

APPENDIX 13A. THE LOW-VOLUME MANUFACTURER

TABLE OF CONTENTS

13A.1	INTRODUCTION	13A-1
13A.2	SEGMENT REVENUES	13A-1
13A.3	SHIPMENT VOLUMES	13A-4
13A.3.1	Shipments Assumptions.....	13A-5

LIST OF TABLES

Table 13A.2.1	Reported LVM Revenue by Product Line	13A-1
Table 13A.2.2	LVM Revenues by Market Segment.....	13A-2
Table 13A.2.3	Stated LVM Revenue by Product and Market Segment (\$MM)	13A-2
Table 13A.2.4	Disaggregated LVM Washer Revenues (\$MM).....	13A-3
Table 13A.2.5	DOE Estimate of LVM Washer Revenue Percentages.....	13A-3
Table 13A.3.1	DOE Estimate of LVM Clothes Washer Unit Shipments (2006).....	13A-5

LIST OF FIGURES

Figure 13A.2.1	LVM Clothes Washer Revenue (\$MM) by End-User and Drum Orientation in 2006	13A-4
----------------	-------------------------------------------------------------------------------------	-------

APPENDIX 13A. THE LOW-VOLUME MANUFACTURER

13A.1 INTRODUCTION

The purpose of this appendix is to clarify how DOE made its estimates regarding the shipment volumes and the importance of the commercial clothes washer business to the low-volume manufacturer (LVM). To make its estimates, DOE relied on statements made by the LVM in its audited annual reports filed with the Securities and Exchange Commission (SEC) which were supplemented with statements to DOE.

From 2002 to 2005, the annual reports broke out the approximate revenue that each LVM product line generated. In its annual reports, the LVM also stated the revenues by end-user market segment, residential and commercial. The LVM recorded no residential revenues from 1999 to 2004 due to a non-compete agreement. In 2004, the non-compete agreement expired and residential sales recommenced.

13A.2 SEGMENT REVENUES

Table 13A.2.1 details DOE's analysis of reported revenues for the LVM disaggregated by product type and market segment as a percentage of total revenue.

Table 13A.2.1 Reported LVM Revenue by Product Line

Category	Year				
	2002	2003	2004	2005	2006
Washer Extractors	26%	25%	24%	25%	24%
Top Load Washers	17%	17%	16%	14%	15%
Front Load Washers	5%	4%	5%	6%	6%
All Washers	48%	46%	45%	45%	45%
Tumbler Dryers	21%	22%	22%	23%	23%
Standard Dryers	11%	11%	11%	11%	11%
All Dryers	32%	33%	33%	34%	34%
Presses + Finishing	3%	3%	3%	2%	2%
Service Parts	14%	14%	14%	13%	13%
Value-Added Services	3%	2%	2%	3%	2%
Other-Sourced Product	0%	2%	3%	3%	4%
Other	20%	21%	22%	21%	21%
Total	100%	100%	100%	100%	100%

The LVM also listed commercial, residential, and service parts revenue for every year 2002 to 2006, as shown in Table 13A.2.2. “Other” revenues refer to revenues from transactions due to an acquisition that the LVM completed in 2006.

Table 13A.2.2 LVM Revenues by Market Segment

Year	2002	2003	2004	2005	2006
Residential Revenue	\$0.0	\$0.0	\$3.6	\$8.5	\$14.4
Commercial Revenue	\$220.1	\$230.7	\$232.9	\$268.3	\$282.9
Service Parts	\$35.5	\$36.9	\$38.2	\$40.5	\$45.7
Other	\$0.0	\$0.0	\$0.0	\$0.0	\$23.1
Annual Revenue	\$255.6	\$267.6	\$281.0	\$317.3	\$366.1

DOE subsequently overlaid the tables listing revenues by product category and revenue by market segment in order to disaggregate the revenue by market segment and product line, shown below in Table 13A.2.3. The LVM subsequently reviewed and corrected the DOE estimates.

Table 13A.2.3 Stated LVM Revenue by Product and Market Segment (\$MM)

Category	Year				
	2002	2003	2004	2005	2006
Residential Sales Revenue					
Top-Load Washers	\$0.0	\$0.0	\$1.5	\$4.4	\$8.7
Front-Load Washers	\$0.0	\$0.0	\$0.8	\$0.9	\$0.6
Standard Dryers	\$0.0	\$0.0	\$1.3	\$3.2	\$5.1
Sub-Total	\$0.0	\$0.0	\$3.6	\$8.5	\$14.4
Commercial Sales Revenue					
Top-Load Washers	\$43.3	\$45.8	\$42.9	\$41.5	\$42.8
Front-Load Washers	\$11.8	\$12.1	\$14.2	\$15.1	\$19.2
Standard Dryers	\$29.3	\$31.1	\$29.3	\$30.3	\$30.7
Sub-Total	\$84.4	\$89.0	\$86.4	\$86.9	\$92.7
Attributable Service Parts Revenue	\$12.1	\$12.6	\$12.5	\$12.6	\$14.5
Total Washer + Dryer Revenues	\$96.5	\$101.6	\$102.5	\$108.0	\$121.6
Total LVM Revenues	\$255.6	\$267.6	\$281.0	\$317.3	\$366.1
Washer + Dryer + Parts Revenue %	37.8%	38.0%	36.5%	34.0%	33.2%

Table 13A.2.3 illustrates how important the clothes washer plus and dryer business is estimated to be for the LVM. The percentage of total revenue represented by the washer and dryer market has shrunk from 38% in 2002 but still represents about a third of its total revenues in 2006. Thus, this product category remains very important to the LVM. The balance of revenue comes primarily from high-capacity commercial laundry equipment. Standard dryer sales are usually bundled with clothes washer sales, hence their inclusion in the above analysis.

Besides providing revenue, the clothes washer and standard dryer sales give the LVM the scale to help in purchase parts, raw materials, and to help amortize equipment and tooling investments. If standard dryers and their estimated parts revenues were to be removed from Table 13A.2.1, the importance of the washer business remains evident in Table 13A.2.4.

Table 13A.2.4 Disaggregated LVM Washer Revenues (\$MM)

Category	Year				
	2002	2003	2004	2005	2006
Residential Sales					
Top-Load Washers	\$0.0	\$0.0	\$1.5	\$4.4	\$8.7
Front-Load Washers	\$0.0	\$0.0	\$0.8	\$0.9	\$0.6
Sub-Total	\$0.0	\$0.0	\$2.3	\$5.3	\$9.3
Commercial Sales					
Top-Load Washers	\$43.3	\$45.8	\$42.9	\$41.5	\$42.8
Front-Load Washers	\$11.8	\$12.1	\$14.2	\$15.1	\$19.2
Sub-Total	\$55.1	\$57.9	\$57.1	\$56.6	\$62.0
Attributable Service Parts Revenue	\$7.9	\$8.2	\$8.3	\$8.2	\$9.7
Total Washer + Dryer Revenues	\$63.0	\$66.1	\$67.7	\$70.1	\$81.0
Total LVM Revenues	\$255.6	\$267.6	\$281.0	\$317.3	\$366.1
Washer + Dryer + Parts Revenue %	24.6%	24.7%	24.1%	22.1%	22.1%

While the revenues of the clothes washer business have been declining as a percentage of overall sales from over 25 percent in 2002 to less than 22 percent in 2006, the clothes washer business remains a substantial business unit for the LVM. Table 13A.2.5 lists the relative importance of washer platforms and market segments to the LVM.

Table 13A.2.5 DOE Estimate of LVM Washer Revenue Percentages

		Year				
		2002	2003	2004	2005	2006
Revenue Percentage by Product Line	Top Loader	77.3%	81.0%	76.2%	70.0%	65.2%
	Front Loader	22.7%	19.0%	23.8%	30.0%	34.8%
Revenue Percentage by Market Segment	Residential	0.0%	0.0%	4.1%	10.2%	13.2%
	Commercial	100.0%	100.0%	95.9%	89.8%	86.8%

Although the revenues of front-loading clothes washers have increased, top-loading commercial clothes washers continue to represent the majority of sales. Figure 13A.2.1 details the product and market segment data for the LVM in 2006.

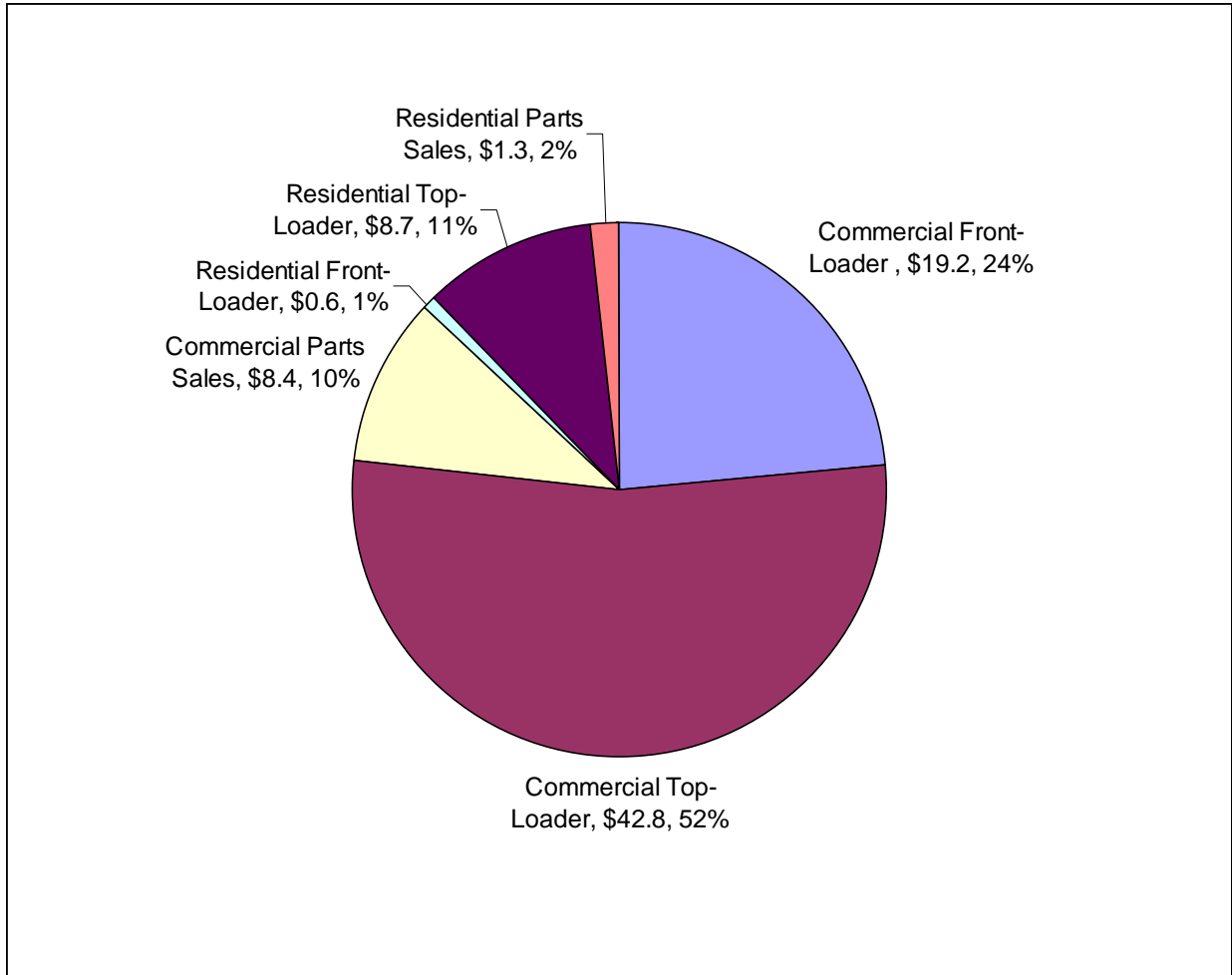


Figure 13A.2.1 LVM Clothes Washer Revenue (\$MM) by End-User and Drum Orientation in 2006

The potential impact of an energy efficiency standard that eliminates top-loading commercial clothes washers could thus be quite significant. Just the commercial top-loading business represents over 52 percent of total clothes washer plus parts sales and about 12 percent of total LVM revenues. Accounting for the bundled parts and dryer sales increases the importance of the commercial clothes washer sales further.

13A.3 SHIPMENT VOLUMES

While annual reports from subsequent years show significant growth in the residential market segment, commercial sales are still significantly higher. Based on the pricing survey (Table 3.11.2 in chapter 3 of this TSD) and the published clothes washer markups (see chapter 6 of this TSD), DOE made the following shipments estimates for this manufacturer as of 2006.

Table 13A.3.1 DOE Estimate of LVM Clothes Washer Unit Shipments (2006)

Market Segment	Drum Axis	Estimated 2005 Revenues (\$MM)		End-User Clothes Washer Cost*		Total Clothes Washer Markup**		Mfgr. Markup*		Shipment Volume by Sales Channel
Commercial	Top-Loading	\$42.8	/	\$824	X	1.93	/	1.23	=	81,502
	Front-Loading	\$19.2	/	\$1,355	X	1.93	/	1.23	=	22,234
Residential	Top-Loading	\$8.7	/	\$697	X	1.93	/	1.23	=	19,586
	Front-Loading	\$0.6	/	\$1,332	X	1.93	/	1.23	=	707
Total Mfg Volume (units)									=	124,028
* See chapter 3 of the TSD										
** See chapter 8 of the TSD										

13A.3.1 Shipments Assumptions

- End-user prices depend on the presence of a coin box. Further,
 - Commercial units require a coin box; and
 - Residential units do not require a coin box.