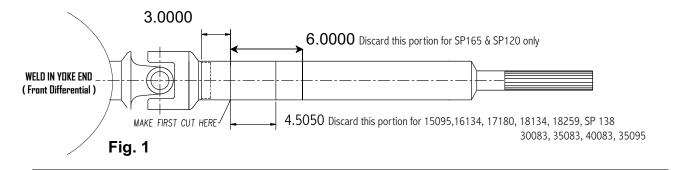
POWER TRAIN SAVERS® INSTALLATION INSTRUCTIONS

A qualified driveline mechanic must install the Power Train Saver

The Power Train Saver should normally be installed directly in front of the front differential, on the weld in yoke end as shown in Fig. 1. The Power Train Saver can also be installed on the next drive-shaft ahead of the steady bearing. However the Power Train Saver unit Must Be Installed On The Weld-In Yoke End on all drive shafts.

1. Check Power Train Saver part number. Then make sure Torque Fuses are installed, with timing marks lined up. Torque down fuse nuts to spec. (See Torque fuse installation page 6). Cut and discard the portion of drive shaft pertaining to your particular Power Train Saver as shown in Fig. 1.



- 2. Install the Power Train Saver into the long section of the drive shaft first.
- 3. Square up the Power Train Saver with the tube. Tack and weld it in place.
- 4. After welding, check the straightness of the Power Train Saver with the drive shaft. The radial run out of the Power Train Saver, measured at the end, **Must be within .002" of True**, see check straightness as shown in Fig 2.

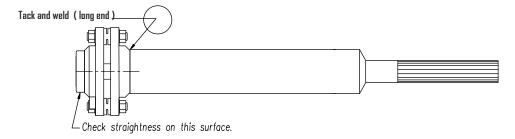


Fig. 2

- 5. Tack and weld the short end of the drive shaft to the Power Train Saver as shown in Fig. 3.
- 6. Check the finished assembly for straightness. No part of the assembly should be more than .004" out of straight.

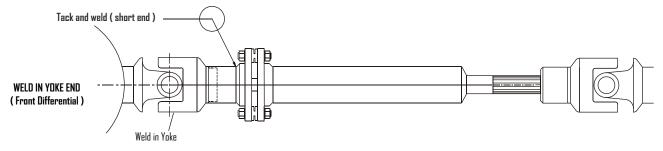


Fig. 3

7. Balance the unit as you would a new drive shaft assembly. **Balance to within .2 oz / in on Both Ends** of the assembly.

Welding Procedure for Power Train Saver Installation

Preparation of Base Material

All loose or thick scale, rust, moisture, grease, paint or other foreign material that would prevent proper welding or produce objectionable fumes shall be removed to within 2" of weld location.

The repair area shall be prepared by machining or grinding to remove any smeared metal and / or small tears that may be present.

Preheat

Preheating of the Power Train Saver unit is not necessary and should not be done. Weld at room temperature ($65^{\circ}F / 20^{\circ}C$) The driveline tube can be preheated if needed.

Welder Settings

All welders are different, some may have to be adjusted higher or lower to produce the same amperage. The information below is average settings.

Voltage: 19 - 21

Amperage: 195 - 200

Weld Procedure

The welding process will be flux cored arc welding (FCAW) process, semi-automatic using an E4801 T-9 CH electrode with a 75/25% shielding gas. Use only stringer beads with a radial direction of travel. The driveline should be mounted on rollers and rotated to maintain a flat or horizontal welding position with a controlled rate of weld deposit.

- Slag or flux remaining after a pass, shall be removed before applying the next pass. Similarly cracks or blowholes that appear on the surface of any pass shall be removed before depositing the next pass.
- Care must be used to prevent the containment or trapping of slag, the formation of voids or root porosity.
- Weld geometry must be free from undercut, cold laps, poor transitions and consistent with acceptable weld profiles Figure 5-2 and Clause 5.9.

Cooling of Driveline

The best method is to air cool welds slowly at room temperature ($65^{\circ}F/20^{\circ}C$). Do not rush the cooling process by quenching welds with coolant or water. This can cause stress cracks not noticeable to the eye.