



# service bulletin

No. 88-21

## A. FUEL PUMP ASSEMBLIES - MERCURY 35 and MARINER/MERCURY/SEA RAY 45 thru 220 MODELS

We are receiving reports of square style fuel pumps assembled with incorrect components. An incorrectly assembled fuel pump may cause poor performance and, in extreme cases, powerhead failure.

When checking or rebuilding the square style fuel pump, carefully inspect the components and compare them to the following drawings. We caution you not to exchange components with those of another model.

### Items of Special Interest

1. **Outer Covers** - some have two small holes thru the center rib - fuel line fittings vary in location, number and direction.
2. **Outer Diaphragm**  
 One Tab - two oil holes - .013 in. (0.33mm) thick  
 Two Tabs - no oil holes - .013 in. (0.33mm) thick  
 Three Tabs - no oil holes - .018 in. (0.45mm) thick

3. **Body** - materials, colors and designs vary between models.

	Previous	New
Model	with Rubber Check Valve Retainer	with Plastic Check Valve Retainer
35	blue	natural (off white)
45	black	red
50/60	black	blue
70/75/80/90	black	natural (off white)
90/115 (6 cyl.)	black	red
100/115 (4 cyl.)	black	natural (off white)
V6 1988 and 1989	—	cast aluminum
220 1987	cast aluminum	—

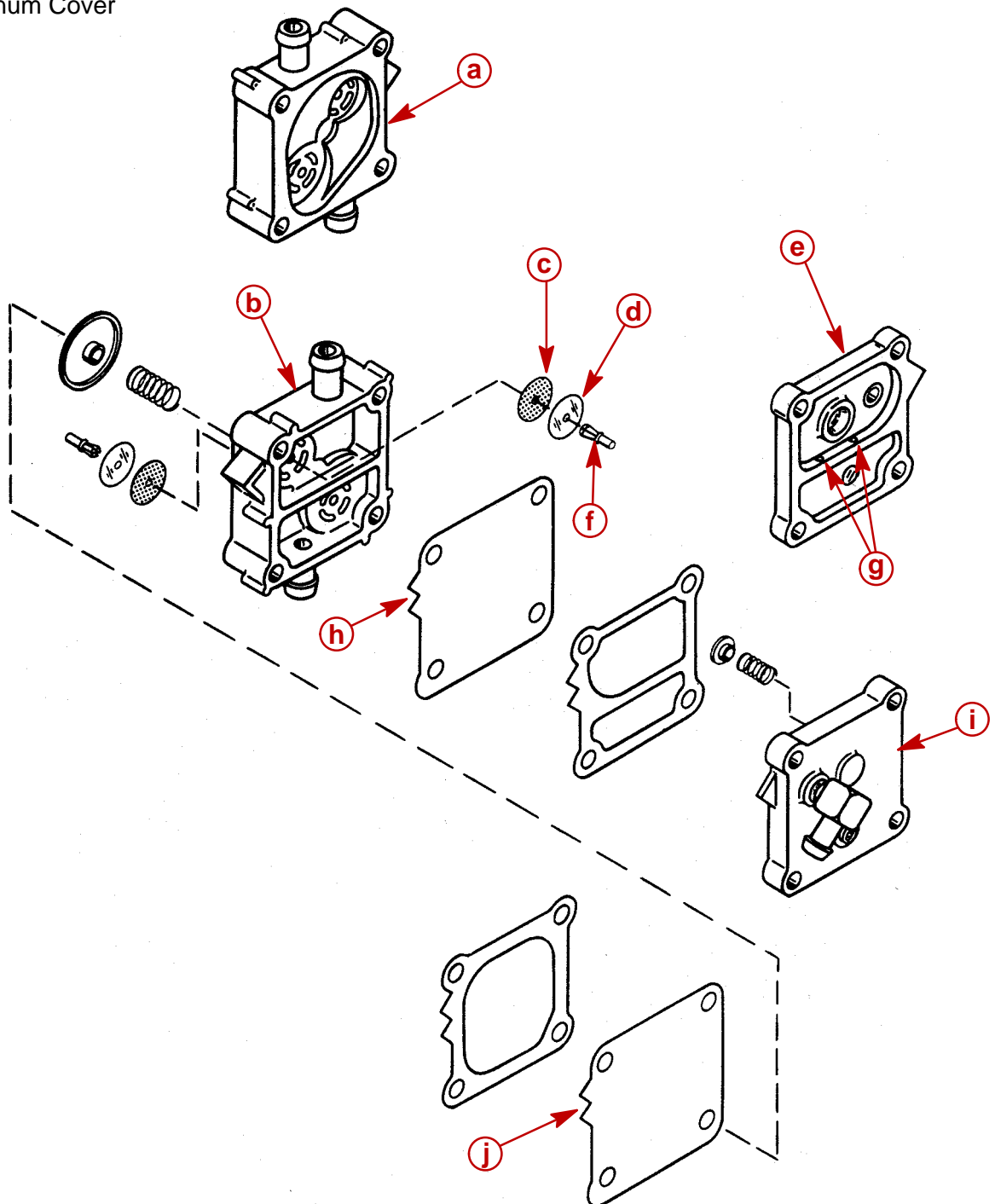
4. **Internal Caps and Springs** - vary in size and design 45 HP uses only one spring and cap.
5. **Inner Diaphragm**  
 Two Tabs - .013 in. (0.33mm) thick  
 Three Tabs - .018 in. (0.45mm) thick
6. **Inner Plate** - vary in design

The following drawings illustrate the proper assembly of the various fuel pumps with the **latest** components.

## 35 hp

Previous body with rubber check valve retainers was colored blue.

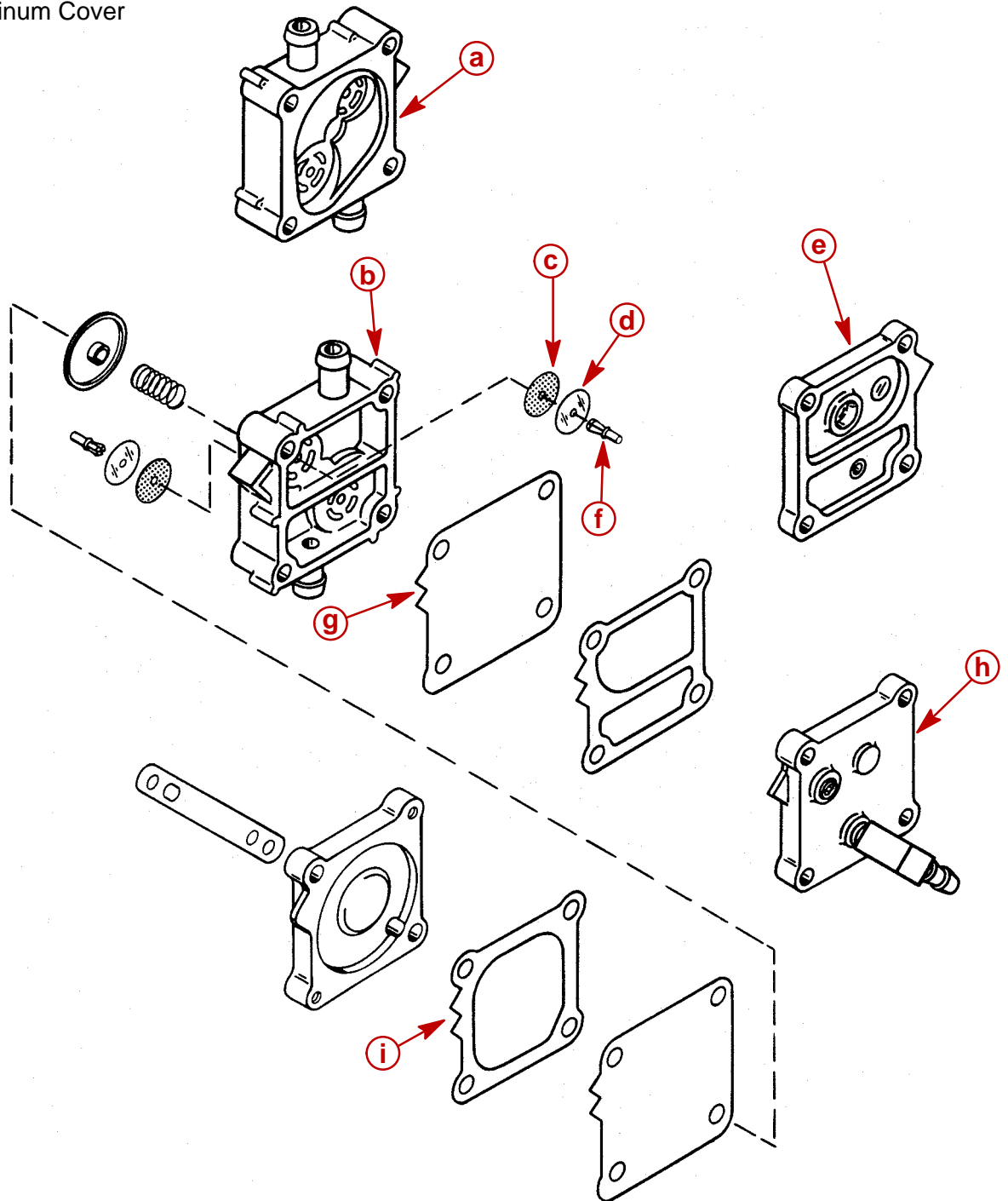
- a** - Body (opposite side view)
- b** - Natural (off white) Body
- c** - Rubber Valve
- d** - Plastic Disc
- e** - Cover (opposite side view)
- f** - Plastic Check Valve Retainer
- g** - Two Bleed Holes
- h** - Two Tabs
- i** - Cast Aluminum Cover
- j** - Two Tabs



# 45 hp

Previous body with rubber check valve retainers was colored black.

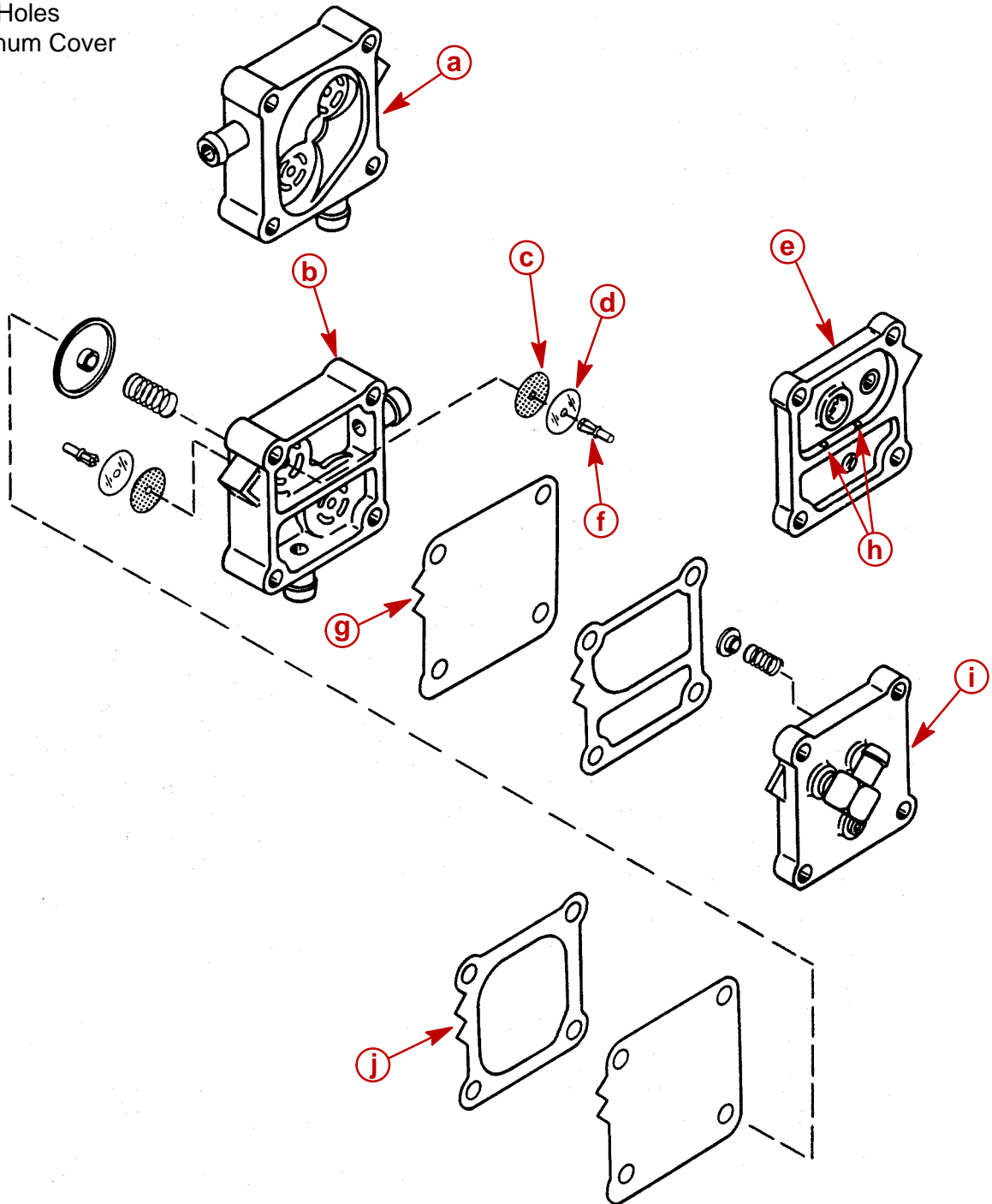
- a** - Body (opposite side view)
- b** - Red Body
- c** - Rubber Valve
- d** - Plastic Disc
- e** - Cover (opposite side view)
- f** - Plastic Check Valve Retainer
- g** - Two Tabs
- h** - Cast Aluminum Cover
- i** - Two Tabs



## 50-60 hp

Previous body with rubber check valve retainers was colored black.

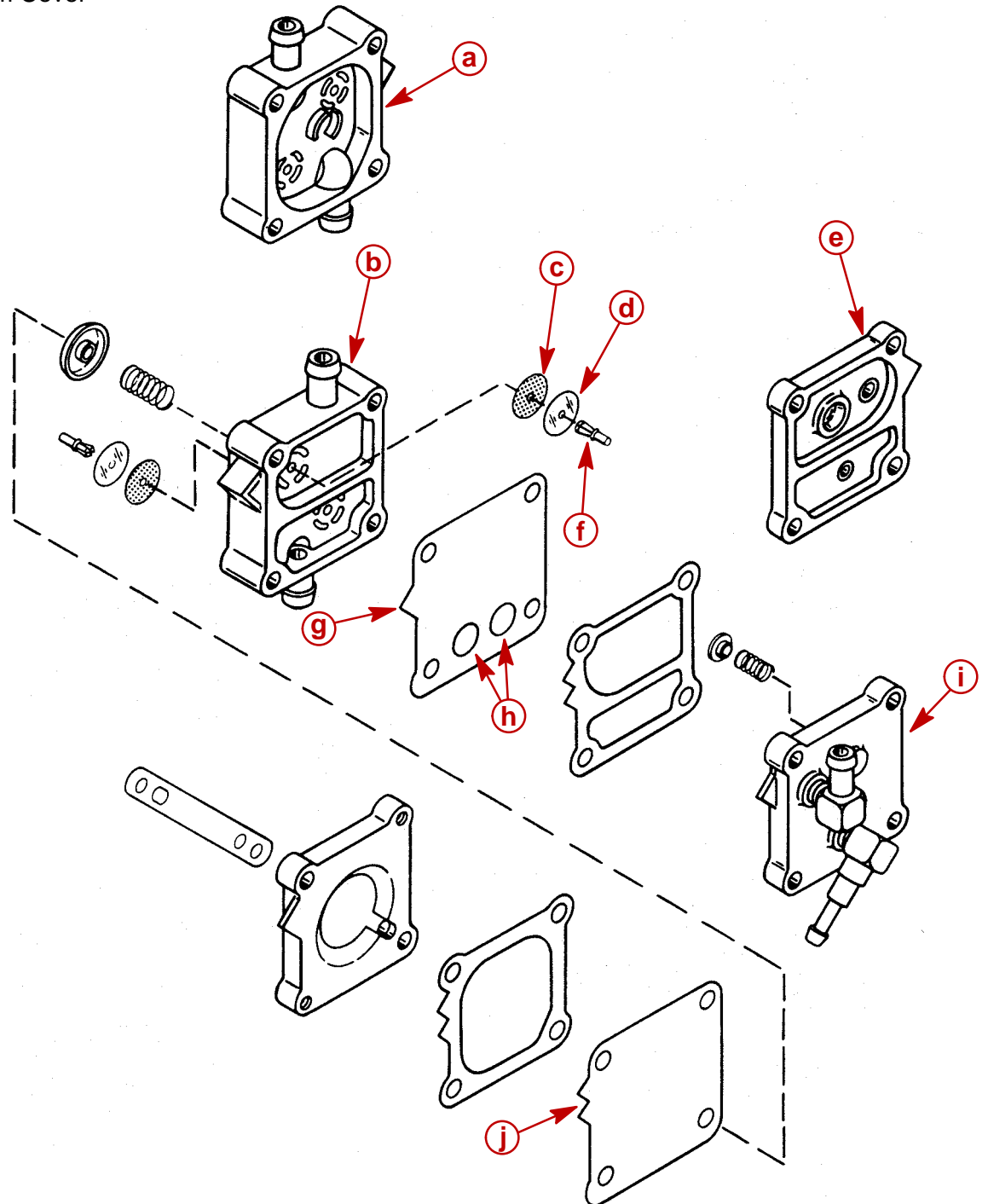
- a** - Body (opposite side view)
- b** - Blue Body
- c** - Rubber Valve
- d** - Plastic Disc
- e** - Cover (opposite side view)
- f** - Plastic Check Valve Retainer
- g** - Two Tabs
- h** - Two Bleed Holes
- i** - Cast Aluminum Cover
- j** - Two Tabs



## 70-75-80-90 (3 cyl.) hp

Previous body with rubber check valve retainers was colored black.

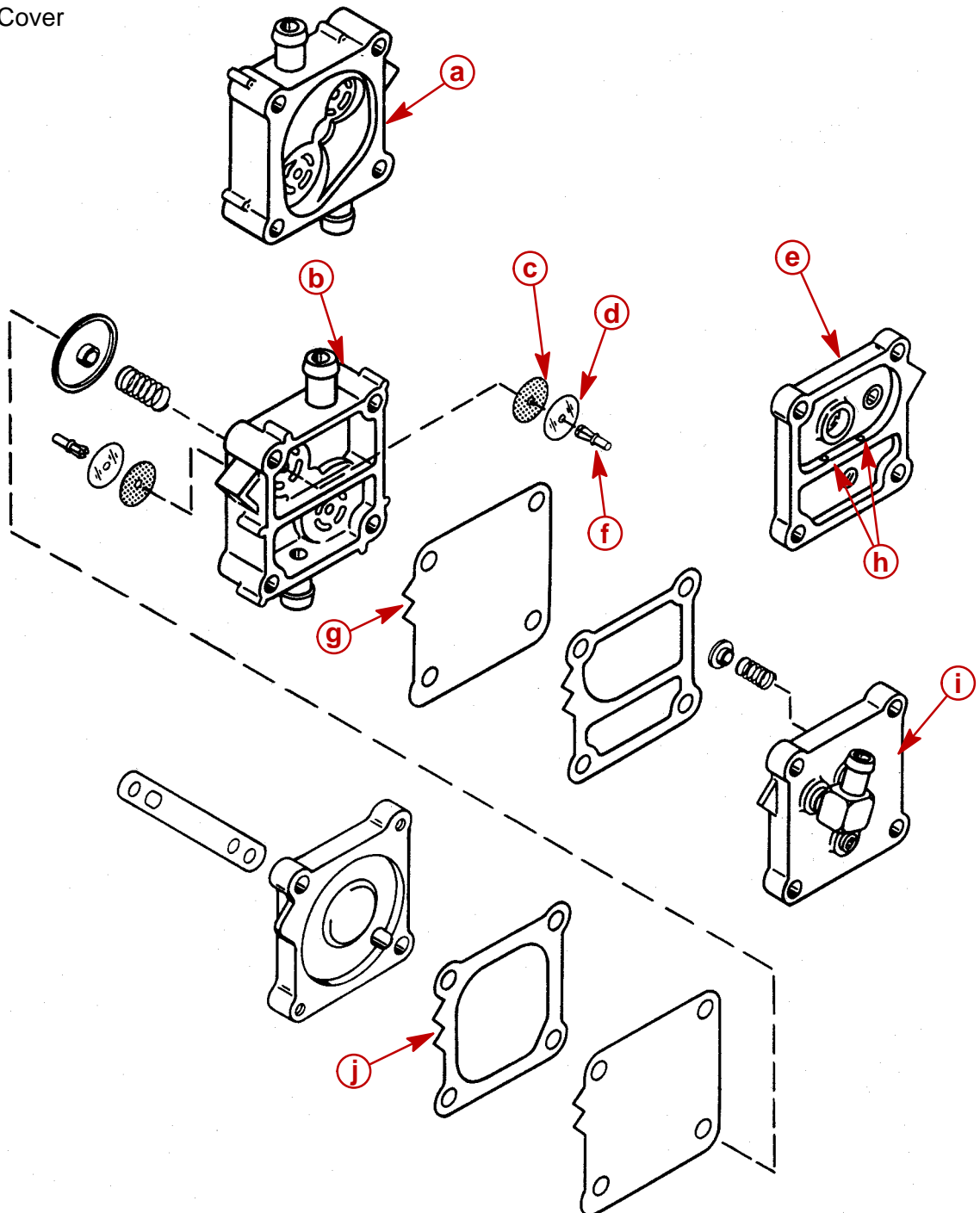
- a** - Body (opposite side view)
- b** - Natural (off white) Body
- c** - Rubber Valve
- d** - Plastic Disc
- e** - Cover (opposite side view)
- f** - Plastic Check Valve Retainer
- g** - One Tab
- h** - Two Oil Passage Holes
- i** - Cast Aluminum Cover
- j** - Two Tabs



## 90-115 (in line - 6) hp

Previous body with rubber check valve retainers was colored black.

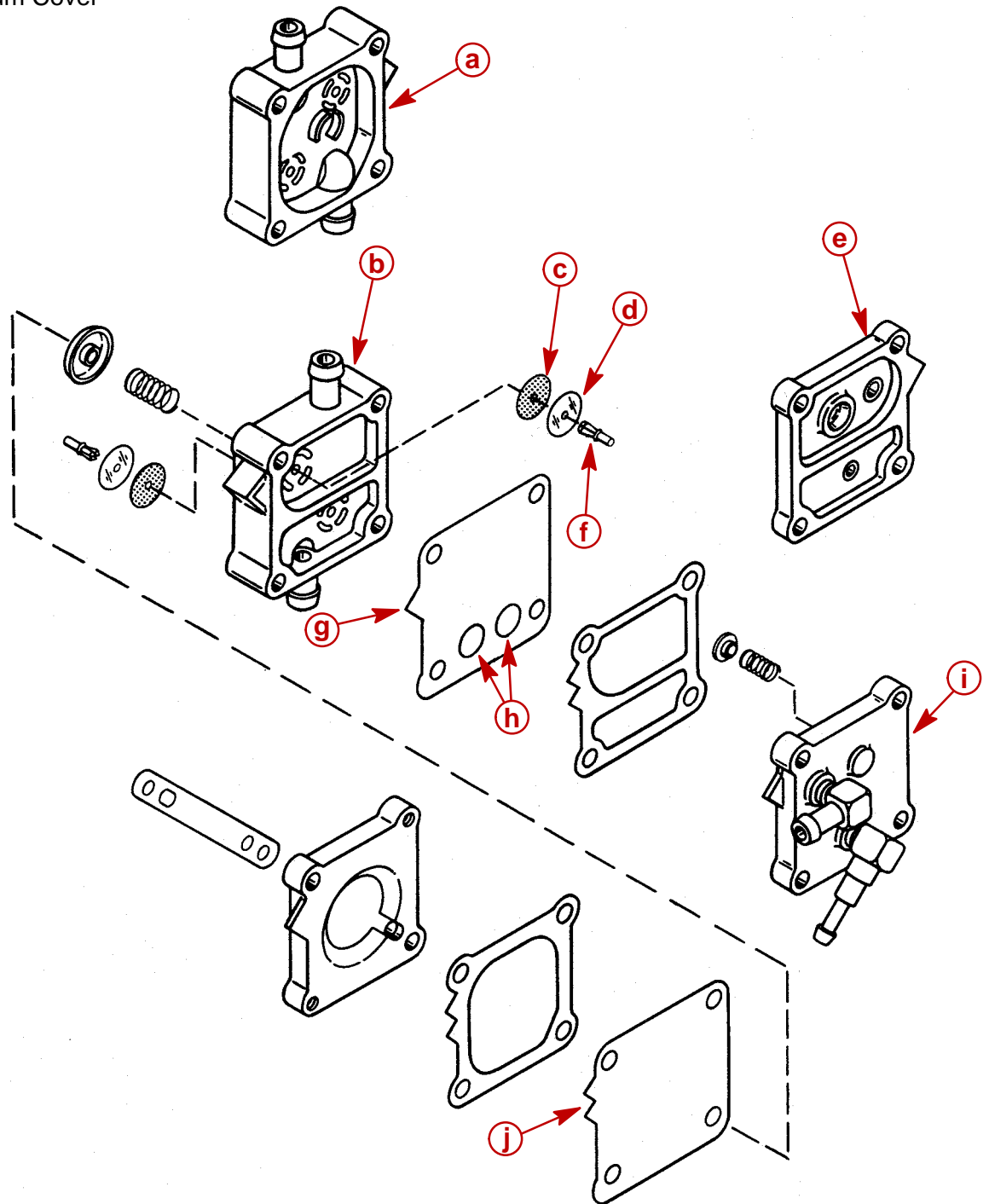
- a** - Body (opposite side view)
- b** - Red Body
- c** - Rubber Valve
- d** - Plastic Disc
- e** - Cover (opposite side view)
- f** - Plastic Check Valve Retainer
- g** - Two Tabs
- h** - Two Bleed Holes
- i** - Cast Aluminum Cover
- j** - Two Tabs



## 100-115 (4 cyl.) hp

Previous body with rubber check valve retainers was colored black.

- a** - Body (opposite side view)
- b** - Natural (Off White) Body
- c** - Rubber Valve
- d** - Plastic Disc
- e** - Cover (opposite side view)
- f** - Plastic Check Valve Retainer
- g** - One Tab
- h** - Two Oil Passage Holes
- i** - Cast Aluminum Cover
- j** - Two Tabs



## V6 hp

Previous body with rubber check valve retainers was also cast aluminum.

- a** - Body (opposite side view)
- b** - Cast Aluminum Body
- c** - Rubber Valve
- d** - Plastic Disc
- e** - Cover (opposite side view)
- f** - Plastic Check Valve Retainer
- g** - Three Tabs
- h** - Two Bleed Holes
- i** - Cast Aluminum Cover
- j** - Three Tabs

