

**TRAK<sup>®</sup> MACHINE  
TOOLS**

Featuring  
**ProtoTRAK CNCs**

# Preventative Maintenance



**CNC Technology for Small Lot Machining**

# A Complete Maintenance Program

Regular preventative maintenance is the best way to keep the investment in your equipment paying dividends.

We keep track of your maintenance due dates and coordinate service times that work for your shop. Our factory trained technicians follow standardized checklists, help resolve other minor issues not on the lists, and provide documentation of all the work that was performed. Our maintenance service is a pay-as-you go program so you won't pay anything until you authorize the work and it is completed.

## Standardized Maintenance Checklist

Includes calibrations, free software updates and more.

| TRAK MACHINE TOOLS<br>SOUTHWESTERN INDUSTRIES, INC.                      |                          | PREVENTATIVE MAINTENANCE<br>28-POINT LATHE CHECKLIST  |  |
|--|--------------------------|---|--|
| SERVICE DATE:  | / /                      | SUPPORT TICKET #:   |  |
| COMPANY:   |                          | #:  |  |
| SERIAL #:  |                          | MODEL:  |  |
| Complete form by placing a checkmark in the boxes as task are completed. |                          |   |  |
| 1  | <input type="checkbox"/> | Update software when applicable. Verify Error Logging is turned on (Code 319) for SLX & RLX.  |  |
| 2  | <input type="checkbox"/> | Check and adjust level of machine.  |  |
| 3  | <input type="checkbox"/> | Fill lube pump. Manually pump oiler and check lube points.  |  |
| 4  | <input type="checkbox"/> | Run spindle throughout all gear ranges and RPM's. Note any unusual noises below.  |  |
| 5  | <input type="checkbox"/> | Check spindle preload and record value: _____ inlbs.  |  |
| 6  | <input type="checkbox"/> | Check alignment X & Z ballscrew.  |  |
| 7  | <input type="checkbox"/> | Check drive train assemblies.   |  |
| 8  | <input type="checkbox"/> | Use jogstick and turn electronic handwheels. Listen for unusual noises. Note any problems below.  |  |
| 9  | <input type="checkbox"/> | Check and adjust spindle motor mounting and belt as needed. Inspect belt.   |  |
| 10   | <input type="checkbox"/> | Change headstock gearbox oil if requested (Customer to provide oil).  |  |
| 11   | <input type="checkbox"/> | Check spindle brakes. Spindle stop? <input type="checkbox"/> Yes <input type="checkbox"/> No (1440 & 1745 models: Check Setting of timer) |  |
| 12   | <input type="checkbox"/> | Inspect Electronic Handwheels, Clean friction pucks as needed.  |  |
| 13   | <input type="checkbox"/> | Check alignment of spindle encoder. Inspect encoder coupling.   |  |
| 14   | <input type="checkbox"/> | Inspect and adjust X and Z axis servo motor belts.  |  |
| 15   | <input type="checkbox"/> | Adjust Gibs and Run Service Codes 12 and 100. (Service Codes 12 & 100 not applicable to RLX products)                                     |  |
| 16   | <input type="checkbox"/> | Calibrate X and Z-axis and check backlash. Record backlash values below.  |  |
| 17   | <input type="checkbox"/> | Record Positional accuracy: X: _____ Z: _____   |  |
| 18   | <input type="checkbox"/> | Record Uni-directional repeatability: X: _____ Z: _____   |  |
| 19   | <input type="checkbox"/> | Record Bi-directional repeatability: X: _____ Z: _____  |  |
| 20a  | <input type="checkbox"/> | Run Code 131: Disable Electronic Handwheels.  |  |
| 20b  | <input type="checkbox"/> | Run Code 132: Electronic Handwheel test.  |  |
| 20c  | <input type="checkbox"/> | Run Code 133: Spindle Encoder test.   |  |
| 21   | <input type="checkbox"/> | Check if emergency stop buttons disable Handwheels, Jogsticks, and Spindle.   |  |
| 22   | <input type="checkbox"/> | Check all cables and cable connections. All cables should be neat and securely tied.  |  |
| 23   | <input type="checkbox"/> | Check coolant pump operation.   |  |
| 24   | <input type="checkbox"/> | Inspect way wipers and note the condition.  |  |
| 25   | <input type="checkbox"/> | Check headstock alignment. Cut test part. Check for taper: _____ Taper Over 6"  |  |
| 26   | <input type="checkbox"/> | Inspect indexer. Can you initialize? <input type="checkbox"/> Yes <input type="checkbox"/> No   |  |
| 27   | <input type="checkbox"/> | Replace Pendant fan filter (N/A on RLX products).   |  |
| 28   | <input type="checkbox"/> | Wipe down machine. Clean touchscreen on RLX products.   |  |
| List potential problems, observations, or recommendations:               |                          |   |  |
|  |                          |   |  |
| TECHNICIAN   |                          | NEXT MAINTENANCE DATE   |  |

## Maintenance Certificates

Documents work performed and certifies the instruments used.

| TRAK MACHINE TOOLS<br>SOUTHWESTERN INDUSTRIES, INC.  |       | Preventative Maintenance Certification |  |
|--|-------|--|--|
| CUSTOMER   |       |  |  |
|  |       |  |  |
| MAINTENANCE SITE ADDRESS   |       |  |  |
|  |       |  |  |
| CITY   | STATE | ZIP CODE                               |  |
|  |       |  |  |
| MAINTENANCE DESCRIPTION  |       | SERIAL NUMBER(S)                       |  |
|  |       |  |  |
| MAINTENANCE DATE   |       |  |  |
|  |       |  |  |
| FIELD SERVICE TECHNICIAN   |       |  |  |
|  |       |  |  |
| CALIBRATION WAS PERFORMED IN ACCORDANCE WITH ISO 10012-1 AND ISO GUIDE 25 USING MASTERS TRACEABLE TO THE NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY<br>THIS CERTIFICATION SHALL NOT BE REPRODUCED EXCEPT IN FULL WITHOUT WRITTEN APPROVAL FROM TRAK MACHINE TOOLS. |       |  |  |
| TRAK Machine Tools<br>Southwestern Industries, Inc.<br>2615 Homestead Place<br>Rancho Dominguez, CA 90220-5610 USA<br>T   310.608.4422   F   310.764.2668<br>Service Department: 800.367.3165<br>e-mail: sales@trakmt.com   service@trakmt.com<br>web: trakmt.com      |       |  |  |

## Convenient Scheduling

We notify you when maintenance is due and schedule a technician when it works for your shop.

## Specialized Tools

Factory-trained technicians have the specialized tools needed to perform work.

# Preventative Maintenance Services

## TRAK Lathes - 28 points of service

- Check level of machine
- Check spindle encoder alignment
- Inspect oiler & lube points
- Inspect gear train
- Check spindle preload
- Check ballscrew alignment
- Check drive train assemblies
- Inspect joystick
- Clean & lubricate hand wheels
- Check spindle motor mount & belt
- Change gearbox oil if needed (customer to provide oil)
- Check spindle braking
- Adjust gibs
- Adjust X & Z-axis belts
- Run diagnostic service codes
- Calibrate X & Z-axis
- Check backlash
- Check position accuracy
- Check unidirectional repeatability
- Check bidirectional repeatability
- Check emergency stop button
- Inspect all cable connections
- Inspect coolant pump
- Inspect way wipers
- Check headstock alignment
- Inspect indexer
- Wipe down machine
- Update software & change pendant fan filter

## TRAK Mills and Retrofit CNCs - 14 or 24 points of service

- Adjust gibs & inspect travel
- Check sensors/glass scales & mountings
- Check alignment of Z-axis
- Inspect pump & lubrication system
- Inspect & adjust spindle belts
- Run diagnostic service codes
- Calibrate all axes & check backlash
- Check positioning accuracy
- Check unidirectional repeatability
- Check bidirectional repeatability
- Inspect all cable connections
- Inspect E-stop
- Wipe down machine
- Update software & replace pendant air filter

### 24-point service also includes:

- Check level of machine
- Check spindle while running through gears
- Check spindle brake
- Jog axes & inspect for wear
- Tram head
- Check functionality of auxiliary functions
- Inspect axis motor belts
- Check drive train assemblies
- Inspect all limit switches
- Clean & lubricate electronic hand wheels

## TRAK DROs and Trav-A-Dials

- Check & clean sensor, Trav-A-Dial, & mounting bracket
- Adjust gibs on the machine
- Check repeatability
- Calibrate each axis
- Check cable & cable connections
- Re-tighten all bolts, screws & nuts
- Clean & organize Trav-A-Dials, sensors, cables, displays, & power cabinet

## TRAK LPM

- Drain regulator assembly
- Check lubrication system
- Check coolant level
- Check level of lubrication pump
- Check level of pneumatic oiler
- Check level of tool change air cylinder oil
- Inspect tool change air cylinder
- Clean electrical cabinet air filters
- Check & adjust level & tram of machine
- Check spindle motor belt tension
- Check & adjust backlash if necessary
- Remove way covers & clean built up debris
- Inspect ATC
- Apply grease to ATC unit

## TRAK 2<sup>op</sup>

- Remove chips from slideways
- Check lube pump level
- Check coolant level
- Check air supply regulator & clean filter
- Clean debris from rear of ATC
- Remove & clean air filters on electrical cabinet & servo cabinet
- Check tool, unclamp oil reservoir
- Check & adjust backlash if necessary
- Remove way covers & clean debris
- Inspect tool change air cylinder
- Grease ATC linear rails
- Check for any usual wear, including cables & pneumatic lines

**Contact the Customer Service department:**

**Toll free:** 800-367-3165

**Direct fax:** 310-886-8029

**Email:** [service@trakmt.com](mailto:service@trakmt.com)

7:00am to 4:30pm, PST

**Preventative Maintenance Terms and Conditions**

Preventative Maintenance products are offered under certain Terms and Conditions which are listed on the Preventative Maintenance Price List.



**TRAK MACHINE TOOLS**



**SOUTHWESTERN INDUSTRIES, INC.**

2615 Homestead Place  
Rancho Dominguez, CA 90220

T | 310.608.4422  
[www.trakmt.com](http://www.trakmt.com)