CRASH RECONSTRUCTION MECHANICAL INSPECTION
WISCONSIN STATE PATROL

STATE PATROL CFS NUMBER: **000221-2755**

MECHANICAL INSPECTOR: **Insp. Ryan Schultz**

RECONSTRUCTIONIST: **Trooper Trent Betley**

Crash Location:	Date / Time of Inspection:	Inspection Location:
USH 2 at entrance to Maslowski Beach	8/2/22 9:00 A.M.	Pospychalla Towing

GENERAL VEHICLE IDENTIFICATION / BODY CONDITION

Vehicle Year:	Make:	Model:	Type:	Color:	Registration Number:	Registration State:
2019	Honda	Civic	Sedan	Black	APY5702	WI

Vehicle Identification Number:	Odometer Reading:	Fuel Delivery Type:
19XFC2F81KE023033	Unresponsive	Carburetor ☐ Fuel Injected ☒

Engine Displacement/Cylinders:	Drive Train Description:	Transmission Description:
2.0L 4-cylinder gasoline	Front-wheel drive	Automatic ☒ Manual ☐

Body/Frame Condition:
Significant damage to sides and rear from two separate impacts

Bumper Condition:
Front: Intact
Rear: Damaged

GLASS / MIRRORS / SEATBELTS / ELECTRICAL / LIGHTING

** Note: Some of the following components may not be examined. Lamps, for example, may be analyzed by the Crash Reconstructionist as part of his/her investigation. **

- **Glass**

Windshield:	Rear Window:	Notable View Obstruction(s):	
Damaged	Damaged	No	
Left Front Side Window:	**Right Front Side Window:**	**Left Rear Side Window:**	**Right Rear Side Window**
Broken out	Broken out	Broken out	Broken out
Other Glass: N/A			

- **Mirrors**

Rear View Mirror:	Left Outside Mirror:	Right Outside Mirror:
Intact	Housing: Cosmetic damage Mirror: Intact	Housing: Missing Mirror: Missing

GLASS / MIRRORS / SEATBELTS / ELECTRICAL / LIGHTING CONT.

- **Seatbelts/Airbag deployment**

Left Front Latch Works: Yes ☒ No ☐ N/A ☐	Left Front Pretensioner Deployment: Yes ☒ No ☐ N/A ☐	Front Center Latch Works: Yes ☐ No ☐ N/A ☒	Front Center Pretensioner Deployment: Yes ☐ No ☐ N/A ☒
Right Front Latch Works: Yes ☐ No ☐ N/A ☒	Right Front Pretensioner Deployment: Yes ☐ No ☐ N/A ☒	Left Rear Latch Works: Yes ☒ No ☐ N/A ☐	Left Rear Pretensioner Deployment: Yes ☐ No ☐ N/A ☒
Rear Center Latch Works: Yes ☐ No ☐ N/A ☒	Rear Center Pretensioner deployment: Yes ☐ No ☐ N/A ☒	Right Rear Latch Works: Yes ☐ No ☐ N/A ☒	Right Rear Pretensioner Deployment: Yes ☐ No ☐ N/A ☒
Other Seat Belt Latches: N/A		Other Pretensioner Deployments: N/A	
Airbag Deployment: Yes ☒ No ☐ N/A ☐	Airbags Deployed (If Applicable): Drivers, both seat side, both curtain		

- **Interior/Settings**

Battery: Good	Horn: Inoperable	Transmission Position: Drive	Headlamp Switch Position: On
Instrument Panel: Unresponsive	Gauges: Unresponsive	Warning Lights: Unresponsive	
Interior Fan Speed: Unresponsive	Fan Direction Setting: Unresponsive	Temperature Setting: Unresponsive	Hazard Lamp Switch Setting: Unresponsive
Windshield Wipers: Good	Wiper Setting Position: Off	Windshield Washer Fluid Level: Empty, damaged	Fuel Level: Unresponsive
Diagnostic Trouble Code Scan: Yes ☐ No ☒ Scan Information:			

- **Lighting/Electrical**
  - Removed or inspected for hot shock: No

Left Headlamp: Assembly: Intact Operable: Yes ☐ No ☒	Right Headlamp: Assembly: Broken Operable: Yes ☐ No ☒	Left Front Turn Signal: Assembly: Intact Operable: Yes ☐ No ☒	Right Front Turn Signal: Assembly: Broken Operable: Yes ☐ No ☒
Left Tail Lamp: Assembly: Broken Operable: Yes ☐ No ☒	Right Tail Lamp: Assembly: Broken Operable: Yes ☐ No ☒	Left Rear Turn Signal: Assembly: Broken Operable: Yes ☐ No ☒	Right Rear Turn Signal: Assembly: Broken Operable: Yes ☐ No ☒
Left Stop Lamp: Assembly: Broken Operable: Yes ☐ No ☒	Right Stop Lamp: Assembly: Broken Operable: Yes ☐ No ☒	High Mount Stop Lamp: Assembly: Broken Operable: Yes ☐ No ☒	License Plate Lamps: Assembly: Intact Operable: Yes ☐ No ☒
Other Lamps: N/A			

ENGINE COMPARTMENT/OPERATIONAL CONTROLS:

Master Cylinder Condition: Intact	Master Cylinder Fluid Level/Condition: Low	
Condition of Brake Lines: Good in engine bay, damaged at wheel ends	Brake Pedal Condition: Good	Locking Ability (At Inspection): Unable
Parking Brake Condition: Untested		Parking Brake Locking Ability (At inspection): Untested
Steering Type: Steering Gear Box ☐ Rack and Pinion ☒	Power Steering Fluid Level/Condition: Intact, locked, no keys to unlock	
Steering Ability (At Inspection): Responsive until lock		
Throttle Type: Electronic ☒ Cable ☐	Throttle Condition: Good	
Throttle Body Condition: Good	Throttle Body Obstructions: None	
Engine Oil Level: Low	Transmission Fluid Level: Sealed	
Coolant Level: Low	Fuel Lines: Intact	

BRAKES / TIRES / WHEELS / SUSPENSION

- **Left-Front Axle (Driver Side)**

Tire Make/Model: Goodyear Eagle Sport	Tire Size: 235/40R18	Tire Tread Depth: 7/32”	Air PSI: 33	Tire and Wheel Conditions: Good	
Brake Type: Disc ☒ Drum ☐	Inner/Front Thickness: 11/32”	Outer/Rear Thickness: 11/32”		Condition of Pads/Shoes: Good	
Rotor/Drum Condition: Good	Caliper/Cylinder Condition: Good			ABS Sensor Condition: Good	
Tie Rod Condition: Good	Upper Ball Joint or Control Arm Condition: Good			Lower Ball Joint or Control Arm Condition: Good	
Suspension Type: Control arm w/MacPherson strut	Suspension Components Condition: Good				Tire Date Code: 0219

- **Right-Front Axle (Passenger Side)**

Tire Make/Model: Goodyear Eagle Sport	Tire Size: 235/40R18	Tire Tread Depth: 7/32”	Air PSI: 33	Tire and Wheel Conditions: Good	
Brake Type: Disc ☒ Drum ☐	Inner/Front Thickness: 11/32”	Outer/Rear Thickness: 11/32”		Condition of Pads/Shoes: Good	
Rotor/Drum Condition: Good	Caliper/Cylinder Condition: Good			ABS Sensor Condition: Good	
Tie Rod Condition: Good	Upper Ball Joint or Control Arm Condition: Good			Lower Ball Joint or Control Arm Condition: Good	
Suspension Type: Control arm w/MacPherson strut	Suspension Components Condition: Good				Tire Date Code: 0219

BRAKES / STEERING / TIRES / WHEELS / SUSPENSION CONT.

- **Left-Rear Axle (Driver Side)**

Tire Make/Model:	Tire Size:	Tire Tread Depth:	Air PSI:	Tire and Wheel Conditions:
Goodyear Eagle Sport	235/40R18	7/32”	0	Both damaged
Brake Type:	Inner/Front Thickness:	Outer/Rear Thickness:		Condition of Pads/Shoes:
Disc ☒ Drum ☐	10/32”	11/32”		Minor chipping
Rotor/Drum Condition:	Caliper/Cylinder Condition:			ABS Sensor Condition:
Cracked	Cracked			Intact
Suspension Type:	Suspension Components Condition:			Tire Date Code:
Control arm w/ coil spring	Bent			0219

- **Right-Rear Axle (Passenger Side)**

Tire Make/Model:	Tire Size:	Tire Tread Depth:	Air PSI:	Tire and Wheel Conditions:
Goodyear Eagle Sport	235/40R18	7/32:	0	Both damaged
Brake Type:	Inner/Front Thickness:	Outer/Rear Thickness:		Condition of Pads/Shoes:
Disc ☒ Drum ☐	9/32”	10/32”		Good
Rotor/Drum Condition:	Caliper/Cylinder Condition:			ABS Sensor Condition:
Good	Good			Good
Suspension Type:	Suspension Components Condition:			Tire Date Code:
Control arm w/coil spring	Bent			0219

OTHER/MISCELLANEOUS NOTES

Other: No recalls
Other:
Other:
Other:
Other:
Other:

CONCLUSION/INSPECTION SUMMARY

On August 2, 2022, I went to Pospychalla Towing in Ashland, WI in reference to a mechanical inspection of a 2019 Honda Civic (Figure 1). The Civic had been involved in a fatality crash on U.S. Highway 2 near the entrance to Maslowski Beach. Upon arrival I met with Trooper Trent Betley. Trooper Betley had obtained consent to conduct the mechanical inspection. The Civic was stored in an indoor area at Pospychalla's. Mark Pospychalla moved the Civic outdoors and elevated it with a tow truck and wooden blocks so I may conduct my inspection.

I began my inspection with a walk around examination of the Civic. I was unable to access the Federal Certification Label in the Civic due to damage sustained in the crash. I verified the Civic's public vehicle identification number (VIN) (Figure 2). The Civic was a unibody construction. The Civic had sustained significant damage in the crash. Crash damage consisted of damage to the: All body panels, the cabin, front bumper, suspension, engine bay area, undercarriage, interior, and many other components. The driver's-front, both seat side, and both curtain side airbags were deployed.

I inspected the engine bay of the Civic next. The Civic was equipped with a 2.0L 4-cylinder gasoline engine and automatic transmission with front-wheel drive. Multiple components in the engine bay were damaged and/or shifted in the crash. The radiator was intact, and the coolant system was low. The engine oil was low. The transmission fluid was sealed. The windshield washer fluid reservoir was damaged and empty. The throttle body on the Civic was controlled electronically. The intake manifold and intake tubing were intact. The throttle body was intact and free of obstructions. I removed the tubing to access the throttle valve. The throttle valve was resting in the closed position. I was able to fully actuate the throttle valve. The throttle valve opened and closed easily and automatically as designed. The throttle appears to have been in proper working condition prior to the crash.

The brake system components in the engine bay were not damaged in the crash. The master cylinder and booster were attached to the firewall. The brake fluid reservoir was intact and low on brake fluid. The brake fluid lines leading from the master cylinder to the anti-lock brake system (ABS) modulator were intact. The brake lines leading from the ABS modulator toward each wheel end were intact. The brake pedal in the cabin was intact. When pressed, the brake pedal moved easily to the floor and did not provide brake lock up at any wheel. I discovered several places near the wheel ends where the brake lines were severed in the crash. This caused the brake fluid to leak from the Civic and prevented the brakes from locking. All damaged lines appear to be freshly damaged. The damage to the lines is consistent with damage sustained in the crash.

The power steering system of the Civic was an electronic rack and pinion. The power steering rack and input shaft appeared to be intact. The keys for the Civic were not present during inspection. The steering column was locked. I was only able to turn the steering wheel a very short distance in the Civic until it stopped against the locking mechanism. The steering was responsive and smooth during the short travel.

I continued my inspection of the interior of the Civic. The AM/FM radio system was intact and unresponsive. The heating, ventilation, and air conditioning (HVAC) system was intact and unresponsive. The dash gauge cluster was intact. The gauges were unresponsive. The gear selector was in "D". The seatbelt buckles were all in working condition. The head lamp control switch was "ON".

I inspected the wheels and tires of the Civic. All four tires were in compliance with Wisconsin State Statute for a minimum of 2/32" tire tread depth. All four tires were worn evenly. The left-front tire was in good condition. The right front and both rear wheels and tires were damaged in the crash. I researched the tire size and inflation value for the Civic. Honda suggests tires sized 235/40R18 inflated to 35 PSI on the front axle and 33 PSI on the rear axle. The Civic was equipped with the correct size tires.

I removed each wheel from the Civic and inspected the suspension and brake system at each wheel end. I began with the left front followed by the right front, left rear, and right-rear wheel end. The Civic was equipped with a power assisted, disc brake at the front wheel ends and a power assisted disc brake with an electronic actuated parking brake at the rear wheel ends.

All four brakes were in good working condition prior to the crash. The pads and shoes were all evenly worn. The rotors and drums were polished smooth. The calipers were free of leaks. Both front and the right-rear brakes were in good condition. The left-rear brake caliper and rotor were both cracked due to contact damage. As mentioned above, the brake lines leading to the rear wheels and the right-front brake were compromised by contact damage. All brakes appear to have been working correctly prior to the crash.

The front suspension of the Civic consisted of control arms with MacPherson strut towers. The rear suspension consisted of control arms with a coil spring. The front suspension system was in good working condition. I did not observe any loose or worn components. Both rear suspension system control arms were damaged in the crash. Both control arms were bent. Both steering tie rods were intact and tightly mated. Both tie rods were straight. All damage appears to be due to contact damage.

I conducted online research through Honda and the National Highway Traffic Safety Administration (NHTSA) on the Civic. There were no recalls or field service campaigns present. No further actions were recommended.

My inspection was completed on August 2, 2022. During the course of my inspection, I did not note any defect on the Civic that would have been a contributing factor to the crash. All damage present appears to be directly related to contact damage sustained in the crash. Upon completion of my inspection the Civic was secured at Pospychalla Towing. This ended my involvement with the vehicle.

Respectfully Submitted,

Ryan Schultz

Inspector Ryan Schultz
Wisconsin State Patrol
ASE-5665-2227

APPENDIX

(Figure 1 Insp. Schultz-jpeg_9715)

(Figure 2 Insp. Schultz-jpeg_9723)

REFERENCES

PHOTOGRAPHY

The following photographs were reviewed while completing this report:

1. Fifty-six (56) photographs from the mechanical inspection taken by Inspector Ryan Schultz on August 2, 2022.

COMPUTER SOFTWARE/DATA

The following computer software programs or professional websites were utilized or consulted in preparing this report:

1. Computer Software Programs:

A. Microsoft® Office Word 2013 – Word Processing Software.

2. Professional Websites:

A. National Highway Transportation Safety Administration (NHTSA) Office of Defects Investigation – Safety Recall Information.
(https://www.nhtsa.gov/recalls?vin=19XFC2F81KE023033#vin)
B. Honda for vehicle recall information.
(https://owners.honda.com/service-maintenance/recalls?id=19XFC2F81KE023033)
C. Research on vehicle technical specifications by year, make, model.
(https://www.driverside.com/?homepage_view=1)
D. Tire size research
(https://tiresize.com/tires/Honda/Civic/2019/Sedan-Sport/)
E. Tire inflation value research
(https://tirepressure.org/honda/civic/2019)