

# PARTS

# Catalog

"AMERICAN"

*Pacemaker*

LATHES

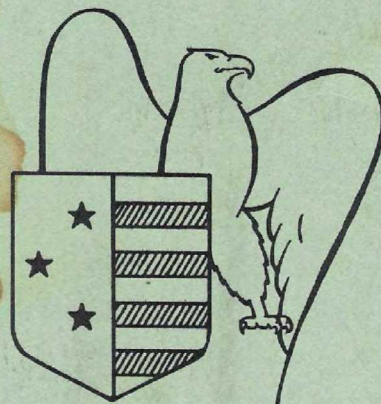
**SIZES . . .**

- 14" - 16"
- 20" Medium Duty
- 20" Heavy Duty
- \* 22" Heavy Duty
- 25" Style "F"

**SPEEDS . . .**

9 - 18 - 27

\* DISCONTINUED



**THE AMERICAN TOOL WORKS CO.**

LATHES AND RADIAL DRILLS

CINCINNATI, OHIO U. S. A.



SERIAL NUMBER AND REPAIR PARTS. Should it be necessary to order repair parts always give the serial number of the machine and the key number of the part. This serial number is stamped on the front of the tailstock end of the bed. It is very important as it enables us to give prompt service, something we positively cannot do unless we know the exact machine on which the new parts are to be used. The key number of the part will be found in this catalog, "M" in back of key numbers denote metric parts. It is seldom advisable to make your own repair parts; this is particularly true with regards to numerous parts where the correctness of shape is extremely important. The manufacturer has an accurate record of all the parts of your "American" Pacemaker Lathe and can supply them on short notice.

This sheet replaces 4.2.1, Par. c (5), Page 15. When necessary to  
to air gaps on all electric clutches, please refer to this sheet.

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AIR GAPS-ELECTRIC CLUTCHES

TAPE LATHE HEADSTOCK

Using feeler between armature plate and magnet body (can be reached  
through slots in the lock nut) with clutch energized to measure. Adjust  
lock nut until feeler of size listed below can be withdrawn only with a  
definite drag being felt. A feeler of .002 or .003 greater thickness than  
the size listed below will be locked when inserted and clutch energized,  
if gap is properly set.

<u>LATHE</u>	<u>CLUTCH</u>	<u>FEELER</u>
2413	EKE-25 (small)	.017
	EKE-65 (large)	.023
2514 )	EKE-100	.027
3220 )		
3220W)		
4025 )	EKE-250	.035
035 )		
040 )		
7050)		

FEED BOX

2413 )	EKE-6-S-24	.013
2514 )		
3220 )		
3220W)		
4025 )	EKE-10-S-24	.015
5035 )		
6040 )		
7050)		

APRON

2413 )	EKE-4-S-24	.011
2514 )		
3220 )		
3220W)		
4025 )	EKE-4-S-24	.011
5035 )		
6040 )		
050)		

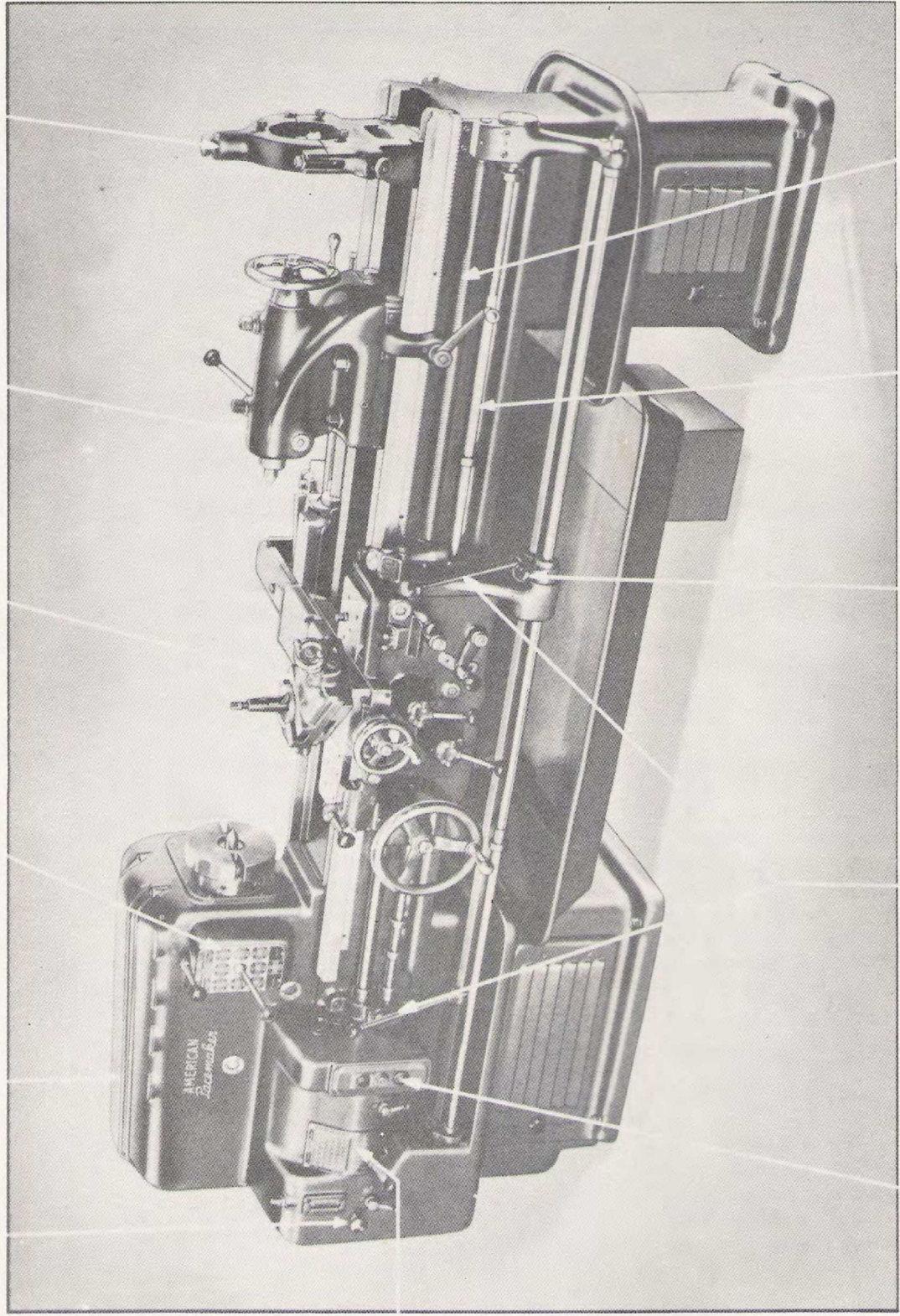


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LATCH FOR SWINGING COVER HEADSTOCK DIRECT READING SPEED CHANGE UNIT COMPOUND REST TAILSTOCK STEADY REST



PUSH BUTTON AND PILOT LIGHT STATION CLUTCH CONTROL LEVERS LEADSCREW REVERSE LEVER FEED ROD LEADSCREW

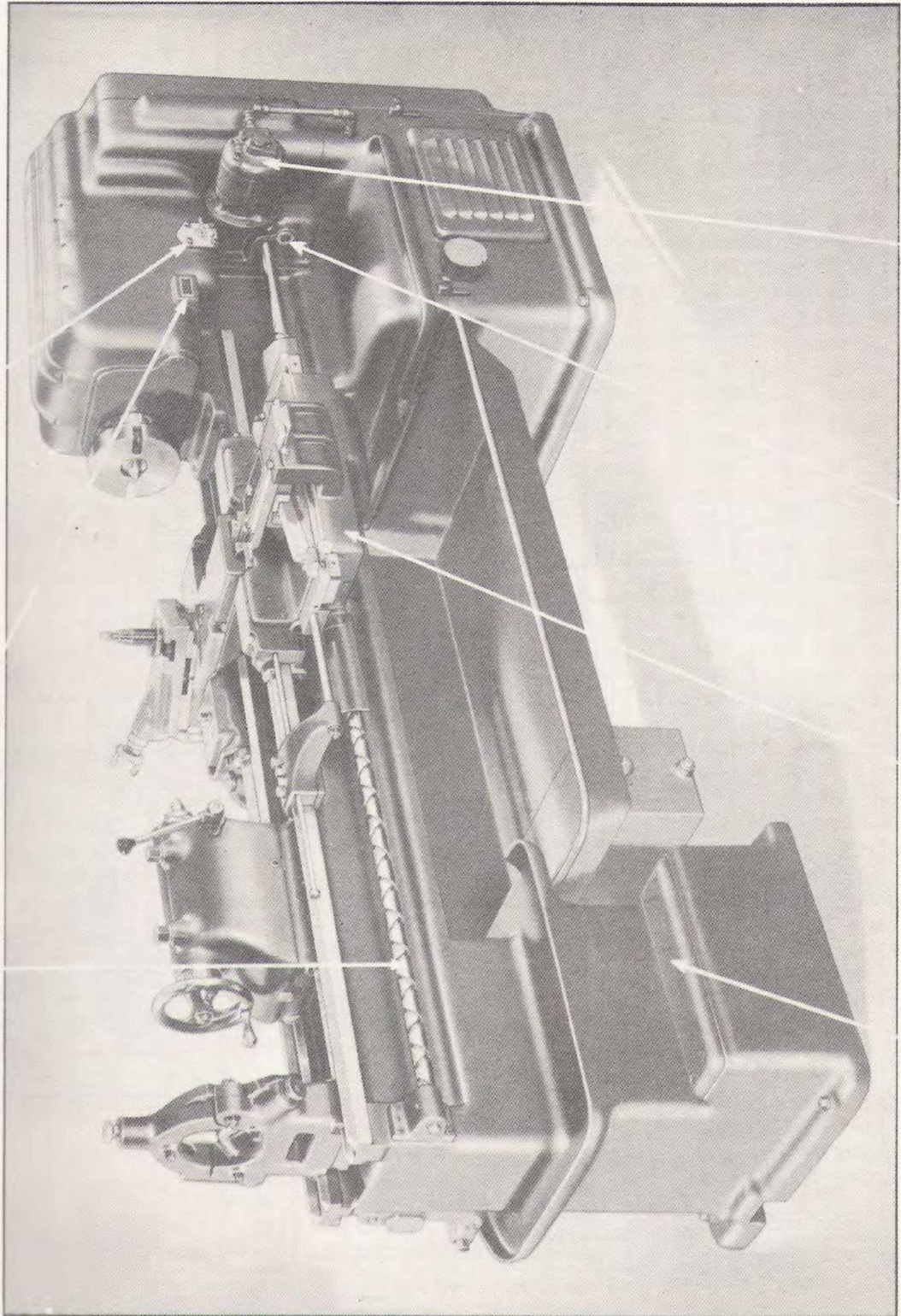
QUICK CHANGE GEAR BOX



POWER TRAVERSE  
SCREW

SPINDLE BEARING  
ADJUSTMENT

OIL FILTER



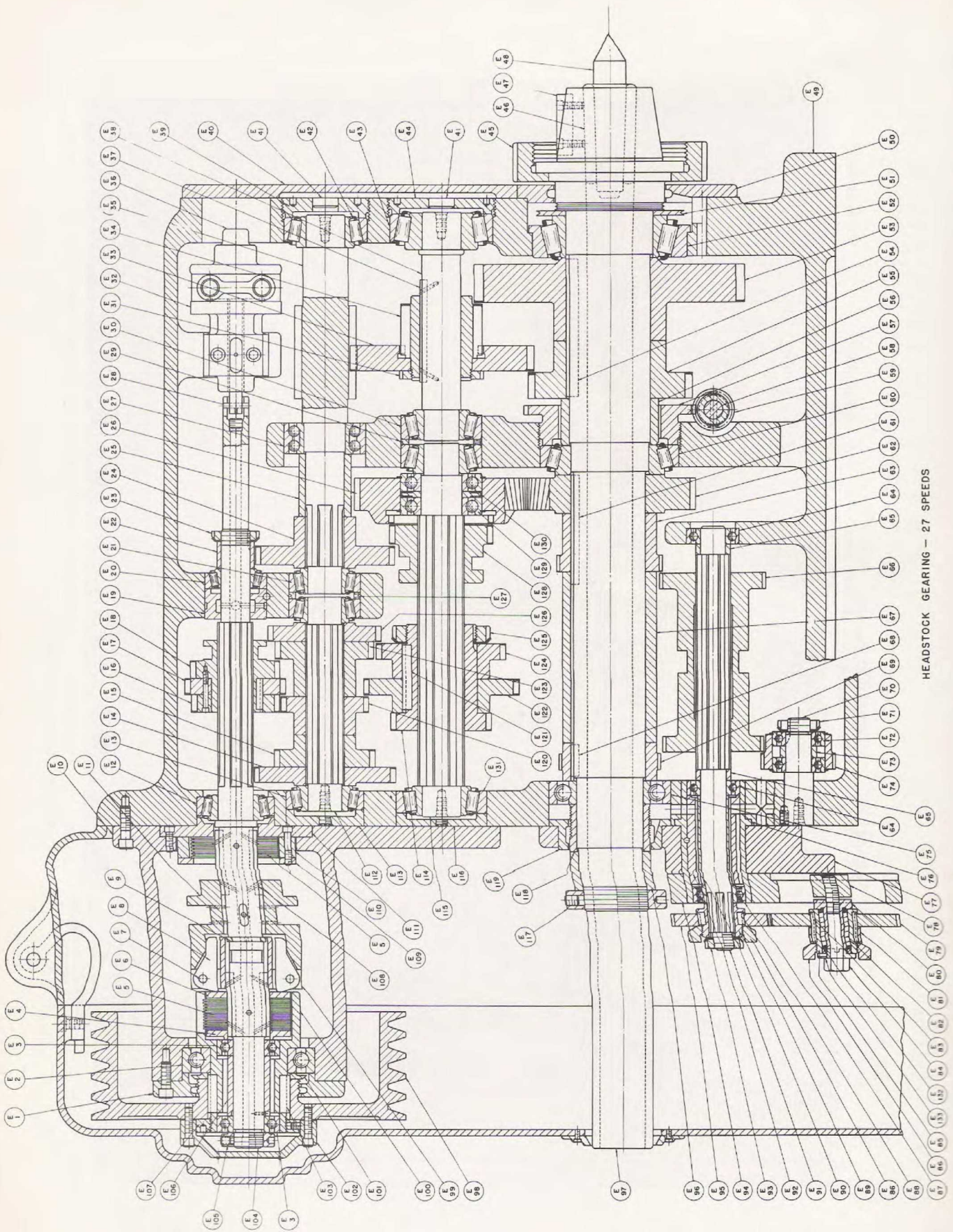
MOUNTING FOR  
PUMP

ANTI-FRICTION  
TAPER ATTACHMENT

POWER TRAVERSE  
DRIVE UNIT

POWER TRAVERSE  
MOTOR





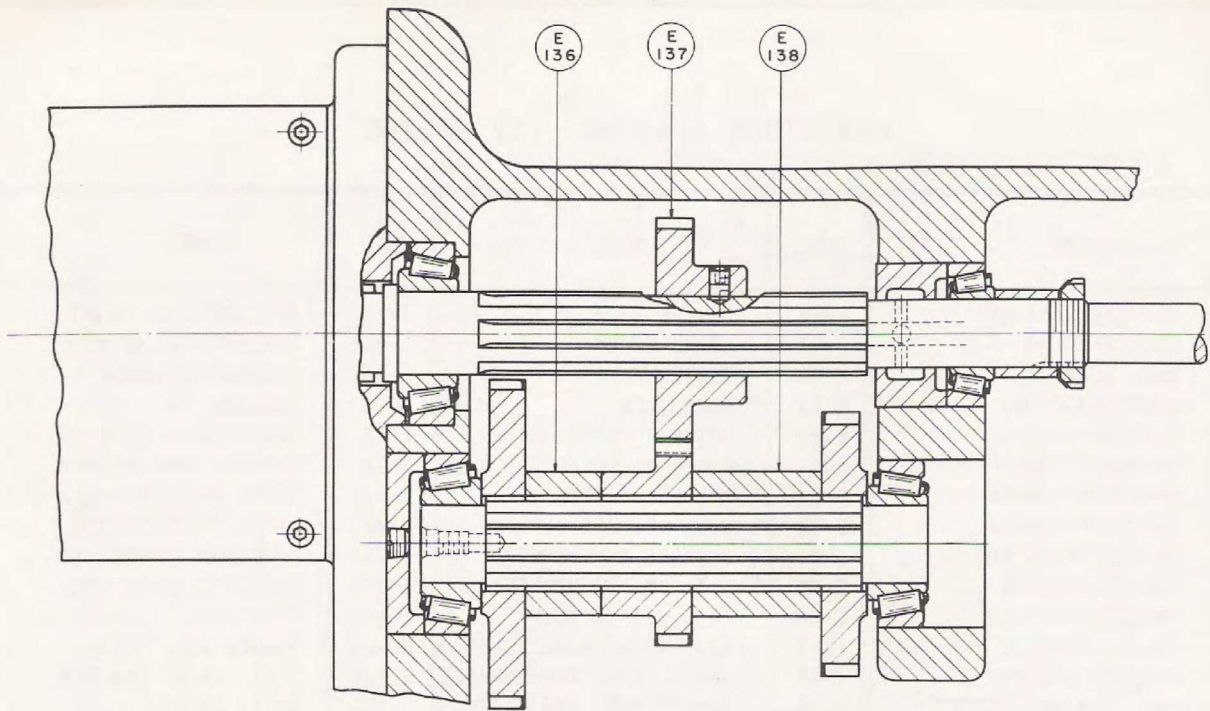
HEADSTOCK GEARING - 27 SPEEDS



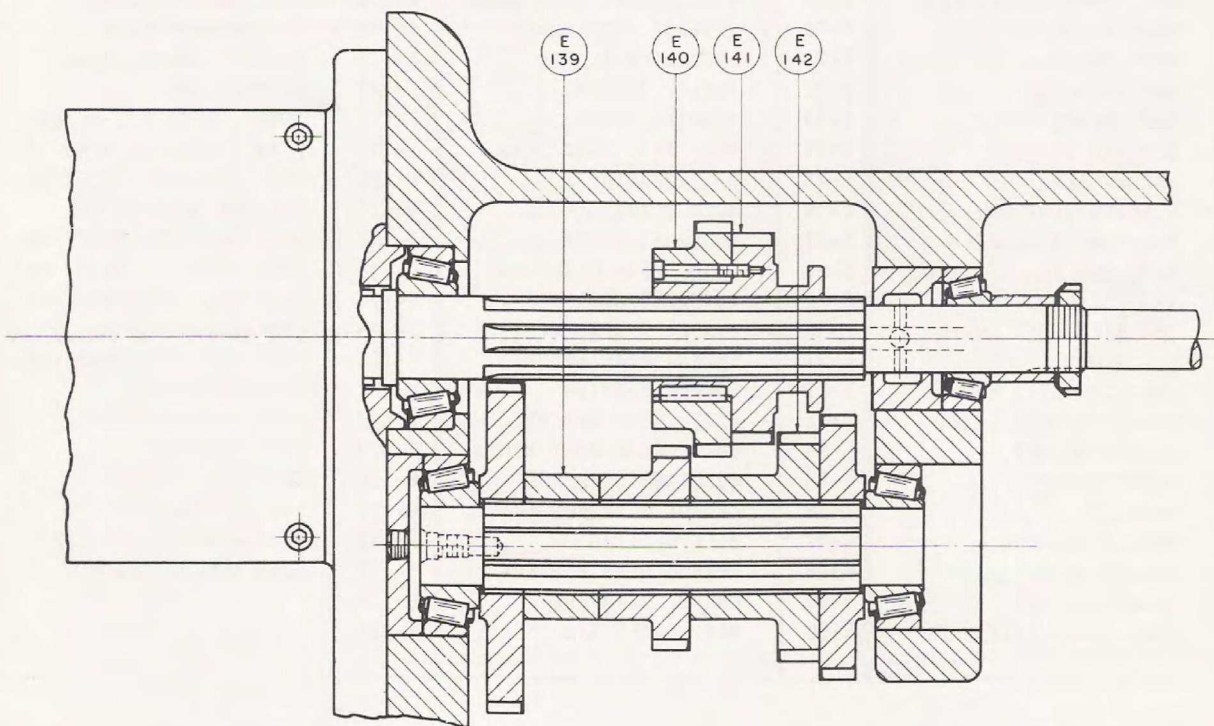
## HEADSTOCK GEARING - 27 SPEEDS

NO.	NAME	NO.	NAME	NO.	NAME
E-1	BEARING RETAINER	E-46	CENTER BUSH	E-91	FEED REVERSE SHAFT
E-2	BALL BEARING	E-47	SPINDLE KEY	E-92	SLEEVE BRG. SPACER
E-3	BALL BEARING	E-48	CENTER	E-93	LOCKNUT & WASHER
E-4	CLUTCH BACKING PLATE	E-49	HEADSTOCK	E-94	QUADRANT
E-5	CLUTCH PLATES	E-50	SPINDLE FRONT COVER	E-95	FEED CHANGE GEAR
E-6	FRICTION FINGER PLATE	E-51	FRONT OIL SLING	E-96	SPINDLE REAR SPACER
E-7	FRICTION FINGER PIN	E-52	ROLLER BEARING	E-97	TAPER NOSE SPINDLE
E-8	FRICTION FINGER	E-53	61T. LOW SPEED GEAR	E-98	DRIVE SHAFT SHEAVE
E-9	FRIC. FINGER HUB RET.	E-54	SPINDLE KEY-FRONT	E-99	FRICTION FINGER HUB
E-10	PULLEY HOUSING	E-55	49T. INT. SPEED GEAR	E-100	FRICTION DRIVE HUB
E-11	FRICTION SPOOL	E-56	INT. GEAR SPACER	E-101	OIL SLING
E-12	ROLLER BEARING	E-57	ADJ. WORM WHEEL	E-102	CLUTCH ADJ. COVER
E-13	ROLLER BEARING	E-58	SPDLE. BRG. ADJ. SHAFT	E-103	FRIC. DRIVE HUB KEY
E-14	53T. 1st INT. SHAFT GR.	E-59	SPDLE. BRG. ADJ. WORM	E-104	DRIVE SHAFT
E-15	37T. 1st INT. SHAFT GR.	E-60	ROLLER BEARING	E-105	FRIC. ADJ. NUT
E-16	31T. DRIVE SHAFT GEAR	E-61	SPINDLE KEY-REAR	E-106	FRIC. ADJ. SLEEVE
E-17	37T. DRIVE SHAFT GEAR	E-62	60T. HIGH SPEED GEAR	E-107	DRIVE HUB NUT
E-18	34T. DRIVE SHAFT GEAR	E-63	64T. SPDLE. FEED GEAR	E-108	DRIVE SHAFT KEY
E-19	INTAKE OIL RING	E-64	BALL BEARING	E-109	BRAKE PLATE RETAINER
E-20	ROLLER BEARING	E-65	REV. SH. INNER SPACER	E-110	BRAKE PLATE COLLAR
E-21	ROLLER BEARING	E-66	FOR. & REV. SLIDING GR.	E-111	CENTERING RING
E-22	DR. SH. BRG. SPACER	E-67	SPDLE. FD. GR. SPACER	E-112	1st INTER. SHAFT
E-23	LOCKNUT & WASHER	E-68	SPDLE. FD. GR. KEY	E-113	1st INT. SHAFT PLUG
E-24	52T. 1st BK. SH. GEAR	E-69	61T. SPDLE. FEED GEAR	E-114	37T. SLIDING GEAR
E-25	BEARING SPACER	E-70	REVERSE FEED SHAFT	E-115	2nd INTER. SHAFT
E-26	61T. 2nd INT. SH. GEAR	E-71	LOCKNUT & WASHER	E-116	2nd INT. SHAFT PLUG
E-27	BALL BEARING	E-72	ROLLER BEARING	E-117	SPINDLE NUT
E-28	PUMP SHAFT PIN	E-73	BEARING SPACER	E-118	SPDLE. REAR OIL SLING
E-29	BEARING SPACER	E-74	44T. REV. FEED GEAR	E-119	REAR PLATE OIL RING
E-30	ROLLER BEARING	E-75	BALL BEARING	E-120	32T. 1st INT. SHAFT GR.
E-31	SLIDING GEAR NUT	E-76	BACK PLATE SLEEVE	E-121	SLIDING GEAR KEY
E-32	OIL PUMP BRACKET	E-77	QUADRANT PLATE	E-122	59T. 2nd INT. SHAFT GR.
E-33	55T. 2nd BK. SH. GEAR	E-78	QUAD. GEAR CLAMP NUT	E-123	35T. 1st INT. SHAFT GR.
E-34	16T. SLIDING GEAR	E-79	QUADRANT GEAR	E-124	48T. 2nd INT. SHAFT GR.
E-35	1st BACK GEAR SHAFT	E-80	QUADRANT GEAR POST	E-125	LOCKNUT & WASHER
E-36	OIL PUMP	E-81	CHANGE GEAR SPACERS	E-126	42T. 1st INT. SHAFT GR.
E-37	2nd BACK GEAR KEY	E-82	ROLLER BEARING	E-127	BEARING SPACER
E-38	2nd BACK GEAR SHAFT	E-83	QUAD. GEAR HUB KEY	E-128	38T. SLIDING GEAR
E-39	ADJUSTING NUT	E-84	QUAD. GEAR POST SCREW	E-129	BALL BEARING
E-40	FRONT COVER	E-85	QUADRANT GEAR HUB	E-130	GEAR BRG. SPACER
E-41	PLUG	E-86	CHANGE GEAR HUB NUT	E-131	ROLLER BEARING
E-42	ROLLER BEARING	E-87	BALL BEARING	E-132	GEAR HUB OIL SLINGER
E-43	ROLLER BEARING	E-88	CHANGE GEAR HUB KEY	E-133	GEAR HUB RETAINER
E-44	ADJUSTING NUT	E-89	CHANGE GEAR HUB	E-134	
E-45	FACE PLATE LOCK NUT	E-90	REV. SHAFT BRG. SPACER	E-135	





HEADSTOCK GEARING - 9 SPEEDS



HEADSTOCK GEARING - 18 SPEEDS



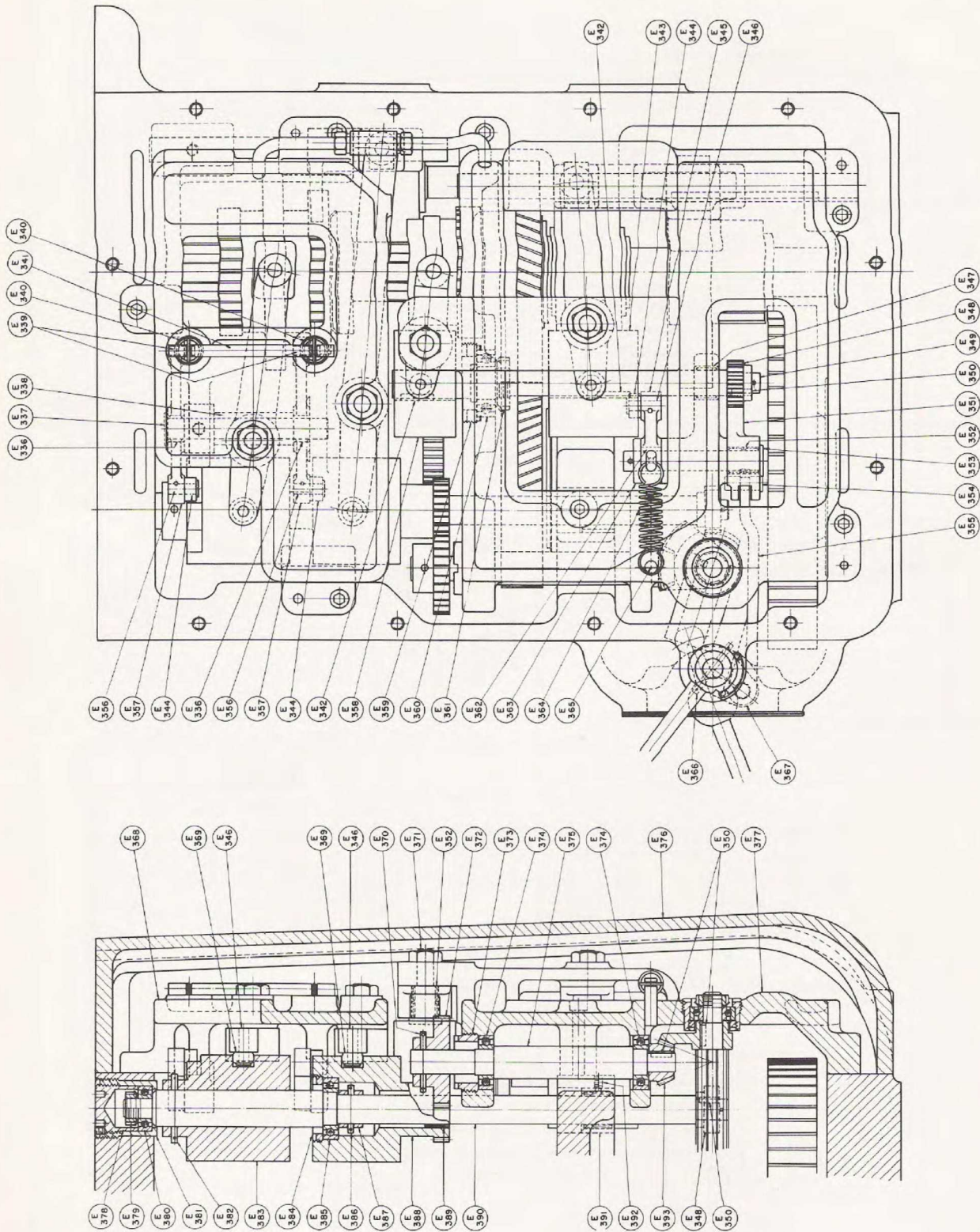
## HEADSTOCK GEARING

9 SPEED

18 SPEED

NO.	NAME	NO.	NAME
E-136	INTER. GEAR SPACER	E-139	INT. GEAR SPACER
E-137	37T. DRIVE SHAFT GEAR	E-140	37T. DRIVE SHAFT GEAR
E-138	INTER. GEAR SPACER	E-141	33T. DRIVE SHAFT GEAR
		E-142	36T. INT. SHAFT GEAR
		E-143	
		E-144	
		E-145	





HEADSTOCK GEAR SHIFTING  
18 AND 27 SPEEDS

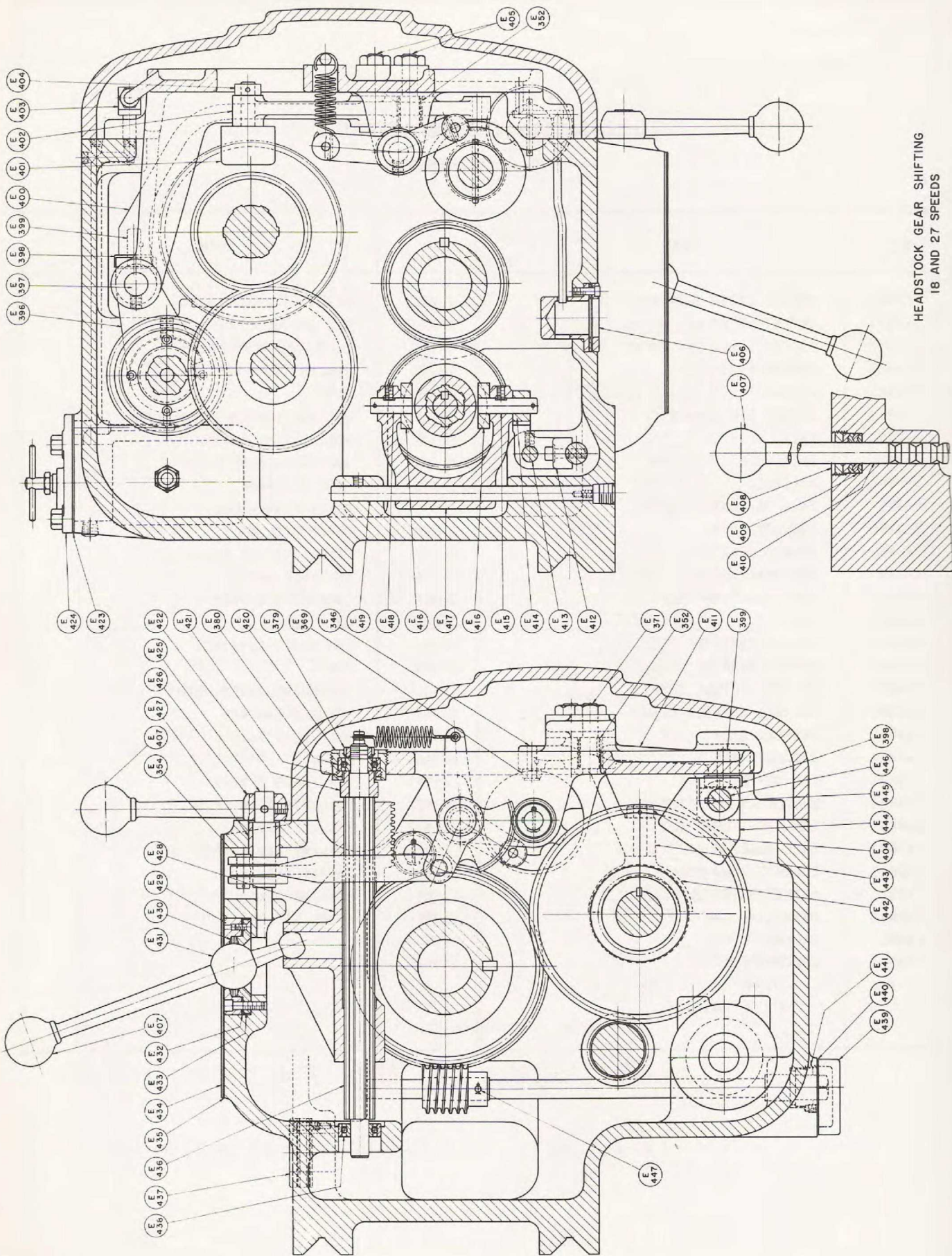


## HEADSTOCK GEAR SHIFTING

18 AND 27 SPEEDS

NO.	NAME	NO.	NAME
E-336	DETENT LEVER BUSHING	E-366	PIN
E-337	DETENT LEVER SHAFT	E-367	BK. GR. SHIFT SH. CRANK
E-338	DETENT LEVER SPACER	E-368	L. H. SHIFTER BRACKET
E-339	SPRING POST	E-369	ROLLER
E-340	SPRING	E-370	PIN
E-341	DETENT SPRING BAR	E-371	CLUTCH SHIFTER LEVER STUD
E-342	KEY	E-372	HORIZ. BEVEL GEAR
E-343	BACK GEAR SHIFT CAM	E-373	ADJUSTING NUT
E-344	ROLLER	E-374	BALL BEARING
E-345	BACK GR. DETENT LEVER	E-375	BEVEL PINION SHAFT
E-346	SHOULDER PIN	E-376	HEADSTOCK COVER
E-347	NEEDLE BEARING	E-377	R. H. SHIFTER BRACKET
E-348	CAM SHAFT GEAR	E-378	RETAINER NUT
E-349	BACK GEAR CAM SHAFT	E-379	LOCKNUT & WASHER
E-350	KEY	E-380	BALL BEARING
E-351	BK. GR. SHIFTER SECTOR	E-381	CAM SHAFT RETAINER
E-352	NEEDLE BEARING	E-382	PIN
E-353	BK. GR. DETENT SHAFT	E-383	SECONDARY SHIFT. CAM
E-354	BK. GR. SHIFTER CRANK	E-384	PRIMARY CAM NUT
E-355	BK. GR. CONN. LINK	E-385	BALL BEARING
E-356	SHOULDER PIN	E-386	PIN
E-357	CAM DETENT LEVER	E-387	CAM SHAFT SPACER
E-358	CLUTCH GR. SHIFT CAM	E-388	PRIMARY SHIFT. CAM
E-359	CAM SHAFT RET. NUT	E-389	NEEDLE BEARING
E-360	BALL BEARING	E-390	PRIMARY CAM SHAFT
E-361	LOCKNUT & WASHER	E-391	NEEDLE BEARING
E-362	DETENT SHAFT BUSHING	E-392	BEARING SCREW
E-363	WASHER	E-393	BEVEL PINION
E-364	SPRING	E-394	
E-365	SPRING POST	E-395	





HEADSTOCK GEAR SHIFTING  
 18 AND 27 SPEEDS

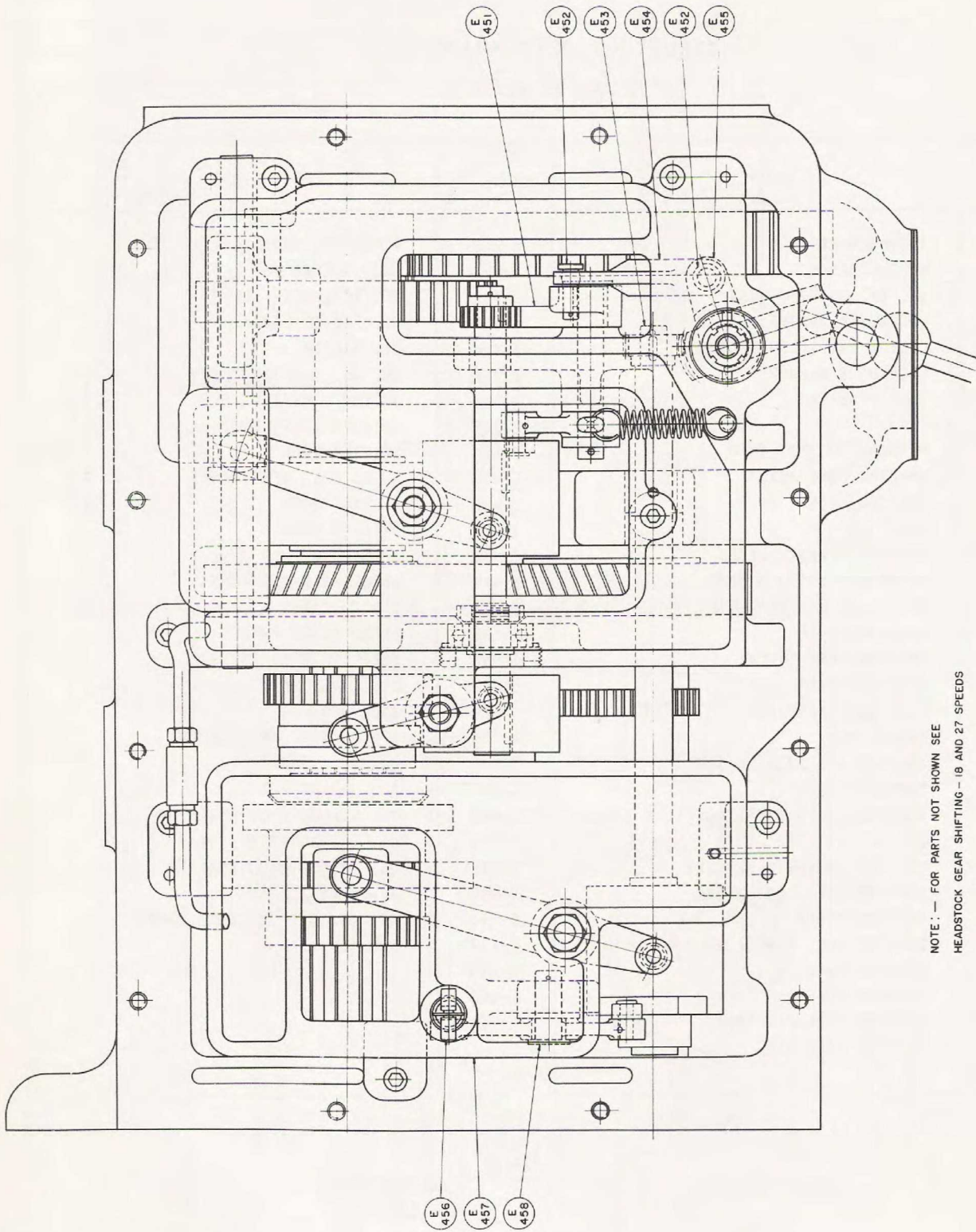


## HEADSTOCK GEAR SHIFTING

18 AND 27 SPEEDS

NO.	NAME	NO.	NAME
E-346	SHOULDER PIN	E-420	VERT. SH. ADJ. SLEEVE
E-352	NEEDLE BEARING	E-421	ADJ. SLEEVE NUT
E-354	BK. GR. SHIFTER CRANK	E-422	VERTICAL BEVEL GEAR
E-361	LOCKNUT & WASHER	E-423	OIL FILTER GASKET
E-371	CLUTCH SHIFT LEVER STUD	E-424	OIL FILTER
E-379	LOCKNUT & WASHER	E-425	BK. GR. SHIFTER SHAFT
E-380	BALL BEARING	E-426	BK. GR. SHIFTER LEVER
E-396	PRIMARY SHIFTER FORK	E-427	SHIFTER SHAFT BUSHING
E-397	SHIFTER FORK SHAFT	E-428	SHIFTER RACK
E-398	SHIFTER SHOE	E-429	HDLE. BALL SEAT-FRONT
E-399	PIN	E-430	PACKING RING
E-400	PRIMARY SHIFTER LEVER	E-431	SHIFTER HANDLE
E-401	SECONDARY SHIFTER SHOE	E-432	SHIFTER HANDLE SPACER
E-402	SECONDARY SHIFTER LEVER	E-433	HDLE. BALL SEAT-REAR
E-403	BRASS FITTING	E-434	SPEED PLATE
E-404	SHIFTER FORK COLLAR	E-435	SPEED PLATE GASKET
E-405	SHIFTER LEVER STUD	E-436	VERT. SHIFTER SHAFT
E-406	FLOW GAGE ASSEMBLY	E-437	OIL LEVEL GAUGE ASSEM.
E-407	HANDLE KNOB	E-438	BALL BEARING
E-408	SHIFTER ROD PACKING NUT	E-439	SPDLE. BRG. ADJ. COVER
E-409	PACKING	E-440	GASKET
E-410	LEAD SCREW SHIFTER ROD	E-441	ADJ. SHAFT NUT
E-411	BK. GR. SHIFTER LEVER	E-442	CL. GR. SHIFTER FORK
E-412	LD. SCR. SHIFTER BRACKET	E-443	CL. GR. SHIFTER LEVER
E-413	SHIFTER BRKT. GUIDE BAR	E-444	BK. GR. SHIFTER FORK
E-414	SHIFTER BLOCK	E-445	SHAFT KEY
E-415	SHIFTER SHOE PIN-LARGE	E-446	BK. GR. SHIFTER FORK SHAFT
E-416	SHIFTER SHOE	E-447	PIN
E-417	SHIFTER YOKE	E-448	
E-418	SHIFTER SHOE PIN-SHORT	E-449	
E-419	SHIFTER YOKE PIN	E-450	





NOTE: — FOR PARTS NOT SHOWN SEE  
 HEADSTOCK GEAR SHIFTING — 18 AND 27 SPEEDS

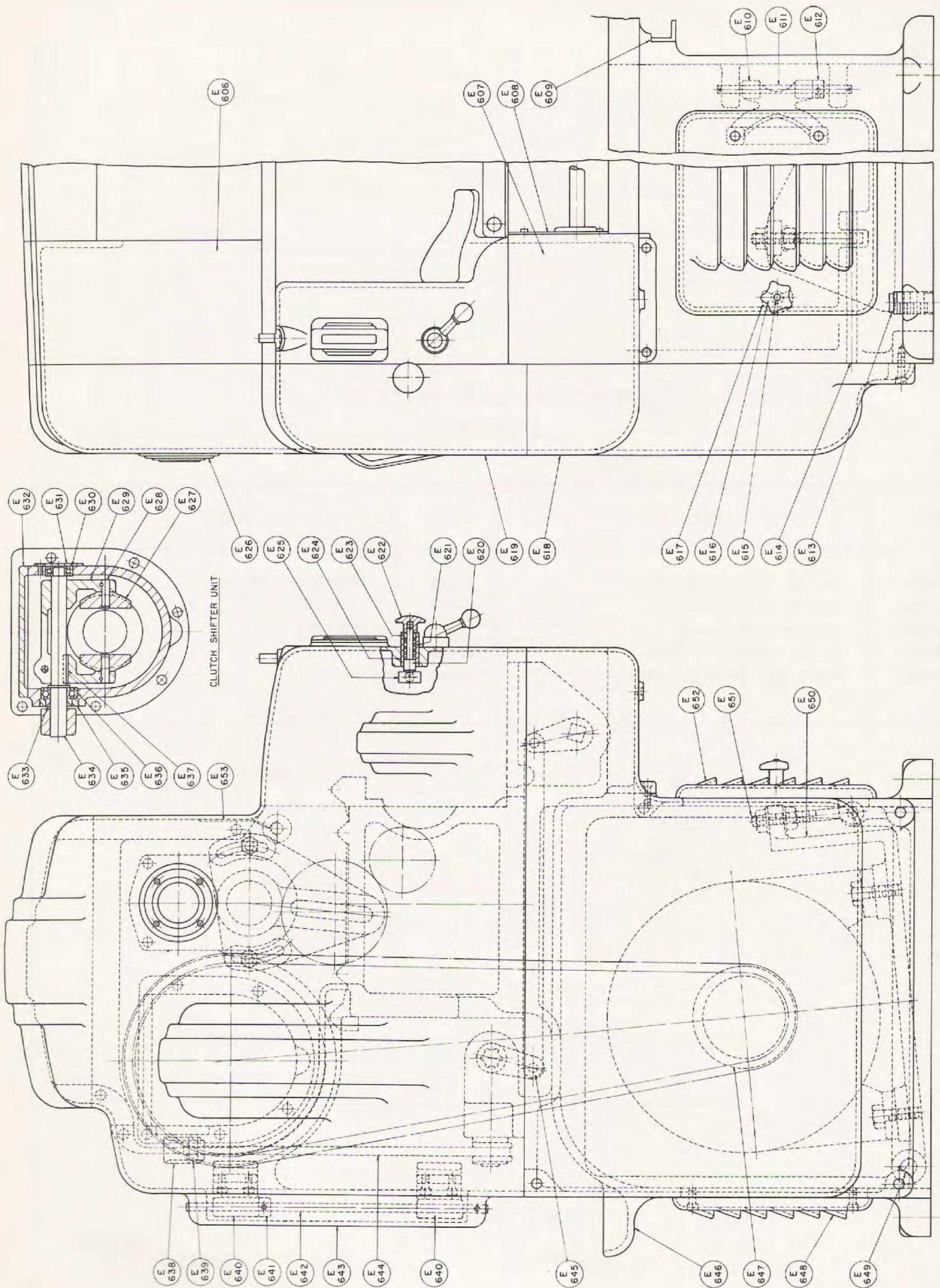
HEADSTOCK GEAR SHIFTING  
 9 SPEEDS



HEADSTOCK GEAR SHIFTING  
9 SPEEDS

NO.	NAME	NO.	NAME
E-451	BK. GR. SHIFTER SECTOR	E-456	DETENT SPRING BAR
E-452	SHIFTER LINE STUD	E-457	SHIFTER BRACKET L. H.
E-453	PRIMARY CAM SHAFT	E-458	SHOULDER PIN
E-454	B. G. CONNECTING LINK	E-459	
E-455	VERT. SH. SHIFTER LEVER	E-460	



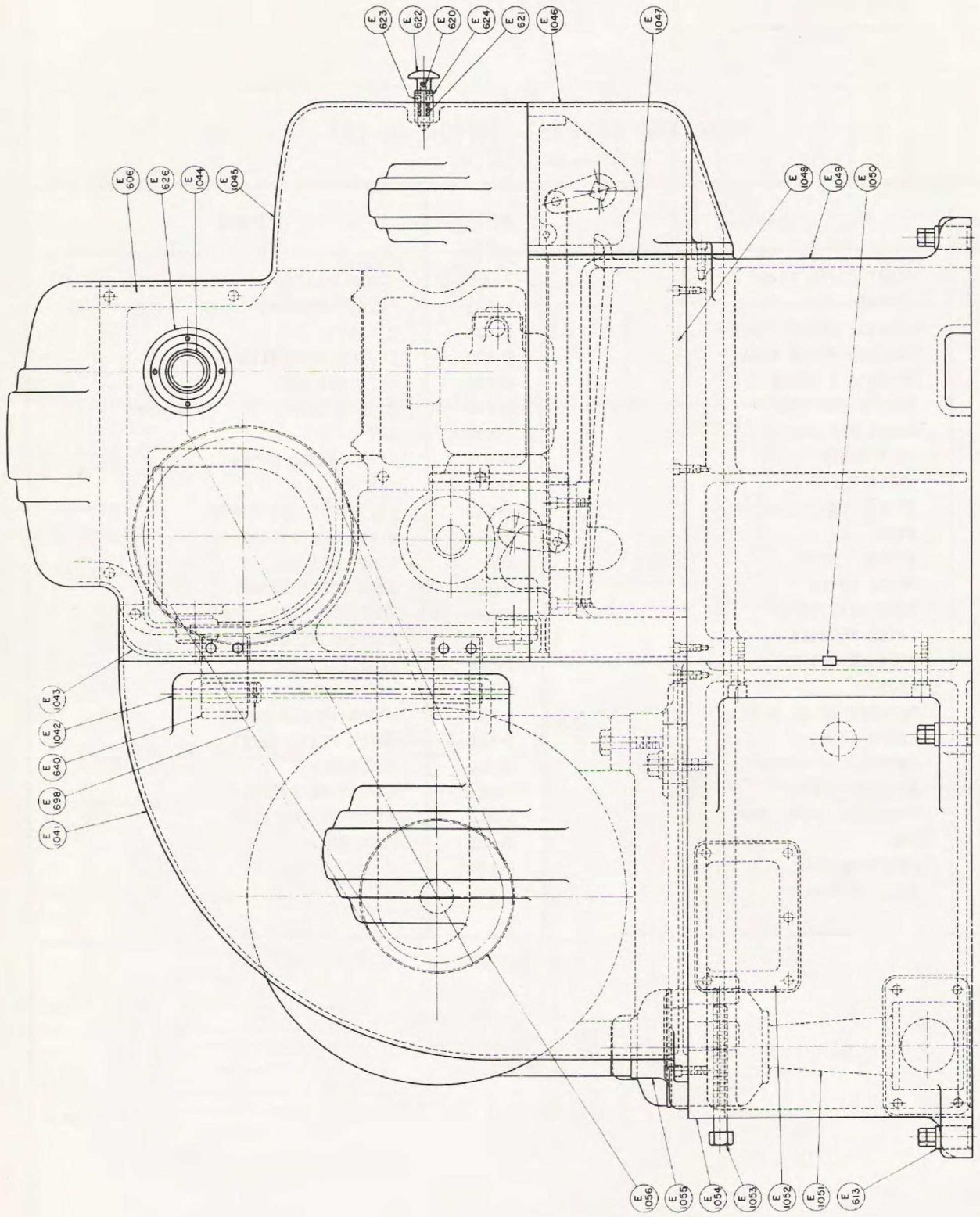


HEAD END COVERS — MOTOR IN LEG

## HEAD END COVERS - MOTOR IN LEG

NO.	NAME	NO.	NAME
E-606	FRONT COVER FRAME	E-631	COVER PLATE
E-607	LINKAGE COVER	E-632	PULLEY HOUSING COVER
E-608	LINKAGE COVER PLATE	E-633	OIL SEAL
E-609	PAN LEG ANGLE IRON	E-634	CLUTCH OPERATING SHAFT
E-610	INVISIBLE HINGE	E-635	RETAINER NUT
E-611	DOOR HINGE PIN	E-636	BALL BEARING
E-612	HINGE PIN COLLAR	E-637	KEY
E-613	JACK SCREW	E-638	VERT. CRANK UPPER
E-614	EYEBOLT PIN	E-639	PIN
E-615	SPIRAL LATCH ROD	E-640	FD. GR. COVER HINGE
E-616	KNOB	E-641	HINGE PIN COLLAR
E-617	SPIRAL LATCH	E-642	HINGE PIN
E-618	MOTOR COVER	E-643	REAR COVER FRAME
E-619	FEED GEAR COVER	E-644	VERTICAL CONN. ROD
E-620	LATCH PLUNGER	E-645	HORIZONTAL CONN. ROD
E-621	PLUNGER SPRING	E-646	HEAD END LEG
E-622	KNOB	E-647	MOTOR SHEAVE
E-623	PLUNGER GUIDE BUSH	E-648	MOTOR IN LEG COVER
E-624	LATCH BUSH	E-649	MOTOR PLATE SHAFT
E-625	LATCH	E-650	MOTOR PLATE
E-626	SPINDLE PLATE	E-651	ADJUSTING EYEBOLT
E-627	FRICTION SPOOL SHOE	E-652	MOTOR IN LEG DOOR
E-628	PIN	E-653	POINTER
E-629	FRICTION FORK	E-654	
E-630	BALL BEARING	E-655	



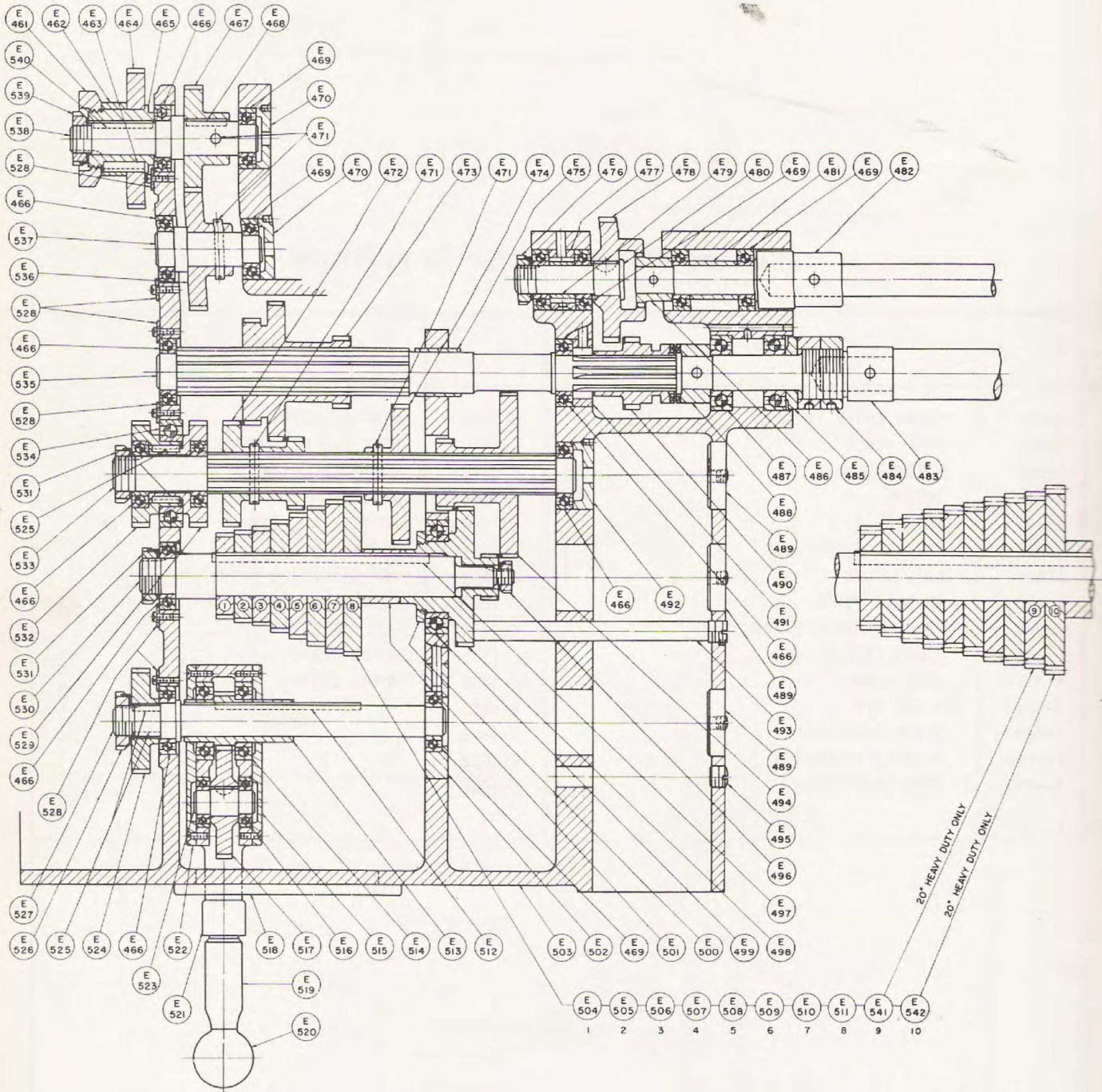


HEAD END COVERS - MOTOR ON PLATFORM

### HEAD END COVERS - MOTOR ON PLATFORM

NO.	NAME	NO.	NAME
E-606	FRONT COVER FRAME	E-1046	LINKAGE COVER
E-613	JACK SCREW	E-1047	HEAD END LEG-UPPER
E-620	LATCH PLUNGER	E-1048	TRAVERSE COVER
E-621	SPRING	E-1049	HEAD END LEG-LOWER
E-622	KNOB	E-1050	MOTOR HINGE KEY
E-623	PLUNGER GUIDE BUSH	E-1051	COOLANT PUMP
E-624	LATCH BUSH	E-1052	LEG EXTENSION COVER
E-626	SPINDLE PLATE	E-1053	ADJUSTING SCREW
E-640	FD. GR. COVER HINGE	E-1054	LEG EXTENSION
E-698	HINGE PIN COLLAR	E-1055	MOTOR PLATE
E-1041	BELT GUARD	E-1056	MOTOR SHEAVE
E-1042	HINGE PIN	E-1057	
E-1043	COVER FRAME-REAR	E-1058	
E-1044	SPINDLE EXTENSION	E-1059	
E-1045	FEED GEAR COVER	E-1060	



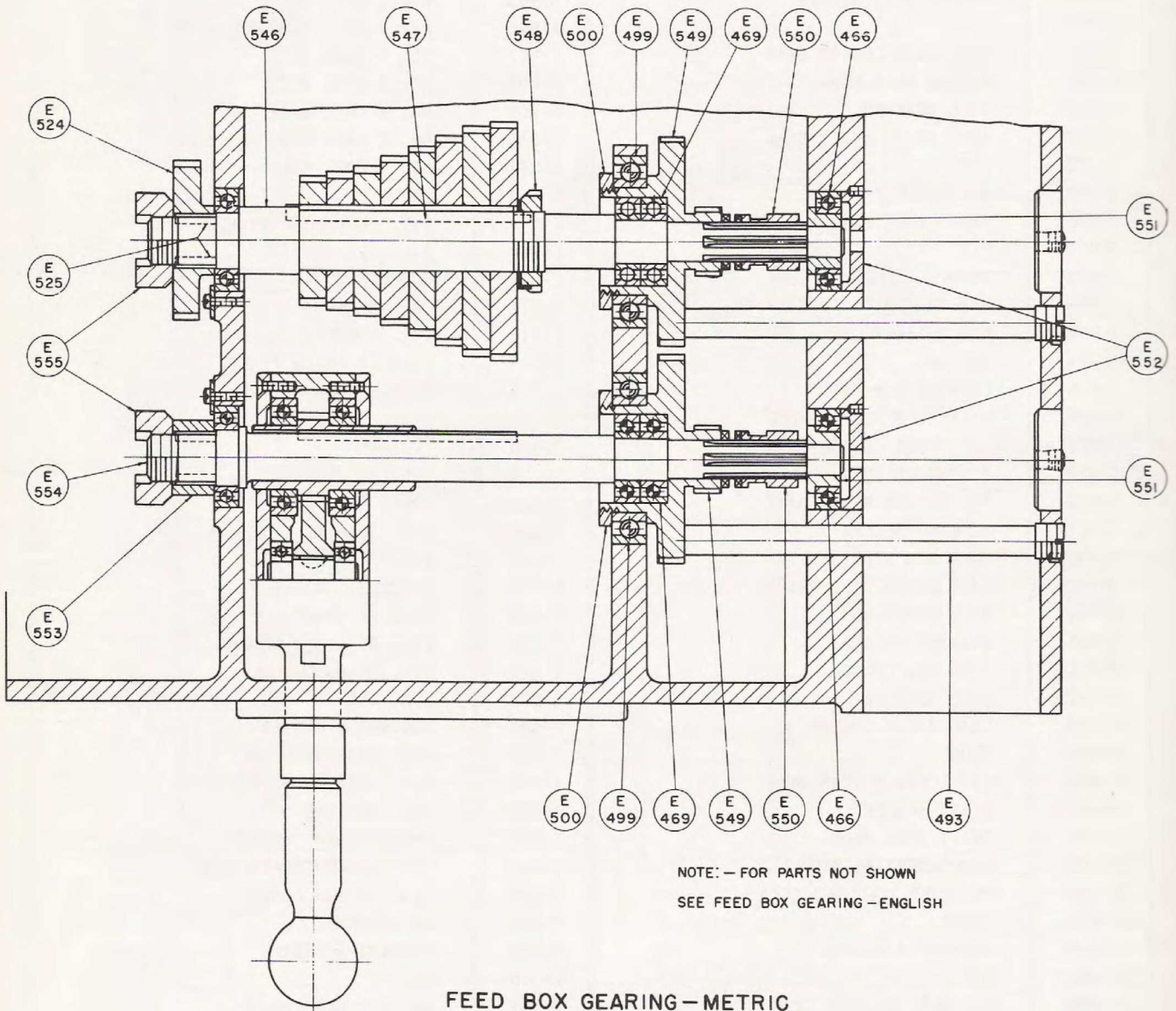


FEED BOX GEARING — ENGLISH

## FEED BOX GEARING - ENGLISH

NO.	NAME	NO.	NAME
E-461	CHANGE GEAR HUB NUT	E-504	NO. 1 CONE GEAR
E-462	CHANGE GEAR SPACER	E-505	NO. 2 CONE GEAR
E-463	KEY	E-506	NO. 3 CONE GEAR
E-464	60T. FEED CHANGE GEAR	E-507	NO. 4 CONE GEAR
E-465	CHANGE GEAR HUB	E-508	NO. 5 CONE GEAR
E-466	BALL BEARING	E-509	NO. 6 CONE GEAR
E-467	45T. DRIVE SHAFT GEAR	E-510	NO. 7 CONE GEAR
E-468	KEY	E-511	NO. 8 CONE GEAR
E-469	BALL BEARING	E-512	KEY
E-470	SHAFT BORE PLUG	E-513	24T. TUMBLER PINION
E-471	PIN	E-514	BALL BEARING
E-472	30-45T. CLUSTER GEAR	E-515	TUMBLER PLATE R. H.
E-473	30-45-60T. CLUSTER GR.	E-516	BALL BEARING
E-474	60T. GEAR	E-517	48T. TUMBLER IDLER GR.
E-475	BUSHING	E-518	TUMBLER GUIDE PLATE
E-476	LOCKNUT & WASHER	E-519	TUMBLER HANDLE
E-477	BEARING SPACER-OUTER	E-520	HANDLE KNOB
E-478	46T. FEED CLUTCH GEAR	E-521	TUMBLER
E-479	BEARING SPACER-INNER	E-522	TUMBLER PLATE L. H.
E-480	FD. CLUTCH GEAR SHAFT	E-523	IDLER GEAR STUD
E-481	BEARING SPACER	E-524	45T. TUMBLER SHAFT GR.
E-482	FEED ROD STUB SHAFT	E-525	KEY
E-483	LEAD SCREW STUB SHAFT	E-526	LOCKNUT & WASHER
E-484	STUB SHAFT NUT	E-527	TUMBLER SHAFT
E-485	BEARING SHIELD	E-528	BRG. RETAINER WASHER
E-486	FEED ROD CLUTCH	E-529	45T. GEAR - INSIDE
E-487	BALL BEARING	E-530	CONE SHAFT
E-488	LEAD SCREW CLUTCH	E-531	LOCKNUT & WASHER
E-489	PLUG	E-532	45T. GEAR - OUTSIDE
E-490	LD. SCREW CLUTCH GEAR	E-533	3rd. INTERM. SHAFT
E-491	SHAFT SPACER	E-534	BALL BEARING
E-492	SHAFT BORE PLUG	E-535	2nd. INTERM. SHAFT
E-493	GEAR LOCATING PIN	E-536	52T. INTERMEDIATE GEAR
E-494	30-108T. CLUSTER GEAR	E-537	1st. INTERM. SHAFT
E-495	SCREW	E-538	DRIVE SHAFT
E-496	LOCKNUT & WASHER	E-539	LOCKNUT & WASHER
E-497	KEY	E-540	KEY
E-498	27-60T. CLUSTER GEAR	E-541	NO. 9 CONE GEAR
E-499	BALL BEARING	E-542	NO. 10 CONE GEAR
E-500	CLUSTER GEAR NUT	E-543	
E-501	GEAR SPACER	E-544	
E-502	BEARING ADAPTER	E-545	
E-503	FEED BOX		

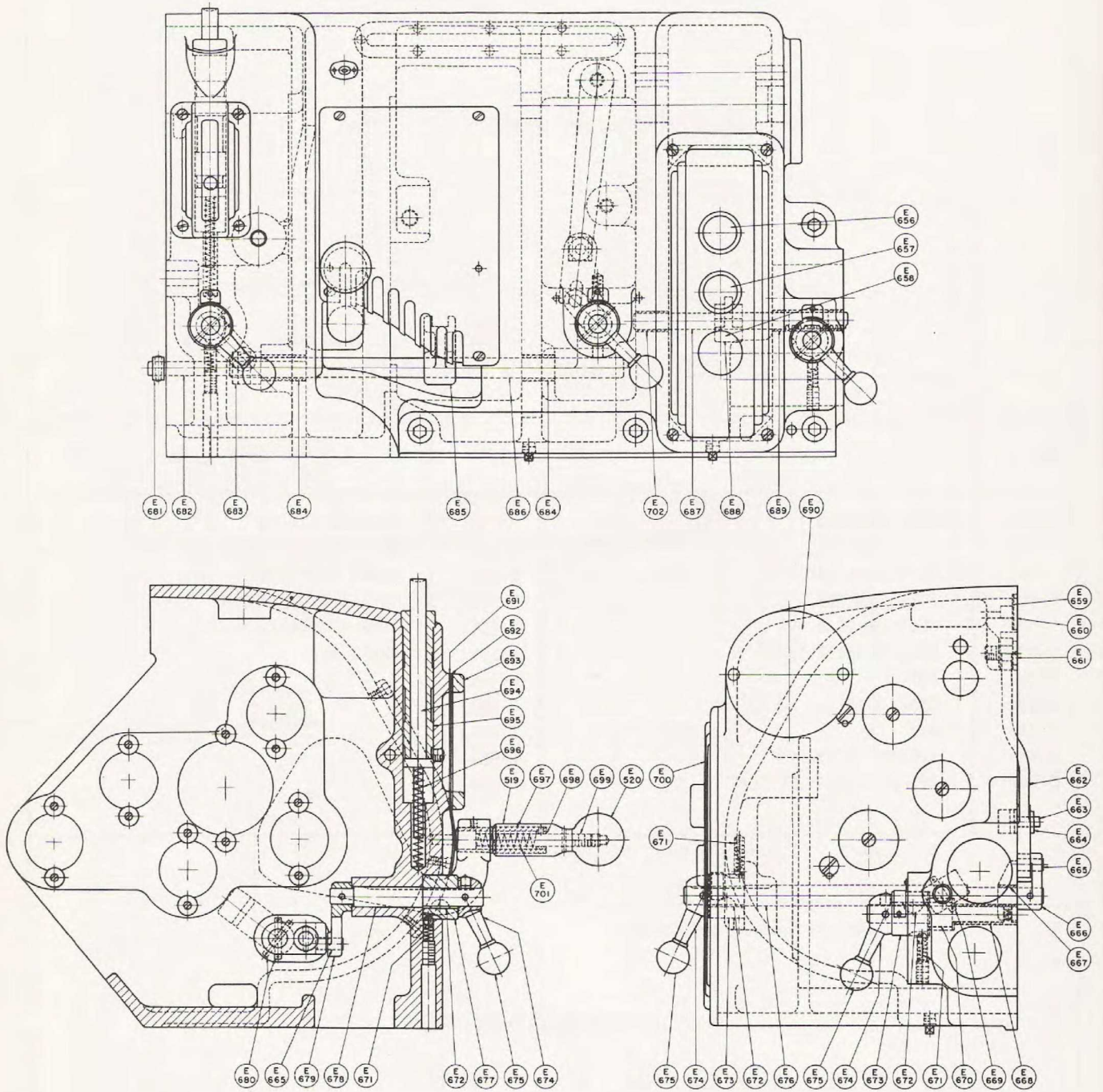




### FEED BOX GEARING - METRIC

NO.	NAME	NO.	NAME
E-466	BALL BEARING	E-550	SLIDING CLUTCH
E-469	BALL BEARING	E-551	BALL BEARING BUSH
E-493	GEAR LOCATING PIN	E-552	SHAFT BORE PLUG
E-499	BALL BEARING	E-553	CHANGE GEAR SPACER
E-500	CLUSTER GEAR NUT	E-554	TUMBLER SHAFT
E-524	45T. TUMBLER SHAFT GR.	E-555	SHAFT NUT
E-525	KEY	E-556	
E-546	CONE SHAFT	E-557	
E-547	KEY	E-558	
E-548	LOCKNUT & WASHER	E-559	
E-549	27-60T. CLUSTER GEAR	E-560	



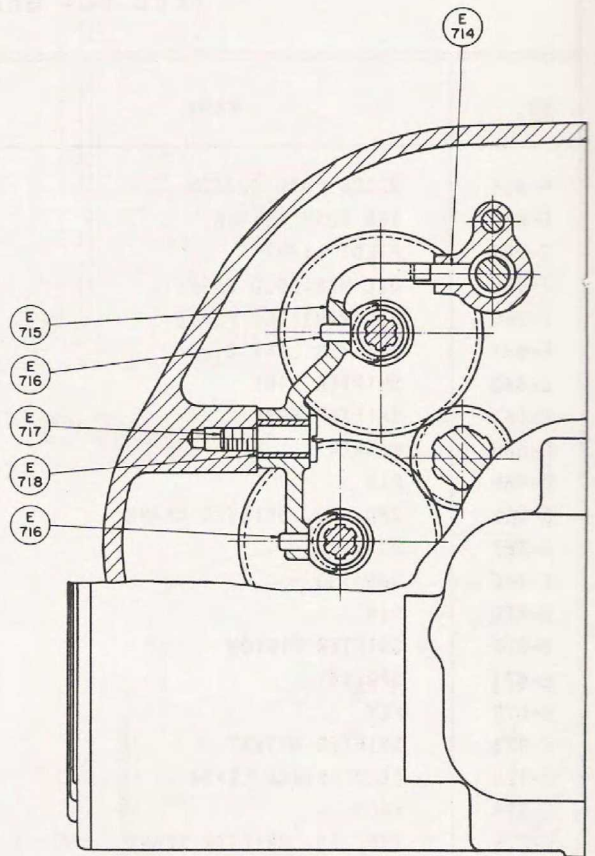
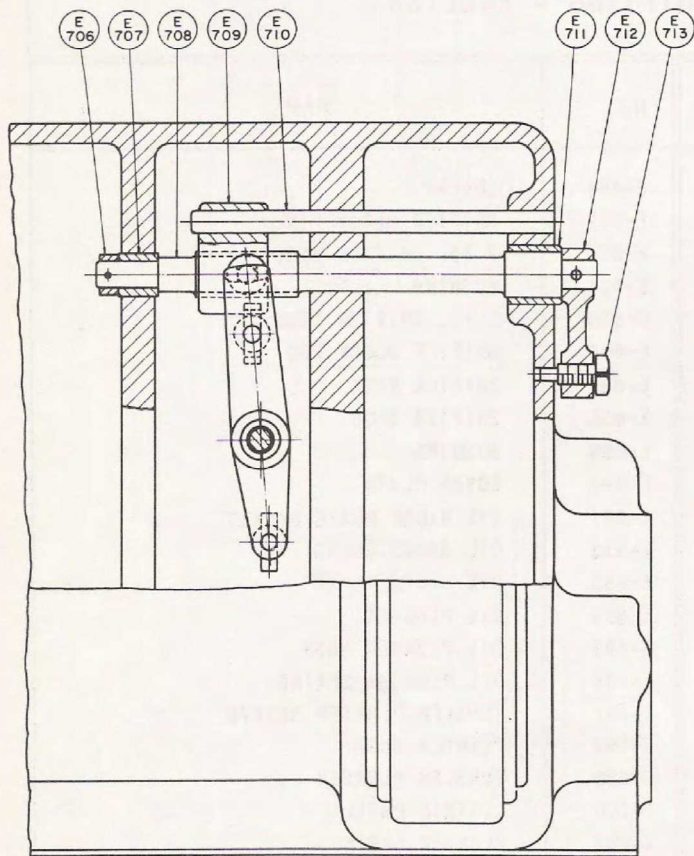


FEED BOX GEAR SHIFTING—ENGLISH

## FEED BOX GEAR SHIFTING - ENGLISH

NO.	NAME	NO.	NAME
E-656	BLACK PUSH BUTTON	E-681	COLLAR
E-657	RED PUSH BUTTON	E-682	SHIFTER BLOCK PIN
E-658	PILOT LIGHT	E-683	3 FD. SHIFTER BLOCK
E-659	OIL MANIFOLD GASKET	E-684	BUSHING
E-660	OIL MANIFOLD PLATE	E-685	3 FD. SHIFTER FORK
E-661	SHIFTER LINK STUD	E-686	SHIFTER BLOCK ROD
E-662	SHIFTER LINK	E-687	SHIFTER RACK
E-663	SHIFTER FORK	E-688	SHIFTER SHOE
E-664	WASHER	E-689	BUSHING
E-665	PIN	E-690	COVER PLATE
E-666	2ND. FD. SHIFTER CRANK	E-691	OIL GAUGE PLATE GASKET
E-667	BUSHING	E-692	OIL GAUGE GLASS
E-668	BUSHING	E-693	OIL GAUGE PLATE
E-669	PIN	E-694	OIL PLUNGER
E-670	SHIFTER PINION	E-695	OIL PLUNGER BUSH
E-671	SPRING	E-696	OIL PLUNGER SPRING
E-672	KEY	E-697	TUMBLER PLUNGER SLEEVE
E-673	SHIFTER DETENT	E-698	PLUNGER BUSH
E-674	FEED CHANGE LEVER	E-699	TUMBLER PLUNGER
E-675	KNOB	E-700	CONTROL PANEL
E-676	2ND. FD. SHIFTER SHAFT	E-701	PLUNGER SPRING
E-677	SHIFTER DETENT	E-702	BUSHING
E-678	3 FD. CHANGE SHAFT	E-703	
E-679	3 FD. CHANGE CRANK	E-704	
E-680	PIN	E-705	





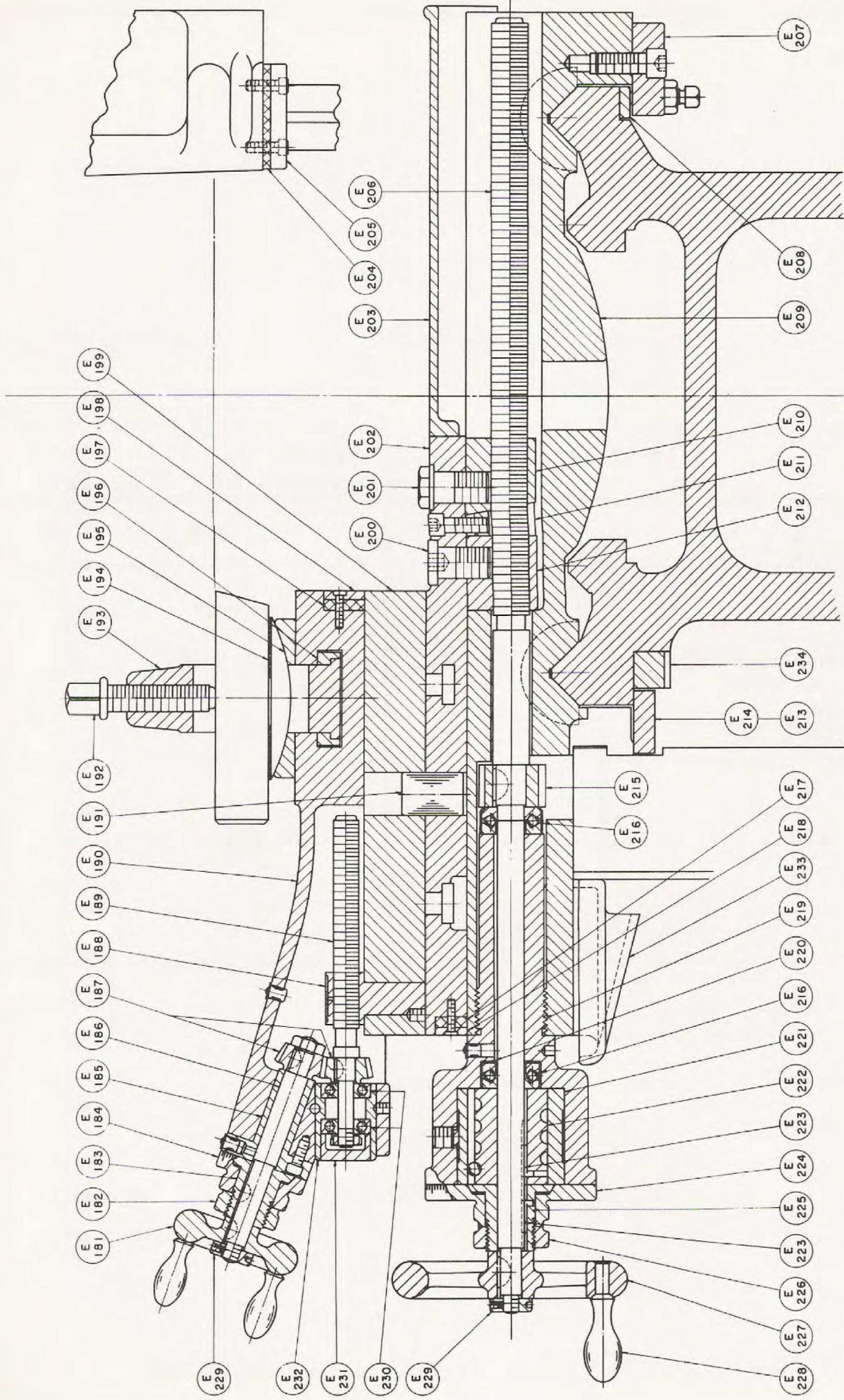
NOTE:— FOR PARTS NOT SHOWN SEE  
 FEED BOX GEAR SHIFTING — ENGLISH

FEED BOX GEAR SHIFTING—METRIC

### FEED BOX GEAR SHIFTING - METRIC

NO.	NAME	NO.	NAME
E-706	COLLAR	E-714	PIN
E-707	BUSHING	E-715	CLUTCH FORK LEVER
E-708	SHIFTER SHAFT	E-716	CLUTCH FORK
E-709	SHIFTER NUT	E-717	SHIFTER LEVER STUD
E-710	SHIFTER NUT ROD	E-718	BUSHING
E-711	BUSHING	E-719	
E-712	SHIFTER LEVER	E-720	
E-713	SHIFTER LEVER SCREW		





- E 181
- E 182
- E 183
- E 184
- E 185
- E 186
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- E 191
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- E 206

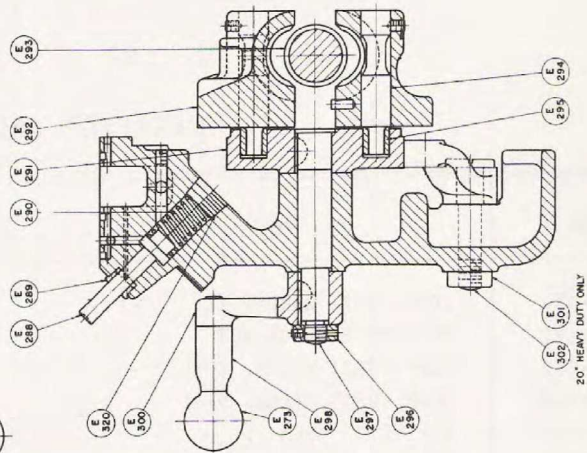
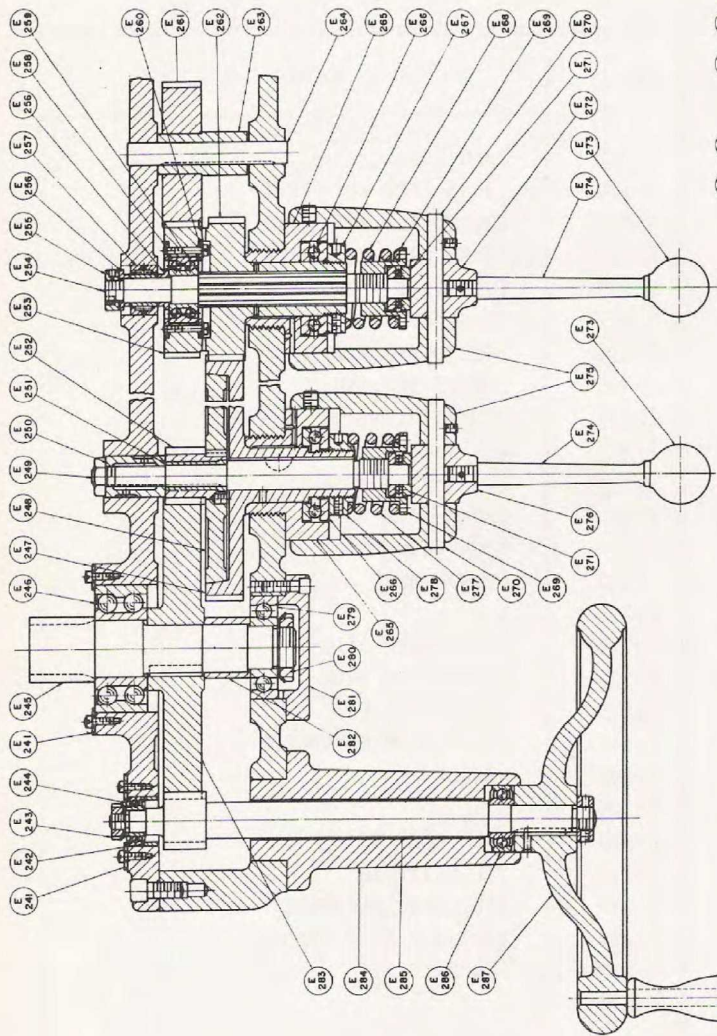
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- E 234

CARRIAGE AND COMPOUND REST

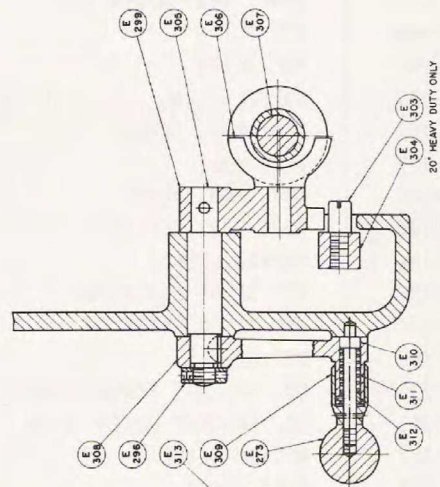
## CARRIAGE AND COMPOUND REST

NO.	NAME	NO.	NAME
E-181	COMP. REST HANDWHEEL	E-209	CARRIAGE
E-182	MICROMETER BUSH NUT	E-210	CROSS FEED NUT-REAR
E-183	COMP. REST MICRO. BUSH	E-211	CROSS FEED NUT WEDGE
E-184	COMP. REST MICRO. DIAL	E-212	CROSS FEED NUT-FRONT
E-185	TOP SLIDE BUSH	E-213	FRONT GIB - SHORT
E-186	COMP. REST DIAL SHAFT	E-214	FRONT GIB - LONG
E-187	BEVEL GEAR	E-215	CROSS FEED PINION
E-188	COMP. REST SCREW NUT	E-216	THRUST BEARING
E-189	TOP SLIDE SCREW	E-217	BOTTOM SLIDE WAY WIPER
E-190	TOP SLIDE	E-218	WAY WIPER PLATE
E-191	SWIVEL PLUG	E-219	CROSS FEED BUSH
E-192	TOOL POST SCREW	E-220	CROSS FEED SCREW SHIM
E-193	TOOL POST	E-221	STOP BUSH
E-194	TOOL POST WEDGE	E-222	SPIRAL BUSH
E-195	TOOL POST COLLAR	E-223	KEY
E-196	SQUARE COLLAR	E-224	MICROMETER DIAL
E-197	TOP SLIDE WAY WIPER	E-225	MICROMETER BUSH
E-198	WAY WIPER PLATE	E-226	MICROMETER NUT
E-199	SWIVEL	E-227	CROSS FEED HANDWHEEL
E-200	CR. FD. NUT SCREW-FRONT	E-228	HANDLE
E-201	CR. FD. NUT SCREW-REAR	E-229	NUT
E-202	BOTTOM SLIDE	E-230	BALL BEARING
E-203	DIRT GUARD	E-231	OIL RETAINER
E-204	CARR. WAY WIPER	E-232	BALL BRG. RETAINER
E-205	CARR. WAY WIPER PLATE	E-233	CARRIAGE DRIP TROUGH
E-206	CROSS FEED SCREW	E-234	BED RACK
E-207	BACK CLAMP	E-235	
E-208	BACK CLAMP GIB		

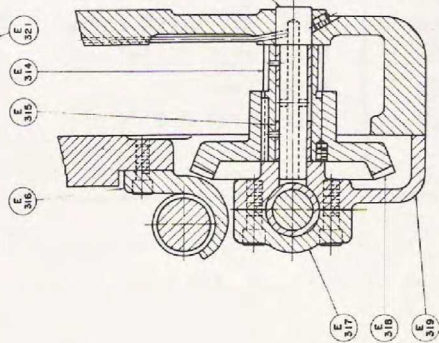




20" HEAVY DUTY ONLY



20" HEAVY DUTY ONLY

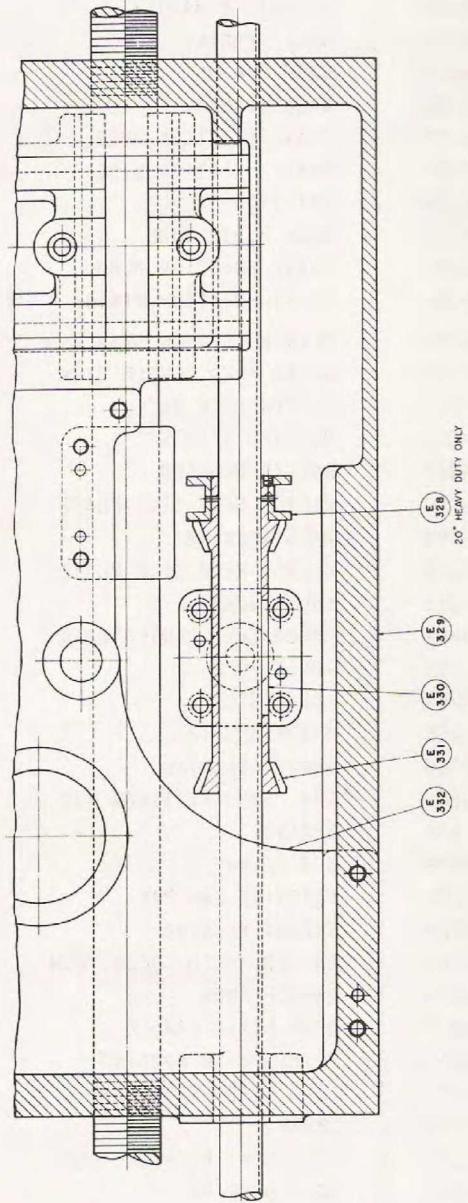
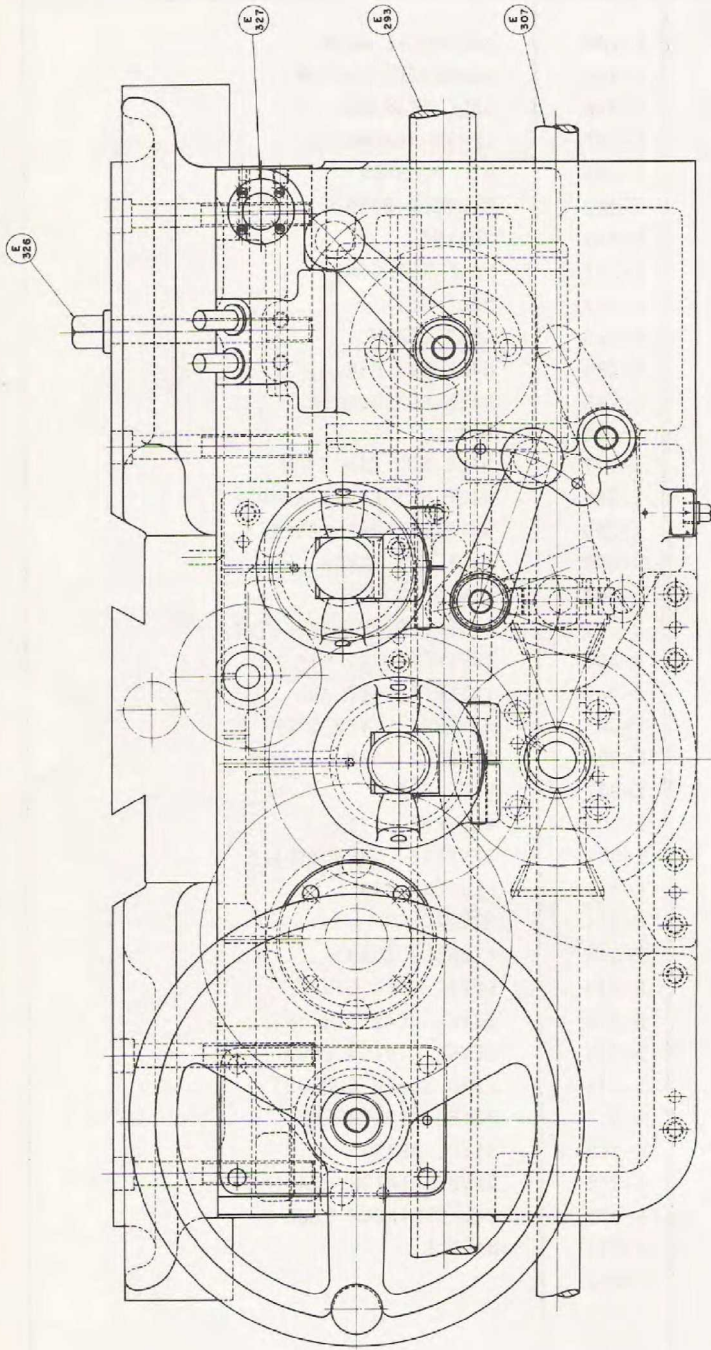


APRON

## APRON

NO.	NAME	NO.	NAME
E-241	BRG. RETAINER WASHER	E-284	HANDWHEEL BUSH
E-242	BEARING SPACER	E-285	HANDWHEEL PINION
E-243	LOCKNUT & WASHER	E-286	BALL BEARING
E-244	BALL BEARING	E-287	APRON HANDWHEEL
E-245	RACK PINION	E-288	OIL PLUNGER
E-246	BALL BEARING	E-289	PLUNGER BUSH
E-247	TRAV. FRICTION WHEEL	E-290	SPRING
E-248	TRAV. FRICTION DISC	E-291	HALF NUT CAM
E-249	FRICTION STEM	E-292	HALF NUT
E-250	BACK PLATE BUSH	E-293	LEAD SCREW
E-251	TRAV. FRICTION BUSH	E-294	HALF NUT PIN
E-252	TRAV. FRICTION PINION	E-295	HALF NUT ROLLER
E-253	SLIDING CLUTCH GEAR	E-296	Nut
E-254	CROSS FEED CLUTCH STEM	E-297	HALF NUT CAM STEM
E-255	CLUTCH STEM NUT	E-298	HALF NUT LEVER HANDLE
E-256	BEARING SPACER	E-299	SHIFTER FORK LEVER
E-257	ROLLER BEARING	E-300	HALF NUT LEVER
E-258	CLUTCH GEAR SIDE PLATE	E-301	ARM STUD NUT
E-259	BALL BEARING	E-302	INTERFERENCE ARM STUD
E-260	CLUTCH GEAR SIDE PLATE	E-303	INTERFERENCE PIN
E-261	IDLER GEAR	E-304	INTERFERENCE ARM
E-262	CROSS FEED CLUTCH GEAR	E-305	REVERSE LEVER STEM
E-263	IDLER BUSH	E-306	SHIFTER FORK
E-264	IDLER STUD	E-307	FEED ROD
E-265	APRON BUSHING	E-308	REVERSE LEVER
E-266	THRUST BEARING	E-309	REVERSE LEVER HANDLE
E-267	THR. BRG. RETAINER NUT	E-310	PLUNGER PIN
E-268	SPRING	E-311	SPRING
E-269	SPRING NUT	E-312	PLUNGER BUSH
E-270	FRICTION CAM PIN	E-313	BEVEL GEAR STUD
E-271	THRUST BEARING	E-314	BEVEL GEAR PINION
E-272	CR. FD. FRIC. OPER. CAM	E-315	BEVEL PINION BUSH
E-273	HANDLE KNOB	E-316	LEAD SCREW SUPPORT
E-274	OPER LEVER HANDLE	E-317	BEVEL PINION CAP
E-275	FRIC. LEVER HOUSING	E-318	BEVEL GEAR
E-276	LONG FEED FRIC. CAM	E-319	BEVEL PINION BEARING
E-277	SPRING	E-320	OIL CYLINDER PLUG
E-278	THR. BRG. RETAINER NUT	E-321	HANDLE
E-279	BALL BEARING	E-322	
E-280	LOCKNUT & WASHER	E-323	
E-281	BEARING RETAINER	E-324	
E-282	RACK PINION SPACER	E-325	
E-283	84T. RACK WHEEL		



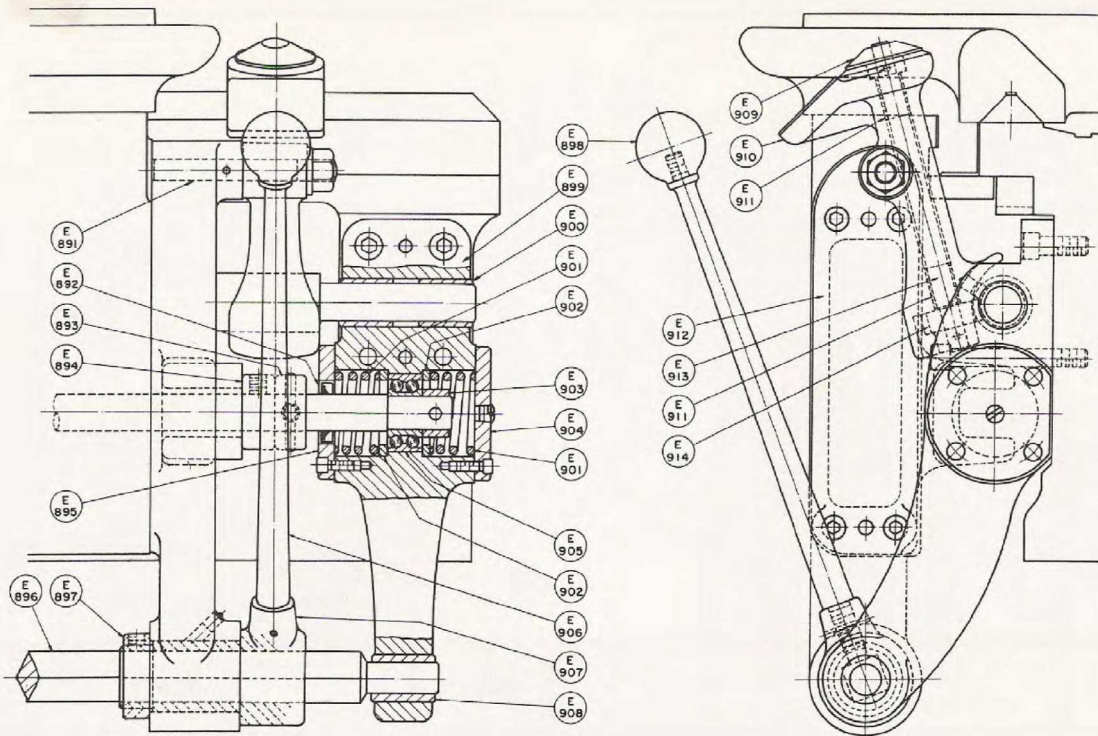


APRON

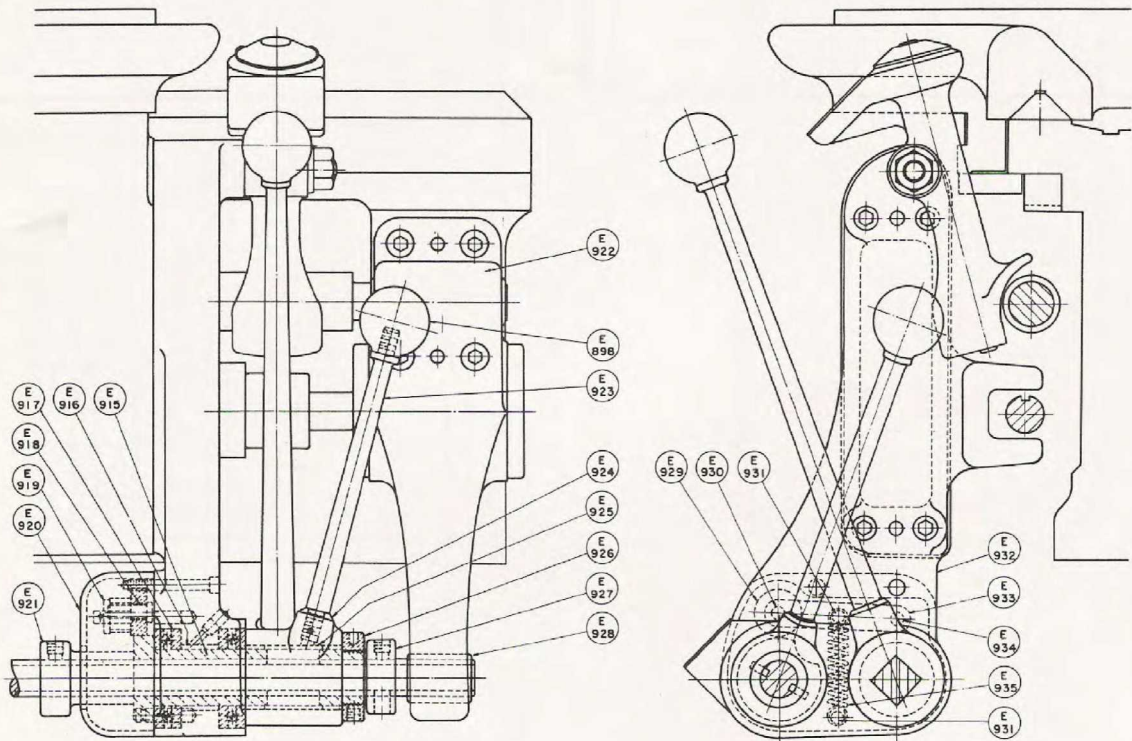
APRON

NO.	NAME	NO.	NAME
E-293	LEAD SCREW	E-330	BEVEL PINION KEY
E-307	FEED ROD	E-331	DOUBLE BEVEL PINION
E-326	CARRIAGE BINDER SCREW	E-332	APRON BACK PLATE
E-327	OIL GAGE ASSEMBLY	E-333	
E-328	SHIFTING SPOOL	E-334	
E-329	APRON	E-335	





MECHANICAL CONTROL



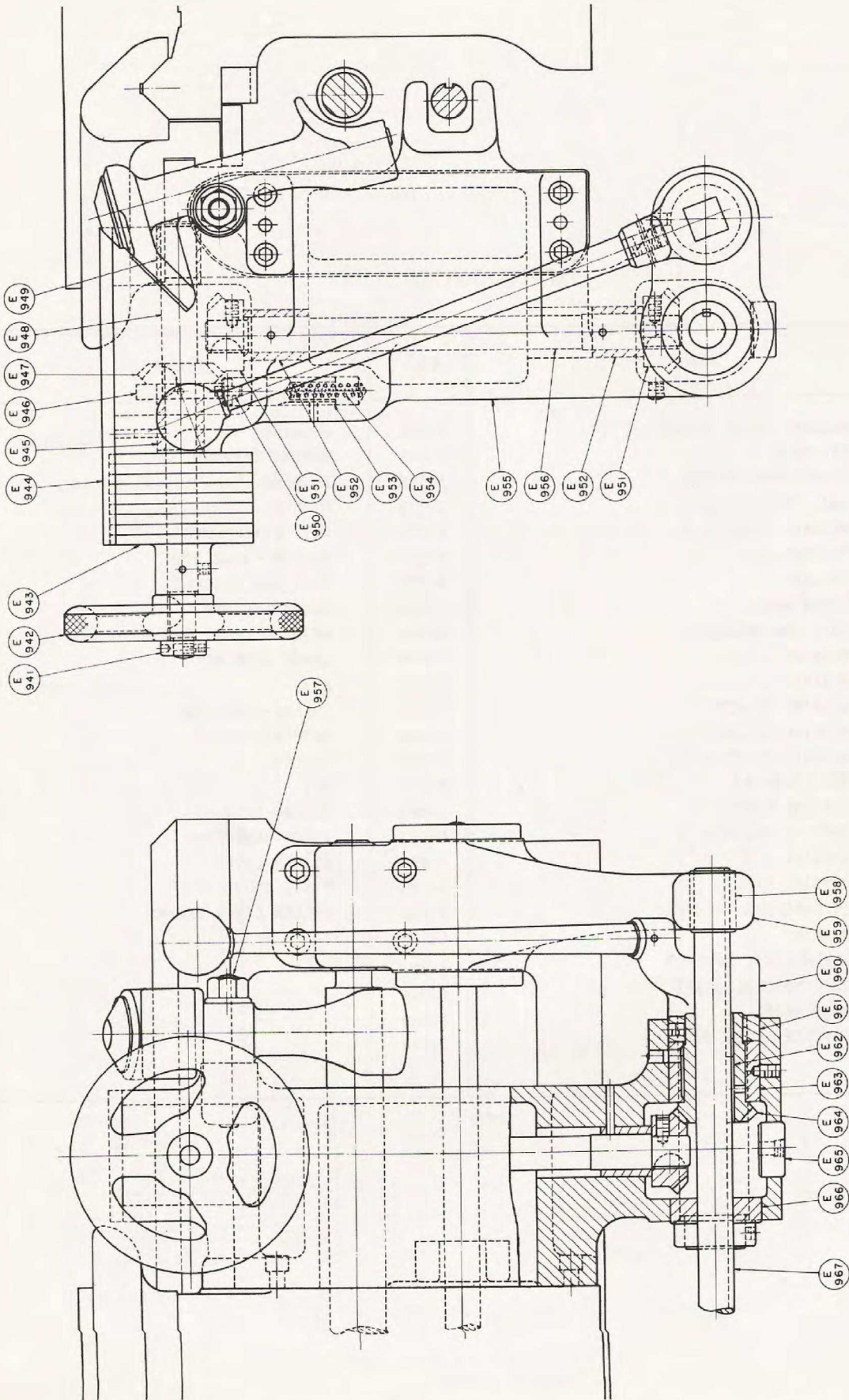
LEAD SCREW REVERSE AND MECHANICAL CONTROL

APRON CONTROLS

## APRON CONTROLS

NO.	NAME	NO.	NAME
E-891	BRACKET PIVOT SCREW	E-916	BUSHING
E-892	OIL SEAL	E-917	THRUST BEARING
E-893	FIXED STOP COLLAR	E-918	BUSHING
E-894	ADJ. STOP COLLAR	E-919	WASHER
E-895	BRACKET PLATE L. H.	E-920	REV. LEVER COVER
E-896	CONTROL ROD	E-921	COLLAR - HEAD END
E-897	COLLAR	E-922	TAIL END BRACKET
E-898	LEVER KNOB	E-923	REVERSE LEVER
E-899	TAIL END BRACKET	E-924	REVERSE LEVER HUB
E-900	BUSHING	E-925	LEVER BUSH KEY
E-901	SPRING	E-926	NUT
E-902	BEARING SPACER	E-927	COLLAR - TAIL END
E-903	BEARING COLLAR	E-928	BUSHING
E-904	BRACKET PLATE R. H.	E-929	ROLLER
E-905	BALL BEARING	E-930	PIN
E-906	CONTROL LEVER	E-931	SPRING POST
E-907	CONT. LEVER HUB	E-932	APRON BRACKET
E-908	BUSHING	E-933	ROLLER LEVER
E-909	CHASING DIAL	E-934	PIVOT STUD
E-910	CHASING DIAL BRACKET	E-935	ROLLER LEVER SPRING
E-911	BUSHING	E-936	
E-912	APRON CONT. BRACKET	E-937	
E-913	CHASING DIAL SHAFT	E-938	
E-914	WORM WHEEL	E-939	
E-915	REVERSE LEVER BUSH	E-940	



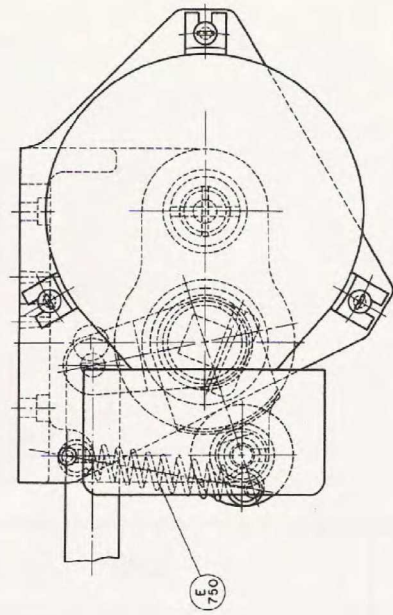
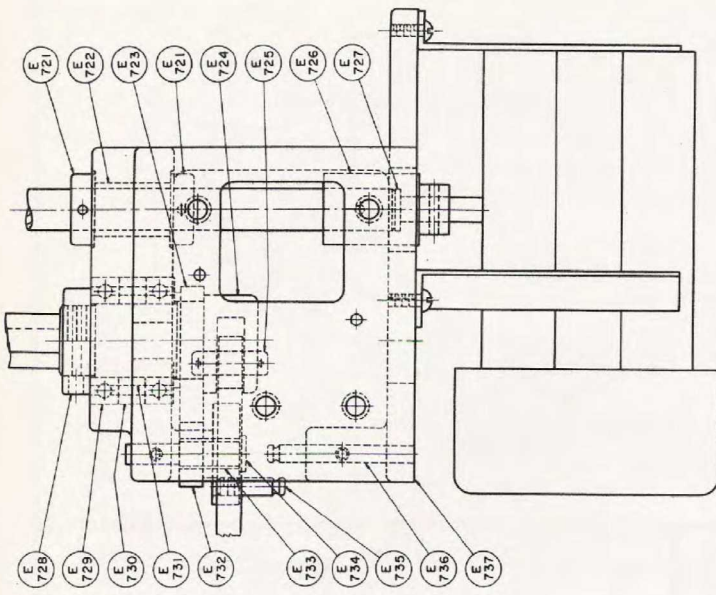


ELECTRICAL APRON CONTROL - ADJUSTABLE SPEED

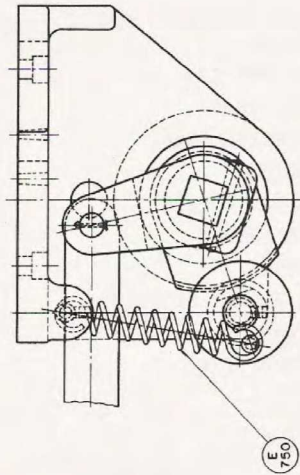
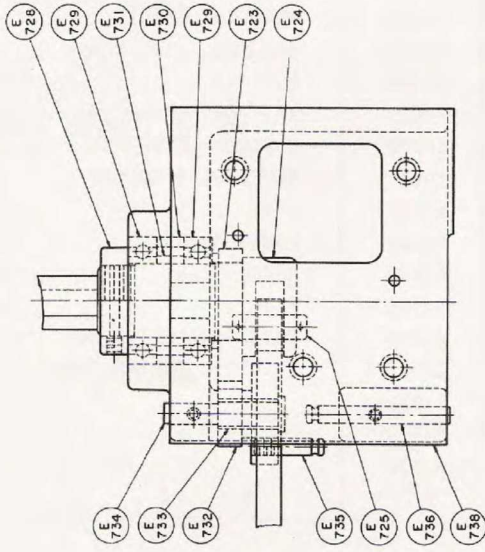
ELECTRICAL APRON CONTROL  
ADJUSTABLE SPEED

NO.	NAME	NO.	NAME
E-941	NUT	E-956	VERTICAL SHAFT
E-942	HANDWHEEL	E-957	BRACKET PIVOT SCREW
E-943	SPEED DIAL	E-958	BUSHING
E-944	SPEED INDICATOR	E-959	TAIL END BRACKET
E-945	BUSHING	E-960	CONTROL LEVER HUB
E-946	SHUT OFF CAM	E-961	BEVEL GEAR COLLAR
E-947	BEVEL GEAR	E-962	KEY
E-948	HANDWHEEL SHAFT	E-963	LOWER BUSHING
E-949	BUSHING	E-964	BEVEL GEAR
E-950	PLUNGER ROLLER	E-965	PLUG
E-951	BEVEL GEAR	E-966	CONT. BRACKET PLUG
E-952	BUSHING	E-967	ELECTRIC CONTROL ROD
E-953	CAM ROLLER PLUNGER	E-968	
E-954	SPRING	E-969	
E-955	CONTROL BRACKET	E-970	

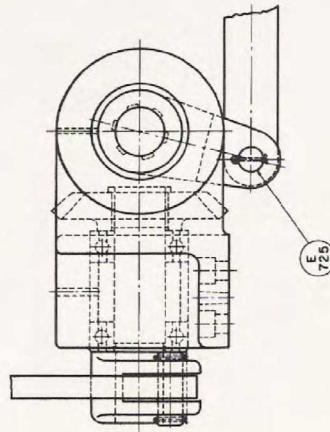
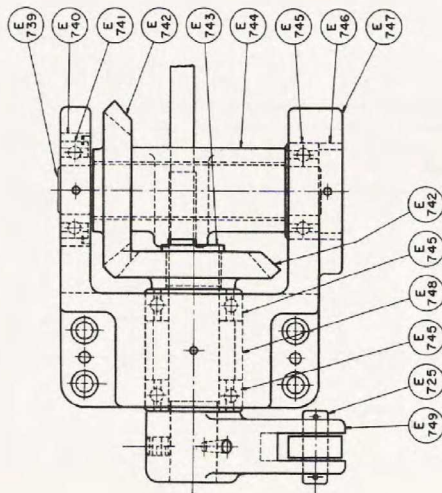




HEAD END - FRONT  
ADJ. SPEED



HEAD END - FRONT



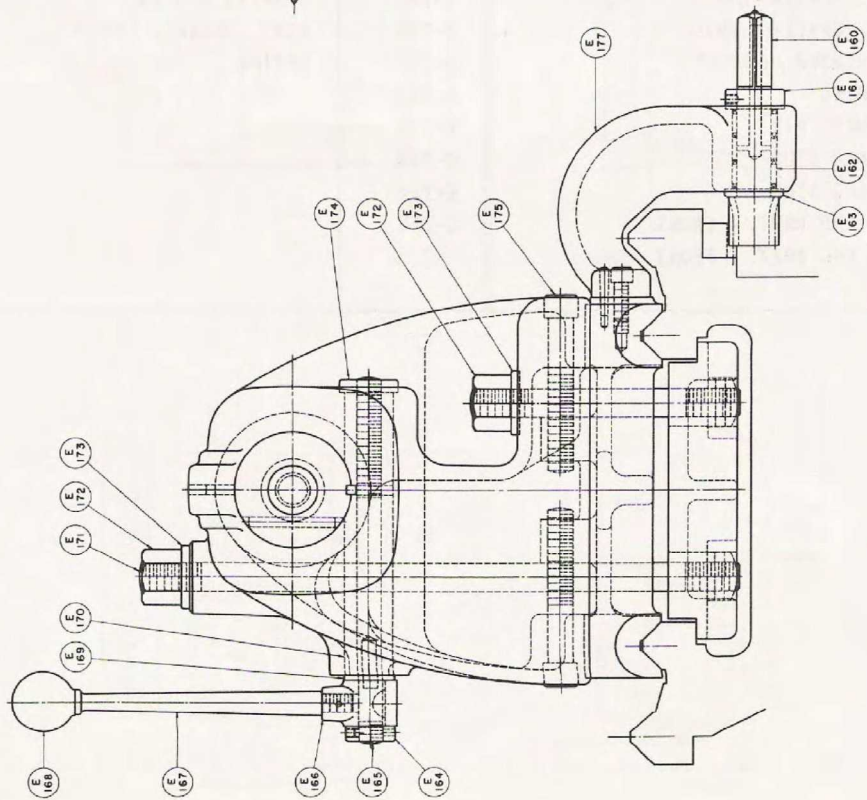
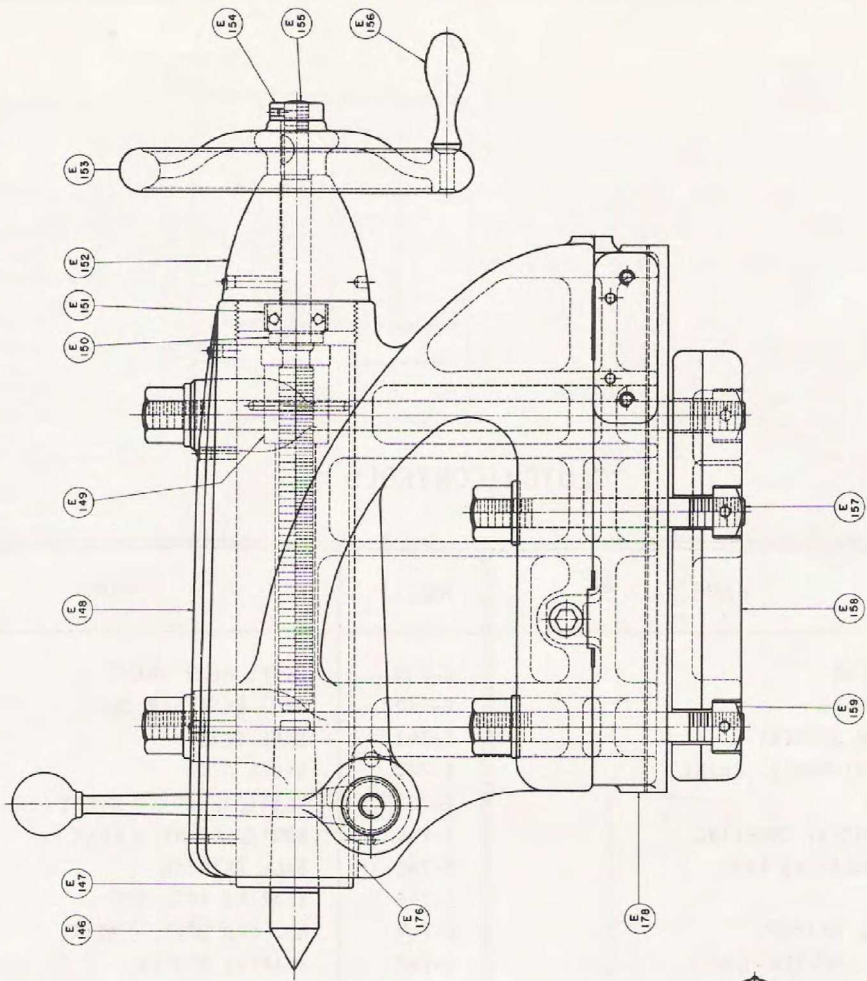
HEAD END - REAR

CLUTCH CONTROLS

## CLUTCH CONTROLS

NO.	NAME	NO.	NAME
E-721	COLLAR	E-739	BEVEL GEAR SHAFT
E-722	BUSHING	E-740	BRG. RETAINER BUSH
E-723	GEAR SEGMENT	E-741	BALL BEARING
E-724	FRONT HORIZ. CRANK	E-742	BEVEL GEAR
E-725	PIN	E-743	VERTICAL CRANK SHAFT
E-726	RHEOSTAT COUPLING	E-744	HORIZ. CRANK - REAR
E-727	INSULATING DISC	E-745	BALL BEARING
E-728	NUT	E-746	BEARING RETAINER
E-729	BALL BEARING	E-747	HD. END BRKT. - REAR
E-730	BRG. SPACER - LARGE	E-748	BEARING SPACER
E-731	BRG. SPACER - SMALL	E-749	VERT. CRANK - LOWER
E-732	OVERLATCH SEGMENT	E-750	SPRING
E-733	BUSHING	E-751	
E-734	SEGMENT PIN	E-752	
E-735	SPRING STUD	E-753	
E-736	SPRING STUD	E-754	
E-737	HD. END BRKT. - FRONT	E-755	
E-738	HD. END BRKT. - FRONT		



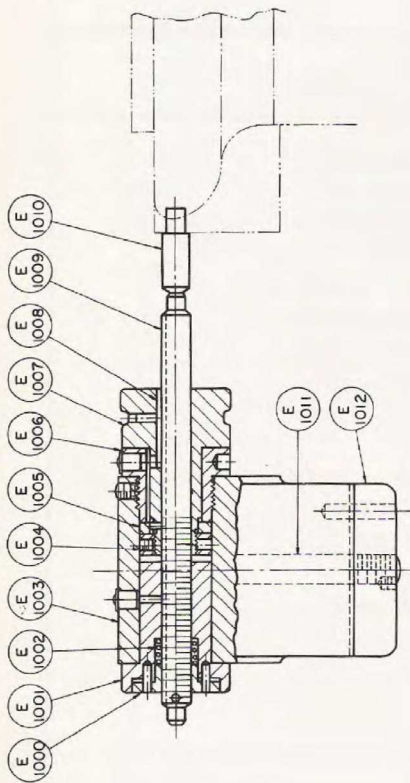


TAILSTOCK

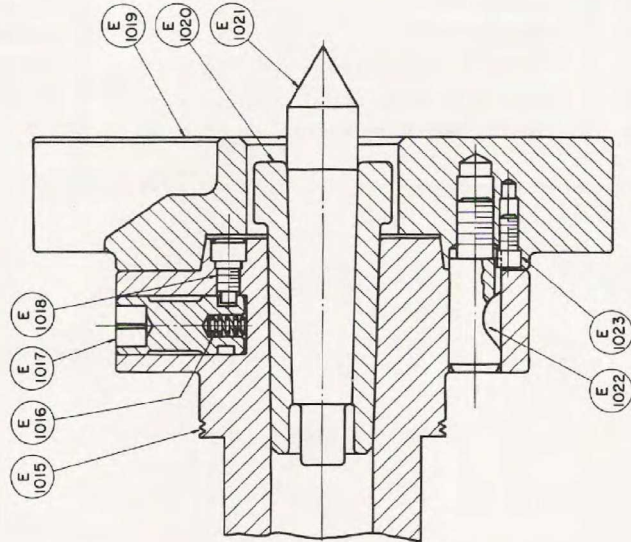
## TAILSTOCK

NO.	NAME	NO.	NAME
E-146	CENTER	E-164	CLAMP SCREW NUT
E-147	SPINDLE	E-165	CLAMP SCREW
E-148	TAILSTOCK TOP	E-166	CLAMP LEVER HUB
E-149	SPINDLE NUT	E-167	CLAMP LEVER
E-150	SPINDLE SCREW COLLAR	E-168	CLAMP LEVER KNOB
E-151	THRUST BEARING	E-169	PIVOT SCREW WASHER
E-152	TAILSTOCK PLUG	E-170	CLAMP BUSH - LONG
E-153	HANDWHEEL	E-171	CLAMP STUD - LONG
E-154	SPINDLE SCREW NUT	E-172	TOP NUT
E-155	SPINDLE SCREW	E-173	WASHER
E-156	HANDLE	E-174	CLAMP BUSH - SHORT
E-157	CLAMP STUD - SHORT	E-175	SET OVER SCREW
E-158	TAILSTOCK CLAMP	E-176	SPINDLE KEY
E-159	BOTTOM NUT	E-177	MOVER BRACKET
E-160	MOVER PINION	E-178	TAILSTOCK BASE
E-161	MOVER PINION COLLAR	E-179	
E-162	NEEDLE BEARING	E-180	
E-163	MOVER PINION WASHER		

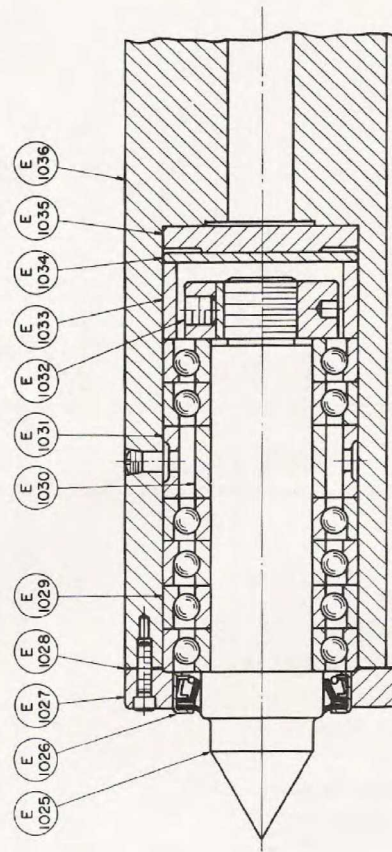




MICROMETER CARRIAGE STOP



CAM LOCK SPINDLE NOSE



BUILT IN ANTI-FRICTION CENTER IN TAILSTOCK SPINDLE

MICROMETER CARRIAGE STOP

NO.	NAME	NO.	NAME
E-1000	MICRO. COMP. NUT	E-1007	MICROMETER DIAL
E-1001	MICROMETER NUT	E-1008	KEY
E-1002	SPRING	E-1009	MICROMETER SCREW
E-1003	STOP BRACKET	E-1010	MICRO. STOP PIN
E-1004	MICRO. DIAL NUT	E-1011	CLAMP STUD
E-1005	MICRO. DIAL WASHER	E-1012	CLAMP - FRONT VEE
E-1006	MICRO. DIAL BUSH		

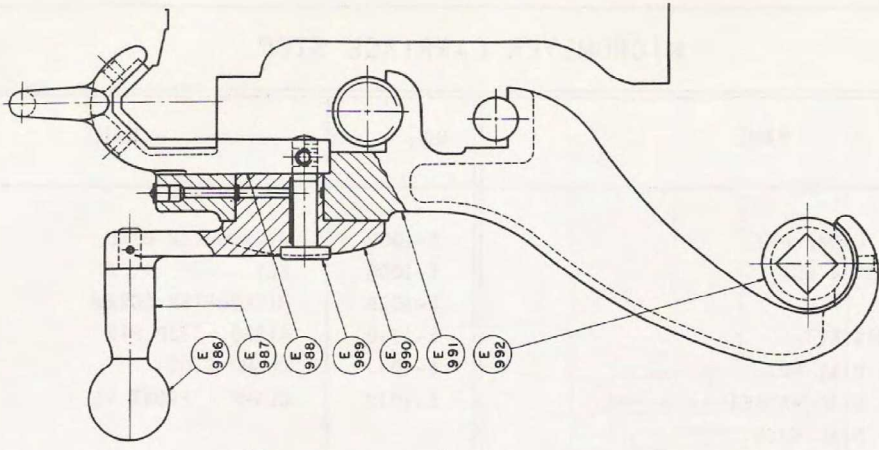
CAM LOCK SPINDLE NOSE

NO.	NAME	NO.	NAME
E-1015	SPINDLE	E-1020	CENTER BUSH
E-1016	CAM SPRING	E-1021	SPINDLE CENTER
E-1017	CAM	E-1022	CAM LOCK STUD
E-1018	CAM SCREW	E-1023	SCREW
E-1019	SMALL FACE PLATE		

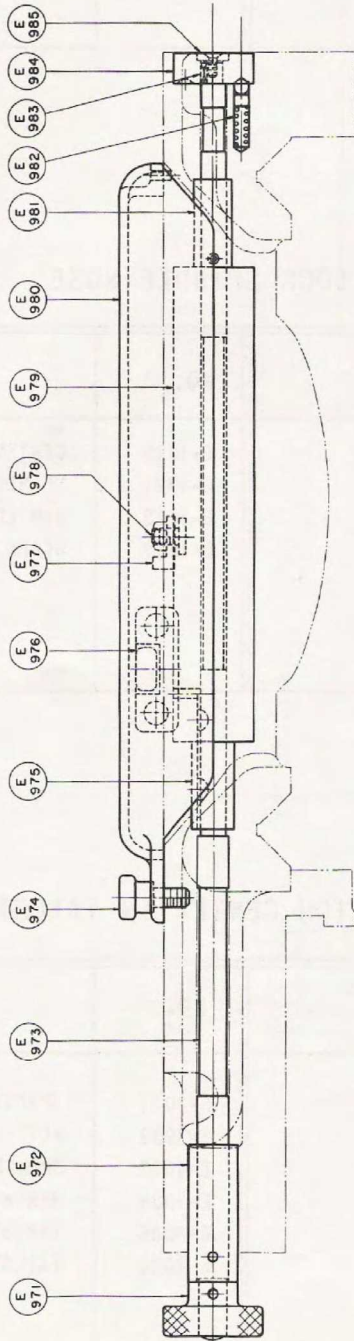
BUILT IN ANTI-FRICTION CENTER IN TAILSTOCK SPINDLE

NO.	NAME	NO.	NAME
E-1025	BALL BEARING CENTER	E-1031	SPACER - OUTER
E-1026	OIL SEAL	E-1032	NUT
E-1027	BALL BEARING CAP	E-1033	BRG. REAR SPACER
E-1028	SHIM	E-1034	SPRING THRUST PLATE
E-1029	SET OF (6) BEARINGS	E-1035	THRUST PLATE
E-1030	SPACER - INNER	E-1036	TAILSTOCK SPINDLE





LEAD SCREW SUPPORT



MULTIPLE CROSS STOPS

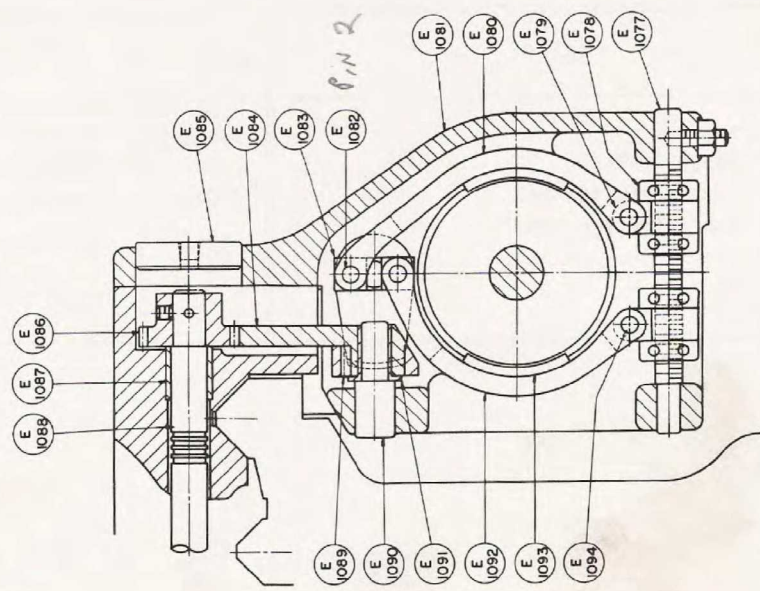
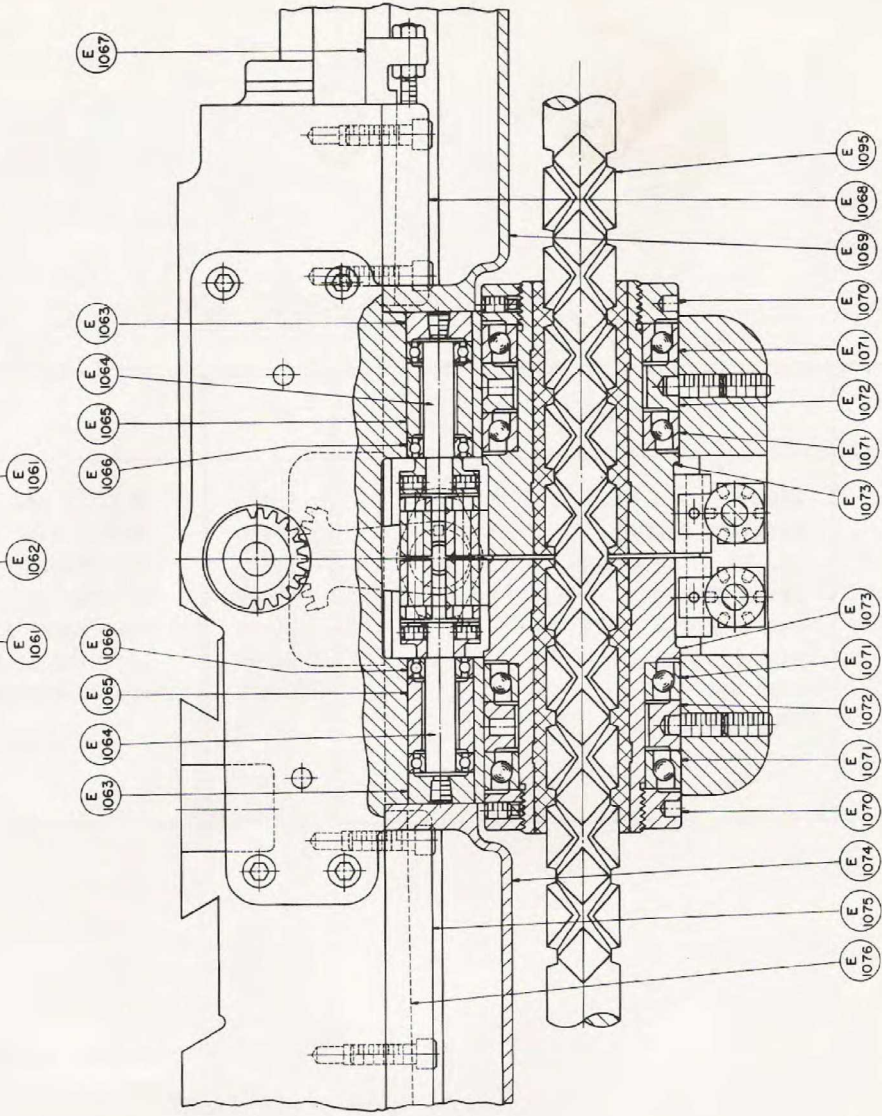
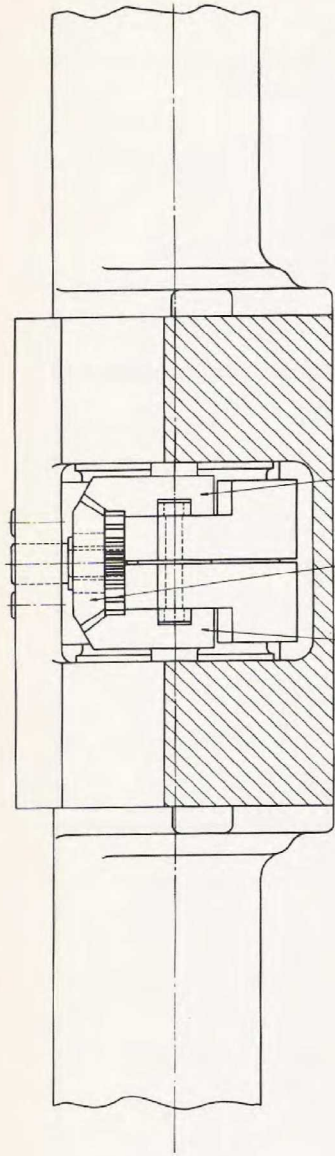
MULTIPLE CROSS STOPS

NO.	NAME	NO.	NAME
E-971	KNOB	E-979	SLOTTED BAR
E-972	LOCATING SLEEVE	E-980	BARREL STOP COVER
E-973	CR. FD. STOP SHAFT	E-981	BAR SPACER - REAR
E-974	COVER STUD	E-982	SPRING
E-975	BAR SPACER - FRONT	E-983	STOP SHAFT KEY
E-976	STOP FINGER	E-984	LOCATING COLLAR
E-977	STOP DOG	E-985	COLLAR WASHER
E-978	STOP DOG SCREW		

LEAD SCREW SUPPORT

NO.	NAME	NO.	NAME
E-986	KNOB	E-990	SUPPORT LEVER
E-987	LEVER HANDLE	E-991	SUPPORT SHOE
E-988	LEAD SCREW SUPPORT	E-992	CONTROL ROD SPOOL
E-989	SUPPORT LEVER STUD		



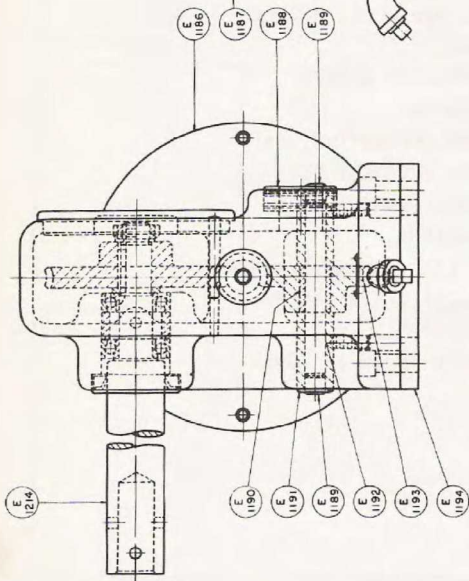
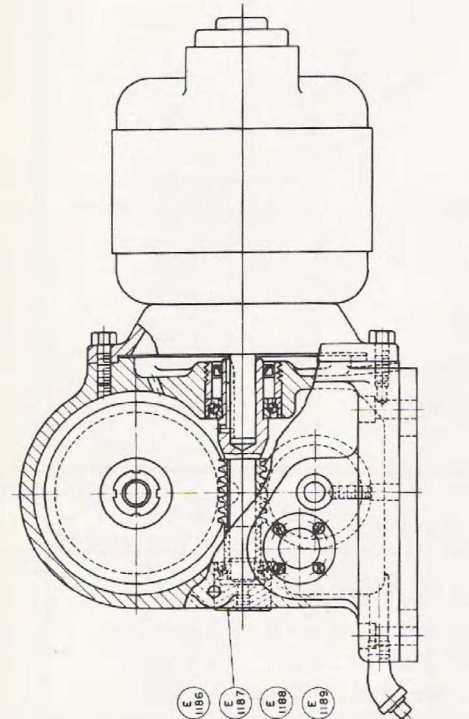


POWER RAPID TRAVERSE NUT BRACKET

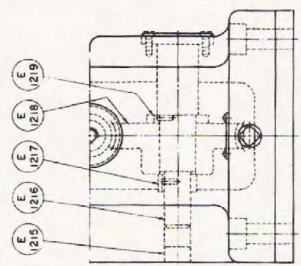
POWER RAPID TRAVERSE NUT BRACKET

NO.	NAME	NO.	NAME
E-1061	BEVEL SEGMENT	E-1081	TRAV. NUT BRACKET
E-1062	OPER. BEVEL SEGMENT	E-1082	SHOE PIN
E-1063	BEARING PLUG	E-1083	CLUTCH LEVER SHOE
E-1064	BEVEL SEGMENT SHAFT	E-1084	INTERM. OPER. SEGMENT
E-1065	BEARING SPACER	E-1085	PLUG
E-1066	BALL BEARING	E-1086	OPERATING SEGMENT
E-1067	BACK CLAMP GIB - R. H.	E-1087	BUSHING
E-1068	BACK CLAMP - R. H.	E-1088	TRAV. OPERATING SHAFT
E-1069	TRAV. SCREW COVER - R. H.	E-1089	OPER. SEGMENT KEY
E-1070	ADJUSTING NUT	E-1090	BEVEL SEGMENT STUD
E-1071	BALL BEARING	E-1091	BUSHING
E-1072	BEARING SPACER	E-1092	R. & L. CL. LEVER - INNER
E-1073	TRAVERSE NUT	E-1093	CLUTCH LEVER LINING
E-1074	TRAV. SCREW COVER L. H.	E-1094	PIN
E-1075	BACK CLAMP-L. H.	E-1095	RAPID TRAVERSE SCREW
E-1076	BACK CLAMP GIB-L. H.	E-1096	
E-1077	LEVER HINGE STUD	E-1097	
E-1078	HINGE ADJUSTING NUT	E-1098	
E-1079	CLUTCH LEVER HINGE	E-1099	
E-1080	R. & L. CL. LEVER - OUTER	E-1100	



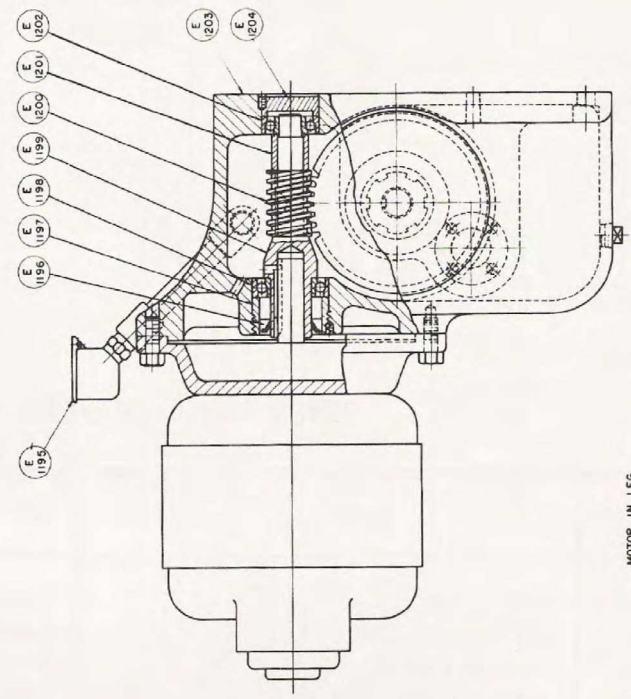


E 1214

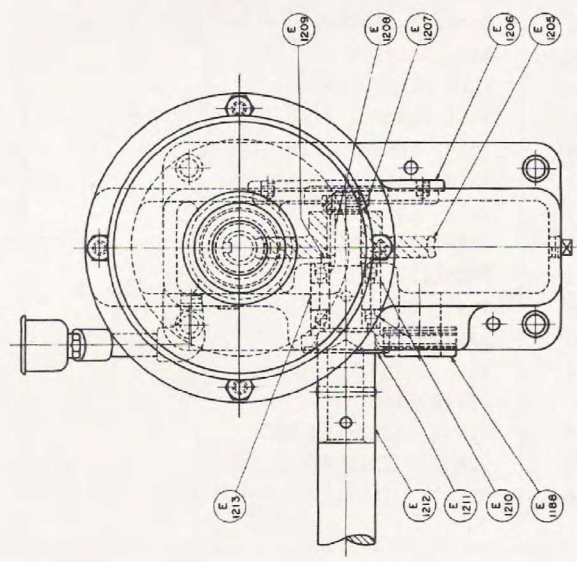


MOTOR ON PLATFORM

20" HEAVY DUTY ONLY



MOTOR IN LEG

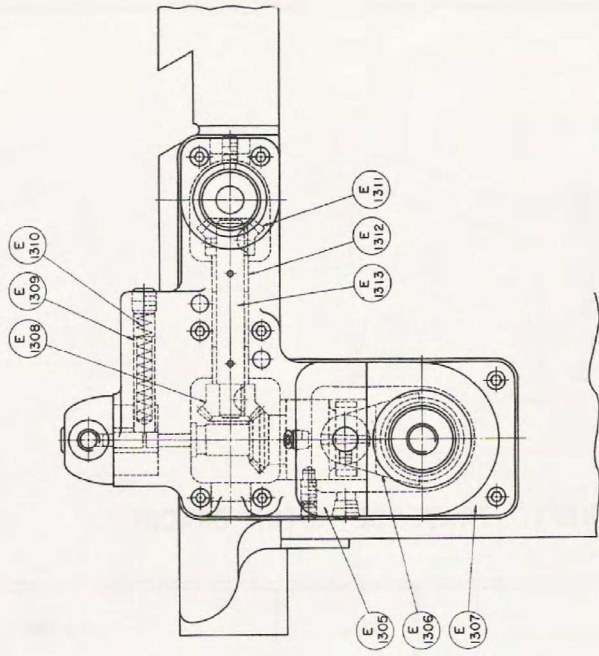
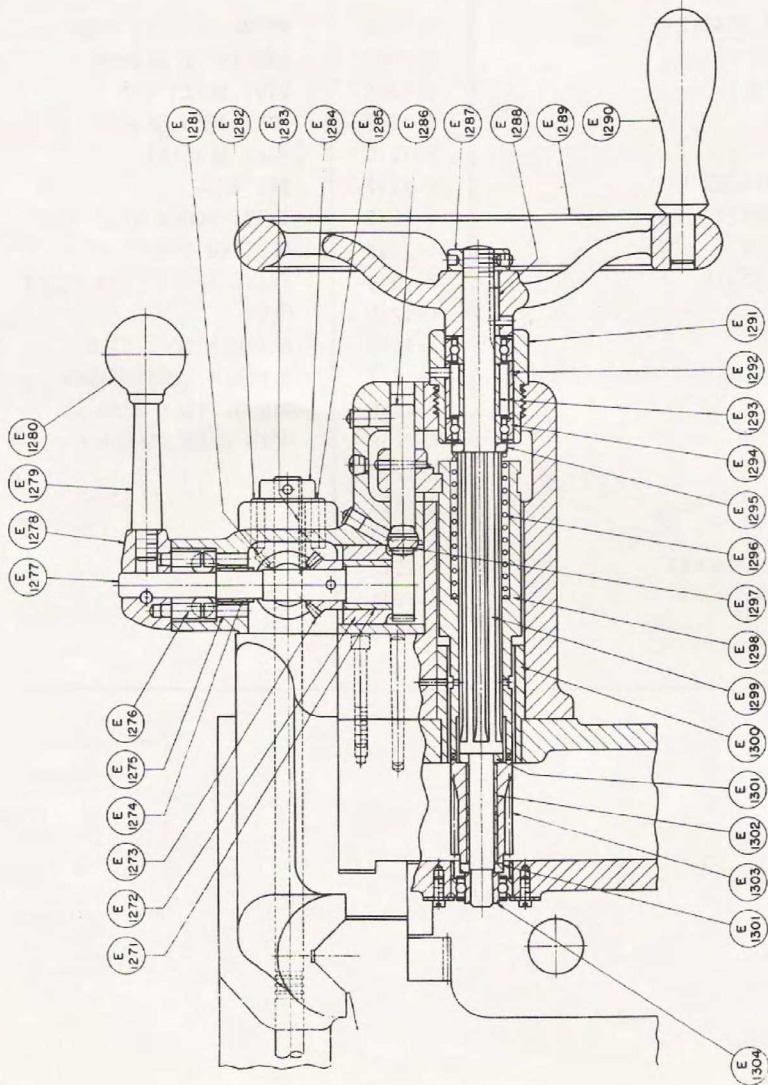


POWER RAPID TRAVERSE MOTOR BRACKET

POWER RAPID TRAVERSE MOTOR BRACKET

NO.	NAME	NO.	NAME
E-1186	TRAVERSE MOTOR BRACKET	E-1206	MOTOR BRACKET PLUG
E-1187	WORM SHAFT PLUG	E-1207	LOCKNUT & WASHER
E-1188	OIL GAGE ASSEMBLY	E-1208	STUB SHAFT KEY
E-1189	PLUG	E-1209	WORM GEAR SPACER
E-1190	BUSHING	E-1210	BALL BEARING
E-1191	SLINGER GEAR SPACER	E-1211	OIL SEAL
E-1192	SLINGER GEAR SHAFT	E-1212	TRAV. SCREW STUB SHAFT
E-1193	OIL SLINGER GEAR	E-1213	BEARING SPACER
E-1194	BRACKET MATCH PLATE	E-1214	TRAV. SCREW STUB SHAFT
E-1195	OILER	E-1215	PLUG
E-1196	OIL SEAL	E-1216	SLINGER GEAR STUD
E-1197	WORM SHAFT ADJ. NUT	E-1217	SLINGER GEAR SPACER
E-1198	BALL BEARING	E-1218	OIL SLINGER GEAR
E-1199	WORM SHAFT	E-1219	WORM GEAR SPACER
E-1200	WORM	E-1220	
E-1201	WORM SPACER	E-1221	
E-1202	BALL BEARING	E-1222	
E-1203	TRAVERSE MOTOR BRACKET	E-1223	
E-1204	WORM SHAFT PLUG	E-1224	
E-1205	WORM GEAR	E-1225	



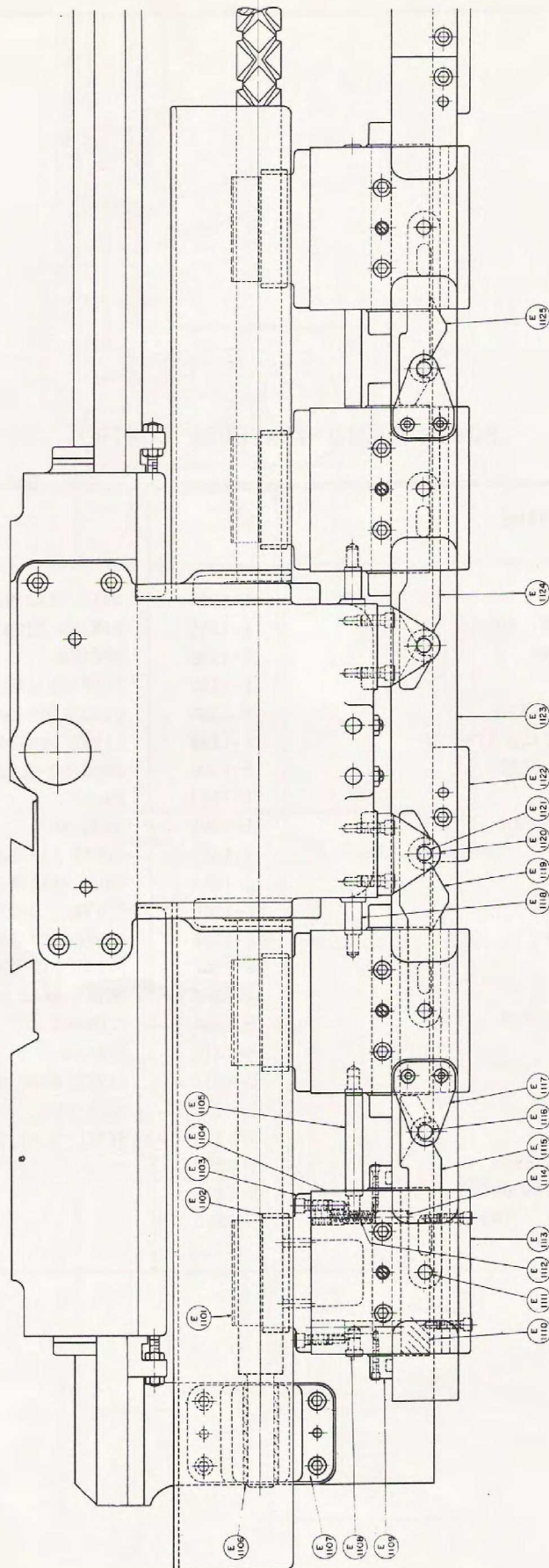


POWER RAPID TRAVERSE CONTROL

POWER RAPID TRAVERSE CONTROL

NO.	NAME	NO.	NAME
E-1271	BUSHING	E-1294	BALL BEARING
E-1272	BEVEL GEAR PIN. BUSH	E-1295	PINION STEM COLLAR
E-1273	VERTICAL PINION	E-1296	SPRING
E-1274	BUSHING	E-1297	PLUNGER RACK CAM
E-1275	PLUNGER STOP PIN	E-1298	FIRST PINION CLUTCH
E-1276	PLUNGER OPERATING PIN	E-1299	FIRST PINION SHAFT
E-1277	PLUNGER OPER. GEAR	E-1300	HOUSING SLEEVE
E-1278	LEVER HUB	E-1301	WASHER
E-1279	OPER. LEVER HANDLE	E-1302	BUSHING
E-1280	KNOB	E-1303	FIRST PINION
E-1281	BEVEL GEAR	E-1304	BALL BEARING
E-1282	BEVEL GEAR BUSH	E-1305	CONTROL HOUSING
E-1283	BEVEL GEAR KEY	E-1306	PINION SHAFT FORK
E-1284	NUT	E-1307	FIRST PINION HOUSING
E-1285	BUSHING	E-1308	BEVEL GEAR HORIZ. L. H.
E-1286	SHAFT FORK PLUNGER	E-1309	PLUNGER
E-1287	NUT	E-1310	SPRING
E-1288	KEY	E-1311	BEVEL GEAR HORIZ. R. H.
E-1289	HANDWHEEL	E-1312	BUSHING
E-1290	HANDLE	E-1313	BEVEL GEAR STUD
E-1291	PINION HOUSING BUSH	E-1314	
E-1292	BEARING SPACER - OUTER	E-1315	
E-1293	BEARING SPACER - INNER	E-1316	



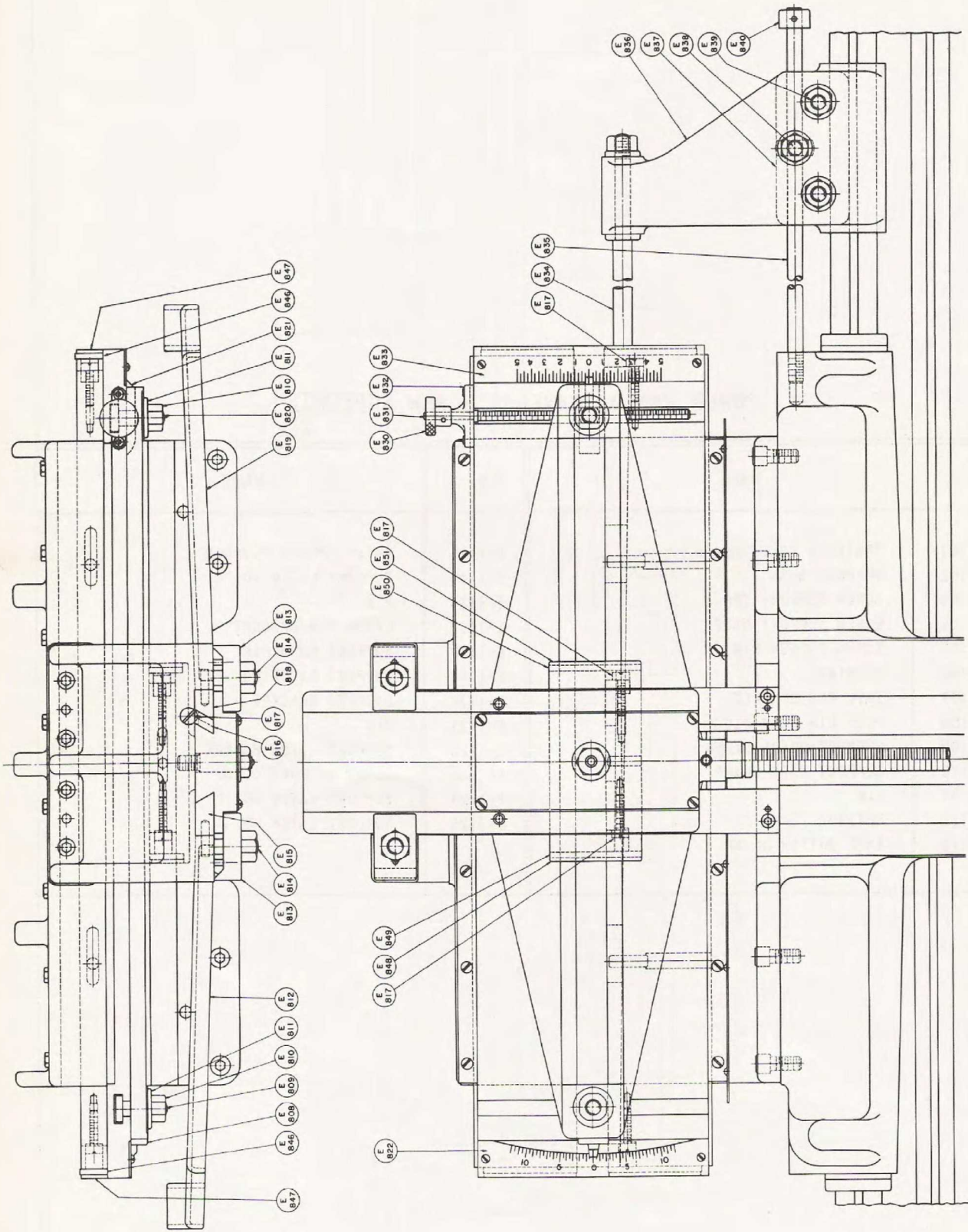


POWER RAPID TRAVERSE SCREW SUPPORTS

POWER RAPID TRAVERSE SCREW SUPPORTS

NO.	NAME	NO.	NAME
E-1101	TRAVERSE SCREW GUARD	E-1114	LATCH SPRING PLUNGER
E-1102	SUPPORT BUSH	E-1115	SUPPORT LATCH NO. 6
E-1103	SCREW SUPPORT TOP	E-1116	PIN
E-1104	SCREW SUPPORT BASE	E-1117	LATCH PIN BRACKET
E-1105	SUPPORT PUSH PIN	E-1118	SUPPORT PUSH PIN
E-1106	BUSHING	E-1119	SUPPORT LATCH NO. 2
E-1107	TAIL END BRACKET	E-1120	CARRIER BRACKET
E-1108	PUSH PIN BUMP PLUG	E-1121	PIN
E-1109	SUPPORT GUIDE WIPER	E-1122	SUPPORT GUIDE HANGER
E-1110	SUPPORT BASE CLAMP	E-1123	SCREW SUPPORT GUIDE
E-1111	PIN	E-1124	SUPPORT LATCH NO. 1
E-1112	SPRING	E-1125	SUPPORT LATCH NO. 3
E-1113	BASE BOTTOM CLAMP		



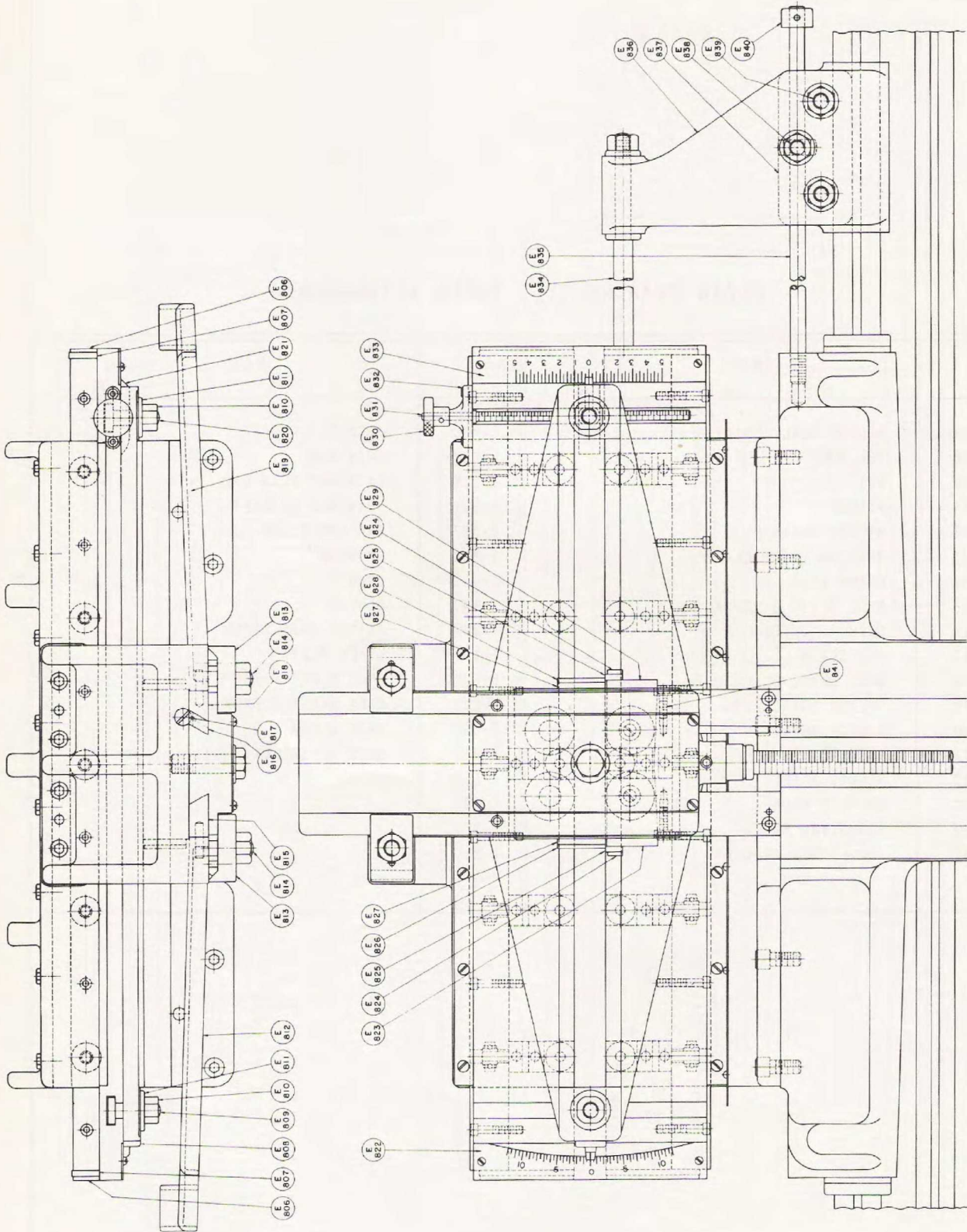


PLAIN BEARING TYPE TAPER ATTACHMENT

PLAIN BEARING TYPE TAPER ATTACHMENT

NO.	NAME	NO.	NAME
E-808	DEGREE SCALE POINTER	E-833	INCH SCALE
E-809	TEE BOLT	E-834	DRAW BAR
E-810	NUT	E-835	CARRIAGE DRAW BAR
E-811	WASHER	E-836	DRAW BAR BRACKET
E-812	SPLASH GUARD R. H.	E-837	BRACKET CLAMP
E-813	BEARING SLIDE CLAMP	E-838	EYEBOLT
E-814	CLAMP STUD	E-839	STUD
E-815	BRG. SLIDE GUIDE R. H.	E-840	COLLAR
E-816	BEARING SLIDE GIB	E-846	SWIVEL BASE WIPER
E-817	GIB SCREW	E-847	WIPER PLATE
E-818	BRG. SLIDE GUIDE L. H.	E-848	SHOE WIPER PLATE - R. H.
E-819	SPLASH GUARD L. H.	E-849	SHOE WIPER - FRONT
E-820	BINDER SCREW	E-850	SHOE WIPER - REAR
E-821	INCH POINTER	E-851	SHOE WIPER PLATE - L. H.
E-822	DEGREE SCALE	E-852	
E-830	KNURLED KNOB	E-853	
E-831	ADJUSTING SCREW	E-854	
E-832	ADJ. SCREW BRACKET	E-855	



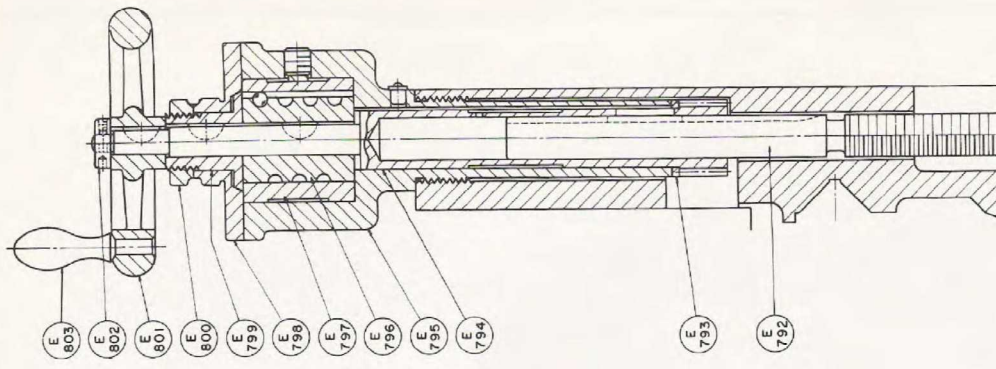


BALL BEARING TYPE TAPER ATTACHMENT

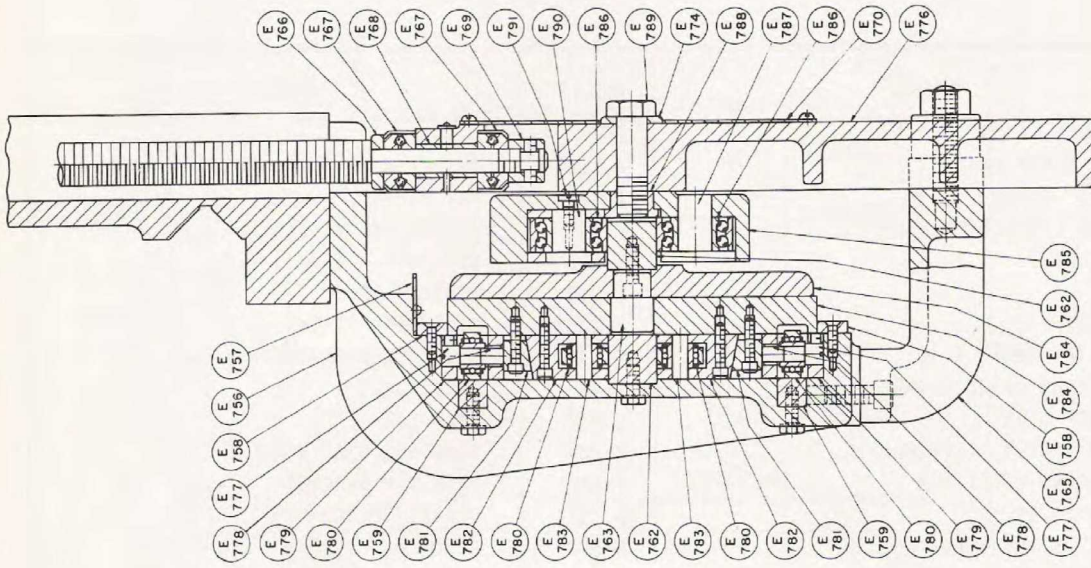
### BALL BEARING TYPE TAPER ATTACHMENT

NO.	NAME	NO.	NAME
E-806	WAY WIPER PLATE	E-826	SWIVEL WAY WIPER - R. H.
E-807	GUIDE WIPER	E-827	WAY WIPER
E-808	DEGREE SCALE POINTER	E-828	SWIVEL WAY WIPER - L. H.
E-809	TEE BOLT	E-829	SHOE GIB - R. H.
E-810	NUT	E-830	KNURLED KNOB
E-811	WASHER	E-831	ADJUSTING SCREW
E-812	SPLASH GUARD R. H.	E-832	ADJ. SCREW BRACKET
E-813	BEARING SLIDE CLAMP	E-833	INCH SCALE
E-814	CLAMP STUD	E-834	DRAW BAR
E-815	BRG. SLIDE GUIDE - R. H.	E-835	CARRIAGE DRAW BAR
E-816	BEARING SLIDE GIB	E-836	DRAW BAR BRACKET
E-817	GIB SCREW	E-837	BRACKET CLAMP
E-818	BRG. SLIDE GUIDE - L. H.	E-838	EYEBOLT
E-819	SPLASH GUARD - L. H.	E-839	STUD
E-820	BINDER SCREW	E-840	COLLAR
E-821	INCH POINTER	E-841	GIB SCREW
E-822	DEGREE SCALE	E-842	
E-823	SHOE GIB - L. H.	E-843	
E-824	SWIVEL WAY WIPER	E-844	
E-825	WAY WIPER	E-845	

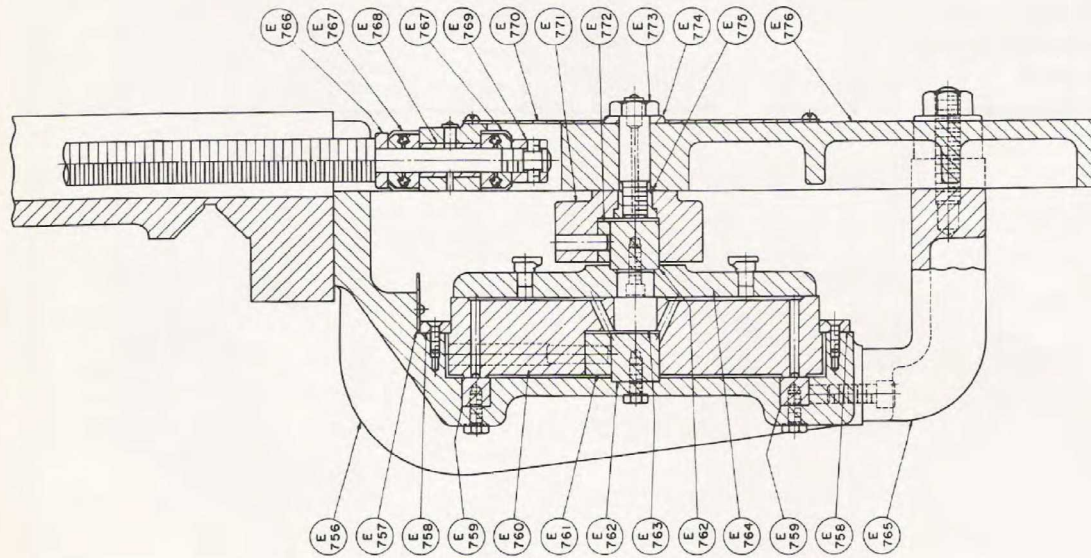




CROSS FEED SCREW ASSEMBLY WITH T. A.



BALL BEARING TYPE



PLAIN BEARING TYPE

TAPER ATTACHMENT

TAPER ATTACHMENT

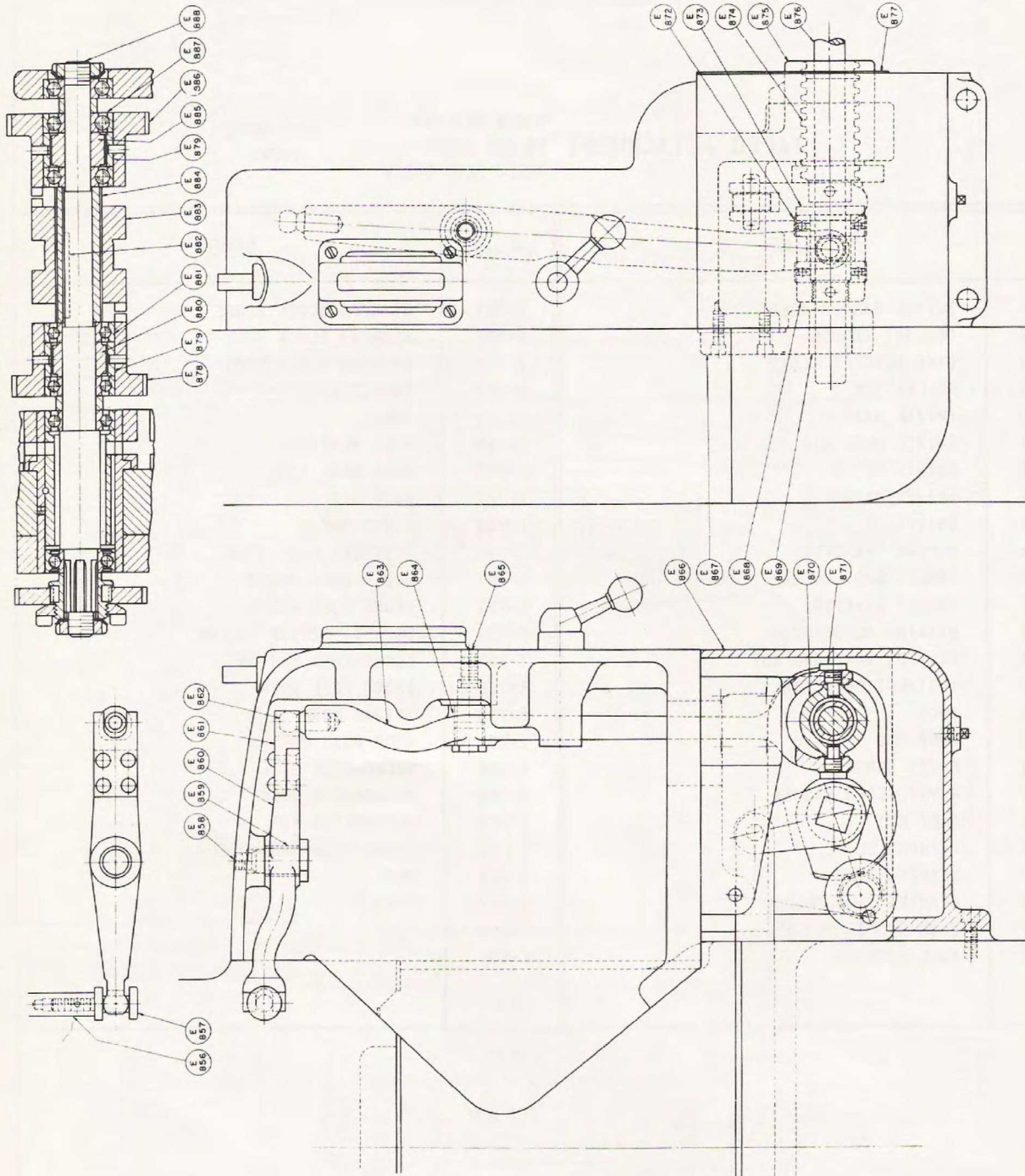
PLAIN BEARING  
 ROLLER BEARING  
 CROSS FEED SCREW

SECTIONAL  
 VIEWS

NO.	NAME	NO.	NAME
E-756	SWIVEL BASE BRACKET	E-781	BEARING BLOCK WEDGE
E-757	COOLANT TROUGH	E-782	BEARING BLOCK
E-758	BASE BRACKET PLATE	E-783	BEARING BLOCK STUD
E-759	ROLLER WAY	E-784	SWIVEL BASE
E-760	SWIVEL BASE	E-785	SHOE
E-761	SWIVEL BASE GIB	E-786	BALL BEARING
E-762	SWIVEL GUIDE	E-787	SHOE BRG. STUD
E-763	SWIVEL PLUG	E-788	SHOE NUT
E-764	SWIVEL	E-789	PIVOT SCREW
E-765	SUPPORT BRACKET	E-790	SHOE GIB BRG. STUD
E-766	THRUST BRG. COLLAR	E-791	GIB BINDER SCREW
E-767	THRUST BEARING	E-792	CROSS FEED SCREW
E-768	BEARING SLIDE BUSH	E-793	CR. FD. PINION COLLAR
E-769	CR. FD. SCR. END NUT	E-794	CROSS FEED PINION
E-770	INSTRUCTION PLATE	E-795	CROSS FEED BUSH
E-771	SHOE	E-796	SPIRAL BUSH
E-772	SHOE GIB	E-797	STOP BUSH
E-773	PIVOT SCREW	E-798	MICROMETER DIAL
E-774	PIVOT SCREW WASHER	E-799	MICROMETER BUSH
E-775	SHOE NUT	E-800	MICROMETER NUT
E-776	BEARING SLIDE	E-801	CROSS FEED HANDWHEEL
E-777	BEARING STUD	E-802	NUT
E-778	BEARING STUD BUSH	E-803	HANDLE
E-779	BASE ROLLER PLATE	E-804	
E-780	BALL BEARING	E-805	



LEAD SCREW REVERSE IN HEADSTOCK

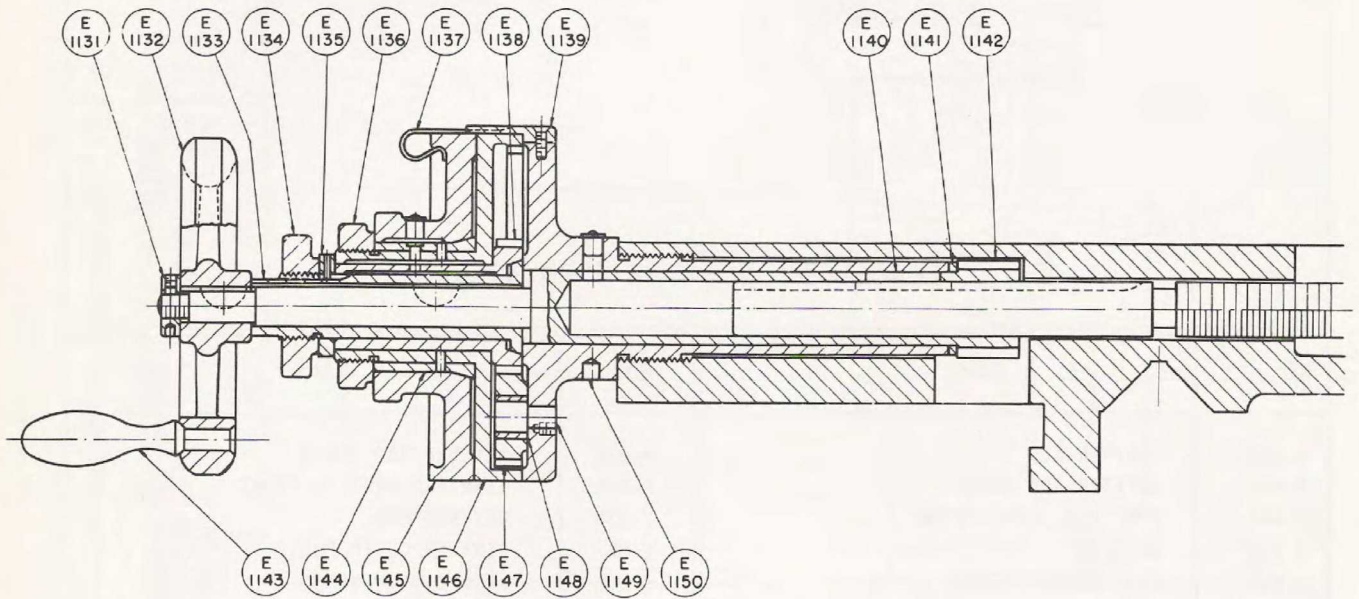


LEAD SCREW REVERSE FROM APRON

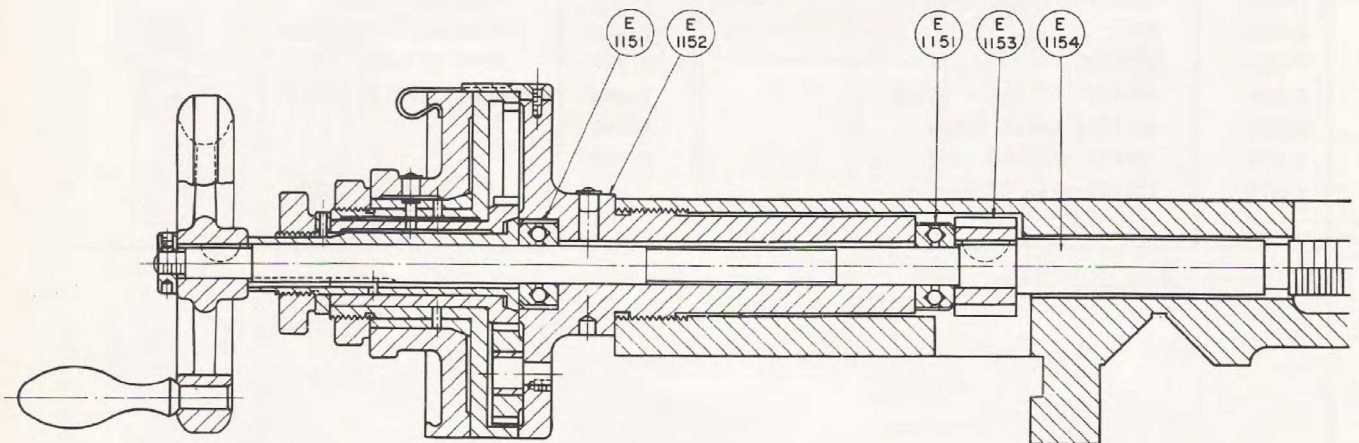
LEAD SCREW REVERSE FROM APRON

NO.	NAME	NO.	NAME
E-856	SHIFTER ROD	E-874	REVERSE ROD SCREW
E-857	SHIFTER ROD SPOOL	E-875	HEAD END BRKT. - FRONT
E-858	HOR. REV. LEVER STUD	E-876	REVERSE ROD
E-859	BUSHING	E-877	LINKAGE COVER PLATE
E-860	REV. HORIZ. LEVER	E-878	REV. CLUTCH GEAR
E-861	REV. LEVER PLATE	E-879	BEARING SPACER
E-862	REV. LEVER BALL PIN	E-880	BEARING SPACER
E-863	REV. VERTICAL LEVER	E-881	BALL BEARING
E-864	BUSHING	E-882	KEY
E-865	VERT. REV. LEVER STUD	E-883	REV. CLUTCH SPOOL
E-866	LINKAGE COVER	E-884	REV. CLUTCH SLEEVE
E-867	HEAD END BRKT. BRG.	E-885	BEARING SPACER
E-868	NUT	E-886	FORWARD CLUTCH GEAR
E-869	BUSHING	E-887	BALL BEARING
E-870	SHIFTER COLLAR - LOWER	E-888	FEED REVERSE SHAFT
E-871	SHIFTER LEVER SCREW	E-889	
E-872	THRUST BEARING	E-890	
E-873	THRUST BRG. BUSH		





DUAL DIALS WITH TAPER ATTACHMENT



DUAL DIALS WITHOUT TAPER ATTACHMENT

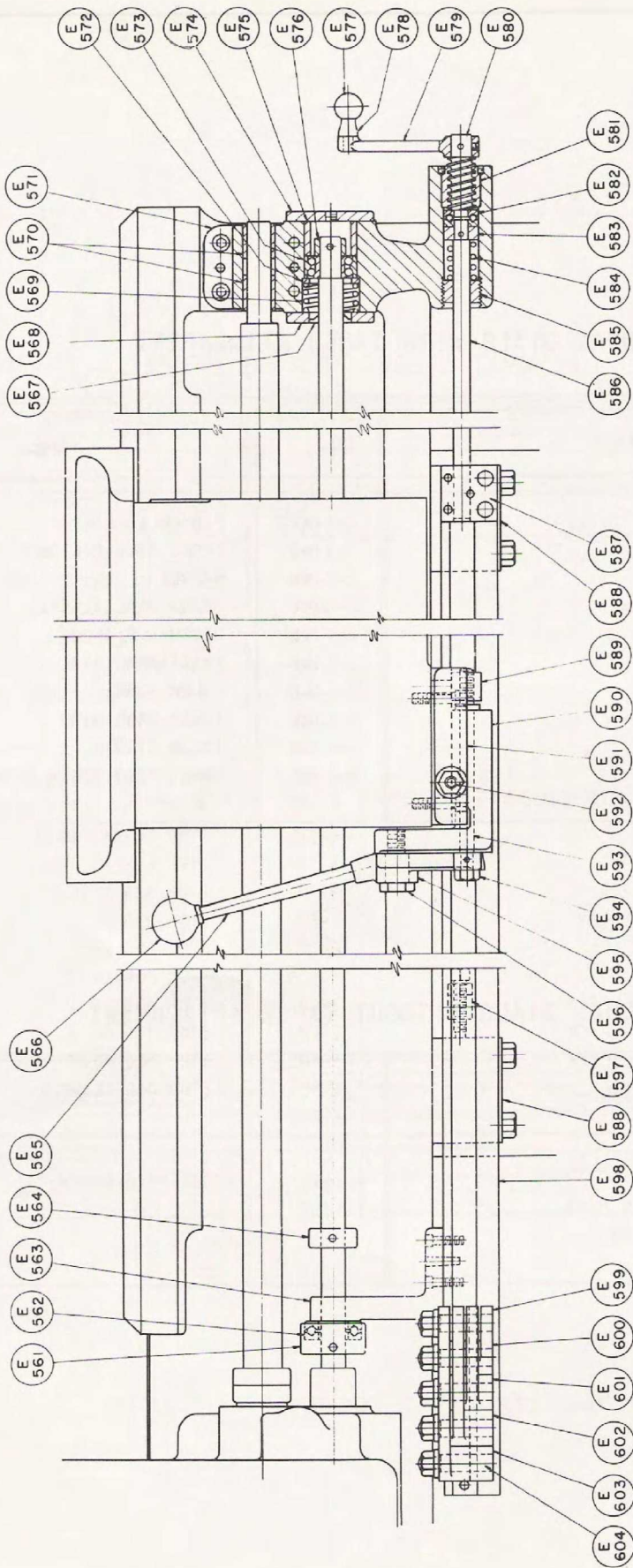
DUAL DIALS WITH TAPER ATTACHMENT

NO.	NAME	NO.	NAME
E-1131	NUT	E-1141	PINION COLLAR
E-1132	HANDWHEEL	E-1142	CROSS FEED PINION
E-1133	SLEEVE	E-1143	HANDLE
E-1134	SLEEVE NUT	E-1144	FRAC. DIAL SLEEVE
E-1135	SLEEVE WASHER	E-1145	DECIMAL DIAL
E-1136	DIAL LOCK NUT	E-1146	FRACTIONAL DIAL
E-1137	SPRING CLIP	E-1147	IDLER GEAR
E-1138	SLEEVE GEAR	E-1148	IDLER GEAR BUSH
E-1139	POINTER	E-1149	IDLER STUD
E-1140	KEY	E-1150	CROSS FEED SCREW BUSH

DUAL DIALS WITHOUT TAPER ATTACHMENT

NO.	NAME	NO.	NAME
E-1151	THRUST BEARING	E-1154	CROSS FEED SCREW
E-1152	CROSS FEED SCREW BUSH	E-1155	
E-1153	CROSS FEED PINION		



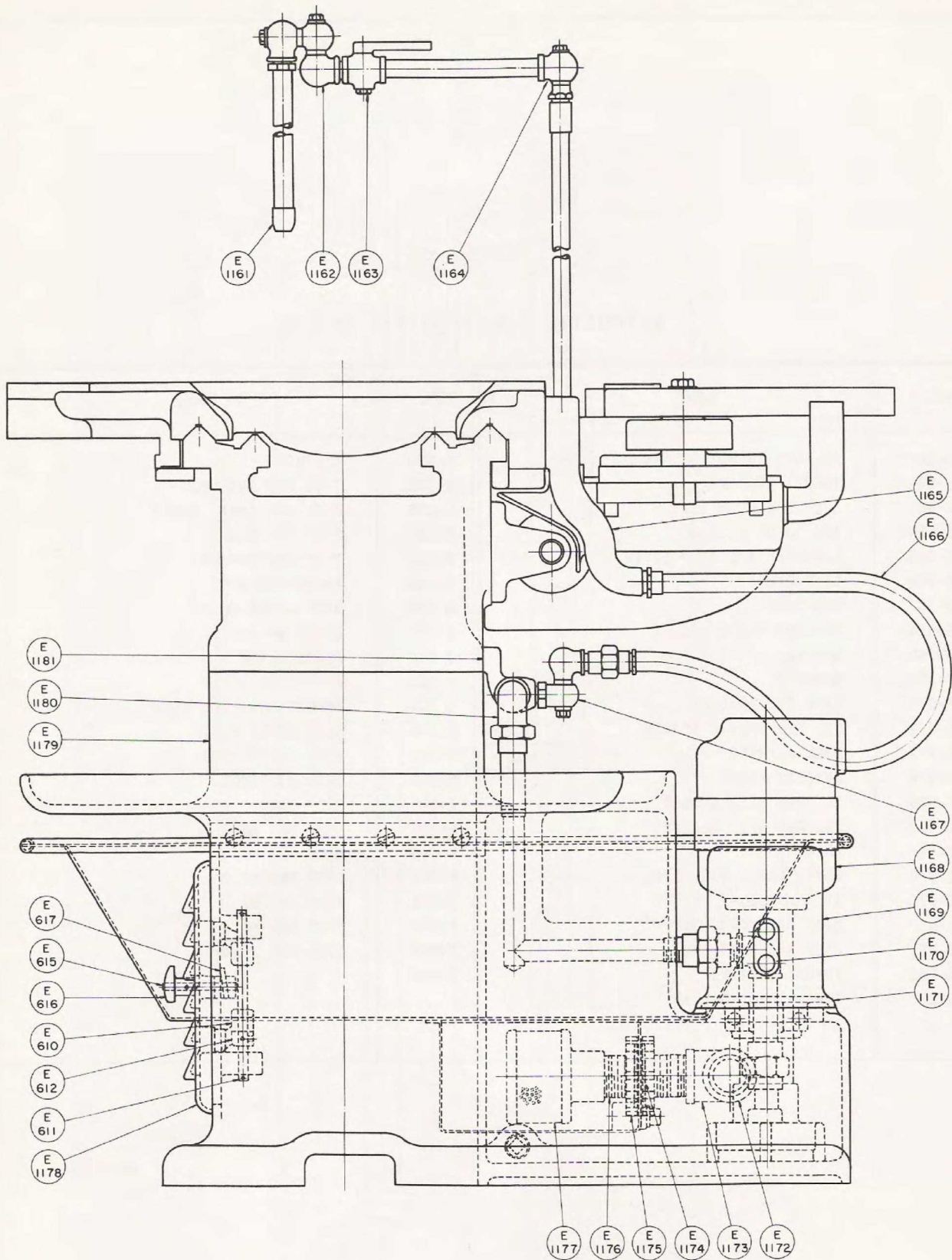


AUTOMATIC LONGITUDINAL STOPS

## AUTOMATIC LONGITUDINAL STOPS

NO.	NAME	NO.	NAME
E-561	FD. ROD THRUST COLLAR	E-584	SPRING
E-562	THRUST BEARING	E-585	TAIL END BRG. NUT
E-563	STOP BAR PUSH BRKT.	E-586	STOP BAR CONT. SHAFT
E-564	ADJ. STOP COLLAR	E-587	STOP BAR BLOCK
E-565	LONGITUDINAL STOP LEVER	E-588	STOP DOG HANGER
E-566	LEVER KNOB	E-589	ADJUSTING NUT
E-567	OIL SEAL	E-590	STOP LEVER SLIDE
E-568	BRACKET PLATE - L. H.	E-591	SLIDE BRACKET
E-569	SPRING	E-592	SLIDE CLAMP
E-570	BUSHING	E-593	ADJUSTING SCREW
E-571	TAIL END BRACKET	E-594	ADJUSTING SCREW HEAD
E-572	FD. ROD SPRING SPACER	E-595	STOP LEVER PLATE
E-573	BALL BEARING	E-596	STOP LEVER STUD
E-574	BRACKET PLATE - R. H.	E-597	STOP BAR STUD
E-575	FD. ROD BRG. SPACER	E-598	STOP BAR
E-576	FD. ROD BRG. COLLAR	E-599	STOP DOG NO. 1
E-577	KNOB	E-600	STOP DOG NO. 2
E-578	CONT. LEVER BALL STUD	E-601	STOP DOG NO. 3
E-579	STOP BAR CONT. LEVER	E-602	STOP DOG NO. 4
E-580	STOP BAR CONT. SCREW	E-603	STOP DOG NO. 5
E-581	STOP BAR CONT. NUT	E-604	STOP DOG CLAMP
E-582	THRUST BEARING	E-605	
E-583	CONT. SHAFT COLLAR		



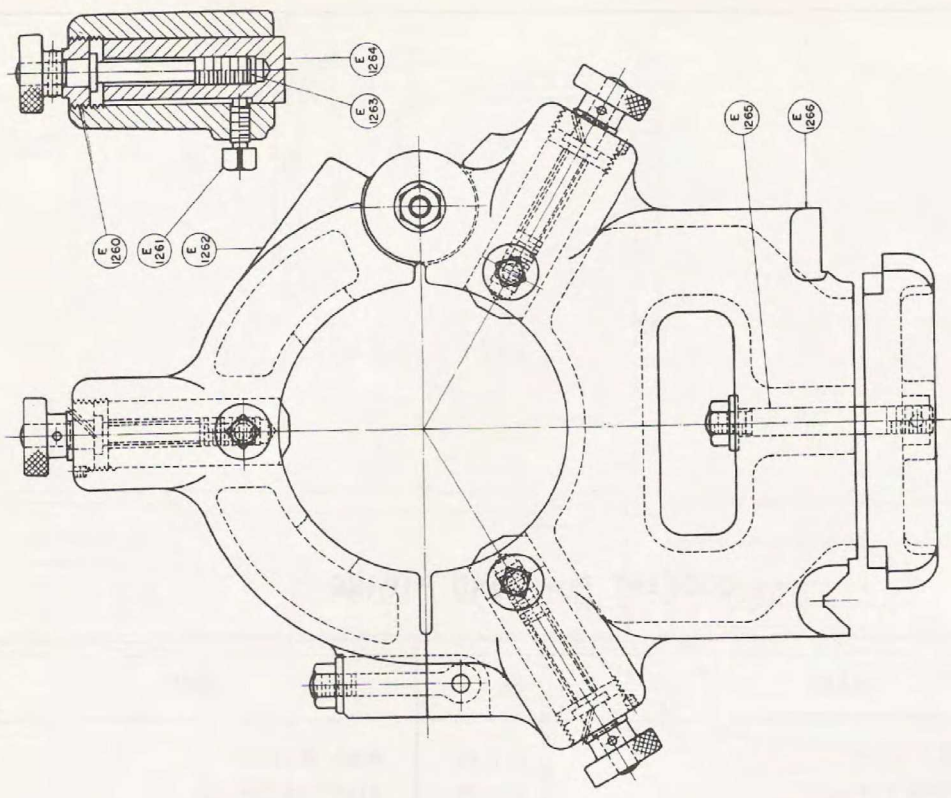
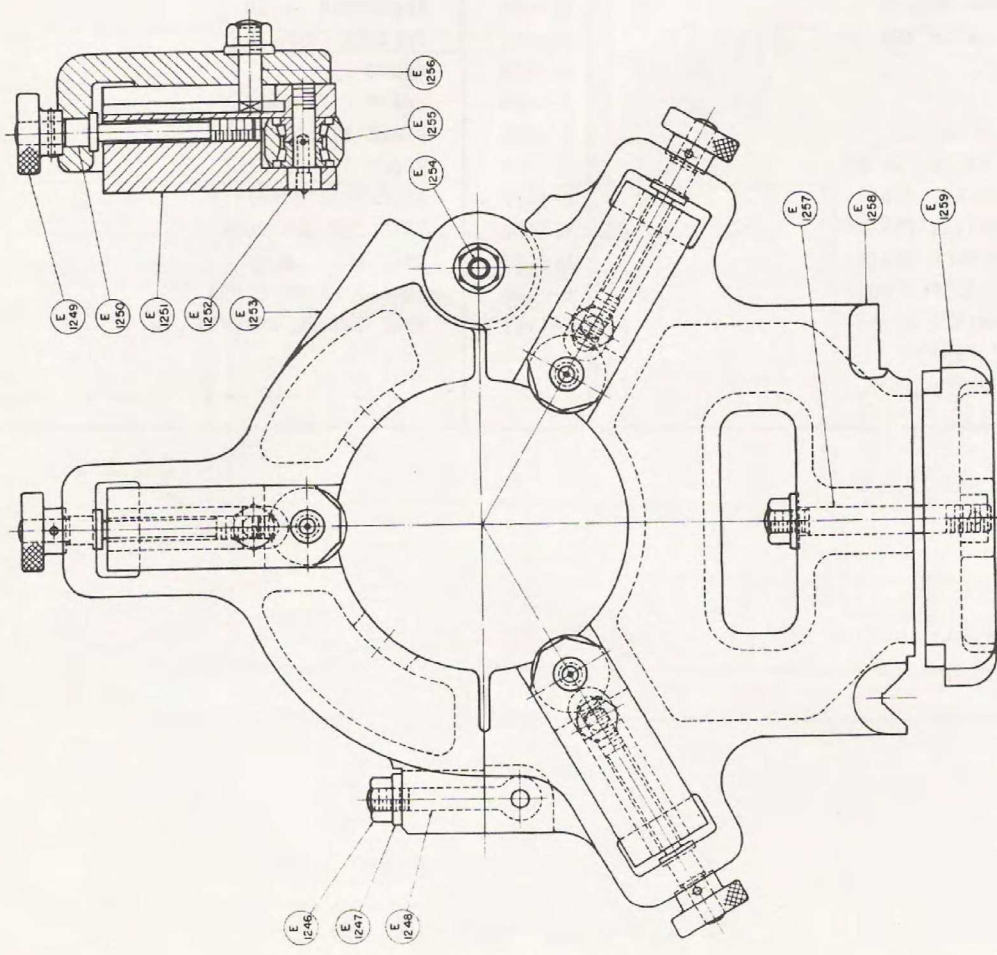


COOLANT PUMP AND PIPING

### COOLANT PUMP AND PIPING

NO.	NAME	NO.	NAME
E-610	INVISIBLE HINGE	E-1169	PUMP BRACKET
E-611	DOOR HINGE PIN	E-1170	STARTING SWITCH
E-612	HINGE PIN COLLAR	E-1171	RESERVOIR COVER
E-615	SPIRAL LATCH ROD	E-1172	DRESSER COUPLING
E-616	KNOB	E-1173	CROSS
E-617	SPIRAL LATCH	E-1174	DRAIN PIPE GASKET
E-1161	FLEXIBLE NOZZLE	E-1175	DRAIN PIPE
E-1162	DOUBLE SWIVEL JOINT	E-1176	DRAIN TANK NIPPLE
E-1163	INVERTED KEY STOP	E-1177	RESERVOIR STRAINER
E-1164	PLAIN SWIVEL PENDANT	E-1178	TAIL END LEG DOOR
E-1165	COOLANT PIPE BRACKET	E-1179	TAIL END LEG
E-1166	COOLANT SUPPLY HOSE	E-1180	FEMALE UNION ELBOW
E-1167	PLAIN SWIVEL JOINT	E-1181	HOSE SWIVEL BRACKET
E-1168	COOLANT PUMP		





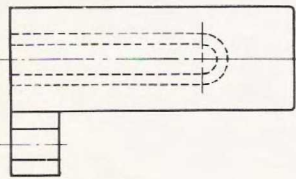
STEADY REST

STEADY REST (SPECIFY OPENING)

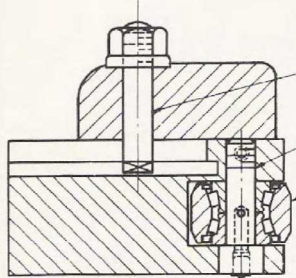
NO.	NAME	NO.	NAME
E-1246	NUT	E-1259	CLAMP
E-1247	WASHER	E-1260	JAW SCREW PLUG
E-1248	CLAMP ROD	E-1261	JAW LOCK SCREW
E-1249	KNOB	E-1262	TOP
E-1250	JAW SCREW	E-1263	JAW SCREW
E-1251	JAW	E-1264	JAW
E-1252	ROLLER JAW STUD	E-1265	CLAMP STUD
E-1253	TOP	E-1266	BASE
E-1254	HINGE STUD	E-1267	
E-1255	ROLLER BEARING	E-1268	
E-1256	JAW BOLT	E-1269	
E-1257	CLAMP STUD	E-1270	
E-1258	BASE		



PLAIN JAW



ROLLER JAW



E 1226

E 1227

E 1228

E 1229

E 1230

E 1236

E 1237

E 1236

E 1235

E 1234

E 1233

E 1240

E 1239

E 1241

E 1232

E 1231

SIZE OPENING

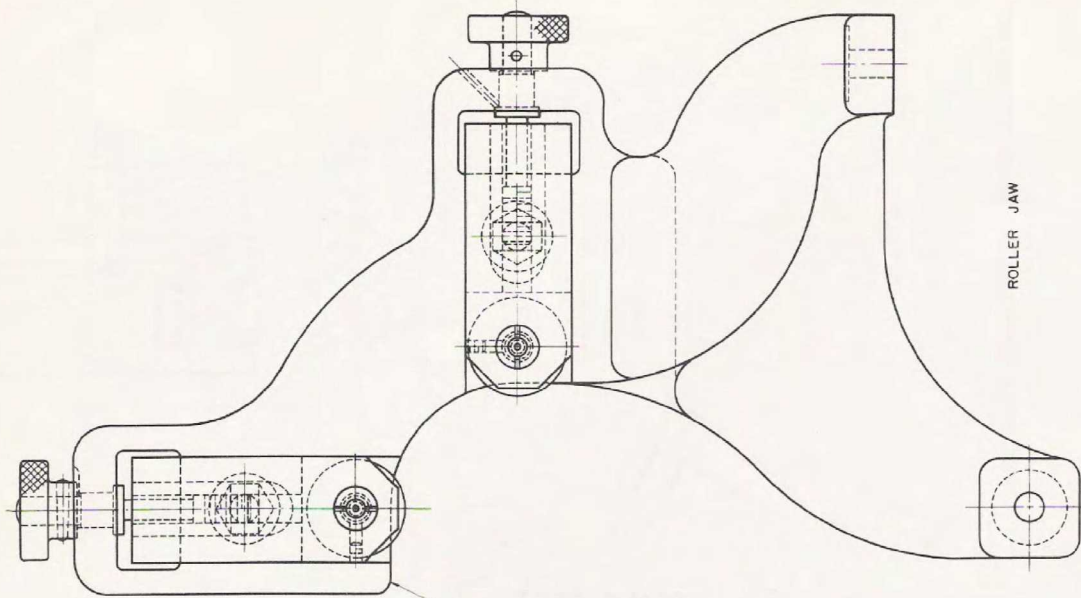
STEADY REST

NOTE: --WHEN ORDERING PARTS, SPECIFY SIZE OPENING.

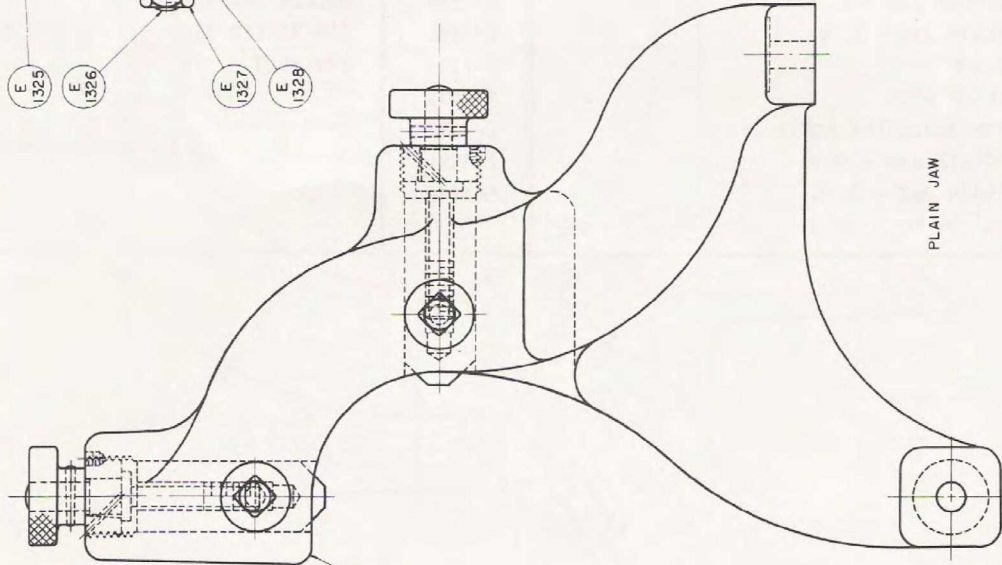
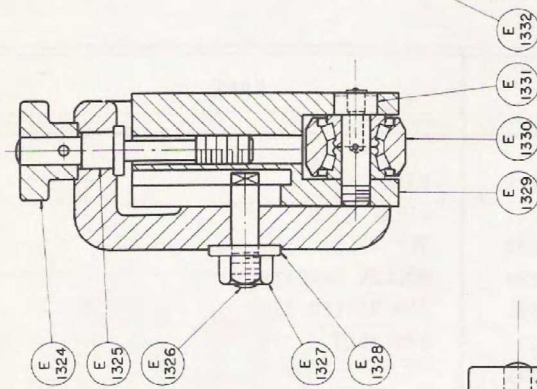
STEADY REST

NO.	NAME	NO.	NAME
E-1226	NUT	E-1236	BASE
E-1227	WASHER	E-1237	HINGE STUD
E-1228	CLAMP ROD	E-1238	TOP
E-1229	ROLLER JAW - L. H.	E-1239	ROLLER BEARING
E-1230	PLAIN JAW - L. H.	E-1240	JAW ROLLER STUD
E-1231	CLAMP	E-1241	JAW BOLT
E-1232	CLAMP STUD	E-1242	
E-1233	JAW ADJUSTING SCREW	E-1243	
E-1234	ROLLER JAW - R. H.	E-1244	
E-1235	PLAIN JAW - R. H.	E-1245	

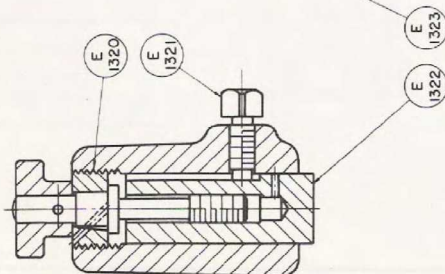




ROLLER JAW



PLAIN JAW



FOLLOW REST

FOLLOW REST

NO.	NAME	NO.	NAME
E-1320	JAW SCREW PLUG	E-1327	NUT
E-1321	JAW LOCK SCREW	E-1328	WASHER
E-1322	JAW	E-1329	ROLLER JAW
E-1323	FOLLOW REST	E-1330	ROLLER BEARING
E-1324	KNOB	E-1331	JAW ROLLER STUD
E-1325	JAW ADJUSTING SCREW	E-1332	FOLLOW REST
E-1326	JAW BOLT		