

T.O. 35D3-3-25-1

HANDBOOK  
OPERATION, SERVICE AND REPAIR  
INSTRUCTIONS

**ENGINE TRANSPORTATION TRAILER**

MODEL 2000  
AF STOCK NUMBER 8220-750421-855

(AIR LOGISTICS)

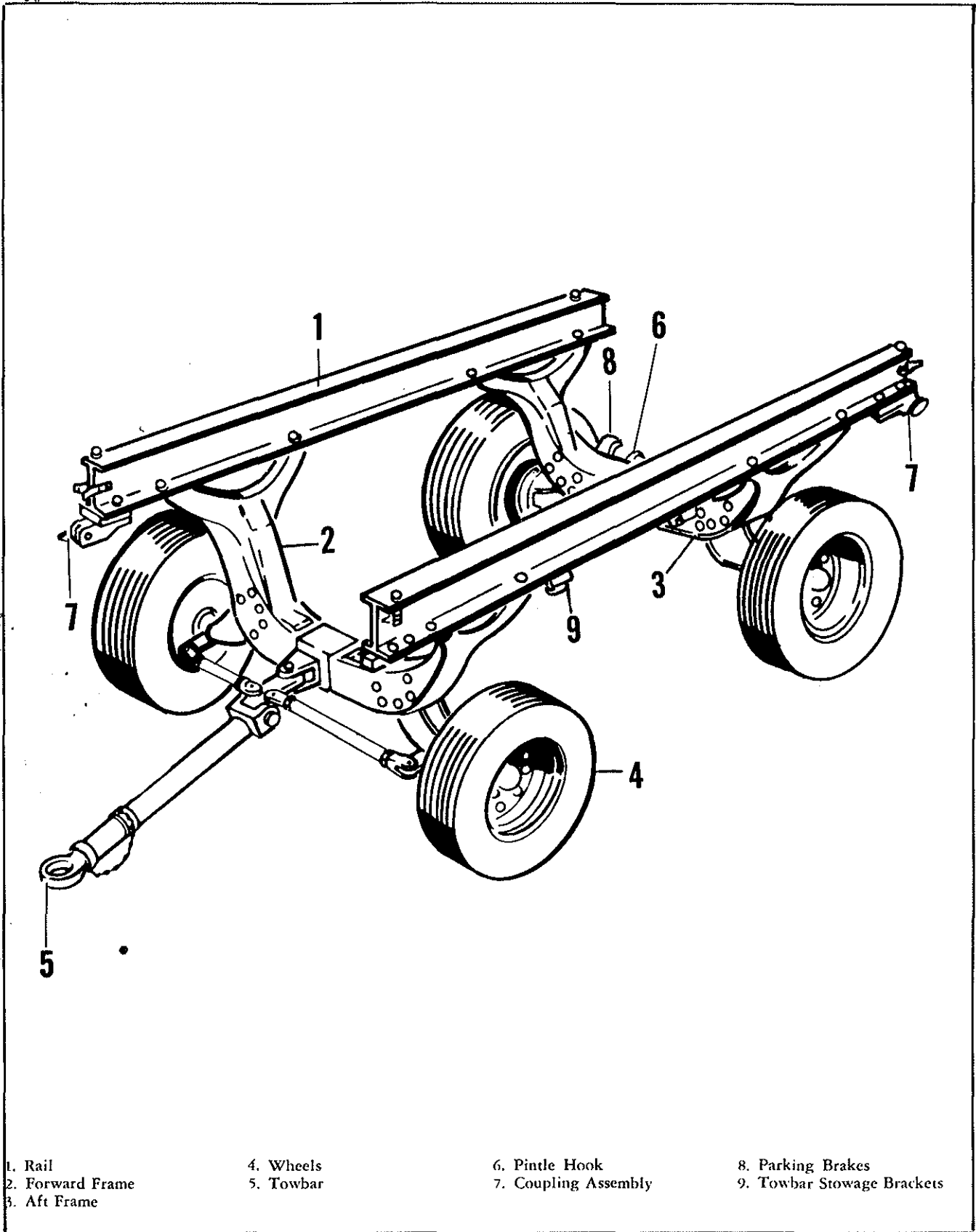
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- |                  |           |                      |                            |
|------------------|-----------|----------------------|----------------------------|
| 1. Rail          | 4. Wheels | 6. Pintle Hook       | 8. Parking Brakes          |
| 2. Forward Frame | 5. Towbar | 7. Coupling Assembly | 9. Towbar Stowage Brackets |
| 3. Aft Frame     |           |                      |                            |

Figure 1-1. Engine Transportation Trailer, Model 2000.

**T.O. 35D3-3-25-1**

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## SECTION I INTRODUCTION

### 1. GENERAL.

1-2. This publication is the basic handbook of Operation, Service and Overhaul Instructions for Engine Transportation Trailer, Model 2000, manufactured by Air Logistics Corporation, 3600 E. Foothill Blvd., Pasadena, California.

#### Note

This handbook should be used in conjunction with the Illustrated Parts Breakdown, T.O. 35D3-3-25-4, which lists, identifies and illustrates all parts of the trailer.

### 1-3. PURPOSE.

1-4. The Model 2000 trailer is used independently for transportation within a facility of jet aircraft engines, aircraft components and comparable equipment and for interplant transportation of heavy loads by air or truck. The trailer is also used for transference of heavy loads to and from other elements of the Air Logistics matched-rail ground handling system.

### 1-5. DESCRIPTION. (See figure 1-1.)

1-6. The Model 2000 trailer is a four-wheel vehicle consisting of two parallel, "I" shaped transfer rails (1), forward and aft frames (2 and 3), and four pneumatic-tired wheels (4). A telescoping towbar (5) and pintle

hook (6) provide a means of towing the trailer singularly or in train. Male and female quick-connect coupling assemblies (7) are located at the ends of the rails (1) for the purpose of coupling the Model 2000 trailer to other elements of the Air Logistics matched-rail system. The rear wheels are equipped with foot-operated parking brakes (8). Stowage brackets (9) provide a means of storing the towbar (5) during static use of the trailer and interplant transportation.

### LEADING PARTICULARS

Tire Size	6.00 x 9, 4 ply
Trailer Weight	350 pounds
Maximum Load	4000 pounds
Tire Inflation	30 psi
Towing Speed:	
Straightaway (Max)	20 MPH
Tight Turns	5 MPH
Rail Length	108.0 inches
Rail Width	3.33 inches
Rail Centerline Spacing	48.0 inches
Rail Height (from ground)	38.0 inches
Overall Width	54.0 inches
Wheel Base	72.0 inches
Wheel Tread	46.0 inches
Standard Towbar Length:	
Extended	72.0 inches
Retracted	44.5 inches

## SECTION II OPERATION AND SERVICE INSTRUCTIONS

### 2-1. OPERATION.

#### 2-2. PREPARATION FOR USE. (See figure 1-1.)

- Remove towbar (5) from stowage brackets (9) and secure to towing link with pin and spring lock.
- Check tires for proper inflation of 30 psi, inflate to proper pressure if required.

c. Make certain parking brakes (8) are released before attempting to tow trailer.

#### 2-3. OPERATING PROCEDURE. (See figure 2-1.)

#### 2-4. COMPONENT ADAPTER INSTALLATION AND REMOVAL.

**WARNING**

Before disconnecting trailers proceed as follows: If load is on the "Lift" trailer, raise rails evenly until the front wheels of the Model 2000 Trailer are at the point of leaving the ground. If load is on the Model 2000 Trailer, open bleed valves of the "Lift" trailer very slowly until rails are level and even with the rails of the Model 2000 Trailer. Close bleed valves. Remove lock pins (7) to uncouple.

**2-10. TOWING.**

a. The Model 2000 Trailer can be towed up to 20 miles per hour on straightaway and moderate curves. Reduce speed to 5 miles per hour on tight curves.

**2-11. PERIODIC LUBRICATION.** (See figure 2-2.)

2-12. Frequency of lubrication, lubricants to be used and lubrication points are as noted on "Lubrication Chart".

**2-13. PERIODIC INSPECTION.** (See Table I.)

2-14. Areas and frequency of inspection shall be as shown in Periodic Inspection Table.

**2-15. TROUBLE SHOOTING.** (See Table II.)

2-16. For indication of trouble, probable cause and remedial action, refer to Trouble Shooting Chart.

**2-17. BRAKE ASSEMBLY TROUBLE SHOOTING.**

2-18. If improper brake action is evidenced inspect for the following.

- a. Improper adjustment.
- b. Worn linings.
- c. Rough brake drums.
- d. Broken spring.
- e. Damaged cam.
- f. Loose internal parts.
- g. Loose pedal.
- h. Oil or grease on lining or drum.

2-19. Correct cause of failure using standard shop procedures, taking care to prevent oil or grease from contacting the lining or drums.

**TABLE I. PERIODIC INSPECTION**

<i>Item</i>	<i>Weekly</i>	<i>Quarterly</i>
Tire pressure	X	
Tires for damage	X	
Wheels for tightness	X	
Wheels for alignment		X
Wheel mounting bolts for serviceable condition		X
King pins and steering knuckles for excessive wear and damage		X
Wheels supports for damage and looseness		X
Brakes for serviceable condition and adjustment		X
Frame assemblies for damage, distortion, and fractured welds		X
Towbar and linkage for security		X
Tie rods for damage and distortion		X
Stop assemblies for proper operation	X	
Lubrication fittings for damage or obstruction		X
All nuts for tightness and cotter pins for serviceable condition		X

**Note**

Component adapters (1) are accessory equipment and are mentioned in this publication for reference only.

2-5. Component adapters may be removed or installed vertically by backing off at socket (4) using standard 1/2-inch socket drive until hook clamps (3) will straddle rail flange.

2-6. To remove or install component adapters horizontally, roll component adapters on or off rails by using standard 1/2-inch socket drive at socket (2).

**2-7. TRANSFERRING LOAD.**

2-8. When transferring a load between the Model 2000 trailer and other elements of the Air Logistics matched-rail system having a fixed height, proceed as follows:

- a. Secure couplings (5 and 6) with lock pin (7).
- b. Set trailer parking brakes to prevent movement during transfer operation.
- c. Unlock component adapters and roll load onto receiving trailer.

**Note**

Adapter stop pins (8) must be held down to allow passage of component adapters.

d. When center of gravity of load has been properly located, lock all component adapters using standard 1/2-inch socket drive at location (4).

2-9. If transfer operation involves one of Air Logistics "Lift" type trailers, proceed as follows:

- a. Adjust rails of lift trailer to level height squarely matching rails of the Model 2000 trailer.
- b. Secure couplings (5 and 6) with lock pin (7).
- c. Set parking brakes of both trailers to prevent movement during transfer operation.
- d. Unlock component adapters and roll load onto receiving trailer.

**Note**

Adapter stop pins (8) must be held down to allow passage of component adapters.

e. When center of gravity of load has been properly located, lock all component adapters using standard 1/2-inch socket drive at location (4).

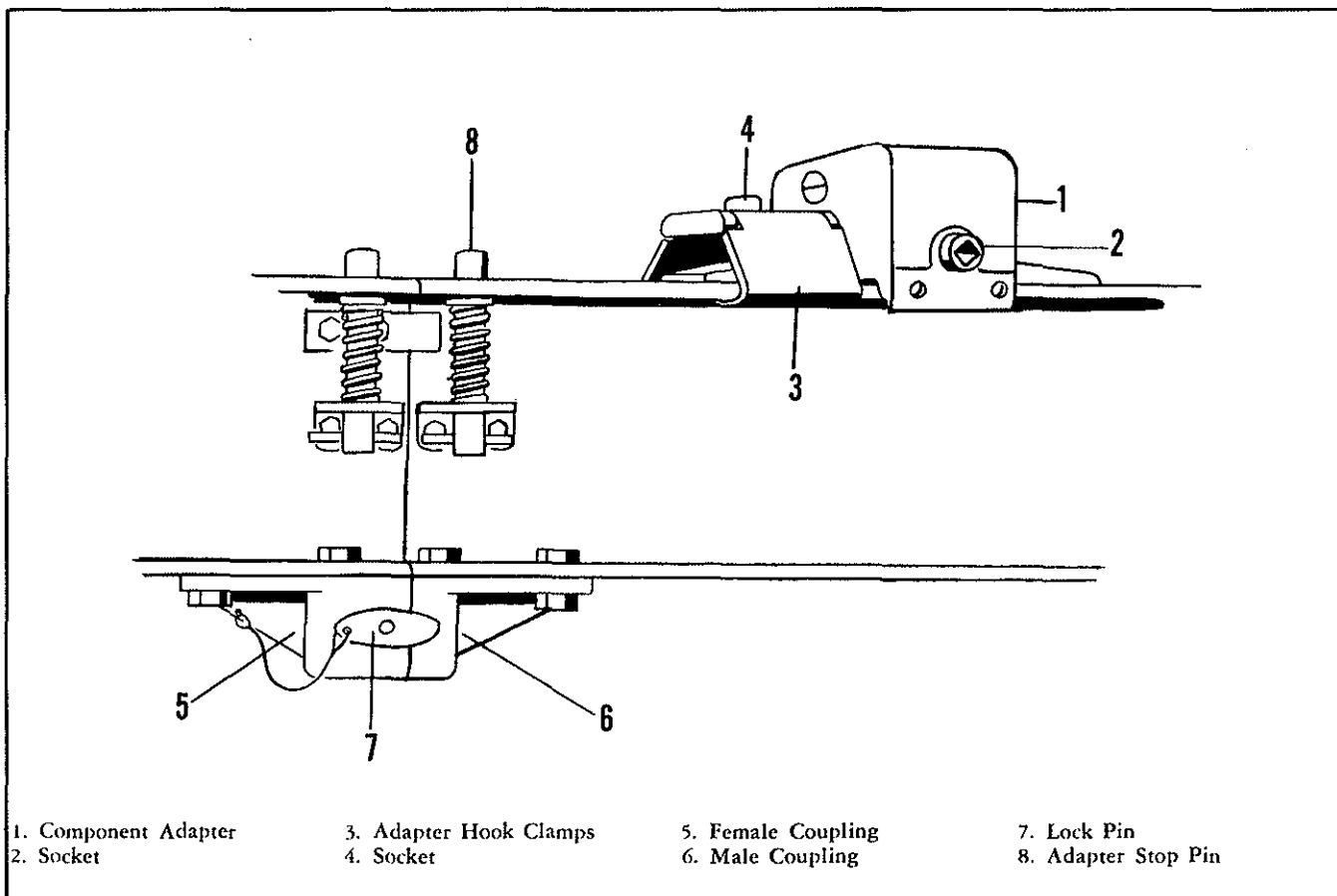


Figure 2-1. Operating Procedure.

**TABLE II. TROUBLE SHOOTING**

TROUBLE	PROBABLE CAUSE	REMEDY
Excessive sway or shimmy when towed.	1. Low tire pressure.	Check all tires for proper inflation.
	2. Damaged tie rod.	Straighten or install new tie rod.
	3. Bent wheel spindle or steering knuckle.	Replace damaged parts with new.
	4. Loose wheel support.	Tighten support.
	5. Worn king pins and bushings.	Install new king pins and bushings.
	6. Bent towbar.	Straighten or install new towbar.
	7. Worn wheel bearings.	Replace bearings with new.
Improper braking.	See Paragraph 2-10.	See Paragraph 2-10.

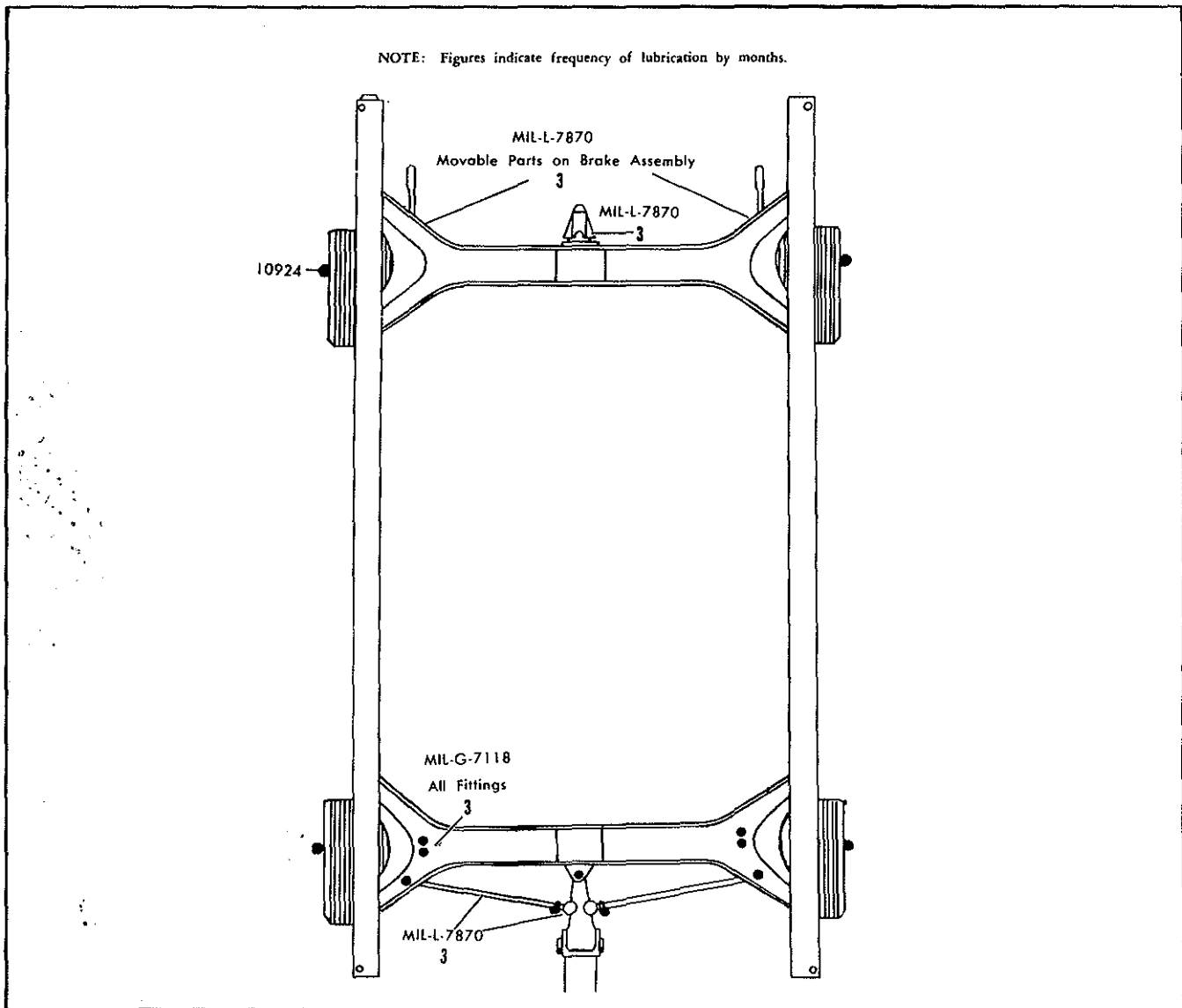


Figure 2-2. Lubrication Chart.



## SECTION III

### REPAIR INSTRUCTIONS

#### 3-1. DISASSEMBLY. (See figures 3-1 through 3-7.)

3-2. Disassemble the trailer in the general order of index numbers assigned to the exploded view illustrations, paying particular attention to the following procedures:

a. Disassembly of parts where wear, damage and/or distortion can be ascertained in the assembled condition is not necessary unless repair or replacement of parts is required.

#### Note

Take care to protect all critical mating surfaces from dirt and abrasions.

b. Do not remove press-fit bushings unless necessary to replace.

c. Do not remove cable assemblies unless cable or attached part requires replacement.

d. Do not remove instruction or identification plates and attaching parts (21 through 26, figure 3-1.) unless defaced beyond legibility.

e. Do not remove wheel bolts (11, figure 3-3.) from hub (17) unless inspection reveals need for replacement, or on rear wheels, if brake drums require repair or replacement.

f. After removal of wheel bearing cones (14 and 16, figure 3-3.) wrap in grease proof barrier to prevent further contamination.

g. Do not remove wheel bearing cups (13 and 15, figure 3-3.) unless inspection reveals need for replacement.

h. Do not attempt disassembly of brake pedal unless necessary to replace detail parts. Spring (15, figure 4.) is very difficult to install.

i. Do not attempt removal of bonded lining from brake shoe (2, figure 3-5.).

#### 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 Table II, "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.

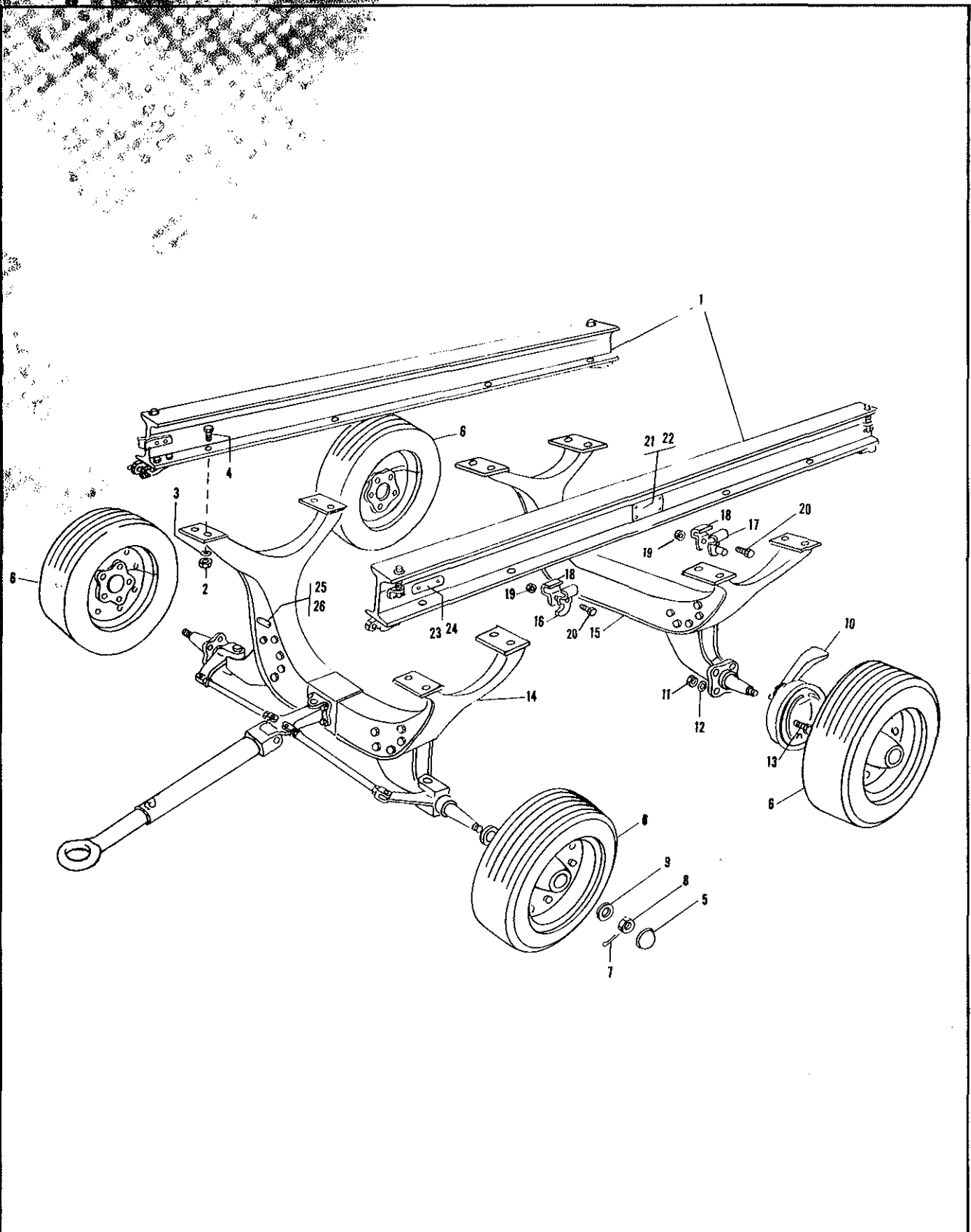


Figure 1. Engine Transportation Trailer Assembly

KEY TO FIGURE 3-1

- |                                       |                                     |   |                          |
|---------------------------------------|-------------------------------------|---|--------------------------|
| 1. Transfer Rail Assembly             | 8. Nut                              | 14. Forward Support and Steering Linkage Assembly | 20. Bolt                 |
| 2. Nut                                | 9. Washer                           | 15. Aft Support Assembly                          | 21. Identification Plate |
| 3. Washer                             | 10. Brake Sector and Pedal Assembly | 16. Bracket                                       | 22. Drive Screw          |
| 4. Bolt                               | 11. Nut                             | 17. Bracket                                       | 23. Instruction Plate    |
| 5. Hub Cap                            | 12. Washer                          | 18. Clamp   | 24. Drive Screw          |
| 6. Wheel, Hub, Tire and Tube Assembly | 13. Bolt                            | 19. Nut   | 25. Instruction Plate    |
| 7. Cotter Pin                         |                                     |   | 26. Drive Screw          |

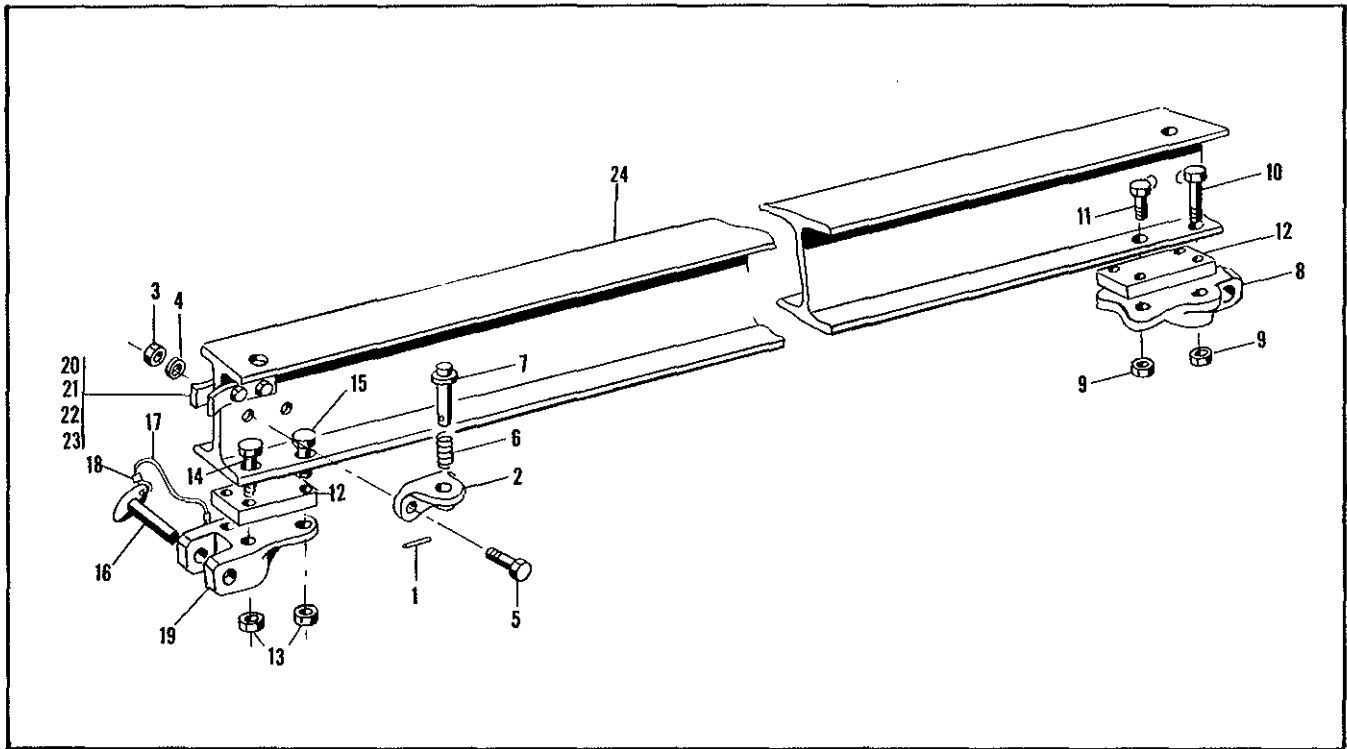


Figure 3-2. Transfer Rail Assembly.

- |                         |                       |                              |                          |
|-------------------------|-----------------------|------------------------------|--------------------------|
| 1. Pin                  | 7. Adapter Stop Pin   | 13. Nut                      | 19. Female Rail Coupling |
| 2. Adapter Stop Bracket | 8. Male Rail Coupling | 14. Bolt                     | 20. Rail Guide Clip      |
| 3. Nut                  | 9. Nut                | 15. Bolt                     | 21. Nut                  |
| 4. Washer               | 10. Bolt              | 16. Quick Release Pin        | 22. Washer               |
| 5. Bolt                 | 11. Bolt              | 17. Cable                    | 23. Bolt                 |
| 6. Adapter Stop Spring  | 12. Coupling Shim     | 18. Wire rope Swaging Sleeve | 24. Transfer Rail        |

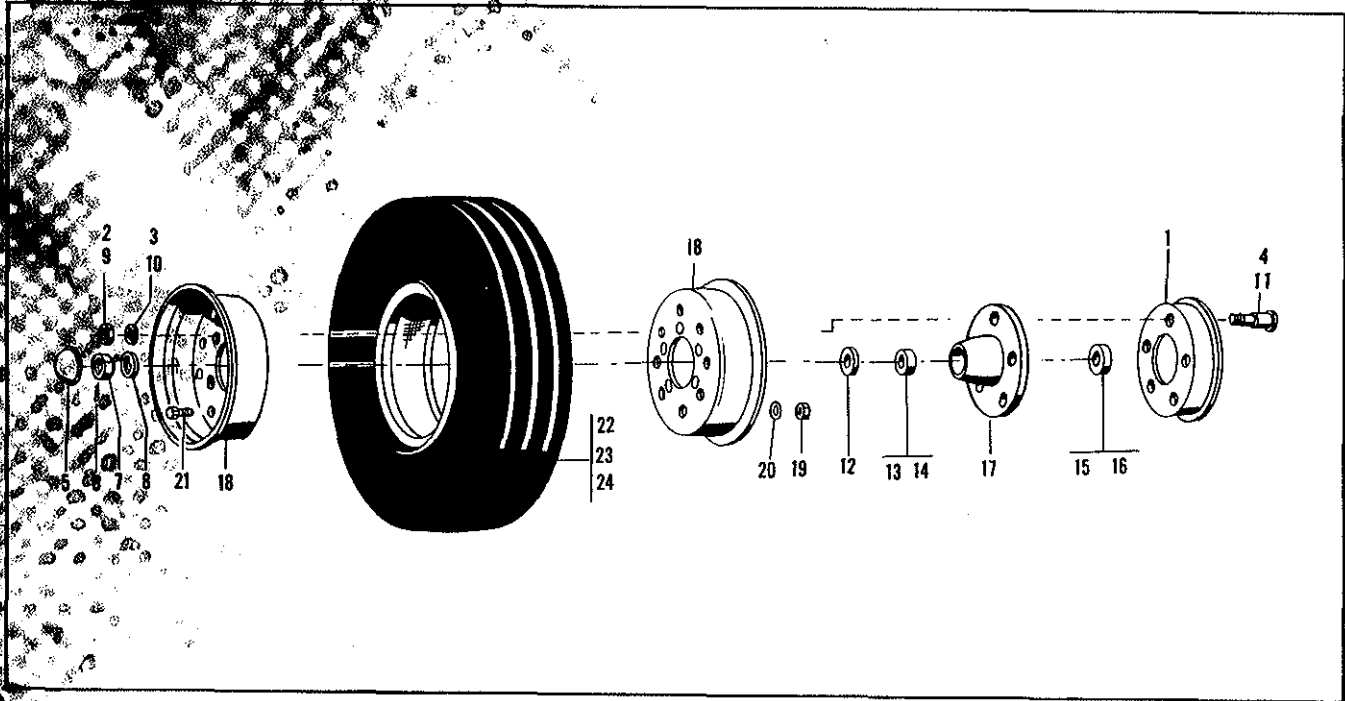
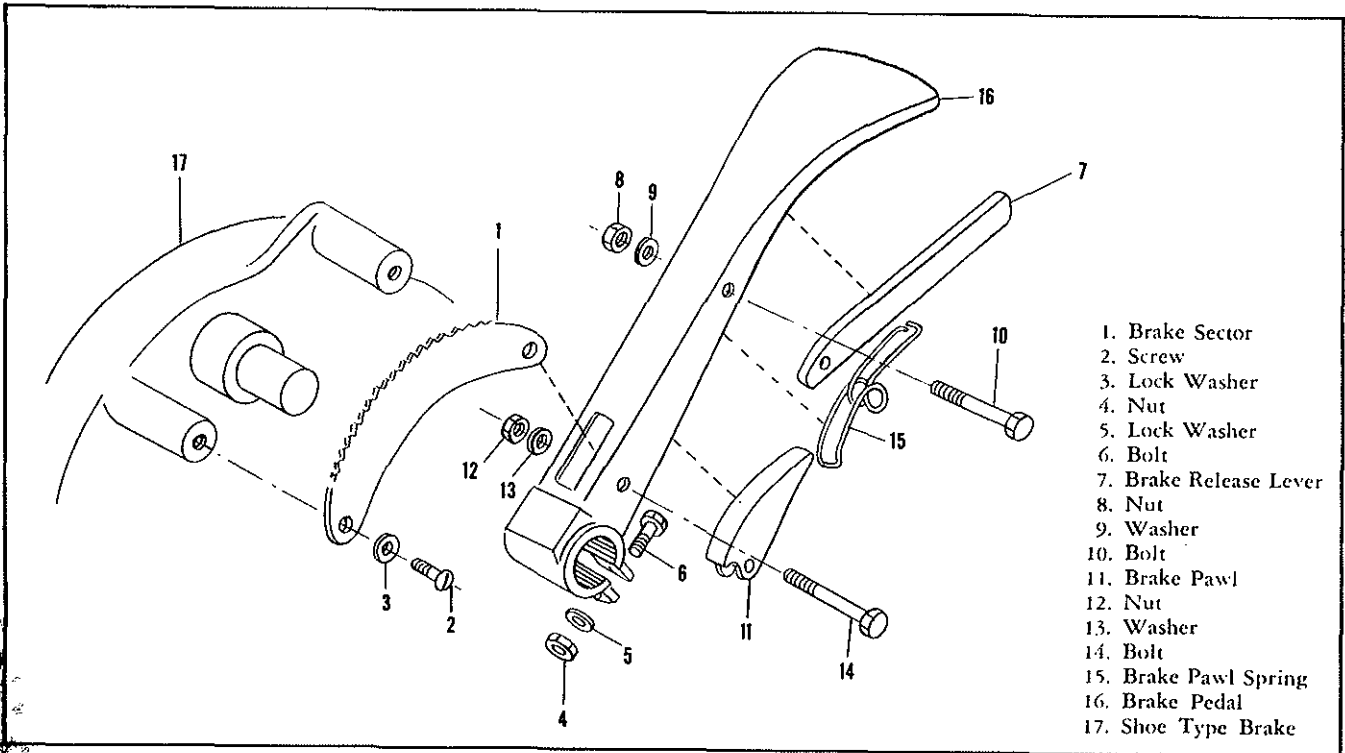


Figure 3-3. Wheel, Hub, Tire, Tube and Flap Assembly.

- |                         |                      |                           |                 |
|-------------------------|----------------------|---------------------------|-----------------|
| 1. Brake Drum           | 7. Nut               | 13. Outboard Bearing Cup  | 19. Nut         |
| 2. Nut                  | 8. Key Washer        | 14. Outboard Bearing Cone | 20. Lock Washer |
| 3. Lock Washer          | 9. Nut               | 15. Inboard Bearing Cup   | 21. Bolt        |
| 4. Ribbed Neck Bolt     | 10. Lock Washer      | 16. Inboard Bearing Cone  | 22. Tire        |
| 5. Wheel Hub Grease Cap | 11. Ribbed Neck Bolt | 17. Hub                   | 23. Tube        |
| 6. Cotter Pin           | 12. Plain Seal       | 18. Wheel Half            | 24. Flap        |



- |                        |
|------------------------|
| 1. Brake Sector        |
| 2. Screw               |
| 3. Lock Washer         |
| 4. Nut                 |
| 5. Lock Washer         |
| 6. Bolt                |
| 7. Brake Release Lever |
| 8. Nut                 |
| 9. Washer              |
| 10. Bolt               |
| 11. Brake Pawl         |
| 12. Nut                |
| 13. Washer             |
| 14. Bolt               |
| 15. Brake Pawl Spring  |
| 16. Brake Pedal        |
| 17. Shoe Type Brake    |

Figure 3-4. Brake Sector and Pedal Assembly.

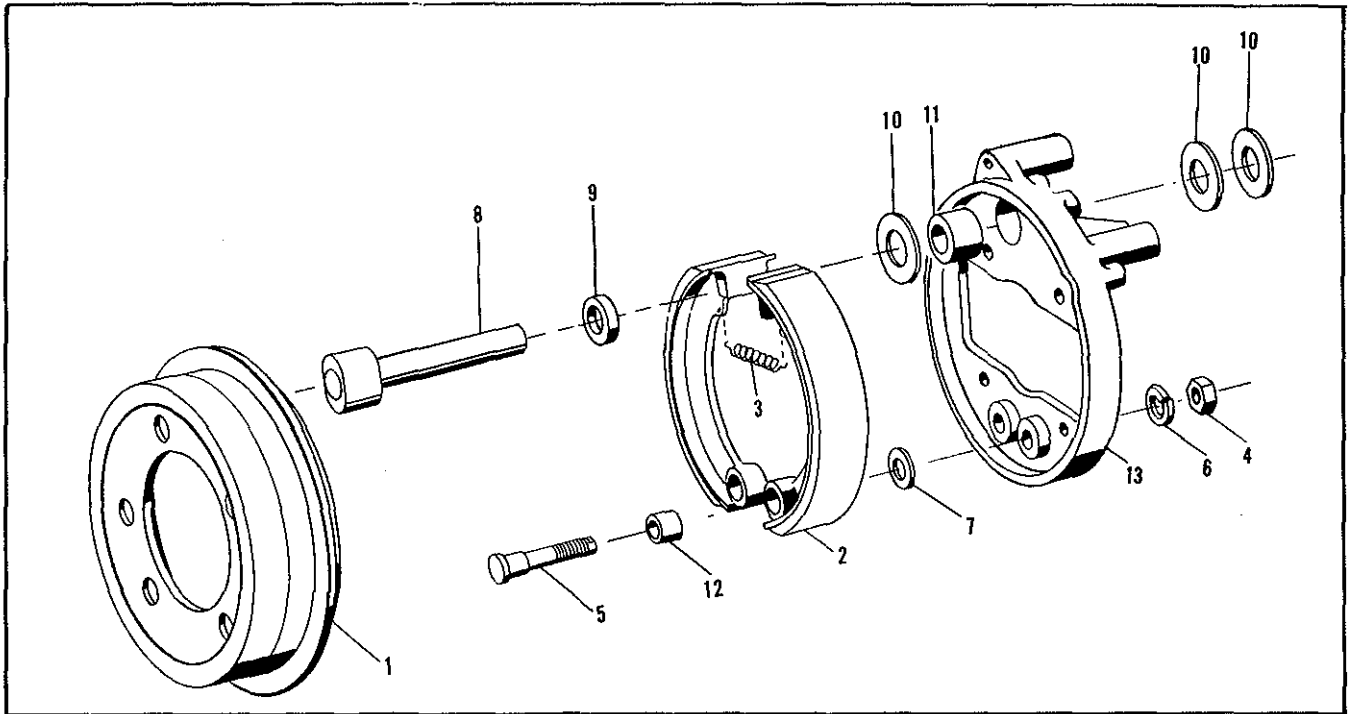


Figure 3-5. Shoe Type Brake

- |               |                    |              |                    |
|---------------|--------------------|--------------|--------------------|
| 1. Brake Drum | 5. Eccentric Pivot | 8. Cam Shaft | 11. Sleeve Bearing |
| 2. Brake Shoe | 6. Lock Washer     | 9. Spacer    | 12. Sleeve Bushing |
| 3. Spring     | 7. Washer          | 10. Washer   | 13. Mounting Plate |
| 4. Nut        |                    |              |                    |

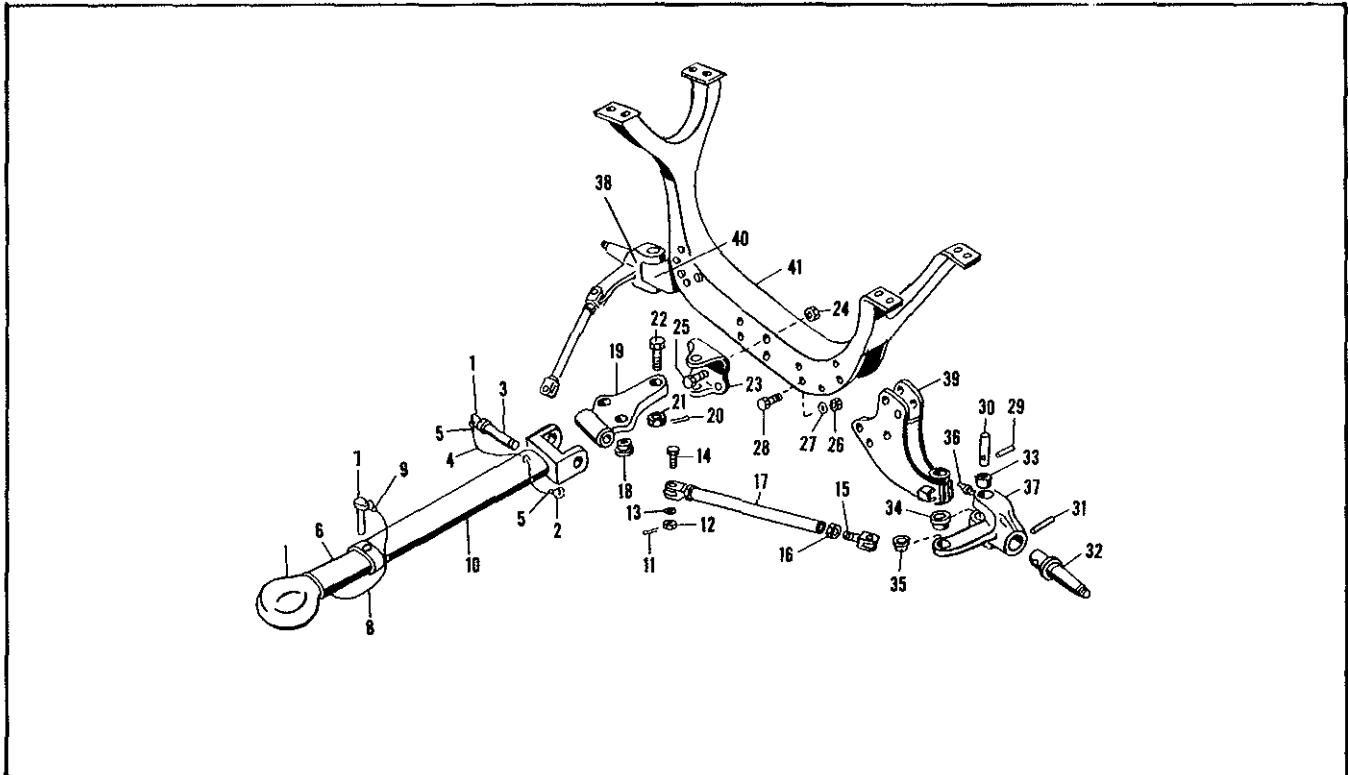


Figure 3-6. Forward Support Assembly and Steering Linkage.

KEY TO FIGURE 3-6

- |                        |                    |                               |                         |
|------------------------|--------------------|-------------------------------|-------------------------|
| 1. Ring                | 12. Nut            | 22. Bolt                      | 32. Axle Spindle        |
| 2. Lock Pin            | 13. Washer         | 23. Towing Link Bracket       | 33. Sleeve Bushing      |
| 3. Pin                 | 14. Bolt           | 24. Nut                       | 34. Shoulder Bushing    |
| 4. Cable               | 15. Rod End Clevis | 25. Bolt                      | 35. Shoulder Bushing    |
| 5. Swaging Sleeve      | 16. Nut            | 26. Nut                       | 36. Lubrication Fitting |
| 6. Inner Tube Assembly | 17. Tierod Tube    | 27. Washer                    | 37. LH Steering Knuckle |
| 7. Spring Lock Pin     | 18. Sleeve Bushing | 28. Bolt                      | 38. RH Steering Knuckle |
| 8. Cable               | 19. Towing Link    | 29. Spring Pin                | 39. LH Wheel Support    |
| 9. Swaging Sleeve      | 20. Cotter Pin     | 30. Steering Knuckle King Pin | 40. RH Wheel Support    |
| 10. Outer Towbar Tube  | 21. Nut            | 31. Spring Pin                | 41. Frame Assembly      |

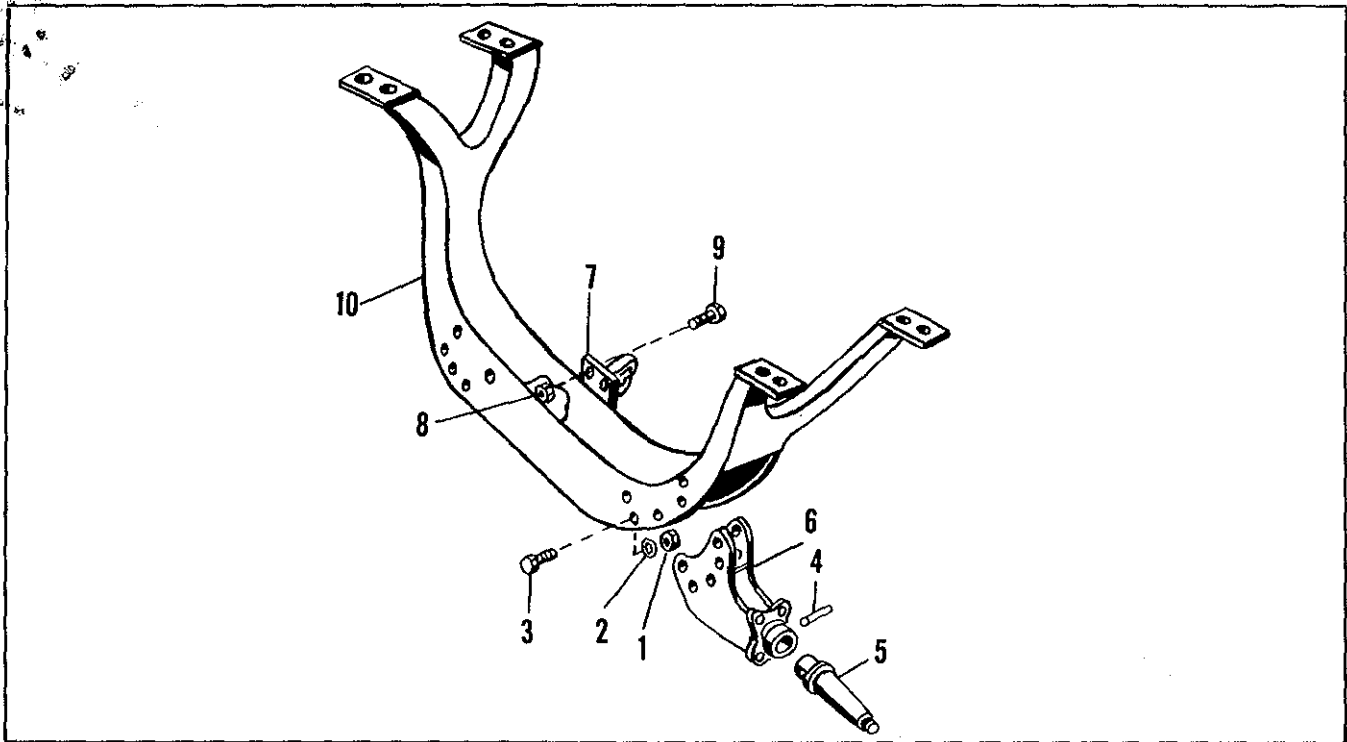


Figure 3-7. Aft Frame and Support Assembly.

- |           |                  |                  |           |
|-----------|------------------|------------------|-----------|
| 1. Nut    | 4. Spring Pin    | 7. Towing Pintle | 9. Bolt   |
| 2. Washer | 5. Axle Spindle  | 8. Nut           | 10. Frame |
| 3. Bolt   | 6. Wheel Support |                  |           |

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 3-1. through 3-7.)

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.

## SECTION IV

### PREPARATION FOR ENGINE SHIPMENT

#### 4-1. TRANSPORTATION ADAPTER KIT.

4-2. The correct adapter kit required for shipment of a designated jet aircraft engine loaded on the Model 2000 Trailer shall be as specified in the following chart.

**CROSS REFERENCE CHART, ENGINE TO ADAPTER KIT**

<i>Engine Type and Model</i>	<i>Transportation Adapter Kit No.</i>	<i>Engine Type and Model</i>	<i>Transportation Adapter Kit No.</i>
J35-	105063	J47-GE25	105063
J47-GE7	105063	J47-GE27	105063
J47-GE9	105063	J47-GE33	105063
J47-GE11	105063	J65-1	105067-3
J47-GE13	105063	J65-3	105067-3
J47-GE15	105063	J65-4	105067-3
J47-GE17	105063	J65-5	105067-3
J47-GE19	105063	J65-6	105067-5
J47-GE23	105063	J65-7	105067-3

NOTE: For physical description of Adapter Kits see figures 4-1 through 4-3.

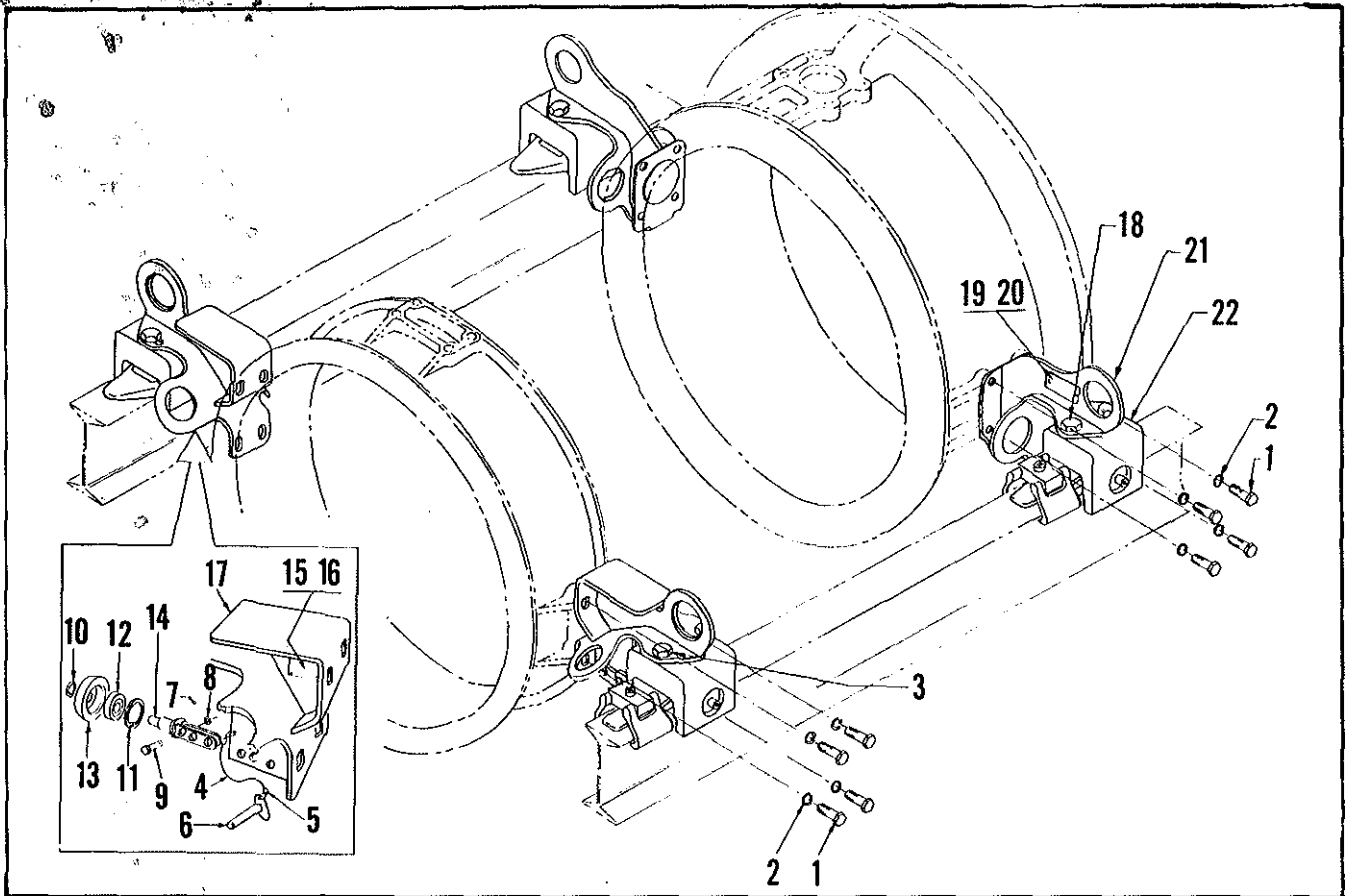


Figure 4-1. Transportation Adapter Kit No. 105063

Fig. & Index No.	Part Number	DESCRIPTION	Units Per Assy	Usable on Code
		1 2 3 4 5 6 7		
4-	105063	ADAPTER KIT, Transportation (Stock No. 1730-573-5112)	Kit	
- 1	AN8-7A	BOLT	16	
- 2	AN935-816	WASHER, Lock	16	
- 3	AN9-13A	BOLT	4	
	100764	ADAPTER, Fwd	2	
	S-102408-5	CABLE ASSEMBLY	1	
- 4	COMM	CABLE, 0.062 dia x 9.50 lg, 7 x 7 flex stainless steel	1	
- 5	28-1-C	SWAGING SLEEVE, Wire rope, (National Telephone and Supply Co., Cleveland, Ohio)	2	
- 6	BL-ST5-8-1.000	PIN, Quick Release (DW Price Corp., Los Angeles, Calif.)	1	
- 7	AN380-3-4	PIN, Cotter	1	
- 8	AN960-816	WASHER	1	
- 9	AN398-31	PIN, Flat head	1	
	S103472	ROLLER ASSEMBLY, Upload	1	
- 10	NAS-51-75	RING, External retaining	1	
- 11	NAS-50-162	RING, Internal retaining	1	
- 12	KP-12A	BEARING, Ball (Fafnir Bearing Co., New Briton, Conn.)	1	
- 13	S-103473	ROLLER	1	
- 14	S-103474	SHAFT	1	
- 15	AN535-0-3	SCREW, Drive	2	
- 16	101206	PLATE, Instruction	1	
- 17	100764-11	ADAPTER	1	
- 18	AN9-14A	BOLT	4	
	100637	ADAPTER, Mid frame	2	
- 19	AN535-0-3	SCREW, Drive	2	
- 20	101201	PLATE, Instruction	1	
- 21	100637-7	ADAPTER	1	
- 22	104568	ADAPTER ASSEMBLY, Roller, Model 2550 (See figure 4-3)	4	



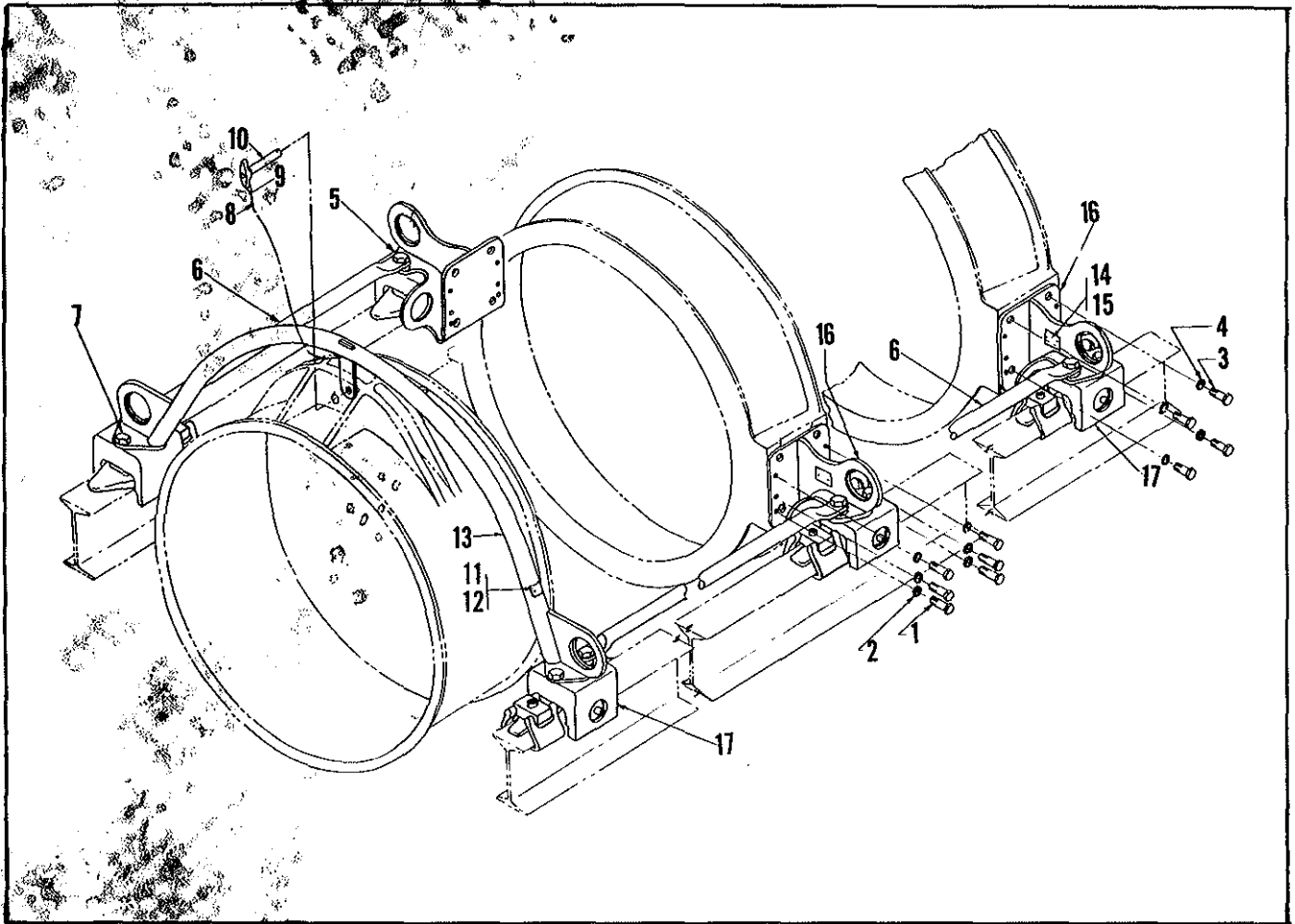


Figure 4-2. Transportation Adapter Kit No. 105067-3 and 105067-5

Fig. & Index No.	Part Number	DESCRIPTION	Units							Usable on Code	
			1	2	3	4	5	6	7		Per Assy
2-	105067-3	ADAPTER KIT, Transportation (Stock No. 1730-573-5115)								1	A
2	105067-5	ADAPTER KIT, Transportation (Stock No. 1730-573-5115)								1	B
1	AN6-10A	BOLT								12	A
2	AN935-616	WASHER, Lock								12	A
3	AN9-11A	BOLT								8	B
4	AN935-916	WASHER, Lock								8	B
5	AN9-22A	BOLT								4	
6	102199	SPACER, Adapter								2	
7	AN9-13A	BOLT								4	
	100824	ADAPTER, Fwd								1	
	S-102408-7	CABLE ASSEMBLY								1	
8	COMM	CABLE, 0.062 dia x 11.50 lg 7 x 7 flex stainless steel								1	
9	28-1-C	SWAGING SLEEVE, Wire rope (National Telephone and Supply Co. Inc., Cleveland, Ohio)								1	
10	BL-STS-10-3.500	PIN, Quick-release (D.W. Price Corp., Los Angeles, Calif.)								1	
11	AN535-0-3	SCREW, Drive								2	
12	101205	PLATE, Instruction								1	
13	100824-9	SUPPORT								1	
	100825	ADAPTER, Mid-frame								2	
14	AN535-0-4	SCREW, Drive								2	
15	101202	PLATE, Instruction								1	
16	100825-7	ADAPTER								1	
17	104568	ADAPTER ASSEMBLY, Roller Model 2550 (See figure 4-3)								4	

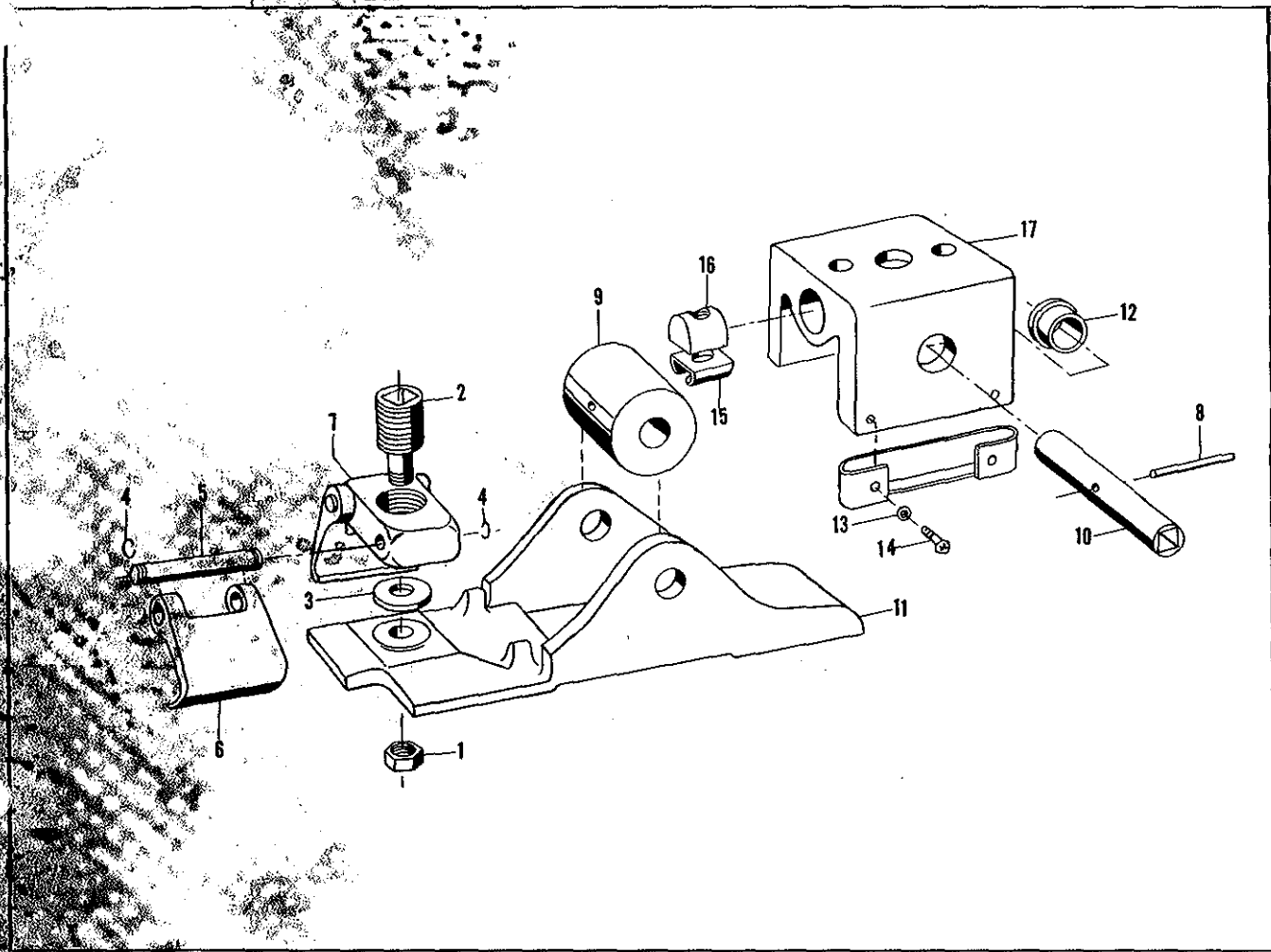


Figure 4-3. Roller Adapter, Model 2550

Fig. & Part Index No.	Part Number	DESCRIPTION	Units Per Assy	Usable on Code
	104568	ADAPTER ASSEMBLY, Roller, Model 2550 (AF Stock No. 8220-005010-2547) (See figures 4-1 and 4-2 for next higher assembly)		Ref
1	AN318-6R	NUT	1	
2	101639	SCREW, Brake (Stock No. 1740-568-9586)	1	
3	100625	WASHER, Thrust (Stock No. 5310-596-6606)	1	
4	NAS51-37	RING, Retainer	4	
5	100630	PIN (Stock No. 5315-663-0614)	2	
6	100946	HOOK, Clamp (Stock 1740-568-9582)	2	
7	S-105719	NUT	1	
8	MS171662	PIN, Spring	1	
9	104541	ROLLER	1	
10	104540	SHAFT	1	
11	100947	BRAKE SHOE (Stock No. 1740-568-9583)	1	
12	104542	BUSHING	2	
13	AN935-10L	WASHER, Lock	2	
14	AN515-10R8	SCREW	2	
15	HS98482	RETAINER (Stock No. 6700-480005-28) (Kaynar Mfg. Co., Los Angeles, Calif.)	2	
16	K1933-918	NUT, Barrel (Stock No. 6500-523780-45) (United Carr Fastener Corp., Cambridge, Mass.)	2	
17	104564	HOUSING	1	

**4-3. AIR SHIPMENT.** (See figure 4-4.)

4-4. Refer to the instruction plate on either the forward or midframe adapter for proper load location and position load on the Model 2000 Trailer so that the adapter to which the instruction plate is attached is at this location on the trailer rails.

**CAUTION**

Make certain the load position indicated on the instruction plate is the correct one for the engine type and model being transported.

4-5. Securely lock all four roller adapters (1) using standard 1/2-inch socket drive.

4-6. Position loaded Model 2000 Trailer in aircraft so that cargo tie-down rings are in proper position relative to tie-down points of adapters, then set footbrakes of trailer.

4-7. Remove towbar (2) from towing position and secure in stowage brackets (3).

4-8. Tie trailer down as illustrated in figure 4-4, making certain tie-downs are tight.

4-9. Prior to movement, check roller adapters (1) and tie-downs (4 and 5) for security.

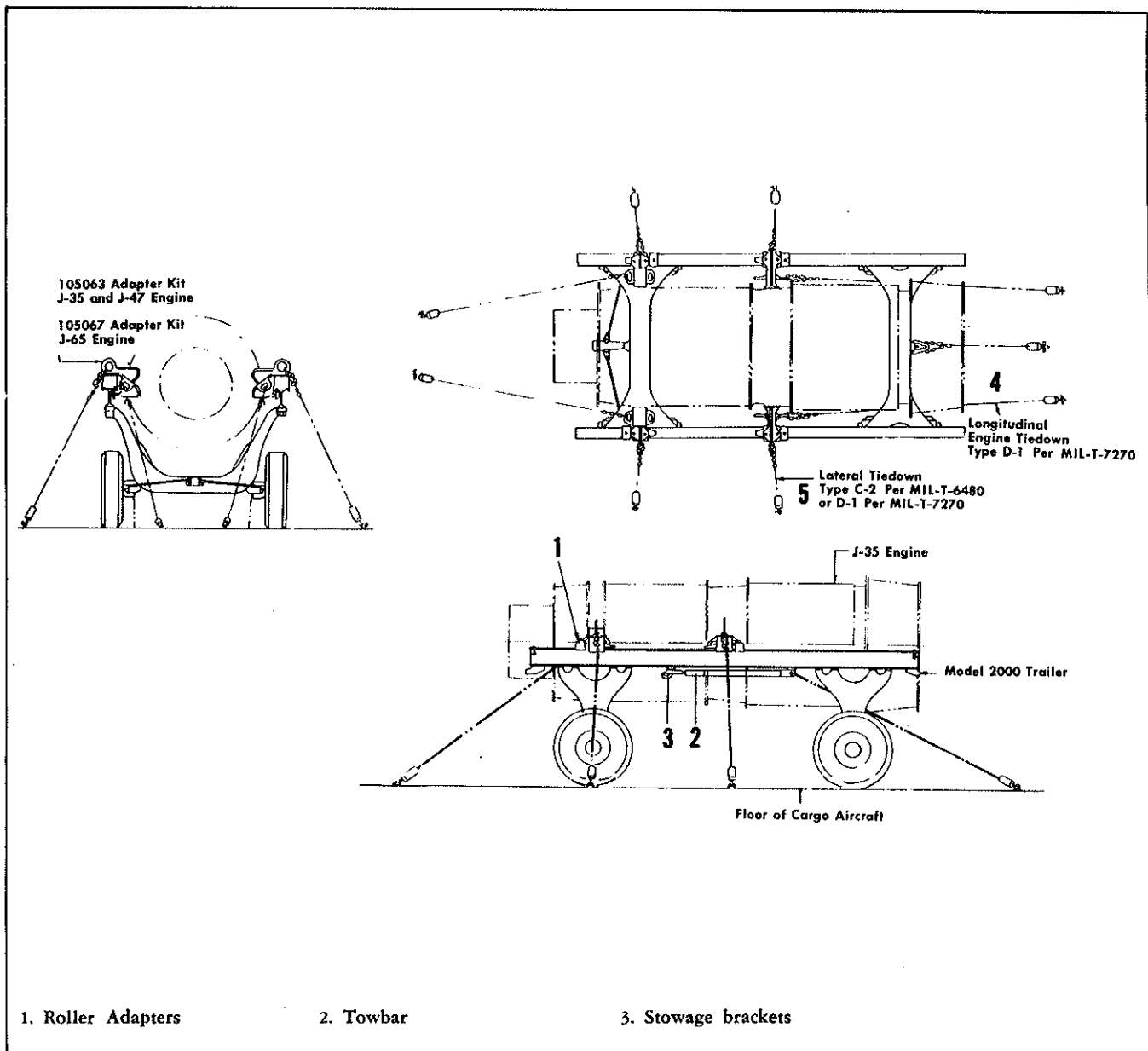


Figure 4-4. Air Shipment Tie-Down

**4-9. TRUCK SHIPMENT.** (See figure 4-5.)

4-10. Refer to the instruction plate on either the forward or midframe adapter for proper load location and position the load on the Model 2000 Trailer so that the adapter to which the instruction plate is attached is at this location on the trailer rails.

**CAUTION**

Make certain the load position indicated on the instruction plate is the correct one specified for the engine type and model being transported.

4-11. Securely lock all four roller adapters (1) using standard 1/2-inch socket drive.

4-12. Load and position loaded Model 2000 Trailer on truck bed so that the tie-down rings or hooks located on or under the truck bed are in proper position for the load tie-down, then set trailer foot brakes.

4-13. Remove tow-bar (2) from towing position and secure in stowage brackets (3).

4-14. Tie trailer down as illustrated in figure 4-5, making certain all tie-downs are tight.

4-15. Block all four wheels for end and side movement as illustrated, nailing lower 2 inch by 4 inch blocks to truck bed and upper blocks to lower.

**Note**

If available, wedge-shaped wheel chocks may be used for end movement if sufficient nailing area is available on block to insure securing to truck bed.

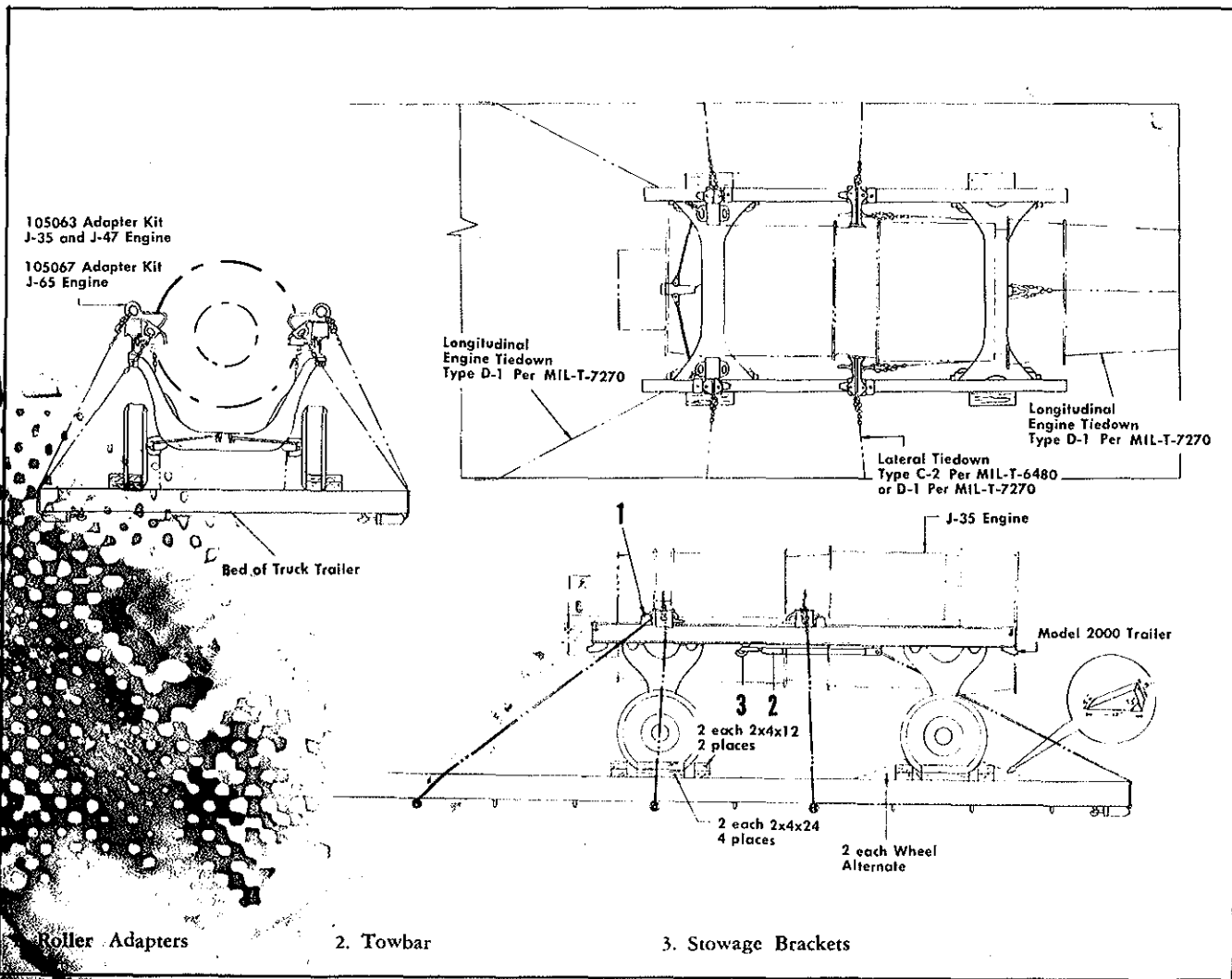


Figure 4-5. Truck Shipment Tie-Down

★  
T.O. 35D3-3-25-4

ILLUSTRATED PARTS BREAKDOWN

**ENGINE TRANSPORTATION TRAILER**

MODEL 2000

AF STOCK NO. 8220-750421-855

(AIR LOGISTICS)

THIS PUBLICATION REPLACES T.O. 35D3-3-25-4  
DATED 15 NOVEMBER 1957

PUBLISHED UNDER AUTHORITY OF THE SECRETARY OF THE AIR FORCE

★  
1 JUNE 1958

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**T.O. 35D3-3-25-4**

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## SECTION I INTRODUCTION

### 1-1. GENERAL.

1-2. This Illustrated Parts Breakdown lists, describes and illustrates all parts for the Model 2000, Engine Transportation Trailer, manufactured by Air Logistics Corporation, 3600 E. Foothill Blvd., Pasadena, California.

#### Note

This handbook does not contain maintenance information. For maintenance of the equipment, refer to T.O. 35D3-3-25-1, Handbook of Operation, Service and Repair Instructions.

### 1-3. TABLE OF CONTENTS.

1-4. The Table of Contents at the front of the handbook serves as a guide to sequence of assemblies and sub-assemblies and the page number on which they appear.

### 1-5. GROUP ASSEMBLY PARTS LIST, SECTION II.

1-6. The Group Assembly Parts List consists of the complete trailer divided into 7 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 detail part of each group assembly.

b. The numbers appearing in the "Part Number" column are either Air Logistics Corporation, government standard or vendor assigned part number. Common parts commercially available are listed as "COMM".

c. The "Description" column lists the noun followed by descriptive modifiers except for government standard parts, which are listed by noun only, and commercially available parts which are completely described to permit procurement and replacement by description. Attaching parts are listed immediately following the items which they attach, are captioned "(ATTACHING PARTS)" and are separated from subsequent listings by the symbol "\_\_\_\_\_\*\_\_\_\_\_" . In the case of purchased vendor

items, the vendors code or name and address immediately follows the part description.

d. The quantities shown in the "Units per Assembly" column are, in the case of assemblies, the total quantity used per trailer, while the quantities listed for 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 III, 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.

### 1-7. NUMERICAL INDEX, SECTION III.

1-8. The Numerical Index lists all of the part numbers in the Group Assembly Parts List, Section II, in alpha-numerical sequence in accordance with the following:

a. Part number 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 or precedence in part number arrangement is as follows:

(1) Space (blank column)

(2) Dash (—)

(3) Letters A through Z

(4) Numerals 0 through 9

(Alphabetical "O"s are considered as numerical "O"s.)

c. "No Number" and commercial parts are listed by their principal identifying noun alphabetically in the body of the alpha-numerical listing.

d. The "Qty per Article" column of the Numerical Index indicates the total quantities used on the trailer. Government standard parts are shown in the Numerical Index for the first occurrence only of the part in the Group Assembly Parts List. All other parts are shown each time they occur, with the figure and index number noted for each occurrence. Stock numbers not listed in this handbook may be found in the S-00-1 Master Numerical Index (Air Force Stock Numbers) or S-00-1-1 Master Cross Reference Index (Federal Stock Numbers).

### 1-9. MANUFACTURER'S PART NUMBERING SYSTEM.



1-10. The manufacturer's part numbering system is divided into the following four categories:

a. Part Number — sequential arrangement has no particular significance.

b. Standard (multi-application) Part — consists of part number, sequential assignment of which has no particular significance, preceded by "S".

c. No Number Assembly or Installation — a fictitious number assigned to a group of components for convenience of cataloging.

d. No Number Part — a component for which no number has been assigned.

### 1-11. SOURCE CODE DEFINITIONS.

a. CODE "A", ASSEMBLE, ASSEMBLY NOT PROCURED.

(1). Code "A" is applied to assemblies composed of two or more units, each of which carry individual part numbers and descriptions and which may be assembled by any maintenance level.

(2). Code "A1" is applied to assemblies composed of two or more parts each of which carry individual part numbers and description and which may be assembled only by activities having depot (O & R) facilities.

b. CODE M, MANUFACTURE, PARTS NOT PROCURED.

(1). Code "M" is applied to parts which are within the facilities of any activity to manufacture. Procurement and stocking are not justified in view of the relatively infrequent usage, or storage and installation factors of their parts. Replacement to be by local manufacture as required.

(2). Code "M1" is applied to parts which can be manufactured only by utilizing the facilities of the depot (O & R) activity. Procurement and stocking of these parts is not justified in view of the relatively infrequent usage or storage and installation factors. The needs of all facilities are to be met through salvage or by depot (O & R) level manufacture.

c. CODE P, PARTS UNDER INVENTORY STOCK CONTROL.

Code "P" is applied to parts which are procured in view of relatively frequent usage. Code "P" parts may be requisitioned and installed by any maintenance level, unless followed by the letter "O" which restricts requisitioning and replacement to depot level only. Restricted service manufacture is considered impracticable but only after an attempt has been made to procure these parts from supply sources. In lieu of "P" coded parts, the department may utilize depot (O & R) activity to manufacture and stock parts for the program.

Code "P1" is applied to parts which are very difficult or uneconomical to manufacture. Service manufacture is considered impracticable. Code "P1" parts may be requisitioned and installed by any maintenance level, unless followed by the letter "O" which restricts

requisition and replacement to depot (O & R) level only.

d. CODE X; PARTS CONSIDERED IMPRACTICAL FOR MANUFACTURE OR PROCUREMENT.

(1). Code "X" is applied to main structural numbers or similar parts which, if required, would suggest expensive reconditioning. The need of a part or parts coded "X" should normally result in a recommendation to retire the equipment from service.

(2). Code "X1" is applied to parts for which procurement of the next larger assembly is justified.

(3). Code "X2" is applied to parts which are neither procured nor stocked. Activities requiring such parts shall attempt to obtain them from salvage. If not obtainable through salvage, such parts shall be requisitioned through normal supply channels with supporting justification.

e. CODE "\*" is applied to installation drawings, instructions or field service drawings, basic drawings which cannot be procured or manufactured, and obsolete parts.

### 1-12. REFERENCE DESIGNATION INDEX, SECTION IV.

1-13. There is no "Reference Designation Index", Section IV, required for this Illustrated Parts Breakdown.

### 1-14. USE OF THE ILLUSTRATED PARTS BREAKDOWN.

1-15. 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 III. 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 number on the illustration. The part number and description will be found opposite that number on the accompanying parts list.

### 1-16. VENDORS CODE.

1-17. Vendors codes applied in this handbook are in accordance with Federal Cataloging Handbook H4-1, immediately follow the description of the part and are listed below in numerical sequence by code.

CODE	VENDORS NAME AND ADDRESS
00481	Asco Sintering Corp. Los Angeles, California
60038	Timken Roller Bearing Co. Canton, Ohio
76691	National Telephone & Supply Co., Inc. Cleveland, Ohio
83269	Welded Construction & Engineering Co. Cleveland, Ohio
83445	Aerol Manufacturing Co., Los Angeles, California
92798	Johns-Manville Corp. Manville, New Jersey
97978	D. W. Price Corp. Los Angeles, California
99946	J. M. Beach Associates Dayton, Ohio

**SECTION II**  
**GROUP ASSEMBLY PARTS LIST**

Fig. & Index No.	Part Number	DESCRIPTION							Units Per Assy	Usable on Code
		1	2	3	4	5	6	7		
1-	100334	TRAILER ASSEMBLY, Engine Transportation . . . . .							Ref	
- 1	No Number	RAIL ASSEMBLY, Transfer (See figure 2.) . . . . .							2	
		(ATTACHING PARTS)								
- 2	MS20365-820	NUT . . . . .							16	
- 3	AN960-816L	WASHER . . . . .							16	
- 4	AN8-11A	BOLT . . . . .							16	
		* . . . . .								
- 5	A-260	CAP, Grease, wheel hub . . . . .							4	
- 6	No Number	WHEEL, HUB, TIRE AND TUBE ASSEMBLY (See figure 3) . . . . .							4	
		(ATTACHING PARTS)								
- 7	AN381-4-28	PIN, Cotter . . . . .							4	
- 8	AN320-16	NUT . . . . .							4	
- 9	111555	WASHER, Key . . . . .							4	
		* . . . . .								
- 10	No Number	BRAKE, SECTOR AND PEDAL ASSEMBLY (See figure 4) . . . . .							2	
		(ATTACHING PARTS)								
- 11	MS20364-624	NUT . . . . .							8	
- 12	AN960-616L	WASHER . . . . .							8	
- 13	AN6-11A	BOLT . . . . .							8	
		* . . . . .								
- 14	No Number	SUPPORT ASSEMBLY and steering linkage fwd (See figure 6.) . . . . .							1	
- 15	No Number	FRAME AND SUPPORT ASSEMBLY, Aft (See figure 7.) . . . . .							1	
	104395	STOWAGE INSTALLATION, Towbar . . . . .							1	
- 16	104873	BRACKET . . . . .							1	
- 17	104876	BRACKET . . . . .							1	
- 18	104877	CLAMP . . . . .							2	
- 19	MS20364-624	NUT . . . . .							2	
- 20	AN6-11A	BOLT . . . . .							2	
- 21	100877	PLATE, Identification . . . . .							1	
		(ATTACHING PARTS)								
- 22	AN535-0-4	SCREW, Drive . . . . .							4	
		* . . . . .								
- 23	100879	PLATE, Instruction . . . . .							1	
		(ATTACHING PARTS)								
- 24	AN535-0-4	SCREW, Drive . . . . .							2	
		* . . . . .								
- 25	100881	PLATE, Instruction . . . . .							4	
		(ATTACHING PARTS)								
- 26	AN535-0-4	SCREW, Drive . . . . .							8	

Section II  
Group Assembly Parts List

T.O. 35D3-3-25-4

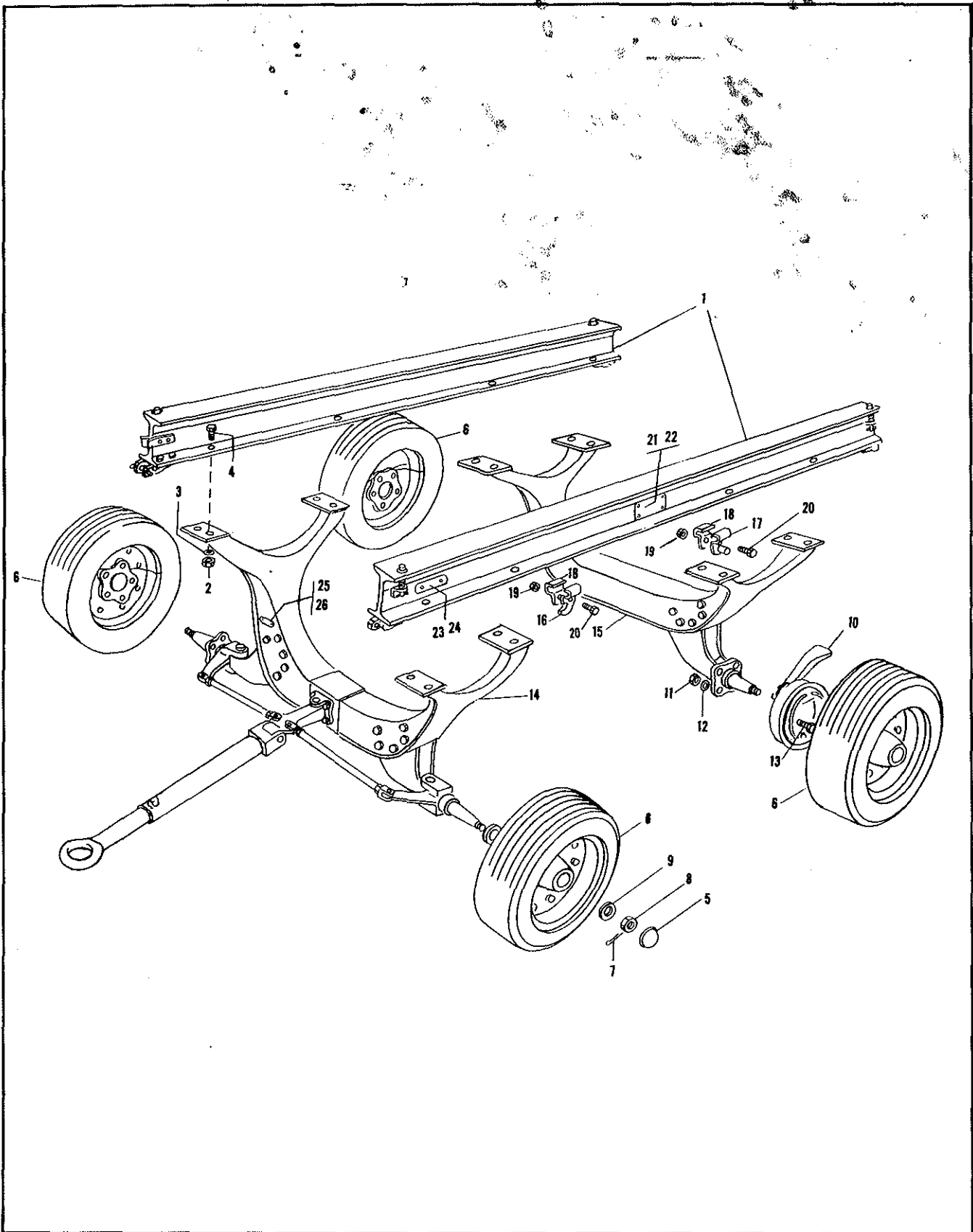


Figure 1. Engine Transportation Trailer Assembly

Section II  
Group Assembly Parts List

T.O. 35D3-3-25-4

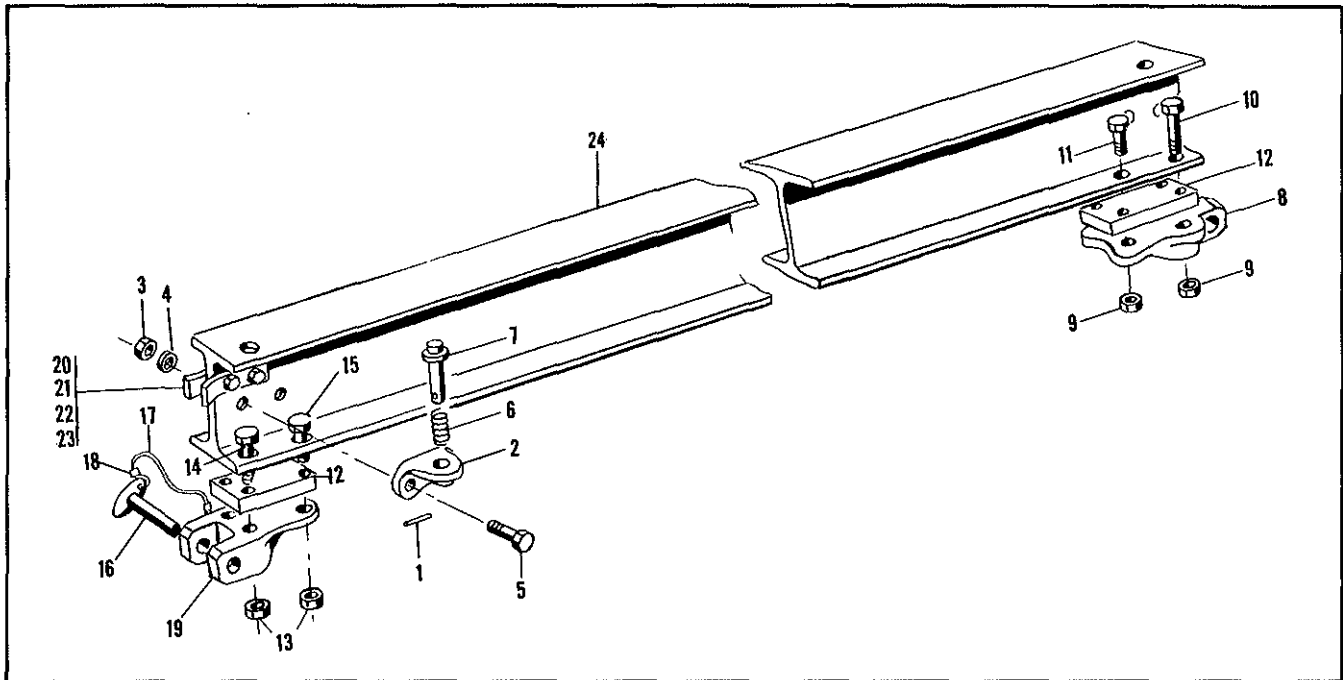


Figure 2. Transfer Rail Assembly

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		
- 1	MS171662									2	
- 2	111534									2	
		(ATTACHING PARTS)									
- 3	MS20364-428									4	
- 4	AN960-416									4	
- 5	AN4-7A									4	
		*-----*									
- 6	111535									2	
- 7	111536									2	
- 8	102314									1	
		(ATTACHING PARTS)									
- 9	MS20365-624									4	
- 10	AN6-21A									2	
- 11	AN6-30A									2	
		*-----*									
- 12	100553									2	
	102334									1	
		(ATTACHING PARTS)									
- 13	MS20365-624									4	
- 14	AN6-21A									2	
- 15	AN6-30A									2	
		*-----*									
- 16	BL-STS-12.750									1	
	S-102408-9									1	
- 17	COMM									1	
- 18	28-1-C									2	
		*-----*									
- 19	102313									1	
- 20	111537									2	
		(ATTACHING PARTS)									
- 21	MS20364-428									2	
- 22	AN960-416									2	
- 23	AN4-7A									2	
		*-----*									
- 24	100456									1	
		RAIL, Transfer									

Section II  
Group Assembly Parts List

T.O. 35D3-3-25-4

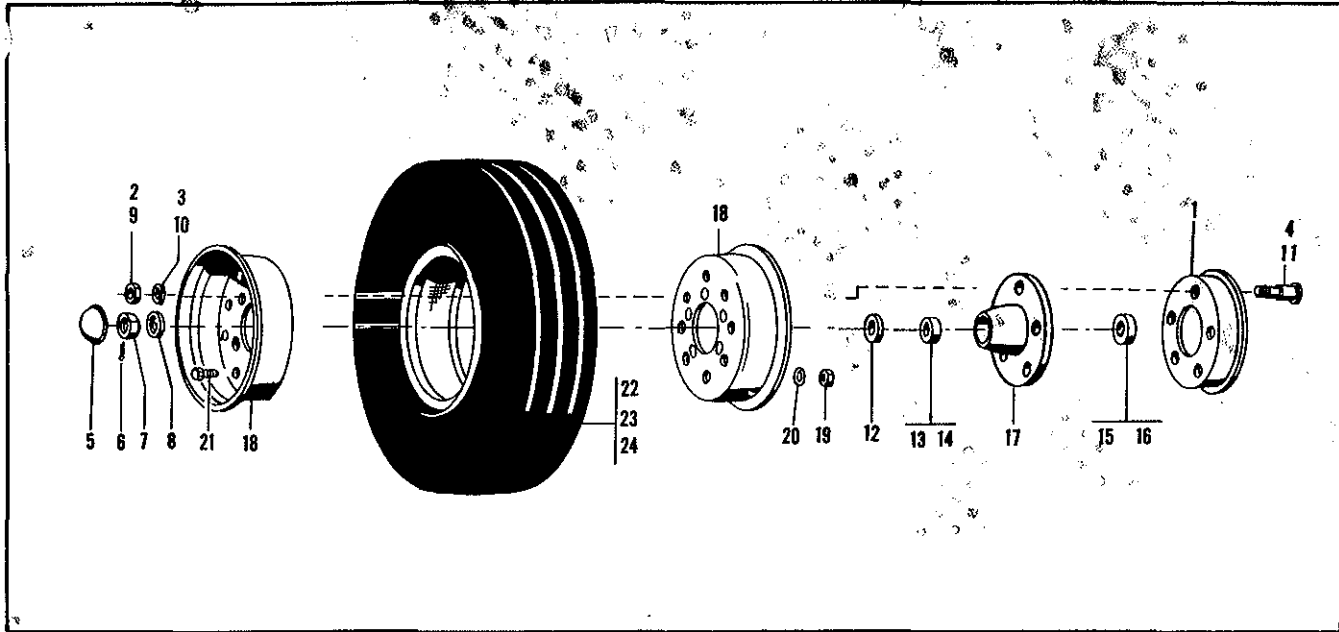


Figure 3. Wheel, Hub, Tire and Tube Assembly

Fig. & Index No.	Part Number	DESCRIPTION							Units Per Assy	Usable on Code
		1	2	3	4	5	6	7		
3-	No Number	WHEEL, HUB, TIRE AND TUBE ASSEMBLY (See figure 1-6 for next higher assembly)							1	Ref
1	51267-6	BRAKE DRUM (rear wheels only) (83445) (ATTACHING PARTS)							1	
2	325-8	NUT							5	
3	AN935-816	WASHER, Lock							5	
4	111556-5	BOLT, Ribbed neck							5	
	MS24328-2	HUB ASSEMBLY							1	
5	*A-260	CAP, Grease, wheel hub							1	
6	*AN381-4-28	PIN, Cotter							1	
7	*AN320-16	NUT							1	
8	*111555	WASHER, Key							1	
9	**325-8	NUT							5	
10	**AN935-816	WASHER, Lock							5	
11	**111556-5	BOLT, Ribbed neck (rear wheels only)							5	
	111556-3	BOLT, Ribbed neck (front wheels only)							5	
12	MLD6081SS(H1/L7)	SEAL, Plain (92798)							1	
	A18393	BEARING ASSEMBLY, Outboard (60038)							1	
13	15245	CUP, Bearing (60038)							1	
14	15123	CONE, Bearing (60038)							1	
	A10322	BEARING ASSEMBLY, Inboard (60038)							1	
15	24720	CUP, Bearing (60038)							1	
16	24780	CONE, Bearing (60038)							1	
17	No Number	HUB							1	
	24325-1	WHEEL, Pneumatic tire							1	
18	No Number	WHEEL HALF (ATTACHING PARTS)							2	
19	325-6	NUT							8	
20	AN935-616	WASHER, Lock							8	
21	60-6-6	BOLT							8	
		*_____								
22	COMM	TIRE, 6.00 x 9 10 ply							1	
23	COMM	TUBE, 6.00 x 9							1	
24	COMM	FLAP, 6.00 x 9							1	
		*Previously listed, Figure 1, indexes 5, 7, 8, 9.								
		**Previously listed, Figure 3, indexes 2, 3, 4.								

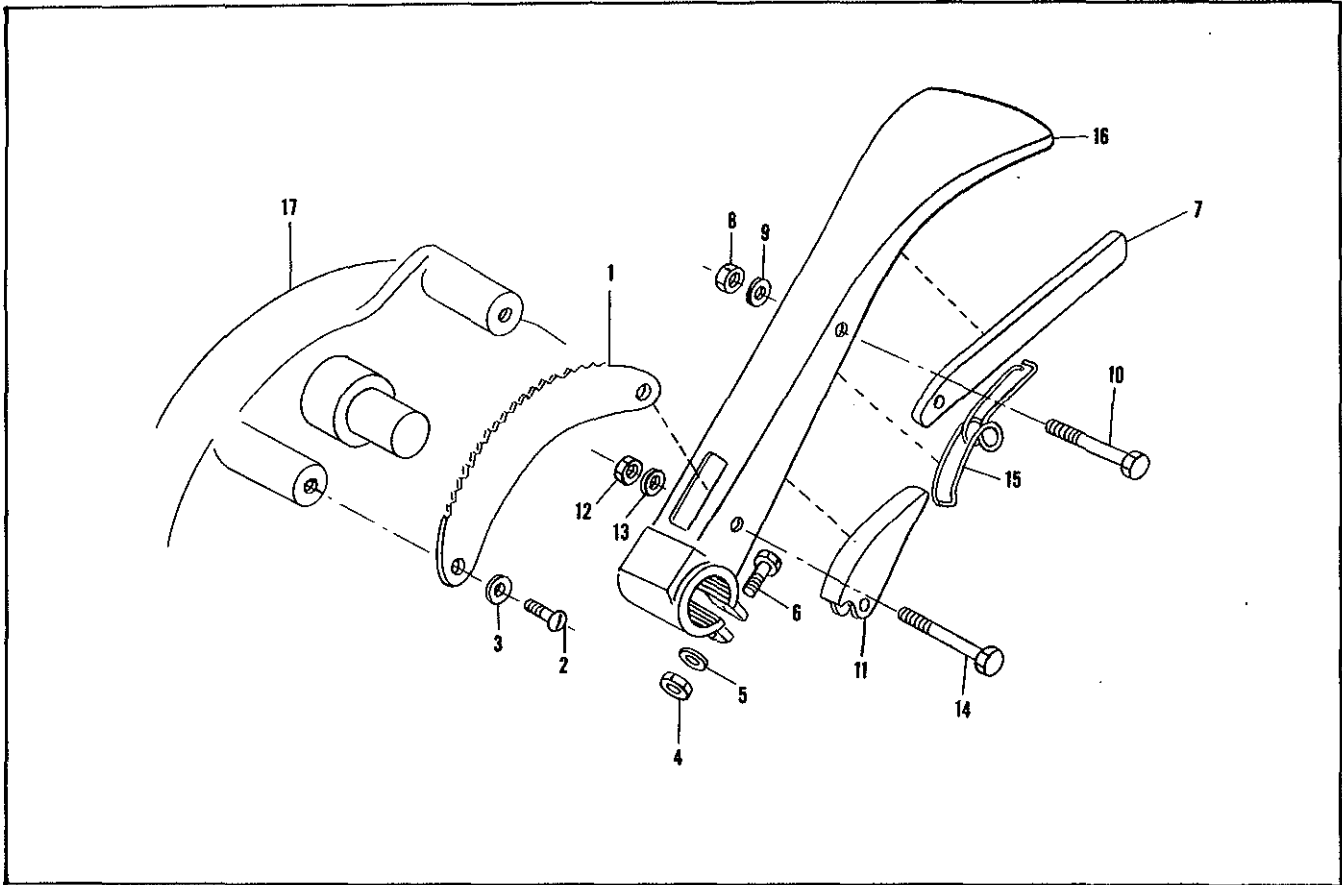


Figure 4. Brake, Sector and Pedal Assembly

Fig. & Index No.	Part Number	DESCRIPTION							Units Per Assy	Usable on Code
		1	2	3	4	5	6	7		
4-	No Number	BRAKE, SECTOR AND PEDAL ASSEMBLY (See figure 1-10 for next higher assembly)							Ref	
- 1	111543	SECTOR, Brake (ATTACHING PARTS)							1	
- 2	AN500A516-10	SCREW							2	
- 3	AN935-516	WASHER, Lock							2	
		*-----*								
	S-101694	PEDAL ASSEMBLY, Brake							1	
- 4	AN315-5R	NUT							1	
- 5	AN935-516	WASHER, Lock							1	
- 6	AN5-13A	BOLT							1	
- 7	S-104925	LEVER, Brake release (ATTACHING PARTS)							1	
- 8	MS20365-1032	NUT							1	
- 9	AN960-10	WASHER							1	
- 10	AN3-12A	BOLT							1	
		*-----*								
- 11	S-104434	PAWL, Brake (ATTACHING PARTS)							1	
- 12	MS20365-1032	NUT							1	
- 13	AN960-10	WASHER							1	
- 14	AN3-12A	BOLT							1	
		*-----*								
- 15	S-104926	SPRING, Brake pawl							1	
- 16	S-104969	PEDAL, Brake							1	
- 17	51267L	BRAKE, Shoe type (83445) (See figure 5.)							1	
	51267R	BRAKE, Shoe type (83445) (See figure 5.)							1	

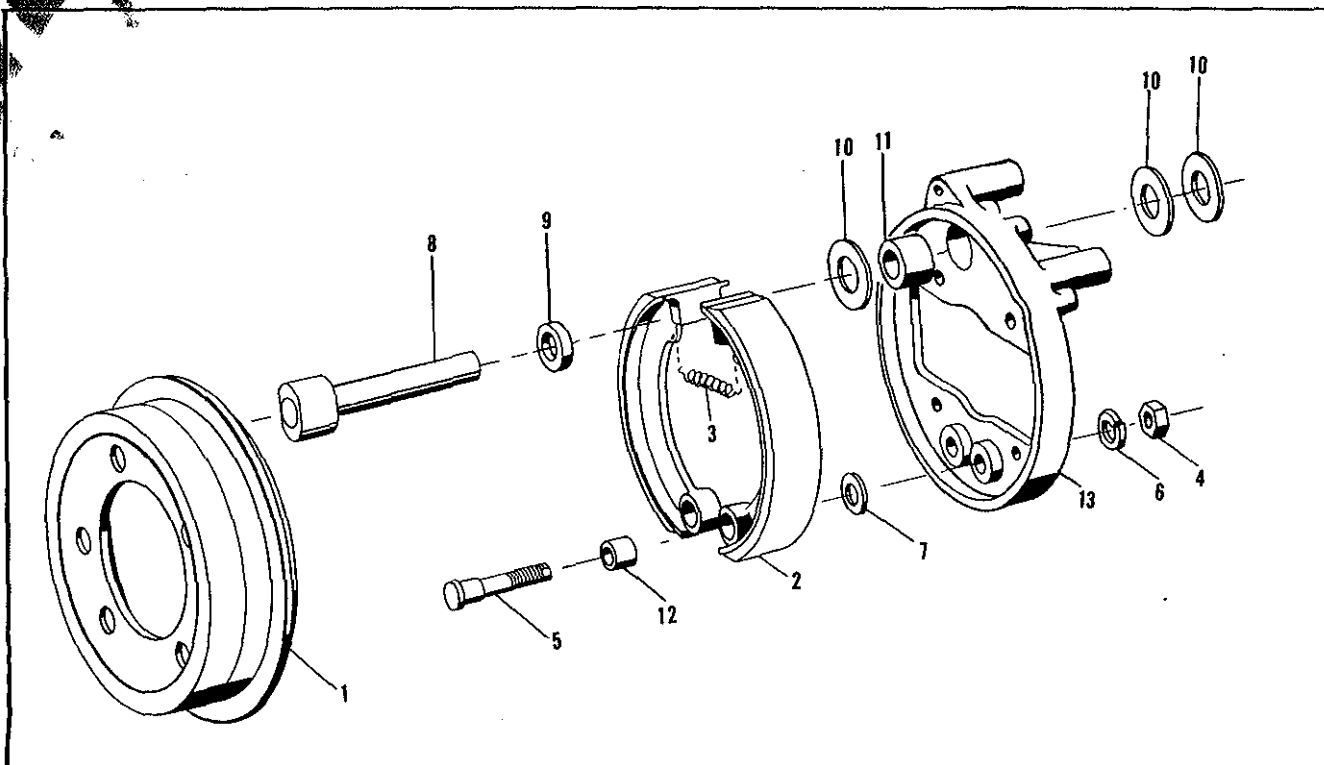


Figure 5. Brake Assembly

Fig. & Index No.	Part Number	DESCRIPTION	Units							Usable on Code	
			1	2	3	4	5	6	7		Per Assy
5-	51267L	BRAKE, Shoe type (83445) (Air Log Spec Cont Dwg 103717-1) (See figure 4-17 for next higher assembly)									Ref
	51267R	BRAKE, Shoe type (83445) (Air Log Spec Cont Dwg 103717-2) (See figure 4-17 for next higher assembly)									Ref
- 1	*51267-6	BRAKE DRUM (83445)									1
- 2	51267-2	BRAKE SHOE, Internally actuated (83445) (ATTACHING PARTS)									2
- 3	51267-5	SPRING, Helical compression (83445)									1
- 4	AN315-820	NUT									2
- 5	51279-40	PIVOT, Eccentric									2
- 6	MS35334-37	WASHER, Lock									2
- 7	AN960-816	WASHER									2
- 8	51327-46	CAM SHAFT, Actuating, brake shoe (83445)									1
- 9	51339-2	SPACER (83445)									1
- 10	AN960-1016L	WASHER									3
	51267-1-L	PLATE ASSEMBLY, Mounting, LH (83445)									1
	51267-R-R	PLATE ASSEMBLY, Mounting, RH (83445)									1
- 11	627-878-16A	BEARING, Sleeve (00481)									2
- 12	50049-12	BUSHING, Sleeve (83445)									2
- 13	51267-1-1-L	PLATE, Mounting, LH (83445)									1
	51267-1-1-R	PLATE, Mounting, RH (83445)									1

\*Previously listed, Figure 3, index 1, for disassembly sequence.



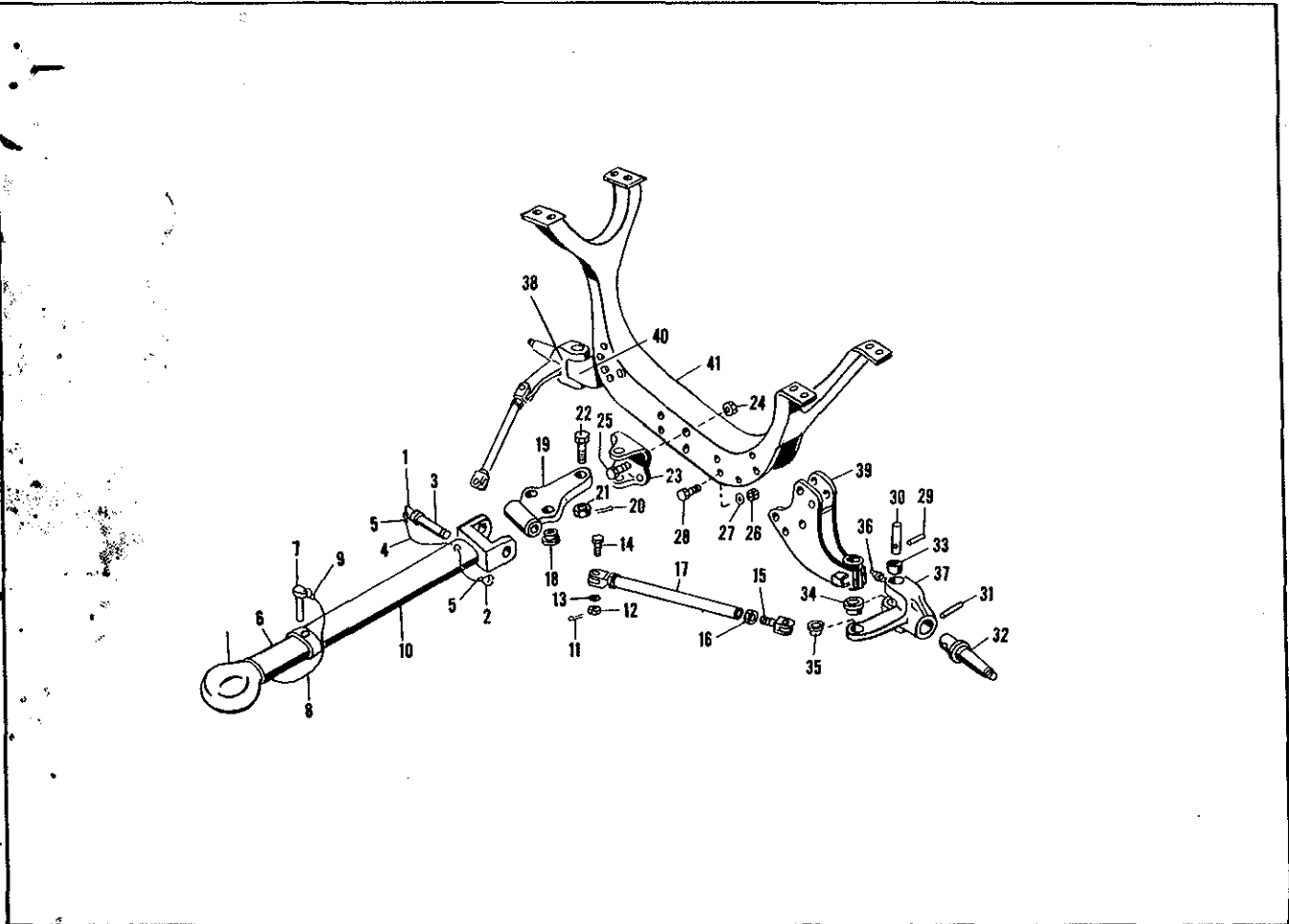


Figure 6. Forward Frame, Tow Bar and Steering Linkage Assembly

Fig. & Index No.	Part Number	DESCRIPTION	Units							Usable on Code	
			1	2	3	4	5	6	7		Per Assy
6-	No Number	SUPPORT ASSEMBLY AND STEERING LINKAGE, FWD (See figure 1-14 for next higher assembly)									Ref
	S-104438	TOWBAR ASSEMBLY, Telescoping									1
	S-105092	PIN ASSEMBLY, Towbar									1
- 1	S-105601	RING									1
- 2	S-105599	PIN, Lock									1
- 3	S-105600	PIN									1
	S-102408-11	CABLE ASSEMBLY									1
- 4	COMM	CABLE, 0.062 dia x 15.50 lg 7 x 7 flex stainless steel									1
- 5	28-1-C	SWAGING SLEEVE, Wire rope (76691)									2
- 6	S-104438-5	TUBE ASSEMBLY, Inner									1
	S-104438-3	TUBE ASSEMBLY, Outer									1
- 7	825	PIN, Spring lock (99946)									1
	S-102408-7	CABLE ASSEMBLY									1
- 8	COMM	CABLE, 0.062 dia x 11.50 lg 7 x 7 flex stainless steel									1
- 9	28-1-C	SWAGING SLEEVE, Wire rope (76691)									2
- 10	No Number 102735	TUBE, Outer TIEROD ASSEMBLY (ATTACHING PARTS)									1 2
- 11	AN381-2-8	PIN, Cotter									4
- 12	AN320-5	NUT									4
- 13	AN960-516L	WASHER									4
- 14	AN25-32	BOLT									4

Section II  
Group Assembly Parts List

T.O. 35D3-3-25-4

Fig. & Index No.	Part Number	DESCRIPTION							Units Per Assy	Usable on Code
		1	2	3	4	5	6	7		
6-15	102734	.	.		CLEVIS, Rod end	.	.	.	2	
-16	AN316-12	.	.		NUT	.	.	.	2	
-17	102732	.	.		TUBE, Tierod	.	.	.	1	
-18	102741	.	.		BUSHING, Sleeve	.	.	.	4	
-19	104331	.	.		LINK, Towing	.	.	.	1	
					(ATTACHING PARTS)					
-20	AN380-4-8	.	.		PIN, Cotter	.	.	.	1	
-21	AN320-14	.	.		NUT	.	.	.	1	
-22	AN34-48	.	.		BOLT	.	.	.	1	
					*					
-23	100415	.	.		BRACKET, Towing link	.	.	.	1	
					(ATTACHING PARTS)					
-24	MS20365-820	.	.		NUT	.	.	.	4	
-25	AN8-11A	.	.		BOLT	.	.	.	4	
					*					
	104489-1	.	.		SUPPORT ASSEMBLY, Front wheel LH	.	.	.	1	
	104489-2	.	.		SUPPORT ASSEMBLY, Front wheel RH	.	.	.	1	
					(ATTACHING PARTS)					
-26	MS20365-820	.	.		NUT	.	.	.	20	
-27	AN960-816L	.	.		WASHER	.	.	.	20	
-28	AN8-7A	.	.		BOLT	.	.	.	20	
					*					
-29	MS171602	.	.		PIN, Spring	.	.	.	1	
-30	100388	.	.		KINGPIN, Steering knuckle	.	.	.	1	
	104491-1	.	.		KNUCKLE ASSEMBLY, Steering LH	.	.	.	1	
	104491-2	.	.		KNUCKLE ASSEMBLY, Steering RH	.	.	.	1	
-31	MS171724	.	.		PIN, Spring	.	.	.	1	
-32	*100447	.	.		SPINDLE, Axle	.	.	.	1	
-33	100379	.	.		BUSHING, Sleeve	.	.	.	1	
-34	S-100380	.	.		BUSHING, Shoulder	.	.	.	1	
-35	102742	.	.		BUSHING, Shoulder	.	.	.	1	
-36	MS15003-1	.	.		FITTING, Lubrication	.	.	.	2	
-37	*104466-1	.	.		KNUCKLE, Steering, LH	.	.	.	1	
-38	*104466-2	.	.		KNUCKLE, Steering, RH	.	.	.	1	
-39	104465-1	.	.		SUPPORT, Front wheel, LH	.	.	.	1	
-40	104465-2	.	.		SUPPORT, Front wheel, RH	.	.	.	1	
-41	100395-3	.	.		FRAME ASSEMBLY (WELDMENT)	.	.	.	1	

\*Not procurable as detail parts. Order next higher assembly.

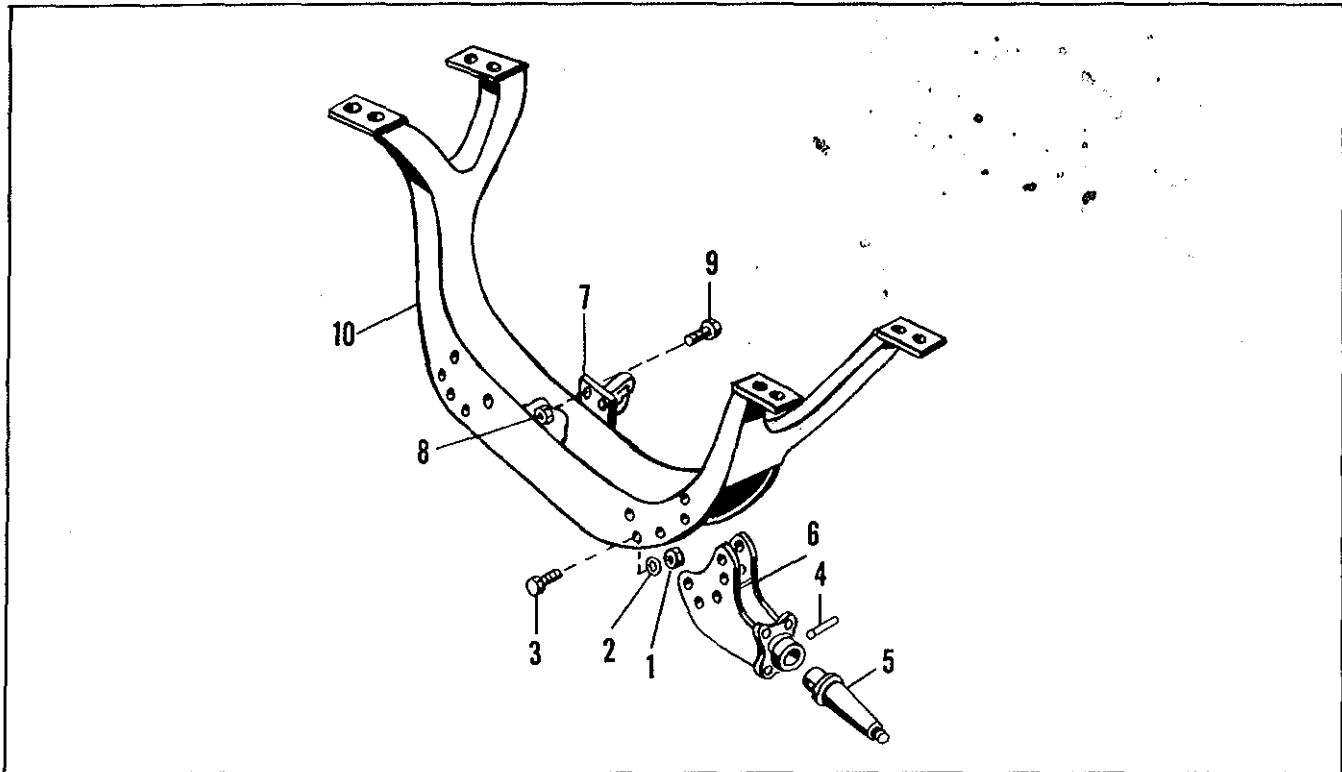


Figure 7. Aft Frame and Support Assembly

Fig. & Index No.	Part Number	DESCRIPTION							Units Per Assy	Usable on Code
		1	2	3	4	5	6	7		
7-	No Number	FRAME AND SUPPORT ASSEMBLY, Aft (See figure 1-15 for next higher assembly)							Ref	
	100441	SUPPORT ASSEMBLY, Rear wheel (ATTACHING PARTS)							2	
- 1	MS20365-820	NUT							20	
- 2	AN960-816L	WASHER							20	
- 3	AN8-7A	BOLT							20	
		*-----								
- 4	MS171724	PIN, Spring							1	
- 5	*100447	SPINDLE, Axle							1	
- 6	*102205	SUPPORT, Rear wheel							1	
- 7	1048W0	PINTLE ASSEMBLY, Towing (83269) (ATTACHING PARTS)							1	
- 8	MS20365-820	NUT							4	
- 9	AN8-12A	BOLT							4	
		*-----								
- 10	100395-3	FRAME							1	
*Not procurable. Order next higher assembly.										

**SECTION III  
NUMERICAL INDEX**

Part Number	Stock Class Code	Number Serial or Part No.	Fig. & Index No.	Qty. Per Art.	Source Code
A10322			3	4	A
A18393			3	4	A
A260	2530	204-2212	1-5	4	P1
AN25-32			3-5		
AN3-12A			6-14	4	
AN315-5R			4-10	3	
AN315-820			4-4	2	
AN316-12			5-4	4	
AN320-14			6-16	4	
AN320-16			6-21	1	
AN320-5			1-8	8	
AN34-48			6-12	4	
AN380-4-8			6-22	1	
AN381-2-8			6-20	1	
AN381-4-28			6-11	4	
AN4-7A			1-7	8	
AN5-13A			2-5	12	
AN500A516-10			4-6	2	
AN535-0-4			4-2	4	
AN6-11A			1-22	14	
AN6-21A			1-13	10	
AN6-30A			2-10	8	
AN8-11A			2-11	8	
AN8-12A			1-4	20	
AN8-7A			7-9	4	
AN935-516			6-28	40	
AN935-616			4-3	6	
AN935-816			3-20	32	
AN960-10			3-3	20	
AN960-1016L			4-9	4	
AN960-416			5-10	6	
AN960-516L			2-4	12	
AN960-616L			6-13	4	
AN960-816			1-12	8	
AN960-816L			5-7	4	
AN960-816L			1-3	56	P1
B1-ST5-12-2.750	5340	587-8300	2-16	2	
Cable (11.50 lg)			6-8	1	
Cable (13.50 lg)			2-17	2	
Cable (15.50 lg)			6-4	1	
Flap			3-24	4	
Hub			3-17	4	X1
MLD6081SS (H1/L7)	5330	576-4465	3-12	4	P1
MS15003-1			6-36	4	
MS171602			6-29	2	
MS171662			2-1	4	
MS171724			6-31	4	
MS20364-428			2-3	12	
MS20364-624			1-11	10	

Part Number	Stock Class Code	Number Serial or Part No.	Fig. & Index No.	Qty. Per Art.	Source Code
MS20365-1032			4-8	4	
MS20365-624			2-9	16	
MS20365-820			1-2	64	
MS24325-1	2530	528-7224	3	4	P1
MS24328-2	2530	562-3415	3	4	P1
MS35335-37			5-6	4	
S-100380	9900	100380	6-34	2	P1
S-101694	1740	568-9591	4	2	P1
S-102408-11			6	1	M
S-102408-7			6	1	M
S-102408-9			2	2	M
S-104434	9900	S104434	4-11	2	P1
S-104438	1740	613-6609	6	1	P1
S-104438-3	1740	602-4542	6	1	P1
S-104438-5	1740	602-4543	6-6	1	P1
S-104925	9900	S104925	4-7	2	P1
S-104926	9900	S104926	4-15	2	P1
S-104969	2530	591-0259	4-16	2	P1
S-105092	1740	602-7967	6	1	P1
S-105599	5315	579-6166	6-2	1	P1
S-105600			6-3	1	X1
S-105601			6-1	1	M
Tire	2690	051-9880	3-22	4	
Tube	2690	269-7354	3-23	4	
Tube, Outer Towbar Wheel, Half			6-10	1	X1
100334	8220	750421-855	3-18	8	
100379	9900	100379	1	1	A
100388	5315	664-4535	6-33	2	P1
100395-3			6-30	2	P1
100415			6-41	2	P1
100441			7-10		
100447			6-23	1	P1
100456			7	2	P1
100553			6-32	4	X1
100877			7-5		
100879			2-24	2	P1
100881	1740	637-6763	2-12	4	P1
102205			1-21	1	P1
102313			1-23	1	P1
102314	9900	102314	1-25	4	P1
102334	9900	102334	7-6	2	X1
102732			2-19	2	X1
102734	5340	596-4923	2-8	2	P1
102735			2	2	P1
102741	1740	555-7041	6-17	2	P1
102742	1740	555-7009	6-15	4	P1
			6	2	A
			6-18	4	P1
			6-35	2	P1

Part Number	Stock Class Code	Number Serial or Part No.	Fig. & Index No.	Qty. Per Art.	Source Code
103717-1			4-17	1	
103717-2			4-17	1	
104331	1740	602-4544	6-19	1	P1
104395			1	1	
104465-1	1740	602-4545	6-39	1	P1
104465-2	1740	602-4546	6-40	1	P1
104466-1			6-37	1	X1
104466-2			6-38	1	X1
104489-1			6	1	A
104489-2			6	1	A
104491-1			6	1	P1
104491-2			6	1	P1
1048WO	2530	528-7225	7-7	1	P1
104873			1-16	1	
104876			1-17	1	
104877			1-18	2	
111534	1740	568-9619	2-2	4	P1
111535	1740	568-9620	2-6	4	P1
111536	5315	664-5523	2-7	4	P
111537	1740	568-9621	2-20	4	P1
111543	1740	568-9622	4-1	2	P1
111555	6700	988830	1-9	4	P1
			3-8		
111556-3	5CHT	111556-3	3-11	10	P1
111556-5	5CHT	111556-5	3-4	10	P1
			3-11		
15123	3110	198-2169	3-14	4	P1
15245	3110	198-2170	3-13	4	P1

Part Number	Stock Class Code	Number Serial or Part No.	Fig. & Index No.	Qty. Per Art.	Source Code
24720	3110	100-0542	3-15	4	P1
24780	3110	100-3537	3-16	4	P1
28-1-C			2-18	8	
			6-5		
			6-9		
325-6			3-19	32	
325-8			3-2	10	
			3-9		
50049-12	2530	555-4713	5-12	4	P1
51267-1-L	2530	604-9890	5	1	P1
51267-1-R	2530	604-9889	5	1	P1
51267-1-1-L			5-13	1	
51267-1-1-R			5-13	1	
51267-2	2530	540-6304	5-2	4	P1
51267-5	2530	593-9810	5-3	2	P1
51267-6			3-1	2	
			5-1		
51267L			4-17	1	
			5	Ref	
51267R			4-17	1	
			5	Ref	
51279-40	2530	593-9809	5-5	4	P1
51327-46	2530	540-6651	5-8	2	P1
51339-2	2530	588-4514	5-9	2	P1
60-6-6			3-21	32	
627-878-16A	2530	540-6991	5-11	4	P1
825	5315	366-1938	6-7	1	P1

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T.O. 35D3-3-25-4

T.O. 35D3-3-25-1

TECHNICAL MANUAL

ILLUSTRATED PARTS BREAKDOWN

*8220-750421-855*

ENGINE TRANSPORTATION TRAILER

MODEL 2000

MODIFIED PART NO. AF 64E34634

(O. E. SZEKELY & ASSOC.)

AF 41(608)40261

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SECTION II  
GROUP ASSEMBLY PARTS LIST

Fig. & Index No.	Part No.	Description	Description						Units Per Assy	Usable on Code
			1	2	3	4	5	6		
1-	102724	TRAILER, Engine transportation-----							1	A
	64133431	TRAILER, Engine transportation-----							1	B
-1	102779	. TOWBAR, Telescoping(Substitute P/N 64133431)----- (ATTACHING PARTS)							1	
-2	AN321-1-20	. PIN, Cotter-----							2	
-3	AN320-1120L	. WASHER-----							2	
-4	111551	. PIN, Washer-----							1	
	<u>102735</u>	. TOWER ASSEMBLY----- (ATTACHING PARTS)							2	
-5	AN321-2-8	. PIN, Cotter-----							4	
-6	AN320-5	. NUT-----							4	
-7	AN320-5197L	. WASHER-----							4	
-8	AN325-32	. BOLT-----							4	
-9	102741	. BUSHING-----							4	
-10	<u>102732</u>	. . TUBE, Tiered-----							1	
-11	AN316-12	. . NUT-----							2	
-12	102731	. . CLAVIS-----							2	
	104331	. LINK, Towing----- (ATTACHING PARTS)							1	
-13	AN381-4-23	. PIN, Cotter-----							1	
-14	AN320-14	. NUT-----							1	
-15	AN34-48	. BOLT-----							1	
-16	104331	. . LINK-----							1	
-17	102740	. . BUSHING-----							2	
-18	102741	. . BUSHING-----							2	
-19	100415	. BRACKET, Towbar attaching----- (ATTACHING PARTS)							1	
-20	AN364-820	. NUT-----							4	
-21	AN2-10A	. BOLT-----							4	
-22	111534	. BRACKET, Stop adapter----- (ATTACHING PARTS)							4	
-23	AN364-423	. NUT-----							8	
-24	AN330-416	. WASHER-----							8	
-25	AN4-7A	. BOLT-----							8	
-26	79-040-250-2000	. ROLL PIN (manufactured by 72962)-----							4	
-27	111536	. PIN, Stop adapter-----							4	
-28	111535	. SPRING, Stop adapter-----							4	
-29	111537	. CLIP, Guide rail----- (ATTACHING PARTS)							4	
-30	AN364-428	. NUT-----							4	
-31	AN360-415	. WASHER-----							4	
-32	AN4-6A	. BOLT-----							4	
-33	102314	. COUPLING, Male-----							2	

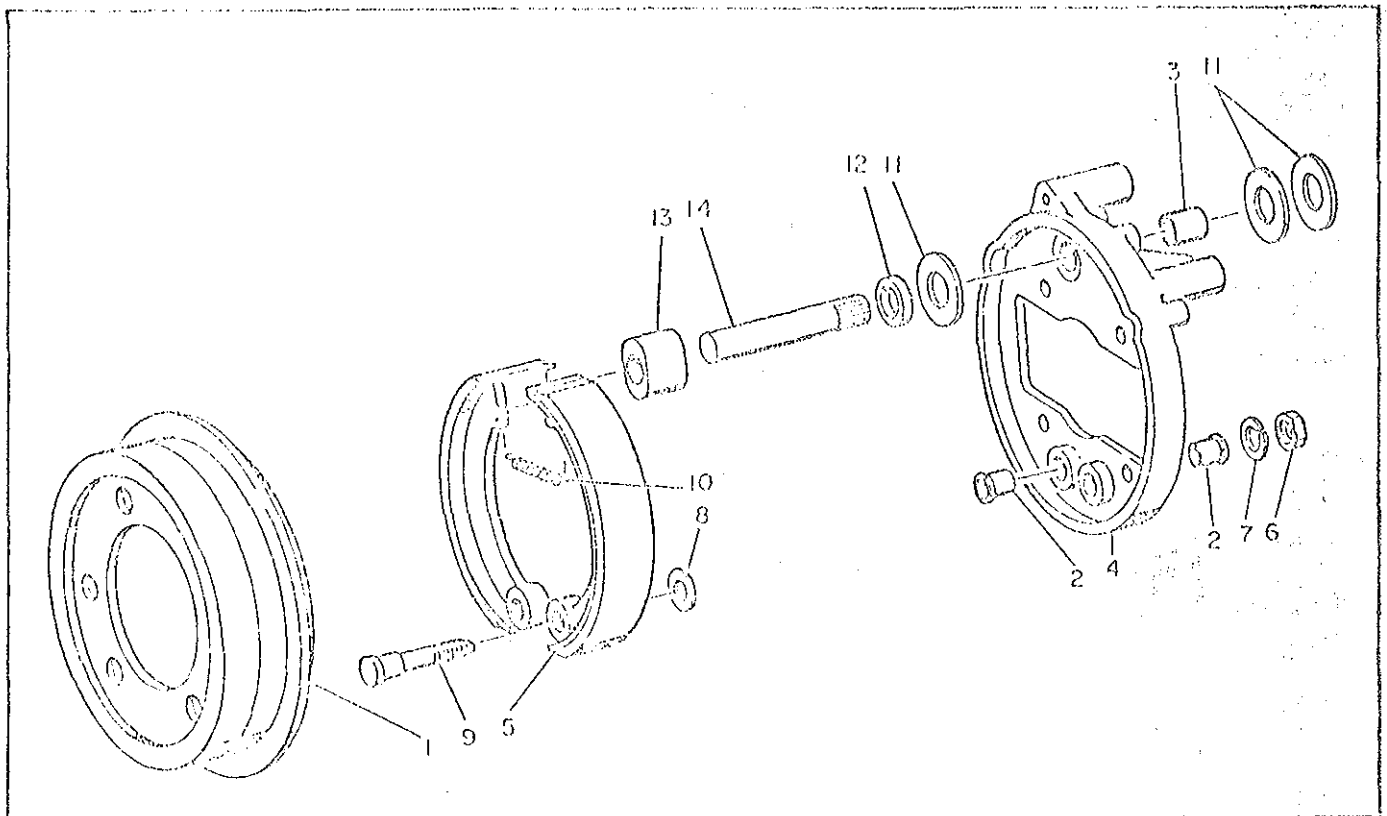


Figure 2. Parking Brake Assembly

Fig. & Index No.	Part No.	Description						Units Per Assy	Usable on Code
		1	2	3	4	5	6		
2-	51267-L	BRAKE ASSEMBLY, Parking, LH (manufactured by 83445)-----						REF	
	51267-R	BRAKE ASSEMBLY, Parking RH (manufactured by 83445) -----						REF	
-1	51267-6	. DRUM, Brake, al (manufactured by 83445) -----						1	
-2	50040-12	. BUSHING, Steel (manufactured by 83445)-----						4	
-3	627-878-16A	. BEARING, Bronze (manufactured by 00431)-----						2	
-4	51267-1L	. PLATE, Mounting, LH (manufactured by 83445)-----						1	
	51267-1R	. PLATE, Mounting, RH (manufactured by 83445)-----						1	
-5	51267-2	. BRAKE SHOE ASSEMBLY (with bonded lining) (manufactured by 83445)						2	
		(ATTACHING PARTS)							
-6	COMM	. NUT, Hex, cad plate, 1/2-20 UNF-2B -----						2	
-7	MS35335-37	. WASHER, Shakeproof, special -----						2	
-8	AN960-816	. WASHER-----						2	
-9	51279-40	. PIVOT, Eccentric (manufactured by 83445)-----						2	
-10	51267-5	. SPRING (manufactured by 83445) -----						1	
-11	AN960-1016L	. WASHER-----						3	
	51327-46	. CAMSHAFT ASSEMBLY, Integral (manufactured by 83445)-----						1	
-12	51339-2	. . SPACER, Cam (manufactured by 83445)-----						1	
-13	51337	. . CAM (manufactured by 83445)-----						1	
-14	51338-46	. . SHAFT, Cam (manufactured by 83445) -----						1	