

# RS1 Manual

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# Operation

See: [REELEX G2 Controls Operation](#), or use the on-screen help function.

## Startup Procedure

1. Turn main power switch to on
2. Make sure air is on and applied (70 lbs)
3. Pull out all E.Stops
4. Push illuminated reset button. If button is not illuminated, check E.STOP circuit.
5. Endform will come up and on, and program will auto-load
6. Select a language if necessary and press "begin"
7. Set wind parameters
8. Feed product through guide tube
9. Press Endform On/Off button to remove Endform. Attach product to mandrel segment hole/slot. Press Endform On/Off button to return Endform to the mandrel and clamp the product.
10. Check Payoff is started
11. Check to make sure footage counter is closed
12. Press start to begin winding

# Setup

## Mandrel Setup Procedure

### Mandrel/Endforms

1. Press E.Stop to cut power
2. Loosen set screws

**NOTE:** There is a set screw on the outside endform that must be loosened before removal.

3. Pull off mandrel and inner endform
4. Change shaft if necessary
5. Mount new mandrel and endforms - make sure center of new mandrel is located within 0.50" of center of removed mandrel set. This will ensure the traverse will be centered properly.
6. Tighten set screws (make sure screws are on flat sections of shaft)

### Traverse

7. Manually move the guide tube (by hand) to ensure it will not strike the endforms. Guide tube should be set within 0.50 inches of the outside edge of endforms. Adjustment set screw is located at the end of the tube holder. Move the guide tube up or down by removing the 4 screws that hold the guide arm to the base. The guide tube should be near the top of the new endforms.
8. Pull out E.Stop.
9. Reset machine
10. Press "Settings"
11. Press "Start" to put traverse in motion (follow startup procedure)
12. Settings screen > adjust width while in motion (at slow speed) so that outer range of guide tube goes just slightly past either end of endform.
13. Check center setting and adjust if necessary. Best way is to wind product and see if the product just touches both endforms evenly.
14. Save changes to product or create new.

# Maintenance

## General Checks

1. Check the wire guides for wear. If the edges of the wire guide become sharp it will damage the jacket of the wire.
2. Guide tube should be no more than 0.50 inches away from the Endform.
3. A general inspection of the traverse assembly should be performed weekly. Check for signs of unusual wear.
4. Check all securing devices, i.e. nuts, bolts, setscrews, and pneumatic fittings, also tighten as necessary.

## Preventative Maintenance Schedule

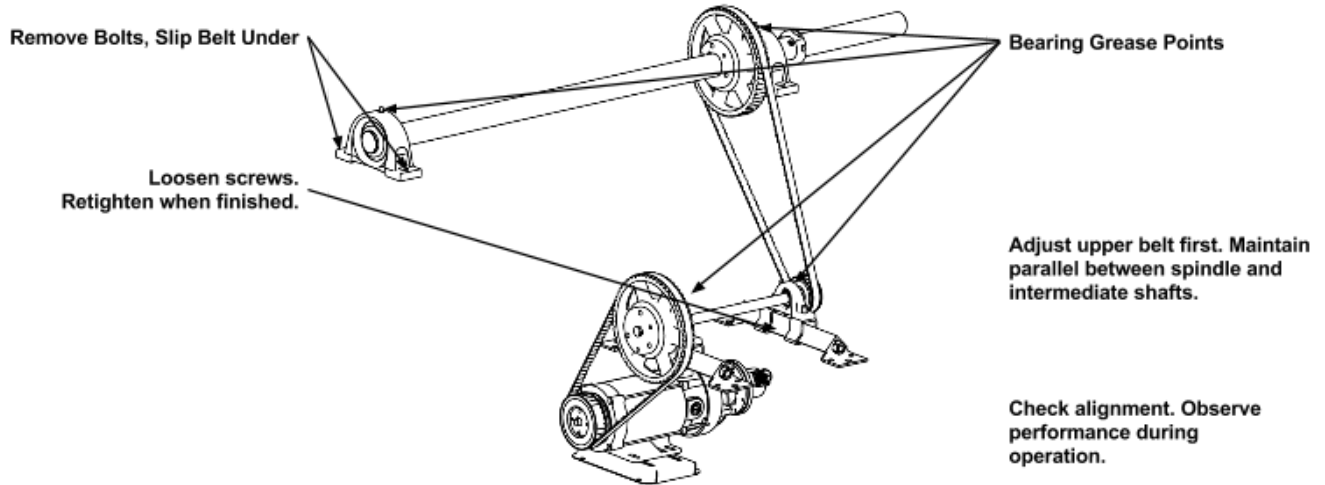
Component	Time Period	Action
Norgren Filter	When Dirty	Change
Norgren Coalescent Filter	When Indicator Shows	Change Element
Traverse Assembly	Once Per Week	General Inspection
All Pillow Blocks	Once Per Month	Multi-Grease (Standard Wheel Bearing Grease)
Belts	Every Other Week	Check Tension. Tension should allow approximately .25 inch of deflection when depressed.
Rails and Thompson Bearings	Once a month	Light Oil
All Shafts and Rails	Every Other Week	Clean and Lubricate with Light Machine Oil
Keyways and couplings	Every other week	Check for loose connections

## Outer Endform Lubrication Schedule

**NOTE:** There is a grease nipple on the aluminum hub. This will grease the adjustable bearing in the the Endform.

Component	Time Period	Action
2 x Movable Table Rails on Endform Table	Once Per Week	Light Oil
Outer Endform	Weekly	Grease

## Belt Replacement



# Troubleshooting

## Traverse Issues

### Reset Traverse Switch:

On reset the traverse always moves toward the outer endform. There is a reset switch that the program uses as a reset for the traverse position. If for some reason the traverse is past this switch the traverse will bottom out and the drive will trip. This will continue to happen until the traverse carriage is moved back (by hand) on the other side of the switch. If it happens again there may be a problem with the switch. If the drive does trip the main power switch must be turned off then back on.

### Mid Traverse Switch:

This switch is a rough setting of the guide stroke to the center of the mandrel. The fine adjustment is done on the "Settings" screen. Adjustment should be done while the machine is winding product. With the use of "Traverse Width" and Traverse Center Adjustment, you can adjust the traverse so that the product just touches the outer edges of each endform evenly.

### Traverse Stops and Spindle Continues to Wind:

Check drive for fault or check the traverse enable. Main power must be cycled to clear drive faults.

### Traverse Acting Erratically:

Check to make sure spindle is working correctly as traverse follows the spindle. If spindle drive and encoder are okay check encoder on traverse. Also make sure there are no faults on the traverse drive.

## Spindle Issues

### Spindle Stops:

1. Check fuses on drive. Check current limits on spindle drive.
2. Make sure drive enable working.
3. Check spindle D/A using function 3 on main screen on troubleshooting.

## Endform Arm Issues

### Endform Stops moving:

Check switch related to position. For example if the endform stops in the up position but doesn't go in check to make sure endform up switch being seen. See SCREEN 4 to see where in the sequence the machine has stopped.

### Endform not moving at all:

1. Check main air.
2. Check dump valve.
3. E.Stop machine to turn off air and move arm by hand. Check for rough movements.

## Maintenance Screen

### Encoders and Sensors

Make sure actual and adjusted values are sequential

D to A spindle should be steady

D to A traverse should oscillate above spindle value, if weird numbers happen you have a problem

Sensor location - should be steady

# Tune Up - Spindle Drive

Please see references below for information on tuning the RS1 spindle drive.

## References

**Drive Manual:** [Eurotherm/Parker Drive Manual](#)

**Drawing:** 25602