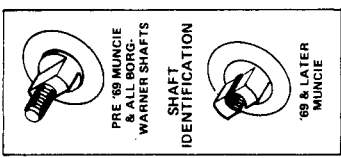
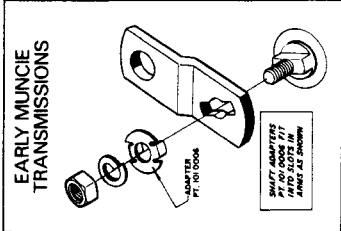
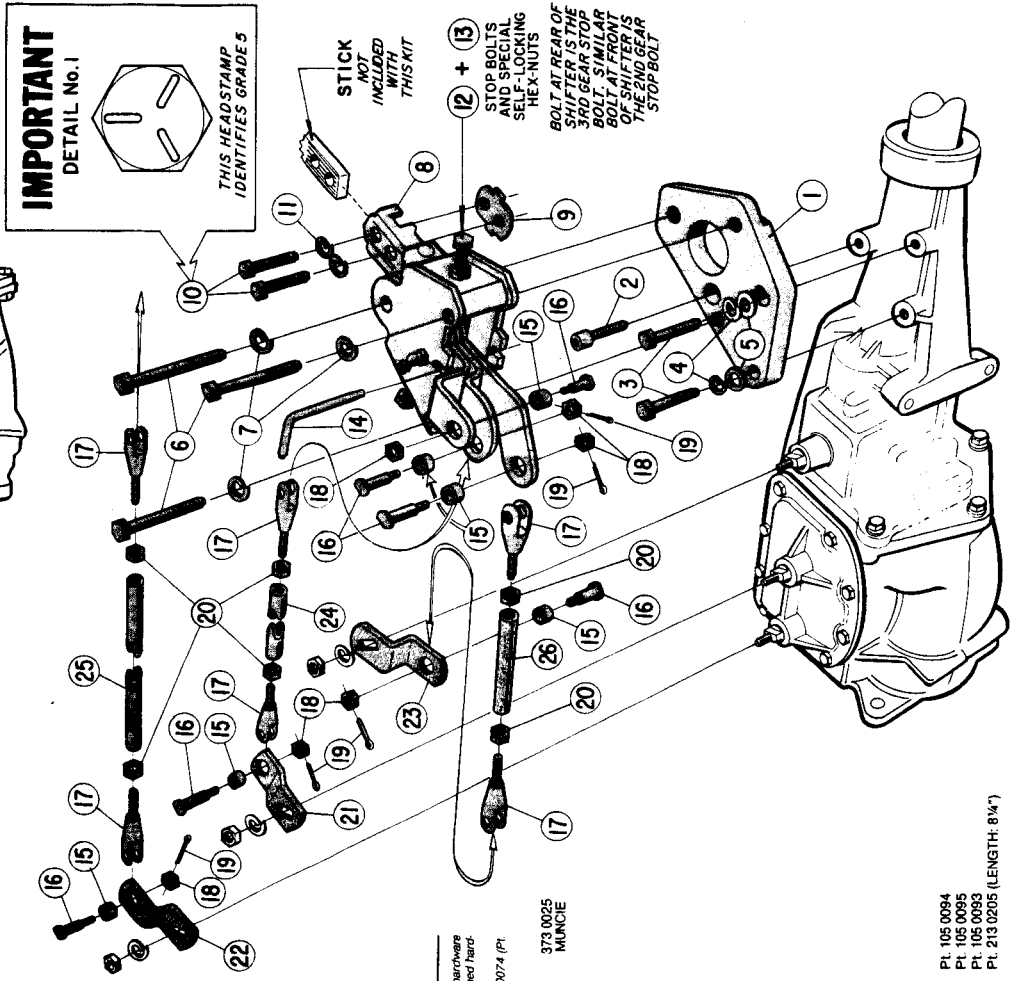
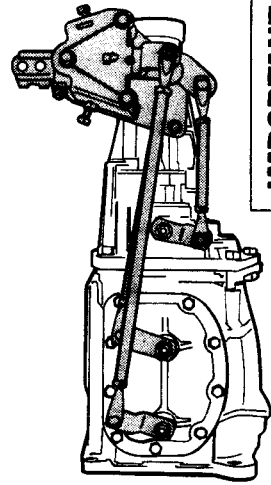


# SPEEDWAY SUPER SHIFTER™

## BORG-WARNER SUPER T-10 TRANSMISSION & MUNCIE (EARLY-LATE) TRANSMISSION



### CONTENTS OF KIT

- \*\*Parts for detaching stick to shifter that are identified below are contained in bagged hardware package Pt. 154-0074 — except locknuts (Pt. 179-0037) which are contained in bagged hardware package Pt. 154-0182. These locknuts prevent the stop bolts from turning IN.*
- NOTE 1. The two 3/8-24 hex-nuts contained in bagged hardware package Pt. 154-0074 (Pt. 179-3494) are optional to the 3/8-24 lock nuts (Pt. 179-0037).*
- |                      |                    |
|----------------------|--------------------|
| 373 0024<br>B-W T-10 | 373 0025<br>MUNCIE |
| Pt. 195 0222         | Pt. 215 0155       |
| Pt. 215 0153 (2)     | Pt. 267 3464 (2)   |
| Pt. 267 3474 (2)     | Pt. 215 0152 (3)   |
| Pt. 267 3469 (3)     | Pt. 267 3469 (3)   |
| Pt. 491 0004         | Pt. 195 0053       |
| Pt. 215 8398 (2)     | Pt. 179 0087 (2)   |
| Pt. 267 7784 (2)     | Pt. 148 0093 (6)   |
| Pt. 215 7789 (2)     | Pt. 118 0023 (6)   |
| Pt. 179 0037 (2)     | Pt. 189 0077 (6)   |
| Pt. 148 0093 (6)     | Pt. 661 0012 (6)   |
| Pt. 179 0082 (6)     | Pt. 190 0009 (6)   |
| Pt. 179 3494 (6)     | Pt. 179 3494 (6)   |
| Pt. 105 0085         | Pt. 105 0086       |
| Pt. 105 0087         | Pt. 105 0088       |
| Pt. 213 0187         | Pt. 213 0187       |
| Pt. 213 0188         | Pt. 213 0188       |
| Pt. 213 0200         | Pt. 213 0200       |
- BAGGED HARDWARE PACKAGE — Pt. 154-0182**
- 1. MOUNTING PLATE
  - 2. 3/8-16 x 1.25 SOCKET-HEAD CAP SCREW
  - 3. 3/8" SA 1.75 HEX-HEAD CAP SCREW
  - 4. 3/8" FLAT WASHER
  - 5. 3/8" FLAT LOCKWASHER
  - 6. 7/16-14 x 3.15 HEX-HEAD CAP SCREW
  - 7. 7/16" SAUT LOCKWASHER (SOLD SEPARATELY)
  - 8. SHIFTER ASSEMBLY (SOLD SEPARATELY)
  - 9. PLATE (STICK ATTACHING)
  - 10. 3/8-24 x 3/8 HEX-HEAD CAP SCREW — SAE GRADE 5
  - 11. 3/8" SPLIT LOCKWASHER
  - 12. 3/8-24 x 1/4 HEX-HEAD CAP SCREW
  - 13. 3/8-24 HEX-NUT — SPECIAL SELF-LOCKING (SEE NOTE 1)
  - 14. NEUTRAL ALIGNMENT GAGE PIN
  - 15. BUSHING
  - 16. CLEVIS YOKE
  - 17. CLEVIS PIN
  - 18. 16-18 HEX-NUT — SPECIAL-DRILLED FOR COTTER PINS
  - 19. COTTER PIN
  - 20. COTTER PIN
  - 21. ARM-1-2 (TRANSMISSION SHAFT)
  - 22. ARM-3-4 (TRANSMISSION SHAFT)
  - 23. ARM-REVERSE (TRANSMISSION SHAFT)
  - 24. ROD-1-2 (LENGTH: 8-5/8")
  - 25. ROD-3-4 (LENGTH: 12-5/8")
  - 26. ROD-REVERSE (LENGTH: 3-3/4")

This shifter installation is designed to withstand the vibration experienced in extended competition service. The hardware supplied with this kit and specified in these instructions must be used as directed. Do not make substitutions.

1. Install the mounting plate on the transmission extension housing as shown in exploded assembly drawing. Tighten all fasteners.
2. Four bolts are contained in the bagged hardware package Pt. 154-0074. Two are SAE Grade 5, 1-3/8" long, the other two are SAE Grade 2, 1-1/4" long. The Grade 5 is also identified by the headstamp (see Detail No. 1). The Grade 5 bolts must be used to attach the stick to the shifter. Two special self-locking hex-nuts (Pt. 179-0037) are contained in bagged hardware package Pt. 154-0182. These self-locking nuts are to be used as jam nuts on the shifter stop bolts. Install stop bolts with jam-nuts in shifter frame about four turns. Note — the two 3/8-24 hex-nuts (Pt. 179-3494) contained in bagged hardware package Pt. 154-0074 are optional to the 3/8-24 self-locking hex-nuts (Pt. 179-0037).
3. Assemble 6 jam nuts (Pt. 179-3494) on threaded ends of 6 clevis yokes. Spin nuts onto end of threads. Assemble the 6 clevis yokes with 3 rods (to full engagement). Note — lubrication of clevis joints is optional, if desired, lubricate pins and bushings before assembling. Insert bushings in levers and transmission arms. Assemble clevis yokes with levers and arms. Refer to exploded assembly drawing for proper combinations of arms, rods, and shifter levers. Install clevis pins. Fasten with special nuts (drilled for cotter pins). Install and secure cotter pins. Install neutral alignment gage pin in shifter to secure all levers at neutral.
4. Install shifter on mounting plate with three bolts supplied. Tighten all bolts. Safety wire can be installed through the holes drilled in the heads of these bolts.

5. **Stick is not included with this kit. See your dealer.** A wide selection of configurations and lengths is available in steel or aluminum. Fasten stick to shifter with SAE Grade 5 bolts. Tighten both bolts evenly. Refer to exploded assembly drawing for proper assembly. Tighten bolts evenly.
6. Rotate all transmission control shafts to neutral position. Neutral is the mid-position (identical between extensions, limits of travel of 1-2 and 3-4 control shafts. Neutral position of reverse control shaft is all the way clockwise).
7. Adjust thread connections equally at both ends of each linkage assembly to present slot in arm to fit easily onto control shaft (to maintain equal thread engagement at each end). Fasten arms to control shafts with original hardware. Remove neutral alignment gage pin from shifter. Test operation of shifter. If shifter operates smoothly, tighten jam nuts against rods. If shifting is difficult, move shifter to neutral. Replace neutral alignment gage pin. Remove each linkage connection (clevis pin) at transmission arm. A clevis pin that is difficult to remove from shaft proves that the linkage is incorrectly adjusted. Adjust linkage as necessary, re-assemble and repeat test. Tighten all jam nuts after satisfactory adjustment.
8. Adjust shifter stop bolts. Pull stick firmly into 2nd gear. Adjust stop bolt at front of shifter until contact of bolt is felt through stick. Back bolt out one turn and tighten jam nut. Adjust stop bolt at rear or shifter by holding stick firmly forward in 3rd gear. The special self-locking nuts supplied are designed to prevent the stop bolts from working inward from vibration. If you prefer, the plain nuts supplied can be used, or you can use no stop bolts.