

# Product Summary

### 1. Available Sizes

2.25 - 14 SOLARMAX D850 Tubeless2.25 - 16 SOLARMAX D850 Tubeless

# 2. Specification of D850

Tire Size	Tire Width	Tire Diameter	Maximum Load Capability
2.25-14	64 mm	483 mm	97.5 kg
2.25-16	64 mm	534 mm	109.0 kg

When the internal pressure is between 600 and 800kPa (6.0~8.0kgf/cm²)

Working Pressure:  $600 \sim 800 \text{kPa} (6.0 \sim 8.0 \text{kgf/cm}^2)$ 

Never inflate the tire over 600kPa (6.0kgf/cm2) when you fit the tire to the rim. Inflate the tire to the working pressure level after you confirm that the tire has been properly fitted to the rim.

#### 3. Product Features

SOLARMAX D850 is a tire exclusively developed for solar vehicles, based on motorcycle tires. The following technologies have been adopted to lower rolling resistance of tires, which is especially important for solar vehicles.

- a. To adopt tread rubber with low rolling resistance
- b. Lighting weight by adopting a tubeless tire and reduction in tread rubber
- c. Optimization of tire pattern and tire profile
- d. To ensure tire strength which can be used under high internal pressure, 600~800kPa (6.0~8.0kgf/cm²)

# 4. Compatible Rims

SOLARMAX D850 has been designed to be fitted into the following sizes of rims in accordance with the standard for motorcycles (Japan Industrial Standards D4215 or Japan Automobile Manufactures Association's standard for WM type deep rim).

# Compatible Rim Size for D850

2.25-14	$14 \times 1.20$	$14 \times 1.40$	$14 \times 1.60$
2.25-16	$16 \times 1.20$	$16 \times 1.40$	$16 \times 1.60$

If you use SOLARMAX D850 with the rim wheel for motorcycle tires, the rim is possibly broken and/or damaged due to insufficient strength of the rims as SOLARMAX D850 is used with higher pressure than general motorcycle tires. Always use the reinforced rim wheel specially manufactured for solar vehicles.

### Recommended Wheels

## RK Solar Vehicle Wheel

For 2.25-14: 14 x 1.40 UT - P Selling Agency: [Sofix Design Co., Ltd]
For 2.25-16: 16 x 1.40 UT - P TEL: +81 52-732-0160 FAX: +81 52-731-6571



<sup>\*</sup> These tires can be used with tubes.



Precautions: Please be sure to read before use.

# SOLARMAX D850





SOLARMAX D850 is a special tire exclusively developed for solar vehicles and requires different handling from other tires including motorcycle tires. Please be sure to comply with the following precautions.

### 1. Intended Use

- SOLARMAX D850 must not be used at general public roads since it does not satisfy the legal requirements for driving on public roads.
- SOLARMAX D850 is a tire exclusively for solar vehicles. Never fit D850 into any other vehicles than solar vehicles.

### 2. Rim Wheel

- Use a compatible size of rim wheel manufactured for solar vehicles.
- Use the rim, which is not damaged (e.g., not deformed and not broken) and not extremely
  eroded. In case you fit deformed, damaged and/or extremely eroded rim wheel with
  SOLARMAX D850 and use it, such fitment could cause puncture and the accident by the
  flat tire and create a significant danger to lives and safety of passengers and/or the
  people around.
- If you use D850 as a tubeless tire, use a rim for a tubeless tire.

### 3. Tube

- If you use a tube with D850, use a Dunlop tube for motorcycle tires of the same size of D850
- If you fit a new D850 to a rim, be sure to use a new tube and rim band.

## 4. Fitment to Rim

- When you fit D850 to the rim, be sure to apply to bead part of tires (which are covered and hidden when the tire is fitted into the rim) a special lubricant agent exclusively for tire fitment. Such lubricant agent helps the tire to be smoothly fitted into the rim when the tire is inflated. It also helps to lower the fitment pressure.
- If you use D850 as a tubeless tire, never damage the bead part of the tire when you fit the
  tire to the rim. If you damage the bead part, it is possible that the air will leak from such
  damaged part.
- Always set the pressure regulation valve at 600kPa (6.0kgf/cm²) or below if you fit the tire to the rim to prevent the tire-burst.





- Never inflate the tire over 600kPa (6.0kgf/cm²) as beat seating pressure when you fit the tire to rims. Bead seating is a condition in which beads at both sides of a tire evenly rest on the circumferential bead seat of the rim. If you inflate the tire over 600kPa (6.0kgf/cm²), there is a danger that the tire will burst.
- If the tire does not properly fit to the rim at the pressure of 600kPa (6.0kgf/cm<sup>2</sup>), deflate and confirm whether the tire and/or rim have any irregularity.
- When you inflate the tire, ensure the safety of the operation by placing the tire into the safety gauge to prevent the tire-burst. If you inflate the tire without using the safety gauge, there is a danger that a worker will be injured by a jumping tire and/or rim due to the burst of the tire.

# 5. Air Pressure Adjustment

- Working air pressure of SOLARMAX D850 is 600~800kPa (6.0~8.0kgf/cm2). Never inflate the tire above 800kPa (8.0kgf/cm²) as the tire possibly bursts.
- When you fit the tire to the rim, if you inflate the tire straight to the working pressure, it
  possibly bursts. Accordingly, be sure to adjust the air pressure after confirming that the
  tire is properly fitted to the rim at the beat seating pressure which is 600kPa (6.0kgf/cm²)
  or below.
- Adjust air pressure regulation valve to 800kPa (8.0kgf/cm²) or below, when you adjust the air pressure to prevent the tire-burst.
- The air pressure is naturally deflated, please adjust air pressure whenever you drive with D850.
- Adjust air pressure only when the tires are cold before driving. Ensure the safety of the adjustment operation by placing the tire into the safety gauge.
  - If you inflate the tire without using the safety gauge, there is a danger that a worker will be injured by a jumping tire and/or rim due to the burst of the tire.
  - When and if the tire is warm, you cannot inflate the tire at the precise air pressure since tire pressure changes in proportion to its temperature.

## 6. Surface Damage

- Please confirm whether (i) the tire has any crack, (ii) nail, metal parts and/or glass are stuck into the tire, and (iii) foreign objects such as stones are stuck into the groove of the tire.
- Never use the tires which have rubber crack and/or surface damage into the cord layer as such tires possibly burst and/or break. Cord layer is a layer made of nylon threads inside the tire.
- Punctured SOLARMAX D850 must not be repaired as it is used with a very high air pressure. Be sure to replace with a new tire when it is punctured to prevent the tire-burst and/or air leakage.

### 7. Storing

Avoid the following places as storage sites.

• The place where ozone is generated (which is vicinity to the motors and equipments generating electric spark.)





- The place where heat is generated (which is the vicinity of heater and steam pipes).
- The place with gasoline and oils.
- The place where it is subject to the direct sunlight.
- The place with high humidity and moisture.
- \* If you have any questions, please contact Customer Relations of Dunlop Falken Tyres, Ltd.

Toll free number: 0120-39-2788 (calling inland Japan only)

+81-3-3841-3643 (from over sea)

Operating Hours: Monday to Friday 9:00 ~ 12:00 and 13:00 ~ 17:00

