

# SCUBAPRO

Technical Service Schematic

**AIR 2, SECOND GENERATION 21-080-000**

Date 9/94 Revison G  
Annual Repair Parts Kit #21-080-041

## Parts

#	QTY	PART #	DESCRIPTION	COST
1	3	01-085-105	BALL, Q.D.	
2	1	21-009-113	BODY, Q.D.	.50
3	1	21-009-112	SEAL, Q.D.	
4	1	21-009-114	POPPET, Q.D.	
5	1	01-020-136	SPRING, POPPET	
6	1	21-009-111	SLEEVE, Q.D.	
7	1	01-020-138	SPRING, SLEEVE	
8	1	01-050-351	O-RING, HOSE, PURPLE	
9	1	01-308-028	HOSE ASSY (28")	
10	1	01-380-028	HOSE & QUICK DISCONNECT ASSY	
11	1	21-080-100	BODY, BLACK	7.40
12	1	21-080-119	DIAPHRAGM, BLACK	
13	1	11-109-123	DISK, DIAPHRAGM	
14	1	21-080-005	DIAPHRAGM ASSY	
15	1	21-080-104	COVER, DIAPHRAGM	
16	1	21-080-105	RETAINER, DIAPHRAGM	
17	1	01-022-101	NUT, LOCKING, #5-40	
18	1	01-060-107	WASHER	
19	1	21-009-121	LEVER	1.50
20	1	21-080-121	INSERT, HOUSING	
21	1	21-080-122	HOUSING	
22	1	01-020-160	SPRING, DEMAND VALVE	
23	1	11-080-116	STEM, DEMAND VALVE	.30
24	1	11-108-101	SEAT, RUBBER	
25	1	21-080-007	SEAT & STEM ASSY	
26	1	21-080-009	ORIFICE	
27	1	01-050-132	O-RING, BLUE	
28	1	21-080-124	TUBE, INLET	
29	2	01-050-144	O-RING, INLET TUBE, BLUE	
▲	1	01-088-101	STRAP, MOUTHPIECE, BLACK	
▲	1	01-088-107	STRAP, MOUTHPIECE, CRYSTAL	
▲	1	01-040-010	MOUTHPIECE, BLACK	
▲	1	01-040-011	MOUTHPIECE, RED	
▲	1	01-040-006	MOUTHPIECE, CRYSTAL	
32	1	21-080-120	CLIP, RETAINING	
33	1	21-080-003	BUTTON, INFLATOR	
*	1	21-080-113	STEM, INFLATOR	
35	1	21-080-008	INFLATOR BUTTON AND STEM ASSY	
36	1	01-020-149	SPRING, INFLATOR	
37	1	21-080-108	BUSHING, INFLATOR STEM	
38	1	01-050-120	O-RING, BUSHING, GRAY	
39	2	01-050-108	O-RING, INFLATOR SEAL, PURPLE	
40	1	01-073-110	CLIP, INLET RETAINING	
*	1	21-080-123	NUT, INFLATOR	
42	1	21-080-118	SEAL, PLUG	
43	1	21-080-101	PLUG, INFLATOR	
44	1	21-080-002	BUTTON, EXHAUST	
45	1	21-080-112	STEM, EXHAUST	
46	1	01-020-154	SPRING, EXHAUST BUTTON	
47	1	21-080-111	GASKET, EXHAUST	
48	1	21-080-106	SPIDER, EXHAUST	
*	1	11-109-122	VALVE, EXHAUST	
50	1	21-080-107	COVER, EXHAUST	
51	1	01-050-312	O-RING, EXHAUST STEM, BLUE	
52	1	01-060-138	WASHER, STEM SEAL	
53	1	01-020-153	SPRING, STEM SEAL	
54	1	21-080-004	SEAL, EXHAUST	
55	1	01-121-114	NUT, HEX, #5-40	
●	1	21-082-101	INLET PROTECTOR	
●	1	01-060-003	WASHER	

## Technical Information:

To prevent field complaints and leakage, the AIR 2 should be adjusted so that it will withstand 150 psi intermediate pressure from the first stage. If it leaks at lower pressures, the spring load of the poppet can be boosted by placing a washer #01-060-003 between the demand valve stem #23 and the spring #22. Refer to engineering bulletin #175 for more information.

Other reference engineering bulletins: see #180.

## Special Engineering Notes:

Item #49 note: After installation, the barb of the valve should be clipped off so only 1/8" remains above the floor of the spider. The extra length of barb is to facilitate assembly, and may interfere with the exhaust seal if left in place.

Item #34 note: This retaining clip is bowed to apply tension to the inlet tube when installed. The clip is installed so the outer curve of the clip faces away from the regulator body.

Item #41 note: The nut is installed so the side with the recess side faces the o-ring.

## Legend (prices subject to change without notice)

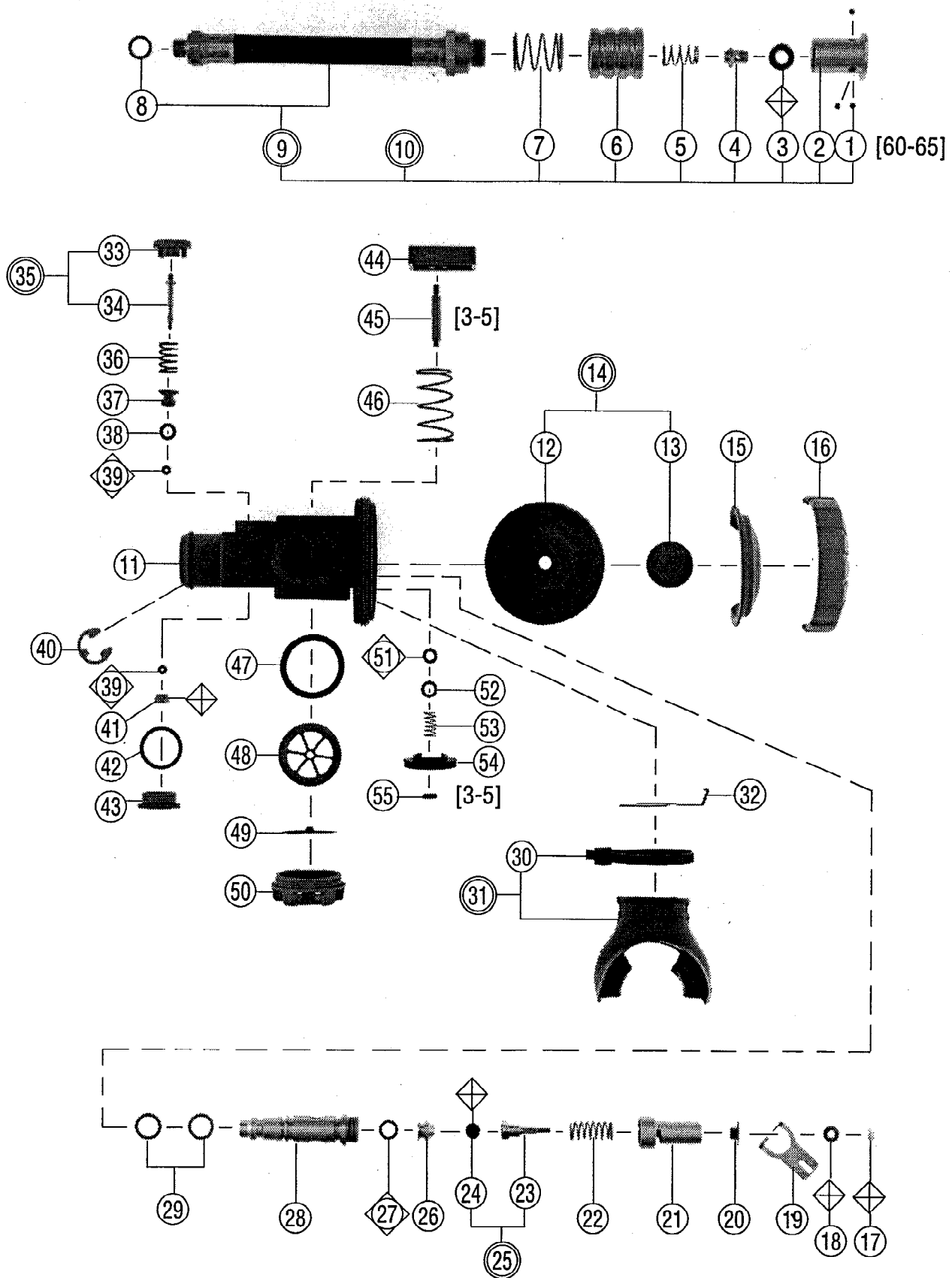
- Not Shown      ◇ Dynamic O'Ring Replace Annually
- Optional Item      ◊ Annual Replacement
- ▲ Limited Warranty      [ ] Torque In Inch Pounds
- Older Configuration      \* See Note

# SCUBAPRO

Technical Service Schematic

AIR 2, SECOND GENERATION 21-080-000

Date 9/94      Revision G  
Annual Repair Parts Kit #21-080-041



# SCUBAPRO

Technical Service Schematic

**AIR 2, THIRD GENERATION 21-08X-000**

Date 9/94

Revison B

Annual Repair Parts Kit #21-085-041

## Parts

*Return*

#	QTY	PART #	DESCRIPTION	COST
1	3	01-085-105	BALL, Q.D.	
2	1	21-009-113	BODY, Q.D.	
3	1	21-009-112	SEAL, Q.D.	1.00
4	1	21-009-114	POPPET, Q.D.	
5	1	01-020-136	SPRING, POPPET	
6	1	21-009-111	SLEEVE, Q.D.	
7	1	01-020-138	SPRING, SLEEVE	
8	1	01-050-351	O-RING, HOSE, PURPLE	
9	1	01-308-028	HOSE ASSY (28")	
10	1	01-380-028	HOSE & QUICK DISCONNECT ASSY	
11	1	21-085-101	BODY, BLACK	
12	1	21-080-119	DIAPHRAGM, BLACK	7.40
13	1	11-109-123	DISK, DIAPHRAGM	
14	1	21-080-005	DIAPHRAGM ASSY	
15	1	21-085-104	WASHER, THRUST	
16	1	21-085-105	COVER, DIAPHRAGM	
17	1	01-022-101	NUT, LOCKING, #5-40	
18	1	01-060-107	WASHER	
19	1	21-009-121	LEVER	
20	1	21-080-121	INSERT, HOUSING	2.00
21	1	21-085-112	HOUSING	
22	1	01-020-216	SPRING, DEMAND VALVE	
23	1	11-108-102	STEM, DEMAND VALVE	
24	1	11-108-101	SEAT, RUBBER	4.00
25	1	11-108-002	SEAT & STEM ASSY	
26	1	21-085-009	ORIFICE	
27	1	01-050-293	O-RING, RED	
28	1	21-085-107	TUBE, INLET	
29	2	01-050-385	O-RING, INLET TUBE, BLACK	
▲	30	01-088-101	STRAP, MOUTHPIECE, BLACK	
	1	01-088-107	STRAP, MOUTHPIECE, CRYSTAL	
▲	31	01-040-010	MOUTHPIECE, BLACK	
	1	01-040-011	MOUTHPIECE, RED	
	1	01-040-006	MOUTHPIECE, CRYSTAL	
*	32	01-073-110	CLIP, INLET RETAINING	
	33	21-085-002	BUTTON, EXHAUST, RED	
	1	21-085-016	BUTTON, EXHAUST, GRAY	
	1	21-085-017	BUTTON, EXHAUST, PINK	
34	1	01-020-172	SPRING, EXHAUST	
35	1	01-060-149	WASHER, STEM SEAL	
36	1	01-050-126	O-RING, EXHAUST STEM	
37	1	21-080-004	SEAL, EXHAUST	
38	1	01-121-114	NUT, HEX, #5-40	
39	1	21-085-109	GASKET, EXHAUST	
*	40	21-085-103	SPIDER, EXHAUST	
41	1	11-109-128	VALVE, EXHAUST, BLACK	
42	1	21-085-106	EXHAUST COVER	
43	1	21-626-005	BUTTON, INFLATION, RED	
	1	21-626-014	BUTTON, INFLATION, GRAY	
	1	21-626-015	BUTTON, INFLATION, PINK	
44	1	01-050-117	O-RING, INFLATOR STEM, BLACK	
45	1	01-020-165	SPRING, INFLATOR	
46	1	21-626-004	SEAT ASSY	3.00
47	1	01-050-161	O-RING, PLUG, BLUE	
48	1	21-085-111	PLUG, INFLATOR	
●	1	21-082-101	INLET PROTECTOR	

### Technical Information:

To prevent field complaints and leakage, the AIR 2 should be adjusted so that it will withstand 150 psi intermediate pressure from the first stage. If it leaks at lower pressures, the spring load of the poppet can be boosted by adjusting the orifice #26. The orifice should be screwed completely into the inlet (away from the demand valve stem) for the initial adjustment, and gradually adjusted forward towards the demand valve stem to increase the spring tension if needed.

### Special Engineering Notes:

Item #40 note: This part is oriented such that the exhaust valve item #41 seats against the side of the plastic spider with the flat ribs. There should be six ribs visible on the outside edge of the valve when it is installed properly. These ribs are provided for tool engagement. The barb of the exhaust valve should rest in the small circular recess on the side of the spider facing the body. After installation, the barb of the valve should be clipped off so only 1/8" remains above the floor of the spider. The extra length of barb is to facilitate assembly, and may interfere with the exhaust seal if left in place.

Item #32 note: This retaining clip is bowed to apply tension to the inlet tube when installed. The clip is installed so the outer curve of the clip faces away from the regulator body.

### Legend (prices subject to change without notice)

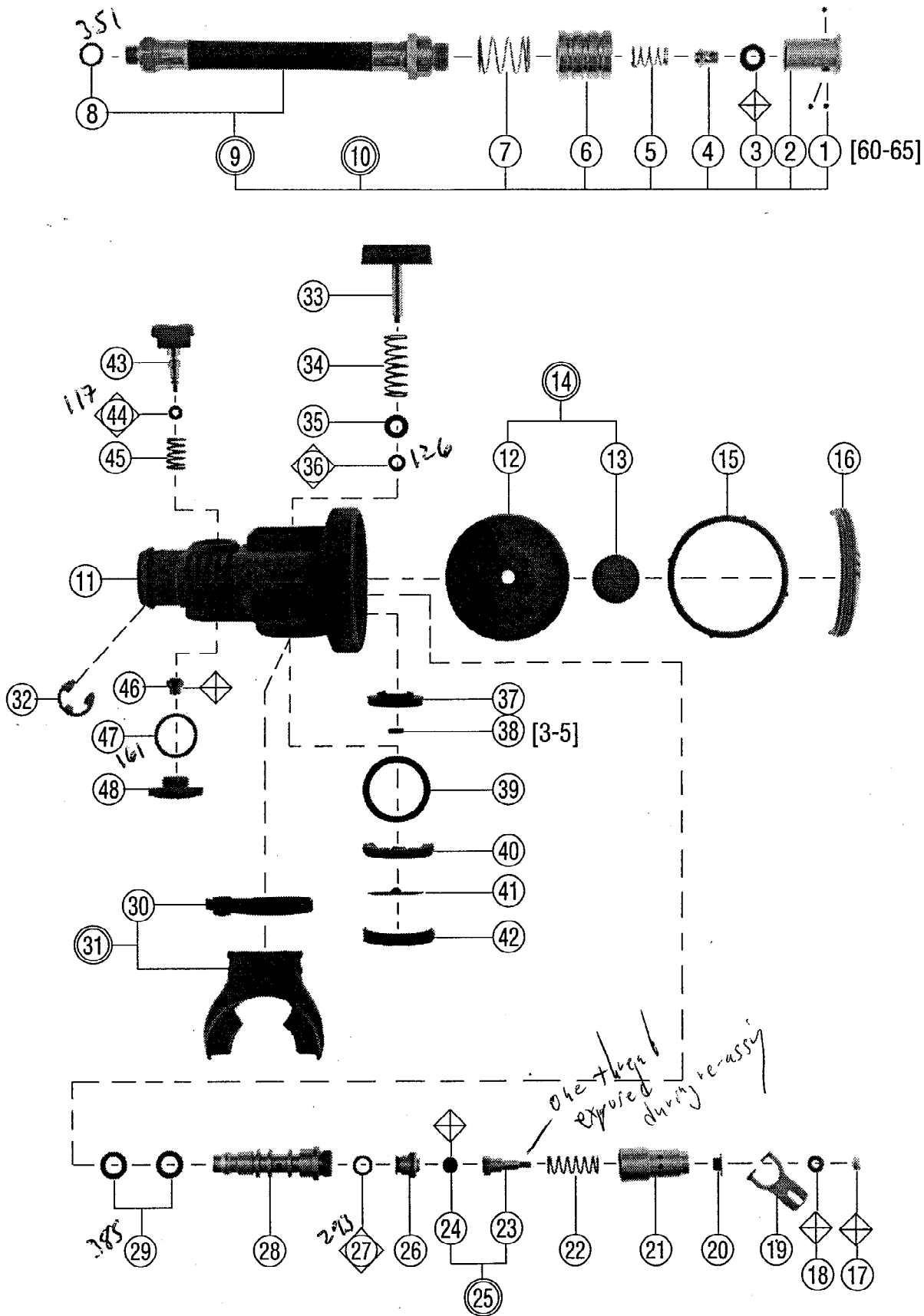
- Not Shown      ◇ Dynamic O'Ring Replace Annually
- Optional Item      ◇ Annual Replacement
- ▲ Limited Warranty      [ ] Torque In Inch Pounds
- Older Configuration      \* See Note

# SCUBAPRO

Technical Service Schematic

AIR 2, THIRD GENERATION 21-08X-000

Date 9/94      Revision B  
Annual Repair Parts Kit #21-085-041



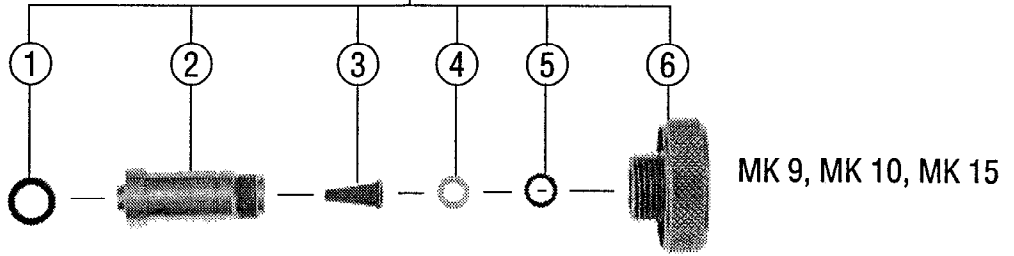
# SCUBAPRO

Technical Service Schematic

## DIN ADAPTERS

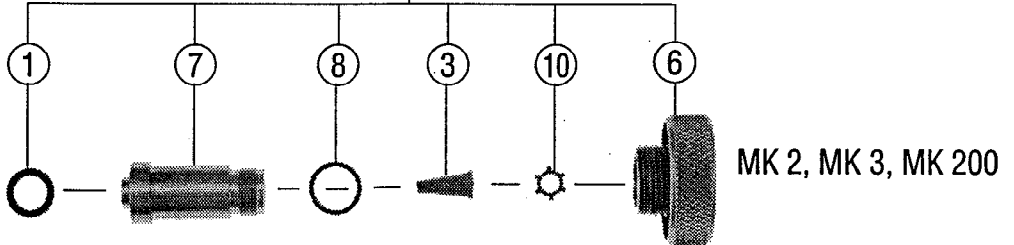
Date 9/94 Revision A

10-400-030

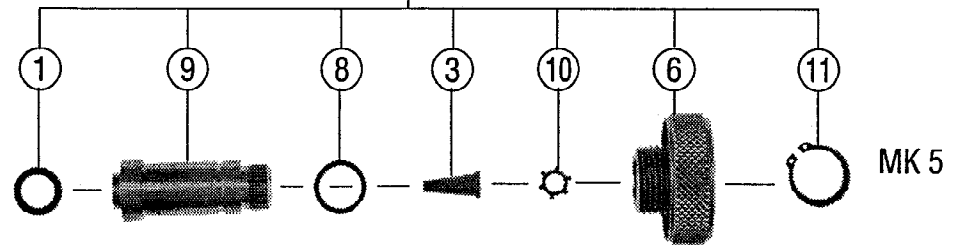


10-043-030

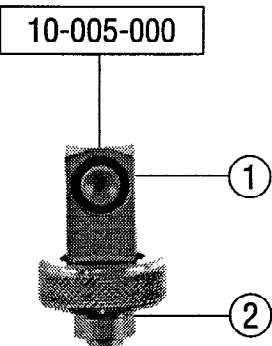
FIRST STAGE  
DIN ADAPTERS



10-105-030



DIN VALVE TO  
YOKE ADAPTER  
200 BAR (3000 PSI) ONLY



DIN FIRST STAGE TO  
YOKE ADAPTER

