

International Association of Machinists Motor City Pension Fund

EIN/Plan #: 38-6237143/001

Checklist Item #7 – 3.02 Plan Actuary’s Certification of Plan Avoiding Insolvency with Suspension and Supporting Illustrations

Does the application include the plan actuary’s certification that the plan is projected to avoid insolvency if the suspension takes effect and the supporting illustrations, including the following?

- *the plan year-by-year projections demonstrating projected solvency during the relevant period,*
- *a description of the assumptions used, including the new entrant profile, the total contribution base units, and the average contributions rates, and*
- *separately identifying the available resources (and the market value of assets and changes in cash flow) during each of those years?*

See section 3.02.

Document 7.1 is the Actuarial Certification of Plan Solvency under ERISA §305(e)(9)(c)(i) and IRC §432(e)(9)(C)(i) as of the Proposed Benefit Suspension Effective Date of January 1, 2018. Document 7.2 includes supporting illustrations to this Actuarial Certification. This includes Exhibit II, which is a year-by-year solvency projection which demonstrates that the Pension Fund will become insolvent in the plan year beginning in 2024. Exhibit III demonstrates that the Pension Fund will avoid insolvency with the Proposed Benefit Suspensions taking into effect January 1, 2018. These Exhibits each separately identify the market value of assets, contributions, investment earnings, benefit payments and plan expenses. The Actuarial Certification in Document 7.1 and the supporting illustrations in Document 7.2 are based upon our interpretation of the requirements under Revenue Procedure 2016-27, Section 3.02.

International Association of Machinists Motor City Pension Fund

EIN/Plan #: 38-6237143/001

Checklist Item #7 – 3.02 Plan Actuary's Certification of Plan Avoiding Insolvency with Suspension and Supporting Illustrations

Document 7.1

Plan Actuary's Certification that the Plan Is Projected to Avoid Insolvency

This letter and the attached exhibits of Document 7.2 have been prepared by United Actuarial Services, Inc. at the request of the Board of Trustees of the International Association of Machinists Motor City Pension Fund to certify under IRC §432(e)(9)(C)(i) that the Plan is projected to avoid insolvency within the meaning of IRC §418E, taking into account the proposed benefit suspension effective January 1, 2018 and assuming such suspension continues indefinitely as demonstrated in Exhibit III. This certification is also intended to comply with regulation §1.432(e)(9)-1 and Revenue Procedure 2016-27. A summary of the proposed benefit suspension can be found in Exhibit VII.

The proposed benefit suspension does not materially exceed the level that is necessary to avoid a projected insolvency under IRC §432(e)(9)(D)(iv) and regulation §1.432(e)(9)-1(d)(5)(iii) as demonstrated in Exhibit IV.

In accordance with generally accepted actuarial principles and practices, this certification is based on the July 1, 2016 actuarial valuation report dated December 15, 2016 [see Document 39.2(2)] and the July 1, 2016 actuarial certification dated July 29, 2016 [see Document 5.1]. Asset values have been updated to December 31, 2016 as required under regulation §1.432(e)(9)-1(d)(5)(iv)(C)(1) and actuarial assumptions have been updated as noted in Exhibit VI.

This certification is intended to demonstrate, as required under IRC §432(e)(9) and regulation §1.432(e)(9)-1, that the proposed benefit suspensions are reasonably projected to avoid insolvency as described in IRC §418E. The results are not applicable for any other purpose.

Future actuarial measurements may differ significantly from the current measurements presented in this certification due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions, changes in economic or demographic assumptions, or changes in plan provisions.

The results are based on my best interpretation of existing laws and regulations and are subject to revision based on future regulatory or other guidance.

United Actuarial Services, Inc. does not provide, nor charge for, investment, tax or legal advice. None of the comments made herein should be construed as constituting such advice. We are not aware of any direct or material indirect financial interest or relationship that could create a conflict of interest that would impair the objectivity of our work.

International Association of Machinists Motor City Pension Fund

EIN/Plan #: 38-6237143/001

Checklist Item #7 – 3.02 Plan Actuary's Certification of Plan Avoiding Insolvency with Suspension and Supporting Illustrations

I am a member of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein. To the best of my knowledge, the information supplied is complete and accurate. As required by IRC §432(b)(3)(B)(iii), the projected industry activity is based on information provided by the plan sponsor. In my opinion, the projections are based on reasonable actuarial estimates, assumptions and methods that (other than projected industry activity) offer my best estimate of anticipated experience under the Plan.

Certified by:

Redacted by the U.S. Department of the Treasury

Paul Bullock, ASA, EA, MAAA

Enrollment Number: Redacted by

11590 N. Meridian St., Suite 610

Carmel, IN 46032

Phone: 317-580-8688

March 29, 2017

International Association of Machinists Motor City Pension Fund

EIN/Plan #: 38-6237143/001

Checklist Item #7 – 3.02 Plan Actuary’s Certification of Plan Avoiding Insolvency with Suspension and Supporting Illustrations

Document 7.2

Actuarial Solvency Certification Contents

EXHIBIT I	Summary December 31, 2016 Assets
EXHIBIT II	Deterministic Projection of Current Plan without Proposed Suspension
EXHIBIT III	Deterministic Projection of Proposed Suspension
EXHIBIT IV	Projection of Benefit Reduction Equal to the Greater of 5% of Current Proposed Reduction or 2% of Participant’s or Beneficiary’s Payment Without Regard to Proposed Reduction
EXHIBIT V	Projected Total Contribution Base Units and Average Contribution Rates
EXHIBIT VI	Actuarial Assumptions and Methodology
EXHIBIT VII	Proposed Benefit Suspensions
EXHIBIT VIII	Breakdown of Benefit Payouts Under Proposed Suspension (Exhibit III)
EXHIBIT IX	Breakdown of Benefit Payouts for Exhibit IV

International Association of Machinists Motor City Pension Fund

EIN/Plan #: 38-6237143/001

Checklist Item #7 – 3.02 Plan Actuary’s Certification of Plan Avoiding Insolvency with Suspension and Supporting Illustrations

Exhibit I – Development of Projected December 31, 2016 Assets

The estimated change in Market Value of Assets from July 1, 2016 through December 31, 2016 is shown below. Contribution income, benefit payments, administrative expenses and investment income were based on the December 31, 2016 unaudited financial statements provided by the plan administrator.

	From July 1, 2016 through December 31, 2016
1. Market Value at beginning of period	\$ 51,181,760
2. Employer contributions	860,185
3. Withdrawal liability payments	311,791
4. Other income	3,992
5. Benefit payments	4,351,508
6. Administrative expenses	91,395
7. Investment earnings/(loss)	2,164,922
8. Market Value at end of period: (1)+(2)-(3)-(4)+(5)	\$ 50,079,747

International Association of Machinists Motor City Pension Fund

EIN/Plan #: 38-6237143/001

Checklist Item #7 – 3.02 Plan Actuary’s Certification of Plan Avoiding Insolvency with Suspension and Supporting Illustrations

Exhibit II – Deterministic Projection of Current Plan without Proposed Suspension

The projected Market Value of Assets and Solvency Ratio for the Plan Years beginning July 1, 2016 through June 30, 2026

Plan Year Ending	1. Beginning Assets	2. Employer Contributions	3. EWL Payments	4. Benefit Payments	5. Expenses	6. Investment Income	7. Ending Assets	8. Resources (1)+(2)+(3)-(5)+(6)	Solvency Ratio (8)/(4)
6/30/2017*	\$51,181,760	\$1,643,522	\$623,582	\$9,022,680	\$307,403	\$3,740,947	\$47,859,728	\$56,882,408	6.304
6/30/2018	\$47,859,728	\$1,502,691	\$753,872	\$9,423,978	\$344,800	\$2,911,250	\$43,258,764	\$52,682,742	5.590
6/30/2019	\$43,258,764	\$1,502,691	\$726,889	\$9,081,019	\$249,696	\$2,621,039	\$38,778,668	\$47,859,687	5.270
6/30/2020	\$38,778,668	\$1,502,691	\$701,841	\$9,083,738	\$254,690	\$2,324,277	\$33,969,049	\$43,052,787	4.740
6/30/2021	\$33,969,049	\$1,502,691	\$649,978	\$9,037,225	\$259,784	\$2,006,504	\$28,831,213	\$37,868,438	4.190
6/30/2022	\$28,831,213	\$1,502,691	\$606,908	\$8,979,230	\$264,979	\$1,667,734	\$23,364,336	\$32,343,566	3.602
6/30/2023	\$23,364,336	\$1,502,691	\$606,908	\$9,015,591	\$270,279	\$1,305,552	\$17,493,617	\$26,509,208	2.940
6/30/2024	\$17,493,617	\$1,502,691	\$606,908	\$8,918,565	\$275,685	\$921,114	\$11,330,081	\$20,248,645	2.270
6/30/2025	\$11,330,081	\$1,502,691	\$606,908	\$8,842,778	\$281,198	\$516,646	\$4,832,349	\$13,675,127	1.546
6/30/2026	\$4,832,349	\$1,502,691	\$323,465	\$8,740,318	\$286,822	\$81,645	Insolvent	\$6,453,328	0.738

* The first six months of this plan year is based on actual asset experience as shown in Exhibit I

International Association of Machinists Motor City Pension Fund

EIN/Plan #: 38-6237143/001

Checklist Item #7 – 3.02 Plan Actuary’s Certification of Plan Avoiding Insolvency with Suspension and Supporting Illustrations

Exhibit III – Deterministic Projection of Proposed Suspension

The projected Market Value of Assets and Solvency Ratio for the Plan Years beginning July 1, 2016 through June 30, 2062

Plan Year Ending	1. Beginning Assets	2. Employer Contributions	3. EWL Payments	4. Benefit Payments	5. Expenses	6. Investment Income	7. Ending Assets	8. Resources (1)+(2)+(3)-(5)+(6)	Solvency Ratio (8)/(4)
6/30/2017*	\$51,181,760	\$1,643,522	\$623,582	\$9,022,680	\$307,403	\$3,740,947	\$47,859,728	\$56,882,408	6.304
6/30/2018	\$47,859,728	\$1,502,691	\$753,872	\$7,800,450	\$344,800	\$2,964,827	\$44,935,868	\$52,736,318	6.761
6/30/2019	\$44,935,868	\$1,502,691	\$726,889	\$5,875,609	\$249,696	\$2,837,506	\$43,877,649	\$49,753,258	8.468
6/30/2020	\$43,877,649	\$1,502,691	\$701,841	\$5,854,236	\$254,690	\$2,767,384	\$42,740,638	\$48,594,874	8.301
6/30/2021	\$42,740,638	\$1,502,691	\$649,978	\$5,797,296	\$259,784	\$2,692,346	\$41,528,574	\$47,325,870	8.163
6/30/2022	\$41,528,574	\$1,502,691	\$606,908	\$5,729,888	\$264,979	\$2,612,988	\$40,256,294	\$45,986,182	8.026
6/30/2023	\$40,256,294	\$1,502,691	\$606,908	\$5,697,783	\$270,279	\$2,529,908	\$38,927,739	\$44,625,522	7.832
6/30/2024	\$38,927,739	\$1,502,691	\$606,908	\$5,626,805	\$275,685	\$2,444,394	\$37,579,243	\$43,206,048	7.679
6/30/2025	\$37,579,243	\$1,502,691	\$606,908	\$5,548,344	\$281,198	\$2,357,807	\$36,217,106	\$41,765,450	7.528
6/30/2026	\$36,217,106	\$1,502,691	\$323,465	\$5,461,427	\$286,822	\$2,261,242	\$34,556,255	\$40,017,682	7.327
6/30/2027	\$34,556,255	\$1,502,691	\$266,818	\$5,357,668	\$292,559	\$2,446,589	\$33,122,126	\$38,479,794	7.182
6/30/2028	\$33,122,126	\$1,502,691	\$266,818	\$5,243,045	\$298,410	\$2,343,116	\$31,693,297	\$36,936,342	7.045
6/30/2029	\$31,693,297	\$1,502,691	\$266,818	\$5,150,951	\$304,378	\$2,239,192	\$30,246,669	\$35,397,620	6.872
6/30/2030	\$30,246,669	\$1,502,691	\$266,818	\$5,033,082	\$310,466	\$2,134,895	\$28,807,524	\$33,840,607	6.724
6/30/2031	\$28,807,524	\$1,502,691	\$213,064	\$4,926,703	\$316,675	\$2,028,708	\$27,308,609	\$32,235,312	6.543
6/30/2032	\$27,308,609	\$1,502,691	\$213,064	\$4,809,099	\$323,008	\$1,920,470	\$25,812,726	\$30,621,825	6.367
6/30/2033	\$25,812,726	\$1,502,691	\$213,064	\$4,694,404	\$329,469	\$1,812,347	\$24,316,955	\$29,011,359	6.180
6/30/2034	\$24,316,955	\$1,502,691	\$198,251	\$4,540,115	\$336,058	\$1,705,156	\$22,846,880	\$27,386,995	6.032
6/30/2035	\$22,846,880	\$1,502,691	\$195,903	\$4,378,568	\$342,779	\$1,600,627	\$21,424,754	\$25,803,322	5.893
6/30/2036	\$21,424,754	\$1,502,691	\$195,903	\$4,226,614	\$349,635	\$1,499,418	\$20,046,517	\$24,273,131	5.743
6/30/2037	\$20,046,517	\$1,502,691	\$195,903	\$4,047,358	\$356,627	\$1,402,520	\$18,743,646	\$22,791,004	5.631
6/30/2038	\$18,743,646	\$1,502,691		\$3,878,467	\$363,760	\$1,303,534	\$17,307,644	\$21,186,111	5.462
6/30/2039	\$17,307,644	\$1,502,691		\$3,712,839	\$371,035	\$1,201,782	\$15,928,242	\$19,641,081	5.290
6/30/2040	\$15,928,242	\$1,502,691		\$3,552,473	\$378,456	\$1,104,072	\$14,604,076	\$18,156,549	5.111
6/30/2041	\$14,604,076	\$1,502,691		\$3,380,067	\$386,025	\$1,010,951	\$13,351,626	\$16,731,694	4.950

International Association of Machinists Motor City Pension Fund

EIN/Plan #: 38-6237143/001

Checklist Item #7 – 3.02 Plan Actuary’s Certification of Plan Avoiding Insolvency with Suspension and Supporting Illustrations

Exhibit III – Deterministic Projection of Proposed Suspension (Cont.)

The projected Market Value of Assets and Solvency Ratio for the Plan Years beginning July 1, 2016 through June 30, 2062

Plan Year Ending	1. Beginning Assets	2. Employer Contributions	3. EWL Payments	4. Benefit Payments	5. Expenses	6. Investment Income	7. Ending Assets	8. Resources (1)+(2)+(3)-(5)+(6)	Solvency Ratio (8)/(4)
6/30/2042	\$13,351,626	\$1,502,691		\$3,221,543	\$393,745	\$922,683	\$12,161,713	\$15,383,255	4.775
6/30/2043	\$12,161,713	\$1,502,691		\$3,057,144	\$401,620	\$839,320	\$11,044,959	\$14,102,103	4.613
6/30/2044	\$11,044,959	\$1,502,691		\$2,889,568	\$409,653	\$761,557	\$10,009,987	\$12,899,555	4.464
6/30/2045	\$10,009,987	\$1,502,691		\$2,732,160	\$417,846	\$689,541	\$9,052,213	\$11,784,373	4.313
6/30/2046	\$9,052,213	\$1,502,691		\$2,570,441	\$426,203	\$623,470	\$8,181,730	\$10,752,171	4.183
6/30/2047	\$8,181,730	\$1,502,691		\$2,413,051	\$434,727	\$563,778	\$7,400,422	\$9,813,473	4.067
6/30/2048	\$7,400,422	\$1,502,691		\$2,265,011	\$443,421	\$510,417	\$6,705,098	\$8,970,109	3.960
6/30/2049	\$6,705,098	\$1,502,691		\$2,121,176	\$452,290	\$463,341	\$6,097,664	\$8,218,841	3.875
6/30/2050	\$6,097,664	\$1,502,691		\$1,985,679	\$461,336	\$422,538	\$5,575,879	\$7,561,558	3.808
6/30/2051	\$5,575,879	\$1,502,691		\$1,859,102	\$470,562	\$387,817	\$5,136,722	\$6,995,825	3.763
6/30/2052	\$5,136,722	\$1,502,691		\$1,744,370	\$479,973	\$358,843	\$4,773,913	\$6,518,283	3.737
6/30/2053	\$4,773,913	\$1,502,691		\$1,632,478	\$489,573	\$335,481	\$4,490,034	\$6,122,512	3.750
6/30/2054	\$4,490,034	\$1,502,691		\$1,529,214	\$499,364	\$317,709	\$4,281,856	\$5,811,070	3.800
6/30/2055	\$4,281,856	\$1,502,691		\$1,433,381	\$509,352	\$305,328	\$4,147,142	\$5,580,523	3.893
6/30/2056	\$4,147,142	\$1,502,691		\$1,343,823	\$519,539	\$298,215	\$4,084,686	\$5,428,509	4.040
6/30/2057	\$4,084,686	\$1,502,691		\$1,262,549	\$529,930	\$296,203	\$4,091,101	\$5,353,650	4.240
6/30/2058	\$4,091,101	\$1,502,691		\$1,187,888	\$540,528	\$299,101	\$4,164,477	\$5,352,365	4.506
6/30/2059	\$4,164,477	\$1,502,691		\$1,119,983	\$551,339	\$306,759	\$4,302,606	\$5,422,589	4.842
6/30/2060	\$4,302,606	\$1,502,691		\$1,058,072	\$562,365	\$319,042	\$4,503,902	\$5,561,973	5.257
6/30/2061	\$4,503,902	\$1,502,691		\$1,002,245	\$573,613	\$335,826	\$4,766,561	\$5,768,806	5.756
6/30/2062	\$4,766,561	\$1,502,691		\$951,926	\$585,085	\$356,998	\$5,089,239	\$6,041,165	6.346
6/30/2063	\$5,089,239	\$1,502,691		\$906,758	\$596,787	\$382,470	\$5,470,855	\$6,377,613	7.033

* The first six months of this plan year is based on actual asset experience as shown in Exhibit I

International Association of Machinists Motor City Pension Fund

EIN/Plan #: 38-6237143/001

Checklist Item #7 – 3.02 Plan Actuary’s Certification of Plan Avoiding Insolvency with Suspension and Supporting Illustrations

Exhibit IV

Projection of Benefit Reduction Equal to the Greater of 5% of Current Proposed Reduction or 2% of Participant’s or Beneficiary’s Payment Without Regard to Proposed Reduction

Plan Year Ending	1. Beginning Assets	2. Employer Contributions	3. EWL Payments	4. Benefit Payments	5. Expenses	6. Investment Income	7. Ending Assets	8. Resources (1)+(2)+(3)-(5)+(6)	Solvency Ratio (8)/(4)
6/30/2017*	\$51,181,760	\$1,643,522	\$623,582	\$9,022,680	\$307,403	\$3,740,947	\$47,859,728	\$56,882,408	6.304
6/30/2018	\$47,859,728	\$1,502,691	\$753,872	\$7,883,177	\$344,800	\$2,962,097	\$44,850,411	\$52,733,588	6.689
6/30/2019	\$44,850,411	\$1,502,691	\$726,889	\$6,040,891	\$249,696	\$2,826,412	\$43,615,815	\$49,656,706	8.220
6/30/2020	\$43,615,815	\$1,502,691	\$701,841	\$6,022,515	\$254,690	\$2,744,549	\$42,287,691	\$48,310,206	8.022
6/30/2021	\$42,287,691	\$1,502,691	\$649,978	\$5,966,722	\$259,784	\$2,656,861	\$40,870,715	\$46,837,437	7.850
6/30/2022	\$40,870,715	\$1,502,691	\$606,908	\$5,900,929	\$264,979	\$2,563,925	\$39,378,330	\$45,279,259	7.673
6/30/2023	\$39,378,330	\$1,502,691	\$606,908	\$5,872,722	\$270,279	\$2,466,190	\$37,811,119	\$43,683,840	7.438
6/30/2024	\$37,811,119	\$1,502,691	\$606,908	\$5,800,532	\$275,685	\$2,364,964	\$36,209,465	\$42,009,997	7.242
6/30/2025	\$36,209,465	\$1,502,691	\$606,908	\$5,721,976	\$281,198	\$2,261,672	\$34,577,562	\$40,299,538	7.043
6/30/2026	\$34,577,562	\$1,502,691	\$323,465	\$5,634,025	\$286,822	\$2,147,336	\$32,630,208	\$38,264,232	6.792
6/30/2027	\$32,630,208	\$1,502,691	\$266,818	\$5,529,802	\$292,559	\$2,295,680	\$30,873,036	\$36,402,838	6.583
6/30/2028	\$30,873,036	\$1,502,691	\$266,818	\$5,412,481	\$298,410	\$2,168,080	\$29,099,734	\$34,512,216	6.376
6/30/2029	\$29,099,734	\$1,502,691	\$266,818	\$5,319,238	\$304,378	\$2,038,364	\$27,283,991	\$32,603,229	6.129
6/30/2030	\$27,283,991	\$1,502,691	\$266,818	\$5,199,660	\$310,466	\$1,906,447	\$25,449,823	\$30,649,482	5.895
6/30/2031	\$25,449,823	\$1,502,691	\$213,064	\$5,091,279	\$316,675	\$1,770,708	\$23,528,331	\$28,619,611	5.621
6/30/2032	\$23,528,331	\$1,502,691	\$213,064	\$4,971,361	\$323,008	\$1,630,865	\$21,580,582	\$26,551,943	5.341
6/30/2033	\$21,580,582	\$1,502,691	\$213,064	\$4,854,025	\$329,469	\$1,488,950	\$19,601,793	\$24,455,818	5.038
6/30/2034	\$19,601,793	\$1,502,691	\$198,251	\$4,695,565	\$336,058	\$1,345,689	\$17,616,801	\$22,312,366	4.752
6/30/2035	\$17,616,801	\$1,502,691	\$195,903	\$4,529,719	\$342,779	\$1,202,703	\$15,645,601	\$20,175,320	4.454
6/30/2036	\$15,645,601	\$1,502,691	\$195,903	\$4,373,814	\$349,635	\$1,060,462	\$13,681,208	\$18,055,022	4.128
6/30/2037	\$13,681,208	\$1,502,691	\$195,903	\$4,188,868	\$356,627	\$919,815	\$11,754,122	\$15,942,990	3.806
6/30/2038	\$11,754,122	\$1,502,691		\$4,014,650	\$363,760	\$774,213	\$9,652,615	\$13,667,265	3.404
6/30/2039	\$9,652,615	\$1,502,691		\$3,843,617	\$371,035	\$622,751	\$7,563,405	\$11,407,022	2.968
6/30/2040	\$7,563,405	\$1,502,691		\$3,678,535	\$378,456	\$471,982	\$5,481,087	\$9,159,622	2.490
6/30/2041	\$5,481,087	\$1,502,691		\$3,500,319	\$386,025	\$322,218	\$3,419,652	\$6,919,971	1.977

International Association of Machinists Motor City Pension Fund

EIN/Plan #: 38-6237143/001

Checklist Item #7 – 3.02 Plan Actuary’s Certification of Plan Avoiding Insolvency with Suspension and Supporting Illustrations

Exhibit IV (Cont.)

Projection of Benefit Reduction Equal to the Greater of 5% of Current Proposed Reduction or 2% of Participant’s or Beneficiary’s Payment Without Regard to Proposed Reduction

Plan Year Ending	1. Beginning Assets	2. Employer Contributions	3. EWL Payments	4. Benefit Payments	5. Expenses	6. Investment Income	7. Ending Assets	8. Resources (1)+(2)+(3)-(5)+(6)	Solvency Ratio (8)/(4)
6/30/2042	\$3,419,652	\$1,502,691		\$3,336,165	\$393,745	\$173,487	\$1,365,920	\$4,702,085	1.409
6/30/2043	\$1,365,920	\$1,502,691		\$3,166,960	\$401,620	\$25,518	Insolvent	\$2,492,508	0.787

* The first six months of this plan year is based on actual asset experience as shown in Exhibit I

International Association of Machinists Motor City Pension Fund

EIN/Plan #: 38-6237143/001

Checklist Item #7 – 3.02 Plan Actuary’s Certification of Plan Avoiding Insolvency with Suspension and Supporting Illustrations

Exhibit V – Projected Total Contribution Base Units and Average Contribution Rates

Plan Year Ending	Total Contribution Base Units	Contribution Rate	Plan Year Ending	Total Contribution Base Units	Contribution Rate
6/30/2017*	6181	\$265.90	6/30/2041	5736	\$261.98
6/30/2018	5736	\$261.98	6/30/2042	5736	\$261.98
6/30/2019	5736	\$261.98	6/30/2043	5736	\$261.98
6/30/2020	5736	\$261.98	6/30/2044	5736	\$261.98
6/30/2021	5736	\$261.98	6/30/2045	5736	\$261.98
6/30/2022	5736	\$261.98	6/30/2046	5736	\$261.98
6/30/2023	5736	\$261.98	6/30/2047	5736	\$261.98
6/30/2024	5736	\$261.98	6/30/2048	5736	\$261.98
6/30/2025	5736	\$261.98	6/30/2049	5736	\$261.98
6/30/2026	5736	\$261.98	6/30/2050	5736	\$261.98
6/30/2027	5736	\$261.98	6/30/2051	5736	\$261.98
6/30/2028	5736	\$261.98	6/30/2052	5736	\$261.98
6/30/2029	5736	\$261.98	6/30/2053	5736	\$261.98
6/30/2030	5736	\$261.98	6/30/2054	5736	\$261.98
6/30/2031	5736	\$261.98	6/30/2055	5736	\$261.98
6/30/2032	5736	\$261.98	6/30/2056	5736	\$261.98
6/30/2033	5736	\$261.98	6/30/2057	5736	\$261.98
6/30/2034	5736	\$261.98	6/30/2058	5736	\$261.98
6/30/2035	5736	\$261.98	6/30/2059	5736	\$261.98
6/30/2036	5736	\$261.98	6/30/2060	5736	\$261.98
6/30/2037	5736	\$261.98	6/30/2061	5736	\$261.98
6/30/2038	5736	\$261.98	6/30/2062	5736	\$261.98
6/30/2039	5736	\$261.98	6/30/2063	5736	\$261.98
6/30/2040	5736	\$261.98			

* The first six months of this plan year is based on actual asset experience as shown in Exhibit I. This year also includes the employers Motor City Electric and Doan Construction, both of whom will completely withdraw as of June 30, 2017.

International Association of Machinists Motor City Pension Fund

EIN/Plan #: 38-6237143/001

Checklist Item #7 – 3.02 Plan Actuary’s Certification of Plan Avoiding Insolvency with Suspension and Supporting Illustrations

Exhibit VI – Assumptions and Methodology

IRC §1.432(e)(9)-1(d)(5)(iv)(B) requires us to explain all actuarial assumption changes from the July 1, 2016 certification of critical and declining status and the actuarial assumptions used for the projections used to demonstrate that the proposed benefit suspension is sufficient to avoid insolvency but not materially in excess of the suspension necessary to avoid insolvency. The changes between the critical and declining status certification and the July 1, 2016 Actuarial Valuation are summarized on page 39.81 in Document 39.2(2). The differences in the data, actuarial assumptions and methodology between the July 1, 2016 Actuarial Valuation and the projections provided here are summarized and explained below. The calculations are based on a current understanding of the requirements of ERISA §305, IRC §432, final regulation §1.432(e)(9)-1 and Revenue Procedure 2016-27.

Data: Supplemental data was provided by the Fund Office to calculate PBGC guaranteed benefits and to model the proposed benefit suspension.

Mortality: 100% of the RP-2014 Blue Collar Mortality Tables for employees and healthy annuitants adjusted backward to 2006 with the MP-2014 projection scale and projected forward using the MP-2016 projection scale.

Rationale for change:

The mortality rates were previously increased by 10% based on the post-retirement experience from other, larger pension plans in similar industries as well as the partial credibility of the Plan’s post-retirement experience. However, the PBGC has disputed our methodology for this custom adjustment. Therefore, this 10% load was removed.

Projected Industry Activity: Based on information provided by the Trustees regarding projection of future industry activity and our assumption for expected weeks per participant, the following weeks were assumed: 6,181 weeks for the plan year beginning in 2016 and 5,736 weeks for the plan year beginning in 2017 and for each plan year thereafter.

Rationale for change:

The expected weeks for the plan year beginning in 2016 are based on six months of estimated actual weeks by dividing the expected future contribution rate of \$265.90 into the \$860,185 actual six-month contribution plus one half of the 5,892 weeks expected for this entire plan year. The expected weeks for the plan year beginning in 2017 and later subtract 156 weeks from the 5,892 weeks expected in 2016 due to the upcoming complete withdrawal of Motor City Electric and Doan Construction as of June 30, 2017.

International Association of Machinists Motor City Pension Fund

EIN/Plan #: 38-6237143/001

Checklist Item #7 – 3.02 Plan Actuary’s Certification of Plan Avoiding Insolvency with Suspension and Supporting Illustrations

Exhibit VI (cont.) – Assumptions and Methodology

Future Contributions: \$265.90 average weekly contribution rate for the plan year beginning in 2016
 \$261.98 average weekly contribution rate for the plan year beginning in 2017 and for each plan year thereafter

Motor City Electric and Doan Construction will completely withdraw from the Plan as of June 30, 2017 due to a cessation of union representation which will invalidate their contracts with the Plan. Motor City Electric is assumed to make withdrawal liability payments that total \$156,188 per year for 20 years. Doan Construction is assumed to make withdrawal liability payments that total \$37,968 per year for 20 years. This is in addition to Doan Construction’s partial withdrawal liability payments that total \$17,000 per year through the plan year beginning in 2032 plus a final payment of \$2,263 in the plan year beginning in 2033. Both employers’ payments are assumed to commence in the plan year beginning in 2017.

Rationale for change:

The lower average weekly contribution rate for the plan year beginning in 2017 and later reflects the upcoming complete withdrawal of Motor City Electric and Doan Construction as of June 30, 2017.

Administrative Expenses: \$307,403 for the plan year beginning in 2016; \$240,000 with 2% annual inflationary adjustments starting in 2017 for the plan year beginning in 2017 and for each plan year thereafter. The plan year beginning in 2017 also has an additional \$100,000 added above and beyond this figure.

Rationale for change:

The expected expenses for the plan year beginning in 2016 include 6 months of actual experience from the December 31, 2016 unaudited financial statements plus an additional \$100,000 for special expenses related to this benefit suspension application. The expected expenses for the plan year beginning in 2017 also include an additional \$100,000 for special expenses related to this benefit suspension application.

International Association of Machinists Motor City Pension Fund

EIN/Plan #: 38-6237143/001

Checklist Item #7 – 3.02 Plan Actuary’s Certification of Plan Avoiding Insolvency with Suspension and Supporting Illustrations

Exhibit VI (cont.) – Assumptions and Methodology

New Entrants: The number of new entrants added annually replaces the number of actives that leave due to termination, retirement, death and retirement decrements so that a stable population of 138 active participants is maintained. The age at hire for new entrants over the five years was summarized (including those that are no longer active). Based on this distribution we assumed new entrants would enter at the following ages:

Age	Percentage of population	Age	Percentage of population	Age	Percentage of population
19	1.1%	31	1.1%	46	1.1%
20	6.5%	32	1.1%	47	1.1%
21	5.4%	34	3.2%	49	1.1%
22	8.7%	35	3.2%	50	1.1%
23	5.4%	36	2.2%	51	1.1%
24	9.8%	38	1.1%	52	3.2%
25	1.1%	40	3.2%	53	2.2%
26	7.6%	41	2.2%	55	2.2%
27	7.6%	42	1.1%	58	1.1%
28	3.2%	43	1.1%	60	1.1%
29	2.2%	44	2.2%	61	1.1%
30	2.2%	45	1.1%	Total	100.0%

Rationale for change:

The new entrant profile based on a distribution of recent entry ages is necessary to yield an expected cash flow which is as accurate as possible.

International Association of Machinists Motor City Pension Fund

EIN/Plan #: 38-6237143/001

Checklist Item #7 – 3.02 Plan Actuary’s Certification of Plan Avoiding Insolvency with Suspension and Supporting Illustrations

Exhibit VI (cont.) – Assumptions and Methodology

Financial Information: Contribution income, benefit payments, administrative expenses and investment income for the first six months of the plan year beginning in 2016 were based on the December 31, 2016 unaudited financial statements provided by the plan administrator.

Also, during the process of putting this application together, 17 retired participants were discovered to have retired late but for whom no late retirement factor had been applied. We estimated and applied the late retirement factor for each of these participants effective January 1, 2018 and also assumed make-up payments that totaled \$236,535 from each participant’s late retirement date to January 1, 2018.

Investment return: The expected investment return for the plan year beginning in 2016 is 7.85%. The expected investment return for the next nine subsequent plan years is 6.60% and then 7.50% per year thereafter.

Rationale for change:

The Horizon Actuarial 2016 survey of investment consultants short-term capital market assumptions produced a median return of at least 6.60% in the short-term taking into account the Plan’s liquidity needs for negative cash flow. 6.60% was used for all short-term return years as a simplification. The expected return for the plan year beginning in 2016 is based on the actual estimated return for the first six months plus an expected return at 6.60% per annum for the remaining six months of the plan year. We lowered the short-term value from 6.75% with the 2016 valuation to 6.60% for the second half of the plan year beginning in 2016 and the nine subsequent plan years to get it below the aforementioned median values.

The Plan’s “liquidity needs” for a given plan year are having two months of negative cash flow (= expected contributions - expected benefit payments - expected operational expenses) on hand in cash equivalent investments at all times. The minimum percent investment in cash equivalents in a plan year equals the two months of negative cash flow divided by the average market value of assets at the beginning and end of the plan year in question. All other asset categories, except real estate and infrastructure, are adjusted proportionately lower if the cash equivalent percentage needed is greater than the 1.1% current target established by the Plan’s investment consultant.

International Association of Machinists Motor City Pension Fund

EIN/Plan #: 38-6237143/001

Checklist Item #7 – 3.02 Plan Actuary’s Certification of Plan Avoiding Insolvency with Suspension and Supporting Illustrations

Exhibit VI (cont.) – Assumptions and Methodology

Inactive vested lives over age 70 Continuing inactive vested participants over age 70 are valued and not assumed to be deceased.

Rationale for change:

The Treasury and PBGC have voiced concern about assuming any vested participants are deceased.

Benefit Payment Projections: Benefit payments were based on a closed group valuation for participants included in the 2016 actuarial valuation and an open group valuation for new entrants.

Rationale for change:

An open group projection is necessary to capture the new entrant profile discussed above.

International Association of Machinists Motor City Pension Fund

EIN/Plan #: 38-6237143/001

Checklist Item #7 – 3.02 Plan Actuary’s Certification of Plan Avoiding Insolvency with Suspension and Supporting Illustrations

Exhibit VII – Proposed Benefit Suspensions

The plan of benefits is as used in the July 1, 2016 actuarial valuation dated December 15, 2016, except as follows:

Proposed Benefit Suspensions: Effective January 1, 2018, the Plan will recalculate accrued benefits or benefits in pay status for all affected participants to be 110% of the benefit guaranteed by the PBGC, but no more than the current benefit level. This benefit change also includes any current or future adjustments for early retirement or optional forms of benefit but not for any current or future adjustments for late retirement. Additionally, the guarantee amount for current or future spouses on a joint and survivor form of benefit includes the reduction to the survivor portion of the benefit. Also, benefit service for the marital period of a Qualified Domestic Relations Order (QDRO) is split between participant and alternate payee in the same manner that the applicable marital benefit was split. Accruals after January 1, 2018 will return to 0.5% of credited contributions.

The above changes will not affect the following groups of participants:

- Participants who were awarded with a disability pension and beneficiaries of such participants, and
- Participants and beneficiaries who are at least age 80 as of the suspension date.

The amount of benefit payable on and after the suspension date for participants and beneficiaries who are at least age 75 but less than age 80 as of the suspension date will equal the sum of:

- The amount of benefit calculated above, and
- 1/60 of the difference between the benefit payable before the suspension date and the amount of benefit calculated above, if any, multiplied by the number of months the participant is over age 75 on the suspension date.

International Association of Machinists Motor City Pension Fund

EIN/Plan #: 38-6237143/001

Checklist Item #7 – 3.02 Plan Actuary’s Certification of Plan Avoiding Insolvency with Suspension and Supporting Illustrations

EXHIBIT VIII - Breakdown of Benefit Payouts for Exhibit III

Plan Year Ending	Actives	Vested Terminations	Retired	New Entrants
6/30/2017*	\$23,632	\$665,857	\$8,333,192	\$0
6/30/2018	\$66,049	\$596,952	\$7,137,449	\$0
6/30/2019	\$93,485	\$575,199	\$5,206,925	\$0
6/30/2020	\$135,399	\$662,529	\$5,056,308	\$0
6/30/2021	\$182,352	\$712,051	\$4,902,893	\$0
6/30/2022	\$226,038	\$757,189	\$4,746,639	\$22
6/30/2023	\$266,654	\$843,386	\$4,587,597	\$146
6/30/2024	\$301,057	\$899,411	\$4,425,900	\$437
6/30/2025	\$334,399	\$951,336	\$4,261,735	\$874
6/30/2026	\$363,994	\$1,000,650	\$4,095,321	\$1,462
6/30/2027	\$393,080	\$1,035,426	\$3,926,896	\$2,266
6/30/2028	\$416,838	\$1,066,157	\$3,756,736	\$3,314
6/30/2029	\$436,103	\$1,125,028	\$3,585,187	\$4,633
6/30/2030	\$456,634	\$1,157,586	\$3,412,654	\$6,208
6/30/2031	\$476,718	\$1,202,383	\$3,239,609	\$7,993
6/30/2032	\$495,797	\$1,236,736	\$3,066,580	\$9,986
6/30/2033	\$515,726	\$1,272,391	\$2,894,104	\$12,183
6/30/2034	\$530,326	\$1,272,458	\$2,722,728	\$14,603
6/30/2035	\$542,631	\$1,265,692	\$2,552,969	\$17,276
6/30/2036	\$559,651	\$1,261,393	\$2,385,337	\$20,233
6/30/2037	\$565,598	\$1,237,900	\$2,220,339	\$23,521
6/30/2038	\$573,436	\$1,219,316	\$2,058,491	\$27,224
6/30/2039	\$575,068	\$1,206,147	\$1,900,359	\$31,265
6/30/2040	\$579,133	\$1,191,129	\$1,746,532	\$35,679
6/30/2041	\$574,683	\$1,167,358	\$1,597,614	\$40,412

International Association of Machinists Motor City Pension Fund

EIN/Plan #: 38-6237143/001

Checklist Item #7 – 3.02 Plan Actuary’s Certification of Plan Avoiding Insolvency with Suspension and Supporting Illustrations

EXHIBIT VIII (Cont.) - Breakdown of Benefit Payouts for Exhibit III

Plan Year Ending	Actives	Vested Terminations	Retired	New Entrants
6/30/2042	\$575,990	\$1,145,865	\$1,454,215	\$45,473
6/30/2043	\$573,668	\$1,115,620	\$1,316,913	\$50,943
6/30/2044	\$569,386	\$1,077,082	\$1,186,218	\$56,882
6/30/2045	\$562,002	\$1,044,417	\$1,062,604	\$63,137
6/30/2046	\$551,270	\$1,002,927	\$946,475	\$69,769
6/30/2047	\$537,979	\$960,193	\$838,105	\$76,774
6/30/2048	\$526,814	\$916,403	\$737,651	\$84,143
6/30/2049	\$512,344	\$871,766	\$645,177	\$91,889
6/30/2050	\$498,359	\$826,508	\$560,674	\$100,138
6/30/2051	\$484,755	\$780,867	\$484,060	\$109,420
6/30/2052	\$474,266	\$735,091	\$415,162	\$119,851
6/30/2053	\$458,520	\$689,438	\$353,686	\$130,834
6/30/2054	\$442,305	\$644,169	\$299,268	\$143,472
6/30/2055	\$424,942	\$599,535	\$251,489	\$157,415
6/30/2056	\$405,330	\$555,767	\$209,862	\$172,864
6/30/2057	\$385,944	\$513,077	\$173,880	\$189,648
6/30/2058	\$365,383	\$471,670	\$143,011	\$207,824
6/30/2059	\$344,884	\$431,722	\$116,733	\$226,644
6/30/2060	\$324,404	\$393,383	\$94,554	\$245,731
6/30/2061	\$304,422	\$356,790	\$75,991	\$265,042
6/30/2062	\$285,025	\$322,053	\$60,584	\$284,264
6/30/2063	\$266,330	\$289,273	\$47,899	\$303,256

* The first six months of this plan year is based on actual benefit payments as shown in Exhibit I

International Association of Machinists Motor City Pension Fund

EIN/Plan #: 38-6237143/001

Checklist Item #7 – 3.02 Plan Actuary’s Certification of Plan Avoiding Insolvency with Suspension and Supporting Illustrations

EXHIBIT IX - Breakdown of Benefit Payouts for Exhibit IV

Plan Year Ending	Actives	Vested Terminations	Retired	New Entrants
6/30/2017*	\$23,632	\$665,857	\$8,333,192	\$0
6/30/2018	\$66,524	\$601,979	\$7,214,674	\$0
6/30/2019	\$96,638	\$586,029	\$5,358,224	\$0
6/30/2020	\$141,634	\$675,891	\$5,204,990	\$0
6/30/2021	\$191,992	\$725,940	\$5,048,790	\$0
6/30/2022	\$238,569	\$772,766	\$4,889,572	\$22
6/30/2023	\$281,223	\$863,974	\$4,727,379	\$146
6/30/2024	\$317,290	\$920,465	\$4,562,340	\$437
6/30/2025	\$352,117	\$974,353	\$4,394,632	\$874
6/30/2026	\$383,057	\$1,025,032	\$4,224,474	\$1,462
6/30/2027	\$413,585	\$1,061,852	\$4,052,099	\$2,266
6/30/2028	\$438,631	\$1,092,752	\$3,877,784	\$3,314
6/30/2029	\$458,985	\$1,153,745	\$3,701,875	\$4,633
6/30/2030	\$481,025	\$1,187,645	\$3,524,782	\$6,208
6/30/2031	\$502,608	\$1,233,692	\$3,346,986	\$7,993
6/30/2032	\$523,602	\$1,268,743	\$3,169,030	\$9,986
6/30/2033	\$545,178	\$1,305,199	\$2,991,465	\$12,183
6/30/2034	\$560,717	\$1,305,383	\$2,814,862	\$14,603
6/30/2035	\$573,717	\$1,298,961	\$2,639,765	\$17,276
6/30/2036	\$592,188	\$1,294,682	\$2,466,711	\$20,233
6/30/2037	\$598,522	\$1,270,583	\$2,296,242	\$23,521
6/30/2038	\$607,100	\$1,251,420	\$2,128,906	\$27,224
6/30/2039	\$609,318	\$1,237,724	\$1,965,310	\$31,265
6/30/2040	\$614,637	\$1,222,139	\$1,806,080	\$35,679
6/30/2041	\$610,410	\$1,197,639	\$1,651,858	\$40,412

International Association of Machinists Motor City Pension Fund

EIN/Plan #: 38-6237143/001

Checklist Item #7 – 3.02 Plan Actuary’s Certification of Plan Avoiding Insolvency with Suspension and Supporting Illustrations

EXHIBIT IX (Cont) - Breakdown of Benefit Payouts for Exhibit IV

Plan Year Ending	Actives	Vested Terminations	Retired	New Entrants
6/30/2042	\$611,900	\$1,175,496	\$1,503,296	\$45,473
6/30/2043	\$610,581	\$1,144,426	\$1,361,010	\$50,943

* The first six months of this plan year is based on actual benefit payments as shown in Exhibit I