



Rev. C

# **INSTRUCTIONS-PARTS LIST**

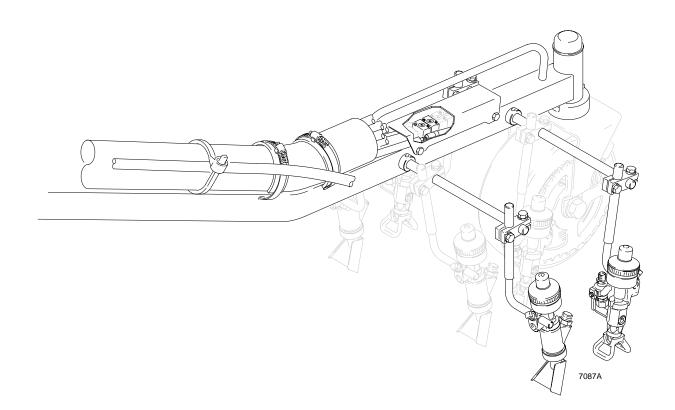


**KEEP FOR REFERENCE.** Read manual 308611 for important warnings and instructions.

INSTRUCTIONS

# Road Lazer Third Gun Kit

Model 244275



# Installation

### **Pressure Relief Procedure**

### 



The system pressure must be manually relieved to prevent the system from

starting or spraying accidentally. Fluid under high pressure can be injected through the skin and cause serious injury. To reduce the risk of an injury from injection, splashing fluid, or moving parts, follow the **Pressure Relief Procedure** in your sprayer manual whenever you:

- are instructed to relieve the pressure,
- stop spraying,
- check or service any of the system equipment,
- or install or clean the spray tip.
- 1. Flush the system. See **Flush System** in manual 308611.
- 2. Relieve pressure. See **Pressure Relief Procedure** in manual 308611.

### **General Instructions**

The following paragraphs provide instructions for installing the third Gun Kit components on the Road Lazer Line Striper. Refer to Fig. 1 for parts identification information and schematics on pages 6 through 8 for detail orientation and wiring. Index numbers with an A are kit parts. Other index numbers are parts for the Road Lazer.

### Installation of Bead Hose

- 1. Remove pipe plug (63) from bead tank fitting (54) at base of bead tank (53) and discard. Replace with bead hose fitting (A13).
- 2. Connect one end of bead hose (A14) to hose fitting.
- 3. Route bead hose along Road Lazer frame to boom beam (312). Fasten hose to main harness protection tube (5) using wire tie straps (A15). See schematics on pages 6 and 7.

### Installation of Solenoid Valves

- 1. Access solenoid valves (343) by removing access cover (319), pins (316), washers (317) and nuts (318).
- Mark or label boom beam (312), air fittings (346), elbow fittings (346), and hoses (338) to indicate first and second paint guns (341); and first and second bead guns (334). Labels and marks will be used to reassemble items in correct order. Notice boom beam already has holes for added fittings.

**NOTE:** Order of guns, looking along boom beam toward wheel end are as follows: first paint and bead guns are on left side of beam, second paint and bead guns are on right side of beam. For orientation of boom beam, solenoid valves, fittings, and guns see schematic on page 6.

- 3. Remove hoses, elbow fittings, and air fittings from solenoid valves.
- 4. Disconnect solenoid valves electrical connector J6 from harness electrical connector P6.
- 5. Remove solenoid valves, capscrews (344), washers, (317), nuts (318), and air fitting (362).
- 6. Carefully remove air fitting end of solenoid valve stack (343). Add two solenoid valves (A03) with supplied hardware. Refasten air fitting end to solenoid valve stack.
- 7. Replace solenoid valves by aligning with holes in boom beam. Reconnect air fitting (362), caps-crews, washers, and nuts.
- 8. Reconnect solenoid valves connector J6 to harness connector P6.
- 9. Connect each set of wires from two added solenoid valves to harness connector wires P7. See schematic on page 8.

**NOTE:** Its not important which set of connector wires from the solenoid valves are connected to the harness connector wires P7.

10. Replace existing air fittings, elbow fittings and hoses as marked and labeled in step 2.

**NOTE:** Do not install fittings on new solenoid valves at this time.

# Installation

# Installation of Third Paint and Third Bead Guns

- 1. Remove third paint hose swivel union (333) and ball valve (339) from second paint gun (341). Replace with pipe plug (A04).
- 2. Note positions and orientation of guns and hoses. See schematic on page 6.
- 3. Slide existing paint and bead guns off gun pivot arms (335) by loosening support clamps (342).
- 4. Remove both gun pivot arms (335) and discard. Replace with new gun pivot arms (A16) and secure.
- 5. Remount paint and bead guns and orient per schematic diagram on page 6. Secure support clamps.
- Mount third paint gun (A02) and mounting arm (A09) on pivot arm next to second paint gun. Secure with arm support clamp (A10), attaching screws (A11) and washers (A12). Attach paint hose.
- Install tube elbow fitting (A08) on third paint gun and attach one end of 1/4 in. air hose (A05) to fitting.
- Mount third bead gun (A01) and mounting arm (A09) on pivot arm next to second bead gun. Secure with support clamp, attaching screws, and washers.
- 9. Install hose bead fitting (A13) on third bead gun and attach bead hose (A14) to fitting.
- 10. Install tube elbow fitting (A08) on third bead gun and attach one end of 1/4 in. air hose (A05) to fitting.

# Connection of Solenoid Valves to Third Paint and Third Bead Guns

**NOTE:** This procedure identifies which solenoid valve controls the third paint gun and which controls the third bead gun.

- 1. Locate two solenoid valves (A03) and install air fittings (A07).
- 2. Install push-in elbow fittings (A06) on 1/4 in. air hoses (A05) from third paint gun (A02) and third bead gun (A01).

### 

The Road Lazer will be turned on and operated by the Programmable Skipline Controller in the following steps. Refer to manuals 308611 and 308616 for operating instructions.

- 3. Turn on Road Lazer and Programmable Skipline Controller.
- 4. Use Programmable Skipline Controller to turn on third paint gun. Note which solenoid valve is on. Turn off third paint gun and connect push-in elbow fitting from third paint gun to solenoid valve.
- 5. Use Programmable Skipline Controller to turn on bead test. Observe that remaining solenoid valve is on. Turn off bead test and connect push-in elbow fitting from third bead gun to solenoid valve.
- 6. Turn off Road Lazer and Programmable Skipline Controller.

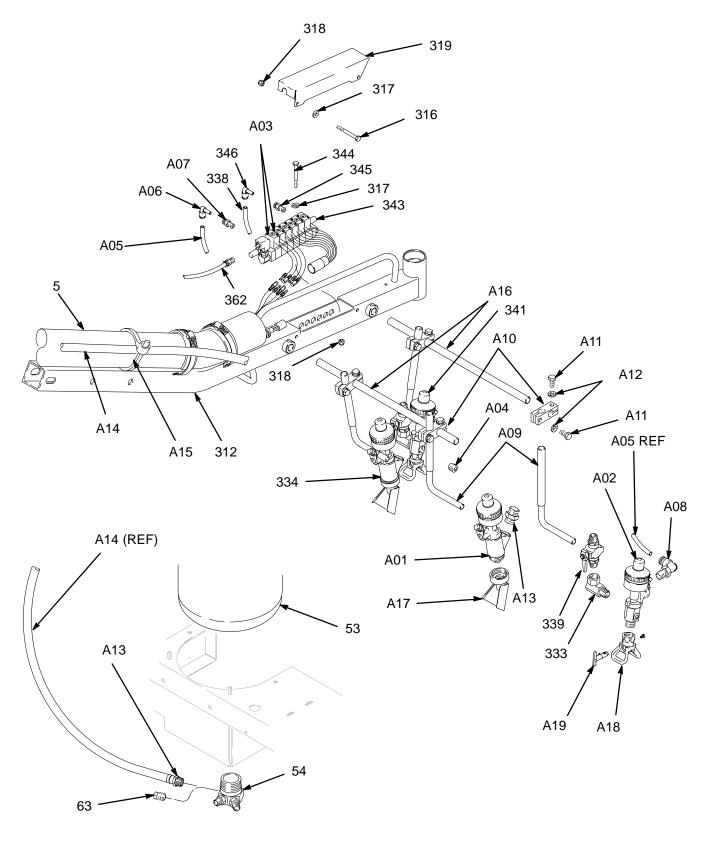
### **Final Installation**

### 

The wiring in and around the solenoid valves may be damaged or shorted by the access cover if wires are not routed carefully or if the access cover is not carefully installed.

- 1. Route wiring above and around solenoid valves leaving clearance for access cover (319).
- 2. Carefully install access cover, using pins (316), washers (317) and nuts (318) to complete installation of kit.

# Assembly





# **Parts List**

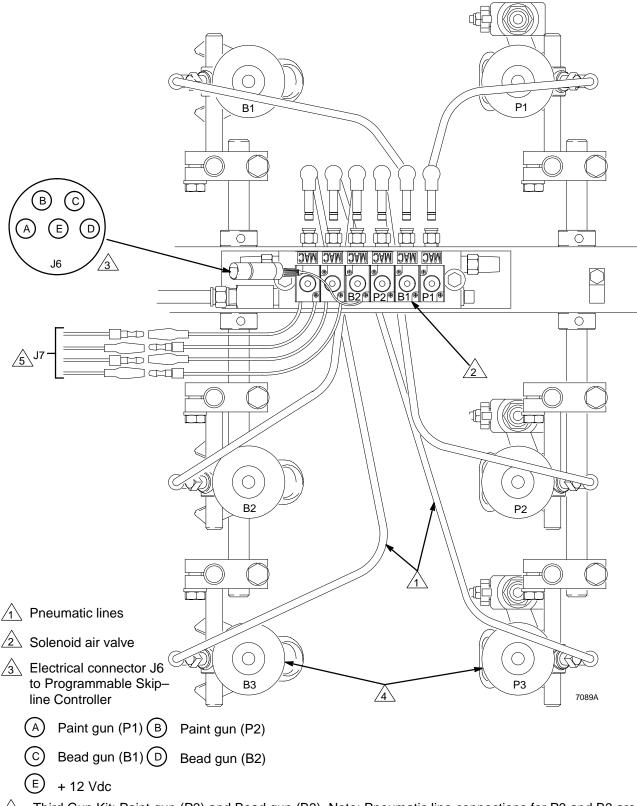
### Third Gun Kit Parts

<b>Road Lazer Parts</b>
Pof

Ref. No.	Part No.	Description	Qty	Ref. No.	Part No.	Description	Qty
4.01	222220	CUN bood	1	5	191857	TUBE, protection	1
A01	238329	GUN, bead	1	53	238299	TANK, bead, 23 gallon	1
A02	238332	GUN, paint	1	54	191222	FITTING, bead tank	1
A03	113792	VALVE, mac	2	63	104663	PLUG, pipe, 3/4 in, npt(m)	1
A04	101748	PLUG, pipe	1	312	238320	BEAM, boom	1
A05	192215	HOSE, air, 1/4 in.	1	316	113469	PIN, clevis	2
A06	113318	FITTING, elbow, push–in	2	317	110755	WASHER, plain	10
A07	113320	FITTING, air	2	318	102040	NUT, lock, hex, grade 5, 1/4–20	
A08	113321	FITTING, elbow, tube	2			unc–3b	5
A09	191164	ARM, mounting, gun, 90 $^\circ$	2	319	191119	COVER, access	1
A10	191218	CLAMP, support, arm	2	334	238329	GUN, spray, bead	2
A11	100101	SCREW, cap, hex head	4	001	200020	See Manual 308612 for parts	-
A12	100133	WASHER, lock	4	338	191191	HOSE, air, 1/4 in. OD,	4
A13	111834	FITTING, bead, hose	2	000	101101	12.0 in. (305 mm) long	
A14	113315	HOSE, bead	1	341	238332	GUN, spray, auto	2
A15	108774	STRAP, tie, wire	10	041	200002	See Manual 308613 for parts	2
A16	192214	ARM, pivot, gun	2	343	112794	VALVE, air, solenoid	1
A17	239695	KIT, deflector, wide	3	343	102313	CAPSCREW, hex hd, grade 5,	2
A18	222674	KIT, repair	3	344	102313		
A19	GHD839	TIP, spray, cylinder (839)	3	245	110000	1/4–20 unc–2a, 1.75 in. (44 mm) long	
-		, , , , , , , , , , , , , , , , , , , ,	-	345	113320	FITTING, air, 1/8–27 npt(f) x	4
				0.40	440040	1/8 npt(m) pipe	4
				346	113318	FITTING, elbow, plug–in, 1/4 OD	4
						female tube x 1/4 male stud elbow	
				362	113319	FITTING, air, 1/4–18 npt(f) x	1
						1/4 npt(m) pipe	

# **Schematics**

**Solenoid Air Valves** 



Third Gun Kit: Paint gun (P3) and Bead gun (B3). Note: Pneumatic line connections for P3 and B3 are determined by solenoid valve wiring and may not be as shown in diagram.

<u>/5</u> Electrical connector wires J7 to Programmable Skipline Controller from Paint gun (P3) and Bead gun (B3)

# **Schematics**

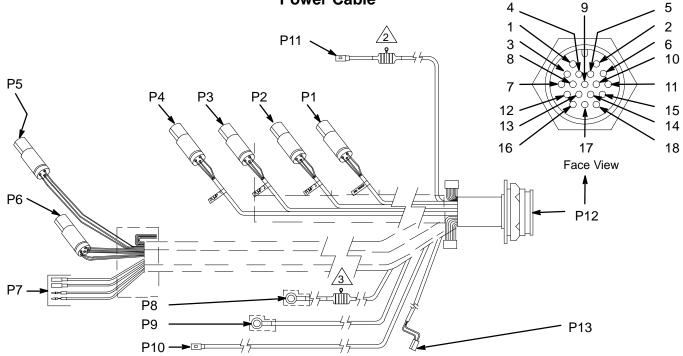
Main Harness 236680

Ref. <u>- 2 ω 4 π</u> 113486 113315 191267 238952 191857 Part No. To cooling fan To engine kill switch To – battery post CABLE, power HOSE, bead, 3/4 in. HOSE, air KIT, hose, replacement TUBE, protection Description  $\bigcirc$ â To + battery post 0 ┟╟ ldmund of Ż S Æ 2 qmuq oT E dmud oT To engine switch To gun arm safety switch From compressor Qty From pump 3  $\mathbb{N}$ - - --GREEN -From pump 2 M BLUE From pump 1 BLACK From bead tank ĦØ From bead tank IIID From bead tank ØØ N 4 To bead gun 1 To bead gun 2 To bead gun 3 Uning the second by 111111P-1111111D To paint gun 1 BLACK To paint gun 2  $\mathbb{N}$ В∟∪Е 6 To paint gun 3 GREEN To valve pack To third gun kit valves 99.00 ω To valve pack Ø To proximity sensor

7090A

### **Schematics**

**Power Cable** 



Connector	6		00	6		00	6	O B A			во	Ć					DB EA	)						0=	0±							B A	
	I	P1		I	P2		F	<b>°</b> 3		F	P4		P5			P6				P7				P8	Р9	P10	P11	P12				Ρ	13
	А	в	С	A	в	С	A	в	С	А	вс	2	B	с	A	в	с	D	Е	А	В	С	D	А	А	А	А	13	14	15	16	А	В
Wire Color Code $1$	R	в	G	R	в	G	R	в	G	R	вс	Э F	R E	w	G	0	B L	W B	_			G / B			В	G	R	в	в	В	В	BL	в
Connects To	19	20	3	19	20	16	19	20	5	192	20 4	1 19	9 20	2	6	9	7	10	19	19	19	11	8	1	20	12	19		2	20		19	20

∕1∖

В

R = RedW R B = Black B = White/black W = Red/white W = White В G G = Green B = Blue/black B = Green/black O = Orange R 0

B = Red/black L = Blue

Fuse: 20A, 32V, type AGC protects the following:

- Fan
- Solenoid air valves .
- Proximity sensors . for the pump, skip timer and gun arm stowed safety.
- Fuse: 4A, 32V, type AGC protects the following:
- Programmable • **Skipline Control**

06339

All written and visual data contained in this document reflects the latest product information available at the time of publication. Graco reserves the right to make changes at any time without notice.

B = Orange/black

Sales Offices: Minneapolis, Detroit International Offices: Belgium, Korea, Hong Kong, Japan

GRACO INC. P.O. BOX 1441 MINNEAPOLIS, MN 55440-1441

PRINTED IN U.S.A. 308678 February 1997, Revised 08/2000