

Smart Die™ II / FlexDie™

3A1738K
EN

- For professional application of thermoplastic traffic marking compound materials (reflective beads applied simultaneously with screeding) -
- For outdoor use only (not to be operated in rain or damp conditions) -



IMPORTANT SAFETY INSTRUCTIONS

For complete warnings and safety instructions, see ThermoLazer® 200/200tc/300tc and ThermoLazer ProMelt™ Pavement Marking Systems operation manual. Save all instructions.

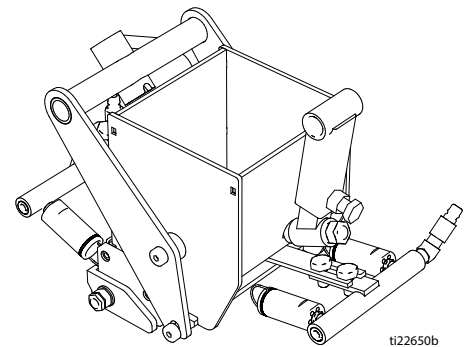
For use with ThermoLazer 300tc/ProMelt
For use with the following SmartDie II Screed Box:

Part	Description
17A173	2 in. (5 cm)
24H431	3 in. (8 cm)
24H426	4 in. (10 cm)
17J250	4.75 in. (12 cm)
24H432	5 in. (13 cm)
24H427	6 in. (15 cm)
24H433	7 in. (18 cm)
24H428	8 in. (20 cm)
24H434	9 in. (22.5 cm)
24H429	10 in. (25 cm)
24H430	12 in. (30 cm)
17A174	16 in. (40 cm)
26D111	18 in. (45 cm)
24H437	3-3-3 in. (8-8-8 cm)
24H435	4-3-4 in. (10-8-10 cm)
24H436	4-4-4 in. (10-10-10 cm)
24J785	4-6-4 in. (10-15-10 cm)
17R378	5-5-5 in. (13-13-13 cm)
26C273	6-3-6 in. (15-8-15 cm)

For use with ThermoLazer 200/200tc
For use with the following FlexDie Screed Box:

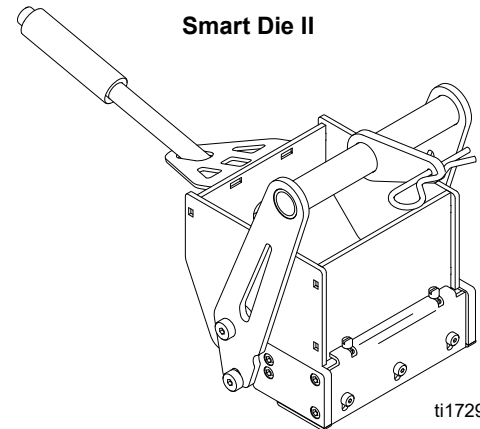
Part	Description
16Y661	2 in. (5 cm)
16Y662	3 in. (8 cm)
16Y320	4 in. (10 cm)
16Y663	5 in. (12 cm)
16Y190	6 in. (15 cm)
16Y664	7 in. (18 cm)
16Y326	8 in. (20 cm)
16Y665	9 in. (22.5 cm)
16Y332	10 in. (25 cm)
16Y207	12 in. (30 cm)
26D189	18 in. (45 cm)
16Y338	3-3-3 in. (8-8-8 cm)
16Y352	4-3-4 in. (10-8-10 cm)
16Y666	4-2-4 in. (10-5-10 cm)
16Y363	4-4-4 in. (10-10-10 cm)
26D109	6-3-6 (15-8-15 cm)

FlexDie



ti22650b

Smart Die II



ti17298a

Related Manuals:






Operation	3A1319
Repair	3A1320
Parts	3A1321
Double Bead Box	3A0004

NOTE: This die is factory-set for 90 mil (1.8 mm) line thickness. See page 5 for adjusting line thickness.



Warnings

The following are general warnings related to the safe setup, use, grounding, maintenance and repair of this equipment. In the text of this manual, the exclamation point symbol alerts you to a warning and the hazard symbol refers to specific risks. Refer back to these General Warnings pages. Additional procedure-specific warnings will be included where applicable.

 WARNING	
	<p>FIRE AND EXPLOSION HAZARD</p> <p>Flammable fumes and liquids, such as propane gas, gasoline and combustible fuel, in work area can ignite or explode. To help prevent fire and explosion:</p> <ul style="list-style-type: none"> • Do not use equipment unless fully trained and qualified. • Do not allow open containers of flammables within 25 ft (7.6 m) of equipment. Do not operate equipment within 10 ft (3 m) of any structure, combustible material, or other gas cylinders. • Shut off all burners when adding fuel to equipment. • Close the tank shut-off valve immediately if you smell propane gas; extinguish all open flames. If gas odor continues, keep away from equipment and immediately call the fire department. • Follow lighting instructions for the burner and torch. • Do not heat thermoplastic traffic marking compound material above its maximum temperature rating. • Fire extinguisher equipment shall be present and working. • Keep work area free of debris, including solvent, rags and gasoline.
	<p>EQUIPMENT MISUSE HAZARD</p> <p>Misuse can cause death or serious injury.</p> <ul style="list-style-type: none"> • Do not leave equipment unattended. • Keep children and animals away from work area. • Do not exceed the maximum working pressure or temperature rating of the lowest rated system component. See Technical Data in all equipment manuals. • Check equipment daily. Repair or replace worn or damaged parts immediately with genuine manufacturer's replacement parts only. • Do not alter or modify equipment. • Use equipment only for its intended purpose. Call your Graco distributor for information. • Do not fill material beyond maximum capacity. • Route gas lines, hoses, wires and cables away from traffic areas, sharp edges, moving parts, and hot surfaces. • Do not kink or overbend gas lines. • Do not override or defeat safety devices. • Do not operate the unit when fatigued or under the influence of drugs or alcohol.
	<p>BURN HAZARD</p> <p>Equipment surfaces and fluid that is heated can become very hot during operation. To avoid severe burns:</p> <ul style="list-style-type: none"> • Do not touch hot fluid or equipment.
	<p>CARBON MONOXIDE HAZARD</p> <p>Exhaust contains poisonous carbon monoxide, which is colorless and odorless. Breathing carbon monoxide can cause death. Do not operate in an enclosed area.</p>

WARNING



TOXIC FLUID OR FUMES HAZARD

Toxic fluids or fumes can cause serious injury or death if splashed in the eyes or on skin, inhaled, or swallowed.

- Read MSDS to know the specific hazards of the materials you are using.



PERSONAL PROTECTIVE EQUIPMENT

You must wear appropriate protective equipment when operating, servicing, or when in the operating area of the equipment to help protect you from serious injury, including eye injury, inhalation of toxic fumes, burns, and hearing loss. This equipment includes but is not limited to:

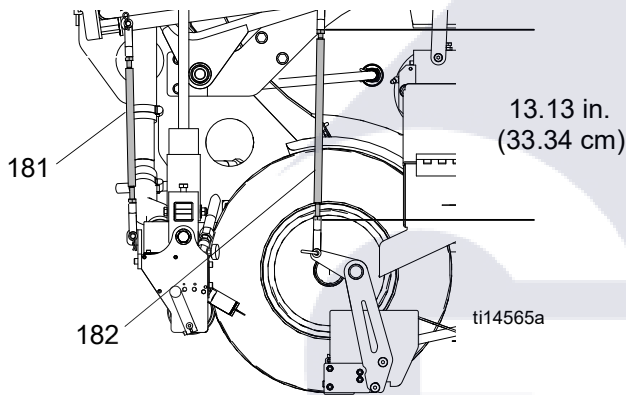
- Clothing and respirator as recommended by the fluid, material, and solvent manufacturer.
- Gloves, shoes, overalls, face shield, hat, etc. rated for elevated temperatures of at least 500° F (260° C).



Linkage Rod Adjustment

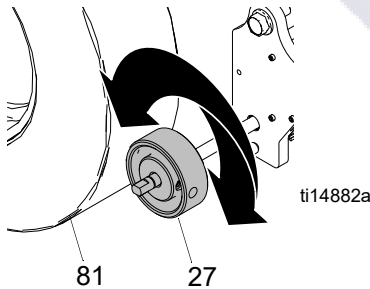
Adjustments can be made to linkage rods by removing clevis cotter hairpin (268), clevis pin from clevis (179), loosening nuts (128), and then turning clevis as required to lengthen or shorten rod connectors.

To ensure proper application of beads and thermoplastic, make sure screed box linkage rod (182) measures 13.13 in. (33.34 cm). Be sure to measure where nut (128) meets clevis (179) when checking for proper linkage rod length.

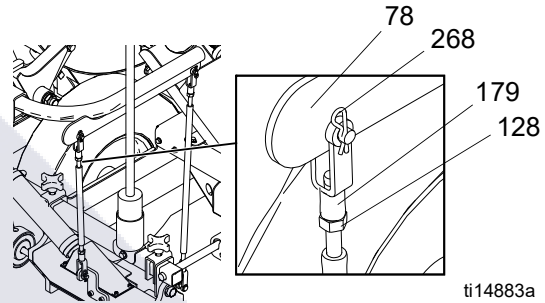


Adjust the bead box linkage rod (181) so bead box drive wheel (27) is touching ThermoLazer tire (81) when screed box is in down (but not open) position. A slight downward force on the bead box rod (181) should be required when inserting the clevis pin through the clevis (179) and deployment bar (78).

1. With screed box in down (but not open) position, rotate the bead box wheel by hand.



2. If the wheel does not cause the ThermoLazer tire to rotate both forward and backwards, loosen nuts (128), remove clevis cotter hairpin (268), remove clevis pin from clevis (179), and rotate the clevis (179) one turn counterclockwise.



3. Reconnect clevis to deployment bar and again rotate bead box wheel to see if adjustments cause ThermoLazer to move forward and backwards.
4. Continue to rotate clevis 1/2 turn counterclockwise until rotating bead box wheel causes ThermoLazer to move forward and backwards.
5. Lock nut (128) to clevis when final adjustment has been made.



NOTE: Linkage rod (182): If converting from SmartDie to SmartDie II, use Die Link Kit 24J714.

6. **26D189 SmartDie only:** Install bracket as shown.

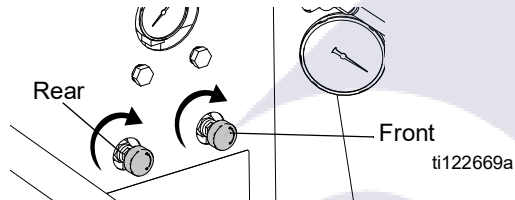


Screed Box ThermoLazer 200/200TC

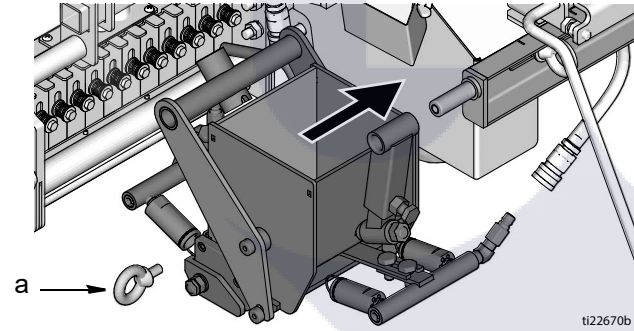
Installation

					
Use extreme caution when installing and removing screed box. Expect all equipment components and material to be extremely hot. See MSDS for Thermo-plastic Traffic Marking Compound.					

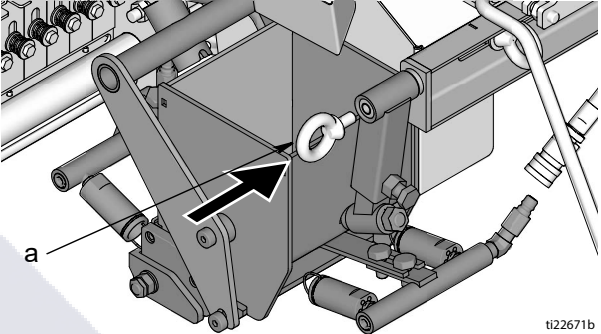
1. Shut off screed box burners.



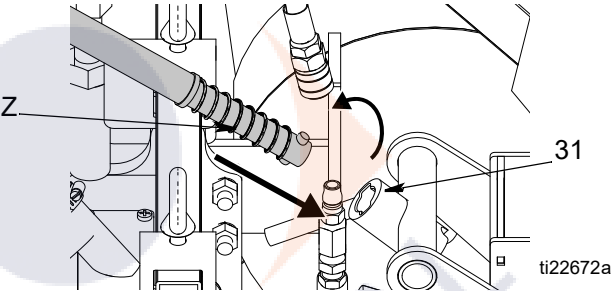
2. Remove bolt (a) and slide FlexDie into place.



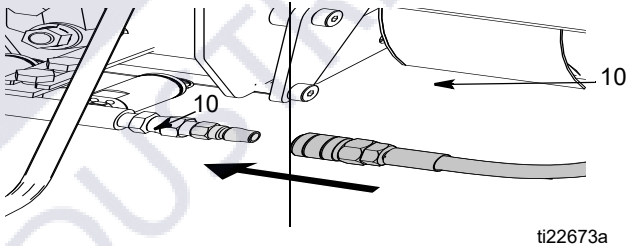
3. Replace and tighten bolt (a).



4. Attach spring loaded handle (Z) to the yoke (31) and turn 90 degrees to lock into place.



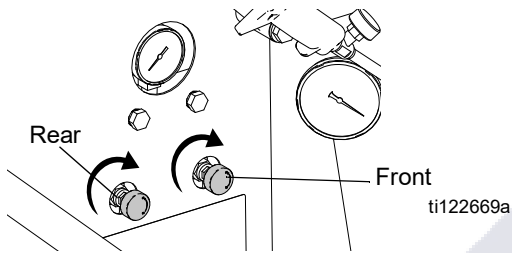
5. Attach both gas hoses to quick release couplings (10).



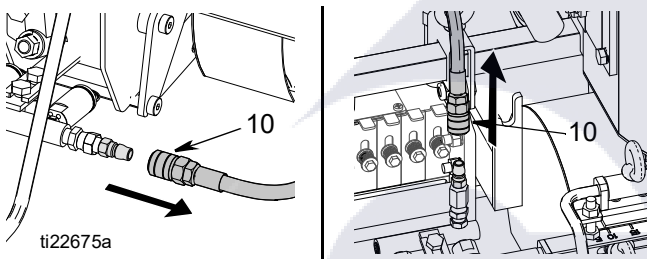
6. Re-light screed box burners as required.

Removal

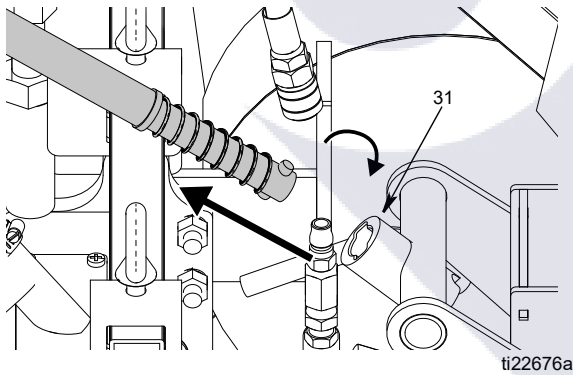
1. Shut off screed box burners.



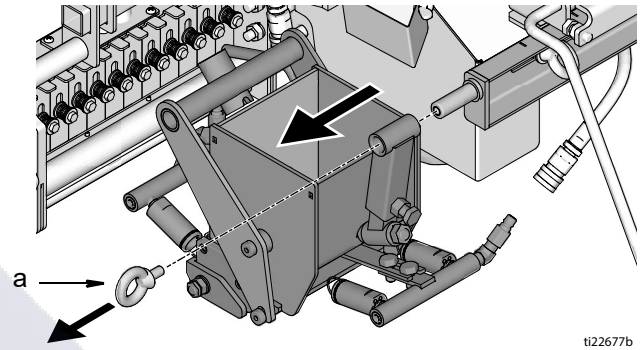
2. Remove the two gas hoses from quick release couplings (10).



3. Push in and turn spring loaded handle 90 degrees and remove from yoke (31).



4. Remove bolt and slide FlexDie box off.



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BURN HAZARD
 Make sure to use two hands when picking up screed box. Place one hand on yoke and one hand on rod.

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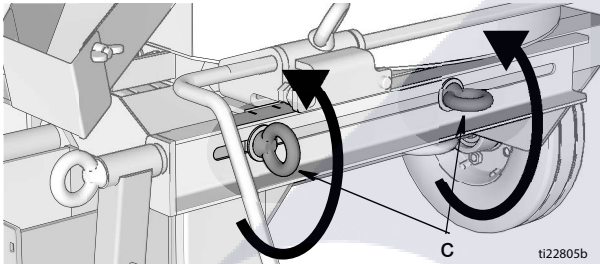
Do **NOT** pick up screed box with one hand and/or at one location.

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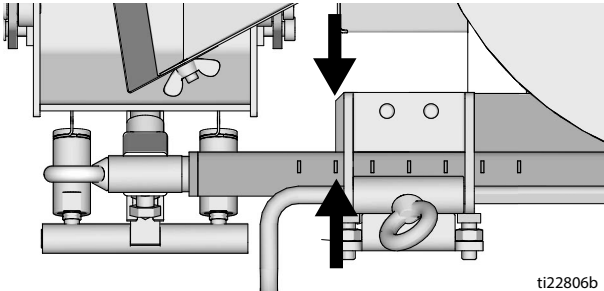
Adjustments

For optimum delivery of the thermoplastic material, make sure the screed box is aligned to center on kettle trough.

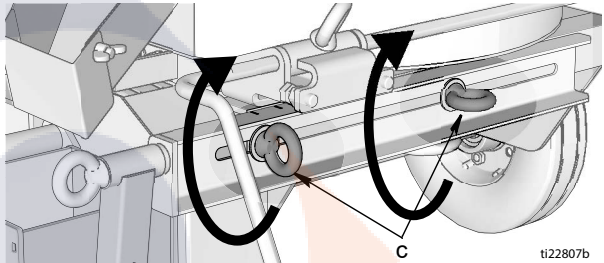
- 1. Loosen two bolts (c) on mounting bracket.



- 2. Slide mount left or right until edge of the frame is aligned with desired markings on bracket.



- 3. Tighten bolts (c) on screed box mounting bracket.



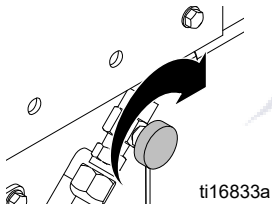
Screed Box Thermolazer 300TC/ProMelt

Installation

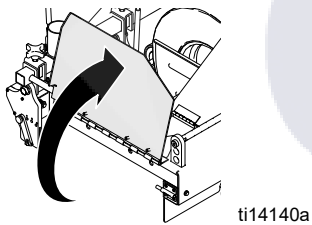


Use extreme caution when installing and removing screed box. Expect all equipment components and material to be extremely hot. See MSDS for Thermoplastic Traffic Marking Compound.

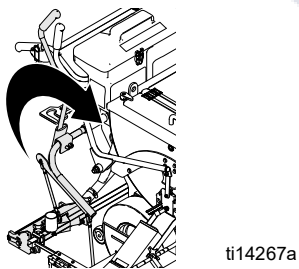
1. Shut off front and rear screed box burners.



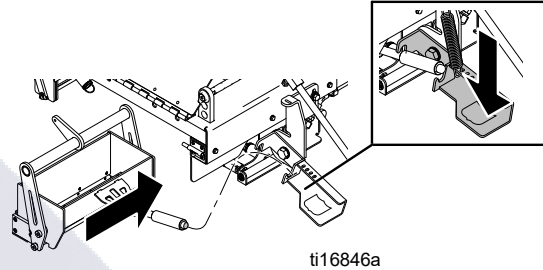
2. Open screed shroud door.



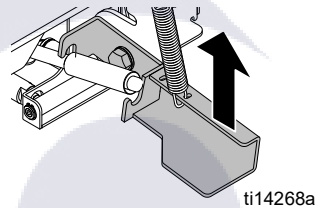
3. Move screed box actuator out of full raised locked position.



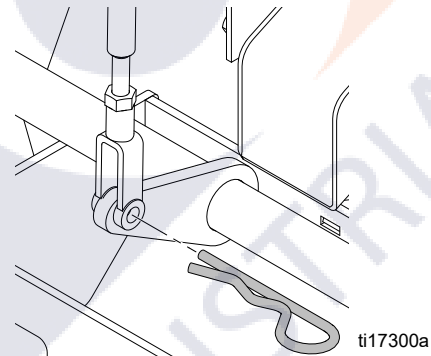
4. Slide screed box under screed shroud and press down on screed box lever.



5. Engage screed box rod into screed box lever.



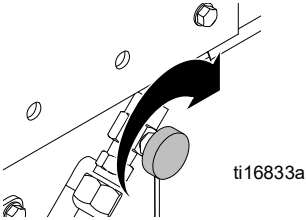
6. Align hole of rod clevis with connecting hole in screed box yoke and install hairpin cotter pin.



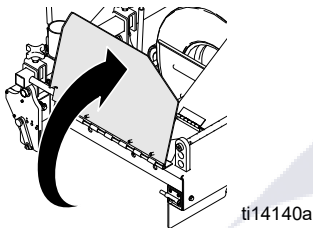
7. Close and lock screed shroud door.

Removal

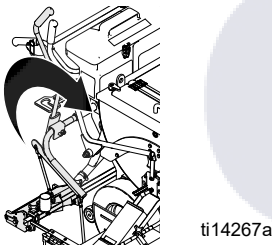
1. Shut off screed box burner.



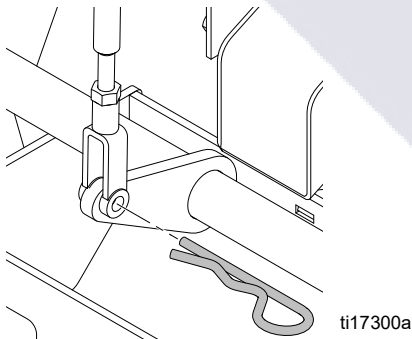
2. Open screed shroud door.



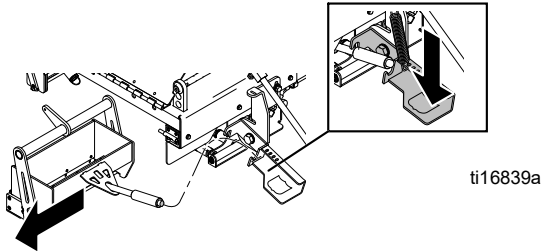
3. Set screed box on ground but not in locked open position.



4. Remove hairpin cotter pin connecting screed box to rod clevis.



5. Press down screed box lever.



6. Disengage screed box rod from screed box lever and carefully remove screed box.

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BURN HAZARD
 Make sure to use two hands when picking up screed box. Place one hand on yoke and one hand on rod.

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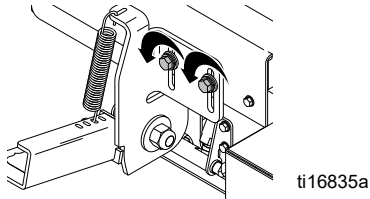
Do **NOT** pick up screed box with one hand and/or at one location.

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Adjustment

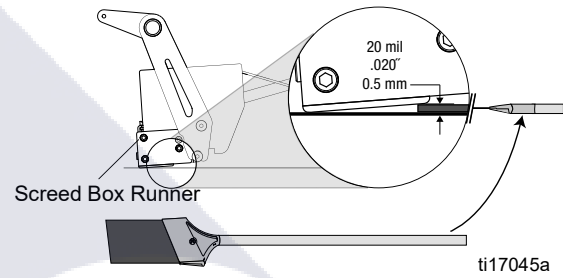
The height and angle of the screed box can be adjusted to ensure a solid line of material on any surface. For optimum delivery of thermoplastic material, make sure the screed box runner is adjusted as described.

1. Loosen two bolts on screed box mounting bracket.

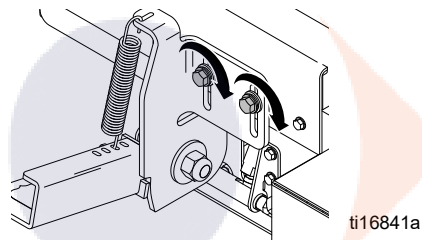


2. Slide mount down until leading box edge of screed box runner is just off of the ground surface. For best performance, raise leading edge .020 in. (0.5 cm) off ground surface. Scraper blade may be used to set this depth.

Screed Box

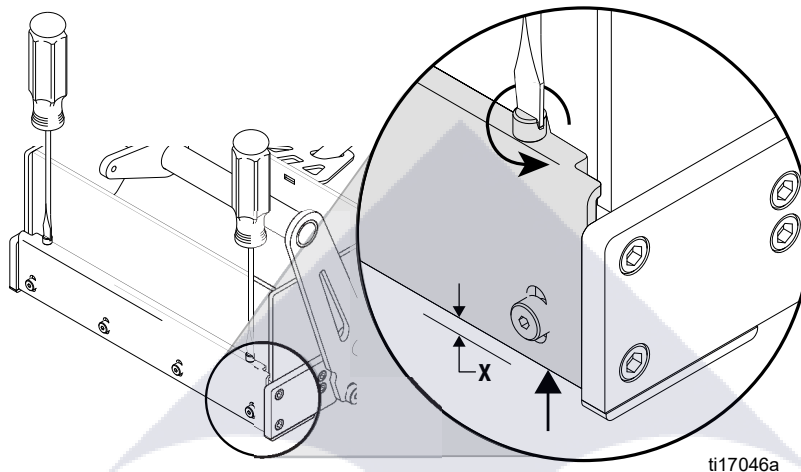


3. Tighten bolts on screed box mounting bracket.



4. Spring position may be moved to a different hole. The farthest holes provide greatest force to close the gate.

Screed Box Line Thickness Adjustment



X ↑	↻
mil	# Turns
30	0,6
60	1,2
90	1,8
120	2,4
150	3,0
mm	# Turns
0,5	0,4
1,0	0,8
1,5	1,2
2,0	1,6

NOTE: 1/4 turn will change line thickness by .013 in. (0.3 mm). Turn the line adjustment screw clockwise for a thinner line, or counterclockwise for a thicker line.

Typical settings on pavement: 0.060 - 0.125 in. (0.153 - 0.318 cm).

Typical settings on metal stencil: Flush - 0.0 in. (0.0 cm).

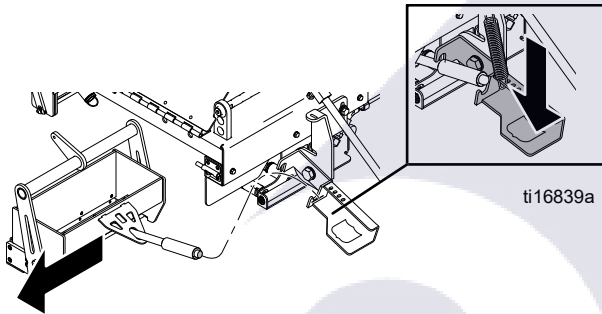
1. Move screed box actuator to middle position. Make sure screed box is closed and resting on the ground. **NOTE:** All screed boxes are initially set at 90 mil (1.8 mm). Adjustment may be required before first use.
2. Use a flat screwdriver to turn line adjustment screw clockwise so that line thickness is zero.
3. Turn line adjustment screw counter-clockwise until desired line thickness is reached.
4. Measure line thickness after applying thermoplastic and adjust as necessary.

Carbide Runner Replacement on Screed Box (1 on each side)

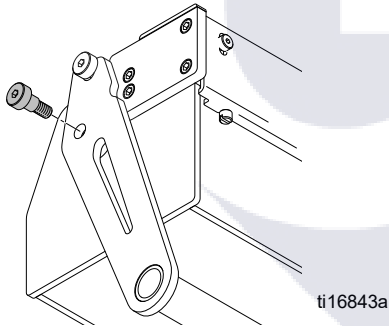
NOTICE

Carbide runners need to be replaced one side at a time. If both runners are removed, adjustment will be lost and screed box will need to be reassembled by a Graco approved technician.

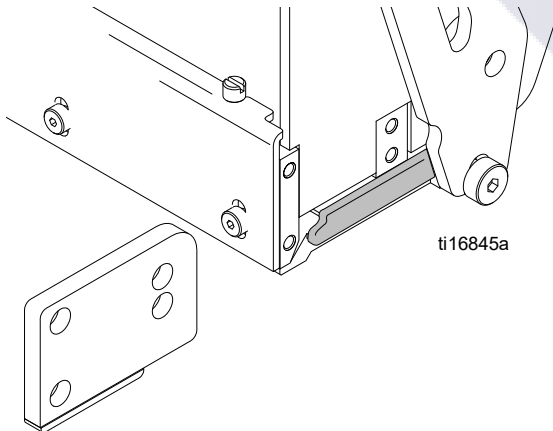
1. Remove screed box.



2. Use allen wrench to loosen and remove upper pivot bolt (511) to free yoke (502).

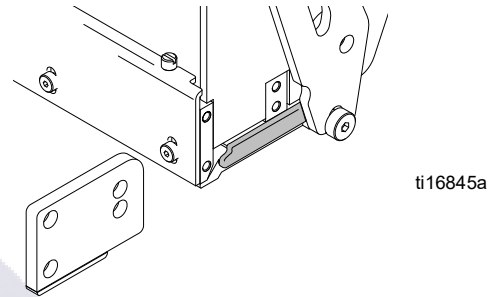


3. Turn unit upside-down and use an allen wrench to remove four screws (513) and plate, die runner (504).



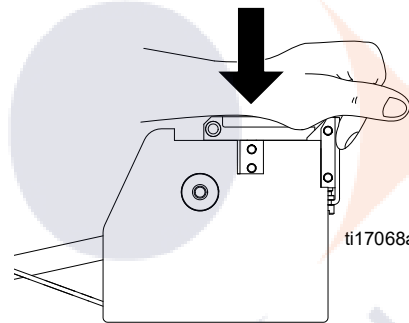
Installation

1. Apply grease to groove where carbide runner sits.

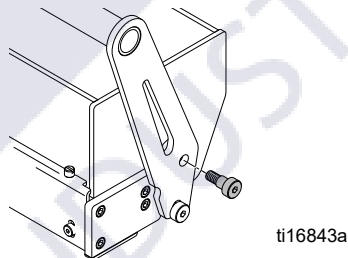


2. Replace plate, die runner (504) with new plate, die runner.

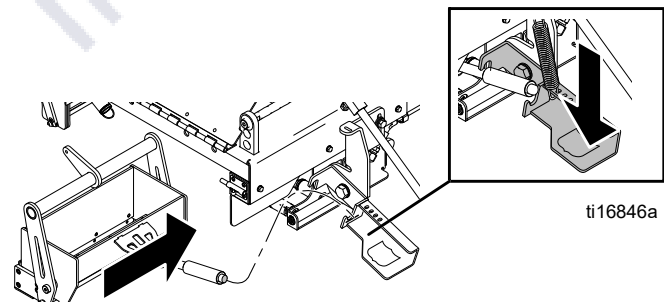
3. While applying pressure to shear bar (506) directly over support bar (509), use allen wrench to replace and tighten four screws (513). There should be no gap between the shear bar and support bar when applying pressure.



4. Use allen wrench to replace and tighten pivot bolt (511) on yoke (502).

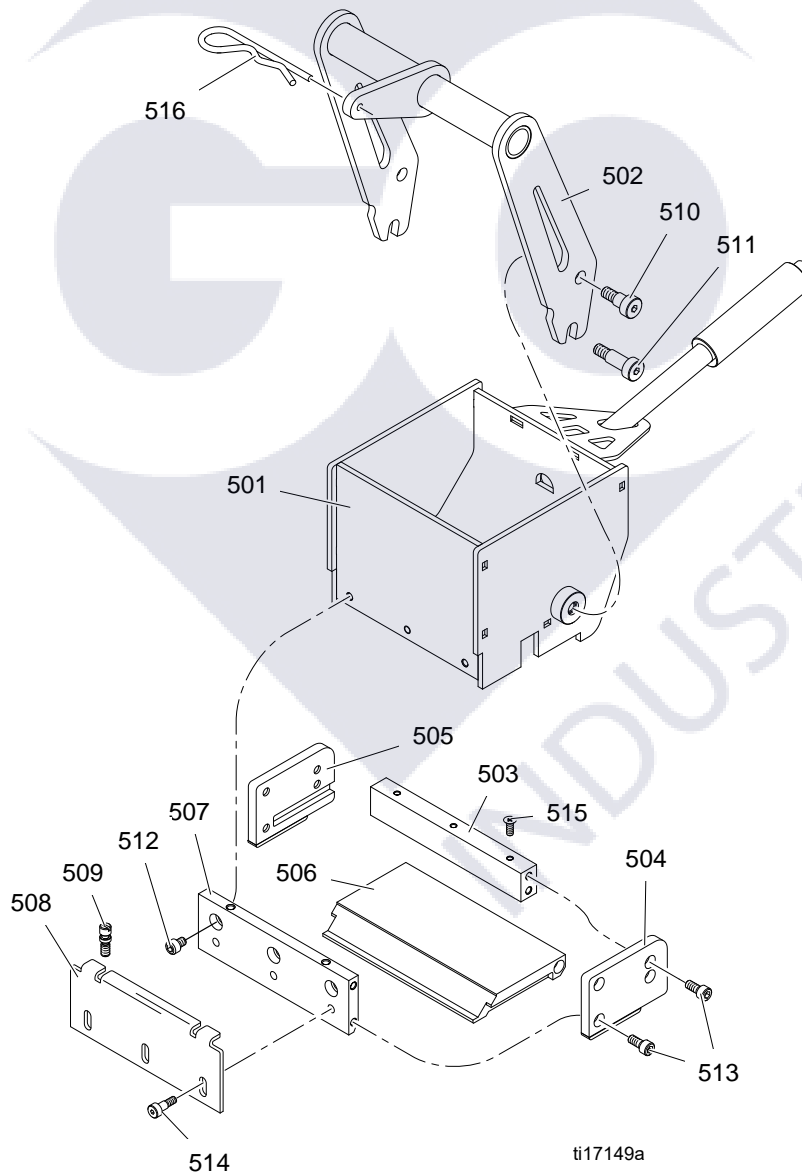


5. Install screed box.



Parts - SmartDie II Box

17A173	2 in. (5 cm)
24H431	3 in. (8 cm)
24H426	4 in. (10 cm)
17J250	4.75 in. (12 cm)
24H432	5 in. (13 cm)
24H427	6 in. (15 cm)
24H433	7 in. (18 cm)
24H428	8 in. (20 cm)
24H434	9 in. (22.5 cm)
24H429	10 in. (25 cm)
24H430	12 in. (30 cm)
17A174	16 in. (40 cm)
26D111	18 in. (45 cm)

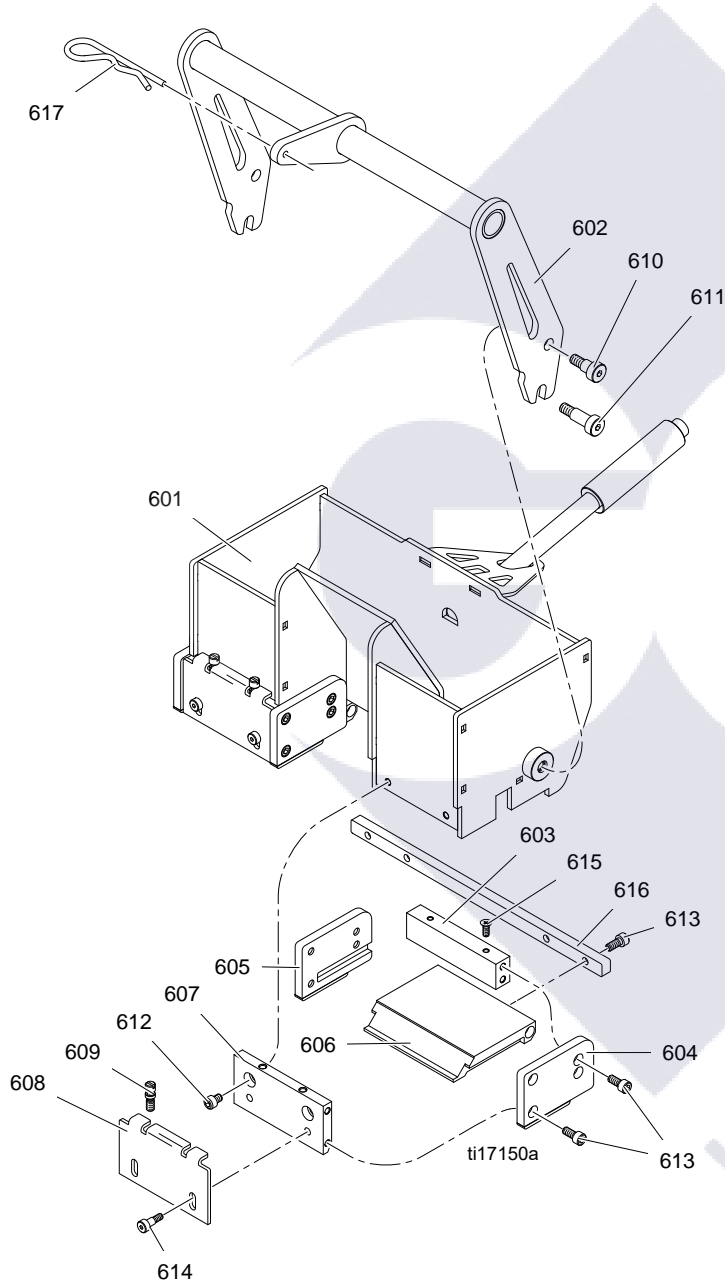


Parts List - SmartDie II Box

Ref. Part	Description	Qty.	Ref. Part	Description	Qty.
19	104541 NUT, lock (26D111) (not shown)	2	16H015	BAR, shear (24H427)	1
20	867539 SCREW, 5/16-18 x 3.75 hx (26D111) (not shown)	2	16H021	BAR, shear (24H433)	1
21	26D563 BRACKET, smart die (26D111) (not shown)	1	16H016	BAR, shear (24H428)	1
501	24H565 BOX, die, weldment (17A173)	1	16H022	BAR, shear (24H434)	1
	24H562 BOX, die, weldment (24H431)	1	16H017	BAR, shear (24H429)	1
	24H563 BOX, die, weldment (24H426)	1	16H018	BAR, shear (24H430)	1
	17J251 BOX, die, weldment (17J250)	1	17A185	BAR, shear (17A174)	1
	24H564 BOX, die, weldment (24H432)	1	18F296	BAR, shear (26D111)	1
	24H565 BOX, die, weldment (24H427)	1	507	16H025 BAR, shear, stop (17A173)	1
	24H566 BOX, die, weldment (24H433)	1		16H029 BAR, shear, stop (24H431)	1
	24H567 BOX, die, weldment (24H428)	1		16H024 BAR, shear, stop (24H426)	1
	24H568 BOX, die, weldment (24H434)	1		17J263 BAR, shear, stop (17J250)	1
	24H569 BOX, die, weldment (24H429)	1		16H030 BAR, shear, stop (24H432)	1
	24H570 BOX, die, weldment (24H430)	1		16H025 BAR, shear, stop (24H427)	1
	17A176 BOX, die, weldment (17A174)	1		16H031 BAR, shear, stop (24H433)	1
	26D124 BOX, die, weldment (26D111)	1		16H026 BAR, shear, stop (24H428)	1
502	24H574 YOKE, weldment (17A173)	1		16H032 BAR, shear, stop (24H434)	1
	24H571 YOKE, weldment (24H431)	1		16H027 BAR, shear, stop (24H429)	1
	24H572 YOKE, weldment (24H426)	1		16H028 BAR, shear, stop (24H430)	1
	17J256 YOKE, weldment (17J250)	1		17A187 BAR, shear, stop (17A184)	1
	24H573 YOKE, weldment (24H432)	1		18F295 BAR, shear, stop (26D111)	1
	24H574 YOKE, weldment (24H427)	1	508	17A188 PLATE, screed, adjustable (17A173)	1
	24H575 YOKE, weldment (24H433)	1		16H033 PLATE, screed, adjustable (24H431)	1
	24H576 YOKE, weldment (24H428)	1		16H034 PLATE, screed, adjustable (24H426)	1
	24H577 YOKE, weldment (24H434)	1		17J264 PLATE, screed, adjustable (17J250)	1
	24H578 YOKE, weldment (24H429)	1		16H035 PLATE, screed, adjustable (24H432)	1
	24H579 YOKE, weldment (24H430)	1		16H036 PLATE, screed, adjustable (24H427)	1
	17A179 YOKE, weldment (17A174)	1		16H037 PLATE, screed, adjustable (24H433)	1
	26D125 YOKE, weldment (26D111)	1		16H038 PLATE, screed, adjustable (24H428)	1
503	16G996 BAR, support (17A173)	1		16H039 PLATE, screed, adjustable (24H434)	1
	16H001 BAR, support (24H431)	1		16H040 PLATE, screed, adjustable (24H429)	1
	16G995 BAR, support (24H426)	1		16H041 PLATE, screed, adjustable (24H430)	1
	17J260 BAR, support (17J250)	1		17A189 PLATE, screed, adjustable (17A184)	1
	16H006 BAR, support (24H432)	1		18F297 PLATE, screed, adjustable (26D111)	1
	16G996 BAR, support (24H427)	1	509	16H044 SCREW, adjustment, screed	2
	16H007 BAR, support (24H433)	1	510	125028 SCREW, shoulder, socket head M8	2
	16G997 BAR, support (24H428)	1	511	125027 SCREW, shoulder, socket head M8	2
	16H008 BAR, support (24H434)	1	512	110501 SCREW, cap sch, M6 x 8	7
	16G998 BAR, support (24H429)	1		(24H431,24H426, 24H432, 24H427, 24H433 ,24H428, 24H434, 24H429, 24H430, 26D111)	
	16G999 BAR, support (24H430)	1	513	121518 SCREW, cap, shc	8
	17A183 BAR, support (17A174)	1	514	125029 SCREW, shoulder, socket head M5	5
	18F282 BAR, support (26D111)	1		(24H431,24H426, 24H432, 24H427, 24H433 ,24H428, 24H434, 24H429, 24H430, 26D111)	
504	24H581 PLATE, die runner, right	1	515	123340 SCREW, mach, flat head, undercut	6
505	24H580 PLATE, die runner, left	1		(24H431,24H426, 24H432, 24H427, 24H433 ,24H428, 24H434, 24H429, 24H430, 26D111)	
506	17A184 BAR, shear (17A173)	1	516	123385 PIN	1
	16H019 BAR, shear (24H431)	1			
	16H014 BAR, shear (24H426)	1			
	17J262 BAR, shear (17J250)	1			
	16H020 BAR, shear (24H432)	1			

Parts - Double Line Die Box

- 24H435 4-3-4 in. (10-8-10 cm)
- 24H436 4-4-4 in. (10-10-10 cm)
- 24H437 3-3-3 in. (8-8-8 cm)
- 24J785 4-6-4 in. (10-15-10 cm)
- 17R378 5-5-5 in. (13-13-13 cm)
- 26C273 6-3-6 in. (15-8-15 cm)

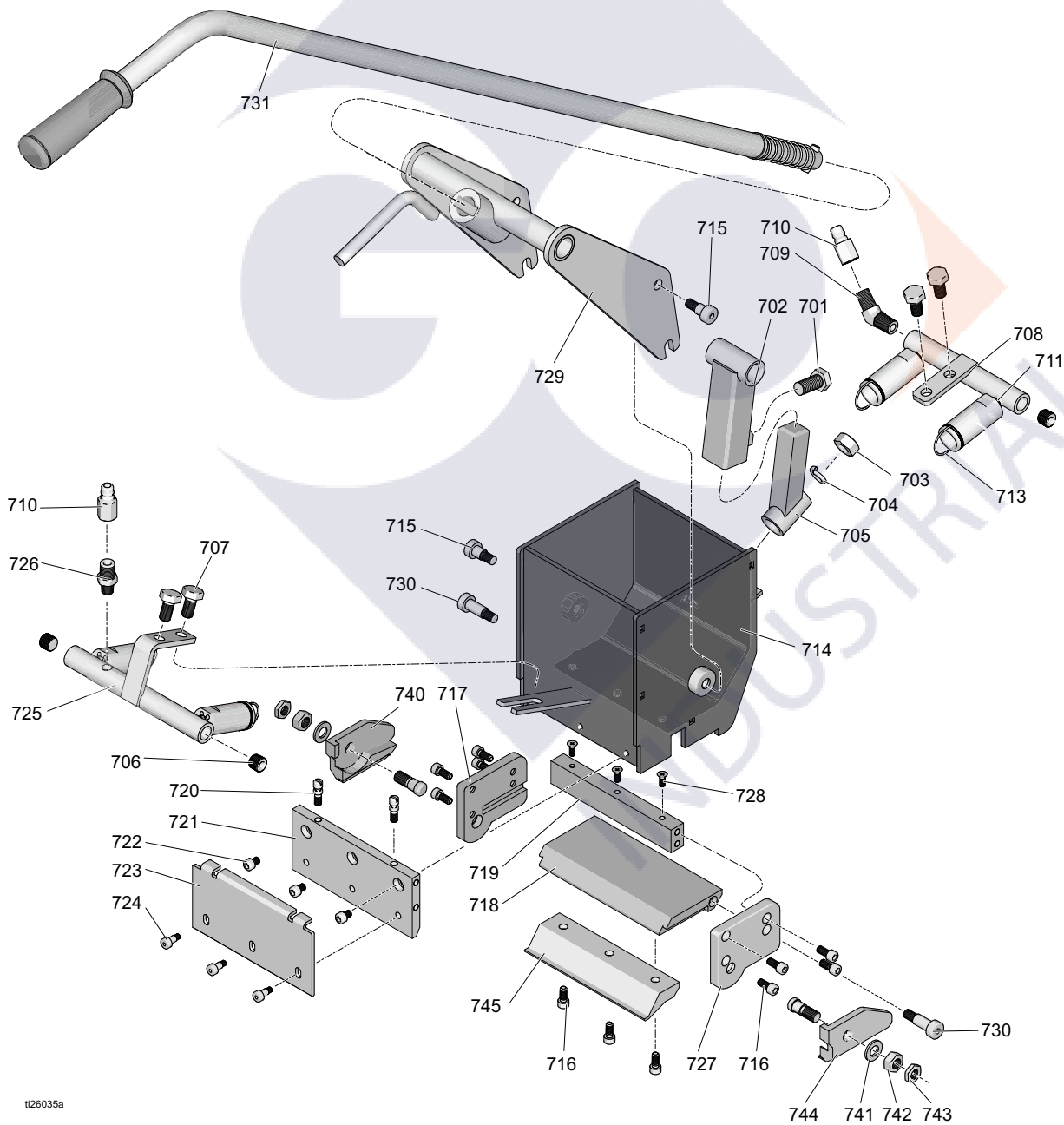


Parts List - Double Line Die Box

Ref.	Part	Description	Qty.
601	24H647	BOX, die, weldment (24H435)	1
	24H648	BOX, die, weldment (24H436)	1
	24H649	BOX, die, weldment (24H437)	1
	24J784	BOX, die, weldment (24J785)	1
	17R379	BOX, die, weldment (17R378)	1
	26C274	BOX, die, weldment (26C273)	1
602	24H652	YOKE, weldment (24H435)	1
	24H579	YOKE, weldment (24H436)	1
	24H577	YOKE, weldment (24H437)	1
	24J783	YOKE, weldment (24J785)	1
	17R382	YOKE, weldment (17R378)	1
		YOKE, weldment (26C273)	1
603	16G995	BAR, support (24H435, 24H436, 24J785)	1
	16H001	BAR, support (24H437)	1
	16H006	BAR, support (17R378)	1
	16G996	BAR, support (26C273)	1
604	24H581	PLATE, die runner, right	2
605	24H580	PLATE, die runner, left	2
606	16H159	BAR, shear, die, double (24H435, 24H436, 24J785)	2
	16H160	BAR, shear, die, double (24H437)	2
	17R384	BAR, shear, die, double (17R378)	2
	17A211	BAR, shear, die, double (26C273)	2
607	16H024	BAR, shear, stop (24H435, 24H436, 24J785)	2
	16H029	BAR, shear, stop (24H437)	2
	16H030	BAR, shear, stop (17R378)	2
	16H025	BAR, shear, stop (26C273)	2
608	16H034	PLATE, screed, adjustable (24H435, 24H436, 24J785)	2
	16H041	PLATE, screed, adjustable (24H437)	2
	16H035	PLATE, screed, adjustable (17R378)	2
	16H036	PLATE, screed, adjustable (26C273)	2
609	16H044	SCREW, adjustment, screed	4
610	125028	SCREW, shoulder, socket head M8	4
611	125027	SCREW, shoulder, socket head M8	4
612	110501	SCREW, cap, sch M6 x 8	4
		SCREW, cap, sch M6 x 8 (17R378)	6
		SCREW, cap, sch M6 x 8 (26C273)	6
613	121518	SCREW, cap, shc	20
614	125029	SCREW, shoulder, socket head M5	4
		SCREW, shoulder, socket head M5 (17R378)	6
		SCREW, shoulder, socket head M5 (26C273)	6
615	123340	SCREW, mach, flat head, undercut	4
		SCREW, mach, flat head, undercut (17R378)	6
		SCREW, mach, flat head, undercut (26C273)	6
616	16H189	GUIDE, bar, shear, double (24H435)	1
	16H161	GUIDE, bar, shear, double (24H436)	1
	16H162	GUIDE, bar, shear, double (24H437)	1
	16J802	GUIDE, bar, shear, double (24J785)	1
	17R385	GUIDE, bar, shear, double (17R378)	1
	17W534	GUIDE, bar, shear, double (26C273)	1
617	123385	PIN	1

Parts - FlexDie Box

16Y661	2 in. (5 cm)
16Y662	3 in. (8 cm)
16Y320	4 in. (10 cm)
16Y663	5 in. (12 cm)
16Y190	6 in. (15 cm)
16Y664	7 in. (18 cm)
16Y326	8 in. (20 cm)
16Y665	9 in. (22.5 cm)
16Y332	10 in. (25 cm)
16Y207	12 in. (30 cm)
26D189	18 in. (45 cm)



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Parts List - FlexDie Box

Ref. Part	Description	Qty.	Ref. Part	Description	Qty.
701	16Y261 SCREW, cap, hex hd, M12 X 1.75 X 25	1	17D542	BAR, shear, 10 in. (16Y332)	1
702	16Y077 CONNECTOR, die pivot	1	17D543	BAR, shear, 12 in. (16Y207)	1
703	107539 NUT, hex	1	18F287	BAR, shear, 18 in. (26D189)	1
704	124704 WASHER, spring, metallic	1			
705	16Y081 HOLDER, die holder	1	719	16G996 BAR, support, 2 in., (16Y661)	1
706	557391 PLUG, dryseal 1/4 NPTF	3	16H001	BAR, support, 3 in., (16Y662)	1
707	105326 SCREW, cap hex hd	4	16G995	BAR, support, 3 in., (16Y320)	1
708	16Y237 TUBE, burner front, 2 in. (16Y661)	1	16H006	BAR, support, 5 in. (16Y663)	1
	TUBE, burner front, 3 in. (16Y662)		16G996	BAR, support, 6 in. (16Y190)	1
	16Y252 TUBE, burner front, 4 in. (16Y320)	1	16H007	BAR, support, 7 in. (16Y664)	1
	16Y681 TUBE, burner front, 5 in. (16Y663)	1	16G997	BAR, support, 8 in. (16Y326)	1
	16Y237 TUBE, burner front, 6 in. (16Y190)	1	16H008	BAR, support, 9 in. (16Y665)	1
	16Y715 TUBE, burner front, 7 in. (16Y664)	1	16G998	BAR, support, 10 in. (16Y332)	1
	16Y689 TUBE, burner front, 8 in. (16Y326)	1	16G999	BAR, support, 12 in. (16Y207)	1
	16Y755 TUBE, burner front, 9 in. (16Y665)	1	18F282	BAR, support, 18 in. (26D189)	1
	16Y486 TUBE, burner front, 10 in. (16Y332)	1	720	16H044 SCREW, adjustment, screed	2
	16Y244 TUBE, burner front, 12 in. (16Y207)	1	721	16H025 BAR, shear, stop, 2 in. (16Y661)	1
	26D123 TUBE, burner front, 18 in. (26D189)	1	17D544	BAR, shear, stop, 3 in., (16Y662)	1
709	17D594 FITTING, elbow 45, 1/4 NPT	1	17D545	BAR, shear, stop, 4 in. (16Y320)	1
710	16Y225 COUPLING, quick release, male	2	17D546	BAR, shear, stop, 5 in. (16Y663)	1
711	17B231 KIT, repair, torch head, die (16Y661)	4	17D547	BAR, shear, stop, 6 in. (16Y190)	1
	KIT, repair, torch head, die (16Y662)	1	17D548	BAR, shear, stop, 7 in. (16Y664)	1
	KIT, repair, torch head, die (16Y320)	4	17D549	BAR, shear, stop, 8 in. (16Y326)	1
	KIT, repair, torch head, die (16Y663)	4	17D550	BAR, shear, stop, 9 in. (16Y665)	1
	KIT, repair, torch head, die (16Y190)	4	17D551	BAR, shear, stop, 10 in. (16Y332)	1
	KIT, repair, torch head, die (16Y664)	4	17D552	BAR, shear, stop, 12 in. (16Y207)	1
	KIT, repair, torch head, die (16Y326)	4	18F285	BAR, shear, stop, 18 in. (26D189)	1
	KIT, repair, torch head, die (16Y665)	6	722	110501 SCREW, cap, sch (M6 X 8) (16Y661)	3
	KIT, repair, torch head, die (16Y332)	6		SCREW, cap, sch (M6 X 8) (16Y662)	2
	KIT, repair, torch head, die (16Y207)	6		SCREW, cap, sch (M6 X 8) (16Y320)	2
	KIT, repair, torch head, die (26D189)	6		SCREW, cap, sch (M6 X 8) (16Y663)	3
713	16H104 INDICATOR, burner (included in 711)	2		SCREW, cap, sch (M6 X 8) (16Y190)	3
714	BOX, die, weldment, 2 in. (16Y661)	1		SCREW, cap, sch (M6 X 8) (16Y664)	3
	BOX, die, weldment, 3 in. (16Y662)	1		SCREW, cap, sch (M6 X 8) (16Y326)	3
	BOX, die, weldment, 4 in. (16Y320)	1		SCREW, cap, sch (M6 X 8) (16Y665)	4
	BOX, die, weldment, 5 in. (16Y663)	1		SCREW, cap, sch (M6 X 8) (16Y332)	4
	BOX, die, weldment, 6 in. (16Y190)	1		SCREW, cap, sch (M6 X 8) (16Y207)	4
	BOX, die, weldment, 7 in. (16Y664)	1		SCREW, cap, sch (M6 X 8) (26D189)	4
	BOX, die, weldment, 8 in. (16Y326)	1	723	17A188 PLATE, screed, adjustable, 2 in., (16Y661)	1
	BOX, die, weldment, 9 in. (16Y665)	1	17D526	PLATE, screed, adjustable, 3 in. (16Y662)	1
	BOX, die, weldment, 10 in. (16Y332)	1	17D527	PLATE, screed, adjustable, 4 in. (16Y320)	1
	BOX, die, weldment, 12 in. (16Y207)	1	17D528	PLATE, screed, adjustable, 5 in. (16Y663)	1
	BOX, die, weldment, 18 in. (26D189)	1	17D529	PLATE, screed, adjustable, 6 in. (16Y190)	1
715	125028 SCREW, shoulder, socket head M8	2	17D530	PLATE, screed, adjustable, 7 in. (16Y664)	1
716	121518 SCREW, cap, sch (16Y661)	8	17D531	PLATE, screed, adjustable, 8 in. (16Y326)	1
	SCREW, cap, sch (16Y662)	10	17D532	PLATE, screed, adjustable, 9 in. (16Y665)	1
	SCREW, cap, sch (16Y320)	10	17D533	PLATE, screed, adjustable, 10 in. (16Y332)	1
	SCREW, cap, sch (16Y663)	11	17D534	PLATE, screed, adjustable, 12 in. (16Y207)	1
	SCREW, cap, sch (16Y190)	11	18F286	PLATE, screed, adjustable, 18 in. (26D189)	1
	SCREW, cap, sch (16Y664)	11	724	17D772 SCREW, shoulder, socket head M5 (16Y661)	3
	SCREW, cap, sch (16Y326)	11		SCREW, shoulder, socket head M5 (16Y662)	2
	SCREW, cap, sch (16Y665)	12		SCREW, shoulder, socket head M5 (16Y320)	2
	SCREW, cap, sch (16Y332)	12		SCREW, shoulder, socket head M5 (16Y663)	3
	SCREW, cap, sch (16Y207)	12		SCREW, shoulder, socket head M5 (16Y190)	3
	SCREW, cap, sch (26D189)	12		SCREW, shoulder, socket head M5 (16Y664)	3
717	24H580 PLATE, die runner, pro screed, left (16Y661)	1		SCREW, shoulder, socket head M5 (16Y326)	3
	17D499 PLATE, pivot, left (16Y320)	1		SCREW, shoulder, socket head M5 (16Y665)	4
	17D499 PLATE, pivot, left (16Y662)	1		SCREW, shoulder, socket head M5 (16Y332)	4
	17D499 PLATE, pivot, left (16Y663)	1		SCREW, shoulder, socket head M5 (16Y207)	4
	17D499 PLATE, pivot, left (16Y190)	1		SCREW, shoulder, socket head M5 (26D189)	4
	17D499 PLATE, pivot, left (16Y664)	1	725	16Y222 TUBE, back burner, 2 in., (16Y661)	1
	17D499 PLATE, pivot, left (16Y326)	1	17D517	TUBE, back burner, 3 in., (16Y662)	1
	17D499 PLATE, pivot, left (16Y665)	1	17D518	TUBE, back burner, 4 in. (16Y320)	1
	17D499 PLATE, pivot, left (16Y332)	1		TUBE, back burner, 5 in. (16Y663)	1
	17D499 PLATE, pivot, left (16Y207)	1	17D520	TUBE, back burner, 6 in. (16Y190)	1
	17D499 PLATE, pivot, left (26D189)	1		TUBE, back burner, 7 in. (16Y664)	1
718	17A184 BAR, shear, 2 in., (16Y661)	1	17D522	TUBE, back burner, 8 in. (16Y326)	1
	17D535 BAR, shear, 3 in., (16Y320)	1	17D523	TUBE, back burner, 9 in. (16Y665)	1
	17D536 BAR, shear, 4 in., (16Y662)	1	17D524	TUBE, back burner, 10 in. (16Y332)	1
	17D537 BAR, shear, 5 in. (16Y663)	1	17D525	TUBE, back burner, 12 in. (16Y207)	1
	17D538 BAR, shear, 6 in. (16Y190)	1	26D122	TUBE, back burner, 18 in. (26D189)	1
	17D539 BAR, shear, 7 in. (16Y664)	1	726	16Y235 FITTING, nipple, 1/4 NPT to 1/8 NPT	1
	17D540 BAR, shear, 8 in. (16Y326)	1	727	24H581 PLATE, die runner, pro screed, right (16Y661)	1
	17D541 BAR, shear, 9 in. (16Y665)	1	17D497	PLATE, pivot, right (16Y320)	1

Parts - FlexDie Box

Ref. Part	Description	Qty.
17D497	PLATE, pivot, right (16Y662)	1
17D497	PLATE, pivot, right (16Y663)	1
17D497	PLATE, pivot, right (16Y190)	1
17D497	PLATE, pivot, right (16Y664)	1
17D497	PLATE, pivot, right (16Y326)	1
17D497	PLATE, pivot, right (16Y665)	1
17D497	PLATE, pivot, right (16Y332)	1
17D497	PLATE, pivot, right (16Y207)	1
17D497	PLATE, pivot, right (26D189)	1
728 123340	SCREW, mach, flat head, undercut (16Y661)	3
	SCREW, mach, flat head, undercut (16Y662)	2
	SCREW, mach, flat head, undercut (16Y320)	2
	SCREW, mach, flat head, undercut (16Y663)	3
	SCREW, mach, flat head, undercut (16Y190)	3
	SCREW, mach, flat head, undercut (16Y664)	3
	SCREW, mach, flat head, undercut (16Y326)	3
	SCREW, mach, flat head, undercut (16Y665)	4
	SCREW, mach, flat head, undercut (16Y332)	4
	SCREW, mach, flat head, undercut (16Y207)	4
	SCREW, mach, flat head, undercut (26D189)	4
729 16Y198	YOKE, weldment, 2 in. (16Y661)	1
16Y702	YOKE, weldment, 3 in. (16Y662)	1
16Y324	YOKE, weldment, 4 in. (16Y320)	1
16Y673	YOKE, weldment, 5 in. (16Y663)	1
16Y198	YOKE, weldment, 6 in. (16Y190)	1
16Y713	YOKE, weldment, 7 in. (16Y664)	1
16Y330	YOKE, weldment, 8 in. (16Y326)	1
16Y753	YOKE, weldment, 9 in. (16Y665)	1
16Y336	YOKE, weldment, 10 in. (16Y332)	1
16Y206	YOKE, weldment, 12 in. (16Y207)	1
26D121	YOKE, weldment, 18 in. (26D189)	1
730 125027	SCREW, shoulder, socket head M8	2
731 16Y205	HANDLE, die handle, assy	1
740 17D504	FLOAT RUNNER, left	1
741 16Y267	WASHER, flat, M10	2
742 105327	NUT, hex	2
743 17D593	NUT, thin nut, M10 (not on 16Y661)	2
744 17D502	FLOAT RUNNER, right	1
745 17D508	BAR, shear, 3 in., (16Y662)	1
17D509	BAR, shear, 4 in., (16Y320)	1
17D510	BAR, shear, 5 in., (16Y663)	1
17D511	BAR, shear, 6 in., (16Y190)	1
17D512	BAR, shear, 7 in., (16Y664)	1
17D513	BAR, shear, 8 in., (16Y326)	1
17D514	BAR, shear, 9 in., (16Y665)	1
17D515	BAR, shear, 10 in., (16Y332)	1
17D516	BAR, shear, 12 in., (16Y207)	1
18F291	BAR, shear, 18 in., (26D189)	1

Parts List - Double Line FlexDie Box

Ref.	Part	Description	Qty.	Ref.	Part	Description	Qty.
800	16Y261	SCREW, cap, hex hd, M12 x 1.75 x 25	1		16H159	BAR, support (16Y363)	2
801	16Y081	HOLDER, die holder	1	820	16G996	BAR, support (26D109)	2
802	107539	NUT, hex	1	821	16H044	SCREW, adjustment, screed	4
803	124704	WASHER, spring, metallic	1	821	16H029	BAR, shear, stop (16Y338)	2
804	16Y077	CONNECT, die pivot	1		16H024	BAR, shear, stop (16Y352, 16Y666, 16Y363)	2
805	557391	PLUG, dryseal, 1/4 NPTF	3		16H025	BAR, shear, stop (26D109)	2
806	105326	SCREW, cap hex hd	4	822	110501	SCREW, cap, sch (M6 x 8)	4
807	16Y351	TUBE, burner front, 3-3-3 (16Y338)	1	823	16H033	PLATE, screed, adjustable, 3 in. (16Y338)	2
	16Y361	TUBE, burner fron, 4-3-4 (16Y352, 16Y666)	1		16H034	PLATE, sreed, adjustable, 4 in. (16Y352, 16Y666, 16Y363)	2
	16Y371	TUBE, burner front, 4-4-4 (16Y363)	1	824	125029	SCREW, shoulder, socket head, M5	4
	26D117	TUBE, burner front, 6-3-6 (26D109)	1	825	16Y347	TUBE, burner back, 3-3-3 (16Y338)	1
808	16Y225	COUPLING, quick release, male	2		16Y358	TUBE, burner back, 4-3-4 (16Y352)	1
809	17D594	FITTING, nipple hx 1/4 x 1/4 npt	1		16Y806	TUBE, burner back, 4-2-4 (16Y666)	1
810	17B231	KIT, repair, torch head, die (model 16Y338)	4		16Y368	TUBE, burner back, 4-4-4 (16Y363)	1
		KIT, repair, torch head, die (model 16Y352)	6		26D128	TUBE, burner back, 6-3-6 (26D109)	1
		KIT, repair, torch head, die (model 16Y666)	6	826	16Y235	FITTING, nipple 1/4 npt to 1/8 npt	1
		KIT, repair, torch head, die (model 16Y363)	6	827	24H581	PLATE, die runner, proscreed, right	2
		KIT, repair, torch head, die (model 26D109)	6	828	123340	SCREW, mach, flat head, undercut	4
813	16Y339	DIE, box weldent, 3-3-3 (16Y338)	1	829	16Y753	YOKE, weldment, 3-3-3 (16Y338)	1
	16Y353	DIE, box weldent, 4-3-4 (16Y352)	1		16Y355	YOKE, weldment, 4-3-4 (16Y352)	1
	16Y800	DIE, box weldent, 4-2-4 (16Y666)	1		16Y336	YOKE, weldment, 4-2-4 (16Y666)	1
	16Y364	DIE, box weldent, 4-4-4 (16Y363)	1		16Y206	YOKE, weldment, 4-4-4 (16Y363)	1
	26D115	DIE, box weldent, 6-3-6 (26D109)	1	830	16H162	GUIDE, bar, shear, double, 3-3-3 (16Y338)	1
814	125028	SCREW, shoulder, socket head M8	2		16H189	GUIDE, bar, shear, double, 4-3-4 (16Y352)	1
815	121518	SCREW, cap, sch	20		16Y805	GUIDE, bar, shear, double, 4-2-4 (16Y666)	1
816	24H580	PLATE, die runner, proscreed, left	2		16H161	GUIDE, bar, shear, double, 4-4-4 (16Y363)	1
817	125027	SCREW, shoulder, socket head M8	2		18F275	GUIDE, bar, shear, double, 6-3-6 (26D109)	1
818	16H160	BAR, shear, die, double 3 in. (16Y338)	2	831	16Y205	HANDLE, die handle, assy	1
	16H159	BAR, shear, die, double, 4 in. (16Y352, 16Y666, 16Y363)	2				
	17A211	BAR, shear, die, double, 6 in. (26D109)	2				
819	16H001	BAR, support (16Y338)	2				
	16G995	BAR, support (16Y352)	2				
	16G995	BAR, support (16Y666)	2				

California Proposition 65

CALIFORNIA RESIDENTS

 **WARNING:** Cancer and reproductive harm – www.P65warnings.ca.gov.

Graco Standard Warranty

Graco warrants all equipment referenced in this document which is manufactured by Graco and bearing its name to be free from defects in material and workmanship on the date of sale to the original purchaser for use. With the exception of any special, extended, or limited warranty published by Graco, Graco will, for a period of twelve months from the date of sale, repair or replace any part of the equipment determined by Graco to be defective. This warranty applies only when the equipment is installed, operated and maintained in accordance with Graco's written recommendations.

This warranty does not cover, and Graco shall not be liable for general wear and tear, or any malfunction, damage or wear caused by faulty installation, misapplication, abrasion, corrosion, inadequate or improper maintenance, negligence, accident, tampering, or substitution of non-Graco component parts. Nor shall Graco be liable for malfunction, damage or wear caused by the incompatibility of Graco equipment with structures, accessories, equipment or materials not supplied by Graco, or the improper design, manufacture, installation, operation or maintenance of structures, accessories, equipment or materials not supplied by Graco.

This warranty is conditioned upon the prepaid return of the equipment claimed to be defective to an authorized Graco distributor for verification of the claimed defect. If the claimed defect is verified, Graco will repair or replace free of charge any defective parts. The equipment will be returned to the original purchaser transportation prepaid. If inspection of the equipment does not disclose any defect in material or workmanship, repairs will be made at a reasonable charge, which charges may include the costs of parts, labor, and transportation.

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Graco's sole obligation and buyer's sole remedy for any breach of warranty shall be as set forth above. The buyer agrees that no other remedy (including, but not limited to, incidental or consequential damages for lost profits, lost sales, injury to person or property, or any other incidental or consequential loss) shall be available. Any action for breach of warranty must be brought within two (2) years of the date of sale.

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In no event will Graco be liable for indirect, incidental, special or consequential damages resulting from Graco supplying equipment hereunder, or the furnishing, performance, or use of any products or other goods sold hereto, whether due to a breach of contract, breach of warranty, the negligence of Graco, or otherwise.

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Graco Information

For the latest information about Graco products, visit www.graco.com.

For patent information, see www.graco.com/patents.

TO PLACE AN ORDER, contact your Graco distributor or call 1-800-690-2894 to identify the nearest distributor.

*All written and visual data contained in this document reflects the latest product information available at the time of publication.
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For patent information, see www.graco.com/patents.
Original instructions. This manual contains English. MM 3A1738

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