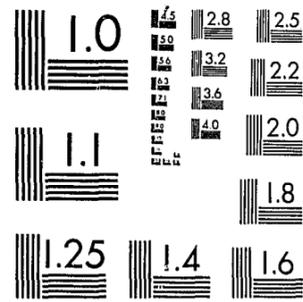


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National Institute of Justice
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Washington, D.C. 20531

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10/08/81

1978

WISCONSIN DEPARTMENT OF JUSTICE
DIVISION OF CRIMINAL INVESTIGATION
ARSON BUREAU
ANNUAL REPORT

U.S. Department of Justice
National Institute of Justice

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Prepared by the
WISCONSIN DEPARTMENT OF JUSTICE
Bronson C. La Follette, Attorney General

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FRANK A. MEYERS, ADMINISTRATOR
DIVISION OF CRIMINAL INVESTIGATION
STATE FIRE MARSHAL

NCJRS
MAY 4 1981
ACQUISITIONS

SECTION I - ARSON BUREAU REPORT

ORGANIZATION:

The Administrator of the Division of Criminal Investigation is the State Fire Marshal. Operational activities are assigned to the Arson Bureau which is one of the four bureaus of the Division. The Bureau consists of a director and nine deputies who are located throughout the state as follows:

Philip C. Culp, Director	Madison
Henry C. Fiege	Eau Claire
Eldon L. Fremming	Park Falls
Gerald Haffner	Milwaukee
Kermit R. Krupka	Milwaukee
William Lundy	Madison
Leslie A. Meyer	Weyauwega
Joseph P. Murray	Appleton
James Olsen	Milwaukee
Paul R. Sainsbury	Madison

The headquarters office of the State Arson Bureau is located at 123 West Washington Avenue, Madison, Wisconsin 53702, 608-266-1671.

FUNCTIONS:

The Arson Bureau serves as a supplement to the fire service and local law enforcement. Services provided include:

- a. Investigative assistance on fires of known or suspected incendiary origin;
- b. Investigative assistance on bombings and explosions of suspected criminal origin;
- c. Investigative assistance on fatal fires of undetermined origin;
- d. Training in fire and arson investigation.

RESPONSIBILITY FOR FIRE AND ARSON INVESTIGATION:

Fire chiefs are responsible* for investigating every fire in which damage exceeds \$500 and where the investigation shows that the fire may be of incendiary origin, that fire must be reported to the State Fire Marshal. Accordingly, the responsibility for fire and arson investigation is as follows:

- a. Fire chiefs are solely responsible for fire investigation.
- b. Fire chiefs and the State Fire Marshal have joint responsibility for arson detection.
- c. The State Fire Marshal and local law enforcement have joint responsibility for arson investigation.

*Section 165.55, Wisconsin Statutes, reads:

"165.55(1). The chief of the fire department or company of every city, village and town in which a fire department or company exists, and where no fire department or company exists, the city mayor, village president or town clerk shall investigate or cause to be investigated the cause, origin, and circumstances of every fire occurring in his city, village or town by which property has been destroyed or damaged when the damage exceeds \$500, and on fires of unknown origin he shall especially investigate whether the fire was the result of negligence, accident or design. Where any investigation discloses that the fire may be of incendiary origin, he shall report the same to the state fire marshal."

SUMMARY AND ANALYSIS

REQUESTS FOR ASSISTANCE:

During 1978, the Arson Bureau received 688 requests for assistance from local units of government. These requests actually covered over 715 separate incidents since some requests covered a series of fires. This is a 52% increase over requests received in 1977. 44% of the requests were received from the City of Milwaukee. It requested assistance on 315 different occasions during 1978 which represents a 1,000% increase in requests from that city.

163 requests were declined for a variety of reasons including lack of access to the premises and excessive overhaul of the fire scene but the overriding reason was workload. This is double the number of requests which were declined in 1977. It should also be noted that 55% of the decline investigations were in the City of Milwaukee. If Milwaukee is excluded, then declined requests were comparable to previous years.

INVESTIGATION:

525 investigations were initiated by the nine(9) man Arson Bureau during 1978. The fact that an investigation was made does not necessarily indicate that the incident was of criminal origin. During the year, about 53% of the cases were found to be incendiary, 22% accidental, 20% undetermined and the remaining 5% were pending as of December 31, 1978.

The percentage of incidents found to be incendiary increased by 6% over 1977, accidental fires decreased by 15% and undetermined fires increased by 10%. Based on the percentage changes between accidental and incendiary incidents, it would appear that local fire departments are doing a better job of investigating fires before requesting Arson Bureau assistance. It may also be an indication that Arson Bureau training efforts are beginning to pay dividends.

The increase in undetermined fires can probably be attributed to two factors. First, there have been an unusually large number of fires in abandoned buildings in Milwaukee. Many of these buildings are inhabited by vagrants who start fires to keep warm. It is often impossible to differentiate between a warming fire which got out of control and an intentionally set fire. Second, the Arson Bureau has changed its operating procedure in regard to non-incendiary fires. In the past, an effort was made to determine the specific accidental cause of these fires. However, in view of excessive Bureau workload and increasing demands to involve fire marshals in civil litigation, little or no effort is now made to determine specific accidental causes. Therefore, fires which would previously have been listed as accidental are being listed as undetermined.

INCENDIARY LOSSES:

The damage caused by fires, explosions and bombings of known incendiary origin investigated by the Arson Bureau was about \$8.2 million. This is an 88% increase over 1977 and an 80% increase over the five year average. It should be stressed that these figures apply only to cases investigated by the Arson Bureau and that the statewide loss from arson is about \$10.6 million. It is believed that these substantial increases reflect three factors: first, there has undoubtedly been an increase in arson in the state; second, inflated building replacement costs are responsible for some of the increase; and third, reporting of incendiary fire losses was greatly improved during 1978.

CASE DISPOSITIONS:

During the year, the Arson Bureau completed 229 full scale investigations. 179 of these cases were determined to be arson and a suspect was apprehended in 48% of the arsons. A total of 73 adult charges were issued and 18 juveniles were referred to the juvenile court system.

54 Arson Bureau cases were finally adjudicated during 1978. 78% resulted in conviction or commitment to a mental institution. 37% of those convicted received prison sentences averaging about 4 years; 63% received probation with the average probationary period being about 3 1/2 years.

MOTIVES:

The Bureau attempts to establish and classify motive in each full scale investigation completed. While motive is not an element of the crime of arson, few prosecutors will accept an arson case without some evidence of motive. Motives are also of some value in spotting trends. 1978 followed a relatively normal pattern in regard to motive. Approximately 10% of the fires were attributed to arson for profit, 43% to various sociological motives, and in 47% of the cases no apparent motive could be determined.

FATAL FIRES:

During the year the Bureau investigated 27 fatal fires involving 48 fatalities. In most of these cases, an accidental cause for the fire was established. In 2 cases, the cause of the fire was definitely established to be arson. A suspect has been apprehended in one of these cases.

GEOGRAPHICAL DISTRIBUTION:

During 1978, the Bureau conducted investigations in 68 of the 72 counties in the state. There are 10 counties each having populations over 100,000. These 10 counties accounted for 55% of the total population and 63% of the requests for investigation. By contrast, there are 48 counties in the state having populations under 50,000. These counties have 13% of the population and they accounted for 23% of the requests for investigation.

In previous years, each of these categories accounted for approximately 40% of the requests and it is apparent that in 1978, the unusually large number of requests from the City of Milwaukee has distorted these figures. For example, if the City of Milwaukee requests are adjusted out of the computation, then 32% of the requests came from counties with populations of 100,000 or more and 42% came from counties with populations under 50,000.

TRAINING:

During 1978, the Arson Bureau conducted 32 separate training sessions for 1,238 students. Subjects covered included fire investigation, arson recognition, and basic arson investigation. In addition, the Bureau co-sponsored the Annual Wisconsin Arson Seminar which was attended by approximately 250 police and fire officials. The 1978 training effort was comparable to 1977 except that there was a 25% increase in attendance at the Arson Seminar.

SECTION II - TABLES

TABLE 1
INVESTIGATIONS

	<u>1977</u>	<u>1978</u>
Fires	338	516
Explosion/Bombing	<u>11</u>	<u>9</u>
TOTAL	<u><u>349</u></u>	<u><u>525</u></u>

TABLE 2
CAUSES

Incendiary	163	276
Accidental	131	113
Juveniles (no malicious intent)	2	7
Undetermined	35	106
Other/unfounded	0	13
Pending	<u>18</u>	<u>10</u>
TOTAL	<u><u>349</u></u>	<u><u>525</u></u>

TABLE 3
INCENDIARY LOSSES

<u>1974</u>	<u>1975</u>	<u>1976</u>	<u>1977</u>	<u>1978</u>
\$4,200,000	\$3,400,000	\$5,900,000	\$4,300,000	\$8,200,000

TABLE 4
CASE DISPOSITIONS

Arson	86	57
Criminal Damage	2	0
Negligent Handling of burning materials	4	1
Homicide/Attempted Homicide	3	2
Other crimes	11	6
Committed to mental institutions	4	7
Other dispositions	1	0
Referred to juvenile authority	<u>24</u>	<u>18</u>
TOTAL	<u><u>135</u></u>	<u><u>91</u></u>

TABLE 5
SENTENCING

	1977	1978
Cases Adjudicated:	48	54
Dismissed-defendant committed	5	7
Dismissed-lack of evidence	4	11
Defendant found not guilty	3	1
Convicted:		
Sentenced to prison	15	13
Suspended sentence & probation	21	22
Pending 12/31/78		36

TABLE 6
MOTIVES

	1977	1978
Fraud	20	19
Political	0	0
Mental:		
Pyromania	11	3
Psychopathic	16	19
Vandalism	27	20
Spite	18	33
Crime cover-up	12	6
Vanity	0	2
Unknown	59	77
TOTAL	<u>163</u>	<u>179</u>

TABLE 7
FATAL FIRES BY CAUSE

	1977	1978
Accidental - various causes	18	21
Incendiary - Homicide	6	2
Unknown - undetermined	1	4
TOTAL	<u>25</u>	<u>27</u>

TABLE 8
GEOGRAPHICAL DISTRIBUTION

COUNTY	1977	1978	COUNTY	1977	1978
Adams	3	1	Marinette	12	6
Ashland	5	0	Marquette	1	4
Barron	2	2	Menominee	0	6
Bayfield	3	2	Milwaukee County	52	22
Brown	21	8	Milwaukee City	28	315
Buffalo	0	2	Monroe	2	1
Burnett	4	4	Oconto	1	6
Calumet	2	3	Oneida	4	2
Chippewa	5	6	Outagamie	22	9
Clark	1	1	Ozaukee	10	5
Columbia	10	9	Pepin	1	1
Crawford	3	4	Pierce	2	3
Dane	21	26	Polk	3	10
Dodge	4	5	Portage	1	9
Door	0	0	Price	7	5
Douglas	4	2	Racine	11	8
Dunn	14	5	Richland	1	4
Eau Claire	6	6	Rock	5	5
Florence	3	1	Rusk	4	5
Fond du Lac	7	6	St. Croix	7	8
Forest	3	4	Sauk	10	7
Grant	9	9	Sawyer	5	3
Green	2	1	Shawano	5	1
Green Lake	1	2	Sheboygan	6	6
Iowa	3	1	Taylor	4	2
Iron	1	2	Trempealeau	3	3
Jackson	3	5	Vernon	2	3
Jefferson	4	4	Vilas	0	2
Juneau	6	1	Walworth	11	21
Kenosha	12	11	Washburn	3	0
Kewaunee	0	0	Washington	7	3
LaCrosse	2	5	Waukesha	18	14
Lafayette	4	3	Waupaca	5	10
Langlade	6	2	Waushara	11	8
Lincoln	0	1	Winnebago	13	9
Manitowoc	3	2	Wood	0	11
Marathon	5	7			
			TOTAL	<u>459</u>	<u>688</u>

SECTION III

1978

WISCONSIN FIRE LOSS STATISTICS

Prepared by the
WISCONSIN DEPARTMENT OF INDUSTRY,
LABOR AND HUMAN RELATIONS
DIVISION OF SAFETY AND BUILDINGS

Joseph N. Noll
Secretary

John Wenning
Division Administrator

WISCONSIN FIRE LOSS STATISTICS

INTRODUCTION:

Pursuant to Section 101.141, Wisconsin Statutes, Wisconsin fire loss statistics are compiled by the Department of Industry, Labor and Human Relations from reports submitted by the insurance industry.

1978 STATISTICAL HIGHLIGHTS:

- 14,287 fire losses were reported resulting in damage of \$59.7 million. 88.7% of this loss was covered by insurance.
- The 14,287 fire losses reported represents an increase of 63.8% from 1977.
- The total dollar loss attributed to fire increased 11.4% from 1977.
- The percent of incendiary and suspicious fires did not increase or decrease significantly during the year. The related dollar loss increased 9.8%.
- 55% of all fires were attributed to lightning.
- 5.2% of all fires were attributed to defective wiring.
- 8.5% of all fires involving 28.1% of the total fire losses were listed as being of undetermined origin.
- 21.3% of all fires and 24.7% of the total fire loss involved 1 to 4 family dwellings.
- Barn fires increased 68.9% from 1977.
- Vehicle fires increased 3.4% and the dollar loss from such fires increased 40.5%.

FIRE LOSSES IN WISCONSIN
by
TYPE OF PROPERTY

TYPE OF PROPERTY	Number of Fires		Amount of Damage		Insurance Paid	
	1977	1978	1977	1978	1977	1978
Apartments	223	257	\$ 2,170,813	\$ 1,969,931	\$ 2,182,415	\$ 1,776,206
Amusement Arcades, Billiard Parlors	1	-0-	320	-0-	272	-0-
Boats	13	17	17,994	19,961	16,859	17,535
Boat Houses, Docks, Marina	2	4	1,751	100,554	1,601	72,841
Bowling Lanes	13	11	177,434	302,092	102,424	281,493
Broadcasting: Radio, Television	5	11	2,858	32,729	2,708	32,029
Business Establishments, Other	86	156	881,491	2,484,112	789,769	2,093,965
Churches, Church Properties	18	21	293,577	489,400	281,743	446,853
Club Houses, Lodges, YMCA	9	13	118,084	177,358	42,703	150,019
Coal Yards, Lumber Yards	10	10	99,601	392,648	99,401	325,822
Construction Company & Equipment	7	9	23,757	86,732	21,561	81,774
Dairy Products Mfg.	4	7	3,877	6,105	3,877	5,791
Dry Cleaning, Laundries; Commercial	2	8	11,053	41,527	11,123	40,921
Dry Cleaning, Laundries; Self-Service	7	11	17,907	20,469	17,240	19,649
Dwellings-Urban (1-4 family)	2,545	3,043	11,785,246	14,748,158	10,767,606	14,565,484
Educational Institutions	20	31	1,258,355	2,969,748	1,742,944	2,227,463
Elevators, Grain Storage, Feeds Mills	17	14	974,796	191,361	800,356	151,475
Factories	78	63	4,075,649	2,177,710	3,814,311	1,913,428
Filling Stations, Fuel Depots	20	15	176,053	72,775	111,586	50,105
<u>FARM:</u>						
Barns	477	806	6,062,878	6,874,187	5,237,042	5,876,466
Brooders, Poultry Houses	9	15	130,950	103,178	92,507	91,402
Dwellings - Rural	2,305	4,964	10,128,541	10,499,137	8,703,750	9,179,778
Graneries, Silos	75	79	209,160	137,582	177,206	126,191
Hay, Straw, Grain, etc.	32	65	25,627	249,480	25,387	183,767
Hog Houses	12	21	30,113	142,084	24,940	117,460
Milk Houses	72	344	34,751	113,079	32,452	108,209
Livestock	169	982	149,648	763,212	143,106	792,187
Machinery, etc.	371	1,207	334,848	510,589	325,658	489,956
Outbuildings, etc.	55	39	355,377	241,996	304,571	178,959
Tractors, Trucks	402	389	362,005	313,312	344,030	289,727

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TYPE OF PROPERTY	TYPE OF PROPERTY					
	Number of Fires		Amount of Damage		Insurance Paid	
	1977	1978	1977	1978	1977	1978
Garages - Private	316	276	1,137,765	990,177	941,872	952,348
Garages - Commercial	11	11	200,531	38,104	184,918	37,516
Halls, Meeting Houses	2	1	2,829	2,000	2,779	2,000
Hospitals, Sanitariums	5	6	57,481	19,818	56,416	19,218
Hotels	13	13	139,798	772,660	136,925	525,915
<u>INSTITUTIONS: PUBLIC BUILDINGS:</u>						
City	4	18	49,450	77,311	46,951	76,561
County	0	3	-0-	4,731	-0-	4,556
Federal	0	3	-0-	15,142	-0-	12,342
State	7	0	183,933	-0-	177,695	-0-
Other	3	8	19,330	2,559	18,071	2,409
Meat Packing, Food Processing	6	16	220,213	860,943	181,963	577,594
Mills - Lumber	4	4	227,772	107,187	142,374	107,137
Mills - Paper	0	1	-0-	110,471	-0-	85,471
Motels	15	23	348,289	462,039	289,042	390,871
Nursing, Convalescent Homes	4	6	806	22,575	756	21,662
Off Premises Personal Property	15	43	5,504	37,488	5,339	28,741
Offices, Commercial Buildings	47	29	844,013	357,140	868,976	299,114
Parks, Campsites	3	3	13,817	3,987	13,526	3,887
Power Plants	0	3	-0-	21,916	-0-	21,416
Restaurants, Supper Clubs, etc.	83	99	1,436,517	2,055,043	1,138,194	1,926,060
Rooming Houses, Fraternities, etc.	6	3	47,307	2,865	46,912	2,665
Seasonal Dwelling - Private	69	77	548,539	623,812	471,970	534,870
Seasonal Dwelling - Commercial	15	10	113,314	70,861	84,734	58,294
Sheds, Shacks, etc.	78	54	427,319	241,483	432,483	214,737
Storage, Warehouses	69	54	1,510,462	1,966,400	1,363,499	1,646,069
Stores, Shops	99	97	2,870,914	1,072,733	2,769,407	953,007
Supermarkets	2	11	1,994	332,937	1,894	330,513

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TYPE OF PROPERTY	TYPE OF PROPERTY					
	Number of Fires		Amount of Damage		Insurance Paid	
	1977	1978	1977	1978	1977	1978
Taverns	84	100	1,169,000	1,159,135	1,010,507	650,141
Tents	3	1	1,427	331	1,254	281
Theaters, Arenas, Auditoriums	2	4	22,871	34,632	13,508	34,379
Trailers, House	167	182	953,598	998,974	840,926	820,009
Trailers - Other	9	6	15,725	7,582	15,525	7,029
Vehicles - Private	463	472	494,443	689,004	475,634	668,916
Vehicles - Commercial	3	10	18,141	31,518	17,791	24,397
Service & Repair Shops	25	23	544,347	285,628	414,521	235,696
Snowmobiles	4	1	2,630	85	2,163	85
Miscellaneous	24	3	39,306	1,408	37,459	1,189
TOTAL	8,720	14,287	\$ 53,583,899	\$59,712,232	\$ 48,427,132	\$ 52,964,397

FIRE LOSSES IN WISCONSIN
by
CAUSE OF FIRE

CAUSE OF FIRE	Number of Fires		Amount of Damage		Insurance Paid	
	1977	1978	1977	1978	1977	1978
Accidental, Miscellaneous	51	85	512,884	770,944	485,523	1,837,662
Ashes, Embers, Rekindle	39	37	367,977	112,585	353,797	107,003
Bonfires, Grass, Rubbish	108	55	758,337	297,565	543,343	259,992
Candles, Lanterns	88	55	299,915	299,484	279,384	282,676
Children at Play, Matches	170	193	1,368,614	972,218	1,265,499	897,124
Chimney Fires	276	295	895,042	1,084,433	812,389	909,967
Christmas Trees, Lights, Floods	7	6	32,469	119,748	31,139	113,390
Clothes Dryers	56	81	317,644	200,026	306,204	195,248
Collisions, Wrecks, Overturns	7	2	14,155	8,800	13,955	7,389
Cooking Fires, Burner Carelessness	528	583	1,606,523	1,363,418	1,041,750	1,290,157
<u>ELECTRIC:</u>						
Fencers	56	2	2,632	12,928	2,304	8,428
Heaters	65	72	486,586	428,072	458,989	392,073
Heat Lamps	22	20	192,177	151,917	160,504	149,624
Heating Pads, Blankets	28	33	70,340	93,712	68,469	87,520
Irons, Mangles	2	11	680	5,849	444	4,365
Light Bulbs, Lamps, Fixtures	75	77	420,057	1,632,091	411,523	1,574,185
Motors - Defective	56	31	428,611	288,824	333,189	257,420
Radios	11	9	3,023	59,332	2,843	57,738
Refrigerators, Freezers	29	28	91,741	347,912	88,886	285,141
Stoves	117	54	699,242	445,658	626,581	338,038
Television	109	40	406,521	165,763	392,519	191,233
Toasters	26	30	34,240	36,899	27,126	34,995
Washing Machines	12	7	5,072	9,862	4,478	9,536
Other Appliances - Heavy	30	19	88,231	328,325	76,147	299,860
Other Appliances - Light	52	76	106,739	494,581	105,252	388,965
Wiring - Defective	967	746	10,365,892	11,440,722	9,913,829	9,688,935
Other - Surges, Accidents	66	39	224,834	118,134	219,049	98,268

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(continued on next page)

CAUSE OF FIRE	CAUSE OF FIRE					
	Number of Fires		Amount of Damage		Insurance Paid	
	1977	1978	1977	1978	1977	1978
<u>EXPLOSIONS:</u>						
Boilers, Heaters	21	3	129,543	7,472	104,745	7,272
Dust	3	-0-	4,676	-0-	4,212	-0-
Dynamite, etc.	3	-0-	97,430	-0-	96,436	-0-
Flammable Liquids	11	15	105,070	135,095	86,462	120,115
Gas-Natural, LP	48	16	537,972	186,695	486,329	142,092
Exposure	98	72	645,649	437,619	729,420	408,869
Fire Places	99	111	436,112	550,810	462,047	505,838
Fireworks	2	5	34,856	49,729	34,706	49,464
Flammable Liquid Accidents, Fumes	72	67	2,148,898	1,019,972	2,513,552	824,303
Gas Leak	44	45	375,670	311,918	326,412	241,541
Gas Stove, Heaters	22	40	216,445	148,135	198,629	131,207
Gasoline Engines, etc.	7	13	39,454	21,699	38,124	20,986
Grease, Tar, etc.	55	14	109,028	34,904	105,995	33,889
Heating Plants (Defective)	185	171	1,104,949	1,371,271	978,093	1,202,283
Heating Plants (Explosions)	71	50	294,431	142,843	252,047	114,063
Incendiary, Suspicious, Vandalism	354	357	4,236,241	4,651,745	3,978,065	4,064,182
Incinerators	4	4	762,299	62,047	567,695	54,631
Industrial Accidents	16	14	94,463	259,716	87,741	230,854
Lawnmowers	13	3	3,449	2,704	3,171	2,604
Lightning	1,574	7,869	1,055,870	4,865,540	977,005	4,463,576
Matches (Carelessness)	28	19	98,312	26,927	93,478	26,677
Material in Contact	36	14	177,660	100,763	153,645	99,858
Open Flame	6	4	41,195	12,791	40,592	12,691
Smokers Carelessness	315	289	1,481,699	1,757,908	1,437,997	1,600,089
Sparks	121	94	973,424	761,308	748,666	725,170
Sparks-Locomotives	2	1	44,654	17,235	27,162	7,443
Spontaneous Ignition	100	137	1,054,559	1,650,833	937,790	1,348,215
Steam Pipes	6	6	5,112	25,920	4,847	25,770

(continued on next page)

CAUSE OF FIRE	CAUSE OF FIRE					
	Number of Fires		Amount of Damage		Insurance Paid	
	1977	1978	1977	1978	1977	1978
Stoves, Space Heaters, etc.	183	167	1,186,618	1,234,727	1,101,403	1,156,847
Thawing Pipes	32	10	264,311	90,731	207,451	76,400
Torches - Blow, Welding, etc.	47	43	192,443	792,931	191,730	766,154
<u>VEHICLES:</u>						
Exhaust-Backfire	33	37	74,699	52,182	67,365	51,267
Fuel System-Carburator	125	126	151,789	156,312	147,154	150,723
Wiring, Ignition	416	466	356,990	451,080	351,319	419,116
Other-Miscellaneous	106	98	184,222	221,065	175,144	196,121
Snowmobiles	1	5	324	7,098	324	6,596
Unknown or Undetermined	<u>1,407</u>	<u>1,216</u>	<u>15,063,205</u>	<u>16,802,705</u>	<u>13,385,056</u>	<u>13,910,559</u>
TOTAL	8,720	14,287	\$53,583,899	\$59,712,232	\$48,427,132	\$52,964,397

END