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TECHNICAL REPORT

NO. 12677

U.S. ARMY TACOM

EVALUATION OF WHEEL AND TIRE
COMPATIBILITY BETWEEN PRIME MOVERS
AND ASSIGNED TRAILERS

SEP 82

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SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

REPORT DOCUMENTATION PAGE

READ INSTRUCTIONS BEFORE COMPLETING FORM

1. REPORT NUMBER
12677

2. GOVT ACCESSION NO.

3. RECIPIENT'S CATALOG NUMBER

4. TITLE (and Subtitle)
Evaluation of Wheel and Tire Compatibility between Prime Movers and Assigned Trailers

5. TYPE OF REPORT & PERIOD COVERED
Mar 82 - Sep 82

6. PERFORMING ORG. REPORT NUMBER

7. AUTHOR(s)
Stan Bienkowski
Craig Filus

8. CONTRACT OR GRANT NUMBER(s)

9. PERFORMING ORGANIZATION NAME AND ADDRESS
US Army Tank-Automotive Command
DRSTA-RTV
Warren, MI 48090

10. PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS

11. CONTROLLING OFFICE NAME AND ADDRESS

12. REPORT DATE
21 Sep 82

13. NUMBER OF PAGES
36

14. MONITORING AGENCY NAME & ADDRESS (if different from Controlling Office)

15. SECURITY CLASS. (of this report)
Unclassified

15a. DECLASSIFICATION/DOWNGRADING SCHEDULE

16. DISTRIBUTION STATEMENT (of this Report)
Approved for public release
Distribution unlimited

17. DISTRIBUTION STATEMENT (of the abstract entered in Block 20, if different from Report)
Approved for public release
Distribution unlimited

18. SUPPLEMENTARY NOTES

19. KEY WORDS (Continue on reverse side if necessary and identify by block number)
Interchangeable Wheel and Tire Capability
Truck/Trailer Combinations
Get Home Capability
Primary and Towed Vehicles

20. ABSTRACT (Continue on reverse side if necessary and identify by block number)
Due to the recent modernization of the tactical wheeled vehicle fleet, many trucks no longer have interchangeable wheels and tires with their assigned trailers. The Tactical Wheeled Vehicle Office has therefore compiled a list of the truck/trailer combinations which do not have a get home capability in the event of a flat tire.

DD FORM 1 JAN 73 1473 EDITION OF 1 NOV 65 IS OBSOLETE

SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

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Executive Summary

Introduction

Before the recent modernization of the tactical wheeled vehicle fleet, most trucks and their assigned trailers were equipped with interchangeable wheels and tires. This enabled the two vehicles to carry only one spare tire between them. Now that a large number of new vehicles are being fielded, the interchangeable wheel and tire capability has been limited. This leaves many truck/trailer combinations with either a spare tire which fits only one vehicle or no spare tire at all. The objective of this study is to determine which truck/trailer combinations do not have a get home capability in the event of a flat tire.

Scope

The study involved the determination of the wheel size, bolt circle diameter, number of mounting holes, tire size, tire clearance, and the existance of a spare tire for each truck and trailer.

Conclusion

The truck/trailer combinations which do not have a get home capability are listed in Table 1, according to the weight class of the truck.

In addition, it has been proposed that all 900 Series 5 Ton Trucks switch from their present dual tire arrangement to a super single tire. This change would not alter the information given in Table 1.

TABLE 1

PRIMARY AND TOWED VEHICLE COMBINATIONS WHICH DO NOT HAVE A GET HOME CAPABILITY

PRIMARY VEHICLES		TOWED VEHICLES	
1 1/4 TON TRUCKS	M880/M890 M886/M893,*M561	CART TRAILERS	*M101 *M762 *M116A1
5 TON TRUCKS	M40 M40A2 M40A2C M51 M51A2 M52 M52A2 M54 M54A2 M55 M54A2C M55A2 M61A2 M61 M63 M63A2 M63A2C M543A2 M246 M139 M809 M809A1 M810 M811 M811A1 M811A2 M818 M812 M812A1 M939 M940 M941 M942 M943 M944 M931 M932 M945	CART TRAILERS	*M105 *M149 *M332 *M200 *M353 *M310 *M796
		DOLLY SETS	*M832 *M840
TRACTOR TRUCK	M920	SEMITRAILER	*M870

* VEHICLE DOES NOT CARRY A SPARE TIRE

1. BACKGROUND

a. The current Army trailers available in the field are classified into two catagories which are cart trailers and semitrailers. Both catagories consist of trailers in varying payload ranges. Each trailer in both catagories has an assigned combination of towing vehicles. Another towed system is a Dolly Set (mobilizer). This system is designed to transport large shelters.

b. Cart trailers, who primarily do not carry a spare tire, are towed by a ¼ ton, 1¼ ton, 2½ ton, and 5 ton trucks. The cart trailer that a truck tows is determined by the trucks weight towing capability.

c. Semi-trailers, who primarily carry a spare tire, are towed by 2½ ton, 5 ton, M915, M916, M920, M911 and M746 trucks. The majority of the semitrailers are towed by the 2½ and 5 ton trucks. M915, M916, M920, M911 and M746 trucks are designed to tow heavy equipment. At this time, each of these trucks has a specific assigned semitrailer.

d. Dolly Sets (mobilizers) are primarily towed by 5 ton trucks. This is because the Dolly Sets (mobilizers) are rated in the 3 ton to 5¼ ton payload class.

e. If a trailer or Dolly Set tire problem develops during a mission, the trailers or Dolly Sets that carry their own spare tires can usually replace the damaged tire with the spare tire. If there is no spare tire provided with the trailer or Dolly Set, and a tire problem occurs, the spare tire of the prime mover can be used as a replacement of the damaged tire to complete its mission if the tire and rim of both the prime mover and the trailer are compatible. If the rims of both the prime mover and the trailer are compatible but the tire size is not compatible, a prime mover spare tire still can be used for a get home capability if enough tire clearance exists between the tire and the trailer parts surrounding the tire.

2. SCOPE OF EVALUATION

a. The evaluation conducted by TACOM involved the determination of the rim size bolt circle diameter of the rim, the number of mounting holes in the rim, tire size and the existence of a spare tire on all trucks, trailers and dolly sets (mobilizers).

b. Interchangeability of wheels is determined for all vehicles concerned with this study regardless of availability of a spare tire on the cart trailers, semitrailers or dolly sets (mobilizers).

3. RESULTS OF EVALUATION

a. Evaluation of cart trailer series M416 and M569 towed by 1/4 ton trucks M152A2, M718A1 and M825 showed compatibility of wheels and tires for interchangeability. The cart trailer rims have the same ordonnance number as that of the 1/4 ton trucks. The tire size of the cart trailers is the same as that of the 1/4 ton trucks. Reference Appendix A for data comparison.

b. Evaluation of cart trailer series M101, M116A1 and M762 towed by 1 1/4 ton truck series M561, M880/M890 and M886/M893 showed non compatibility of wheels and tires for interchangeability. The rims of the 1 1/4 ton trucks could not be mounted on the trailer hub because of dimensional differences. Reference Appendix B for data comparison.

c. Evaluation of cart trailer series M625, M492, M105, M149, M332, M200 and semitrailer series M373, M348, M508, M750, M119, M146, M313 and M118A1 towed by 2½ ton trucks showed compatibility of wheels and tires for all series of 2½ ton trucks with the exception of series M44 and M44A2. M44 and M44A2 series trucks have compatible wheels with the above trailers but their tire envelope dimensions exceeds the tire envelope dimensions of the above trailers. The increase in the overall diameter of the tire is 2.84 inches and the increase in total width is 1.47 inches. Evaluation of trailer drawing suggests that such an increase in size would be acceptable for using the truck spare tire on the trailers for a get home capability. Reference Appendix C for data comparison and Tire Data Table for maximum tire dimensions.

d. Evaluation of cart trailer series M105, M149, M332 and M200 and semitrailer series M382, M508, M750, M119, M146, M313, M447, M118A1, M373 and M348 towed by 2½ or 5 ton series trucks showed that only 2½ ton series trucks, with the exception of series M44 and M44A2, have compatible wheels and tires with the above trailers. M44 and M44A2 series trucks have compatible wheels with the above trailers but their tire envelope dimensions exceeds the tire envelope dimensions of the above trailers. The increase in the overall diameter of the tire is 2.84 inches and the increase in total width is 1.47 inches. Evaluation of trailer drawings suggests that such an increase would be acceptable for using the truck spare tire on the trailers for a get home capability. Reference Appendix D for data comparison and Tire Data Table for maximum tire dimensions.

e. Evaluation of cart trailer series M105, M149, M332, M200, M353, M310, M795 and M796 and semitrailers M382, M508, M750, M119, M146, M313, M447, M118A1, M373 and M348 towed by 5 ton series trucks showed non compatability of wheels and tires. The major difference is that the 5 ton truck wheels have a larger

mounting bolt circle diameter resulting in total non compatibility.

Semitrailers M126, M127, M128, M129, M269, M270, M131, M347, M967, M969, M970 and M871 showed compatibility of wheels and tires with all 5 ton series trucks with the exception of series M246, M812, M812A1 and M139 5 ton trucks. M246 series trucks have compatible wheels with the above trailers but their tire envelope dimensions exceeds the tire envelope dimensions of the above trailers. The increase in the overall diameter of the tire is 1.75 inches and the increase in total width is .93 inches. Evaluation of above trailer drawings suggests that such a increase in size would be acceptable for using the truck spare tire on the trailers for a get home capability. M139, M812 and M812A1 series 5 ton trucks have wheels that have offsets 2.19 inches wider than that of the above trailers. The increase in the overall diameter of the 14.00 x 20 tire as compared to 11.00 x 20 trailer tire is 6.87 inches and the increase in total width is 3.49 inches.

Evaluation of trailer drawings suggests that such an increase in size would be unacceptable to use the spare tire on any of the above trailers. Reference Appendix E for data comparison.

Dolly Sets (mobilizers) series M832, M890 and M720 towed by 5 ton series trucks have wheels and tires that are not compatible with the wheels and tires of all 5 ton truck series. Both the tire size and the mounting circle diameter is different between the trucks and above dolly sets. Reference Appendix E for data comparison.

f. Evaluation of a M172 semitrailer towed by a M916 tractor truck showed that their wheels and tires are not compatible because of differences in tire sizes and rim sizes. Reference Appendix F for data comparison.

g. Evaluation of a M872 semitrailer towed by a M915 tractor truck showed that their wheels and tires are not compatible because of differences in tire and rim sizes. Reference Appendix G for data comparison.

h. Evaluation of a M870 semitrailer towed by a M920 tractor truck showed that their wheels and tires are not compatible due to differences in tire and rim sizes. Reference Appendix H for data comparison.

i. Evaluation of a M747 semitrailer towed by a M911 or a M746 tractor truck showed that their wheels and tires are not compatible because of differences in tire and rim sizes. Reference Appendix I for data comparison.

4. CONCLUSION

Evaluation of reference material leads to the following conclusions:

a. $\frac{1}{4}$ ton trucks can use their spare tire to replace a damaged trailer tire without mobility degradation on the trailers they are assigned to tow.

b. $1\frac{1}{4}$ ton trucks can not use their spare tire to replace a damaged trailer tire, on the trailers they are assigned to tow, because the truck and the trailer rims and tires are not compatible.

c. With the exception of series M44 and M44A2 all 2½ ton truck series can use their spare tire to replace a damaged tire on all cart trailers or semitrailers assigned to the 2½ ton truck. The two series of 2½ ton trucks, M44 and M44A2, have a compatible rim but the tire envelope dimensions are greater than that of the assigned cart trailers or semitrailers. The spare tire of series M44 and M44A2 can be used to replace a damaged tire of the assigned cart trailers or semitrailers but only for a get home capability with a degradation of mobility.

d. 5 ton truck series can not use their spare tire to replace a damaged tire on any of their assigned cart trailers or semitrailers M382, M508, M750, M119, M146, M313, M447, M118A1, M373 and M348. This is due to the 5 ton truck series rims having a considerably larger bolt circle diameter than the above cart trailer or semitrailer rims. Semitrailers M126, M127, M128, M129, M269, M270, M131, M347, M967, M969, M970 and M871 can use the spare tire of all series of 5 ton trucks with the exception of series M139, M812, M812A1, and M246 to replace a damaged trailer tire. 5 ton truck series M246 spare tire can be used to replace a tire of the above trailers but only for a get home capability. This is because the truck tire envelope dimensions exceed the semitrailers tire envelope dimensions. 5 ton truck series M139, M812 and M812A1 can not use their spare tire to replace a damaged tire of the above semitrailers because their overall tire envelope dimensions exceed available space between the trailer tire and its surrounding chassis.

e. Dolly Sets (mobilizers) towed by 5 ton trucks have wheels and tires that are not compatible to the wheels and tires of all series of 5 ton trucks

f. M172 semitrailers towed by M916 tractor trucks have wheels and tires that are not compatible due to tire and rim size differences.

g. M872 semitrailers towed by M915 tractor trucks showed that their rims and tires are not compatible due to differences of tire and rim sizes.

h. M870 semitrailers towed by M920 tractor trucks showed that their rims and tires are not compatible due to differences of tire and rim sizes.

i. M747 semitrailers towed by a M911 or M797 tractor truck have rims and tires that are not compatible.

5. RECOMMENDATIONS

In cases where the rim of the prime mover is compatible with the rim of the trailer but tire dimensional envelope of the prime mover exceeds the tire envelope dimensions of the trailer, a get home capability has been estimated from trailer wheel, tire and chassis dimensions. For accurate results, tests should be conducted on these trailers to determine the largest tires that can be mounted on these trailers because accurate data is not available due to tolerances of dimensions on the trailer and the growth of a new tire during use.

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14. MS53085, MS53028, MS52111, subject: M101A1, M116A1 and M762 3/4 Ton, 2 Wheel Trailers.

15. 2½ Ton Truck Characteristic Data Sheets, subject: M44A2, M45A2, M45A2G, M46A2C, M275A2, M49A2C, M35A2, M35A2C, M36A2, M50A2, M109A3, M185A3, M275A2, M342A2, M756A2, M751A2, M763, M764, M602, M607, M609A1, M610, M611, M613, M614, M616, M617, M618, M619.

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17. MS500013, MS500024, MS52108, MS500031, MS52109, MS500078, subject: M105A2, M149, M149A1, M332, M625, M492 Trailers, 1½ Ton, 2 Wheel.

18. MS53030, subject: M200A1 Trailer, 2½ Ton, 2 Wheel.

19. MS500012, MS53031, subject: M310 and M353 Trailers, 3½ Ton, 2 Wheel.

20. Characteristic Data Sheet, subject: M795, M796 Trailers, 4 Ton, 4 Wheel.

21. MS500006, MS500007, MS53098, MS500028, MS53086, MS53055, MS53054, MS500067, MS500066, MS500082, subject: Semitrailers, 6 Ton, 2 Wheel, M508, M508C, M119A1, M146, M118A1, M373A2, M348A2, M348A2D, M348A2F, M348A2H.

22. MS500026, MS52133, MS500025, MS500035, subject: Trailer, 6 Ton, 4 Wheel, M382A1, Semitrailers 6 Ton, 4 Wheel, M750, M313, M447

23. MS53021, MS500089, MS53097, MS500099, MS53095, MS500097, MS53096, MS500098, MS500003, MS53089, subject: Semitrailers, 12 Ton, 4 Wheel, M126A1C, M126A2C, M127A1C, M127A2C, M128A1C, M128A2C, M129A1C, M129A2C, M269A1 and M270A1.

24. MS500011 and Characteristic Data Sheets, subject: Semitrailers, 5000 Gallon, 4 Wheel, M131A4, M967, M969, M970.

25. MS500002, subject: Semitrailer, 15 Ton, 4 Wheel, M347.

26. Characteristic Data Sheet, subject: Semitrailer, Flatbed, 22½ Ton, M871.

27. MS52147, subject: Dolly Set, Lift, Transportable Shelter, 3 Ton, M720.

28. MS52145, subject: Dolly Set, Lift, Transportable Shelter, 5¼ Ton, M832.

29. MS52148, subject: Dolly Set, Lift, Transportable Shelter, 4½ Ton, M840.

30. Characteristic Data Sheet, subject: Tractor Truck, 20 Ton, M916.

31. MS500001, subject: Semitrailer, Lowbed, 25 Ton, 4 Wheel, M172A1.

32. Characteristic Data Sheet, subject: Tractor Truck, 15 Ton, M915.

33. Characteristic Data Sheet, subject: Semitrailer, Flatbed, 34 Ton, M872.

34. Characteristic Data Sheet, subject: Tractor Truck, 20 Ton, M920.

35. Characteristic Data Sheet, subject: Semitrailer Lowbed, 40 Ton, M870.

36. Characteristic Data Sheet, subject: Tractor Truck (Commercial), 85,000 GVWR, M911.

37. Characteristic Data Sheet, subject: Truck Tractor, 22½ Ton, M746.

38. Characteristic Data Sheet, subject: Semitrailer Lowbed, 60 Ton, M747.

APPENDIX A - ¼ Ton Trucks and Assigned Trailers Data Summary

1/4 TON TRUCKS AND ASSIGNED TRAILERS THEY TOW

Wheel and Tire Characteristics

1/4 TON TRUCK

NOMENCLATURE	TIRE SIZE	WHEEL ORD. NO.	WHEEL SIZE
M151A2, M718A1 M825	7.00 x 16, 6 ply	10921860	4.50 x 16

TRAILERS TOWED BY 1/4 TON TRUCK

NOMENCLATURE	TIRE SIZE	WHEEL ORD. NO.	WHEEL SIZE	COMPATIBLE WITH PRIME MOVER
* M416,*M569	7.00 x 16, 6 ply	10921860	4.50 x 16	YES

* Trailer does not carry a spare tire.

1/4 towing vehicle spare tire is interchangeable with trailer wheel.

APPENDIX B - 1¼ Ton Trucks and Assigned Trailers Data Summary

1 1/4 TON TRUCKS AND ASSIGNED TRAILERS THEY TOW

Wheel and Tire Characteristics

1 1/4 Ton Trucks

Nomenclature	Tire Size	Wheel Ord. No.	Wheel Size
* M561	11.00 x 18	11640253	8.0 x 18
M880/890 M886/893	9.50 x 16.5, 8 ply		6.75 x 16.5

Trailers Towed by 1 1/4 Ton Trucks

Nomenclature	Tire MS NO.	Tire Size	Wheel MS or Ord. No.	Wheel Size	Compatible with Prime Mover
* M101, *M116A1	MS35388-11	9.00 x 16, 8 ply	MS53044-2	6.5 x 16	NO
* M762	MS35388-93	7.00 x 16, 6 ply	10921860	4.50 x 16	NO

* Truck or Trailer does not come with a spare.

APPENDIX C - $2\frac{1}{2}$ Ton Trucks and Assigned Trailers Data Summary

2½ TON TRUCKS AND ASSIGNED TRAILERS THEY TOW

Wheel and Tire Characteristics

2½ Ton Trucks

NOMENCLATURE	TIRE MS NO. OR MIL-T	TIRE SIZE	WHEEL MS OR ORD. NO.	WHEEL SIZE
M35, M36, M45 M46C, M50A2, M58 M109A1, M342A2 M45A2, M45A26 M46A2C	MS35388-16	9.00 x 20, 8 Ply	MS53044-5	7.50 x 20
M35A2, M36A2 M49A2C, M109A3	MIL-T-12459	9.00 x 20, 8 Ply	MS53044-5	7.50 x 20
M35A2C, M275A2, *M607, M616, M617 M618, M619	MS35388-16	9.00 x 20, 8 Ply	7389620	7.50 x 20
M44	MS35388-21	11.00 x 20, 8 Ply	MS53044-4	7.50 x 20
M44A2	MS35388-21	11.00 x 20, 12 Ply	7389617	7.50 x 20

* Truck does not carry a spare tire

Trailers Towed by 2½ Ton Truck

NOMENCLATURE	TIRE MS NO.	TIRE SIZE	WHEEL MS NO.	WHEEL SIZE	COMPATIBLE WITH PRIME MOVER
*M625, *M492 *M105, *M149, *M332 *M200	MS-35388-16	9.00 x 20, 8 Ply	MS53044-5	7.50 x 20	Yes

* CART TRAILER DOES NOT CARRY A SPARE TIRE

SEMITRAILERS THAT ARE TOWED BY A 2½ TON TRUCK

NOMENCLATURE	TIRE MS NO. OR MIL-T-	TIRE SIZE	WHEEL MS NO.	WHEEL SIZE	COMPATIBLE W/ PRIME MOVER
M373, M348	MIL-T-12459	9.00 x 20 8 Ply	MS53044-5	7.50 x 20	YES
M508, M750, M119, M146, M313, M118A1	MS35388-16	9.00 x 16 8 Ply	MS53044-5	7.50 x 20	YES

* SEMITRAILER DOES NOT CARRY A SPARE TIRE

APPENDIX D - $2\frac{1}{2}$ Ton or 5 Ton Trucks and Assigned Trailers Data Summary

2 1/2 & 5 TON TRUCKS AND ASSIGNED TRAILERS THEY TOW

Wheel and Tire Characteristics

2 1/2 TON TRUCKS

Nomenclature	Tire MS No. Or MIL-T-	Tire Size	Wheel MS or Ord. No.	Wheel Size
M35, M36, M45, M46C M50A2, M58, M109A1 M342A2, M45A2, M45A2G M46A2C	MS35388-16	9.00 x 20 8 ply	MS53044-5	7.50 x 20
M35A2, M36A2, M49A2C, M109A3	MIL-T-12459	9.00 x 20 8 ply	MS53044-5	7.50 x 20
M35A2C, M275A2, *M607, M616, M617, M618, M619	MS35388-16	9.00 x 20 8 ply	7389620	7.50 x 20
M44	MS35388-21	11.00 x 20 8 ply	MS53044-4	7.50 x 20
M44A2	MS35388-21	11.00 x 20 12 ply	7389617	7.50 x 20

* Truck Does Not Carry A Spare Tire

5 TON TRUCKS

Nomenclature	Tire MS No.	Tire Size	Wheel MS or Ord. No.	Wheel Size
M40, M40A2, M40A2C M51, M51A2, M52, M52A2 M54, M54A2, M54A2C, M55, M55A2, M61, M61A2, M63, M63A2, M63A2C, M543A2, M809 M809A1, M810, M811, M811A1, M811A2, M818	MS35388-21	11.00 x 20 12 ply	MS53044-6	7.50 x 20
M246	MS35388-23	12.00 x 20 14 ply	MS53044-6	7.50 x 20
M139, M812, M812A1	MS35388-25	14.00 x 20	MS53044-8	10.00 x 20

CART TRAILERS THAT ARE TOWED BY A 2 1/2 OR 5 TON TRUCK

Nomenclature	Tire MS No.	Tire Size	Wheel MS No.	Wheel Size	Compatible with Prime Mover
*M105, *M149, *M332 *M200	MS35388-16	9.00 x 20 8 ply	MS53044-5	7.50 x 20	#1

* Trailer Does Not Carry A Spare Tire

#1 Wheels and Tires of Cart Trailers are only Interchangeable with 2 1/2 Ton Prime Mover.

SEMI TRAILERS THAT ARE TOWED BY A 2 1/2 OR 5 TON TRUCK

Nomenclature	Tire MS No.	Tire Size	Wheel MS No.	Wheel Size	Compatible with Prime Mover
M382	MS35388-78	9.00 x 16 8 ply	MS53044-3	6.50 x 16	NO
M508, M750, M119 M146, M313, M447, M118 A1	MS35388-16	9.00 x 16 8 ply	MS53044-5	7.50 x 20	#1
M373, M348	MIL-T-12459	9.00 x 20 8 ply	MS53044-5	7.50 x 20	#1

#1 Wheels and Tires of Semitrailer are only interchangeable with 2 1/2 Ton Prime Mover

APPENDIX E - 5 Ton Trucks and Assigned Trailers Data Summary

5 TON TRUCKS AND ASSIGNED TRAILERS THEY TOW

Wheel and Tire Characteristics

5 TON TRUCKS

NOMENCLATURES	TIRE MS NO.	TIRE SIZE	WHEEL MS. NO.	WHEEL SIZE
M40, M40A2, M40A2C M51, M51A2, M52, M52A2, M54, M54A2 M54A2C, M55, M55A2 M61, M61A2, M63 M63A2, M63A2C M543A2, M809, M809A1 M810, M811, M811A1, M811A2 M818	MS35388-21	11.00 x 20 12 Ply	MS53044-6	7.50 x 20
M246	MS35388-23	12.00 x 20 14 Ply	MS53044-6	7.50 x 20
M139, M812, M812A1	MS35388-25	14.00 x 20 12 Ply	MS53044-8	10.00 x 20

CART TRAILERS TOWED BY 5 TON TRUCK

NOMENCLATURE	TIRE MS NO.	TIRE SIZE	WHEEL MS NO.	WHEEL SIZE	COMPATIBLE WITH PRIME MOVER
*M105, *M149 *M332, *M200	MS35388-16	9.00 x 20 8 Ply	MS53044-5	7.50 x 20	NO
*M353	MS35388-21	11.00 x 20 12 Ply	MS53044-5	7.50 x 20	NO
*M310	MS35388-21	11.00 x 20 12 Ply	MS53044-4	7.50 x 20	NO
M795, *M796	11636428	12 x 16.5 10 Ply	11592642	9.75 x 16.5	NO

* CART TRAILER DOES NOT CARRY A SPARE TIRE

SEMITRAILERS TOWED BY 5 TON TRUCK

NOMENCLATURE	TIRE MS NO. OR MIL-T-	TIRE SIZE	MIL STD OR ORD. NO.	WHEEL SIZE	COMPATIBLE WITH PRIME MOVER
M126, M127, M128 M129, M269, M270 M131, M347	MS35388-21	11.00 x 20 12 Ply	MS53044-6	7.50 x 20	**
M382	MS35388-78	9.00 x 16 8 Ply	MS53044-3	6.50 x 16	NO
M508, M750, M119, M146, M313, M447, M118A1	MS35388-16	9.00 x 16 8 Ply	MS53044-5	7.50 x 20	NO
M373, M348	MIL-T-12459	9.00 x 20 8 Ply	7389621	7.50 x 20	NO
M967, M969, M970	MIL-T-12459	11.00 x 20 14 Ply	MS53044-6	7.50 x 20	**
M871	MS35338-20	11.00 x 20 12 Ply	MS53044-6	7.50 x 20	**

* SEMITRAILER DOES NOT CARRY A SPARE TIRE

** NOT COMPATIBLE WITH M139, M812, M812A1, M246

DOLLY SETS (MOBILIZERS) TOWED BY 5 TON TRUCK

NOMENCLATURE	TIRE MS NO. OR ORD. NO.	TIRE SIZE	WHEEL ORD. NO.	WHEEL SIZE	COMPATIBLE WITH PRIME MOVER
*M832, *M840	MS35388-16	9.00 x 20 8 Ply	7389620	7.50 x 20	NO
M720	11602665	7.00 x 16 8 Ply	7387807	4.50 x 16	NO

* DOLLY SET (MOBILIZER) DOES NOT CARRY A SPARE TIRE

APPENDIX F - M916 Tractor and M172 Trailer Data Summary

M916 TRACTOR TOWING M172 TRAILER

Wheel and Tire Characteristics

TRACTOR:

Nomenclature	Tire No.	Tire Size	Wheel No.	Wheel Size
M916	CQD-L	11.00 x 24 14 Ply	BUDD No. R49210	8.00 x 24

Tractor carries a spare tire

Trailer towed by M916 tractor

Nomenclature	Tire MS No.	Tire Size	Wheel MS No.	Wheel Size	Compatible with Prime Mover
M172	MS35390-47	11.00 x 15 16 Ply	MS53044-1	7.50 x 15	No

APPENDIX G - M915 Tractor and M872 Trailer Data Summary

M915 TRACTOR TOWING M872 TRAILER

Wheel and Tire Characteristics

TRACTOR:

Nomenclature	Tire No.	Tire Size	Wheel No.	Wheel Size
M915	Super Himiler	10.00 x 20 14 Ply	BUDD No. 47890-3	8.0 x 20

Truck Carries a spare tire

TRAILER TOWED BY M915 TRACTOR:

Nomenclature	Tire No.	Tire Size	Wheel No.	Wheel Size	Compatible with Prime Mover
M872	General SR.100	10.00 x 20 12 Ply		7.5 x 20	No

Trailer carries a spare tire

APPENDIX H - M920 Tractor and M870 Trailer Data Summary

M920 TRACTOR TOWING M870 TRAILER

Wheel and Tire Characteristics

TRACTOR:

Nomenclature	Tire No.	Tire Size	Wheel No.	Wheel Size
M920	Goodyear CQD-L	11.00 x 24 14 Ply	BUDD No. R-49210	8.00 x 24

Tractor carries a spare tire

TRAILER TOWED BY M920 TRACTOR

Nomenclature	Tire No.	Tire Size	Wheel No.	Wheel Size	Compatible with Prime Mover
M870	MS35390-4	10.00 x 15 14 Ply	BUDD Disk Type	7.50 x 15	No

Trailer does not carry a spare tire

APPENDIX I - M911/M746 Tractors and M747 Trailer Data Summary

M911/M746 TRACTORS TOWING M747 TRAILER

Nomenclature	Tire No.	Tire Size	Wheel No.	Wheel Size
M911		14.00 x 24 18 Ply	Disc	10.00 x 24
M746	Goodyear	18-22.5 22 Ply	CPR109474	10 Holes 1.187 13.187 Dia.

TRAILER TOWED BY M911/M746 TRACTOR:

Nomenclature	Tire No.	Tire Size	Wheel No.	Wheel Size	Compatible with Prime Mover
M747	CPR100057	15-19.5 14 Ply	CPR100058	11.75 x 19.5	No

Trailer carries a spare tire

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