

# WHAT IS A MICHELIN® X® TWEEL® AIRLESS RADIAL TIRE?

# **NO MAINTENANCE**

The MICHELIN® X® TWEEL® airless radial tire is one single unit, replacing the current tire and wheel assembly. There is no need for complex mounting equipment and once they are bolted on, there is no air pressure to maintain.

### **NO COMPROMISE**

The unique energy transfer within the Polyresin spokes helps reduce the "bounce" associated with pneumatic tires, while providing outstanding handling characteristics.

# **NO DOWNTIME (NO FLATS!)**

The TWEEL® airless radial tire is designed to perform like a pneumatic tire, but without the inconvenience and downtime associated with flat tires.



# MICHELIN® X® TWEEL® SSL 2 AIRLESS RADIAL TIRE FOR SKID STEERS AND LIGHT CONSTRUCTION EQUIPMENT

MICHELIN® X® TWEEL® SSL 2 airless radial tires are available in two tread patterns: All Terrain and Hard Surface Traction. This second generation MICHELIN X TWEEL SSL offers significant new benefits, including:

- Improved shear beam construction engineered to maximize core life.1
- New spoke material helps provide up to 10 times greater spoke life compared to the previous models.<sup>2</sup>
- New interlocked hub designed to increase durability in demanding conditions.

#### **KEY FEATURES**

- 1. Deep open tread (AT) designed for excellent cleaning and traction. A deep layer of undertread means the core can be retreaded again and again.
- 2. Zero degree belts (under the tread) and proprietary design provide great lateral stiffness, while resisting damage and absorbing impacts.
- 3. Michelin's proprietary Comp10 Cable™ forms a semi-rigid "shear beam", and allows the load to hang from the top.
- 4. Universal, 8 hole, interlocking heavy gauge steel hub for robust attachment to the machine.
- 5. High strength, Polyresin spokes carry the load and absorb impacts, help dampen the ride, and provide a unique energy transfer that reduces pneumatic bounce.

Use of incorrect mounting hardware can lead to separation of the TWEEL from the vehicle, loss of control, and serious injury or death

(1) On an internal drum endurance test, the MICHELIN X TWEEL SSL 2 with a new shear beam construction lasted over twice as long as the original design.

(2) Under testing measuring crack growth under fully relaxed conditions, the new spoke material had a crack growth rate that was nearly 10 times slower than the original material.









MSPN 07013 / CAI 357108 All Terrain

- Outstanding stability contributes to high machine productivity.
- ✓ Unique spoke design helps reduce "bounce" and driver fatigue associated with pneumatic tires.
- Consistent footprint, with tread designed to last 2-3 times longer than a pneumatic tire at equal tread depth, and capable of being retreaded.



2-Piece Hub X TWEEL SSL shown without a hub adapter installed

# 2-PIECE HUB MODELS AVAILABLE WITH ADAPTERS

• Five adapters enable the TWEEL® airless radial tire to be used with a range of equipment.



Hub Adapter MSPN 47139 CAI 419992

12 mm thick 1015 carbon steel / reversible 8.75" (22.2 mm) center dia. 8 x 10.91" bolt pattern 0.79" (20 mm) bolt holes, no taper Fits front of Case backhoe loader machines



Hub Adapter MSPN 47462 CAI 481115

12 mm thick 1015 carbon steel / reversible 9.0" (228.6 mm) center dia. 8 x 10.75" bolt pattern 0.67" (17 mm) bolt holes, tapered Fits some Bobcat machines



Hub Adapter MSPN 47868 CAI 291074

12 mm thick 1015
carbon steel / reversible
6.0" (152.4 mm) center dia.
8 x 8.0" bolt pattern
0.67" (17 mm) bolt holes, tapered
Use adapter to change offset on
8 x 8.0" standard fitment size



Hub Adapter MSPN 04630 CAI 336820

12 mm thick 1015 carbon steel / reversible 3.68" (93.5 mm) center dia. 10 x 140 mm bolt pattern 0.63" (16 mm) bolt holes, tapered Fits some truck mounted forklifts



Hub Adapter MSPN 47999 CAI 336959

12 mm thick 1015 carbon steel / reversible Blank for custom applications, including a specific bolt configuration not identified here

MSPN	CAI	Description	Size	Max Load @ ~9 mph	Tread Depth	Undertread	Weight
07013	357108	X TWEEL SSL 2 All Terrain	12N16.5	1996 kg	25 mm	10 mm	103 kg
45604	976836	X TWEEL SSL 2 Hard Surface Traction	12N16.5	1996 kg	38 mm	6.4 mm	116 kg
93405	817393	X TWEEL SSL 2 All Terrain	10N16.5	1678 kg	25 mm	8 mm	81 kg
69607	883466	X TWEEL SSL 2 Hard Surface Traction	10N16.5	1678 kg	25 mm	10 mm	103 kg
76642	709241	X TWEEL SSL All Terrain / 2-Piece Hub*	12N16.5	1996 kg	38 mm	6.4 mm	116 kg
56289	170674	X TWEEL SSL Hard Surface Traction / 2-Piece Hub*	12N16.5	1996 kg	38 mm	6.4 mm	116 kg

<sup>\*</sup> Includes improved shear beam and new spoke material introduced with SSL 2, but does not include the SSL 2 interlocking hub.

Product measurements are subject to change and are listed here for your convenience. Please see your MICHELIN representative for up-to-date data.





- Consistent hub height helps ensure the mower deck produces an even cut.
- Excellent lateral stability on hillsides and sloped surfaces, and outstanding operator comfort, even when navigating over curbs and other bumps.
- ✓ High performance compounds and an efficient contact patch designed to provide a long wear life that is 2-3 times that of a pneumatic tire at equal tread depth.











# AVAILABLE IN SIZES TO FIT A WIDE RANGE OF MOWERS. FOR MORE DETAILS PLEASE REFER TO THE ONLINE FITMENT GUIDE AT MICHELINTWEEL.COM

MSPN	CAI	Description	Size	Center Color	Max Load	Wheel Offset	Bolt Pattern	Weight
01133	019985	X TWEEL TURF	18x8.5N10	Black	240 kg	-12.7 mm	4X101.6 mm	12.3 kg
37968	865514	X TWEEL TURF	22x11N12	Black	240 kg	-27.9 mm	4X101.6 mm	17.4 kg
47260	318203	X TWEEL TURF	22x11N12 XL	Black	329 kg	-34.9 mm	5X114.3 mm	17.9 kg
50357	332857	X TWEEL TURF	24x12N12	Black	340 kg	-19.1 mm	4X101.6 mm	21.6 kg
77185	436629	X TWEEL TURF	24x12N12	Black	340 kg	-55.9 mm	4X101.6 mm	21.9 kg
54411	472782	X TWEEL TURF	24x12N12	Black	340 kg	-33.0 mm	5X114.3 mm	21.6 kg
14365	169991	X TWEEL TURF	24x12N12	Black	340 kg	17.0 mm	5X114.3 mm	21.6 kg
06358	252641	X TWEEL TURF	24x12N12 XL	Black	394 kg	-55.9 mm	4X101.6 mm	22.4 kg
08189	124062	X TWEEL TURF	26x12N12	Black	467 kg	-22.1 mm	4X101.6 mm	26.1 kg
25913	004510	X TWEEL TURF	26x12N12	Black	467 kg	-55.9 mm	5X114.3 mm	26.3 kg
25926	561237	X TWEEL TURF	26x12N12	Black	467 kg	17.0 mm	5X114.3 mm	26.3 kg
PRODU	CTS LISTEI	D BELOW ARE EXCLUS	SIVE TO JOHN DEERE	AND JOHN DEERE DE	ALERS			
30504	361420	X TWEEL TURF	18x8.5N10	Yellow	320 kg	-12.7 mm	4X101.6 mm	12.3 kg
89064	904073	X TWEEL TURF	24x12N12	Yellow	340 kg	-19.1 mm	4X101.6 mm	21.6 kg
05583	484963	X TWEEL TURF	24x12N12	Yellow	340 kg	-55.9 mm	4X101.6 mm	21.9 kg
17510	586606	X TWEEL TURF	24x12N12 XL	Yellow	394 kg	-19.1 mm	4X101.6 mm	22.2 kg
80949	393921	X TWEEL TURF	24x12N12 XL	Yellow	394 kg	-55.9 mm	4X101.6 mm	22.4 kg
39287	124062	X TWEEL TURF	26x12N12	Yellow	391 kg	-22.1 mm	4X101.6 mm	26.1 kg

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# FRONT CASTERS FIT MOST MOWERS

Durable, polyresin tread helps provide a long wear life.

Integrated metal center hub with OEM quality sealed bearings, available for 5/8" and 3/4" diameter axle bolts. Spacers are available to adapt fit for a variety of popular mowers.

Unique circular outer beam functions like a spring, creating suspension like characteristics for the front of the mower.



Use of incorrect mounting hardware can lead to separation of the TWEEL from the vehicle, loss of control, and serious injury or death







13" Grooved 13" Smooth Polyresin Tread

15" Smooth Polyresin Tread

#### **HUB DIAMETER / SPACERS**

The TWEEL® caster is available for 15.9 mm and 19.1 mm diameter axle bolt diameters. Depending on axle diameter and fork width, spacers may be required for proper installation. Refer to the chart on the right for part numbers and dimensions. Additional fitment information is available at **tweel.michelinman.com**.

MSPN	CAI	Description	Size	Tread	Max Load	Axle Bolt Diameter	Weight
73818	529089	X TWEEL TURF Caster	13x6.5N6	Grooved	131 kg	15.9 mm	12.5 kg
52441	786694	X TWEEL TURF Caster	13x6.5N6	Grooved	131 kg	19.1 mm	12.3 kg
41011	462981	X TWEEL TURF Caster	13x6.5N6	Smooth	131 kg	15.9mm	12.6 kg
05768	969970	X TWEEL TURF Caster	13x6.5N6	Smooth	131 kg	19.1 mm	12.4 kg
49136	198082	X TWEEL TURF Caster	15x6.0N6	Smooth	167 kg	15.9mm	15.4 kg
31716	788796	X TWEEL TURF Caster	15x6.0N6	Smooth	167 kg	19.1 mm	15.2 kg

MSPN	CAI	Spacer	Axle Bolt Diameter	Bushing Width	Ass'y / Fork Inside Width
34578	899379		12.7 mm	7.9 mm	16.2 cm
38182	391030		12.7 mm	15.9 mm	17.8 cm
40653	857027		12.7 mm	25.4 mm	19.7 cm
65019	227555		19.1 mm	25.4 mm	19.7 cm
34193	146756		15.9 mm	15.9 mm	For John Deere 997
30927	280161		12.7 – 19.1 mm	54 mm	Bearing Dust Cap





- Designed specifically for difficult environments and conditions where vehicles are exposed to rugged roads, jagged terrain and other elements hostile to ordinary tires.
- ✓ Full width Polyresin spokes help dampen the ride for enhanced operator comfort, while providing outstanding lateral stiffness, excellent cornering and side-hill stability.
- ✓ Low pressure contact patch helps provide outstanding off-road traction.



MSPN 68495 & 65631



MSPN 01638



MSPN 36384



MSPN 43096



hardware can lead to separation of the TWEEL from the vehicle, loss of control, and serious injury or death

MSPN	CAI	Description	Common Fitments	Size	Max Load	Max Speed	Bolt Pattern	True Offset	Industry Offset/ Backspace	Center Hole Dia.	Bolt Hole Dia.	Weight
68495	316179	X TWEEL ATV	Honda ATV	26x9N14	229 kg	80 kph	4 X 110 mm	+45 mm	5+2	68.6 mm	13 mm	22.7 kg
65631	615832	X TWEEL UTV	Honda, Kubota, Yamaha	26x9N14	324 kg	80 kph	4 X 110 mm	+52 mm	6+1	68.6 mm	13 mm	25.9 kg
01638	824661	X TWEEL UTV	Polaris	26x9N14	324 kg	80 kph	4 X 156 mm	+30 mm	5+2	132.1 mm	13 mm	22.7 kg
36384	876426	X TWEEL UTV	Can Am/Kawasaki	26x9N14	324 kg	80 kph	4 X 137 mm	+48 mm	5+2	104.1 mm	14.3 mm	22.7 kg
43096	257086	X TWEEL UTV	John Deere Gator	26x9N14	324 kg	80 kph	5 X 114 mm	+25 mm	5+2	79.5 mm	13 mm	22.7 kg

Note: All UTV/ATVs use 60° / Conical / Tapered Lug Nuts.





- Unique spoke design helps dampen the ride for enhanced rider comfort when driving over gravel, uneven pavement, and bumps.
- Full width Polyresin spokes help provide outstanding lateral stiffness for excellent side-hill stability.
- Designed to provide excellent traction and long wear life – up to two times longer than a pneumatic golf cart tire.





MSPN 01133

Golf cart hub

(includes center dust cap)



MSPN 78245 Utility cart hub (shown above)



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MSPN	CAI	Description	Size	Wheel Offset	Max Speed	Max Load	Bolt Pattern	Weight (lbs.)
01133	019985	X TWEEL TURF for Golf Carts (Comfort)	18x8.5N10 (205/50N10)	-12.7 mm	40 kph	240 kg	4 X 101.6 mm	12.7 kg
78245	361420	X TWEEL TURF for Utility Carts	18x8.5N10 (205/50N10)	-12.7 mm	40 kph	320 kg	4 X 101.6 mm	12.2 kg



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