TAYLOR MACHINE WORKS, INC.



FEATURES BROCHURE

FAITH - VISION - WORK



# **Excellence and Experience** for over 88 years and counting...















# **Excellence and Experience** for over 88 years and counting...







#### **ENGINE**

#### **Proven Performance**

















#### **Cummins QSF3.8**

110 HP engine (STD) Electronic turbocharger, Charge-air after-cooled (air to air) diesel

Rated 110 HP @ 2500 rpm Peak torque 306 ft-lbs. @ 1600 rpm

For models: X-160 - X-175 & XH-180 models



#### **Cummins QSB6.7**

173 HP engine (STD)
Electronic turbocharger
Charge-air after-cooled (air to air) diesel
408 cu-in. (6.7 L) displacement
Rated 173 HP @ 2200 rpm
Peak torque 590 ft-lbs. @ 1500 rpm

For models: X-180 - X-360L, XB, XH & XHO models



#### **Cummins QSB6.7**

225 HP engine (STD)
Electronic turbocharger
Charge-air after-cooled (air to air) diesel
408 cu-in. (6.7 L) displacement
Rated 225 HP @ 2200 rpm
Peak torque 700 ft-lbs. @ 1500 rpm

For models: X-450S, X-520S, X-550S, X-550RC models



#### **Cummins QSL9**

250 HP engine (STD)
Electronic turbocharger
Charge-air after-cooled (air to air) diesel
543 cu-in. (8.9 L) displacement
Rated 250 HP @ 2200 rpm
Peak torque 675 ft-lbs. @ 1500 rpm

For models: X-400M, X-450M, X-520M, X-550M, X-650S, X-650L, X-700L models

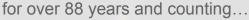
Other manufacturers are putting smaller displacement engines in their products. While it is true, with today's electronic controlled engines, the engines can offer more horsepower from a smaller displacement.

Higher horse power, from a smaller engine, stresses the mechanical components at higher levels.

You can't expect the same engine life from these smaller displacement engines compared to the larger displacements.

Our studies show, if you take two trucks doing the same work in a particular duty cycle, one with a small displacement and one with a larger displacement, the larger displacement truck will last longer with less downtime and lower operating costs.

#### **Excellence and Experience**







The actual fuel costs are heavily influenced by operator style and duty cycle (think gas mileage difference at 45 mph vs 75 mph). A smaller displacement truck may offer minor reductions in fuel used while idling, but the fuel curve of the trucks at high loads are based on the consumption of fuel per horsepower-hour. In other words, if you do the same work (same average horsepower per hour) there is very little difference in fuel consumed.

<u>Low end torque is heavily influenced by displacement.</u> Even at the same horsepower, the smaller displacement engines have some performance disadvantages. In tests that we have taken, experienced operators have noticed and commented on the smaller displacement engines not performing as well as the larger ones.

#### **ENGINE**







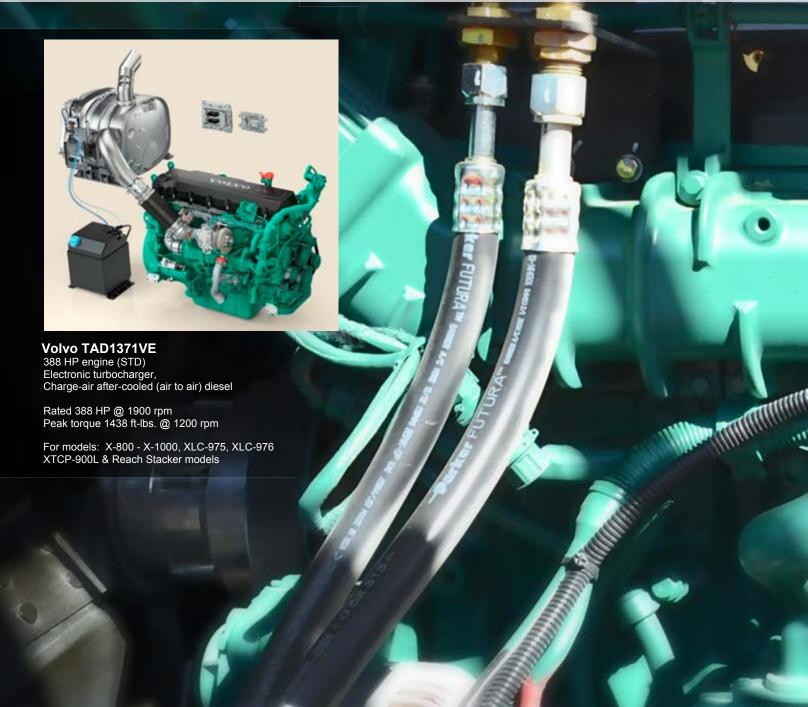










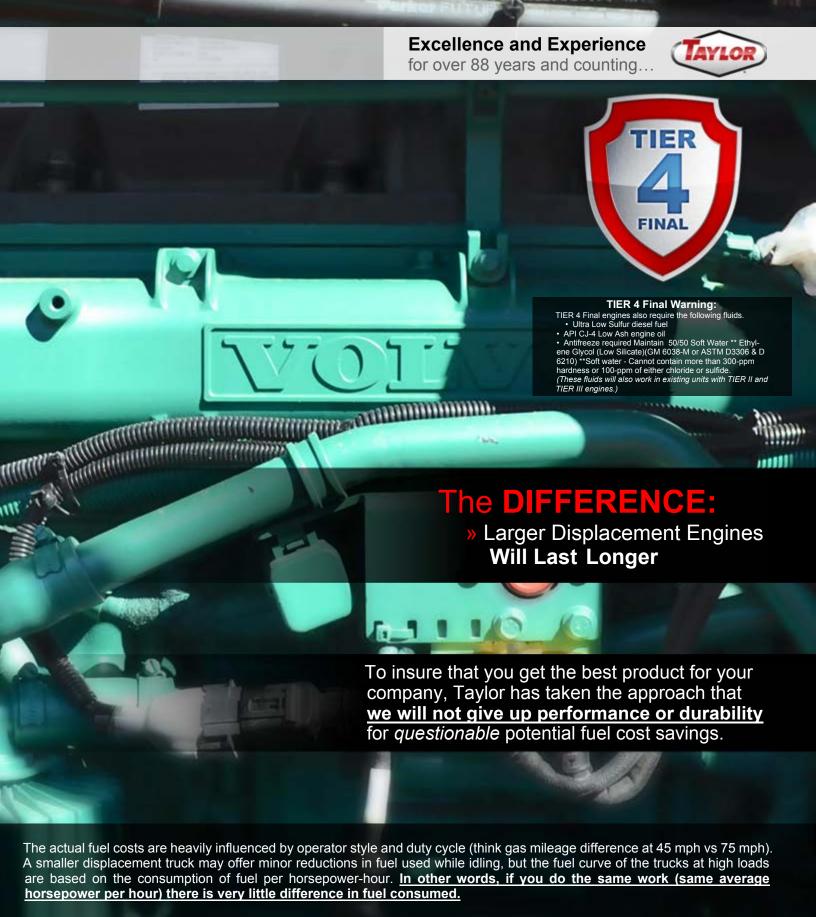


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#### COOLING

#### **Proven Performance**















**Bolted Multi-Section Cooler** 

**Charge-Air Cooler** 

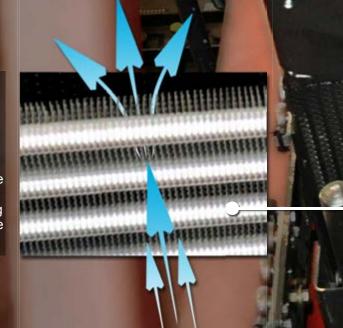
**Transmission Cooler** 

**Engine Cooler** 

#### Wider Fin Spacing

(6.3 FPI compared to 10 FPI)

The wider fin spacing allows more air to flow through the cooling system. As a result of this, the system runs cooler and is easier to clean. When particulate matter builds up on a cooling system it becomes less efficient. Easily removing this material becomes part of the uptime built into a Taylor.

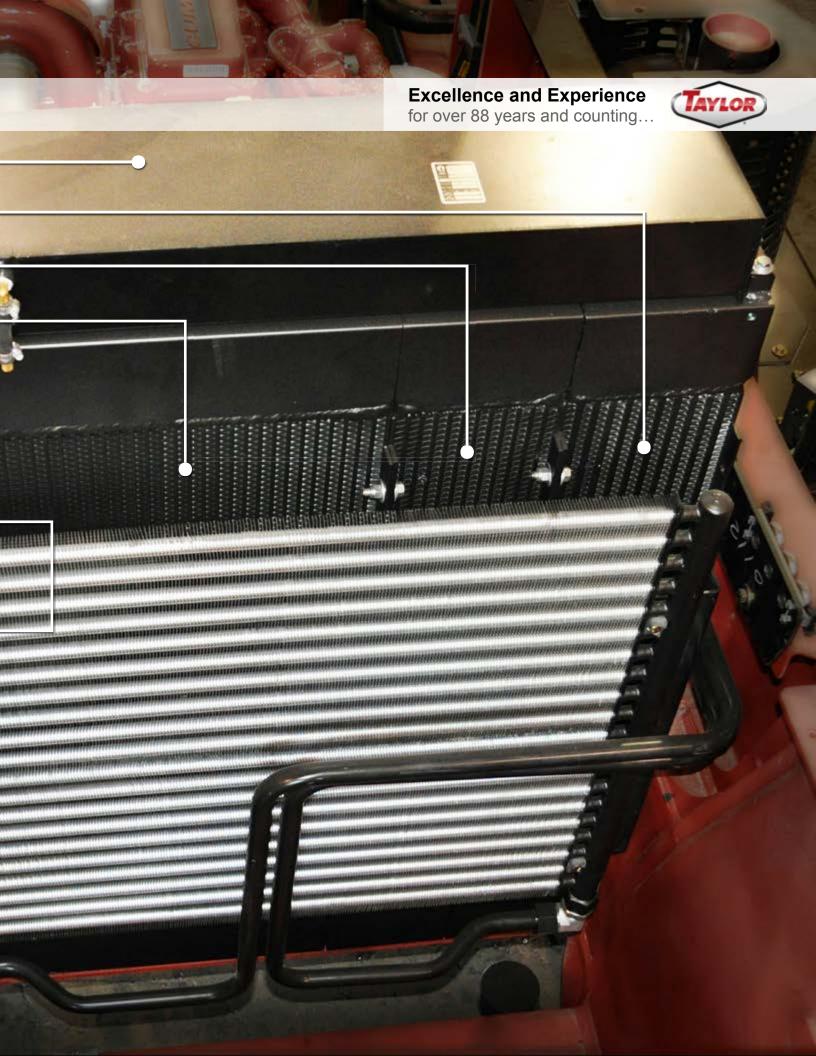


Brakes/Hydraulic Oil Cooler

### The **DIFFERENCE**:

- » Better Air Flow
- » Easier to Clean
- » Reduced Maintenance
- » More Efficient Cooling

We build Up-time into every machine!



#### **Transmission**

#### Proven Performance













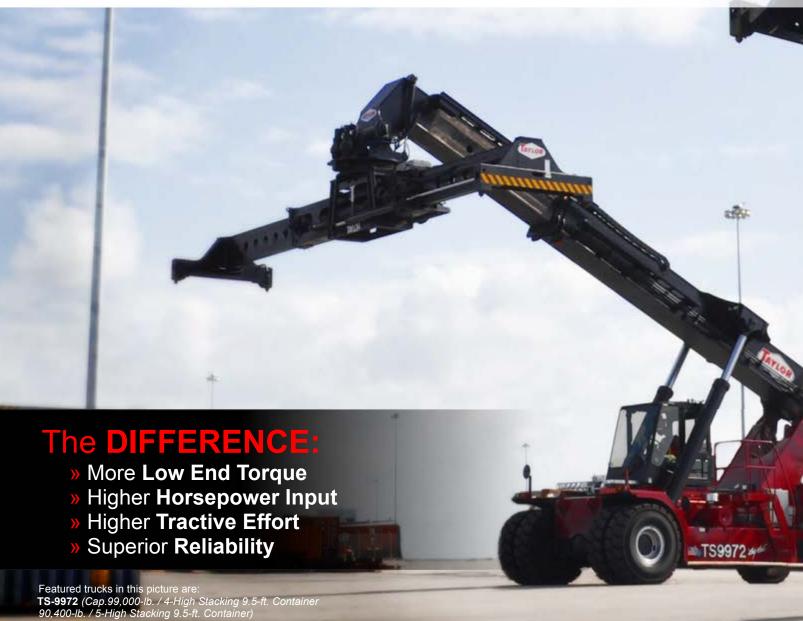




<u>Steady, reliable shifting</u> is essential to controlling a machine in a heavy-duty work environment. **Control is Productive.** 

- Heavy-duty Powershift transmission
- · Larger horsepower input rating
- · Flex-plate drive
- High capacity 12-plate clutch system for added durability
- Automatic Powershift Control (APC)
- Full directional modulation for soft direction changes
- Transmission mount goes from rail to rail in chassis for a more stable drivetrain

Brake saver system does not allow operator to drive through parking brakes. This feature reduces the excess wear on the brakes.







#### FAITH VISION WORK

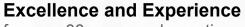


**Taylor Lift Trucks have been refined** while thriving in some of the harshest, most demanding "proving grounds" on the planet.

Our reputation was built through over 87 years of working in our <u>customers unique industrial settings</u>. This experience is another way **Up-time** is built into every machine.

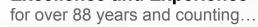
Featured trucks in this picture are: (left) **TXLC-975** (Cap.90,000-lbs. / 2-High Stacking
80,000-lbs. / 5-High Stacking at 97" L.C.)

GESEGCO



Pad In

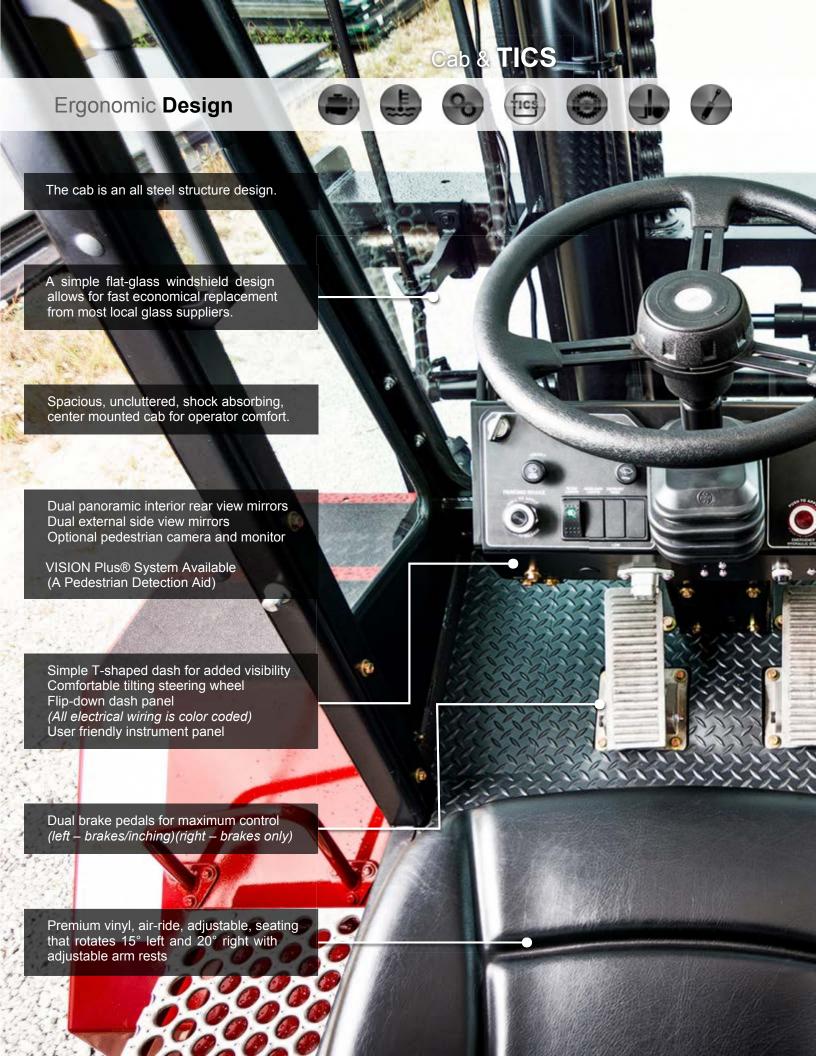






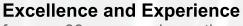
#### The **DIFFERENCE**:

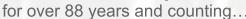
- » Over 87 Years of Experience
- » Privately Held **Since 1927**
- » We Build What You Need













#### TICS: Taylor Integrated Control System

TICS gives customers the ability to customize operation parameters of their Taylor lift truck and perform diagnostics, which eliminate excessive downtime.

#### TICS is different from other systems.

The interface is large (7-in. display), easy to understand and user friendly.

TICS diagnostic ability is key to quick repair and less downtime. Troubleshooting and diagnosing a problem can be done by the customer's own service mechanic, without the need for a detached laptop, which gets the machine up and running sooner.



- Idle times
- Lift counts
- Load scales

- · Displays transmission data
- · Monitor hydraulic system
- · Limit travel speed
- · Troubleshoot and Diagnose

Proven Design















#### Fabricated "Not Forged"

Heavy-duty Steer Axle

#### **Larger Wheel Bearings**

**Tapered Roller Bearings** 

#### Bigger & Heavier

"Dog-Bone" Steer Links

#### **Larger Steer Cylinder**

**Bolt Through** 

# SIZE does matter!

#### **Heavy-duty Steer Axles**

To insure your machine will continue to handle the demands of your business, we have designed a steer axle like no other.

The hydraulic cylinder design utilizes heavy-duty links from the cylinder ram directly to the spindles. Taylor uses tapered roller bearings exclusively in all our steer axle spindles. These bearings absorb shock loads better and are considered the strongest and most durable bearings in the industry. You deserve nothing less...

#### **Excellence and Experience**

for over 88 years and counting...





We build Up-time into every machine!

# he DIFFERENCE: » Fabricated Not Forged » Bigger & Heavier Built » Robust Components » Superior Durability

#### Proven Design















#### **Heavy-duty Planetary Drive Axles**

- Wide stance for more stable and confident material handling
- Hydraulic actuated brakes
- · Internal, force-cooled, wet disc brakes
- Bolt through mounting
- · Increased tread life



The DIFFERENCE:

» The Most Rugged & Durable
Planetary Axles Available

Up-time is built in!



#### Mast & Carriage

#### Proven **Design**















#### **Tilt Cylinders**

Overhead tilt cylinders allow less mast rail twisting and greater mast stability than low mount.

#### **Main Rollers**

The mast and carriage main rollers are common throughout and use greaseable twin tapered roller bearings.

#### **Side Thrust Pads**

Common, cast nylon, side thrust pads are adjustable to compensate for wear.

# The DIFFERENCE: » Stronger Overhead Tilting

- » Greaseable Tapered Main Rollers
- » Hidden Chains for Enhanced Visibility
- » More Robust Carriage Design

#### **Taylor Designed Heavy-duty Mast & Carriage**

All the horsepower in the world will not help if the mast and carriage can't handle the work load. We have designed the utmost durability into all of our mast & carriages.

We will never sacrifice quality nor durability for cost.



#### Proven Design















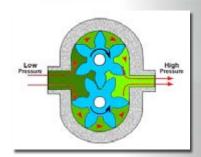
#### **Proven Durable Gear Pumps**

A gear pump produces flow by carrying fluid in between the teeth of two meshing gears. One gear is driven by the drive shaft and turns the idler gear. The chambers formed between adjacent gear teeth are enclosed by the pump housing and side plates.

Our research and testing shows that this simple design results in a more durable, efficient and cost effective system.

#### Power-On-Demand

The Power-On-Demand feature automatically increases the engine speed when the operator activates a hydraulic control which can lead to increased responsiveness from the hydraulic system and an improvement in truck performance. Depending upon duty cycle, keeping engine speed low when hydraulic system demand is low can also lead to less fuel usage.



#### Taylor will not compromise on durability.

- Gear type pumps
  - -more durable against contamination
  - -more dependable in different climates
  - -lower replacement cost
- Constant full flow, in-tank filtration
- Internal suction screen
- 10-Micron return filtration
- Safety load release valve
- Manual override valves (this feature can be turned on/off to suit operator performance)



#### The **DIFFERENCE**:

- » Durable Gear Pumps
- » Lower Cost Replacement
- » Robust Components
- » Superior Quality

We build Up-time into every machine!





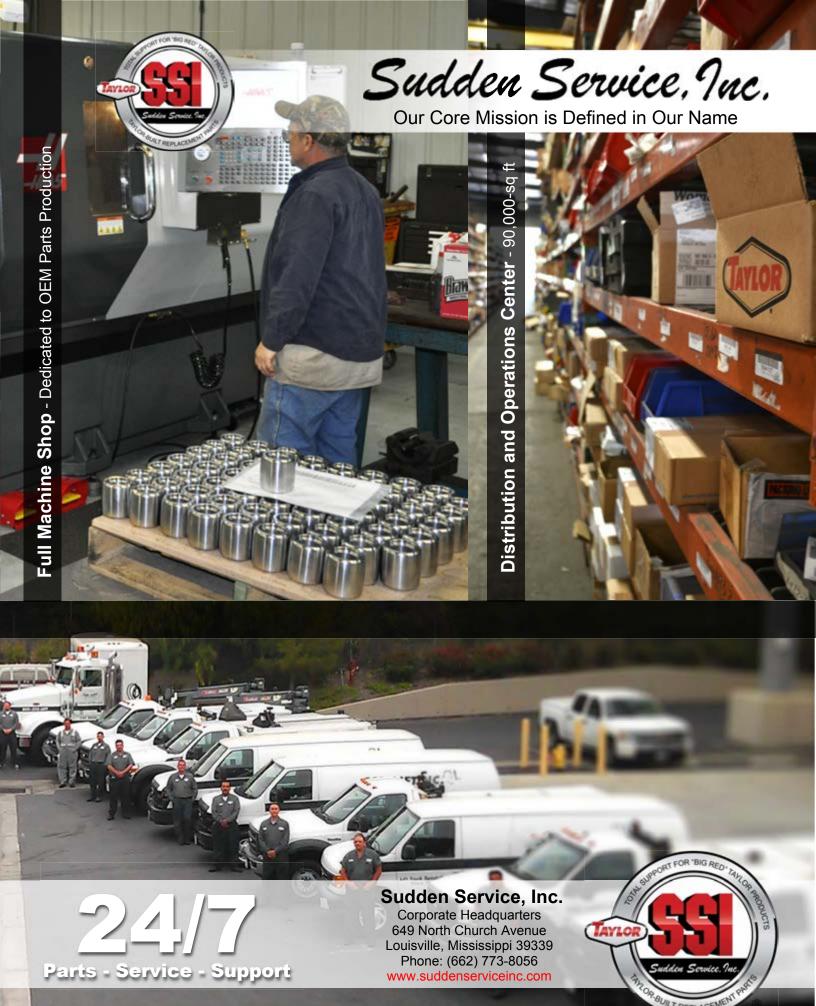


Taylor Dealer Sales & Service Centers - Hundreds of Factory Trained Technicians Nationwide

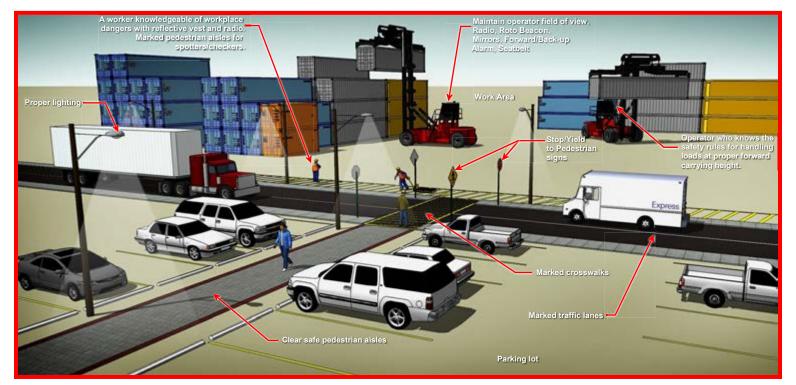


#### The Best OEM Support in the Industry.

Our customers deserve to know they can always depend on us for service and support 24/7. Because of that expectation, we have factory trained service techs on the ground nationwide. Over 200 service technicians receive continuing education (hands-on) at the factory each year. Your service techs are supported by the best OEM parts and distribution facility in the world. With \$60,000,000 dollars worth of parts distributed across our factory stores and millions more on the shelves at our dealers, **Your Taylor lift truck will be working** instead of sitting for weeks waiting for parts to be shipped from overseas.



#### For every industry, there is a Taylor truck that can do the job safely.



Every work site is different and operating conditions change moment by moment. By establishing and enforcing forklift/pedestrian lanes you can increase the safety of your workers and others. Keep pedestrians out of areas where trucks operate and always require operators to look in the direction of and keep a clear view of the path of travel. OSHA requires you to make sure you are doing it safely. ANSI B 56.1 provides: The user shall determine if operating conditions require the truck to be equipped with additional sound-proofing or visual devises (such as lights or blinkers) and be responsible for providing and maintaining such devices. Do the job and do it safely! Little things make a big difference!

#### "TAYLORIZE" YOUR TRUCK

Taylor Machine Works has kits (comprising all installation/mounting materials) available for customer order, which can include any or all devices shown in this brochure. Kit contents will depend on individual needs and customer operating conditions. Kit orders must include truck model number and serial number. Order from your authorized Taylor dealer or directly from Taylor Machine Works, Inc., Marketing Support Department.

As discussed in **Safety Check**, pages 31-37, many factors must be considered in determining what, if any, additional devices are necessary for an increase in safety in your operation: ambient noise, habituation, filtering, dependency, fatigue and pedestrian traffic patterns. In fact, some devices may have a net decrease in the safety of your operation. Improper use of mirrors and alarms may encourage an operator not to look in the direction of travel. Remember, in choosing ancillary devices: **One size does not fit all!** 

Given the wide variety of manufacturing and material handling situations which exist, the wide variety of alarms, flashing lights, mirrors, cameras, and other devices which are commercially available, **Taylor strongly suggests that you consult with a safety professional familiar with your type of industrial setting when assessing your specific workplace safety requirements.** 



## VIP - Vehicle Information Package

#### **Support Materials Provided for Each Machine**

(Contents of the VIP may vary depending on the particular model)



- Maintenance Manual
- · Operator's Guide
- Safety Check Manual 2nd edition
- Safety Check Video
- Safety Features/Operations Brochure
- Limited Warranty
- New Component Warranties
- Genuine Taylor Parts Brochure
- · Leaf Chain Wear Scale
- TaylorMax Oil Filtration Service Instructions

- TaylorMax Filtration Housing
- Service Instructions
- · TaylorMax Warranty
- OEM Tire Notification
- · Vendor Tire Warranty
- · Goodyear OTR Maintenance
- Manual (CD)
- Mirror Lens Warranty
- OSHA Compliance Statement
- "Its Time For Training" pamphlet

- · Operator Examination
- Examination Answer Sheet
- · Vendor Publications Order Form
- Service Publications Order Form
- Service Bulletin Volume 13 #7 (audible and visual warning devices)
- · Forward Alarm System info
- Tier 4i engine booklet
- · Fork Inspection Wear & Testing
- · Fork Arm Wear Caliper



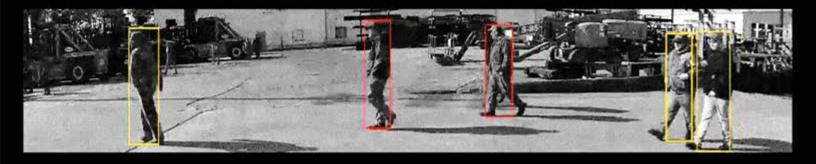
#### WWW. VISIONPLUSSAFETY. COM

Vision Plus® is a pedestrian detection system designed to aid industrial vehicle operators in monitoring the presence of pedestrians in the work area.



Vision Plus® tracks multiple pedestrians at the same time and requires

No Device or Tag to be worn by the pedestrian.



## Have you considered leasing?

**Or Custom Fleet Management?** 

# Take a moment to discuss our affordable lease options...



Our goal is to structure a financial product that improves your profit with reduced operating cost by increasing up-time and offering a wide range of financial solutions to fit the specific needs of your business. Taylor Leasing offers over 100 different financial structures within the main product categories of:

- Operating Lease A financial choice which provides use of equipment for extended period of time with a low monthly operating cost.
- **Finance Lease** This type of lease offers flexibility in payments with equipment ownership options at the end of the lease term.
- Fleet Management Your needs and goals are always evaluated carefully before providing you with a custom fleet leasing solution. We only include fleet management services (including maintenance solutions detailed below) that help your fleet function more efficiently.
- Fleet Maintenance We offer tailored fleet maintenance solutions, that range from periodic service and emergency repairs to full on site personnel. Taylor Fleet Maintenance Programs assist in budgeting, while helping to eliminate unpredictable expenses and allowing you to focus on your actual business.

For more information Phone: (662) 773-3421 Ext. 400 - Fax: (662) 773-9146 or E-mail Stephen Arnett sarnett@taylorbigred.com

www.taylorleasingandrental.com



#### FAITH VISION WORK

