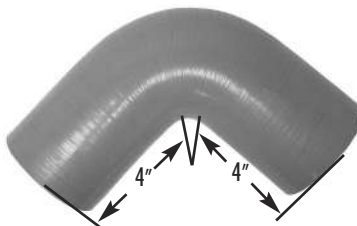
45° SILICONE CAC HOSE



High temp (500° F compatible), 45° silicone hose used in diesel air intake systems. Use on either hot or cold side charge air cooler connection.

3" Dia.	Z71070
3 1/2" Dia.	Z71071
4" Dia.	Z71072

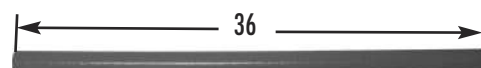
90° SILICONE CAC HOSE



High temp (500° F compatible), 90° silicone hose used in diesel air intake systems. Use on either hot or cold side charge air cooler connection.

3" Dia.	Z71055
3 1/2" Dia.	Z71056
4" Dia.	Z71057

SILICONE STICK RADIATOR HOSE



For automotive and diesel truck engine plumbing. Great for all types of cut-to-fit radiator hose connections.

1 1/2" Dia. x 36" Long.....	Z71086
1 3/4" Dia. x 36" Long.....	Z71087
2" Dia. x 36" Long	Z71088
2 1/2" Dia. x 36" Long.....	Z71089

REPLACEMENT PARTS

BRASS RADIATOR CONNECTIONS

- RW0179-1 1 ³/₄" Round Connection
 RW0179-2 1 ¹/₂" Round Connection
 RW0179-4 1 ¹/₄" x 1 ¹/₂" Dual Connection
 RW0179-12 2" Round Connection



RW0179-1



RW0179-2



RW0179-4



RW0179-13

- RW0179-13 1 ¹/₄" Round Connection
 RW0179-14 3/4" Round Connection
 RW0179-23 2 ¹/₂" Round Connection
 RW0179-24 1 ¹/₂" Ford Oval End Connection
 RW0179-25 2 ¹/₄" Connection



RW0179-14



RW0179-23



RW0179-24



RW0179-25

BY-PASS CAPS

Replacement rubber caps for non-utilized radiator heater ports. * Requires hose clamp, not included.

- RW8060 ⁵/₈" RW8065 ³/₄"



OIL COOLER ADAPTERS

Adapts engine or transmission coolers to oil line fittings.

RW0176-6-1



Brass 1/8" NPT Male X
 5/16" Barb - Each

RW8043



3/8" NPT Male X
 1/2" Hose Barb EOC - Pair

RW8044



M20 - 1.5 Male O-Ring X
 3/4" - 18 UNS Female O-Ring - Pair

RW8046



3/4" NPT Male X #12 SAE - Pair

RW8047



3/4" NPT Male X
 1 ¹/₁₆" - 16 UNF O-Ring GM - Pair

RW8049



3/8" Male Inverted Flare X
 5/16" Female Inverted Flare
 GM Step Up Adapter - 2 Pk

RW8051



5/16" Male Inverted Flare X
 3/8" Female Inverted Flare - 2 Pk

Z80200



1/2" - 20 Male X
 5/16" Female Inverted Flare - 2 Pk

REPLACEMENT PARTS

RW8057



1/4" NPT Male X
5/16" Female Inverted Flare - 4 Pk

Z50620



GM
Z50620
EOC Adapter - 1/2 NPT to
m20-1.5 O-Ring - 2 Pk

Z80175



Brass 1/2" NPT Male X
3/8" Hose Barb - TOC - 2 Pk

Z80184



3/4" Heater Hose to 3/8" NPT - Each

Z80190



1/8" NPT Male X
5/16" Female Inverted Flare
(Ford to GM) - 2 Pk

Z50650



3/4" NPT Fittings TO 1/2" NPT
Steel - 2 Pk

Z50610



GM Aluminum Adapter - 1/2 NPT x
3/4-18 UNS O-Ring - 2 Pk

Z50640



3/4" NPT Fittings to 5/16" Inverted
Flare Aluminum - 2 Pk

CHARGE AIR COOLER ISOLATOR KIT

Kit Includes:

- (2) Rubber Cushions
- (2) Steel Pipes
- (2) Washers
- (4) Steel Liners
- (4) Rubber Fittings



Z72016

This kit is included with the following Northern Radiator charge air coolers:
222277, 222322, 222290, 222279, 222347, 222281, 222243, 222239,
222223, 222236, 222304, 222356, 222240, 222237

It will also replace the OEM isolator kit.

SHOP EQUIPMENT

NORTHERN RADIATOR LIFTS

- Lift capacities up to 850 lbs
- Corrosion resistant clamp assemblies
- Large clamp pads for a positive grip
- Polished hydraulic cylinder & floating piston cup mean smooth operation & extended life
- Featured on the 260 & 460 arch models is a double action brake with an improved roller assembly for free arch movement
- Pneumatic air over oil models run off of shop air
- Electric hydraulic 460-55 & 460-65 models are 120V single phase

MODEL #	RW0160-35	RW0560	RW0260-45	RW0260-55	RW0460-55	RW0460-65
LIFTING CAPACITY PDS	200	250	400	400	650	850
MAX. WIDTH OF RAD.	35"	45"	45"	55"	55"	65"
OVERALL HEIGHT	110"	106"	118"	118"	118"	118"
OVER ALL DIA.	44"	45 1/4"	55"	65"	65"	75"
PISTON TRAVEL	44 1/2"	44 1/2"	47"	47"	47"	47"
CYLINDER SIZE, INSIDE DIA.	2 1/2"	2 1/2"	3"	3"	3"	3"
CYLINDER SIZE, OUTSIDE DIA.	3"	3"	3 1/2"	3 1/2"	3 1/2"	3 1/2"
OIL CAPACITY	9 pts.	9 pts.	7 qts.	7 qts.	4 gal.	4 gal.
SHIPPING WEIGHTS	262	285	355	370	535	595

OIL TYPE

ISO 32 Hydraulic Fluid for all Lifts



SHOP EQUIPMENT

ELECTRIC HYDRAULIC LIFT PARTS

REF. #	NFS PARTS	DESCRIPTION
29	RW0282-1111	Hydraulic Valve, 360, 460 & 282
30	RW282-1112	Replacement Handle Kit for 1111
-	RW0282-1190	Safety Switch for Barbee 282
-	RW0282-1192	Micro Switch for Barbee 282



RW0282-1190



RW0282-1192

RW0360-1



Replacement 1 H.P. Motor 360 & 460

RW0360-10



Electrical Control Box 360 & 460

RW0360-289



Micro Switch NFS Lifts 360 & 460

RW0282-1113



Gresen Hydraulic Valve Seal Kit for
RW0282-1111, 282, 360 & 460

SHOP EQUIPMENT

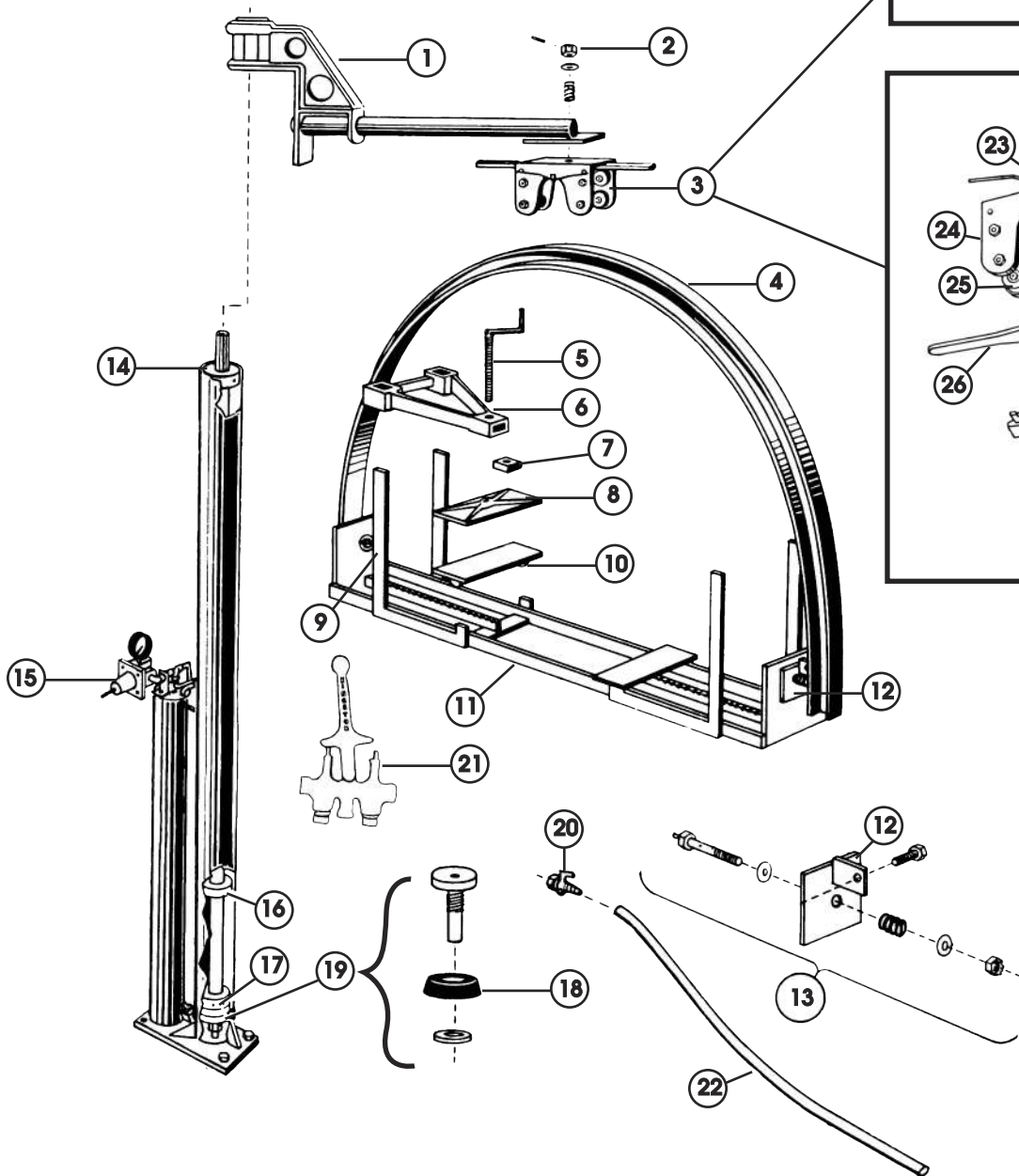
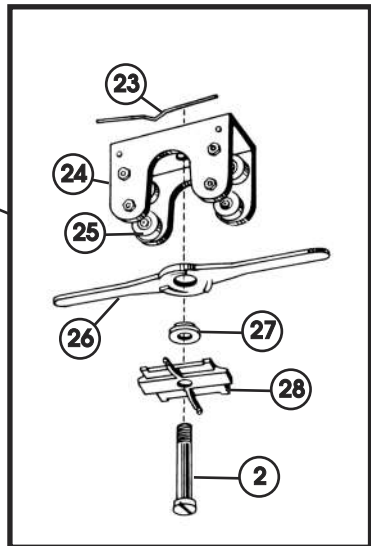
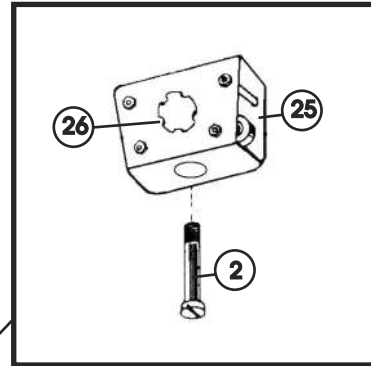
Replacement Parts Breakdown for Tilt-A-Lifts®

Proper maintenance and replacing worn parts can prolong the life of your shop equipment!

**Does your lift leak oil out of the top?
Here's why and what you can do about it.**

As you load your lift the top and bottom bushing will begin to wear in an egg shape fashion causing the shaft to travel more and more out of a vertical alignment. This 'leaning shaft' deforms the piston cup as it floats below, finally allowing oil to leak by. When servicing your lift it is important to replace the top bushing, bottom bushing and the cup at the same time.

TIP: Did you know you can prolong the life of your top bushing by rotating it periodically?



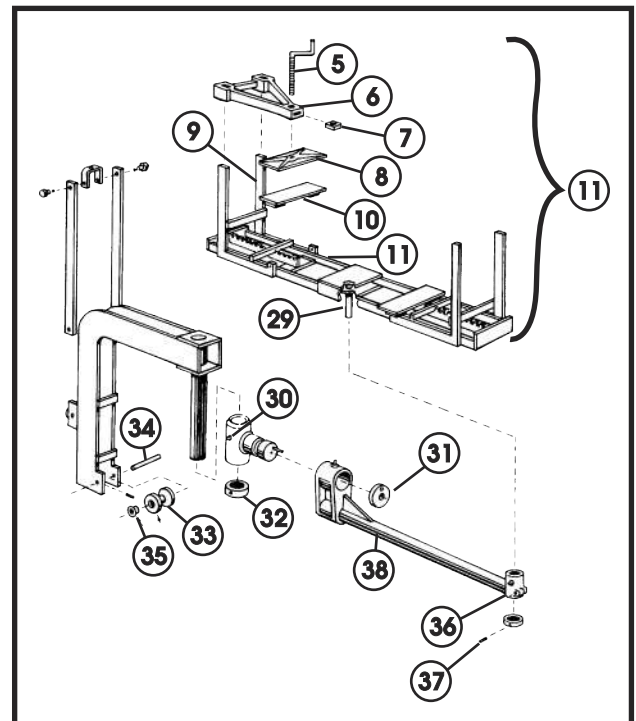
SHOP EQUIPMENT

Parts List for Tilt-A-Lifts®

REF. #	NFS PARTS	DESCRIPTION
1	RW0160-18 RW0260-15 RW0360-15 RW0260-18 RW0360-18 RW0460-18	Arm Assembly for 35" Arch Arm Assembly for 45" Arch Arm Assembly for 45" Arch w/brace Arm Assembly for 55" Arch Arm Assembly for 55" Arch w/ brace Arm Assembly for 65" Arch
2	RW0160-24 RW0280-24	Arch Lock Bolt Assembly - Northern Arch Lock Bolt Assembly - Barbee
3	RW0160-19 RW0260-19 RW0360-19 RW0460-19 RW0280-19 RW0281-19	35" Brake Assembly 45" Brake Assembly 55" Brake Assembly w/steel wheels 65" Brake Assembly w/steel wheels 35" Brake Assembly - Barbee 45"/55" Brake Assembly - Barbee
4	RW0160-25 RW0260-25 RW0360-25 RW0460-25 RW0280-25 RW0281-25 RW0282-25	35" Arch Only - Northern 45" Arch Only - Northern 55" Arch Only - Northern 65" Arch Only - Northern 35" Arch Only - Barbee 45" Arch Only - Barbee 55" Arch Only - Barbee
5	RW0280-38	Stainless Screw Only
6	RW0280-34	Clamp Casting
7	RW0280-38-3 RW0160-8	Brass Block - Barbee Northern Hex Nut
8	RW0280-33 RW0460-33	Upper Pad Upper Pad for #460
9	RW0280-31 RW0460-31	Clamp Post Clamp Post for #460
10	RW0280-32 RW0460-32	Lower Pad Lower Pad for #460
11	RW0280-26 RW0281-26 RW0282-26 RW0285-26 RW0460-26 RW0280-D RW0281-D RW0282-D RW0285-D RW0460-D	35" Table Only 45" Table Only 55" Table Only Table w/pin, Fits models 560 & 285 65" Table Only 35" Table Assembly 45" Table Assembly 55" Table Assembly Table Assembly, Fits models 560 & 285 65" Table Assembly
12	RW0280-28 RW0460-28	Pivot Plate - 1/2" Pivot Plate for #460 - 5/8"
13	RW0280-29 RW0460-29	Pivot Bolt Assembly - 1/2" Pivot Bolt Assembly for #460 - 5/8"
14	RW0280-1-25 RW0281-1-25 RW0282-1-25	1 3/4" ID X 2 1/2" OD - Bushing Top 2 1/4" ID X 3" OD - Bushing Top 2 1/4" ID X 2 1/2" OD - Bushing (Flanged)
15	RW0039 RW0039-2	Regulator Only Gauge Only
16	RW0280-8-4 RW0281-8-4	1 3/4" ID x 2 1/2" OD - Bushing 2 1/4" ID x 3" OD - Bushing
17	RW0280-8-2 RW0281-8-2 RW0282-8-2	1 3/4" ID x 2 1/2" OD - Bushing Bottom 2 1/4" ID x 3" OD - Bushing Bottom 1 3/4" ID x 2 1/2" OD - Bushing Bottom
18	RW0280-4-4 RW0281-4-4	2 1/2" x 3/4" Piston Cup Only 3" x 3/4" Piston Cup Only

REF. #	NFS PARTS	DESCRIPTION
19	RW0280-4 RW0281-4	2 1/2" x 3/4" Cup & Piston Assembly 3" x 3/4" Cup & Piston Assembly
20	RW0280-49	Air Test Valve
21	RW0088-A RW0088-1	Kingston Valve Repair Kit for 88-A
22	RW0046 RW0047	Latex Test Hose - Per Ft. Red Test Hose - 25 ft. Roll
23	RW0281-23-5	Arch Lock Brake Shoe Spring - Barbee
24	RW0281-20	Arch Lock Housing - Barbee
25	RW0281-21 RW0281-22 RW0160-21 RW0360-21	Arch Lock Roller Barbee (Plain) Arch Lock Roller Barbee (Flanged) Plastic Rollers for 160 Steel Rollers for 260, 360 & 460
26	RW0281-23-2 RW0160-23	Arch Lock Handle Casting - Barbee Northern Steel Brake Knob
27	RW0281-23-3	Arch Lock Bushing - Barbee
28	RW0281-23-4	Arch Lock Brake Shoe - Barbee
29	RW0285-26-1	Pin & Support Plates (weld on)
30	RW0285-15	Swivel Tee Casting
31	RW0285-15-1	Tee Washer
32	RW0285-17-1	Lock Ring
33	RW0285-14-1	Roller (2 required)
34	RW0285-14-3	Roller Pin (2 required)
35	RW0285-14-2	Roller Bearing (4 required)
36	RW0285-18-4	Arm End Casting (weld on)
37	RW0285-26-7	Table Collar
38	RW0285-18A	Complete Arm Assembly (includes RW0285-18-4)

Northern 560/Barbee 285 Radiator Hoist



All Northern Lift Parts feature
a superior gray powder coat finish!

BLAST MEDIA

Choose the right media for your project!

REMEMBER: Blasting works best with dry, oil and grease free parts!

PLASTIC MEDIA

- 20/30 standard mesh, fast, safe & cost effective for surface cleaning & paint removal
- Used on a variety of soft metals, including aluminum, and some composites & steel
- Removes coatings without damage normally associated with hard abrasives
- Applied in range of 200-400 lbs. (depending on nozzle size) per hr. @ 20-40 p.s.i.



Z33150 1 Gallon Can

GLASS BEADS

- Removing light coating or oxidation where tolerance and finish must be maintained
- Shot peens and stress relieves metal surfaces
- Use under low pressure for best results
- Recycles well

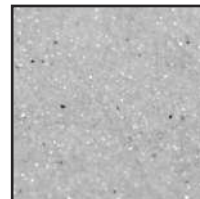


Z33110 Medium AE - 1 Gallon

Z33111 Medium AE - 2 Gallon

ALOX GLASS

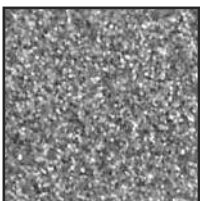
- Blended aluminum oxide and glass bead mixture
- For production cleaning when surface tolerances and etching are not a concern
- Used at low to moderately low pressures
- Recycles well and less expensive than aluminum oxide



Z33120 1 Gallon

ALUMINUM OXIDE

- Most aggressive media, fast cutting, sharp and hard, will create deep surface profile
- Low to moderately low pressure needed, adjust regulator to achieve desired results
- Breaks down slowly and each new fracture creates a new cutting edge



Z33135 Medium 80 - 1 Gallon

Z33136 Medium 80 - 2 Gallon

GROUND/FRACTURED GLASS

- More rapid cleaning without deep anchor patterns
- Produces etching on metal surfaces with minimum dust
- Moderately priced
- Used at low to moderately low pressures



Z33115 Medium AE - 1 Gallon

WALNUT SHELL

- Soft media for delicate surfaces such as jewelry, precious metals or aluminum
- Generally used at very low pressure but may develop minor anchor pattern
- For cleaning greasy parts, has absorbent qualities

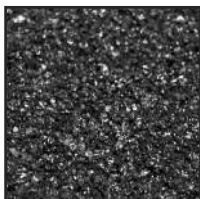


Z33125 Walnut Shells Medium 1220 - 1 Gallon

Z33126 Walnut Shells Medium 1220 - 2 Gallon

BLACK SLAG

- Inexpensive, used for general cleaning or cleaning dirty surfaces
- Material breaks down rapidly upon first application
- Will leave anchor patterns on surfaces which allow for paint adhesive after blasting

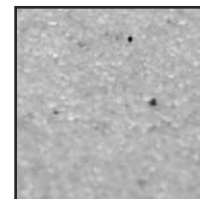


Z33105 Black Slag - 1 Gallon

Z33106 Black Slag - 2 Gallon

SILICA SAND

- Inexpensive, used for general cleaning or cleaning dirty surfaces
- Material breaks down rapidly upon first application
- Will leave anchor patterns on surfaces which allow for paint adhesive after blasting



Z33100 Silica General Purpose 4030 - 1 Gallon

REPLACEMENT PARTS FOR BLAST CABINETS

RW0340-1 Safety Glass 9 1/2" x 21
RW0340-3 Blast Gun with Nozzle
RW0340-7 150 PSI Regulator Filter Gauge
RW0340-9 Steel Jet Nozzle for 340-3
RW0340-S Carbide Nozzle

RW0345-5 Plastic Window Protector - 10' Roll
RW0345-100 Plastic Window Protector - 100' Roll
RW0345-12 Neoprene Glove Set
RW0345-45 Rubber Glove Set