RioV360

Toyota Forklift Pedestrian Detection Fitment Guide

Find your Toyota series, match the power, and order the right RioV360 kit.

UNIVERSAL FIT

One RioV360 Kit for Toyota Forklifts

RioV360 is a 4-camera AI pedestrian detection system that alerts the operator and people on foot before a collision. The same complete kit fits the Toyota series in this guide, from 3,000 lb warehouse trucks to 125,000 lb THD high-capacity machines. It runs on 8 to 32 V DC, mounts on the overhead guard, counterweight or cab, and needs no tags, software or subscription.



4 AI cameras
1080p, 130° view, infrared night vision, IP69K. Full 360° coverage.

Detects people
Standing, crouching, kneeling or partly hidden, 0 to 5 m, alert in under 400 ms.

7 inch monitor
Live view with red, yellow and green zones set per camera.

120 dB beacon
External voice alert and light so people on foot know to move.

Onboard recording
Continuous video, 256GB card included, about 30 hours.

Fast install
Complete kit with harness and hardware. Most teams finish in under 2 hours.

How to Use This Guide

1. Find your Toyota series in the table on page 2.
2. Match the power column to your machine. RioV360 runs on 8 to 32 V DC, so most machines connect directly to the switched ignition circuit.
3. Confirm the model and voltage on the machine data plate. Model ranges change by year and region.
4. Check attachments. Side shifters, clamps and long forks can change where cameras need to go.
5. Order the complete kit, plus any accessories listed for your series.

Power: IC and Electric Toyota Trucks

- **Gas, LP and diesel:** 12 V system. Connect to a fused, key-switched 12 V circuit and the constant 12 V line, as the user manual shows.
- **Electric:** 36, 48, 72 or 80 V traction battery. Never connect RioV360 to the traction battery.
- **Accessory circuit:** electric trucks run lights, horn and dash on a key-switched 12 or 24 V circuit. A qualified installer can tap it, with no converter needed.
- **No low-voltage circuit:** add the RV360-DCC isolated DC-DC converter. Electric forklift batteries are isolated from the frame, so the converter must be isolated too, to avoid ground faults.

RioV360 User Manual

Installation, settings and troubleshooting: **Download the RioV360 User Manual (PDF, v4.4)**.

Current Toyota Forklifts by Series

Series	Models	Years	Capacity	Power / RioV360 connection	RioV360 Accessories	Notes
Core IC Pneumatic	8FGU15 to 8FGU32 (gas/LP), 8FDU15 to 8FDU32 (diesel)	2007 to present	3,000 to 6,500 lb	12 V. Direct: 12 V key-switched circuit	EXT, 512	Outdoor yards and docks. Rear camera on the counterweight or overhead guard.
Core IC Cushion	8FGCU15 to 8FGCU32, 8FGCSU20	2007 to present	3,000 to 6,500 lb	12 V. Direct: 12 V key-switched circuit	EXT, 512	Indoor and dock work. RV360-MAG speeds installs on steel guards.
Large IC Cushion	8FGC35U to 8FGC70U	About 2010 to present	7,000 to 15,500 lb	12 V. Direct: 12 V key-switched circuit	EXT, CBX, 512	Longer trucks: add RV360-CBX for the front camera run.
Core Electric (4-wheel)	8FBC15U, 8FBC18U, 8FBCU20 to 8FBCU32, 8FBCHU25, 8FBCH32U	About 2010 to present	3,000 to 6,500 lb	36 or 48 V battery. Key-switched 12/24 V accessory circuit, or RV360-DCC	EXT, 512, DCC if needed	Most common Toyota warehouse truck.
3-Wheel Electric	8FBE15U to 8FBE20U, 8FBES15U, 8FBEH18U	Current	3,000 to 4,000 lb	36 V battery. Key-switched 12/24 V accessory circuit, or RV360-DCC	EXT, 512, DCC if needed	Tight turning radius: side cameras matter most.
48V Electric Pneumatic	8FBM16T to 8FBM20T	Current	3,000 to 4,000 lb	48 V battery. Key-switched 12/24 V accessory circuit, or RV360-DCC	EXT, 512, DCC if needed	Outdoor electric. Confirm the accessory circuit voltage.
80V Electric Pneumatic	9FBM20T to 9FBM35T, 8FBM40T to 8FBM50T, 9FBM60T to 9FBM80T, 9FBH80T	Current	4,000 to 17,500 lb	80 V battery. Key-switched 12/24 V accessory circuit, or RV360-DCC	EXT, 512, DCC if needed	Never connect RioV360 to the 80 V traction battery.
Large Electric	7FBCU35 to 7FBCU55	Current	7,000 to 11,000 lb	36 or 48 V battery. Key-switched 12/24 V accessory circuit, or RV360-DCC	EXT, 512, DCC if needed	Add RV360-CBX on long chassis.
High-Capacity Electric Cushion	THDE1500 to THDE4000	Current	15,000 to 40,000 lb	72 or 80 V battery. Key-switched 12/24 V accessory circuit, or RV360-DCC	EXT, CBX, 512, DCC if needed	Large trucks: detection covers 0 to 5 m from each camera.
High-Capacity IC Pneumatic	THD3000 to THD12500	Current	30,000 to 125,000 lb	12 or 24 V (check the machine). Direct: key-switched circuit	EXT, CBX, 512	Ports, steel and intermodal. Mount cameras high on the counterweight and cab.
High-Capacity Large IC Cushion	THDC series	Current	25,000 to 100,000 lb	12 V. Direct: 12 V key-switched circuit	EXT, CBX, 512	Indoor heavy lift. Plan cable runs before drilling.

Accessory codes are shortened from RV360-EXT, RV360-CBX, RV360-512 and RV360-DCC. Accessory details are on page 3.

Older Toyota Forklifts

Series	Models	Years	Power / RioV360 connection	Notes
7-Series IC	7FGU, 7FDU, 7FGCU, 7FGCSU	About 1999 to 2007	12 V. Direct: 12 V key-switched circuit	Same layout as the 8-Series. Check guard condition before mounting.
7-Series Electric	7FBCU, 7FBEU, 7FBMF	About 2000 to 2011	36 or 48 V battery. Key-switched 12/24 V accessory circuit, or RV360-DCC	Use the lights or horn circuit, switched by the key.
6-Series IC	6FGU, 6FDU, 6FGCU	About 1995 to 1999	12 V. Direct: 12 V key-switched circuit	Inspect wiring and the fuse block first.
5-Series and older	5FGU, 5FGC, 5FBCU and earlier	Before about 1995	IC: direct 12 V. Electric: accessory circuit or RV360-DCC	Send the data plate photo and we will confirm.

Camera / Beacon Layout

- **Rear:** on the counterweight or the rear overhead guard crossbar, aimed at the reverse path.
- **Sides:** on the overhead guard posts, aimed along the turning arc.
- **Front:** on the front overhead guard crossbar, looking past the load and mast.
- **Monitor:** on the overhead guard post or dash with the RV360-EXT kit.
- **Beacon:** high on the rear guard where people on foot can see and hear it.

No tags for workers to wear: the AI cameras detect any person in the zone. A common alternative layout is two cameras forward, one rear and a side curtain zone on the passenger side.

RioV360 Accessories

- **RV360-EXT** Monitor Extension and Mounting Kit: rail clamp, round base, cab-frame bracket or T-attachment.
- **RV360-CBX** Extension Cables: two 3 m and two 5 m camera cables plus a 5 m monitor cable for long machines.
- **RV360-512** Upgraded Storage: 512GB card for about 60 hours of continuous video.
- **RV360-MAG** Magnetic Camera Mounts: no-drill mounting on steel surfaces (US shipments).
- **RV360-DCC** Isolated DC-DC Converter: for high-voltage electric trucks with no low-voltage circuit. Priced on quote.

PILOT UNIT PROGRAM

Prove It on Your Toyota Before You Commit

$500 off

PILOT discount applies to all RioV360 units through December 31, 2026

Put RioV360 on your highest-risk Toyota forklift and let your operators, supervisors and EHS team see it work in your own operation. No long trial agreements and no software to set up. Install it, run it, and decide.

1. **Pick the truck** — Choose the forklift with the most foot traffic or the worst blind spots.
2. **Order** — Send the model and serial number. Pay by credit card.
3. **Ships fast** — In-stock units ship from Arizona in 2 business days.
4. **Install** — Most teams finish in under 2 hours with the user manual.
5. **Roll out** — Use the same kit and layout across the rest of the fleet.

Included with the PILOT unit: 4 AI cameras, 7 inch monitor, 120 dB voice beacon, 256GB card, wiring harness, mounting hardware, user manual and 18-month warranty. Phone, email or Teams support for your installer.

Recommended PILOT Unit Accessories

RV360-512
Upgraded Storage
512GB high endurance card for about 60 hours of continuous video.

RV360-EXT
Monitor Extension and Mounting Kit
Rail clamp, round base, cab-frame bracket or T-attachment.

RV360-MAG
Magnetic Camera Mounting Kit
No-drill camera mounts for steel guards and counterweights.

RV360-PWR
Bench Test AC Power Adapter
Run the system from a wall outlet and learn it on a table before install.

Order a PILOT unit: **+1 (520) 501-0602** | **info@riodatos.com**

Model years are approximate; the exact build date comes from the model and serial number on the data plate. Toyota is a trademark of its owner. RioDatos is not affiliated with or endorsed by Toyota. Model names are used only to identify compatible machines.