

# Plate Jacks® vs. Locking Collar Jacks —

**Use Locking Collar Jacks (we make these, too) when you —**  
 have need for temporary shoring, require small footprint and high bearing pressures are possible, and have sufficient headroom.

**Use Plate Jacks® when you —**  
 have limited headroom, need permanent installation, have nonparallel bearing surfaces, have limited bearing pressure allowable, have need for light weight for handling, or are working in a corrosive environment.

**Hydraulic nozzles —**  
 are easily configured for your application.

Lifts 200 tons, weighs 60 lb.

Lifts 200 tons, weighs 274 lb.

## Oakland City Hall, Oakland, CA

181 Plate Jacks® from 80 to 1,360 kips, epoxy injection system, and associated engineering services for load transfer to seismic isolators.

## Western Oregon State College, Monmouth, OR

42 RS 400 and 3 RS 240 Plate Jacks®, injection system, and engineering services to hydraulically preload seismic isolators over a period of time to achieve soil consolidation settlement, then transfuse with epoxy for permanent load transfer.

## Braddock Locks and Dam, Monogahela River, PA

RS 2100 Plate Jacks®, stacked in pairs to provide 2" lift, for leveling and load distribution as two floating precast concrete dam sections were lowered onto pile caps.

## Kerckhoff Hall, U. C. L. A., Los Angeles, CA

146 RPS Plate Jacks®, 420 kip to 1,000 kip for load transfer to seismic isolators, including 4 stainless steel jacks for long term isolator tests.

## Hughes Aircraft, El Segundo, CA

45 RPS 1,900 Plate Jacks® with epoxy injection system and support services for load transfer to seismic isolators.



RS 400 over lead-rubber seismic isolator, Campbell Hall, Monmouth, OR

## Midtown Station, MARTA, Atlanta, GA

56 RS 500 transfusion jacks and integral stainless/PTEE sliding bearings to replace elastomer bearings at 26 locations under a 3,500-ton roof structure. RPS designed and built an electronic data acquisition system, allowing reactions to be balanced for optimum structural stresses. After load balancing, jacks were transfused with epoxy for permanent installation.

## Tantawan Explorer, Gulf of Thailand

8 modified RS 800 Plate Jacks® to transfer main rotation bearing load to elastomeric supports, epoxy injection manifolded to equalize load around perimeter of turret bearing on the moored processing and storage tanker.

## Los Angeles City Hall, Los Angeles, CA

534 RPS Plate Jacks® configured for transfusion, RS 500 to RS 6100 for use in load transfer to retrofitted seismic isolators plus injection system and installation consultation.

## South Carolina State House, SC

123 RS 1400 and RS 1900 Plate Jacks®, transferred load to seismic isolators, with periodic adjustment for soil consolidation, then transfused with epoxy.

The San Francisco City Hall sits on some amazing real estate.

The San Francisco City Hall also sits on 542 of these.



Lifting and leveling civilization

Plate Jack® — the jack of choice in areas of constrained headroom and for effective permanent jack installation

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plate jack logic **RPS**

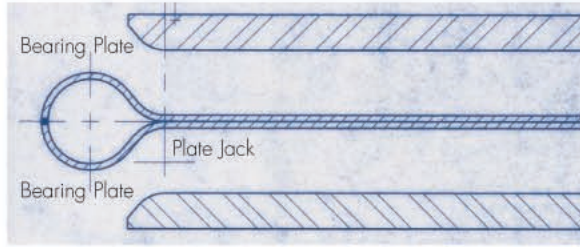
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plate jack logic **RPS**



# Plate Jack® Makes Most Other Jacking Systems seem too heavy, too costly or too restrictive.



**Plate Jack Assembly**  
 exploded section



On Your Next Lift, raise your profitability.

**Jacks Configured for Transfusion**, where you require adjustment of loads  
 settlement correction over a period of time, then solidification to permanently lock in load  
 or displacement—initially extend with nonhardening fluid, then transfuse with epoxy.



Before Your Next Project, do the math.

Jack Size	Rated Load, kips	Outside Dia.	Bearing Plate Dia.	Jack and Fitting	With Bearing Plates
RS 020	18	4.75"	2.79"	3 lb.	5 lb.
RS 030	30	6.00"	4.04"	4 lb.	7 lb.
RS 080	89	8.75"	6.79"	5 lb.	16 lb.
RS 110	118	9.88"	7.92"	6 lb.	20 lb.
RS 130	140	10.63"	8.67"	7 lb.	24 lb.
RS 180	180	11.88"	9.92"	8 lb.	30 lb.
RS 240	280	13.88"	11.92"	10 lb.	41 lb.
RS 400	420	16.50"	14.54"	13 lb.	60 lb.
RS 500	570	19.00"	17.04"	16 lb.	81 lb.
RS 800	930	23.63"	21.67"	24 lb.	128 lb.
RS 1000	1,160	26.00"	24.04"	28 lb.	156 lb.
RS 1400	1,500	29.50"	27.54"	35 lb.	204 lb.
RS 1900	2,060	34.25"	32.29"	46 lb.	278 lb.
RS 2100	2,320	36.25"	34.29"	51 lb.	312 lb.
RS 2500	2,680	38.22"	36.26"	54 lb.	347 lb.
RS 2900	2,970	40.86"	38.90"	59 lb.	396 lb.
RS 3800	3,860	46.29"	44.33"	75 lb.	512 lb.
RS 4500	4,530	50.00"	48.04"	87 lb.	601 lb.
RS 5300	5,300	53.93"	51.97"	100 lb.	701 lb.
RS 6100	6,135	57.86"	55.90"	115 lb.	810 lb.

Rated load is thrust at 2,500 psi hydraulic pressure. Where jacks are extended with a hardening material, the permanent compressive capacity is the bearing area of the jack times the allowable compressive strength of the injection material.

Versatile, light, powerful

**Low cost for capacity.** Low headroom. Low weight. Available in stainless steel, or Monel for marine application. Conforms to nonparallel bearing faces. Stackable for greater lift. Calibration to NIST reference available.

**Applications—**

- load transfer to seismic isolators
- lifting, lowering or leveling of structures and machines
- correction of settlement
- thrust maintenance in shoring
- weighing and center of gravity
- redistribution of reactions in redundant structures



Your solution is assured with RPS engineering support.