

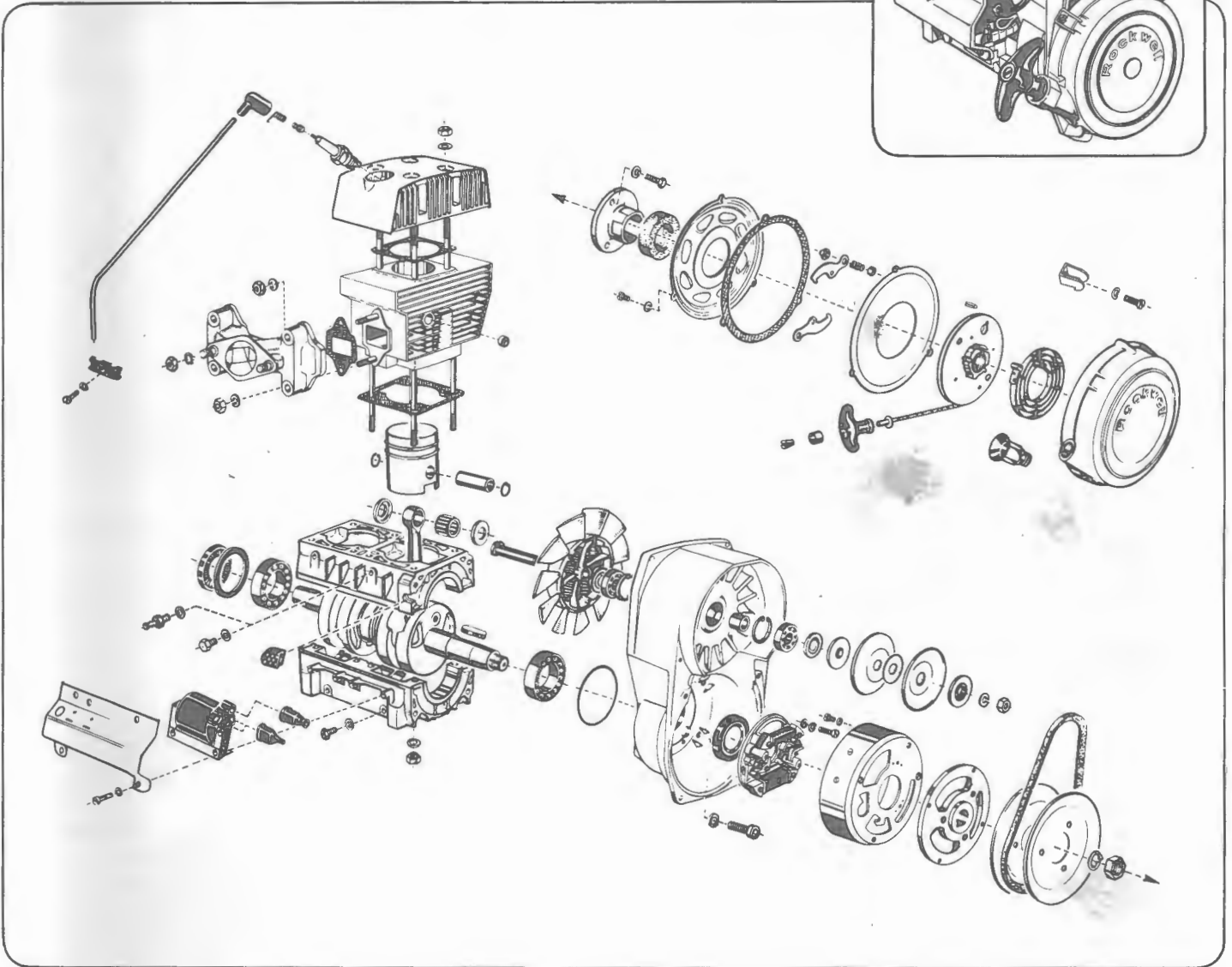
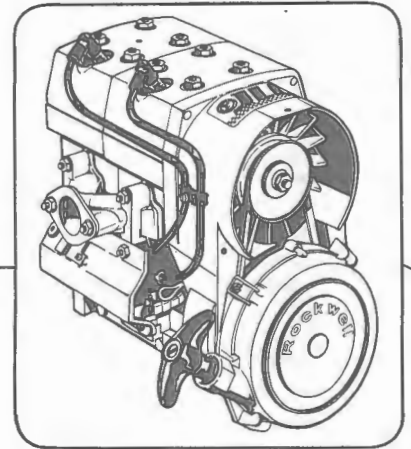
**ROCKWELL**

Bulletin SCP-7732/2

**Model 2F-440-3 (Scorpion)  
Axial-Fan Cooled Twin Cylinder Engine**

**SPARE PARTS LIST**

**General View Model 2F-440-3**



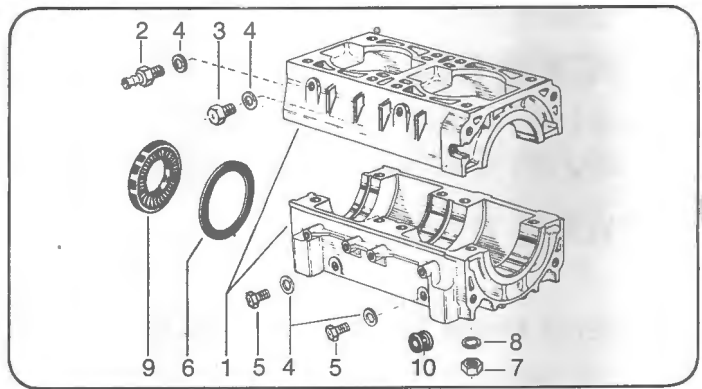
**WHEN ORDERING SPARE PARTS:**

1. Indicate engine model number and serial number.
2. Order parts by part number, not by illustration number, and always use recommended replacement part unless otherwise indicated.
3. Give exact description of part required.
4. Specify quantity.

# Spare Parts List

## Model 2F-440-3 (Scorpion)

### Crankcase



**Note:** Use parts below for engines with the following serial numbers:  
 438-1323 to 438-1342, 438-493 to 438-4927,  
 438-5433 to 438-8432, 438-9384 to 438-9418,  
 438-9469 to 438-10068, 438-10382 to 438-11381

Illus. No	Description	Part No.	Qty. Req'd.
1	Crankcase, complete, U.N.C. base thread. (Use with standard or electric starter)	338-01-810-20 (a)	1
2 ←	Impulse Connector	002-45-513-26	1
3	Screw Plug	000-41-48-053	1
4 ✓	Gasket Ring	000-35-00-070 (b)	4
5	Hexagon Screw	000-41-01-089	2
6	Washer	338-03-007-00	1
7	Nut	000-41-97-010	8
8	Spring Washer	000-40-42-209	8
9	Oil Seal (Electric Start)	000-42-31-891	1
10	Grommet	002-44-430-00	1

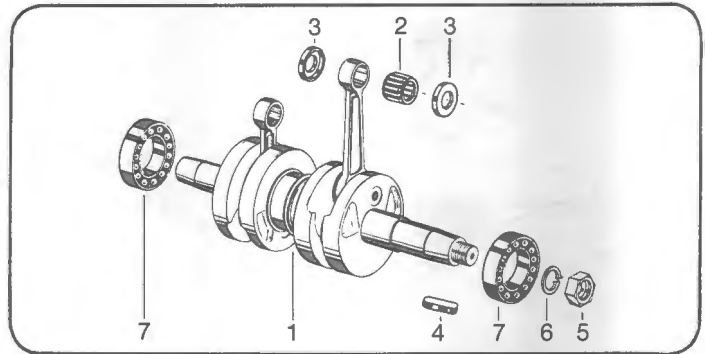
(a) Crankcase 338-01-810-20 will be supplied until present stock is exhausted. Thereafter, new Crankcase 338-01-810-3 will be supplied; however, it will require a new, larger coil cover 338-11-008-2 plus 2 new plugs 002-42-062-00 which must be specified on parts order.

(b) New Gasket Ring 000-35-000-84 will be supplied after present stock of 000-35-00-070 is exhausted.

# Spare Parts List

## Model 2F-440-3 (Scorpion)

### Crankshaft



Illus. No.	Description	-ORIGINAL PARTS		Recommended Replacement Part	Quantity Req'd.
		Engine Serial Numbers			
		438-1323 to 438-1342, 438-4493 to 438-4927, 438-5433 to 438-8432, 438-9384 to 438-9418, 438-9469 to 438-10068	438-10382 to 438-11381		
1	Crankshaft, complete P.T.O. with 1/2" - 20 U.N.F. female thread; (including items 2 thru 6)	338-86-904-00 (a)	338-86-904-10 (a)	338-86-908-1	1
2	Needle Bearing	000-39-11-253 (b)	000-39-11-253 (b)	000-39-112-73	2
3	Check Plate (Spacer)	338-03-006-10 (b)	338-03-006-10 (b)	338-03-013-0	4
4	Key	000-40-89-615	000-40-89-615	000-40-89-615	1
5	Nut	000-41-95-507	000-41-95-507	000-41-95-507	1
6	Lock Washer	000-40-64-520	000-40-64-520	000-40-64-520	1
7	Ball Bearing	000-39-07-521	000-39-07-521	000-39-07-521	2

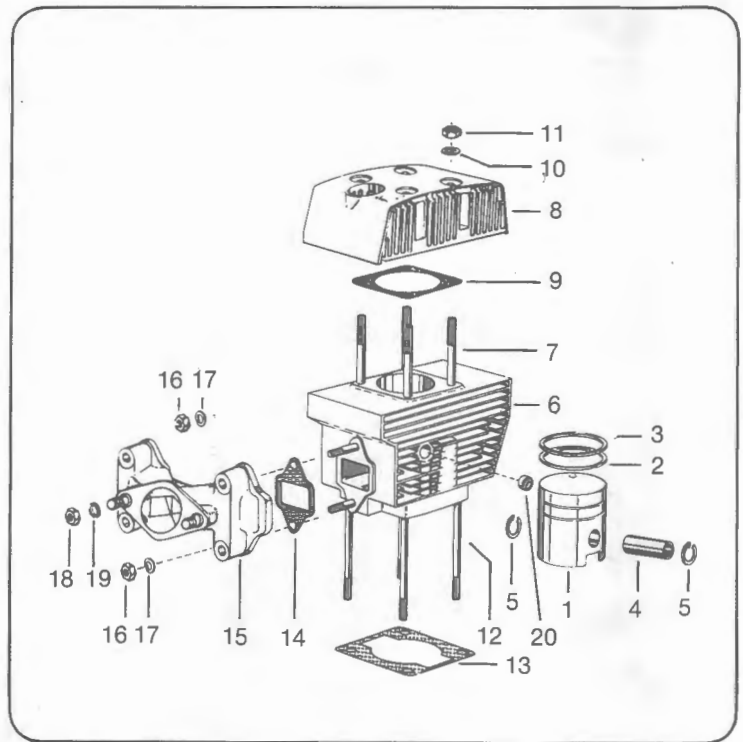
(a) Crankshafts 338-86-904-00 and 338-86-904-10 will be supplied until present stock is exhausted; thereafter, crankshaft 338-86-908-1 only will be supplied

(b) For replacement use new needle bearing 000-39-112-73; however, this needle bearing requires 2 new check plates 338-03-013-0. If replacement check plates are needed, use 338-03-013-0; however, they must be used with new needle bearing 000-39-112-73.

# Spare Parts List

## Model 2-F-440-3 (Scorpion)

### Piston and Cylinder



Illus. No.	Description	ORIGINAL PARTS		Recommended Replacement Part	Quantity Req'd.
		Engine Serial Numbers			
		438-1323 to 438-1342, 438-4493 to 438-4927, 438-5433 to 438-8432, 438-9384 to 438-9418, 438-9469 to 438-10068	438-10382 to 438-11381		
1	Piston (including items 2 thru 5)	438-05-911-00	438-05-911-00	438-05-913-00	2
2	Piston Ring (Bottom)	000-42-12-488	000-42-12-487	000-42-139-87	2
3	Piston Ring (Top)	000-42-14-488	000-42-14-487		
4	Wrist-Pin	338-05-002-00	338-05-002-00	338-05-002-00	2
5	Circlip	000-40-62-142	000-40-62-142	000-40-62-142	4
6	Cylinder, (includes illustration 7 & 20)	438-07-814-10	438-07-814-11	See Note (b)	2
7	Stud	000-41-24-085	000-41-24-085	000-41-24-085	8
8	Cylinder Head (Small Step)	438-07-006-00	438-07-006-00	438-07-006-00	2*
	Cylinder Head (Large Step)	438-07-007-00	438-07-007-00	438-07-007-00	2*
9	Cylinder Head Gasket	438-07-002-00	438-07-002-00	438-07-002-00 or 438-07-002-10	2
10	Washer	000-40-51-010	000-40-51-010	000-40-51-010	8
11	Nut	000-41-97-011	000-41-97-011	000-41-97-011	8
12	Stud	000-41-24-360	000-41-24-360	000-41-24-360	8
13	Cylinder Base Gasket				
	Red 0.3 mm.	338-07-025-00	338-07-025-00	338-07-025-00	*
	Black 0.5 mm.	338-07-008-01	338-07-008-01	338-07-008-01	*
	Light Green 0.75 mm.	338-07-026-01	338-07-026-01	338-07-026-01	*
	Dark Green 1.0 mm.	338-07-027-01	338-07-027-01	338-07-027-01	*
14	Intake Gasket	338-07-011-01	338-07-011-01	338-07-001-01	2
15	Intake Manifold (HD)	338-07-029-00	338-07-029-00	338-07-029-00 (a)	1
16	Nut	000-41-97-010	000-41-97-010	000-41-97-010	4
17	Spring Washer	000-40-42-209	000-40-42-209	000-40-42-209	4
18	Nut	000-41-96-010	000-41-96-010	000-41-96-010	2
19	Spring Washer	000-40-42-209	000-40-42-209	000-40-42-209	2
20	Transfer Plug	000-42-30-058	000-42-30-058	000-42-30-058	4

\*Type and quantity as required.

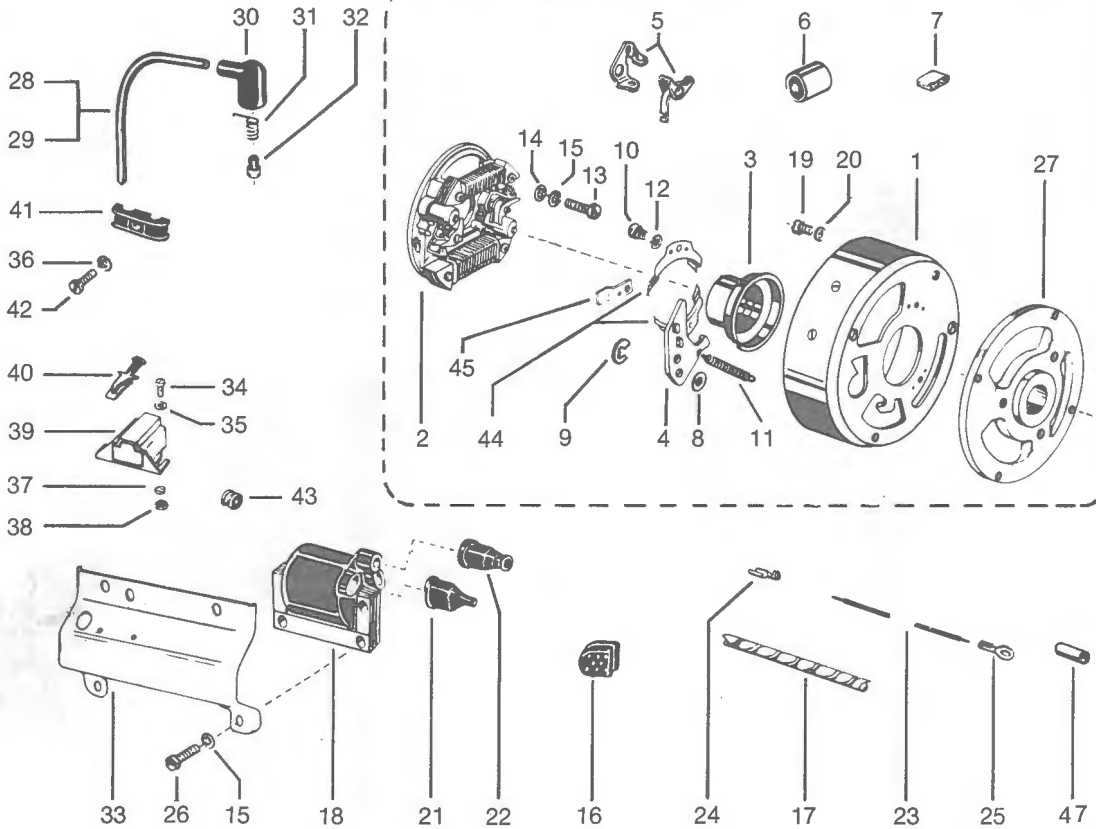
(a) Intake Manifold 338-87-822-0 will be supplied after present stock of 338-07-029-00 is exhausted.

(b) Cylinder, complete, including illustrations 7 and 20, to be supplied only with matched piston, piston rings, wrist pin and circlips. Specify Part Number 438-92-901-0. However, pistons, piston rings, circlips and wrist pins for this engine are still available as separate items as listed in column "recommended replacement part".

# Spare Parts List

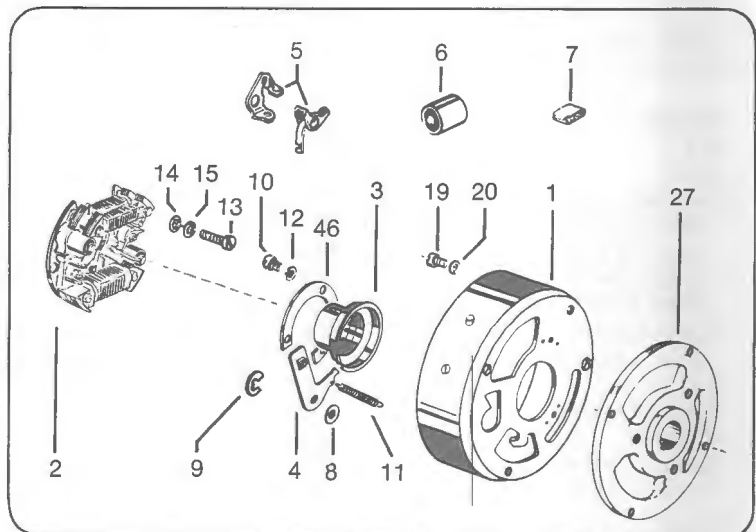
## Model 2F-440-3 (Scorpion)

### Electrical Equipment



Physical breakdown of Magneto Flywheel Assembly used on engines with serial numbers listed in column 2, at right.

Physical breakdown of Magneto Flywheel Assembly used on engines with serial numbers listed in columns 1 and 3, on righthand page.



**ORIGINAL PARTS**

**ENGINE SERIAL NUMBERS**

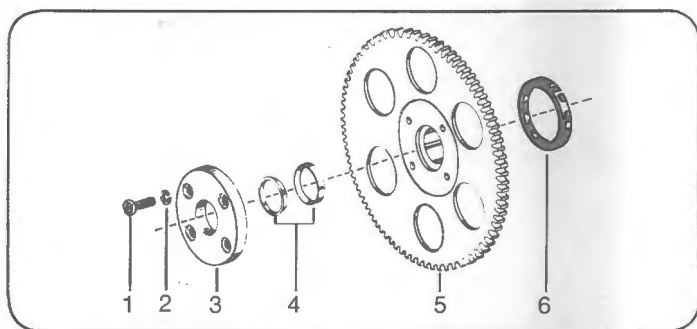
Illus. No.	Description	438-1323 to 438-1342 438-4493 to 438-4927		438-5433 to 438-8432 438-9384 to 438-9418 438-9469 to 438-10068		438-10382 to 438-11381	
		① Part No.	Qty. Req'd	② Part No.	Qty. Req'd.	③ Part No.	Qty. Req'd.
1	Magnetic Flywheel Assy.	000-43-05-198	1	000-43-05-199	1	000-43-05-195 (b)	1
2	Armature Plate Assy.	000-43-05-331 (a)	1	438-11-001-00	1	438-50-013-00	1
3	Cam	000-43-05-728	1	000-43-05-727	1	000-43-05-728	1
4	Centrifugal Weight	000-43-06-019	1	000-43-06-021	1	000-43-06-015 (c)	1
5	Ignition Points (2)	000-43-06-223	2	000-43-06-223	2	000-43-06-223	2
6	Condenser	000-43-06-530	2	000-43-06-530	2	000-43-06-530	2
7	Lubricating Wick	000-43-06-313	1	000-43-06-312	1	000-43-06-313	1
8	Washer	000-43-12-559	1	000-43-12-559	1	000-43-12-559	1
9	Retainer	000-40-76-008	1	000-40-76-008	1	000-40-76-008	1
10	Screw	000-41-50-094	3	000-41-50-112	2	000-41-50-094	3
11	Spiral Spring	000-43-08-768	1	000-43-08-767	1	000-43-08-768	1
12	Spring Washer	000-40-42-206	3	000-40-42-207	2	000-40-42-206	3
13	Screw	000-41-50-115	2	000-41-50-115	2	000-41-50-115	2
14	Washer	000-40-51-006	2	000-40-51-006	2	000-40-51-006	2
15	Lock Washer	000-40-64-505	6	000-40-64-505	6	000-40-64-505	6
16	Grommet	002-44-450-01	1	002-44-450-01	1	002-44-450-01	1
17	Spiral Band	002-44-127-16 (d)	1	002-44-127-16 (d)	1	002-44-127-16 (d)	1
18	Ignition Coil	000-43-05-606	2	000-43-05-606	2	000-43-05-606	2
19	Screw	000-41-74-011 (e)	4	000-41-74-011 (e)	4	000-41-74-011 (e)	4
20	Lock Washer	000-40-64-506	4	000-40-64-506	4	000-40-64-506	4
21	Protective Cap	002-44-498-00	4	002-44-498-00	4	002-44-498-00	4
22	Protective Cap	002-44-499-00	2	002-44-499-00	2	002-44-499-00	2
23	Ground Cable (4-5/16")	002-44-140-11	2	002-44-140-11	2	002-44-120-11	2
24	Connector	002-44-523-00	4	002-44-523-00	4	002-44-523-00	4
25	Cable Connector	000-43-10-004	2	000-43-10-004	2	000-43-10-004	2
26	Screw	000-41-50-120	4	000-41-50-120	4	000-41-50-120	4
27	Magnetic Flywheel Flange	338-11-022-00	1	338-11-022-00	1	338-11-022-00	1
28	Ignition Cable (14")	002-44-152-36	1	002-44-152-36	1	002-44-152-36	1
29	Ignition Cable (20-7/16")	002-44-152-52	1	002-44-152-52	1	002-44-152-52	1
30	Spark Plug Connector	002-44-275-00	2	002-44-275-00	2	002-44-275-00	2
31	Spring	002-44-276-00	2	002-44-276-00	2	002-44-276-00	2
32	Contact Nut	002-44-277-90	2	002-44-277-90	2	002-44-277-90	2
33	Cover Plate	338-11-008-10	1	338-11-008-10	1	338-11-008-10	1
34	Screw	000-41-50-097	2	000-41-50-097	2	000-41-50-097	2
35	Washer	000-40-51-005	2	000-40-51-005	2	000-40-51-005	2
36	Spring Washer	000-40-422-08	1	000-40-422-08	1	000-40-422-08	1
37	Lock Washer	000-40-64-504	2	000-40-64-504	2	000-40-64-504	2
38	Nut	000-41-97-006	2	000-41-97-006	2	000-41-97-006	2
39	Terminal Case	002-44-556-00	1	002-44-556-00	1	002-44-556-00	1
40	Connection	002-44-550-00	5	002-44-550-00	5	002-44-550-00	5
41	Ignition Cable Bracket	002-50-120-08	1	002-50-120-08	1	002-50-120-08	1
42	Screw	000-41-50-138	1	000-41-50-138	1	000-41-50-138	1
43	Grommet	002-44-430-00	1	002-44-430-00	1	002-44-430-00	1
44	Cam Holder	—	-	000-43-12-604	2	—	-
45	Spring Holder	—	-	000-43-12-605	1	—	-
-	Fastening Hardware (Set)	000-43-13-100	2	000-43-13-100	2	000-43-13-100	2
46	Ring Segment	000-43-12-538	1	—	-	000-43-12-538	1
47	Sleeve	002-44-472-90	1	002-44-472-90	1	002-44-472-90	1

- (a) For Replacement use Armature Plate Assy. 438-50-013-00
- (b) For Replacement use Magnetic Flywheel Assy. 000-43-05-198
- (c) For Replacement use Centrifugal Weight 000-43-06-019
- (d) Spiral Band 002-44-127-48 will be supplied after present stock of 002-44-127-16 is exhausted.
- (e) For Replacement use Screw 000-41-50-435

# Spare Parts List

## Model 2F-440-3 (Scorpion)

### Ring Gear\*



Illus. No.	Description	ORIGINAL PARTS		Quantity Req'd.
		Engine Serial Numbers	Recommended Replacement Part	
		All		
1	Allen Head Screw (6 mm)**	000-41-74-011	<b>Use Original Parts</b>	4
	Allen Head Screw (8 mm)**	000-41-74-123		4
2	Lock Washer (6 mm)**	000-40-64-506		4
	Lock Washer (8 mm)**	000-40-64-508		4
3	Pressure Flange (6 mm)**	338-11-015-10		1
	Pressure Flange (8 mm)**	338-11-015-20		1
4	Clamping Ring (Set 2)	002-42-640-30	1	
5	Starter Gear (6 mm)**	338-11-010-00	1	
	Starter Gear (8 mm)**	338-11-010-10	1	
6	Oil Seal	000-42-31-891	1	

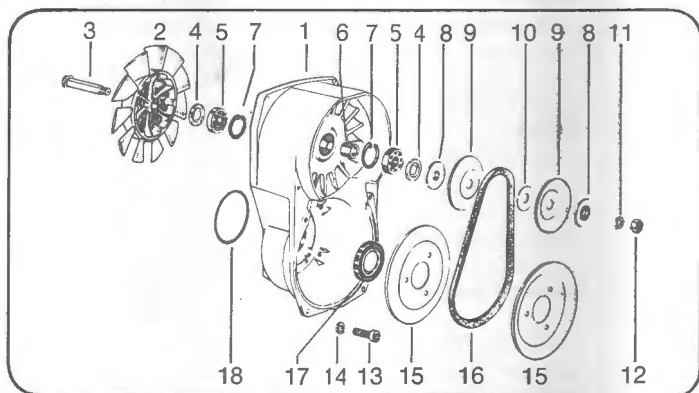
\*Note: For electric starter parts and service detail, refer to Scorpion vehicle service manual.

\*\* Do not intermix items of different sizes, i.e.; use 6 mm. lockwashers with 6 mm. screws; 8 mm. lockwashers with 8 mm. screws, etc.

# Spare Parts List

## Model 2F-440-3 (Scorpion)

### Fan Case



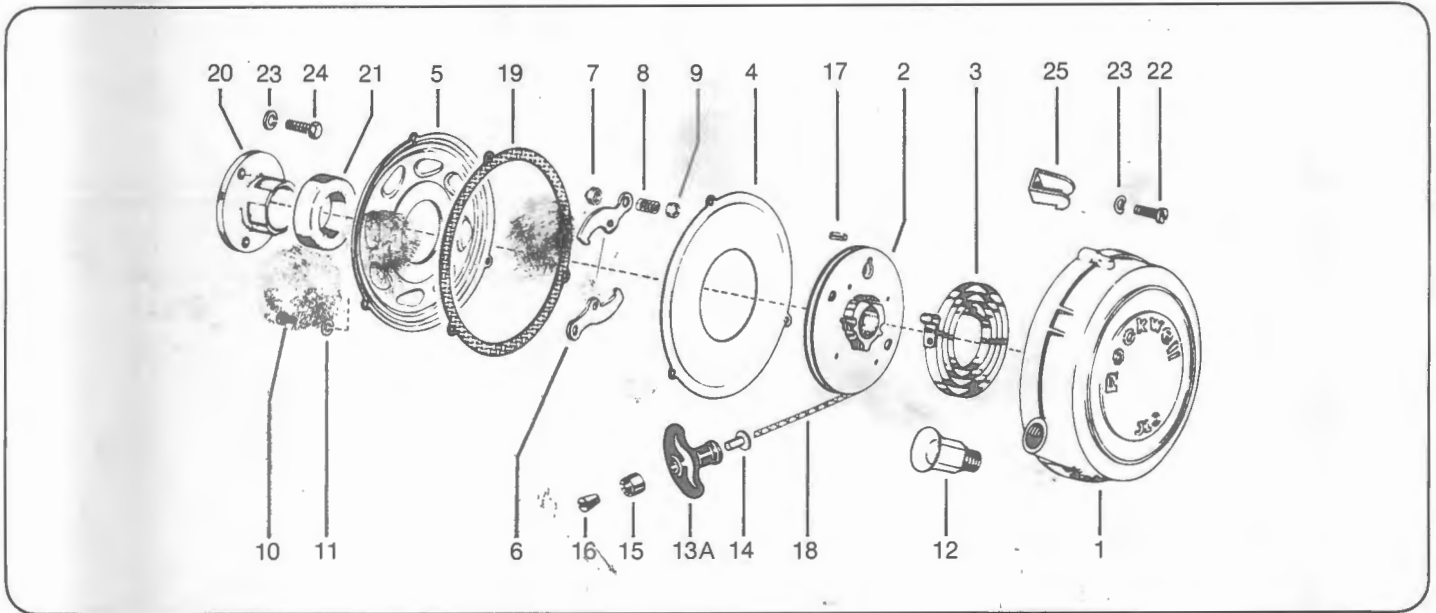
Illus. No.	Description	ORIGINAL PARTS		Quantity Req'd.
		Engine Serial Numbers	Recommended Replacement Part	
		All		
1	Fan Case - (Unpainted)	—	338-14-002-04	1
	Fan Case - (Black)	338-14-017-01	—	1
2	Impeller (Unpainted)	—	399-14-003-00	1
	Impeller (Black)	399-14-004-00	—	1
3	Shaft	338-14-007-02	338-14-007-02	1
4	Nilos Ring	000-40-47-735	000-40-47-735	2
5	Ball Bearing	000-39-07-113	000-39-07-113	2
6	Spacer	338-14-008-00	338-14-008-00	1
7	Circlip	000-40-61-432	000-40-61-432	2
8	Clamp Washer	338-14-009-00	338-14-009-00	2
9	Pulley Half (Small)	399-14-002-00	399-14-002-00	2
10	Spacer	338-14-012-00	338-14-012-00	4
11	Lock Washer	000-40-64-510	000-40-64-510	1
12	Nut	000-41-95-202	000-41-95-202	1
13	Socket Cap Screw	000-41-74-128	000-41-74-128	4
14	Lock Washer	000-40-64-607	000-40-64-607	4
15	Pulley Half (Large)	399-14-001-00	399-14-001-00	2
16	V-Belt	000-42-17-508	000-42-17-508	1
17	Oil Seal	000-42-31-548	000-42-31-548 <sup>(a)</sup>	1
18	O-Ring	002-52-665-00	002-52-665-00	1

<sup>(a)</sup> Oil Seal 000-42-31-553 may also be used.

# Spare Parts List

## Model 2F-440-3 (Scorpion)

### Recoil Starter



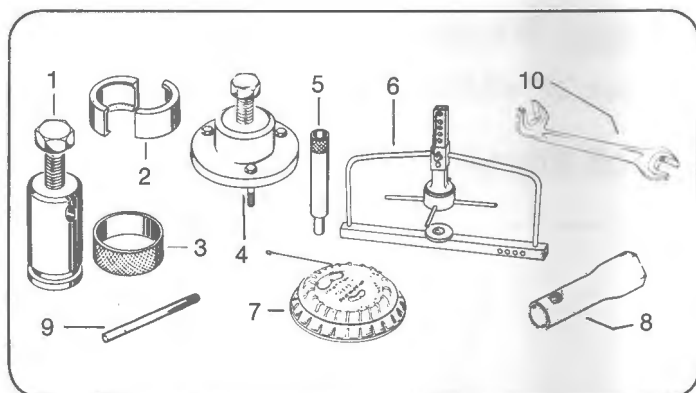
Illus. No.	Description	ORIGINAL PARTS		Quantity Req'd.
		Engine Serial Numbers		
		All		
-	Recoil Starter Assembly complete (includes items 1 thru 19); 65" rope (Unpainted)	-	338-41-803-11	-
-	Recoil Starter Assembly complete (includes items 1 thru 19); 65" rope (Black)	338-41-811-00	-	-
1	Recoil Starter Housing (Unpainted)	-	338-41-003-10	1
-	Recoil Starter Housing (Black)	338-41-017-00	-	1
2	Rope Drum	197-41-070-00	197-41-070-00	1
3	Recoil Spring	252-41-429-21	252-41-429-21	1
4	Intermediate Plate	338-41-006-00	338-41-006-00	1
5	Cover Plate	338-41-005-00	338-41-005-00	1
6	Starter Pawl	252-41-065-10	252-41-065-10	2
7	Spring Cap	252-41-066-00	252-41-066-00	2
8	Pressure Spring	252-41-067-00	252-41-067-00	2
9	Inner Spring Cap	102-41-499-00	102-41-499-00	2
10	Screw	000-41-53-443	000-41-53-443	3
11	Lock Washer	000-40-67-005	000-40-67-005	3
12	Rope Bushing	102-41-469-00	102-41-469-00	1
13	Handle, complete (includes items 13A thru 16).	102-41-801-00	102-41-801-00	
13A	Handle	252-41-007-00	252-41-007-00	1
14	Bushing	252-41-009-00	252-41-009-00	1
15	Retaining Ring	252-41-015-00	252-41-015-00	1
16	Retaining Key	252-41-016-00	252-41-016-00	1
17	Tension Pin	000-40-39-145	000-40-39-145	2
18	Rope; 65"	252-41-807-00	252-41-807-00 (a)	1
19	Gasket	338-41-007-00	338-41-007-00	1
20	Carrier	338-41-810-00	338-41-810-00	1
21	Dust Seal	079-11-017-00	079-11-017-00	1
22	Socket Cap Screw	000-41-50-136	000-41-50-136	4
23	Lock Washer	000-40-64-506	000-40-64-506	7
24	Hexagon Screw	000-41-01-069	000-41-01-069	3
25	Recoil Starter Clamp	338-41-016-00	338-41-016-00	4

(a) Rope 252-41-806-00 may also be used.

# Spare Parts List

## Model 2F-440-3 (Scorpion)

### Special Service Items



### Service Tools

Illus. No.	Description	Part No.	Qty. Req'd.
1	Bearing Puller	444-31-807-00	1
2	Half Shells (2)	444-31-072-00	1
3	Retaining Ring	444-31-071-00	1
4	Flywheel Puller	444-31-843-10	1
5	Guide Pin	444-31-666-00	1
6	Assembly Jig (starter)	444-31-863-10	1
7	R.P.M. Indicator	000-15-30-010	1
8	Spark Plug Wrench, 14 mm.; single end	000-15-20-421	1
9	Bar (use with sockets)	000-15-21-012	1
10	Wrench, double, 13 x 17 mm., open end, offset to clear carburetor	444-31-682-00	1

### Gasket Sets

Illus. No.		Gasket set 399-61-801-10*	Gasket set 438-61-802-00*	Qty. Req'd.
-	Oil Seal	000-42-319-45	—	1
-	Oil Seal	000-42-31-578	—	1
-	Oil Seal	000-42-31-548	000-42-31-548	1
-	Oil Seal	000-42-31-891	000-42-31-891	1
-	Cylinder Head Gasket (400 cc)	399-07-006-10	—	2
-	Cylinder Head Gasket (440 cc)	438-07-002-10	438-07-002-00	2
-	Cylinder Base Gasket			
-	Red 0.3 mm.	338-07-008-01	338-07-008-01	2
-	Black 0.5 mm.	338-07-025-00	338-07-025-00	2
-	Light Green 0.75 mm.	338-07-026-01	338-07-026-01	2
-	Dark Green 1.0 mm.	338-07-027-01	338-07-027-01	2
-	Intake Gasket	338-07-011-01	338-07-011-01	2
-	O-Ring	002-52-665-00	002-52-665-00	1
-	Gasket Ring	000-35-000-84	000-35-00-070	4
-	Gasket Rings	000-35-000-54	—	2

\*Both gasket sets above may be used interchangeably; however, only gasket set 399-61-801-1 will be supplied after present stock of 438-61-801-00 is exhausted.

# Rockwell



ROCKWELL MANUFACTURING COMPANY  
ENGINE DIVISION, 400 North Lexington Ave., Pgh., Pa. 15208