

ROADMASTER ACTIVE SUSPENSION

These Fitting Instructions must be read and followed step by step for the following kits.

ITEM#: 25II 26II 26I2

Patents Worldwide. USA5540417 Canada 2129275

The ROADMASTER is a load absorber and will assist with the load carrying ability as stated by the manufacturer with enhanced stability, provided the fitting instructions are followed correctly.

-----**IMPORTANT**-----

The Roadmaster Active Suspension kit must never be fitted while the vehicle is standing with the rear wheels on the ground. In this position the rear leaf springs will be under load and the Roadmaster coil spring settings cannot be achieved, resulting in the Roadmaster not working correctly. Always install with the rear axle and leaf springs hanging free.

- A. ALWAYS CHECK THE LEAF SPRINGS FOR ANY EXCESS WEAR, FATIGUE, CRACKED OR BROKEN BLADES OR WORN BUSHINGS - ESPECIALLY OLDER SPRINGS, THESE MUST BE REPLACED WHERE NECESSARY.
- B. WHEN FITTING TO OLDER VEHICLES, THE U/BOLTS NUTS COULD BE BADLY CORRODED, MAKING IT IMPOSSIBLE TO REMOVE THEM. IF THIS SHOULD BE EXPERIENCED THE U/BOLTS MUST BE REPLACED.
- C. IF THE VEHICLE THE ROADMASTER KIT WILL BE INSTALLED ON, IS FITTED WITH OVERLOAD LEAF SPRINGS, LOCATED ABOVE THE LEAF SPRINGS, THE OVERLOAD LEAF SPRINGS MUST FIRST BE REMOVED BEFORE THE KIT CAN BE INSTALLED.

ANY DEVIATION FROM THESE INSTRUCTIONS WILL VOID THE WARRANTY. THIS KIT WILL NOT BE WARRANTIED IF INSTALLED ON ANY VEHICLE USED FOR RACING, SIMILAR ACTIVITIES OR FITTED TO VEHICLES WHERE THE REAR SUSPENSION HAS BEEN MODIFIED IN ANY WAY. AFTER FITTING A ROADMASTER ACTIVE SUSPENSION SYSTEM ON 15 PASSENGER VANS, THE VEHICLE WILL BECOME MORE STABLE AND LESS PRONE TO ROLLOVER. HOWEVER, WE STRONGLY RECOMMEND TO ACHIEVE THE MAXIMUM SAFETY ADVANTAGE THE FOLLOWING MUST BE ADHERED TO:

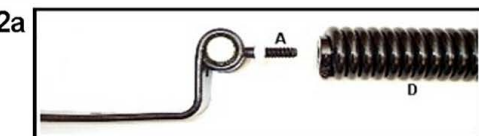
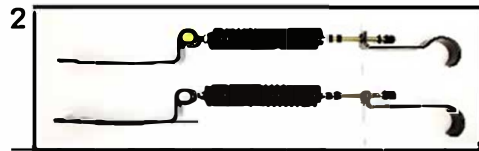
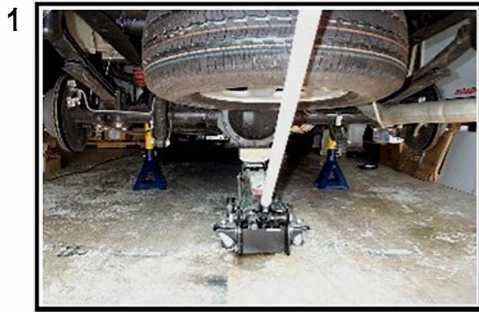
- 1) THE TIRES MUST BE IN GOOD CONDITION AND INFLATED TO THE CORRECT PRESSURE, WHICH MUST BE MAINTAINED AT ALL TIMES.
- 2) THE MANUFACTURER'S GROSS VEHICLE WEIGHT (GVW) SHOULD NOT BE EXCEEDED.
- 3) THE DRIVER SHOULD BE COMPETENT AND EXPERIENCED IN THE HANDLING OF THIS TYPE OF VEHICLE.
- 4) ALL OCCUPANTS MUST WEAR SEAT BELTS AT ALL TIMES.
- 5) ALLOW LONGER FOLLOWING AND STOPPING DISTANCES AND AVOID SHARP MANEUVERS.

ROADMASTER ACTIVE SUSPENSION ASSEMBLY COMPONENTS



QTY. PER KIT FOR BOTH REAR LEAF SPRINGS

A. CAP SCREW	2
B. CUP BEARING	2
C. EYE BRACKET	2
D. TENSION SPRING	2
E. THREADED ROD	2
F. AXLE BRACKET ASSEMBLY	2
	10



WHEN FITTING TO A VEHICLE ON THE GROUND

1) WITH THE VEHICLE ON A LEVEL SURFACE, PLACE WHEEL CHOCKS ON EITHER SIDE OF THE FRONT WHEELS TO PREVENT THE VEHICLE ROLLING. JACK UP REAR OF VEHICLE UNDER THE DIFF, USING A TROLLEY JACK OF THE CORRECT CAPACITY AND THEN PLACE JACK STANDS UNDER THE AXLE TO TAKE THE LOAD. LOWER VEHICLE ONTO STANDS. NEXT REMOVE THE REAR WHEELS, FOR BETTER ACCESS TO THE LEAF SPRINGS.

WHEN FITTING TO A VEHICLE USING A LIFT THAT WILL ALLOW THE REAR AXLE TO HANG FREE WITHOUT RESTRICTION

RAISE VEHICLE ON LIFT AND PLACE TWO AXLE SUPPORT STANDS UNDER THE AXLE TO SUPPORT THE FULL WEIGHT OF THE AXLE AND REAR SUSPENSION. (NOT THE WEIGHT OF THE VEHICLE). NEXT REMOVE WHEELS FOR BETTER ACCESS TO THE LEAF SPRINGS.

2) FOR PACKAGING PURPOSES, THIS KIT COMES FULLY ASSEMBLED. BEFORE STARTING INSTALLATION, UNSCREW THE CAP SCREWS (A) FROM THE COIL SPRING (D) AS SHOWN IN ILLUSTRATION (2a).

NOW FOLLOW THE INSTRUCTIONS STEP BY STEP.

PLEASE NOTE: WHEN FITTING TO A 07, 08 OR 09 CHEVY OR GHC 1500 NON CLASSIC PICKUP, THE FOLLOWING ADDITIONAL INSTRUCTIONS (PAGE 7) ATTACHED MUST BE FOLLOWED.

WHEN FITTING TO VEHICLES WHERE THE NUTS ON THE U/BOLTS ARE LOCATED BELOW THE LEAF SPRING

3) LOOSEN THE U/BOLT NUTS SO THAT THE U/BOLTS CAN BE RAISED, THIS WILL ALLOW THE AXLE ANCHOR BRACKET (F) TO BE POSITIONED ON TOP OF THE LEAF SPRING. THE 22mm HOLE IN THE BRACKET (F) MUST BE LOCATED DIRECTLY OVER THE NUT ON THE LEAF SPRING CENTER LOCATING BOLT. SHOULD THERE BE A U/BOLT LOCATING PLATE ON TOP OF THE LEAF SPRING, THIS PLATE MUST BE RELOCATED AS SHOWN IN THE ILLUSTRATION, ON TOP OF THE BRACKET (F). ONCE THE AXLE ANCHOR BRACKET (F) IS IN PLACE AND 100% CENTRALLY ALIGNED AND PARALLEL WITH THE LEAF SPRING, REPOSITION THE U/BOLTS ON THE LOCATING PLATE AND SECURELY TIGHTEN THE U/BOLT NUTS. REPEAT ON THE OTHER SIDE LEAF SPRING.

WHEN FITTING TO A FORD THAT HAS THE U/BOLT PLATE ABOVE THE LEAF SPRINGS

4) LOOSEN THE NUTS ON THE U/BOLTS, RAISE THE U/BOLT PLATE AND POSITION THE AXLE ANCHOR BRACKET (F) UNDER THE PLATE AND ON TOP OF THE LEAF SPRING. THE 22mm HOLE IN THE BRACKET (F) MUST BE LOCATED DIRECTLY OVER THE NUT ON THE LEAF SPRING CENTER LOCATING BOLT. ONCE THE AXLE ANCHOR BRACKET (F) IS IN PLACE AND 100% CENTRALLY ALIGNED AND PARALLEL WITH THE LEAF SPRING, RE-POSITION THE U/BOLT PLATE AND SECURELY RETIGHTEN THE U/BOLT NUTS. REPEAT ON THE OTHER SIDE LEAF SPRING.

5) ILLUSTRATION SHOWING THE AXLE CONNECTING BRACKET (F) IN POSITION UNDER THE U/BOLT PLATE

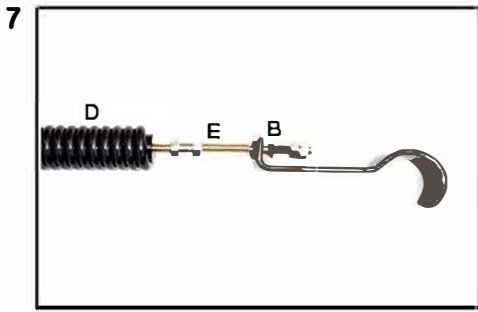
IF THE AXLE ANCHOR BRACKET (F) IN THIS KIT HAS THREE 22 mm HOLES, THE HOLE AS SHOWN IN THE ILLUSTRATION ABOVE MUST BE USED.

WHEN FITTING ON THE GROUND

6) WITH THE AXLE ANCHOR BRACKET (F) INSTALLED ON BOTH REAR LEAF SPRINGS, ONCE AGAIN JACK UP THE VEHICLE UNDER THE DIFF, REMOVE THE JACK STANDS FROM UNDER THE AXLE AND RE-POSITION THE STANDS UNDER THE FRAME OF THE VEHICLE TO SUPPORT THE REAR OF THE VEHICLE. REMOVE THE JACK AND ALLOW THE AXLE AND REAR LEAF SPRINGS TO HANG FREE.

WHEN FITTING ON A LIFT

WITH THE AXLE CONNECTING BRACKET (F) INSTALLED, ON BOTH REAR LEAF SPRINGS, REMOVE THE SUPPORT STANDS FROM UNDER THE AXLE, ALLOWING THE AXLE AND REAR LEAF SPRINGS TO HANG FREE.



7) BEFORE LOCATING THE EYE BRACKET (C) OVER THE LEAF SPRING EYE AND SHACKLE, CHECK THAT THE THREADED ROD (E) HAS TWO NUTS LOCATED IN THE CENTER OF THE ROD. NOW TURN THE THREADED ROD OUT OF THE COIL SPRING UNTIL ONLY ABOUT ONE INCH OF THREAD REMAINS. THE OTHER END OF THE THREADED ROD COMES LOCATED THROUGH THE RECESSED DIMPLED HOLE IN THE EYE BRACKET (C) WITH A CUP BEARING (B) ON THE ROD. NOW APPLY A THIN COATING OF GREASE TO THE DOMED SIDE OF THE CUP BEARING (B) WHICH LOCATES INTO THE DIMPLE HOLE. THE THREADED ROD HAS TWO NUTS LOCATED AT THE END WHICH ARE LOCKED TIGHTLY TOGETHER WITH ABOUT 1/2 INCH OF THREAD PROTRUDING.



8) SLIDE THE EYE BRACKET (C) OVER THE REAR SHACKLE EYE OF THE LEAF SPRING, ON THE REAR SWINGING SHACKLE END. THIS BRACKET MUST BE POSITIONED IN THE CENTER OF THE EYE OF THE LEAF SPRING AS SHOWN IN ILLUSTRATION (8a)



9) CONNECT THE COIL SPRING (D) TO THE AXLE CONNECTING BRACKET (F) (NOW INSTALLED) BY TURNING THE CAP SCREW (A) INTO THE TENSION SPRING UNTIL THE NUT ON THE CAP SCREW (A) SEATS AGAINST THE COIL SPRING.



10) NOW LOCK THE NUT ON THE CAP SCREW (A) AGAINST THE COIL SPRING USING A WRENCH ON THE NUT. NEXT TURN THE THREADED ROD (E) BY HAND INTO THE COIL SPRING UNTIL THE COIL SPRING IS SUPPORTED.

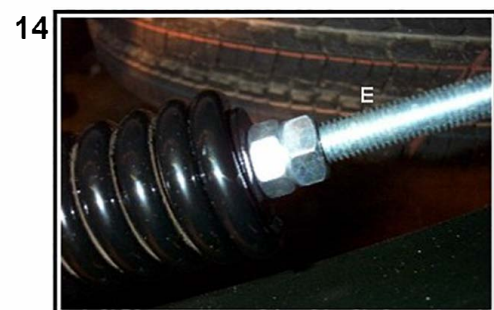
11) TO ADJUST AND PRE LOAD THE COIL SPRING TO THE CORRECT TENSION, USE A RATCHET FITTED WITH A 12mm HEX BIT SOCKET.

12) HOLD THE LOCK NUTS ON THE END OF THE THREADED ROD WITH A WRENCH 22mm or 7/8 AND BY USING THE RATCHET, TURN THE CAP SCREW (A) NOW LOCKED TO THE COIL SPRING. THIS WILL SCREW THE THREADED ROD INTO THE COIL SPRING.



13) THE CORRECT ADJUSTMENT IS ACHIEVED WHEN THE COIL SPRING HAS A GAP BETWEEN THE COILS OF 2mm, A QUARTER COIN CAN BE USED AS A GAUGE AND SHOULD JUST PASS BETWEEN THE COILS IN THE CENTER OF THE COIL SPRING. (NEVER EXCEED THIS ADJUSTMENT)

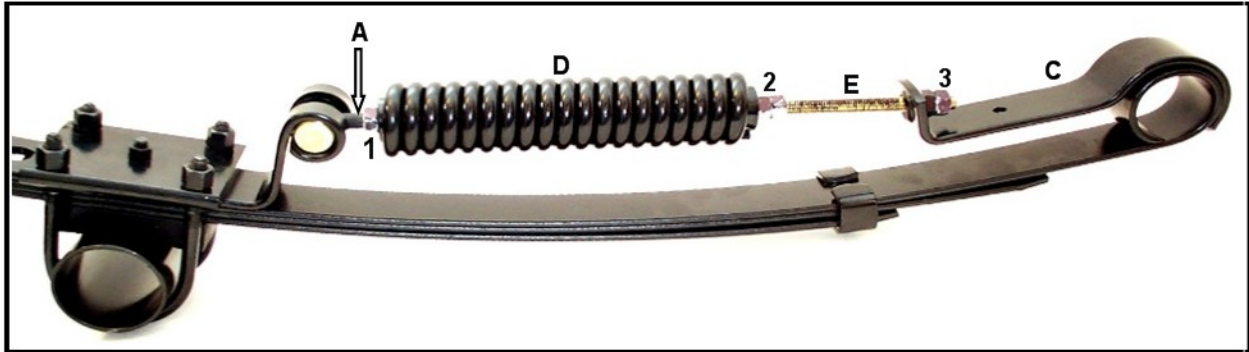
14) NOW TURN ONE OF THE TWO NUTS ON THE THREADED ROD (E) AND LOCK HARD AGAINST THE COIL SPRING, FOLLOW WITH THE SECOND NUT AND JAM AGAINST THE FIRST. FINALLY TIGHTEN AND LOCK ALL NUTS AND CHECK TO SEE THAT THE ROADMASTER IS 100% SECURE



IMPORTANT NOTICE

WHEN ASSEMBLING THIS KIT IT IS VERY IMPORTANT THAT THE NUTS AS SHOWN IN THIS ILLUSTRATION ARE CORRECTLY POSITIONED.

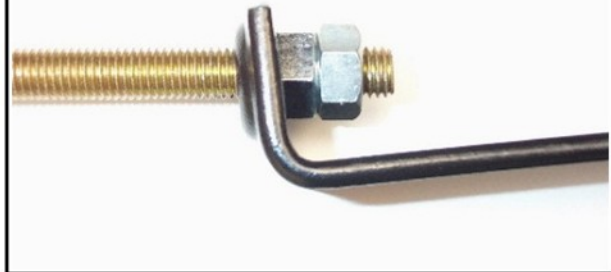
- 1) NUT ON THE CAP SCREW (A) MUST BE TIGHTENED HARD AGAINST THE TENSION SPRING (D)
- 2) BOTH NUTS ON THE THREADED ROD (E) MUST BE TIGHTENED AGAINST THE TENSION SPRING (D) WITH THE 2nd NUT JAMMED AGAINST THE 1st NUT.
- 3) BOTH NUTS AT THE END OF THE THREADED ROD (E) MUST BE TIGHTENED AGAINST THE CUP BEARING RECESSED IN THE DIMPLE OF BRACKET (C) WITH ABOUT 1/2 INCH OF THREAD PROTRUDING.



ENLARGED ILLUSTRATION SHOWING LOCATION OF THE TWO NUTS, AS IN (2) ABOVE



ENLARGED ILLUSTRATION SHOWING LOCATION OF TWO NUTS AT THE END OF THE THREADED ROD, AS IN (3) ABOVE



WHEN FITTING TO A VEHICLE ON THE GROUND

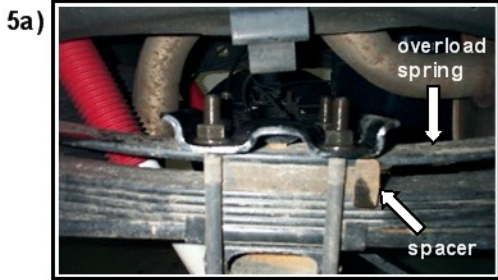
AFTER THE FITTING OF THE ROADMASTER ACTIVE SUSPENSION HAS BEEN COMPLETED ON BOTH SIDES, JACK UP VEHICLE, REMOVE JACK STANDS, REPLACE WHEELS AND LOWER VEHICLE TO GROUND.

IF THE INSTRUCTIONS ARE CORRECTLY FOLLOWED YOU WILL BE AMAZED AT THE IMPROVEMENT IN STABILITY, HANDLING AND LOAD CARRYING ABILITY THAT HAS BEEN ACHIEVED, BY FITTING A ROADMASTER ACTIVE SUSPENSION KIT.

SHOULD YOU HAVE ANY QUESTIONS OR REQUIRE TECHNICAL ASSISTANCE, PLEASE CONTACT:

ROADMASTER ACTIVE SUSPENSION
330 UNIT D EAST HEBRON ST. CHARLOTTE, NC 28273 USA.
PH (800) 398-5036 FAX (704) 523-0259 E-MAIL sales@activesuspension.com
Web Site www.activesuspension.com

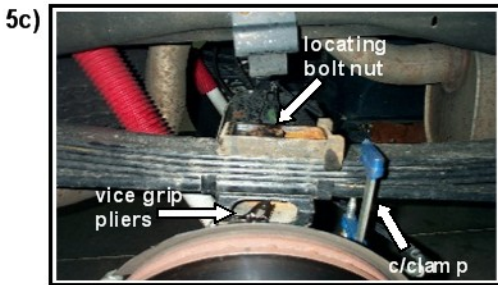
**ADDITIONAL FITTING INSTRUCTIONS WHEN FITTING TO A FORD F-250 OR F-350 PICKUP, THAT HAS AN OVERLOAD LEAF SPRING LOCATED ABOVE THE LEAF SPRING PACK.
FOLLOW THE MAIN FITTING INSTRUCTION UP TO # (5) THEN CONTINUE WITH THESE INSTRUCTIONS.**



5a) ILLUSTRATION SHOWING ONE SIDE OF THE REAR LEAF SPRINGS BEFORE STARTING THE INSTALLATION OF THE ROADMASTER KIT. THE PACK OF LEAF SPRINGS, HAS AN OVERLOAD SPRING ON TOP OF THE PACK WITH A CAST IRON SPACER BETWEEN THE PACK AND THE OVERLOAD SPRING



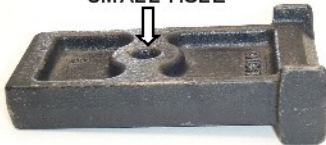
5b) BEFORE LOOSENING THE U/BOLT NUTS SPRAY THE U/BOLT THREADS WITH WD 40 OR SIMILAR ANTI-SEIZE LUBRICANT, THEN REMOVE THE FOUR NUTS, THE U/BOLT PLATE AND U/BOLTS.



5c) NEXT CLAMP THE PACK OF LEAF SPRINGS TOGETHER, AS SHOWN, USING A C/CLAMP, THIS WILL PREVENT THE PACK OF LEAF SPRINGS SEPARATING. LOOSEN THE NUT ON THE LEAF SPRING CENTER LOCATING BOLT, THEN REMOVE THE OVERLOAD SPRING BLADE. (IF THE NUT TURNS TOGETHER WITH THE BOLT, RAISE THE SPRING PACK OFF THE AXLE PERCH BRACKET AND HOLD THE ROUND HEAD OF THE CENTER LOCATING BOLT WITH A PAIR OF VICE GRIP PLIERS. ONCE THE NUT HAS BEEN REMOVED, LIFT OFF THE CAST IRON SPACER BLOCK AND CUT OFF THE TWO LOBES ON TOP OF THE SPACER AS ILLUSTRATED BELOW. (NOTE NOT THE BOTTOM LOBES) THIS WILL ALLOW YOU TO RELOCATE THE U/BOLT PLATE ON A FLAT SURFACE, WHEN INSTALLING THE ROADMASTER KIT.

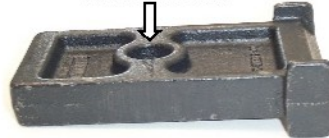
TOP SIDE OF SPACER WITH SMALL HOLE OPENING

SMALL HOLE



BOTTOM SIDE OF SPACER WITH LARGE HOLE OPENING

LARGE HOLE



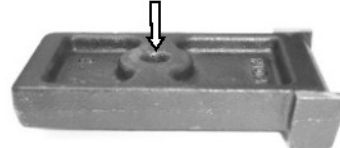
CUT OFF BOTH TOP LOBES ON THE SIDE WITH THE SMALL HOLE ON TOP AS SHOWN



SIDE VIEW OF SPACER SHOWING WHERE TO CUT



small hole



SPACER WITH LOBES REMOVED



SIDE VIEW OF LOBES REMOVED.

5d) ILLUSTRATION SHOWING CUTTING OFF THE TWO LOBES WITH A HACKSAW FROM TOP SIDE OF SPACER. (SIDE WITH SMALL HOLE)

WITH THE SPACER NOW MODIFIED CONTINUE THE INSTALLATION BY FOLLOWING THE MAIN FITTING INSTRUCTIONS STARTING FROM # (6). WITH THE AXLE ANCHOR BRACKET (F) LOCATED OVER THE CENTER LOCATING BOLT, PLACE THE SPACER ON TOP OF THE BRACKET (F) WITH THE TWO REMAINING LOBES FACING DOWN

ADDITIONAL FITTING INSTRUCTIONS WHEN FITTING TO A NISSAN TITAN PICKUP

FOLLOW THE MAIN INSTRUCTIONS UP TO NUMBER (5) THEN CONTINUE WITH THE INSTRUCTIONS ON THIS SHEET.



A) THIS VEHICLE HAS A CLAMP BRACKET THAT ATTACHES TO THE OVERLOAD SPRING BLADE, AND HAS A ROLLER LOCATED ABOVE THE TOP SPRING BLADE. IN ORDER TO INSTALL THE ROADMASTER KIT THE ROLLER MUST BE REMOVED.



B) THIS ILLUSTRATION SHOWS THE ROLLER REMOVED. IN ORDER TO REMOVE THE ROLLER THE COUNTER-SUNK HEXAGON SOCKET HEAD BOLT MUST FIRST BE REMOVED. THE HEAD OF THE BOLT IS LOCATED ON THE SPARE TIRE SIDE OF THE VEHICLE

WITH THE ROLLER NOW REMOVED, CONTINUE TO FOLLOW THE MAIN FITTING INSTRUCTIONS FROM (#3) ONWARDS

ADDITIONAL FITTING INSTRUCTIONS
WHEN FITTING TO A TOYOTA TACOMA 4x4 OR PRE- RUNNER PICKUP
WHERE THE EYE BRACKET (C) WILL NOT FIT OVER THE REAR EYE
OF THE LEAF SPRING, FOLLOW THE MAIN FITTING INSTRUCTIONS UP
TO (#5) THEN CONTINUE WITH (A) ON THIS INSTRUCTION SHEET



WHEN FITTING TO A VEHICLE ON THE GROUND
WITH THE VEHICLE NOW WELL SUPPORTED WITH JACK
STANDS UNDER THE FRAME AND THE LEAF SPRINGS HANGING
FREE, REMOVE THE TWO NUTS ON THE REAR SHACKLES AS IN
ILLUSTRATION (7a) DO NOT REMOVE THE TWO BOLTS.

WHEN FITTING TO A VEHICLE USING A LIFT THAT WILL ALLOW
THE REAR AXLE TO HANG FREE WITHOUT RESTRICTION,
WITH THE VEHICLE NOW WELL SUPPORTED UNDER THE FRAME
AND THE LEAF SPRINGS HANGING FREE, REMOVE THE TWO
NUTS ON THE REAR SHACKLES AS IN ILLUSTRATION (A)
DO NOT REMOVE THE TWO BOLTS.



NEXT REMOVE THE ONE SIDE OF THE SHACKLE



NOW POSITION THE EYE BRACKET (C) OVER THE EYE OF THE
LEAF SPRING AND REPLACE THE SIDE OF THE SHACKLE THAT
WAS REMOVED, AND SECURE THE TWO NUTS. REPEAT ON THE
OTHER SIDE LEAF SPRING.

NOW CONTINUE WITH THE MAIN FITTING INSTRUCTIONS FROM
(#6) ONWARDS