REID HAND FEED PRECISION SURFACE GRINDER

1. Cross Feed Handwheel
2. Table Handwheel
3. Cross Slide Lock
4. Neg’ator Stainless Steel Roll Type Dust Guards
5. Head Elevating Handwheel
6. One-Shot Lubrication System
7. Table Lock For Wheel Dressing
TO OUR CUSTOMER

We sincerely appreciate your selection of a new REID Surface Grinder.

This operation manual and parts book will assist you in operating and maintaining this quality tool. The "exploded" drawings of all assemblies will provide ready identification of components. We suggest that the booklet be kept handy for the assistance of your operator.

We look forward to serving you in the future, and take this opportunity to wish you success with your new REID Grinder.

REID BROTHERS COMPANY, INC.

Walter W. Perkins, President

INSTALLATION . . .

Mount the machine on a firm foundation and bolt to the floor if possible. Mounting pads will assist in eliminating excessive floor vibration. It is important that the machine be mounted level.

On three phase grinders, incoming power supply should be connected to terminals L1, L2, and L3 of starter contactor. On two phase grinders, incoming power supply should be connected to terminals L1, L2, L3, and L4 of starter contactor. After connecting power supply start spindle motor. Spindle should turn clockwise. If not, change any two wires of the input power supply.

LUBRICATION . . .

Keep a constant check on the level of the oil reservoir. Lubrication should be accomplished as operating use demands. Every four to five months, or as required, the table should be removed and the ways and rollers cleaned with a solvent. Then use a clean oily cloth on the rollers and ways to leave a film of oil which is all that is necessary.

STARTING . . .

On hand feed models, push switch button to start spindle motor and operate by hand. The table handwheel operates the table longitudinally. The cross feed handwheel moves the cross feed "in" or "out". The head elevating wheel is used to raise or lower the grinding wheel.

ADJUSTMENTS . . .

Correct tension on table drive belt is obtainable by adjusting belt tensioning device located on the underside of both ends of the table. Should sticking occur in the head assembly, flush the ways with kerosene and re-oil.

GRINDER "TIPS" . . .

Grind the underside of chuck before mounting on table. After bolting chuck to table, grind top of chuck before using machine.

Use correct grade and grit of wheel for work to be ground. When wheel burns or glazes, wheel is too hard.

Wheels should be in balance.

True wheel with diamond dressing tool to clean cutting surface and correct wear in face.

Consult your wheel supplier for recommended grades of wheels for various materials to be ground.
HERE IS ACCURATE... LOW COST PRECISION GRINDING

This Reid surface grinder is the newest in a long line of precision machine tools. Nearly 60 years of manufacturing experience is reflected in this outstanding machine.

Here is a toolroom grinder which is substantially heavier than comparable grinders in this size. It offers many exclusive features, covered in detail in this folder.

It is worth noting, also, that Reid Grinders are equipped with sealed, anti-friction bearings throughout. Longer ways assure better wearing and grinding accuracy with a full 18” center distance on cross slide ways for greater stability. This model features a full one H.P. spindle motor... for more power than other grinders of similar capacity.

Optional equipment includes J.I.C and/or 110 Volt Controls, Chrome Ways, Automatic Lubrication and a Motorized Spindle.

THE MOST RUGGED SURFACE GRINDER IN THE INDUSTRY FOR ITS SIZE

COMPLETE UNDERGUARD AND DUST GUARD PROTECTION

FINGER TIP CONTROLS FOR EASIER OPERATION . . . LESS FATIGUE

CROSS SLIDE LOCK IS STANDARD EQUIPMENT

A FULL 15¼” WORK HEIGHT FROM TOP OF TABLE TO UNDERSIDE OF 7” WHEEL

STANDARD MODEL FEATURES PRECISION, ANTI-FRICTION, BELT-DRIVEN SPINDLE
BASIC MACHINE ARRANGEMENT

- S612-182 DUST COVER
- 612-235 (2 REQ'D.) SIDE COVER
- 612-83 BEARING COVER
- 612-132 TOP PLATE
- S612-152 DUST GUARD
- S612-236 R.H. S612-237 L.H. DUST RAIL
- S612-153-1 DUST GUARD
- S612-234-1 DUST RAIL (2 REQ'D.)
- S612-133 DUST COVER
- S618-1175 COVER PLATE
- 618-938 BASE
- REF S618L-1 LUBE PUMP
- S618-1177 COVER

MIMS Machinery Movers   mimsriggers.com
COLUMN SHOWING GRINDING HEAD
AND BELT DRIVEN SPINDLE ARRANGEMENT
REID-O-MATIC
ALL-HYDRAULIC 618 HYD

POWER OPERATED TABLE, CROSS FEED.
A heavy 18 inch all-hydraulic grinder with power feed. Has low pressure hydraulic power pac, instant power-to-hand change-over, and many other special features. Ideal for all-purpose precision grinding.

618 HYT
POWER TABLE, HAND CROSS FEED. Identical to 618 HYD except power to table only.

REID 612-SG REPEATING SLICER AND GRINDER
REID 612-DG REPEATING DICER AND GRINDER
Repeat Accuracy to ± One Tenth of a Thousandth!

IDEAL FOR AUTOMATIC CUTTING OR GRINDING
OF CLOSE TOLERANCE REPEAT WORK

Industry is finding all manner of uses for these unique REID machines which can make repeat cuts and grinds automatically—with electronically controlled accuracy. The 612-SG and DG were developed especially for consistently-accurate slicing and dicing of valuable germanium and silicon wafers used by the semi-conductor industry. These versatile REID machines can perform close tolerance broach, step, and serration grinding automatically with the same repeat accuracy—making them ideal for precision grinding on a form or production basis.

DUST COLLECTOR. Vacuum type cabinet model No. 66. Self contained motor draws dirt and dust from grinding area. Foot pedal shaker cleans filter surfaces. Larger Dust Collectors for servicing two or three grinders also available.

REID COOL GRINDING ATTACHMENT. A fine jet of coolant directed at grinding wheel contact prevents excessive heating, eliminates dust. Spray mist evaporates, eliminating need for a conventional return system. Coolant container mounts on grinder column, uses customer's own air pressure. Regulator controls volume of coolant to the adjustable spray nozzle.

For Complete Information, Ask Your AUTHORIZED REID DEALER

REID WET GRINDING ATTACHMENT. Provides flow of coolant over work—from a tank by motor driven pump. A spray guard with adjustable shields is placed on work table to control coolant return.

REID...Makers since 1900 for quality precision surface grinders

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**SINGLE SHOT LUBRICATING SYSTEM**

NOTE: For Bijur Pump use Socony-Mobil Oil Vactra #2 or Equivalent.

CODE | REID NUMBER | NOMENCLATURE | MFG. NUMBER | QTY.
--- | --- | --- | --- | ---
A | S824L — 377 | 3 Way Junction | B1092 | 1
B | S618L — 4 | 7 Way Junction | B3289 | 1
C | S824L — 379 | 20" Hose Ass’y 5/16 O.D. | B6651 | 1
D | S618L — 25 | 18" Hose Ass’y 5/16 O.D. | B6416 | 1
E | S618L — 3 | 3 Way Junction | B3065 | 1
F | S618L — 12 | Compression Sleeve 5/32 | B1061 | 8
G | S618L — 14 | Compression Bushing 5/32 | B1371 | 8
H | S618L — 15 | Closure Plug | B2488 | 2
I | S618L — 34 | Clip | B3570 | 4
J | S618L — 32 | Compression Bushing | B3373 | 2
K | S824L — 381 | Straight Adapter | B4452 | 4
L | S618L — 18 | Brass Tubing 3/32 x .025 | 5B — 25 | Ft.
M | S618L — 30 | Compression Sleeve 3/32 | B3313 | 16
N | S618L — 26 | Motor Unit FJD — 00 | B3773 | 8
O | S618L — 31 | Motor Unit FJD — 1 | B3775 | 2
P | S618L — 13 | Compression Nut 3/32 | B3610 | 14
Q | S618L — 1 | Steel Tubing 3/32 x .020 | 3S20 | Ft.
R | S612 — 181 | Straight Adapter | A-2835 | 2
S | S618L — 21 | 1/4 Pipe Plug | B-3262 | 1
T | S618L — 16 | 4 Way Junction | A-2835 | 2
U | S618L — 1 | Pump H.I.B. | D2075 | 1

**LOCATION ON GRINDER**

1. CROSS SLIDE (LEFT)
2. PUMP
3. TABLE
4. CROSS FEED SCREW
5. PLUGGED
6. HEAD & ELEVATING NUT
7. CROSS SLIDE (RIGHT)
8. HEAD (BEARING WAY)
9. HEAD (BEARING WAY)
10. NUT HEAD ELEVATING
CROSS SLIDE . . . SHOWING CROSS FEED AND CROSS SLIDE LOCK ARRANGEMENT
MIDDLE SECTION . . . SHOWING
GRINDING HEAD ELEVATING ARRANGEMENT