

INSTRUCTIONS

© 2025, Speedway Motors, Inc.

SPEEDWAY
motors®

916-28914 - Speedway Motors GM Manual Transmission to Flathead V8 Adapter (GM Clutch) 560-5174 - Offenhauser 5174 GM Manual Transmission to Flathead V8 Adapter (GM Clutch)

Read Complete Instructions Before Starting Assembly.

This adapter allows installation of 1955-and-later GM 3, 4, or 5-speed manual transmissions, including early GM-style T-5 units, onto 1932-48 Ford and 1939-50 Mercury Flathead engines, but it is not compatible with 1993 and newer S10/NV1500 transmissions. For 1948 trucks and 1949-53 Ford or Mercury 8BA engines, a 3-inch adapter bellhousing is required. Suitable options include the cast-iron 1948-52 Ford pickup bellhousing (3¼ inches tall) or the stamped-steel 1949-50 Mercury V8 bellhousing, while Ford 6-cylinder bellhousings will not work. When using the 1948-52 pickup bellhousing, the starter mount plate must match the bellhousing. The adapter is designed for use with Borg & Beck or diaphragm-style clutch setups and includes a pilot bushing adapter. It is not compatible with Canadian Mercury "French block" engines.

ADDITIONAL ITEMS THAT MAY BE REQUIRED		
Pilot Bearing		
Qty	Part #	Description
1	910-29520	Pilot Bearing, GM Transmission to Flathead
Release Bearing Components (Select Only One System)		
Mechanical/Manual Clutch Set-Up		
Qty	Part #	Description
1	916-29510	Flathead to GM Transmission Bearing & Arm Kit
Hydraulic Clutch Set-Up		
Qty	Part #	Description
1	910-0530	Hydraulic Throwout Bearing & Bleeder Kit
Release Bearing Adapter (Select Only One to Match Application)		
Qty	Part #	Description
1	916-29505	Release Bearing Adapter, Flathead to GM Manual Transmission
1	916-29515	GM T-5 to Flathead Release Bearing Adapter
Hydraulic Clutch Set-Up		
Qty	Part #	Description
1	910-15629	1949-53 Flathead Steel Flywheel
1	101-2002802	ARP 200-2802 Flywheel Bolts
1	910-15637	Speedway Motors 10-1/2" Pressure Plate (16.9 lbs.)
1	101-1302201	ARP 130-2201 Pressure Plate Bolts
Note: Clutch Disc Selection - Must match the diameter of pressure plate, spline count, and input shaft diameter of the transmission being used.		

Installation Procedures:

1. Flywheel Install/Prep

- Install or inspect the existing flywheel and ensure it's ready for the clutch assembly.

2. Pilot Bearing Adapter and Bearing

- Lightly tap the pilot bearing adapter and bearing into place using a soft mallet.

3. Clutch Disc and Pressure Plate

- Use the appropriate clutch alignment tool to center the clutch disc on the flywheel, then bolt the pressure plate in place using the specified hardware.

4. Throwout (Release) Bearing and adapter if used

• Mechanical/Manual Clutch Setup:

- Thread the adjustable pivot ball (Part #5503855) into the bellhousing.
- Install the release bearing and arm using Kit #91629510.

• Hydraulic Clutch Setup:

- Install Bearing Adapter
- If using a hydraulic throwout bearing (such as Part #91025610, with the included Bleeder Kit #91605004), the pivot ball or release arm are not required. The hydraulic system provides bearing movement directly via fluid pressure rather than mechanical linkage.

5. Transmission Adapter and Transmission

- Bolt the adapter to the engine block.
- Mount the transmission to the adapter.

6. Throwout (Release) Bearing/Pedal Adjustment

• Mechanical/Manual Style System Pedal Adjustments:

- Adjust clutch pedal linkage to achieve 1/2 inch to 1 inch of free play at the pedal.

• Hydraulic Style System Setup Pedal Adjustments:

- Use Speedway Hydraulic Clutch Release Bearing Setup Tool (Part #91381090) or similar method to measure and set bearing clearance.
- Slide the hydraulic bearing over the transmission input shaft.
- Use supplied shims/spacers to achieve approximately 1/8 inch clearance between the bearing and clutch fingers.
- Connect the hydraulic lines (one for fluid supply, one for bleeding) and route them safely away from heat and moving parts.
- Fill the system with DOT 3 or DOT 4 brake fluid.
- Open the bleeder line and slowly pump the clutch pedal until air is fully purged and pedal feel is firm.

INSTRUCTIONS

© 2025, Speedway Motors, Inc.

SPEEDWAY
motors®

Additional Installation Note:

If you're using the stock rear axle, an open-drive conversion is required before installation. Speedway Motors offers several kits for this, including options for 6-spline (Part #919-1105) and 10-spline (Part #919-1106) 1935-48 Ford V8 banjo rear ends, as well as a kit for 1928-31 Model A axles (Part #919-1111). After completing the conversion, a custom driveshaft must be installed. Speedway Motors provides a Universal Steel Custom Length Driveshaft Kit (Part #910-383, 3-inch OD) along with other size and material options for various applications.

Need Help with This Product?

Talk to one of our Tech Support Agents:

Mon-Fri, 8am - 5pm (CST)

U.S.: 800.979.0122

Canada: 855.313.9180

International: 1.402.323.3200