OPI ESTIMATE OF 2003 ANNUAL US EXPENDITURES ON REMANUFACTURING/OVERHAUL/REBUILD

Capital Goods Operators	US Installed Base at CRV (Current Replacement Cost) SM		Annual Maintenance and Modification expenditures as a % of CRV	Annual Remfg/ overhaul/ rebuild expenditures as a % of Maintenance expenditures	Annual Remfg/ overhaul/ rebuild expenditures \$M	
Transportation						
Aircraft	\$	390,000	4.0%	35%	\$	5,500
Maritime	\$	80,000	3.5%	30%	\$	800
Railroad	\$	70,000	4.0%	30%	\$	900
Trucks	\$	180,000	3.1%	15%	\$	900
Subtotal	\$	720,000			\$	8,100
Computer	\$	370,000	1.1%	5%	\$	200
Communications	\$	1,100,000	1.1%	5%	\$	600
Office	\$	240,000	2.5%	10%	\$	600
Medical	\$	170,000	4.0%	10%	\$	700
Manufacturing						
Material Shaping	\$	300,000	2.5%	15%	\$	1,100
Semiconductor	\$	110,000	4.0%	15%	\$	600
Factory Automation	\$	220,000	2.5%	15%	\$	800
Subtotal	\$	630,000			\$	2,500
Mineral Extraction	\$	280,000	3.5%	25%	\$	2,500
Agriculture	\$	110,000	2.1%	20%	\$	500
Construction	\$	330,000	2.1%	25%	\$	1,700
Electric Generation	\$	200,000	4.0%	40%	\$	3,100
Instruments	\$	120,000	1.5%	15%	\$	300
HVAC	\$	230,000	1.1%	5%	\$	100
Printing & Paper	\$	140,000	4.0%	15%	\$	800
Entertainment	\$	30,000	1.5%	10%	\$	100
Transaction	\$	40,000	1.5%	10%	\$	100
Others	\$	440,000	2.5%	15%	\$	1,600
Total	\$	5,150,000			\$	23,500
Automotive/light truck	\$	4,020,000	1.5%	10%	\$	6,500
DOD	\$	1,000,000	3.2%	33%	\$	10,500
Grand Total	\$	10,170,000			\$	40,500