

**MODEL
SR24, SR36 & SR42
SLIP ROLLS**

13811

TENNSMITH  **USA**



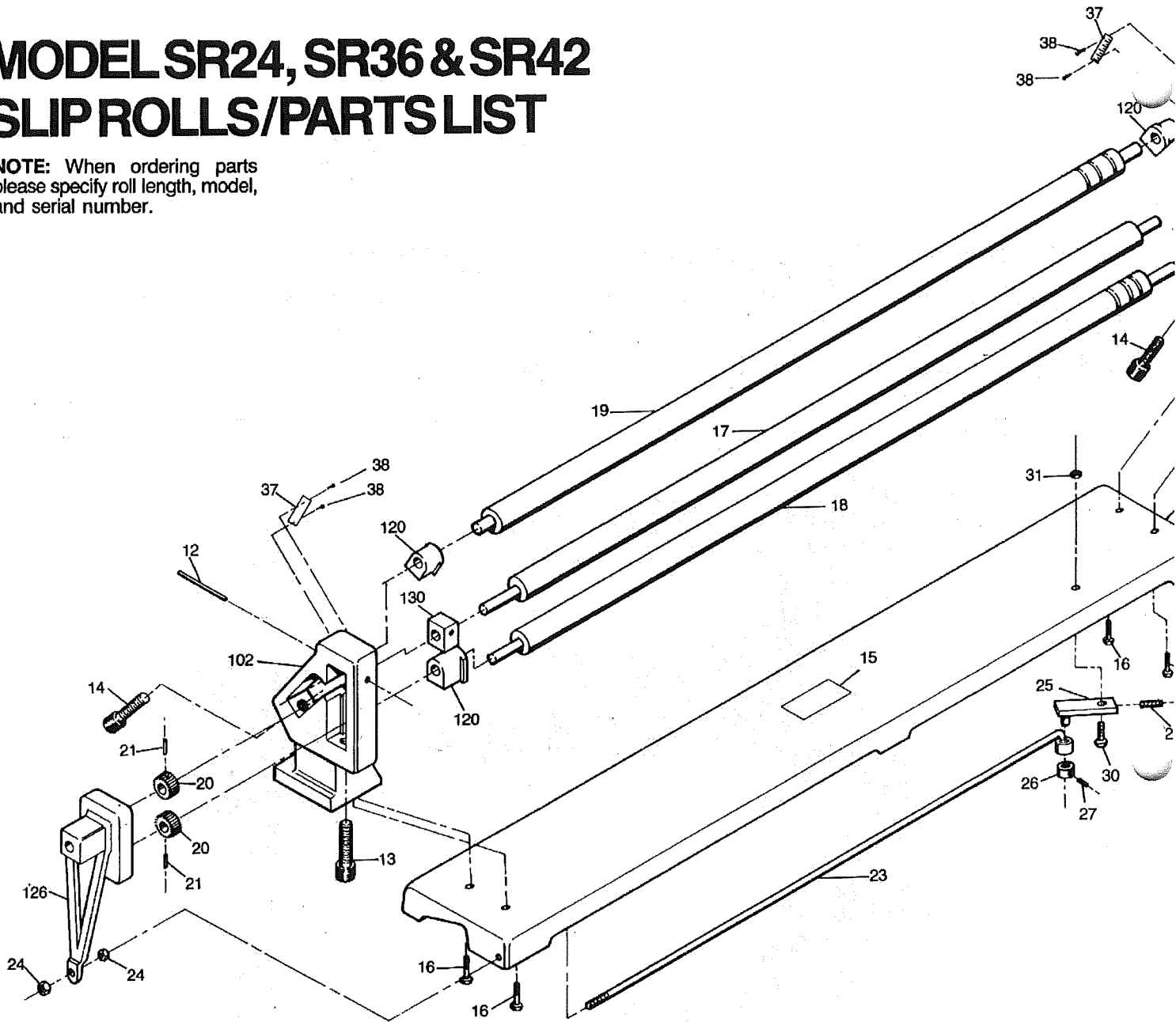
OPERATION, PARTS & MAINTENANCE MANUAL

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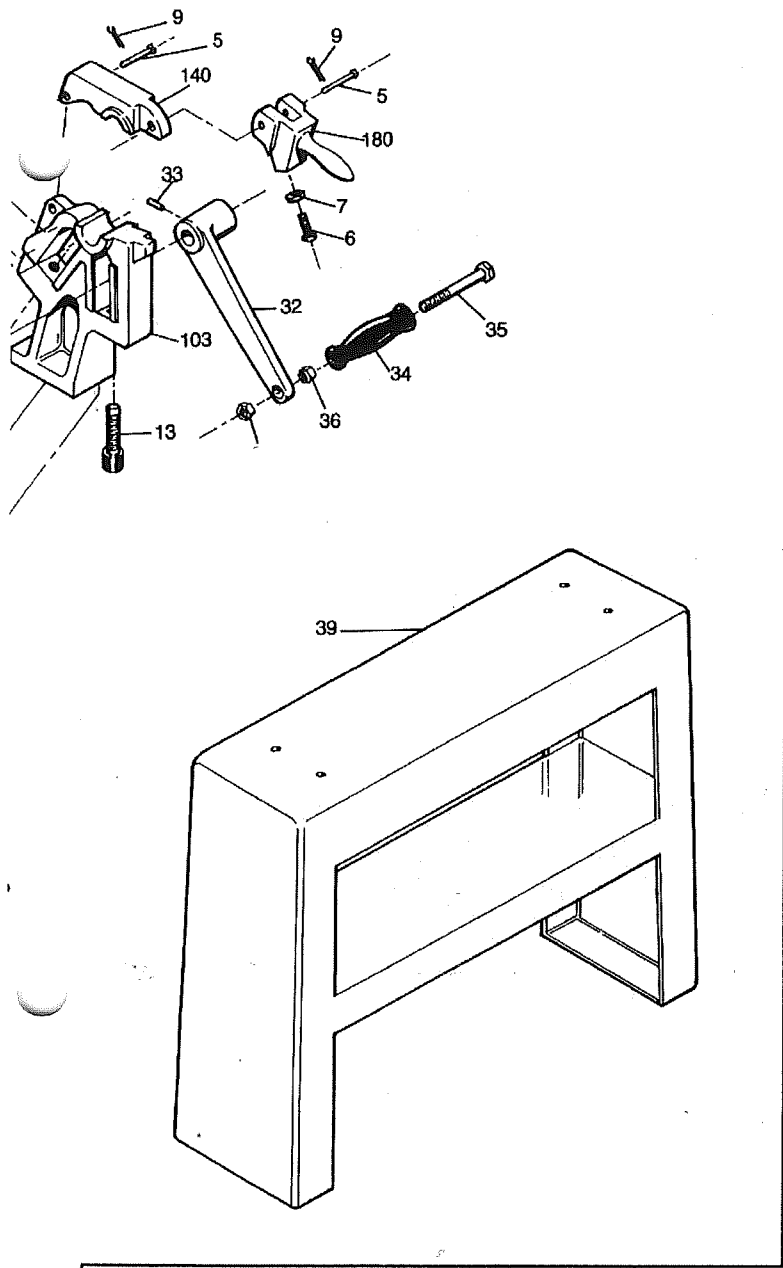
MODEL SR24, SR36 & SR42 SLIP ROLLS/PARTS LIST

NOTE: When ordering parts please specify roll length, model, and serial number.



Parts used on all SR Rolls are indicated with an asterisk.

| PART NO. | DESCRIPTION | NO. REQ'D. | PART NO. | DESCRIPTION | NO. REQ'D. |
|----------|------------------------------|------------|----------|------------------------|------------|
| SR-101 | BASE | 1 | SR-21* | SPLIT PIN, GEAR | 2 |
| SR-102* | LEFT HAND SIDE FRAME | 1 | SR-126* | GEAR COVER | 1 |
| SR-103* | RIGHT HAND SIDE FRAME | 1 | SR-23 | ROD, ROLL LIFT | 1 |
| SR-140* | TOP LATCH | 1 | SR-24* | NUT, ROLL LIFT ROD | 2 |
| SR-5* | PIN, LATCH | 2 | SR-25* | BRKT. ROLL LIFT | 1 |
| SR-6* | BOLT, TOP LATCH | 1 | SR-26* | LOCK COLLAR | 1 |
| SR-7* | NUT, TOP LATCH | 1 | SR-27* | SCREW, COLLAR LOCK | 1 |
| SR-180* | LOCK, TOP LATCH | 1 | SR-28* | STUD, HANDLE | 1 |
| SR-9* | COTTER KEY | 2 | SR-29* | HANDLE, ROLL LIFT | 1 |
| SR-120* | BLOCK, ROLL ADJUSTMENT | 4 | SR-30* | SCREW, LIFT BRKT. MTG. | 1 |
| SR-130* | BLOCK, TOP ROLL SWIVEL | 1 | SR-31* | NUT, LIFT BRKT. SCREW | 1 |
| SR-12* | PIN, SWIVEL BLOCK | 1 | SR-32* | CRANK | 1 |
| SR-13* | SCREW, PINCH ROLL ADJUSTMENT | 2 | SR-33* | SCREW, CRANK LOCK | 1 |
| SR-14 | SCREW, IDLER ROLL ADJUSTMENT | 2 | SR-34* | HANDLE, ROLL CRANK | 1 |
| SR-15* | NAME PLATE | 1 | SR-35* | SCREW, CRANK HANDLE | 1 |
| SR-16* | SCREW, SIDE FRAME MTG. | 4 | SR-36* | NUT, HANDLE SCREW | 2 |
| SR-17 | TOP ROLL | 1 | SR-37* | SCALE | 2 |
| SR-18 | LOWER PINCH ROLL | 1 | SR-38* | DRIVE SCREW, SCALE | 4 |
| SR-19 | IDLER ROLL | 1 | SR-39 | FLOOR STAND (OPTIONAL) | 1 |
| SR-20* | GEAR, ROLL DRIVE | 2 | | | |



SAFETY INSTRUCTIONS

1. Know the safety and operating instructions contained in this brochure. Become familiar with and understand the hazards and limitations of your slip rolls. Always practice safety.
2. Wear approved eye safety protection, such as glasses, goggles, etc., when operating the slip rolls to protect your eyes.
3. Protective type footwear should be worn, and jewelry, such as rings, watches, etc., should be removed when operating the rolls. Do not wear loose clothing.
4. Rolls should be securely bolted to a work table or bench. The bench should be bolted to the floor.
5. Always keep hands clear of entry area to rolls while operating.
6. Do not misuse the slip rolls by using them for other than their intended use.
7. Keep the work area clear and clean to avoid tripping or slipping.

THESE INSTRUCTIONS MUST BE FOLLOWED OR SERIOUS PERSONAL INJURY OR PROPERTY DAMAGE COULD OCCUR.

FOREWORD

This manual has been prepared for the owner and operators of the TENNSMITH Model SR24, SR36 and SR42 slip rolls.

Its purpose, aside from operation instruction, is to promote safety through the use of accepted operating procedures.

Read all instructions thoroughly before operating your slip rolls. **THIS MANUAL SHOULD BE KEPT IN THE VICINITY OF THE MACHINE AT ALL TIMES.**

Also contained in this manual is the the parts list for your slip rolls. It is recommended that only TENNSMITH or factory authorized parts be used for replacement parts.

WARRANTY

Your rolls have a three year limited warranty from date of purchase. The terms of the warranty are stated on the warranty registration card enclosed with your machine.

RECEIVING THE SLIP ROLLS

Remove the slip rolls from its crate and inspect the unit for damage.

Any damage should be reported to your distributor. Concealed damage should also be reported to the delivering freight carrier immediately.

INSTALLING THE SLIP ROLLS

Locate the slip rolls in a well lighted area on a solid, level work bench, and secure to bench with lag screws or bolts.

Use lag screws or bolts with expandable shields or similar holding devices thru mounting feet located on the bottom of the side panels to mount work bench to floor.

OPERATION INSTRUCTIONS

The full-length capacities of the various models are shown in the chart below.

The chart (Figure 1) should be used as an approximate material conversion comparison to show equivalent capacities of material other other than mild steel. Do not exceed the capacity of your slip rolls as permanent damage to the machine may result.

FIGURE 1

| MAXIMUM CAPACITIES (INCHES) | SR24 | SR36 | SR42 |
|-----------------------------|-------------|-------------|-------------|
| Mild Steel | 20ga./0.036 | 22ga./0.030 | 24ga./0.024 |
| Stainless Steel | 24ga./0.024 | 26ga./0.018 | 28ga./0.015 |
| Cold Rolled Steel | 20ga./0.036 | 22ga./0.036 | 24ga./0.024 |
| Aluminum, Soft | .060 | .048 | .036 |
| Aluminum, Hard | .036 | .030 | .024 |
| Brass, Soft Yellow | .048 | .036 | .030 |
| Brass, Hard Yellow | .036 | .030 | .024 |
| Bronze, Phosphor Annealed | .036 | .030 | .024 |
| Copper, Soft | .048 | .036 | .030 |
| Copper, Hard | .036 | .030 | .024 |

The two front rolls carry the work through as the crank handle (32) is turned in a clockwise direction. The pinch roll adjustment screws (13) are used to move the lower pinch roll (18) up and down for different gauge material clearance between the two front rolls. The gap between the two front rolls should be equal at both ends of the rolls to assure an even advancement of the material being worked.

The rear idler roll (19) adjusts to control the radius of the material being worked by means of the idler roll adjustment screws (14). The gap between the idler roll and the two front rolls should be equal at both ends of the roll to assure an equal radius at both ends of the material being worked. The scales (37) mounted at each side frame are helpful in maintaining an equal gap. The scales can also be used to record approximate idler roll settings for forming a particular radius in a particular gauge of material.

Once the material being worked has been formed to the desired shape, removal is accomplished by raising the latch assembly (180, 140) to its fully open resting position and elevating the top roll (19) by means of the roll lift handle (29).

The degree of roll lift can be adjusted by moving the roll lift rod nuts (24) in the desired location.

$\frac{3}{16}$ ", $\frac{1}{4}$ ", and $\frac{5}{16}$ " diameter end grooves in the roll permit rolling wires.

LUBRICATION

The machine must be lubricated every day of service. The bottom and rear rolls are contained at each end by the adjusting blocks (14). An oil pin hole is located on the top of each of these blocks. Lubricate these blocks daily with two to three drops of oil. The upper roll is lubricated on the left hand side at the pin hole on the top of the gear cover (126) and on the right hand side by opening the latch assembly and oiling lightly the end of the roll shaft. We recommend a good grade of light machine oil with a viscosity of 300 SSU.

After every thirty days of operation, apply grease to the gears (20) by removing the gear cover (126).

We recommend that the rolls be lightly oiled when not in use to prevent rusting.



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