

# 2022 WRANGLER RUBICON 392

PERFORMANCE FEATURES GUIDE





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## INTRODUCTION

Dear Customer.

This Supplement has been prepared with the assistance of service and engineering specialists to acquaint you with the operation and maintenance of your Jeep®. Within this information, you will find a description of the services that FCA US LLC offers to its customers. Please take the time to read all of this publication carefully before driving your vehicle for the first time. Following the instructions, recommendations, tips, and important warnings in this manual will help ensure safe and enjoyable operation of your vehicle. For additional information, refer to your vehicle's Owner's Manual.

Following the instructions and recommendations provided herein will help ensure safe and reliable operation of your vehicle. After you have read the booklet, it should be stored in the vehicle for convenient reference and remain with the vehicle when sold.

When it comes to service, remember that authorized dealers know your Jeep® best, have factory-trained technicians, genuine Mopar® parts, and care about your satisfaction.

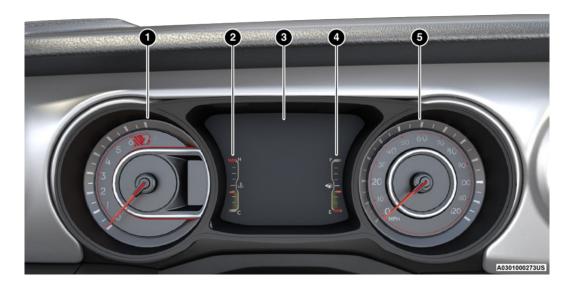
## **SYMBOLS KEY**

WARNINGI	These statements are against operating procedures that could result in a collision, bodily injury and/or death.
CAUTION!	These statements are against procedures that could result in damage to your vehicle.
NOTE:	A suggestion which will improve installation, operation, and reliability. If not followed, may result in damage.
TIP:	General ideas/solutions/suggestions on easier use of the product or functionality.

PAGE REFERENCE ARROW ⇒ page	Follow this reference for additional information on a particular feature.
FOOTNOTE	Supplementary and relevant information pertaining to the topic.

## GETTING TO KNOW YOUR INSTRUMENT PANEL

### **INSTRUMENT CLUSTER**



### **INSTRUMENT CLUSTER DESCRIPTIONS**

#### 1. Tachometer

O Indicates the engine speed in revolutions per minute (RPM x 1000).

#### CAUTION!

Do not operate the engine with the tachometer pointer in the red area. Engine damage will occur.

#### 2. Temperature Gauge

- O The temperature gauge shows engine coolant temperature. Any reading within the normal range indicates that the engine cooling system is operating satisfactorily.
- O The pointer will likely indicate a higher temperature when driving in hot weather, up mountain grades, or when towing a trailer. It should not be allowed to exceed the upper limits of the normal operating range.

#### WARNING!

A hot engine cooling system is dangerous. You or others could be badly burned by steam or boiling coolant. You may want to call an authorized dealer for service if your vehicle overheats.

#### CAUTION!

Driving with a hot engine cooling system could damage your vehicle. If the temperature gauge reads "H" pull over and stop the vehicle. Idle the vehicle with the air conditioner turned off until the pointer drops back into the normal range. If the pointer remains on the "H", turn the engine off immediately and call an authorized dealer for service.

#### 3. Instrument Cluster Display

O The instrument cluster display features a driver interactive display.

#### 4. Fuel Gauge

 The pointer shows the level of fuel in the fuel tank when the ignition switch is in the ON/RUN position.



O The fuel pump symbol points to the side of the vehicle where the fuel filler door is located.

#### 5. Speedometer

O Indicates vehicle speed.

## STARTING AND OPERATING

### **ENGINE BREAK-IN RECOMMENDATIONS**

This breaking in occurs mainly during the first 500 miles (805 km) and continues through the first oil change interval.

It is recommended for the operator to observe the following driving behaviors during the new vehicle break-in period:

0 to 100 miles (0 to 161 km):

- Do not allow the engine to operate at idle for an extended period of time.
- Press the accelerator pedal slowly and not more than halfway to avoid rapid acceleration.
- Avoid aggressive braking.
- Drive with the engine speed below 3.500 RPM.
- Maintain vehicle speed below 55 mph (88 km/h) and observe local speed limits.

100 to 300 miles (161 to 483 km):

 Press the accelerator pedal slowly and not more than halfway to avoid rapid acceleration in lower gears (FIRST to THIRD gears).

- Avoid aggressive braking.
- Drive with the engine speed below 5,000 RPM.
- Maintain vehicle speed below 70 mph (112 km/h) and observe local speed limits.

300 to 500 miles (483 to 805 km):

- Exercise the full engine RPM range, shifting manually (paddles or gear shift) at higher RPMs when possible.
- Do not perform sustained operation with the accelerator pedal at wide open throttle.
- Maintain vehicle speed below 85 mph (136 km/h) and observe local speed limits.

For the first 1,500 miles (2,414 km):

 Do not participate in track events, sport driving schools, or similar activities.

#### NOTE:

Check engine oil with every refueling and add if necessary. Oil and fuel consumption may be higher through the first oil change interval. Running the engine with an oil level below the add mark can cause severe engine damage.

### **AUTOMATIC TRANSMISSION**

You must press and hold the brake pedal while shifting out of PARK.

#### WARNING!

- Never use the PARK position as a substitute for the parking brake. Always apply the parking brake fully when exiting the vehicle to guard against vehicle movement and possible injury or damage.
- Your vehicle could move and injure you and others if it is not in PARK. Check by trying to move the transmission gear selector out of PARK with the brake pedal released. Make sure the transmission is in PARK before exiting the vehicle.
- The transmission may not engage PARK if the vehicle is moving. Always bring the vehicle to a complete stop before shifting to PARK, and verify that the transmission gear position indicator solidly indicates PARK (P) without blinking. Ensure that the vehicle is completely stopped, and the PARK position is properly indicated, before exiting the vehicle.

(Continued)

#### WARNING!

- It is dangerous to shift out of PARK or NEUTRAL if the engine speed is higher than idle speed. If your foot is not firmly pressing the brake pedal, the vehicle could accelerate quickly forward or in reverse. You could lose control of the vehicle and hit someone or something. Only shift into gear when the engine is idling normally and your foot is firmly pressing the brake pedal.
- Unintended movement of a vehicle could injure those in or near the vehicle. As with all vehicles, you should never exit a vehicle while the engine is running. Before exiting a vehicle. always come to a complete stop, then apply the parking brake, shift the transmission into PARK, and turn the ignition to the OFF position. When the ignition is in the OFF position, the transmission is locked in PARK, securing the vehicle against unwanted movement.
- When exiting the vehicle, always make sure the ignition is in the OFF position, remove the key fob from the vehicle, and lock the vehicle.

(Continued)

#### WARNING!

- Never leave children alone in a vehicle, or with access to an unlocked vehicle. Allowing children to be in a vehicle unattended is dangerous for a number of reasons. A child or others could be seriously or fatally injured. Children should be warned not to touch the parking brake, brake pedal or the transmission gear selector.
- Do not leave the key fob in or near the vehicle (or in a location accessible to children), and do not leave the ignition in the ACC or ON/RUN position. A child could operate power windows, other controls, or move the vehicle.

#### CAUTION!

- Shift into or out of PARK or REVERSE only after the vehicle has come to a complete stop.
- Do not shift between PARK. REVERSE. NEUTRAL, or DRIVE when the engine is above idle speed.
- Before shifting into any gear, make sure your foot is firmly pressing the brake pedal.

#### IGNITION PARK INTERLOCK

This vehicle is equipped with an Ignition Park Interlock which requires the transmission to be in PARK before the ignition can be turned to the OFF position. This helps the driver avoid inadvertently leaving the vehicle without placing the transmission in PARK. This system also locks the transmission in PARK whenever the ignition is in the OFF position.

#### NOTE:

The transmission is NOT locked in PARK when the ignition is in the ACC position (even though the engine will be off). Ensure that the transmission is in PARK, and the ignition is OFF (not in ACC position) before exiting the vehicle.

### **BRAKE/TRANSMISSION SHIFT** INTERLOCK (BTSI) SYSTEM

This vehicle is equipped with a BTSI system that holds the transmission gear selector in PARK unless the brakes are applied. To shift the transmission out of PARK, the engine must be running and the brake pedal must be pressed. The brake pedal must also be pressed to shift from NEUTRAL into DRIVE or REVERSE when the vehicle is stopped or moving at low speeds.

#### 8-SPEED AUTOMATIC TRANSMISSION

The transmission gear range (PRNDM) is displayed both beside the gear selector and in the instrument cluster. To select a gear range, push the lock button on the gear selector and move the selector rearward or forward. To shift the transmission out of PARK, the engine must be running and the brake pedal must be pressed. You must also press the brake pedal to shift from NEUTRAL into DRIVE or REVERSE when the vehicle is stopped or moving at low speeds. Select the DRIVE range for normal driving.

#### NOTE:

In the event of a mismatch between the gear selector position and the actual transmission gear (for example, driver selects PARK while driving), the position indicator will blink continuously until the selector is returned to the proper position, or the requested shift can be completed.

The electronically controlled transmission adapts its shift schedule based on driver inputs, along with environmental and road conditions. The transmission electronics are self-calibrating; therefore, the first few shifts on a new vehicle may be somewhat abrupt. This is a normal condition, and precision shifts will develop within a few hundred miles (kilometers).

The electronically controlled transmission adapts its shift schedule based on driver inputs, along with environmental and road conditions.

Only shift from DRIVE to PARK or REVERSE when the accelerator pedal is released and the vehicle is stopped. Be sure to keep your foot on the brake pedal when shifting between these gears.

The transmission gear selector provides PARK, REVERSE, NEUTRAL, and MANUAL (M) (AutoStick) shift positions. Manual shifts can be made using the AutoStick shift control. Toggling the gear selector forward (-) or rearward (+) while in the MANUAL (AutoStick) position (beside the DRIVE position), or tapping the shift paddles (+/-), (if equipped) will manually select the transmission gear, and will display the current gear in the instrument cluster ♀ page 11.



**Transmission Gear Selector** 

#### NOTE:

If the gear selector cannot be moved to the PARK, REVERSE, or NEUTRAL position (when pushed forward), it is probably in the AutoStick (+/-) position (beside the DRIVE position). In AutoStick mode, the transmission gear (1, 2, 3, etc.) is displayed in the instrument cluster. Move the gear selector to the right (into the DRIVE [D] position) for access to PARK, REVERSE, and NEUTRAL.

#### Gear Ranges

Do not press the accelerator pedal when shifting out of PARK or NEUTRAL.

#### NOTE:

After selecting any gear range, wait a moment to allow the selected gear to engage before accelerating. This is especially important when the engine is cold.

#### PARK (P)

This range supplements the parking brake by locking the transmission. The engine can be started in this range. Never attempt to use PARK while the vehicle is in motion. Apply the parking brake when exiting the vehicle in this range.

When parking on a hill, apply the parking brake before shifting the transmission to PARK. As an added precaution, turn the front wheels toward the curb on a downhill grade and away from the curb on an uphill grade.

When exiting the vehicle, always:

- Apply the parking brake.
- Shift the transmission into PARK.
- Turn the ignition OFF.
- Remove the key fob from the vehicle.

#### NOTE:

On four-wheel drive vehicles, be sure that the transfer case is in a drive position.

#### CAUTION!

- Before moving the transmission gear selector out of PARK, you must start the engine, and also press the brake pedal. Otherwise, damage to the gear selector could result.
- DO NOT race the engine when shifting from PARK or NEUTRAL into another gear range, as this can damage the drivetrain.

The following indicators should be used to ensure that you have properly engaged the transmission into the PARK position:

- When shifting into PARK, push the lock button on the gear selector and firmly move the gear selector all the way forward until it stops and is fully seated.
- Look at the transmission gear position display and verify that it indicates the PARK (P) position, and is not blinking.

 With the brake pedal released, verify that the gear selector will not move out of PARK.

#### REVERSE (R)

This range is for moving the vehicle backward. Shift into REVERSE only after the vehicle has come to a complete stop.

#### **NEUTRAL (N)**

Use this range when the vehicle is standing for prolonged periods with the engine running. Apply the parking brake and shift the transmission into PARK if you must exit the vehicle.

#### WARNING!

Do not coast in NEUTRAL and never turn off the ignition to coast down a hill. These are unsafe practices that limit your response to changing traffic or road conditions. You might lose control of the vehicle and have a collision.

#### CAUTION!

 Towing the vehicle, coasting, or driving for any other reason with the transmission in NEUTRAL can cause severe transmission damage.

(Continued)

#### CAUTION!

 Refer to "Recreational Towing" in "Starting And Operating" or "Towing A Disabled Vehicle" in "In Case Of Emergency" in the Owner's Manual for further information.

#### DRIVE (D)

This range should be used for most city and highway driving. It provides the smoothest upshifts and downshifts, and the best fuel economy. The transmission automatically upshifts through all forward gears. The DRIVE position should be used for all normal operating conditions.

When frequent transmission shifting occurs (such as when operating the vehicle under heavy loading conditions, in hilly terrain, traveling into strong head winds, or while towing a heavy trailer), use the AutoStick shift control to select a lower gear page 11. Under these conditions, using a lower gear will improve performance and extend transmission life by reducing excessive shifting and heat build-up.

During extremely cold temperatures (-22°F [-30°C] or below), transmission operation may be modified depending on engine and transmission temperature as well as vehicle speed. Normal operation will resume once the transmission temperature has risen to a suitable level.

#### MANUAL (M)

The MANUAL (M, +/-) position (beside the DRIVE position) enables full manual control of transmission shifting also known as AutoStick mode. Toggling the gear selector forward (-) or rearward (+) while in the MANUAL (AutoStick) position will manually select the transmission gear, and will display the current gear in the instrument cluster ♀ page 11.

#### Transmission Limp Home Mode

Transmission function is monitored electronically for abnormal conditions. If a condition is detected that could result in transmission damage, Transmission Limp Home mode is activated. In this mode, the transmission may operate only in certain gears, or may not shift at all. Vehicle performance may be severely degraded and the engine may stall. In some situations, the transmission may not re-engage if the engine is turned off and restarted. The Malfunction Indicator Light (MIL) may be illuminated. A message in the instrument cluster will inform the driver of the more serious conditions, and indicate what actions may be necessary.

In the event of a momentary problem, the transmission can be reset to regain all forward gears by performing the following steps:

#### NOTE:

- In cases where the instrument cluster message indicates the transmission may not re-engage after engine shutdown, perform this procedure only in a desired location (preferably, at an authorized dealer).
- Even if the transmission can be reset, we recommend that you visit an authorized dealer at your earliest possible convenience. An authorized dealer has diagnostic equipment to assess the condition of your transmission.
- If the transmission cannot be reset, authorized dealer service is required.
- 1. Stop the vehicle.
- 2. Shift the transmission into PARK, if possible. If not, shift the transmission to NEUTRAL.
- 3. Push and hold the ignition switch until the engine turns off.
- 4. Wait approximately 30 seconds.
- 5. Restart the engine.
- Shift into the desired gear range. If the problem is no longer detected, the transmission will return to normal operation.

#### **AutoStick**

AutoStick is a driver-interactive transmission feature providing manual shift control, giving you more control of the vehicle. AutoStick allows you to maximize engine braking, eliminate undesirable upshifts and downshifts, and improve overall vehicle performance. This feature can also provide you with more control during passing, city driving, cold slippery conditions, mountain driving, trailer towing, and many other situations.



**Steering Wheel Mounted Paddle Shifters** 

1 - (-) Paddle Shifter

2 - (+) Paddle Shifter

#### Operation

In AutoStick mode, you can use the gear selector (in the MANUAL position), or the paddle shifters, to manually shift the transmission. To activate AutoStick mode, move the gear selector into the MANUAL (M) position (beside the DRIVE position). or tap one of the paddle shifters on the steering wheel. Tapping the (-) paddle shifter to enter AutoStick mode will downshift the transmission to the next lower gear, while tapping (+) to enter AutoStick mode will retain the current gear. The current transmission gear will be displayed in the instrument cluster.

AutoStick mode has the following operational benefits:

- The transmission will automatically downshift as the vehicle slows (to prevent engine lugging) and will display the current gear.
- The transmission will automatically downshift to FIRST gear when coming to a stop. After a stop, the driver should manually upshift (+) the transmission as the vehicle is accelerated.

- You can start out, from a stop, in FIRST or SECOND gear (or THIRD gear, in 4L range). Tapping (+) (at a stop) will allow starting in SECOND gear. Starting out in SECOND or THIRD gear can be helpful in snowy or icy conditions.
- If a requested downshift would cause the engine to over-speed, that shift will not occur.
- The system will ignore attempts to upshift at too low of a vehicle speed.
- Holding the (-) paddle pressed (if equipped), or holding the gear selector in the (-) position, will downshift the transmission to the lowest gear possible at the current speed.
- Transmission shifting will be more noticeable when AutoStick is enabled.
- The system may revert to automatic shift mode if a fault or overheat condition is detected.

#### NOTE:

When Selec-Speed Control is enabled, AutoStick is not active.

To disengage AutoStick, return the gear selector to the DRIVE position, or press and hold the (+) shift paddle (and the gear selector is already in DRIVE) until "D" is once again indicated in the instrument cluster. You can shift in or out of AutoStick at any time without taking your foot off the accelerator pedal.

#### WARNING!

Do not downshift for additional engine braking on a slippery surface. The drive wheels could lose their grip and the vehicle could skid, causing a collision or personal injury.

### TORQUE RESERVE

Torque Reserve is automatically enabled while staging a brake-torque launch, to reduce the time required for the intake system to fill with air. Torque Reserve provides greater engine airflow than is otherwise required, stops fuel flow to multiple cylinders and retards spark as necessary to hold the torque from the extra airflow "in reserve". As soon as the driver launches the vehicle, fuel flow is restored and spark is advanced to instantaneously deliver the reserve torque. For a given launch engine speed, additional torque is delivered more quickly than is possible without Torque Reserve.

#### NOTE:

Due to the way the engine is controlled during Torque Reserve, a distinct exhaust note is produced and engine vibration increases.

### **DUAL MODE EXHAUST**

This vehicle is equipped with a dual-mode exhaust, designed to provide both quiet cruising and sporty sound. The system has two modes, Performance Exhaust ON and Performance Exhaust OFF. A button on the dashboard can be used to toggle between settings, and the light illuminates when "Performance Exhaust ON" mode is active. In this mode, the exhaust valves are commanded fully open to deliver a deep, sporty sound. A message appears momentarily in the instrument cluster whenever the exhaust oFF" setting is active, the exhaust valves are closed except at high engine speeds and loads, when they are commanded open without notification.



**Dual Mode Exhaust Button** 

The Performance Exhaust is OFF by default; however, if Performance Exhaust ON is activated by pressing the exhaust button, this setting will be saved after changing drive modes and after restarting the engine.

### FOUR-WHEEL DRIVE OPERATION

#### WARNING!

Failure to engage a transfer case position completely can cause transfer case damage or loss of power and vehicle control. You could have a collision. Do not drive the vehicle unless the transfer case is fully engaged.

#### **FOUR-POSITION TRANSFER CASE**



**Four-Wheel Drive Gear Selector** 

The transfer case provides four positions:

- 4H AUTO Four-Wheel Drive Auto High Range
- 4H PART TIME Four-Wheel Drive Part Time High Range
- N (Neutral)
- 4L Four-Wheel Drive Low Range

For additional information on the appropriate use of each transfer case position, see the information below:

#### 4H AUTO

Four-Wheel Drive Auto High Range — This range is for normal street and highway driving on dry, hard surfaced roads. This range sends power to the front wheels. The four-wheel drive system will be automatically engaged when the vehicle senses a loss of traction. This range provides additional traction for varying road conditions.

#### **4H PART TIME**

Four-Wheel Drive Part Time High Range — This range maximizes torque to the front driveshaft, forcing the front and rear wheels to rotate at the same speed. This range provides additional traction for loose, slippery road surfaces only.

#### N (Neutral)

#### WARNING!

You or others could be injured or killed if you leave the vehicle unattended with the transfer case in the (N) Neutral position without first fully engaging the parking brake. The transfer case (N) Neutral position disengages both the front and rear driveshafts from the powertrain, and will allow the vehicle to roll, even if the automatic transmission is in PARK (or manual transmission is in gear). The parking brake should always be applied when the driver is not in the vehicle.

Neutral - This range disengages both the front and rear driveshafts from the powertrain. To be used for flat towing behind another vehicle. Refer to "Recreational Towing" in "Starting And Operating" in the Owner's Manual for further information.

#### 4L

Four-Wheel Drive Low Range — This range provides low speed four-wheel drive. It maximizes torque to the front driveshaft, forcing the front and rear wheels to rotate at the same speed. This range provides additional traction and maximum pulling power for loose, slippery road surfaces only. Do not exceed 25 mph (40 km/h).

This transfer case is designed to be driven in the four-wheel drive position (4H AUTO) for normal street and highway conditions on dry hard surfaced roads.

For variable driving conditions, the 4H AUTO mode can be used. In this mode, the front axle is engaged, but the vehicle's power is sent to the rear wheels. Four-wheel drive will be automatically engaged when the vehicle senses a loss of traction.

In the event that additional traction is required, the transfer case 4H AUTO and 4L positions can be used to lock the front and rear driveshafts together, forcing the front and rear wheels to rotate at the same speed. The 4H AUTO and 4L positions are intended for loose, slippery road surfaces only and not intended for normal driving. Driving in the 4H AUTO and 4L positions on hard-surfaced roads will cause increased tire wear and damage to the driveline components. For further information on shifting into 4H AUTO or 4L ⇒ page 15.

The instrument cluster alerts the driver that the vehicle is in four-wheel drive, and the front and rear driveshafts are locked together. The light will illuminate when the transfer case is shifted into the 4H AUTO position.

When operating your vehicle in 4L, the engine speed will be approximately three times that of the 4H AUTO position at a given road speed. Take care not to overspeed the engine.

Proper operation of four-wheel drive vehicles depends on tires of equal size, type, and circumference on each wheel. Any difference will adversely affect shifting and cause damage to the transfer case.

Because four-wheel drive provides improved traction, there is a tendency to exceed safe turning and stopping speeds. Do not go faster than road conditions permit.

### **Shifting Procedures**

4H AUTO TO 4H PART TIME OR 4H PART TIME TO 4H AUTO

Shifting between 4H AUTO to 4H PART TIME can be made with the vehicle stopped or in motion. The preferred shifting speed would be 0 to 45 mph (72 km/h). With the vehicle in motion, the transfer case will engage/disengage faster if you momentarily release the accelerator pedal after completing the shift. Do not accelerate while shifting the transfer case. Apply a constant force when shifting the transfer case lever.

#### NOTE:

- Do not attempt to make a shift while only the front or rear wheels are spinning. The front and rear driveshaft speeds must be equal for the shift to take place. Shifting while only the front or rear wheels are spinning can cause damage to the transfer case.
- Delayed shifts out of four-wheel drive may be experienced due to uneven tire wear, low or uneven tire pressures, excessive vehicle loading, or cold temperatures.
- Shifting effort will increase with speed, this is normal.

During cold weather, you may experience increased effort in shifting until the transfer case fluid warms up. This is normal.

4H PART TIME/4H AUTO TO 4L OR 4L TO 4H PART TIME/4H AUTO

With the vehicle rolling at 2 to 3 mph (3 to 5 km/h), shift an automatic transmission into NEUTRAL (N), or press the clutch pedal on a manual transmission. While the vehicle is coasting at 2 to 3 mph (3 to 5 km/h), shift the transfer case lever firmly to the desired position. Do not pause with the transfer case in N (Neutral). Once the shift is completed, place the automatic transmission into DRIVE or release the clutch pedal on a manual transmission.

#### NOTE:

Shifting into or out of 4L is possible with the vehicle completely stopped; however, difficulty may occur due to the mating teeth not being properly aligned. Several attempts may be required for clutch teeth alignment and shift completion to occur. The preferred method is with the vehicle rolling at 2 to 3 mph (3 to 5 km/h). Avoid attempting to engage or disengage 4L with the vehicle moving faster than 2 to 3 mph (3 to 5 km/h).

#### WARNING!

Failure to engage a transfer case position completely can cause transfer case damage or loss of power and vehicle control. You could have a collision. Do not drive the vehicle unless the transfer case is fully engaged.

### **FUEL SAVER TECHNOLOGY 6.4L**

This feature offers improved fuel economy by shutting off four of the engine's eight cylinders during light load and operation. The system is automatic with no driver inputs. It is not available in 4L. There is also a four cylinder indicator in the instrument cluster to indicate when this feature is active.

#### NOTE:

This system may take some time to return to full functionality after a battery disconnect.

### **TRAILER TOWING**

In this section you will find safety tips and information on limits to the type of towing you can reasonably do with your vehicle. Before towing a trailer, carefully review this information to tow your load as efficiently and safely as possible.

To maintain the New Vehicle Limited Warranty coverage, follow the requirements and recommendations in this manual concerning vehicles used for trailer towing.

### TRAILER TOWING WEIGHTS (MAXIMUM TRAILER WEIGHT RATINGS)

Engine/Transmission	Model	GCWR	Frontal Area	Maximum GTW	Maximum Trailer TW
6.4L	Four-Door	9,000 lb (4,082 kg)	30 ft <sup>2</sup> (2.79 m <sup>2</sup> )	3,500 lb (1,587 kg)	350 lb (158 kg)
Refer to local laws for ma	ximum trailer towing spee	ds.			

## SERVICING AND MAINTENANCE

### **SCHEDULED SERVICING**

The Scheduled Maintenance services listed in this manual must be done at the times or mileages specified to protect the vehicle warranty and ensure the best vehicle performance and reliability. More frequent maintenance may be needed for vehicles in severe operating conditions, such as dusty areas and very short trip driving. Inspection and service should also be done anytime a malfunction is suspected.

The oil change indicator system will remind you that it is time to take your vehicle in for scheduled maintenance.

The instrument cluster display will display an "Oil Change Required" message and a single chime will sound, indicating that an oil change is necessary. Based on engine operation conditions, the oil change indicator message will illuminate. This means that service is required for your vehicle. Have your vehicle serviced as soon as possible, within the next 500 miles (805 km).

#### NOTE:

- The oil change indicator message will not monitor the time since the last oil change.
  Change your vehicle's oil if it has been six months since your last oil change, even if the oil change indicator message is NOT illuminated.
- Change your engine oil more often if you drive your vehicle off-road for an extended period of time.
- Under no circumstances should oil change intervals exceed 6,000 miles (10,000 km) or six months, whichever comes first.

An authorized dealer will reset the oil change indicator message after completing the scheduled oil change. If a scheduled oil change is performed by someone other than an authorized dealer, the message can be reset by referring to the steps described under instrument cluster display. Refer to "Instrument Cluster Display" in "Getting To Know Your Instrument Panel" in the Owner's Manual for further information.

#### Severe Duty All Models

Vehicles that are operated in a dusty and off-road environment, or predominately at idle or very low engine RPM are known as Severe Duty vehicles. It is recommended that you change engine oil at 4,000 miles (6,500 km) or 350 hours of engine run time.

#### At Each Stop For Fuel

- Check the engine oil level.
- Check the windshield washer solvent and add if required.

#### Once A Month

- Check tire pressure and look for unusual wear or damage.
- Inspect the battery, and clean and tighten the terminals as required.
- Check the fluid levels of the coolant reservoir, engine oil, brake master cylinder, and add as needed.
- Check all lights and other electrical items for correct operation.

#### At Each Oil Change

- Change the engine oil filter.
- Inspect the brake hoses and lines.
- Inspect the CV/Universal joints.

#### CAUTION!

Failure to perform the required maintenance items may result in damage to the vehicle.

### **MAINTENANCE PLAN**

Miles:	000'9	12,000	18,000	24,000	30,000	36,000	42,000	48,000	54,000	000'09	000'99	72,000	78,000	84,000	000'06	000'96	102,000	108,000	114,000	120,000	126,000	132,000	138,000	144,000	150,000
Or Months:	6	12	18	24	30	36	42	48	54	60	66	72	78	84	90	96	102	108	114	120	126	132	138	144	150
Or Kilometers:	10,000	20,000	30,000	40,000	50,000	000'09	70,000	80,000	000'06	100,000	110,000	120,000	130,000	140,000	150,000	160,000	170,000	180,000	190,000	200,000	210,000	220,000	230,000	240,000	250,000
Change the engine oil and engine oil filter.	Χ	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Χ	Χ	Х	Х	Х	Х	Х	Χ	Х	Х	Х	Χ	Х	Χ
Rotate the tires. Rotate at the first sign of irregular wear, even if it occurs before scheduled maintenance.	Х	х	х	х	х	х	х	х	Х	х	Х	х	Х	Х	х	х	Х	Х	Х	Х	Х	Х	Х	Х	х
If using your vehicle for any of the following: dusty or off-road conditions. Inspect the engine air cleaner filter; replace if necessary.		Х		X		Х		X		Х		Х		Х		X		Х		Х		х		х	
Inspect the brake linings; replace if necessary.		х		х		Х		Х		х		Х		Х		х		Х		Х		X		Х	

Miles:	000'9	12,000	18,000	24,000	30,000	36,000	42,000	48,000	54,000	000'09	000'99	72,000	78,000	84,000	90,000	96,000	102,000	108,000	114,000	120,000	126,000	132,000	138,000	144,000	150,000
Or Months:	6	12	18	24	30	36	42	48	54	60	66	72	78	84	90	96	102	108	114	120	126	132	138	144	150
Or Kilometers:	10,000	20,000	30,000	40,000	50,000	000'09	70,000	80,000	000'06	100,000	110,000	120,000	130,000	140,000	150,000	160,000	170,000	180,000	190,000	200,000	210,000	220,000	230,000	240,000	250,000
Inspect the CV/ Universal joints.	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Χ	Χ	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х
Inspect the exhaust system.		Х		Х		Х		Х		Х		Χ		Х		Х		Х		Х		Х		Х	
Adjust the parking brake on vehicles equipped with four wheel disc brakes.					Х					Х					Х					Х					Х
Drain the transfer case and refill.					Х					Х					Х					Х					Х
Inspect the accessory drive belts, replace if necessary.										х										Х					

Miles:	000'9	12,000	18,000	24,000	30,000	36,000	42,000	48,000	54,000	60,000	000'99	72,000	78,000	84,000	90,000	000'96	102,000	108,000	114,000	120,000	126,000	132,000	138,000	144,000	150,000
Or Months:	6	12	18	24	30	36	42	48	54	60	66	72	78	84	90	96	102	108	114	120	126	132	138	144	150
Or Kilometers:	10,000	20,000	30,000	40,000	50,000	000'09	70,000	80,000	000'06	100,000	110,000	120,000	130,000	140,000	150,000	160,000	170,000	180,000	190,000	200,000	210,000	220,000	230,000	240,000	250,000
Inspect the front and rear axle fluid. Change if using your vehicle for any of the following: police, taxi, fleet, sustained high speed driving, off-road or frequent trailer towing.				Х				X				X				X				х				Х	
Inspect front suspension, tie rod ends, and boot seals for cracks or leaks and all parts for damage, wear, improper looseness or end play; replace if necessary.		х		х		Х		X		X		X		Х		X		Х		х		х		Х	
Replace the engine air cleaner filter.					Х					Х					Χ					Х					Х
Replace cabin air filter.			To be replaced every 12,000 mi (19,000 km).																						

Miles:	000'9	12,000	18,000	24,000	30,000	36,000	42,000	48,000	54,000	000'09	66,000	72,000	78,000	84,000	000'06	000'96	102,000	108,000	114,000	120,000	126,000	132,000	138,000	144,000	150,000
Or Months:	6	12	18	24	30	36	42	48	54	60	66	72	78	84	90	96	102	108	114	120	126	132	138	144	150
Or Kilometers:	10,000	20,000	30,000	40,000	50,000	000'09	70,000	80,000	000'06	100,000	110,000	120,000	130,000	140,000	150,000	160,000	170,000	180,000	190,000	200,000	210,000	220,000	230,000	240,000	250,000
Inspect and replace the PCV Valve if necessary.															Х										
Replace the spark plugs – 6.4L Engine. <sup>1</sup>																Х									
Flush and replace the engine coolant at 120 months if not done at 150,000 miles (240,000 km).																				Х					Х

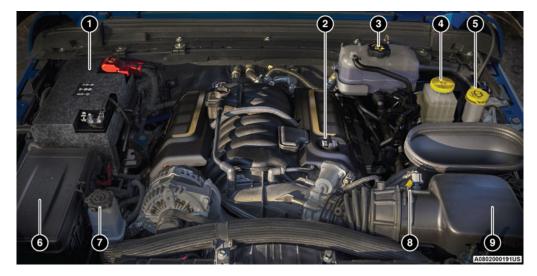
1. The spark plug change interval is mileage based only, monthly intervals do not apply.

#### WARNING!

- You can be badly injured working on or around a motor vehicle. Do only service work for which you have the knowledge and the right equipment. If you have any doubt about your ability to perform a service job, take your vehicle to a competent mechanic.
- Failure to properly inspect and maintain your vehicle could result in a component malfunction and effect vehicle handling and performance. This could cause an accident.

### **ENGINE COMPARTMENT**

### 6.4L ENGINE



- 1 Battery
- 2 Engine Oil Fill
- 3 Engine Coolant Reservoir Pressure Cap
- 4 Brake Fluid Reservoir Cap
- 5 Washer Fluid Reservoir Cap

- 6- Power Distribution Center (Fuses)
- $7- \hbox{Power Steering Fluid Reservoir}$
- 8 Engine Oil Dipstick
- 9 Engine Air Cleaner Filter

### **VEHICLE MAINTENANCE**

An authorized dealer has the qualified service personnel, special tools, and equipment to perform all service operations in an expert manner. Service Manuals are available which include detailed service information for your vehicle. Refer to these Service Manuals before attempting any procedure yourself.

#### NOTE:

Intentional tampering with emission control systems may void your warranty and could result in civil penalties being assessed against you.

#### WARNING!

You can be badly injured working on or around a motor vehicle. Only do service work for which you have the knowledge and the proper equipment. If you have any doubt about your ability to perform a service job, take your vehicle to a competent mechanic.

#### **ENGINE OIL**

### **Engine Oil Selection**

Use only the manufacturer's recommended fluid ♀ page 29.

#### NOTE:

Hemi engines (6.4L) at times can tick right after startup and then quiet down after approximately 30 seconds. This is normal and will not harm the engine. This characteristic can be caused by short drive cycles. For example, if the vehicle is started then shut off after driving a short distance. Upon restarting, you may experience a ticking sound. Other causes could be if the vehicle is unused for an extended period of time, incorrect oil, extended oil changes or extended idling. If the engine continues to tick or if the Malfunction Indicator Light (MIL) comes on, see the nearest authorized dealer.

#### CAUTION!

Do not use chemical flushes in your engine oil as the chemicals can damage your engine. Such damage is not covered by the New Vehicle Limited Warranty.

### American Petroleum Institute (API) Approved Engine Oil

These symbols mean that the oil has been certified by the API. The manufacturer only recommends API trademark oils.



The API Starburst trademark certifies 0W-20, 0W-30 and 5W-30 engine oils.



The API Donut trademark certifies OW-40 and 5W-40 engine oil.

#### CAUTION!

Do not use chemical flushes in your engine oil as the chemicals can damage your engine. Such damage is not covered by the New Vehicle Limited Warranty.

### Synthetic Engine Oils

Your engine was designed for synthetic engine oils. only use synthetic API approved engine oils.

Synthetic engine oils which do not have both the correct API trademark and the correct SAE viscosity grade numbers should not be used.

#### Materials Added To Engine Oil

The manufacturer strongly recommends against the addition of any additives (other than leak detection dyes) to the engine oil. Engine oil is an engineered product and its performance may be impaired by supplemental additives.

# Disposing Of Used Engine Oil And Oil Filters

Care should be taken in disposing of used engine oil and oil filters from your vehicle. Used oil and oil filters, indiscriminately discarded, can present a problem to the environment. Contact an authorized dealer, service station or governmental agency for advice on how and where used oil and oil filters can be safely discarded in your area.

#### **ENGINE AIR CLEANER FILTER**

For the proper maintenance intervals  $\Rightarrow$  page 19.

#### NOTE:

Be sure to follow the "Severe Duty All Models" maintenance interval if applicable.

#### WARNING!

The air induction system (air cleaner, hoses, etc.) can provide a measure of protection in the case of engine backfire. Do not remove the air induction system (air cleaner, hoses, etc.) unless such removal is necessary for repair or maintenance. Make sure that no one is near the engine compartment before starting the vehicle with the air induction system (air cleaner, hoses, etc.) removed. Failure to do so can result in serious personal injury.

#### **Engine Air Cleaner Filter Selection**

The quality of replacement engine air cleaner filters varies considerably. Only high quality Mopar® filters should be used.

### First Water Separation Chamber Removal

The vehicle is equipped with a hood duct system for filtering out water, dirt and debris to keep them out of the engine air cleaner filter. The first water separation chamber can be removed for cleaning if necessary.

#### Removal

 Loosen the six captured fasteners from the first water separation chamber using a suitable tool.



**First Water Separation Chamber** 

1 - Captured Fasteners

#### NOTE:

The captured fasteners are made to stay with the first water separation chamber and must NOT be removed.

2. Pull on the hood duct at the top to disengage the push pin clip along with the rubber grommet and remove from vehicle.



First Water Chamber Removal

#### Installation

#### NOTE:

Inspect and clean the housing if dirt or debris is present before replacing.

1. Locate the first water separation chamber to hood/second chamber then engage the push pin clip and grommet.



**First Water Separation Chamber** 

- 1 Push Pin
- 2 Grommet (On The Backside)

#### NOTE:

Both components should click-in. The cone shaped of the second chamber can aid in locating parts.

- 2. Hand start the six captured fasteners.
- 3. Tighten the captured fasteners, do not over-tighten.

### **Engine Air Cleaner Filter Inspection and** Replacement

Follow the recommended maintenance intervals as shown in the Maintenance Plan in this section.

#### **Engine Air Cleaner Filter Removal**

1. Loosen the fasteners from the air cleaner cover using a suitable tool.



**Engine Air Cleaner Cover** 

- 1 Engine Air Cleaner Filter Cover
- 2 Fasteners

- Lift the engine air cleaner filter cover to access the engine air cleaner filter by rotating at the hinge and pulling the cover away from the engine.
- Remove the engine air cleaner filter from the housing assembly.

# Engine Air Cleaner Filter Installation NOTE:

Inspect and clean the housing if significant dirt or debris is present before replacing the engine air cleaner filter.

- Install the engine air cleaner filter into the housing assembly with the engine air cleaner filter inspection surface facing downward.
- 2. Tighten engine air cleaner filter cover fasteners using a suitable tool.

#### CAUTION!

Do not overtighten the engine air cleaner filter cover lid screws or damage may result.

## TECHNICAL SPECIFICATIONS

### **FUEL REQUIREMENTS — GASOLINE ENGINE**

While operating on gasoline with the required octane number, hearing a light knocking sound from the engine is not a cause for concern. However, if the engine is heard making a heavy knocking sound, see a dealer immediately. Use of gasoline with an octane number lower than recommended can cause engine failure and may void the New Vehicle Limited Warranty.

Poor quality gasoline can cause problems such as hard starting, stalling, and hesitations. If you experience these symptoms, try another brand of gasoline before considering service for the vehicle.

### 6.4L ENGINE

Do not use E-85 flex fuel or ethanol blends greater than 15% in this engine.



This engine is designed to meet all emissions regulations, provide optimal fuel economy and performance when using high-quality unleaded premium

gasoline having a posted octane number of 91 as specified by the (R+M)/2 method. The use of 91 or higher octane premium gasoline is required in these engines.

## **FLUID CAPACITIES**

	US	Metric
Fuel (Approximate)	,	
Four Door Models	21.5 Gallons	81 Liters
Engine Oil with Filter		
6.4L Engine	7.5 Quarts	7.1 Liters
Cooling System *	,	
6.4L Engine	16 Quarts	15 Liters
* Includes coolant recovery bottle filled to MAX level.	,	

## **ENGINE FLUIDS AND LUBRICANTS**

Component	Fluid, Lubricant, or Genuine Part
Engine Coolant	We recommend using Mopar® Antifreeze/Coolant 10 Year/150,000 Mile (240,000 km) Formula OAT (Organic Additive Technology) or equivalent meeting the requirements of the manufacturer Material Standard MS.90032.
Engine Oil — 6.4L Engine	We recommend using Mopar® API Certified SAE OW-40 Full Synthetic Engine Oil which meets the requirements of the manufacturer Material Standard MS-A0921. Equivalent full synthetic SAE OW-40 engine oil can be used but must have the API Donut trademark ♀ page 24.
Engine Oil Filter	We recommend using Mopar® Engine Oil Filter. If a Mopar® Engine Oil Filter is unavailable only use filters that meet or exceed SAE/USCAR-36 Filter Performance Requirements.
Fuel Selection — 6.4L Engine	Premium Unleaded 91 Octane Only or Higher (R+M)/2 Method, 0-15% Ethanol (Do Not Use E-85).

#### CAUTION!

- Mixing of engine coolant (antifreeze) other than specified Organic Additive Technology (OAT) engine coolant (antifreeze), may result in engine damage and may decrease corrosion protection. Organic Additive Technology (OAT) engine coolant is different and should not be mixed with Hybrid Organic Additive Technology. nology (HOAT) engine coolant (antifreeze) or any "globally compatible" coolant (antifreeze). If a non-OAT engine coolant (antifreeze) is introduced into the cooling system in an emergency, the cooling system will need to be drained, flushed, and refilled with fresh OAT coolant (conforming to MS.90032), by an authorized dealer as soon as possible.
- Do not use water alone or alcohol-based engine coolant (antifreeze) products. Do not use additional rust inhibitors or antirust products, as they may not be compatible with the radiator engine coolant and may plug the radiator.
- This vehicle has not been designed for use with propylene glycol-based engine coolant (antifreeze). Use of propylene glycol-based engine coolant (antifreeze) is not recommended.

### CHASSIS FLUIDS AND LUBRICANTS

Component	Fluid, Lubricant, or Genuine Part	
Automatic Transmission	Use only Mopar® ZF 8 & 9 Speed Automatic Transmission Fluid (ATF) or equivalent. Failure to use the correct fluid may affect the function or performance of your transmission.	
Transfer Case	We recommend using Mopar® ATF+4 Automatic Transmission Fluid.	
Front Axle Differential	We recommend using Mopar® Gear & Axle Lubricant (SAE 75W85)(API GL-5).	
Rear Axle Differential	We recommend using Mopar® Gear & Axle Lubricant (SAE 75W85)(API GL-5). Models equipped with Trac-Lok Limited Slip Differential require a friction modifier additive.	
Brake Master Cylinder	We recommend using Mopar® DOT 3 Brake Fluid, SAE J1709.	
Power Steering Reservoir	We recommend using Mopar® Electric Steering Pump Fluid.	

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