	Computer Sports Medicine, Inc.		
	Title:	Work Simulation Tools	
	Document #:	7720A001	
	Rev:	C	Effective Date: 7/14/2010
	DCR#:	625	
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ASSEMBLY METHOD COVER SHEET		
WORK SIMULATION TOOLS ASSEMBLY		
P/N: 7720A001	N/A:	REV.: C

APPROVALS			
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RECORD OF REVISIONS

<u>REV</u> <u>LTR</u>	<u>ECN</u> <u>NUMBER</u>	<u>REVISION</u> <u>DESCRIPTION</u>	<u>PGS</u> <u>CHG</u>	<u>BY</u> <u>DATE</u>	<u>APP'D</u> <u>DATE</u>
A		PRODUCTION RELEASE		JM 9/97	
B	00047	BOM UPDATE	2-21	RB 5/06	KAL 5/4/06
C	625	CHANGED HANDGRIP	10	RJP 7/10	RJP 7/13

ADAPTER AND ACCESSORY LISTING

ADAPTER	DESCRIPTION	PART NUMBER	FIGURE #	PAGE #
A	Universal WorkSim Adapter	7720A100	2	5
B	Steering Wheel/Valve Adapter	7720A400	3	7
C	Small Fluted Knob Adapter	7320A600	4	9
D	Small Fluted Knob w/Large Offset	7320A610	4	9
E	Large Fluted Knob	7320A640	4	9
F	Small T-Handle	7320A660	4	9
G	Large T-Handle	7320A670	4	9
H	Spherical Knob	7320A620	4	9
I	Oval Knob	7320A550	4	9
J	Multi-Grip / Screwdriver Adapter	7720A630	5	11
K	Universal Tool Adapter	7320P201	6	13
L	Stationary Gripper Arm	7720A300	7	15
M	Gripping Device	7720A320	8	17
N	1/2" Diameter Handle (2 pieces)	7720C302	8	17
O	3/4" Diameter Handle (2 pieces)	7720C301	8	17
P	Push / Pull Input Arm	7720A500	9	19
Q	Simulation Handle	7720A500	10	21
R	1/8" Wrench	BK030125		

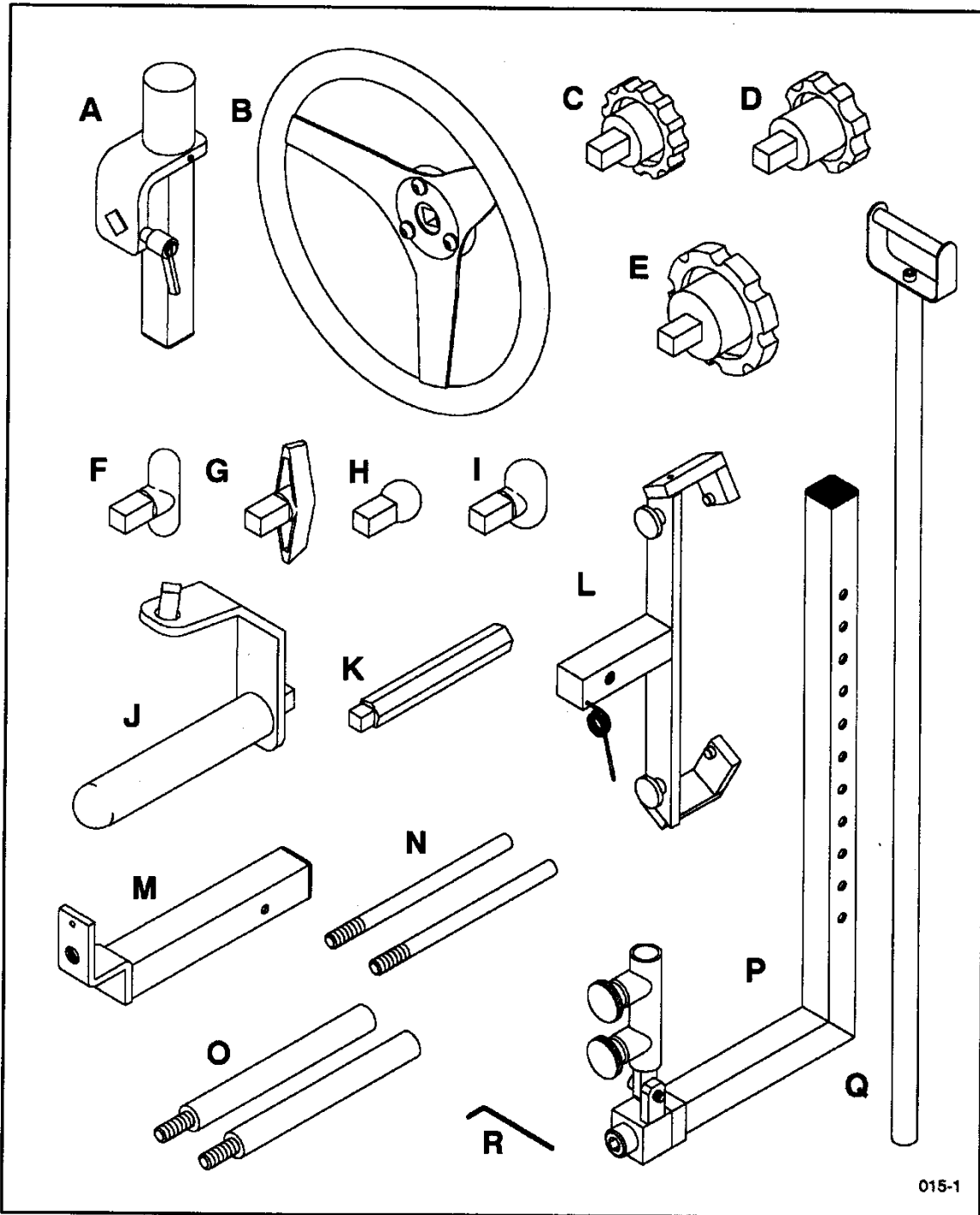


Figure 1. Work Simulation Adapters and Accessories.

REPLACEABLE PARTS

REF. NO.	PART NO.	QTY	DESCRIPTION
A	7720A100		Universal Work Sim Arm Assembly
1.	7720C121-1	1	Counter Weight
2.	7320M122	1	Stud, 3/8 – 16 × 1-1/2
3.	HY622920	1	Set Screw, 1/4–20 × 1-1/4
4.	BH030019	1	Adjustable Handle
5.	BK030125	1	Allen Wrench, 1/8
6.	PP300013	1	Insert Glide, 1-1/4” sq. × 16 ga.
7.	7720C110	1	Universal WorkSim Weldment
8.	YA000023	A/R	Loctite #262 (Red)
9.	YG000007	A/R	SuperLube Gel

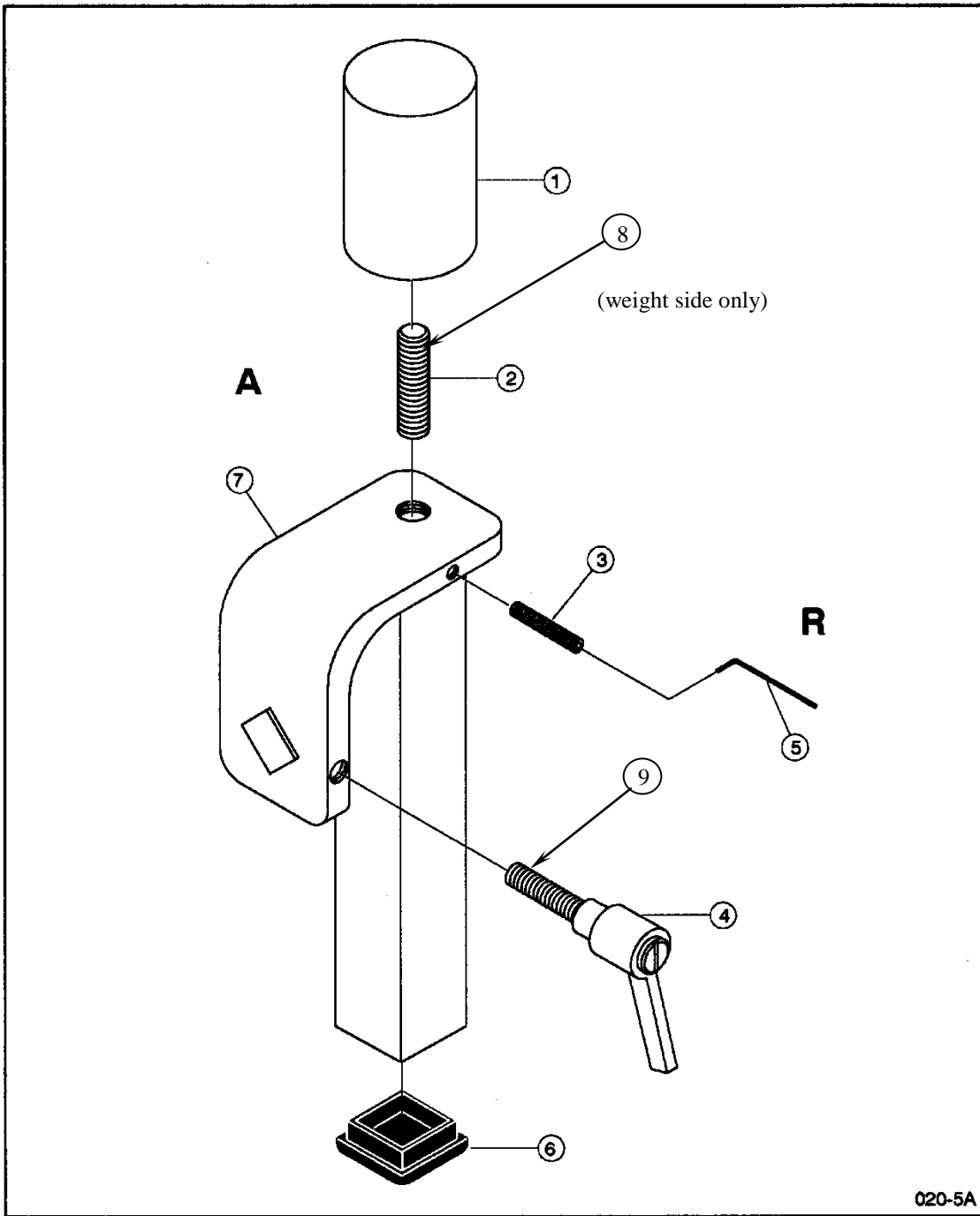


Figure 2. Universal WorkSim Arm.

REPLACEABLE PARTS

REF. NO.	PART NO.	QTY	DESCRIPTION
B	7720A400		Steering Wheel / Valve Assembly
1.	7720P408	1	Steering Wheel / Valve Weldment
2.	HS308300	3	Lockwasher, 1/4
3.	HC620412	3	Butt. Hd. Cap Screw, 1/4×-20×1/2
4.	732WW412	1	Steering Wheel / Valve Adapter
5.	YA000008	A/R	Loctite #242-31 (Blue)

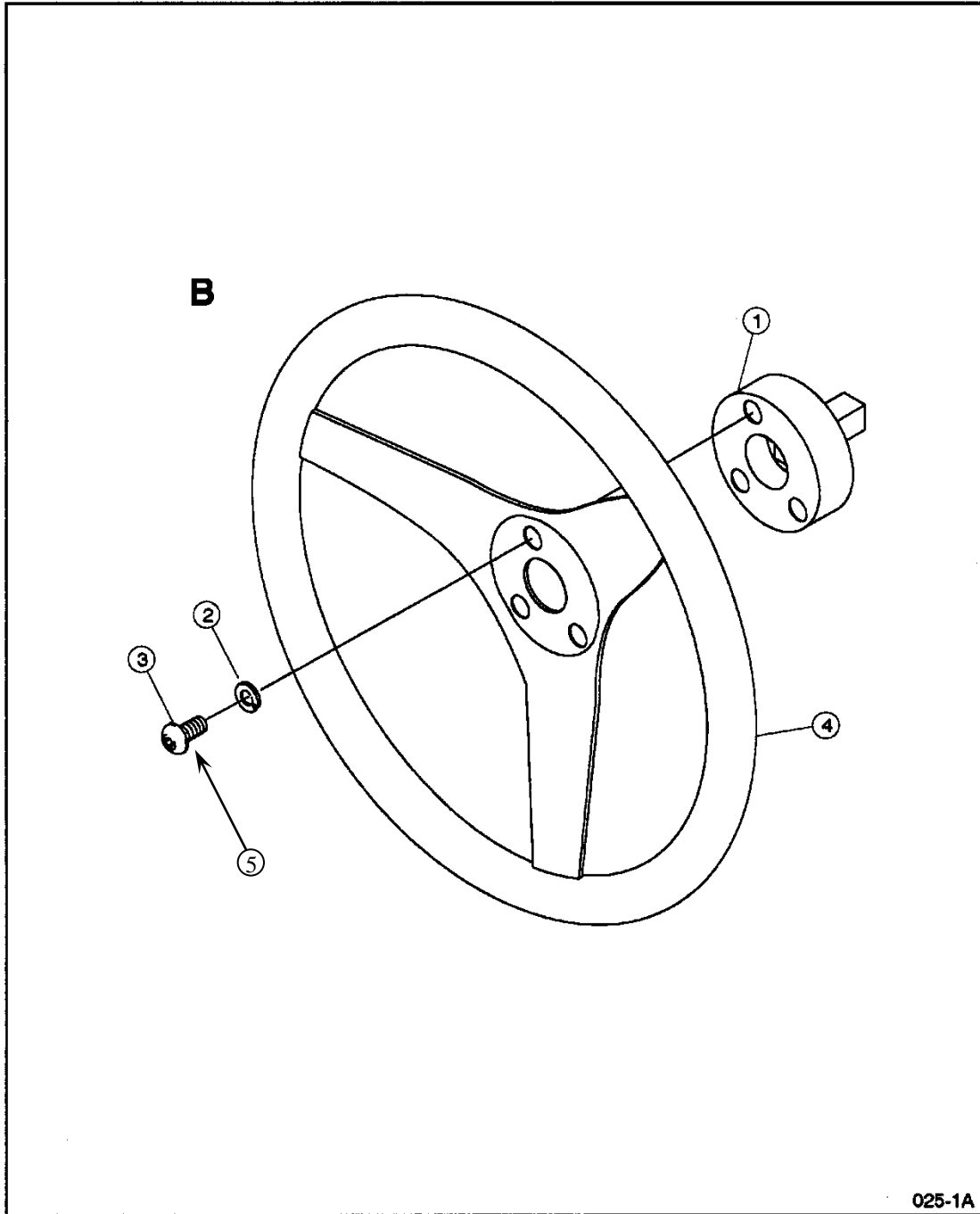


Figure 3. Steering Wheel / Valve Adapter.

REPLACEABLE PARTS

REF. NO.	PART NO.	QTY	DESCRIPTION
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C	7320A600		Small Fluted Knob Assembly
1.	7320P601	1	Threaded Knob Adapter, 3/8–16
2.	732PP602	1	Small Fluted Knob
9.	YA000023	A/R	Loctite #262 (Red)
D	7320A610		Small Fluted Knob with Offset
1.	7320P601	1	Threaded Knob Adapter, 3/8–16
3.	PP450005	1	Small Fluted Knob with Offset
9.	YA000023	A/R	Loctite #262 (Red)
E	7320A640		Large Fluted Knob Assembly
1.	7320P601	1	Threaded Knob Adapter, 3/8–16
4.	732PP641	1	Large Fluted Knob
9.	YA000023	A/R	Loctite #262 (Red)
F	7320A660		Small “T” Handle Assembly
1.	7320P601	1	Threaded Knob Adapter, 3/8–16
5.	732PP661	1	Small “T”–Handle
9.	YA000023	A/R	Loctite #262 (Red)
G	7320A670		Large “T” Handle Assembly
1.	7320P601	1	Threaded Knob Adapter, 3/8–16
6.	732PP671	1	Large “T”–Handle
9.	YA000023	A/R	Loctite #262 (Red)
H	7320A620		Spherical Knob Assembly
1.	7320P601	1	Threaded Knob Adapter, 3/8–16
7.	732PP621	1	Spherical Knob
9.	YA000023	A/R	Loctite #262 (Red)
I	7320A650		Oval Knob Assembly
1.	7320P601	1	Threaded Knob Adapter, 3/8–16
8.	732PP651	1	Oval Knob
9.	YA000023	A/R	Loctite #262 (Red)

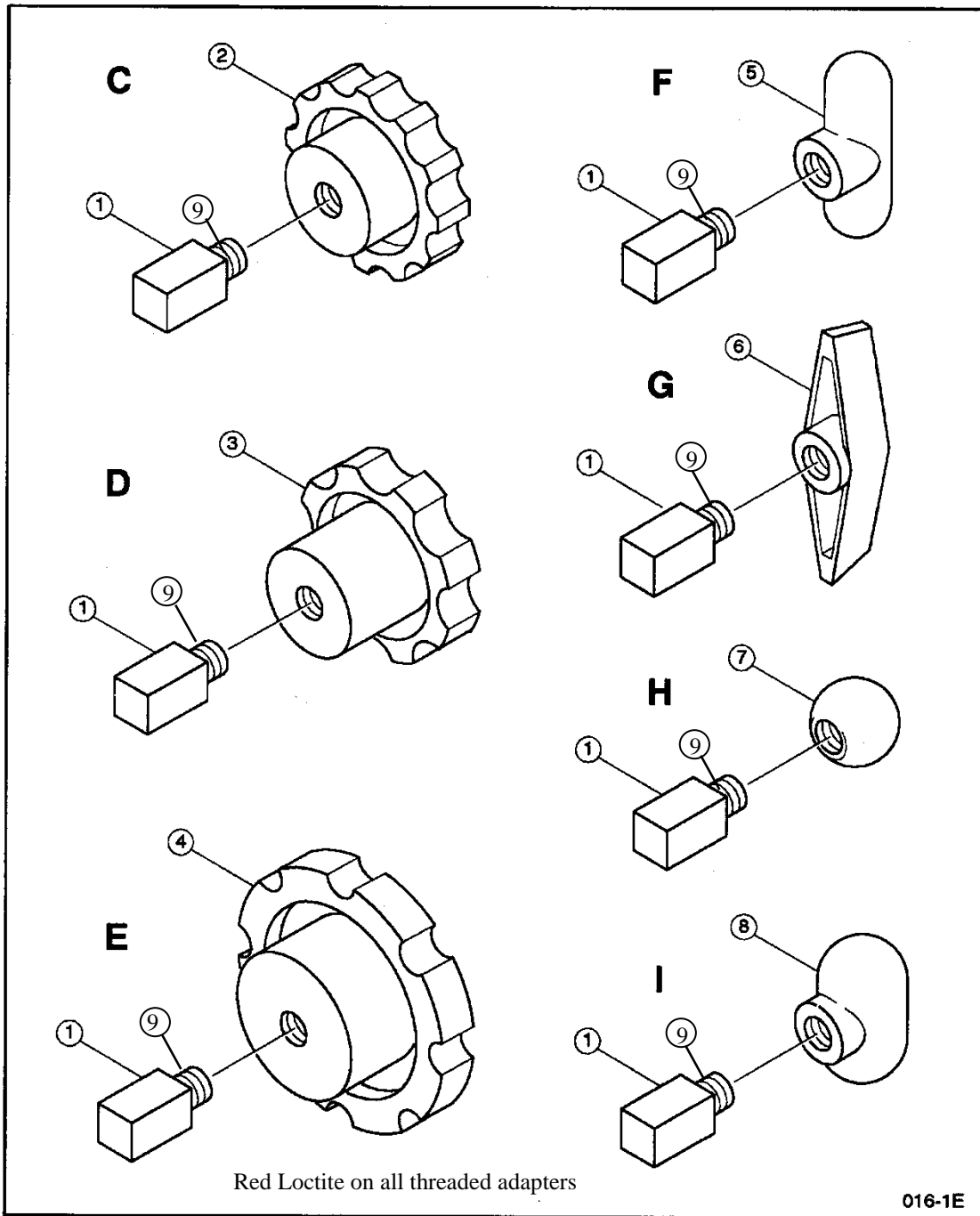


Figure 4. Handles and Knobs.

REPLACEABLE PARTS

REF. NO.	PART NO.	QTY	DESCRIPTION
J	7720A630		Multi-Grip / Screwdriver Assembly
1.	7720C631	1	Multi-Grip Screwdriver Weldment
2.	PP400201	1	HandGruip (Fly)

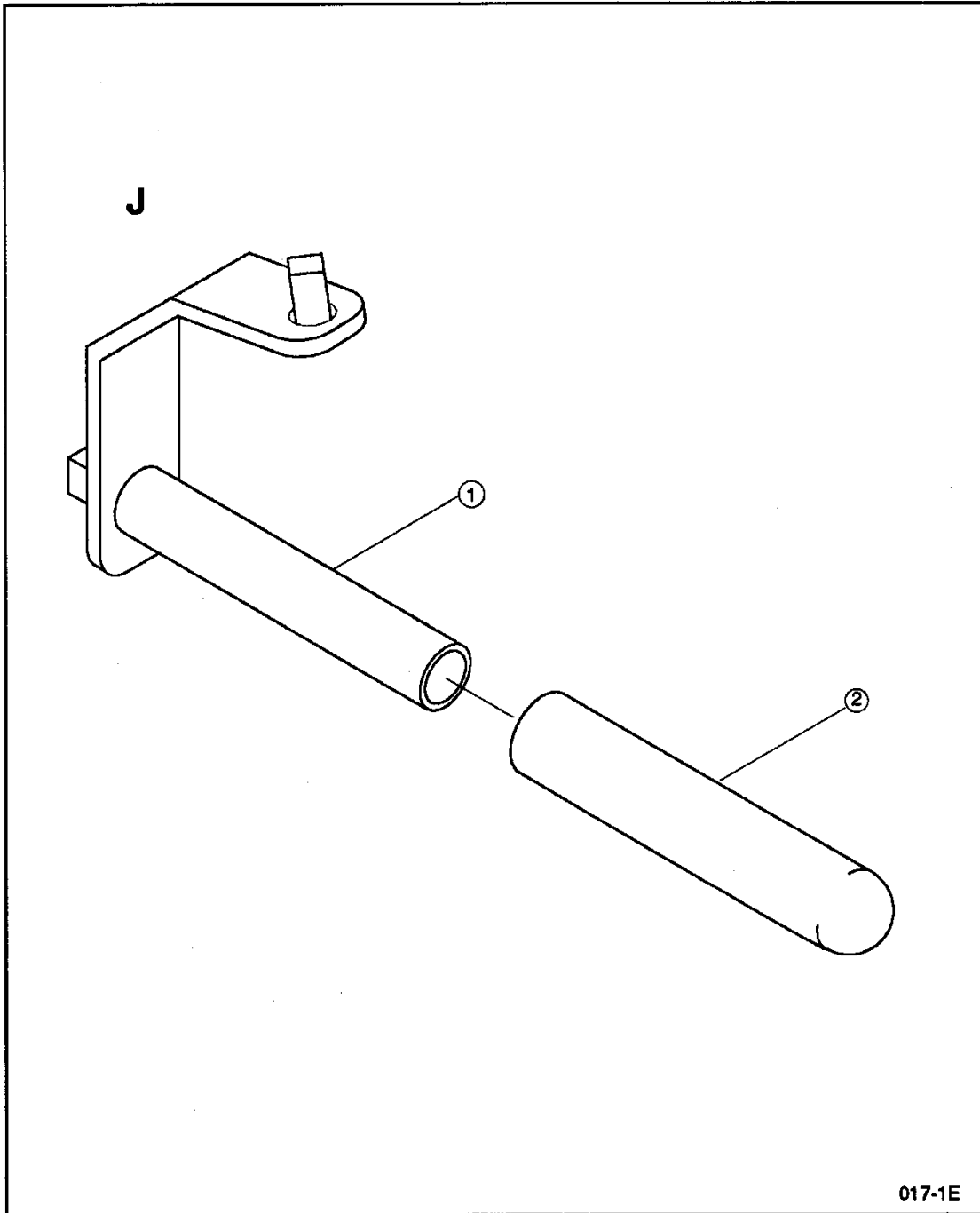


Figure 5. Multi-Grip / Screwdriver Adapter.

REPLACEABLE PARTS

REF. NO.	PART NO.	QTY	DESCRIPTION
K	7320P201	1	Universal Tool Adapter

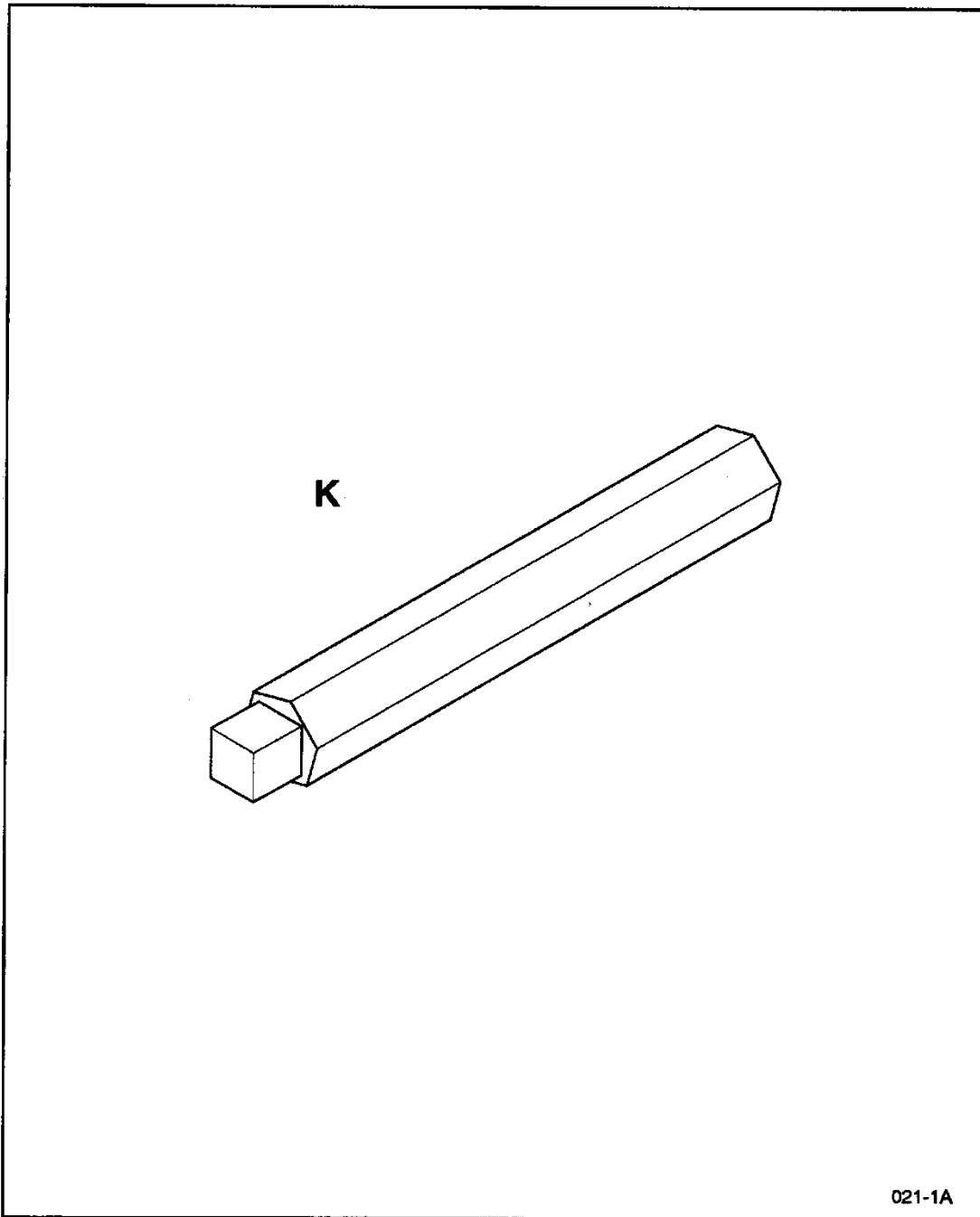


Figure 6. Universal Tool Adapter.

REPLACEABLE PARTS

REF. NO.	PART NO.	QTY	DESCRIPTION
L	7720A300		Stationary Gripper Arm Assembly
1.	HD583307	2	Slotted Shoulder Screw #10-32×14
2.	7320M305	2	R.O.M. Face Clamp
3.	HS107702	2	Flat Washer, 1/4"
4.	PP060010	2	Stem Bumper, 7/16" Dia.
6.	HC582810	1	Socket Head Cap Screw, #10-32×3/8
7.	HY581408	2	Set Screw, #10-32×1/4
8.	7320M307	2	Machined Stud
9.	PP460019	2	Clamp Knob
10.	7720C316	1	Gripper Weldment
11.	YA000023	A/R	Loctite #262 (Red)
12.	YA000008	A/R	Loctite #242-31 (Blue)
13.	YG000007	A/R	SuperLube Gel

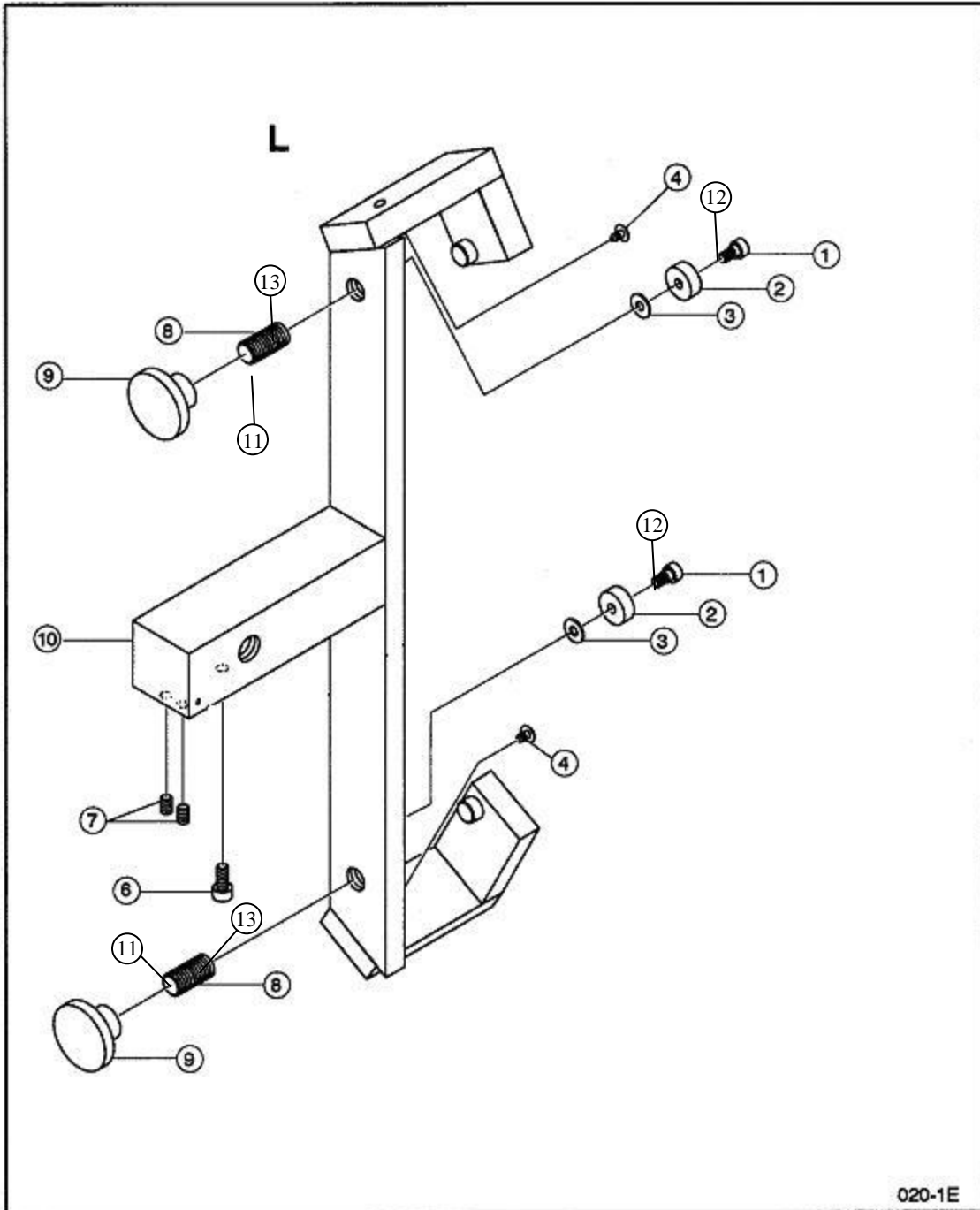


Figure 7. Stationary Gripper Arm.

REPLACEABLE PARTS

REF. NO.	PART NO.	QTY	DESCRIPTION
M	7720A320	1	Gripping Device Assembly
1.	7720W320	1	Gripping Device
2.	PP300013	1	Insert Glide, 1-1/4" sq. × 16 ga.
N	7320C302	1 pair	Handles, 1/2" Diameter
O	7320C301	1 pair	Handles, 3/4" Diameter

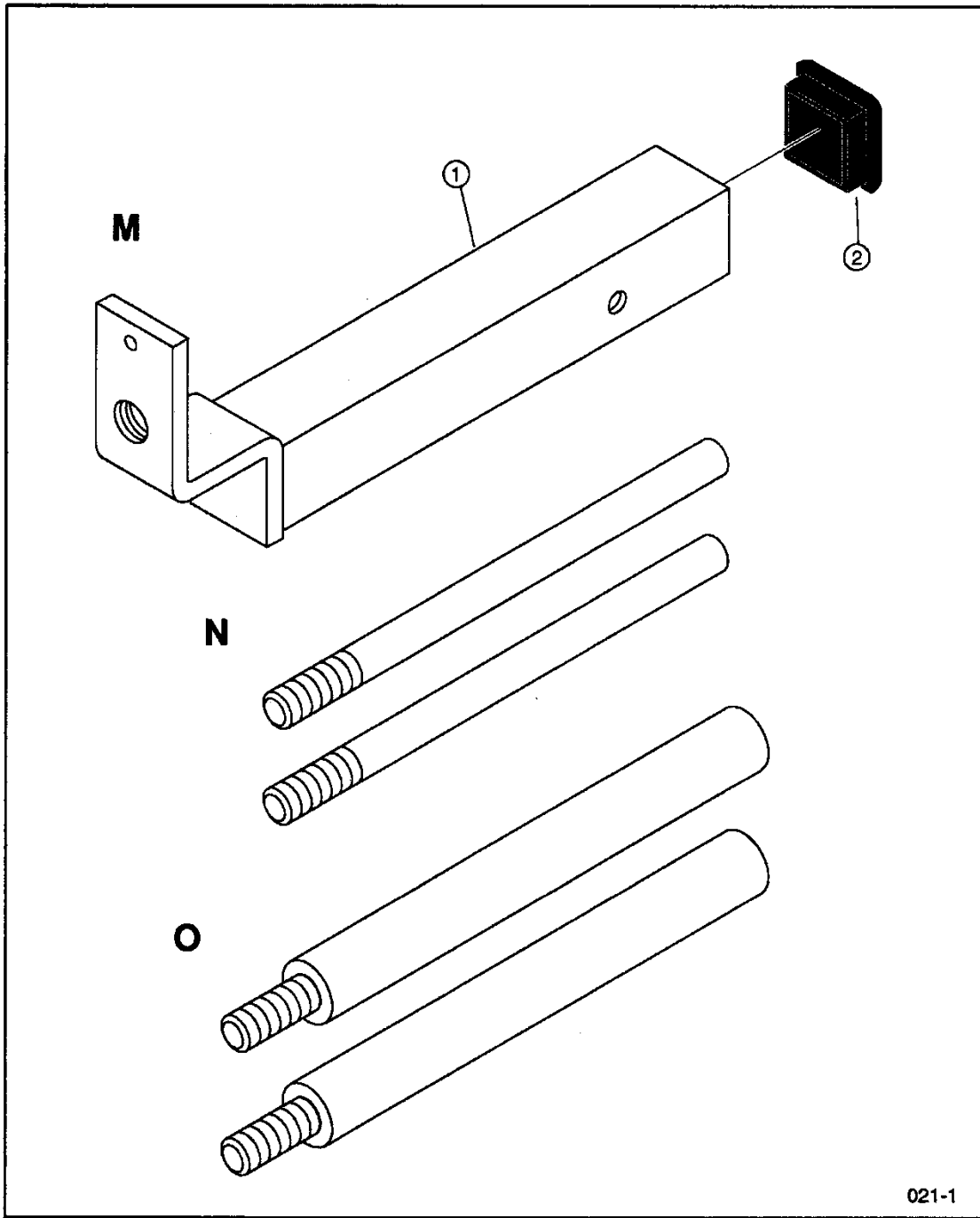
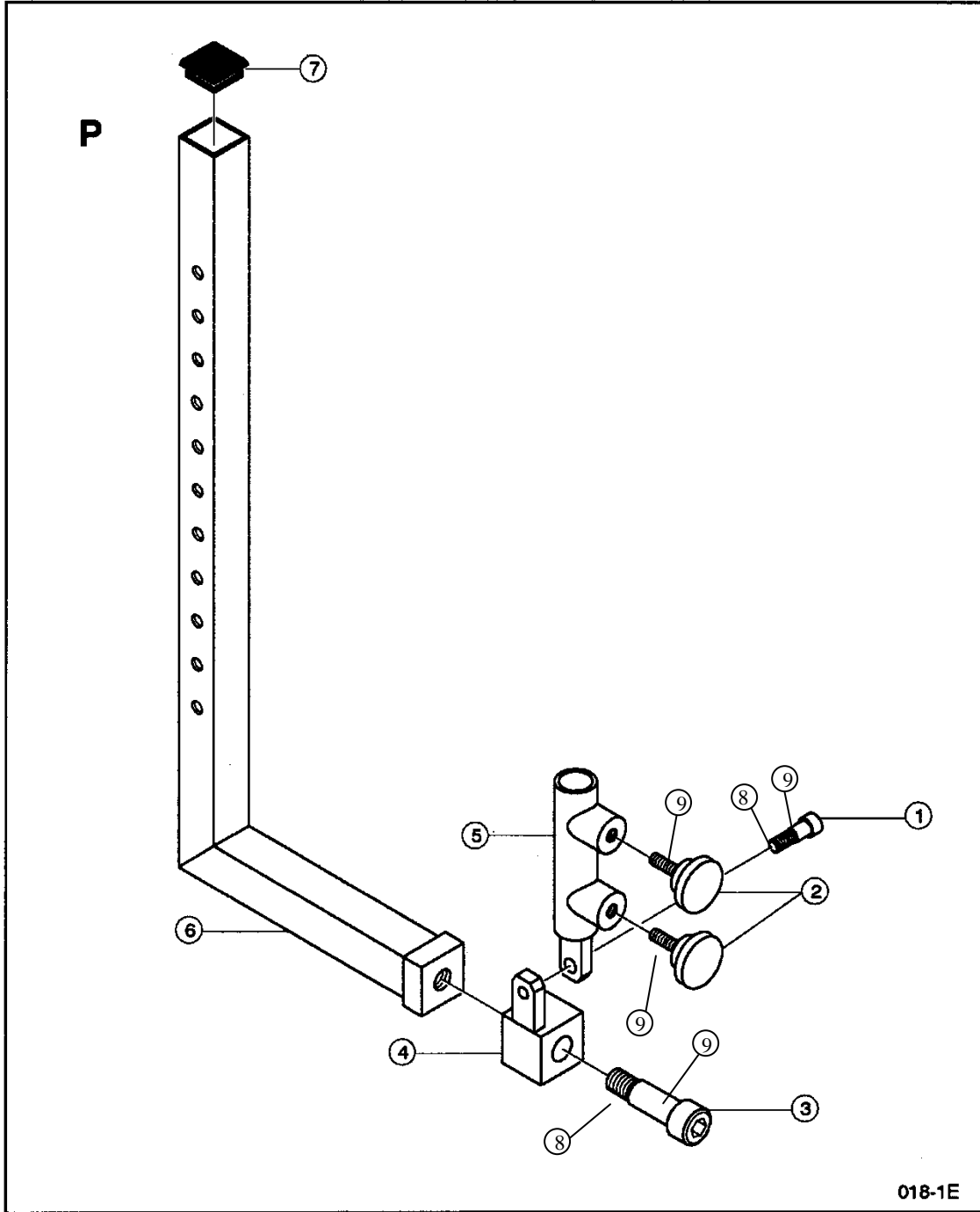


Figure 8. Gripping Device and Handles.

REPLACEABLE PARTS

REF. NO.	PART NO.	QTY	DESCRIPTION
P	7720A500		Push / Pull Input Arm Assembly
1.	HD383312	1	Shoulder Bolt, 3/8-16 × 1-1/16
2.	PP460012	2	Locking Knob w/Shaft
3.	HD753322	1	Shoulder Bolt, 3/4 (5/8-11 NC) × 1-1/2
4.	7720C510	1	C/Swivel Hub Weldment
5.	7720C515	1	Input Arm Receiving Tube Weldment
6.	7720W505	1	Input Tube Weldment
7.	PP300013	1	Insert Glide, 1-1/4" sq. × 16 ga.
8.	YA000008	A/R	Loctite #242-31 (Blue)
9.	YG000007	A/R	SuperLube Gel



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Figure 9. Push / Pull Input Arm.

REPLACEABLE PARTS

REF. NO.	PART NO.	QTY	DESCRIPTION
Q	7720A500		Simulation Handle Assembly
1.	7720C520	1	Simulation Handle Adapter
2.	7720C525	1	Simulation Handle Weldment
3.	HD383312	1	Shoulder Bolt, 3/8-16 × 11/16
4.	YA000008	A/R	Loctite #242-31 (Blue)
5.	YG000007	A/R	SuperLube Gel

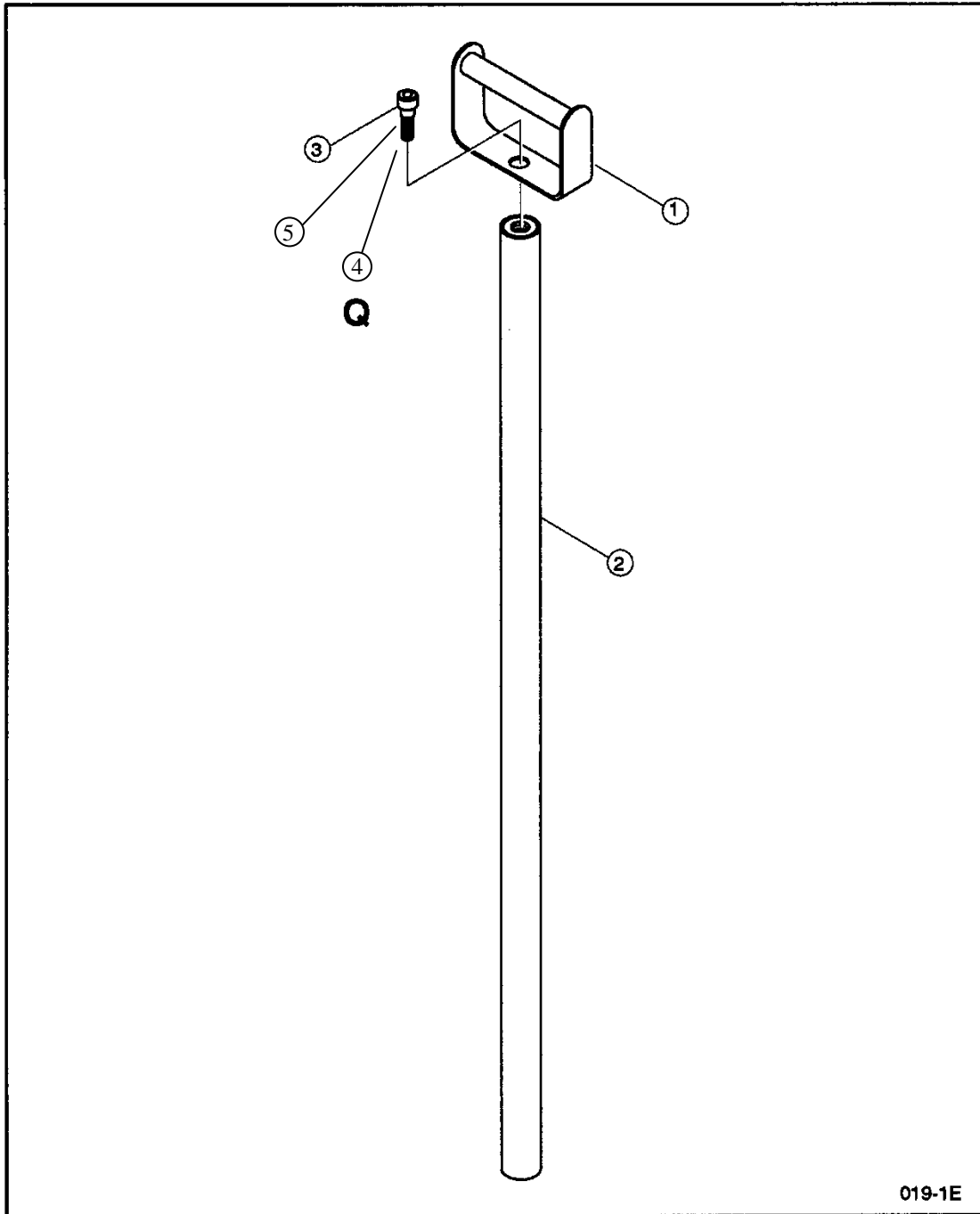


Figure 10. Simulation Handle.

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