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September 2006
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Master Products Catalog

2006 WEB Version



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Warning

Be safe! Do not use Gates belts, pulleys or sprockets on any aircraft propeller or rotor drive systems or in-flight accessory drives. Those Gates products are not designed or intended for aircraft use.

Caution

Use Gates products only on applications specified in Gates literature. Install and maintain products according to the vehicle manufacturer's recommended procedures and with recommended tools. Failure to follow these instructions could result in injury or property damage. Gates disclaims all liability due to failure to follow these instructions.

Limited Warranty for the Life of the Merchandise

Merchandise is warranted to be free from defects in materials or workmanship for the life of the merchandise. Damages from misuse, abuse or gradual wear from normal use are excluded from this warranty. Gates Corporation will, at its option, replace or repair any merchandise proved defective in material or workmanship, or both, during the warranty period. This is the exclusive remedy. For warranty service, please contact the Service Department, Gates Corporation, P.O. Box 5887, Denver, Colorado 80217. THERE IS NO OTHER EXPRESSED WARRANTY. IMPLIED WARRANTIES, INCLUDING THOSE OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE LIMITED TO THE EXPRESSED WARRANTY PERIOD. LIABILITY FOR CONSEQUENTIAL OR INCIDENTAL DAMAGES UNDER ANY AND ALL WARRANTIES ARE EXCLUDED TO THE EXTENT EXCLUSION IS PERMITTED BY LAW.

Some states do not allow the exclusion or limitation of incidental or consequential damages, and some states do not allow limitations on how long an implied warranty lasts, so the above limitation and exclusion may not apply to you. This warranty gives you specific legal rights and you may also have other rights which vary from state to state.

For additional applications or part number information contact the Automotive Product Application Tech Line at 303-744-5651.

[†]SuperStat is a registered trademark of Stant Manufacturing, Inc.

[‡]Weir-Stat is a registered trademark of Standard-Thomson Corporation.



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Denver, Colorado 80217

Visit our website for the most up-to-date information!



Gates has all your cooling system and power transmission needs—plus power steering, hydraulics, water and air hose—in one complete line.

To learn more about our superior product technology, contact your Gates representative, or visit us online at: www.gates.com



Timing Component Kits

With Gates Timing Components Kits, you don't have to shop for additional tensioner & idler pulleys, buy from multiple sources or hassle with returning components that don't fit.

Timing component kits provide a complete system replacement solution, plus detailed installation instructions for each application. There is no guesswork required getting the proper fit.

Each kit includes all the parts for a specific application:

- Timing Belts
- Tensioner Pulleys
- Idlers
- Installation Instructions



Now everything that goes into a complete timing system installation — comes out of a single box.

Timing Component Kit Oil Seals



Gates offers Timing Component Kits so timing belt replacement is done correctly with replacement of tensioner and idler pulleys. Now do a more complete job by replacing the camshaft, crankshaft and oil seals, the most commonly requested component not in the kit. Protect yourself and your customer by replacing these seals with the Gates Timing Component Kit Oil Seals.

Oil Seals offered in addition to the timing component kits.

For complete information, see the application section of the new catalog 428-1447.

DriveAlign™ Automatic Belt Tensioners and Pulleys

Gates automatic belt tensioners meet and exceed OE specifications for all of today's major car manufacturers. That means you and your customers will get the quality and performance you expect from the leader — Gates.

Automatic belt tensioners offer:

- Improved Belt Life
- Increased Bearing Life of Accessories
- Reduced Maintenance



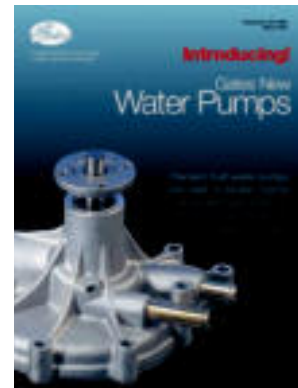
For complete information, see application section of the new tensioner catalog (428-0725).

Water Pumps

Gates new water pumps feature superior alloy materials and state-of-the-art manufacturing techniques that provide worry free operation for the life of the vehicle. Engines run cool under extreme conditions with Gates water pumps. Gates Water pumps feature:

- 1 Original Equipment Manufacturer (OEM) materials and design
- 2 Pump cavity and impeller match OEM shape for proper coolant flow
- 3 Unitized bearings and seals for long service life
- 4 Precision ground surfaces for proper fit and sealing
- 5 New premium components, nothing re-used
- 6 Limited lifetime warranty

For complete application information see the new Water Pump catalog (431-2085).



When installing a new Gates water pump always check or replace these parts:



Belts

Tensioners

Hoses & Clamps

Radiator Cap

Thermostat



Unicoil™ Hose Bending System

Bend Straight Hose Into Any Shape



Now your customers can make their own custom hoses using stock heater hose and the new, patented Unicoil™ hose bending system. Unicoil is perfect for customized engines, out-of-stock situations and one-of-a-kind routing problems.

- No tools or special equipment needed
- Great for modified or customized engines
- Prevents kinks in tight hose bends
- Perfect solution when custom molded hose isn't available
- Can be ordered individually or in a box of 12 with pop-up display

Available in 3 sizes: 1/2", 3/4" and 5/8"

UNICOIL APPLICATION CHART

Part No.	Description	Qty.
28510	1/2" Unicoil	1
28511	5/8" Unicoil	1
28512	3/4" Unicoil	1
28513	Unicoil - 12 Pack Assortment (3) 1/2", (6) 5/8", (3) 3/4" and merchandiser	1



Gates has what it takes to make it,

When it comes to automotive and heavy-duty products, Gates can call on the expertise of its sales/marketing field personnel and operations worldwide to offer you a breadth and depth of product line unmatched in the industry.

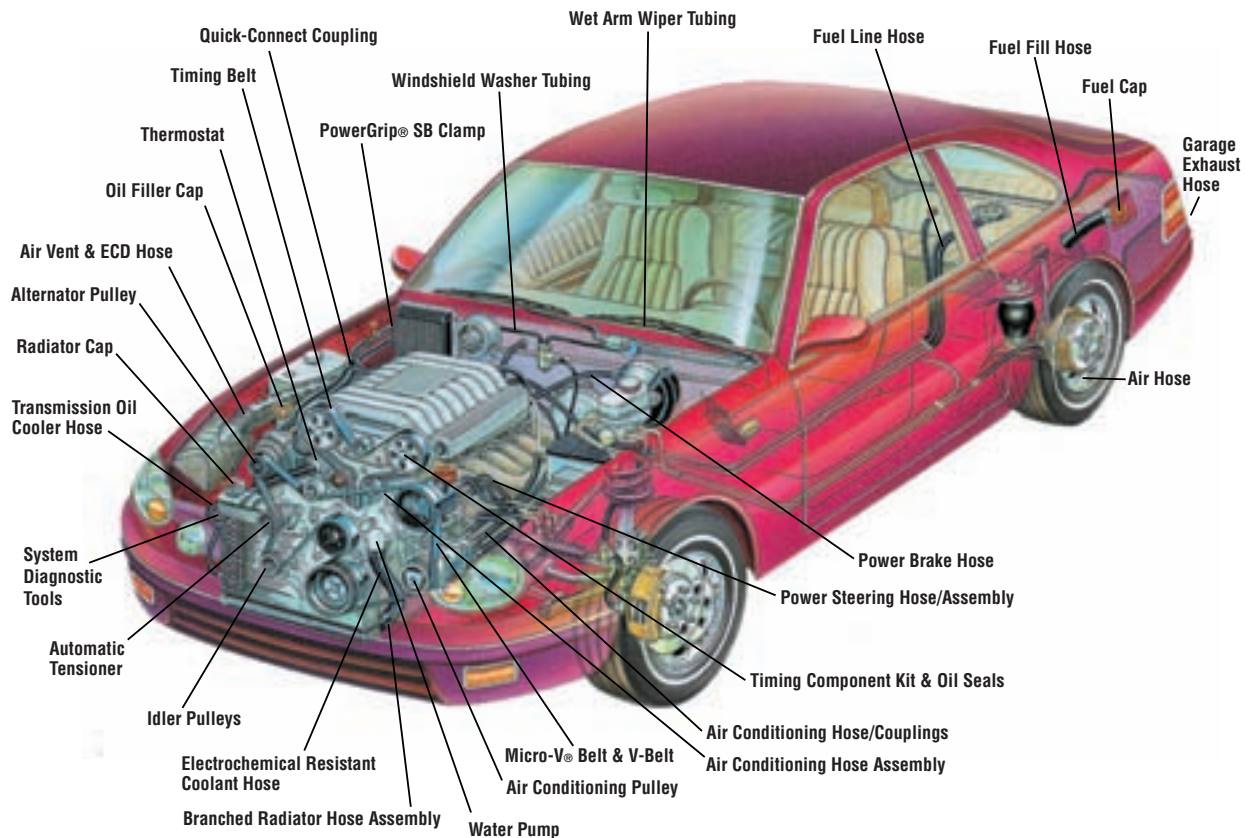
Make it well,

The quality of Gates products is reflected by the fact that we are a major supplier to both domestic and foreign vehicle manufacturers. Our belts and hoses are specified by OEMs around the world. And, we are a leader in supplying our products to the aftermarket.

and help you sell it

Gates provides professional, factory-trained field personnel dedicated to helping you pull our products through the pipeline. This assures profits for everyone along the way.

When it comes from Gates, you can depend on it!



Gates PowerGrip® SB Clamps



Gates PowerGrip® SB Clamps are especially important for the fleet and heavy-duty market. These “no maintenance” coolant hose clamps offer unsurpassed sealability on all types of coolant hoses — even silicone. PowerGrip® SB Clamps are ideal for all applications. Unlike other clamps, they maintain a dynamic tension so they never need to be re-tightened.

PowerGrip® SB clamp advantages:

- Eliminate cold-water leaks by maintaining a sealing force even at sub-zero temperatures.
- Conform to the shape of the fitting (won't leak, even on out-of-round stems).
- Eliminate environmental contamination.
- No retightening saves maintenance costs.
- No overtightening eliminates clamp breakage and hose damage.
- Can be used on silicone or rubber hoses, eliminating two-clamp inventories.

Whether you're overhauling an existing engine or buying a new one, you'll save more than \$500 per truck. With Gates Green Stripe® II hoses and PowerGrip SB clamps you'll have better cooling system performance.

For more information on how to use PowerGrip SB Clamps, order the video (428-9290).



Gates continues to lead the way in problem solving and innovation!

By constantly innovating and solving problems, Gates has remained at the top and Gates customers have the distinct edge over competition.

Before the mid-1980's, most coolant hose failures were blamed on heat cracking, yarn failure and cold cracks. Gates engineers discovered that most hose failures are the result of electrochemical attack on the hose tube. Different kinds of metals in the cooling system — for instance, a cast-iron block, an aluminum heater core and a copper radiator core — generate an electrical charge. This charge is carried between the metals by the coolant in the system, like copper wire carries electricity between an AC outlet and a lamp.

Under a barrage of electrical charge, tiny cracks appear in the hose tube. Coolant seeps through these cracks and “wicks” along the length of hose. When it finds a weak spot, the coolant bursts through.

Gates termed this cause and effect *Electrochemical Degradation*.

Gates engineers then developed a new hose tube, using a new rubber compound. When you see this ECR symbol on Gates coolant hose labels, it assures that the hose will show no ill effects from electrochemical degradation. This means longer hose life and more dependable service.

For additional information order form No. 428-9268 or the Hose & Clamp Video #433-0785.



ECR[®]
ELECTROCHEMICAL
RESISTANT



Hydraulic Hose, Fittings and Equipment

Gates Offers a full line of Hydraulic Hose and Fittings for: Agriculture, Trucking, Mining, Construction, Excavating & Manufacturing.

Gates also offers products for specific applications, such as hose for Car Washes, Pressure Washers, or PortaPower applications.

For a complete listing of the Gates Hydraulic Hose and Fittings see the current 431-2080 catalog.



PolarSeal® Barrier Refrigerant Hose and PolarSeal Portable Crimper

Gates **PolarSeal** hose lets you take advantage of the market for “barrier” refrigerant hose to protect the environment. All new heavy-duty fleet, off-road equipment and industrial air conditioning systems manufactured in North America must use the environmentally safe R134a (a gas which replaces R12).

PolarSeal hose can safely be used with both the old R12 and the new R134a gases thanks to the tough nylon liner (barrier) that allows this hose to meet the new SAE and Montreal Mandate requirements.

The market for environmentally safe refrigerant hose for both mobile and stationary applications is huge and growing.

For complete information see PolarSeal catalog (428-7240)



PolarSeal™ Assemblies

PolarSeal assemblies contain, direct and muffle the flow of refrigerant. Most assemblies have service ports built in, which allow access to this closed system. This permits recovery of charging of refrigerant, system evacuation, or monitoring system pressures. Gates PolarSeal assemblies are manufactured for specific applications within the A/C system:

- Discharge Lines
- Liquid Lines
- Suction Lines



Air Compressors & Pressure Washers



Commercial Air Compressors

Heavy-Duty two-stage air compressors engineered for auto, tire, auto body repair shops, automated machinery, dry cleaning and many industrial and commercial applications.



Item No.	ASME Tank Type	Weight Lbs.	Dimensions	HP	Engine (Phase) Voltage	Disp. CFM	SCFM@ 175 psi	Pump Cylinders	Pump RPM
GATCC-348-HAT	80 Gal.Horiz.	580	71 "L x 24 "W x 47 "H	5.0	(1)208/230	21.7	16.0	2	800
GATCC-348-VAT	80 Gal.Vertical	580	39.5 "L x 24 "W x 73 "H	5.0	(1)208/230	21.7	16.0	2	800
GATCC-378-VAT	80 Gal.Vertical	720	39.5 "L x 24 "W x 73 "H	7.5	(1)208/230	32.6	24.0	4	600
GATCC-309-HBT	120 Gal.Horiz.	830	71 "L x 24 "W x 45 "H	10.0	(3)208/230/460	43.5	32.0	4	800
GATCC-1633-GT	30 Ga.Horiz.	550	50 "L x 23.5 "W x 43 "H	16.0	Briggs & Stratton Vanguard	41	32.0	4	800



Midline Air Compressors

Medium-Duty two-stage air compressors designed for automotive garages, light body shops, service trucks, and small to medium applications.



Item No.	ASME Tank Type	Weight Lbs.	Dimensions	HP	Engine (Phase) Voltage	Disp. CFM	SCFM@ 175 psi	Pump Cylinders	Pump RPM
GATCC-823-GT	30 Gal.Horiz.	300	39.5 "L x 19 "W x 39 "H	8.0	Briggs & Stratton Intek	19.5	13.5	2	1300
GATCC-1023-GT	30 Gal.Horiz.	302	39.5 "L x 19 "W x 39 "H	10.0	Briggs & Stratton Intek	24.5	17.0	2	1065
GATCC-358-VAT	80 Ga.Vertical	435	36.5 "L x 24 "W x 73 "H	5.0	(1)208/230	19.5	13.5	2	1300

Pressure Washers

Hot water pressure washers built for the professional that demands a portable, reliable and self-contained unit.



Item No.	PSI	GPM	Driven	Engine (Phase) Voltage	HP	Total Amp Draw	Pump Drive	Detergent Injection	Dimensions	Weight Lbs.
GATCP-101	1000	2.0	Electric	1/120V	1.5	15.0	Direct	Low	34 "L x 33 "W x 29 "H	373
GATCP-116	2200	2.5	Gas	Briggs & Stratton	5.5	N/A	Direct	Low	40.5 "L x 29.5 "W x 35.75 "H	368

All units shipped freight prepaid.

Additional units are available under the GATCC & GATCP brands. Contact your Gates representative for more details.

Green Stripe® Fleet and Heavy-Duty Replacement Products

Gates Green Stripe® and heavy-duty products are preferred by four out of five fleets simply because they can't afford costly downtimes. Green Stripe products are your customers' assurance of maximum performance under the most demanding conditions, and at low cost-per mile operation.

Gates continually researches and tests new products to solve problems that arise as changes are made to enhance engine performance, creating a more hostile operating environment for belts.

**For complete application information,
see the Fleet & Heavy-Duty catalog (431-2030)**

Belts

1. Fleet Runner™ Micro-V® Belt
2. Fleet Runner™ V-Belt
3. Green Stripe® PowerBand® Belt
4. Premium V-Ribbed Belt
5. Refrigeration Belt

Clamps

4. Constant Tension Clamp
5. PowerGrip® SB Clamp

Caps & Thermostats

6. Heavy-Duty Gas Cap
7. Heavy-Duty Radiator Cap
8. WeirStat*** Thermostat

Hoses

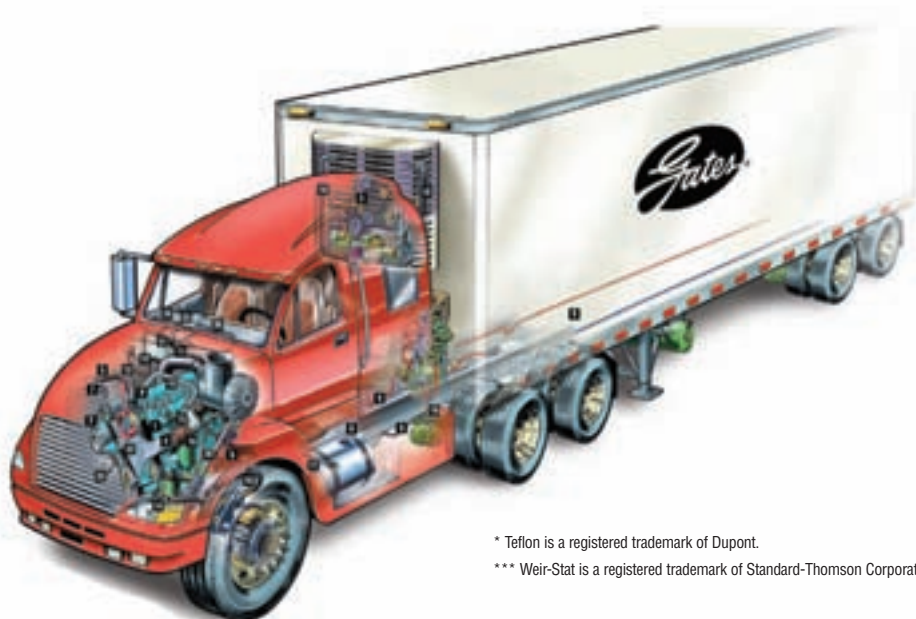
9. Air Brake Hose
10. Air Brake Hose Assembly
11. Green Stripe® AV Vent Hose
12. Green Stripe® Coolant Hose
13. Green Stripe® Heater Hose
14. Green Stripe® Hump Hose
15. Green Stripe® Straight Hose
16. Green Stripe® Turbocharger Hose
17. Fuel Fill Hose
18. Refrigeration Hose & Couplings
19. Silicone Heater Hose
20. Compressor Discharge Hose Assembly
21. Windshield Wiper & Vacuum Tubing
27. Nylon Air Brake Hose
28. C5-Textile Wire Textile Hose

Tensioners & Pulleys

22. DriveAlign® Idler Pulley
23. DriveAlign™ Tensioner

Couplings

29. Surelok Nylon Air Brake Couplings
30. Compression Nylon Air Brake Couplings
31. Compression Rubber Air Brake Couplings
32. C5-DOT AI & AII Couplings



* Teflon is a registered trademark of Dupont.

*** Weir-Stat is a registered trademark of Standard-Thomson Corporation.

Early belt failure could indicate pulley incompatibility

There are two forms of pulley incompatibility: pulley size mismatch and pulley spacing mismatch.

Pulley size mismatch (Fig. 1) often occurs when an original component – an alternator, for example – is replaced in a vehicle. The new alternator may come with a pulley attached or a new pulley may be used to replace the old one. If the new pulley has a different size top-width (ie. a 1/2" replacing a 3/8"), pulley size mismatch will occur.

In this case, because of the size mismatch, the belt will not seat properly in the drive. The result is excessive wear, belt squeal, belt turnover and premature failure.

Pulley spacing mismatch (Fig. 2) can occur in the construction of the vehicle. A fire truck may have a chassis manufactured by Freightliner, an engine made by Detroit Diesel and the vehicle designer decides to incorporate an extra heavy-duty alternator and not consider a possible pulley mismatch which could result.

Dual-groove pulleys incorporate a ridge between grooves to separate the belts. The specifications set by the Rubber Manufacturers' Association, for example, call for a spacing of 16.5 mm. Other manufacturers may specify wider spacing.

To the untrained eye, two 3/8"-inch belts can be installed side by side on seemingly compatible pulleys, but until a belt fails prematurely, or flips out of the drive, the incompatibility might not be seen.

Frequent replacement of belts is not the solution to the problem. When installing a new component, or when replacing a belt after what seems to be an early demise, take time to assure pulley compatibility.

For proper belt-to-pulley fit, Use the easy-to-use Green Stripe® PowerBand® templates for pulley measurement to RMA standards (Fig.3).

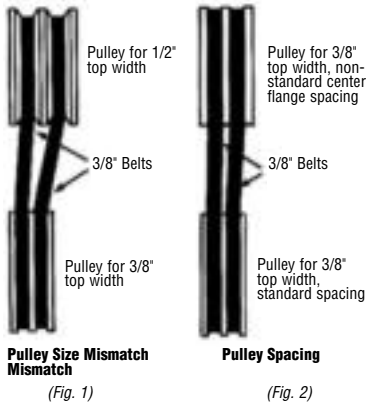
Follow these instructions to determine correct fit:

- 1 With the engine cool and stationary, locate the intended belt set drive and all its accessories. **Never attempt this procedure on a hot or running engine.**
- 2 Insert the two V-shaped portions of the template into the back side of the accessory pulley so the template is standing upright in the grooves. Be certain that the template is in a location where you can see all angles of its position.
- 3 While pressing template into pulley, make certain all four sides make equal contact with all four sides of the pulley. This is the correct fit. (see Figure A).

If only two sides make contact (Figure B & C), the PowerBand belt will not function as intended and is not recommended. The PowerBand belt is also not recommended if the pulley grooves are too shallow causing the template to ride up in the groove (Figure D).

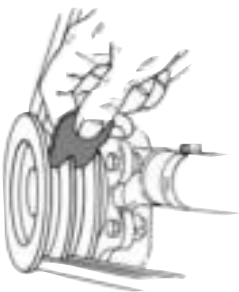
Note: For the complete GreenStripe PowerBand template set, order 31-2036.

For more information on pulley incompatibility, order the video "When Pulleys Don't Agree" #434-0537.

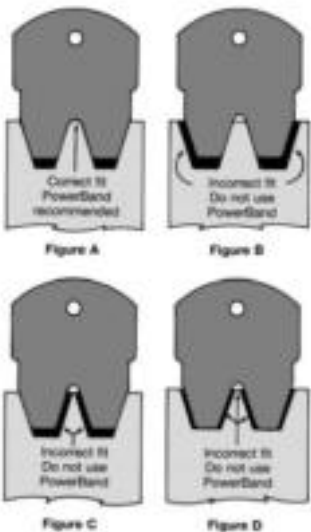


(Fig. 1)

(Fig. 2)



(Fig. 3)



Belts and Drive Systems

Passenger Car, Light Truck and Marine Application Belts

Micro-V® Belts

For replacing original belts on serpentine drives and other V-ribbed belt applications. Designed for small diameter pulleys, backside idlers, and for use with (or without) automatic tensioners.

- Special belt constructions eliminate belt noise, reduce tension loss and solve problem drive applications.
- Specially constructed to resist wear and cracking.
- Special tensile members and fiber-loaded reinforcement of ribs for added wear and crack resistance.
- Unique form grinding of each individual belt assures precise dimensional control.
- Meets or exceeds SAE J1459 specifications.

(Product Type 8552)

Dual-sided Micro-V® Belts

For replacing original equipment belts on serpentine drives that require a higher degree of efficiency when transmitting power. Designed for small diameter pulleys and for use with (or without) automatic tensioners.

- V-ribbed on both sides of the belt
- Specially designed to resist wear and cracking
- Broad coverage on unique applications

XL® V-Belts

Replacement belt for today's most demanding engine drives. Due to thermal forces, this variable notched belt actually tightens on the drive as it gets hot. This results in improved belt performance by reducing tension decay and noise.

- Fiber-loaded rubber stock puts more flexibility along the length of the belt, yet gives the belt greater lateral stability in the pulley.
- Thermally active tensile cords for maintenance-free performance when properly installed and tensioned.
- Form ground to ensure precise top width and sidewall dimensional control for proper fit in pulley as well as a smoother, quieter running belt.
- Belt undercord is aramid fiber reinforced.
- Meets or exceeds SAE J636c specifications.

(Product Type 8701)

Timing Belts

Designed to handle a wide speed range and constant, synchronous drive power requirement common to overhead camshaft applications. OEM equivalent and profile. Meets or exceeds OEM performance requirements. Approved for Marine Applications.

- "Gates is the OE" for Audi, BMW, Chevy, Citroen, Daimler Chrysler, Fiat, Ford, General Motors, Honda, Hyundai, Isuzu, Mazda, Mitsubishi, Nissan, Peugeot, Renault, Subaru, Toyota, Volvo, Volkswagen,
- Most extensive coverage in the industry or domestic and import vehicles.
- Tough, wear-resistant fabric resists oil and engine heat.
- High tensile strength cord construction minimizes stretch.

(Product Type 8595)

Timing Component Kits

A complete Timing Component Kit includes belt(s), idler and tensioner pulley(s) to replace the entire timing belts system. Replace all the worn components, not just the timing belt.

- Avoid warranties and comebacks by replacing all timing system components.
- Save time by providing a one stop source for all timing components.
- Each kit includes detailed installation instructions for each application.
- Tamper-evident packaging assures that all parts are in each box.
- Eliminate the frustration of searching for individual parts.

(Product Type 7782)

Timing Component Kit Oil Seals

The most commonly requested addition to the popular Gates Timing Component Kits, camshaft and crankshaft oil seals, are now available. Do a complete job by replacing the oil seals with the other components within the kits.

- Molded with precise tolerances to provide positive O.D. sealing
- Made of leading edge sealing materials to perform for extended life
- OEM equivalent or better



Belts and Drive Systems

Passenger Car, Light Truck and Marine Applications

DriveAlign™ Automatic Belt Tensioners

Gates Automatic belt tensioners meet and exceed OE specifications for all of today's major car manufacturers.

- Fits, looks, and performs like OEM design.
- OE Vibration damping system improves tensioners, belt, and accessory bearing life.
- Torsional round spring design provides consistent tension and is not effected by contamination.
- Comprehensive line includes parts to fit cars, vans, suv, light trucks and imports.

For application information see the alphabetical section of catalog.

(Product Type 7808)



DriveAlign® Idler Pulleys

Manufactured for use on automobiles and light trucks with locked center and automatic tensioners.

- Meets and exceeds OE specifications.
- High quality, high strength bearings run cooler. Last ten times longer than original bearings.
- Steel and glass reinforced polymer pulleys built to last, resist dirt, salt and other under-hood contaminants.

Packaging: Individually boxed.

(Product Type 7803)



Heavy-Duty Fleet, Off-Road Equipment and Marine Applications

(See 431-2030 for complete application information)

Green Stripe® Micro-V® Belts

Long wearing fiber-loaded stocks with greater load-carrying capacity designed for demanding, heavy-service drives. For replacing original belts on serpentine drives and other heavy-duty V-ribbed belt applications. Approved for Marine Applications.

- Special belt constructions eliminate belt noise, reduce tension loss and solve problem drive applications.
- Extra heavy-duty construction resists cracking and wear.
- Precision ground to assure optimum belt-to-pulley fit.
- Special formation process for precise dimensional control.
- Reinforced with stretch-resistant, thermally active polyester tensile members.
- Meets or exceeds SAE J1459 specifications.

(Product Type 8552)



FleetRunner™ Micro-V Belts – “The Green Belts”

- Belt of choice by fleets, including 3/4 & 1 ton pickups
- Lowest cost per mile
- Consistently outperforms all competitors
- Outstanding crack resistance at extreme temperatures
- Problem solver
- Designed for toughest applications



Belts and Drive Systems (continued)

Heavy-Duty Fleet, Off-Road Equipment and Marine Application Belts (continued)

DriveAlign™ Heavy-Duty Automatic Belt Tensioners

The longest lasting belt tensioners in the industry. Engineered to exceed demanding OEM requirements. In laboratory tests, under extreme peak-to-peak vibration and contamination tests, DriveAlign heavy-duty tensioners lasted up to three times longer than competitive aftermarket tensioners did.

- Labyrinth Seal – prevents contamination of internal parts for maximum durability and service life
- Machined Steel Pulley – reduces surface wear while shielding internal bearing from outside contaminants
- Double Row Bearings – twin rows of bearings minimize friction for reduced bearing wear and noise
- Optimized Components – engineered for maximum strength and durability
- Patented Design – provides superior belt alignment and tension for improved drive efficiency and life
- Round Spring Wire – includes chrome-silicone torsion spring for less flex-fatigue than flat-wire designs
- Patented Damping Mechanism – provides maximum stability, reducing vibration and increasing tensioner life



DriveAlign® Heavy-Duty Idler Pulleys

Long-lasting pulleys built to endure the rigors of today's heavy-duty, fleet and off-road equipment.

- Superior bearings out perform OE Idler Pulleys.
- Robust and high quality pulley materials to withstand contaminants.



FleetRunner™ Heavy-Duty V-Belts

Patented EPDM construction with distinct green overcord built specifically for more durability and longer life on heavy duty drives.

- Outperforms the competition on the most troublesome drives
- Special compound provides un-matched flexibility, stability, load carrying capacity, and belt life
- Patented material provides peak performance at extreme prolonged operating temperatures
- Heavy-duty construction resists cracking and wear
- Oil and heat resistant
- Unique undercord notch pattern offers increased flexibility for smaller diameter pulleys
- Available in over 70 1/2" V-belts sizes



Green Stripe® XL® V-Belts

Premium quality replacement belts for heavy-duty engines. Approved for Marine Applications.

- Fiber loaded rubber stock puts added flexibility along belt's length, yet affords greater lateral stability.
- Variable notch pattern causes belt to run cooler, quieter and with less bending stress.
- Precision V-forming process assures exact size and angle control.
- High tenacity tensile cords and special layer of reinforcement for long, maintenance-free performance when belt is properly installed and tensioned.
- Meets or exceeds SAE 636 specifications.
- Meets or exceeds RMA standards for static conductivity.

(Product Type 8701)



Belts and Drive Systems (continued)

Heavy-Duty Fleet, Off-Road Equipment and Marine Application Belts (continued)

Green Stripe® Truck and Bus Series V-Belts

Specifically designed for heavy-duty truck, bus and off-road equipment applications. Absorbs normal shock loads without damage to belt.

- Special tensile cords give high stretch resistance.
- Special notch design resists cracking while providing tensile member support during operation.
- Deep notch pattern also allows greater flexibility over small diameter pulleys and helps keep the belt cool.
- Oil and heat-resistant construction throughout.
- Meets SAE J636b and SAE J637 specifications.

(Product Type 8620)

Green Stripe® BSX® V-Belts

Ideal for high-torque, high-horsepower, tough long span applications with backside idlers.

- Thin profile for less resistance on the backside bend.
- Cordline specifically located to reduce stress on the belt's notch apex.
- Special undercord compound is crack resistant.
- Layer of aramid fibers helps belt slide in and out of pulleys efficiently.
- Meets or exceeds RMA standards for static conductivity.

NOTE: Do not use the Green Stripe BSX V-Belt if your long span drive does not have a backside idler. It will not be as stable as the standard Green Stripe XL Belt.

(Product Type 8545)

Green Stripe® PowerBand® Belts

Designed for problem, heavy-duty, heavily vibrating automotive applications requiring belt sets. Tie-band feature joining belts together ensures stability lacking in ordinary belt sets.

- Even load distribution between strands provides better shock load absorption.
- Belt can't turn over or slip off drive.
- Unique tensile cord design gives belt extra strength, added flexibility and shock-load resistance.
- Molded notches reduce bending stress, especially on small diameter pulleys. Also helps dissipate heat.
- Meets or exceeds SAE J1459 specifications.

(Product Type 8541)

Refrigeration Belts

Gates offers a unique line of heavy-duty construction V-belts ideal for use in truck and trailer refrigeration units. Fits most popular applications.

For application information, see Gates Catalog 31-2030.

Heavy-Duty Industrial Belts

Gates belts are the number one choice of industry thanks to a long-lasting commitment to product innovation, improvement through research and development, and quality.

Hi-Power® II Belts

Designed to give long, dependable service and superior performance on heavy-duty A, B, C, D and E Section single or multiple V-belt drives.

- Composite multi-purpose construction reduces flex fatigue.
- Superior resistance to oil, heat, ozone, sunlight, weather.
- Meets Rubber Manufacturer's Association tests for static conductivity.
- Superior length stability means less tensioning and takeup during service.
- V80 Gates matching program guarantee.


(Product Type 9002 - 9006)

Belts and Drive Systems (continued)

Heavy-Duty Industrial Belts (continued)

Tri-Power® Belts **Vextra**

Constructed to provide superior performance on the toughest heavy-duty A, B and C Section industrial drives. Carries a higher horsepower rating than conventional cross section belts. Ideal for drives with small diameter sheaves (where conventional A, B and C Section belts are not recommended).

- Vextra construction
-  Gates matching program guarantee.
- Special molded notch reduces bending stresses, especially on drives with smaller diameter sheaves.
- Tough tensile members for superior resistance to fatigue and shock loads.
- Bandless cut edge for even wedging action and uniform fit.
- Meet or exceed Rubber Manufacturer's Association tests for static conductivity.


(Product Type 9012 - 9015)



Super HC® and Super HC **Vextra**

Molded Notch V-Belts

Recommended for use on special drives where space and weight limitations are critical. They can transmit up to three times the horsepower of conventional V-belts in the same drive space. In many cases, they can replace high maintenance chain and gear drives.

- Vextra construction
-  Gates matching program guarantee.
- Reduce weight and overhung load on bearings.
- Sheaves can be smaller in diameter and operate at belt speeds up to 6,500 fpm without dynamic balancing.
- Special material that resists oil, heat, sunlight, ozone, weathering and aging.
- Special tensile cords treated with a material that bonds with the cords and surrounding rubber.
- Meets or exceeds RMA standards for static conductivity.

(Product Type 9006)



Belts and Drive Systems (continued)

Heavy-Duty Industrial Belts and Industrial Belts (continued)

Industrial Micro-V® Belts (J, L and M Series)

Specially designed to replace original equipment belts on extra heavy applications such as machine tools, compressors, pumping equipment and other industrial equipment requiring V-ribbed belts.

- Exclusive Gates truncated belt design offers up to 80% higher horsepower capacity than RMA standards.
- Increased flexibility, reduced heat buildup permit extra high speeds on smaller diameter sheaves.
- Highly resistant to oil, heat and other adverse conditions.
- Less sensitive to debris in sheave groove.
- Meets or exceeds RMA standards for static conductivity.
- Energy efficient.
- Runs cooler than conventional belts.
- High power density.

(Product Type 9171, 9173 and 9174)

Special Application Belts

For complete coverage on Gates Special Application Belts, see Catalog 431-2060. Appliance Owners' Manuals should also be consulted for recommended replacement parts.

BladeRunner™ Belts

An aftermarket belt designed and applied to specific unique applications providing exact OEM fit, construction, and performance of leading lawn and garden equipment manufacturers.

Built to withstand the rigorous start and stop operation of outdoor power equipment.

- Meets or exceeds the performance of each specific application
- Utilizes Aramid cord construction in most cases
- Smooth operation during frequent and severe shock loads
- Reduces costly downtime and labor associated with replacing a belt
- Superior performance over fractional horsepower belts on recommended applications.

PoweRated® V-Belts

PoweRated belts transmit more horse-power than conventional utility belts... up to 17 horsepower. Gives outstanding performance on drives with backside idlers.

- Reinforced with aramid tensile cord, pound for pound stronger than steel.
- Green Flex-Weave® cover resists heat, oil and cracking.
- Superior performance on clutching and backside idler drives.

NOTE: PoweRated V-Belts can be substituted for equivalent sizes of Truflex V-Belts.

(Product Type 8423)

Note: PoweRated belts do not meet RMA requirements for static conductivity.

Truflex® V-Belts

Recommended for lower horsepower lawn and garden equipment, heating and home air conditioning drives, light-duty appliances, shop and miscellaneous fractional horsepower applications.

- "Universal Construction" features cord placement that combines with oil and heat-resistant Flex-Weave® cover to provide smooth, quiet operation with reduced vibration.
- Concave sides fill out to make even contact with the sides of the sheave grooves to distribute wear uniformly.
- Oil and heat resistant. Also resists ozone, weather and many chemicals and detergents.
- Meets or exceeds RMA standards for static conductivity.

NOTE: Do not use on clutching drives and applications where PoweRated belts are recommended.

(Product Type 8400)

Belts and Drive Systems (continued)

Special Application Belts (continued)

Xtreme® Mountain Snowmobile Belts

Xtreme Mountain snowmobile belt is built to take snowmobilers faster, higher and farther in deep powder and hill climbing situations. Field tests show Xtreme Mountain belt lasts at least three times longer than other high performance belts.

- Able to withstand higher operating temperatures.
- Runs cooler during aggressive driving
- Especially for snowmobiles in the 440cc to 900 cc range (with 60hp and over 9,000 rpm)



Xtreme® High Performance Snowmobile Belts

Designed to meet the toughest rider demands and hyper sled action. Offers better fit and flexibility, using advanced composite technology.

- Kevlar* cords for unsurpassed strength and flexibility.
- Gives top performance even at -30°F (-34°C).
- Maximum clutch efficiency.
- Extra long life and dependability in deep powder or hard pack conditions.

(Product Type 9839)

For complete application data, see Gates Catalog 431-2070.

*Kevlar is a registered trademark of The Dupont Corporation.



Trail Runner® Snowmobile Belts

Built for lower horsepower entry-level or touring sleds, or riders with moderate demands. Outlasts ordinary snowmobile belts.

- Quality materials coupled with high-tech design provide long life and dependability.
- Peak clutch efficiency.

(Product Type 9836)

For complete application data, see Gates Catalog 431-2070.



Sportline® Recreational Equipment V-Belts

Specially designed for mini-bikes, all-terrain vehicles, golf carts, vintage snowmobiles and other recreational vehicles. Retains dependability throughout wide range of speed and load variations.

- Low temperature flexibility helps assure smooth vehicle operation.
- Reinforced with aramid fibers for extra strength on higher horsepower, high speed recreational application drives.

NOTE: Do not use Sportline Belts as timing belts.

(Product Type 9806 & 9831)

For complete application data, see Gates Catalog 431-2060.



Coolant Hose and Systems

Passenger Cars, Light Trucks
and Marine Applications



Molded Coolant Hose

Factory molded to fit specific applications. Similar to OEM specifications. Approved for marine applications.

- Recommended for upper, lower, by-pass, heater and other coolant hose applications.
- Heat and ozone resistant cover.
- **Engineered to resist electrochemical degradation – the leading cause of hose failure.**
- Re-engineered materials resist vacuum collapse. This reduces the need for internal springs in many applications.
- Meets SAE 20R4 and 20R3 Type EC Class D-1 and D-2 specifications.

Temperature Rating: -40°F to 275°F (-40°C to 135°C) in coolant hose applications

NOTE: Gates recommends replacing standard worm drive and spring loaded clamps with PowerGrip® SB clamps each time a new coolant hose is installed.

CAUTION: Do not use for fuel or oil transfer applications.

(Product Type 4261)

For sizes and configurations, see Gates 431-2040 Competitive Number I.D. Guide.



Branched Radiator Hose

Molded to fit specific applications. Factory quality connections are durable, and eliminate coolant leaks.

- **Engineered to resist electrochemical degradation – the leading cause of hose failure.**
- Heat & ozone resistant cover
- Meets SAE 20R4 and 20R3 Type EC Class D-1 and D-2 specifications.

Temperature Rating: -40°F to +275°F (-40°C to +135°C) in coolant hose applications.

NOTE: Gates recommends replacing standard worm drive and spring loaded clamps with PowerGrip SB Clamps each time a new coolant hose is installed.

CAUTION: Do not use for fuel or oil transfer applications

(Product Type 4294)



Small Inside Diameter Molded Coolant Hose

Specially designed, OEM style factory-molded hose to fit today's smaller, tighter-fitting engine compartments. Can be used for coolant, water and air applications. Approved for marine applications.

- Similar to OEM specifications.
- Has all the quality features of Gates molded coolant hose.
- **Engineered to resist electrochemical degradation – the leading cause of hose failure.**
- Inside diameters range from ¼" to 1".
- Meets SAE 20R3 Type EC Class D-1 and D-2 specifications.

Temperature rating: -40°F to 275°F (-40°C -135°C) in coolant hose applications.

NOTE: Gates recommends replacing standard worm drive and spring loaded clamps with PowerGrip SB clamps each time a new coolant hose is installed.

CAUTION: Do not use for fuel or oil transfer applications.

(Product Type 4257)

Coolant Hose and Systems (continued)

Passenger Cars, Light Trucks and Marine Applications (continued)

Vulco-Flex® II Coolant Hose

Redesigned Gates Vulco-Flex II will bend in almost any direction. It easily replicates the angles and planes of a wide variety of expensive original equipment coolant hose, for quick, easy, replacement.

- Improved sealing surface for greater leak resistance and increased flexibility for easier installation
- Heat and ozone resistant cover
- Rated for SAE 20R5 Class D-2 performance
- High temperature rating up to +257°F(+125°C)

NOTE: Gates recommends replacing clamps each time a new coolant hose is installed.

CAUTION: Do not use for fuel or oil transfer applications. (Product Type 4254)



Part No.	I.D. Inches (mm)	Length Inches (mm)	Part No.	I.D. Inches (mm)	Length Inches (mm)	Part No.	I.D. Inches (mm)	Length Inches (mm)
25149	1 1/8 (29)	9 (230)	25269	1 1/4 (32)	41 (1041)	25478	1 1/2 (38)	17 (394)
25150	1 1/8 (29)	12 (305)	25284	1 1/4 (32), 1 1/8 (35)	26 (660)	25480	1 1/2 (38)	20 (508)
25152	1 1/8 (29)	15 (381)	25300	1 1/4 (32), 1 1/2 (38)	12 (305)	25482	1 1/2 (38)	22 (559)
25154	1 1/8 (29)	18 (457)	25302	1 1/4 (32), 1 1/2 (38)	15 1/2 (394)	25484	1 1/2 (38)	25 (635)
25157	1 1/8 (29)	23 (584)	25305	1 1/4 (32), 1 1/2 (38)	19 1/2 (495)	25487	1 1/2 (38)	30 (762)
25180	1 1/8 (29), 1 1/4 (32)	19 (483)	25307	1 1/4 (32), 1 1/2 (38)	23 (584)	25490	1 1/2 (38)	35 (889)
25249	1 1/4 (32)	7 1/2 (190)	25309	1 1/4 (32), 1 1/2 (38)	26 (660)	25499	1 1/2 (38)	48 (1219)
25250	1 1/4 (32)	9 1/2 (240)	25311	1 1/4 (32), 1 1/2 (38)	29 (737)	25526	1 1/2 (38), 1 3/4 (44)	13 1/5 (335)
25251	1 1/4 (32)	13 (330)	25321	1 1/4 (32), 1 1/2 (38)	44 (1118)	25527	1 1/2 (38), 1 3/4 (44)	15 (381)
25252	1 1/4 (32)	15 (381)	25384	1 3/8 (35)	25 (635)	25528	1 1/2 (38), 1 3/4 (44)	16 1/2 (419)
25253	1 1/4 (32)	17 (432)	25409	1 3/8 (35), 1 1/2 (38)	26 (660)	25530	1 1/2 (38), 1 3/4 (44)	20 (508)
25254	1 1/4 (32)	18 1/2 (470)	25428	1 3/8 (35), 1 1/2 (41)	17 (432)	25532	1 1/2 (38), 1 3/4 (44)	22 (559)
25255	1 1/4 (32)	20 (508)	25472	1 1/2 (38)	8 (205)	25535	1 1/2 (38), 1 3/4 (44)	27 (686)
25257	1 1/4 (32)	23 (584)	25473	1 1/2 (38)	10 1/2 (265)	25582	1 1/2 (38), 2 (51)	22 (559)
25260	1 1/4 (32)	26 1/2 (673)	25474	1 1/2 (38)	12 (305)	25804	1 1/2 (38)	19 3/4 (505)
25262	1 1/4 (32)	30 (762)	25476	1 1/2 (38)	14 (356)	25806	1 1/2 (38)	23 1/8 (589)
25265	1 1/4 (32)	35 (889)	25477	1 1/2	15 1/2 (394)	25808	1 1/2 (38)	25 5/8 (650)

Green Stripe® Straight Coolant Hose

Stick hose designed for demanding heavy-duty coolant/air applications. Approved for Marine Applications.

- Two-ply bias fabric construction to maximize flexibility and strength.
- Resists "cold water leaks" thanks to advanced EPDM tube and cover that stay soft and pliable, even under adverse operating conditions.
- Exceeds SAE 20R1 Type EC (Class D-1 Tube, and cover, Standard Wall).
- **Engineered to resist electrochemical degradation – the leading cause of hose failure.**

CAUTION: Do not use for fuel or oil transfer applications.

Temperature rating: -40°F to +257°F (-40°C to +125°C).

Packaging: 3 ft. lengths. (Product Type 4168)



Part No.	I.D. (In.)	Work. Press. (psi)	Part No.	I.D. (In.)	Work. Press. (psi)	Part No.	I.D. (In.)	Work. Press. (psi)	Part No.	I.D. (In.)	Work. Press. (psi)
24212	3/4	100	24222	1 3/8	100	24232	2	60	24242	2 3/8	60
24214	7/8	100	24224	1 1/2	100	24234	2 1/8	60	24244	2 3/4	60
24216	1	100	24226	1 5/8	85	24236	2 1/4	60	24246	2 7/8	55
24218	1 1/8	100	24228	1 3/4	75	24238	2 3/8	60	24248	3	25
24220	1 1/4	100	24230	1 7/8	75	24240	2 1/2	60	24250	3 3/8	25

Green Stripe® 4-Ply Coolant Hose

For severe operating conditions found on stationary engines, construction equipment and off-road vehicle applications. Nitrile tube specially compounded to handle common coolants and additives.

- Four plies of woven, heavy-duty fabric reinforcement
- Neoprene cover resists heat, abrasion and oil.
- Handles higher temperatures and resists petroleum additives.
- Exceeds SAE 20R1 (Class B Tube, Class C Cover, Heavy Wall).

CAUTION: Do not use for gasoline or diesel transfer applications.

Maximum constant working temperature: -40°F to +212°F (-40°C to +100°C), intermittent to 257°F (125°C)

Packaging: 3 ft. lengths, 1 each. (Product Type 4179G)



Part No.	I.D. (In.)	Work. Press. (psi)	Part No.	I.D. (In.)	Work. Press. (psi)	Part No.	I.D. (In.)	Work. Press. (psi)	Part No.	I.D. (In.)	Work. Press. (psi)
24428	1 1/4	100	24436	2 1/4	90	24444	2 3/4	60	24452	3 1/4	50
24430	1 1/8	100	24438	2 3/8	90	24446	2 7/8	60	24456	3 1/2	50
24432	2	90	24440	2 1/2	75	24448	3	60	24458	3 3/8	50
24434	2 1/8	90	24442	2 3/4	75	24450	3 1/8	60	24460	3 3/4	50

Coolant Hose and Systems (continued)

Heavy-Duty Fleet, Off-Road Equipment and Marine Applications



Vulco® Straight Coolant Hose

Specially engineered stick hose is ideal for straight coolant/air connections in automotive, stationary engine, industrial and home applications.

- Heat-resistant cover.
- Meets SAE 20R1 Standard Wall Class D-2 requirements.
- Cover marked in one-inch increments for easy measuring and cutting... allows "custom fit" light-duty coolant installations.

Temperature rating: -40°F to 257°F (-40°C to 125°C)

Packaging: 3 ft. lengths.

CAUTION: Do not use for fuel or oil transfer applications.

(Product Type 4178)

Part No.	I.D. (In.)	Work. Press. (psi)	Part No.	I.D. (In.)	Work. Press. (psi)	Part No.	I.D. (In.)	Work. Press. (psi)	Part No.	I.D. (In.)	Work. Press. (psi)	Part No.	I.D. (In.)	Work. Press. (psi)
24008	½	105	24020	¼	65	24030	1⅞	50	24040	2½	35	24052	¾	20
24012	¾	80	24022	1⅜	65	24032	2	50	24042	2⅝	30	24056	3½	18
24014	⅞	80	24024	1½	60	24034	2⅞	45	24044	2¾	30	24064	4	12
24016	1	75	24026	1⅝	55	24036	2¼	40	24046	2⅞	25			
24018	1⅝	75	24028	1¾	50	24038	2⅝	40	24048	3	25			



Green Stripe® Vulco-Flex® Coolant Hose

Heavy-duty flexible hose designed to replace straight or curved coolant hoses. The benefit is maximum coverage with minimum inventory. Hose inside diameter remains constant from end to end. Approved for Marine Applications.

- Excellent flexibility, yet collapse and kink resistant.
- Extra strength fabric reinforcement with helical steel wire spiral molded between tube and cover.
- Heat resistant construction throughout.
- EPDM tube and neoprene cover for extended service life.
- Performs to SAE 20R5 Type EC Class D-2 specifications.
- **Engineered to resist electrochemical degradation – the leading cause of hose failure.**

Temperature rating: -40°F to +257°F (-40°C to +125°C)

Working pressure 40 psi maximum.

Packaging: 5 per carton.

CAUTION: Do not use for fuel or oil transfer applications.

(Product Type 4284)

For sizes and configurations, see Gates 431-2040 Competitive Number I.D. Guide.

Part No.	I.D. Inches (mm)	Length Inches (mm)	Part No.	I.D. Inches (mm)	Length Inches (mm)	Part No.	I.D. Inches (mm)	Length Inches (mm)
26501	1¾ (44)	13½ (343)	26516	2 (51), 2¼ (57)	17½ (445)	26530	2½ (64)	14 (356)
26502	1¾ (44)	16½ (419)	26517	2 (51), 2¼ (57)	25 (635)	26531	2½ (64)	16 (406)
26503	1¾ (44), 2 (51)	10 (254)	26518	2 (51), 2½ (64)	20 (508)	26532	2½ (64)	24 (610)
26504	1¾ (44), 2 (51)	16½ (419)	26519	2¼ (57)	9 (229)	26533	2½ (64)	28 (711)
26505	1¾ (44), 2 (51)	19 (483)	26520	2¼ (57)	11 (279)	26534	2¾ (70)	7 (178)
26506	1¾ (44), 2 (51)	23½ (597)	26521	2¼ (57)	14 (356)	26535	2¾ (70)	14 (356)
26507	2 (51)	9½ (241)	26522	2¼ (57)	17 (432)	26536	2¾ (70)	18 (457)
26508	2 (51)	12¼ (311)	26523	2¼ (57)	19 (483)	26537	2¾ (70)	32 (813)
26509	2 (51)	14½ (368)	26524	2¼ (57)	24 (610)	26538	3 (76)	37 (940)
26510	2 (51)	17 (432)	26525	2¼ (57)	27 (686)	26601	1¾ (44)	6 (152)
26511	2 (51)	20 (508)	26526	2¼ (57), 2½ (64)	18 (457)	26602	1¾ (44)	8½ (216)
26512	2 (51)	24 (610)	26527	2¼ (57), 2½ (64)	21 (533)	26603	1¾ (44)	11 (279)
26513	2 (51)	33 (838)	26528	2¼ (57), 2½ (64)	25 (635)	26611	1¾ (44)	19 (483)
26514	2 (51), 2¼ (57)	8½ (216)	26529	2½ (64)	11 (279)	26612	1¾ (44)	23½ (597)
26515	2 (51), 2¼ (57)	15 (381)						

Coolant Hose and Systems (continued)

Heavy-Duty Fleet, Off-Road Equipment and Marine Applications (continued)

Wire-Inserted Green Stripe® Coolant Hose

Provides the ability to replace many sizes of tailor-made curved hoses. Results in maximum coverage with minimum inventory. Approved for Marine Applications.

- Heavy-duty fabric reinforcement with helical carbon steel wire.
- Bends easily to make curved connections.
- Cuts easily with knife and wire cutters to reduce installation time.
- Exceeds SAE 20R2 Type EC (Class D2 Tube and cover) except in vacuum applications.
- **Engineered to resist electrochemical degradation – the leading cause of hose failure.**
- Resists water permeation.

Do not use for oil, hydraulic or fuel transfer.

Temperature rating: -40°F to +257°F (-40°C to +125°C)

Packaging: Available in 5 ft. and 10 ft. lengths, individually cartoned.

CAUTION: Do not use for oil, or fuel transfer applications.
(Product Type 4685)



Part No.	Part No.	I.D.	Work.	Vacuum	Min.	Part No.	Part No.	I.D.	Work.	Vacuum	Min.
5 Foot	10 Foot	(In.)	Press.	(In. Hg.)	Bend Radius	5 Foot	10 Foot	(In.)	Press.	(In. Hg.)	Bend Radius
			(psi)		(In.)				(psi)		(In.)
24916	28316	1	100	25	2	24938	—	2½	50	20	6 ½
24918	—	1½	100	25	2½	24940	28340	2½	50	20	6 ½
24920	28320	1¼	100	25	2½	24942	—	2½	40	15	7 ½
24922	—	1¾	85	25	3	24944	28344	2¾	40	15	7 ½
24924	28324	1½	85	20	3½	24946	—	2½	40	15	9
24926	28326	1¾	75	20	3½	24948	28348	3	40	15	9
24928	28328	1¾	75	20	4	24956	28356	3½	35	15	12
24930	28330	1¾	60	20	4½	24964	—	4	30	10	20
24932	28332	2	60	20	4½	24980	—	5	15	5	24
24934	—	2½	55	20	5½	24996	—	6	15	5	30
24936	28336	2¼	55	20	5½						

NOTE: Long spans must be supported every 3 feet.

Green Stripe® Vibraflex® Coolant Hose

For heavy-duty applications requiring short length hose that must absorb vibration and/or fitting misalignment. High flexibility reduces installation time and provides lower cost-per-mile operation.

- Oil and heat resistant nitrile tube.
- Oil, abrasion and heat resistant neoprene cover.
- Exceeds SAE J20 (Class B Tube and Class C Cover).
- Two-ply fabric reinforced.

Temperature rating: -40°F to 212°F (-40° to 100°C)

Packaging: One each, not cartoned.

CAUTION: Do not use for gasoline or diesel transfer applications.
(Product Types 3177 and 4177W)



Part No.	I.D. x Lgth. (In.)	Work. Press. (psi)	Part No.	I.D. x Lgth. (In.)	Work. Press. (psi)	Part No.	I.D. x Lgth. (In.)	Work. Press. (psi)	Part No.	I.D. x Lgth. (In.)	Work. Press. (psi)
23505	1¼ x 4	70	23547	2¼ x 4½	40	23567	2¾ x 4½	30	23004	5 x 6	25
23511	1¾ x 5	60	23557	2¾ x 5	35	23568	2¾ x 5¾	30	23005	5½ x 6	25
23515	1½ x 5	60	23559	2¾ x 6¼	35	23572	3 x 4	25	23006	6 x 5	25
23520	1¾ x 5	55	23562	2½ x 4½	35	23575	3 x 7	25			
23531	2 x 3½	50	23550	2½ x 6	35	23585	3½ x 5½	25			
23533	2 x 5	50	23566	2¾ x 3¼	30	23002	4 x 5	25			

Coolant Hose and Systems (continued)

Heavy-Duty Fleet, Off-Road Equipment and Marine Applications (continued)



Durion® Silicone Coolant Hose

Extra long-lasting hose constructed with silicone rubber. Ideal for extremely high temperature service in radiator, heater and other coolant transfer hose applications.

- Excellent for extreme ambient and radiant temperature conditions.
- Resists weathering, ozone, heat and coolant deterioration.
- Silicone tube and cover resist prolonged exposure to under-hood and coolant heat.
- Use PowerGrip SB clamps or silicone hose clamps.
- Exceeds SAE 20R1 (Class A Standard Wall).

Temperature rating: -70°F to +350°F (-56°C to +177°C)

Packaging: 3 ft. lengths. Individually polybagged.

CAUTION: Do not use for fuel or oil transfer applications.

NOTE: Silicone's water permeation rate is 10 to 15 times greater than Green Stripe coolant hose. (Product Type 4171)

Part No.	I.D. (In.)	Work. Press. (psi)	Part No.	I.D. (In.)	Work. Press. (psi)	Part No.	I.D. (In.)	Work. Press. (psi)	Part No.	I.D. (In.)	Work. Press. (psi)
24808	½	110	24820	1¼	85	24836	2¼	75	24852	¾	40
24810	⅝	110	24822	1⅜	85	24838	2⅝	65	24856	3½	35
24812	¾	110	24824	1½	85	24840	2½	65	24860	3¾	35
24814	7⁄8	110	24826	1⅝	80	24844	2¾	50	24864	4	35
24816	1	90	24828	1¾	80	24848	3	50	24872	4½	25
24818	1⅛	90	24832	2	75	24850	3⅛	40			

Hose I.D. Reducers

Slip inside current Gates hose to reduce inside diameters. Gives maximum coverage with minimum hose inventory. Make it possible to adjust inside diameters of larger hoses for emergency replacements.

- Quality rubber construction assures maximum dependability, no leakage.
- Fits Green Stripe straight or Green Stripe Vulco-Flex hoses.

CAUTION: Recommended for coolant and air applications only.

(Product Type 7736)

Part No.	Size (In.)	Part No.	Size (In.)
26390	1½ to 1¼	26393	2¼ to 2
26391	1¾ to 1½	26394	2½ to 2¼
26392	2 to 1¾	26395	3 to 2½



Coolant Hose and Systems (continued)

Passenger Cars and Light Trucks Heater/Coolant Hose

Safety Stripe® Heater Hose

EPDM hose constructed for extra-long service life.

- Unaffected by most coolants and non-oil based coolant additives.
- Unaffected by high cooling system pressures.
- Good resistance to high temperatures for extended periods of time.
- Similar to SAE 20R3 Class D-2.
- Not recommended for heavy duty truck, bus and off-road construction equipment — use Green Stripe® heater hose for these applications.
- **Engineered to resist electrochemical degradation – the leading cause of hose failure.**



Temperature rating: -40°F to +257°F
(-40°C to +125°C)

Packaging: Individual cartons or reels.

CAUTION: Do not use for fuel or oil transfer applications.
(Product Type 3270)

Part No.	I.D. (In.)	I.D. (mm)	Length (Ft.)	Working Pressure (psi)
28407	¼	6.3	50	60
28408	⅜	7.9	50	60
28409	½	9.5	50	60
28410	⅝	12.7	50	60
28411	¾	15.9	50	60
28417	¾	15.9	250 (reel)	60

Part No.	I.D. (In.)	I.D. (mm)	Length (Ft.)	Working Pressure (psi)
28412	¾	19.0	50	50
28418	¾	19.0	250 (reel)	50
28413	1	25.4	50	45
28420	1	25.0	25	45
28421	¾	25.0	25	50
28422	¾	25.0	25	60

Polybagged Safety Stripe® Heater Hose

Ideal self-service package for retail oriented merchandising. Fits standard pegboard displays.

- Package measures 12" wide x 13" high.
- Hose comes in 6 ft. lengths of Gates Safety Stripe® heater hose in ⅜", ½", ⅝" and ¾" I.D.

Packaging: 25 units per carton.
(Product Type 3269S)

Part No.	I.D. (In.)	I.D. (mm)
28489	⅜	9.5
28490	½	12.7
28491	⅝	15.9
28492	¾	19.0



Firewall® Heater Hose

Extra duty hose designed for maximum durability. Easily recognized by its red cover.

- Unaffected by most coolants and non-oil based coolant additives.
- Unaffected by high cooling system pressures.
- Good resistance to high temperatures for extended periods of time.
- Similar to SAE 20R3 Class D-2.

Temperature rating: -40°F to +257°F
(-40°C to +125°C)

Packaging: Individually cartoned.

CAUTION: Do not use for fuel or oil transfer applications.

(Product Type 3271)

Part No.	I.D. (In.)	I.D. (mm)	Length (Ft.)	Work. Press. (psi)
28430	½	12.7	50	60
28431	⅝	15.9	50	60
28432	¾	19.0	50	50

Part No.	I.D. (In.)	I.D. (mm)	Length (Ft.)	Work. Press. (psi)
28433	⅝	15.9	250	60
28434	¾	19.0	250	50



Charter® Heater Hose

Economically priced heater hose – yet affords long service life. Tested by Gates to assure reliability.

- Good resistance to high temperatures.
- Good resistance to non-oil based coolant additives.
- Moderate resistance to oil and grease contamination.
- Similar to SAE 20R3 Class D-2.

Temperature rating: -40°F to +257°F
(-40°C to +125°C)

CAUTION: Do not use for fuel or oil transfer applications.

Packaging: Individually cartoned.
(Product Type 3272)

Part No.	I.D. (In.)	I.D. (mm)	Length (Ft.)	Working Pressure (psi)
28400	½	12.7	50	60
28403	½	12.7	250	60
28401	⅝	15.9	50	60

Part No.	I.D. (In.)	I.D. (mm)	Length (Ft.)	Working Pressure (psi)
28404	⅝	15.9	250	60
28402	¾	19.0	50	50
28405	¾	19.0	250	50



Coolant Hose and Systems (continued)

Passenger Cars and Light Trucks (continued)

Heater/Coolant Hose (continued)



Green Stripe® Heater Hose

Heavy-duty construction assures dependable operation in truck, bus and off-road equipment heater systems. For a maintenance free connection, install with Power-Grip® SB clamps. Approved for Marine Applications.

- Green Stripe construction provides best cost-per-mile economics.
- Cover is abrasion resistant.
- Advanced EPDM tube, cover and reinforcement withstand high under-hood and coolant temperatures. Designed for extended use without cracking or hardening.
- **Engineered to resist electrochemical degradation – the leading cause of hose failure.**
- Exceeds SAE 20R1 Type EC, Standard Wall Class D-1.
- Reduces water loss from water permeating the hose wall and cover, a distinct advantage over silicone.

Temperature rating: -40°F to +275°F (-40°C to +135°C)

Packaging: Individually cartoned.

CAUTION: Do not use for fuel or oil transfer applications.
(Product Type 3269S)

Part No.	Part No.	I.D.	I.D.	Work.
50 Foot	300 Foot	(In.)	(mm)	Press.
28439	—	½	12.7	105
28441	28447	⅝	15.9	95
28442	28448	¾	19.0	80
28443	—	7/8	22.2	80
28444	—	1	25.4	75
28445	—	1 ¼	31.7	70



Durion® Silicone Heater Hose

Constructed with silicone rubber. Ideal for extremely high temperature service in radiator, heater and other coolant transfer hose applications. Approved for Marine Applications.

- Reinforced with tough, high temperature resistant polyester textile cords.
- Exceptionally flexible.
- Highly resistant to weathering, coolant deterioration, ozone and temperature extremes.
- Exceeds SAE 20R3 Class A Tube and Cover.
- Also can be used for emission hose applications.

For proper installation, use Gates PowerGrip SB Clamps or Gates Silicone Hose Clamps.

Temperature rating: -70°F to +400°F
(-57°C to +204°C)

Packaging: Individually cartoned.

NOTE: Silicone's water permeation rate is 10 to 15 times greater than Green Stripe heater hose.

CAUTION: Do not use for fuel or oil transfer applications.
(Product Type 3230)

Part No.	I.D.	I.D.	O.D.	Length	Work.
25 Foot	(In.)	(mm)	(mm)	(Ft.)	Press.
26239	⅜	9.5	17.5	25	60
26240	½	12.7	20.7	25	60
26241	⅝	15.9	23.9	25	60
26242	¾	19.0	27.0	25	50
26244	1	25.4	33.4	25	45

Coolant Hose and Systems (continued)

Passenger Cars and Light Trucks (continued)

Heater/Coolant Hose (continued)

Heater Hose and Fuel Line Connectors

Unique single barb design provides greater sealability between single or dual inside diameter hoses.

- Using straight, elbow and tee shapes almost any hose configuration can be constructed.
- Glass reinforced nylon resists chemicals, gasoline, diesel fuels and temperatures from -40°F to 480°F (-40°C to 250°C).
- Bulkheads assure proper insertion depths.
- Anti-rotation device prevents hose twisting.

Packaging: 5 per package, except 1" which is 2 per package.

(Product Type 7315)



Straight Connectors

Part No.	O.D. (In.)	O.D. (mm)
28561	3/32	2.4
28562	1/8	3.2
28563	5/32	4.0
28564	3/16	4.8
28601	1/4	6.3
28600	5/16	8.0
28602	3/8	9.5
28603	1/2	12.7
28604	5/8	15.9
28605	3/4	19.0
28606	1	25.4

Elbow Connectors

Part No.	O.D. (In.)	O.D. (mm)
28571	3/32	2.4
28572	1/8	3.2
28573	5/32	4.0
28574	3/16	4.8
28621	1/4	6.3
28620	5/16	8.0
28622	3/8	9.5
28623	1/2	12.7
28624	5/8	15.9
28625	3/4	19.0
28626	1	25.4

Reducer Connectors

Part No.	O.D. (In.)	O.D. (mm)
28591	3/32 to 1/8	2.4 to 3.2
28592	1/8 to 5/32	3.2 to 4.0
28593	3/16 to 1/4	4.8 to 6.3
28594	3/16 to 3/8	7.9 to 9.5
28609	3/8 to 1/2	9.5 to 12.7
28610	1/2 to 5/8	12.7 to 15.9
28611	5/8 to 3/4	15.9 to 19.0
28612	3/4 to 1	19.0 to 25.4

Tee Connectors

Part No.	O.D. (In.)	O.D. (mm)
28581	3/32	2.4
28582	1/8	3.2
28583	5/32	4.0
28584	3/16	4.8
28631	1/4	6.3
28630	5/16	8.0
28632	3/8	9.5
28633	1/2	12.7
28634	5/8	15.9
28635	3/4	19.0
28638	1	25.4

“Y” Connectors

Part No.	O.D. (In.)	O.D. (mm)
28551	3/32	2.4
28552	1/8	3.2
28554	3/16	4.8

Tee Reducer Connectors

Part No.	End 1		90° Tee		End 2	
	O.D. (In.)	O.D. (mm)	O.D. (In.)	O.D. (mm)	O.D. (In.)	O.D. (mm)
28636	5/8	15.9	3/8	9.5	5/8	15.9
28637	3/4	19.0	3/8	9.5	3/4	19.0

Quick-Lok® Connectors

Quick-Lok connectors provide a fast, easy way to connect replacement heater hose on cars and trucks. Car manufacturers have used them for years for hard-to-reach connections.

Now Gates has made these convenient connectors available to you.

- Quick-Lok connectors come in **three** sizes for more coverage and broader applications
- **New design retains O-rings**, they can't fall out or get damaged.
- Gates connectors are OE equivalent.

Part No.	Tube O.D. (In.)	Hose I.D. (In.)
28500	5/8	5/8
28501	3/4	5/8
28502	3/4	3/4



Coolant Hose and Systems (continued)

Passenger Cars and Light Trucks (continued)

Heater/Coolant Hose (continued)



90° Molded Heater Hose

Especially designed for difficult heater hose applications requiring sharp 90° bends in the hose. Eliminates the need for extensive inventory of OE type curved heater hose. Just 22 sizes handle thousands of applications.

- **Engineered to resist electrochemical degradation – the leading cause of hose failure.**
- Resists water permeation.
- Similar to heater SAE 20R4 Type EC Class D-2.
- Use with heater hose connectors and bulk heater hose for virtually complete molded heater hose coverage.

Temperature rating: -40°F to 275°F (-40°C to 135°C)

CAUTION: Do not use for fuel or oil transfer applications.

Arm Lengths (In.)	Arm Lengths (mm)	I.D. Part No.							
		1/4" (6.35mm)	5/16" (7.9mm)	3/8" (9.5mm)	1/2" (12.7mm)	5/8" (15.9mm)	5/8" x 3/4" (15.0 x 19.1mm)	3/4" x 5/8" (19.1 x 15.9mm)	3/4" (19.0mm)
4 x 6	101.6 x 152.4	18010*	18020*	18030*	28460**	28466**	18079*	18070*	28474**
4 x 12	101.6 x 304.8	18011*	18021*	18031*	28461**	28467**	—	18071*	28475**
4 x 18	101.6 x 457.2	—	—	—	28462**	28468**	18076*	—	28476**
8 x 18	203.2 x 457.2	—	—	—	28463**	28469**	—	18072*	—
4 x 24	101.6 x 609.6	—	—	—	28464**	28470**	—	18073*	28477**
8 x 24	203.2 x 609.6	—	—	—	—	—	—	—	28478**
4 x 33	101.6 x 825.0	—	—	—	—	—	18077*	—	—
8 x 34	203.2 x 863.6	—	—	—	—	—	—	18078*	—
4 x 36	101.6 x 914.4	—	—	—	28465**	28471**	—	18074*	28479**
4 x 48	101.6 x 1219.2	—	—	—	—	28472**	—	—	28480**
4 x 60	101.6 x 1524.0	—	—	—	—	28473**	—	18075*	28481**

* Product Type 4257

** Product Type 4261



Dual I.D. Heater Hose

Specially designed for heater hose applications requiring changes in diameter.

- **Engineered to resist electrochemical degradation – the leading cause of hose failure.**
- Meets to SAE 20R4 Type EC Class D-2.
- Use with hose connectors and bulk heater hose for virtually complete molded heater hose coverage.

Temperature rating: -40°F to 275°F (-40C to 135°C)

CAUTION: Do not use for fuel or oil transfer applications.

(Product Type 4257)

Length (In.)	Part No.	Part No.
	1/2" x 5/8" I.D.	5/8" x 3/4" I.D.
6	18050	18080
12	18051	18081
18	—	18082
24	18052	—
36	—	18083
60	—	18084

Cooling System Components

Passenger Cars and Light Trucks
Thermostats, Gaskets and Seals

For application information, see the Cap and Thermostat Catalog #431-2090



SuperStat* Thermostats

The newly designed Superstat Thermostat incorporates an all stainless steel construction, larger heat motor and larger spring to provide superior performance. These new features provide:

- Precision temperature control
- More efficient engine operation
- Faster engine warm up
- Fewer emissions, better fuel economy.

(Product Type 7412)



Offset Thermostats

- Offset design thermostat is specified by many Japanese car manufacturers.
- Stem, spring and heat motor is offset from the center of the thermostat flange.
- A "jiggle pin" located in the offset flange of the thermostat allows release of trapped air behind the thermostat.

Packaging: Individually boxed.

(Product Type 7412)



Thermostats

Quality controlled factory calibration assures accuracy of opening and closing, regardless of pressure changes.

- Positive Piston Heat Motor provides accurate temperature control.
- Sturdy metal construction throughout.

Packaging: Individually boxed.

(Product Type 7412)



Seal-Eze Thermostat Gaskets

Cuts installation time in half. Adhesive-backed gasket material helps prevent breaking of water outlet. Gasket cement is not needed. Approved for Marine Applications.

- Self-adhesive backing holds thermostat in place while water outlet is being installed.
- Rubber thermostat seals also available.

Packaging: 10 per box.

(Product Type 7413)

Cut To Fit Gasket Material

Part No. 33635

* SuperStat is a registered trademark of Stant Manufacturing, Inc.

Cooling System Components

Passenger Cars, Light Trucks,
Heavy-Duty Fleet, Off-Road Equipment
and Marine Applications

Thermostats, Gaskets and Seals

For application
information, see the Cap
and Thermostat Catalog
#431-2090



Weir-Stat* Thermostats

The most effective cooling system control ever developed. Provides faster engine warm-up, stable temperature control, longer thermostat and seal life, improved fuel economy and driver comfort. Vehicles can operate without radiator shutters, reducing front axle weight, cost and noise. Fleets can operate at higher temperatures without the unnecessary activation of shut-down devices or fan clutches.

- Machined bead edge that seats positively down on a resilient 3-piece flange. As a result, no-leak, precision control is even greater than the original Weir-Stat.
- Flange retains its elasticity, resists abrasion and corrosion, remains stable during extreme temperature and pressure changes.

Packaging: Individually boxed.

(Product Type 7412)

**Weir-Stat is a registered trademark of Standard-Thomson Corporation.*

Weir-Stat Part No.	Temperature
33577	170°
33578	180°
33579	190-195°
33587	170°
33588	180°
33589	190-195°
33599	190-195°



Green Stripe™ Heavy-Duty Thermostats

Quality controlled factory calibration assures accurate heat control under extreme variations in temperature, load and engine vibrations. Approved for Marine Applications.

- Heavy-gauge brass and stainless steel with Positive Piston Heat Motor.
- Available in Choke type, Top By-Pass, Bottom By-Pass, Side By-Pass, Normally Open and other types to meet heavy-duty cooling system designs.

NOTE: Seal should always be changed when new thermostat is installed.

Packaging: Individually boxed.

(Product Type 7412)

Part No.	Temperature
33406	160-170°
33397	170°
33398	180°



Green Stripe™ Heavy-Duty Thermostat Seals

Fits securely around thermostat valve to prevent leakage. Approved for Marine Applications.

- Corrosion-resistant steel construction.
- Specially constructed to assure accurate fit.

Packaging: Individually boxed, 10 boxes to overpack.

(Product Type 7413)

Cooling System Components (continued)

Passenger Cars and Light Trucks Radiator Pressure Caps

**For application information, see the
Cap and Thermostat Catalog 431-2090**

All Gates radiator pressure caps are constructed of corrosion-resistant, heavy-gauge metal. This assures long service life and accurate control of pressure. Four types of caps are offered.

1.0 Bars = 14.5 psi

Packaging: Individually boxed, 100 per overpack.

Spinlok® Caps

Can be used for applications with or without coolant recovery systems. Inventory requirements are dramatically reduced.

- Unique 8-sided, scalloped crown allows for a firm grip for easy installation and removal.
- Neoprene upper and lower seal.
- Body rotates independently of crown – customer merely pushes down and twists.
- Safe and reliable.

(Product Type 7410)

Part No.	Pressure (psi)	Part No.	Pressure (psi)	Part No.	Pressure (psi)
31520	15	31523	16	31527	14
31521	9	31524*	4	31528	15
31522	22	31526	7		

*Spinlok construction, 2 ear (not 8-sided crown).



Safty-Vent™ Pressure Release Caps

Can be used for applications with or without coolant recovery systems. Inventory requirements are dramatically reduced.

- Safety release lever.
- Protects against accidental burns by releasing steam thru overflow tube.

(Product Type 7410)

Part No.	Pressure (psi)	Part No.	Pressure (psi)
31505	4	31518	15
31508	7	31516	16
31511	14		



Standard Caps

- Covers a wide range of pressures.

(Product Type 7410)

Part No.	Pressure (psi)
31306	7
31333	13



Cool Control Caps

Diverts pressurized coolant to a reservoir rather than to an overflow valve.

- Constant pressure type cap for use on closed cooling systems.
- Increases cooling system efficiency by eliminating air from the cooling system.

(Product Type 7410)

Part No.	Pressure (psi)	Part No.	Pressure (psi)
31301	15	31313†	—
31310	13	31314	—
31311	16	31335	20
31312*	—		

*Coolant Recovery Cap
Thermostat Housing Cap



Cooling System Components (continued)

Heavy-Duty Fleet and Off-Road Equipment Radiator Caps



Heavy-Duty Radiator Caps

For use on heavy-duty trucks, buses and tractors.

- Fits applications with $\frac{3}{4}$ " deep filler necks.

Packaging: Individually boxed.

(Product Type 7410)

Part No.	Pressure (psi)	Fits Filler Neck I.D. (In.)
31307	4	2 $\frac{1}{16}$
31308	7	2 $\frac{1}{16}$
31309	10	2 $\frac{1}{16}$



Heavy-Duty Cool Control Caps

Diverts pressurized coolant to reservoir instead of an overflow tube.

- Corrosion-resistant, heavy-gauge metal construction assures long life and accurate control of pressure.
- Atmospheric type valve allows cooling system to pressurize as needed, resulting in less strain on system's components.

Packaging: Individually boxed.

(Product Type 7410)

Part No.	Pressure (psi)
31347	4
31348	7
31349	10
31350	15

Radiator Cap Reference Chart

Part No.	Cap Type	Pressure Rating (psi)	SAE Range (psi)	Part No.	Cap Type	Pressure Rating (psi)	SAE Range (psi)
31301	Cool Control	15	14-18	31349	Heavy-Duty Cool Control	10	9-11
31306	Standard	7	6- 8	31350	Heavy-Duty Cool Control	15	14-18
31307	Heavy Duty	4	3- 5	31505	Safti-Vent	4	3- 5
31308	Heavy Duty	7	6- 8	31508	Safti-Vent	7	6- 8
31309	Heavy Duty	10	9-11	31511	Safti-Vent	14	12-16
31310	Coolant Recovery	13	12-14	31518	Safti-Vent	15	14-18
31311	Coolant Recovery	16	14-18	31520	Spinlok	15	14-18
31312	Coolant Recovery	—	—	31521	Spinlok	9	9-11
31313	Thermostat Housing	—	—	31522	Spinlok	20	18-22
31333	Standard	13 (.9 Bars)	12-16	31524	Spinlok	4	3- 5
31335	Cool Control	20	18-22	31526	Spinlok	7	6- 8
31347	Heavy-Duty Cool Control	4	3- 5	31527	Spinlok	14	12-16
31348	Heavy-Duty Cool Control	7	6- 8	31528	Spinlok	15	14-18

There are two important steps in efficient cooling system maintenance.

1. Pressure testing the cooling system to see that it holds pressure and is leak-free.
2. Pressure testing the radiator caps.

Radiator Cap and Cooling System Analyzer Kit

Part No. 31367

Contains all components needed to check cooling systems and radiator caps.

- Lightweight, impact-resistant analyzer.
- Pressure release button on easy-to-read gauge allows for safe venting of system during testing.
- Complete Kit — Includes Part Nos. 31425, 31413 and carrying case. Kit replaces old 31365

Packaging:

Individually boxed.

(Product Type 7410)



Part No.	Description	Part No.	Description
31370	Threaded Adapter	31409	Adapter
31371	Threaded Adapter	31410	Threaded Adapter
31377	Threaded Adapter	31413	Cap Adapter
31378	Cap Adapter	31422	Rubber Plug
31379	Threaded Cap Testing Adapter	31423	Rubber Gasket
31380	Threaded System Testing Adapter	31424	Threaded Adapter
31381	System Testing Adapter	31426	Kit
31382	Cap Adapter	31428	System Testing Adapter
31384	Threaded Adapter	31429	Truck Adapter Kit
31390	Threaded Adapter	31431	Threaded Cap Testing Adapter

For applications, see the Cooling System Tester Adapters in Gates Comp. No. I.D. Guide (431-2040).

Hose Clamps

Passenger Cars, Light Trucks,
Heavy-Duty Fleet and Off-Road Equipment

PowerGrip® SB Clamps

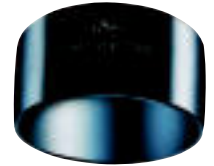
Maintenance-free clamps that retain dynamic tension and never need retightening. These clamps stop leaks, even on out-of-round applications. Clamp down better in all conditions and temperature extremes. Environmentally friendly, eliminate antifreeze leaks and ground water contamination.

- Easy to install with ordinary heat gun. No scraped hands.
- Wider sealing area entraps connector bead.
- Conform to any shape of hose and housing, even out-of-round fittings.
- Made from a heat-sensitive thermoplastic with a memory to prevent over- or under-tightening.
- Unique indicator tells you when clamp has shrunk to seal.
- Can be used with all brands of silicone hose.

Temperature rating: -40°F - 302°F (-40°C - 150°C)

Packaging: Ten to carton.

(Product Type 7405)



Part No.	Size	Nominal Hose I.D. (In.)	Fits Hose O.D. (In.)*	Part No.	Size	Nominal Hose I.D. (In.)	Fits Hose O.D. (In.)*
32915	SB15	¼	½ to 11/16	32948	SB48	1½	1¾ to 2
32919	SB19	3/8	11/16 to 13/16	32954	SB54	1¾	2 to 2¼
32922	SB22	½	13/16 to 15/16	32960	SB60	2	2¼ to 2½
32925	SB25	5/8	15/16 to 11/16	32967	SB67	2¼	2½ to 2¾
32929	SB29	¾	11/16 to 13/16	32973	SB73	2½	2¾ to 3
32934	SB34	1	13/16 to 1½	32979	SB79	2¾	3 to 3¼
32941	SB41	1¼	1½ to 1¾	32986	SB86	3	3¼ to 3½
				32990	SB90	3½	3½ to 3¾

* To insure accuracy, use the PowerGrip SB Measuring Tape.

Hose Clamps (continued)

Passenger Cars and Light Trucks



Super Hex/Minex Clamps

Top quality clamp with extra-strength construction features. Super Hex features a 1/2" wide band, while the Minex band is 5/16".

- Durable 200 series stainless steel band and screw housing.
- One-piece screw housing is interlocked onto band for extra strength.
- Solid head forged from one piece of steel, cadmium plated.
- Hex shaped screw with deep slot – tightens with screwdriver, nutdriver or socket wrench.
- Tighten to 30 in./lbs.

Packaging: 10 per box.
(Product Type 7400)

SAE Size	Green Stripe Stainless Steel		Minex & Super Hex		Silicone		
	Part No.	Part No.	Fits Hose I.D. (In.)	Clamping Range (In.)	Part No.	Fits Hose I.D. (In.)	Clamping Range (In.)
4	32001*	32201	5/32 to 1/2	1/4 to 5/8			
6	32006	—	1/4 to 3/8	3/8 to 7/8			
7	32007*	32207	7/32 to 11/16	5/16 to 7/8			
8	32008	32208	9/16 to 1/2	7/16 to 1	32308	5/16 to 1/2	7/16 to 1
10	32010	32210	3/8 to 5/8	1/2 to 1 1/8	32310	3/8 to 5/8	3/4 to 1 1/8
12	32012	32212	5/8 to 3/4	1/2 to 1 1/4	32312	5/8 to 3/4	7/8 to 1 1/4
16	32016	32216	3/4 to 1	3/4 to 1 1/2	32316	3/4 to 1	1 to 1 1/2
20	32020	32220	1 to 1 1/4	3/4 to 1 3/4	32320	1 to 1 1/4	1 1/8 to 1 3/4
24	32024	32224	1 1/4 to 1 1/2	1 to 2	32324	1 1/4 to 1 1/2	1 1/4 to 2
28	32028	32228	1 1/4 to 1 3/4	1 5/16 to 2 1/4	32328	1 1/4 to 1 3/4	1 5/16 to 2 1/4
32	32032	32232	1 1/2 to 2	1 1/16 to 2 1/2	32332	1 1/2 to 2	1 1/16 to 2 1/2
36	32036	32236	1 3/4 to 2 1/4	7/8 to 2 3/4	32336	1 3/4 to 2 1/4	1 13/16 to 2 3/4
40	32040	—	2 to 2 1/2	1 1/8 to 3	32340	2 to 2 1/2	2 1/16 to 3
44	32044	—	2 1/4 to 2 3/4	1 5/16 to 3 1/4	32344	2 1/4 to 2 3/4	2 5/16 to 3 1/4
48	32048	32248	2 1/2 to 3	1 5/8 to 3 1/2	32348	2 1/2 to 3	2 9/16 to 3 1/2
52	32052	32252	3 to 3 1/4	1 7/8 to 3 3/4	32352	3 to 3 1/4	2 13/16 to 3 3/4
56	32056	32256	2 to 3 1/2	2 1/8 to 4	32356	3 1/4 to 3 1/2	3 1/16 to 4
60	—	32260	2 1/4 to 3 3/4	2 5/16 to 4 1/4	—	—	—
64	32064	32264	2 1/4 to 4	2 5/8 to 4 1/2	32364	3 3/4 to 4	3 9/16 to 4 1/2
72	32072	32272	3 to 4 1/2	3 3/8 to 5	32372	4 to 4 1/2	4 1/16 to 5
104	32104	32304	4 to 6 1/2	4 to 7	—	—	—

*Minex

Type of Clamp	Recommended Installation Torque	Maximum Torque
Minex, Mini Charter, Mini Green Stripe	14-16 in./lbs.	20 in./lbs.
Super Hex & Charter	25-35 in./lbs.	50 in./lbs.
Green Stripe Stainless Steel, Silicone & Marine	30-40 in./lbs.	60 in./lbs.

* Minex, Mini Charter and Mini Green Stripe (32001, 32007, 32401, 32407, 32201, 32207)

Hose Clamps (continued)

Heavy-Duty Fleet, Off-Road Equipment and Marine Applications

Green Stripe™ Stainless Steel Clamps

Ideal for applications where corrosion is a problem, or for industrial use.

- Housing and $\frac{5}{16}$ " wide band constructed of heavy-gauge stainless steel.
- Screw is 400 series stainless steel.
- Rounded band edges.
- Hex shaped screw with deep slot – tightens with screwdriver, nutdriver or socket wrench.
- Tighten to 35 in./lbs.

Packaging: 10 per box.

(Product Type 7408)



Strap Clamps

Packaged 10 to carton.

Part No.	Clamp Length	Fits Hose up to
32112	12"	3 $\frac{1}{2}$ " O.D.
32115	15"	4 $\frac{1}{2}$ " O.D.
32124	24"	7 $\frac{1}{2}$ " O.D.

(Product Type 7400)



Silicone Hose Clamps

Designed to provide an extra-tight seal on silicone hose and prevent hose cover extrusion.

- 300 series stainless steel band, screw and housing resist corrosion.
- Four-piece construction and 100% mechanical interlock for added strength and torque capability.
- Combination $\frac{5}{16}$ " hexagon, deep slot screw head makes installation easy... tightens with screwdriver, nutdriver or socket wrench.
- One piece band and liner.
- Inner-liner band eliminates hose cover extrusion.
- Wide $\frac{5}{16}$ " band gives 12 $\frac{1}{2}$ % more compression than $\frac{1}{2}$ " band.
- Tighten to 35 lbs.

Packaging: 10 per box.

(Product Type 7400)



Hose Clamps (continued)

Heavy-Duty Fleet, Off-Road Equipment and Marine Applications



Green Stripe™ Marine Clamps

Constructed of 100% marine grade stainless steel. Bands are 9/16" wide with rounded edges. Screws feature 300 series stainless steel construction and deep slotted 5/16" hex heads. Approved for Marine Applications.

- Saline and corrosion-resistant.

Packaging: 10 per box.

(Product Type 7408)

Size No.	Part No.	Size No.	Part No.	Size No.	Part No.	Size No.	Part No.
8M	32508	20M	32520	36M	32536	60M	32560
10M	32510	24M	32524	48M	32548	64M	32564
12M	32512	28M	32528	52M	32552	72M	32572
16M	32516	32M	32532	56M	32556	104M	32604

Green Stripe™ and Green Stripe Heavy-Duty Constant Tension Clamp

Green Stripe constant tension clamps provide the reusable, self-adjusting band you need for a dependable seal, even in the coldest conditions. Applications include auto, truck and bus cooling systems and turbo chargers.



Green Stripe and Green Stripe HD constant tension clamps feature:

- Larger, heavier gauge precision-formed spring washers with higher rates of band tension and adjustable for a more dependable seal.
- All stainless steel construction for maximum corrosion resistance.
Band and Housing – 9/16" wide – GSCT 301 and GSHD 304 stainless steel.
Hex-Head Screw – 410 stainless steel GSCT 5/16" and GSHD 3/8" wide.
- A uniform 360° seal.
- Clamping diameters – GSCT 9/16" to 3-1/2" and GSHD 1" to 9-1/8".
- Tighten Green Stripe Clamps to 50 in./lbs.
- Tighten Green Stripe Heavy-Duty Clamps to 75 in./lbs.

(Product Type 7408)

Green Stripe Constant Tension Clamps				Green Stripe HD Constant Tension Clamps		
301 Stainless Steel 9/16" Band and Housing				304 Stainless Steel 9/16" Band and Housing		
410 Stainless Steel 5/16" Hex-Head Screw				410 Stainless Steel 3/8" Hex-Head Screw		
Part Number	Standard Packaging	SAE Size	Clamping Ranges	Part Number	Standard Packaging	Clamping Ranges
32710	10	10	9/16" to 1 1/16"	32617	10	1" to 1 3/4"
32712	10	12	5/8" to 1 1/4"	32620	10	1 1/4" to 2 1/8"
32716	10	16	1 3/16" to 1 1/2"	32625	10	1 3/4" to 2 5/8"
32720	10	20	1 3/16" to 1 3/4"	32630	10	2 1/4" to 3 1/8"
32724	10	24	1 1/16" to 2"	32635	10	2 3/4" to 3 5/8"
32728	10	28	1 5/16" to 2 1/4"	32640	10	3 1/4" to 4 1/8"
32732	10	32	1 9/16" to 2 1/2"	32645	10	3 3/4" to 4 5/8"
32736	10	36	1 13/16" to 2 3/4"	32650	10	4 1/4" to 5 1/8"
32740	10	40	2 1/16" to 3"	32655	10	4 3/4" to 5 5/8"
32744	10	44	2 5/16" to 3 1/4"	32660	10	5 1/4" to 6 1/8"
32748	10	48	2 9/16" to 3 1/2"	32665	10	5 3/4" to 6 5/8"
				32670	10	6 1/4" to 7 1/8"
				32675	10	6 3/4" to 7 5/8"
				32680	10	7 1/4" to 8 1/8"
				32685	10	7 3/4" to 8 5/8"
				32690	10	8 1/4" to 9 1/8"

Hose Clamps (continued)

Heavy-Duty T-Bolt Clamps & Spring Loaded T-Bolt Clamps

Heavy-Duty T-Bolt and Spring-Loaded T-Bolt Clamps for Heavy-Duty Trucks, Off-Road Equipment and Industrial Applications. Designed for use in high-vibration and large diameter applications common with heavy truck, off-road equipment and industrial machinery.



GREEN STRIPE T-BOLT CLAMPS						
SAE Sizes	Gates Part Numbers	Min. Dia. (Inches)	Max. Dia. (Inches)	Min. Dia. (mm)	Max. Dia. (mm)	Installation Torque
-	32749	1 3/8	1 9/16	35.1	38.6	75.0 in. lbs. (8.5 Nm)
-	32750	1 1/2	1 5/8	38.1	41.7	75.0 in. lbs. (8.5 Nm)
-	32751	1 5/8	1 7/8	41.4	46.0	75.0 in. lbs. (8.5 Nm)
28	32752	1 3/4	2	44.5	50.8	75.0 in. lbs. (8.5 Nm)
32	32753	1 7/8	2 3/16	47.8	55.6	75.0 in. lbs. (8.5 Nm)
36	32754	2	2 5/16	50.8	58.7	75.0 in. lbs. (8.5 Nm)
40	32755	2 1/8	2 7/16	54.1	62.0	75.0 in. lbs. (8.5 Nm)
44	32756	2 1/4	2 9/16	57.2	65.0	75.0 in. lbs. (8.5 Nm)
48	32757	2 3/8	2 11/16	60.5	68.3	75.0 in. lbs. (8.5 Nm)
52	32758	2 1/2	2 13/16	63.5	71.4	75.0 in. lbs. (8.5 Nm)
56	32759	2 5/8	2 15/16	66.8	74.7	75.0 in. lbs. (8.5 Nm)
60	32760	2 3/4	3 1/16	69.9	77.7	75.0 in. lbs. (8.5 Nm)
64	32761	2 7/8	3 3/16	73.2	81.0	75.0 in. lbs. (8.5 Nm)
68	32762	3	3 5/16	76.2	84.1	75.0 in. lbs. (8.5 Nm)
72	32763	3 1/8	3 7/16	79.5	87.4	75.0 in. lbs. (8.5 Nm)
76	32764	3 1/4	3 9/16	82.6	90.4	75.0 in. lbs. (8.5 Nm)
80	32765	3 3/8	3 11/16	85.9	93.7	75.0 in. lbs. (8.5 Nm)
84	32766	3 1/2	3 13/16	88.9	96.8	75.0 in. lbs. (8.5 Nm)
88	32767	3 5/8	3 15/16	92.2	100.1	75.0 in. lbs. (8.5 Nm)
92	32768	3 3/4	4 1/16	95.3	103.1	75.0 in. lbs. (8.5 Nm)
100	32769	4	4 5/16	101.6	109.5	75.0 in. lbs. (8.5 Nm)
108	32770	4 1/4	4 9/16	108.0	115.8	75.0 in. lbs. (8.5 Nm)
116	32771	4 1/2	4 13/16	114.3	122.2	75.0 in. lbs. (8.5 Nm)
124	32772	4 3/4	5 1/16	120.7	128.5	75.0 in. lbs. (8.5 Nm)
132	32773	5	5 5/16	127.0	134.9	75.0 in. lbs. (8.5 Nm)
140	32774	5 1/4	5 9/16	133.4	141.2	75.0 in. lbs. (8.5 Nm)
148	32775	5 1/2	5 13/16	139.7	147.6	75.0 in. lbs. (8.5 Nm)
156	32776	5 3/4	6 1/16	146.1	153.9	75.0 in. lbs. (8.5 Nm)
164	32777	6	6 5/16	152.4	160.3	75.0 in. lbs. (8.5 Nm)
172	32778	6 1/4	6 9/16	158.8	166.6	75.0 in. lbs. (8.5 Nm)
180	32779	6 1/2	6 13/16	165.1	173.0	75.0 in. lbs. (8.5 Nm)
188	32780	6 3/4	7 1/16	171.5	179.3	75.0 in. lbs. (8.5 Nm)
196	32781	7	7 5/16	177.8	185.7	75.0 in. lbs. (8.5 Nm)
204	32782	7 1/4	7 9/16	184.2	192.0	75.0 in. lbs. (8.5 Nm)
212	32783	7 1/2	7 13/16	190.5	198.4	75.0 in. lbs. (8.5 Nm)
220	32784	7 3/4	8 1/16	196.9	204.7	75.0 in. lbs. (8.5 Nm)
228	32785	8	8 5/16	203.2	211.1	75.0 in. lbs. (8.5 Nm)
236	32786	8 1/4	8 9/16	209.6	217.4	75.0 in. lbs. (8.5 Nm)
244	32787	8 1/2	8 13/16	215.9	223.8	75.0 in. lbs. (8.5 Nm)

GREEN STRIPE SPRING-LOADED T-BOLT CLAMPS						
SAE Sizes	Gates Part Numbers	Min. Dia. (Inches)	Max. Dia. (Inches)	Min. Dia. (mm)	Max. Dia. (mm)	Installation Torque
70	32861	3 1/16	3 3/8	77.8	85.7	75.0 in. lbs. (8.5 Nm)
86	32862	3 9/16	3 7/8	90.5	98.4	75.0 in. lbs. (8.5 Nm)
102	32863	4 1/16	4 3/8	103.2	111.1	75.0 in. lbs. (8.5 Nm)
118	32864	4 9/16	4 7/8	115.9	123.8	75.0 in. lbs. (8.5 Nm)

Fuel Systems

Passenger Cars, Light Trucks,
Heavy-Duty Fleet and Off-Road Equipment



Safety Stripe® II Fuel Line/PCV/Evaporative Emission Control Hose

Multi-purpose hose for use on fuel lines, PCV and EEC systems, and for fuel return hose connections on diesel fuel injection systems. Approved for use with leaded and unleaded gasoline, diesel and gasoline blends of ethanol, methanol and ethers (up to the legal limits allowed by the EPA).

- Reinforced construction.
- Nitrile tube.
- Hypalon cover.
- Oil resistant cover resists the effects of high heat and ozone found in engine compartments.
- Performs to SAE 30R6 and 30R7.
- Vacuum rating of 24 In./Hg for sizes less than 1/2" I.D., and 10 In./Hg for sizes 1/2" to 3/4" I.D. at ambient temperatures. Packaging: See table.
- Temperature rating: 40°F to 257°F (-40°C to 125°C)

WARNING: Do not use for pressure lines on fuel injected engines or for cooling system applications. Use Multi-Port Injection (MPI) hose for fuel injection applications.

(Product Type 4219 XL)

Intended for use with fuels where MTBE concentrations are no greater than 15% by volume.

I.D. (In.)	I.D. (mm)	Work. Press. (psi)	25	25	250
			Foot Reel	Foot Box	Foot Reel*
1/8	3.2	50	27000	—	—
3/16	4.8	50	27001	—	—
1/4	6.3	50	27002	—	27068
5/16	8.0	50	27003	—	27069
3/8	9.5	50	27004	—	27070
7/16	11.1	35	—	27005	27071
1/2	12.7	35	—	27006	27019
5/8	15.9	35	—	27008	27020
3/4	19.0	35	—	27010	27021

*250' reels can have as many as 3 lengths with any 1 length no shorter than 50'.

Packaged Safety Stripe II Fuel Line/PCV/Evaporative Emission Control Hose

Convenient, popular 2 foot lengths of Fuel Line, PCV and EEC Hose in self-service, reusable, recyclable package. Can be stacked on shelf, or hung on a pegboard display.

- Easy to follow instructions in each package.
- Handy hose diameter indicator helps customer select the correct size.

(Product Type 4219)

I.D. (In.)	I.D. (mm)	Work. Press. (psi)	Part No.
1/4	6.3	50	27027
5/16	8.0	50	27028
3/8	9.5	50	27029



Fuel Systems (continued)

Passenger Cars, Light Trucks, Heavy-Duty Fleet and Off-Road Equipment

MPI/Fuel Injection Hose

Recommended as the premium choice for clamped hose applications **on all fuel systems**, including fuel injection systems. Not designed to replace coupled hose assemblies on fuel injected engines.

Approved for use with leaded and unleaded gasoline, diesel fuel and gasoline blends of ethanol, methanol and ethers (up to maximum concentrations allowed by the EPA) and 100% methanol or ethanol.

- Outstanding fluoroelastomer liner resists permeation and alcohol.
- Outstanding oil resistant tube combats heat.
- Polyester braid reinforcement increases strength.
- Oil, heat, ozone and abrasion resistant cover.
- Meets SAE 30R9 requirements.
- Superior for service life over standard fuel hose.

NOTE: Do not submerge in gasoline.

Maximum temperature to +302°F (+150°C)

Packaging: See table.

Intended for use with fuels where MTBE concentrations are no greater than 15% by volume.

(Product Type 4219D)



			10 Foot Length	25 Foot Length
		Work. Press.		
I.D. (In.)	I.D. (mm)	(psi)	Part No.	Part No.
1/4	6.3	180	27082	27094
5/16	8	180	27085	27095
3/8	10	180	27088	27096

Retail Packaged MPI/Fuel Injection Hose

Convenient, popular lengths of Fuel Line and Multi-Port Injection Fuel Line Hose in self-service, recyclable package. Can be hung on a pegboard display.

- Easy-to-follow instructions in each package.
- Handy hose diameter indicator helps customer select the correct size.
- 24" length.

(Product Type 4219D)

NOTE: Do not submerge in gasoline.

I.D. (In.)	I.D. (mm)	Work. Press. (psi)	Part No.
1/4	6.3	180	27090
5/16	8	180	27091
3/8	9.5	180	27092



Submersible Fuel Line Hose

Ordinary fuel line hose is designed to handle fuel on the inside only. *The Gates Submersible Fuel Line Hose Exceeds the SAE 30R10 rating* and is capable of handling gasoline, alcohol-extended gasoline or diesel fuel in fully immersed, mobile, stationary and marine applications.

- Engineered for constant contact with gasoline (and other liquid petroleum distillates) on the inside and the outside.
- Excellent for use on fuel pumps in the gas tank.
- Meets the SAE 30R10 specification for submersible fuel line hose applications.
- Fluoroelastomer (FKM) tubed cover resists gas permeation and retards aging.
- Aramid Fiber reinforcement—the same fiber used in bulletproof vests and is pound-for-pound stronger than steel.

(Product Type 4219)



I.D. (In.)	Length (Ft.)	Work. Press. (psi)	Part No.
3/8	1	100	27097
5/16	1	100	27093

Fuel Service Hose

Fuel Fill Hose

Designed for transferring fuel from vehicle's filler neck to fuel tank. Works equally well on passenger cars and light trucks, as well as on auxiliary fuel tanks on recreational vehicles. For use with most types of fuels – especially resistant to gasoline and diesel.

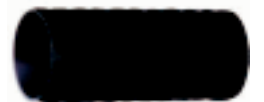
- Suitable for use with gasoline, gasohol blends of ethanol, methanol and ethers (up to maximum concentrations allowed by the EPA).
- Corrugated cover with helical wire reinforcement.
- Features a high quality nitrile tube.
- Meets requirements of SAE 30R5.
- Cuts easily with knife and wire cutters.

Temperature rating: -40°F to 212°F (-40°C to +100°C)

Packaging: 3 ft. lengths, 5 per carton.

NOTE: Use Gates Super Hex Clamps for reliable installation.

(Product Type 4663K)



I.D. (In.)	Work. Press. (psi)	Part No.
1 1/2	20	23924
1 7/8	20	23930
2	20	23932
2 1/4	20	23936
2 1/2	20	23940

Fuel Service Hose (continued)



Fuel Filler Neck Hose

Designed specifically for auxiliary gas tanks on recreational vehicles. Excellent replacement for passenger cars and trucks where a straight hose with a minimal bend is required.

- Smooth oil resistant cover, tough textile cord reinforcement and petroleum-resistant nitrile tube.
- Non-wire reinforced
- Meets SAE 30R6 specifications.

Temperature rating: -40°F to +212°F (-40°C to +100°C)

CAUTION: Not recommended for marine gasoline applications.



Part No.	I.D. (In.)	Ctr. Length (In.)	Work. Press. (psi)
23964	1½	3	20
23968	1¾	3	20
23972	2	3	20
23976	2¼	3	20
23980	2½	3	20

(Product Type 4271)

45° Bend:

Part No.	I.D. (In.)	Ctr. Length (In.)	Work. Press. (psi)
24710	1½	15.9	20
24711	1¾	15.9	20
24712	2	15.9	20
24713	2¼	15.9	20
24714	2½	15.8	20

(Product Type 4278)

90° Bend:

Part No.	I.D. (In.)	Ctr. Length (In.)	Work. Press. (psi)
24715	1½	15.1	20
24716	1¾	15.0	20
24717	2	14.9	20
24718	2¼	14.7	20
24719	2½	14.6	20

(Product Type 4278)



Wagon Master® (421B)

Fuel Transfer Hose For Fuel Oil Delivery Trucks

For fuel oil, gasohol, commercial gasolines with up to 50% aromatics and diesel oil in transfer applications from tank trucks to storage tanks in home and commercial service. Do not use for jet fuel transfer.

- Nitrile tube and cover resist oil and other petroleum based products.
- Locked angle construction reduces diameter or length change under pressure for accurate metering.
- Designed for use with Permanent Brass, non-sparking fittings. Current industry sources are Dixon (1-800-237-6762) and United Metal Industries (1-800-359-6801). Coupling requires special Internal Expander available from Dixon Value and Coupling Company.

Temperature rating: -20°F to +180°F (-20°C to +82°C)

Packaging: 125 ft. lengths individually coiled and wrapped.

(Product Type 3221WM)

Part No.	I.D. (In.)	O.D. (In.)	Work. Press. (psi)	Min. Bend Radius
28714	1	1½	200	8.0
28722	1¼	1¾	200	10.0
28738	1½	2	200	12.0

Fuel Service Hose (continued)

Gas Pump Hose 124HW (Retractable Reel)

For Service Stations

For dispensing gasoline, diesel and gasohol from retractable reel type dispensers where small I.D., lightweight, flexible hard wall hose is required.

- One-ply braided textile with helical steel wire reinforcement and built-in static wire.
- Smooth bore assures fast discharge.
- Coupled with male, NPT, Brass with chrome plate couplings.
- Nitrile tube, CPE cover.
- Underwriters Laboratory (UL330) Listed.
Packaging: Individually cartoned.
(Product Types 4525 & 7731)

Part No.	I.D. (In.)	O.D. (In.)	Length (Ft.)	Work Press. (psi)	Thread Size (In.)	Min. Bend Radius
27470	3/4	1 1/8	10	125	3/4	1.0
27471	3/4	1 1/8	12	125	3/4	4.0
27472	3/4	1 1/8	14	125	3/4	1.0



Gas Pump Hose 24B (Retractable Cable) For Service Stations and Marine Applications

For dispensing gasoline, diesel and gasohol from stand-up or retractable cable type pumps requiring soft wall hose. Also ideal for fuel or oil transfer applications.

- Nitrile tube and cover provide excellent resistance to oil and petroleum products.
- One (3/4" I.D.) and two (1" I.D.) plies of reinforcement with built-in static wire.
- Coupled with male, NPT, Brass with chrome plate couplings.
- Underwriters Laboratory Listed. Meets UL 330.

Packaging: Individually cartoned.
CAUTION: Not recommended for reel type dispensers.
(Product Types 3224 & 7730)

Part No.	I.D. (In.)	O.D. (In.)	Length (Ft.)	Work Press. (psi)	Thread Size (In.)	Min. Bend Radius
27450	3/4	1 1/8	10	125	3/4	6.0
27452	3/4	1 1/8	12	125	3/4	6.0
27453	3/4	1 1/8	14	125	3/4	6.0
27454	3/4	1 1/8	17	125	3/4	6.0
27459	1	1 15/32	11	125	1	8.0
27460	1	1 15/32	12	125	1	8.0
27461	1	1 15/32	14	125	1	8.0



Marine Fuel Feed and Vent Hose – Type A

Top quality, multi-purpose hose specifically designed to provide flexible connections between rigid fuel distribution lines and engine. Excellent for vent lines* and emission control systems. Braided construction provides greater kink resistance and flexibility than spiral construction hose.

- Suitable for marine diesel fuel and gasohol blends of ethanol, methanol and ethers up to 10%.
- Heat and oil resistant Type A neoprene cover.
- Type C nitrile tube with high-tensile synthetic textile cord reinforcement.
- Meets SAE J1527 Style R1 Class 1 and USCG Type A requirements.

Packaging: 25 and 50 foot lengths in carton and 250 foot reels.
(Product Type 4219M)

***NOTE:** Minimum I.D. for vent hose is 3/16".

I.D. (In.)	Work. Press. (psi)	25 Foot Carton Part No.	50 Foot Carton Part No.	250 Foot Reel Part No.
1/4	40	350-0145	350-0146	350-0140
5/16	40	350-0565	350-0566	350-0560
3/8	40	350-0385	350-0386	350-0380
1/2	40	350-0125	350-0126	350-0120
5/8	40	350-0585	350-0586	350-0580



Fuel Cap Systems

Passenger Cars and Light Trucks

For application information, see the Cap and Thermostat Catalog #431-2090

Evaporative Emission Control Fuel Caps

Meet OEM specifications and Federal and State Emission Requirements. Two-way action pressure relief/vacuum relief valve allows fuel tank to “breathe” while preventing the escape of fuel fumes. Seals are compounded from fuel-resistant rubber. Available in three configurations.
(Product Type 7410)



Fenderwell

- Zinc-plated and dichromate dipped for superior corrosion resistance.
- Some models are made from rugged plastic. Exterior

Exterior

- Caps have chrome-plated finish.

Locking

- Comes with two keys. Keyed-alike caps available on special order.

Packaging: Individually boxed.

NOTE: Due to the critical nature of the EEC valves, it is necessary to keep these caps clean at all times.



Fuel Caps

Rugged, heavy-duty construction. Meet or exceed OEM specifications. Caps fit both shallow and deep cam filler necks – vented, non-vented and vented anti-surge. Three configurations available for most popular applications.
(Product Type 7410)



Fenderwell

- Sturdy metal construction throughout.

Locking

- Comes with two keys. Keyed-alike caps available on special order.

Exterior

- Attractive chrome-plated finish.
- Packaging: Individually boxed.



VaporVent

Designed for late model cars. Allows car owner to release pressure from fuel system prior to removing cap from the filler neck. Reduces the risk of fuel spray and vapor surge.

- Handy push button releases fuel vapor pressure.



Fuel cap Systems (continued)

Mechanical Fuel Cap Tester Kit

Economical, easy-to-use alternative to electronic testers.

- Compact, lightweight design
- Easy-to-read pass/fail gauge
- Convenient hand operation – needs no batteries
- Set of two pass and fail calibration caps to confirm tester accuracy
- Complete set of nine color-coded adapters with adapter application chart
- Tester unit and adapters packaged in separate plastic carrying cases



Part No.	Description	Pkg.	Part No.	Description	Pkg.
12300	Fuel Cap Tester Kit	1	12411	Green "Pass" Cap	1
12302	Replacement Gauge	1	12412	Red "Fail" Cap	1
12403	Blue Adapter	1	12417	Pump Oil	1
12404	Yellow Adapter	1	12418	Adapter Seal	1
12405	Red Adapter	1	12419	Orange Adapter	1
12406	Green Adapter	1	12420	Brown Adapter	1
12407	Black Adapter	1	12421	Light Blue Adapter	1
12408	Gray Adapter	1	12556	Plastic Knob	1
12410	Threaded Adapter	1			

Heavy-Duty Fleet and Off-Road Equipment

Heavy-Duty Saddle Tank Caps

Heavy metal construction throughout. Meets I.C.C. requirements.

- Available for side or saddle tanks.
- Locking caps come with two keys. Keyed-alike caps available on special order.

Packaging: Individually boxed.

(Product Type 7410)



Part No.	Description
31801*	2 1/8" Brass, non-vented, 12 UN male thread. Fusible elements, 8 1/4" chain with 3 1/2" cross bar. Non-locking.
31803	2" Brass, vented, 11-1/2" NPSM female thread. Fusible elements 8 1/4" chain with 3 1/2" cross bar. Non-locking.
31804	Vented bayonet type, zinc-plated steel. Fits 3 3/8" ordnance-type filler neck steel or aluminum. 3 cam type. Non-locking. Diesel fuel systems only.
31805*	4 1/4" Brass, non-vented 12 NS male thread. Fusible elements, 8 1/4" chain with 8 3/8" cross bar. Non-locking.
31806*	4 1/4" Brass, non-vented, 8 NS male thread. Fusible elements, 8 1/4" chain with 8 3/8" cross bar. Non-locking.
31807*	4" Brass, non-vented, 8 NPSM female thread. Fusible elements, 8 1/4" chain with 8 3/8" cross bar. Non-locking.
31821	2 1/8" Brass, vented, 12 UN male thread. Fusible elements, 8 1/4" chain with 3 1/2" cross bar. Locking.
31823	2" Brass, vented 11-1/2" NPSM female thread. Fusible elements, 8 1/4" chain with 3 1/2" cross bar. Locking.
31825*	4 1/4" Brass, non-vented, 12 NS male thread. Fusible elements, 8 1/4" chain with 8 3/8" cross bar. Locking.
31826*	4 1/4" Brass, non-vented, 8 NS male thread. Fusible elements, 8 1/4" chain with 8 3/8" cross bar. Locking.
31827*	4" Brass, non-vented, 8 NPSM female thread. Fusible elements, 8 1/4" chain with 8 3/8" cross bar. Locking.



* Use only on fuel tanks requiring a non-vented cap.

Oil Systems

Passenger Cars and Light Trucks



Transmission Oil Cooler Hose

Provides a safe, heat and oil resistant connecting line between oil cooler and transmission.

- One fiber braid reinforcement over an oil resistant nitrile rubber tube.
- Oil and abrasion resistant black hypalon cover.
- Meets or exceeds SAE J1019 requirements.
- Can be stacked on shelf or hung on pegboard.
- Easy-to-follow instructions in each package.
- Handy hose diameter indicator on package.
- Package is recyclable.

Maximum temperature rating: +300°F (+150°C)

Packaging: 3 ft. lengths in retail package; 25 ft. and 50 ft. lengths individually cartoned.

(Product Type 3319N)

I.D. (In.)	Work. (psi)	Press. Burst	3 Foot Length	25 Foot Length	50 Foot Length
			Part No.	Part No.	Part No.
5/16	400	1600	27056	27058	27060
3/8	400	1600	27057	27059	27061
1/2	400	1600	27065	27066	27067

For application information,
see the Cap and Thermostat
Catalog #431-2090



PCV Oil Filler Caps

Meets requirements of emission control systems on late model cars and light trucks. Universal design offers maximum coverage with minimum inventory.

- Sealed construction prevents engine crankcase gases from escaping into the atmosphere.
- Heavy-gauge steel construction resists underhood heat and corrosion.

Packaging: Individually boxed.

NOTE: To assure proper operation of PCV Systems, Oil Filler Caps should be cleaned or replaced every 12,000 miles.

(Product Type 7410)



Oil Filler Caps

Durable construction assures long service life.

- Special finish resists rust and provides excellent protection against underhood heat.

Packaging: Individually boxed.

(Product Type 7410)

Power Steering Systems

See Gates Power Steering Catalog 431-2140 for complete product identification and application. Power Steering products are supplied through Edelmann at 1-800-770-4639.

OEM Type Power Steering Hose Assemblies

Gates extensive field examination and testing assure proper fit. For passenger cars and light trucks. General instructions are packed with every assembly. Hoses and fittings are also available for tailor-made medium and heavy-duty truck applications.

- Comes complete with factory-installed, pre-bent zinc-dichromate plated end fittings, bracketry, sensor ports, sheathing, bushings and grommets.
- Exceeds SAE J2050 performance requirements.

Packaging: Individually boxed.
(Product Type 7741)



Power Steering Assembly Packaging

Part numbers and carton sizes are organized according to assembly size. This eliminates mixing of carton sizes and results in a neat, manageable inventory.

- Assemblies are individually cartoned using the Gates size-significant part numbering system.
- 175 pound test, crush-resistant cartons protect assemblies until they are installed.



Low Pressure Power Steering Return Line Assemblies

Assemblies come complete with factory-installed, pre-bent, coupled end fittings where required.

- Connection on uncoupled end is made with ordinary worm-drive clamps.

Packaging: Individually boxed.
(Product Type 7741)



PS188 Power Steering Hose

Recommended for power steering pressure lines.

- Synthetic rubber hose cover developed specifically to resist rugged under-hood environments. Type CSM.
- Use with one-piece Gates PowerCrimp® power steering couplings (Refer to catalog 431-2080 and 431-2140 for details).
- Meets SAE J2050 Type 1 performance requirements.

Packaging: 25 ft. or 50 ft. lengths.
(Product Type 3317)



I.D. (in.)	Part No. 25 Foot	Part No. 50 Foot
3/8	86049	86050

Power Crimp® Power Steering Coupling (One-Piece)

SAE and Metric Male Flareless one-piece couplings.

Packaging: 5 per bag.
(Product Type 7334)



Hose I.D. (in.)	Part No. SAE	Tube O.D. (in.)	Part No. Metric	Tube O.D. (mm)
3/8	80730	1/4	80735	8
3/8	80731	5/16	80736	10
3/8	80732	3/8	80737	12

Power Steering Systems (continued)



Bulk Power Steering Return Line Hose (w/o Couplings)

Allows "custom fit" cutting and assembly for low pressure fluid return lines.

- Use with Return Line End Fittings if required.
- Nitrile tube, neoprene cover.
- Meets OEM power steering return line and SAE J189 requirements.

Temperature range: -40°F to +275°F (-40°C to +135°C)

Packaging: Individually boxed.

(Product Type 3283SA)

I.D. (In.)	Length (Ft.)	Part No.
1 1/32	25	349960
3/8	25	350010
3/8	5	350020
1/2	10	349970
5/8	3 1/2	350030
5/8	10	349980
3/4	10	349990



High Temperature 300° CPE Power Steering Return Line Hose

For late model vehicles.

- Use with Return Line End Fittings if required.
- Special high temperature tube and cover designed for today's high under-the-hood temperatures.
- Meets SAE J189 requirements.

Temperature range: -40°F to +300°F (-40°C to +150°C).

Packaging: Available in 25 ft. lengths.

(Product Type 3283PS)

I.D. (In.)	Length (Ft.)	Work. Press. (psi)	Burst Press. (psi)	Part No.
3/8	25	250	1800	349950



Power Steering Return Line End Fitting

Furnished separately – for use with Return Line Power Steering Hose.

- Zinc-dichromate plated to resist corrosion.
- Coverage includes popular inverted flare threads.

Packaging: Individually boxed.

(Product Type 7255)



Power Steering Repair Kits

Kit components are made of OEM quality materials and come with easy-to-read instructions.

Repair Kits available for:

- Adjuster Plug Seal
- Control Valve Seal
- Piston Rod End Bushing
- Pitman Shaft Seal (complete)
- Pitman Shaft Seal (lower)
- Power Cylinder Seal
- Pump Seal
- Rack and Pinion Seal
- Steering Gear Major Seal

Packaging: Individually boxed

(Product Type 7749)

For "O" Ring Assortment See Catalog 431-2140.

Braking Systems

Heavy-Duty Fleet and Off-Road Equipment

Air Brake Hose Assemblies*

Factory crimped assemblies meet the rigorous demands of the fleet and heavy-duty market.

- Extremely flexible and kink resistant.
- Four spiral construction meets SAE J1402 specifications.
- Complies with DOT FMVSS 106 requirements.
- Couplings meet SAE and DOT minimum pull-off requirements.
- High quality brass male pipe fitting on one end, female air brake swivel with male pipe adapter on other end.

Temperature rating: -40°F to +212°F (-40°C to +100°C)

Packaging: Individually cartoned.

(Product Type 7745)



3/8" I.D. Hose With 1/4" MPT Fixed & Swivel			
Length (In.)	Part No.	Length (In.)	Part No.
14	27242	26	27247
16	27243	30	27248
18	27244	32	27249
20	27245	36	27250
24	27246	42	27251
		48	27350

3/8" I.D. Hose With 3/8" MPT Fixed & Swivel			
Length (In.)	Part No.	Length (In.)	Part No.
14	27261	32	27270
16	27262	34	27271
18	27263	36	27272
20	27264	42	27275
24	27266	45	27277
26	27267	48	27279
28	27268	60	27281
30	27269		

1/2" I.D. Hose With 3/8" MPT Fixed & Swivel			
Length (In.)	Part No.	Length (In.)	Part No.
18	27252	30	27256
20	27253	32	27257
24	27254	36	27258
28	27255	42	27259
		48	27360
		60	27361
		72	27362

1/2" I.D. Hose With 1/2" MPT Fixed End 3/8" MPT Swivel End			
Length (In.)	Part No.	Length (In.)	Part No.
18	27286	32	27293
20	27287	34	27294
24	27289	36	27295
28	27291	42	27297
30	27292		

Air Brake Hose Assembly Merchandisers

These air brake merchandisers are a must for anyone that has air brake applications. Assortments feature the most popular SAE J1402 hose with brass couplings, as well as the most popular compressor air brake discharge hoses and brass couplings.

- 91181 – Large assortment
- 91182 – Small assortment



Nylon Air Brake Tubing

Recommended for truck, bus, and mobile air brake, and service lines where heat and battery acids are not present. Conforms to SAE J844 specifications. Meets D.O.T. FMVSS 106.

- **Tube:** Heat and light stabilized seamless extruded nylon.
- **Cover:** Nylon. Available in black (NABTA), blue (NABTB), green (NABTG), red (NABTR), yellow (NABTY) and orange (NABTO) colors. Other colors available upon request.
- **Temperature Range:** -40°F to +200°F
- **Couplings:** Use Gates DOT SureLok™ (G31) or Gates DOT compression. (G32)

Type A: Non-reinforced in sizes 1/8", 5/32", 3/16", and 1/4".

NOTE: 1/8" and 5/32" are NOT recognized by D.O.T. for air brake systems, these are for service lines only.

Type B: Reinforced with one open ply of fibrous nylon in sizes 5/16", 3/8", 1/2", 5/8" and 3/4".



*NOTE: Federal law requires registration with the Department of Transportation for anyone producing air brake hose assemblies with swaged or crimped fittings.

Braking Systems (continued)

Heavy-Duty Fleet and Off-Road Equipment

SureLok™ Fittings

Recommended for compressed air as a connector on all air brake systems at locations other than between chassis frame and axle or between towed and towing vehicle. Also as a connector on all air operated systems as applicable to suspension, steering, engine, transmission and auxiliary mechanisms. Fittings and tubing comply to Department Of Transportation Federal Motor Vehicle Safety Standard, (DOT FMVSS 106) (mandatory requirements for inch tube fittings in U.S.A.) Society for Automotive Engineers (SAE) J1131 (inch tube and fittings) and meet DIN 74324 and German TUV requirements (metric tube and fittings).

- Simple tube connection and disconnection
- Fewer component parts – Internally machined form in body to secure collet
- All collets marked with tube size
- Ease of tube insertion in areas of restricted access
- Total fittings system solution

Maximum Working Pressure: 0 to 150 psi

Working Temperature: -40°F to +220°F (-40°C to +100°C)

Materials: Body, tube support, Collet - Brass;
O-Ring – Buna N (Low Nitrile); Thread Sealant - Precoat 5

Tubing: Tube should be to SAE J844 or DIN 74324

SureLok™ Coupling Assortments



Small Air Brake Assortment

(Part Number: A33001)

This small SureLok™ assortment is a basic starter package for the jobber or fleet. The SureLok coupling allows for repairs or replacement of J844 nylon air brake lines without the need of tools.

Assortment Contains:

- 4 Sizes of Hoses
- 16 Coupling Configurations
- 158 Individual Couplings



Large Air Brake Assortment

(Part Number: A33002)

The large SureLok assortment is perfect for the jobber or fleet. SureLok couplings allow for repairs or replacement of J844 nylon air brake lines without tools. Along with the SureLok couplings, this assortment features brass field attachable couplings for SAE J1402 DOT All hose.

Assortment Contains:

- 7 Sizes of Hoses
- 51 Coupling Configurations
- 318 Individual Couplings

Small Air Brake Assortment

(Part Number: A33003)

Handy, small compression assortment is a basic starter package for the jobber or fleet. This assortment features brass compression couplings for J844 nylon air brake hose.

Assortment Contains:

- 4 Sizes of Hoses
- 31 Coupling Configurations
- 211 Individual Couplings



Large Air Brake Assortment

(Part Number: A33004)

The large compression assortment is perfect for the jobber or fleet. This assortment features both brass compression couplings for J844 nylon air brake hose and brass field attachable couplings for SAE J1402 DOT All hose.

Assortment Contains:

- 7 Sizes of Hoses
- 59 Coupling Configurations
- 330 Individual Couplings

Braking Systems (continued)

Heavy-Duty Fleet and Off-Road Equipment

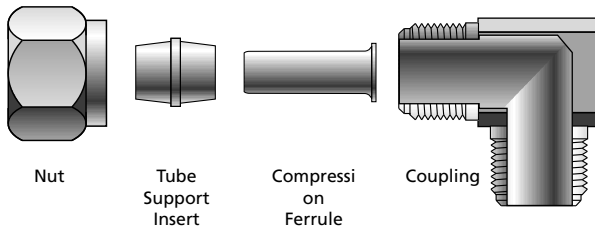
Compression Fittings

Recommended for compressed air as a connector on all air brake systems at locations other than between chassis frame and axle or between towed and towing vehicle. Also as a connector on all air operated systems as applicable to suspension, steering, engine, transmission and auxiliary mechanisms. Fittings and tubing comply to Department Of Transportation Federal Motor Vehicle Safety Standard, (DOT FMVSS571.106) (Mandatory requirements for inch tube fittings in U.S.A.) Society for Automotive Engineers (SAE J246) and (SAE J1131) (inch tube and fittings).

- **Maximum Working Pressure:** 150 psi
- **Working Temperature:** -40°F to +200°F (-40°C to +100°C)
- **Materials:** Brass
- **Tubing:** SAE J844 or DIN 74324

Component Functions

The Gates compression coupling has four parts:



AB Series Air Brake Hose*

Computer-controlled manufacturing process virtually insures product uniformity.

- Superior EPDM rubber resists damaging effects of ozone and heat, plus harmful grease and oil common to air brake systems.
- Four spiral polyester construction, meets SAE J1402 specifications. Complies with DOT FMVSS 106 requirements.
- Flexible and kink-resistant.
- Designed to accept all styles of air brake couplings, including conventional brass and plastic couplings.

Temperature rating: -40°F to +212°F
(-40°C to +100°C)

Packaging: 50 ft. per carton or 250 ft. reels
(maximum 3 pieces, shortest length 50 ft. or greater).

(Product Type 3245E)

I.D. (In.)	O.D. (In.)	Length (Ft.)	Work. Press. (psi)	Part No.
3/8	3/4	50	225	27240
3/8	3/4	250	225	28760
1/2	7/8	50	225	27241
1/2	7/8	250	225	28761



Heavy-Duty Green Stripe® Air Brake Hose*

Can be used as flexible connector between frame and axle.

- Compatible with standard air brake couplings.
- Neoprene construction is oil resistant.
- Two-braid rayon reinforced construction with smooth cover.
- Exceeds SAE J1402 and Bendix specifications. Complies with DOT FMVSS 106 requirements.

Packaging: Individually cartoned.

(Product Type 3245G)

I.D. (In.)	O.D. (In.)	Length (Ft.)	Work. Press. (psi)	Part No.
3/8	3/4	50	225	27220
3/8	3/4	250	225	28304
1/2	7/8	50	225	27221



***NOTE:** Federal law requires registration with the Department of Transportation for anyone producing air brake hose assemblies with swaged or crimped fittings.

Braking Systems (continued)



Power Brake Vacuum Hose

Light-duty hose specially engineered for power brake applications on passenger cars and light trucks.

- Complies with DOT FMVSS 106VL. Meets SAE 1403 Type L.
- Ozone-resistant EPDM cover.
- Textile reinforcement.
- Vacuum rating 30 In. Hg.

Temperature rating: -40°F to +257°F (-40°C to +125°C)

(Product Type 3276)

(Product Type 3276H)

I.D. (In.)	Work. Press. (psi)	Part No.	
		3 Foot	50 Foot
1 ¹ / ₃₂	85	27232	27230
1 ⁵ / ₃₂	85	27233	27231



Green Stripe® Vacuum Brake Hose 69W

Extra heavy-duty hose designed to fit most air brake systems on trucks, trailers and other heavy equipment.

- Wrapped hose construction with multiple plies of rubber-impregnated fabric.
- Resists collapsing or deforming even under high vacuum at elevated temperatures.
- Rated at 30 In./Hg.
- Exceeds SAE J1403, Type H. Complies with DOT FMVSS 106VH.

Temperature rating: -40°F to +257°F (-40°C to +125°C)

Packaging: 50 ft. lengths, individually cartoned.

(Product Type 3276)

I.D. (In.)	Work Press. (psi)	O.D. (In.)	Part No.
1/2	85	1 ⁵ / ₁₆	27211
5/8	85	1 ¹ / ₁₆	27212
3/4	85	1 ³ / ₁₆	27213

Air Conditioning & Refrigeration Systems



PolarSeal® Barrier Refrigerant Hose

Designed for environmentally safe R134a refrigerants in automotive air conditioning and industrial systems such as tractors, construction trucks, and mobile and stationary refrigeration units. Can be crimped with current AC die sets on MC4-20, PC707, 3000B and OmniCrimp® 21 crimpers, or, with the new PolarSeal Portable Crimper II (Part No. 77715).

- Minimizes permeation of both R134a and R12 refrigerants.
- Cover is black synthetic EPDM rubber.
- Nylon barrier inside black chloroprene rubber tube is reinforced with spiraled polyester.
- Meets or exceeds SAE J2064 Type C., Class 2.

Temperature rating: -22°F to +257°F (-30°C to +125°C). Class II.

Packaging: 25 foot cartons and UPS shippable reels.

(Product Type 3353)

NOTE: For a complete listing of PolarSeal Couplings, see Gates PolarSeal Catalog #428-7240.

*Beginning in 1995, all new air conditioning systems in cars, light trucks and industrial applications manufactured in North America must use R134a refrigerant.

PolarSeal™ Couplings & Accessories

OEM quality couplings in 64 configurations to fit most mobile refrigeration and air conditioning applications.

- Available in straight, 45° and 90° styles.
- Comes in male, female, flared, flareless and swivel ends to fit most popular applications.
- 4 sizes of "O Rings" especially compounded for R134a refrigerants.
- 5 inline orifice tubes.

Packaging: 1 each in plastic bag. 5 to 10 per carton according to popularity.

NOTE: For a complete listing of PolarSeal Couplings, see Gates Hydraulic Hose & Fittings Catalog #431-2080.

***NOTE:** Federal law requires registration with the Department of Transportation for anyone producing air brake hose assemblies with swaged or crimped fittings.



PolarSeal® Portable Crimper II



Windshield Washer and Vacuum Systems

Passenger Cars, Light Trucks,
Heavy-Duty Fleet and Off-Road Equipment

Windshield Washer, Vacuum and Radiator Overflow Tubing

Ideal for windshield washers, and vacuum-operated accessories, and radiator over flow.

- Vacuum and kink resistant construction.
- Meets SAE J1037, J942b specifications.

Temperature rating: -40° to +257°F (-40°C to 125°C)

Packaging: One 72 in. length per box. 50 ft. reel. One 250 ft. length per box.

(Product Type 4040A)

		72 Inch Length		50 Foot Reel		250 Foot Length		36 Inch Length		72 Inch Length		25 Foot Length		50 Foot Reel	
Nipple		Nipple		Nipple		Nipple		Nipple		Nipple		Nipple		Nipple	
I.D. (In.)	Size (In.)	Part No.	Part No.	Part No.	I.D. (In.)	Size (In.)	Part No.	Part No.	Part No.	Part No.	Part No.	Part No.	Part No.	Part No.	Part No.
7/64	1/8	27037	27041	—	1/4	5/16	—	27040	—	27044	—	—	—	—	—
5/32	3/16	27038	27042	27035	5/16	3/8	27555	—	27050	—	—	—	—	—	—
7/32	1/4	27039	27043	27036	3/8	7/16	27556	—	27053	—	—	—	—	—	—



Wet Arm Wiper Tubing

One size, small outside diameter washer tubing designed as an integral part of windshield wiper systems. Same construction as Windshield Washer and Vacuum Tubing above.

- Meets SAE J1037, J942b specifications.

(Product Type 4040A)

I.D. (In.)	Nipple Size (In.)	Part No. 72 Inch Clamshell	Part No. 50 Foot Clamshell
3/32	1/16	27030	27045

Clamshell Packaging

Four sizes of Windshield Washer and Vacuum Tubing attractively packaged in this self-service, recyclable package. Can be displayed on pegboard.

(Product Type 4040A)

I.D. (In.)	Nipple Size (In.)	Length (Ft.)	Part No.
7/64	1/8	6	27037
5/32	3/16	6	27038
7/32	1/4	6	27039
1/4	5/16	6	27040
5/16	3/8	3	27555
3/8	7/16	3	27556



Silicone Vacuum Tubing

Specially formulated silicone rubber. High temperature resistance assures long service life in harsh environments.

- Extremely flexible and kink resistant.
- Also used to transfer air, water and coolant.
- Orange color for easy identification.

Temperature range: 300°F (149°C) to

25 In./Hg. Possible reduced capacity above 300°F. Maximum 400°F (204°C).

Packaging: One 6 foot length in reusable, recyclable, self-service package.

(Product Type 4040T)

I.D. (In.)	Nipple Size (In.)	Min. Bend Radius (In.)	Part No.
7/64	1/8	1	27075
5/32	3/16	1 1/2	27076
7/32	1/4	1 1/2	27077
1/4	5/16	1 1/2	27078



Windshield Wiper Hose

Ideal for windshield washers, vacuum-operated accessories and radiator overflow applications.

- Reinforced construction for pressure applications. Kink and collapse resistant.
- EPDM tube and cover resists splitting or cracking during stem insertion.

Temperature rating: -40°F to +257°F (-40° to 125°C) to 26 In./Hg.

Packaging: 50 ft. reels.

(Product type 4251T)

I.D. (In.)	Work. Press. (psi)	Nipple Size (In.)	Part No.
5/32	50	3/16	27072
7/32	50	1/4	27073
1/4	50	5/16	27074



Air and Defroster Systems

Passenger Cars, Light Trucks, Heavy-Duty Fleet, Off-Road Equipment and Marine Applications



Emission Control Duct Hose

Connects hot air from exhaust manifold shroud to air cleaner for efficient control of emissions. Helps eliminate carburetor icing and improves engine warmup.

- Aluminum polyester construction for economy.
- Fiberglass aluminum (black) for greater strength and durability.
- Completely flexible and easily bent, yet retains shape after forming.
- Resists heat, cold, oil and water.
- Installs easily... cuts with knife.
- Install with or without clamps.

Packaging: Individually packed.
(Product Type 7743)

I.D. (In.)	Length (In.)	Part No.	I.D. (mm)	Length (mm)	Part No.
3/4	36	28092	40	1000	28091
7/8	36	28085	50	1000	28082
1 1/2	18	28093	60	1000	28081
1 1/2	36	28088			
1 3/4	18	28094			
1 3/4	36	28089			
2	18	28095			
2	36	28090			



Defroster/Air Intake Hose

For defrosters, air ducts, air intakes, under-hood applications and other low pressure, low suction applications. Approved for Marine Applications.

- Flexible, heat-resistant materials and helical steel wire reinforced.
- Easily cut and formed to desired shape and length.
- Tear, abrasion and ozone resistant.
- Complies with DOT FMVSS 302.
- Temperature range: -40°F to +200°F (-40°C to +93°C).

Packaging: Individually boxed in 6 ft. lengths (compressed to 21").
(Product Type 7768)

I.D. (In.)	Part No.	I.D. (In.)	Part No.	I.D. (In.)	Part No.
1 1/4	23820	2 1/2	23840	3 3/4	23860*
1 1/2	23824	2 3/4	23844	4	23864
1 3/4	23828	3	23848	4 1/2	23872
2	23832	3 1/4	23850	5	23880
2 1/4	23836	3 1/2	23856	6	23896

* Available until stock is depleted.

A.



Retractable Hose Reels

Gates reels conveniently coil hose out of the way to extend hose life and prevent accidental trips and falls. Available in either automatic or manual rewind reels. For greater convenience, longer hose life and a safer work area, choose Gates!

A. Automatic Rewind Hose Reel:

27509 – Reel with 25' of 3/8" Rubber Hose

27510 – Reel with 50' of 3/8" Rubber Hose

- All-Steel Construction
- Spring-Powered Auto Rewind
- Includes Locking-Ratchet Brake
- Mounts to Walls, Floors or Ceilings
- Guide Arm Adjusts to Different Angles
- Valve Assembly Handles up to 250 PSI and 25 CFM
- For Industrial Air, and Water Applications
- Includes 3' Leader Hose

B.



B. Manual Rewind Hose Reel:

27506 – Reel Only

27507 – Reel with 50' of 3/8" Thermo GP®X Hose and 3' Leader Hose

- Spring-Tension Brake
- All-Steel Construction
- Solid-Brass 1/4" Fittings
- Convenient Swiveling Handle
- Mounts in Any Direction
- Holds 100' of 3/8" Air Hose

27511 – 3' Leader Hose

- 3/8" Thermo GP®X
- 1/4" Male and Swivel Female Fittings
- Use with 27506 (reel only) or as a replacement

Air and Defroster Systems (continued)

Passenger Cars, Light Trucks, Heavy-Duty Fleet, Off-Road Equipment and Marine Applications

Turbocharger Hose

Specially compounded for use as a short, flexible connector between the air intake and the turbocharger. Can also be used for turbocharger air discharge.

- Approved for Marine Applications.
- Silicone elastomer inner liner reinforced with woven fiberglass fabric and coated with orange silicone rubber.
- Resists high temperatures and pressures.
- Resists coolants, weathering and ozone.
- Highly visible orange color helps distinguish this hose from engine coolant hose.

Temperature rating: -60°F to +500°F (-51°C to +260°C)

Packaging: 1 each.

(Product Type 7734)



I.D. (In.)	Part No.	Length (In.)	Work Press. (psi)	I.D. (In.)	Part No.	Length (In.)	Work Press. (psi)	I.D. (In.)	Part No.	Length (In.)	Work Press. (psi)
1	26116	36	45	2¾	26144	36	25	3½	26156	36	20
1½	26124	36	40	3	26001	3	25	3¾	26160	36	15
1¾	26128	36	35	3	26148	36	25	3¾	26162	36	15
2	26132	36	35	3¾	26002	3½	15	4	26164	36	15
2¼	26136	36	30	3¾	26003	6	15	4½	26166	36	15
2¾	26138	36	30	3¾	26154	36	15	5	26007	3½	15
2½	26140	36	30	3½	26004	3	20	5½	26008	3½	15
2½	26142	36	15								

Green Stripe® Ring Retained Turbocharger Hose

Made for turbocharged Class 8 and heavy-duty diesel engines. Multi-hump design isolates vibration and absorbs rotational shock. Depending on application, hose is engineered with three or four rings to maintain design integrity.

- Four layer silicone construction with aramid fiber reinforcement for maximum durability.
- Meets or exceeds OEM specifications.

Temperature rating: -60°F to +500°F (-51°C to +260°C)

(Product Type 4177M)

I.D. (In.)	Part No.	Length (In.)	Min. Burst Press. (psi)
3	26200	6	110
3½	26201	6	110
4	26203	6	110
4	26204	8	110



Green Stripe® Heavy-Duty Air Vent Hose

Specifically designed for air cleaner-to-engine connections and other ducting applications.

- Heat and oil-resistant tube.
- Flexible, helical wire reinforced.
- Cover is heat, oil and abrasion resistant.
- Smooth interior offers minimum air resistance for maximum efficiency.
- Easily cut with knife and wire cutters.

Temperature rating: -40°F to +257°F (-40°C to +125°C)

Packaging: 10 ft. lengths, individually cartoned.

CAUTION: Not recommended for conveying liquids.

(Product Type 4663G)

Part No.	Work I.D. (In.)	Vacuum Press. (psi)	Rating (In. /Hg)
23764	4	10	7
23772	4½	10	7
23780	5	10	6
23788	5½	10	6



Air and Defroster Systems (continued)

Passenger Cars, Light Trucks, Heavy-Duty Fleet and Off-Road Equipment (continued)



Air Vent Hose

Light-duty hose for air cleaner-to-engine connections, defroster ducts and air or heater ducting.

- Extremely flexible.
- Helical wire construction.
- Heat and oil resistant tube.

Temperature rating: -40°F to +212°F (-40°C to +100°C)

Packaging: 10 ft. lengths, individually cartoned.

NOTE: For abrasive environments use Gates Green Stripe® Heavy-Duty Air Vent Hose.

CAUTION: Not recommended for conveying liquids.
(Product Type 4663A)

Part No.	I.D. (In.)	Work. Press. (psi)	Vacuum Rating (In/Hg)	Part No.	I.D. (In.)	Work. Press. (psi)	Vacuum Rating (In/Hg)	Part No.	I.D. (In.)	Work. Press. (psi)	Vacuum Rating (In/Hg)
23610	5/8	10	5	23628	1 3/4	10	5	23644	2 3/4	5	3
23612	3/4	10	5	23630	1 7/8	10	5	23648	3	5	3
23614	7/8	10	5	23632	2	5	3	23656	3 1/2	5	3
23616	1	10	5	23634	2 1/8	5	3	23658	3 5/8	5	3
23620	1 1/4	10	5	23636	2 1/4	5	3	23664	4	5	3
23622	1 3/8	10	5	23638	2 3/8	5	3	23672	4 1/2	5	3
23624	1 1/2	10	5	23640	2 1/2	5	3	23680	5	5	3
23626	1 5/8	10	5	23642	2 5/8	5	3	23688	5 1/2	5	3

AV Series Air Vent Hose

Specifically designed for air cleaner-to-engine connections – and other ducting applications.

- Available in pre-formed Hump (similar to Vibraflex®), Straight and Curved configurations.
- Heat and oil resistant.

Temperature rating: -40°F to +225°F



Style	Part No.	(I.D. x Length) (In.)
Hump¹	23002	4 x 5
	23004	5 x 6
	23005	5 1/2 x 6
	23006**	6 x 5
Straight	23400	4 x 22
Flexible²	23402	6 1/8 x 19
Reducer Hump³	23100	3 1/2 x 3 x 5 1/4
	23101	4 x 3 x 5 1/4
	23106	6 x 5 1/2 x 6
	23107	7 x 6 x 5
Molded Elbow³	23201	3 x 5.25 x 90°*
	23202	3 1/2 x 5 1/2 x 45°
	23203	3 1/2 x 5 1/2 x 90°*
	23208	5 x 5 1/4 x 45°
	23209	5 x 6.0 x 90°
	23215	6 x 6 1/2 x 45°*
	23216	6 x 7 1/2 x 54°*
	23218	6 x 7.0 x 90°*
23221	7 x 7.5 x 90°	
Reducer Elbow³	23300	6 x 5 1/2 x 90°

*Ribbed

**Available until stocks depleted.

(Product Types 3177¹, 4663², 7736³)

Service Hose

Passenger Cars, Light Trucks, Heavy-Duty Fleet and Off-Road Equipment (continued)

Safety Stripe® Air Hose



Durable, premium hose for garage and service station air impact tools.

- High strength reinforcement.
- High flexibility is easy on wrists.
- Perforated EPDM **red cover** that resists ozone and abrasion.
- Bend restrictors for extended life.
- Factory assembled male couplings with 300 lb. minimum coupling pull.

Temperature range: -40°F to +200°F
(-40°C to +93°C)

Packaging: 25 ft. and 50 ft. individually cartoned.
(Product Type 3215, 3215A)

Part No.	I.D. (In.)	O.D. (In.)	Length (Ft.)	Working Pressure (psi)	Coupling Thread Size
27485	¼	35/64	25	300	¼-18NPT
27486	¼	35/64	50	300	¼-18NPT
27488	3/8	23/32	25	300	¼-18NPT
27489	3/8	23/32	50	300	¼-18NPT
27491	½	27/32	25	300	½-14NPT
27492	½	27/32	50	300	½-14NPT

Thermo GP®X Air Hose



Light-weight thermoplastic hose suitable for air impact tools and general service applications.

- White virgin PVC tube with polyester cord reinforcement.
- **Red w/black cover** PVC cover resists abrasion and combats the effects of sunlight, weathering and ozone.
- Bend restrictors for extended life.
- 0.5" ferrule wall thickness to resist crushing and deforming.
- Allows dirt and grease to be cleaned off easily.
- Suitable for air impact tools.
- Factory crimped, heavy-duty male couplings assure maximum dependability under pressure.

Temperature range: -15°F to +150°F
(-26°C to +66°C) continuous service.

Packaging: 25 ft. and 50 ft. assemblies, individually cartoned.

CAUTION: Do not use near welding equipment.
(Product Type 7746)

Part No.	I.D. (In.)	O.D. (In.)	Length (Ft.)	Working Pressure (psi)*	Coupling Thread Size
27480	¼	35/64	25	300	¼-18NPT
27481	¼	35/64	50	300	¼-18NPT
27501	¼	35/64	250**	300	—
27502	3/8	3/8	250**	300	—
27482	3/8	5/8	25	300	¼-18NPT
27483	3/8	5/8	50	300	¼-18NPT
27499	½	49/64	25	300	½-14NPT
27500	½	49/64	50	300	½-14NPT
27503	½	49/64	200**	300	—

*At 70°F (20°C).

** Bulk lengths are not coupled.

Charter® Air Hose



Designed for multi-purpose air hose applications. Capable of impact tool use.

- Textile reinforcement.
- Perforated EPDM **red cover** is ozone and abrasion resistant.
- Factory applied male couplings have 250 lb. minimum coupling pull.

Temperature range: -40°F to +200°F
(-40°C to +93°C)

Packaging: 25 ft. and 50 ft. coupled lengths individually cartoned; 300 ft. reels (maximum 2 pieces, shortest length 50 ft.).
(Product Type 3215)

Part No.	I.D. (In.)	O.D. (In.)	Length (Ft.)	Working Pressure (psi)	Coupling Thread Size
27475	¼	35/64	25	200	¼-18NPT
27476	¼	35/64	50	200	¼-18NPT
28673	¼	35/64	300*	200	—
27478	3/8	47/64	25	200	¼-18NPT
27479	3/8	47/64	50	200	¼-14NPT
28674	3/8	47/64	300*	200	—

*300' lengths are not coupled.

Service Hose (continued)

Passenger Cars, Light Trucks, Heavy-Duty Fleet and Off-Road Equipment (continued)



Charter Multi-Use Air/Water Hose

Ideal for air and water applications. Engineered for heat, abrasion and ozone resistance.

- EPDM rubber tube and cover
- Two layers of spiral synthetic reinforcement
- Gates PowerCrimp specifications available*

Temperature rating -40°F to +200°F.

Packaging: 50-ft. cartons, bulk reels.

*Contact your local Gates sales associate for spec. information.

CAUTION: Do not use for oil, grease or fuel transfer.

(Product Type 3204)

I.D. (in.)	Work. Press. (psi.)	Part No. 50Ft.	Part No. Reels	Reel Length Ft.	I.D. (in.)	Work. Press. (psi.)	Part No. 50Ft.	Part No. Reels	Reel Length Ft.
¼	200	28823	28800	500	¾	200	28832	28815	500
⅝	200	28825	28803	500	1	200	28836	28818	300
¾	200	28826	28806	500	1¼	200	N/A	28821	300
½	200	28828	28809	500	1½	200	N/A	28824	250
⅝	200	28830	28812	500					



Multi-Use Hose

For handling lower pressure air, water, agricultural spraying, oil or grease. Also can be used for air spray painting.

- Nitrile tube and cover provide high oil resistance.
- One or two braid polyester cord reinforcement.

Temperature rating: 0°F to +212°F (-18°C to +100°C)

Packaging: 50 ft. to carton; 300 ft. reels (maximum 3 pieces, shortest piece 50 ft.).

CAUTION: Not recommended for use as small I.D. by-pass, coolant and heater hose.

Do not use for fuel transfer applications.

(Product Type 3223)

I.D. (In.)	O.D. (In.)	Work Press. (psi)	Braid	Part No. 50 Ft.	Part No. 300 Ft.	I.D. (In.)	O.D. (In.)	Work Press. (psi)	Braid	Part No. 50 Ft.	Part No. 300 Ft.
¼	½	200	1	27402	28652	⅝	1⅝	250	1	27414	28667
¼	⅝	500	2	27403	28654	⅝	1	500	2	27415	28668
⅝	⅝	250	1	27404	28657	¾	1⅜	250	1	27418	28671
⅝	1⅛	500	2	27405	28658	¾	1⅜	500	2	27419	28672
¾	1⅛	250	1	27406	28661	1	1⅜	250	1	—	28765
¾	¾	500	2	27407	28662	1	1½	500	2	—	28766
½	27/32	250	1	27410	28665	1¼	1¾	250	1	—	28767
½	⅞	500	2	27411	28666						



Signal Call Tubing

For driveway signal devices in service station and garages.

- Long-lasting EPDM rubber tubing specially built to register under the slightest pressure.
- Withstands vehicle weight at temperatures up to +150°F (+66°C)
- Meets SAE J1037, J942b specifications.

Packaging: 50 ft. and 100 ft. (without couplings) individually cartoned; 300 ft. reels (maximum 2 pieces, shortest length 100 ft.).

(Product Type 4040)

I.D. (In.)	O.D. (In.)	Length (Ft.)	Part No.
⅝	⅝	50	27539
⅝	⅝	100	28681
⅝	⅝	300	28686

Service Hose (continued)

Garage Exhaust Hose

High Temperature Dynamometer, Rough Service Garage Exhaust Hose

Specially designed for state inspection facilities or high volume, rough service applications. The solid rubber construction will recover 100% after crushing. In addition, the durable abrasion resistant compound will endure heavy use.

- 30% thicker wall is durable, yet flexible.
- Ideal for state testing equipment and dynamometers.
- Less expensive and more resilient than silicone or metal tubing.
- Compound will withstand transient temperatures up to +700° F.
- One end of hose threads into another to create longer lengths.

Note: To increase service life rotate hoses and allow to cool.
(Product Type 7229)

Part Number	Description
90109	11' x 4" Dynamometer High Temperature Hose
90118	Straight Adapter with Chain and Hook
90119	Oval Adapter with Chain and Hook



Garage Exhaust Hose

Perfect for both floor use and suspended overhead applications. Resists high heat from catalytic converters, emission control devices, exhaust pipe and gas temperatures.

- Withstands temperatures up to +600°F (+300°C).
- Solid rubber construction recovers 100% when accidentally run over.
- Adapters and accessories available to lengthen or reshape hose.
- One end of hose threads into another to create longer lengths, except for accordion style hose.

Packaging: 11, 12 and 20 ft. lengths.

CAUTION: Don't run more than 23 feet of hose without a fan.

NOTE: Do not: kink hose, put directly into tailpipe or wind on over-head reels.
(Product Type 7729)



Hose I.D.				
(In.)	(mm)	Part No.	Description	Vehicle Type
2	50.8	90100	2" x 11' Hose	Motorcycle
2½	63.5	90101	2½" x 11' Hose	Small Car
3	76.0	90102	3" x 11' Hose	Medium/Large Car
4	102.0	90103	4" x 11' Hose	Light Truck
4	102.0	90105	4" x 15-20' Accordion-Type Hose	Light Truck
5	117.0	90104	5" x 11' Hose	Diesel Truck/Bus
5	117.0	90106	5" x 9-12' Accordion-Type Hose	Diesel Truck/Bus
5	127.0	90107	5" x 11' Wire Inserted	Diesel Truck/Bus
6	152.0	90108	6" x 11' Wire Inserted	Diesel Truck/Bus

Y-Assembly Kit

For Dual Exhaust vehicles.

Part No.	Description
90111	3" Y Assembly, two 4' x 3" hose and two straight tailpipe adapters.
90112	4" Y Assembly, two 4' x 4" hose and two straight tailpipe adapters.
90113	Twin Dual Assembly, two 4' x 3" hose and two 3" x 8" oval adapters. (90125)



Service Hose (continued)

Garage Exhaust Hose Adapters and Accessories (continued)



Adapters

Attaching hoses directly to tailpipe decreases hose life. These heavy-duty rubber adapters fit all sizes of tailpipes and can be screwed onto the convoluted profile of the hose.

Part No.	Description	Tail Pipe Size
90120	Tailpipe Adapter (Fits 2½" & 3" Hose)	Up to 2"
90121	Tailpipe Adapter (Fits 3" & 3½" Hose)	Up to 2½"
90122	Tailpipe Adapter (Fits 3½" & 4" Hose)	Up to 3"
90123	Tailpipe Adapter (Fits 3½" & 4" Hose)	Up to 3½"
90124	Twin/Oval Pipe Adapter (Fits 3" & 4" Hose)*	?
90125	Twin/Oval Pipe Adapter (Fits 3" & 4" Hose)**	?
90126	Universal Adapter (Fits 2½" & 3½" Hose)	All
90127	Universal Adapter (Fits 2" & 3" Hose)	All
90128	Diesel Stack (Fits 4" & 5" Hose)	5½"
90129	Diesel Stack (Fits 6" Wire Inserted Hose)	5½"

* 2½" x 5½" opening.

** 3" x 8" opening.



Splice Connectors

For securely joining two exhaust hoses of the same diameter.

Part No.	Description	Material	Key
90130	For 2½" Hose	Rubber	A
90131	For 3" Hose	Rubber	A
90132	For 4" Hose	Rubber	A
90133	For 3" Hose	Aluminum	B
90134	For 4" Hose	Aluminum	B
90135	For 5" Hose	Aluminum	B
90136	For 6" Wire Inserted Hose	Aluminum	B



Door Ports

For venting fumes through solid doors. Closure flap included with each port.

Part No.	Description	Material
90140	Port for 2½" Hose	Rubber
90141	Port for 3" Hose	Aluminum
90142	Port for 4" Hose	Aluminum



Y Fittings

For dual exhaust vehicles.

Part No.	Description	Material
90150	For 2½" Hose	Rubber
90151	For 3" Hose	Rubber
90152	For 4" Hose	Aluminum



Elbows

Aluminum 90° elbow connectors for use with overhead pulley systems.

Part No.	Description
90153	For Overhead 2½" Hose
90154	For Overhead 3" Hose
90155	For Overhead 4" Hose
90156	For Overhead 5" Hose

Safety Reminder: Replace damaged hoses immediately. Use exhaust hose on every running engine. Check powered exhaust system daily to be sure system is in working order.

Exhaust System Hose

Marine Applications

Exhaust Hose (Hardwall) Wire Reinforced

Heavy-duty fabric-reinforced hose with a helical steel wire reinforcement to meet marine water and wet exhaust hose requirements.

- Features blue layline for easy identification.
- Resists heat and oil.
- Meets SAE J2006 requirements.
- Working pressure 100 psi for water application, 10 psi for exhaust application.
- May be used for engine water circulation, discharge lines, heat exchangers and wet exhaust connections.

Packaging: 12.5 foot lengths.
(Product Type 4686ME)



I.D. (In.)	12.5 Foot Length Part No.	I.D. (In.)	12.5 Foot Length Part No.	I.D. (In.)	12.5 Foot Length Part No.
1 $\frac{1}{8}$	250-1184	2 $\frac{1}{8}$	250-2184	3 $\frac{1}{2}$	250-3124
1 $\frac{1}{4}$	250-1144	2 $\frac{1}{4}$	250-2144	4	250-4004
1 $\frac{3}{8}$	250-1384	2 $\frac{3}{8}$	250-2384	4 $\frac{1}{2}$	250-4124
1 $\frac{1}{2}$	250-1124	2 $\frac{1}{2}$	250-2124	5	250-5004
1 $\frac{5}{8}$	250-1584	2 $\frac{5}{8}$	250-2584	5 $\frac{1}{2}$	250-5124
1 $\frac{3}{4}$	250-1344	2 $\frac{3}{4}$	250-2344	6	250-6004
1 $\frac{7}{8}$	250-1784	2 $\frac{7}{8}$	250-2784		
2	250-2004	3	250-3004		

Water System Hose

Heavy-Duty Fleet and Off-Road Equipment and Marine Applications

Service-Master® Water Hose

Heavy-duty hose for fleets, service stations and repair shops. Ideal for cement trucks and wash rack use.

- EPDM tube handles hot water up to +200°F (+93°C).
- Two-braid reinforcement.
- Flexible and kink resistant.
- Rugged black EPDM cover with protective rib design resists abrasion, weathering and crushing.
- 25 ft. and 50 ft. lengths come coupled. 250 ft. bales uncoupled.

Packaging: Individually cartoned; bales.
(Product Type 3808)



I.D. (In.)	Length (Ft.)	Work. Press. (psi)	Part No.	I.D. (In.)	Length (Ft.)	Work. Press. (psi)	Part No.
$\frac{5}{8}$	25	200	27101	$\frac{3}{4}$	25	200	27102
$\frac{5}{8}$	50	200	27107	$\frac{3}{4}$	50	200	27108
$\frac{5}{8}$	250	200	28691	$\frac{3}{4}$	250	200	28692

Fleet Accessories

Splash Guards



Minimizes annoying splashing of rain and settled water from wheels on medium and heavy-duty trucks.

- Tough rubber and fabric-filled construction for maximum service life.
- Special half-round reinforced ridge resists tearing and cracking.
- Body is ¼" thick and edge is ⅜" thick for extra strength.

Packaging: Order in pairs (unpackaged).
(Product Type 1170)

Length (In.)	Width (In.)	Part No.
26	24	90335
30	24	90333
36	24	90334
40	24	90332

Static Straps



Discharges potentially dangerous static electricity from equipment when properly grounded.

- Specially compounded rubber conducts static electricity.
- Resists weathering, abrasion and tearing.
- Meets, military specifications MILR3065C

Packaging: 25 per carton.
(Product Type 2960)

Length (In.)	Width (In.)	Depth (In.)	Part No.
25	1 1/16	3/16	90330
30	1 1/16	3/16	90331

Merchandisers and Sales Aids

PoweRated® "70" Belt Merchandiser

(Part No. 91230)

(Part No. 91234 - Display unit without belts - Charge Item)

Eye-appealing merchandiser encourages self-service retailing.

Takes up approximately 4 feet of gondola space.

Provides 78% coverage on applications in the 3 to 17 horsepower range.

- Belt measuring device makes it easy to select the correct replacement belt.
- Complete application catalog also furnished.
- Six 4 ft. metal racks.
- Belt number tags.
- 4 ft. header sign.
- One each in the top 70 sizes included.

NOTE: Pegboard and gondola not included



Qty.	Part No.	Qty.	Part No.	Qty.	Part No.	Qty.	Part No.	Qty.	Part No.
1	6731	1	6834	1	6848	1	6862	1	6878
1	6734	1	6835	1	6849	1	6863	1	6879
1	6822	1	6836	1	6850	1	6864	1	6880
1	6823	1	6837	1	6851	1	6865	1	6881
1	6824	1	6838	1	6852	1	6866	1	6882
1	6825	1	6839	1	6853	1	6867	1	6883
1	6826	1	6840	1	6854	1	6868	1	6884
1	6827	1	6841	1	6855	1	6869	1	6885
1	6828	1	6842	1	6856	1	6870	1	6886
1	6829	1	6843	1	6857	1	6871	1	6887
1	6830	1	6844	1	6858	1	6872	1	6888
1	6831	1	6845	1	6859	1	6874	1	6890
1	6832	1	6846	1	6860	1	6876	1	6895
1	6833	1	6847	1	6861	1	6877	1	6969

Truflex® Belt "70" Low Profile Belt Merchandiser

(Part No. 91234 - Display unit without belts. Charge item)

Facilitates self-service retailing – easy for customers to select correct replacement belts.

Utilizes maximum depth of display area, allows more products in less space.

Belt assortment gives 80% coverage. For applications of less than 3 horsepower.

- Unique belt measuring tool and handy applications catalog helps proper belt selection.
- Six 4 ft. adjustable display racks.
- Belt number tags
- 4 ft. header sign.

NOTE: Pegboard and gondola not included.



Belts not included.

Merchandisers and Sales Aids (continued)

Thermostat, Gasket & Radiator Cap Cabinet Fuel Cap Cabinet

Attractive displays keep products neatly organized. These cabinets are attractive and eye-catching, as well as rugged and durable. The thermostat cabinet comes with a wall mountable gasket board to organize your gaskets. Both cabinets have room to add part numbers beyond the basic 80 percent coverage, whether new numbers or for a specific need. Sturdy Steel construction for prolonged life and durability.

(Part No. 91116 Stat, Gasket & Rad. Cap Cabinet* includes gasket display board)

(Part No. 91117 Fuel Cap Cabinet)



Cap & Thermostat Cabinet Part No. 91116

Part No.	Type	Qty.
31333	Rad. Cap	1 ea.
31523	Rad. Cap	1 ea.
31526	Rad. Cap	1 ea.
31527	Rad. Cap	1 ea.
31528	Rad. Cap	1 ea.
33006	Thermostat	1 ea.
33259	Thermostat	1 ea.
33269	Thermostat	1 ea.
33299	Thermostat	1 ea.
33479	Thermostat	1 ea.
33488	Thermostat	1 ea.
33508	Thermostat	1 ea.
33509	Thermostat	1 ea.
33529	Thermostat	1 ea.
33708	Thermostat	1 ea.
33779	Thermostat	1 ea.
33008S	Thermostat	1 ea.
33009S	Thermostat	1 ea.
33329S	Thermostat	1 ea.
33429S	Thermostat	1 ea.
33489S	Thermostat	1 ea.
33608	Gaskets	10 ea.
33611	Gaskets	10 ea.
33619	Gaskets	10 ea.
33624	Gaskets	10 ea.
33631	Gaskets	10 ea.
33633	Gaskets	10 ea.
33635	Gaskets	10 ea.
33637	Gaskets	10 ea.
33638	Gaskets	10 ea.
33641	Gaskets	10 ea.
33643	Gaskets	10 ea.
33644	Gaskets	10 ea.

Fuel Cap Cabinet Part No. 91117

Part No.	Qty.
31612	1
31615	2
31623	2
31625	1
31629	1
31630	1
31640	1
31676	1
31702	1
31720	2
31723	1
31734	1
31738	1
31742	1
31743	1
31748	3
31778	1
31803	1



A-frame Curved Hose Racking

Maximize your space with A-frame curved hose racking. A-frame Racking is an easy-to-assemble, efficient and economical storage system for both belts and hoses. This racking is the most practical way to keep stock right at your fingertips without crowding your valuable storage space. The racks are free standing and hold over 300 different hoses.

- Each Kit Contains: Eleven (11) – 8 foot sections of Dexion girder and Two (2) – 24 inch sections of Dexion girder

Dimensions: H 7.5', W 2.5', L 8'

(Part No. 91516)

Merchandisers and Sales Aids (continued)

Vacuum & Fuel Line Hose Merchandiser/ Assortment

(Part No. 91159)

(Part No. 91158 - Display only. Charge Item)

(Part No. 91997 - Replacement Pack of Hose Grommets)

Attractive, metal cabinet with heavy gauge plastic see-through cover comes assembled. Holds and dispenses three reels of fast-selling Gates Fuel Line*, EEC and PCV hoses... plus three reels of popular size tubing for windshield washers and vacuum-operated accessories.

- Contains 9 fast-selling hose sizes on individually mounted and replaceable reels.
- Handy measuring scale printed on lid makes it easy to measure exact size of hose needed.
- Can be displayed on counter or mounted on wall.
- Attached chain designed to hold hand-held hose cutter.
- Base dimensions are 14 $\frac{3}{8}$ " x 18 $\frac{3}{4}$ ".

NOTE: Combine this merchandiser with the Heater Hose Merchandiser below to create the modular "Hose Center" shown below.

*For gasoline, gasohol and diesel fuels only.

Fuel Line/PCV / EEC Hose			Vacuum Tubing		
I.D. (In.)	Length (Ft.)	Part No.	I.D. (In.)	Length (Ft.)	Part No.
1/8	25	27000	1/8	50	27041
3/16	25	27001	5/32	50	27042
1/4	25	27002	7/32	50	27043
5/16	25	27003	1/4	50	27044
3/8	25	27004			



Fuel Injector Hose Merchandiser

(Part No. 91185 - Display only. Charge Item)

(Part No. 91186 - Hose Assortment)

Attractive well constructed metal cabinet, powder coated for long lasting durability

- Contains 3 top selling sizes on individually mounted and replaceable reels.
- Fits in-between the 9-reel (91158) and the heater hose merchandiser 91160.
- Easy front door access to reels for refilling.
- Base dimensions 14 $\frac{3}{8}$ " x 18 $\frac{3}{4}$ ".
- Constructed to be combined with the 9-reel and heater hose cabinets.

I.D. (In.)	Length (Ft.)	Part No.
1/4	25	27094
5/16	25	27095
3/8	25	27096



Heater Hose Merchandiser

(Part No. 91160)

Attractive, yet rugged metal cabinet organizes and keeps stock neat. Designed to hold dispensing cartons – makes it easy to pull hose out for measuring. Create a "Hose Center" by adding the popular Gates Fuel Line/PCV/EEC and Vacuum Tubing Merchandiser to the top of this unit.

- Holds 1 each 50 ft. cartons of 1/2", 5/8" and 3/4" heater hose.
- Handy 36" measuring scale printed on side makes it easy to measure the exact length of hose needed.
- Assembled unit measures 20 $\frac{1}{8}$ " x 17 $\frac{1}{2}$ " x 43". (Shipped K.D.)

NOTE: Merchandiser does not include hose.



Create a "Hose Center"

Just add the popular Gates Fuel Line/PCV/EEC and Vacuum Tubing Merchandiser to the Heater Hose Merchandiser – and all the popular small I.D. hoses will be located in one neat and convenient location.

Part No.	Description
91160	Heater Hose Merchandiser
28410	1/2" Heater Hose
28411	5/8" Heater Hose
28412	3/4" Heater Hose
91159	Vacuum & Fuel Line Merchandiser
91141	Small I.D. Hose Cutter



Merchandisers and Sales Aids (continued)



Fuel Line Rack (6 Reel)

(Part No. 91126)

Heavy-gauge black wire rack conveniently holds six reels of Fuel Line Hose and Vacuum Tubing. Makes dispensing of hose easy.

- Designed to hang on wall or pegboard gondola.
- Pre-assembled unit comes with header card and measures 17" wide, 32" high and 8" deep (when hose reels are added).

Packaging: 5 per carton.

NOTE: Unit does not include hose.



Fuel Line and Vacuum Tubing Connector Kit

(Part No. 91156. Charge Item)

Handy impact resistant plastic case holds an assortment of 36 fuel line and vacuum tubing connectors. Assortment includes two of each connector shapes – "Y", elbow, tee, reducer and straight.

- Plan-o-gram inside lid identifies location of each type and size connector.
- Provides convenient storage for complete line of fuel line and vacuum tubing connectors.
- Assortment contains two of each size from 3/32" to 3/16" O.D.

Part No.	Description	I.D.	Part No.	Description	I.D.
28561	Straight	3/32"	28574	Elbow	3/16"
28562	Straight	1/8"	28592	Reducer	1/8" – 5/32"
28563	Straight	5/32"	28552	"Y" Connector	1/8"
28564	Straight	3/16"	28581	Tee	3/32"
28591	Reducer	3/32" - 1/8"	28582	Tee	1/8"
28551	"Y" Connector	3/32"	28583	Tee	5/32"
28571	Elbow	3/32"	28584	Tee	3/16"
28572	Elbow	1/8"	28593	Reducer	3/16" – 1/4"
28573	Elbow	5/32"	28554	"Y" Connector	3/16"



Heater Hose Quick-Lok® Connector Assortment

(Part No. 91166. Charge Item)

Purchase this assortment and save, vs. buying each component individually.

Each assortment includes: (1) Disconnect tool and (6) Quik-Lok Connectors (2 each of part numbers 28500, 28501, 28502)

Heater Hose Connector Assortment

(Part No. 91136. Charge Item)

Sturdy impact-resistant plastic case holds an assortment of 36 hose connectors for 1/4" through 3/4" I.D. hose.

- Case opens from either side.
- Handy plan-o-gram inside both lids identifies location of each type and size connector.
- Assortment contains two each elbow, straight, reducer and "T" connectors.
- Provides convenient storage for complete line of connectors.

Part No.	O.D. (in.)	O.D. (mm)	Part No.	O.D. (in.)	O.D. (mm)
28601	1/4"	6mm	28622	3/8"	10mm
28602	3/8"	10mm	28623	1/2"	12mm
28603	1/2"	12mm	28624	5/8"	15mm
28604	5/8"	15mm	28625	3/4"	19mm
28605	3/4"	19mm	28631	1/4"	6mm
28609	3/8" to 1/2"	10mm-12mm	28632	3/8"	10mm
28610	1/2" to 5/8"	12mm-15mm	28633	1/2"	12mm
28611	5/8" to 3/4"	15mm-19mm	28634	5/8"	15mm
28621	1/4"	6mm	28635	3/4"	19mm

Merchandisers and Sales Aids (continued)

Air Brake Hose Product Merchandiser

(Part No. 91180 - Charge Item)

The merchandiser will hold air brake hose assemblies, Teflon assemblies and is packed with labels for both products. The merchandiser keeps assemblies organized, handy and ready to use. Mounts to the wall.



PowerGrip® SB Clamp Merchandiser

(Part No. 91163)

This handy storage rack holds all available sizes of PowerGrip SB Clamps. A very convenient way to organize clamps.

- Saves time, no searching for the right size
- Can see at a glance if out of a size
- Comes loaded with clamps
- Saves money
- Easily mounts on wall or will stand on the counter.

(Order PowerGrip SB Clamp Stand – Part No. 91165)



Merchandiser contains the following components:

Size No.	Part No.	Qty.	Nominal		Size No.	Part No.	Qty.	Nominal	
			Hose I.D. (In.)	Fits Hose O.D. (In.)*				Hose I.D. (In.)	Fits Hose O.D. (In.)*
SB15	32915	5	¼	½ to 1¼	SB48	32948	10	1½	1¾ to 2
SB19	32919	10	⅜	1¼ to 1⅝	SB54	32954	10	1¾	2 to 2¼
SB22	32922	10	½	1⅝ to 1⅞	SB60	32960	10	2	2¼ to 2½
SB25	32925	10	5/8	1⅞ to 1⅞	SB67	32967	8	2¼	2½ to 2¾
SB29	32929	20	¾	1⅞ to 1⅞	SB73	32973	4	2½	2¾ to 3
SB34	32934	10	1	1⅞ to 1½	SB79	32979	4	2¾	3 to 3¼
SB41	32941	10	1¼	1½ to 1¾	SB86	32986	4	3	3¼ to 3½
					SB90	32990	4	3½	3½ to 3¾

* To insure accuracy, use the PowerGrip SB Measuring Tape.

NOTE: PowerGrip SB Clamp Merchandiser is available without clamps. (Order Part No. 91164)

Merchandisers and Sales Aids (continued)

PowerGrip® SB Clamp Assortment

(Part No. 91162)

Starter kit comes with a clamp removal tool and assortment of popular size Power-Grip SB clamps. Includes handy size chart on inside of lid.

Assortment includes:

Quantity	Part No.	Hose O.D. (In.)	Quantity	Part No.	Hose O.D. (In.)
2	32915 (SB15)	½ - 11/16	2	32948 (SB48)	1¾ - 2
2	32919 (SB19)	11/16 - 13/16	2	32954 (SB54)	2 - 2¼
2	32922 (SB22)	13/16 - 15/16	2	32960 (SB60)	2¼ - 2½
4	32925 (SB25)	15/16 - 17/16	2	32967 (SB67)	2½ - 2¾
4	32929 (SB29)	1¾ - 1¾	2	32973 (SB73)	2¾ - 3
2	32934 (SB34)	1¾ - 1½			
2	32941 (SB41)	1½ - 1¾	1	91215	Removal Tool

To ensure proper clamp size, measure hose O.D. with stem installed.



Heavy-Duty PowerGrip SB Clamp Removal Tool

(Part No. 91215 Tool. Charge Item)

Offers easiest method for removing Gates PowerGrip SB clamps.

- Quickly removes clamps without damaging hose.



Sizing Chart Decal

(Part No. 91221)

Stick this handy pressure-sensitive size and part number chart on heat gun handle, tool kit or any convenient location. No charge for this item.



Size Selector

(Part No. 91220)

Easy-to-use measuring device accurately determines the size SB clamp needed for application. Simply wrap selector around outside of hose and read the corresponding

PowerGrip SB Clamp number. No charge for this item.

For PowerGrip SB Merchandiser—See Next Page.

Hose Clamp Merchandiser

(Part No. 91139)

Handy and durable plastic storage rack, comes complete with seven different sizes of hose clamps. Keep your popular sizes of hose clamps neatly organized with this merchandiser.

Merchandiser contains the following clamps:

Part No.	Size No.	Qty.
32001	1	20
32007	7	10
32010	10	10
32012	12	20
32020	20	10
32028	28	20
32036	36	10

NOTE: Rack is available without clamps (Order Part No. 91145)



Merchandisers and Sales Aids (continued)

Hose Cutters (Hand-Held) and Replacement Blades

Makes clean cuts - no ragged edges. Cuts most non-metal reinforced rubber hoses up to 3" I.D. Excellent for cutting thin walled flexible pipe, PE and PVC pipe (up to 1½") used in sprinkler systems.

- Lightweight with nylon handles.
- Blade closes into handle for safety.
- Use small cutter for hoses up to 1½" I.D.

Packaging: Cutter and blades individually packaged on shrink-wrapped cards ready for pegboard display.



Hose Cutter Replacement	Description	Blade
		91143
91153	Small I.D. Hose Cutter	91154

All charge items

Molded Coolant Hose Locator Guide and CD

(Part No. 91472. Charge Item.)

The New Hose Locator Guide and CD (2002 Edition) Gives location and helpful information for selling molded cooling system hoses found on North American cars and light trucks made by Chrysler, Ford, GM, Jeep, Hyundai, Kai, Mazda, Mitsubishi, Nissan, Subaru, Toyota and Volkswagen.

- Detailed illustrations showing hose locations and identification.
- Covers popular vehicles from 1986 – 2002.
- Gates replacement hose is listed with each application.
- Covers over 24,000 applications.
- Includes average technician "labor time".



Timing Belt Replacement Manual

(Part No. 91471. Charge Item.)

Updated edition for 2002 has all the information needed for any car or light truck timing belt replacement. Manual is indispensable for installing or selling timing belts.

Now Available on CD.

- Over 600 illustrated pages of detailed instructions.
- Covers popular vehicles 1970 and newer.
- Gates replacement belt is listed with each application.
- Includes average technician "labor time" and identifies applications where w.p. is included.



Technical Service Bulletin

(Part No. 91473. Charge Item.)

One handy, easy-to-use manual, filled with technical tips direct from OEM's. The perfect problem solving tool for any installer who wants to improve service to customers.

- 300 pages of information on replacing and trouble-shooting cooling systems, accessory drives and engine timing.
- Detailed technical instructions covering 1984-1998 import and domestic cars, light, medium and heavy-duty trucks.
- Information categorized by vehicle symptom as well as make, model and year.
- "Part Number Supersession" – the OE part number is listed alongside the Gates number for faster part ordering.



Merchandisers and Sales Aids (continued)



Conversion Chart

(Form No. 428-1800)

This tool was specifically designed to measure Micro-V Belts. Belts other than Micro-Vs can be measured by following instructions printed on this card.

- Comes attached to each Micro-V Belt Length Finder.
- Card is laminated for long service life.



Early Warning Gauge

(Form No. 428-1780)

Unique tool designed to help inspect Micro-V Belts for cracking and chunking (pieces breaking off). Simply hold gauge parallel to belt's ribs and count the number of rib cracks that appear in the 3" gauge slot to determine replacement need.

V-Belt Number Finder

(Part No. 91201 - Belt Finder. Charge Item.)

Versatile device helps determine replacement belt numbers for cars, light trucks, heavy trucks, buses and Truflex® /PoweRated® light-duty belts... when old belt is available.

Packaging: Individually cartoned

For automotive and light-duty belt applications, see Gates Catalogs and Owners' Manuals to verify recommended replacement parts.



Micro-V® Belt Length Finder

(Part No. 91202 Finder. Charge Item)

Handy tool measures every Micro-V Belt made to help determine replacement belt for cars, light trucks, buses, heavy trucks and other equipment... when used belt is available. Dealer recovers cost of Finder when belts are sold.

- Telescopes out to measure up to 120" belts. Compact 3 ft. length when closed.
- Accurate, lightweight and easy to use.

Packaging: Individually cartoned

For specific applications and recommended replacement belt numbers, see Gates Catalogs and Owners' Manuals.



Truflex® and PoweRated® Belt Length Finder

(Part No. 91104)

Improved belt length finder measures fhp belts up to 107" to determine equivalent Truflex or PoweRated belt numbers.

- Instructions for using finder packed with unit.

Packaging: Individually cartoned.



Merchandisers and Sales Aids (continued)

Product Grabber (Telescoping Pole)

(Part No. 91233)

Easy product hanging and retrieval from belt boards that are installed high on walls.

- 4' pole, extends to 11'
- Extra long 8" hook for extended reaches



Power Steering & Alternator Pulley Kit

(Part No. 91014)

Designed to remove and install press-on-type belt driven accessory pulleys found on most vehicles.

- Kit includes components necessary to remove and install pulleys on pumps with common 3/8-16 threaded shaft.
- Also includes unique interchangeable components to remove and install pulleys on GM Quad 4, 3.1L, and Ford 4.6L engines.

Designed to be used with either hand tools or air impact gun.

- Kit includes special holding bar to stop housing from spinning during use with impact gun.



TubeMedic® Radiator Overflow Repair Kit

(Part No. 91004)

Offers a unique method of repairing or relocating radiator overflow spouts without removing or disassembling radiator. With kit, technicians can remove broken overflow tube, cut a new hole and O-ring seat, and replace tube in about five minutes.

- Five-pack refill kit is also available (part no. 91005).



Airlift™ Cooling System Vacuum Fill Tool

(Part No. 91003)

Gates Airlift tool places a vacuum on system, filling it to 100 percent capacity in seconds. Unlike other tools, Gates Airlift tool also has a unique cone design that fits all applications without adapters.

- Eliminates trapped air from cooling system.
- Trapped air can destroy an engine, causing corrosion, hot spots, loss of circulation, poor thermostat operation, poor heater output and water pump cavitations. Many vehicles have specialized air-bleeding procedures that are difficult and time consuming.



Coolant & Battery Refractometer

(Part No. 91001)

Measures concentration of coolant mixture in engine. Place small sample of coolant on lens, then hold lens up to light source. Light bends through liquid, providing an accurate reading on scale.

- Measuring coolant concentrations is essential to cooling system maintenance.
- Most technicians use hydrometers to test coolant concentration via gravity or floating ball scales.
- Hydrometers must be temperature corrected, and may give false readings when testing new, propylene-based coolants.
- Gates refractometer automatically corrects for temperature on both types of coolant (ethylene and propylene glycol) while also measuring battery charge levels.



Professional-Grade Tools

Tools that help you quickly and easily install Gates products.



Heavy-Duty Ratcheting Serpentine Wrench

(Part No. 91012)

Designed for restricted areas where radiator hoses, charged air cooler pipes, hydraulic lines and frame rails often interfere with maintenance.

- 27-tooth ratchet for better tool positioning and more swing than standard serpentine belt wrenches.
- Reversible ratchet head is only 1" thick to fit between tensioner face and fan blades.
- Great for buses and delivery vans.
- Works on any serpentine belt tensioner with a 1/2" square drive opening.



Serpentine Belt Tension Relief Tool

(Part No. 91015)

Ideal tool for removing and installing serpentine belts. Provides necessary leverage and clearance to release spring pressure and move tensioner pulley arm.

- New 3-bar design includes seven sockets (13mm, 14mm, 15mm, 16mm, 18mm, 3/8" and 1/2").



Serpentine Ratcheting Wrench Set

(Part No. 91011)

Provides fast way of releasing tension on serpentine belt drives. Reversible, 21-tooth ratcheting heads on each end allow for better tool positioning and more swing than standard serpentine belt wrenches.

- Wrenches are 21-1/2" long, 6" longer than competitive designs for increased leverage.
- Includes eight sizes for maximum application coverage: 13mm, 14mm, 15mm, 16mm, 17mm, 3/8", 1/2" and 3/4."



DriveAlign™ Laser Alignment Device

(Part No. 91006)

Exclusive, patented tool is compatible with all automotive serpentine belt drives. Quickly identifies two most common types of pulley misalignment – parallel offset and angular – that reduce belt and pulley service life and produce unwanted noise. Simply position tool within grooves of pulley and aim laser beam at opposite pulley.

- Lightweight, easy-to-use tool includes special laser enhancement glasses for easy viewing in all light conditions.
- Comes with high-impact resistant carrying case.

Professional-Grade Tools (continued)

Krikit II Micro-V® (V-Ribbed) Belt Tension Gauge

(Part No. 91132. Charge Item.)

Designed for tensioning V-ribbed belts on passenger cars, light trucks, heavy trucks and buses.

- Bright green Pressure Pad and Indicator Arm.
- Calibrated to measure tension from 100 to 320 lbs., and 50 to 150 kg.
- Measure belts up to 8 ribs in width.

Packaging: Individually boxed.



Krikit V-Belt Tension Gauge

(Part No. 91107. Charge Item.)

Permits user to tension belts during installation, while engine is shut off. This is important to belt life and performance. Use for tensioning all automotive V-belts up to, and including, 7/8" top widths. Easy to use.

- Instructions packed with product.
- Scale reads in pounds and kilograms. Measures tension from 30 to 160 lbs., and 15 to 75 kg.
- Die-cast aluminum body, nylon Indicator Arm and Pressure Pad.
- Fits in pocket like a pen. Has stainless steel pocket clip.

Packaging: Individually boxed.

NOTE: Not for use on timing belts.



Belt Installation Tool

(Part No. 91209. Charge Item)

Time-saving tool affords control and reach when installing serpentine belts.

Also helps install V-belts and timing belts located in difficult-to-reach areas.

- Two pin design affords convenient belt push/pull capability.
- Tool's handle lends easy twisting control of belt in hard-to-reach places.



Professional-Grade Tools (continued)



Cam Gear Sprocket Tool

(Part No. 91008)

Gear holding tool provides safe, effective means for holding gear while removing and reinstalling belt or sprockets without damaging gears, cams or valves. Many engine-timing procedures require camshaft to be held in position while gear or belt is removed from shaft to re-align cam timing position properly.

- Tool can also be used to turn gears during timing alignment.
- Essential tool for many timing belt, pump adjustment and engine timing applications.



Multi-Lock Tool

(Part No. 91009)

Multi-Lock tool "locks" twin camshafts in place during timing belt replacement or engine overhaul.

- Fits onto sprockets and extends to hold sprocket teeth. Incorporates "variable pitch" adjustable arms to fit various diameters and tooth pitches.
- Unique design is fully adjustable to fit numerous applications including diesel injector pump sprockets and sprockets that are positioned closely together like those on Mitsubishi or GM EcoTec engines.
- Ratchet locking handle provides compact, strong lever action for secure positioning.
- Also includes extension bar for wider spaced cams (\$25 value).



Timing Belt Tension Tester

(Part No. 91000)

Provides a precise method of testing timing belt tension on a variety of automotive applications.

- Gates tension tester will test any timing belt up to 30mm wide, thus replacing several expensive tools.
- Comes with adapters for varying belt thicknesses.
- Uses force deflection method to measure tension.
- Compact design works in tight engine compartments.
- Scale can be read in any position. Includes coupon for free timing belt installation CD-ROM.

Professional-Grade Tools (continued)

Master Timing Kit

(Part No. 91007)

Includes one Gates Timing Belt Tension Tester (part no. 91000), one Cam Gear Sprocket Tool (part no. 91008) and two Gates Multi-Lock Tools (part no. 91009).



Hydraulic Tensioner Pin Set

(Part No. 91010)

A Gates exclusive that's a must have for every technician. Timing belt tensioners need to be compressed during service. Many technicians use a drill bit or allen wrench to hold tensioners in their compressed state, which can be dangerous and may bend or damage tools.

- Hardened spring steel to hold the strongest tensioners.
- Conveniently mounted on key chain with six different sizes to service a variety of applications.
- Holds certain serpentine belt tensioners and timing chain tensioners in place, during service.



SureLok™ Quick-Release Pliers

SureLok™ couplings (Push-to-Connect) are the easiest and quickest coupling to install. Disconnecting them can be another thing. Placement near obstructions, as well as age and road debris, affect your ability to disconnect the SureLok coupling. Many times getting hands into an area to remove a coupling is almost impossible.

For these reasons Gates is offering SureLok Pliers.

SureLok pliers allow for the removal of a Push-to-Connect coupling from the tubing in seconds with just one hand. To help get into those tight spaces, SureLok pliers offer two different heads; one straight and one with a 90° offset. They also come in two sizes: Small, for tubing from 1/8" to 3/8"; and Large, for tubing 3/8" to 3/4". An instructional CD is included with each part number.

Sold as single units, packs of two (Large or Small), as well as all four in a handy carrying case.

Part No. 91017



Single Units

Small

Part No. 91023, Straight
Part No. 91021, Angle

Large

Part No. 91022, Straight
Part No. 91020, Angle



Dual Packs

(Contains one small and one large)

Straight

Part No. 91019

90° Angle

Part No. 91018



Tube Bender

Gates Bend-N-Fit™ Tube Bender

(Part No. 91025)

Part Number: 91025

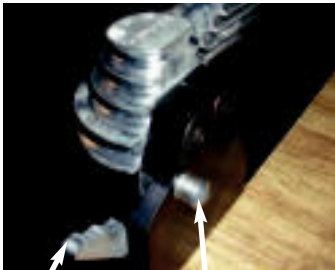
Product Number: 7468-1040

Simply and easily duplicates bent tubes:

- Power Steering
- Air Conditioning
- Transmission Oil Cooler
- Fuel Lines
- Plus many more applications

Bends SAE tubing as well as metric tubing – without changing any tooling - in the following sizes:

1/4" 5/16" 3/8" 1/2" 6mm –13mm



Tubing Lock

Tubing Lock Release



One-handed Operation

Load tubing by pushing in on Tubing Lock Release.

- Pull down on Tubing Lock.
- Load tubing into proper size bending slot.
- Close Tubing Lock until it snaps into place. (Tubing Lock must snap for the tube to be firmly supported and for the tube to bend properly.)
- Close the tube support slide onto the tube.

Top of bender is segmented into 7 1/2° marks. This aids in precision bends. Original tube can be used as a pattern by measuring bends or by holding old tube above bender.

IMPORTANT: Be sure the mark on the tube support slide lines up with the zero on the top of the bender. Not lining up with zero will cause notching or creasing of the tube.

- Push handle sliding Tube Support Slide across tube to make your bend.
- Once you've made your first bend, rotate handle out of your way.
- Push in on Tubing Lock Release.
- Pull down on Tubing Lock.
- Remove tubing and reorient for next bend.

Both the Tube Slide and Tube Lock move completely out of the way. This allows for bends in multiple planes.

