

WILSON HYDRAULIC R. G.  
POB 160  
LEEDS, NEW YORK 12451  
518-622-2373

SET-UP INSTRUCTIONS FOR 10 TON BENCH PRESS

1. INSPECT FOR DAMAGED OR LOST COMPONENTS. THE FOLLOWING ARE INCLUDED IN THE SHIPPING BOX:
  - (1) 10 TON BENCH PRESS
  - (1) ACCESSORY BOX CONTAINING (1) GAUGE, (1) FLAT RAM NOSE, (1) "U" BLOCK, AND (2) "V" BLOCKS
2. CAREFULLY CUT AWAY SHIPPING CARTON, THEN REMOVE ACCESSORY BOX AND STAND PRESS ON ITS BASE.
3. REMOVE THE OIL LEVEL PLUG AT THE REAR OF THE OIL CHAMBER (INSIDE PRESS FRAME) AND FILL THE OIL RESERVOIR THROUGH THE FILLER PORT ON TOP OF THE CYLINDER WITH CLEAN LIGHT WEIGHT HYDRAULIC FLUID. FILL UNTIL THE OIL LEVEL REACHES BOTTOM OF THE OIL LEVEL OPENING AT THE REAR OF THE OIL CHAMBER. REPLACE THE OIL LEVEL OPENING PLUG.
4. INSTALL THE RAM NOSE ON THE END OF THE RAM BY TAPPING IT IN PLACE.
5. REMOVE THE PIPE PLUG FROM THE GAUGE PORT AND INSTALL THE PRESSURE GAUGE. APPLY A PIPE SEALANT TO THE THREADS, AND USE A WRENCH TO TIGHTEN BY TURNING THE GAUGE STEM. DO NOT ATTEMPT TO TURN THE GAUGE USING THE GAUGE BODY, THIS WILL DAMAGE THE UNIT.
6. MOUNT THE PRESS SECURELY TO THE BENCH WHERE IT WILL BE USED.
7. PLACE U-BLOCK AND V-BLOCKS IN PLACE AS REQUIRED.
8. THE PRESS IS NOW READY TO OPERATE.

NOTE: DURING THE INITIAL BREAK-IN OF THE PRESS, THE SPRING MAY NOT FULLY RETURN THE RAM DUE TO THE TIGHTNESS OF THE SEALS AND COMPONENTS. THE RAM CAN BE FULLY RETRACTED BY LIFTING THE RAM WHILE HOLDING DOWN ON THE RELEASE LEVER.  
PERIODICALLY APPLY LUBRICANT TO THE RAM DURING BREAK-IN TO AVOID FORMATION OF RUST AS SYSTEM OIL DOES NOT COME INTO CONTACT WITH THE RAM UNLESS THE CYLINDER SEALS LEAK. A COATING OF GREASE WAS APPLIED TO THE RAM DURING INITIAL TESTING, AND APPEARANCE OF THIS GREASE ON THE RAM IS TO BE EXPECTED.

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REASONS PRESS MAY NOT OPERATE EFFICIENTLY

1. PUMPING ACTION "SPONGY" - AIR POCKET IN CYLINDER HEAD. LOOSEN PLUG, ITEM 1 ON ATTACHED CYLINDER DRAWING, AND, PUMP GENTLY UNTIL AIR ESCAPES AND OIL STARTS TO BLEED AROUND THE THREADS. RE-TIGHTEN THE PLUG.
2. RAM DOES NOT TRAVEL FULL LENGTH OF SIX-INCH (6") STROKE. CHECK OIL LEVEL IN RESERVOIR. REFILL IF NECESSARY.
3. RAM REFUSES TO RETURN:
  - A. CHECK RAM FOR POSSIBLE DAMAGE. SMOOTH ANY DAMAGED RAM AREA USING A FINE FILE OR HONING STONE.
  - B. BROKEN RETURN SPRING. REMOVE CYLINDER NOSE AND CHECK SPRING. REPLACE IF BROKEN.
4. LEAKING AROUND RAM OR PUMP. DISMANTLE LEAKING ITEM AND CHECK FOR SCORED SHAFTS AND/OR WORN PACKINGS. REPLACE ANY WORN ITEMS WITH NEW PARTS AVAILABLE FROM WILSON HYDRAULIC REPAIR GROUP, PARTS DEPARTMENT.

NOTE: IF IT EVER BECOMES NECESSARY TO RETURN THE "REMOVEABLE CYLINDER" TO WILSON HYDRAULIC REPAIR GROUP FOR SERVICE REPAIR, DRAIN THE OIL FROM THE TANK AND SHIP THE WHOLE CYLINDER ASSEMBLY.

REMOVAL OF CYLINDER ASSEMBLY

DISCONNECT PUMP LINKS, PART NUMBER 137BH-4. UNSCREW LOWER CYLINDER GAP, PART NUMBER 137BH-10A AND LOCKNUT, PART NUMBER 137BH-70 REMOVING CORRESPONDING PARTS. THE CYLINDER ASSEMBLY SHOULD NOW LIFT STRAIGHT UP AND OUT OF THE PRESS FRAME.

WITH THE PUMP PLUNGER FACING UP, GRIP THE CYLINDER HEAD HORIZONTALLY SECURELY IN VICE JAWS. GRIP THE CYLINDER BARREL APPROXIMATELY FOUR-INCHES (4") FROM THE LOWER END WITH A PIPE WRENCH. TURN COUNTER-CLOCKWISE AND REMOVE CAREFULLY TO AVOID DAMAGE TO THE THREADS.

REMOVE THE OIL RESERVOIR BY SLIPPING IT OFF THE "O" RING ON THE SHOULDER OF THE CYLINDER HEAD. THIS WILL EXPOSE THE POPPET BY-PASS VALVE AND BALL, PART NUMBERS 137BH-9 AND 137BH-27, RESPECTIVELY. THE BALL VALVE SEAT'S CAN BE RE-SEATED BY TAPPING THEM LIGHTLY WITH A HAMMER USING A BRASS DRIFT TO AVOID DAMAGE TO THE BALL. THE POPPET VALVE CAN BE RE-SEATED BY USING A FINE LAPPING COMPOUND.

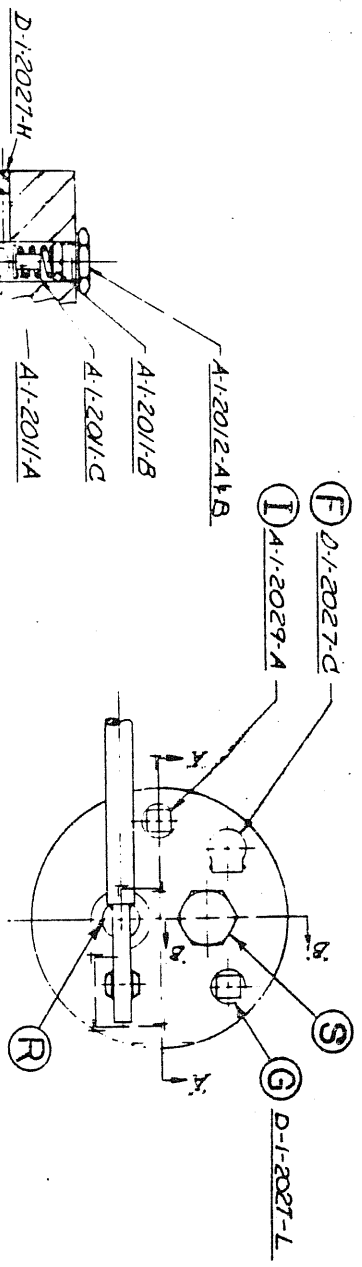
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TO RE-ASSEMBLE, PLACE THE "O" RING SEAL IN THE GROOVE IN THE  
CYLINDER HEAD. CAREFULLY SLIP THE RESERVOIR OVER THE "O" RING AND  
SLIDE THE CYLINDER THROUGH THE LOWER END OF THE RESERVOIR. TIGHTEN  
THE BARREL USING MODERATE PRESSURE ON THE PIPE WRENCH.

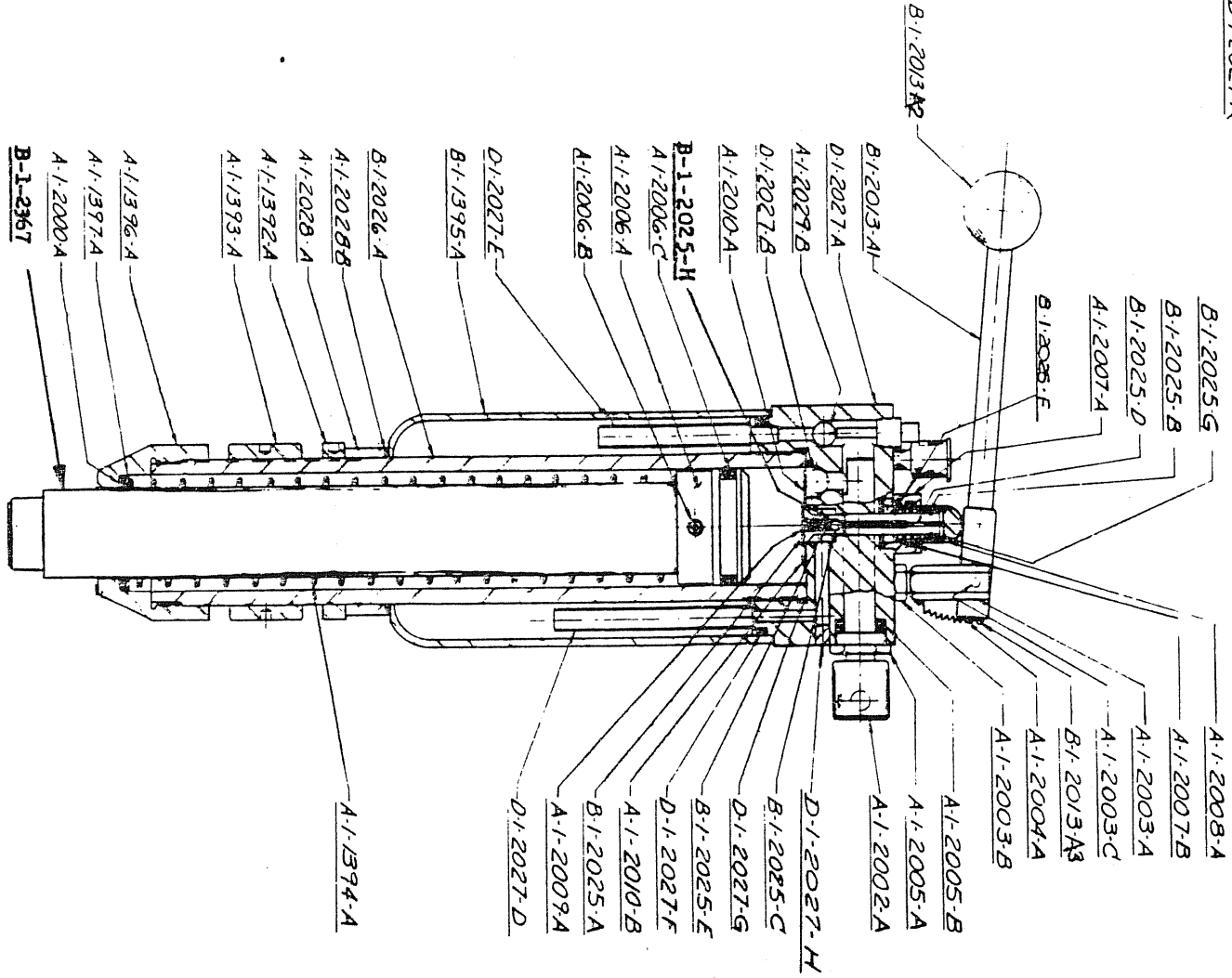
CHECK FOR LEAKS.

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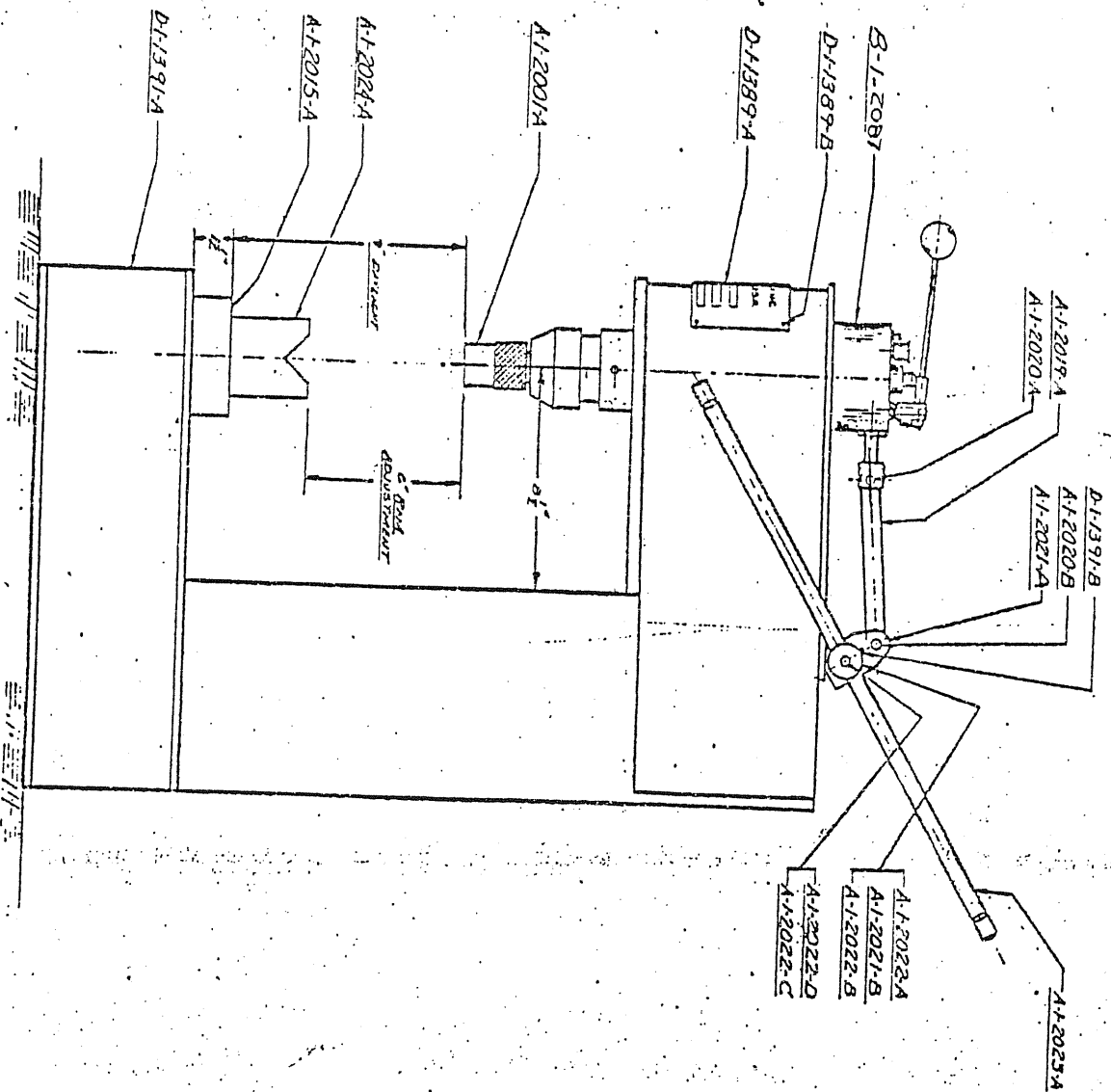


SECTION B-B



A-1-2001  
 A-B1-C





WILSON HYD REPAIR  
 GROUP P. O. BOX 180  
 LEEDS N. Y. 12451

A-1-2271

WILSON HYDRAULIC REPAIR GROUP

(WHRG)

P. O. BOX 160

LEEDS, NEW YORK 12451

TEL: 518/622-2373

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PARTS LISTING FOR N. R. WILSON MODEL 137BH-1 10 TON HYDRAULIC BENCH  
ARBOR PRESS

<u>DRAWING PART NO.</u>	<u>137BH P/N</u>	<u>DESCRIPTION</u>
B-1-2367	137BH-F9R	STD. RAM FOR 137BH-1
A-1-1392-A	137BH-68	LOCKNUT
A-1-1393-A	137BH-70	LOCKNUT
A-1-1394-A	137BH-50	RAM RETURN SPRING
B-1-1395-A	137BH-03	OIL RESERVOIR
A-1-1396-A	137BH-10A	CAP FOR LOWER CYLINDER
A-1-1397-A	137BH-52	RAM NOSE WASHER
A-1-2000-A	137BH-53	RAM NOSE PACKING (FELT)
A-1-2002-A	137BH-35	PUMP PLUNGER
A-1-2003-A	137BH-08	STUD FOR VALVE LEVER
A-1-2003-B	137BH-08A	HEX JAM NUT
A-1-2003-C	137BH-17	REL. LEVER HINGE PIN
A-1-2004-A	137BH-15	RELIEF VALVE HANDLE SPRING
A-1-2005-A	137BH-12	PUMP GLAND NUT
A-1-2005-B	137RH-33	"G-7" RING
A-1-2006-A	137RH-20	PISTON
A-1-2006-B	137RH-28	SET SCREW
A-1-2006-C	137BH-45	"G-7" RING
A-1-2007-A	137RH-14	GLAND FOR RELIEF VALVE
A-1-2007-B	137BH-32	"O" RING
A-1-2008-A	137BH-05	BY-PASS VALVE CAP
A-1-2009-A	137BH-43	CRACKER VALVE SPRING RET.
A-1-2010-A	137RH-13	LEAF SPRING, EXHAUST VALVE
A-1-2010-B	137BH-42	CAP SCREWS
A-1-2011-A	137BH-06	PLUNGER
A-1-2011-B	137BH-07A	PLUG FOR SAFETY VALVE
A-1-2011-C	137BH-24	SPRING FOR SAFETY VALVE
A-1-2012-A	137BH-69	PLUG
A-1-2012-B	137BH-69A	GASKET, MC CORP
B-1-2013-A1	137BH-11	REL. VALVE HANDLE
B-1-2013-B	137BH-21	REL. LEVER KNOB
B-1-2013-A3		DRIVE SCREWS
B-1-2025-A	137RH-09	BY-PASS VALVE
B-1-2025-B	137BH-29	REL. VALVE STEM RET. RING
B-1-2025-C	137BH-38	BALL
B-1-2025-D	137RH-18	PUSH ROD PIN (CRACKER V.)
B-1-2025-E	137BH-39	SPRING FOR CRACKER VALVE
	(37R-18)	*CAN BE USED AS SUBSTITUTE

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PARTS LIST FOR K. R. WILSON MODEL 137BH-1 10 TON HYDRAULIC BENCH  
 ARBOR PRESS . . . . . (CONTINUED)

B-1-2025-F	137BH-31	SPRING FOR RELEASE VALVE
B-1-2025-G	137BH-30	REL. VALVE CAP SPRING
B-1-2025-H		CRACKER VALVE SPRG. BUTTON
B-1-2026-A	137BH-02A	CYLINDER BARREL
D-1-2027-A	137BH-01	CYLINDER HEAD
D-1-2027-B	137BH-27	EXHAUST VALVE BALL
D-1-2027-C	137BH-22	FILLER CAP (GITS)
D-1-2027-D	137BH-46	TUBE (RETURN)
D-1-2027-E	137BH-47	TUBE (INTAKE)
D-1-2027-F	137BH-41	"O" RING
D-1-2027-G	137BH-40	"O" RING
D-1-2027-H		PLUG
D-1-2027-K	137BH-25	SAFETY BY-PASS BALL
D-1-2027-J		PLUG
D-1-2027-L	137BH-22A	PIPE PLUG, INTAKE CHAMBER
A-1-2028-A	137BH-49	RETAINING PLUG
A-1-2028-B	137BH-48	"O" RING
A-1-2029-A	137BH-23	VALVE RETAINER
A-1-2029-B	137BH-26	BALL
D-1-1389-A		NAME PLATE
D-1-1389-B		DRIVE SCREWS
B-1-2087		CYLINDER PUMP ASSEMBLY
D-1-1391-A		"G" FRAME WELDMENT
D-1-1391-B		LUBRICATION FITTING
D-1-1391-C		SET SCREW
A-1-2001-A	137BH-19(A2A)	RAM NOSE (FLAT)
A-1-2001-B		BALL
A-1-2001-C		SPRING
A-1-2002-A	137BH-35	PUMP PLUNGER
A-1-2015-A	137BH-65	SLOTTED TABLE PLATE
A-1-2019-A	137BH-04	PUMP LINKS
A-1-2020-A	137BH-36	PINS (LINK)
A-1-2020-B	137BH-37	COTTER PINS
A-1-2021-A		CRANK FOR PUMP SHAFT
A-1-2021-B		SET SCREW
A-1-2022-A	137BH-60	SHAFT FOR PUMP HANDLE
A-1-2022-B	137BH-62	WOODRUFF KEY
A-1-2022-C	137BH-58A	SPRING
A-1-2022-D	137BH-57A	BALL
A-1-2023-A	137BH-64	PUMP HANDLE
A-1-2024-A	137BH-199	"V" BLOCKS
	137BH-200	GAUGE ADAPTER
		HYD. PRESSURE GAUGE

NOTE: FOR COMPLETE SEAL KIT ASSEMBLY ORDER PART NUMBER BELOW;  
 137BH-100 COMPLETE SEAL KIT

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MODEL: 137BH-1

