LEE MODEL'S R8-R6LK FACETING UNITS

OWNERS MANUAL

MACHINE SETUP

OK FACET HEAD PARTS & FUNCTIONS

TRANSFER BLOCK

KEYED DOP SYSTEM

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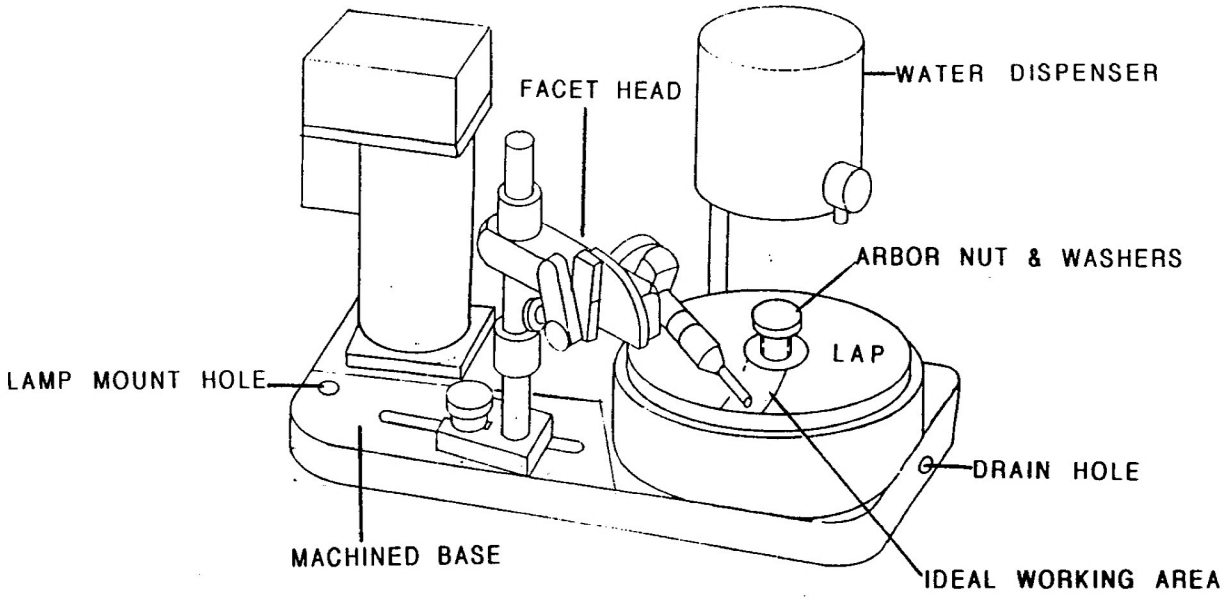
FACET EQUIPMENT MANUFACTURERS SINCE 1940



MODEL R8LK (R6LK) SET UP INSTRUCTIONS

(1) MOUNT THE WATER DISPENSER TO THE MACHINE BASE BY MEANS OF THE 1/4" SCREW & WASHER NEXT TO THE LAP BOWL. POSITION THE DISPENSER SO IT DRIPS TOWARD THE CENTER OF THE LAP. NEXT INSERT THE DRAIN HOSE INTO THE HOLE AT THE END OF THE BASE AND DRAIN INTO A BUCKET ETC.

(2) REMOVE THE ARBOR THUMB B NUT & PLASTIC WASHERS AND PLACE A LAP ON THE ARBOR (*SOME LAPS MAY REQUIRE A MASTER LAP FOR SUPPORT WHEN MOUNTING.*) AND LOCK DOWN WITH THE THUMBNUT & WASHERS. BOTH WASHERS MAY NOT BE NEEDED FOR MOUNTING AND SHOULD NOT BE USED UNDER A LAP.

(3) OPTIONAL MOFFATT LAMP: MOUNT THE LAMP BY MEANS OF THE SPECIAL THREADED STUD INCLUDED WITH THE LAMP. THE STUD MOUNTS VIA THE TAPPED HOLE LOCATED AT THE REAR OF THE MACHINED BASE NEXT TO THE MOTOR. FURTHER INSTRUCTIONS INCLUDED WITH LAMP.

MOUNTING THE OK FACET HEAD:

(1) LOOSEN THE THUMBNUT IN THE MACHINE BASE SLOT AND SLIDE THE MAST FOOT UNDER THE NUT & WASHER. TIGHTEN THE NUT JUST ENOUGH TO ALLOW THE MAST TO BE MOVED ALONG THE MACHINE BASE.

(2) SLIDE THE OK HEAD ONTO THE MAST OVER THE ELEVATING SLEEVE AND PLASTIC WASHER (FOUND IN THE PARTS BAG).

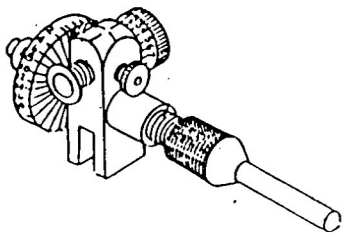
(3) PLACE A DOP OR DOPPED STONE IN THE DOP CHUCK AND TIGHTEN.

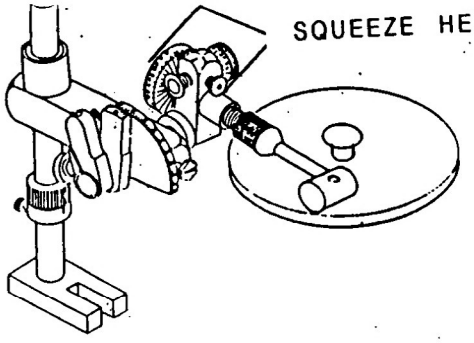
(4) SET THE ANGLE POINTER TO ABOUT 45 DEGREES ON THE PROTRACTOR AND LOCK THE ANGLE STOP.

(5) LOWER THE HEAD BY USING THE ELEVATING SLEEVE TILL THE TIP OF THE DOP OR STONE IS NEARLY TOUCHING THE LAP.

(6) MOVE THE MAST AND HEAD TO A POSITION WERE THE TIP OF THE DOP OR STONE IS IN LINE WITH THE ARBOR SPINDLE AND WILL STAY IN LINE WHEN SWINGING THE HEAD FROM THE INSIDE OF THE LAP TO THE OUTSIDE.

(7) LOCK THE MAST DOWN BY TIGHTENING THE THUMBNUT HOLDING THE MAST. THE LEE FACET UNIT IS NOW READY TO FACET.





CHANGING INDEX PLATES

(1) INSERT THE 45 DEGREE ADAPTER IN THE DOP CHUCK, MAKE SURE THE KEYWAY IN THE ADAPTER SHANK IS ENGAGED WITH THE KEY IN THE DOP CHUCK AND LOCK THE CHUCK.

(2) MAKE SURE THE CHEATER DIAL IS IN THE CENTER POSITION *(NO. 12 ON THE DIAL)*, THE INDEX TOOTH SHOULD BE IN THE CENTER OF THE CROSS ARM. THE INDEX PLATE SHOULD BE ON THE HIGHEST NUMBER.

(3) REMOVE THE CLUTCH CAP AND INDEX PLATE, PLACE THE NEW INDEX PLATE ON THE CHUCK AND PUT THE CLUTCH CAP BACK ON. MAKE SURE THE INDEX TOOTH IS ENGAGED IN THE HIGHEST NUMBER NOTCH ON THE INDEX PLATE. TIGHTEN THE CLUTCH CAP JUST ENOUGH SO THAT YOU CAN TURN THE DOP CHUCK WITHOUT THE INDEX PLATE TURNING.

(4) WITH THE STOP ARM LOOSE LOWER THE HEAD UNTIL THE ADAPTER CONTACTS THE LAP, IF THE ANGLE IS LESS THAN 60 DEGREES, LOWER THE HEAD BY MEANS OF THE ELEVATING SLEEVE UNTIL THE ANGLE IS 60 DEGREES OR GREATER.

(5) GRASP THE HAND PIECE IN A WAY THAT YOU CAN HOLD THE INDEX TOOTH AND THE INDEX PLATE TOGETHER AND PUSH THE ADAPTER DOWN ON THE LAP TILL IT LAYS FLAT ACROSS THE LAP. HOLD IT DOWN AGAINST THE LAP AND CAREFULLY TIGHTEN THE CLUTCH CAP. REMOVE THE ADAPTER.

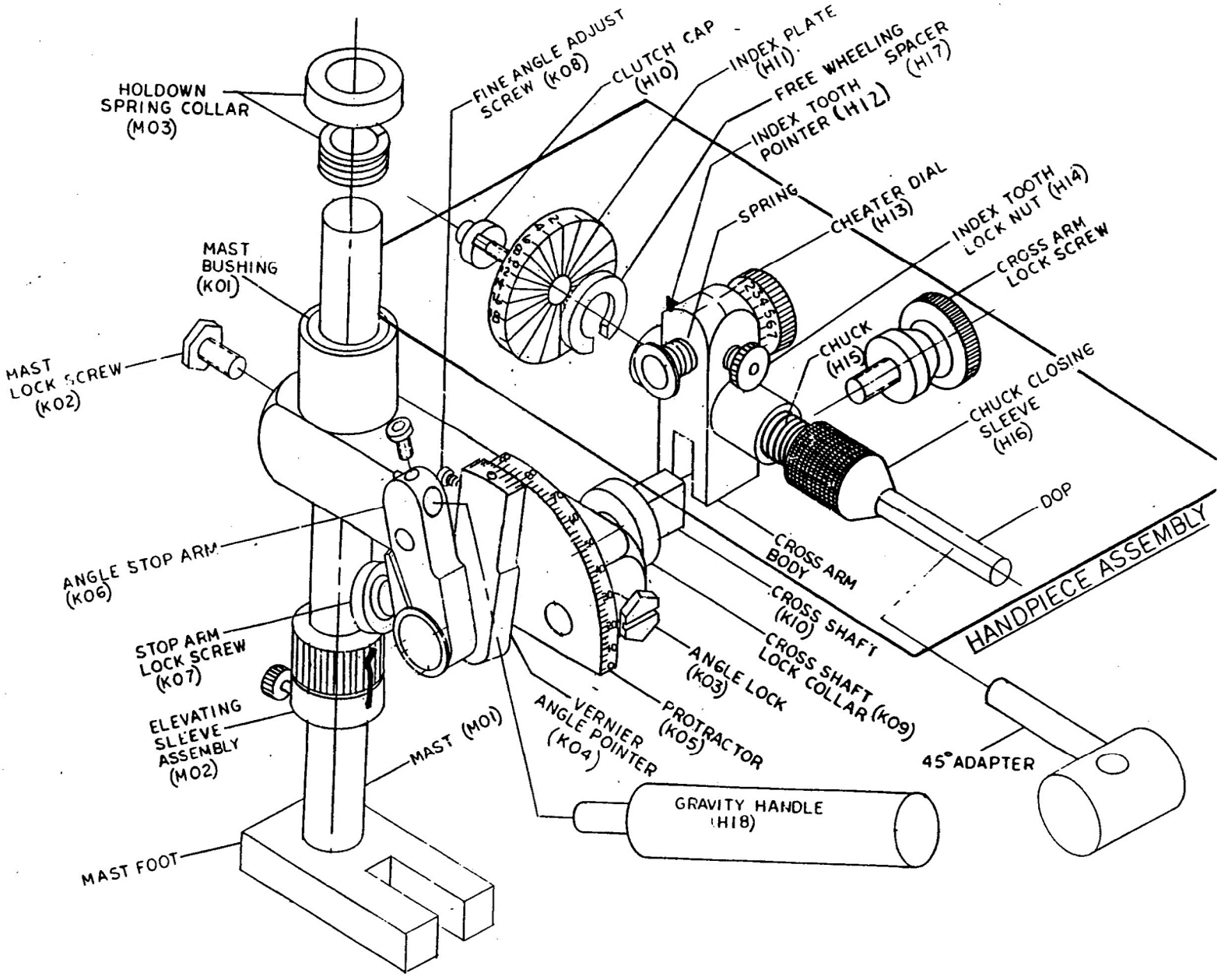
USING THE KEYED DOP SYSTEM

ALL LEE DOPS HAVE A 1/16" KEYWAY MILLED IN THE END. THIS IS TO GIVE YOU CONTROL OF THE STONE DURING THE VARIOUS FACETING OPERATIONS. THE DOP CHUCK, TRANSFER BLOCK, AND PREFORMER (*OPTIONAL*) ALL UTILIZE THE KEYWAY. THE DOP CHUCK HAS A KEY IN IT WHICH IS NORMALLY IN DIRECT LINE WITH THE HIGHEST NUMBER ON THE INDEX PLATE*(STARTING POSITION)*. THIS IS SET BY USING THE 45 DEGREE ADAPTER (SEE CHANGING INDEX PLATES). WHEN INITIALLY DOPING YOUR STONE FOR PREFORMING OR FOR FACETING TRY TO DOP THE STONE SO THAT YOUR FIRST FACET WILL BE OPPOSITE THE KEYWAY IN THE DOP. BY DOING THIS THE SHAPE OF YOUR STONE WILL BE ORIENTATED TO THE INDEX PLATE WHEN YOU PUT THE DOPPED STONE IN THE CHUCK. IF AFTER DOING THIS YOU FIND YOU ARE TO FAR OFF WHEN YOU START CUTTING OR PREFORMING *(STONE IS CUTTING OR GRINDING HEAVY ON ONE SIDE AND HARDLY AT ALL ON ANOTHER)* YOU CAN SHIFT THE STONE ON THE DOP AND TRY AGAIN.

WHEN TRANSFERRING THE STONE FROM ONE DOP TO ANOTHER WITH THE LEE TRANSFER BLOCK THE KEYWAY IN THE DOPS ASSURE THAT YOUR FACETS TOP TO BOTTOM WILL LINE UP. AND THE SHAPE OF THE STONE WILL STILL BE ORIENTATED TO THE INDEX PLATE.

IF YOU ARE USING A LEE PREFORMER TO SHAPE YOUR STONE PRIOR TO FACETING, THE KEYED DOPS ALSO ORIENTATE TO THE DIFFERENT CAM SHAPES AVAILABLE. THIS ENABLES YOU TO DOP YOUR STONE, PREFORM IT, FACET IT, TRANSFER IT AND FINISH FACET IT WITHOUT THE FUSS OF ADJUSTING THE DOPPED STONE EACH TIME YOU DO A DIFFERENT OPERATION. UNLIKE SOME FACETING SYSTEMS THAT DON'T UTILIZE A KEYED DOP THE LEE SYSTEM ENABLES YOU TO SPEND MORE TIME FACETING AND LESS ON ADJUSTMENTS.

THE KEYED DOP SYSTEM ALSO ENABLES YOU TO WORK ON MORE THAN ONE STONE AT A TIME. A DOPPED STONE CAN BE REMOVED FROM THE FACET HEAD AND THEN REINSERTED WITHOUT LOSING ITS ORIENTATION TO THE INDEX PLATE. IF YOUR DOING 2 OR 200 STONES THIS ENABLES YOU TO DO IT IN A PRODUCTION MANNER. YOU CAN CUT THE PAVILION OR CROWN FACETS ON SEVERAL STONES AS THE FIRST OPERATION, THEN YOU CAN POLISH THEM ALL AS THE SECOND OPERATION. BY WORKING IN THIS MANNER YOU UTILIZE THE MOST FROM EACH LAP CHANGE OR SETUP YOU MAKE TO YOUR FACETING MACHINE. IF YOU SET UP A COARSE LAP TO PREFORM ONE STONE, WHY NOT DO SEVERAL AT THE SAME TIME, THE SAME GOES FOR CUTTING AND POLISHING. THE LESS TIME YOU SPEND ON LAP CHANGES AND MACHINE SETUP THE MORE TIME YOU HAVE TO CONCENTRATE ON FACETING. EXTRA DOPS AND PREFORMER ACCESSORIES ARE AVAILABLE FROM YOUR LEE DEALER.


HOLDOWN SPRING COLLAR (M03)
FINE ANGLE ADJUST SCREW (K08)
CLUTCH CAP (H10)
INDEX PLATE (H11)
FREE WHEELING SPACER (H17)
INDEX TOOTH POINTER (H12)
SPRING
CHEATER DIAL (H13)
INDEX TOOTH LOCK NUT (H14)
CROSS ARM LOCK SCREW
MAST BUSHING (K01)
MAST LOCK SCREW (K02)
CHUCK (H15)
CHUCK CLOSING SLEEVE (H16)
DOP
HANDPIECE ASSEMBLY
CROSS ARM BODY
ANGLE STOP ARM (K06)
CROSS SHAFT (K10)
CROSS SHAFT LOCK COLLAR (K09)
STOP ARM LOCK SCREW (K07)
ANGLE LOCK (K03)
ELEVATING SLEEVE ASSEMBLY (M02)
VERNIER ANGLE POINTER (K04)
PROTRACTOR (K05)
MAST (M01)
45° ADAPTER
GRAVITY HANDLE (H18)
MAST FOOT

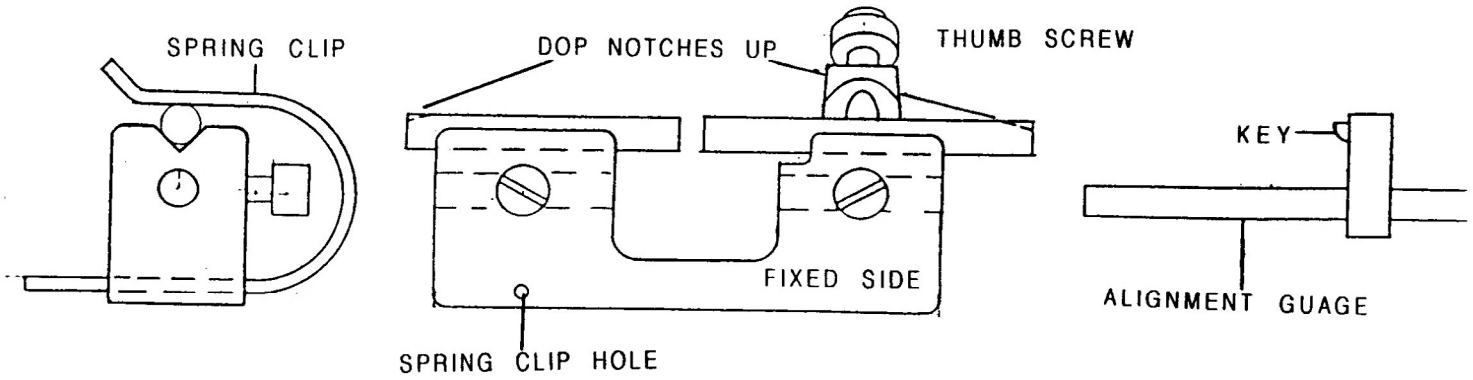
OK FACET HEAD PARTS AND FUNCTIONS

(M1) MAST USED TO MOUNT THE FACET HEAD TO THE LAP MACHINE BASE (11" X 5/8" DIAMETER), HAS A 3/8" SLOT IN THE FOOT. KEEP CLEAN AND DRY, A COAT OF LIGHT OIL IS RECOMMENDED WHEN STORING.
(M02) ELEVATING SLEEVE: USED TO SET THE HEIGHT OF THE FACET HEAD. THE THUMB SCREW IS FOR COURSE HEIGHT ADJUSTMENT AND THE KNURLED NUT FOR FINE HEIGHT ADJUSTMENT. EACH CLICK TURNED MOVES THE HEAD UP OR DOWN APPROXIMATELY .001". USE THE PLASTIC WASHER SUPPLIED IN THE PARTS BAG BETWEEN THE ELEVATING SLEEVE AND THE FACET HEAD.
(M03) HOLD DOWN SPRING & COLLAR: HELPFUL WHEN MAKING FINE HEIGHT ADJUSTMENTS, COMPRESS SPRING AND LOCK COLLAR OVER FACET HEAD, THIS ENSURES THE HEAD DOESN'T STICK DURING FINE FEED.
(K01) MAST BUSHING: LONG WEARING NYLON BUSHING, NO LUBRICATION NECESSARY.
(K02) MAST LOCK SCREW: (5/16X18 THREAD) CAN BE USED TO LOCK HEAD TO MAST IF DESIRED.
(K03) ANGLE LOCK SCREW: USED TO LOCK THE HEAD IN POSITION WHEN TILTED BACK FOR STONE EXAMINATION. USE UNLOCKED DURING CUTTING AND POLISHING OPERATIONS.
(K04) VERNIER ANGLE POINTER, K05 PROTRACTOR: INDICATES THE ANGLE THE HEAD IS SET FOR. THE -0- *(CENTER LINE ON THE POINTER)* INDICATES THE DEGREE ON THE PROTRACTOR. THE 10 LINES ON EITHER SIDE OF THE 0 ARE 1/10 TH DEGREE SETTINGS. THESE WORK THE SAME AS ON A VERNIER CALIPER. *(EXAMPLE)*: IF YOUR CUT CALLS FOR A 46.7 DEGREE ANGLE - ALIGN THE 0-LINE ON THE POINTER WITH THE 46 LINE ON THE PROTRACTOR, LOCK THE STOP ARM (K 0 6). TURN THE FINE ADJUST SCREW(K 0 8) IN UNTIL THE 7TH LINE TO THE LEFT OF THE 0-LINE IS IN DIRECT ALIGNMENT WITH A LINE ON THE PROTRACTOR. IN THIS CASE IT WOULD BE THE 53 ON THE PROTRACTOR.
(K06) ANGLE STOP ARM: USED TO SET THE FACETING ANGLE. MOVE THE HEAD TILL THE DESIRED ANGLE IS INDICATED ON THE PROTRACTOR. PUSH THE STOP ARM TILL THE FINE ADJUST SCREW (K 0 8)TOUCHES THE PROTRACTOR AND LOCK THE ARM WITH THE STOP ARM LOCK SCREW (K 0 7).
(K10) CROSS SHAFT: CONNECTS THE MAIN COMPONENENTS OF THE HEAD TOGETHER. THE HAND PIECE MOUNTS ON THE SQUARED END AND IS LOCKED IN PLACE BY MEANS OF THE CROSS ARM LOCK SCREW(H18).

HAND PIECE ASSEMBLY

(H10) CLUTCH CAP: A SPECIAL WASHER USED WITH THE 10-32 SCREW TO HOLD THE INDEX PLATE TO THE DOP CHUCK. THE CLUTCH CAP MAY BE A SNUG FIT ON THE CHUCK AND NEED SOME SIDE WARD TAPPING WITH A HARD NON-METAL OBJECT TO REMOVE. A HAMMER OR OTHER METAL OBJECTS MAY NICK THE END OF THE CHUCK OR INDEX PLATE. THE SCREW IS ADEQUATE TO PULL AND TIGHTEN THE CAP BACK ON *(DO NOT TAP)*.
(H11) INDEX PLATE: CONTROLS THE RADIAL POSITIONING OF THE FACETS. 5 DIFFERENT PLATES ARE AVAILABLE FOR THE OK FACET HEAD. 96,80,64,60,&32
(H12) INDEX TOOTH: ENGAGES WITH THE INDEX PLATE TO HOLD THE DOP CHUCK IN RADIAL POSITION, ALSO INDICATES THE INDEX POSITION YOU ARE IN. KEEP LOCKED DURING CUTTING OR POLISHING OPERATIONS.
(H13) CHEATER DIAL: USED TO POSITION FACETS BETWEEN THE NOTCHES ON THE INDEX PLATE.IS NUMBERED FORM 1 TO 12 WITH 12 BEING THE NORMAL FACETING POSITION. TO USE, LOOSEN THE INDEX TOOTH LOCK NUT (H 1 4) APPROXIMATELY 1/2 TURN AND PUSH UP ON IT AND RELEASE *(THIS IS TO ASSURE THAT THE INDEX TOOTH MOVES FREELY)*. TURN THE DIAL UNTIL THE DESIRED POSITION IS ACHIEVED AND LOCK THE INDEX TOOTH. MAKE NOTES OF THE SETTINGS AND WHICH FACET YOU USED THEM ON WHEN CUTTING SO YOU CAN GO BACK TO IT WHEN POLISHING.
(H15) DOP CHUCK: HOLDS THE DOP IN THE FACET HEAD. TO TIGHTEN OR LOOSEN MAKE SURE THE INDEX TOOTH IS ENGAGED WITH A NOTCH IN THE INDEX PLATE. GRASP THE HAND PIECE IN A WAY THAT YOU CAN HOLD THE INDEX TOOTH AND THE INDEX PLATE TOGETHER AND TURN THE CHUCK CLOSING SLEEVE (H 1 6)
(H17) FREE WHEELING SPACER: USED TO DISENGAGE THE INDEX TOOTH FROM THE INDEX PLATE FOR FREE SPINNING THE CHUCK DURING PREFORMING. TO USE PUSH THE CHUCK UP THE SAME AS FOR INDEXING AND SLIP THE SPACER AROUND THE CHUCK DIRECTLY UNDER THE INDEX PLATE AND RELEASE THE CHUCK.
(H18) GRAVITY HANDLE: A WEIGHT THAT KEEPS PRESSURE EVEN DURING CUTTING OPERATIONS. MOUNTS IN THE STOP ARM (B 6) DO NOT PUSH DOWN ON THE HANDLE IF MORE PRESSURE IS DESIRED DURING CUTTING OR POLISHING OPERATIONS AS THIS CAN CHANGE THE ANGLE SETTING. IF MORE PRESSURE IS DESIRABLE THAN THE GRAVITY HANDLE PROVIDES, PUSH DIRECTLY ON THE CHUCK OR DOP.

45 DEGREE TABLE ADAPTER: USED TO CUT & POLISH TABLES, MOUNTS IN THE DOP CHUCK. TO USE SET THE HEAD ANGLE AT 45 DEGREES, SLIDE YOUR DOPPED STONE IN THE GROOVE OF THE ADAPTER AND LOCK IT IN PLACE WITH THE THUMB SCREW. FINE ADJUST THE TABLE FACET THE SAME WAY YOU WOULD ANY OTHER FACET BY USING THE ELEVATING SLEEVE & CHEATER DIAL AS NECESSARY (SEE STEP 4 OF POLISHING A STONE) * SOMETIMES A LOPSIDED TABLE CAN BE CORRECTED BY TURNING THE DOPPED STONE IN THE 45 ADAPTER AND TRYING IT AT A DIFFERENT POSITION.



TRANSFER BLOCK

THE TRANSFER BLOCK IS BASICALLY A V-BLOCK USED TO TRANSFER A STONE FROM ONE DOP TO ANOTHER. THE FOLLOWING INSTRUCTIONS ASSUME THAT YOU HAVE CUT & POLISHED HALF THE STONE AND ARE READY TO DO THE OTHER HALF(CROWN/PAVILION). THE RIGHT SIDE OF THE TRANSFER BLOCK (STATIONARY) HAS A SCREW ON TOP TO HOLD ONE OF THE DOPS IN PLACE, THE LEFT SIDE HAS A SPRING CLIP TO HOLD THE OTHER DOP IN PLACE WHILE ALLOWING IT TO SLIDE IN THE V-GROOVE. THE DOPPED STONE YOU ARE TRANSFERRING CAN BE ON EITHER SIDE OF THE TRANSFER BLOCK TO START. FOR OUR INSTRUCTIONS WE'LL PUT THE DOPPED STONE ON THE RIGHT (STATIONARY) SIDE.

* A LITTLE VASELINE OR LIGHT GREASE APPLIED TO THE DOP NOTCHES, ALIGNMENT GAUGE, AND SPRING CLIP WILL MAKE FOR SMOOTHER OPERATION DURING DOP TRANSFER.

(1) PLACE THE DOPPED STONE IN THE RIGHT SIDE V-GROOVE UNDER THE THUMB SCREW,TIGHTEN THE THUMB SCREW JUST ENOUGH TO ALLOW THE DOP TO MOVE FREELY IN THE V-GROOVE.

(2) PLACE THE ALIGNMENT GAUGE IN THE HOLE DIRECTLY BELOW THE DOP AND PUSH THE KEY INTO THE SLOT IN THE END OF THE DOP *(THE KEY MAY BE A SNUG FIT IN THE DOP SLOT AND DOES NOT HAVE TO BE PUSHED ALL THE WAY INTO THE SLOT)*

(3) PUSH THE DOP USING THE ALIGNMENT GAUGE TOWARD THE CENTER OF THE TRANSFER BLOCK, STOP WHEN THE KEY BLOCK IS ABOUT 1/8" FROM THE END OF THE TRANSFER BLOCK.

(4) PUSH DOWN ON THE DOP TO MAKE SURE ITS IN THE GROOVE STRAIGHT AND LOCK THE THUMB SCREW.

(5) PLACE THE DOP YOU ARE TRANSFERRING TOO IN THE GROOVE ON THE LEFT SIDE OF THE TRANSFER BLOCK. PUSH THE ALIGNMENT GAUGE KEY ALL THE WAY INTO THE DOP SLOT, PUSH THE DOP DOWN IN THE GROOVE TO MAKE SURE ITS STRAIGHT IN THE GROOVE.

(6) INSERT THE STRAIGHT END OF THE SPRING CLIP INTO THE SMALL HOLE DIRECTLY BELOW THE THUMB SCREW ON THE LEFT SIDE OF THE TRANSFER BLOCK. PUSH THE CLIP IN UNTIL IT GOES OVER THE DOP.

(7) PREPARE THE DOP FOR THE TRANSFER WITH EITHER WAX OR GLUE.

(8) USING THE ALIGNMENT GAUGE PUSH THE DOP UP AGAINST THE DOPPED STONE, THE STONE IS NOW DOPPED TO BOTH DOPS.

(9) AFTER ALLOWING TIME FOR THE GLUE OR WAX TO SET, LOOSEN THE THUMBNUT HOLDING THE DOP IN THE RIGHT SIDE OF THE TRANSFER BLOCK SLIGHTLY. USE HEAT OR SOLVENT TO LOOSEN THE STONE FROM THE DOP AND PULL THE DOP AWAY FROM THE STONE. THE TRANSFER IS NOW COMPLETE.

** WHEN DOPING RATHER USING WAX OR GLUE DON'T USE MORE THAN YOU NEED. PUSH THE STONE SECURELY AGAINST THE DOP TO SQUEEZE OUT ALL THE EXCESS. A THIN LAYER OF ADHESIVE WILL HOLD BETTER THAN A THICK LAYER.

IF YOU WISH TO USE THE TRANSFER BLOCK IN A VERTICAL POSITION YOU CAN DO SO BY INSERTING A SPARE DOP IN ONE OF THE ALIGNMENT GAUGE HOLES AND LOCKING IT IN PLACE WITH THE THUMB SCREW PROVIDED FOR THE HOLE. NOW PLACE THE DOP IN ONE OF THE HOLES IN THE DOP RACK AND YOU CAN USE THE TRANSFER BLOCK IN A VERTICAL POSITION.

CUTTING A STONE

(1) CHOOSE A SUITABLE LAP FOR THE MATERIAL YOU ARE CUTTING AND MOUNT IT.

(2) INDEX THE HEAD TO THE HIGHEST NUMBER ON THE INDEX PLATE YOU ARE USING. THIS IS DONE BY GRASPING THE KNURLED PART OF DOP CHUCK AND PUSHING IT AGAINST THE SPRING UNTIL THE INDEX TOOTH IS DISENGAGED FROM THE INDEX PLATE; THEN ROTATE THE CHUCK TO THE DESIRED POSITION ON THE INDEX PLATE AND RELIEVE THE PRESSURE ALLOWING THE INDEX TOOTH TO ENGAGE THE INDEX PLATE IN THE INDEX POSITION DESIRED. THE CHEATER DIAL SHOULD BE IN THE NUMBER 12 POSITION FOR NORMAL CUTTING UNTIL NEEDED.

(3) SET THE ANGLE TO THE FIRST CUT YOU WILL BE FACETING (MAIN, STAR, BREAK ETC.) AND LOCK THE ANGLE STOP. THE STARTING FACETS AND ANGLE DEPEND ON THE CUT YOU SELECT.

(4) TURN THE KNURLED NUT ON THE ELEVATING SLEEVE UP ABOUT 1/4" THIS GIVES YOU FINE ADJUSTMENT BOTH UP AND DOWN. EACH CLICK OF THE NUT MOVES IT APPROXIMATELY .001"

(5) USE THE THUMB SCREW ON THE ELEVATING SLEEVE TO SET THE HEIGHT OF THE HEAD SO THE DOPPED STONE IS ALMOST TOUCHING THE LAP; LOCK THE ELEVATING SLEEVE. THE HOLDOWN SPRING & COLLAR CAN NOW BE MOUNTED TO KEEP DOWNWARD PRESSURE ON THE FACET HEAD IF DESIRED.

(6) START THE LAP UNIT , MAKE SURE ENOUGH WATER IS DRIPPING ON THE LAP TO KEEP IT WET.

(7) FEED THE STONE DOWN TO START CUTTING BY USING THE KNURLED NUT ON THE ELEVATING SLEEVE; MOVE THE FACET HEAD BACK AND FORTH ACROSS THE LAP ALWAYS ENDING THE CUT AT THE INSIDE OF THE LAP. FEED A LITTLE AT A TIME SO AS NOT TO OVER CUT THE FACET.

(8) PIVOT THE HEAD BACK AND EXAMINE THE CUT FOR DEPTH. LOWER THE HEAD BACK DOWN TO THE LAP AND CONTINUE CUTTING USING THE KNURLED NUT TO FEED THE STONE UNTIL THE DESIRED DEPTH OF THE FACET IS ACHIEVED.

(9) AFTER SETTING THE DEPTH ON THE FIRST CUT YOU CAN NOW INSERT THE GRAVITY HANDLE IN THE STOP ARM AND LET IT APPLY EVEN PRESSURE FOR THE REST OF THE FACETS AT THE SET ANGLE. IF FASTER REMOVAL OF MATERIAL IS DESIRED THAN THE GRAVITY HANDLE PROVIDES, YOU CAN APPLY PRESSURE BY PUSHING ON THE DOP OR DOP CHUCK DIRECTLY. *(DO NOT APPLY PRESSURE BY PUSHING DOWN ON THE GRAVITY HANDLE; THE DESIGN OF THE HEAD WILL ALLOW THE ANGLE TO CHANGE IF TOO MUCH PRESSURE IS APPLIED TO THE GRAVITY HANDLE.)* THE GRAVITY HANDLE HOWEVER CAN BE USED TO MOVE THE FACET HEAD BACK AND FORTH THOUGH IF HELD LIGHTLY.

(10) REPEAT STEPS 3 THROUGH 9 FOR EACH ROW OF FACETS YOU CUT.

POLISHING A STONE

(1) SET THE ANGLE FOR THE FIRST ROW OF FACETS YOU ARE GOING TO POLISH AND LOCK THE STOP ARM.
(2) LOWER THE HEAD USING THE ELEVATING SLEEVE UNTIL THE STONE JUST TOUCHES THE LAP, TILT THE HEAD BACK AND START THE MACHINE (RUN AT SLOW SPEED). KEEP THE LAP WET.
(3) UNLOCK THE STOP ARM AND LOWER THE STONE TO THE LAP . MOVE THE STONE ACROSS THE LAP USING LIGHT PRESSURE , ONE OR TWO STROKES SHOULD DUE. (AS WHEN CUTTING ALWAYS END YOUR STROKE TOWARD THE CENTER OF THE LAP).
(4) TILT THE HEAD BACK AND EXAMINE THE FACET TO SEE IF IT IS POLISHING ACROSS MOST OF THE SURFACE. IF NOT MAKE ANY ADJUSTMENTS TO THE ANGLE (TOP OR BOTTOM OF FACET) BY USING THE KNURLED NUT ON THE ELEVATING SLEEVE. IF SIDE WARD ADJUSTMENT (LEFT OR RIGHT) IS NECESSARY USE THE CHEATER DIAL. **(SOME VARIATION IN THE WAY FACETS POLISH IS NORMAL, IF YOU CAN CLEAN UP MOST OF THE FACET S WITHOUT NOTICEABLY CHANGING THE SIZE OF THE FACETS, IT IS BEST TO KEEP YOUR INITIAL SETTINGS*).
*APPLY ALL PRESSURE NEEDED FOR POLISHING DIRECTLY TO THE DOP OR DOP CHUCK.
(5) YOU CAN CHOOSE TO LOCK THE STOP ARM AT THIS TIME AND FEED WITH THE ELEVATING SLEEVE OR LEAVE UNLOCKED AND POLISH AND LOOK UNTIL THE FACET IS POLISHED *(THE POLISH & LOOK METHOD WORKS WELL ON HARDER STONES THAT ARE NOT LIKELY TO OVER POLISH AND CHANGE THE SIZE OF THE FACETS.)
(6) REPEAT STEPS 2 THROUGH 5 FOR EACH ROW OF FACETS.

*THE ABOVE STEPS ARE SUGGESTIONS ON HOW TO USE THE LEE FACETOR AND MAY BE CHANGED AS YOU BECOME MORE FAMILIAR WITH THE EQUIPMENT OR ARE AN EXPERIENCED FACETOR.