

PBF70

PLATINUM EDITION



PBF70
PINSPOTTER
PART # 27187

**OWNER'S
MANUAL**

**DURO
DYNE**

**MACHINERY
DIVISION**

SET UP

1. Plug the gun cable camlock connector into either the high or low gun female camlock **(A)**. (The HIGH tap produces about 10 volts, typically used for long pins or heavy gauge material. The LOW produces 5 volts, typically used for light gauge material.)
2. Plug the switch cable into the switch cable socket **(B)**.
3. Plug the ground cable camlock connector into the ground female camlock **(C)**.



TIMER ADJUSTMENT

The timer dial facing you on the front panel of the unit, determines the duration of the weld cycle. For maximum efficiency of the unit, the weld cycle should be set for the shortest length of time necessary to provide a good weld. An excessive amount of time does not improve the weld. On the contrary, the resulting weld may not be an acceptable one. It is recommended that at the start of a production run, using a given length of pin with a given gauge of metal, the operator take a few moments to determine the minimum timer setting to perform the job and leave the timer at that point.

NOTE: There is a common misconception that the longer the weld time, the stronger the weld. This is not true. It is important that you follow the above instructions for maintaining the minimum weld time.

ELECTRICAL REQUIREMENTS

Connect the PBF70 to a 100 amp power supply. (208-230 volts - 60 cycle). The PBF70 unit uses 208-230 volt single phase. To wire to 208-230 volt single phase, the green lead is ground and the white and black leads are power. It is suggested that the unit be permanently wired into a 100 amp disconnect box fitted with 100 amp slow blow fuses. Note: due to inherent inrush current, it is recommended to use the next size gauge wire over codes when possible.

PBF70 AS A BENCH TOOL

To use your work bench as a welding table, set the PBF70 alongside the work bench. Cover the bench top with a copper sheet, (.025 inch) which will act as a permanent ground when the duct work is placed on the table top. Attach the ground clamp to the duct work or copper bench top. The Clip Pins will quickly weld every time with no burn marks or wasted pins due to misfires.

WHEEL PBF70 TO THE WORK

Where the duct is too large to put on a bench, snap the ground clamp onto the duct and secure the insulation quickly by welding the Clip Pins inside or outside of the ducts as required. Eliminate the heat mark on the duct by using the simple "heat sink" included on opposite the side of weld.

SERVICE

The PBF70 has been designed and built to withstand rugged shop usage. The Indicator lights on the front panel will help you to diagnose minor problems. If your PBF70 fails to operate, follow this simple procedure to find the defective component.

1. Pull the trigger and watch the lights, the green light (24 volts) and then the red light (220 volts) should flash on and off.
2. If only the green light comes on, go to step 4
3. If neither light comes on, press the WELD CYCLE TEST switch on the front panel.
 - a. If both lights flash and the transformer does not hum go to step 5.
 - b. If both lights flash and the transformer hums, the problem is either a bad trigger switch or bad switch cable.
 - c. If only the green light flashes, go to step 4
 - d. If neither light flashes, replace the 24 volt transformer.
4. Replace the weld activator.
5. The problem is probably a bad weld transformer. Call technical service for further assistance. (1-800-899-3876)

MAINTENANCE

The PBF70 has been designed and built to withstand rugged shop usage. Constant, trouble-free operation is assured with a minimum of maintenance. The GUN TIP, the GROUND CLAMP and all CABLE CONNECTIONS should be kept clean to maintain a good electrical contact. Wire brush the parts to remove any oxidation or adhesive that may have accumulated during the fastening operation.

INSTALLING CLIP PINS

Clip Pins are welded as easily as "A", "B", "C".

"A"

Position the Clip pin on the Magnetic tip of hand gun.



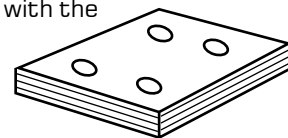
"B"

Press down through the insulation, twist the gun, pull the trigger. Do not release the trigger until the timer cycle has ended.

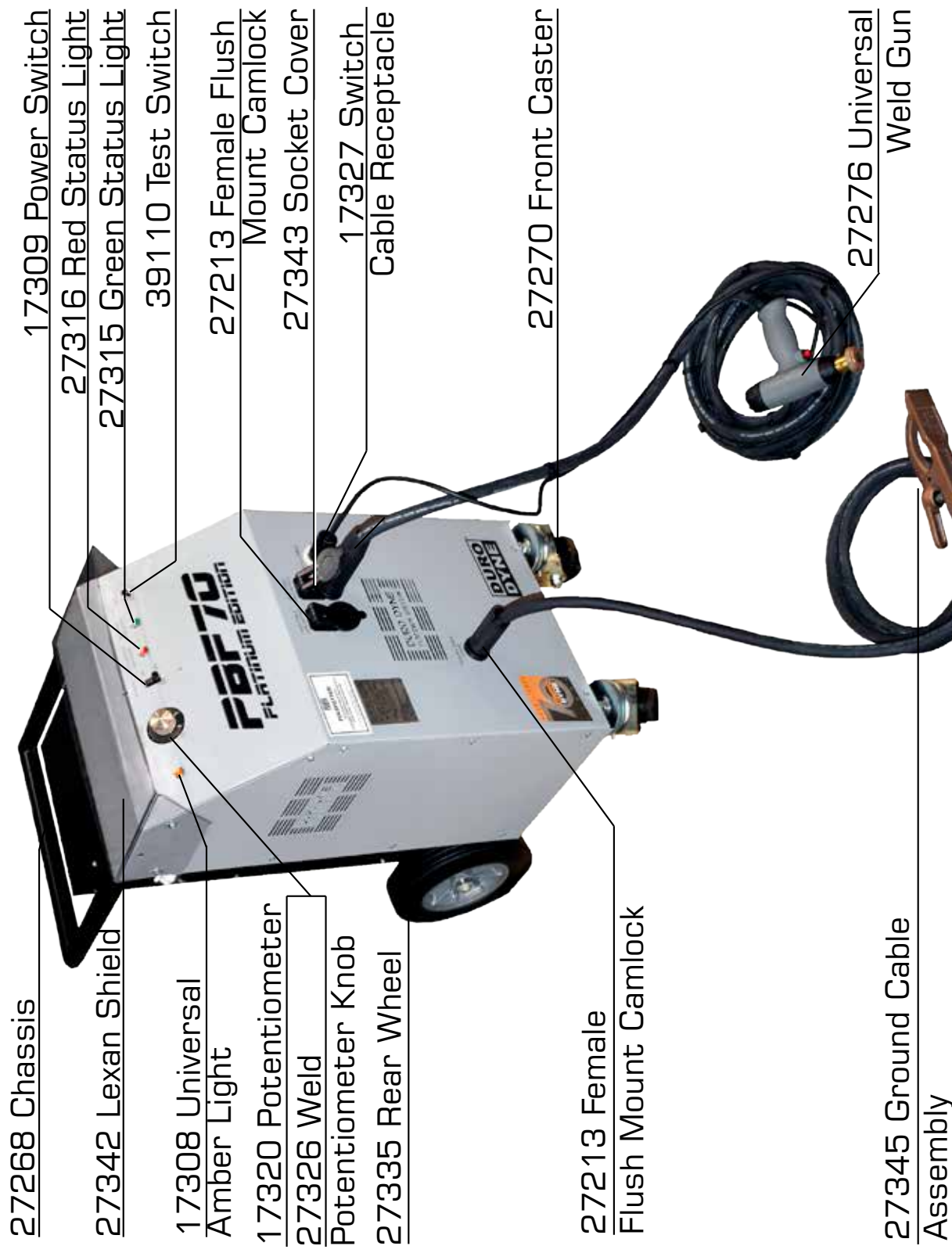


"C"

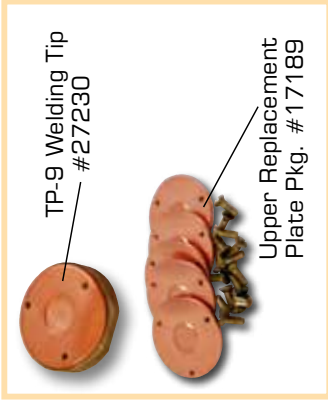
The Clip Pins are permanently welded in position flush with the insulation.



PARTS LOCATION



PARTS LOCATION

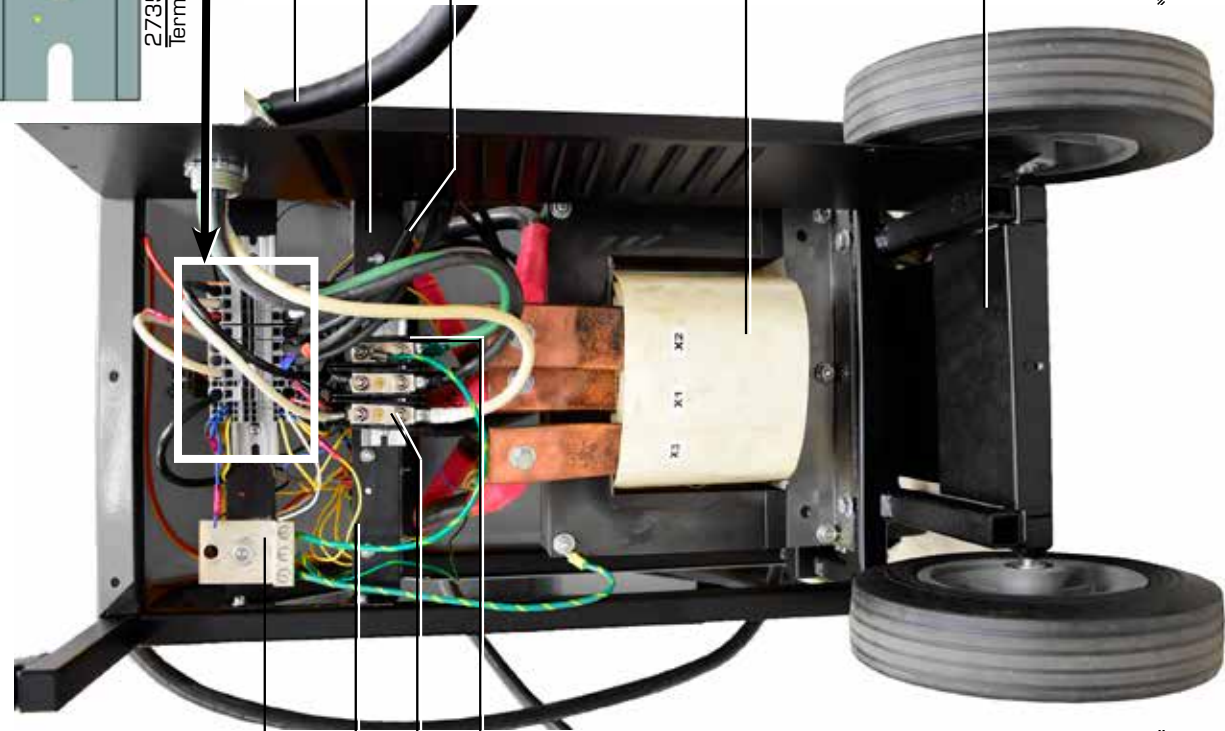


27274 Ground Block

17140 Weld Activator

27277 Hi-Volt Terminal Block

27278 Hi-Volt Terminal Block End Stop



27351 Push-in Term Block End Plate

27353 22-12 Push-in Terminal Block

27350 PBF70 Terminal Block Jumper

27352 20-6 Push-in Term Block

27273 Line Cord w/ Strain Relief

27271 Component Mounting Bracket

44091 24V Multi-Tap Transformer

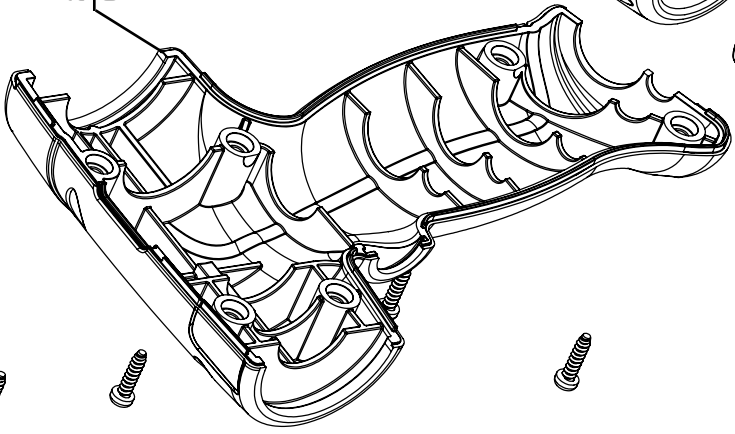
37272 Weld Transformer

27269 Lower Chassis Cover

FRAME ASSEMBLY

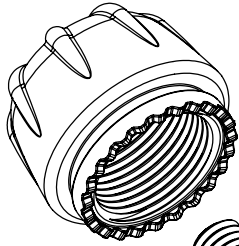
PARTS LOCATION

27100 Screws (6)

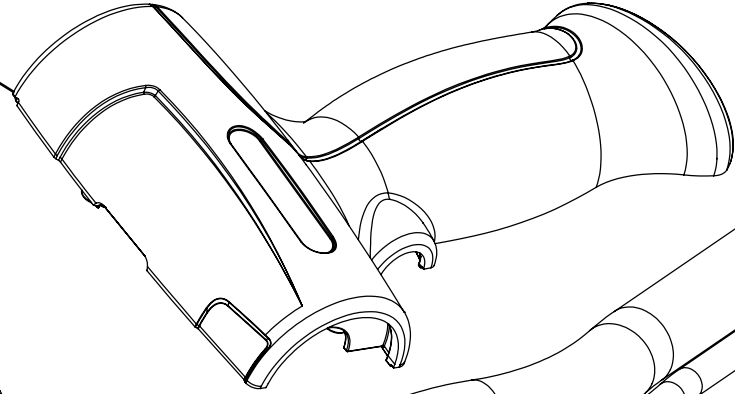


27103 Gun Body
(Rt & Lft Halves)

27102 Spindle Shaft



27103 Gun Body
(Rt & Lft Halves)

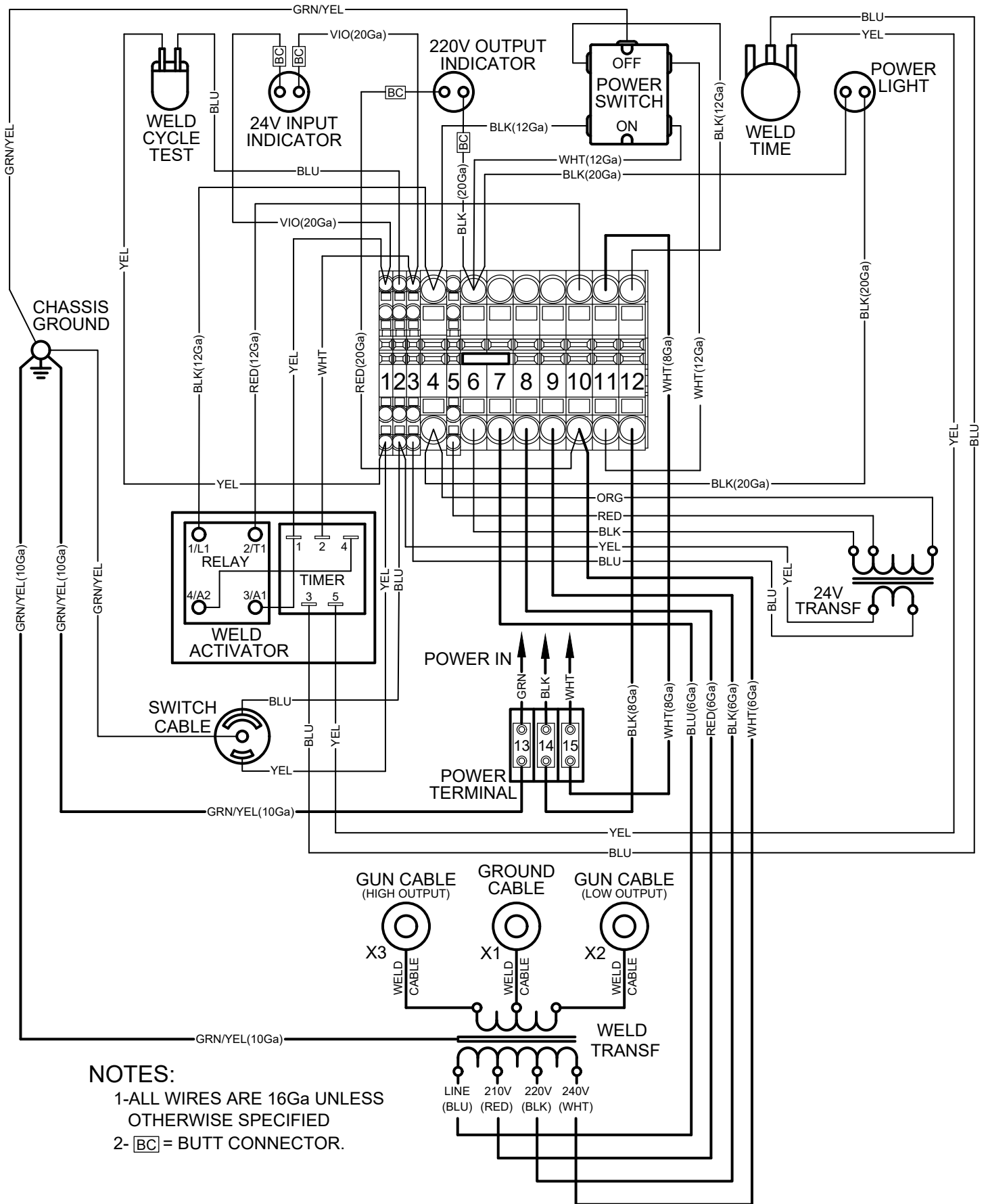


27101 Taper Adapter

27104 Face Plate Nut

27099 Trigger Switch
(No Leads)

PBF70 WIRING DIAGRAM



NOTES:
 1-ALL WIRES ARE 16Ga UNLESS OTHERWISE SPECIFIED
 2- [BC] = BUTT CONNECTOR.

NOTES

A series of 20 horizontal grey bars, each representing a line of text for notes.

PBF70 PARTS & SPECIFICATIONS

ITEM	DESCRIPTION
17049	Male Camlock
17140	Weld Activator
17288	Switch Cable Plug
17308	Universal Amber Light
17309	Power Switch
17320	Potentiometer
17327	Switch Cable Receptacle
27054	Gun Extension Set 8 ft.
27099	Trigger Switch - No Leads
27100	Thread Form Screw - 6pk
27101	Tapered Adapter
27102	Spindle Shaft
27103	Gun Body (Rt & Left)
27104	Face Plate Nut
27213	Female Flush Mount Camlock
27230	TP-9 Welding Tip
27268	Chassis
27269	Lower Chassis Cover
27270	Wheel - Front Caster
27271	Comp Mounting Bracket
27272	Weld Transformer
27273	Line Cord
27274	Ground Block
27275	UWG10 Universal Weld Gun 10ft
27276	UWG16 Universal Weld Gun 16ft
27277	Hi-Volt Terminal Block
27278	Hi-Volt Terminal Block End Stop
27315	Green Status Light
27316	Red Status Light
27326	Weld Potentiometer Knob
27335	Wheel - Rear
27340	Ground Cable only
27342	Lexan Shield
27343	Socket Cover
27345	Ground Cable Assembly
27350	PBF70 Terminal Block Jumper
27351	Push-in Term Block End Plate
27352	20-6 Push-in Terminal Block
27353	22-12 Push-in Terminal Block
39110	Test Switch
44091	24V Multi-Tap Transformer



MACHINERY DIVISION

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