

# Aero-Motive

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**W** A Woodhead Industries, Inc. Company  
P.O. Box 2678 • Kalamazoo, Michigan 49003  
Telephone: (616) 381-1242 • Telex: 224420

## SERVICE MANUAL

**SERIES:** SWING JOINT PART NO'S: 1-313560, 1-313561 & 1-313581  
REFERENCE SEAL KIT H73130003

**FORM:** #SM4085-03 FP

**DATE:** June 1, 1985

### I. DISASSEMBLY

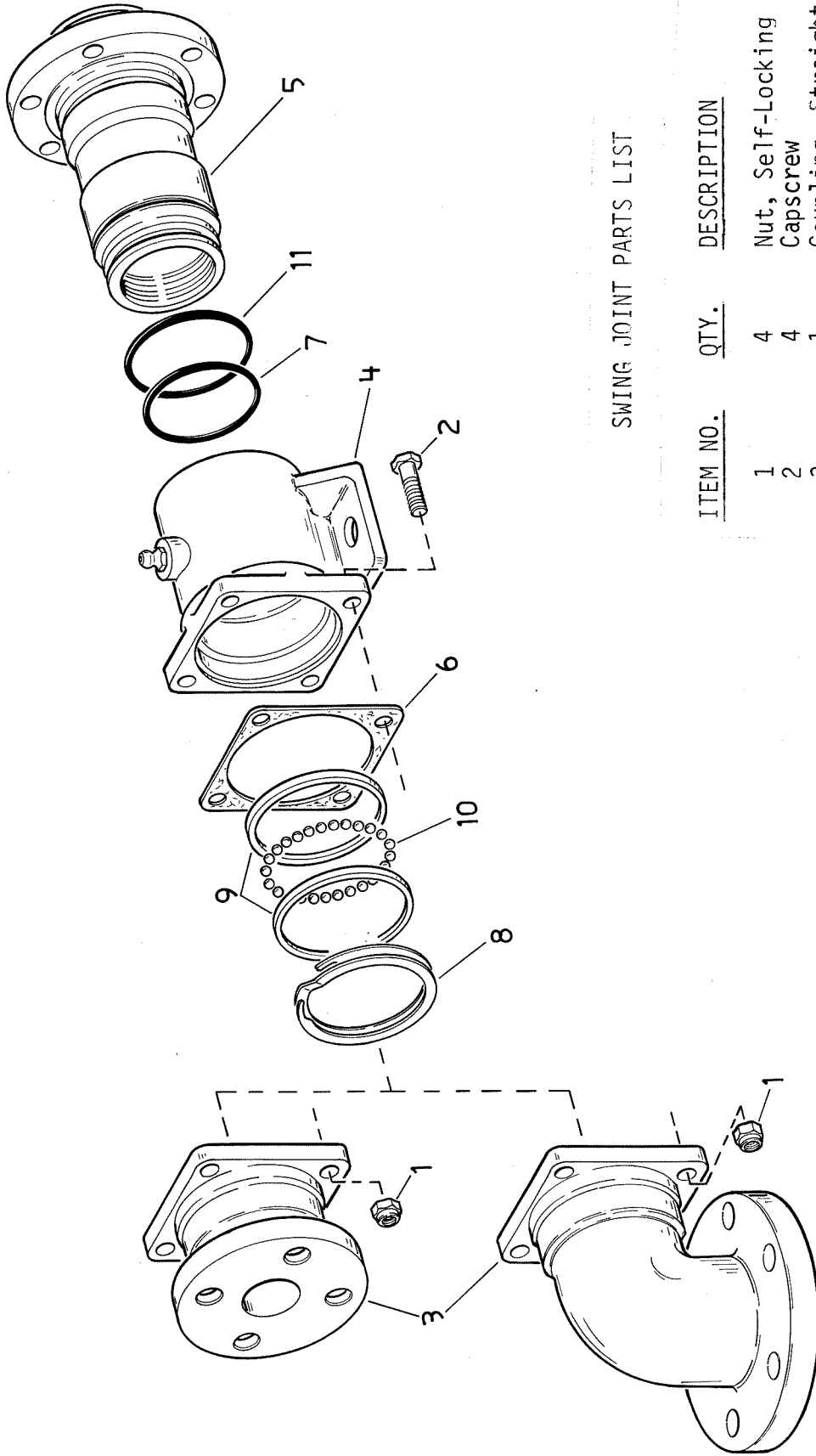
- A. Disassemble the four nuts(1) and capscrews(2) fastening the coupling(3) to the housing(4) and separate coupling(3) from the spool(5) and housing(4). Remove gasket(6).
- B. In sequence, disassemble retaining ring(8), a thrust washer(9), the 49 balls(10), and the second thrust washer(9).
- C. Slide housing(4) off spool(5) and remove small O-Ring(7) and large O-Ring(11) from the spool(5), using either a wood, plastic or brass probe.

### II. CLEANING AND INSPECTION

Clean the coupling(3), housing(4) and spool(5) with an approved solvent and dry them with a lint free cloth. Check the parts for foreign matter, corrosion, pitting or scratches on the mating surfaces and O-Ring groove surfaces. Replace any part found defective.

### III. ASSEMBLY

- A. Assemble a new large O-Ring(11) and a new small O-Ring(7) into their respective grooves in the spool(5) taking care to properly seat the O-Ring into the groove without twisting the O-Ring. After applying a thin film of lubricant per MIL-G-18709 to both O-Rings(7) and (11) and the outside surface of the spool(5), slide the spool(5) with a slight rotation into the housing(4).
- B. With the spool(5) placed on it's end down on a clean flat surface, the small O-Ring(7) on the top of the spool(5), assemble a new thrust washer(9) on to the spool(5), firmly seating the thrust washer(9) into the cavity in the housing(4). Place the new 49 balls(10) on top of the thrust washer(9) in the cavity in housing(4), then assemble the second thrust washer(9) over the balls(10). Assemble the retaining ring(8) into it's groove in the spool(5).
- C. Place a new gasket(6) over the pilot diameter on the coupling(3), then insert the spool(5) into the coupling(3) with a slight rotation. Align the four holes in the coupling(3), gasket(6), and housing(4), then fasten them together using the four capscrews(2) and nuts(1).



SWING JOINT PARTS LIST

ITEM NO.	QTY.	DESCRIPTION
1	4	Nut, Self-Locking Capscrew
2	4	Coupling, Straight
3	1	Coupling, 90° Elbow
4	1	Housing
5	1	Spool, Shaft
6	1	Gasket
7	1	O-Ring (small)
8	1	Retaining Ring
9	2	Washer, Thrust
10	49	Ball Bearings
11	1	O-Ring (large)