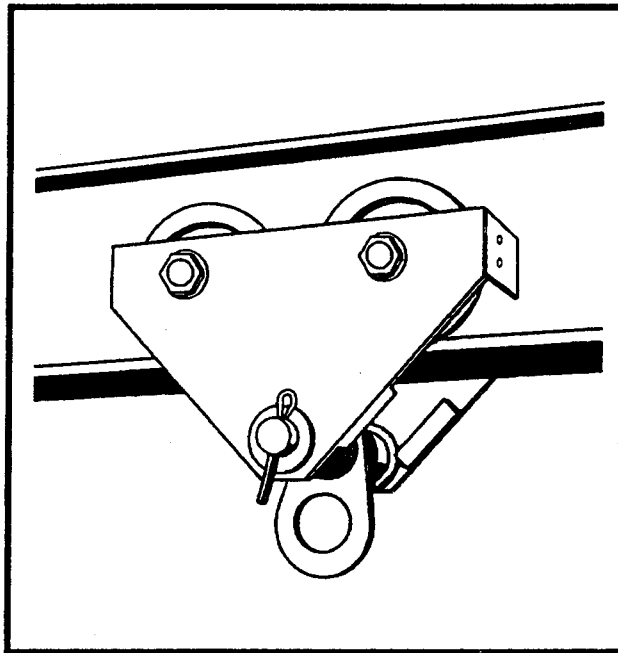


TROLLEYS

MODEL FTG

OPERATING & MAINTENANCE INSTRUCTIONS

**WITH ILLUSTRATED PARTS LIST
PUBLICATION PART NO.**



IMPORTANT -- CAUTION

This manual contains important information for the correct installation, operation and maintenance of the equipment described herein. All persons involved in such installation, operation and maintenance should be thoroughly familiar with the contents. To safeguard against the possibility of personal injury or property damage, follow the recommendations and instructions of this manual and keep it for further reference.

WARNING

The equipment shown in this manual is intended for industrial use only and should not be used to lift, support, or otherwise transport people.

SECTION I. GENERAL INFORMATION

1-1. Important Notes

FTP and FTG trolleys are shipped completely assembled and may need to be partially disassembled to be mounted on the I-beam. For proper assembly and operation follow the procedures as listed in this manual.

Even though each part has been manufactured and inspected under rigid quality control procedures, the trolley has not been tested as a complete unit before shipment. After the unit has been assembled on the I-beam, check to be sure all nuts are tight and that all cotter pins are secure. Make sure the trolley is properly adjusted to the I-beam and each wheel rolls freely and makes good contact with the flange of the beam. Before placing the trolley into service, apply 125% of rated load and operate the trolley on the beam, checking to be sure the trolley tracks properly and will support the load.

WARNING

READ THE FOLLOWING CAREFULLY BEFORE OPERATING TROLLEY

1-2. Safe Operating Practices for Trolleys

For your own safety and that of your fellow workers, material handling equipment must be used and maintained as recommended by the manufacturer. Failure to heed these recommendations could endanger your life. Use good common sense and judgement at all times. Safety is the responsibility of the operator of this equipment. Before

operating trolley, be sure equipment is properly adjusted and that any damage or undue wear has been repaired, but do not adjust or repair trolley unless qualified for maintenance of it. When applying a load, center trolley over load before lifting and avoid side pull. Never apply a load above the rated capacity of trolley, except for properly authorized tests. When moving the load do not engage in any activity which will divert your attention, never move a load until you and all other personnel are clear of the load, make sure load clears all obstacles before moving, never transport load over personnel, never carry personnel on the load, avoid swinging of load when traveling and avoid sharp contact between trolleys or between trolleys and end stops. Do not leave a load suspended in the air for extended or unattended periods.

1-3. Inspection, Preventive Maintenance and Testing

A preventive maintenance program should be initiated for this trolley immediately after it is entered into service. The program should comply with recommendations of this Parts and Instruction Manual and all pertinent Federal, State and local regulations. Regular inspections, maintenance, testing and record keeping required in these codes and manuals should be followed for the life of the trolley. A daily visual inspection of trolley for cracks, deformation, proper operation and proper lubrication is recommended. A detailed inspection for cracks, bearing failures and wearing of both trolley and I-beam should be performed annually (more often under severe service or environmental conditions) and repairs made as necessary. A written record of the annual inspection should be kept on file.

SECTION II. INSTALLATION AND MAINTENANCE

2-1. Repair Parts Ordering Information

To ensure prompt service, place all parts orders with your local Yale Hoists distributor.

Please give all information listed below in items (a), (b) and

- (c). This will enable your distributor to fill your order promptly.
- (a) Give model and capacity of trolley.
- (b) Give part numbers, description and quantity required.
- (c) Give the correct shipping designation.

2-2. Assembly Procedures

Check the I-beam size and consult the applicable chart on this page for your model unit to find the correct setting of the adjusting washers.

Insert a cotter pin into one end of the suspension pin and spread the ends.

Slip the proper number of adjusting washers (column A of chart) onto the suspension and slide the pin into one sideplate.

Slide the proper number of adjusting washers (column B of chart), the clevis (if applicable) and the proper number of adjusting washers (column C of chart) onto the suspension pin.

Slide suspension pin into the other sideplate and set the trolley on the I-beam. Add the rest of the adjusting washers (column D of chart) to the suspension pin. Insert the cotter pin and spread the ends.

Then follow the testing procedures listed on page 2 of this manual.

2-3. Trolley Adjustment

For installation on I-beam other than the standard sizes

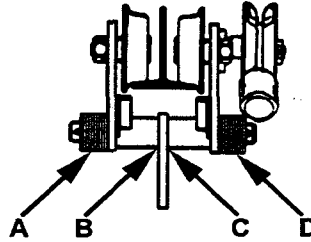
shown, or if final adjustment to beam is required, follow the instructions below.

Measure the I-beam flange width and temporarily assemble the trolley before installation to determine the exact distribution of washers required.

The distance between track wheel flanges should be $\frac{3}{16}$ inch greater than the beam flange width for straight runway

beams, and $\frac{3}{16}$ to $\frac{1}{4}$ inch in runway systems that include curves. The number of washers between the sideplates and the clevis should be the same, or differ only by one washer, in order to keep the clevis centered under the I-beam. The distribution of washers outside the trolley sideplates is unimportant, except that all washers furnished must be used to ensure that all components will retain their proper positioning.

ADJUSTMENTS FOR VARIOUS SIZE I-BEAMS



CAP IN TONS	WASHER SPACING															
	8 inch 18.4 lbs. 4.00 inch flange				10 inch 25.4 lbs. 4.66 inch flange				12 inch 31.8 lbs. 5.00 inch flange				15 inch 42.9 lbs. 5.25 inch flange			
	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D
4	13	2	2	13	11	4	5	10	9	6	6	9	8	7	7	8
5	13	3	3	13	11	5	6	10	9	7	7	9	8	8	8	8
6	13	3	3	13	11	5	6	10	9	7	7	9	8	8	8	8
8					11	4	4	11	9	6	5	10	8	7	6	9
10					11	4	4	11	9	6	5	10	8	7	6	9
12					12	3	4	11	10	5	5	10	9	6	6	9

CAP IN TONS	WASHER SPACING											
	18 inch 54.7 lbs. 6.00 inch flange				20 inch 65.4 lbs. 6.25 inch flange				24 inch 79.9 lbs. 7.00 inch flange			
	A	B	C	D	A	B	C	D	A	B	C	D
4	5	10	10	5	4	11	11	4	1	14	14	1
5	5	11	11	5	4	12	12	4	1	15	15	1
6	5	11	11	5	4	12	12	4	1	15	15	1
8	5	10	9	6	4	11	10	5	1	14	13	2
10	5	10	9	6	4	11	10	5	1	14	13	2
12	6	9	9	6	5	10	10	5	2	13	13	2
16-40	4	5	5	4	3	6	6	3	0	9	9	0

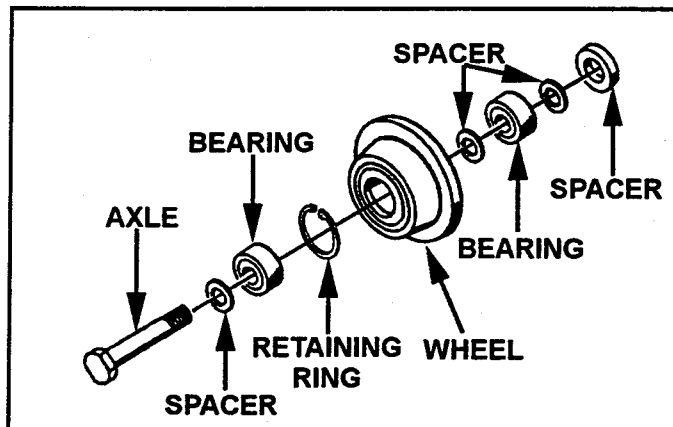
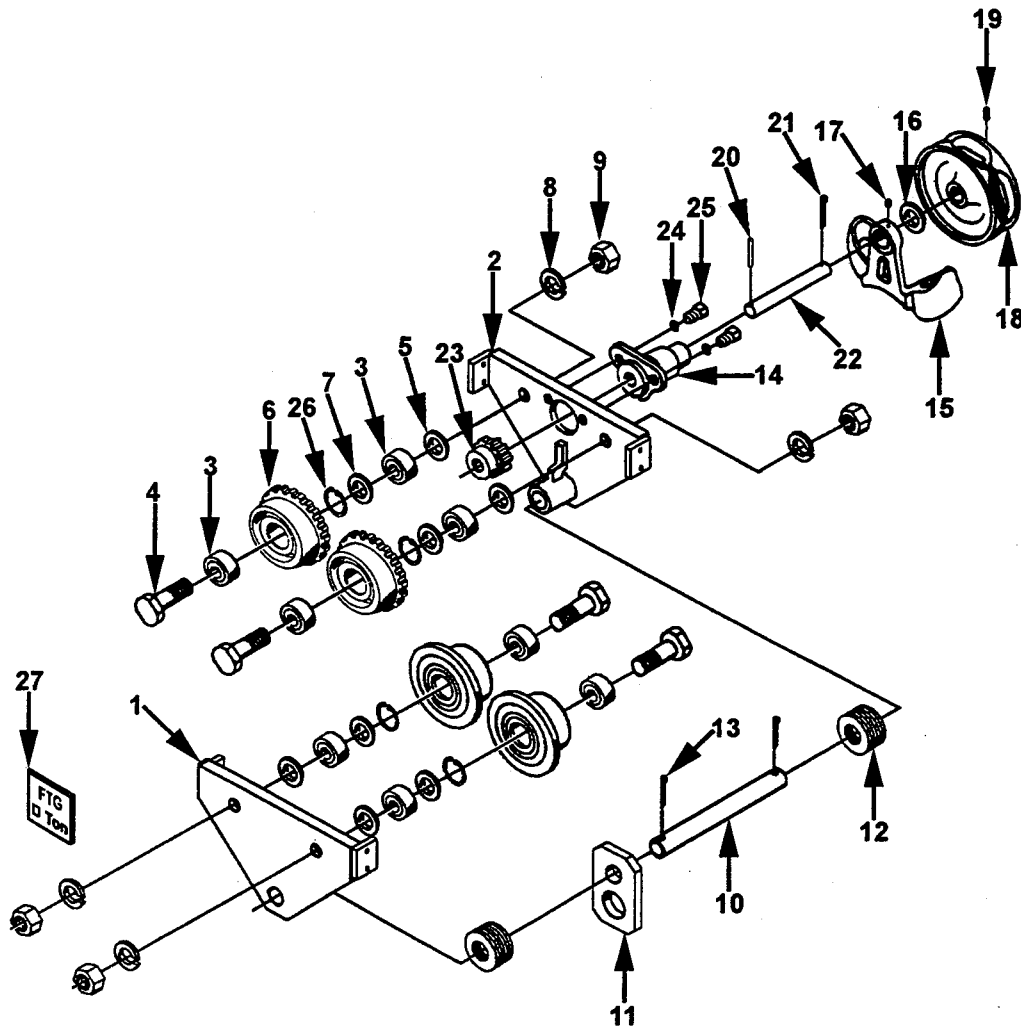
LUBRICATION

PART	LUBRICANT	LUBRICATION POINT	LUBRICATION INSTRUCTIONS
HAND CHAIN GUIDE	Light Machine Oil	Oil hole in guide	5 or 6 drops of oil
SUPPORT BRACKET	Light Machine Oil	Oil hole in support bracket	5 or 6 drops of oil

NOTE: If trolley wheels are not equipped with alermitte fittings, the bearings are lifetime lubricated.

REPAIR PARTS

FTG Series Trolleys



Parts List for FTG Series Trolleys

	PLAIN SIDE PLATE		GEARED SIDE PLATE		WHEEL BEARING		WHEEL AXLE		WHEEL SPACER		T ROLLEY WHEEL	
	ITEM 1		ITEM 2		ITEM 3		ITEM 4		ITEM 5		ITEM 6	
TON	PART #	QTY	PART #	QTY	PART #	QTY	PART #	QTY	PART #	QTY	PART #	QTY
4	640117600	1	640118600	1	057898200	8	057917300	4	057917400	4	SEE CHART 1	
5	640973600	1	640974600	1	057898200	8	057917300	4	057917400	4	SEE CHART 1	
6	640973600	1	640974600	1	057898200	8	057917300	4	057917400	4	SEE CHART 1	
8	640976600	1	640975600	1	064666900	8	058969600	4	023602400	4	SEE CHART 1	
10	642129600	1	642130600	1	064666900	8	058969600	4	023602400	4	SEE CHART 1	
12	642129600	1	642130600	1	064666900	8	058969600	4	023602400	4	SEE CHART 1	
16	641981600	1	641982600	1	065124600	8	065124300	4	065125000	4	SEE CHART 1	
20	641981600	1	641982600	1	065124600	8	065124300	4	065125000	4	SEE CHART 1	
25	642129600	2	642130600	2	064666900	16	058969600	8	023602400	8	SEE CHART 1	
30	641981600	2	641982600	2	065124600	16	065124300	8	065125000	8	SEE CHART 1	
40	641981600	2	641982600	2	065124600	16	065124300	8	065125000	8	SEE CHART 1	

	BEARING SPACER		LOCKWASHER		HEX NUT		SUSPENSION PIN		CLEMS		ADJUSTING WASHER	
	ITEM 7		ITEM 8		ITEM 9		ITEM 10		ITEM 11		ITEM 12	
TON	PART #	QTY	PART #	QTY	PART #	QTY	PART #	QTY	PART #	QTY	PART #	QTY
4	060108300	4	040101000	4	037903200	4	064665600	1	064665200	1	053977900	30
5	060108300	4	040101000	4	037903200	4	064665700	1	059535600	1	053582200	32
6	060108300	4	040101000	4	037903200	4	064665700	1	059535600	1	053582200	32
8	064666800	4	015030000	4	014971900	4	064665800	1	064665400	1	053582400	30
10	064666800	4	015030000	4	014971900	4	064665900	1	064665500	1	053582500	30
12	064666800	4	015030000	4	014971900	4	064665900	1	059509700	1	053582500	30
16	065124900	4	502137905	4	640167902	4	065124500	1	065125700	1	055233400	26
20	065124900	4	502137905	4	640167902	4	065124500	1	065124400	1	055233400	26
25	064666800	8	015030000	8	014971900	8	500351904	2	065145800	1	053582500	42
30	065124900	8	502137905	8	640167902	8	065124500	2	065145900	1	055233400	20
40	065124900	8	502137905	8	640167902	8	065124500	2	065146000	1	055233400	20

	COTTER PIN		H.W. SUPPORT BRKT		HAND CHAIN GUIDE		WASHER		ALEMITE		HAND WHEEL	
	ITEM 13		ITEM 14		ITEM 15		ITEM 16		ITEM 17		ITEM 18	
TON	PART #	QTY	PART #	QTY	PART #	QTY	PART #	QTY	PART #	QTY	PART #	QTY
4	015428800	2	059677300	1	058816500	1	025066800	1	015628900	2	011113200	1
5	053585300	2	059677300	1	058816500	1	025066800	1	015628900	2	011113200	1
6	053585300	2	059677300	1	058816500	1	025066800	1	015628900	2	011113200	1
8	015428800	2	059141400	1	059141000	1	025066400	1	015628900	2	053579500	1
10	015429100	2	059141400	1	059141000	1	025066400	1	015628900	2	053579500	1
12	015429100	2	059141400	1	059141000	1	025066400	1	015628900	2	053579500	1
16	015429300	2	059141400	1	059141000	1	025066400	1	015628900	2	053579500	1
20	015429300	2	059141400	1	059141000	1	025066400	1	015628900	2	053579500	1
25	015429100	4	059141400	1	059141000	1	025066400	1	015628900	2	053579500	1
30	015429300	4	059141400	1	059141000	1	025066400	1	015628900	2	053579500	1
40	015429300	4	059141400	1	059141000	1	025066400	1	015628900	2	053579500	1

	SET SCREW		ROLL PIN		COTTER PIN		PIN SHAFT		WHEEL PINION		LOCKWASHER	
	ITEM 19		ITEM 20		ITEM 21		ITEM 22		ITEM 23		ITEM 24	
TON	PART #	QTY	PART #	QTY	PART #	QTY	PART #	QTY	PART #	QTY	PART #	QTY
4	038805400	1	055929200	1	038140000	1	058964900	1	058816800	1	015026600	2
5	038805400	1	055929200	1	038140000	1	058964900	1	058816800	1	015026600	2
6	038805400	1	055929200	1	038140000	1	058964900	1	058816800	1	015026600	2
8	038801400	1	023023600	1	015421400	1	058969300	1	058969000	1	015026600	2
10	038801400	1	023023600	1	015421400	1	058969300	1	058969000	1	015026600	2
12	038801400	1	023023600	1	015421400	1	058969300	1	058969000	1	015026600	2
16	038801400	1	023023600	1	015421400	1	058969300	1	058969000	1	015026600	2
20	038801400	1	023023600	1	015421400	1	058969300	1	058969000	1	015026600	2
25	038801400	1	023023600	1	015421400	1	058969300	1	058969000	1	015026600	2
30	038801400	1	023023600	1	015421400	1	058969300	1	058969000	1	015026600	2
40	038801400	1	023023600	1	015421400	1	058969300	1	058969000	1	015026600	2

	HEX BOLT		RETAINING RING		DECAL		DUST COVER INNER		DUST COVER OUTER		BRG. SHIM	
	ITEM 25		ITEM 26		ITEM 27		NOT SHOWN		NOT SHOWN		NOT SHOWN	
TON	PART #	QTY	PART #	QTY	PART #	QTY	PART #	QTY	PART #	QTY	PART #	QTY
4	055485000	2			645814100	1					011195000	8
5	055485000	2			645814100	1					011195000	8
6	055485000	2	640046912	4	645814100	1					011195000	8
8	055485000	2	640046923	4	645814100	1	064666600	4	064666700	4	011194800	8
10	055485000	2	648471600	4	645814100	1	064666600	4	064666700	4	011194800	8
12	055485000	2			645814100	1	064666600	4	064666700	4	011194800	8
16	055485000	2			645814100	1	065125200	4	065125300	4		
20	055485000	2			645814100	1	065125200	4	065125300	4		
25	055485000	2			645814100	1	064666600	8	064666700	8	011194800	16
30	055485000	2			645814100	1	065125200	8	065125300	8		
40	055485000	2			645814100	1	065125200	8	065125300	8		

	LOAD BAR		SUSP. PIN		CHAIN CONN. LINK		HAND CHAIN	
	NOT SHOWN		NOT SHOWN		NOT SHOWN		NOT SHOWN	
TON	PART #	QTY	PART #	QTY	PART #	QTY	PART #	QTY
4					641041100	1	003373000	12
5					641041100	1	003373000	12
6					641041100	1	003373000	12
8					641041100	1	003373000	12
10					641041100	1	003373000	12
12					641041100	1	003373000	12
16					641041100	1	003373000	12
20					641041100	1	003373000	12
25	065145000	1	065146100	1	641041100	1	003373000	12
30	065145100	1	065146200	1	641041100	1	003373000	12
40	065145100	1	065146200	1	641041100	1	003373000	12

CHART 1								
PLAIN WHEELS					GEARED WHEELS			
NON-S/R			S/R (BRZ)		NON-S/R		S/R (BRZ)	
TON	PART #	QTY	PART #	QTY	PART #	QTY	PART #	QTY
4	648333600	4	648615600	4	648379600	4	648614600	4
5	648333600	4	648615600	4	648379600	4	648614600	4
6	648333600	4	648615600	4	648379600	4	648614600	4
8	648449600	4	648569600	4	648450600	4	648570600	4
10	648449600	4	648569600	-4	648450600	4	648570600	4
12	648449600	4	648569600	4	648450600	4	648570600	4
16	648502600	4	648562600	4	648523600	4	648563600	4
20	648502600	4	648562600	4	648503600	4	648563600	4
25	648449600	8	648569600	8	648450600	8	648570600	8
30	648502600	8	648562600	8	648503600	8	648563600	8
40	648502600	8	648562600	8	648503600	8	648563600	8

WARRANTY

Every hoist is thoroughly inspected and tested prior to shipment from the factory. Should any problems develop, return the complete hoist prepaid to your nearest Yale Hoists Authorized Warranty Repair Station.

This warranty does not apply where: (1) deterioration is caused by normal wear, abuse, improper or inadequate power supply, eccentric or side loading, overloading, chemical or abrasive actions, improper maintenance or excessive heat; (2) problems resulted from repairs, modifications or

alterations made by persons other than factory or Yale Hoists personnel; (3) the hoist has been abused or damaged as a result of an accident; (4) repair parts or accessories other than those supplied by Yale Hoists are used on the hoist. Equipment and accessories not of the seller's manufacture are warranted only to the extent that they are warranted by the manufacturer. EXCEPT AS STATED HEREIN, YALE HOISTS MAKES NO OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

Improvements:

Yale Hoists is constantly striving to improve its product. Changes in design and improvements will be made whenever manufacturer believes the efficiency of the product will be improved without incurring any obligation to incorporate such improvements in any products which have been shipped or are in service.

Important Notice:

Use of chain, wire rope or replacement parts other than as supplied as original equipment on Yale hoists may lead to dangerous operation. Accordingly, Yale Hoists cannot be responsible in such cases and our warranty will be voided.

For more information, write Yale Hoists, Forrest City, Arkansas 72335.

Yale® HOISTS
3105 N. Washington
P. O. Box 1000
Forrest City, Arkansas 72335
Customer Service (800) 999-6318
FAX (800) 766-0223