

Maintenance - Single Spindle

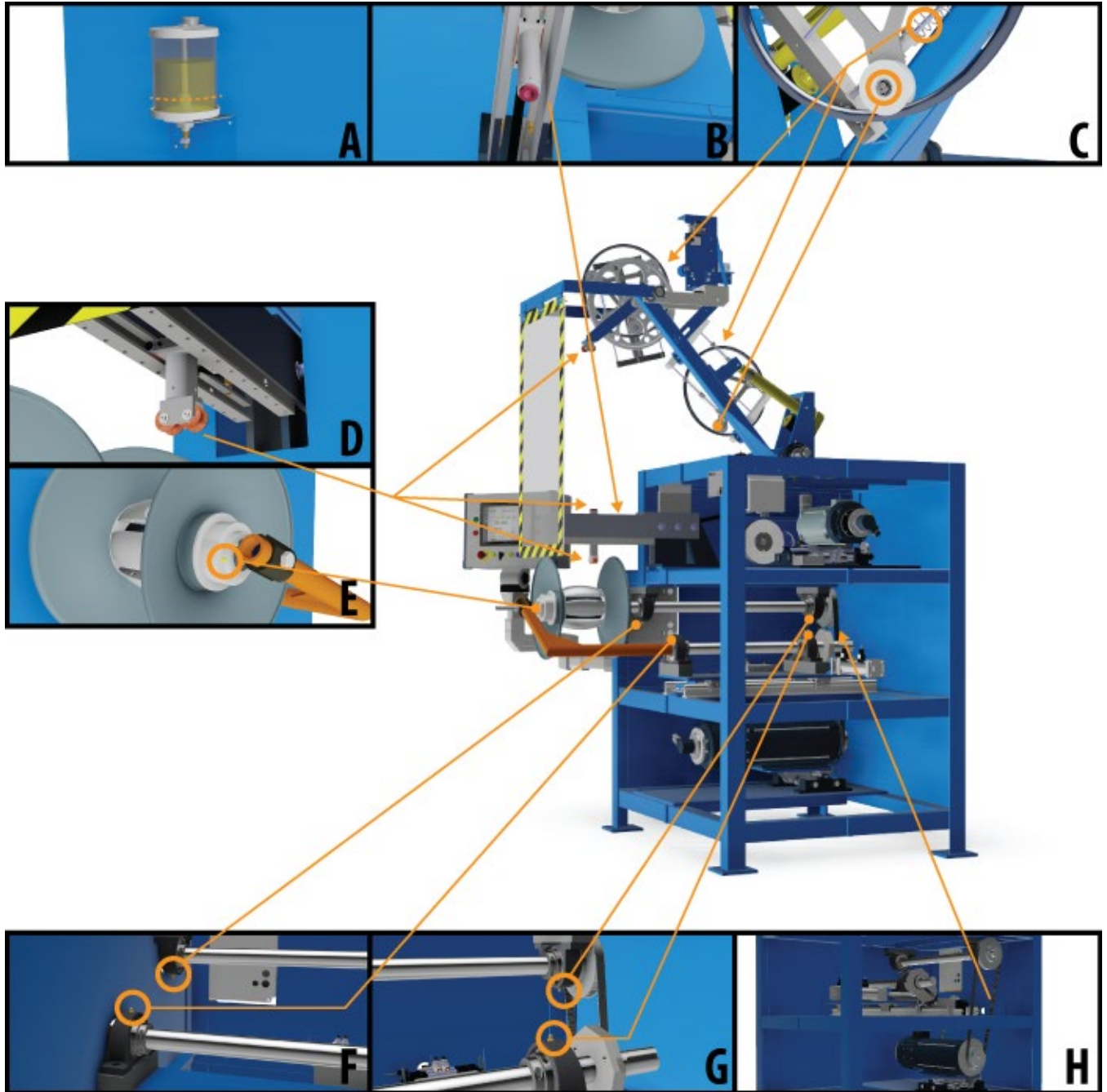
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D-750 Periodic Maintenance

The REELEX D-750 Single-Spindle coiling machine is designed to operate for years without issue as long as the following periodic maintenance takes place.

Periodic Maintenance Locations



A & B - Traverse

References:

Reference Document:

- See [REELEX Traverse System Maintenance](#)

Reference Drawings:

- [Drawing 10002](#) - Traverse Assembly
- [Drawing 10011](#) - Connecting Rod Assembly

A - Traverse Oil

The traverse is equipped with an automatic oiler system. The oil reservoir is clearly located on the back side of the machine.

Action	Type	Time Period
Fill reservoir with oil.	Mobil DTE 10 Light—Mineral Base Oil ISO grade 32	When reservoir is low. Do not overfill.
Check oil level in cam box.		Monthly.

B - Traverse Slider Block

Action	Time Period
Inspect for wear. Inspect for play. Confirm automatic lubrication is taking place.	Weekly

C - Buffer Components

Optimal buffer performance is essential to REELEX coil formation. Guides, springs and rollers must be replaced when worn or broken.

Action	Type	Time Period
Replace worn or broken buffer springs	SPRING- L800L-12	When springs do not provide adequate cushion for sheaves.
Oil rim sheave rollers	Silicone Spray	Weekly

Buffer slider block shaft	Silicone Spray	Weekly
Buffer cam follower bearing and raceway	Silicone Spray	Weekly

D - Rollers and Guides

Action	Time Period
Check all rollers and guides for grooves and proper function	Weekly

E - Mandrel and Endforms

Endform Hub Lubrication

Action	Type	Time Period
Add grease until visually coming out of bearing, then wipe off excess.	Grease	Monthly

Mandrel and Endform Maintenance

Action	Time Period
Check Mandrel segments and alignment with inner endform.	Monthly
Check white nylon rings on inner and outer endforms.	Monthly

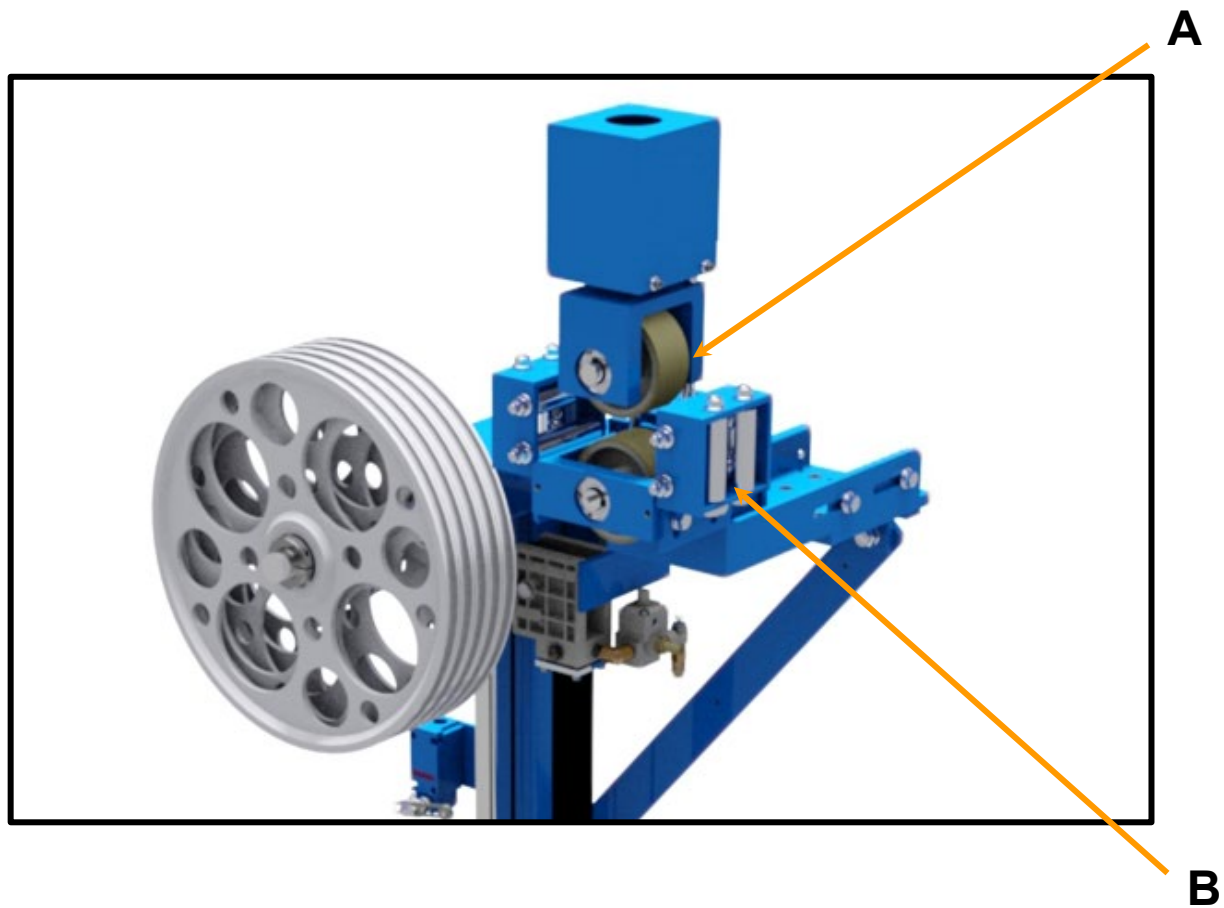
F & G - Shaft Bearings Lubrication

Action	Type	Time Period
Add grease until visually coming out of bearing, then wipe off excess.	Grease	Monthly

H - Drive Belts, Geneva Mechanism

Action	Time Period
Inspect drive belts inside D750 monthly. Check for dry rotting, excessive wear, and tightness. Tighten belts when needed, until about ¼ inch of play	Monthly
Lubricate rails for Endform arm table.	Monthly
Inspect Geneva mechanism for wear and lubricate.	Monthly

Wheels and Rollers



A - Footage Counter Wheels

Action	Time Period
Inspect footage counter wheels. Replace if a groove is forming.	Monthly

B - Rollers

Action	Time Period
Inspect all steel wire guide rollers on machine and dancer. Replace if groove is forming.	Monthly

Other Single-Spindle Machines

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 ½" away from the Endform.

Traverse and Cam

D-510, S-500, A-500



NOTE: The D-510 and similar machines use a different traverse from most REELEX machines. Please see the Maintenance - D-510 document for traverse information.

Reference Document:

- See [Maintenance - D-510](#)

Other Single-Spindle Machines

References:

Reference Document:

- See [REELEX Traverse System Maintenance](#)

Reference Drawings:

- [Drawing 10002](#) - Traverse Assembly
- [Drawing 10011](#) - Connecting Rod Assembly

Buffer and Endform Lubrication

Component	Time Period	Action
Buffer Slider Block Shaft (Thompson)	Once Per Week	Light Machine Oil
Buffer Cam Follower Bearing and Raceway	Once Per Week	Lubricating Oil
Buffer Roller Block Bearings and Wheels		Silicone Spray ONLY
2 x Movable Table Rails on Endform Table	Once Per Week	Light Oil
Outer Endform	Weekly	Grease

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

Other Components

Component	Time Period	Action
Festo Filter	When Dirty	Change Filter
Festo Coalescent Filter	When Red Indicator Shows	Change Element
2 x Movable Table Rails on Endform Table	Once Per Week	Light Oil
Outer Endform	Weekly	Grease

Wire Buffer System

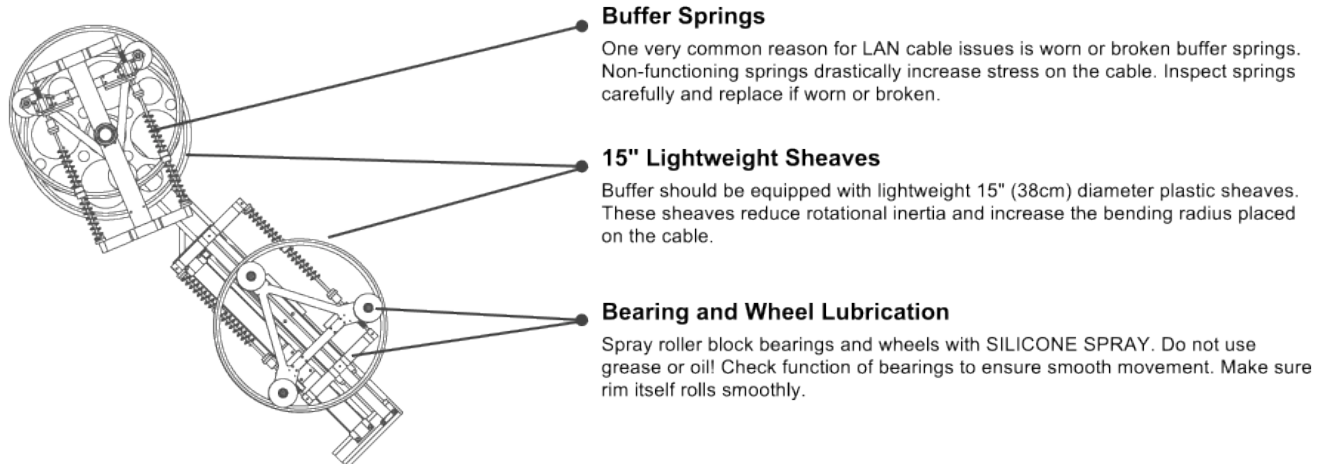
The buffer unit is essential to winding quality REELEX coils. The buffer should be regularly checked for good operation, and all springs and bearings should be replaced when worn. Not doing so could have adverse effects on the REELEX coil, including increased stress on the product (leading to poor electrical performance and other issues).

The wire buffer unit is designed to be raised and lowered as necessary. When raised, the buffer is in its normal operation position. There is a lockout switch system, which prevents the machine from starting unless the buffer is in the full up position.

The wire buffer is designed to compensate for changes in wire length during winding. The slider block shaft requires an application of light machine oil weekly, as the bearings in the buffer slider block are subjected to high velocity and cycle rates. Inspect all rollers and sheaves for serviceability. Check all securing devices, i.e. nuts, bolts, set screws, and lock rings also tighten if necessary.

The buffer slider block is equipped with a cam follower bearing, which tracks in a raceway. Check the cam follower bearing and raceway for wear and apply a small amount of lubricating oil weekly.

Inspection and Maintenance



Buffer Replacement Kit

REELEX Offers a wearing parts replacement kit that includes commonly worn parts. Alternatively, you can order a complete refurbished buffer and swap out your worn buffer. To order a kit or replace your current buffer with a new one, call +1 845-878-7878 or email sales@reelex.com.

Buffer Repair Kit - Part Number:	Refurbished Buffer Swap Program:
REPAIR-BUF/01	REFURB-BUF/01

Outer Endform Alignment Procedure

Reference Drawing:

- [10000](#) - D-750 Final Assembly

To properly align the outer Endform you should first machine an alignment plug. This can be done by taking a piece of 2.000" round steel stock by about 4" long, drilling and tapping a $\frac{3}{4}$ -16 threaded hole in it.

1. Remove the outer endform (#63 on drawing #10000). Be sure to loosen the 10-32 set screw before you loosen the endform or you could damage the $\frac{3}{4}$ -16 bolt that holds the endform in place.
2. Thread your machined ALIGNMENT PLUG onto the $\frac{3}{4}$ -16 bolt where you removed the outer endform.
3. Loosen the set screws that hold the mandrel assembly in place (#43 on drawing # 10000) and slide it forward about 2".
4. Apply air (about 70 psi.) to the cylinder in the upward stroke. This will simulate a running condition. You can use the troubleshooting program in the controller to supply the air pressure for the up / down cylinder if you know how to run that program. If not, you will have to supply air by means of an outside air source.
5. By hand, see if you can insert the alignment plug into the mandrel assembly. If alignment is off there are two different types of alignment that need to be checked.
6. On drawing #10000 (weldment, E/F arm) the slot in the endform arm is slightly bigger than the $\frac{3}{4}$ -16 bolt that goes through it. By loosening the $\frac{3}{4}$ -16 bolt this will allow you to move the endform from right to left. Also the slot in the endform arm will allow you to move the endform up and down. When you are able to insert and retract the alignment plug, tighten the $\frac{3}{4}$ -16 bolt then try again to insert and retract the alignment plug.
7. If you still can't get the desired alignment then you must readjust the GENEVA MECHANISM. This is part # 75 & 76 on drawing # 10000.
8. To do this, remove the air pressure from the up / down cylinder then loosen the 3 bolts on the Geneva mechanism, insert the alignment plug into the mandrel assembly. Put the air pressure back on the up / down cylinder then tighten the 3 bolts on the Geneva mechanism.
9. Now see how your alignment is. You may have to go back and try adjusting the endform arm a little to get the alignment perfect.