

NO PART OF THIS DOCUMENT MAY BE REPRODUCED WITHOUT PRIOR AGREEMENT AND WRITTEN PERMISSION OF FORD PERFORMANCE PARTS © Ford Motor Company 2020

# WARNING

MODIFYING AN ORIGINAL EQUIPPED VEHICLE WILL RESULT IN A VEHICLE HANDLING DIFFERENTLY. ALL TYPES OF SUSPENSION MODIFICATIONS WILL AFFECT REACTION, RIDE, HANDLING AND WEAR AND TEAR RATE OF A VEHICLE AND ITS COMPONENTS. ABRUPT MANEUVERS, SHARP AND SUDDEN TURNS AND WEATHER CONDITIONS WILL INCREASE THE VEHICLE'S SUSCEPTIBILITY FOR LOSS OF CONTROL. DEATH AND SERIOUS INJURY COULD BE THE RESULT IF YOU FAIL TO OPERATE A MODIFIED VEHICLE SAFELY. KNOW AND FOLLOW THE LAWS OF THE STATES.

#### READ INSTRUCTIONS COMPLETELY THROUGH BEFORE STARTING.

FAILURE TO ADHERE TO THE INSTRUCTIONS WILL VOID ANY GROUND FORCE WARRANTY IT IS RECOMMENDED THAT INSTALLATION BE DONE BY A QUALIFIED MECHANIC.

REPLACE ALL STOCK PARTS THAT ARE DAMAGED OR WORN.

INTERMIXING OF PARTS IS NOT RECOMMENDED AND WILL VOID THE WARRANTY. ALWAYS WEAR EYE PROTECTION.

ALWAYS USE PROPERLY RATED SAFETY STANDS WHENEVER A PROCEDURE REQUIRES YOU TO BE UNDER A VEHICLE. KNOW AND FOLLOW ALL SAFE WORK PRACTICES TO AVOID SERIOUS INJURY OR DEATH.

CHECK TO SEE THAT ALL PARTS LISTED ARE INCLUDED.

- 1-INSTRUCTION SHEET
- 1-GROUND FORCE WARNING DECAL
- 2-SHACKLES
- 4-URETHANE SHACKLE BUSHINGS
- 2-SHACKLE SLEEVES
- 2-GREASE FITTINGS

Ford Factory Shop Manual purchase options www.motorcraftservice.com

Techline 1-800-367-3788 Page 1 of 5 IS M-300-HB 061223



NO PART OF THIS DOCUMENT MAY BE REPRODUCED WITHOUT PRIOR AGREEMENT AND WRITTEN PERMISSION OF NOTE: AMOUNT OF DROP AFPROREMIAPMENTE AFTS A COLUMN OF PROPERTY OF THE PROPERTY O

LF		RF		LR		RR				
MEASURE	AND	DOCUMENT	THE	VEHICLE	HEIGHT	FROM	FLOOR	10	FENDER	LIP.

- 1. BEFORE GETTING UNDER VEHICLE, JACK UP THE REAR OF THE VEHICLE AND PLACE JACK STANDS UNDER THE FRAME RAILS. LOWER THE VEHICLE ONTO THE JACK STANDS AND MAKE SURE THE STANDS ARE SECURELY HOLDING THE VEHICLE. SUPPORT THE REAR AXLE WITH A FLOOR JACK AND SMALL JACK STANDS.
- 2. REMOVE THE REAR TIRE WHEEL ASSEMBLY.

WARNING: THE LEAF SPRINGS ARE UNDER PRESSURE. EXTREME CARE MUST BE TAKEN WHEN WORKING WITH THE SPRINGS TO AVOID INJURY.

- 3. MAKE SURE THE REAR AXLE IS SUPPORTED.
- 4. REMOVE THE STOCK REAR SHOCKS FROM THE LOWER MOUNTS, SAVE HARDWARE.

<u>WARNING</u>: THE LEAF SPRINGS ARE UNDER PRESSURE. EXTREME CARE MUST BE TAKEN WHEN REMOVING AND INSTALLING THE SHACKLES TO AVOID INJURY.

- 5. REAR SHACKLE REMOVAL. MAKE SURE THE JACK STANDS ARE SECURE UNDER THE VEHICLES FRAME.
  - A. NOTE THE STOCK SHACKLE HARDWARE LOCATION AND DIRECTION OF THE BOLT HEADS.
  - B. LOOSEN THE LOWER SHACKLE TO FRAME BOLT.
  - C. LOOSEN THE UPPER SHACKLE TO SPRING EYE BOLT.
  - D. APPLY A 6.00 INCH PC OF TAPE TO THE BACK SIDE OF THE BED CROSSMEMBER ABOVE THE STOCK SHACKLE AS SHOW BELOW. THIS WILL HELP PROTECT THE COATING ON THE CROSSMEMBER WHILE REMOVING AND INSTALLING THE SPRING SHACKLE.



PROTECTIVE TAPE APPLIED ON THE REAR OF THE CROSSMEMBER ABOVE THE SPRING SHACKLE

Ford Factory Shop Manual purchase options <a href="https://www.motorcraftservice.com">www.motorcraftservice.com</a>



NO PART OF THIS DOCUMENT MAY BE REPRODUCED WITHOUT PRIOR AGREEMENT AND WRITTEN PERMISSION OF FORD PERFORMANCE PARTS © Ford Motor Company 2020

ALL HARDWARE AS IT WILL BE REUSED. JACK THE AXLE UP UNTIL THE UPPER SHACKLE BOLTS CAN BE REMOVED OVER THE TOP OF THE FRAME RAIL. THE LEAF SPRING REAR EYE WILL SLIDE UP **BEHIND** THE REAR BED CROSS MEMBER AS SHOWN BELOW. MAKE SURE THE VEHICLE IS SECURE ON THE STANDS AS YOU WILL HAVE TO PUT SOME PRESSURE ON THE JACK TO GET THE SHACKLE HIGH ENOUGH TO BE ABLE TO SLIDE THE FACTORY SHACKLE BOLTS OUT OVER THE FRAME RAIL, ROTATE THE BOTTOM OF THE SHACKLE UP TOWARD THE REAR OF VEHICLE AS SHOW BELOW AND REMOVE THE UPPER SHACKLE BOLT AND REMOVE THE FACTORY SHACKLE FROM THE VEHICLE.



UPPER SHACKLE BOLT BEING REMOVED OVER THE TOP OF THE FRAME

- E. REPEAT TO OTHER SIDE OF VEHICLE.
- 6. GREASE THE NEW SHACKLE BUSHINGS (INSIDE, OUT AND THE FACE OF THE BUSHINGS). GREASE THE STEEL SLEEVES AND THE INSIDE OF THE LOWER SHACKLE TUBES. INSTALL THE GREASED SHACKLE BUSHINGS AND SLEEVES INTO THE GREASED LOWER SHACKLE TUBES (HIGH TEMP WHEEL BEARING GREASE WORKS FINE). NOTE: IF YOU DO NOT GREASE THESE POINTS BEFORE THE SHACKLE IS ASSEMBLED THE BUSHINGS WILL SQUEAK.
- 7. DROP SHACKLE INSTALLATION.



NEW REAR SHACKLE BEING INSTALLED.

GREASE THE BUSHINGS AND FRAME TO BUSHING AREA.

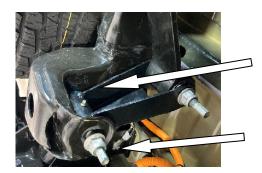
Ford Factory Shop Manual purchase options www.motorcraftservice.com

Techline 1-800-367-3788 Page 3 of 5 IS M-300-HB 061223



NO PART OF THIS DOCUMENT MAY BE REPRODUCED WITHOUT PRIOR AGREEMENT AND WRITTEN PERMISSION OF A. INSTALL THE NEW FORD PERFORMANCE PARTS HE FREMRING EYE WITH THE

OPEN END OF THE SHACKLE TOWARD THE FRONT.



OPEN SIDE OF NEW SHACKLE TOWARD THE FRONT OF VEHICLE

#### **GREASE FITTING**

- B. INSTALL THE STOCK UPPER BOLT (WITH THE HEAD INBOARD) THROUGH THE NEW SHACKLE AND THE STOCK LEAF SPRING, INSTALL THE STOCK NUT AND JUST SNUG AT THIS TIME.
- C. REPEAT TO THE OTHER SIDE.
- 8. LOWER THE REAR AXLE SLIGHTLY AND LINE UP BOTH LOWER SHACKLE TO FRAME BOLT HOLES.
  - A. INSTALL THE STOCK LOWER SHACKLE BOLT (WITH THE HEAD INBOARD) THROUGH THE FRAME AND SHACKLE.
  - B. INSTALL THE STOCK LOWER SHACKLE NUT AND JUST SNUG AT THIS TIME.
  - C. REPEAT TO THE OTHER SIDE OF VEHICLE.
- 9. WITH THE JACK STANDS SECURE UNDER THE VEHICLES FRAME, JACK THE REAR AXLE UP TO RIDE HEIGHT AND TORQUE THE SHACKLE HARDWARE TO SPEC.
- 10. REINSTALL THE FACTORY SHOCKS IN THE LOWER MOUNTS, INSTALL THE FACTORY HARDWARE AND TORQUE TO SPEC.
- 11. REINSTALL THE REAR TIRE AND WHEEL ASSEMBLY. TORQUE THE LUG NUTS TO SPEC. CHECK THE CLEARANCE BETWEEN THE REAR AXLE AND ALL REAR COMPONENTS. ADJUST IF NECESSARY.
- 12. JACK UP THE REAR OF VEHICLE REMOVE SAFETY STANDS AND LOWER VEHICLE.
- 13. GO BACK AND CHECK THAT ALL INSTALLATION STEPS HAVE BEEN COMPLETED.

  CHECK THE TORQUE OF ALL NUTS AND BOLTS AFFECTED BY THIS PROCEDURE. RECHECK

  ALL NUTS AND BOLTS FOR TIGHTNESS AFTER THE FIRST 300 MILES AND AT EVERY ROUTINE

  SERVICE INSPECTION.
- 14. MAKE SURE TO INSTALL THE SUPPLIED WARNING DECAL FOLLOWING THE INSTRUCTIONS INCLUDED WITH THE WARNING INFORMATION SHEET.
- 15. MAKE SURE TO KEEP THESE INSTRUCTIONS WITH THE VEHICLE.

Ford Factory Shop Manual purchase options www.motorcraftservice.com



NO PART OF THIS DOCUMENT MAY BE REPRODUCED WITHOUT PRIOR AGREEMENT AND WRITTEN PERMISSION OF 16. READJUST THE HEADLIGHTS PERFORMANCE PARTS & Ford Meter Company 2020

17. ROAD TEST THE VEHICLE.



MAKE SURE TO GREASE BOTH SHACKLES DURING EVERY SERVICE SCHEDULE.

WARNING: AGAIN CHECK TIRE AND WHEEL CLEARANCE BEFORE MOVING VEHICLE.
ALSO CHECK CLEARANCE IF INSTALLING NEW TIRES AND/OR WHEELS.

NOTE: INSTALLATION OF WHEELS WITH BACKSPACING OTHER THAN STOCK MAY CHANGE THE VEHICLE HEIGHT AND ALSO EFFECT THE FRONT END ALIGNMENT.

Ford Factory Shop Manual purchase options <u>www.motorcraftservice.com</u>