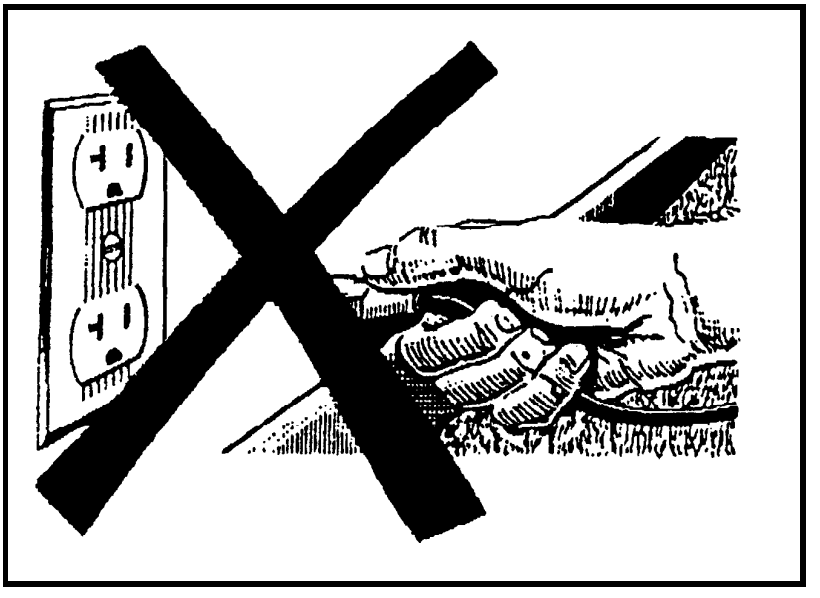
WB60
OPERATORS MANUAL

DO NOT PLUG IN CRIMPER UNTIL AFTER READING INSTRUCTIONS COMPLETELY.



INSTALLATION INSTRUCTIONS

WARNING - SAFETY NOTICE

- READ INSTRUCTIONS BEFORE PLUGGING IN CRIMPER.
- CHASSIS MUST BE PROPERLY GROUNDED TO PREVENT POSSIBLE SHOCK HAZARD.
- . DO NOT USE A PLUMBING LINE AS A GROUND. ALWAYS PROVIDE AN ELECTRICAL GROUND WHEN AN ADAPTER IS USED.
- DO NOT OVERLOAD CIRCUIT BY PLUGGING IN TOO MANY DEVICES.
- DO NOT PUSH EQUIPMENT AGAINST CORDS OR WALL OUTLETS.
- . ALWAYS FOLLOW THF NATIONAL AND LOCAL ELECTRICAL CODES.

FAILURE TO COMPLY RISKS PERSONAL INJURY,
EQUIPMENT DAMAGE, FIRE, OR SHOCK HAZARD.

ELECTRICAL REQUIREMENTS: 120 VOLTS AC, 60HZ., 20 AMP SLOW BLOW, SINGLE PHASE.

WB60 CRIMPER INSTRUCTION

SPECIFICATION

Physical Size: Dimensions
30" Deep x 37-I/2" Wide x 31" High
Weight – Approximately 514 pounds

Dies: Ten Sets .520, .670, .830, 1.100, 1.320, 1.500, 1.730, 1.920, 2.300, 2.800

WB60 Style Dies: 2.300, 2.800

Available as an option are die sizes .350 (NP60 Style) and 2.140, 2.620 (WB60 Style) and special configurations on request.

Pump: Maximum psi - 10,000 psi
Delivery - 600 Cubic Inches at 200 psi
- 60 Cubic Inches at 10,000 psi
Type Oil - Hydraulic Fluid
IS0 68 for Hot Weather
IS0 46 for Normal Conditions
IS0 32 for Cold Weather

Crimper: Output Force - 60 Tons
Stroke - 6"
Cylinder Effective Area - 12.56 Square Inches

Electrical Requirements:
115 Volt AC: Single Phase 60Hz;
20 Amp Slow Blow Service
(WBGOG) Requires 230V, 50 Hz, 10 Service)

Lubrication: Molybdenum Disulfate Lubricant (P/N E-Z Crimp M) on die wearing surfaocs. Only lubrication required. Never Seize/30W oil not supplied

INSTALLATION

Unpack the machine and verify you have received the following items.

- WB60 Crimper
- Ten sets of dies marked as follows:

.520 - Red	1.500 - Brown
.670 - Yellow	1.730 - Silver
.830 - Blue	1.920 - Purple
1.100 - Green	2.300 - Fluorescent Pink
1.320 - Black	2.800 - White

- .750 Steel Calibration Pin
- Pusher Plate – Large I.D. (yellowDecal) and small I.D. (Blue Decal).
- Die lubricant (P/N E-Z Crimp M)
- WB60 Instruction Book
- WB60 Crimp Specifications

Location of WB6O Crimper

The Crimper should be located in a well-lighted area on a sturdy bench or work table that is 28 to 34 inches high. Place unit as close as possible to 115 Volt AC outlet. (Avoid using extension cords). The unit must set on a flat surface. (Base plate is not designed to bridge between uprights.)

Set-Up

The WB60 Crimper is fully assembled, calibrated and ready to use. By following these few steps you will be ready to crimp.

- Check the oil in the pump reservoir to insure it is 1-1/2" below reservoir cover. Fill if necessary with recommended oil only.
- Open stem vent on the cap of the reservoir.
- Plug unit and light into 115 Volt AC outlet; 20 Amp Slow Blow Service.

CALIBRATION CHECK

The unit is calibrated prior to shipment but calibration should be checked to be certain the crimper is operating properly.

- Lubricate cone base with E-Z Crimp M.
- Place .670 (Yellow) die set in cone base
- Place .750 +/- .001" steel pin in die set
- Position blue pusher plate on die
- Set thumb wheel setting to 82
- Depress "on" power switch.
- Press "Start" button and release.
- Pusher will start down and engage the pusher plate
- Pressure will begin to build.
- Pump automatically shuts off at 1 second.
- Should more than 1.3 seconds elapse until pump shuts down, the unit needs recalabration and should be manually shut down by depressing the stop button
- Should less than .90 seconds elapse, until pump shuts down - the unit needs recalabration.

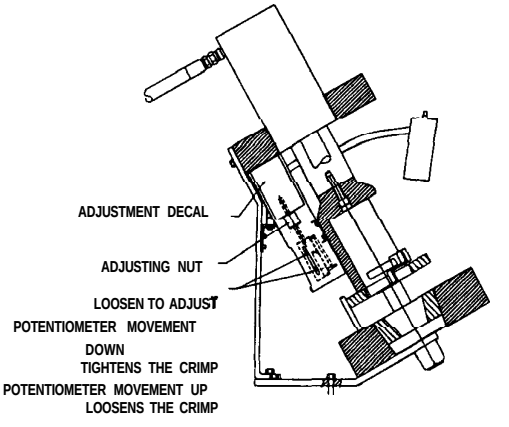
RECALIBRATION

If the pump shut off exceeds 1 second –

- Loosen the two socket head cap screws on the side of the actuator guide.
- Follow the directions on the decal.
- One complete revolution of the thumb wheel will move the potentiometer .056 of an inch.
- If the crimp is too loose, the potentiometer needs to be lowered. Turn the thumb wheel in the counter-clockwise direction.
- If the crimp is too tight, the potentiometer needs to be rasied. Turn the thumb wheel in the clockwise direction.
- Tighten the socket head cap screws.

Test Crimp.

When calibration check is correct, proceed to crimp hose assembly.



HOSE PREPARATION

- Select hose and coupling to be assembled.
- Cut hose to proper length. The hose cut length is determined by subtracting the cut-off factor for each coupling from the overall length of the assembly. For these factors, see coupling information in the Parker catalog.
- Fasten the coupling securely in a vise with jaws on the hex nut. Push the hose onto the stem with a clockwise twisting motion until the hose bottoms out in the collar. To insure that the hose is bottomed in collar, mark the insertion depth on the hose before inserting it into the coupling. Hose assembly lubricant. (HAL-16) should be brushed onto the coupling stem and on the inside of the hose before insertion. Your hose and coupling are now ready to be crimped.

CRIMPING

WARM UP CRIMPER 10 MINUTES BEFORE CRIMPING.

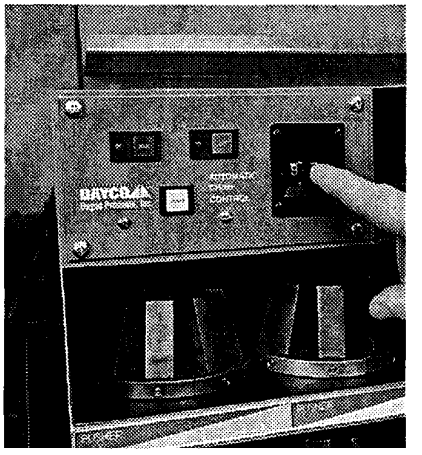
HOSE SIZE THROUGH 1-1/4":

The WB60 is unique in the way that two different die styles may be used. The smaller dies for hose sizes 3/16" through 1-1/4" are the same as what are used for the NP60.

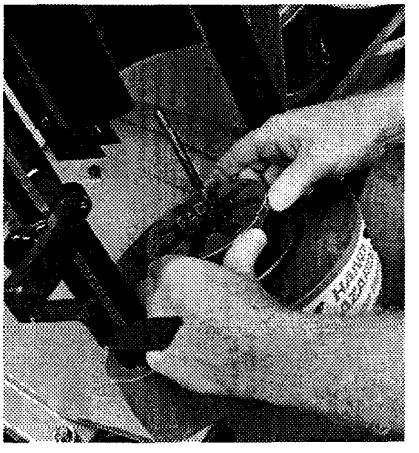
This requires the cone insert to be placed into the large cone of the cone flange. It is important to lubricate the O.D. of this cone with a 30 weight machine oil or a never seize type product. It is recommended that the cone never be placed in the cone flange that has high pressure grease still on the surface of' the cone. The high pressure lacks in rust preventative and in our tests, some greases actually increased the formation of rust between the flange the large cone I.D. and the small cone O.D. This unfortunately increased the amount of force required to remove the small cone when needed.

- Lubricate cone base with E-Z Crimp M.

- Select the proper crimp setting from the crimp specifications and enter this number on the thumb wheel of the Automatic Crimp Control.



- Place the die set in cone base.



- Insert the hose assembly into die set with c:onn tor end up.

One-Piece Coupling with Crimp Location Markings

Several of the couplings are provided with a knurl around the circumference of the ferrule. This knurl can be used for setting the length of the crimp on the coupling.

Looking down from the top of the die set, line up the knurl with the top of the die.

One-Piece Coupling without Crimp Location Markings

Select the crimp length required from the Parker Crimp Specification Guide and mark the coupling accordingly with a marking pen, pencil or scribe. This mark is used for setting the length of the crimp on the coupling.

Looking down from the top of the die set, line up the mark with the top of the die.

- Position blue pusher plate on die set.

- Seat die set in cone base by firmly pushing downward on pusher.

- Check for correct alignment of die set. Improper seating or overlapping of dies will result in damaged dies.

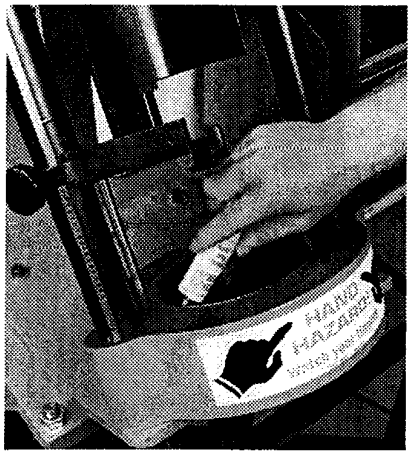
YES

NO

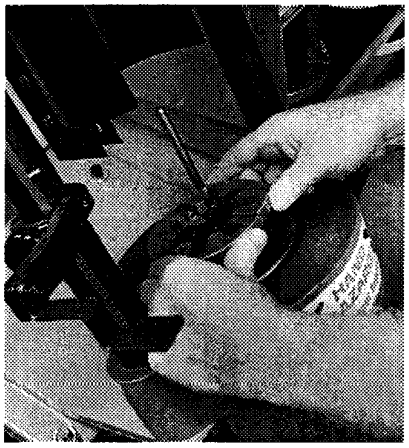
- Crimper should be warmed up
- Depress the “On” power button.
- Depress the “Start” button.
- Pusher will engage pusher plate until the crimp setting is reached.
- Pump will automatically shut off.
- Pusher returns to “Up” position.
- Remove assembly.

CRIMPING 1-1/2"- 2" 4 SPIRAL
The small cone is removed and all oil is wiped out of the large cone area.

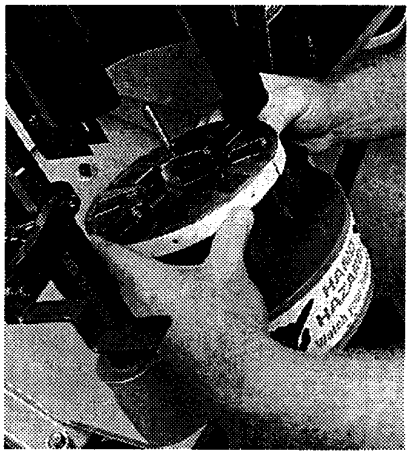
- Lubricate cone base with E-Z Crimp M.



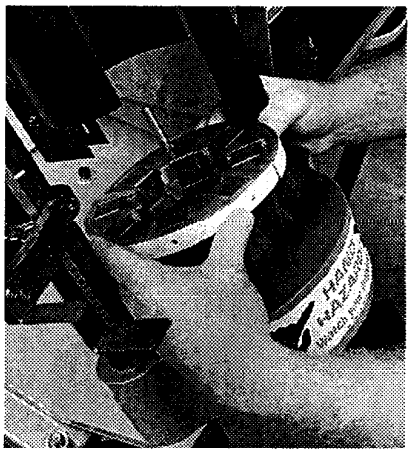
- Select the correct die set for the assembly from the Crimp Specification Guide.
- Select the proper crimp setting from the crimp specifications and enter this number on the thumb wheel of the Automatic Crimp Control.



- Place the die set in cone base.



- Insert the hose assembly into die set with connector end up.



One-Piece Coupling with Crimp Location Markings
Several of the couplings are provided with a knurl around the circumference of the ferrule. This knurl can be used for setting the length of the crimp on the coupling.

Looking down from the top of the die set, line up the knurl with the top of the die.

One-Piece Coupling without Crimp Location Markings
Select the crimp length required from the Crimp Specification Guide and mark the coupling accordingly with a marking pen, pencil or scribe. This mark is used for setting the length of the crimp on the coupling.

Looking down from the top of tho die set, line up the mark with the top of the die.

- Position yellow pusher plate on die set.

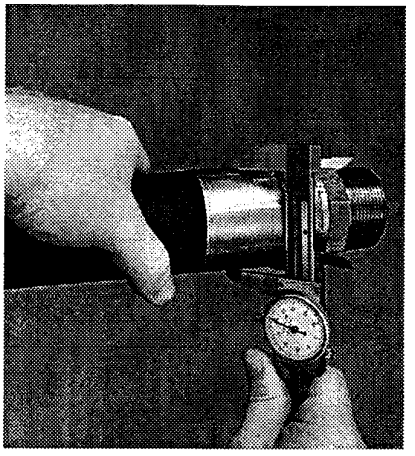
- Seat die set in cone base by firmly pushing downward on pusher.

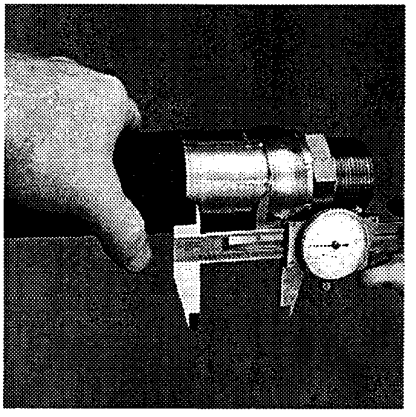
- Check for correct alignment of die set. Improper seating or overlapping of dies will result in damaged dies.

YES

NO

- Crimper should be warmed up.
- Depress the “On” power button.
- Depress the “Start” button.
- Pusher will engage pusher plate until the crimp setting is reached.
- Pump will automatically shut off.
- Pusher returns to “Up” position.
- Remove assembly





IMPORTANT

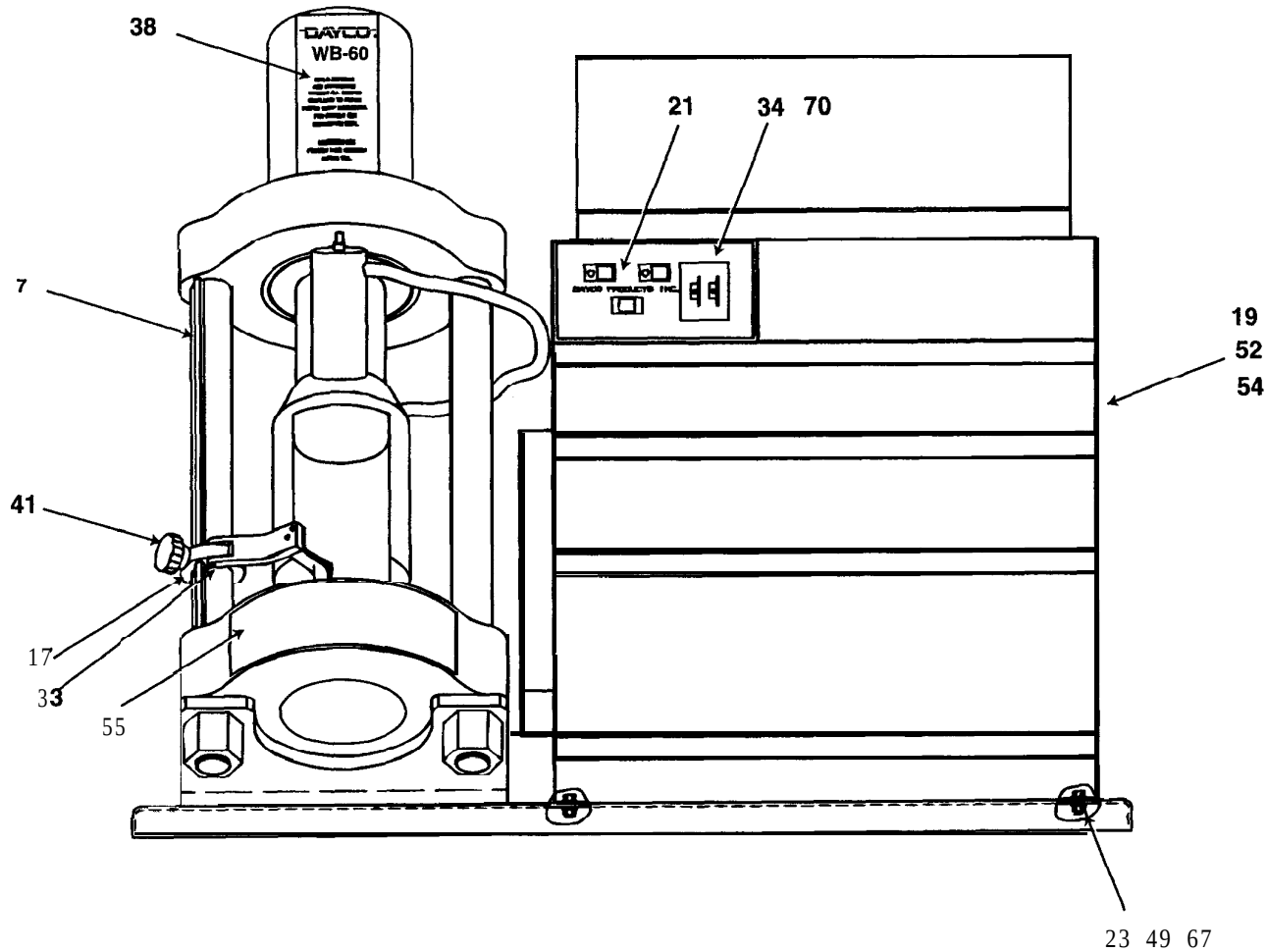
Due to machining tolerance on metal surfaces of dies and cone, finished crimp diameters may not be accurate on all sizes. To correct for slight variances the Set Point must be adjusted using these guidelines:

- Each number on the thumb wheel is approximately .004 of an inch difference on the crimp diameter,
- The higher the thumb wheel number, the tighter the crimp.
- The lower the thumb wheel number, the looser the crimp.

For example:

If, when coupling a 6MX hose and a 6SB Coupling using a .670 die and a scale setting of 82, you do not achieve a .750 crimp diameter – a thumb wheel adjustment is necessary . . . A crimp diameter of .746 requires the thumb wheel setting to be changed to 81 – If the finished crimp diameter is .754 the thumb wheel setting should be changed to 83.

ITEM	REQ'D.	DESCRIPTION	MATERIAL	PART NUMBER
1	1	Cone Plate	8620 Steel	See page EN94-024-D-A for details
2	1	Cylinder Flange	A-36 Mild Steel	See page EN94-025-D-A for details
3	1	Pusher Plate	4340 Steel	See page EN94-030-C-A for details
4	1	Pusher Plate	4340 Steel	See page EN94-024-D- for details
5	1	Pusher	Mild Steel	See page EN94-028-D-A for details
6	1	Cone Insert	8620 Steel	See page EN94-027-C for details
7	1	Scale	Std. Key Stock	See page EN94-033-C-A for details
8	2	Strain Rod	Stressproof	See page EN94-026-C-A for details
9	1	Support Base	A-36 Mild Steel	See page EN94-032-C-A for details
10	1	Support Arm	A-36 Mild Steel	See page EN94-036-C-A for details
11	1	Nut. Adjusting	Stainless	See page EN94-037-A for details
12	1	Potentiometer Bracket Assy.	Sheet Steel	See page EN94-038-C for details
13	1	Actutor Guide	Sheet Steel	See page EN94-039-C for details
14	1	Actuator	Sheet Steel	See page EN94-036-B for details
15	1	Coupling Stop Arm	1018 CRS	See page EN94-013-B for details
16	1	Coupling Stop Bracket	Sheet Steel	See page EN94-013-B for details
17	1	Coupling Stop Collar	1018 CRS	See page EN94-065-B for details
18	1	Base Plate	Sheet Steel	See page EN94-022-D for details
19	1	Die Shelf	Sheet Steel	See page EN94-064-D for details
20	A.R.	Dies		See Note 2
21	1	Auto Crimp		P/N WCS-300 See Assy EN95-028-D.A.
22	1	Hose Assy		Dayco 8WB W/ 8KC Coupling 20 3/8" Lg.
23	6	Hex Hd. Bolt	Purchase	3/8-16-UNC x 3/4" Lg. GR 5 Std.
24	8	Lock Washer	Purchase	3/8" Nom. Std.
25	1	I.D. Plate	As Noted	See Dwg. EN95-020-A For Details
26	1	Pump	Purchase	EN95-015-B
27	1	Potentiometer	Purchase	Refer to item 21
28	1	Spring	Purchase	Lee Spring LE-022B-5 or Equal
29	1	Lamp	Purchase	Fostoria Ind. P/N 15-MC-901 (Fostoria, OH)
30	1	Bulb	Purchase	25 Watt R-14
31	6	Soc. Hd. Cap SC.	Purchase	1/4"-20-UNC 3/8" Lg. Std.
32	6	Lockwasher	Purchase	3/8" Std.
33	1	Pin. Spring	Purchase	3/16" Dia. 1" Lg.
34	4	Pin. Spring	Purchase	Pan Hd. #10 x 3/8" Lg.
35	2	Hex Hd. Bolt	Purchase	5/16-18-UNC x 1-1/4" Gr. 5 Std.
36	2	Lock washer	Purchase	5/16" Nom.
37	4	Drive Screws	Purchased	Size 4 x 3/16" Lg.
38	1	Decal	As Noted	See Drg. EN95-017-B for details
39	2	Soc. Hd. Cap SC.	Purchase	#6-32-UNC x 3/4" Lg.
40	2	Flat Washer	Purchase	#6 Nominal Std.
41	1	Knob. Plastic	Purchase	Reid Tool P/N DK73 (or equal)
42	1	Calibration Pin	Steel	EN86-039
43	1	Rd. Hd. Mach Screw	Purchase	#4-40 UNC x 1/2" Lg.
44	2	Hex Nut	Purchase	#4-40 UNC
45	1	Soc. Hd. Cap SC.	Purchase	#18-32 UNC x 3/8" Lg. Std.
46	1	Lockwasher	Purchased	#8 Nominal
47	2	Pan Hd. Screw	Purchase	Metric M 2. 6 x 5MM
48	3	Hex Hd. Bolt	Purchase	3/8-16-UNC x 1" Lg. Gr. 5 Std.
49	5	Flat Washer	Purchase	3/8" Nom. Std.
50	2	Dowel Pin	Purchase	3/8 x 4"
51	1	Soc. Hd. Cap SC.	Purchase	1/2"-13-UNC x 2" Lg.
52	Set	Decals	Purchase	EN94-064
53	2	Hex Nut	Purchase	Grade 8, 1-1/4"-12-UNF, Extra Lg. 1-5/8" Lg.
54	Set	Shelf Mats	Purchased	EN95-064
55	1	Hazard Label	Purchased	P/N PSK312 Emed Co. Inc 2-1/4" x 9"
56	1	Cylinder	Purchased	EN94-020
57	1	Adapter	Purchased	Dayco Part No. 53-6-8
58	1	Adapter	Purchased	Dayco Part No. 55-6-8
59	1	Service Tee	Purchased	Dayco Part No. 5602-6-6
60	1	Coupling	Purchased	Dayco Part No. 5404-6-6
61	1	Female Union	Purchased	Dayco Part No. 5000-8-6
62	1	Male Plug	Purchased	Dayco Part No. 54062-8P
63	1	Decal Bracket	Sheet Steel	See Dwg. EN95-019-C For details
64	1	Decal	Purchased	See Dwg. Page EN95-016-B
65	2	Soc. Hd. Cap. SC.	Purchased	10-32 NF x 3/8" Lg.
65	2	Lockwasher	Purchased	#10 Nominal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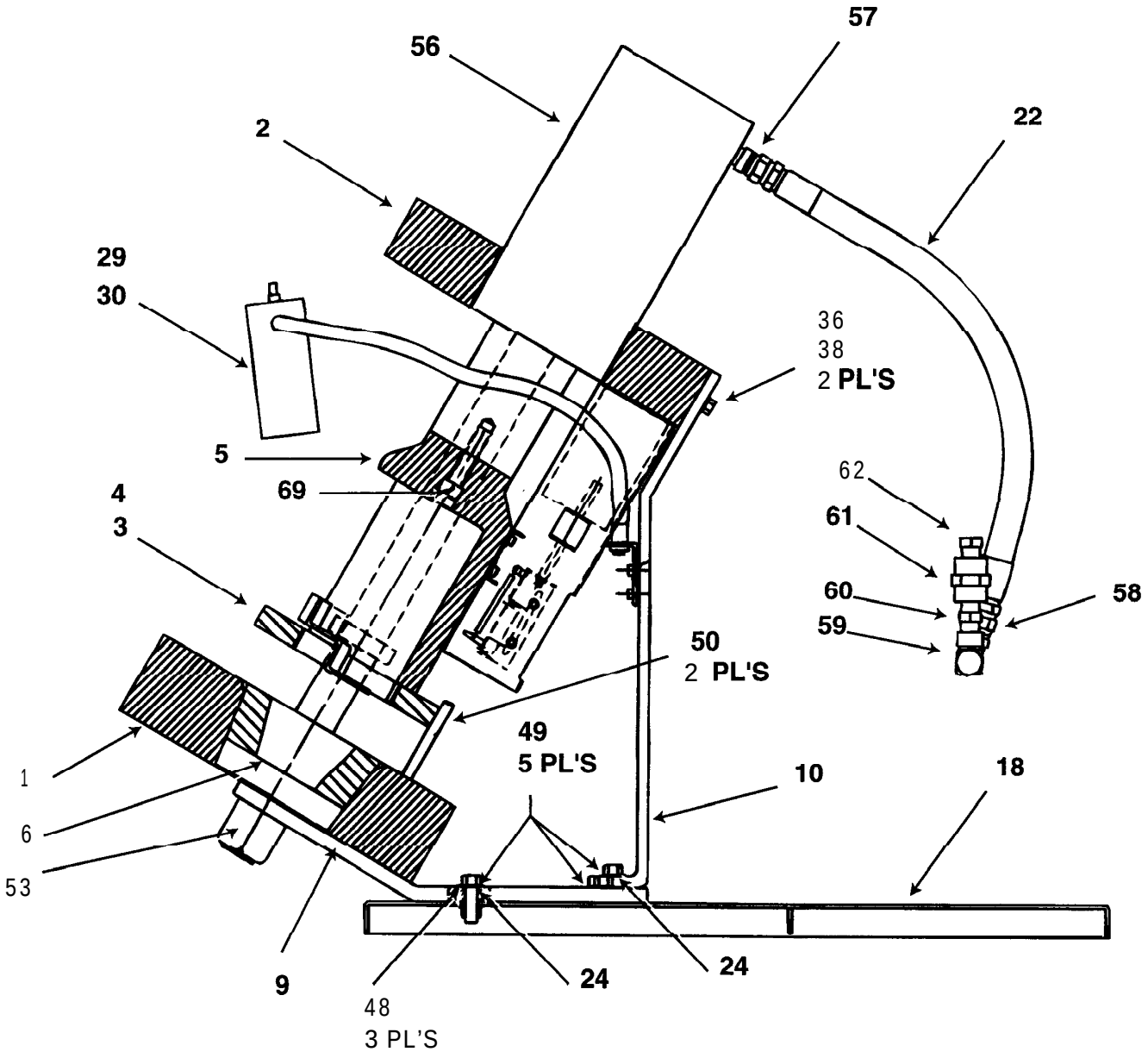
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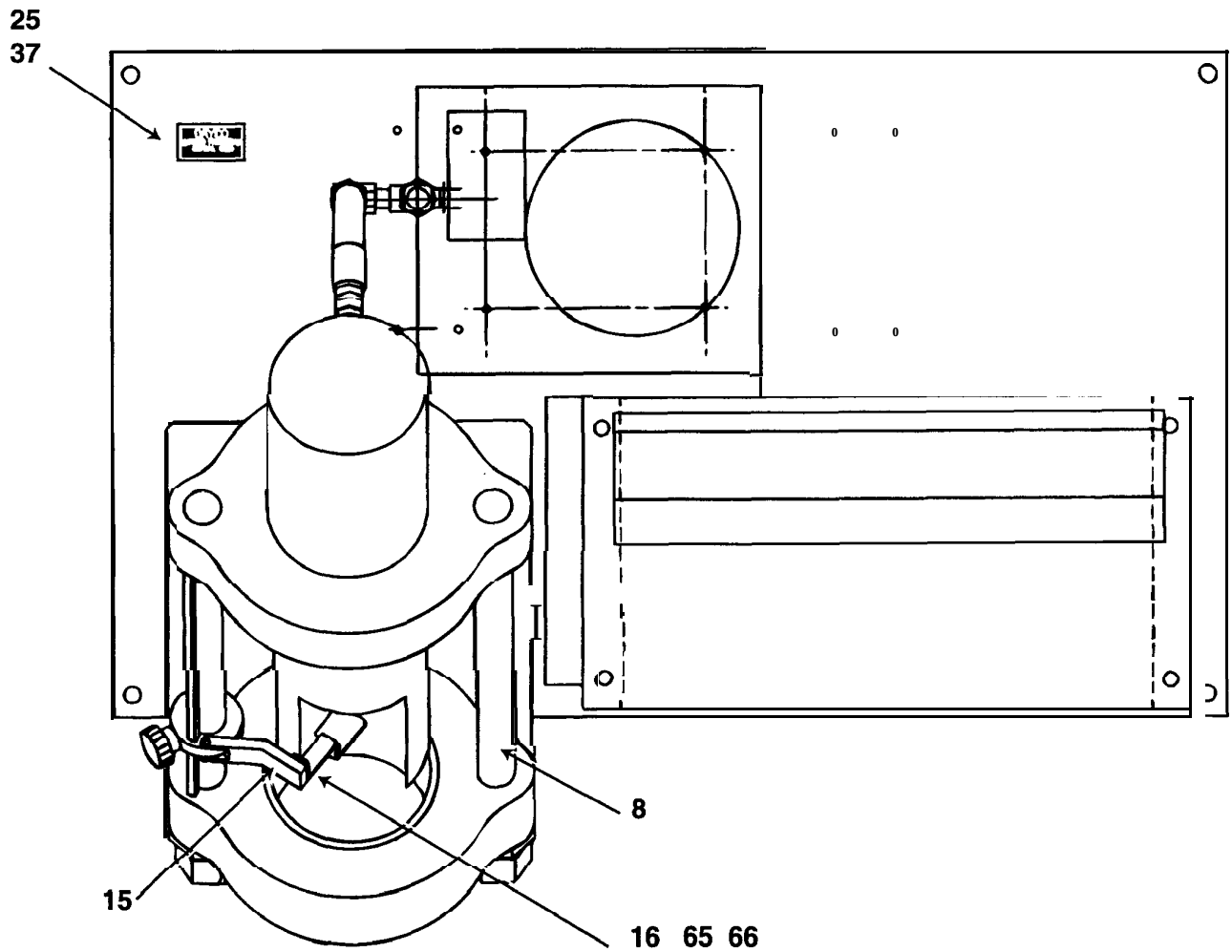
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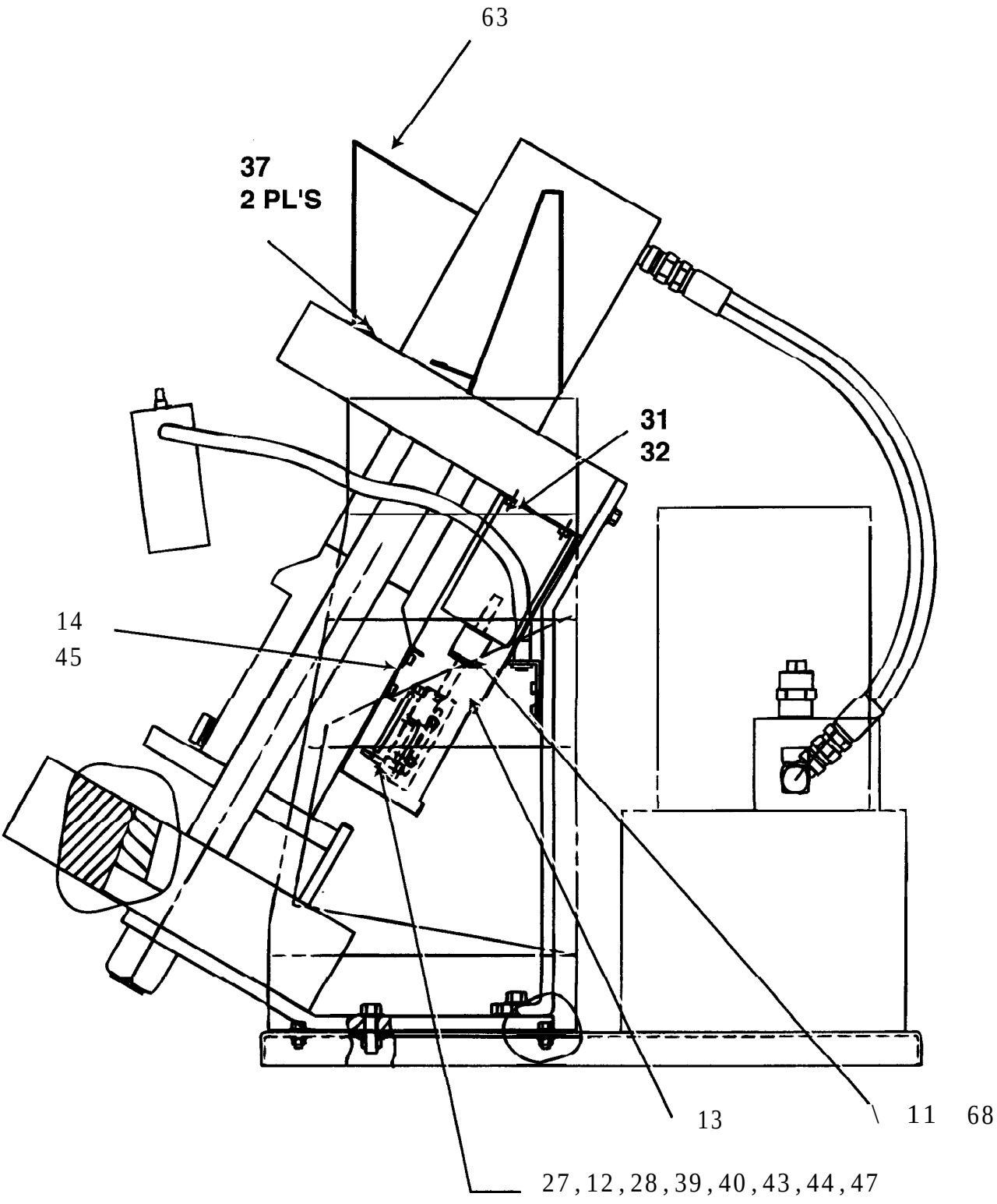
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LIMITED WARRANTY

WB60 is warranted to be free from defects in material and workmanship under normal operating conditions and recommended usage for a period of ninety (90) days from date of delivery. Any product which is shown to be defective shall be replaced or repaired free of charge or extended a credited refund of the original acquisition cost to purchaser. This limited warranty is contingent upon the conditions that prompt receipt of notice of any defect, that purchaser establish the product has been properly installed, maintained, and operated within the limits of related and normal usage as specified, and that upon request purchaser will return the defective product.

The terms of this limited warranty do not in any way extend to any product or part which have a life, under normal usage, inherently shorter than ninety (90) days.

THESE LIMITED WARRANTIES TO REPAIR OR REPLACE DEFECTIVE PRODUCTS AS SET FORTH ABOVE AND ANY ADDITIONAL WARRANTY EXPRESSLY STATED TO BE A WARRANTY AND SET FORTH IN WRITING ARE IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANT ABILITY OR FITNESS FOR A PARTICULAR USE OR PURPOSE.

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UNDER NO CIRCUMSTANCES SHALL ANY LIABILITY WHATSOEVER BE IMPOSED FOR SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES, SUCH AS, BUT NOT LIMITED TO, LOSS OF PROFIT OR REVENUE, LOSS OF USE OF THE PRODUCT, COST OF CAPITAL, COST OF REPLACEMENT EQUIPMENT, OR CLAIMS RESULTING FROM CONTRACTS WITH THIRD PARTIES. UNLESS EXPRESSLY PROVIDED IN WRITING, IN NO EVENT SHALL ANY LIABILITY OR RESPONSIBILITY BE ASSUMED FOR PENALTIES, PENALTY CLAUSES OR LIQUIDATED DAMAGES OF ANY DESCRIPTION, CERTIFICATIONS OR INDEMNIFICATIONS OF PURCHASERS OR OTHERS OR COSTS, DAMAGES OR EXPENSES ARISING OUT OF OR RELATED TO THE PRODUCTS.