



Truck Hydraulics Products and

Innovative Products and System Solutions

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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/___. Use the web addresses provided with each product to go directly to that product or series on the Parker website.

Parker Hannifin Corporation



Parker Hannifin world headquarters in Cleveland, OH USA

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.



Premier Customer Service



Worldwide Network of Distributors



Engineering Expertise



Industry-Leading Technical Support and Training



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

facilities are equipped with stateof-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



Value Added Programs



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.



www.parker.com/ truckhydraulics

Parker's extensive web site is the industry's most comprehensive, offering a wealth of product information including technical product data, downloadable catalogs, contact information, training materials, product selection and RFQ software, as well as other useful resources. Customers can search by general product family, specific product type, Division, or keyword.

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.





Extensive Product Offering

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





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)





- Broadest coverage in industry
- Industry leading innovation, engineering and performance
- For virtually all transmission applications
- Wet line kits, reservoirs and accessories



Products and Technologies

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



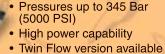
- Pump/valve combinations
- Available in remote mount or direct PTO Mount
- Two or three-line installations on G101/G102; three or four-line installations on G104/G105



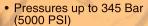
- Rugged cast iron body
- Variety of drive shafts and mounting styles
- Flows: up to 29 GPM at 2400 rpm and 3000 PSI; up to 39 GPM at 2400 rpm and 2500 PSI



- Three-piece cast iron construction
- Heavy duty application
- Long life in severe environments



- High self-priming speed



- Suitable for all load-sensing systems
- Splined shaft DIN 5462
- Mounting flange ISO 7653-1985



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



- Silent technology
- Wide range of displacements
- User friendly
- Available in single, double and triple



Truck Hydraulic Product Applications

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	Durigh	Mecker	Rollofts	Reialch	Bulkteen	Buspect	Vacuum	QUIN TON	the De	Catkaun	Moving	Oilfield
Gear Pumps/Motors	•	•	•		•	•		•				•
Vane Pumps/Motors	•	•	•		•	•						
Piston Pumps	•	•	•	•	•	•	•					
PTOs 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	٠	•	•	•	•	•	•	•		•	•	



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

www.parker.com/hyd/c101-102 www.parker.com/hyd/g101-102 www.parker.com/hyd/g104-105



- 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 www.parker.com/hyd/p16



- 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 piggyback configurations
- Integral priority valve available with relief, for steering or brake circuits
- Choice of mounting, shaft or port configuration



CP16 Series www.parker.com/hyd/cp16



- 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





Pump/Motors Gear

PGP030/031, PGP050/051 PGP075/076 Series

www.parker.com/hyd/pgp030-031 www.parker.com/hyd/pgp050-051 www.parker.com/hyd/pgp075-076



- 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

www.parker.com/hyd/pgp300



- 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

www.parker.com/hyd/pgp500



- 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
- Lightweight slim cross-section designed for truck applications
- Strong and reliable
- Less energy less fuel less heat
- Self-priming



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

zp01

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

zp18



Pumps Vane

SDV Series-Single



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-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







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.

- 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





Motors Vane

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





M5AF

- · 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





Low Speed High Torque Motors

Small Frame

- High volumetric efficiency
- Long life
- Full flow spline cooling
- High pressure shaft seal
- · High flow shaft seal cooling
- High starting torque





www.parker.com/hyd/tb



Medium Frame

www.parker.com/hyd/tj



- 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







- High volumetric efficiency
- Full flow spline cooling
- High pressure shaft seal
- High flow shaft seal cooling
- High starting torque







Power Take Off CHELSEA®

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

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

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



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



442 Series 6-Bolt 489 Series 8-Bolt

www.parker.com/hyd/442 www.parker.com/hyd/489



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

- 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





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



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





Power Take Off CHELSEA®

236 Series 6-Bolt

www.parker.com/hyd/236



250 Series 6-Bolt

www.parker.com/hyd/250



236 Series

- Powershift
- Patent pending internal self adjusting shaft brake option
- Wide selection of input gears for virtually all currently produced transmissions
- Helical gears and optional pressure lubrication to extend P.T.O. service life
- Inspection cove for adjusting backlash
- Air or electric/air shift unit



- Fixed compression gasket eliminates setting of backlash
- Weather tight electrical connectors for secure under-the-vehicle connections
- Electric/hydraulic shift unit



250 Series

- Powershift
- Latest P.T.O. technology for automatic transmission applications
- Patented integral solenoid design (patent # 6151975)

243, 246 Series 6-Bolt

www.parker.com/hyd/243 www.parker.com/hyd/246





243 Series

- 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

246 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

zpto44

800, 852, 885 Series 8-Bolt

www.parker.com/hyd/800 www.parker.com/hyd/852 www.parker.com/hyd/885





800 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

852 Series

- Designed for Heavy Duty applications
- Three speed ratios to choose from
- Pump flanges to fit most popular hydraulic pumps

- Pressure Lubrication standard
- Electric/Hydraulic Shift Unit

- 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 10-Bolt

www.parker.com/hyd/267



277, 278 Series 10-Bolt

www.parker.com/hyd/277 www.parker.com/hyd/278



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 Series

- 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
- NEW internal bearing lube

278 Series

- Approved for use with Allison World Transmissions
- Enhanced housing design for maximum transmission clearance when direct mounting a pump
- Six speed ratios and fourteen output options
- Internal bearing lube
- SuperTorque[™] gears available for 20% higher intermittent torque ratings
- · Electric/hydraulic shift



859 Series 10-Bolt

www.parker.com/hyd/859



859 Series

- 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 10-Bolt



- 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 CHELSEA®

290, 429, 435 Series 6-Bolt

www.parker.com/hyd/290 www.parker.com/hyd/429



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

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

435 Series

- 435 Series fits the Hino LF06S and LJ06S transmissions
- Three speed ratios and seven output options
- Mounts directly to transmissions, no geared adapter needed
- Cast iron housing for strength and tapered cone bearings for increased load capacity

452 Series 6-Bolt



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



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Reversible 340, 352 Series 6-Bolt 863 Series 8-Bolt

www.parker.com/hyd/340 www.parker.com/hyd/352 www.parker.com/hyd/863



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

- 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





CHELSEA° Power Take Off

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 Freedomline[™] transmissions (US) and ZF, Eaton and Iveco transmissions (EU)
- Direct mount pump flanges available
- Installation is quick and easy
- Comes standard with 1410 Series output flange (US)



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

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

- Smaller version of the 912 Series with two 6-bolt openings
- Designed for Class 3, 4, 5 and 6 trucks with automatic transmissions and no P.T.O. opening or trucks requiring additional P.T.O. openings
- Several 6-bolt and reversible P.T.O.s will fit on the 941 Series





Power Take Off CHELSEA®

Geared Adapters 626, 628, 630, 645 Series

www.parker.com/hyd/626 www.parker.com/hyd/628 www.parker.com/hyd/630 www.parker.com/hyd/645



626 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 8-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

www.parker.com/hyd/c101-102 www.parker.com/hyd/g101-102 www.parker.com/hyd/g104-105



- 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)





Wet Line Kits, Reservoirs and Accessories

www.parker.com/hyd/wetline

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

zpto44



Hydraulic Valves

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



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



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



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

www.parker.com/hyd/vls www.parker.com/hyd/lt-ltf



Series LT-LTF

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



Flow Control, Check and Ball Valves

www.parker.com/hyd/flowcb



Flow Control, Check Valves feature:

- Inline mounted flow, check, needle, gauge isolator and snubber valves
- Flow controls available in pressure compensated models
- Sizes 1/8"-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

Accessories

www.parker.com/hyd/accessories



- 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





Auxiliary Valves

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



PCL4-N

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 ½6 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 ½" O.D. hoses. The primary port and tank port are available in 6 mm, 8 mm, ½" or ½6" I.D.

TOC8, TOC Series LSL, LST Series

www.parker.com/igan



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

IQAN Mobile Electronics

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)







Pressure Control Valves







Solenoid Valves







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.

- · 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



- 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





Mobile Cylinders



Parker offers single- or doubleacting 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





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 3/4 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 antifreeze 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

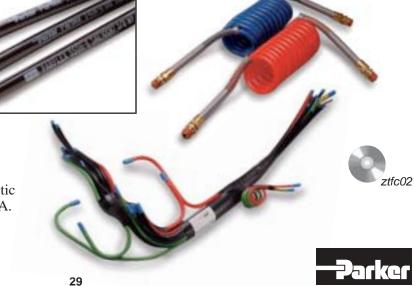


Parker DOT-approved nylon tubing and coils give long-lasting, reliable performance for all air brake systems. We also offer reinforced hose in a wide range of materials to meet specific low-, medium-, and high-pressure application requirements, as well as products conforming to SAE 100R7 and 100R8. The 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 ¾6" through 1½" 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



Fluid Connectors

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

Brass Valves



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



Parker offers a wide range of brass, valves with a large variety of end configurations. These are used as fuel shut-off lines and other general 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.





carbon steel, and stainless steel ball

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





Fluid Connectors

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 inter-

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.

Hydraulic



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

Kit Department

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.



Action Directory

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.

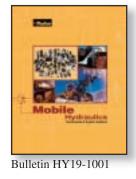
For North America, Europe and rest of the world regional offices, see back cover.

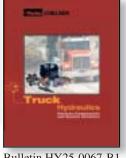
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CD Codes







Bulletin HY25-0067-B1

Call us at 800-CPARKER to order our Mobile Solutions Guide paired with an interactive CD and a Chelsea Power Take-Off product brochure.

⚠ WARNING

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System Requirements

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

The CD is self-loading. Just place it in your CD drive. Acrobat Reader will open (or install), and the opening page will appear on your monitor. From this page you can navigate to the following sections.

- 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.



*Use the web addresses provided with each product to go directly to that product or series on the Parker website www.parker.com/hyd/X

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