

SERVICE INSTRUCTIONS FOR SEAL REPLACEMENT OF POWER GEAR HYDRAULIC LEVELING LEGS

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.

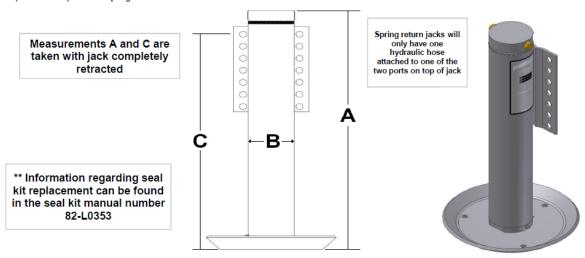
- 1/4" punch
- 1/8" punch
- hammer
- strap wrench
- Small pick or screwdriver
- Grease gun
- Large spanner wrench
- Bench vise
- 15/16" socket
- 9/16" socket
- 7 mm socket
- Impact wrench
- Torque wrench
- Clean lint free shop towels
- Locktite® 243 or equivalent
- Wire brush
- Spray cleaning solvent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

POWER GEAR JACK ASSEMBLIES

INTERNAL SPRING JACK ASSEMBLIES

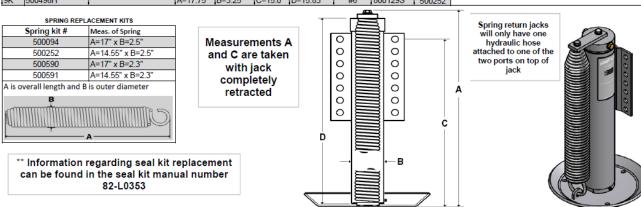
Can	Leveling jack #	* Jack obsolete use #	Dimen	sions (in in	chae)	Seal kit#	Spring #	Notes
	500386T		A=22.37			800130S **	N/A	Hotes
24K	500620		A=22.375	B=4.5	C=22.37	800130S **	N/A	has mounting pad width of 7.25
	501136		A=22.37			800131S **		4 bolt mounting pattern
16K	501137		A=22.37			800131S **		4 bolt mounting pattern
		500386T	A=22.37	B=4.5	C=20.09	800130S **	N/A	
16k	501298		A=22.37	B=4.0	C=13.25	800131S **		4 bolt mounting pattern/has 8" Shoe instead of the typical 10'
16k	501299		A=22.37	B=4.0	C=18.94	800131S **	N/A	4 bolt mounting pattern/has 8" Shoe instead of the typical 10'
12K	500385TH		A=22.3			800137S **		
12K	500385 *	500385TH	A=22.25	B=3.625	C=20.11	800137S **	N/A	
16K	500070 *	500070TH	A=22.25	B=4.0	C=21.42	800131S **	N/A	
16K	500070TH		A=22.37	B=4.0	C=20.09	800131S **	N/A	
16K	500145		A=22.25	B=4.0	C=21.42	800131S **	N/A	

N/A (Not Available) - Internal springs are not a service item

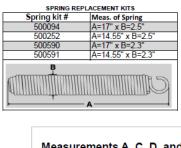


EXTERNAL SPRING JACK ASSEMBLIES

I_										
Cap.	Leveling jack #	*Jack obsolete use #		Dimension:			Port Size		Spring #	Notes
6K		501022	A=21.25	B=2.625	C=17.61	D=19.08	#6	No Kit	500590	501022 kit contains qty 1 500384HR jack and qty 2 hose adapter fittings
6K	500384H*	501022	A=21.25	B=2.625	C=17.61	D=19.08	#6	800132S **	500590	501022 kit contains qty 1 500384HR jack and qty 2 hose adapter fittings
6K	500598*	501022	A=21.25	B=2.625	C=18.17	D=19.08	#6	800132S **	500590	501022 kit contains qty 1 500384HR jack and qty 2 hose adapter fittings
6K	500384HR		A=20.85	B=2.625	C=17.61	D=19.59		800132S **	500590	
9K	500082*	500146	A=20.75	B=3.25	C=17.38	D=18.71	#6	800129S **	500094	500146 kit contains qty 1 500082HR jack and qty 2 hose adapter fitting
9K	500082H*		A=20.75	B=3.25	C=17.38	D=18.71	#6	800129S **	500094	
9K	500082HR		A=20.75	B=3.25	C=17.38	D=19.21	#4	800129S **	500094	
9K	500146		A=20.75	B=3.25	C=17.38	D=19.21	#4	800129S **	500094	500146 kit contains qty 1 500082HR jack and qty 2 hose adapter fitting
9K	500272*	obsolete	A=20.75	B=3.25	C=17.82	D=18.83	#6	800129S **	500094	
9K	500759		A=20.40	B=2.6	C=17.6	D=19.08	#4	800138S **	500094	
12K	501315		A=20.33	B=3.25	C=17.19	D=19.33	#6	800199S **	500094	
12K	500800		A=19.2	B=3.25	C=16.75	D=19.21	#4	800199S **	500094	
9K	500235*	500235H	A=18.25	B=3.25	C=17.38	D=15.83	#6	800129S **	500252	
9K	500235H		A=18.19	B=3.25	C=17.38	D=15.83	#6	800129S **	500252	
6K	500600*	500482H	A=18.0	B=2.625	C=15.63	D=14.73	#6	800132S **	500591	Flat shoe
6K	500482*	500482H	A=18.0	B=2.625	C=15.38	D=14.73	#6	800132S **	500591	
6K	500482H		A=18.0	B=2.625	C=15.38	D=14.73	#6	800132S **	500591	
9K	500498	500498H	A=17.75	B=3.25	C=15.0	D=15.83	#6	800129S **	500252	
9K	500498H		A=17.75	B=3.25	C=15.0	D=15.83	#6	800129S **	500252	

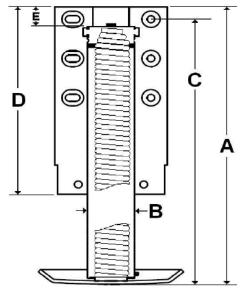


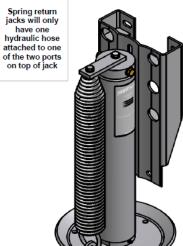
POWER LEVEL (EXTERNAL SPRING) JACK ASSEMBLIES | Seal kit # | Spring # Notes | 8001385 ** 500094 | 8001995 ** 500094 | 8001935 ** 500094 | No replacement is available | 8001385 ** 5000591 | Cap. Leveling jack # 9K 500932 12K 501005 Dimensions (in inches) 2.6 C=24.4 D=14.3 3.25 C=23.26 D=16.0 *Jack obsolete use # E=3.4 E=5.0 C=22.3 D=8.0 C=22.2 D=14.3 C=21.70 D=14.31 C=16.81 D=12.3 A=23.25 500832 B=2 25 50032 500833 501106 501173 A=23.25 B=2.25 A=23.15 B=2.6 A=22.20 B=3.25 A=21.44 B=2.25 E=3.0 800138S ** 500094 800138S ** 500094 Not Avalable 500094 800133S ** 500591 | A=21.44 | B=2.25 |
A=21.15	B=2.6
A=20.4	B=2.25
A=20.21	B=19.27
A=19.75	B=2.25
A=19.15	B=2.25
A=18.94	B=2.25



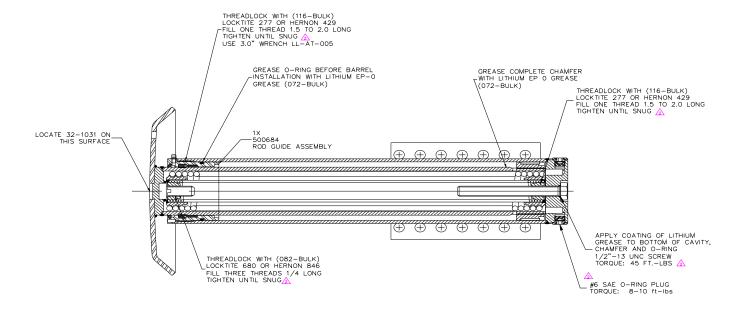
Measurements A, C, D, and E are taken with jack completely retracted

** Information regarding seal kit replacement can be found in the seal kit manual number 82-L0353

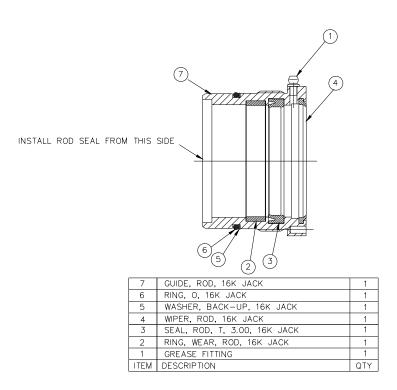




INTERNAL SPRING LEGS



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

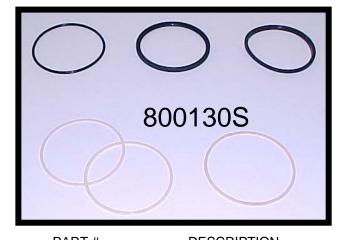
800131S FOR 16000 LB. LEGS - PART NUMBERS 500070 & 500145





QTY	PART#	DESCRIPTION	QTY	PART#	DESCRIPTION			
	* included within 800)149 Elastomer pkg	* in	 included within 800146 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.

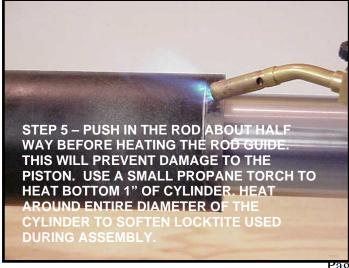




NOTE - IT MAY BE HELPFUL WHEN MOUNTING THIS JACK IN THE VISE TO ELEVATE THE FOOT END. THIS WILL PREVENT REMAINING OIL IN THE CYLINDER FROM DRAINING OUT WHEN THE ROD IS REMOVED.





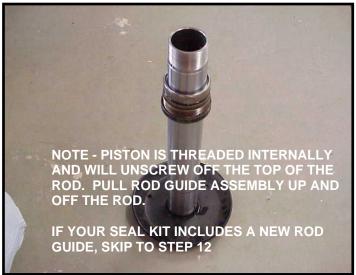




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NOTE - WIRE BRUSH DOES NOT NEED TO BE PNEUMATIC. ANY WIRE BRUSH CAN BE USED.

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.





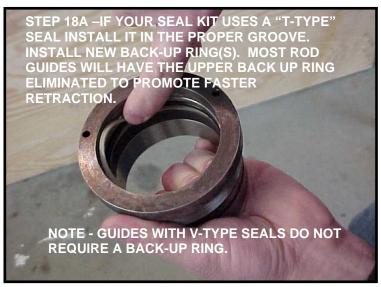


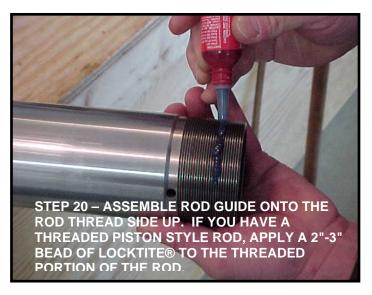


 $\frac{\text{NOTE}}{\text{Fall.}}$ - Make sure seals are installed in the proper direction. Seals installed incorrectly will cause the leg to fail. Please note the cross sectional drawing of the rod guide on page 6 to note the proper installation of the seals and rings. Page~10~of~25

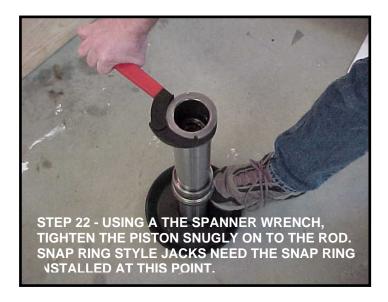
NOTE - CHECK ORDER OF ASSEMBLY ON PAGE 6.















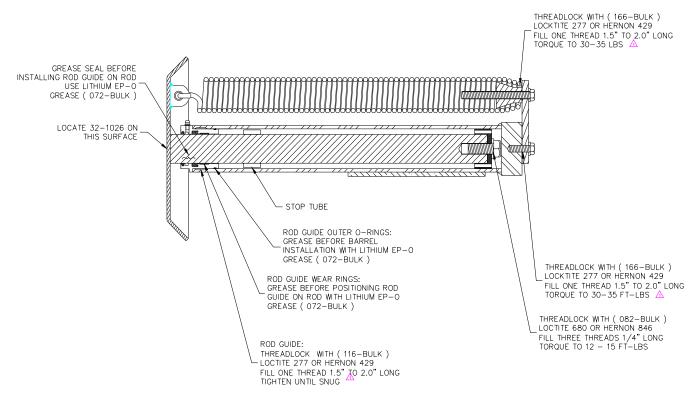




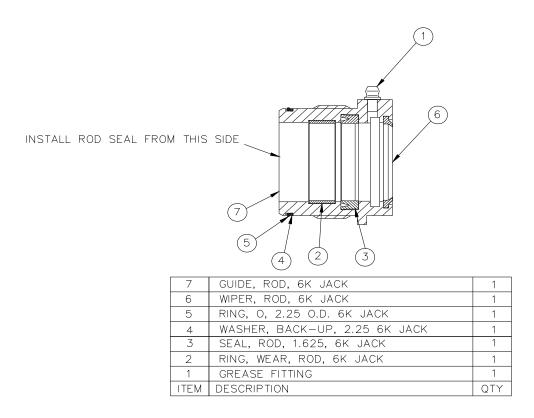


NOTE – PAINT THE RODE GUIDE ONCE THE JACK IS COMPLETELY REASSEMBLED. GREASE THE ROD GUIDE. RE-INSTALL LEG ON THE COACH AND TEST TO OPERATE. FLUSH AND REFILL THE HYDRAULIC SYSTEM WITH FRESH FLUID (DEXTRON III). CYCLE EACH LEG 2-3 TIMES FROM FULL EXTENSION TO FULL RETRACTION AFTER FILLING RESERVOIR TO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

EXTERNAL SPRING LEGS



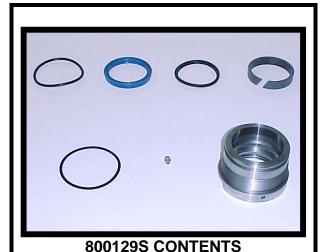
EXAMPLE OF A TYPICAL ROD GUIDE CROSS SECTION DETAIL AND ORDER OF ASSEMBLY



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

PART#	DESCRIPTION
01-1071	O-RING
02-1032	U-CUP SEAL
03-1012	ROD WIPER
04-1017	ROD WEAR RING
040-1030	ROD WEAR RING
05-1027	BACK UP WASHER
500602	ROD GUIDE
10-1002	GREASE FITTING
030-1020	O-RING
050-1041	BACK UP RING
	01-1071 02-1032 03-1012 04-1017 040-1030 05-1027 500602 10-1002 030-1020

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.

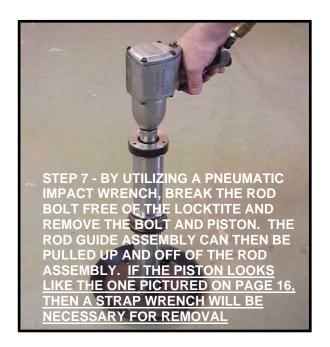








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STEP 7A- HR STYLE JACKS WILL USE A PISTON WHICH REQUIRES A STRAP WRENCH TO REMOVE

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







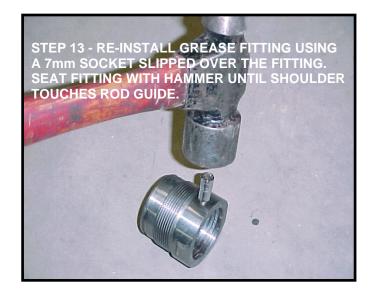
<u>NOTE</u> - MAKE SURE SEALS ARE INSTALLED IN THE PROPER DIRECTION. SEALS INSTALLED INCORRECTLY WILL CAUSE THE LEG TO FAIL. PLEASE NOTE THE CROSS SECTIONAL DRAWING OF THE ROD GUIDE ON PAGES 14 AND 15 TO NOTE THE PROPER INSTALLATION OF THE SEALS AND RINGS.





<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.



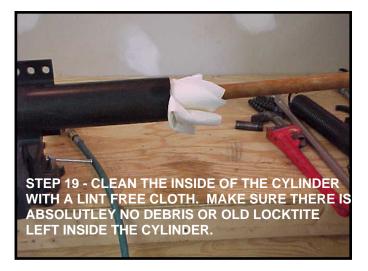








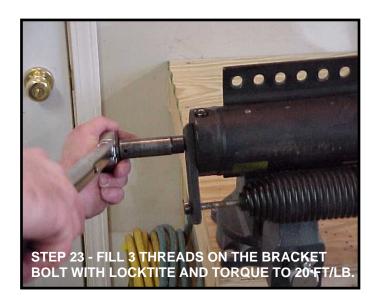








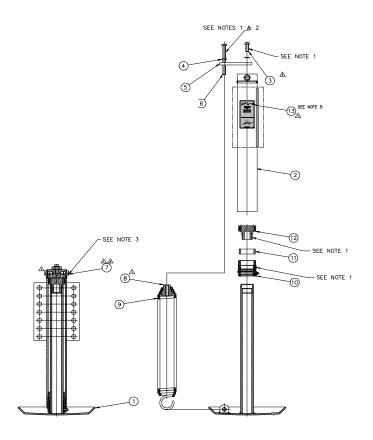




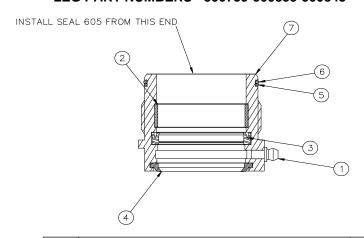


NOTE - GREASE THE ROD GUIDE AND PAINT THE ROD GUIDE AREA ONCE THE JACK HAS BEEN FULLY ASSEMBLED. RE-INSTALL LEG ON THE COACH AND TEST TO OPERATE. FLUSH AND REFILL THE HYDRAULIC SYSTEM WITH FRESH FLUID (DEXTRON III). CYCLE EACH LEG 2-3 TIMES FROM FULL EXTENSION TO FULL RETRACTION TO PURGE AIR FROM THE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

POWER LEVEL HYDRAULIC LEGS

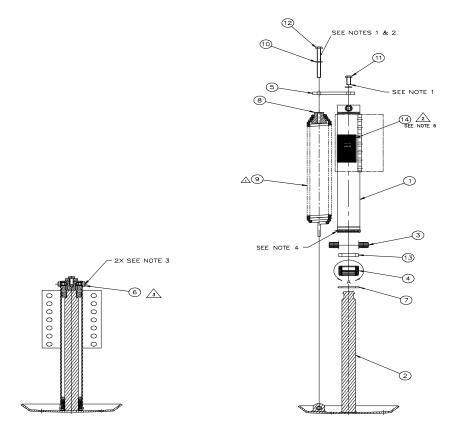


EXAMPLE OF A TYPICAL POWER GEAR POWER LEVEL HYDRAULIC LEG CROSS SECTION DETAIL LEG PART NUMBERS - 500759-500833-500843

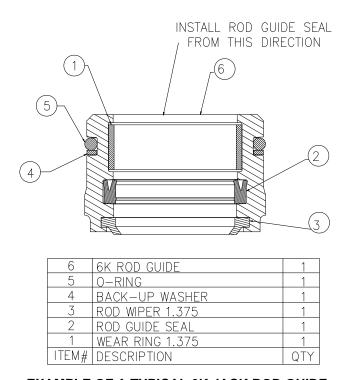


7	ROD GUIDE 1.75 ROD HOLLOW	1
6	0-RING 2.25 O.D. 9K-LW JACK	1
5	BACK-UP WASHER 2.25 9K LW JACK	1
4	WIPER, ROD, 9K-LW JACK 1.75 DIA.	1
3	SEAL 605 1.75	1
2	WEAR RING 1.75 DIA. ROD	1
1	GREASE FITTING	1
ITEM	DESCRIPTION	QTY

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

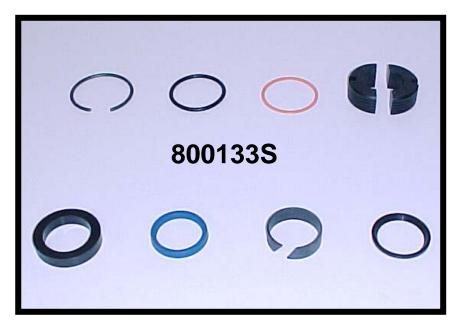


EXAMPLE OF A TYPICAL
POWER GEAR POWER LEVEL HYDRAULIC LEG CROSS SECTION DETAIL
LEG PART NUMBERS - 500730-500832-500842



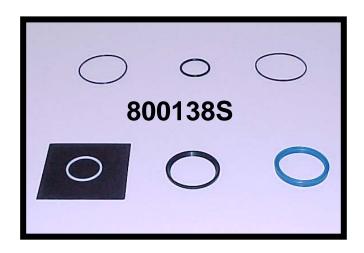
EXAMPLE OF A TYPICAL 6K JACK ROD GUIDE CROSS SECTION DETAIL AND ASSEMBLY ORDER LEG PART NUMBERS - 500730-500832-500842

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



* 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	pka

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

11101	included within 000200 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.











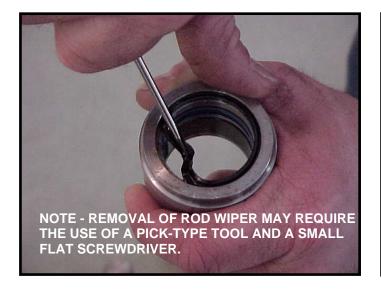






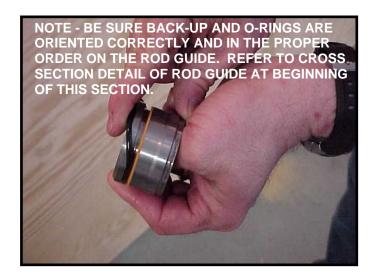








NOTE - MAKE SURE SEALS ARE INSTALLED IN THE PROPER DIRECTION. SEALS INSTALLED INCORRECTLY WILL CAUSE THE LEG TO FAIL. PLEASE NOTE THE CROSS SECTIONAL DRAWING OF THE ROD GUIDE ON PAGES 21 AND 22 TO NOTE THE PROPER INSTALLATION OF THE SEALS AND RINGS.













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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.