Weatherly No. 400
Catalog No. 431-2010
Edition 2012
Supersedes 431-2010W (2008)

MASTER PRODUCTS CATALOG

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Today, more and more people are turning to the Internet and other digital tools to obtain vehicle repair and parts information. To meet this growing demand for real-time content, Gates is providing online access to the latest product news and educational resources anytime, anywhere on any device.

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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 manufacturers' 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

Goods are warranted to be free from defects in material or workmanship for the life of the Goods (or the published recommended replacement interval specified by Gates). Gates will replace or repair, at its option, any Goods proved defective in material or workmanship during the warranty period. This is the sole remedy for breach of warranty. Color fade and color difference is not warranted. This warranty is void if the defect is caused by improper installation, use or maintenance of the Goods, or used for racing or competition. Goods are not warranted to comply with laws that may apply to uses of the Goods not stated in related materials, e.g., use in manned or unmanned aviation or life support applications.

ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE EXPRESSLY DISCLAIMED. FAILURE TO REPLACE TIMING BELTS OR OTHER GATES PRODUCTS AS SPECIFIED MAY RESULT IN CATASTROPHIC ENGINE OR EQUIPMENT DAMAGE FOR WHICH GATES DISCLAIMS ALL RESPONSIBILITY, TO THE EXTENT PERMITTED BY APPLICABLE LAW.

This publication contains the latest information available to our engineers. If you require additional application or part number information, contact the Automotive Product Application Tech Line at 303-744-5651.

Gates Engineered Solution Kits

Solution Kits are precision engineered by Gates – The world's most experienced designer of accessory belt drive systems and manufacturer of premium quality parts.

Audi/VW "Master Kits", 1996-2005
Part numbers 38193MK1, 38193MK2 + 38192MK1

- Application specific kits created for high labor applications where the front end module (bumper, grille, radiator, etc.) must be pulled forward for access to accessory and timing belt systems.
- Kit reduces overall labor time and expense when repairing accessory or timing belt systems.

Dodge Trucks, Chrysler Passenger Cars, 2000-2010
Part number 32948K1

- Standard maintenance procedures can damage the upper hose filler neck.
- Permanent and inexpensive fix for damaged filler neck.

Ford Crown Victoria 4.6L V8 (fleet), 2003-2011
Part numbers 38189K1 + 38189K2

- Kits allow complete service of accessory drive, including Alternator Decoupler Pulley (ADP), without replacing expensive alternator.
- Installation of the kit will ensure longer durability and less costly repair for the accessory drive.

Toyota Corolla, Celica, Matrix 1.8L (1ZZ-FE) 4-Cyl., 1998-2008
Part numbers 39068K1 + 39068K2

- Chronic noise issue (squealing or rattling noise from engine particularly at low speeds) with accessory belt drive system.
- Reduces comebacks and is a permanent solution for noise issues.
- Reference Technical Service Bulletin: TSB EG014-01, TSB EG015-01, and TSB EG021-07.

Chrysler, Dodge + Plymouth Mini-Van 3.0L-3.8L V6, 1993-2000
Part numbers 38342K, 38379K + 38398K

- Under rain or snow conditions, the serpentine belt could come off leaving your customer stranded.
- Delivers the proper tension and performance to the belt drive system making it virtually impossible for the belt to jump off.
- Reference Technical Service Bulletin: TSB 07-01-99 & 07-02-94

Toyota Camry, Solara + Highlander, RAV4 2.4L 4-Cyl., 2001-2004
Part number 38216K

- Noise from engine compartment during vehicle operation, especially after cold soak.
- Provides proper tension and belt surface to correct problem.
- Reference Technical Service Bulletin: TSB EG040-04

From belt jump off to chronic belt noise, we offer a line of specially engineered solutions to enhance Original Equipment drive designs so customer vehicles are better than when they left the showroom. At Gates, we understand what you need to make your customers happy.

Ford F-series trucks 7.3L Diesel, 1999-2003
*** Part numbers 22434K-1999 - April 28, 2001 + 22690K- April 29, 2001-2003**

Before

After

* Lower Hose differs after April 28, 2001

- Kit designed to correct OEM situation where upper radiator hose must be removed to replace the serpentine accessory drive belt.
- OE upper radiator hose is routed through accessory drive belt system (left photo). To replace belt, cooling system must be drained and upper hose removed, adding additional cost and labor.
- Kit designed to route upper hose around accessory drive system, allowing belt to be replaced without draining cooling system and removing radiator hoses (right photo) reducing labor by up to 50% on future belt replacement.

Honda Civic 1.8L 4-Cyl., 2006
Part number 39054K

- Accessory drive belt routing produces excessive force on tensioner causing tensioner misalignment, belt noise and possible tensioner bolt failure.
- New belt length and construction allow for new belt routing, reducing force on tensioner and tensioner bolt.
- Reference Technical Service Bulletin: 09-007

Honda Odyssey 3.5L V6, 1999-2001
Part number 38327K

- Buzzing or humming sound from accessory drive, particularly at the alternator.
- Provides proper pulley friction and tension to eliminate noise.
- Reference Technical Service Bulletin: TSB 03-052

Mazda 6 2.3L 4-Cyl., 2003-2005
Part number 38408K

- Squeaking or rattling may emit from engine compartment during normal driving conditions.
- New tensioner design prevents tensioner spring-to-housing contact while new belt reduces overall noise.
- Reference Technical Service Bulletin: 01-018/05

Nissan Frontier, Xterra + Pathfinder 4.0L V6, 2005-2007
Part number 38378K

- OE tensioner does not provide proper tension to serpentine belt, causing belt squeal.
- Delivers required tension and belt grip to correct problem.
- Reference Technical Service Bulletin: TSB NTB06-072A

Go to www.Gates.com/solutionkits for more information on Gates Solution Kits.

Timing Component Kits

Today, Gates is the world's largest manufacturer of Timing Belts and Timing Component Kits (TCKs). Import or Domestic, if there is a car in the U.S. with a timing belt in it, we have the replacement part for it. As the Original Equipment (OE) for virtually every vehicle manufacturer worldwide, you can be confident every time you install Gates. Restore your customers' drive system to factory original condition with Gates Timing Belts and Timing Component Kits.

Automotive Timing Belts

Gates is the largest global manufacture of OE timing belts. This means Gates is able to cover the Aftermarket with timing belts that are OE-equivalent, or better, in service life and performance. Our timing belts are manufactured using the same high grade materials and processes as the OE to ensure superior heat and contamination resistance. Import or domestic, Gates timing belts provide the most extensive coverage in the industry.

- Aramid reinforced nylon jackets and back side jackets for longer wear.
- High grade HNBR rubber for superior heat and contamination resistance.
- Premium high strength tensile members.
- Most extensive coverage in the industry. Import or Domestic.
- PTFE infused jackets to reduce frictional losses + tooth shear.

Timing Component Kits

Why take a chance? With Gates TCKs, you can avoid warranties and comebacks by replacing all critical system components at the same time.

- Popular kits covering over 33 million import applications include actual OE tensioners and Idlers.
- Total solution for any application, including Belts, Idler(s), Tensioniers and supporting hardware with detailed installation instruction.
- Great convenience. Ease of part sourcing. Reduced customer comebacks.

Timing Belt Component Kits with Water Pump

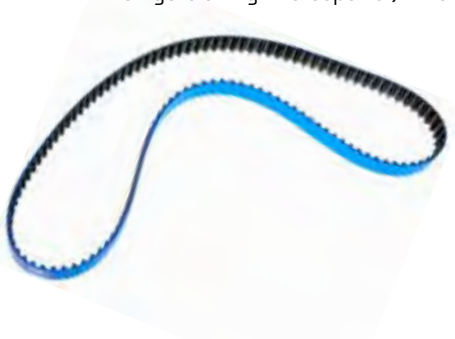
Gates Timing Belt Component Kits with Water Pump offer customers the best and most complete repair solution by including the same OE components as our TCKs: timing belts, pulleys and tensioners as well as a water pump. Timing belt driven water pumps should always be replaced at the same time as the timing belt. Don't take chances. With Gates TCKWPs, you can avoid returns by replacing all critical system components at the same time.

- Water Pumps are designed and built for long lasting, efficient cooling.
- Hydraulic tensioners included where available.
- Everything you need to do the job right, all in one box.
- See Power Clean™ Flush Tool on page 89.

Racing Performance Timing Belts

No other belts help protect your engine investment while delivering high performance like Gates Racing Performance Timing Belts.

Gates Racing Performance Timing Belts are incredibly strong and extremely heat resistant. Constructed of HNBR elastomeric composites, Gates Racing Performance Timing Belts are as much as 300% stronger than stock belts and deliver up to three times the heat resistance. You can count on them to hold up to the rigors of high horsepower, which is extremely important with interference engines.



- Superior construction provides up to three times the heat resistance.
- Gripping teeth reinforced with aramid and nylon rubber minimize wear.
- As much as 300% stronger than the standard aftermarket belt.
- Withstand the rigors of high horsepower.

Racing Timing Component Kits

Gates covers your racing application needs with Racing Timing Component Kits (TCKs). Protect your investment with components that are OE-equivalent or better in service life and performance. With Gates Racing TCKs, you can replace all critical system components at the same time.

- Popular kits for racing applications.
- Most kits include actual OE Tensioners and Idlers.
- Total solution for any application, including specially formulated Gates Racing Performance Timing Belts, Idler(s), Tensioners, and supporting hardware.

Racing Timing Component Kits with Water Pump

Gates Racing Timing Component Kits with Water Pump (TCKWP) offer the same OE components as our Racing TCKs - with the addition of a water pump. Timing belt driven water pumps should always be replaced at the same time as the timing belt. Protect your investment. With Gates Racing TCKs, you can replace all critical system components at the same time.

- Everything you need to do the job right, all in one box, including formulated Gates Racing Performance Timing Belts, Idler(s), Tensioners, a Water Pump, and supporting hardware.
- Water Pumps are designed and built for long lasting, efficient cooling.
- Hydraulic tensioners included where available.

Micro-V AT® Belts

Replacement belt for Accessory Belt Drive Systems (ABDS) and other serpentine belt applications. Designed using advanced manufacturing technology and premium EPDM construction to provide customers with superior ABDS and new vehicle type performance.

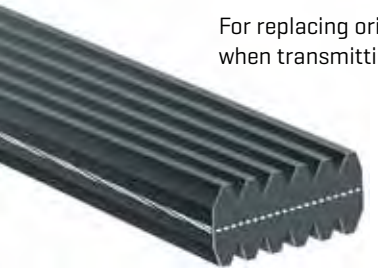
- Belt of choice by professional technicians, lasting 50%-60% longer than retail belts.
- Precision dimension control of rib profile transmits load efficiently throughout the ABDS allowing components to operate at optimum levels.
- Able to operate and accept misalignment in the ABDS system better than other serpentine belts.
- Flexible construction allows the belt to withstand billions of topside and backside bends resulting in long belt life.
- Meets or exceeds SAE J1459.

Micro-V AT® EMD Belts

Electrical Mechanical Drive (EMD) belt engineered to meet the demands of Electric Assist models (Saturn Aura/Vue and Chevrolet Malibu).

- Enhanced undercord of synthetic fibers for extended belt life.
- Manufactured using Gates TwistLock® aramid cord technology for increased load capacity.

Micro-V® Dual-sided 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.

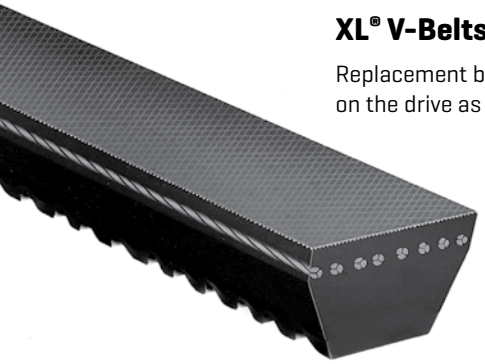
- V-ribbed on both sides of the belt.
- Specially designed to resist wear and cracking.
- Broad coverage on unique applications.

Micro-V® Stretch Fit® Belts

New Stretch Fit Drive Systems Demand New Solutions. Gates Micro-V® Stretch Fit® Belts, with exclusive self-tensioning technology, are the first and only Aftermarket belts engineered to fit like a glove and perform properly on these unique stretch fit drive systems.

- Patented highly engineered EPDM belt ribs are extremely resistant to oil leaks, wear and pilling.
- New TwistLock® technology provides the strength and flexibility of advanced polyamide tensile cord.
- Specially formulated adhesive locks onto the cord allowing it to elongate and stretch, but never lose tension.

Prior to installation, Stretch Fit® belts are shorter than the actual working length, but once installed they automatically tension – maintaining the proper tension over the life of the belt and ensuring optimum load-carrying capacity.



XL® V-Belts

Replacement belt for the most demanding engine drives. Due to thermal forces, this variable notched belt 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.
- Meets or exceeds SAE J636c specifications.

Belt Wear and the Accessory Belt Drive System (ABDS)

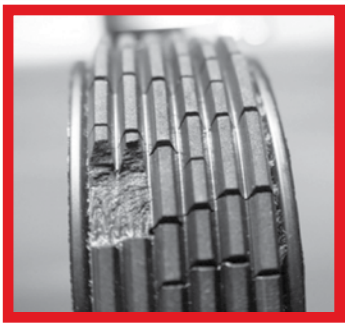
An important message on Belt Wear and its role in the ABDS!!

New belt vs. Worn belt illustration

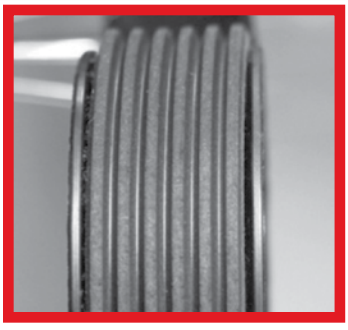
Over time, belt ribs lose material, similar to a tire. With material loss, the space between the ribs increases which can cause the belt to "bottom out" on the pulley, resulting in:

- accelerated belt wear
- slip
- noise
- hydroplaning

Neoprene belts exhibit cracks as they age. Ethylene Propylene Diene Monomer (EPDM), belts do **NOT** show cracks as quickly and have a life expectancy of 50-60K miles. Until all belt manufacturers supply EPDM belts, you will continue to see cracks as a sign of wear on belts!



Neoprene belt with 100,000 miles



EPDM belt with 100,000 miles

www.Gatesbeltwear.com

Alternator Decoupler Pulleys (ADP)

Gates Alternator Decoupler Pulleys provide vibration isolation within the Accessory Belt Drive System resulting in smoother engine performance and efficiency and increased belt and component life. The line consists of overrunning alternator decoupler pulleys and one way clutches (not interchangeable).

- Exact OE replacement.
- Patented design unmatched by any other supplier.
- Torsion spring absorbs engine vibration for quieter, smoother ride.
- Chosen by OEM to reduce noise, vibration and harshness.
- Need tools? See page 89 for the ADP Tool Kit.
- Visit www.gates.com/adp for in-depth information about Gates' ADP line.

DriveAlign® Automatic Belt Tensioners

Gates is a global leader in Original Equipment (OE) System Design. With a full line of over 500 tensioners globally, you can count on Gates to supply premium quality DriveAlign® Automatic Belt Tensioners. Gates ensures that every tensioner they manufacture is built to rigid tolerances and specifications that guarantee OE fit, form and function.

- Full line coverage for Import, Domestic and Heavy-Duty applications.
- Looks, fits and functions just like the OE.
- Manufactured using the same technology as Original Equipment Manufacturer (OEM) part, assuring a factory match.
- Patented vibration damping system improves tensioners, belts and accessory life.
- Torsional round spring design provides consistent tension and does not allow contamination.
- Comprehensive line includes parts to fit cars, vans, SUV's and light trucks.

DriveAlign® Idler Pulleys

Designed for use on automobiles and light trucks as a locked center tensioning pulley, an automatic belt tensioner pulley or an idler pulley.

- Steel or thermoplastic construction provides high durability for long life.
- Bearing meets or exceeds OE and is designed for application specific speed and load requirements.
- Reliable operation under severe conditions.
- Applicated for import and domestic vehicles.
- Mounting hardware included on some popular applications.

EuroGrip® OE Drive Couplers

Gates is the only manufacturer in the Aftermarket offering EuroGrip® Original Equipment (OE) Drive Couplers. That's because Gates designed, engineered and produced new technology for European Original Equipment Manufacturers (OEM) to help drive accessories in compact engine compartments.

Using Gates proven synchronous belt technology, the flexible coupling connects the drive pulley to the decoupler pulley on the alternator and air conditioning compressor, working to dampen engine vibration and increase performance. Our high quality OE replacement couplings guarantee a perfect fit every time.

- Designed for specific VW and Volvo vehicles.
- Lubricated jacket minimizes coupling and end piece wear and retains tooth integrity during operation.
- Glass fiber cord provides excellent dimensional stability at high rotational speeds.
- Fiber-loaded construction maximizes torque capability, controls damping and provides excellent age resistance.
- Coupling's flexibility tolerates misalignment in components.
- Predictable shear properties allow for component protection.

Gates also offers EuroGrip® Coupler Kits, allowing you to replace the drive coupler and decoupler pulley at the same time.

Hydraulic Tensioners

For applications with high loads and/or angular vibrations, where a mechanical automatic tensioner cannot provide sufficient damping or tensioner movement.

- Market-leading application coverage.
- All parts are either OE sourced or meet/exceed OE performance standards.
- Gates tensioner pin set tool (PN#91010) for securing piston.

PowerGrip® Individual Timing Components

Gates PowerGrip® timing components for those who want to replace individual parts.

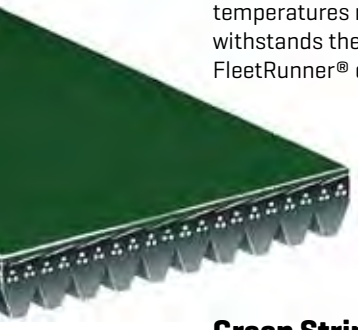
- Components include automatic, manual and hydraulic tensioners and idler pulleys.
- Only OE components for the most popular and problematic applications.

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 sizes.

FleetRunner® Micro-V® Belts



Designed for the toughest applications, FleetRunner® construction provides superior flexibility, stability, load capacity and unsurpassed belt life. Patented materials deliver peak performance at extreme prolonged operating temperatures making this belt the ultimate problem solver. An advanced blend of EPDM rubber technology withstands the modern threats of deterioration from increased exposure to ozone and water-based coolants. FleetRunner® does this all while providing the lowest cost per mile for fleets, including 3/4 + 1 ton pickups.

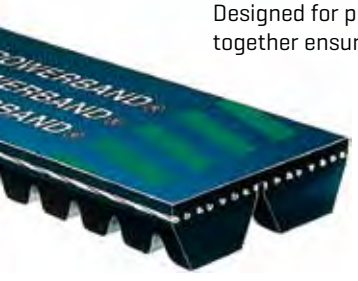
- Belt of choice by fleets, including 3/4 + 1 ton pickups.
- Lowest cost per mile.
- Consistently outperforms all competitors.
- Outstanding crack resistance at extreme temperatures.
- Problem-solver designed for the toughest applications.

Green Stripe® Micro-V AT® Belts

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

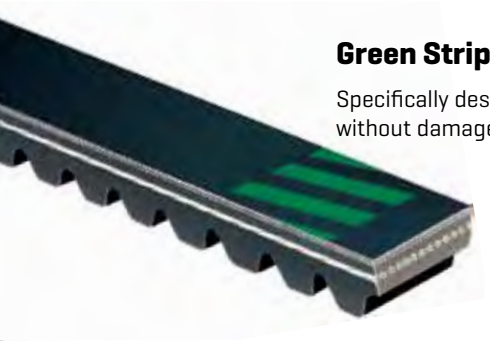
- Special belt constructions eliminate belt noise, reduce tension loss and solve problem drive applications.
- Extra heavy-duty construction resists cracking and wear.
- Precision ground to assure optimum belt-to-pulley fit.
- Special formation process for precise dimensional control.
- Reinforced with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

Green Stripe® PowerBand® Belts



Designed for problem, heavy-duty, heavily vibrating 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 cannot 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, while dissipating heat.
- Meets or exceeds SAE J1459 specifications.



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.
- Oil and heat-resistant construction throughout.
- Meets SAE J636b and SAE J637 specifications.

Green Stripe® XL® V-Belts

Premium quality replacement belts for heavy-duty engines.

- 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.

Hi-Power® II Belts

Featuring a composite, multi-purpose construction, these belts resist oil and heat, ozone, sunlight, weather and aging. Suitable for all industrial applications, including v-flat drives.

- Gates Curves provide proper cord support and full contact with the sheave-groove for uniform loading, uniform wear and increased belt life.
- Flex-bonded cords are strongly bonded to the body of the belt resulting in equal load distribution and the absorption of bending stress without cord deterioration.
- The Flex-Weave® Cover is a patented fabric construction for longer cover life, providing extended protection to the belt core from oil, dirt and heat.
- Meet or exceed RMA standards for static conductivity and oil and heat resistance.

Tri-Power® Belts

Constructed with Gates proprietary construction, this belt has a superior combination of flex and load carrying capacity, as well as less stretch resulting in less maintenance. This provides superior performance on the toughest heavy-duty A, B and C Section industrial drives. Suitable for all industrial applications, particularly where small or sub-minimal sheave diameters are required.

- Notches molded into the belt during manufacturing make this belt well suited for drives with smaller diameter sheaves.
- Belt edge is machined for even sheave groove contact resulting in less slip and wear.
- Flex-bonded cords are strongly bonded to the body of the belt resulting in equal load distribution and the absorption of bending stress without cord deterioration.
- Meets RMA oil and heat resistant standards.
- Meets RMA static conductivity requirements.

Note: Tri-Power® belts are available in AX, BX, and CX sizes.
Tri-Power® belts longer than 210 inches are a banded, cut notch construction.

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.

- 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 carry more load and last up to three times longer than two individual bearings.
- 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 the life of belt, tensioner and other accessory drive components.

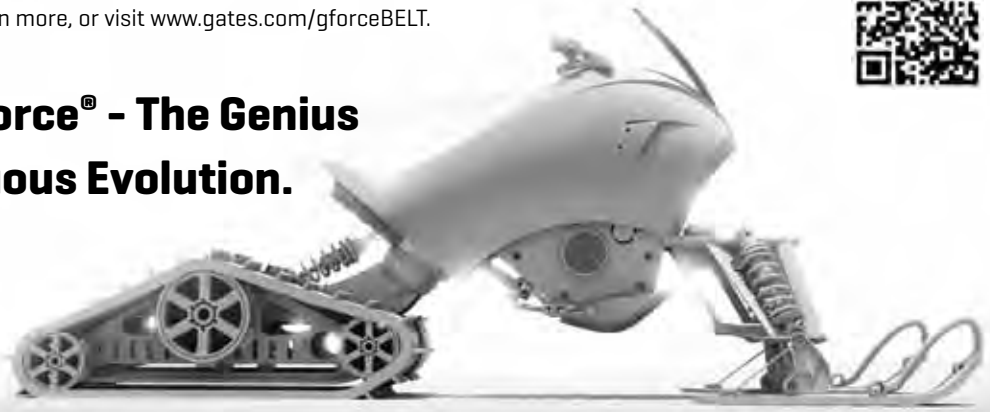
DriveAlign® Heavy-Duty Idler Pulleys

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 contaminates.
- New hardware included on some popular applications.
- Built with precise dimensional tolerance to ensure proper fit and long lasting performance.
- Built with corrosive-resistant coating to prevent rust and increase durability.

Gates G-Force®, a CVT belt designed to withstand all the G's snowmobiles of the present - and future - can throw at it. Utilizing proprietary design software combined with the most advanced composite materials and construction technology, G-Force® belts are engineered for a precise fit with drop-in performance and durability to meet the demands of today's and tomorrow's powersports equipment. Scan this QR code with your smart phone to learn more, or visit www.gates.com/gforceBELT.

Gates G-Force® - The Genius of Continuous Evolution.



G-FORCE® THE SNOWMOBILE DRIVE BELT FOR TODAY AND TOMORROW.

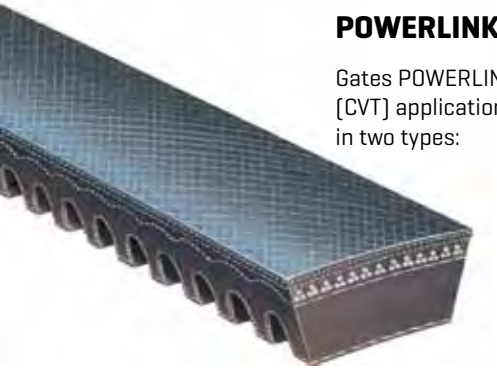
G-Force® CVT Belts

Gates G-Force® belts are the first of a new generation of Continuously Variable Transmission (CVT) belts. Designed using Finite Element Analysis (FEA) techniques, the latest construction, materials and measuring technology G-Force® drive belts are designed for superior fit, performance and durability for today's recreational and utility all-terrain equipment. Identical to OEM, G-Force® belts are constructed with double or single cog designs to match the OEM belt. Extreme testing, in controlled environments as well as on race vehicles, has proven the G-Force® belt to be high performing and durable, with no clutching adjustments necessary at installation.

- OEM constructed drop-in belt with no clutching adjustments.
- Tested under extreme conditions in controlled environments as well as on race vehicles.
- Viability testing completed to match shift curves.
- Dynamometer testing proves G-Force® belts outlast other high-performance belts by as much as five times.
- Advanced aramid tensile cords and reinforced fiber loaded undercord are used in construction for durability and dependability.
- Proprietary measuring technology assures exact fit.

POWERLINK® Belts

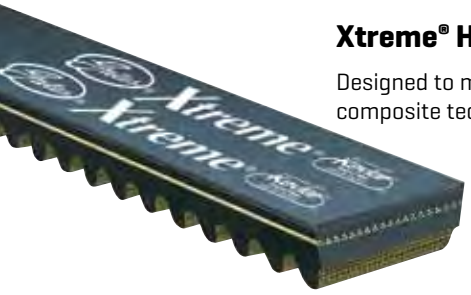
Gates POWERLINK® drive belts are specially designed for a variety of motorized Continuous Variable Transmission (CVT) applications including street legal step-through scooters and Go-Karts. POWERLINK® belts are available in two types:



- Conventional belt offers OE-equivalent performance and durability.
- Premium belt provides longer durability for high performance applications.

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.



- Aramid 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.

Xtreme® Recreation Belts

The Xtreme® Recreation belt offers the advantage of a performance-oriented belt, along with the drop-in ease of a replacement product that requires no clutch re-calibration. Truly the blending of "both worlds", Xtreme® Recreation belts will satisfy the needs of all but the most aggressive rider.

- Double-cog design to dissipate heat faster and increase belt life.
- Greater flexibility cuts energy loss allowing more horsepower.
- Thicker cross-section means more surface contact, resulting in less slippage for quicker acceleration.

Super HC® and Super HC® Molded Notch V-Belts

Recommended for use on special drives where space and weight limitations are critical. These "narrow" cross-sections can transmit up to three times the horsepower of the classical cross-sections (A, B, C and D) in the same amount of drive space. Suitable for all industrial applications, particularly where space, weight and horsepower capacity are critical.

- Gates curves provide proper cord support and full contact with the sheave-groove for uniform loading, uniform wear and increased belt life.
- Flex-bonded cords are strongly bonded to the body of the belt resulting in equal load distribution and the absorption of bending stress without cord deterioration.
- The Flex-Weave® cover is a patented construction for longer cover life, providing extended protection to the core of the belt from oil, dirt, and heat.
- Meets or exceeds RMA standards for static conductivity and heat and oil resistance.

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

Exclusive truncated (shortened) profile gives Micro-V® belts increased flexibility, reduced heat buildup and allows performance at higher speeds on smaller diameter sheaves. Well suited for applications such as appliances, outdoor power equipment, roller conveyors, machine tools, medical equipment and exercise equipment.

- Fiber reinforced ribs for excellent wear resistance.
- High modulus, low stretch tensile member for added strength and dependability.
- Smooth running for minimal vibration at high speeds.
- Meets or exceeds RMA standards for static conductivity and heat and oil resistance.

Super HC® and Super HC® Molded Notch PowerBand® V-Belts

The PowerBand® construction allows multiple belts to function as a single unit, with even load distribution and each strand fitting securely in the sheave groove. Recommended for multiple V-belt drives exposed to pulsating or heavy shock loads which can make belts whip, turn over or jump off the drive.

- The tie band assures high lateral rigidity, guiding the belt in a straight line and preventing it from coming off the drive.
- Concave sidewalls provide proper cord support and full contact with the sheave-groove for equal loading and uniform wear.
- Flex-bonded cords are strongly bonded to the body of the belt resulting in equal load distribution and the absorption of bending stress without cord deterioration.
- Meets or exceeds RMA standards for static conductivity and heat and oil resistance.

BladeRunner® Belts

An aftermarket belt designed and applicated 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

These green belts are an alternative to conventional light-duty belts, with high performance construction delivering more horsepower, less stretch and providing longer service life. PoweRated® belts are suitable for outdoor power equipment, appliances and industrial applications where Fractional Horsepower (FHP) belts are typically used.

- Bareback construction for smooth clutching on shock loaded, backside-idler driven equipment.
- Aramid tensile cords combine limited stretch with extraordinary strength and durability.
- Meets RMA oil and heat resistant standards.

Note: PoweRated® V-Belts can be substituted for equivalent sizes of Truflex® V-Belts.
Note: PoweRated® belts do not meet RMA requirements for static conductivity.

Truflex® V-Belts

Truflex® belts feature superior length stability for minimal take-up requirements. Suitable for all industrial light duty applications, usually using fractional horsepower (FHP) motors.

- Gates curves provide proper cord support and full contact with the sheave-groove for uniform loading, uniform wear and increased belt life.
- Flex-bonded cords are strongly bonded to the body of the belt resulting in equal load distribution and the absorption of bending stress without cord deterioration.
- The Flex-Weave® cover is a patented construction for longer cover life, providing extended protection to the core of the belt from oil, dirt and heat.
- Meets or exceeds RMA standards for static conductivity and heat and oil resistance.

Note: Truflex® belts are offered in cross sections 2L (0), 3L (1), 4L (2), 5L (3).

Water Pumps

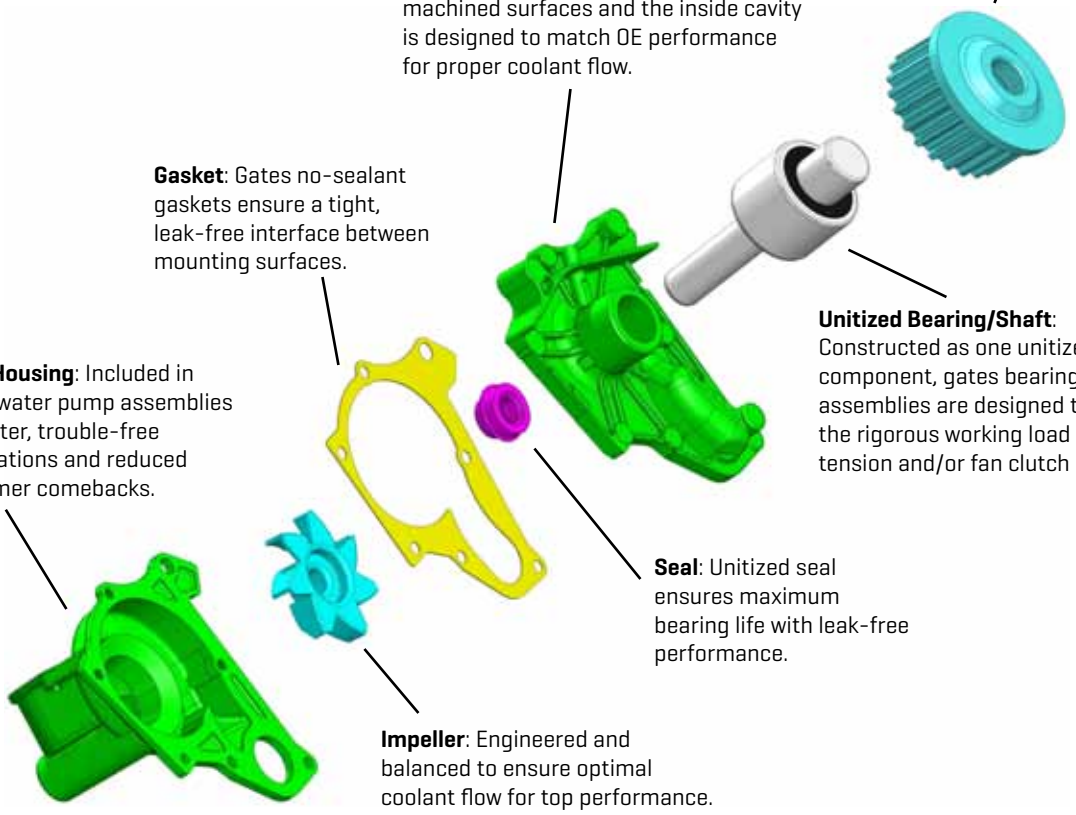
Gates offers a limited lifetime warranty and state-of-the-art manufacturing process.

Gates water pumps are recognized in the industry for their durability and superior quality. Every Gates water pump is constructed with premium alloy materials and a 100% functional test of seals and bearings along with a 100% leakage test for both the casting and assembled water pump. We are commited to selling the highest quality new, never remanufactured, water pumps in the aftermarket. Our end goal is to provide our customers with worry-free operation for the life of their vehicle.

Hub-Pulley: Manufactured from quality material and precisely pressed onto shaft with tight tolerances to endure the working loads and conditions.

Housing: Gates uses quality cast aluminum with no flashing. Gates quality-cast housing have computerized machined surfaces and the inside cavity is designed to match OE performance for proper coolant flow.

Gasket: Gates no-sealant gaskets ensure a tight, leak-free interface between mounting surfaces.



Unitized Bearing/Shaft: Constructed as one unitized component, gates bearing/shaft assemblies are designed to withstand the rigorous working load from the belt tension and/or fan clutch assembly.

Back Housing: Included in many water pump assemblies for faster, trouble-free installations and reduced customer comebacks.

Seal: Unitized seal ensures maximum bearing life with leak-free performance.

Impeller: Engineered and balanced to ensure optimal coolant flow for top performance.

Water Pumps

Water Pumps for Heavy Duty Applications

Gates carries an extensive line of water pumps for heavy duty applications

- Our heavy duty water pump offering is designed to handle rugged Fleet standards.
- New pumps manufactured to ISO/TS 16949 standards.
- 100% fully tested unitized bearings/seals.
- Gates heavy duty water pumps, represented as a part number with an HD suffix, carry a warranty of 18 months or 150,000 miles / 5,400 hours, whichever comes first.
- Computerized machined surfaces for proper fit/sealing.

Water Pump Coverage for virtually every Hybrid Application

- Coverage includes Toyota Prius, Honda Civic, Ford Escape and more.
- New pumps manufactured to ISO/TS 16949 standards.
- 100% fully tested unitized bearings/seals.
- Quality packaging ensures intact delivery of all components.
- 100% inline quality tested.
- Limited lifetime warranty.

Water Pumps for Import Vehicles

- Over 95% coverage for import vehicles.
- Metal impeller pumps available where applicable.
- Computerized machined surfaces for proper fit/sealing.
- Precisely balanced impeller for OE fit/function.

Water Pumps with Back Housings

- Allows the technician to replace both pieces with one pre-assembled unit.
- Order one part number and receive the water pump and back housing.
- Reduces installation time and ensures trouble-free operation with reduced warranty claims and comebacks.

Hose Shelf Life

Storage environment, along with rubber materials, can vary the shelf life limit. Shelf life is difficult to quantify as many variables affect the hose. Proper storage precautions can result in three to five years of shelf life. Beyond this time, there can be a significant service life decrease, depending on storage environment variables.

Some variables include:

Hose should be stored in a cool, dry area never exceeding +100°F (+38°C). If stored below freezing, pre-warming may be required prior to handling, testing and placing into service. Store hose in original container. Never stack hose too high, as its weight can crush hose at the bottom of the stack. Gates recommends hose in extended storage be visually inspected and tested prior to use. Hose judged marginal should be replaced to avoid potential failure, property damage or bodily injury. Store hose on a first-in/first-out basis. Unusually long storage, or poor storage environment can deteriorate hose, reduce performance and may lead to premature failure.

Molded Coolant Hose

Gates molded coolant hose is manufactured to fit specific applications. Similar to OEM specifications. Approved for marine applications.

- Recommend 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 Gates PowerGrip® SB Clamps each time a new coolant hose is installed.
Caution: Do not use for fuel or oil transfer applications.

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 1/4" 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.

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 and 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.

Vulco-Flex® II Coolant Hose

Gates Vulco-Flex® II hose 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.

Part No.	I.D. Inches(mm)	Length Inches(mm)
25150	1 1/8[29]	12[305]
25152	1 1/8[29]	15[381]
25154	1 1/8[29]	18[457]
25157	1 1/8[29]	23[584]
25180	1 1/8[29], 1 1/4[32]	19[483]
25249	1 1/4[32]	7 1/2[190]
25250	1 1/4[32]	9 1/2[240]
25251	1 1/4[32]	13[330]
25252	1 1/4[32]	15[381]
25253	1 1/4[32]	17[432]
25254	1 1/4[32]	18 1/2[470]
25255	1 1/4[32]	20[508]
25257	1 1/4[32]	23[584]
25260	1 1/4[32]	26 1/2[673]
25262	1 1/4[32]	30[762]
25265	1 1/4[32]	35[889]
25269	1 1/4[32]	41[1041]
25284	1 1/4[32], 1 3/8[35]	26[660]
25300	1 1/4[32], 1 1/2[38]	12[305]
25302	1 1/4[32], 1 1/2[38]	15 1/2[394]
25305	1 1/4[32], 1 1/2[38]	19 1/2[495]
25307	1 1/4[32], 1 1/2[38]	23[584]
25309	1 1/4[32], 1 1/2[38]	26[660]
25311	1 1/4[32], 1 1/2[38]	29[737]
25321	1 1/4[32], 1 1/2[38]	44[1118]

Part No.	I.D. Inches(mm)	Length Inches(mm)
25384	1 3/8[35]	25[635]
25409	1 3/8[35], 1 1/2[38]	26[660]
25428	1 3/8[35], 1 5/8[41]	17[432]
25472	1 1/2[38]	8[205]
25473	1 1/2[38]	10 1/2[265]
25474	1 1/2[38]	12[305]
25476	1 1/2[38]	14[356]
25477	1 1/2	15 1/2[394]
25478	1 1/2[38]	17[394]
25480	1 1/2[38]	20[508]
25482	1 1/2[38]	22[559]
25484	1 1/2[38]	25[635]
25487	1 1/2[38]	30[762]
25490	1 1/2[38]	35[889]
25499	1 1/2[38]	48[1219]
25526	1 1/2[38], 1 3/4[44]	13 1/5[335]
25527	1 1/2[38], 1 3/4[44]	15[381]
25528	1 1/2[38], 1 3/4[44]	16 1/2[419]
25530	1 1/2[38], 1 3/4[44]	20[508]
25532	1 1/2[38], 1 3/4[44]	22[559]
25535	1 1/2[38], 1 3/4[44]	27[686]
25582	1 1/2[38], 2[51]	22[559]
25804*	1 1/2[38]	19 3/4[505]
25806*	1 1/2[38]	23 1/8[589]
25808*	1 1/2[38]	25 5/8[650]

* 90° end

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" due 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).
- Cover marked in one-inch increments to facilitate approximate cut lengths, allows "custom-fit" installations.
- Engineered to resist electrochemical degradation – the leading cause of hose failure.
- Temperature rating: –40°F to +257°F (–40°C to +125°C).
- Packaging: 3 ft. lengths.

EC/R ELECTROCHEMICAL RESISTANT

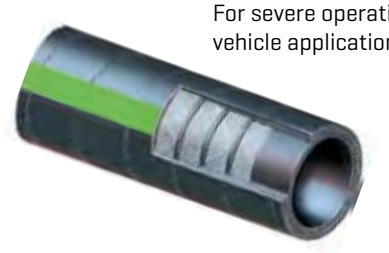
Note: For a maintenance free connection, use PowerGrip® SB Clamps.

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

Part No.	I.D. (In.)	O.D. (In.)	Work. Press. (psi)	Part No.	I.D. (In.)	O.D. (In.)	Work. Press. (psi)	Part No.	I.D. (In.)	O.D. (In.)	Work. Press. (psi)
24212	3/4	1.14	100	24230	1 7/8	2.27	75	24248	3	3.39	25
24214	7/8	1.27	100	24232	2	2.39	60	24250	3 1/8	3.52	25
24216	1	1.39	100	24234	2 1/8	2.52	60	24252	3 1/4	3.64	20
24218	1 1/8	1.52	100	24236	2 1/4	2.64	60	24256	3 1/2	3.89	18
24220	1 1/4	1.64	100	24238	2 3/8	2.77	60	24260	3 3/4	4.14	18
24222	1 3/8	1.77	100	24240	2 1/2	2.89	60	24264	4	4.39	12
24224	1 1/2	1.89	100	24242	2 5/8	3.02	60	24272	4 1/2	4.92	12
24226	1 5/8	2.02	85	24244	2 3/4	3.14	60				
24228	1 3/4	2.14	75	24246	2 7/8	3.27	55				

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-ply 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).
- Reduces water loss from water permeating the hose wall and cover, a distinct advantage over silicone.
- Engineered to resist electrochemical degradation – the leading cause of hose failure.
- Temperature rating: –40°F to +212°F (–40°C to +100°C), intermittent to 257°F (125°C).
- Packaging: 3 ft. lengths, 1 each.

EC/R ELECTROCHEMICAL RESISTANT

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

Part No.	I.D. (In.)	O.D. (In.)	Work. Press. (psi)	Part No.	I.D. (In.)	O.D. (In.)	Work. Press. (psi)	Part No.	I.D. (In.)	O.D. (In.)	Work. Press. (psi)
24428	1 3/4	2.31	100	24440	2 1/2	3.06	75	24452	3 1/4	3.81	50
24430	1 7/8	2.43	100	24442	2 5/8	3.18	75	24456	3 1/2	4.06	50
24432	2	2.56	90	24444	2 3/4	3.31	60	24458	3 5/8	4.18	50
24434	2 1/8	2.68	90	24446	2 7/8	3.43	60	24460	3 3/4	4.31	50
24436	2 1/4	2.81	90	24448	3	3.56	60	24464	4	4.56	40
24438	2 3/8	2.94	90	24450	3 1/8	3.68	60	24480	5	5.56	40

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.

Part No.	I.D. (In.)	O.D. (In.)	Work. Press. (psi)	Part No.	I.D. (In.)	O.D. (In.)	Work. Press. (psi)	Part No.	I.D. (In.)	O.D. (In.)	Work. Press. (psi)
24008	1/2	.89	105	24026	1 5/8	2.02	55	24042	2 5/8	3.02	30
24012	3/4	1.14	80	24028	1 3/4	2.14	50	24044	2 3/4	3.14	30
24014	7/8	1.27	80	24030	1 7/8	2.27	50	24046	2 7/8	3.27	25
24016	1	1.39	75	24032	2	2.39	50	24048	3	3.39	25
24018	1 1/8	1.52	75	24034	2 1/8	2.52	45	24052	3 1/4	3.64	20
24020	1 1/4	1.64	65	24036	2 1/4	2.64	40	24056	3 1/2	3.89	18
24022	1 3/8	1.77	65	24038	2 3/8	2.77	40	24064	4	4.39	12
24024	1 1/2	1.89	60	24040	2 1/2	2.89	35				

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.

ECR ELECTROCHEMICAL RESISTANT

- 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.
- 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 fuel or oil transfer applications.

Part No. 5 Foot	Part No. 10 Foot	I.D. (In.)	O.D. (In.)	Work. Press. (psi)	Vacuum (In. Hg.)	Min. Bend Radius (In.)	Part No. 5 Foot	Part No. 10 Foot	I.D. (In.)	O.D. (In.)	Work. Press. (psi)	Vacuum (In. Hg.)	Min. Bend Radius (In.)
24916	28316	1	1.46	100	25	2	24938	—	2 3/8	2.83	50	20	6 1/2
24918	—	1 1/8	1.58	100	25	2 1/2	24940	28340	2 1/2	2.96	50	20	6 1/2
24920	28320	1 1/4	1.71	100	25	2 1/2	24942	—	2 5/8	3.08	40	15	7 1/2
24922	—	1 3/8	1.83	85	25	3	24944	28344	2 3/4	3.21	40	15	7 1/2
24924	28324	1 1/2	1.96	85	20	3 1/2	24946	—	2 7/8	3.33	40	15	9
24926	28326	1 5/8	2.08	75	20	3 1/2	24948	28348	3	3.43	40	15	9
24928	28328	1 3/4	2.21	75	20	4	24956	28356	3 1/2	3.93	35	15	12
24930	28330	1 7/8	2.33	60	20	4 1/2	24964	—	4	4.43	30	10	20
24932	28332	2	2.46	60	20	4 1/2	24980	—	5	5.43	15	5	24
24934	—	2 1/8	2.58	55	20	5 1/2	24996	—	6	6.43	15	5	30
24936	28336	2 1/4	2.71	55	20	5 1/2							

NOTE: Long spans must be supported every 3 feet.

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. No convolutions inside hose so tube is smooth, allowing free coolant flow. Approved for marine applications.

ECR ELECTROCHEMICAL RESISTANT

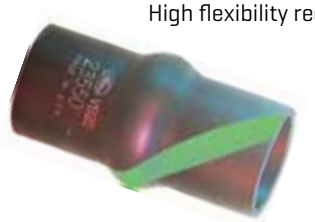
- Excellent flexibility, yet collapse and kink resistant.
- Extra strength fabric reinforcement with helical steel wire spiral molded between tube and cover.
- Heat resistant construction throughout.
- EPDM tube and neoprene cover for extended service life.
- Performs to SAE 20R5 Type EC Class D-2 specifications.
- 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.

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)
26502	1¾ (44)	16½ (419)	26517	2 (51), 2¼ (57)	25 (635)
26503	1¾ (44), 2 (51)	10 (254)	26518	2 (51), 2½ (64)	20 (508)
26504	1¾ (44), 2 (51)	16½ (419)	26519	2¼ (57)	9 (229)
26505	1¾ (44), 2 (51)	19 (483)	26520	2¼ (57)	11 (279)
26506	1¾ (44), 2 (51)	23½ (597)	26521	2¼ (57)	14 (356)
26507	2 (51)	9½ (241)	26522	2¼ (57)	17 (432)
26508	2 (51)	12¼ (311)	26530	2½ (64)	14 (356)
26509	2 (51)	14½ (368)	26531	2½ (64)	16 (406)
26510	2 (51)	17 (432)	26532	2½ (64)	24 (610)
26511	2 (51)	20 (508)	26533	2½ (64)	28 (711)
26512	2 (51)	24 (610)	26534	2¾ (70)	7 (178)
26513	2 (51)	33 (838)	26535	2¾ (70)	14 (356)
26514	2 (51), 2¼ (57)	8½ (216)	26536	2¾ (70)	18 (457)
26515	2 (51), 2¼ (57)	15 (381)	26537	2¾ (70)	32 (813)
26523	2¼ (57)	19 (483)	26538	3 (76)	37 (940)
26524	2¼ (57)	24 (610)	26601	1¾ (44)	6 (152)
26525	2¼ (57)	27 (686)	26602	1¾ (44)	8½ (216)
26526	2¼ (57), 2½ (64)	18 (457)	26603	1¾ (44)	11 (279)
26527	2¼ (57), 2½ (64)	21 (533)	26611	1¾ (44)	19 (483)
26528	2¼ (57), 2½ (64)	25 (635)	26612	1¾ (44)	23½ (597)
26529	2½ (64)	11 (279)			

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.



ELECTROCHEMICAL RESISTANT

- 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.

Part No.	I.D. (In.)	Work. Press. (psi)	Part No.	I.D. (In.)	Work. Press. (psi)	Part No.	I.D. (In.)	Work. Press. (psi)
23505	1¼ x 4	70	23547	2¼ x 4½	40	23567	2¾ x 4½	30
23511	1⅜ x 5	60	23557	2⅜ x 5	35	23568	2¾ x 5⅜	30
23515	1½ x 5	60	23559	2⅜ x 6¼	35	23572	3 x 4	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			

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.

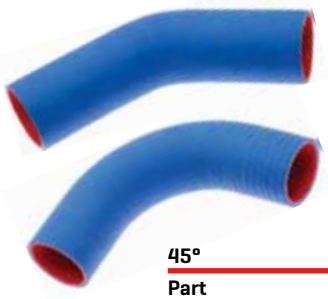
Part No.	I.D. (In.)	Work. Press. (psi)	Part No.	I.D. (In.)	Work. Press. (psi)	Part No.	I.D. (In.)	Work. Press. (psi)	Part No.	I.D. (In.)	Work. Press. (psi)
24808	½	110	24820	1¼	85	24836	2¼	75	24852*	3¼	40
24810	⅝	110	24822	1⅜	85	24838	2⅜	65	24856*	3½	35
24812	¾	110	24824	1½	85	24840	2½	65	24860*	3¾	35
24814	⅞	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			

* SB clamps not available, use silicone hose clamps

Molded Silicone Elbow Coolant Hose

Newer heavy-duty engines with advanced emissions systems (from 2007 to current model year) produce higher under-hood temperatures, requiring the use of silicone coolant hose. In these new low engine-air-flow and high-heat conditions, Gates Silicone Coolant Hose is the perfect product.

Gates now offers high-quality 4-ply silicone coolant hose for high-heat (up to 500°F) performance in these demanding conditions.



- Premium 4-ply construction.
- High-heat resistance material meets or exceeds OE specifications.
- Industry standard blue cover for easy identification.
- Used when hose routing passes near turbo or hot side of the charged air system.

45°

Part No.	I.D. (In.)
28200	2½
28201	2¾
28202	3
28203	3½
28204	4
28205	1¾

90°

Part No.	I.D. (In.)
28210	2
28211	2¼
28212	2½
28213	2¾
28214	3
28215	3½
28216	4
28217	1¾

500°F Severe Service Silicone Coolant Hose

Newer heavy-duty engines with advanced emissions systems (from 2007 to current model year) produce higher under-hood temperatures, requiring the use of silicone coolant hose. In these new low engine-air-flow and high-heat conditions, Gates Silicone Coolant Hose is the perfect product.

Gates now offers high-quality 4-ply silicone coolant hose for high-heat (up to 500° F) performance in these demanding conditions.

- Available in 36" straight sections.
- Premium 4-ply construction.
- High heat resistance material meets or exceeds OE specifications.
- Industry standard blue cover for easy identification.
- Used when hose routing passes near turbo or hot side of the charged air system.

Part No.	I.D. (In.)
28225	1
28226	1¼
28227	1½
28228	1¾
28229	2
28230	2¼
28231	2½
28232	2¾
28233	3

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.

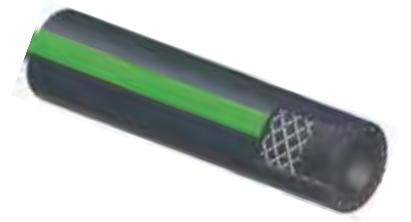
- Reinforced with tough, high temperature resistant polyester textile cords.
- Exceptionally flexible.
- Highly resistant to weathering, coolant deterioration, ozone and temperature extremes.
- Exceeds SAE 20R3 Class A Tube and Cover.
- Can be used for emission hose applications.
- For proper installation,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

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

Part No. 25 Foot	I.D. (In.)	I.D. (mm)	O.D. (In.)	O.D. (mm)	Lenght (Ft.)	Work. Press. (psi)
26239	3/8	9.5	.74	17.5	25	60
26240	1/2	12.7	.87	20.7	25	60
26241	5/8	15.9	.99	23.9	25	60
26242	3/4	19.0	1.12	27.0	25	50
26244	1	25.4	1.37	33.4	25	45

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.

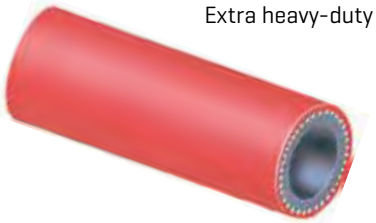


- Green Stripe® construction provides best cost-per-mile economics.
- Cover is abrasion resistant.
- Advanced EPDM tube, cover and reinforcement withstand high under-hood and coolant temperatures. Designed for extended use without cracking or hardening.
- Engineered to resist electrochemical degradation – 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.

Part No.	I.D. (In.)	I.D. (mm)	O.D. (In.)	Length (Ft.)	Working Pressure (psi)
28439	—	1/2	.89	12.7	105
28441	28447	5/8	1.02	15.9	95
28442	28448	3/4	1.14	19.0	80
28443	—	7/8	1.27	22.2	80
28444	28449	1	1.39	25.4	75
28445	—	1 1/4	1.64	31.7	70

Firewall® Heater Hose



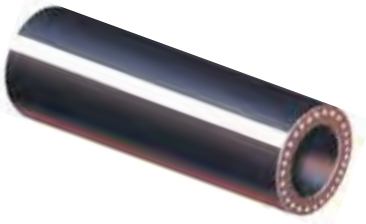
Extra heavy-duty hose designed for maximum durability. Easily recognized by its red cover.

- 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.

Part No.	I.D. (In.)	I.D. (mm)	O.D. (In.)	Length (Ft.)	Working Pressure (psi)
28430	1/2	12.7	.77	50	60
28431	5/8	15.9	.89	50	60
28432	3/4	19.0	1.02	50	50
28433	5/8	15.9	.89	250	60
28434	3/4	19.0	1.02	250	50

Safety Stripe® Heater Hose



EPDM hose constructed for extra-long service life.

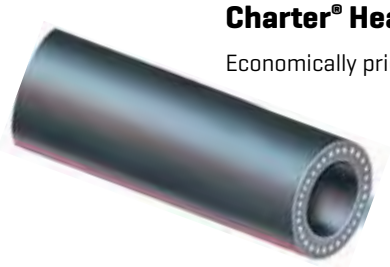
- Unaffected by most coolants and non-oil based coolant additives.
- Unaffected by high cooling system pressures.
- Good resistance to high temperatures for extended periods of time.
- Similar to SAE 20R3 Class D-2.
- Not recommended for heavy-duty truck, bus and off-road construction equipment; use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

Part No.	I.D. (In.)	I.D. (mm)	O.D. (In.)	Length (Ft.)	Working Pressure (psi)
28407	1/4	6.3	.50	50	60
28408	5/16	7.9	.62	50	60
28409	3/8	9.5	.69	50	60
28410	1/2	12.7	.77	50	60
28411	5/8	15.9	.89	50	60

Part No.	I.D. (In.)	I.D. (mm)	O.D. (In.)	Length (Ft.)	Working Pressure (psi)
28417	5/8	15.9	.89	250 (reel)	60
28412	3/4	19.0	1.02	50	50
28418	3/4	19.0	1.02	250 (reel)	50
28413	1	25.4	1.34	50	45
28420	1	25.0	1.34	25	45

Charter® Heater Hose



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

- Good resistance to high temperatures.
- Moderate resistance to oil and grease contamination.
- Good resistance to non-oil based coolant additives.
- 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.

Part No.	I.D. (In.)	I.D. (mm)	O.D. (In.)	Length (Ft.)	Working Pressure (psi)
28400	1/2	12.7	.77	50	60
28403	1/2	12.7	.77	250	60
28401	5/8	15.9	.89	50	60
28404	5/8	15.9	.89	250	60
28402	3/4	19.0	1.02	50	50
28405	3/4	19.0	1.02	250	50

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 3/8", 1/2", 5/8" and 3/4" I.D.
- Packaging: 25 units per carton.

Part No.	I.D. (In.)	I.D. (mm)	O.D. (In.)
28489	3/8	9.5	.69
28490	1/2	12.7	.77
28491	5/8	15.9	.89
28492	3/4	19.0	1.02

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 20R3 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)	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 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.

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

Hose I.D. Reducers

Slip inside current Gates hose to reduce inside diameters, providing 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.

Part No.	Size (In.)
26390	1 1/2 to 1 1/4
26391	1 3/4 to 1 1/2
26392	2 to 1 3/4
26393	2 1/4 to 2
26394	2 1/2 to 2 1/4
26395	3 to 2 1/2

Fuel Line and Vacuum Tubing Connector Kit

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. Part No. 91156.

- 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. (In.)
28561	Straight	3/32
28562	Straight	1/8
28563	Straight	5/32
28564	Straight	3/16
28591	Reducer	3/32 – 1/8
28551	"Y" Connector	3/32
28571	Elbow	3/32
28572	Elbow	1/8
28573	Elbow	5/32

Part No.	Description	I.D. (In.)
28574	Elbow	3/16
28592	Reducer	1/8 – 5/32
28552	"Y" Connector	1/8
28581	Tee	3/32
28582	Tee	1/8
28583	Tee	5/32
28584	Tee	3/16
28593	Reducer	3/16 – 1/4
28554	"Y" Connector	3/16

Heater Hose and Fuel Line Connectors

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

- Almost any hose configuration can be constructed using straight, elbow and tee shapes.
- 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.

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

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

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 6.7
28594	5/16 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 Reducer Connectors

Part No.	End 1 O.D. (In.)	End 1 O.D. (mm)	90° Tee O.D. (In.)	90° Tee O.D. (mm)	End 2 O.D. (In.)	End 2 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

"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

Heater Hose Quick-Lok® Connector Assortment

Purchase this assortment and save verses buying each component individually. Part No. 91166.
Each assortment includes:

- (1) Disconnect tool and (6) Quik-Lok Connectors.

Unicoil™* Hose Bending System

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.

Each coil bends up to 90 degrees!

Use additional coils to make bends of 180 degrees or more!

- 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.
- Available in these sizes: 1/4", 1/2", 3/4", 1".

Unicoil™ Application Chart

Part No.	Description	Qty.
28514	1/4" Unicoil	1
28510	1/2" Unicoil	1
28512	3/4" Unicoil	1
28517	1" Unicoil	1

Fits Gates:

Heater Hose
(Safety Stripe, Firewall, Charter)

Fuel Line Hose
(Safety Stripe, Barricade)

Transmission Oil Cooler Hose

Unicoil™* Assortment

Unicoil™ assortment contains three each of the six most popular sizes so you can quickly solve most bent hose problems. The assortment has space for more backup coils and/or the optional 1" sizes. Part No. 28519.

Unicoil™ Assortment includes:

Part No.	Hose ID	Qty.
28514	1/4" (6.3mm)	3
28510	1/2" (13mm)	3
28512	3/4" (19mm)	3

* Unicoil™ is a registered trademark of Unicoil International, Pty., Ltd.

SuperStat™* Thermostats

The 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.

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.

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.

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.

* SuperStat™ is a registered trademark of STANT USA Corporation.

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 seats positively down on a resilient 3-piece flange resulting in greater no-leak, precision control than the original Weir-Stat™.
- Flange retains its elasticity, resists abrasion and corrosion and remains stable during extreme temperature and pressure changes.
- Packaging: Individually boxed.

Weir-Stat™ Part No.	Temperature
33577	170°
33578	180°
33579	190-195°
33587	170°
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.
- Packaging: Individually boxed.

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

Part No.	Temperature
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.

*Weir-Stat is a registered trademark of STANT USA Corporation.

Radiator Pressure Caps

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

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 eight-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.

Safti-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 through overflow tube.

Standard Caps

- Covers a wide range of pressures.

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.

The racing radiator caps are specialty parts for use on high performance cooling systems. Caps are available in 18 to 22, 21 to 25 and 28 to 32 pound ranges. Caps are available for mini (32mm ID, 16 mm deep), and standard SAE "A" size (2 1/8" OD, 3/4" deep) filler necks.

31551 (19-21 pounds), 31552 (22-24 pounds)

These two caps fit the mini (32mm ID, 16 mm deep) filler neck. They include lower and upper gaskets so they can be used on both open (no recovery bottle) and closed (recovery bottle) cooling systems.

31553 (18-22 pounds), 31554 (21-25 pounds), 31555 (28-32 pounds)

These caps fit a standard SAE "A" size (2 1/8" OD, 3/4" deep) filler neck. These do not include an upper gasket, making them for use on open cooling systems only.

31556 (18-22 pounds), 31557 (21-25 pounds)

These are Safti-Vent™ style racing radiator caps that fit the standard SAE "A" size (2 1/8" OD, 3/4" deep) filler neck. They both include both lower and upper gaskets so they can be used on open or closed cooling systems.

31558 (18-22 pounds), 31559 (21-25 pounds), 31560 (28-32 pounds)

These are Spinlok design caps that fit the standard SAE "A" size (2 1/8" OD, 3/4" deep) filler neck. The caps include both lower and upper gaskets so they can be used on open or closed cooling systems.

WARNING – These are high pressure radiator caps made for use on race cars only. Do not use them on a passenger car. Pressure test the complete cooling system to the maximum level of pressure indicated on the box. Failure to test the cooling system to the proper pressure prior to installing the cap may result in damage to the cooling system or bodily injury.

Heavy-Duty Radiator Caps

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

- Fits applications with 3/4" deep filler necks.
- Packaging: Individually boxed.

Part No.	Pressure (psi)	Fits Filler Neck I.D. (In.)
31307	4	2 11/16
31308	7	2 11/16
31309	10	2 11/16

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 components.
- Packaging: Individually boxed.

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

Radiator Cap and Cooling System Analyzer Kit

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, part no. 31367, replaces old part no. 31365.
- Packaging: Individually boxed.

Part No.	Description
31370	Threaded Adapter
31371	Threaded Adapter
31377	Threaded Adapter
31378	Cap Adapter
31379	Threaded Cap Testing Adapter
31380	Threaded System Testing Adapter
31381	System Testing Adapter
31382	Cap Adapter
31384	Threaded Adapter
31390	Threaded Adapter

Part No.	Description
31409	Adapter
31410	Threaded Adapter
31413	Cap Adapter
31422	Rubber Plug
31423	Rubber Gasket
31424	Threaded Adapter
31426	Kit
31428	System Testing Adapter
31429	Truck Adapter Kit
31431	Threaded Cap Testing Adapter

Hose Clamps

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 by eliminating antifreeze leaks and ground water contamination.

- Easy to install with ordinary heat gun.
- 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.
- Can be used with all brands of silicone hose.
- Temperature rating: -40°F - 302°F(-40°C - 150°C).
- Packaging: Ten to carton.

Part No.	Size	Nominal Hose I.D. (In.)	Fits Hose O.D. (In.)*
32915	SB15	1/4	1/2 to 11/16
32919	SB19	3/8	11/16 to 13/16
32922	SB22	1/2	13/16 to 15/16
32925	SB25	5/8	15/16 to 1 1/16
32929	SB29	3/4	1 1/16 to 1 3/16
32932	SB32	7/8	1 3/16 to 1 5/16
32934	SB34	1	1 5/16 to 1 1/2
32941	SB41	1 1/4	1 1/2 to 1 3/4
32948	SB48	1 1/2	1 3/4 to 2
32954	SB54	1 3/4	2 to 2 1/4
32960	SB60	2	2 1/4 to 2 1/2
32967	SB67	2 1/4	2 1/2 to 2 3/4
32973	SB73	2 1/2	2 3/4 to 3
32979	SB79	2 3/4	3 to 3 1/4
32986	SB86	3	3 1/4 to 3 1/2
32990	SB90	3 1/8	3 1/2 to 3 5/8

Green Stripe® Stainless Steel Clamps

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

- Housing and 9/16" 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.

Strap Clamps

Packaged 10 to carton.

Part No.	Clamp Length	Fits Hose up to
32112	12"	31/2" O.D.
32115	15"	41/2" O.D.
32124	24"	71/2" O.D.

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.
- Meets SAE J1508.
- Packaging: 10 per box.

	Minex+ Super Hex	Green Stripe® Stainless Steel		Silicone			
SAE Size (In.)	Part No.	Part No.	Fits Hose I.D. (In.)	Clamping Range (In.)	Part No.	Fits Hose I.D. (In.)	Clamping Range
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	5/16 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 9/16 to 2 1/2	32332	1 1/2 to 2	1 9/16 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 1/8 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

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 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 9/16" band gives 12-1/2% more compression than 1/2" band.
- Tighten to 35 in/lbs.
- Packaging: 10 per box.

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.

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

The Gates Automotive Solutions (GAS) online forum is your source for information on products within the belts, hose and hydraulics categories. Join in: www.GatesGAS.com.

Gates Automotive Solutions (GAS)

Green Stripe® and Green Stripe® Heavy-Duty Constant Tension Clamps

Green Stripe® constant tension clamps provide the reusable, self-adjusting band needed 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 adjustability 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 minimum of 50 in./lbs. and maximum of 85 in./lbs.
- Tighten Green Stripe® heavy-duty clamps to minimum of 75 in./lbs. and maximum of 125 in./lbs.

Green Stripe® Constant Tension Clamps
301 Stainless Steel 9/16" Band and Housing
410 Stainless Steel 5/16" Hex-Head Screw

Part Number	Standard Packaging	SAE Size	Clamping Ranges
32710	10	10	9/16" to 1 1/16"
32712	10	12	5/8" to 1 1/4"
32716	10	16	13/16" to 1 1/2"
32720	10	20	13/16" to 1 3/4"
32724	10	24	1 1/16" to 2"
32728	10	28	1 5/16" to 2 1/4"
32732	10	32	1 9/16" to 2 1/2"
32736	10	36	1 13/16" to 2 3/4"
32740	10	40	2 1/16" to 3"
32744	10	44	2 5/16" to 3 1/4"
32748	10	48	2 9/16" to 3 1/2"

Green Stripe® HD Constant Tension Clamps
304 Stainless Steel 9/16" Band and Housing
410 Stainless Steel 3/8" Hex-Head Screw

Part Number	Standard Packaging	Clamping Ranges
32617	10	1" to 1 3/4"
32620	10	1 1/4" to 2 1/8"
32625	10	1 3/4" to 25/8"
32630	10	2 1/4" to 3 1/8"
32635	10	2 3/4" to 3 5/8"
32640	10	31/14" to 4 1/8"
32645	10	3 3/4" to 4 5/8"
32650	10	4 1/4" to 5 1/8"
32655	10	4 3/4" to 5 5/8"
32660	10	5 1/4" to 6 1/8"
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"

Green Stripe® Heavy-Duty T-Bolt Clamps + Spring Loaded T-Bolt Clamps

Heavy-Duty T-Bolt and Spring-Loaded T-Bolt Clamps for Light, Medium and 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	.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)

Barricade® Fuel Injection Hose (MPI)

Low-permeation, premium hose for use on all fuel systems, including fuel injection (MPI). Approved for use with gasoline, diesel, bio-diesel including soybean methyl ester (SME), rapeseed methyl ester (RME), palm methyl ester (PME) per ASTM D6751, E-85, methanol, ethanol, ethanol extended gasoline, and gasohol fuels. Patented five-layer Greenshield® barrier technology keeps fuel out of the environment while delivering peak fuel efficiency.

- Exceeds SAE J30R14T2 (except for kink resistance) as well as low-permeation requirements for CARB.
- Aramid reinforcement spiral braid for superior burst strength.
- Thermoplastic barrier layer.
- Oil, heat, ozone and abrasion resistant cover.
- 225 psi working pressure rating.
- Recommended for any fuel injection applications for superior service life.
- Temperature rating : -40° F to 275° F (-40° C to 135° C) continuous, up to 302°F (150°C) intermittent.

Note: Do not submerse in gasoline.

Packaging: I.D. (in.)	I.D.(mm)	O.D.(in.)	O.D.(mm)	Working (psi)	2'retail PartNo.	15' length PartNo.	25' length PartNo.	250' reel PartNo.
1/4	6.3	1/2	12.7	225	27334	27347	27339	27344
5/16	8.0	9/16	14.3	225	27335	27348	27340	27345
3/8	9.5	5/8	15.9	225	27336	27349	27341	27346

Barricade® Carburetion Fuel Line Hose

Low-permeation, premium hose for use on carbureted engines, PCV and EEC systems, and for fuel return hose on fuel injection systems. Not for use on the pressure-side of fuel injection systems. Approved for use with leaded and unleaded gasoline, diesel, bio-diesel, E-85, methanol, ethanol, and gasohol fuels. Patented five-layer Greenshield® barrier technology keeps fuel out of the environment while delivering peak fuel efficiency.

- Meets SAE J30R14T1, EPA 40 CFR 1051.110 , and CARB small engine off-road requirements for low permeation (except for kink resistance).
- Textile spiral layer (two spiral).
- Thermoplastic barrier layer.
- Oil, heat, ozone and abrasion resistant cover.
- Recommended for carbureted engines in cars, light trucks, off-road vehicles and small engines.
- Temperature rating: -40° F to 257° F (-40° C to 125° C).

Note: Do not submerse in gasoline.

Caution: Do not use on pressure lines on fuel injection systems or cooling system applications. Use MPI (4219D) or Barricade Fuel Injection (4219BF) hose for Multi-Port Injection systems.

Packaging: I.D. (in.)	I.D.(mm)	O.D.(in.)	O.D.(mm)	Working (psi)	2'retail PartNo.	25' length PartNo.	250' reel PartNo.
3/16	4.8	13/32	10.3	50	27302	27312	27321
1/4	6.3	1/2	12.7	50	27303	27313	27323
5/16	8.0	9/16	14.3	50	27304	27314	27324
3/8	9.5	5/8	15.9	50	27305	27315	27325
1/2	12.7	25/32	19.8	35	27306	27316	27326

Fuel Fill Hose

Designed for transferring fuel from vehicle's filler neck to fuel tank. Works 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.

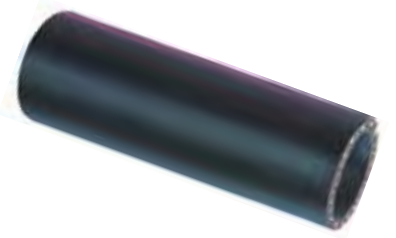
- Suitable for use with gasoline, gasohol blends of ethanol, methanol, ethers, diesel and biodiesel to B20 (up to maximum concentrations allowed by the EPA).
- Corrugated cover with helical wire reinforcement.
- Features a high quality nitrile tube.
- Meets requirements of SAE 30R5.
- Cuts easily with knife and wire cutters.
- Temperature rating: –40°F to 212°F (–40°C to +100°C) with gasoline blends, –40°F to 125°F (–40°C to +51°C) with biodiesel (B20).
- Packaging: 3 ft. lengths.

Note: Use Gates Super Hex Clamps for reliable installation.

I.D. (In.)	Work. Press. (psi)	Part No.	Std. Pkg.
1¼	20	23963	10
1½	20	23924	10
1⅞	20	23930	10
2	20	23932	10
2¼	20	23936	8
2½	20	23940	8

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.



- Suitable for use with gasoline, gasohol blends of ethanol, methanol, ethers, diesel and biodiesel to B20 (up to maximum concentrations allowed by the EPA).
- 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).
- Biodiesel (B20) temperature rating: -40°F to +212°F (-40°C to +51°C).

Caution: Not recommended for marine gasoline applications.

Part No.	I.D. (In.)	O.D. (In.)	Ctr. Length (ft.)	Work. Press. (psi)
24702	1⅜	1.71	3	20
23964	1½	1.84	3	20
23968	1¾	2.09	3	20
23972	2	2.14	3	20
23976	2¼	2.59	3	20
23980	2½	2.84	3	20

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

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

Diesel Emission Fluid (DEF) Hose

Diesel Emission Fluid (DEF) Hose Assemblies are specially designed and manufactured to convey Diesel Emission Fluid (DEF). Because DEF freezes at +11°F (-12°C), the hose and couplings are electronically heated using Gates revolutionary carbon fiber heating system. This patent pending technology allows for more uniform fluid heating compared to heated-wire designs. Customizable hose lengths offer greater flexibility in design while thermoplastic over-molds protect electrical connections against moisture and corrosion.

Part Number	OEM Part Number	Make/ Model	Engine
DEF7000	M50602071230800	Peterbilt / Cummins	Pete 386 w/ ISX
DEF7001	M50602274110500	Peterbilt / Cummins	Pete 386 w/ ISX
DEF7002	M50602274320500	Peterbilt / Cummins	Pete 386 w/ ISX
DEF7004	04-28650-000	Freightliner	2012 Cascadia DD15
DEF7006	04-28841-200	Freightliner	2012 Cascadia DD15
DEF7007	52122427AC	Chrysler	Dodge Ram PU 6.7L

Diesel Emission Fluid (DEF) Tank Fill Hose

DEF Tank Transfer Hose are manufactured for the specific filling functions of DEF tanks. They feature the highest quality construction to meet the demands of DEF handling and transfer.

- 3/4" and 1" standard I.D. sizes.
- Temperature rating: -40°F to +212°F (-40°C to +100°C).
- Non-zinc, peroxide-cured EPDM.

Part No.	Description
DEF750025	3/4" DEF Hose 25'
DEF750500	3/4" DEF Hose 300'
DEF100025	1" DEF Hose 25'
DEF100300	1" Hose 300'

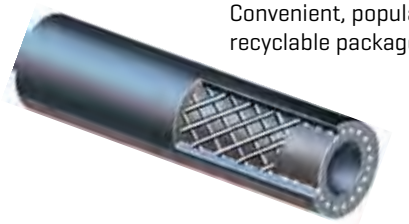
Submersible Fuel Line Hose

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.
- Maximum temperature rating: +302°F (+150°C).

I.D. (In.)	Work. Press. (psi)	1-Ft. Part No.	10-Ft. Part No.	32.8-Ft. Part No.
1/4	100	27086	27087	27083
5/16	100	27093	27080	27084
3/8	100	27097	27081	27089

Packaged Safety Stripe® II Return Fuel Line/PCV/Evaporative Emission Control Hose (1986 & older)



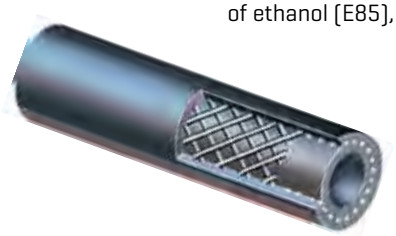
Convenient, popular two foot lengths of return fuel line, PCV and EEC hose in self-service, reusable, recyclable package. Can be stacked on shelf or hung on a pegboard display.

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

I.D. (In.)	I.D. (mm)	O.D. (In.)	O.D. (mm)	Work. Press. (psi)	Part No.
1/4	6.3	1/2	12.7	50	27027
5/16	8.0	9/16	14.3	50	27028
3/8	9.5	5/8	15.9	50	27029

Safety Stripe® II Return Fuel Line/PCV/Evaporative Emission

Control Hose (1986 & older)
Multi-purpose hose for use on return 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 (E85), methanol and ethers (up to the legal limits allowed by the EPA).



- Spiral reinforced construction.
- Nitrile tube.
- NBR-PVC cover.
- Oil resistant cover resists the effects of high heat and ozone found in engine compartments.
- Meets 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) with gasoline blends

Caution: Do not use for pressure lines on fuel injected engines or for cooling system applications. Use Barricade Fuel Injection hose for fuel injection applications.
Intended for use with fuels where MTBE concentrations are no greater than 15% by volume.

					25 Foot Reel	25 Foot Box	250 Foot Reel
I.D. (In.)	I.D. (mm)	O.D. (In.)	O.D. (mm)	Work. Press. (psi)	Part No.	Part No.	Part No.
1/8	3.2	5/16	7.9	50	27000	—	27099
3/16	4.8	13/32	10.3	50	27001	—	27098
1/4	6.3	1/2	12.7	50	27002	—	27068
3/16	8.0	9/16	14.3	50	27003	—	27069
3/8	9.5	5/8	15.9	50	27004	—	27070
7/16	11.1	47/64	18.3	35	—	27005	27071
1/2	12.7	25/32	19.8	35	—	27006	27019
5/8	15.9	15/16	23.8	35	—	27008	27020
3/4	19.0	1 1/8	28.6	35	—	27010	27021

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.

Part No.	I.D. (In.)	O.D. (In.)	Length (Ft.)	Work Press. (psi)	Thread Size (In.)	Min. Bend Radius
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
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%.
- Temperature Rating: -20°F to 212°F(-29°C to 100°C) for all fuels except B100 biodiesel which is max. temp. of 125°F (52°C).
- 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.

I.D. (In.)	O.D. (In.)	Work. Press. (psi)	25 Foot Carton Part No.	250 Foot Reel Part No.
1/4	.64	40	350-0145	350-0140
5/16	.70	40	350-0565	350-0560
3/8	.77	40	350-0385	350-0380
1/2	.89	40	350-0125	350-0120
5/8	1.01	40	350-0585	350-0580

***Note:** Minimum I.D. for vent hose is 9/16".

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.

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.
- Handy push button 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.

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

Fenderwell

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

Exterior

- Caps have chrome-plated finish.

Locking

- Comes with two keys. Keyed-alike caps available on special order.
- Packaging: Individually boxed.

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.

Part No.	Description	Type
31801	Solid Brass – 2-11/16" Non- Vented (2-1/8" x 12 UN Male Thread)	Non-Locking
31803	Solid Brass – 2-49/64" Vented (2"x 11-1/2 NPSM Female Thread)	Non-Locking
31804	Zinc Plated Steel or Aluminum – 4-7/16" Vented (Bayonet – Fits3 Cam-Ordnance Type Filler Neck	Non-Locking
31805	Solid Brass – 5-3/32" Non-Vented (4-1/4" x 12 NS Male Thread)	Non-Locking
31806	Solid Brass – 4-31/32" Non-Vented (4-1/4" x 8 NS Male Thread)	Non-Locking
31807	Aluminum – 4-5/32" Non-Vented (4" x 8 NPSM Female Thread)	Non-Locking
31821	Solid Brass – 2-1/2" Vented (2-1/8" x 12 UN Male Thread)	Locking
31823	Solid Brass – 2-1/2" Vented (2"x 11-1/2 NPSM Female Thread)	Locking
31825	Solid Brass – 4-63/64" Non-Vented (4-1/4" x 12 NS Male Thread)	Locking
31826	Solid Brass – 4-63/64" Non-Vented (4-1/4" x 8 NS Male Thread)	Locking
31827	Solid Brass – 4-25/32" Non-Vented (4" x 8 NPSM Female Thread)	Locking

Mechanical Fuel Cap Tester Kit

Economical, easy-to-use alternative to electronic testers. Part No. 12370.

- 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.
12370	Fuel Cap Tester Kit	1
12302	Replacement Gauge	1
12403	Blue Adapter	1
12404	Yellow Adapter	1
12405	Red Adapter	1
12406	Green Adapter	1
12407	Black Adapter	1
12408	Gray Adapter	1
12410	Threaded Adapter	1

Part No.	Description	Pkg.
12411	Green "Pass" Cap	1
12412	Red "Fail" Cap	1
12417	Pump Oil	1
12418	Adapter Seal	1
12419	Orange Adapter	1
12420	Brown Adapter	1
12421	Light Blue Adapter	1
12423	Light Green Adapter	1
12556	Plastic Knob	1

Innovative Solutions, Legendary Performance

Whether your customers are looking to shave seconds off their time, or customize the look of their vehicle, Gates Racing and Performance Products deliver.

Gates Racing® Performance Timing Belts

- Superior construction provides up to three times the heat resistance.
- Gripping teeth reinforced with aramid and nylon rubber minimize wear.
- 300 percent stronger than the standard aftermarket belt.
- Withstands the rigors of higher horsepower while providing confidence that the timing belt will hold up, particularly with interference engines.

The Racing Performance timing belts install and fit just like the OE version while offering unsurpassed durability, performance and extended life. The superior construction reduces the chance of engine damage, particularly interference engines.

Gates Racing® Performance Belts

Customization is key and how the engine looks is just as important as how it performs. Gates offers the form and function they crave.

Gates Racing® Performance Micro-V® Belts

- High-modulus, low-stretch polyester tensile cord provides extra strength and unmatched reliability — lasting three times longer.
- Patented EPDM compound construction has three times the heat resistance and durability of standard belts.

Strict dimensional tolerances to OEM specifications guarantee the belt fits correctly — eradicating slip noise from a belt that's too long and unnecessary accessory drive bearing wear from a belt too short.

www.Gatesracing.com

Oil Systems

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.

				3 Foot Length	25 Foot Length	50 Foot Length
I.D. (In.)	O.D. (In.)	Work. (psi)	Press. Burst	Part No.	Part No.	Part No.
5/16	.56	400	1600	27056	27058	27060
3/8	.625	400	1600	27057	27059	27061
1/2	.780	400	1600	27065	27066	27067

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.

Oil Filler Caps

Durable construction assures long service life.

- Special finish resists rust and provides excellent protection against underhood heat.
- Packaging: Individually boxed.

Power Steering Systems

OEM Type Power Steering Hose Assemblies

Gates extensive field examination and testing assure proper fit. Designed 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 bagged.

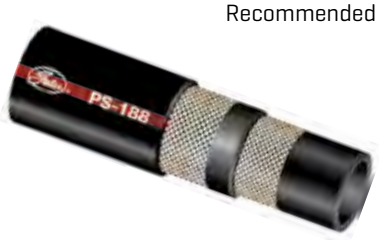
Low Pressure Power Steering Return Line Assemblies

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 bagged.

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 for details).
- Meets SAE J2050 Type 1 performance requirements.
- Packaging: 25 ft. or 50 ft. lengths.
- 25 Foot Part No. 86049.
- 50 Foot Part No. 86050.

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.

Power Steering products are supplied through Edelmann at 1-800-770-4639.

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 rating: –40°F to +275°F (–40°C to +135°C).
- Packaging: Individually boxed.

I.D. (In.)	O.D. (In.)	Length (Ft.)	Part No.
3/8	.655	25	350010
3/8	.655	5	350020
1/2	NA	10	349970
5/8	.970	3 1/2	350030
5/8	.970	10	349980
3/4	NA	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 and SAE J2076.
- Temperature rating: -40°F to +300°F (-40°C to +150°C).
- Packaging: Available in 25 ft. lengths.

I.D. (In.)	O.D. (In.)	Length (Ft.)	Work. Press. (psi)	Burst Press. (psi)	Part No.
3/8	.655	25	250	1800	349950
11/32	.682	25	250	1800	349960

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
- Power Cylinder Seal
- Control Valve Seal
- Pump Seal
- Piston Rod End Bushing
- Rack and Pinion Seal
- Pitman Shaft Seal (complete)
- Steering Gear Major Seal
- Pitman Shaft Seal (lower)
- Packaging: Individually boxed

Power Steering products are supplied through Edelmann at 1-800-770-4639.

Air Brake Hose Assemblies*

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

- Extremely flexible and kink resistant.
- Two 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.

3/8" I.D. Hose With 1/4" MPT Fixed + Swivel		3/8" I.D. Hose With 3/8" MPT Fixed + Swivel		1/2" I.D. Hose With 3/8" MPT Fixed + Swivel		1/2" I.D. Hose With 1/2" MPT Fixed + Swivel	
Length (In.)	Part No.	Length (In.)	Part No.	Length (In.)	Part No.	Length (In.)	Part No.
14	27242	14	27261	18	27252	18	27286
16	27243	16	27262	20	27253	20	27287
18	27244	18	27263	24	27254	24	27289
20	27245	20	27264	28	27255	28	27291
24	27246	24	27266	48	27360	30	27292
26	27247	26	27267	60	27361	32	27293
30	27248	28	27268	72	27362	34	27294
32	27249	30	27269	30	27256	36	27295
36	27250	32	27270	32	27257	42	27297
42	27251	34	27271	36	27258		
48	27350	36	27272	42	27259		
		42	27275				
		45	27277				
		48	27279				
		60	27281				

Brake Line Abrasion Shields

The Federal Motor Carrier Safety Administration's recently launched Compliance Safety Accountability (CSA) program requires abrasion shields on brake lines that fall below the chassis and in circumstances where chafing, kinking or other mechanical damage can occur. Gates provides high-quality products that meet the rules and specifications for brake line protection.

PolySleeve High Density Polyethylene Hose Wrap
Protects lines and hoses from chafing, rubbing, crushing, ultraviolet rays and other hazards that cause hose failures. Easy to install before or after assemblies are in place. Effective temperature range from –40°F to +280°F.

Nylon Sleeves
Nylon filament mesh forms a self-renewing shield that protects against abrasion for brake lines, hose and hose bundles. Extremely flexible, flame resistant and easy to install.

Plastic Coil Sleeve
Economical, lightweight plastic sleeving protects lines and hoses from water, air, gasoline, hydraulic fluids and impacts. Easy to install before or after assemblies are in place. Effective temperature range from -40°F to +250°F.

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

SureLok™ Fittings

Recommended for compressed air connector on all nylon air brake tubing air brake systems at locations other than between chassis frame and axle or between towed and towing vehicle. Also recommended 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

Small Air Brake Assortment

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. Part Number: A33001.
Assortment contains:

- Four hose sizes.
- 16 coupling configurations.
- 158 individual couplings.

Large Air Brake Assortment

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 AII hose. Part Number: A33002.
Assortment contains:

- seven sizes of hoses
- 51 coupling configurations
- 318 individual couplings

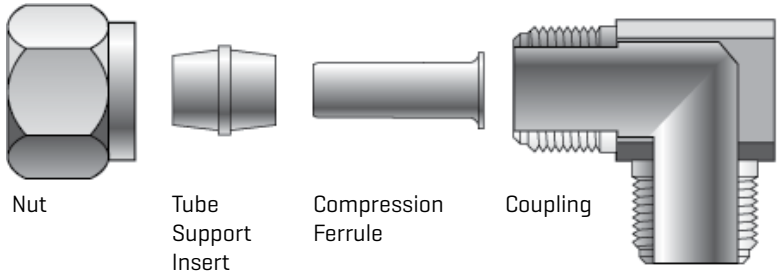
Note: Federal law requires registration with the Department of Transportation for anyone producing air brake hose assemblies with swaged or crimped fittings.

Compression Fittings

Recommended for compressed air connector on all nylon air brake tubing air brake systems at locations other than between chassis frame and axle or between towed and towing vehicle. Also recommended 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:



Nut | Tube Support Insert | Compression Ferrule | Coupling

Small Compression Assortment

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. Part Number: A33003.
Assortment contains:

- Four sizes of hoses.
- 31 coupling configurations.
- 211 individual couplings.

Large Compression Assortment

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. Part Number: A33004.
Assortment Contains:

- Seven sizes of hoses.
- 59 coupling configurations.
- 330 individual couplings.

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

AB Series Air Brake Hose

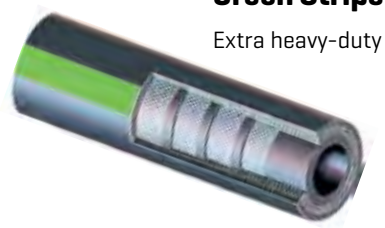
Computer-controlled manufacturing process virtually insures product uniformity.

- 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).

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

Green Stripe® Vacuum Brake Hose 69W

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

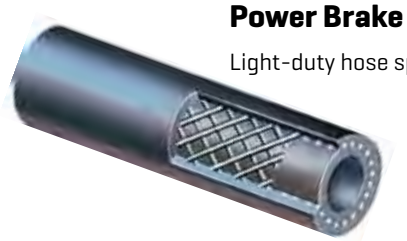


- Wrapped hose construction with multiple plies of rubber-impregnated fabric.
- Resists collapsing or deforming even under high vacuum at elevated temperatures.
- Rated at 30 In./Hg.
- Exceeds SAE J1403, Type H. Complies with DOT FMVSS 106VH.
- Temperature rating: –40°F to +257°F (–40°C to +125°C).
- Packaging: 50 ft. lengths, individually cartoned.

I.D. (In.)	O.D. (In.)	Work. Press. (psi)	O.D. (In.)	Part No.
3/8	.65	85	13/16	27210
1/2	.77	85	15/16	27211
5/8	1.06	85	11/16	27212
3/4	1.18	85	13/16	27213

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

Power Brake Vacuum Hose

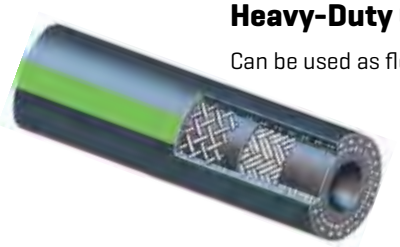


Light-duty hose specially engineered for power brake applications on passenger cars and light trucks.

- 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).

I.D. (In.)	O.D. (In.)	Work. Press. (psi)	Part No. 3 Foot	Part No. 50 Foot
11/32	.70	85	27232	27230
15/32	.82	85	27233	27231

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.

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

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 rating: -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: Sizes 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".

Ultra High Pressure

G8K Spiral Wire Hose

Recommended for: ultra high-pressure, high-impulse applications such as hydrostatic transmissions, for use in the construction, agriculture, forestry, underground or open pit mining, or other industries on applications where extremely high pressure capability is required. G8K hose and couplings offer industry-leading bend radius capability, which leads to ease of routing and installation, longer hose life in flexing applications and fewer bent tube fitting requirements.

Extremely High Pressure

EFG6K Spiral Wire Hose—SAE 100R15

EFG6K is designed to meet or exceed all requirements of SAE 100R15 specifications and performance requirements of EN 856 4SP (-6, -8, -10 and -12), EN 856 4SH (-12, -16, and -20), and ISO 3862 Type R15 (-6, -8, -10, -12, -16, -24).
Available with unique abrasion-resistant MegaTuff® cover.

EFG5K Spiral Wire Hose—SAE 100R13

EFG5K is designed to meet or exceed all requirements of SAE 100R13 specifications and performance requirements of EN 856 4SH (-16 and -20), EN 856 4SP (-8, -10, and -12) and EN 856 R13.
Available with unique abrasion-resistant MegaTuff® cover.

EFG4K Spiral Wire Hose—SAE 100R12

EFG4K is designed to meet or exceed all requirements of SAE 100R12 specifications and performance requirements of EN 856 R12 and EN 856 4SP (-16).
Available with unique abrasion-resistant MegaTuff® cover.

EFG3K Spiral Wire Hose—SAE 100R12

EFG3K is designed to meet or exceed all requirements of SAE 100R12 specifications and performance requirements of EN 856 R12 and performance requirements of EN 856 4SP.
Available with unique abrasion-resistant MegaTuff® cover.

High Pressure

Global M6K Mega6000™ Hose

Recommended for: high-pressure hydraulic applications. Provides tighter than standard minimum bend radius and greater flexibility for easier plumbing.
Also available with unique abrasion resistant MegaTuff® or XtraTuff™ cover.

Global M5K Mega5000™ Hose

Recommended for: high-pressure hydraulic applications. Provides tighter than standard minimum bend radius and greater flexibility for easier plumbing.
Also available with unique abrasion resistant MegaTuff® or XtraTuff™ cover.

High Pressure continued

Global M4K Mega4000™ Hose—SAE 100R19

Recommended for: high-pressure hydraulic applications. Exceeds SAE 100R19 and ISO11237 R19. Allows for tighter minimum bend radius, increased working pressure and improved impulse cycles than industry standards. Provides greater performance, flexibility, easier routing and plumbing of mobile and stationary hydraulic platforms.
Also available with unique abrasion resistant MegaTuff® or XtraTuff™ cover.

Global M3K Mega3000® Hose—SAE 100R17

Recommended for: high-pressure hydraulic oil lines. Exceeds SAE 100R17 and ISO11237 R17 working pressure, minimum bend radius requirements and performance requirements of EN 857 1SC. M3K hose has smaller exterior dimensions and significantly tighter bend radius than other SAE 100R1 and 100R2 hose.
Also available with unique abrasion resistant MegaTuff® or XtraTuff™ cover.

Global G2 2-Wire Braid Hose—SAE 100R2 Type AT

Recommended for: high-pressure hydraulic oil lines. Meets or exceeds the requirements of SAE 100R2, ISO1436 2SN R2 and EN 853 2SN.

Global G2H High-Temp 2-Wire Braid Hose

Recommended for: high-pressure hydraulic oil lines. Meets or exceeds the requirements of SAE 100R2, ISO1436 2SN R2 and EN 853 2SN.
Available with unique abrasion-resistant MegaTuff® cover.

Global G2L PolarFlex® Hose—SAE 100R2 Type AT

Recommended for: high-pressure hydraulic oil lines. Meets or exceeds the requirements of SAE 100R2, ISO1436 2SN R2 and EN 853 2SN.

M4KH Wire Braid Hose—High-Temp—SAE 100R19

Recommended for: high-pressure hydraulic applications. Exceeds SAE 100R19 and ISO11237 R19. Allows for tighter minimum bend radius, increased working pressure and improved impulse cycles than industry standards. Provides greater performance, flexibility, easier routing and plumbing of mobile and stationary hydraulic platforms.
Available with unique abrasion-resistant MegaTuff® cover.

M3KH Wire Braid Hose—High-Temp—SAE 100R17

Recommended for: high-pressure hydraulic oil lines. Exceeds SAE 100R17 and ISO11237 R17 requirements and performance requirements of EN 857 1SC. M3KH hose has smaller exterior dimensions and significantly tighter bend radius than other SAE 100R1 and 100R2 hose.
Available with unique abrasion-resistant MegaTuff® cover.

M-XP™ Million Impulse Xtra Performance Wire Braid Hose

Recommended for: high-pressure, high-impulse life hydraulic applications. Provides tighter than standard minimum bend radius and greater flexibility for easier plumbing.

High Pressure continued

CM2T MegaFlex® Connected Twin-Line 2-Wire Braid—SAE 100R16

Recommended for: high-pressure hydraulic oil lines joined together for easier plumbing and routing. Meets SAE 100R16 requirements. CM2T hose has smaller exterior dimensions and significantly tighter bend radius. Exceeds performance standards of EN 857 2SC and ISO/DIS 1436.

M2T® MegaFlex® 2-Wire Braid Hose—SAE 100R16

Recommended for: high-pressure hydraulic oil lines. Exceeds SAE 100R16 and ISO11237 2SC R16 requirements and performance requirements of EN 857 2SC. M2T hose has smaller exterior dimensions and significantly tighter bend radius.
Also available with unique abrasion resistant MegaTuff® or XtraTuff™ cover.

Hot Oiler 2-Wire Braid Hose

Recommended for: static pressure, hot oiler applications. Designed specifically to handle the transfer of hot oil at 275°F continuous, 300°F intermittent to clear the paraffin around the casing to help start the flow of oil to the surface.

G2XH 2-Wire Braid Extreme Heat Hose—SAE 100R2

Recommended for: high-pressure hydraulic applications where pressure or temperature requirements exceed SAE 100R2, ISO1436 2SN R2 and EN 853 2SN or where resistance to either petroleum-base or phosphate ester fluids is required. Meets SAE J1942 requirements.

J2AT 2-Wire Braid Jack Hose—10,000 Static Pressure Only

Recommended for: hydraulic jack applications. Meets Material Handling Institute specification IJ 100 for hydraulic hose and assemblies used with jacking systems. 10,000 Static Pressure Only.
Available with unique abrasion-resistant MegaTuff® cover.

MegaTech® II—SAE 100R2 Type AT—ACP Carton Pack

Recommended for: multi-purpose high-pressure, high-temperature, air compressor lines, petroleum-base or phosphate ester hydraulic fluid supply lines. Meets the requirements of SAE J1405 performance specifications for high-temperature transmission and lubricating oil systems using petroleum base oils. Meets or exceeds the requirements of SAE 100R2 and SAE 100R2 Type S.

MegaTech® 3000 High-Temp Oil/Air Return

Recommended for pressurized hot oil return lines and rotary oil lines. Meets the requirements of SAE J1405 performance specifications for high-temperature transmission and lubricating oil systems using petroleum base oils.

Medium Pressure

G1 1-Wire Braid Hose—SAE 100R1 Type AT

Recommended for: medium pressure hydraulic lines. Meets or exceeds the requirements of SAE 100R1, ISO 1436 1SNR1 and EN 853 1SN.

G1H 1-Wire Braid Hose—High-Temp—SAE 100R1 Type AT

Recommended for: medium pressure hydraulic oil lines. Meets or exceeds requirements of SAE 100R1 Type AT.

RFS Red Fire Suppressant Hose

Recommended for: low-pressure powder fire suppressant applications in mining, forestry and fire fighting equipment. The red cover allows for easy visual identification in these applications.Meets performance requirements of SAE 100R1.

G3H High-Temp 2-Fiber Braid Hose—SAE 100R3

Recommended for: hydraulic oil lines, anti-freeze solutions or water. Meets or exceeds requirements of SAE 100R3.

GTH High-Temp 1-Fiber Braid Hose—SAE 100R6

Recommended for: hydraulic oil lines, heavy-duty transmission oil cooler lines and glycol anti-freeze solutions. Meets or exceeds requirements of SAE 100R6.

GTHX High-Temp Fiber Spiral Hose—SAE 100R6

Recommended for: hydraulic oil lines, heavy-duty transmission oil cooler lines and glycol anti-freeze solutions. Meets or exceeds requirements of SAE 100R6.

Low Pressure

M500 Wire Braid Hose

Recommended for: pilot lines, grease lines, pressure return lines and 500 psi or less pressure applications.
Also available with unique abrasion resistant XtraTuff™ cover.

TR500 High-Temp/Air Brake/Engine Hose

Recommended for: air brake hose, high temperature pressurized oil return lines and rotary oil/air compressor lines, engine and transmission coolant lines and lube oil lines. Meets or exceeds DOT FMVSS 106-74, SAE J1402 for air brake hose (4, 6, 8, 10). Not recommended for gasoline or diesel fuel applications.

GMV Global MegaVac® Return Line and Suction Hose

Recommended for: petroleum and water-base hydraulic fluids in suction lines or in low pressure return lines. Meets or exceeds requirements of SAE 100R4. Uses half the bend radius of SAE 100R4. Meets marine ABS with use of HeatGuard® high temperature sleeve.

Low Pressure continued

G4H MegaVac® Return Line and Suction Hose

Recommended for: petroleum and water-base hydraulic fluids in suction lines or in low pressure return lines. Meets or exceeds requirements of SAE 100R4 (except 1" I.D.). Uses half the bend radius of SAE 100R4.

RLA 1-Fiber Braid Return Line and Low Pressure Hose

Recommended for: low-pressure hydraulic oil return lines for general purpose water, glycol antifreeze solutions, conveying diesel fuel, gasoline or air. Meets SAE 30R2 performance requirements of both Type 1 and Type 2 for fuel and B20 constant contact up to 125°F biodiesel fuel transfer applications.

RLC 3-Fiber Braid Return Line and Low Pressure Hose

Recommended for: petroleum-base hydraulic oils, glycol antifreeze, air or water in low pressure fluid transfer or hydraulic system return lines. Generally connected to 100R4 stems, beaded nipples or tube type ports with worm gear clamps.

MegaTech® LOC 1-Fiber Braid High-Temp Lock-On Hose

Recommended for: high-temperature (300°F) transmission oil cooler lines, pressurized hot oil return lines and turbocharger oil supply lines. Meets or exceeds SAE J1405 performance specifications for high-temperature transmission and lubricating oil systems using petroleum base oils. Not recommended for gasoline or diesel fuel applications.

LOC 1-Fiber Braid Lock-On Hose

Recommended for: petroleum-base hydraulic oils, glycol antifreeze compounds, water, engine lubricating oils and air. Lock-on hose and couplings are NOT recommended for vibration or pressure surge applications, such as permanent piping in residential or commercial buildings. Meets SAE 30R2, SAE 30R6 and SAE 30R7 performance requirements for fuel and B20 biodiesel fuel transfer applications up to +125°F.

LOL Lock-On Hose

Recommended for: petroleum-base hydraulic oils, water, glycol antifreeze solutions, engine lubricating oils and air. Lock-on hose and couplings are NOT recommended for pressure surge applications or critical applications, such as permanent piping in residential or commercial buildings. Do not use for gasoline or diesel fuels, unless approved by Gates H/C Product application.

Fleet Application

C5C Hydraulic Hose—SAE 100R5

Recommended for: medium pressure hydraulic petroleum-base oil lines in impulse applications, lube oil, air and water in applications such as air brakes, power steering (CAUTION: Intended for heavy-duty commercial vehicle use only), turbocharger oil supplies, tilt cab cylinders, transmission coolant and filtration lines. Meets or exceeds requirements of SAE 100R5 for traditional hydraulic applications, DOT FMVSS 106-74 Type AII and SAE J1402 Type AII for air brake applications (-4 to -12). Not recommended for gasoline or diesel fuel.

C5D High-Temp Multi-Fluid Hose

Recommended for: petroleum-base or phosphate ester fluids, diesel fuels and filtration lines, transmission coolant lines, hot lube oil lines, power steering (CAUTION: Intended for heavy-duty commercial vehicle use only), gasoline and turbocharger oil supplies. Tilt cab cylinder and air brakes. C5D (-4 to -12) meets or exceeds DOT FMVSS 106-74 Type AII, SAE J1402 Type AII and SAE J1405 and fuel resistance of SAE J30R2. Not approved for bio diesel.

C5M Marine Fuel Line Hose

Recommended for: on-shore/off-shore and marine diesel fuel and gasoline applications and hot oil lines up to +212°F. Meets USCG marine fuel line specifications, SAE J1527 B100 to +125°F Type A Class 1 and SAE J1942 requirements. Exceeds performance requirements of SAE J30R2 for non-marine applications.

C5E High-Temp Flexline Hose

Recommended for: air brake hose, power steering (CAUTION: Intended for heavy-duty commercial vehicle use only), fuel filter, engine and transmission coolant lines, and hot (+300°F) lube oil lines.

MegaTech® 1000 High-Temp Oil/Air Return

Recommended for: air brake, pressurized hot oil return lines and rotary oil/air compressor lines. Meets the requirements of DOT FMVSS 106- 74, SAE J1402, for Air Brake Hose (-4, 6, 8, 10), and SAE J1405 performance specifications for high-temperature transmission and lubricating oil systems using petroleum base oils. Not recommended for gasoline or diesel fuel applications.

MegaTech® 500 High-Temp Oil/Air Return

Recommended for: air brake hose, pressurized hot oil return lines and rotary oil/air compressor lines. Meets the requirements of SAE J1405 performance specifications for high-temperature transmission and lubricating oil systems using petroleum-base oils. Not recommended for gasoline or diesel fuel applications.

MegaTech® 250 High-Temp Transmission Oil Cooler (TOC) Hose

Recommended for: high-temperature (300°F) transmission oil cooler lines, pressurized hot oil return lines and turbocharger oil supplies. Meets or exceeds SAE J1405 performance specifications for hightemperature transmission and lubricating oil systems using petroleum base oils. Not recommended for gasoline or diesel fuel applications.

MegaTech® G5TB Extreme Heat Oil/Air Return

Recommended For: pressurized hot oil return lines and rotary oil lines. Meets the requirements of SAE J1405 performance specifications for high-temperature transmission and lubricating oil systems using petroleum base oils.

Specialty/Thermoplastic

TH8 Hydraulic Hose—SAE 100R8

Recommended for: use with petroleum, water base and synthetic hydraulic fluids. Applications include: power and telephone mobile equipment (cherry pickers), lubrication lines, blowout preventer control lines, hydraulic lifts and farm and construction machinery. TH8 hose meets or exceeds performance requirements of SAE 100R8 with a significantly tighter bend radius. Multi-line available.

TH8NC Non Conductive Hydraulic Hose—SAE 100R8

Recommended for: use with petroleum, water base and synthetic hydraulic fluids. Applications include: power and telephone mobile equipment (cherry pickers), lubrication lines, blowout preventer control lines, hydraulic lifts and farm and construction machinery. TH8NC hose (orange cover) meets SAE 100R8 non-conductivity requirements. TH8NC hose meets or exceeds performance requirements of SAE 100R8 with a significantly tighter bend radius. Multi-line available.

TH7 Hydraulic Hose—SAE 100R7

Recommended for: petroleum, water base and synthetic hydraulic fluids. Applications include: power and telephone mobile equipment (cherry pickers), lubrication lines, blowout preventer control lines, hydraulic lifts and farm and construction machinery. TH7 hose meets or exceeds performance requirements of SAE 100R7 with a significantly tighter bend radius.

TH7NC Non Conductive Hydraulic Hose—SAE 100R7

Recommended for: power and telephone mobile equipment (cherry pickers), lubrication lines, blowout preventer control lines, hydraulic lifts and farm and construction machinery. Orange color TH7NC meets SAE 100R7 non-conductivity requirements and meets or exceeds performance requirements of SAE 100R7 with a significantly tighter bend radius. Meets ANSI A92.2 for vehicle mounted aerial devices (-4 to -8).

TH7DL Dual Line Hydraulic Hose—SAE 100R7

Recommended for: petroleum, water base and synthetic hydraulic fluids. Applications include: power and telephone mobile equipment (cherry pickers), lubrication lines, blowout preventer control lines, hydraulic lifts and farm and construction machinery. TH7DL hose meets or exceeds performance requirements of SAE 100R7 with significantly tighter bend radius.

TH7NCDL Non Conductive Dual Line Hydraulic Hose—SAE 100R7

Recommended for: petroleum, water base and synthetic hydraulic fluids. Applications include: power and telephone mobile equipment (cherry pickers), lubrication lines, blowout preventer control lines, hydraulic lifts and farm and construction machinery. Orange color TH7NCDL meets SAE 100R7 non-conductivity requirements and meets or exceeds performance requirements of SAE 100R7 with significantly tighter bend radius. Meets ANSI A92.2 for vehicle mounted aerial devices (-3 and -8).

TH18 Constant Pressure Hydraulic Hose— SAE 100R18

Recommended for: petroleum or synthetic-based hydraulic fluids. TH18 hose meets or exceeds performance requirements of SAE 100R18 with a significantly tighter bend radius. TH18 is ideal for industrial and agricultural applications exposed to low temperatures or cyclic and quick temperature changes. Remains highly flexible in cold weather conditions and is resistant to hydraulic fluids, high temperatures, aging and weathering.

Specialty/Thermoplastic continued

TH18NC Constant Pressure Non Conductive Hydraulic Hose—SAE 100R18

Recommended for: petroleum or synthetic-based hydraulic fluids. TH18NC hose meets or exceeds performance requirements of SAE 100R18 with a significantly tighter bend radius. TH18NC non-conductive hoses are suitable for use in high-voltage applications. Remains highly flexible in cold weather conditions and is resistant to hydraulic fluids, high temperatures, aging and weathering.

C14 PTFE Hose—SAE 100R14 Type A—Nonconductive

Recommended for: air compressor discharge, hot oil and fluids, hot and greasy environments.

C14CT PTFE Hose—SAE 100R14 Type B—Conductive

Recommended for: air compressor discharge, hot oil and fluids, hot and greasy environments.

Power Clean™ Hose

When you have to keep it clean, nothing does the job better than Gates Industrial high pressure cleaning hose for water cleanup applications at food handling and processing operations, meat and poultry plants, creameries, paper mills, and other facilities. Depending on your need, our durable, reliable hose line handles pressures up to 5000 psi, temperatures up to 250°F, and can be used with hot or cold water, steam injected water, and mild detergents.

LP350 Liquid Hose

Recommended for: liquid or gaseous propane, butane, or a combination of the two. Consumer applications include gas grills, heaters, torches, and other outdoor equipment. It can also be used as an industrial transfer hose and for natural gas under certain conditions such as open/outside areas and well ventilated factory buildings (if local building codes permit).
Note: Not recommended for residential or office buildings. Contact Gates Product Application for inspection and assembly testing information.

Def Hose

To see information on DEF hose see page 43.

MobileCrimp® 4-20 Crimper

This lightweight, versatile crimper is powerful enough to crimp up to 1-1/4" four spiral-wire hose. Weighing approximately 57 pounds, this new field crimper combines the latest crimping technology with old-fashioned toughness and durability. Just dial in the appropriate crimp setting and hold the start button until the light comes on and the buzzer sounds, then release.

- Ability to lock-in setting for multiple assemblies.
- Light and buzzer operate on two "AAA" batteries.
- Portable and lightweight – only 57 pounds.
- Powerful enough to crimp up to 1-1/4" I.D. four spiral-wire hose.
- Great for jobs in the field.

Power Crimp® 707

The Power Crimp® 707 is the most precise, yet simple crimper made. It was the first crimper with electronic digital readout to indicate gauge setting. The toughest part about using the 707 is pushing a button. It takes just a few seconds to make factory-quality hose assemblies. It crimps most hydraulic hoses from low pressure return lines to extremely high pressure spirals, from 3/16" to 1-1/4" I.D. Crimps straight and bent tube couplings, plus 45° and 90° block types. The Power Crimp® 707 can also be adapted for use as a power swager.

- Crimps low pressure return lines to high pressure spiral hoses, from 3/16" to 1-1/4" I.D. four-spiral wire.
- Crimps straight and bent tube couplings, plus 45° and 90° block types.
- Swage capable.

SC™32 Crimper

The Gates SC™32 crimper is a versatile, easy-to-use, economical machine suitable for a hardworking shop environment. It is offered in 110V and 220V single phase versions to match the shop power supply. This rugged crimper is designed for continued use to meet day-to-day shop and counter needs for crimps on hoses up to 1-1/4" I.D., with occasional crimps for larger assemblies up to 2", six-spiral hose.

- High-ton ram force with an integrated pump.
- Pump pre-wired for either 110 Volt or 220 Volt (1 phase) outlets.
- Bottom-loading makes crimping easier.
- Comes with all the base plates and spacers required to crimp up to 2" hoses.

GC®96 Crimper

The GC®96 crimper is capable of crimping 2" six wire and up to 6" ID industrial hose. This crimper allows distributors to make reliable and professional looking assemblies providing more value to the end user. The large crimper head allows industrial hose assemblies to be made with a variety of terminations using crimpable ferrules and sleeves. The GC®96 crimper has additional versatility since it can make Gates hydraulic hose assemblies in conjunction with optional spacer dies and GC®32-XD dies.

- Horizontal front-end feed makes crimping easier and convenient.
- 340-ton force allows crimping of a wide variety of couplings.
- Two speed die closure and rapid retract permit fast assembly fabrication.
- Full range die sets that enable production of a wide range of hose assemblies.
- 2" six wire and 6" industrial.

GC®32-XD Crimper

The new GC®32-XD crimper from Gates crimps every hose and coupling in our hydraulics catalog. The open crimper head accommodates any Gates hose construction or coupling configuration, including 2-1/2" Global MegaVac® return lines. It makes them at a rate that is twice as fast as the Gates OmniCrimp® 21 crimper, which the GC®32-XD is replacing. Internally, the GC®32-XD uses a unique cloverleaf design that simply produces a better crimp. Unlike standard annular head configurations, Gates exclusive cloverleaf design reinforces the piston so the dies move smoother for more consistent crimps without any taper in the crimp OD.

- Accepts electrical input from 208 volts to 260 volts, single phase.
- Twice as fast as the Gates OmniCrimp® 21 crimper, which the GC®32-XD is replacing.
- Patented quick change tool enables fast loading and unloading of color-coded, numbered dies.
- 470 Radial Ton crimping force.

PolarSeal® Hose Portable Crimper II

Gates portable PolarSeal® Crimper II is a hand-operated hose crimping machine specifically designed for crimping Gates PolarSeal® couplings and is intended for use with Gates PolarSeal® refrigerant hose.

- Standard dies included will crimp 5/16" [-6 Black], 13/32" [-8 Blue], 1/2" [-10 Green] and 5/8" [-12 Clear] sizes.

Vertical Hydraulic Hose Cabinet

This new vertical hydraulic hose cabinent from Gates offers many options to make getting organized easy.

- Six narrow and two wide slots to stock a variety of hydraulic hoses.
- Designed to support one hydraulic coupling cabinet on top for maximum efficiency.
- Optional choice for use as cabinet base with maximum of one four-drawer cabinet.

Two-Drawer Coupling Cabinet

This two-drawer cabinet is ideal to add nylon air brake tubing couplings to any hydraulic inventory.

- Can be stacked and bolted together with existing hydraulic cabinets.
- Measures 41" wide by 11" high by 12" deep.

Hydraulic Hose Reel Rack

This sturdy and convenient rack stores three reels of hose.

Work Bench

This new hydraulic work bench is ideal for holding the Power Crimp® 707, MobileCrimp® 4-20 crimpers or hydraulic saws. The lower shelf can be used for storage or with the pump. All hardware is included to allow for easy assembly in about 10 minutes.

- Made of an angle iron frame construction with a high-density fiberboard top and welded 13-gauge steel lower shelf.
- Measures 36" wide by 24" deep by 36" tall.

Hydraulic Coupling Bin

This 24-bin cabinet is constructed of heavy gauge steel and is excellent for storing large couplings.

- Excellent for storing large 1-1/4" to 2" I.D. couplings.
- Measures 34" wide by 24" high by 12" deep.

Gates Hose Cutter Model 2-24

Designed for two-wire braid hose through 1-1/2" ID. Provides safe operation for clean, easy cuts.

- Cuts up to 1-1/2" I.D. two-wire braid reinforced hose.
- Designed to operate on standard 20 amp service.
- Reversible 8" scalloped-edge, high-speed steel blade with 5/8" bore can be sharpened.
- Radius hose feed into blade for safety and reduced friction.
- Inner blade guard for safe operation.
- Power Source: 1-1/2 HP (2.6 HP Peak), 115V, 60 Hz., 15 Amp motor with power cord and plug.
- Dimensions: 13" wide by 24" length by 17" high.
- Weight: 65 lbs.

Gates Power Cutter 208

Provides effortless, straight cuts every time.

- Clear face shield for added safety.
- Powerful high torque, 4.5 horsepower peak motor that makes cutting faster and easier.
- Includes scalloped, 12" blade to dissipate heat, reducing friction for clean, faster cuts up to 1-1/4" I.D.
- Optional abrasive blade for continuous use with 1-1/4" I.D and larger spiral-wire reinforced hose.
- Safely cuts two and four-wire hoses up to 2", six-wire hoses through 1-1/4".
- Reversible blade can be sharpened; removal and installation is easy.
- Cuts small 3/16" I.D. hose and handles the tough jobs, including 2" I.D. spiral wire hoses.*
- Easy-to-use, front face plate with moveable pins holds hose securely for a clean straight cut.
- Sturdy blade guard shields blade for safety.
- Permanent mounting brackets (included) to attach saw to table.

* Optional abrasive blade preferred for cutting spiral-wire hose, larger than 1-1/4" I.D.

Gates Hose Cutter Model 6-32

Designed for six-wire spiral and two-wire braid hose through 2" I.D. Provides safe operation for clean, easy cuts.

- Cuts up to 2" I.D. two-wire braid through six-spiral reinforced hose.
- Reversible 10" scalloped-edge, high-speed steel blade with 3/4" bore can be sharpened.
- Radius hose feed into blade for safety and reduced friction.
- Inner blade guard for safe operation.
- Includes Coolant Spray System Kit for reduced heat in high-capacity cutting applications (recommended for multi-braid and spiral reinforced hose). Kit includes reservoir, spray nozzle and mounting hardware.
- Power cord not included.

4-16 Portable Hose Saw

This portable hose saw includes an abrasive cutt-off wheel and is capable of cutting up to 1" four-wire braid.

- **Voltage:** 120 Volts
- **Cycle:** 60 Hz / 1 phase
- **Power:** 6.5 Amp
- **No-load speed:** 7,400 rpm
- **Wheel size**: 6"
- **Arbor Hole:** 7/8"

Small Nylon Tubing Cutter + Replacement Blades

Tubing cutter gives straight, clean, square cuts on J844 tubing.

- Lightweight and compact size – 3/4" by 3".
- Designed to ensure user safety.
- Blade guard offers more protection against accidental blade contact.
- Handle has ribs for improved grip.

MegaClean™ System

Used to remove dirt with the help of pressurized launchers and compatible nozzles. Gates MegaClean™ foam projectiles sweep through the inside surface of the hose, taking fine particles of loose dirt and other contaminants with them. At 20–30 percent larger than the hose ID, these projectiles leave nothing behind but a hose that is clean from the inside out.

Air Brake Fittings

Gates is proud to offer a large assortment of air brake fittings. The assortment includes SureLok™ fittings, compression fittings, air brake copper tubing and air brake fittings for rubber hose.

Nylon Protective Sleeve

Gates Nylon Sleeves perform a dual role. They provide excellent abrasion resistance to protect individual hoses and they can be used to bundle several hose assemblies together for maximum protection. Downtime and maintenance costs are reduced. These Nylon Sleeves are unique because they form an extra protective layer against abrasive forces. Specifically, thousands of tiny Nylon filaments, woven into the texturized yarn, "friz" into a self-renewing shield that is extremely resistant to severe abrasion. This nylon sleeving has MSHA flame-resistance approval. Add 1/8" for installation.

Note: Do not use the Nylon Sleeve where ambient temperatures exceed 250°F.

Life Guard™ Line-of-Site Sleeving

The LifeGuard™ Line-of-Sight Sleeving System is the first true protection in line-of-sight hydraulic applications. It contains bursts up to 10,000 psi and pinhole leaks up to 5,000 psi at 250°F for up to five minutes. After redirecting the explosive force down the length of the hose, the LifeGuard sleeve disperses the energy and fluids at the hose ends via carefully designed "channel" clamps. The leaked fluid then allows for fast hose failure detection. The double-layer sleeve effectively shields against hazards.

Hose Guards

Gates offers a full line of hose guards for most every need.

- Plated Wire Spring Guards
- Plated Flat Armor Spring Guards
- Plastic Protective Coil Sleeves
- PolySleeve™ High Density Polyethylene Hose Wrap - Black
- HeatGuard® Protective Sheathing
- HeatGuard® High-Temp Protective Sheathing

Vinyl Bend Restrictor

Gates tapered PVC sleeve reduces bending stress in the hose near the coupling to prevent damage, such as in power wash applications. Installed during hose assembly, this smoothly-finished product withstands temperatures from -40°F to +200°F (-40°C to +93°C).

- Friction Fit.
- Smooth finish will not scratch finish on equipment being washed.
- Tapered design reduces bending stress.
- Wide temperature helps give extra long service life for both hot and cold power wash assemblies.

Gates hydraulic hoses and couplings beat the competition, and meet or exceed the toughest SAE requirements. These products offer maximum flexibility and leak prevention on heavy-duty applications, regardless of pressure. By offering a full line of couplings and adpters, Gates can meet your every need. The listing below is not an exhaustive list of all Gates has to offer, for all of Gates couplers and adapters please see the 2012 Hydraulic Catalog.

G8K Couplings

Gates offers a full line of G8K Couplings for most every need.

- Caterpillar Style O-Ring Flange
- Caterpillar Style O-Ring Flange - 45° Bent Tube and 90° Bent Tube
- G8K Ferrule for G8K Spiral Hose

Globalspiral™ Couplings

A new, no-skive permanent coupling design with superior performance features is now available for extreme high-pressure and high-impulse hydraulic applications. The GlobalSpiral™ coupling can be used with Gates' C13 and G6K six- and four-spiral wire hydraulic hoses and the C12 four-spiral wire hose.

- Can be used on hoses with up to 6,000 psi working pressure in all sizes.
- Available in + 30 thread/flange configurations.
- Bite the wire crimp.
- Non-lead steel.
- + 250°F temperature capability.

Power Crimp® Couplings

Wide variety of couplings available for easy installation.

- Designed to perform with high and medium pressure hose.
- Sizes 3/16" through 2" I.D.
- Zinc plated carbon steel.

MegaCrimp® Couplings

MegaCrimp couplings give you a leak-proof seal that's so innovative, it's patented. In fact, it surpassed one million impulse cycles during design testing. MegaCrimp® couplings set a new standard for hydraulic couplings. The unique "C" insert ensures "weep-free" concentric crimping to keep equipment and the environment clean.

- Robust "bite-the-wire" crimp .
- Low profile.
- Full stem insertion.
- Full-length crimp.
- TuffCoat™ plating for 500% better corrosion resistance.
- Fully qualified EN-performance coupling.

LOC, GI And GLP Couplings

Wide variety of couplings available for easy installation.

- Brass Field Attachable Couplings For Lock-On
- GLP Couplings
- GI Couplings

C14 Couplings

Special tools available to make swage type installations easy.

- Designed to perform with C14 Hose.
- Sizes 3/16" through 7/8" O.D.
- Stainless steel, brass or carbon steel.
- 13 thread configurations.

PCTS Thermoplastic Couplings

Swage style couplings make factory quality assemblies.

- Designed to perform with C7 and C8 thermoplastic hose.
- Sizes 3/16" through 1" O.D.
- 21 thread configurations.

Field Attachable C5 Couplings

Makes assemblies without a crimper.

- Designed to perform with Gates C5 hose.
- Sizes 3/16" through 113/16" I.D.
- 22 thread configurations.
- Zinc plated carbon steel.
- Meets DOT FMVSS 106-74 Type AII

Field Attachable C5E Couplings

Makes assemblies without a crimper.

- Designed to perform with Gates C5E Hose.
- Sizes 1/4" through 11/4" O.D.
- 16 thread configurations.
- Zinc plated carbon steel.
- Meets DOT FMVSS 106-74 Type AII

Adapters

For easy assembly on extremely high, very high, high and medium pressure hose

- [Rated to SAE 100R2 pressure maximum.]
- 8 flange to MJ adapters for extremely and very high pressure hose.
- 69 thread configurations.

Quick Disconnect Couplers

Features a meaningful part number that makes coupling identification fast and easy.

- Full line of hydraulic quick disconnects.
- Agriculture and Industrial interchange.
- Flush face and wing nut styles.
- Dust caps and plugs.

PolarSeal® 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. 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 II.
- Temperature rating: –22°F to +257°F (–30°C to +125°C), Class II.
- Packaging: 25 foot cartons and UPS shippable reels.

Note: For a complete listing of PolarSeal® Couplings, see Gates Hydraulic Catalog #431-2080.

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

PolarSeal® II Hose

PolarSeal® II Hose is designed to be installed with PolarSeal® II couplings and clamps. Meets SAE J2064 Type C, Class I - Use with R12, R13A and R22 refrigerants. Recommended for air condition systems on school/transit buses, RV's, limos and other heavy equipment that has long run or hard to service AC lines. Elastomeric tube with fabric braid reinforcement. Cover is heat, moisture and ozone resistant.

- Temperature rating: -22°F to +257°F (-30°C to +125°C).
- Coupling Recommendation (See Crimp Data Manual 428-7365 or E.Crimp): PolarSeal® II Coupling.

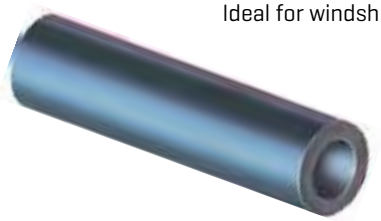
PolarSeal® and PolarSeal® II Couplings + Accessories

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.
- Four sizes of "O Rings" especially compounded for R134a refrigerants.
- Five inline orifice tubes.
- Packaging: one each in plastic bag. Five to 10 per carton according to popularity.

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

Windshield Washer, Vacuum and Radiator Overflow Tubing



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

- Vacuum and kink resistant construction.
- Vacuum rated to 24" Hg (610mm).
- Meets SAE J1037, J942b specifications.
- 25 psi working pressure.
- Temperature rating: -40° to +257°F (-40°C to 125°C)
- Packaging: One 72" length per box. 50 ft. reel. One 250 ft. length per box.

		72 Inch Length	50 Foot Reel	250 Foot Length	36 Inch Length	72 Inch Length	25 Foot Length	50 Foot Reel		
I.D. (In.)	Nipple Size (In.)	Part No.	Part No.	Part No.	I.D. (In.)	Nipple Size (In.)	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	—

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.

I.D. (In.)	Work. O.D. (In.)	Nipple Press. (psi)	Size (In.)	Part No.
5/32	.300	50	3/16	27072
7/32	.360	50	1/4	27073
1/4	.400	50	5/16	27074

Clamshell Packaging

Four sizes of windshield washer and vacuum tubing in self-service, recyclable packaging.

- Can be displayed on pegboard.

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

High Temperature DPFE Hose Solution Kit

Specially formulated silicone rubber hoses designed as a solution for common DPFE failures. High temperature resistance assures long service life in harsh environments. Part No. 27079.

- Extremely flexible and kink resistant.
- Solves common failure issue on Ford/Lincoln/Mercury trucks and SUVs.
- Includes two sections of hoses so both can be replaced at the same time.
- One 7/32" x 13" and one 5/32" x 10" section in clamshell package.

Silicone Vacuum Tubing (EGR Hose) + DPFE

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 for exhaust gas recirculation.
- Orange color for easy identification.
- Temperature rating: 300°F (149°C) to 25 In./Hg; Possible reduced capacity above 300°F; Maximum 400°F (204°C).
- Packaging: One six-foot length in reusable, recyclable, self-service package.

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

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.

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

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)

Part No.	I.D. (In.)	Length (In.)	Work. Press. (psi)
26200	3	6	25
26201	3½	6	25
26203	4	6	25
26204	4	8	25

Defroster/Air Intake Hose

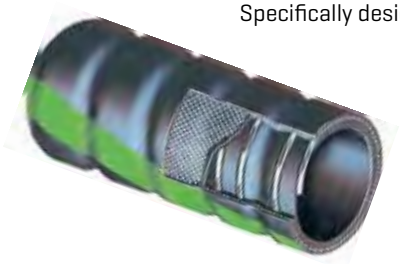
For defrosters, air ducts, air intakes, under-hood applications and other low pressure, low suction applications. Approved for marine applications.

- 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 rating: -40°F to +200°F (-40°C to +93°C).
- Packaging: Individually boxed in six ft. lengths (compressed to 21").

I.D. (In.)	Part No.	I.D. (In.)	Part No.	I.D. (In.)	Part No.
1¼	23820	2½	23840	3¾	23860
1½	23824	2¾	23844	4	23864
1¾	23828	3	23848	4½	23872
2	23832	3¼	23850	5	23880
2¼	23836	3½	23856	6	23896

Green Stripe® Heavy-Duty Air Vent Hose

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



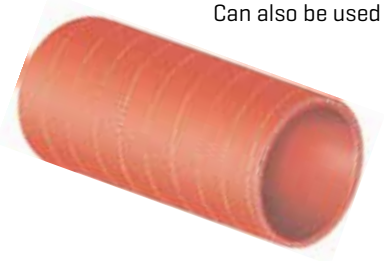
- Heat and oil-resistant tube.
- Flexible, helical wire reinforced.
- Cover is heat, oil and abrasion resistant.
- Smooth interior offers minimum air resistance for maximum efficiency.
- Easily cut with knife and wire cutters.
- Temperature rating: -40°F to +257°F (-40°C to +125°C)
- Packaging: 10 ft. lengths, individually cartoned.

Caution: Not recommended for conveying liquids.

Part No.	I.D. (In.)	O.D. (In.)	Work Press. (psi)	Vacuum Rating (In. /Hg)
23764	4	4.38	10	7
23772	4½	4.88	10	7
23780	5	5.38	10	6
23788	5½	5.88	10	6

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.

I.D. (In.)	Part No.	Length (In.)	Work Press. (psi)
1	26116	36	45
1 1/2	26124	36	40
1 3/4	26128	36	35
2	26132	36	35
2 1/4	26136	36	30
2 3/8	26138	36	30
2 1/2	26140	36	30
2 5/8	26142	36	15

I.D. (In.)	Part No.	Length (In.)	Work Press. (psi)
2 3/4	26144	36	25
3	26001	3	25
3	26148	36	25
3 3/8	26002	3 1/2	15
3 3/8	26003	6	15
3 3/8	26154	36	15
3 1/2	26004	3	30

I.D. (In.)	Part No.	Length (In.)	Work Press. (psi)
3 1/2	26156	36	20
3 3/4	26160	36	15
3 7/8	26162	36	15
4	26164	36	15
4 1/2	26166	36	15
5	26007	3 1/2	15
5 1/2	26008	3 1/2	15

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. xLength) (In.)
Hump[1]	23002	4 x 5
	23004	5 x 6
	23005	5 1/2 x 6
	23006**	6 x 5
Straight	23400	4 x 22
Flexible[2]	23401	6 x 19
	23402	6 1/8 x 19
Reducer	23100	3 1/2 x 3 x 5 1/4
Hump[3]	23101	4 x 3 x 5 1/4
	23106	6 x 5 1/2 x 6
	23107	7 x 6 x 5

Style	Part No.	(I.D. xLength) (In.)
Molded	23201	3 x 5 1/4 x 90°*
Elbow[3]	23202	3 1/2 x 5 1/4 x 45°
	23203	3 1/2 x 5 1/2 x 90°*
	23208	5 x 5 1/4 x 45°
	23209	5 x 6 x 90°
	23215	6 x 6 1/2 x 45°*
	23216	6 x 7 1/2 x 45°*
	23218	6 x 7 x 90°*
	23221	7 x 7 1/2 x 90°
Reducer	23300	6 x 5 1/2 x 90°
Elbow[3]		

*Ribbed
**Available until stocks depleted.

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.
- Cuts with knife for easy installation.
- Install with or without clamps.
- Temperature rating: -40°F to 400°F (-40°C to +204°C).
- Packaging: Individually packed.

I.D. (In.)	Length (In.)	Part No.
3/4	36	28092
7/8	36	28085
1 1/2	18	28093
1 1/2	36	28088
1 3/4	18	28094
1 3/4	36	28089
2	18	28095
2	36	28090

I.D. (mm)	Length mm)	Part No.
40	1000	28091
50	1000	28082
60	1000	28081

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.

Part No.	I.D. (In.)	O.D. (In.)	Work. Press. (psi)	Vacuum Rating (In/Hg)
23610	5/8	.85	10	5
23612	3/4	.97	10	5
23614	7/8	1.10	10	5
23616	1	1.22	10	5
23620	1 1/4	1.47	10	5
23622	1 3/8	1.60	10	5
23624	1 1/2	1.72	10	5
23626	1 5/8	1.85	10	5
23628	1 3/4	1.97	10	5
23630	1 7/8	2.10	10	5
23632	2	2.22	5	3
23634	2 1/8	2.28	5	3

Part No.	I.D. (In.)	O.D. (In.)	Work. Press. (psi)	Vacuum Rating (In/Hg)
23636	2 1/4	2.35	5	3
23638	2 3/8	2.47	5	3
23640	2 1/2	2.60	5	3
23642	2 5/8	2.72	5	3
23644	2 3/4	2.97	5	3
23648	3	3.22	5	3
23656	3 1/2	3.35	5	3
23658	3 5/8	3.47	5	3
23664	4	3.72	5	3
23672	4 1/2	3.85	5	3
23680	5	4.24	5	3
23688	5 1/2	4.74	5	3

Service Hose

Multi-Use Hose

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

- Nitrile tube and cover provide high oil resistance.
- One 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 three 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.

Part No. 50 Ft.	Part No. 300 Ft.	I.D. (In.)	O.D. (In.)	Work Press. (psi)	Braid
27402	28652	1/4	1/2	315	1
27404	28657	5/16	5/8	315	1
27406	28661	3/8	11/16	315	1
27410	28665	1/2	27/32	315	1
27414	28667	5/8	15/16	315	1
27418	28671	3/4	1 3/32	315	1
27420	28765	1	1 3/32	250	1

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 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 pressure.
- Temperature rating: -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.

Part No.	I.D. (In.)	O.D. (In.)	Length (Ft.)	Working Pressure (psi)*	Coupling Thread Size
27480	1/4	35/64	25	300	1/4-18NPT
27481	1/4	35/64	50	300	1/4-18NPT
27501	1/4	35/64	250**	300	—
27502	3/8	5/8	250**	300	—
27482	3/8	5/8	25	300	1/4-18NPT
27483	3/8	5/8	50	300	1/4-18NPT
27499	1/2	49/64	25	300	1/2-14NPT
27500	1/2	49/64	50	300	1/2-14NPT

Service Hose

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 rating: –40°F to +200°F (–40°C to +93°C)
- Packaging: 25 ft. and 50 ft. individually cartoned.

Part No.	I.D. (In.)	O.D. (In.)	Length (Ft.)	Working Pressure (psi)	Coupling Thread Size
27485	1/4	35/64	25	300	1/4-18NPT
27486	1/4	35/64	50	300	1/4-18NPT
27488	3/8	23/32	25	300	1/4-18NPT
27489	3/8	23/32	50	300	1/4-18NPT
27491	1/2	27/32	25	300	1/2-14NPT
27492	1/2	27/32	50	300	1/2-14NPT

Charter® Air Hose

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

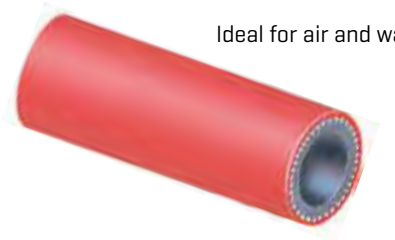
- Textile reinforcement.
- Perforated EPDM red cover is ozone and abrasion resistant.
- Factory applied male couplings have 250 lb. minimum coupling pull.
- Temperature rating: -40°F to +200°F (-40°C to +93°C)
- Packaging: 25 ft. and 50 ft. coupled lengths individually cartoned; 300 ft. reels (maximum two pieces, shortest length 50 ft.).

Part No.	I.D. (In.)	O.D. (In.)	Length (Ft.)	Working Pressure (psi)	Coupling Thread Size
27475	1/4	35/64	25	200	1/4-18NPT
27476	1/4	35/64	50	200	1/4-18NPT
28673	1/4	35/64	300*	200	—
27478	3/8	47/64	25	200	1/4-18NPT
27479	3/8	47/64	50	200	1/4-14NPT
28674	3/8	47/64	300*	200	—

*300' lengths are not coupled.

Service Hose

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 Power Crimp® specifications available*
- Temperature rating: -40°F to +200°F.
- Packaging: 50-ft. cartons, bulk reels.

*Contact your local Gates sales associate for specification information.

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

I.D. (in.)	Work. Press. (psi.)	Part No. 50Ft.	Part No. Reels	Reel Length Ft.
1/4	200	28823	28800	500
5/16	200	28825	28803	500
3/8	200	28826	28806	500
1/2	200	28828	28809	500
5/8	200	28830	28812	500

I.D. (in.)	Work. Press. (psi.)	Part No. 50Ft.	Part No. Reels	Reel Length Ft.
3/4	200	28832	28815	500
1	200	28836	28818	300
1 1/4	200	N/A	28821	300
1 1/2	200	N/A	28824	250

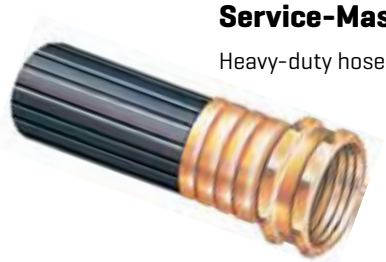
Signal Call Tubing

Designed for driveway signal devices in service stations 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 two pieces, shortest length 100 ft.).

Part No.	I.D. (In.)	O.D. (In.)	Length (Ft.)
27539	3/8	5/8	50
28681	3/8	5/8	100
28686	3/8	5/8	300

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.

Part No	I.D. (In.)	Length (Ft.)	Work Press. (psi)
27101	5/8	25	200
27107	5/8	50	200
28691	5/8	250	200

Part No	I.D. (In.)	Length (Ft.)	Work Press. (psi)
27102	3/4	25	200
27108	3/4	50	200
28692	3/4	250	200

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.

I.D. (In.)	O.D. (In.)	12.5 Foot Length Part No.
1 1/8	1.50	250-1184
1 1/4	1.63	250-1144
1 3/8	1.75	250-1384
1 1/2	1.88	250-1124
1 5/8	2.00	250-1584
1 3/4	2.12	250-1344
1 7/8	2.24	250-1784
2	2.36	250-2004

I.D. (In.)	O.D. (In.)	12.5 Foot Length Part No.
2 1/8	2.49	250-2184
2 1/4	2.63	250-2144
2 3/8	2.75	250-2384
2 1/2	2.90	250-2124
2 5/8	3.02	250-2584
2 3/4	3.22	250-2344
2 7/8	3.42	250-2784
3	3.54	250-3004

I.D. (In.)	O.D. (In.)	12.5 Foot Length Part No.
3 1/2	4.04	250-3124
4	4.54	250-4004
4 1/2	5.04	250-4124
5	5.54	250-5004
5 1/2	6.04	250-5124
6	6.68	250-6004

Splash Guards

Minimizes 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 1/4" thick and edge is 3/8" thick for extra strength.
- Packaging: Order in pairs (unpackaged).

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.

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

POWERCLEAN™ Flush Tool

Cooling systems can be difficult to flush completely due to accumulated debris. Inadequate flushing can ruin a newly installed water pump and result in warranty problems and frustrated customers. Make sure you perform a complete cooling system flush by using clean water and compressed air. The Power Clean Flush Tool "water hammers" accumulated sludge and scale deposits without the use of harsh chemicals or solvents. It cleans radiators, heat exchangers, hoses and engine blocks more effectively than conventional flushes, maintains system integrity and ensures warranty coverage on replacement parts, including water pumps. The Gates Power Clean Flush Tool patented process uses fixed dimensional control of the air and liquid flow paths. The process allows air to pressurize the cleaning fluid to scrub deep into corners and crevices, eliminating trapped debris.

- **Pulsating gun assembly with pre-set regulator.**
- **Water line backflow preventer.**
- **Large rubber tip for radiator necks and direct flushing ofthe engine block.**
- **Small rubber tip on whip hose for direct access to heater core tube stubs.**
- **5/8" And 3/4" heater hose barbs for flushing heater cores or engine blocks.**
- **Durable protective storage case with room for additional items.**

Watch a video on the Gates Power Clean Flush Tool.

Fuel Injector Hose Merchandiser

Attractive, well constructed metal cabinet, powder-coated for long lasting durability.
Part No. 91185 - Display only. Charge Item.

- Contains three top selling sizes on individually mounted and replaceable reels.
- Fits between the 9-reel (91158) and the heater hose merchandiser 91160.
- Easy front door access to reels for refilling.
- Base dimensions 143/8" x 183/4".
- Constructed to be combined with the 9-reel and heater hose cabinets.

Barricade® Fuel Line and Vacuum Tubing Merchandiser/Assortment

Attractive, metal cabinet with heavy gauge plastic see-through cover. Comes assembled. Holds and dispenses 12 reels of fast-selling Gates Barricade® Fuel Line, EEC and PCV hoses, or tubing for windshield washers and vacuum-operated accessories. Part No. 91184 and Part No. 91183 - Display only. Charge Item.
Replaces the 91158/91159 rack.

- Contains 12 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 16"D x 19-1/2"W x 18"H.

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

Fuel Line /PCV / EEC Hose			Vacuum Tubing			Barricade® Carburetion Hose			Barricade® Injection Hose		
I.D. (In.)	Length (Ft.)	Part No.	I.D. (In.)	Length (Ft.)	Part No.	I.D. (In.)	Length (Ft.)	Part No.	I.D. (In.)	Length (Ft.)	Part No.
1/8	25	27000	1/8	50	27041	1/4	25	27313	1/4	25	27339
3/16	25	27001	5/32	50	27042	5/16	25	27314	5/16	25	27340
3/16	25	27312	7/32	50	27043	3/8	25	27315	3/8	25	27341
			1/4	50	27044						

Create a "Hose Center"

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.

- Base dimensions are 20-1/8"D x 19-1/2"W x 61"H.

Merchandisers + Sales Aids

Heater Hose Merchandiser

Attractive, yet rugged metal cabinet organizes and keeps stock neat. Designed to hold dispensing cartons, making 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. Part No. 91160.

- Holds one 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 201/8" x 171/2" x 43". [Shipped K.D.]

Note: Merchandiser does not include hose.

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 includes the thermostat, gasket, radiator cap cabinet and gasket display board,
- Part No. 91117 includes the fuel cap cabinet.

PoweRated® "70" Belt Merchandiser

This eye-appealing merchandiser encourages self-service retailing. It takes up approximately four feet of gondola space and provides 78% coverage on applications in the three to 17 horsepower range. Part No. 91230.

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

Note: Pegboard and gondola not included.

Air Brake Hose Product Merchandiser

This merchandiser holds air brake hose assemblies, PTFE assemblies and is packed with labels for both products. The merchandiser keeps assemblies organized, handy and ready to use. Part No. 91180 - Charge Item.

- Mounts to the wall.

Sizing Chart Decal

Stick this handy pressure-sensitive size and part number chart on heat gun handle, tool kit or any convenient location. Part No. 91221.

- No charge for this item.

Conversion Chart

This tool was specifically designed to measure Micro-V AT® belts. Belts other than Micro-V's® can be measured by following instructions printed on this card. Form No. 428-1800.

- Comes attached to each Micro-V AT® belt length finder.
- Card is laminated for long service life.

Heater Hose Connector Assortment

Sturdy impact-resistant plastic case holds an assortment of 36 hose connectors for 1/4" through 3/4" I.D. hose. Part No. 91136. Charge Item.

- 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.	Description	I.D.
28574	Elbow	3/16"
28592	Reducer	1/8" – 5/32"
28552	"Y" Connector	1/8"
28581	Tee	3/32"
28582	Tee	1/8"
28583	Tee	5/32"
28584	Tee	3/16"
28593	Reducer	3/16" – 1/4"
28554	"Y" Connector	3/16"

Part No.	O.D. (in.)	O.D. (mm)
28601	1/4"	6mm
28602	3/8"	10mm
28603	1/2"	12mm
28604	5/8"	15mm
28605	3/4"	19mm
28609	3/8" to 1/2"	10mm-12mm
28610	1/2" to 5/8"	12mm-15mm
28611	5/8" to 3/4"	15mm-19mm
28621	1/4"	6mm

Hose Clamp Merchandiser

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. Part No. 91139.

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.

V-Belt Number Finder

Versatile device helps determine replacement belt numbers for cars, light trucks, heavy trucks, buses and Truflex® /PoweRated® light-duty belts, when the old belt is available. Part No. 91201 - Belt Finder. Charge Item.

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

Micro-V AT® Belt Length Finder

Handy tool measures every serpentine belt made to help determine replacement belt for cars, light trucks, buses, heavy trucks and other equipment. Part No. 91202 Finder. Charge Item.

- 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

Improved belt length finder measures FHP belts up to 107" to determine equivalent Truflex® or PoweRated® belt numbers. Part No. 91104.

- Instructions for using finder packed with unit.
- Packaging: Individually cartoned.

Heavy-Duty PowerGrip® SB Clamp Removal Tool

Offers easiest method for removing Gates PowerGrip® SB clamps. Part No. 91215 Tool. Charge Item.

- Quickly removes clamps without damaging hose.

Interactive Timing Component System Display

Gates Interactive Timing Component System Display engages and educates customers, helping service centers increase sales of complete timing system repairs. Timing System Kit Includes:

- Interactive Timing Component System Display.
- $50 rebate (with purchase of two Gates Timing Component Kits).
- Autodata Timing Belt Manual.
- Consumer take-one brochures.
- Recommended Timing Belt Replacement Interval Poster.
- Timing Belt Replacement Interval Guide entire Timing System.
- Tips describing how to sell the entire Timing System.
- Installation Manual 91474.

Interactive Accessory Belt Drive System Display

Gates interactive Accessory Belt Drive System (ABDS) Display engages and educates customers, helping service centers increase sales on complete ABDS repairs. ABDS Kit Includes:

- ABDS Display.
- Laser Alignment Tool.
- $20 Dealer/Consumer Coupon ($20 off the purchase of a premium belt and tensioner).
- Consumer Tri-Fold 25-packs.
- Consumer Tri-Fold Holder.
- 10 Belt Wear Gauges with Instruction Cards.
- ABDS Counter Mat.
- ABDS Poster.

Power Steering + Alternator Pulley Kit

Designed to remove and install press-on-type belt driven accessory pulleys found on most vehicles. Part No. 91014.

- Kit includes components necessary to remove and install pulleys on pumps with common 3/8-16 threaded shaft.
- 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.

ADP Tool Kit

This handy tool kit contains all of the tools required for ADP removal and installation. One kit eliminates the need to shop around for hard-to-find tools and reduces service bay downtime that can take a toll on dealer profits. Part No. 91024.

- Kit includes eight tools designed to R + R all vehicles that utilize ADPs found on the road today.
- For more information about the Gates ADP line, visit www.gates.com/adp.

POWERCLEAN™ Flush Tool

Cooling systems can be difficult to flush completely due to accumulated debris. Inadequate flushing can ruin a newly installed water pump and result in warranty problems and frustrated customers. Make sure you perform A complete cooling system flush by using clean water and compressed air. The Power Clean™ Flush Tool "water hammers" accumulated sludge and scale deposits without the use of harsh chemicals or solvents. It cleans radiators, heat exchangers, hoses and engine blocks more effectively than conventional flushes, maintains system integrity and ensures warranty coverage on replacement parts, including water pumps. The Power Clean™ Flush Tool patented process uses fixed dimensional control of the air and liquid flow paths. The process allows air to pressurize the cleaning fluid to scrub deep into corners and crevices, eliminating trapped debris.

- Pulsating gun assembly with pre-set regulator.
- Water line backflow preventer.
- Large rubber tip for radiator necks and direct flushing of the engine block.
- Small rubber tip on whip hose for direct access to heater core tube stubs.
- 5/8" And 3/4" heater hose barbs for flushing heater cores or engine blocks.
- Durable protective storage case with room for additional items.

Belt Installation Tool

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. Part No. 91209. Charge Item.

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

Bend-N-Fit Tube Bender

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.

Cam Gear Sprocket Tool

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. Part No. 91008.

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

Serpentine Belt Tension Relief Tool

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

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

Belt Wear Gauge

Like tires, EPDM belts wera out gradually, steadily losing rubber material. This unique tool designed to help inspect serpentine belts for wear. EPDM belts, installed by original equipment manufacturers on new equipment, typically do not show obvious signs of wear such as cracking. Contact your local Gates representative to receive your tool. Part No. 91190.

Professional-Grade Tools

DriveAlign® Laser Alignment Device

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. Part No. 91006.

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

Heavy-Duty Ratcheting Serpentine Wrench

Designed for restricted areas where radiator hoses, charged air cooler pipes, hydraulic lines and frame rails often interfere with maintenance. Part No. 91012.

- 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.

Hydraulic Tensioner Pin Set

A Gates exclusive that is a must have for every technician. Hydraulic 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. Part No. 91010.

- 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.

Water Pump Spanner Wrench

- Gates 2 ½" spanner wrench (Part No. 91060) adapts to a 3/8" ratchet or breaker bar to make water pump removal faster and easier.
- Lets the technician get a firm grip on the water pump to remove the clutch without scratching or galling the pulley.
- Fits several Gates water pump pulleys including part numbers 43034, 43037, 45005, 45006 and 45010 covering many Chrysler and GM applications.

PolarSeal® II Pliers

PolarSeal® II Pliers are used to crimp clamps on PolarSeal® II couplings. Any one of three pliers will get the job done. Each tool is designed with slightly different features.

Ratcheting Plier – Part No. 77953

- The ratcheting plier features a no-release function. Once a crimp is started the plier does not release until the crimp is complete. This guarantees a proper seal, with no guess work in the crimp.

Straight Jaw Plier – Part No. 77952

- The straight jaw plier is a low cost, no-frills plier. This plier works best when there are no obstructions to hinder gripping the clamp or completing the crimp.

Notched Jaw Plier – Part No. 77951

- The notched jaw plier is designed for the hard-to-reach places. If obstructions prohibit the use of straight jaw pliers this is the tool to use. Use either side or the front of this plier to make the crimp.

Krikit™ V-Belt Tension Gauge

This easy-to-use gauge is designed for tensioning all automotive V-belts up to, and including, 7/8" top widths. Part No. 91107. Charge Item.

- 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 with stainless steel pocket clip.
- Packaging: Individually boxed.

Note: Not for use on timing belts.

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

Designed for tensioning V-ribbed belts on passenger cars, light trucks, heavy trucks and buses. Part No. 91132. Charge Item.

- 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 eight ribs in width.
- Packaging: Individually boxed.

Note: Not for use on timing belts.

SureLok™ Quick-Release Pliers

SureLok™ couplings (Push-to-Connect) are the easiest and quickest coupling to install, but can be difficult to disconnect. Placement near obstructions, as well as age and road debris, affect the ability to disconnect the SureLok™ coupling. Tight spaces can also make removing a coupling almost impossible. 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 tight spaces, SureLok pliers offer two different heads; one straight and one with a 90° offset. They 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.

Single Units

Small
Part No. 91023, Vertical
Part No. 91021, Angle

Large
Part No. 91022, Vertical
Part No. 91020, Angle

Four Pack

Part No. 91017

Coolant + Battery Refractometer

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. Part No. 91001.

- 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 measuring battery charge levels.

Hose Cutters (Hand-Held) and Replacement Blades

Makes clean cuts with 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 11/2") used in sprinkler systems.

- Lightweight with nylon handles.
- Blade closes into handle for safety.
- Use small cutter for hoses up to 11/2" I.D.
- Packaging: Cutter and blades individually packaged on shrink-wrapped cards ready for pegboard display.

Hose Cutter	Description	Replacement Blade	Cuts to Hose I.D.
91143	Large I.D. Hose Cutter	91144	3"
91153	Small I.D. Hose Cutter	91154	1½

Serpentine Ratcheting Wrench Set

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."

Micro-V® Stretch Fit® Belt Installation Tool

Installation tool for Gates Micro-V® Stretch Fit® belts. The belt can be damaged if the right tools are not used. Part No. 91030.

- Installation instructions printed on inside of each belt sleeve.

Multi-Lock Tool

Multi-Lock tool "locks" twin camshafts in place during timing belt replacement or engine overhaul. Part No. 91009.

- 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.
- Includes extension bar for wider spaced cams ($25 value).

Product Grabber (Telescoping Pole)

Allows easy product hanging and retrieval from belt boards that are installed high on walls. Part No. 91233.

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

Timing Belt Tension Tester

Provides a precise method of testing timing belt tension on a variety of automotive applications. Part No. 91000.

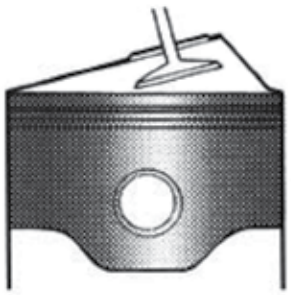
- Gates tension tester will test any timing belt up to 30mm wide, replacing several expensive tools.
- Comes with adapters for varying belt thicknesses.
- Uses force deflection method to measure tension.
- Compact design works in tight engine compartments.
- Scale can be read in any position.

Notes

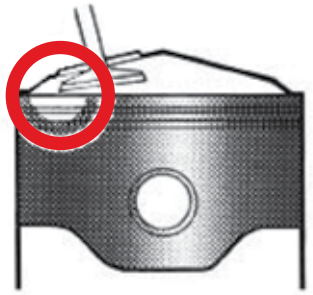
Free Running or Interference Engine? You and Your Customers Need to Know.

Automobile engines can be classified as either Free-Running or Interference, depending on what occurs if piston/valve synchronization is lost.

As illustrated below, in the free-running engine with the crankshaft still moving, there is enough clearance between the valve and piston, even if the cam stops with a valve fully open. However, interference engines usually sustain damage if synchronization is lost. As illustrated, disrupted synchronization allows the piston and valve to collide causing damage and very expensive repairs for the vehicle owner. Damage can occur to valves, pistons, or heads, and in some cases, completely ruin the engine. Most import (with higher compression engines) and most car and light truck diesel engines are interference. To avoid costly engine repairs, follow the auto manufacturers' mileage replacement recommendations, or we recommend timing belt replacement at around 60,000 miles.



Free Running
No Valve/Piston Interference



Interference
Valve/Piston Interference

NOTE: For your convenience, interference engines will be footnoted in our publications. This lets you easily identify them, and pass that information on to your customers.

Since timing belts are inside the engine, they tend to be an out-of-sight, out-of-mind item and are seldom thought of as a part of routine maintenance. Here are some questions to ask that will help sell belts and protect the customer from expensive repairs:

1. Did they buy the car new? If yes, they'll know if the belt has ever been replaced.
2. Did they buy the car used? If so, they won't know if the belt has been replaced. This is a flag for the customer to get the belt checked, replaced or at least be aware that he has a timing belt.
3. How many miles are on the vehicle? Generally belts should be replaced at around 60,000 miles or less. Our Timing Belt Replacement Recommendations Booklet is an excellent tool for determining replacement intervals.
4. Have they ever replaced the timing belt? If the answer is yes or no (and the customer knows the mileage) you can determine where the vehicle is in the replacement cycle.

Here's a helpful hint for customers with vehicles within a few thousand miles of the recommended replacement interval: If they are having any engine repair done, have the timing belt checked. If it needs replacing, save time and money by doing it along with the other repairs.

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GATES CORPORATION – WORLD HEADQUARTERS
1551 Wewatta Street / P.O. Box 5887
Denver, Colorado 80217, U.S.A.
800.366.3128 / **Fax 303.744.4499**
Gates.com