

SERVICE INSTRUCTIONS FOR SEAL REPLACEMENT OF POWER GEAR HYDRAULIC LEVELING LEGS

POWER GEAR BASE LEG PART NUMBER SEAL REPAIR KIT PART NUMBERS:

Jack assembly #'s	Cap. (lbs.)	Application	Kit #
500384,500384H,500384HR, 500482H	6000	2001-present	800132S
500082,500082H,500082HR,500146,500235H,500272	9000	2003 & prior	800129S
500385TH	12,000	2003 & prior	800137S
500070,500070TH,500145	16,000	2003 & prior	800131S
500386T,500620	24,000	2003 & prior	800130S
Power Level Jacks	Cap. (lbs.)	Application	Kit #
500876,500730,500832,500842,500933	6000	Power Level	800133S
500759,500833,500843,500932	9000	Power Level	800138S
500800	12,000	Power Level	800199S

82-L0352

WARNING!

HYDRAULIC COMPONENTS CAN CAUSE SERIOUS INJURY OR DEATH IF PROPER SAFETY PRECAUTIONS ARE NOT FOLLOWED. ALL HYDRAULIC PRESSURE MUST BE RELEASED FROM THE SYSTEM, INCLUDING RAISING ALL JACKS AND REMOVING POWER FROM THE SYSTEM BEFORE REMOVAL OR DISASSEMBLY IS ATTEMPTED.

ALWAYS WEAR SAFETY EQUIPMENT. SAFETY GLASSES, GOGGLES AND/OR FACE SHIELDS CAN PREVENT SERIOUS INJURY AND SHOULD BE USED TO PREVENT EYE DAMAGE.

POWER GEAR WARRANTS THE SEALS AND COMPONENTS OF THESE KITS FOR 90 DAYS AGAINST DEFECTS IN MATERIALS AND WORKMANSHIP. NO GUARANTEE EXISTS ON THE ULTIMATE SUCCESS OR FAILURE OF THE JACK. THE SUCCESS OF THE RESEAL DEPENDS ON THE CARE TAKEN DURING INSPECTION, THE SKILL OF THE TECHNICIAN AND THE CLEANLINESS DURING THE RE-ASSEMBLY. ANY DEFECT ON THE SURFACE OF THE ROD WILL RESULT IN SEAL FAILURE OR REDUCE THE LIFE OF THE SEALS.

NOT ALL JACKS CAN BE DISASSEMBLED DUE TO VARIANCES IN ASSEMBLY TECHNIQUE, DISASSEMBLY TOOLS AVAILABLE OR DAMAGE DUE TO ENVIRONMENTAL CONDITIONS OR ABUSE. WHILE ONLY A VERY SMALL PERCENTAGE OF JACKS ARE IMPOSSIBLE TO DISASSEMBLE, JACKS SHOULD BE DISASSEMBLED BEFORE SEAL REPLACEMENT OR JACK REPLACEMENT COSTS ARE DETERMINED.

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TOOL REQUIREMENTS:

NOTE: Some tools may not be required for some jacks. This is a complete tool list to equip a technician for repairs to all types of Power Gear leveling cylinders.

- 1/4" punch
- 1/8" punch
- hammer
- strap wrench
- Small pick or screwdriver
- Grease gun
- Large spanner wrench
- Bench vise
- 15/16" socket
- 9/16" socket
- 7 mm socket
- Impact wrench
- Torque wrench
- Clean lint free shop towels
- Locktite® 243 or equivalent
- Wire brush
- Spray cleaning solvent
- Compressor
- Large pipe wrench or chain wrench
- Small propane torch

Power Gear

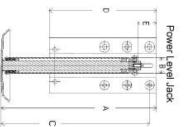
Hydraulic LEG IDENTIFICATION INFORMATION

Rev.10/09

	Leveling jack #	Internal Spring Jacks and Rebuild Kits	Measurements in inches
2000		Jacks and	in inches
	200 million 200	Rebuild	
	Jack	Kits	
10000	Jack obsol		

	5003861		-			500070TH	10	500385TH	022	Leveling jack #
500620	61	500386 24K	500145 16K	501137 16K	501138	I	500070	H	500385 12K	44
24K has	24K	5 24K	5 16K	7 16K	5 16K	16K) 16K	12K	5 12K	200000000000000000000000000000000000000
500620 24K has mounting pad width of 7.25		500386T				er.	5000701		500385TH	Jack obsolete use #
width of 7.25				4 bolt	4 bolt		_			ete use #
				pattern	pattern				17.4	
kit # 800130s	kit # 800130s	kit # 800130s	kit # 800131s	kit# 800131s	KI# 8001318	kit # 800131s	kit # 800131s	kit # 800137s	kit # 800137s	Rebuild kit #
								kit # 800137s KIT SERVICE 12K JACK 2003 & PRIOR A=22.3	kit # 800137s KIT SERVICE 12K JACK 2003 & PRIOR A=22.25 B=3.625	
A=22.375 B=4.5	A=22.375	A=22.375 B=4.5	A=22.25 B=4.0	A=22.37	A=22 37	A=22.25 B=4.0	A=22.25	A=22.3	A=22.25	
8=4.5	5 B=4.5	8=4.5	B=4.0	B=4.0	B=40	B=4.0	B=4.0	B=3.63	B=3.625	Dimensions
C=22.37	C=20.09	C=20.09	C=21.42	C=18.94	C=13.25	C=21.42	C=21.42	C=20.11	C=20.11	5
int	em	als	spri	ing	s ne	ot a	ıvail	abl	e	Spring #

Leveling jack #	Jack obsolete use #	# Rebuild kit #		Dimensions	G		Spring #
500082 9K	500146	800129s	KIT SERVICE 9K 2002 & PRIOR	A=20.75 B=3.25	B=3.25	C=17.38	500094
500082H 9K		800129s	KIT SERVICE 9K 2002 & PRIOR	A=20.75	B=3.25	C=17.38	500094
500082HR 9K	=2	800129s	KIT SERVICE 9K 2002 & PRIOR	A=20.75	B=3.25	C=17.38	500094
500146 9K		800129s	KIT SERVICE 9K 2002 & PRIOR	A=20.75 B=3.25	B=3.25	C=17.38	500094
500272 9K	obsolete	800129s	KIT SERVICE 9K 2002 & PRIOR	A=20.75 B=3.25	B=3.25	C=17.82	500094
500235 9K	500235H	800129s	KIT SERVICE 9K 2002 & PRIOR	A=18.25	B=3.25	C=17.38	500252
500235H 9K		800129s	KIT SERVICE 9K 2002 & PRIOR	A=18.25	B=3.25	C=17.38	500252
500498 9K	500498H	800129s	KIT SERVICE 9K 2002 & PRIOR	A=17.75 B=3.25	B=3.25	C=15.0	500252
500498H 9K		800129s	KIT SERVICE 9K 2002 & PRIOR	A=17.75	B=3.25	C=15.0	500252
500384 6K	501022	no rebuild, kit jack has fine ti	no rebuild, kit jack has fine thread gland nut kit has coarse thread nut	A=21.25 B=2.625	B=2.625	C=17.61	500590
500384H 6K	501022	800132s	KIT SERVICE 6K 2002 & PRIOR	A=21.25	B=2.625	C=17.61	500590
500384HR 6K	210	800132s	KIT SERVICE 6K 2002 & PRIOR	A=21.25	B=2.625	C=17.61	500590
500598 6K	500384HR	800132s	KIT SERVICE 6K 2002 & PRIOR	A=21.25	B=2.625	C=18.17	500590
500482 6K	500482H	800132s	KIT SERVICE 6K 2002 & PRIOR	A=18.0	B=2.625	C=15.38	50059
500482H 6K		800132s	KIT SERVICE 6K 2002 & PRIOR	A=18.0	B=2.625	C=15.38	50059
500600 6К flat pad 500482H	d 500482H	800132s	KIT SERVICE 6K 2002 & PRIOR	A=18.0	B=2.625	C=15.63	50059
500800 12K		Ki# 800199s		A=19.2	B=3.25	C=16.75	500094
500759 9K		Kit# 800138s		A=20.85	B=2.6	C=17.6	500094
501315 tox		Kit# 800199s		A=20.33	B=3.25	C=17.19	500094



Spring kit#

501005 12K

500094 500252 500590 500591

measurment of spring 2.5" X 17" 2.5" X 14.55" 2.3" X 17" 2.3" X 14.55" eveling jack #

Jack obsolete use #

Rebuild kit # Kit# 800133s Kit# 800133s

A=19.15 A=23.25

B=2.25 B=2.25

C=16.0 C=22.3

D=8.0

E=1.125 E=5.0

Spring # 500591 500591

500730 6K 500832 6K 500842 6K 500876 6K

500833 9K 500843 9K 500932 9K

Ki# 800138s Ki# 800138s Ki# 800138s

A=23.15 A=21.15 A=25.3

B=2.6 B=2.6 B=2.6

D=14.3 D=14.3 D=14.3

E=3.0 E=1.0 E=5.0

500094 500094 500094 Ki# 800133s

A=18.94

B=2.25

C=17.0

D=12.3

E= .5

500591

Ki# 800199s

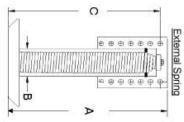
A=24.26

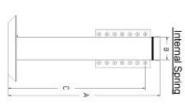
B=3.25

C=23.26

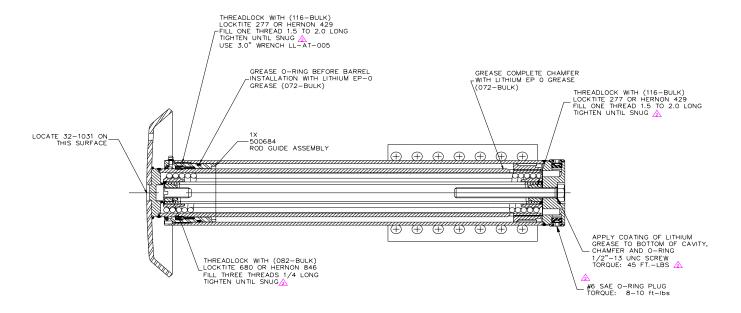
D=16.0

500094

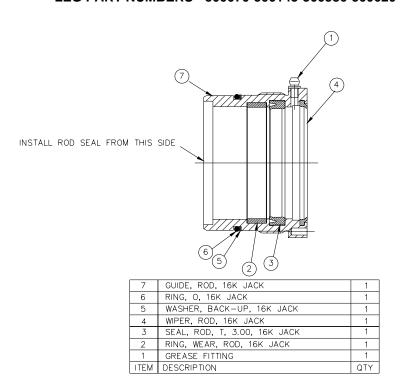




INTERNAL SPRING LEGS



EXAMPLE OF A TYPICAL POWER GEAR HYDRAULIC LEG CROSS SECTION LEG PART NUMBERS - 500070-500145-500386-500620



EXAMPLE OF A TYPICAL
ROD GUIDE CROSS SECTION DETAIL AND <u>ORDER OF ASSEMBLY</u>
LEG PART NUMBERS - 500070-500145-500386-500620

<u>SEAL REPLACEMENT KIT PART NUMBER -</u> <u>800137S FOR 12000 LB. LEG - PART NUMBER</u> <u>500385</u>

SEAL REPLACEMENT KIT PART NUMBER

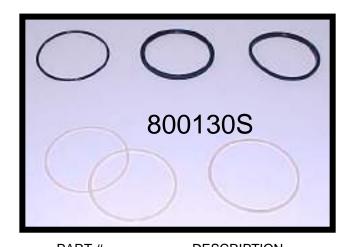
800131S FOR 16000 LB. LEGS - PART NUMBERS 500070 & 500145





QTY	PART#	DESCRIPTION	QTY	PART#	DESCRIPTION
	* included within 800	0149 Elastomer pkg	* in	cluded within 80	0146 Elastomer pkg
* 1	01-1077	O-RING	* 1	01-1067	O-RING
* 1	01-1079	O-RING	* 1	02-1035	ROD GUIDE SEAL
* 1	02-1034	SEAL	* 1	03-1015	16K ROD WIPER
* 1	03-1009	WIPER	* 1	04-1019	ROD WEAR RING
* 1	04-1023	WEAR RING	* 1	05-1024	BACK-UP WASHER
* 1	05-1034	BACK-UP RING	1	10-1002	GREASE FITTING
* 1	02-1030	BOLT SEAL (not shown)	1	500681	ROD GUIDE
1	500680	ROD GUIDE `	* 1	02-1030	BOLT SEAL (not shown)
1	10-1002	GREASE FITTING			,

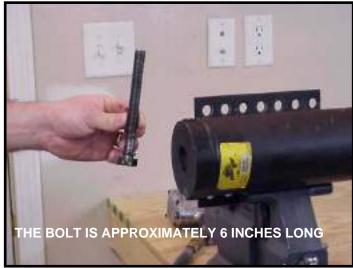
SEAL REPLACEMENT KIT PART NUMBER 800130S FOR 24000 LB. LEGS - PART NUMBERS 500386 & 500620



QTY	PART #	<u>DESCRIPTION</u>
	* included within 800157 E	Elastomer pkg
* 1	01-1011	O-RÍNĞ
* 1	02-1028	ROD GUIDE T-SEAL
* 1	03-1010	24K ROD WIPER
* 2	05-1035	BACK-UP WASHER
* 1	05-1036	BACK-UP WASHER
* 1	02-1019	THREAD SEAL (NOT PICTURED)

NOTE - (NOT SHOWN) PRESSURE WASH THE EXTERIOR OF THE LEG TO PREVENT DIRT FROM CONTAMINATING INTERIOR OF THE LEG DURING THE RE-ASSEMBY PROCESS.

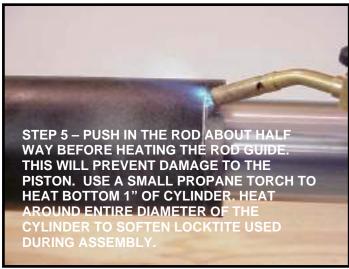




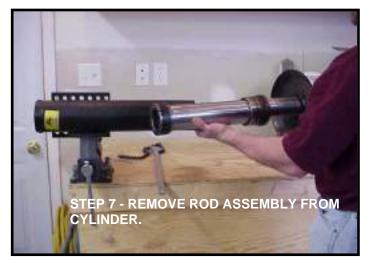
NOTE - IT MAY BE HELPFUL WHEN MOUNTING THIS JACK IN THE VISE TO ELEVATE THE FOOT END. THIS WILL PREVENT REMAINING OIL IN THE CYLINDER FROM DRAINING OUT WHEN THE ROD IS REMOVED.





















NOTE - WIRE BRUSH DOES NOT NEED TO BE PNEUMATIC. ANY WIRE BRUSH CAN BE USED.

BE CAREFUL WHEN CLEANING THE INSIDE OF THE ROD GUIDE. THE SOFTER BEARING MATERIAL CAN BE DAMAGED.





NOTE: STEP 13 SHOWS AN O-RING FOR THE BOLT. ON OLDER JACK LEGS, PART # 500385, A 1/2" BOLT SEAL WAS USED INSTEAD OF AN O-RING. NOTE THE PART #: IF THE PART # READS 500385, WITH NO LETTER SUFFIX, THE SEAL MUST BE USED INSTEAD OF THE O-RING. PLEASE CHECK THE BILL OF MATERIALS ON PAGE 6 FOR THE PART NUMBER OF THE SEAL. THE SEAL WILL BE INCLUDED IN ALL KITS WITH PART # 800137S.





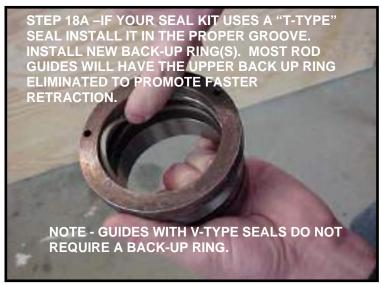




NOTE - MAKE SURE SEALS ARE INSTALLED IN THE PROPER DIRECTION. SEALS INSTALLED INCORRECTLY WILL CAUSE THE LEG TO FAIL. PLEASE NOTE THE CROSS SECTIONAL DRAWING OF THE ROD GUIDE ON PAGE 6 TO NOTE THE PROPER INSTALLATION OF THE SEALS AND RINGS.

NOTE - CHECK ORDER OF ASSEMBLY ON PAGE 6.















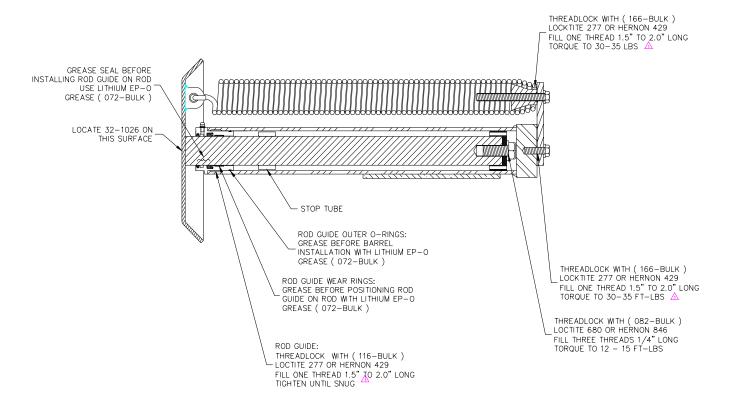




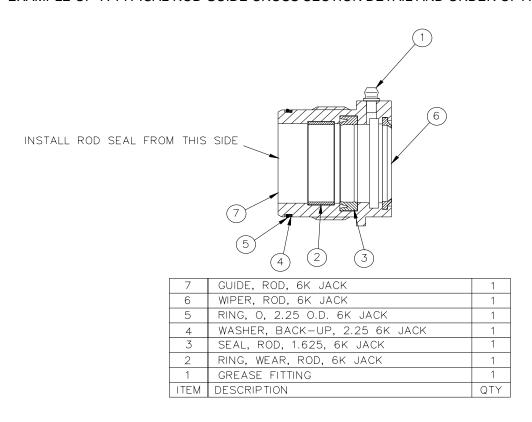


NOTE – PAINT THE RODE GUIDE ONCE THE JACK IS COMPLETELY REASSEMBLED. GREASE THE ROD GUIDE. RE-INSTALL LEG ON THE COACH AND TEST TO OPERATE. FLUSH AND REFILL THE HYDRAULIC SYSTEM WITH FRESH FLUID (DEXTRON III). CYCLE EACH LEG 2-3 TIMES FROM FULL EXTENSION TO FULL RETRACTION AFTER FILLING RESERVOIR TO PURGE AIR FROM THE SYSTEM. BE SURE TO CHECK FLUID LEVEL AFTER EACH CYCLE OF THE LEGS.

EXTERNAL SPRING LEGS



EXAMPLE OF A TYPICAL ROD GUIDE CROSS SECTION DETAIL AND ORDER OF ASSEMBLY



SEAL REPLACEMENT KIT PART NUMBER:

800129S FOR 9000 LBS. LEGS - PART NUMBERS 500082, 500082H, 500082HR, 500146, 500235, 500272

800132S FOR 6000 LBS. LEGS (2001 -PRESENT) PART NUMBERS: 500384, 500384H, 500384HR & 500482



included within 800145 Elastomer pkg

111010		ie ziastomer piis
QTY	PART #	<u>DESCRIPTION</u>
* 1	01-1071	O-RING
* 1	02-1032	U-CUP SEAL
* 1	03-1012	ROD WIPER
* 1	04-1017	ROD WEAR RING
* 1	040-1030	ROD WEAR RING
* 1	05-1027	BACK UP WASHER
1	500602	ROD GUIDE
1	10-1002	GREASE FITTING
* 1	030-1020	O-RING
* 1	050-1041	BACK UP RING

The 800129S kit will include 2 similar looking rod guide wear rings. One is thicker than the other. If you are re-sealing an "HR" series jack, use the thicker wear ring



800132S CONTENTS

- ** included within 800285 "HR" KIT
- * included with 800147 Elastomer pkg.

QTY	PART#	<u>DESCRIPTION</u>
* 1	01-1078	O-RING
* 1	02-1033	U-CUP SEAL
* 1	03-1013	ROD WIPER SEAL
* 1	04-1028	ROD WEAR RING
* 1	05-1037	BACK UP WASHER
1	10-1002	GREASE FITTING
1	500679	ROD GUIDE
1	500497	PISTON GUIDE
** 1	030-1019	O-RING
** 1	050-1040	BACK UP WASHER
** 1	01-1078	O-RING
** 1	05-1037	O-RING
** 1	500752C	ROD GUIDE
** 1	500756	SEAL
** 1	500757	ROD WIPER SEAL
** 1	500758	WEAR RING-ROD

The 800132S kit will have a separate kit within the box labeled 800285. Use components in this kit for HR style jacks.

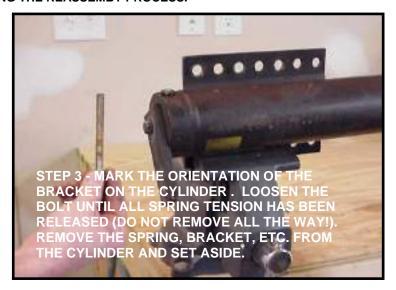


Kit numbers 800129S and 800132S include parts for two different style jacks. When re-assembling the jack you will need to determine which style you are working on. Use the following guidelines to choose the correct components: There are a few different ways to determine that you are working on an "HR" series jack.

- 1. If the jack part number ends with the letters HR.
- 2. HR jacks have a #4 JIC hose fitting. Non "HR" jacks use a #6 JIC.
- 3. If the **piston** looks like the one pictured to the left, then it is an HR series jack.

STEP 1 - (NOT SHOWN) PRESSURE WASH THE EXTERIOR OF THE LEG TO PREVENT DIRT FROM CONTAMINATING INTERIOR OF THE LEG DURING THE REASSEMBY PROCESS.





NOTE - IT MAY BE HELPFUL WHEN MOUNTING THIS JACK IN THE VISE TO ELEVATE THE FOOT END. THIS WILL PREVENT REMAINING OIL IN THE CYLINDER FROM DRAINING OUT WHEN THE ROD IS REMOVED.













STEP 7A- HR STYLE JACKS WILL USE A PISTON WHICH REQUIRES A STRAP WRENCH TO REMOVE

SKIP TO STEP 11 IF YOU ARE SUPPLIED WITH A NEW ROD GUIDE.







NOTE - MAKE SURE SEALS ARE INSTALLED IN THE PROPER DIRECTION. SEALS INSTALLED INCORRECTLY WILL CAUSE THE LEG TO FAIL. PLEASE NOTE THE CROSS SECTIONAL DRAWING OF THE ROD GUIDE ON PAGES 14 AND 15 TO NOTE THE PROPER INSTALLATION OF THE SEALS AND RINGS.





<u>NOTE</u> - WIRE BRUSH DOES NOT NEED TO BE PNEUMATIC. ANY WIRE BRUSH CAN BE USED. BE CAREFUL NOT TO DAMAGE THE SOFT BEARING MATERIAL.

NOTE - CHECK ORDER OF ASSEMBLY ON PAGE 14.











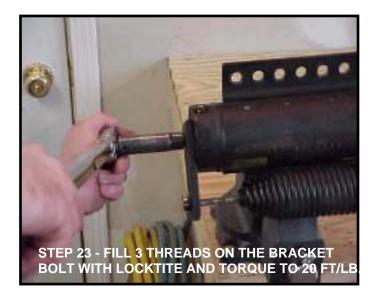








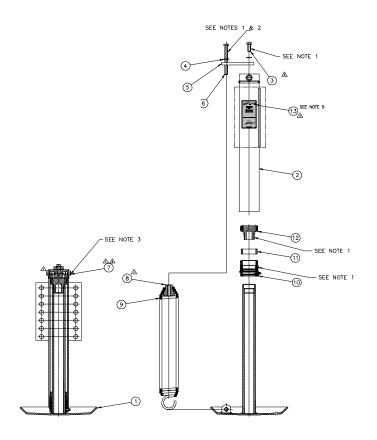




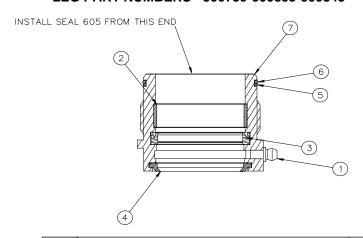


NOTE - GREASE THE ROD GUIDE AND PAINT THE ROD GUIDE AREA ONCE THE JACK HAS BEEN FULLY ASSEMBLED. RE-INSTALL LEG ON THE COACH AND TEST TO OPERATE. FLUSH AND REFILL THE HYDRAULIC SYSTEM WITH FRESH FLUID (DEXTRON III). CYCLE EACH LEG 2-3 TIMES FROM FULL EXTENSION TO FULL RETRACTION TO PURGE AIR FROM THE SYSTEM. BE SURE TO CHECK FLUID LEVEL AFTER EACH CYCLE OF THE LEGS.

POWER LEVEL HYDRAULIC LEGS

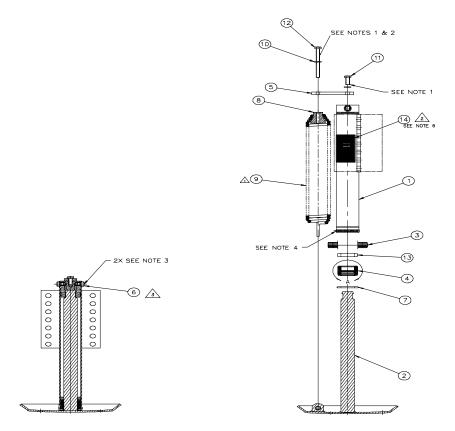


EXAMPLE OF A TYPICAL POWER GEAR POWER LEVEL HYDRAULIC LEG CROSS SECTION DETAIL LEG PART NUMBERS - 500759-500833-500843

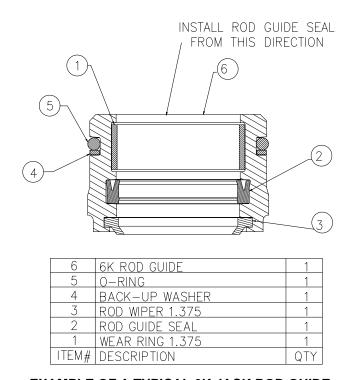


7	ROD GUIDE 1.75 ROD HOLLOW	1
6	0-RING 2.25 O.D. 9K-LW JACK	1
5	BACK-UP WASHER 2.25 9K LW JACK	1
4	WIPER, ROD, 9K-LW JACK 1.75 DIA.	1
3	SEAL 605 1.75	1
2	WEAR RING 1.75 DIA. ROD	1
1	GREASE FITTING	1
ITEM	DESCRIPTION	QTY

EXAMPLE OF A TYPICAL
ROD GUIDE CROSS SECTION DETAIL AND ORDER OF ASSEMBLY
LEG PART NUMBERS - 500759-500833-500843

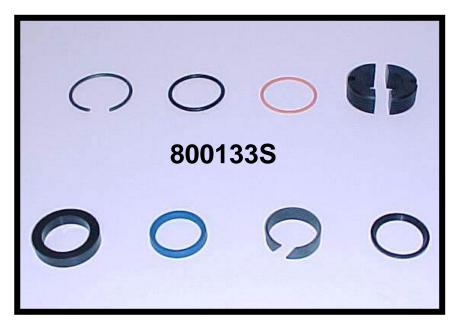


EXAMPLE OF A TYPICAL
POWER GEAR POWER LEVEL HYDRAULIC LEG CROSS SECTION DETAIL
LEG PART NUMBERS - 500730-500832-500842



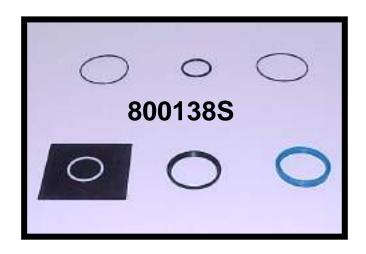
EXAMPLE OF A TYPICAL 6K JACK ROD GUIDE CROSS SECTION DETAIL AND ASSEMBLY ORDER LEG PART NUMBERS - 500730-500832-500842

<u>SEAL REPLACEMENT KIT PART NUMBER – 800133S</u> FOR 6000 LBS. POWER LEVEL LEGS – PART NUMBERS – 500730, 500832, 500842, 500933



* included within 800148 Elastomer pkg

QTY	PART#	DESCRIPTION
1	A8121049	RETAINING RING
* 1	01-1009	O-RING
* 1	05-1020	BACK-UP WASHER
2	500734	PISTON
1	500739	NYLON STOP
* 1	500746	ROD GUIDE SEAL
* 1	500747	WEAR RING
* 1	500748	ROD WIPER



* included within 800150 Elastomer pkg

QTY	PART #	DESCRIPTION
*1	01-1078	O-RING
*1	030-1019	O-RING
*1	050-1040	TEFLON BACK-UP RING
*1	05-1037	BACK-UP RING
*1	500756	ROD GUIDE SEAL
*1	500757	ROD WIPER
1	10-1002	GREASE FITTING

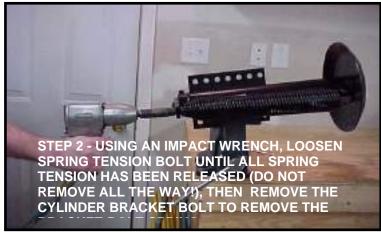


* included within 800200 Elastomer pkg

QTY	PART #	DESCRIPTION
*1	01-1071	O-RING
*1	02-1032	U-CUP SEAL
*1	03-1012	ROD WIPER
*1	030-1020	O-RING
*1	040-1029	PISTON WEAR RING
*1	040-1030	ROD WEAR RING
*1	05-1027	BACK UP WASHER
*1	050-1041	BACK UP RING
1	10-1002	GREASE FITTING

NOTE -THE FOLLOWING DISASSEMBLY PROCEDURE IS FOR <u>6K LEGS</u>. 9 AND 12K LEGS WILL USE THE SAME REBUILD PROCEDURE AS ON EXTERNAL SPRING STYLE LEGS. (NOT SHOWN) PRESSUREWASH THE EXTERIOR OF THE LEG TO PREVENT DIRT FROM CONTAMINATING INTERIOR OF THE LEG DURING THE RE-ASSEMBLY PROCESS.

























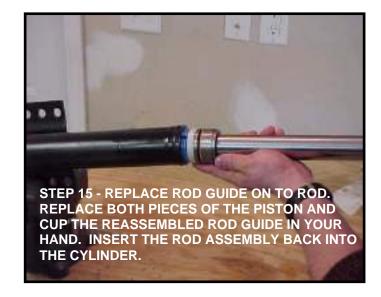
NOTE - MAKE SURE SEALS ARE INSTALLED IN THE PROPER DIRECTION. SEALS INSTALLED INCORRECTLY WILL CAUSE THE LEG TO FAIL. PLEASE NOTE THE CROSS SECTIONAL DRAWING OF THE ROD GUIDE ON PAGES 21 AND 22 TO NOTE THE PROPER INSTALLATION OF THE SEALS AND RINGS.













NOTE - MAKE SURE SEALS ARE INSTALLED IN THE PROPER DIRECTION. SEALS INSTALLED INCORRECTLY WILL CAUSE THE LEG TO FAIL. PLEASE NOTE THE CROSS SECTIONAL DRAWING OF THE ROD GUIDE ON PAGES 20 AND 21 TO NOTE THE PROPER INSTALLATION OF THE SEALS AND RINGS.







NOTE - RE-INSTALL LEG ON THE COACH AND TEST TO OPERATE. FLUSH AND REFILL THE HYDRAULIC SYSTEM WITH FRESH FLUID (DEXTRON III). CYCLE EACH LEG 2-3 TIMES AFTER FILLING RESERVOIR TO PURGE AIR FROM THE SYSTEM AND PUSH THE FLUID THROUGH THE LINES. BE SURE TO CHECK FLUID LEVEL AFTER EACH CYCLE OF THE LEGS.



1217 E. 7TH St. Mishawaka, IN 46544 (800) 334-4712