

Technical Manual
1-007
Issued: 11/93
Supersedes:4/88

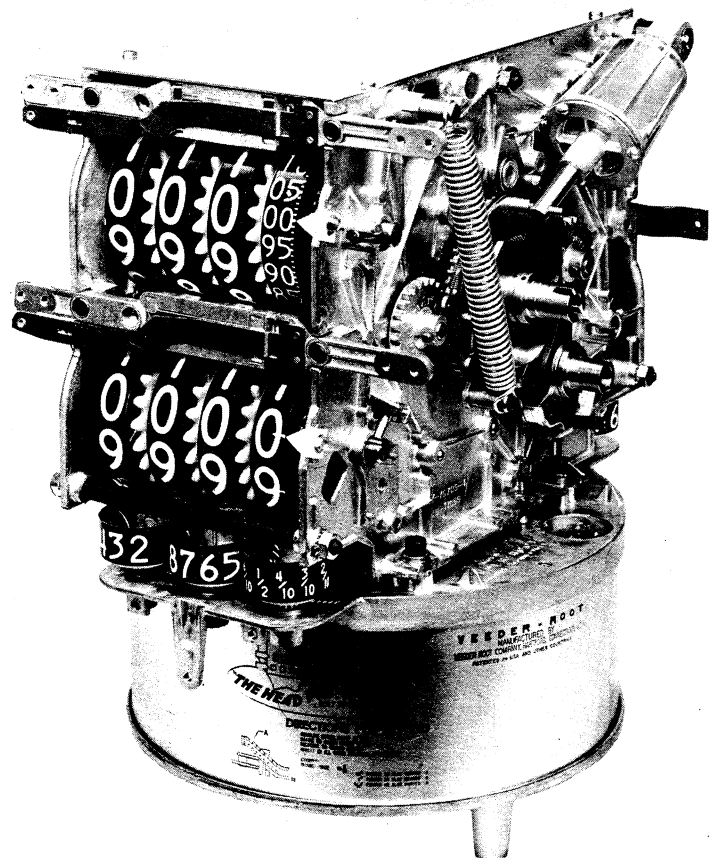
Manual No. 231107

Parts List

MODEL VR101 COMPUTER

4 WHEEL
FULL RANGE
2:1 RATIO

4 WHEEL
VARIABLE RANGE
2:1 RATIO

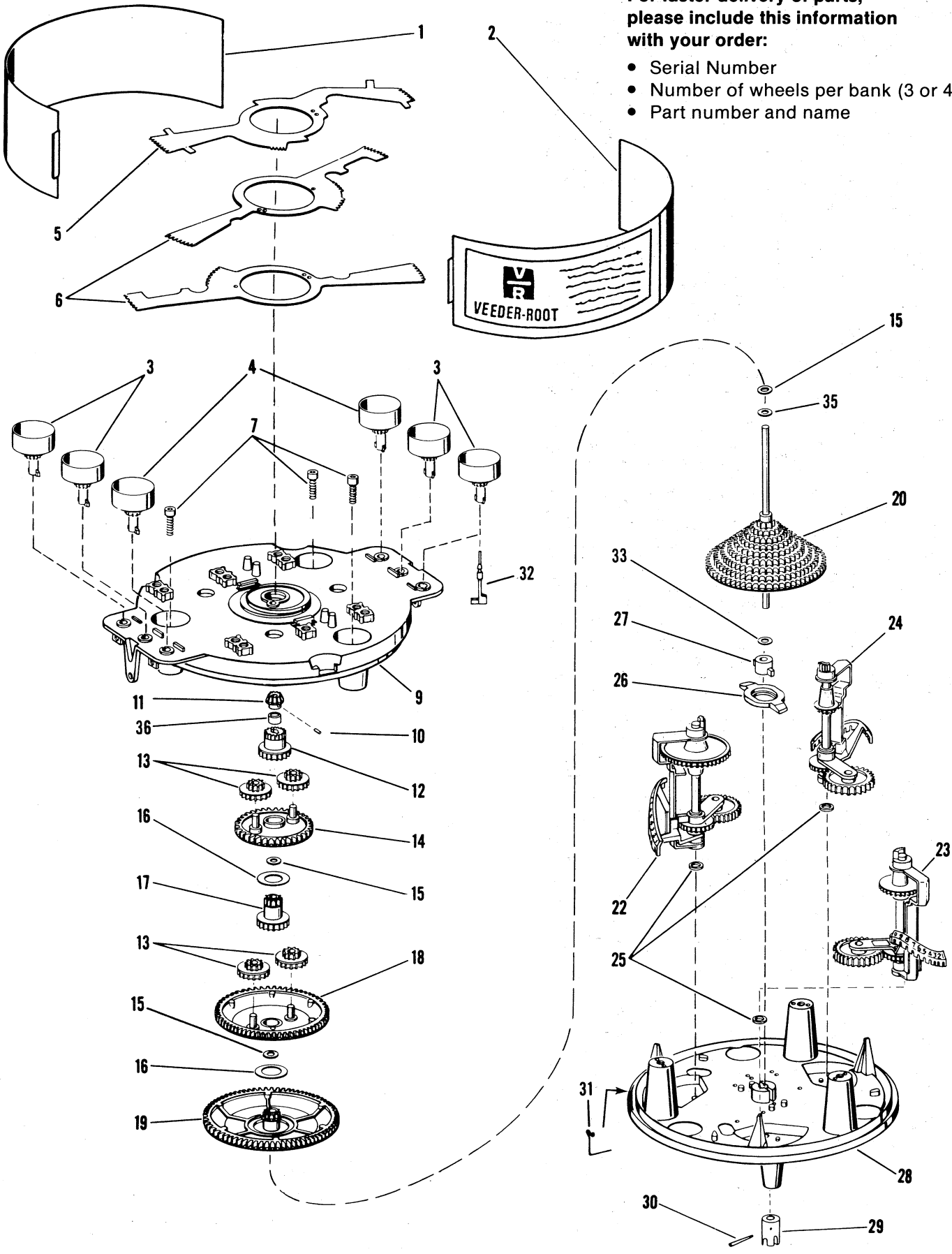


VEEDER-ROOT 
Petroleum Products

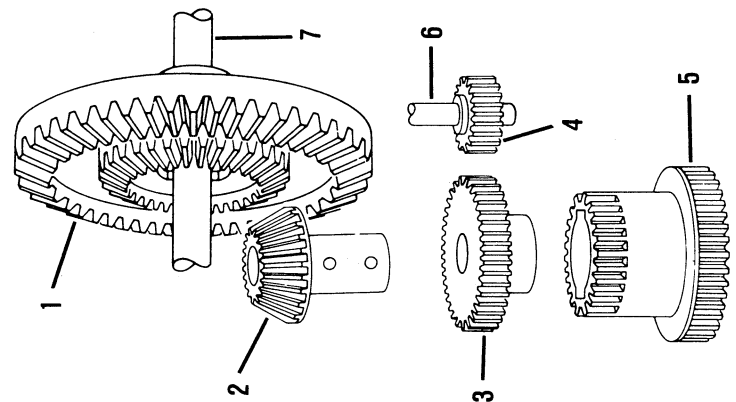
Variator Section

For faster delivery of parts,
please include this information
with your order:

- Serial Number
- Number of wheels per bank (3 or 4)
- Part number and name



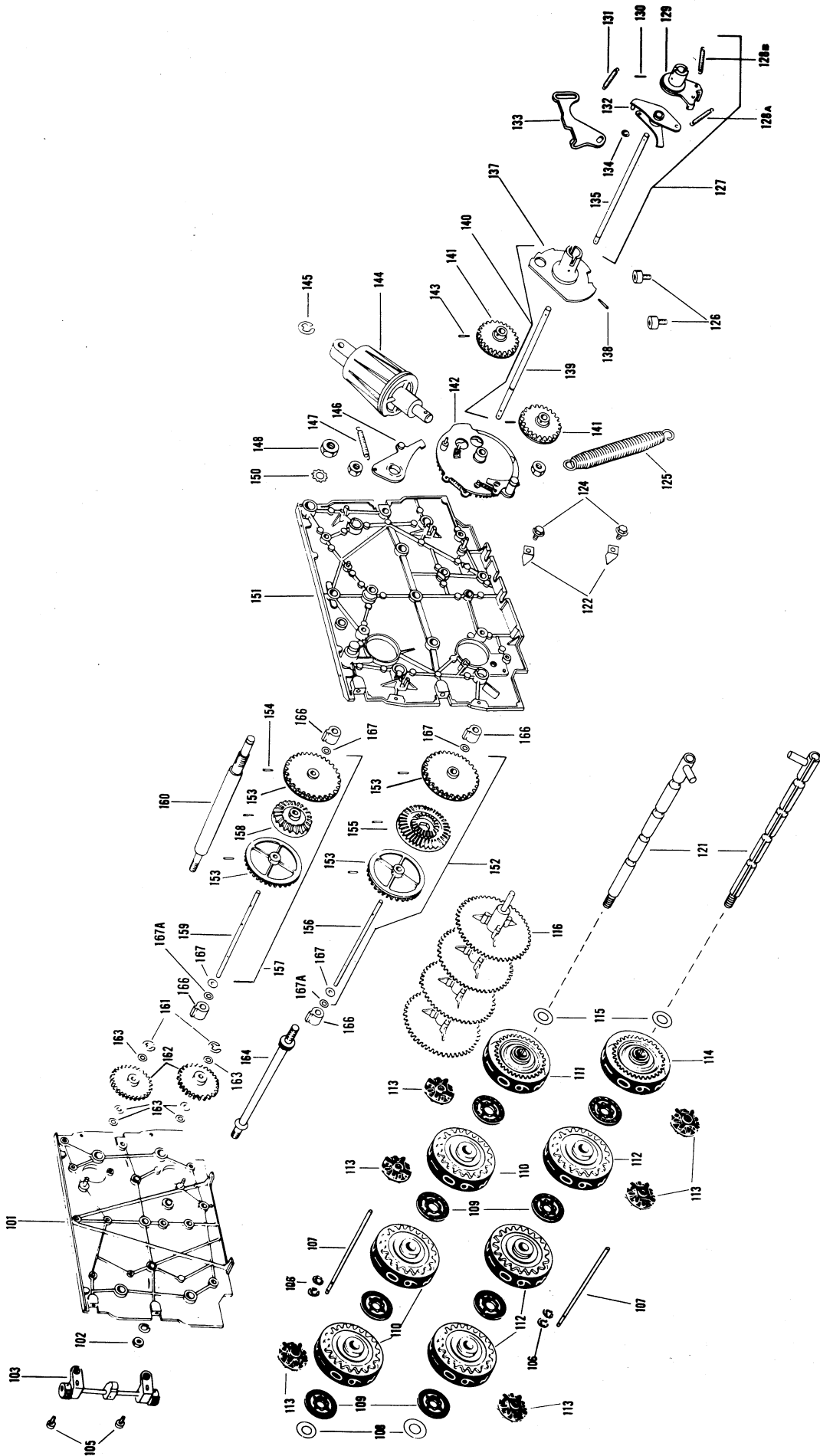
2:1 EXTENDED RANGE VARIATOR



ITEM NO.	U.S. PART NO.	U.K. PART NO.	DESCRIPTION	QUANTITY
1	313934-010	2071-087	Sliding Band	1
2	326811-013		Door Grp-Printed	1
3	313935-042	7771-906	1c & 10c Price Wheel Group (Incl. 32)	4
4	313935-041		1/10c Price Wheel Group (Fractions) (Incl. 32)	2
	313935-042	7771-906	1c & 10c Price Wheel Group (Whole Nos.) (Includes 32)	2
5	313944-010	3571-027	Link Gear-Price	1
6	313943-010	3571-095	Link Gear-Price	2
7	510500-326	5471-177	Screw	3
8	Deleted			
9	313946-012		Upper Base Group (Incl. 126)	1
10	510106-002	4606-010	Pin	1
11	403010-005	3010-005	Gear Quantity Bevel	1
12	319115-001	7778-127	Gear Intermediate Upper	1
13	313963-010	3071-148	Gear Planetary	4
14	313964-010	7771-904	Gear Integrator (10c)	1
15	74800-58-157	6104-023	Washer	3
16	11071-DH-209	6104-059	Washer	2
17	319116-001	7778-126	Gear Intermediate	1
18	313966-010	7771-905	Gear Integrator (1c)	1
19	G78951-1-005	3006-013	Gear Integrator (1/10c)	1
20	313968-014	7779-718	Cone Gear Group	1
21	Deleted			
22	313959-010	7771-903	10 Cent Range Arm Group	1
23	313957-010	7771-902	1 Cent Range Arm Group	1
24	313948-010	7771-899	1/10 Cent Range Arm Group	1
25	11071-MO-735	6104-092	Washer	3
26	313983-010	4571-049	Pawl — No Back	1
27	313980-011	1171-092	Bushing-Keyed	1
28	313971-010	2871-034	Lower Base Group	1
29	313985-011	2401-022	Coupling	1
30	510122-002	4606-013	Groove Pin 3/32 x 9/16	1
31	325162-001	5271-210	Retainer, Range Arm	1
32	317028-001	4571-050	Detent	6
33	11071-CU-183	6104-029	Washer	1
34	Deleted			
35	11071-CC-141	6104-026	Washer	1
36	884008-433	5371-252	Spacer	1

ITEM NO.	U.S. PART NO.	U.K. PART NO.	DESCRIPTION	QUANTITY
1	403005-035	3005-035	Gear	1
2	403010-005	3010-005	Gear	1
3	403071-022	3071-022	Gear (32T)	1
4	403071-020	3071-020	Gear (12T)	1
5	G319115-001	7778-127	Gear	1
6	318725-001		Shaft	1
7	318701-002	5573-150	Shaft	1

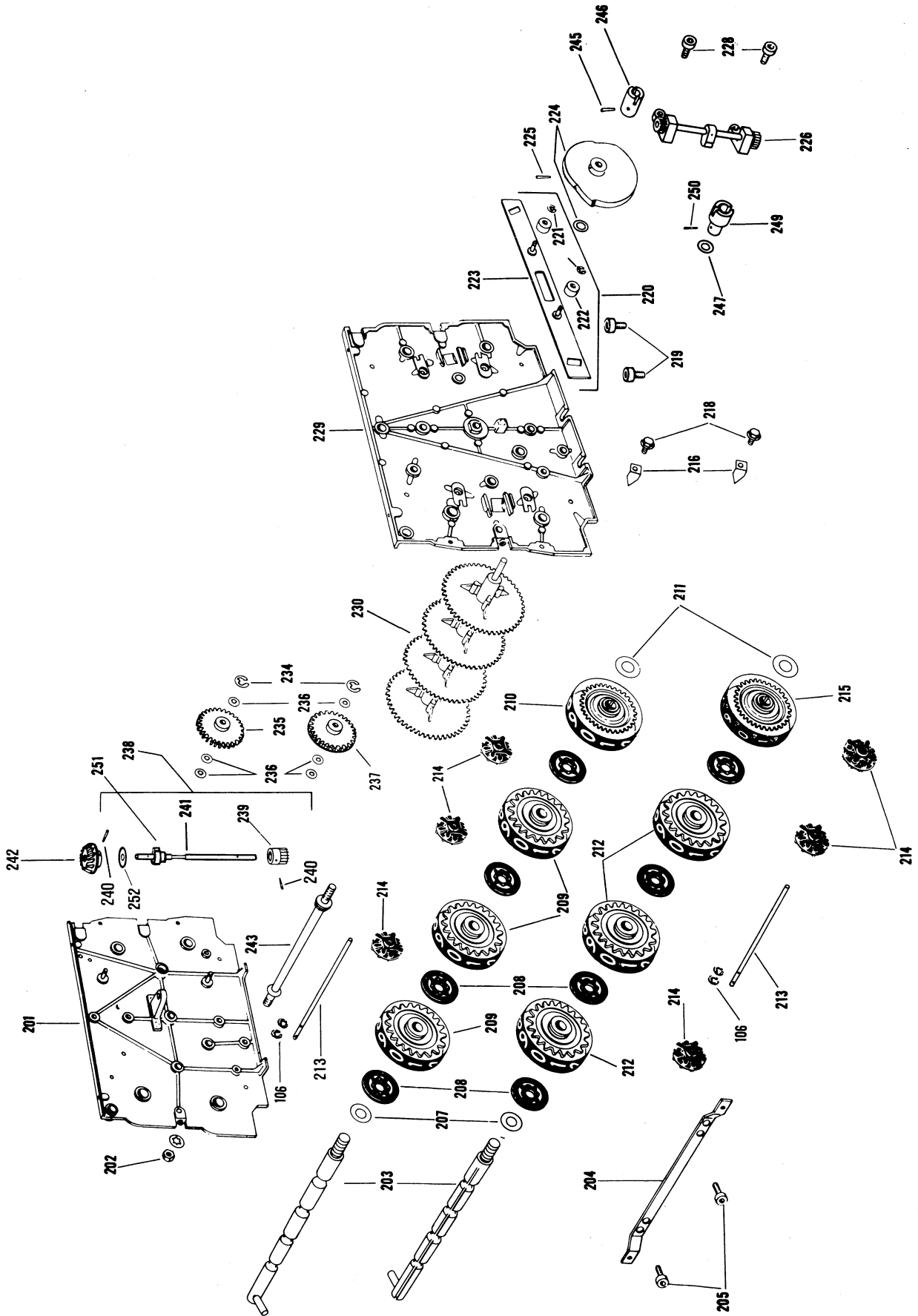
Counter Section
Front (Totalizer) Side



ITEM NO.	U.S. PART NO.	U.K. PART NO.	DESCRIPTION	QUANTITY	ITEM NO.	U.S. PART NO.	U.K. PART NO.	DESCRIPTION	QUANTITY
101	86743-3-015		Left Hand Frame	1	138	510105-178	4604-038	Groove Pin 1/8" x 11/16"	2
102	511019-030	4102-008	Tie Rod Nut 1/4"	9	139	86661-2-010	5571-113	Center Shaft	1
	510003-006	6106-019	Lock Washer	9	140	86999-2-010	7771-251	Center Shaft Assb. (Incl. 137-139)	1
103	77062-3-015	7130-004	Rocker Shaft Assb.	2	141	76751-1-005	3006-116	Reset Driven Gear	2
104	Deleted				142	86672-1-006		Reset Driven Gear Assb.	1
105	510500-328	5471-175	Screw	4		310300-257	5202-080	External Spring	1
106	511807-001	4010-007	Retaining Ring	4		328528-100	5202-072	External Spring - Reset Latch	1
107	329409-001	5573-126	Pinion Shaft	4		14427-J0-422	5206-025	Internal Spring	1
108	74800-63-167		Washer 0.020	As Req.		76978-1-005	4506-003	Reset Latch Pawl	1
	74800-80-201	6104-087	Washer 0.010	As Req.		511807-001	4010-007	Truarc	2
	74800-81-203	6104-088	Washer 0.015	As Req.	143	510100-104-044	4602-020	Groove Pin 3/32" x 5/16"	2
	74800-82-205	74800-205	Washer 0.025	As Req.	144	77053-2-010	7245-005	Dashpot Group	1
	74800-83-207	74800-207	Washer 0.030	As Req.	145	511819-001	4010-016	Truarc	3
	74800-84-209	74800-209	Washer 0.035	As Req.	146	77368-1-005	7095-012	Ratchet Stop Pawl	1
	885005-793		Washer	As Req.	147	14427-RK-842		Ratchet Stop Pawl Spring	2
109	77481-1-006	7188-002	Reset Disc Pinion	16	148	511027-001	4102-016	Nut (Large Tie Rod)	1
110	See LE Sheet		Rev. Mid. & Left Money Wheel	3	150	510005-001	4606-021	Lock Washer	1
111	See LE Sheet		Rev. Right Hand Money Wheel	1	151	322420-009		Right Hand Frame	1
112	See LE Sheet		Rev. Mid. & Left Quant. Wheel	3	152	G318702-001		Lower Drive Assb. (Incl. 153-156)	1
113	73154-3-016	4371-021	Pinion	6	153	76765-1-005		Gear	4
114	See LE Sheet		Rev. Right Hand Quant. Wheel	3	154	510114-001	3071-550	Groove Pin 5/64" x 1/2"	6
115	74800-80-201	6104-087	Washer	4	155	403005-035	3006-035	Lower Bevel Drive Gear	1
116	310763-110	7771-370	Rev. Reset Gear Grp.	1	156	318701-002	5573-150	Lower Drive Shaft Ext. 0.360	1
121	77070-3-015	7778-037	Rev. Wheel Shaft	2	157	317482-002	602-287	Upper Drive Assb. (Incl. 153, 154, 158, 159)	1
122	33620-P-082	4018-008	Pointer (White)	2	158	76816-1-005		Upper Bevel Drive Gear	1
124	510500-330	5405-026	Screw-Pointer	2	159	76819-4-020		Upper Drive Shaft Ext. 0.360	1
125	14427-MG-598	5202-090	Reset Spring	1	160	77005-2-010	6001-005	Large Tie Rod	1
126	510500-325	5471-419	Screw	4	161	511810-001	4010-014	Truarc	1
	405471-416	5471-416	Screw With Hole Thru Head	4	162†	76764-1-007	3071-830	Idler Gear	1
127	78497-6-030	7778-747	Trip Lever Reset Assb. (Incl. 128A-135)	1	163	11071-FN-325	601-748	Washer	2
128A	14427-NN-673	5202-073	Trip Lever Spring (Light)	1		11071-NO-791	6171-019	Washer	As Req.
128B	14427-OG-714	5202-076	Trip Lever Spring (Heavy)	1		11071-FR-333	6171-019	Washer	As Req.
129	77803-2-010	7181-002	Trip Lever Reset	1	164	27719-20-115	6001-004	Tie Rod	As Req.
130	510125-001	4606-029	Groove Pin 3/32" x 11/16"	3	166	884008-635	1171-284	Bushing	4
131	14427-M0-614	5202-071	Stop Pawl Spring	2	167	11071-DF-205	6104-166	Washer	4
132	77034-2-010		Stop Pawl Hub Assy.	1	167A	11071-DF-205	6104-166	Washer	As Req.
133	77830-2-012	4506-004	Trip Lever Lock Pawl	1					
134	511807-001	4101-007	Retaining Ring	1					
135	76855-4-020	5522-038	Trip Lever Shaft	1					
137	86665-1-005	7031-010	Shaft Cam	1					

† Computers equipped with rear-mounted Series 1871 Pulser may contain a tan, no-back money idler gear P/N 325861-001.

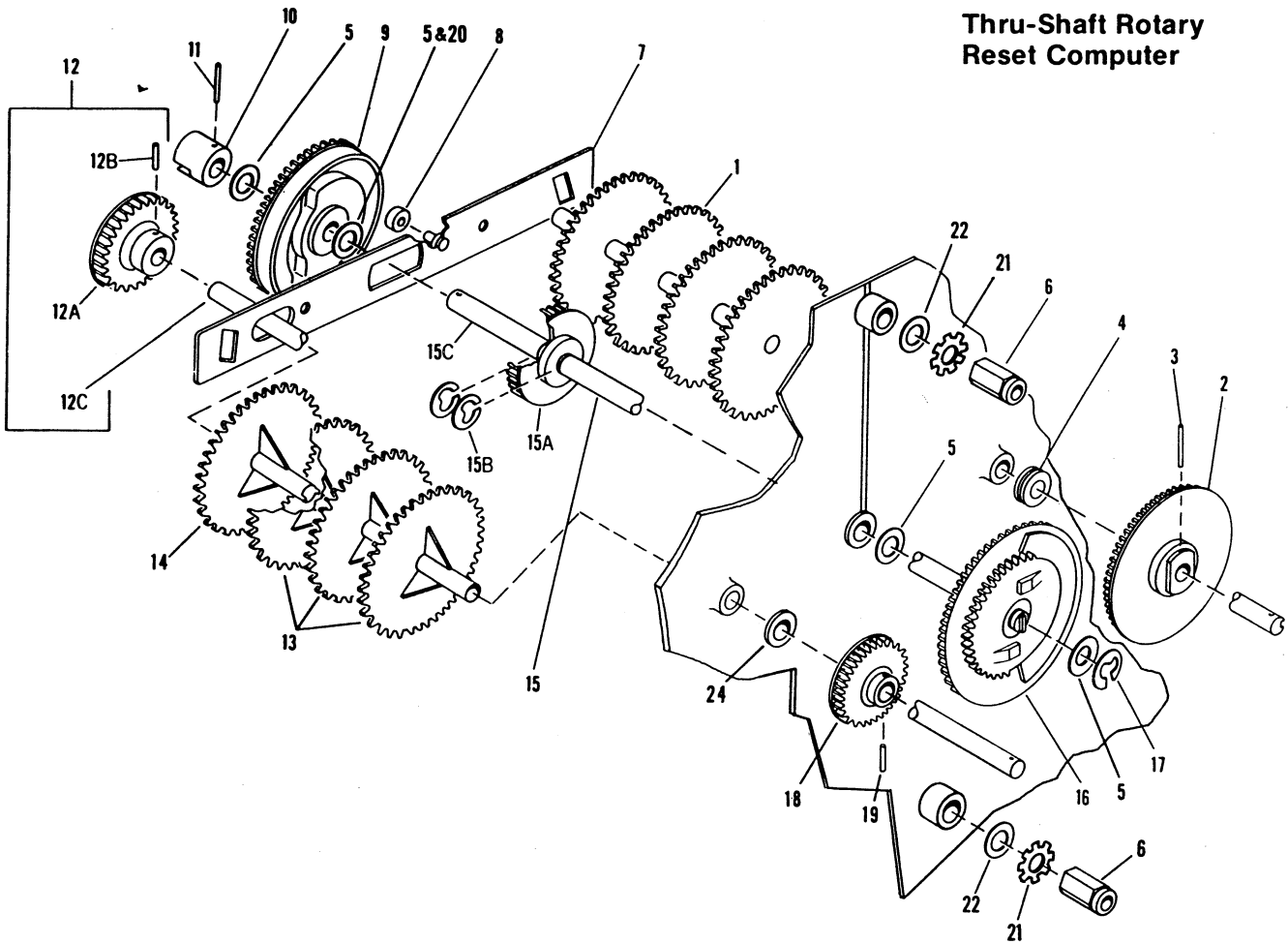
Counter Section
Rear Side



ITEM NO.	U.S. PART NO.	U.K. PART NO.	DESCRIPTION	QUANTITY
227	Deleted		Screw	4
228	See Item 105		Left Hand Frame	1
229	See Item 101		Reg. Reset Gear Grp.	1
230	310764-110	7771-369	Truarc	5
234	511810-001	4010-014	Idler Gear	1
235	76764-1-007	3071-830	Washer	As Req.
236	11071-FN-325	601-748	Washer	As Req.
	11071-NO-791		Washer	As Req.
237	11071-FR-333	6171--019	Idler Gear. GRP — Quantity	
238	325960-001		Vertical Shaft Assb.	1
	322427-005		(Incl. 239 thru 242, 251, & 252)	
239	403071-020	3071-020	Gear (12 Teeth)	1
240	510108-001	4606-012	Groove Pin 1/16" × 1/2"	2
241	318725-001		Vertical Shaft	1
242	27759-B-010	3071-187	Gear	1
243	See Item 164		Tie Rod	4
245	510105-178	4606-038	Groove Pin 1/8" × 11/16"	3
246	86662-1-006	2471-005	Left Center Coupling	1
247	74800-7-023	6104-178	Washer	As Req.
249	77769-2-010	2401-008	Left Trip Coupling	1
250	510105-182		Groove Pin	1
251	884008-529	1171-280	Bushing	1
252	11071-NU-803	6171-013	Washer (0.005)	As Req.
	11071-FN-325	601-748	Washer (0.010)	As Req.
	11071-FR-333	6171--019	Washer. (0.020)	As Req.
	11071-CJ-159	6104-191	Washer (0.031)	As Req.

ITEM NO.	U.S. PART NO.	U.K. PART NO.	DESCRIPTION	QUANTITY
201	See Item 151		Right Hand Frame	1
202	See Item 102		Tie Rod Nut	9
	See Item 102		Lockwasher	9
203	77070-4-020	7778-038	Reg. Wheel Shaft	2
204	73217-2-011	1308-008	Dial Spacer	1
205	510500-329	5471-176	Screw	2
206	Deleted			
207	See Item 108		Washer	16
208	See Item 109		Reset Disc Pinion	3
209	See LE Sheet		Reg. Mid. & Left Money Wheel	1
210	See LE Sheet		Reg. R.H. Money Wheel	1
211	7480080-201	6104-087	Washer	2
212	See LE Sheet		Reg. Mid. & Left Quant. Wheel	3
213	See Item 107		Pinion Shaft	4
214	73154-3-016	4371-021	Pinion	6
215	See LE Sheet		Reg. R.H. Quant. Wheel	1
216	33620-0-087	4018-010	Pointer (White)	2
218	510500-330	5405-026	Pointer Screw	2
219	See Item 126		Screw	4
220	77821-2-010	7247-004	Reset Slide Assy. (Incl. Items 221-223)	1
221	511807-001	4010-007	Truarc	2
222	76774-1-006	4048-003	Roller	2
223	77061-2-010	7247-004	Slide Bar (only)	1
224	86704-1-006	2171-021	Shift Cam	1
	885005-281	6104-032	Washer	As Req.
	11071-NL-785	6171-037	Washer	As Req.
225	510100-111-069	600-425	Groove Pin 1/8" × 7/8"	1
226	77062-3-015	7130-004	Rocker Shaft Assb.	2

Thru-Shaft Rotary Reset Computer

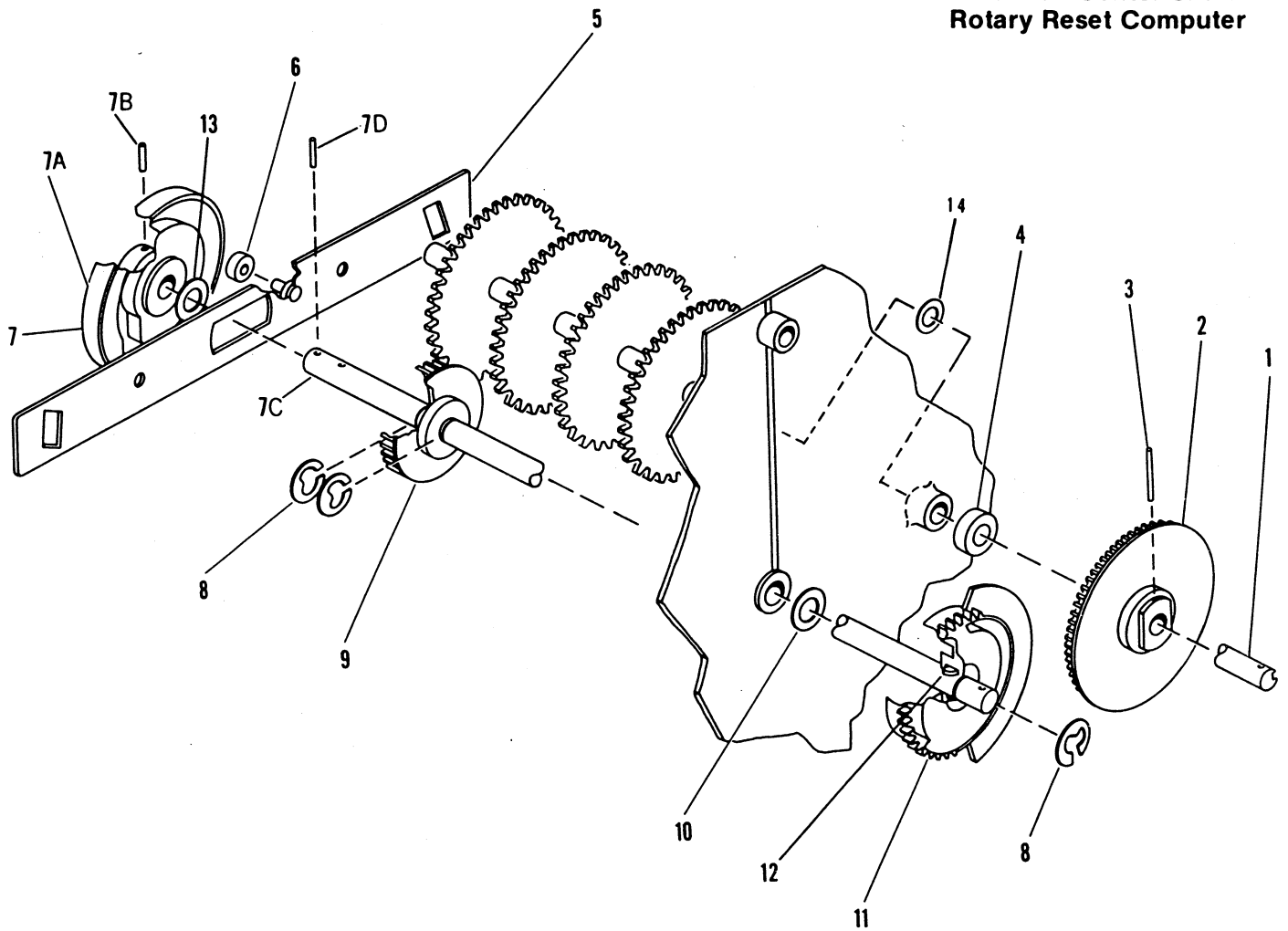


ITEM NO.	U.S. PART NO.	U.K. PART NO.	DESCRIPTION	QTY.
1	G315195-002		Rear Reset Shaft & Gear Group	1
2	311015-110	3006-129	Reset Gear	1
3	510120-002	4606-006	Groove Pin	1
4	11071-147	11071-147	Washer 5/16" x .045"	As Req.
	11071-361	11071-361	Washer (not shown)	As Req.
5	74800-258	6104-117	Washer	As Req.
	885005-281	6104-032	Washer	As Req.
6	314841-001	5171-337	Stud	3
7	77061-026	7247-008	Slide Bar Group	1
8	76774-006	4048-003	Roller	1
9	317739-001		Shift Cam	1
10	86662-006	2471-005	Coupling	1
11	510100-042	4606-044	Groove Pin	1
12	G318738-002		Front Reset Shaft Grp. (Incl. A & B & C)	1
12A	76751-005	3006-116	Reset Driven Gear	1
12B	510123-002	4606-041	Groove Pin	1

ITEM NO.	U.S. PART NO.	U.K. PART NO.	DESCRIPTION	QTY.
12C	317747-002		Front Reset Shaft	1
13	317746-003		Front Left & Mid. Reset Gears	3
14	317746-004		Front Right Reset Gear	1
15	G318737-002		Center Shaft Group (Incl. A & B & C)	1
15A	319551-002	3071-013	Idler Gear	1
15B	511816-001	4010-025	Retaining Ring	2
15C	317738-002		Center Shaft	1
16	G317743-003	601-993	Reset Gear Group	1
17	511816-001	4010-025	Retaining Ring	1
18	76751-005	3006-116	Reset Driven Gear	1
19	510123-002	4606-041	Groove Pin	1
20	11071-209	6104-059	Washer	1
21	510003-006	6105-019	Lockwasher	2
22	11071-183	6104-029	Washer	4
24	11071-361	11071-361	Washer	As Req.

NOTE: Left side frame assembly 86743-15-075 (No Cam Stop).

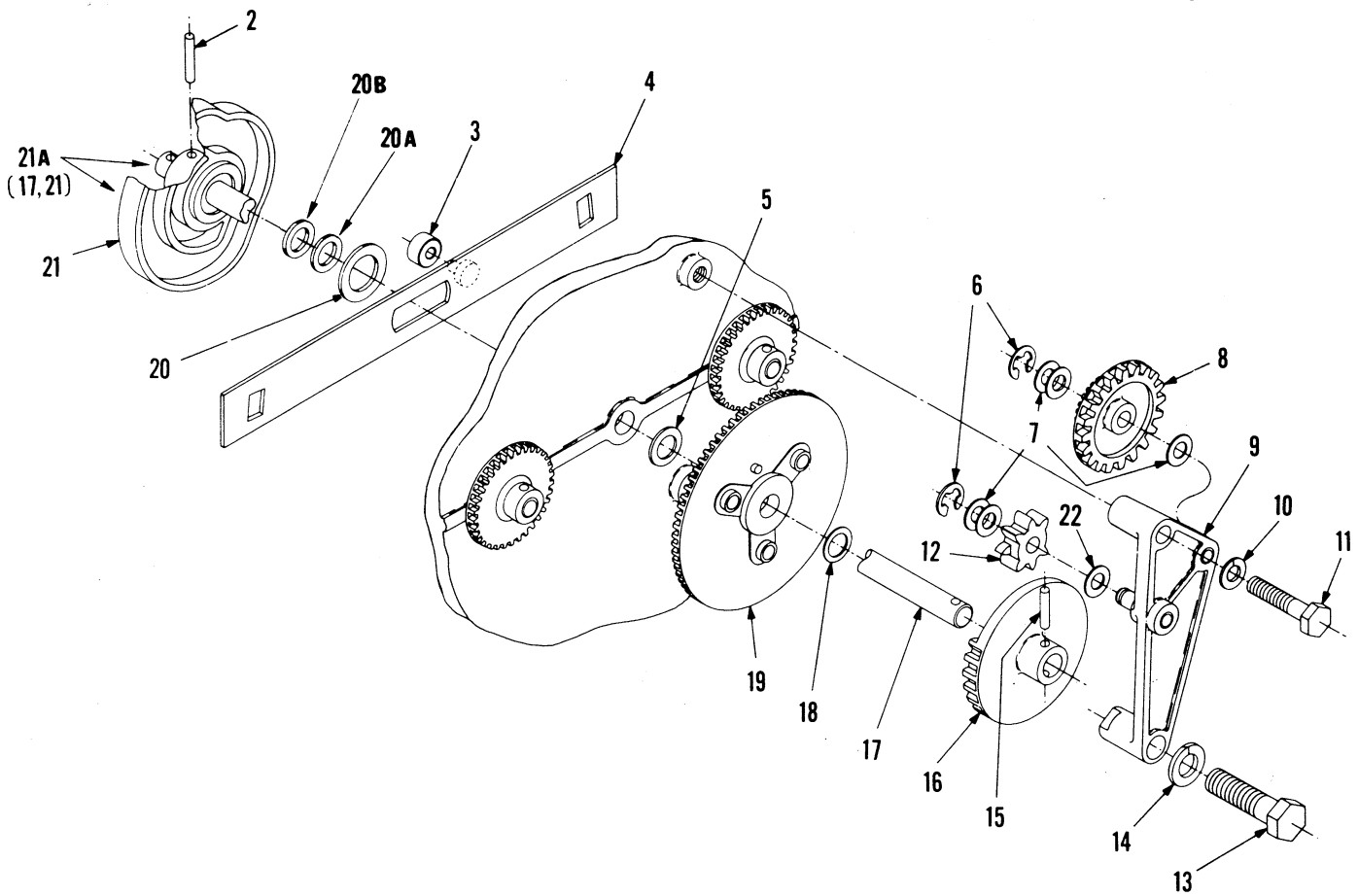
Extended Center Shaft Rotary Reset Computer



ITEM NO.	U.S. PART NO.	U.K. PART NO.	DESCRIPTION	QTY.	ITEM NO.	U.S. PART NO.	U.K. PART NO.	DESCRIPTION	QTY.
1	G311362-111	7778-526	Rear Reset Shaft & Gear Group	1	7C	311012-112		Center Shaft	1
2	311015-110	3006-129	Reset Gear	1	7D	510105-140	600-261	Groove Pin 3/4" x 9/64"	1
3	510120-002	4606-006	Groove Pin 7/64" x 7/8"	1	8	511816-001	4010-025	Retaining Ring	3
4	27719-037	5371-077	Spacer	1	9	319551-002	3071-013	Idler Gear	1
5	G77061-026	7247-008	Slide Bar Group	1	10	885005-281	6104-032	Washer .010"	1
6	76774-006	4048-003	Roller	1	11	311014-110		Reset Gear	1
7	G311120-111		Center Shaft & Cam Group	1	12	311122-110	4602-064	Pin	1
7A	311016-110	2106-008	Shift Cam	1	13	11071-527		Washer .010"	As Req.
7B	510119-002	4606-005	Groove Pin 7/64" x 3/4"	1		74800-258	6104-117	Washer .031"	As Req.
					14	11071-129	6104-012"	Washer	As Req.
						11071-126	6104-168	Washer	As Req.

NOTE: Left side frame assembly 86743-15-075 (No Cam Stop).

Tokheim Power Reset Components

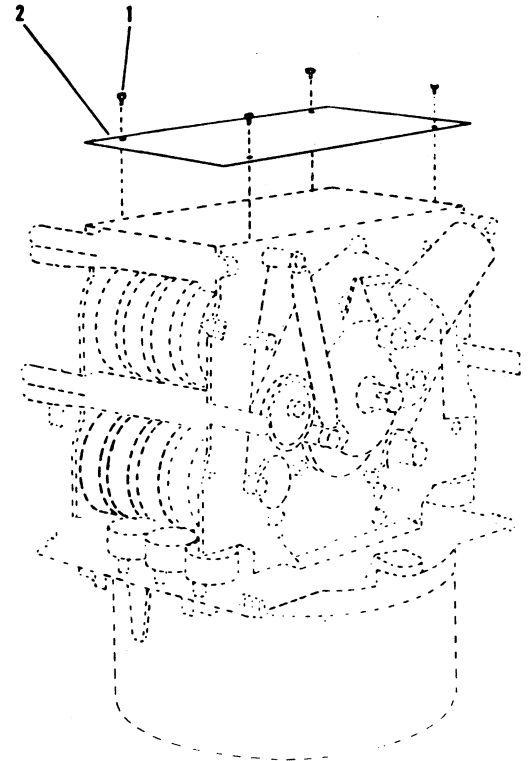
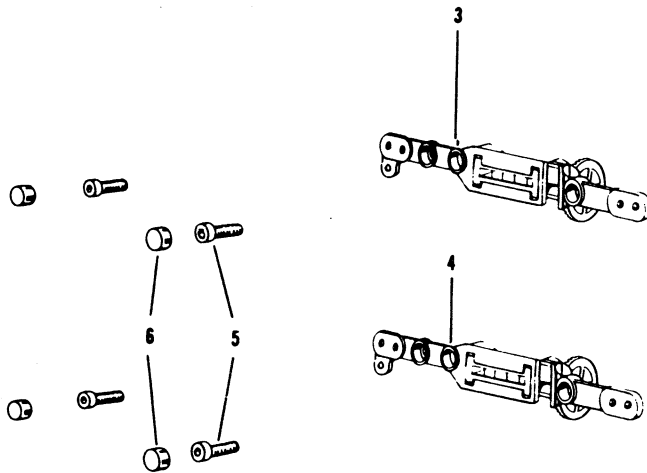


ITEM NO.	U.S. PART NO.	U.K. PART NO.	DESCRIPTION	QTY.
1			Deleted	
2	510105-178	4606-038	Groove Pin	1
3	76774-1-006	4048-003	Roller	1
4	G77061-5-026	7247-008	Shift Slide Group	1
5	11071-ED-253		Washer	1
6	511810-001	4010-014	Retaining Ring	2
7	11071-FN-325	601-748	Washer .010	As Req.
	11071-NU-803	601-148	Washer .005	As Req.
8	95167-1-005		Compound Gear	1
9	G95182-1-005		Bracket Assembly	1
10	510020-001	6105-010	Lockwasher	1
11	503305-005		1/4-20 x 1-3/8 Lg. Hex Hd. Cap Screw	1
12	95168-1-005		Idler Gear	1

ITEM NO.	U.S. PART NO.	U.K. PART NO.	DESCRIPTION	QTY.
13	505018-001		3/8-16 x 1-1/2 Lg. Hex Hd. Cap. Screw	1
14	510023-001		3/8 Lockwasher	1
15	510100-102-042	4606-044	Groove Pin	1
16	95166-1-005	601-049	Drive Gear	1
17	86661-2-010	5571-113	Center Shaft (4 Wheel)	1
18	885005-281	6104-032	Washer	1
19	77001-2-010	600-258	Idler Gear	1
20	11071-DH-209	6104-059	Washer	2
20A	885005-281	6104-032	Washer	As Req.
20B	74800-108-258	6104-117	Washer	As Req.
21	95291-1-005	600-260	Shift Cam	1
21A	G316241-001		Shift Cam Shaft Grp.	1
22	11071-NU-803	601-148	Washer	1

NOTE: Left side frame assembly 86743-15-075 (No Cam Stop).
Right side frame assembly 322420-011 (Tapped for Bracket).

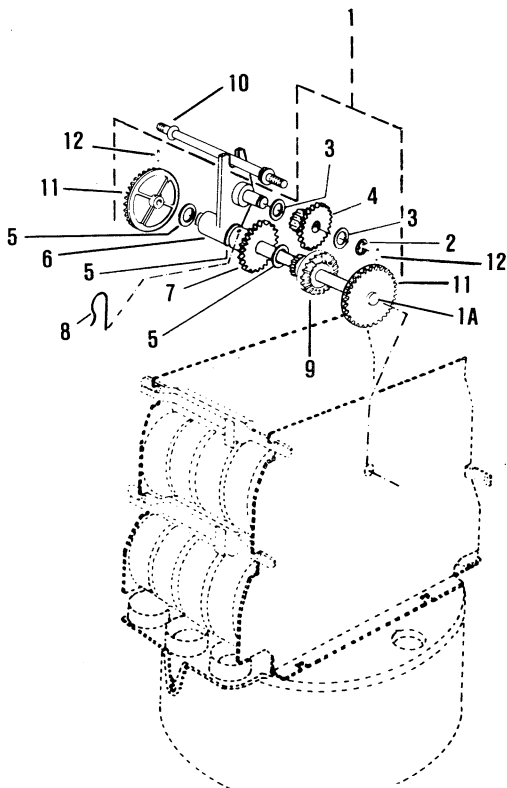
External Parts



ITEM NO.	U.S. PART NO.	U.K. PART NO.	DESCRIPTION	QUANTITY
1	510549-001	5405-013	Top Cover Screw	4
2	76915-2-010	2002-023	Top Cover	1
	80044-2-010		Top Cover with Brackets	1
•3	Variable	Variable	Money Totalizer	1
•4	Variable	Variable	Quantity Totalizer	1
5	510500-327	5471-174	Totalizer Screw	4
6	28698-K-060	1705-001	Totalizer Seal	4

• NOTE: Computers are normally equipped with mechanical money and quantity totalizers.
Please contact Sales Department for Description and Part Number of optional combined Pulser/Totalizers.

Variable Gear Drive — Extended Range Low



ITEM NO.	U.S. PART NO.	U.K. PART NO.	DESCRIPTION	QUANTITY
1	G-318715-002		Upper Shaft Group (Item 1 Includes 1A Thru 9 & 11 & 12)	1
1A	318714-002		Shaft	1
2	511807-001	4010-007	Retaining Ring	1
3	74800-44-129		Washer	1
4	403071-175	3071-175	Gear	1
5	74800-58-157	6104-023	Washer	1
6	G-326754-002	7123-005	Steady Bracket Group	1
7	G-326756-001		Gear Group	1
8	310340-464	5271-167	Spring	1
9	G-326755-001	7075-042	Gear Group-Bevel	1
10	27719-20-115	6001-004	Tie Rod	1
11	76765-1-005	3071-550	Gear	2
12	510114-001	4606-001	Groove Pin	2

**For faster delivery of parts,
please include this information
with your order:**

- Serial number
- Part number and description

For ordering instructions and terms
and conditions of sale, refer to a current
Veeder-Root price list.

VEEDER-ROOT 
Petroleum Products

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