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All products made in the USA

# ▶ TITAN MACHINE

▶ Each new project presents new challenges. Titan Machine provides you with the solutions to overcome them and maximize your bottom line. We are the only specialty elevator machine shop which also manufactures new traction machines and hoistway equipment. At Titan you are presented with unique options.

As the most experienced and best equipped fabricator of replacement machine components, Titan delivers quality products at competitive prices and in unequalled time. We maintain a huge inventory of raw materials to accomplish the renewal of so-called obsolete machine parts. Our machinists prepare your goods to the most critical tolerances to facilitate reinstallation and restore elevator service quickly.

Titan's geared machine line incorporates the most current technology and is manufactured of the highest quality material. We tailor our production line to meet your required scheduling needs. With Titan's unsurpassed and flexible lead times no longer do you have to juggle

your modernization schedule awaiting machine deliveries. Our modern manufacturing plant is designed to fully serve our customers' needs.

The Titan solution doesn't end once you take delivery of your equipment. All our replacement components and new equipment are fully guaranteed. We possess a large, comprehensive library of technical data on virtually all types and vintages of O.E.M. machinery and share this information to your advantage.

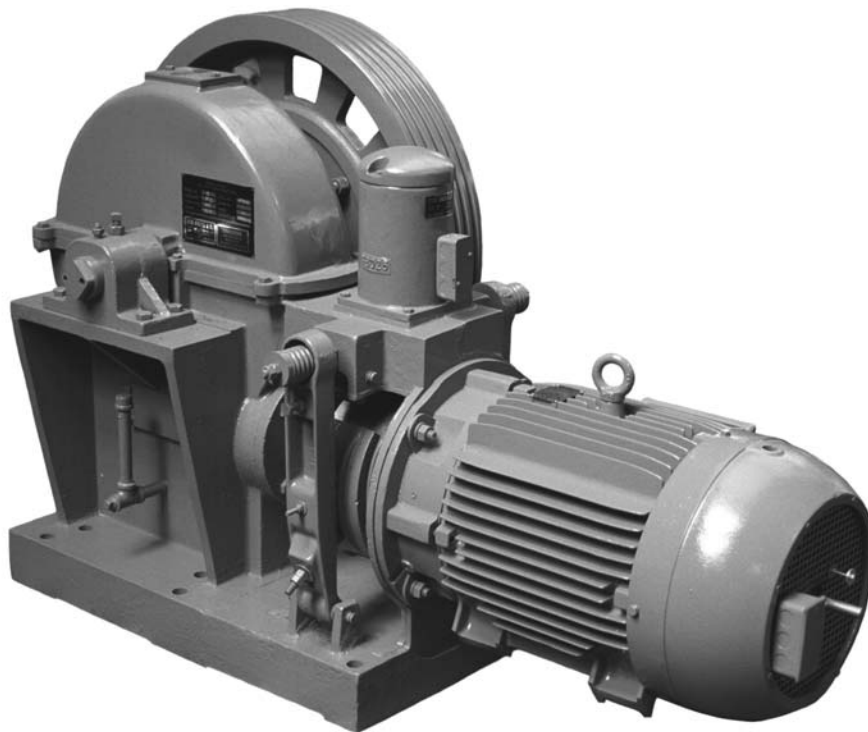
Our management and technical staff are the most experienced in the elevator industry. Their expertise is available to you for machine trouble shooting and the proper installation guidelines.

We believe in the partnership between Titan and its clients. We provide effective solutions for all your projects, regardless of size, from a preliminary estimate to a satisfactory culmination.

# TRACTION MACHINES

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▶ **SPECIFICATION**

- ▶ Capacity: 1,000 lbs- 5,000 lbs
- ▶ Speed: 50 fpm-350 fpm
- ▶ Maximum Main Shaft Load: 26,000 lbs
- ▶ Sheave Diameters: 20", 25", 27", 30"
- ▶ Approximate Weight: 2,000 lbs plus motor

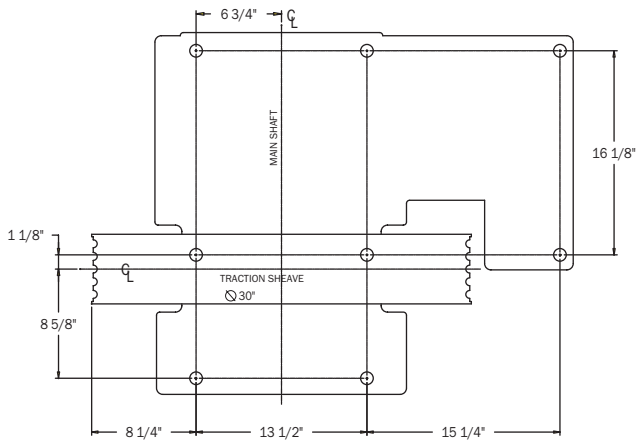
▶ **FEATURES**

- ▶ Simple, compact, easy installation & maintenance
- ▶ Demountable traction sheave, 220 Brinell Hardness
- ▶ D.C. Brake, 110 or 220 volts
- ▶ Integral bedplate available in left or right hands
- ▶ Flange mounted motor (supplied by customer)
- ▶ Dynamically balanced split brake pulley/coupling
- ▶ Eccentric main shaft on taper roller bearings
- ▶ Modern single end, double acting thrust bearing
- ▶ Heavy duty ball bearing and oil seals in front bonnet
- ▶ Demountable centrifugal bronze gear
- ▶ Factory loaded and vibration tested
- ▶ Improved spider seal
- ▶ Improved ball & socket brake arms & shoes
- ▶ Easy to disassemble and reassemble

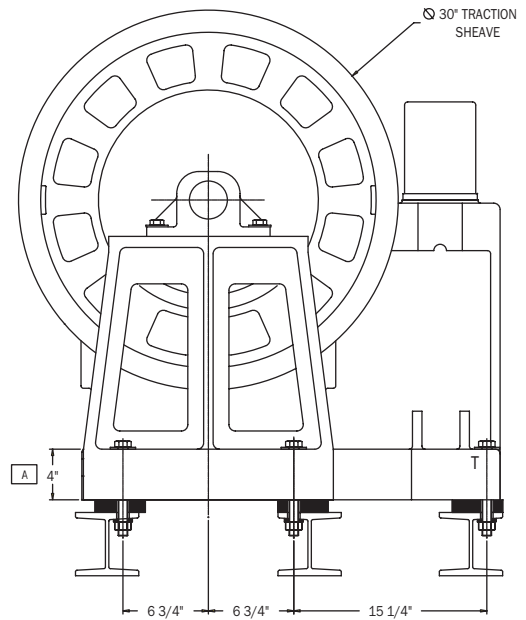
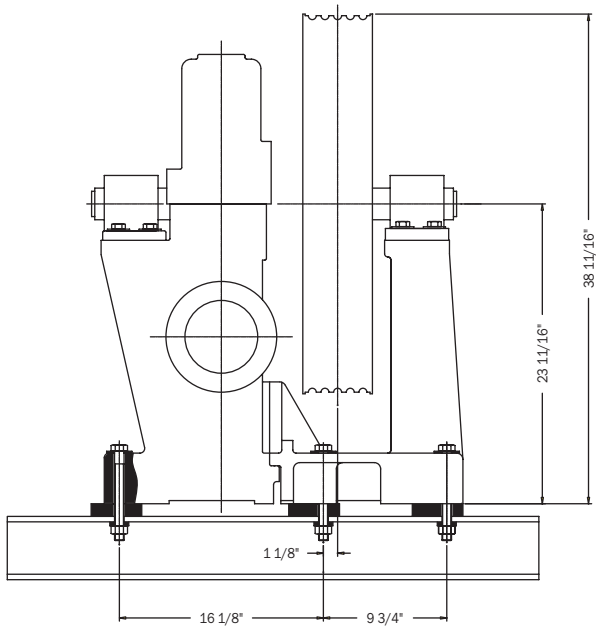
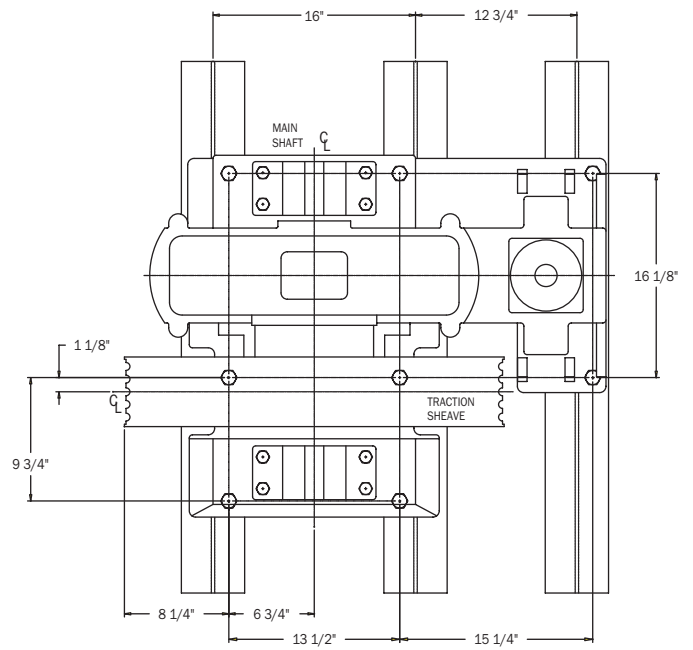
**TITAN I HORSEPOWER RATINGS**

CAPACITY [LBS]	50 FPM	75 FPM	100 FPM	125 FPM	150 FPM	200 FPM	250 FPM	300 FPM	350 FPM
1000	3	3	5	5	5	7.5	10	10	12.5
1500	3	5	7.5	7.5	5	10	12.5	15	15
2000	5	7.5	7.5	10	7.5	12.5	15	20	20
2500	5	7.5	10	12.5	10	15	20	25	25
3000	7.5	10	12.5	12.5	12.5	20	25		
3500	7.5	10	12.5	15	15	25	25		
4000	7.5	12.5	15	20	20	25			
4500	10	12.5	20	20	20				
5000	12.5	15	20	25	25				

Ratings are approximate and are based on 40% counterweighting. Consult engineering department for other applications. Specifications, illustrations and descriptions are subject to change without notice.



FOOTPRINT TO SHOW HOLES' POSITION

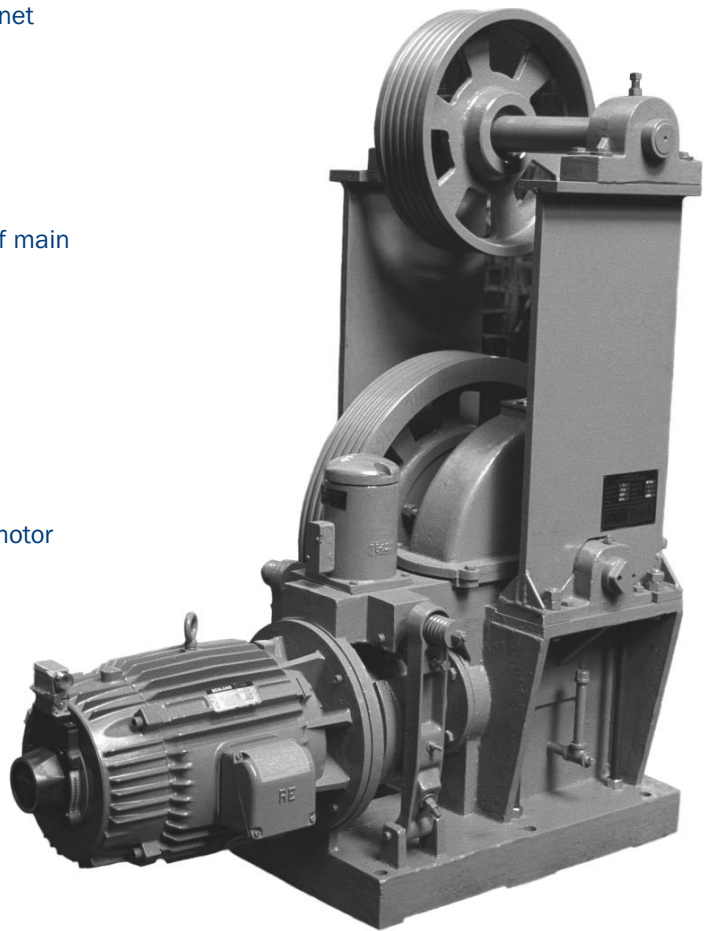


## ▶ FEATURES

- ▶ Simple, compact, easy installation & maintenance
- ▶ Demountable traction sheave, 220 Brinell Hardness
- ▶ D.C. Brake, 110 or 220 volts
- ▶ Integral bedplate available in left and right hands
- ▶ Flange mounted motor (supplied by customer)
- ▶ Dynamically balanced split brake pulley/coupling
- ▶ Eccentric main shaft on taper roller bearings
- ▶ Modern single end, double acting thrust bearing
- ▶ Heavy duty ball bearing and oil seals in front bonnet
- ▶ Demountable centrifugal bronze gear
- ▶ Factory loaded and vibration tested
- ▶ Improved spider seal
- ▶ Improved ball & socket brake arms & shoes
- ▶ Easy to disassemble and reassemble
- ▶ New & improved deflector stands, independent of main shaft, easy removal & reassembly

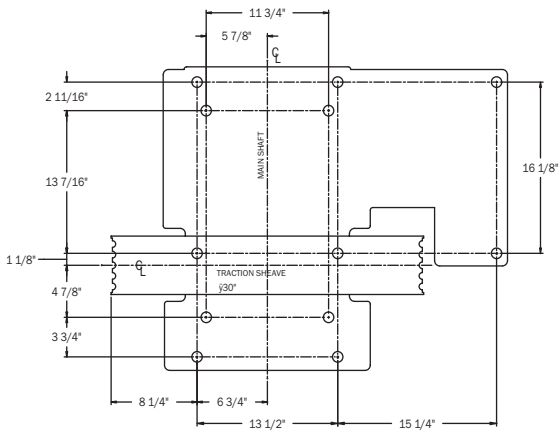
## ▶ SPECIFICATION

- ▶ Capacity Range: 1,000 lbs.-5,000 lbs.
- ▶ Speed Range: 50 fpm-350 fpm
- ▶ Maximum Main Shaft Load: 26,000 lbs.
- ▶ Traction Sheave Diameters: 20", 25", 27", 30"
- ▶ Approximate Weight: Basement=2,000 lbs. plus motor  
Basement with deflector=2,400 lbs. plus motor

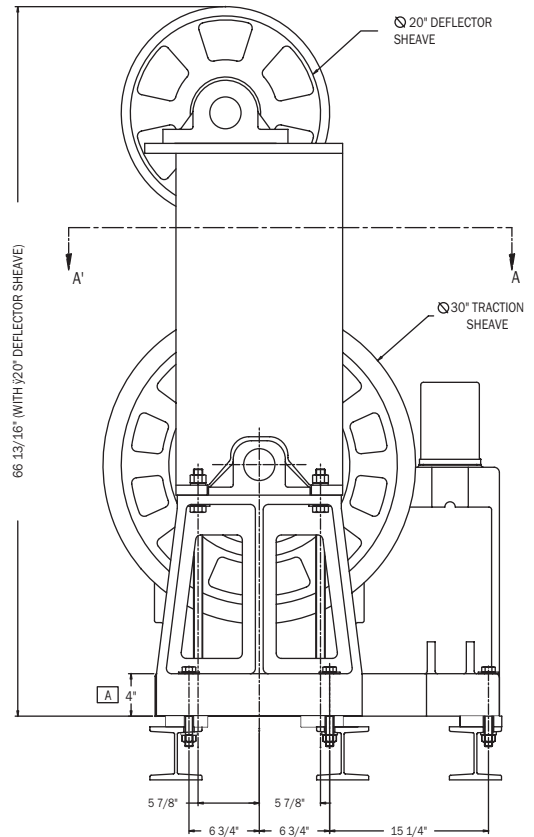
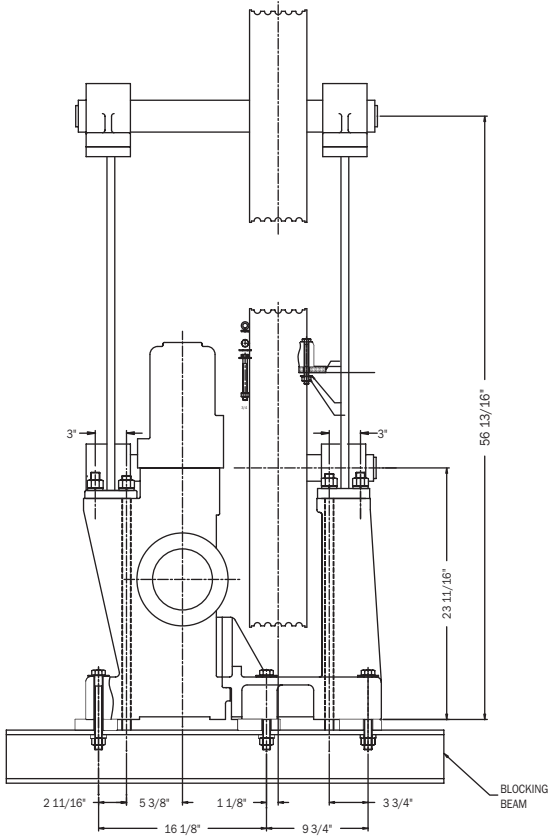
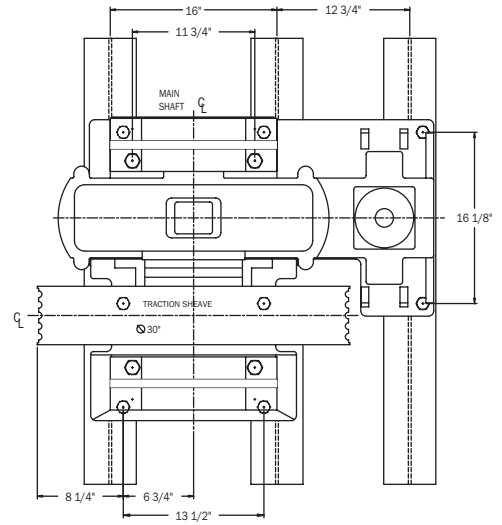


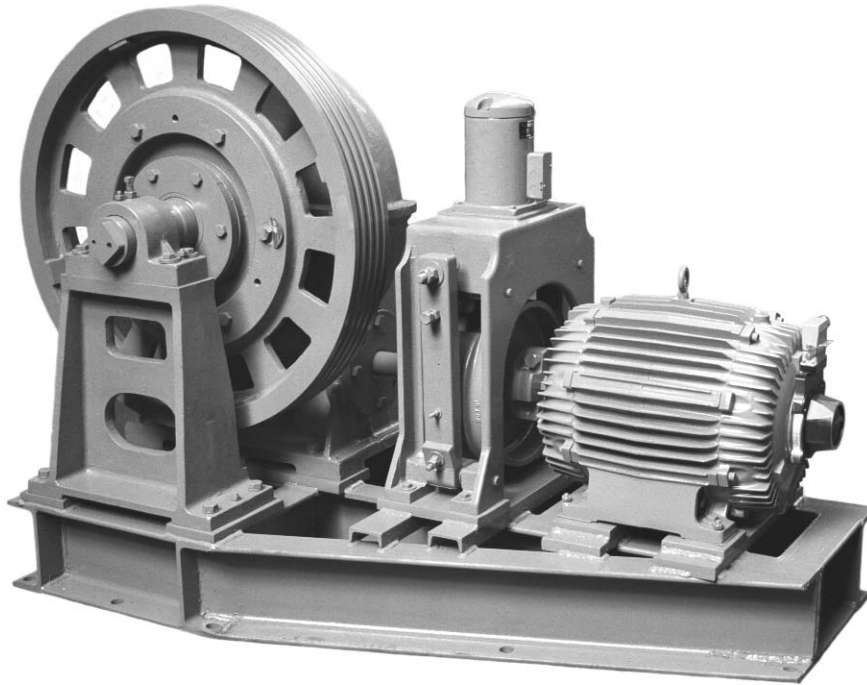
## TITAN I HORSEPOWER RATINGS

CAPACITY [LBS]	50 FPM	75 FPM	100 FPM	125 FPM	150 FPM	200 FPM	250 FPM	300 FPM	350 FPM
1000	3	3	5	5	7.75	7.5	10	10	12.5
1500	3	5	7.5	7.5	10	12.5	12.5	15	20
2000	5	7.5	7.5	10	12.5	15	20	20	25
2500	5	7.5	10	12.5	15	20	25	25	
3000	7.5	10	12.5	15	20	25			
3500	7.5	10	15	20	25	20			
4000	10	12.5	20	20	25				
4500	10	15	20	25	25				
5000	12.5	20	20	25					



VIEW A-A'





### ► SPECIFICATION

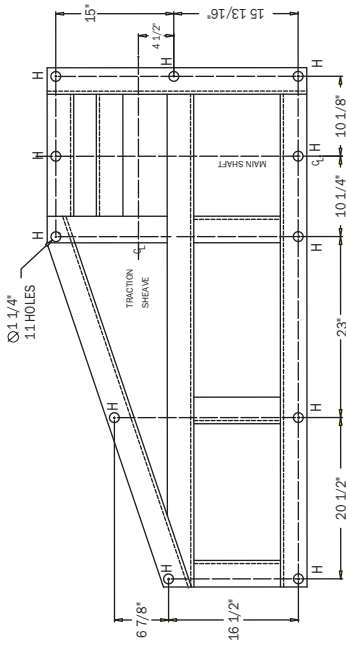
- Capacity Range: 1,000 lbs.-8,000 lbs.
- Speed Range: 50 fpm-450 fpm
- Maximum Main Shaft Load: 35,000 lbs.
- Traction Sheave Diameters: 25", 27", 30", 36"
- Approximate Weight: 3,500 plus motor

### ► FEATURES

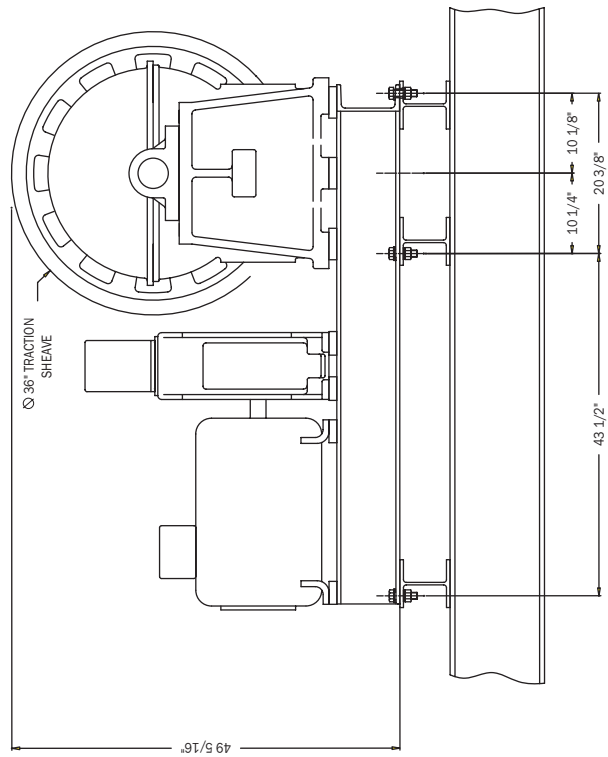
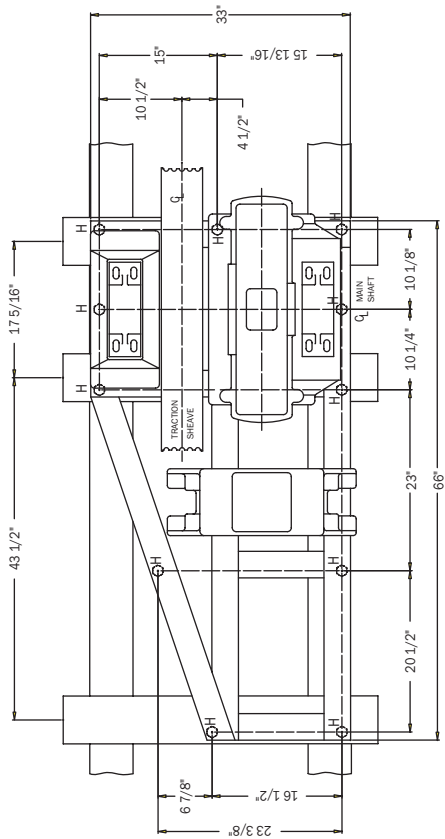
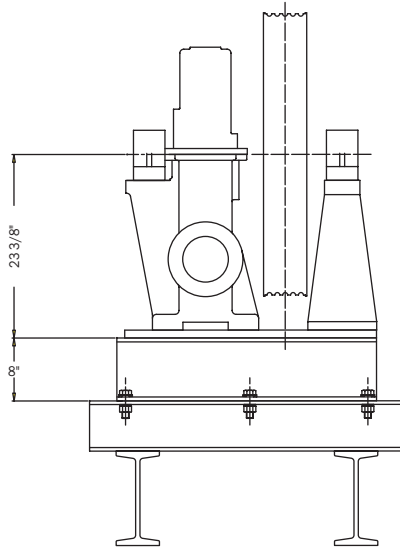
- Tough, heavy duty, yet compact machine
- Demountable traction sheave with 220 Brinell Hardness
- D.C. Brake, 110 or 220 volts
- Improved steel frame base available in left and right hands
- Dynamically balanced split brake pulley/coupling
- Foot mounted motor (supplied by customer)
- Eccentric main shaft on tapered roller bearings
- Modern single end, double acting thrust bearing
- Heavy duty ball bearing and oil seals in front bonnet
- Demountable centrifugal bronze gear
- Factory loaded and vibration tested
- Improved spider seal
- Improved ball & socket brake arms & shoes

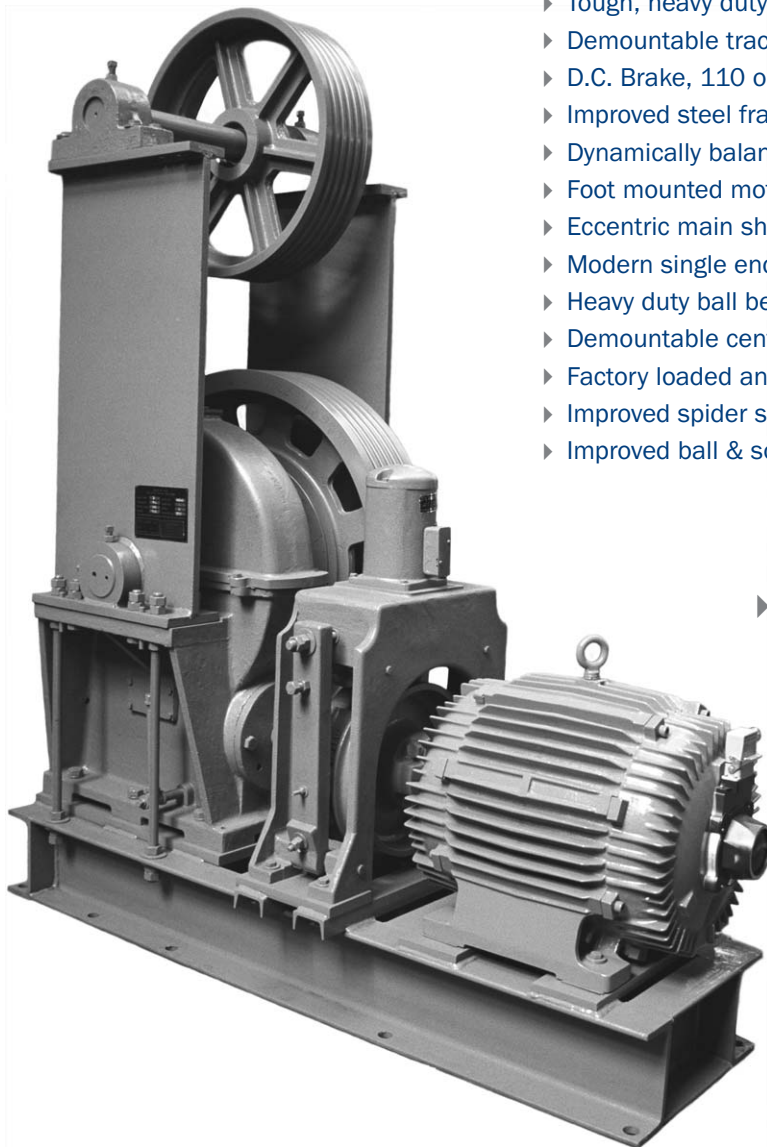
## TITAN II HORSEPOWER RATINGS

CAPACITY [LBS]	50 FPM	75 FPM	100 FPM	125 FPM	150 FPM	200 FPM	250 FPM	300 FPM	350 FPM	400 FPM	450 FPM
1000										15	15
1500										20	20
2000										25	30
2500										30	40
3000								30	30	40	40
3500							30	30	40	40	50
4000						25	40	40	40	50	
4500						30	40	40	50		
5000					25	30	50	50			
6000	12.5	20	25	30	30	40					
7000	15	20	25	30	40	50					
8000	20	25	30	40	40						



FOOTPRINT TO SHOW BOTTOM FRAME HOLES' POSITION





### ▶ FEATURES

- ▶ Tough, heavy duty, yet compact machine
- ▶ Demountable traction sheave with 220 Brinell Hardness
- ▶ D.C. Brake, 110 or 220 volts
- ▶ Improved steel frame base available in left and right hands
- ▶ Dynamically balanced split brake pulley/coupling
- ▶ Foot mounted motor (supplied by customer)
- ▶ Eccentric main shaft on taper roller bearings
- ▶ Modern single end, double acting thrust bearing
- ▶ Heavy duty ball bearing and oil seals in front bonnet
- ▶ Demountable centrifugal bronze gear
- ▶ Factory loaded and vibration tested
- ▶ Improved spider seal
- ▶ Improved ball & socket brake arms & shoes

### ▶ SPECIFICATION

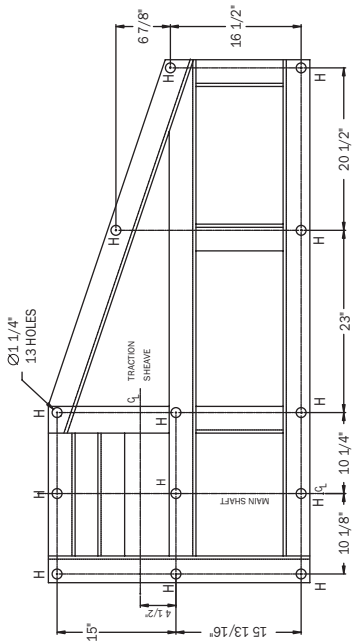
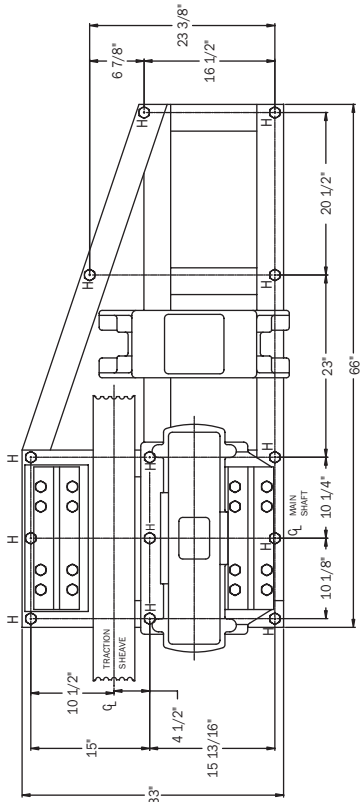
- ▶ Capacity Range: 1,000 lbs.-8,000 lbs.
- ▶ Speed Range: 50 fpm-450 fpm
- ▶ Maximum Main Shaft Load: 35,000 lbs.
- ▶ Traction Sheave Diameters 25", 27", 30" 36"
- ▶ Approximate Weight Basement: 3,500 lbs. plus motor  
Basement with Deflector=4,200 lbs. plus motor

## TITAN II HORSEPOWER RATINGS

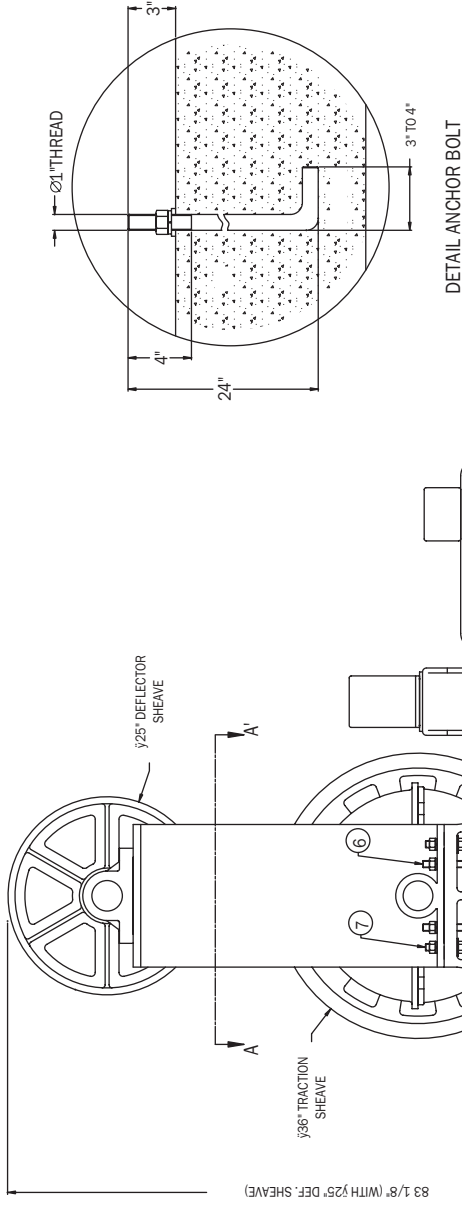
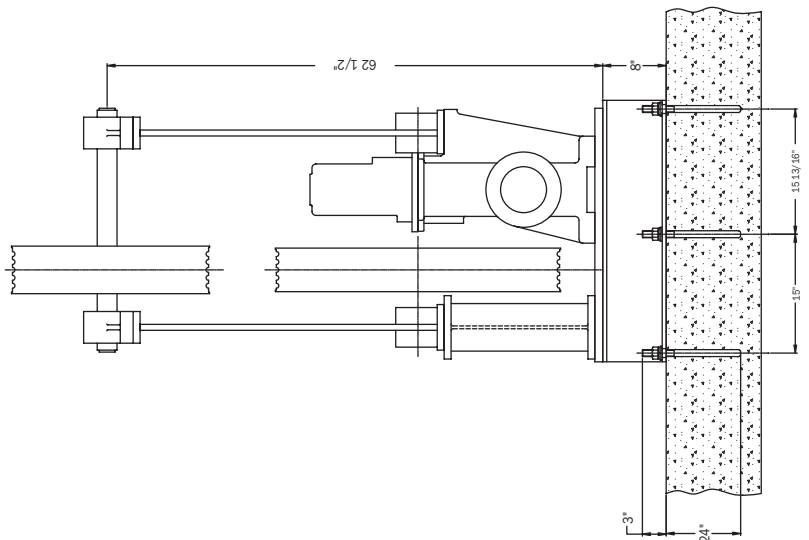
CAPACITY [LBS]	50 FPM	75 FPM	100 FPM	125 FPM	150 FPM	200 FPM	250 FPM	300 FPM	350 FPM	400 FPM	450 FPM
1000										15	15
1500										20	20
2000										25	30
2500									30	40	40
3000							30	30	40	40	50
3500							30	40	40	50	50
4000						30	40	40	50	50	
4500						40	40	50	50		
5000					30	40	50	50			
6000	12.5	20	25	30	40	50					
7000	15	25	30	40	40	50					
8000	20	25	30	40	50						

Ratings are approximate and are based on 40% counterweighting. Consult engineering department for other applications. Specifications, illustrations and descriptions are subject to change without notice.

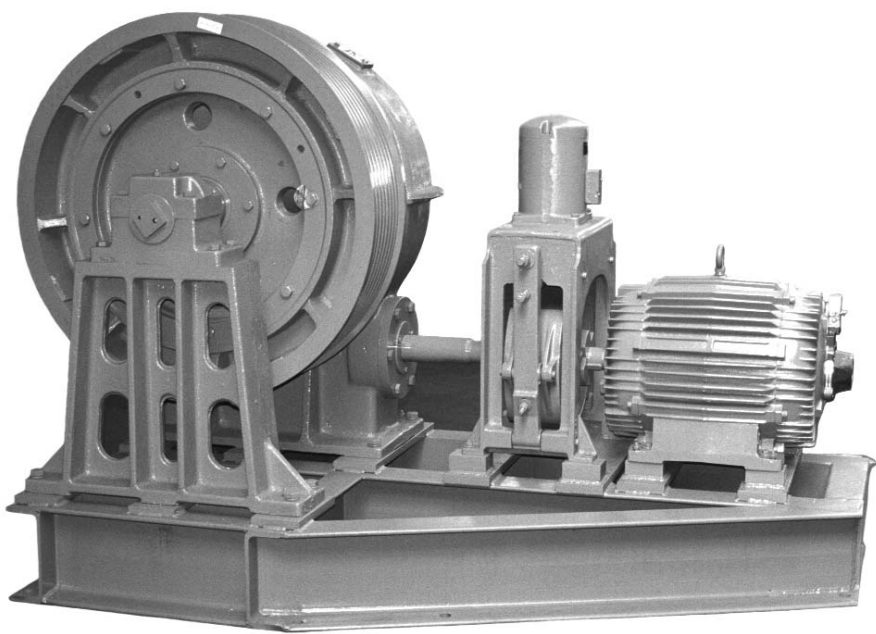
VIEW A-A'



FOOTPRINT TO SHOW BOTTOM FRAME HOLES POSITION



SEE DETAIL ANCHOR BOLT



▶ **FEATURES**

- ▶ Heavy duty design
- ▶ Overhead and basement models
- ▶ Demountable traction sheave
- ▶ D.C. brake 110 or 220 volt
- ▶ Machined steel frame base
- ▶ Dynamically balanced split brake pulley/coupling
- ▶ Eccentric main shaft on tapered roller bearings
- ▶ Heavy duty single end thrust bearing on integral worm shaft
- ▶ Heavy duty ball bearing and oil seal in front bonnet
- ▶ Demountable centrifugal bronze gear
- ▶ Factory loaded and vibration tested
- ▶ Improved spider seal

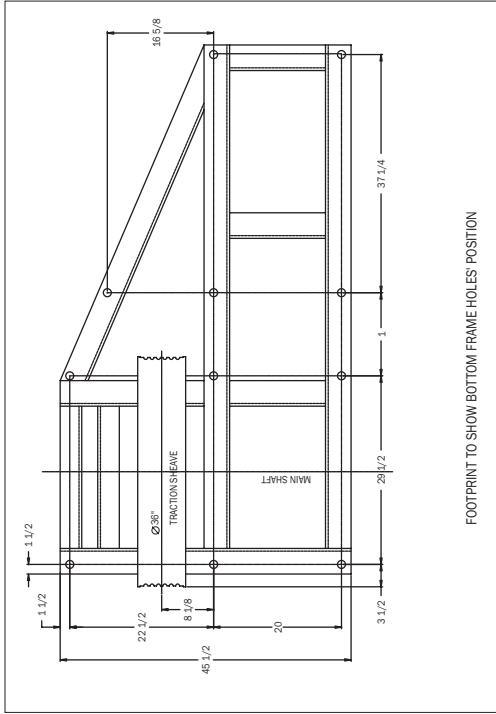
▶ **SPECIFICATION**

- ▶ Capacity: 4,000 lbs.-20,000 lbs.
- ▶ Speed: 75 fpm-450 fpm
- ▶ Maximum Main Shaft Load: 60,000 lbs.
- ▶ Sheave Diameters: 34", 40"
- ▶ Approximate Weight: 6,000 lbs. plus motor

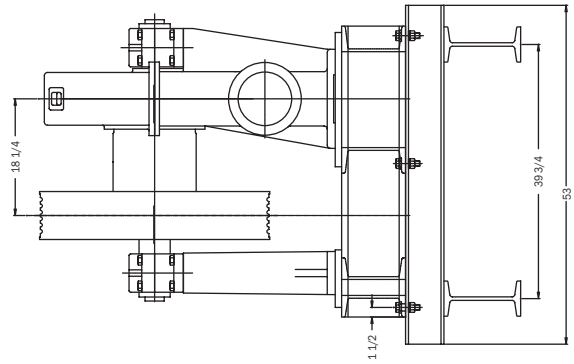
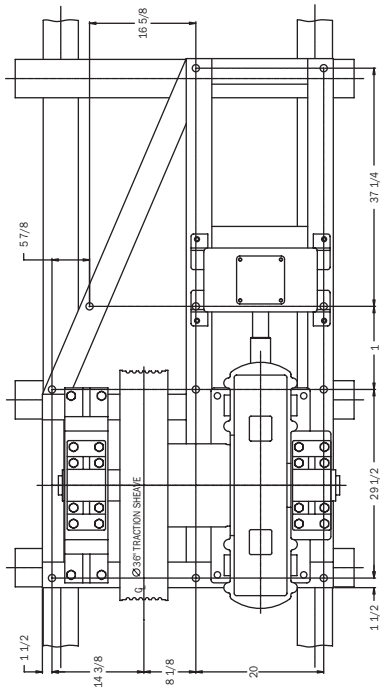
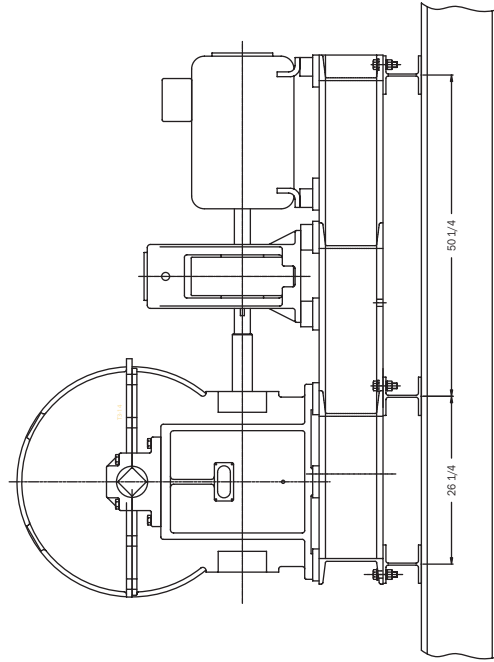
**TITAN III HORSEPOWER RATINGS**

CAPACITY [LBS]	OVERHEAD											BASEMENT										
	50 FPM	75 FPM	100 FPM	125 FPM	150 FPM	200 FPM	250 FPM	300 FPM	350 FPM	400 FPM	450 FPM	50 FPM	75 FPM	100 FPM	125 FPM	150 FPM	200 FPM	250 FPM	300 FPM	350 FPM	400 FPM	450 FPM
4,000											60											60
4,500										50	60										60	75
5,000									50	60	75							60	60	60	75	
6,000									60	75								75	75	75		
7,000								60	75								50	75	75			
8,000						50	60	60								60	60					
10,000		30	40	50	50	60	75	75					30	40	50	60	75	75				
12,000		40	40	50	60	75	75						40	50	50	75						
15,000		40	50	75	75								40	60	75							
20,000		50	75										60	75								

Ratings are approximate and are based on 40% counterweighting. Consult engineering department for other applications. Specifications, illustrations and descriptions are subject to change without notice.



FOOTPRINT TO SHOW BOTTOM FRAME HOLES' POSITION



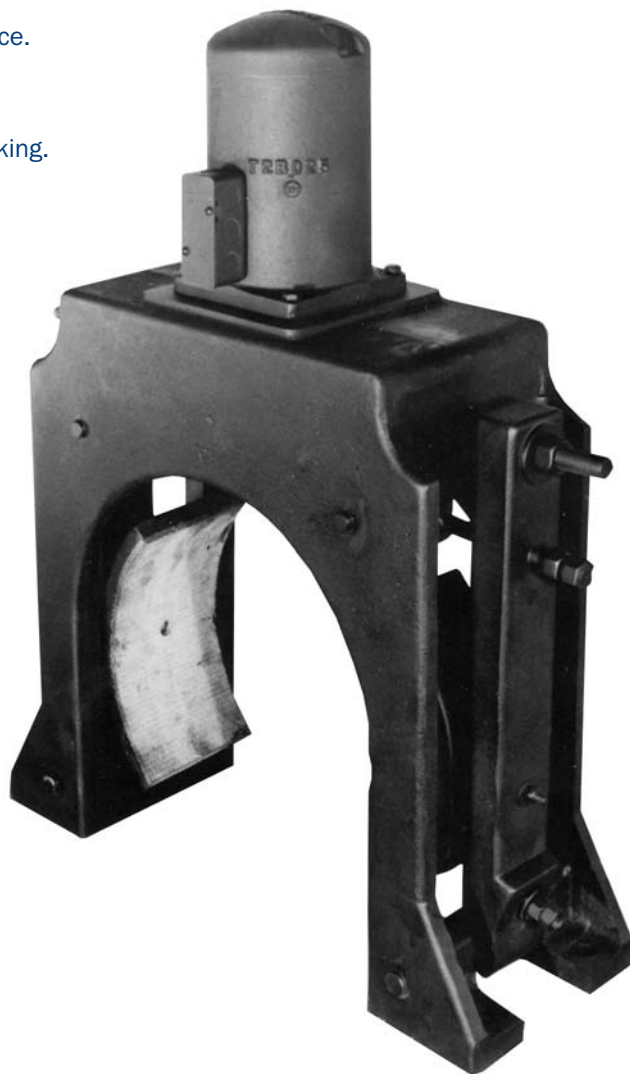
# DC BRAKES | BRAKE COUPLINGS

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► **FEATURES**

- Inexpensive ,efficient design with large mechanical advantage, works smoother, energy efficient.
- Vertical plunger design for easier adjustment and service. Preferred by maintenance professionals.
- Enclosed D.C. coil for trouble-free service.
- Ball & socket design brake shoes for smooth, even braking.
- Toe & heal adjustments.
- Drop in installation, no need to disassemble or split.
- Non asbestos brake linings are bonded by heat cured adhesive for longer life and easy relinings.



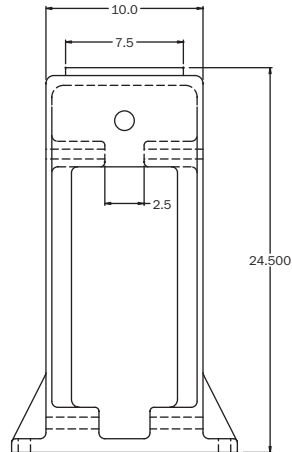
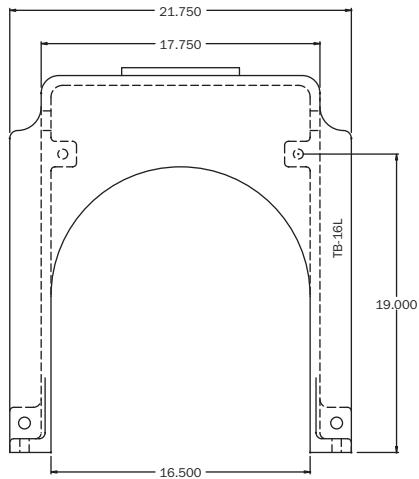
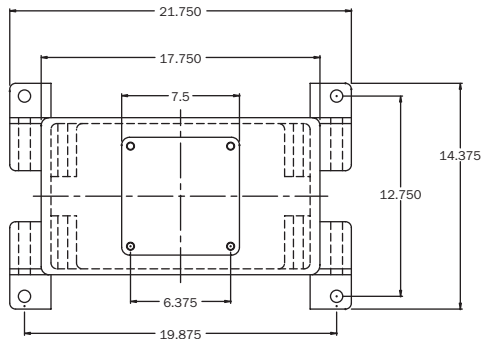
**ELECTRICAL SPECIFICATIONS**

BRAKE SIZE	TB-10 to TB-14		TB-16 to TB-20	
VOLTS	110V	220V	110V	220V
OHMS	68	280	59.5	168
AMPS	1.62	.78	1.94	1.18
WATTS	178	173	224	260

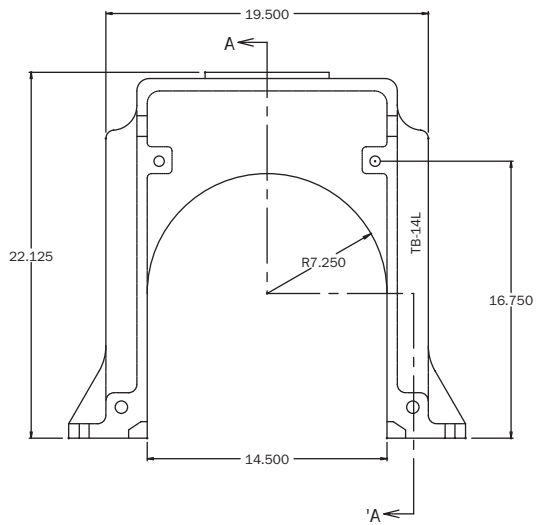
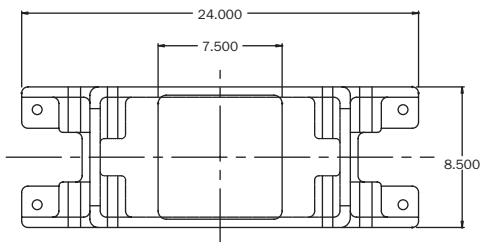
**TITAN BRAKE DIMENSIONS**

PART #	MOUNTING TYPE	A	B	C	D	E	F	G	H	I	J	K	L
TB-14L	B	7 3/8	25 3/4	33 1/8	14	23 7/8	5 3/16	2 19/32	13	8 13/16	17 5/8	5 1/2	14 7/16
TB-14H	B	11 3/8	25 3/4	37 1/8	14	23 7/8	5 3/16	2 19/32	13	8 13/16	17 5/8	5 1/2	14 7/16
TB-16L	A	9	26 3/16	35 1/16	16	21 3/4	12 3/4	6 3/8	14 1/8	9 15/16	19 7/8	6	16 1/2
TB-16H	A	13	26 3/16	39 3/16	16	21 3/4	12 3/4	6 3/8	14 1/8	9 15/16	19 7/8	6	16 1/2
TB-18L	A	10 1/2	30 5/8	41 1/8	18	26 1/2	14 7/8	7 7/16	16 7/8	12 3/8	24 3/4	7	20 1/2
TB-20L	A	10 1/2	30 5/8	41 1/8	20	26 1/2	14 7/8	7 7/16	16 7/8	12 3/8	24 3/4	7	20 1/2

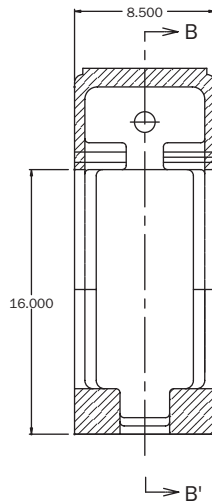
BRAKE HOUSING 14-TITAN 2



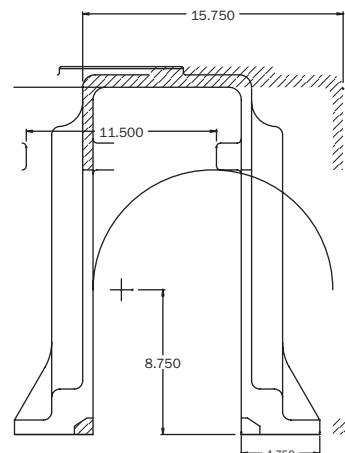
BRAKE HOUSING 16-TITAN 2



VIEW A-A'



VIEW B-B'



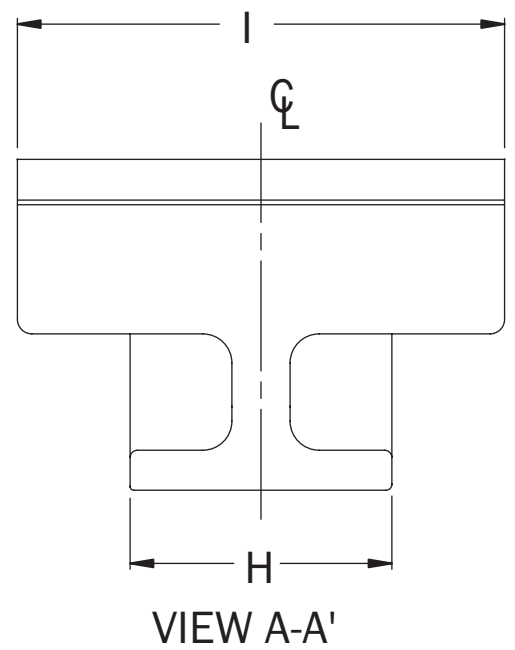
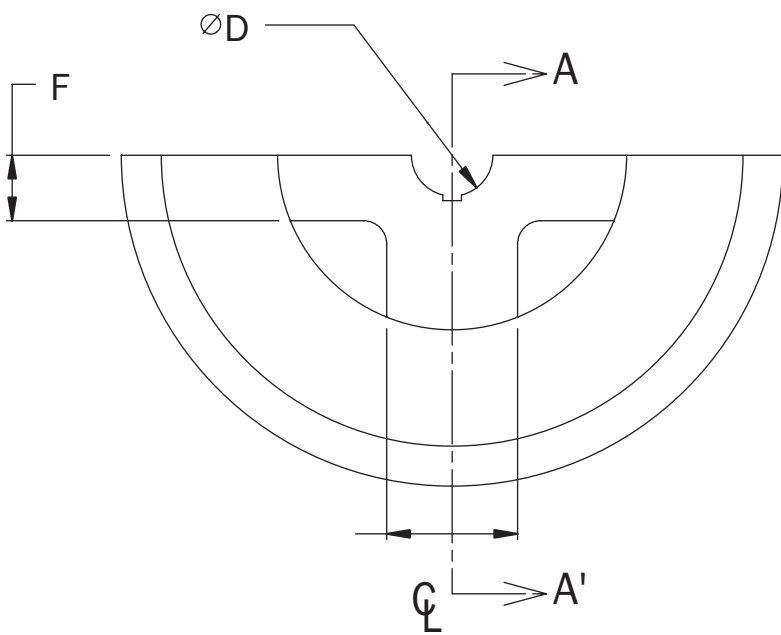
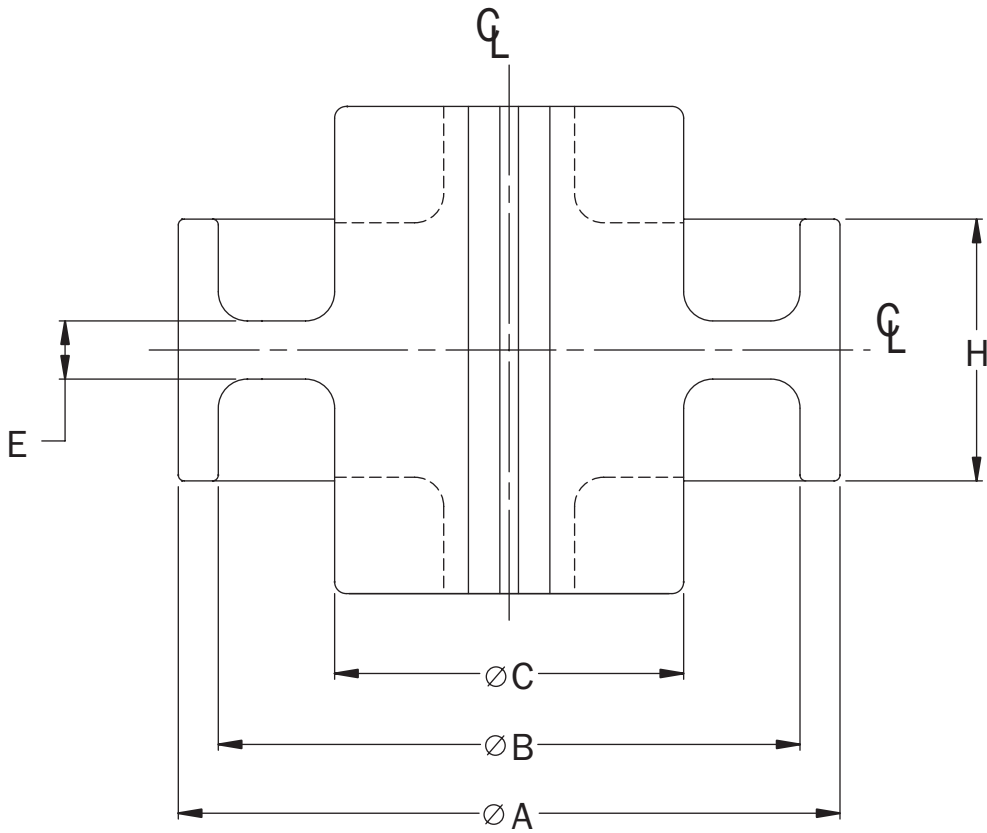


### ▶ FEATURES

- ▶ Available semi-finished or machine finished to size needed, in all popular sizes, complete with mounting hardware.
- ▶ Simple design for easy installation and motor alignment for most geared traction machines.
- ▶ Dynamic balancing available.

### TITAN SPLIT BRAKE COUPLINGS DIMENSIONS

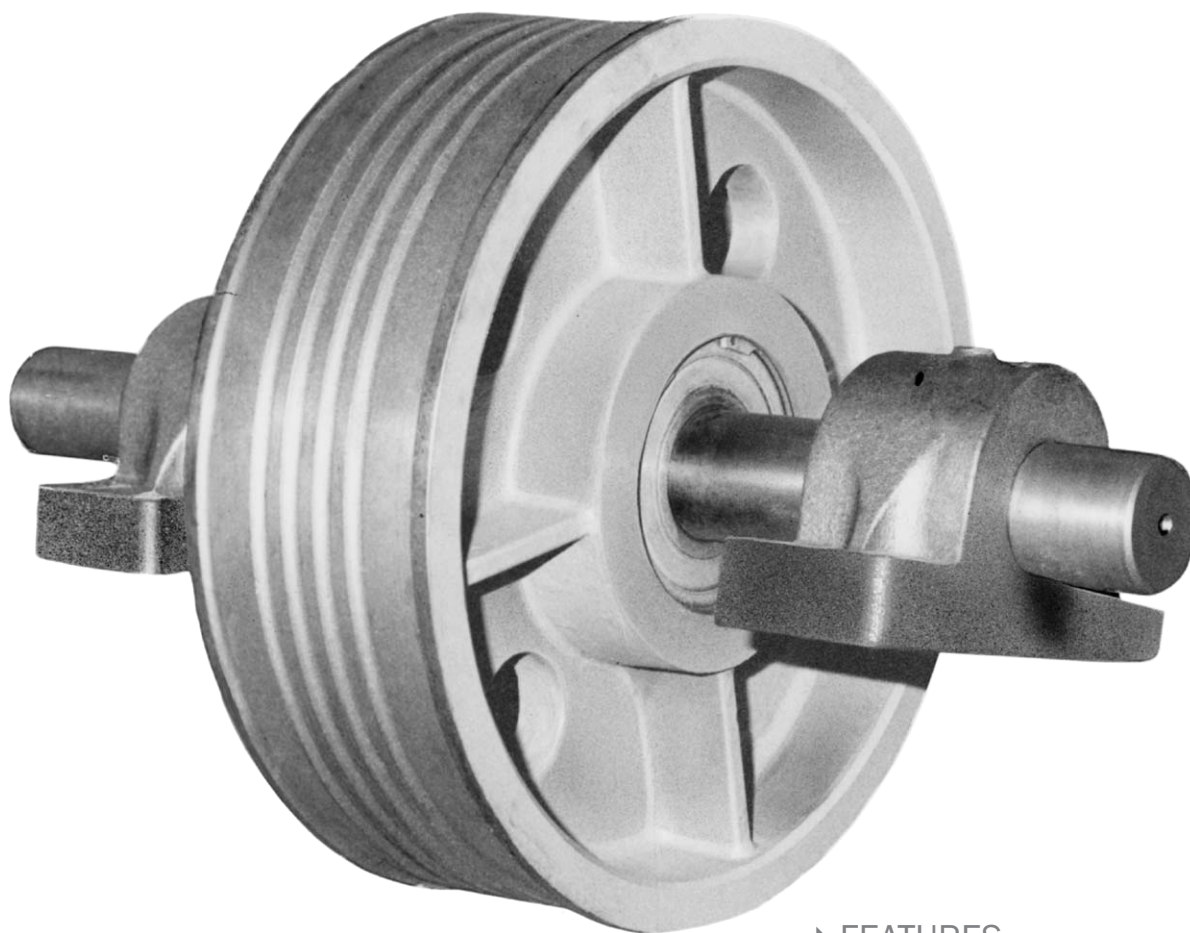
PART NO	Ø A	Ø B	Ø C	Ø DMax	E	F	G	H	I
TSC-10	10.0	9.0	5.875	2.0	1.0	1.125	2.250	4.5	8.250
TSC-11	11.0	9.875	5.875	2.375	1.0	1.125	2.250	4.5	8.250
TSC-12	12.0	11.0	6.250	2.5	1.125	1.125	2.250	5.0	8.750
TSC-14	14.0	12.875	6.375	2.5	1.125	1.250	2.250	5.5	8.875
TSC-16	16.0	14.875	6.625	2.750	1.125	1.375	2.250	6.0	8.875
TSC-18	18.0	16.875	8.125	3.5	1.375	2.250	2.750	7.0	9.375
TSC-20	20.0	18.875	8.875	3.5	1.375	2.250	3.0	7.0	9.375



# SHEAVE ASSEMBLIES

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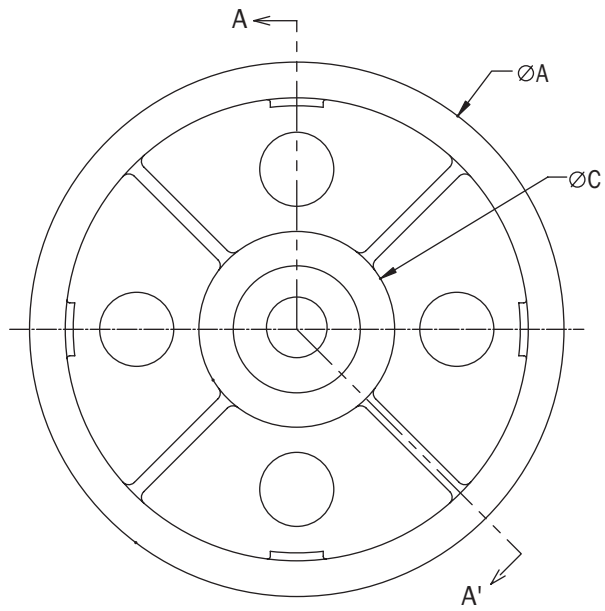
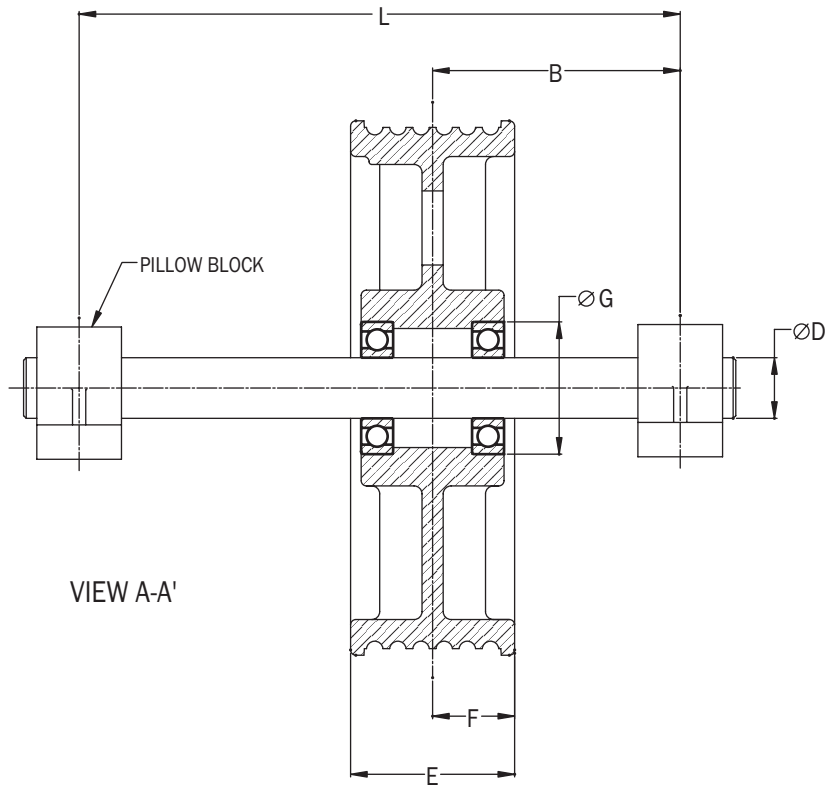


▶ **FEATURES**

- ▶ Special per customer specification/popular sizes available with desired mounting
- ▶ Car 2:1 sheave assemblies
- ▶ Counterweight 2:1 sheave assemblies
- ▶ Overhead sheave assemblies
- ▶ Secondary sheave assemblies
- ▶ Compensating sheave assemblies

**SPECIAL SHEAVE ASSEMBLIES** Specify details of your order.

A	B	C	D	E	F	G	NO. OF CABLES	SIZE OF CABLES



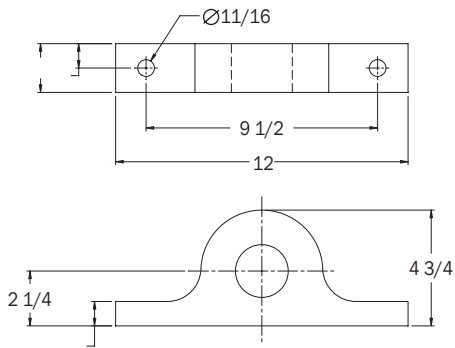


▶ EACH SHEAVE ASSEMBLY INCLUDES:

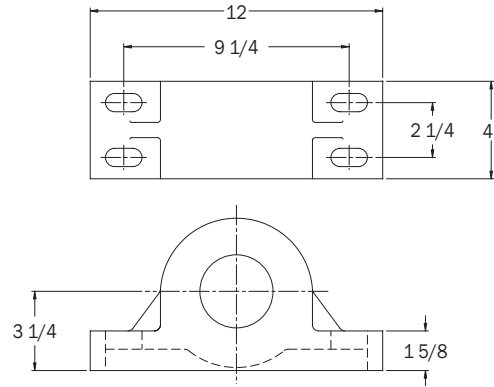
- ▶ Mounting Blocks, 2 Hole or 4 Hole Available
- ▶ Standard shaft diameter 2-15/16"
- ▶ Standard length of shaft x 33"
- ▶ Standard Groove Pitch
  - 1/2" Cable = 7/8" Pitch
  - 5/8" Cable = 1" Pitch
  - 3/4" Cable = 1-1/8" Pitch
- ▶ Groove Pitch Available to Your Specifications

STANDARD DEFLECTOR SHEAVE ASSEMBLIES

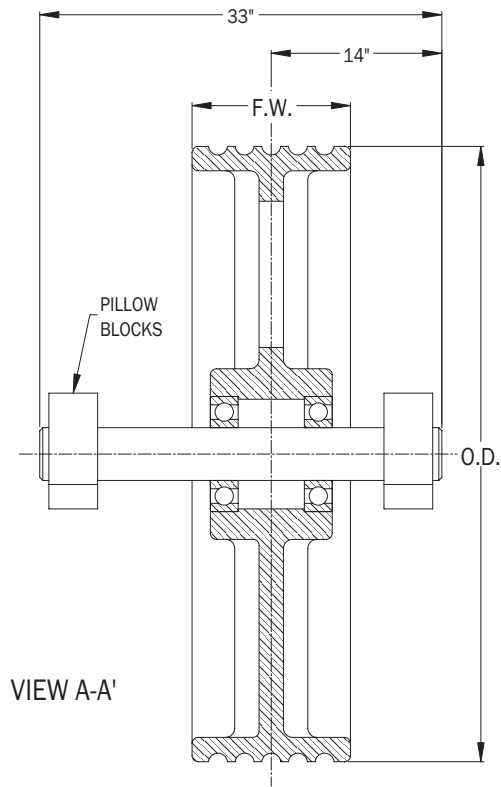
PART NO.	OUTSIDE DIAMETER	FACE WIDTH	MAX NO. & SIX OF CABLES
THSD-32	32	7.25	(7) <sup>1/2</sup> OR (6) <sup>5/8</sup>
THSD-30	30	7.25	(6) <sup>5/8</sup> OR (6) <sup>3/4</sup>
THSD-28	28	7.25	(6) <sup>5/8</sup> OR (8) <sup>1/2</sup>
THSD-25	25	7.25	(6) <sup>5/8</sup> OR (8) <sup>1/2</sup>
THSD-25-6	25	6.0	(6) <sup>1/2</sup> OR (5) <sup>5/8</sup>
THSD-20	20	7.25	(8) <sup>1/2</sup>
THSD-20-5	20	5.0	(5) <sup>1/2</sup>
THSD-20-4.5	20	4.5	(4) <sup>1/2</sup>



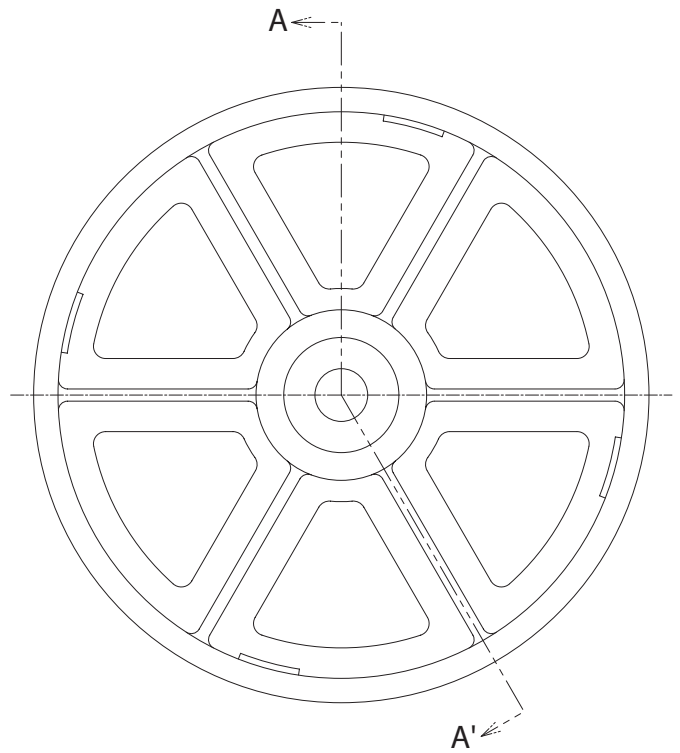
2 HOLES PILLOW BLOCK



4 HOLES PILLOW BLOCK

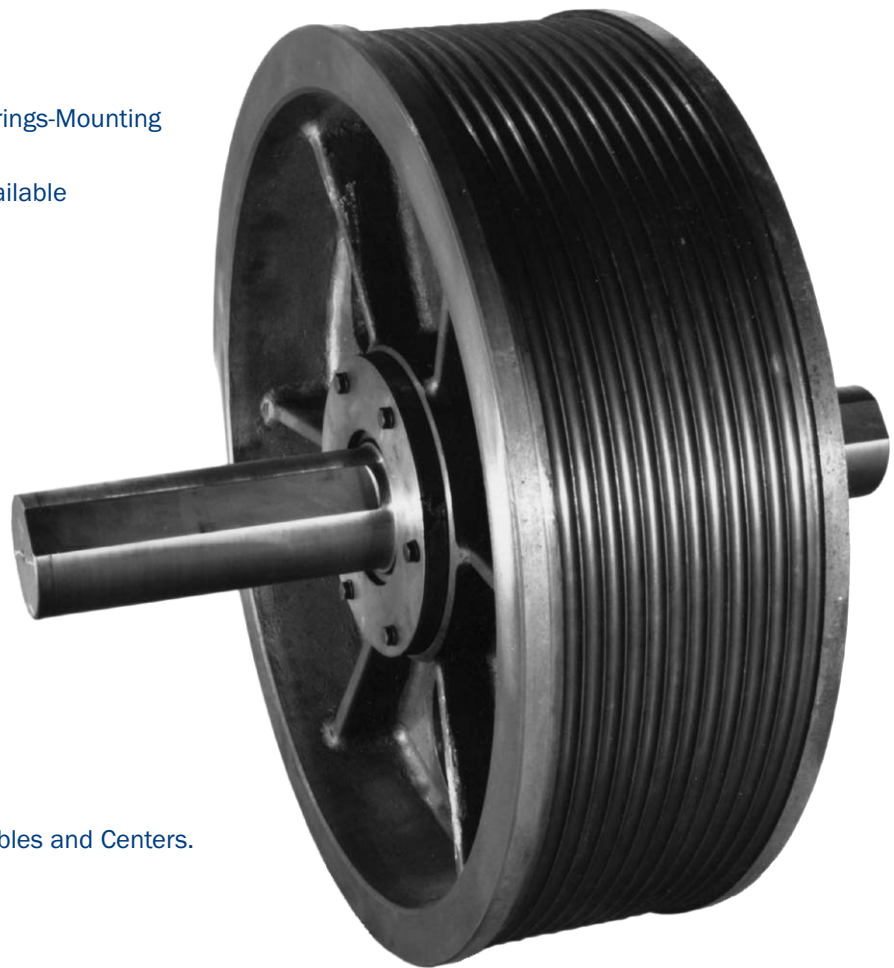


VIEW A-A'



### ▶ INCLUDES

- ▶ Sheave, Shaft, Heavy Duty Bearings-Mounting Blocks Available.
- ▶ Special Sheave Assemblies ,Available

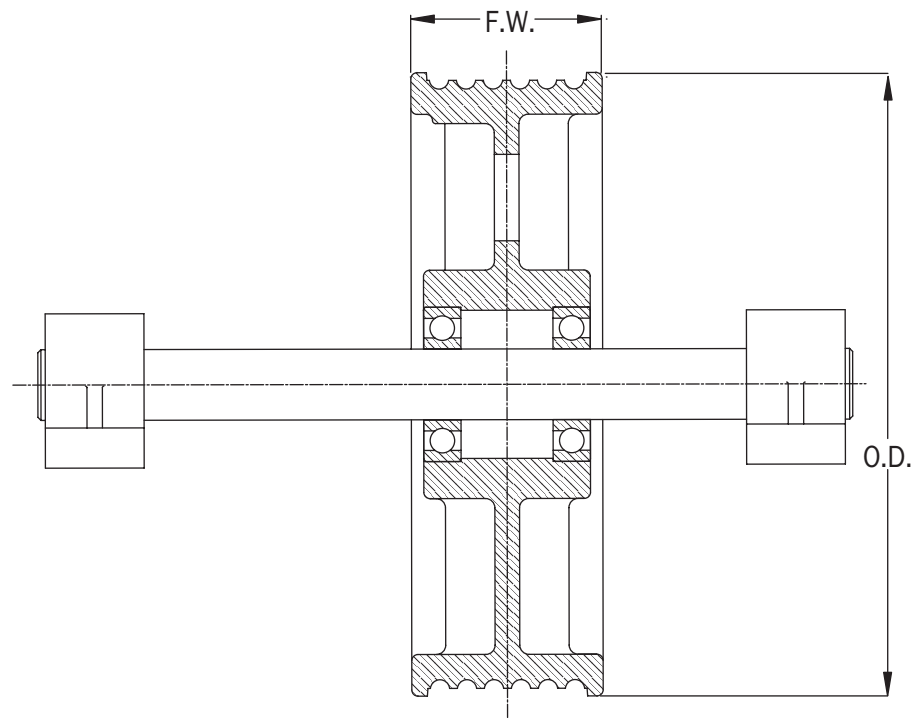
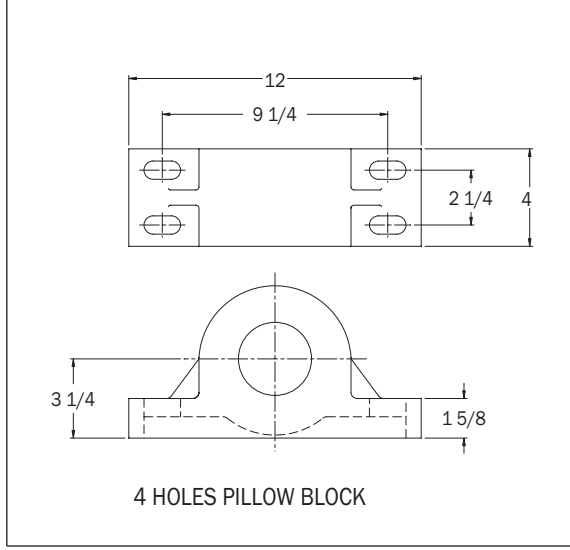
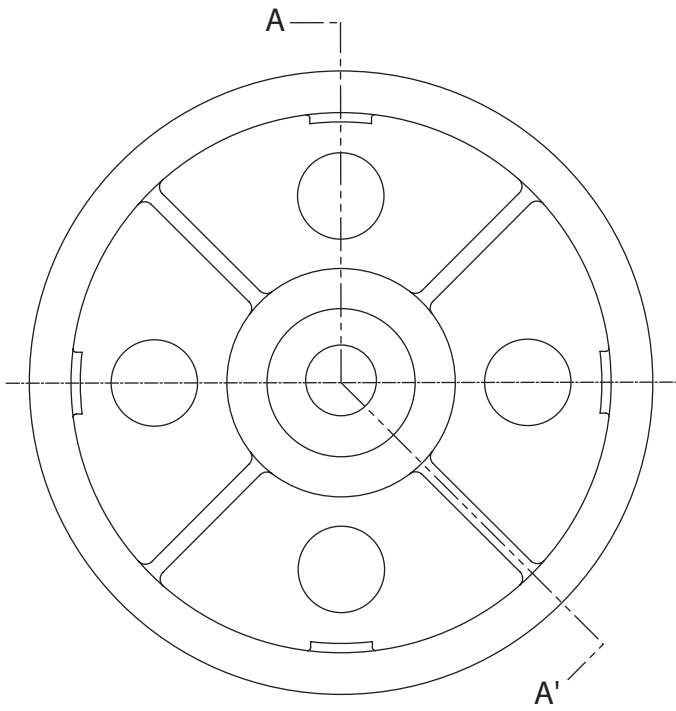


### ▶ NOTE

- ▶ Specify Number and Size of Cables and Centers.
- ▶ Standard Centers
  - 1/2" Rope = 7/8" Pitch
  - 5/8" Rope = 1 " Pitch
  - 3/4" Rope = 1-1/8 Pitch
- \*Secondary Sheave

## HEAVY DUTY SHEAVE ASSEMBLIES FOR DEFLECTORS, 2:1, OVERHEAD, COUNTERWEIGHT AND GEARLESS SECONDARY SHEAVES

PART NO.	OUTSIDE DIAMETER	FACE WIDTH	MAX NO. & SIX OF CABLES
THSD-40-HD	40	7.5	(8) <sup>1/2</sup> , (7) <sup>5/8</sup> , (6) <sup>3/4</sup>
THSD-38-HD	38	7.5	(8) <sup>1/2</sup> , (7) <sup>5/8</sup> , (6) <sup>3/4</sup>
THSD-36-HD	36	7.5	(8) <sup>1/2</sup> , (7) <sup>5/8</sup> , (6) <sup>3/4</sup>
*THSD-34-HD	34	7.0	(7) <sup>1/2</sup> , (6) <sup>5/8</sup>
THSD-33-HD	33	14.0	(22) <sup>1/2</sup> , (18) <sup>5/8</sup> , (16) <sup>3/4</sup>
THSD-33-HD	32	7.0	(7) <sup>1/2</sup> , (6) <sup>5/8</sup>
*THSD-30-W	30	10.0	(16) <sup>1/2</sup> , (12) <sup>5/8</sup> , (10) <sup>3/4</sup>
THSD-30-HD	30	7.0	(6) <sup>5/8</sup>
THSD-28-HD	28	7.25	(8) <sup>1/2</sup> , (7) <sup>5/8</sup>
THSD-25-W	25	10.0	(16) <sup>1/2</sup> , (12) <sup>5/8</sup>
THSD-25-HD	25	8.0	(8) <sup>1/2</sup> , (7) <sup>5/8</sup>
THSD-20-HD	20	8.0	(8) <sup>1/2</sup>



# DRIVE SHEAVES | GEARED & GEARLESS

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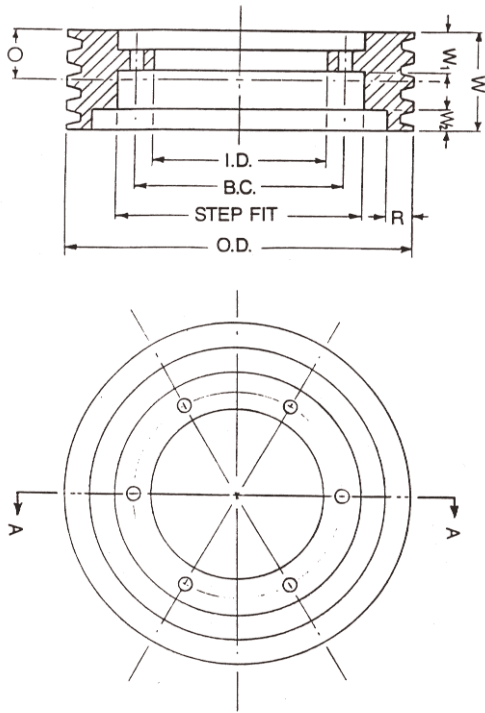
SHOWN: New Demountable Drive Sheave Replacement for an Otis #2 Machine



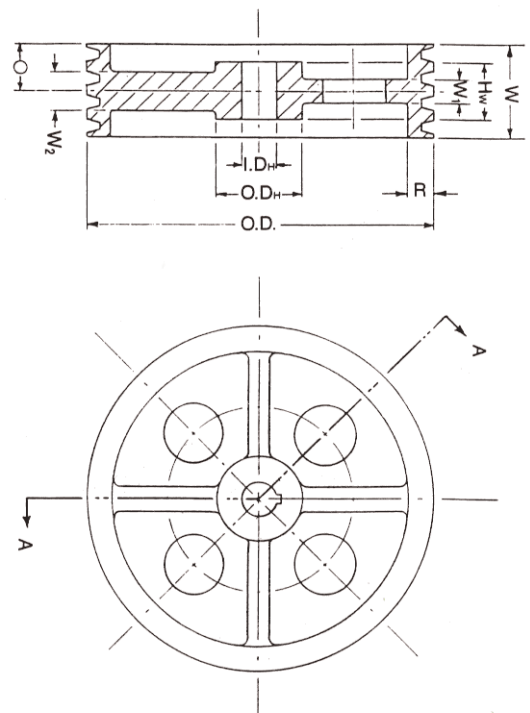
#### ▶ TITAN MACHINE CORPORATION

- ▶ Is industry known for being the source for quality replacement drive sheaves for all types of traction elevator machinery, for all geared and gearless applications.
- ▶ Stocks tens of thousands of pounds of high quality cast iron raw sheave castings to assure a quick turn around time to our customers.
- ▶ Popular demountable sheaves are pre manufactured in some cases, ready for immediate shipping.
- ▶ Unusual and special application drive sheaves are our specialty, as we have manufactured sheaves from 6" diameter to 77" diameter.
- ▶ The following pages are a comprehensive listing of elevator manufacturers for whom Titan has fabricated new replacement sheaves for geared applications.

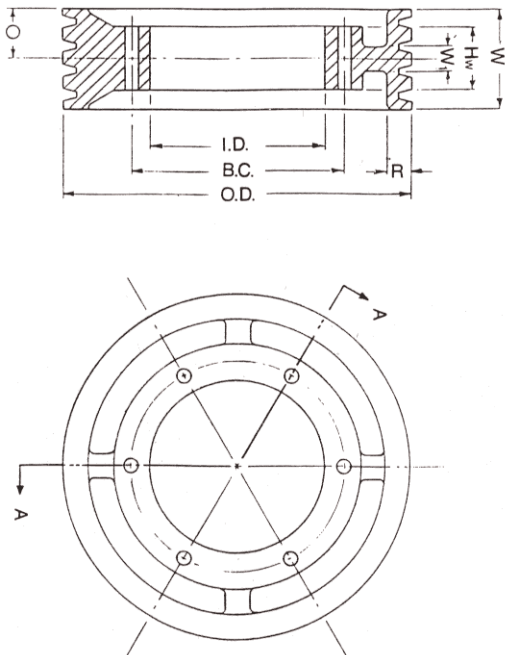
VIEW A



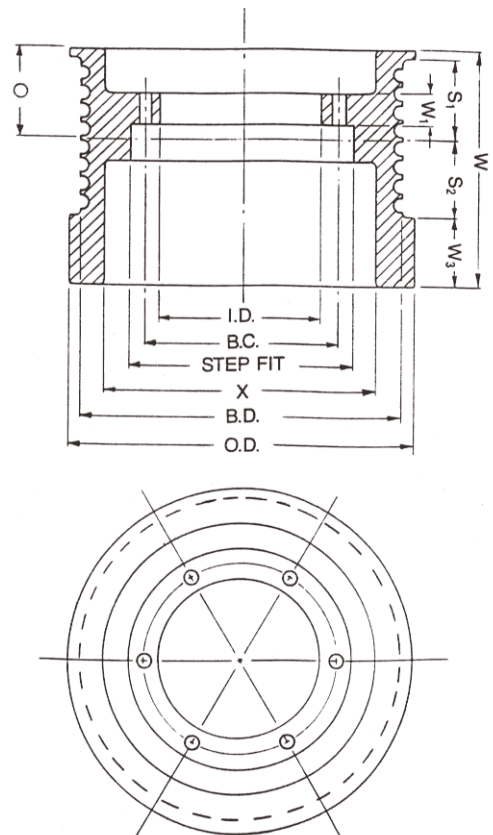
VIEW B



VIEW C



VIEW D



MANUFACTURER	MFRS CASTING NO.	SHEAVE DIAMETER	TITAN TYPE NO.	DESCRIPTION
<b>A.B. SEE</b>				
#1 1/2		26"	C	TFS-0330
#2				
#3			C	52577B
#4		30"		
#5			C	
#6		32"	C	
#7		40"		
#21		26"	C	TFS-0370
#22		26"/28"	C	
#23		26"/32"	C	
#24		30"	C	TFS-0620
#25		22"/24"/28"/30"	A	

Demountable type,-letters after machine types should be included, as they designate wrap and machine mounting, etc.

#5-Offset Mounted.

#21 Offset Mounted.

#25 Basement Long Shaft Type.

**ARMOR (HORN)**

#1, 1BB		22"/28"	A	
#2,2BB		25"	A	T200-25
		27"/30"	A	
#3, 4B, 4BB		30"/30"	A	TFS-AR-430
		34"	A	TFS-0840
		38"	A	TFS-AR-438
4B		30"/36"/42"	A	
#5, 5BB		36"/48"	A	
#7, 7X				

Early Armor geared units are solid sheave assemblies. Call Titan for details on sheave replacements. Many Armor sheaves are demountable.

**CURTIS**

K		20"	A	TFS-0070
		20"	A	TFS-0850
		22"	A	TFS-1377
L		27"/30"	A	

Demountable type. 15" fit

Demountable type

**DOVER**

GD,45,50,75		20"/25"		
GD 100, 105		25"	A	TFS-0230
		30"	A	DOVER 30
GD-1		30"	B	
GD-1		25"	B	
GD 200		30"/33"	A	
GD 240		30"/33"	A	
GD 300		30"	A	TFS-0490
GD 300		33"	A	
GDF25		20"/25"		

Demountable type

Demountable type

Demountable type

Hub mounted type

Hub mounted type

Demountable type

Demountable type

Demountable type

Demountable type

Demountable type

**GENERAL**

C		21"/24"	A	
D		21"/24"	A	
F		25"	A	TFS-0320
G		27"/30"	A	
GS		21"	C	TFS-0850
H			A	
M			A	
P		40"	A	

Early models may have solid sheave assemblies. Call Titan for details on sheave replacement. Demountable type later models.

MANUFACTURER	MFRS CASTING NO.	SHEAVE DIAMETER	TITAN TYPE NO.	DESCRIPTION
<b>GURNEY</b>				
H13VTE		21"/24"/27"/30"	A	Early Gurney Sheaves are Solid Cast Types.
H14VTE		21"/27"/30"	A	
H15VTE		25"	A	
H15VTE		30"	A	
H16VTE		24"/27"/30"/33"/36"/39"	A	
H17VTE		33"	A	
H18VTE		37"	A	
H19VTE		24"/27"/30"/33"/36"/39"/42"	A	
H20VTE				
W13		27"/30"/33"/36"/39"/42"/45"	A	
W14				
		27"/30"/33"/36"/39"/42"/45"	A	
		12"/14"/18"/24"	A	
		12"/14"/18"/24"	A	

<b>HAUGHTON</b>					
AV	1-45027-64	27"	A	TFS-0370	1920 Vintage demountable type.
BV	5362	36"	A		Demountable type.
E		36"	A	TFS-3879	
EK		36"	A	TFS-3879	Solid
FV		33"	A		Hub mounted sheave assembly used with tandem gear models.
NNV			A		
H		23 <sup>1/2</sup> "/30"	A	TFS-0140	23" Demountable.
K	10352	33"	A	243SH2	Demountable type.
L	3-10370-03	39"	A	9883B	Demountable type, 1936 vintage.
N	3-10375-01	46"	A		1935 Vintage, demountable type.
N	3-40270-43	36"	A		1935 Vintage, demountable type.
O	3-10359-03	21"	A	TFS-0070	1950 Vintage, demountable type.
O	10359-E,D	21"	A	TFS-0070	1950 Vintage, demountable type.
RV/R	10351	27"	A	TFS-0010	1920 vintage solid gear spider assembly

<b>HOLLISTER WHITNEY</b>					
#43		20"	A	TFS-0850	Demountable type
		25"/28"	A		Early models may have solid sheave assemblies. Call Titan for details on sheave replacement.
#53		20"/25"/28"	A		
#63		32"	A	TFS-0680	
		36"	A	61788	
#73,74		32"/38"	A		

<b>KIESLING</b>					
#1		25"	A	TFS-0250	Demountable type
#2		30"		TFS-0570	Solid sheave assembly. Call Titan for details.

MANUFACTURER	MFRS CASTING NO.	SHEAVE DIAMETER	TITAN TYPE NO.	DESCRIPTION
<b>LAGERQUIST</b>				
OT-2-VV		24"/26"/28"	A	Demountable type
		30"/32"	A	Demountable type
OT-3-VV		26"/28"/30"	A	Demountable type
		32"/36"	A	Demountable type
OT-4-VV		36"/38"/40"	A	Demountable type
<b>MONARCH</b>				
				Call Titan for details on sheave replacements
<b>MONTGOMERY</b>				
#207		22"	A	TFS-1377 Demountable type
		20"	A	TFS-0030 Demountable type
#208		26"	A	TFS-0060 Demountable type
#210		27"/26"/28"/30"	A	T-2000-27 Demountable type
		28"	A	TFS-MONT-210 Demountable type
#214		30"/35"	A	
#215		32"/36"/38"/40"	A	TFS-MONT-215
<b>OTIS</b>				
#9, AD	B260C	12"	B	Hub mounted dumbwaiter on drive sheave.
#14 AT	C260A	20"	B	1935 to present, hub mounted with or w/o tape grooves.
#14 AX				TFS-0250
#1/2 I.G	260E	24"		External gear and sheave assembly.
	515SH1	24"	B	1910-1950's Otis #1/2 internal geared machines, used with or w/o chain groove non-demountable type, also used with #16 models.
	542SH1	24"	B	TFS-1030
	192SH1	24"	B	
	530SH1		B	
#1 I.G	557SH1	30"	B	THS-1IG 1910 to 1940's Otis #1 internal gear, non-demountable type, also used with #16 models.
	587SH1	30"	B	
	337MC1	30"	B	
#1/2SWT/16BT	517SH1	24"	C	TFS-1030 1930's to present, demountable type, very popular machines with or w/o tape grooves.
	260F	25"	C	TFS-1080
			B	
#1SWT/19BT	260AL	30"	B	Hub mounted.
#1SWT/19BT	260AV	30"	C	
	744SH1	27"	C	TFS-0520
	1-260W	27"	C	
#1SWT/19BT	518SH1	30"	C	TFS-0630 1930's to present, demountable type, very popular.
	260AB	30"	C	TFS-0600
	260AR	30"	C	TFS-0600 1950's to present, demountable type with tape grooves.
#2SWT	520SH1	27"	C	TFS-0520 1930's to present, demountable type, very popular.
#27BT	260T	27"	C	TFS-0520 1930's to present, demountable type, very popular.
	521SH1	30"	C	260TS 1930's to present, demountable type, very popular.
	1-260T	30"	C	260TS 1930's to present, demountable type, very popular.
	522SH1	33"	C	TFS-0410 1930's to present, demountable type, very popular.
	2-260T	33"	C	TFS-0410 1930's to present, demountable type, very popular.
	260AS	27"	C	
	1-260AS	30"	C	260TW 1960 vintage to present, demountable type with tape groove.
#27BX	260R	40"	B	4981 External gear driven sheave assembly, used with heavy freights.
	A260R	40"	B	4981 B

MANUFACTURER	MFRS CASTING NO.	SHEAVE DIAMETER	TITAN TYPE NO.	DESCRIPTION
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**OTIS** (continued)

#22 standard	260AY	28"	A		1960's to present, demountable type, popular models.
	260BA	30"	A		
#22CT	1P-260-BR	30"	B	THS-0190B	Late model with Polyurethane insert.
	1P-260-AX	30"	B		
	260AW	28"	B	THS-0190	Hub mounted, overhung model.
	A260AX	30"	B	THS-2232	Hub mounted, overhung model.
	260BL	32"	B		Hub mounted, overhung model.
#29 standard	260BB	30"	A		1960's to present.
	260BE	32"	A	TFS-0640	Demountable type.
#29CT	260BN	32"	B	TMSC-29CT	Late model with Polyurethane insert.
	260BB	30"	B		1960's to present, hub mounted, overhung model.
	A260BC	32"	B	TMSC-29CT	
	260BH	38"	B	THS-29CT-38	1960's to present, hub mounted, overhung model.
#3 BAS	610SH1	30"	C	TFS-0670	Demountable type.
	260Z	30"	C	TFS-0670	Demountable type.
	524SH1	34"	C	T260AA	Demountable type.
	260AA	34"	C	T260AA	Demountable type.
#3 SWT	523SH1	30"	C	TFS-0670	1922 to 1950 vintage, demountable type.
#38BT	525SH	34"	C	TFS-3879	1948 vintage, demountable type.
	260AF 2	34"	C		Late model - Demountable type.
	60AG	38"	C	32782	Late model - Demountable type.
	555SH1	38"	C	32782	1920's, #3 version, demountable type.
	centermount	40"	A		
	549SH1	40"	A	549SH1	1922 #3-#4 SWT version demountable type.
#4,#5	243SH1	34"	A	243SH2	1920-1940's, demountable type.
#43BT	243SH2	34"	C	243Sh2	
	539SH1	38"	A		1920's, #5 SWT, demountable types.
	158SH1	38"	A		
	197SH1	40"	A	52879	Pre-1920, #4 SWT, demountable types.
	A197SH1		A		
	204SH1		A		
#7,7L	230SH1	44"	A		1930's demountable type.
			A		

**PAYNE**

#300		30"		TFS-AR4-30	Demountable type. Early models are solid sheave assemblies.
#400		30"	A	9883	
#500		38"	A		Call Titan for details on sheave replacement

**SEEBERG/TURNBULL**

		27"			Solid type
3B		27"		TFS-0540	Demountable type. (Narrow)
			A	TFS-0550	Demountable type. (Wide)
Turnbull		20"	A	TFS-0070	
		22"	A	TFS-1377	Demountable type.
OEA		27"	A	TFS-0550	Demountable type.
OEN		20"/22"	A	TFS-1377	Demountable type.
		30"	A		Demountable type.

MANUFACTURER	MFRS CASTING NO.	SHEAVE DIAMETER	TITAN TYPE NO.	DESCRIPTION
<b>SERGE</b>				
		27"		TFS-0010 Solid type
#9SR		21"	A	TFS-0060 Demountable type.
#9SR		27"	A	Demountable type.
#12SR		30"	A	Demountable type.
#12SR		34"	A	TFS-SR12-34 Demountable type.
#16SR		38"	A	TFS-AR-4-38 Demountable type.
<b>STALEY</b>				
		20"	A	TFS-0860 Demountable type. 13 <sup>1/4</sup> " fit
		22"	A	TFS-1377 Demountable type.
		24"	A	B1575 Demountable type.
		27"	A	TFS-0360 Demountable type.
		30"	A	52577 Demountable type.
<b>WATSON/WARSAW</b>				
		34"		TFS-3879 Many models have solid sheave assemblies.
		30"		TFS-0610 Call Titan for details on sheave replacements.
IEN		32"		TFS-0670 Call Titan for details on sheave replacements.
		27"		TFS-0500
OEN		24"		TFS-0210
XE		20"		TFS-0070
XEN		20"		TFS-0070 Demountable type.
<b>WESTINGHOUSE</b>				
#18		24"		Most Westinghouse geared units are solid sheave assemblies.
#25,27,27L		27"	TFS-0130	
#28		30"	TFS-0610	Call Titan for details on sheave replacement.
#35,36		27"		
#37		27"	TFS-WEST 37	
#38		30"	TFS-0610	
#51,53,54		32"	TFS-0170	
#57,#58		32"	TFS-0710	
#61		38"	9883B	
#81		40"		



SHOWN: New Demountable Drive Sheave/Brake Drum for Houghton Type #20 Gearless Sheave

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- ▶ Popular demountable sheaves are pre manufactured in some cases, ready for immediate shipping.
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- ▶ The following pages are a comprehensive listing of elevator manufacturers for whom Titan has fabricated new replacement sheaves for gearless applications.

MANUFACTURER	MFRS CASTING NO.	SHEAVE DIAMETER	BRAKE DIAMETER	TITAN TYPE NO.	DESCRIPTION
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### A.B. SEE

#14,#14 1/2		35"		D		Conversion of main bearing available. Call for details.
#37				D		

### DOVER

G3,G3A		24", 25", 26"		D	TFS-G3	
G4		27", 30"		D		

### ELECTRO DYNAMIC (see Leroy Somer)

#20S-20SL		24"	28"	D		Demountable type, some models have overhung sheave arrangement.
#30S-30SL		24"	28"			

### GENERAL ELECTRIC

#GTE,10,12		26"	30"	D		
16,20,25,31		26"	30"			
GTE-40		30"	36"			
63,80		36"	40"			

### GURNEY

#422				D		Call with details.
#622						
#722						

### HAUGHTON

#15		28"	28"	D		1950 Vintage
#20		28"	33"			1950 Vintage
#20		30"	33"			1950 Vintage
#30						1950 Vintage

### LEROY SOMER

GAL FRAME		24"	28"	D		
		26"	28"			
		30"				
GEL FRAME		22"	26"			
		24"	28"			
		26"	28"			

### OTIS

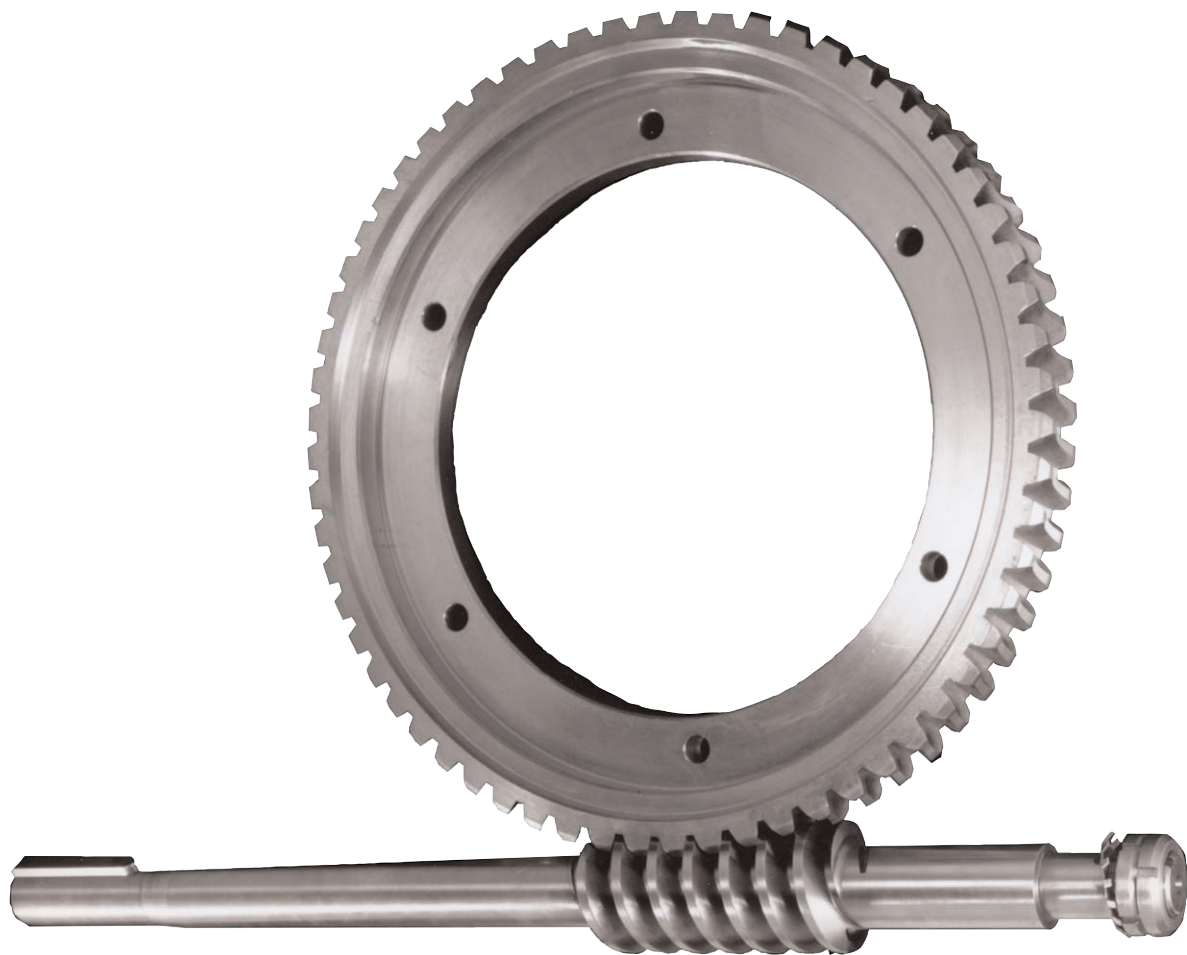
#70	549SH1	30"	30"			1926 vintage/hollow shaft.
						1933 vintage/solid shaft.
#72	261E	28"	25"		THS-558SH1	
#74	546SH1	28"	28"			
#74D	558SH1					
#77		36"	36"			Safe lift brake.
#77A	B-15SH	36"	36"			
	15SH	36"	36"			1928 vintage.
#78						1924 vintage/hollow shaft.
						1933 vintage/solid shaft.
#79	1-692SH1	40"	40"	D		1930 vintage.
#131HT	260AJ	27"		B		Overhung sheave with hub & key mounting.
#139HT	LX260BY			B		
#155HT	261J	27"	33"	D		Internal brake model.



# WORM & GEAR SETS

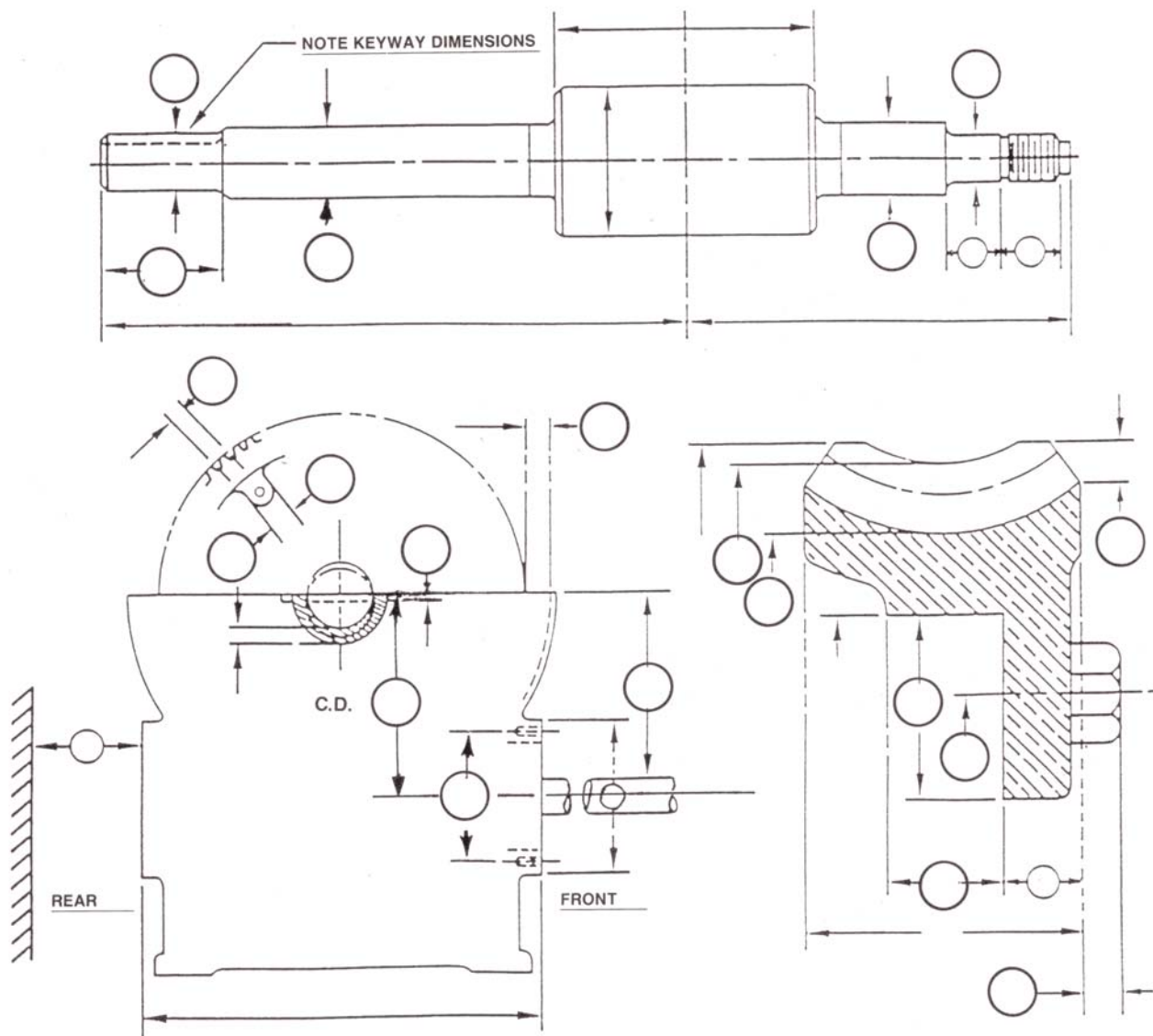
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### ▶ TITAN MACHINE CORPORATION

- ▶ Servicing the elevator industry. Titan's years of experience and dedication to quality have contributed to our growth.
- ▶ Is industry known for being the source for quality replacement worm & gear sets for any type of worm geared elevator machine.
- ▶ Titan's flexible manufacturing capabilities and complete "in house" material supply, keeps customer down time to a minimum, assuring quick turn around time.
- ▶ The following listings of elevator machinery has been compiled to help manufacturers, elevator mechanics, supervisors, modernization specialists, and sales personnel to identify elevator equipment for ease of pricing and to minimize confusion.
- ▶ The following pages are a comprehensive listing of elevator manufacturers for whom Titan has fabricated new replacement worm and gear sets.



FIELD DATA FOR WORM & GEAR REPLACEMENT

Specify details of your order

Machine Mfgr/Type/Year \_\_\_\_\_

Machine Mfgr/Type/Year \_\_\_\_\_

Car Speed-Rated \_\_\_\_\_ Tach \_\_\_\_\_

Car Speed-Rated \_\_\_\_\_

Car Roping \_\_\_\_\_

Car Roping \_\_\_\_\_

Motor Speed-Nameplate \_\_\_\_\_ Tach \_\_\_\_\_

Motor Speed-Nameplate \_\_\_\_\_

Traction or Drum Diameter \_\_\_\_\_

Traction or Drum Diameter \_\_\_\_\_

MANUFACTURER

GEAR OUTSIDE  
DIAMETERTITAN  
TYPE NO.

DESCRIPTION

## A.B. SEE

#2/2A/2E	21"		Most A.B. See machines are left hand threads. Please specify if different. Single end thrust conversions available.
#3	25"		
#3B	31 <sup>1/2</sup> "		
#4	27"		
#4A/4B	28 <sup>1/2</sup> "		
#5	32"		
#6	34 <sup>1/4</sup> "		
#6	37"	TG1870	Basement drum.
#7	39 <sup>1/2</sup> "		
#21	18"		
#22	25"		
#23	29 <sup>5/8</sup> "		
#24	34 <sup>3/4</sup> "		
#25	39 <sup>1/2</sup> "	TG1961	

## ARMOR

#1B,1BB	17"		
#2B,2BB	20"	TG0501	
#3	22"	TG0680	
#4B/4BB	25"	TG1250	
#5,5BB	35 <sup>3/4</sup> "		
#7,7X	40"		

## ATLANTIC

#1DMZ	21 <sup>1/2</sup> "		
#1TMZ	20 <sup>3/4</sup> "		
#1TLZ	13 <sup>3/4</sup> "		
#3	18 <sup>3/4</sup> "	TG0380	Ceiling hung.
#3H	17 <sup>3/4</sup> "		
#4	25 <sup>3/4</sup> "/26 <sup>3/4</sup> "		Worm over gear.
#6	26"		
#27	35 <sup>3/8</sup> "		
TYPE "J"	30"		

## BAKER

	29 <sup>3/4</sup> "		Basement drum.
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## BERWICK

	8 <sup>3/8</sup> "		
	14 <sup>7/8</sup> "		

## CLEVELAND

	12 <sup>1/4</sup> "		
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## CURTIS

K	16"	TG8258	
L	17 <sup>7/8</sup> "		

## DOVER

#GD-1	20"		
#GD 25	15"	TG-0080	1990 Version.
#GD 45	14 <sup>3/8</sup> "	TG-0080	

MANUFACTURER	GEAR OUTSIDE DIAMETER	TITAN TYPE NO.	DESCRIPTION
<b>DOVER (con.)</b>			
#GD50/75/105	19 <sup>3/4</sup>	TG0380	
#GD200-4	30"		
#GD200-4			
#GD240	24"		
#GD300	30 <sup>1/4</sup> "		
<b>GENERAL</b>			
#D,DS,DSB			
#F			
#G		TG0520	
#GSB	16"	TG0520	
#H	18"		
#M	20 <sup>3/4</sup> "		
#P			
<b>GURNEY</b>			
#A3			Gurney machines vary in thread design. Common are left hand threads, some are right hand threads, Single and thrust bearing conversions available.
H13VTE		TG0220	
H14VTE	17 <sup>5/8</sup> "	TG0220B	
H15VTE	24 <sup>3/4</sup> "		
H16VTE	17 <sup>3/8</sup> "		
H17VTE	18"		
H18VTE	24 <sup>1/2</sup> "		
H19VTE			
H20VTE	30"		
W13			
W14			
<b>HAUGHTON/SCHINDLER</b>			
#E		TG-1290	Dumbwaiter machine.
#EK	25"		
#H	17 <sup>1/2</sup> "	TG0310	
#K	29 <sup>3/8</sup> "		Babbit eccentric bearings.
#N	42"		1935 vintage.
#NNV	41 <sup>1/4</sup> "		Tandem machine, RH and LH worm shaft.
#O	14 <sup>1/8</sup> "		1950 vintage
#OH	20 <sup>3/4</sup> "	TG0620	
#R	20"		
#RE	25"		
<b>HOLLISTER WHITNEY</b>			
#41	15"	TG8258	For early models, call with details.
#43	16 <sup>1/8</sup> "		
#53	17 <sup>3/8</sup> "		
#63	23"		
# 74	29"		
<b>HOWARD BUFFALO</b>			
	25"		

MANUFACTURER	GEAR OUTSIDE DIAMETER	TITAN TYPE NO.	DESCRIPTION
<b>KAESTNER AND HECHT</b>			
#E,EA	14 <sup>3</sup> / <sub>8</sub> "		1930 Vintage.
# 1 1/2 V	21"		
#2	25 <sup>7</sup> / <sub>8</sub> "		
#2 1/2"V	29 <sup>1</sup> / <sub>4</sub> "		Basement drum.
# 3	19"		
#3 1/2	33"		1930 vintage.
#4 1/2 Model "J"	40 <sup>3</sup> / <sub>4</sub> "		
#22A	25 <sup>7</sup> / <sub>8</sub> "		Tandem
<b>KIEDLING</b>			
	14 <sup>1</sup> / <sub>2</sub> "	TG0080	
<b>KIMBAL</b>			
	20 <sup>3</sup> / <sub>8</sub> "		
<b>LAGERQUIST</b>			
OT-4-VV	23"		
<b>McLAUTHLIN</b>			
	22 <sup>1</sup> / <sub>4</sub> "		
<b>MOFFAT</b>			
	26 <sup>3</sup> / <sub>4</sub> "		
<b>MONTGOMERY</b>			
#207	16"	TG0190	
#208	20 <sup>3</sup> / <sub>4</sub> "	TG0520	
#208E	20 <sup>3</sup> / <sub>4</sub> "	TG0520/TG0570	
#210	27 <sup>1</sup> / <sub>2</sub> "	TF1480	Full Rim
#211	30"		
#214	35 <sup>1</sup> / <sub>2</sub> "		
#215	41"		
#60A	10"	MONT ESC	Escalator drive series 438.
<b>MORSE WILLIAMS</b>			
	26 <sup>1</sup> / <sub>4</sub> "		Basement drum.
<b>NATIONAL</b>			
#0	30"		Ring gear.
	24"		Basement drum.
<b>NORTHWESTERN</b>			
ROSENBERG #2	17 <sup>3</sup> / <sub>8</sub> "		1930 vintage.
ROSENBERG #3 1/2"	22 <sup>5</sup> / <sub>8</sub> "		1930 vintage.
ROSENBERG #4	26 <sup>1</sup> / <sub>2</sub> "		1919 vintage.
KIECKHEFER	20"		1920 vintage. Invincible machine.
	24 <sup>5</sup> / <sub>8</sub> "		1920 vintage. Standard machine.
	38 <sup>5</sup> / <sub>8</sub> "		1920 vintage. Atlas machine.
	39 <sup>3</sup> / <sub>4</sub> "		1920 vintage. Peerless machine.

MANUFACTURER	GEAR OUTSIDE DIAMETER	TITAN TYPE NO.	DESCRIPTION
<b>OTIS</b>			
#1/4 micro	9 3/8"		U/W Dumbwaiter and older microdrive leveling machines.
#2DW	9 3/8"		
#9	9 3/8"		
#14	12 1/4"	TG-62978	Known as 14AT,14AD, 14AX, 14AY, 14EX.
#15	15"		
#16	14 5/8"	TG-0090 TG-0100	Known as 16BT, 16VE, 16VEG, 16VEC, #1/2SWT, #1/2I.G. Old machines have double end thrust. U/W escalator drives and internal geared machines.
#17	15 3/8"	TG-0150 TG-0195	#17VE, #17VEG(Escalator drive machines). #17CT Elevator machine. Late 1970's.
#19	18"	TG-62186	Known as #3/4, #1SWT,#1 I.G.(internal geared), 19BT elevator machine, overhead and basement models.
#22	19 1/4"	TG-0370	#22 standard, #22CT machines, 1967 vintage.
#27	24 1/2"	TG-1005	Known as #1 1/2, #2, #2 SWT, #27BT, #27BE, #27BEC, #27BX, #617G, #2H, #2N, #2G, #3G, machines.
	25"	TG-1020	
#29	26 1/8"	TG-1320	#29 standard, #29 CT machines, 1970 vintage.
#3	27 1/2"	TG-0715H	Known as #3SWT, #3H, #3N, #6E, #3A (Escalator Drive), #31G, #3A Furnace Hoist, #3 Microdrive, Safelift.
#38	33 3/8"	TG-1870	Known as #38BT, #38BE, #38BEC, #4SWT, #4H with Microdrive.
#43	37 3/4"	TG-1883	Known as #43BT, #43BEC,#43BEG machines. 1960's.
#5	37 1/4"	TG-1900	Known as #5, #5SWT, #5SS machines. 1920's
#7	41 3/4"	TG-1930	Known as #7, #7L machines.1930's.
TANDEMS #4DS	22 1/2"		1905 vintage (Type H).
#4DS	27"		1905 vintage (Type H).
#4H	33 5/8"		1915 vintage (Type K).
#5H	29 5/8"		
#6H	37 15/16"		Titan replaces Tandem worm and gear sets, converting to a single worm and gear set arrangement, employing an engineered single thrust housing. Call Titan with details.
<b>PAYNE</b>			
#300	18"		Early Payne machines. Call with details.
#400	24"		
#500	34"		
<b>READING SPIEDEL</b>			
#10	20 3/8"		
#30	26 1/8"		
<b>REEDY</b>			
	24 3/4"		
	23"		Basement drum.
	26 1/4"		Ring gear.
<b>SEEBERG/TURNBULL</b>			
#3A	20"		
	12 3/4"		

MANUFACTURER	GEAR OUTSIDE DIAMETER	TITAN TYPE NO.	DESCRIPTION
<b>SERGE</b>			
#2-SM	16"		
	21 1/4"		
#9SR	16 1/8"	TG-0195	
#12SR	21 1/4"	TG-0680	
#S-2M	15 1/4"		
#16SR	32"		
<b>SHEPARD</b>			
	15 7/8"		
#H	20 3/4"		
GD 25	15"		1953 vintage
<b>TURNBULL</b>			
	24 3/8"		Worm over gear.
<b>WARSAW</b>			
#1E	28"		
#5E	41"		
<b>WATSON</b>			
#125H	12 3/4"		
	22 1/4"		
	23"		
<b>WESTBROOK</b>			
#22	24 1/4"		Babbit & roller bearing machines.
#26	27"		
<b>WESTINGHOUSE</b>			
**#18	17 1/4"	TG0196	Late 1950 vintage to present.
*#25,26	19 3/4"		1920 vintage to 1930's
*#27L,27	19 3/4"	TG0440	1930 vintage to early 1950's.
**#28	21"	TG0620	Early 1950 vintage to present.
*#32,35,35E	22 1/4"		1920 vintage.
*#36	22 1/4"		1930 vintage to 1940's.
*#37,37L	23 1/2"	TG0900	Early 1940's to 1950's.
**#38	25"	TG1290	Early 1950 vintage to present.
*#53,53E,54	29 1/4"	TG1860B	Early 1930's to late 1940's
*#57,5E	29 1/4"		Early 1950's.
#58	29 1/4"	TG0010	1950's to early 1980's.
#61, 61E	36 1/2"	TG01590	1940 vintage.
#81	44"		1940 vintage to late 1970's.
Type "L"	17 3/8"	TG1860	Stairway machine late 1940's.
#32N	10 3/4"	TG0010	Stairway machine 1940 vintage to 1970.
#48N	15"	TG-0150	Stairway machine 1940's to late 1970's
#48N-60	37"	TG1860B	H.D. stairway machine 1950's.
#48L,48N	15 3/8"	TG-0150	Stairway machine 1940's to late 1970's

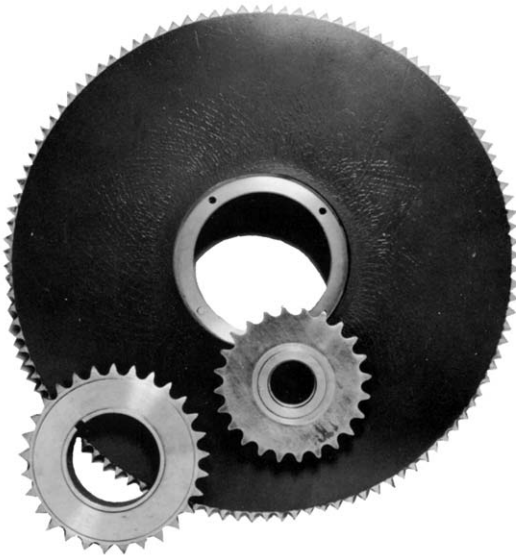
# ESCALATOR GEARS & SPROCKETS

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- ▶ Titan can manufacture new replacement escalator gears and sprockets from samples or blueprints provided, with some popular gears in stock ready for immediate shipment.
- ▶ All components are manufactured to meet or exceed original equipment manufacturers' material and quality standards.
- ▶ The following pages are a comprehensive listing of elevator/escalator manufacturers with specific sizes and designs.



New Replacement Escalator Gears for Otis #17VEG Machine. Three Gears shown.



New Replacement Sprockets for Most Escalator Applications Including Main Drive Sprockets.



New Replacement Worm Gear Sets for Montgomery Escalator Machines.

DESCRIPTION	OTIS PART NO.	CASTING NUMBER	NO. OF TEETH DIMENSIONS	TITAN TYPE NO.	REMARKS
SPROCKET	195BK1	195BK	23 Teeth 7 <sup>15/16"</sup> O.D.	TS-	U/W Type O Escalator, 1944 vintage
SPROCKET	195CB1	195CB	68 Teeth 16 <sup>5/8"</sup> O.D.	TS-	U/W Type R Escalator, handrail drive sprocket, 1947 vintage.
SPROCKET	195CN1 thru 5	1-195CN	32 Teeth 5 <sup>3/8"</sup> O.D.	TS-	1949 vintage, various hub variations.
SPROCKET	195FB1	Steel	22 Teeth 5 <sup>5/8"</sup> O.D.	TS-	U/W Type R, J Escalator machine drive
	195FB2		23 Teeth 5 <sup>15/16"</sup> O.D.	TS-	quintuple sprocket, 1957 vintage.
	195FB3		24 Teeth 6 <sup>1/8"</sup> O.D.	TS-	
SPROCKET	195FG1	195FG	65 Teeth 20 <sup>1/2"</sup> O.D.	TS-	U/W selector, tape drive sprocket, 1959 vintage.
	2195DR1	2-195DR			
SPROCKET	195FH1	195FH	90 Teeth 28 <sup>1/4"</sup> O.D.	TS-	U/W selector, tape drive sprocket, 1960 vintage.
		1-195EB			
SPROCKET	1-195FH1	1-195FH	88 Teeth	TS-	U/W selector, tape drive sprocket, 1960 vintage.
SPROCKET	195FP1	Steel	23 Teeth 9 <sup>7/8"</sup> O.D.	TS-	U/W drive machine, double pinion sprocket, 1963 vintage.
	195FP2		22 Teeth 9 <sup>1/2"</sup> O.D.		
SPROCKET	195FS1	195FS	90 Teeth 36 <sup>1/2"</sup> O.D.	TS-	U/W main drive assembly, Type R, 1963 vintage.
SPROCKET	195FW1	195FW	24 Teeth 8 <sup>1/4"</sup> O.D.	TS-	U/W RB Escalator, idler sprocket 1965 vintage.
	1-195BZ1	1P-1-195BZ			
SPROCKET	195FX1	195FX	16 Teeth 28 <sup>5/8"</sup> O.D.	TS-	Type R, RB, step chain sprocket, 1965 vintage.
SPROCKET	195EB1	195EB	78 Teeth 24 <sup>1/2"</sup> O.D.	TS-	Selector tape drive sprocket.
		1-195DR			
SPROCKET	195EH1-2	A195BR	52 Teeth 16 <sup>7/16"</sup> O.D.		Selector tape drive sprocket, with and without teeth.
	195EH3-4		W/O Teeth		
SPROCKET	2-195EP1	2P-2-195EP	75 Teeth 24 <sup>1/2"</sup> O.D.		U/W RA Escalator, handrail drive sprocket, 1960 vintage.
SPROCKET	1-195ET1	1P-1-195ET	20 Teeth 34" O.D.		U/W R, RA Escalator, step chain drive sprocket, 1956 vintage.
SPROCKET	3-195GH1	Steel	16 Teeth 7" O.D.	TS-	U/W machine drive double pinion sprocket, 1977 vintage.
SPROCKET	4-195GH1	Steel	19 Teeth 8" O.D.	TS-	U/W machine drive, triple pinion sprocket, 1977 vintage.
SPROCKET	4-195GH2		20 Teeth 8 <sup>1/2"</sup> O.D.	TS-	
	4-195GH3		21 Teeth 8 <sup>15/16"</sup> O.D.	TS-	
	4-195GH4		22 Teeth 9 <sup>1/4"</sup> O.D.	TS-	
SPROCKET	195AY1 thru		17T/thru	TS-	U/W various components with adjustable mountings.
	195AY12	195AY	53 Teeth Various diameters	TS-	
SPROCKET ASSEMBLY	198AB2	198AB	68 Teeth 22 <sup>1/4"</sup> O.D.	TS-	U/W Otis Escalator, handrail drive pulley assembly with 30 3/4" rubber trim.
SPROCKET	195AG2	195AG	63 Teeth 20 <sup>5/8"</sup> O.D.	TS-	U/W ML-C Escalator, 1939 vintage.
	195AG4	385 ME1	64 Teeth 20 <sup>15/16"</sup> O.D.	TS-	
SPROCKET	195BD1	195BD	25 Teeth 8 <sup>1/2"</sup> O.D.	TS-	U/W Type O Escalator, handrail countershaft sprocket, 1943 vintage.
SPROCKET	195BC1	195BC	34 Teeth 11 <sup>3/8"</sup> O.D.	TS-	U/W Type O Escalator, handrail chain sprocket, split, 1943 vintage.
SPROCKET	A195BR1	A195BR	52 Teeth 16 <sup>7/16"</sup> O.D.	TS-	Selector tape drive sprocket.
	A195BR2			TS-	Selector tape drive sprocket.
	A195BR3		No Teeth	TS-	Selector tape drive sprocket.
SPROCKET	195EY1	195EY	142 Teeth 34 <sup>3/8"</sup> O.D.	TS-	U/W Type RB Escalator, maindrive assembly 1956 vintage quintuple sprocket.
	1-195BH1	1P-1-195BH		TS-	

DESCRIPTION	OTIS PART NO.	CASTING NUMBER	NO. OF TEETH DIMENSIONS	TITAN TYPE NO.	REMARKS
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### TITAN REPLACEMENT SPROCKETS AND GEARS FOR OTIS ESCALATORS

SPROCKET	195BF1	Steel	20 Teeth 5 1/8" O.D.	TS-	U/W Type J escalator, 1974 vintage to present.
	YYGOA195BF1				
SPROCKET	A195BB1	A195BB	21 Teeth 37 1/2" O.D.	TS-	U/W Type O, modified O Escalator, stepchain drive sprocket, 1943 vintage.
SPROCKET	195BZ1	195BZ	24 Teeth 6 1/8" O.D.	TS-	U/W Type R Escalator, idler sprocket, 1943 vintage.
SPROCKET	195BV1	195 BV	75 Teeth 18 3/8" O.D.	TS-	U/W Type R Escalator, handrail drive sprocket, 1974 vintage.
SPROCKET	A195BV1	A195BV	75 Teeth 24 1/2" O.D.	TS-	U/W Type R Escalator, handrail drive sprocket, 1947 vintage.
SPROCKET	1-195BT1	Steel	21 Teeth 9" O.D.	TS-	U/W Type RA Escalator, machine drive sprocket, triple 1968 vintage.
	1-195BT2	Steel	22 Teeth 9 7/16" O.D.	TS-	
HELICAL PINION GEAR	199J1	199J	33 5/32" O.D. 129T/RH		U/W Type R, RB Escalators 1947 vintage, main drive assembly.
HELICAL PINION GEAR	2-199R1	STEEL	7 9/16" O.D.		U/W 16 veg machine R.H. 28 Teeth, 1950 vintage, Type R, RB Escalators.
	10-199R1	STEEL	28 T/RH		
HELICAL GEAR	A-199R1	STEEL	5 5/8" O.D.		Pinion, U/W 16 veg machine, 1950 vintage. Late 1940 vintage, Type R, RB Escalator
	3-199R1	STEEL	20 T/LH		
HELICAL GEAR	9-199R1	STEEL	6" O.D.		Pinion, U/W 16 veg machine R.H. 22 Teeth, Type R, RB Escalators.
HELICAL GEAR	199AD1	199AD	22 3/32" O.D.		U/W 16 veg machine. Late 1940 vintage, RH, 86 Teeth, 1955 vintage. Type R, RB Escalators.
	199H1				
	A199AD1				

DESCRIPTION	WESTINGHOUSE PART NO.	CASTING NUMBER	NO. OF TEETH DIMENSIONS	TITAN TYPE NO.	REMARKS
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### TITAN REPLACEMENT SPROCKETS FOR WESTINGHOUSE STAIRWAY MACHINES

SPROCKET	5191D57	Steel	45 Teeth 15" O.D.		U/W modular stwy, double drive sprocket, 1980 vintage.
SPROCKET	5191D57	Steel	44 Teeth 14 1/2" O.D.		U/W modular stwy, double idler sprocket, 1980 vintage.
SPROCKET		322C901K01	19 Teeth 9 15/16" O.D.		U/W Type 48 N, single drive sprocket, spline fit, 1960 vintage.
SPROCKET		322C901K02	21 Teeth 10 7/8" O.D.		
SPROCKET		94559-81	19 Teeth 9 15/16" O.D.		U/W Type 48 L, single drive sprocket, spline fit, 1948 vintage.
SPROCKET		9455-3	19 Teeth 9 15/16" O.D.		
	322863	Steel	84 Teeth 20 3/8" O.D.		U/W Type 32 N & 48 N handrail drive sprocket, 1960 vintage.
	322863	Steel	86 Teeth 21" O.D.		
SPROCKET & GEAR CENTER	322863	Steel	75 Teeth 18 3/8" O.D.		U/W 48 N stairway machine, 1958 vintage.
	466D343	Steel	12 3/8" O.D. x 15" Long		

# NEW REPLACEMENT SLEEVE BEARINGS

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## BRONZE SLEEVES



TITAN		DESCRIPTION		
PART #	BORE	O.D.	LENGTH	USED WITH
T-132350	1.752	2.75	4.5	1-mg, 1A-mg
T-151351	1.312	2.12	3.25	0-1/2 S
T-151352	1.44	2.5	3.5	1 1/4, 11/2 S, 2 1/2 AC, 60ES
T-151353	1.628	2.25	4.0	2 1/4 S, 2 1/2 S
T-151354	2.003	3.0	5.0	3 1/2 S, 4, 4 1/2 S
T-151355	2.128	3.12	5.37	5 1/2 S, 5/12 AC
T-210R	1.997	3.25	3.75	83ES, 77G, 71GA

OTIS ELEVATOR					
CASTING NO.	PART NO.	ADAMS PART NO.	WHEELER PART NO.	RULE PART NO.	BRM PART
			WS-8353		
R-3000	151351		WS-6900		
R-2964	151352	0-612	WS-7314	RL-208	BB51352
R-2946	151353		WS-7864	RL-207	BB51353
R-2963	151354	0-604	WS-8812	RL-205	BB51354
R-3110	151355	0-605	WS-8948	RL-206	BB51355
		0-613			

## BRONZE SLEEVES



TITAN		DESCRIPTION		
PART #	BORE	O.D.	LENGTH	USED WITH
T-151357	2.00		5.0	5, 7 1/2 AC, 1 mg
T-151358	2.250		5.7	10,15, 17AC, 2 & 3 mg.
T-151359	2.750		6.875	20, 35AC, 25, 30
T-151385	1.625		4.500	3, 4AC
T-151361	3.75		8.00	45, 60AC

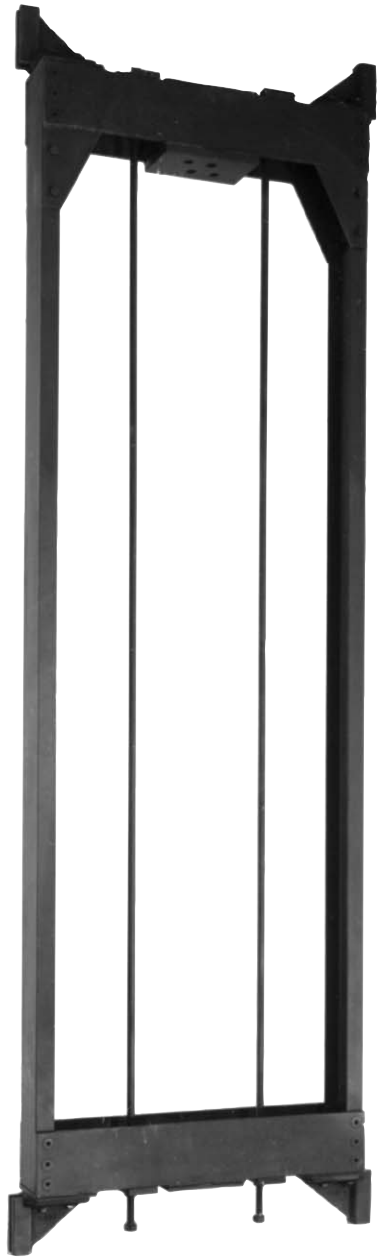
OTIS ELEVATOR					
CASTING NO.	PART NO.	ADAMS PART NO.	WHEELER PART NO.	RULE PART NO.	BRM PART
R-2671	151357	0-600	WS-8873	RL-421	BB-51357
R-2675	151358	0-601	WS-9211	RL-422	BB-51358
R-2676	151359	0-602	WS-9623E	RL-423	BB-51359
R-2687	151385	0-603	WS-7865	RL-424	BB-51385
387M02	151361				



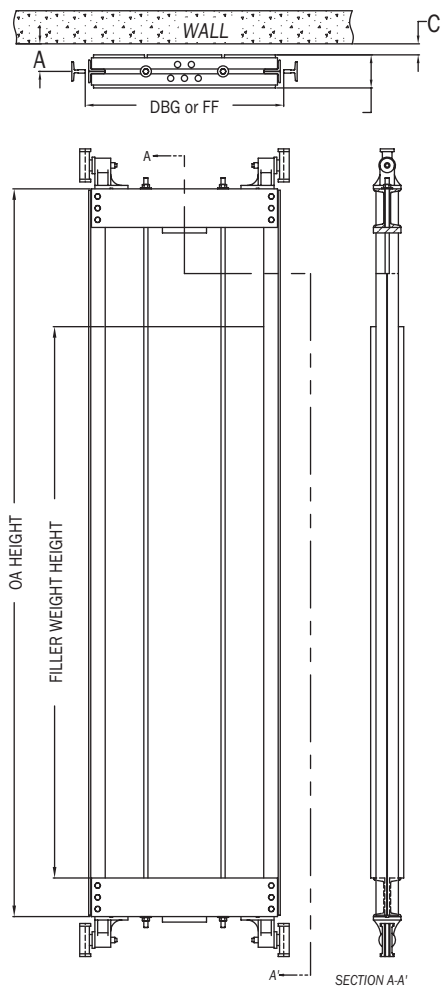
# HOISTWAY EQUIPMENT & ACCESSORIES

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Titan Machine manufactures counterweight frames for most low and midrise applications using structural steel components. Each frame assembly is available in "T" or "C" construction to best suit your application. Includes hitch plate, (2) tie rods, buffer plate and drilled holes for mounting guide shoes.

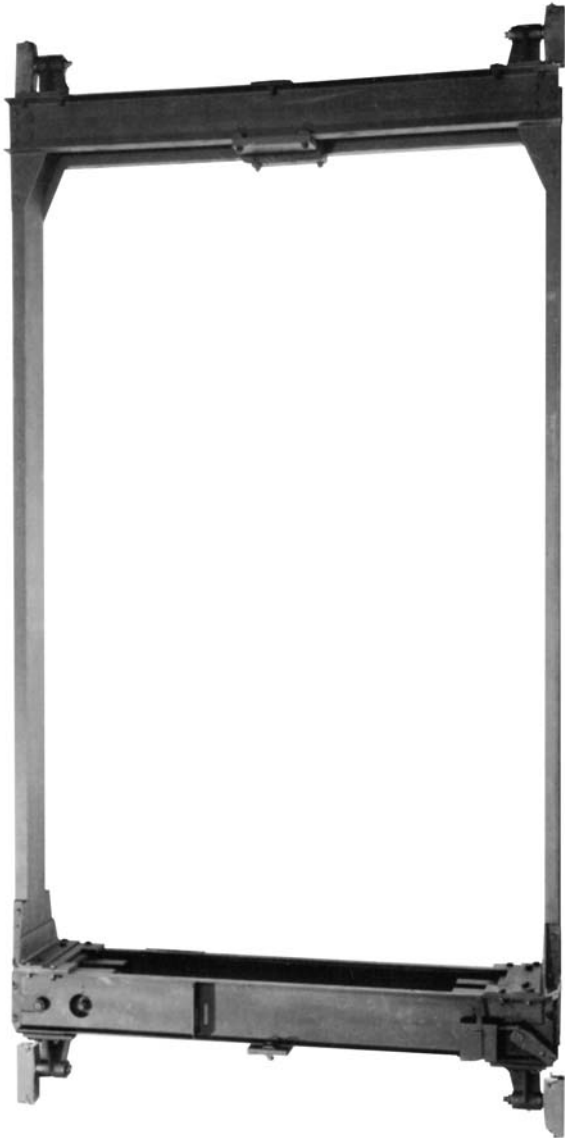


\*Filler weights and filler weight drawings are available from Titan by filling out this easy guide.

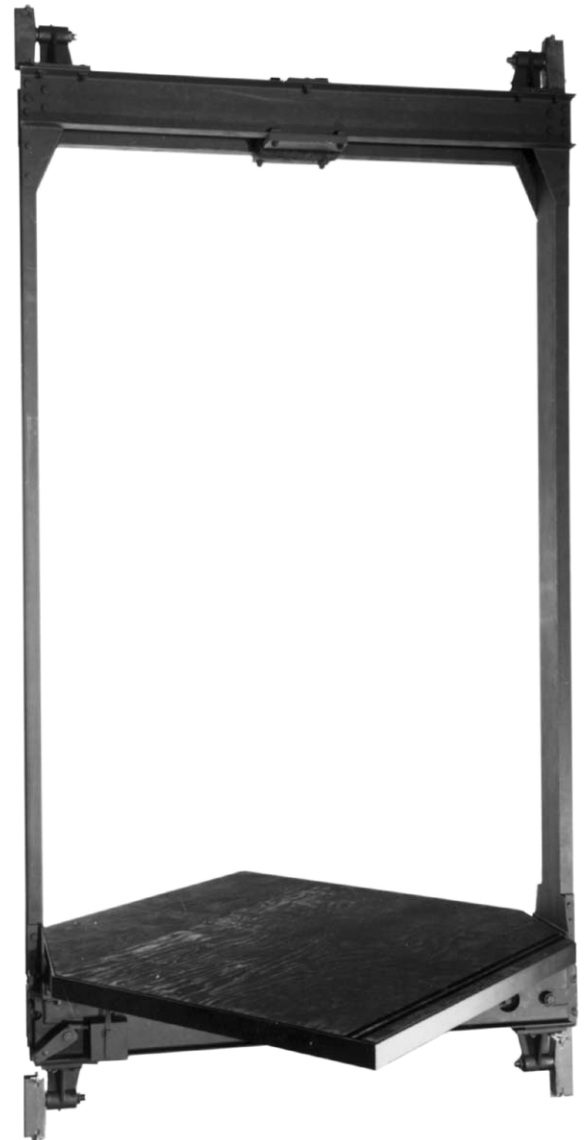
Contact our customer service department for special applications as we will build to suit your needs.

A=	
D.B.G.F.F.=	
C=	
D=	
GUIDE SHOES=	
RAIL SIZE=	
OVERALL LENGTH=	

CAR SLING



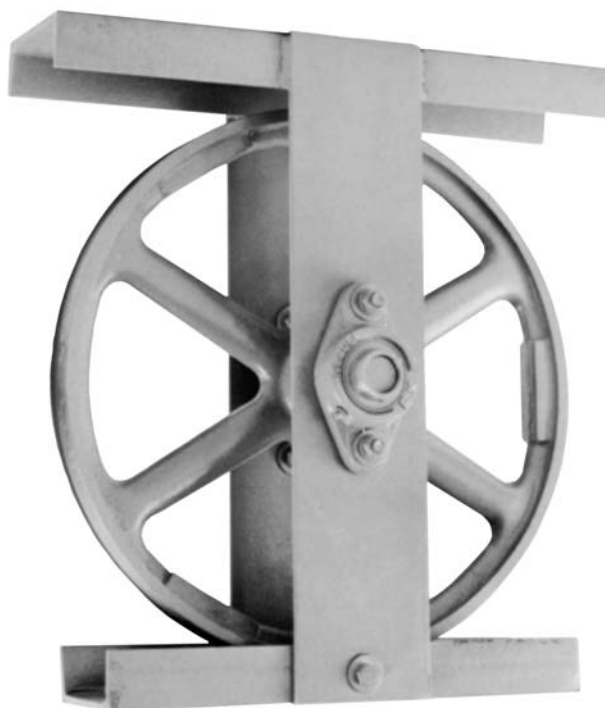
CAR SLING WITH PLATFORM (CORNER POST)





New Replacement Tape Sheave for Armor Applications 48" Teeth, 1" Circular Pitch

New Replacement Idler Sheave Assembly for Armor Applications





New Replacement Baby Otis Bronze Shoe for Counterweight



New Replacement Babbit Insert for A.B. See Guide Shoe 21/32" Rail Size

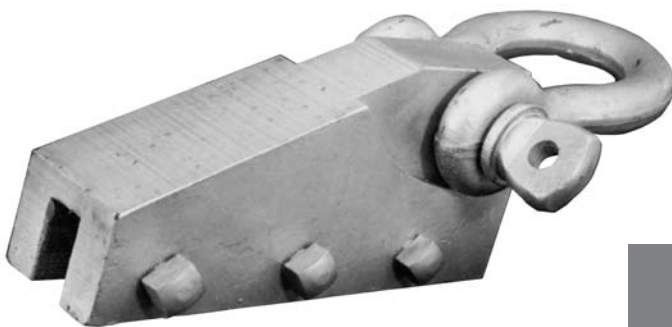


New Replacement Cast Iron or Bronze Car Shoe Insert for Otis Jumbo Rails 1 1/8" Rail Size



New Replacement Cast Iron Guide for Counterweight Frame 5/8" Rail Size

SHEAVE ASSEMBLIES



Hanging Clamps for 5/8" Rail  
Heavy Duty Hanging Clamps for 1 1/8" Rail

# WARRANTY

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Titan Machine Corporation warrants equipment of our manufacture to be free from defects in material and workmanship not commercially acceptable, for a period of one year from date of shipment when used by the buyer in accordance with maintenance and operation instructions recommended by us.

Titan Machine agrees to repair or replace, f.o.b. our factory, any such defective equipment, upon determination that warranty is applicable.

Under no circumstances shall Titan Machine be liable for labor, transportation or any other incidental expense and/or liability.

There are no other warranties that extend beyond warranty herein contained; and no statement, oral or written, inconsistent with this warranty is binding on Titan Machine Corporation.

\*All Products proudly made in the U.S.A.