# EAGLE lifts your business!

#### Made in Japan



#### Japan's Share No.1

EAGLE currently shares 70% of Japan's Toe Jack market.

Made in Japan Most reliable and user-friendly designed and made in Japan

#### **Only EAGLE**

Field KAIZEN spirit driven design unique functions

#### Safe

EAGLE ensures to keep your operation safe and efficient

#### Smart

EAGLE is designed to cause NO damage to your clients' properties.

#### Speedy

EAGLE eliminates waste of time and ensures highest efficiency at work.

#### **Products Catalogue**

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https://toe-jack.com/

EAGLE Japan's best sold toe jack, makes your impossible work become possible. Rapidly growing Asian factories demand speed, smartness and safety in the heavy machinery moving and transportation service as Japanese factories demands them. EAGLE met them all and now ready to serve you!

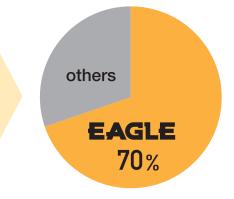


## **EAGLE's Achievement**

#### Heaviest Use In Japan Now Ready In Asia

Japanese customers' demand for heavy items transportation is world's toughest and they even specify tools and equipment to be used for their orders. In such a tough market, more than 350,000 EAGLE products have been sold achieving Japan's No.1 market share (70%). EAGLE is now the best partner for moving and transportation industry in Japan.

The above figures are as of 2019.



#### **EAGLE's customers**

Asahi Kasei Corp. Canon Inc. Carim Engineering Corporation Daihatsu Motor Co.,Ltd. DAINIPPON SCREEN MFG.CO.,LTD. East Japan Railway Company FANUC CORPORATION FUJITSU LIMITED Honda Motor Co.,Ltd. IHI Corporation IWASE TRANSPORTATION CO., LTD. KINTETSU WORLD EXPRESS DELIVERRY CO. LTD K LINE (THAILAND) LTD.

## KOKUYO Co.,Ltd. Komatsu Ltd. Murata Machinery,Ltd MIPPON EXPRESS Okuma Corporation SAN-EI CO., LTD. SANKYU INC SUMITOMO NACCO MATERIALS HANDLING CO.,Ltd Tokyo Electron Kyushu Limited TOSHIBA MACHINE CO.,LTD. ULVAC,Inc. West Japan Railway Company

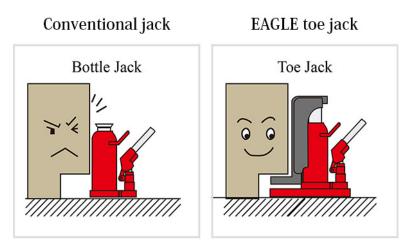
#### EAGLE, the Originator of Toe Jacks

The very first Toe Jack was brought to the market by EAGLE in 1976. Before the Toe Jack, only jacks available were portable hydraulic jacks, but they had not been able to meet the field workers demand for a jack to fit in a small gap at low positions. EAGLE took up the demand and successfully developed its first Toe Jack. Since then, EAGLE has been releasing its new family products such as Toe Jacks with Slide Table and Power Wedge, etc. to swiftly respond and shape new field demand for improvement and new functions of its Toe Jacks.

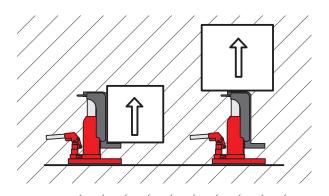
## What is EAGLE's "Toe Jack"?

The special combination between a conventional hydraulic jack and a toe structural part made an EAGLE Toe Jack. It is intended to lift its load from significantly lower positions than before. As long as there is a gap of 20mm or so, Toe Jacks can lift the load than before.

Since the toe structural part has two lifting points. its toe and head points, it can be used for much wider applications than before.



#### **EAGLE Toe Jacks' Four Basic Functions**

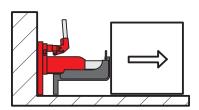


#### Lifting

It is a very basic function of it. Since both its toe and head can lift its load, its usage is twice than before.

#### 2 Adjustment of positioning

EAGLE can do position adjustment as fine as an millimeter order. It is best suited for delicate works like machines' level matching.



#### 3 Widening

By placing its base on one side, and its toe on the other side, the Toe Jacks can widen the gap between two objects.

#### 4 Lateral pressing

In case of setting a machine, you may sometimes want to slide it a little bit. EAGLE's Toe Jacks can be laid down to slide the machine by using the counterforce from the wall.

## **Highest Reliability**

EAGLE places three priorities in its technological investment, 1 robustness and durability, 2 user oriented product design, and 3 high quality material and solid manufacturing technology. More than 40 years of experiences and lessons learned in responding Japanese customers' highest demand in heavy machinery movement field are reflected in EAGLE's products line.

#### 1 Robustness and Durability

EAGLE has been pursuing robustness and durability in its products in order to satisfy the customers' need for moving and placing high value added large scale precision machinery. Its R&D effort for robustness and durability bear fruits of its own technology such as high tension steel based integral structure and safety valve mechanism for robustness, and high durability internal structure of hydraulic cylinder.

EAGLE's R&D organization has been achieving high performance goals through its design using its most advanced 3-D CAD and structural analytical system as well as its actual products test using its originally developed repetitive durability test machine.

#### 2 User Oriented Product Design

EAGLE's products development always goes with its users. Its sales staff visit customers' operational sites, directly listen to local users voices and reflect them in its products improvements. This user oriented product design posture is no exception for the design of accessories, which generally tend to be low priority area for product improvement. For example, EAGLE improved the lever handle of its jack products for higher stiffness to satisfy users' need for easy handling and work efficiency.

#### 3 High Quality Material and Solid Manufacturing Technology

For its main part that requires full strength, EAGLE adopts Japan's renowned highest quality steel material. And then, its proficient manufacturing staff with high skill attains highest quality in their parts processing and welding assembly by skillful operations of robots and NC machines.

By making most use of Japan's "Mono Tsukuri" (high quality product manufacturing) concept that consists of manufacturing technology, craftsmen' skill and quality control system, EAGLE is providing products with highest running cost performance and reliability.



## **Demanded Functions**

#### EAGLE listens to new demand in the fields and develops new functions to be added to EAGLE's products family.

#### Remote Toe Jacks that enable safe operations

These jacks are optimized for the use in a small and confined space where regular toe jack operation is difficult. Since it can be remotely operated, higher safety is ensured. There are several types of specification depending on operational conditions, and therefore, customers are required to purchase jack's main body and its Hand Pumps separately.

#### Toe Jacks with Slide Table that enable forward/backward position adjustment

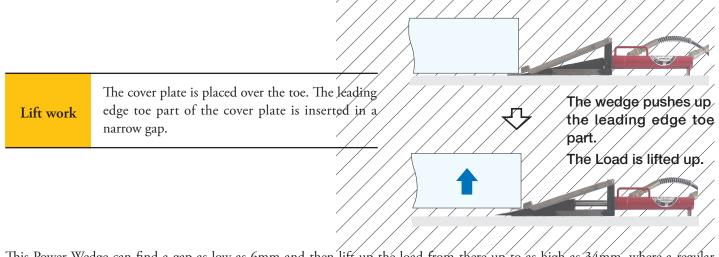
These Toe Jacks are optimized for movement of a large system like a printing system that connects multiple units. Since these jacks enable strict placement adjustment at a jack-up position, they greatly improve work efficiency. One family product of this type enables forward/backward adjustment while another family product with roller attached to it enables both forward/backward and left/right adjustment at your discretion. Depending on your usage, mostly optimized product can be chosen.

#### Power Wedge that greatly improves efficiency of pushing work and lifting work

Power Wedge can slide a heavy item up to the wall. Power Wedge can lift equipment directly placed on the floor up to a height where Toe Jack can be operated. Unlike using a bar, Power Wedge should not cause any damage on the floor, and ensures safe and swift work.

Push work	The cover plate should be removed during its operation	-	Cover plate

Unlike a pushing work using a bar, it enables smart sliding work without causing any damage on the floor. Since this Power Wedge operation does not require counterforce receiver, total work efficiency is greatly improved.



This Power Wedge can find a gap as low as 6mm and then lift up the load from there up to as high as 34mm, where a regular jack-up operation can be done.

Its double acting cylinders enable fine adjustment during a lowering operation and therefore, it ensures operational safety.



#### EAGLE's approach to highest work safety

#### Remote Toe Jack + Hand Pump

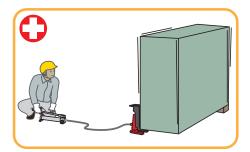
How safe are you in jacking a machine that is positioned unstably?



Conventional jacks require their operators to do jack-up operations right beside the machines to be jacked. If the machines are positioned unstably, there is a risk that they might fall down during jack-up operation.

EAGLE's Remote Toe Jack + Hand Pump enable its operator to remotely operate the jack-up from safe place. For a lowering operation, an operator can directly grab control valve and therefore, it can ensure to lower the load slowly and safely.



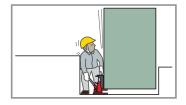


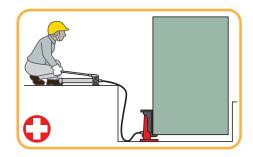
#### How safe are you in jacking in a small and confined space?



In case of a conventional jack-up operation in a small and confined space, there are a lot of safety risks because it is quite difficult for its operator to escape from the spot.

EAGLE's Remote Toe Jack + Hand Pump enable its operator to operate the jack-up from outside the pit and therefore, it is much safer and easier.





#### EAGLE's approach to highest work safety

#### **Power Wedge**

How safe are you in doing fine adjustment of a machine placement position?

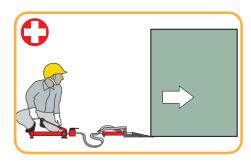


Fine adjustment work by a bar tends to cause counterforce, which could throw its operator away and hurt it.



EAGLE's Power Wedge ensures operational safety because its operator can do the fine adjustment by only controlling its external pump.







#### EAGLE's approach to highest work quality

Power Wedge

How smart are you in doing fine adjustment of a machine placement position?

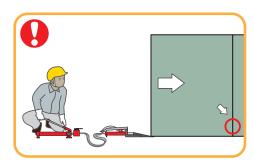


After

Fine adjustment work by a bar tends to cause some damage on the floor. It is also difficult to achieve precise positioning on a right spot.

EAGLE's Power Wedge can do the job without any damage on the floor, while it can adjust the position on a millimeter basis.





#### EAGLE's approach to highest work quality

#### Toe Jack with Slide Table

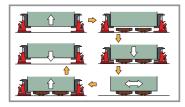
## How smart are you in doing machine assembly (integration of multiple units)?

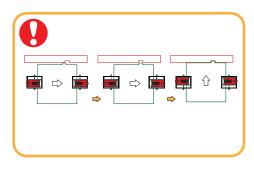


Conventional machine assembly work by jacks and rollers requires multiple jack-up and jack-down operations for all the units to reach final position for assembly. It has high risk of damaging machines and the floor. It is also time consuming.



EAGLE's Toe Jack with Slide Table can do the job extremely simply and accurately. It is friendly to machines and the floor, and does not take much time.





#### EAGLE's approach to highest work quality

#### Remote Toe Jacks + Hand Pump

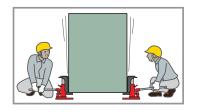
How smart are you in jacking the load in two separate points simultaneously?

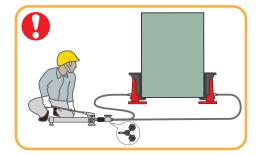


With conventional jacks, two operators have to try to manually synchronize individual jack handling.



EAGLE's Remote Toe Jacks + Hand Pump enable one operator to operate the two jacks set in two separate positions in the total synchronization.







#### EAGLE's approach to highest speed

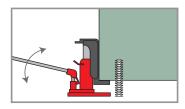
Remote Toe Jack + Hand Pump

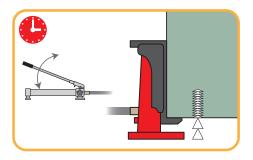
How speedy are you in jacking through no-load path?



In case there is a gap between the toe of the jack and the contact point of the machine where its load is incurred, conventional jacks' pump discharge speed is all the same regardless of the load, and therefore, it takes time to reach its load contact point.

EAGLE's Remote Type Toe Jack + Hand Pump have the two stage pump discharge, which enables the toe to reach its load contact point much faster and therefore, shortens its work time.





#### EAGLE's approach to highest speed

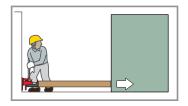
#### **Power Wedge**

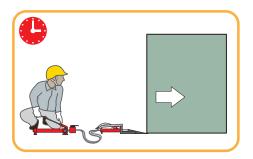
## How speedy are you in doing fine adjustment of machine placement position?



When you slide a machine by pushing it laterally up to the wall by a conventional jack, you have to manage its counterforce by the other wall. Also, you may need something like iron block to fill the gap between the jack and the machine.

EAGLE's Power Wedge enables you to do this work without receiving its counterforce, and complete the task real quick.





#### EAGLE's approach to highest speed

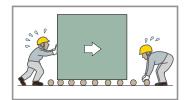
#### Machinery Skate

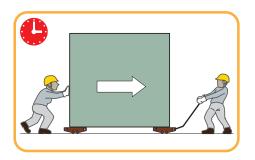
How speedy are you in moving a machine on the floor?



When you try to move machinery on the floor by a conventional jack, you have to place rollers and you have to do resetting the rollers one at a time depending on the distance you want to move it.

In case of machinery skates, a machine can be fixed to it and therefore, once the first setting was made, the movement of the machine is done so efficiently.





## **Toe Jacks**

#### These are our Toe Jacks' standard G-series models, which are used by our customers most.

- They are equipped with a safety valve to prevent overload, enhancing work safety.
- The toe structural part from its head down to toe is cast from a mold without welding or bending process. Besides, it is made of high tension steel, which materializes great strength and durability.
- By making their toes' corners R shaped, it is reducing the risk of deformation or break by stress concentration.
- Their insertion sockets can rotate so that their operators can handle pumping at the best positions.
- They adopt "Two Rods Locked Type Handle with Grip", which is very easy to use.
- G-60&G-100 can be laid down for use.



G-200

	G-60	G-100	G-200
Toe capacity (ton)	3	5	10
Head capacity (ton)	6	10	20
Minimum toe height (mm)	19	22	28
Stroke (mm)	115	130	140
Minimum head height (mm)	230	288	333
Base width (mm)	155	183	230
Base length (mm)	236	262	300
Toe width (mm)	65	75	100
Toe length (mm)	50	55	60
Product weight (kg)	13	21	38

## Hand Pumps

#### These are hand pumps to drive EAGLE's various Remote Toe-Lift Jacks and Short Cylinder Jacks.

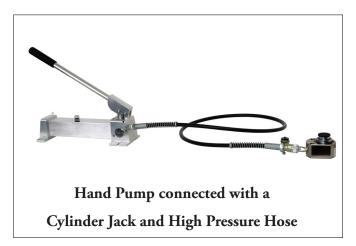
- They are optimized for Remote Toe Jacks and for Super Low Floor Cylinder Jack.
- They have a double cylinder discharge mechanism (automatic switching between high pressure and low pressure) so that their jack strokes widths are widened when their pressures are low or none to shorten their work time.
- Our 2V series Double Pumps enable a synchronized operation of two jacks by equipping its branch with the automatic adjustment valve.
- These Hand Pumps can be used for other suppliers' jacks.

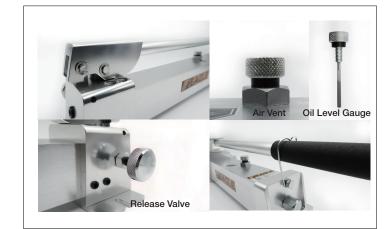


APS05-70









	APS05-70	APS05-70-2V	APS1-70	APS1-70-2V
Pressure rating 1 stage (MPa)	2	2	2	2
Pressure rating 2 stage (MPa)	70	70	70	70
Usable oil capacity (cc)	500	500	1000	1000
Oil volume per stroke 1 stage (cc)	12.9	12.9	12.9	12.9
Oil volume per stroke 2 stage (cc)	1	1	1.65	1.65
Product length with handle (mm)	512	690	619	797
Product weight (kg)	5	7	6	8

## Remote Toe Jacks

"K-series" products are remotely controllable and highly maneuverable. They embodied the 3"S" approaches and they are the flag ship of EAGLE's Jacks.

- These hydraulic jacks are connected with an external pump and a high pressure hose.
- Since their operators can operate them remotely, jack-up tasks in a small space or in a place where the foothold of a machine is unstable can be safely completed.
- They can be operated with a small number of pumping.
- They can be laid on their side, tilted or placed upside down for their operations.
- Two jacks can be synchronized and controlled by one place.



K1-150S



K2-150S



K1-150S connected with a Hand Pump by high pressure hose

	K1-150S	K2-125S	K3-125S	K5-150S
Toe capacity (ton)	5	10	15	25
Head capacity (ton)	10	20	30	50
Minimum toe height (mm)	22	28	32	38
Stroke (mm)	150	125	125	154
Minimum head height (mm)	343	325	329	363
Base width (mm)	180	224	272	353
Base length (mm)	200	257	290	320
Toe width (mm)	75	100	125	150
Toe length (mm)	60	60	60	70
Product weight (kg)	24	44	57	97
Oil required (cc)	218	419	553	1104

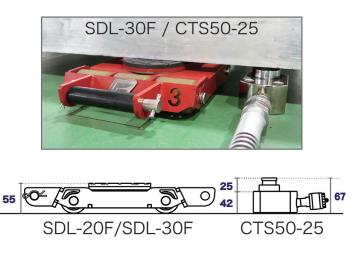
## Short Cylinder Jack

#### Uniquely designed to match the heights of the EAGLE machinery skates.

- This model is optimized to change directions of EAGLE machinery skates during their heavy load carriage task or to lift machinery for maintenance and placement of it.
- This is a remote operation type short cylinder jack, which is operated by a hand pump connected to it.
- There are 2 types of short cylinder: 2 stages extensions (CTS type) and one stage extension (CJ type)



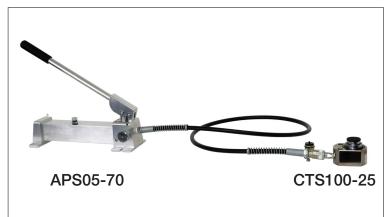
CTS50-70 (2 stages extension)



CTS50-25 used with machinery skate SDL-30F



CJ2-50 (1 stage extension)



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CTS100-25 connected with Hand Pump by Hose
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	CTS50-70	CTS100-70	CTS50-25	CTS100-25	CJ2-50	CJ3-50
Capacity (ton)	5	10	5	10	20	30
Stroke (mm)	70	70	25	25	50	50
Body height (mm)	84	90	42	51	95	95
Base length (mm)	62	86	82.5	100	88	105
Product weight (kg)	1.7	3.3	1.3	2.4	3.5	5
Oil required	80	153	29	55	152	233

## Machinery Skate

#### Machinery Skate enables smooth carriage and transportation of heavy items.

- They adopt urethane wheels, which have excellent durability and prevent any damage on the floor.
- Machinery skates adopts urethane wheels of the same type and have the same product height regardless of different capacities.
- This same wheel design can save purchasing cost of consumable urethane wheels.
- High anti-abrasion rubber made turnable table : perfectly fit with the lifting heavy load
- Effective work thank to low height roller (just 55mm)



**SD-50F** 



SDL-30F



Tilt design( incline up to 4°)



Low height roller - just 55mm

Model	Capacity	Height	Size(W)	Size(L)	Wheel No.	Wheel Diameter	Weight
SD-25F	2.5 ton	120 mm	128 mm	400 mm	2 pcs	85	11 kg
SD-50F	5 ton	120 mm	238 mm	400 mm	4 pcs	85	19 kg
SD-100F	10 ton	120 mm	360 mm	455 mm	8 pcs	85	30 kg
SDL-20F	2 ton	55 mm	145 mm	339 mm	4 pcs	46	4.5 kg
SDL-30F	3 ton	55 mm	212 mm	339 mm	6 pcs	46	6.5 kg

## Power Wedge

Pushing work

Lifting

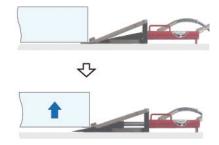
work

#### This cool model enables both sliding heavy load laterally and widening a slight gap for toe jack.

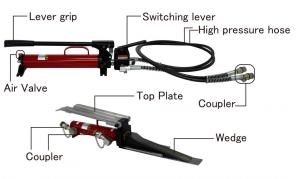
- This is a hydraulic tool to greatly enhance work efficiency to move heavy items.
- It can handle both lateral pushing and lifting.

Unlike using a bar, Power Wedge does not cause any damage on the	
floor. Since it does not need to manage counterforce, pushing works	
are greatly efficient.	

Power Wedge can work with a gap as small as 6mm, and lift and widen it up to 34mm in which a Toe-Jack's toe can be inserted. This product has double cylinders and therefore, it enables fine adjustment during its lowering operation and it is so safe.







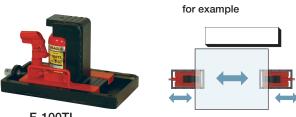
Parts List

Jack unit	KP-15	KP-35
Capacity (ton)	15	30
Minimum height (mm)	6	6
Maximum height (mm)	34	34
Gross weight (kg)	30	35

## Toe Jacks with Slide Table

#### They enable forward/backward position adjustment while keeping heavy load in a jacked position.

- EAGLE's Toe Jacks are assembled individually to a slide table consisting of ball bearings.
- They enable fine position adjustment of forward/backward and up/ down within the range of 100mm.
- Slide Table is integrated with the jack through its ant ditch guide causing no left/right slight shifting.
- The same specification as the G-series is applied to these jacks.



F-100TL

## for example

## Slide Table with Roller

## This model enables you to handle fine position adjustment in any of the three directions.

• This model consists of an F-series jack and wheels that are made of urethane, enabling fine position adjustment in three directions, forward/backward, left/right and up/down while keeping the load in a jacked position.



FR-100TL

+	
	+

	F-100TL	F-200TL	FR-100TL
Toe capacity (ton)	5	10	5
Minimum toe height (mm)	44	51	53
Jack stroke (mm)	63	52	63
Minimum head height (mm)	243	268	252
Slide table width (mm)	226	270	373
Slide table length (mm)	413	451	443
(forward/backward) Slide stroke (mm)	100	100	100
Toe width (mm)	75	100	75
Toe length (mm)	75	80	75
Product weight (kg)	32	50	39
Attached	Ratchet handlex1 / Jack leverx1		

## Lifting Jack

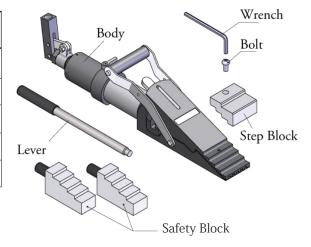
#### Lifting Jack enables vertical lifting or lowering heavy items from an access of only 9.5mm

- From the limited insertion space, Lifting Jack can lift maximum 15 ton of heavy machinery up to 67.5mm
- Lifting Jack is excellent tool for aligning, balancing, or positioning fixed equipment
- Thanks to the light weight of 10 kg, it is easy to carry out and get the job done safely, with improved productivity



Model	LJ-150
Capacity (ton)	15
Minimum height (mm)	9.5
Maximum stroke (mm)	58
Body Length (mm)	536
Gross weight (kg)	10

[Lifting Jack Set]



## MM Block

#### MM Block enables holding heavy load when lifting up safely and smoothly.

- MM Block is lighter and easier to handle than conventional wooden or aluminum boards
- MM Block is made of plastic which is resistant to rust or corrosion so it is more durable and lasts a long time
- It can be stacked according to the workpiece's height.
- Each Block has a hole which make more convienient to carry
- Environment-friendly product (No. 20118001) certified by Japan Environment Association (JEA)



MM Block MM200-30



MM Block MM200-45

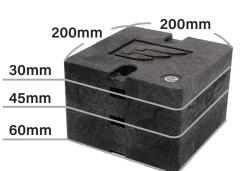


Three types of block: 30 mm, 45mm and 60 mm which can seasily fit the work's height



Each block has small hole that make it easier to handle and carry out

Model	MM200-30	MM200-45	MM200-60
Capacity	20 ton	20 ton	20 ton
Height	30 mm	45 mm	60 mm
Width	200 mm	200 mm	200 mm
Length	200 mm	200 mm	200 mm
Weight	1kg	1.5 kg	2 kg



New EAGLE Rollers for Heavy Load Moving

# MACHINERY SKATE



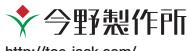
## Heavy loads such as machinery can be moved safely and quickly.



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http://toe-jack.com/