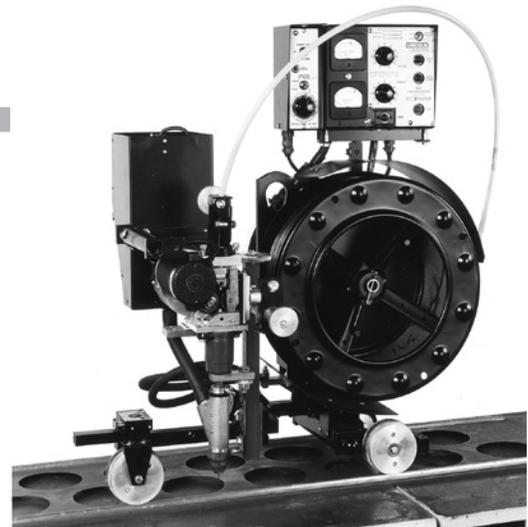


# LT-7 Tractor

## Submerged Arc DC Wire Feeder

The LT-7 Tractor is a self-propelled mechanized wire feeder, designed for the submerged arc process with track system capabilities. It is self-guiding and easy to operate – only one operator is usually required. It is designed to be used with a variety of Lincoln DC constant voltage and constant current power sources. The rugged, lightweight unit permits quick movement to the next joint. Its compact size fits through small openings and confined spaces. Butt and fillet welds can be made on heavy plate or steel as light as 12 gauge (2.5mm). The LT-7 Tractor is ideal for the following applications: ship and barge building, storage tank erection, bridge deck installation, beam, girder or column fabrication, and long seams on heavy weldments.



Track Model Shown

### Processes

Submerged Arc

### Advantage Lincoln

- LT-7 Tractor feeds 3/32 to 3/16" (2.4 to 4.8 mm) solid wires, from 100 - 400 inches per minute (2.5 - 10.2 m/min) wire feed speed.
- Calibrated tractor drive adjusts travel speeds from 6 to 70 inches per minute (0.12 to 1.8 m/min).
- Vertical head lift adjuster for adjusting electrical stickout from 1/2 in. to 5 in. (12.7 to 127.0 mm).
- Weld angle is up to 50° from vertical on either side; drag angle is up to 30° from vertical.
- Control box is conveniently located on the tractor (can be mounted either left or right), eliminating the need to return to the power source for routine procedure changes.
- Exceptional tracking control and self-steering in most applications leave the operator free for quality control, joint cleaning and flux handling.
- Welds butts, horizontal fillet and lap joints to the left or right side of the tractor frame for convenience.
- Close mechanical alignment between wire and joint maximizes weld quality with no fixturing costs.
- Three-year warranty on parts and labor.

### Description

Output  Input  115 VAC

### Required Options

Control Cable, Weld Power Cable, Contact Nozzle Assembly

### Recommended General Options

Wire Feeder Control Cable Extensions, Adapter Cable, Linc-Fill™ Attachments, Horizontal Fillet and Lap Adapter Kit, Flat Fillet Adapter Kit, Butt Seam Guide Kit, Track Conversion Kit, Tiny Twinarc® Adapter Kit, Track Section, Flux Screen, Magnetic Flux Screen Separator, Concentric Flux Cone Assembly

### Recommended Power Sources

CV-655, DC-600, DC-655, DC-1000, DC-1500

### Order

K227-1 LT-7 Standard Model  
K395-1 LT-7 Track Model

### TECHNICAL SPECIFICATIONS

| Product Name  | Product Number | Input Power         | Rated Output Current/Duty Cycle              | Wire Feed Speed Range ipm (m/min) | Wire Size Range Solid in. (mm) | Dimensions H x W x D in. (mm)       | Net Weight lbs. (kg) |
|---------------|----------------|---------------------|--|-----------------------------------|--------------------------------|-------------------------------------|----------------------|
| LT-7 Standard | K227-1         | 115 VAC<br>50/60 Hz | 600A/100%<br>1100A/100% (with water cooling) | 100 - 400<br>(2.5 - 10.2)         | 3/32 - 3/16"<br>(2.4 - 4.8)    | 27.5 x 33 x 14<br>(698 x 838 x 356) | 120<br>(54)          |
| LT-7 Track    | K395-1         |                     |  |                                   |                                |                                     | 130<br>(59)          |

## A CLOSER LOOK

### PERFORMANCE

- Solid-state control system precisely regulates procedures for reliable starting and economical welding.
- Automatic compensation for input voltage and tractor loading variations.
- Function lights built into the solid-state printed circuit boards aid troubleshooting to minimize down time.

- Cross seam adjuster speeds setup and lets operator track irregular joints while welding. Adjustment range is 3-1/8 in. (79 mm) with clamp and 2-1/2 in. (63 mm) with handwheel.
- To perform a curved weld, the minimum diameter can be as small as 10 ft. (3.0m) for an inside weld and 13 ft. (3.9m) for an outside weld.
- To perform an inside circumferential weld, the minimum inside diameter that can be welded is approximately 5 ft. (1.5m).

### FEATURES

- Quick, easy installation of optional guides for different joints.
- Reel holds 60 lb. (27.2 kg) solid wire coils.
- Flux hopper capacity of 15 lbs. (6.8 kg). Includes a manual flux flow rate control valve and can be mounted at four locations to the left or right.

- Continuous Vertical Adjustment: 1-1/2" (38 mm) handwheel variation for ESO (electrical stickout).
- Travel clutch operates from either side of the tractor.

### QUALITY AND RELIABILITY

- Three-year warranty on parts and labor.
- Manufactured under a quality system certified to ISO 9001 requirements.
- Rugged and durable design recognized throughout the industry for its long life and years of trouble-free wire feeding.

## REQUIRED OPTIONS

### CONTROL CABLES

| Description   | Order No.   |
|---|---|
| Wire Feeder Control Cable                                       | K1822-25 - 25 ft. (7.6m)<br>* Included                |
| Wire Feeder Control Cable Extensions                            | K1797-25 - 25 ft. (7.6m)<br>K1797-50 - 50 ft. (15.2m) |
| Adapter Cable for Control Cable to Terminal Strip Power Sources | K1798   |

### CONTACT NOZZLE ASSEMBLIES

| Description/Diameter Wire   | Order No.                                       |
|---|---|
| Submerged Arc:<br>3/32" (2.4 mm)<br>1/8" (3.2 mm)<br>5/32" (4.0 mm)<br>3/16" (4.8 mm)   | K231-3/32<br>K231-1/8<br>K231-5/32<br>K231-3/16 |
| Positive:<br>3/32 - 1/8" (2.4 - 3.2 mm)<br>3/32 - 3/16" (2.4 - 4.8 mm)  | K148A<br>K148B                                  |
| Linc-Fill™ Attachments for Positive Contact Nozzle Assembly Extension for K148<br>3/32" (2.4 mm)<br>1/8" (3.2 mm)<br>5/32" (4.0 mm) | K149-3/32<br>K149-1/8<br>K149-5/32              |

### WELD POWER CABLES

| Order No. | Description  |
|-----------|--|
| K1842-10  | Lug to Lug, 3/0, 600A, 60% duty cycle, 10 ft. (3.0m)   |
| K1842-35  | Lug to Lug, 3/0, 600A, 60% duty cycle, 35 ft. (10.6m)  |
| K1842-60  | Lug to Lug, 3/0, 600A, 60% duty cycle, 60 ft. (18.2m)  |
| K1842-110 | Lug to Lug, 4/0, 600A, 60% duty cycle, 110 ft. (33.5m) |

**GENERAL OPTIONS**



**Horizontal Fillet and Lap Adapter Kit**

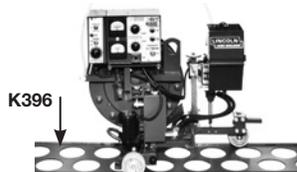
Includes a rear guide wheel, head tension spring and front guide wheel assembly on an adjustable arm which rides in the joint to maintain alignment and electrode angle. Kit includes separate front guide wheel assemblies for fillet and lap joints. Welds to the left or right of the tractor's center line.  
**Order K232**

**GENERAL OPTIONS**

**Tiny Twinarc Adapter Kit**

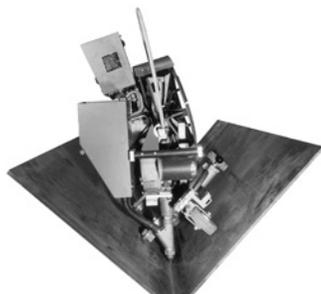
Converts the LT-7 standard model to Tiny Twinarc using 5/64" (2.0 mm) electrode. These kits may also be used for horizontal fillets with the addition of the K232 Adapter Kit.

**Order K277-1 for Butt Seams**  
**Order K277-2 for Flat Fillets**



**Track Section**

Each provides 70 in. (1.8m) of travel. To be used with the K395-1, LT-7 Track Model.  
**Order K396**



**Flat Fillet Adapter Kit**

Includes front and rear guide wheels for operating the tractor in 30° or 45° flat fillet joints.  
**Order K229**



**Flux Screen**

For submerged arc welding. Removes large particles from reused flux. Includes air-driven vibrator.  
**Order K310**



**Butt Seam Guide Kit**

Mount in place of the standard front wheel to ride in a V-groove or open 1/8 - 3/8" (3.2 - 9.5 mm) butt joint, keeping the wire in required alignment.  
**Order K230**



**Magnetic Flux Screen Separator**

For submerged arc welding. Removes foreign magnetic particles from reused flux.  
**Order K58**



**Track Conversion Kit**

Converts the LT-7 standard model for track guidance. Shown with K396 track section.  
**Order K400**



**Concentric Flux Cone Assembly**

For use with the K148B, Positive Contact Nozzle Assembly. Gives concentric flux coverage around the electrode.  
**Order K285**

**LT-7 TRACTOR ORDER FORM**

| PRODUCT DESCRIPTION                        | ORDER NUMBER          | QUANTITY | PRICE |
|--|-----------------------|----------|-------|
| <b>LT-7 STANDARD MODEL</b>                 | <b>K227-1</b>         |          |       |
| <b>LT-7 TRACK MODEL</b>                    | <b>K395-1</b>         |          |       |
| <b>REQUIRED OPTIONS</b>                    |                       |          |       |
| Control Cable                              | See Page 2            |          |       |
| Weld Power Cable                           | See Page 2            |          |       |
| Contact Nozzle Assembly                    | See Page 2            |          |       |
|  |                       |          |       |
| <b>RECOMMENDED GENERAL OPTIONS</b>         |                       |          |       |
| Wire Feeder Control Cable Extensions       | See Page 2            |          |       |
| Adapter Cable                              | See Page 2            |          |       |
| Linc-Fill™ Attachments                     | See Page 2            |          |       |
| Horizontal Fillet and Lap Adapter Kit      | K232                  |          |       |
| Flat Fillet Adapter Kit                    | K229                  |          |       |
| Butt Seam Guide Kit                        | K230                  |          |       |
| Track Conversion Kit                       | K400                  |          |       |
| Tiny Twinarc Adapter Kit, for Butt Seams   | K277-1                |          |       |
| Tiny Twinarc Adapter Kit, for Flat Fillets | K277-2                |          |       |
| Track Section                              | K396                  |          |       |
| Flux Screen                                | K310                  |          |       |
| Magnetic Flux Screen Separator             | K58                   |          |       |
| Concentric Flux Cone Assembly              | K285                  |          |       |
|  |                       |          |       |
| <b>RECOMMENDED POWER SOURCES</b>           |                       |          |       |
| CV-655                                     | see publication E4.40 |          |       |
| DC-600                                     | see publication E5.40 |          |       |
| DC-655                                     | see publication E5.46 |          |       |
| DC-1000                                    | see publication E5.50 |          |       |
| DC-1500                                    | see publication E5.60 |          |       |
|  |                       |          |       |
|  | <b>TOTAL:</b>         |          |       |

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