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ER/5-60

HANDBOOK
OPERATION, SERVICE AND REPAIR
INSTRUCTIONS
ILLUSTRATED PARTS BREAKDOWN
ENGINE TRANSPORTATION TRAILERS
MODELS 3060
3060A
3060B



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1 FEBRUARY 1960

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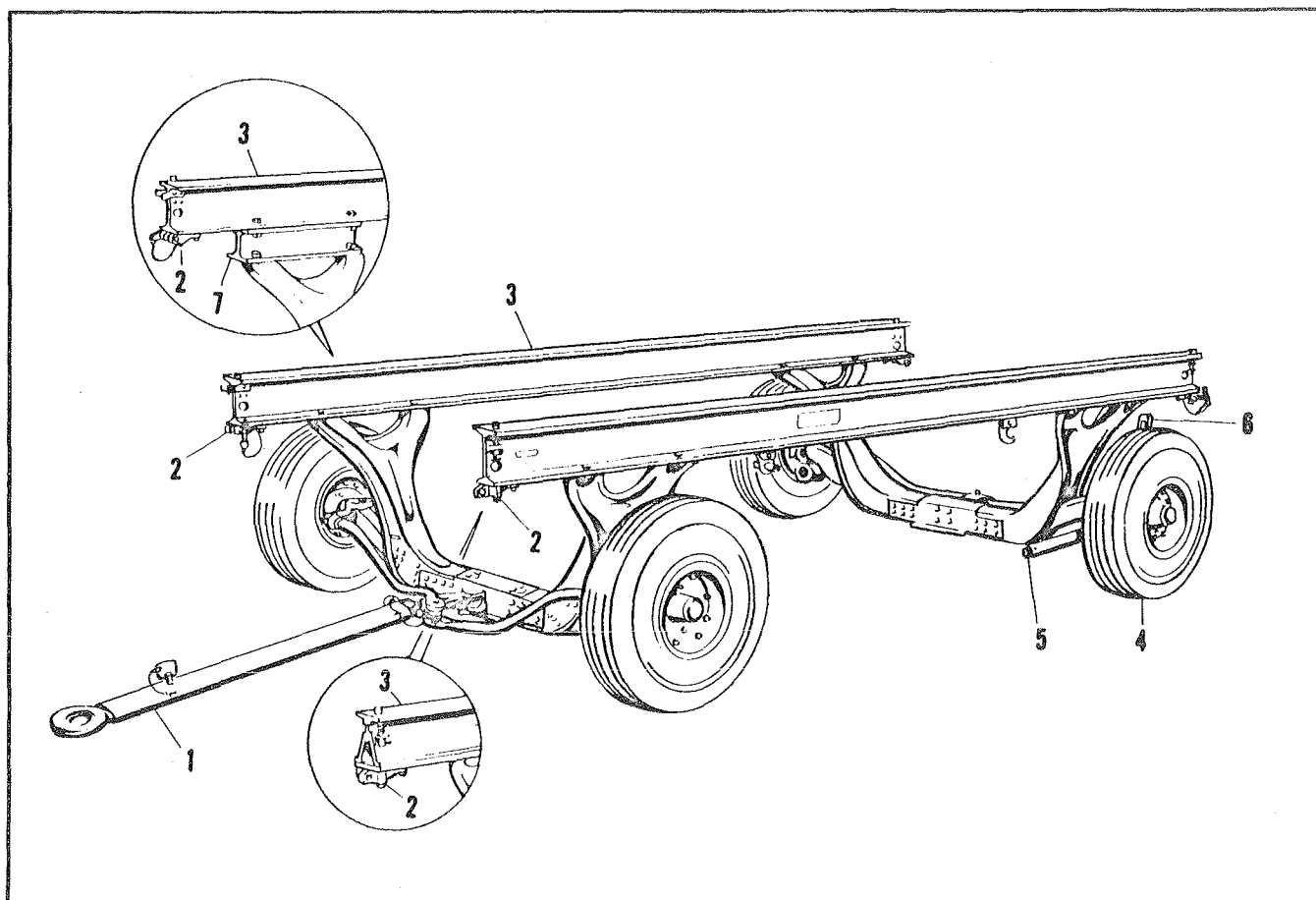


FIGURE 1-1. ENGINE TRANSPORTATION TRAILER
MODELS 3060, 3060A AND 3060B

SECTION I
INTRODUCTION

1-1. GENERAL.

1-2. THIS PUBLICATION IS ISSUED AS THE BASIC HANDBOOK OF OPERATION, SERVICE AND REPAIR INSTRUCTIONS WITH ILLUSTRATED PARTS BREAKDOWN, COVERING THE ENGINE TRANSPORTATION TRAILERS, MODELS 3060, 3060A AND 3060B, MANUFACTURED BY AIR LOGISTICS CORPORATION, 3600 E. FOOTHILL BLVD., PASADENA, CALIFORNIA.

NOTE

THE THREE MODELS COVERED IN THIS HANDBOOK ARE SIMILAR, THEREFORE, ALL INSTRUCTIONS CONTAINED IN THIS HANDBOOK APPLY TO ALL MODELS EXCEPT WHERE A SPECIFIC MODEL IS SPECIFIED.

1-3. PURPOSE.

1-4. THE MODELS 3060, 3060A AND 3060B TRAILERS ARE USED INDEPENDENTLY FOR TRANSPORTING HEAVY LOADS WITHIN A PLANT FOR INTERPLANT TRANSPORTATION. THESE TRAILERS ARE ALSO USED FOR TRANSFERENCE OF AIRCRAFT ENGINES AND OTHER COMPONENTS TO AND FROM OTHER UNITS OF THE AIR LOGISTICS MATCHED RAIL GROUND HANDLING SYSTEM.

1-5. DESCRIPTION. (SEE FIGURE 1-1.)

1-6. THE MODELS 3060, 3060A AND 3060B TRAILERS ARE FOUR WHEEL TRAILERS INCORPORATING A TELESCOPING TOWBAR (1) AT THE FRONT. MALE AND FEMALE COUPLINGS (2) ARE LOCATED AT THE ENDS OF THE RAILS (3) FOR THE PURPOSE OF COUPLING THE MODELS 3060, 3060A AND 3060B TRAILERS TO OTHER UNITS OF THE AIR LOGISTICS MATCHED RAIL SYSTEM. THE REAR WHEELS (4) ARE PROVIDED WITH STEERING ROD ASSEMBLY (5) WHICH IS USED FOR STEERING THE REAR END OF THE TRAILER, AND ALSO ARE EQUIPPED WITH FOOT OPERATED BRAKES (6). THE MODEL 3060A IS PROVIDED WITH 5 INCH SPACERS (7) TO ALLOW MORE CLEARANCE ABOVE THE FRAMES.

TIRE SIZE	7.50 x 10, 6 PLY	RAIL WIDTH	3.33 INCHES
TRAILER WEIGHT	APPROX. 700 POUNDS	RAIL CENTERLINE SPACING	
MAXIMUM LOAD	3060, 3060A, 8000 POUNDS	RAIL HEIGHT	3060, 3060B, 34.0 INCHES
	3060B, 10000 POUNDS		3060A, 39.0 INCHES
TIRE INFLATION	3060, 3060A, 30 PSI	OVERALL WIDTH	85.4 INCHES
	3060C, 100 PSI	WHEEL BASE	90.0 INCHES
TOWING SPEED:		WHEEL TREAD	77.0 INCHES
STRAIGHT AWAY	20 MPH	STANDARD TOWBAR LENGTH:	
URNS	5 MPH	EXTENDED	72.0 INCHES
RAIL LENGTH	132.0 INCHES	RETRACTED	44.0 INCHES

FIGURE 1-2. TABLE OF LEADING PARTICULARS

SECTION II

OPERATING AND SERVICE INSTRUCTIONS

2-1. OPERATION.

2-2. PREPARATION FOR USE. (SEE FIGURE 1-1 AND 5-1.)

2-3. THE FOLLOWING PROCEDURE SHALL BE USED WHEN TRAILER IS CRATED:

A. TRAILER DISASSEMBLED IN CRATE:

- (1) REMOVE THE CRATE AND BANDING FROM TRAILER COMPONENTS.
- (2) REMOVE THE FWD AND AFT FRAME FROM THE CRATE BASE AND POSITION, BY BLOCKING, INTO A VERTICAL POSITION.
- (3) REMOVE RAILS FROM THE CRATE BASE AND ATTACH TO THE FRAME, USING CORRECT HARDWARE.
- (4) REMOVE TOWBAR AND SECURE TO TOWBAR LINK WITH ATTACHING PIN.
- (5) CHECK TIRES FOR PROPER INFLATION IN ACCORDANCE WITH FIGURE 1-2, TABLE OF LEADING PARTICULARS.
- (6) MAKE CERTAIN THAT PARKING BRAKES ARE RELEASED BEFORE ATTEMPTING TO TOW TRAILER.

B. TRAILER ASSEMBLED IN CRATE:

- (1) REMOVE THE CRATE AND BANDING FROM THE TRAILER.
- (2) REMOVE THE TOWBAR FROM THE STOWAGE POSITION AND SECURE TO THE TOWBAR LINK WITH THE ATTACHING PIN.
- (3) CHECK TIRES FOR PROPER INFLATION IN ACCORDANCE WITH FIGURE 1-2, TABLE OF LEADING PARTICULARS.
- (4) MAKE CERTAIN THAT PARKING BRAKES ARE RELEASED BEFORE ATTEMPTING TO TOW TRAILER.

2-4. OPERATING PROCEDURE.

2-5. LOAD TRANSFER. (SEE FIGURE 2-1.)

2-6. WHEN TRANSFERRING A LOAD BETWEEN THE MODEL 3060, 3060A AND 3060B TRAILERS AND OTHER UNITS OF THE AIR LOGISTICS MATCHED RAIL SYSTEM, PROCEED AS FOLLOWS:

- A. IF LOAD BEARING UNIT IS A FIXED HEIGHT UNIT, SECURE COUPLINGS (1 AND 2) WITH PIN (3).
- B. SET TRAILER BRAKES TO PREVENT MOVEMENT DURING TRANSFER OPERATION.
- C. UNLOCK LOAD BEARING ROLLER ADAPTERS.

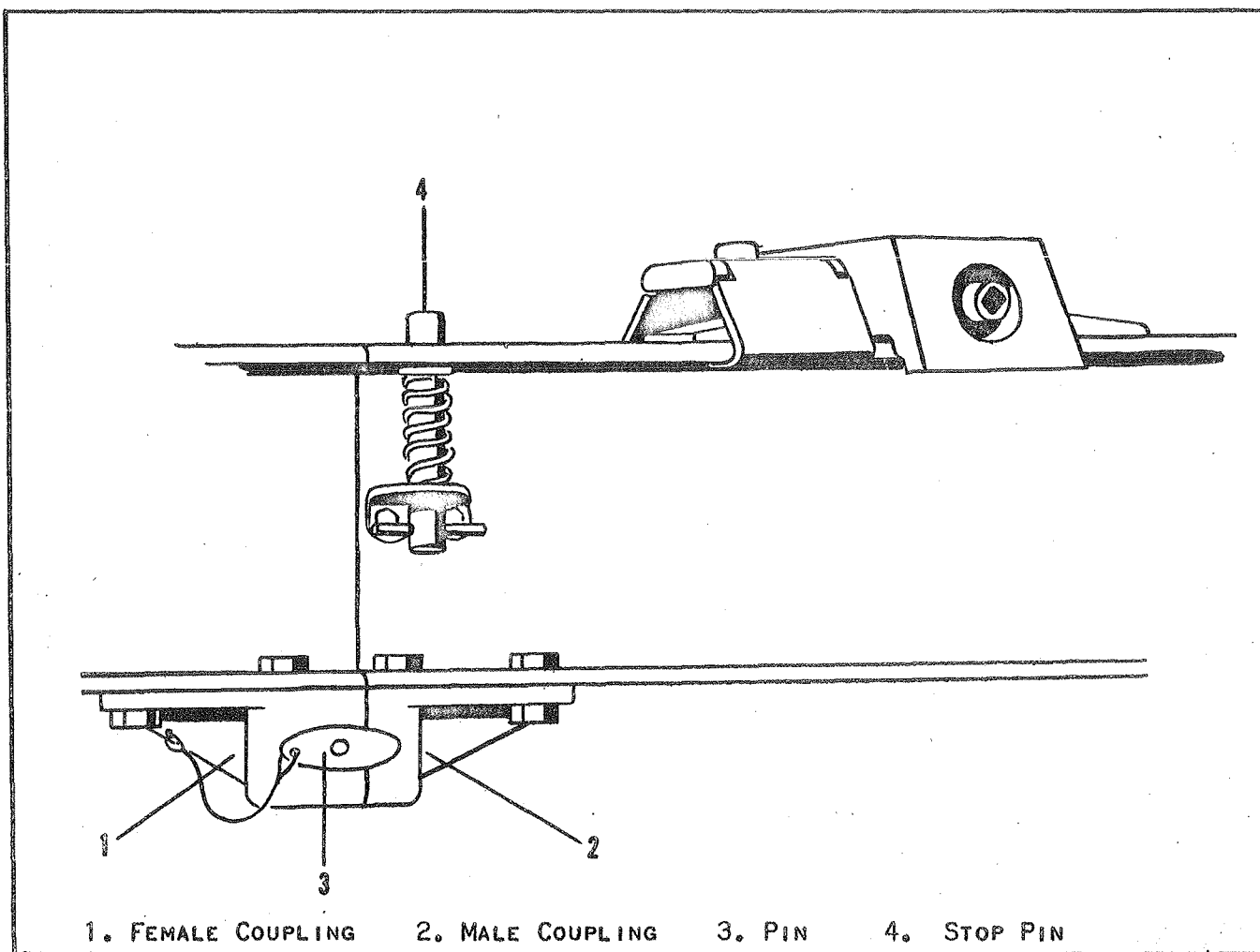


FIGURE 2-1. LOAD TRANSFER

WARNING

STOPS (4) MUST BE HELD IN DOWN POSITION TO ALLOW PASSAGE OF LOAD BEARING ROLLER ADAPTERS.

NOTE

- (1) IF TRANSFER OPERATION INVOLVES ONE OF AIR LOGISTICS "LIFT" TYPE TRAILERS, PROCEED AS FOLLOWS BEFORE DISCONNECTING THE TRAILERS. IF LOAD IS ON A "LIFT" TRAILER, LIFT THE RAILS EVENLY UNTIL THE FRONT WHEELS OF THE MODELS 3060, 3060A AND 3060B TRAILERS ARE AT THE POINT OF LEAVING THE GROUND. IF LOAD IS ON THE TRANSPORTATION TRAILERS, OPEN BLEED VALVES OF THE "LIFT" TRAILER VERY SLOWLY UNTIL RAILS ARE LEVEL AND EVEN WITH THE RAILS OF THE TRANSPORTATION TRAILER. CLOSE THE BLEED VALVES.
- (2) FOR DETAIL DESCRIPTION AND OPERATION OF THE "LIFT" TYPE TRAILERS, REFER TO THE APPLICABLE PUBLICATION.

D. WHEN LOAD HAS BEEN CENTERED ON RECEIVING TRAILER, LOCK ROLLER ADAPTERS.

2-7. TOWING.

2-8. THE MODELS 3060, 3060A AND 3060B TRAILERS CAN BE TOWED UP TO TWENTY MILES PER HOUR ON STRAIGHT-AWAY AND MODERATE CURVES. REDUCE SPEED TO FIVE MILES PER HOUR ON TIGHT CURVES.

2-9. PERIODIC LUBRICATION. (SEE FIGURE 2-2.)

2-10. FREQUENCY AND TYPE OF LUBRICATION SHALL BE AS INDICATED ON THE LUBRICATION CHART.

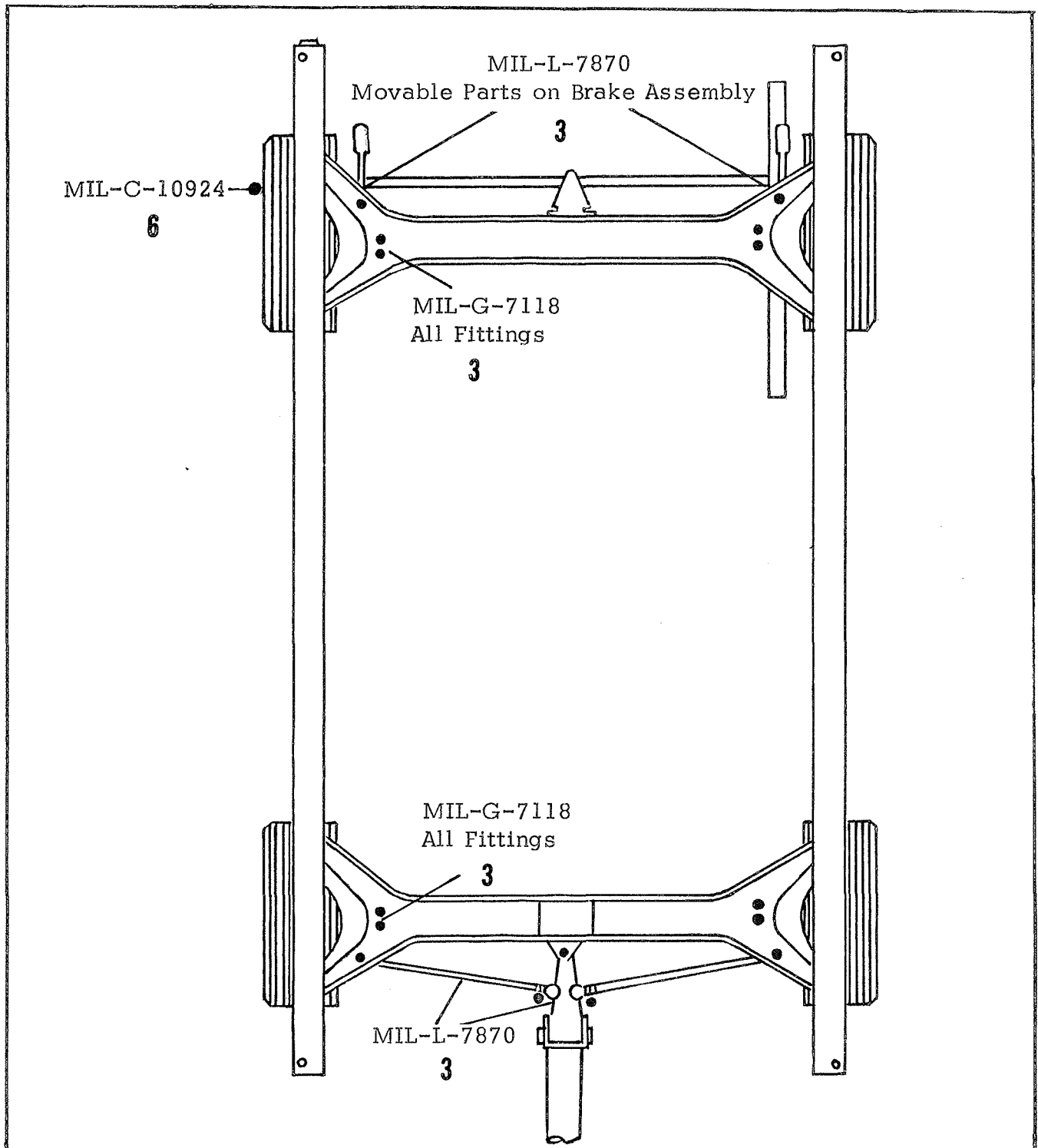


FIGURE 2-2. LUBRICATION CHART

2-11. PERIODIC INSPECTION. (SEE FIGURE 2-3.)

2-12. INSPECT TRAILER AT AREAS AND INTERVALS INDICATED IN FIGURE 2-3, PERIODIC INSPECTION.

2-13. TROUBLE SHOOTING. (SEE FIGURE 2-4.)

2-14. FOR INDICATION OF TROUBLE, PROBABLE CAUSE, REMEDIAL ACTION, REFER TO FIGURE 2-4, TROUBLE SHOOTING.

ITEM	WEEKLY	QUARTERLY	ITEM	QUARTERLY
TIRE PRESSURE	X		FRAME ASSEMBLIES FOR	X
TIRES FOR DAMAGE	X		DAMAGE, DISTORTION	
WHEELS FOR TIGHTNESS	X		AND FRACTURED WELDS	
WHEELS FOR ALIGNMENT		X	TOWBAR AND LINKAGE FOR	X
WHEEL MOUNTING BOLTS FOR		X	SECURITY	
SERVICEABLE CONDITION			TIE RODS FOR DAMAGE AND	X
KING PINS AND STEERING		X	DISTORTION	
KNUCKLES FOR EXCESSIVE			STOP ASSEMBLIES FOR	X
WEAR AND DAMAGE			PROPER OPERATION	
WHEEL SUPPORTS FOR DAMAGE		X	LUBRICATION FITTINGS FOR	X
AND LOOSENESS			DAMAGE OR OBSTRUCTION	
BRAKES FOR SERVICEABLE		X	ALL NUTS FOR TIGHTNESS	X
CONDITION AND ADJUST-			AND COTTER PINS FOR	
MENT			SERVICEABLE CONDITION	

FIGURE 2-3. PERIODIC INSPECTION

TROUBLE	CAUSE	REMEDY
EXCESSIVE SWAY OR SHIMMY WHEN TOWED.	1. LOW TIRE PRESSURE. 2. DAMAGED TIE ROD. 3. BEND WHEEL SPINDLE OR STEERING KNUCKLE. 4. LOOSE WHEEL SUPPORT. 5. WORN KING PINS AND BUSHINGS. 6. BENT TOWBAR. 7. WORN WHEEL BEARINGS.	CHECK ALL TIRES FOR PROPER INFLATION. STRAIGHTEN OR INSTALL NEW TIE ROD. REPLACE DAMAGED PARTS WITH NEW. TIGHTEN SUPPORT. INSTALL NEW KING PINS AND BUSHINGS. STRAIGHTEN OR INSTALL NEW TOWBAR. REPLACE BEARINGS WITH NEW.
IMPROPER BRAKING	1. IMPROPER ADJUSTMENT. 2. WORN LININGS. 3. ROUGH BRAKE DRUMS. 4. BROKEN SPRING. 5. DAMAGED CAM. 6. LOOSE INTERNAL PARTS. 7. LOOSE PEDAL. 8. OIL OR GREASE ON LINING OR DRUM.	CORRECT CAUSE OF FAILURE, USING STANDARD SHOP PROCEDURE, TAKING CARE TO PREVENT OIL OR GREASE FROM CON- TACTING THE LINING OR DRUMS.

FIGURE 2-4. TROUBLE SHOOTING.

SECTION III
REPAIR INSTRUCTIONS

3-1. DISASSEMBLY. (SEE FIGURES 5-1 THROUGH 5-8.)

3-2. DISASSEMBLY IS THE ORDER OF INDEX NUMBERS ASSIGNED TO THE EXPLODED VIEW ILLUSTRATIONS, EXCEPT AS FOLLOWS:

- A. DISASSEMBLY OF AREAS WHERE DAMAGE, DISTORTION AND WEAR CAN BE VISUALLY ASCERTAINED IS NOT NECESSARY, UNLESS REPAIR OR REPLACEMENT OF PARTS IS REQUIRED.

WARNING

TAKE CARE TO PROTECT ALL CRITICAL MATING SURFACES FROM DIRT AND ABRASIONS.

3-3. CLEANING.

- A. WASH TRAILER WITH SOAP AND HOT WATER, USING STIFF BRISTLE BRUSH IF NECESSARY. USE DRY CLEANING SOLVENT, FEDERAL SPECIFICATION P-S-661, OR EQUIVALENT, TO REMOVE GREASE. DRY TRAILER WITH COMPRESSED AIR.

WARNING

FOLLOW PRECAUTIONARY MEASURES FOR HANDLING SOLVENTS.
KEEP AWAY FROM OPEN FLAME AND AVOID INHALING THE FUMES
FOR PROLONGED PERIODS OF TIME.

- B. CLEAN WHEEL BEARINGS IN DRY CLEANING SOLVENT, FEDERAL SPECIFICATION P-S-661. SOLVENT SPRAY OR IMMERSION CLEANING SHALL BE USED. AFTER CLEANING, RINSE BEARINGS IN A CLEAN CONTAINER OF CLEAN SOLVENT. DRY WITH HEAT OR FILTERED COMPRESSED AIR. IF BEARINGS ARE TO REMAIN DISASSEMBLED FROM HUBS FOR A PROLONGED PERIOD OF TIME, COAT CLEAN BEARINGS WITH A RUST PREVENTATIVE COMPOUND OR OPERATING LUBRICANT AND WRAP IN GREASE PROOF WRAPPER, SPECIFICATION MIL-B-121, GRADE "A".

CAUTION

DO NOT SPIN DIRTY BEARINGS. SPINNING MAY RESULT IN SCORING.

3-4. INSPECTION AND REPAIR.

- A. CONDUCT VISUAL INSPECTION OF PARTS SPECIFIED IN FIGURE 2-3, PERIODIC INSPECTION.
- B. CONDUCT INSPECTION FOR EXCESSIVE CLEARANCES BETWEEN KING PINS AND ASSOCIATED BUSHINGS. CLEARANCE SHALL NOT EXCEED 0.010 INCH.

- C. CLEARANCES BETWEEN TOWING LINK ASSEMBLY AND ASSOCIATED BUSHINGS SHALL NOT EXCEED 0.010 INCH.

NOTE

IF CLEARANCES ARE EXCESSIVE, REPLACE ONE OR BOTH MATING PARTS AS NECESSARY.

- D. CHECK BRAKE LININGS FOR WEAR. IF LININGS ARE NOT SERVICEABLE, COMPLETE BRAKE SHOE ASSEMBLIES MUST BE INSTALLED, AS LININGS ARE BONDED TYPE.
- E. INSPECT TIE RODS, STEERING KNUCKLES, AXLE SPINDLES AND WHEEL SUPPORT ASSEMBLIES FOR FRACTURED WELDS AND MISALIGNMENT. WELD FRACTURES MAY BE REPAIRED IF DAMAGE HAS NOT RESULTED IN DISTORTION OF THE PART. REPLACE ANY DISTORTED PART WITH NEW.
- F. IF ANY WHEEL BEARING ASSEMBLY PART IS EXCESSIVELY WORN, REPLACE WITH COMPLETE NEW ASSEMBLY.
- G. INSPECT ALL THREADED PARTS FOR CROSSED OR DAMAGED THREADS. MINOR THREAD DAMAGE MAY BE REPAIRED WITH A FINE FILE AND EMERY PAPER PROVIDING REPAIR DOES NOT RESULT IN A LOOSE FIT OR MISALIGNMENT OF MATING PARTS.

3-5. LUBRICATION. AREAS OF LUBRICATION, TYPES OF LUBRICATION AND FREQUENCY OF LUBRICATION ARE SO SPECIFIED IN FIGURE 2-2.

3-6. REASSEMBLY. (SEE FIGURES 5-1 THROUGH 5-8.)

3-7. REASSEMBLE IN THE REVERSE ORDER OF INDEX NUMBERS ASSIGNED TO THE EXPLODED VIEW ILLUSTRATION, PAYING PARTICULAR ATTENTION TO THE FOLLOWING:

- A. MAKE CERTAIN ALL BEARINGS, BUSHINGS AND PINS ARE PROPERLY POSITIONED AND ALIGNED.
- B. MAKE CERTAIN MALE AND FEMALE COUPLINGS ARE PROPERLY LOCATED ON RAIL ENDS TO FACILITATE COUPLING OPERATION WITH OTHER MATCHED RAIL UNITS.
- C. MAKE CERTAIN ALL WASHERS HAVE BEEN INSTALLED IN THEIR PROPER POSITION.
- D. MAKE CERTAIN ALL ATTACHING HARDWARE IS SECURE.

3-8. TEST AFTER REASSEMBLY.

3-9. NO TEST IS NECESSARY AFTER REASSEMBLY, OTHER THAN A TRIAL RUN TO CHECK FOR SATISFACTORY OPERATION.

ILLUSTRATED PARTS BREAKDOWN

ENGINE TRANSPORTATION TRAILER

MODELS 3060, 3060A AND 3060B

(AIR LOGISTICS)

SECTION IV
INTRODUCTION

4-1. GENERAL.

4-2. THIS ILLUSTRATED PARTS BREAKDOWN LISTS AND ILLUSTRATES ALL PARTS FOR THE MODELS 3060, 3060A AND 3060B, ENGINE TRANSPORTATION TRAILER, MANUFACTURED BY AIR LOGISTICS CORPORATION, 3600 E. FOOTHILL BLVD., PASADENA, CALIFORNIA.

4-3. GROUP ASSEMBLY PARTS LIST, SECTION V.

4-4. THE GROUP ASSEMBLY PARTS LIST, SECTION V, CONSISTS OF THE COMPLETE TRAILER DIVIDED INTO 8 GROUP ASSEMBLIES AS SHOWN IN THE TABLE OF CONTENTS. EACH GROUP ASSEMBLY LISTED IS FOLLOWED FIRST BY ITS ATTACHING PARTS, THEN BY ITS DETAIL PARTS PROPERLY INDENTED TO SHOW THEIR RELATIONSHIP TO THE ASSEMBLY. THE MAJOR ASSEMBLY LIST AND THE GROUP ASSEMBLY LISTS ARE CROSS REFERENCED BY FIGURE AND INDEX NUMBERS. EXPLANATION OF COLUMNS CONTAINED IN THE GROUP ASSEMBLY PARTS LIST IS AS FOLLOWS:

- A. THE "FIGURE AND INDEX NUMBER" COLUMN LISTS THE FIGURE NUMBER ASSIGNED TO EACH GROUP ASSEMBLY AND THE INDEX NUMBER ASSIGNED TO EACH DETAIL PART OF EACH GROUP ASSEMBLY.
- B. THE NUMBERS APPEARING IN THE "PART NUMBER" COLUMN ARE EITHER AIR LOGISTICS CORPORATION, GOVERNMENT STANDARD OR VENDOR PART NUMBERS. COMMON PARTS COMMERCIALY AVAILABLE ARE LISTED AS "COMM".
- C. THE "DESCRIPTION" COLUMN LISTS THE NOUN FOLLOWED BY THE DESCRIPTIVE NOMENCLATURE EXCEPT FOR GOVERNMENT STANDARD PARTS WHICH ARE LISTED BY NOUN ONLY. THE DESCRIPTION OF EACH PART IS INDENTED UNDER COLUMNS "1" THROUGH "7" TO

INDICATE ITS RELATIONSHIP TO THE NEXT HIGHER ASSEMBLY. ATTACHING PARTS ARE LISTED IMMEDIATELY AFTER THE ITEMS WHICH THEY ATTACH, PRECEDING ANY DETAIL PARTS OF THAT ITEM. THEY ARE CAPTIONED "(ATTACHING PARTS)" AND ARE SEPARATED FROM SUBSEQUENT LISTINGS BY THE SYMBOL "-----O-----". IN THE CASE OF VENDOR PURCHASED ITEMS, THE VENDORS CODE OR NAME AND ADDRESS ARE INCLUDED IMMEDIATELY AFTER THE DESCRIPTION.

- D. THE QUANTITIES USED IN THE "UNITS PER ASSEMBLY" COLUMN ARE, IN THE CASE OF ASSEMBLIES, THE TOTAL QUANTITY USED PER TRAILER, WHILE THE COMPONENT PARTS INDENTED UNDER THE ASSEMBLIES ARE THE TOTAL USED PER ASSEMBLY. THE QUANTITIES SPECIFIED, THEREFORE, ARE NOT NECESSARILY THE TOTAL USED PER TRAILER. REFER TO THE "NUMERICAL INDEX", SECTION VI, FOR TOTAL QUANTITIES PER TRAILER. THE LETTERS "REF" ARE INSERTED IN THE "UNITS PER ASSEMBLY" COLUMN TO INDICATE THE ASSEMBLY IS LISTED ELSEWHERE IN THE PUBLICATION. THE DESCRIPTION COLUMN WILL INDICATE PARENTHETICALLY WHERE THE LISTING OCCURS.
- E. THE "USABLE ON CODE" COLUMN PROVIDES A MEANS OF CODING PART VARIATIONS WITHIN THE GROUP ASSEMBLY PARTS LIST.

4-5. NUMERICAL INDEX.

4-6. THE "NUMERICAL INDEX", SECTION VI, LISTS ALL OF THE PART NUMBERS IN THE GROUP ASSEMBLY PARTS LISTS, SECTION V, IN ALPHABETICAL-NUMERICAL SEQUENCE IN ACCORDANCE WITH THE FOLLOWING SYSTEM.

- A. PART NUMBER NUMERICAL ARRANGEMENT STARTS ON THE LEFT HAND COLUMN AND CONTINUES FROM LEFT TO RIGHT, ONE COLUMN AT A TIME UNTIL PART NUMBER NUMERICAL ARRANGEMENT IS DETERMINED.
- B. THE ORDER OF PRECEDENCE IN PART NUMBER NUMERICAL SEQUENCE ARRANGEMENT IS AS FOLLOWS:

SPACE (BLANK COLUMNS)
DASH (—)
LETTERS A THROUGH Z
NUMERALS 0 THROUGH 9
(ALPHABETICAL "O"s ARE CONSIDERED
AS NUMERICAL "0"s)

- C. "NO NUMBER" AND COMMERCIAL PARTS ARE LISTED BY THEIR PRINCIPAL IDENTIFYING NOUN IN PROPER ALPHABETICAL-NUMERICAL SEQUENCE.
- D. THE "TOTAL QTY." COLUMN OF THE NUMERICAL INDEX INDICATES THE TOTAL QUANTITY OF EACH PART PER TRAILER.

4-7. USE OF THE ILLUSTRATED PARTS BREAKDOWN.

4-8. PROCEDURAL STEPS FOR LOCATING PART NUMBERS, PART ILLUSTRATIONS AND FIGURE NUMBERS WHEN COMPLETE INFORMATION IS NOT KNOWN, IS AS FOLLOWS:

- A. WHEN A PART NUMBER IS KNOWN AND IT IS DESIRED TO FIND ITS ILLUSTRATION, LOCATE THE NUMBER IN THE NUMERICAL INDEX, SECTION VI. TURN TO THE ILLUSTRATION INDICATED IN THE FIGURE AND INDEX NUMBER COLUMN, AND LOCATE THE PART IN THE ILLUSTRATION, USING THE INDEX NUMBER ASSIGNED. THE PARTS LIST

ACCOMPANYING THAT ILLUSTRATION WILL LIST THE PART NUMBER AND FULL DESCRIPTION OF THE PART OPPOSITE THE SAME INDEX NUMBER.

- B. WHEN THE CONFIGURATION AND LOCATION OF A PART IS KNOWN, BUT THE PART NUMBER AND DESCRIPTION IS NOT KNOWN, TURN TO THE TABLE OF CONTENTS AND LOCATE THE FIGURE TITLE WITHIN WHICH THE PART WOULD BE FOUND. TURN TO THE PAGE INDICATED AND LOCATE THE PART AND ITS ASSIGNED INDEX ON THE ILLUSTRATION. THE PART NUMBER AND DESCRIPTION WILL BE FOUND OPPOSITE THAT NUMBER OF THE ACCOMPANYING PARTS LIST.

4-9. VENDORS CODE.

4-10. VENDORS CODES (IN A/W FED CAT HANDBOOK H4-1) APPLIED IN THIS HANDBOOK ARE AS FOLLOWS AND WILL BE FOUND IMMEDIATELY FOLLOWING THE DESCRIPTION OF THE PART.

CODE	VENDORS NAME AND ADDRESS
00481	ASCO SINTERING COMPANY LOS ANGELES, CALIFORNIA
60038	TIMKEN ROLLER BEARING COMPANY CANTON, OHIO
76691	NATIONAL TELEPHONE SUPPLY Co., INC. CLEVELAND, OHIO
83269	WELDED CONSTRUCTION ENGINEERING Co. CLEVELAND, OHIO
83445	AEROL COMPANY, INC. LOS ANGELES, CALIFORNIA
92798	JOHNS MANVILLE CORPORATION MANVILLE, NEW JERSEY
97978	D. W. PRICE CORPORATION LOS ANGELES, CALIFORNIA
99946	J. M. BEACH ASSOCIATES DAYTON, OHIO

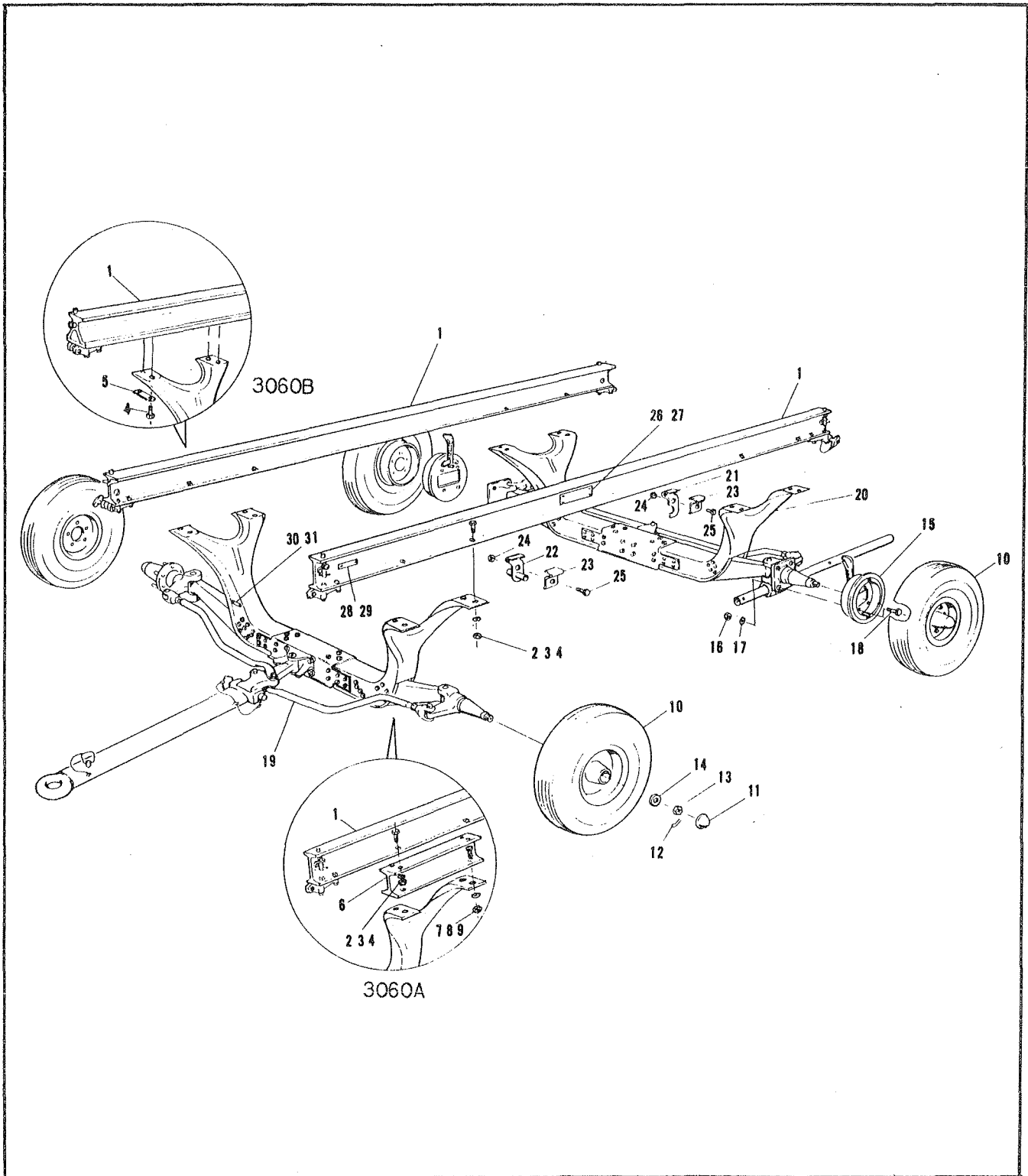


FIGURE 5-1. ENGINE TRANSPORTATION TRAILERS
MODELS 3060, 3060A AND 3060B

FIG. & INDEX NO.	PART NUMBER	DESCRIPTION	UNITS PER ASSY	USABLE ON CODE
		1 2 3 4 5 6 7		
1-	106281	TRAILER, ENGINE TRANSPORTATION, MODEL 3060	REF	A
	106377	TRAILER, ENGINE TRANSPORTATION, MODEL 3060A	REF	B
	106622	TRAILER, ENGINE TRANSPORTATION MODEL 3060B	REF	C
✓ - 1	No NUMBER	. RAIL ASSEMBLY, TRANSFER (SEE FIGURE 2)	2	A, B
	No NUMBER	. RAIL ASSEMBLY, TRANSFER (SEE FIGURE 3) (ATTACHING PARTS)	2	C
- 2	MS20365-820C	. NUT	16	A, B
- 3	AN960-816L	. WASHER	16	A, B
- 4	AN8-10A	. BOLT	16	A, B
	AN8-7A	. BOLT	16	C
✓ - 5	S105182	. WASHER	8	C
		-----X-----		
- 6	107734	. SPACER, RAIL (ATTACHING PARTS)	4	B
- 7	MS20365-820C	. NUT	16	B
- 8	AN960-816L	. WASHER	32	B
- 9	AN8-12A	. BOLT	16	B
		-----X-----		
-10	No NUMBER	. WHEEL, HUB, TIRE AND TUBE ASSEMBLY (SEE FIGURE 4) (ATTACHING PARTS)	4	
-11	A260	. CAP, HUB (83268)	4	
-12	AN381-4-28	. PIN, COTTER	4	
-13	AN320-16	. NUT	4	
-14	111555	. WASHER, KEY	4	
		-----X-----		
-15	No NUMBER	. BRAKE, SECTOR AND PEDAL ASSEMBLY (SEE FIGURE 5) (ATTACHING PARTS)	2	
-16	MS20364-624C	. NUT	8	
-17	AN960-616L	. WASHER	8	
-18	AN6-12A	. BOLT	8	
		-----X-----		
-19	No NUMBER	. FRAME FWD AND STEERING LINKAGE (SEE FIGURE 7)	1	
-20	No NUMBER	. FRAME, AFT AND STEERING LINKAGE (SEE FIGURE 8)	1	
	104395	. STOWAGE INSTALLATION, TOWBAR	1	A, B
-21	104873	. BRACKET	1	A, B
-22	104876	. BRACKET	1	A, B
-23	104877	. CLAMP	2	A, B
-24	MS20364-624C	. NUT	2	A, B
-25	AN6-11A	. BOLT	2	A, B
-26	106281-3	. NAMEPLATE, MODEL 3060	1	A
	106377-3	. NAMEPLATE, MODEL 3060A	1	B
	106622-3	. NAMEPLATE, MODEL 3060B	1	C

SECTION V
GROUP ASSEMBLY PARTS LIST

ER/5-60

FIG. & INDEX No.	PART NUMBER	DESCRIPTION							UNITS PER ASSY	USABLE ON CODE
		1	2	3	4	5	6	7		
		(ATTACHING PARTS)								
1-27	AN535-0-4	.	SCREW, DRIVE						4	
			-----X-----							
-28	103341	.	NAMEPLATE, SPEED AND LOAD						1	
			(ATTACHING PARTS)							
-29	AN535-0-4	.	SCREW, DRIVE						2	
			-----X-----							
-30	100881	.	NAMEPLATE, TIRE INFLATION						4	
			(ATTACHING PARTS)							
-31	AN535-0-4	.	SCREW, DRIVE						8	
			-----X-----							

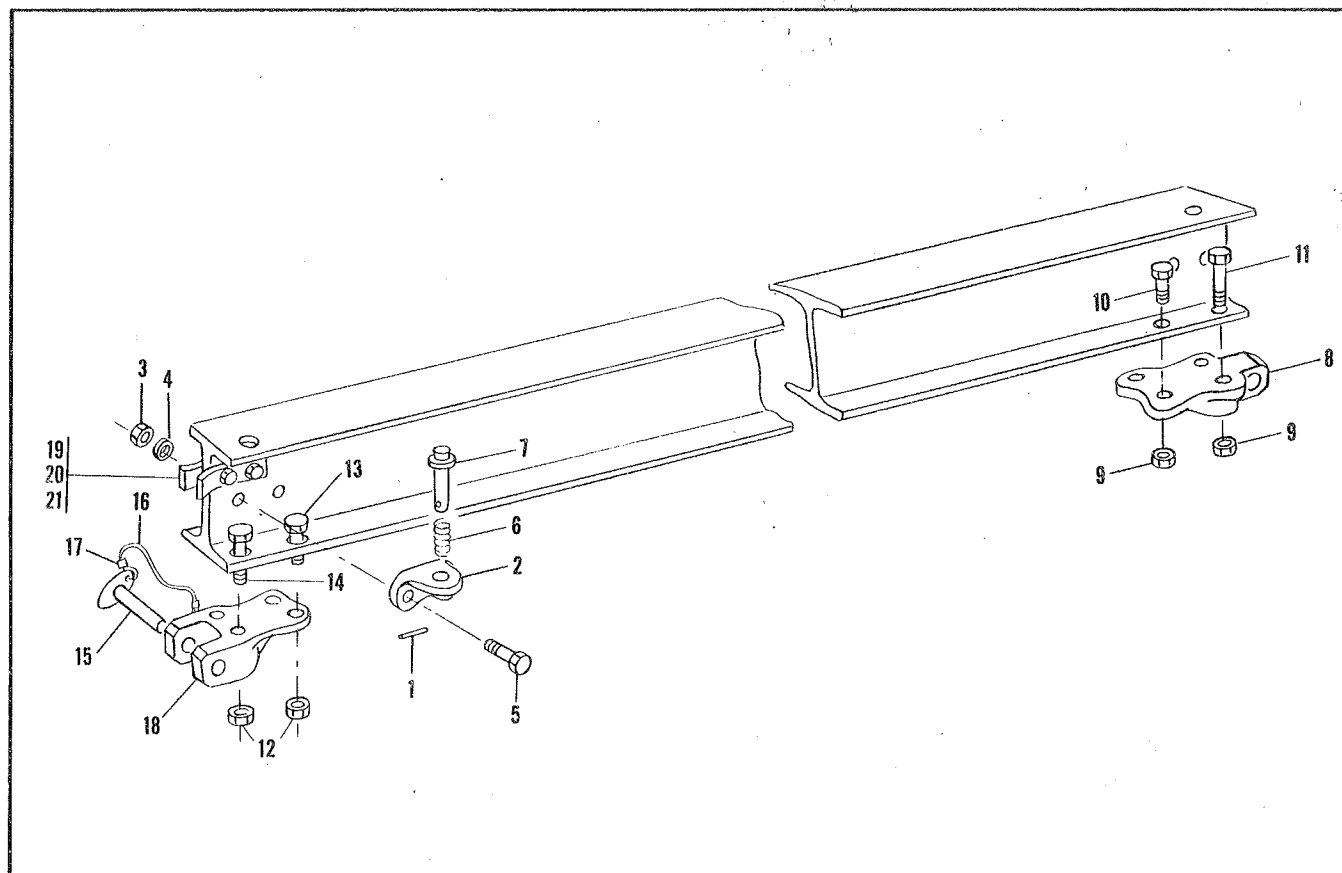


FIGURE 2. TRANSFER RAIL ASSEMBLY

FIG. & INDEX No.	PART NUMBER	DESCRIPTION							UNITS PER ASSY	USABLE ON CODE
		1	2	3	4	5	6	7		
2-	No NUMBER	RAIL ASSEMBLY, TRANSFER (SEE FIGURE 1-1 FOR NEXT HIGHER ASSEMBLY)							REF	A, B
- 1	MS171662	.	ROLL PIN						2	A, B
- 2	111534	.	BRACKET						2	A, B
			(ATTACHING PARTS)							
- 3	MS20364-428C	.	NUT						4	A, B
- 4	AN960-416L	.	WASHER						4	A, B
- 5	AN4-6A	.	BOLT						4	A, B
			-----X-----							

FIG. & INDEX No.	PART NUMBER	DESCRIPTION	UNITS PER ASSY	USABLE ON CODE
		1 2 3 4 5 6 7		
2- 6	111535	. SPRING, ADAPTER STOP	2	A, B
- 7	111536	. PIN, ADAPTER STOP	2	A, B
- 8	102314	. COUPLING, RAIL MALE	1	A, B
		(ATTACHING PARTS)		
-12	MS20365-624C	. NUT	4	A, B
-13	AN6-11A	. BOLT	2	A, B
-14	AN6-20A	. BOLT	2	A, B
		-----X-----		
-15	BL-ST5-12-2.750	. . PIN, QUICK RELEASE (97978) . . .	1	A, B
	S102408-9	. . CABLE ASSEMBLY	1	A, B
-16	COMM	. . . CABLE, .062 DIA X 13.50 LG 7 X 7 FLEX STAINLESS STEEL	1	A, B
-17	28-1-C	. . . SLEEVE (76691)	2	A, B
-18	102313	. . COUPLING	1	A, B
-19	111537	. CLIP, GUIDE	2	A, B
		(ATTACHING PARTS)		
-20	MS20364-428C	. NUT	2	A, B
-21	AN4-7A	. BOLT	2	A, B
		-----X-----		
-22	100455	. RAIL	1	A, B

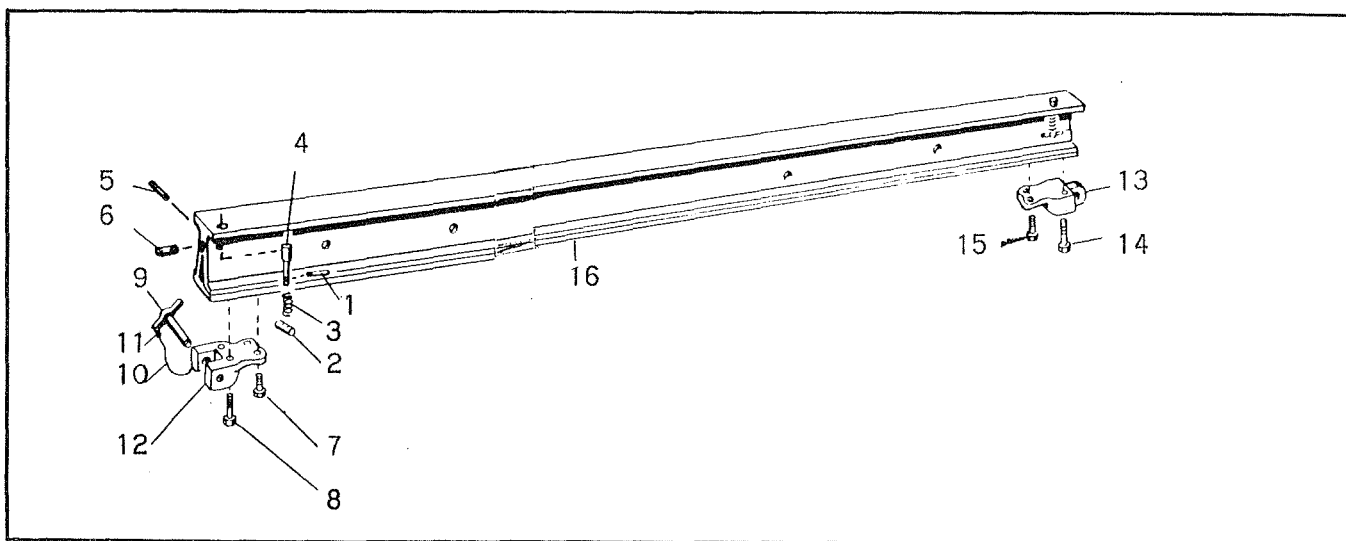


FIGURE 3. TRANSFER RAIL ASSEMBLY

FIG. & INDEX No.	PART NUMBER	DESCRIPTION	UNITS PER ASSY	USABLE ON CODE
		1 2 3 4 5 6 7		
3-	No NUMBER	RAIL ASSEMBLY, TRANSFER (SEE FIGURE 1-1, FOR NEXT HIGHER ASSEMBLY	REF	C, D
-1	MS171596	. ROLL PIN	2	C
-2	104359	. PIN, GUIDE	2	C
-3	111535	. SPRING	2	C
-4	104358	. PIN, ADAPTER STOP	2	C
-5	MS171657	. ROLL PIN	1	C
-6	104360	. PIN, RAIL INDEXING	1	C
	102334	. COUPLING ASSEMBLY, FEMALE	1	C

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FIG. & INDEX No.	PART NUMBER	DESCRIPTION							UNITS PER ASSY	USABLE ON CODE
		1	2	3	4	5	6	7		
(ATTACHING PARTS)										
3- 7	AN6-7A	.	BOLT	.	.	.	.	.	2	C
- 8	AN6-16A	.	BOLT	.	.	.	.	.	2	C
-----X-----										
- 9	BL-ST5-12-2.750	.	.	PIN, QUICK RELEASE (97978)	.	.	.	.	1	C
	S102408-9	.	.	CABLE ASSEMBLY	.	.	.	.	1	C
-10	COMM	.	.	CABLE, .062 DIA X 13.50 LG	.	.	.	.		
7 x 7 FLEX STAINLESS										
		.	.	STEEL	.	.	.	.	1	C
-11	28-1-C	.	.	SLEEVE (76691)	.	.	.	.	2	C
-12	102313	.	.	COUPLING	.	.	.	.	1	C
-13	102314	.	.	COUPLING, MALE	.	.	.	.	1	C
(ATTACHING PARTS)										
-14	AN6-7A	.	BOLT	.	.	.	.	.	2	C
-15	AN6-16A	.	BOLT	.	.	.	.	.	2	C
-----X-----										
-16	107404	.	RAIL	.	.	.	.	.	1	C
	107783									

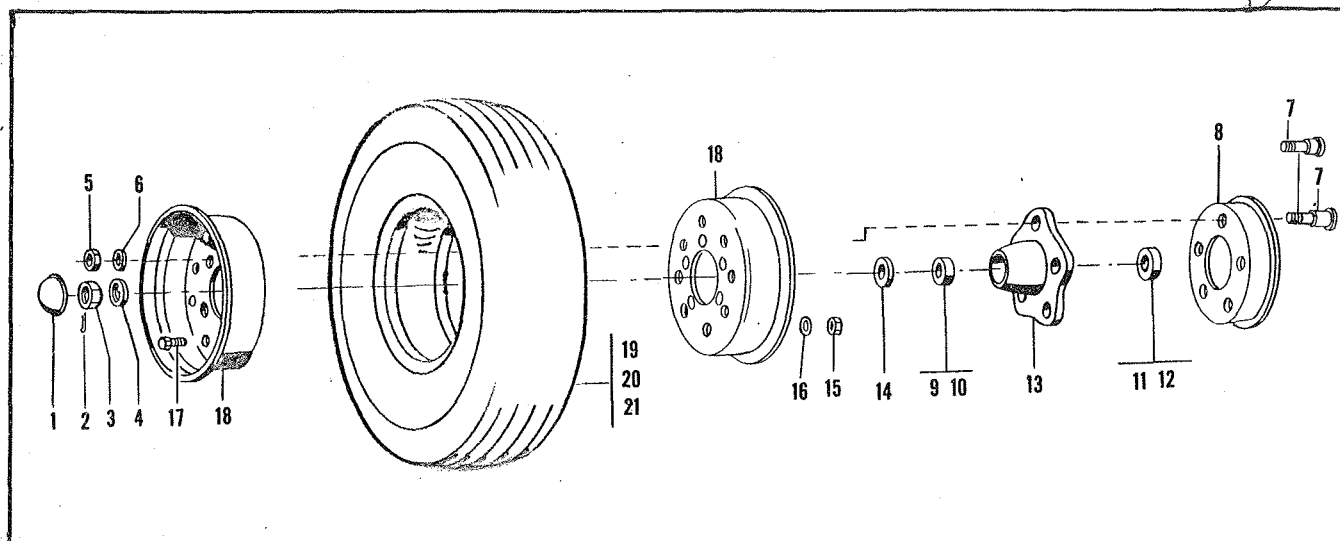


FIGURE 4. WHEEL, HUB, TIRE, TUBE AND FLAP ASSEMBLY

FIG. & INDEX No.	PART NUMBER	DESCRIPTION							UNITS PER ASSY	USABLE ON CODE
		1	2	3	4	5	6	7		
4-	No NUMBER	WHEEL, HUB, TIRE, TUBE AND FLAP ASSEMBLY (SEE FIGURE 1-10 FOR NEXT HIGHER ASSEMBLY)							REF	
	MS24328-2	.	HUB ASSEMBLY	.	.	.	.	.	1	
-1	*A260	.	CAP, HUB (83269)	.	.	.	.	.	1	
-2	*AN381-4-28	.	PIN, COTTER	.	.	.	.	.	1	
-3	*AN320-16	.	NUT	.	.	.	.	.	1	
-4	*111555	.	WASHER, KEY	.	.	.	.	.	1	
-5	325-8	.	NUT	.	.	.	.	.	5	
-6	AN935-816	.	WASHER	.	.	.	.	.	5	
-7	111556-3	.	BOLT	.	.	.	.	.	5	
	111556-5	.	BOLT	.	.	.	.	.	5	
-8	51314-6	.	DRUM, BRAKE	.	.	.	.	.	1	

FIG. & INDEX No.	PART NUMBER	DESCRIPTION							UNITS		USABLE ON CODE
		1	2	3	4	5	6	7	PER	ASSY	
4- 9	15245	.	.	CUP (60038)	.	.	.	.	.	.	1
-10	15123	.	.	CONE (60038)	.	.	.	.	.	.	1
-11	24720	.	.	CUP (60038)	.	.	.	.	.	.	1
-12	24780	.	.	CONE (60038)	.	.	.	.	.	.	1
-13	No NUMBER	.	.	HUB	.	.	.	.	.	.	1
-14	MLD6081SS(H1/L7)	.	.	SEAL (92798)	.	.	.	.	.	.	1
	MS24326-1	.	.	WHEEL ASSEMBLY	.	.	.	.	.	.	1
-15	325-6	.	.	NUT	.	.	.	.	.	.	8
-16	AN935-616	.	.	WASHER	.	.	.	.	.	.	8
-17	60-6-6	.	.	BOLT	.	.	.	.	.	.	8
-18	No NUMBER	.	.	WHEEL HALF	.	.	.	.	.	.	2
-19	COMM	.	.	TIRE, 7.50 x 10 6 PLY	.	.	.	.	.	.	1
-20	COMM	.	.	TUBE, 7.50 x 10	.	.	.	.	.	.	1
-21	COMM	.	.	FLAP, 7.50 x 10	.	.	.	.	.	.	1

*PREVIOUSLY LISTED AS ATTACHING PARTS FOR THE WHEEL, HUB,
TIRE AND TUBE ASSEMBLY. SEE 1-11, 1-12, 1-13 AND 1-14.

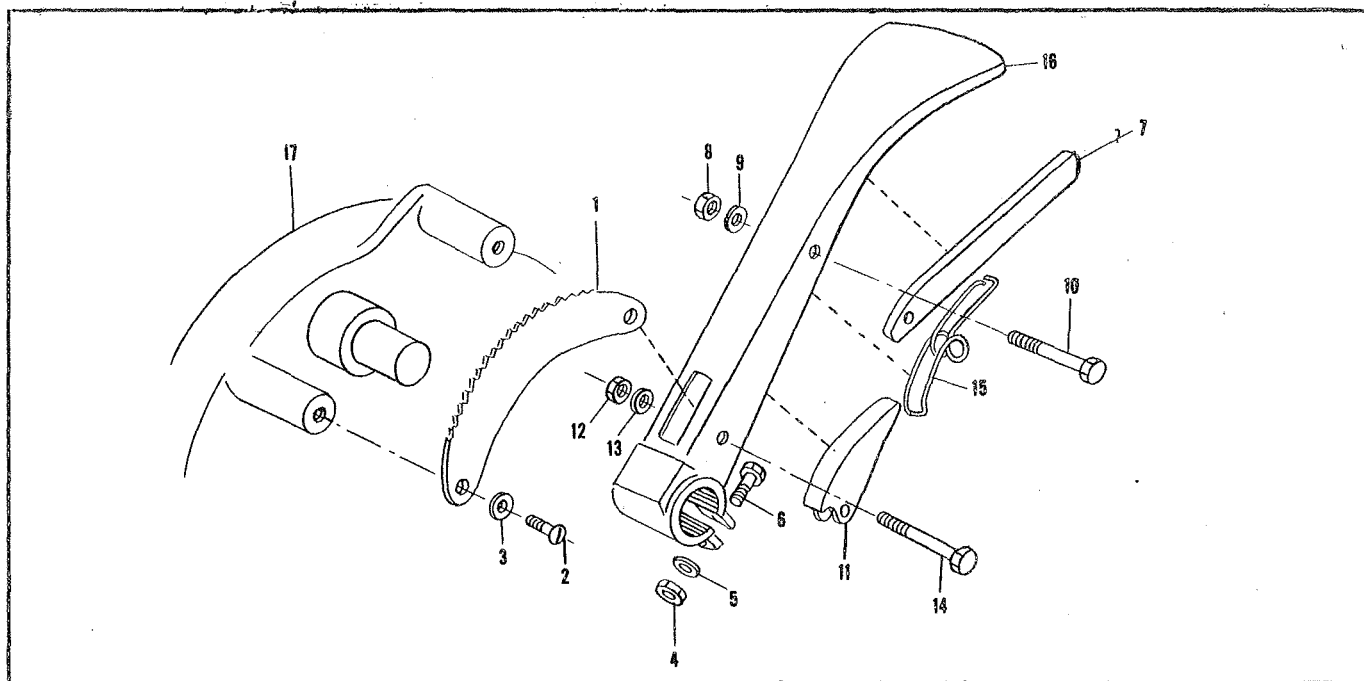


FIGURE 5. BRAKE, SECTOR AND PEDAL ASSEMBLY

FIG. & INDEX No.	PART NUMBER	DESCRIPTION							UNITS		USABLE ON CODE
		1	2	3	4	5	6	7	PER	ASSY	
5-	No NUMBER	BRAKE, SECTOR AND PEDAL ASSEMBLY (SEE FIGURE 1-15 FOR NEXT HIGHER ASSEMBLY)									REF
-1	111543	.	.	SECTOR, BRAKE PEDAL (ATTACHING PARTS)	.	.	.	.	.	.	1
-2	AN500A516-10	.	.	SCREW	.	.	.	.	.	.	2
-3	AN935-516	.	.	WASHER	.	.	.	.	.	.	2
		-----X-----									
	101694	.	.	PEDAL ASSEMBLY, BRAKE	.	.	.	.	.	.	1
-4	AN315-5R	.	.	NUT	.	.	.	.	.	.	1
-5	AN935-516	.	.	WASHER	.	.	.	.	.	.	1

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FIG. & INDEX No.	PART NUMBER	DESCRIPTION							UNITS PER ASSY	USABLE ON CODE
		1	2	3	4	5	6	7		
5-6	AN5-13A	.	.	BOLT	.	.	.	.	1	
-7	S104925	.	.	LEVER	.	.	.	.	1	
				(ATTACHING PARTS)						
-8	MS20365-1032C	.	.	NUT	.	.	.	.	1	
-9	AN960-10	.	.	WASHER	.	.	.	.	1	
-10	AN3-12A	.	.	BOLT	.	.	.	.	1	
				-----X-----						
-11	S104434	.	.	PAWL, BRAKE	.	.	.	.	1	
				(ATTACHING PARTS)						
-12	MS20365-1032C	.	.	NUT	.	.	.	.	1	
-13	AN960-10	.	.	WASHER	.	.	.	.	1	
-14	AN3-12A	.	.	BOLT	.	.	.	.	1	
				-----X-----						
-15	S104926	.	.	SPRING, BRAKE PAWL	.	.	.	.	1	
-16	S104969	.	.	PEDAL ASSEMBLY, BRAKE	.	.	.	.	1	
-17	51594L	.	.	BRAKE ASSEMBLY, LH (83445)	.	.	.	.		
				(SEE FIGURE 6) (AIR LOG SPEC						
				CONT S106236-1)	.	.	.	.	1	
	51594R	.	.	BRAKE ASSEMBLY, RH (83445)	.	.	.	.		
				(SEE FIGURE 6) (AIR LOG SPEC						
				CONT S106236-1)	.	.	.	.	1	

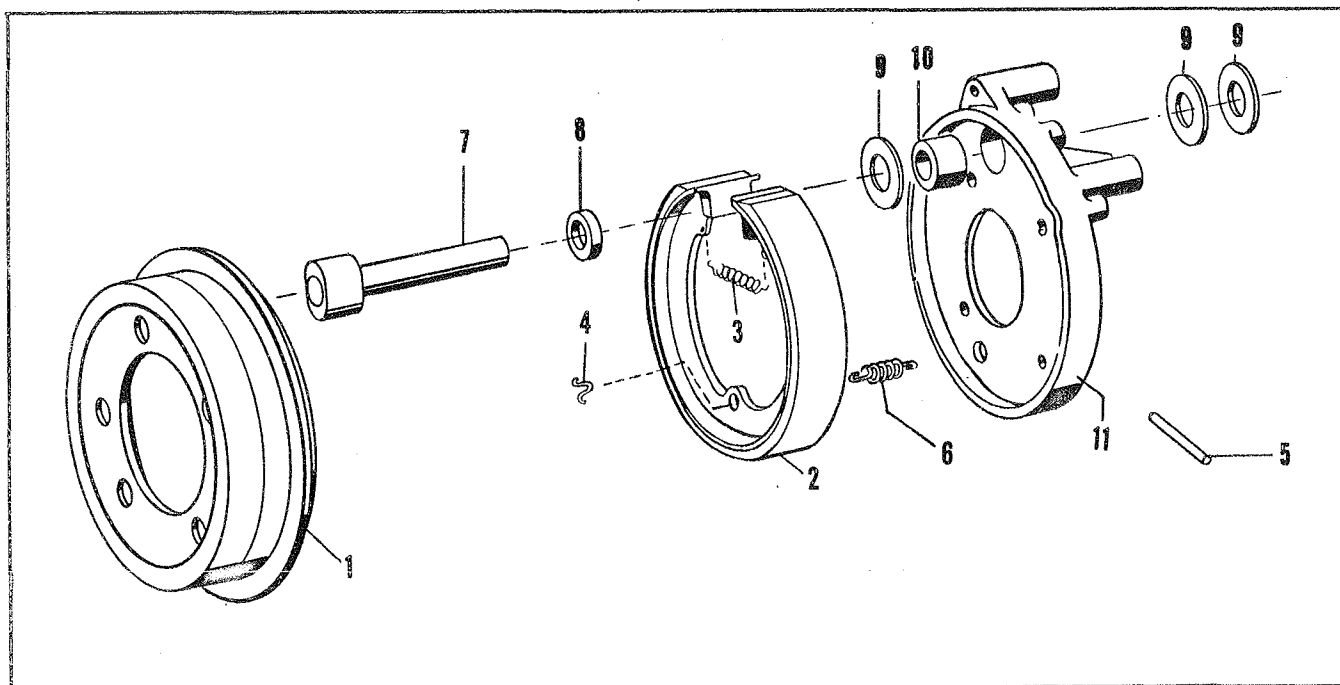
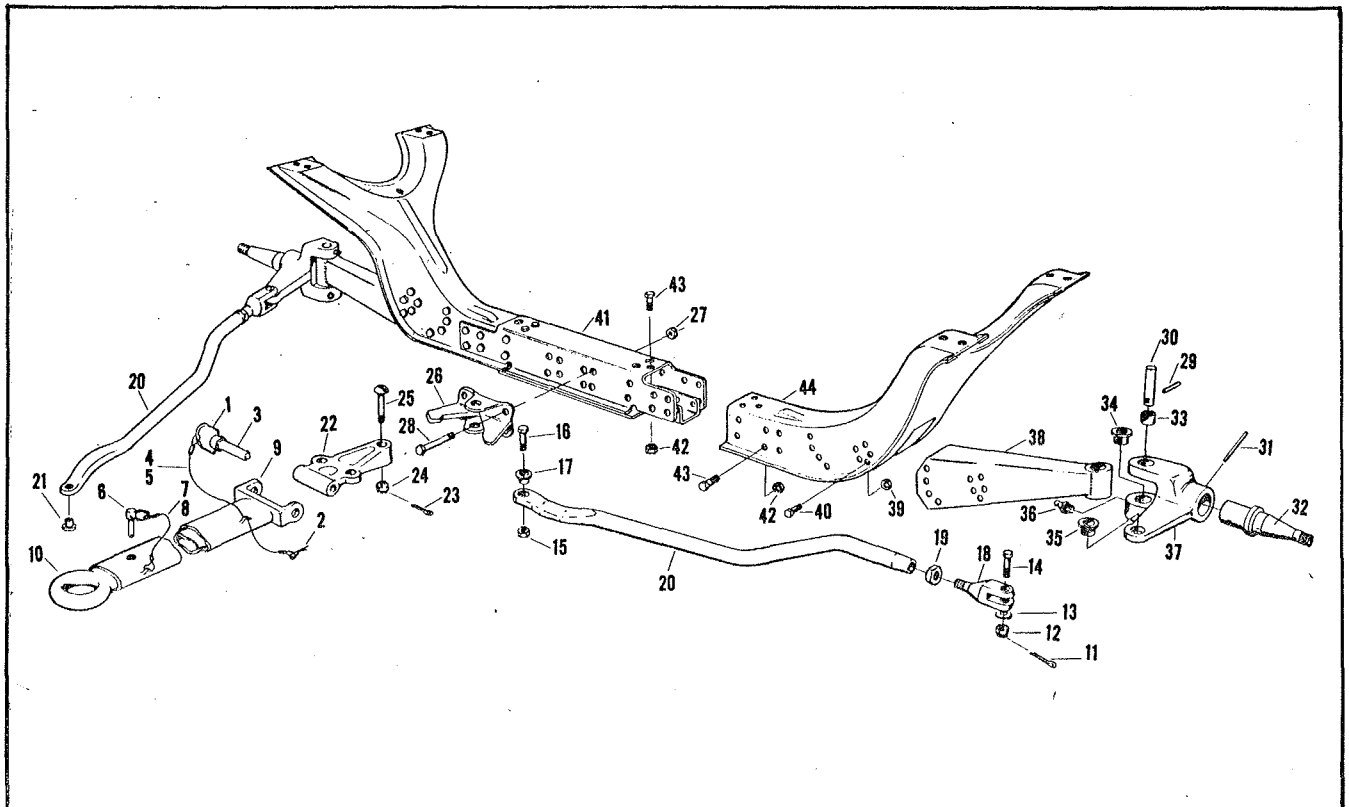


FIGURE 6. BRAKE ASSEMBLY

FIG. & INDEX No.	PART NUMBER	DESCRIPTION							UNITS PER ASSY	USABLE ON CODE
		1	2	3	4	5	6	7		
6-	51594L			BRAKE ASSEMBLY, LH (83445)						
				(AIR LOG SPEC CONT S106236-1)						
				(FOR NEXT HIGHER ASSEMBLY, SEE						
				FIGURE 5-17)	.	.	.	.	REF	

FIG. & INDEX No.	PART NUMBER	DESCRIPTION	UNITS		USABLE ON CODE
			1	2 3 4 5 6 7	
6-	51594R	BRAKE ASSEMBLY, RH (83445) (AIR LOG SPEC CONT S106236-2) (FOR NEXT HIGHER ASSEMBLY, SEE FIGURE 5-17)			REF
-1	*51314-6	. DRUM, BRAKE (83445)			1
-2	51496	. BRAKE SHOE, INTERNALLY ACTUATED) (83445)			1
		(ATTACHING PARTS)			
-3	51267-5	. SPRING (83445)			1
-4	55008	. CLIP (83445)			1
-5	MS171534	. PIN, SPRING			1
-6	55007	. SPRING			1
		-----X-----			
-7	51402-46	. SHAFT ASSEMBLY, CAM (83445)			1
-8	51339-2	. SPACER (83445)			1
-9	AN960-1016L	. WASHER			3
	51594-1L	. PLATE ASSEMBLY, MOUNTING, LH (83445)			1
	51594-1R	. PLATE ASSEMBLY, MOUNTING, RH (83445)			1
-10	627-878-16A	. . BEARING (00481)			2
-11	51594-1-1L	. . PLATE, MOUNTING, LH (83445)			1
	51594-1-1R	. . PLATE, MOUNTING, RH (83445)			1
*PREVIOUSLY LISTED, FIGURE 4-8 FOR DISASSEMBLY SEQUENCE.					

FIGURE 7. FWD FRAME, TOWBAR AND STEERING
LINKAGE ASSEMBLY

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FIG. & INDEX No.	PART NUMBER	DESCRIPTION	UNITS PER ASSY	USABLE ON CODE
		1 2 3 4 5 6 7		
7-	No NUMBER	FRAME, FWD, TOWBAR AND STEERING		
		LINKAGE ASSEMBLY (SEE FIGURE 1-19, FOR NEXT HIGHER ASSEMBLY	REF	
	S104438	. TOWBAR ASSEMBLY	1	
	S105092	. . PIN ASSEMBLY	1	
-1	S105601	. . . RING	1	
-2	S105599	. . . LOCK, SPRING	1	
-3	S105600	. . . PIN	1	
	S102408-11	. . CABLE ASSEMBLY	1	
-4	COMM	. . . CABLE, .062 DIA X 15.50 LG 7 X 7 FLEX STAINLESS STEEL	1	
-5	28-1-C	. . . SLEEVE (76691)	2	
-6	825	. . PIN, SPRING LOCK (99946)	1	
	S102408-7	. . CABLE ASSEMBLY	1	
-7	COMM	. . . CABLE, .062 DIA X 11.50 LG 7 X 7 FLEX STAINLESS STEEL	1	
-8	28-1-C	. . . SLEEVE (76691)	2	
-9	S104438-3	. . TUBE ASSEMBLY, OUTER	1	
-10	S104438-5	. . TUBE ASSEMBLY, INNER	1	
-11	AN381-2-8	. PIN, COTTER	2	
-12	AN320-5	. NUT	2	
-13	AN960-516L	. WASHER	2	
-14	AN25-32	. BOLT	2	
-15	MS20364-720C	. NUT	2	
-16	AN7-21A	. BOLT	2	
-17	NAS77-7-75	. BUSHING	2	
-18	102734	. YOKE	2	
-19	AN316-12R	. NUT	2	
-20	106473	. TIEROD	1	
	106478	. TIEROD	1	
-21	102741	. BUSHING	2	
-22	106569	. LINK, TOWING (ATTACHING PARTS)	1	
-23	AN381-4-32	. PIN, COTTER	1	
-24	AN320-14	. NUT	1	
-25	AN34-48	. BOLT	1	
		-----X-----		
-26	106475	. BRACKET, TOWING LINK (ATTACHING PARTS)	1	
-27	MS20365-820C	. NUT	4	
-28	AN8-51A	. BOLT	4	
		-----X-----		
	104477-1	. KNUCKLE ASSEMBLY, FRONT, LH	1	
	104477-2	. KNUCKLE ASSEMBLY, FRONT, RH (ATTACHING PARTS)	1	
-29	MS171602	. PIN, SPRING	2	
-30	105397	. KING PIN	2	
		-----X-----		
-31	MS171725	. . PIN, SPRING	1	
-32	100381	. . SPINDLE, AXLE	1	
-33	100379	. . BUSHING, PLAIN	1	

FIG. & INDEX No.	PART NUMBER	DESCRIPTION							UNITS		USABLE	
		1	2	3	4	5	6	7	PER	ASSY	ON	CODE
7-34	S100380	.	.	BUSHING, SHOULDER	.	.	.	.	1			
-35	102742	.	.	BUSHING	.	.	.	.	1			
-36	MS15003-1	.	.	FITTING, LUBRICATION	.	.	.	.	2			
-37	104466-1	.	.	KNUCKLE, LH	.	.	.	.	1			
	104466-2	.	.	KNUCKLE, RH	.	.	.	.	1			
	106476	.	.	FRAME ASSEMBLY	.	.	.	.	1			
-38	105381-1	.	.	SUPPORT, WHEEL	.	.	.	.	2			
				(ATTACHING PARTS)								
-39	MS20365-720C	.	.	NUT	.	.	.	.	36			
-40	AN7-6A	.	.	BOLT	.	.	.	.	36			
				-----X-----								
-41	106476-5	.	.	SPLICE	.	.	.	.	1			
				(ATTACHING PARTS)								
-42	MS20364-820C	.	.	NUT	.	.	.	.	30			
-43	AN8-7A	.	.	BOLT	.	.	.	.	30			
				-----X-----								
-44	106476-3	.	.	FRAME, SUB ASSEMBLY	.	.	.	.	2			

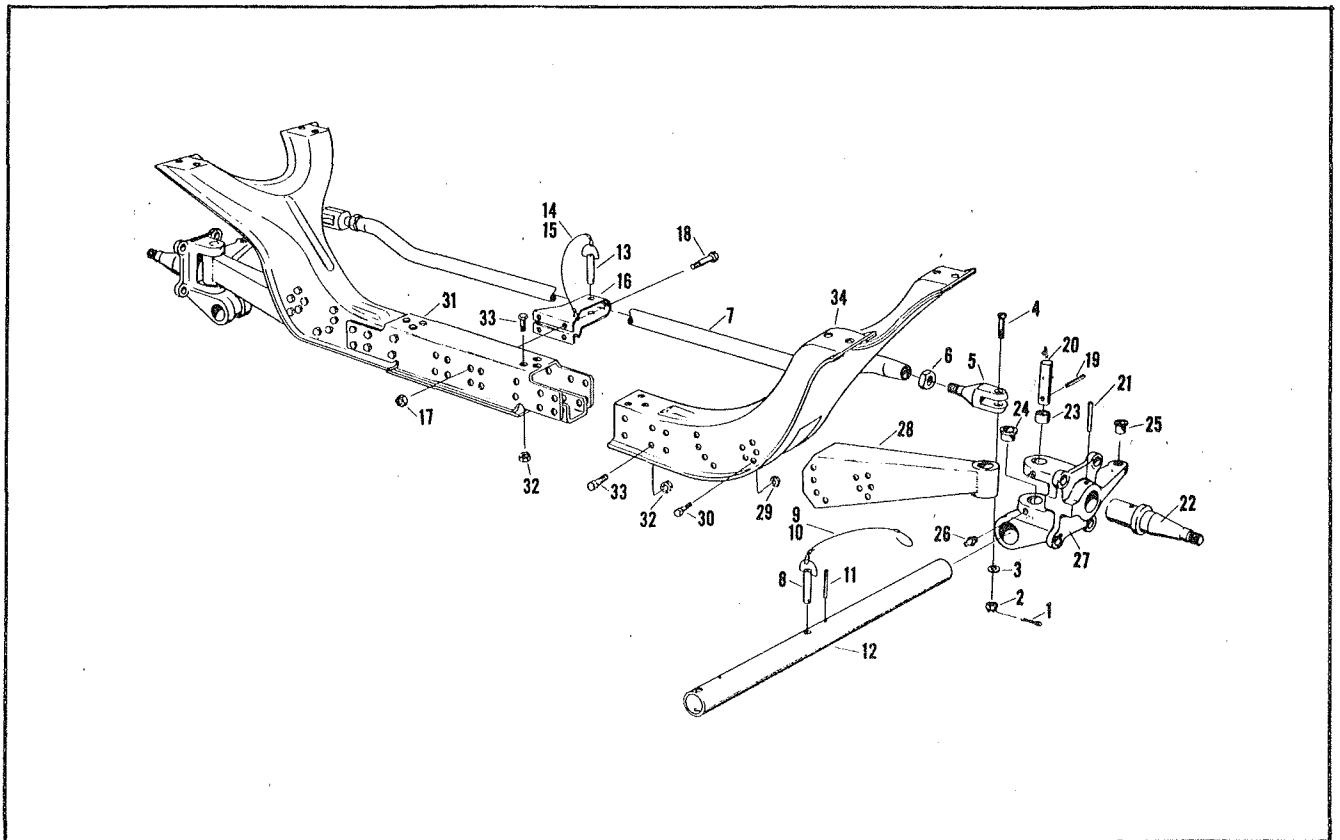


FIGURE 8. AFT FRAME AND SUPPORT ASSEMBLY

FIG. & INDEX No.	PART NUMBER	DESCRIPTION							UNITS		USABLE	
		1	2	3	4	5	6	7	PER	ASSY	ON	CODE
8-	No NUMBER			FRAME, AFT, AND STEERING LINKAGE								
				(SEE FIGURE 1-20)	.	.	.	.	REF			
-1	AN381-2-8	.	.	PIN, COTTER	.	.	.	.	2			
-2	AN320-5	.	.	NUT	.	.	.	.	2			

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FIG. & INDEX No.	PART NUMBER	DESCRIPTION	UNITS PER ASSY	USABLE ON CODE
		1 2 3 4 5 6 7		
8-3	AN960-516L	. WASHER	2	
-4	AN25-32	. BOLT	2	
-5	102734	. YOKE	2	
-6	AN316-12R	. NUT	2	
-7	106472	. TIE ROD	1	
-8	BL-8-2.750	. PIN, QUICK RELEASE (97978)	1	
	S102408-11	. CABLE ASSEMBLY	1	
-9	COMM	. . CABLE, .062 DIA X 15.50 LG 7 x 7 FLEX STAINLESS STEEL	1	
-10	28-1-C	. . SLEEVE (76691)	2	
	106477	. ROD ASSEMBLY, STEERING	1	A, B
	106477-501	. ROD ASSEMBLY, STEERING	1	C
-11	MS171664	. . PIN, SPRING	1	
-12	106477-3	. . ROD	1	
-13	106501	. PIN	1	
	S102408-11	. CABLE ASSEMBLY	1	
-14	COMM	. . CABLE, .062 DIA X 15.50 LG 7 x 7 FLEX STAINLESS STEEL	1	
-15	28-1-C	. . SLEEVE (76691)	2	
-16	106474	. BRACKET (ATTACHING PARTS)	1	
-17	MS20365-820C	. NUT	4	
-18	AN8-51A	. BOLT	4	
		-----X-----		
	106470-1	. KNUCKLE ASSEMBLY, REAR STEERING, LH	1	
	106470-2	. KNUCKLE ASSEMBLY, REAR STEERING, RH (ATTACHING PARTS)	1	
-19	MS171602	. PIN, SPRING	2	
-20	105397	. KING PIN	2	
		-----X-----		
-21	MS171725	. . PIN, SPRING	1	
-22	100381	. . SPINDLE, AXLE	1	
-23	100379	. . BUSHING, PLAIN	1	
-24	S100380	. . BUSHING, SHOULDER	1	
-25	102742	. . BUSHING	1	
-26	MS15003-1	. . FITTING, LUBRICATION	1	
-27	106430-1	. . KNUCKLE, LH	1	
	106430-2	. . KNUCKLE, RH	1	
	106476	. FRAME ASSEMBLY	1	
-28	105381-1	. . SUPPORT, WHEEL (ATTACHING PARTS)	2	
-29	MS20365-720C	. . NUT	36	
-30	AN7-6A	. . BOLT	36	
		-----X-----		
-31	106476-5	. . SPLICE (ATTACHING PARTS)	1	
-32	MS20364-820C	. . NUT	30	
-33	AN8-7A	. . BOLT	30	
		-----X-----		
-34	106476-3	. . FRAME, SUB ASSEMBLY	2	

SECTION VI
NUMERICAL INDEX

NOTE: "QTY REC." COLUMN SHOWS THE QUANTITY SPARE PARTS RECOMMENDED TO SUPPORT ONE UNIT FOR A PERIOD OF 12 MONTHS.

PART No.	FIG. & INDEX No.	TOTAL QTY.	QTY REC.	PART No.	FIG. & INDEX No.	TOTAL QTY.	QTY REC.
AN25-32	7-14	4		CABLE (11.50 LG)	7-7	1	
AN3-12A	5-10	4		CABLE (13.50 LG)	2-16	2	
AN315-5R	5-4	2			3-10		
AN316-12R	7-19	4		CABLE (15.50 LG)	7-4	3	
AN320-14	7-24	1			8-9		
AN320-16	1-13	8			8-14		
AN320-5	7-12	4		FLAP	4-21	4	
AN34-48	7-25	1		FRAME, AFT	1-20	1	
AN381-2-8	7-11	4			8-		
AN381-4-28	1-12	8		FRAME, FWD	1-19	1	
AN381-4-32	7-23	1			7-		
AN4-6A	2-5	8		HUB	4-13	4	
AN4-7A	2-21	4		MLD6081SS	4-14	4	
AN5-13A	5-6	2		MS15003-1	7-36	6	
AN500A516-10	5-2	4		MS171534	6-5	2	
AN535-0-4	1-27	14		MS171596	3-1	4	
AN6-11A	1-25	6		MS171602	7-29	4	
AN6-12A	1-18	8		MS171657	3-5	2	
AN6-16A	3-8	8		MS171662	2-1	4	
AN6-20A	2-14	4		MS171664	8-11	1	
AN6-7A	3-7	8		MS171725	7-31	4	
AN7-21A	7-16	2		MS20364-428C	2-3	12	
AN7-6A	7-40	72		MS20364-624C	1-16	10	
AN8-10A	1-4	16		MS20364-720C	7-15	2	
AN8-12A	1-9	16		MS23064-820C	7-42	60	
AN8-51A	7-28	8		MS20365-1032C	5-8	4	
AN8-7A	1-4	76		MS23065-624C	2-12	8	
AN935-516	5-3	6		MS20365-720C	7-39	72	
AN935-616	4-16	32		MS20365-820C	1-2	40	
AN935-816	4-6	20		MS24326-1	4-	4	
AN960-10	5-9	4		MS24328-2	4-	4	
AN960-1016L	6-9	6		NAS77-7-75	7-17	2	
AN960-416L	2-4	8		RAIL ASSY	1-1	2	
AN960-516L	7-13	4			2-		
AN960-616L	1-17	8			3-		
AN960-816L	1-3	48		S100380	7-34	4	2
A260	1-11	4			8-24		
	4-1			S102408-11	7-	3	
BL-ST5-12-2.750	2-15	2	1		8-		
	3-9			S102408-7	7-	1	
BL-ST5-8-2.750	8-8	1	1	S102408-9	2-	2	
BRAKE, SECTOR	1-15	2			3-		
& PEDAL ASSY	5-			S104434	5-11	2	2
				S104438	7-	1	1

SECTION VI
NUMERICAL INDEX

ER/5-60

NOTE: "QTY REC." COLUMN SHOWS THE QUANTITY SPARE PARTS RECOMMENDED TO SUPPORT ONE UNIT FOR A PERIOD OF 12 MONTHS.

PART No.	FIG. & INDEX No.	TOTAL QTY.	QTY REC.	PART No.	FIG. & INDEX No.	TOTAL QTY.	QTY REC.
S104438-3	7-9	1		106281-3	1-26	1	
S104438-5	7-10	1		106377	1-	REF.	
S104925	5-7	2	2	106377-3	1-26	1	
S104926	5-15	2	2	106430-1	8-27	1	
S104969	5-16	2		106430-2	8-27	1	
S105092	7-	1	1	106470-1	8-	1	
S105182	1-5	8		106470-2	8-	1	
S105599	7-2	1		106472	8-7	1	1
S105600	7-3	1		106473	7-20	1	1
S105601	7-1	1		106474	8-16	1	
TIRE	4-19	4		106475	7-26	1	
TUBE	4-20	4		106476	7-37	2	
WHEEL	4-18	8			8-27		
WHEEL, HUB, TIRE & TUBE ASSY	1-10	4		106476-3	7-44	4	
	4-				8-34		
100379	7-33	4	2	106476-5	7-41	2	
	8-23				8-31		
100381	7-32	4		106477	8-	1	1
	8-22			106477-3	8-12	1	
100455	2-22	2	1	106477-501	8-	1	1
100881	1-30	4		106478	7-20	1	1
101694	5-	2	2	106501	8-13	1	1
102313	2-18	2		106569	7-22	1	1
	3-12			106622	1-	REF.	
102314	2-8	2		106622-3	1-26	1	
	3-13			107404	3-16	2	
102334	3-	2		107734	1-6	4	
102734	7-18	4		111534	2-2	4	
	8-5			111535	2-6	4	2
102741	7-21	2			3-3		
102742	7-35	4	2	111536	2-7	4	2
	8-25			111537	2-19	4	2
103341	1-28	1		111543	5-1	2	2
104358	3-4	4		111555	1-14	4	
104359	3-2	4			4-4		
104360	3-6	2		111556-3	4-7	20	
104395	1-	1		111556-5	4-7	20	
104466-1	7-37	1		15123	4-10	4	
104466-2	7-37	1		15245	4-9	4	
104477-1	7-	1		24720	4-11	4	
104477-2	7-	1		24780	4-12	4	
104873	1-21	1		28-1-C	2-17	12	
104876	1-22	1			3-11		
104877	1-23	2			7-5		
105381-1	7-38	4			7-8		
	8-28				8-10		
105397	7-30	4	2		8-15		
	8-20			325-6	4-15	32	
106281	1-	REF.		325-8	4-5	20	
				51267-5	6-3	2	2

NOTE: "QTY REC." COLUMN SHOWS THE QUANTITY SPARE PARTS RECOMMENDED TO SUPPORT ONE UNIT FOR A PERIOD OF 12 MONTHS.

PART No.	FIG. & INDEX No.	TOTAL QTY.	QTY REC.
51314-6	4-8	2	
	6-1		
51339-2	6-8	2	
51402-46	6-7	2	2
51496	6-2	2	2
51594-1-1L	6-11	1	
51594-1-1R	6-11	1	
51594-1L	6-	1	
51594-1R	6-	1	

PART No.	FIG. & INDEX No.	TOTAL QTY.	QTY REC.
51594L	5-17	2	
	6-		
51594R	5-17	2	
	6-		
55007	6-6	2	2
55008	6-4	2	2
60-6-6	4-17	32	
627-879-16A	6-10	4	4
825	7-6	1	1

AL-66-1

INSTRUCTIONS FOR

FIELD MODIFICATION - CONVERSION

OF MODEL 3000 TRAILER TO

MODEL 3060J

USING

MODIFICATION KIT P/N 113423

24 January 1966

Rev. 11 February 1966



A I R L O G I S T I C S C O R P O R A T I O N

AL-66-1
INSTRUCTIONS FOR
FIELD MODIFICATION - CONVERSION
OF MODEL 3000 TRAILER TO
MODEL 3060J
USING
MODIFICATION KIT P/N 113423

- 1-1 DESCRIPTION AND PURPOSE
- 1-2 Kit Number 113423 is designed to provide all necessary components and parts to accomplish the field modification which converts the Air-Log standard 48 inch rail gauge transportation trailer Model 3000 to a transportation trailer with heavy weight rails spaced at 60 inches. The model number designated for the converted trailer is 3060J.
- 1-3 Modification Kit, Part Number 113423, does not include the replacement rails. It does, however, include all those components which are normally mounted on the rails and the hardware necessary to attach the components to the rails as well as the hardware required to fasten the new rails to the modified trailer chassis and replacement hardware to which damage might be anticipated during the modification process.
- 1-4 Table I provides a complete list of all components and parts included in the kit as well as a brief statement as to the use of each item.

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A I R L O G I S T I C S C O R P O R A T I O N

<u>P/N</u>	<u>Description</u>	<u>Qty.</u>	<u>Use</u>
113423-3	Frame Assembly	1	Replace existing part
113423-5	Frame Assembly	1	Replace existing part
113423-15	Tie Rod	2	Replace existing part
112891-3	Ident. Plate	1	Replace existing part
102314	Coupling, Male	2	Attach to new rail
102334	Coupling Assy, Female	2	Attach to new rail
111534	Bracket, Stop Assy.	4	Attach to new rail
111535	Spring, Stop Assy.	4	Attach to new rail
111536	Pin, Stop Assy.	4	Attach to new rail
111537	Guide, Rail Index	4	Attach to new rail
MS171662	Roll Pin, Stop Assy.	4	Attach to new rail
AN8-11A	Bolt	4	Replacement hardware
AN8-12A	Bolt	4	Replacement hardware
AN535-0-4	Screw, Drive	12	Replacement hardware
AN8-20A	Bolt	16	Attach rail to frame
AN4-6A	Bolt	8	Attach stop assys.
AN4-7A	Bolt	4	Attach rail guides
AN6-17A	Bolt	8	Attach couplings
AN6-26A	Bolt	8	Attach couplings
AN960-416L	Washer	8	Attach stop assys.
AN960-816	Washer	16	Attach rail to frame
MS20364-428C	Nut	12	Attach rail guides & stop assy.
MS20365-624C	Nut	16	Attach couplings
MS20365-820C	Nut	16	Attach rail to frame
MS20365-820C	Nut	8	Replacement hardware

TABLE I - KIT LIST - P/N 113423

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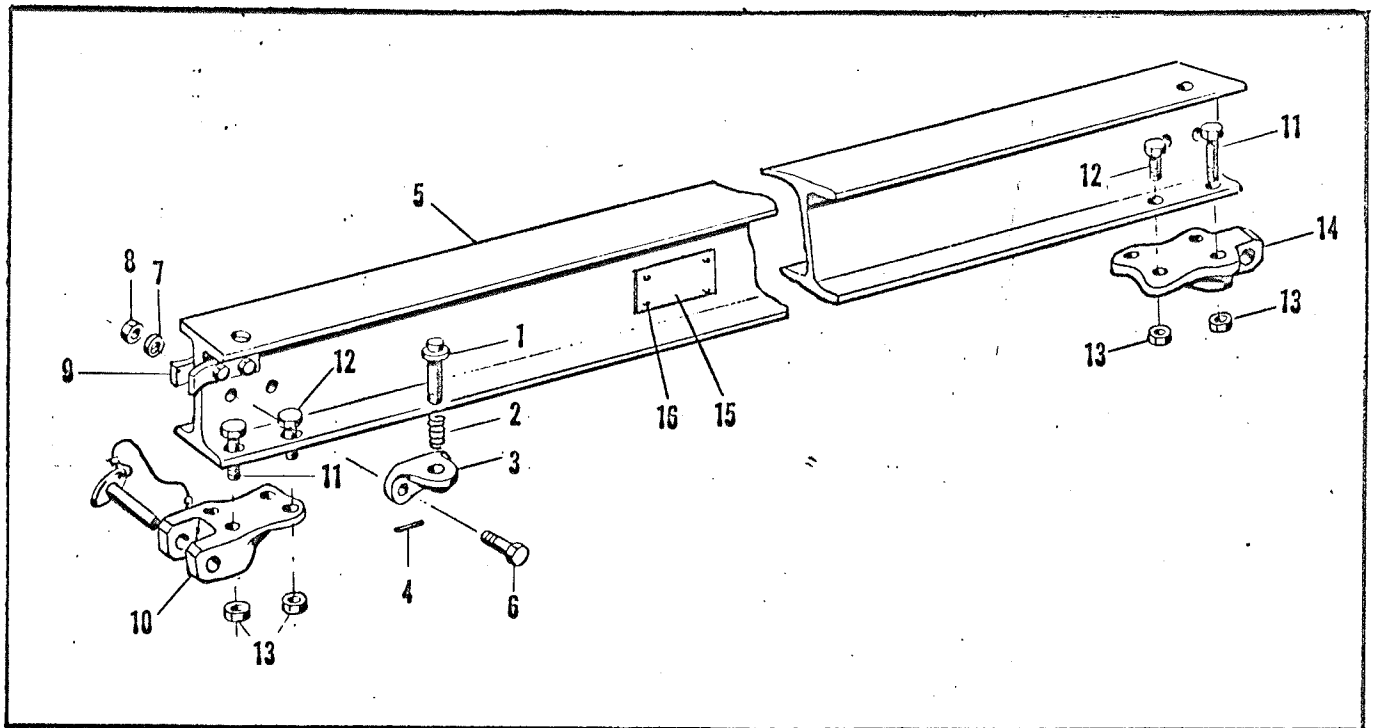


Figure 1 - Rail Assembly

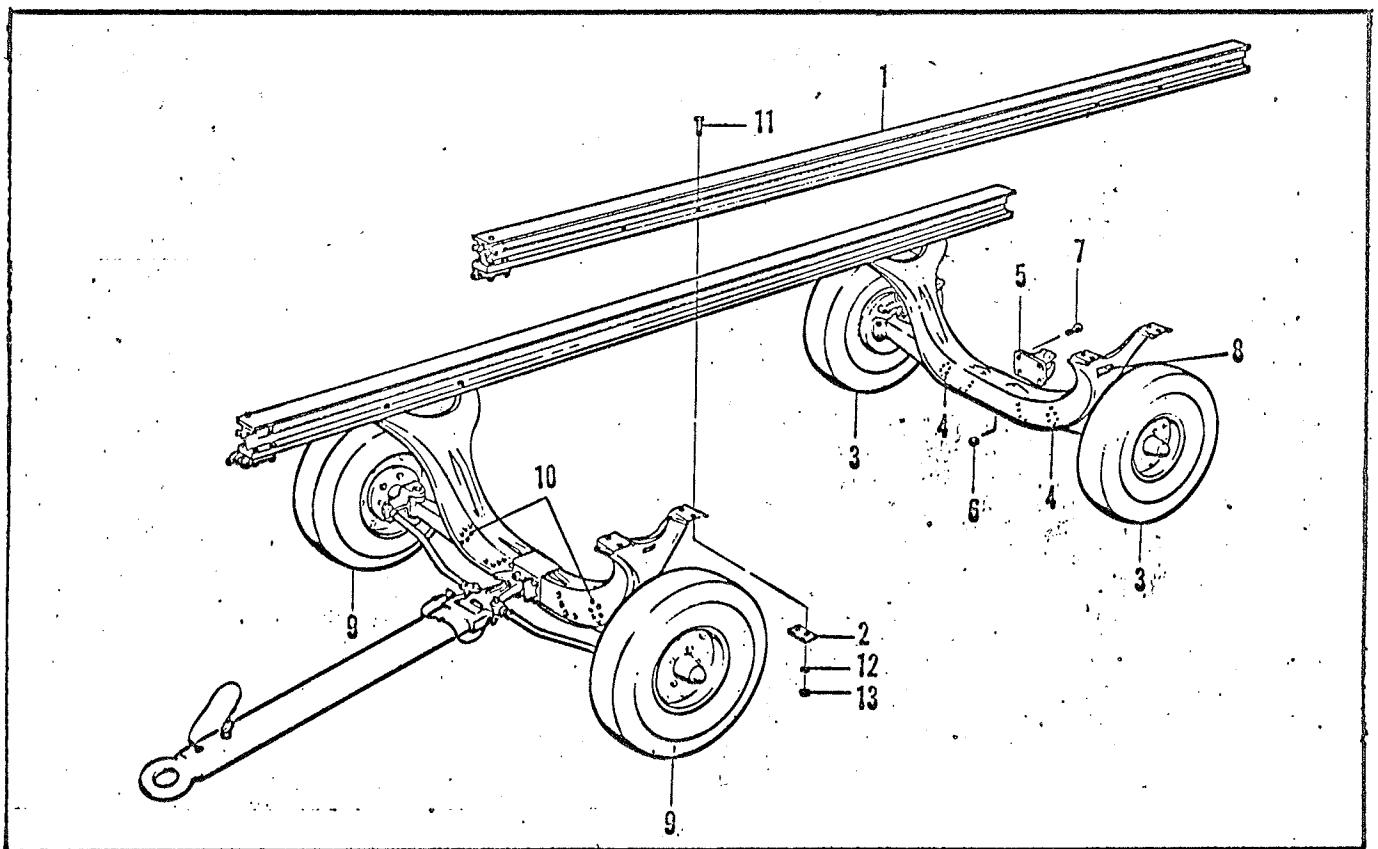


Figure 2 - Trailer-Disassembly and Reassembly

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AIR LOGISTICS CORPORATION

2-1 MODIFICATION INSTRUCTIONS

2-2 The field conversion of the Model 3000 Transportation Trailer is accomplished in three steps: Assembly of heavy weight rails, disassembly of Model 3000 and reassembly of 3060J using modification kit components.

2-3 Rail Assembly - Refer to Figure I and proceed as follows:

- a. Insert stop pin (1) through spring (2) and bracket (3), then insert rollpin (4) through hole in shank of stop pin.
- b. Insert one stop assembly (step a.) through hole in top flange of each rail (5) (Total four assemblies, two rails) and attach to rail using eight AN4-6A Bolts (6), eight AN960-416L Washers (7) and eight MS20364-428C Nuts (8).
- c. Attach one pair of rail indexing guides (9) to each rail using four AN4-7A Bolts and four MS20364-428C Nuts.
- d. Attach female coupling assembly (10) to forward end of each rail using two AN6-26A Bolts (11), two AN6-17A Bolts (12) and four MS20365-624C Nuts (13).
- e. Repeat step d. to attach male coupling (14) to aft end of each rail.
- f. Attach Identification Plate (15) to rail using four AN535-0-4 Drive Screws (16).

2-4 Disassembly - Refer to Figure 2 and proceed as follows:

- a. Remove rails from frame assemblies retaining flat rectangular washers (Part Number S105182) (2) for reassembly. Disposition of removed rail is to be determined by modification personnel and balance of attaching hardware may be discarded.
- b. Disassemble aft frame assembly as follows:
 1. Remove wheel and support assemblies (3) by removing nuts and bolts (4) from frame.
 2. Remove pintle assembly (5) by removing nuts (6) and bolts (7).
 3. Remove two instruction plates (Part Number 100881) (8) from frame and retain for reassembly; discard attaching screws.
 4. Dispose of frame and retain all other components and hardware for reassembly.

NOTE: Replacement hardware for attaching pintle assembly is provided in the modification kit.

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1. 3)



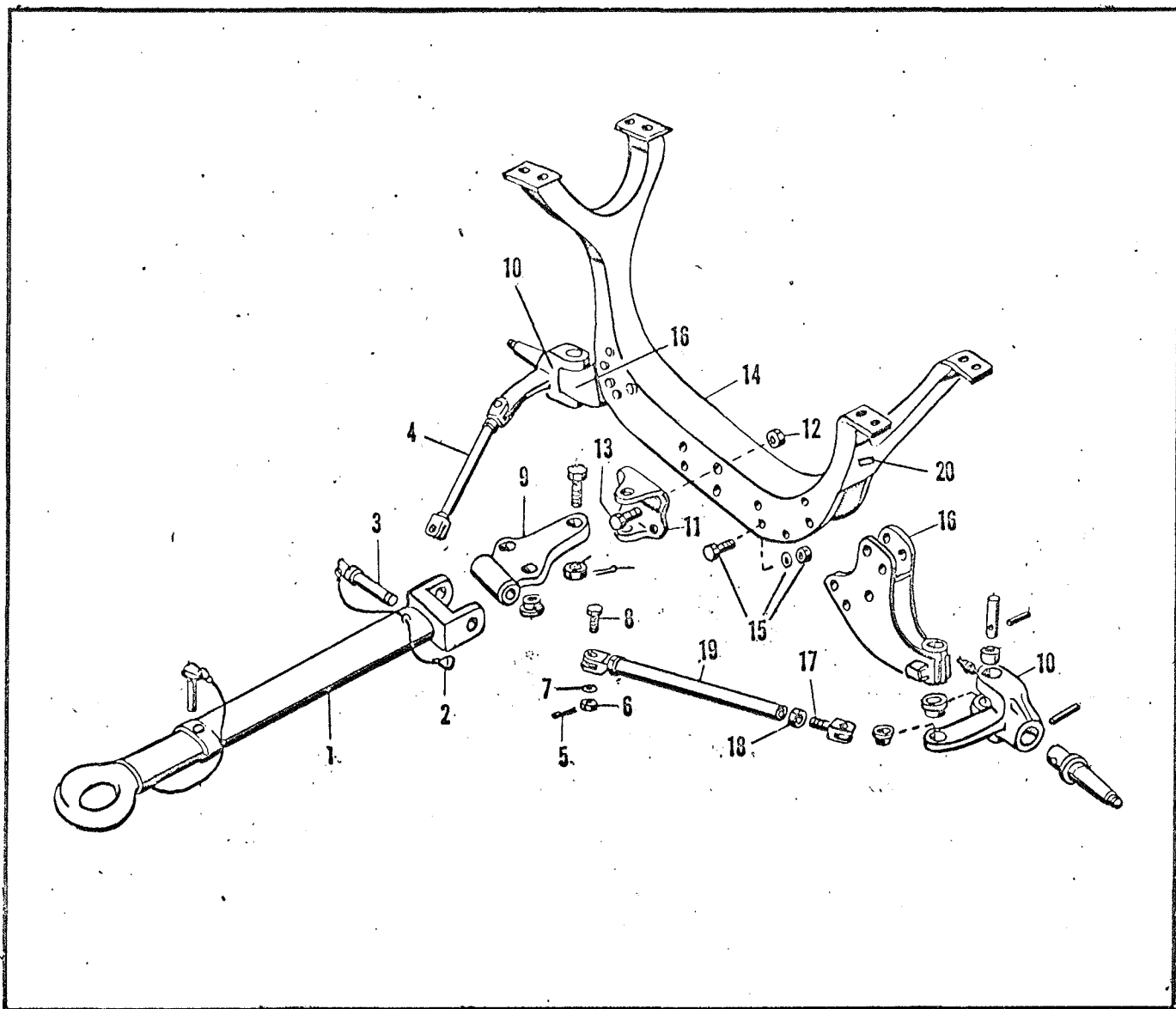


Figure 3 - Forward Frame
Disassembly and Reassembly

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A I R L O G I S T I C S C O R P O R A T I O N

- c. To disassemble the forward frame assembly Refer to Figure 3 and proceed as follows:
1. Remove towbar (1) by loosening safety pin (2) and withdrawing pivot pin (3).
 2. Disconnect tie rod assemblies (4) by removing cotter pin (5), nut (6), washer (7) and bolt (8) which attach them to towing link (9). It is not necessary to disconnect tie rods from steering knuckles (10).
 3. Disconnect towing link bracket (11) by removing nuts (12) and bolts (13) attaching it to frame (14). It is not necessary to disassemble towing link from bracket.
 4. Disconnect wheel, steering knuckle, tie rod and support assemblies (9, Figure 2) by removing nuts, bolts and washers (15, Figure 3 and 10, Figure 2) from frame. Except for tie rod replacement (see step 5 below) further disassembly of these units is not necessary unless repair or replacement of bushings and king pins is required. Figure 3 illustrates such disassembly of knuckle assemblies (10) and wheel supports (16) as well as the towing link (9). For replacement or repair parts identification refer to T.O. 35D3-3-26-4 covering the Model 3000 Trailer.
 5. Disassemble tie rod assemblies from towing link end only by removing clevis (17), jam nut (18) and tie rod tube (19). Discard tie rod tubes and retain other components for reassembly.
 6. Remove two instruction plates (Part Number 100881, 20) from frames and retain for reassembly; discard attaching screws.
 7. Dispose of frame and retain all other components and hardware for reassembly.

NOTE: Replacement hardware for attaching towing link and bracket assembly is provided in the modification kits.

2-5 Reassembly - Generally, reassembly of the trailer will be in the reverse order of the disassembly described in the preceding paragraph. The following provides the special instructions for reassembly and replacement with parts contained in the modification kit:

- a. Replace two instruction plates (8, Figure 2 and 20, Figure 3) to each replacement frame, Part Numbers 113423-3 (aft) and 113423-5 (forward) using a total of eight AN535-0-4 drive screws provided in the modification kit.

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- b. Reassemble tie rods using Parts Number 113423-15 from modification kit in lieu of tubes removed (Item 19, Figure 3).
 - c. Install wheel, knuckle, support and tie rod assemblies on forward frame, utilizing removed attaching hardware.
 - d. Install towing link and bracket on new forward frame using four AN8-11A Bolts and four MS20365-820C Nuts from modification kits. Connect tie rods to towing link.
 - e. Install wheel assemblies and pintle assembly on new aft frame using removed hardware for wheel assemblies and four each AN8-12A Bolts and MS20365-820C Nuts from modification kit for pintle assembly.
 - f. Refer to Figure 2 and attach new rail assemblies to modified chassis using sixteen AN8-20A Bolts (11), AN860-816 Washers (12), and sixteen MS20365-820 Nuts (13) from modification kit. Make sure that eight rectangular washers (Part Number S105182) removed from Model 3000 are installed between frame and attaching hardware.
 - g. Attach towbar to towing link.
- 2-6 When reassembly has been completed, service the Model 3060J Trailer in accordance with instructions contained in Model 3000 Operation and Service instructions T.O. 35D3-3-26-1.
- 2-7 Adjust tie rod assemblies as follows:
- a. Loosen jam nuts (18, Figure 3) and rotate tie rod tubes until each front wheel has a toe-in of 1° to $1-1/2^{\circ}$
 - b. Tighten jam nuts against each end of each tie rod.

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