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*Use the CD search codes provided in this catalog to go directly to the section for that product.*

[www.parker.com/hyd/](http://www.parker.com/hyd/) *Use the web addresses provided with each product to go directly to that product or series on the Parker website.*

© Copyright 2005, Parker Hannifin Corporation. All rights reserved.
A global, Fortune 300 company with customers in 46 countries, Parker Hannifin is the world’s leading supplier of hydraulic, pneumatic, and electromechanical motion control. Customers rely on our best-in-industry customer service and engineering excellence for comprehensive application solutions that are second to none.

- More than $8 billion in sales
- 254 plants worldwide
- 8,600 distributors
- 400,000 plus customers
- Over 1,400 product lines
- Listed as PH on the NYSE

Truck Hydraulics

No one knows truck hydraulics better than Parker’s highly qualified application specialists, design engineers, and system-solutions specialists. Our market-focused Hydraulics Truck Team concentrates solely on the needs of vocational truck customers.

Let Parker become part of your team. Whether you need a single part or an entire system, we work hand-in-hand with you until your job is done. Parker’s highly trained field-sales engineers provide knowledgeable assistance to customers within hours of a request. Linked by global communication systems, these experts work together with local Parker distributors.
Truck Hydraulics

Parker also offers the widest variety of truck hydraulic products available anywhere, leading in both technology and innovation. Our breadth of line allows you to reduce the number of vendors you use without compromising product integrity. And buying from a single source saves time and money, allowing easier ordering and faster deliveries.

Our world-class, ISO 9001-certified facilities are equipped with state-of-the-art equipment and staffed with the personnel necessary to meet customer demands. Our continuing investment in factories ensures quality control and timely product delivery.

Our Value To You
Parker believes that it takes more than great products, competitive prices, and on time delivery to satisfy customer demands. It takes a commitment to provide exceptional value. And at Parker, value is not a commodity.

It is the result of personal relationships built around the customer’s use of Parker’s extensive resources. Our customer services include:

- Truck analysis and troubleshooting
- Design engineering support
- System design
- Components selection
- New-product development
- Custom component manufacturing
- Assemblies and kits
- Sub-system configuration
- Global support and service
- ISO certification
In addition to providing assured product quality and engineering excellence, Parker offers service and value-added programs that always exceed customer expectations.

**Training**

Parker’s technical training for hydraulic technology is the best in the world. We offer complete and comprehensive texts, Web-based training, and hands-on classes for employees, distributors, and customers. Classes are held at your facilities, or at ours.

Find out more about Parker training by visiting our web site at www.parker.com/training, or call 216-896-2495.

**Kitting**

Parker Hydraulics Group provides a kitting service for customers whose vocational truck applications require multiple components and sub-assemblies. Kits are ready to install and deliver everything you need for your application in one convenient package.

**Truck Hydraulic Distributors**

Parker Truck Hydraulic Distributors are selected for their commitment to providing exceptional customer service and complete hydraulics systems. They offer a one-stop shop for a wide range of products and engineering services, including design, fabrication, and assembly. These select distributors meet the needs of truck customers looking for higher levels of service. Locate your nearest Parker Truck Hydraulic Distributor by calling 1-800-CPARKER.
When it comes to hydraulic products, Parker is the most recognized name in the business. With over 75 years of experience, Parker currently inventories more than 200,000 hydraulic part numbers, allowing for unlimited solution possibilities. Customers can reduce their number of vendors without compromising quality. And buying from a single source saves time and money, and allows for easier ordering and faster shipping.

**Fluid Connectors**
- Brass products
- Quick couplings
- Rubber hose products
- Thermoplastic products
- Tube fittings

**Auxiliary Electronics**
The TOC 2 can be used as a non-ground speed manual spreader control. A bidirectional valve section driver module, the TOC2 can be used for many applications including truck mounted cranes, winches and lifts.

**Filtration**
- Low and medium pressure filters
- Variety of mounting configurations
- High capacity/high efficiency Microglass III media
- Visual and electrical indicators with several connector styles
- Flange options for low profile, easy mounting

**Mobile Cylinders**
Parker offers single or double-acting telescopic cylinders and single or double-acting “rod type” mobile cylinders, available with:
- Bore sizes from 3”-14”
- Stroke up to 1270 cm (500”)
- Operating pressures up to 689 Bar (10,000 PSI)

**CHESLSEA® Power Take Off**
- Broadest coverage in industry
- Industry leading innovation, engineering and performance
- For virtually all transmission applications
- Wet line kits, reservoirs and accessories
Remote Control Systems

Proportional Remote Control
PCL4 Series
• Hydraulic pilot system
• Available with coordinate lever units and linear units for hand or foot control
VP04 Series
• Pneumatic pilot system
• Linear or coordinate lever versions are available

Hydraulic Valves
Four models of open-center, constant flow valves are available, with flow ranges from 10-70 GPM and pressures up to 241 Bar (3500 PSI). Manual, pneumatic, hydraulic and solenoid back cap options also available. Also offered from Parker:
• Hydraulic velocity fuse valves
• Low cost check valves
• Restrictor check valves
• Priority flow control valves
• Inline mounted flow, check, needle, gauge isolator and snubber valves

Gear, Vane and Piston Pumps
• Pump/valve combinations
• Available in remote mount or direct PTO Mount
• Two or three-line installations on G101/G102; three or four-line installations on G104/G105
• Rugged cast iron body
• Variety of drive shafts and mounting styles
• Flows: up to 29 GPM at 2400 rpm and 3000 PSI; up to 39 GPM at 2400 rpm and 2500 PSI
• Three-piece cast iron construction
• Heavy duty application
• Long life in severe environments
• Pressures up to 345 Bar (5000 PSI)
• High power capability
• Twin Flow version available
• High self-priming speed
• Pressures up to 345 Bar (5000 PSI)
• Suitable for all load-sensing systems
• Splined shaft DIN 5462
• Mounting flange ISO 7653-1985
• Silent technology
• Wide range of displacements
• User friendly
• Available in single, double and triple

Vane, Fan Drive and Gerotor Motors
• High volumetric efficiency
• Long life
• Full flow spline cooling
• High pressure shaft seal
• High flow shaft seal cooling
• High starting torque

Threaded Cartridge Valves
• Standard cavities sizes from 4-20
• Pressures to 345 Bar (5000 PSI)
• Flows up to 378 LPM (100 GPM)
• Steel and aluminum bodies
## Truck Hydraulic Product Applications

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### Categories
- Gear Pumps/Motors
- Vane Pumps/Motors
- Piston Pumps
- PTOs
- Hydraulic Valves
- Volume and Check Valves
- Accessory Valves
- Remote Control Systems
- Auxiliary Electronics
- Integrated Hydraulic Circuits/Cartridge Valves
- Mobile Cylinders
- Motors Fixed Displacement
- Filtration
- Reservoir Accessories
- Fluid Connectors
- Kits

### Applications
- Dump Trucks/Trailers
- Wreckers
- Roll-Offs Hooklifts
- Aerial Crane Utility
- Bulk/Recreational Trucks
- Vacuum Trucks
- Bulk Tanker
- Car Haulers
- Moving Floor
- Oil Field Service

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*Parker*
**C101/102, G101/102, G104/105 Series**

- Pump/valve combinations
- Available in remote mount or direct PTO Mount
- Two or three-line installations on G101/G102; three or four-line installations on G104/G105
- Air remote operators available
- Supplied with 138 Bar (2000 PSI) relief valve
- Pressures to 172 Bar (2500 PSI)

**P16 Series**

- Aluminum flange and cover
- Cast iron gear plate
- Clockwise or counter-clockwise rotation
- Flow range to 38 GPM per section
- Journal bearings
- Available with fluorocarbon seals
- Available in tandem and piggy-back configurations
- Integral priority valve available with relief, for steering, or brake circuits
- Choice of mounting, shaft or port configuration

**CP16 Series**

- V-Belt, Direct Couple, or Serpentine Belt clutch options
- In-cab control available
- Side or rear porting option
- Same displacements and ratings as P16 units (above)
- Clutches available as separate items

**PGP020 Series**

- Rugged cast iron body
- Variety of drive shafts and mounting styles
- Flows: up to 29 GPM at 2400 rpm and 3000 PSI; up to 39 GPM at 2400 rpm and 2500 PSI
- Can be assembled in tandem
- Can be configured as a pump or motor
**PGP030/031, PGP050/051**
**PGP075/076 Series**
- Three-piece cast iron construction
- Heavy duty application
- Long life in severe environments
- Single, multiple or piggyback assemblies
- Variety of valve option available
- Can be configured as a pump or motor

**PGP300 Series**
- Three-piece cast iron construction
- Low friction bushing design
- Single, multiple, piggyback and thru-drive assemblies
- Heavy duty application
- Long life in severe operating environments
- Integrated or bolt-on valve options available
- Direct clutch mount available
- Can be configured as pump or motor

**PGP 500 Series**
- Superior performance
- High efficiency
- Low noise operation at high operating pressures
- International mounts and connections
- Integrated valve capabilities
- Common inlet multiple pump configurations
- Can be configured as a pump or motor
**F1/F2 Series**
- Fixed displacement piston
- Pressures up to 345 Bar (5000 PSI)
- High power capability
- Twin Flow version available
- High self-priming speed
- Easy to install
- Easy to service

**VP1 Series**
- Variable displacement load sense
- Pressures up to 345 Bar (5000 PSI)
- Suitable for all load-sensing systems
- Splined shaft DIN 5462
- Mounting flange ISO 7653-1985

**PAVC Series**
- High strength cast iron housing
- Built in supercharger
- High sideload capacity
- Sealed shaft bearing option
- Two piece housing
- Cartridge controls
- Airbleed valve
- Thru-shaft option (PAVC100)
- Optional port location
- Full pressure rating on water glycol fluids
- Control drain may be filtered and/or cooled

**P1 Series**
- Variable displacement, axial piston pump for open-circuit applications
- Medium pressure, continuous operation at pressures up to 280 bar
- Quiet and efficient control capability
- Low ripple to further reduce noise
- Compact overall package size
- Elastomer seals that eliminate gaskets and external leakage
- High operating efficiency results in lower power consumption and reduced heat generation
- Simple “no-leak” hydraulic controls
The SDV Series are a fixed displacement vane pump ideal for low to mid pressure applications. Their compact design and low noise features make them well suited for filter carts, test stands and remote pilot pumps.

- Two compact frame sizes to choose from
- Low noise
- 100% tested
- Easy to convert or repair

SDV Series-Single

SDV Series-Double

The SDV Series are a fixed displacement vane pump, ideal for low to mid pressure applications. The double pump provides the flexibility of two different displacements within one housing. The compact design and low noise features make them well suited for filter carts, test stands, remote pilot pumps, and for hi/lo circuits.

- Two compact frame sizes to choose from
- Low noise
- 100% tested
- Easy to convert or repair
### T Series-Single
- Fixed displacement vane
- Silent technology
- Wide range of displacements
- User friendly - easy conversions and evolutions
- Wide number of shafts available
- Double shaft seal option possible
- Drive train options available (SAE-A/B/C)

### T Series-Double
- Fixed displacement vane
- Low noise
- SAE or ISO standards
- One piece shaft (no internal torque limitations)
- One inlet
- Wide displacement possibility
- High power to weight ratio
- Wide range of options available - shafts, threads and pilots
- Double - 32 porting orientations available
- Triple - 128 porting orientations available

### T Series-Triple
- Very compact
- High pressure ratings
- Low noise
- Independent outlets for fixed and variable flow allow simultaneous cycles
- Internal or external drain
- Choice of controls
- Wide range of acceptable fluids

### Variable Piston/Fixed Vane Hybrid Pumps
- T6H-Series Hybrid
  The hybrid pump is a combination of fixed displacement vane pump B, C, D cartridges combined with a variable cartridge of PV20 or PV29 piston pump. The cartridges are driven by a common shaft without coupling in between they have a large common suction port and two or three independent outlet ports: One for the piston, one or two for the vane pump.
**M3-M4, M5B/S Series**
*Fixed Displacement*
- Low ripple torque
- Low starting torque
- Low noise
- Bi-rotational technology
- Various pilot, threaded port and porting configurations
- External/internal drain option
- Many displacement combinations for double motor

**M5AF-M5BF Series**
*Fan Drive Vane Motors*
- Low noise
- Designed for severe duty applications
- High efficiency
- High starting torque
- Low torque ripple
- Long life
- Interchangeable rotating groups
- Cross port check valve on M5BF/1
**Small Frame**
- High volumetric efficiency
- Long life
- Full flow spline cooling
- High pressure shaft seal
- High flow shaft seal cooling
- High starting torque

**Medium Frame**
- High volumetric efficiency
- Full flow spline cooling
- High pressure shaft seal
- High flow shaft seal cooling
- High starting torque
- High side load capacity
- Long life

**Large Frame**
- High volumetric efficiency
- Full flow spline cooling
- High pressure shaft seal
- High flow shaft seal cooling
- High starting torque
- High side load capacity
- Long life
100 Series 6-Bolt
812 Series 8-Bolt
www.parker.com/hyd/100
www.parker.com/hyd/812

100 Series
- Single speed, low torque applications
- Compact size for tight areas
- Sturdy cast iron housing
- Available for most transmissions

489 Series 8-Bolt
www.parker.com/hyd/489

442 Series 6-Bolt
www.parker.com/hyd/442

442 Series
- Two gear
- Engineered to work with virtually all existing transmission applications
- Economical workhorse features a cast iron housing
- Tapered cone bearings for high torque rating and long service life
- Slip fit idler pin for easy interchange from one transmission to another
- Easy to set backlash
- Wide range of shift and output options

812 Series
- Only single gear 8-bolt P.T.O. in the industry
- High torque for extra heavy duty applications
- Ideal for Chelsea 912 Series split shaft applications
- Rotatable pump flanges available

221, 260 Series 6-Bolt
www.parker.com/hyd/221
www.parker.com/hyd/260

221 Series
- Two gear
- Low speed, heavy duty applications on both manual and automatic transmissions
- Available with both a standard housing or a special low-profile housing
- Pressure lube option
- Wide range of pump flanges

441 Series 6-Bolt
www.parker.com/hyd/441

441 Series
- Two gear
- Dowel pin alignment for the Eaton Lightning transmissions
- No backlash to set
- Speed ratios providing a broad range of application coverage
- Wide range of shift and output options

489 Series 8-Bolt
www.parker.com/hyd/489

489 Series
- Two gear
- 442 Series family, but with an 8-bolt mounting flange
- No adapter plate needed
- Less installation time, less expense and less chance of leakage
- Wide range of shifters options and pump flanges

442 Series
- Two gear
- Engineered to work with virtually all existing transmission applications
- Economical workhorse features a cast iron housing
- Tapered cone bearings for high torque rating and long service life
- Slip fit idler pin for easy interchange from one transmission to another
- Easy to set backlash
- Wide range of shift and output options

441 Series
- Two gear
- Dowel pin alignment for the Eaton Lightning transmissions
- No backlash to set
- Speed ratios providing a broad range of application coverage
- Wide range of shift and output options

260 Series
- Two gear
- Designed for use on automatic or high speed manual transmissions
- Extra-low speeds available through high reduction gearing
- Pressure lube option
- Wide range of pump flanges
**447 Series 6-Bolt**
www.parker.com/hyd/447

**880 Series 8-Bolt**
www.parker.com/hyd/880

**823 Series 8-Bolt**
www.parker.com/hyd/823

**230/231, 270/271 Series 6-Bolt**
www.parker.com/hyd/230-231
www.parker.com/hyd/270-271

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**447 Series**
- Two gear
- Eliminates interference problems inside transmission/P.T.O. opening
- One-piece input/ratio gear
- Pressure Lube option
- Wide range of shift and output options

**880 Series**
- Two gear
- Wide coverage for tough applications
- Speed ratios for high and low speed applications
- Removable shift cover for adjusting backlash
- Dual-pump output for mounting a pump on each end of the P.T.O.

**823 Series**
- Two gear
- Robust design for high torque applications
- Lever shift standard
- Inspection cover for adjusting backlash
- Popular pump mounts available

**230/231 Series**
- Powershift
- Designed for both manual and automatic transmissions
- 231 offers low profile housing for avoiding clearance problems
- Pressure lubrication option available for both units
- Patent pending internal self adjusting shaft brake option
- Air or electric/air shift unit

**270/271 Series**
- Powershift
- Designed for automatic transmissions
- 271 offers low profile housing for avoiding clearance problems
- Pressure lubrication available for both units
- Patent pending internal self adjusting shaft brake option
- Electric/hydraulic shift unit
236 Series 6-Bolt

- Powershift
- Patent pending internal self-adjusting shaft brake option
- Wide selection of input gears for virtually all currently produced transmissions

236 Series

- Powershift
- Helical gears and optional pressure lubrication to extend P.T.O. service life
- Inspection cover for adjusting backlash
- Air or electric/air shift unit

243, 246 Series 6-Bolt

- Powershift
- Designed for Aisin and Mitsubishi transmissions
- Lightweight housing allows for maximum heat dissipation
- Controlled compression interface Gasket eliminates setting backlash
- Electronic overspeed control available
- Electric/hydraulic shift unit

243 Series

- Powershift
- The only Ford tested tough P.T.O. for the TorqShift™ transmission
- Operates in all gears
- Specially matched P.T.O. and pumps for superior work load capabilities
- One P.T.O. for 4 x 2 and 4 x 4 applications
- Speed ratio of 154% of engine speed

246 Series

- Only Single Gear Powershift P.T.O. on the market today
- Compact size makes it a good solution when space is limited
- Pressure Lubrication standard
- Electric/Hydraulic Shift Unit

800, 852, 885 Series 8-Bolt

- Only Single Gear Powershift P.T.O. on the market today
- Compact size makes it a good solution when space is limited
- Pressure Lubrication standard
- Electric/Hydraulic Shift Unit

800 Series

- Electric/Hydraulic Shift Unit
- Designed for Heavy Duty applications
- Three speed ratios to choose from
- Pump flanges to fit most popular hydraulic pumps

852 Series

- Pressure Lubrication standard
- Electric/Air Shift Unit

885 Series

- Designed for Heavy Duty applications such as pneumatic blowers
- Rugged cast iron housing
- Four speed ratios to choose from
- Pressure Lubrication available
- Electric/Air Shift Unit
267 Series
- Approved for use with Allison World Transmissions
- Constant Mesh (non-shiftable) P.T.O. that is ideal for applications requiring continuous power
- Three speed ratios and ten output options
- SuperTorque™ gears available for 20% higher intermittent torque ratings
- No backlash to adjust
- Wet spline output options available

277, 278 Series
10-Bolt
- Approved for use with Allison World Transmissions
- Exceeds the torque capacity of a 6-bolt P.T.O. while offering the tighter sealing of a 10-bolt pattern
- Five speed ratios and fourteen output options
- SuperTorque™ gears available for 20% higher intermittent torque ratings
- Electronic overspeed control available to protect driven equipment from overspeeding
- Electric/hydraulic shift
- Internal bearing lube

859 Series
10-Bolt
- Highest torque capacities of any P.T.O. offered for the Allison World transmissions
- P.T.O. torque ratings from 285 to 575 Ft. lbs
- Electronic overspeed control available to protect driven equipment from overspeeding
- Advanced gear design for increased tooth-contact ratio for quieter operation
- Electric/hydraulic shift

867 Series
- Approved for use with Allison World Transmissions
- Constant mesh (non-shiftable) P.T.O. that is ideal for applications requiring continuous power
- Four speed ratios and five output options
- Torque ratings from 350 to 575 Ft. lbs.
Power Take Off

290, 429, 435 Series 6-Bolt
www.parker.com/hyd/290
www.parker.com/hyd/429
www.parker.com/hyd/435

290 Series
- 290 Series fits the Eaton’s 4106 used in Mack Midliners and Mack’s T2060A transmissions
- Mounts directly to transmissions, no geared adapter needed
- Cast iron housing for strength and tapered cone bearings for increased load capacity

429 Series
- 429 Series fits Mitsubishi MO50S5, MO60S6 and MO70S6 transmissions
- Eight output options

435 Series
- Three shift options
- Mounts directly to transmissions, no geared adapter needed

452 Series
- Only dual shaft P.T.O. offered in the industry
- Designed for fuel delivery trucks and other applications requiring two single-rotation shafts
- Same gearing as the 442 Series
- Both standard and deep mounting options available

340 Series
- Single low-speed forward and reverse
- Removable cover plate for adjusting backlash
- Shift options include air and lever
- Variety of input gears to cover most applications
- 6-bolt mounting pad

352 Series
- Offers faster speeds than the 340 Series
- Designed with tapered roller bearings for maximum durability
- Shift options include wire, lever and air
- Same input gears as the 442 Series
- 6-bolt mounting pad

863 Series
- Designed to fit transmissions with 8-bolt openings
- Capable of up to 500 Ft. lbs of intermittent torque
- Designed for maximum duty reversible applications such as large-capacity winches
- Lever shift is standard
Crankshaft-Driven
2230U, 2442 Series
www.parker.com/hyd/2230U
www.parker.com/hyd/2442

2230U Series
• Allows the driver to shift “on the go”
• Electric-over-air for reliable shifting
• 2230U Series run at 88% of engine speed
• Electronic overspeed control (EOC) available to protect driven equipment

2442 Series
• The economical 2442 Series is a manual shift P.T.O.
• Operator must stop the engine before shifting
• Available in 7 different speed ratios ranging from 39% to 123% of engine speed
• 10 shift options available

541 Series Rear Mount
www.parker.com/hyd/541

541 Series
• Thrushaft® design for Eaton® Fuller® transmissions
• Three speed ratios available
• Two shift options available
• Direct mount pump flanges or driveshaft output options

522 Series Rear Mount

522 Series
• Designed for the ZF Freedom-line™ transmissions (US) and ZF, Eaton and Iveco transmissions (EU)
• Direct mount pump flanges available

901, 912, 941 Series
Split Shaft
www.parker.com/hyd/901
www.parker.com/hyd/912
www.parker.com/hyd/941

901 Series
• Used on medium duty trucks that have applications requiring the torque capacity of an 8-bolt P.T.O.
• Provides 100% of input speed
• Mount in any orientation with the P.T.O. shaft going to the front or rear of the truck
• Air and lever shift available, along with three direct mount flanges

912 Series
• Three 8-bolt openings that allow you to operate a variety of auxiliary equipment

941 Series
• Wide variety of 6-bolt, 8-bolt, Powershift, and reversible P.T.O.s fit the 912 Series
• Air and lever shift available

Power Take Off
**Power Take Off**

**Geared Adapters**

**626, 628, 630, 645 Series**

- 6-bolt P.T.O. for a 6-bolt transmission opening
- Moves the P.T.O. straight out from the transmission
- Uses the same input gears as the 442 and 489 Series
- Uses the same mounting hardware and spacers used to mount a 442 Series to a specific application

**628 Series**

- 6-bolt P.T.O. for a 6-bolt transmission opening
- Moves the P.T.O. straight out from the transmission
- Uses the same input gears as the 442 and 489 Series
- Uses the same mounting hardware and spacers used to mount a 489 Series to a specific application

**630 Series**

- 6-bolt P.T.O. for a 6-bolt transmission opening
- Moves the P.T.O. down at a 30° angle, helping to eliminate interference problems
- Uses the same input gears as the 442 and 489 Series
- 630-02 used with Eaton UltraShift I-Brake for interference problems

**645 Series**

- 6-bolt P.T.O. for a 6-bolt transmission opening
- Moves the P.T.O. down at a 45° angle, helping to eliminate interference problems
- Uses the same input gears as the 442 and 489 Series

---

**Dump Pumps**

**C101/102, G101/102, G104/105 Series**

- Pump/valve combinations
- Available in remote mount or direct PTO Mount
- Two or three-line installations on G101/G102; three or four-line installations on G104/G105
- Air remote operators available
- Supplied with 138 Bar (2000 PSI) relief valve
- Pressures to 172 Bar (2500 PSI)
Parker's e-Configurator Makes Building Wet Line Kits Easy

- Simple to use software builds complete Wet Line System – saves time
- Uses Parker and Chelsea quality components
- Single part numbered kits are pre-assembled for immediate installation
- Software provides a Bill of Material used to order repair/replacement parts
- Takes the guesswork out of system design
Open-Center Directional Control Valves

Four models of open-center, constant flow valves are available, with flow ranges from 10-70 GPM and pressures up to 241 Bar (3500 PSI). This product offering includes a variety of manual, pneumatic, hydraulic and solenoid back cap options.

Open-center, constant flow valves are intended for applications in which simple, uncomplicated components are required and where the demands for simultaneous-operation characteristics are moderate.

Parker valves can be obtained with a large number of optional components and mountings such as:

- A main pressure relief
- Individually adjusted port-relief and anti-cavitation valves
- Application adapted spools
- A large selection of spool actuators
- Single or multi-pump operation by stacked valves
- Load hold checks
- Crossover reliefs
- Flow controls
- Power beyond feature

Options vary for different valves.

Closed-center, pressure compensated, load sensing valves are available for specified truck applications. Please contact your field sales representative.

V10 Series

www.parker.com/hyd/v10

- Stackable circuit flexibility via parallel or tandem combinations
- Compact size
- Enclosed handles
- Standard high or low flow spools
- Dual-function mechanical joysticks

VA35, VG35 Series

www.parker.com/hyd/va-vg35

- Exceptional size to pressure drop ratio
- .47” spool stroke – industry leader; provides outstanding feathering control
- Cost effective, electrohydraulic operation now available
- Differential main relief’s – quick response and low pressure rise
- Low cost VA iron option for medium duty applications

VA20, VG20 Series

www.parker.com/hyd/va-vg20

- Exceptional size to pressure drop ratio
- .41” spool stroke – industry leader; provides outstanding feathering control
- Stackable circuit flexibility via parallel, series, or tandem combinations
- Differential main relief’s – quick response and low pressure rise
- Low cost VA iron option for medium duty applications

V20 Series

www.parker.com/hyd/v20

- Most recognizable and versatile valve in the mobile market
- Stackable circuit flexibility via parallel, series, or tandem combinations
- .31” spool stroke – industry leader; provides outstanding feathering control
- SAE-12 work port option is the largest for this size valve in the market
- Load-sense available

MV3 Series

www.parker.com/hyd/mv3

- Superior versatility
- Excellent metering characteristics
- Beyond-power feature
- Both open and closed-center configurations
Volume and Check Valves

- Hydraulic velocity fuse valves
- Low cost check valves
- Restrictor check valves
- Priority flow control valves

Flow Control, Check and Ball Valves

- Flow Control, Check Valves feature:
  - Inline mounted flow, check, needle, gauge isolator and snubber valves
  - Flow controls available in pressure compensated models
  - Sizes ⅛”–2”
  - Choice of NPTF, SAE, BSPP and ISO 6149 metric ports
  - Maximum operating pressures up to 345 Bar (5000 PSI)
  - Flows up to 568 LPM (150 GPM)
  - Steel bodies; some models also available with brass or stainless steel

- Ball Valves feature:
  - Designed for hydraulic, pneumatic and other media
  - Features full-port design for low pressure drop and maximum system efficiency
  - Blowout-proof stems
  - Assortment of port configurations including threaded, manifold mounted, SAE split flange and a unique 4-bolt rotating SAE flange design

Mobile Accessory Valves

- Flow controls, flow dividers, pilot operated check valves, relief valves, selector valves and bankable/stackable directional control valves
- Flows to 225 LPM (60 GPM)
- Pressures to 207 Bar (3000 PSI)
- Cast iron bodies
C5V Series

The C5V flange mounted check valves are ideal for pump outlet ports, cylinder ports, manifolds, or any Code 61 or 62 four bolt flange. These valves provide a compact, leak-free solution for any hydraulic circuit. Unloader circuits can also be easily configured using the C5V/R5U combination, with the built-in downstream sensing line passage located in the flange face.

- Bolts directly to pumps and motors
- Flange mounting eliminates costly piping
- Three different springs for range of cracking pressures
- Capsulated spring chamber
- Increase range of other flange mounted valves

R5 Series 2-Port

R5 Series 2-port pressure valves are pilot operated controls consisting of two or three valve sections. The electric vent and proportional control section are standard options that suit well for on/off hydraulic functions and precise variable pressure control.

- Direct mounting to SAE pump outlet flange ensures maximum pump protection against peak pressure and eliminates costly piping
- Minimum pressure overshoot and cracking flow
- Extremely precise pressure setting
- Fast response, high accuracy and quiet, flutter-free control
- Wide range of control options and accessories

R5 Series 3-Port

R5 Series 3-port pressure valves are pilot operated controls consisting of two or three valve sections. The electric vent and proportional control section are standard options that suit well for on/off hydraulic functions and precise variable pressure control.
Remote Control Systems

PCL4 Series, Hydraulic
www.parker.com/hyd/pcl4

The PCL4 is a hydraulic pilot system for the proportional remote control of directional valves, pumps, motors, etc. It is available with coordinate lever-units, as well as linear units for hand or foot control. The PCL4 is intended primarily for the remote control of hydraulically operated spool actuators and pump regulators in all kinds of mobile applications.

All connection ports can be obtained with G½, M14x1.5 or ⅜ UNF connection threads. The coordinate valve is available in a version with all connections in the base plate. Up to 6 linear units can be built together in a block.

VP04 Series, Pneumatic
www.parker.com/hyd/vp04

The VP04 is a pneumatic pilot valve for the proportional remote control of directional valves, positioning cylinders, etc. Either linear or coordinate-lever versions of the VP04 are available.

Principal applications include the proportional remote control of pneumatic spool-actuators and positioning cylinders in mobile hydraulic systems.

All connections are furnished with couplings of the plug-in type. The signal ports can be obtained for 6 mm or ¼” O.D. hoses. The primary port and tank port are available in 6 mm, 8 mm, ¼” or ⅜” I.D.

TOC8, TOC Series
LSL, LST Series
www.parker.com/iqan

IQAN-TOC8 is a general purpose controller and communicates with a variety of input and output devices. It connects to a laptop PC and is programmed with IQANdevelop software. No Master module is required. It has proportional current outputs for valve control, digital/PWM outputs for auxiliary functions and analog/digital inputs for signals like pressure, RPM or temperature. The unit has a CAN hub designed to interface with a SAE J1939 network.

The TOC2 is a general purpose unit that can control two bi-directional valve sections or two cartridge solenoids simultaneously. The IQAN-TOC2 communicates with a variety of input and output devices. It has current mode (current closed-loop) or PWM mode (voltage open-loop) output for valve control. The analog inputs accept signals from joysticks or potentiometers. Two digital inputs can be used to read switches.

The LSL is a single-axis joystick, 0.5 - 4.5 VDC, intended for the proportional control of one double-acting hydraulic function. The lever has several options including a manual neutral detent, a switch in the top of the handle and solenoid detents at full stroke in either the B (minus) direction or both A (plus) and B (minus) directions. A solenoid detent at 75% in the B (minus) direction is also available. The LSL can be mounted in the armrest or on the dashboard in mobile vehicles. It has a comfortable grip and is easily actuated for good ergonomics.

The LST is a small single-axis joystick 0.5 - 4.5 VDC, intended for the proportional control of one double-acting hydraulic function. The combination of a minilever and armrest can provide substantial ergonomic benefits. The LST can be mounted in the armrest or on the dashboard in mobile vehicles. It is easily actuated with a fingertip for good ergonomics.
Threaded Cartridge Valves

Parker offers the broadest line of threaded cartridge, integrated packages and specialty valves in the industry. In addition, Parker is staffed with experienced cartridge and application engineers to design and specify products to meet customer applications.

Product Highlights
- Standard cavities sizes from 4–20
- Pressures to 345 Bar (5000 PSI)
- Flows up to 378 LPM (100 GPM)
- Steel and aluminum bodies
- New RESILON™ D-Ring Seal eliminates need for back-up rings; improves wear, extrusion and spiral failure resistance
- Spherical Poppet design assures accurate alignment and reduces leakage rating on many valves
- New crimp design eliminates adhesive between adapter and cage

Solenoid Valves
- 10 standard termination options (and many specials)
- Many DC and AC voltages available
- Waterproof coil options
- Optional manual overrides

Pressure Controls
- Zinc-coated (protection from salt spray)
- Knob and tamper-proof options
- Low profile design (fits in tight spaces)

Check Shuttle Valves
Directional Control Valves
Pressure Control Valves
Specialty Valves
Solenoid Valves

Spread Master Model: PSM1000

Parker Hannifin introduces the Spread Master Model PSM1000 spreader control system to provide reliable remote electronics and a safer quieter cab environment. The electronics provide remote proportional control of the Feed Rate and Spinner for your V-Box or Tailgate Spreader. This is a non-ground speed system and operates in open loop only.

- Feed Rate proportional cartridge 16 GPM
- Spinner proportional cartridge 7 GPM
- Manual over-rides
- Proportional unloader for fixed displacement pumps
- System safety relief
- Standard SAE ports
- 3000 PSI operation
- Main Power Button
- Feed Rate Potentiometer – 10 detents
- Spinner Potentiometer – 10 detents
- Blast Button – preset for 5 second duration
- EMI/RFI compliant
- Solid state circuit protection
- Wire harness included for plug and play

www.parker.com/hyd/tcv
Parker offers single- or double-acting telescopic cylinders and single- or double-acting “rod type” mobile cylinders, available with:

- Bore sizes from 3”–14”
- Stroke up to 1270 cm (500”)
- Operating pressures up to 689 Bar (10,000 PSI)
- Various materials and coatings including chrome, nitriding, stainless steel and double chrome

Typical Options
- Load holding valves
- Flow controls and fuses
- End of stroke cushions

Single-acting telescopics are available off the shelf or in production quantities. Parker can also design and manufacture cylinders to customer specifications from one piece to virtually any quantity.

Our standard single-acting telescopic cylinders can be used with almost any mounting setup: doghouse, bail, side frame, underbody, inverted mounts or inverted mount design. These cylinders, coupled with our dump pumps and PTOs, offer a variety of combinations that allow you to mount it and forget it.

**Design Features**

- Longer sleeve overlap for stability
- External packing nuts add strength
- Beveled steel stop rings provide superior strength
- Hi-strength tubing has up to 27% greater cross-section area
- Chevron Packing and self-adjusting wave springs
- Wide rod bearings and improved, longer life urethane wiper rings
- Steel pin-eye mount
- Cylinder design that allows for easy repacking and repair

**Standard Build**

www.parker.com/hyd/standbuild

Our Standard Build Program offers the benefit of standard tube and rod sizes with custom design options to create a highly engineered, quality cylinder configurable to provide quick delivery. Various mounting options are available. The configurable menu provides same day assembly drawings and same day pricing. Bill of Materials and manufacturing processes support a reduced lead time.

Seal kits are available on same day delivery for consistent quality and standardization in service needs.

Standard Build cylinders are manufactured with Parker “Zero Leak” sealing technology which offers the following benefits:

- Additional outside diameter lip that prevents contaminates from entering the system by bypassing the OD of the wiper body.
- Superior BTU rod seal increases the conformity of the seal to the rod. The second lip on the seal improves stability, limiting the rocking motion of the seal to reduce seepage
- Buffer ring acts as a primary seal and pressure spike suppressor. The combination of rod seal and buffer ring results in an exceptionally dry rod for longer life.
- Piston includes two wear rings and bronze filled PTFE seal designed for leak-free, service life
- 1045/1050 chrome plated, induction hardened, 100K yield rod reduces damage to rod and seal
- 1026 DOM cylinder tube bores are skived and roller burnished to provide precision finishes for extended seal life

Our Standard Build program offers a wide variety of in stock mobile cylinders available for fast delivery.
Filtration

**Low Pressure Filters**
www.parker.com/hyd/filterlow
- Variety of mounting configurations
- High capacity/high efficiency
  Microglass III media
- Visual and electrical indicators with several connector styles
- Flange options for low profile, easy mounting

**Medium Pressure Filters**
www.parker.com/hyd/filtermed
- NPT, SAE or flange ports
- High capacity/high efficiency
  Microglass III media
- Visual and electrical indicators with several connector styles
- Cartridge style bypass valve

**Portable/Offline Systems**
www.parker.com/hyd/guardian
www.parker.com/hyd/filtercart
- Provide flexibility for removing contaminants from hydraulic fluid
- Guardian hand-held purification system with 15 LPM (4 GPM) flow rate
- Choice of two filter carts:
  - 18 LPM (5 GPM) flow ½ HP motor
  - 37 LPM (10 GPM) flow ¾ HP motor

**Reservoir Accessories**
www.parker.com/hyd/resacc
- Non-metallic breathers and filler breathers
- Metallic breathers and filler breathers
- Triceptor™ desiccant type breathers
- Spin-on breathers
- Diffusers
- Fluid level/temperature gauges
- Suction strainers
**Hydraulic/Engine-Air Brake Hose**

Parker offers a complete line of SAE and DOT specified hose and a wide variety of steel, brass and stainless steel fitting end configurations. Applications include petroleum based hydraulic fluids and lubricating oils, diesel fuels, crude, fuel oils and anti-freeze solutions. Two piece 20 series field attachable hose assemblies are easily created, as are 26 series permanent hose assemblies with Parkrimp crimping units.

For a complete review of Parker Rubber Hose Products, please reference Catalog 4400/USA. www.parkerhose.com

**Thermoplastic Tubing & Hose**

Parker DOT-approved nylon tubing and coils give long-lasting, reliable performance for all air brake systems. We also offer reinforced hose in a wide range of materials to meet specific low-, medium-, and high-pressure application requirements, as well as products conforming to SAE 100R7 and 100R8. The Parflex line includes many specialty hoses such as Teflon (PTFE) wire-reinforced and non-conductive hoses and seamless, extruded Optima™ PFT reinforced tubing. Hoses and tubing range from ¼" through 1⅛" in size. Pressures are from 17 to 345 Bar (250 to 5000 PSI). Custom truck harnesses also are offered.

For a complete review of Parker Thermoplastic Products, please reference Catalog 4660/USA. www.parker.com/parflex
Hydraulic Adapters

Forged for strength and durability, Parker hydraulic adapters include JIC, Seal-lok o-ring face seal, pipe, flange, and JIS styles. Made from steel, stainless, and brass in inch and metric sizes, with pressures up to 620 Bar (9000 PSI).

For a complete review of Parker Tube Fittings, please reference Catalog 4300/USA.
www.parker.com/tfd

Brass Fittings

Parker brass fittings set the world standard for low and medium pressure applications. Through innovations like our push-to-connect DOT airbrake Prestomatic fitting (available in both brass and composite material) we have the products to meet your needs including airbrake NTA/AB, pipe, 45 degree flare, hose barb, compression, and inverted flare. Inch and metric sizes available. Prepackaged merchandising assortments also available.

For a complete review of Parker Tube Fittings, please reference Catalog 4300/USA.
www.parker.com/tfd

Brass Valves

Parker offers a wide range of brass, carbon steel, and stainless steel ball valves with a large variety of end configurations. These are used as fuel shut-off lines and other general purpose applications that require shut-off capability. Inch and metric sizes available. Lanyard valves are used with low pressure air systems such as air tanks on heavy trucks.

For a complete review of Parker Brass Products, please reference Catalog 3501-E/USA.
www.parker.com/brassprod
Hydraulic/Pneumatic Quick Couplings, Hydraulic Swivels, and Diagnostic Equipment

Parker offers the industry’s broadest range of hydraulic and pneumatic quick couplings. Designs include ball locking and thread-to-connect versions with poppet, ball, or flush face valving. Material options include brass, steel, stainless steel and plastic. A variety of fitting ends are available to fit your needs. In addition, special purpose couplings include non-spill, connect under pressure and HTMA/ISO interchange designs.

Hydraulic Swivels are available in in-line and 90 degree configurations to prevent hose twisting. Several port options are available.

Diagnostic nipples provide accessibility for system monitoring and testing. Parker’s SensoControl equipment accurately measures pressure, temperature, flow and RPM.

For a complete review of Parker Quick Coupling Products, please reference Catalog 3800/USA.
www.parker.com/quickcouplings

Parker’s Kit Department is dedicated to helping you streamline your operations by pre-assembling and packaging fluid connectors and related fluid-system components into a single kit, with a single part number and single invoice.

Parker kits eliminate time wasted in parts collating. They eliminate the need for multiple suppliers, multiple invoices, and excess inventory. Kits lend themselves to just-in-time manufacturing, and ease in changing schedules. And packaging can be customized to your specific needs, such as subkitting for different workstations. Kits can include, but are not limited to, Parker components such as valves, connectors, filters, pumps, and flow control products. Kits may also incorporate purchased products such as nuts, bolts and brackets.

Everything you need is delivered preassembled, in one convenient pack and ready for installation on your equipment. For more information contact your local Parker sales representative.
Parker Truck Hydraulics wants to keep you informed. Listed below are resources enabling you to communicate with the industry’s most knowledgeable truck field sales engineers.

To order literature or locate a distributor by phone 1-800-CPARKER (272-7537).

For the latest truck hydraulic information www.parker.com/truckhydraulics.

Parker Hannifin Corporation
Hydraulics Group
Truck and Trailer Solutions
6035 Parkland Blvd.
Cleveland, OH 44124
Tel: 843-838-2070
Fax: 866-871-2926

To locate your nearest truck hydraulic distributor www.parker.com/hyd/distloc.

For North America, Europe and rest of the world regional offices, see back cover.

For detailed product information Right Now!
Use the enclosed:
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P16 Series
www.parker.com/hyd/p16

CD Codes

Bulletin HY25-0067-B1

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To view the CD, the following are required:
• Pentium®-class processor
• Win® 95 OSR 2.0, Win 98 Sec. Ed., Win ME, Win NT 4.0 (with Service Pack 5 or 6), Win 2000 or Win XP
• 16 MB of RAM (32 recommended)
• 20 MB of available hard-disk space

Acrobat Reader
Catalog files are viewed using Adobe Acrobat Reader. If you do not have Acrobat Reader installed on your PC, it will install from the CD. If you have Acrobat Reader but do not have the search plug-in, you will be given the option to install Acrobat Reader 6.0 with search.

You must have the search plug-in to take advantage of the search feature described in the next section.

To View the CD
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• Search takes you to the search feature. When the search window opens, type a word(s) or code* and press enter. A list of pages where that word appears is shown. Select one and click the View button. Repeat as needed.
• Contents takes you to the selection of catalogs and products on the CD.
• Product Overview takes you to a .pdf file of this Truck Hydraulic Product Range.
• Warning/Offer of Sale takes you to these legal documents.
• Getting Started provides a summary of how to navigate using Acrobat Reader.
• Contact Us provides you with phone, fax and online information.

Text links are easily identified by blue type. The catalog files are fully bookmarked to make navigation quick and easy. Each catalog also has a bookmark which will take you to the Parker web home page for that division if you are online while you are viewing the CD. You must first enter your web browser information into the Acrobat preferences.

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*Use the CD search codes provided in this catalog to go directly to the section for that product.

zx99

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