P/A INDUSTRIES INC.
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Stock Reel Winder

Model Numbers: SRWD-1,2

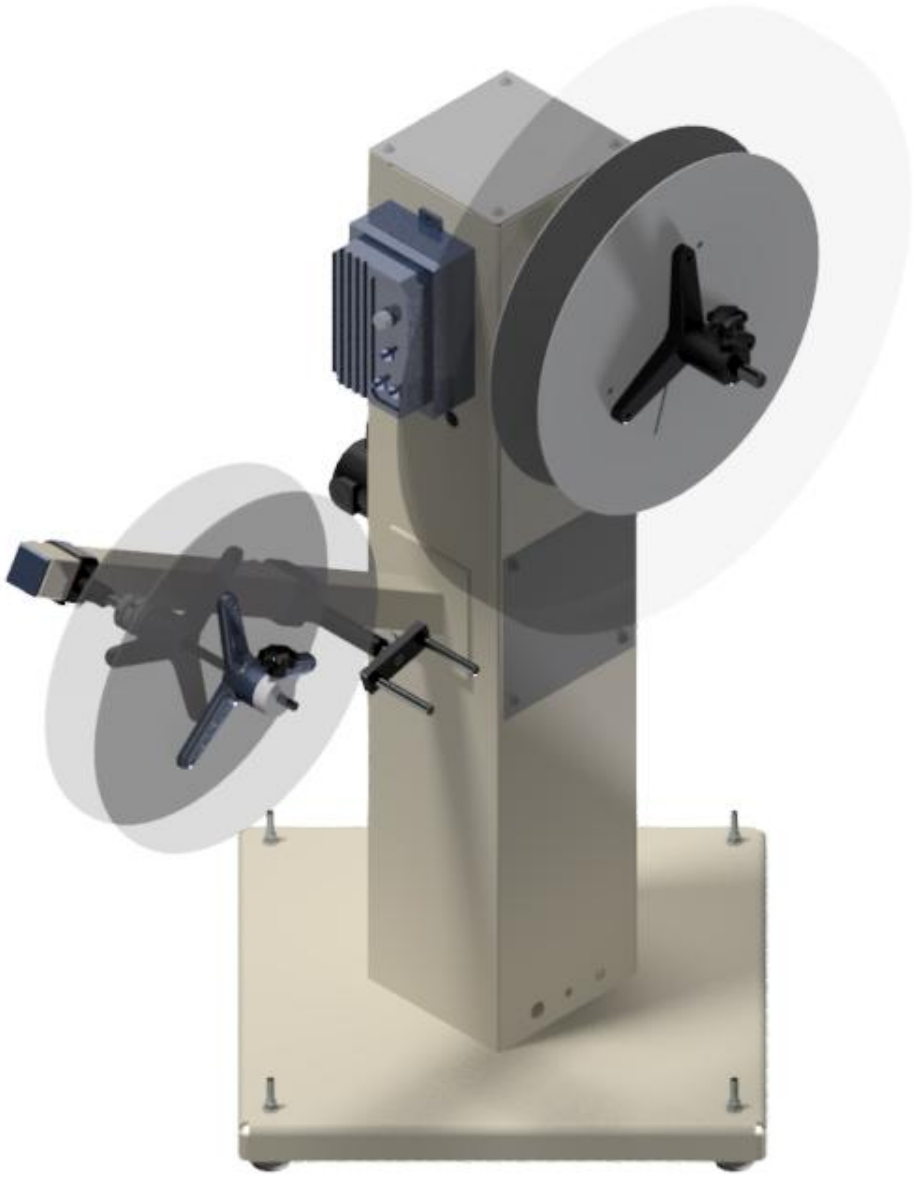


Table of Contents

Thank you for selecting our product for your coil handling needs. This manual will provide you with all the information necessary to install, operate, apply and maintain your machine. Safety is always a priority so please follow all the caution and warning stickers labeled on our machines.

1 Introduction

Please read this manual thoroughly before installing, operating, applying and maintaining this machinery. Failure to do so may result in serious injury to yourself and/or others.

1.1 General Safety program

Accident free operation will result from a well developed, management sponsored and enforced safety program. Of vital importance to any successful program is the proper selection of guards and devices. However, there is no safety device that will bring "automatic" safety to your operation.

Of equal importance to this proper selection of the guard and the device is the training of your personnel. Each person must be trained as to the operation of the guard or safety device, highlighting why they have been provided on the equipment. Rules for safe operating should be written and enforced at all times. A final major concern of an effective safety program is regularly scheduled inspection and maintenance of all of the equipment.

To ensure continued safety at all times, top management, line supervision, safety engineers and all employees must assume their proper share of the responsibility in the program. Only as a group, one that knows your own operation and its problems, can you carry out an effective safety program.

To assist you in the development of and continued use of safety programs, many safety minded groups have made guidelines available to you. However, you must know when and how to apply these guidelines. The manufacturer provides information to assist you in properly adjusting and maintaining your equipment. There is no short cut to proper safety; therefore, it is recommended that you comply with their recommendations at all times.

1.2 Warning

This equipment offers various means of operating or controlling machines. The operator must not be in or near the point-of-operation of the machine, or the operating parts of any equipment installed on the machine, or bodily injury could result. The EMPLOYER must post adequate warning signs onto the machine with proper warnings for his machine and the specific application to which the machine and equipment are being applied. Occupational Safety and Health Act (OSHA) Sections 1910.211, 1910.212, and 1910.217 contain installation information on the distance between danger points and point-of-operation guards and devices. No specific references have been made to which paragraph of OSHA 1910.211, 1910.212, 1910.217 or any other applicable sections because the paragraphs may change with each edition of the publication of OSHA provisions. All equipment manufactured by us is designed to meet the construction standards of OSHA in effect at the time of sale, but the EMPLOYER installs the equipment so the EMPLOYER is responsible for installation, use, application, training, and maintenance, as well as adequate signs on the machine onto which this equipment will be installed. Remember, OSHA says that the EMPLOYER must use operating methods designed to control or eliminate hazards to operating personnel. It shall be the responsibility of the EMPLOYER to establish and follow a program of periodic and regular inspections of his machine to insure that all their parts, auxiliary equipment, and safeguards are in a safe operating condition and adjustment. Each machine

should be inspected and tested no less than weekly to determine the condition of the machine. Necessary maintenance or repair of both shall be performed and completed before the machine is operated. The EMPLOYER shall maintain records of these inspections and the maintenance work performed.
Our Company is not responsible to notify the user of this equipment of future changes in State or Federal laws, or construction standards.

1.3 Warranty Program

We warrant our new parts against defects under normal use and service for a period of 12 months after date of shipment. Our obligation under this warranty is limited to replacing or repairing (at our option) the defective part without charge, F.O.B. our plant in Bloomfield, Connecticut. The defective part must be forwarded to our plant, freight prepaid, for our inspection prior to replacement or repair**. EXCEPT AS EXPRESSLY PROVIDED HEREIN, THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING A WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.** Furthermore, the seller does not warrant or represent that the equipment complies with the provisions of any law, particularly including the Occupational Safety and Health Act of 1970, and regulations promulgated there under. In no event shall we be liable for special, indirect incidental or consequential damages, however rising.

1.4 Receiving and Inspection

SPECIAL NOTE: P/A INDUSTREIS INC. ASSUMES NO RESPONSIBILTIY IN CONNECTION HEREWITH, NOR CAN IT BE ASSUMED THAT ALL ACCEPTABLE SAFETY MEASURES ARE CONTAINED IN THIS PUBLICATION, OR THAT OTHER ADDITIONAL MEASURES MAY NOT BE REQUIRED UNDER PARTICULAR OR EXCEPTIONAL CIRCUMSTANCES OR CONDITIONS.

RECEIVING INSPECTION

Before removing the unit from its packaging, check for visual damage, especially if crate, skid, or carton had been damaged in transit. Any damage caused by shipping should be immediately reported to the carrier. If the unit appears in satisfactory condition, remove all the packaging. Read these instructions. They are provided to answer questions regarding the Operation and use of this equipment.

2 Installation and Assembly

2.1 Mechanical

The reel is designed for either permanent mounting or portability from the press line to press line. It can be positioned on its adjustable machine mounts or firmly bolted to the floor through the four holes provided in the base. With the use of lockable casters, the reel can easily be moved to various locations in your facility. The reel should be placed on the exit side of the press for rewind applications. When the location is chosen, the reel should be placed so the backing plate is in line with the Pass-Line of the press. Enough room should be provided between the press and reel to allow for placement of the appropriate loop control device.

2.2 Electrical

Please see the schematic attached for information regarding tying in the main power. The standard loop control consists of a separate stand with electrical enclosure and touch probes which control the loop height by cycling the Reel's D.C. motor on and off as the material moves up and down between the probes. **Please note that the material must be electrically conductive and grounded**. Detail operating instructions for the loop control are provided separately from this manual. Other non-touch loop control devices are also available.

3 Operation

With the reel in line with the press, the conductive material will be rising and falling between the two touch probes on the loop control. Moving the toggle switch located at the bottom of the reel to the on position will bring power to the motor controller and loop control. When the run/brake toggle switch is in the run position, the reel can now be jogged by pressing the jog button on the motor controller box. The speed of the reel can be adjusted by turning the speed knob. The direction of rotation is selected by the forward and reverse toggle switch.

If removable spools are to be used, be sure they fit properly onto the reel's mandrel. **DO NOT EXCEED THE WEIGHT RATING OF THE MANDREL**. If paper is to be interleaved, the paper holder must fit on the paper spindle on the outrigger arm. Adjusting the knurled nut on the paper tension assembly and/or adjusting the wrap angle around the tension fork assembly can change the paper's tension.

To thread the material onto the reel first turn off the power to the unit. Bring the material from the payout device to the loop control and up onto the reel. Attach the strip to the spool or storage device on the reel mandrel. Attach the paper if applicable. Adjust the loop control probes to the desired height of the loop. Now turn the power ON. The strip should rise as it is wound up by the reel and stop when the material hits the upper probe of the loop control. If the reel continues to wind the material, switch the drive to the BRAKE position. Check the probe connections and make sure that they are in the proper positions in the loop control. Now turn the drive switch to the run position to start the payout device. The reel should begin to follow the payout device. Adjust the desired speed of the take up to match or slightly exceed the line speed of the payout device by using the speed knob on the drive.

The P/A motorized stock reel works through the Penta drive control panel. On the control panel you have forward "FWD", break or stop "BRK" and you have reverse "REV". You have two settings for jog or run with the corresponding start and stop. Looking at the dancer arm switch below you will see the corresponding rewind and unwind positions.

All models of motorized reels may be used either for Unwind (Pay-off) or Rewind of coiled material. Frictional drag is not desired for motorized operation, and a drag brake is not provided. However, electrical "dynamic" braking is available as an option

A D.C. variable speed motor drives the reel shaft and is controlled by the position of the dancer arm. The dancer arm is in turn adjustable via a selector switch on the side of the unit.
Below are various combinations between dancer arm location and selector switch setting for your

application's combination of:

- Mode (unwind or rewind)
- Dancer arm location (right or left side of reel)
- Coil wrap (under or over)

3.1 Dancer Arm

Install the dancer arm toward the side of your choice through the clamp on the dancer arm shaft extending from the front panel of the base cabinet. Slide the dancer arm in or out to set the roller at the estimated point of minimum material slack loop motion. Set the slack loop height by rotating the dancer arm clamp on the shaft, after first loosening the clamping screws, then retightening.

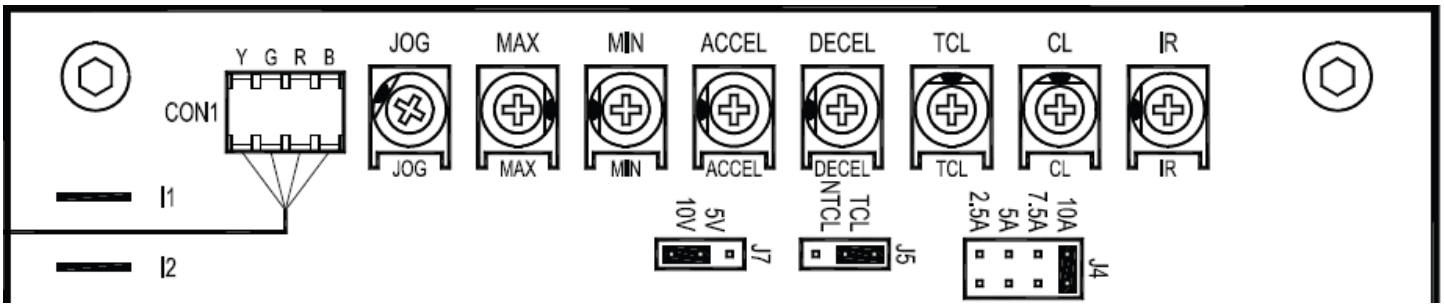
You may find that the mechanical smoothness of a dancer arm motion (up and down) can be improved by the setting of dancer arm extension (closer to or further from, the reel) for higher speeds and longer travel feed lengths. Find the point of minimum loop motion while feeding and place the roller at that point.

While the dancer arm is very light and flexible to reduce the danger of light material being marked by contact with the roller, further protection is available for extremely delicate material in critical situations.

- You may add a small counterbalance to the dancer arm.
- You may add a foam rubber sleeve around the roller, provided in attached kit.

The roller has been positioned on the arm so that the inner edge of its cylindrical section is in line with the inner keeper disc.

These parameters are all preset to factory defaults and equipment specification and should not be changed before consulting the PA service department.



Inside of the KB control are a set of potentiometers at the top of the control. These trim pots are used to adjust the following parameters:

JOG – Adjusts motor speed when in manual mode
MAX – Maximum speed for motor when the maximum signal is reached
MIN – Minimum speed for motor at 0 (Zero) volts
ACCEL (Acceleration) – The time it takes the control to reach full output.
DECEL (Deceleration) – The time it takes the control to go from max output to minimum speed.
TCL (Time Current Limit) – Time the control will time out after being in current limit.
CL (Current Limit) – Maximum current (DC) the motor can draw.
IR (IR Compensation) - Sets the amount of compensating voltage required to keep the motor speed constant under changing loads

NOTE: Do not adjust trim pots with main power on.

4 Maintenance

4.1 Mechanical

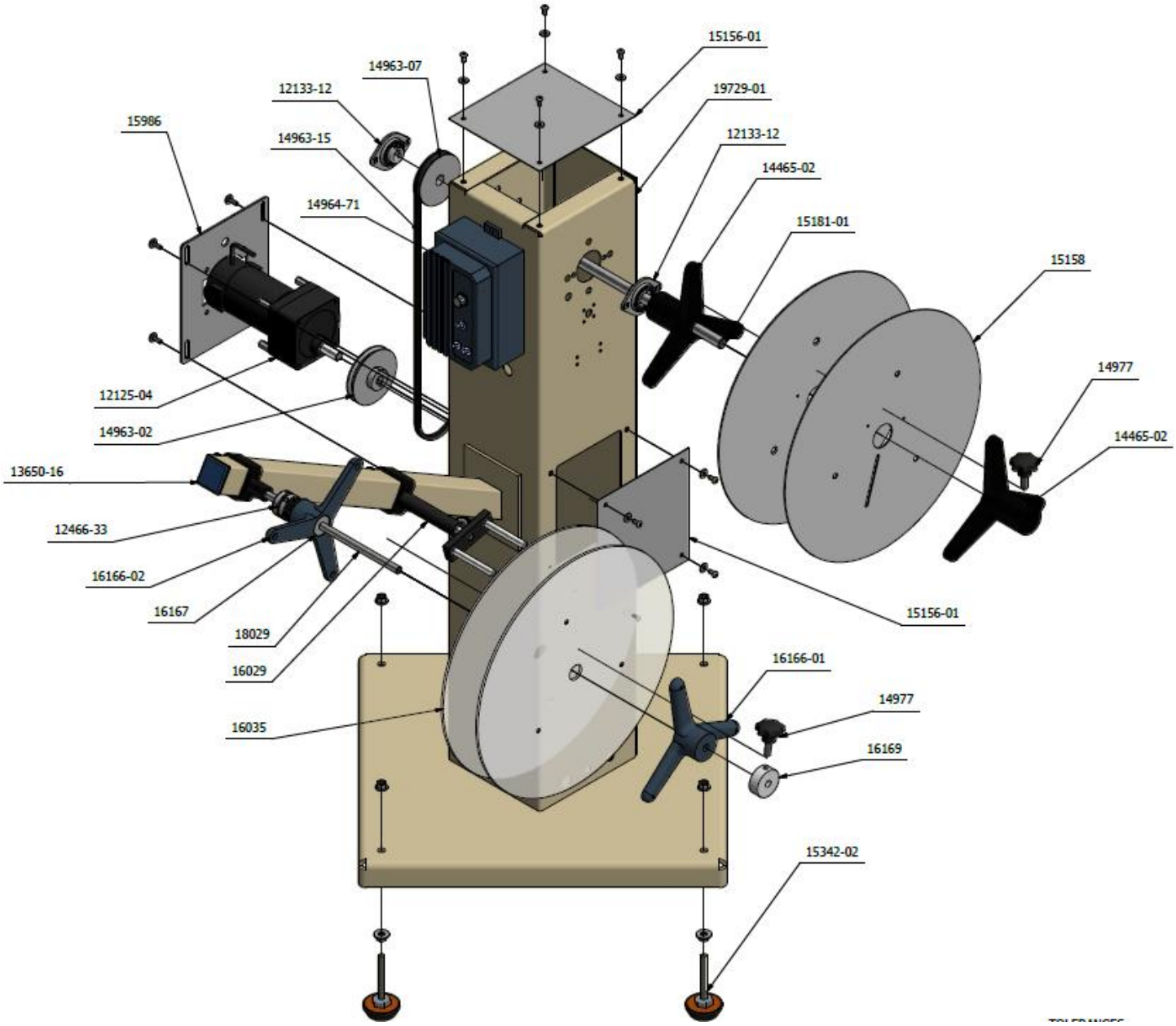
This equipment requires very little maintenance. However, there are moving parts and components, which will wear through continuous use. As with any tool, this equipment should be kept in good operating condition, in a clean and obstruction free area, with all safety devices in good working order. The bearings provided are "sealed-for life" type and no lubrication is required. The drive V belts should be checked periodically for wear and proper tension. The D.C. Motors "brushes" are very durable and should last for many years. It is important that if these brushes are removed from the motor that they be replaced exactly as removed or severe commutator damage could result. The gear motor does not require any lubrication throughout its operational life.

5 Troubleshooting

Please call P/A Industries for all service related questions at 860-243-8306.

5.1 Overall Model Specifications

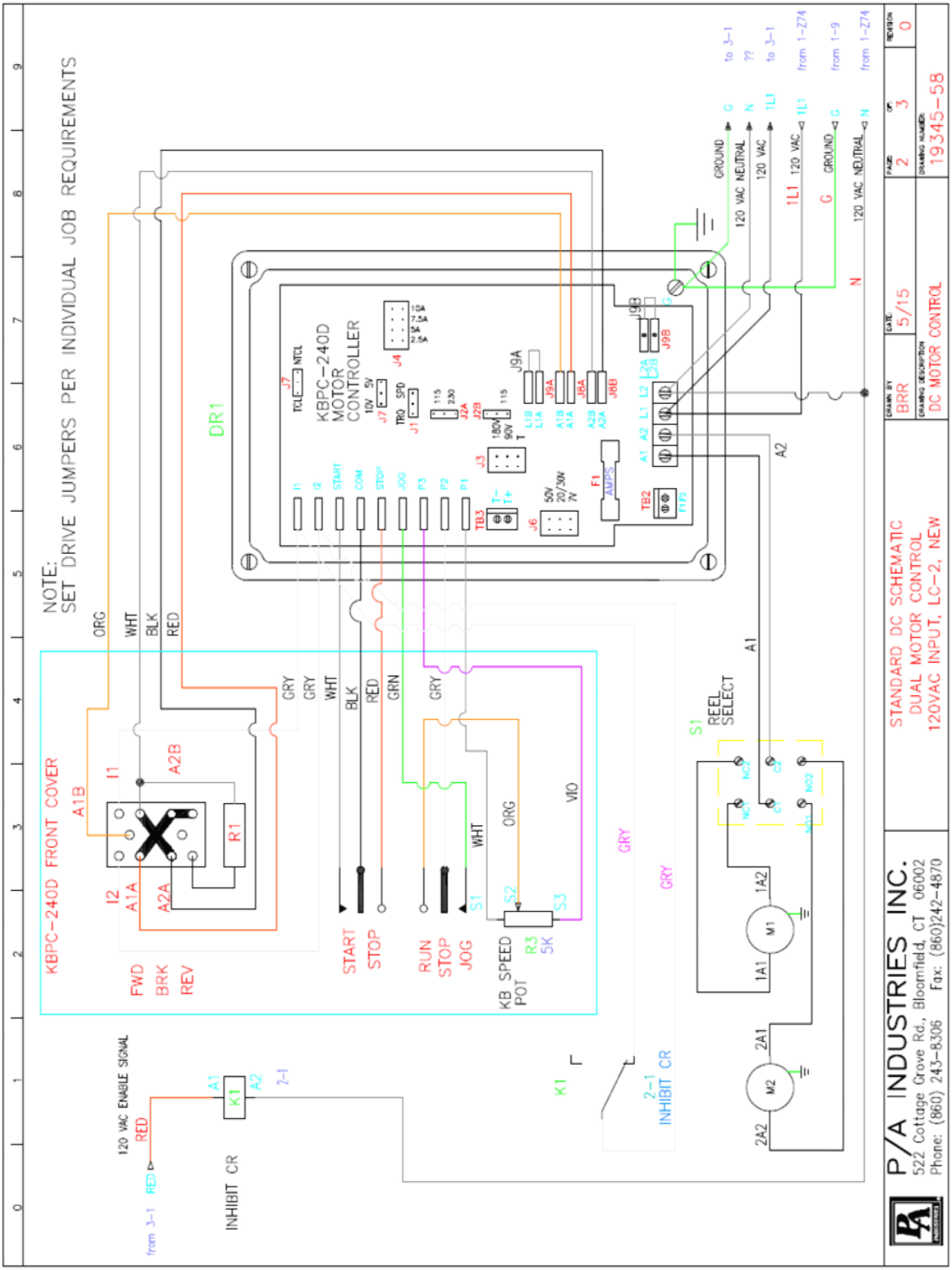
Model	Max Spool Weight lbs(kg)	Max Strip Width in(mm)	Shaft Dia. In(mm)	Max Spool OD in(mm)	Speed Range (RPM)	DC Drive Motor HP(kW)	AC Power Input V/Ph/Hz
SRWD-1	75(34)	3(75)	.75(19)	30(760)	0-50	1/8(0.1)	120/1/60
SRWD-2	75(34)	3(75)	.75(19)	30(760)	0-50	1/8(0.1)	120/1/60

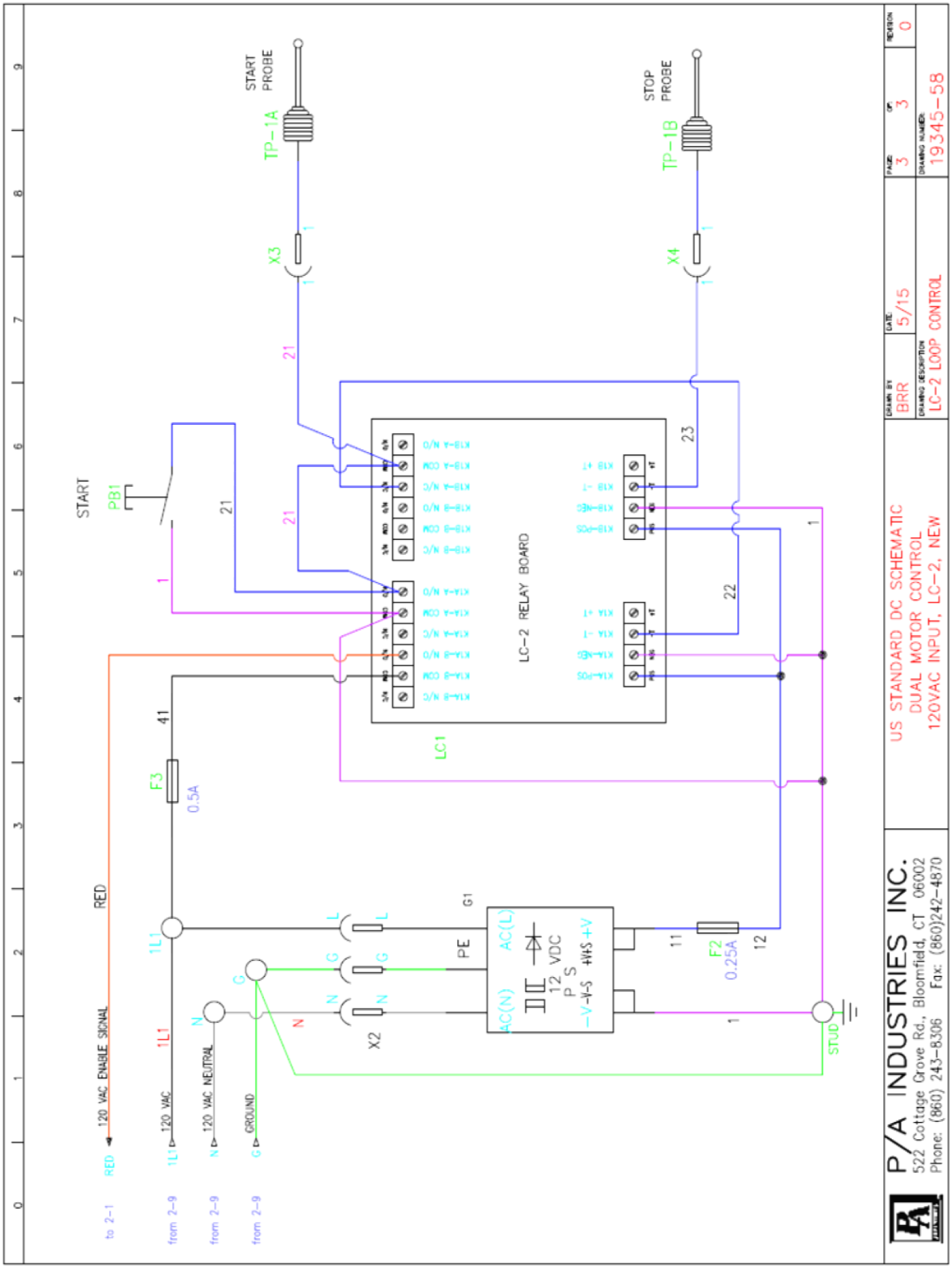

15156-01
14963-07
12133-12
19729-01
15986
14963-15
12133-12
14465-02
14964-71
15181-01
15158
14977
12125-04
14963-02
14465-02
13650-16
12466-33
16166-02
16167
18029
16029
15156-01
16166-01
14977
16035
16169
15342-02

6.2 Parts List

Item#	Part#	Description	Qty
1	15986	PLATE, MOTOR	1
2	12125-04	GEARMOTOR ASSY, 130 VDC, 1/8 HP, 57 RPM	1
3	14963-02	SHEAVE, 3L x 3.5 PD x 5/8 BORE,2	1
4	13650-16	HOLE PLUG, SQUARE, 2in SQ x 14 Ga	1
5	12466-33	FASTENER, NUT, KNURLED, 3/4-10 THD.	2
6	16166-02	KEEPER DISC HUB	1
7	16167	SHAFT, SLIP CLUTCHSHAFT, SLIP CLUTCH	1
8	18029	SHAFT, SPINDLE (PAPER INTERLEAF)SHAFT, SPINDLE (PAPER INTERLEAF)	1
9	16029	SUPPORT, TENSION FORKSUPPORT, TENSION FORK	1
10	16035	DISC, LEXAN, 18in DIA X 1.12" ID	2
11	15342-02	LEVELING PAD (180 LB. MAX.LOAD) ******	1
12	16169	COLLAR, NYLON CLAMP	1
13	14977	KNOB, 2.38 DIA x 3/8-16 THD x 1.0 LONG	2
14	16166-01	KEEPER DISC HUB	1
15	15156-01	COVER, TOP, 8.875 X 8.375	2
16	15158	KEEPER DISC, 18in DIA X .09 FOR 1.75 ID	2
17	15181-01	SHAFT, .750 OD x 21.0 LONG	1
18	14465-02	KEEPER DISC HUB, FOR .750 DIA SHAFT*****	1
19	12133-12	BEARING, FLANGED, 3/4	2
20	19729-01	SRWD1 CABINET ASSY W/30" OUTRIGGER ARM	1
21	14963-07	SHEAVE, 3L x 3.5 P.D. x 3/4 BORE	1
22	14963-15	BELT, 3L x 46in LONG	1
23	14964-71	CONTROLLER, MOTOR, DC, KBPC-240D	1
24	15820-02	WASHER, NON-METALLIC, 1.5 OD x .765 ID x	1
25	15820-03	WASHER, NON-METALLIC 2.0 OD x .765 ID x	1
26	15504-02	SPRING, WASHER*	4

5.2 Drawings and Dimensions


NOTE:
SET DRIVE JUMPERS PER INDIVIDUAL JOB REQUIREMENTS
KBPC-240D FRONT COVER
FWD
BRK
REV
START
STOP
RUN
STOP
JOG
KB SPEED POT
R3
5K
INHIBIT CR
120 VAC ENABLE SIGNAL
DR1
KBPC-240D
MOTOR
CONTROLLER
REEL
SELECT
GROUND
120 VAC NEUTRAL
120 VAC
STANDARD DC SCHEMATIC
DUAL MOTOR CONTROL
120VAC INPUT, LC-2, NEW
P/A INDUSTRIES INC.
522 Cottage Grove Rd., Bloomfield, CT 06002
Phone: (860) 243-8306 Fax: (860)242-4870
BRR
5/15
DC MOTOR CONTROL
19345-58


P/A INDUSTRIES INC.
522 Cottage Grove Rd., Bloomfield, CT 06002
Phone: (860) 243-8306 Fax: (860)242-4870
US STANDARD DC SCHEMATIC
DUAL MOTOR CONTROL
120VAC INPUT, LC-2, NEW
DRAWN BY BRR
DATE 5/15
DRAWING DESCRIPTION LC-2 LOOP CONTROL
PAGE 3 OF 3
DRAWING NUMBER 19345-58
REVISION 0
START PROBE
TP-1A
STOP PROBE
TP-1B
X3
X4
START
PB1
LC-2 RELAY BOARD
LC1
F3 0.5A
F2 0.25A
X2
G1
12 VDC P S
AC(L)
AC(N)
PE
STUD
RED
120 VAC ENABLE SIGNAL
120 VAC
120 VAC NEUTRAL
GROUND
to 2-1
from 2-9
from 2-9
from 2-9