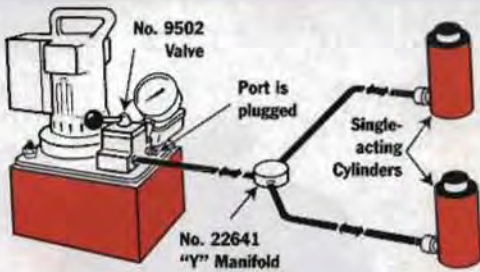


# Hydraulic CIRCUITS

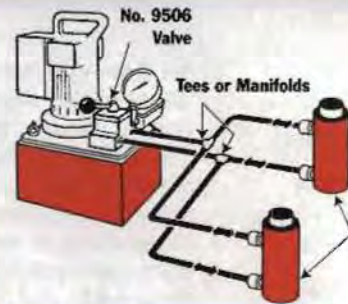
## Pumps, Cylinders, Controls

These are just a few basic systems possible with Power Team hydraulic components. Countless applications are possible: In presses, for lifting or jacking applications or in production or maintenance setups. The pump shown is a typical electric/hydraulic unit. Electric, air or gas driven pumps are available.

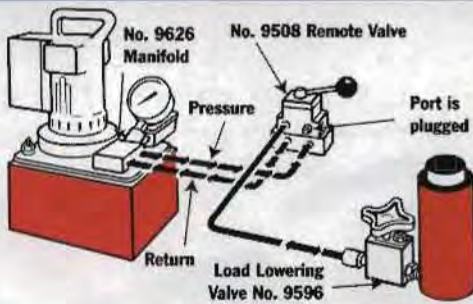
**1** Single-acting cylinder or cylinders in the circuit, controlled by a pump mounted valve.



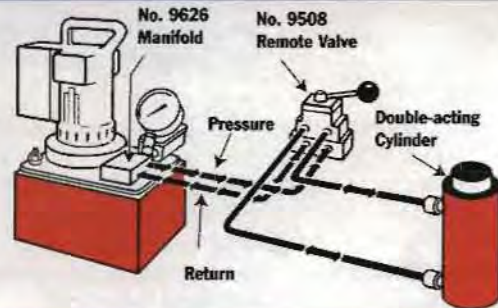
**2** Double-acting cylinder or cylinders in the circuit, controlled by a pump mounted valve.



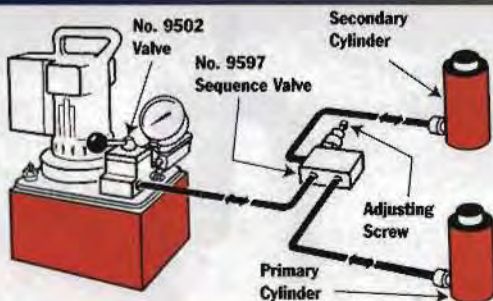
**3** Single-acting cylinder controlled by a remote mounted valve.



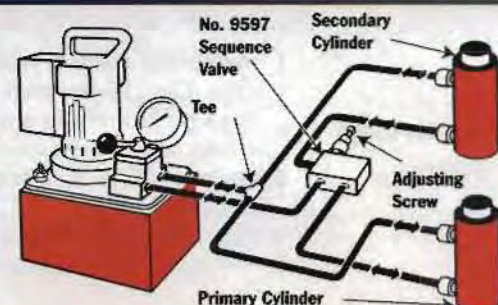
**4** Double-acting cylinders controlled by a remote mounted valve.



**5** Single-acting cylinders with a sequence valve which controls the primary and secondary cylinder circuits.



**6** Double-acting cylinder with a sequence valve which controls the primary and secondary cylinder circuits.



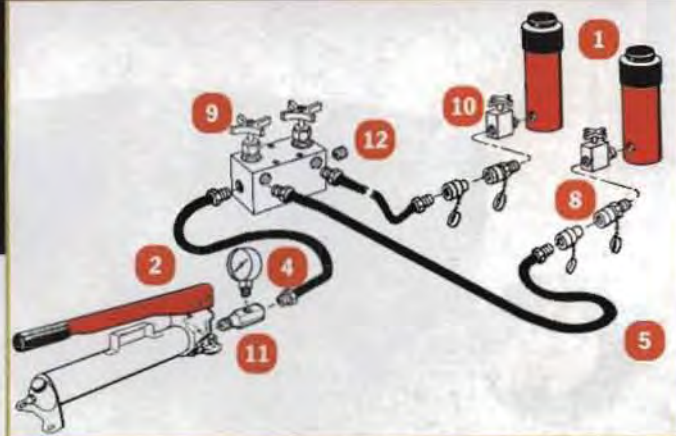


Basic single-acting system with a hand pump, gauge, hose and single-acting cylinder.

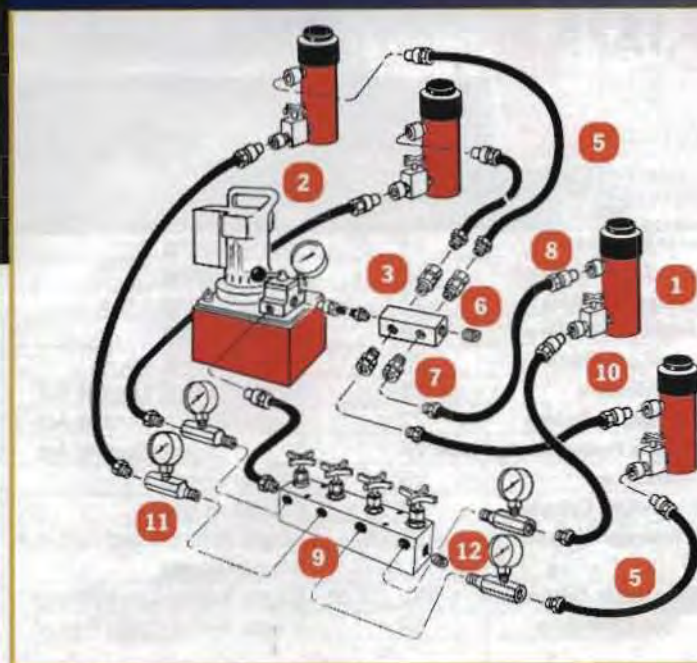


- 1 Cylinder – applies hydraulic force.
- 2 Pump – a device for converting mechanical energy to fluid energy.
- 3 Directional valve – controls the direction of hydraulic fluid in the system.
- 4 Gauge – measures bar pressure and/or force.
- 5 Hose – transports hydraulic fluid.
- 6 Manifold – allows distribution of hydraulic fluid from one source to several cylinders. (No. 9617)
- 7 Swivel Connector – allows proper alignment of valves and/or gauges. Used when units being connected cannot be rotated. (No. 10469)
- 8 Quick Coupling – “hose half” and “cylinder half” couplings are used for quick connection and fluid flow check when separated. (No. 9797 and 9798)
- 9 Shut-Off Valve – regulates the flow of hydraulic fluid to or from cylinders. (No. 9642 or 9644)
- 10 Load-Lowering Valve – allows metered lowering of cylinder and provides safety when prolonged load holding is required. (No. 9596)
- 11 Tee Gauge Adapter – allows for installation of pressure/tonnage gauge anywhere in the hydraulic system. (No. 9670)
- 12 Pipe Plug – for blocking unused ports within the system. (No. 10909)

Basic single-acting system with a hand pump, gauge, hose, multiple shut-off valves, load-lowering valves and multiple cylinders.



Basic double-acting system with an electric/hydraulic pump, shut-off valves, load-lowering valves and multiple double-acting cylinders.





# CYLINDERS

## SUPERIOR FEATURES OF POWER TEAM HYDRAULIC CYLINDERS:

We build our own cylinders in our ISO 9001 registered manufacturing facility. All Power Team cylinders are date-coded. Maximum pressure rating and capacity are stamped on the cylinder. All cylinders comply to the demanding ASME B30.1 standard and are proof tested to 125% of capacity before

leaving our factory. Cylinder bores are roller burnished to harden the surface and make it smoother, increasing seal life by 30%. Base mounting holes withstand full capacity of the cylinder. Typical cylinder burst pressures range from 700 to 2400 bar. Cylinders with gland nuts may be "dead-ended" at 700 bar.

Cylinders are assembled and tested by certified assemblers. Eddy current and mag particle inspection detects flaws in the steel. Cylinder bodies are solid steel, not welded like some competitive cylinders. Material is removed from surface, to assure that any flaws are removed.



FROM  
2  
TO  
1220  
TONS!

Series	Description	Page	Action	TONNAGE										
				2	5	10	12	15	17.5	20	25	30	50	
C	General Purpose	14	Single/Spring		X	X		X				X		
CBT	Threaded End Cylinders	16	Single/Spring		X	X						X		
RA	Aluminum Cylinders	17	Single/Spring								X		X	
RD	Industrial Cylinders	18	Double Acting		4	9	16					X		
RLS	Low Profile Cylinders	20	Single/Spring		X	X					X		X	X
RSS	Shorty Cylinders	21	Single/Spring/Double Act			X					X		X	X
RH	Center Hole Cylinders	22	Single/Spring/Double Act			X	X				X		X	X
RT	Center Hole Power Twin Cylinders	24	Single/Spring/Double Act							X			X	X
RP	Pull Cylinders	25	Single/Spring	X	X									
RD	Double Acting Cylinders	26	Double Acting			X						X		
R	High Tonnage Cylinder	28, 30	Single Acting/Load Return/ Double Acting											
RL	Locking Collar Cylinders	32, 34-35	Single Acting/Load Return											
RC	Pancake Cylinders	33	Single Acting/Load Return											





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Shorty Cylinders



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**CBT SERIES...16**  
Threaded End Cylinders



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**RH SERIES...22**  
Center Hole Cylinders



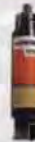
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Aluminum Cylinders



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**RT SERIES...24**  
Center Hole Power-twin®  
Cylinders



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Industrial Cylinders



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**RP SERIES...25**  
Pull Cylinders



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Low Profile Cylinders



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**RD SERIES...26**  
Double-Acting,  
Hydraulic-Return



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**R SERIES...28, 30**  
Single Acting, Load Return  
Double-Acting, Hydraulic  
Return



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Locking Collar Aluminum



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Pancake Cylinders



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**RL STEEL...34**  
Locking Collar Steel



Page  
**ACCESSORIES ...36-41**



**TONNAGE**

740  
TO  
1220

	55	60	75	80	100	150	200	250	280	300	355	400	430	500	565	1220
<b>C</b>	X		X		X											
<b>CBT</b>																
<b>RA</b>	X				X											
<b>RLS</b>			X		X	X										
<b>RSS</b>					X			X								
<b>RH</b>		X			X	X	X									
<b>RT</b>					X											
<b>RP</b>																
<b>RD</b>	X			X	X	X	X			X		X		X		
<b>R</b>	X				X	X	X		X	X		X		X	X	
<b>RL</b>	X†				X†	X	X		X	X		X		X	X	
<b>RC</b>	X				X	X		240		X					620	

† LOCKING COLLAR AVAILABLE IN ALUMINUM.