

LN-10 & DH-10 WIRE FEEDERS



DH-10
Wire Feeder

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Single & Double Header Wire Feeders

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DH-10 Boom Model

The LN-10 and the Double Header DH-10 wire feeders are available in both bench and boom mounted versions. The unique and creative modular designs of the LN-10 and DH-10 give the system maximum versatility in today's demanding industrial welding environment.

The LN-10 and DH-10 bench models are ideal for mounting on top of the power source, onto a portable undercarriage, or hung from a jib crane or boom. The modular design of both wire feeders easily allows the user to remove the welding controls from the wire drive and wire reel stand. This permits mounting the welding controls onto a boom or welding fixture, next to or in the welding station, or placed securely by the power source. In addition, the wire reel stand can be separated from the

wire drive, allowing the customer to select any welding equipment configuration that best fits their manufacturing needs...today and in the future.

The LN-10 and DH-10 boom models are designed specifically for boom or fixture mounting directly from the factory.

ADVANTAGE LINCOLN

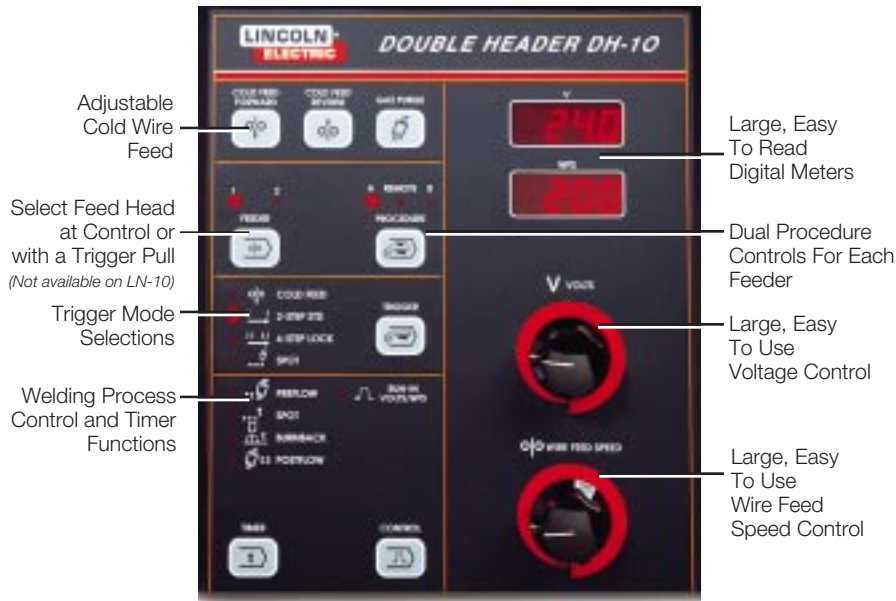
- Designed for feeding solid steel, flux-cored, metal-cored, stainless steel, low alloy, high alloy, aluminum and hardfacing wires.
- Rugged 4 driven roll design for positive wire feeding.

- 35-750 ipm wire feed speed range on standard speed models. 50-1250 ipm range on high speed models.
- Presettable voltage and wire feed speed using large control knobs. Easy adjustment with a gloved hand.
- Two large, easy to read digital meters allow operators and welding supervisors to monitor the welding process from a distance.
- New design voltmeter "holds" reading of actual welding voltage for 5 seconds after welding has stopped. Lets operator verify true procedures without added helper.
- Standard dual procedure for both wire drives. Selectable at the control unit, with the optional dual procedure switch, dual schedule Magnum gun, or with the optional dual procedure remote control.
- Cold feed forward and reverse controls for safe wire loading/unloading.
- Selectable trigger control for standard 2 step, interlocking 4 step, spot weld and cold feed trigger control (ideal for booms where cold wire feeding can be done at the gun trigger.)
- Five welding process control and timer functions:
 - preflow gas timer
 - run-in wfs/voltage control
 - spot weld timer
 - burnback control
 - postflow gas timer
- Low 42 volt AC power system meets worldwide IEC safety standards.
- Security features are available to limit setting changes.
- 3 year warranty on parts and labor.
- Manufactured under a quality system certified to ISO9002 requirements.



A CLOSER LOOK

Control Box



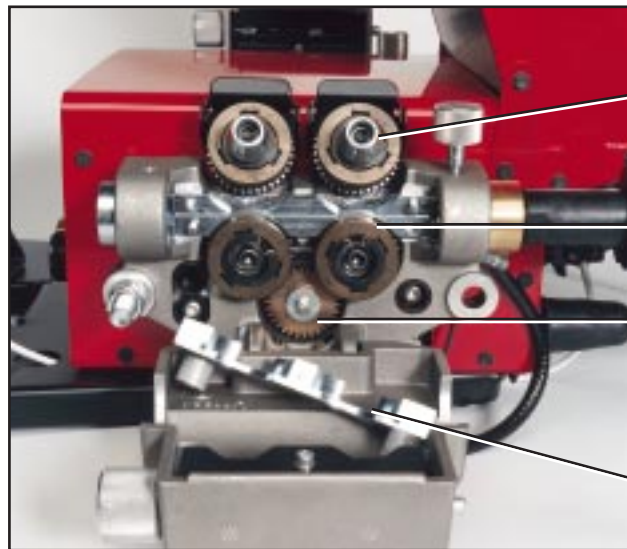
Double Header Wire Drive System



NEW WIRE DRIVE

ADVANTAGES

- Four gear driven rolls on each wire drive. No tools needed to snap rolls on or off. Each roll has two grooves of the same size to double feed life.
- Revolutionary split wire guide precisely aligns and supports wire through the entire system. Maximizes support and minimizes problems.
- Two piece split wire guide construction provides easy access for inspection, cleaning or changing to different wire sizes.
- User can change external speed range gear quickly from the two different available gear boxes. Feeder can be low speed/high torque or high speed/fast acceleration.
- The standard speed model goes from 35-500 ipm with low pinion gear and 50-750 ipm with high pinion gear. The high speed model goes from 50-825 ipm with low pinion gear and 75-1250 ipm with the high pinion gear.
- Entire feed head can be removed for fast, easy servicing. Ideal for production shops where downtime must be minimized.



- Feed head assembly can rotate to minimize gun cable kinks and bends. Reduces gun stresses and improves feedability.
- Each side of the DH-10 wire drive system is driven by its own motor and gear box. Gives user confidence the feeder won't go down from broken switches or clutches.
- Simple symmetric design of the DH-10 feed heads, allows quick removal and replacement. Either head may be mounted on either side of the feeder.
- Incoming guide bushing is designed to accept wire guides, straighteners or

- conduits used with larger pay off wire packages.
- Simple wire drive pressure knob with indicator bar.
- Rugged electrically insulated door protects drive system with simple positive locking.
- Gun connection provides lower cost adapters for Magnum or competitive guns. Easier interchangeability, better mechanical support and electrical current transfer.

TECHNICAL SPECIFICATIONS

Description (Head 1/Head 2)	Ordering Information	Wire Speed Range IPM (m/min)	Suggested Wire Size Range in. (mm)		Input	Net Weight	Dimensions H x W x D in. (mm)
			Solid	Cored			
LN-10 BENCH (Standard Speed)	K1559-1	STANDARD SPEED Low Gear 35-500 ipm	.023-5/64 ⁽⁵⁾ (0.6-2.0)	.035-3/32 (0.9-2.4)	42 VAC 50/60 Hz	65 lbs. (29.5 kg)	16 x 15 x 31 ⁽¹⁾ (406 x 381 x 787)
LN-10 BENCH (High Speed)	K1559-2						
DH-10 BENCH (Standard/Standard Speed)	K1499-1	HIGH SPEED Low Gear 50-825 ipm	.023-1/16 (0.6-1.6)	.035-5/64 (0.9-2.0)	42 VAC 50/60 Hz	98 lbs. (44.4 kg)	21 x 20 x 32 ⁽¹⁾ (533 x 508 x 813)
DH-10 BENCH (Standard/High Speed)	K1499-2						

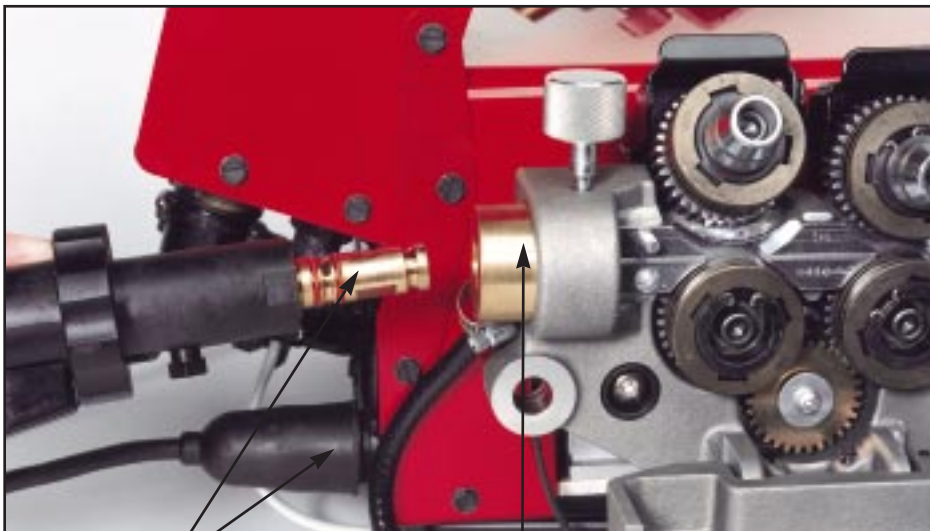
Description (Head 1/Head 2)	Ordering Information	Wire Speed Range IPM (m/min)	Suggested Wire Size Range in. (mm)		Input	Net Weight	Dimensions H x W x D in. (mm)				
			Solid	Cored							
LN-10 BOOM MODELS:											
16 ft. Generic Boom (Standard Speed)	K1564-1	STANDARD SPEED Low Gear 35-500 ipm	.023-3/32 (0.6-2.4)	.035-.120 (0.9-3.0)	42 VAC 50/60 Hz	65 lbs. (29.5 kg)	16 x 15 x 31 ⁽²⁾ (406 x 381 x 787)				
12 ft. Zipline Ready (Standard Speed)	K1564-2							High Gear 50-750 ipm	.023-1/16 (0.6-1.6)	.035-5/64 (0.9-2.0)	4 Amps
16 ft. Zipline Ready (Standard Speed)	K1564-3										
Control Box Only ^(3,4)	K1562-1					18 lbs. (8 kg)	15 x 14 x 4 (381 x 356 x 101)				
Wire Drive Only ⁽⁴⁾ (Standard Speed)	K1563-1	HIGH SPEED Low Gear 50-825 ipm	.023-1/16 (0.6-1.6)	.035-5/64 (0.9-2.0)	42 VAC 50/60 Hz	25 lbs. (11.3 kg)	8 x 15 x 13 (203 x 381 x 330)				
Wire Drive Only ⁽⁴⁾ (High Speed)	K1563-2							High Gear 75-1250 ipm	.023-.045 (0.6-1.2)	.035-.045 (0.9-1.2)	4 Amps
DH-10 BOOM MODELS:											
16-18 ft. Boom Pkg. ⁽²⁾ (Standard/Standard Speed)	K1521-1	STANDARD SPEED Low Gear 35-500 ipm	.023-3/32 (0.6-2.4)	.035-.120 (0.9-3.0)	42 VAC 50/60 Hz	98 lbs. (44.5 kg)	21 x 20 x 32 ⁽²⁾ (533 x 508 x 812)				
12 ft. Zipline Ready (Standard/Standard Speed)	K1521-2							High Gear 50-750 ipm	.023-1/16 (0.6-1.6)	.035-5/64 (0.9-2.0)	4 Amps
16 ft. Zipline Ready (Standard/Standard Speed)	K1521-3										
16 ft. Generic Boom (Standard/High Speed)	K1521-4										
12 ft. Zipline Ready (Standard/High Speed)	K1521-5										
16 ft. Zipline Ready (Standard/High Speed)	K1521-6										
Control Box Only ^(3,4)	K1496-1										
Wire Drive Only ⁽³⁾ (Standard/Standard Speed)	K1497-1	HIGH SPEED Low Gear 50-825 ipm	.023-1/16 (0.6-1.6)	.035-5/64 (0.9-2.0)	42 VAC 50/60 Hz	61 lbs. (28 kg)	8 x 18 x 11 (203 x 457 x 279)				
Wire Drive Only ⁽³⁾ (Standard/High Speed)	K1497-2							High Gear 75-1250 ipm	.023-.045 (0.6-1.2)	.035-.045 (0.9-1.2)	4 Amps

(1) Includes wire drive, control unit and wire reel stand. (2) May be used with Synergic 7 feed head (K679-1, -2). (3) Hand held submerged arc applications to 1/16" only.
 (4) Includes wire drive, control unit, weld and control cables. (4) Requires control cable for connection between control box and wire drive.

FEED PLATE GUN RECEIVER BUSHINGS

One of the following Gun Receiver Bushings is required for connecting gun and cable assemblies to the feed plate.

K1500-1 Gun Receiver Bushing (Optional)	K1500-2 Gun Receiver Bushing ⁽¹⁾ (Standard)	K1500-3 Gun Receiver Bushing (Optional)	K1500-4 Gun Receiver Bushing (Optional)
<ul style="list-style-type: none"> Magnum 200, 300 and 400 gun and cable assemblies using K466-1 connector kit. Lincoln Innershield® gun and cable assembly. Fast-Mate™ gun and cable assembly with K489-2 Fast-Mate Adapter Kit. Magnum 550 gun and cable assembly with K613-1 adapter. 	<ul style="list-style-type: none"> Magnum 200 and 400 fully assembled guns (K497-X and K471-X). (Refer to Magnum Guns chart below). Magnum 200, 300 and 400 gun and cable assemblies with K466-2 connector kit. Guns with Tweco® #2, #3 and #4 connectors. <p>⁽¹⁾ This gun receiver bushing comes standard with each feed head.</p>	<ul style="list-style-type: none"> Magnum 550 gun and cable assembly with K613-7 connection. Guns with Tweco #5 connectors. 	<ul style="list-style-type: none"> Magnum 200, 300 and 400 gun and cable assemblies with K466-3 connector kit. Guns with Miller® connectors.



Connector Kit for Magnum Guns (K466-2 or K613-7)

Feed Plate Gun Receiver Bushing K1500-X.

K1500-2 comes standard with feed head (as shown).

MAGNUM® GUNS

The following guns come pre-assembled with liner and gun connector that is compatible with the Tweco #2-#4 gun receiver bushing (K1500-2). They connect directly to 10 Series Feeders. Gun cables are 15 ft. length:

K471-21	Magnum 400	.035-.045"
K471-22	Magnum 400	.052-1/16"
K471-23	Magnum 400	1/16-5/64"
K497-20	Magnum 200	.025-.030"
K497-21	Magnum 200	.035-.045"

DRIVE ROLLS AND WIRE GUIDE KITS

Description	4 roll, DH Drive (4 Driven)
Solid Steel Wire, Smooth V Groove .023-.030" (0.6-0.8mm) Solid .035" (0.9mm) Solid .040-.045" (1.0-1.2mm) Solid .052" (1.4mm) Solid 1/16" (1.6mm) Solid	KP1505-030S KP1505-035S KP1505-045S KP1505-052S KP1505-1/16S
Cored Steel Wire, Knurled V Groove .030-.035" (0.8-0.9mm) Cored .040-.045" (1.0-1.2mm) Cored .052" (1.4mm) Cored 1/16" (1.6mm) Cored 7/64" Hardfacing, (Knurled V Groove with Matching Smooth U Groove)	KP1505-035C KP1505-045C KP1505-052C KP1505-1/16C KP1505-7/64H

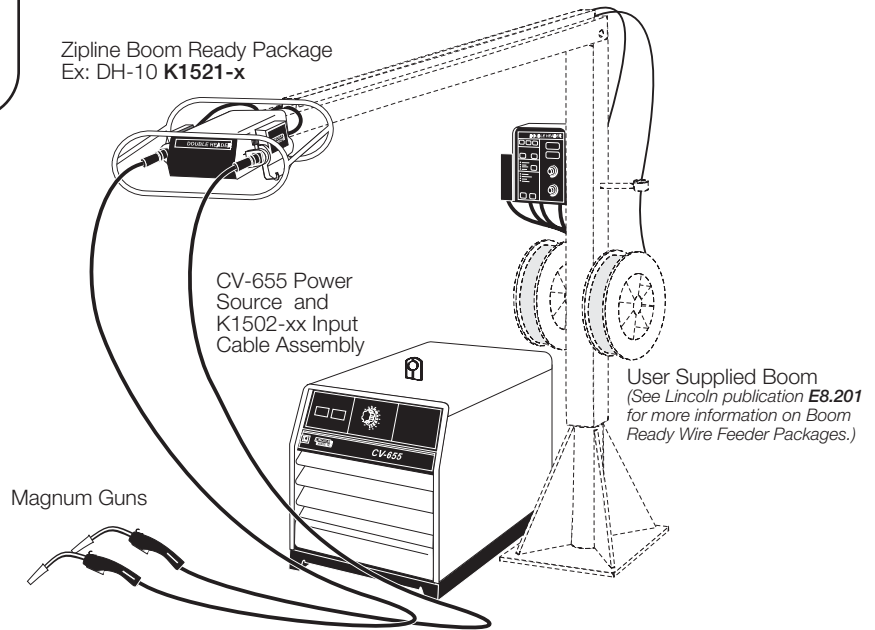
DH-10 AND LN-10 Double Groove Drive Rolls and Wire Guide for feeding solid steel wire.



Description	4 roll, DH Drive (4 Driven)
Cored or Solid Steel Wire, Knurled V Groove .068-.072" (1.8mm) 5/64" (2.0mm) 3/32" (2.4mm) 7/64" (2.8mm) cored .120" (3.2mm) cored	KP1505-068 KP1505-5/64 KP1505-3/32 KP1505-7/64 KP1505-120
Aluminum Wire, Smooth U Groove .035" (0.9mm) Aluminum .040" (1.0mm) Aluminum 3/64" (1.2mm) Aluminum 1/16" (1.6mm) Aluminum	KP1507-035A KP1507-040A KP1507-3/64A KP1507-1/16A

SAMPLE BOOM PACKAGE

Zipline Boom Ready Package
 Ex: DH-10 K1521-x



INPUT CABLE ASSEMBLIES

FOR CONNECTION BETWEEN POWER SOURCE AND WIRE FEEDER (Only one cable needed)

14 Pin Control Cable/ Twist-Mate™ Welding Cable

K1503-(length)

Rated 500 amps 60% duty cycle: 2/0 (67mm²) cable with Magnum Twist-Mate™ and 14-pin MS-type (Amphenol) connector. 10, 25, 50 and 100 ft. (3.0, 7.6, 15.0 and 30m) lengths. Order K1503-10, -25, -50 or -100.

14 Pin Control Cable/ Stud Welding Cable

K1502-(length)

Rated 600 amps 60% duty cycle: 3/0 (85mm²) cable with lugs and 14 pin MS-type (Amphenol) connector. 10, 25, 50 and 100 ft. (3.0, 7.6, 15.0 and 30m) lengths. Order K1502-10, -25, -50 or -100.

14 Pin Control Cable Only

K1501-(length)

14 pin MS-type (Amphenol) connector. 10, 25, 50 and 100 ft. (3.0, 7.6, 15.0 and 30m) lengths. Order K1501-10, -25, -50 or -100.

FOR CONNECTION BETWEEN CONTROL BOX AND WIRE DRIVE - BOOM MODELS ONLY⁽¹⁾

14 Pin Control Cable/ Stud Welding Cable

K1498-(length)

Rated 600 amps 60% duty cycle: 3/0 (85mm²) cable with lugs and 14 pin MS-type (Amphenol) connector. 16 and 25 ft. (4.9 and 7.6m) lengths. Order K1498-16 or -25.

14 Pin Control Cable Only

K681-(length)

14 pin MS-type (Amphenol) connector. 12, 16 and 25 ft. (3.6, 4.9 and 7.6m) lengths. Order K681-12, -16 or -25.

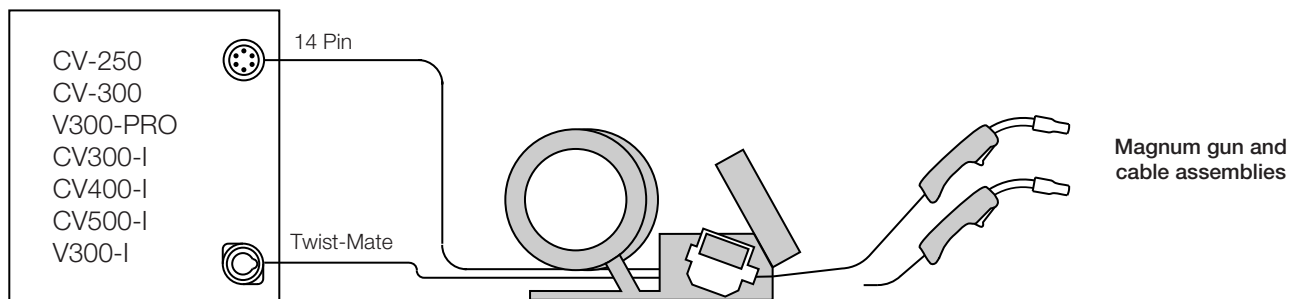
(Two control cables required for DH-10)

Conversion of LN/DH-10 from bench to boom version.

MS-type connector for wire drive to allow use of K1498 or K681 control cable between control box and wire drive. Order S13100-197.

⁽¹⁾ Required when wire drive and control box are ordered separately.

SYSTEM SET-UP



CV-250
CV-300
V300-PRO
CV300-I
CV400-I
CV500-I
V300-I

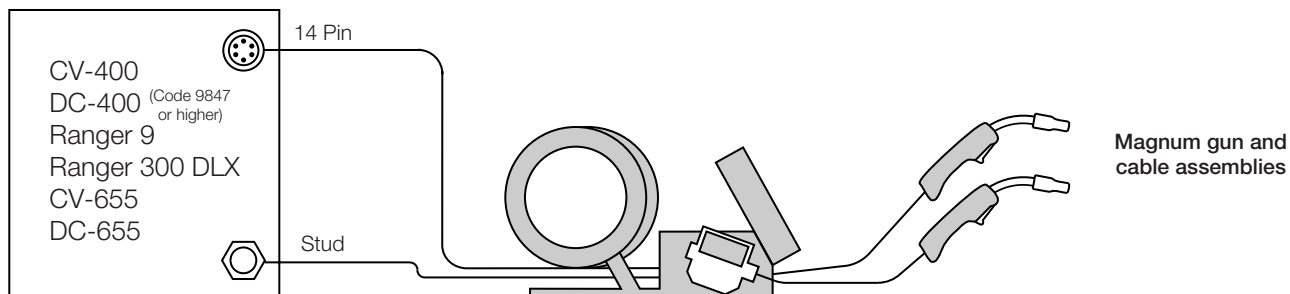
14 Pin

Twist-Mate

Magnum gun and cable assemblies

14 Pin/Twist-Mate™ Input Cable Assemblies

K1503-10, 25, 50 or 100



CV-400
DC-400 (Code 9847 or higher)
Ranger 9
Ranger 300 DLX
CV-655
DC-655

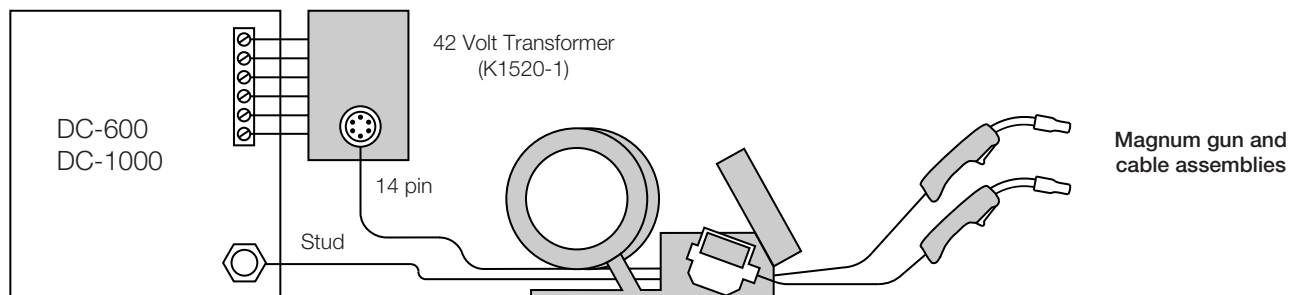
14 Pin

Stud

Magnum gun and cable assemblies

14 Pin/Stud Input Cable Assemblies

K1502-10, 25, 50 or 100



DC-600
DC-1000

42 Volt Transformer
(K1520-1)

14 pin

Stud

Magnum gun and cable assemblies

14 Pin/Stud Input Cable Assemblies

K1502-10, 25, 50 or 100

RECOMMENDED OPTIONS

SPINDLE ADAPTERS

For 14 lb. (6 kg) Innershield® Coils
Permits 14 lb. (6 kg) Innershield electrode coils to be mounted on 2" (51mm) O.D. spindles.

Order K435.

For Small Spools (10-12.5 lb.)

Permits 8" (203mm) O.D. spools to be mounted on 2" (51mm) O.D. spindles.

Order K468.

READI-REEL ADAPTERS

30 lb. (14 kg) Adapter
Adapts 22-30 lb. (10-14 kg) Lincoln Read-Reel coils of electrode to 2" (51mm) spindle.

Order K363P.

60 lb. (27.2 kg) Adapter

Adapts 50-60 lb. (22.7-27.2 kg) Lincoln Read-Reel coils of electrode to 2" (51mm) spindle.

Order K438.



COIL ADAPTER

60 lb. Coil Adapter
Adapts 60 lb. Lincoln coils of electrode to 2" (51mm) spindle.
Order K1504-1.

Plastic Wire Cover

For 30-44 lb. (14 - 20 kg) wire packages. Protects wire from dust and dirt. **Order K1634-1.**

RECOMMENDED OPTIONS

Water Connection Kit

Includes fittings for use with water-cooled guns and Magnum Coolers. Kit provides for one gun.

Order K590-4.

Gas Guard Regulator

For CO₂ and Argon blend gases.

Reduces surge caused by excess pressure in supply hose. Includes adjustable flow regulator with removable adjuster key. Kit provides for one gun. **Order K659-1.**

115V/42V Transformer Kit

Provides a way to use the LN-10 or DH-10 on power sources that have 115V AC available on terminal.

Order K1520-1.



K1520-1

Dual Procedure Switch

Allows the use of two welding procedures with one Lincoln Magnum gun connected to a LN-10 or DH-10. 15 ft. (7.6m). **Order K683-3.**



K683-3

Dual Procedure Remote Control Pendant

Contains voltage and wire feed speed control knobs for remote setting of procedures, and a switch to select between two procedures.

Order K1449-1.



K1449-1

Extension Cable

For use with K1449-1.

12 ft., Order K1450-12.

16 ft., Order K1450-16.

20 ft., Order K1450-20.

25 ft., Order K1450-25.

Remote Switch Interface Module

Single input/output switch module for each LN-10 and DH-10 wire drive.

Allows for control of wire feeder and external devices. **Order K1558-1.**

Ball Bearing Incoming Guide

Ball bearings on this incoming guide smoothly roll the wire into the feed head. The smooth action virtually eliminates any chance of wire shaving from a misaligned feed head.

Replacement for steel "funnel" type incoming guide. **Order K1551-1.**

Feed Plate Incoming Bushing

Connects directly to Magnum plastic conduit (not included), for use in boom systems, long distances, or large pay-off packages.

For .025-1/16" wire

Order K1546-1.

For 1/16-1/8" wire

Order K1546-2.

K1546-1



Swivel Platform

Mounts to the lift bail on the power source and bottom of the LN-10. Wire feeder may be lifted off if needed. Compatible with Light Duty Caster Kit. Includes "lazy susan" parts tray. For LN-10 only. **Order K1557-1.**



K1557-1

Caster Kit - Light Duty

Mounts to the wire reel stand on the LN-10. Allows for easy movement of wire feeder. For LN-10 only.

Order K1556-1.



K1556-1

Undercarriage

Includes mounting frame, front casters, rear wheels and handle for hand towing. **Order K163.**



K163

Insulated Lift Bail

Allows the entire wire feeder to be hung from a crane or hook. For LN-10 only. **Order K1555-1.**



K1555-1

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