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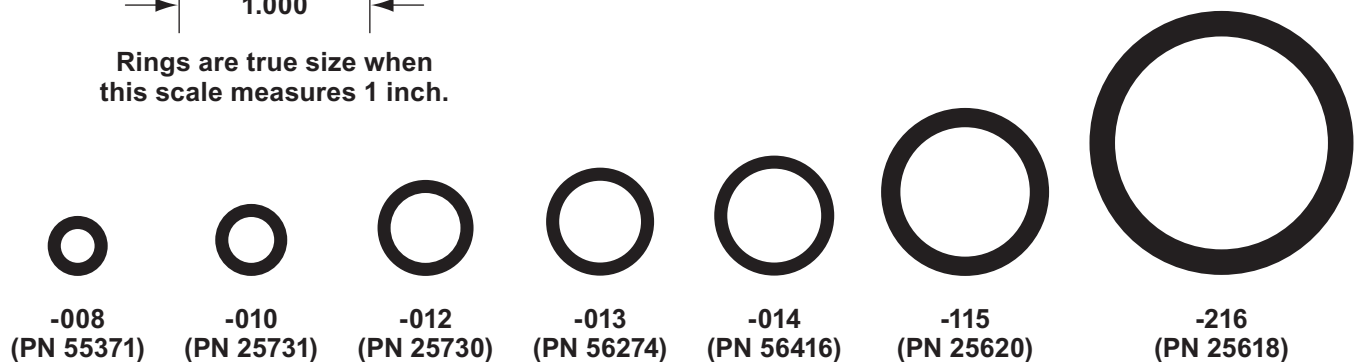
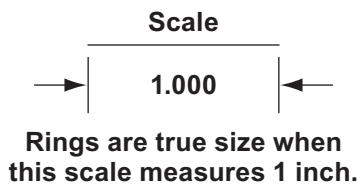
 A DIVISION OF DOUGLAS DYNAMICS, L.L.C.

**49340 – Solenoid ISARMATIC®  
Rework Kit – 1-1/2"**

**Parts List & Installation Instructions**

## PARTS LIST

# O-Ring Size Chart



See page 3 for location of O-rings.

Torque Specifications		
Base Lug	5/16-18 x 1-1/4	180–216 in-lb
Pump	5/16-18 x 2-1/4	175–185 in-lb
Front Motor	7/16-14 x 1-1/4	180–240 in-lb
Rear Motor	7/16-14 x 1-1/2	180–240 in-lb
Valve Manifold	1/4-20 x 3-1/4	50–55 in-lb
Coil Retaining Nut		48–60 in-lb
Cartridge to Manifold		120 in-lb

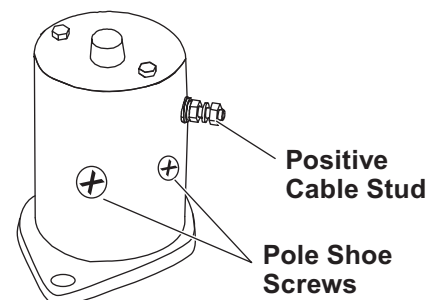
## INSTALLATION INSTRUCTIONS

### Motor Installation Without Ground Stud or Motor Frame Hole for Ground Cable

Older motors without a ground stud or motor frame hole for the ground cable should be modified to improve the ground circuit connection at the motor. This modification can be done without disassembling the motor. Refer to the template on the next page or follow the instructions below to create the motor frame hole.

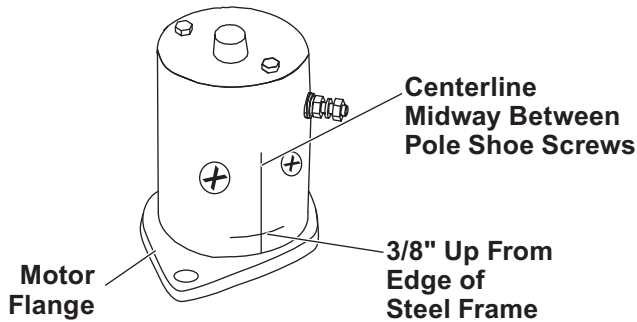
1. Locate the first and second pole shoe screws moving clockwise from the positive cable stud when viewing the motor from the top end.

#### Top End of Motor

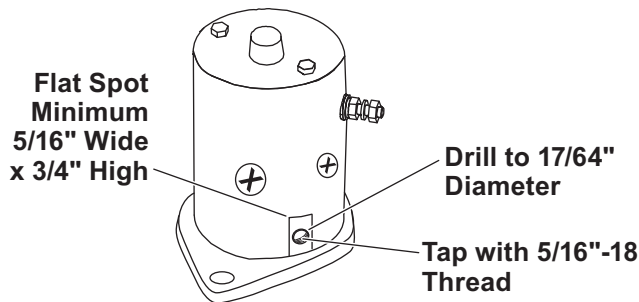


## 49340 SOLENOID ISARMATIC® REWORK KIT – 1-1/2"

2. Accurately locate the midpoint between the two pole shoe screws. (Failure to be at the midpoint could result in drilling into the field windings, ruining the motor.)
3. Measure up 3/8" from the bottom (mounting flange end) on the centerline between pole shoe screws. Mark this location with a center punch.



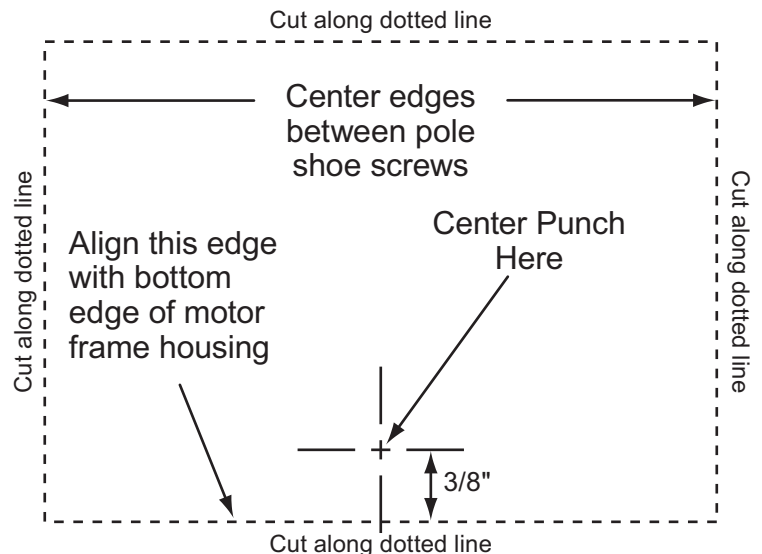
4. Use a file or grinder to create a minimum of 5/16" wide x 3/4" high flat spot centered on the center punch mark. Make sure that all paint is removed in the area covered by the ground cable terminal when it is attached.



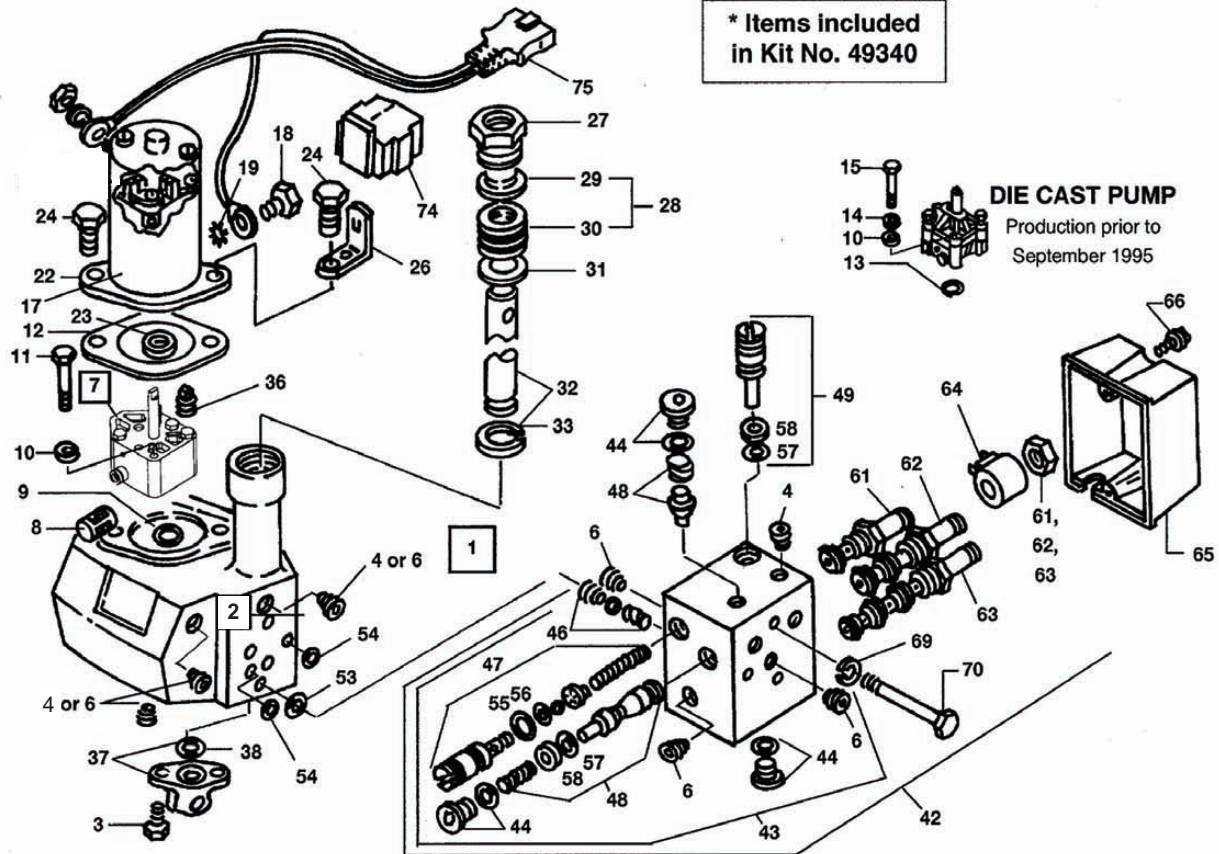
5. Re-punch the center location from Steps 2 and 3.

6. Drill a 17/64" diameter hole at the center punch location. **Avoid pushing drill bit into the motor casing after break through.** The motor frame is 5/16" thick material.
7. Thread the hole using a 5/16" tap and cutting oil. Be careful not to break the tap. Applying grease to the flutes of the tap will help keep chips from entering the motor.
8. Install the motor. Attach the ground cable to this new hole as shown. Use a 5/16" x 1/2" stainless steel cap screw (PN 90088) and stainless steel external tooth washer (PN 91263). (Use of a plated or brass cap screw may result in a poor ground.)

### Template for Motor Frame Ground Hole



**\* Items Included  
in Kit No. 49340**



**ITEM PART NO. QTY. DESCRIPTION**

1	49253	1	HYDRAULIC UNIT 1-1/2" SOL 3500
	49280	1	HYDRAULIC UNIT 1-1/2" SOL 2500
2	49252	1	SERVICE HOUSING KIT 1-1/2" SOL
3	93166	2	5/16-18X1-1/4 HXW TRTS TY TR-3
4	92095	3	PLUG 1/4 NPTF HX SO THREAD SEAL

6	92071	2	PLUG 1/8 NPTF HX SO STEEL (w/o Fluid Level Plug)
7	49211	1	HYDRAULIC PUMP KIT
*8	56185K	1	SUCTION FILTER
*9	56416	1	O-RING - 014
10	90311	2	1/4 PLAIN WASHER TY A STD ZP
11	90080	2	5/16-18X2-1/2 HX CS G5 ZP/ZYC
*12	25861K	1	GASKET

**The following three parts are used only for Die Cast Pumps**

*13	25620	1	O-RING - 115
14		2	BELLEVILLE SPRING WASHER
15	90073	2	5/16-18X2-1/4 HX CS G5 ZP
17	56133	1	MOTOR ASSY 4-1/2"
18	90088	1	5/16-18X1/2 HX CS 18-8 STS
19	91263	1	5/16 EX TOOTH LK WASHER STS

22	49084	1	MOTOR FLANGE BRG & SEAL
*23	49014	1	OIL SEAL
24	90066	2	7/16-14X1-1/4 HX CS G5 ZP
26	56356	1	BOOT BRACKET
27	25944K	1	PACKING NUT 1-1/2"
28	25205K	1	PACKING SET W/WIPER 1-1/2"
*29	55137	1	WIPER RING - 1-1/2"
*30	55136	1	PACKING SET 1-1/2"
31	338	1	WASHER - SPECIAL
32	25202	1	PLUNGER KIT 1-1/2 X 6
33	48415	1	RETAINER RING 1-1/2"
36	92079	1	PLUG 3/8 NPTF SQ
37	25968K	1	BASE LUG W/25618 O-RING
*38	25618	1	O-RING - 216

**ITEM PART NO. QTY. DESCRIPTION**

42	49265	1	VALVE MANIFOLD ASSY SOL 3500
	49278	1	VALVE MANIFOLD ASSY SOL 2500
43	49224	1	MANIFOLD ASSY SOL 3500 (W/O CARTRIDGES)
	49279	1	MANIFOLD ASSY SOL 2500
*44	92960	3	3/8-24 HX SO O-RING BOSS PLUG
6	92071	3	PLUG 1/8 NPTF HX SO STEEL
4	92095	1	PLUG 1/4 NPTF HX SO THREAD SEAL
46	49225	1	INLET CHECK VALVE KIT
47	49138K-3	1	CUSHION VALVE REPAIR KIT-SET
*48	49226K	1	POPPET CHECK VALVE KIT
*49	56330	1	QUILL ASSY
	56657-3	1	BACK-UP/ O-RING KIT - SOL
*53	56274	1	O-RING - 013
*54	25730	2	O-RING - 012
*55	25731	2	O-RING - 010
*56	55371	2	O-RING - 008
57	25622	2	O-RING - 006
58	56315	2	BACK UP RING - 006 PARBAK SPLIT
61	49227K-2	1	CARTRIDGE 20 W/JAM NUT
*	49258-2	1	SEAL KIT - CARTRIDGE 20
62	49228K-1	1	CARTRIDGE 30 W/JAM NUT
63	49229K-1	1	CARTRIDGE 40 W/JAM NUT
*	49259-2	2	SEAL KIT - CARTRIDGE 30, 33 & 40
64	49230K-2	3	COIL W/SPADE TERMINALS
65	56291	1	COVER ASSY
66	90650	2	#8-32X1/2 SL HXW TCTS TY D ZP
69	91201	3	1/4 SP LK WASHER ZP
70	90083	3	1/4-20X3-1/4 HX CS G5 ZP
74	61246	1	CABLE BOOT U

**Abbreviation Key**

ASSY	Assembly	PR	Prestolite	TRTS	Thread Rolling
BRG	Bearing	SL	Slotted		Tapping Screw
CS	Cap Screw	SO	Socket Head	TY	Type
EX	External	SOL	Solenoid	U	UniMount® System
G	Grade	SQ	Square	W/	With
HX	Hex	STD	Standard	W/O	Without
HXW	Hex Washer	STS	Stainless Steel	ZP	Zinc Plate
LK	Lock	TCTS	Thread Cutting	ZYC	Zinc Yellow
NPTF	National Pipe Thread (Fluid)				Chromate
		TR	Truss		

## 49340 SOLENOID ISARMATIC® REWORK KIT – 1-1/2"

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