

EXHAUST SYSTEM TEMPEST

DESCRIPTION

L-6 ENGINE (Fig. 8-12)

Two separate exhaust systems are used with the L-6 engine - one with the standard engine and the other with the high performance 4-barrel carburetor engine.

Standard engines have a single outlet exhaust manifold to which a 2" exhaust pipe connects. A single cross-flow muffler is used with a 2" tailpipe.

L-6 engines equipped with 4-barrel carburetors have a dual outlet exhaust manifold with 2" diameter legs connecting to a Y pipe adapter and a 2 1/4" exhaust pipe. This engine uses a low restriction cross-flow muffler and a 2 1/4" tailpipe. A tuned resonator is used, allowing the use of a muffler with less back pressure and providing for optimum tuning characteristics of the exhaust system.

V-8 ENGINE (Figs. 8-13 and 8-14)

Two exhaust systems are used with V-8 engines - single and dual.

In the single exhaust system, two individual legs make up the crossover pipe. These legs connect to the right and left exhaust manifolds at front, then come together at rear. This crossover pipe then clamps to a single 2 1/4" exhaust pipe. The exhaust pipe connects to a cross-flow muffler which is attached to a 2" tailpipe.

The dual exhaust system consists of two 2" exhaust pipes, two low restriction mufflers, two 2" tailpipes and a pair of tuned resonators. The dual exhaust system is standard equipment on GTO models and optional on other models (except Station Wagon).

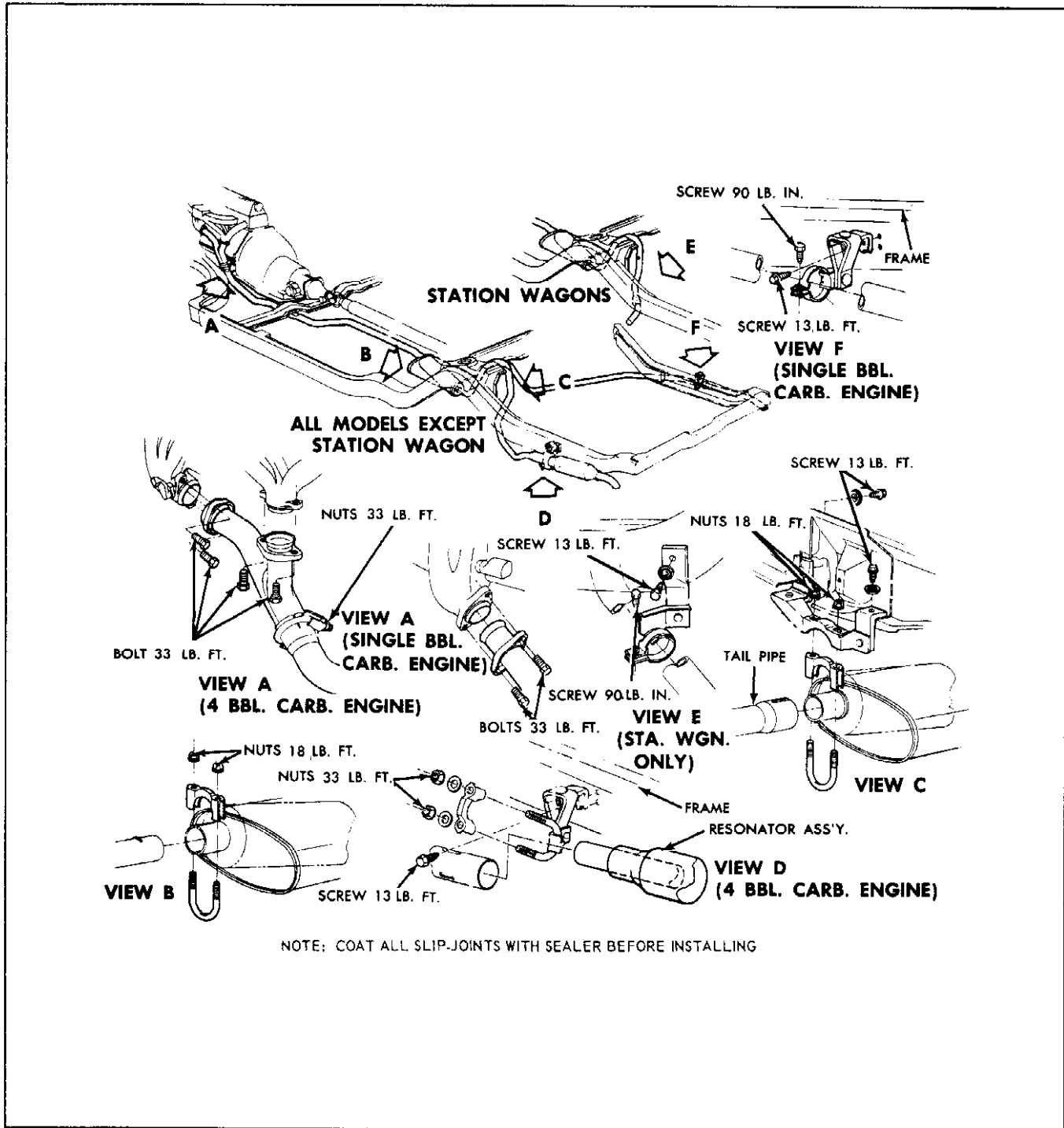


Fig. 8-12 Exhaust System - Tempest Six Cyl. Engine

Both single and dual exhaust systems are supported by rubber mounted clamps which attach to the frame and keep the exhaust system in proper alignment. It is important that these supports be properly installed. Improperly installed supports can cause annoying vibrations which are difficult to diagnose. Figs 8-12 through 8-14 illustrate the correct location and installation of supports for all models.

SERVICE PROCEDURES L-6 ENGINE

SIX CYLINDER STANDARD ENGINE (Fig. 8-12)

EXHAUST PIPE—REMOVE AND REPLACE

1. Remove two bolts from exhaust pipe flange at manifold.

2. Loosen exhaust pipe to muffler U-bolt clamp.
3. Remove exhaust pipe from muffler.
4. Install exhaust pipe by reversing above procedure. Tighten exhaust pipe to manifold bolts 35 lb. ft. torque. Tighten exhaust pipe to muffler U-bolt 18 lb. ft. torque.

NOTE: Coat inside diameter of front muffler opening with sealer before installing exhaust pipe.

MUFFLER—REMOVE AND REPLACE

1. Loosen both tailpipe support clamps.
2. Slide tailpipe off rear of muffler.
3. Loosen U-bolt clamp at front of muffler.
4. Slide muffler off exhaust pipe.
5. Replace muffler by reversing above procedure. Tighten exhaust pipe to muffler front U-bolt clamp 18 lb. ft. torque. Tighten tailpipe front support clamp (behind muffler) 18 lb. ft. torque. Tighten tailpipe rear support clamp 8 lb. ft. torque.

NOTE: Coat inside diameter of front muffler opening and tailpipe flange with sealer before installing muffler.

TAILPIPE—REMOVE AND REPLACE

1. Loosen both tailpipe support clamps.
2. Slide tailpipe off rear of muffler and remove.
3. To replace tailpipe, reverse above procedure. Tighten tailpipe front support clamp (behind muffler) 18 lb. ft. torque. Tighten tailpipe rear support clamp 8 lb. ft. torque.

NOTE: Coat inside diameter of tailpipe flange with sealer before installing.

SIX CYLINDER HIGH PERFORMANCE ENGINE (Fig. 8-12)

EXHAUST PIPE—REMOVE AND REPLACE

1. Loosen front (behind muffler) and rear (at resonator) tailpipe support clamps.
2. Loosen exhaust pipe to muffler U-bolt clamp.
3. Disconnect muffler from exhaust pipe by moving muffler and tailpipe assembly rearwards.
4. Loosen U-bolt clamp connecting exhaust pipe to manifold Y pipe and remove exhaust pipe.

5. Remove four bolts holding "Y" pipe to exhaust manifold and remove Y pipe.

6. To install, reverse above procedure. Tighten "Y" pipe to manifold bolts 33 lb. ft. torque. Tighten "Y" pipe to exhaust pipe U-bolt clamp 33 lb. ft. torque. Tighten front muffler U-bolt clamp 18 lb. ft. torque. Tighten tailpipe front U-bolt clamp (behind muffler) 18 lb. ft. torque. Tighten tailpipe to resonator U-bolt clamp 33 lb. ft. torque.

NOTE: Coat inside diameter of front muffler opening with sealer before installing exhaust pipe.

MUFFLER—REMOVE AND REPLACE

1. Loosen front (behind muffler) and rear (at resonator) tailpipe support U-bolt clamps.
2. Disconnect tailpipe from muffler.
3. Loosen exhaust pipe to muffler U-bolt and remove muffler.
4. To install, reverse above procedure. Tighten front muffler U-bolt clamp 18 lb. ft. torque. Tighten tailpipe front U-bolt clamp (behind muffler) 18 lb. ft. torque. Tighten tailpipe to resonator U-bolt clamp 33 lb. ft. torque.

NOTE: Coat inside diameter of front muffler opening and tailpipe flange with sealer before installing muffler.

TAILPIPE—REMOVE AND REPLACE

1. Loosen front (behind muffler) tailpipe support clamp.
2. Remove rear (at resonator) tailpipe support U-bolt.
3. Remove tailpipe and, if necessary, disconnect resonator from tailpipe.
4. To install, reverse above procedure. Tighten tailpipe front bracket clamp (behind muffler) 18 lb. ft. torque. Tighten tailpipe to resonator U-bolt clamp 33 lb. ft. torque.

NOTE: Coat inside diameter of tailpipe flange with sealer before installing.

V-8 ENGINE

SINGLE EXHAUST SYSTEM (Fig. 8-13)

EXHAUST MANIFOLD CROSSOVER PIPE— REMOVE AND REPLACE

1. Disconnect crossover pipe at right and left manifold.

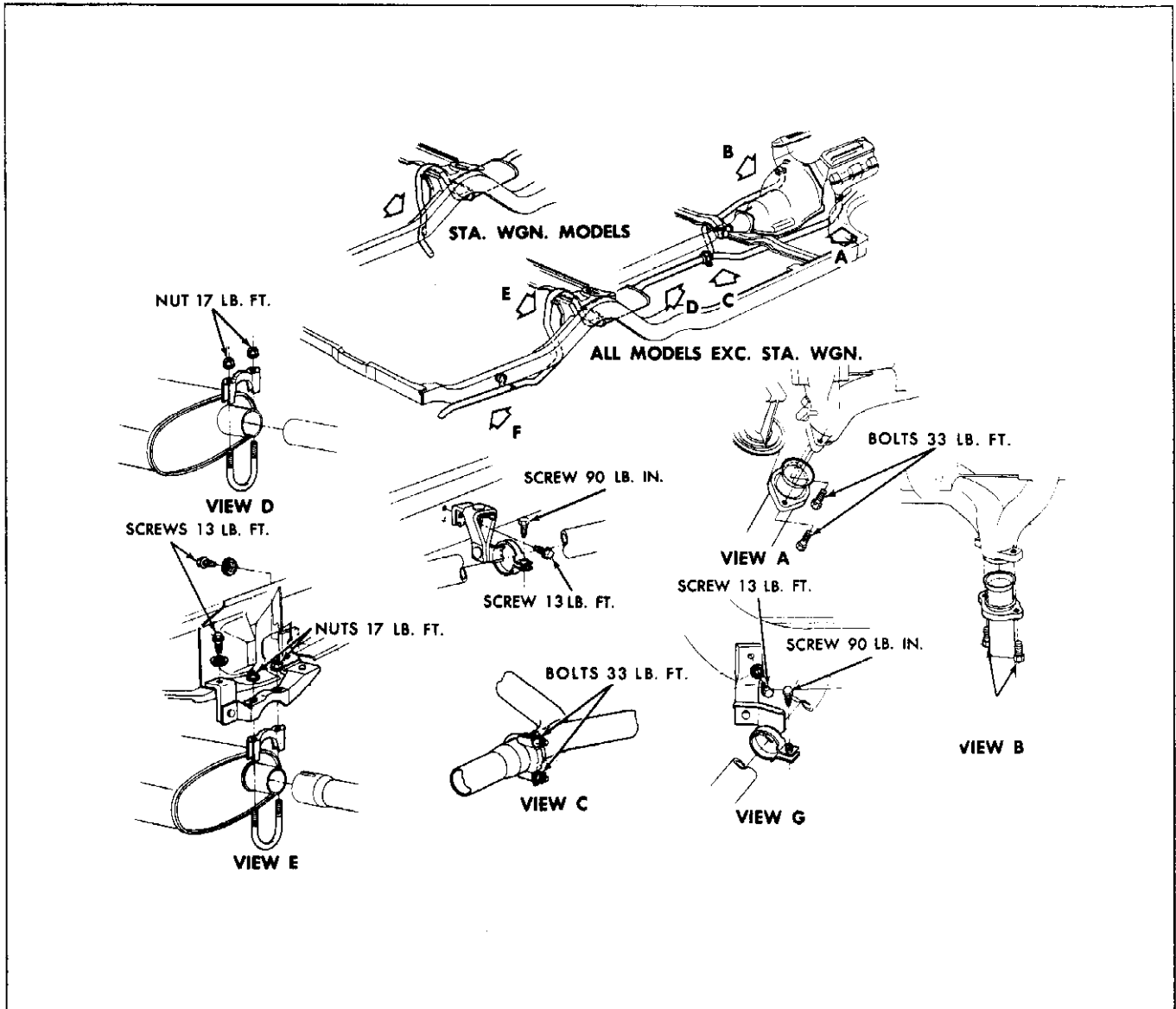


Fig. 8-13 Single Exhaust System - Tempest Eight Cylinder Engine

2. Loosen crossover pipe to exhaust pipe U-bolt clamp.

3. Remove crossover pipe.

4. Install crossover pipe by reversing above procedure. Tighten crossover pipe to manifold bolts 33 lb. ft. torque. Tighten exhaust pipe to crossover pipe U-bolt clamp 33 lb. ft. torque.

NOTE: Coat outside diameter of crossover to exhaust pipe flange with sealer before installing.

EXHAUST PIPE—REMOVE AND REPLACE

1. Loosen crossover to exhaust pipe U-bolt clamp.

2. Disconnect crossover pipe from exhaust pipe by moving exhaust pipe and assembly rearward.

3. Loosen front U-bolt clamp on muffler and remove exhaust pipe.

4. To install exhaust pipe, reverse above procedure. Tighten front U-bolt clamp on muffler 18 lb. ft. torque. Tighten exhaust pipe to crossover pipe U-bolt clamp 33 lb. ft. torque.

NOTE: Coat inside diameter of front muffler opening and outside diameter of crossover to exhaust pipe flange with sealer before installing exhaust pipe.

MUFFLER—REMOVE AND REPLACE

1. Loosen crossover to exhaust pipe U-bolt clamp.

2. Disconnect crossover pipe from exhaust pipe by moving exhaust pipe and assembly rearward.

3. Loosen front U-bolt clamp on muffler and remove exhaust pipe.

4. Loosen tailpipe to muffler support U-bolt clamp and remove muffler.

5. To install, reverse removal procedure. Tighten tailpipe to muffler support U-bolt clamp 18 lb. ft. torque. Tighten front U-bolt clamp on muffler 18 lb. ft. torque. Tighten crossover to exhaust pipe U-bolt 33 lb. ft. torque.

NOTE: Coat inside diameter of front muffler opening, outside diameter of crossover to exhaust pipe flange, and inside diameter of tailpipe to muffler flange with sealer before installing.

2. Slide tailpipe off rear of muffler and remove.

3. To replace tailpipe, reverse above procedure. Tighten tailpipe front support clamp (behind muffler) 18 lb. ft. torque. Tighten tailpipe rear support clamp 8 lb. ft. torque.

NOTE: Coat inside diameter of tailpipe flange with sealer before installing.

DUAL EXHAUST SYSTEM (Fig. 8-14)

EXHAUST PIPE—REMOVE AND REPLACE

1. Loosen front (behind muffler) and rear (at resonator) tailpipe support U-bolt clamps.

2. Separate tailpipe from muffler.

3. Loosen front muffler U-bolt clamp and remove muffler.

TAILPIPE—REMOVE AND REPLACE

1. Loosen front (behind muffler) and rear tailpipe support clamps.

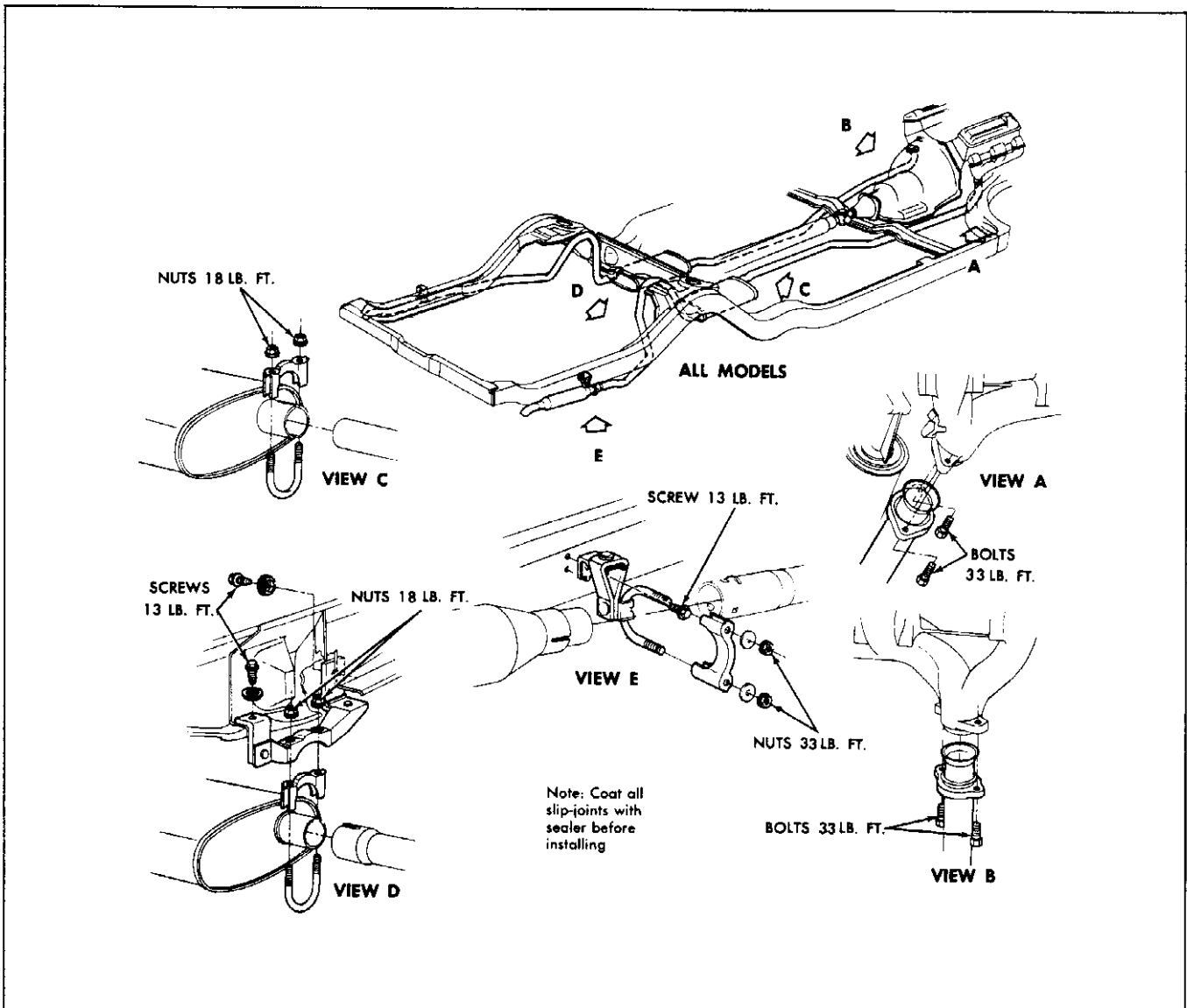


Fig. 8-14 Dual Exhaust System - Tempest Eight Cylinder Engine

4. Disconnect exhaust pipe from manifold and remove.

5. To install exhaust pipe, reverse removal procedure. Tighten exhaust pipe to manifold bolts 33 lb. ft. torque. Tighten front muffler U-bolt clamp 18 lb. ft. torque. Tighten front (behind muffler) tailpipe support U-bolt clamp 18 lb. ft. torque. Tighten rear (at resonator) tailpipe support U-bolt clamp 33 lb. ft. torque.

NOTE: Coat inside diameter of front muffler opening and tailpipe flange with sealer before installing muffler.

MUFFLER—REMOVE AND REPLACE

1. Loosen front (behind muffler) and rear (at resonator) tailpipe support U-bolt clamps.

2. Separate tailpipe from muffler.

3. Loosen front muffler U-bolt clamp and remove muffler.

4. To install muffler, reverse removal procedure. Tighten front muffler U-bolt clamp 18 lb. ft. Tighten front (behind muffler) tailpipe support U-bolt clamp 18 lb. ft. torque. Tighten rear (at resonator) tailpipe support U-bolt clamp 33 lb. ft. torque.

NOTE: Coat inside diameter of front muffler opening and tailpipe flange with sealer before installing muffler.

TAILPIPE—REMOVE AND REPLACE

1. Remove front (behind muffler) and rear (at resonator) tailpipe support U-bolt clamps.

2. Separate tailpipe from muffler and remove.

3. To install tailpipe, reverse above procedure. Tighten front (behind muffler) tailpipe support U-bolt clamp 18 lb. ft. torque. Tighten rear (at resonator) tailpipe support U-bolt clamp 33 lb. ft. torque.

NOTE: Coat inside diameter of tailpipe flange with sealer before installing tailpipe.